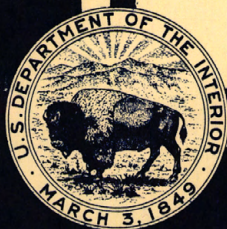
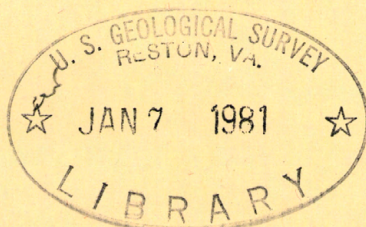


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Water Resources Data for Wyoming

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 1971

OCTOBER 1970

S	M	T	W	T	F	S
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MARCH 1971

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JUNE 1971

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JULY 1971

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AUGUST 1971

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SEPTEMBER 1971

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1971

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 State Engineer
Wyoming Highway Department
Wyoming Department of Economic Planning and Development
Wyoming State Department of Agriculture
Wyoming Game and Fish Commission
City of Casper, Board of Public Utilities
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

Water resources records, 1971, 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
P. O. Box 2087
215 East Eighth Avenue
Cheyenne, Wyoming 82001

CONTENTS

	Page
List of surface-water stations, in downstream order, for which records are published.	IV
Introduction	1
Cooperation.	1
Definition of terms.	2
Special networks and programs.	4
Downstream order and station numbers	4
Explanation of surface-water data.	4
Collection and computation of data	4
Accuracy of data	9
Publications	9
Other data available	10
Hydrologic conditions.	11
Selected references.	11
Surface-water records.	12
Discharge at partial-record stations and miscellaneous sites . .	233
Crest-stage partial-record stations.	233
Discharge measurements at miscellaneous sites.	248
Index.	257

ILLUSTRATIONS

Figure 1. Map of Wyoming showing location of lake and stream gaging stations.	263
Figure 2. Map of Wyoming showing location of partial- record stations	265

IV SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED

Page

MISSOURI RIVER BASIN

Jefferson River:

MADISON RIVER BASIN

Madison River near West Yellowstone, Mont. 12

Missouri River (continuation of Jefferson River):

YELLOWSTONE RIVER BASIN

Yellowstone Lake at Bridge Bay, Yellowstone National Park. 13

Yellowstone River at Yellowstone Lake Outlet, Yellowstone
National Park. 14

Gardner River near Mammoth, Yellowstone National Park. 15

Yellowstone River at Corwin Springs, Mont. 16

Clarks Fork Yellowstone River:

Sunlight Creek near Painter, Wyo 17

Clarks Fork Yellowstone River near Belfry, Mont. 18

Silver Tip Creek near Belfry, Mont 19

Wind River (head of Bighorn River) near Dubois, Wyo. 20

Dinwoody Creek above lakes, near Burris, Wyo 21

Crow Creek near Tipperary, Wyo 22

Bull Lake Creek above Bull Lake, Wyo 23

Bull Lake Creek near Lenore, Wyo 24

Wind River near Crowheart, Wyo 25

Wyoming Canal near Lenore, Wyo 26

Wind River at Riverton, Wyo. 27

Little Wind River:

Popo Agie River:

Little Popo Agie River near Atlantic City, Wyo 28

Little Popo Agie River near Lander, Wyo. 29

Little Wind River near Riverton, Wyo 30

Muskrat Creek near Shoshoni, Wyo 31

Fivemile Creek above Wyoming Canal, near Pavillion, Wyo. 32

Fivemile Creek near Shoshoni, Wyo. 33

Badwater Creek at Lysite, Wyo. 34

Bridger Creek near Lysite, Wyo 35

Dry Creek near Bonneville, Wyo 36

Badwater Creek at Bonneville, Wyo. 37

Muddy Creek near Pavillion, Wyo. 38

Wind River below Boysen Reservoir, Wyo 39

Bighorn River:

South Fork Owl Creek near Anchor, Wyo. 40

South Fork Owl Creek below Anchor Reservoir, Wyo 41

North Fork Owl Creek above Basin Ranch, near Anchor, Wyo 42

Gooseberry Creek at Dickie, Wyo. 43

Fifteen Mile Creek near Worland, Wyo 44

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED

V

Page

MISSOURI RIVER BASIN--Continued

YELLOWSTONE RIVER BASIN--Continued

Bighorn River:--Continued

Nowood River:

Tensleep Creek:

