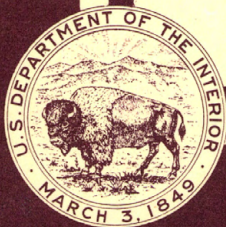
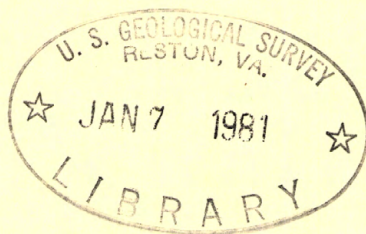


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Water Resources Data for Wyoming

Part 1. Surface Water Records



**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

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

CALENDAR FOR WATER YEAR 1973

1972

OCTOBER

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1973

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1973

Water Resources Data for Wyoming

Part 1. Surface Water Records



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Prepared in cooperation with

Office of the Wyoming State Engineer
Wyoming Highway Department
Wyoming Department of Economic Planning and Development
Wyoming State Department of Agriculture
City of Cheyenne, Board of Public Utilities
Bureau of Reclamation, U. S. Department of the Interior
Bureau of Land Management, U. S. Department of the Interior
Corps of Engineers, U. S. Army
National Park Service, U. S. Department of the Interior
Environmental Protection Agency

Water resources records, 1973, for Wyoming are in the following reports of the U. S. Geological Survey:

1. Water Resources Data for Wyoming
Part 1: Surface-Water Records
2. Water Resources Data for Wyoming
Part 2: Water-Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U. S. Geological Survey
4015 Warren Avenue
P. O. Box 2087
Cheyenne, Wyoming 82001

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WATER RESOURCES DATA FOR WYOMING, 1973

PART 1. SURFACE-WATER RECORDS

by F. C. Boner and K. G. Polinoski

INTRODUCTION

Surface-water records for the 1973 water year for Wyoming, including records of streamflow or reservoir storage at gaging stations, partial-record stations, and miscellaneous sites, are given in this report. The locations of the gaging stations and partial-record stations are shown in figures 1 and 2. Records for a few pertinent gaging stations in bordering States also are included. These data represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Wyoming. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of Robert L. Cushman, district chief. Wyoming district personnel who contributed significantly to the collection and preparation of data included in this report were: S. A. Druse, D. J. O'Connell, G. S. Craig, Jr., G. W. Armentrout, Jr., H. W. Lowham, J. G. Rankl, P. B. McCollam, C. F. Obert, W. R. Glass, T. W. Custis, R. L. Muench, J. O. Ragsdale, M. D. Stevens, R. C. Bauman, J. L. Lynch, and S. L. Green.

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. These reports are for limited distribution and are designed primarily for rapid release of data shortly after the end of the water year.

Records of discharge and stage of streams and canals, and contents and stage of lakes or reservoirs, are published in a series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and since then are in a 5-year series. More information is given under the heading "Publications" on page 9.

COOPERATION

The U.S. Geological Survey and organizations of the State of Wyoming have had cooperative agreements for the systematic collection of surface-water records since 1895. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Office of the State Engineer, Floyd A. Bishop

Wyoming Highway Department, William G. Lucas, superintendent

Wyoming Department of Economic Planning and Development,
Myron W. Goodson, Chief of Water Development

Wyoming State Department of Agriculture, Glenn J. Hertzler, Jr.,
commissioner

City of Cheyenne, Board of Public Utilities, Ray L. Sherard,
superintendent

Assistance in the form of funds or services was given by the Bureau of Reclamation and by the Bureau of Land Management, Department of the Interior, by the Corps of Engineers, U.S. Army, by the National Park Service, Department of the Interior, and by the Environmental Protection Agency, in collecting data published in the report. Funds and services were also provided by the Missouri River Basin Program.

The following organization aided in collecting records:

Western Ore Operations, United States Steel Corporation

Organizations assisting with collection of records for stations operated by other than the Wyoming district are acknowledged in the respective state reports for those districts.

DEFINITION OF TERMS

Terms related to streamflow and other hydrologic data, as used in this report, are given below. See also table for converting English Units to International System of Units (SI) on page 12.

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, an artificial structure, or a uniform cross section over a long reach of the channel.

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.

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.

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.HT.) 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.

Partial-record station is a particular site where limited stream-flow 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 basins.

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 mainstream stations are listed before the first mainstream 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 indentation, each indentation 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; therefore, 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 06320500, includes the part number "06" and a 6-digit station number. This complete station number appears just to the left of the station name. In this report, the records are listed in downstream order by parts. All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

EXPLANATION OF SURFACE-WATER DATA

Collection and Computation of Data

The base data collected at gaging stations consists of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from a water-stage recorder that gives a continuous graph of the fluctuations (for digital recorders, a

tape punched at 15- or 30-minute intervals) or from direct readings on a nonrecording gage. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks on the measurement of stream discharge. (See also SELECTED REFERENCES.) Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

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

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

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

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

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the 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. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current 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 gaging station gives the location, drainage area, 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" for some stations, is that determined and used by the Corps of Engineers or other agencies. 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, 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 gage, 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 (graphic 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, the 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.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. 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 for 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 annual rainfall over the drainage basin is usually less than 20 inches.

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.

Footnotes to the table of daily discharges are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other usual 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 site 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.

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 subjected to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. The daily tables for reservoir stations give the contents corresponding to the water-surface elevation at a given time, usually at 2400 each day. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

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, and the yearly summary gives the change in contents for the calendar year and for the water year.

Data collected at partial-record stations and at miscellaneous sites are given in two tables following the surface-water records in this report. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at miscellaneous sites.

Accuracy of data

The accuracy of discharge 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 and miscellaneous sites.

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, unless it is so stated. 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

In each water-supply paper entitled, "Surface Water Supply of the United States" there is a list of numbers of preceding water-supply papers containing streamflow information for the area covered by the report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for stations in Wyoming for the period October 1960 to September 1965 are in Water-Supply Papers 1916, 1917, 1918, 1925, 1927, and 1934. Records for the period October 1965 to September 1970 are in Water-Supply Papers 2116, 2117, 2118, 2125, 2127, and 2134.

Two series of summary reports entitled, "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of record through September 1950 and the second series covers the period October 1950 to September 1960. 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. Records for stations in Wyoming are compiled in Water-Supply Papers 1309, 1310, 1313, 1314, and 1317 through September 1950, and in 1729, 1730, 1733, 1734, and 1737 for October 1950 to September 1960.

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

Information of a more detailed nature 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 Wyoming through 1967 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; and (3) the highest mean discharge for selected numbers of consecutive days in each year.

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, and on the sediment. 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

Streamflow during the 1973 water year was above average in the lower Wind, Tongue, lower Powder, Belle Fourche, North Platte, Big Sandy, lower Green, Little Snake, and Bear River basins. Average runoff was recorded in the Cheyenne River basin and below average runoff was recorded in the upper Yellowstone, Clarks Fork Yellowstone, upper Wind, Shoshone, upper Green, and Snake River basins.

Flow in most of the larger streams was above average at the beginning of the water year and declined to below normal in April. Below average temperatures over most of the State during April and early May delayed the spring snowmelt. Snowpacks during April were maximum of record at several sites in the Laramie Range in the North Platte River basin. High flows during June were experienced in streams draining the Laramie Range but below average precipitation during late May and June prevented wide-spread flooding.

Reservoir storage in the upper Yellowstone River basin decreased 9,100 acre-feet during the year. Storage in Keyhole Reservoir, on the Belle Fourche River, decreased 13,200 acre-feet during the year. In the North Platte River basin, storage in the major reservoirs increased 287,400 acre-feet and Glendo Reservoir reached a record high level.

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.
- Langbein, W. G., 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
<i>Length</i>		
inches (in)	25.4	millimeters (mm)
	.0254	meters (m)
feet (ft)	.3048	meters (m)
yards (yd)	.9144	meters (m)
rods	5.0292	meters (m)
miles (mi)	1.609	kilometers (km)
<i>Area</i>		
acres	4047	square meters (m ²)
	.4047	*hectares (ha)
	.4047	square hectometer (hm ²)
	.004047	square kilometers (km ²)
square miles (mi ²)	2.590	square kilometers (km ²)
<i>Volume</i>		
gallons (gal)	3.785	**liters (l)
	3.785	cubic decimeters (dm ³)
	3.785x10 ⁻³	cubic meters (m ³)
million gallons (10 ⁶ gal)	3785	cubic meters (m ³)
	3.785x10 ⁻³	cubic hectometers (hm ³)
cubic feet (ft ³)	28.32	cubic decimeters (dm ³)
	.02832	cubic meters (m ³)
cfs-day (ft ³ /s-day)	2447	cubic meters (m ³)
	2.447x10 ⁻³	cubic hectometers (hm ³)
acre-feet (acre-ft)	1233	cubic meters (m ³)
	1.233x10 ⁻³	cubic hectometers (hm ³)
	1.233x10 ⁻⁶	cubic kilometers (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	28.32	liters per second (l/s)
	28.32	cubic decimeters per second (dm ³ /s)
	.02832	cubic meters per second (m ³ /s)
gallons per minute (gpm)	.06309	liters per second (l/s)
	.06309	cubic decimeters per second (dm ³ /s)
	6.309x10 ⁻⁵	cubic meters per second (m ³ /s)
million gallons per day (mgd)	43.81	cubic decimeters per second (dm ³ /s)
	.04381	cubic meters per second (m ³ /s)
<i>Mass</i>		
ton (short)	.9072	tonne (t)

*The unit hectare is approved for use with the International System (SI) for a limited time. See NBS Special Bulletin 330, p.15, 1972 edition.

**The unit liter is accepted for use with the International System (SI). See NBS Special Bulletin 330, p. 13, 1972 edition.

MISSOURI RIVER BASIN

MADISON RIVER BASIN

06037500 MADISON RIVER NEAR WEST YELLOWSTONE, MT.

LOCATION.--Lat 44°39'24", long 111°04'00", in SW¼ sec.36, T.13 S., R.5 E., (unsurveyed), Yellowstone National Park, on left bank 0.3 mi (0.5 km) upstream from Riverside ranger station, 1.6 mi (2.6 km) east of West Yellowstone and west boundary of Yellowstone National Park, 12.5 mi (20.1 km) downstream from confluence of Firehole and Gibbon Rivers, and at mile 120 (193 km).

DRAINAGE AREA.--420 mi² (1,088 km²).

PERIOD OF RECORD.--June 1913 to December 1917, July 1918 to October 1921, June 1922 to September 1973 (discontinued). Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 6,650 ft (2,030 m), from topographic map. Prior to Oct. 20, 1918, nonrecording gage, and Oct. 20, 1918, to June 29, 1930, nonrecording gage or water-stage recorder at sites 2.5 mi (4.0 km) upstream at different datums. Supplementary nonrecording gage at site 0.3 mi (0.5 km) downstream at different datum used at times during 1927-30.

AVERAGE DISCHARGE.--58 years (1913-17, 1918-21, 1922-73), 488 ft³/s (13.82 m³/s), 15.78 in/yr (401 mm/yr), 353,600 acre-ft/yr (436 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,400 ft³/s (39.6 m³/s) May 21, gage height, 3.05 ft (0.93 m); minimum daily, 352 ft³/s (9.97 m³/s) Aug. 17.

Period of record: Maximum discharge, 2,150 ft³/s (60.9 m³/s) May 24, 1956, gage height, 3.4 ft (1.049 m); maximum gage height, about 10.0 ft (3.048 m) Jan. 8, 1937 (ice jam); minimum discharge, 100 ft³/s (2.83 m³/s), estimated, Feb. 7, 1933.

REMARKS.--Records good. No regulation or diversions above station.

REVISIONS (WATER YEARS).--WSP 1439: 1942. WSP 1729: 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	559	511	503	460	441	434	441	441	786	455	378	441
2	543	519	503	440	434	441	434	427	825	434	372	420
3	535	519	511	430	434	427	434	427	759	420	378	399
4	527	527	500	420	441	434	427	471	678	406	413	385
5	551	559	490	410	448	434	434	519	642	399	420	385
6	567	543	480	410	455	434	441	519	642	392	392	385
7	551	519	490	410	448	427	427	543	669	385	399	385
8	543	511	480	400	427	427	420	607	696	385	372	413
9	535	511	470	400	441	427	427	660	723	385	366	441
10	624	503	460	410	448	427	427	583	768	385	366	399
11	669	503	470	420	455	448	427	567	750	385	366	392
12	599	503	480	450	455	448	441	567	660	385	378	385
13	559	503	503	455	441	448	463	607	615	385	372	378
14	551	503	495	463	434	441	487	669	599	385	359	392
15	559	511	490	455	427	434	455	705	633	392	359	420
16	575	511	500	455	427	434	448	777	633	385	359	420
17	551	511	511	463	427	441	455	835	678	378	352	399
18	543	511	511	455	434	441	455	895	714	378	366	385
19	535	511	511	471	420	427	434	995	599	385	366	385
20	535	503	511	455	420	434	427	1,180	551	406	372	399
21	543	495	519	455	413	441	420	1,280	519	434	372	413
22	535	503	527	448	420	448	420	1,090	511	413	455	413
23	527	495	511	441	420	441	427	1,020	495	441	406	406
24	559	495	511	441	420	434	455	975	487	399	406	434
25	551	495	503	441	420	434	463	1,030	479	385	392	455
26	551	511	503	455	420	441	441	1,100	471	385	385	434
27	551	503	503	441	420	441	463	885	463	385	378	406
28	535	487	511	427	427	441	479	768	455	378	378	392
29	527	495	511	441	-----	434	487	723	463	385	378	385
30	503	503	487	448	-----	434	455	714	511	385	378	378
31	503	-----	480	448	-----	441	-----	723	-----	385	385	-----
TOTAL	17,096	15,274	15,435	13,618	12,117	13,538	13,314	23,302	18,474	12,285	11,818	12,124
MEAN	551	509	498	439	433	437	444	752	616	396	381	404
MAX	669	559	527	471	455	448	487	1,280	825	455	455	455
MIN	503	487	460	400	413	427	420	427	455	378	352	378
AC-FT	33,910	30,300	30,620	27,010	24,030	26,850	26,410	46,220	36,640	24,370	23,440	24,050
CAL YR 1972	TOTAL 229,956	MEAN 628	MAX 1,720	MIN 427	AC-FT 456,100							
WTR YR 1973	TOTAL 178,395	MEAN 489	MAX 1,280	MIN 352	AC-FT 353,800							

PEAK DISCHARGE (BASE, 950 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE
5-21	0900	3.05	1,400

GALLATIN RIVER BASIN

06043500 GALLATIN RIVER NEAR GALLATIN GATEWAY, MT.

LOCATION.--Lat 45°29'51", long 111°16'09", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.7, T.4 S., R.4 E., Gallatin County, on left bank 0.3 mi (0.5 km) downstream from Spanish Creek, 7.3 mi (11.7 km) south of Gallatin Gateway, and at mile 42.5. (68.4 km).

DRAINAGE AREA.--825 mi² (2,137 km²).

PERIOD OF RECORD.--August 1889 to September 1894, June 1930 to September 1969, annual maximum, water years 1970-71, October 1971 to current year. Monthly discharge only for some periods, published in WSP 1309. Published as West Gallatin River near Bozeman 1889-94.

GAGE.--Water-stage recorder. Datum of gage is 5,167.7 ft (1,575.11 m) above mean sea level. Prior to Oct. 20, 1932, nonrecording gages at several different sites and datums within 0.8 mi (1.3 km) of present site.

AVERAGE DISCHARGE.--46 years, 797 ft³/s (22.57 m³/s), 577,400 acre-ft/yr (712 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,500 ft³/s (184 m³/s) June 10, gage height, 5.41 ft (1.649 m); minimum daily, 250 ft³/s (7.08 m³/s) Dec. 9.

Period of record: Maximum discharge, 9,270 ft³/s (263 m³/s) June 27, 1971, gage height, 6.49 ft (1.978 m), from rating curve extended above 6,000 ft³/s (170 m³/s); minimum, 117 ft³/s (3.31 m³/s) Jan. 19, 1935, gage height, 0.68 ft (0.207 m).

REMARKS.--Records good. Diversions for irrigation of about 1,400 acres (5.67 km²) above station.

REVISIONS (WATER YEARS).--WSP 1389: 1892(M), 1893-94. WSP 1559: 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	603	533	420	354	356	355	331	432	3,430	2,860	767	742
2	597	573	426	347	345	347	323	423	3,420	2,410	748	708
3	582	541	372	337	356	321	326	516	2,900	2,160	746	643
4	583	540	324	308	362	320	325	599	2,510	2,060	817	620
5	612	562	304	319	368	323	361	685	2,360	2,000	797	610
6	598	523	289	315	365	338	373	690	2,710	1,930	758	618
7	601	506	280	300	330	326	326	900	3,400	1,800	716	630
8	591	526	260	290	330	331	307	1,030	4,290	1,680	687	630
9	584	494	250	280	337	322	322	945	5,370	1,590	672	633
10	647	498	270	260	349	330	348	864	5,080	1,500	667	583
11	681	496	300	300	360	344	369	810	4,180	1,460	677	567
12	633	497	335	320	364	333	444	900	3,730	1,430	700	557
13	623	481	360	340	351	331	485	1,130	3,850	1,330	646	546
14	652	496	348	363	347	328	469	1,350	4,190	1,260	625	557
15	726	489	356	361	339	316	361	1,660	4,090	1,210	611	569
16	725	478	351	368	347	318	382	2,170	3,180	1,150	602	551
17	665	462	382	369	350	330	378	2,540	2,860	1,120	591	538
18	637	475	387	364	354	335	366	2,810	2,500	1,090	585	528
19	622	454	377	371	348	317	361	3,360	2,250	1,060	582	525
20	625	447	382	340	332	324	345	3,690	2,180	1,050	581	598
21	608	426	385	333	325	338	335	3,630	2,240	1,100	577	665
22	601	367	395	343	330	350	362	3,020	2,560	1,080	592	589
23	598	376	387	335	340	330	456	3,020	2,930	1,070	593	638
24	589	430	382	335	341	323	473	3,040	3,010	983	618	673
25	578	406	372	346	350	330	455	3,490	2,890	911	593	663
26	609	454	352	366	341	345	450	3,090	2,920	885	571	634
27	552	419	367	352	346	332	554	2,550	3,010	863	556	600
28	548	365	381	336	347	327	623	2,260	2,980	847	574	589
29	502	351	385	343	-----	310	567	2,050	3,570	819	552	574
30	411	415	354	357	-----	321	472	2,000	3,250	811	540	567
31	441	-----	344	365	-----	330	-----	2,410	-----	797	554	-----
TOTAL	18,624	14,080	10,877	10,417	9,710	10,225	12,049	58,064	97,840	42,316	19,895	18,145
MEAN	601	469	351	336	347	330	402	1,873	3,261	1,365	642	605
MAX	726	573	426	371	368	355	623	3,690	5,370	2,860	817	742
MIN	411	351	250	260	325	310	307	423	2,180	797	540	525
AC-FT	36,940	27,930	21,570	20,660	19,260	20,280	23,900	115,200	194,100	83,930	39,460	35,990
CAL YR 1972	TOTAL 345,931	MEAN 945	MAX 5,540	MIN 250	AC-FT 686,200							
WTR YR 1973	TOTAL 322,242	MEAN 883	MAX 5,370	MIN 250	AC-FT 639,200							

PEAK DISCHARGE (BASE, 2,900 FT³/S)

DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
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15

LOCATION. --Lat 44°32'00", long 110°26'20", Yellowstone National Park, at marina at Bridge Bay, 3.7 mi (6.0 km) southwest of lake outlet.

PERIOD OF RECORD.--October 1921 to current year (gage heights only). Prior to October 1966, published as Yellowstone Lake at Lake Hotel.

EXTREMES.--Current year: Maximum gage height observed, 4.37 ft (1.332 m) July 1; minimum observed, 1.14 ft (0.347 m) Apr. 21.

Period of record: Maximum gage height observed, 7.06 ft (2.152 m) June 30, 1971; minimum observed, -0.1 ft (-0.030 m) Dec. 7, 8, 1931.

REVISIONS. - WSP 1916: Drainage area.

[illegible]

YELLOWSTONE RIVER BASIN

06186500 YELLOWSTONE RIVER AT YELLOWSTONE LAKE OUTLET, YELLOWSTONE NATIONAL PARK

LOCATION.--Lat 44°34'03", long 110°22'48", Yellowstone National Park, on left bank 450 ft (137 m) downstream from Fishing Bridge, 0.2 mi (0.3 km) downstream from outlet of Yellowstone Lake, and at mile 594.8 (957.0 km).

DRAINAGE AREA.--1,006 mi² (2,606 km²).

PERIOD OF RECORD.--December 1922 to current year (prior to October 1926, gage heights only). Monthly discharge only for winter periods in water years 1927-30, 1932-33, 1935-38, 1940, 1942-46, published in WSP 1309; figures of daily discharge for these months published in WSP 646, 666, 686, 701, 731, 746, 786, 806, 826, 856, 896, 956, 976, 1006, 1036, and 1056, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 7,727.77 ft (2,355.424 m) above mean sea level. Prior to Oct. 2, 1928, nonrecording gage at site 450 ft (137 m) upstream at datum 1.07 ft (0.326 m) higher.

AVERAGE DISCHARGE.--47 years (1926-73), 1,319 ft³/s (37.35 m³/s), 17.81 in/yr (452 mm/yr), 955,600 acre-ft/yr (1,180 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,500 ft³/s (99.1 m³/s) July 1, gage height, 5.45 ft (1.661 m); minimum daily, 492 ft³/s (13.9 m³/s) Apr. 13, 19, 20, 22, 23, 30.

Period of record: Maximum discharge, 8,250 ft³/s (234 m³/s) June 28, 1971, gage height, 7.95 ft (2.423 m); minimum daily, 130 ft³/s (3.68 m³/s) Mar. 1-31, 1935, but may have been less during periods of ice effect; minimum gage height, 1.45 ft (0.442 m) Dec. 17, 1936.

REMARKS.--Records good except those for winter period, which are poor. No artificial regulation.

REVISIONS (WATER YEARS).--WSP 1309: See PERIOD OF RECORD. WSP 1729: 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	1,350	1,100	750	640	570	550	525	500	1,620	3,460	2,240	1,220
2	1,340	1,090	750	640	570	550	525	505	1,720	3,470	2,190	1,180
3	1,340	1,080	740	630	570	550	520	500	1,780	3,380	2,150	1,170
4	1,340	1,060	740	620	570	550	515	510	1,840	3,360	2,150	1,160
5	1,330	1,050	730	620	570	550	510	510	1,870	3,340	2,110	1,120
6	1,330	1,050	720	620	560	550	510	510	1,920	3,300	2,070	1,110
7	1,320	1,040	720	620	560	550	505	510	2,000	3,280	2,030	1,100
8	1,300	1,020	710	620	560	550	500	515	2,090	3,200	1,970	1,060
9	1,250	1,020	710	610	550	550	505	525	2,260	3,170	1,940	1,060
10	1,320	1,000	700	610	560	550	500	515	2,410	3,110	1,910	1,060
11	1,310	988	700	610	560	550	496	520	2,590	3,050	1,840	1,050
12	1,300	973	700	610	560	550	496	525	2,700	3,000	1,800	1,030
13	1,250	959	690	600	560	550	492	535	2,790	2,980	1,780	1,020
14	1,270	945	690	600	560	550	505	550	2,890	2,940	1,740	995
15	1,270	938	690	600	560	550	505	572	3,020	2,900	1,710	988
16	1,270	931	690	600	560	550	510	610	3,080	2,860	1,670	973
17	1,260	917	690	590	560	550	510	660	3,170	2,770	1,640	966
18	1,240	903	680	590	560	550	500	720	3,170	2,720	1,630	945
19	1,250	895	680	590	560	550	492	804	3,160	2,650	1,580	938
20	1,220	884	670	580	560	550	492	924	3,140	2,630	1,550	924
21	1,220	875	670	590	550	550	496	1,020	3,110	2,630	1,530	917
22	1,220	860	670	590	550	550	492	1,100	3,110	2,590	1,510	889
23	1,210	840	670	590	550	550	492	1,170	3,140	2,570	1,490	896
24	1,210	834	660	590	550	545	496	1,240	3,170	2,520	1,480	889
25	1,200	820	660	590	550	540	500	1,230	3,180	2,460	1,430	858
26	1,200	800	660	570	530	520	496	1,350	3,200	2,440	1,400	861
27	1,150	790	660	570	530	520	496	1,460	3,250	2,400	1,360	861
28	1,130	780	660	570	530	525	505	1,490	3,300	2,370	1,330	854
29	1,150	770	650	570	530	540	496	1,510	3,340	2,330	1,310	847
30	1,130	750	650	570	530	535	492	1,520	3,390	2,300	1,270	834
31	1,110	740	650	570	530	535	492	1,550	3,400	2,270	1,260	834
TOTAL	35,030	27,988	21,320	18,570	15,550	16,940	15,074	26,160	41,410	88,380	53,070	29,785
MEAN	1,259	933	690	600	554	546	502	844	2,714	2,851	1,712	993
MAX	1,340	1,100	750	640	570	550	525	1,550	3,390	3,460	2,240	1,220
MIN	1,110	740	650	570	530	520	492	500	1,620	2,270	1,260	834
AC-FT	77,420	55,450	42,440	36,430	31,840	33,600	29,900	51,990	161,500	175,300	105,300	59,030

DAY YR 1972 TOTAL 461,262 MEAN 1,487 MAX 6,880 MIN 490 AC-FT 1,312,000

DAY YR 1973 TOTAL 433,447 MEAN 1,418 MAX 3,460 MIN 422 AC-FT 859,700

NOTE.--Stage-discharge relation affected by ice Nov. 25 to Mar. 19.

YELLOWSTONE RIVER BASIN

17

06191500 YELLOWSTONE RIVER AT CORWIN SPRINGS, MT.

LOCATION.--Lat 45°06'43", long 110°47'37", in SE¼NW¼ sec.30, T.8 S., R.8 E., Park County, on left bank 20 ft (6 m) downstream from highway bridge at Corwin Springs, 1.3 mi (2.1 km) upstream from Mol Herron Creek, 7 mi (11 km) northwest of Gardiner, and at mile 530.5 (853.6 km).

DRAINAGE AREA.--2,623 mi² (6,794 km²).

PERIOD OF RECORD.--August 1889 to November 1893 (published as "at Horr"), September 1910 to current year. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 5,079.09 ft (1,548.107 m) above mean sea level. Aug. 12, 1889, to Nov. 4, 1893, nonrecording gages at site 2 mi (3 km) upstream at different datums. Sept. 2, 1910, to Apr. 19, 1935, nonrecording gages on bridge at present datum.

AVERAGE DISCHARGE.--67 years, 3,103 ft³/s (87.9 m³/s), 16.06 in/yr (408 mm/yr), 2,248,000 acre-ft/yr (2,772 km³/yr).

EXTREMES.--Current year: Maximum discharge, 17,200 ft³/s (487 m³/s) June 10, gage height, 7.82 ft (2.384 m); minimum recorded, 828 ft³/s (23.4 m³/s) Apr. 8, but may have been less during periods of no gage-height record Dec. 7-15 or Jan. 7-11.

Period of record: Maximum discharge observed, 32,000 ft³/s (906 m³/s) June 14, 15, 1918, gage height, 11.5 ft (3.51 m), from rating curve extended above 18,000 ft³/s (510 m³/s); minimum observed, 389 ft³/s (11.0 m³/s) Feb. 23, Mar. 5, 9, 1937, gage height, 0.05 ft (0.015 m).

REMARKS.--Records good. Natural storage in Yellowstone Lake. Diversions for irrigation of about 960 acres, (3.89 km²) of which 40 acres (162,000 m²) lies below station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1309: 1912. WSP 1509: 1889-94, 1911, 1913, 1916-18, 1920-21, 1925, 1927. WSP 1559: 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	2,620	2,000	1,560	1,210	1,150	1,100	1,040	1,140	9,370	8,390	3,170	1,950
2	2,610	2,120	1,510	1,220	1,130	1,110	1,010	1,120	10,500	7,420	3,080	1,900
3	2,570	2,040	1,440	1,100	1,120	1,060	978	1,160	8,310	6,900	3,010	1,820
4	2,530	2,030	1,220	1,050	1,130	1,030	986	1,230	6,930	6,650	3,110	1,770
5	2,540	2,040	1,100	1,050	1,150	1,050	1,030	1,330	6,600	6,420	3,250	1,750
6	2,510	2,000	1,400	1,100	1,160	1,090	1,040	1,290	8,280	6,250	3,080	1,690
7	2,480	1,900	1,000	1,100	1,120	1,040	946	1,640	9,950	6,050	3,030	1,690
8	2,460	1,940	1,000	1,050	1,030	1,040	923	1,940	11,800	5,690	2,860	1,730
9	2,430	1,820	1,050	950	1,090	1,040	962	1,920	14,000	5,440	2,740	1,820
10	2,620	1,860	1,100	1,000	1,140	1,070	1,030	1,840	14,800	5,210	2,670	1,680
11	2,800	1,420	1,100	1,050	1,140	1,080	1,000	1,800	12,700	5,060	2,680	1,650
12	2,440	1,800	1,100	1,100	1,150	1,070	1,020	1,560	11,400	4,930	2,640	1,650
13	2,610	1,770	1,100	1,200	1,140	1,100	1,060	2,430	11,200	4,740	2,550	1,530
14	2,590	1,770	1,150	1,240	1,130	1,030	1,120	3,090	11,300	4,550	2,480	1,620
15	2,620	1,740	1,190	1,240	1,110	1,020	1,050	3,890	11,500	4,440	2,410	1,840
16	2,710	1,750	1,200	1,230	1,110	1,050	1,060	5,350	9,400	4,320	2,350	1,750
17	2,550	1,710	1,200	1,240	1,120	1,050	1,100	6,880	8,760	4,220	2,310	1,690
18	2,470	1,710	1,250	1,230	1,130	1,070	1,100	7,090	8,120	4,120	2,270	1,620
19	2,400	1,700	1,330	1,230	1,120	1,000	1,040	9,280	7,370	4,040	2,270	1,560
20	2,370	1,520	1,350	1,160	1,100	1,020	978	11,300	7,210	3,930	2,220	1,590
21	2,360	1,570	1,400	1,150	1,040	1,060	1,040	10,800	7,240	4,140	2,170	1,660
22	2,320	1,570	1,340	1,150	1,050	1,060	1,020	8,560	7,850	3,940	2,190	1,620
23	2,300	1,460	1,360	1,150	1,080	1,040	1,040	8,760	8,650	4,080	2,150	1,590
24	2,320	1,440	1,340	1,140	1,080	1,010	1,080	8,180	9,070	3,780	2,140	1,680
25	2,270	1,500	1,320	1,150	1,100	1,020	1,100	9,820	8,790	3,610	2,070	1,710
26	2,310	1,590	1,300	1,140	1,100	1,050	1,100	9,160	8,480	3,580	2,000	1,690
27	2,220	1,440	1,320	1,150	1,100	1,050	1,150	7,240	8,370	3,520	1,920	1,630
28	2,150	1,400	1,310	1,080	1,090	1,040	1,260	6,120	8,650	3,440	1,910	1,590
29	2,120	1,460	1,300	1,150	-----	986	1,230	5,650	9,430	3,250	1,860	1,560
30	1,820	1,550	1,140	1,140	-----	1,040	1,200	5,400	9,190	3,300	1,830	1,520
31	1,860	-----	1,210	1,160	-----	1,040	-----	6,650	-----	3,250	1,800	-----
TOTAL	75,310	52,340	38,330	35,370	31,110	32,526	31,753	155,070	245,220	148,800	76,220	50,620
MEAN	2,429	1,745	1,233	1,141	1,111	1,049	1,034	5,002	9,507	4,800	2,459	1,687
MAX	2,900	2,120	1,560	1,240	1,160	1,110	1,290	11,300	14,800	8,390	3,250	1,950
MIN	1,860	1,400	1,000	950	1,030	986	923	1,120	6,600	3,250	1,800	1,520
CFSM	.93	.57	.47	.44	.42	.40	.40	1.91	3.62	1.83	.94	.64
IN	1.07	.74	.54	.50	.44	.46	.45	2.20	4.05	2.11	1.08	.72
AC-FT	140,400	103,800	76,150	70,160	61,710	64,520	62,480	307,600	565,700	295,100	151,200	100,400
DAY YR 1972	TOTAL 1,454,670	MEAN 3,975	MAX 21,900	MIN 785	CFSM 1.52	IN 20.63	AC-FT 2,845,000					
DAY YR 1973	TOTAL 1,012,120	MEAN 2,775	MAX 14,800	MIN 923	CFSM 1.06	IN 14.36	AC-FT 2,009,000					

PEAK DISCHARGE (BASE, 12,000 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE
5-21	0400	6.60	12,700
6-10	0430	7.82	17,200

06207500 CLARKS FORK YELLOWSTONE RIVER NEAR BELFRY, MT.

LOCATION.--Lat 45°00'40", long 109°04'00", in E4NE4 sec.31, T.9 S., R.22 E., Carbon County, on left bank 0.4 mi (0.6 km) upstream from county road bridge and Big Sand Coulee, 0.8 mi (1.3 km) north of Wyoming-Montana State line, 9.5 mi (15.3 km) southwest of Belfry, and at mile 78.5 (126.3 km).

DRAINAGE AREA.--1,154 mi² (2,989 km²).

PERIOD OF RECORD.--July 1921 to current year. Monthly discharge only for some periods, published in WSP 1309. Published as Clarks Fork at Chance prior to October 1956 and as Clarks Fork Yellowstone River at Chance October 1956 to September 1968.

GAGE.--Water-stage recorder. Altitude of gage is 3,980 ft (1,210 m), from topographic map. Prior to Nov. 15, 1934, nonrecording gage, and Nov. 15, 1934, to July 26, 1951, water-stage recorder at bridge 0.4 mi (0.6 km) downstream at different datum. July 27, 1951, to Sept. 30, 1953, water-stage recorder at present site at datum 0.98 ft (0.299 m) higher.

AVERAGE DISCHARGE.--52 years, 944 ft³/s (26.7 m³/s), 683,900 acre-ft/yr (843 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,380 ft³/s (209 m³/s) June 10; gage height, 6.78 ft (2.067 m); minimum, 179 ft³/s (5.07 m³/s) Sept. 8, gage height, 1.05 ft (0.320 m), but may have been less during period of ice effect.

Period of record: Maximum discharge observed, 10,900 ft³/s (309 m³/s) May 26, 1928, gage height, 6.5 ft (1.98 m), site and datum then in use; minimum observed, 32 ft³/s (0.91 m³/s) Apr. 26, 1961, result of discharge measurement.

REMARKS.--Records good. Diversions for irrigation of about 11,100 acres (44.9 km²) above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1309: 1922(M). WSP 1729: 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	531	442	417	296	259	251	233	244	2,340	4,280	570	271
2	525	522	368	301	255	255	229	240	3,780	3,390	540	292
3	511	505	240	260	259	248	233	233	3,190	2,650	534	288
4	504	487	250	250	263	237	229	267	2,310	2,340	534	259
5	541	486	270	230	263	244	229	336	1,800	2,300	648	233
6	535	478	260	220	229	248	255	336	2,200	2,340	624	207
7	561	447	260	210	284	233	240	433	3,200	2,420	746	193
8	532	433	240	200	255	240	222	528	4,670	2,310	618	630
9	522	444	240	210	248	240	218	516	5,850	1,990	546	870
10	519	433	240	240	271	240	240	344	6,770	1,770	488	494
11	568	433	250	260	280	244	233	311	5,760	1,640	499	433
12	563	422	260	290	267	240	244	311	4,790	1,600	540	466
13	554	411	280	320	263	240	276	466	4,300	1,470	516	433
14	556	384	300	360	251	240	321	660	4,350	1,310	499	411
15	542	417	330	380	244	229	292	846	4,690	1,130	455	570
16	551	411	340	346	248	229	271	1,330	3,630	1,040	428	672
17	531	395	360	326	251	233	271	2,000	2,660	974	395	660
18	512	378	370	301	248	240	284	2,450	2,090	958	384	582
19	490	395	357	292	248	237	259	3,280	1,590	1,020	417	534
20	479	373	346	284	240	229	244	3,860	1,450	958	400	516
21	469	321	368	263	237	237	222	3,940	1,450	1,070	378	534
22	456	288	417	271	240	240	193	5,090	1,520	1,050	362	510
23	457	264	568	251	244	233	200	2,940	2,510	1,250	346	494
24	524	311	357	284	244	229	218	2,720	3,030	950	326	483
25	478	321	341	284	248	225	222	3,150	3,120	823	306	505
26	496	346	331	260	255	233	214	3,110	3,280	730	280	510
27	500	378	351	267	255	251	222	2,320	3,310	704	255	477
28	479	311	357	240	248	248	311	1,730	3,700	678	237	472
29	481	284	346	284	-----	237	373	1,410	4,300	678	225	450
30	449	331	341	284	-----	233	292	1,140	4,710	684	211	422
31	383	-----	276	267	-----	233	-----	1,430	-----	518	204	-----
TOTAL	15,799	11,871	9,831	8,555	7,101	7,396	7,498	46,041	102,630	47,134	13,511	13,871
MEAN	510	396	317	274	254	239	250	1,445	3,421	1,520	436	462
MAX	568	522	417	360	284	255	373	3,940	6,770	4,280	746	870
MIN	383	284	240	200	229	225	193	233	1,430	618	204	193
AC=FT	31,340	23,550	19,500	16,970	14,080	14,670	14,670	91,320	203,600	93,490	26,800	27,510
CAL YR 1972	TOTAL 455,929	MEAN 1,246	MAX 9,500	MIN 230	AC=FT 904,300							
WTR YR 1973	TOTAL 291,238	MEAN 798	MAX 6,770	MIN 193	AC=FT 577,700							

PEAK DISCHARGE (BASE, 5,400 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE
6-10	0545	6.78	7,380

YELLOWSTONE RIVER BASIN

19

06207507 BIG SAND COULEE ABOVE STATE DITCH, NEAR BADGER BASIN, WYO.

LOCATION.--Lat 44°55'30, long 109°00'38", in NW¼SE¼NE¼ sec.14, T.57 N., R.101 W., Park County, on left bank
1.8 mi (2.9 km) upstream from return from state ditch and 3.0 mi (4.8 km) east of Badger Basin.

DRAINAGE AREA.--98.3 mi² (254.6 km²).

PERIOD OF RECORD.--May to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 4,150 ft (1,265 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 243 ft³/s (6.88 m³/s) Sept. 8, gage height, 4.89 ft (1.490 m),
from rating curve extended above 10 ft³/s (0.283 m³/s) on basis of slope-area measurements at gage
height 1.98 ft (0.604 m) and 4.89 ft (1.490 m); no flow on many days.

REMARKS.--Records poor. No diversion above station. Natural flow of stream can be affected by release of
wastewater from Heart Mountain Canal into headwaters. Water-quality records for the current year 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								0	1.1	0	0	37
2								0	.57	0	0	14
3								0	.18	0	0	6.1
4								0	.12	0	0	5.1
5								.50	0	0	0	3.5
6								.70	0	0	0	2.9
7								2.0	0	0	0	2.6
8								5.0	0	0	0	94
9								4.0	0	0	0	30
10								3.5	0	0	0	9.6
11								2.8	0	0	0	4.9
12								2.0	0	0	0	3.7
13								1.4	0	0	0	2.5
14								.72	0	0	0	2.6
15								0	0	0	0	5.5
16								0	0	0	0	5.7
17								0	0	0	0	4.4
18								0	0	0	0	3.9
19								0	0	1.7	0	3.5
20								0	0	1.1	0	3.7
21								0	0	.78	0	3.2
22								2.2	0	.46	0	2.4
23								2.4	0	2.0	0	1.9
24								2.7	0	.37	0	1.3
25								3.2	0	0	0	.65
26								1.4	0	0	0	.50
27								0	0	0	0	.50
28								2.4	0	0	.24	.45
29								6.4	0	.01	.57	.45
30								7.0	0	.13	.10	.40
31								4.6	-----	.01	0	-----
TOTAL								55.22	1.97	6.56	.91	256.95
MEAN								1.80	.066	.21	.029	8.57
MAX								7.0	1.1	2.0	.57	94
MIN								0	0	0	0	.40
AC-FT								115	2.6	13	1.8	510

YELLOWSTONE RIVER BASIN

06207510 BIG SAND COULEE AT WYOMING-MONTANA STATE LINE

LOCATION.--Lat 45°00'17", long 109°03'29", in SE¼NE¼SW¼ sec.32, T.9 S., R.22 E., Carbon County, Mont., on right bank 0.3 mi (0.5 km) north of Wyoming-Montana State line and 0.5 mi (0.8 km) upstream from mouth.

DRAINAGE AREA.--134 mi² (347 km²).

PERIOD OF RECORD.--May to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 4,000 ft (1,219 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 365 ft³/s (10.3 m³/s) Sept. 9, gage height, 4.75 ft (1.448 m), from rating curve extended above 100 ft³/s (2.83 m³/s) on basis of slope-area measurement of peak flow; minimum daily during period of operation, 23 ft³/s (0.65 m³/s) May 22.

REMARKS.--Records fair. No diversion above station. Water-quality records for the current year 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								45	42	61	41	93
2								45	57	60	39	122
3								45	64	57	36	98
4								45	53	67	36	93
5								48	44	57	47	85
6								55	34	53	40	78
7								60	30	50	38	69
8								70	34	53	38	161
9								60	35	50	34	171
10								55	44	40	34	103
11								47	43	40	38	103
12								50	36	41	45	104
13								62	33	40	45	106
14								63	36	47	43	108
15								53	36	47	46	114
16								40	40	38	50	103
17								40	41	45	51	100
18								38	44	45	50	100
19								36	44	46	72	98
20								39	45	55	67	96
21								33	35	66	65	96
22								23	35	73	75	96
23								25	52	85	71	96
24								31	66	98	73	97
25								33	67	100	78	96
26								33	58	98	80	96
27								34	52	98	69	96
28								44	47	77	58	94
29								48	56	72	52	91
30								45	61	64	46	90
31	-----				-----		-----	44	-----	52	48	-----
TOTAL								1,339	1,569	1,881	1,611	3,053
MEAN								44.8	45.6	60.7	52.0	102
MAX								70	67	100	80	171
MIN								23	30	33	34	69
AC-FT								2,760	2,720	3,730	3,200	6,060

YELLOWSTONE RIVER BASIN

21

06207540 SILVER TIP CREEK NEAR BELFRY, MT.

LOCATION.--Lat 45°09'32", long 108°58'31", in NE¼NW¼ sec.12, T.8 S., R.22 E., Carbon County, on right bank 0.1 mi (0.2 km) upstream from county bridge, 1.5 mi (2.4 km) upstream from mouth, and 2.0 mi (3.2 km) north-east of Belfry.

DRAINAGE AREA.--88.0 mi² (228 km²). Area at site used prior to May 12, 1972, 87.6 mi² (227 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 3,830 ft (1,170 m), from topographic map. Prior to May 12, 1972, at site 0.4 mi (0.6 km) upstream at different datums.

AVERAGE DISCHARGE.--6 years, 2.51 ft³/s (0.071 m³/s), 1,820 acre-ft/yr (2.24 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 388 ft³/s (11.0 m³/s) Sept. 8, gage height, 8.06 ft (2.457 m), from floodmark, from rating curve extended above 20 ft³/s (0.57 m³/s) on basis of slope-area measurement of peak flow at gage height 10.5 ft (3.200 m); no flow at times.

Period of record: Maximum discharge, 1,100 ft³/s (31.2 m³/s) June 9, 1972, gage height, 10.5 ft (3.200 m), from floodmark, from rating curve extended above 20 ft³/s (0.57 m³/s) on basis of slope-area measurement of peak flow (includes 100 ft or 2.83 m³/s, bypass flow in Clarks Fork and Silver Tip Ditch); no flow at times each year.

REMARKS.--Records poor. Flow affected by oil recovery operations in Elk Basin oil field. No diversions above station. Water quality records for the current year 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	1.3	2.5	0	0	.20	2.2	8.0	20	.20	.10	.80	25
2	1.0	2.3	.20	0	.10	2.1	10	20	.20	0	.50	9.5
3	1.0	2.1	.20	0	.40	2.0	9.0	18	.20	.13	.50	2.0
4	1.0	2.0	.10	0	.80	1.8	7.5	17	.10	.70	1.9	1.3
5	2.0	2.0	0	0	.60	1.6	6.0	14	.10	.15	3.8	1.0
6	2.6	2.0	0	0	.30	1.5	5.0	9.8	.10	0	1.8	.10
7	1.2	1.8	0	0	0	1.4	1.5	5.4	.10	0	1.2	1.1
8	1.0	2.0	0	0	0	1.3	1.5	4.0	.10	0	.50	65
9	.70	1.8	0	0	0	1.2	3.0	3.3	0	0	.60	11
10	.70	1.8	0	0	0	1.1	5.0	3.0	0	0	.20	1.0
11	1.5	.90	0	0	0	1.0	6.0	2.7	0	0	.30	.10
12	2.6	.50	0	0	0	1.0	6.5	2.5	0	0	.50	0
13	2.2	.30	0	0	0	.90	7.0	2.4	0	0	.60	0
14	2.5	.20	0	0	0	.90	9.3	2.3	0	0	.60	0
15	3.0	.20	0	10	0	.90	6.5	2.3	0	.09	.40	1.4
16	3.4	.20	0	7.5	0	.80	5.0	2.2	0	.80	.20	1.4
17	3.4	.10	0	5.0	0	1.6	3.8	2.2	0	.45	.10	.90
18	3.4	.10	0	4.0	0	2.0	3.0	2.2	0	0	0	.20
19	3.6	.10	0	3.0	1.0	2.2	2.0	2.2	.40	0	.10	0
20	3.6	.10	0	2.0	2.0	2.5	1.5	2.5	.40	33	.20	0
21	3.8	.10	.10	1.5	3.0	2.8	1.5	2.8	0	4.8	.30	0
22	3.0	.10	.20	1.0	4.0	3.1	2.4	3.1	0	4.0	.80	0
23	3.4	.30	.20	.90	5.0	3.4	30	3.4	0	5.4	.30	0
24	4.4	.30	.20	.80	5.0	3.8	40	2.8	0	5.0	.30	1.4
25	4.0	.20	.20	.70	5.0	4.2	46	2.6	0	1.1	.20	.40
26	3.5	.20	.20	.60	5.0	4.6	31	2.0	0	.70	1.0	0
27	3.2	.10	.20	.50	4.4	6.0	31	1.4	0	.50	.50	0
28	3.0	.10	.20	.40	3.0	7.0	30	1.0	0	.10	0	.50
29	2.0	0	0	.40	-----	8.0	23	.60	.10	.10	.50	0
30	1.0	0	0	.30	-----	9.0	19	.40	.90	.40	.60	0
31	1.5	-----	0	.20	-----	9.0	-----	.30	-----	.50	.30	-----
TOTAL	74.50	24.40	2.00	38.80	39.80	90.90	361.0	158.40	2.90	58.02	19.60	123.30
MFAN	2.40	.81	.065	1.25	1.42	2.93	12.0	5.11	.097	1.87	.63	4.11
MAX	4.4	2.5	.20	10	5.0	9.0	46	20	.90	33	3.8	65
MIN	.70	0	0	0	0	.80	1.5	.30	0	0	0	0
AC-FT	148	48	4.0	77	79	180	716	314	5.8	115	39	245
CAL YR 1972	TOTAL 1,710.85	MEAN 4.67	MAX 170	MIN 0	AC-FT 3,390							
WTR YR 1973	TOTAL 993.62	MEAN 2.72	MAX 65	MIN 0	AC-FT 1,970							

PEAK DISCHARGE (BASE, 60 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE
7-20	0400	7.30	150
9-1	2000	7.10	116
9-8	1800	8.06	388

YELLOWSTONE RIVER BASIN

06218500 WIND RIVER NEAR DUBOIS, WYO.

LOCATION.--Lat 43°34'43", long 109°45'33", in NW¼NE¼ sec.25, T.42 N., R.108 W., Fremont County, on left bank 2.5 mi (4.0 km) upstream from Warm Springs Creek and 7.0 mi (11.3 km) northwest of Dubois.

DRAINAGE AREA.--232 mi² (601 km²).

PERIOD OF RECORD.--October 1945 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,188.71 ft (2,191.119m) above mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--28 years, 177 ft³/s (5.013m³/s), 128,200 acre-ft/yr (158 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,220 ft³/s (34.6 m³/s) May 19, gage height, 4.73 ft (1.442 m); minimum daily, 49 ft³/s (1.39 m³/s) Mar. 31.

Period of record: Maximum discharge, 1,940 ft³/s (54.9 m³/s) June 8, 1972, gage height, 5.48 ft (1.670 m); maximum gage height, 5.66 ft (1.725 m) June 2, 1956; minimum daily discharge, 30 ft³/s (0.85 m³/s) Dec. 12, 1949, Jan. 5, 1950, Nov. 20, 1957.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. Diversions above station for irrigation of about 2,300 acres (9.31 km²), of which about 110 acres (45 hm²) lies below station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1709: 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	113	90	91	75	90	60	50	86	499	322	107	85
2	111	105	87	73	86	59	51	80	546	243	102	95
3	106	110	82	72	84	56	52	92	408	221	104	88
4	106	102	75	69	83	57	53	114	320	216	128	78
5	119	102	70	66	85	60	64	127	300	206	125	73
6	115	98	67	64	83	60	81	157	382	199	112	71
7	123	91	70	61	79	57	73	171	473	195	103	74
8	120	98	71	61	76	55	63	164	586	180	95	84
9	115	91	74	63	72	56	60	143	629	163	91	106
10	134	86	78	68	69	58	66	140	676	149	95	85
11	136	99	83	74	71	60	73	166	601	136	100	83
12	120	94	85	80	75	60	99	197	426	136	93	86
13	119	91	88	84	78	57	108	269	415	145	91	78
14	123	88	90	88	75	54	127	328	402	144	89	76
15	116	91	95	85	72	52	118	406	465	131	85	81
16	118	90	98	82	70	51	105	559	315	126	83	84
17	111	89	102	80	67	52	93	730	323	121	83	83
18	109	87	101	78	65	53	84	845	294	120	88	75
19	107	85	99	75	66	52	73	981	262	132	89	73
20	113	80	98	74	67	50	70	902	277	182	86	73
21	152	77	100	73	66	52	68	653	250	229	83	74
22	135	73	98	73	63	53	76	514	260	179	89	73
23	117	78	94	75	60	54	90	541	296	165	90	77
24	118	84	90	77	59	54	97	562	299	146	96	89
25	110	79	85	80	56	55	85	655	289	154	88	87
26	114	84	84	84	56	56	84	495	317	134	82	81
27	98	75	82	86	59	55	117	343	329	133	79	77
28	85	78	80	84	60	54	146	292	340	129	78	75
29	95	83	78	80	-----	52	120	310	331	122	77	73
30	85	88	77	86	-----	50	90	283	383	119	75	71
31	82	-----	76	90	-----	49	-----	373	-----	110	74	-----
TOTAL	3,525	2,666	2,648	2,360	1,992	1,703	2,536	11,678	11,693	5,087	2,860	2,408
MEAN	114	88.9	85.4	76.1	71.1	54.9	84.5	377	390	164	92.3	80.3
MAX	152	110	102	90	90	60	146	981	676	322	128	106
MIN	82	73	67	61	56	49	50	80	250	110	74	71
AC=FT	6,990	5,290	5,250	4,680	3,950	3,380	5,030	23,160	23,190	10,090	5,670	4,780

CAL YR 1972 TOTAL 92,182 MEAN 252 MAX 1,870 MIN 64 AC=FT 182,800
WTR YR 1973 TOTAL 51,156 MEAN 140 MAX 981 MIN 49 AC=FT 101,500

PEAK DISCHARGE (BASE, 850 FT³/S)

NOTE.--No gage-height record Feb. 8 to Apr. 5.

DATE TIME G.HT. DISCHARGE
5-19 0300 4.73 1,220

YELLOWSTONE RIVER BASIN

23

06221400 DINWOODY CREEK ABOVE LAKES, NEAR BURRIS, WYO.

LOCATION.--Lat 43°20'44", long 109°24'34", in SE¼SE¼ sec.1, T.4 N., R.6 W., Fremont County, Wind River Indian Reservation, on left bank 0.5 mi (0.8 km) upstream from Upper Dinwoody Lake, 7.0 mi (11.3 km) west of Burris, and 17 mi (27 km) southeast of Dubois.

DRAINAGE AREA.--88.2 mi² (228 km²). Drainage area at mouth, 100 mi² (259 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,500 ft (1,981 m), from topographic map.

AVERAGE DISCHARGE.--16 years, 144 ft³/s (4.078 m³/s), 104,300 acre-ft/yr (129 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,000 ft³/s (28.3 m³/s) Sept. 11, gage height, 4.26 ft (1.298 m); minimum daily, 5.9 ft³/s (0.17 m³/s) Mar. 5.

Period of record: Maximum discharge, 1,400 ft³/s (39.6 m³/s) June 18, 1971, gage height, 4.57 ft (1.393 m); minimum daily, 2.2 ft³/s (0.062 m³/s) Mar. 4, 1963.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. 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	51	31	17	12	7.1	6.4	8.5	14	246	579	335	212
2	47	32	16	12	7.1	6.4	8.3	14	298	483	366	215
3	43	32	15	12	7.0	6.3	8.5	16	243	420	335	212
4	43	32	13	11	7.1	6.0	9.0	21	178	522	420	201
5	46	32	12	11	7.0	5.9	9.8	23	141	498	448	201
6	48	25	11	10	6.9	6.1	11	26	166	490	420	209
7	49	27	10	10	6.7	6.2	11	31	263	483	378	250
8	49	27	10	9.6	6.5	6.2	10	34	390	476	330	294
9	47	22	11	9.6	6.2	6.4	9.4	33	441	469	315	434
10	47	24	11	9.0	6.2	6.4	9.3	27	522	441	320	414
11	49	25	11	9.0	6.3	6.4	9.8	29	514	441	330	820
12	48	24	12	9.4	6.5	6.7	12	33	384	469	325	730
13	47	22	12	10	6.9	6.8	14	42	378	490	325	498
14	47	28	13	10	6.6	6.7	15	56	390	490	315	384
15	47	24	15	10	6.5	7.3	13	77	414	408	306	340
16	47	23	16	9.8	6.7	7.4	12	141	286	384	302	288
17	43	22	17	9.5	6.8	7.5	12	270	233	384	330	238
18	42	20	17	9.2	7.0	7.6	9.8	366	198	390	378	194
19	42	19	18	9.0	7.1	7.2	9.3	483	162	455	378	162
20	43	18	18	8.8	7.2	7.3	9.0	506	157	730	378	146
21	43	17	17	8.7	7.1	7.3	9.3	414	169	790	390	137
22	42	15	17	8.6	7.0	7.3	11	270	215	514	378	126
23	39	15	16	8.5	6.8	7.3	12	243	274	434	384	124
24	40	16	16	8.4	6.7	7.6	13	239	325	372	448	121
25	36	16	15	8.3	6.5	7.8	13	315	345	335	378	109
26	43	18	15	8.2	6.6	8.3	13	270	390	310	310	97
27	31	16	14	7.9	6.7	8.5	16	180	483	315	282	94
28	35	14	14	7.8	6.6	8.1	20	139	506	350	230	89
29	35	15	13	7.6	-----	8.1	19	133	562	360	215	83
30	34	16	13	7.5	-----	8.3	16	133	588	355	221	80
31	32	-----	12	7.4	-----	8.3	-----	175	-----	340	218	-----
TOTAL	1,535	667	437	289.8	189.3	220.1	353.0	4,753	9,861	13,977	10,488	7,502
MEAN	43.1	22.2	14.1	9.35	6.76	7.10	11.8	155	329	451	338	250
MAX	51	32	18	12	7.2	8.5	20	506	588	790	448	820
MIN	31	14	10	7.4	6.2	5.9	8.3	14	141	310	215	80
AC-FT	2,650	1,320	867	575	375	437	700	9,430	19,560	27,720	20,800	14,880

CAL YR 1972 TOTAL 53,641.9 MEAN 146 MAX 821 MIN 8.7 AC-FT 106,290
WTR YR 1973 TOTAL 50,072.2 MEAN 157 MAX 820 MIN 5.9 AC-FT 59,320

PEAK DISCHARGE (BASE, 700 FT³/S)

NOTE.--No gage-height record Dec. 11 to Mar. 14.

DATE	TIME	G.H.T	DISCHARGE
7-21	0330	4.25	992
9-11	1630	4.26	1000

06222700 CROW CREEK NEAR TIPPERARY, WYO.

LOCATION.--Lat 43°34'20", long 109°15'40", in sec.20, T.7 N., R.4 W., Fremont County, Wind River Indian Reservation, on right bank 300 ft (91 m) upstream from mouth of Crow Creek Canyon, 5.0 mi (8.0 km) north of Tipperary, and 19 mi (31 km) north of Crowheart.

DRAINAGE AREA.--30 mi² (78 km²), approximately.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,600 ft (2,621 m), from topographic map.

AVERAGE DISCHARGE.--11 years, 23.2 ft³/s (0.657 m³/s), 16,810 acre-ft/yr (20.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 289 ft³/s (8.18 m³/s) May 18, gage height, 4.68 ft (1.426 m); minimum daily, 2.2 ft³/s (0.062 m³/s) Jan. 8.

Period of record: Maximum discharge, 568 ft³/s (16.1 m³/s) June 16, 1965, gage height, 5.20 ft (1.585 m), from rating curve extended above 220 ft³/s (6.23 m³/s) on basis of velocity-area study; maximum gage height, 5.54 ft (1.689 m) Feb. 18, 1966 (backwater from ice); minimum daily discharge, 0.50 ft³/s (0.014 m³/s) Feb. 2, 1970.

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

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

DAY	UCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	6.2	4.6	3.1	2.8	3.4	3.6	4.5	77	35	13	7.9
2	6.5	6.0	4.7	2.9	2.7	3.4	3.7	4.7	68	25	16	7.2
3	6.0	5.8	4.5	2.7	2.7	3.2	3.7	5.5	47	24	14	6.8
4	6.3	5.5	3.9	2.5	2.8	3.2	3.8	9.0	33	23	19	6.0
5	7.5	5.5	2.9	2.4	2.8	3.3	3.8	15	36	21	21	5.8
6	7.5	5.4	2.5	2.4	2.7	3.3	3.9	19	66	21	17	6.0
7	7.2	5.2	2.6	2.3	2.6	3.3	3.7	21	84	20	14	6.3
8	7.2	5.1	2.5	2.2	2.5	3.4	3.3	19	95	17	12	16
9	7.2	5.2	2.7	2.3	2.3	3.3	3.2	16	91	16	12	12
10	7.5	5.0	2.8	2.4	2.3	3.4	3.3	16	82	14	12	11
11	7.2	4.9	3.0	2.5	2.4	3.4	3.4	22	58	14	11	23
12	6.5	4.8	3.1	2.8	2.4	3.4	3.5	37	47	14	9.8	19
13	6.8	4.7	3.3	3.3	2.5	3.4	3.5	62	45	14	9.8	15
14	6.8	4.5	3.3	3.6	2.5	3.3	3.4	91	52	12	9.0	15
15	6.8	4.6	3.4	3.5	2.4	3.2	3.0	136	41	12	7.9	14
16	6.5	4.5	3.5	3.4	2.3	3.2	3.0	168	24	11	7.5	14
17	6.5	4.4	3.6	3.2	2.4	3.3	3.5	182	25	10	7.2	12
18	6.3	4.5	3.9	3.1	2.5	3.4	3.2	178	20	10	7.5	10
19	6.3	4.6	4.0	3.0	2.6	3.3	3.0	172	18	15	7.5	10
20	7.1	4.5	3.9	3.0	2.6	3.4	2.9	128	23	32	6.5	10
21	7.0	4.8	3.9	2.9	2.7	3.5	2.9	63	34	25	6.5	10
22	6.6	4.6	3.8	2.9	2.6	3.6	3.0	59	45	18	8.6	9.0
23	6.3	4.5	3.7	2.8	2.6	3.5	3.5	77	44	18	7.2	8.6
24	6.0	4.6	3.6	2.8	2.7	3.5	3.5	74	39	18	6.8	7.9
25	6.0	4.7	3.6	2.9	2.8	3.5	3.5	63	40	17	6.3	8.6
26	6.0	4.7	3.7	2.9	3.1	3.5	3.7	40	40	14	5.8	7.2
27	5.8	4.4	3.6	2.9	3.3	3.5	4.5	28	47	16	5.8	7.2
28	6.0	4.2	3.4	2.8	3.3	3.5	7.9	27	48	17	5.8	7.2
29	5.9	4.1	3.4	2.7	-----	3.5	6.5	32	51	17	5.5	6.5
30	6.1	4.3	3.3	2.9	-----	3.4	5.5	28	47	15	5.2	6.5
31	6.3	-----	3.2	2.8	-----	3.5	-----	65	-----	14	5.2	-----
TOTAL	204.5	145.8	107.9	87.9	73.9	105.0	112.9	1,861.7	1,467	549	502.4	505.7
MEAN	6.60	4.86	3.48	2.84	2.64	3.39	3.76	60.1	48.9	17.7	9.75	10.2
MAX	7.5	6.2	4.7	3.6	3.3	3.6	7.9	182	95	45	21	23
MIN	5.8	4.1	2.5	2.2	2.3	3.2	2.9	4.5	18	10	5.2	5.8
AC=FT	406	289	214	174	147	208	224	3,690	2,910	1,090	600	606
CAL YR 1972	TOTAL	11,863.2	MEAN	32.4	MAX	376	MIN	2.3	AC=FT	23,530		
WTR YR 1973	TOTAL	5,323.7	MEAN	14.6	MAX	182	MIN	2.2	AC=FT	10,560		

PEAK DISCHARGE (BASE, 180 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
5-18	2230	4.68	289

YELLOWSTONE RIVER BASIN

25

06224000 BULL LAKE CREEK ABOVE BULL LAKE, WYO.

LOCATION.--Lat 43°10'37", long 109°12'08", in NE¼SW¼ sec.2, T.2 N., R.4 W., Fremont County, Wind River Indian Reservation, on left bank 1.2 mi (1.9 km) upstream from high-water line of Bull Lake and 9.0 mi (14.5 km) south of Crowheart.

DRAINAGE AREA.--187 mi² (484 km²).

PERIOD OF RECORD.--June 1941 to December 1953, October 1966 to current year. Monthly discharge only for some periods, published in WSP 1309. Prior to October 1950, published as "above Bull Lake Reservoir."

GAGE.--Water-stage recorder. Altitude of gage is 5,874 ft (1,790 m), from topographic map.

AVERAGE DISCHARGE.--19 years (1941-53, 1966-73), 308 ft³/s (8.723m³/s), 223,100 acre-ft/yr (275 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,960 ft³/s (55.5 m³/s) Sept. 11, gage height, 5.58 ft (1.701 m); minimum daily, 18 ft³/s (0.51 m³/s) Feb. 5.

Period of record: Maximum discharge, 3,420 ft³/s (96.9 m³/s) June 18, 1971, gage height, 7.05 ft (2.149 m); minimum, 5.2 ft³/s (0.15 m³/s) Jan. 28, 1970, gage height, 1.44 ft (0.439 m).

REMARKS.--Records good except those for winter period, which are poor. No 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	113	92	39	31	26	20	23	50	638	1,390	486	278
2	111	92	34	30	27	20	24	47	772	1,190	479	390
3	109	87	30	29	26	19	24	48	719	964	485	364
4	104	83	28	28	26	19	24	57	577	884	517	356
5	117	81	27	27	25	19	27	64	473	863	649	381
6	126	77	26	26	25	18	28	67	516	885	674	430
7	131	74	26	25	25	18	28	94	735	898	599	485
8	133	72	27	25	24	18	24	91	972	884	515	631
9	133	71	28	27	23	19	25	93	1,290	844	457	765
10	145	67	28	29	23	19	26	80	1,650	797	429	657
11	155	67	30	31	24	19	26	90	1,780	769	422	1,630
12	147	65	32	33	25	20	28	103	1,490	786	415	1,530
13	142	58	33	35	25	21	31	126	1,330	825	399	1,120
14	147	59	35	32	26	21	35	157	1,300	854	387	861
15	150	62	37	29	24	21	31	200	1,400	755	375	707
16	157	55	39	26	25	21	30	287	1,040	646	363	628
17	150	56	40	24	24	22	30	452	787	610	357	575
18	142	47	40	26	25	22	31	656	621	602	378	498
19	133	46	38	26	23	21	31	963	488	648	397	433
20	133	47	37	27	23	22	30	1,260	432	856	409	378
21	140	46	35	28	22	22	30	1,300	425	1,120	424	362
22	140	33	35	29	22	22	30	938	510	935	432	343
23	135	41	35	30	21	22	33	807	664	741	431	319
24	137	43	34	31	21	22	40	817	777	631	482	314
25	131	35	34	30	20	23	38	930	892	573	492	298
26	128	47	34	29	20	24	37	865	1,040	509	424	284
27	119	42	34	29	20	23	42	627	1,240	497	371	267
28	109	33	33	28	20	24	58	499	1,360	524	348	252
29	111	32	33	29	-----	24	63	467	1,430	530	301	238
30	104	35	33	28	-----	23	52	429	1,490	541	276	228
31	96	-----	32	27	-----	24	-----	462	-----	519	264	-----
TOTAL	4,028	1,745	1,026	884	660	652	979	13,126	28,838	24,070	13,437	16,002
MEAN	130	58.2	33.1	28.5	23.6	21.0	32.6	423	961	776	433	533
MAX	157	92	40	35	27	24	63	1,300	1,780	1,390	674	1,630
MIN	96	32	26	24	20	18	23	47	425	497	264	228
AC-FT	7,990	3,460	2,040	1,750	1,310	1,290	1,940	26,040	57,200	47,740	26,650	31,740

CAL YR 1972 TOTAL 120,066 MEAN 328 MAX 2,480 MIN 26 AC-FT 238,200
WTR YR 1973 TOTAL 105,447 MEAN 289 MAX 1,780 MIN 18 AC-FT 209,200

PEAK DISCHARGE (BASE, 1,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-21	0100	5.04	1,500	6-30	0830	5.10	1,540
6-11	0830	5.55	1,920	9-11	1200	5.58	1,960

YELLOWSTONE RIVER BASIN

06225000 BULL LAKE CREEK NEAR LENORE, WYO.

LOCATION.--Lat 43°14'33", long 109°01'20", in NE¼NW¼ sec.17, T.3 N., R.2 W., Fremont County, Wind River Indian Reservation, on left bank 700 ft (213 m) upstream from mouth, 2.8 mi (4.5 km) downstream from Bull Lake, and 8.5 mi (13.1 km) southeast of Lenore.

DRAINAGE AREA.--213 mi² (552 km²), of which 12 mi² (31.1 km²) is probably noncontributing.

PERIOD OF RECORD.--May 1918 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,654 ft (1,723 m), from topographic map. May 18, 1918, to Sept. 30, 1922, at site 10 ft (3.0 m) upstream at datum 0.86 ft (0.262 m) higher; Oct. 1, 1922, to Oct. 3, 1934, at present site at datum 2.00 ft (0.610 m) lower.

AVERAGE DISCHARGE.--55 years, 280 ft³/s (7.930 m³/s), 202,900 acre-ft/yr (250 hm³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 3,130 ft³/s (88.6 m³/s) July 22, gage height, 5.31 ft (1.618 m); minimum daily, 18 ft³/s (0.51 m³/s) May 21, 22.

Period of record: Maximum discharge, 6,200 ft³/s (176 m³/s) Aug. 8, 1951, gage height, 7.09 ft (2.161 m), result of automatic spillway gates releasing on Bull Lake Dam, from rating curve extended above 2,000 ft³/s (56.6 m³/s) on basis of slope-area measurement of peak flow; minimum prior to construction of Bull Lake Dam not determined, probably occurred during period of ice effect in March 1933; no flow Feb. 28 to Apr. 7, 1937 (result of regulation).

REMARKS.--Records fair except those for periods of no gage-height record, which are poor. Flow completely regulated by Bull Lake 2.8 mi (4.5 km) upstream since April 1938. (See page 93.) Diversions above station for irrigation of about 730 acres (2.95 km²) below.

REVISIONS (WATER YEARS).--WSP 1309: 1921(M, date only), 1925(M), 1926(M), 1930(M). WSP 1709: 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	402	209	38	45	40	36	249	52	275	1,670	458	509
2	410	148	38	45	40	36	235	51	118	1,100	459	370
3	410	87	39	45	40	36	203	50	77	904	461	370
4	410	60	45	45	39	36	203	50	498	904	461	370
5	405	60	45	45	39	36	196	50	853	912	458	310
6	320	60	45	45	39	36	133	51	761	848	504	310
7	280	62	45	45	38	36	143	51	431	832	595	190
8	280	62	45	45	38	36	181	50	45	864	589	222
9	280	60	45	45	38	36	192	49	43	872	585	222
10	206	60	45	45	37	36	59	49	44	880	627	222
11	44	60	45	45	37	36	58	122	46	888	752	222
12	44	62	45	45	37	36	58	106	49	872	817	222
13	44	60	45	45	36	36	54	49	450	676	926	222
14	44	83	45	45	36	36	51	44	723	515	977	458
15	44	106	45	45	36	36	51	43	1,020	751	1,070	590
16	44	106	45	45	36	36	51	35	1,200	758	988	627
17	45	104	45	45	36	36	52	37	1,310	872	862	654
18	54	104	45	45	36	36	52	24	1,200	744	755	683
19	55	104	45	45	36	36	52	20	976	676	750	680
20	55	112	45	44	36	36	52	20	978	896	710	593
21	55	62	45	44	36	36	52	18	998	904	662	439
22	55	59	45	44	36	36	52	18	960	1,580	647	346
23	55	60	45	43	36	36	122	20	871	1,190	601	326
24	55	59	45	43	36	36	119	20	743	346	526	327
25	55	59	45	43	36	36	54	22	717	259	449	329
26	55	59	45	42	36	36	52	20	555	358	423	293
27	55	59	45	42	36	36	50	22	214	452	422	214
28	56	59	45	42	36	280	50	120	81	512	422	173
29	81	40	45	41	-----	280	50	285	701	561	478	173
30	130	37	45	41	-----	255	51	397	1,190	595	507	173
31	170	-----	45	41	-----	216	-----	455	-----	522	507	-----
TOTAL	4,698	2,322	1,375	1,365	1,038	2,003	2,977	2,400	18,127	24,713	19,448	10,839
MEAN	152	77.4	44.4	44.0	37.1	64.6	99.2	77.4	604	797	627	361
MAX	410	209	45	45	40	280	249	455	1,310	1,670	1,070	683
MIN	44	37	38	41	36	36	50	18	43	259	422	173
AC-FT	9,320	4,610	2,730	2,710	2,060	3,970	5,900	4,760	35,950	49,020	38,580	21,500
CAL YR 1972	TOTAL	122,433	MEAN	335	MAX	2,000	MIN	37	AC-FT	242,800		
WTR YR 1973	TOTAL	91,305	MEAN	250	MAX	1,670	MIN	18	AC-FT	181,100		

NOTE.--No gage-height record Dec. 5 to Feb. 12, Feb. 15 to Mar. 15.

YELLOWSTONE RIVER BASIN

27

06225500 WIND RIVER NEAR CROWHEART, WYO.

LOCATION.--Lat 43°14'33", long 109°00'35", in NW¼NW¼ sec.16, T.3 N., R.2 W., Fremont County, Wind River Indian Reservation, on right bank 0.9 mi (1.4 km) downstream from Bull Lake Creek and 9.0 mi (14.5 km) south-east of Crowheart.

DRAINAGE AREA.--1,891 mi² (4,898 km²).

PERIOD OF RECORD.--October 1945 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,635 ft (1,718 m), from topographic map.

AVERAGE DISCHARGE.--28 years, 1,243 ft³/s (35.20m³/s), 900,600 acre-ft/yr (1,110 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,770 ft³/s (163 m³/s) July 22, gage height, 7.95 ft (2.423 m); minimum daily, 220 ft³/s (6.23 m³/s) Dec. 7, 8.

Period of record: Maximum discharge, 13,000 ft³/s (368 m³/s) June 16, 1963, gage height, 9.16 ft (2.792 m); minimum daily, 200 ft³/s (5.66 m³/s) Dec. 9, 1961, Dec. 30, 1962.

Flood of June 29, 1927, reached a discharge of 13,000 ft³/s (368 m³/s), result of discharge measurement made by Bureau of Reclamation at site 1.0 mi (1.6 km) downstream.

REMARKS.--Records good except those for winter period, which are poor. Some regulation by Bull Lake on Bull Lake Creek. (See page 93.) Diversions for irrigation of about 25,000 acres (101 km²) above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1116: 1946-47. WSP 1709: 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	944	663	430	295	318	365	504	439	2,290	3,850	1,530	1,060
2	962	694	375	285	310	355	504	421	2,200	2,890	1,500	1,250
3	991	646	300	276	308	342	471	401	1,750	2,370	1,520	1,070
4	982	607	242	270	316	335	464	432	1,690	2,240	1,620	1,010
5	991	598	238	265	320	330	471	492	1,870	2,270	1,800	972
6	944	588	225	257	314	344	458	556	2,170	2,190	1,750	924
7	888	559	220	250	310	344	464	665	2,400	2,140	1,760	870
8	888	559	220	250	300	350	452	690	2,610	2,110	1,660	1,250
9	861	559	225	260	292	350	452	624	2,860	2,070	1,560	1,650
10	771	524	232	275	300	360	374	534	3,340	2,010	1,550	1,550
11	687	517	230	300	312	372	380	640	3,260	1,960	1,670	2,590
12	655	559	235	320	320	370	391	745	2,260	1,950	1,730	2,820
13	625	538	240	342	328	368	427	991	2,340	1,960	1,820	2,430
14	640	524	260	360	332	355	464	1,350	2,640	1,860	1,800	2,220
15	655	552	280	360	328	350	452	1,700	3,080	1,970	1,840	2,180
16	640	573	300	352	316	365	427	2,350	2,650	1,840	1,730	2,120
17	632	559	320	342	305	374	421	3,050	2,490	1,870	1,600	2,030
18	625	545	330	338	310	385	409	3,510	2,330	1,700	1,470	1,930
19	625	524	340	330	315	368	397	4,430	1,930	1,830	1,520	1,800
20	632	517	350	328	325	352	368	4,430	1,930	2,800	1,470	1,620
21	671	458	350	322	320	363	363	3,550	1,970	3,460	1,390	1,390
22	703	478	345	316	314	368	368	2,400	2,130	3,860	1,400	1,260
23	655	484	338	314	330	368	427	2,280	2,240	3,200	1,370	1,200
24	663	497	332	312	350	363	484	2,410	2,090	1,860	1,280	1,190
25	655	504	340	312	375	352	452	2,530	2,040	1,710	1,220	1,190
26	640	497	345	316	388	363	415	2,180	1,980	1,620	1,150	1,100
27	632	470	340	320	380	458	403	1,500	1,860	1,660	1,090	972
28	566	435	330	320	374	595	484	1,240	2,060	1,710	1,030	906
29	588	405	322	310	-----	559	552	1,330	2,610	1,800	1,040	897
30	626	425	315	310	-----	524	497	1,330	3,460	1,830	1,030	870
31	610	-----	304	320	-----	478	-----	1,630	-----	1,670	1,000	-----
TOTAL	22,647	16,058	9,253	9,527	9,110	11,925	13,195	50,830	70,530	68,260	45,900	44,321
MEAN	731	535	298	307	325	385	440	1,640	2,351	2,202	1,481	1,477
MAX	991	694	430	360	388	595	552	4,430	3,460	3,860	1,840	2,820
MIN	566	405	220	250	292	330	363	401	1,690	1,620	1,000	870
AC-FT	44,920	31,850	18,350	18,900	18,070	23,650	26,170	100,800	139,900	135,400	91,040	87,910
CAL YR 1972	TOTAL	551,509	MEAN	1,507	MAX	8,950	MIN	220	AC-FT	1,094,000		
WTR YR 1973	TOTAL	371,556	MEAN	1,018	MAX	4,430	MIN	220	AC-FT	737,000		

LOCATION.--Lat 43°13'45", long 108°53'40", in SE¼SE¼ sec.17, T.3 N., R.1 W., Fremont County, on right bank 3.3 mi (5.3 km) downstream from diversion dam on Wind River and 15 mi (24 km) southeast of Lenore.

PERIOD OF RECORD.--May 1941 to September 1945 (irrigation season only), May 1949 to current year. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 5,560.85 ft (1,694.947m) above mean sea level. May 1, 1941, to Sept. 30, 1945, nonrecording gage at site 3.2 mi (5.1 km) upstream at different datum. May 3, 1949, to Oct. 2, 1952, Apr. 12 to May 15, 1971, water-stage recorder at site 3.0 mi (4.8 km) upstream at different datum.

AVERAGE DISCHARGE.--24 years (1949-73), 546 ft³/s (15.46m³/s), 395,600 acre-ft/yr (488 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,820 ft³/s (51.5 m³/s) July 1, 1972; no flow at times in most years.

REMARKS.--Records fair. Flow used for irrigation and power on Riverton 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	699	444				0	439	335	1,390	1,320	738	694
2	699	423				0	435	345	1,500	1,230	744	696
3	699	422				0	433	330	1,400	1,130	744	694
4	705	422				0	431	333	1,270	1,060	744	686
5	721	422				0	431	337	1,370	1,100	752	670
6	696	423				0	426	337	1,460	1,150	802	670
7	673	423				0	421	373	1,520	1,150	930	590
8	575	422				0	411	391	1,540	1,180	920	546
9	675	423				0	371	425	1,650	1,230	912	540
10	544	420				0	280	482	1,690	1,220	938	536
11	0	418				0	256	474	1,690	1,210	1,040	506
12	0	422				0	256	522	1,620	1,360	1,150	388
13	0	422				0	254	520	1,590	1,430	1,210	222
14	0	420				0	249	516	1,670	1,440	1,260	182
15	0	420				0	256	507	1,720	1,490	1,310	176
16	0	422				0	217	503	1,660	1,450	1,290	176
17	0	422				0	167	554	1,660	1,440	1,120	176
18	0	422				0	192	601	1,660	1,350	1,090	171
19	0	420				0	189	613	1,620	1,320	1,090	170
20	0	309				26	187	579	1,640	1,350	1,090	170
21	0	0				84	188	567	1,630	1,320	1,070	171
22	0	0				102	187	648	1,660	1,090	1,080	170
23	130	0				126	203	766	1,640	1,000	1,070	172
24	522	0				196	355	930	1,600	805	1,020	167
25	466	0				201	352	1,120	1,580	780	905	154
26	466	0				141	357	1,110	1,490	742	860	146
27	466	0				115	344	979	1,240	752	842	140
28	464	0				416	340	745	1,500	802	790	126
29	462	0			-----	415	343	954	1,620	768	734	104
30	465	0			-----	413	340	1,010	1,540	748	728	88
31	466	-----			-----	426	-----	1,220	-----	736	724	-----
TOTAL	10,693	8,341	0	0	0	2,701	9,401	16,315	47,070	35,143	29,705	10,105
MEAN	345	278	0	0	0	87.1	313	523	1,569	1,134	958	337
MAX	721	444	0	0	0	426	439	1,220	1,720	1,490	1,310	696
MIN	0	0	0	0	0	0	167	340	1,270	736	724	88
AC=FT	21,210	16,560	0	0	0	5,360	18,650	38,290	93,360	69,710	58,920	20,040
CAL YR 1972	TOTAL 231,199.00	MEAN 432	MAX 1,420	MIN 0	AC=FT 458,600							
WTR YR 1973	TOTAL 172,664.00	MEAN 473	MAX 1,720	MIN 0	AC=FT 342,100							

29

LOCATION.--Lat 43°00'38", Long 108°22'32", in NE¼NW¼ sec.2, T.1 S., R.4 E., Fremont County, Wind River Indian Reservation, on left bank 265 ft (81 m) downstream from bridge on State Highway 789, 1.1 mi (1.8 km) southeast of post office in Riverton, and 1.5 mi (2.4 km) upstream from Little Wind River.

PERIOD OF RECORD.--May to August 1906, August to December 1907, May to October 1908, May 1911 to current year. Monthly discharge only for some periods, published in WSP 1309. Published as Big Wind River near Arapahoe Agency 1906 and as Big Wind River near Riverton 1907-08.

EXTREMES.--Current year: Maximum discharge, 5,320 ft³/s (151 m³/s) May 20, gage height, 6.09 ft (1.856 m); minimum daily, 42 ft³/s (1.19 m³/s) July 17.

Period of record: Maximum discharge, 13,300 ft³/s (377 m³/s) June 15, 1935, gage height, 8.15 ft (2.484 m), from rating curve extended above 7,200 ft³/s (204 m³/s); minimum daily, 10 ft³/s (0.28 m³/s) May 18, 1955.

REMARKS.--Records good except those for winter period, which are poor. Some regulation by Bull Lake beginning in 1938 (see page 93) and Pilot Butte Reservoir beginning in 1926, combined capacity, 182,000 acre-ft (224 km³). Diversions above station for irrigation of about 128,000 acres (518 km²) above and below station. The Wyoming canal of the Riverton project is the major diversion. This diversion began in 1926 and part of it can be returned to the river above station through Pilot waste-way. Additional waste water returns to river below station through Fivemile and Muddy Creeks. Water-quality records for the current year are published in Part 2 of this report.

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

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1	326	530	510	300	322	300	570	505	153	2,640	545	43
2	332	650	470	290	300	300	560	515	505	1,700	480	425
3	360	635	350	280	310	300	550	405	536	953	470	395
4	382	600	225	260	320	345	570	376	95	827	495	296
5	385	580	192	280	320	330	598	410	62	820	652	296
6	396	580	180	280	315	350	592	480	112	718	688	288
7	472	555	190	285	310	345	545	560	380	570	565	292
8	476	530	198	290	290	345	535	712	580	550	495	658
9	472	545	200	295	285	345	282	616	760	510	485	1,140
10	448	452	190	308	300	360	222	324	1,100	385	348	1,050
11	770	492	208	320	320	380	195	135	1,260	352	292	2,410
12	872	515	228	330	325	390	222	177	736	239	312	2,710
13	770	530	238	350	350	390	239	250	250	177	284	2,670
14	791	500	260	380	320	380	300	640	420	117	246	2,190
15	865	505	200	370	320	355	515	1,140	724	87	215	2,080
16	919	535	310	360	315	380	870	1,460	882	77	242	2,060
17	914	468	330	350	315	380	328	2,610	510	42	185	1,930
18	892	410	390	350	310	380	336	3,050	480	68	147	1,840
19	866	392	440	340	305	370	300	3,540	230	53	81	1,680
20	777	368	440	330	310	350	280	4,390	49	652	97	1,580
21	789	540	440	324	315	280	305	3,920	59	2,000	84	1,240
22	827	500	420	420	320	290	540	2,520	85	2,800	62	1,100
23	800	476	400	320	330	290	545	1,510	112	2,820	73	1,020
24	402	472	380	318	345	265	610	1,310	183	1,810	67	981
25	299	480	390	320	365	240	592	1,260	120	1,150	68	995
26	305	484	370	320	380	250	525	1,110	70	1,030	85	968
27	448	515	350	350	370	390	465	676	91	900	64	883
28	532	480	380	325	390	400	455	300	53	778	57	796
29	525	330	330	320	-----	510	550	145	256	855	53	808
30	560	390	320	320	-----	560	622	147	730	890	61	790
31	540	-----	310	550	-----	550	-----	66	-----	790	50	-----
TOTAL	18,512	15,039	9,861	9,895	9,077	11,430	13,448	35,689	11,440	26,820	8,026	35,676
MEAN	597	501	318	319	324	369	408	1,151	381	865	259	1,189
MAX	919	650	510	380	390	590	622	4,390	1,280	2,820	688	2,710
MIN	299	330	180	260	285	240	195	46	49	42	50	43
AC=FT	36,720	29,830	19,560	19,530	18,000	22,670	26,670	70,790	22,690	53,200	15,920	70,760
CAL YR 1972	TOTAL 346,631	MEAN 561	MAX 4,390	MIN 42	AC=FT 687,500							
WTR YR 1973	TOTAL 204,913	MEAN 651	MAX 4,390	MIN 42	AC=FT 406,400							

YELLOWSTONE RIVER BASIN

06232800 LITTLE POPO AGIE RIVER NEAR ATLANTIC CITY, WYO.

LOCATION.--Lat 42°35'32", long 108°55'08", in SW¼NE¼NE¼ sec.8, T.30 N., R.101 W., Fremont County, Shoshone National Forest, on left bank 200 ft (61 m) downstream from Gustave Lake and 11.6 mi (18.7 km) northwest of Atlantic City.

DRAINAGE AREA.--5.99 mi² (15.51 km²).

PERIOD OF RECORD.--October 1957 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 9,780 ft (2,981 m), from topographic map.

AVERAGE DISCHARGE.--16 years, 9.20 ft³/s (0.261 m³/s), 6,670 acre-ft/yr (8.22 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 189 ft³/s (5.35 m³/s) June 14, gage height, 2.91 ft (0.887 m); maximum gage height, 3.45 ft (1.052 m) May 20 (backwater from snow); minimum daily, 0.02 ft³/s (0.001 m³/s) Mar. 4.

Period of record: Maximum discharge, 189 ft³/s (5.35 m³/s) June 14, 1973, gage height, 2.91 ft (0.887 m); maximum gage height, 3.45 ft (1.052 m) May 20, 1973 (backwater from snow); minimum daily discharge, 0.02 ft³/s (0.001 m³/s) Mar. 4, 1973.

REMARKS.--Records fair except those for winter period and period of no gage-height record, which are poor. Flow regulated by Christina Lake 0.6 mi (1.0 km) upstream, capacity, 3,860 acre-ft (4.76 hm³). 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	37	.48	.36	.22	.08	.03	.11	.23	5.9	31	8.5	30
2	37	.60	.33	.21	.07	.03	.13	.22	6.5	25	8.1	32
3	36	.60	.31	.20	.08	.03	.13	.25	5.6	20	7.9	30
4	36	.60	.28	.19	.08	.02	.14	.27	3.9	19	8.3	30
5	37	.64	.26	.19	.07	.03	.16	.30	3.7	19	8.0	30
6	36	.69	.24	.18	.06	.03	.15	.37	5.8	17	8.4	29
7	35	.65	.25	.17	.05	.03	.13	.39	6.5	14	8.3	29
8	35	.68	.26	.17	.04	.03	.12	.39	12	12	5.8	30
9	34	.70	.27	.16	.03	.03	.13	.41	20	12	4.9	29
10	36	.67	.26	.16	.04	.03	.14	.42	71	11	4.8	29
11	34	.59	.25	.17	.05	.03	.16	.45	95	11	4.7	31
12	33	.55	.26	.18	.04	.03	.17	.48	81	11	4.4	29
13	33	.49	.27	.19	.04	.03	.19	.50	76	13	11	28
14	32	.44	.27	.19	.04	.03	.18	.53	109	13	36	28
15	32	.46	.27	.18	.04	.04	.16	.60	129	12	37	27
16	24	.44	.28	.16	.04	.03	.18	.72	62	12	35	26
17	3.4	.43	.30	.14	.04	.04	.19	1.1	59	11	34	26
18	1.6	.41	.32	.13	.04	.05	.16	1.9	42	9.9	34	26
19	1.3	.40	.33	.12	.04	.05	.17	4.0	29	9.7	33	25
20	1.6	.41	.33	.11	.04	.05	.17	5.5	25	14	32	24
21	1.5	.42	.33	.10	.04	.05	.18	4.3	25	18	32	24
22	1.4	.40	.34	.09	.03	.06	.19	3.8	28	18	32	24
23	1.3	.39	.33	.09	.03	.06	.21	3.7	34	16	32	24
24	1.2	.40	.31	.09	.03	.06	.20	3.9	37	13	32	23
25	1.1	.41	.29	.10	.03	.06	.21	4.0	36	12	30	23
26	1.0	.41	.31	.10	.03	.07	.22	3.3	38	11	30	22
27	.96	.35	.29	.08	.03	.06	.24	2.7	39	10	31	22
28	.88	.28	.27	.08	.03	.07	.26	2.7	39	10	30	21
29	.58	.29	.25	.09	-----	.08	.23	3.0	36	11	30	21
30	.49	.33	.24	.09	-----	.08	.24	2.8	33	10	30	21
31	.42	-----	.23	.08	-----	.09	-----	3.9	-----	9.1	30	-----
TOTAL	565.73	14.61	8.89	4.41	1.26	1.41	5.27	57.13	1,194.9	434.7	673.1	793
MEAN	18.2	.49	.29	.14	.045	.046	.16	1.84	39.8	14.0	21.7	26.4
MAX	37	.70	.36	.22	.08	.09	.26	5.5	129	31	37	32
MIN	.42	.28	.23	.08	.03	.02	.11	.22	3.7	9.1	4.4	21
AC=FT	1,120	29	18	8.7	2.5	2.8	10	113	2,370	862	1,340	1,570
CAL YR 1972	TOTAL 5,231.62	MEAN 14.3	MAX 165	MIN .23	AC=FT 10,380							
WTR YR 1973	TOTAL 3,754.41	MEAN 10.3	MAX 129	MIN .02	AC=FT 7,450							

NOTE.--No gage-height record Dec. 24 to Apr. 12.

YELLOWSTONE RIVER BASIN

31

06233000 LITTLE POPO AGIE RIVER NEAR LANDER, WYO.

LOCATION.--Lat 42°43'00", long 108°38'34", in NE¼SE¼ sec.27, T.32 N., R.99 W., Fremont County, on left bank 700 ft (213 m) downstream from bridge on State Highway 28, 2.5 mi (4.0 km) downstream from Red Canyon Creek, and 9.5 mi (15.3 km) southeast of post office in Lander.

DRAINAGE AREA.--125 mi² (324 km²).

PERIOD OF RECORD.--March 1946 to current year (no winter records since 1971).

GAGE.--Water-stage recorder. Datum of gage is 5,436.49 ft (1,657.042m) above mean sea level.

AVERAGE DISCHARGE.--25 years (1946-71), 80.3 ft³/s (2.274m³/s), 58,180 acre-ft/yr (71.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 970 ft³/s (27.5 m³/s) June 15, gage height, 5.24 ft (1.597 m); minimum daily during period of operation, 21 ft³/s (0.59 m³/s) Apr. 1.

Period of record: Maximum discharge, 2,010 ft³/s (56.9 m³/s) June 16, 1963, gage height, 6.64 ft (2.024 m); minimum daily, 12 ft³/s (0.34 m³/s) Jan. 20, 21, Feb. 26 to Mar. 2, 1960, Jan. 10, 11, 18, 19, 1963.

REMARKS.--Records good. Diversions for irrigation of about 540 acres (2.19 km²) above station. Slight regulation by Christina Lake, capacity, about 3,860 acre-ft (4.76 hm³).

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

REVISIONS.--WSP 1709: 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	78	389	195	82	76
2							22	73	420	180	81	111
3							22	35	389	161	79	99
4							22	156	329	149	81	102
5							25	151	288	147	81	104
6							26	184	302	141	78	97
7							26	171	356	135	76	89
8							23	173	371	133	71	143
9							27	191	452	131	66	137
10							31	211	566	122	64	124
11							31	228	578	120	62	221
12							45	220	473	120	62	193
13							65	225	424	141	61	149
14							73	245	459	149	73	133
15							65	270	663	131	82	122
16							55	299	362	122	82	118
17							75	350	311	120	81	113
18							68	424	268	104	79	108
19							56	543	232	109	84	102
20							53	636	268	178	79	100
21							51	670	206	171	78	99
22							53	578	213	151	79	97
23							52	529	230	131	79	95
24							69	536	228	117	78	95
25							72	529	225	108	75	99
26							71	476	230	99	73	102
27							79	383	238	102	72	99
28							156	347	230	93	79	95
29							102	350	222	99	75	93
30							84	308	208	92	73	90
31							-----	323	-----	84	72	-----
TOTAL							1,649	9,944	10,070	4,035	2,337	3,405
MEAN							55.0	321	336	130	75.4	114
MAX							156	670	663	195	84	221
MIN							21	73	206	84	61	76
AC-FT							3,270	19,720	19,970	8,000	4,640	6,750

PEAK DISCHARGE (BASE, 350 FT³/S)

DATE	TIME	G.HT	DISCHARGE	DATE	TIME	G.HT	DISCHARGE
5-20	2300	4.89	795	6-15	0200	5.24	970
6- 2	0400	4.02	452	9- 8	1230	4.14	494
6-11	0600	4.58	662				

YELLOWSTONE RIVER BASIN

06235500 LITTLE WIND RIVER NEAR RIVERTON, WYO.

LOCATION.--Lat 42°59'51", long 108°22'29", in NE¼NW¼ sec.11, T.1 S., R.4 E., Fremont County, Wind River Indian Reservation, on right bank 1.8 mi (2.9 km) upstream from mouth and 1.9 mi (3.1 km) southeast of Riverton.

DRAINAGE AREA.--1,904 mi² (4,931 km²).

PERIOD OF RECORD.--May 1941 to current year. Prior to October 1958, published as Popo Agie River near Riverton.

GAGE.--Water-stage recorder. Datum of gage is 4,901.84 ft (1,494.081m) above mean sea level. Prior to Sept. 19, 1956, at site 600 ft (183 m) downstream at same datum.

AVERAGE DISCHARGE.--32 years, 594 ft³/s (16.82m³/s), 430,400 acre-ft/yr (531 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,550 ft³/s (129 m³/s) June 11; maximum gage height, 6.55 ft (1.996 m) Sept. 12; minimum daily discharge, 135 ft³/s (3.82 m³/s) Jan. 8.

Period of record: Maximum discharge, 14,700 ft³/s (416 m³/s) June 17, 1963, gage height, 10.85 ft (3.307 m); minimum daily, 41 ft³/s (1.16 m³/s) Aug. 7, 1960.

REMARKS.--Records good except those for winter period which are poor. Diversions for irrigation of about 62,900 acres (255 km²) above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1729: 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	314	395	270	185	198	188	440	1,080	1,810	1,630	675	202
2	290	528	260	180	190	190	470	924	2,280	1,380	585	703
3	330	534	230	175	180	185	500	932	2,350	1,150	534	1,000
4	346	517	210	170	175	190	540	948	2,050	448	512	724
5	368	506	205	160	165	200	590	1,640	1,590	865	513	661
6	470	512	195	150	155	210	640	2,030	1,580	768	490	681
7	450	495	180	140	145	220	650	2,340	1,670	703	440	663
8	470	470	170	135	145	230	605	1,890	2,110	656	353	903
9	460	470	165	140	150	240	455	1,500	2,600	640	307	2,260
10	445	460	160	145	155	250	400	1,550	3,560	623	270	1,310
11	455	430	160	160	160	260	359	1,700	4,300	560	249	2,920
12	470	425	162	180	165	270	610	1,620	3,790	545	247	4,160
13	460	425	170	200	172	280	1,280	1,410	2,910	649	234	2,990
14	465	395	179	230	171	290	2,320	1,360	2,520	1,210	220	2,200
15	475	377	185	250	170	310	1,960	1,390	3,310	1,150	220	1,890
16	495	386	190	250	165	322	1,150	1,550	2,820	970	231	1,710
17	506	362	195	240	162	320	1,270	1,770	1,850	731	233	1,590
18	475	377	203	230	165	325	1,820	2,080	1,520	598	233	1,420
19	450	368	213	220	170	340	1,040	2,670	1,130	566	230	1,280
20	455	354	220	218	170	350	798	3,430	886	940	223	1,160
21	470	325	230	215	167	360	642	4,140	738	2,100	212	1,070
22	475	290	240	208	165	370	610	3,880	707	1,790	192	1,030
23	505	258	235	195	162	380	768	3,560	818	1,560	191	990
24	517	260	250	190	165	390	1,260	3,380	1,010	1,220	200	958
25	534	270	222	195	170	400	1,370	3,340	1,120	1,100	195	921
26	495	290	215	200	175	410	1,490	3,340	1,220	978	184	913
27	490	260	210	195	180	420	1,690	2,790	1,430	925	177	895
28	445	220	205	190	165	420	1,960	2,230	1,560	902	182	874
29	450	200	200	193	-----	410	2,150	1,990	1,650	835	194	830
30	465	230	195	200	-----	400	1,490	1,850	1,750	812	198	790
31	415	-----	190	200	-----	415	-----	1,630	-----	738	192	-----
TOTAL	13,911	11,409	6,296	5,939	4,697	9,545	31,307	66,034	58,439	30,253	9,122	39,698
MEAN	449	380	203	192	168	308	1,044	2,130	1,948	976	294	1,323
MAX	534	534	270	250	198	420	2,320	4,140	4,300	2,100	675	4,160
MIN	290	200	160	135	145	165	359	924	707	545	177	202
AC-FT	27,590	22,630	12,490	11,780	9,320	16,930	62,100	131,000	115,900	60,010	18,090	78,740
GAL YR 1972	TOTAL 249,759 MEAN 632 MAX 5,450 MIN 160 AC-FT 495,400											
WTH YR 1973	TOTAL 286,650 MEAN 765 MAX 4,300 MIN 135 AC-FT 568,600											

PEAK DISCHARGE (BASE, 3,200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
5-21	1415	6.50	4,490
6-11	1815	6.53	4,550
9-12	0645	6.55	4,410

06239000 MUSKRAT CREEK NEAR SHOSHONI, WYO.

LOCATION.--Lat 43°08'53", long 108°09'27", in SW¼NE¼SW¼ sec.15, T.2 N., R.6 E., Fremont County, Wind River Indian Reservation, on right bank 2.0 mi (3.2 km) upstream from mouth and 7.0 mi (11.3 km) southwest of Shoshoni. Prior to Oct. 1, 1972, 60 ft (18 m) upstream on left bank.

DRAINAGE AREA.--733 mi² (1,898 km²).

PERIOD OF RECORD.--June 1950 to September 1958, October 1959 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 4,770 ft (1,454 m), from topographic map. Prior to Oct. 1, 1971, water-stage recorder at present site and datum. Oct. 1, 1971 to Sept. 30, 1972, at site 60 ft (18 m) upstream, on right bank, at datum 6.00 ft (1.829 m) lower.

AVERAGE DISCHARGE.--22 years, 3.53 ft³/s (0.100m³/s), 2,560 acre-ft/yr (3.16 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,170 ft³/s (33.1 m³/s) May 6, gage height, 3.29 ft (1.003 m); maximum gage height, 3.35 ft (1.021 m) Sept. 8; no flow for most of year.

Period of record: Maximum discharge, 13,300 ft³/s (377 m³/s) Feb. 10, 1962, gage height, 6.44 ft (1.963 m), from floodmarks, present site and datum, on basis of slope-area measurement of peak flow; no flow for most of each year.

REMARKS.--Records poor. Bureau of Land Management has extensive spreader and detention systems on some of the tributaries above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1709: 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						0	.15	161	12	0		0
2						0	.25	168	31	0		2.0
3						0	3.5	142	17	0		7.2
4						0	4.1	265	14	0		0
5						0	17	402	10	0		0
6						0	124	747	8.8	0		0
7						0	30	673	8.2	0		0
8						0	10	464	4.4	0		46
9						0	7.0	267	1.9	0		3.8
10						0	11	275	80	0		0
11						0	17	241	.41	0		11
12						0	135	150	.20	0		12
13						0	132	90	0	0		2.1
14						0	138	50	0	0		0
15						1.4	75	50	0	0		0
16						0.0	40	42	0	0		0
17						4.2	45	36	0	0		0
18						0	74	31	0	0		0
19						0	26	23	0	0		0
20						0	70	44	0	0		0
21						0	45	49	0	0		0
22						0	47	34	0	0		0
23						0	49	21	0	0		0
24						0	59	22	0	0		0
25						0	125	20	0	0		0
26						.16	214	31	0	0		0
27						0	255	20	0	0		0
28						.05	425	18	0	0		0
29						.20	594	9.4	0	.50		0
30						.20	262	14	0	0		0
31						0	-----	11	-----	0		-----
TOTAL	0	0	0	0	0	12.74	3,227.35	4,672.4	108.71	.50	0	84.1
WY 1972	0	0	0	0	0	.2	101	151	3.62	.316	0	2.80
WY 1973	0	0	0	0	0	6.5	964	747	31	.50	0	46
MIN	0	0	0	0	0	0	.15	9.4	0	0	0	0
ACFT	0	0	0	0	0	29	3,910	2,270	210	1.0	0	167
CAL YR 1972	TOTAL 2,000 17.24											
WY 1973	TOTAL 1,422 11.7											
WY 1974	TOTAL 1,422 11.7											
WY 1975	TOTAL 1,422 11.7											

PEAK DISCHARGE (BASE, 100 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4- 6	0300	2.65	250	4-28	0800	3.11	948
4-14	1100	2.58	310	5- 6	1430	3.29	1,170
4-18	2100	2.51	156	9- 8	1800	3.35	340

YELLOWSTONE RIVER BASIN

06244500 FIVEMILE CREEK ABOVE WYOMING CANAL, NEAR PAVILLION, WYO.

LOCATION.--Lat 43°18'04", long 108°42'04", in NW¼NE¼ sec.25, T.4 N., R.1 E., Fremont County, on right bank 1,400 ft (427 m) upstream from Wyoming Canal siphon and 4.0 mi (6.4 km) north of Pavillion.

DRAINAGE AREA.--118 mi² (306 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,495 ft (1,675 m), from topographic map. Prior to Mar. 29, 1950, at site 0.2 mi (0.3 km) downstream at different datum.

AVERAGE DISCHARGE.--24 years, 2.17 ft³/s (0.061 m³/s), 1,570 acre-ft/yr (1.94 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 235 ft³/s (6.66 m³/s) Sept. 8, gage height, 2.40 ft (0.732 m); minimum daily, 0.01 ft³/s (<0.001 m³/s) June 25, July 2-5, Aug. 18-21.

Period of record: Maximum discharge, 1,750 ft³/s (49.6 m³/s) Sept. 6, 1951, gage height, 5.60 ft (1.707 m), from floodmarks, from rating curve extended above 350 ft³/s (9.91 m³/s); no flow at times in most years.

Flood in September 1948 reached a stage of about 6.1 ft (1.86 m), discharge, 2,600 ft³/s (73.6 m³/s), by slope-area measurement of peak flow.

REMARKS.--Records poor. Flow regulated by Bureau of Indian Affairs reservoir system approximately 10.5 mi (16.9 km) upstream. Diversions for irrigation of about 320 acres (1.30 km²) above station. Water-quality records for the current year 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	1.8	3.1	3.5	2.0	3.4	3.2	5.6	6.7	2.2	.06	7.5	.33
2	1.6	3.8	2.2	2.0	3.3	3.2	6.1	6.4	1.8	.01	5.3	9.0
3	1.8	4.3	1.1	1.9	3.1	3.0	5.5	5.7	1.1	.01	3.8	5.7
4	2.2	3.2	.75	1.8	3.2	2.9	6.0	5.3	1.4	.01	7.9	3.2
5	3.2	5.0	.54	1.7	3.3	3.2	6.9	5.3	1.5	.01	6.7	2.4
6	3.8	5.7	.50	1.8	3.2	3.5	6.0	5.3	1.4	.06	2.8	1.8
7	3.6	5.0	.48	1.5	3.1	3.9	6.0	5.3	1.1	.05	3.5	1.6
8	3.4	5.0	.46	1.5	2.9	3.5	6.3	4.6	.82	.06	1.5	.44
9	3.0	5.0	.45	1.4	2.5	3.7	5.8	3.5	.66	.13	1.2	.46
10	2.6	4.5	.44	1.4	2.5	4.1	5.0	3.2	.74	.06	1.0	.19
11	2.6	4.3	.43	1.5	3.0	4.5	5.7	2.8	.66	.06	.50	110
12	2.8	3.5	.47	1.9	3.0	5.4	5.7	3.0	.50	.06	.23	.44
13	2.6	3.6	.46	2.2	3.0	5.2	6.4	3.0	.50	.13	.35	.36
14	2.3	3.4	.49	2.0	2.9	5.0	6.0	3.0	.58	.09	.35	.16
15	3.2	1.7	.55	3.2	2.8	5.0	5.0	3.2	1.0	.06	.23	.13
16	3.2	3.2	.55	4.0	2.7	5.0	5.3	3.0	.74	.13	.06	.12
17	3.5	3.2	.71	4.1	2.6	5.7	6.4	2.8	1.1	.13	.06	.11
18	3.5	3.1	1.0	3.9	2.9	6.4	6.7	2.4	1.1	.13	.01	8.4
19	3.6	2.5	1.2	3.7	2.4	6.8	5.7	2.6	1.1	.06	.01	6.4
20	4.3	2.7	1.4	3.5	2.8	6.4	5.0	2.6	.74	6.0	.01	6.4
21	4.0	2.8	1.6	3.3	2.7	6.2	6.7	1.8	.66	14	.01	5.3
22	4.3	2.8	1.6	3.2	2.7	5.5	6.7	1.6	.50	22	.06	4.3
23	3.6	2.4	1.0	3.1	2.6	5.4	6.7	1.5	.29	26	.06	4.3
24	4.0	3.0	1.2	3.2	2.7	5.6	9.2	1.8	.18	26	.06	4.3
25	4.0	3.1	2.2	3.0	3.0	6.2	9.2	4.0	.01	41	.23	4.0
26	3.8	3.7	2.4	3.2	3.5	6.3	6.6	3.0	.02	40	.13	4.3
27	3.6	3.4	2.3	3.1	3.4	5.4	6.4	2.6	.02	24	.13	4.3
28	3.3	2.8	2.2	3.0	3.3	5.4	7.4	2.2	.62	22	.13	3.2
29	3.2	2.5	2.2	3.1	-----	5.1	7.1	3.0	.06	43	.13	3.2
30	3.1	3.4	2.1	3.5	-----	4.8	6.4	3.2	.23	70	.13	3.0
31	2.5	-----	2.1	3.5	-----	4.8	-----	2.8	-----	20	.13	-----
TOTAL	79.5	110.0	70.7	82.5	83.9	151.4	196.5	106.0	22.73	355.32	44.21	436.43
MEAN	3.21	3.6	2.6	2.97	3.06	4.88	6.02	3.42	.76	11.5	1.43	14.5
MAX	4.3	5.7	3.5	4.1	3.5	6.4	9.2	6.7	2.2	70	7.9	110
MIN	1.6	2.0	1.4	1.4	2.6	2.4	5.0	1.5	.01	.01	.01	.33
AC-FT	157	213	131	164	166	303	394	210	45	705	88	866

CAL YR 1972 TOTAL 1,272.79 MEAN 6.30 MAX 33 MIN .01 AC-FT 2,390
 WTR YR 1973 TOTAL 1,732.46 MEAN 6.75 MAX 110 MIN .01 AC-FT 3,440

NOTE.--No gage-height record Dec. 4 to Mar. 19.

06253000 FIVEMILE CREEK NEAR SHOSHONI, WYO.

LOCATION.--Lat 43°13'20", long 108°13'06", in NW¼SW¼ sec.19, T.3 N., R.6 E., Fremont County, on right bank 1.2 mi (1.9 km) upstream from normal high-water line of Boysen Reservoir at elevation 4,725 ft (1,440 m) and 5.0 mi (8.0 km) west of Shoshoni.

DRAINAGE AREA.--418 mi² (1,083 km²), of which 133 mi² (344 km²) is probably noncontributing.

PERIOD OF RECORD.--May 1941 to September 1942, August 1948 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,750 ft (1,448 m), from topographic map. May 10, 1941, to Sept. 30, 1942, nonrecording gage at site 1.0 mi (1.6 km) downstream at different datum.

AVERAGE DISCHARGE.--26 years, 148 ft³/s (4.191 m³/s), 107,200 acre-ft/yr (132 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,250 ft³/s (35.4 m³/s) Sept. 8, gage height, 5.30 ft (1.615 m); maximum gage height, 6.32 ft (1.926 m) Dec. 7 (backwater from ice); minimum daily discharge, 27 ft³/s (0.76 m³/s) Jan. 8.

Period of record: Maximum discharge, 3,390 ft³/s (96.0 m³/s) June 15, 1962, gage height, 7.85 ft (2.393 m), from rating curve extended above 2,500 ft³/s (70.8 m³/s); maximum gage height, 9.61 ft (2.929 m) Dec. 27, 1954 (backwater from ice); minimum daily discharge, 1.0 ft³/s (0.028 m³/s) Jan. 4-6, 1942.

Flood of July 24, 1923, discharge, 3,500 ft³/s (99.1 m³/s), estimated by Bureau of Reclamation, exceeded all floods at this location during period of record.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by regulation of Bureau of Indian Affairs reservoir system in the headwaters, diversions for irrigation, and return flow from irrigated area. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1709: 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	185	98	56	51	63	57	57	72	222	228	257	314
2	180	98	47	45	67	53	58	75	248	230	254	420
3	178	98	38	41	69	50	57	74	263	225	266	406
4	175	98	35	37	65	48	53	93	272	233	266	378
5	172	98	33	33	62	50	59	106	284	242	275	353
6	170	99	31	31	57	49	63	115	287	239	281	304
7	168	99	30	28	53	51	58	114	281	254	294	294
8	164	99	29	27	50	53	53	114	297	245	269	516
9	162	95	28	30	48	55	53	85	308	263	275	604
10	159	91	28	34	50	57	57	74	328	257	294	374
11	156	93	29	39	52	58	58	75	364	251	290	964
12	153	95	30	48	52	60	61	191	370	251	275	442
13	148	95	31	56	50	60	62	147	367	278	284	328
14	131	95	33	64	47	51	61	145	342	308	297	281
15	131	95	36	68	45	52	59	163	350	290	300	269
16	129	95	42	67	44	50	59	137	325	287	311	254
17	127	88	46	65	42	52	61	168	342	290	318	236
18	123	95	53	63	41	51	69	200	353	287	300	218
19	125	91	58	60	45	47	70	191	356	294	297	215
20	123	88	62	58	46	52	62	181	318	346	300	208
21	121	68	68	56	45	55	59	177	287	384	294	200
22	121	62	70	55	44	56	70	179	281	339	311	191
23	117	77	70	53	45	57	77	166	281	353	314	218
24	115	72	67	54	46	54	108	186	269	346	318	233
25	114	74	68	57	48	56	93	233	266	328	308	195
26	110	76	70	62	51	57	79	251	251	308	311	179
27	110	63	69	64	55	57	75	236	248	297	314	174
28	106	63	65	62	56	53	74	225	228	263	287	174
29	106	56	63	65	-----	51	70	215	210	266	281	172
30	101	50	55	68	-----	52	71	215	225	287	290	172
31	99	-----	55	65	-----	53	-----	212	-----	294	297	-----
TOTAL	4,279	2,001	1,502	1,606	1,440	1,657	1,961	4,315	8,623	8,763	9,028	9,286
MEAN	138	64.7	48.5	51.8	51.4	53.5	65.4	155	294	283	291	310
MAX	185	99	70	68	69	60	108	251	370	384	318	964
MIN	95	50	26	27	41	47	53	72	210	225	254	172
AC-FT	8,490	5,100	2,560	3,190	2,880	3,290	3,890	9,550	17,500	17,380	17,910	18,420

CAL YR 1972 TOTAL 62,006 MEAN 172 MAX 573 MIN 28 AC-FT 124,600
 WTR YR 1973 TOTAL 59,741 MEAN 153 MAX 964 MIN 27 AC-FT 110,600

YELLOWSTONE RIVER BASIN

06256650 BADWATER CREEK AT LYSITE, WYO.

LOCATION.--Lat 43°15'53", long 107°41'44", in NE¼SW¼NW¼ sec.13, T.38 N., R.91 W., Fremont County, on right bank 2.2 mi (3.5 km) upstream from Bridger Creek and 0.4 mi (0.6 km) southwest of Lysite.

DRAINAGE AREA.--415 mi² (1,075 km²).

PERIOD OF RECORD.--November 1965 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 5,240 ft (1,597 m), from topographic map. Prior to Oct. 26, 1970, at site 0.1 mi (0.2 km) upstream at datum 6.01 ft (1.832 m) higher.

AVERAGE DISCHARGE.--7 years, 20.0 ft³/s (0.566 m³/s), 14,490 acre-ft/yr (17.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,550 ft³/s (43.9 m³/s) July 29, gage height, 8.80 ft (2.682 m); minimum daily, 1.8 ft³/s (0.051 m³/s) Oct. 31.

Period of record: Maximum discharge, 6,240 ft³/s (177 m³/s) June 8, 1968, gage height, 7.92 ft (2.414 m), site and datum then in use, from rating curve extended above 630 ft³/s (17.8 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 0.04 ft³/s (0.001 m³/s) Jan. 26, 1966.

REMARKS.--Records poor. Several small reservoirs for irrigation, railroad, and domestic use above station. Diversions for irrigation of about 1,700 acres (6.83 km²) above station. Water-quality records for the current year are published in part 2 of this report.

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

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	1.5	4.4	6.0	7.0	7.5	8.9	35
2	4.6	2.0	4.7	6.2	7.1	7.6	10	25
3	4.0	4.3	4.7	6.3	7.1	7.4	12	41
4	3.4	4.3	4.4	6.0	7.2	7.1	11	75
5	41	4.3	2.5	6.9	7.3	7.3	25	52
6	4.4	2.0	2.3	5.5	7.1	7.5	34	102
7	4.0	2.0	2.3	5.3	6.8	7.2	13	110
8	4.0	2.0	2.3	5.1	6.9	7.3	7.0	102
9	4.6	2.0	2.3	5.4	6.3	7.4	6.4	90
10	2.0	2.0	2.3	5.0	6.6	7.2	5.4	100
11	4.4	2.0	2.3	6.3	7.0	6.2	5.0	102
12	4.0	2.0	2.3	7.1	7.0	6.4	17	94
13	3.4	2.0	3.1	7.7	7.0	6.0	38	94
14	4.1	2.0	3.0	6.0	7.1	6.3	74	118
15	2.0	2.0	2.3	7.5	7.0	7.5	20	138
16	1.0	4.0	2.3	7.7	6.0	7.4	14	195
17	1.0	4.0	2.3	7.6	6.4	7.4	12	215
18	2.0	4.4	2.3	7.5	7.0	6.0	5.3	233
19	2.0	4.0	2.3	7.0	7.0	6.0	7.0	231
20	2.0	4.0	2.3	7.5	6.8	6.7	5.2	222
21	2.0	4.4	2.3	7.3	6.8	6.3	3.7	347
22	2.2	4.0	6.7	7.4	6.0	6.0	7.0	235
23	2.0	4.0	6.7	7.4	7.0	10	21	175
24	2.0	4.4	7.1	7.7	7.4	5.0	5.3	152
25	2.2	4.0	7.4	7.5	7.4	5.7	10.0	190
26	2.2	4.0	6.0	7.3	7.4	6.8	75	200
27	2.2	4.0	7.1	7.2	7.6	11	112	138
28	2.5	4.0	7.1	7.1	7.4	6.4	152	110
29	2.5	3.7	7.4	7.1	7.4	6.4	94	94
30	2.2	3.0	7.4	7.4	7.4	6.4	40	38
31	1.8	-----	6.1	7.7	-----	7.6	-----	90
TOTAL	152.5	142.5	142.5	213.5	191.7	207.5	954.5	4,431
MEAN	4.9	4.6	4.6	6.6	6.0	6.6	30.8	143
MAX	41	4.3	4.7	6.9	7.3	7.6	10	152
MIN	1.0	2.0	2.3	5.1	6.0	6.0	3.7	25
AC-FT	332	332	332	423	390	510	1,994	4,790
DAY YR 1972	TOTAL 1,772.5	1,772.5	1,772.5	2,135	1,917	2,075	9,545	44,310
DAY YR 1973	TOTAL 1,650.5	1,650.5	1,650.5	2,135	1,917	2,075	9,545	44,310

PEAK DISCHARGE (BASE, 110 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-14	0600	5.94	128	7-19	0430	7.21	735
4-27	1830	6.36	210	7-22	2200	6.08	287
5-21	0930	6.61	473	7-29	1930	8.80	1,550
6- 2	1300	5.69	198				

YELLOWSTONE RIVER BASIN

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06256800 BRIDGER CREEK NEAR LYSITE, WYO.

LOCATION.--Lat 43°17'22", long 107°43'16", in NE¼NE¼SW¼ sec.2, T.38 N., R.91 W., Fremont County, on left bank 0.3 mi (0.5 km) upstream from mouth and 2.2 mi (3.5 km) northwest of Lysite.

DRAINAGE AREA.--182 mi² (471 km²).

PERIOD OF RECORD.--November 1965 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 5,200 ft (1,585 m), from topographic map. Prior to Oct. 27, 1970, at site 800 ft (244 m) upstream at datum 5.62 ft (1.713 m) higher.

AVERAGE DISCHARGE.--7 years, 18.0 ft³/s (0.510 m³/s), 13,040 acre-ft/yr (16.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 580 ft³/s (16.4 m³/s) May 21; maximum gage height, 8.49 ft (2.588 m) May 21 (backwater from slide); minimum daily discharge, 2.0 ft³/s (0.057 m³/s) Dec. 6.

Period of record: Maximum discharge, 880 ft³/s (24.9 m³/s) June 9, 1968, gage height, 7.52 ft (2.292 m), site and datum then in use; maximum gage height, 8.49 ft (2.588 m) May 21, 1973 (backwater from slide); no flow at times in 1966, 1971, 1972.

REMARKS.--Records fair except those for winter period and period of no gage-height record, which are poor. Divisions for irrigation of about 1,100 acres (4.45 km²) above station. Water-quality records for the current year 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	2.4	7.0	3.0	4.4	5.6	7.7	11	37	194	34	28	5.5
2	2.4	9.0	5.0	4.6	5.8	7.9	11	57	224	33	24	14
3	2.5	9.6	4.0	4.2	5.5	8.2	12	75	216	32	24	26
4	2.2	7.8	2.1	3.9	6.1	7.9	12	100	177	29	23	16
5	10	7.5	2.1	3.8	5.5	8.5	14	120	160	25	24	9.9
6	4.0	7.2	2.0	3.6	5.7	7.9	15	141	141	24	23	13
7	3.6	7.2	2.1	3.6	5.4	8.2	15	176	135	23	22	12
8	4.2	7.0	2.2	3.8	5.2	9.7	12	203	126	20	21	13
9	4.2	6.8	2.4	4.1	5.1	9.4	12	209	118	20	21	21
10	3.8	6.5	2.8	4.4	5.7	9.5	12	240	111	20	20	16
11	3.2	6.2	1.6	4.9	6.0	10	15	302	109	18	20	20
12	2.7	6.2	4.2	5.4	6.6	10	15	245	102	17	20	16
13	2.6	6.0	4.7	5.7	6.6	9.6	21	214	97	16	20	14
14	4.2	5.7	5.0	6.0	6.5	9.5	22	219	92	20	17	13
15	5.0	5.4	5.2	6.2	6.4	9.3	23	240	89	17	14	13
16	5.2	5.4	5.5	6.2	6.3	9.5	20	282	84	16	13	14
17	5.5	5.7	5.6	6.3	6.1	10	23	313	76	16	13	17
18	5.2	5.8	6.2	6.1	6.5	11	24	377	69	15	13	19
19	5.2	5.2	6.4	5.9	6.6	10	19	418	64	17	13	17
20	5.2	5.4	6.3	5.8	6.6	11	14	397	66	18	12	17
21	5.7	5.5	6.1	5.6	6.5	11	5.0	462	54	19	12	17
22	5.7	5.0	5.6	5.3	6.2	11	5.0	365	50	20	12	17
23	6.0	5.2	5.8	5.2	6.2	10	1.5	234	50	104	10	17
24	7.5	5.2	5.7	5.5	6.4	10	5.7	327	47	27	10	17
25	8.1	5.3	5.6	5.7	6.7	11	22	344	42	22	9.6	17
26	9.4	5.5	5.5	5.6	7.1	12	20	358	44	21	9.0	16
27	9.4	5.7	5.4	5.5	7.5	12	69	305	44	21	8.7	16
28	9.4	4.0	5.5	5.2	7.7	11	102	246	41	21	8.4	16
29	7.5	2.6	5.2	5.0	-----	10	119	222	36	42	6.0	16
30	6.0	2.6	5.0	5.2	-----	9.5	45	208	35	156	6.5	15
31	5.5	-----	4.8	5.5	-----	10	-----	200	-----	36	6.5	-----
TOTAL	162.1	190.1	141.6	155.0	175.5	302.5	732.5	7,726	2,892	919	483.7	470.4
MEAN	5.23	6.00	4.57	5.13	6.27	9.76	24.4	250	56.4	29.6	15.6	15.7
MAX	10	9.6	6.4	6.2	7.7	11	119	462	274	156	28	26
MIN	2.2	2.6	2.0	3.6	5.1	7.7	5.8	37	25	15	6.0	5.5
AC-FT	322	357	291	315	348	600	1,450	15,240	5,740	1,920	959	933

CAL YR 1972 TOTAL 4,459.71 MEAN 12.2 MAX 144 MIN 0 FC-FT 8,850
WTR YR 1973 TOTAL 14,354.20 MEAN 39.2 MAX 462 MIN 2.0 AC-FT 29,470

PEAK DISCHARGE (BASE, 35 FT³/S)

NOTE.--No gage-height record Dec. 5 to Feb. 14.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-29	0515	4.83	158	7-23	0600	6.81	520
5-11	1800	6.18	349	7-29	2400	6.23	416
5-21	unknown	unknown	a580				

a About

YELLOWSTONE RIVER BASIN

06256900 DRY CREEK NEAR BONNEVILLE, WYO.

LOCATION.--Lat 43°16'52", long 107°54'45", in NW¼NW¼ sec.8, T.38 N., R.92 W., Fremont County, on left bank 0.4 mi (0.6 km) upstream from mouth and 8.0 mi (12.9 km) east of Bonneville.