Canyon Creek below Cooks Canyon, near Ten Sleep, Wyo. 45

Tensleep Creek near Ten Sleep, Wyo. 46

Paint Rock Creek:

Medicine Lodge Creek near Hyattville, Wyo 47

Greybull River near Pitchfork, Wyo. 48

Wood River near Kirwin, Wyo 49

Wood River at Sunshine, Wyo 50

Greybull River at Meeteetse, Wyo. 51

Greybull River near Basin, Wyo. 52

Shell Creek above Shell Reservoir, Wyo. 53

Shell Creek near Shell, Wyo 54

Bighorn River at Kane, Wyo. 55

North Fork Shoshone River:

South Fork Shoshone River near Valley, Wyo. 56

Shoshone River below Buffalo Bill Reservoir, Wyo. 57

Shoshone River near Garland, Wyo. 58

Bitter Creek near Garland, Wyo. 59

Whistle Creek near Garland, Wyo 60

Shoshone River near Lovell, Wyo 61

Sage Creek at Sidon Canal, near Deaver, Wyo 62

Crooked Creek:

Big Coulee near Lovell, Wyo 63

Bighorn Lake near St. Xavier, Mont. 65

Bighorn River near St. Xavier, Mont 66

Little Bighorn River near Parkman, Wyo. 67

West Fork Little Bighorn River near Parkman, Wyo. 68

Little Bighorn River at State line, near Wyola, Mont. 69

Little Bighorn River below Pass Creek, near Wyola, Mont 70

North Tongue River:

South Tongue River near Dayton, Wyo 71

Tongue River near Dayton, Wyo 72

Little Tongue River near Dayton, Wyo. 73

Wolf Creek at Wolf, Wyo 74

East Fork Big Goose Creek (head of Goose Creek) near

Big Horn, Wyo 75

Cross Creek above Bighorn Reservoir, near Big Horn, Wyo. 76

West Fork Big Goose Creek near Big Horn, Wyo. 77

Big Goose Creek near Sheridan, Wyo. 78

Little Goose Creek in Canyon, near Big Horn, Wyo. 79

Goose Creek below Sheridan, Wyo 80

Prairie Dog Creek near Acme, Wyo. 81

Tongue River at State line, near Decker, Mont 82

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED

Page

MISSOURI RIVER BASIN--ContinuedYELLOWSTONE RIVER BASIN--Continued

Middle Fork Powder River (head of Powder River) near Barnum, Wyo	83
North Fork Powder River near Hazelton, Wyo	84
North Fork Powder River near Mayoworth, Wyo.	85
Powder River near Kaycee, Wyo.	86
North Fork Crazy Woman Creek below Spring Draw, near Buffalo, Wyo	87
Middle Fork Crazy Woman Creek near Greub, Wyo.	88
Powder River at Arvada, Wyo.	89
Clear Creek near Buffalo, Wyo.	90
Rock Creek near Buffalo, Wyo	91
South Piney Creek (head of Piney Creek) at Willow Park, Wyo.	92
South Piney Creek near Story, Wyo.	93
North Piney Creek near Story, Wyo.	94
Piney Creek at Kearny, Wyo	95
Piney Creek at Ucross, Wyo	96
Clear Creek near Arvada, Wyo	97
Powder River at Moorhead, Mont	98
Little Powder River near Broadus, Mont	99
Reservoirs in Yellowstone River basin in Wyoming	100

CHEYENNE RIVER BASIN

Cheyenne River:

Lance Creek at Spencer, Wyo.	101
Cheyenne River near Spencer, Wyo	102
Beaver Creek near Newcastle, Wyo	103
Cheyenne River at Edgemont, S. Dak	104
Keyhole Reservoir near Moorcroft, Wyo.	105
Belle Fourche River below Keyhole Reservoir, Wyo	106
Belle Fourche River at Wyoming-South Dakota State line	107
Redwater Creek:	
Murray ditch at Wyoming-South Dakota State line.	108
Redwater Creek at Wyoming-South Dakota State line.	109

NIOBRARA RIVER BASIN

Niobrara River at Wyoming-Nebraska State line.	110
Niobrara River at Agate, Nebr.	111