DRAINAGE AREA.--52.6 mi² (136 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,010 ft (1,527 m), from topographic map.

AVERAGE DISCHARGE.--8 years, 3.52 ft³/s (0.100 m³/s), 2,550 acre-ft/yr (3.14 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 306 ft³/s (8.67 m³/s) Apr. 28, gage height, 6.83 ft (2.082 m); no flow for many days.

Period of record: Maximum discharge, 1,650 ft³/s (46.7 m³/s) June 17, 1967, gage height, 12.41 ft (3.783 m), from rating curve extended above 67 ft³/s (1.90 m³/s) on basis of slope-area measurement of peak flow; no flow for most of each year.

REMARKS.--Records poor. Diversions for irrigation of about 200 acres (81 hm²) above station. Water-quality records for the current year 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						0	.10	90	33	.18		0
2						0	.20	80	47	.13		.60
3						0	.38	90	55	.02		.05
4						0	.70	112	29	0		0
5						0	.90	134	25	0		0
6						0	.62	148	23	0		0
7						0	.41	134	22	0		0
8						0	.29	113	18	0		17
9						0	.14	97	17	0		.46
10						0	.28	98	16	0		0
11						0	.28	91	16	0		1.9
12						.10	.47	75	16	0		1.7
13						.07	.70	72	14	0		0
14						.05	10	67	12	0		0
15						.05	.70	60	11	0		0
16						.03	.58	63	9.2	0		0
17						.02	.76	72	8.1	0		.32
18						.03	.93	78	7.6	0		0
19						.02	6.1	84	6.8	0		0
20						.01	3.9	97	5.2	0		0
21						.01	.50	94	1.6	0		0
22						0	.26	70	.45	3.4		0
23						0	.42	55	.35	3.7		0
24						0	.32	63	.14	0		0
25						0	.44	57	.01	0		0
26						0	.52	51	0	0		0
27						0	.81	46	0	0		0
28						0	1.25	42	0	0		0
29					-----	0	1.19	38	0	.97		0
30					-----	0	1.09	34	.18	2.0		0
31		-----			-----	0	-----	32	-----	.53		-----
TOTAL	0	0	0	0	0	.39	639.55	2,437	375.63	10.93	0	22.03
MEAN	0	0	0	0	0	.013	21.3	78.6	12.5	.35	0	.73
MAX	0	0	0	0	0	.10	125	148	47	3.7	0	17
MIN	0	0	0	0	0	0	.10	32	0	0	0	0
AC-FT	0	0	0	0	0	.8	1,270	4,830	741	22	0	44
CAL YR 1972	TOTAL	367.12	MEAN	1.00	MAX	64	MIN	0	AC-FT	726		
WTR YR 1973	TOTAL	3,482.66	MEAN	9.54	MAX	143	MIN	0	AC-FT	8,410		

PEAK DISCHARGE (BASE, 50 FT³/S)

NOTE.--No gage-height record Apr. 29 to May 3.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-28	2100	6.83	306	6-2	0600	5.14	57
5-4	2330	6.28	212	7-22	2300	5.46	66
5-21	0100	5.71	121	9-8	1030	5.98	143

YELLOWSTONE RIVER BASIN

39

06257000 BADWATER CREEK AT BONNEVILLE, WYO.

LOCATION.--Lat 43°16'09", long 108°04'46", in NW¼NE¼ sec.14, T.38 N., R.94 W., Fremont County, on right bank 0.4 mi (0.6 km) west of Bonneville and 3.0 mi (4.8 km) upstream from normal high-water line of Boysen Reservoir at elevation 4,725 ft (1,440 m).

DRAINAGE AREA.--808 mi² (2,093 km²).

PERIOD OF RECORD.--April 1947 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 4,774.17 ft (1,455.167 m) above mean sea level. Prior to June 27, 1947, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--26 years, 22.8 ft³/s (0.646 m³/s), 16,520 acre-ft/yr (20.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,900 ft³/s (82.1 m³/s) July 30, gage height, 3.77 ft (1.149 m); no flow for many days.

Period of record: Maximum discharge, 8,490 ft³/s (240 m³/s) June 9, 1968, gage height, 7.64 ft (2.329 m); no flow for many days in each year.

Flood of July 24, 1923, reached a discharge of 18,600 ft³/s (527 m³/s), from slope-area measurement of peak flow.

REMARKS.--Records poor. Diversions for irrigation of about 3,100 acres (12.5 km²) above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1709: 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	0	5.0	1.0		0	5.0	18	126	306	38	150	1.0
2	0	1.0	1.0		0	9.0	4.8	110	470	35	70	18
3	0	2.0	5.0		0	6.5	24	210	530	31	58	142
4	0	5.0	0		0	8.0	31	378	396	31	54	86
5	0	7.5	0		0	7.7	7.0	432	360	31	50	54
6	0	8.5	0		0	7.5	6.0	450	342	44	46	20
7	0	8.0	0		0	7.5	4.3	530	306	51	41	14
8	0	7.0	0		0	7.5	2.3	610	306	58	34	382
9	0	5.5	0		0	6.0	5.3	510	246	31	28	150
10	0	5.0	0		0	6.5	10	570	210	14	26	120
11	0	5.5	0		0	9.0	24	590	234	10	24	94
12	0	6.0	0		0	10	78	450	174	4.8	22	94
13	0	6.5	0		0	8.7	54	378	162	24	20	102
14	0	6.0	0		0	6.0	116	396	150	10	18	91
15	0	5.0	0		0	5.0	31	432	102	14	13	82
16	0	5.0	0		0	7.5	14	590	102	14	9.0	73
17	0	7.5	0		0	9.0	44	710	78	10	2.8	64
18	0	4.5	0		0	12	28	870	64	10	1.0	134
19	0	7.0	0		0	16	18	970	58	298	4.8	94
20	0	5.5	0		0	20	10	850	51	10	2.8	82
21	0	6.0	0		0	25	4.8	850	86	38	4.8	70
22	0	7.0	0		0	30	4.8	432	94	224	1.0	58
23	0	2.5	0		0	38	24	470	78	401	1.0	64
24	0	4.0	0		0	49	86	650	70	18	1.0	38
25	0	5.5	0		0	55	128	710	86	14	1.0	7.0
26	0	6.0	0		0	58	254	750	78	24	1.0	38
27	0	5.0	0		5.0	44	246	650	58	38	1.0	44
28	0	3.0	0		5.0	38	324	342	44	14	1.0	44
29	1.0	2.0	0		-----	32	306	356	42	44	1.0	31
30	1.0	1.5	0		-----	28	162	258	40	667	1.0	44
31	5.0	-----	0		-----	21	-----	288	-----	300	1.0	-----
TOTAL	2.50	153.10	2.50	0	1.00	603.5	2,099.5	15,958	5,323	2,550.8	689.2	2,335.0
MEAN	.081	5.10	.081	0	.036	19.5	70.0	515	177	82.3	22.2	77.8
MAX	1.0	8.5	1.0	0	5.0	58	324	970	530	667	150	382
MIN	0	5.0	0	0	0	5.0	2.3	110	40	4.8	1.0	1.0
AC-FT	5.0	304	5.0	0	2.0	1,200	4,160	31,650	10,560	9,060	1,370	4,630

CAL YR 1972 TOTAL 20,085.20 MEAN 54.7 MAX 1,600 MIN 0 AC-FT 39,720
 WTR YR 1973 TOTAL 29,715.10 MEAN 81.4 MAX 570 MIN 0 AC-FT 56,950

PEAK DISCHARGE (BASE, 1,000 FT³/S)

NOTE.--No gage-height record Oct. 29 to Nov. 30.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-18	1800	3.07	1,210	7-30	0100	3.77	2,900
7-19	1130	3.56	2,280	9- 8	1830	3.76	2,800
7-22	2230	3.27	1,870				

YELLOWSTONE RIVER BASIN

06257500 MUDDY CREEK NEAR PAVILLION, WYO.

LOCATION.--Lat 43°21'46", long 108°36'08", in NW¼SE¼ sec.35, T.5 N., R.2 E., Fremont County, on left bank 600 ft (183 m) upstream from Wyoming Canal siphon, 4.1 mi (6.6 km) downstream from Sheep Creek, and 9.2 mi (14.8 km) northeast of Pavillion.

DRAINAGE AREA.--267 mi² (692 km²).

PERIOD OF RECORD.--March 1949 to December 1953, October 1954 to September 1958, October 1959 to December 1964, July 1965 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 5,350 ft (1,631 m), from topographic map. Prior to Oct. 16, 1956, at site 1.1 mi (1.8 km) upstream at different datum.

AVERAGE DISCHARGE.--21 years (1949-53, 1954-58, 1959-64, 1965-73), 4.81 ft³/s (0.136 m³/s), 3,480 acre-ft/yr (4.29 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 74 ft³/s (2.10 m³/s) Sept. 11, gage height, 3.95 ft (1.204 m); maximum gage height recorded, 4.01 ft (1.222 m) Mar. 19 (backwater from ice); minimum daily discharge, 0.56 ft³/s (0.016 m³/s) July 9, 10.

Period of record: Maximum discharge, 2,300 ft³/s (65.1 m³/s) June 5, 1949, gage height, 9.70 ft (2.957 m), from floodmark, site and datum then in use, from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of slope-area measurement of peak flow; no flow at times most years.

REMARKS.--Records fair except those for winter period and period of no gage-height record, which are poor. Flow regulated by Bureau of Indian Affairs reservoir systems, the nearest of which is approximately 6.5 mi (10.5 km) upstream on Sheep Creek and the other approximately 18.6 mi (29.9 km) upstream on main stem. The flow is also affected by several small spreader dike systems and diversions for irrigation of about 1,500 acres (6.07 km²) above station.

REVISIONS.--WSP 1709: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973¹

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.92	2.5	2.4	2.5	3.1	5.0	10	10	14	5.4	18	1.3
2	.92	2.9	2.0	2.3	3.0	4.9	11	9.6	15	4.6	8.5	2.1
3	.87	2.0	1.7	2.1	3.1	4.2	12	9.6	15	2.9	8.0	4.4
4	.98	3.1	1.6	2.0	3.2	5.0	13	9.6	14	1.1	7.5	4.8
5	1.1	3.2	1.5	1.9	3.2	5.2	15	11	13	.72	6.8	5.8
6	1.4	3.0	1.4	1.9	3.0	5.0	17	12	12	.68	5.8	4.8
7	1.4	2.7	1.3	2.0	2.9	6.2	18	13	12	.64	5.2	2.0
8	1.5	2.5	1.3	2.2	2.9	6.4	16	12	12	.60	5.0	8.2
9	1.5	2.3	1.4	2.4	2.8	6.4	12	12	11	.56	4.6	12
10	1.5	2.1	1.3	2.7	2.9	6.6	13	11	10	.56	4.5	3.4
11	2.0	2.1	1.2	3.1	3.2	7.0	15	11	10	.64	4.1	34
12	1.6	2.1	1.2	3.4	3.4	6.8	14	11	9.3	.92	4.0	18
13	1.6	2.0	1.3	3.0	3.4	6.6	13	11	9.0	1.5	2.7	8.0
14	1.5	1.9	1.4	4.0	3.5	6.2	11	11	8.0	5.6	1.5	5.8
15	2.8	2.0	1.6	4.0	3.4	6.8	10	11	8.0	5.8	1.0	4.8
16	2.2	2.1	1.7	3.7	3.4	5.9	10	12	8.0	5.6	1.0	4.6
17	2.1	2.0	1.9	3.6	3.6	6.2	9.6	12	8.8	5.2	.98	4.6
18	2.1	1.9	2.2	3.5	3.8	6.6	9.6	14	9.0	5.0	.98	4.3
19	2.1	1.9	2.5	3.6	3.9	7.2	8.6	17	9.5	5.2	.98	3.8
20	2.2	1.8	2.8	3.5	3.9	7.0	8.6	18	9.8	17	.92	3.0
21	2.3	1.7	2.0	3.4	3.8	7.2	9.2	18	9.9	16	.98	2.6
22	2.3	1.7	3.2	3.3	3.8	7.4	9.2	17	9.2	8.8	1.2	2.1
23	2.1	1.6	3.4	3.2	3.7	6.4	9.2	15	8.8	13	1.3	2.1
24	2.2	1.9	3.4	3.3	3.6	6.4	15	14	9.5	9.0	1.3	2.1
25	2.5	2.0	3.3	3.4	3.7	10	16	16	8.2	6.0	1.4	2.0
26	2.6	2.1	3.2	3.5	3.9	11	13	18	7.8	5.2	1.2	1.8
27	2.2	1.9	3.3	3.4	4.5	10	12	18	7.2	5.4	1.3	1.7
28	2.2	1.8	3.2	3.3	4.9	9.8	12	17	6.2	4.1	1.4	1.8
29	2.2	2.0	3.0	3.2	-----	9.6	14	16	5.2	3.3	1.2	1.7
30	2.1	2.2	2.8	3.4	-----	9.7	12	16	5.0	2.6	1.2	1.8
31	2.3	-----	2.6	3.3	-----	10	-----	15	-----	8.7	1.1	-----
TOTAL	57.39	66.2	68.1	64.8	67.4	224.6	365.0	418.8	293.8	152.32	105.64	159.4
MEAN	1.85	2.11	2.20	2.06	2.18	7.25	12.2	13.5	9.79	4.91	3.41	5.31
MAX	2.8	3.2	3.4	4.0	4.9	11	18	18	15	17	18	34
MIN	.87	1.7	1.2	1.8	2.8	4.8	8.2	9.6	5.0	.56	.92	1.3
AC-FT	114	121	125	108	105	445	724	831	583	302	210	316

CAL YR 1972 TOTAL 1,103.56 MEAN 2.02 MAX 85 MIN 0 AC-FT 2,190
 WTR YR 1973 TOTAL 2,103.45 MEAN 2.76 MAX 24 MIN .56 AC-FT 4,170

NOTE.--No gage-height record Nov. 17 to Mar. 19.

YELLOWSTONE RIVER BASIN

41

06258000 MUDDY CREEK NEAR SHOSHONI, WYO.

LOCATION.--Lat 43°17'10", long 108°16'30", in NE¼NW¼ sec.34, T.4 N., R.5 E., Fremont County, on left bank 2.5 mi (4.0 km) upstream from normal high-water line of Boysen Reservoir at elevation 4,725 ft (1,440 m) and 9.0 mi (14.5 km) northwest of Shoshoni.

DRAINAGE AREA.--332 mi² (860 km²).

PERIOD OF RECORD.--March 1949 to September 1968, October 1972 to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 4,780 ft (1,457 m), from topographic map. Prior to May 13, 1949, water-stage recorder at site 50 ft (15 m) upstream at different datum.

AVERAGE DISCHARGE.--20 years (1949-68, 1972-73), 18.8 ft³/s (0.532 m³/s), 13,620 acre-ft/yr (16.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 443 ft³/s (12.5 m³/s) Sept. 8, gage height, 4.64 ft (1.414 m); minimum daily, 3.7 ft³/s (0.10 m³/s) Jan. 6.

Period of record: Maximum discharge, 1,430 ft³/s (40.5 m³/s) July 22, 1951, gage height, 7.50 ft (2.286 m); no flow at times in most years.

Flood of July 24, 1923, reached a discharge of 16,300 ft³/s (462 m³/s), from slope-area measurement of peak flow.

REMARKS.--Records fair except those for winter period, which are poor. Natural flow of stream affected by regulation of Bureau of Indian Affairs reservoir system in the headwaters, 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	25	11	7.0	4.7	4.5	9.3	20	22	37	18	43	32
2	20	12	6.4	4.5	4.7	9.4	21	21	37	18	40	35
3	16	12	5.6	4.3	4.9	9.3	23	20	38	16	33	43
4	21	13	5.2	4.1	5.2	9.4	25	20	46	19	45	46
5	30	13	5.0	3.9	5.6	9.4	27	20	40	16	41	46
6	27	14	4.7	3.7	5.5	9.2	29	21	47	20	40	31
7	27	14	4.5	3.8	5.3	9.1	30	22	36	24	41	24
8	31	13	4.3	3.9	5.2	9.2	28	22	39	15	49	65
9	35	13	4.2	4.0	5.1	9.4	26	21	39	12	45	69
10	36	13	4.1	4.1	5.5	9.5	26	39	49	11	37	33
11	40	13	4.0	4.3	6.1	9.3	28	52	51	12	42	193
12	46	14	3.9	4.4	7.0	9.4	30	47	43	17	38	80
13	18	14	4.0	4.6	7.6	9.5	32	104	35	23	40	38
14	15	15	4.2	4.8	7.8	9.7	33	144	33	25	36	30
15	15	15	4.4	4.9	8.0	9.9	27	109	34	25	38	28
16	15	15	4.6	4.6	7.8	10	24	103	36	23	42	25
17	15	16	4.8	4.4	7.7	10	24	103	44	21	27	22
18	11	14	5.1	4.2	7.6	10	25	100	51	28	18	21
19	11	13	5.4	4.0	7.4	11	27	75	61	32	17	20
20	11	13	5.5	4.0	7.5	12	26	32	50	35	18	19
21	11	12	5.6	3.9	7.6	12	24	30	62	56	21	18
22	11	11	5.6	4.0	7.4	12	24	29	36	44	20	18
23	11	10	5.5	4.1	7.6	13	27	54	31	54	24	16
24	11	9.7	5.3	4.2	7.9	14	31	35	29	52	28	16
25	11	8.8	5.4	4.3	8.2	14	33	47	27	41	32	16
26	11	8.2	5.3	4.3	8.6	14	29	49	29	35	32	15
27	11	7.5	5.2	4.2	8.9	15	25	75	23	32	32	14
28	11	6.6	5.2	4.2	9.1	16	23	79	17	35	33	13
29	11	6.2	5.1	4.3	-----	17	24	79	14	32	31	12
30	11	6.5	5.0	4.4	-----	18	25	62	16	36	28	12
31	10	-----	4.9	4.4	-----	19	-----	47	-----	33	25	-----
TOTAL	583	356.5	155.0	131.5	191.3	358.0	796	1,684	1,130	860	1,034	1,050
MEAN	18.8	11.9	5.00	4.24	6.85	11.5	26.5	54.3	37.7	27.7	35.4	35.0
MAX	46	16	7.0	4.9	9.1	19	33	144	62	56	49	193
MIN	10	6.2	3.9	3.7	4.5	9.1	20	20	14	11	17	12
AC-FT	1,160	707	307	261	579	710	1,580	5,340	2,240	1,710	2,050	2,080

WTR YR 1973 TOTAL 8,329.3 MEAN 22.8 MAX 193 MIN 3.7 AC-FT 16,520

YELLOWSTONE RIVER BASIN

06259000 WIND RIVER BELOW BOYSEN RESERVOIR, WYO.

LOCATION.--Lat 43°25'30", long 108°10'42", in NW¼SW¼ sec.9, T.5 N., R.6 E., Fremont County, on right bank 0.6 mi (1.0 km) downstream from Boysen Dam and 13 mi (21 km) north of Shoshoni.

DRAINAGE AREA.--7,701 mi² (19,946 km²).

PERIOD OF RECORD.--May 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,608.58 ft (1,404.695 m) above mean sea level.

AVERAGE DISCHARGE.--22 years, 1,412 ft³/s (39.99m³/s), 1,023,000 acre-ft/yr (1,261 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,190 ft³/s (119 m³/s) Sept. 14, 15, gage height, 7.91 ft (2.411 m); minimum daily, 448 ft³/s (12.7 m³/s) June 27.

Period of record: Maximum discharge, 13,500 ft³/s (382 m³/s) July 7, 1967, gage height, 13.35 ft (4.069 m); minimum daily, 4.7 ft³/s (0.13 m³/s) Apr. 3, 1962.

REMARKS.--Records good. Flow regulated by Boysen Reservoir since October 1951. (See page 93.) Natural flow also affected by Bull Lake, Pilot Butte Reservoir, and several small reservoirs, combined capacity, 190,000 acre-ft (234 hm³), and diversions for irrigation of about 196,000 acres (793 km²) above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1709: 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	1,560	1,580	1,670	1,610	956	1,190	974	1,270	2,250	1,510	2,170	956
2	1,550	1,630	1,670	1,630	956	1,200	974	1,370	2,260	1,510	2,180	956
3	1,530	1,650	1,670	1,640	956	1,210	974	1,560	2,270	1,510	2,180	950
4	1,540	1,650	1,730	1,630	956	1,200	1,020	1,560	2,260	1,490	2,180	956
5	1,550	1,650	1,710	1,630	956	1,200	1,110	1,570	2,050	1,500	2,190	950
6	1,540	1,650	1,660	1,640	962	1,120	1,250	1,570	1,510	1,500	2,200	956
7	1,540	1,650	1,650	1,630	956	915	1,250	1,650	1,520	1,510	2,200	962
8	1,550	1,650	1,630	1,630	956	875	1,250	1,700	1,510	1,520	2,200	962
9	1,550	1,650	1,630	1,630	980	880	1,240	1,710	1,520	1,510	2,200	956
10	1,540	1,650	1,630	1,630	980	880	1,260	1,710	1,540	1,510	2,210	1,700
11	1,550	1,660	1,630	1,620	980	880	1,250	1,710	1,520	1,510	2,200	2,110
12	1,540	1,670	1,630	1,550	980	885	1,240	1,710	1,520	1,520	2,200	2,810
13	1,540	1,670	1,630	1,350	980	895	1,240	1,710	1,520	1,510	1,850	3,870
14	1,540	1,670	1,630	1,150	980	880	1,250	1,710	1,520	1,520	1,480	4,160
15	1,540	1,660	1,630	992	980	885	1,230	1,530	1,520	1,510	1,330	4,170
16	1,540	1,660	1,640	962	992	885	1,240	1,710	1,520	1,520	1,180	4,150
17	1,550	1,660	1,640	962	1,090	885	1,250	1,710	1,510	1,330	1,180	4,140
18	1,540	1,650	1,630	962	1,180	890	1,260	1,720	1,530	1,210	1,180	4,140
19	1,540	1,660	1,180	962	1,200	890	1,270	1,710	1,530	1,210	1,180	4,150
20	1,550	1,660	1,630	974	1,200	885	1,270	1,710	1,500	1,210	1,120	4,140
21	1,550	1,660	1,350	968	1,190	880	1,260	1,720	1,490	1,210	1,030	3,540
22	1,550	1,660	1,630	962	1,200	885	1,260	1,930	1,480	1,220	1,020	3,000
23	1,550	1,650	1,630	956	1,200	890	1,250	2,210	1,490	1,210	1,020	3,000
24	1,560	1,650	1,630	956	1,190	890	1,240	2,210	1,500	2,100	1,020	2,720
25	1,550	1,650	1,630	956	1,200	885	1,250	2,200	1,490	2,800	1,030	2,450
26	1,550	1,670	1,630	962	1,200	885	1,240	2,200	1,490	2,370	1,030	2,450
27	1,550	1,660	1,630	974	1,200	890	1,260	2,200	448	2,380	1,030	2,440
28	1,540	1,650	1,630	956	1,200	890	1,260	2,200	2,250	2,380	926	2,450
29	1,560	1,650	1,660	956	-----	926	1,260	2,200	1,500	2,380	885	2,440
30	1,560	1,660	1,630	956	-----	974	1,260	2,210	1,500	2,240	938	2,440
31	1,540	-----	1,620	956	-----	974	-----	2,240	-----	2,170	950	-----
TOTAL	47,940	49,590	50,190	38,342	29,756	29,499	36,342	56,120	48,518	51,580	47,689	75,074
MEAN	1,546	1,653	1,619	1,237	1,063	952	1,211	1,810	1,617	1,664	1,538	2,502
MAX	1,560	1,670	1,730	1,640	1,200	1,210	1,270	2,240	2,270	2,800	2,210	4,170
MIN	1,530	1,580	1,180	956	956	875	974	1,270	448	1,210	885	950
AC-FT	95,090	98,360	99,550	76,050	59,020	58,510	72,080	111,300	96,240	102,300	94,590	148,900

CAL YR 1972 TOTAL 750,360 MEAN 2,050 MAX 6,680 MIN 1,180 AC-FT 1,488,000
 WTR YR 1973 TOTAL 560,640 MEAN 1,536 MAX 4,170 MIN 448 AC-FT 1,112,000

YELLOWSTONE RIVER BASIN

43

06260000 SOUTH FORK OWL CREEK NEAR ANCHOR, WYO.

LOCATION.--Lat 43°39'53", long 108°52'02", in sec.28, T.43 N., R.100 W., Hot Springs County, on left bank 0.9 mi (1.4 km) upstream from normal high-water line of Anchor Reservoir, 2.3 mi (3.7 km) upstream from Anchor Dam, 3.2 mi (5.1 km) southwest of Anchor, and 34 mi (55 km) west of Thermopolis.

DRAINAGE AREA.--87 mi² (225 km²), approximately.

PERIOD OF RECORD.--April to May 1932, August 1939 to September 1943 (no winter records except 1941 water year), April 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,504.47 ft (1,982.562 m) above mean sea level. See WSP 1916 for history of changes prior to Aug. 11, 1965. Aug. 11, 1965, to Nov. 3, 1968, water-stage recorder and concrete flume 0.7 mi (1.1 km) downstream at different datum. Nov. 4, 1968, to June 5, 1970, at present site and datum. June 6, 1970, to Sept. 30, 1972, on right bank at present site at datum 0.14 ft (0.043 m) lower.

AVERAGE DISCHARGE.--15 years (1940-41, 1959-73), 35.3 ft³/s (1.000 m³/s), 25,570 acre-ft/yr (31.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 540 ft³/s (15.3 m³/s) May 18, gage height, 5.93 ft (1.807 m); minimum daily, 0.34 ft³/s (0.010 m³/s) Feb. 26-28.

Period of record: Maximum discharge, 1,940 ft³/s (54.9 m³/s) July 25, 1941, gage height, 8.73 ft (2.661 m), present site and datum, from rating curve extended above 190 ft³/s (5.38 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 0.10 ft³/s (0.003 m³/s) Jan. 11-22, 1960.

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

REVISIONS.--WSP 1729: 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	11	6.0	7.6	4.2	2.4	.41	.98	4.0	240	78	34	24
2	11	15	7.2	4.6	2.4	.50	.90	3.0	220	55	40	22
3	11	13	6.2	3.7	2.2	.70	.84	5.0	140	53	38	25
4	11	12	5.2	2.8	2.1	1.3	.81	15	76	52	48	25
5	12	12	5.0	2.1	2.1	1.2	.86	25	80	48	58	27
6	11	11	5.2	2.3	2.0	1.2	.96	38	195	47	53	30
7	11	9.2	5.4	2.0	1.9	1.1	.90	56	262	46	46	30
8	11	8.2	5.2	1.9	1.9	1.1	.90	65	291	40	40	48
9	11	8.9	5.4	2.0	1.8	1.0	.87	46	291	34	36	47
10	11	7.8	5.4	2.2	1.4	1.0	.90	29	268	32	36	48
11	11	7.5	5.6	2.4	1.2	1.0	.90	50	181	32	41	78
12	11	7.2	5.9	2.7	1.2	1.0	1.2	115	108	32	38	71
13	11	7.0	6.2	3.0	1.0	.96	1.5	193	108	36	34	58
14	11	6.6	6.4	3.1	.91	.92	1.5	200	112	26	32	53
15	11	7.0	6.6	2.8	.74	.92	1.3	262	87	24	27	55
16	11	6.4	6.8	2.6	.74	1.0	1.4	224	46	24	25	48
17	10	6.4	7.0	2.4	.65	.96	2.0	218	43	24	26	38
18	10	6.0	6.8	2.2	.65	.96	1.7	336	32	22	21	36
19	9.6	5.6	6.6	2.1	.57	1.0	1.3	363	32	26	21	34
20	11	5.4	6.4	2.0	.46	1.1	1.0	342	40	84	20	32
21	12	5.6	6.4	1.9	.41	1.0	.95	202	68	76	19	30
22	11	6.0	6.8	1.9	.41	1.0	1.0	140	96	48	26	27
23	10	7.0	6.2	2.1	.41	.96	1.2	205	92	51	24	26
24	9.2	7.4	5.8	2.4	.41	1.0	1.3	232	83	46	21	26
25	8.6	7.4	6.0	2.6	.41	1.1	1.1	205	80	44	18	26
26	11	7.2	6.2	2.5	.34	1.1	1.0	130	85	36	17	23
27	5.6	7.0	6.4	2.3	.34	1.0	2.3	82	104	51	16	24
28	7.0	6.0	6.6	2.3	.34	.97	4.0	73	116	42	16	21
29	7.0	6.4	6.0	2.4	-----	.94	8.0	102	108	46	15	21
30	5.0	6.7	5.0	2.5	-----	.90	5.2	78	104	43	14	20
31	3.2	-----	4.0	2.4	-----	.95	-----	164	-----	44	14	-----
TOTAL	307.2	254.9	187.5	78.4	31.52	30.25	48.77	4,402.0	3,788	1,267	914	1,073
MEAN	9.91	7.83	6.05	2.53	1.13	.98	1.63	142	126	43.8	29.5	35.8
MAX	12	15	7.6	4.6	2.4	1.3	8.0	363	291	89	58	78
MIN	3.2	5.4	4.0	1.9	.34	.41	.81	3.0	32	22	14	20
AC-FT	609	466	372	156	63	60	97	8,730	7,510	2,690	1,810	2,130
CAL YR 1972	TOTAL 14,474.20 MEAN 39.4 MAX 366 MIN 3.2 AC-FT 28,610											
WTR YR 1973	TOTAL 12,453.54 MEAN 34.1 MAX 363 MIN 3.2 AC-FT 24,700											

PEAK DISCHARGE (BASE, 200 FT³/S)

NOTE.--No gage-height record Dec. 6 to Jan. 31.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-18	2100	5.93	540	5-31	2330	5.23	318
5-24	0130	5.12	285	6- 9	2100	5.71	474

YELLOWSTONE RIVER BASIN

06260400 SOUTH FORK OWL CREEK BELOW ANCHOR RESERVOIR, WYO.

LOCATION.--Lat 43°39'57", long 108°47'34", in sec.25, T.43 N., R.100 W., Hot Springs County, on left bank 1.6 mi (2.6 km) downstream from Anchor Dam and 30 mi (48 km) west of Thermopolis.

DRAINAGE AREA.--133 mi² (344 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,120 ft (1,865 m), from topographic map.

AVERAGE DISCHARGE.--14 years, 21.2 ft³/s (0.600 m³/s), 15,360 acre-ft/yr (18.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 186 ft³/s (5.27 m³/s) June 10, gage height, 3.31 ft (1.009 m); no flow for many days.

Period of record: Maximum discharge, 373 ft³/s (10.6 m³/s) May 26, 1967, gage height, 3.64 ft (1.109 m); no flow at times in most years.

REMARKS.--Records good except those for November to April, which are poor. Some regulation at high flows by Anchor Dam. (See page 93.) 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	4.0					0	9.8	154	66	27	6.5
2	6.8	4.0					0	5.6	102	52	26	16
3	7.1	4.0					0	4.6	160	44	25	16
4	7.1	6.0					0	4.3	151	45	27	17
5	7.1	7.0					0	8.0	149	50	29	18
6	7.1	8.0					0	9.4	136	40	31	19
7	7.1	5.0					0	10	85	39	31	21
8	7.1	5.0					0	9.0	152	36	35	25
9	7.1	1.7					0	8.6	153	30	29	36
10	7.1	2.2					0	8.6	158	26	24	39
11	7.1	3.4					0	9.0	153	26	18	44
12	7.1	5.0					0	9.4	141	19	21	39
13	7.1	1.6					0	10	154	31	22	14
14	7.1	7.0					0	10	151	24	30	15
15	7.1	5.0					0	11	147	18	22	16
16	7.1	4.0					0	11	140	18	13	16
17	6.8	4.0					0	12	145	17	14	14
18	6.8	3.0					0	13	156	16	16	14
19	6.8	3.0					0	13	154	29	16	14
20	6.8	3.0					0	13	124	34	14	13
21	6.8	3.0					0	14	57	48	12	13
22	6.5	3.0					0	14	75	43	14	13
23	6.5	3.0					0	14	90	38	16	13
24	6.5	3.0					0	14	75	35	15	12
25	6.5	3.0					0	13	71	35	14	11
26	6.5	3.0					0	13	71	31	12	10
27	6.0	1.0					0	13	84	33	9.0	10
28	5.0	1.0					2.1	13	92	34	7.5	9.4
29	5.0	0					2.0	43	97	29	7.8	9.4
30	4.0	0					2.3	104	92	24	5.9	9.4
31	4.0	-----					-----	132	-----	26	4.8	-----
TOTAL	203.6	51.70	0	0	0	0	55.1	577.3	3,610	1,036	588.0	522.7
MEAN	6.56	1.71	0	0	0	0	1.84	18.6	120	33.4	19.0	17.4
MAX	7.1	8.0	0	0	0	0	3.0	132	158	66	35	44
MIN	4.0	0	0	0	0	0	0	4.3	57	16	4.8	6.5
AC-FT	404	102	0	0	0	0	109	1,150	7,160	2,050	1,170	1,040

CAL YR 1972 TOTAL 8,885.80 MEAN 27.0 MAX 182 MIN 0 AC-FT 19,610
 WTR YR 1973 TOTAL 6,643.90 MEAN 19.2 MAX 158 MIN 0 AC-FT 13,150

NOTE.--No gage-height record Nov. 24 to Apr. 28.

YELLOWSTONE RIVER BASIN

45

06262300 NORTH FORK OWL CREEK ABOVE BASIN RANCH, NEAR ANCHOR, WYO.

LOCATION.--Lat 43°41'21", long 108°50'24", in NW¼SW¼SE¼ sec.15, T.43 N., R.100 W., Hot Springs County, on right bank 0.1 mi (0.2 km) downstream from Anchor Dam road, 1.1 mi (1.8 km) southwest of Anchor, and 32 mi (51 km) west of Thermopolis.

DRAINAGE AREA.--61 mi² (158 km²), approximately.

PERIOD OR RECORD.--April 1962 to current year. Published as "below Cup Creek, near Anchor" 1962-67.

GAGE.--Water-stage recorder. Altitude of gage is 6,340 ft (1,932 m), from topographic map. Prior to Oct. 1, 1967, at site 0.1 mi (0.2 km) upstream at different datum. Oct. 1, 1967, to Sept. 5, 1972, at site 0.5 mi (0.8 km) downstream at different datum.

AVERAGE DISCHARGE.--10 years (1962-72), 13.5 ft³/s (0.382m³/s), 9,780 acre-ft/yr (12.1 hm³/yr).

EXTREMES.--Current year: Not determined.

Period of record: Maximum discharge, 1,370 ft³/s (38.8 m³/s) June 15, 1963, computation of peak flow through culvert and over embankment; no flow for many days in 1964-67, 1970-72.

REMARKS.--Records unreliable and not published for current year. Several small reservoirs above station used for storage of stock and irrigation water. Diversion above station into Basin Ranch ditch for irrigation of about 820 acres (3.32 km²) below station. Results of discharge measurements, in cubic feet per second, made during the current year are given below:

Nov. 10 . .	0.58	June 8 . .	80
May 15 . .	88	June 29 . .	23
May 16 . .	358	July 25 . .	33
May 23 . .	85	Sept. 6 . .	14

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

YELLOWSTONE RIVER BASIN

06265800 GOOSEBERRY CREEK AT DICKIE, WYO.

LOCATION.--Lat 44°00'00", long 108°45'25", in NE¼ sec.32, T.47 N., R.99 W., Hot Springs County, at left downstream wingwall of county bridge, 0.6 mi (1.0 km) downstream from Middle Creek, and 0.8 mi (1.3 km) northwest of Dickie.

DRAINAGE AREA.--95.0 mi² (246 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,750 ft (1,753 m), from topographic map.

AVERAGE DISCHARGE.--16 years, 13.0 ft³/s (0.368m³/s), 9,420 acre-ft/yr (11.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 312 ft³/s (8.84 m³/s) May 7, gage height, 3.31 ft (1.009 m); minimum daily, 0.87 ft³/s (0.025 m³/s) Jan. 13.

Period of record: Maximum discharge, 1,130 ft³/s (32.0 m³/s) June 15, 1963, gage height, 5.66 ft (1.725 m), from rating curve extended above 170 ft³/s (4.81 m³/s) on basis of slope-area measurement of peak flow; no flow Sept. 8-13, 1959, Jan. 28 to Feb. 8, Aug. 5, 6, 18-25, 1961, Jan. 5-9, Aug. 19, 1970.

REMARKS.--Records good except those for winter period, which are poor. 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	3.6	8.8	3.0	2.5	1.7	3.5	4.8	24	121	23	20	23
2	3.4	8.8	3.0	2.3	1.8	3.5	5.0	20	203	21	19	54
3	3.4	6.2	2.8	2.2	1.9	3.5	5.0	38	167	19	19	24
4	3.8	5.6	2.3	2.0	1.9	3.5	5.2	94	135	17	19	20
5	5.6	5.3	2.0	2.2	1.4	3.5	5.6	109	116	16	19	20
6	7.0	5.0	2.0	2.0	1.9	3.5	8.0	182	110	12	17	19
7	7.3	4.2	1.6	2.0	1.9	3.5	7.0	172	116	12	16	17
8	5.9	4.0	1.7	1.9	1.9	3.5	7.0	149	124	12	14	56
9	5.3	4.2	1.8	1.3	2.0	3.5	7.5	151	126	14	13	82
10	5.0	4.0	1.6	1.5	2.0	4.0	7.0	123	129	12	13	51
11	4.7	4.2	2.0	1.0	2.0	4.0	8.0	116	117	12	18	51
12	4.7	4.7	2.0	.96	1.9	4.0	9.0	111	96	14	18	41
13	4.7	4.2	2.2	.87	1.8	4.3	10	117	86	19	14	34
14	4.7	3.8	2.2	1.0	1.9	4.0	10	123	80	17	12	31
15	4.7	4.7	2.6	1.2	2.0	4.4	9.0	138	76	10	10	34
16	4.7	5.0	3.0	1.4	2.2	4.0	9.0	158	65	4.8	8.5	30
17	4.7	4.7	3.0	1.5	2.5	4.0	10	167	60	6.6	8.5	28
18	4.7	4.5	3.0	1.6	2.5	4.5	10	194	52	12	8.0	25
19	4.7	4.7	3.0	1.7	2.5	5.0	9.0	212	45	28	7.6	23
20	4.7	5.0	3.0	1.7	2.5	5.0	8.0	208	42	34	7.3	22
21	5.9	4.7	3.2	1.7	2.8	4.7	10	201	39	27	6.6	19
22	6.2	4.7	3.4	1.7	2.8	5.0	15	158	38	31	9.0	19
23	6.6	5.3	3.4	1.6	2.6	5.0	18	144	35	34	8.5	19
24	7.0	7.3	3.2	1.6	3.0	4.4	39	138	34	28	7.0	19
25	6.2	6.0	3.0	1.6	3.4	5.0	34	144	31	25	6.2	18
26	7.6	5.0	3.0	1.6	3.4	5.4	20	189	29	20	5.9	19
27	7.0	5.0	2.8	1.6	3.5	5.0	43	144	28	22	5.2	16
28	5.6	5.0	3.0	1.6	3.5	5.0	119	117	28	24	4.8	15
29	5.6	5.0	3.0	1.6	-----	4.8	123	107	32	26	4.5	14
30	5.6	4.0	2.8	1.7	-----	4.6	33	97	26	28	4.1	14
31	5.9	-----	2.5	1.7	-----	4.7	-----	97	-----	24	4.1	-----
TOTAL	166.5	153.6	81.3	51.33	65.9	132.3	608.1	4,142	2,386	604.4	346.8	857
MEAN	5.37	5.12	2.62	1.60	2.35	4.27	20.3	134	79.5	19.5	11.2	28.6
MAX	7.6	5.8	3.4	2.5	3.5	5.4	123	212	203	34	20	82
MIN	3.4	3.8	1.6	.87	1.7	3.5	4.8	20	26	4.8	4.1	14
AC-FT	330	305	161	102	131	262	1,210	8,220	4,730	1,200	688	1,700

CAL YR 1972 TOTAL 4,817.90 MEAN 13.2 MAX 96 MIN 1.6 AC-FT 9,560
 WTR YR 1973 TOTAL 9,595.23 MEAN 26.3 MAX 212 MIN .87 AC-FT 19,030

PEAK DISCHARGE (BASE, 150 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-29	0100	2.71	269	5-26	0430	3.00	260
5-7	0200	3.31	312	6-2	0900	3.04	262
5-19	0330	2.99	262	9-9	0100	2.67	189

YELLOWSTONE RIVER BASIN

47

06267400 EAST FORK NOWATER CREEK NEAR COLTER, WYO.

LOCATION.--Lat 43°54'55", long 107°55'46", in SE¼NE¼ sec.31, T.46 N., R.92 W., Washakie County, on left bank 50 ft (15 m) upstream from county road, 1.8 mi (2.9 km) upstream from mouth, 5.2 mi (8.4 km) southeast of Colter, and 7.0 mi (11 km) south of Worland.

DRAINAGE AREA.--149 mi² (386 km²).

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,165 ft (1,269 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 1,680 ft³/s (47.6 m³/s) July 23, gage height, 3.27 ft (0.997 m), from rating curve extended above 400 ft³/s (11.3 m³/s) on basis of velocity-area study; no flow most of year.

Period of record: Maximum discharge, 2,300 ft³/s (65.1 m³/s) Feb. 20, 1971, gage height, 3.52 ft (1.073 m) from rating curve extended above 400 ft³/s (11.3 m³/s) on basis of velocity-area study, but may have been greater during period of no gage-height record Oct. 1 to Nov. 22, 1971; no flow most of each year.

REMARKS.--Records fair except those for February to May, which are poor.

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	24	0	49	0	0		3.6
2	0				0	18	0	6.4	44	0		80
3	0				0	15	0	.27	.62	0		36
4	0				0	8.0	0	0	0	0		2.0
5	.62				0	7.0	0	0	0	0		0
6	15				0	7.0	0	0	0	0		0
7	.96				0	1.0	0	0	0	0		0
8	0				0	.15	0	0	0	0		120
9	0				0	0	0	0	0	0		63
10	0				0	0	4.5	0	0	0		2.4
11	0				0	0	8.0	0	0	0		.03
12	0				0	.83	3.4	0	0	0		0
13	0				0	.15	.27	0	0	0		0
14	0				0	0	.02	0	0	0		0
15	0				0	0	0	0	0	0		0
16	0				0	0	0	0	0	0		0
17	0				0	0	0	0	0	0		0
18	0				0	0	4.9	0	0	0		0
19	0				0	0	23	0	0	0		0
20	0				0	0	2.0	0	0	0		0
21	0				0	0	2.0	0	0	0		0
22	0				0	0	5.8	0	0	0		0
23	0				0	0	2.4	0	0	288		0
24	0				0	0	2.4	0	0	2.4		0
25	0				0	0	2.4	0	0	.01		0
26	0				0	0	8.0	5.0	0	0		0
27	0				0	0	.74	.27	0	0		0
28	0				.01	0	0	0	0	0		0
29	0				-----	0	0	0	2.8	.55		0
30	0				-----	0	0	0	0	93		0
31	0	-----			-----	0	-----	0	-----	1.5		-----
TOTAL	77.96	0	0	0	.01	91.12	72.82	60.94	47.42	385.46	0	307.03
MEAN	2.51	0	0	0	.0004	2.62	2.43	1.97	1.58	12.4	0	10.2
MAX	62	0	0	0	.01	24	23	49	44	288	0	120
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	155	0	0	0	.02	161	144	121	94	765	0	609

CAL YR 1972 TOTAL 3,022.86 MEAN 8.26 MAX 626 MIN 0 AC-FT 6,000
WTR YR 1973 TOTAL 1,032.78 MEAN 2.83 MAX 288 MIN 0 AC-FT 2,050

YELLOWSTONE RIVER BASIN

06270000 NOWOOD RIVER NEAR TEN SLEEP, WYO.
(Formerly published as Nowood Creek near Tensleep, Wyo.)

LOCATION.--Lat 44°00'48", long 107°25'39", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.27, T.47 N., R.88 W., Washakie County, on right bank, 1.7 mi (2.7 km) southeast of Ten Sleep, and 4.3 mi (6.9 km) upstream from Tensleep Creek.

DRAINAGE AREA.--803 mi² (2,080 km²).

PERIOD OF RECORD.--May 1938 to September 1943, March 1950 to December 1955 (published as Nowood Creek near Tensleep), October 1972 to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 4,420 ft (1,347 m), from topographic map. May 6, 1938, to Sept. 30, 1943, nonrecording gage at site 200 ft (61 m) downstream at different datum. Mar. 17, 1950, to Dec. 31, 1955, water-stage recorder at site 100 ft (30 m) upstream at different datum.

AVERAGE DISCHARGE.--11 years (1938-43, 1950-55, 1972-73), 106 ft³/s (3.002m³/s), 76,800 acre-ft/yr (94.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,180 ft³/s (61.7 m³/s) May 22, gage height, 11.44 ft (3.487 m); minimum daily, 31 ft³/s (0.88 m³/s) Aug. 26, 27.

Period of record: Maximum discharge, 3,330 ft³/s (94.3 m³/s) June 16, 1955, gage height, 12.3 ft (3.75 m), from floodmark, site and datum then in use, from rating curve extended above 600 ft³/s (17.0 m³/s) on basis of slope-area measurement of peak flow; maximum gage height observed, 13.0 ft (3.96 m) Mar. 12, 13, 1942 (ice jam), site and datum then in use; minimum daily discharge, 0.7 ft³/s (0.020 m³/s) Aug. 13, 1940.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 550 acres (2.23 km²) above station. Water-quality records for the current year 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	80	80	72	75	105	85	223	699	136	76	50
2	80	96	80	72	75	110	85	200	777	119	74	72
3	80	89	80	70	72	110	85	200	1,040	116	66	105
4	80	87	75	70	70	110	83	250	789	108	58	104
5	100	87	70	70	70	115	83	300	642	106	58	87
6	120	87	73	70	70	115	85	400	555	98	56	82
7	90	86	73	70	70	115	98	550	525	94	56	76
8	80	86	73	68	75	120	90	550	510	90	53	71
9	80	86	75	65	78	120	79	500	470	87	48	82
10	80	86	80	68	82	120	80	500	430	76	47	83
11	80	86	76	70	82	120	89	588	408	69	46	85
12	84	86	76	70	80	110	87	639	372	64	43	83
13	82	86	76	70	78	105	92	615	335	61	39	82
14	80	86	78	70	75	105	102	693	302	65	38	86
15	80	86	80	68	75	100	122	840	278	70	38	92
16	83	86	80	65	75	95	114	1,000	269	71	33	96
17	83	86	80	62	75	90	102	1,180	247	61	34	98
18	83	86	80	60	80	100	106	1,370	243	53	32	98
19	83	86	80	60	85	105	130	1,530	237	58	37	98
20	83	82	80	60	90	100	121	1,680	225	64	39	96
21	82	87	78	60	95	116	89	1,830	203	74	37	94
22	82	79	80	60	95	116	92	2,030	184	121	34	94
23	82	75	60	60	95	99	104	1,600	160	303	35	96
24	82	75	75	62	95	96	127	1,410	148	96	36	96
25	82	80	78	62	100	93	207	1,400	139	94	33	96
26	82	80	78	60	100	92	249	1,420	131	82	31	99
27	82	85	78	60	100	92	201	1,390	124	72	31	99
28	83	80	78	60	100	90	265	1,020	121	72	32	99
29	83	60	78	64	-----	86	402	822	221	71	35	99
30	85	70	76	68	-----	86	372	726	165	87	34	99
31	79	-----	75	72	-----	85	-----	687	-----	94	36	-----
TOTAL	2,595	2,497	2,401	2,038	2,312	3,221	4,032	28,143	10,949	2,832	1,345	2,697
MEAN	83.7	83.2	77.5	65.7	82.6	104	134	908	365	91.4	43.4	89.9
MAX	120	96	80	72	100	120	402	2,030	1,040	303	76	105
MIN	79	60	70	60	70	85	79	200	121	53	31	50
AC-FT	5,150	4,950	4,760	4,400	4,590	6,390	8,000	55,820	21,720	5,620	2,670	5,350
WTR YR 1973	TOTAL 65,062 MEAN 178 MAX 2,030 MIN 31 AC-FT 125,100											

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-30	0330	6.14	535	6-3	0930	8.09	1,110
5-22	0800	11.44	2,180	7-23	0600	7.93	1,060

YELLOWSTONE RIVER BASIN

49

06273000 MEDICINE LODGE CREEK NEAR HYATTVILLE, WYO.

LOCATION.--Lat 44°17'37", long 107°32'23", in NE¼SE¼NE¼ sec.21, T.50 N., R.89 W., Big Horn County, on left bank 0.3 mi (0.5 km) downstream from Dry Medicine Lodge Creek and 4.5 (7.2 km) northeast of Hyattville.

DRAINAGE AREA.--86.8 mi² (224.8 km²).

PERIOD OF RECORD.--October 1942 to September 1973 (discontinued). Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 4,780 ft (1,457 m), from topographic map. Prior to June 24, 1943, nonrecording gage at different datum. June 24, 1943, to June 5, 1968, water-stage recorder at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--31 years, 34.6 ft³/s (0.980m³/s), 25,070 acre-ft/yr (30.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 344 ft³/s (9.74 m³/s) June 10, gage height, 3.66 ft (1.116 m); minimum daily, 9.8 ft³/s (0.28 m³/s) Apr. 21-23, 26-28.

Period of record: Maximum discharge, 1,160 ft³/s (32.9 m³/s) June 24, 1945, gage height, 6.10 ft (1.859 m), present datum, from floodmark, from rating curve extended above 550 ft³/s (15.6 m³/s); minimum daily, 4.1 ft³/s (0.12 m³/s), Feb. 2, 1963.

REMARKS.--Records good. Diversion for irrigation of about 40 acres (16 hm²) above station.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1239: 1945, 1946(M). WSP 1709: 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	19	15	13	11	11	10	10	10	174	116	29	16
2	19	16	13	11	11	10	10	10	233	96	28	19
3	19	15	13	11	11	10	10	11	179	77	26	21
4	19	15	13	11	11	10	10	11	114	70	25	22
5	20	15	13	11	11	10	10	12	86	67	25	23
6	19	15	13	11	10	10	10	14	123	64	24	22
7	20	15	13	11	10	10	10	14	169	60	25	22
8	19	16	13	11	10	10	10	14	198	56	24	22
9	19	17	13	11	10	10	10	14	238	51	22	26
10	19	17	13	11	10	10	10	13	255	48	21	28
11	18	15	13	11	10	10	10	15	213	45	21	26
12	18	15	13	11	10	10	10	16	174	43	20	24
13	18	15	13	11	10	10	10	20	163	41	20	22
14	18	15	13	11	10	10	10	23	153	39	21	22
15	18	15	13	11	10	10	10	27	186	37	20	22
16	17	15	12	11	10	11	10	53	128	36	20	22
17	17	15	12	11	10	11	10	137	103	34	19	23
18	17	15	12	11	10	11	10	198	102	32	19	22
19	17	14	12	11	10	11	10	225	86	30	19	22
20	17	14	12	11	10	11	10	240	84	29	18	21
21	17	14	12	11	10	11	9.8	242	107	28	18	20
22	17	14	12	11	10	11	9.8	174	137	27	19	22
23	17	14	12	11	10	11	9.8	163	143	25	20	22
24	17	13	12	11	10	11	10	130	146	27	19	22
25	17	13	12	11	10	10	10	142	135	28	18	22
26	17	13	11	11	10	10	9.8	134	124	26	17	22
27	16	13	11	11	10	10	9.8	84	128	24	16	22
28	15	13	11	11	10	10	9.8	72	120	22	16	20
29	16	13	11	11	-----	10	11	72	116	23	16	20
30	15	13	11	11	-----	10	11	60	138	24	16	19
31	15	-----	11	11	-----	10	-----	104	-----	24	16	-----
TOTAL	546	437	381	341	285	319	300.8	2,454	4,455	1,349	637	658
MEAN	17.6	14.6	12.3	11.0	10.2	10.3	10.0	79.2	149	43.5	20.5	21.9
MAX	20	17	13	11	11	11	11	242	255	116	29	28
MIN	15	13	11	11	10	10	9.8	10	84	22	16	16
AC-FT	1,080	867	756	676	565	633	597	4,870	8,840	2,680	1,260	1,310

CAL YR 1972 TOTAL 13,720.0 MEAN 37.5 MAX 331 MIN 10 AC-FT 27,210
WTR YR 1973 TOTAL 12,162.8 MEAN 33.3 MAX 255 MIN 9.8 AC-FT 24,120

PEAK DISCHARGE (BASE, 350 FT³/S).--No peak above base.

NOTE.--No gage-height record Dec. 3 to Jan. 2.

06274800 WOOD RIVER NEAR KIRWIN, WYO.

LOCATION.--Lat 43°52'10", long 109°18'39", T.45 N., R.104 W., Park County, Shoshone National Forest, on left bank 0.8 mi (1.3 km) upstream from Cascade Creek, 0.8 mi (1.3 km) southwest of Kirwin, and 1.1 mi (1.8 km) downstream from Horse Creek.

DRAINAGE AREA.--7.66 mi² (19.8 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 9,380 ft (2,859 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 160 ft³/s (4.53 m³/s) May 18, maximum gage height, about 5.6 ft (1.71 m) June 9; minimum daily discharge, 0.61 ft³/s (0.017 m³/s) Apr. 25.

Period of record: Maximum discharge, 338 ft³/s (9.57 m³/s) June 23, 1971, gage height, 5.27 ft (1.606 m); maximum gage height, about 5.6 ft (1.71 m) June 9, 1973; minimum daily discharge, 0.50 ft³/s (0.014 m³/s) Jan. 13, 1971.

REMARKS.--Records fair except those for May to July, which are poor. 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	8.0	7.6	1.8	1.4	.84	.72	.72	1.2	28	44	15	13
2	7.5	2.4	1.8	1.4	.84	.72	.72	1.1	18	31	14	12
3	8.0	2.3	1.8	1.4	.84	.72	.72	1.1	12	42	14	11
4	7.5	2.3	1.8	1.2	.84	.72	.72	1.6	6.8	42	14	11
5	13	2.2	1.8	1.2	.84	.72	.72	1.8	19	46	13	10
6	7.3	2.1	1.8	1.2	.84	.72	.72	2.2	43	43	12	10
7	5.9	2.0	1.8	1.2	.84	.72	.80	4.0	55	35	11	11
8	4.7	2.0	1.8	1.2	.84	.72	.80	4.3	60	24	11	16
9	4.7	2.0	1.8	1.2	.84	.72	.75	3.3	80	22	10	14
10	4.7	2.0	1.8	1.2	.84	.72	.72	3.0	60	24	10	13
11	4.3	2.0	1.8	1.2	.84	.72	.80	3.8	25	26	10	20
12	4.3	2.0	1.8	1.1	.84	.72	1.2	6.0	16	23	9.5	16
13	4.7	2.0	1.8	1.1	.84	.72	1.3	10	52	17	8.9	14
14	4.7	2.0	1.8	.97	.84	.72	1.4	20	41	15	8.3	13
15	4.0	2.0	1.8	.97	.84	.72	1.1	35	25	14	7.8	12
16	3.6	2.0	1.6	.97	.84	.72	1.1	40	17	14	7.3	11
17	4.3	2.0	1.6	.97	.72	.72	1.1	66	14	17	7.3	10
18	4.0	2.2	1.6	.97	.72	.72	1.1	82	13	26	7.3	10
19	4.3	2.2	1.6	.97	.72	.72	1.1	81	13	20	6.8	10
20	4.0	2.2	1.6	.97	.72	.72	1.1	52	17	16	6.4	10
21	3.6	2.2	1.6	.97	.72	.72	1.1	24	32	14	7.3	9.5
22	3.3	2.2	1.6	.97	.72	.72	.97	23	51	12	7.8	8.9
23	3.0	2.2	1.6	.97	.72	.72	.97	34	46	10	7.3	8.9
24	2.7	2.0	1.6	.97	.72	.72	.97	35	52	10	6.8	8.9
25	3.3	1.8	1.6	.97	.72	.72	.61	28	52	10	6.4	8.9
26	3.1	1.8	1.4	.84	.72	.84	.97	16	54	10	6.4	8.3
27	2.8	1.8	1.4	.84	.72	.84	1.8	14	69	11	5.9	8.3
28	2.9	1.8	1.4	.84	.72	.84	1.8	16	65	16	5.6	8.3
29	2.7	1.8	1.4	.84	-----	.84	1.6	12	74	19	5.5	7.8
30	2.3	1.8	1.4	.84	-----	.72	1.4	12	64	17	5.4	7.8
31	2.5	-----	1.4	.84	-----	.72	-----	35	-----	16	10	-----
TOTAL	145.7	61.9	51.4	32.68	22.08	22.80	30.88	688.4	1,173.8	686	278.0	332.6
MEAN	4.70	2.06	1.66	1.06	.70	.74	1.03	21.6	39.1	22.1	8.97	11.1
MAX	13	2.6	1.8	1.4	.84	.84	1.8	82	80	46	15	20
MIN	2.3	1.3	1.4	.84	.72	.72	.61	1.1	6.8	10	5.4	7.8
AC-FT	289	173	102	65	44	45	61	1,320	2,330	1,360	551	660
CAL YR 1972	TOTAL	3,993.95	MEAN	10.9	MAX	120	MIN	.85	AC-FT	7,920		
WTR YR 1972	TOTAL	3,006.24	MEAN	9.61	MAX	82	MIN	.61	AC-FT	6,950		

YELLOWSTONE RIVER BASIN

51

06275000 WOOD RIVER AT SUNSHINE, WYO.

LOCATION.--Lat 44°02'15", long 108°58'24", in NW¼SW¼ sec.15, T.47 N., R.101 W., Park County, on right bank at bridge on county road, 1.0 mi (1.6 km) downstream from Ernest May Ranch, 5.2 mi (8.4 km) downstream from Dick Creek, and 10 mi (16 km) southwest of Meeteetse.

DRAINAGE AREA.--194 mi² (502 km²), approximately.

PERIOD OF RECORD.--August 1945 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,450 ft (1,966 m), from topographic map. Prior to Sept. 18, 1952, and Oct. 28, 1953, to June 15, 1963, water-stage recorder at site 2.0 mi (3.2 km) upstream at different datum. Sept. 18, 1952, to Oct. 27, 1953, nonrecording gage at site 2.0 mi (3.2 km) upstream at different datum. June 16, 1963, to Aug. 13, 1967, water-stage recorder at site 1.4 mi (2.3 km) upstream at different datum. Aug. 14, 1967, to Oct. 5, 1967, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--28 years, 118 ft³/s (3.342m³/s), 85,490 acre-ft/yr (105 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,470 ft³/s (41.6 m³/s) May 18, gage height, 8.57 ft (2.612 m); minimum daily, 21 ft³/s (0.59 m³/s) Jan. 8.

Period of record: Maximum discharge, 5,080 ft³/s (144 m³/s) June 15, 1963, gage height, 7.00 ft (2.134 m), from floodmark, site and datum then in use, from contracted-opening measurement of peak flow; minimum daily, 2.8 ft³/s (0.079 m³/s) Oct. 22, 25, 1960.

REMARKS.--Records fair except those for winter period and period of no gage-height record, which are poor. Water diverted above station to Lower Sunshine Reservoir since 1972. Diversions above station for irrigation of about 3,200 acres (13.0 km²), of which about 1,000 acres (4.05 km²) lies below station.

REVISIONS (WATER YEARS).--WSP 1309: 1947(M). WSP 1709: 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	83	62	47	32	28	31	30	76	540	239	200	120
2	80	64	43	20	28	30	29	72	670	179	190	170
3	76	61	38	32	28	29	27	91	429	179	182	160
4	73	60	36	35	28	27	30	147	291	188	182	150
5	81	60	33	36	28	27	34	199	288	168	180	140
6	79	60	32	32	27	29	32	291	460	154	178	130
7	82	58	24	26	25	28	31	307	670	148	170	125
8	77	60	30	21	25	29	34	311	776	136	162	520
9	75	64	37	22	26	30	34	279	898	124	156	440
10	72	62	34	23	27	31	32	238	814	121	158	400
11	70	60	42	25	27	32	34	273	630	116	160	600
12	67	62	44	26	26	31	47	327	460	129	154	534
13	66	50	43	27	26	29	62	351	630	160	148	402
14	66	58	44	29	25	27	65	425	373	134	143	363
15	66	58	48	29	25	27	51	564	306	115	134	329
16	65	56	46	29	26	28	51	695	214	108	127	294
17	65	50	48	27	28	29	54	783	190	124	121	250
18	65	50	49	25	28	28	59	896	164	146	119	237
19	64	52	50	26	28	29	56	849	154	190	122	221
20	66	52	50	24	27	30	54	872	145	377	116	206
21	70	51	54	26	28	29	50	550	141	306	112	192
22	67	50	56	25	28	28	51	493	186	245	124	188
23	62	51	54	26	29	27	55	505	224	164	116	188
24	65	48	52	28	28	30	56	528	209	143	110	188
25	64	44	50	27	29	35	54	518	194	136	103	185
26	71	46	46	26	30	38	54	417	219	113	100	177
27	60	48	47	25	31	37	80	282	276	112	97	168
28	54	50	47	25	31	35	110	255	356	116	94	158
29	59	48	48	27	-----	32	90	261	356	122	92	152
30	57	46	40	28	-----	33	50	217	310	199	89	143
31	56	-----	32	28	-----	32	-----	320	-----	220	88	-----
TOTAL	2,123	1,651	1,346	847	770	637	1,530	12,432	11,575	5,111	4,227	7,530
MEAN	68.5	53.0	43.4	27.2	27.5	20.2	51.0	401	386	165	136	251
MAX	83	64	56	36	31	38	110	896	898	377	200	600
MIN	54	44	24	21	25	27	27	72	141	108	88	120
AC-FT	4,210	3,270	2,670	1,680	1,530	1,860	3,030	24,660	22,960	10,140	8,380	14,940
CAL YR 1972	TOTAL 47,414		MEAN 130	MAX 982	MIN 24	AC-FT 94,050						
WTR YR 1973	TOTAL 50,079		MEAN 137	MAX 896	MIN 21	AC-FT 96,330						

PEAK DISCHARGE (BASE, 830 FT³/S)

NOTE.--No gage-height record Nov. 7 to Dec. 12.

DATE	TIME	G.HT.	DISCHARGE
5-18	2200	8.57	1,470
6- 2	0130	7.61	916
6- 9	2230	8.15	1,350

YELLOWSTONE RIVER BASIN

06276500 GREYBULL RIVER AT MEETEETSE, WYO.

LOCATION.--Lat 44°09'20", long 108°52'35", in sec.4, T.48 N., R.100 W., Park County, on right bank at Meeteetse, 0.3 mi (0.5 km) upstream from bridge on State Highway 120, and 3.0 mi (4.8 km) upstream from Meeteetse Creek.

DRAINAGE AREA.--681 mi² (1,764 km²).

PERIOD OF RECORD.--June to December 1897, April to October 1903 (gage heights and discharge measurements only), July 1920 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 5,739.42 ft (1,749.375m) above mean sea level. See WSP 1916 for history of changes prior to Apr. 28, 1939. Apr. 28, 1938, to May 24, 1961, at site on left bank at datum 2.00 ft (0.610 m) higher. May 25, 1961, to May 9, 1967, at site 100 ft (30 m) downstream at present datum.

AVERAGE DISCHARGE.--51 years (1920-71), 347 ft³/s (9.827m³/s), 251,400 acre-ft/yr (310 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,660 ft³/s (104 m³/s) June 8, gage height, 5.71 ft (1.740 m); minimum daily during period of operation, 33ft³/s (0.93 m³/s) Apr. 3.

Period of record: Maximum discharge, 13,600 ft³/s (385 m³/s) June 15, 1963, gage height, 9.20 ft (2.804 m), from floodmark, from rating curve extended above 4,600 ft³/s (130 m³/s) on basis of velocity-area study; minimum daily, 16 ft³/s (0.45 m³/s) Mar. 4, 1963.

REMARKS.--Records poor. Some regulation by Sunshine Reservoir beginning May 1940, capacity, 52,990 acre-ft (65.3 hm³), and Lower Sunshine Reservoir beginning December 1972, capacity, 58,900 acre-ft (72.6 hm³). Diversions for irrigation of about 10,600 acres (42.9 km²) above station. Several diversions above station for irrigation below station.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1309: 1923(M), 1924, 1925(M). WSP 1709: 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							36	150	1,200	646	502	341
2							36	125	1,030	510	628	307
3							33	143	815	473	664	240
4							34	207	583	518	683	253
5							42	253	559	543	683	292
6							51	353	826	610	637	297
7							64	390	1,080	646	601	307
8							61	384	1,140	637	567	435
9							60	396	1,400	619	551	835
10							39	370	1,840	637	542	520
11							43	436	1,470	664	551	620
12							56	526	752	703	583	583
13							71	673	655	783	551	458
14							71	794	646	742	526	416
15							66	952	592	732	510	403
16							58	972	458	713	502	480
17							66	1,420	292	732	518	526
18							68	1,850	244	742	518	473
19							69	2,390	227	815	518	451
20							71	2,260	262	848	487	429
21							61	1,360	347	655	480	410
22							62	826	518	663	510	384
23							74	916	610	542	502	364
24							85	964	473	466	451	358
25							81	904	473	370	436	353
26							85	870	534	444	436	336
27							130	730	670	480	429	318
28							135	655	952	502	436	313
29							175	722	848	473	410	302
30							160	722	837	542	396	297
31								904		466	396	
TOTAL							2,143	24,617	22,333	18,916	16,204	12,101
MEAN							71.4	794	744	610	523	403
MAX							175	2,390	1,840	848	683	835
MIN							33	125	227	370	396	240
AC-FT							4,250	48,830	44,300	37,520	32,140	24,000

06277500 GREYBULL RIVER NEAR BASIN, WYO.

LOCATION.--Lat 44°24'24", long 108°11'10", in NE¼NW¼SW¼ sec.8, T.51 N., R.94 W., Big Horn County, on right bank at upstream side of bridge on State Highway 0200, 3.0 mi (4.8 km) upstream from Dorsey Creek, and 8.0 mi (12.9 km) west of Basin.

DRAINAGE AREA.--1,115 mi² (2,888 km²).

PERIOD OF RECORD.--April 1930 to September 1973 (discontinued). Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 4,000 ft (1,219 m), from topographic map. Prior to Sept. 30, 1930, nonrecording gage at site 250 ft (76.2 m) downstream at datum 2.92 ft (0.890 m) higher. Oct. 1, 1930, to Sept. 20, 1934, nonrecording gage and Sept. 21, 1934, to Apr. 14, 1936, water-stage recorder, at site 250 ft (76.2 m) downstream at datum 1.92 ft (0.585 m) higher. Apr. 15, 1936, to Aug. 13, 1951, at site 100 ft (30 m) downstream at present datum. Aug. 14, 1951, to June 17, 1970, at site 300 ft (91 m) downstream at present datum.

AVERAGE DISCHARGE.--43 years, 180 ft³/s (5.098 m³/s), 130,400 acre-ft/yr (161 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,280 ft³/s (92.9 m³/s) May 19, gage height, 6.22 ft (1.896 m); maximum gage height observed, 6.33 ft (1.929 m) Mar 5, backwater from ice; minimum daily discharge, 16 ft³/s (0.45 m³/s) July 11, 12.

Period of record: Maximum discharge, 19,400 ft³/s (549 m³/s) June 16, 1963, gage height, 8.83 ft (2.691 m), from rating curve extended above 2,200 ft³/s (62.3 m³/s) on basis of contracted-opening measurement of peak flow; no flow at times in 1931-34, 1936, 1939.

REMARKS.--Records fair except those for winter period and period of no gage-height record, which are poor. Slight regulation by Sunshine Reservoir, beginning May 1940, capacity, 53,000 acre-ft (65.3 hm³), and Lower Sunshine Reservoir, beginning November 1972, capacity, 58,900 acre-ft (72.6 hm³). Diversions above station for irrigation of about 63,300 acres (256 km²), of which about 2,600 acres (10.5 km²) lies below station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 826: 1936. WSP 1509: 1930-31, 1932-33(M). WSP 1709: 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	22	136	140	90	90	210	114	210	178	179	42	439
2	20	149	145	90	88	220	106	193	459	89	35	388
3	17	152	80	86	86	230	103	168	279	44	64	226
4	18	142	72	80	90	240	94	172	114	22	56	96
5	28	149	66	70	96	180	96	252	54	21	133	76
6	41	155	63	74	90	180	122	331	48	20	103	74
7	39	155	62	68	82	180	130	486	180	17	66	57
8	35	149	63	64	76	140	120	479	504	22	49	94
9	30	155	62	60	76	140	110	472	680	28	44	828
10	33	152	80	62	78	180	110	331	820	18	41	382
11	43	142	74	64	84	250	106	261	1,020	16	43	439
12	41	152	90	70	95	440	108	261	432	16	49	658
13	57	158	100	77	92	440	146	300	152	24	46	479
14	114	139	100	34	88	430	160	377	78	51	34	348
15	125	158	100	84	88	410	140	535	114	30	30	359
16	114	155	110	82	90	380	135	805	74	28	22	480
17	106	149	110	86	96	350	135	1,150	42	22	20	400
18	103	149	110	84	100	200	150	1,460	30	38	18	350
19	108	145	115	82	100	160	145	1,780	24	105	18	330
20	111	140	115	78	94	136	140	1,460	18	212	22	320
21	111	140	115	74	94	136	135	1,010	18	238	20	310
22	119	135	120	76	96	119	135	310	18	599	20	310
23	114	130	120	74	98	122	145	175	77	612	21	300
24	127	130	115	78	130	127	140	165	41	336	21	290
25	136	135	115	80	160	116	135	183	22	266	20	280
26	127	140	110	84	165	127	135	226	23	149	21	270
27	127	120	110	80	170	139	190	168	44	160	21	260
28	119	98	115	78	190	133	270	116	228	119	22	240
29	111	110	120	80	-----	122	240	92	125	327	24	220
30	111	130	110	85	-----	114	220	72	238	98	22	230
31	139	-----	100	94	-----	111	-----	62	-----	70	22	-----
TOTAL	2,546	4,249	3,107	2,418	2,683	6,462	4,215	14,062	6,134	3,976	1,169	9,533
MEAN	82.1	142	100	78.0	103	208	141	454	204	128	37.7	318
MAX	139	158	145	94	190	440	270	1,780	1,020	612	133	828
MIN	17	98	62	60	76	111	94	62	16	16	18	57
AC-FT	5,050	6,430	6,160	4,800	5,720	12,820	8,360	27,890	12,170	7,890	2,320	18,910

CAL YR 1972 TOTAL 51,572 MEAN 141 MAX 1,880 MIN 13 AC-FT 102,300
WTR YR 1973 TOTAL 60,754 MEAN 166 MAX 1,780 MIN 16 AC-FT 120,500

PEAK DISCHARGE (BASE, 1,300 FT³/S)

NOTE.--No gage-height record Dec. 4 to Mar. 16.

DATE	TIME	G.HT.	DISCHARGE
5-19	1300	6.22	3,280
6-11	1230	4.97	1,570
9-9	1000	4.75	1,320

YELLOWSTONE RIVER BASIN

06278300 SHELL CREEK ABOVE SHELL RESERVOIR, WYO.

LOCATION.--Lat 44°30'29", long 107°24'11", in sec.1, T.52 N., R.88 W., Big Horn County, Bighorn National Forest, on right bank 0.2 mi (0.3 km) upstream from Shell Reservoir, 1.1 mi (1.8 km) downstream from Buckley Creek, 6.0 mi (9.7 km) southeast of Shell Creek ranger station, and 19 mi (31 km) east of Shell.

DRAINAGE AREA.--23.1 mi² (59.8 km²).

PERIOD OF RECORD.--October 1956 to current year. Prior to October 1969, published as Shell Creek above Shell Creek Reservoir.

GAGE.--Water-stage recorder. Altitude of gage is 9,050 ft (2,758 m), from topographic map.

AVERAGE DISCHARGE.--17 years, 36.8 ft³/s (1.042m³/s), 26,660 acre-ft/yr (32.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,080 ft³/s (30.6 m³/s) June 9, gage height, 6.57 ft (2.003 m); minimum daily, 1.1 ft³/s (0.03 m³/s) Apr. 8.

Period of record: Maximum discharge, 1,870 ft³/s (53.0 m³/s) June 15, 1963, gage height, 7.84 ft (2.390 m), from floodmarks, from rating curve extended above 550 ft³/s (15.6 m³/s) on basis of velocity-area study; minimum daily, 0.60 ft³/s (0.017 m³/s) Mar. 7, 1967.

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

REVISIONS (WATER YEARS).--WSP 1629: 1958. WSP 1709: 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	15	9.0	6.0	3.4	1.8	1.3	1.4	5.0	302	119	22	12
2	14	9.0	6.4	3.4	1.8	1.3	1.4	5.0	407	89	20	17
3	13	9.0	6.0	3.0	1.8	1.2	1.4	6.0	184	71	19	24
4	13	9.3	5.0	2.5	1.8	1.3	1.3	7.0	83	62	18	26
5	13	9.3	4.7	2.6	1.8	1.5	1.5	15	84	57	18	24
6	14	9.5	4.5	2.8	1.6	1.5	1.5	17	200	52	17	23
7	14	9.0	4.4	2.9	1.5	1.4	1.3	20	321	47	17	22
8	14	9.3	4.3	2.9	1.5	1.4	1.1	22	490	43	15	28
9	13	9.0	4.2	2.9	1.6	1.4	1.3	25	633	38	14	48
10	13	9.3	4.0	2.9	1.8	1.4	1.5	22	575	34	13	30
11	13	9.8	4.1	3.0	1.7	1.4	1.7	23	405	30	13	27
12	12	9.8	4.2	3.0	1.7	1.5	1.7	30	334	29	14	23
13	12	9.6	4.3	3.0	1.7	1.4	1.7	40	315	27	13	21
14	12	9.0	4.4	2.8	1.6	1.3	1.7	45	337	25	12	20
15	12	8.6	4.5	2.8	1.5	1.2	1.7	50	312	23	12	21
16	11	8.3	4.6	2.7	1.5	1.3	1.6	70	130	21	12	20
17	11	8.1	4.8	2.7	1.5	1.5	1.7	90	103	20	11	19
18	11	7.8	4.6	2.7	1.5	1.5	1.7	120	89	18	10	18
19	11	7.5	4.5	2.6	1.5	1.4	1.6	145	73	18	10	16
20	12	7.2	4.5	2.5	1.4	1.4	1.4	170	74	18	11	14
21	12	6.9	4.2	2.4	1.4	1.4	1.5	200	108	18	10	14
22	12	7.6	4.0	2.4	1.4	1.4	1.7	180	176	17	9.5	15
23	11	8.0	4.0	2.5	1.4	1.4	1.8	144	238	22	11	14
24	10	8.4	4.0	2.5	1.4	1.4	2.7	114	270	21	12	14
25	10	7.0	3.8	2.5	1.4	1.3	2.5	145	205	20	11	14
26	11	7.0	3.8	2.4	1.4	1.4	2.4	120	193	18	9.0	15
27	10	6.5	3.8	2.3	1.4	1.5	4.0	68	183	17	8.5	14
28	9.5	6.0	3.6	2.0	1.3	1.4	6.0	53	150	16	9.0	13
29	9.5	5.4	3.6	2.0	-----	1.3	7.0	43	149	15	8.0	12
30	9.4	5.6	3.6	1.9	-----	1.4	5.5	54	153	17	7.5	11
31	8.6	-----	3.4	1.8	-----	1.4	-----	151	-----	18	7.0	-----
TOTAL	366.0	245.8	135.8	81.8	43.7	42.9	65.3	2,199.0	7,276	1,040	393.5	589
MEAN	11.8	8.19	4.38	2.64	1.56	1.38	2.18	70.9	243	33.5	12.7	19.6
MAX	15	9.8	6.4	3.4	1.8	1.5	7.0	200	633	119	22	48
MIN	8.6	5.4	3.4	1.8	1.3	1.2	1.1	5.0	73	15	7.0	11
AC-FT	726	488	269	162	87	85	130	4,360	14,430	2,060	781	1,170

CAL YR 1972 TOTAL 13,675.85 MEAN 37.4 MAX 552 MIN .95 AC-FT 27,130
 WTR YR 1973 TOTAL 12,478.80 MEAN 34.2 MAX 633 MIN 1.1 AC-FT 24,750

PEAK DISCHARGE (BASE, 400 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
5-21	Unknown	4.85	452
6- 2	0300	5.08	510
6- 9	2030	6.57	1,080

NOTE.--No gage-height record Dec. 6 to Apr. 11, May 7-22, Aug. 13 to Sept. 30.

YELLOWSTONE RIVER BASIN

55

06278500 SHELL CREEK NEAR SHELL, WYO.

LOCATION.--Lat 44°33'54", long 107°42'44", in SE¼SW¼ sec.17, T.53 N., R.90 W., Big Horn County, in right bank 0.9 mi (1.4 km) upstream from White Creek and 5.0 mi (8.0 km) northeast of Shell.

DRAINAGE AREA.--145 mi² (376 km²).

PERIOD OF RECORD.--October 1940 to current year (no winter records since 1971). Prior to December 1940 monthly discharge only, published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 4,370.05 ft (1,331.991m) above mean sea level.

AVERAGE DISCHARGE.--31 years (1940-71), 119 ft³/s (3.370m³/s), 86,220 acre-ft/yr (106 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,690 ft³/s (47.9 m³/s) June 10, gage height, 5.42 ft (1.652 m); minimum daily during period of operation, 32 ft³/s (0.91 m³/s) Apr. 8.

Period of record: Maximum discharge, 3,020 ft³/s (85.5 m³/s) June 24, 1945, gage height, 7.49 ft (2.283 m), from rating curve extended above 1,600 ft³/s (45.3 m³/s); minimum daily, 18 ft³/s (0.51 m³/s) Mar. 5, 7, 1950, Jan. 30, 31, 1951.

REMARKS.--Records good. Some regulation by two small reservoirs, capacity, 3,650 acre-ft (4.50 hm³). Diversions above station for irrigation of about 80 acres (32 hm²) below station.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1239: 1941, 1945(M). WSP 1709: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						39	40	45	870	330	89	94
2						40	40	45	1,270	282	89	97
3						40	40	45	750	235	115	95
4						39	40	54	393	210	116	94
5						39	41	61	358	195	120	89
6						40	41	69	535	182	115	81
7						40	39	76	816	168	108	77
8						40	32	84	935	159	106	87
9						41	40	78	1,200	152	101	89
10						42	41	69	1,210	139	100	81
11						42	41	80	960	130	98	81
12						42	42	89	750	128	101	78
13						41	43	112	685	123	100	77
14						39	44	131	640	116	94	81
15						42	41	172	858	112	92	85
16						43	41	249	468	107	91	82
17						43	42	390	396	104	89	81
18						43	41	732	386	100	88	81
19						43	38	858	334	97	89	78
20						43	39	1,100	327	100	87	76
21						42	43	1,160	340	102	85	67
22						42	44	710	396	98	91	64
23						41	43	585	472	116	87	61
24						41	45	472	500	118	85	66
25						42	46	635	456	112	84	64
26						42	43	550	412	98	87	64
27						41	45	344	396	101	87	62
28						41	53	303	365	89	88	60
29					-----	41	51	261	340	89	87	58
30					-----	41	46	238	390	95	84	58
31		-----			-----	40	-----	460	-----	88	82	-----
TOTAL						1,275	1,265	10,257	18,268	4,275	2,935	2,308
MEAN						41.1	42.2	331	509	138	94.7	76.9
MAX						43	53	1,160	1,270	330	120	97
MIN						39	32	45	327	88	82	58
AC-FT						2,530	2,510	20,340	36,230	8,430	5,820	4,580

PEAK DISCHARGE (BASE, 750 FT³/S)

DATE	TIME	G.H.T	DISCHARGE
5-20	2100	5.13	1,430
6-2	0530	5.03	1,350
6-10	0215	5.42	1,690

YELLOWSTONE RIVER BASIN

06279500 BIGHORN RIVER AT KANE, WYO.

LOCATION.--Lat 44°45'31", long 108°10'51", in NW¼NE¼SW¼ sec.9, T.55 N., R.94 W., Big Horn County, on right bank 180 ft (55 m) upstream from Bighorn Canyon National Recreation Area boundary, 0.5 mi (0.8 km) upstream from normal high-water line of Bighorn Lake at elevation 3,660 ft (1,116 m), 1.3 mi (2.1 km) upstream from Five Springs Creek, and 5.9 mi (9.5 km) south of Kane.

DRAINAGE AREA.--15,765 mi² (40,831 km²). Area at sites used prior to May 17, 1956, 15,846 mi² (41,041 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 3,660 ft (1,116 m), from topographic map. Aug. 29, 1928, to Apr. 25, 1932, nonrecording gage, and Apr. 25, 1932, to May 16, 1956, water-stage recorder, at site 12.5 mi (20.1 km) downstream at different datum.

AVERAGE DISCHARGE.--45 years, 2,282 ft³/s (64.63m³/s), 1,653,000 acre-ft/yr (2,038 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,800 ft³/s (249 m³/s) May 21, gage height, 5.60 ft (1.707 m); maximum gage height, 6.80 ft (2.072 m) Dec. 8 (backwater from ice); minimum daily discharge, 718 ft³/s (20.3 m³/s) Aug. 31.

Period of record: Maximum discharge, 25,200 ft³/s (714 m³/s) June 16, 1935, gage height, 11.10 ft (3.383 m), site and datum then in use; minimum daily, 179 ft³/s (5.07 m³/s) July 22, 1934.

Maximum stage known, 14.8 ft (4.51 m) Sept. 30, 1923, site and datum in use April 1932 to May 1956.

REMARKS.--Records fair except those for winter period, which are poor. Some regulation by Boysen Reservoir since October 1951. (See page 93.) Diversions for irrigation of about 376,000 acres (1,522 km²) above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1309: 1929(M). WSP 1509: 1929. WSP 1709: 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	2,200	2,250	2,250	2,100	1,700	2,320	1,640	2,850	3,970	3,140	2,520	890
2	2,200	2,320	2,320	2,100	1,700	2,400	1,670	2,610	5,350	2,660	2,320	2,340
3	2,150	2,460	2,320	2,000	1,650	2,440	1,920	2,530	6,550	2,220	2,230	2,380
4	2,090	2,460	2,300	1,950	1,600	2,470	1,580	2,530	5,490	1,880	2,230	2,160
5	2,250	2,440	2,100	1,900	1,600	2,340	1,580	2,640	4,390	1,830	2,320	1,760
6	2,830	2,440	1,900	2,000	1,550	2,320	1,740	2,850	3,860	1,580	2,470	1,610
7	2,250	2,380	1,900	1,950	1,500	2,410	1,900	3,070	3,730	1,440	2,380	1,500
8	2,190	2,340	1,700	1,850	1,450	2,200	1,880	3,150	4,220	1,370	2,340	1,660
9	2,180	2,320	1,900	1,800	1,500	2,010	1,850	3,320	5,090	1,340	2,250	3,990
10	2,180	2,320	2,000	1,900	1,600	1,960	1,890	3,240	5,860	1,270	2,200	3,340
11	2,230	2,340	1,950	2,000	1,600	2,010	1,900	3,120	5,920	1,170	2,190	2,640
12	2,400	2,340	1,950	2,100	1,500	2,200	1,920	3,050	5,070	1,060	2,190	3,700
13	2,320	2,300	1,950	2,050	1,500	2,220	1,960	3,030	4,180	1,020	2,190	3,930
14	2,260	2,300	2,000	2,000	1,450	2,350	1,990	3,100	3,790	1,120	2,120	4,650
15	2,250	2,350	2,100	1,950	1,450	2,290	2,080	3,240	4,440	1,130	1,520	5,190
16	2,380	2,350	2,150	1,700	1,500	2,040	2,010	3,640	4,140	1,110	1,260	5,290
17	2,320	2,300	2,200	1,600	1,500	2,120	1,890	4,350	3,100	1,080	1,080	5,470
18	2,290	2,300	2,200	1,550	1,600	2,130	1,880	5,410	2,820	1,010	860	5,570
19	2,290	2,300	2,250	1,500	1,700	1,930	2,020	6,570	2,780	920	980	5,490
20	2,290	2,300	2,300	1,500	1,500	1,750	2,110	7,760	2,590	1,030	950	5,410
21	2,300	2,350	2,100	1,450	2,000	1,710	2,050	8,400	2,460	1,230	950	5,290
22	2,320	2,350	2,300	1,450	2,000	1,700	2,040	7,430	2,480	1,960	910	5,050
23	2,300	2,300	2,250	1,500	2,000	1,670	2,060	6,340	2,670	2,310	880	4,290
24	2,380	2,300	2,350	1,550	2,050	1,710	2,180	5,750	2,910	3,660	830	4,270
25	2,410	2,300	2,300	1,550	2,100	1,660	2,590	5,190	2,960	2,360	830	4,200
26	2,320	2,250	2,300	1,500	2,150	1,640	2,800	5,650	2,670	3,550	830	3,730
27	2,300	2,300	2,200	1,450	2,180	1,640	2,620	5,470	2,530	2,880	830	3,660
28	2,280	2,400	2,200	1,400	2,180	1,680	2,380	4,870	2,590	2,860	830	3,620
29	2,250	2,300	2,250	1,450	-----	1,680	2,620	4,200	2,850	2,880	810	3,570
30	2,220	2,230	2,300	1,500	-----	1,620	3,150	3,710	3,290	3,100	781	3,550
31	2,200	-----	2,200	1,600	-----	1,620	-----	3,500	-----	3,140	718	-----
TOTAL	70,830	69,990	66,490	53,900	48,210	62,240	61,550	132,570	114,750	59,310	47,799	110,200
MEAN	2,285	2,333	2,145	1,739	1,722	2,008	2,052	4,276	3,825	1,913	1,542	3,673
MAX	2,830	2,460	2,350	2,100	2,180	2,470	3,150	8,400	6,550	3,660	2,520	5,570
MIN	2,090	2,230	1,700	1,400	1,450	1,620	1,520	2,530	2,460	920	718	890
AC-FT	140,500	138,800	131,900	106,900	95,620	125,900	122,100	263,000	227,600	117,600	94,810	218,600
CAL YR 1972	TOTAL	1,093,450	MEAN	2,988	MAX	9,500	MIN	1,700	AC-FT	2,169,000		
WTR YR 1973	TOTAL	897,839	MEAN	2,400	MAX	8,400	MIN	718	AC-FT	1,781,000		

YELLOWSTONE RIVER BASIN

57

06280300 SOUTH FORK SHOSHONE RIVER NEAR VALLEY, WYO.

LOCATION.--Lat 44°12'30", long 109°33'15", in NE¼ sec.24, T.49 N., R.106 W., Park County, Shoshone National Forest, on left bank 75 ft (23 m) downstream from U.S. Forest Service bridge, 0.4 mi (0.6 km) downstream from Boulder Creek, 3.2 mi (5.1 km) northeast of Valley, and 34 mi (55 km) southwest of Cody.

DRAINAGE AREA.--297 mi² (769 km²).

PERIOD OF RECORD.--October 1956 to September 1958, October 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,200 ft (1,890 m), from topographic map. Prior to Nov. 22, 1961, at site 75 ft (23 m) upstream at same datum.

AVERAGE DISCHARGE.--16 years, 426 ft³/s (12.06m³/s), 308,600 acre-ft/yr (381 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,950 ft³/s (112 m³/s) June 9, gage height, 6.76 ft (2.060 m); minimum daily, 51 ft³/s (1.44 m³/s) Dec. 7.

Period of record: Maximum discharge, 6,610 ft³/s (187 m³/s) June 15, 1963, gage height, 8.83 ft (2.691 m), from rating curve extended above 3,200 ft³/s (90.6 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 41 ft³/s (1.16 m³/s) Feb. 27, 28, 1961.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 450 acres (1.82 km²) above station.

DISCHARGE, IN CURIC 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	145	94	81	80	83	73	124	1,340	1,510	341	198
2	223	157	102	75	80	83	73	118	1,250	1,050	329	235
3	207	149	99	74	80	73	73	130	867	1,000	310	213
4	213	148	78	70	80	67	70	171	636	987	308	193
5	219	149	70	80	78	68	73	203	673	979	308	184
6	214	145	70	70	70	72	90	247	1,110	964	306	179
7	214	141	51	66	70	73	67	374	1,750	921	282	174
8	207	144	54	60	72	73	56	333	2,370	804	266	450
9	208	140	58	66	76	77	55	236	2,800	725	252	400
10	234	135	56	70	76	79	68	181	3,000	680	256	320
11	230	135	62	74	76	76	93	215	2,190	660	259	460
12	219	135	60	78	72	76	127	376	1,610	652	248	382
13	215	130	70	80	66	75	142	595	1,730	713	239	304
14	214	131	70	83	68	73	135	727	1,690	542	226	296
15	208	130	76	87	70	75	122	954	1,340	496	213	296
16	202	126	91	86	74	71	122	1,250	834	479	207	316
17	197	127	95	84	79	75	116	1,580	742	465	204	284
18	192	125	97	82	78	75	112	1,860	588	462	213	248
19	189	125	98	80	76	70	106	2,100	534	632	210	229
20	191	121	99	78	74	73	103	1,870	552	904	198	213
21	192	114	104	78	79	83	99	1,120	729	726	196	213
22	186	101	111	78	76	75	97	902	1,080	559	193	201
23	182	105	108	80	75	75	101	970	1,280	509	187	204
24	191	97	102	80	79	72	108	1,000	1,250	453	219	207
25	187	83	100	74	83	76	110	1,100	1,270	411	201	201
26	188	89	96	71	84	85	106	790	1,480	396	181	187
27	166	96	98	70	85	89	137	575	1,740	397	176	174
28	151	93	101	72	85	85	190	495	1,630	422	168	174
29	153	93	104	78	-----	79	166	475	1,600	405	163	171
30	138	86	90	80	-----	78	135	500	1,970	400	158	171
31	123	-----	78	80	-----	74	-----	853	-----	349	153	-----
TOTAL	6,098	3,695	2,642	2,365	2,141	2,358	3,125	22,424	41,635	20,652	7,170	7,477
MEAN	197	123	85.2	76.3	76.5	76.1	104	723	1,388	666	231	249
MAX	245	157	111	87	85	89	190	2,100	3,000	1,510	341	460
MIN	123	83	51	60	66	67	55	118	534	349	153	171
AC-FT	12,100	7,330	5,240	4,690	4,250	4,680	6,200	44,480	82,580	40,960	14,220	14,830
CAL YR 1972	TOTAL 172,157	MEAN 470	MAX 3,500	MIN 49	AC-FT 341,500							
WTR YR 1973	TOTAL 121,782	MEAN 334	MAX 3,000	MIN 51	AC-FT 241,600							

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
5-18	2300	5.90	2,970
6-9	2300	6.76	3,950
6-30	0200	5.83	2,880

YELLOWSTONE RIVER BASIN

59

06284400 SHOSHONE RIVER NEAR GARLAND, WYO.

LOCATION.--Lat 44°44'20", long 108°35'38", in SE¼SE¼ sec.13, T.55 N., R.98 W., Park County, on right bank 50 ft (15 m) downstream from bridge on county road, 600 ft (183 m) downstream from Penrose Dam, 1.3 mi (2.1 km) upstream from Bitter Creek, 4.3 mi (6.9 km) southeast of Garland, and 8.0 mi (12.9 km) east of Powell.

DRAINAGE AREA.--2,036 mi² (5,273 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 4,077.31 ft (1,242.764 m) above mean sea level. Prior to Nov. 12, 1965, at site 50 ft (15 m) upstream at same datum. Nov. 12, 1965, to June 13, 1968, at site 150 ft (46 m) upstream at different datum.

AVERAGE DISCHARGE.--15 years, 651 ft³/s (18.44m³/s), 471,600 acre-ft/yr (581 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,060 ft³/s (58.3 m³/s) Sept. 1, gage height, 6.35 ft (1.936 m); minimum daily, 7.8 ft³/s (0.22 m³/s) July 12.

Period of record: Maximum discharge, 13,300 ft³/s (377 m³/s) July 1, 1967, gage height, 8.76 ft (2.670 m), from floodmark, site and datum then in use; minimum daily, 5.0 ft³/s (0.14 m³/s) May 25, 26, 1959.

REMARKS.--Records fair except those for period of no gage-height record and those below 80 ft³/s (2.27 m³/s), which are poor. Flow regulated by Buffalo Bill Reservoir. (See page 93.) Diversions above station for irrigation of about 143,000 acres (579 km²), of which 37,000 acres (150 km²) lies below station.

REVISIONS.--WSP 1709: 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	460	600	900	934	958	974	753	692	140	531	143	590
2	508	630	950	953	958	974	840	567	302	543	87	620
3	503	630	950	942	958	974	820	476	342	465	48	540
4	520	630	780	870	958	966	800	370	370	445	78	500
5	579	640	600	1,030	958	966	840	276	293	385	137	470
6	598	630	600	1,030	950	966	880	253	276	245	142	395
7	585	630	600	1,000	950	966	950	139	230	190	165	385
8	579	630	540	850	990	848	880	241	183	132	142	807
9	585	637	540	600	974	650	860	196	102	98	142	650
10	585	637	540	650	966	542	900	151	87	48	162	561
11	579	630	540	700	950	950	900	127	97	21	171	460
12	585	630	500	900	950	950	902	94	107	7.8	177	405
13	567	630	450	980	950	958	910	42	73	11	184	390
14	573	624	470	990	950	942	894	21	57	20	140	370
15	579	657	520	1,000	950	934	886	19	306	37	110	400
16	549	685	520	1,000	950	934	728	15	532	31	84	470
17	520	692	520	998	950	950	618	28	848	28	80	561
18	531	706	580	998	950	966	635	46	902	10	80	637
19	537	706	600	982	950	950	592	100	512	66	84	630
20	543	750	758	982	950	942	720	87	216	124	120	644
21	549	900	942	982	950	942	878	125	234	165	160	624
22	561	870	1,010	982	942	942	950	105	227	626	160	604
23	630	870	1,020	974	942	926	966	66	230	855	170	604
24	910	900	1,010	982	942	894	942	89	257	585	160	604
25	878	960	1,010	974	942	886	918	114	238	435	180	585
26	894	960	1,040	974	958	894	902	140	174	380	300	579
27	862	900	982	966	982	886	810	162	162	365	395	580
28	832	880	934	966	974	886	855	168	148	276	375	580
29	848	860	886	958	-----	878	886	222	382	216	190	585
30	802	860	934	958	-----	870	886	257	567	165	140	585
31	561	-----	934	958	-----	818	-----	171	-----	149	140	-----
TOTAL	19,392	21,964	23,160	29,068	26,752	28,524	25,356	5,559	8,894	7,654.8	4,836	16,415
MEAN	626	732	747	938	955	920	845	179	296	247	156	547
MAX	910	960	1,040	1,030	990	974	966	692	902	855	395	807
MIN	460	600	450	600	942	650	592	15	57	7.8	48	370
AC-FT	38,460	43,570	45,940	57,660	53,060	56,580	50,240	11,030	17,640	15,180	9,590	32,560

CAL YR 1972 TOTAL 261,578.0 MEAN 715 MAX 2,650 MIN 15 AC-FT 518,800
 WTR YR 1973 TOTAL 217,574.8 MEAN 596 MAX 1,040 MIN 7.8 AC-FT 431,600

NOTE.--No gage-height record Nov. 20 to Dec. 19.

YELLOWSTONE RIVER BASIN

06284500 BITTER CREEK NEAR GARLAND, WYO.

LOCATION.--Lat 44°45'13", long 108°35'29", in SW¼SW¼SW¼ sec.7, T.55 N., R.97 W., Big Horn County, on left bank 100 ft (30 m) downstream from bridge on county road, 1.0 mi (1.6 km) upstream from mouth, 4.0 mi (6.4 km) southeast of Garland, and 5.0 mi (8.0 km) southwest of Byron.

DRAINAGE AREA.--80.5 mi² (208.5 km²).

PERIOD OF RECORD.--March 1950 to December 1953, October 1957 to September 1960, October 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,080 ft (1,244 m), from topographic map.

AVERAGE DISCHARGE.--11 years (1950-53, 1957-60, 1968-73), 147 ft³/s (4.163m³/s), 106,500 acre-ft/yr (131 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 966 ft³/s (27.4 m³/s) Sept. 1, gage height, 3.88 ft (1.183 m); minimum daily, 14 ft³/s (0.40 m³/s) Dec. 6.

Period of record: Maximum discharge, 1,510 ft³/s (42.8 m³/s) June 10, 1960, gage height, 4.48 ft (1.366 m), from rating curve extended above 390 ft³/s (11.0 m³/s); minimum daily, 0.50 ft³/s (0.014 m³/s) Jan. 30 to Feb. 3, 1969.

REMARKS.--Records fair except those for December to March, which are poor. Flow is mainly return flow from Garland Canal system of Shoshone irrigation project. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1709: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JUL	AUG	SEP
1	254	49	30	17	18	22	20	69	353	404	255	505
2	245	49	29	17	18	22	20	106	383	388	255	404
3	237	48	25	16	18	22	19	130	348	367	283	350
4	237	48	20	16	18	22	23	174	344	378	334	350
5	260	48	16	16	18	22	30	168	343	354	376	345
6	278	46	14	16	17	22	26	159	342	292	397	334
7	286	46	15	16	16	22	23	181	332	246	369	322
8	288	46	16	16	16	22	21	234	318	243	313	390
9	277	44	16	15	16	22	19	224	300	252	319	355
10	267	44	16	15	17	22	19	224	309	225	310	343
11	272	43	17	16	19	22	19	212	286	234	304	346
12	274	42	17	17	21	22	19	220	258	255	322	346
13	279	40	17	17	21	21	19	232	246	262	322	343
14	281	40	17	17	20	19	19	261	261	279	304	337
15	281	40	17	17	20	20	18	242	284	276	283	358
16	280	39	18	17	20	22	18	224	149	279	280	380
17	277	38	19	17	21	23	31	222	134	271	262	355
18	252	38	20	17	21	25	79	222	128	271	271	260
19	255	37	20	16	20	22	84	229	152	289	298	268
20	262	36	20	16	20	23	15	235	265	331	316	265
21	255	35	20	16	20	23	16	243	272	345	316	258
22	240	34	20	16	21	22	23	244	276	416	313	258
23	248	34	20	17	22	22	27	244	284	507	307	265
24	192	34	20	18	22	21	34	264	302	441	322	262
25	83	33	20	18	22	22	61	287	305	400	334	248
26	68	34	20	18	22	22	64	301	304	328	349	252
27	60	33	20	17	22	22	71	314	295	289	340	255
28	57	35	20	17	22	20	101	325	294	274	301	252
29	52	33	19	18	-----	19	74	345	341	292	277	258
30	50	31	17	18	-----	19	59	362	402	277	271	252
31	49	-----	17	18	-----	20	-----	355	-----	262	271	-----
TOTAL	6,696	1,197	592	518	548	671	1,071	7,252	8,615	9,747	9,574	9,536
MEAN	216	39.9	19.1	16.7	19.6	21.6	35.7	234	287	314	309	318
MAX	288	49	30	18	22	25	101	362	402	507	597	505
MIN	49	31	14	15	16	19	15	69	128	225	255	248
AC-FT	13,280	2,370	1,170	1,030	1,090	1,330	2,120	14,380	17,090	19,350	18,990	18,910

CAL YR 1972 TOTAL 61,431.6 MEAN 168 MAX 437 MIN 9.0 AC-FT 121,800
WTR YR 1973 TOTAL 56,017.0 MEAN 153 MAX 507 MIN 14 AC-FT 111,100

NOTE.--No gage-height record Jan. 11 to Feb. 13.

YELLOWSTONE RIVER BASIN

61

06284800 WHISTLE CREEK NEAR GARLAND, WYO.

LOCATION.--Lat 44°43'21", long 108°34'16", in NW¼NW¼NE¼ sec.30, T.55 N., R.97 W., Big Horn County, on right bank 300 ft (91 m) upstream from Elk-Lovell Canal, 5.6 mi (9.0 km) southeast of Garland, and 6.3 mi (10.1 km) southwest of Byron.

DRAINAGE AREA.--101 mi² (262 km²).

PERIOD OF RECORD.--May 1958 to May 1960, October 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,150 ft (1,265 m), from topographic map. Prior to May 31, 1960, at different datum.

AVERAGE DISCHARGE.--6 years (1958-59, 1968-73), 29.0 ft³/s (0.821 m³/s), 21,010 acre-ft/yr (25.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,350 ft³/s (38.2 m³/s) Sept. 1, gage height, 6.43 ft (1.960 m); minimum daily, 0.10 ft³/s (0.003 m³/s) Dec. 7-13.

Period of record: Maximum discharge, 1,350 ft³/s (38.2 m³/s) Sept. 1, 1973, gage height, 6.43 ft (1.960 m); minimum daily, 0.05 ft³/s (0.001 m³/s) Jan. 12, 1971.

Flood of Sept. 19, 1961, reached a discharge of 4,260 ft³/s (121 m³/s), at site 6.5 mi (10.5 km) upstream.

REMARKS.--Records good except those for November to April, which are poor. Part of flow is return flow from areas irrigated by diversions from the Shoshone River. Water-quality records for the current year 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	57	38	1.0	.60	.60	3.0	2.8	41	57	76	42	400
2	26	10	1.0	.60	.60	3.0	2.8	48	82	48	44	69
3	5.0	3.8	.80	.50	.60	3.0	2.6	56	76	53	43	61
4	3.4	3.3	.60	.50	.60	3.0	3.0	64	86	47	43	59
5	3.8	3.3	.40	.50	.60	3.0	4.0	56	57	47	48	59
6	8.0	2.8	.20	.50	.60	2.0	3.5	47	51	47	50	56
7	2.3	2.5	.10	.50	.50	3.0	3.0	36	53	33	43	85
8	1.9	2.5	.10	.50	.50	3.0	2.7	46	53	31	47	276
9	2.3	2.2	.10	.40	.50	3.0	2.5	44	41	42	44	94
10	2.8	2.0	.10	.40	.50	3.0	2.0	54	46	41	56	69
11	2.6	2.0	.10	.60	.50	3.0	3.6	54	46	36	62	41
12	2.8	2.0	.10	.80	.50	3.0	5.3	54	37	38	65	35
13	2.3	2.0	.10	.30	.50	2.9	5.5	50	43	42	56	46
14	2.3	2.6	.20	.30	.50	2.7	5.5	50	43	47	51	48
15	2.8	2.5	.30	.80	.50	2.7	3.1	50	43	48	57	59
16	2.5	2.0	.40	.80	.60	3.0	1.6	42	46	48	56	65
17	3.6	2.4	.60	.80	1.0	3.5	1.2	35	56	47	48	41
18	21	2.3	.80	.80	1.0	4.0	4.8	44	69	47	44	34
19	36	2.0	.80	.60	1.2	3.5	26	48	67	47	59	31
20	36	2.3	.80	.60	1.6	3.2	14	46	64	48	56	30
21	37	1.7	.80	.60	2.0	3.2	4.6	50	64	62	56	27
22	34	1.4	.80	.50	2.0	3.0	12	46	61	117	56	26
23	33	1.4	.80	.70	2.0	3.0	9.9	36	61	101	73	26
24	39	1.6	.80	.80	2.0	2.8	6.3	37	62	46	62	26
25	51	1.4	.80	.80	2.3	3.0	14	48	59	50	73	32
26	39	1.2	.60	.80	2.6	3.0	33	56	54	56	76	32
27	30	1.0	.80	.60	3.0	3.0	27	61	61	53	75	33
28	25	1.0	.80	.60	3.0	2.7	23	65	61	50	78	34
29	24	1.0	.70	.60	-----	2.5	23	67	83	48	69	35
30	26	1.0	.60	.60	-----	2.5	26	64	96	48	64	36
31	36	-----	.60	.60	-----	2.8	-----	61	-----	42	71	-----
TOTAL	598.4	105.2	16.90	19.70	32.40	93.0	278.3	1,556	1,778	1,586	1,767	1,965
MEAN	19.3	3.51	.55	.64	1.16	3.00	9.28	50.2	59.3	51.2	57.0	65.5
MAX	57	38	1.0	.80	3.0	4.0	33	67	96	117	78	400
MIN	1.9	1.0	.10	.40	.50	2.5	1.2	35	37	31	42	26
AC-FT	1,190	209	34	39	64	184	592	3,090	3,530	3,150	3,500	3,900

CAL YR 1972 TOTAL 10,956.43 MEAN 29.9 MAX 227 MIN .10 AC-FT 21,730
WTR YR 1973 TOTAL 9,755.90 MEAN 26.8 MAX 400 MIN .10 AC-FT 19,430

YELLOWSTONE RIVER BASIN

06285100 SHOSHONE RIVER NEAR LOVELL, WYO.

LOCATION.--Lat 44°50'20", long 108°26'00", in NW¼NW¼ sec.16, T.56 N., R.96 W., Big Horn County, on right bank 30 ft (9 m) upstream from bridge on U.S. Highway 310 and 1.5 mi (2.4 km) west of Lovell.

DRAINAGE AREA.--2,350 mi² (6,090 km²), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 3,850 ft (1,173 m), from topographic map.

AVERAGE DISCHARGE.--7 years, 1,060 ft³/s (30.02m³/s), 768,000 acre-ft/yr (947 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,590 ft³/s (215 m³/s) Sept. 1, gage height, 5.13 ft (1.564 m); maximum gage height, 7.95 ft (2.423 m) Jan. 17 (backwater from ice); minimum daily discharge, 200 ft³/s (5.66 m³/s) May 16.

Period of record: Maximum discharge, 13,400 ft³/s (379 m³/s) July 1, 1967, gage height, 6.49 ft (1.978 m); maximum gage height, 8.09 ft (2.466 m) Feb. 3, 1972 (backwater from ice); minimum daily discharge, 199 ft³/s (5.64 m³/s) July 25, 1968.

REMARKS.--Records fair except those below 500 ft³/s (14.2 m³/s), which are poor. Flow regulated by Buffalo Bill Reservoir. (See page 93.) Natural flow of stream affected by storage reservoirs, power development, diversions above station for irrigation of about 143,000 acres (579 km²), of which about 8,000 acres (32.4 km²) lies below station, and return flow from irrigated areas. Water-quality records for the current year 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	980	899	1,500	1,080	1,150	1,260	856	917	653	1,500	534	2,910
2	1,060	899	1,600	1,130	1,080	1,250	1,000	790	926	1,400	471	1,650
3	962	873	1,590	1,030	1,050	1,220	908	723	953	1,180	438	1,360
4	962	839	1,440	908	1,070	1,200	890	702	1,050	1,130	492	1,170
5	1,030	839	971	1,080	1,060	1,190	690	604	856	1,000	667	1,090
6	1,050	839	967	1,150	1,070	1,180	1,060	576	805	723	688	990
7	1,060	830	971	1,110	1,120	1,200	990	485	760	569	702	1,000
8	1,050	822	800	1,050	1,080	1,090	962	569	716	457	618	2,490
9	1,070	790	700	900	1,110	723	980	569	555	438	611	1,740
10	1,080	782	760	600	1,140	1,210	1,050	534	485	342	639	1,250
11	1,050	782	700	700	1,260	1,190	1,060	495	478	265	674	1,170
12	1,080	752	660	800	1,140	1,160	1,080	471	438	255	702	1,040
13	1,080	798	620	900	1,140	1,150	1,080	408	426	250	723	1,060
14	1,100	782	580	1,100	1,130	1,120	996	414	295	653	1,070	700
15	1,100	805	600	1,100	1,150	1,200	1,000	305	623	342	569	1,210
16	1,050	848	640	1,100	1,130	1,180	822	200	1,470	378	492	1,390
17	980	822	640	1,150	1,140	1,150	458	235	1,510	360	485	1,470
18	1,030	822	640	1,150	1,140	1,190	790	300	1,640	325	485	1,310
19	1,020	814	720	1,150	1,150	1,150	782	366	1,050	384	618	1,300
20	1,060	790	720	1,190	1,110	1,150	864	360	653	590	688	1,290
21	1,060	1,070	900	1,170	1,150	1,190	1,150	438	688	716	653	1,170
22	1,050	1,070	1,000	1,140	1,130	1,160	1,140	438	730	1,530	674	1,110
23	1,100	1,080	1,100	1,140	1,150	1,110	1,200	390	716	2,120	681	1,140
24	1,480	1,060	1,100	1,150	1,120	1,060	1,120	414	775	1,510	653	1,140
25	1,320	1,140	1,100	1,150	1,140	1,050	1,110	492	768	1,140	730	1,110
26	1,260	1,160	1,100	1,110	1,210	1,080	1,150	548	709	962	908	1,090
27	1,150	1,170	1,110	1,080	1,260	1,020	1,030	618	709	873	926	1,070
28	1,150	1,140	1,050	1,130	1,240	1,020	1,110	660	688	760	805	1,070
29	1,150	1,280	1,020	1,240	-----	1,050	1,120	723	1,050	702	597	1,120
30	1,140	1,370	1,100	1,160	-----	1,070	1,090	805	1,670	667	569	1,080
31	848	-----	1,050	1,160	-----	1,060	-----	665	-----	562	590	-----
TOTAL	32,667	28,007	29,394	33,008	31,890	35,123	30,053	16,230	24,864	23,725	19,735	39,060
MEAN	1,086	904	946	1,065	1,129	1,133	1,002	524	832	765	637	1,302
MAX	1,480	1,270	1,600	1,240	1,260	1,260	1,200	917	1,670	2,120	926	2,910
MIN	848	752	580	600	1,070	723	688	200	414	250	438	990
AC-FT	68,770	58,560	58,210	65,470	63,250	69,670	59,610	32,150	49,520	47,060	39,140	77,480
CAL YR 1972	TOTAL 404,522		MEAN 1,105		MAX 3,430		MIN 438		AC-FT 802,400			
WTR YR 1973	TOTAL 344,641		MEAN 945		MAX 2,910		MIN 200		AC-FT 684,000			

63

LOCATION.--Lat 44°53'08", long 108°33'01", in NE¼NE¼NW¼ sec.34, T.57 N., R.97 W., Big Horn County, on left bank 300 ft (91 m) downstream from Polecat Creek, 800 ft (244 m) upstream from Sidon Canal crossing, and 2.4 mi (3.9 km) east of Deaver.

PERIOD OF RECORD.--June 1958 to May 1960, October 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,020 ft (1,225 m), from topographic map.

AVERAGE DISCHARGE.--6 years (1958-59, 1968-73), 66.5 ft³/s (1.883m³/s), 48,180 acre-ft/yr (59.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 448 ft³/s (12.7 m³/s) Sept. 1, gage height, 4.92 ft (1.500 m); minimum daily, 7.2 ft³/s (0.20 m³/s) Feb. 19, 21.

Period of record: Maximum discharge, 2,250 ft³/s (63.7 m³/s) June 8, 1958, gage height, 9.22 ft (2.810 m), from floodmark, on basis of slope-area measurement of peak flow; minimum daily, 0.50 ft³/s (0.014 m³/s) Feb. 2-6, Feb. 21 to Mar. 5, 1960.

REMARKS.--Records fair except those for November to April, which are poor. Flow is mostly return flow from land irrigated by canals diverting water from Shoshone River. Water-quality records for the current year are published in Part 2 of this report.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	40	17	12	9.6	41	22	73	46	94	54	219
2	139	35	17	12	9.2	39	22	82	75	91	50	188
3	135	34	16	11	9.2	33	23	110	107	84	50	176
4	118	33	15	11	9.2	31	25	123	107	80	59	185
5	135	33	12	11	9.6	33	26	119	106	97	74	173
6	131	32	10	11	8.8	33	23	119	97	81	64	133
7	127	31	11	11	8.5	31	10	90	97	51	75	130
8	135	33	11	11	8.5	37	20	113	100	51	82	163
9	132	34	11	10	9.0	34	29	117	91	59	68	160
10	121	31	11	10	9.0	34	21	90	101	54	64	142
11	112	30	12	11	10	37	19	63	109	53	67	152
12	111	30	12	12	12	37	20	80	86	50	73	156
13	124	30	13	13	12	35	19	91	72	45	80	148
14	127	31	13	15	11	27	22	90	73	41	72	146
15	131	31	13	16	8.0	26	21	82	84	45	75	162
16	128	31	13	16	8.0	25	21	75	68	50	97	169
17	131	30	14	15	7.6	30	22	78	24	46	96	167
18	123	30	14	14	7.6	33	22	95	15	47	85	153
19	113	26	14	11	7.2	28	20	78	12	51	96	141
20	116	28	15	9.0	7.6	29	10	67	38	54	101	135
21	121	24	16	9.6	7.2	31	48	68	59	60	107	117
22	118	26	16	9.2	7.6	33	38	77	67	58	96	116
23	126	27	16	9.2	7.6	27	37	68	67	99	91	118
24	149	26	15	10	8.4	29	79	57	59	119	90	127
25	85	25	14	9.6	9.6	31	135	58	60	128	91	118
26	58	24	14	10	12	27	126	56	50	121	95	117
27	47	22	14	10	25	20	140	57	42	100	106	116
28	44	20	15	10	42	22	187	52	32	79	95	116
29	42	19	13	10	-----	25	165	52	47	66	90	115
30	42	18	12	10	-----	25	103	48	74	79	87	116
31	41	-----	12	9.6	-----	22	-----	48	-----	61	85	-----
TOTAL	3,394	866	421	349.2	301.0	945	1,476	2,476	2,065	2,194	2,515	4,374
MEAN	109	28.9	13.6	11.3	10.8	30.5	49.2	79.9	68.8	70.8	81.1	146
MAX	149	40	17	16	42	41	187	123	109	128	107	219
MIN	41	18	10	9.0	7.2	20	10	48	12	41	50	115
AC-FT	6,730	1,720	835	693	597	1,870	2,930	4,910	4,100	4,350	4,990	8,680
CAL YR 1972	TOTAL 22,677.1		MEAN 62.0	MAX 194	MIN 7.5	AC-FT 44,980						
WTR YR 1973	TOTAL 21,376.2		MEAN 58.6	MAX 219	MIN 7.2	AC-FT 42,400						

LOCATION.--Lat 44°58'31", long 108°17'50", in SE¼NW¼SE¼ sec.27, T.58 N., R.95 W., Big Horn County, on right bank 0.6 mi (1.0 km) upstream from county road, 1.3 mi (2.1 km) upstream from mouth, and 11 mi (18 km) northeast of Lovell.

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

EXTREMES.--Current year: Maximum discharge, 640 ft³/s (18.1 m³/s) July 28, gage height, 4.39 ft (1.338 m), from floodmark, by slope-area measurement of peak flow; no flow most of year.

REMARKS.--Records poor. Water-quality records for the current year are published in Part 2 of this report.

MAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0	.05				0	0	.55
2					0	.05				0	0	0
3					0	.05				0	0	0
4					0	.03				0	0	0
5					0	.03				0	0	0
6					0	.01				0	0	0
7					0	0				0	0	0
8					0	0				0	0	4.1
9					0	0				0	0	0
10					0	0				0	0	0
11					0	0				0	0	2.5
12					0	0				0	0	0
13					0	0				0	0	0
14					0	0				0	0	.14
15					0	0				0	0	0
16					0	0				0	0	0
17					0	0				0	0	0
18					0	0				0	.51	0
19					0	0				0	0	0
20					0	0				0	0	0
21					0	0				0	0	0
22					0	0				0	0	0
23					0	0				0	0	0
24					.02	0				0	0	0
25					.05	0				0	0	0
26					.05	0				0	0	0
27					.05	0				0	0	0
28					.08	0				24	0	0
29					-----	0				.15	0	0
30					-----	0				0	0	0
31		-----			-----	0	-----		-----	0	0	-----
TOTAL	0	0	0	0	.28	.22	0	0	0	24.15	.51	7.29
MEAN	0	0	0	0	.010	.007	0	0	0	.78	.017	.24
MAX	0	0	0	0	.08	.05	0	0	0	24	.51	4.1
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	.6	.4	0	0	0	48	1.0	14
CAL YR 1972	TOTAL 12.09		MEAN .033	MAX 5.3	MIN 0	AC-FT 24						
WTR YR 1973	TOTAL 32.45		MEAN .089	MAX 24	MIN 0	AC-FT 64						

YELLOWSTONE RIVER BASIN

65

06286400 BIGHORN LAKE NEAR ST. XAVIER, MONT.

LOCATION.--Lat 45°18'27", long 107°57'26", in SW¼SE¼ sec.18, T.6 S., R.31 E., Big Horn County, in block 13 of Yellowtail dam, 1.3 mi (2.1 km) upstream from Grapevine Creek, 15.5 mi (24.9 km) southeast of St. Xavier, and at mile 81.0 (130.3 km).

DRAINAGE AREA.--19,626 mi² (50,831 km²).

PERIOD OF RECORD.--November 1965 to current year (monthend contents only). Prior to October 1969, published as "Yellowtail Reservoir."

GAGE.--Water-stage recorder in powerhouse control room. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum daily contents, 1,076,000 acre-ft (1,330 hm³) Aug. 15, elevation, 3,638.31 ft (1,108.957 m); minimum, 881,500 acre-ft (1,090 hm³) Mar. 12, elevation, 3,618.03 ft (1,102.776 m).

Period of record: Maximum contents, 1,346,000 acre-ft (1,660 hm³) July 6, 1967, elevation 3,656.43 ft (1,114.480 m); minimum since first filling, 660,700 acre-ft (815 hm³) Mar. 11, 1970, elevation, 3,584.45 ft (1,092.540 m).

REMARKS.--Reservoir is formed by thin concrete-arch dam; construction began in 1961; completed in 1967. Storage began Nov. 3, 1965. Usable capacity, 1,356,000 acre-ft (1,670 hm³) between elevation 3,296.5 ft (1,004.8 m), river outlet invert, and 3,657.0 ft (1,114.7 m), top of flood control. Elevation of spillway crest, 3,593 ft (1,095.1 m). Normal maximum operating level, 1,097,000 acre-ft (1,350 hm³), elevation, 3,640 ft (1,109.5 m). Minimum operating level, 483,400 acre-ft (596 hm³), elevation 3,547 ft (1,081.1 m). Dead storage, 18,970 acre-ft (23.4 hm³) below elevation 3,296.5 ft (1,004.8 m). Figures given herein represent usable contents. Water is used for power production, flood control, irrigation and recreation.

COOPERATION.--Elevations and capacity table furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	3,637.76	1,069,000	-
Oct. 31	3,637.01	1,060,000	-9,000
Nov. 30	3,629.64	981,200	-78,800
Dec. 31	3,626.63	952,800	-28,400
CAL YR 1972	-	-	+41,300
Jan. 31	3,622.60	917,400	-35,400
Feb. 28	3,618.64	886,000	-31,400
Mar. 31	3,619.65	893,400	+7,400
Apr. 30	3,625.31	940,900	+47,500
May 31	3,631.16	996,400	+55,500
June 30	3,631.45	999,400	+3,000
July 31	3,635.89	1,047,000	+47,600
Aug. 31	3,632.84	1,014,000	-33,000
Sept. 30	3,637.99	1,072,000	+58,000
WTR YR 1973	-	-	+3,000

LOCATION.--Lat 45°19'00", long 107°55'05", in NW¼NE¼ sec.16, T.6 S., R.31 E., Big Horn County, on right bank 800 ft (244 m) downstream from Yellowtail afterbay dam, 1,500 ft (460 m) downstream from Lime Kiln Creek, and 14 mi (23 km) southwest of St. Xavier.

PERIOD OF RECORD.--October 1934 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,100 ft (945 m) above mean sea level (levels by Bureau of Reclamation). Prior to Apr. 16, 1963, and June 13, 1964, to Mar. 31, 1965, water-stage recorder at site 1.2 mi (1.9 km) upstream at different datum. Apr. 16, 1963, to June 12, 1964, water-stage recorder at present site at present datum. Apr. 1, 1965, to July 31, 1966, water-stage recorder at site 1,300 ft (400 m) downstream at present datum.

EXTREMES.--Current year: Maximum discharge, 7,560 ft³/s (214 m³/s) May 23; minimum daily, 1,350 ft³/s (38.2 m³/s) Apr. 26-30.

Period of record: Maximum discharge, 37,400 ft³/s (1,060 m³/s) June 16, 1935; minimum observed, 49 ft³/s (1.39 m³/s) Mar. 29, 1966, result of discharge measurement (dam closure); minimum daily, 112 ft³/s (3.17 m³/s) Apr. 2, 1967.

REMARKS.--Records good. Figures of discharge given herein are sum of river flow and flow of Bighorn Canal. Some regulation by 14 reservoirs in Wyoming with combined capacity of 1,400,000 acre-ft (1,726 hm³) and complete regulation by Bighorn Lake (see p. 65) since Nov. 3, 1965. Diversions for irrigation of about 375,000 acres (1,520 km²) above station. Water quality records for the current year 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	3,150	5,180	4,110	2,840	3,650	3,790	2,930	2,450	6,420	4,450	1,690	3,510
2	3,160	5,190	4,110	2,840	3,650	3,790	3,200	3,740	4,990	4,420	1,660	3,500
3	3,130	5,180	4,110	2,840	3,650	3,790	3,920	3,360	4,960	4,280	1,640	3,520
4	4,100	5,180	4,110	3,070	3,650	3,790	3,990	2,320	5,640	4,120	1,640	3,520
5	4,100	5,180	4,110	3,690	3,650	3,800	3,970	2,690	6,200	4,130	1,640	3,520
6	4,100	5,180	4,110	3,680	3,650	3,800	3,400	2,320	6,200	4,130	1,930	3,910
7	4,100	5,180	4,110	3,680	3,640	3,800	2,920	2,540	6,190	4,130	2,370	4,200
8	4,100	5,180	4,100	3,680	3,650	3,790	2,920	2,720	6,200	4,130	2,380	4,210
9	4,100	5,170	4,110	3,680	3,640	3,800	2,920	3,090	6,200	3,410	2,380	4,210
10	4,100	5,170	4,110	3,980	3,650	3,790	2,910	3,920	6,200	2,210	2,370	4,210
11	4,090	5,180	4,110	4,150	3,650	3,790	2,910	3,910	6,220	2,250	2,370	4,200
12	4,100	5,170	4,100	4,150	3,650	3,790	2,920	3,910	6,200	2,440	2,360	4,220
13	4,090	5,180	4,110	4,010	3,650	3,690	2,920	3,670	6,200	2,610	2,360	4,200
14	4,100	5,180	4,040	3,680	3,650	3,190	2,910	3,840	6,190	2,590	2,330	4,000
15	4,100	5,170	3,830	3,680	3,650	2,920	2,910	3,900	6,190	2,590	2,330	4,040
16	4,120	5,180	3,830	3,680	3,650	2,920	2,920	3,900	6,190	2,160	3,210	4,280
17	4,100	5,140	3,840	3,660	3,110	2,920	2,920	3,900	6,190	1,720	3,890	4,430
18	4,100	5,180	3,670	3,670	2,950	2,940	2,920	4,120	6,190	1,740	3,890	4,530
19	4,100	5,170	3,050	3,650	3,040	2,920	2,920	4,550	6,180	1,740	3,890	4,530
20	4,100	5,170	2,810	3,650	3,230	2,930	2,210	4,550	6,270	1,740	3,610	4,630
21	1,540	5,170	2,810	3,650	3,230	2,930	1,700	4,690	6,200	1,750	3,690	5,540
22	4,070	5,170	2,800	3,650	3,420	2,930	1,710	6,500	6,210	1,740	4,270	5,810
23	4,940	5,170	2,800	3,640	3,510	2,930	1,770	7,450	5,760	1,730	4,290	5,560
24	4,980	5,180	2,800	3,650	3,510	2,930	2,060	7,390	5,800	1,730	4,290	5,440
25	4,980	5,180	2,800	3,650	3,510	2,920	1,610	7,390	5,490	1,720	4,280	5,720
26	4,980	5,170	2,810	3,650	3,670	2,940	1,350	7,390	4,460	1,720	4,280	5,710
27	4,960	4,580	2,840	3,650	3,790	2,930	1,350	7,380	4,460	1,730	4,260	5,710
28	1,500	4,110	2,840	3,650	3,790	2,930	1,350	7,380	4,450	1,720	4,280	5,710
29	4,100	4,110	2,840	3,650	-----	2,930	1,350	7,380	4,450	1,720	4,260	5,710
30	5,170	4,110	2,830	3,650	-----	2,920	1,350	7,380	4,450	1,720	3,960	3,830
31	5,180	-----	2,840	3,650	-----	2,930	-----	7,390	-----	1,720	3,510	-----
TOTAL	125,540	151,460	109,490	112,100	99,140	102,170	77,140	147,120	172,950	79,990	95,310	136,310
MEAN	4,050	5,049	3,532	3,616	3,541	3,296	2,571	4,746	5,765	2,580	3,075	4,544
MAX	5,180	5,190	4,110	4,150	3,790	3,800	3,990	7,450	6,420	4,450	4,290	5,810
MIN	1,500	4,110	2,800	2,840	2,950	2,920	1,350	2,320	4,450	1,720	1,640	3,500
AC=FT	249,000	300,400	217,200	222,400	196,600	202,700	153,000	291,800	343,000	158,700	189,000	270,400
CAL YR 1972	TOTAL 1,626,710		MEAN 4,445		MAX 7,680		MIN 1,500		AC=FT 3,227,000			
WTR YR 1973	TOTAL 1,408,720		MEAN 3,860		MAX 7,450		MIN 1,350		AC=FT 2,794,000			

YELLOWSTONE RIVER BASIN

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06289000 LITTLE BIGHORN RIVER AT STATE LINE, NEAR WYOLA, MT.

LOCATION.--Lat 45°00'25", long 107°37'05", in SW¼NW¼ sec.36, T.9 S., R.33 E., Bighorn County, on right bank 20 ft (6 m) downstream from county bridge, 0.5 mi (0.8 km) north of Wyoming-Montana State line, 1 mi (1.6 km) downstream from West Fork, and 13 mi (21 km) southwest of Wyola.

DRAINAGE AREA.--193 mi² (500 km²).

PERIOD OF RECORD.--March 1939 to current year. Prior to October 1940, published as Little Horn River at State line, near Wyola.

GAGE.--Water-stage recorder. Altitude of gage is 4,450 ft (1,360 m), from topographic map.

AVERAGE DISCHARGE.--34 years, 151 ft³/s (4.28 m³/s), 109,400 acre-ft/yr (135 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,750 ft³/s (49.6 m³/s) June 8, gage height, 4.37 ft (1.332 m); minimum daily, 37 ft³/s (1.05 m³/s) Dec. 6.

Period of record: Maximum discharge, 2,730 ft³/s (77.3 m³/s) June 3, 1944, gage height, 4.87 ft (1.484 m), from rating curve extended above 1,400 ft³/s (39.6 m³/s); maximum gage height recorded, 5.93 ft (1.807 m) June 9, 1944 (log jam); minimum discharge, 21 ft³/s (0.59 m³/s) Dec. 27, 1954, result of freezeup.

REMARKS.--Records good. Diversions for irrigation of 163 acres (660,000 m²) above station.

REVISIONS.--WSP 1729: 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	99	86	80	64	70	70	63	101	962	378	178	141
2	97	90	75	60	70	70	63	98	1,290	350	173	162
3	97	87	59	52	71	68	62	103	976	335	167	139
4	97	86	48	48	70	69	60	118	698	324	170	134
5	99	87	40	47	72	71	63	131	675	313	167	127
6	95	85	37	45	65	70	65	149	848	306	170	123
7	97	83	45	45	53	69	57	182	962	291	167	123
8	97	83	50	48	52	71	57	196	1,120	281	156	146
9	95	83	57	55	55	72	60	201	1,230	267	154	137
10	97	81	64	62	70	71	67	186	1,050	256	151	123
11	97	82	74	72	80	72	65	179	878	249	151	120
12	92	82	79	87	81	72	67	184	818	246	154	118
13	90	80	79	88	76	74	71	207	734	235	151	116
14	92	79	78	85	72	67	74	253	716	228	146	118
15	90	83	74	79	74	72	69	329	848	225	146	120
16	90	81	78	74	74	71	71	460	655	222	144	116
17	90	79	83	73	73	70	72	611	610	215	144	114
18	88	80	86	72	72	70	74	793	560	208	141	114
19	86	78	85	72	72	69	70	1,010	495	205	139	112
20	88	74	78	70	71	70	60	1,160	465	208	139	112
21	88	70	77	70	70	69	70	1,050	465	211	144	112
22	90	69	78	65	71	70	73	830	455	215	144	109
23	88	75	76	71	71	70	76	788	445	222	144	109
24	88	77	75	71	71	67	77	764	435	208	144	112
25	88	76	73	70	71	66	78	908	426	193	139	109
26	90	80	74	70	70	68	75	842	398	187	137	107
27	84	78	74	67	70	68	82	670	398	184	127	105
28	81	66	74	65	70	66	101	635	390	181	127	105
29	84	69	74	71	-----	64	108	595	402	205	125	103
30	70	84	71	72	-----	64	105	580	398	196	123	103
31	72	-----	74	72	-----	63	-----	722	-----	184	123	-----
TOTAL	2,796	2,393	2,169	2,062	1,957	2,143	2,155	15,035	20,802	7,528	4,585	3,589
MEAN	90.2	79.8	70.0	66.5	69.9	69.1	71.8	485	693	243	148	120
MAX	99	90	86	88	81	74	108	1,160	1,290	378	178	162
MIN	70	66	37	45	52	63	57	98	390	181	123	103
AC-FT	5,550	4,750	4,300	4,090	3,880	4,250	4,270	29,820	41,260	14,930	9,090	7,120

CAL YR 1972 TOTAL 55,828 MEAN 153 MAX 1,030 MIN 37 AC-FT 110,700
WTR YR 1973 TOTAL 67,214 MEAN 184 MAX 1,290 MIN 37 AC-FT 133,300

PEAK DISCHARGE (BASE, 510 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
5-20	2215	4.11	1,500
6- 2	2230	4.05	1,450
6- 8	2100	4.11	1,750

YELLOWSTONE RIVER BASIN

06290500 LITTLE BIGHORN RIVER BELOW PASS CREEK, NEAR WYOLA, MT.

LOCATION.--Lat 45°10'38", long 107°23'36", in W½SW¼ sec.35, T.7 S., R.35 E., Big Horn County, on right bank 3.5 mi (5.6 km) north of Wyola and 6 mi (9.7 km) downstream from Pass Creek.

DRAINAGE AREA.--428 mi² (1,109 km²).

PERIOD OF RECORD.--March 1939 to December 1958, August 1959 to current year. Prior to October 1940, published as Little Horn River below Pass Creek, near Wyola.

GAGE.--Water-stage recorder. Altitude of gage is 3,600 ft (1,100 m), from topographic map.

AVERAGE DISCHARGE.--33 years, 207 ft³/s (5.86 m³/s), 150,000 acre-ft/yr (185 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,820 ft³/s (51.5 m³/s) June 10, gage height, 5.40 ft (1.646 m); minimum daily, 60 ft³/s (1.70 m³/s) Feb. 8.

Period of record: Maximum discharge, 3,630 ft³/s (103 m³/s) June 14, 1963, gage height, 7.43 ft (2.265 m), from rating curve extended above 2,800 ft³/s (79.3 m³/s); minimum, 12 ft³/s (0.34 m³/s) Aug. 5, 7, 8, 1961, gage height, 0.89 ft (0.271 m).

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 8,300 acres (33.6 km²) above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1729: 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	140	130	132	80	110	132	154	526	1,070	482	158	153
2	136	136	128	80	115	119	173	625	1,380	446	156	238
3	134	135	113	75	110	106	153	713	1,440	410	149	247
4	134	135	75	75	113	104	149	707	1,020	388	150	185
5	148	137	70	70	115	106	165	687	842	367	153	165
6	143	155	65	70	90	116	229	585	974	348	155	148
7	140	143	75	65	70	111	202	595	1,200	333	168	147
8	138	137	80	65	60	111	165	587	1,340	319	160	181
9	135	135	85	65	65	110	149	571	1,500	307	157	211
10	135	132	85	70	70	110	171	511	1,600	291	151	169
11	141	131	85	75	80	110	206	467	1,450	267	154	172
12	138	131	85	80	90	114	253	439	1,240	257	156	171
13	136	129	85	80	95	115	240	436	1,130	253	161	167
14	141	124	80	85	100	114	257	455	1,030	254	145	177
15	139	132	80	90	100	110	220	505	1,260	251	140	208
16	135	130	80	90	100	116	204	614	1,090	246	141	196
17	133	127	80	90	100	126	193	771	932	223	137	186
18	133	126	85	90	106	139	206	964	895	212	139	175
19	131	122	90	90	110	133	255	1,190	788	211	142	169
20	134	115	90	90	110	134	162	1,350	727	218	143	166
21	136	117	90	90	100	137	147	1,630	671	225	142	164
22	136	119	95	90	98	149	228	1,460	631	226	140	162
23	136	120	90	90	110	145	394	1,280	602	245	149	159
24	158	120	90	90	123	131	569	1,170	599	239	140	166
25	145	119	90	90	145	135	694	1,250	581	211	137	166
26	144	124	90	90	150	149	642	1,350	541	194	134	164
27	142	124	90	85	145	168	643	1,070	516	180	132	162
28	134	126	85	80	134	156	738	922	489	170	134	157
29	137	125	85	85	-----	142	724	848	485	181	129	154
30	125	130	80	90	-----	141	553	741	549	192	131	152
31	123	-----	80	100	-----	142	-----	799	-----	170	127	-----
TOTAL	4,260	3,866	2,713	2,555	2,914	3,931	9,238	25,818	28,572	8,316	4,510	5,237
MEAN	137	129	87.5	82.4	104	127	308	833	952	268	145	175
MAX	158	155	132	100	150	168	738	1,630	1,600	482	168	247
MIN	123	115	65	65	60	104	147	456	485	170	127	147
AC-FT	8,450	7,670	5,380	5,070	5,780	7,800	18,320	51,210	56,670	16,490	8,950	10,390
CAL YR 1972	TOTAL	83,566	MEAN	228	MAX	1,170	MIN	50	AC-FT	165,800		
WTR YR 1973	TOTAL	101,930	MEAN	279	MAX	1,630	MIN	60	AC-FT	202,200		

PEAK DISCHARGE (BASE, 580 FT³/S)

NOTE.--Stage-discharge relation affected by ice jam Dec. 4 to Feb. 1 (no gage-height record Jan. 26 to Feb. 1).

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-29	0315	3.93	880	6-3	1015	5.02	1,560
5-3	0200	3.79	810	6-10	0945	5.40	1,820
5-21	1430	5.35	1,750	6-15	1100	4.90	1,480

06298000 TONGUE RIVER NEAR DAYTON, WYO.

LOCATION.--Lat 44°50'58", long 107°18'14", in NE¼NE¼NE¼ sec.11, T.56 N., R.87 W., Sheridan County, on left bank 0.5 mi (0.8 km) upstream from Crystal Draw, 0.6 mi (1.0 km) downstream from intake of Highline ditch, and 2.5 mi (4.0 km) southwest of Dayton.

DRAINAGE AREA.--204 mi² (528 km²).

PERIOD OF RECORD.--October 1918 to September 1929, October 1940 to current year. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 4,060 ft (1,237 m), from topographic map.

AVERAGE DISCHARGE.--44 years (1918-29, 1940-73), 187 ft³/s (5.296 m³/s), 135,500 acre-ft/yr (167 hm³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 1,940 ft³/s (54.9 m³/s) June 2, gage height, 4.95 ft (1.509 m); minimum daily, 22 ft³/s (0.62 m³/s) Apr. 20.

Period of record: Maximum discharge, 3,400 ft³/s (96.3 m³/s) June 3, 1944, gage height, 6.45 ft (1.966 m); minimum daily, 18 ft³/s (0.51 m³/s) Nov. 29, 1919.

REMARKS.--Records good. Small diversion above station for Dayton municipal supply. Figures of daily discharge do not include water diverted 0.6 mi (1.0 km) above station by Highline ditch for irrigation below station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1309: 1921.

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	77	69	63	60	56	50	52	71	1,430	485	126	96
2	72	82	56	65	56	53	51	69	1,760	425	119	156
3	68	77	51	56	59	46	43	69	1,280	390	121	131
4	68	79	50	47	59	50	47	84	923	354	117	131
5	79	80	45	66	59	56	53	96	951	334	117	113
6	77	77	46	66	53	55	55	110	1,170	310	113	102
7	95	69	50	71	48	51	45	148	1,300	290	110	96
8	96	77	49	71	48	53	39	145	1,380	270	106	117
9	95	72	47	72	56	51	46	148	1,480	263	102	158
10	91	65	47	74	62	51	58	128	1,430	246	100	110
11	91	69	52	78	53	53	58	126	1,280	228	98	100
12	87	69	50	87	60	55	59	135	1,140	218	115	96
13	86	65	52	79	58	53	62	178	1,030	209	117	93
14	89	58	54	63	56	46	55	238	972	199	98	98
15	91	68	58	63	56	40	53	318	1,140	193	95	123
16	87	62	66	62	56	50	55	455	909	184	93	119
17	84	56	80	62	58	58	59	671	839	172	89	110
18	84	56	68	62	56	58	58	923	790	169	87	115
19	84	53	66	60	56	50	50	1,200	738	167	89	106
20	86	47	66	58	55	51	22	1,230	744	167	87	102
21	84	39	65	53	52	52	27	1,310	689	184	86	106
22	86	38	68	55	55	50	36	1,220	647	178	87	110
23	84	45	66	59	55	50	42	1,160	617	199	87	106
24	89	47	65	60	55	51	59	1,140	605	205	95	106
25	86	45	63	60	55	47	63	1,350	572	181	86	104
26	96	51	63	59	53	52	60	1,210	550	153	80	108
27	82	51	63	55	55	55	63	867	522	164	79	108
28	68	48	65	51	51	53	77	797	506	145	84	104
29	84	53	63	62	-----	46	86	738	534	178	79	102
30	66	62	56	60	-----	50	79	725	578	167	80	102
31	68	-----	62	56	-----	48	-----	1,020	-----	135	76	-----
TOTAL	2,580	1,829	1,815	1,959	1,561	1,586	1,627	18,079	28,506	7,162	3,018	3,328
MEAN	83.2	61.0	58.5	63.2	55.8	51.2	54.2	583	950	231	97.4	111
MAX	96	82	80	87	63	58	86	1,350	1,760	485	126	158
MIN	66	38	45	47	48	40	22	69	506	135	76	93
AC-FT	5,120	3,630	3,600	3,890	3,100	3,150	3,230	35,800	56,540	14,210	5,990	6,600
†	266	0	0	0	0	0	0	74	1,200	1,240	1,330	671

ADJUSTED FOR DIVERSION BY HIGHLINE DITCH

MEAN	87.6	61.0	58.5	63.2	55.8	51.2	54.2	584	970	251	119	122
AC-FT	5,380	3,630	3,600	3,890	3,100	3,150	3,230	35,930	57,740	15,450	7,320	7,270

UNADJUSTED

ADJUSTED

CAL YR 1972	TOTAL 66,301	MEAN 181	MAX 1,250	MIN 37	AC-FT 131,500	MEAN 188	AC-FT 136,800
WTR YR 1973	TOTAL 73,050	MEAN 200	MAX 1,760	MIN 22	AC-FT 144,900	MEAN 207	AC-FT 149,700

PEAK DISCHARGE (BASE, 980 FT³/S)

† Diversion, in acre-ft, above station by Highline ditch

DATE	TIME	G.H.T	DISCHARGE
5-25	2200	4.71	1,690
6- 2	0330	4.95	1,940
6- 9	0230	4.84	1,820

YELLOWSTONE RIVER AASIN

06298500 LITTLE TONGUE RIVER NEAR DAYTON, WYO.

LOCATION.--Lat 44°48'38", long 107°17'02", in SW¼NE¼SE¼ sec.24, T.56 N., R.87 W., Sheridan County, on right bank 0.1 mi (0.2 km) downstream from South Fork, 0.2 mi (0.3 km) upstream from East Fork, and 4.5 mi (7.2 km) south of Dayton.

DRAINAGE AREA.--25.1 mi² (65.0 km²).

PERIOD OF RECORD.--January 1951 to December 1953, March 1955 to current year.

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

AVERAGE DISCHARGE.--20 years, 12.9 ft³/s (0.365 m³/s), 9,350 acre-ft/yr (11.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 188 ft³/s (5.32 m³/s) May 20, gage height, 2.79 ft (0.850 m); minimum daily, 1.3 ft³/s (0.037 m³/s) Jan. 4.

Period of record: Maximum discharge, 850 ft³/s (24.1 m³/s) June 9, 1964, gage height, 4.60 ft (1.402 m), from rating curve extended above 300 ft³/s (8.50 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 0.80 ft³/s (0.023 m³/s) Sept. 4-7, 1960.

REMARKS.--Records fair except those for winter period and period of no gage-height record, which are poor. 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	2.6	3.1	2.6	1.6	1.5	1.5	1.5	5.0	133	40	6.8	2.9
2	2.6	3.1	2.4	1.6	1.5	1.5	1.5	4.5	162	36	6.5	12
3	2.5	3.1	2.3	1.5	1.5	1.5	1.5	5.0	148	34	5.9	9.8
4	2.4	3.1	2.1	1.3	1.5	1.5	1.5	6.5	130	30	5.6	8.1
5	2.6	3.1	1.9	1.4	1.5	1.5	1.5	7.5	121	26	5.6	6.2
6	2.6	3.1	1.7	1.5	1.4	1.5	1.6	7.8	121	22	5.3	5.3
7	2.6	3.1	1.5	1.6	1.4	1.5	1.6	9.8	126	20	5.3	4.8
8	2.6	3.1	1.5	1.6	1.4	1.5	1.6	11	123	19	5.0	5.6
9	2.6	3.1	1.5	1.6	1.5	1.5	2.0	11	123	17	4.8	8.4
10	2.6	3.1	1.5	1.7	1.5	1.5	1.8	10	118	16	4.0	5.9
11	2.6	3.1	1.6	1.8	1.5	1.5	1.8	9.3	112	14	4.0	5.0
12	2.6	3.1	1.7	1.9	1.5	1.5	2.1	10	98	14	4.5	4.8
13	2.6	2.9	1.7	1.7	1.5	1.5	2.8	13	90	14	5.3	4.2
14	2.8	2.9	1.7	1.6	1.4	1.5	3.4	17	82	14	4.2	4.5
15	2.9	2.9	1.7	1.6	1.4	1.5	2.5	32	78	13	3.4	4.8
16	2.9	2.9	1.8	1.6	1.4	1.5	2.4	55	78	13	2.9	4.8
17	2.9	2.9	1.9	1.6	1.4	1.5	2.5	70	72	12	2.3	4.8
18	2.9	2.9	1.7	1.6	1.4	1.6	2.6	94	70	12	2.1	4.8
19	2.9	2.9	1.7	1.6	1.4	1.5	2.6	114	70	11	2.3	4.8
20	2.9	2.9	1.7	1.6	1.4	1.5	2.5	145	67	11	2.4	4.5
21	2.9	2.6	1.6	1.6	1.4	1.5	2.4	145	65	12	2.9	4.2
22	2.9	2.6	1.6	1.6	1.5	1.5	2.5	150	61	12	2.9	4.0
23	2.9	2.6	1.6	1.6	1.5	1.5	3.0	126	58	13	3.4	4.0
24	3.7	2.6	1.6	1.6	1.5	1.5	3.0	130	58	13	3.4	3.7
25	3.4	2.6	1.6	1.5	1.5	1.5	3.5	138	58	11	2.9	3.7
26	4.0	2.9	1.5	1.5	1.5	1.5	3.2	133	55	9.5	2.6	3.7
27	3.7	2.9	1.5	1.5	1.5	1.5	3.6	128	52	9.2	2.4	3.7
28	3.4	2.9	1.5	1.4	1.5	1.5	5.9	123	48	8.7	2.3	3.4
29	3.4	2.6	1.5	1.5	-----	1.5	6.8	121	46	8.7	2.3	3.1
30	3.1	2.6	1.5	1.5	-----	1.5	5.6	118	42	7.8	2.1	3.1
31	3.1	-----	1.5	1.5	-----	1.5	-----	126	-----	7.2	2.1	-----
TOTAL	90.2	87.3	53.2	48.8	40.9	46.6	80.8	2,055.4	2,665	500.1	117.5	152.6
MEAN	2.91	2.91	1.72	1.57	1.46	1.50	2.69	66.3	88.8	16.1	3.79	5.09
MAX	4.0	3.1	2.6	1.9	1.5	1.6	6.8	145	162	40	6.8	12
MIN	2.4	2.6	1.5	1.3	1.4	1.5	1.5	4.5	42	7.2	2.1	2.9
AC=FT	179	173	106	97	81	92	160	4,080	5,290	992	233	303

CAL YR 1972 TOTAL 4,639.3 MEAN 12.7 MAX 106 MIN 1.4 AC=FT 9,200
 WTR YR 1973 TOTAL 5,938.4 MEAN 16.3 MAX 162 MIN 1.3 AC=FT 11,780

PEAK DISCHARGE (BASE, 100 FT³/S)

NOTE.--No gage-height record Jan. 28 to Mar. 16.

DATE TIME G.H.T. DISCHARGE
 5-20 2030 2.79 188

YELLOWSTONE RIVER BASIN

71

06299500 WOLF CREEK AT WOLF, WYO.

LOCATION.--Lat 44°46'21", long 107°14'01", in NE¼SW¼NW¼ sec.4, T.55 N., R.86 W., Sheridan County, on left bank at Wolf and 0.5 mi (0.8 km) downstream from Red Canyon Creek.

DRAINAGE AREA.--37.8 mi² (97.9 km²).

PERIOD OF RECORD.--January 1945 to current year (no winter records since 1971). Monthly discharge for January to March 1945, published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 4,525 ft (1,379 m), from topographic map. Prior to May 26, 1945, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--26 years (1945-71), 29.3 ft³/s (0.830 m³/s), 21,230 acre-ft/yr (26.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 352 ft³/s (9.97 m³/s) June 9, gage height, 2.95 ft (0.899 m); minimum daily during period of operation, 4.1 ft³/s (0.12 m³/s) Apr. 3.

Period of record: Maximum discharge, 1,130 ft³/s (32.0 m³/s) June 15, 1963, gage height, 4.60 ft (1.402 m), from rating curve extended above 500 ft³/s (14.2 m³/s); no flow for part of each day Jan. 13, 15, 29, 30, Feb. 26, 1947, result of freezeup.

Maximum stage known, about 5.0 ft (1.5 m) May 18, 1944.

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

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

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							4.3	12	210	72	22	13
2							4.3	15	278	68	21	27
3							4.1	16	233	62	20	20
4							4.3	17	190	59	20	20
5							4.7	19	193	55	20	16
6							5.0	20	215	52	19	15
7							4.5	25	238	48	19	13
8							5.2	26	263	45	18	15
9							5.9	27	299	44	17	23
10							5.0	25	309	40	16	16
11							5.2	24	284	39	16	15
12							5.9	26	255	37	16	14
13							6.7	31	235	36	19	13
14							8.0	36	217	35	16	13
15							6.2	50	207	33	15	16
16							6.2	72	173	32	14	15
17							6.7	110	156	31	13	14
18							7.0	156	142	30	13	15
19							5.9	208	130	29	13	14
20							5.9	269	130	29	13	13
21							5.9	249	120	31	12	13
22							6.2	210	110	35	12	13
23							7.0	195	100	39	12	12
24							7.3	202	92	37	13	13
25							9.0	225	84	31	12	12
26							8.6	202	79	28	11	12
27							8.0	175	74	28	11	12
28							8.6	156	72	26	11	11
29					-----		10	138	74	29	11	11
30					-----		13	142	78	26	10	11
31		-----			-----		-----	187	-----	24	9.6	-----
TOTAL							194.6	3,265	5,240	1,210	464.6	440
MEAN							6.49	105	175	39.0	15.0	14.7
MAX							13	269	309	72	22	27
MIN							4.1	12	72	24	9.6	11
AC-FT							386	6,480	10,390	2,400	922	873

PEAK DISCHARGE (BASE, 180 FT³/S)

DATE	TIME	G.HT	DISCHARGE
5-20	1700	2.94	348
6-9	2200	2.95	352

YELLOWSTONE RIVER BASIN

06300500 EAST FORK BIG GOOSE CREEK NEAR BIG HORN, WYO.

LOCATION.--Lat 44°32'18", long 107°13'33", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.28, T.53 N., R.86 W., Johnson County, Bighorn National Forest, on right bank 0.7 mi (1.1 km) upstream from Park Reservoir and 16 mi (26 km) southwest of Big Horn.

DRAINAGE AREA.--20.1 mi² (52.1 km²).

PERIOD OF RECORD.--October 1953 to current year. Prior to Oct. 1960, published as East Goose Creek near Big Horn.

GAGE.--Water-stage recorder. Altitude of gage is 8,320 ft (2,536 m), from topographic map. Prior to June 28, 1960, water-stage recorder at site 1.1 mi (1.8 km) downstream at different datum. June 28, 1960, to July 14, 1970, water-stage recorder at site 0.9 mi (1.4 km) downstream at different datums and July 15, 1970, to Oct. 7, 1970, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--20 years, 32.6 ft³/s (0.932 m³/s), 23,620 acre-ft/yr (29.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,120 ft³/s (31.7 m³/s) June 9, gage height, 6.66 ft (2.030 m), from rating curve extended above 250 ft³/s (7.08 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 1.4 ft³/s (0.04 m³/s) Apr. 8.

Period of record: Maximum discharge, 1,230 ft³/s (34.8 m³/s) June 15, 1963, gage height, 4.59 ft (1.399 m), site and datum then in use, from rating curve extended above 250 ft³/s (7.08 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 1.0 ft³/s (0.03 m³/s) Dec. 11-14, 1963, Mar. 24, 25, Nov. 14, 15, 1964, Mar. 18, 1971.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. 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	11	6.8	5.6	1.6	1.9	1.7	1.7	4.3	210	164	29	13
2	11	7.0	3.4	1.5	2.0	1.8	1.7	4.0	312	115	25	24
3	10	6.4	3.0	1.6	2.1	1.6	1.6	4.6	195	88	24	28
4	9.6	6.2	3.2	1.6	2.0	1.7	1.6	4.5	116	83	22	30
5	11	6.1	3.0	1.5	2.0	1.9	1.7	4.8	108	79	24	35
6	12	6.1	2.9	1.6	1.8	1.8	1.8	5.0	172	73	23	32
7	13	5.9	2.9	1.9	1.7	1.7	1.6	9.0	258	69	24	30
8	13	5.9	2.8	2.2	1.7	1.6	1.4	13	419	61	21	38
9	12	5.3	2.6	2.3	1.9	1.7	1.5	14	602	54	19	66
10	12	5.3	2.4	2.4	2.0	1.7	1.7	12	606	50	18	44
11	11	5.2	2.4	2.5	1.9	1.8	1.7	13	439	47	17	37
12	10	5.2	2.3	2.5	1.7	1.8	1.8	14	353	45	19	32
13	9.6	4.6	2.3	2.5	1.7	1.8	1.9	22	338	40	19	29
14	9.3	4.6	2.2	2.6	1.7	1.6	2.1	35	330	36	16	27
15	9.2	4.6	2.2	2.4	1.9	1.5	2.0	35	375	32	15	29
16	8.6	4.5	2.4	2.4	1.9	1.7	1.9	47	162	30	14	28
17	9.4	4.5	2.5	2.4	2.0	1.9	2.2	62	120	29	14	26
18	7.9	4.4	2.2	2.4	1.9	1.9	2.7	146	107	28	13	24
19	7.7	4.2	2.1	2.2	1.8	1.7	2.5	160	86	27	13	22
20	8.1	4.0	2.1	2.2	1.7	1.7	2.0	210	77	27	15	20
21	9.1	4.0	2.0	2.1	1.8	1.7	2.6	235	87	27	14	20
22	9.3	3.8	2.1	2.2	1.8	1.7	3.0	145	139	27	14	21
23	8.8	3.6	2.0	2.2	1.8	1.7	4.0	125	185	34	15	20
24	9.1	3.3	1.9	2.3	1.8	1.7	5.0	110	229	32	16	19
25	8.4	3.2	1.8	2.3	1.8	1.6	4.5	137	159	30	12	19
26	8.6	3.3	1.8	2.2	1.8	1.7	4.0	128	205	26	11	20
27	7.9	3.2	1.7	2.1	2.0	1.8	4.5	80	206	26	11	19
28	7.5	3.0	1.7	2.0	1.9	1.8	4.0	68	194	24	11	18
29	7.7	3.0	1.6	2.2	-----	1.6	7.0	57	220	25	11	17
30	6.4	3.6	1.7	2.1	-----	1.7	4.5	57	194	35	9.8	16
31	6.1	-----	1.7	2.0	-----	1.6	-----	107	-----	29	9.3	-----
TOTAL	293.4	140.9	72.6	66.3	51.3	55.4	80.2	2,068.2	7,243	1,491	518.1	803
MEAN	9.46	4.70	2.34	2.14	1.85	1.72	2.67	66.7	241	48.1	16.7	26.8
MAX	13	7.0	3.6	2.6	2.1	1.9	7.0	235	606	164	29	66
MIN	6.1	3.0	1.6	1.5	1.7	1.5	1.4	4.0	77	24	9.3	13
AC-FT	522	279	144	122	103	106	159	4,100	14,370	2,960	1,030	1,590

CAL YR 1972 TOTAL 13,707.2 MEAN 37.5 MAX 529 MIN 1.3 AC-FT 27,190
WTR YR 1973 TOTAL 12,981.9 MEAN 36.3 MAX 606 MIN 1.4 AC-FT 25,550

PEAK DISCHARGE (BASE, 180 FT³/S)

NOTE.--No gage-height record Jan. 12 to Apr. 15.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-21	0100	4.72	290	6- 9	2300	6.66	1,120
6- 2	0600	5.00	365	6-29	2330	4.86	325

YELLOWSTONE RIVER BASIN

73

06301500 WEST FORK BIG GOOSE CREEK NEAR BIG HORN, WYO.

LOCATION.--Lat 44°36'47", long 107°17'49", Sheridan County, Bighorn National Forest, on left bank 0.3 mi (0.5 km) downstream from Twin Lakes Branch and 16 mi (26 km) west of Big Horn.

DRAINAGE AREA.--24.4 mi² (63.2 km²).

PERIOD OF RECORD.--October 1953 to current year (no winter records since 1971). Prior to October 1960, published as West Goose Creek near Big Horn.

GAGE.--Water-stage recorder. Altitude of gage is 8,420 ft (2,566 m), from topographic map.

AVERAGE DISCHARGE.--18 years (1953-71), 34.4 ft³/s (0.974 m³/s), 24,920 acre-ft/yr (30.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 550 ft³/s (15.6 m³/s) June 11, gage height, 4.36 ft (1.329 m); minimum daily during period of operation, 2.0 ft³/s (0.057 m³/s) May 2, 3.

Period of record: Maximum discharge, 1,030 ft³/s (29.2 m³/s) June 15, 1963, gage height, 5.37 ft (1.637 m), from rating curve extended above 410 ft³/s (11.6 m³/s) on basis of velocity-area study; minimum daily, 0.80 ft³/s (0.023 m³/s) Dec. 14, 26, 1963, Jan. 15, 16, Feb. 26, 1964.

REMARKS.--Records fair. Some regulation by Twin Lakes, capacity, 1,200 acre-ft (1.48 hm³) and Dome Lake, capacity, 1,800 acre-ft (2.22 hm³). No diversion above station.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

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								2.1	169	120	40	23
2								2.0	260	100	42	23
3								2.0	230	93	42	23
4								7.0	184	89	40	23
5								12	165	63	13	25
6								15	180	25	8.9	25
7								17	223	23	8.9	26
8								18	246	22	8.9	28
9								20	291	33	8.6	28
10								16	458	40	8.4	28
11								18	461	56	8.4	27
12								22	352	60	8.6	27
13								29	315	52	8.9	26
14								34	282	49	11	25
15								41	393	48	22	20
16								58	258	46	26	20
17								63	217	40	26	20
18								71	206	40	26	20
19								110	191	39	26	20
20								180	118	39	26	19
21								160	47	38	27	19
22								145	50	38	27	19
23								136	53	39	25	19
24								128	105	40	24	19
25								126	167	40	23	20
26								118	159	40	23	20
27								111	148	41	23	20
28								114	162	40	23	19
29								105	113	40	22	19
30								71	92	41	22	19
31								104		41	22	
TOTAL								2,055.1	6,295	1,515	670.6	669
MEAN								66.3	210	48.9	21.6	22.3
MAX								180	461	120	42	28
MIN								2.0	47	22	8.4	19
AC-FT								4,080	12,490	3,010	1,330	1,330

YELLOWSTONE RIVER BASIN

06302000 BIG GOOSE CREEK NEAR SHERIDAN, WYO.

LOCATION.--Lat 44°42'08", long 107°10'51", in NW¼NE¼ sec.35, T.55 N., R.86 W., Sheridan County, on right bank 0.4 mi (0.6km) upstream from Cave Creek and 14 mi (23km) southwest of Sheridan.

DRAINAGE AREA.--120 mi² (311 km²).

PERIOD OF RECORD.--September 1929 to current year (no winter records since 1971). Prior to October 1960, published as Goose Creek near Sheridan. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 4,505 ft (1,375 m), from topographic map.

AVERAGE DISCHARGE.--42 years (1929-71), 79.6 ft³/s (2.254m³/s), 57,670 acre-ft/yr (71.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,380 ft³/s (39.1 m³/s) June 10, gage height, 4.49 ft (1.369 m); minimum daily during period of operation, 8.5 ft³/s (0.24 m³/s) Apr. 20.

Period of record: Maximum discharge, 3,160 ft³/s (89.5 m³/s) June 15, 1963, gage height, 5.83 ft (1.777 m), from rating curve extended above 1,600 ft³/s (45.3 m³/s); minimum daily, 1.6 ft³/s (0.045 m³/s) Nov. 29, 1954.

REMARKS.--Records fair. Natural flow of stream affected by transbasin diversions, storage reservoirs, diversions for irrigation of about 20 acres (8.1 hm²) above station, and return flow from irrigated areas. PK ditch bypasses station.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1006: Drainage area. WSP 1509: 1930(M), 1931.

DISCHARGE, IN CURIC 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	21	484	274	26	27
2							13	19	808	210	25	56
3							16	19	762	132	31	40
4							16	27	550	109	33	29
5							18	35	448	94	64	24
6							15	37	476	39	62	18
7							12	42	492	21	36	20
8							13	42	684	21	29	33
9							14	45	948	24	25	42
10							16	40	1,280	32	23	31
11							17	42	1,100	40	19	25
12							16	48	831	59	28	26
13							16	59	575	51	28	24
14							17	74	684	43	32	25
15							14	102	829	42	24	20
16							14	153	660	38	21	18
17							14	232	505	30	21	18
18							15	301	436	28	27	17
19							12	388	362	27	28	28
20							8.5	543	293	29	25	90
21							15	510	164	37	26	92
22							17	480	127	43	29	87
23							18	480	147	67	29	85
24							17	476	205	62	24	84
25							17	480	312	48	19	81
26							16	436	326	35	17	78
27							19	392	316	34	18	75
28							29	369	316	32	21	61
29							29	340	293	37	19	45
30							24	296	262	39	20	41
31								343		31	20	
TOTAL							491.5	6,871	15,675	1,808	849	1,340
MEAN							16.4	222	523	58.3	27.4	44.7
MAX							29	543	1,280	274	64	92
MIN							8.5	19	127	21	17	17
AC-FT							975	13,630	31,090	3,590	1,680	2,660

YELLOWSTONE RIVER BASIN

75

06303500 LITTLE GOOSE CREEK IN CANYON, NEAR BIG HORN, WYO.

LOCATION.--Lat 44°35'46", long 107°02'22", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.1, T.53 N., R.85 W., Sheridan County, on left bank 100 ft (30 m) upstream from headgate of Lower Peralta ditch and 6.5 mi (10.5 km) southwest of Big Horn.

DRAINAGE AREA.--55 mi² (142 km²), approximately.

PERIOD OF RECORD.--April 1941 to current year (no winter records since 1971).

GAGE.--Water-stage recorder. Altitude of gage is 4,860 ft (1,481 m), from topographic map.

AVERAGE DISCHARGE.--30 years (1941-71), 63.4 ft³/s (1.795m³/s), 45,930 acre-ft/yr (56.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 826 ft³/s (23.4 m³/s) June 9, gage height, 5.42 ft (1.652 m); minimum daily during period of operation, 16 ft³/s (0.45 m³/s) May 2.

Period of record: Maximum discharge, 1,350 ft³/s (38.2 m³/s) June 15, 1963, gage height, 6.78 ft (2.067 m), from rating curve extended above 900 ft³/s (25.5 m³/s); minimum recorded, 2.2 ft³/s (0.062 m³/s) Dec. 4, 1949, gage height, 0.71 ft (0.216 m).

REMARKS.--Records good. Three small reservoirs above station, combined capacity, 860 acre-ft (1.06 hm³), two of which store some imported water. Water imported into drainage basin above station from East Goose Creek basin is diverted below station for irrigation.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

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	376	191	96	106
2								16	493	176	101	137
3								19	445	163	103	114
4								25	365	155	101	105
5								32	335	142	120	100
6								34	368	112	108	89
7								40	460	104	108	83
8								42	557	96	105	84
9								44	681	91	101	96
10								51	679	91	99	79
11								55	585	90	103	73
12								59	536	91	106	71
13								72	519	89	103	66
14								90	500	84	103	66
15								122	453	83	105	67
16								170	332	81	103	66
17								280	284	91	95	64
18								363	248	90	96	58
19								451	207	80	96	62
20								607	188	80	96	79
21								598	184	76	100	78
22								517	207	72	105	76
23								466	216	100	100	73
24								460	215	96	95	70
25								472	198	91	90	68
26								424	240	95	89	66
27								358	230	94	89	63
28								305	215	90	94	59
29					-----			264	213	93	94	55
30					-----			256	202	90	96	51
31		-----			-----		-----	300	-----	92	97	-----
TOTAL								7,015	10,731	3,169	3,097	2,324
MEAN								226	358	102	99.9	77.5
MAX								607	681	191	120	137
MIN								16	184	72	89	51
AC-FT								13,910	21,280	6,290	6,140	4,610

PEAK DISCHARGE (BASE, 420 FT³/S)

DATE	TIME	G.HT	DISCHARGE
5-20	1930	5.03	706
6- 2	2230	4.39	517
6- 9	2130	5.42	826

YELLOWSTONE RIVER BASIN

06305500 GOOSE CREEK BELOW SHERIDAN, WYO.

LOCATION.--Lat 44°49'25", long 106°57'40", in SE4SW¼ sec.15, T.56 N., R.84 W., Sheridan County, on right bank 700 ft (213 m) north of Sheridan city limits and 0.2 mi (0.3 km) downstream from Soldier Creek.

DRAINAGE AREA.--392 mi² (1,015 km²).

PERIOD OF RECORD.--October 1941 to current year. Monthly discharge only for October to December 1941, published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 3,701.36 ft (1,128.175 m) above mean sea level. Prior to Aug. 3, 1951, nonrecording gage at site 600 ft (183 m) upstream at datum 2.18 ft (0.664 m) lower.

AVERAGE DISCHARGE.--32 years, 182 ft³/s (5.154 m³/s), 131,900 acre-ft/yr (163 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,180 ft³/s (61.7 m³/s) June 10, gage height, 5.16 ft (1.573 m); minimum daily, 45 ft³/s (1.27 m³/s) Dec. 4.

Period of record: Maximum discharge, 5,450 ft³/s (154 m³/s) June 16, 1963, gage height, 7.82 ft (2.384 m); maximum gage height, 9.11 ft (2.777 m) Feb. 28, 1972 (backwater from ice); minimum daily discharge, 4.0 ft³/s (0.11 m³/s) Aug. 11, 1957.

REMARKS.--Records good except those for winter period, which are poor. Some regulation by many small reservoirs, combined capacity, about 15,000 acre-ft (18.5 hm³). Natural flow of stream affected by transbasin diversions, storage reservoirs, diversions for irrigation, and return flow from irrigated areas. Water-quality records for the current year 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	130	110	118	82	72	56	85	312	730	512	59	97
2	118	136	99	80	70	52	92	392	1,160	452	55	226
3	116	138	47	76	74	47	92	400	1,250	326	54	302
4	118	124	45	64	76	52	84	348	1,020	252	51	197
5	154	124	46	70	74	56	87	368	808	229	60	170
6	174	144	50	80	60	58	105	340	793	150	92	152
7	152	125	60	80	54	52	92	352	838	89	89	143
8	167	120	58	80	56	54	76	326	992	78	63	167
9	157	117	60	80	58	52	77	316	1,350	80	55	263
10	148	111	64	85	60	52	93	284	1,940	68	56	191
11	167	110	74	90	62	54	117	270	1,910	62	63	180
12	160	113	70	95	60	56	146	266	1,550	64	78	172
13	154	108	74	95	58	54	129	280	1,120	60	108	167
14	164	101	76	90	56	54	123	316	1,080	56	85	177
15	160	112	85	84	56	59	109	376	1,270	54	75	223
16	145	113	100	84	56	64	101	492	1,140	52	68	231
17	130	106	110	84	58	72	101	665	893	50	68	211
18	126	102	105	86	60	77	128	854	824	47	63	191
19	126	98	96	80	58	71	170	1,020	675	46	59	178
20	129	94	96	76	56	75	92	1,260	596	50	64	230
21	119	85	100	72	56	78	106	1,420	352	62	62	271
22	110	77	110	74	56	86	160	1,220	287	75	77	269
23	110	95	92	80	58	95	226	1,160	296	112	84	260
24	134	110	88	82	60	84	288	1,090	326	152	84	266
25	128	97	85	77	62	79	326	1,110	477	120	78	266
26	124	102	84	74	60	87	312	1,080	535	90	75	264
27	126	94	94	70	56	99	302	926	547	80	70	252
28	112	70	88	52	52	89	368	849	516	72	66	247
29	118	87	84	76	-----	82	372	750	575	75	72	210
30	103	130	60	74	-----	81	330	615	499	77	64	198
31	96	-----	84	72	-----	82	-----	615	-----	66	69	-----
TOTAL	4,175	3,253	2,502	2,444	1,694	2,109	4,889	20,072	26,349	3,758	2,166	6,371
MEAN	135	108	80.7	78.8	60.5	68.0	163	647	878	121	69.9	212
MAX	174	144	118	95	76	99	372	1,420	1,940	512	108	302
MIN	96	70	45	52	52	47	76	266	287	46	51	97
AC-FT	8,280	6,450	4,960	4,650	3,360	4,180	9,700	39,810	52,260	7,450	4,300	12,640

CAL YR 1972 TOTAL 61,293 MEAN 167 MAX 908 MIN 45 AC-FT 121,600
WTR YR 1973 TOTAL 79,782 MEAN 219 MAX 1,940 MIN 45 AC-FT 158,200

PEAK DISCHARGE (BASE, 1,200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
5-21	0330	4.54	1,560
6-3	0500	4.24	1,350
6-10	1500	5.16	2,180

YELLOWSTONE RIVER BASIN

77

06306250 PRAIRIE DOG CREEK NEAR ACME, WYO.

LOCATION.--Lat 44°59'02", long 106°50'21", in NE¼SW¼SW¼ sec.23, T.58 N., R.83 W., Sheridan County, on right bank, 600 ft (183 m) upstream from county bridge, 0.9 mi (1.5 km) upstream from mouth, 2.8 mi (4.5 km) downstream from Coutant Creek, and 7.6 mi (12.2 km) northeast of Acme.

DRAINAGE AREA.--358 mi² (927 km²).

PERIOD OF RECORD.--October 1970 to current year. Records for May 1965 to September 1970 in files of Office of Wyoming State Engineer.

GAGE.--Water-stage recorder. Altitude of gage is 3,450 ft (1,052 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 417 ft³/s (11.8 m³/s) May 6, gage height, 4.52 ft (1.378 m), from rating curve extended above 190 ft³/s (5.38 m³/s) on basis of step-backwater computation; minimum daily, 7.0 ft³/s (0.198 m³/s) July 20.

Period of record: Maximum discharge, 673 ft³/s (19.1 m³/s) May 22, 1972, gage height, 5.59 ft (1.704 m), from rating curve extended above 190 ft³/s (5.38 m³/s) on basis of step-backwater computation; maximum gage height, 5.62 ft (1.713 m) Feb. 16, 1971 (backwater from ice); minimum daily discharge, 7.0 ft³/s (0.198 m³/s) July 20, 1973.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 13,600 acres (55.0 km²) above station, of which about 60 acres (243,000 m²) lies below station. Flow supplemented by 3 transbasin diversions from North Piney Creek and South Piney Creek via Prairie Dog Creek ditch, Piney and Cruse ditch and Mead-Coffeen ditch.

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	55	37	35	31	23	98	41	340	27	54	30	38
2	50	40	36	27	25	93	44	280	27	45	30	49
3	46	40	32	24	26	91	49	280	30	44	28	83
4	49	37	31	22	26	71	51	312	35	43	30	115
5	50	37	29	21	26	67	48	345	48	37	33	80
6	49	37	28	20	25	59	50	397	43	31	32	66
7	52	43	27	20	23	61	64	407	37	29	27	59
8	51	47	25	19	22	53	55	387	32	31	29	61
9	48	39	23	19	21	53	41	341	27	27	28	68
10	45	36	22	18	21	51	42	296	22	23	25	87
11	44	35	24	18	23	52	46	250	19	23	22	85
12	44	34	27	19	24	45	53	227	15	19	23	86
13	44	34	28	20	24	48	76	211	11	16	27	83
14	43	33	29	21	24	38	79	190	10	11	37	81
15	43	32	29	21	24	31	69	175	11	8.8	35	86
16	44	34	29	21	24	30	58	170	12	10	30	93
17	43	33	29	21	24	35	57	169	18	8.2	31	93
18	42	33	29	21	26	41	59	163	19	8.5	31	93
19	41	32	30	20	30	42	76	158	24	8.2	26	94
20	41	30	30	21	31	40	91	142	32	7.0	27	92
21	41	32	30	22	35	44	35	124	31	8.5	27	88
22	40	33	30	23	43	48	33	112	27	18	31	85
23	40	32	31	25	63	51	41	96	26	26	39	82
24	41	31	30	25	124	44	66	81	28	28	40	81
25	41	34	37	24	139	41	127	73	32	29	44	77
26	44	35	39	22	126	41	170	66	36	23	45	75
27	43	38	37	21	108	47	186	62	29	27	46	76
28	43	29	37	21	101	49	241	57	27	29	43	74
29	41	25	39	21	-----	46	336	49	27	28	39	71
30	38	24	40	22	-----	42	385	40	57	29	34	69
31	34	-----	37	22	-----	40	-----	32	-----	31	34	-----
TOTAL	1,370	1,036	959	672	1,231	1,592	2,769	6,032	819	760.2	1,003	2,370
MEAN	44.2	34.5	30.9	21.7	44.0	51.4	92.3	195	27.3	24.5	32.4	79.0
MAX	55	47	40	31	139	98	385	407	57	54	46	115
MIN	34	24	22	18	21	30	33	32	10	7.0	22	38
AC-FT	2,720	2,050	1,900	1,330	2,440	3,160	5,490	11,960	1,620	1,510	1,990	4,700
CAL YR 1972	TOTAL 16,839.0 MEAN 46.0 MAX 488 MIN 11 AC-FT 33,400											
WTR YR 1973	TOTAL 20,613.2 MEAN 56.5 MAX 407 MIN 7.0 AC-FT 40,890											

NOTE.--Stage-discharge relation affected by ice Dec. 4 to Jan. 29.

YELLOWSTONE RIVER BASIN

06306300 TONGUE RIVER AT STATE LINE, NEAR DECKER, MT.

LOCATION.--Lat 45°00'32", long 106°50'08", in NW¼NE¼ sec.33, T.9 S., R.40 E., Big Horn County, on left bank 1 mi (1.6 km) north of Wyoming-Montana State line, 1.5 mi (2.4 km) upstream from Badger Creek, and 1.4 mi (2.3 km) southeast of Decker.

DRAINAGE AREA.--1,477 mi² (3,825 km²).

PERIOD OF RECORD.--August 1960 to current year. Records published as "near Decker" May 1928 to September 1938, not equivalent owing to intervening drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 3,430 ft (1,050 m), from topographic map.

AVERAGE DISCHARGE.--13 years, 498 ft³/s (14.1 m³/s), 360,800 acre-ft/yr (445 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,810 ft³/s (108 m³/s) May 21, gage height, 7.66 ft (2.335 m); minimum daily, 100 ft³/s (2.83 m³/s) Dec. 4.

Period of record: Maximum discharge, 7,480 ft³/s (212 m³/s) June 15, 1967, gage height, 10.86 ft (3.310 m); maximum gage height, 10.94 ft (3.335 m) Feb. 6, 1963 (backwater from ice jam); minimum discharge, 3.0 ft³/s (0.11 m³/s) Aug. 23, 1961, gage height, 1.83 ft (0.558 m).

REMARKS.--Records good except those for winter period, which are poor. Flow regulated by many small reservoirs in Wyoming, combined capacity, about 15,000 acre-ft (18.5 hm³). Diversions for irrigation of about 64,300 acres (260 km²) above station. Water quality records for the current year 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	324	260	290	190	215	285	233	1,140	2,000	1,160	217	177
2	304	286	230	195	210	280	243	1,270	2,550	1,080	199	254
3	283	312	130	190	200	275	253	1,210	3,190	941	176	580
4	284	304	100	180	200	270	245	1,070	2,630	791	169	530
5	302	297	130	165	200	255	231	1,180	2,090	721	164	445
6	338	311	150	170	200	240	242	1,210	2,040	632	167	395
7	341	318	165	175	195	240	282	1,220	2,200	525	179	360
8	352	298	170	170	190	250	247	1,180	2,380	463	170	359
9	358	297	175	165	195	255	203	1,070	2,780	439	155	476
10	339	288	180	165	205	255	207	956	3,200	415	141	559
11	332	269	190	165	210	250	245	850	3,430	399	134	464
12	342	274	195	170	220	250	277	780	3,050	391	136	438
13	337	277	200	180	210	245	309	767	2,510	397	149	418
14	341	264	200	190	205	233	305	805	2,180	395	194	414
15	350	254	205	200	200	207	303	905	2,370	382	163	471
16	346	278	210	210	205	198	262	1,100	2,400	373	143	537
17	327	269	220	220	210	212	250	1,420	1,970	361	138	522
18	315	259	220	230	215	238	262	1,880	1,830	338	135	489
19	311	252	225	220	220	246	333	2,370	1,630	321	132	468
20	310	245	225	210	215	236	350	2,820	1,550	305	135	446
21	314	235	230	200	210	251	183	3,410	1,390	342	137	501
22	307	225	230	205	210	259	227	3,310	1,160	382	137	512
23	304	225	230	210	220	272	323	2,860	1,100	392	169	505
24	317	240	225	215	260	265	604	2,630	1,090	449	175	487
25	336	250	215	220	290	247	882	2,670	1,140	436	178	501
26	316	250	210	215	300	249	1,050	2,880	1,180	370	177	494
27	325	250	215	210	300	270	933	2,440	1,170	312	177	488
28	309	240	220	195	290	277	1,040	2,090	1,120	308	174	474
29	287	235	210	195	-----	256	1,240	1,880	1,130	280	177	459
30	291	230	195	200	-----	237	1,160	1,660	1,270	312	170	422
31	266	-----	185	215	-----	234	-----	1,660	-----	284	163	-----
TOTAL	9,908	7,992	6,175	6,040	6,200	7,737	12,924	52,673	59,730	14,696	5,030	13,645
MEAN	320	266	199	195	221	250	431	1,699	1,991	474	162	455
MAX	358	318	290	230	300	285	1,240	3,410	3,430	1,160	217	580
MIN	266	225	100	165	190	198	183	767	1,090	280	132	177
AC=FT	19,650	15,850	12,250	11,980	12,300	15,350	25,630	104,500	118,500	29,150	9,980	27,060
CAL YR 1972	TOTAL 177,491	MEAN 485	MAX 2,360	MIN 100	AC=FT 352,100							
WTR YR 1973	TOTAL 202,750	MEAN 555	MAX 3,430	MIN 100	AC=FT 402,200							

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE
5-21	2030	7.66	3,810
6-3	1730	7.10	3,230
6-10	2145	7.43	3,580

NOTE.--Stage-discharge relation affected by ice Nov. 22 to Mar. 12.

YELLOWSTONE RIVER BASIN

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06309200 MIDDLE FORK POWDER RIVER NEAR BARNUM, WYO.

LOCATION.--Lat 43°34'40", long 107°08'16", in SE¼SW¼NE¼ sec.26, T.42 N., R.86 W., Washakie County, on left bank 1,100 ft (335 m) downstream from Rock Creek and 13 mi (21 km) southwest of Barnum.

DRAINAGE AREA.--46 mi² (119 km²), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 7,220 ft (2,201 m), from topographic map. Prior to Oct. 1, 1970, at site 900 ft (274 m) upstream at different datum.

AVERAGE DISCHARGE.--12 years, 34.3 ft³/s (0.971 m³/s), 24,850 acre-ft/yr (30.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,130 ft³/s (32.0 m³/s) May 20, gage height, 5.20 ft (1.585 m); minimum daily, 4.6 ft³/s (0.130 m³/s) Dec. 11-15.

Period of record: Maximum discharge, 7,110 ft³/s (201 m³/s) June 15, 1963, gage height, 12.6 ft (3.84 m), from floodmark, site and datum then in use, on basis of slope-area measurement of peak flow; minimum daily, 1.0 ft³/s (0.028 m³/s) Dec. 15, 16, 1964, Jan. 24-27, 1966.

REMARKS.--Records fair except those for April, which are poor. 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	6.0	5.5	5.8	5.2	5.8	6.3	6.0	13	365	26	13	9.4
2	6.0	6.3	5.8	4.9	5.8	6.0	6.0	13	440	23	11	16
3	6.0	6.0	5.8	4.9	5.8	6.6	6.0	13	324	22	11	13
4	6.6	6.0	5.8	4.9	5.8	6.3	6.0	17	263	20	11	11
5	11	5.8	5.8	4.9	5.8	6.0	6.0	24	245	19	11	9.4
6	7.6	5.2	5.5	4.9	5.8	6.0	5.5	38	251	18	11	8.3
7	7.2	5.5	5.5	4.9	5.8	6.0	5.5	47	247	17	10	7.6
8	6.9	6.0	5.5	4.9	5.8	6.0	5.5	50	231	16	9.4	9.7
9	6.3	5.5	5.2	4.9	6.0	6.0	5.5	59	220	16	9.4	11
10	6.0	5.0	4.9	4.9	6.0	6.3	5.5	71	197	16	9.4	9.0
11	6.0	5.0	4.6	4.9	6.0	5.8	6.0	71	171	17	9.4	13
12	6.0	5.0	4.6	4.9	6.0	6.0	7.0	67	152	18	14	11
13	6.0	6.0	4.6	4.9	6.0	6.0	8.6	94	130	24	10	9.0
14	6.0	6.0	4.6	5.2	6.3	6.0	9.7	112	120	20	9.0	8.3
15	6.0	6.0	4.6	5.5	6.3	5.5	8.5	152	103	17	9.0	8.3
16	6.0	6.3	4.9	5.5	6.3	5.5	9.0	204	87	16	8.6	8.3
17	6.0	6.0	5.2	5.5	6.3	6.6	9.7	259	77	15	8.3	8.3
18	6.0	6.0	5.8	5.5	6.3	6.6	9.4	329	73	14	9.0	7.9
19	6.0	6.0	5.8	5.2	6.0	6.6	8.3	416	64	18	8.6	7.6
20	6.3	6.0	5.8	5.5	6.0	6.3	9.0	647	56	26	8.6	7.2
21	6.6	6.0	5.2	5.8	6.0	6.6	10	568	52	21	8.3	11
22	7.2	6.0	5.5	5.8	6.0	6.9	10	440	49	19	8.6	9.4
23	7.6	6.0	5.5	5.8	6.0	6.9	10	422	44	33	8.6	7.9
24	7.2	6.0	5.5	5.8	6.0	6.3	10	527	42	20	8.3	7.6
25	6.9	6.0	5.5	5.8	6.0	6.0	10	510	39	17	7.6	7.2
26	6.9	6.0	5.5	5.8	6.0	6.0	10	407	36	14	7.6	7.2
27	6.6	6.0	5.5	5.8	6.0	6.0	15	285	35	14	7.2	7.2
28	6.3	6.0	5.2	5.8	5.8	6.0	20	241	36	14	7.6	6.9
29	5.8	6.0	5.2	5.8	-----	6.0	20	222	32	17	7.6	6.9
30	5.5	6.0	5.2	5.8	-----	6.0	17	231	28	18	7.2	6.6
31	5.5	-----	5.2	5.8	-----	6.0	-----	278	-----	13	6.9	-----
TOTAL	202.0	175.1	165.1	165.7	167.7	191.1	274.7	6,827	4,209	578	286.2	271.2
MEAN	6.52	5.84	5.33	5.35	5.99	6.16	9.16	220	140	18.6	9.23	9.04
MAX	11	6.3	5.8	5.8	6.3	6.9	20	647	440	33	14	16
MIN	5.5	5.0	4.6	4.9	5.8	5.5	5.5	13	28	13	6.9	6.6
AC-FT	401	347	327	329	333	379	545	13,540	8,350	1,150	568	538

CAL YR 1972 TOTAL 10,897.5 MEAN 29.8 MAX 560 MIN 4.6 AC-FT 21,620
WTR YR 1973 TOTAL 13,512.8 MEAN 37.0 MAX 647 MIN 4.6 AC-FT 26,800

PEAK DISCHARGE (BASE, 200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
5-20	1830	5.20	1,130
6- 1	2030	4.18	681

YELLOWSTONE RIVER BASIN

06311000 NORTH FORK POWDER RIVER NEAR HAZELTON, WYO.

LOCATION.--Lat 44°01'43", long 107°04'55", in NW¼SE¼NW¼ sec.21, T.47 N., R.85 W., Johnson County, on right bank 0.5 mi (0.8 km) downstream from Twin Creek, 0.7 mi (1.1 km) upstream from Dullknife Reservoir, 7.2 mi (11.6 km) southwest of Hazelton, and 19 mi (31 km) northwest of Mayoworth.

DRAINAGE AREA.--24.5 mi² (63.5 km²).

PERIOD OF RECORD.--September 1946 to current year. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 8,180 ft (2,493 m), from topographic map. Prior to Oct. 1, 1966, at site 0.8 mi (1.3 km) downstream at different datum.

AVERAGE DISCHARGE.--27 years, 14.3 ft³/s (0.405 m³/s), 10,360 acre-ft/yr (12.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 330 ft³/s (9.35 m³/s) May 18, gage height, 3.80 ft (1.158 m); maximum gage height, 5.15 ft (1.570 m) May 14 (backwater from ice); minimum daily discharge, 1.3 ft³/s (0.037 m³/s) Feb. 7.

Period of record: Maximum discharge, 886 ft³/s (25.1 m³/s) June 15, 1953, gage height, 4.34 ft (1.323 m), site and datum then in use, from rating curve extended above 110 ft³/s (3.12 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 0.60 ft³/s (0.017 m³/s) Oct. 30, 1960, Apr. 9, 12, 15-17, 1961, but may have been less during winter months of water years 1947-48.

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

REVISIONS (WATER YEARS).--WSP 1279: 1947-48(M), 1949, 1950-51(M), 1952.

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	4.4	4.6	3.4	1.8	1.6	1.9	7.0	58	26	14	6.7
2	4.6	4.6	4.5	3.6	1.8	1.6	1.9	6.0	132	19	12	10
3	4.4	4.2	4.5	3.1	1.9	1.5	1.9	7.0	67	17	11	10
4	4.6	4.0	4.4	2.4	1.9	1.5	2.0	16	47	16	11	11
5	5.9	4.4	4.3	2.5	1.9	1.6	2.2	30	44	15	10	7.7
6	5.4	4.6	3.7	2.4	1.6	1.6	2.1	26	48	14	9.6	6.4
7	5.6	4.2	3.1	2.6	1.3	1.6	1.9	24	55	14	9.6	6.0
8	5.1	4.4	3.4	2.8	1.4	1.6	2.0	25	58	14	8.7	7.2
9	4.9	4.6	3.5	2.9	1.6	1.6	2.2	27	55	13	8.3	11
10	4.6	4.4	3.7	2.9	1.7	1.6	2.3	26	49	13	8.0	9.6
11	4.6	4.4	3.9	3.0	1.7	1.7	2.4	28	44	12	8.3	8.8
12	4.4	4.4	3.7	3.0	1.6	1.7	2.8	30	39	12	7.7	8.0
13	4.2	4.4	3.9	3.2	1.5	1.7	3.3	34	35	13	7.4	7.0
14	4.4	4.2	3.9	3.3	1.5	1.6	4.5	41	36	13	6.9	7.2
15	4.4	4.2	4.2	3.4	1.5	1.4	4.2	56	40	12	6.9	7.6
16	4.2	4.4	4.4	2.8	1.5	1.5	4.0	40	34	11	6.9	7.4
17	4.0	4.2	4.6	2.4	1.6	1.6	3.9	110	34	11	6.7	7.2
18	4.2	4.0	4.4	2.4	1.6	1.7	4.1	169	40	12	6.7	7.0
19	4.2	3.8	4.2	2.3	1.6	1.6	3.9	170	43	17	6.7	6.6
20	4.6	3.8	3.9	2.2	1.5	1.8	3.5	166	54	24	6.4	6.4
21	5.4	3.6	3.9	2.1	1.5	1.8	3.0	98	41	19	6.1	6.4
22	5.1	3.6	4.3	2.1	1.5	1.7	3.5	66	32	15	6.9	6.7
23	4.9	3.5	3.9	2.1	1.5	1.6	4.0	68	27	37	6.7	5.6
24	4.6	3.3	3.9	2.1	1.5	1.6	4.6	65	25	23	6.1	5.6
25	4.4	3.7	3.7	2.2	1.5	1.7	4.3	89	23	18	5.6	5.6
26	4.2	4.2	3.7	2.2	1.5	2.1	4.0	66	22	13	5.1	5.9
27	3.7	4.2	3.7	2.1	1.6	2.0	5.0	45	22	12	5.4	5.9
28	4.3	3.5	3.8	2.0	1.6	1.9	10	40	22	12	5.4	5.6
29	3.6	3.9	3.6	2.1	-----	1.8	15	38	28	12	5.1	5.4
30	3.7	4.4	3.5	2.0	-----	1.8	10	37	25	17	5.1	5.1
31	4.0	-----	3.5	1.9	-----	1.8	-----	46	-----	17	5.1	-----
TOTAL	140.8	123.5	122.3	79.5	44.7	51.9	120.4	1,696.0	1,279	493	235.4	216.6
MEAN	4.54	4.12	3.95	2.56	1.60	1.67	4.01	54.7	42.6	15.9	7.59	7.22
MAX	5.9	4.6	4.6	3.6	1.9	2.1	15	170	132	37	14	11
MIN	3.6	3.3	3.1	1.9	1.3	1.4	1.9	6.0	22	11	5.1	5.1
AC-FT	279	245	243	158	89	103	239	3,360	2,540	978	467	430
CAL YR 1972	TOTAL 4,524.70	MEAN 12.4	MAX 150	MIN 2.0	AC-FT 8,970							
WTR YR 1973	TOTAL 4,603.10	MEAN 12.6	MAX 170	MIN 1.3	AC-FT 9,130							

PEAK DISCHARGE (BASE, 190 FT³/S)

NOTE.--No gage-height record Dec. 5 to May 11.

DATE	TIME	G.H.T	DISCHARGE
5-18	2030	3.80	330
6- 2	0830	3.26	197

YELLOWSTONE RIVER BASIN

81

06311500 NORTH FORK POWDER RIVER NEAR MAYOWORTH, WYO.

LOCATION.--Lat 43°53'50", long 106°52'40", in NE¼SW¼ sec.6, T.45 N., R.83 W., Johnson County, on right bank 2.0 mi (3.2 km) downstream from Pass Creek, 6.0 mi (9.7 km) northwest of Mayoworth, and 14 mi (23 km) downstream from Dullknife Reservoir.

DRAINAGE AREA.--106 mi² (275 km²).

PERIOD OF RECORD.--October 1940 to current year. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 5,590 ft (1,704 m), from topographic map. Prior to May 12, 1948, at site 300 ft (91 m) downstream at datum 4.43 ft (1.350 m) lower.

AVERAGE DISCHARGE.--33 years, 32.7 ft³/s (0.926 m³/s), 23,690 acre-ft/yr (29.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 293 ft³/s (8.30 m³/s) May 16, gage height, 4.44 ft (1.353 m); minimum daily, 17 ft³/s (0.48 m³/s) Dec. 5-9.

Period of record: Maximum discharge, 1,270 ft³/s (36.0 m³/s) Aug. 11, 1941, gage height, 7.64 ft (2.329 m), site and datum then in use, from rating curve extended above 190 ft³/s (5.38 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 5.6 ft³/s (0.16 m³/s) Nov. 5, 1954.

REMARKS.--Records fair. Some regulation for irrigation by Dullknife Reservoir 14 mi (23 km) upstream, capacity, 4,350 acre-ft (5.36 hm³), since spring of 1967. Diversions above station for irrigation of about 180 acres (72.8 hm²), of which about 160 acres (64.8 hm²) lies below station.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

REVISIONS.--WSP 1209: 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	23	23	24	25	23	20	20	22	66	43	27	21
2	23	24	23	25	22	20	20	22	113	42	27	25
3	23	25	19	23	22	20	20	22	110	42	27	25
4	23	25	18	21	22	20	20	22	73	42	26	23
5	26	25	17	23	22	21	20	28	70	42	26	22
6	28	24	17	23	22	21	20	28	68	40	26	22
7	28	24	17	25	22	21	20	46	62	36	26	22
8	28	24	17	25	20	21	20	44	51	36	25	32
9	28	24	17	26	21	21	20	48	50	36	25	27
10	27	24	18	26	21	21	21	50	51	36	25	25
11	27	25	18	24	21	21	21	43	56	36	28	23
12	27	25	19	22	21	21	21	41	54	35	33	23
13	28	25	19	21	21	21	21	44	50	35	32	23
14	28	25	19	21	21	20	21	49	48	37	31	23
15	28	25	19	21	21	20	21	95	51	38	30	22
16	27	25	19	21	21	21	21	122	49	38	29	22
17	27	25	21	21	20	21	21	112	48	38	29	21
18	27	24	22	22	20	21	22	108	55	37	28	21
19	27	24	23	22	20	20	22	119	56	41	27	21
20	27	23	23	22	20	20	20	114	56	43	26	20
21	27	23	23	22	20	20	20	124	55	36	25	21
22	27	23	23	23	20	20	21	132	50	32	26	22
23	26	22	22	23	20	20	22	110	49	39	25	23
24	26	23	24	23	20	20	22	95	48	33	25	23
25	26	23	24	23	20	20	22	100	46	31	24	23
26	26	23	24	23	20	20	21	103	45	30	22	23
27	25	23	24	23	20	20	21	93	42	29	20	23
28	25	21	24	23	20	20	22	90	42	28	20	23
29	25	20	24	23	-----	20	22	90	46	26	20	23
30	24	23	24	23	-----	20	22	80	44	26	20	23
31	23	-----	24	23	-----	20	-----	68	-----	27	20	-----
TOTAL	810	713	650	711	513	632	677	2,274	1,702	1,115	800	690
MEAN	26.1	23.8	21.0	22.9	20.8	20.4	20.9	73.4	56.7	36.0	25.8	23.0
MAX	28	25	24	26	22	21	22	132	113	43	33	32
MIN	23	20	17	21	20	20	20	22	42	27	20	20
AC-FT	1,610	1,410	1,290	1,410	1,160	1,250	1,240	4,510	3,350	2,210	1,590	1,370

CAL YR 1972 TOTAL 13,273 MEAN 36.6 MAX 320 MIN 17 AC-FT 26,530
 WTR YR 1973 TOTAL 11,307 MEAN 31.0 MAX 132 MIN 17 AC-FT 22,430

NOTE.--No gage-height record Oct. 9 to Nov. 9.

YELLOWSTONE RIVER BASIN

06313700 DEAD HORSE CREEK NEAR BUFFALO, WYO.

LOCATION.--Lat 44°12'50", long 106°06'20", in SW¼SE¼ sec.15, T.49 N., R.77 W., Johnson County, on left bank 0.5 mi (0.8 km) upstream from bridge on private road, 1.7 mi (2.7 km) upstream from bridge on Interstate Highway 90, and 31 mi (50 km) east of Buffalo.

DRAINAGE AREA.--155 mi² (401 km²), approximately.

PERIOD OF RECORD.--Annual maximum, water years 1958-71. October 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,950 ft (1,204 m), from river-profile map. Oct. 1, 1958, to Sept. 30, 1971, crest-stage gage at site 0.5 mi (0.8 km) downstream at different datum.

EXTREMES.--Current year: Maximum discharge, 975 ft³/s (27.6 m³/s) July 23, gage height, 8.40 ft (2.560 m), from floodmarks, from rating curve extended above 300 ft³/s (8.50 m³/s) on basis of slope-area measurement of peak flow; no flow for many days.

Period of record: Maximum discharge, 2,300 ft³/s (65.1 m³/s) May 26, 1962, gage height, 11.6 ft (3.54 m), site and datum then in use; no flow for many days.

REMARKS.--Records poor.

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	14	.03	0	.03	0
2						0	0	3.3	1.0	0	.02	.03
3						0	0	10	.05	0	.02	.06
4						0	0	26	.04	0	.02	.02
5						0	0	15	.02	0	.04	.01
6						0	0	11	.02	0	.04	0
7						0	0	5.9	.02	0	.04	0
8						0	0	4.6	.02	0	.04	.01
9						0	0	1.5	.02	0	.03	.02
10						0	0	.04	.02	0	.04	.02
11						0	0	0	.02	0	.03	.02
12						0	0	0	.01	0	.03	.03
13						0	0	0	.01	0	.03	.02
14						0	0	0	0	0	.03	.01
15						0	0	0	0	0	.01	.02
16						0	0	0	0	0	0	.03
17						0	0	0	0	0	0	.04
18						.02	0	0	0	0	0	.03
19						.10	0	0	0	0	0	.02
20						.10	0	0	0	0	0	.02
21						.06	0	0	0	18	0	.02
22						.04	0	0	0	12	0	.01
23						.03	0	0	0	73	0	0
24						.02	0	0	0	.23	0	0
25						.01	0	0	0	.04	0	0
26						.01	0	0	0	.03	0	0
27						.01	6.9	0	0	.03	0	0
28						0	26	0	0	.03	0	0
29						0	16	0	0	.04	0	0
30						0	15	0	0	.04	0	0
31						0		.04		.04	0	
TOTAL	0	0	0	0	0	.40	63.9	91.38	1.28	103.48	.45	.44
MEAN	0	0	0	0	0	.013	2.13	2.95	.043	3.34	.015	.015
MAX	0	0	0	0	0	.10	26	26	1.0	73	.04	.06
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	.8	127	181	2.5	205	.9	.9

CAL YR 1972 TOTAL 1,871.67 MEAN 5.11 MAX 530 MIN 0 AC-FT 3,710
WTR YR 1973 TOTAL 261.33 MEAN .72 MAX 73 MIN 0 AC-FT 518

PEAK DISCHARGE (BASE, 300 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE
7-21	2330	6.03	536
7-23	0130	a8.40	975

a From floodmarks.

06317000 POWDER RIVER AT ARVADA, WYO.

LOCATION.--Lat 44°38'45", long 106°08'00", in NE¼NW¼ sec.21, T.54 N., R.77 W., Sheridan County, on left bank 0.5 mi (0.8 km) upstream from bridge on county road, 0.5 mi (0.8 km) southwest of Arvada, and 0.8 mi (1.3 km) upstream from Wild Horse Creek.

DRAINAGE AREA.--6,050 mi² (15,670 km²), approximately.

PERIOD OF RECORD.--May 1919 to current year (no winter records in water years 1919-30, 1934). Records for Feb. 16-23, 1930, published in WSP 701 are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 3,622.01 ft (1,103.989 m) above mean sea level. Prior to Oct. 24, 1938, nonrecording gage at bridge 0.5 mi (0.8 km) downstream at datum 0.14 ft (0.043 m) lower.

AVERAGE DISCHARGE.--42 years (1930-33, 1934-73), 274 ft³/s (7.760 m³/s), 198,500 acre-ft/yr (245 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,470 ft³/s (155 m³/s) July 23, gage height, 7.17 ft (2.185 m); minimum daily, 8.1 ft³/s (0.23 m³/s) July 18.

Period of record: Maximum discharge, about 100,000 ft³/s (2,830 m³/s) Sept. 29, 1923, gage height, 23.7 ft (7.22 m), from floodmarks, site and datum then in use, from rating curve extended above 20,000 ft³/s (566 m³/s); no flow at times most years.

REMARKS.--Records poor. Numerous small reservoirs and diversions for irrigation of about 29,000 acres (117 km²) above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1509: 1921(M), 1923(M), 1924-26, 1927-28(M), 1929, 1930(M), 1931, 1932(M), 1933, 1934(M), 1935-36. See PERIOD OF RECORD.

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	90	115	110	65	120	210	275	1,400	650	215	166	30
2	88	154	110	70	120	210	258	1,270	720	335	231	42
3	88	158	90	60	120	200	293	1,040	770	287	190	82
4	88	195	70	50	120	200	287	1,700	1,740	242	142	720
5	158	220	60	50	110	210	305	2,490	1,500	195	118	710
6	166	210	55	50	100	210	363	2,080	1,030	154	112	363
7	370	210	50	45	95	250	335	1,470	750	118	112	215
8	311	200	55	45	100	300	329	1,260	569	92	90	180
9	200	185	60	50	110	350	435	1,040	512	82	73	180
10	150	190	65	55	120	390	435	1,050	480	59	65	121
11	138	205	70	65	120	363	377	949	496	40	67	90
12	138	190	70	80	120	384	349	861	528	27	73	127
13	134	185	70	100	120	356	356	790	496	22	75	2,400
14	138	154	70	110	110	370	270	760	370	19	80	949
15	138	170	70	120	120	398	342	700	287	16	158	488
16	138	185	75	120	130	412	323	710	242	12	118	335
17	138	166	80	115	140	384	323	810	210	8.4	92	258
18	138	146	80	110	130	335	242	993	226	8.1	65	231
19	150	134	80	105	130	323	253	1,250	190	20	57	215
20	158	142	80	100	130	317	293	1,560	150	22	44	200
21	158	138	80	100	120	370	299	1,650	205	25	37	205
22	154	112	80	100	140	356	180	1,660	220	1,110	54	185
23	154	75	80	105	160	391	210	2,030	195	2,800	190	158
24	150	73	80	110	160	488	329	1,620	170	2,730	49	180
25	154	98	75	120	170	298	750	1,440	200	1,780	37	195
26	170	75	80	110	180	242	1,840	1,580	190	770	26	215
27	205	70	90	105	190	329	1,760	1,500	175	458	22	170
28	190	70	90	100	200	311	2,070	1,490	200	342	44	158
29	180	80	85	105	-----	281	3,520	1,100	166	323	34	158
30	142	100	80	110	-----	317	2,470	850	287	261	26	158
31	80	-----	75	120	-----	305	-----	750	-----	242	26	-----
TOTAL	4,854	4,405	2,565	2,750	3,685	10,068	19,871	40,053	13,924	12,834.5	2,673	9,718
MEAN	157	147	76.3	88.7	122	325	662	1,292	464	414	86.2	324
MAX	370	220	110	120	200	488	3,520	2,490	1,740	2,800	231	2,400
MIN	80	70	50	45	95	200	180	700	150	8.1	22	30
AC-FT	9,630	8,740	4,690	5,450	7,310	19,970	39,410	79,450	27,620	25,460	5,300	19,280

CAL YR 1972 TOTAL 116,456.0 MEAN 318 MAX 3,500 MIN 12 AC-FT 231,000
WTP YR 1973 TOTAL 127,200.5 MEAN 348 MAX 3,520 MIN 8.1 AC-FT 252,300

PEAK DISCHARGE (BASE, 3,800 FT³/S)

NOTE.--No gage-height record Aug. 15 to Sept. 30.

DATE	TIME	G.HT.	DISCHARGE
4-29	0830	7.01	5,180
7-23	1630	7.17	5,470
9-13	a0730	6.35	4,080

YELLOWSTONE RIVER BASIN

06318500 CLEAR CREEK NEAR BUFFALO, WYO.

LOCATION.--Lat 44°19'58", long 106°46'36", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.6, T.50 N., R.82 W., Johnson County, on left bank 500 ft (152 m) upstream from abandoned Pacific Power & Light Company powerplant, 2.0 mi (3.2 km) downstream from Mosier Gulch, and 4.0 mi (6.4 km) west of Buffalo.

DRAINAGE AREA.--120 mi² (310 km²), approximately.

PERIOD OF RECORD.--April to September 1894, May to September 1896, May 1897 to December 1899, June 1917 to October 1927, April 1938 to current year. Published as "at Buffalo" 1897-98. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 5,184.83 ft (1,580.336 m) above mean sea level. See WSP 1916 for history of changes prior to 1961.

AVERAGE DISCHARGE.--47 years (1897-99, 1917-27, 1938-73), 62.5 ft³/s (1.770 m³/s), 45,280 acre-ft/yr (55.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 693 ft³/s (19.6 m³/s) May 20, gage height, 4.02 ft (1.225 m); minimum daily, 4.8 ft³/s (0.14 m³/s) Feb. 7.

Period of record: Maximum discharge, 3,420 ft³/s (96.9 m³/s) June 15, 1963, gage height, 6.19 ft (1.887 m), from rating curve extended above 900 ft³/s (25.5 m³/s) on basis of velocity-area study; no flow Feb. 14-16, 1939, Nov. 12, 13, 1940.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 330 acres (1.34 km²), of which about 320 acres (1.30 km²) lies below station.

REVISIONS (WATER YEARS).--WSP 1309: 1896, 1898, 1938, 1939(M), 1945(M). WSP 1729: 1921.

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	36	37	20	8.6	5.6	7.0	8.5	30	209	159	52	28
2	34	35	19	9.4	5.6	7.2	8.5	24	424	126	50	47
3	34	31	14	8.0	6.0	7.5	8.5	28	292	96	51	52
4	33	31	12	6.0	6.0	7.8	9.0	65	179	83	50	43
5	38	31	12	6.4	5.8	7.8	10	131	134	77	52	39
6	37	30	10	6.0	5.4	7.8	9.4	112	134	70	48	37
7	40	28	8.0	6.6	4.8	7.2	8.4	96	179	67	60	36
8	40	27	9.0	7.0	5.0	7.4	10	98	250	65	51	44
9	39	27	9.0	7.2	5.6	7.0	11	106	338	63	45	105
10	38	23	9.5	7.5	6.2	7.0	14	103	357	58	43	72
11	35	28	10	7.6	6.4	7.4	21	113	328	55	41	63
12	33	27	9.5	7.8	6.0	7.6	20	116	253	55	41	56
13	33	24	10	8.0	5.8	7.2	22	135	237	54	41	50
14	32	21	10	8.0	5.6	6.2	30	153	213	52	36	46
15	33	28	11	6.8	5.6	5.6	26	200	243	48	36	49
16	31	24	12	6.2	5.6	7.0	25	236	164	44	33	47
17	31	23	14	6.0	6.0	8.4	24	321	126	41	32	45
18	30	19	13	6.0	6.0	8.2	25	408	119	41	31	44
19	29	18	11	5.8	6.0	7.6	18	470	103	41	31	40
20	30	17	10	5.6	5.8	8.0	16	550	90	52	30	38
21	32	15	10	5.2	5.8	8.0	16	484	83	67	30	38
22	32	14	11	5.4	5.8	7.6	16	279	88	68	31	39
23	30	16	10	5.4	5.8	7.6	18	259	99	136	32	36
24	32	17	10	5.4	5.8	8.2	20	230	124	103	30	36
25	30	17	9.5	5.6	6.0	7.6	17	253	128	97	27	36
26	32	19	9.5	5.6	6.0	8.4	16	245	125	81	26	38
27	30	19	9.5	5.4	6.2	8.8	20	175	145	73	24	38
28	24	18	9.8	5.0	6.5	8.2	43	142	159	65	24	36
29	22	19	9.4	6.0	-----	8.5	81	112	175	63	24	34
30	20	20	8.9	5.8	-----	8.5	41	94	170	61	23	33
31	25	-----	8.9	5.6	-----	8.5	-----	128	-----	54	23	-----
TOTAL	995	703	339.5	200.9	162.7	236.8	612.3	5,896	5,668	2,215	1,148	1,345
MEAN	32.1	23.4	11.0	6.48	5.81	7.64	20.4	190	189	71.5	37.0	44.8
MAX	40	37	20	9.4	6.5	8.8	81	550	424	159	60	105
MIN	20	14	8.0	5.0	4.8	5.6	8.4	24	83	41	23	28
AC=FT	1,970	1,390	673	398	323	470	1,210	11,690	11,240	4,390	2,280	2,670

CAL YR 1972 TOTAL 28,350.0 MEAN 77.5 MAX 668 MIN 8.0 AC=FT 56,230
WTR YR 1973 TOTAL 19,522.2 MEAN 53.5 MAX 550 MIN 4.8 AC=FT 38,720

PEAK DISCHARGE (BASE, 380 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
5-20	0030	4.02	693
6- 2	1000	3.80	565
6-10	0430	3.52	436

YELLOWSTONE RIVER BASIN

85

06320000 ROCK CREEK NEAR BUFFALO, WYO.

LOCATION.--Lat 44°27'22", long 106°52'42", in NW¼NW¼NW¼ sec.29, T.52 N., R.83 W., Johnson County, on left bank 300 ft (91 m) downstream from confluence of North and South Forks and 11.5 mi (18.5 km) northwest of Buffalo.

DRAINAGE AREA.--60.0 mi² (155.4 km²).

PERIOD OF RECORD.--April to August 1941, April to December 1942, May 1943 to November 1944, April 1945 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 5,280 ft (1609 m), from topographic map. Prior to Jan. 8, 1944, nonrecording gages 600 ft (183 m) upstream on North and South Forks at different datum. Jan. 8, 1944, to Sept. 30, 1952, water-stage recorder at present site at datum 0.72 ft (0.219 m) lower.

AVERAGE DISCHARGE.--27 years (1943-44, 1945-71), 36.4 ft³/s (1.031m³/s), 26,370 acre-ft/yr (32.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 615 ft³/s (17.4 m³/s) June 2, gage height, 6.24 ft (1.902 m); minimum daily during period of operation, 4.5 ft³/s (0.13 m³/s) Apr. 8, 9.

Period of record: Maximum discharge, 1,860 ft³/s (52.7 m³/s) June 15, 1963, gage height, 7.98 ft (2.432 m), from rating curve extended above 450 ft³/s (12.7 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 0.50 ft³/s (0.014 m³/s) Sept. 19, 1954.

Maximum stage known, about 8.05 ft (2.454 m), probably during 1944.

REMARKS.--Records good. Water is imported into drainage basin above station from South Piney Creek. Diversions for irrigation of about 250 acres (1.01 km²) above station.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

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							4.9	11	312	87	52	41
2							4.9	9.1	441	76	50	54
3							4.8	9.6	265	74	52	49
4							4.9	13	200	72	50	45
5							5.1	19	198	61	50	42
6							6.0	24	237	53	47	38
7							5.0	29	252	51	50	38
8							4.5	29	280	50	42	44
9							4.5	31	308	47	41	58
10							5.0	29	268	31	48	40
11							5.5	35	215	28	48	32
12							6.5	41	188	29	50	19
13							7.0	52	170	43	50	17
14							7.0	70	157	40	51	17
15							5.0	82	149	39	43	18
16							5.8	131	114	36	43	19
17							6.3	195	98	37	44	19
18							7.2	268	96	43	44	18
19							6.5	324	84	50	43	17
20							6.0	405	76	65	41	16
21							7.0	353	70	70	45	16
22							8.0	265	74	63	44	17
23							6.1	272	89	115	39	15
24							6.0	272	87	84	37	15
25							5.2	280	80	82	35	15
26							5.8	258	76	67	32	16
27							6.1	208	83	62	31	15
28							13	200	82	58	31	14
29					-----		15	188	96	68	28	13
30					-----		14	180	89	75	26	13
31		-----			-----		-----	241	-----	57	29	-----
TOTAL							198.6	4,523.7	4,934	1,813	1,316	790
MEAN							6.52	146	164	58.5	42.5	26.3
MAX							15	405	441	115	52	58
MIN							4.5	9.1	70	28	26	13
AC-FT							394	8,970	9,790	3,600	2,610	1,570

YELLOWSTONE RIVER BASIN

06320500 SOUTH PINEY CREEK AT WILLOW PARK, WYO.

LOCATION.--Lat 44°27'59", long 107°02'03", Johnson County, Bighorn National Forest, on left bank about 300 ft (91 m) downstream from Willow Park Dam, 1.4 mi (2.3 km) upstream from Kearny Creek, and 10 mi (16 km) southwest of Story.

DRAINAGE AREA.--33.6 mi² (87.0 km²).

PERIOD OF RECORD.--September 1945 to September 1957 (no winter records prior to 1948), October 1959 to current year (no winter records since 1971).

GAGE.--Water-stage recorder. Altitude of gage is 8,540 ft (2,603 m), from topographic map. Prior to Oct. 1, 1957, at site about 600 ft (183 m) upstream at different datum. Oct. 1, 1959, to Sept. 30, 1965, at present site at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--22 years (1947-57, 1959-71), 42.4 ft³/s (1.201 m³/s), 30,720 acre-ft/yr (37.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, not determined; minimum daily during period of operation, 11 ft³/s (0.31 m³/s) Sept. 27-30.

Period of record: Maximum discharge, 1,620 ft³/s (45.9 m³/s) June 15, 1963, gage height, 5.68 ft (1.731 m), present datum, from rating curve extended above 360 ft³/s (10.2 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 0.30 ft³/s (0.008 m³/s) Nov. 19-21, 1966, but may have been less on individual days of no gage-height record; minimum daily determined prior to construction of Willow Park Reservoir, 4.5 ft³/s (0.13 m³/s) Mar. 1 to Apr. 5, 1955, but may have been less during years of no winter records.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Some regulation by Cloud Peak Reservoir, capacity, 3,385 acre-ft (4.17 hm³), and Willow Park Reservoir, capacity, 4,457 acre-ft (5.50 hm³). Storage began in Willow Park Reservoir in April 1959. Cloud Peak Reservoir enlarged December 1958. Water released from storage in Cloud Peak Reservoir is diverted just below station into Rock Creek basin.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1309: 1949(M). WSP 1709: 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									210	196	122	82
2									260	166	109	83
3									230	128	96	84
4									200	105	87	84
5									180	94	88	84
6									200	88	94	82
7									230	87	108	79
8									350	87	111	78
9									430	89	112	78
10									500	81	112	81
11									430	76	112	80
12									330	84	114	78
13									218	82	114	78
14									235	75	114	78
15									279	65	115	78
16									218	58	118	76
17									151	58	122	60
18									116	67	122	45
19									88	85	122	41
20									73	112	114	38
21									73	111	102	38
22									91	88	99	38
23									105	131	95	37
24									125	149	94	31
25									131	139	94	28
26									140	128	94	19
27									166	116	91	11
28									184	115	93	11
29					-----				216	115	91	11
30					-----				211	121	85	11
31		-----			-----		-----		-----	130	82	-----
TOTAL									6,370	3,226	3,226	1,702
MEAN									212	104	104	56.7
MAX									500	196	122	84
MIN									73	58	82	11
AC-FT									12,630	6,400	6,400	3,380

YELLOWSTONE RIVER BASIN

87

06321000 SOUTH PINEY CREEK NEAR STORY, WYO.

LOCATION.--Lat 44°33'26", long 106°56'11", in NW¼NE¼NE¼ sec.23, T.53 N., R.84 W., Johnson County, Bighorn National Forest, on left bank 2.3 mi (3.7 km) southwest of Story and 3.3 mi (5.3 km) upstream from confluence with North Piney Creek.

DRAINAGE AREA.--69.4 mi² (179.7 km²).

PERIOD OF RECORD.--June 1951 to current year (no winter records since 1971).

GAGE.--Water-stage recorder. Altitude of gage is 5,590 ft (1,704 m), from topographic map. Prior to Oct. 1, 1951, nonrecording gage at site 300 ft (91 m) upstream at different datum. Oct. 1, 1951, to July 9, 1970, at site 200 ft (61 m) downstream at datum 10.08 ft (3.072 m) lower.

AVERAGE DISCHARGE.--20 years (1951-71), 75.3 ft³/s (2.132m³/s), 54,550 acre-ft/yr (67.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,380 ft³/s (39.1 m³/s) June 10, gage height, 4.23 ft (1.289 m); minimum daily during period of operation, 23 ft³/s (0.65 m³/s) Sept. 29, 30.

Period of record: Maximum discharge, 2,090 ft³/s (59.2 m³/s) June 15, 1963, gage height, 4.37 ft (1.332 m), site and datum then in use, from rating curve extended above 1,050 ft³/s (29.7 m³/s); maximum gage height, 5.30 ft (1.615 m) June 15, 1963 (backwater from slide), site and datum then in use; minimum daily discharge, 0.40 ft³/s (0.01 m³/s) Nov. 14, 1964.

REMARKS.--Records poor. Some regulation by Cloud Peak Reservoir, capacity, 3,385 acre-ft (4.17 hm³), Willow Park Reservoir, capacity, 4,457 acre-ft (5.50 hm³), and Kearny Lake, capacity, 1,860 acre-ft (2.29 hm³). Diversion above station into Rock Creek basin for irrigation.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

REVISIONS.--WSP 1916: 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									315	438	172	112
2									570	295	155	138
3									431	175	142	152
4									295	128	132	138
5									257	128	125	135
6									300	132	130	145
7									382	130	140	132
8									424	155	148	152
9									580	160	150	200
10									1,070	169	145	208
11									964	169	145	194
12									752	158	142	187
13									685	152	142	184
14									685	140	142	181
15									812	104	135	169
16									630	86	130	169
17									382	81	148	155
18									321	86	135	118
19									253	100	135	110
20									197	98	132	108
21									169	100	106	63
22									155	106	110	53
23									155	148	122	50
24									222	158	115	44
25									275	155	128	42
26									310	155	130	38
27									369	155	118	25
28									389	155	112	24
29									410	152	135	23
30									454	152	118	23
31									-----	178	106	-----
TOTAL									13,213	4,698	4,125	3,472
MEAN									440	152	133	116
MAX									1,070	438	172	208
MIN									155	81	106	23
AC-FT									26,210	9,320	8,180	6,890

YELLOWSTONE RIVER BASIN

06321500 NORTH PINEY CREEK NEAR STORY, WYO.

LOCATION.--Lat 44°34'50", long 106°55'55", in NW¼SW¼ sec.12, T.53 N., R.84 W., Sheridan County, on left bank 2.1 mi (3.4 km) west of Story and 3.2 mi (5.1 km) upstream from confluence with South Piney Creek.

DRAINAGE AREA.--36.8 mi² (95.3 km²).

PERIOD OF RECORD.--June 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,290 ft (1,612 m), from topographic map. Prior to Sept. 14, 1951, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--22 years, 37.9 ft³/s (1.073m³/s), 27,460 acre-ft/yr (33.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 821 ft³/s (23.3 m³/s) June 9, gage height, 3.74 ft (1.140 m); minimum daily, 4.8 ft³/s (0.14 m³/s) Jan. 4.

Period of record: Maximum discharge, 1,820 ft³/s (51.5 m³/s) June 15, 1963, gage height, 5.04 ft (1.536 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s); minimum daily, 3.0 ft³/s (0.08 m³/s) Mar. 12, 1956, Jan. 20, 21, 24, 25, Mar. 3, 1966.

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

REVISIONS.--WSP 1916: 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	15	11	8.5	6.0	5.6	5.4	6.7	19	387	100	24	30
2	13	12	8.8	6.6	5.4	5.6	6.7	17	476	85	23	80
3	12	11	7.6	6.4	5.6	5.8	6.5	18	406	70	23	50
4	12	10	7.2	4.8	5.6	6.5	6.8	21	335	60	24	30
5	15	10	6.6	5.4	5.6	5.4	8.0	26	341	55	23	26
6	14	11	6.8	5.2	5.8	5.4	8.8	33	395	50	22	25
7	16	10	7.0	5.2	5.4	5.2	7.0	39	462	47	21	25
8	15	10	6.8	5.6	5.4	5.2	6.5	42	523	45	21	27
9	14	10	6.4	6.4	5.4	5.2	7.5	43	609	43	20	60
10	13	9.0	5.6	7.7	5.4	5.2	8.3	41	673	41	20	40
11	12	9.8	5.8	8.0	5.6	5.2	9.0	44	494	39	19	30
12	11	9.4	6.0	8.8	5.4	5.2	11	50	430	37	21	27
13	11	9.0	6.4	8.0	5.6	5.0	11	59	401	35	21	26
14	12	9.0	6.6	7.0	5.4	5.0	12	74	359	34	19	26
15	11	9.5	7.0	6.4	5.4	5.2	10	99	319	32	18	27
16	11	9.4	7.4	6.4	5.4	6.0	10	143	250	30	17	27
17	11	8.9	8.0	6.4	5.4	7.2	11	224	215	28	17	26
18	11	9.2	7.4	6.4	5.2	7.0	12	306	200	25	16	26
19	10	9.3	6.8	6.2	5.2	6.3	8.8	352	169	26	17	24
20	11	8.9	6.7	6.0	5.2	6.5	8.5	453	150	26	17	23
21	10	8.7	6.6	5.4	5.2	6.5	9.5	444	139	27	16	23
22	11	8.3	6.9	5.6	5.2	6.4	11	382	110	34	18	23
23	11	9.4	6.7	5.8	5.2	6.0	13	381	105	82	17	22
24	12	8.8	6.5	5.8	5.2	6.4	12	406	100	44	14	21
25	11	8.5	6.3	5.8	5.2	8.0	12	411	90	33	14	21
26	13	9.0	6.7	5.8	5.2	9.0	12	374	90	30	17	22
27	11	9.0	6.7	5.2	5.4	8.3	14	312	95	29	20	20
28	9.0	8.8	6.6	5.6	5.4	7.2	19	278	100	27	20	20
29	10	8.5	5.7	6.1	-----	6.8	21	245	110	30	16	18
30	8.9	8.5	5.6	5.8	-----	6.7	21	248	140	27	14	18
31	9.2	-----	5.6	5.6	-----	6.7	-----	305	-----	25	13	-----
TOTAL	366.1	283.9	209.3	191.4	151.0	191.5	320.6	5,889	8,673	1,296	582	863
MEAN	11.8	9.46	6.75	6.17	5.39	6.18	10.7	190	289	41.8	18.8	28.8
MAX	16	12	8.8	8.8	5.8	9.0	21	453	673	100	24	80
MIN	8.9	8.3	5.6	4.8	5.2	5.0	6.5	17	90	25	13	18
AC=FT	726	563	415	380	300	380	636	11,680	17,200	2,570	1,150	1,710
CAL YR 1972	TOTAL 13,334.6	MEAN 36.4	MAX 324	MIN 5.6	AC=FT 26,450							
WTR YR 1973	TOTAL 19,016.8	MEAN 52.1	MAX 673	MIN 4.8	AC=FT 37,720							

PEAK DISCHARGE (BASE, 200 FT³/S)

NOTE.--No gage-height record June 9-11.

DATE	TIME	G.HT.	DISCHARGE
5-20	1730	3.22	541
6- 2	0115	3.13	499
6- 9	a2100	3.74	821

a About.

YELLOWSTONE RIVER BASIN

89

06323000 PINEY CREEK AT KEARNY, WYO.

LOCATION (revised).--Lat 44°32'08", long 106°49'18", in NE¼NE¼SW¼ sec.26, T.53 N., R.83 W., Johnson County, on right bank at Kearny, 300 ft (91 m) northeast of Historical Monument and 2.0 mi (3.2 km) upstream from Little Piney Creek.

DRAINAGE AREA.--118 mi² (306 km²).

PERIOD OF RECORD.--September 1902 to June 1906, June to August 1910, May 1911 to July 1917, May 1919 to September 1923 (no winter records), October 1940 to current year. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 4,655.11 ft (1,418.878 m) above mean sea level. Sept. 6, 1902, to June 30, 1906, nonrecording gage at site 50 ft (15 m) upstream at different datum. May 14, 1911, to July 31, 1917, and May 1, 1919, to Sept. 30, 1923, nonrecording gage at site 50 ft (15 m) upstream at present datum.

AVERAGE DISCHARGE.--33 years (1940-73), 86.2 ft³/s (2.441m³/s), 62,450 acre-ft/yr (77.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,880 ft³/s (53.2 m³/s) June 9, gage height, 5.10 ft (1.554 m); minimum daily, 4.5 ft³/s (0.13 m³/s) Sept. 28.

Period of record: Maximum discharge, 3,410 ft³/s (96.6 m³/s) June 15, 1963, gage height, 6.05 ft (1.844 m), from rating curve extended above 1,800 ft³/s (51.0 m³/s); minimum daily, 2.0 ft³/s (0.06 m³/s) Oct. 10, 1922.

REMARKS.--Records fair except those for winter period and periods of no gage-height record, which are poor. Some regulation by Cloud Peak Reservoir, capacity, 3,385 acre-ft (4.17 hm³), Willow Park Reservoir, capacity, 4,457 acre-ft (55.0 hm³), and Kearny Lake, capacity, 1,860 acre-ft (2.29 hm³). Diversion above station from South Piney Creek into Rock Creek basin for irrigation. Diversions above station for irrigation of about 240 acres (97 hm²), of which about 90 acres (36 hm²) lies below station. Record includes flow in bypass channel (Spring Creek), 300 ft (91 m) left of main channel.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1176: 1944. WSP 1309: 1913(M). WSP 1509: 1906, 1920(M), 1941(M), 1942, 1943(M). WSP 1916: 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	7.6	39	35	47	39	41	43	64	658	320	48	15
2	12	40	36	46	39	42	42	61	939	212	33	156
3	15	41	34	46	40	43	40	66	841	110	23	121
4	25	42	33	45	40	40	42	78	628	83	13	80
5	22	44	23	44	39	40	44	93	550	56	10	61
6	34	43	32	41	38	40	46	106	622	34	8.6	48
7	37	42	30	43	29	39	44	119	827	21	12	44
8	38	42	29	44	40	40	42	116	995	33	18	69
9	45	42	28	46	40	42	40	114	1,370	41	25	130
10	45	42	27	49	40	42	40	108	1,500	39	16	140
11	45	41	28	49	41	42	40	114	1,390	34	15	120
12	32	40	30	52	40	42	46	123	1,180	26	19	120
13	36	39	33	49	41	42	50	141	1,040	24	23	110
14	37	39	36	47	40	42	47	162	939	18	15	100
15	39	39	39	45	39	43	45	203	1,060	10	12	100
16	39	40	41	44	38	45	44	268	766	6.6	9.0	100
17	39	41	42	43	38	46	47	380	480	4.8	8.6	95
18	38	39	43	42	38	46	52	490	404	5.2	8.0	74
19	33	37	44	39	36	45	44	574	308	10	7.6	71
20	34	36	42	38	37	46	42	700	236	13	7.6	64
21	35	35	44	37	36	48	43	712	186	21	5.2	35
22	35	35	42	39	35	47	50	610	173	30	6.6	21
23	41	34	42	40	36	46	57	580	175	87	8.3	18
24	41	33	42	39	37	48	59	694	218	75	6.6	14
25	42	31	44	39	38	50	57	784	252	45	6.2	11
26	40	31	45	39	39	48	53	730	276	40	6.2	10
27	45	32	45	38	40	46	62	556	312	35	5.5	5.0
28	47	31	44	39	40	44	85	480	316	25	6.2	4.5
29	41	34	43	38	-----	43	86	420	324	39	9.0	9.5
30	40	25	43	38	-----	43	74	400	348	29	9.0	15
31	38	-----	45	37	-----	43	-----	495	-----	51	6.2	-----
TOTAL	1,107.6	1,141	1,174	1,324	1,082	1,355	1,506	10,541	19,318	1,577.6	406.4	1,961.0
MEAN	35.7	36.0	37.6	42.7	38.6	43.7	50.2	340	644	50.9	13.1	65.4
MAX	47	44	45	52	41	50	86	784	1,500	320	48	156
MIN	7.6	31	27	37	25	39	40	61	175	4.8	5.2	4.5
AC-FT	2,260	2,260	2,330	2,630	2,150	2,650	2,990	20,910	38,320	2,130	806	3,890

CAL YR 1972 TOTAL 33,834.2 MEAN 92.5 MAX 680 MIN 7.6 AC-FT 67,120
WTR YR 1973 TOTAL 42,493.6 MEAN 116 MAX 1,500 MIN 4.5 AC-FT 84,290

NOTE.--No gage-height record Oct. 4 to Nov. 19, Jan. 31 to Apr. 9.

YELLOWSTONE RIVER BASIN

06323500 PINEY CREEK AT UCROSS, WYO.

LOCATION.--Lat 44°33'45", long 106°32'25", in SW¼ sec.18, T.53 N., R.80 W., Sheridan County, on left bank at Ucross, 190 ft (58 m) upstream from bridge on U.S. Highways 14 and 16, and 1.0 mi (1.6 km) upstream from mouth.

DRAINAGE AREA.--267 mi² (692 km²).

PERIOD OF RECORD.--May 1917 to September 1923 (no winter record), January 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,066.83 ft (1,239.570 m) above mean sea level. Prior to Sept. 30, 1923, nonrecording gage at approximately same site at different datum.

AVERAGE DISCHARGE.--23 years (1950-73), 83.6 ft³/s (2.368 m³/s), 60,570 acre-ft/yr (74.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,600 ft³/s (45.3 m³/s) June 10, gage height, 5.96 ft (1.817 m); minimum daily discharge, 1.1 ft³/s (0.031 m³/s) Apr. 21.

Period of record: Maximum discharge, 3,570 ft³/s (101 m³/s) June 16, 1963, gage height, 7.33 ft (2.234 m); minimum daily, 0.60 ft³/s (0.017 m³/s) Oct. 12-26, 1955, Sept. 28, Oct. 1, 2, 1956.

Maximum stage known, 10.9 ft (3.32 m), present datum, June 1, 1929, from information by local resident. Stage may have been affected by backwater from bridge.

REMARKS.--Records fair except those for periods of no gage-height record, which are poor. Some regulation by Cloud Peak Reservoir, capacity, 3,385 acre-ft (4.17 hm³), Willow Park Reservoir, capacity, 4,457 acre-ft (5.50 hm³), Kearny Lake, capacity, 1,860 acre-ft (2.29 hm³), and Lake De Smet, capacity, 32,250 acre-ft (39.8 hm³). Diversion above station from South Piney Creek into Rock Creek basin for irrigation. Diversions for irrigation of about 9,800 acres (39.7 km²) above station.

REVISIONS (WATER YEARS).--WSP 1176: Drainage area. WSP 1439: 1952.

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	145	153	30	35	30	32	85	638	272	83	30
2	14	149	101	30	35	31	35	83	890	221	79	120
3	9.7	158	70	27	36	29	35	95	795	126	88	221
4	32	152	60	25	39	29	32	106	700	79	83	150
5	66	151	46	24	38	32	32	135	562	59	79	124
6	104	154	36	22	34	31	36	137	598	30	72	101
7	112	151	30	21	31	30	34	120	785	18	72	97
8	122	151	22	19	31	31	26	114	910	11	72	103
9	135	153	20	20	34	31	27	97	1,090	30	69	167
10	148	143	21	21	38	30	34	95	1,390	38	67	179
11	143	141	21	22	40	31	35	97	1,300	74	69	164
12	132	141	22	27	38	32	45	94	1,110	69	83	155
13	137	141	23	35	37	33	48	86	980	70	85	148
14	137	141	24	40	36	27	46	86	855	69	79	146
15	141	144	24	45	35	23	41	95	940	64	64	148
16	141	146	25	44	35	26	37	99	800	61	62	146
17	139	146	28	42	35	28	40	124	478	56	56	146
18	155	146	29	39	36	28	46	188	415	41	61	124
19	132	145	32	37	34	24	36	359	314	36	59	110
20	145	145	33	35	33	25	3.8	538	244	41	55	103
21	135	143	31	34	31	25	1.1	755	186	48	53	90
22	134	145	32	34	32	24	2.8	642	167	55	58	66
23	142	154	31	36	33	24	26	815	155	81	53	64
24	142	153	31	38	33	24	66	870	164	122	41	59
25	140	143	30	39	33	22	70	890	198	94	41	52
26	138	146	30	38	32	24	77	825	206	94	48	41
27	145	142	30	35	32	25	90	775	238	85	53	43
28	138	148	31	32	31	23	114	626	249	83	55	49
29	145	139	32	38	-----	28	122	550	252	104	42	48
30	137	149	30	37	-----	25	103	450	272	99	42	43
31	142	-----	28	35	-----	29	-----	490	-----	95	32	-----
TOTAL	3,700.7	4,405	1,156	1,001	967	854	1,372.7	10,521	17,881	2,425	1,955	3,237
MEAN	119	147	37.3	32.3	34.5	27.5	45.8	339	596	78.2	63.1	108
MAX	155	158	153	45	40	33	122	890	1,390	272	88	221
MIN	9.7	139	20	19	31	22	1.1	83	155	11	32	30
AC-FT	7,340	8,740	2,290	1,990	1,920	1,690	2,720	20,870	35,470	4,810	3,880	6,420
CAL YR 1972	TOTAL 32,249.9	MEAN 88.1	MAX 775	MIN 6.6	AC-FT 63,970							
WTR YR 1973	TOTAL 49,475.4	MEAN 136	MAX 1,390	MIN 1.1	AC-FT 98,130							

PEAK DISCHARGE (BASE, 750 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
5-25	2230	4.85	1,000
6-2	1400	5.00	1,010
6-10	1200	5.96	1,600

NOTE.--No gage-height record Jan. 1 to Feb. 21, Feb. 28 to Mar. 28.

LOCATION.--Lat 44°52'18", long 106°04'56", in SE¼ sec.36, T.57 N., R.77 W., Sheridan County, on right bank 600 ft (183 m) downstream from Cabin Creek, 1.8 mi (2.9 km) upstream from mouth, and 16 mi (26 km) north of Arvada.

PERIOD OF RECORD.--August 1915 to April 1919 and April 1928 to May 1929 (no winter records), September 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,506.51 ft (1,068.784 m) above mean sea level. July 21, 1915, to Apr. 30, 1919, nonrecording gage at same date at different datum. Apr. 15, 1928, to May 26, 1929, nonrecording gage at site 0.2 mi (0.3 km) upstream at different datum. Sept. 13, 1939, to Jan. 14, 1951, nonrecording gage at present site and datum.

EXTREMES.--Current year: Maximum discharge, 2,000 ft³/s (56.6 m³/s) June 11, gage height, 5.65 ft (1.722 m); minimum daily, 4.9 ft³/s (0.14 m³/s) July 12.

Period of record: Maximum discharge, 9,600 ft³/s (272 m³/s) Aug. 5, 1954, gage height, 10.45 ft (3.185 m), from rating curve extended above 2,500 ft³/s (70.8 m³/s) on basis of slope-area measurement at gage height 10.17 ft (3.100 m); no flow July 22, 1954, May 8-29, Sept. 6-9, 1960, July 5, Aug. 26-28, Aug. 31 to Sept. 6, 1961, Aug. 7-10, 1969.

REMARKS.--Records good except those for winter period, which are poor. Some regulation by Cloud Peak Reservoir, capacity, 3,385 acre-ft (4.17 hm³), Willow Park Reservoir, capacity, 4,457 acre-ft (5.50 hm³), Kearny Lake, capacity, 1,860 acre-ft (2.29 hm³) and Lake De Smet, capacity, 32,250 acre-ft (3.98 hm³). Diversions for irrigation of about 35,000 acres (142 km²) above station. Diversion to Kendrick Canal about 4.5 mi (7.2 km) upstream; results of discharge measurements, in cubic feet per second, of flow in canal are given below:

June	14		2.9
July	17		15
Aug.	15		12
Sept.	14		14

REVISIONS (WATER YEARS) .--WSP 1309: 1928(M) .

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	221	190	66	67	90	86	329	589	326	78	45
2	98	225	200	74	67	92	88	250	913	322	60	47
3	92	234	120	66	72	96	90	243	1,470	251	36	105
4	82	255	100	56	71	100	92	245	1,220	155	29	257
5	108	246	80	60	69	98	88	263	860	94	28	200
6	142	248	70	55	65	94	86	375	682	67	33	173
7	186	248	60	52	62	91	90	413	720	48	33	151
8	196	243	62	50	65	91	92	363	1,010	24	30	142
9	200	238	62	53	69	94	79	338	1,180	18	34	173
10	205	236	70	57	74	97	68	314	1,530	12	48	287
11	214	229	74	64	80	100	82	289	1,790	5.9	45	308
12	210	222	70	70	80	100	84	300	1,640	4.9	48	263
13	203	225	72	79	74	94	101	283	1,350	7.9	56	239
14	204	224	74	88	74	80	109	295	1,170	6.7	69	221
15	203	214	76	92	77	76	107	318	1,050	5.3	84	219
16	198	221	78	92	81	90	108	369	1,190	6.0	61	225
17	195	228	82	86	84	105	96	471	832	6.1	52	235
18	195	227	82	80	80	131	100	617	600	6.9	46	233
19	218	224	82	76	78	123	127	926	478	6.8	40	205
20	205	209	79	80	78	110	148	1,180	364	35	42	189
21	210	210	83	76	76	121	55	1,460	269	66	37	175
22	202	195	84	74	78	117	46	1,490	195	87	32	160
23	205	197	80	80	80	112	41	1,190	165	150	162	135
24	212	221	83	87	82	100	160	1,210	145	212	75	134
25	210	214	78	87	85	94	255	1,180	142	312	53	125
26	215	233	77	82	87	89	241	1,160	160	212	48	117
27	215	226	79	76	90	92	236	1,170	165	188	38	109
28	227	192	80	70	93	98	248	931	192	148	38	110
29	227	140	76	80	-----	95	285	746	227	131	43	105
30	218	160	72	78	-----	87	337	620	269	131	43	109
31	198	-----	72	73	-----	86	-----	533	-----	96	42	-----
TOTAL	5,805	6,605	2,647	2,259	2,138	3,043	3,825	19,871	22,567	3,141.5	1,563	5,196
MEAN	187	220	85.4	72.9	76.4	98.2	128	641	752	101	50.4	173
MAX	227	255	200	92	93	131	337	1,490	1,790	326	162	308
MIN	82	140	60	50	62	76	41	243	142	4.9	28	45
AC=FT	11,510	13,100	5,250	4,480	4,240	6,040	7,590	39,410	44,760	6,230	3,100	10,310
CAL YR 1972	TOTAL 67,388.0		MEAN 184	MAX 1,390	MIN 23	AC=FT 133,700						
WTR YR 1973	TOTAL 78,660.5											

YELLOWSTONE RIVER BASIN

06324970 LITTLE POWDER RIVER ABOVE DRY CREEK, NEAR WESTON, WYO.

LOCATION.--Lat 44°55'45", long 105°21'06", in NW¼SW¼ sec.13, T.57 N., R.71 W., Campbell County, on left bank 3.1 mi (5.0 km) upstream from Dry Creek, 5.0 mi (8.0 km) south of the Wyoming-Montana State line, and 20 mi (32 km) north of Weston.

DRAINAGE AREA.--1,250 mi² (3,240 km²), approximately.

PERIOD OF RECORD.--October 1972 to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 3,410 ft (1,039 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 186 ft³/s (5.27 m³/s) Apr. 25, gage height, 5.44 ft (1.658 m); no flow July 18, Aug. 15-19.

REMARKS.--Records poor. Diversions above station for irrigation of about 80 acres (32 hm²) below 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	1.0	1.0	1.5	1.5	2.3	3.0	2.5	77	6.2	4.6	.02	.01
2	1.0	1.0	1.5	1.5	2.3	3.0	2.3	87	7.4	2.6	.02	.01
3	1.0	1.0	1.0	1.5	2.3	3.0	4.0	68	17	1.7	.04	.02
4	1.0	1.0	.80	1.0	2.5	3.0	4.2	53	55	1.3	.04	13
5	3.0	1.0	.60	1.0	2.0	3.0	5.1	38	26	1.1	.02	24
6	5.0	1.0	.50	1.0	2.0	3.0	2.5	30	24	.86	.02	2.7
7	3.0	1.0	.50	1.0	2.0	3.0	2.3	25	14	1.4	.06	2.3
8	1.0	1.1	.50	1.0	2.0	3.0	2.5	20	10	.38	.06	2.2
9	1.0	1.1	.60	1.0	2.0	3.0	3.5	17	7.7	.23	.06	1.1
10	1.0	1.2	.70	1.0	2.0	3.0	2.9	16	5.3	.15	.04	.26
11	1.0	1.1	.70	1.5	2.5	2.6	3.0	14	4.7	.04	.02	.06
12	1.0	1.2	.80	2.5	2.5	2.6	2.7	12	3.8	.02	.01	.04
13	1.0	1.2	.90	3.0	2.5	3.2	4.9	11	3.5	.04	.01	.02
14	1.0	1.2	1.0	3.5	2.5	4.6	5.7	9.3	3.2	.04	.01	.02
15	1.0	1.2	1.0	4.0	2.5	3.5	4.4	9.0	3.0	.02	0	.06
16	1.0	1.4	1.2	4.5	2.9	4.2	3.7	8.1	2.6	.02	0	.04
17	1.0	1.8	1.4	4.5	2.9	4.9	3.2	7.2	2.6	.01	0	.09
18	1.0	1.7	1.7	4.0	3.0	4.9	3.3	6.6	2.5	0	0	.02
19	1.0	1.7	2.0	4.0	2.9	5.3	6.4	6.2	15	.01	0	.04
20	1.0	1.5	2.0	4.0	2.7	3.8	8.4	5.7	12	.04	.02	.06
21	1.0	1.4	2.0	3.5	2.6	3.8	9.8	5.9	9.5	.04	.02	.09
22	1.0	1.4	2.0	3.5	3.0	3.0	11	5.0	7.5	.04	.02	.06
23	1.0	1.4	2.0	3.5	3.0	3.2	12	4.5	6.4	.04	.02	.12
24	1.0	1.4	2.0	3.5	3.0	3.7	56	4.2	4.7	.04	.01	.23
25	1.0	1.5	2.0	3.5	3.0	3.3	149	4.2	3.8	.02	.01	.23
26	1.0	1.6	2.0	3.5	3.0	2.9	95	6.8	3.2	.02	.01	.19
27	1.0	1.8	2.0	2.6	3.0	3.0	83	7.0	2.5	.01	.01	.23
28	1.0	1.5	2.0	2.3	3.0	3.0	71	29	2.0	.01	.01	.23
29	3.0	1.5	2.0	2.5	-----	2.5	72	21	1.7	.02	.01	.28
30	1.0	1.5	1.5	2.3	-----	2.5	72	12	5.2	.02	.01	.33
31	1.0	-----	1.5	2.2	-----	2.5	-----	8.1	-----	.02	.01	-----
TOTAL	41.0	39.4	41.90	79.5	71.9	103.0	708.3	627.8	272.2	14.84	.59	48.04
MEAN	1.32	1.31	1.35	2.58	2.57	3.32	23.6	20.3	9.07	.48	.019	1.60
MAX	5.0	1.8	2.0	4.5	3.0	5.3	149	87	55	4.6	.06	.24
MIN	1.0	1.0	.50	1.0	2.0	2.5	2.3	4.2	1.7	0	0	.01
AC-FT	81	78	83	158	143	204	1,400	1,250	340	29	1.2	95

WTR YR 1973 TOTAL 2,048.87 MEAN 5.61 MAX 149 MIN 0 AC-FT 4,060

NOTE.--No gage-height record Nov. 30 to Jan. 25.

Reservoirs in Yellowstone River basin in Wyoming

06224500 BULL LAKE.--Lat 43°12'35", long 109°02'30", in E½NW¼ sec.30, T.3 N., R.2 W., Fremont County, Wind River Indian Reservation, at dam on Bull Lake Creek, 2.8 mi (4.5 km) upstream from mouth of Bull Lake Creek, and 9.8 mi (15.8 km) south of Lenore. Period of record, April 1938 to current year. Monthend contents only for some periods, published in WSP 1309. Published as Bull Lake Reservoir near Lenore 1938-50. Water-stage recorder. Datum of gage is at mean sea level (Bureau of Reclamation datum). Extremes for current year: Maximum daily contents, 153,600 acre-ft (189 hm³) July 15, elevation, 5,805.35 ft (1,769.471 m); minimum daily, 112,600 acre-ft (139 hm³) Apr. 24-28, elevation, 5,791.70 ft (1,765.310 m). Extremes for period of record: Maximum daily contents, 154,200 acre-ft (190 hm³) Aug. 10, 1965, elevation, 5,805.70 ft (1,769.577 m); minimum daily (since appreciable storage was attained), 5,540 acre-ft (6.83 hm³) Mar. 15, 1950, elevation, 5,742.56 ft (1,750.332 m).

Reservoir is formed by rock-fill dam completed by Bureau of Reclamation July 22, 1938. Capacity, 152,500 acre-ft (188 hm³) below elevation 5,805.00 ft (1,769.364 m), top of spillway gates. Dead storage, 722 acre-ft (0.890 hm³). Figures given herein represent total contents. Water used for irrigation near Riverton. Records furnished by Bureau of Reclamation.

06258900 BOYSEN RESERVOIR.--Lat 43°25'00", long 108°10'37", in NW¼NW¼ sec.16, T.5 N., R.6 E., Fremont County, at dam on Wind River and 13 mi (21 km) north of Shoshoni. Period of record, October 1951 to current year. Water-stage recorder. Datum of gage is at mean sea level, datum of 1933 (levels by Bureau of Reclamation). Extremes for current year: Maximum daily contents, 810,300 acre-ft (999 hm³) Sept. 15, 16, elevation, 4,725.42 ft (1,440.308 m); minimum daily, 497,100 acre-ft (613 hm³) Mar. 18-22, elevation, 4,706.72 ft (1,434.608 m). Extremes for period of record: Maximum daily contents, 922,400 acre-ft (1,140 hm³) July 6, 7, 1967, elevation, 4,730.83 ft (1,441.956 m); minimum daily (since normal use of water started), 251,800 acre-ft (310 hm³) Mar. 18, 19, 1956, elevation, 4,684.18 ft (1,427.73° m).

Reservoir is formed by rock-fill dam completed by Bureau of Reclamation in October 1951. Capacity, 802,000 acre-ft (989 hm³) below elevation 4,725.00 ft (1,440.180 m), top of spillway gate. Includes 59,880 acre-ft (73.8 hm³) dead storage below elevation 4,657.00 ft (1,419.454 m), invert of penstock pipe. Figures given herein represent total contents. Water used for irrigation, flood control, and power development. Records furnished by Bureau of Reclamation.

06260300 ANCHOR RESERVOIR.--Lat 43°39'50", long 108°49'27", in sec.26, T.43 N., R.100 W., Hot Springs County, at dam on South Fork Owl Creek, 2.0 mi (3.2 km) downstream from Middle Fork, 3.0 mi (4.8 km) southeast of Anchor, and 32 mi (51 km) west of Thermopolis. Period of record, November 1960 to current year. Water-stage recorder. Datum of gage is mean sea level (Bureau of Reclamation datum). Extremes for current year: Maximum daily contents, 3,420 acre-ft (4.22 hm³) May 21, elevation, 6,392.63 ft (1,948.474 m); no storage on many days. Extremes for period of record: Maximum daily contents, 9,250 acre-ft (11.4 hm³) July 4, 1967, elevation 6,418.52 ft (1,956.365 m); no storage on many days each year.

Reservoir is formed by concrete arch dam completed by Bureau of Reclamation in 1960. Capacity, 17,230 acre-ft (21.2 hm³), below elevation 6,441.00 ft (1,963.217 m), crest of spillway. Includes 68 acre-ft (0.0838 hm³) below elevation 6,343.75 ft (1,933.575 m), invert of river outlet. Figures given herein represent total contents. Water used for irrigation of lands in Owl Creek basin. Records furnished by Bureau of Reclamation.

06281500 BUFFALO BILL RESERVOIR.--Lat 44°30'05", long 109°11'00", in NE¼ sec.12, T.52 N., R.103 W., Park County, at dam on Shoshone River, 5.0 mi (8.0 km) upstream from Trail Creek, and 6.0 mi (9.7 km) southwest of Cody. Period of record, May to July 1909, January 1910 to current year. Monthend contents only prior to October 1938, published in WSP 1309. Prior to October 1944, published as Shoshone Reservoir near Cody. Water-stage recorder. Datum of gage is mean sea level (Bureau of Reclamation datum). Prior to July 8, 1959, nonrecording gage at same datum. Extremes for current year: Maximum daily contents, 377,600 acre-ft (466 hm³) July 8, 9, elevation, 5,353.25 ft (1,631.671 m); minimum daily, 181,100 acre-ft (223 hm³) May 12, elevation, 5,313.46 ft (1,619.543 m). Extremes for period of record: Maximum daily contents, 507,000 acre-ft (625 hm³) June 15, 1918, elevation, 5,367.3 ft (1,635.95 m); minimum daily, 19,000 acre-ft (23.4 hm³) Jan. 23-25, 1941, elevation, 5,225.3 ft (1,592.67 m).

Reservoir is formed by masonry dam completed by Bureau of Reclamation in 1909. Capacity, 421,300 acre-ft (519 hm³) between elevations 5,140.00 ft (1,566.672 m), gate sill, and 5,360.00 ft (1,633.728 m), crest of spillway. Dead storage negligible. Figures given herein represent total contents. Water used for power development and irrigation of lands east of Cody. Records furnished by Bureau of Reclamation.

YELLOWSTONE RIVER BASIN

Reservoirs in Yellowstone River basin in Wyoming--Continued

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973			
Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
06224500 BULL LAKE			
Sept. 30	5,794.90	121,800	-
Oct. 31	5,794.20	119,800	-2,000
Nov. 30	5,793.85	118,800	-1,000
Dec. 31	5,793.90	118,900	+100
CAL YR 1972	-	-	-10,100
Jan. 31	5,793.85	118,800	-100
Feb. 28	5,793.63	118,100	-700
Mar. 31	5,792.87	116,000	-2,100
Apr. 30	5,791.75	112,800	-3,200
May 31	5,798.80	133,300	+20,500
June 30	5,805.20	153,100	+19,800
July 31	5,804.40	150,600	-2,500
Aug. 31	5,799.40	135,200	-15,400
Sept. 30	5,802.62	145,000	+9,800
WTR YR 1973	-	-	+23,200
06258900 BOYSEN RESERVOIR			
Sept. 30	4,719.40	697,700	-
Oct. 31	4,718.27	677,800	-19,900
Nov. 30	4,715.65	633,300	-44,500
Dec. 31	4,711.87	573,000	-60,300
CAL YR 1972	-	-	-122,000
Jan. 31	4,709.29	534,200	-38,800
Feb. 28	4,707.39	506,700	-27,500
Mar. 31	4,706.83	498,700	-8,000
Apr. 30	4,709.78	541,500	+42,800
May 31	4,718.58	683,200	+141,700
June 30	4,722.83	760,400	+77,200
July 31	4,724.75	797,200	+36,800
Aug. 31	4,722.94	762,400	-34,800
Sept. 30	4,724.75	797,200	+34,800
WTR YR 1973	-	-	+99,500
06260300 ANCHOR RESERVOIR			
Sept. 30	Dry	0	0
Oct. 31	Dry	0	0
Nov. 30	Dry	0	0
Dec. 31	Dry	0	0
CAL YR 1972	-	-	-
Jan. 31	Dry	0	0
Feb. 28	Dry	0	0
Mar. 31	Dry	0	0
Apr. 30	6,352.00	197	+197
May 31	6,383.47	2,170	+1,973
June 30	Dry	0	-2,170
July 31	6,350.85	171	+171
Aug. 31	Dry	0	-171
Sept. 30	6,365.52	681	+681
WTR YR 1973	-	-	+681
06281500 BUFFALO BILL RESERVOIR			
Sept. 30	5,352.55	373,200	-
Oct. 31	5,347.40	341,900	-31,300
Nov. 30	5,345.70	332,000	-9,900
Dec. 31	5,342.00	311,000	-21,000
CAL YR 1972	-	-	+22,900
Jan. 31	5,336.10	279,500	-31,500
Feb. 28	5,329.76	248,600	-30,900
Mar. 31	5,322.80	217,800	-30,800
Apr. 30	5,316.10	190,900	-26,900
May 31	5,327.50	238,300	+47,400
June 30	5,350.68	361,600	+123,300
July 31	5,349.40	353,800	-7,800
Aug. 31	5,335.25	275,200	-78,600
Sept. 30	5,328.20	241,400	-33,800
WTR YR 1973	-	-	-131,800

CHEYENNE RIVER BASIN

95

06386000 LANCE CREEK AT SPENCER, WYO.

LOCATION.--Lat 43°22', long 104°16', in sec.14, T.39 N., R.62 W., Niobrara County, on right bank 0.4 mi (0.6 km) north of Spencer, 1.0 mi (1.6 km) upstream from mouth, and 34 mi (55 km) south of Newcastle.

DRAINAGE AREA.--2,070 mi² (5,360 km²), approximately.

PERIOD OF RECORD.--April 1948 to September 1954, August 1956 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,750 ft (1,143 m), from map prepared by Army Map Service, Corps of Engineers. Prior to Aug. 14, 1948, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--23 years, 26.6 ft³/s (0.753 m³/s), 19,270 acre-ft/yr (23.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,490 ft³/s (98.8 m³/s) July 22, gage height, 7.00 ft (2.134 m); no flow for many days.

Period of record: Maximum discharge, 7,410 ft³/s (210 m³/s) May 24, 1971, gage height, 9.67 ft (2.947 m); no flow for many days each year.

REMARKS.--Records poor. There are many small reservoirs above station used for storage of stock and irrigation water, total capacity, about 12,800 acre-ft (15.8 hm³). Diversions for irrigation of about 3,500 acres (14.2 km²) above station.

REVISIONS (WATER YEARS).--WSP 1209; 1948(P), 1950.

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	.10	.10		0	.50	1.6	337	9.0	.20	76	.60
2	0	.10	.10		0	.50	1.9	376	10	.20	49	5.5
3	0	.10	.10		0	.60	1.9	323	7.6	.20	44	57
4	.20	.10	.10		0	.70	2.7	226	14	.20	29	108
5	.20	.20	0		0	.70	1.9	229	14	.20	21	57
6	.20	.20	0		0	.70	1.9	247	8.2	.20	10	32
7	.10	.20	0		0	.70	1.9	217	6.0	.20	7.0	21
8	.10	.20	0		0	.70	1.9	283	3.9	.20	4.0	10
9	.10	.20	0		0	.70	2.2	170	2.5	.20	3.0	560
10	.10	.20	0		0	.80	1.9	105	1.3	.20	2.0	689
11	.10	.20	0		0	.90	1.5	68	.80	.20	2.0	175
12	.10	.20	0		0	.80	1.5	53	1.4	.20	2.0	693
13	.10	.20	0		0	.80	1.5	47	.30	.20	1.0	410
14	.10	.20	0		0	.80	1.5	41	1.7	.20	23	181
15	.10	.20	0		0	.80	1.0	33	5.5	.20	10	99
16	.10	.20	0		0	.80	1.0	28	17	.20	5.0	72
17	.10	.20	0		0	.80	1.0	26	9.0	.20	3.0	72
18	.10	.20	0		0	.80	1.2	23	2.9	.20	2.0	58
19	.10	.20	0		0	.80	6.6	22	1.3	1.0	1.0	44
20	.10	.20	0		0	.80	6.6	20	1.0	4.4	1.0	34
21	.10	.20	0		0	.80	4.9	18	.50	426	1.0	29
22	.10	.20	0		0	.80	4.4	15	.50	2,010	.80	26
23	.10	.20	0		0	.80	3.4	13	.50	575	.30	21
24	.10	.20	0		0	.80	3.9	12	.50	211	.80	19
25	.10	.20	0		0	.80	7.5	12	.20	116	.80	17
26	.10	.20	0		0	.80	17	16	.20	68	.60	15
27	.10	.20	0		0	.80	38	17	.20	47	.60	13
28	.10	.10	0		.50	.80	106	14	.20	33	.60	11
29	.10	.10	0		-----	.80	313	8.2	.20	31	.60	10
30	.10	.10	0		-----	.95	44	8.2	.20	238	.60	9.0
31	.10	-----	0		-----	1.3	-----	10	-----	108	.60	-----
TOTAL	3.10	5.30	.40	0	.50	24.05	985.4	3,017.4	120.60	3,872.00	302.80	3,548.10
MEAN	.10	.18	.013	0	.018	.78	32.8	97.3	4.02	125	9.77	118
MAX	.20	.20	.10	0	.50	1.3	444	376	17	2,010	76	693
MIN	0	.10	0	0	0	.50	1.0	8.2	.20	.20	.60	.60
AC-FT	6.1	11	.8	0	1.0	46	1,950	5,990	239	7,660	601	7,040

CAL YR 1972 TOTAL 2,851.94 MEAN 7.81 MAX 490 MIN 0 AC-FT 5,660
WTR YR 1973 TOTAL 11,879.65 MEAN 32.5 MAX 2,010 MIN 0 AC-FT 23,560

PEAK DISCHARGE (BASE, 750 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
7-22	0300	7.00	3,490
9-9	2400	4.88	1,470
9-12	1400	3.99	874

NOTE.--No gage-height record Oct. 4 to Dec. 4, Feb. 28 to Mar. 29.

CHEYENNE RIVER BASIN

06386500 CHEYENNE RIVER NEAR SPENCER, WYO.

LOCATION.--Lat 43°25', long 104°08', in N½ sec.25, T.40 N., R.61 W., Niobrara County, at right abutment on downstream side of old highway bridge, 1.8 mi (2.9 km) downstream from Robbers Roost Creek, 7.5 mi (12.1 km) northeast of Spencer, and 30 mi (48 km) south of Newcastle.

DRAINAGE AREA.--5,270 mi² (13,650 km²), approximately.

PERIOD OF RECORD.--October 1948 to current year. Published as South Fork Cheyenne River near Spencer October 1949 to September 1951.

GAGE.--Water-stage recorder. Altitude of gage is 3,600 ft (1,097 m) from topographic map. Prior to Oct. 18, 1955, water-stage recorder at site 400 ft (122 m) upstream, Oct. 18, 1955, to Aug. 1, 1961, at site 2,500 ft (762 m) upstream, and Aug. 1, 1961, to Aug. 22, 1962, at site 2,200 ft (671 m) upstream, all at different datums.

AVERAGE DISCHARGE.--25 years, 59.8 ft³/s (1.694m³/s), 43,330 acre-ft/yr (53.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,250 ft³/s (177 m³/s) Sept. 10, gage height, 7.30 ft (2.225 m); no flow for many days.

Period of record: Maximum discharge, 16,000 ft³/s (453 m³/s) May 27, 1962, gage height, 8.74 ft (2.664 m), site and datum then in use; no flow for many days in each year.

REMARKS.--Records poor. There are many small reservoirs above station used for storage of stock and irrigation water, total capacity, about 33,900 acre-ft (41.8 hm³). Diversions above station for irrigation of about 6,860 acres (27.8 km²), of which about 140 acres (57 hm²) lies below 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						0	1.0	462	21	2.0	92	.20
2						0	1.0	1,000	22	1.6	75	1.1
3						0	1.0	733	22	1.4	66	1.4
4						0	1.0	478	18	1.1	57	106
5						0	1.0	489	19	.75	40	66
6						5.8	1.0	530	22	.75	25	40
7						3.0	1.0	1,440	22	.50	18	25
8						2.0	1.0	1,390	17	.30	10	15
9						1.0	1.2	760	14	.25	5.1	1,920
10						.90	1.0	495	11	.20	3.9	3,130
11						.80	1.0	414	9.9	.20	3.3	639
12						.69	1.0	373	8.8	.15	2.5	751
13						.60	1.0	313	8.8	.05	2.5	605
14						.50	1.0	240	8.2	.05	2.0	317
15						.80	1.0	180	9.3	.01	1.4	203
16						1.0	1.0	130	8.2	.01	1.2	149
17						1.0	1.0	88	11	0	1.2	120
18						1.0	1.0	80	10	0	.90	98
19						1.0	6.4	70	8.2	.53	.70	85
20						1.0	17	57	7.1	3.9	.50	75
21						1.0	12	56	6.0	87	.30	68
22						1.0	10	46	5.1	2,540	.20	56
23						1.0	6.6	45	4.3	768	.09	40
24						1.0	6.0	40	3.6	300	.07	42
25						1.0	8.8	35	2.8	150	.05	31
26						1.0	16	37	2.5	100	.04	28
27						1.0	26	33	2.3	70	.03	22
28						1.0	82	31	1.8	51	.02	43
29					-----	1.0	290	30	1.6	43	.02	57
30					-----	1.0	598	27	1.8	182	.02	39
31		-----			-----	1.0	-----	23	-----	152	.02	-----
TOTAL	0	0	0	0	0	32.09	1,097.0	10,175	309.3	4,456.75	409.06	8,772.70
MEAN	0	0	0	0	0	1.04	36.6	328	10.3	144	13.2	292
MAX	0	0	0	0	0	5.8	598	1,440	22	2,540	92	3,130
MIN	0	0	0	0	0	0	1.0	23	1.6	0	.02	.20
AC-FT	0	0	0	0	0	64	2,180	20,180	613	8,840	811	17,400
CAL YR 1972	TOTAL	8,611.51	MEAN	23.5	MAX	839	MIN	0	AC-FT	17,080		
WTR YR 1973	TOTAL	25,251.90	MEAN	59.2	MAX	3,130	MIN	0	AC-FT	50,090		

PEAK DISCHARGE (BASE, 2,000 FT³/S)

NOTE.--No gage-height record Mar. 6 to Apr. 18.

DATE	TIME	G.HT.	DISCHARGE
5-7	2130	5.51	2,180
7-22	0630	6.28	4,000
9-10	0100	7.30	6,250

CHEYENNE RIVER BASIN

97

06394000 BEAVER CREEK NEAR NEWCASTLE, WYO.

LOCATION.--Lat 43°32'07", long 104°07'02", in NW¼ sec.18, T.41 N., R.60 W., Weston County, at highway bridge, 2.2 mi (3.5 km) downstream from Sheep Creek, and 23 mi (37 km) south of Newcastle.

DRAINAGE AREA.--1,320 mi² (3,420 km²), approximately.

PERIOD OF RECORD.--February to September 1943, October 1944 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,660 ft (1,116 m), from topographic map. Prior to Nov. 1, 1945, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--29 years (1944-73), 32.7 ft³/s (0.926 m³/s), 23,690 acre-ft/yr (29.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 964 ft³/s (27.3 m³/s) June 16, gage height, 9.19 ft (2.801 m); minimum daily, 0.22 ft³/s (0.006 m³/s) July 13, 18.

Period of record: Maximum discharge, 11,900 ft³/s (337 m³/s) June 16, 1962, gage height, 19.98 ft (6.090 m); no flow at times in 1943, 1945, 1950, 1952-61, 1966.

REMARKS.--Records fair except those for winter periods, which are poor. There are many small reservoirs above station used for storage of stock and irrigation water, total capacity, about 11,000 acre-ft (13.6 hm³). Diversions for irrigation of about 4,900 acres (19.8 km²) above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1209: 1943, 1946, 1948-49.

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	13	10	9.0	15	17	18	28	9.3	1.1	10	2.5
2	11	15	10	9.0	15	17	18	37	64	.84	9.3	5.9
3	11	16	8.0	9.0	15	17	16	48	167	.65	8.6	10
4	11	17	6.0	8.0	15	17	14	26	163	.65	8.2	9.5
5	12	17	5.0	8.0	15	17	12	17	205	.60	8.3	8.3
6	13	17	5.0	8.0	15	17	12	71	51	5.1	8.4	7.1
7	14	17	5.0	8.0	15	17	8.8	20	24	5.9	8.5	5.8
8	15	17	5.0	8.0	15	17	9.1	9.9	15	2.8	8.4	5.4
9	14	17	5.0	8.0	15	17	8.5	8.0	11	3.5	8.3	5.3
10	14	17	5.0	9.0	15	17	8.2	6.2	7.5	3.3	7.2	5.3
11	14	17	5.0	10	16	17	8.9	5.4	5.4	.95	7.1	6.1
12	15	17	6.0	11	16	17	8.5	4.2	4.0	.28	7.5	14
13	15	17	6.0	12	16	17	2.3	3.6	2.9	.22	8.0	97
14	16	15	6.0	13	16	17	1.5	3.3	2.7	.48	7.2	25
15	16	14	6.0	13	16	30	1.4	2.8	47	.79	7.0	16
16	16	14	7.0	13	16	30	1.2	2.4	755	1.0	4.9	10
17	16	14	8.0	13	16	30	1.2	1.9	411	.46	3.0	9.2
18	16	14	9.0	13	17	30	1.4	1.8	59	.22	2.4	8.1
19	16	14	10	13	17	28	11	1.6	31	2.5	2.4	6.6
20	16	13	10	13	17	28	16	1.4	21	22	2.5	5.0
21	16	13	10	13	17	39	14	1.4	41	21	2.1	4.0
22	16	13	10	13	17	53	32	1.2	28	17	2.0	3.0
23	16	12	10	13	17	68	29	1.0	16	87	6.5	3.0
24	16	12	10	13	17	59	33	1.2	12	35	3.0	3.0
25	16	12	10	13	17	54	77	1.2	8.6	22	3.4	3.0
26	17	12	10	13	17	41	75	1.3	6.6	65	2.8	3.0
27	17	12	10	13	17	33	57	1.7	5.3	18	2.3	3.0
28	16	10	10	13	17	29	126	1.4	3.0	16	2.3	10
29	16	10	10	13	-----	24	54	1.1	2.3	15	2.1	10
30	14	10	10	15	-----	24	31	20	1.7	13	1.7	10
31	13	-----	9.0	15	-----	20	-----	18	-----	12	2.2	-----
TOTAL	455	428	246.0	355.0	449	858	706.0	349.0	2,180.3	375.14	167.6	314.1
MEAN	14.7	14.3	7.94	11.5	16.0	27.7	23.5	11.3	72.7	12.1	5.41	10.5
MAX	17	17	10	15	17	68	126	71	755	87	10	97
MIN	11	10	5.0	8.0	15	17	1.2	1.0	1.7	.22	1.7	2.5
AC=FT	902	849	488	704	891	1,700	1,400	692	4,320	744	332	623

CAL YR 1972 TOTAL 16,431.90 MEAN 44.9 MAX 1,000 MIN 3.6 AC=FT 32,590
WTR YR 1973 TOTAL 6,883.14 MEAN 18.9 MAX 755 MIN .22 AC=FT 13,650

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G.H.T	DISCHARGE
6-16	1130	9.19	964

CHEYENNE RIVER BASIN

06395000 CHEYENNE RIVER AT EDMONT, S. DAK.

LOCATION.--Lat 43°18'20", long 103°49'14", in SW¼SE¼SE¼ sec.36, T.8 S., R.2 E., Fall River County, on right bank at downstream side of bridge on U.S. Highway 18 at Edgemont, 300 ft (91 m) downstream from Burlington Northern Railroad bridge and 600 ft (183 m) upstream from Cottonwood Creek.

DRAINAGE AREA.--7,143 mi² (18,500 km²).

PERIOD OF RECORD.--June 1903 to November 1906 (no winter records), April 1928 to February 1933, October 1946 to current year.

GAGE (revised).--Water-stage recorder. Datum of gage is 3,414.56 ft (1,040.758 m) above mean sea level. Prior to Dec. 1, 1906, nonrecording gage 20 ft (6 m) upstream at datum 0.7 ft (0.21 m) lower. Apr. 11, 1928, to Feb. 28, 1933, Oct. 4, 1946, to Oct. 23, 1947, and Jan. 11, 1961, to Apr. 24, 1963, nonrecording gage at present site at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--31 years (1928-32, 1946-73), 106 ft³/s (3.002 m³/s), 76,800 acre-ft/yr (94.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,920 ft³/s (139 m³/s) Sept. 10, gage height, 7.31 ft (2.228 m); minimum daily, 0.50 ft³/s (0.014 m³/s) Jan. 9.

Period of record: Maximum discharge, 13,800 ft³/s (391 m³/s) May 25, 1971, gage height, 8.57 ft (2.612 m); no flow at times most years.

Flood of May 1, 1920, reached a stage of 12.0 ft (3.66 m), present datum, from floodmarks at railroad bridge. Flood of May 12, 1920, reached a stage of 11.0 ft (3.35 m), present datum, from floodmarks at railroad bridge.

REMARKS.--Records good except those for winter periods, which are poor. Many small reservoirs above station used for stock and irrigation water, total capacity, about 45,000 acre-ft (55.5 hm³). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1086: Drainage area. WSP 1116: 1947.

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	8.1	29	16	3.0	10	116	27	475	35	8.7	82	11
2	8.7	29	13	4.0	9.0	102	24	654	101	7.0	52	22
3	8.7	30	8.0	3.0	10	82	21	823	237	7.0	43	19
4	9.3	22	5.0	2.0	10	73	17	608	185	5.4	37	35
5	9.9	19	2.0	2.0	10	43	16	486	189	5.4	32	82
6	8.7	19	1.0	2.0	8.0	43	18	472	156	4.7	26	60
7	9.3	18	1.0	2.0	6.0	43	19	916	60	4.0	20	41
8	9.9	18	1.0	1.0	6.0	44	19	1,440	39	4.4	16	31
9	9.9	17	1.0	.50	7.0	47	23	870	27	5.8	16	172
10	9.9	18	1.0	1.0	8.0	77	17	545	19	5.1	14	3,270
11	9.3	19	1.5	3.0	9.0	75	14	464	15	4.0	14	1,060
12	10	18	1.5	5.0	9.0	48	11	388	10	3.3	12	612
13	10	16	1.5	7.0	8.0	43	10	296	7.0	3.3	12	753
14	11	14	1.5	12	7.0	29	9.9	240	16	3.6	8.7	519
15	12	12	1.5	14	7.0	27	9.5	182	22	2.9	10	326
16	11	13	1.5	15	8.0	27	9.3	146	86	2.9	12	222
17	11	13	2.0	14	9.0	27	11	121	645	2.2	10	171
18	11	13	2.5	13	10	41	16	102	276	1.5	7.0	150
19	12	12	3.0	10	10	43	25	87	82	1.1	5.1	119
20	13	12	3.0	7.0	11	37	44	70	45	16	4.0	95
21	15	12	3.0	7.0	15	37	58	52	35	19	4.0	77
22	17	13	4.0	8.0	18	44	39	47	37	1,310	4.7	62
23	16	14	4.0	9.0	20	60	32	40	33	940	7.5	51
24	16	15	4.0	10	25	64	32	35	22	484	5.8	45
25	14	14	4.0	10	24	64	45	35	16	201	5.8	43
26	14	14	5.0	9.0	26	47	92	37	14	121	7.0	41
27	13	14	6.0	8.0	30	40	75	35	12	108	7.5	37
28	13	13	5.0	7.0	50	32	77	30	11	56	7.5	34
29	14	13	4.0	9.0	-----	27	231	27	10	52	8.1	50
30	9.3	14	3.0	10	-----	29	456	25	10	45	9.3	47
31	19	-----	3.0	10	-----	27	-----	23	-----	151	9.3	-----
TOTAL	363.0	497	113.5	217.50	380.0	1,538	1,499.5	9,815	2,452.0	3,589.3	509.3	8,257
MEAN	11.7	16.6	3.66	7.02	13.6	49.6	50.0	317	81.7	116	16.4	275
MAX	19	30	16	15	50	116	456	1,440	645	1,310	82	3,270
MIN	8.1	12	1.0	.50	6.0	27	9.3	23	7.0	1.5	4.0	11

CAL YR 1972 TOTAL 14,444.20 MEAN 39.5 MAX 614 MIN .10
WTR YR 1973 TOTAL 29,231.10 MEAN 80.1 MAX 3,270 MIN .50

PEAK DISCHARGE (BASE, 1,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
5- 8	0500	5.31	1,870
7-22	1300	5.94	2,550
9-10	0700	7.31	4,920

CHEYENNE RIVER BASIN

99

06427000 KEYHOLE RESERVOIR NEAR MOORCROFT, WYO.

LOCATION.--Lat 44°22'55", long 104°46' 45", in NW¼NW¼ sec.27, T.51 N., R.66 W., Crook County, at reservoir dam on Belle Fourche River 12 mi (19 km) northeast of Moorcroft.

DRAINAGE AREA.--2,000 mi² (5,180 km²), approximately.

PERIOD OF RECORD.--March 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (Bureau of Reclamation datum). Prior to May 15, 1958, and Oct. 1, 1968 to Mar. 13, 1970, nonrecording gages, and May 15, 1958, to Sept. 30, 1968, water-stage recorder, all at present site and datum.

EXTREMES.--Current year: Maximum daily contents, 174,200 acre-ft (215 hm³) May 4, elevation 4,096.41 ft (1,248.586 m); minimum daily, 157,300 acre-ft (194 hm³) Sept. 30, elevation 4,094.32 ft (1,247.949 m).

Period of record: Maximum contents, 195,800 acre-ft (241 hm³) Mar. 8, 1972, elevation 4,098.87 ft (1,249.336 m); minimum daily contents (since appreciable storage was attained), 6,030 acre-ft (7.43 hm³) Mar. 8, 9, 1955, elevation, 4,046.35 ft (1,233.327 m).

REMARKS.--Reservoir is formed by a zoned earth-fill dam completed by the Bureau of Reclamation Oct. 25, 1952. Storage began Feb. 12, 1952. Dead storage, below elevation 4,036.0 ft (1,230.17m), 1,170 acre-ft (1.44 hm³). Inactive storage, between elevations 4,036.0 ft (1,230.17m) and 4,051.0 ft (1,234.74m), 8,310 acre-ft (10.2 hm³). Total capacity below elevation 4,099.3 ft (1,249.47m), crest of spillway, 199,900 acre-ft (246 hm³). Figures given herein represent total contents. The reservoir provides flood control and water for irrigation in Wyoming and near Belle Fourche, S. Dak.

COOPERATION.--Records furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	4,095.98	170,500	-
Oct. 31	4,095.61	167,500	-3,000
Nov. 30	4,095.57	167,200	-300
Dec. 31	4,095.58	167,300	+100
CAL YR 1972	-	-	+10,500
Jan. 31	4,095.58	167,300	0
Feb. 28	4,095.60	167,500	+200
Mar. 31	4,095.73	168,500	+1,000
Apr. 30	4,096.23	172,600	+4,100
May 31	4,096.25	172,800	+200
June 30	4,096.09	171,500	-1,300
July 31	4,095.27	164,800	-6,700
Aug. 31	4,094.38	157,800	-7,000
Sept. 30	4,094.32	157,300	-500
WTR YR 1973	-	-	-13,200

CHEYENNE RIVER BASIN

06427500 BELLE FOURCHE RIVER BELOW KEYHOLE RESERVOIR, WYO.

LOCATION.--Lat 44°23'05", long 104°46'50", in NE&SE&SE& sec.21, T.51 N., R.66 W., Crook County, on right bank 0.2 mi (0.3 km) downstream from Keyhole Dam, 1.0 mi (1.6 km) downstream from Mule Creek, 2.5 mi (4.0 km) upstream from Spring Creek, and 12 mi (19 km) northeast of Moorcroft.

DRAINAGE AREA.--2,000 mi² (5,180 km²), approximately.

PERIOD OF RECORD.--April 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,031.26 ft (1,228.728 m) above mean sea level.

EXTREMES.--Current year: Maximum daily discharge, 237 ft³/s (6.71 m³/s) Oct. 1, 2; maximum gage height, 2.88 ft (0.878 m) July 10 (backwater from beaver dam); minimum daily discharge, 1.2 ft³/s (0.034 m³/s) Oct. 4-12 (seepage flow).

Period of record: Maximum discharge, 1,020 ft³/s (28.9 m³/s) Sept. 5, 1951, gage height, 6.30 ft (1.920 m); minimum daily since appreciable storage in Keyhole Reservoir, 0.30 ft³/s (0.008 m³/s) Feb. 6-20, 1960; no flow at times in 1951-52.

REMARKS.--Records good above 5.0 ft³/s (0.14 m³/s) and poor below. Flow completely regulated by Keyhole Reservoir 0.2 mi (0.3 km) upstream. (See sta 06427000.) Diversions for irrigation of about 820 acres (3.32 km²) 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	237	1.4	1.7	2.0	2.0	2.0	2.5	3.0	5.0	5.0	73	2.5
2	237	1.4	1.7	2.0	2.0	2.0	2.5	3.0	5.0	5.0	73	2.5
3	135	1.4	1.7	2.0	2.0	2.0	2.5	3.0	5.0	5.0	73	2.5
4	1.2	1.4	1.7	2.0	2.0	2.0	2.5	3.0	5.0	5.0	73	2.5
5	1.2	1.4	1.7	2.0	2.0	2.0	2.5	3.0	5.0	5.0	73	2.5
6	1.2	1.4	1.7	2.0	2.0	2.0	2.5	3.0	5.0	5.0	73	2.5
7	1.2	1.4	1.7	2.0	2.0	2.0	2.5	3.0	5.0	5.0	73	2.5
8	1.2	1.5	1.7	2.0	2.0	2.0	2.5	3.0	5.0	5.0	73	2.5
9	1.2	1.5	1.7	2.0	2.0	2.0	2.5	3.0	5.0	37	73	2.5
10	1.2	1.5	1.8	2.0	2.0	2.0	2.5	3.0	5.0	75	73	2.5
11	1.2	1.5	1.8	2.0	2.0	2.0	2.5	3.0	5.0	75	73	2.5
12	1.2	1.5	1.8	2.0	2.0	2.0	2.5	3.0	5.0	75	73	2.5
13	1.3	1.5	1.8	2.0	2.0	2.0	2.5	3.0	5.0	75	73	2.5
14	1.3	1.5	1.8	2.0	2.0	2.0	2.5	3.0	5.0	75	73	2.5
15	1.3	1.5	1.8	2.0	2.0	2.0	2.5	3.0	5.0	75	73	2.5
16	1.3	1.5	1.8	2.0	2.0	2.0	2.5	3.0	5.0	75	73	2.5
17	1.3	1.5	1.8	2.0	2.0	2.0	2.5	3.0	5.0	75	73	2.5
18	1.3	1.5	1.8	2.0	2.0	2.0	2.5	3.0	5.0	74	73	2.5
19	1.3	1.6	1.9	2.0	2.0	2.0	2.5	3.0	5.0	74	73	2.5
20	1.3	1.6	1.9	2.0	2.0	2.0	2.5	3.0	5.0	74	73	2.5
21	1.3	1.6	1.9	2.0	2.0	2.0	2.5	3.0	5.0	74	73	2.5
22	1.3	1.6	1.9	2.0	2.0	2.0	2.5	3.0	5.0	74	73	2.5
23	1.3	1.6	1.9	2.0	2.0	2.0	2.5	3.0	5.0	74	41	2.5
24	1.3	1.6	1.9	2.0	2.0	2.0	2.5	3.0	5.0	74	2.5	2.5
25	1.3	1.6	1.9	2.0	2.0	2.0	2.5	3.0	5.0	74	2.5	2.5
26	1.3	1.6	1.9	2.0	2.0	2.0	2.5	3.0	5.0	74	2.5	2.5
27	1.4	1.6	1.9	2.0	2.0	2.0	2.5	3.0	5.0	74	2.5	2.5
28	1.4	1.6	2.0	2.0	2.0	2.0	2.5	3.0	5.0	74	2.5	2.5
29	1.4	1.6	2.0	2.0	-----	2.0	2.5	3.0	5.0	74	2.5	2.5
30	1.4	1.6	2.0	2.0	-----	2.0	2.5	3.0	5.0	74	2.5	2.5
31	1.4	-----	2.0	2.0	-----	2.0	-----	3.0	-----	74	2.5	-----
TOTAL	645.0	45.5	56.6	62.0	56.0	62.0	75.0	93.0	150.0	1,713.0	1,667.0	75.0
MEAN	20.8	1.52	1.83	2.00	2.00	2.00	2.50	3.00	5.00	55.3	53.8	2.50
MAX	237	1.6	2.0	2.0	2.0	2.0	2.5	3.0	5.0	75	73	2.5
MIN	1.2	1.4	1.7	2.0	2.0	2.0	2.5	3.0	5.0	5.0	2.5	2.5
AC-FT	1,280	90	112	123	111	123	149	184	298	3,400	3,310	149

CAL YR 1972 TOTAL 16,769.1 MEAN 45.9 MAX 813 MIN 1.2 AC-FT 33,300
 WTR YR 1973 TOTAL 4,700.1 MEAN 12.9 MAX 237 MIN 1.2 AC-FT 9,320

101

LOCATION.--Lat 44°44'59", long 104°02'49", in NE¼NW¼ sec.18, T.9 N., R.1 E., Butte County, S. Dak., on left bank 0.3 mi (0.5 km) downstream from State line, 3.7 mi (6.0 km) downstream from Oak Creek and 11 mi (18 km) northwest of Belle Fourche, S. Dak.

PERIOD OF RECORD.--December 1946 to current year. Records for water year 1947 incomplete, yearly estimate published in WSP 1729.

AVERAGE DISCHARGE.--27 years, 87.8 ft³/s (2.486 m³/s), 63,660 acre-ft/yr (78.4 hm³/yr).

Period of record: Maximum discharge, 4,400 ft³/s (125 m³/s) June 18, 1962, gage height, 15.59 ft (4.752 m); no flow at times most years.

REMARKS.--Records good except those for winter periods, which are poor. Diversions above station for irrigation of about 5,400 acres (2,200 hm²). Flow regulated by Keyhole Reservoir, usable capacity, 191,600 acre-ft (236 hm³), 143 mi (230 km) upstream, since Oct. 25, 1952. (See sta 06427000.) Water-quality records for the current year are published in Part 2 of this report.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	193	65	32	31	45	130	91	344	306	128	100	37
2	204	63	30	31	45	150	92	310	383	111	94	39
3	210	59	28	30	45	130	89	264	768	105	91	43
4	216	55	27	28	44	125	86	230	623	100	86	47
5	233	50	26	28	42	125	85	216	546	93	81	49
6	181	47	22	25	38	150	84	246	398	86	80	50
7	100	47	15	22	35	150	84	264	313	83	80	47
8	78	47	10	20	36	130	88	256	267	80	79	44
9	70	47	10	20	37	125	88	241	229	74	82	41
10	70	46	10	22	38	126	87	233	201	69	86	39
11	70	46	10	24	40	103	85	219	182	61	90	37
12	69	40	10	26	40	98	84	192	167	56	94	45
13	69	30	10	30	37	94	83	175	158	65	92	54
14	69	25	12	35	35	104	86	160	151	89	98	48
15	68	26	12	50	30	97	90	148	148	94	99	47
16	68	25	12	100	32	94	98	138	165	91	89	44
17	68	25	15	150	35	106	96	133	145	93	84	42
18	67	25	20	100	38	105	93	128	189	91	86	41
19	67	25	25	60	40	100	113	123	424	87	84	40
20	67	25	30	50	40	92	926	121	306	98	82	39
21	66	25	35	50	45	90	1,040	118	316	109	80	39
22	66	28	40	50	50	93	512	108	277	123	80	40
23	66	30	38	60	60	105	338	101	225	128	85	38
24	66	30	35	80	60	146	328	97	196	131	84	39
25	66	30	38	60	50	146	503	93	171	118	84	39
26	65	30	40	50	70	124	678	124	153	113	84	37
27	65	30	40	35	100	114	432	493	142	116	69	36
28	65	29	35	30	120	102	371	824	135	120	55	39
29	65	28	30	40	-----	107	343	852	123	111	48	37
30	65	32	28	45	-----	100	366	529	172	108	44	35
31	65	-----	30	45	-----	92	-----	400	-----	104	40	-----
TOTAL	2,957	1,110	755	1,427	1,327	3,553	7,539	7,880	7,979	3,035	2,510	1,252
MEAN	95.4	37.0	24.4	46.0	47.4	115	251	254	266	97.9	81.0	41.7
MAX	233	65	40	150	120	150	1,040	852	768	131	100	54
MIN	65	25	10	20	30	90	83	93	123	56	40	35
AC-FT	5,870	2,200	1,500	2,830	2,630	7,050	14,950	15,630	15,830	6,020	4,980	2,480
CAL YR 1972	TOTAL 69,470		MEAN 190	MAX 2,030	MIN 10	AC-FT 137,800						
WTR YR 1973	TOTAL 41,324		MEAN 113	MAX 1,040	MIN 10	AC-FT 81,970						

CHEYENNE RIVER BASIN

06430000 MURRAY DITCH AT WYOMING-SOUTH DAKOTA STATE LINE

LOCATION.--Lat 44°34'35", long 104°02'58", in SW¼SW¼ sec.7, T.7 N., R.1 E., Butte County, S. Dak., on right bank 15 ft (5 m) downstream from State line and 12 mi (19 km) southwest of Belle Fourche, S. Dak.

PERIOD OR RECORD.--June 1954 to current year (irrigation seasons only prior to October 1959).

GAGE.--Water-stage recorder. Altitude of gage is 3,440 ft (1,050 m), from topographic map.

EXTREMES.--Period of record: Maximum daily discharge, 37 ft³/s (1.05 m³/s) July 17, 1973; no flow for long periods each year.

REMARKS.--Records fair. Ditch diverts water from left bank of Redwater Creek, 2.0 mi (3.2 km) upstream, for irrigation of about 700 acres (283 hm²). Flow maintained during irrigation season only.

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	.45	1.7						0	0	5.1	16	0
2	.35	1.7						0	.03	5.1	15	0
3	.30	1.7						0	0	5.1	14	0
4	.24	1.7						0	0	5.7	16	0
5	.40	1.7						0	0	5.8	18	0
6	.27	1.7						0	0	5.3	20	0
7	.24	1.7						0	0	6.4	21	0
8	.21	1.7						0	0	8.1	21	0
9	.21	1.7						0	0	7.6	22	1.0
10	.18	1.7						0	0	7.6	22	3.0
11	.27	1.7						0	0	13	22	3.0
12	.27	1.7						0	0	19	22	3.0
13	.24	1.7						0	0	20	23	3.0
14	.24	1.7						0	0	25	22	3.0
15	.21	1.7						0	0	22	22	3.1
16	.18	1.7						0	0	21	23	1.4
17	.15	1.7						0	0	37	22	.91
18	.15	1.7						0	0	35	22	.75
19	.12	1.7						0	0	36	24	.65
20	.03	1.7						0	0	32	23	.60
21	0	1.7						0	0	28	22	.50
22	.11	1.7						0	0	27	1.6	.40
23	2.3	1.7						0	0	33	.46	.35
24	2.2	1.7						0	0	30	0	.35
25	1.9	1.7						0	3.2	21	0	.24
26	1.8	1.6						0	5.6	17	0	.21
27	1.8	1.6						.10	5.6	15	0	.09
28	1.7	1.5						0	5.5	14	0	.53
29	1.7	1.5			-----			0	5.3	15	0	2.2
30	1.7	.10			-----			0	5.3	16	0	2.0
31	1.7	-----			-----		-----	0	-----	15	0	-----
TOTAL	21.62	48.80	0	0	0	0	0	.10	30.53	552.8	434.06	30.28
MEAN	.70	1.63	0	0	0	0	0	.003	1.02	17.8	14.0	1.01
MAX	2.3	1.7	0	0	0	0	0	.10	5.6	37	24	3.1
MIN	0	.10	0	0	0	0	0	0	0	5.1	0	0
AC-FT	43	97	0	0	0	0	0	.2	61	1,100	861	60
CAL YR 1972	TOTAL	536.32	MEAN	1.47	MAX	30	MIN	0	AC-FT	1,060		
WTR YR 1973	TOTAL	1,118.19	MEAN	3.06	MAX	37	MIN	0	AC-FT	2,220		

103

LOCATION.--Lat 44°34'26", long 104°02'54", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.18, T.7 N., R.1 E., Butte County, S. Dak., on left bank 800 ft (244 m) downstream from State line, 5.7 mi (9.2 km) upstream from Crow Creek, and 12 mi (19 km) southwest of Belle Fourche, S. Dak.

PERIOD OF RECORD.--April 1929 to September 1931 and February 1936 to July 1937 (published as "near Beulah, Wyo."), June 1954 to current year.

EXTREMES.--Current year: Maximum discharge, 2,440 ft³/s (69.1 m³/s) Aug. 22, gage height, 12.19 ft (3.716 m); minimum, 12 ft³/s (0.34 m³/s) July 11, gage height, 1.86 ft (0.567 m).

Period of record: Maximum discharge, 2,440 ft³/s (69.1 m³/s) Aug. 22, 1973, gage height, 12.19 ft (3.716 m); no flow Aug. 13-15, 1929.

REVISIONS (WATER YEARS). --WSP 1309: 1931(M), 1936-37(M).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	45	47	42	47	42	43	81	226	60	32	45
2	44	46	46	42	46	42	43	74	198	59	35	42
3	43	46	45	43	47	42	42	70	235	58	36	50
4	44	45	40	42	47	42	42	76	161	57	36	49
5	49	45	40	40	46	42	42	109	126	56	33	49
6	48	45	40	38	44	42	44	138	106	56	32	51
7	47	44	40	36	44	42	45	141	94	54	31	54
8	47	45	35	34	45	41	44	144	85	51	30	53
9	46	45	35	34	44	42	43	155	80	51	31	50
10	44	45	40	36	45	41	44	128	75	49	35	49
11	44	45	40	38	46	41	43	117	73	40	36	49
12	45	45	42	41	46	41	44	106	72	35	37	49
13	45	45	44	42	45	43	47	102	71	32	38	48
14	45	45	44	45	44	49	50	103	69	29	40	47
15	45	45	43	45	44	40	50	104	70	27	37	49
16	45	45	42	47	45	40	47	120	68	23	38	50
17	45	45	42	47	45	42	48	125	68	21	37	51
18	45	45	44	46	45	42	50	130	71	18	37	52
19	46	44	44	45	44	42	58	120	89	19	38	53
20	46	44	45	45	44	42	74	104	98	26	39	53
21	46	43	45	45	44	44	66	92	77	28	142	53
22	45	43	47	45	45	48	57	83	71	29	490	52
23	43	44	45	45	45	46	60	74	68	28	85	53
24	43	44	45	46	44	45	73	70	67	28	65	53
25	44	44	44	46	44	44	82	69	62	33	55	52
26	45	45	44	46	43	44	72	82	59	32	49	53
27	44	44	44	45	42	46	68	116	59	32	50	53
28	44	43	44	44	43	46	78	151	59	34	48	51
29	45	43	44	47	-----	43	93	145	59	34	45	50
30	45	45	42	49	-----	43	87	150	60	33	45	49
31	44	-----	42	48	-----	43	-----	211	-----	33	45	-----
TOTAL	1,395	1,337	1,324	1,334	1,253	1,332	1,679	3,490	2,776	1,165	1,827	1,512
MEAN	45.0	44.6	42.7	43.0	44.8	43.0	56.0	113	92.5	37.6	58.9	50.4
MAX	49	46	47	49	47	49	93	211	235	60	490	54
MIN	43	43	35	34	42	40	42	69	59	18	30	42
AC-FT	2,770	2,650	2,630	2,650	2,490	2,640	3,330	6,920	5,510	2,310	3,620	3,000
CAL YR 1972	TOTAL	18,405	MEAN	50.3	MAX	178	MIN	32	AC-FT	36,510		
WTR YR 1973	TOTAL	20,424	MEAN	56.0	MAX	490	MIN	18	AC-FT	40,510		

NIOBRARA RIVER BASIN

06454000 NIOBRARA RIVER AT WYOMING-NEBRASKA STATE LINE

LOCATION.--Lat 42°39'33", long 104°03'54", in SE¼SW¼ sec.15, T.31 N., R.60 W., Niobrara County, Wyo., on left bank 0.2 mi (0.3 km) downstream from Van Tassel Creek, 0.3 mi (0.5 km) upstream from Wyoming-Nebraska State line, and 3.0 mi (4.8 km) east of Van Tassel, Wyo.

DRAINAGE AREA.--450 mi² (1,170 km²), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 4,687.70 ft (1,428.811 m) above mean sea level, datum of 1956.

AVERAGE DISCHARGE.--18 years, 4.35 ft³/s (0.123 m³/s), 3,150 acre-ft/yr (3.88 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 85 ft³/s (2.41 m³/s) Feb. 24, gage height, 2.81 ft (0.856 m); maximum gage height, 4.69 ft (1.430 m) Mar. 15 (backwater from snow); minimum daily discharge, 1.8 ft³/s (0.051 m³/s) July 25-27.

Period of record: Maximum discharge, 800 ft³/s (22.7 m³/s) July 17, 1969, gage height, 6.92 ft (2.109 m) in gage well, 6.75 ft (2.057 m) from floodmarks, from rating curve extended above 63 ft³/s (1.78 m³/s) on basis of computation of peak flow through culvert and over road; minimum daily, 1.4 ft³/s (0.040 m³/s) on Sept. 12-16, 20, 1959, July 26, 27, 1961, Aug. 20, 1964, Aug. 20, 22, 24, 1968.

REMARKS.--Records fair. Diversions for irrigation of about 4,700 acres (19.0 km²) 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	3.0	2.6	4.2	3.3	3.7	5.2	9.4	11	3.3	2.4	2.4	2.1
2	3.0	3.1	4.2	3.3	3.8	5.4	10	9.9	3.9	2.3	2.4	6.3
3	3.2	3.4	4.0	3.2	3.8	5.5	10	9.1	3.6	2.5	2.5	3.5
4	3.2	3.4	3.8	3.1	4.0	5.5	9.5	8.9	3.5	2.5	2.5	2.9
5	3.4	3.4	3.8	3.0	4.2	7.6	9.3	8.4	3.3	2.5	2.4	2.8
6	3.3	3.2	3.6	3.0	4.2	8.4	8.7	8.7	3.3	2.4	2.3	2.7
7	3.2	3.1	3.5	2.9	4.0	7.7	8.5	8.6	3.1	3.6	2.2	2.7
8	3.1	3.3	3.4	2.8	4.0	7.4	7.8	8.1	3.0	3.6	2.3	2.8
9	2.9	3.4	3.4	2.8	3.8	7.3	8.4	7.2	2.9	3.2	2.4	2.8
10	2.8	3.3	3.4	2.8	3.8	7.0	8.2	6.7	2.7	2.9	2.3	2.7
11	2.8	3.0	3.3	3.0	3.9	6.8	8.3	6.3	2.7	2.7	2.2	6.1
12	2.8	2.7	3.3	3.0	4.1	6.6	7.8	5.6	2.8	2.4	2.3	4.1
13	2.8	2.7	3.3	3.0	4.0	6.6	7.6	6.4	2.8	2.5	2.2	3.8
14	2.7	2.7	3.2	3.1	3.7	6.0	7.3	6.6	3.4	2.7	2.1	3.8
15	3.2	2.8	3.0	3.2	3.6	5.0	7.2	6.7	3.2	2.5	2.1	4.5
16	3.1	3.0	3.0	3.5	3.5	4.5	6.8	6.6	2.8	2.2	2.1	4.3
17	2.4	3.1	3.0	14	3.6	5.0	6.7	6.4	2.8	2.0	2.2	4.0
18	2.4	3.3	3.1	11	3.8	5.5	6.8	6.3	2.7	2.0	2.1	3.5
19	2.4	3.3	3.2	7.0	3.8	6.0	6.2	5.7	2.7	2.1	2.0	3.0
20	2.4	3.3	3.3	4.6	3.6	4.7	7.4	5.0	2.6	4.2	1.9	3.0
21	2.5	3.2	3.4	4.2	3.5	4.1	9.7	4.2	2.5	2.5	2.0	2.8
22	3.0	3.1	3.6	4.0	3.9	8.3	9.4	3.7	2.4	2.2	2.1	2.8
23	2.5	3.1	3.7	3.9	4.1	8.1	7.7	3.5	2.2	2.0	2.1	2.9
24	2.6	3.1	3.9	4.0	39	6.2	7.6	3.5	2.2	2.0	2.1	2.9
25	2.7	3.1	4.4	5.0	28	5.5	9.6	3.5	2.2	1.8	2.1	2.5
26	2.8	3.3	4.2	6.0	11	14	11	3.4	2.2	1.8	2.1	2.2
27	2.6	3.4	4.0	9.8	7.8	12	9.9	4.5	2.2	1.8	2.1	2.4
28	2.5	3.3	4.2	3.9	5.8	9.9	9.4	3.9	2.3	2.1	2.1	2.4
29	2.5	3.0	4.5	3.7	-----	10	8.8	3.6	2.5	2.3	2.1	2.5
30	2.5	2.8	4.0	3.6	-----	9.7	10	3.5	2.6	2.3	2.0	2.6
31	2.6	-----	4.2	3.5	-----	9.5	-----	3.3	-----	2.3	1.9	-----
TOTAL	86.9	93.5	113.1	137.2	180.0	221.0	255.0	188.8	84.4	76.3	67.6	97.4
MEAN	2.80	3.12	3.65	4.43	6.43	7.13	8.50	6.09	2.81	2.46	2.18	3.25
MAX	3.4	3.4	4.5	14	39	14	11	11	3.9	4.2	2.5	6.3
MIN	2.4	2.6	3.0	2.8	3.5	4.1	6.2	3.3	2.2	1.8	1.9	2.1
AC-FT	172	185	224	272	357	438	506	374	167	151	134	193

CAL YR 1972 TOTAL 1,636.5 MEAN 4.47 MAX 227 MIN 1.8 AC-FT 3,250
WTR YR 1973 TOTAL 1,601.2 MEAN 4.39 MAX 39 MIN 1.8 AC-FT 3,180

PEAK DISCHARGE (BASE, 20 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1-17	1100	2.13	34	2-24	1045	2.81	85
1-27	0845	1.95	23	3-26	1215	2.11	26

NIOBRARA RIVER BASIN

105

06454100 NIOBRARA RIVER AT AGATE, NEBR.

LOCATION.--Lat 42°25'22", long 103°47'28", in SW¼ sec.6, T.28 N., R.55 W., Sioux County, on right bank 10 ft (3 m) upstream from timber farm-vehicle bridge, 300 ft (91 m) upstream from bridge on State Highway 29, 0.2 mi (0.3 km) northwest of Agate, and 14.5 mi (23.3 km) upstream from Whistle Creek.

DRAINAGE AREA.--840 mi² (2,180 km²), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,440 ft (1,353 m), from topographic map. Prior to Nov. 3, 1960, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--16 years, 14.8 ft³/s (0.419 m³/s), 10,720 acre-ft/yr (13.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 46 ft³/s (1.30 m³/s) Mar.24, gage height, 3.52 ft (1.073 m); minimum daily, 2.9 ft³/s (0.082 m³/s) July 18.

Period of record: Maximum discharge, 181 ft³/s (5.13 m³/s) June 23, 1959, gage height, 5.00 ft (1.524 m), from floodmark; minimum daily, 1.8 ft³/s (0.051 m³/s) Apr. 4, 1968, result of freezeup.

REMARKS.--Records good. Diversions for irrigation of about 6,700 acres (27.1 km²) 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	13	14	18	8.4	18	29	26	27	13	6.0	5.1	6.8
2	13	15	17	13	18	27	28	26	14	5.8	4.8	11
3	7.7	15	12	14	18	26	29	25	14	5.6	4.7	11
4	6.7	15	13	15	18	25	31	23	14	5.3	4.6	9.9
5	12	14	14	15	19	24	31	23	14	5.7	4.6	9.6
6	8.7	14	13	15	19	28	30	24	12	5.0	4.5	9.9
7	8.2	14	13	15	12	26	30	23	12	3.9	4.4	9.6
8	7.2	14	13	15	16	26	30	23	13	4.2	4.3	9.4
9	7.2	14	13	15	16	26	30	22	12	4.2	4.1	10
10	7.3	14	12	15	17	26	29	21	12	3.7	4.1	10
11	10	14	12	15	17	26	29	20	11	3.5	4.1	15
12	11	14	12	15	18	26	29	20	7.5	3.4	4.2	16
13	11	14	12	15	19	26	28	20	7.5	3.6	4.7	14
14	11	15	12	15	19	7.0	27	20	8.0	3.5	4.9	14
15	11	15	12	15	18	4.7	27	19	9.1	3.4	4.4	14
16	11	16	12	15	19	5.4	26	19	7.3	3.3	4.1	14
17	11	16	12	15	19	10	26	16	6.6	3.0	4.1	14
18	11	16	12	16	20	18	26	14	6.2	2.9	4.3	14
19	11	16	13	16	23	18	29	14	6.0	3.8	4.3	13
20	11	16	14	16	23	20	30	15	6.0	7.7	4.1	13
21	12	16	15	17	23	29	26	15	6.0	7.0	4.7	13
22	12	16	17	17	23	33	24	16	6.0	6.0	5.5	12
23	11	16	16	18	25	36	24	14	6.1	5.4	7.0	12
24	12	16	16	18	24	43	24	14	5.8	4.4	6.8	13
25	12	15	17	19	25	41	25	14	5.5	4.4	6.6	15
26	12	16	17	19	30	40	27	14	5.2	4.3	6.6	16
27	12	16	17	13	34	41	25	16	4.9	4.2	6.4	15
28	12	14	17	7.9	38	37	24	15	5.5	4.1	6.4	15
29	11	14	17	14	-----	36	23	14	6.1	4.2	6.6	15
30	12	15	7.1	15	-----	33	25	16	6.3	4.8	6.8	15
31	15	-----	6.5	17	-----	30	-----	14	-----	5.1	6.6	-----
TOTAL	333.0	449	423.6	468.3	588	823.1	818	576	262.6	141.4	158.4	379.2
MEAN	10.7	15.0	13.7	15.1	21.0	26.6	27.3	18.6	8.75	4.56	5.11	12.6
MAX	15	16	18	19	38	43	31	27	14	7.7	7.0	16
MIN	6.7	14	6.5	7.9	12	4.7	23	14	4.9	2.9	4.1	6.8
AC-FT	661	891	840	929	1,170	1,630	1,620	1,140	521	280	314	752
CAL YR 1972	TOTAL 4,834.8	MEAN 13.2	MAX 82	MIN 5.4	AC-FT 9,590							
WTR YR 1973	TOTAL 5,420.6	MEAN 14.9	MAX 43	MIN 2.9	AC-FT 10,750							

PEAK DISCHARGE (BASE, 35 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE
2-28	0630	3.36	42
3-24	1715	3.52	46

PLATTE RIVER BASIN

06620000 NORTH PLATTE RIVER NEAR NORTHGATE, COLO.

LOCATION.--Lat 40°56'10", long 106°20'21", in SW¼SE¼ sec.11, T.11 N., R.80 W., Jackson County, on right bank 350 ft (110 m) downstream from bridge on State Highway 125, 0.8 mi (1.3 km) upstream from Camp Creek, 4.2 mi (6.8 km) northwest of Northgate, and 4.4 mi (7.1 km) south of Colorado-Wyoming State line.

DRAINAGE AREA.--1,431 mi² (3,706 km²).

PERIOD OF RECORD.--May to November 1904 (published as "near Pinkhampton"), May 1915 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 7,810.39 ft (2,380.607 m) above mean sea level. See WSP 1730 for history of changes prior to Apr. 8, 1918. Apr. 8, 1918 to Aug. 21, 1961, water-stage recorder, at site 0.8 mi (1.3 km) downstream at datum 3.36 ft (1.024 m) lower.

AVERAGE DISCHARGE.--58 years, 434 ft³/s (12.29 m³/s), 314,400 acre-ft/yr (388 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,950 ft³/s (112 m³/s) Apr. 30, gage height, 6.35 ft (1.935 m); maximum gage height, 7.77 ft (2.368 m) Apr. 26 (ice jam); minimum daily discharge, 90 ft³/s (2.55 m³/s) Feb. 15.

Period of record: Maximum discharge, 6,720 ft³/s (190 m³/s) June 11, 1923, gage height, 6.24 ft (1.902 m), site and datum then in use; maximum gage height recorded, 8.84 ft (2.694 m) Apr. 9, 1962 (ice jam); minimum daily discharge, 19 ft³/s (0.54 m³/s) July 17-19, 1934.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 130,000 acres (526 km²) of hay meadows above station. Transbasin diversions above station to Cache la Poudre River basin (see page 154). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS)--WSP 1310: 1916-21, 1929(M), 1930-32. WSP 1730: 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	105	240	130	105	100	100	120	3,770	1,050	1,690	663	166
2	105	250	130	105	100	100	120	2,390	1,070	1,430	592	177
3	101	260	120	105	100	100	120	1,640	1,340	1,230	536	176
4	101	270	120	105	100	100	120	1,440	1,560	1,110	545	181
5	103	270	110	105	100	100	120	1,620	1,490	985	543	176
6	108	260	110	105	100	100	120	1,960	1,170	865	547	165
7	118	270	110	105	100	110	120	2,290	931	776	557	157
8	127	270	110	105	100	110	120	2,110	755	784	548	152
9	153	250	110	105	100	110	120	1,920	748	802	496	147
10	165	240	110	105	100	110	120	1,960	1,080	710	453	142
11	164	230	110	105	100	110	120	2,110	1,560	666	396	161
12	143	210	110	105	100	110	120	2,430	2,010	588	371	202
13	126	200	110	105	100	110	130	2,520	2,270	849	338	211
14	121	190	110	105	96	110	150	2,340	2,650	1,800	312	194
15	122	180	110	105	90	120	160	2,200	3,290	1,970	290	171
16	135	170	110	105	97	120	180	2,040	3,790	1,670	271	158
17	201	160	110	105	96	120	210	1,920	3,580	1,390	260	151
18	226	160	110	105	98	120	390	1,860	2,520	1,120	258	146
19	260	160	110	105	100	120	440	1,860	1,940	1,270	253	140
20	240	150	110	105	100	120	470	2,020	1,540	1,640	243	139
21	263	150	110	100	100	120	500	2,410	1,190	1,810	237	127
22	313	150	110	100	100	120	560	2,780	985	1,810	241	116
23	301	140	110	100	100	120	620	2,680	904	1,330	245	112
24	288	140	110	100	100	120	780	2,340	912	1,050	245	113
25	264	140	110	100	100	120	900	2,270	1,050	929	237	124
26	236	140	110	100	100	120	1,100	2,120	1,100	838	226	143
27	226	130	110	100	100	120	1,600	1,970	1,300	774	213	157
28	236	130	110	100	100	120	1,700	1,640	1,520	743	195	163
29	254	130	100	100	-----	120	2,410	1,240	1,700	727	181	179
30	157	130	100	100	-----	120	5,530	1,130	1,700	718	172	189
31	168	-----	100	100	-----	120	-----	1,180	-----	696	168	-----
TOTAL	5,610	5,770	5,440	5,200	2,777	3,520	17,070	64,180	48,705	34,770	10,812	4,735
MEAN	181	192	111	103	99.2	114	569	2,070	1,624	1,122	349	158
MAX	313	270	130	105	100	120	5,530	3,770	3,790	1,970	663	211
MIN	101	130	100	100	90	100	120	1,130	748	588	168	112
AC-FT	11,130	11,440	6,620	6,350	5,510	6,980	33,860	127,500	96,610	68,970	21,450	9,390
CAL YR 1972	TOTAL	121,586	MEAN	332	MAX	2,990	MIN	66	AC-FT	241,200		
WTR YR 1973	TOTAL	204,589	MEAN	561	MAX	3,790	MIN	90	AC-FT	405,800		

PLATTE RIVER BASIN

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06622700 NORTH BRUSH CREEK NEAR SARATOGA, WYO.

LOCATION.--Lat 41°22'10", long 106°31'22", in NE¼SE¼NW¼ sec.8, T.16 N., R.81 W., Carbon County, Medicine Bow National Forest, on left bank 10 ft (3.0 m) downstream from logging road bridge, 0.7 mi (1.1 km) downstream from Lincoln Creek, 1.6 mi (2.6 km) upstream from South Brush Creek, and 16 mi (26 km) southeast of Saratoga.

DRAINAGE AREA.--37.4 mi² (96.9 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 8,020 ft (2,444 m), from topographic map. Prior to June 17, 1971, at site 110 ft (34 m) downstream at different datum. June 17 to Sept. 21, 1971, at site 10 ft (3 m) downstream at present datum.

AVERAGE DISCHARGE.--13 years, 52.4 ft³/s (1.484m³/s), 37,960 acre-ft/yr (46.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 680 ft³/s (19.3 m³/s) June 10, gage height, 3.94 ft (1.201 m); minimum daily, 7.5 ft³/s (0.21 m³/s) Dec. 10.

Period of record: Maximum discharge, 1,120 ft³/s (31.7 m³/s) June 7, 1964, gage height, 5.75 ft (1.753 m), site and datum then in use, from rating curve extended above 480 ft³/s (13.6 m³/s); minimum daily, 5.0 ft³/s (0.14 m³/s) Aug. 25, 1971.

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are poor. 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	17	14	12	9.0	10	13	12	16	304	231	23	13
2	15	15	13	10	10	13	12	14	368	189	22	20
3	14	15	12	11	11	12	12	15	336	155	21	24
4	13	13	10	10	12	12	12	19	280	140	34	22
5	42	12	9.0	9.0	12	13	13	23	266	123	37	20
6	20	11	8.0	10	11	14	17	29	304	104	34	18
7	14	17	9.0	10	11	13	16	32	368	98	24	17
8	24	17	9.0	11	10	13	15	38	404	107	21	16
9	18	16	8.0	10	11	13	15	40	489	90	19	15
10	16	16	7.5	11	12	13	13	41	597	64	18	14
11	14	18	8.0	10	13	13	16	49	548	54	16	39
12	12	18	8.0	11	13	14	19	66	520	49	16	27
13	12	16	8.5	11	12	13	22	81	498	57	15	17
14	13	17	8.0	12	12	12	26	98	530	62	14	14
15	42	15	8.0	13	11	13	25	120	472	47	13	16
16	24	15	8.5	13	10	12	23	144	328	40	13	14
17	21	15	8.5	13	10	13	12	185	276	36	16	13
18	24	16	9.0	14	11	14	11	231	252	37	18	12
19	18	15	9.5	14	12	13	12	283	204	74	14	11
20	20	15	10	13	12	13	18	311	155	142	12	11
21	24	15	10	14	12	13	20	336	222	92	13	10
22	22	14	11	13	11	13	16	325	266	60	16	10
23	19	14	11	12	12	12	14	322	311	54	16	11
24	18	13	10	13	13	12	15	325	328	46	13	11
25	18	13	10	13	14	13	13	328	356	40	12	13
26	18	12	10	13	13	13	12	325	376	35	11	16
27	18	12	10	12	13	13	14	297	342	30	11	15
28	16	10	11	11	13	13	18	280	304	27	12	16
29	14	10	10	12	-----	14	16	256	280	28	11	16
30	14	11	10	12	-----	12	16	230	258	32	11	16
31	13	-----	10	11	-----	11	-----	246	-----	24	11	-----
TOTAL	537	432	240.5	361.0	327	398	479	5,107	10,582	2,369	537	487
MEAN	18.9	14.4	7.5	11.6	11.7	12.8	16.0	165	353	76.4	17.3	16.2
MAX	42	18	13	14	14	14	26	336	597	231	37	39
MIN	12	10	7.5	9.0	10	11	11	14	195	24	11	10
AC-FT	1,160	857	588	716	649	785	950	10,130	20,990	4,700	1,070	966
CAL YR 1972	TOTAL 16,737.2 MEAN 45.7 MAX 404 MIN 6.4 AC-FT 33,200											
WTR YR 1973	TOTAL 21,902.5 MEAN 60.2 MAX 597 MIN 7.5 AC-FT 43,550											

PEAK DISCHARGE (BASE, 350 FT³/S)

NOTE.--No gage-height record Nov. 24 to Jan. 16, Jan. 22 to Apr. 16, May 24-29.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-22	1830	3.32	353	6-10	2200	3.94	680
6- 2	2030	3.36	392	6-25	2130	3.53	480

PLATTE RIVER BASIN

06622900 SOUTH BRUSH CREEK NEAR SARATOGA, WYO.

LOCATION.--Lat 41°20'38", long 106°31'33", in NE¼NW¼ sec.20, T.16 N., R.81 W., Carbon County, Medicine Bow National Forest, on left bank 300 ft (91 m) upstream from culvert on State Highway 130, 1.6 mi (2.6 km) upstream from North Brush Creek, and 17 mi (27.4 km) southeast of Saratoga.

DRAINAGE AREA.--22.8 mi² (59.1 km²).

PERIOD OF RECORD.--May 1960 to current year (no winter records since 1972).

GAGE.--Water-stage recorder. Altitude of gage is 8,100 ft (2,469 m), from topographic map.

AVERAGE DISCHARGE.--12 years (1960-72), 31.8 ft³/s (0.901 m³/s), 23,040 acre-ft/yr (28.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 329 ft³/s (9.32 m³/s) June 10, gage height, 3.50 ft (1.067 m); minimum daily during period of operation, 2.7 ft³/s (0.076 m³/s) Sept. 9, 10.

Period of record: Maximum discharge, 559 ft³/s (15.8 m³/s) June 10, 1965, gage height, 4.09 ft (1.247 m); minimum daily, 0.80 ft³/s (0.023 m³/s) Aug. 15-20, 28, 29, 1963.

REMARKS.--Records fair. Transbasin diversion 0.3 mi (0.5 km) above station for irrigation in North Brush Creek basin.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

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	207	142	19	3.4
2								10	221	116	18	4.2
3								10	210	91	17	4.3
4								12	190	80	22	3.7
5								14	185	76	27	3.1
6								18	195	66	22	2.8
7								20	220	62	16	2.8
8								24	225	59	12	2.8
9								25	274	51	9.4	2.7
10								25	318	49	6.5	2.7
11								30	284	54	8.2	3.0
12								40	274	53	8.2	8.5
13								50	280	53	7.9	5.2
14								60	280	52	9.4	3.8
15								75	230	43	10	3.2
16								90	153	36	10	3.5
17								116	136	33	12	3.0
18								142	119	31	18	3.0
19								162	77	51	13	3.0
20								190	70	74	11	2.8
21								218	91	61	11	2.8
22								250	112	48	13	2.8
23								274	162	47	8.2	2.8
24								284	198	41	6.6	3.0
25								274	218	37	5.7	3.2
26								256	270	31	4.8	3.5
27								246	246	29	4.5	3.5
28								234	204	26	4.2	3.5
29					-----			221	177	24	3.7	3.8
30					-----			204	164	22	3.2	3.5
31		-----			-----		-----	212	-----	21	3.1	-----
TOTAL								3,797	5,990	1,659	346.6	103.9
MEAN								122	200	53.5	11.2	3.46
MAX								284	318	142	27	8.5
MIN								10	70	21	3.1	2.7
AC-FT								7,530	11,880	3,290	687	206

PLATTE RIVER BASIN

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06623800 ENCAMPMENT RIVER ABOVE HOG PARK CREEK, NEAR ENCAMPMENT, WYO.
(Hydrologic bench-mark station)

LOCATION.--Lat 41°01'25", long 106°49'27", in NE¼SW¼ sec.10, T.12 N., R.84 W., Carbon County, Medicine Bow National Forest, on left bank 0.6 mi (1.0 km) upstream from Hog Park Creek and 13 mi (21 km) south of Encampment.

DRAINAGE AREA.--72.7 mi² (188.3 km²). Area at mouth, 265 mi² (686 km²).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,270 ft (2,521 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 110 ft³/s (3.115m³/s), 79,700 acre-ft/yr (98.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 942 ft³/s (26.7 m³/s) June 14, gage height, 4.47 ft (1.362 m); minimum daily, 13 ft³/s (0.37 m³/s) Feb. 9.

Period of record: Maximum discharge, 1,680 ft³/s (47.6 m³/s) about June 13, 1965 (gage height, not determined), from slope-area measurement of peak flow; minimum daily, 9.5 ft³/s (0.27 m³/s) Dec. 31, 1968.

REMARKS.--Records good except those for winter period, which are poor. No diversion above station. Water-quality records for the current year 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	26	23	27	20	14	22	19	34	478	462	75	34
2	24	25	26	20	15	21	18	32	610	398	70	43
3	23	27	26	21	15	20	18	32	470	356	66	41
4	22	30	24	21	16	19	18	38	383	322	127	39
5	35	32	23	20	16	21	19	47	359	258	104	33
6	32	30	22	20	16	22	19	58	402	270	103	31
7	27	29	22	20	15	22	18	61	482	252	85	30
8	36	29	22	20	14	20	18	65	595	230	75	29
9	33	30	21	19	13	22	19	81	705	206	63	27
10	29	31	20	19	14	21	20	86	790	186	57	29
11	26	31	20	18	14	22	20	99	810	166	55	40
12	23	29	20	19	15	22	19	124	775	163	54	44
13	23	30	20	19	16	21	18	135	760	217	50	34
14	24	29	20	20	16	20	18	136	815	223	47	30
15	35	29	20	20	16	22	18	164	825	178	44	30
16	38	28	21	20	16	22	20	196	675	164	43	28
17	35	28	22	20	17	21	18	226	570	135	43	27
18	36	26	22	19	19	20	19	278	510	135	43	26
19	32	27	22	18	20	20	20	350	423	176	40	24
20	32	26	22	18	21	22	27	420	409	202	38	23
21	40	25	22	18	21	24	22	446	426	202	38	22
22	38	24	22	17	21	23	20	409	466	140	38	23
23	32	25	22	17	22	23	20	402	518	121	38	23
24	31	26	22	17	22	22	22	395	554	111	37	29
25	28	27	21	17	21	22	22	406	566	105	35	32
26	30	26	22	17	21	21	23	362	610	94	33	34
27	32	26	23	17	21	20	26	290	630	87	33	30
28	30	26	23	17	21	19	29	270	595	85	33	33
29	24	27	22	16	-----	19	32	275	570	80	32	33
30	22	26	21	16	-----	19	33	280	522	99	30	32
31	22	-----	21	15	-----	19	-----	344	-----	77	30	-----
TOTAL	920	827	683	575	488	653	632	6,941	17,303	5,941	1,659	933
MEAN	29.7	27.6	22.0	18.5	17.4	21.1	21.1	211	577	192	53.5	31.1
MAX	40	32	27	21	22	24	33	446	825	462	127	44
MIN	22	23	20	15	13	19	18	32	359	77	30	22
AC-FT	1,820	1,640	1,350	1,140	968	1,300	1,250	12,970	34,320	11,780	3,290	1,850

CAL YR 1972 TOTAL 32,830 MEAN 89.7 MAX 800 MIN 15 AC-FT 65,120
WTR YR 1973 TOTAL 37,155 MEAN 102 MAX 825 MIN 13 AC-FT 73,700

PEAK DISCHARGE (BASE, 750 FT³/S)

DATE	TIME	G.H.T	DISCHARGE
6-14	2300	4.47	942

PLATTE RIVER BASIN

06625000 ENCAMPMENT RIVER AT MOUTH, NEAR ENCAMPMENT, WYO.

LOCATION.--Lat 41°18'12", long 106°42'53", in NE¼NW¼ sec.3, T.15 N., R.83 W., Carbon County, on left bank 0.5 mi (0.8 km) upstream from mouth and 8.0 mi (12.9 km) northeast of Encampment.

DRAINAGE AREA.--265 mi² (686 km²).

PERIOD OF RECORD.--April 1940 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 6,970 ft (2,124 m), from topographic map. Prior to June 28, 1961, water-stage recorder at site 660 ft (201 m) upstream at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--33 years, 236 ft³/s (6.684m³/s), 171,000 acre-ft/yr (211 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,400 ft³/s (68.0 m³/s) June 15, gage height, 5.86 ft (1.786 m); minimum daily, 34 ft³/s (0.96 m³/s) Oct. 2, 3.

Period of record: Maximum discharge, 4,510 ft³/s (128 m³/s) June 1, 1943, gage height, 8.25 ft (2.515 m), site and datum then in use; maximum gage height, 8.33 ft (2.539 m) June 4, 1952, site and datum then in use; minimum daily discharge, 5.2 ft³/s (0.15 m³/s) Aug. 15, 16, 1940.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. Five small reservoirs above station for irrigation, total capacity, about 400 acre-ft (0.493 hm³). Slight regulation by Hog Park Creek Reservoir, capacity, about 2,970 acre-ft (3.66 hm³). Diversions for irrigation of about 8,800 acres (35.6 km²) above station. Transbasin diversion above station into Hog Park Creek (tributary to Encampment River) from North Fork Little Snake River for municipal, industrial, and irrigation uses began September 1964. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1710: 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	43	100	125	65	55	50	67	173	1,570	790	130	54
2	34	105	105	65	55	50	63	154	1,820	688	128	69
3	34	100	95	70	60	50	62	147	1,400	590	125	64
4	40	95	85	65	60	45	61	172	1,200	520	169	61
5	43	97	75	60	60	50	63	202	1,170	470	155	59
6	51	100	70	60	55	50	91	244	1,280	415	163	53
7	65	88	80	65	50	50	89	255	1,400	370	169	50
8	76	96	75	65	45	50	73	286	1,530	354	163	49
9	76	97	70	65	40	50	72	362	1,730	294	142	48
10	70	86	65	65	40	50	73	402	1,870	244	125	49
11	66	86	65	60	45	50	83	446	2,000	205	106	61
12	57	81	65	65	45	50	103	495	1,900	187	92	64
13	53	86	70	70	45	50	134	550	1,800	272	86	62
14	57	93	70	70	45	50	181	585	1,820	406	80	55
15	83	84	65	70	45	50	134	658	2,240	272	80	55
16	104	81	65	70	45	55	96	754	1,680	268	80	58
17	79	80	70	70	45	60	131	850	1,310	220	78	53
18	96	76	70	65	50	64	144	994	1,110	196	80	51
19	80	81	70	65	50	61	103	1,250	898	252	78	50
20	84	77	70	60	50	58	92	1,460	790	366	76	50
21	136	81	70	60	45	67	93	1,630	748	392	73	46
22	117	85	75	60	45	63	94	1,530	766	266	71	47
23	95	85	75	60	45	61	115	1,410	814	227	65	45
24	103	90	70	60	50	64	140	1,350	910	202	65	46
25	104	90	70	60	50	60	142	1,280	945	193	68	56
26	98	95	70	65	50	57	139	1,170	1,070	172	63	60
27	104	90	75	60	50	65	145	960	1,100	148	58	63
28	101	110	75	60	50	67	158	900	1,030	128	57	65
29	100	120	70	60	-----	76	199	930	973	130	53	74
30	77	125	70	60	-----	66	191	1,000	886	140	55	72
31	90	-----	65	60	-----	61	-----	1,230	-----	132	52	-----
TOTAL	2,416	2,760	2,310	1,975	1,370	1,750	3,331	23,829	39,760	9,509	2,985	1,689
MEAN	77.9	92.0	74.5	63.7	48.9	56.5	111	769	1,325	307	96.3	56.3
MAX	136	125	125	70	60	76	199	1,630	2,240	790	169	74
MIN	34	76	65	60	40	45	61	147	748	128	52	45
AC-FT	4,790	5,470	4,580	3,920	2,720	3,470	6,610	47,260	78,860	18,860	5,920	3,350

CAL YR 1972 TOTAL 80,337 MEAN 220 MAX 2,290 MIN 27 AC-FT 159,300
WTR YR 1973 TOTAL 93,684 MEAN 257 MAX 2,240 MIN 34 AC-FT 185,800

PEAK DISCHARGE (BASE, 1,700 FT³/S)

NOTE.--No gage-height record May 24 to June 13.

DATE	TIME	G.HT.	DISCHARGE
5-21	2230	5.01	1,710
6-2	unknown	unknown	al,900
6-15	0600	5.86	2,400
a	About		

PLATTE RIVER BASIN

111

06628800 SAGE CREEK NEAR SARATOGA, WYO.

LOCATION.--Lat 41°34'53", long 106°59'17", in SE¼NE¼NW¼ sec.32, T.19 N., R.85 W., Carbon County, on right bank 300 ft (91 m) upstream from private farm bridge, 1.1 mi (1.8 km) downstream from Little Sage Creek, 3.6 mi (5.8 km) upstream from mouth, and 13 mi (21 km) northwest of Saratoga.

DRAINAGE AREA.--263 mi² (681 km²).

PERIOD OF RECORD.--May to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 6,650 ft (2,027 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 355 ft³/s (10.1 m³/s) May 22, gage height, 9.25 ft (2.819 m); minimum daily, 2.9 ft³/s (0.082 m³/s) Sept. 30.

Flood of June 5, 1972, reached a discharge of 1,800 ft³/s (51.0 m³/s), gage height, 11.71 ft (3.569 m) from floodmarks, by slope-area measurement of peak flow.

REMARKS.--Records fair. Several small reservoirs above station, total capacity, about 3,000 acre-ft (3.70 km³). Diversions for irrigation of about 1,560 acres (6.31 km²) above station. Water-quality records for the current year 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								160	105	32	13	5.4
2								104	121	27	10	165
3								109	138	26	15	18
4								188	113	23	83	7.8
5								186	99	22	150	6.4
6								186	89	22	80	6.2
7								190	85	18	31	5.8
8								216	83	17	14	5.6
9								261	78	18	9.4	5.3
10								284	80	18	7.6	5.1
11								296	80	16	6.3	5.5
12								292	77	15	6.2	5.4
13								241	73	33	5.8	5.2
14								225	71	37	5.4	4.5
15								222	73	33	5.0	4.1
16								216	77	23	4.8	4.2
17								219	73	19	4.8	4.1
18								223	64	16	4.9	4.1
19								238	59	41	4.7	3.9
20								278	55	97	4.6	3.5
21								298	52	63	4.5	3.4
22								301	49	31	4.4	3.5
23								236	45	23	4.5	3.6
24								194	41	19	4.5	3.7
25								201	40	16	4.2	3.4
26								224	36	16	3.9	3.6
27								196	35	14	4.2	3.1
28								142	36	13	3.8	3.1
29					-----			122	34	20	3.9	3.1
30					-----			117	33	20	3.6	2.9
31	-----				-----		-----	109	-----	13	3.7	-----
TOTAL								6,474	2,094	801	510.7	308.5
MEAN								209	69.8	25.8	16.5	10.3
MAX								301	138	97	150	165
MIN								104	33	13	3.6	2.9
AC-FT								12,840	4,150	1,590	1,010	612

PLATTE RIVER BASIN

06628900 PASS CREEK NEAR ELK MOUNTAIN, WYO.

LOCATION.--Lat 41°35'10", long 106°36'37", in SW¼SW¼ sec.27, T.19 N., R.82 W., Carbon County, on right bank 235 ft (72 m) downstream from Lone Tree Creek, 1,000 ft (305 m) upstream from Brush Creek, 12 mi (19 km) southwest of Elk Mountain, and 14 mi (23 km) northeast of Saratoga.

DRAINAGE AREA.--91.5 mi² (237.0 km²). Area at mouth, 279 mi² (723 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 7,230 ft (2,204 m), from topographic map. Prior to Oct. 6, 1966, 15 ft (5 m) downstream at present datum.

AVERAGE DISCHARGE.--16 years, 39.5 ft³/s (1.119m³/s), 28,620 acre-ft/yr (35.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,180 ft³/s (33.4 m³/s) May 9, gage height, 6.27 ft (1.911 m); minimum daily, 7.0 ft³/s (0.20 m³/s) Dec. 12, Feb. 21, 22.

Period of record: Maximum discharge, 1,180 ft³/s (33.4 m³/s) May 9, 1973, gage height, 6.27 ft (1.911 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Sept. 11, 12, 1959.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 6,300 acres (25.5 km²) above station. Diversion to Kerr ditch 7.5 mi (12.1 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	10	11	12	8.5	10	10	14	204	322	62	33	23
2	10	13	13	8.5	10	10	13	190	464	51	33	44
3	10	15	13	9.5	11	9.5	12	188	382	42	31	31
4	9.5	17	11	9.0	11	9.0	13	248	279	42	51	26
5	20	17	9.5	8.5	11	9.0	13	356	224	40	53	19
6	19	19	8.5	8.5	11	9.0	12	439	248	31	56	16
7	14	20	9.0	8.5	10	9.0	12	439	283	27	44	15
8	15	16	9.0	8.5	9.0	9.0	14	511	325	32	36	14
9	15	16	8.5	8.5	7.5	9.0	16	751	342	35	32	15
10	12	17	8.0	8.5	8.0	9.0	17	688	331	38	30	15
11	12	17	7.5	8.5	8.5	9.5	15	635	298	32	28	41
12	11	16	7.0	9.5	8.5	9.5	16	570	264	33	27	43
13	10	15	8.0	10	8.0	9.5	16	504	246	120	26	26
14	12	15	8.5	11	7.5	10	18	470	258	97	26	19
15	20	14	8.5	12	7.5	10	19	468	289	65	26	20
16	23	14	9.0	12	7.5	11	20	490	242	50	26	23
17	17	14	10	12	8.0	11	27	509	168	37	28	20
18	17	14	11	12	8.5	12	32	575	156	42	31	18
19	15	13	11	12	9.0	13	28	690	113	125	26	17
20	14	13	12	12	8.5	14	27	733	97	206	24	17
21	33	13	12	11	7.0	15	30	808	86	174	25	15
22	28	12	12	10	7.0	15	28	511	77	79	30	15
23	23	12	12	10	7.5	15	30	455	75	71	28	16
24	21	12	11	10	8.0	14	35	509	70	56	26	16
25	17	11	10	11	9.0	14	45	464	71	55	23	18
26	20	11	11	11	10	14	60	488	67	44	22	22
27	22	11	11	11	10	14	75	321	83	38	20	22
28	17	10	11	10	10	15	117	252	81	36	23	20
29	14	10	10	11	-----	13	184	254	104	34	22	22
30	10	11	9.5	12	-----	12	234	238	86	37	21	21
31	10	-----	9.0	12	-----	13	-----	234	-----	34	20	-----
TOTAL	508.5	419	312.5	316.5	248.5	356.0	1,192	14,242	6,131	1,865	927	649
MEAN	16.4	14.0	10.1	10.2	8.88	11.5	39.7	459	204	60.2	29.9	21.6
MAX	33	20	13	12	11	15	234	808	464	206	56	44
MIN	9.5	10	7.0	8.5	7.0	9.0	12	188	67	27	20	14
AC-FT	1,010	831	620	623	493	706	2,360	28,250	12,160	3,700	1,840	1,290
CAL YR 1972	TOTAL 12,358.7	MEAN 33.8	MAX 270	MIN 5.9	AC-FT 24,510							
WTR YR 1973	TOTAL 27,187.0	MEAN 74.4	MAX 808	MIN 7.0	AC-FT 53,890							

PEAK DISCHARGE (BASE, 300 FT³/S)

DATE	TIME	G.HT	DISCHARGE	DATE	TIME	G.HT	DISCHARGE
5- 9	2300	6.27	1,180	6- 2	1400	4.14	560
5-21	0100	6.24	1,170	6- 9	0430	3.48	409

PLATTE RIVER BASIN

113

06630000 NORTH PLATTE RIVER ABOVE SEMINOE RESERVOIR, NEAR SINCLAIR, WYO.

LOCATION.--Lat 41°52'20", long 107°03'25", in SW¼SW¼ sec. 13, T.22 N., R.86 W., Carbon County, on left bank 6.5 mi (10.5 km) northeast of Sinclair and 14 mi (22.5 km) upstream from high-water line of Seminole Reservoir at elevation 6,357 ft (1,938 m).

DRAINAGE AREA.--8,134 mi² (21,067 km²), of which 4,073 mi² (10,549 km²), including 3,959 mi² (10,254 km²) in Great Divide Basin in southern Wyoming, is probably noncontributing.

PERIOD OF RECORD.--July 1939 to current year. Prior to October 1943, published as "near Parco."

GAGE.--Water-stage recorder. Datum of gage is 6,400.75 ft (1,950.949m) above mean sea level.

AVERAGE DISCHARGE.--34 years, 1,098 ft³/s (31.10m³/s), 795,500 acre-ft/yr (981 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,400 ft³/s (295 m³/s) June 16, gage height, 8.28 ft (2.524 m); minimum daily, 264 ft³/s (7.48 m³/s) Oct. 4.

Period of record: Maximum discharge, 14,500 ft³/s (411 m³/s) June 15, 1957, gage height, 9.72 ft (2.963 m); minimum daily, 70 ft³/s (1.98 m³/s) Sept. 17, 1944.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 215,000 acres (870 km²) above station. Transbasin diversions above station. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Nine discharge measurements furnished by Bureau of Reclamation.

REVISIONS.--WSP 1918: 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	282	440	440	320	340	420	600	5,090	4,290	3,790	1,270	312
2	232	460	480	320	320	420	640	5,650	4,870	3,450	1,240	409
3	276	540	480	350	340	400	680	3,850	6,090	3,020	1,130	486
4	264	660	420	320	360	370	750	3,100	5,690	2,620	1,160	430
5	306	700	360	300	380	380	850	3,160	5,070	2,370	1,440	402
6	312	705	340	300	380	380	900	3,770	4,510	2,120	1,430	381
7	330	700	390	300	360	380	950	4,410	4,130	1,920	1,330	360
8	342	620	360	300	340	380	850	4,690	4,290	1,780	1,200	336
9	388	628	340	300	310	380	720	4,730	4,990	1,800	1,110	324
10	395	660	310	300	330	400	750	4,930	6,190	1,750	1,000	342
11	388	596	290	300	360	440	800	5,170	6,950	1,610	894	409
12	381	556	270	330	370	500	900	5,210	7,570	1,490	822	479
13	360	520	300	360	370	540	1,120	5,490	7,650	1,510	777	493
14	348	500	340	380	350	500	1,610	5,570	7,590	1,800	714	479
15	367	480	320	400	330	480	2,140	5,330	8,880	2,740	652	444
16	458	480	340	420	320	460	1,760	5,330	10,200	2,860	604	409
17	451	480	360	420	320	480	1,530	5,470	9,080	2,500	572	395
18	430	480	390	400	340	550	1,800	5,710	7,630	2,180	564	374
19	493	460	390	420	370	580	2,010	5,230	5,950	2,040	564	354
20	532	460	410	400	360	600	1,750	7,090	4,730	2,760	556	336
21	732	460	410	380	330	620	1,560	7,830	3,990	3,360	524	318
22	921	440	410	340	310	520	1,560	8,720	3,440	3,260	500	312
23	849	440	400	340	310	620	1,530	8,600	3,300	3,000	493	300
24	759	440	390	360	350	600	1,870	8,410	3,320	2,420	479	294
25	705	420	370	380	320	600	2,240	8,150	3,400	1,990	465	294
26	652	420	400	390	420	600	2,540	8,130	3,750	1,800	444	312
27	612	420	400	370	420	600	2,730	7,530	4,050	1,620	423	336
28	604	400	400	340	420	600	2,830	6,390	4,070	1,440	402	360
29	612	380	380	370	-----	600	3,740	5,330	4,070	1,390	395	388
30	580	400	360	390	-----	600	5,590	4,470	4,010	1,370	367	423
31	480	-----	340	370	-----	550	-----	4,010	-----	1,330	342	-----
TOTAL	14,891	15,345	11,590	10,970	9,900	15,650	49,590	178,570	163,850	69,090	23,863	11,291
MEAN	480	512	374	354	354	505	1,653	5,760	5,462	2,229	770	376
MAX	921	705	480	420	420	620	5,690	8,720	10,200	3,790	1,440	493
MIN	264	380	270	300	310	370	600	3,100	3,300	1,330	342	294
AC-FT	29,540	30,440	22,990	21,760	19,640	31,040	98,360	354,200	325,000	137,000	47,330	22,400

CAL YR 1972 TOTAL 347,873 MEAN 950 MAX 8,520 MIN 175 AC-FT 690,000
 WTR YR 1973 TOTAL 574,600 MEAN 1,574 MAX 10,200 MIN 264 AC-FT 1,140,000

PLATTE RIVER BASIN

06630440 MEDICINE BOW RIVER AT BOW RANGER STATION, NEAR ELK MOUNTAIN, WYO.

LOCATION.--Lat 41°31'12", long 106°22'56", in SE¼SE¼NE¼ sec.21, T.18 N., R.80 W., Carbon County, Medicine Bow National Forest, on right bank 0.5 mi (0.8 km) southeast of Bow ranger station, 4.0 mi (6.4 km) upstream from East Fork Medicine Bow River, and 11.5 mi (18.5 km) south of Elk Mountain.

DRAINAGE AREA.--28.7 mi² (74.3 km²).

PERIOD OF RECORD.--October 1972 to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 8,410 ft (2,563 m), from topographic map.

EXTREMES.--Current year: Maximum discharge 776 ft³/s (22.0 m³/s) June 25; gage height, 2.88 ft (0.878 m); minimum daily, 5.8 ft³/s (0.16 m³/s) Feb. 9.

REMARKS.--Records poor. 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	18	16	10	7.5	6.0	7.3	7.1	8.9	151	366	49	15
2	17	17	10	7.6	6.1	7.5	7.1	9.0	178	338	43	20
3	17	17	5.6	7.4	6.2	7.3	7.1	9.0	145	289	38	18
4	16	18	9.0	7.2	6.4	7.4	7.1	9.9	117	278	61	16
5	20	16	8.4	7.0	6.5	7.6	7.3	10	117	272	68	15
6	23	16	8.0	6.9	6.6	7.6	7.4	10	151	254	66	14
7	17	17	8.0	7.0	6.4	7.6	7.6	11	216	240	48	14
8	21	16	6.2	7.0	6.1	7.5	7.6	12	322	247	40	13
9	18	17	8.0	7.0	5.8	7.3	7.6	13	418	202	32	13
10	17	15	7.7	7.0	6.0	7.3	7.3	14	520	169	30	12
11	17	14	7.6	7.1	6.4	7.3	7.3	15	536	145	28	23
12	14	14	7.5	7.2	6.6	7.3	7.3	17	525	129	26	26
13	14	13	7.5	7.3	6.6	7.3	7.3	19	525	140	24	19
14	14	12	7.4	7.4	6.5	7.3	7.8	22	525	151	23	16
15	33	12	7.4	7.5	6.4	7.4	8.0	26	480	108	21	16
16	30	12	7.4	7.4	6.3	7.4	7.8	31	366	88	21	16
17	24	12	7.5	7.2	6.4	7.3	7.8	49	292	76	22	15
18	26	12	7.6	7.1	6.5	7.6	8.0	71	278	71	25	14
19	24	11	7.6	6.9	6.6	7.6	9.6	112	230	135	21	13
20	22	11	7.7	6.8	6.5	7.7	12	160	208	196	19	12
21	26	11	7.6	6.6	6.4	7.6	12	199	272	169	19	11
22	28	10	6.0	6.5	6.5	7.8	11	187	354	112	21	11
23	24	10	8.1	6.5	6.7	7.6	9.4	193	414	92	21	11
24	22	10	6.3	6.6	7.0	7.6	8.6	190	460	74	19	12
25	20	10	8.4	6.5	7.3	7.6	8.3	145	513	66	18	12
26	19	10	8.4	6.6	7.3	7.8	8.0	132	500	56	17	14
27	20	11	6.4	6.6	7.3	7.3	8.3	96	450	49	16	14
28	18	10	8.2	6.5	7.3	7.3	9.0	62	382	45	16	15
29	17	10	8.0	6.4	-----	7.1	9.2	80	374	64	15	15
30	16	10	7.9	6.2	-----	7.1	9.6	36	358	98	15	17
31	16	-----	7.5	6.1	-----	7.1	-----	119	-----	62	14	-----
TOTAL	630	574	251.1	214.7	182.7	230.5	249.5	2,137.6	10,417	4,781	896	452
MEAN	20.3	18.1	8.10	6.93	6.53	7.44	6.32	69.0	347	154	28.9	15.1
MAX	33	18	10	7.6	7.3	7.8	12	199	536	366	68	26
MIN	14	10	7.4	6.1	5.8	7.1	7.1	8.9	117	45	14	11
AC-FT	1,250	761	456	426	362	457	495	4,240	20,660	9,480	1,780	897

WTR YR 1973 TOTAL 20,836.3 MEAN 57.1 MAX 536 MIN 5.8 AC-FT 41,330

PLATTE RIVER BASIN

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06630480 EAST FORK MEDICINE BOW RIVER NEAR ELK MOUNTAIN, WYO.

LOCATION.--Lat 41°32'55", long 106°23'46", in SE¼SW¼NW¼ sec.9, T.18 N., R.80 W., Carbon County, on right bank 15 ft (5 m) downstream from abandoned bridge, 0.2 mi (0.3 km) downstream from county road, 0.7 mi (1.1 km) upstream from mouth, 1.7 mi (2.7 km) north of Bow ranger station, and 9.5 mi (15.3 km) south of Elk Mountain.

DRAINAGE AREA.--44.5 mi² (115.3 km²).

PERIOD OF RECORD.--October 1972 to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 8,020 ft (2,444 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 385 ft³/s (10.9 m³/s) June 9, gage height, 3.09 ft (0.942 m); minimum daily, 2.8 ft³/s (0.079 m³/s) Oct. 4, Feb. 8.

REMARKS.--Records poor. 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	3.2	3.9	3.4	3.5	2.9	3.3	3.9	4.8	157	42	6.9	3.3
2	3.1	3.8	3.4	3.2	3.0	3.2	3.9	4.8	180	34	5.4	3.9
3	2.9	3.7	3.8	3.3	3.0	3.2	4.0	4.9	130	29	6.8	3.7
4	2.8	3.7	3.5	3.2	3.0	3.2	4.0	5.5	96	27	8.6	3.4
5	3.7	3.7	3.2	3.1	3.1	3.3	4.1	8.1	96	23	9.4	3.2
6	4.4	3.9	3.8	3.0	3.1	3.3	4.1	6.7	130	20	9.0	3.1
7	3.7	3.3	3.9	3.0	3.0	3.3	4.0	7.5	172	19	8.6	3.1
8	3.4	3.7	3.7	3.0	2.8	3.4	3.9	8.4	217	19	5.0	3.1
9	3.4	3.7	3.6	3.1	3.3	3.3	3.9	9.6	244	18	4.5	3.0
10	3.4	3.6	3.4	3.1	3.3	3.2	3.8	11	238	15	4.3	3.0
11	3.6	3.5	3.3	3.1	3.1	3.2	3.7	12	217	13	4.2	5.0
12	3.2	3.4	3.3	3.1	3.2	3.2	3.8	15	214	13	4.1	6.0
13	2.9	3.3	3.3	3.2	3.2	3.2	4.1	18	169	16	3.9	4.5
14	2.9	3.3	3.4	3.2	3.1	3.3	4.4	22	164	20	3.8	3.7
15	5.4	3.4	3.4	3.3	3.2	3.2	4.5	28	164	16	3.7	3.6
16	5.2	3.4	3.4	3.2	3.2	3.2	4.5	38	114	13	3.7	3.6
17	4.4	3.4	3.4	3.2	3.3	3.3	4.5	49	103	12	3.7	3.7
18	4.8	3.4	3.4	3.1	3.2	3.4	4.5	74	87	12	3.8	3.7
19	4.1	3.3	3.4	3.1	3.3	3.7	5.2	120	59	19	3.8	3.6
20	3.7	3.2	3.4	3.0	3.4	4.0	5.8	155	56	27	3.4	3.4
21	5.2	3.3	3.4	2.9	3.3	4.1	5.1	159	59	20	3.4	3.2
22	5.2	3.3	3.4	2.9	3.2	4.1	4.5	174	54	13	3.4	3.2
23	4.6	3.3	3.5	2.9	3.2	4.0	4.1	177	61	12	3.4	3.3
24	4.6	3.2	3.6	2.9	3.3	4.0	4.2	152	65	10	3.6	3.2
25	4.5	3.1	3.7	2.9	3.3	4.0	4.1	146	65	9.9	3.6	3.3
26	4.6	3.2	3.8	2.9	3.3	4.0	3.8	137	70	8.0	3.6	3.9
27	4.8	3.4	3.8	2.9	3.3	4.0	4.4	91	61	7.2	3.0	4.1
28	4.5	3.4	3.6	2.9	3.2	4.0	5.2	75	53	7.6	3.0	4.1
29	4.1	3.4	4.1	2.9	-----	4.0	5.6	82	57	9.8	3.0	4.4
30	3.7	3.4	3.8	2.9	-----	3.9	5.0	86	50	13	3.0	4.2
31	3.6	-----	3.5	2.9	-----	3.9	-----	135	-----	9.0	3.0	-----
TOTAL	124.0	104.1	109.3	94.7	88.8	110.4	130.6	2,014.3	3,602	526.5	142.6	110.5
MEAN	4.00	3.47	3.53	3.05	3.17	3.56	4.35	65.0	120	17.0	4.60	3.68
MAX	5.4	3.9	4.1	3.3	3.4	4.1	5.8	177	244	42	9.4	6.0
MIN	2.8	3.1	3.3	2.9	2.8	3.2	3.7	4.8	50	7.2	3.0	3.0
AC-FT	245	209	217	188	176	219	259	4,000	7,140	1,040	283	219
WTR YR 1973 TOTAL 7,157.8 MEAN 19.6 MAX 244 MIN 2.8 AC-FT 14,200												

NOTE.--No gage-height record Dec. 30 to Jan. 31.

PLATTE RIVER BASIN

06632400 ROCK CREEK ABOVE KING CANYON CANAL, NEAR ARLINGTON, WYO.

LOCATION.--Lat 41°35'07", long 106°13'20", in SE¼SW¼ sec.25, T.19 N., R.79 W., Carbon County, on left bank 200 ft (61 m) upstream from point of diversion to King Canyon Canal, 0.4 mi (0.6 km) downstream from Overland Creek, 1.0 mi (1.6 km) southwest of Arlington, and 6.9 mi (11.1 km) southwest of McFadden.

DRAINAGE AREA.--62.9 mi² (162.9 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 7,790 ft (2,374 m), from topographic map.

AVERAGE DISCHARGE.--19 years (1954-73), 80.9 ft³/s (2.291m³/s), 58,610 acre-ft/yr (72.3 hm³/yr), includes records for station 06632500 Rock Creek at Arlington 1954-65, adjusted for diversion by King Canyon Canal.

EXTREMES.--Current year: Maximum discharge, 2,240 ft³/s (63.4 m³/s) June 12, gage height, 5.20 ft (1.585 m); minimum daily, 7.4 ft³/s (0.21 m³/s) Feb. 1.

Period of record: Maximum discharge, 2,590 ft³/s (73.3 m³/s) June 19, 1971, gage height, 5.83 ft (1.777 m); minimum daily, 5.5 ft³/s (0.16 m³/s) Dec. 21, 1967.

REMARKS.--Records good except those for winter period, which are poor. Minor regulation by Sand Lake, capacity, 1,100 acre-ft (1.36 hm³) on Deep Creek, 12 mi (19 km) upstream. 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	16	20	28	12	7.4	8.6	10	24	426	475	55	22
2	16	26	24	12	8.2	8.5	11	21	475	377	52	29
3	15	25	23	13	9.0	8.6	11	20	377	310	50	26
4	14	24	22	11	10	8.6	11	26	306	268	62	23
5	30	23	22	10	12	9.4	11	31	322	237	84	22
6	32	22	22	12	12	11	11	32	475	216	70	27
7	23	22	22	12	12	10	11	32	643	195	56	51
8	26	22	22	13	11	10	11	38	936	201	47	50
9	23	22	22	12	11	9.9	12	48	1,230	160	44	48
10	21	22	22	11	10	9.9	12	50	1,350	134	40	47
11	20	22	22	10	9.4	9.9	12	52	1,280	117	38	77
12	17	20	19	10	9.4	9.9	12	60	1,340	119	37	63
13	16	20	19	9.4	9.9	9.9	13	69	1,250	162	35	54
14	16	21	17	9.0	9.4	9.5	16	77	1,140	165	32	48
15	39	22	15	8.3	9.4	9.0	18	85	885	117	32	47
16	34	22	16	8.3	9.0	9.0	18	100	590	96	32	46
17	29	22	17	8.3	9.0	10	17	124	500	87	33	48
18	29	22	17	8.3	9.0	12	18	165	440	82	36	54
19	25	22	17	8.3	9.0	11	18	264	310	172	32	51
20	25	22	17	8.0	8.6	11	17	399	292	189	29	48
21	31	22	16	7.8	8.6	11	16	435	350	141	29	46
22	30	23	15	7.6	9.4	11	16	465	436	105	30	38
23	26	24	15	7.6	9.9	11	16	475	540	94	29	33
24	26	24	16	8.0	9.9	10	17	465	607	82	28	28
25	20	24	17	9.0	9.0	11	17	408	679	80	27	30
26	23	26	19	8.6	8.6	11	15	368	836	69	26	28
27	23	25	20	8.6	8.6	10	16	261	728	64	25	25
28	21	23	18	8.4	8.6	10	22	225	625	60	25	32
29	20	23	15	8.8	-----	10	26	204	584	64	23	31
30	18	27	14	8.8	-----	11	26	195	540	75	22	28
31	16	-----	13	8.4	-----	10	-----	292	-----	60	22	-----
TOTAL	722	684	583	297.5	267.3	311.8	457	5,543	20,492	4,773	1,182	1,200
MEAN	23.3	22.8	18.8	9.60	9.55	10.1	15.2	179	683	154	38.1	40.0
MAX	39	27	28	13	12	12	26	495	1,350	475	84	77
MIN	14	20	13	7.6	7.4	8.6	10	20	292	60	22	22
AC-FT	1,430	1,360	1,160	590	530	613	906	10,990	40,654	9,470	2,340	2,380
CAL YR 1972	TOTAL 30,394.5	MEAN 83.0	MAX 1,110	MIN 8.0	AC-FT 60,290							
WTR YR 1973	TOTAL 36,512.6	MEAN 100	MAX 1,350	MIN 7.4	AC-FT 72,420							

PEAK DISCHARGE (BASE, 700 FT³/S)

DATE	TIME	G.HT	DISCHARGE
6-12	2130	5.20	2,240
6-26	2030	4.17	1,140

PLATTE RIVER BASIN

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06635000 MEDICINE BOW RIVER ABOVE SEMINOLE RESERVOIR, NEAR HANNA, WYO.

LOCATION.--Lat 42°00'35", long 106°30'45", in SE¼NW¼ sec.34, T.24 N., R.81 W., Carbon County, on left bank 15 ft (5 m) downstream from county highway bridge, 2.0 mi (3.2 km) upstream from Troublesome Creek, 9.0 mi (14.5 km) upstream from high-water line of Seminole Reservoir at elevation 6,357 ft (1,938 m), and 10 mi (16 km) north of Hanna.

DRAINAGE AREA.--2,338 mi² (6,055 km²), of which 396 mi² (1,026 km²) is probably noncontributing.

PERIOD OF RECORD.--July 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,415.40 ft (1,955.414 m) above mean sea level.

AVERAGE DISCHARGE.--34 years, 175 ft³/s (4.956m³/s), 126,800 acre-ft/yr (156 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,010 ft³/s (170 m³/s) May 12, gage height, 6.74 ft (2.054 m); minimum daily, 24 ft³/s (0.68 m³/s) Dec. 10.

Period of record: Maximum discharge, 6,590 ft³/s (187 m³/s) Mar. 29, 1943, gage height, 5.23 ft (1.594 m), from rating curve extended above 2,500 ft³/s (70.8 m³/s); maximum gage height, 6.74 ft (2.054 m) May 12, 1973; minimum daily discharge, 1.1 ft³/s (0.031m³/s) Sept. 7-14, 1959, Aug. 7, 1963.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. Many small reservoirs above station, total capacity, about 6,000 acre-ft (7.40 hm³), for irrigation. Diversions for irrigation of about 43,000 acres (174 km²) above station. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Nine discharge measurements furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 956: 1941(M). WSP 1440: 1940(M), 1941. WSP 1710: 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	36	76	39	26	31	54	140	3,830	1,340	896	358	55
2	35	88	40	26	33	60	165	3,390	1,320	768	270	103
3	36	100	39	28	35	60	170	2,820	1,380	624	231	64
4	37	118	33	27	38	58	130	2,170	1,500	502	213	67
5	67	130	30	26	37	60	210	2,320	1,420	412	200	69
6	53	130	27	27	36	64	224	3,220	1,200	335	191	71
7	55	124	30	28	35	64	220	3,500	1,070	285	191	67
8	56	140	29	28	32	64	222	4,690	1,050	240	187	64
9	64	159	27	28	30	66	230	5,080	1,070	204	167	181
10	64	144	24	29	34	66	260	5,200	1,140	200	138	360
11	62	144	26	28	39	70	300	5,330	1,290	204	124	1,090
12	60	124	27	28	39	76	448	4,820	1,420	195	114	1,270
13	64	76	28	29	38	74	696	3,410	1,710	245	103	1,000
14	64	72	28	29	37	78	1,000	2,800	1,890	346	95	544
15	64	70	27	29	37	76	1,530	2,540	1,990	467	87	346
16	62	68	28	29	37	76	1,880	2,410	2,060	388	83	240
17	67	70	29	30	39	80	1,600	2,570	2,070	346	78	183
18	78	66	24	29	42	90	1,660	2,410	2,050	285	71	152
19	87	62	28	30	44	86	1,690	2,460	1,640	325	67	134
20	80	60	29	29	44	90	1,110	2,590	1,340	537	65	117
21	152	50	29	27	43	100	593	2,740	936	728	74	112
22	167	54	28	28	41	110	523	3,060	690	848	71	103
23	187	50	24	28	45	110	523	2,940	551	816	67	95
24	155	46	23	29	50	120	565	2,920	509	728	64	87
25	144	41	23	31	54	130	800	2,750	537	600	60	83
26	127	43	29	33	52	140	1,040	2,660	608	436	58	80
27	114	40	30	31	52	150	1,140	2,570	672	388	58	80
28	114	37	29	29	54	145	1,360	2,400	951	330	55	80
29	103	33	25	31	-----	145	2,280	1,980	696	275	51	83
30	74	39	27	33	-----	150	3,490	1,740	904	240	50	85
31	70	-----	26	32	-----	160	-----	1,500	-----	236	48	-----
TOTAL	2,598	2,467	908	895	1,120	2,872	26,695	64,840	37,210	13,429	3,689	7,065
MEAN	83.8	82.2	29.3	28.9	40.3	92.6	890	3,059	1,240	433	119	236
MAX	187	159	40	33	54	160	3,400	5,330	2,070	896	358	1,270
MIN	35	37	24	26	30	54	160	1,500	509	195	48	55
AC-FT	5,150	4,890	1,800	1,780	2,240	5,700	52,990	188,100	73,810	26,640	7,320	14,010
CAL YR 1972	TOTAL	57,017	MEAN	156	MAX	1,410	MIN	20	AC-FT	113,100		
WTR YR 1973	TOTAL	193,754	MEAN	531	MAX	5,330	MIN	24	AC-FT	384,400		

NOTE.--No gage-height record Dec. 25 to Mar. 26.

06635500 SEMINOE RESERVOIR NEAR LEO, WYO.

LOCATION.--Lat 42°09'21", long 106°54'29", in NW¼NE¼ sec.8, T.25 N., R.84 W., Carbon County, on upstream side near center of dam on North Platte River, 6.0 mi (9.7 km) upstream from high-water line of Pathfinder Reservoir at elevation 5,850.1 ft (1,783.1 m), and 9.0 mi (14.5 km) southwest of Leo.

DRAINAGE AREA.--11,189 mi² (28,980 km²), of which 4,548 mi² (11,779 km²), including 3,959 mi² (10,254 km²) in Great Divide Basin in southern Wyoming, is probably noncontributing.

PERIOD OF RECORD.--February 1939 to current year. Monthend figures only for February, March 1939, October 1940 to September 1950, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 6,190.00 ft (1,886.712m) above mean sea level (levels by Bureau of Reclamation); gage readings have been reduced to elevations above mean sea level. Prior to Apr. 20, 1939, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum daily contents, 999,700 acre-ft (1,230 hm³) July 22, 23, elevation, 6,356.44 ft (1,937.443 m); minimum daily, 489,800 acre-ft (604 hm³) Mar. 20, elevation, 6,323.23 ft (1,927.321 m).

Period of record: Maximum daily contents, 1,073,000 acre-ft (1,320 hm³) June 20, 1949, elevation, 6,359.29 ft (1,938.312 m); minimum daily (since appreciable storage was attained), 19,040 acre-ft (23.5 hm³) Sept. 1, 1939, elevation, 6,228.00 ft (1,898.294 m).

REMARKS.--Reservoir is formed by concrete-arch dam. Storage began Apr. 1, 1939, but some regulation for power development during period Jan. 1 to Mar. 31, 1939. Capacity, 1,011,000 acre-ft (1,250 hm³) below elevation 6,357 ft (1,937.6 m), top of spillway gates. Figures given herein represent total contents, of which 30,100 acre-ft (37.1 hm³), capacity below elevation 6,239 ft (1,901.6 m), minimum operating level for power development, are not available for power development and 325 acre-ft (0.400 hm³), below elevation 6,185.09 ft (1,885.215 m), penstock invert, is dead storage. Water is used for irrigation and power development.

COOPERATION.--Records furnished by Bureau of Reclamation.

REVISIONS.--WSP 1918: Drainage area.

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

6,323	487,200	6,350	877,900
6,330	572,200	6,357	1,011,000
6,340	712,300		

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	880,600	826,100	762,800	649,300	569,200	511,000	491,800	640,900	947,500	978,800	984,900	954,400
2	877,500	823,600	760,100	644,700	567,400	508,800	491,800	658,100	946,500	979,000	984,500	954,000
3	875,900	821,900	757,400	641,100	565,300	506,900	492,500	670,200	948,100	978,000	984,500	953,200
4	874,100	820,400	754,500	639,400	562,700	504,600	492,700	677,300	948,800	976,200	984,100	952,800
5	871,400	818,300	752,500	636,500	560,500	503,200	493,000	685,400	947,700	973,300	984,900	952,000
6	870,000	817,300	750,200	634,100	558,500	501,600	493,900	694,900	946,000	973,300	984,900	950,500
7	867,200	815,600	748,200	631,200	556,900	500,000	494,800	707,500	942,600	972,700	984,900	947,700
8	865,900	812,900	744,500	628,700	554,700	498,500	495,600	723,100	942,200	973,100	985,000	944,600
9	863,400	812,200	741,200	625,900	552,600	497,600	495,800	738,000	938,600	973,500	984,900	944,300
10	861,100	810,000	737,200	624,000	550,600	495,800	496,400	751,800	938,600	973,700	984,700	943,100
11	859,300	808,700	732,700	621,100	548,200	494,900	497,900	769,300	942,200	973,300	983,900	946,000
12	857,100	806,300	729,200	618,400	545,700	493,900	500,300	785,400	946,000	976,800	983,100	951,500
13	854,800	804,500	726,100	616,100	544,100	493,500	505,000	798,800	950,700	978,000	982,900	953,000
14	852,900	802,300	721,800	614,600	541,900	495,000	510,200	811,500	956,700	979,800	981,700	954,400
15	850,800	800,300	717,900	611,600	539,900	492,000	517,900	823,100	963,800	984,100	980,900	954,400
16	849,000	798,300	713,900	609,000	537,900	491,000	525,300	834,400	972,900	988,600	980,200	954,600
17	846,900	796,000	709,300	607,000	536,200	490,600	530,800	846,600	979,800	989,000	978,400	954,600
18	845,000	794,500	704,800	604,800	533,800	490,000	537,100	859,200	983,100	991,300	977,200	954,600
19	842,500	791,600	700,300	601,800	532,300	490,000	546,100	872,500	984,100	994,500	976,000	954,600
20	842,900	789,200	697,000	599,600	530,400	489,800	551,600	886,900	983,100	996,900	975,300	953,800
21	842,000	787,100	693,400	596,400	528,500	490,200	555,400	905,200	980,500	999,100	974,300	953,800
22	841,700	785,100	688,800	594,300	526,100	490,400	559,300	921,800	978,400	999,700	971,700	953,000
23	841,000	782,800	685,600	592,000	523,800	490,500	562,500	933,100	975,400	999,700	969,600	952,800
24	839,900	780,300	681,000	589,100	521,400	490,800	566,800	940,700	972,500	998,900	966,900	952,800
25	839,100	777,900	676,600	586,500	519,100	491,000	572,600	948,100	969,800	996,900	964,400	952,000
26	837,300	774,800	673,000	583,900	517,100	491,000	579,100	950,900	970,400	995,300	961,500	951,500
27	835,500	772,200	668,100	581,700	514,800	490,300	586,400	953,200	972,300	993,700	959,000	951,500
28	834,100	769,900	664,100	578,900	513,200	490,900	593,100	953,200	975,300	991,500	956,500	951,100
29	831,800	766,700	661,500	576,100	-----	490,900	604,600	954,000	976,800	990,100	955,300	950,500
30	830,500	765,700	657,400	573,700	-----	491,500	621,500	952,600	977,600	988,600	954,600	950,500
31	829,200	-----	653,200	570,900	-----	491,500	-----	949,600	-----	986,600	954,000	-----
MAX	880,600	826,100	762,800	649,300	569,200	511,000	621,500	954,000	954,100	999,700	985,000	954,600
MIN	829,200	765,700	653,200	570,900	513,200	489,800	491,800	640,900	938,600	972,700	954,000	943,100
(†)	6,347.23	6,343.31	6,335.98	6,329.90	6,325.23	6,323.37	6,333.71	6,353.87	6,355.32	6,355.78	6,354.10	6,353.92
(‡)	-53,200	-63,500	-112,500	-82,300	-57,700	-21,700	+130,000	+328,100	+28,000	+9,000	-32,600	-3,500

CAL YR 1972..... -97,500

WTR YR 1973..... +68,100

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.

06637550 SWEETWATER RIVER NEAR SOUTH PASS CITY, WYO.

LOCATION.--Lat 42°22'30", long 108°52'56", in NW¼NW¼ sec.28, T.28 N., R.101 W., Fremont County, on left bank 100 ft (30 m) downstream from small tributary, 0.8 mi (1.3 km) downstream from Fog Gulch, 1.2 mi (1.9 km) downstream from State Highway 28, and 7.6 mi (12.2 km) southwest of South Pass City.

DRAINAGE AREA.--177 mi² (458 km²).

PERIOD OF RECORD.--October 1958 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 7,420 ft (2,260 m), from topographic map.

AVERAGE DISCHARGE.--15 years, 65.4 ft³/s (1.852m³/s), 47,380 acre-ft/yr (58.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 714 ft³/s (20.2 m³/s) June 15, gage height, 6.28 ft (1.914 m); minimum daily, 11 ft³/s (0.31 m³/s) Jan. 7.

Period of record: Maximum discharge, 1,150 ft³/s (32.6 m³/s) June 10, 1965, gage height, 7.53 ft (2.295 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Jan. 3, 1960.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. Water rights totaling 13.39 ft³/s (0.38 m³/s), priorities 1903-12, for irrigation of about 950 acres (3.84 km²), adjudicated for diversion above station. Transbasin diversion by Continental Divide ditch diverts water from Little Sandy Creek in sec.25, T.30 N., R.104 W., to land along Lander Creek (tributary to Sweetwater River above station). The appropriation permits total 22.71 ft³/s (0.64 m³/s), but no discharge records are available.

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	26	26	20	17	16	21	18	78	291	156	68	23
2	25	31	19	16	15	20	17	70	307	118	74	49
3	24	34	18	15	16	19	18	77	267	106	71	56
4	23	36	17	14	17	18	19	91	220	98	63	82
5	30	34	16	13	16	19	20	160	196	94	64	73
6	42	32	15	12	15	20	19	268	221	90	60	58
7	35	30	14	11	14	19	18	323	272	86	55	48
8	34	31	14	12	15	18	17	388	270	83	50	60
9	32	32	15	13	17	19	16	232	359	83	47	113
10	35	30	16	14	19	20	17	270	429	77	44	77
11	57	29	18	15	21	20	19	244	380	72	43	98
12	43	29	19	17	23	19	22	248	335	81	42	133
13	37	28	20	19	23	18	29	252	285	105	39	97
14	36	28	21	21	22	17	40	210	261	106	37	82
15	38	29	22	20	21	16	38	195	503	92	35	76
16	46	28	23	18	21	16	45	210	261	104	34	71
17	39	27	24	16	22	17	62	219	216	84	33	66
18	35	27	25	16	23	18	58	261	192	73	32	61
19	34	28	25	15	23	17	56	375	174	75	31	57
20	40	29	24	15	22	16	55	435	158	106	30	54
21	55	28	25	16	21	15	55	423	156	156	29	54
22	48	26	24	15	20	16	57	323	162	151	29	54
23	48	26	23	15	19	17	61	315	173	128	29	52
24	44	27	22	16	19	16	66	335	164	107	31	53
25	39	28	23	17	20	17	70	345	164	96	27	55
26	36	26	23	16	21	16	64	323	164	86	25	62
27	31	24	22	15	21	16	71	250	165	80	24	59
28	28	22	21	15	22	15	80	228	157	75	30	53
29	26	23	20	16	-----	15	93	215	154	74	26	49
30	23	23	19	17	-----	16	87	203	146	72	23	45
31	24	-----	18	16	-----	17	-----	224	-----	69	22	-----
TOTAL	1,113	851	625	483	544	543	1,307	7,770	7,202	2,963	1,247	1,970
MEAN	35.9	28.4	20.2	15.6	19.4	17.5	43.6	251	240	95.6	40.2	65.7
MAX	57	36	25	21	23	21	93	435	503	156	74	133
MIN	23	22	14	11	14	15	16	70	146	69	22	23
AC-FT	2,210	1,690	1,240	958	1,080	1,080	2,590	15,410	14,290	5,880	2,470	3,910
CAL YR 1972	TOTAL 40,789.5		MEAN 111		MAX 835		MIN 4.5		AC-FT 80,910			
WTR YR 1973	TOTAL 26,618.0		MEAN 72.9		MAX 503		MIN 11		AC-FT 52,800			

PEAK DISCHARGE (BASE, 200 FT³/S)

NOTE.--No gage-height record Dec. 6 to Feb. 15.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5- 8	0700	5.86	565	6-10	1230	5.89	573
5-21	0700	5.52	480	6-15	1130	6.28	714
6- 2	1000	4.92	353				

PLATTE RIVER BASIN

06637750 ROCK CREEK ABOVE ROCK CREEK RESERVOIR, WYO.

LOCATION.--Lat 42°32'59", long 108°46'26", in NW¼NW¼ sec.27, T.30 N., R.100 W., Fremont County, Shoshone National Forest, on left bank 200 ft (61 m) upstream from high-water line of Rock Creek Reservoir, 2.7 mi (4.3 km) downstream from Little Rock Creek, and 4.3 mi (6.9 km) northwest of Atlantic City.

DRAINAGE AREA.--9.2 mi² (23.8 km²), approximately.

PERIOD OF RECORD.--May 1962 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 8,330 ft (2,539 m), from topographic map.

AVERAGE DISCHARGE.--11 years, 9.21 ft³/s (0.261 m³/s), 6,670 acre-ft/yr (8.22 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 96 ft³/s (2.72 m³/s) May 20, gage height, 6.65 ft (2.027 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Feb. 9.

Period of record: Maximum discharge, 214 ft³/s (6.06 m³/s) June 9, 1965, gage height, 7.26 ft (2.213 m); maximum gage height, 8.54 ft (2.603 m) Apr. 22, 1965 (backwater from ice); minimum daily discharge, 0.5 ft³/s (0.014 m³/s) Jan. 12-14, 1963.

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

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

DAY	UCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	2.0	1.8	1.8	1.7	1.6	1.6	2.6	47	9.9	4.9	3.1
2	2.0	2.2	1.8	1.8	1.7	1.6	1.6	2.5	48	9.2	4.6	5.1
3	2.0	2.1	1.8	1.8	1.7	1.6	1.6	2.7	42	8.5	4.3	5.5
4	2.2	2.1	1.8	1.7	1.8	1.6	1.6	3.5	38	8.1	4.2	8.3
5	2.8	2.2	1.8	1.7	1.7	1.6	1.6	4.6	36	7.7	4.1	8.4
6	2.5	2.2	1.8	1.7	1.6	1.6	1.8	6.2	37	7.1	3.8	6.1
7	2.9	2.1	1.6	1.7	1.6	1.6	1.6	6.6	38	6.7	3.6	4.1
8	2.9	2.2	1.8	1.7	1.6	1.6	1.7	7.3	40	6.4	3.2	7.3
9	2.6	2.2	1.8	1.7	1.5	1.6	1.7	8.5	41	6.6	3.1	5.5
10	6.0	2.2	1.7	1.7	1.6	1.6	1.7	9.7	41	6.0	3.1	4.3
11	3.5	2.2	1.7	1.6	1.6	1.6	1.7	13	36	5.5	3.1	19
12	2.6	2.2	1.7	1.7	1.6	1.6	1.9	15	32	7.1	3.1	9.3
13	2.4	2.0	1.7	1.7	1.6	1.6	2.1	17	29	10	2.9	5.9
14	2.4	2.1	1.7	1.7	1.6	1.6	2.3	19	44	8.5	2.8	5.1
15	2.9	2.0	1.7	1.7	1.7	1.6	2.1	23	36	6.7	2.7	5.2
16	2.5	2.0	1.7	1.7	1.6	1.6	2.1	29	29	9.9	2.6	5.1
17	2.3	2.0	1.7	1.7	1.6	1.6	2.0	35	28	7.7	2.5	4.9
18	2.2	1.9	1.7	1.7	1.6	1.6	1.8	44	25	5.9	2.5	4.5
19	2.4	1.8	1.7	1.7	1.6	1.6	1.8	58	23	9.7	2.5	4.3
20	4.8	1.9	1.8	1.7	1.7	1.6	1.8	75	21	19	2.4	4.1
21	3.1	2.0	1.8	1.7	1.6	1.6	1.7	72	20	9.7	2.4	4.2
22	2.9	1.8	1.8	1.7	1.6	1.6	1.9	64	19	8.1	2.5	4.0
23	2.6	1.8	1.8	1.7	1.7	1.6	2.2	63	17	6.7	2.6	4.1
24	2.4	1.8	1.8	1.7	1.7	1.6	2.3	60	16	6.0	2.5	4.1
25	2.5	1.8	1.7	1.7	1.6	1.6	2.0	65	15	6.4	2.2	4.8
26	2.7	1.8	1.7	1.7	1.7	1.6	2.0	53	14	5.9	2.2	6.1
27	2.4	1.9	1.7	1.7	1.7	1.6	2.4	46	13	5.9	2.3	5.5
28	2.1	1.8	1.7	1.7	1.7	1.6	3.1	45	14	6.4	2.5	4.7
29	2.1	1.8	1.7	1.7	-----	1.6	3.0	42	12	7.7	2.2	4.2
30	2.0	1.8	1.7	1.7	-----	1.6	2.8	40	11	5.9	2.2	3.9
31	1.9	-----	1.7	1.7	-----	1.6	-----	44	-----	4.9	2.1	-----
TOTAL	82.6	59.9	54.1	52.9	46.0	49.6	59.5	982.2	862	240.3	91.7	170.7
MEAN	2.66	2.00	1.75	1.71	1.64	1.60	1.98	31.7	28.7	7.75	2.96	5.69
MAX	6.0	2.2	1.8	1.8	1.8	1.6	3.1	75	48	19	4.9	19
MIN	1.9	1.8	1.7	1.6	1.5	1.6	1.6	2.5	11	4.9	2.1	3.1
AC=FT	164	119	107	105	91	98	118	1,950	1,710	477	182	339

CAL YR 1972 TOTAL 4,145.1 MEAN 11.3 MAX 106 MIN 1.7 AC=FT 8,220
WTR YR 1973 TOTAL 2,751.5 MEAN 7.54 MAX 75 MIN 1.5 AC=FT 5,460

PEAK DISCHARGE (BASE, 70 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE
5-20	1900	6.65	96
6-14	1900	6.48	88

PLATTE RIVER BASIN

121

06637900 SLATE CREEK NEAR ATLANTIC CITY, WYO.

LOCATION.--Lat 42°30'57", long 108°44'52", in SE¼NW¼ sec.2, T.29 N., R.100 W., Fremont County, on left bank 600 ft (183 m) upstream from mouth and 1.6 mi (2.6 km) northwest of Atlantic City.

DRAINAGE AREA.--5.92 mi² (15.3 km²).

PERIOD OF RECORD.--March 1957 to June 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 7,880 ft (2,402 m), from topographic map. Prior to Oct. 1, 1963, at datum 1.00 ft (0.305 m) higher.

EXTREMES.--Current year: Maximum discharge, 68 ft³/s (1.93 m³/s) June 14, gage height, 2.60 ft (0.792 m); minimum daily during period of operation, 0.82 ft³/s (0.023 m³/s) Nov. 1.

Period of record: Maximum discharge, 296 ft³/s (8.38 m³/s) June 10, 1965, gage height, 4.02 ft (1.225 m), from rating curve extended above 130 ft³/s (3.68 m³/s); minimum daily, 0.1 ft³/s (0.003 m³/s) for many days during 1959-61.

REMARKS.--Records poor. Flow affected by diversion from Rock Creek into Slate Creek basin above station during some periods since 1963. No diversion 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	1.3	.82	1.5	1.4	1.1	1.0	1.0	2.4	11			
2	1.3	.90	1.4	1.4	1.1	.96	1.0	2.3	34			
3	1.3	1.1	1.2	1.3	1.1	.92	1.1	2.2	48			
4	1.3	1.3	1.1	1.2	1.2	.90	1.2	3.0	42			
5	1.6	1.3	1.0	1.1	1.2	.94	1.5	3.9	43			
6	1.6	1.4	.94	1.0	1.1	.94	1.5	4.8	46			
7	1.7	1.4	.90	1.1	1.1	.90	1.2	5.5	46			
8	1.7	1.3	.95	1.1	1.0	.91	1.2	6.6	44			
9	1.5	1.3	1.0	1.4	1.0	.94	1.2	7.3	47			
10	1.7	1.3	1.1	1.6	1.1	.97	1.2	7.9	46			
11	1.9	1.3	1.2	1.8	1.2	.99	1.5	7.9	42			
12	1.5	1.3	1.3	1.8	1.3	1.0	2.0	10	37			
13	1.5	1.3	1.4	1.9	1.3	.99	2.7	10	33			
14	1.4	1.2	1.5	1.7	1.2	.96	2.6	12	39			
15	1.4	1.2	1.6	1.5	1.2	.93	2.0	14	38			
16	1.4	1.2	1.7	1.3	1.1	1.0	2.1	18	24			
17	1.4	1.2	1.8	1.2	1.2	1.1	1.9	24	22			
18	1.4	1.2	1.8	1.1	1.2	1.0	1.7	28	20			
19	1.4	1.2	1.7	1.1	1.2	.93	1.5	30	18			
20	1.8	1.1	1.6	1.2	1.1	.97	1.4	31	16			
21	1.8	1.1	1.6	1.2	1.0	1.0	1.4	30	14			
22	1.6	1.0	1.5	1.2	.97	1.0	1.7	25	14			
23	1.6	1.1	1.5	1.3	.93	.95	2.1	25	11			
24	1.5	1.2	1.4	1.3	.92	.95	2.1	28	10			
25	1.4	1.3	1.5	1.4	.94	.90	1.8	26	9.4			
26	1.4	1.4	1.6	1.3	.97	1.0	1.9	23	8.8			
27	1.2	1.2	1.6	1.2	1.0	1.0	2.6	17	8.5			
28	1.1	1.0	1.6	1.1	1.0	.95	3.4	14	8.8			
29	1.0	1.1	1.5	1.2	-----	.95	3.4	14	7.9			
30	.94	1.3	1.5	1.3	-----	1.0	2.8	14	7.9			
31	.85	-----	1.5	1.2	-----	1.0	-----	10	-----			-----
TOTAL	44.49	36.02	43.49	40.9	30.73	29.95	54.7	456.8	796.3			
MEAN	1.44	1.20	1.40	1.32	1.10	.97	1.82	14.7	26.5			
MAX	1.9	1.4	1.8	1.9	1.3	1.1	3.4	31	48			
MIN	.85	.82	.90	1.0	.92	.90	1.0	2.2	7.9			
AC-FT	.88	.71	.86	.81	.61	.59	1.08	906	1,580			

CAL YR 1972 TOTAL 3,608.91 MEAN 9.86 MAX 140 MIN .79 AC-FT 7,160

NOTE.--No gage-height record Nov. 18 to Mar. 22.

PLATTE RIVER BASIN

06637910 ROCK CREEK AT ATLANTIC CITY, WYO.

LOCATION.--Lat 42°30'47", long 108°44'46", in NW¼SE¼ sec.2, T.29 N., R.100 W., Fremont County, on left bank 500 ft (152 m) downstream from Slate Creek and 1.4 mi (2.3 km) northwest of Atlantic City.

DRAINAGE AREA.--21.3 mi² (55.2 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 7,850 ft (2,393 m), from topographic map. Prior to Oct. 4, 1957, at site 35 ft (11 m) upstream at different datum.

AVERAGE DISCHARGE.--16 years, 11.7 ft³/s (0.331 m³/s), 8,480 acre-ft/yr (10.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 65 ft³/s (1.84 m³/s) June 2, gage height, 2.87 ft (0.875 m); minimum daily, 2.5 ft³/s (0.071 m³/s) Oct. 3.

Period of record: Maximum discharge, 340 ft³/s (9.63 m³/s) June 10, 1965, gage height, 3.85 ft (1.173 m); maximum gage height, 4.30 ft (1.311 m) Sept. 28, 1971 (backwater from beaver dam); minimum daily discharge, 0.62 ft³/s (0.018 m³/s) Aug. 31, 1966.

REMARKS.--Records fair except those for winter period, which are poor. Flow regulated by Rock Creek Reservoir 3.0 mi (4.8 km) upstream since October 1961, capacity, 2,800 acre-ft (3.45 hm³). Water-quality records for the current year 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	5.7	5.9	8.2	4.5	5.4	13	13	14	21	20	14	10
2	4.8	7.0	4.7	4.7	6.6	12	7.7	13	44	16	13	14
3	2.5	6.7	3.5	7.0	8.1	12	7.4	13	59	16	8.7	16
4	2.7	6.7	3.7	7.5	7.0	12	11	12	48	16	12	12
5	3.2	7.7	5.0	11	7.0	11	14	14	46	12	12	9.7
6	5.4	8.6	7.2	9.9	6.0	12	12	18	46	9.9	11	8.2
7	7.4	9.6	10	6.7	5.7	11	10	18	46	10	11	10
8	5.4	11	12	5.2	5.1	10	8.1	15	45	7.7	12	14
9	5.4	11	13	6.5	4.6	11	6.7	12	42	8.1	11	14
10	4.8	11	13	9.1	4.0	10	7.7	13	42	7.3	11	13
11	3.6	12	13	8.9	3.3	11	5.4	15	42	7.2	11	19
12	2.9	12	12	8.7	3.0	9.9	5.1	20	39	7.6	11	16
13	3.6	10	6.3	7.9	2.9	11	9.9	21	53	11	11	11
14	3.0	8.7	5.5	8.1	2.8	10	7.7	21	37	12	11	13
15	3.0	8.4	5.3	7.6	2.7	10	6.7	24	45	10	11	12
16	2.7	8.2	5.0	8.1	3.0	11	7.7	26	33	10	10	12
17	7.5	8.5	5.4	8.1	3.6	11	6.7	29	32	11	10	11
18	7.0	7.9	8.3	7.7	4.6	11	6.0	36	31	11	8.1	7.6
19	7.7	7.4	11	4.7	5.5	11	6.7	44	26	11	6.5	7.2
20	10	5.6	10	4.6	6.2	8.7	9.0	45	23	19	6.2	9.1
21	10	3.0	10	4.5	7.3	7.2	11	41	23	16	6.1	11
22	11	3.7	10	4.4	7.3	6.5	12	35	25	14	6.3	11
23	11	9.3	9.2	4.4	11	9.9	9.0	35	22	13	9.0	11
24	12	8.4	4.8	3.5	13	11	10	36	20	12	9.9	9.9
25	9.4	3.8	4.3	4.4	13	6.7	14	35	19	11	9.4	10
26	7.7	3.6	4.1	7.1	13	8.1	14	32	15	11	9.3	12
27	7.4	4.8	4.1	9.6	13	9.0	14	29	16	12	9.2	8.8
28	11	5.5	4.1	8.5	14	11	15	22	18	16	6.8	8.8
29	11	8.6	4.2	7.7	-----	11	15	22	16	19	5.1	11
30	11	8.9	4.3	6.8	-----	11	14	22	17	16	5.5	10
31	4.2	-----	4.4	6.3	-----	12	-----	20	-----	14	7.7	-----
TOTAL	204.0	233.5	225.6	213.7	188.7	322.0	296.5	752	971	386.8	295.8	342.3
MEAN	6.58	7.78	7.28	6.89	6.74	10.4	9.88	24.3	32.4	12.5	9.54	11.4
MAX	12	12	13	11	14	13	15	45	59	20	14	19
MIN	2.5	3.0	3.5	3.5	2.7	6.5	5.1	12	15	7.2	5.1	7.2
AC-FT	405	463	447	424	374	639	588	1,490	1,930	767	587	679

CAL YR 1972 TOTAL 6,344.4 MEAN 17.3 MAX 145 MIN 2.3 AC-FT 12,580
WTR YR 1973 TOTAL 4,431.9 MEAN 12.1 MAX 59 MIN 2.5 AC-FT 8,790

PLATTE RIVER BASIN

123

06639000 SWEETWATER RIVER NEAR ALCOVA, WYO.

LOCATION.--Lat 42°27'28", long 107°11'45", in SW¼NE¼ sec.25, T.29 N., R.87 W., Natrona County, on left bank at Dumbell Ranch, 1.0 mi (1.6 km) downstream from Schounmaker ditch diversion dam, 13 mi (21 km) upstream from high-water line of Pathfinder Reservoir at elevation 5,850 ft (1,783 m), and 25 mi (40 km) southwest of Alcova.

DRAINAGE AREA.--2,327 mi² (6,027 km²).

PERIOD OF RECORD.--August 1913 to September 1924, October 1938 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 5,920 ft (1,804 m), from topographic map. Aug. 28, 1913, to Sept. 30, 1924, nonrecording gages at site 0.4 mi (0.6 km) upstream at different datums.

AVERAGE DISCHARGE.--46 years, 126 ft³/s (3.568 m³/s), 91,290 acre-ft/yr (113 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,040 ft³/s (57.8 m³/s) May 13, gage height, 8.57 ft (2.612 m); minimum daily, 28 ft³/s (0.79 m³/s) Jan. 9.

Period of record: Maximum discharge observed, 4,290 ft³/s (121 m³/s) Apr. 13, 1924, gage height, 8.36 ft (2.548 m), site and datum then in use; minimum daily, 0.5 ft³/s (0.014 m³/s) July 30 to Aug. 12, 1940.

REMARKS.--Records fair except those for winter period, which are poor. Several small reservoirs above station, combined capacity, about 5,000 acre-ft (6.16 hm³), for irrigation. Diversions for irrigation of about 24,000 acres (97.1 km²) above station. Water-quality records for the current year are published in part 2 of this report.

COOPERATION.--Nine discharge measurements were made by the Bureau of Reclamation. Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1310: 1921, 1923-24. WSP 1710: 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	53	86	58	40	47	54	81	580	717	136	160	46
2	53	86	60	35	47	50	88	600	698	130	156	58
3	54	87	60	35	47	50	88	690	669	126	149	92
4	57	87	54	30	47	55	88	490	641	118	146	71
5	65	90	45	30	47	55	86	511	608	111	141	68
6	70	96	40	30	47	60	87	537	599	105	132	87
7	70	98	40	30	47	65	96	680	571	98	130	99
8	71	102	40	29	47	65	92	820	548	84	122	98
9	72	106	37	28	43	70	84	1,010	534	75	114	99
10	72	96	37	29	43	70	88	1,530	527	65	110	98
11	72	94	37	29	43	72	93	1,640	519	54	106	100
12	72	98	37	29	44	80	94	1,760	485	53	103	132
13	72	88	40	29	46	80	94	1,960	475	57	100	141
14	72	88	40	29	47	85	110	1,740	475	59	98	156
15	72	80	40	33	47	80	146	1,490	485	63	96	196
16	72	75	40	33	47	78	157	1,390	442	64	92	183
17	77	77	40	35	47	85	154	1,320	413	64	87	162
18	75	80	45	37	47	90	176	1,310	409	80	82	149
19	74	77	45	39	47	100	194	1,320	423	93	81	143
20	74	77	45	41	47	108	175	1,390	394	87	77	136
21	78	74	45	41	45	104	122	1,490	339	108	75	129
22	81	74	45	42	45	111	118	1,530	297	120	71	123
23	81	74	45	44	48	88	197	1,540	256	138	68	117
24	84	74	45	47	49	84	216	1,480	233	170	65	112
25	88	72	45	47	50	86	216	1,420	219	176	63	110
26	90	72	45	47	52	80	228	1,280	205	173	60	106
27	92	66	45	47	52	84	232	1,170	189	168	57	105
28	92	60	45	47	52	82	241	1,110	173	175	54	105
29	96	56	45	47	-----	82	291	1,010	160	173	49	106
30	90	56	42	47	-----	80	389	894	141	154	48	108
31	88	-----	40	47	-----	86	-----	773	-----	162	46	-----
TOTAL	2,329	2,446	1,367	1,153	1,317	2,419	4,521	26,375	12,854	3,438	2,938	3,435
MEAN	75.1	81.5	44.1	37.2	47.0	78.0	151	1,173	428	111	94.8	115
MAX	96	106	60	47	52	111	389	1,960	717	176	160	196
MIN	53	56	37	28	43	50	81	490	141	53	46	46
AC-FT	4,620	4,850	2,710	2,290	2,610	4,900	8,970	72,150	25,500	6,820	5,830	6,810

CAL YR 1972 TOTAL 71,662 MEAN 196 MAX 1,090 MIN 18 AC-FT 142,100
WTR YR 1973 TOTAL 74,592 MEAN 204 MAX 1,960 MIN 28 AC-FT 148,000

PLATTE RIVER BASIN

06640500 PATHFINDER RESERVOIR NEAR ALCOVA, WYO.

LOCATION.--Lat 42°28'06", long 106°51'12", in NW¼SW¼ sec.24, T.29 N., R.84 W., Natrona County, in gatehouse near left end of dam on North Platte River and 9.0 mi (14.5 km) southwest of Alcova.

DRAINAGE AREA.--14,670 mi² (37,995 km²), of which 4,659 mi² (12,067 km²), including 3,959 mi² (10,254 km²) in Great Divide Basin in southern Wyoming, is probably noncontributing.

PERIOD OF RECORD.--January 1909 to current year. Monthend figures only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 5,678.1 ft (1,730.68m) above mean sea level; gage readings have been reduced to elevations above mean sea level. Prior to Oct. 1, 1950, sea level elevations were referred to Bureau of Reclamation datum which was 1.9 ft (0.58m) lower than mean sea level. Prior to Apr. 12, 1950, nonrecording gages near present site at datum 1.9 ft (0.58m) lower.

EXTREMES.--Current year: Maximum daily contents, 1,056,000 acre-ft (1,300 hm³) June 5-11; maximum daily elevation, 5,851.90 ft (1,783.659 m) June 6-9; minimum daily contents, 668,900 acre-ft (825 hm³) Oct. 1, elevation, 5,831.96 ft (1,777.581 m).

Period of record: Maximum daily contents, 1,182,000 acre-ft (1,460 hm³) June 25-27, 1917, elevation, 5,858.86 ft (1,785.781 m), present datum; no storage at times during 1909-12, 1931, 1958-59.

REMARKS.--Reservoir is formed by masonry dam. Storage began in April 1909. Capacity, 1,016,000 acre-ft (1,250 hm³) between elevations 5,668.1 ft (1,727.64m), north outlet trashrack sill, and 5,850.1 ft (1,783.11m), crest of spillway. No dead storage. Figures given herein represent total contents. Water is used to irrigate lands in Wyoming and Nebraska under the North Platte projects. Since December 1960 the water has been diverted directly through a tunnel to Fremont Canyon Powerplant, bypassing a section of river channel immediately below Pathfinder Dam.

COOPERATION.--Records furnished by Bureau of Reclamation

REVISIONS.--WSP 1918: Drainage area.

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

5,831	653,500	5,845	907,700
5,835	719,500	5,850	1,014,000
5,840	809,500	5,852	1,058,000

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	668.9	712.4	745.3	832.0	885.4	919.6	932.9	913.1	1,052	1,028	918.8	817.9
2	670.9	713.4	744.6	835.1	886.5	920.9	932.9	914.3	1,053	1,027	914.3	815.2
3	673.5	714.4	745.7	837.8	887.8	922.5	933.3	914.3	1,053	1,027	908.9	812.2
4	675.4	715.1	747.8	839.3	889.1	923.3	932.9	916.3	1,054	1,026	903.2	809.9
5	676.7	716.5	748.9	841.3	889.9	924.6	933.7	917.6	1,056	1,025	897.2	808.0
6	678.4	718.2	749.9	842.8	891.5	925.0	933.7	921.7	1,056	1,021	890.3	806.2
7	680.0	719.2	752.4	844.4	892.7	925.8	932.9	923.4	1,056	1,016	884.2	803.9
8	682.9	719.9	754.9	846.3	893.5	926.2	933.3	930.8	1,056	1,011	878.6	803.5
9	684.2	721.3	757.4	847.8	894.3	927.1	932.5	936.6	1,056	1,006	872.7	801.3
10	685.6	721.6	760.3	849.8	895.9	927.1	931.2	944.6	1,056	1,001	866.3	799.4
11	686.2	723.0	763.5	851.0	896.4	927.9	929.5	949.6	1,056	995.3	860.0	800.9
12	688.2	724.0	766.8	852.9	898.0	927.9	928.3	952.6	1,055	988.0	854.1	800.6
13	689.2	725.9	768.9	854.9	899.2	930.8	928.6	956.0	1,055	981.1	850.2	799.4
14	691.5	727.2	772.2	856.1	900.4	932.9	925.8	957.2	1,055	975.1	848.2	797.4
15	692.9	728.9	775.4	857.3	901.6	933.3	925.4	958.1	1,053	969.9	847.1	795.7
16	694.2	730.3	778.7	859.2	903.2	934.1	924.2	958.9	1,052	965.3	846.3	794.6
17	695.9	730.6	782.8	861.2	904.5	933.5	923.3	961.9	1,053	958.5	844.0	793.1
18	697.5	731.7	785.7	862.8	906.1	933.3	922.5	966.1	1,051	953.0	841.6	791.2
19	698.9	732.4	789.4	864.3	907.3	933.3	922.5	968.7	1,051	949.2	840.1	789.7
20	701.5	733.4	792.0	866.3	907.7	933.3	922.5	970.4	1,051	945.4	838.6	788.6
21	703.6	734.4	794.9	867.9	909.4	933.3	921.3	971.2	1,051	942.5	835.8	786.8
22	705.9	735.5	798.7	869.5	911.0	933.3	920.9	973.8	1,049	941.7	834.3	785.0
23	706.6	737.4	801.7	871.1	912.2	932.9	920.9	979.4	1,048	940.8	833.5	783.5
24	707.6	737.6	804.7	872.7	913.5	933.3	920.1	989.3	1,045	940.4	833.1	781.3
25	707.6	739.0	808.4	874.7	914.7	932.9	918.4	1,001	1,043	939.1	831.6	779.1
26	707.6	739.9	811.8	875.9	915.9	932.9	915.5	1,013	1,040	937.5	830.8	778.0
27	708.3	740.7	814.4	877.8	917.2	932.9	913.5	1,025	1,037	935.4	829.3	776.2
28	708.7	741.1	818.2	879.4	916.8	932.5	912.6	1,035	1,033	932.0	828.3	774.7
29	709.7	742.2	822.0	880.6	-----	932.9	912.6	1,041	1,032	927.9	826.0	773.6
30	710.7	743.6	825.5	882.6	-----	932.9	913.1	1,046	1,031	925.4	823.8	771.8
31	711.0	-----	828.9	884.2	-----	932.9	-----	1,049	-----	922.1	820.9	-----
MAX	711.0	743.6	828.9	884.2	918.8	934.1	933.7	1,049	1,056	1,028	918.8	817.9
MIN	668.9	712.4	744.6	832.0	885.4	919.6	912.6	913.1	1,031	922.1	820.9	771.8
(†)	5,834.50	5,836.38	5,841.02	5,843.84	5,845.54	5,846.22	5,845.26	5,851.58	5,850.76	5,845.70	5,840.60	5,837.96
(‡)	+42,400	+32,600	+85,300	+55,300	+34,600	+14,100	-19,800	+135,900	-18,000	-108,900	-101,200	-49,100

CAL YR 1972..... -29,100

WTR YR 1973..... +103,200

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.

06641500 ALCOVA RESERVOIR AT ALCOVA, WYO.

LOCATION.--Lat 42°32'52", long 106°43'08", in SE¼SE¼ sec.24, T.30 N., R.83 W., Natrona County, in elevator shaft at right end of dam on North Platte River and 0.2 mi (0.3 km) southwest of Alcovia.

DRAINAGE AREA.--14,735 mi² (38,164 km²), of which 4,659 mi² (12,067 km²), including 3,959 mi² (10,254 km²) in Great Divide Basin in southern Wyoming, is probably noncontributing.

PERIOD OF RECORD.--February 1938 to current year. Prior to October 1950 monthend figures only, published in WSP 1310.

GAGE.--Water-stage recorder for elevations above 5,447.00 ft (1,660.246m). Datum of gage is 5,320 ft (1,622.5m) above mean sea level (levels by Bureau of Reclamation); gage readings have been reduced to elevations above mean sea level. Prior to June 27, 1955, nonrecording gages near present site at same datum.

EXTREMES.--Current year: Maximum daily contents, 183,000 acre-ft (226 hm³) May 15, elevation, 5,499.48 ft (1,676.242 m); minimum daily, 154,800 acre-ft (191 hm³) Dec. 23, elevation, 5,487.49 ft (1,672.587 m).

Period of record: Maximum daily contents, 190,300 acre-ft (235 hm³) Aug. 14, 15, 1952, elevation 5,499.92 ft (1,676.376 m); minimum daily (since appreciable storage was attained), 1,980 acre-ft (2.44 hm³) Sept. 30, 1940, elevation, 5,353.56 ft (1,631.765 m). No usable storage prior to February 1938.

REMARKS.--Reservoir is formed by rock-fill dam; completed in January 1938; storage began Feb. 8, 1938. Capacity, 184,400 acre-ft (227 hm³) at elevation 5,500.00 ft (1,676.400m), top of spillway gates. Dead storage, 100 acre-ft (0.123 hm³). Figures given herein represent total contents. Usable contents published prior to October 1956. Water is used for irrigation in North Platte River basin.

COOPERATION.--Records furnished by Bureau of Reclamation

REVISIONS.--WSP 1918: Drainage area.

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

5,487	153,700	5,495	172,200
5,490	160,500	5,500	184,300

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	178,400	156,600	155,700	155,900	155,600	155,600	155,600	177,700	167,800	178,000	177,600	178,800
2	177,100	156,600	155,500	156,000	155,500	155,700	155,700	177,900	167,800	178,000	177,400	179,200
3	174,800	156,500	155,500	156,000	155,400	155,500	156,100	178,900	167,700	177,900	177,500	179,400
4	173,600	156,300	155,700	155,800	155,400	155,600	155,900	180,500	168,100	178,000	177,900	179,300
5	172,900	156,500	155,900	155,700	155,500	155,600	155,500	181,600	168,900	178,100	178,100	179,500
6	172,000	156,700	156,000	155,700	155,700	155,700	155,300	181,900	170,400	178,000	178,300	179,600
7	171,200	156,700	156,000	155,900	155,900	155,700	155,400	181,900	171,800	177,800	178,400	179,700
8	170,300	156,700	155,800	155,800	156,100	156,000	155,100	181,600	173,300	178,000	178,500	180,000
9	169,400	156,800	155,900	155,700	156,000	156,300	155,900	181,900	174,200	178,300	178,600	180,100
10	168,400	156,700	155,900	155,800	156,100	156,000	156,500	182,500	174,600	178,600	178,700	180,300
11	167,500	156,800	155,900	155,800	156,300	156,000	157,500	182,500	174,600	178,900	178,800	180,000
12	166,500	156,900	155,900	155,600	156,400	156,200	158,500	182,700	174,600	179,200	178,800	179,900
13	165,500	156,900	155,800	155,600	156,400	156,400	159,600	182,800	175,100	179,500	179,200	179,400
14	164,300	156,700	155,600	155,200	156,300	156,700	160,500	182,900	176,200	179,700	178,900	179,300
15	163,400	156,400	155,600	155,800	156,400	156,600	161,700	183,000	177,000	179,900	179,100	178,900
16	162,400	156,300	155,100	156,000	156,400	156,400	162,700	182,800	177,300	180,000	179,300	178,800
17	161,300	156,100	155,100	155,600	156,200	156,200	163,100	182,500	177,400	179,900	179,300	178,800
18	160,300	156,100	155,000	155,700	156,200	156,200	163,600	182,000	177,300	179,700	179,400	179,000
19	159,300	156,200	154,900	155,500	156,000	156,300	164,000	181,100	177,400	179,800	179,700	178,600
20	158,300	156,400	155,000	155,600	156,000	156,000	164,700	180,800	177,600	179,800	179,900	178,300
21	157,300	156,400	155,000	155,600	156,000	156,000	165,200	180,500	177,700	179,600	180,100	178,000
22	156,300	156,300	154,900	156,000	156,000	156,000	165,600	179,500	177,600	179,400	180,200	177,700
23	156,100	156,700	154,800	155,900	156,400	156,200	166,100	177,300	177,500	179,200	179,700	177,600
24	155,900	155,800	155,100	155,900	156,200	156,100	167,000	174,700	177,300	178,900	179,100	178,100
25	156,000	155,900	155,100	155,800	156,100	156,200	168,600	172,000	177,300	178,800	179,000	179,100
26	156,000	156,000	155,100	155,900	156,000	156,200	170,300	169,500	177,100	178,600	178,800	178,900
27	156,100	155,900	155,200	155,900	156,000	156,100	171,900	167,300	177,100	178,300	178,800	179,100
28	156,300	155,800	155,500	156,000	156,400	156,000	174,100	167,500	177,500	178,100	173,900	179,500
29	156,300	155,700	155,900	156,000	-----	156,100	175,900	167,500	177,500	177,900	178,900	179,400
30	156,300	155,800	156,000	155,700	-----	156,600	177,400	167,600	177,800	177,800	179,000	179,300
31	156,300	-----	155,900	155,700	-----	155,500	-----	167,800	-----	177,800	178,700	-----
MAX	178,400	156,900	156,000	156,000	156,400	156,700	177,400	183,000	177,800	180,000	180,200	180,300
MIN	155,900	155,700	154,800	155,200	156,900	155,500	155,100	167,300	167,700	177,800	173,900	177,600
(†)	5,488.16	5,487.95	5,488.00	5,487.88	5,487.56	5,487.79	5,497.20	5,493.15	5,497.36	5,497.34	5,497.70	5,497.95
(‡)	-22,000	-500	+100	-200	-800	+600	+21,900	-9,600	+10,000	0	+900	+600

CAL YR 1972..... -500

WTR YR 1973..... +1,000

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.

06646600 DEER CREEK BELOW MILLAR WASTEWAY, AT GLENROCK, WYO.

LOCATION.--Lat 42°51'50", long 105°51'56", in NW¼NW¼ sec.4, T.33 N., R.75 W., Converse County, on right bank in Glenrock, 900 ft (274 m) downstream from bridge on U.S. Highways 20 and 87, and 0.5 mi (0.8 km) upstream from mouth.

DRAINAGE AREA.--213 mi² (552 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 4,980 ft (1,518 m), from topographic map.

AVERAGE DISCHARGE.--12 years, 80.7 ft³/s (2.285m³/s), 58,470 acre-ft/yr (72.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,250 ft³/s (177 m³/s) May 20, gage height, 8.15 ft (2.484 m) in gage well, 8.75 ft (2.667 m) from floodmark; minimum daily, 1.7 ft³/s (0.048 m³/s) Oct. 3.

Period of record: Maximum discharge, 14,200 ft³/s (402 m³/s) June 12, 1970, gage height, 9.45 ft (2.880 m); no flow at times in 1961-63, 1965.

REMARKS.--Records fair except those for winter period, which are poor. One small reservoir above station, capacity, about 60 acre-ft (0.074 hm³) for irrigation. Diversions above station for irrigation of about 3,700 acres (15.0 km²), of which about 400 acres (1.62 km²) lies below station. Water is diverted to Millar ditch 0.3 mi (0.5 km) upstream and bypasses the station; observations of no flow, estimate of flow, and results of discharge measurements, in cubic feet per second, of flow in ditch are given below:

Oct. 6 . . 0	May 8 . . 0	July 19 . . 1.2
Nov. 3 . . 0	May 14 . . 0	Aug. 7 . . 0
Jan. 11 . . 0	May 23 . . a3.0	Sept. 14 . . 0
Apr. 11 . . 0	June 12 . . 0	
Apr. 23 . . 0	June 22 . . 0	
a Estimated		

Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 2118: 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	5.0	22	32	25	30	29	33	197	672	28	27	9.5
2	3.8	29	30	25	30	31	34	177	880	25	26	20
3	1.7	33	20	20	34	28	35	182	840	22	24	22
4	2.1	33	10	15	30	26	32	235	658	20	24	19
5	5.3	31	10	20	28	28	34	320	516	18	25	16
6	5.0	33	10	20	26	28	35	462	470	17	25	15
7	5.8	32	15	20	24	25	34	560	460	15	20	15
8	11	30	15	20	20	26	34	798	475	11	16	16
9	12	31	15	20	25	28	34	1,090	475	14	15	21
10	12	31	15	20	25	26	36	1,270	451	9.6	13	30
11	11	28	15	25	30	27	37	1,500	420	9.5	12	33
12	10	29	20	30	30	28	38	1,420	365	9.5	12	36
13	10	28	20	30	30	29	38	1,340	300	12	12	36
14	11	27	20	35	25	26	45	1,510	253	13	11	37
15	25	26	20	35	25	26	53	1,850	241	18	10	41
16	28	27	25	35	25	27	53	2,260	195	16	11	43
17	28	30	30	30	25	31	63	2,580	164	14	12	43
18	28	31	35	30	30	33	86	3,050	148	13	12	39
19	28	31	35	30	30	32	79	3,350	128	16	12	38
20	28	28	30	30	30	31	37	3,420	111	60	11	36
21	28	26	30	25	25	34	73	3,280	98	55	12	36
22	29	26	33	25	25	33	98	2,010	82	36	12	35
23	30	26	31	30	30	34	95	1,620	64	27	12	35
24	28	26	29	30	30	33	104	1,560	52	24	12	33
25	26	28	30	30	30	31	107	1,390	45	22	12	32
26	23	29	23	30	28	31	100	1,520	33	21	12	33
27	21	27	31	25	27	34	111	1,060	29	18	11	33
28	21	25	29	25	28	34	177	742	26	18	11	36
29	23	23	28	30	-----	33	256	688	28	20	9.5	37
30	24	27	25	35	-----	32	238	588	30	27	9.5	37
31	22	-----	25	35	-----	30	-----	594	-----	27	9.1	-----
TOTAL	545.7	853	736	835	775	924	2,229	42,621	8,709	655.6	452.1	912.5
MEAN	17.6	28.4	23.7	26.9	27.7	29.8	74.3	1,375	290	21.1	14.6	30.4
MAX	30	33	35	35	34	34	256	3,420	880	60	27	43
MIN	1.7	22	10	15	20	25	32	177	26	9.5	9.1	9.5
AC-FT	1,080	1,690	1,460	1,660	1,540	1,830	4,420	84,540	17,270	1,300	897	1,810

CAL YR 1972	TOTAL 24,075.12	MEAN 65.8	MAX 664	MIN .08	AC-FT 47,750
4TR YR 1973	TOTAL 60,247.90	MEAN 165	MAX 3,420	MIN 1.7	AC-FT 119,500

PEAK DISCHARGE (BASE, 450 FT³/S)

DATE	TIME	G.HT	DISCHARGE
5-20	2400	8.15	6,250
6-2	2300	a5.00	1,000
a About			

PLATTE RIVER BASIN

06646800 NORTH PLATTE RIVER NEAR GLENROCK, WYO.

LOCATION.--Lat 42°50'10", long 105°45'30", in NW¼NE¼ sec.17, T.33 N., R.74 W., Converse County, on left bank 0.8 mi (1.3 km) downstream from Sand Creek, 1.0 mi (1.6 km) downstream from Dave Johnston powerplant, and 5.8 mi (9.3 km) east of Glenrock city limits.

DRAINAGE AREA.--17,497 mi² (45,317 km²), of which 5,132 mi² (13,292 km²), including 3,959 mi² (10,254 km²) in Great Divide Basin in southern Wyoming, is probably noncontributing.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,920 ft (1,500 m), from topographic map. Prior to Oct. 1, 1965, at datum 1.00 ft (0.305 m) higher.

EXTREMES.--Current year: Maximum discharge, 13,500 ft³/s (382 m³/s) May 21, gage height, 6.65 ft (2.027 m); minimum daily, 299 ft³/s (8.47 m³/s) Dec. 5.

Period of record: Maximum discharge, 16,000 ft³/s (453 m³/s) May 14, 1965, gage height, 6.10 ft (1.859 m); minimum daily, 176 ft³/s (4.98 m³/s) Dec. 11, 1961.

REMARKS.--Records good. Flow regulated by Seminoe, Pathfinder, and Alcova Reservoirs. (See sta 06635500, 06640500, 06641500.) Slight regulation 1.0 mi (1.6 km) upstream by storage pond for Dave Johnston powerplant, capacity, 755 acre-ft (0.931 hm³). Natural flow of stream affected by transbasin diversions, storage reservoirs, power development, diversions for irrigation, and return flow from irrigated areas. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1918: 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	1,010	1,250	1,280	934	1,080	1,400	1,070	2,480	7,960	4,760	4,420	1,830
2	1,030	1,280	1,090	948	1,030	1,280	1,080	2,120	9,050	4,670	4,380	2,170
3	1,070	1,310	985	928	1,050	1,240	1,080	2,260	9,670	4,680	4,350	2,220
4	1,200	1,320	545	851	1,080	1,160	1,070	5,170	9,450	4,560	4,270	2,050
5	1,350	1,310	299	641	1,080	1,140	1,060	5,910	8,830	4,350	4,070	2,010
6	1,300	1,310	329	851	1,070	1,120	1,100	3,910	8,440	4,260	4,050	2,020
7	1,280	1,280	540	983	1,030	1,090	1,150	5,610	8,090	4,370	4,070	2,010
8	1,290	1,310	663	990	819	1,090	1,120	3,870	7,960	4,290	4,040	2,000
9	1,290	1,290	600	950	890	1,110	1,110	4,340	8,040	4,080	4,040	2,020
10	1,250	1,300	738	980	931	1,110	1,150	4,700	8,090	3,930	4,030	2,010
11	1,240	1,290	771	975	1,070	1,090	1,220	5,220	8,370	3,940	4,080	2,160
12	1,240	1,290	789	984	1,130	1,100	1,240	5,580	8,400	3,910	4,090	1,920
13	1,240	1,290	969	1,060	1,110	1,150	1,290	5,850	8,290	3,970	4,090	1,790
14	1,270	1,290	954	1,150	1,060	1,170	1,390	5,960	7,810	4,020	3,340	1,710
15	1,290	1,300	948	1,190	1,090	1,100	1,530	6,530	7,380	4,010	2,440	1,720
16	1,290	1,300	964	1,170	1,080	1,070	1,540	7,690	7,350	4,010	2,040	1,710
17	1,300	1,300	1,040	1,140	1,070	1,070	1,390	8,610	7,380	4,050	1,860	1,710
18	1,300	1,300	1,160	1,130	1,060	1,080	1,430	8,860	7,550	4,120	1,850	1,680
19	1,290	1,290	1,160	1,090	1,090	1,090	1,590	9,270	7,460	4,310	1,800	1,660
20	1,300	1,290	1,130	1,110	1,030	1,090	1,420	9,980	7,290	4,620	1,780	1,650
21	1,330	1,290	1,110	1,050	1,090	1,100	1,230	11,000	7,270	4,540	1,760	1,650
22	1,340	1,290	1,150	1,050	1,050	1,110	1,250	9,350	7,260	4,490	1,760	1,620
23	1,330	1,280	1,140	1,030	1,070	1,090	1,320	8,760	7,210	4,460	1,810	1,630
24	1,320	1,290	1,100	1,020	1,090	1,080	1,560	8,960	7,000	4,510	2,060	1,600
25	1,320	1,290	1,120	1,060	1,140	1,060	1,770	8,960	6,810	4,520	2,070	1,590
26	1,300	1,300	1,090	1,080	1,150	1,060	1,860	9,150	6,450	4,450	2,020	1,570
27	1,290	1,330	1,100	1,060	1,210	1,060	1,900	8,670	6,090	4,400	1,930	1,550
28	1,260	1,310	1,090	970	1,200	1,070	2,220	7,770	5,480	4,430	1,800	1,570
29	1,260	1,250	1,080	960	-----	1,070	2,820	6,590	4,930	4,530	1,790	1,580
30	1,290	1,260	917	1,030	-----	1,060	2,850	6,920	5,050	4,600	1,790	1,580
31	1,260	-----	839	1,080	-----	1,060	-----	7,430	-----	4,430	1,810	-----
TOTAL	59,130	58,790	28,690	31,445	29,850	34,570	45,810	201,480	226,410	134,270	89,690	53,990
MEAN	1,262	1,293	925	1,014	1,066	1,115	1,460	6,499	7,547	4,331	2,893	1,800
MAX	1,350	1,330	1,280	1,190	1,210	1,400	2,850	11,000	9,670	4,760	4,420	2,220
MIN	1,010	1,250	299	641	819	1,060	1,060	2,120	4,930	3,910	1,760	1,550
AC=FT	77,610	76,940	56,910	62,370	59,210	68,570	86,900	399,600	449,100	266,300	177,900	107,100

CAL YR 1972 TOTAL 566,720 MEAN 1,548 MAX 3,250 MIN 299 AC=FT 1,124,000
 WTR YR 1973 TOTAL 952,125 MEAN 2,609 MAX 11,000 MIN 299 AC=FT 1,889,000

PLATTE RIVER BASIN

129

06647500 BOX ELDER CREEK AT BOXELDER, WYO.

LOCATION.--Lat 42°36'40", long 105°51'20", in center sec.32, T.31 N., R.75 W., Converse County, on left bank at Hiser Ranch (old Boxelder Post Office), about 1.0 mi (1.6 km) downstream from Snowshoe Creek, and 17 mi (27 km) south of Glenrock.

DRAINAGE AREA.--63.0 mi² (163.2 km²).

RECORDS AVAILABLE.--April 1946 to September 1951, October 1961 to September 1967, October 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,703.18 ft (2,043.129 m) above mean sea level. Prior to June 7, 1946, nonrecording gage, and June 8, 1946, to Oct. 26, 1965, water-stage recorder at same site at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--13 years, 40.5 ft³/s (1.147 m³/s), 29,340 acre-ft/yr (36.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,010 ft³/s (56.9 m³/s) May 20, gage height, 7.18 ft (2.188 m); no flow Aug. 27 to Sept. 1.

Period of record: Maximum discharge, 4,530 ft³/s (128 m³/s) May 14, 1965, gage height, 9.58 ft (2.920 m), present datum; no flow at times.

REMARKS.--Records fair above 25 ft³/s (0.71 m³/s) and poor below. Diversions above station for irrigation of about 60 acres (24.3 hm²), of which about 40 acres (16.2 hm²) lies below 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	1.6	2.7	2.5	2.0	2.8	3.4	4.2	80	346	25	15	0
2	1.0	3.0	2.5	2.0	2.7	3.9	4.4	70	453	22	13	4.1
3	1.1	3.0	2.0	2.0	2.7	3.9	4.3	83	432	21	12	6.7
4	1.1	2.5	.50	2.0	2.7	3.7	4.3	101	365	19	12	4.4
5	2.8	3.1	.50	2.0	2.5	3.8	4.4	181	306	16	11	2.9
6	3.1	3.0	.50	2.0	2.5	2.9	4.6	255	283	14	9.4	1.8
7	2.8	2.5	1.0	2.0	2.7	2.9	4.8	263	278	12	8.1	1.1
8	2.4	3.0	1.0	2.0	2.9	3.3	4.7	342	284	10	6.5	.62
9	2.1	3.0	1.0	2.0	3.2	3.8	4.6	440	283	9.1	5.7	.81
10	2.1	3.0	1.0	2.0	3.2	4.4	4.8	482	270	7.8	4.9	1.0
11	2.0	3.0	1.0	2.5	2.9	4.7	5.1	515	242	6.5	4.5	3.2
12	2.0	3.0	1.5	2.7	2.7	6.0	6.0	497	215	5.4	5.2	11
13	2.0	2.5	1.5	2.7	2.5	6.9	6.0	521	180	7.1	5.3	6.3
14	2.2	2.5	1.5	2.7	2.7	5.7	8.0	571	155	20	4.4	5.4
15	2.4	2.9	1.5	2.7	2.9	4.9	8.0	672	137	15	3.2	7.1
16	2.8	3.0	2.0	2.9	2.9	4.4	8.0	751	114	10	2.2	6.8
17	2.7	2.5	2.5	2.9	2.9	4.2	10	904	99	7.3	1.3	6.4
18	2.5	2.5	2.5	2.9	2.9	4.1	15	1,040	92	5.6	.91	5.3
19	2.5	2.5	2.5	2.9	2.7	4.0	20	1,130	80	14	.53	4.5
20	2.6	2.0	2.5	2.9	2.7	4.4	15	1,490	70	39	.32	4.0
21	3.0	2.0	2.5	3.2	2.7	5.3	15	1,300	59	25	.16	4.0
22	3.9	2.0	2.5	2.9	2.7	5.0	20	930	50	20	.12	4.0
23	3.9	1.6	2.5	2.9	2.7	4.4	20	791	42	16	.12	3.6
24	3.6	1.7	2.5	2.9	2.7	4.0	20	752	37	14	.12	3.3
25	3.3	1.6	2.5	2.7	2.5	3.8	20	707	34	13	.06	3.3
26	3.1	1.7	2.5	2.5	2.7	4.1	20	702	31	11	.02	4.6
27	2.9	1.5	2.5	2.7	2.9	4.6	30	520	29	8.6	0	4.6
28	2.8	1.5	2.5	2.9	3.2	4.8	50	401	31	7.2	0	4.4
29	2.5	2.0	2.5	2.9	-----	4.2	100	344	35	21	0	4.2
30	2.0	2.3	2.0	2.9	-----	4.0	100	299	29	25	0	3.9
31	2.5	-----	2.0	2.9	-----	4.1	-----	302	-----	17	0	-----
TOTAL	77.3	73.1	58.00	79.2	77.8	133.6	541.2	17,436	5,061	463.6	126.06	123.33
MEAN	2.49	2.44	1.87	2.55	2.78	4.31	18.0	562	169	15.0	4.07	4.11
MAX	3.9	3.1	2.5	3.2	3.2	6.9	100	1,490	453	39	15	11
MIN	1.0	1.5	.50	2.0	2.5	2.9	4.2	70	29	5.4	0	0
AC=FT	153	145	115	157	154	265	1,070	34,580	10,040	920	250	245

CAL YR 1972 TOTAL 13,915.59 MEAN 38.0 MAX 473 MIN .14 AC=FT 27,600
WTR YR 1973 TOTAL 24,250.19 MEAN 66.4 MAX 1,490 MIN 0 AC=FT 48,100

PEAK DISCHARGE (BASE, 250 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
5-20	1915	7.18	2,010
6-2	1730	3.93	491

PLATTE RIVER BASIN

06649000 LA PRELE CREEK NEAR DOUGLAS, WYO.

LOCATION.--Lat 42°40'52", long 105°37'48", in NW¼SE¼SW¼ sec.5, T.31 N., R.73 W., Converse County on right bank 0.8 mi (1.3 km) upstream from La Prele Reservoir and 13.5 mi (21.7 km) southwest of Douglas.

DRAINAGE AREA.--135 mi² (350 km²).

PERIOD OF RECORD.--August 1919 to current year (no winter records since 1971).

GAGE.--Water-stage recorder. Altitude of gage is about 5,600 ft (1,707 m), from nearby line of levels.

AVERAGE DISCHARGE.--52 years (1919-71), 40.4 ft³/s (1.144m³/s), 29,270 acre-ft/yr (36.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,720 ft³/s (48.7 m³/s) May 10, gage height, 10.74 ft (3.274 m); minimum daily during period of operation, 3.4 ft³/s (0.096 m³/s) Sept. 5.

Period of record: Maximum discharge, 17,300 ft³/s (490 m³/s) June 12, 1970, gage height, 13.01 ft (3.965 m), from rating curve extended above 2,700 ft³/s (76.5 m³/s) on basis of slope-area measurement of peak flow; no flow at times in 1936, 1939-40, 1943.

REMARKS.--Records fair. Several small reservoirs above station; combined capacity, about 140 acre-ft (0.173 hm³) for irrigation. Diversions for irrigation of about 4,600 acres (18.6 km²) above station. Water is imported from La Bonte Creek and Wagon Hound Creek basins into Little La Prele Creek, upstream from the station, for irrigation below La Prele Reservoir.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1710: Drainage area. WSP 1918: 1920(M), 1952(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973⁴

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						12	14	295	240	19	18	4.0
2						13	15	249	312	16	17	5.3
3						12	15	273	288	15	16	4.5
4						13	15	419	246	11	14	4.5
5						12	15	615	214	8.9	14	3.4
6						12	14	903	193	8.9	13	4.2
7						12	15	825	177	9.2	13	5.6
8						11	20	903	175	9.2	12	5.8
9						12	21	1,250	179	8.6	12	5.8
10						11	18	1,180	171	8.9	12	9.5
11						11	18	1,120	156	9.5	12	12
12						12	20	936	142	8.9	12	28
13						13	27	925	112	7.2	10	18
14						15	47	909	98	7.6	8.9	14
15						20	59	1,030	90	6.9	8.9	15
16						30	52	1,220	81	6.4	9.2	15
17						25	63	1,270	72	5.6	9.2	14
18						16	118	1,200	67	4.7	10	14
19						14	124	1,130	64	21	9.2	12
20						13	268	1,180	61	54	8.2	12
21						16	252	1,090	57	35	7.6	16
22						15	198	740	44	21	6.9	18
23						15	143	558	35	16	6.6	19
24						14	148	510	29	15	6.6	19
25						15	128	469	28	15	6.6	19
26						15	114	463	25	12	6.9	20
27						16	146	376	23	12	7.2	21
28						16	433	308	21	12	7.2	20
29					-----	15	508	286	20	13	4.7	19
30					-----	14	385	249	20	20	4.0	18
31		-----			-----	14	-----	222	-----	16	3.8	-----
TOTAL						454	3,415	23,163	3,440	433.5	306.7	395.6
MEAN						14.6	114	747	115	14.0	9.89	13.2
MAX						30	508	1,270	312	54	18	28
MIN						11	14	222	20	4.7	3.8	3.4
AC-FT						901	6,770	45,940	6,820	860	608	785

PLATTE RIVER BASIN

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06652000 NORTH PLATTE RIVER AT ORIN, WYO.

LOCATION.--Lat 42°39'02", long 105°09'46", in SW¼SW¼ sec.17, T.31 N., R.69 W., Converse County, on right bank 630 ft (192 m) downstream from bridge on U.S. Highway 87, 0.2 mi (0.3 km) upstream from Shawnee Creek, and 1.5 mi (2.4 km) east of Orin.

DRAINAGE AREA.--18,847 mi² (48,814 km²), of which 5,152 mi² (13,344 km²), including 3,959 mi² (10,254 km²) in Great Divide Basin in southern Wyoming, is probably noncontributing.

PERIOD OF RECORD.--January, April to November 1895, April to October 1896, January 1897 to December 1898, April to November 1899, April to September 1917, April to September 1918, May to September 1924, April 1958 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as "at Orin Junction" 1895, 1897-99 and as "at McKinley" 1917-18.

GAGE.--Water-stage recorder. Altitude of gage is 4,660 ft (1,420 m), from topographic map. Jan. 1, 1895, to Nov. 30, 1899, and May 1 to Sept. 30, 1924, nonrecording gage at railroad bridge just upstream from U.S. Highway 87 at different datum. Apr. 1, 1917, to Sept. 30, 1918, nonrecording gage at site 2.2 mi (3.5 km) downstream at different datum.

EXTREMES.--Current year: Maximum discharge, 16,000 ft³/s (453 m³/s) May 21, gage height, 8.45 ft (2.576 m); minimum daily, 400 ft³/s (11.3 m³/s) Dec. 6.

Period of record: Maximum discharge, 23,800 ft³/s (674 m³/s) May 15, 1965, gage height, 10.00 ft (3.048 m); maximum gage height, 10.45 ft (3.185 m) June 12, 1970; minimum daily discharge determined, 170 ft³/s (4.81 m³/s) Sept. 11-14, 1899.

REMARKS.--Records good except those for winter period, which are fair. Major regulation began after completion of Pathfinder Reservoir in April 1909. Natural flow of stream affected by storage reservoirs, power development, and diversions for irrigation and return flow from irrigated areas. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Eighteen discharge measurements furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 1310: 1896, 1899. WSP 1918: 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	990	1,450	1,450	900	1,200	1,330	1,150	4,210	7,800	4,820	4,320	1,730
2	1,030	1,440	1,410	900	1,200	1,560	1,170	3,620	8,390	4,400	4,290	1,940
3	1,050	1,460	1,230	900	1,150	1,420	1,170	3,620	9,370	4,510	4,270	2,330
4	1,110	1,470	1,000	800	1,150	1,350	1,170	4,110	9,300	4,470	4,240	2,210
5	1,280	1,460	600	700	1,200	1,290	1,140	6,050	8,770	4,410	4,090	2,070
6	1,410	1,450	400	700	1,200	1,270	1,120	7,200	8,350	4,150	3,960	2,030
7	1,370	1,440	450	800	1,100	1,260	1,180	7,610	8,030	4,200	3,960	2,030
8	1,350	1,400	600	900	1,000	1,230	1,210	7,230	7,870	4,250	3,960	2,110
9	1,350	1,410	800	1,000	900	1,230	1,190	8,740	7,700	4,130	3,950	2,200
10	1,350	1,400	700	1,100	1,000	1,250	1,210	9,780	7,820	3,840	3,960	2,100
11	1,320	1,410	800	1,100	1,100	1,260	1,250	10,100	7,920	3,810	4,010	2,410
12	1,310	1,430	850	1,200	1,300	1,230	1,340	10,200	7,980	3,800	4,080	2,530
13	1,340	1,440	900	1,300	1,300	1,260	1,400	10,100	7,860	3,780	4,100	2,080
14	1,350	1,440	1,050	1,400	1,200	1,420	1,520	10,100	7,640	3,880	4,000	1,890
15	1,400	1,440	1,050	1,400	1,150	1,330	1,710	10,200	7,130	3,940	3,040	1,870
16	1,410	1,450	1,050	1,400	1,150	1,250	1,840	11,500	6,760	3,940	2,210	1,820
17	1,360	1,450	1,100	1,300	1,150	1,230	1,770	12,500	6,820	3,920	2,010	1,810
18	1,340	1,460	1,100	1,300	1,150	1,230	1,750	13,300	6,780	3,960	1,840	1,780
19	1,350	1,460	1,100	1,300	1,150	1,240	2,080	13,400	6,810	4,340	1,830	1,720
20	1,370	1,450	1,100	1,200	1,150	1,240	2,000	13,000	6,840	6,020	1,770	1,670
21	1,400	1,440	1,100	1,200	1,150	1,250	1,690	14,500	7,000	5,020	1,740	1,660
22	1,430	1,430	1,200	1,200	1,150	1,280	1,600	12,900	6,980	4,820	1,750	1,630
23	1,460	1,420	1,200	1,150	1,150	1,260	1,740	11,200	6,910	4,600	1,740	1,590
24	1,460	1,400	1,200	1,150	1,200	1,240	2,090	10,500	6,820	4,520	1,820	1,600
25	1,460	1,400	1,200	1,150	1,210	1,220	2,380	10,500	6,480	4,720	1,990	1,590
26	1,500	1,400	1,200	1,150	1,240	1,190	2,570	9,980	6,250	4,460	2,010	1,580
27	1,470	1,400	1,200	1,150	1,260	1,190	2,730	9,830	5,980	4,380	1,940	1,560
28	1,460	1,390	1,200	1,150	1,310	1,180	3,310	8,820	5,590	4,350	1,830	1,530
29	1,440	1,380	1,200	1,100	-----	1,180	4,630	8,020	4,810	4,390	1,710	1,540
30	1,480	1,360	1,100	1,100	-----	1,170	4,760	7,190	4,780	4,750	1,680	1,540
31	1,480	-----	900	1,100	-----	1,170	-----	7,470	-----	4,490	1,680	-----
TOTAL	41,880	42,830	31,440	34,200	32,570	39,210	55,870	287,480	217,540	135,070	89,780	56,150
MEAN	1,351	1,428	1,014	1,103	1,163	1,265	1,662	9,274	7,251	4,357	2,896	1,872
MAX	1,500	1,470	1,450	1,400	1,310	1,560	4,760	14,500	9,370	6,020	4,320	2,530
MIN	990	1,360	400	700	900	1,170	1,120	3,620	4,780	3,780	1,680	1,530
AC-FT	83,070	84,950	62,360	67,840	64,600	77,770	110,800	570,200	431,500	267,900	178,100	111,400

CAL YR 1972 TOTAL 643,444 MEAN 1,758 MAX 3,560 MIN 400 AC-FT 1,276,000
 WTR YR 1973 TOTAL 1,064,020 MEAN 2,915 MAX 14,500 MIN 400 AC-FT 2,110,000

PLATTE RIVER BASIN

06652700 GLEND0 RESERVOIR NEAR GLEND0, WYO.

LOCATION.--Lat 42°28'21", long 104°57'28", in SW¼NE¼ sec.24, T.29 N., R.68 W., Platte County, on right bank in gate shaft house 0.5 mi (0.8 km) southwest of Glendo Dam and 5.0 mi (8.0 km) southeast of Glendo.

DRAINAGE AREA.--19,504 mi² (50,515 km²), of which 5,174 mi² (13,401 km²), including 3,959 mi² (10,254 km²) in Great Divide Basin in southern Wyoming, is probably noncontributing.

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

GAGE.--Water-stage recorder for elevations above 4,543.50 ft (1,384.859m). Datum of gage is 4,543.50 ft (1,384.859m) above mean sea level, datum of 1934 (adjusted 1940), levels by Bureau of Reclamation; gage readings have been reduced to elevations above mean sea level.

EXTREMES.--Current year: Maximum daily contents, 758,800 acre-ft (936 hm³) May 28, elevation 4,650.94 ft (1,417.607 m); minimum daily, 45,620 acre-ft (56.2 hm³) Oct. 1, elevation, 4,563.47 ft (1,390.946 m).

Period of record: Maximum daily contents, 758,800 acre-ft (936 hm³) May 28, 1973, elevation 4,650.94 ft (1,417.607 m); minimum daily (since appreciable storage was attained), 15,140 acre-ft (18.7 hm³) Sept. 28, 1966, elevation, 4,548.10 ft (1,386.261 m).

REMARKS.--Reservoir is formed by rock-fill dam; completed in October 1957. Storage began Oct. 17, 1957. Capacity, 795,200 acre-ft (980 hm³) at elevation 4,653.00 ft (1,418.234 m), spillway crest. Dead storage, 11,500 acre-ft (14.2 hm³). Figures given herein represent total contents. Water is used for irrigation in North Platte River basin.

COOPERATION.--Records furnished by Bureau of Reclamation.

REVISIONS.--WSP 1918: Drainage area.

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

4,563	44,370	4,620	363,400
4,570	64,780	4,630	464,700
4,580	100,900	4,640	588,600
4,590	146,900	4,650	742,700
4,600	206,000	4,651	759,900
4,610	278,300		

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	45,620	130,900	216,000	278,300	345,400	408,500	448,600	465,700	748,000	638,000	503,800	230,400
2	47,890	133,700	219,300	279,700	347,600	410,600	447,900	470,800	744,700	632,000	498,900	220,200
3	50,150	136,500	221,600	281,700	350,200	413,900	447,800	474,500	743,700	626,800	494,100	209,900
4	52,470	139,500	222,900	283,400	352,400	417,200	447,800	479,600	742,300	620,900	489,000	200,500
5	55,090	142,000	223,700	284,700	354,600	419,000	448,200	487,700	740,500	615,600	483,700	191,500
6	57,730	145,300	223,900	286,000	357,100	419,800	448,800	498,200	737,300	609,400	477,500	182,500
7	60,410	148,300	224,500	287,300	359,400	421,100	449,500	511,200	733,200	603,300	470,800	174,600
8	63,320	151,300	225,200	289,000	361,100	422,200	450,100	523,100	729,500	597,400	463,300	168,100
9	66,080	154,200	226,400	290,800	362,600	423,300	450,600	538,200	725,400	595,100	456,300	164,500
10	68,760	157,200	227,600	292,800	364,300	424,700	451,500	556,400	721,000	596,500	449,400	164,300
11	71,420	160,100	229,700	294,600	366,300	426,000	452,400	574,600	717,500	598,700	442,800	167,200
12	74,010	163,000	231,700	296,800	368,200	427,300	452,700	593,700	714,000	599,100	436,500	167,200
13	76,640	165,600	233,800	299,100	370,700	429,100	452,200	612,100	710,700	593,900	430,000	164,200
14	79,280	168,500	236,000	301,700	373,100	431,200	451,500	628,500	707,100	588,200	423,100	159,500
15	82,100	171,400	238,100	304,500	375,600	432,600	450,400	641,000	702,900	583,700	414,400	155,100
16	84,950	174,200	240,400	307,300	377,800	433,600	450,100	654,200	698,400	576,000	404,400	151,500
17	87,770	177,000	242,500	310,200	380,100	435,000	449,500	667,900	694,000	569,800	395,100	149,300
18	90,530	179,900	244,900	312,800	382,400	436,200	449,100	681,900	690,600	563,300	385,000	148,800
19	93,320	182,800	247,400	315,500	384,900	437,400	450,600	695,600	686,600	559,300	374,500	146,700
20	95,150	185,500	250,100	317,900	387,200	438,800	450,100	708,100	682,800	556,000	364,200	144,300
21	97,110	188,400	252,500	320,300	389,400	440,300	448,500	723,600	678,700	550,900	353,700	142,200
22	101,900	191,200	255,400	322,700	391,700	441,700	447,000	735,200	675,600	545,800	342,600	140,200
23	104,800	194,100	257,800	325,000	394,100	442,800	444,700	743,200	672,400	540,800	330,500	138,200
24	107,600	196,200	260,600	327,500	396,400	444,100	443,500	747,800	669,500	536,800	318,700	137,200
25	110,700	198,300	263,300	329,700	398,900	445,300	442,800	752,500	665,900	533,200	307,600	137,200
26	113,600	199,600	265,900	332,300	401,400	445,900	442,700	755,700	661,700	529,600	296,600	137,000
27	116,400	205,300	268,400	334,600	403,700	446,500	442,100	758,100	658,100	525,600	286,100	138,000
28	119,300	208,400	271,000	336,400	406,100	447,100	443,600	758,800	653,500	521,500	275,500	141,100
29	122,200	210,700	273,600	338,400	-----	447,600	448,400	758,500	648,800	516,700	264,600	144,300
30	125,200	213,000	275,400	340,800	-----	448,500	458,200	755,200	643,200	512,400	253,400	147,900
31	128,000	-----	276,900	343,100	-----	448,700	-----	751,100	-----	508,300	241,700	-----
MAX	128,000	213,000	276,900	343,100	406,100	448,700	458,200	758,800	748,000	638,000	503,800	230,400
MIN	45,620	130,900	216,000	278,300	345,400	403,500	442,100	462,700	643,200	503,300	241,700	137,000
(+)	4,586.20	4,601.05	4,609.82	4,617.76	4,624.44	4,628.54	4,629.41	4,650.49	4,643.79	4,633.77	4,605.14	4,590.20
(+)	+84,610	+85,000	+63,900	+66,200	+63,000	+42,600	+29,500	+292,900	-107,900	-134,900	-266,600	-93,800

CAL YR 1972..... -64,400

WTR YR 1973..... +104,510

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.

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LOCATION.--Lat 42°27'25", long 104°56'50", in SW¼SW¼NW¼ sec.30, T.29 N., R.67 W., Platte County, on right bank opposite Sand Draw, 1.3 mi (2.1 km) upstream from Horseshoe Creek, 3.1 mi (5.0 km) downstream from Glendo Dam, and 5.2 mi (8.4 km) southeast of Glendo.

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

EXTREMES.--Current year: Maximum discharge, 9,700 ft³/s (275 m³/s) June 1, 6; maximum gage height, 10.97 ft (3.344 m); minimum daily discharge, 1.0 ft³/s (0.028 m³/s) Dec. 9-12, Jan. 4, 5.

Period of record: Maximum discharge, 9,700 ft³/s (275 m³/s) June 1, 6, 1973, maximum gage height, 10.97 ft (3.344 m); minimum daily discharge, 0.80 ft³/s (0.023 m³/s) Oct. 5, Dec. 3, 1966.

REMARKS.--Records good except those below 40 ft³/s (1.13 m³/s), which are poor. Flow completely regulated by Glendo Reservoir since Oct. 17, 1957. (See sta 06652700.) Natural flow of stream affected by trans-basin diversions, storage reservoirs, power development, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Twenty-two discharge measurements furnished by Bureau of Reclamation.

REVISIONS.--WSP 1918: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,4	2,0	2,3	1,5	2,3	3,4	1,510	793	9,600	7,510	6,600	7,580
2	4,6	2,6	2,1	1,6	2,3	3,4	1,430	1,320	9,620	7,250	6,730	7,460
3	4,6	2,6	2,1	1,5	2,3	3,4	1,130	1,720	9,640	7,060	6,820	7,420
4	5,0	2,5	2,0	1,0	2,3	3,4	1,040	1,580	9,590	7,120	6,840	7,110
5	5,9	2,3	1,5	1,0	2,3	418	959	1,500	9,600	7,120	6,910	6,620
6	2,4	4,4	1,5	1,5	2,3	738	924	1,440	9,620	7,120	7,080	6,470
7	2,0	2,0	1,5	2,0	2,0	552	910	576	9,610	7,130	7,620	6,200
8	2,2	1,9	1,5	2,0	1,5	540	945	870	9,550	7,130	7,670	5,720
9	2,2	2,2	1,0	1,5	2,0	546	786	415	9,480	5,140	7,580	4,590
10	2,3	2,0	1,0	1,5	2,5	510	750	12	9,530	2,950	7,440	3,510
11	2,5	2,2	1,0	2,0	2,5	510	973	11	9,520	2,550	7,260	2,310
12	2,5	2,3	1,0	2,0	2,5	530	997	11	9,580	3,580	7,300	2,920
13	2,6	2,3	1,5	2,0	2,6	525	1,700	280	9,580	6,470	7,330	3,710
14	2,9	2,5	1,5	2,5	2,6	530	2,030	1,320	9,310	6,620	7,490	4,390
15	2,9	2,5	1,5	2,5	2,6	530	1,890	3,350	9,120	6,780	7,390	4,210
16	2,8	3,7	1,5	2,6	2,8	525	1,990	4,010	9,140	6,840	7,420	3,750
17	2,9	2,2	1,6	2,6	2,8	510	2,100	4,520	8,890	6,910	6,620	3,010
18	2,9	2,2	1,6	2,6	2,9	515	2,090	5,560	8,640	6,950	7,020	2,240
19	2,6	2,2	1,7	2,6	2,8	530	2,090	5,860	8,700	7,040	6,930	2,930
20	2,5	2,2	1,8	2,6	2,8	535	2,840	6,080	8,690	7,390	7,020	3,080
21	3,1	2,1	1,9	2,6	2,9	535	2,500	6,320	8,690	7,720	7,130	2,820
22	3,4	2,1	1,9	2,6	2,9	525	2,480	6,700	8,450	7,390	7,330	2,820
23	2,8	2,1	1,9	2,5	2,9	530	2,970	7,070	8,160	7,150	7,860	2,810
24	2,9	2,2	1,9	2,5	3,1	535	2,750	7,780	8,190	6,470	7,910	2,260
25	2,6	2,0	1,9	2,5	3,1	525	2,780	8,330	8,120	6,450	7,580	1,810
26	2,9	2,3	1,9	2,5	3,1	854	2,860	8,230	8,010	6,310	7,550	1,930
27	2,9	2,3	1,8	2,5	3,2	869	2,820	8,230	8,040	6,380	7,370	1,230
28	2,9	2,3	1,7	2,5	3,2	875	2,690	8,400	7,780	6,490	7,170	242
29	3,1	2,1	1,7	2,5	-----	882	2,170	8,550	7,510	6,910	7,170	200
30	2,8	2,2	1,5	2,5	-----	868	280	8,730	7,510	6,890	7,420	8
31	2,0	-----	1,5	2,5	-----	804	-----	9,300	-----	6,730	7,580	-----
TOTAL	94,1	70,5	50,8	66,8	73,1	16,379,6	53,384	128,888	267,470	201,550	225,140	111,360
MEAN	3,04	2,35	1,64	2,15	2,61	528	1,779	4,158	8,916	6,502	7,263	3,712
MAX	5,9	4,4	2,3	2,6	3,2	889	2,970	9,300	9,640			

PLATTE RIVER BASIN

06655500 GUERNSEY RESERVOIR NEAR GUERNSEY, WYO.

LOCATION.--Lat 42°17'23", long 104°45'48", in NE¼NW¼ sec.27, T.27 N., R.66 W., Platte County, on gate structure at right end of dam on North Platte River and 1.2 mi (1.9 km) northwest of Guernsey.

DRAINAGE AREA.--20,183 mi² (52,274 km²), of which 5,175 mi² (13,403 km²), including 3,959 mi² (10,254 km²) in Great Divide Basin in southern Wyoming, is probably noncontributing.

PERIOD OF RECORD.--January 1928 to current year. Prior to October 1950 monthend figures only, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 4,370.00 ft (1,331.976m) above mean sea level (levels by Bureau of Reclamation); gage readings have been reduced to elevations above mean sea level. Prior to Sept. 20, 1966, nonrecording gages at same datum.

EXTREMES.--Current year: Maximum daily contents, 36,850 acre-ft (45.4 hm³) Apr. 29, elevation, 4,416.31 ft (1,346.091 m); minimum daily, 100 acre-ft (0.123 hm³) Oct. 17 to Nov. 9, elevation, 4,369.88 ft (1,331.939 m).

Period of record: Maximum daily contents, 73,240 acre-ft (90.3 hm³) Oct. 17, 1929, elevation 4,420.95 ft (1,347.506 m); minimum daily, 30 acre-ft (0.0370 hm³) Oct. 5, 6, 1958, elevation 4,361.50 ft (1,329.385 m), and Oct. 18 to Nov. 3, 1969, elevation, 4,367.70 ft (1,331.275 m).

REMARKS.--Reservoir is formed by rock-fill dam; completed in July 1927. Capacity, 45,230 acre-ft (55.8 hm³) at elevation, 4,420 ft (1,347.2 m), top of spillway gate. Dead storage is negligible. Figures given herein represent total contents. Usable contents published prior to October 1956. Water is used for irrigation in eastern Wyoming and western Nebraska, and for development of power.

COOPERATION.--Records furnished by Bureau of Reclamation.

REVISIONS.--WSP 1918: Drainage area.

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

4,370	100	4,390	3,530	4,410	24,140
4,375	480	4,395	5,870	4,415	34,040
4,380	1,060	4,400	9,840	4,417	38,360
4,385	2,010	4,405	15,940		

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	7,180	100	1,780	3,480	5,360	7,080	33,730	34,700	34,700	34,430	20,520	20,490
2	4,950	100	1,840	3,560	5,420	7,170	34,940	34,110	34,510	34,260	20,390	20,680
3	3,170	100	1,870	3,610	5,490	7,240	35,190	34,110	34,340	34,210	20,250	20,440
4	1,920	100	1,920	3,670	5,550	7,320	35,300	34,720	34,190	34,150	20,030	20,430
5	1,040	100	1,960	3,710	5,610	7,410	35,300	35,170	34,080	34,380	19,950	20,390
6	970	100	2,010	3,750	5,670	9,020	35,220	35,980	33,980	34,470	19,880	20,970
7	940	100	2,050	3,790	5,720	10,180	35,110	35,960	33,850	34,510	20,110	22,570
8	920	100	2,100	3,840	5,750	11,260	35,120	35,470	33,620	34,600	20,440	24,570
9	910	100	2,160	3,890	5,800	12,340	34,580	35,900	33,250	32,600	20,640	26,990
10	800	140	2,200	3,940	5,830	13,380	34,210	35,920	32,900	24,470	20,710	27,880
11	690	230	2,240	3,980	5,840	14,360	34,020	35,730	32,940	15,380	20,590	27,130
12	580	330	2,280	4,030	5,880	15,480	34,280	35,280	33,190	6,940	20,330	27,300
13	470	430	2,300	4,070	6,040	16,660	34,060	34,640	33,460	4,950	20,100	26,900
14	370	530	2,360	4,130	6,110	17,640	34,020	33,310	33,560	3,960	20,250	27,940
15	270	620	2,400	4,200	6,160	18,810	34,210	33,620	33,500	3,500	20,440	28,870
16	170	710	2,430	4,290	6,220	19,820	33,560	34,320	34,000	3,330	20,620	28,850
17	100	800	2,450	4,400	6,280	20,830	33,560	35,170	34,940	3,290	20,870	28,430
18	100	880	2,480	4,500	6,340	21,870	34,600	35,390	35,170	3,250	20,460	27,240
19	100	980	2,630	4,590	6,410	23,000	35,390	35,790	35,490	3,570	19,770	26,530
20	100	1,050	2,710	4,660	6,460	24,100	35,320	35,640	35,920	7,680	19,180	27,420
21	100	1,120	2,800	4,730	6,530	24,810	34,920	35,260	36,350	13,840	18,840	27,400
22	100	1,190	2,890	4,780	6,590	25,220	33,980	34,960	36,630	17,410	18,530	27,440
23	100	1,260	2,990	4,840	6,660	25,730	34,020	34,360	36,090	20,020	19,110	27,710
24	100	1,330	3,070	4,900	6,730	26,160	33,980	33,310	35,620	20,940	20,130	27,780
25	100	1,380	3,150	4,980	6,790	26,490	34,870	33,170	35,410	21,240	20,410	27,180
26	100	1,460	3,220	5,040	6,870	27,550	34,280	33,350	35,090	20,830	20,620	27,280
27	100	1,520	3,300	5,070	6,940	28,730	34,830	33,690	35,020	20,490	20,730	26,880
28	100	1,580	3,380	5,120	7,010	29,820	35,000	34,170	34,960	20,060	20,340	24,680
29	100	1,630	3,410	5,180	-----	30,880	36,850	34,830	34,680	20,180	19,880	22,510
30	100	1,710	3,420	5,240	-----	31,960	36,280	34,960	34,490	20,200	19,750	19,980
31	100	-----	3,430	5,300	-----	32,980	-----	34,790	-----	20,440	20,150	-----
MAX	7,180	1,710	3,430	5,300	7,010	32,980	36,850	35,980	36,630	34,600	20,870	28,870
MIN	100	100	1,780	3,480	5,360	7,080	33,560	33,170	32,900	3,250	18,530	19,980
(+)	4,369.88	4,383.68	4,389.71	4,393.98	4,396.73	4,414.49	4,416.05	4,415.35	4,415.21	4,307.90	4,307.72	4,307.62
(+)	-9,320	+1,610	+1,720	+1,870	+1,710	+25,970	+3,300	-1,490	-300	-14,050	-290	-170

CAL YR 1972..... -3,690

WTR YR 1973..... +10,560

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.

06656000 NORTH PLATTE RIVER BELOW GUERNSEY RESERVOIR, WYO.

LOCATION.--Lat 42°16'50", long 104°45'15", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.27, T.27 N., R.66 W., Platte County, on right bank 1.0 mi (1.6 km) northwest of Guernsey and 1.1 mi (1.8 km) downstream from Guernsey Dam.

DRAINAGE AREA.--20,196 mi² (52,308 km²), of which 5,175 mi² (13,403 km²), including 3,959 mi² (10,254 km²) in Great Divide Basin in southern Wyoming, is probably noncontributing. Area at site used May 1909 to December 1927, 20,277 mi² (52,517 km²).

PERIOD OF RECORD.--June 1900 to current year (no winter records prior to 1903). Monthly discharge only for some periods, published in WSP 1310. Published as "near Guernsey" 1900-1901, 1904; as "at Guernsey" 1902-3, 1905-8, March to October 1912; as "at Whalen" 1909; as North Platte River and Interstate Canal at Whalen 1910-11, 1913-16; and as "above Whalen" 1917-27.

GAGE.--Water-stage recorder. Altitude of gage is 4,340 ft (1,323 m), from topographic map. Prior to Nov. 17, 1908, and Mar. 30 to Oct. 31, 1912, nonrecording gages downstream at several sites within 0.8 mi (1.3 km) at different datums. May 1, 1909, to Dec. 31, 1927, nonrecording gages at different datums on river and diversion canals at Whalen Dam about 9.0 mi (14 km) downstream. Jan. 1, 1928, to Sept. 30, 1964, water-stage recorder at present site and datum 1.50 ft (0.457 m) higher.

EXTREMES.--Current year: Maximum discharge, 10,000 ft³/s (283 m³/s) June 7, 9, 10, gage height, 8.00 ft (2.438 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Nov. 12-28.

Period of record: Maximum discharge, 30,000 ft³/s (850 m³/s) June 2 or 3, 1908, gage height, 11.5 ft (3.51 m), from floodmark, site and datum then in use, from rating curve extended above 13,000 ft³/s (368 m³/s); no flow Feb. 28, 1927, Nov. 19 to Dec. 8, Dec. 10-12, 14, 15, 1951.

REMARKS.--Records excellent except those below 500 ft³/s (14.2 m³/s), which are poor. Flow completely regulated by Guernsey Reservoir since 1927. (See sta 06655500.) Small diversions for irrigation between this station and diversion dam at Whalen. Natural flow of stream affected by transbasin diversions, storage reservoirs, power development, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Twenty-nine discharge measurements furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 1310: 1903-4, 1924. WSP 1918: 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	1,120	50	2.1	3.5	2.1	2.1	642	1,850	9,810	7,660	6,520	7,290
2	1,120	52	2.1	3.4	2.2	2.3	1,000	1,920	9,950	7,520	6,700	7,290
3	1,010	55	2.0	3.3	2.1	2.5	1,000	1,920	9,940	7,140	6,830	7,260
4	782	47	1.8	2.8	2.2	1.9	1,010	2,030	9,960	7,170	6,920	7,000
5	565	44	2.1	3.0	2.1	1.6	971	2,080	9,950	7,180	6,880	6,450
6	512	41	2.5	3.0	1.8	1.9	960	2,080	9,960	7,200	6,950	5,850
7	106	40	2.5	3.0	2.0	2.1	953	2,080	9,950	7,200	7,340	5,280
8	81	41	2.5	3.0	2.1	2.1	958	2,080	9,940	7,230	7,390	4,740
9	71	40	2.5	2.5	2.1	5.3	953	1,760	9,960	7,220	7,470	4,010
10	65	30	2.5	2.5	2.1	11	958	1,350	9,960	7,170	7,450	3,710
11	58	1.8	2.3	2.5	2.1	15	960	1,250	9,760	7,180	7,410	3,260
12	56	1.5	2.1	2.5	2.1	18	976	1,240	9,670	7,160	7,410	3,090
13	56	1.5	2.1	2.3	1.7	19	1,660	1,250	9,670	7,190	7,400	3,620
14	50	1.5	2.1	2.5	1.6	16	2,010	2,250	9,680	7,160	7,410	3,980
15	54	1.5	2.1	2.3	1.6	25	2,010	3,830	9,340	7,180	7,380	3,980
16	56	1.5	2.1	2.7	1.6	26	1,990	4,360	9,040	7,220	7,250	3,940
17	51	1.5	2.2	3.0	1.6	19	1,990	4,910	8,710	7,230	6,610	3,660
18	47	1.5	3.0	3.0	1.6	10	2,010	6,120	8,570	7,200	7,260	3,150
19	44	1.5	2.6	2.6	1.6	9.7	2,010	6,600	8,580	7,170	7,230	2,990
20	46	1.5	2.5	2.5	1.6	9.1	2,600	6,950	8,580	5,680	7,230	3,010
21	46	1.5	2.5	1.9	2.1	263	3,010	7,350	8,580	5,020	7,290	3,010
22	48	1.5	2.7	1.9	2.1	308	3,010	7,490	8,540	5,840	7,380	3,010
23	48	1.5	2.6	2.1	2.3	308	3,010	7,860	8,570	5,990	7,350	3,000
24	45	1.5	2.4	2.1	2.5	302	3,010	8,570	8,550	6,220	7,350	2,780
25	44	1.5	2.3	1.8	2.5	296	3,010	8,940	8,380	6,440	7,350	2,420
26	45	1.5	2.3	2.1	2.1	302	3,010	8,530	8,270	6,600	7,350	2,100
27	41	1.5	2.1	1.7	2.1	302	3,010	8,280	8,170	6,620	7,320	2,300
28	42	1.5	2.1	1.8	2.1	302	2,930	8,340	8,030	6,700	7,290	1,810
29	32	1.6	1.7	2.2	-----	320	2,430	8,350	7,740	6,840	7,260	1,680
30	18	1.7	2.9	2.5	-----	314	1,760	8,730	7,720	6,870	7,260	1,770
31	49	-----	4.9	2.1	-----	308	-----	9,440	-----	6,650	7,290	-----
TOTAL	6,408	470.6	74.2	78.1	55.7	3,524.6	55,811	149,790	273,530	212,850	223,530	117,440
MEAN	207	15.7	2.39	2.52	1.99	114	1,860	4,832	9,118	6,866	7,211	3,915
MAX	1,120	55	4.9	3.5	2.5	320	3,010	9,440	9,960	7,660	7,470	7,290
MIN	18	1.5	1.7	1.7	1.6	1.6	642	1,240	7,720	5,020	6,520	1,680
AC-FT	12,710	933	147	155	110	6,990	110,700	297,100	542,500	422,200	443,400	232,900
CAL YR 1972	TOTAL	674,580.5	MEAN	1,843	MAX	6,380	MIN	1.5	AC-FT	1,338,000		
WTR YR 1973	TOTAL	1,043,562.2	MEAN	2,859	MAX	9,960	MIN	1.5	AC-FT	2,070,000		

PLATTE RIVER BASIN

06657000 NORTH PLATTE RIVER AT RECORDER STATION, BELOW WHALEN, WYO.

LOCATION.--Lat 42°14'20", long 104°36'29", in NE¼SW¼ sec.12, T.26 N., R.65 W., Goshen County, on left bank 0.2 mi (0.3 km) downstream from Cottonwood Draw, 2.5 mi (4.0 km) downstream from Whalen Dam, and 4.8 mi (7.7 km) northwest of Fort Laramie.

DRAINAGE AREA.--20,384 mi² (52,795 km²), of which 5,178 mi² (13,411 km²), including 3,959 mi² (10,254 km²) in Great Divide Basin in southern Wyoming, is probably noncontributing. Area at site used prior to Apr. 16, 1938, 20,277 mi² (52,517 km²).

PERIOD OF RECORD.--May 1909 to current year. Prior to Apr. 16, 1938, published as "below Whalen."

GAGE.--Water-stage recorder. Altitude of gage is 4,250 ft (1,295 m), from topographic map. Prior to Apr. 16, 1938, nonrecording gages at Whalen Dam and canals 2.5 mi (4.0 km) upstream at different datums. Apr. 16, 1938, to Nov. 17, 1955, water-stage recorder at site 200 ft (61 m) downstream, and Nov. 18, 1955, to Feb. 16, 1972, at present site at datum 1.00 ft (0.305 m) higher.

EXTREMES.--Current year: Maximum discharge, 7,540 ft³/s (214 m³/s) June 8, gage height, 6.98 ft (2.128m); minimum daily, 0.49 ft³/s (0.014 m³/s) Feb. 10, 27.

Period of record: Maximum discharge determined, 22,000 ft³/s (623 m³/s) June 26, 1955, gage height, 9.85 ft (3.002 m), from rating curve extended above 4,500 ft³/s (127 m³/s) on basis of studies of peak flow measurements of upstream floods; no flow at times in 1910, 1916, 1925-27, 1962-64, 1967, 1970-71.

REMARKS.--Records good. Flow regulated by Whalen Dam 2.5 mi (4.0 km) upstream. Natural flow of stream affected by storage reservoirs, transbasin diversions, power development, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Seventeen discharge measurements furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 1310: 1924. WSP 1918: 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	147	45	4.6	2.1	1.2	.56	380	923	6,930	4,120	3,260	4,000
2	144	44	4.3	1.8	1.1	.63	945	1,010	7,240	4,050	3,370	4,090
3	133	44	3.4	1.5	.96	.83	956	1,010	7,330	3,660	3,470	4,120
4	166	43	3.3	1.3	.70	1.1	978	1,080	7,410	3,640	3,480	3,970
5	198	40	3.1	1.1	.96	1.2	967	1,140	7,300	3,630	3,480	3,530
6	478	39	2.9	1.1	.70	1.2	956	1,130	7,280	3,590	3,500	3,070
7	221	36	3.0	1.1	.83	1.2	967	1,130	7,370	3,590	3,780	2,600
8	75	35	2.8	1.1	.70	1.2	956	1,130	7,430	3,610	3,810	2,050
9	88	36	2.5	1.2	.63	1.1	956	972	7,370	3,590	3,900	1,250
10	100	35	2.5	1.4	.49	.83	956	520	7,300	3,560	3,900	800
11	78	28	2.4	1.1	.70	.70	967	362	7,100	3,560	3,860	663
12	109	17	2.2	1.1	1.4	3.8	967	350	7,010	3,510	3,810	636
13	78	14	2.2	1.9	1.5	7.9	1,180	350	7,120	3,560	3,800	1,090
14	67	12	2.4	3.8	1.1	16	1,960	933	7,140	3,560	3,800	1,670
15	66	10	2.4	4.1	.96	16	2,000	2,800	7,050	3,580	3,830	1,810
16	60	9.6	2.4	4.3	.83	17	1,990	3,350	6,740	3,580	3,780	1,880
17	54	9.0	2.2	4.3	.70	17	1,770	3,880	6,530	3,580	3,170	1,710
18	53	8.2	3.3	4.3	.63	14	1,460	4,430	6,250	3,560	3,780	1,130
19	49	7.9	4.1	3.6	.70	11	1,190	5,010	6,230	3,610	3,760	820
20	49	7.2	4.6	3.1	.83	9.0	1,550	5,310	6,210	3,110	3,760	830
21	48	6.8	4.9	2.7	.83	153	2,030	5,580	6,170	2,560	3,810	860
22	48	6.5	5.2	1.7	.70	272	2,000	5,710	6,110	3,130	3,900	840
23	46	6.2	4.6	1.7	.63	297	2,050	5,730	5,950	3,000	3,920	700
24	45	5.7	4.1	1.9	.63	298	2,080	6,210	5,770	3,050	3,920	700
25	44	5.4	3.4	1.9	.56	300	2,060	6,650	5,390	3,230	3,930	740
26	43	6.0	3.3	1.6	.56	310	2,060	6,410	5,140	3,430	3,920	710
27	42	5.7	3.1	1.4	.49	308	2,050	6,110	4,810	3,430	3,920	800
28	40	5.4	2.7	1.4	.56	324	2,030	6,030	4,610	3,480	3,880	750
29	39	4.6	2.6	1.1	-----	353	1,650	5,950	4,270	3,550	3,900	520
30	32	4.8	2.4	1.4	-----	332	890	6,090	4,220	3,560	3,920	618
31	31	-----	2.4	1.2	-----	326	-----	6,590	-----	3,420	3,950	-----
TOTAL	2,871	577.0	99.3	63.3	22.58	3,395.25	42,961	103,880	192,780	108,090	116,270	48,957
MEAN	92.6	19.2	3.20	2.04	.81	110	1,432	3,351	6,426	3,487	3,751	1,632
MAX	478	45	5.2	4.3	1.5	353	2,080	6,650	7,430	4,120	3,950	4,120
MIN	31	4.6	2.2	1.1	.49	.56	380	350	4,220	2,560	3,170	520
AC-FT	5,690	1,140	197	126	45	6,730	85,210	206,000	382,400	214,400	230,600	97,110
CAL YR	1972	TOTAL	254,456.70	MEAN	695	MAX	3,000	MIN	1.0	AC-FT	504,700	
WTR YR	1973	TOTAL	619,966.43	MEAN	1,699	MAX	7,430	MIN	.49	AC-FT	1,230,000	

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LOCATION.--Lat 40°48'02", long 105°52'40", in NW¼NW¼ sec.36, T.10 N., R.76 W., Larimer County, on left bank 200 ft (61 m) downstream from bridge on county road, 350 ft (110 m) downstream from Nunn Creek, 1,300 ft (400 m) upstream from Stub Creek, and 3.0 mi (4.8 km) east of Glendevy.

PERIOD OF RECORD.--June 1904 to October 1905, August 1910 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as "at Glendevay" 1905, 1910-18.

AVERAGE DISCHARGE.--64 years, 73.8 ft³/s (2.090 m³/s), 53,470 acre-ft/yr (65.9 hm³/yr).

Period of record: Maximum discharge, 2,240 ft³/s (63.4 m³/s) June 9, 1923, gage height, 4.55 ft (1.387 m), site and datum then in use, from floodmarks, from rating curve extended above 1,400 ft³/s (40 m³/s); minimum daily recorded, 5.0 ft³/s (0.14 m³/s) Feb. 14, 15, 1911, but may have been less during winter periods of no gage-height record.

REVISIONS (WATER YEARS).--WSP 469: 1911-12. WSP 506: Drainage area. WSP 1310: 1905, 1914. WSP 1918: 1918 (monthly runoff).

DAY	UCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	41	23	15	16	17	17	43	292	352	57	22
2	34	37	24	15	16	17	17	35	318	331	60	22
3	33	36	23	15	16	17	17	34	266	280	53	50
4	31	38	22	15	16	18	17	44	224	203	52	53
5	34	36	22	15	16	18	17	56	203	176	61	49
6	34	34	22	15	16	18	17	66	235	170	57	47
7	33	34	22	15	17	18	17	69	296	156	51	53
8	38	36	22	15	17	18	17	80	380	132	47	49
9	40	32	22	15	17	18	17	108	487	123	41	47
10	36	31	22	15	17	18	18	117	736	112	37	52
11	33	31	22	16	17	18	18	117	820	98	39	63
12	31	31	22	16	16	18	20	119	754	100	37	58
13	31	31	22	16	16	18	21	123	759	152	34	50
14	32	31	22	16	16	18	23	134	786	188	31	45
15	37	31	21	16	16	18	25	145	764	135	30	43
16	49	31	21	17	16	18	22	172	565	115	29	41
17	44	31	21	17	15	18	23	206	455	91	29	39
18	50	30	20	17	15	18	25	254	428	82	29	38
19	48	29	20	17	15	18	21	328	345	105	28	36
20	44	28	19	17	15	18	22	402	296	144	26	35
21	54	27	19	16	15	18	22	444	314	142	26	33
22	53	26	18	16	15	18	22	347	311	93	26	32
23	47	25	18	16	15	18	22	398	248	75	26	32
24	45	24	17	16	16	18	22	410	296	152	26	32
25	42	23	17	16	16	18	23	376	284	141	26	34
26	41	22	17	15	16	18	23	352	373	169	24	40
27	42	22	17	15	17	18	26	277	380	79	23	37
28	40	21	17	14	17	18	34	251	335	63	22	44
29	36	21	17	15	-----	18	47	254	292	64	22	47
30	32	22	16	16	-----	17	52	254	328	79	21	49
31	43	-----	15	16	-----	17	-----	243	-----	68	21	-----
TOTAL	1,225	892	622	486	448	553	684	6,298	12,575	4,390	1,091	1,272
MEAN	39.5	29.7	20.1	15.7	16.0	17.8	22.8	203	419	142	35.2	42.4
MAX	54	41	24	17	17	18	52	444	620	352	61	63
MIN	31	21	15	14	15	17	17	34	203	63	21	22
AC=FT	2,430	1,770	1,230	964	889	1,100	1,360	12,490	24,940	8,710	2,160	2,520
CAL YR 1972	TOTAL 25,605		MEAN 70.0		MAX 708	MIN 15	AC=FT 50,790					
WIR YR 1973	TOTAL 30,536		MEAN 83.7		MAX 820	MIN 14	AC=FT 60,570					

PLATTE RIVER BASIN

06659500 LARAMIE RIVER AND PIONEER CANAL NEAR WOODS, WYO.

LOCATION.--River: Lat 41°08'17", long 105°58'49", in NW¼SE¼ sec.36, T.14 N., R.77 W., Albany County, on left bank 100 ft (30 m) upstream from diversion dam for Pioneer Canal, 2.2 mi (3.5 km) downstream from Fox Creek, 2.5 mi (4.0 km) northeast of Woods, and 23 mi (37 km) southwest of Laramie.

Canal: Lat 41°08'21", long 105°58'45", in SE¼NE¼ sec.36, T.14 N., R.77 W., Albany County, on left bank 400 ft (122 m) downstream from headgate.

DRAINAGE AREA.--434 mi² (1,124 km²). Drainage area at mouth, 4,565 mi² (11,823 km²).

PERIOD OF RECORD.--April 1912 to September 1924, October 1926 to September 1927, October 1931 to current year (no winter records since 1972). Monthly discharge only for some periods, published in WSP 1310.

GAGE.--River: Water-stage recorder and concrete control. Datum of gage is 7,388.99 ft (2,252.164m) above mean sea level. Apr. 16 to Nov. 15, 1912, nonrecording gage and Nov. 16, 1912, to Sept. 22, 1915, water-stage recorder 90 ft (27 m) downstream between dam crest and canal headgates at datum 1.00 ft (0.305 m) higher. Sept. 23, 1915, to Sept. 30, 1924, Apr. 19 to Sept. 30, 1927, and Apr. 11, 1932, to Sept. 30, 1935, water-stage recorder at site 50 ft (15 m) downstream at datum 1.00 ft (0.305 m) higher. Oct. 1, 1935, to July 13, 1950, water-stage recorder at site 50 ft (15 m) downstream at present datum.

Canal: Water-stage recorder and Parshall flume. Altitude of gage is 7,390 ft (2,250 m), from topographic map. Apr. 16, 1912, to Apr. 10, 1923, nonrecording gage; Apr. 11, 1923, to Sept. 30, 1924, and Apr. 19 to June 9, 1927, water-stage recorder; June 10 to Sept. 30, 1927, and Apr. 11, 1932, to May 8, 1938, nonrecording gage; May 9, 1938, to Apr. 26, 1966, water-stage recorder at site 1.5 mi (2.4 km) downstream at different datums. Apr. 27, 1966, to May 8, 1967, at present site, at datum 0.06 ft (0.018 m) lower.

EXTREMES (combined flow river and canal).--Current year: Maximum discharge, 2,470 ft³/s (70.0 m³/s) June 15; minimum daily during period of operation, 53 ft³/s (1.50 m³/s) Apr. 2, 3.

Period of record: Maximum discharge, 5,060 ft³/s (143 m³/s) June 10, 1923 (river discharge by computation of peak flow over dam); minimum daily (1950-72), 10 ft³/s (0.28 m³/s) Aug. 30, Sept. 2-5, 1954.

REMARKS.--Records good except those for winter period, which are poor. Pioneer Canal diverts from left bank of river at diversion dam 100 ft (30 m) downstream for irrigation in vicinity of Laramie. Records show combined flow of river and canal. Three small reservoirs above station in Wyoming, total capacity, about 600 acre-ft (0.740 km³) for irrigation, stock water, and domestic use. Diversions for irrigation of about 5,200 acres (21.0 km²) above station. Transbasin diversions above station to Cache la Poudre River and tributaries (see page 154).

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1310: 1918-20, 1922, 1924. WSP 1710: 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							53	250	1,010	689	193	58
2							53	184	1,110	653	193	66
3							53	159	1,150	575	194	71
4							53	192	971	489	193	91
5							60	242	816	417	222	89
6							60	304	805	376	206	82
7							68	309	881	357	173	82
8							62	304	1,050	339	156	90
9							78	362	1,250	339	141	81
10							66	404	1,490	287	126	81
11							60	462	1,930	253	119	99
12							63	486	1,930	240	119	125
13							60	520	1,800	366	112	106
14							106	534	1,920	552	101	93
15							157	581	2,280	440	95	83
16							125	687	1,790	332	92	82
17							112	815	1,210	265	90	78
18							146	990	1,060	232	90	75
19							116	1,310	887	291	89	71
20							112	1,570	791	425	83	66
21							104	1,910	758	425	90	62
22							98	1,840	748	317	82	61
23							94	1,610	698	252	78	61
24							102	1,570	711	229	76	61
25							112	1,590	716	292	77	66
26							106	1,630	800	296	72	81
27							118	1,290	859	257	64	85
28							178	1,050	806	183	61	85
29							275	1,010	769	186	59	112
30							354	931	726	228	58	114
31								918		231	57	
TOTAL							3,263	26,014	33,742	10,813	3,561	2,457
MEAN							109	839	1,125	349	115	81.9
MAX							354	1,910	2,280	689	222	125
MIN							53	159	693	183	57	58
AL-FIT							6,470	51,600	66,930	21,450	7,060	4,870

PLATTE RIVER BASIN

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06659580 SAND CREEK AT COLORADO-WYOMING STATE LINE

LOCATION.--Lat 40°59'44", long 105°45'36", in NE¼NW¼ sec.1, T.12 N., R.75 W., Larimer County, Colorado, on left bank 200 ft (61 m) south of Colorado-Wyoming State line, and 17 mi (27 km) southwest of Tie Siding, Wyo.

DRAINAGE AREA.--29.2 mi² (75.6 km²).

PERIOD OF RECORD.--October 1968 to current year (no winter records since 1971).

GAGE.--Water-stage recorder. Altitude of gage is 7,620 ft (2,323 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 198 ft³/s (5.61 m³/s) May 21, gage height, 4.20 ft (1.280 m); minimum daily during period of operation, 1.2 ft³/s (0.034 m³/s) Aug. 31, Sept. 1.

Period of record: Maximum discharge, 250 ft³/s (7.08 m³/s) June 15, 1970, gage height, 4.41 ft (1.344 m); minimum daily during period of operation, 0.13 ft³/s (0.004 m³/s) July 26-28, 1972.

REMARKS.--Records good. Natural flow affected by diversion above station to Cache la Poudre River basin through Wilson Supply ditch (see page 154). Water imported above station from Deadman Creek in Laramie River basin is rediverted through Wilson Supply ditch but is wasted down Sand Creek at times. Diversions for irrigation of about 170 acres (69 hm²) above station.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

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	19	107	26	7.0	1.2
2							2.7	14	127	23	5.6	1.3
3							2.8	12	115	19	5.6	1.8
4							2.9	17	98	16	7.0	1.8
5							3.0	24	85	14	8.1	1.8
6							3.0	32	90	12	8.5	1.8
7							2.8	31	102	11	6.6	1.6
8							2.9	42	113	12	5.6	1.4
9							2.6	51	90	13	4.8	1.4
10							2.4	53	102	11	4.2	1.6
11							2.2	58	94	8.9	3.4	3.8
12							2.0	61	83	9.2	3.7	5.1
13							2.0	67	170	16	3.7	4.0
14							3.0	72	164	26	3.4	3.0
15							3.5	83	149	19	3.0	2.6
16							3.7	96	118	17	2.8	2.4
17							5.4	115	98	11	2.6	2.4
18							5.9	132	94	8.9	2.6	2.4
19							5.4	155	74	10	2.6	2.0
20							8.5	170	72	23	2.4	1.8
21							10	191	38	19	2.2	1.8
22							7.7	173	21	13	2.0	1.6
23							5.6	152	18	9.2	2.0	1.6
24							5.4	146	41	7.3	2.0	1.6
25							5.4	132	42	6.6	2.0	1.8
26							4.8	127	40	5.9	1.8	3.4
27							6.2	111	39	5.6	1.6	4.5
28							11	96	37	6.2	1.4	4.8
29						-----	20	89	37	7.7	1.4	7.3
30						-----	26	81	32	7.3	1.3	7.0
31		-----				-----	-----	83	-----	8.1	1.2	-----
TOTAL							171.3	2,685	2,490	401.9	112.1	80.6
MEAN							5.71	86.6	83.0	13.0	3.62	2.69
MAX							26	191	170	26	8.5	7.3
MIN							2.0	12	18	5.6	1.2	1.2
AC-FT							340	5,330	4,940	797	222	160

PLATTE RIVER BASIN

06661000 LITTLE LARAMIE RIVER NEAR FILMORE, WYO.

LOCATION.--Lat 41°17'22", long 106°02'29", in NW¼NW¼NE¼ sec.9, T.15 N., R.77 W., Albany County, on left bank 25 ft (8 m) downstream from bridge at May Ranch, 1.5 mi (2.4 km) west of Filmore, and 3.5 mi (5.6 km) downstream from North Fork.

DRAINAGE AREA.--156 mi² (404 km²).

PERIOD OF RECORD.--July 1902 to September 1903 (published as "near Hatton"), May 1911 to November 1926, October 1932 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 7,600 ft (2,316 m), from topographic map. July 5, 1902, to Aug. 15, 1903, nonrecording gage at site 5 ft (1.5 m) downstream at different datum. May 14, 1911, to Apr. 17, 1914, nonrecording gage at site 5 ft (1.5 m) downstream at datum 0.21 ft (0.064 m) lower. May 1, 1933, to Sept. 15, 1938, nonrecording gage, and Sept. 16, 1938, to Nov. 5, 1969, water-stage recorder at site 5 ft (1.5 m) downstream at present datum.

AVERAGE DISCHARGE.--55 years (1902-3, 1911-26, 1932-71), 103 ft³/s (2.917m³/s), 74,620 acre-ft/yr (92.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 922 ft³/s (26.1 m³/s) June 11, gage height, 3.36 ft (1.024 m); minimum daily during period of operation, 24 ft³/s (0.68 m³/s) Sept. 21.

Period of record: Maximum discharge, 3,450 ft³/s (97.7 m³/s) June 10, 1965, gage height, 5.33 ft (1.625 m); minimum daily determined, 1.0 ft³/s (0.028 m³/s) Sept. 17-20, 1913.

REMARKS.--Records good. Ten small reservoirs above station, combined capacity, about 160 acre-ft (0.20 hm³), for irrigation, stock water, recreation, and domestic use. Diversions above station for irrigation of about 11,020 acres (44.6 km²), of which about 20 acres (8.1 hm²) lies below station.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1310: 1903, 1914, 1922-26. WSP 1440: 1902. WSP 1730: 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							40	53	313	307	103	33
2							38	56	336	283	93	41
3							36	97	304	247	85	39
4							40	72	289	226	97	35
5							42	59	274	196	125	31
6							45	93	292	184	105	30
7							42	95	327	170	93	33
8							38	69	440	196	79	30
9							35	71	610	202	68	29
10							42	68	710	170	64	30
11							45	69	768	155	65	62
12							54	74	665	152	63	59
13							55	80	665	214	59	41
14							56	89	655	232	53	36
15							48	95	635	170	49	36
16							38	117	475	145	48	37
17							39	145	364	140	52	35
18							42	149	339	132	54	31
19							38	274	301	250	45	29
20							25	310	280	322	44	27
21							32	346	280	271	44	24
22							39	346	301	193	44	26
23							44	357	316	162	44	26
24							48	384	336	138	43	27
25							51	364	339	132	41	31
26							54	357	388	119	38	34
27							72	304	396	111	36	33
28							79	277	360	109	34	35
29					-----		74	274	364	130	34	41
30					-----		68	253	346	145	33	36
31		-----			-----		-----	268	-----	117	31	-----
TOTAL							1,397	5,715	12,468	5,720	1,866	1,037
MEAN							46.6	184	416	185	60.2	34.6
MAX							79	384	768	322	125	62
MIN							25	53	274	109	31	24
AC-FT							2,770	11,340	24,730	11,350	3,700	2,060

PLATTE RIVER BASIN

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06661585 LARAMIE RIVER NEAR BOSLER, WYO.

LOCATION.--Lat 41°33'17", long 107°40'58", in NW¼NW¼NE¼ sec.10, T.18 N., R.74 W., Albany County, on left bank 50 ft (15 m) upstream from bridge on U.S. Highways 30 and 287, 0.2 mi (0.3 km) northwest of Bosler Junction, 1.7 mi (2.7 km) south of Bosler, and 2.0 mi (3.2 km) downstream from Soil Bank Boughton Canal diversion dam.

DRAINAGE AREA.--1,790 mi² (4,636 km²), of which 283 mi² (733 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1972 to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 7,030 ft (2,140 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 1,630 ft³/s (46.2 m³/s) June 19, gage height, 6.72 ft (2.048 m); maximum gage height, 8.40 ft (2.560 m) Apr. 22 (backwater from ice jam); minimum daily discharge, 25 ft³/s (0.71 m³/s) Oct. 2.

REMARKS.--Records fair except those for winter period and period of no gage-height record, which are poor. Natural flow of stream affected by transbasin diversions, storage reservoirs, diversion above station for irrigation of about 54,700 acres (221 km²), of which about 2,300 acres (9.31 km²) lies below station, and return flows from irrigated areas.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

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	26	65	52	40	44	68	78	1,070	1,100	273	288	36
2	25	70	54	40	46	68	74	885	989	291	282	39
3	27	76	56	40	48	67	70	749	873	269	267	40
4	26	80	54	40	47	67	75	741	741	290	255	41
5	26	80	50	40	46	66	95	737	733	297	269	40
6	26	78	50	39	47	66	120	729	785	329	284	39
7	26	82	50	37	47	66	115	701	857	302	284	39
8	26	85	50	36	46	67	105	721	785	311	265	43
9	29	86	50	34	44	67	100	623	677	336	231	47
10	29	80	49	32	46	72	130	525	633	327	206	50
11	28	75	48	30	48	78	150	528	626	311	185	76
12	28	65	46	30	48	80	210	553	725	277	170	141
13	29	56	44	32	47	82	270	549	965	253	154	134
14	29	55	45	32	43	85	300	563	1,160	277	138	117
15	30	54	47	34	44	75	290	561	1,340	351	127	105
16	31	56	46	33	45	78	270	595	1,540	469	115	96
17	33	53	46	32	47	76	310	605	1,580	504	108	90
18	33	52	43	31	46	77	315	609	1,580	433	105	84
19	32	50	46	33	47	78	270	547	1,620	373	96	79
20	32	50	45	32	49	75	250	705	1,500	504	88	66
21	44	51	46	30	53	77	305	797	1,160	677	78	55
22	59	48	45	30	52	79	400	917	821	821	71	52
23	88	46	48	31	54	75	550	1,070	563	897	71	48
24	90	45	47	33	57	75	775	1,230	427	801	71	44
25	88	44	47	37	59	75	1,030	1,450	334	591	61	43
26	90	49	48	40	60	78	1,060	1,540	275	463	54	44
27	93	50	50	37	64	78	870	1,510	253	424	47	50
28	90	45	47	39	66	81	833	1,520	249	394	42	52
29	88	45	43	42	-----	78	1,090	1,470	269	348	41	64
30	73	50	42	40	-----	76	1,430	1,420	275	318	39	76
31	70	-----	40	41	-----	75	-----	1,270	-----	299	37	-----
TOTAL	1,444	1,821	1,474	1,097	1,390	2,306	11,940	27,610	25,435	12,770	4,529	1,930
MEAN	46.6	60.7	47.5	35.4	49.6	74.4	398	891	848	412	146	64.3
MAX	93	86	56	42	66	85	1,430	1,540	1,620	897	288	141
MIN	25	44	40	30	43	66	70	525	249	251	37	36
AC-FT	2,800	3,610	2,920	2,180	2,760	4,570	23,680	54,760	50,450	25,330	8,980	3,830

WTR YR 1973 TOTAL 93,746 MEAN 257 MAX 1,620 MIN 25 AC-FT 185,900

NOTE.--No gage-height record Mar. 16 to Apr. 14.

PLATTE RIVER BASIN

06662000 LARAMIE RIVER NEAR LOOKOUT, WYO.

LOCATION.--Lat 41°45'44", long 105°41'16", in NE¼NW¼SE¼ sec.27, T.21 N., R.74 W., Albany County, on right bank 155 ft (47 m) downstream from bridge on county road, 1.0 mi (1.6 km) upstream from Wheatland Reservoir No. 2, and 9.0 mi (14.5 km) northeast of Lookout.

DRAINAGE AREA.--2,174 mi² (5,631 km²), of which 603 mi² (1,562 km²) is probably noncontributing. Drainage area at mouth, 4,565 mi² (11,823 km²).

PERIOD OF RECORD.--May 1912 to December 1917, January 1921 to December 1927, April 1932 to current year (no winter records since 1972). Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 6,962.68 ft (2,122.225m) above mean sea level. Prior to Apr. 22, 1915, nonrecording gage and Apr. 22, 1915, to Aug. 31, 1917, water-stage recorder, at bridge 155 ft (47 m) upstream at same datum. Oct. 14, 1931, to Sept. 17, 1938, at site 125 ft (38 m) upstream at same datum.

AVERAGE DISCHARGE.--51 years (1912-17, 1921-27, 1932-72), 131 ft³/s (3.710m³/s), 94,910 acre-ft/yr (117 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,740 ft³/s (49.3 m³/s) June 20, gage height, 4.97 ft (1.515 m); maximum gage height, about 8.0 ft (2.4 m), date unknown (backwater from ice); minimum daily discharge during period of operation, 18 ft³/s (0.51 m³/s) Oct. 1, 2.

Period of record: Maximum discharge, 3,340 ft³/s (94.6 m³/s) June 17, 1957, gage height, 6.41 ft (1.954 m); maximum gage height, about 8.0 ft (2.4 m), occurred in 1973 (backwater from ice); no flow at times in 1934-35, 1939-40, 1954-55.

REMARKS.--Records fair. Natural flow of stream affected by transbasin diversions, storage reservoirs, diversions for irrigation of about 108,000 acres (437 km²) above station, and return flow from irrigated areas.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1310: 1913-17. WSP 1710: Drainage area.

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

DAY	GCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18							1,300	1,280	359	337	54
2	18							1,200	1,100	345	326	70
3	21							1,060	958	318	312	56
4	24							1,070	850	318	302	56
5	30							1,100	767	312	302	58
6	30							1,080	773	315	307	56
7	31							1,000	862	313	310	55
8	32							1,050	898	296	299	70
9	34							920	811	307	288	75
10	32							789	740	307	259	80
11	34							635	710	294	228	110
12	34							590	730	277	205	200
13	32							577	856	259	190	185
14	34							563	1,080	257	180	156
15	37							577	1,250	285	172	152
16	34							581	1,400	354	161	145
17	37							590	1,580	425	152	141
18	38							590	1,620	429	147	136
19	38							613	1,660	383	143	132
20	38							650	1,730	399	134	124
21	53							695	1,580	527	128	115
22	61							773	1,200	635	117	111
23	75							885	817	745	111	107
24	93							1,040	572	795	107	101
25	97							1,240	473	675	101	97
26	97							1,460	365	518	91	91
27	99							1,560	337	437	84	84
28	99							1,540	337	418	77	84
29	103				-----			1,570	345	402	73	86
30	97				-----			1,520	356	377	68	86
31	87	-----			-----		-----	1,460	-----	354	64	-----
TOTAL	1,587							30,279	28,037	12,440	5,775	3,133
MEAN	51.2							977	935	401	186	104
MAX	103							1,570	1,730	795	337	200
MIN	18							563	337	257	64	54
AC-FT	3,150							60,060	55,610	24,670	11,450	6,210

06664490 SYBILLE CREEK BELOW MULE CREEK, NEAR WHEATLAND, WYO.

LOCATION.--Lat 41°50'53", long 105°13'01", in NW¼NE¼SE¼ sec.27, T.22 N., R.70 W., Platte County, on left bank 0.4 mi (0.6 km) downstream from Mule Creek, 2.3 mi (3.7 km) upstream from Bluegrass Creek, and 19.5 mi (31.4 km) southwest of Wheatland.

DRAINAGE AREA.--219 mi² (567 km²).

PERIOD OF RECORD.--October 1968 to September 1972, April to July 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 5,325 ft (1,623 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, about 3,800 ft³/s (108 m³/s) July 28, gage height, 10.2 ft (3.11 m), from floodmarks, from rating curve extended above 1,300 ft³/s (36.8 m³/s); minimum daily during period of operation, 9.2 ft³/s (0.26 m³/s) Apr. 6.

Period of record: Maximum discharge, about 3,800 ft³/s (108 m³/s) July 28, 1973, gage height, 10.2 ft (3.11 m) from floodmarks, from rating curve extended above 1,300 ft³/s (36.8 m³/s); minimum daily, 1.0 ft³/s (0.028 m³/s) Sept. 23, 1972.

REVISIONS.--The maximum discharge for the water year 1971 has been revised to 324 ft³/s (9.18 m³/s) Mar. 27, 1971, gage height, 6.06 ft (1.847 m), superseding figure published in WRD Wyo, 1971.

REMARKS.--Records poor. Seven small reservoirs above station, combined capacity, about 400 acre-ft (0.493 km³) for irrigation. Diversions above station for irrigation of about 2,020 acres (8.77 km²), of which about 80 acres (32.4 km²) lies below station.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

REVISIONS.--Revised figures of discharge, in cubic feet per second, for the water year 1971, superseding those published in WRD Wyo, 1971, are given below:

Date		Discharge			
1971					
Mar. 27		198			
28		165			

	Cfs-days	Maximum	Minimum	Mean	Acre-feet
March 1971	1,207	198	17	38.9	2,390
WTR YR 1971	22,144	318	11	60.7	43,920
CAL YR 1971	22,064	318	11	60.4	43,760

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	392	215	53		
2							13	378	212	56		
3							13	376	188	54		
4							13	448	162	54		
5							14	516	149	54		
6							9.2	620	139	51		
7							11	680	135	50		
8							16	927	128	53		
9							15	1,210	122	50		
10							16	1,460	116	49		
11							17	1,080	116	48		
12							18	800	132	48		
13							22	705	119	48		
14							36	600	122	51		
15							63	500	123	50		
16							54	400	115	48		
17							62	350	110	47		
18							79	300	101	46		
19							107	250	94	55		
20							46	200	93	111		
21							87	220	91	99		
22							113	200	88	79		
23							123	130	78	73		
24							131	180	73	67		
25							143	180	70	66		
26							142	200	64	63		
27							166	190	61	60		
28							255	160	64	220		
29					-----		418	180	87	70		
30					-----		466	190	61	60		
31		-----			-----		-----	200	-----	50		-----
TOTAL							2,624.2	14,294	3,408	1,988		
MEAN							87.5	461	114	64.1		
MAX							419	1,460	215	220		
MIN							9.2	180	61	46		
AC-FT							5,210	24,350	6,760	3,940		

NOTE.--No gage-height record May 8-11, 14-31, July 28-31.

PLATTE RIVER BASIN

06664900 BLUEGRASS CREEK NEAR WHEATLAND, WYO.

LOCATION.--41°52'14", long 105°12'51", in NE¼NE¼NE¼ sec.22, T.22 N., R.70 W., Platte County, on right bank 150 ft (46 m) upstream from State Highway 34, 0.2 mi (0.3 km) upstream from Sybille Creek, and 18.2 mi (29.3 km) southwest of Wheatland.

DRAINAGE AREA.--139 mi² (360 km²).

PERIOD OF RECORD.--August 1958 to September 1963, October 1968 to current year(no winter records since 1972).

GAGE.--Water-stage recorder. Altitude of gage is 5,250 ft (1,600 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 2,590 ft³/s (73.3 m³/s) May 9, gage height, 5.92 ft (1.804 m), from rating extended above 700 ft³/s (19.8 m³/s); minimum daily during period of operation, 5.5 ft³/s (0.16 m³/s) Apr. 1, 3, 4.

Period of record: Maximum discharge, 2,590 ft³/s (73.3 m³/s) May 9, 1973, gage height, 5.92 ft (1.804 m), from rating extended above 700 ft³/s (19.8 m³/s); minimum daily, 0.35 ft³/s (0.010 m³/s) Jan. 8, 1970.

Flood of June 8, 1968, reached a discharge of about 3,400 ft³/s (96.3 m³/s), from comparison of flow at stations on Sybille Creek above and below Bluegrass Creek.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Most of flow during irrigation season is water released from Wheatland Reservoir No. 2, capacity, 90,870 acre-ft (112 hm³), revised, on the Laramie River and diverted through a tunnel 15 mi (24 km) upstream. Diversions for irrigation of about 210 acres (85 hm²) above station.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

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	377	350	542	358	385
2							6.0	262	370	531	354	430
3							5.5	274	350	547	354	405
4							5.5	407	405	581	358	362
5							5.6	686	490	587	362	362
6							6.4	964	505	599	358	286
7							8.1	933	531	605	354	286
8							7.4	1,240	531	611	358	298
9							7.0	1,360	564	611	350	258
10							7.7	772	564	542	354	242
11							7.4	558	553	569	362	205
12							7.4	262	626	569	390	145
13							9.0	185	390	599	380	90
14							17	158	405	575	366	40
15							46	145	405	510	358	26
16							49	160	400	525	358	25
17							50	145	430	542	385	25
18							97	143	430	558	410	25
19							128	138	430	617	405	24
20							26	129	480	564	400	24
21							17	131	490	380	405	24
22							33	115	500	294	490	21
23							44	107	500	279	480	20
24							48	105	495	242	475	33
25							81	103	485	276	465	95
26							84	105	485	276	455	110
27							151	99	515	276	455	115
28							414	90	553	338	450	115
29					-----		858	114	569	415	445	115
30					-----		642	294	547	430	380	100
31		-----			-----		-----	366	-----	400	375	-----
TOTAL							2,873.5	10,927	14,348	14,990	12,249	4,691
MEAN							95.8	352	478	484	395	156
MAX							858	1,360	626	617	490	430
MIN							5.5	90	350	242	350	20
AC-FT							5,700	21,670	28,460	29,730	24,300	9,300

LOCATION.--Lat 42°11'57", long 104°35'28", in SE₄SE₄NE₄ sec.25, T.26 N., R.65 W., Goshen County, on right bank 5 ft (1.5 m) downstream from Fort Laramie Canal Siphon, 10 ft (3 m) east of county road, 1.1 mi (1.8 km) downstream from Gering-Fort Laramie Canal diversion, 1.7 mi (2.7 km) southwest of Old Fort Laramie, 3.0 mi (4.8 km) upstream from Deer Creek, 4.0 mi (6.4 km) southwest of Fort Laramie and 5.1 mi (8.2 km) upstream from mouth. Prior to May 10, 1973, at site 4.4 mi (7.1 km) downstream.

PERIOD OF RECORD.--April 1915 to current year (no winter records prior to 1927). Monthly discharge only for some periods, published in WSP 1310. Records for water years 1926-39, previously published including diversions to Gering-Fort Laramie Canal, were adjusted to exclude flow in the canal in WSP 1310. Prior to October 1931, published as "at Fort Laramie." Prior to May 10, 1973, at site 4.4 mi (7.1 km) downstream at different datum.

GAGE.--Water-stage recorder. Datum of gage is 4,257.04 ft (1,297.546m) above mean sea level (Bureau of Reclamation bench mark). Apr. 4, 1915, to Mar. 31, 1925, nonrecording gage at site 4.4 mi (7.1 km) downstream at different datum. Apr. 1, 1925, to Sept. 30, 1932, nonrecording gage and Oct. 1, 1932, to Aug. 20, 1935, water-stage recorder, at present site at different datum. Aug. 21, 1935, to Nov. 2, 1970, water-stage recorder 4.0 mi (6.4 km) downstream at different datum. Nov. 3, 1970, to May 9, 1973, water-stage recorder 4.4 mi (7.1 km) downstream at different datum.

EXTREMES.--Current year: Maximum discharge, 6,260 ft³/s (177 m³/s) May 10, gage height, 9.40 ft (2.865 m), from floodmark; minimum daily, 56 ft³/s (1.59 m³/s) July 11, 12.

Period of record: Maximum discharge, 6,260 ft³/s (177 m³/s) May 10, 1973, gage height, 9.40 ft (2.865 m); no flow Jan. 31 to Mar. 20, Oct. 24 to Dec. 17, 1926, Mar. 1-26, 1927, Apr. 14, 1938 (all flow diverted by Gering-Fort Laramie Canal).

REMARKS.--Records good except those for winter period, which are poor. No diversion to Gering-Fort Laramie Canal since 1956. Natural flow of stream affected by transbasin diversions, storage reservoirs, power development, ground-water withdrawals and diversions for irrigation of about 176,000 acres (710 km²) above station, and return flow from irrigated areas. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1918: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	112	110	80	100	122	158	3,920	912	141	326	78
2	70	117	110	90	100	122	158	3,440	758	131	253	92
3	68	125	110	90	100	125	161	2,940	670	123	227	99
4	70	127	100	90	105	129	169	2,790	614	115	215	107
5	75	127	85	85	110	127	169	3,180	567	110	204	108
6	75	126	80	90	100	123	165	3,840	538	105	196	107
7	77	118	80	100	90	122	163	4,400	507	90	182	107
8	75	117	75	110	85	116	169	4,810	471	78	173	105
9	77	117	70	100	90	116	176	5,200	433	73	165	271
10	77	121	70	110	100	116	174	5,810	403	65	155	245
11	73	126	65	120	120	116	185	5,530	385	59	153	229
12	72	126	70	130	130	114	190	4,930	400	56	148	447
13	73	126	80	140	130	116	186	4,400	418	56	140	514
14	73	125	90	150	120	132	185	3,490	443	62	138	458
15	75	123	100	160	110	91	195	3,070	403	78	92	368
16	79	129	110	160	110	109	305	2,800	388	88	96	329
17	80	132	120	145	110	123	330	2,800	356	86	90	326
18	82	133	120	135	105	134	340	2,750	331	86	88	320
19	83	133	120	140	111	143	464	2,770	310	96	84	307
20	87	130	120	125	116	148	750	2,800	289	164	82	289
21	92	129	120	120	102	152	536	2,650	276	362	82	271
22	99	129	130	110	111	163	367	2,550	259	385	84	257
23	102	127	140	90	113	168	400	2,370	242	323	85	250
24	108	122	130	100	117	160	472	2,200	223	262	84	246
25	111	118	130	105	122	161	556	2,080	204	253	79	239
26	112	118	120	105	126	160	710	1,960	187	246	76	231
27	108	117	114	100	127	158	818	1,890	171	235	78	231
28	105	120	112	80	127	158	856	1,790	152	223	78	233
29	107	120	121	90	-----	161	1,210	1,620	141	209	75	239
30	111	115	68	100	-----	163	3,520	1,490	141	200	72	244
31	111	-----	70	100	-----	163	-----	1,210	-----	374	73	-----
TOTAL	2,677	3,705	3,140	3,450	3,087	4,211	14,247	97,480	11,592	4,934	4,073	7,347
MEAN	86.4	124	101	111	110	136	475	3,145	386	159	131	245
MAX	112	133	140	160	130	168	3,520	5,810	912	385	326	514
MIN	68	112	65	80	85	91	158	1,210	141	56	72	78
AC-FT	5,310	7,350	6,230	6,840	6,120	8,350	28,260	193,400	22,990	9,790	8,080	14,570
CAL YR 1972	TOTAL	45,294	MEAN	124	MAX	305	MIN	36	AC-FT	89,840		
WTR YR 1973	TOTAL	159,943	ME									

PLATTE RIVER BASIN

06670900 NORTH PLATTE RIVER NEAR LINGLE, WYO.

LOCATION.--Lat 42°06'13", long 104°21'02", in SW¼SE¼ (two channels) sec.30, T.25 N., R.62 W., Goshen County, on left bank of main channel at downstream side of bridge, and on right bank of north channel at upstream side of bridge, on State Highway 0805, 1.8 mi (2.9 km) upstream from mouth of Rawhide Creek, and 2.1 mi (3.4 km) south of Lingle.

DRAINAGE AREA.--25,095 mi² (64,996 km²), of which 5,809 mi² (15,045 km²), including 3,959 mi² (10,254 km²) in Great Divide Basin in southern Wyoming, is probably noncontributing.

PERIOD OF RECORD.--May 1968 to current year.

GAGE.--Two water-stage recorders. Datum of gages is 4,131.41 ft (1,259.254 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 8,440 ft³/s (239 m³/s) May 25; minimum daily, 150 ft³/s (4.25 m³/s) Dec. 11, 12.

Period of record: Maximum discharge, 9,480 ft³/s (268 m³/s) May 16, 1971; minimum daily, 106 ft³/s (3.00 m³/s) Jan. 6, 1970.

REMARKS.--Records fair. River flows in two channels for which separate records are computed; figures given herein represent combined discharge. Natural flow of stream affected by storage reservoirs, transbasin diversions, power development, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Diversion from main channel to Rock Ranch Canal 0.6 mi (1.0 km) upstream. Diversion from north channel to Torrington ditch 1.4 mi (2.3 km) upstream. Water-quality records for the current year 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	352	279	226	210	186	181	507	4,740	7,800	4,220	3,470	4,160
2	346	281	224	210	176	181	817	4,410	7,910	4,150	3,500	4,280
3	334	287	220	208	174	181	1,060	3,980	7,870	3,900	3,600	4,310
4	337	293	210	200	175	181	1,150	3,690	7,870	3,840	3,580	4,250
5	351	290	200	190	175	182	1,150	3,890	7,790	3,800	3,700	4,000
6	436	281	180	190	175	180	1,150	4,700	7,730	3,710	3,660	3,580
7	583	279	190	185	180	176	1,130	5,430	7,690	3,660	3,780	3,130
8	396	276	160	185	175	174	1,130	5,920	7,630	3,620	3,990	2,670
9	348	276	170	185	175	172	1,160	6,100	7,600	3,550	4,080	2,070
10	341	273	160	185	175	170	1,170	6,270	7,420	3,420	4,110	1,690
11	351	276	150	190	180	170	1,170	6,080	7,280	3,390	4,060	1,570
12	330	273	150	195	190	169	1,170	3,470	7,010	3,380	4,040	1,500
13	344	269	155	200	192	168	1,180	5,090	7,100	3,460	3,980	1,660
14	316	261	160	210	194	178	1,750	4,400	7,110	3,510	3,920	2,250
15	306	259	170	215	187	179	2,000	5,340	7,150	3,480	3,870	2,260
16	296	256	175	220	186	169	2,100	5,800	6,910	3,500	3,880	2,400
17	290	255	185	222	184	175	2,090	6,280	6,740	3,510	3,560	2,370
18	287	252	205	220	182	182	1,830	6,600	6,490	3,450	3,530	2,020
19	279	250	230	216	182	180	1,700	7,000	6,410	3,530	3,810	1,620
20	279	250	240	214	181	190	1,910	7,360	6,380	3,590	3,800	1,480
21	281	255	250	208	180	190	2,560	7,670	6,340	2,670	3,840	1,460
22	281	250	250	198	178	252	2,300	7,630	6,350	3,180	3,940	1,390
23	284	243	240	186	176	362	2,320	7,630	6,170	3,150	4,030	1,310
24	237	245	235	130	180	409	2,420	7,920	6,020	3,070	4,070	1,240
25	290	242	225	192	180	438	2,570	8,260	5,600	3,180	4,140	1,200
26	290	242	220	194	181	451	2,660	8,140	5,390	3,420	4,150	1,200
27	287	238	215	192	181	484	2,780	7,700	5,060	3,470	4,190	1,140
28	284	235	214	188	182	477	2,820	7,660	4,870	3,500	4,150	1,300
29	279	226	210	168	-----	487	2,910	7,490	4,470	3,560	4,100	1,070
30	281	216	215	182	-----	501	3,700	7,390	4,310	3,620	4,120	1,130
31	276	-----	215	185	-----	508	-----	7,550	-----	3,670	4,110	-----
TOTAL	10,022	7,813	6,275	6,134	5,564	3,078	54,394	193,490	200,470	109,160	120,760	65,710
MEAN	323	250	202	196	181	261	1,813	6,242	6,682	3,521	3,895	2,190
MAX	583	283	250	222	194	506	3,700	8,260	7,910	4,220	4,190	4,310
MIN	276	216	150	168	174	168	507	3,690	4,310	2,670	3,470	1,070
AC-FT	19,880	15,500	12,450	12,170	10,040	16,020	107,900	383,800	397,600	216,500	239,500	130,300
CAL YR 1972	TOTAL	312,343	MEAN	853	MAX	2,950	MIN	150	AC-FT	619,500		
WTR YR 1973	TOTAL	707,370	MEAN	2,157	MAX	3,260	MIN	150	AC-FT	1,562,000		

PLATTE RIVER BASIN

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06671000 RAWHIDE CREEK NEAR LINGLE, WYO.

LOCATION.--Lat 42°07'32", long 104°19'36", in SE¼NE¼ sec.20, T.25 N., R.62 W., Goshen County, on right bank 200 ft (61 m) upstream from bridge on U.S. Highway 26, 1.0 mi (1.6 km) east of Lingle, and 1.0 mi (1.6 km) upstream from mouth.

DRAINAGE AREA.--522 mi² (1,352 km²).

PERIOD OF RECORD.--May 1928 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 4,160 ft (1,268 m), from topographic map. See WSP 1918 for history of changes prior to May 16, 1955.

AVERAGE DISCHARGE.--43 years (1928-71), 21.5 ft³/s (0.609 m³/s), 15,580 acre-ft/yr (19.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge 303 ft³/s (8.58 m³/s) Sept. 11, gage height, 6.03 ft (1.838 m); minimum daily during period of operation, 4.3 ft³/s (0.12 m³/s) June 1.

Period of record: Maximum discharge, 3,970 ft³/s (112 m³/s) Sept. 7, 1946, gage height, 11.76 ft (3.584 m); no flow July 5-7, 1961, Apr. 12, 29, 1966, Mar. 20-28, 1967, Apr. 13, 1971.

REMARKS.--Records poor. Low flow represents return water from lands irrigated by Interstate Canal in Rawhide Creek Basin. Six small reservoirs above station, combined capacity, about 460 acre-ft (0.567 hm³), for irrigation. Diversions for irrigation of about 1,600 acres (6.48 km²) above station. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1440: 1932, 1936(M). WSP 1918: 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							17	32	4.3	9.0	19	28
2							17	29	7.5	9.0	18	67
3							16	26	13	9.6	17	74
4							14	20	14	9.6	19	65
5							15	28	14	9.0	30	61
6							17	27	14	9.9	21	56
7							17	28	12	9.0	19	53
8							17	27	12	10	18	51
9							17	18	16	9.6	18	50
10							16	14	16	9.0	19	56
11							18	14	12	7.5	18	193
12							18	14	12	10	23	90
13							17	11	12	15	23	53
14							17	9.6	13	14	23	54
15							17	8.5	17	16	22	40
16							9.3	8.2	20	16	22	61
17							5.1	8.0	20	15	20	63
18							6.1	8.0	21	13	20	60
19							16	7.0	24	19	20	54
20							20	6.8	24	107	19	52
21							21	6.8	20	165	19	50
22							20	6.8	19	34	20	47
23							20	6.5	16	36	19	43
24							22	18	16	32	21	42
25							24	34	15	31	24	48
26							26	31	14	24	28	50
27							25	31	20	15	26	47
28							24	26	17	13	26	50
29							25	16	13	13	26	50
30							28	13	8.0	17	23	38
31							-----	6.5	-----	22	22	-----
TOTAL							943.5	542.7	455.8	728.2	662	1,746
MEAN							18.1	17.6	15.2	23.5	21.4	58.2
MAX							28	34	24	165	30	193
MIN							5.1	6.5	4.3	7.5	17	28
AC-FT							1,060	1,030	904	1,440	1,310	3,460

PLATTE RIVER BASIN

06672500 CHERRY CREEK DRAIN NEAR TORRINGTON, WYO.

LOCATION.--Lat 42°02'22", long 104°10'07", in SW¼NW¼ sec.23, T.24 N., R.61 W., Goshen County, on left bank 50 ft (15 m) downstream from bridge on county road, 0.6 mi (1.0 km) upstream from mouth, and 2.0 mi (3.2 km) southeast of Torrington.

DRAINAGE AREA.--356 mi² (922 km²).

PERIOD OF RECORD.--May to September 1931, May to September 1932, May 1935 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 4,080 ft (1,244 m), from topographic map. Prior to June 12, 1935, nonrecording gage at site 1.0 mi (1.6 km) upstream at different datum. June 12, 1935, to Sept. 30, 1945, water-stage recorder at site 100 ft (30 m) downstream at datum 2.00 ft (0.610 m) higher. Oct. 1, 1945, to Nov. 27, 1950, water-stage recorder at site 100 ft (30 m) downstream at present datum.

AVERAGE DISCHARGE.--36 years (1935-71), 21.6 ft³/s (0.612m³/s), 15,560 acre-ft/yr (19.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 207 ft³/s (5.86 m³/s) Sept. 11, gage height, 3.93 ft (1.198 m); maximum gage height, 4.00 ft (1.219 m) July 20; minimum daily discharge during period of operation, 7.2 ft³/s (0.20 m³/s) Apr. 17, 18.

Period of record: Maximum discharge, 2,420 ft³/s (68.5 m³/s) June 27, 1955, gage height, 10.31 ft (3.142 m) from floodmark; minimum daily, 0.40 ft³/s (0.011 m³/s) Jan. 28, 29, 1949.

REMARKS.--Records poor. Flow is mainly return water from irrigation.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

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							8.4	37	50	60	63	85
2							0.4	23	52	55	59	95
3							9.0	15	52	52	58	81
4							9.5	13	46	48	58	70
5							6.4	12	52	51	59	68
6							7.7	12	52	44	61	69
7							7.9	12	49	44	66	75
8							6.2	13	48	43	62	72
9							6.2	12	52	42	59	66
10							1.4	12	54	44	62	58
11							7.9	13	53	41	61	156
12							7.7	12	70	40	63	126
13							7.4	12	60	43	67	80
14							7.4	11	57	50	66	69
15							7.4	10	54	51	67	66
16							7.4	9.0	51	56	68	60
17							7.2	8.0	51	61	65	56
18							7.2	8.0	49	68	63	52
19							9.0	8.0	45	106	61	49
20							12	8.0	36	167	63	49
21							14	8.0	35	156	61	48
22							14	9.0	36	97	63	47
23							14	8.0	37	86	66	48
24							12	10	46	77	68	46
25							12	11	45	83	68	44
26							16	14	53	74	71	37
27							15	18	58	62	76	31
28							12	25	61	58	80	31
29							11	32	60	56	80	33
30							16	41	65	61	80	30
31								43		62	84	
TOTAL							504.7	479.0	1,529	2,038	2,048	1,897
MEAN							16.2	15.5	51.0	65.7	66.1	63.2
MAX							15	43	70	167	84	156
MIN							7.2	8.0	35	40	58	30
AC-FT							604	950	3,030	4,040	4,060	3,760

NOTE.--Stage-discharge relation affected by backwater from North Platte River May 7 to June 26.

PLATTE RIVER BASIN

149

06673500 KATZER DRAIN NEAR HENRY, NEBR.

LOCATION.--Lat 41°58'58", long 104°04'13", in NW¼SW¼NW¼ sec.10, T.23 N., R.60 W., Goshen County, Wyoming, on right bank 10 ft (3.0 m) downstream from bridge on county road, 0.6 mi (1.0 km) upstream from mouth, and 1.6 mi (2.6 km) southwest of Henry.

DRAINAGE AREA.--45.9 mi² (118.9 km²), of which 8.2 mi² (21.2 km²) is probably noncontributing.

PERIOD OF RECORD.--May 1928 to current year (no winter records prior to 1932 and since 1971).

GAGE.--Water-stage recorder. Altitude of gage is 4,050 ft (1,234 m), from topographic map. See WSP 1918 for history of changes prior to Dec. 1, 1950. Dec. 1, 1950, to Sept. 30, 1969, at site 1.2 mi (1.9 km) upstream at different datum.

AVERAGE DISCHARGE.--40 years (1931-71), 19.6 ft³/s (0.555 m³/s), 14,200 acre-ft/yr (17.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 233 ft³/s (6.60 m³/s) Sept. 11, gage height, 4.81 ft (1.466 m); maximum gage height, 5.07 ft (1.545 m) June 14; minimum daily discharge during period of operation, 5.1 ft³/s (0.14 m³/s) Apr. 16-20.

Period of record: Maximum discharge, 1,230 ft³/s (34.8 m³/s) May 19, 1938, gage height, 9.47 ft (2.886 m), site and datum then in use, from rating curve extended above 330 ft³/s (9.35 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 0.50 ft³/s (0.014 m³/s) Jan. 14, 1937.

REMARKS.--Records poor. Flow is mainly return water from land irrigated by Fort Laramie Canal.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

REVISIONS.--WSP 1710: Drainage area.

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

JAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							8.5	20	40	38	61	58
2							6.5	18	44	39	56	136
3							6.5	15	43	42	64	136
4							3.1	13	43	40	64	128
5							7.9	11	39	47	63	128
6							7.7	11	43	42	67	127
7							7.9	11	49	35	62	122
8							8.1	10	49	43	62	120
9							7.9	10	50	43	58	128
10							8.1	10	55	41	61	106
11							7.9	10	65	39	58	179
12							7.7	9.0	60	39	56	142
13							7.5	9.0	55	40	69	118
14							5.7	9.0	60	41	59	91
15							5.4	9.0	55	39	58	87
16							5.1	9.0	50	38	54	74
17							5.1	9.0	50	42	50	71
18							5.1	9.0	50	43	50	65
19							5.1	9.0	50	90	47	60
20							5.1	9.0	51	143	51	55
21							10	9.0	51	95	52	53
22							15	13	49	87	50	52
23							13	14	50	86	49	51
24							14	22	50	84	48	50
25							12	29	49	91	50	55
26							13	33	47	79	52	50
27							13	35	49	76	59	30
28							13	27	44	68	58	25
29					-----		14	28	40	61	55	20
30					-----		17	28	39	65	55	15
31		-----			-----		-----	35	-----	58	55	-----
TOTAL							272.9	493.0	1,469	1,814	1,753	2,532
MEAN							8.80	15.9	49.0	58.5	56.5	84.4
MAX							17	35	65	143	69	179
MIN							5.1	9.0	39	35	47	15
AC-FT							541	978	2,910	3,600	3,480	5,020

NOTE.--Stage-discharge relation affected by backwater from North Platte River Apr. 14 to June 18. No gage-height record June 19 to July 20.

PLATTE RIVER BASIN

06674500 NORTH PLATTE RIVER AT WYOMING-NEBRASKA STATE LINE

LOCATION.--Lat 41°59'25", long 104°02'57", in SW4NE4SE4 sec.4, T.23 N., R.58 W., Scottsbluff County, Nebraska, on right bank 650 ft (198 m) upstream from bridge on Nebr. State Highway 86, 700 ft (213 m) downstream from Wyoming-Nebraska State line, and 0.5 mi (0.8 km) south of Henry, Nebraska.

DRAINAGE AREA.--26,177 mi² (67,798 km²), of which 5,888 mi² (15,250 km²), including 3,959 mi² (10,254 km²) in Great Divide Basin in southern Wyoming, is probably noncontributing.

PERIOD OF RECORD.--April 1929 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,020 ft (1,225 m), from topographic map. Prior to Nov. 6, 1929, nonrecording gage and Nov. 6, 1929, to Feb. 22, 1972, water-stage recorder at sites 0.5 mi (0.8 km) upstream at different datums.

EXTREMES.--Current year: Maximum discharge, 8,700 ft³/s (246 m³/s) May 26, gage height, 6.38 ft (1.945 m); minimum daily, 190 ft³/s (5.38 m³/s) Dec. 11.

Period of record: Maximum discharge observed, 17,900 ft³/s (507 m³/s) June 2, 1929, gage height, 7.04 ft (2.146 m), site and datum then in use; minimum daily, 13 ft³/s (0.37 m³/s) May 12, 1961.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by storage reservoirs, transbasin diversions, power development, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Gering-Mitchell Canal diverts from right bank 0.8 mi (1.3 km) upstream. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1918: 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	578	460	328	250	284	292	573	4,560	7,900	4,310	3,630	3,920
2	520	460	336	250	284	292	617	4,640	8,000	4,170	3,460	4,170
3	510	465	340	250	276	304	828	4,270	8,200	4,040	3,490	4,260
4	500	460	340	240	280	296	983	3,900	8,200	3,760	3,500	4,240
5	510	441	348	210	280	304	1,030	3,840	8,150	3,730	3,490	4,080
6	520	441	320	230	284	304	1,040	4,270	8,050	3,630	3,440	3,690
7	600	436	300	250	260	296	1,080	4,960	7,950	3,570	3,490	3,310
8	700	432	280	230	280	288	1,100	5,850	7,800	3,570	3,700	2,910
9	580	432	260	200	259	284	1,120	5,940	7,850	3,480	3,740	2,530
10	560	436	220	220	273	280	1,160	6,120	7,760	3,420	3,770	2,040
11	540	436	190	260	273	276	1,190	6,090	7,760	3,370	3,770	2,190
12	520	436	210	290	284	280	1,220	5,320	7,560	3,320	3,820	2,020
13	505	432	240	308	292	288	1,240	4,960	7,480	3,340	3,820	1,890
14	500	423	260	312	292	296	1,470	4,560	7,520	3,460	3,770	2,120
15	500	410	270	312	292	292	1,900	4,600	7,720	3,420	3,660	2,400
16	500	400	270	312	284	288	1,970	5,620	7,480	3,420	3,630	2,440
17	495	396	290	320	276	288	2,090	6,090	7,280	3,420	3,600	2,470
18	480	396	310	324	280	304	1,960	6,640	6,840	3,400	3,180	2,310
19	460	400	330	312	288	316	1,870	7,080	6,570	3,550	3,540	1,970
20	460	400	330	308	280	316	1,870	7,520	6,640	4,110	3,550	1,750
21	460	392	330	308	284	328	2,400	7,680	6,640	3,460	3,580	1,670
22	460	387	340	296	260	356	2,490	7,760	6,640	3,340	3,630	1,610
23	460	378	330	284	280	414	2,450	7,800	6,510	3,500	3,740	1,540
24	470	360	320	276	284	470	2,520	7,760	6,360	3,370	3,810	1,410
25	470	356	310	284	284	500	2,660	8,250	6,000	3,430	3,820	1,330
26	470	360	300	296	288	520	2,780	8,500	5,580	3,540	3,820	1,310
27	460	356	290	296	292	520	2,840	8,200	5,180	3,600	3,840	1,270
28	460	344	290	300	292	535	2,890	7,900	4,940	3,550	3,840	1,320
29	465	336	270	276	-----	545	2,980	7,800	4,660	3,570	3,820	1,300
30	460	328	260	266	-----	545	3,180	7,480	3,660	3,600	3,840	1,200
31	460	-----	260	284	-----	566	-----	7,680	-----	3,710	3,850	-----
TOTAL	15,633	12,189	9,072	8,554	7,905	11,183	53,511	193,640	209,660	111,220	113,640	70,670
MEAN	504	406	293	276	282	361	1,784	6,246	6,989	3,588	3,666	2,356
MAX	700	465	348	324	292	566	3,180	8,500	8,200	4,310	3,850	4,260
MIN	460	328	190	200	259	276	578	3,840	4,440	3,320	3,180	1,200
AC-FT	31,010	24,160	17,990	16,970	15,680	22,180	106,100	384,100	415,900	220,600	225,400	140,200
CAL YR 1972	TOTAL	326,723	MEAN	893	MAX	2,560	MIN	190	AC-FT	648,100		
WTR YR 1973	TOTAL	316,877	MEAN	2,238	MAX	8,500	MIN	190	AC-FT	1,620,000		

PLATTE RIVER BASIN

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06676550 HORSE CREEK AT WYXCROSS RANCH, NEAR LA GRANGE, WYO.

LOCATION.--Lat 41°40'35", long 104°12'11", in SW¼NW¼ sec.28, T.20 N., R.61 W., Goshen County, on right bank 0.3 mi (0.5 km) upstream from Hawk Springs ditch, 1.4 mi (2.3 km) downstream from WyCross ditch, 2.7 mi (4.3 km) upstream from Bear Creek, and 3.3 mi (5.3 km) northwest of La Grange.

DRAINAGE AREA.--680 mi² (1,760 km²), approximately.

PERIOD OF RECORD.--October 1965 to December 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 4,490 ft (1,369 m), from topographic map.

AVERAGE DISCHARGE.--8 years, 26.5 ft³/s (0.750 m³/s), 19,200 acre-ft/yr (23.7 hm³/yr).

EXTREMES.--Water year 1973: Maximum discharge, 220 ft³/s (6.23 m³/s) May 14, gage height, 5.30 ft (1.615 m); minimum daily, 1.9 ft³/s (0.054 m³/s) June 14, July 9, 10.

October to December 1973: Maximum discharge, 95 ft³/s (2.69 m³/s) Nov. 22, gage height, 3.40 ft (1.036 m); maximum gage height, 5.20 ft (1.585 m) Dec. 21 (backwater from ice); minimum daily discharge, 36 ft³/s (1.02 m³/s) Oct. 28, 29.

Period of record: Maximum discharge, 480 ft³/s (13.6 m³/s) June 11, 1967, gage height, 6.27 ft (1.911 m); minimum daily, 0.14 ft³/s (0.004 m³/s) Aug. 29, Sept. 7, 8, 1969.

REMARKS.--Records good. Diversions above station for irrigation of about 9,000 acres (36.4 km²). Except for extreme high flow, WyCross ditch diverts all water from Bear Creek to Horse Creek 1.4 mi (2.3 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	4.8	7.9	29	8.5	45	68	113	172	94	2.1	32	4.0
2	4.5	11	31	12	46	68	112	173	81	2.0	29	4.5
3	4.5	9.7	34	20	44	66	106	164	73	2.0	27	4.4
4	3.9	9.5	16	19	46	66	111	155	71	2.2	19	4.1
5	3.6	9.3	9.8	23	50	65	107	146	68	2.0	12	4.0
6	3.6	9.1	10	25	54	64	100	146	66	2.0	8.5	3.9
7	4.4	8.7	15	29	52	64	102	154	61	2.1	5.5	4.1
8	4.6	8.2	17	30	46	62	111	144	43	2.0	5.6	4.3
9	4.0	8.6	18	23	40	62	111	122	22	1.9	5.6	25
10	4.5	8.6	20	22	37	60	106	116	19	1.9	5.7	19
11	3.9	7.4	26	26	42	62	106	140	15	2.0	5.8	41
12	3.5	8.8	29	37	46	61	103	177	7.0	2.1	5.9	64
13	3.0	11	32	28	49	60	89	203	2.7	2.1	6.1	123
14	3.1	12	33	44	50	30	96	215	1.9	2.3	9.3	78
15	3.4	19	35	51	49	8.7	106	207	2.3	2.4	7.7	61
16	4.2	21	33	52	49	11	110	185	2.3	2.4	6.1	60
17	3.2	17	33	52	51	14	99	173	2.4	2.5	5.9	64
18	3.2	17	32	53	50	22	103	156	2.5	2.5	5.5	65
19	3.2	17	34	48	54	62	115	154	2.8	3.9	4.3	62
20	3.5	17	38	44	52	124	160	159	3.1	7.6	2.3	59
21	3.9	18	32	38	55	164	129	157	4.0	8.4	2.0	58
22	4.0	17	32	30	58	173	143	156	3.7	12	2.1	58
23	3.9	22	34	90	63	170	145	158	3.2	12	2.2	57
24	4.1	25	41	85	70	147	138	176	2.6	6.6	2.2	55
25	5.0	23	44	58	87	136	144	175	2.7	5.4	3.5	55
26	6.0	26	37	60	92	139	150	154	2.7	16	3.7	58
27	4.6	19	32	40	81	129	147	131	2.5	17	3.8	58
28	4.7	14	31	27	74	123	141	127	2.3	16	3.7	61
29	4.6	13	32	34	-----	119	132	123	2.2	24	3.9	82
30	4.2	21	15	44	-----	114	156	117	2.2	29	3.9	94
31	11	-----	9.6	42	-----	112	-----	108	-----	55	3.7	-----
TOTAL	132.2	435.8	862.4	1,194.5	1,532	2,625.7	3,593	4,843	668.1	231.4	243.5	1,390.3
MEAN	4.26	14.5	27.8	38.5	54.7	84.7	120	156	22.3	7.46	7.85	46.3
MAX	11	26	44	90	92	173	160	215	94	35	32	123
MIN	3.0	7.4	9.6	8.5	37	8.7	89	108	1.9	1.9	2.0	3.9
AC-FT	262	864	1,710	2,370	3,040	5,210	7,150	9,610	1,330	459	483	2,760
CAL YR 1972	TOTAL	6,120.2	MEAN	16.7	MAX	94	MIN	1.1	AC-FT	12,140		
WTR YR 1973	TOTAL	17,751.9	MEAN	48.6	MAX	215	MIN	1.9	AC-FT	35,210		

PLATTE RIVER BASIN

06676550 HORSE CREEK AT WYXCROSS RANCH, NEAR LA GRANGE, WYO.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER TO DECEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	40	52									
2	76	44	52									
3	73	47	54									
4	74	53	62									
5	73	59	59									
6	73	65	53									
7	72	68	66									
8	68	69	73									
9	69	72	69									
10	70	74	63									
11	71	70	66									
12	74	67	62									
13	70	68	53									
14	68	71	52									
15	65	69	48									
16	62	63	47									
17	58	61	50									
18	50	62	52									
19	50	64	50									
20	50	69	45									
21	49	76	40									
22	48	83	42									
23	48	81	41									
24	49	74	45									
25	50	72	48									
26	51	68	47									
27	47	67	46									
28	36	64	47									
29	36	67	48		-----							
30	37	52	49		-----							
31	38	-----	50		-----		-----		-----		-----	
TOTAL	1,837	1,959	1,631									
MEAN	59.5	65.3	52.6									
MAX	82	83	73									
MIN	36	40	40									
AC-FT	3,640	3,890	3,240									

CAL YR 1973 Total 21,748.5 MEAN 59.6 MAX 215 MIN 1.9 AC-FT 43,140

PLATTE RIVER BASIN

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06679500 NORTH PLATTE RIVER AT MITCHELL, NEBR.

LOCATION.--Lat 41°55'38", long 103°48'48", in NE4NE4 sec.33, T.33 N., R.56 W., Scotts Bluff County, near right bank of main channel on downstream side of pier of bridge on State Highway 29, 0.5 mi (0.8 km) south of Mitchell.

DRAINAGE AREA.--28,300 mi² (73,300 km²), approximately, of which about 5,960 mi² (15,440 km²) is noncontributing.

PERIOD OF RECORD.--June 1901 to September 1910, May to December 1911, February 1912 to July 1913 (gage heights only), May 1916 to October 1918 (irrigation seasons only), May 1920 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 3,929.3 ft (1,197.65 m) above mean sea level. See WSP 1918 for history of changes prior to May 27, 1960. May 27, 1960 to Aug. 24, 1971, at datum 1.00 ft (0.305 m) higher.

EXTREMES.--Current year: Maximum discharge, 8,840 ft³/s (250 m³/s) May 26, gage height, 8.54 ft (2.603 m); minimum daily, 519 ft³/s (14.7 m³/s) Feb. 10.

Period of record: Maximum discharge, 27,500 ft³/s (779 m³/s) June 3, 1909, gage height, 6.45 ft (1.966 m), datum then in use, from graph based on gage readings, from rating curve extended above 17,000 ft³/s (481 m³/s); minimum daily observed, 25 ft³/s (0.71 m³/s) Sept. 25-29, 1908.

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

REVISIONS.--WRD Nebr. 1967: 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	1,040	795	670	599	568	568	765	4,330	7,350	2,860	2,900	3,070
2	983	790	674	603	559	563	765	5,210	7,660	2,660	2,620	3,390
3	966	810	661	608	559	590	911	4,690	7,770	2,540	2,580	3,760
4	966	800	634	594	559	586	1,070	4,410	7,730	2,240	2,600	3,800
5	950	790	617	559	568	586	1,140	4,210	7,800	2,120	2,570	3,730
6	955	785	581	550	572	586	1,180	4,460	7,880	2,060	2,550	3,390
7	999	775	577	563	550	572	1,200	5,210	7,660	1,980	2,430	2,950
8	1,070	770	577	577	532	555	1,230	5,940	7,630	1,960	2,580	2,640
9	972	765	581	568	524	555	1,240	6,350	7,390	1,970	2,660	2,360
10	933	755	581	563	519	550	1,250	6,870	7,260	1,890	2,710	1,980
11	906	755	599	563	532	541	1,260	6,970	7,100	1,810	2,740	2,220
12	895	755	599	572	546	537	1,260	6,440	7,130	1,750	2,770	2,450
13	884	755	608	594	555	541	1,270	5,720	7,000	1,790	2,820	2,160
14	878	750	608	625	550	572	1,320	5,070	7,260	1,960	2,810	2,150
15	867	750	608	656	546	559	1,620	4,230	7,730	1,910	2,740	2,590
16	856	741	617	648	541	568	1,790	5,210	7,520	1,930	2,720	2,660
17	845	741	639	643	541	559	1,960	5,600	7,060	1,950	2,700	2,730
18	835	736	679	643	537	568	1,990	6,180	6,780	1,950	2,380	2,600
19	825	732	674	643	546	581	1,990	6,740	6,350	2,180	2,510	2,320
20	825	727	679	634	537	572	1,980	7,490	6,380	3,190	2,590	2,020
21	820	723	683	625	541	577	2,260	7,910	6,300	3,000	2,600	1,900
22	825	714	692	608	541	617	2,690	8,400	6,270	2,360	2,630	1,860
23	820	714	692	586	541	630	2,600	6,400	6,050	2,630	2,770	1,880
24	810	710	687	586	550	665	2,700	8,100	5,600	2,490	2,840	1,860
25	800	701	679	590	555	692	2,880	8,170	5,210	2,670	2,890	1,960
26	800	696	674	586	555	710	3,080	8,640	4,640	2,740	2,900	2,110
27	785	696	665	581	559	718	3,140	8,520	4,180	2,890	2,950	2,000
28	785	683	661	559	559	741	3,230	7,980	3,700	2,880	3,000	2,010
29	780	679	652	563	-----	745	3,260	7,430	3,480	2,830	2,980	2,120
30	780	670	599	559	-----	765	3,490	7,160	3,070	2,900	3,020	1,780
31	785	-----	581	568	-----	765	-----	6,940	-----	2,890	3,040	-----
TOTAL	27,240	22,263	19,728	18,416	15,342	18,934	56,521	199,520	194,940	72,980	84,580	74,450
MEAN	879	742	636	594	548	611	1,884	6,436	6,498	2,354	2,728	2,482
MAX	1,070	810	692	656	572	765	3,490	8,640	7,880	3,190	3,040	3,800
MIN	780	670	577	550	519	537	765	4,210	5,070	1,750	2,380	1,780
AC-FT	54,030	44,160	39,130	36,530	30,630	37,560	112,100	395,700	386,700	144,800	167,800	147,700
CAL YR 1972	TOTAL	317,877	MEAN	869	MAX	2,400	MIN	227	AC-FT	630,590		
WTR YR 1973	TOTAL	804,914	MEAN	2,205	MAX	8,640	MIN	519	AC-FT	1,597,000		

PLATTE RIVER BASIN

TRANSBASIN DIVERSIONS FROM NORTH PLATTE RIVER BASIN TO
CACHE LA POUFRE RIVER BASIN IN COLORADO

The following seven diversions, which are equipped with water-stage recorders, divert water from tributaries of the North Platte River to the Cache la Poudre River or its tributaries. Records furnished by Colorado Division of Water Resources.

06745500 Cameron Pass ditch diverts water from tributaries of Michigan River in sec.10, T.6 N., R.76 W., to Joe Wright Creek (tributary to Cache la Poudre River) in sec.2, T.6 N., R.76 W.

06746000 Michigan ditch diverts water from Michigan River, headgate in sec.12, T.6 N., R.76 W., and many small tributaries and Agnes Creek (tributary to Michigan River), headgate in sec.15, T.6 N., R.76 W., to Joe Wright Creek (tributary to Cache la Poudre River) in sec.2, T.6 N., R.76 W.

06746500 Skyline ditch diverts water from West Branch Laramie River (tributary to Laramie River), headgate in sec.14, T.8 N., R.76 W., to Chambers Lake (tributary to Cache la Poudre River) in sec.31, T.8 N., R.75 W.

06747000 Laramie-Poudre tunnel diverts water from Laramie River in sec.7, T.8 N., R.75 W., and Rawah Creek (tributary to Laramie River) in sec.14, T.9 N., R.76 W., to Cache la Poudre River in sec.9, T.8 N., R.75 W.

06747200 Bob Creek ditch diverts water from Nunn Creek (tributary to Laramie River) in sec.9, T.9 N., R.75 W., to Roaring Creek (tributary to Cache la Poudre River) in sec.11, T.9 N., R.75 W.

06750000 Columbine ditch diverts water from Nunn Creek (tributary to Laramie River) in sec.3, T.9 N., R.75 W., to North Fork Cache la Poudre River (tributary to Cache la Poudre River) in sec.25, T.10 N., R.75 W.

06750500 Wilson supply ditch diverts water from Sand Creek in sec.22, T.11 N., R.75 W., and at times includes water diverted from tributaries of Deadman Creek in sec.9, T.10 N., R.75 W. Diversion is from the Laramie River basin to Sheep Creek (tributary to North Fork Cache la Poudre River) in sec.23, T.11 N., R.75 W., in the Cache la Poudre River basin. Records herein represent total flow diverted from the Laramie River basin by Wilson supply ditch.

REVISIONS (WATER YEARS).--WSP 1310: 1945, 1947.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Month	06745500 Cameron Pass ditch	06746000 Michigan ditch	06746500 Skyline ditch	06747000 Laramie- Poudre tunnel	06747200 Bob Creek ditch	06750000 Columbine ditch	06750500 Wilson supply ditch	Total
October.....	0	0	0	0	0	0	0	0
November.....	0	0	0	0	0	0	0	0
December.....	0	0	0	0	0	0	0	0
January.....	0	0	0	0	0	0	0	0
February.....	0	0	0	0	0	0	0	0
March.....	0	0	0	0	0	0	0	0
April.....	0	0	0	0	0	0	0	0
May.....	0	0	0	216	0	0	0	216
June.....	137	452	571	5,020	0	0	1,140	7,320
July.....	258	1,190	2,110	6,980	0	0	243	10,780
August.....	12	236	0	4,340	0	0	0	4,590
September.....	0	14	0	139	0	0	0	153
Water year 1973....	407	1,890	2,680	16,690	0	0	1,380	23,050

GREEN RIVER BASIN

09188500 GREEN RIVER AT WARREN BRIDGE, NEAR DANIEL, WYO.

LOCATION.--Lat 43°01'08", long 110°07'03", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.8, T.35 N., R.111 W., Sublette County, on left bank 100 ft (30 m) upstream from bridge on U.S. Highways 187 and 189, 3.4 mi (5.5 km) upstream from Beaver Creek, and 12 mi (19 km) north of Daniel.

DRAINAGE AREA.--468 mi² (1,212 km²).

PERIOD OF RECORD.--October 1931 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 7,468.09 ft (3,276.274m) above mean sea level.

AVERAGE DISCHARGE.--42 years, 513 ft³/s (14.53m³/s), 371,700 acre-ft/yr (458 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,670 ft³/s (75.6 m³/s) May 19, gage height, 5.11 ft (1.558 m); minimum daily, 90 ft³/s (2.55 m³/s) Jan 6.

Period of record: Maximum discharge, 4,840 ft³/s (137 m³/s) June 9, 1972, gage height, 5.77 ft (1.759 m); minimum recorded, 31 ft³/s (0.88 m³/s) Nov. 26, 1933, gage height, 0.70 ft (0.213 m), from rating curve extended below 120 ft³/s (3.40 m³/s).

REMARKS.--Records fair except those for winter period and period of no gage-height record, which are poor. Diversions above station for irrigation of about 10,200 acres (41.3 km²), of which about 6,100 acres (24.7 km²) lies below station.

REVISIONS (WATER YEARS).--WSP 979: 1932(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	260	230	185	108	101	135	108	242	824	1,840	604	271
2	256	260	189	105	105	132	110	222	1,080	1,680	568	299
3	256	270	186	100	110	130	115	214	1,070	1,440	562	306
4	250	270	176	97	113	128	120	284	944	1,190	616	302
5	288	264	170	95	115	128	130	400	796	1,130	664	292
6	340	260	160	90	115	132	135	667	775	1,140	712	284
7	316	239	151	100	114	130	130	1,010	936	1,170	705	284
8	303	239	141	120	110	125	125	960	1,290	1,190	659	308
9	294	242	135	130	108	120	120	568	1,640	1,150	592	363
10	302	232	125	140	107	125	114	430	1,930	1,080	538	363
11	355	228	115	150	110	130	139	445	2,120	984	508	447
12	333	232	112	150	115	132	139	475	2,150	920	490	600
13	313	214	112	154	118	125	147	586	1,900	1,010	483	719
14	304	187	115	158	115	120	139	747	1,640	1,060	469	664
15	308	185	120	155	115	122	147	976	1,780	1,010	451	556
16	328	180	125	148	117	122	155	1,360	1,680	866	435	483
17	308	175	135	140	120	121	134	1,760	1,390	747	430	425
18	304	165	140	138	122	118	144	2,310	1,060	691	461	375
19	296	160	147	133	124	114	142	2,460	858	691	461	336
20	304	155	152	130	125	110	114	2,490	700	775	468	308
21	340	155	152	129	123	115	110	2,550	617	1,000	450	292
22	328	165	148	128	121	115	110	2,000	635	1,240	450	276
23	312	175	145	128	121	111	119	1,580	778	1,200	465	272
24	312	185	140	125	125	107	132	1,460	997	968	440	284
25	316	185	138	123	120	103	169	1,660	1,210	810	411	292
26	308	175	131	120	125	104	187	1,690	1,340	691	410	280
27	292	163	127	113	130	105	194	1,330	1,510	646	380	268
28	272	160	123	108	135	104	250	1,030	1,670	622	350	256
29	253	162	118	104	-----	100	264	904	1,770	628	322	250
30	100	170	113	102	-----	98	250	838	1,840	640	298	246
31	160	-----	110	100	-----	105	-----	789	-----	634	278	-----
TOTAL	9,011	6,082	4,536	3,821	3,279	3,666	4,392	34,457	38,910	50,843	15,130	10,721
MEAN	291	203	140	123	117	118	146	1,112	1,297	995	488	357
MAX	355	270	189	158	135	135	264	2,550	2,150	1,840	712	719
MIN	100	155	110	90	101	98	108	214	617	622	278	246
AC=FT	17,870	12,060	8,600	7,580	6,500	7,270	8,710	68,350	77,180	61,180	30,010	21,270
CAL YR 1972	TOTAL 248,615		MEAN 679		MAX 4,760		MIN 91		AC=FT 493,100			
WTR YR 1973	TOTAL 164,648		MEAN 451		MAX 2,550		MIN 90		AC=FT 326,600			

NOTE.--No gage-height record Dec. 14 to Mar. 29.

GREEN RIVER BASIN

09189500 HORSE CREEK AT SHERMAN RANGER STATION, WYO.

LOCATION.--Lat 42°56'40", long 110°23'20", in SW¼ sec.6, T.34 N., R.113 W., Sublette County, Bridger National Forest, on left bank 0.5 mi (0.8 km) east of Sherman ranger station, 0.8 mi (1.3 km) downstream from Spring Creek, 5.5 mi (8.8 km) upstream from South Horse Creek, and 17 mi (27 km) west of Daniel.

DRAINAGE AREA.--43.0 mi² (111 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 7,770.71 ft (2,368.512 m) above mean sea level.

AVERAGE DISCHARGE.--19 years, 68.3 ft³/s (1.934m³/s), 49,480 acre-ft/yr (61.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 908 ft³/s (25.7 m³/s) June 9, gage height, 6.26 ft (1.908 m); minimum daily, 3.8 ft³/s (0.11 m³/s) Mar. 8.

Period of record: Maximum discharge, 1,860 ft³/s (52.7 m³/s) June 1, 1956; maximum gage height, 7.37 ft (2.246 m) June 6, 1972; minimum daily discharge, 1.4 ft³/s (0.040 m³/s) Aug. 11, 14, 15, 19, 1957.

REMARKS.--Records fair except those for winter period and periods of no gage-height record, which are poor. Diversion for irrigation of about 360 acres (1.45 km²) 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	12	10	11	6.1	4.3	4.6	5.0	19	525	80	15	7.6
2	12	11	10	5.9	4.3	4.5	5.2	23	500	64	13	16
3	11	11	9.4	5.7	4.4	4.4	5.3	27	378	58	13	16
4	11	11	8.8	5.6	4.5	4.3	5.2	33	297	52	21	12
5	20	11	8.4	5.5	4.6	4.2	5.4	38	322	48	17	8.6
6	22	10	8.3	5.4	4.6	4.1	5.8	50	434	45	20	7.6
7	21	10	8.5	5.4	4.6	4.0	6.2	61	551	41	15	8.6
8	16	11	8.5	5.7	4.5	3.8	5.9	72	585	38	12	23
9	15	11	8.2	6.0	4.3	4.0	5.7	86	599	34	11	25
10	17	10	8.0	6.5	4.2	4.2	5.9	90	573	32	11	18
11	19	9.7	7.6	7.0	4.4	4.4	6.3	97	419	30	11	13
12	16	10	7.7	7.2	4.7	4.6	6.5	138	334	31	10	12
13	14	10	7.9	7.6	4.6	4.6	6.7	198	294	33	9.2	9.8
14	16	9.7	8.2	7.7	4.4	4.5	6.7	258	287	33	8.6	8.6
15	15	10	8.5	7.3	4.3	4.4	6.6	326	236	31	8.1	9.2
16	17	10	8.7	6.8	4.2	4.3	6.8	408	185	27	8.1	8.6
17	14	9.5	9.0	6.5	4.1	4.2	6.7	515	191	25	8.6	8.1
18	13	9.5	9.3	6.3	4.0	4.1	6.5	605	158	24	9.2	7.6
19	12	10	9.5	5.9	3.9	4.2	6.4	680	154	28	8.6	7.0
20	16	10	9.6	5.6	3.9	4.4	6.6	722	174	44	7.6	7.0
21	22	9.7	9.5	5.4	4.1	4.7	7.1	565	170	36	7.6	8.6
22	18	9.5	9.2	5.2	4.2	5.0	7.7	444	174	32	9.2	8.6
23	16	9.0	8.7	5.0	4.3	5.0	8.4	476	173	32	10	8.1
24	16	9.2	8.3	4.9	4.4	4.8	8.9	535	162	24	11	11
25	15	9.8	7.9	5.0	4.5	4.7	9.5	615	156	23	8.6	12
26	16	9.6	7.5	5.2	4.7	5.0	10	378	149	21	7.0	11
27	15	9.3	7.2	5.0	4.8	5.3	11	268	132	22	6.6	12
28	14	9.8	6.9	4.8	4.7	5.5	12	250	119	20	6.6	12
29	13	10	6.7	4.6	-----	5.3	11	300	115	18	6.6	12
30	12	11	6.5	4.5	-----	5.1	13	338	97	17	6.3	10
31	11	-----	6.3	4.4	-----	5.0	-----	448	-----	16	6.3	-----
TOTAL	477	301.3	259.8	179.7	122.5	141.2	220.0	9,063	8,643	1,059	322.8	338.6
MEAN	15.4	10.0	8.38	5.80	4.38	4.55	7.33	292	288	34.2	10.4	11.3
MAX	22	11	11	7.7	4.8	5.5	13	722	599	80	21	25
MIN	11	9.0	6.3	4.4	3.9	3.8	5.0	19	97	16	6.3	7.0
AC=FT	946	598	515	356	243	280	436	17,980	17,140	2,100	640	672
CAL YR 1972	TOTAL 40,170.1	MEAN 110	MAX 1,300	MIN 4.3	AC=FT 79,680							
WTR YR 1973	TOTAL 21,127.9	MEAN 57.9	MAX 722	MIN 3.8	AC=FT 41,910							

PEAK DISCHARGE (BASE, 200 FT³/S)

NOTE.--No gage-height record Dec. 25 to Mar. 30, Apr. 5 to May 4.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-20	0100	6.11	854	5-31	2330	5.98	704
5-24	2400	5.95	710	6-9	2300	6.26	908

09196500 PINE CREEK ABOVE FREMONT LAKE, WYO.

LOCATION.--Lat 43°01'50", long 109°46'10", in S½ sec.5, T.35 N., R.108 W., Sublette County, Bridger National Forest, on right bank 0.5 mi (0.8 km) upstream from Fremont Lake, 0.5 mi (0.8 km) downstream from Fremont Creek, and 12 mi (19 km) northeast of Pinedale.

DRAINAGE AREA.--75.8 mi² (196 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 7,540 ft (2,298 m), from topographic map.

AVERAGE DISCHARGE.--19 years, 180 ft³/s (5.098m³/s), 130,400 acre-ft/yr (161 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,720 ft³/s (48.7 m³/s) June 11, gage height, 6.24 ft (1.902 m); minimum daily, 9.9 ft³/s (0.28 m³/s) Mar. 8.

Period of record: Maximum discharge, 2,550 ft³/s (72.2 m³/s) June 16, 1959, gage height, 7.15 ft (2.179 m); minimum daily, 6.0 ft³/s (0.17 m³/s) Dec. 19, 20, 1969.

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

REVISIONS.--WSP 1443: 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	60	66	27	14	17	13	13	24	483	878	220	94
2	60	62	26	13	18	12	12	24	608	718	194	99
3	60	58	26	13	17	12	12	25	568	595	184	97
4	60	56	25	12	17	12	12	27	449	564	200	99
5	69	55	25	11	17	12	11	30	403	560	235	100
6	73	56	24	11	17	11	11	36	509	564	259	100
7	78	56	23	12	16	11	13	42	716	566	231	99
8	78	57	22	13	16	9.9	13	42	1,350	529	201	102
9	79	53	21	14	15	10	12	38	1,330	466	178	108
10	89	50	20	16	15	11	11	39	1,590	402	164	115
11	94	49	20	18	16	11	11	43	1,480	370	153	214
12	94	46	20	19	17	12	12	54	1,080	362	144	304
13	97	44	19	21	17	12	13	71	1,050	379	137	337
14	98	42	19	21	17	13	13	87	1,170	397	131	257
15	106	41	19	21	16	13	13	118	1,220	351	125	209
16	111	40	19	20	16	12	13	148	714	282	119	187
17	107	39	18	19	16	12	14	260	516	261	117	169
18	101	38	18	18	16	12	14	410	387	258	114	154
19	97	37	17	18	15	12	14	610	306	249	112	141
20	102	35	15	18	15	13	14	920	281	284	109	130
21	104	32	14	18	14	12	14	920	323	510	108	122
22	100	32	14	19	14	13	14	810	463	420	108	113
23	96	32	15	19	14	13	15	750	668	309	111	107
24	96	30	15	20	13	13	16	710	793	252	112	105
25	91	30	15	20	13	13	16	662	906	223	111	105
26	88	29	15	20	13	14	16	557	1,050	202	112	103
27	82	28	15	19	13	12	19	416	1,100	191	111	101
28	78	28	15	18	13	12	24	336	1,060	191	109	99
29	78	28	14	19	-----	12	25	303	950	222	104	96
30	73	27	14	18	-----	12	24	282	926	266	99	93
31	68	-----	14	18	-----	12	-----	336	-----	257	94	-----
TOTAL	2,667	1,276	583	530	433	373.9	434	9,130	24,449	12,078	4,506	4,159
MEAN	86.0	42.5	18.8	17.1	15.5	12.1	14.5	295	815	390	145	139
MAX	111	66	27	21	18	14	25	920	1,590	878	259	337
MIN	60	27	14	11	13	9.9	11	24	281	191	94	93
AC-FT	5,290	2,530	1,160	1,050	859	742	861	18,110	48,490	23,960	8,940	8,250
CAL YR 1972	TOTAL 83,421.0	MEAN 228	MAX 1,810	MIN 14	AC-FT 165,500							
WTR YR 1973	TOTAL 60,618.9	MEAN 166	MAX 1,590	MIN 9.9	AC-FT 120,200							

PEAK DISCHARGE (BASE, 800 FT³/S)

NOTE.--No gage-height record Jan. 15 to Feb. 27.

DATE	TIME	G.H.T.	DISCHARGE
a5-20	unknown	unknown	unknown
6-11	0100	6.24	1,720
6-27	0200	5.56	1,170

GREEN RIVER BASIN

09202000 BOULDER CREEK BELOW BOULDER LAKE, NEAR BOULDER, WYO.

LOCATION.--Lat 42°49'10", long 109°42'59", in SW¼NE¼NW¼ sec.23, T.33 N., R.108 W., Sublette County, in right bank 1.5 mi (2.4 km) downstream from outlet of Boulder Lake and 5.0 mi (8.0 km) north of Boulder.

DRAINAGE AREA.--130 mi² (337 km²).

PERIOD OF RECORD.--October 1938 to October 1971, May 1972 to September 1973 (discontinued). Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 7,180 ft (2,188 m), from topographic map.

AVERAGE DISCHARGE.--33 years (1939-71, 1972-73), 195 ft³/s (5.522m³/s), 141,300 acre-ft/yr (174 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,010 ft³/s (56.9 m³/s) June 11, gage height, 5.41 ft (1.649 m); minimum daily, 3.9 ft³/s (0.11 m³/s) Oct. 27, 28, Oct. 30 to Nov. 7, 9.

Period of record: Maximum discharge, 2,810 ft³/s (79.6 m³/s) June 15, 1953, gage height, 6.12 ft (1.865 m); no flow Nov. 28, 1939, to Apr. 15, 1940, Nov. 18, 1944.

REMARKS.--Records good except those for winter period, which are poor. Flow regulated 1.5 mi (2.4 km) upstream by Boulder Lake, capacity, about 22,300 acre-ft (27.5 hm³). One diversion above station for irrigation of about 700 acres (2.83 km²) below 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	145	3.9	36	31	24	20	21	52	659	842	150	114
2	145	3.9	38	31	23	20	22	54	766	773	142	115
3	145	3.9	38	30	23	20	22	54	869	681	136	114
4	145	3.9	38	30	23	20	21	54	870	601	131	113
5	146	3.9	38	29	24	20	22	55	796	544	136	111
6	145	3.9	40	28	23	19	22	56	782	500	138	111
7	145	3.9	41	27	23	19	21	59	882	468	136	112
8	145	4.1	42	27	22	17	20	65	1,100	442	131	112
9	144	3.9	41	28	21	17	19	67	1,390	411	125	112
10	133	6.1	40	29	20	18	19	66	1,730	384	114	114
11	114	11	39	30	21	19	19	64	1,970	357	108	114
12	114	17	39	31	22	19	19	67	1,860	350	110	116
13	114	21	40	32	22	22	20	74	1,330	344	165	124
14	114	24	40	32	21	25	21	126	1,210	328	211	145
15	116	27	41	31	20	23	21	161	1,430	308	172	157
16	88	30	41	30	19	23	21	202	1,350	280	129	164
17	36	33	41	30	20	23	24	242	1,080	255	121	150
18	37	32	42	29	21	24	25	289	847	234	117	131
19	37	34	39	29	22	23	25	419	672	258	116	132
20	38	36	37	28	21	22	25	668	568	204	116	131
21	38	36	37	28	21	23	24	1,120	507	174	116	130
22	38	36	37	27	21	25	25	1,260	497	174	116	128
23	38	35	36	27	22	24	30	1,180	551	195	116	125
24	34	34	35	26	23	23	32	1,150	628	201	115	124
25	4.6	34	35	26	24	22	34	1,180	706	201	114	122
26	4.1	35	34	25	23	22	35	1,170	782	195	114	122
27	3.9	35	34	26	22	23	37	1,020	855	189	114	121
28	3.9	34	33	26	22	23	42	844	879	177	114	119
29	4.1	35	33	25	-----	23	48	723	875	168	113	117
30	3.9	35	32	25	-----	22	51	646	877	162	113	113
31	3.9	-----	32	24	-----	21	-----	611	-----	155	113	-----
TOTAL	2,422.4	655.4	1,169	877	613	664	787	13,798	29,318	10,555	3,962	3,713
MEAN	78.1	21.8	37.7	28.3	21.9	21.4	26.2	445	977	340	128	124
MAX	146	36	42	32	24	25	51	1,260	1,970	842	211	164
MIN	3.9	3.9	32	24	19	17	19	52	497	155	108	111
AC-FT	4,800	1,300	2,320	1,740	1,220	1,320	1,560	27,370	58,150	20,940	7,860	7,360

WTR YR 1973 TOTAL 68,533.8 MEAN 188 MAX 1,970 MIN 3.9 AC-FT 135,900

GREEN RIVER BASIN

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09203000 EAST FORK RIVER NEAR BIG SANDY, WYO.

LOCATION.--Lat 42°40', long 109°25', in sec.7, T.31 N., R.105 W., Sublette County, on left bank 1.0 mi (1.6 km) downstream from Jim Creek and 4.0 mi (6.4 km) northeast of Big Sandy.

DRAINAGE AREA.--79.2 mi² (205 km²).

PERIOD OF RECORD.--October 1938 to current year. Prior to October 1967, published as East Fork near Big Sandy. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 7,800 ft (2,377 m), by barometer.

AVERAGE DISCHARGE.--35 years, 103 ft³/s (2.917m³/s), 74,620 acre-ft/yr (92.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,480 ft³/s (41.9 m³/s) June 15, gage height, 6.71 ft (2.045 m); minimum daily, 8.3 ft³/s (0.24 m³/s) Mar. 30, Apr. 1, 2.

Period of record: Maximum discharge, 1,790 ft³/s (50.7 m³/s) June 11, 1965, gage height, 7.16 ft (2.182 m), from rating curve extended above 1,200 ft³/s (34.0 m³/s) on basis of slope-area measurement at gage height 6.88 ft (2.097 m); minimum observed, 1.2 ft³/s (0.034 m³/s) Jan. 4, 1940 (discharge measurement).

REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. 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	19	38	29	14	11	9.3	8.3	20	730	299	52	21
2	18	36	30	13	11	9.2	8.3	19	746	239	51	37
3	17	34	28	13	11	8.9	8.4	21	665	200	51	46
4	16	33	26	12	11	8.9	8.4	25	466	183	49	56
5	25	32	25	12	11	8.9	9.2	28	402	170	53	69
6	32	31	24	11	11	8.8	10	33	534	170	51	69
7	37	31	23	12	11	8.7	10	42	768	160	46	63
8	38	31	22	13	11	8.6	9.8	44	880	146	41	70
9	39	31	21	14	11	8.7	9.3	42	976	153	38	95
10	45	31	20	15	11	8.6	9.3	47	1,030	173	35	85
11	52	31	20	16	11	8.7	9.7	54	994	158	32	185
12	53	30	20	16	11	8.5	10	66	655	155	31	180
13	57	29	19	16	12	9.0	11	85	600	165	29	126
14	53	28	19	16	12	9.2	11	102	720	170	28	98
15	68	27	18	15	12	9.0	11	137	1,000	137	26	82
16	87	26	18	15	12	8.9	11	195	446	117	25	71
17	73	25	18	15	11	8.9	12	299	334	104	25	62
18	61	25	19	15	11	8.9	11	458	260	87	26	55
19	55	24	19	14	11	8.6	11	685	223	79	25	49
20	72	23	20	14	10	8.8	11	1,030	233	121	24	45
21	85	23	19	13	10	9.3	11	1,020	260	208	23	45
22	71	23	18	13	9.9	9.0	12	892	320	173	25	47
23	73	22	17	14	9.7	9.0	14	812	383	144	28	44
24	65	22	17	15	9.2	9.0	16	778	369	117	31	45
25	57	22	16	15	9.8	8.9	16	800	387	95	27	48
26	59	22	16	15	9.7	9.0	15	586	426	82	23	49
27	47	23	16	14	9.6	9.1	18	410	434	79	21	46
28	46	23	15	13	9.5	8.8	23	344	394	71	25	43
29	44	25	15	13	-----	8.5	23	376	380	65	24	39
30	42	28	14	13	-----	8.3	20	352	334	61	21	36
31	40	-----	14	12	-----	8.5	-----	498	-----	57	19	-----
TOTAL	1,546	829	615	431	300.4	274.5	367.7	10,300	16,349	4,338	1,005	2,006
MEAN	49.9	27.6	19.8	13.9	10.7	8.85	12.3	332	545	140	32.4	66.9
MAX	87	38	30	16	12	9.3	23	1,030	1,030	299	53	185
MIN	16	22	14	11	9.2	8.3	8.3	19	223	57	19	21
AC=FT	3,070	1,640	1,220	855	596	544	729	20,430	32,430	8,600	1,990	3,980
CAL YR 1972	TOTAL	56,356.7	MEAN	154	MAX	1,530	MIN	8.8	AC=FT	111,800		
WTR YR 1973	TOTAL	38,361.6	MEAN	105	MAX	1,030	MIN	8.3	AC=FT	76,090		

PEAK DISCHARGE (BASE, 700 FT³/S)

NOTE.--No gage-height record Dec. 8 to Jan. 10.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-20	2330	6.24	1,180	6-11	0500	6.42	1,290
6-2	0530	5.62	806	6-15	0130	6.71	1,480

LOCATION.--Lat 42°34'02", long 109°55'46", in SE¼NE¼NE¼ sec.22, T.30 N., R.110 W., Sublette County, on right bank 35 ft (11 m) downstream from old highway bridge, 3.4 mi (5.5 km) upstream from mouth, and 9.5 mi (15.3 km) northeast of Big Piney.

AVERAGE DISCHARGE.--19 years, 724 ft³/s (20.50m³/s), 524,500 acre-ft/yr (647 hm³/yr).

Period of record: Maximum discharge, 9,170 ft³/s (260 m³/s) June 10, 1972, gage height, 8.15 ft (2.484 m); minimum daily, 90 ft³/s (2.55 m³/s) Jan. 13, 1963.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by storage reservoirs, power development, and diversions for irrigation of about 62,100 acres (251 km²) above station. Water-quality records for the current year are published in Part 2 of this report.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	395	514	375	229	226	230	300	690	1,790	2,340	732	363
2	383	539	360	222	232	224	321	622	2,180	2,100	697	443
3	377	548	342	218	238	215	350	542	2,350	1,900	681	505
4	384	556	325	214	240	205	370	608	2,290	1,670	645	474
5	430	548	311	205	236	206	350	579	1,980	1,460	664	453
6	514	539	300	200	232	210	330	568	1,830	1,270	692	429
7	482	514	295	190	235	216	350	571	2,010	1,040	666	426
8	460	514	290	200	235	220	370	559	2,370	1,090	666	437
9	445	505	281	211	230	220	400	538	2,920	1,090	645	473
10	438	494	276	230	226	220	452	515	3,550	1,020	623	501
11	452	487	270	237	230	226	478	484	4,170	984	599	589
12	468	496	261	240	233	225	530	477	4,600	964	563	673
13	468	496	253	243	240	230	515	484	4,260	1,020	525	699
14	475	473	254	244	232	231	500	501	5,610	1,270	519	697
15	498	475	262	240	230	230	475	519	3,970	1,360	492	717
16	514	465	270	239	225	228	446	548	4,540	1,200	462	735
17	530	467	279	237	223	225	439	590	3,810	1,070	446	753
18	530	448	285	231	229	228	491	780	3,160	963	471	722
19	539	454	295	230	224	225	404	1,170	2,510	940	444	675
20	573	436	305	231	220	220	346	1,880	1,960	1,100	424	645
21	598	423	307	225	222	223	343	2,780	1,580	1,330	409	641
22	607	397	310	222	227	230	473	3,390	1,560	1,370	405	614
23	573	377	310	225	231	236	665	3,480	1,290	1,240	416	596
24	598	372	302	231	238	237	1,130	3,370	1,340	1,180	426	589
25	598	362	295	237	240	235	1,230	3,430	1,430	1,010	400	614
26	582	345	287	235	240	245	986	3,630	1,540	932	383	592
27	573	328	275	232	242	256	875	3,070	1,720	868	373	569
28	539	310	267	229	237	264	992	2,420	1,920	858	368	554
29	539	331	256	222	-----	275	1,030	2,020	2,110	852	358	538
30	522	360	242	221	-----	290	888	1,790	2,370	831	353	503
31	505	-----	238	220	-----	296	-----	1,630	-----	784	333	-----
TOTAL	15,589	13,573	8,978	6,990	6,493	7,221	17,009	44,275	76,520	37,216	15,900	17,219
MEAN	503	452	290	225	232	233	567	1,428	2,551	1,201	513	574
MAX	607	556	375	244	242	296	1,230	3,630	4,600	2,340	732	753
MIN	377	310	238	190	220	205	300	477	1,290	784	353	363
AC=FT	30,920	26,920	17,810	13,860	12							

GREEN RIVER BASIN

161

09207700 DRY PINEY CREEK NEAR BIG PINEY, WYO.

LOCATION.--Lat 42°23'25", long 110°15'09", in NW¼NE¼ sec.27, T.28 N., R.113 W., Sublette County, on right bank 8.3 mi (13.4 km) upstream from mouth and 16.3 mi (26.2 km) southwest of Big Piney.

DRAINAGE AREA.--67 mi² (174 km²), approximately.

PERIOD OF RECORD.--October 1965 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 7,150 ft (2,179 m), from topographic map.

AVERAGE DISCHARGE.--8 years, 3.76 ft³/s (0.106 m³/s), 2,720 acre-ft/yr (3.35 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 66 ft³/s (1.87 m³/s) Apr. 27, gage height, 5.00 ft (1.524 m); minimum daily, 0.17 ft³/s (0.005 m³/s) Aug. 31.

Period of record: Maximum discharge, 98 ft³/s (2.78 m³/s) June 8, 1969, gage height, 5.75 ft (1.753 m), from rating curve extended above 13 ft³/s (0.37 m³/s) on basis of slope-area measurement of peak flow; maximum observed gage height, 6.61 ft (2.015 m) Mar. 26, 1971 (backwater from ice); no flow for many days most years.

REMARKS.--Records fair except those for winter period and period of no gage-height record, which are poor. Diversions for irrigation of about 50 acres (20 hm²) above station. Water-quality records for the current year 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	3.2	4.5	1.9	.50	.65	1.2	.66	8.4	5.4	4.0	2.2	.27
2	3.1	5.0	1.8	.48	.67	1.2	.74	11	5.5	3.6	2.2	.45
3	3.0	5.4	1.7	.46	.74	1.1	.74	18	5.0	3.2	4.6	1.9
4	3.1	4.8	1.5	.44	.82	1.1	.83	17	5.0	2.8	4.7	1.2
5	4.0	4.4	1.4	.41	.96	1.0	1.4	17	5.0	2.6	3.2	.66
6	4.9	3.8	1.4	.39	1.2	.99	2.2	18	4.6	2.3	2.6	.51
7	4.4	4.0	1.5	.40	1.1	.98	1.9	17	4.4	2.0	2.2	.51
8	4.2	4.2	1.5	.41	1.1	1.1	1.6	17	4.4	2.0	1.8	7.6
9	3.9	4.2	1.3	.42	1.0	1.2	1.6	16	4.1	2.1	1.2	4.0
10	4.0	4.6	1.0	.44	.95	1.3	2.3	15	3.6	2.1	1.1	2.1
11	4.2	4.7	.90	.46	1.0	1.4	3.5	14	3.7	2.0	.83	1.9
12	4.0	4.5	.88	.50	1.1	1.5	5.3	13	3.5	2.0	.74	1.7
13	3.7	4.2	.90	.54	1.1	1.5	7.7	12	3.7	3.0	.66	1.1
14	3.9	4.1	.90	.58	1.0	1.4	5.6	11	4.0	3.3	.58	.74
15	4.8	4.0	.86	.62	.95	1.3	5.2	10	4.5	3.5	.51	.58
16	4.6	3.8	.88	.66	.91	1.2	5.6	9.4	4.8	3.5	.51	.58
17	4.5	3.9	.91	.68	.90	1.4	6.0	9.6	5.2	2.8	.58	.58
18	4.0	3.8	.95	.70	.90	1.5	6.7	12	5.4	2.2	.58	.66
19	4.4	3.7	.97	.71	.93	1.1	4.5	11	5.0	3.2	.51	.58
20	5.6	3.5	.94	.70	.95	.91	4.0	11	4.2	5.2	.40	.51
21	5.4	3.2	.95	.68	.98	.99	4.6	8.4	4.0	5.2	.45	.51
22	4.5	3.1	.93	.66	1.0	1.2	6.7	6.7	4.0	4.1	.58	.66
23	4.1	3.0	.90	.66	1.1	1.1	8.7	5.8	3.6	4.8	.91	.66
24	5.8	2.9	.85	.64	1.1	.91	11	5.0	3.3	3.3	.99	.74
25	5.2	2.7	.81	.64	1.2	.83	11	6.6	3.3	2.8	.66	1.1
26	4.9	2.4	.77	.66	1.2	.74	12	6.6	3.9	2.6	.45	.99
27	4.0	2.1	.70	.70	1.3	.74	23	6.0	3.5	5.0	.40	.91
28	4.2	1.9	.67	.70	1.3	.66	26	5.2	3.5	4.8	.40	.83
29	4.3	1.7	.63	.67	-----	.74	17	5.0	4.4	3.2	.31	.74
30	4.1	1.7	.57	.65	-----	.74	9.5	6.1	4.5	2.8	.20	.58
31	4.2	-----	.53	.63	-----	.74	-----	6.0	-----	2.7	.17	-----
TOTAL	132.2	109.8	32.40	17.79	26.11	33.77	197.37	334.8	129.0	98.7	37.22	35.85
MEAN	4.26	3.66	1.05	.57	1.00	1.09	6.58	10.8	4.30	3.18	1.20	1.20
MAX	5.8	5.4	1.9	.71	1.3	1.5	26	18	5.5	5.2	4.7	7.6
MIN	3.0	1.7	.53	.39	.65	.66	.66	5.0	3.3	2.0	.17	.27
AC-FT	262	218	64	35	56	67	391	664	256	196	74	71
CAL YR 1972	TOTAL 3,953.01	MEAN 10.8	MAX 78	MIN .39	AC-FT 7,840							
WTR YR 1973	TOTAL 1,187.01	MEAN 3.25	MAX 26	MIN .17	AC-FT 2,350							

PEAK DISCHARGE (BASE, 20 FT³/S)

NOTE.--No gage-height record Dec. 6 to Mar. 13.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-27	2030	5.00	66	8- 3	1500	3.31	23
5- 3	1900	4.18	46	9- 8	0930	4.23	49
7-27	1500	3.88	37				

GREEN RIVER BASIN

09208000 LA BARGE CREEK NEAR LA BARGE MEADOWS RANGER STATION, WYO.

LOCATION.--Lat 42°30'30", long 110°40'10", in SE¼ sec.8, T.29 N., R.116 W., Lincoln County, Bridger National Forest, on right bank 0.5 mi (0.8 km) upstream from Crystal Creek, 2 mi (3.2 km) southeast of La Barge Meadows ranger station, and 29 mi (46.7 km) northwest of La Barge.

DRAINAGE AREA.--6.3 mi² (16.3 km²), approximately.

PERIOD OF RECORD.--October 1940 to September 1942, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 8,410 ft (2,563 m), from topographic map. Oct. 1, 1940, to Sept. 30, 1942, at site 300 ft (91.4 m) upstream at different datum. Oct. 31, 1950, to Aug. 30, 1972, on left bank at present datum.

AVERAGE DISCHARGE.--25 years, 14.2 ft³/s (0.402 m³/s), 10,290 acre-ft/yr (12.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 85 ft³/s (2.41 m³/s) May 19, 25, gage height, 4.47 ft (1.362 m); minimum daily, 3.6 ft³/s (0.10 m³/s) Jan. 6.

Period of record: Maximum discharge, 196 ft³/s (5.55 m³/s) June 9, 1972, gage height, 5.48 ft (1.670 m); maximum gage height, 7.08 ft (2.158 m) Nov. 25, 1967 (backwater from snow); minimum daily discharge, 1.3 ft³/s (0.037 m³/s) Jan. 29 to Feb. 2, 1963.

REMARKS.--Records fair except those for winter period and period of no gage-height record, which are poor. 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	5.9	6.0	5.1	4.3	4.5	3.7	3.9	4.1	65	19	8.0	5.9
2	5.9	6.2	5.5	4.2	4.5	3.7	3.7	4.3	62	18	7.6	7.1
3	6.2	6.2	5.5	4.1	4.5	3.7	3.7	4.5	56	17	8.0	5.5
4	6.2	6.2	5.5	4.0	4.5	3.7	3.7	4.5	50	16	9.2	4.8
5	8.8	6.2	5.1	3.8	4.5	3.8	3.9	4.7	47	15	8.8	4.5
6	7.6	5.9	4.8	3.6	4.5	3.8	3.8	5.0	48	15	8.4	4.5
7	6.7	5.9	5.1	3.8	4.2	3.9	3.7	5.2	53	15	7.6	4.5
8	6.7	6.2	5.1	3.9	4.2	4.0	3.7	5.6	62	14	7.1	9.6
9	6.7	5.9	4.8	4.1	4.2	4.2	3.7	6.4	69	14	6.7	8.0
10	8.0	5.9	4.8	4.2	4.2	4.4	3.7	7.2	73	13	6.2	6.2
11	7.1	5.9	4.8	4.3	4.2	4.5	3.7	8.4	70	13	5.9	5.9
12	6.2	5.9	4.8	4.4	4.1	4.6	4.2	11	62	13	6.2	5.5
13	6.7	5.5	5.1	4.5	3.9	4.5	4.2	13	56	13	6.7	5.1
14	6.7	5.5	4.8	4.6	3.9	4.5	4.5	16	59	13	7.1	4.8
15	7.1	5.5	4.8	4.8	3.7	4.4	4.5	19	53	13	7.1	4.8
16	7.1	5.9	5.1	4.8	3.7	4.4	4.2	25	44	12	7.1	4.8
17	6.7	5.7	5.1	4.7	3.7	4.5	4.5	36	47	12	6.7	4.8
18	6.7	5.5	5.1	4.7	3.8	4.4	4.5	51	37	11	6.2	4.8
19	6.7	5.5	5.1	4.6	3.8	4.3	4.2	60	35	12	6.2	4.5
20	7.1	5.5	5.2	4.6	3.9	4.2	4.2	65	32	14	5.9	4.8
21	6.7	5.5	5.3	4.5	3.9	4.1	4.2	59	30	11	5.9	5.9
22	6.7	5.3	5.3	4.5	3.9	4.0	4.2	55	29	11	6.7	5.1
23	6.2	5.3	5.4	4.4	3.7	3.9	3.9	56	28	11	5.3	5.5
24	7.1	5.5	5.5	4.4	3.9	4.0	3.9	59	27	10	6.3	6.2
25	6.7	5.5	5.3	4.3	3.9	4.0	4.2	70	26	9.6	5.6	6.7
26	6.7	5.3	5.1	4.3	3.9	3.9	4.2	49	25	9.6	5.6	5.9
27	6.4	5.0	5.0	4.2	3.7	3.9	4.2	41	24	9.2	4.6	5.5
28	6.0	5.2	4.9	4.2	3.7	3.9	4.2	43	25	9.2	4.3	5.1
29	6.2	5.4	4.9	4.2	-----	3.9	4.1	47	24	9.2	5.2	5.1
30	6.0	5.5	4.7	4.2	-----	3.7	4.0	53	22	9.2	4.8	4.8
31	5.8	-----	4.5	4.5	-----	3.9	-----	61	-----	8.4	5.1	-----
TOTAL	207.3	170.5	157.1	133.7	113.1	126.4	121.3	948.9	1,340	389.4	202.1	166.2
MEAN	6.69	5.68	5.07	4.31	4.04	4.08	4.04	30.6	44.7	12.6	6.52	5.54
MAX	8.8	6.2	5.5	4.8	4.5	4.6	4.5	70	73	19	9.2	9.6
MIN	5.8	5.0	4.5	3.6	3.7	3.7	3.7	4.1	22	8.4	4.3	4.5
AC-FT	411	338	312	265	224	251	241	1,880	2,660	772	401	330

CAL YR 1972 TOTAL 7,143.0 MEAN 19.5 MAX 161 MIN 2.8 AC-FT 14,170
 WTR YR 1973 TOTAL 4,076.0 MEAN 11.2 MAX 73 MIN 3.6 AC-FT 8,080

PEAK DISCHARGE (BASE, 120 FT³/S).--No peak above base.

NOTE.--No gage-height record Dec. 25 to Jan. 26.

GREEN RIVER BASIN

163

09209400 GREEN RIVER NEAR LA BARGE, WYO.

LOCATION.--Lat 42°11'34", long 110°09'45", in SE¼SE¼NW¼ sec.33, T.26 N., R.112 W., Lincoln County, on right bank 1.7 mi (2.7 km) upstream from high-water line of Fontenelle Reservoir at elevation 6,513 ft (1,985.2 m), 4.0 mi (6.4 km) upstream from Muddy Creek, and 5.0 mi (8.0 km) south of La Barge.

DRAINAGE AREA.--3,910 mi² (10,130 km²), approximately.

PERIOD OF RECORD.--October 1963 to current year. Records are equivalent to those published August 1946 to March 1965 as Green River near Fontenelle (sta 09209500).

GAGE.--Water-stage recorder. Altitude of gage is 6,520 ft (1,987 m), from topographic map.

AVERAGE DISCHARGE.--27 years (1946-73), 1,650 ft³/s (46.73m³/s), 1,195,000 acre-ft/yr (1,473 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,700 ft³/s (190 m³/s) June 12, gage height, 7.87 ft (2.399 m); minimum daily, 360 ft³/s (10.2 m³/s) Jan. 8.

Period of record: Maximum discharge, 18,000 ft³/s (510 m³/s) June 11, 1972, gage height, 10.34 ft (3.152 m); minimum daily, 280 ft³/s (7.93 m³/s) Dec. 29, 1969.

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are poor. Natural flow of stream affected by storage reservoirs and diversions for irrigation of about 198,000 acres (801 km²) above station. Water-quality records for the current year 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	1,010	1,180	805	448	500	600	830	2,390	2,530	4,200	1,660	823
2	1,010	1,310	840	425	520	580	900	2,080	2,880	4,000	1,550	924
3	996	1,250	750	420	530	550	980	1,880	3,350	3,680	1,500	1,090
4	984	1,230	690	408	540	535	1,100	1,830	3,500	3,280	1,480	1,100
5	996	1,230	650	400	560	510	1,200	1,970	3,180	2,830	1,560	1,020
6	1,140	1,210	620	390	575	525	1,200	2,060	2,730	2,470	1,630	972
7	1,230	1,160	585	375	585	530	1,360	2,290	2,630	2,150	1,660	936
8	1,190	1,160	550	360	590	535	1,700	2,570	2,930	2,060	1,610	1,090
9	1,140	1,140	545	375	585	530	1,900	2,490	3,530	2,020	1,510	1,070
10	1,100	1,100	530	400	590	540	2,140	1,830	4,380	1,990	1,430	1,160
11	1,090	1,070	515	440	600	545	2,300	1,880	5,370	1,880	1,320	1,250
12	1,120	1,120	510	470	610	550	2,230	1,810	6,310	1,810	1,260	1,370
13	1,140	1,140	490	500	600	560	2,200	1,790	6,450	1,880	1,190	1,510
14	1,150	1,140	472	530	580	550	2,100	1,860	5,580	2,350	1,150	1,590
15	1,180	1,070	480	550	570	545	2,000	1,990	5,310	2,530	1,110	1,590
16	1,180	1,090	498	530	560	540	2,010	2,060	6,070	2,410	1,060	1,510
17	1,210	1,090	505	525	580	550	1,920	2,230	5,930	2,210	1,030	1,470
18	1,190	1,040	525	520	570	540	1,920	2,510	5,100	1,970	1,030	1,400
19	1,190	1,010	540	520	560	525	1,840	3,030	4,280	1,880	1,050	1,310
20	1,220	1,000	560	520	570	535	1,700	3,930	3,480	2,190	1,010	1,220
21	1,280	970	575	520	575	545	1,500	5,070	2,830	2,950	996	1,180
22	1,310	905	585	500	580	560	1,500	5,960	2,370	3,080	996	1,150
23	1,320	890	585	500	580	565	1,740	5,680	2,130	3,250	1,020	1,110
24	1,350	850	580	510	585	560	2,130	5,010	2,130	3,080	1,090	1,100
25	1,350	835	570	530	600	590	2,390	4,710	2,230	2,590	1,030	1,120
26	1,320	810	560	530	600	620	2,570	5,130	2,430	2,230	984	1,150
27	1,290	775	540	520	600	640	2,350	4,980	2,650	2,040	936	1,110
28	1,230	735	520	510	610	660	2,210	4,130	3,000	1,950	912	1,070
29	1,210	700	500	500	-----	690	2,490	3,380	3,450	1,860	878	1,050
30	1,160	745	482	490	-----	720	2,670	2,930	3,930	1,790	856	1,020
31	1,100	-----	450	490	-----	760	-----	2,630	-----	1,750	823	-----
TOTAL	36,386	30,955	17,607	14,706	16,105	17,785	55,080	94,090	112,670	76,360	37,321	35,465
MEAN	1,174	1,032	568	474	575	574	1,836	3,035	3,756	2,463	1,204	1,182
MAX	1,350	1,310	840	550	610	760	2,670	5,960	6,450	4,200	1,660	1,590
MIN	984	700	450	360	500	510	830	1,790	2,130	1,750	823	823
AC=FT	72,170	61,400	34,920	29,170	31,940	35,280	109,300	186,600	223,500	151,500	74,030	70,340

CAL YR 1972 TOTAL 937,171 MEAN 2,561 MAX 17,800 MIN 450 AC=FT 1,859,000
WTR YR 1973 TOTAL 544,530 MEAN 1,492 MAX 6,450 MIN 360 AC=FT 1,080,000

NOTE.--No gage-height record Dec. 8 to Jan. 16, Jan. 20 to Mar. 9.

GREEN RIVER BASIN

09210500 FONTENELLE CREEK NEAR HERSCHLER RANCH, NEAR FONTENELLE, WYO.

LOCATION.--Lat 42°05'46", long 110°24'57", in NW¼SW¼NE¼ sec.2, T.24 N., R.115 W., Lincoln County, on left bank 2 mi (3.2 km) downstream from Dutch George Creek and 14 mi (22.5 km) west of Fontenelle.

DRAINAGE AREA.--152 mi² (394 km²).

PERIOD OF RECORD.--August 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,950 ft (2,118 m), from topographic map. Prior to May 5, 1970, at site 300 ft (91 m) downstream at present datum.

AVERAGE DISCHARGE.--22 years, 70.8 ft³/s (2.005m³/s), 51,290 acre-ft/yr (63.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 346 ft³/s (9.80 m³/s) May 20, gage height, 7.31 ft (2.228 m); minimum daily, 22 ft³/s (0.62 m³/s) Jan. 6.

Period of record: Maximum discharge, 821 ft³/s (23.3 m³/s) June 13, 1965, gage height, 6.87 ft (2.094 m), site then in use; maximum gage height, 7.93 ft (2.417 m) Dec. 24, 1955 (backwater from ice), site then in use; minimum daily discharge, 10 ft³/s (0.28 m³/s) Dec. 10, 1963.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 780 acres (3.16 km²) 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	43	50	43	27	30	32	30	60	209	73	44	31
2	43	51	40	27	31	32	29	56	222	70	42	36
3	42	47	38	26	32	31	30	66	213	68	42	36
4	43	46	36	25	34	30	30	86	198	64	45	33
5	47	47	35	24	35	29	29	100	188	62	45	32
6	52	43	35	22	34	29	31	120	183	59	39	30
7	47	38	37	23	33	30	32	140	183	59	37	29
8	45	44	35	24	32	30	28	170	185	56	36	32
9	44	35	34	25	31	31	27	200	190	55	35	48
10	46	37	33	27	31	31	32	220	195	50	33	41
11	46	38	31	29	31	32	36	222	190	47	32	40
12	44	37	31	30	32	31	37	211	180	48	31	38
13	44	34	32	32	33	32	39	216	168	53	30	33
14	46	36	34	34	31	31	43	220	166	66	29	32
15	49	37	34	33	31	30	44	220	175	59	28	32
16	47	38	36	32	30	30	45	228	158	58	28	30
17	46	38	36	32	29	30	47	246	151	53	30	30
18	45	36	38	30	28	31	46	270	144	47	35	31
19	46	38	39	30	27	32	45	286	133	57	31	31
20	47	40	40	30	26	31	44	326	122	115	30	32
21	48	39	39	29	27	30	44	311	114	119	29	33
22	47	39	38	28	28	31	45	268	106	71	31	33
23	47	41	37	27	28	29	47	250	97	75	33	33
24	53	43	36	28	29	30	50	240	93	60	35	35
25	51	44	34	30	30	31	53	276	92	54	29	38
26	50	43	33	31	31	29	52	264	89	52	28	34
27	45	42	32	32	31	30	56	228	84	52	28	34
28	41	40	31	32	32	31	62	200	79	51	28	33
29	42	41	30	31	-----	30	58	193	87	47	28	33
30	42	43	29	30	-----	29	56	193	82	48	28	33
31	47	-----	28	29	-----	29	-----	197	-----	47	29	-----
TOTAL	1,425	1,225	1,084	889	857	944	1,267	6,283	4,476	1,895	1,028	1,016
MEAN	45.0	40.8	35.0	28.7	30.6	30.5	42.2	203	149	61.1	33.2	33.9
MAX	53	51	43	34	35	32	68	326	222	119	45	48
MIN	41	34	28	22	26	29	27	56	79	47	28	29
AC-FT	2,330	2,430	2,150	1,760	1,700	1,670	2,510	12,400	8,880	3,760	2,040	2,020

CAL YR 1972 TOTAL 47,011 MEAN 128 MAX 700 MIN 20 AC-FT 93,250
WTR YR 1973 TOTAL 22,389 MEAN 61.3 MAX 326 MIN 22 AC-FT 44,410

PEAK DISCHARGE (BASE, 150 FT³/S)

DATE	TIME	G.H.T	DISCHARGE
5-20	1230	7.31	346
7-21	0700	6.45	176

GREEN RIVER BASIN

165

09211150 FONTENELLE RESERVOIR NEAR FONTENELLE, WYO.

LOCATION.--Lat 42°02', long 110°04' in S½ sec.25, T.24 N., R.112 W., Lincoln County, at dam on Green River 3.0 mi (4.8 km) north of Fontenelle and 3.5 mi (5.6 km) upstream from Slate Creek.

DRAINAGE AREA.--4,280 mi² (11,085 km²), approximately.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum daily contents, 352,100 acre-ft (434 hm³) July 25, elevation 6,506.82 ft (1,983.279 m); minimum daily, 167,000 acre-ft (206 hm³) Apr. 10, elevation, 6,480.06 ft (1,975.122 m).

Period of record: Maximum daily contents, 387,000 acre-ft (477 hm³) June 29, 1965, elevation, 6,511.01 ft (1,984.556 m); minimum daily, 5,680 acre-ft (7.00 hm³) July 28, 1967.

REMARKS.--Reservoir is formed by earth-fill dam completed by Bureau of Reclamation in April 1964. Capacity, 344,800 acre-ft (425 hm³) between elevations 6,506.0 ft (1,983.03m), crest of spillway, and 6,408.0 ft (1,953.16m), invert of outlet pipe. Dead storage, below elevation 6,408.0 ft (1,953.16m), 563 acre-ft (0.694 hm³). Figures given herein represent total contents. Water used for irrigation and power development.

COOPERATION.--Records furnished by Bureau of Reclamation.

REVISIONS.--WSP 2125: Drainage area.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	6,505.68	342,900	-
Oct. 31	6,505.51	341,500	-1,400
Nov. 30	6,502.67	319,100	-22,400
Dec. 31	6,501.47	309,900	-9,200
CAL YR 1972	-	-	+37,700
Jan. 31	6,497.36	279,100	-30,800
Feb. 28	6,488.90	220,300	-58,800
Mar. 31	6,481.54	175,200	-45,100
Apr. 30	6,483.75	188,000	+12,800
May 31	6,490.43	230,500	+42,500
June 30	6,501.86	312,900	+82,400
July 31	6,506.45	349,100	+36,200
Aug. 31	6,503.30	324,000	-25,100
Sept. 30	6,504.98	337,300	+13,300
WTR YR 1973	-	-	-5,600

LOCATION.--Lat 42°01'16", long 110°02'57", in NW¼NW¼NE¼ sec. 31, T.24 N., R.111 W., Sweetwater County, on right bank 1.0 mi (1.6 km) downstream from Fontenelle Dam, 2.5 mi (4.0 km) upstream from Slate Creek, and 6.0 mi (9.7 km) southeast of Fontenelle.

PERIOD OF RECORD.--November 1963 to current year.

EXTREMES.--Current year: Maximum discharge, 3,060 ft³/s (86.7 m³/s) May 31, gage height, 12.83 ft (3.911 m); minimum daily, 332 ft³/s (9.40 m³/s) Sept. 27.

Period of record: Maximum discharge, 19,400 ft³/s (549 m³/s) Sept. 5, 1965, gage height, 18.74 ft (5.712 m), from floodmarks, caused by emergency release from Fontenelle Reservoir; minimum daily, 209 ft³/s (5.92 m³/s) Nov. 22-24, 1968.

REMARKS.--Records good. Flow completely regulated by Fontenelle Reservoir 1.0 mi (1.6 km) upstream. (See sta 09211150.) Natural flow of stream affected by storage reservoirs and diversions for irrigation of about 202,000 acres (817 km²) above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 2125: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,000	1,330	1,130	767	1,300	1,050	1,480	2,000	3,010	1,650	1,850	1,510
2	1,010	1,320	990	740	1,300	860	1,430	2,190	2,980	1,640	1,780	1,540
3	1,010	1,320	900	830	1,300	860	1,470	2,390	2,950	1,600	1,720	1,540
4	1,010	1,320	758	850	1,300	860	1,470	2,390	2,980	1,580	1,680	1,540
5	1,010	1,340	708	850	1,310	860	1,280	2,400	2,980	1,560	1,650	1,540
6	934	1,240	708	850	1,380	860	1,030	2,400	2,960	1,520	1,640	1,600
7	1,010	772	794	850	1,470	860	1,030	2,470	2,950	1,520	1,630	1,650
8	1,020	620	830	850	1,590	950	1,030	2,720	2,930	1,520	1,610	1,670
9	1,010	612	830	880	1,670	1,070	1,020	2,660	2,950	1,510	1,600	1,680
10	1,010	723	830	767	1,710	1,200	1,020	2,220	2,950	1,500	1,580	1,670
11	1,010	990	880	880	1,720	1,370	1,010	1,960	2,980	1,480	1,580	1,670
12	1,010	990	880	880	1,710	1,480	1,010	1,980	2,990	1,480	1,560	1,430
13	1,010	1,140	880	930	1,710	1,610	1,020	2,000	2,930	1,500	1,460	930
14	1,010	1,270	880	1,030	1,710	1,640	1,020	2,220	2,910	1,500	1,210	840
15	1,010	1,260	880	1,160	1,710	1,540	1,020	2,360	2,430	1,500	1,210	840
16	1,140	1,260	830	1,280	1,710	1,510	1,140	2,360	2,200	1,510	1,220	840
17	954	1,260	785	1,280	1,700	1,510	1,440	2,360	2,200	1,500	1,330	850
18	740	1,270	700	1,300	1,700	1,520	1,540	2,360	2,000	1,480	1,510	840
19	724	1,270	684	1,300	1,710	1,520	1,610	2,470	1,740	1,500	1,510	812
20	928	1,270	660	1,310	1,700	1,540	1,610	2,660	1,740	1,500	1,500	717
21	1,320	1,270	660	1,310	1,700	1,520	1,610	2,820	1,710	1,480	1,500	524
22	1,330	1,390	700	1,300	1,700	1,510	1,600	2,870	1,710	1,520	1,510	516
23	1,330	1,510	740	1,300	1,700	1,510	1,600	2,870	1,710	1,720	1,510	524
24	1,320	1,500	740	1,280	1,700	1,500	1,600	2,910	1,710	2,010	1,520	524
25	1,330	1,510	740	1,300	1,700	1,500	1,610	2,950	1,720	2,200	1,520	524
26	1,330	1,510	740	1,280	1,700	1,500	1,740	2,960	1,720	2,240	1,510	345
27	1,330	1,510	740	1,270	1,610	1,500	1,950	2,980	1,710	2,180	1,510	332
28	1,320	1,510	740	1,280	1,310	1,500	1,980	3,030	1,710	2,100	1,510	338
29	1,320	1,510	620	1,280	-----	1,480	1,980	3,030	1,710	2,020	1,510	338
30	1,330	1,360	740	1,280	-----	1,480	1,980	3,030	1,680	1,950	1,510	452
31	1,330	-----	785	1,120	-----	1,480	-----	3,040	-----	1,890	1,510	-----
TOTAL	34,150	37,157	24,482	33,584	44,530	41,150	42,380	79,060	70,850	51,860	47,450	30,126

09212500 BIG SANDY RIVER AT LECKIE RANCH, NEAR BIG SANDY, WYO.

LOCATION.--Lat 42°35', long 109°17', in sec.18, T.30 N., R.104 W., Sublette County, on left bank at Leckie Ranch, 0.5 mi (0.8 km) downstream from Squaw Creek, and 9.0 mi (14.5 km) southeast of Big Sandy.

DRAINAGE AREA.--94 mi² (243 km²), approximately.

PERIOD OF RECORD.--July to November 1910, May to August 1911, July 1939 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1313. Published as Big Sandy Creek near Big Sandy 1910-11 and in WSP 618, and as Big Sandy Creek at Leckie Ranch, near Big Sandy July 1939 to October 1968.

GAGE.--Water-stage recorder. Altitude of gage is 7,800 ft (2,377 m), by barometer. See WSP 1733 for history of changes prior to July 24, 1939. July 24, 1939, to June 1, 1961, water-stage recorder at site 75 ft (23 m) downstream at present datum.

AVERAGE DISCHARGE.--32 years (1939-71), 86.0 ft³/s (2.436m³/s), 62,310 acre-ft/yr (76.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,330 ft³/s (37.7 m³/s) June 15, gage height, 8.64 ft (2.633 m); minimum daily during period of operation, 12 ft³/s (0.34 m³/s) Mar. 30.

Period of record: Maximum discharge, 1,580 ft³/s (44.7 m³/s) June 10, 1965, gage height, 9.06 ft (2.761 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s); minimum daily, 3.0 ft³/s (0.085 m³/s) Dec. 17, 1964.

REMARKS.--Records good except those for March and April, which are poor. Diversions for irrigation of about 750 acres (3.04 km²) above station.

REVISIONS (WATER YEARS).--WSP 2125: 1963, 1964(P), 1965.

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	14	28	442	237	68	39
2						15	13	25	428	199	74	64
3						15	14	28	368	176	75	75
4						14	15	40	267	160	69	103
5						14	16	56	231	146	74	110
6						14	16	88	330	157	72	90
7						15	15	119	430	128	63	79
8						14	14	96	543	123	56	95
9						14	15	86	648	130	50	128
10						14	15	110	718	116	48	107
11						14	16	119	679	107	46	175
12						14	18	120	489	124	43	175
13						14	21	124	435	139	41	139
14						14	19	123	555	146	40	116
15						14	18	151	821	123	38	102
16						15	19	207	385	119	36	90
17						15	20	325	307	104	40	79
18						14	19	465	255	91	38	70
19						14	18	700	211	90	35	63
20						14	17	802	192	161	33	58
21						15	17	640	195	233	32	59
22						15	18	507	220	197	35	61
23						15	20	501	271	161	39	56
24						14	23	513	267	134	39	59
25						14	25	549	275	116	34	65
26						14	25	382	311	102	31	68
27						14	29	261	311	98	32	65
28						14	42	225	285	89	43	58
29					-----	13	45	255	293	81	37	53
30					-----	12	39	218	269	77	35	50
31		-----			-----	13	-----	301	-----	73	33	-----
TOTAL						439	615	8,164	11,431	4,117	1,429	2,551
MEAN						14.2	20.5	263	381	133	46.1	85.0
MAX						15	45	802	821	237	75	175
MIN						12	13	25	192	73	31	39
AC-FT						871	1,220	16,190	22,670	8,170	2,830	5,060

PEAK DISCHARGE (BASE, 400 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-19	2400	7.60	885	6-10	0530	7.61	889
6-1	0530	6.46	498	6-15	0030	8.64	1,330

GREEN RIVER BASIN

09213500 BIG SANDY RIVER NEAR FARSON, WYO.

LOCATION.--Lat 42°19'01", long 109°29'06", in NW¼SE¼NW¼ sec.17, T.27 N., R.106 W., Sublette County, on left upstream side of Eden Canal diversion, about 1.0 mi (1.6 km) upstream from high-water line of Big Sandy Reservoir, 14.5 mi (23.3 km) north of Farson, and 24.5 mi (39.4 km) upstream from Little Sandy Creek.

DRAINAGE AREA.--322 mi² (834 km²).

PERIOD OF RECORD.--October 1914 to September 1917, October 1920 to October 1924, October 1926 to September 1934, April 1953 to current year (no winter records since 1971). Prior to October 1968, published as Big Sandy Creek near Farson. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,770 ft (2,063 m), from topographic map. Prior to Apr. 28, 1921, nonrecording gage, and Apr. 28, 1921, to Aug. 3, 1934, water-stage recorder at site 0.5 mi (0.8 km) upstream at different datum. Apr. 17, 1953, to Nov. 11, 1954, water-stage recorder at site 1.5 mi (2.4 km) upstream at different datum.

AVERAGE DISCHARGE.--33 years (1914-17, 1920-24, 1926-34, 1953-71), 86.5 ft³/s (2.450 m³/s), 62,700 acre-ft/yr (77.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,220 ft³/s (34.6 m³/s) Apr. 24, gage height, 7.74 ft (2.359 m); minimum daily during period of operation, 15 ft³/s (0.42 m³/s) Apr. 1.

Period of record: Maximum discharge, 1,480 ft³/s (41.9 m³/s) June 9, 1972, gage height, 8.10 ft (2.469 m); no flow Jan. 27-31, 1963, may have also reached no flow in previous years during periods of ice effect.

REMARKS.--Records fair. Diversions for irrigation of about 1,000 acres (4.05 km²) above station. The Eden Canal, which would bypass the station, has not been used since station was established at present site in November 1954. Results of discharge measurements, in cubic feet per second, made during the winter when station was not in operation are given below:

Nov. 6 . . 66
Mar. 27 . . 17

Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1733: 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							15	98	304	268	72	32
2							17	83	442	240	66	46
3							16	68	428	200	66	59
4							17	63	368	170	71	75
5							18	66	289	150	69	83
6							19	74	277	130	66	92
7							20	95	310	120	67	85
8							20	147	413	115	62	77
9							20	139	514	108	56	72
10							23	103	595	111	51	98
11							30	121	644	107	46	99
12							40	134	590	102	45	129
13							58	139	457	116	43	167
14							100	144	421	158	40	137
15							120	138	554	138	37	118
16							120	153	692	117	34	102
17							150	211	392	107	33	93
18							190	348	318	95	32	85
19							157	528	254	93	32	77
20							122	752	218	107	30	69
21							77	837	198	159	28	65
22							98	651	202	238	28	61
23							328	543	224	197	29	61
24							690	534	279	164	30	62
25							498	555	272	143	31	60
26							246	570	280	124	31	65
27							232	408	310	106	30	71
28							283	268	310	95	32	70
29					-----		161	228	290	90	30	68
30					-----		118	258	300	82	35	64
31		-----			-----		-----	230	-----	77	31	-----
TOTAL							4,003	8,686	11,145	4,227	1,353	2,442
MEAN							133	280	372	136	43.6	81.4
MAX							690	837	692	268	72	167
MIN							15	63	198	77	28	32
AC-FT							7,940	17,230	22,110	8,380	2,680	4,840

PEAK DISCHARGE (BASE, 350 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-24	0500	7.74	1,220	6-12	0330	7.17	762
5-20	2200	7.24	894	6-16	0530	7.50	960
6- 2	0500	6.41	483				

GREEN RIVER BASIN

169

09214500 LITTLE SANDY CREEK ABOVE EDEN, WYO.

LOCATION.--Lat 42°14'12", long 109°18'44", in SE¼SW¼SW¼ sec.11, T.26 N., R.105 W., Sweetwater County, on right bank 1.6 mi (2.6 km) upstream from diversion to Eden No. 2 Reservoir, 11 mi (18 km) northeast of Farson, and 14 mi (23 km) northeast of Eden.

DRAINAGE AREA.--170 mi² (440 km²), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,750 ft (2,057 m), from topographic map.

AVERAGE DISCHARGE.--19 years, 17.9 ft³/s (0.507 m³/s), 12,970 acre-ft/yr (16.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 212 ft³/s (6.00 m³/s) July 20, gage height, 7.99 ft (2.435 m); maximum gage height, 8.52 ft (2.597 m) Apr. 28 (backwater from beaver dam); minimum daily discharge, 4.2 ft³/s (0.12 m³/s) Jan. 7.

Period of record: Maximum discharge, 386 ft³/s (10.9 m³/s) June 17, 1963, gage height, 8.57 ft (2.612 m); maximum gage height, 9.42 ft (2.871 m) Apr. 5, 1969 (backwater from ice); no flow at times in most years.

REMARKS.--Records poor. Diversions above station for irrigation of about 1,220 acres (4.94 km²), of which about 150 acres (61 hm²) lies below 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	10	7.9	6.3	5.8	7.4	6.7	46	33	78	30	13
2	6.9	14	7.4	6.0	5.5	7.0	6.4	35	38	67	25	20
3	7.3	19	6.9	5.6	5.9	6.7	6.4	36	51	62	23	28
4	7.5	23	6.6	5.2	6.2	6.4	6.4	32	54	51	24	46
5	7.9	23	6.3	4.8	6.1	6.2	6.4	40	53	36	23	24
6	7.1	21	6.0	4.5	5.8	6.6	6.6	45	48	26	20	15
7	7.9	18	5.7	4.2	5.4	6.4	6.9	45	40	18	19	14
8	7.7	21	5.4	4.5	5.7	6.1	6.9	54	43	15	14	13
9	7.5	20	5.6	4.8	6.2	6.3	6.9	55	57	13	14	15
10	7.5	19	6.1	5.1	7.0	6.5	7.1	43	84	12	14	19
11	7.9	17	6.6	5.6	7.6	6.6	7.3	46	120	11	14	18
12	9.6	18	7.0	6.2	8.2	6.8	10	48	146	11	14	21
13	8.8	21	7.5	6.8	8.2	7.0	13	48	159	40	13	23
14	7.9	13	8.0	7.4	7.9	6.9	30	48	114	51	13	21
15	8.1	16	8.4	7.0	7.5	6.7	32	45	111	49	14	21
16	8.1	17	8.8	6.4	7.6	6.5	31	42	134	36	14	23
17	9.0	18	9.0	5.8	7.9	6.4	45	44	175	30	14	23
18	9.0	15	9.4	5.5	8.1	6.7	60	46	98	30	14	23
19	8.8	17	9.4	5.6	8.2	6.5	76	46	70	28	14	23
20	9.2	16	9.0	5.5	7.9	6.4	57	60	55	122	14	21
21	9.4	14	9.4	5.8	7.5	6.5	52	66	44	129	13	20
22	9.2	13	9.0	5.6	7.2	6.7	56	64	38	93	14	21
23	9.0	9.5	8.7	5.6	6.9	6.5	65	62	34	83	14	20
24	9.0	8.8	8.2	5.8	6.8	6.4	80	60	37	75	14	22
25	9.0	8.8	8.6	6.1	7.1	6.3	120	61	49	72	14	24
26	8.8	9.3	8.7	5.9	7.3	6.4	113	65	54	62	14	25
27	8.1	9.6	8.3	5.7	7.5	6.6	100	52	59	49	14	26
28	8.0	9.6	7.9	5.6	7.7	6.6	124	42	72	44	17	25
29	7.8	9.3	7.5	5.8	-----	6.6	130	34	83	40	14	24
30	7.5	8.8	7.1	6.2	-----	6.7	67	32	80	38	13	22
31	7.2	-----	6.7	6.0	-----	6.8	-----	33	-----	34	12	-----
TOTAL	253.5	456.7	237.1	176.9	196.7	204.2	1,335.0	1,475	2,233	1,505	497	653
MEAN	8.18	15.2	7.65	5.71	7.03	6.59	44.5	47.6	74.4	48.5	16.0	21.8
MAX	9.6	23	9.4	7.4	8.2	7.4	130	66	175	129	30	46
MIN	6.8	8.8	5.4	4.2	5.4	6.1	6.4	32	33	11	12	13
AC=FT	503	906	470	351	390	405	2,650	2,930	4,430	2,990	986	1,300
CAL YR 1972	TOTAL 10,832.5	MEAN 29.6	MAX 198	MIN 2.1	AC=FT 21,490							
WTR YR 1973	TOTAL 9,223.1	MEAN 25.3	MAX 175	MIN 4.2	AC=FT 18,290							

NOTE.--No gage-height record Nov. 30 to Mar. 27.

GREEN RIVER BASIN

09215000 PACIFIC CREEK NEAR FARSON, WYO.

LOCATION.--Lat 42°07'47", long 109°19'23", in NW¼SW¼NE¼ sec.22, T.25 N., R.105 W., Sweetwater County, on right bank 200 ft (61 m) upstream from Eden Canal siphon, 6.3 mi (10.1 km) east of Farson, and 7.2 mi (11.6 km) upstream from mouth.

DRAINAGE AREA.--500 mi² (1,300 km²), approximately.

PERIOD OF RECORD.--October 1954 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 6,660 ft (2,030 m), from topographic map. Prior to Oct. 30, 1963, at site 1.0 mi (1.6 km) upstream at different datum.

AVERAGE DISCHARGE.--19 years, 4.99 ft³/s (0.141m³/s), 3,620 acre-ft/yr (4.46 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 402 ft³/s (11.4 m³/s) July 19, gage height, 5.32 ft (1.622 m); no flow for many days.

Period of record: Maximum discharge, 972 ft³/s (27.5 m³/s) Mar. 27, 1971, gage height, 7.34 ft (2.237 m); no flow for many days each year.

REMARKS.--Records poor. Some regulation by Pacific No. 2 Reservoir, capacity, 1,400 acre-ft (1.73 hm³). Diversions for irrigation of about 50 acres (20 hm²) above station. Water is imported into basin from Sweetwater River in Platte 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	.55	.31	.13				.10	33	4.4	.88	3.0	.45
2	.65	.39	.14				.20	25	4.6	.76	2.4	1.3
3	.65	.50	.17				.50	22	4.0	.70	2.1	8.2
4	.70	.54	.10				1.0	28	3.6	.65	1.9	34
5	1.0	.50	0				2.0	46	3.6	.60	16	39
6	1.1	.46	0				4.6	47	3.2	.45	2.4	10
7	1.0	.45	0				4.2	44	3.0	.41	1.1	3.2
8	.88	.43	0				4.0	34	2.6	.45	.82	2.6
9	.85	.41	0				6.0	28	2.6	.41	.76	3.6
10	.95	.42	0				22	21	2.1	.37	.70	24
11	.95	.44	0				40	18	2.0	.37	.65	16
12	.95	.45	0				59	14	2.0	.37	.65	9.8
13	.88	.45	0				99	11	1.9	13	.65	18
14	.87	.31	0				118	9.5	2.7	32	.60	7.3
15	.95	.32	0				110	8.8	3.8	7.3	.55	4.2
16	1.0	.33	0				88	7.9	3.2	3.8	.55	3.2
17	1.0	.34	0				90	7.9	2.6	2.4	.55	2.9
18	.95	.34	0				98	7.3	2.4	1.9	.55	2.4
19	.95	.32	0				70	7.0	2.1	159	.50	1.9
20	1.2	.29	0				45	7.0	2.0	215	.50	1.3
21	1.3	.27	0				39	6.8	1.7	300	.45	1.2
22	1.3	.25	0				43	6.6	1.7	146	.45	1.2
23	1.9	.22	0				50	6.3	1.4	60	.45	1.1
24	2.1	.19	0				70	6.0	1.2	56	.45	1.2
25	2.3	.18	0				100	6.8	1.1	29	.41	1.6
26	2.0	.19	0				88	6.8	1.2	18	.33	1.7
27	1.2	.17	0				90	6.3	1.1	12	.33	1.6
28	.30	.15	0				132	6.0	1.1	7.3	.37	1.3
29	.60	.13	0				125	5.3	1.2	6.0	.41	1.2
30	.50	.12	0				50	5.0	1.0	4.6	.45	1.2
31	.40	-----	0				-----	4.8	-----	3.4	.41	-----
TOTAL	32.41	9.87	.49	0	0	0	1,657.60	493.1	71.1	1,083.12	41.44	206.65
MEAN	1.05	.33	.016	0	0	0	55.3	15.9	2.37	34.9	1.34	6.89
MAX	2.3	.54	.14	0	0	0	132	47	4.6	300	16	39
MIN	.40	.12	0	0	0	0	.10	4.8	1.0	.37	.33	.45
AC-FT	64	20	1.0	0	0	0	2,290	978	141	2,150	82	410
CAL YR 1972	TOTAL 2,530.35	MEAN 6.91	MAX 180	MIN 0	AC-FT 5,020							
WTR YR 1973	TOTAL 3,581.78	MEAN 6.95	MAX 300	MIN 0	AC-FT 7,130							

PEAK DISCHARGE (BASE, 120 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
4-28	1530	4.68	195
7-19	1200	5.32	402

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LOCATION.--Lat 42°00'37", long 109°34'57", in NE¼SE¼SW¼ sec.31, T.24 N., R.107 W., Sweetwater County, on right bank 0.1 mi (0.2 km) downstream from Simpson Gulch, 8.0 mi (12.9 km) southwest of Eden, and 12.5 mi (20.1 km) downstream from Little Sandy Creek.

PERIOD OF RECORD.--October 1954 to current year. Prior to October 1968, published as Big Sandy Creek below Eden.

AVERAGE DISCHARGE.--19 years, 44.4 ft³/s (1.257m³/s), 32,170 acre-ft/yr (39.7 hm³/yr).

Period of record: Maximum discharge, 1,440 ft³/s (40.8 m³/s) Mar. 28, 1971, gage height, 6.47 ft (1.972 m), from floodmarks; maximum gage height, 7.22 ft (2.201 m) Mar. 20, 1956 (backwater from ice); minimum daily discharge, 0.1 ft³/s (0.003 m³/s) Feb. 24, Feb. 26 to Mar. 1, 1960.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by storage reservoirs and diversions for irrigation of about 19,300 acres (78.1 km²) above station. Water-quality records for the current year are published in Part 2 of this report.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	47	49	29	29	30	31	101	48	64	59	87
2	41	52	52	28	29	28	31	65	53	62	64	109
3	42	59	48	28	30	27	32	50	59	66	70	120
4	45	61	43	27	31	26	34	45	65	64	78	114
5	48	68	41	26	32	26	36	62	61	65	86	104
6	46	65	40	25	33	26	44	82	57	60	93	94
7	44	59	37	25	32	28	45	93	51	61	86	82
8	43	62	35	27	31	29	40	87	50	64	82	75
9	42	61	33	28	30	29	42	91	49	68	83	75
10	44	57	32	30	29	30	69	88	49	66	95	77
11	43	56	31	32	30	30	125	75	51	65	82	90
12	42	54	31	34	30	30	165	60	51	69	83	90
13	42	54	32	35	32	29	225	50	60	81	87	81
14	52	53	34	33	33	29	277	45	82	103	90	77
15	56	48	36	32	33	33	215	43	90	103	84	70
16	56	51	38	31	31	30	178	44	78	95	81	61
17	56	52	38	31	30	31	156	44	83	95	81	58
18	57	51	37	31	31	29	183	47	115	82	84	58
19	58	48	35	30	31	29	156	50	119	91	87	57
20	60	50	32	29	32	30	94	58	87	189	87	56
21	60	44	32	29	32	30	74	158	78	247	91	52
22	59	39	33	28	33	30	68	293	66	193	93	52
23	62	36	33	28	33	29	81	288	68	123	88	54
24	71	39	33	27	35	31	176	227	68	100	88	56
25	71	42	32	28	35	30	277	174	70	83	84	57
26	68	45	32	29	36	30	288	138	73	77	83	56
27	66	44	31	28	37	30	178	122	78	70	86	53
28	62	42	31	28	35	29	207	87	75	68	93	52
29	57	43	30	27	-----	30	285	56	73	65	91	51
30	50	45	30	27	-----	28	233	51	75	61	88	51
31	45	-----	29	28	-----	28	-----	48	-----	57	83	-----
TOTAL	1,629	1,527	1,100	898	895	904	4,045	2,922	2,082	2,757	2,610	2,169
MEAN	52.5	50.9	35.5	29.0	32.0	29.2	135	94.3	69.4	88.9	84.2	72.3
MAX	71	68	52	35	37	33	288	293	119	247	95	120
MIN	41	36	29	25	29	26	31	43	48	57	59	51
AC-FT	3,230	3,030	2,180	1,780	1,780	1,790	8,020	5,800	4,130	5,470	5,180	4,300
CAL YR 1972	TOTAL	33,772	MEAN	92.3	MAX	754	MIN	17	AC-FT	66,990		
WTR YR 1973	TOTAL	23,538	MEAN	64.5	MAX	293	MIN	25	AC-FT	46,690		

GREEN RIVER BASIN

09216050 BIG SANDY RIVER AT GASSON BRIDGE, NEAR EDEN, WYO.

LOCATION.--Lat 41°56'43", long 109°41'04", in NE¼SW¼NW¼ sec.29, T.23 N., R. 108 W., Sweetwater County, on left bank 0.2 mi (0.3 km) upstream from Gasson Bridge and 14.5 mi (23.3 km) southwest of Eden.

DRAINAGE AREA.--1,720 mi² (4,450 km²), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,350 ft (1,935 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 366 ft³/s (10.4 m³/s) Apr. 26, gage height, 6.12 ft (1.865 m); maximum gage height, 6.62 ft (2.018 m) Mar. 7 (backwater from ice); minimum daily discharge, 34 ft³/s (0.96 m³/s) Jan. 7.

Period of record: Maximum discharge, 736 ft³/s (20.8 m³/s) June 11, 1972, gage height, 7.16 ft (2.182 m); minimum daily, 34 ft³/s (0.96 m³/s) Jan. 7, 1973.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. Natural flow of stream affected by storage reservoirs and diversions for irrigation of about 19,300 acres (78.1 km²) 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	62	58	69	40	40	45	46	162	70	80	73	94
2	62	66	74	39	42	43	47	107	74	74	76	105
3	63	80	71	39	44	41	43	83	74	78	80	124
4	66	78	64	37	46	40	49	70	83	78	89	117
5	74	85	60	36	47	40	54	70	85	78	94	113
6	74	87	56	35	48	40	61	96	81	76	100	104
7	70	80	51	34	47	43	64	102	71	74	102	94
8	68	80	48	37	46	45	58	109	65	76	94	89
9	66	78	45	39	44	44	60	104	63	83	92	89
10	68	74	45	43	43	46	68	107	58	83	107	90
11	68	76	43	45	44	44	128	98	63	81	96	127
12	66	73	44	47	44	44	180	83	63	83	96	130
13	66	70	45	49	46	44	232	70	65	92	96	111
14	71	70	47	46	48	42	288	62	65	109	104	105
15	83	65	50	44	48	48	238	56	94	115	100	98
16	81	66	53	43	46	45	212	57	87	107	94	90
17	80	68	52	43	44	46	172	57	85	111	94	85
18	81	66	51	43	45	43	192	58	98	102	96	83
19	81	62	49	42	45	43	202	60	124	107	100	83
20	81	63	47	41	46	46	141	62	104	160	98	81
21	81	57	47	40	47	44	111	120	92	249	100	80
22	81	57	46	39	48	44	100	260	80	222	102	78
23	85	45	46	39	49	43	100	318	76	160	98	78
24	94	49	46	38	52	46	152	271	78	121	98	80
25	94	54	44	39	51	45	257	210	80	105	96	81
26	90	66	45	40	52	46	336	174	81	96	92	80
27	89	61	43	39	54	46	232	150	81	90	96	78
28	85	57	43	38	50	43	197	124	87	87	100	76
29	78	59	42	37	-----	44	300	96	81	85	102	76
30	66	62	42	37	-----	41	291	76	85	81	102	74
31	56	-----	41	39	-----	42	-----	74	-----	73	94	-----
TOTAL	2,330	2,012	1,549	1,247	1,306	1,356	4,616	3,546	2,393	3,216	2,961	2,793
MEAN	75.2	67.1	50.0	40.2	46.6	43.7	154	114	79.8	104	95.5	93.1
MAX	94	87	74	49	54	48	336	318	124	249	107	130
MIN	56	45	41	34	40	40	46	56	58	73	73	74
AC-FT	4,020	3,990	3,070	2,470	2,590	2,690	9,150	7,030	4,750	6,380	5,870	5,540

WTR YR 1973 TOTAL 29,325 MEAN 80.3 MAX 336 MIN 34 AC-FT 58,170

NOTE.--No gage-height record Dec. 12 to Jan. 15.

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LOCATION.--Lat 41°30'59", long 109°26'54", in NW¼NE¼ sec.26, T.18 N., R.107 W., Sweetwater County, on right bank 0.1 mi (0.2 km) downstream from Bitter Creek, 1.0 mi (1.6 km) southeast of town of Green River, and 4.0 mi (6.4 km) upstream from high-water line of Flaming Gorge Reservoir.

PERIOD OF RECORD.--April 1951 to current year.

AVERAGE DISCHARGE.--22 years, 1,708 ft³/s (48.37m³/s), 1,237,000 acre-ft/yr (1,530 hm³/yr), unadjusted.

Period of record: Maximum discharge, 16,800 ft³/s (476 m³/s) Sept. 7, 1965, gage height, 8.53 ft (2.600 m), caused by emergency release from Fontenelle Reservoir; minimum daily, 170 ft³/s (4.81 m³/s) Nov. 16, 1955.

REMARKS.--Records good except those for winter period, which are poor. Some regulation by Fontenelle Reservoir since August 1963. (See sta 09211150.) Natural flow of stream affected by transbasin diversions, storage reservoirs, power development, and diversions for irrigation of about 223,000 acres (902 km²) above station. Water-quality records for the current year 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	1,050	1,530	1,450	860	1,200	1,400	1,660	2,600	3,100	2,040	2,060	1,830
2	1,120	1,520	1,260	840	1,360	1,100	1,650	2,520	3,060	1,990	2,010	2,050
3	1,160	1,550	1,050	810	1,380	950	1,640	2,700	3,040	1,980	1,950	1,910
4	1,160	1,560	800	900	1,370	925	1,650	2,700	3,040	1,970	1,910	1,760
5	1,190	1,560	640	930	1,390	930	1,640	2,770	3,070	1,940	1,880	1,720
6	1,190	1,580	600	940	1,400	933	1,590	2,860	3,090	1,880	1,830	1,740
7	1,100	1,470	610	940	1,500	930	1,660	2,830	3,090	1,870	1,820	1,820
8	1,180	1,020	620	940	1,620	950	1,390	2,900	3,100	1,860	1,790	1,830
9	1,180	784	630	940	1,710	1,000	1,310	3,060	3,140	1,860	1,770	1,850
10	1,210	776	690	940	1,800	1,150	1,410	2,800	3,190	1,850	1,740	1,830
11	1,190	832	750	770	1,850	1,310	1,640	2,390	3,240	1,820	1,720	2,450
12	1,180	1,170	850	970	1,850	1,410	1,950	2,220	3,290	1,830	1,710	2,720
13	1,190	1,170	960	970	1,850	1,610	2,020	2,220	3,270	1,870	1,710	1,940
14	1,170	1,310	970	1,060	1,850	1,720	1,980	2,190	3,340	2,040	1,560	1,200
15	1,200	1,420	980	1,190	1,850	1,800	1,740	2,450	3,260	2,010	1,390	1,070
16	1,200	1,420	970	1,320	1,850	1,900	1,600	2,540	2,830	1,860	1,390	997
17	1,350	1,420	940	1,430	1,840	1,910	1,530	2,550	2,670	1,790	1,410	952
18	1,140	1,420	890	1,450	1,840	1,920	1,830	2,520	2,660	1,790	1,560	934
19	891	1,430	790	1,520	1,840	1,900	2,040	2,540	2,390	1,860	1,720	908
20	900	1,430	760	1,590	1,840	1,890	2,050	2,690	2,250	2,280	1,720	883
21	1,050	1,440	750	1,550	1,830	1,820	1,970	2,860	2,240	2,700	1,740	832
22	1,510	1,470	740	1,460	1,820	1,850	1,900	3,020	2,220	2,400	1,760	594
23	1,540	1,600	780	1,440	1,830	1,730	1,870	3,140	2,160	2,040	1,790	559
24	1,590	1,700	820	1,420	1,830	1,700	1,880	3,170	2,150	2,160	1,780	545
25	1,580	1,700	820	1,400	1,820	1,680	1,980	3,190	2,150	2,400	1,780	552
26	1,580	1,680	820	1,410	1,820	1,670	2,130	3,150	2,130	2,510	1,770	559
27	1,560	1,700	820	1,400	1,810	1,670	2,360	3,140	2,120	2,450	1,780	493
28	1,550	1,700	820	1,390	1,700	1,670	2,460	3,120	2,110	2,390	1,810	438
29	1,580	1,700	800	1,390	-----	1,660	2,480	3,100	2,110	2,310	1,770	438
30	1,560	1,580	700	1,400	-----	1,650	2,580	3,100	2,090	2,220	1,760	432
31	1,540	-----	800	1,390	-----	1,650	-----	3,090	-----	2,130	1,760	-----
TOTAL	39,591	42,642	25,880	36,960	47,650	46,388	55,590	86,130	81,600	64,100	54,150	37,836
MEAN	1,277	1,421	835	1,192	1,702	1,496	1,853	2,778	2,720	2,068	1,747	1,261
MAX	1,590	1,700	1,450	1,590	1,850	1,920	2,580	3,190	3,340	2,700	2,060	2,720
MIN	891	776	600	770	1,200	925	1,310	2,190	2,090	1,790	1,390	432
AC-FT	78,530	84,580	51,330	73,310	94,510	92,010	110,300	170,800	161,900	127,100	107,400	75,050
CAL YR 1972	TOTAL	1,012,517	MEAN	2,766	MAX	15,400	MIN	600	AC-FT	2,008,000		
WTR YR 1973	TOTAL	618,517	MEAN	1,695	MAX	3,340	MIN	432	AC-FT	1,227,000		

GREEN RIVER BASIN

09217900 BLACKS FORK NEAR ROBERTSON, WYO.

LOCATION.--Lat 40°57'53", long 110°34'38", in NW¼SW¼ sec.27, T.3 N., R.12 E., Summit County, Utah, on left bank 1 mi (2 km) downstream from East Fork, 2.5 mi (4.0 km) south of Utah-Wyoming State line, and 17 mi (27 km) south of Robertson.

DRAINAGE AREA.--130 mi² (337 km²), approximately.

PERIOD OF RECORD.--October 1937 to July 1939 (published as "at Blacks Fork Ranger Station"), July 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8,803.8 ft (2,683.40 m) above mean sea level (levels by Bureau of Reclamation). Prior to July 29, 1966, water-stage recorder at site 0.5 mi (0.8 km) downstream at different datum.

AVERAGE DISCHARGE.--8 years (1938, 1966-73), 170 ft³/s (4.814 m³/s), 123,200 acre-ft/yr (152 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,720 ft³/s (48.7 m³/s) June 10, gage height, 3.77 ft (1.149 m); minimum observed, 26 ft³/s (0.74 m³/s) Apr. 10, discharge measurement.

Period of record: Maximum discharge, 2,160 ft³/s (61.2 m³/s) June 6, 1968, gage height, 4.91 ft (1.500 m); minimum indicated, 13 ft³/s (0.37 m³/s) Feb. 25, 1968.

REMARKS.--Records good except those for the winter periods and period of no gage-height record, which are poor. 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	42	41	40	35	33	30	28	70	765	546	199	119
2	41	43	40	35	33	30	28	57	716	475	189	135
3	40	44	40	35	33	30	28	53	600	430	196	146
4	39	45	40	35	33	30	28	55	480	390	282	155
5	49	45	40	35	33	30	28	61	430	385	254	158
6	50	47	40	35	33	30	30	68	552	367	212	122
7	43	46	40	35	33	30	32	77	779	371	193	124
8	48	44	40	35	33	30	35	88	974	358	180	117
9	44	45	40	35	33	30	34	107	1,200	344	171	119
10	78	45	40	35	33	30	35	142	1,490	313	161	112
11	59	45	40	35	33	30	37	172	1,340	304	158	189
12	51	45	40	35	33	30	38	208	1,200	335	149	182
13	51	45	40	35	33	30	39	262	1,080	480	144	139
14	51	45	40	35	33	30	41	327	1,240	415	135	129
15	100	45	40	35	33	30	43	410	870	390	150	125
16	69	45	40	35	33	28	45	492	630	326	130	122
17	57	45	40	35	33	28	46	618	504	286	171	118
18	52	45	40	35	33	28	45	793	440	282	233	115
19	55	45	40	35	33	28	40	974	376	486	152	111
20	72	45	40	35	33	28	37	1,110	367	390	155	108
21	63	43	35	35	33	28	36	1,060	420	340	202	105
22	58	43	35	35	33	28	38	966	450	344	186	104
23	52	43	35	35	33	28	41	878	522	326	152	107
24	54	43	35	35	33	28	45	863	552	405	135	112
25	53	43	35	35	33	28	48	842	600	295	127	119
26	54	40	35	35	33	28	52	636	688	274	122	119
27	52	40	35	35	33	28	56	522	702	290	130	117
28	44	40	35	35	33	28	60	470	660	270	127	122
29	42	40	35	35	-----	28	70	480	606	247	114	112
30	41	40	35	35	-----	28	73	540	576	236	107	102
31	40	-----	35	35	-----	28	-----	636	-----	212	104	-----
TOTAL	1,644	1,310	1,185	1,085	924	898	1,234	14,037	21,809	10,912	5,100	3,744
MEAN	53.0	43.7	38.2	35.0	33.0	29.0	41.1	453	727	352	165	125
MAX	100	47	40	35	33	30	73	1,110	1,490	546	282	189
MIN	39	40	35	35	33	28	28	53	367	212	104	102
AC-FT	3,260	2,600	2,350	2,150	1,830	1,780	2,450	27,840	43,260	21,640	10,120	7,430

CAL YR 1972 TOTAL 62,194 MEAN 170 MAX 1,690 MIN 23 AC-FT 123,400
WTR YR 1973 TOTAL 63,882 MEAN 175 MAX 1,490 MIN 28 AC-FT 126,700

PEAK DISCHARGE (BASE, 1,000 FT³/S)

NOTE.--No gage-height record Dec. 11 to May 4.

DATE	TIME	G.HT.	DISCHARGE
5-20	2200	3.24	1,260
6-10	0400	3.77	1,720

GREEN RIVER BASIN

175

09218500 BLACKS FORK NEAR MILLBURNE, WYO.

LOCATION.--Lat 41°01'54", long 110°34'43", in NW¼NE¼SW¼ sec.11, T.12 N., R.117 W., Uinta County, on left bank 0.4 mi (0.6 km) downstream from Meeks Cabin Dam, 2.7 mi (4.3 km) north of Utah-Wyoming State line, and 17 mi (27.4 km) southwest of Millburne.

DRAINAGE AREA.--152 mi² (394 km²).

PERIOD OF RECORD.--July 1939 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 8,512.27 ft (2,594.540m) above mean sea level (Bureau of Reclamation bench mark). Prior to Oct. 1, 1971, at several sites about 2.0 mi (3.2 km) downstream at various datums.

AVERAGE DISCHARGE.--34 years, 160 ft³/s (4.531m³/s), 115,900 acre-ft/yr (143 hm³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 759 ft³/s (21.5 m³/s) June 16, gage height, 3.96 ft (1.207 m); minimum daily, 11 ft³/s (0.31 m³/s) Oct. 7-10.

Period of record: Maximum discharge, 2,530 ft³/s (71.6 m³/s) June 7, 1957, from rating curve extended above 1,500 ft³/s (42.5 m³/s); maximum gage height, 6.46 ft (1.969 m) in gage well, 6.76 ft (2.060 m) from floodmarks, June 12, 1965, site and datum them in use; minimum daily discharge, 3.7 ft³/s (0.10 m³/s) Nov. 12, 1970, due to regulation by Meeks Cabin Dam.

REMARKS.--Records good. Flow completely regulated by Meeks Cabin Reservoir, capacity, 32,470 acre-ft (40.0 hm³), revised, since June 1971. No diversion above station.

COOPERATION.--One discharge measurement furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 929: 1940.

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	174	31	30	30	28	28	28	559	636	200	133
2	98	174	30	30	29	28	28	28	612	580	200	133
3	86	171	30	30	29	28	28	28	612	480	200	133
4	86	171	30	30	30	28	28	23	604	456	200	138
5	96	171	31	30	30	28	28	17	604	456	204	150
6	43	168	31	30	30	28	28	17	545	420	204	150
7	11	168	31	30	29	28	29	17	559	375	174	150
8	11	168	31	30	29	28	29	17	660	375	148	150
9	11	166	31	30	29	27	29	17	714	375	148	150
10	11	166	31	30	29	27	29	17	723	420	135	150
11	22	163	31	30	29	27	28	17	732	456	115	150
12	81	163	31	30	30	27	28	17	750	456	115	142
13	132	160	31	30	30	27	28	17	741	468	115	128
14	152	160	31	31	30	27	28	51	732	498	115	128
15	152	155	30	31	30	28	28	249	750	498	115	128
16	152	155	31	31	30	28	28	456	750	498	115	126
17	174	135	31	31	29	28	28	510	750	480	115	126
18	185	120	31	31	29	29	29	596	705	468	115	126
19	185	120	31	31	29	29	29	687	552	468	115	117
20	182	96	31	31	29	29	29	705	456	468	115	107
21	182	65	30	31	29	29	29	533	456	468	115	107
22	180	63	30	31	29	29	28	456	456	468	115	107
23	177	57	30	31	28	29	28	492	462	438	117	107
24	93	57	31	31	28	28	28	498	462	327	117	107
25	16	57	31	31	28	28	28	498	504	279	117	107
26	30	57	31	31	28	28	28	504	588	283	117	107
27	89	48	31	31	28	28	28	504	652	283	117	107
28	115	31	31	30	28	28	28	510	669	283	126	107
29	115	31	31	30	-----	28	29	504	652	283	133	107
30	133	31	31	30	-----	28	29	510	636	283	133	107
31	163	-----	31	30	-----	28	-----	510	-----	252	133	-----
TOTAL	3,237	3,621	954	944	815	868	850	9,033	18,647	12,978	4,303	3,785
MEAN	104	121	30.8	30.5	29.1	28.0	28.3	291	622	419	139	126
MAX	185	174	31	31	30	29	29	705	750	636	204	150
MIN	11	31	30	30	28	27	28	17	456	252	115	107
AC-FT	6,420	7,180	1,890	1,870	1,620	1,720	1,690	17,920	36,990	25,740	8,540	7,510

CAL YR 1972 TOTAL 66,566 MEAN 182 MAX 1,270 MIN 11 AC-FT 132,000
 WTR YR 1973 TOTAL 60,035 MEAN 164 MAX 750 MIN 11 AC-FT 119,100

09220000 EAST FORK OF SMITH FORK NEAR ROBERTSON, WYO.

LOCATION.--Lat 41°03'15", long 110°23'52", in NE¼NW¼NE¼ sec.5, T.12 N., R.115 W., Uinta County, Wasatch National Forest, on left bank 60 ft (18 m) downstream from bridge, 1.0 mi (1.6 km) upstream from Gilbert Creek, and 9.0 mi (14.5 km) south of Robertson.

DRAINAGE AREA.--53.0 mi² (137.3 km²).

PERIOD OF RECORD.--July 1939 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 8,470 ft (2,582 m), from topographic map. Prior to July 12, 1957, at datum 3.96 ft (1.207 m) higher.

AVERAGE DISCHARGE.--32 years (1939-71), 47.1 ft³/s (1.334m³/s), 34,120 acre-ft/yr (42.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 879 ft³/s (24.9 m³/s) June 10, gage height, 6.21 ft (1.893 m); minimum daily during period of operation, 19 ft³/s (0.538 m³/s) May 1.

Period of record: Maximum discharge, 1,450 ft³/s (41.1 m³/s) June 10, 1965, gage height, 6.75 ft (2.057 m); no flow part of each day Apr. 17-22, 24, 25, 1950; minimum gage height, 3.26 ft (0.994 m), present datum, Apr. 22, 1950.

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

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

REVISIONS.--WSP 979: 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								19	320	206	64	37
2								21	284	180	60	46
3								23	230	148	63	48
4								25	203	135	83	57
5								27	168	129	72	51
6								32	212	120	65	44
7								34	284	124	59	44
8								35	380	120	54	41
9								40	510	120	51	41
10								53	675	106	48	41
11								66	558	99	46	68
12								78	470	120	43	85
13								94	405	153	41	57
14								120	480	158	41	50
15								137	356	135	39	46
16								162	236	116	40	44
17								212	185	103	48	42
18								280	153	92	65	41
19								322	131	155	49	40
20								395	176	170	44	39
21								385	133	126	63	37
22								356	146	122	57	37
23								320	172	116	49	37
24								300	185	146	45	40
25								304	200	106	41	42
26								224	227	87	38	42
27								185	233	98	40	43
28								160	220	85	51	41
29					-----			170	224	77	41	39
30					-----			197	212	76	38	37
31		-----			-----		-----	239	-----	68	37	-----
TOTAL								5,025	8,328	3,766	1,575	1,357
MEAN								162	279	122	50.8	45.2
MAX								395	675	206	83	85
MIN								19	126	68	37	37
AC-FT								9,970	16,520	7,510	3,120	2,690

PEAK DISCHARGE (BASE, 300 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
5-20	2300	5.65	485
6-1	0430	5.40	360
6-10	0530	6.21	879

GREEN RIVER BASIN

177

09220500 WEST FORK OF SMITH FORK NEAR ROBERTSON, WYO.

LOCATION.--Lat 41°01'20", long 110°28'43", in SE¼NW¼NW¼ sec.15, T.12 N., R.116 W., Uinta County, Wasatch National Forest, on left bank 0.8 mi (1.3 km) downstream from Archie Creek and 11.6 mi (18.7 km) southwest of Robertson.

DRAINAGE AREA.--37.2 mi² (96.3 km²).

PERIOD OF RECORD.--July 1939 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 8,615.0 ft (2,625.85 m) above mean sea level. July 13, 1939, to Aug. 16, 1949, at site 75 ft (23 m) upstream at datum 2.00 ft (0.610 m) higher; Aug. 17, 1949, to June 13, 1965, at present site at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--32 years (1939-71), 21.5 ft³/s (0.609 m³/s), 15,580 acre-ft/yr (19.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 289 ft³/s (8.18 m³/s) June 1, gage height, 2.81 ft (0.856 m); minimum daily during period of operation, 3.9 ft³/s (0.11 m³/s) Aug. 31.

Period of record: Maximum discharge, 2,100 ft³/s (59.5 m³/s) June 10, 1965, gage height, 3.20 ft (0.975 m), in gage well, 3.60 ft (1.097 m), from floodmarks, datum then in use; minimum observed, 0.2 ft³/s (0.006 m³/s) Aug. 13, 1940, Feb. 25, 1941 (discharge measurement).

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

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 929: 1940. WSP 1343, 1733: 1943.

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									170	19	11	8.1
2									165	16	10	13
3									89	15	11	14
4									62	14	18	13
5									52	12	18	9.1
6									74	11	12	7.0
7									103	11	9.8	9.0
8									124	11	8.7	10
9									135	10	7.9	11
10									128	9.4	7.3	11
11									106	9.1	6.7	25
12									82	18	6.2	15
13									70	34	5.7	10
14									80	26	5.2	9.0
15									58	21	4.8	8.0
16									41	16	8.1	7.5
17									34	12	12	7.0
18									30	12	23	7.0
19									26	47	10	6.5
20									24	40	8.7	6.5
21									24	39	14	6.0
22									24	50	12	6.0
23									26	38	8.1	6.0
24									26	61	5.5	6.5
25									26	30	4.8	7.0
26									28	20	4.1	7.0
27									26	18	4.8	7.5
28									24	16	5.2	7.0
29									24	14	4.4	6.5
30									71	13	4.1	6.0
31										12	3.9	
TOTAL									1,912	674.5	275.0	272.2
MEAN									63.7	21.8	8.87	9.07
MAX									170	61	23	25
MIN									21	9.1	3.9	6.0
AC-FT									3,790	1,340	645	540

PEAK DISCHARGE (BASE, 280 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
6- 1	2300	2.81	289

GREEN RIVER BASIN

09222000 BLACKS FORK NEAR LYMAN, WYO.

LOCATION.--Lat 41°27'08", long 110°10'20", in SW¼NW¼SW¼ sec.15, T.17 N., R.113 W., Uinta County, on left bank 200 ft (61 m) downstream from bridge on old U.S. Highway 30S, 8.5 mi (13.7 km) downstream from Smiths Fork, and 11 mi (18 km) northeast of Lyman.

DRAINAGE AREA.--821 mi² (2,126 km²).

PERIOD OF RECORD.--October 1937 to December 1957, May 1962 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 6,380 ft (1,945 m), from topographic map. Oct. 21, 1937, to Dec. 31, 1957, at site 300 ft (91 m) downstream, at datum 1.51 ft (0.460 m) higher.

AVERAGE DISCHARGE.--31 years, 150 ft³/s (4.248m³/s), 108,700 acre-ft/yr (134 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,200 ft³/s (90.6 m³/s) Apr. 10, gage height, 9.82 ft (2.993 m); maximum gage height, 10.50 ft (3.200 m) Apr. 7 (backwater from ice); minimum daily discharge, 24 ft³/s (0.68 m³/s) Oct. 1.

Period of record: Maximum discharge, 7,960 ft³/s (225 m³/s) June 11, 1965, gage height, 12.68 ft (3.865 m); no flow Aug. 8, 15-22, 1940, Dec. 26-28, 1962.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by regulation from Meeks Cabin Reservoir, capacity, 32,470 acre-ft (40.0 hm³), revised, since June 1971, several smaller reservoirs, and diversions for irrigation of about 62,200 acres (252 km²) above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1733: 1947, 1948(M), 1951(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	24	79	54	38	53	61	150	535	305	112	208	69
2	26	160	52	37	56	56	173	620	539	101	154	122
3	27	200	50	36	60	58	200	447	562	105	126	116
4	27	249	49	35	64	60	260	379	406	94	137	105
5	28	275	47	34	62	62	540	388	346	82	502	99
6	31	282	46	35	59	64	800	364	290	69	474	99
7	30	228	44	36	58	68	1,200	429	243	55	308	97
8	30	232	42	37	57	75	1,610	446	233	49	238	101
9	27	245	41	39	56	78	1,410	419	268	42	150	105
10	30	221	40	41	57	81	1,730	412	323	40	122	106
11	27	212	39	44	58	80	2,320	450	440	38	112	308
12	27	213	38	47	56	77	1,270	443	490	44	76	370
13	27	198	36	50	55	73	1,260	419	490	61	64	263
14	29	200	38	52	53	74	1,040	426	433	75	60	180
15	85	204	40	50	54	75	584	454	478	116	48	143
16	110	201	42	49	55	78	490	670	522	183	44	130
17	108	188	44	49	56	80	482	936	440	154	49	120
18	124	190	47	48	54	83	436	986	422	145	367	124
19	154	152	48	48	53	88	320	1,170	334	470	164	120
20	171	176	49	47	52	91	258	1,220	275	1,450	94	110
21	204	147	49	47	50	94	235	1,200	210	855	76	96
22	174	94	48	47	50	96	334	1,030	161	725	92	96
23	165	88	47	46	53	98	422	790	118	860	99	99
24	186	81	46	46	59	101	502	584	92	620	84	103
25	165	71	45	45	64	106	616	571	92	379	67	112
26	96	68	44	44	67	110	530	625	78	288	60	114
27	63	64	43	44	70	115	486	436	67	243	51	120
28	62	62	42	45	66	121	575	346	81	203	49	112
29	60	60	41	47	-----	125	645	290	94	180	48	105
30	57	56	40	49	-----	130	602	268	114	164	48	97
31	57	-----	39	50	-----	140	-----	288	-----	198	44	-----
TOTAL	2,431	4,896	1,370	1,362	1,607	2,698	21,480	18,041	8,946	8,200	4,215	3,941
MEAN	78.4	163	44.2	43.9	57.4	87.0	716	582	298	265	136	131
MAX	204	282	54	52	70	140	2,320	1,220	562	1,450	502	370
MIN	24	56	36	34	50	56	150	268	67	38	44	69
AC-FT	4,820	9,710	2,720	2,700	3,190	5,350	42,610	35,780	17,740	16,260	8,360	7,820

CAL YR 1972 TOTAL 74,141 MEAN 203 MAX 1,970 MIN 15 AC-FT 147,100
WTR YR 1973 TOTAL 79,187 MEAN 217 MAX 2,320 MIN 24 AC-FT 157,100

GREEN RIVER BASIN

179

09223000 HAMS FORK BELOW POLE CREEK, NEAR FRONTIER, WYO.

LOCATION.--Lat 42°06'38", long 110°42'34", in NW¼SE¼NW¼ sec.35, T.25 N., R.117 W., Lincoln County, on left bank 2.0 mi (3.2 km) downstream from Pole Creek, 4.6 mi (7.4 km) upstream from Taylor Creek, and 22 mi (35.4 km) northwest of Frontier.

DRAINAGE AREA.--128 mi² (332 km²).

PERIOD OF RECORD.--October 1952 to current year. Prior to October 1970, published as "near Elk Creek ranger station."

GAGE.--Water-stage recorder. Altitude of gage is 7,455 ft (2,272 m), from topographic map. Prior to Sept. 2, 1971, at site 120 ft (36.6 m) upstream at present datum.

AVERAGE DISCHARGE.--21 years, 99.6 ft³/s (2.821m³/s), 72,160 acre-ft/yr (89.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 872 ft³/s (24.7 m³/s) May 20, gage height, 6.88 ft (2.097 m); minimum daily, 13 ft³/s (0.37 m³/s) Jan 6.

Period of record: Maximum discharge, 1,520 ft³/s (43.0 m³/s) May 28, 1971, gage height, 8.10 ft (2.469 m); minimum daily, 2.0 ft³/s (0.057 m³/s) Mar. 20, 1965.

REMARKS.--Records fair except those for winter period, which are poor. 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	23	20	25	16	20	21	18	69	385	123	42	17
2	23	21	23	16	21	20	19	66	427	113	38	21
3	23	22	22	15	21	20	20	78	397	109	37	22
4	22	22	21	15	22	19	21	108	358	102	38	21
5	28	22	20	14	22	19	23	133	324	95	40	19
6	34	21	20	13	22	19	22	188	310	91	38	17
7	31	21	21	14	21	19	21	238	319	86	35	16
8	28	22	20	14	20	20	22	243	347	81	31	18
9	27	22	20	15	20	20	23	250	370	77	31	16
10	27	23	19	16	19	21	23	282	388	72	30	26
11	27	24	18	17	20	21	25	310	382	66	30	25
12	26	25	18	18	20	22	28	344	352	64	28	28
13	25	22	19	19	21	22	33	403	321	67	27	21
14	25	24	20	20	20	23	36	436	310	71	26	18
15	25	24	20	20	20	23	36	451	313	67	24	18
16	26	23	21	19	19	23	38	510	277	69	24	18
17	26	22	21	19	19	22	40	622	258	61	24	18
18	24	22	22	16	18	22	39	720	245	57	26	18
19	24	24	22	18	18	21	38	748	216	63	26	18
20	24	24	23	18	17	21	38	816	195	106	26	17
21	24	23	23	17	17	20	40	658	182	100	25	18
22	24	22	22	17	18	20	44	559	173	77	25	20
23	24	22	22	16	18	21	47	514	164	90	27	20
24	26	23	21	17	19	22	50	506	160	71	27	22
25	26	24	20	18	19	21	48	584	155	63	25	27
26	25	25	19	18	20	20	48	528	147	55	22	26
27	23	24	19	18	20	19	52	415	141	53	20	22
28	21	23	18	19	21	18	58	355	143	51	18	21
29	20	24	18	19	-----	19	67	330	147	47	18	20
30	19	25	17	19	-----	18	73	324	135	47	18	20
31	19	-----	17	20	-----	17	-----	341	-----	46	16	-----
TOTAL	769	685	631	532	552	633	1,090	12,139	8,041	2,340	862	608
MEAN	24.8	22.8	20.4	17.2	19.7	20.4	36.3	392	268	75.5	27.8	20.3
MAX	34	25	25	20	22	23	73	816	427	123	42	28
MIN	19	20	17	13	17	17	18	66	135	46	16	16
AC-FT	1,530	1,360	1,250	1,060	1,090	1,260	2,150	24,080	15,950	4,640	1,710	1,210
CAL YR 1972	TOTAL 57,838	MEAN 158	MAX 1,080	MIN 12	AC-FT 114,700							
WTR YR 1973	TOTAL 28,882	MEAN 79.1	MAX 816	MIN 13	AC-FT 57,290							

PEAK DISCHARGE (BASE, 350 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE
5-20	1000	6.88	872

GREEN RIVER BASIN

09224700 BLACKS FORK NEAR LITTLE AMERICA, WYO.

LOCATION.--Lat 41°32'46", long 109°41'34", in NE¼NE¼NE¼ sec.15, T.18 N., R.109 W., Sweetwater County, on right bank 200 ft (61 m) upstream from bridge on U.S. Highway 30, 4.2 mi (6.8 km) upstream from Meadow Springs Wash, and 8.5 mi (13.7 km) east of Little America.

DRAINAGE AREA.--3,100 mi² (8,030 km²), approximately.

PERIOD OF RECORD.--June 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,127.66 ft (1,867.711m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 370 ft³/s (10.48m³/s), 268,100 acre-ft/yr (331 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,740 ft³/s (134 m³/s) July 20, gage height, 8.54 ft (2.603 m); minimum daily, 52 ft³/s (1.47 m³/s) Oct. 3.

Period of record: Maximum discharge, 9,980 ft³/s (283 m³/s) June 13, 1965, gage height, 10.90 ft (3.322 m); no flow Sept. 20-26, 1962.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by regulation from Meeks Cabin Reservoir, capacity, 32,470 acre-ft (40.0 hm³), revised, since June 1971, Viva Naughton Reservoir, capacity, 42,400 acre-ft (52.3 hm³), numerous smaller reservoirs, and diversions for irrigation of about 76,100 acres (308 km²) above station. Water-quality records for the current year 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	60	110	90	72	95	120	380	1,250	686	178	274	110
2	57	122	94	72	100	110	400	1,240	656	196	292	220
3	52	190	94	70	105	100	430	1,360	782	185	260	175
4	54	410	92	68	110	102	450	1,180	818	171	236	175
5	60	400	89	66	115	107	500	1,130	668	157	274	157
6	60	380	87	65	110	110	600	1,090	555	135	549	147
7	62	395	86	66	105	113	1,000	1,020	467	113	602	147
8	62	328	84	68	105	118	1,250	1,140	405	103	435	157
9	64	296	83	70	102	126	1,360	1,340	375	93	318	161
10	69	301	80	72	101	130	1,320	1,380	440	86	256	161
11	69	274	76	77	103	138	2,240	1,420	538	75	203	260
12	69	260	74	83	103	137	3,870	1,490	602	71	189	680
13	69	256	71	89	100	130	3,870	1,530	656	82	168	620
14	73	244	69	94	98	125	4,010	1,480	680	91	144	430
15	75	232	72	98	96	135	2,600	1,410	650	129	129	314
16	82	248	76	95	96	146	1,500	1,350	680	147	120	256
17	123	256	79	93	97	153	1,200	1,470	692	178	157	224
18	132	210	85	89	98	160	1,020	1,580	662	206	206	210
19	135	256	88	89	97	173	930	1,670	662	269	385	199
20	150	199	91	88	95	190	700	1,870	584	3,560	350	199
21	164	206	92	88	93	200	560	2,090	478	2,320	220	185
22	178	210	92	87	90	212	500	2,210	425	1,500	175	175
23	196	190	91	87	90	215	700	1,860	370	1,220	154	168
24	196	138	89	86	96	220	890	1,690	301	1,180	157	168
25	199	125	87	85	105	235	1,050	1,460	224	854	147	171
26	217	120	85	84	115	255	1,250	1,310	192	614	129	175
27	164	112	83	83	120	272	1,150	1,380	175	483	113	185
28	132	100	81	83	126	290	1,050	1,160	150	415	108	196
29	118	94	79	84	-----	310	1,200	995	135	350	98	199
30	110	91	76	87	-----	325	1,320	886	141	310	93	182
31	105	-----	75	90	-----	350	-----	740	-----	287	88	-----
TOTAL	3,356	6,753	2,590	2,528	2,866	5,507	39,300	43,181	14,849	15,758	7,029	6,806
MEAN	108	225	83.5	81.5	102	178	1,310	1,393	495	508	227	227
MAX	217	410	94	98	126	350	4,010	2,210	818	3,560	602	680
MIN	52	91	69	65	90	100	380	740	135	71	88	110
AC-FT	6,660	13,390	5,140	5,010	5,680	10,920	77,950	85,650	29,450	31,260	13,940	13,500

CAL YR 1972 TOTAL 193,232 MEAN 528 MAX 3,540 MIN 34 AC-FT 383,300
WTR YR 1973 TOTAL 150,523 MEAN 412 MAX 4,010 MIN 52 AC-FT 298,600

GREEN RIVER BASIN

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09228500 BURNT FORK NEAR BURNTFORK, WYO.

LOCATION.--Lat 40°56'47", long 110°03'56", in NE¼SE¼SE¼ sec.36, T.3 N., R.16 E., Summit County, Utah, Wasatch National Forest, on left bank 0.6 mi (1.0 km) west of forest boundary and 6.5 mi (10.5 km) south-west of Burntfork.

DRAINAGE AREA.--52.8 mi² (136.8 km²).

PERIOD OR RECORD.--April 1943 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 8,430 ft (2,569 m), from topographic map. Prior to June 10, 1965, water-stage recorder at site 0.5 mi (0.8 km) downstream at different datum. June 10 to Oct. 5, 1965, water-stage recorder at site 400 ft (122 m) downstream at different datum.

AVERAGE DISCHARGE.--28 years (1943-71), 31.1 ft³/s (0.881m³/s), 22,530 acre-ft/yr (27.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 528 ft³/s (15.0 m³/s) June 8, gage height, 3.77 ft (1.149 m); minimum daily during period of operation, 22 ft³/s (0.62 m³/s) Sept. 30.

Period of record: Maximum discharge, 3,200 ft³/s (90.6 m³/s) June 10, 1965 (gage height, not determined), from slope-area measurement of peak flow; minimum daily, 0.65 ft³/s (0.018 m³/s) Mar. 31, 1967.

REMARKS.--Records poor. Flow is partially regulated by Island Lake, capacity, 797 acre-ft (0.983 hm³), and Beaver Meadows Reservoir, capacity, 1,722 acre-ft (2.12 hm³). Diversion out of basin above station into Hoop Lake, capacity, 3,920 acre-ft (4.83 hm³).

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1243: 1944.

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									268	120	78	38
2									225	115	70	44
3									170	110	76	44
4									133	105	82	44
5									105	105	78	38
6									160	103	85	33
7									221	86	64	32
8									414	80	58	34
9									304	78	57	34
10									358	78	53	34
11									337	76	50	54
12									292	85	51	58
13									265	105	51	44
14									340	120	50	40
15									225	115	46	40
16									181	105	46	40
17									161	100	44	38
18									143	95	46	36
19									131	129	42	37
20									119	135	38	35
21									112	131	48	34
22									109	116	46	32
23									93	100	46	30
24									95	123	44	31
25									110	109	40	33
26									145	95	38	32
27									155	91	40	33
28									140	90	42	32
29									125	86	38	25
30									120	86	36	22
31										82	35	
TOTAL									5,756	3,154	1,618	1,101
MEAN									192	102	52.2	36.7
MAX									414	135	85	58
MIN									93	76	35	22
AC-FT									11,420	6,260	3,210	2,180

GREEN RIVER BASIN

09229500 HENRYS FORK NEAR MANILA, UTAH

LOCATION.--Lat 41°00'45", long 109°40'20", in NW¼NW¼ sec.23, T.12 N., R.109 W., Sweetwater County, Wyoming, on right bank 0.8 mi (1.3 km) north of Wyoming-Utah State line, 1.3 mi (2.1 km) upstream from normal high-water line of Flaming Gorge Reservoir, and 3.0 mi (4.8 km) northeast of Manila, Utah.

DRAINAGE AREA.--520 mi² (1,350 km²), approximately.

PERIOD OF RECORD.--October 1928 to current year. Prior to October 1971, published as "at Linwood, Utah."

GAGE.--Water-stage recorder. Altitude of gage is 6,060 ft (1,847 m), from topographic map. Prior to Oct. 1, 1957, nonrecording gages or water-stage recorder at several sites about 2.0 mi (3.2 km) downstream at various datums. Oct. 1, 1957, to July 7, 1965, and July 8 to Dec. 2, 1965, water-stage recorders at sites about 1.0 mi (1.6 km) upstream at different datums.

AVERAGE DISCHARGE.--45 years, 83.2 ft³/s (2.356m³/s), 60,280 acre-ft/yr (74.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,270 ft³/s (36.0 m³/s) July 13, gage height, 5.40 ft (1.646 m); minimum daily, 8.7 ft³/s (0.25 m³/s) Oct. 5.

Period of record: Maximum discharge determined, 6,750 ft³/s (191 m³/s) Aug. 3, 1936, gage height, 7.19 ft (2.192 m); site and datum then in use, from floodmarks, from rating curve extended above 570 ft³/s (16.1 m³/s) on basis of slope-area measurement of peak flow; higher discharge occurred July 15, 1959, gage height, 9.42 ft (2.871 m), discharge not determined; no flow for several days in 1933-35, 1939-40.

REMARKS.--Records poor. Peoples Irrigation Canal diverts 5.9 mi (9.5 km) upstream. Natural flow of stream affected by transbasin diversions, small storage reservoirs, diversions for irrigation, and return flow from irrigated areas. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1443: 1955.

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	30	60	62	44	42	59	56	227	528	239	198	92
2	26	70	60	42	44	57	76	251	796	208	177	171
3	25	80	59	41	46	55	70	208	568	180	168	159
4	9.2	85	56	39	48	52	62	227	435	180	190	129
5	8.7	97	54	37	50	50	97	255	340	144	279	107
6	13	92	52	36	48	55	162	267	271	120	231	97
7	14	74	50	35	48	60	141	291	326	102	174	92
8	13	79	52	37	48	73	76	259	484	115	147	81
9	17	76	55	39	46	86	70	212	796	208	129	92
10	25	61	52	42	46	100	92	158	952	144	123	87
11	32	59	48	46	48	120	156	162	1,130	132	115	119
12	32	57	46	50	48	152	212	171	1,130	153	107	336
13	33	55	45	55	46	190	287	171	802	324	107	190
14	35	51	46	60	46	190	345	190	706	595	102	144
15	40	53	47	65	44	200	227	165	958	360	83	138
16	43	54	46	63	46	220	190	159	790	283	76	135
17	43	53	47	60	48	267	198	177	495	251	90	126
18	43	52	49	56	48	184	150	219	370	204	126	123
19	45	49	52	50	46	147	112	331	313	346	147	120
20	48	51	55	46	44	144	90	517	267	846	102	112
21	55	51	57	44	44	104	74	682	219	522	123	110
22	57	49	60	42	44	102	132	664	150	592	177	104
23	51	52	59	40	46	90	208	628	156	528	245	110
24	55	55	57	40	48	74	259	622	184	522	147	107
25	64	59	56	40	52	66	275	632	165	446	107	102
26	72	57	54	38	54	70	243	580	177	287	92	120
27	70	54	52	38	50	99	212	400	198	255	87	135
28	62	53	50	38	61	104	251	304	231	223	94	132
29	61	55	49	38	-----	85	313	243	335	198	99	123
30	57	60	47	38	-----	68	271	308	304	377	85	112
31	55	-----	46	40	-----	66	-----	360	-----	267	81	-----
TOTAL	1,233.9	1,853	1,620	1,379	1,339	3,391	5,119	10,070	14,576	9,351	4,208	3,805
MEAN	39.8	61.8	52.3	44.5	47.8	109	171	325	486	302	136	127
MAX	72	97	62	65	61	267	345	632	1,130	846	279	336
MIN	8.7	49	45	35	42	50	62	159	150	102	76	81
AC-FT	2,450	3,680	3,210	2,740	2,660	6,730	10,150	19,970	28,910	18,550	8,350	7,550
CAL YR 1972	TOTAL 32,178.0	MEAN 87.9	MAX 892	MIN 2.3	AC-FT 63,830							
WTR YR 1973	TOTAL 57,944.9	MEAN 159	MAX 1,130	MIN 3.7	AC-FT 114,900							

NOTE.--No gage-height record Dec. 5 to Mar. 9.

09234400 FLAMING GORGE RESERVOIR AT FLAMING GORGE DAM, UTAH

LOCATION.--Lat 40°54'23", long 109°25'15", in NW¼NE¼ sec.15, T.2 N., R.22 E., Daggett County, at Flaming Gorge Dam on Green River, 1.8 mi (2.9 km) southwest of Dutch John, and 4 mi (6.4 km) northeast of Greendale.

DRAINAGE AREA.--15,100 mi² (39,100 km²), approximately.

PERIOD OF RECORD.--November 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, datum of 1929 (levels by Bureau of Reclamation). Prior to Jan. 1, 1964 on left bank 600 ft (180 m) upstream from face of dam.

EXTREMES.--Current year: Maximum contents observed, 3,462,000 acre-ft (4,270 hm³) Oct. 1, elevation, 6,032.97 ft (1,838.849 m); minimum observed, 2,845,000 acre-ft (3,510 hm³) Mar. 9, 10, elevation, 6,016.19 ft (1,833.734 m).

Period of record: Maximum contents observed, 3,540,000 acre-ft (4,370 hm³) July 28, 29, 1972, elevation, 6,034.91 ft (1,839.441 m); minimum, 582,900 acre-ft (719 hm³), Apr. 26, 1965.

REMARKS.--Records excellent. Reservoir is formed by concrete arch-type dam; storage began Nov. 1, 1962; mass concrete of dam completed Nov. 15, 1962. Total capacity, 3,789,000 acre-ft (4,670 hm³), consisting of the following: Dead storage, 39,700 acre-ft (49.0 hm³) below elevation 5,740 ft (1,750 m); inactive storage, 233,500 acre-ft (288 hm³) between elevations 5,740 ft (1,750 m) and 5,871 ft (1,789 m); usable contents, 3,516,000 acre-ft (4,340 hm³) between elevations 5,871 ft (1,789 m) and 6,040 ft (1,841 m), top of conservation pool. Reservoir is used for flood control, storage replacement to meet downstream requirements under the Colorado River Compact of 1922, and power development. Figures given herein represent usable contents.

COOPERATION.--Records furnished by Bureau of Reclamation.

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

6,010	2,639,000	6,030	3,346,000
6,020	2,977,000	6,035	3,543,000

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	3,462	3,352	3,235	3,081	2,957	2,870	2,898	3,070	3,244	3,298	3,323	3,228
2	3,458	3,347	3,221	3,075	2,953	2,867	2,890	3,073	3,250	3,290	3,320	3,229
3	3,453	3,341	3,227	3,070	2,949	2,862	2,901	3,075	3,256	3,287	3,318	3,232
4	3,449	3,337	3,225	3,067	2,948	2,856	2,904	3,081	3,261	3,286	3,315	3,232
5	3,445	3,336	3,219	3,060	2,946	2,853	2,908	3,082	3,264	3,284	3,313	3,229
6	3,440	3,334	3,213	3,055	2,942	2,850	2,912	3,091	3,267	3,283	3,311	3,226
7	3,442	3,331	3,207	3,049	2,938	2,849	2,918	3,093	3,269	3,280	3,309	3,223
8	3,442	3,327	3,200	3,044	2,934	2,846	2,925	3,101	3,271	3,278	3,308	3,219
9	3,441	3,322	3,194	3,038	2,930	2,843	2,926	3,103	3,275	3,276	3,305	3,217
10	3,439	3,316	3,190	3,033	2,927	2,845	2,928	3,108	3,282	3,273	3,302	3,214
11	3,436	3,310	3,185	3,028	2,924	2,845	2,934	3,112	3,286	3,270	3,300	3,215
12	3,433	3,308	3,179	3,023	2,923	2,846	2,944	3,116	3,291	3,267	3,298	3,220
13	3,428	3,302	3,173	3,017	2,921	2,848	2,952	3,124	3,294	3,266	3,294	3,221
14	3,423	3,296	3,169	3,016	2,918	2,849	2,968	3,127	3,298	3,266	3,289	3,223
15	3,420	3,293	3,164	3,013	2,916	2,850	2,977	3,131	3,305	3,266	3,287	3,218
16	3,417	3,287	3,158	3,008	2,912	2,851	2,983	3,135	3,310	3,268	3,285	3,215
17	3,414	3,285	3,155	3,005	2,909	2,855	2,990	3,140	3,315	3,267	3,281	3,210
18	3,409	3,280	3,146	3,000	2,908	2,858	2,999	3,146	3,313	3,266	3,276	3,206
19	3,404	3,275	3,140	2,999	2,902	2,860	3,004	3,152	3,313	3,265	3,271	3,202
20	3,400	3,272	3,135	2,997	2,900	2,862	3,008	3,158	3,312	3,279	3,266	3,200
21	3,394	3,267	3,129	2,995	2,896	2,863	3,012	3,164	3,311	3,293	3,261	3,197
22	3,389	3,263	3,128	2,990	2,891	2,866	3,017	3,173	3,309	3,303	3,258	3,196
23	3,385	3,259	3,121	2,987	2,896	2,868	3,021	3,183	3,307	3,305	3,252	3,195
24	3,383	3,256	3,116	2,983	2,893	2,871	3,027	3,193	3,307	3,307	3,248	3,193
25	3,381	3,253	3,116	2,981	2,882	2,873	3,032	3,200	3,305	3,311	3,244	3,191
26	3,377	3,253	3,111	2,977	2,881	2,875	3,036	3,210	3,303	3,313	3,240	3,188
27	3,373	3,251	3,108	2,973	2,875	2,879	3,042	3,218	3,301	3,314	3,238	3,187
28	3,369	3,248	3,101	2,971	2,875	2,885	3,047	3,226	3,299	3,317	3,237	3,185
29	3,367	3,243	3,095	2,968	2,879	2,889	3,056	3,234	3,298	3,319	3,236	3,181
30	3,367	3,239	3,093	2,965	2,879	2,889	3,063	3,237	3,294	3,321	3,234	3,180
31	3,357	-----	3,087	2,962	-----	2,894	-----	3,240	-----	3,322	3,231	-----
MAX	3,462	3,353	3,235	3,081	2,957	2,894	2,963	3,240	3,315	3,322	3,323	3,232
MIN	3,357	3,239	3,087	2,962	2,875	2,845	2,898	3,070	3,244	3,265	3,231	3,180
(+)	6,030.28	6,027.18	6,023.07	6,019.57	6,017.07	6,017.64	6,022.40	6,027.23	6,028.63	6,029.38	6,026.99	6,025.62
(#)	-108	-118	-152	-125	-87	+19	+169	+177	+54	+28	-91	-51

CAL YR 1972..... + 382

WTR YR 1973..... + 285

+ Elevation, in feet, at end of month.

Change in contents, in thousands of acre-feet

GREEN RIVER BASIN

09234500 GREEN RIVER NEAR GREENDALE, UTAH

LOCATION.--Lat 40°54'30", long 109°25'20", in NW¼SE¼ sec.15, T.2 N., R.22 E., Daggett County, Ashley National Forest, on right bank 0.5 mi (0.8 km) downstream from Flaming Gorge Dam, 2 mi (3.2 km) south of Dutch John, 4 mi (6.4 km) northeast of Greendale, and 407.0 mi (654.9 km) from mouth.

DRAINAGE AREA.--15,100 mi² (39,110 km²), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 5,594.48 ft (1,705.198 m) above mean sea level. Prior to Sept. 2, 1959, water-stage recorder at site 2.2 mi (3.5 km) upstream at different datum.

AVERAGE DISCHARGE.--23 years, 2,033 ft³/s (57.57m³/s), 1,473,000 acre-ft/yr (1,820 hm³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 4,690 ft³/s (133 m³/s) Jan. 11, gage height, 6.43 ft (1.960 m); maximum gage height, 6.49 ft (1.978 m) Sept. 29; minimum discharge, 718 ft³/s (20.3 m³/s) Mar. 29.

Period of record: Maximum discharge, 19,600 ft³/s (555 m³/s) June 12, 1957, gage height, 10.60 ft (3.231 m), site and datum then in use; minimum, 2.3 ft³/s (0.065 m³/s) Mar. 20, 22, 27, 28, 1963 (regulated).

REMARKS.--Records good. Transbasin diversions and diversions for irrigation above station. Flow completely regulated by Flaming Gorge Reservoir 0.5 mi (0.8 km) upstream, since Nov. 1, 1962 (see sta 09234400). Water-quality records for the current year 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	2,210	3,650	3,190	3,930	3,670	3,970	805	1,530	3,040	2,900	2,910	3,480
2	3,360	3,890	4,010	3,600	3,930	3,430	1,200	3,590	2,630	3,190	3,640	1,850
3	3,410	3,560	3,470	4,130	3,240	3,990	1,170	3,450	1,810	3,550	3,520	1,890
4	3,460	3,850	3,060	3,870	1,990	4,220	887	3,330	2,970	2,750	3,580	3,180
5	3,410	2,810	3,780	4,010	3,380	2,720	878	1,970	3,310	2,980	3,260	3,380
6	2,860	3,330	3,850	3,960	4,000	2,680	875	1,430	3,060	3,470	3,390	3,570
7	823	3,770	3,760	3,920	3,970	2,490	850	3,070	3,510	3,580	3,320	3,490
8	823	3,690	4,090	4,020	3,910	2,450	910	2,710	3,580	2,560	3,030	3,400
9	1,580	3,560	3,860	4,240	3,810	2,010	1,880	2,300	2,900	3,260	3,440	2,710
10	2,800	4,010	3,680	3,950	3,040	1,290	1,250	3,070	2,380	3,490	3,640	3,380
11	2,900	3,890	2,990	3,900	3,160	1,290	1,540	3,000	3,340	3,540	3,430	3,280
12	2,770	3,310	3,440	4,050	3,540	1,880	1,030	2,290	3,470	3,540	2,790	2,140
13	3,420	4,020	3,850	3,370	3,750	1,540	847	1,220	3,100	3,280	3,510	2,380
14	3,460	4,050	3,730	2,440	3,970	2,010	1,060	2,780	3,250	2,840	4,070	3,260
15	2,950	4,060	3,990	3,480	3,770	1,860	860	2,890	3,260	1,050	3,480	2,970
16	3,360	4,070	3,720	3,570	4,080	1,570	908	3,070	2,400	2,910	3,810	3,020
17	3,080	4,030	4,000	3,460	3,490	1,290	864	3,210	2,050	2,600	3,710	3,590
18	3,460	4,070	3,840	3,380	3,650	1,290	867	3,190	2,940	2,910	3,860	3,120
19	3,570	3,940	3,780	3,490	3,700	1,880	865	3,290	3,700	2,890	3,760	2,970
20	3,560	3,810	4,120	3,200	4,170	1,680	864	3,350	3,830	2,900	4,020	2,690
21	3,930	4,080	3,980	3,170	4,170	2,170	859	3,090	3,330	2,280	4,150	1,870
22	3,980	4,120	3,380	3,710	4,360	1,340	865	3,220	3,380	819	4,260	816
23	3,500	2,910	3,630	3,190	4,240	1,070	1,230	2,350	3,560	2,650	4,250	833
24	3,060	3,060	2,780	3,730	3,790	800	1,220	2,240	2,900	2,390	3,990	2,020
25	3,370	3,320	1,670	3,280	2,480	800	1,360	2,370	3,080	2,790	3,470	2,010
26	3,690	1,160	3,160	3,860	3,650	868	1,160	1,280	3,620	2,670	3,050	1,560
27	3,820	2,820	4,200	3,600	3,570	830	1,120	1,360	3,680	2,710	3,230	1,400
28	3,700	4,090	3,820	2,890	3,750	877	1,110	1,600	3,970	1,490	2,060	1,560
29	3,850	3,760	3,820	3,360	-----	863	892	2,330	3,230	1,550	1,800	2,410
30	3,980	3,940	4,170	3,030	-----	814	916	2,780	3,830	2,420	2,520	1,270
31	4,050	-----	3,590	3,120	-----	869	-----	3,620	-----	2,050	3,250	-----
TOTAL	98,196	108,630	112,410	110,910	102,230	56,841	31,142	80,980	95,110	84,009	106,210	75,499
MEAN	3,168	3,621	3,626	3,578	3,651	1,834	1,038	2,612	3,170	2,710	3,426	2,517
MAX	4,050	4,120	4,200	4,240	4,360	4,220	1,880	3,620	3,970	3,580	4,260	3,590
MIN	823	1,160	1,670	2,440	1,990	800	805	1,220	1,810	819	1,800	816
AC-FT	194,800	215,500	223,000	220,000	202,800	112,700	61,770	160,600	188,700	166,600	210,700	149,800

CAL YR 1972 TOTAL 1,049,926 MEAN 2,869 MAX 4,590 MIN 731 AC-FT 2,083,000
WTR YR 1973 TOTAL 1,062,167 MEAN 2,910 MAX 4,360 MIN 800 AC-FT 2,107,000

GREEN RIVER BASIN

185

09253000 LITTLE SNAKE RIVER NEAR SLATER, COLO.

LOCATION.--Lat 40°59'58", long 107°08'34", in SW¼NW¼ sec.15, T.12 N., R.87 W., Routt County, on left bank just downstream from highway bridge at Focus Ranch, 0.2 mi (0.3 km) downstream from Spring Creek and 12 mi (19 km) east of Slater.

DRAINAGE AREA.--285 mi² (738 km²).

PERIOD OF RECORD.--October 1942 to September 1947, October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,831.00 ft (2,082.089 m) above mean sea level.

AVERAGE DISCHARGE.--28 years, 220 ft³/s (6.230 m³/s), 159,400 acre-ft/yr (197 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,170 ft³/s (61.5 m³/s) June 2, gage height, 7.24 ft (2.207 m); minimum daily, 23 ft³/s (0.65 m³/s) Sept. 21, 22.

Period of record: Maximum discharge, 3,230 ft³/s (91.5 m³/s) June 7, 1957, gage height, 8.27 ft (2.521 m); minimum daily, 8.6 ft³/s (0.24 m³/s) Sept. 10, 1944.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 2,000 acres (8.09 km²) above station.

REVISIONS (WATER YEARS).--WSP 1733: 1960.

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	62	37	50	48	56	39	250	1,210	578	74	39
2	25	64	39	48	45	50	39	204	1,790	500	69	52
3	25	51	41	47	43	44	38	230	1,550	430	72	54
4	24	50	44	45	42	46	39	360	1,270	380	81	48
5	30	41	45	43	43	48	37	485	1,090	325	101	42
6	36	42	45	42	45	50	42	644	1,070	282	96	38
7	30	42	45	40	48	51	40	680	1,140	242	81	32
8	33	42	47	39	47	52	44	729	1,290	227	71	30
9	36	41	43	41	47	51	41	995	1,480	198	62	29
10	34	38	39	44	46	51	41	1,020	1,640	174	54	33
11	32	41	41	48	45	51	39	1,050	1,630	151	50	39
12	28	51	42	50	46	52	45	1,120	1,540	140	52	54
13	28	39	43	48	48	51	53	1,150	1,410	204	60	42
14	29	44	45	46	52	52	62	1,170	1,480	246	64	34
15	36	41	46	43	55	51	69	1,250	1,770	168	60	34
16	44	39	45	45	56	54	65	1,310	1,410	146	60	33
17	35	38	44	47	54	51	74	1,340	1,120	136	60	30
18	36	44	43	44	52	49	74	1,450	960	120	59	28
19	35	38	44	43	50	46	68	1,670	813	162	57	27
20	37	45	45	43	51	49	62	1,730	722	262	55	25
21	53	41	44	43	54	50	65	1,800	674	262	56	23
22	60	42	44	43	56	46	67	1,590	674	174	62	23
23	49	35	43	43	58	45	68	1,480	715	165	66	24
24	46	36	40	45	60	42	97	1,420	750	129	60	30
25	41	38	42	44	57	49	114	1,500	771	125	52	38
26	40	38	45	43	53	44	107	1,490	806	103	50	45
27	49	39	46	46	54	42	120	1,170	778	92	52	40
28	45	41	48	48	56	41	168	988	736	92	50	35
29	42	39	50	47	-----	40	238	953	680	87	47	35
30	36	36	51	46	-----	37	274	946	632	99	36	33
31	45	-----	52	47	-----	39	-----	1,020	-----	81	29	-----
TOTAL	1,147	1,278	1,368	1,391	1,411	1,480	2,329	33,204	33,601	6,480	1,898	1,069
MEAN	37.0	42.6	44.1	44.9	50.4	47.7	77.6	1,071	1,120	209	61.2	35.6
MAX	60	64	52	50	60	56	274	1,800	1,790	578	101	54
MIN	24	35	37	39	42	37	37	204	632	81	29	23
AC-FT	2,280	2,530	2,710	2,760	2,800	2,940	4,620	65,860	66,650	12,850	3,760	2,120
CAL YR 1972	TOTAL 75,119	MEAN 205	MAX 1,540	MIN 12	AC-FT 149,000							
WTR YR 1973	TOTAL 86,656	MEAN 237	MAX 1,800	MIN 23	AC-FT 171,900							

PEAK DISCHARGE (BASE, 1,600 FT³/S)

NOTE.--No gage-height record Aug. 10 to Sept. 12.

DATE	TIME	G.HT.	DISCHARGE
6- 2	1130	7.24	2,170

GREEN RIVER BASIN

09255000 SLATER FORK NEAR SLATER, COLO.

LOCATION.--Lat 40°58'57", long 107°22'56", in SW¼NE¼ sec.21, T.12 N., R.89 W., Moffat County, on right bank 15 ft (5 m) downstream from highway bridge, 1.0 mi (1.6 km) upstream from mouth, and 1.5 mi (2.4 km) south of Slater.

DRAINAGE AREA.--161 mi² (417 km²).

PERIOD OF RECORD.--May to October, December 1910, March to October 1911, and April to May 1912 (published as Slater Creek), July 1931 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 6,600 ft (2,012 m), from river-profile map. May 28, 1910, to May 25, 1912, nonrecording gage at site 1.5 mi (2.4 km) upstream at different datum. July 9, 1931, to May 6, 1932, nonrecording gage at site 0.2 mi (0.3 km) downstream at different datum.

AVERAGE DISCHARGE.--42 years (1931-73), 72.7 ft³/s (2.059 m³/s), 52,670 acre-ft/yr (64.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 892 ft³/s (25.3 m³/s) June 15, gage height, 8.74 ft (2.664 m); minimum daily, 8.3 ft³/s (0.24 m³/s) Aug. 27.

Period of record: Maximum discharge observed, 1,700 ft³/s (48.1 m³/s) May 19, 1912, gage height, 5.00 ft (1.524 m), site and datum then in use; no flow Aug. 2-10, 1934, Aug. 18, 25-27, 1936, Aug. 29 to Sept. 3, 1954.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 500 acres (2.02 km²) above station.

REVISIONS (WATER YEARS).--WSP 618: 1910-11. WSP 764: 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	18	29	17	20	22	26	32	120	467	143	31	9.6
2	17	25	17	19	20	25	25	93	632	122	29	16
3	16	26	16	21	21	24	25	106	531	103	25	20
4	15	24	17	21	22	22	23	172	374	93	25	17
5	23	21	19	20	21	24	24	209	312	82	31	15
6	23	23	18	19	22	26	30	277	329	70	36	12
7	20	21	19	19	22	27	31	298	389	61	26	10
8	22	23	19	18	22	26	26	339	449	53	21	9.7
9	22	22	19	19	20	26	28	499	512	47	19	9.1
10	22	20	16	22	21	28	27	617	556	49	16	8.8
11	20	19	17	19	21	26	26	687	537	46	16	11
12	17	23	18	23	22	26	32	698	487	37	15	15
13	17	21	22	22	23	26	42	633	413	93	13	16
14	20	20	18	21	24	26	49	645	549	83	11	15
15	25	26	17	20	25	26	46	659	672	62	10	14
16	31	21	18	21	22	24	40	698	636	55	9.7	14
17	26	20	20	22	23	25	45	715	404	50	10	14
18	31	19	20	21	24	25	50	773	319	40	12	14
19	28	18	20	20	26	24	38	819	243	42	12	14
20	30	16	21	20	23	23	35	835	203	93	10	13
21	35	18	20	20	25	23	37	843	193	123	10	13
22	36	14	20	22	26	24	38	742	198	80	11	12
23	31	16	19	20	27	23	46	657	207	61	12	13
24	29	18	18	21	27	25	69	608	215	44	11	15
25	26	19	19	21	26	23	67	645	208	52	12	19
26	26	17	20	22	25	28	53	722	215	39	11	25
27	28	18	21	22	25	28	71	447	209	35	8.3	22
28	28	17	22	20	27	25	104	351	192	35	9.0	20
29	28	17	22	21	-----	26	163	356	172	37	9.4	19
30	23	17	23	23	-----	25	160	364	162	38	9.4	18
31	22	-----	23	-----	-----	26	-----	406	-----	35	8.6	-----
TOTAL	755	608	595	641	654	781	1,482	16,033	11,185	2,003	489.4	443.2
MEAN	24.4	20.3	19.2	20.7	23.4	25.2	49.4	517	373	64.6	15.8	14.8
MAX	36	29	23	23	27	28	163	843	872	143	36	25
MIN	15	14	16	18	20	22	23	93	162	35	8.3	8.8
AC-FT	1,500	1,210	1,180	1,270	1,300	1,550	2,940	31,800	22,190	3,970	971	879

CAL YR 1972 TOTAL 19,048.34 MFAN 52.0 MAX 307 MIN .60 AC-FT 57,780
 WTR YR 1973 TOTAL 35,669.60 MEAN 97.7 MAX 872 MIN 8.3 AC-FT 70,750

PEAK DISCHARGE (BASE, 430 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE
5-22	0600	8.73	889
6-15	0300	8.74	892

09257000 LITTLE SNAKE RIVER NEAR DIXON, WYO.

LOCATION.--Lat 41°01'42", long 107°32'55", in SE¼NW¼ sec.8, T.12 N., R.90 W., Carbon County, on left bank 200 ft (61 m) upstream from highway bridge, 1,000 ft (305 m) upstream from Willow Creek, and 0.8 mi (1.3 km) west of Dixon.

DRAINAGE AREA.--988 mi² (2,559 km²).

PERIOD OF RECORD.--May 1910 to September 1923, March 1938 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 6,331.22 ft (1,929.756 m) above mean sea level. May 27, 1910, to Sept. 30, 1923, nonrecording gage on highway bridge 200 ft (61 m) downstream at datum 2.98 ft (0.908 m) higher. Mar. 15, 1938, to Sept. 30, 1957, water-stage recorder at site 225 ft (69 m) downstream at datum 2.98 ft (0.908 m) higher; Oct. 1, 1957, to June 6, 1968, at site 850 ft (259 m) downstream at present datum; and June 7 to Sept. 30, 1968, at site 225 ft (69 m) downstream at present datum.

AVERAGE DISCHARGE.--46 years (1910-23, 1938-71), 514 ft³/s (14.56m³/s), 372,400 acre-ft/yr (459 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,120 ft³/s (173 m³/s) May 21, gage height, 11.38 ft (3.469 m); minimum daily during period of operation, 1.2 ft³/s (0.034 m³/s) Aug. 29-31.

Period of record: Maximum discharge observed, 9,600 ft³/s (272 m³/s) May 26, 1920, gage height, 11.6 ft (3.54 m), present datum; maximum gage height, 11.74 ft (3.578 m) May 30, 1971; minimum daily discharge, 0.2 ft³/s (0.006 m³/s) Sept. 26, 1956.

REMARKS.--Records poor. Diversions for irrigation of about 9,500 acres (38.4 km²) above station. One diversion above station for irrigation of about 3,000 acres (12.1 km²) below. Transbasin diversions above station. Results of discharge measurements, in cubic feet per second, made during winter when station was not in operation are given below:

Oct. 26 . . .	98	Feb. 21 . . .	67
Dec. 21 . . .	102	Mar. 27 . . .	93
Jan. 16 . . .	100		

Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1243: 1920(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							80	840	2,590	1,300	88	2.0
2							80	700	4,080	1,150	83	28
3							80	780	3,980	1,000	77	60
4							80	1,200	2,740	750	77	28
5							75	1,600	2,340	450	90	12
6							80	2,200	2,250	550	118	6.8
7							75	2,700	2,410	450	109	4.8
8							80	3,000	2,710	450	92	3.5
9							75	3,350	3,260	400	76	2.2
10							75	3,630	3,820	350	65	1.8
11							75	3,800	3,800	320	57	2.2
12							90	3,720	3,540	300	54	9.2
13							140	3,900	3,210	400	50	24
14							190	3,910	3,310	500	44	13
15							230	4,070	4,600	300	38	10
16							220	4,210	3,620	220	36	13
17							250	4,290	2,550	170	31	10
18							260	4,600	2,060	140	6.0	7.9
19							230	5,120	1,730	180	12	5.2
20							210	5,180	1,520	392	6.2	3.3
21							220	5,600	1,400	601	4.5	2.5
22							220	4,900	1,270	312	5.0	2.1
23							230	4,180	1,420	242	2.1	1.8
24							310	3,760	1,560	190	1.7	2.3
25							400	3,970	1,600	185	1.7	12
26							370	4,660	1,680	150	1.7	32
27							400	3,110	1,690	124	1.6	36
28							550	2,380	1,570	115	1.4	29
29						-----	500	2,240	1,500	106	1.2	27
30						-----	900	2,120	1,450	111	1.2	26
31		-----			-----	-----	-----	2,740	-----	104	1.2	-----
TOTAL							7,075	101,970	75,380	12,012	1,232.5	417.6
MEAN							226	3,289	2,513	387	39.8	13.9
MAX							900	5,600	4,600	1,300	118	60
MIN							75	700	1,370	104	1.2	1.8
AC-FT							14,030	202,300	149,500	23,820	2,440	828

PEAK DISCHARGE (BASE, 3,200 FT³/S)

NOTE.--No gage-height record Apr. 1 to May 8.

DATE	TIME	G. HT.	DISCHARGE
5-21	1230	11.38	6,120
6- 2	2100	10.37	4,860
6-15	1500	10.28	4,830

GREEN RIVER BASIN

09258000 WILLOW CREEK NEAR DIXON, WYO.

LOCATION.--Lat 40°54'56", long 107°31'16", on line between secs.8 and 17, T.11 N., R.90 W., Moffat County, Colorado, on right bank 6.2 mi (10.0 km) south of Colorado-Wyoming State line, 8.0 mi (12.9 km) upstream from mouth, and 8.3 mi (13.4 km) south of Dixon.

DRAINAGE AREA.--24 mi² (62 km²), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,700 ft (2,042 m), from topographic map.

AVERAGE DISCHARGE.--20 years, 9.38 ft³/s (0.266 m³/s), 6,800 acre-ft/yr (8.38 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 242 ft³/s (6.85 m³/s) May 8, gage height, 5.00 ft (1.524 m), from high-water mark; minimum daily, 0.32 ft³/s (0.009 m³/s) Oct. 31.

Period of record: Maximum discharge, 267 ft³/s (7.56 m³/s) May 6, 1970, gage height, 5.16 ft (1.573 m); no flow Sept. 17-19, 1955.

REMARKS.--Records good except those for winter periods and period of no gage-height record, which are fair. One small ditch diverts water above station for irrigation. Regulation by Elk Lake, capacity, 400 acre-ft (0.493hm³).

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	2.3	2.4	2.2	2.7	2.8	3.5	5.4	26	33	39	4.2	2.0
2	2.0	3.1	2.3	2.5	2.7	3.8	5.2	18	56	31	4.2	4.4
3	1.9	2.7	2.5	2.5	2.5	3.6	4.8	36	41	27	3.8	3.4
4	1.8	2.4	2.6	2.7	2.4	3.2	4.4	65	25	24	4.0	3.1
5	3.9	2.4	2.7	2.5	2.3	3.4	5.6	73	21	21	5.6	2.5
6	3.1	2.7	2.8	2.5	2.4	4.1	8.2	102	24	19	6.7	2.1
7	2.1	2.0	3.0	2.5	2.5	3.5	8.7	115	32	18	5.0	2.1
8	2.7	2.5	3.3	2.5	2.5	3.6	7.0	150	41	16	4.2	2.0
9	2.3	2.5	2.9	2.5	2.6	4.0	5.8	110	57	13	3.7	1.9
10	2.1	2.0	2.5	2.5	2.6	4.1	4.6	54	61	10	3.4	1.9
11	2.1	2.4	2.8	2.5	2.5	4.0	6.2	56	64	8.9	3.4	2.8
12	1.7	3.1	2.6	2.7	2.5	4.1	9.4	54	61	9.2	3.2	4.0
13	1.7	2.5	2.9	2.5	2.6	4.2	15	50	60	17	4.6	3.0
14	1.8	2.4	2.8	2.8	2.7	4.1	18	47	88	9.2	4.4	2.4
15	3.1	3.4	2.5	2.8	2.7	3.7	14	46	130	7.7	4.2	2.4
16	2.5	3.0	2.7	2.8	2.8	3.8	13	47	62	7.0	4.2	2.3
17	2.0	2.4	2.8	2.7	2.8	3.9	15	46	40	6.0	4.2	2.1
18	2.4	2.4	3.0	2.7	2.8	4.0	14	49	32	5.2	4.2	2.0
19	2.1	2.0	2.9	2.8	2.9	4.2	8.9	51	24	7.0	3.8	1.9
20	2.8	2.2	2.8	2.8	3.0	4.5	13	53	23	17	3.8	1.9
21	3.6	2.4	2.7	2.7	3.1	4.5	11	53	26	15	3.8	1.8
22	3.7	2.4	2.5	2.5	3.2	4.3	9.7	41	31	8.2	5.0	1.9
23	2.7	2.4	2.5	2.5	3.2	4.2	23	57	36	7.4	4.4	1.8
24	2.8	2.3	2.4	2.5	3.2	4.0	40	35	43	8.9	3.7	2.6
25	2.1	2.3	2.4	2.7	3.3	4.2	27	40	44	8.7	3.6	3.2
26	2.1	2.4	2.1	2.8	3.3	4.9	18	57	47	7.2	3.4	3.6
27	1.9	2.7	2.3	2.8	3.3	5.3	31	28	49	6.5	3.4	3.2
28	1.2	2.5	2.5	2.7	3.3	5.0	54	22	46	5.8	3.6	3.2
29	.76	2.1	2.7	2.6	-----	4.7	128	22	41	5.4	3.1	3.1
30	.49	2.0	2.7	2.7	-----	5.0	108	22	41	5.2	2.0	3.1
31	.32	-----	3.0	2.7	-----	5.4	-----	28	-----	4.6	1.7	-----
TOTAL	68.07	74.0	82.4	81.7	78.5	128.8	633.9	1,633	1,379	395.1	122.5	77.7
MEAN	2.20	2.47	2.66	2.64	2.80	4.15	21.1	52.7	46.0	12.7	3.95	2.59
MAX	3.9	3.4	3.3	2.8	3.3	5.4	128	150	130	39	6.7	4.4
MIN	.32	2.0	2.1	2.5	2.3	3.2	4.4	18	21	4.6	1.7	1.8
AC-FT	135	147	163	162	156	255	1,260	3,240	2,140	784	243	154

CAL YR 1972 TOTAL 2,182.35 MEAN 5.96 MAX 56 MIN .32 AC-FT 4,330
WTR YR 1973 TOTAL 4,154.67 MEAN 13.0 MAX 150 MIN .32 AC-FT 9,430

PEAK DISCHARGE (BASE, 70 FT³/S)

NOTE.--No gage-height record May 7-14.

DATE	TIME	G.HT.	DISCHARGE
4-29	1800	4.75	203
5- 8	Unknown	5.00	242
6-15	0130	4.38	158

GREAT SALT LAKE BASIN

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BEAR RIVER BASIN

10010500 HILLIARD-EAST FORK CANAL NEAR STATE LINE, NEAR EVANSTON, WYO.

LOCATION.--Lat 40°54'49", long 110°49'25", in NW¼ sec.16, T.2 N., R.10 E., Summit County, Utah, Wasatch National Forest, on left bank 300 ft (91 m) downstream from road bridge, 0.8 mi (1.3 km) downstream from head, and 32 mi (51 km) south of Evanston.

PERIOD OF RECORD.--November 1941 to current year. Monthly discharge only for some periods, published in WSP 1514.

GAGE.--Water-stage recorder. Altitude of gage is 8,500 ft (2,590 m), from topographic map.

AVERAGE DISCHARGE.--31 years (1942-73), 5.07 ft³/s (0.144 m³/s), 3,670 acre-ft/yr (4.53 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 44 ft³/s (1.25 m³/s) July 3-5, 8, 1963; no flow during winter and at other times each year except 1958.

REMARKS.--Records good. Canal diverts from East Fork Bear River for irrigation of about 2,600 acres (10.5 km²) in Hilliard Flat area in Wyoming.

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								0	36	.15	.44
2	.23								0	28	.15	.39
3	.20								0	23	.20	.36
4	.20								0	21	.23	.36
5	.23								0	19	8.5	.27
6	.23								0	19	6.5	.27
7	.20								0	19	.31	.27
8	.20								0	19	.27	.31
9	.23								0	20	.27	.27
10	.23								0	21	.31	.31
11	.20								0	21	.31	.31
12	.20								0	21	.31	.27
13	.20								0	24	.36	.27
14	.20								0	24	.36	.31
15	.20								0	24	.36	.27
16	.20								0	23	.39	.23
17	.20								0	22	.44	3.2
18	.20								0	21	.39	12
19	.20								0	24	.31	11
20	.20								0	23	.31	11
21	.20								0	22	.31	11
22	.20								0	22	.31	10
23	.20								0	11	.31	12
24	.20								6.2	.31	.27	12
25	.20								24	.23	.31	13
26	.20								25	.20	.36	13
27	.20								33	.20	.36	13
28	.20								36	.20	.39	14
29	.20								37	.20	.39	12
30	.10								37	.18	.39	11
31	0	-----							-----	.18	.39	-----
TOTAL	6.08	0	0	0	0	0	0	0	198.2	508.70	24.22	163.11
MEAN	.20	0	0	0	0	0	0	0	6.61	16.4	.78	5.44
MAX	.23	0	0	0	0	0	0	0	37	36	8.5	14
MIN	0	0	0	0	0	0	0	0	0	.18	.15	.23
AC-FT	12	0	0	0	0	0	0	0	393	1,010	48	324
CAL YR 1972	TOTAL	1,419.24	MEAN	3.88	MAX	34	MIN	0	AC-FT	2,820		
WTR YR 1973	TOTAL	900.31	MEAN	2.47	MAX	37	MIN	0	AC-FT	1,790		

BEAR RIVER BASIN

10011200 WEST FORK BEAR RIVER AT WHITNEY DAM, NEAR OAKLEY, UTAH

LOCATION.--Lat 40°50'30", long 110°55'35", in NE¼ sec.9, T.1 N., R.9 E., Summit County, Wasatch National Forest, on left bank 1,380 ft (421 m) below Whitney Dam, 7.0 mi (11 km) upstream from Deer Creek, and 21.5 mi (34.6 km) northeast of Oakley.

DRAINAGE AREA.--6.79 mi² (17.59 km²), revised.

PERIOD OF RECORD.--October 1963 to current year. Prior to October 1965, published as "at Whitney Dam Site."

GAGE.--Water-stage recorder and concrete control with V-notch sharp-crested weir since Aug. 4, 1966. Altitude of gage is 9,120 ft (2,780 m), from topographic map.

AVERAGE DISCHARGE.--7 years (1967-73), 7.97 ft³/s (0.226 m³/s), 5,770 acre-ft/yr (7.11 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 76 ft³/s (2.15 m³/s) June 16, Sept. 21, gage height, 2.52 ft (0.768 m); minimum daily, 0.15 ft³/s (0.004 m³/s) Oct. 1-16.

Period of record: Maximum discharge, 145 ft³/s (4.11 m³/s) June 13, 1965, gage height, 1.95 ft (0.594 m); maximum gage height, 3.08 ft (0.939 m) June 26, 1967; no flow July 24 to Sept. 30, Nov. 16-29, 1966.

REMARKS.--Records good. Flow regulated by Whitney Reservoir. Usable capacity between sill of outlet and spillway crest, 4,200 acre-ft (5.18 hm³). Dead storage, 500 acre-ft (617,000 m³). Construction of dam began Aug. 1, 1965 and completed October 1966. Storage began July 24, 1966, and reached sill of outlet Nov. 20, 1966. 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	.15	.62	1.3	1.2	1.2	1.4	1.5	1.4	2.2	1.6	3.2	2.0
2	.15	.62	1.3	1.2	1.2	1.4	1.5	1.4	1.6	1.6	3.1	3.2
3	.15	.62	1.3	1.2	1.2	1.4	1.5	1.5	.63	1.6	3.2	3.2
4	.15	.64	1.3	1.2	1.2	1.4	1.5	1.4	.62	1.7	5.2	3.2
5	.15	.60	1.3	1.2	1.2	1.4	1.5	1.5	.63	1.7	6.8	3.1
6	.15	.57	1.3	1.2	1.2	1.4	1.5	1.5	.62	1.6	5.7	3.0
7	.15	.58	1.3	1.2	1.2	1.4	1.5	1.5	.63	1.6	4.5	2.9
8	.15	.60	1.3	1.2	1.2	1.4	1.5	1.5	.65	1.7	3.7	2.7
9	.15	.60	1.3	1.2	1.2	1.4	1.5	1.5	.68	1.8	3.2	2.7
10	.15	.60	1.3	1.2	1.3	1.5	1.5	1.5	.68	1.8	2.9	2.6
11	.15	.60	1.3	1.2	1.2	1.5	1.5	1.5	.67	1.8	2.6	3.4
12	.15	.60	1.3	1.2	1.2	1.5	1.5	1.6	.67	1.8	2.3	4.3
13	.15	.60	1.3	1.2	1.2	1.5	1.5	1.6	8.4	1.8	2.2	3.7
14	.15	.61	1.3	1.2	1.2	1.5	1.4	1.6	36	1.9	2.1	3.2
15	.15	.58	1.3	1.2	1.3	1.5	1.4	1.7	45	3.2	2.0	2.8
16	.15	.50	1.2	1.7	1.2	1.5	1.4	1.7	53	4.2	2.2	2.5
17	.70	.71	1.2	1.2	1.2	1.5	1.4	1.7	47	4.4	2.8	2.3
18	.94	1.0	1.2	1.2	1.3	1.5	1.4	1.8	36	4.5	4.5	2.1
19	.89	1.1	1.2	1.2	1.3	1.5	1.4	1.8	32	6.5	3.7	2.0
20	.88	1.1	1.3	1.2	1.3	1.5	1.4	1.9	30	7.3	3.1	2.0
21	.85	1.1	1.2	1.2	1.3	1.5	1.4	2.0	28	6.4	3.7	55
22	.83	1.1	1.2	1.2	1.3	1.5	1.4	2.0	28	6.1	4.9	74
23	.83	1.2	1.2	1.2	1.3	1.5	1.4	2.0	28	6.4	4.1	45
24	.74	1.2	1.2	1.2	1.4	1.5	1.4	2.0	28	6.8	3.1	13
25	.71	1.2	1.2	1.2	1.4	1.5	1.4	2.1	28	6.1	2.5	13
26	.72	1.2	1.2	1.2	1.4	1.5	1.4	2.1	28	5.4	2.1	13
27	.73	1.2	1.2	1.2	1.4	1.5	1.5	2.0	28	4.8	2.0	13
28	.71	1.2	1.2	1.2	1.4	1.5	1.4	2.1	12	4.3	1.7	13
29	.70	1.2	1.2	1.2	-----	1.5	1.4	2.1	1.7	4.0	1.7	12
30	.65	1.2	1.2	1.2	-----	1.5	1.4	2.1	1.6	3.7	1.7	12
31	.61	-----	1.2	1.2	-----	1.5	-----	2.2	-----	3.5	1.7	-----
TOTAL	13.89	25.25	38.8	37.7	35.4	45.6	43.4	54.3	508.98	111.6	98.2	319.9
MEAN	.45	.84	1.25	1.22	1.26	1.47	1.45	1.75	17.0	3.60	3.17	10.7
MAX	.94	1.2	1.3	1.7	1.4	1.5	1.5	2.2	53	7.3	6.8	74
MIN	.15	.50	1.2	1.2	1.2	1.4	1.4	1.4	.62	1.6	1.7	2.0
AC-FT	28	50	77	75	70	90	86	108	1,010	221	195	635

CAL YR 1972 TOTAL 3,248.83 MEAN 8.88 MAX 120 MIN .15 AC-FT 6,440
WTR YR 1973 TOTAL 1,333.02 MEAN 3.65 MAX 74 MIN .15 AC-FT 2,640

BEAR RIVER BASIN

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10011500 BEAR RIVER NEAR UTAH-WYOMING STATE LINE

LOCATION.--Lat 40°57'55", long 110°51'10", in SE¼ sec.30, T.3 N., R.10 E., Summit County, Utah, on left bank just downstream from West Fork and 2.8 mi (4.5 km) upstream from Utah-Wyoming State line.

DRAINAGE AREA.--176 mi² (456 km²).

PERIOD OF RECORD.--July 1942 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,965 ft (2,427.7 m), from river-profile map.

AVERAGE DISCHARGE.--31 years, 192 ft³/s (54.34 m³/s), 139,100 acre-ft/yr (172 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,870 ft³/s (53.0 m³/s) June 10, gage height, 3.24 ft (0.988 m); maximum gage height, 3.88 ft (1.183 m) Jan. 7; minimum daily discharge, 41 ft³/s (1.16 m³/s) Apr. 8.

Period of record: Maximum discharge, 2,980 ft³/s (84.4 m³/s) June 6, 1968, gage height, 3.79 ft (1.155 m); maximum gage height, 4.27 ft (1.301 m) June 6, 1957; minimum discharge determined, 16 ft³/s (0.45 m³/s) Apr. 11, 1951, Nov. 5, 1954, Nov. 1, 1955, Oct. 30, 1956.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated slightly by Whitney Reservoir completed in 1966. Usable capacity, 4,200 acre-ft (5.18 hm³). Three diversions above station for irrigation of about 265 acres (1.07 km²) above and 2,600 acres (10.5 km²) below 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	53	70	65	55	51	45	42	70	903	450	139	98
2	52	76	66	55	48	46	47	66	894	379	128	122
3	51	74	64	55	48	46	47	78	742	330	128	117
4	50	72	64	55	48	46	45	102	569	285	196	128
5	62	72	64	55	45	46	45	109	513	267	212	111
6	64	70	62	55	45	47	47	133	646	262	168	100
7	59	62	62	55	47	47	46	168	667	258	152	98
8	56	72	62	55	47	47	41	182	1,030	240	136	91
9	61	70	62	55	47	47	43	196	1,230	228	125	96
10	117	64	62	55	48	50	46	258	1,520	216	117	89
11	89	66	60	55	48	46	44	335	1,370	212	109	130
12	74	58	60	55	48	46	46	414	1,200	212	106	168
13	70	62	60	53	48	46	52	555	1,120	396	102	122
14	72	74	60	52	48	46	52	686	1,300	315	98	109
15	111	70	60	52	46	47	51	766	1,010	310	89	109
16	98	65	62	51	46	50	50	885	768	240	85	106
17	83	70	62	51	46	50	53	1,060	638	216	136	102
18	79	64	62	51	46	47	47	1,240	534	200	182	85
19	79	65	62	52	46	51	51	1,300	444	295	122	81
20	117	70	62	52	45	50	43	1,420	450	272	111	81
21	111	70	61	50	45	47	51	1,200	506	228	130	96
22	93	65	56	50	45	46	53	1,090	527	232	172	136
23	83	65	56	50	45	46	59	1,020	569	262	128	136
24	89	65	62	50	45	48	63	975	583	280	109	109
25	85	65	56	50	45	48	64	993	598	228	102	109
26	85	65	57	50	45	48	61	795	678	208	96	109
27	85	65	57	50	45	48	74	606	678	204	89	109
28	68	65	56	50	45	46	89	506	646	190	85	111
29	76	65	59	50	-----	45	93	520	569	176	85	109
30	70	65	57	50	-----	45	79	614	520	165	83	102
31	65	-----	57	50	-----	44	-----	777	-----	152	81	-----
TOTAL	2,407	2,021	1,879	1,524	1,301	1,459	1,639	19,121	23,622	7,908	3,801	3,269
MEAN	77.6	67.4	60.6	52.4	46.5	47.1	54.6	617	787	255	123	109
MAX	117	76	66	55	51	51	93	1,420	1,520	450	212	168
MIN	50	58	56	50	45	44	41	66	444	152	81	81
AC-FT	4,770	4,010	3,730	3,220	2,560	2,890	3,250	37,930	46,850	15,690	7,540	6,480

CAL YR 1972 TOTAL 73,175 MEAN 214 MAX 1,850 MIN 41 AC-FT 155,100
WTR YR 1973 TOTAL 70,051 MEAN 192 MAX 1,520 MIN 41 AC-FT 138,900

PEAK DISCHARGE (BASE, 1,100 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
5-20	0100	3.05	1,710
6-10	0200	3.24	1,870

10015700 SULPHUR CREEK ABOVE RESERVOIR, NEAR EVANSTON, WYO.

LOCATION.--Lat 41°08'38", long 110°48'19", in SE¼SW¼ sec.35, T.14 N., R.119 W., Uinta County, on right bank 1.2 mi (1.9 km) downstream from Willow Creek, 2.0 mi (3.2 km) upstream from Sulphur Creek Dam, and 11.5 mi (18.5 km) southeast of Evanston.

DRAINAGE AREA.--64 mi² (166 km²), approximately.

PERIOD OF RECORD.--October 1957 to current year. Monthly discharge only for October and November 1957, published in WSP 1734.

GAGE.--Water-stage recorder. Altitude of gage is 7,180 ft (2,188 m), from topographic map.

AVERAGE DISCHARGE.--16 years, 15.6 ft³/s (0.442 m³/s), 11,300 acre-ft/yr (13.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 456 ft³/s (12.9 m³/s) Apr. 28, gage height, 4.99 ft (1.521 m); maximum gage height, 5.43 ft (1.655 m) Apr. 12 (backwater from ice); minimum discharge, 0.24 ft³/s (0.007 m³/s) July 13.

Period of record: Maximum discharge, 1,220 ft³/s (34.6 m³/s) Apr. 21, 1965, gage height, 6.02 ft (1.835 m); maximum gage height, 6.19 ft (1.887 m) Mar. 11, 1972 (backwater from ice); no flow at times most years.

REMARKS.--Records good except those for winter period, which are poor. Several 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	1.3	7.2	6.3	7.0	8.0	8.5	14	85	56	3.8	6.1	3.4
2	1.4	8.0	5.3	7.0	8.0	8.5	17	84	108	4.3	5.6	10
3	1.7	8.6	5.3	7.0	8.0	8.5	14	139	67	4.0	4.9	12
4	1.9	8.8	6.3	7.0	8.0	8.5	15	234	53	3.2	6.4	8.9
5	3.6	9.0	6.3	7.0	8.0	8.5	23	245	43	3.2	14	6.9
6	4.5	8.0	6.3	7.0	8.0	8.5	31	245	40	2.5	11	4.9
7	3.8	8.0	5.3	7.0	8.0	8.5	21	215	26	2.2	7.7	4.5
8	3.8	8.0	5.3	7.0	8.0	8.5	15	170	27	3.0	6.1	4.9
9	5.1	8.0	6.3	7.0	8.0	8.5	23	142	24	4.0	4.3	5.1
10	11	8.0	5.3	7.0	8.0	8.5	34	156	20	3.6	3.6	5.4
11	5.9	7.5	6.3	7.5	8.0	9.0	75	156	18	2.5	3.0	10
12	2.4	7.5	6.3	7.5	8.0	9.0	110	158	16	1.3	2.4	13
13	3.6	7.5	6.3	7.5	8.0	9.0	170	164	14	1.4	2.0	8.0
14	5.5	7.5	6.3	7.5	8.0	9.0	150	172	17	3.4	1.9	5.9
15	9.9	7.5	6.3	7.5	8.0	9.0	120	152	21	3.2	1.7	5.1
16	6.9	7.0	6.5	8.0	8.0	9.0	90	176	23	11	1.9	4.7
17	6.1	7.0	6.5	8.0	8.0	9.0	70	197	18	60	1.7	4.9
18	6.1	7.0	6.5	8.0	8.0	9.0	54	219	17	5.4	5.4	4.9
19	6.7	7.0	6.5	8.0	8.0	9.0	54	213	16	52	3.4	4.7
20	8.9	7.0	6.5	8.0	8.0	9.0	58	216	13	47	2.5	4.7
21	14	6.3	7.0	8.0	8.0	9.0	80	190	9.6	15	2.4	4.5
22	14	6.3	7.0	8.0	8.0	9.0	100	138	8.9	54	4.3	3.4
23	9.6	6.3	7.0	8.0	8.0	9.0	130	102	8.0	79	3.4	4.5
24	8.8	6.3	7.0	8.0	8.0	9.0	117	81	7.7	29	2.8	5.4
25	11	6.3	7.0	8.0	8.0	9.0	95	129	8.3	20	2.4	6.7
26	13	6.3	7.0	8.0	8.0	9.0	120	126	6.1	15	2.0	6.7
27	9.8	6.3	7.0	8.0	8.0	9.0	158	81	6.1	15	1.7	5.6
28	7.7	6.3	7.0	9.0	8.0	9.0	250	65	6.4	18	1.7	5.4
29	8.6	6.3	7.0	8.0	-----	9.0	226	63	5.6	15	1.9	5.1
30	7.7	6.3	7.0	8.0	-----	10	135	66	4.9	13	1.7	4.9
31	6.4	-----	7.0	8.0	-----	11	-----	66	-----	8.3	1.7	-----
TOTAL	210.8	217.1	204.0	235.5	224.0	277.0	2,600	4,645	718.6	503.3	121.6	186.1
MEAN	5.80	7.24	6.58	7.60	8.00	8.94	86.7	150	24.0	16.2	3.92	6.20
MAX	14	9.0	7.0	8.0	8.0	11	250	245	108	79	14	13
MIN	1.3	6.3	6.3	7.0	8.0	8.5	14	63	4.9	1.3	1.7	3.4
AC-FT	418	431	405	467	444	549	5,160	9,210	1,430	998	241	369
CAL YR 1972	TOTAL	8,846.75	MEAN	24.2	MAX	272	MIN	1.30	AC-FT	17,550		
WTR YR 1973	TOTAL	10,143.00	MEAN	27.8	MAX	260	MIN	1.3	AC-FT	20,120		

BEAR RIVER BASIN

193

10015900 SULPHUR CREEK BELOW RESERVOIR, NEAR EVANSTON, WYO.

LOCATION.--Lat 41°09'21", long 110°50'05", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.28, T.14 N., R.119 W., Uinta County, on left bank 400 ft (122 m) downstream from Sulphur Creek Dam, 6.3 mi (10.1 km) upstream from mouth, and 10.5 mi (16.9 km) southeast of Evanston.

DRAINAGE AREA.--68 mi² (176 km²), approximately.

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

GAGE.--Water-stage recorder and concrete V-notch control. Altitude of gage is 7,120 ft (2,170 m), from topographic map.

AVERAGE DISCHARGE.--6 years (1958-64), 11.2 ft³/s (0.317 m³/s), 8,110 acre-ft/yr (10.0 hm³/yr); 9 years (1964-73), 26.1 ft³/s (0.739 m³/s), 18,910 acre-ft/yr (23.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 220 ft³/s (6.23 m³/s) May 7, gage height, 3.84 ft (1.170 m); no flow June 11-20, Sept. 18-30.

1958-64: Maximum discharge, 164 ft³/s (4.64 m³/s) June 29, 1959, gage height, 3.67 ft (1.119 m); no flow at times each year.

1964-72: Maximum discharge, 343 ft³/s (9.71 m³/s) June 11, 1965, gage height, 4.96 ft (1.512 m); no flow at times each year except 1972.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Flow regulated by Sulphur Creek Reservoir 400 ft (122 m) upstream, capacity, 7,100 acre-ft (8.75 hm³). Enlargement completed November 1964. Prior to enlargement, capacity, 4,600 acre-ft (5.67 hm³). Records prior to 1965 do not include flow over spillway of the dam.

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	4.1	4.1	4.1	5.1	7.8	5.9	33	62	56	12	21	52
2	4.2	4.1	4.1	5.4	7.8	6.2	33	63	19	11	17	52
3	4.4	4.1	4.4	5.4	7.1	6.2	33	63	19	12	14	52
4	4.6	4.1	4.1	4.4	6.2	5.9	33	121	16	13	14	51
5	4.9	4.4	4.1	3.9	6.8	5.9	33	150	1.3	12	16	51
6	4.9	4.4	3.6	3.9	6.8	5.9	33	191	1.1	10	23	51
7	4.7	4.6	3.9	4.4	7.1	13	33	218	1.0	8.4	22	51
8	4.9	4.6	3.9	4.4	7.1	32	33	215	.92	8.0	17	50
9	4.9	4.6	3.9	4.6	7.1	33	33	207	.67	7.6	14	50
10	5.0	4.6	3.6	4.9	6.5	33	33	205	.18	24	14	50
11	4.9	4.6	3.6	4.6	6.8	33	33	204	0	46	13	49
12	5.0	4.6	3.6	5.1	6.8	32	33	200	0	52	10	49
13	5.1	4.6	3.9	5.6	7.4	32	33	198	0	56	8.9	49
14	5.2	4.6	3.9	5.9	7.4	32	33	197	0	67	9.5	49
15	5.2	4.6	3.9	5.9	7.1	33	33	180	0	67	8.3	49
16	4.7	4.6	3.6	6.2	7.4	32	34	132	0	54	12	49
17	4.3	4.6	3.9	6.2	7.1	32	34	130	0	40	17	30
18	4.1	4.6	3.9	6.5	7.1	32	34	128	0	36	17	0
19	4.1	4.6	4.1	6.2	6.8	32	34	128	0	36	17	0
20	4.1	4.6	4.1	6.5	6.8	32	34	142	0	36	18	0
21	4.4	4.9	4.6	6.5	6.5	32	34	162	.54	31	23	0
22	4.4	4.9	4.6	6.5	6.5	32	34	180	2.6	20	22	0
23	4.4	4.6	4.9	6.2	6.5	32	34	169	4.1	61	22	0
24	4.6	4.6	4.9	6.5	6.5	32	34	168	5.2	71	33	0
25	4.6	4.4	5.1	6.2	6.2	32	34	165	6.9	60	57	0
26	4.4	4.6	4.9	6.8	5.9	32	60	162	8.1	43	57	0
27	4.4	4.6	4.9	6.8	5.9	32	59	159	10	33	56	0
28	4.4	4.4	4.9	7.1	5.9	32	57	154	12	33	54	0
29	4.4	3.9	5.1	7.1	-----	32	60	138	13	32	53	0
30	4.1	3.9	5.1	7.8	-----	32	60	78	14	31	53	0
31	4.4	-----	5.4	7.8	-----	32	-----	79	-----	27	52	-----
TOTAL	141.8	134.4	132.6	180.4	190.9	821.0	1,131	4,748	191.61	1,050.0	784.7	834
MEAN	4.57	4.48	4.28	5.82	6.82	26.5	37.7	153	6.39	33.9	25.3	27.8
MAX	5.2	4.9	5.4	7.8	7.8	33	60	218	56	71	57	52
MIN	4.1	3.9	3.6	3.9	5.9	5.9	33	62	0	7.6	8.3	0
AC=FT	281	267	263	358	379	1,630	2,240	9,420	380	2,080	1,560	1,650

CAL YR 1972 TOTAL 11,780.40 MEAN 32.2 MAX 116 MIN 3.5 AC=FT 23,370
WTR YR 1973 TOTAL 10,340.41 MEAN 28.3 MAX 218 MIN 0 AC=FT 20,510

NOTE.--No gage-height record Mar. 21 to Apr. 25.

BEAR RIVER BASIN

10017000 YELLOW CREEK NEAR EVANSTON, WYO.

LOCATION.--Lat 41°08'39", long 111°03'08", in NW¼NW¼NW¼ sec.28, T.5 N., R.8 E., Summit County, Utah, on left bank 600 ft (183 m) downstream from Sage Creek, 1.5 mi (2.4 km) upstream from Coyote Creek, 1.8 mi (2.9 km) downstream from Barker Dam, and 9.8 mi (15.8 km) southwest of Evanston.

DRAINAGE AREA.--80 mi² (207 km²), approximately.

PERIOD OF RECORD.--October 1944 to September 1945, October 1949 to current year. Records for February 1943 to September 1944 at site 1.2 mi (1.9 km) downstream not equivalent, but would be equivalent by adding flow of Wright No. 2 and Cook Canals, in reports on Bear River Hydrometric Data, 1944 (Geological Survey open-file report).

GAGE.--Water-stage recorder. Altitude of gage is 6,920 ft (2,109 m), from river-profile map. Oct. 1, 1944 to Sept. 30, 1945, at site 500 ft (152 m) upstream, at different datums.

AVERAGE DISCHARGE.--25 years (1944-45, 1949-73), 10.3 ft³/s (0.292 m³/s), 7,460 acre-ft/yr (9.20 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 198 ft³/s (5.61 m³/s) May 7, gage height, 6.47 ft (1.972 m); minimum daily, 0.86 ft³/s (0.024 m³/s) Oct. 2.

Period of record: Maximum discharge, 477 ft³/s (13.5 m³/s) Apr. 28, 1952, gage height, 7.04 ft (2.146 m); maximum gage height, 7.05 ft (2.149 m) Mar. 12, 1972 (backwater from ice); no flow at times in most years.

REMARKS.--Records good except those for winter months, which are fair. One small diversion for irrigation of hay meadows above station. Flow regulated by Barker Reservoir, capacity, 162 acre-ft (0.200 hm³), completed in fall of 1959.

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	.98	2.1	2.9	2.8	3.5	3.2	4.9	117	51	5.6	5.8	5.0
2	.85	1.8	2.9	2.8	3.6	3.5	4.1	73	51	5.0	6.4	5.2
3	.92	1.7	2.9	2.8	3.6	3.6	4.9	77	36	4.6	5.8	4.9
4	1.2	6.4	2.9	2.8	3.6	3.4	4.9	129	36	4.2	5.9	4.9
5	1.7	9.8	3.2	2.8	3.4	3.3	5.2	158	37	4.0	6.5	5.2
6	1.7	5.0	2.8	2.6	3.6	3.1	6.0	169	37	3.7	6.6	3.9
7	1.6	2.5	2.9	2.6	3.6	3.0	5.8	183	37	3.6	7.3	4.4
8	2.1	3.2	3.0	2.6	3.6	3.1	5.3	167	36	3.3	7.0	4.8
9	2.2	3.8	3.0	2.5	3.4	3.2	5.0	147	34	3.2	6.2	4.6
10	2.7	4.0	3.0	2.6	3.6	3.3	4.9	144	33	3.2	5.2	4.8
11	3.3	3.2	2.8	2.6	3.7	3.4	5.4	138	32	2.7	4.5	5.3
12	2.8	2.7	2.8	2.6	2.9	3.6	8.8	127	24	2.6	4.6	4.9
13	2.5	2.3	2.8	2.8	3.1	3.7	8.6	121	8.1	2.7	4.5	4.9
14	2.3	2.5	2.8	3.0	3.1	3.8	12	172	8.6	2.7	3.9	4.8
15	3.1	2.4	2.8	3.4	3.2	3.7	11	119	9.3	3.3	3.2	4.5
16	3.2	2.4	2.8	3.6	3.2	3.7	12	118	11	3.2	2.8	4.1
17	3.0	2.1	2.8	3.9	3.2	3.9	13	118	19	3.0	2.5	3.9
18	2.6	2.1	2.8	3.9	3.2	4.1	15	120	22	2.6	3.8	3.8
19	2.7	2.2	2.8	3.8	3.3	4.8	20	124	21	3.1	2.8	3.9
20	3.7	2.1	2.8	3.2	3.3	4.9	28	131	20	5.4	2.2	3.3
21	4.1	2.2	2.8	3.4	3.4	4.1	29	125	18	6.0	3.7	3.6
22	3.2	2.1	2.8	3.4	3.4	5.3	27	112	17	4.4	4.5	2.8
23	2.9	1.7	2.8	3.6	3.4	4.8	32	104	15	4.0	3.6	3.2
24	2.5	1.5	2.8	3.6	3.4	4.8	48	68	13	4.9	3.0	4.2
25	2.6	1.3	2.8	3.8	3.3	4.5	64	67	12	4.9	3.1	7.6
26	2.7	1.7	2.8	3.7	3.1	4.8	72	97	11	3.9	3.7	7.3
27	2.6	2.2	2.8	3.7	3.1	4.8	79	100	9.3	3.7	3.2	7.1
28	2.5	3.1	2.8	3.6	3.1	4.4	102	65	7.0	4.0	3.8	6.6
29	2.2	3.0	2.8	3.7	-----	4.6	149	57	3.8	3.7	3.9	6.2
30	2.4	2.9	2.8	3.7	-----	4.4	142	52	6.0	4.0	3.3	6.0
31	2.2	-----	2.8	3.7	-----	4.1	-----	51	-----	3.9	4.1	-----
TOTAL	75.06	86.0	88.3	99.6	94.0	123.1	929.8	3,500	675.1	119.1	137.4	145.7
MEAN	2.42	2.87	2.85	3.21	3.36	3.97	31.0	113	22.5	3.84	4.43	4.86
MAX	4.1	9.8	3.2	3.9	3.7	5.3	149	183	51	6.0	7.3	7.6
MIN	.85	1.3	2.8	2.5	2.9	3.0	4.1	51	3.8	2.6	2.2	2.8
AC-FT	149	171	175	198	186	244	1,840	6,940	1,340	236	273	289
CAL YR 1972	TOTAL 7,143.84			MEAN 19.5		MAX 130	MIN 0	AC-FT 14,170				
4TR YR 1973	TOTAL 6,073.16			MEAN 16.6		MAX 183	MIN .86	AC-FT 12,050				

BEAR RIVER BASIN

195

10019500 CHAPMAN CANAL AT STATE LINE, NEAR EVANSTON, WYO.

LOCATION.--Lat 41°24'24", long 111°02'26", in SE¼ sec.36, T.17 N., R.121 W., Uinta County, on left bank at highway bridge, 6.5 mi (10.5 km) downstream from headgates, and 10 mi (16 km) northwest of Evanston.

PERIOD OF RECORD.--April 1942 to current year (prior to October 1944, irrigation seasons only). Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder and flashboard control. Altitude of gage is 6,570 ft (2,003 m), from river-profile map. Prior to Oct. 11, 1946, nonrecording gage and Oct. 11, 1946 to Aug. 2, 1961, water-stage recorder at site 20 ft (6 m) downstream at same datum.

AVERAGE DISCHARGE.--29 years (1944-73), 20.0 ft³/s (0.556 m³/s), 14,490 acre-ft/yr (17.9 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 143 ft³/s (4.05 m³/s) June 24, 1970; no flow at times each year.

REMARKS.--Records fair. Canal diverts water from Bear River in NW¼ sec.36, T.16 N., R.121 W. Many diversions above station for irrigation in Wyoming. Flow at station is for storage in Neponset Reservoir, Utah, and irrigation in Saleratus basin, Utah.

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	30	3.0	4.2				0	51	92	28	55	49
2	29	8.0	4.0				0	47	98	24	48	61
3	29	45	4.0				0	46	80	21	48	69
4	32	45	4.0				0	51	74	18	48	64
5	39	50	4.0				0	60	66	12	56	61
6	45	49	4.0				0	63	68	15	56	57
7	41	46	4.0				0	66	81	14	52	53
8	41	46	4.0				0	66	87	13	63	38
9	40	48	4.0				0	61	89	8.6	72	11
10	54	46	4.0				0	61	98	5.8	66	9.7
11	82	45	4.0				0	75	102	17	54	6.4
12	79	45	4.0				0	81	100	22	46	0
13	53	45	4.0				0	81	96	31	35	0
14	3.6	45	4.0				0	89	98	60	30	0
15	3.6	45	4.0				0	86	107	63	26	0
16	3.3	45	4.0				22	90	97	70	22	0
17	3.1	45	4.0				44	98	84	72	21	0
18	3.3	45	4.0				45	123	71	64	26	0
19	3.3	45	4.0				45	133	62	69	42	0
20	3.3	20	2.0				46	134	55	115	30	0
21	3.6	10	0				46	113	52	127	24	0
22	3.8	4.0	0				47	111	41	121	39	0
23	3.8	4.0	0				47	105	33	124	48	0
24	3.8	4.0	0				48	98	31	72	39	0
25	3.8	3.8	0				53	84	32	128	37	0
26	3.8	3.8	0				55	98	35	115	43	0
27	2.8	3.8	0				57	58	37	99	34	0
28	3.0	4.2	0				66	93	37	90	35	0
29	3.0	3.8	0		-----		82	100	37	59	37	0
30	3.0	3.8	0		-----		70	68	33	57	37	0
31	3.0	-----	0		-----		-----	83	-----	57	37	-----
TOTAL	654.9	856.2	78.2	0	0	0	773	2,573	2,073	1,791.4	1,306	479.1
MEAN	21.1	28.5	2.52	0	0	0	25.8	83.0	69.1	57.8	42.1	16.0
MAX	82	50	4.2	0	0	0	82	134	107	128	72	69
MIN	2.8	3.0	0	0	0	0	0	46	31	5.8	21	0
AC-FT	1,300	1,700	155	0	0	0	1,530	5,100	4,110	3,550	2,590	950

CAL YR 1972 TOTAL 6,768.32 MEAN 18.5 MAX 98 MIN 0 AC-FT 13,420
WTR YR 1973 TOTAL 10,584.80 MEAN 29.0 MAX 134 MIN 0 AC-FT 20,990

BEAR RIVER BASIN

10020100 BEAR RIVER ABOVE RESERVOIR, NEAR WOODRUFF, UTAH

LOCATION.--Lat 41°26'04", long 111°01'01", in NW¼NW¼ sec.29, T.17 N., R.120 W., Uinta County, Wyoming, on right bank 9.3 mi (15.0 km) upstream from Woodruff Narrows Dam and 10 mi (16 km) southeast of Woodruff.

DRAINAGE AREA.--780 mi² (2,020 km²), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,455 ft (1,967.5 m), from river-profile map.

AVERAGE DISCHARGE.--12 years, 249 ft³/s (7.052m³/s), 180,400 acre-ft/yr (222 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,010 ft³/s (56.9 m³/s) May 21, gage height, 5.29 ft (1.612 m); minimum daily, 8.4 ft³/s (0.24 m³/s) Oct. 1, 3, 4.

Period of record: Maximum discharge, 3,340 ft³/s (94.6 m³/s) June 13, 14, 1965, gage height, 5.89 ft (1.795 m); minimum, 0.1 ft³/s (0.003 m³/s) Aug. 24, 1964.

REMARKS.--Records good except those for winter months, which are fair. Diversion for irrigation of about 43,500 acres (176 km²) above station. Water-quality records for the current year 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	8.4	110	80	75	85	120	150	745	972	211	86	40
2	8.9	120	80	75	85	120	150	620	1,060	187	57	71
3	8.4	99	80	75	85	120	150	608	930	155	50	84
4	8.4	97	80	75	85	120	155	781	751	127	49	74
5	8.9	114	80	75	85	120	170	1,020	590	109	77	68
6	9.3	120	75	75	85	120	200	1,070	530	103	123	63
7	9.8	101	75	75	85	120	242	1,190	638	81	88	56
8	10	91	75	75	85	120	187	1,190	757	32	71	62
9	11	107	75	75	85	120	178	1,090	900	20	41	116
10	10	97	75	75	85	120	225	984	1,030	19	31	120
11	46	85	70	80	85	120	290	996	1,230	18	26	172
12	54	88	70	80	85	125	335	1,050	1,150	29	21	266
13	38	88	70	80	85	130	423	1,120	984	72	18	250
14	79	89	70	90	85	135	488	1,220	912	210	15	196
15	85	90	70	90	85	135	404	1,290	1,070	236	14	159
16	123	85	75	90	85	135	370	1,350	793	246	11	164
17	120	85	75	90	85	135	335	1,470	578	184	9.3	155
18	99	85	75	85	85	135	380	1,580	459	130	13	132
19	91	85	75	85	85	135	298	1,720	380	150	32	99
20	101	85	75	85	85	135	290	1,860	316	441	27	88
21	161	85	75	85	85	135	266	1,970	308	326	21	88
22	155	85	75	85	85	135	277	1,950	273	214	27	95
23	130	85	75	85	85	135	326	1,840	250	225	45	132
24	132	85	75	85	85	135	470	1,680	236	303	37	161
25	140	85	75	85	110	135	595	1,590	228	242	28	142
26	147	80	75	85	120	135	656	1,680	250	172	32	150
27	152	80	75	85	120	150	753	1,350	259	115	29	147
28	140	80	75	85	120	150	1,060	1,060	273	114	25	147
29	134	80	75	85	-----	150	1,280	912	262	142	26	144
30	132	80	75	85	-----	150	1,130	824	242	112	27	140
31	105	-----	75	85	-----	150	-----	824	-----	97	24	-----
TOTAL	2,458.1	2,747	2,325	2,540	2,520	4,080	12,295	38,624	18,521	4,823	1,180.3	3,791
MEAN	79.3	91.5	75.0	81.9	90.0	132	410	1,246	621	156	38.1	126
MAX	161	120	80	90	120	150	1,280	1,970	1,230	441	123	256
MIN	8.4	80	70	75	85	120	150	608	228	18	9.3	40
AC-FT	4,880	5,450	4,610	5,040	5,000	8,090	24,390	76,610	36,930	9,570	2,340	7,520
CAL YR 1972	TOTAL	111,716.0	MEAN	305	MAX	2,100	MIN	4.5	AC-FT	221,600		
HYD YR 1973	TOTAL	96,004.4	MEAN	263	MAX	1,970	MIN	3.4	AC-FT	190,400		

BEAR RIVER BASIN

197

10020200 WOODRUFF NARROWS RESERVOIR NEAR WOODRUFF, UTAH

LOCATION.--Lat 41°30'10", long 111°00'55", in sec.32, T.18 N., R.120 W., Uinta County, Wyoming, in gate house on dam, 5.6 mi (9.0 km) upstream from Wyoming-Utah State line, and 7.7 mi (12.4 km) east of Woodruff.

DRAINAGE AREA.--810 mi² (2,100 km²), approximately.

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

GAGE.--Water-stage recorder and mercury manometer. Datum of gage is 6,405 ft (1,952.2 m), from levels by Bureau of Reclamation.

EXTREMES.--Current year: Maximum contents, 32,880 acre-ft (40.5 hm³) May 21, gage height, 38.2 ft (11.64 m); minimum, 10,300 acre-ft (12.7 hm³) Oct. 10-12.

Period of record: Maximum contents, 32,880 acre-ft (40.5 hm³) May 21, 1973, gage height, 38.2 ft (11.64 m); minimum, 6,480 acre-ft (7.99 hm³) Sept. 11-13, 1966.

REMARKS.--Reservoir formed by earth-fill, rock faced dam. Lower portion of spillway cut in natural rock. Storage began Jan. 5, 1962. Total capacity, 28,000 acre-ft (34.5 hm³) below spillway crest, which includes 18,240 acre-ft (22.5 hm³) of Compact allocation for irrigation, 4,260 acre-ft (5.25 hm³) of irrigation holdover, 4,000 acre-ft (4.93 hm³) for winter release for fish propagation in Utah, and 1,500 acre-ft (1.85 hm³) of storage for fish propagation in Wyoming. Gage height of spillway is 35.3 ft (10.76 m). Figures given herein represent total contents.

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

21	10,760	30	20,180
22	11,600	32	23,040
24	13,360	34	25,800
26	15,570	36	29,000
28	17,770	38	32,520

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	11,000	13,800	17,770	19,840	24,410	27,550	28,410	30,630	30,850	23,160	16,810	14,370
2	10,920	14,030	17,890	19,960	24,410	27,690	28,410	30,230	31,030	22,020	16,710	14,370
3	10,840	14,260	18,000	20,060	24,550	27,690	28,410	30,080	31,030	20,890	16,710	14,480
4	10,760	14,370	18,130	20,180	24,550	27,330	28,410	30,080	30,630	19,840	16,710	14,480
5	10,680	14,590	18,130	20,270	24,550	27,970	28,410	30,410	30,230	18,880	16,600	14,480
6	10,610	14,800	18,260	20,360	24,710	27,970	28,550	30,850	30,080	17,890	16,710	14,480
7	10,530	15,000	18,260	20,510	24,710	27,970	28,710	31,030	30,080	15,920	16,710	14,590
8	10,450	15,220	18,390	20,890	24,850	28,120	28,710	31,200	30,230	15,780	16,600	14,590
9	10,370	15,340	18,390	21,030	24,850	28,120	28,710	31,030	30,410	14,590	16,490	14,700
10	10,300	15,570	18,510	21,180	25,010	28,120	28,710	30,850	30,850	13,470	16,370	14,800
11	10,300	15,670	18,510	21,320	25,010	28,260	28,850	31,030	31,200	12,820	16,240	15,110
12	10,300	15,780	18,510	21,450	25,170	28,260	28,850	31,030	31,370	12,740	16,000	15,570
13	10,370	15,890	18,640	21,600	25,340	28,260	29,180	31,200	31,200	12,660	15,890	15,890
14	10,530	16,000	18,640	21,740	25,500	28,260	29,370	31,370	31,370	12,820	15,780	16,240
15	10,680	16,120	18,760	21,880	25,650	28,410	29,370	31,530	31,200	13,090	15,670	16,490
16	10,920	16,240	18,760	22,170	25,800	28,410	29,180	31,690	30,850	13,470	15,570	16,710
17	11,000	16,240	18,880	22,310	25,970	28,410	29,180	31,850	30,410	13,690	15,450	16,810
18	11,090	16,370	18,880	22,450	26,140	28,410	29,180	32,020	29,930	13,800	15,340	16,920
19	11,180	16,490	18,880	22,590	26,320	28,410	29,000	32,180	29,550	14,030	15,340	17,020
20	11,360	16,600	19,000	22,740	26,320	28,410	29,000	32,520	29,370	14,800	15,220	17,130
21	11,600	16,810	19,000	22,890	26,490	28,410	28,850	32,880	29,180	15,340	15,220	17,130
22	11,780	16,920	19,120	23,040	26,550	28,410	28,850	32,520	28,710	15,570	15,110	17,230
23	12,050	16,920	19,120	23,160	26,660	28,410	28,850	32,180	28,250	15,780	15,110	17,330
24	12,250	17,020	19,240	23,290	26,840	28,410	29,180	32,020	27,830	16,240	15,000	17,440
25	12,490	17,130	19,240	23,520	27,020	28,410	29,550	32,180	27,200	16,490	14,900	17,550
26	12,660	17,230	19,360	23,640	27,020	28,410	29,740	32,180	26,660	16,710	14,900	17,770
27	12,900	17,330	19,360	23,760	27,220	28,410	30,080	32,020	25,320	16,710	14,800	18,030
28	13,090	17,440	19,480	23,890	27,370	28,410	30,630	31,530	25,650	16,710	14,700	18,130
29	13,360	17,440	19,480	24,010	-----	28,410	31,200	31,030	24,710	16,810	14,590	18,250
30	13,470	17,550	19,600	24,140	-----	28,410	31,200	30,850	23,890	16,810	14,480	18,390
31	13,590	-----	19,600	24,260	-----	28,410	-----	30,630	-----	16,810	14,370	-----
MAX	13,690	17,550	19,600	24,260	27,370	28,410	31,200	32,880	31,370	23,160	16,810	18,390
MIN	10,300	13,800	17,770	19,840	24,410	27,550	28,410	30,080	23,890	12,560	14,370	14,370
(+)	24.3	27.8	29.5	33.0	34.9	35.6	37.2	36.9	32.7	27.1	24.9	28.5
(#)	+2,690	+3,860	+2,050	+4,660	+3,110	+1,040	+2,790	-570	-6,740	-7,080	-2,440	+4,020

CAL YR 1972..... ± -7,950
WTR YR 1973..... ± +7,390

+ Gage height, in feet, at 2400 of last day of month.
Change in contents, in acre-feet.

LOCATION.--Lat 41°30'20", long 111°00'50", in NW¼NW¼ sec.32, T.18 N., R.120 W., Uinta County, Wyoming, on right bank, 1,100 ft (340 m) below Woodruff Narrows Dam, 1.6 mi (2.6 km) upstream from Salt Creek, 5.4 mi (8.7 km) upstream from Wyoming-Utah State line, and 7.7 mi (12.4 km) east of Woodruff.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,400 ft (1,950.7 m), from river-profile map. Prior to Sept. 26, 1962, at site 175 ft (53 m) upstream at same datum.

AVERAGE DISCHARGE.--12 years, 243 ft³/s (6.882m³/s), 176,100 acre-ft/yr (217 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,810 ft³/s (51.3 m³/s) May 22, gage height, 6.90 ft (2.103 m); minimum daily, 30 ft³/s (0.85 m³/s) Oct. 5, 10, 11, 13-18.

Period of record: Maximum discharge, 3,000 ft³/s (85.0 m³/s) June 14, 1965, gage height, 7.88 ft (2.402 m); no flow July 4, 5, 1962.

REMARKS.--Records excellent. Flow regulated by Woodruff Narrows Reservoir beginning January 1962 (see sta 10020200). Diversions for irrigation of about 43,500 acres (176 km²) above station.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	36	41	42	43	45	154	1,020	913	660	91	62
2	31	36	41	42	43	45	154	793	992	653	91	59
3	31	36	41	42	43	46	151	664	1,020	644	90	57
4	31	37	40	42	43	50	153	635	947	636	90	57
5	30	37	41	42	43	59	158	753	801	626	89	57
6	31	37	41	42	43	66	177	868	671	616	89	57
7	31	37	41	42	43	73	214	959	616	606	88	57
8	31	38	42	42	43	80	224	1,040	654	596	88	57
9	31	38	42	39	43	85	214	1,050	749	585	88	57
10	30	38	42	40	44	93	215	1,010	853	573	88	57
11	30	38	42	40	44	103	244	1,000	1,010	351	88	57
12	31	39	42	42	44	115	284	1,010	1,080	122	88	58
13	30	39	42	42	44	127	333	1,030	1,090	88	80	59
14	30	39	42	42	44	134	410	1,090	1,010	88	64	59
15	30	39	42	42	44	134	432	1,190	1,020	87	64	58
16	30	40	42	42	44	132	408	1,270	995	84	60	58
17	30	40	42	42	44	132	390	1,350	813	85	58	59
18	30	40	42	42	44	137	398	1,440	656	85	58	59
19	33	40	42	42	44	138	369	1,560	537	85	58	59
20	33	40	42	42	44	140	336	1,650	448	86	58	58
21	33	40	42	42	45	143	314	1,700	385	86	58	58
22	33	41	42	42	45	142	292	1,750	488	89	59	63
23	34	41	42	42	45	141	290	1,700	528	90	59	58
24	34	41	42	42	45	140	335	1,600	469	90	59	58
25	34	41	42	42	45	140	430	1,480	452	91	58	58
26	34	40	42	42	45	141	522	1,560	449	90	58	58
27	35	41	42	42	45	145	509	1,520	447	90	58	59
28	35	41	42	42	45	160	753	1,300	561	91	61	59
29	35	41	42	42	-----	159	1,000	1,070	653	91	62	59
30	35	41	42	43	-----	156	1,140	982	665	91	62	59
31	36	-----	42	43	-----	155	-----	897	-----	91	62	-----
TOTAL	993	1,172	1,294	1,297	1,231	3,556	11,103	36,941	21,972	8,346	2,224	1,750
MEAN	32.0	39.1	41.7	41.8	44.0	115	370	1,192	732	269	71.7	58.3
MAX	36	41	42	43	45	160	1,140	1,750	1,090	660	91	63
MIN	30	36	40	39	43	45	151	635	385	84	58	57
AC=FT	1,970	2,320	2,570	2,570	2,440	7,050	22,020	73,270	43,580	16,550	4,410	3,470
CAL YR 1972	TOTAL	116,387.2	MEAN	318	MAX	2,460	MIN	6.2	AC=FT	230,900		
WTR YR 1973	TOTAL	91,879.0	MEAN	252	MAX	1,750	MIN	30	AC=FT	182,200		

BEAR RIVER BASIN

199

10026500 BEAR RIVER NEAR RANDOLPH, UTAH

LOCATION.--Lat 41°48'02", long 111°04'20", in SE¼NE¼ sec.7, T.12 N., R.8 E., Rich County,,on left bank 3.7 mi (6.0 km) upstream from Twin Creek, 5.0 mi (8.0 km) upstream from Utah-Wyoming State line, and 11 mi (18 km) northeast of Randolph.

DRAINAGE AREA.--1,640 mi² (4,250 km²), approximately.

PERIOD OF RECORD.--October 1943 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Prior to Aug. 17, 1971, 0.2 mi (0.3 km) upstream at different datum. Altitude of gage is 6,200 ft (1,889.8 m), from river-profile map.

AVERAGE DISCHARGE.--30 years, 201 ft³/s (5.692 m³/s), 145,600 acre-ft/yr (180 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,480 ft³/s (41.9 m³/s) May 26, gage height, 6.66 ft (2.030 m); minimum daily not determined, occurred during period of ice effect.

Period of record: Maximum discharge, 2,660 ft³/s (75.3 m³/s) May 8, 1952; maximum gage height, 8.99 ft (2.740 m) June 17, 1965; minimum discharge, 1.6 ft³/s (0.045 m³/s) Nov. 12, 1961.

REMARKS.--Records good except those for winter period, which are fair. Diversion for irrigation of about 94,500 acres (382 km²) above station. Flow regulated by Woodruff Narrows Reservoir beginning January 1962 (see sta 10020200). Water-quality records for the current year 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	109	110	65	65	75	78	243	940	586	144	229	81
2	109	113	65	65	75	78	243	1,060	545	155	217	81
3	109	114	65	65	75	78	257	1,100	529	152	210	84
4	109	117	65	65	75	78	276	980	522	148	209	81
5	114	120	65	65	75	78	289	830	454	169	204	77
6	114	123	65	65	75	78	353	802	426	186	190	76
7	114	123	65	65	75	78	412	852	349	180	180	76
8	113	124	65	65	75	86	442	913	261	179	175	77
9	106	124	65	65	75	95	472	972	267	193	169	88
10	98	124	65	65	75	110	572	1,040	275	257	171	89
11	90	123	65	65	75	120	650	1,080	334	272	161	100
12	98	123	65	70	75	130	720	1,060	462	258	152	104
13	96	120	65	70	75	145	825	1,030	636	256	151	101
14	90	121	65	70	75	160	884	1,030	655	237	151	107
15	88	124	65	70	75	190	849	1,060	622	236	142	106
16	94	127	65	70	75	210	819	1,040	525	195	130	113
17	91	128	65	70	75	230	753	1,020	565	156	125	113
18	90	128	65	70	75	240	687	968	553	157	119	113
19	90	124	65	70	75	250	632	999	493	202	103	113
20	92	124	65	70	75	250	608	1,070	424	351	108	114
21	92	126	65	70	78	250	572	1,120	376	476	103	116
22	91	121	65	70	78	250	546	1,180	322	431	106	115
23	91	110	65	70	78	250	538	1,140	287	393	106	117
24	95	100	65	70	78	250	526	1,110	261	336	108	123
25	95	85	65	70	78	250	520	1,340	270	313	105	125
26	95	75	65	70	78	250	546	1,460	286	309	94	125
27	95	70	65	70	78	250	598	1,310	293	290	90	123
28	100	68	65	70	78	245	658	1,100	244	269	88	121
29	112	66	65	70	-----	236	729	1,060	204	254	84	120
30	112	66	65	70	-----	248	823	921	179	239	81	118
31	106	-----	65	70	-----	243	-----	723	-----	235	80	-----
TOTAL	3,098	3,321	2,015	2,115	2,124	5,484	17,042	32,310	12,205	7,628	4,341	3,099
MEAN	99.9	111	65.0	68.2	75.9	177	568	1,042	407	246	140	103
MAX	114	128	65	70	78	250	884	1,460	655	476	229	125
MIN	88	66	65	65	75	78	243	723	179	144	80	76
AC-FT	6,140	6,590	4,000	4,200	4,210	10,880	33,800	64,090	24,210	15,130	8,610	6,150
CAL YR 1972	TOTAL	137,345	MEAN	375	MAX	2,260	MIN	55	AC-FT	272,400		
WTR YR 1973	TOTAL	94,782	MEAN	260	MAX	1,460	MIN	65	AC-FT	188,000		

BEAR RIVER BASIN

10028500 BEAR RIVER BELOW PIXLEY DAM, NEAR COKEVILLE, WYO.

LOCATION.--Lat 41°56'20", long 110°59'05", in SE¼SE¼ sec.25, T.23 N., R.120 W., Lincoln County, 800 ft (243 m) downstream from Pixley Dam, 11 mi (18 km) south of Cokeville, and 17.5 mi (28.2 km) downstream from Twin Creek.

DRAINAGE AREA.--2,040 mi² (5,280 km²), approximately.

PERIOD OF RECORD.--October 1941 to November 1943 (published as Bear River near Cokeville), October 1952 to September 1956, May 1958 to current year (irrigation seasons only). Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Altitude of gage is 6,185 ft (1,885.2 m), from river-profile map. Oct. 31, 1941 to Nov. 30, 1943, at site 200 ft (61 m) downstream at different datum.

EXTREMES.--Current season: Maximum discharge, 1,060 ft³/s (30.0 m³/s) May 4, gage height, 7.19 ft (2.192 m); minimum daily, 70 ft³/s (1.98 m³/s) June 12.

Period of record: Maximum daily discharge, 2,300 ft³/s (65.1 m³/s) Mar. 25, 1956, minimum daily recorded, 0.3 ft³/s (0.008 m³/s) Aug. 21, 1961.

REMARKS.--Records good. Natural flow of stream affected by diversions for irrigation and return flow from irrigated areas.

DISCHARGE, IN CUBIC FEET PER SECOND, MAY TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								912	760	144	278	91
2								977	696	135	265	92
3								1,030	588	130	251	92
4								1,050	439	128	245	95
5								977	457	126	245	90
6								880	449	144	237	86
7								857	393	158	221	83
8								904	357	158	212	87
9								947	344	158	204	92
10								975	336	158	200	99
11								998	231	161	200	111
12								1,010	70	167	188	134
13								1,010	146	194	180	134
14								990	194	218	177	128
15								990	249	212	175	129
16								1,000	291	220	161	130
17								996	301	221	193	134
18								929	320	253	147	130
19								910	327	246	136	130
20								872	315	341	122	129
21								915	286	554	124	123
22								918	267	586	126	116
23								853	258	537	124	126
24								858	251	469	123	138
25							632	869	241	411	124	146
26							625	891	237	384	117	146
27							653	931	230	370	107	144
28							708	980	195	342	102	141
29					-----		770	932	171	318	99	138
30					-----		837	945	155	301	94	136
31		-----			-----		-----	886	-----	286	90	-----
TOTAL								29,252	9,554	8,230	5,227	3,550
MAFAN								944	318	265	169	118
MAX								1,050	760	586	278	146
MIN								853	70	126	90	83
AC-FT								58,070	18,950	16,320	10,370	7,040

BEAR RIVER BASIN

201

10032000 SMITHS FORK NEAR BORDER, WYO.

LOCATION.--Lat 42°17'16", long 110°52'14", in NW¼ sec.33, T.27 N., R.118 W., Lincoln County, on left bank 4.5 mi (7.2 km) upstream from Howland Creek, 6.0 mi (10 km) downstream from Hobble Creek, and 12 mi (19 km) northeast of Border.

DRAINAGE AREA.--165 mi² (427 km²).

PERIOD OF RECORD.--May 1942 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,680 ft (2,036 m), from topographic map. Prior to Oct. 16, 1945, at site 0.8 mi (1.3 km) downstream at different datum.

AVERAGE DISCHARGE.--31 years, 197 ft³/s (5.579 m³/s), 142,700 acre-ft/yr (176 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 840 ft³/s (23.8 m³/s) May 20, gage height, 4.32 ft (1.317 m); minimum, 40 ft³/s (1.13 m³/s) Mar. 26.

Period of record: Maximum discharge, 1,610 ft³/s (45.6 m³/s) June 18, 1971, gage height, 5.61 ft (1.710 m); minimum recorded, 35 ft³/s (0.99 m³/s) Mar. 21, 1955, result of freezeup.

REMARKS.--Records good except those for winter periods, which are fair. One diversion for irrigation of about 200 acres (80.9 hm²) above station.

REVISIONS (WATER YEARS).--WSP 1734: 1952(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	115	98	87	75	63	59	54	126	559	282	155	112
2	115	101	87	75	63	59	57	117	561	271	152	119
3	113	98	87	75	63	54	56	127	538	260	151	111
4	115	98	87	75	63	59	56	153	486	253	160	106
5	136	100	74	75	63	61	57	178	451	248	153	103
6	124	98	80	75	63	60	61	239	449	241	152	102
7	117	96	80	75	63	57	61	297	462	236	146	103
8	113	100	80	75	63	57	55	310	507	232	140	118
9	113	96	80	75	63	58	59	315	537	225	136	119
10	119	93	80	75	63	59	62	346	573	221	133	108
11	115	95	80	75	63	60	60	393	564	216	130	108
12	110	92	80	75	63	58	65	417	522	217	128	105
13	112	95	80	75	63	60	71	467	490	219	126	101
14	110	90	80	75	63	58	79	514	504	214	123	100
15	112	92	80	75	60	57	77	532	493	209	122	99
16	112	92	80	75	60	54	80	579	439	205	122	98
17	108	90	80	75	60	59	83	644	431	197	120	97
18	106	92	80	75	60	59	79	708	391	193	120	96
19	106	90	80	75	60	54	75	751	358	209	117	95
20	106	89	80	75	60	58	72	795	340	237	116	95
21	105	89	80	65	60	62	70	733	326	205	116	100
22	105	80	80	65	60	61	73	672	318	195	118	96
23	105	89	80	65	60	59	78	637	322	193	125	100
24	112	88	80	65	60	57	88	625	327	183	117	105
25	106	88	80	65	60	56	97	701	320	178	114	108
26	105	87	75	65	60	60	95	650	319	174	111	100
27	100	87	75	65	60	62	111	561	314	175	110	97
28	100	84	75	65	60	62	147	502	331	173	109	95
29	103	86	75	65	-----	58	163	473	317	166	108	93
30	100	87	75	65	-----	56	137	470	300	164	105	93
31	95	-----	75	65	-----	59	-----	489	-----	159	104	-----
TOTAL	3,413	2,760	2,472	2,215	1,722	1,812	2,378	14,521	12,849	6,550	3,939	3,082
MEAN	110	92.0	79.7	71.5	61.5	58.5	79.3	468	428	211	127	103
MAX	136	101	87	75	63	62	163	795	573	282	160	119
MIN	95	80	74	65	60	54	54	117	300	159	104	93
AC-FT	6,770	5,470	4,900	4,390	3,420	3,590	4,720	28,800	25,490	12,990	7,810	6,110
CAL YR 1972	TOTAL	103,492	MEAN	283	MAX	1,420	MIN	53	AC-FT	205,300		
WTR YR 1973	TOTAL	57,713	MEAN	158	MAX	795	MIN	54	AC-FT	114,500		

BEAR RIVER BASIN

10038000 BEAR RIVER BELOW SMITHS FORK, NEAR COKEVILLE, WYO.

LOCATION.--Lat 42°07'36", long 110°58'21", in SE¼NE¼ sec.28, T.25 N., R.119 W., Lincoln County, 1.1 mi (1.8 km) upstream from Wyman Dam, 2.8 mi (4.5 km) northwest of Cokeville, and 3.8 mi (6.1 km) downstream from Smiths Fork.

DRAINAGE AREA.--2,460 mi² (6,370 km²), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,140 ft (1,871 m), from river-profile map.

AVERAGE DISCHARGE.--19 years, 430 ft³/s (12.18 m³/s), 311,500 acre-ft/yr (384 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,830 ft³/s (51.8 m³/s) May 21, gage height, 5.91 ft (1.801 m); minimum, 184 ft³/s (5.21 m³/s) Aug. 31.

Period of record: Maximum discharge, 3,780 ft³/s (107 m³/s) Mar. 26, 1956, gage height, 7.54 ft (2.298 m); minimum, 63 ft³/s (1.78 m³/s) Nov. 2, 1961.

REMARKS.--Records good except those for winter periods, which are fair. Natural flow of stream affected by diversion 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	276	253	280	200	210	222	440	1,250	1,410	414	466	201
2	276	257	280	200	210	236	410	1,300	1,310	380	442	214
3	276	284	280	200	210	225	412	1,360	1,190	342	419	213
4	280	280	280	200	210	210	441	1,430	1,010	325	408	209
5	309	293	260	200	210	230	489	1,430	899	317	407	204
6	309	293	250	200	220	230	581	1,380	892	313	395	199
7	297	293	250	200	220	230	667	1,390	851	329	368	195
8	297	305	250	200	220	230	704	1,430	774	332	354	210
9	288	305	250	200	220	230	680	1,470	777	331	336	232
10	288	297	250	200	220	237	748	1,500	786	334	319	227
11	280	297	220	200	217	247	923	1,570	787	362	315	248
12	264	293	220	200	225	255	1,100	1,610	585	359	302	269
13	264	293	220	200	229	274	1,310	1,650	628	358	285	275
14	268	284	220	200	242	312	1,510	1,680	675	395	257	260
15	260	280	220	200	230	347	1,530	1,690	765	371	254	261
16	260	284	220	200	220	335	1,480	1,700	841	391	249	268
17	260	288	220	200	220	324	1,440	1,770	854	380	236	275
18	260	293	220	200	220	333	1,330	1,760	869	366	239	274
19	253	288	220	200	220	354	1,160	1,770	864	382	230	280
20	253	280	220	200	220	369	1,070	1,790	823	468	214	276
21	260	284	240	200	210	359	1,000	1,810	757	684	209	285
22	257	272	253	200	210	363	970	1,790	690	898	220	268
23	257	257	253	200	210	365	957	1,680	680	856	229	271
24	280	260	240	200	205	361	978	1,640	670	774	222	305
25	272	293	220	200	210	367	975	1,660	632	686	220	325
26	268	309	210	200	214	389	943	1,710	591	642	217	320
27	268	293	210	200	210	405	960	1,650	566	623	202	309
28	264	290	210	200	216	443	1,040	1,670	572	614	194	300
29	280	280	210	200	-----	453	1,150	1,710	511	562	196	293
30	288	270	210	200	-----	432	1,190	1,610	458	529	192	288
31	288	-----	210	200	-----	437	-----	1,530	-----	500	184	-----
TOTAL	8,500	8,548	7,296	6,200	6,078	9,804	28,608	49,390	23,717	14,617	8,780	7,754
MEAN	274	285	235	200	217	316	954	1,593	791	472	283	258
MAX	309	309	280	200	242	453	1,530	1,810	1,410	898	466	325
MIN	253	253	210	200	205	210	410	1,250	458	313	184	195
AC-FT	16,860	16,950	14,470	12,300	12,060	19,450	56,740	97,970	47,040	28,990	17,420	15,380
CAL YR 1972	TOTAL	277,911	MEAN	759	MAX	3,120	MIN	210	AC-FT	551,200		
WTR YR 1973	TOTAL	179,292	MEAN	491	MAX	1,810	MIN	184	AC-FT	355,600		

BEAR RIVER BASIN

203

10039500 BEAR RIVER AT BORDER, WYO.

LOCATION.--Lat 42°12'40", long 111°03'11", in NE4NE4 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 mi² (6,450 km²), 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 ft³/s (11.92 m³/s), 305,000 acre-ft/yr (376 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,800 ft³/s (51.0 m³/s) May 21, gage height, 6.57 ft (2.003 m); minimum daily, 182 ft³/s (5.15 m³/s) Aug. 31, Sept. 7.

Period of record: Maximum discharge, 3,680 ft³/s (104 m³/s) May 11, 1952, gage height, 8.89 ft (2.710 m); minimum daily, 30 ft³/s (0.85 m³/s) Aug. 18-22, 1940.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 122,000 acres (494 km²) above station. Water-quality records for the current year 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	856	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	532	1,350	700	299	336	190
9	285	310	240	190	200	220	503	1,400	690	296	322	208
10	283	305	240	190	200	220	632	1,400	597	308	310	208
11	279	303	210	190	200	240	779	1,450	697	331	301	236
12	258	303	210	190	200	250	946	1,500	593	355	294	257
13	261	299	210	190	200	270	1,140	1,530	564	352	283	261
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	815	405	232	268
20	257	294	210	190	210	355	1,080	1,760	783	455	222	266
21	261	294	220	190	200	350	992	1,780	722	616	212	272
22	263	288	230	190	200	350	948	1,750	549	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	950	1,600	508	561	203	288
29	285	280	200	190	-----	433	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	5,510	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	397	1,180	444	292	182	182
AC-FT	16,920	17,350	13,790	11,680	11,130	18,740	53,330	93,480	43,910	27,800	17,000	14,580
CAL YR 1972	TOTAL	280,644	MEAN	767	MAX	3,270	MIN	203	AC-FT	556,700		
WTR YR 1973	TOTAL	171,217	MEAN	469	MAX	1,780	MIN	182	AC-FT	339,600		

BEAR RIVER BASIN

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, Wyoming, 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 mi² (293 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,280 ft (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 ft³/s (1.541 m³/s), 39,410 acre-ft/yr (48.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 488 ft³/s (13.8 m³/s) May 17, 18, gage height, 2.81 ft (0.856 m); minimum, 10 ft³/s (0.28 m³/s) Mar. 15.

Period of record: Maximum discharge, 1,040 ft³/s (29.5 m³/s) May 14, 1971, gage height, 3.84 ft (1.170 m); minimum, 2.6 ft³/s (0.074 m³/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	66	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 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
4-28	2300	1.89	184
5-17,18	2400	2.81	488

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 mi² (2,134 km²).

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 hm³) June 27, elevation, 6,769.14 ft (2,063.234 m); minimum, 581,500 acre-ft (717 hm³) Oct. 4, elevation, 6,758.20 ft (2,059.899 m).

Period of record: Maximum contents, 859,530 acre-ft (1,060 hm³) July 11, 1965, elevation, 6,769.49 ft (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 hm³). 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 hm³). The earth dam was raised in 1916, increasing the usable capacity to 790,000 acre-ft (974 hm³). In 1917, by dredging the outlet, the capacity was further increased to 847,000 acre-ft (1,040 hm³) between elevations 6,730 ft (2,051 m), 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	639,900	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	619,300	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	638,300	641,400	667,500	835,000	824,600	729,500	641,400
15	587,900	597,900	606,400	622,700	634,500	638,300	641,400	672,100	842,400	821,800	726,000	638,100
16	588,600	598,100	606,700	622,900	634,500	638,300	641,700	678,000	846,000	819,000	722,600	635,200
17	589,100	598,600	606,900	623,900	634,700	638,300	642,200	685,500	847,000	816,000	719,100	631,800
18	589,100	598,800	606,900	624,600	634,700	638,300	642,400	695,000	848,200	813,400	715,900	628,900
19	589,300	599,000	607,600	625,600	634,700	638,300	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	797,700	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	639,500	646,000	784,700	849,800	785,000	684,600	609,100
29	593,100	601,400	615,300	627,700	-----	639,500	647,000	785,500	849,300	781,700	681,200	608,100
30	593,100	601,700	615,500	627,700	-----	639,500	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	6,769.05	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.

SNAKE RIVER MAIN STEM

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 mi² (2,134 km²). 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 ft³/s (40.61 m³/s), 1,039,000 acre-ft/yr (1,280 hm³/yr); 15-year base period (1952-67), 1,392 ft³/s (39.42 m³/s).

EXTREMES.--Current year: Maximum discharge, 4,580 ft³/s (130 m³/s) June 4-6, 8, gage height, 7.00 ft (2.134 m); minimum, 299 ft³/s (8.47 m³/s) Nov. 16, gage height, 2.36 ft (0.719 m).

Period of record: Maximum discharge, 15,100 ft³/s (428 m³/s) June 12, 1918, gage height, 10.41 ft (3.173 m), site and datum then in use; minimum, 0.30 ft³/s (0.01 m³/s) Oct. 26, 27, 28, 1969, gage height, 0.89 ft (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).

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

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

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	675	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	27,340	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		

PACIFIC CREEK BASIN

207

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 mi² (414 km²). 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 ft³/s (7.533 m³/s), 22.58 in/yr (573 mm/yr), 192,700 acre-ft/yr (238 hm³/yr); 15-year base period (1952-67), 258 ft³/s (7.307 m³/s).

EXTREMES.--Current year: Maximum discharge, 1,690 ft³/s (47.9 m³/s) May 20, gage height, 5.14 ft (1.567 m); minimum daily, 48 ft³/s (138 m³/s) Mar. 6-9, Sept. 19.

Period of record: Maximum discharge, 3,470 ft³/s (98.3 m³/s) May 21, 1954; maximum gage height, 6.35 ft (1.935 m) June 23, 1971; minimum daily discharge, 22 ft³/s (0.62 m³/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 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
5-20	0600	5.14	1,690
6-10	0200	4.78	1,340

BUFFALO FORK BASIN

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 mi² (919 km²).

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 ft³/s (16.23 m³/s), 415,100 acre-ft/yr (512 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,160 ft³/s (118 m³/s) June 10, gage height, 6.68 ft (2.036 m); minimum daily, 100 ft³/s (2.83 m³/s) Mar. 3-22, Mar. 28 to Apr. 3.

Period of record: Maximum discharge, 5,160 ft³/s (146 m³/s) June 8, 1972; maximum gage height, 7.66 ft (2.335 m) June 23, 1971; minimum daily, 82 ft³/s (2.32 m³/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 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE
6-10	0400	6.68	4,160

SNAKE RIVER MAIN STEM

209

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 September 1973.

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

EXTREMES.--Current year: Maximum discharge, 11,000 ft³/s (312 m³/s) June 10, gage height, 11.81 ft (3.600 m);
minimum daily discharge, 900 ft³/s (25.5 m³/s) Jan. 5.

REMARKS.--Records good. Flow partly regulated by Jackson Lake (see sta 13010500). Some diversions from
tributaries 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	2,720	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	63,650	76,900	272,400	433,800	296,100	222,000	179,500
CAL YR 1972	TOTAL	131,550.00	MEAN	359	MAX	2,720	MIN	.0	AC-FT	260,900		
WTR YR 1973	TOTAL	972,221.00	MEAN	2,664	MAX	10,400	MIN	900	AC-FT	1,928,000		

FLAT CREEK BASIN

13018300 CACHE CREEK NEAR JACKSON, WYO.
(Hydrologic bench-mark station)

LOCATION.--Lat 43°27'08", long 110°42'12", in SW¼SW¼SE¼ sec.1, T.40 N., R.116 W., Teton County, Teton National Forest, on right bank 0.7 mi (1.1 km) upstream from Salt Lick Draw, 2.4 mi (3.9 km) southeast of Jackson, and 4.0 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--10 mi² (26 km²), approximately.

PERIOD OF RECORD.--June 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,750 ft (2,057 m), from topographic map.

AVERAGE DISCHARGE.--11 years, 14.3 ft³/s (0.405 m³/s), 10,360 acre-ft/yr (12.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 46 ft³/s (1.30 m³/s) May 20, gage height, 3.29 ft (1.003 m); maximum gage height, 3.38 ft (1.030 m) Nov. 24 (backwater from ice); minimum daily discharge, 3.8 ft³/s (0.11 m³/s) Feb. 15.

Period of record: Maximum discharge, 225 ft³/s (6.37 m³/s) June 24, 1971, gage height, 3.90 ft (1.189 m); maximum gage height, 3.97 ft (1.210 m) June 7, 1972; minimum daily discharge, 2.7 ft³/s (0.076 m³/s) Jan. 5, 1971.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. No diversion above station. Water-quality records for the current year 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	8.4	7.0	5.4	5.5	4.7	5.0	4.0	5.2	37	22	10	7.4
2	8.4	7.2	5.4	5.4	4.7	4.9	4.1	5.2	37	21	9.9	7.4
3	8.4	7.4	5.4	5.2	4.6	4.9	4.1	5.4	34	20	9.9	7.1
4	8.4	7.4	5.1	5.1	4.4	5.0	4.3	5.9	30	19	10	7.1
5	11	7.4	4.9	4.9	4.3	5.3	4.3	6.6	29	19	9.9	6.8
6	8.8	7.4	5.1	5.1	4.3	5.2	4.3	8.4	29	18	9.9	6.8
7	8.4	7.1	5.3	5.3	4.1	4.8	4.1	9.5	31	17	9.9	6.8
8	8.4	7.1	5.1	5.5	4.0	4.8	4.0	9.9	33	17	9.9	7.4
9	8.4	7.1	4.9	5.4	4.0	4.9	4.0	9.9	35	16	9.5	7.1
10	12	7.1	5.0	5.4	4.1	5.0	4.1	11	35	15	9.5	7.1
11	9.5	6.8	5.2	5.4	4.1	5.1	4.3	12	34	15	9.5	7.1
12	9.1	6.8	5.7	5.4	4.1	5.1	4.5	14	31	14	9.1	6.8
13	8.8	6.8	6.0	5.2	4.1	5.0	4.7	16	30	14	8.8	6.5
14	8.8	6.8	6.3	5.2	3.9	5.0	4.7	17	31	13	8.8	6.2
15	8.8	6.8	6.6	5.2	3.8	4.9	4.9	19	30	12	8.4	6.2
16	8.8	6.5	6.8	4.9	3.9	4.8	4.5	22	30	12	8.4	6.2
17	8.4	6.5	7.1	4.9	4.0	4.7	4.5	26	30	12	8.4	5.9
18	8.4	6.5	6.8	4.9	3.9	4.6	4.5	29	28	12	8.4	5.9
19	8.1	6.5	6.5	4.9	3.9	4.5	4.5	33	27	13	8.1	5.9
20	8.4	6.5	6.5	4.8	3.9	4.4	4.5	41	26	14	8.1	5.9
21	8.4	6.2	6.2	4.7	3.9	4.5	4.3	40	25	13	7.7	5.9
22	8.1	5.9	6.2	4.6	4.0	4.6	4.3	37	26	13	8.1	5.9
23	8.1	5.6	6.2	4.5	4.1	4.5	4.5	37	26	12	8.1	6.5
24	8.1	5.2	6.2	4.7	4.3	4.4	4.7	37	26	12	7.4	6.8
25	7.7	5.5	6.2	4.8	4.6	4.3	4.5	42	25	12	7.4	6.2
26	7.7	5.3	5.9	5.0	4.8	4.2	4.7	38	25	12	7.1	5.7
27	7.7	4.9	5.9	4.9	5.2	4.3	5.2	33	25	11	7.1	5.7
28	7.1	4.6	5.9	4.8	5.1	4.5	5.7	30	24	12	7.1	5.7
29	6.8	4.6	5.9	4.7	-----	4.3	5.7	30	24	12	6.8	5.4
30	6.5	5.2	6.0	4.7	-----	4.2	5.4	30	23	11	6.8	5.4
31	6.7	-----	5.7	4.7	-----	4.1	-----	31	-----	11	6.8	-----
TOTAL	260.6	191.9	181.4	155.7	114.8	145.8	135.9	691.2	876	446	264.8	192.8
MEAN	8.41	6.40	5.85	5.02	4.24	4.70	4.53	22.3	29.2	14.4	8.54	6.43
MAX	12	7.4	7.1	5.5	5.2	5.3	5.7	42	37	22	10	7.4
MIN	6.5	4.6	4.9	4.5	3.8	4.1	4.0	5.2	23	11	6.8	5.4
AC=FT	517	381	360	309	236	289	270	1,370	1,740	885	525	382

CAL YR 1972 TOTAL 7,058.6 MEAN 19.3 MAX 148 MIN 4.0 AC=FT 14,000
WTR YR 1973 TOTAL 3,660.9 MEAN 10.0 MAX 42 MIN 3.8 AC=FT 7,260

PEAK DISCHARGE (BASE, 52 FT³/S)--No peak above base.

NOTE.--No gage-height record Feb. 23 to Apr. 2.

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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).

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 ft³/s (128.8 m³/s), 3,296,000 acre-ft/yr (4,060 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 14,700 ft³/s (416 m³/s) June 11, gage height, 8.30 ft (2.530 m); minimum daily, 1,400 ft³/s (39.6 m³/s) Jan. 5.

Period of record: Maximum discharge, 26,800 ft³/s (759 m³/s) June 28, 1954, gage height, 11.68 ft (3.560 m); minimum, 740 ft³/s (21.0 m³/s) Nov. 16, 1955, gage height, 2.19 ft (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. Chemical analyses for the current year are published in Part 2 of this report.

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	1,630	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	7,230	8,060	5,390	3,920	3,690
25	2,920	1,890	1,780	1,620	1,660	1,590	2,340	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	3,030	8,790	9,140	4,970	3,590	2,510
31	2,410	-----	1,650	1,680	-----	1,630	-----	9,070	-----</			

GREYS RIVER BASIN

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 mi² (1,160 km²). Mean altitude, 8,080 ft (2,460 m).

PERIOD OR 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 ft³/s (18.46 m³/s), 19.76 in/yr (502 mm/yr), 472,400 acre-ft/yr (582 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,550 ft³/s (72.2 m³/s) May 20, gage height, 4.59 ft (1.399 m); minimum daily, 200 ft³/s (5.66 m³/s) Dec. 10.

Period of record: Maximum discharge observed, 7,230 ft³/s (205 m³/s) June 19, 1971, gage height, 6.33 ft (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 ft³/s (3.14 m³/s) Dec. 7, 1960, gage height, 2.45 ft (0.747 m), former site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Less than 500 acres (2.02 km²) 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 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
5-20	2000	4.59	2,550
6-10	unknown	unknown	2,500

13025000 SWIFT CREEK NEAR AFTON, WYO.

LOCATION.--Lat 42°43'30", long 110°54'00", in SE¼ sec.29, T.32 N., R.118 W., Lincoln County, Bridger National Forest, on right bank 1.0 mi (1.6 km) upstream from mouth of canyon, 1.5 mi (2.4 km) east of Afton, and 4.5 mi (7.2 km) upstream from mouth.

DRAINAGE AREA.--27.4 mi² (71.0 km²).

PERIOD OF RECORD.--October 1942 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Altitude of gage is 6,420 ft (1,957 m), from topographic map.

AVERAGE DISCHARGE.--29 years (1942-71), 86.9 ft³/s (2.461m³/s), 62,960 acre-ft/yr (77.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 514 ft³/s (14.6 m³/s) June 10, gage height, 3.53 ft (1.076 m); minimum daily during period of operation, 44 ft³/s (1.24 m³/s) May 2, 3.

Period of record: Maximum discharge, 775 ft³/s (21.9 m³/s) June 30, 1957, gage height, 3.52 ft (1.073 m); maximum gage height, 3.73 ft (1.137 m) June 17, 1971; minimum daily discharge, 20 ft³/s (0.57 m³/s) Dec. 30, 1958.

REMARKS.--Records poor. Small powerplant and reservoir, adjudication, 48.45 acre-ft/yr (0.060 hm³/yr), 0.2 mi (0.3 km) upstream. Pipeline, adjudication, 2.5 ft³/s (0.071 m³/s), diverts water above station for town of Afton. No diversion for irrigation above station.

COOPERATION.--Records collected and computed by Office of the Wyoming State Engineer and reviewed by Geological Survey.

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								45	244	258	76	65
2								44	296	221	76	67
3								44	247	209	76	65
4								45	215	206	78	64
5								48	200	206	77	64
6								51	221	200	78	64
7								54	280	193	83	64
8								58	384	178	82	67
9								60	433	170	80	65
10								60	473	160	80	65
11								61	453	158	76	64
12								64	380	156	74	64
13								74	366	143	72	62
14								85	371	128	71	64
15								101	366	113	70	64
16								123	272	110	70	62
17								158	224	106	71	61
18								203	200	99	71	61
19								244	173	97	70	61
20								247	160	101	68	61
21								244	163	97	68	60
22								218	198	93	70	60
23								215	240	91	70	61
24								218	264	89	68	64
25								258	261	85	67	64
26								230	288	83	65	62
27								203	296	82	67	62
28								183	296	80	65	62
29					-----			176	284	80	64	65
30					-----			173	268	78	64	57
31		-----			-----		-----	203	-----	77	64	-----
TOTAL								4,190	8,516	4,147	2,231	1,901
MEAN								135	284	134	72.0	63.4
MAX								258	473	258	83	67
MIN								44	160	77	64	60
AC-FT								8,310	16,890	8,230	4,430	3,770

PEAK DISCHARGE (BASE, 390 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
6-10	0140	3.53	514

SALT RIVER BASIN

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 mi² (2,147 km²).

PERIOD OR 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 ft³/s (21.38 m³/s), 547,000 acre-ft/yr (674 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,250 ft³/s (63.7 m³/s) May 21, gage height, 4.76 ft (1.268 m); minimum, 409 ft³/s (11.6 m³/s) Dec. 10, 16, gage height, 1.96 ft (0.597 m).

Period of record: Maximum discharge, 3,870 ft³/s (110 m³/s) June 1, 1971, gage height, 5.30 ft (1.615 m); minimum, 160 ft³/s (4.53 m³/s) Jan. 7, 8, 1971, gage height, 1.53 ft (0.466 m).

REMARKS.--Records excellent. Diversions above station for power developments, industry, municipal supply, and irrigation of about 60,500 acres (245 km²), of which about 1,000 acres (4.05 km²) are below station (1966 determination). For details on adjudication of diversions, see REMARKS for this station in WSP 1347. Chemical analyses for the current year 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	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	1,030	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	591	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	2,130	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	1,230	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	1,230	2,180	1,290	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	2,130	MIN	414	AC-FT	524,900		

HENRYS FORK BASIN

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Small Reservoir in Henrys Fork basin

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 mi² (26.9 km²), 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 hm³) June 23, elevation, 7,210.35 ft (2,197.715 m); minimum contents observed, 9,530 acre-ft (11.8 hm³) Oct. 12, elevation, 7,190.25 ft (2,191.588 m). Period of record: Maximum contents observed, 15,446 acre-ft (19.0 hm³) July 2, 1943, elevation, 7,210.85 ft (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 hm³) between elevations 7,135.0 ft (2,174.75 m), sill of trashrack, and 7,210.0 ft (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

DATE	ELEVATION (FEET)	CONTENTS (ACRE- FEET)	CHANGE IN CONTENTS (ACRE-FEET)
SEPT. 30	---	a9,500	---
OCT. 31	7,190.70	9,650	+150
NOV. 30	7,191.35	9,820	+170
DEC. 31	---	a10,100	+280
CALENDAR YEAR 1972.	---	---	-3,400
JAN. 31	---	a10,300	+200
FEB. 28	7,193.75	10,500	+200
MAR. 31	---	a10,600	+100
APR. 30	7,194.90	10,800	+200
MAY 31	---	a13,100	+2,300
JUNE 30	---	a15,200	+2,100
JULY 31	---	a12,000	-3,200
AUG. 31	---	a9,610	-2,390
SEPT 30	---	a9,700	+90
WATER YEAR 1973	---	---	+200

a No gage-height record.

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. For some stations designated by the symbol S following the station name, a graphic record is obtained of stage and of rainfall. 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, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. 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)	Dis-charge (cfs)
Yellowstone River basin							
06218700	Wagon Gulch near Dubois, Wyo.	Lat 43°34'42", long 109°44'13", in NE¼NE¼ sec.30, T.42 N., R.107 W., Fremont County, 600 ft upstream from U.S. Highways 26 and 287 and 6.2 miles northwest of Dubois. Prior to Oct. 1, 1970, at site 600 ft downstream at different datum.	4.89	1961-73	8- 4-73	15.26	82
06223700	Sand Draw near Crowheart, Wyo.	Lat 43°15'50", long 109°05'05", in NE¼SW¼ sec.2, T.3 N., R.3 W., Fremont County, Wind River Indian Reservation, at culvert on U.S. Highway 26 and 6.3 miles southeast of Crowheart.	12.8	1961-73	1973		(a)
06223800	Wind River tributary No. 2 near Crowheart, Wyo.	Lat 43°14'18", long 109°01'52", in SE¼NE¼ sec.18, T.3 N., R.2 W., Fremont County, Wind River Indian Reservation, at culvert on U.S. Highway 26 and 9.6 miles southeast of Crowheart.	3.16	1961-73	5-25-73	(b)	c3
06226200	Little Dry Creek near Crowheart, Wyo.	Lat 43°32'10", long 109°05'20", in SW¼ sec.35, T.7 N., R.3 W., Fremont County, Wind River Indian Reservation, 800 ft upstream from Blue Draw Road and 16.5 miles north of Crowheart. Prior to June 16, 1965, at site 800 ft downstream at different datum.	10.5	1961-73	8- 4-73	6.04	731
06226300	Dry Creek near Crowheart, Wyo.	Lat 43°23'40", long 109°02'25", in NW¼SE¼ sec.19, T.5 N., R.2 W., Fremont County, Wind River Indian Reservation, on left bank 9.7 miles northeast of Crowheart.	97.9	1959, 1961-73	7-20-73	10.02	510
06229700	Norkok Meadows Creek near Fort Washakie, Wyo.	Lat 43°04'56", long 108°54'12", in NE¼NW¼ sec.8, T.1 N., R.1 W., Fremont County, Wind River Indian Reservation, 100 ft downstream from culvert on U.S. Highway 287 and 5.5 miles north of Fort Washakie.	15.4	1965-73	7-13-73	7.65	186
06229800	Sand Draw near Fort Washakie, Wyo.	Lat 43°03'42", long 108°54'44", in NE¼SE¼ sec.18, T.1 N., R.1 W., Fremont County, Wind River Indian Reservation, at culvert on U.S. Highway 287 and 4.3 miles north of Fort Washakie.	.99	1961-73	7-19-73	d4.95	15
06229900	Trout Creek near Fort Washakie, Wyo.	Lat 42°57'04", long 108°56'54", in NW¼NW¼ sec.25, T.1 S., R.2 W., Fremont County, Wind River Indian Reservation, 100 ft upstream from Blue Trail and 5.0 miles southwest of Fort Washakie. Prior to Oct. 1, 1968, at site 100 ft downstream at same datum.	16.1	1961-68, 1970-73	5-25-73	6.10	115
06231600	Middle Popo Agie River below The Sinks, near Lander, Wyo.	Lat 42°45'27", long 108°47'52", in SW¼NW¼SW¼ sec.9, T.32 N., R.100 W., Fremont County, on left bank 0.2 mile upstream from Sawmill Creek, 1.2 miles downstream from The Sinks, and 6.5 miles southwest of Lander.	87.5	1960-68, 1969-73	6-11-73	5.55	1,340
06233360	Monument Draw at lower station, near Hudson, Wyo. S	Lat 42°49'15", long 108°34'59", in SW¼NW¼ sec.21, T.33 N., R.98 W., Fremont County, on left bank 225 ft upstream from dirt road crossing and 5.8 miles south of Hudson.	8.38	1965-73	9-10-73	5.27	387

See footnotes at end of table, p. 229

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Yellowstone River basin--Continued							
06234800	Bobcat Draw near Sand Draw, Wyo.	Lat 42°49'34", long 108°13'18", in NW¼NW¼ sec.21, T.33 N., R.95 W., Fremont County, about 500 ft upstream from culvert on Sand Draw Road, 0.3 mile upstream from mouth, and 5.0 miles north of Sand Draw.	e2.89	1969, 1971-73	5-19-73	6.26	93
06235700	Haymaker Creek near Riverton, Wyo. (station discontinued)	Lat 43°04'54", long 108°22'46", in NW¼NW¼ sec.11, T.1 N., R.4 E., Fremont County, Wind River Indian Reservation, at culvert on U.S. Highway 26 and 4.0 miles north of Riverton. Prior to Oct. 1, 1964, gage at different datum.	9.52	1961-64, 1966-73	9- 8-73	15.13	1,170
06236000	Kirby Draw near Riverton, Wyo.	Lat 43°05'29", long 108°16'06", in NW¼SE¼ sec.3, T.1 N., R.5 E., Fremont County, Wind River Indian Reservation, on left bank 1.5 miles upstream from mouth and 7.0 miles northeast of Riverton.	129	1951-53 [†] , 1961-73	9- 2-73	4.77	520
06238760	West Fork Dry Cheyenne Creek at upper station, near Riverton, Wyo. S	Lat 42°57'12", long 108°06'16", in NE¼NW¼ sec.4, T.34 N., R.94 W., Fremont County, on left bank 45 ft upstream from dim trail, 2.2 miles south of Ohio Road, and about 14 miles east of Riverton.	.69	1965-73	9- 2-73	1.80	34
06238780	West Fork Dry Cheyenne Creek tributary near Riverton, Wyo. S (station discontinued)	Lat 42°58'03", long 108°06'12", in SE¼NW¼ sec.33, T.35 N., R.94 W., Fremont County, on left bank 1.3 miles south of Ohio Road and 14 miles east of Riverton.	1.85	1965-72			
06255190	Dead Man Gulch near Lysite, Wyo. S (station discontinued)	Lat 43°10'58", long 107°46'50", in SW¼SE¼ sec.8, T.37 N., R.91 W., Fremont County, on right bank 0.5 mile upstream from U.S. Highways 20 and 26 and 7.7 miles southwest of Lysite.	4.11	1965-73	9- 8-73	d1.62	(+)
06255300	Poison Creek tributary near Shoshoni, Wyo.	Lat 43°13'26", long 107°59'59", in NW¼NE¼ sec.33, T.38 N., R.93 W., Fremont County, at culvert on old U.S. Highways 20 and 26 and 5.2 miles east of Shoshoni.	.39	1959-73	9- 2-73	7.49	158
06256600	Red Creek near Arminto, Wyo.	Lat 43°14'44", long 107°19'38", in SW¼SE¼ sec.19, T.38 N., R.87 W., Natrona County, at culvert on Lost Cabin-Arminto Road and 5.9 miles northwest of Arminto.	7.15	1963-73	7-23-73	6.86	97
06256670	Badwater Creek tributary near Lysite, Wyo. S (station discontinued)	Lat 43°15'30", long 107°42'55", in NE¼SE¼ sec.14, T.38 N., R.91 W., Fremont County, on left bank 0.2 miles upstream from dim road and 1.5 miles southwest of Lysite.	5.86	1965-73	9- 8-73	d2.22	170
06256700	South Bridger Creek near Lysite, Wyo.	Lat 43°26'40", long 107°45'22", in SE¼SE¼ sec.9, T.40 N., R.91 W., Fremont County, 600 ft downstream from bridge on Bridger Creek Road and 12.5 miles northwest of Lysite. Prior to Oct. 1, 1968, at site 600 ft upstream at different datum.	10.0	1960-73	7-20-73	9.60	540
06257300	Shotgun Creek tributary near Pavillion, Wyo.	Lat 43°27'35", long 108°44'37", in SW¼SE¼ sec.27, T.6 N., R.1 E., Fremont County, Wind River Indian Reservation, at bridge on dirt road, about 1 mile west of Shotgun Butte, and 15.2 miles north of Pavillion.	2.57	1961-73	8- 4-73	6.17	(+)

See footnotes at end of table, p. 229

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Yellowstone River basin--Continued							
06265200	Sand Draw near Thermopolis, Wyo.	Lat 43°48'30", long 108°28'00", in SW¼ sec.2, T.44 N., R.97 W., Hot Springs County, at culvert on State Highway 120 and about 17 miles northwest of Thermopolis.	6.33	1960-73	9- 8-73	7.40	390
06265600	Tie Down Gulch near Worland, Wyo.	Lat 43°53'15", long 108°07'45", in NW¼NW¼ sec.10, T.45 N., R.94 W., Washakie County, at culvert on U.S. Highway 20 and 12.3 miles southwest of Worland.	1.78	1961-73	9- 8-73	5.27	66
06266320	Gillies Draw tributary near Grass Creek, Wyo. S (station discontinued)	Lat 44°04'53", long 108°34'52", in SE¼SW¼ sec.35, T.48 N., R.98 W., Park County, on left bank 120 ft northwest of jeep road and 10.4 miles north of Grass Creek.	1.30	1965-73	5- 1-73	d.61	1.8
06266460	Murphy Draw near Grass Creek, Wyo. S	Lat 44°00'52", long 108°30'08", in SE¼NW¼ sec.28, T.47 N., R.97 W., Hot Springs County, on left bank 0.4 mile upstream from State Secondary Highway 2200 and 8.9 miles northeast of Grass Creek.	2.32	1965-73	9- 8-73	d2.56	28
06267260	North Prong East Fork Nowater Creek near Worland, Wyo. S	Lat 43°57', long 107°49', in SW¼SE¼ sec.18, T.46 N., R.91 W., Washakie County, on right bank 0.3 mile upstream from South Fork-Sand Creek Oil Field Road and 8.7 miles southeast of Worland.	f3.8	1965-73	9- 8-73	4.97	243
06267270	North Prong East Fork Nowater Creek tributary near Worland, Wyo. S (station discontinued)	Lat 43°57', long 107°49', in NW¼NE¼ sec.19, T.46 N., R.91 W., Washakie County, on right bank about 1,000 ft upstream from mouth, 0.3 mile north of South Fork-Sand Creek Oil Field Road, and 8.9 miles southeast of Worland.	f2.1	1965-73	9- 8-73	2.80	34
06268500	Fifteen Mile Creek near Worland, Wyo.	Lat 44°01'14", long 108°00'42", in NW¼NW¼NE¼ sec.27, T.47 N., R.93 W., Washakie County, on left bank 300 ft upstream from Bighorn Canal spillway, 2.0 miles upstream from mouth, and 2.8 miles west of Worland.	518	1951-72 [‡] 1973	9- 8-73	3.55	460
06269700	Spring Creek near Ten Sleep, Wyo.	Lat 43°57'30", long 107°23'20", in NE¼NE¼ sec.14, T.46 N., R.88 W., Washakie County, at culvert on paved road and 6.0 miles southeast of Ten Sleep.	57.9	1961-73	5-18-73	d4.78	86
06269750	Nowood River tributary near Ten Sleep, Wyo.	Lat 43°58'30", long 107°23'20", in NE¼NE¼ sec.11, T.46 N., R.88 W., Washakie County, at culvert on paved county road and 5.1 miles southeast of Ten Sleep.	.42	1960-73	7-22-73	6.24	34
06270200	Leigh Creek near Ten Sleep, Wyo.	Lat 44°09'49", long 107°09'14", in NW¼NE¼ sec.2, T.48 N., R.86 W., Washakie County, Bighorn National Forest, at culvert on Forest Service road, 1.4 miles west of Washakie-Johnson County line, and 16.9 miles northeast of Ten Sleep. Prior to Oct. 1, 1970, at site 0.4 mile downstream at different datum.	2.54	1961-73	5-18-73	15.55	(+)
06270300	Canyon Creek tributary near Ten Sleep, Wyo.	Lat 44°09'40", long 107°06'30", in SE¼NW¼ sec.5, T.48 N., R.85 W., Johnson County, Bighorn National Forest, at culvert on U.S. Highway 16, 1.1 miles east of Washakie-Johnson County line, and 19.2 miles northeast of Ten Sleep.	.52	1961-73	6- 1-73	6.82	28

See footnotes at end of table, p. 229

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Yellowstone River basin--Continued							
06274190	Nowood River tributary No. 2 near Basin, Wyo. S	Lat 44°16'42", long 107°54'33", in SE½NE½ sec.28, T.50 N., R.92 W., Big Horn County, on right bank 0.2 mile upstream from State Secondary Highway 0201, 2.7 miles east of Manderson, and 9.3 miles southeast of Basin.	1.51	1965-73	8-22-73	0.94	14
06274250	Elk Creek near Basin, Wyo.	Lat 44°18'30", long 108°01'50", in NE½ sec.16, T.50 N., R.93 W., Big Horn County, at bridge on Orchard Bench Road and 5.1 miles south of Basin.	96.9	1959-73	9- 8-73	7.57	1,000
06277700	Twentyfour Mile Creek near Emblem, Wyo.	Lat 44°27'32", long 108°36'30", in SE½SW½ sec.23, T.52 N., R.98 W., Park County, at bridge on U.S. Highways 14 and 20 and 10.0 miles southwest of Emblem.	12.8	1960-73	9- 1-73	4.07	41
06277750	Dry Creek tributary near Emblem, Wyo.	Lat 44°27'42", long 108°34'12", in NW½SW½ sec.19, T.52 N., R.97 W., Big Horn County, at culvert on U.S. Highways 14 and 20 and 8.8 miles southwest of Emblem.	.65	1960-68, 1970-73	9- 1-73	4.09	43
06278400	Granite Creek near Shell Creek ranger station, near Shell, Wyo. (Formerly published as Granite Creek near Shell ranger station, near Shell, Wyo.)	Lat 44°34'32", long 107°32'52", Big Horn County, Bighorn National Forest, at culvert on U.S. Highway 14, 3.0 miles northwest of Shell Creek ranger station, and 11.8 miles east of Shell.	11.1	1961-73	6- 9-73	7.56	245
06279020	Red Gulch near Shell, Wyo.	Lat 44°32'04", long 107°50'06", in NE½NW½ sec.32, T.53 N., R.91 W., Big Horn County, 0.2 mile downstream from bridge on old section of U.S. Highway 14, 0.3 mile upstream from mouth, and 2.7 miles west of Shell. Prior to Oct. 1, 1971, at site 400 ft upstream at different datum.	47.8	1967, 1970-73	6-15-73	7.57	(+)
06279700	Willow Creek near Kane, Wyo.	Lat 44°49'49", long 108°09'08", in NW½SE½ sec.15, T.56 N., R.94 W., Big Horn County, at culvert on U.S. Highway 14 Alternate and 2.6 miles southeast of Kane.	14.0	1961-73	6- 2-73	4.39	21
06279950	Trout Creek near Wapiti, Wyo.	Lat 44°29'10", long 109°20'55", in NE½NW½ sec.15, T.52 N., R.104 W., Park County, at culvert on U.S. Highways 14 and 20 and 4.5 miles east of Wapiti.	49.4	1961-73	5-18-73	2.19	(+)
06282700	Cottonwood Creek tributary near Cody, Wyo. (station discontinued)	Lat 44°36'00", long 109°07'50", in NE½SW½ sec.3, T.53 N., R.102 W., Park County, at culvert on State Highway 120 and 6.3 miles northwest of Cody.	.76	1961-73	8-11-73	16.28	314
06296700	Big Willow Creek near Dayton, Wyo. (station discontinued)	Lat 44°45'58", long 107°32'25", in NW½NE½ sec.11, T.55 N., R.89 W., Sheridan County, Bighorn National Forest, on right bank 240 ft downstream from culvert on U.S. Highway 14 and 15.6 miles southwest of Dayton.	7.08	1961-73	6- 9-73	5.60	(+)
06299900	Slater Creek near Monarch, Wyo.	Lat 44°54'32", long 107°02'49", in SE½SW½ sec.18, T.57 N., R.84 W., Sheridan County, 30 ft upstream from bridge on U.S. Highways 14 and 87, 0.2 mile upstream from mouth, and 0.9 mile northwest of Monarch.	18.0	1967-73	4- -73	56.34	(+)

See footnotes at end of table, p. 229

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Yellowstone River basin--Continued							
06312700	South Fork Powder River near Powder River, Wyo.	Lat 43°02'00", long 107°01'00", in SE¼NW¼ sec.3, T.35 N., R.85 W., Natrona County, at bridge on U.S. Highways 20 and 26 and 1.6 miles west of Powder River.	262	1961-73	9-11-73	8.52	1,200
06312795	Sanchez Creek above reservoir, near Arminto, Wyo.	Lat 43°20'23", long 107°10'48", in NE¼NE¼ sec.20, T.39 N., R.86 W., Natrona County, 0.9 mile upstream from Buffalo Creek Road, 1.0 mile upstream from mouth, and 12.3 miles northeast of Arminto.	5.53	1970-73	6-10-73	14.69	13
06312800	Sanchez Creek near Arminto, Wyo.	Lat 43°20'07", long 107°09'58", in NW¼SE¼ sec.21, T.39 N., R.86 W., Natrona County, on right bank about 200 ft upstream from Buffalo Creek Road and 12.3 miles northeast of Arminto. (Peaks after 1969 affected by small stockwater reservoir 0.2 mile upstream).	5.95	1961-73	5-26-73	d4.3	f24
06313020	Bobcat Creek near Edgerton, Wyo. S	Lat 43°11'55", long 106°05'25", in NW¼NW¼ sec.10, T.37 N., R.77 W., Natrona County, on left bank about 300 ft upstream from jeep road, about 600 ft south of Seven L Ranch Headquarters, and 16.7 miles southeast of Edgerton.	8.29	1965-73	9-11-73	4.62	1,060
06313030	Coopers Draw near Edgerton, Wyo. S (station discontinued)	Lat 43°11'10", long 106°07'20", in SE¼SW¼ sec.8, T.37 N., R.77 W., Natrona County, on right bank 1.5 miles southwest of Seven L Ranch Headquarters and 16.8 miles southeast of Edgerton.	1.11	1965-73	9-11-73	.41	5.1
06313040	Seven L Creek near Edgerton, Wyo. S (station discontinued)	Lat 43°12'45", long 106°08'10", in NE¼NE¼ sec.6, T.37 N., R.77 W., Natrona County, on left bank about 2,000 ft east of Allemand Ranch Headquarters and 14.9 miles southeast of Edgerton.	7.10	1965-73	9-11-73	1.61	124
06313050	East Teapot Creek near Edgerton, Wyo.	Lat 43°10'50", long 106°12'40", in SE¼NE¼ sec.16, T.37 N., R.78 W., Natrona County, on right bank about 2 miles southwest of light duty road and 16.2 miles southeast of Edgerton.	5.44	1965-73	1973	(b)	(b)
06313100	Coal Draw near Midwest, Wyo.	Lat 43°27'00", long 106°14'00", in NE¼SE¼ sec.8, T.40 N., R.78 W., Natrona County, at bridge on State Highway 387 and 3.4 miles northeast of Midwest.	11.4	1961-73	9- 2-73	6.95	308
06313180	Dugout Creek tributary near Midwest, Wyo.	Lat 43°26', long 106°25', in NE¼NW¼ sec.14, T.40 N., R.80 W., Natrona County, on left bank 1.1 miles north of Smoky Gap Road and 6.5 miles west of Midwest.	.71	1965-73	5-26-73	d2.3	96
06313630	Van Houghton Draw near Buffalo, Wyo.	Lat 44°10'40", long 106°07'25", in NE¼ sec.33, T.49 N., R.77 W., Johnson County, about 300 ft upstream from dirt road, 0.4 mile upstream from mouth, and 31 miles southeast of Buffalo.	10.8	1971-73	7-23-73	d11.46	2,720
06313900	Caribou Creek near Buffalo, Wyo.	Lat 44°10'40", long 106°55'10", in NW¼NW¼ sec.36, T.49 N., R.84 W., Johnson County, Bighorn National Forest, at culvert on U.S. Highway 16 and 15.8 miles southwest of Buffalo.	5.08	1961-73	5-18-73	6.24	112

See footnotes at end of table, p. 229

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Yellowstone River basin--Continued							
06316480	Headgate Draw at upper station, near Buffalo, Wyo. S (station discontinued)	Lat 44°31', long 106°10', in SW¼SE¼ sec.31, T.53 N., R.77 W., Johnson County, on left bank 1.5 miles up-stream from bridge on Crazy Woman Creek Road and about 29 miles north-east of Buffalo.	f1.1	1965-73	8-23-73	d0.94	34
06316490	Headgate Draw at lower station, near Buffalo, Wyo. S (station discontinued)	Lat 44°29', long 106°08', in SE¼SE¼ sec.8, T.52 N., R.77 W., Johnson County, on right bank 600 ft upstream from bridge on Crazy Woman Creek Road and about 29 miles northeast of Buffalo.	f2.6	1965-73	6-23-68 6-22-70 6-11-71 6-19-72 8-23-73	4.80 7.54 5.87 6.78 4.65	g24 g648 g125 g353 16
06316700	Powder River tributary near Buffalo, Wyo. S	Lat 44°30', long 106°08', in NE¼NW¼ sec.9, T.52 N., R.77 W., Johnson County, on right bank 0.5 mile up-stream from bridge on Crazy Woman Creek-Arvada Road and about 30 miles northeast of Buffalo.	f1.5	1965-73	9-11-73	.58	10
06317050	Spotted Horse Creek tributary near Spotted Horse, Wyo.	Lat 44°43'10", long 105°53'10", in NW¼NE¼ sec.28, T.55 N., R.75 W., Campbell County, at culvert on U.S. Highways 14 and 16 and 2.7 miles west of Spotted Horse.	4.28	1961-73	9- 2-73	9.76	195
06319100	Sand Creek near Buffalo, Wyo.	Lat 44°16'38", long 106°44'42", in SW¼NE¼ sec.29, T.50 N., R.82 W., Johnson County, 3.5 miles upstream from bridge on U.S. Highway 87 and 5.5 miles southwest of Buffalo.	10.8	1969-73	10- 5-72	4.56	35
06324800	Little Powder River tributary near Gillette, Wyo.	Lat 44°26'50", long 105°27'40", in NE¼ sec.36, T.52 N., R.72 W., Campbell County, 145 ft upstream from culvert on State Secondary Highway 0301 and 10.6 miles north of Gillette. Prior to Oct. 1, 1969, at site 125 ft downstream at same datum.	.81	1960-73	4-23-73	7.65	20
06324900	Little Powder River tributary No. 2 near Gillette, Wyo.	Lat 44°31'00", long 105°26'40", in NW¼ sec.6, T.52 N., R.71 W., Campbell County, at culvert on State Secondary Highway 0301 and 15.3 miles north of Gillette.	3.95	1959-73	4-23-73	6.04	118
06324910	Cow Creek tribu-tary near Weston, Wyo.	Lat 44°32'35", long 105°21'40", in SE¼ sec.26, T.53 N., R.71 W., Campbell County, at culvert on dirt road, about 0.4 mile upstream from mouth, and about 6.6 miles south of Weston.	.72	1971-73	4-19-73	6.20	61
Cheyenne River Basin							
06363700	Porcupine Creek near Turnercrest, Wyo.	Lat 43°37'40", long 105°28'00", in SW¼NE¼ sec.11, T.42 N., R.72 W., Campbell County, at bridge on State Highway 59 and 10.8 miles northeast of Turnercrest.	31.5	1959-73	1973		(a)
06378640	Lance Creek tributary near Lance Creek, Wyo. S(station discontinued)	Lat 43°10', long 104°37', in NE¼NE¼ sec.26, T.37 N., R.65 W., Niobrara County, on left bank 350 ft upstream from culvert on county road and 9.3 miles north of Lance Creek.	f1.2	1965-73	9- 8-73	1.00	27
06379600	Box Creek near Bill, Wyo.	Lat 43°06'20", long 105°15'35", in SW¼SE¼ sec.9, T.36 N., R.70 W., Converse County, on left bank 12 ft downstream from bridge on State High-way 59 and 8.8 miles south of Bill.	112	1956-58; 1959, 1961-73	4-30-73	5.27	235

See footnotes at end of table, p. 229

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
Cheyenne River basin--Continued							
06382200	Pritchard Draw near Lance Creek, Wyo.	Lat 43°12', long 104°41', in SW¼NE¼ sec.8, T.37 N., R.65 W., Niobrara County, on right bank 200 ft upstream from unmaintained road, 4.1 miles west of Lance Creek-Cow Creek Road, and 11.9 miles north of Lance Creek.	45.1	1965-73	9- 8-73	8.50	1,100
06385400	Cottonwood Creek at Hat Creek, Wyo.	Lat 42°56'15", long 104°21'55", in NE¼ sec.12, T.34 N., R.63 W., Niobrara County, at culvert on county road and 0.1 mile east of Hat Creek.	414.5	1972-73	1973		(a)
06387500	Turner Creek near Osage, Wyo.	Lat 44°01'10", long 104°30'10", in SW¼SE¼ sec.26, T.47 N., R.64 W., Weston County, at bridge on U.S. Highway 16 and 4.7 miles northwest of Osage.	47.8	1959-73	6- 2-73	11.57	820
06388800	Blacktail Creek tributary near Newcastle, Wyo.	Lat 43°47'53", long 104°10'52", in NE¼NE¼ sec.16, T.44 N., R.61 W., Weston County, at culvert on U.S. Highway 85 and 4.1 miles south of Newcastle.	.25	1960-73	8-22-73	7.29	55
06426195	Donkey Creek tributary above reservoir, near Gillette, Wyo.	Lat 44°16'57", long 105°25'38", in NW¼SW¼ sec.29, T.50 N., R.71 W., Campbell County, 0.1 mile upstream from culvert on U.S. Highways 14 and 16, 0.2 mile upstream from mouth, and 3.8 miles east of Gillette.	.2	1970-73	7-21-73	16.79	(+)
06426200	Donkey Creek tributary near Gillette, Wyo.	Lat 44°17'00", long 105°25'40", in SW¼NW¼ sec.29, T.50 N., R.71 W., Campbell County, at culvert on U.S. Highway 16 and 3.8 miles east of Gillette. (Peaks after 1968 affected by small stockwater reservoir 50 ft upstream.)	.28	1960-73	6-21-73	8.40	133
06427700	Inyan Kara Creek near Upton, Wyo.	Lat 44°13'45", long 104°26'45", in S½ sec.17, T.49 N., R.63 W., Crook County, at bridge on State Highway 116 and 13.0 miles northeast of Upton.	96.5	1959-73	1973	(i)	(b)
06427880	Barlow Creek near Devils Tower, Wyo.	Lat 44°39'00", long 104°41'53", in NW¼SW¼ sec.20, T.54 N., R.65 W., Crook County, at culvert on Tower Road, 1.8 miles downstream from Sawmill Gulch, and 4.1 miles north of Devils Tower.	21.9	1971-73	5-26-73	8.36	173
06428100	Belle Fourche River tributary No. 2 near Hulett, Wyo.	Lat 44°41'35", long 104°32'10", in SW¼SW¼ sec.3, T.54 N., R.64 W., Crook County, at culvert on State Highway 24 and 3.2 miles east of Hulett.	10.2	1962-73	4-19-73	1.35	(+)
06429300	Ogden Creek near Sundance, Wyo.	Lat 44°27'30", long 104°21'10", in SW¼SW¼ sec.30, T.52 N., R.62 W., Crook County, on left bank 225 ft upstream from bridge on Sundance-Farrall Road and 3.9 miles northeast of Sundance. Prior to 1967, station Nos. 06429299 and 06429300 published as separate stations.	8.42	1962-73	7-20-73	1.21	50

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Platte River basin							
06629100	Rattlesnake Creek near Walcott, Wyo.	Lat 41°41'56", long 106°37'34", in SE½SW¼ sec.16, T.20 N., R.82 W., Carbon County, at bridge on Overland Trail and 12.2 miles southeast of Walcott. Prior to Oct. 1, 1969, at site 20 ft upstream at same datum.	13.9	1962-73	5-11-73	5.78	140
06629150	Coal Bank Draw tributary near Walcott, Wyo.	Lat 41°44'05", long 106°43'18", in SE½NW¼ sec.3, T.20 N., R.83 W., Carbon County, on right bank 60 ft downstream from dirt road and 6.6 miles southeast of Walcott.	3.65	1962-73	8-12-73	7.73	113
06629200	Coal Bank Draw tributary No. 2 near Walcott, Wyo.	Lat 41°44'19", long 106°43'36", in NE½NE¼ sec.4, T.20 N., R.83 W., Carbon County, on left bank 6.3 miles southeast of Walcott.	2.41	1962-73	5-12-73	6.39	38
06629800	Coal Creek near Rawlins, Wyo.	Lat 41°45'44", long 107°16'07", in NW¼SW¼ sec.30, T.21 N., R.87 W., Carbon County, 0.2 mile upstream from State Secondary Highway 0402 and 2 miles southwest of Rawlins. Prior to June 25, 1970, at site 0.2 mile downstream at different datum.	7.34	1959-73	7-19-73	17.37	104
06629850	Delaney Draw near Red Desert, Wyo.	Lat 41°38'18", long 108°07'26", in NE¼ sec.8, T.19 N., R.95 W., Sweetwater County, 1 mile south of Red Desert and 1.3 miles upstream from culvert on Interstate Highway 80. Prior to Oct. 1, 1969, at site 1.2 miles downstream at different datum.	32.8	1961-73	4- -73	10.31	255
06630200	Big Ditch tributary near Hanna, Wyo.	Lat 41°51'45", long 106°31'35", in SE¼ sec.21, T.22 N., R.81 W., Carbon County, at culvert on U.S. Highway 30 and 2 miles southeast of Hanna.	7.42	1959-73	5-12-73	7.25	320
06630800	Bear Creek near Elk Mountain, Wyo.	Lat 41°39'11", long 106°20'41", in NE½NE¼ sec.2, T.19 N., R.80 W., Carbon County, at culvert on Elk Mountain-Arlington Road and 4.2 miles southeast of Elk Mountain.	8.93	1962-73	5-12-73	9.07	80
06631100	Wagonhound Creek near Elk Mountain, Wyo.	Lat 41°38'24", long 106°18'17", in NW¼NW¼ sec.8, T.19 N., R.79 W., Carbon County, at bridge on Elk Mountain-Arlington Road, 0.1 mile upstream from West Fork, and 6.4 miles southeast of Elk Mountain.	25.6	1962-73	5-19-73	7.81	350
06631140	Third Sand Creek tributary near Medicine Bow, Wyo. S (station discontinued)	Lat 41°45', long 106°19', in NE½NE¼ sec.32, T.21 N., R.79 W., Carbon County, on right bank about 50 ft upstream from mouth, 660 ft upstream from Third Sand Creek bridge on Medicine Bow-Elk Mountain Road, and 11.1 miles southwest of Medicine Bow.	.78	1965-73	9-11-73	1.77	84
06631150	Third Sand Creek near Medicine Bow, Wyo. S	Lat 41°45', long 106°19', in SE½SE¼ sec.29, T.21 N., R.79 W., Carbon County, on right bank 60 ft upstream from bridge on Medicine Bow-Elk Mountain Road and 11.0 miles southwest of Medicine Bow.	10.8	1965-73	9-12-73	4.38	526
06632600	Threemile Creek near Arlington, Wyo.	Lat 41°33'18", long 106°10'19", in SW¼SW¼ sec.4, T.18 N., R.78 W., Carbon County, 1.7 miles upstream from Canon ditch crossing and 3.3 miles southeast of Arlington.	6.31	1962-73	5-19-73	5.04	99

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Platte River basin--Continued							
06632700	Onemile Creek near Arlington, Wyo.	Lat 41°35'08", long 106°11'26", in SW¼SW¼ sec.29, T.19 N., R.78 W., Carbon County, 200 ft upstream from bridge on Overland Trail and 1.2 miles southeast of Arlington.	3.59	1962-73	5-19-73	2.00	(+)
06634200	Sheep Creek near Marshall, Wyo.	Lat 42°16'48", long 105°53'06", in NW¼SW¼ sec.30, T.27 N., R.75 W., Albany County, 500 ft downstream from culverts on Marshall Road and 2.4 miles southwest of Marshall. Prior to Oct. 1, 1969, at site 500 ft upstream at different datum.	61.0	1961-73	5-23-72 5-12-73	6.79 7.22	680 880
06634300	Sheep Creek near Medicine Bow, Wyo.	Lat 42°07'48", long 106°00'19", in NW¼NW¼ sec.19, T.25 N., R.76 W., Albany County, at bridge on Marshall Road and 19.5 miles northeast of Medicine Bow.	174	1961-73	5-12-73	9.88	1,120
06634910	Medicine Bow River tributary near Hanna, Wyo. S	Lat 42°00'32", long 106°29'32", in SE¼NW¼ sec.35, T.24 N., R.81 W., Carbon County, on left bank 0.2 mile upstream from dirt road, 1.0 mile east of North Road, and 10.2 miles north-east of Hanna.	3.01	1965-73	9-10-73	5.68	748
06634950	Willow Springs Draw tributary near Hanna, Wyo. S (station discontinued)	Lat 41°58'30", long 106°31'50", in NE¼SW¼ sec.9, T.23 N., R.81 W., Carbon County, on left bank 0.1 mile upstream from culvert on North Road and 7.5 miles north of Hanna.	1.98	1965-73	9-11-73	3.28	85
06638100	Sweetwater River at Sweetwater Station, near Lander, Wyo. (station discontinued)	Lat 42°32'30", long 108°10'46", in SE¼SW¼ sec.27, T.30 N., R.95 W., Fremont County, at bridge on U.S. Highway 287, 1.2 miles downstream from Crooked Creek, and 34 miles southeast of Lander	889	1965-73	5-20-73	9.70	1,700
06638300	West Fork Crooks Creek near Jeffrey City, Wyo.	Lat 42°20'56", long 107°51'45", in SE¼SW¼ sec.31, T.28 N., R.92 W., Fremont County, at culvert on dirt road and 10.1 miles south of Jeffrey City.	11.6	1961-73	5-20-73	5.67	97
06638350	Coal Creek near Muddy Gap, Wyo.	Lat 42°20'23", long 107°28'02", in NE¼SE¼ sec.4, T.27 N., R.89 W., Carbon County, 500 ft upstream from culvert on U.S. Highway 287 and 1.0 mile southwest of Muddy Gap. Prior to Oct. 1, 1970, at site 500 ft downstream at different datum.	6.08	1961-73	5- 3-73	17.23	250
06641400	Bear Springs Creek near Alcova, Wyo.	Lat 42°31'57", long 106°41'56", in SE¼SE¼ sec.30, T.30 N., R.82 W., Natrona County, 250 ft upstream from culvert on Kortess Road and 1.6 miles southeast of Alcova. Prior to Oct. 1, 1970, at site 250 ft downstream at same datum.	9.33	1960-73	4- -73	13.35	350
06642700	Lawn Creek near Alcova, Wyo.	Lat 42°29'21", long 106°27'28", in SW¼SW¼ sec.8, T.29 N., R.80 W., Natrona County, at bridge on State Highway 487 and 13.9 miles southeast of Alcova.	11.5	1961-73	4-20-73	5.97	125
06642760	Stinking Creek near Alcova, Wyo.	Lat 42°32'31", long 106°27'32", in SE¼NE¼ sec.30, T.30 N., R.80 W., Natrona County, at bridge on Bates Hole Stock Trail and 13.2 miles east of Alcova.	117	1961-73	5- 2-73	17.59	2,280

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Platte River basin--Continued							
06643300	Coal Creek near Goose Egg, Wyo.	Lat 42°42'47", long 106°32'13", in SW¼NW¼ sec.27, T.32 N., R.81 W., Natrona County, 0.2 mile upstream from culvert on State Highway 220 and 4.2 miles southwest of Goose Egg. Prior to Oct. 1, 1970, at site 0.2 mile downstream at different datums.	5.39	1960-73	4-23-73	6.28	48
06644840	McKenzie Draw tributary near Casper, Wyo. S	Lat 43°06'20", long 106°09'05", in SW¼NE¼ sec.12, T.36 N., R.78 W., Natrona County, on right bank about 2,000 ft northwest of Ormsby Road and about 22 miles northeast of Casper.	2.02	1965-73	9-11-73	7.03	970
06646700	East Fork Dry Creek tributary near Glenrock, Wyo.	Lat 42°47'37", long 105°49'40", in SW¼SW¼ sec.26, T.33 N., R.75 W., Converse County, at culvert on Boxelder Road and 4.9 miles southeast of Glenrock.	2.60	1961-73	4-23-73	6.79	72
06648720	Frank Draw tributary near Orpha, Wyo. S (station discontinued)	Lat 43°02'00", long 105°41'15", in SW¼NW¼ sec.1, T.35 N., R.74 W., Converse County, on left bank 60 ft upstream from culvert on Ross Road and about 16 miles northwest of Orpha.	.79	1965-73	7-30-73	3.07	163
06648780	Sage Creek tributary near Orpha, Wyo. S	Lat 43°00'35", long 105°40'00", in NE¼NW¼ sec.18, T.35 N., R.73 W., Converse County, on right bank 600 ft upstream from culvert on Ross Road and about 14 miles northwest of Orpha.	1.38	1965-73	7-22-73	.99	59
06649900	North Platte River tributary near Douglas, Wyo.	Lat 42°41'22", long 105°23'30", in SW¼NE¼ sec.5, T.31 N., R.71 W., Converse County, at culvert on Esterbrook Road and 4.2 miles south of Douglas.	8.53	1961-73	4-20-73	4.52	44
06651800	Sand Creek near Orin, Wyo.	Lat 42°40'09", long 105°12'44", in NE¼SE¼ sec.11, T.31 N., R.70 W., Converse County, at bridge on old U.S. Highway 87 and 1.6 miles northwest of Orin.	27.8	1955, 1961-73	7-19-73	6.45	c700
06652200	Shawnee Creek tributary near Orin, Wyo.	Lat 42°41'14", long 105°06'28", in NW¼SW¼ sec.2, T.31 N., R.69 W., Converse County, at culvert on U.S. Highway 20 and 4.6 miles northeast of Orin.	.33	1961-73	9-11-73	6.28	(+)
06652400	Watson Draw near Lost Springs, Wyo.	Lat 42°45'20", long 104°57'30", in SW¼SE¼ sec.12, T.32 N., R.68 W., Converse County, 350 ft downstream from culvert on U.S. Highway 20 and 2.1 miles southwest of Lost Springs. Prior to Sept. 30, 1963, at site 250 ft upstream at different datum.	6.95	1960-73	4- -73	5.17	110
06655380	Fish Canyon near Guernsey, Wyo.	Lat 42°19'00", long 104°45'45", in SE¼NW¼ sec.15, T.27 N., R.66 W., Platte County, on right bank about 200 ft upstream from Shore Road around Guernsey Reservoir and 3.4 miles northwest of Guernsey.	1.06	1965-73	5- -73	.6	c7
06661580	Sevenmile Creek near Centennial, Wyo.	Lat 41°27'29", long 106°00'36", in NW¼SE¼ sec.11, T.17 N., R.77 W., Albany County, at culvert on county road and 12.7 miles northeast of Centennial.	11.2	1962-73	5-19-73	6.08	112
06668040	Rabbit Creek near Wheatland, Wyo.	Lat 42°12'57", long 105°13'43", in NW¼NE¼ sec.22, T.26 N., R.70 W., Platte County, on right bank 200 ft east of Fletcher Park Road and about 17 miles northwest of Wheatland.	f1.3	1965-73	1973		(a)

See footnotes at end of table, p. 229

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Platte River basin--Continued							
06670100	Laramie River tributary near Guernsey, Wyo.	Lat 42°09'08", long 104°42'25", in N½SW¼ sec.7, T.25 N., R.65 W., Platte County, at culvert on county road, 0.4 mile upstream from mouth, and 9.4 miles south of Guernsey.	1.97	1971-73	9-11-73	4.96	32
06670480	Laramie River tributary No. 2 near Fort Laramie, Wyo.	Lat 42°11'12", long 104°32'47", in SW¼NE¼ sec.33, T.26 N., R.64 W., Goshen County, 0.1 mile upstream from dirt road, 1.3 miles upstream from mouth, and 2.5 miles southwest of Fort Laramie.	8.91	1971-73	9-11-73	5.54	33
06670985	Dry Rawhide Creek near Lingle, Wyo.	Lat 42°18'14", long 104°18'18", in NE¼NE¼ sec.21, T.27 N., R.62 W., Goshen County, 400 ft upstream from culvert on U.S. Highway 85, 0.6 mile upstream from mouth, and 11.5 miles north of Lingle.	20	1969-73	1973		(a)
06675300	Horse Creek tributary near Little Bear, Wyo.	Lat 41°27'21", long 104°53'00", in NW¼SW¼ sec.10, T.17 N., R.67 W., Laramie County, at culvert on U.S. Highway 87 and 6.1 miles south of Little Bear. Prior to Sept. 30, 1966, at different datum.	8.16	1961-73	4-30-73	4.55	4.0
06676700	South Fork Bear Creek near Little Bear, Wyo.	Lat 41°33'43", long 104°52'57", in SW¼NW¼ sec.3, T.18 N., R.67 W., Laramie County, at bridge on U.S. Highway 87 and 1.3 miles north of Little Bear.	34.2	1960-73	4-28-73	10.95	(+)
06761600	Ninemile Draw tributary near Federal, Wyo.	Lat 41°15'05", long 105°02'34", in SE¼SE¼ sec.19, T.15 N., R.68 W., Laramie County, at culvert on State Secondary Highway 1100 and 4.0 miles southeast of Federal.	1.49	1960-73	1973		(a)
06761700	Muddy Creek tributary near Burns, Wyo.	Lat 41°09'16", long 104°20'57", in NE¼NE¼ sec.30, T.14 N., R.62 W., Laramie County, at culvert on State Secondary Highway 1103 and 2.3 miles south of Burns.	24.8	1960-73	1973		(a)
06761900	Lodgepole Creek tributary near Pine Bluffs, Wyo.	Lat 41°15'23", long 104°04'50", in NE¼NE¼ sec.21, T.15 N., R.60 W., Laramie County, at culvert on State Secondary Highway 1104 and 5.0 miles north of Pine Bluffs.	.44	1960-73	4-25-73	7.12	31
06762600	Lodgepole Creek tributary No. 2 near Albin, Wyo.	Lat 41°19'11", long 104°04'49", in SE¼SE¼ sec.28, T.16 N., R.60 W., Laramie County, at culvert on State Secondary Highway 1104 and 6.8 miles south of Albin.	5.69	1960-73	4-30-73	5.93	65
Green River basin							
09204700	Sand Springs Draw tributary near Boulder, Wyo.	Lat 42°35'07", long 109°37'23", in SW¼NE¼ sec.8, T.30 N., R.107 W., Sublette County, at culvert on U.S. Highway 187 and 12.4 miles southeast of Boulder.	2.77	1961-73	7-20-73	7.14	82
09207650	Dry Basin Creek near Big Piney, Wyo.	Lat 42°25'28", long 110°06'35", in SW¼NW¼ sec.12, T.28 N., R.112 W., Sublette County, just downstream from bridge on U.S. Highway 89, about 2,000 ft upstream from mouth, and 7.8 miles south of Big Piney.	47.2	1971-73	7-20-73	d2.49	47
09211100	Green River tributary near Fontenelle, Wyo.	Lat 42°02'40", long 110°09'40", in SE¼ sec.19, T.24 N., R.112 W., Lincoln County, at culvert on U.S. Highway 189 and 6.5 miles northwest of Fontenelle.	3.75	1961-73	8-18-73	5.22	c7

See footnotes at end of table, p. 229

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Green River basin--Continued							
09211300	Fourmile Gulch tributary near Fontenelle, Wyo.	Lat 42°03'09", long 109°59'40", in SW¼SE¼ sec.15, T.24 N., R.111 W., Sweetwater County, 0.7 mile upstream from Lincoln-Sweetwater Road and 6.0 miles northeast of Fontenelle.	14.2	1971-73	1973		(a)
09216290	East Otterson Wash near Green River, Wyo.	Lat 41°47'04", long 109°44'03", in SE¼SW¼NE¼ sec.23, T.21 N., R.109 W., Sweetwater County, 0.1 mile downstream from dirt road, 0.9 mile upstream from mouth, and 21 miles northwest of Green River.	16.6	1969-73	9-11-73	6.93	250
09216350	Skunk Canyon Creek near Green River, Wyo.	Lat 41°43'55", long 109°30'39", in NW¼NE¼ sec.8, T.20 N., R.107 W., Sweetwater County, 0.4 mile upstream from mouth and 14.0 miles north of Green River.	15.7	1965, 1971-73	4- -73	4.60	13
09216400	Greasewood Canyon near Green River, Wyo.	Lat 41°33'34", long 109°30'38", in NW¼NE¼ sec.8, T.18 N., R.107 W., Sweetwater County, 0.9 mile upstream from mouth and 3.5 miles northwest of Green River. Prior to Oct. 1, 1969, at site 0.5 mile downstream at different datum.	45.1	1959-73	7-20-73	1.66	46
09216550	Deadman Wash near Point of Rocks, Wyo.	Lat 41°40'30", long 108°44'10", in SE¼ sec.25, T.20 N., R.101 W., Sweetwater County, at bridge on old U.S. Highway 30 and 2.8 miles east of Point of Rocks.	152	1962-73	7-13-73	8.06	660
09216560	Bitter Creek near Point of Rocks, Wyo.	Lat 41°40'40", long 108°47'10", in SW¼ sec.27, T.20 N., R.101 W., Sweetwater County, at bridge on dirt road and 0.2 miles south of Point of Rocks.	759	1961-73	7-20-73	14.56	1,380
09216580	Big Flat Draw near Rock Springs, Wyo.	Lat 41°18'57", long 108°53'50", in NE¼NW¼NE¼ sec.4, T.15 N., R.102 W., Sweetwater County, 0.3 mile upstream from mouth and 25 miles southeast of Rock Springs.	19.5	1973	7-19-73	15.03	(+)
09216600	Salt Wells Creek tributary near Rock Springs, Wyo.	Lat 41°27'20", long 108°56'30", in NW¼ sec.17, T.17 N., R.102 W., Sweetwater County, at culvert on State Highway 430 and 17 miles southeast of Rock Springs.	7.88	1959-73	9-11-73	6.87	(+)
09216695	No Name Creek near Rock Springs, Wyo.	Lat 41°28'54", long 108°58'17", in SW¼SW¼NE¼ sec.1, T.17 N., R.103 W., Sweetwater County, 700 ft upstream from mouth, and 15 miles southeast of Rock Springs.	18.2	1973	7-19-73	18.37	(+)
09216700	Salt Wells Creek near Rock Springs, Wyo.	Lat 41°29'00", long 108°58'00", in NE¼ sec.1, T.17 N., R.103 W., Sweetwater County, at bridge on old State Highway 430 and 15 miles southeast of Rock Springs. Prior to Apr. 12, 1962, at site 500 ft downstream at different datum.	515	1959-73	9-11-73	6.05	1,610
09216900	Bitter Creek tributary near Green River, Wyo.	Lat 41°31'58", long 109°22'49", in SE¼SW¼ sec.16, T.18 N., R.106 W., Sweetwater County, at culvert on U.S. Highway 30 and 4 miles east of Green River.	1.65	1959-73	7-19-73	4.67	(+)
09221680	Mud Spring Hollow near Church Butte, near Lyman, Wyo. S	Lat 41°23'05", long 110°11'12", in SW¼NE¼ sec.7, T.16 N., R.113 W., Uinta County, on left bank 0.4 mile upstream from culvert on U.S. Highway 30S and 6.7 miles northeast of Lyman	8.83	1965-73	9- 5-70 4- -71 4- -72 7-19-73	j2.19 j1.36 j1.62 3.07	j114 g33 j51 276

See footnotes at end of table, p. 229

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Green River basin--Continued							
09224600	Blacks Fork tributary near Granger, Wyo.	Lat 41°32'04", long 109°56'11", in SE¼SW¼ sec.15, T.18 N., R.111 W., Sweetwater County, at culvert on U.S. Highway 30S and 4.3 miles south of Granger. (Peaks after 1966 affected by small stockwater reservoir 0.1 mile upstream.)	5.03	1959-73	7-20-73	13.03	770
09224800	Meadow Springs Wash tributary near Green River, Wyo.	Lat 41°32'37", long 109°45'36", in SE¼NW¼ sec.18, T.18 N., R.109 W., Sweetwater County, at culvert on Interstate Highway 80 and 15 miles west of Green River. Prior to Oct. 1, 1970, 150 ft upstream at culvert on U.S. Highway 30.	5.22	1962-65, 1968-73	7-20-73	2.29	74
09224810	Blacks Fork tributary No. 2 near Green River, Wyo.	Lat 41°27'35", long 109°37'20", in SW¼SE¼ sec.8, T.17 N., R.108 W., Sweetwater County, 600 ft upstream from dirt road, 1.3 miles upstream from mouth, and 8.7 miles southwest of Green River.	12.0	1965-73	7-20-73	5.76	43
09224820	Blacks Fork tributary No. 3 near Green River, Wyo.	Lat 41°25'30", long 109°36'55", in SW¼NW¼ sec.28, T.17 N., R.108 W., Sweetwater County, 50 ft upstream from dirt road, 1 mile upstream from mouth, and 10.5 miles southwest of Green River.	3.59	1965-73	7-20-73	7.56	170
09224840	Blacks Fork tributary No. 4 near Green River, Wyo.	Lat 41°24'40", long 109°36'05", in SE¼NE¼ sec.33, T.17 N., R.108 W., Sweetwater County, 700 ft downstream from dirt road, 1 mile upstream from mouth, and 10.9 miles southwest of Green River.	1.26	1965-73	7-20-73	5.32	17
09224980	Summers Dry Creek near Green River, Wyo.	Lat 41°22'25", long 109°38'40", in NW¼NE¼ sec.13, T.16 N., R.109 W., Sweetwater County, 600 ft downstream from Little Dry Creek, 1.6 miles upstream from mouth, and 14.2 miles southwest of Green River.	423	1965-73	7-20-73	14.67	13,900
09225200	Squaw Hollow near Burntfork, Wyo.	Lat 41°10'14", long 109°36'34", in NE¼NW¼ sec.29, T.14 N., R.108 W., Sweetwater County, 0.1 mile downstream from culvert on State Highway 530, 2.1 miles upstream from normal pool level of Flaming Gorge Reservoir, and 22 miles northeast of Burntfork. Prior to Oct. 1, 1969, at site 0.1 mile upstream at different datum.	6.57	1965-73	4- -72 9-11-73	12.58 12.75	166 83
09225300	Green River tributary No. 2 near Burntfork, Wyo.	Lat 41°03'40", long 109°37'05", in NE¼SE¼ sec.31, T.13 N., R.108 W., Sweetwater County, 200 ft downstream from State Highway 530, 7.4 miles northeast of Manila, Utah, and 20.6 miles east of Burntfork. Prior to Oct. 1, 1971, at site 300 ft upstream at datum 10.00 ft higher.	13.0	1959, 1961-73	7-20-73	13.93	1,290
09229450	Henry's Fork tributary near Manila, Utah	Lat 41°01'14", long 109°40'46", in NW¼SE¼ sec.15, T.12 N., R.109 W., Sweetwater County, 800 ft upstream from mouth, 1.4 miles north of Wyoming-Utah State line, and 4.5 miles northeast of Manila, Utah. Prior to Apr. 30, 1970, at site 300 ft downstream at different datum.	3.15	1965-73	7-20-73	4.93	49
09258200	Dry Cow Creek near Baggs, Wyo.	Lat 41°20'24", long 107°40'14", in SE¼SE¼ sec.19, T.16 N., R.91 W., Carbon County, 1.6 miles upstream from county road, 4.3 miles upstream from mouth, and 21 miles north of Baggs.	49.7	1970-73	5- 9-73	8.38	420

See footnotes at end of table, p. 229

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Bear River basin							
10019700	Whitney Canyon Creek near Evanston, Wyo.	Lat 41°25'42", long 110°58'21", in SE¼NW¼ sec.27, T.17 N., R.120 W., Uinta County, at culvert on dirt road and 11.1 miles north of Evanston.	8.93	1965-73	4-27-73	5.44	34
Buffalo Fork basin							
13011800	Blackrock Creek tributary near Moran, Wyo.	Lat 43°47'10", long 110°08'30", Teton County, Teton National Forest, at culvert on U.S. Highway 26, 4.8 miles northwest of Togwotee Pass, and 23 miles east of Moran.	.80	1964-73	5-18-73	5.86	52
Hoback River basin							
13019210	Rim Draw near Bondurant, Wyo.	Lat 43°08'00", long 110°13'40", in NE¼ sec.36, T.37 N., R.112 W., Sublette County, Teton National Forest, at culvert on U.S. Highway 187 and 10.8 miles southeast of Bondurant.	3.41	1964-73	5-17-73	5.08	6
13019220	Sour Moose Creek near Bondurant, Wyo.	Lat 43°09'00", long 110°15'20", in N¼ sec.26, T.37 N., R.112 W., Sublette County, Teton National Forest, at culvert on U.S. Highway 187 and 9.5 miles southeast of Bondurant.	.70	1964-73	4-27-73	4.74	3
13019400	Cliff Creek near Bondurant, Wyo.	Lat 43°13'40", long 110°30'17", Sublette County, Teton National Forest, on right bank 1.6 miles upstream from mouth and 4.9 miles west of Bondurant.	58.6	1964-73	6- 9-72 5-17-73	8.84 7.59	gl,150 600
Tributaries to Snake River Between Hoback River and Greys River							
13020000	Fall Creek near Jackson, Wyo.	Lat 43°18'59", long 110°44'18", in SE¼NE¼ sec.27, T.39 N., R.116 W., Teton County, Teton National Forest, at culvert on U.S. Highway 89 and 11.3 miles south of Jackson.	46.8	1917-18 [†] 1964-73	5-17-73	6.60	328
13021000	Cabin Creek near Jackson, Wyo.	Lat 43°14'58", long 110°46'40", Teton County, Targhee National Forest, at culvert on U.S. Highway 89 and 16.2 miles south of Jackson.	8.71	1917-18 [†] 1964-73	5-17-73	5.86	115
13022550	Red Creek near Alpine, Wyo. (station discontinued)	Lat 43°11'39", long 110°55'37", Lincoln County, Targhee National Forest, at culvert on U.S. Highway 89 and 6.0 miles east of Alpine.	3.88	1964-73	5-17-73	4.26	29
Salt River basin							
13023800	Fish Creek near Smoot, Wyo.	Lat 42°31'10", long 110°53'45", in NW¼NW¼ sec.9, T.29 N., R.118 W., Lincoln County, Bridger National Forest, at culvert on U.S. Highway 89 and 6.9 miles south of Smoot.	f3.6	1964-73	5-18-73	6.54	52

† Discharge not determined.

‡ Operated as a continuous-record gaging station.

a No evidence of flow.

b Not determined.

c Estimate.

d From floodmarks.

e Of which 0.50 sq mi is probably noncontributing.

f Approximately.

g Not previously published.

h Of which 2.5 sq mi is probably noncontributing.

i Peak stage did not reach bottom of gage.

j Revised.

Discharge 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)
Part 6 Yellowstone River basin						
Little Wind River 06231000	Wind River	Lat 42°57'37", long 108°29'54", in NE½SE¼ sec.22, T.1 S., R.3 E., Fremont County, Wind River Indian Reservation, at bridge on county road, 0.5 mile west of Arapahoe, and 1.2 miles upstream from Popo Agie River.	660	1906-19† 1966-72	10-13-72 12-19-72 1- 8-73 2-21-73 3-21-73 4- 5-73 5- 2-73 6- 1-73 7- 3-73 8- 1-73 8-31-73	154 106 88 64 64 131 259 423 533 265 45
Beaver Creek 06235000	Little Wind River	Lat 42°57'16", long 108°25'39", in NW½NE¼ sec.29, T.1 S., R.4 E., Fremont County, Wind River Indian Reservation, 1.0 mile upstream from mouth and 3.8 miles east of Arapahoe.	354	1950-53† 1968-72	11- 3-72 12- 4-72 2- 3-73 4- 5-73 5- 4-73 6- 1-73 7- 3-73 8- 1-73	4.8 1.8 3.7 104 119 154 11 11
Bighorn River 06264700	Yellowstone River	Lat 43°44'10", long 108°09'38", in SE¼ sec.32, T.44 N., R.94 W., Hot Springs County, at bridge on Black Mountain Road, 0.7 mile upstream from Kirby Creek, 0.8 mile east of Lucerne, and 1 mile downstream from Owl Creek.		1966-72	5- 3-73 6-25-73 9-18-73	1,680 1,370 4,170
Bighorn River 06268600	Yellowstone River	Lat 44°00'53", long 107°58'08", in SW½NE¼ sec.25, T.47 N., R.93 W., Washakie County, at bridge on U.S. Highway 20 at Worland and 0.5 mile downstream from Fifteen Mile Creek.	10,810	1965-69† 1970-72	6-28-73 8- 2-73	57 1,290
Paint Rock Creek 06273500	Nowood River	Lat 44°12'20", long 107°42'54", in SW½SE½NW½ sec.19, T.49 N., R.90 W., Big Horn County, at bridge on county road, 0.5 mile south of State Secondary Highway 0201, 1.0 mile upstream from mouth, and 6.4 miles southwest of Hyattville. (Formerly "near Bonanza.")	376	1910-14† 1915-23† 1968-72	10-11-72 1- 8-73 2- 1-73 3- 6-73 5- 2-73 6-25-73 8- 1-73	97 32 39 44 47 812 129
Nowood River 06274220	Bighorn River	Lat 44°16'34", long 107°57'35", in NE½SW½ sec.30, T.50 N., R.92 W., Big Horn County, at bridge on State Secondary Highway 0201 and 0.5 mile upstream from mouth near corporate limit of Manderson.	a2,000	1950-51 1965-72	12-13-72 1- 9-73 2- 1-73 3- 5-73 4- 2-73 5- 2-73 6-25-73 8- 1-73 9- 6-73	192 133 197 270 192 342 1,340 *277 236
Wood River 06274810	Greybull River	Lat 43°52'33", long 109°17'52", Park County, Shoshone National Forest, at bridge 0.1 mile northwest of Kirwin and 0.2 mile downstream from Cascade Creek.		1971-72	10- 6-72 11- 6-72 1-15-73 2-27-73 4-13-73 5-23-73 6-21-73 6-27-73 8- 7-73 9-11-73	9.9 *3.4 1.2 .84 1.0 36 24 140 *15 38
Shell Creek 06279090	Bighorn River	Lat 44°30'34", long 108°02'52", in NW½SW½ sec.4, T.52 N., R.93 W., Big Horn County, at bridge on county road, 0.4 mile upstream from mouth, and 1.5 miles north of post office in Greybull.	a560	1965-72	12-13-72 1- 8-73 2- 6-73 3- 5-73 4- 2-73 5- 1-73 6-26-73 8- 2-73 9- 4-73	79 53 81 93 72 41 498 34 75

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)
Part 6 Yellowstone River basin--Continued						
Powder River 06312500	Yellowstone River	Lat 43°41'35", long 106°31'48", in NE¼NW¼SW¼ sec.13, T.43 N., R.81 W., Johnson County, at D Ranch, 600 ft downstream from headgate of Sussex Irrigation Canal, 2 miles downstream from confluence of North and Middle Forks, and 6 miles east of Kaycee.	a980	1933-35† 1938-71† 1972	11-14-72 1-19-73 2-16-73 3-21-73 4-12-73 6-13-73 7- 9-73 8- 8-73	104 147 80 115 117 230 2.1 28
South Fork Powder River 06313000	Powder River	Lat 43°37'10", long 106°34'36", in NE¼SE¼ sec.9, T.42 N., R.81 W., Johnson County, 200 ft upstream from bridge on old U.S. Highway 87, 0.6 mile upstream from bridge on Interstate Highway 25, 1.2 miles upstream from Murphy Creek, 6.6 miles southeast of Kaycee, and 7 miles upstream from mouth.	a1,150	1911-12† 1938-40† 1950-69† 1970-72	10-17-72 11-14-72 12-13-72 1-19-73 2-16-73 3-21-73 4-12-73 5-30-73 6-13-73 7- 9-73 8- 8-73 9- 5-73	7.0 2.0 0 1.8 5.2 103 165 65 22 1.9 7.6 84
Salt Creek 06313400	Powder River	Lat 43°37'22", long 106°22'00", in NE¼NE¼SE¼ sec.8, T.42 N., R.79 W., Johnson County, at bridge in West Sussex Dugout Oil Field, 6.3 miles southwest of Sussex, and 12.6 miles upstream from mouth.	765	1967-72	10-18-72 11-14-72 1-19-73 2-15-73 3-21-73 4-12-73 5-30-73 6-13-73 7- 9-73 8- 8-73 9- 5-73	18 26 46 22 80 53 26 23 16 18 32
North Fork Crazy Woman Creek 06313950	Powder River	Lat 44°11'11", long 106°51'12", in NW¼NE¼SW¼ sec.28, T.49 N., R.83 W., (unsurveyed), Johnson County, Bighorn National Forest, at bridge on county road, 0.7 mile upstream from Bighorn National Forest boundary, 3.4 miles downstream from Pole Creek, 4.0 miles west of Klondike Ranch, and 13 miles southwest of Buffalo.	43.4		8- 2-73 8-28-73 9-19-73	*34 *13 14
North Fork Crazy Woman Creek 06314000	Powder River	Lat 44°11'16", long 106°49'48", in SW¼SW¼NE¼ sec.27, T.49 N., R.83 W., (unsurveyed), Johnson County, at bridge on county road, 2.1 miles upstream from Spring Draw, 3.0 miles west of Klondike Ranch, and 13 miles southwest of Buffalo.	44.9	1942-49†	8- 2-73 8-28-73 9-19-73	*27 *12 13
Little North Fork Crazy Woman Creek 06314510	North Fork Crazy Woman Creek	Lat 44°13'43", long 106°49'49", in SW¼NW¼SE¼ sec.10, T.49 N., R.83 W., Johnson County, 3.7 miles northwest of Klondike Ranch and 10 miles southwest of Buffalo.			8- 2-73 8-30-73 9-19-73	*3.3 *1.4 2.0
Little North Fork Crazy Woman Creek 06314520	North Fork Crazy Woman Creek	Lat 44°13'34", long 106°49'00", in NE¼SW¼SW¼ sec.11, T.49 N., R.83 W., Johnson County, 3.0 miles northwest of Klondike Ranch and 10.5 miles southwest of Buffalo.			8- 2-73 8-30-73 9-19-73	*4.1 *1.5 2.8
Muddy Creek 06314890	North Fork Crazy Woman Creek	Lat 44°09'36", long 106°52'24", in SE¼SW¼NE¼ sec.6, T.48 N., R.83 W., Johnson County, 6.0 miles southwest of Klondike Ranch, and 15.5 miles southwest of Buffalo.			8-28-73 9-19-73	*.28 .95

See footnotes at end of table, p. 238

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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)
Part 6 Yellowstone River basin--Continued						
Muddy Creek 06314900	North Fork Crazy Woman Creek	Lat 44°09'45", long 106°49'10", in NE¼SE¼NW¼ sec.3, T.48 N., R.83 W., Johnson County, 3.5 miles southwest of Klondike Ranch and 14 miles southwest of Buffalo.			8-28-73 9-19-73	*0.65 1.1
Billy Creek 06314920	Muddy Creek	Lat 44°07'44", long 106°50'35", in NE¼NW¼SW¼ sec.16, T.48 N., R.83 W., Johnson County, 6 miles southwest of Klondike Ranch and 16 miles southwest of Buffalo.			8- 1-73 8-28-73 9-19-73	*1.2 *1.1 1.2
Billy Creek 06314930	Muddy Creek	Lat 44°08'05", long 106°48'54", in SW¼NW¼NE¼ sec.15, T.48 N., R.83 W., Johnson County, 5 miles southwest of Klondike Ranch and 15 miles southwest of Buffalo.			8- 1-73 8-28-73 9-19-73	*1.3 *1.0 1.2
Crazy Woman Creek 06316400	Powder River	Lat 44°29'15", long 106°10'25", in NW¼ sec.18, T.52 N., R.77 W., Johnson County, on left bank 0.2 mile upstream from unnamed tributary, 4.5 miles upstream from mouth, and 11.5 miles south of Arvada.	a945	1963-70† 1971-72	12-19-72 1-24-73 2-22-73 5-29-73 8-14-73 9-20-73	5.8 8.2 20 81 28 24
Cheyenne River basin						
Belle Fourche River 06427850	Cheyenne River	Lat 44°35'22", long 104°42'12", in NW¼SE¼SE¼ sec.7, T.53 N., R.65 W., Crook County, at bridge 0.2 mile west of entrance to Devils Tower National Monument.		1968-72	10-17-72 11-15-72 12-13-72 1-17-73 2-14-73 3-21-73 4-11-73 5-23-73 6- 5-73 7-25-73 8-21-73 9-18-73	13 12 8.9 18 15 59 29 24 78 77 71 11
Platte River basin						
Hog Park Creek 06623820	Encampment River	Lat 41°02'01", long 106°51'33", in SW¼SE¼ sec.5, T.12 N., R.84 W., Carbon County, about 800 ft downstream from Hog Park Creek Dam and 13.2 miles southwest of Encampment.		1967-72	10-10-72 6-27-73 7-17-73 7-31-73 8-30-73 9-28-73	1.8 104 639 48 3.8 3.5
Little Medi- cine Bow River 06634030	Medicine Bow River	Lat 42°22'10", long 106°06'17", in NW¼NE¼SE¼ sec.30, T.28 N., R.77 W., Carbon County, at bridge on old Casper-Medicine Bow road, 3.4 miles downstream from South Fork, 3.4 miles upstream from Spring Creek, 7.0 miles northeast of Shirley Basin, and 36 miles northeast of Medicine Bow.		1972	12- 9-72 5-31-73 6-29-73 7-31-73	2.0 146 47 36
Little Medi- cine Bow River 06634100	Medicine Bow River	Lat 42°15'14", long 106°07'36", in NW¼NE¼SE¼ sec.1, T.26 N., R.78 W., Carbon County, at bridge on old Casper-Medicine Bow road, 4.1 miles downstream from Sand Creek, 4.9 miles southeast of Shirley Basin, and 23 miles northeast of Medicine Bow.		1971-72	12-19-72 1- 4-73 1-15-73 2-22-73 5- 4-73 5-31-73 6-29-73 7-31-73	0 0 0 0 240 152 54 20

See footnotes at end of table, p. 238

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)
Part 6 Platte River basin--Continued						
Little Medicine Bow River 06634600	Medicine Bow River	Lat 41°56'55", long 106°10'13", in NE¼SE¼ sec.21, T.23 N., R.78 W., Carbon County, at bridge on State Highway 487 and 3.8 miles north of Medicine Bow.	966	1960-61 1965-72	10-17-72 11-10-72 1- 4-73 2-20-73 3-26-73 4-17-73 5- 9-73 6-13-73 7-23-73 8-22-73 9-27-73	16 21 0 0 19 763 3,370 195 58 9.4 19
Bates Creek 06643000	North Platte River	Lat 42°40'34", long 106°36'09", in SE¼SE¼ sec.1, T.31 N., R.82 W., Natrona County, 2.8 miles upstream from mouth and 10.5 miles northeast of Alcova.	393	1916-24† 1928 1935-54† 1957-61† 1968-72	2- 5-73 3- 1-73 4- 2-73 5- 3-73 5-18-73 5-19-73 6- 5-73 7- 3-73 8- 6-73 9- 4-73	14 14 17 112 +2,960 c1,770 194 12 4.8 8.8
Middle Fork Casper Creek 06644120	Casper Creek	Lat 43°01'10", long 106°36'30", in NE¼ sec.12, T.35 N., R.82 W., Natrona County, at culvert on county road, 0.6 mile east of Bucknum, and 10 miles east of Natrona.		1968-72	3- 1-73 4- 3-73	9.9 .73
Casper Creek 06644500	North Platte River	Lat 42°50'52", long 106°21'52", in NW¼NE¼ sec.7, T.33 N., R.79 W., Natrona County, 700 ft upstream from bridge on U.S. Highways 20 and 26, 0.4 mile upstream from mouth, and 2 miles west of city hall in Casper	d668	1946-56† 1968-72	10-30-72 1- 9-73 2- 5-73 4- 3-73 5- 3-73 5-15-73 5-29-73 6-11-73 6-25-73 7- 3-73 7- 9-73 8- 6-73 8-20-73 9- 4-73	11 2.6 8.6 20 343 73 42 21 22 23 13 17 13 73
Laramie River 06660500	North Platte River	Lat 41°28'22", long 105°43'30", in NW¼NE¼SW¼ sec.5, T.17 N., R.74 W., Albany County, at old Two Rivers Post Office, 0.6 mile upstream from Little Laramie River, and 14 miles northwest of Laramie.	1,224	1909-27† 1933-72†	1-17-73 2-23-73 3-30-73 5-30-73 7-27-73	32 34 80 1,320 287
Little Laramie River 06661500	Laramie River	Lat 41°28'07", long 105°43'56", in SE¼SE¼SE¼ sec.6, T.17 N., R.74 W., Albany County, at bridge at old Two Rivers Post Office, 0.5 mile upstream from mouth, and 14 miles northwest of Laramie.	376	1903 1911-27† 1933-72†	1-17-73 2-23-73 3-30-73 4-30-73 5-30-73 7-27-73 8-24-73 9-21-73	4.7 0 37 229 100 118 17 13
Fish Creek	North Laramie River	Lat 42°10'45", long 104°59'55", in SE¼SW¼ sec.34, T.26 N., R.68 W., Platte County, at bridge on Interstate Highway 25, and 4.1 miles north of Wheatland.	a60		9- 8-73	+7,500
Chugwater Creek 06669300	Laramie River	Lat 41°34'52", long 110°11'54", in SW¼NW¼NE¼ sec.35, T.19 N., R.70 W., Laramie County, 2.5 miles northeast of Farthing.	164		6- 1-73	+1,100

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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)
Part 6 Platte River basin--Continued						
Rawhide Creek 06670990	North Platte River	Lat 42°12'17", long 104°15'42", in SW¼SW¼ sec.24, T.26 N., R.62 W., Goshen County, near Interstate Canal crossing and 6.5 miles northeast of Lingle.		1970-72	10- 6-72 10-12-72 10-20-72 10-27-72 11- 3-72 11-10-72 11-17-72 11-22-72 11-30-72 12-15-72 12-21-72 12-28-72 1-18-73 2-16-73 3-26-73 4-24-73 5-18-73 6-25-73 7- 2-73 7- 9-73 7-16-73 7-23-73 7-30-73 8- 6-73 8-13-73 8-20-73 8-27-73 9- 4-73 9-10-73 9-17-73 9-24-73	*0.78 *.62 .83 1.2 1.8 2.1 2.4 2.4 2.2 0 1.8 1.7 2.4 1.9 13 8.4 5.7 .47 .62 1.2 .77 *.39 .44 *.39 *.33 *.32 .63 *.54 *.43 5.6 3.5
Horse Creek	North Platte River	Lat 41°33'53", long 104°08'37", in SW¼SE¼SW¼ sec.36, T.19 N., R.61 W., Goshen County, 50 ft downstream from county line, 0.2 mile northwest of Johnson Ranch, and 5.2 miles south of La Grange.			11-10-72	28
Horse Creek	North Platte River	Lat 41°35'36", long 104°09'06", in NE¼NE¼NE¼ sec.26, T.19 N., R.61 W., Goshen County, 25 ft upstream from section line, 2.1 miles northwest of Johnson Ranch, and 3.1 miles south of La Grange.			11-10-72	27
Horse Creek	North Platte River	Lat 41°36'28", long 104°09'12", in NW¼NE¼NE¼ sec.23, T.19 N., R.61 W., Goshen County, 20 ft downstream from irrigation diversion, 2.2 miles south of La Grange, and 3.0 miles north of Johnson Ranch.			7-23-73	3.6
Horse Creek	North Platte River	Lat 41°37'56", long 104°09'49", in NW¼SE¼NW¼ sec.11, T.19 N., R.61 W., Goshen County, 50 ft upstream from private bridge and 0.4 mile south of La Grange.			7-23-73	3.3
Horse Creek	North Platte River	Lat 41°38'15", long 104°10'09", in SE¼SE¼SE¼ sec.3, T.19 N., R.61 W., Goshen County, 100 ft upstream from Horse Creek No. 1 headgate, 200 ft downstream from bridge on State Highway 151, and 0.2 mile west of La Grange.			7-23-73	3.1
Horse Creek	North Platte River	Lat 41°38'14", long 104°10'10", in SE¼SE¼SE¼ sec.3, T.19 N., R.61 W., Goshen County, 100 ft downstream from Horse Creek No. 1 headgate, 380 ft downstream from bridge on State Highway 151, and 0.2 mile west of La Grange.			7-23-73	1.4

See footnotes at end of table, p. 238

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)
Part 6 Platte River basin--Continued						
Horse Creek	North Platte River	Lat 41°39'06", long 104°11'16, in NW¼NW¼NW¼ sec.3, T.19 N., R.61 W., Goshen County, 100 ft upstream from bridge on county road, 1.5 miles north-west of La Grange, and 2.7 miles east of U.S. Highway 85.			7-23-73	7.2
Unnamed tributary	North Bear Creek	Lat 41°37'30", long 104°51'53", in SE¼SE¼SE¼ sec.10, T.19 N., R.67 W., Laramie County, 0.6 mile upstream from U.S. Highway 87 and 9.0 miles south of Chugwater.	2.4	1966	9-10-73	+1,320
Unnamed tributary	North Bear Creek	Lat 41°37'37", long 104°51'17", in NW¼SW¼SE¼ sec.11, T.19 N., R.67 W., Laramie County, at bridge on U.S. Highway 87 and 9.0 miles south of Chugwater.	10.2		9-10-73	+4,120
Unnamed tributary	North Bear Creek	Lat 41°37'08", long 104°51'27", in SW¼SE¼NW¼ sec.14, T.19 N., R.67 W., Laramie County, at culvert on U.S. Highway 87 and 10 miles south of Chugwater.	.38		9-10-73	+197
Crow Creek 06756000	South Platte River	Lat 41°07'09", long 104°45'33", in NW¼SW¼SE¼ sec.3, T.13 N., R.66 W., Laramie County, 400 ft downstream from Cheyenne Sewage Disposal Plant outlet, 1.3 miles upstream from Wyoming Hereford Ranch Reservoir No. 1, and 3.4 miles southwest of State Capitol Building in Cheyenne.	297	1922-24† 1951-57† 1972	10- 2-72 11- 4-72 12- 1-72 1- 9-73 3- 2-73 3-30-73 5- 3-73 6-30-73 9-14-73	9.0 12 15 14 15 18 26 8.8 9.9
Part 9 Green River basin						
Green River 09192600	Colorado River	Lat 42°34'14", long 109°56'58", in NE¼NE¼NE¼ sec.21, T.30 N., R.110 W., Sublette County, at birdge on State Secondary Highway 1801, 1.9 miles upstream from New Fork River, 8.4 miles northeast of Big Piney, and 16.2 miles southwest of Boulder.		1965-66 1968-72	12- 7-72 1-11-73 2- 9-73 3-12-73	146 144 173 214
Hams Fork 09224450	Blacks Fork	Lat 41°35'56", long 109°59'28", in center of sec.30, T.19 N., R.111 W., Sweetwater County, at railroad bridge, 1.2 miles northwest of Granger, and 1.8 miles upstream from mouth.		1965-72	12- 8-72 1- 8-73 2- 7-73 3- 8-73 4- 3-73 6- 7-73 8- 7-73 9- 6-73	19 28 29 29 68 65 75 20
North Fork Little Snake River diversion to Hog Park Creek 09251750	Transbasin diversion between North Fork Little Snake River and Hog Park Creek.	Lat 41°02'17", long 106°53'16", in NW¼SW¼ sec.6, T.12 N., R.84 W., Carbon County, below outlet, just upstream from Hog Park Creek, and 13 miles southwest of Encampment.		1966-72	10-10-72 6-27-73 7-17-73 7-31-73 8-30-73 9-28-73	2.2 36 b9.9 6.7 2.5 2.2
Little Snake River 09259700	Yampa River	Lat 41°00'17", long 107°54'59", in SW¼ sec.18, T.12 N., R.93 W., Carbon County, 600 ft upstream from Wyoming-Colorado State line and 15 miles west of Baggs.	c3,020	1962-68† 1969-70	10-26-72	131

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)
Part 13						
Sheffield Creek basin						
Sheffield Creek 13010060	Snake River	Lat 44°05'53", long 110°39'53", Teton County, John D. Rockefeller, Jr., Memorial Parkway, 75 ft upstream from mouth and 0.2 mile southeast of Flagg Ranch.			9-27-73	3.2
Polecat Creek basin						
Polecat Creek 13010170	Snake River	Lat 46°06'31", long 110°41'00", Teton County, John D. Rockefeller, Jr., Memorial Parkway, 0.5 mile upstream from mouth and 1.0 mile northwest of Flagg Ranch.			9-27-73	59
Spring Creek basin						
Spring Creek 13011100	Snake River	Lat 43°51'32", long 110°35'00", in SW¼SE¼SE¼ sec.18, T.45 N., R.114 W., Grand Teton National Park, Teton County, 500 ft upstream from mouth and 4.0 miles northwest of Moran.		1972	10-17-72	*16
Buffalo Fork basin						
Lava Creek 13011980	Buffalo Fork	Lat 43°50'31", long 110°27'23", in NW¼NW¼NW¼ sec.29, T.45 N., R.113 W., Teton County, Teton National Forest, 750 ft upstream from bridge on U.S. Highways 26 and 287, and 2.5 miles east of Moran.		1972	10-18-72	*17
Spread Creek basin						
Spread Creek 13012480	Snake River	Lat 43°46'37", long 110°21'38", Teton County, Teton National Forest, 150 ft downstream from bridge, 2.3 miles upstream from Skull Creek, and 9.5 miles southeast of Moran.			9-27-73	*38
Spread Creek 13012500	Snake River	Lat 43°47'26", long 110°32'14", in NE¼NE¼SW¼ sec.9, T.44 N., R.114 W., Grand Teton National Park, Teton County, 200 ft upstream from bridge on U.S. Highways 26, 89, and 287, 1.7 miles upstream from mouth, and 3.9 miles south of Moran.	101	1917-18; 1971	10-18-72	*57
Snake River tributary between Spread Creek and Cottonwood Creek						
Unnamed Spring 13012720	Snake River	Lat 43°47'08", long 110°32'25", in SW¼SE¼SW¼ sec.9, T.44 N., R.114 W., Grand Teton National Park, Teton County, 50 ft downstream from culvert on U.S. Highways 26, 89 and 187, and 4.2 miles southwest of Moran.			10-23-72	*4.9

Discharge measurements made at miscellaneous sites during water year 1973

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)
Part 13 Snake River Main Stem						
Snake River 13012760	Columbia River	Lat 43°44'09", long 110°39'43", in SE¼SW¼NW¼ sec.33, T.44 N., R.115 W., Grand Teton National Park, Teton County, 5.5 miles upstream from Cottonwood Creek and 6.2 miles north-east of Moose.			10-16-72	1,330
Cottonwood Creek basin						
Cottonwood Creek 13013000	Snake River	Lat 43°40'46", long 110°42'47", in NW¼SW¼NE¼ sec.24, T.43 N., R.116 W., Grand Teton National Park, Teton County, 1.0 mile upstream from mouth and 1.7 miles north of Moose.	72.3	1917-18; 1972	10-17-72	*38
Ditch Creek basin						
Ditch Creek 13013600	Snake River	Lat 43°39'52", long 110°41'44", in NE¼SE¼NW¼ sec.30, T.43 N., R.115 W., Grand Teton National Park, Teton County, 100 ft downstream from bridge on U.S. Highways 26, 89, and 187, 0.5 mile upstream from mouth, and 1.3 miles northeast of Moose.		1972	10-18-72	*6.2
Snake River Main Stem						
Snake River 13013650	Columbia River	Lat 43°39'15", long 110°42'52", in NW¼NW¼NE¼ sec.36, T.43 N., R.116 W., Grand Teton National Park, Teton County, at bridge on Teton Park Road and 0.2 mile east of Moose.		1972	10-16-72	1,720
Gros Ventre River basin						
Gros Ventre River 13014300	Snake River	Lat 43°34'34", long 110°18'36", in SE¼SE¼NE¼ sec.29, T.42 N., R.112 W., Teton County, Teton National Forest, 250 ft upstream from bridge, 0.5 mile upstream from Devils Dip Creek, 0.5 mile downstream from Coal Mine Draw, 1.0 mile north of Goosewing Guard Station, and 16 miles east of Kelly.			9-26-73	*129
Alkali Creek 13014320	Gros Ventre River	Lat 43°35'32", long 110°22'58", Teton County, Teton National Forest, 5 ft upstream from culvert, 0.3 mile upstream from mouth, and 12.0 miles east of Kelly.			9-26-73	*1.5
Crystal Creek 13014350	Gros Ventre River	Lat 43°33'37", long 110°24'28", Teton County, Teton National Forest, 100 ft downstream from footbridge, 4.3 miles upstream from mouth, and 11.5 miles east of Kelly.			9-26-73	*50

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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)
Part 13 Spring Creek basin						
Warm Spring 13017250	Spring Gulch	Lat 43°32'41", long 110°44'29", in NW¼NW¼SW¼ sec.2, T.41 N., R.116 W., Grand Teton National Park, Teton County, 100 ft downstream from swimming pool at Warm Springs Ranch and 4.6 miles north of Jackson.			10-26-72	*0.88
Hoback River basin						
Hoback River 13019180	SNAKE RIVER	Lat 43°09'37", long 110°21'52", in NE¼NE¼SE¼ sec.23, T.37 N., R.113 W., Sublette County, Teton National Forest, 2 ft downstream from bridge on U.S. Highways 187 and 189, 0.6 mile upstream from Fisherman Creek, and 3.5 miles southeast of post office in Bondurant.			9-28-73	*16
Hoback River 13019300	SNAKE RIVER	Lat 43°14'38", long 110°28'43", in NE¼SW¼NW¼ sec.24, T.38 N., R.114 W., Sublette County, Teton National Forest, 50 ft upstream from bridge on U.S. Highways 187 and 189, 1.1 miles upstream from Cliff Creek, 3.2 miles downstream from Dell Creek, and 4.6 miles northwest of post office in Bondurant.			9-28-73	*77
Granite Creek 13019430	Hoback River	Lat 43°21'53", long 110°26'36", Teton County, Teton National Forest, 200 ft downstream from Granite Falls, 1.1 miles upstream from Swift Creek, and 12.0 miles north of post office in Bondurant.			9-28-73	*52
Granite Creek 13019435	Hoback River	Lat 43°21'31", long 110°26'35", Teton County, Teton National Forest, 0.5 mile downstream from Granite Falls, 0.7 mile upstream from Swift Creek, and 11.5 miles north of post office in Bondurant.			9-28-73	*58

* Base flow.

† Peak flow.

‡ Operated as a continuous-record gaging station.

a Approximately.

b Furnished by Bureau of Reclamation.

c Furnished by Corps of Engineers, U.S. Army.

d 98 mi² is probably noncontributing.

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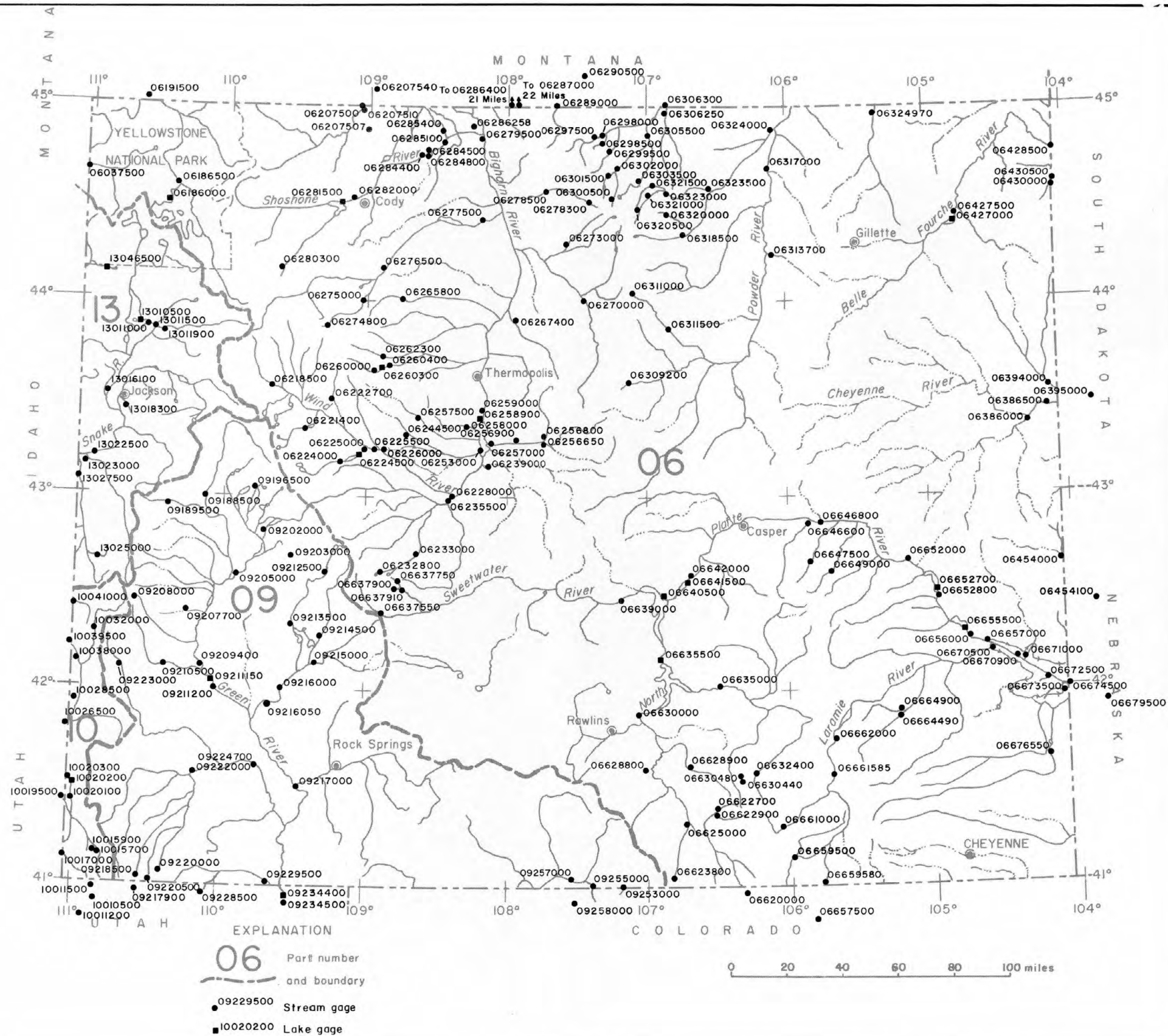


Figure 1.--Map of Wyoming showing locations of lake and stream gaging stations.

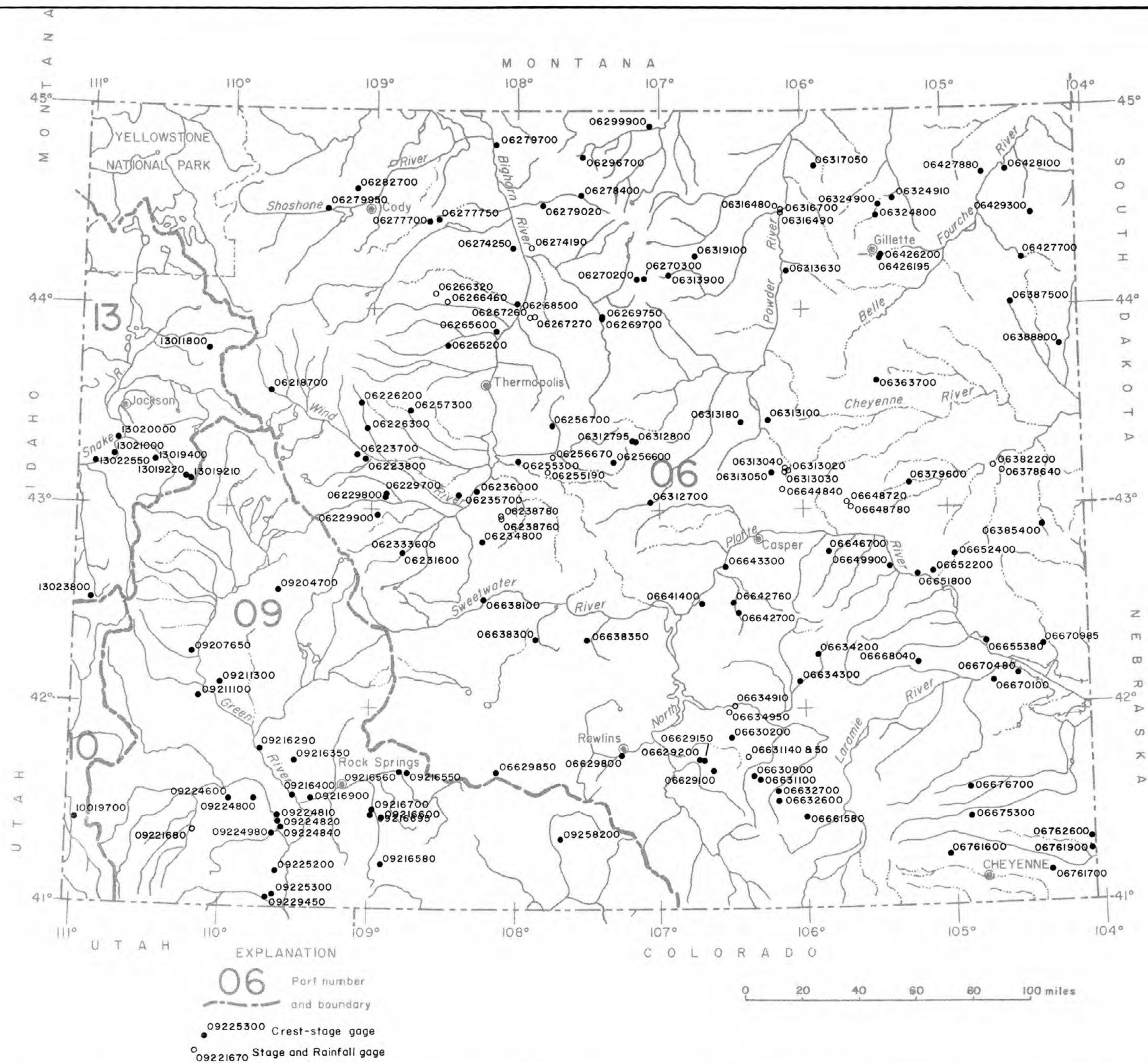


Figure 2.--Map of Wyoming showing location of partial-record stations.

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