PLATTE RIVER BASIN

North Platte River (head of Platte River) near Northgate, Colo . .	112
Douglas Creek near Foxpark, Wyo.	113
North Brush Creek (head of Brush Creek) near Saratoga, Wyo . . .	114
South Brush Creek near Saratoga, Wyo	115
Encampment River above Hog Park Creek, near Encampment, Wyo. . .	116
Encampment River at mouth, near Encampment, Wyo.	117
Pass Creek near Elk Mountain, Wyo.	118

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED

VII

	Page
<u>MISSOURI RIVER BASIN--Continued</u>	
<u>PLATTE RIVER BASIN--Continued</u>	
North Platte River:--Continued	
North Platte River above Seminoe Reservoir, near Sinclair, Wyo. . .	119
Medicine Bow River:	
Rock Creek above King Canyon Canal, near Arlington, Wyo	120
Medicine Bow River above Seminoe Reservoir, near Hanna, Wyo . . .	121
Seminoe Reservoir near Leo, Wyo	122
Sweetwater River near South Pass City, Wyo.	123
Rock Creek above Rock Creek Reservoir, Wyo.	124
Slate Creek near Atlantic City, Wyo	125
Rock Creek at Atlantic City, Wyo.	126
Sweetwater River near Alcova, Wyo	127
Pathfinder Reservoir near Alcova, Wyo	128
Alcova Reservoir at Alcova, Wyo	129
North Platte River at Alcova, Wyo	130
Deer Creek below Millar wasteway, at Glenrock, Wyo.	131
North Platte River near Glenrock, Wyo	132
La Prele Creek near Douglas, Wyo.	133
North Platte River at Orin, Wyo	134
Glendo Reservoir near Glendo, Wyo	135
North Platte River below Glendo Reservoir, Wyo.	136
Guernsey Reservoir near Guernsey, Wyo	137
North Platte River below Guernsey Reservoir, Wyo.	138
North Platte River at recorder station, below Whalen, Wyo	139
Laramie River near Glendevay, Colo.	140
Laramie River near Jelm, Wyo.	141
Laramie River and Pioneer Canal near Woods, Wyo	142
Sand Creek at Colorado-Wyoming State line	143
Laramie River at Laramie, Wyo	144
Laramie River at Two Rivers, Wyo.	145
Little Laramie River near Filmore, Wyo.	146
Little Laramie River at Two Rivers, Wyo	147
Laramie River near Lookout, Wyo	148
Sybille Creek below Mule Creek, near Wheatland, Wyo	149
Bluegrass Creek near Wheatland, Wyo	150
North Laramie River near Wheatland, Wyo	151
Laramie River near Fort Laramie, Wyo.	152
North Platte River near Lingle, Wyo	153
Rawhide Creek near Lingle, Wyo.	154
Cherry Creek drain near Torrington, Wyo	155
Katzner drain near Henry, Nebr	156

MISSOURI RIVER BASIN--ContinuedPLATTE RIVER BASIN--ContinuedNorth Platte River:--Continued

North Platte River at Wyoming-Nebraska State line.	157
Horse Creek at WyCross Ranch, near La Grange, Wyo.	158
Horse Creek at lower station, near Yoder, Wyo.	159
Horse Creek at Wyoming-Nebraska State line	160
North Platte River at Mitchell, Nebr	161
South Platte River:	
Cache la Poudre River:	
Transbasin diversions from North Platte River basin to	
Cache la Poudre River basin in Colorado.	162

COLORADO RIVER BASINGREEN RIVER BASIN

Green River at Warren Bridge, near Daniel, Wyo	163
Horse Creek at Sherman ranger station, Wyo	164
New Fork River below New Fork Lakes, near Cora, Wyo.	165
Pine Creek above Fremont Lake, Wyo	166
Pole Creek below Little Half Moon Lake, near Pinedale, Wyo . .	167
Fall Creek near Pinedale, Wyo.	168
Boulder Creek below Boulder Lake, near Boulder, Wyo.	169
East Fork River near Big Sandy, Wyo.	170
Silver Creek near Big Sandy, Wyo	171
New Fork River near Big Piney, Wyo	172
North Piney Creek near Mason, Wyo.	173
Dry Piney Creek near Big Piney, Wyo.	174
La Barge Creek near La Barge Meadows ranger station, Wyo . . .	175
Green River near La Barge, Wyo	176
Fontenelle Creek near Herschler Ranch, near Fontenelle, Wyo. . .	177
Fontenelle Reservoir near Fontenelle, Wyo.	178
Green River below Fontenelle Reservoir, Wyo.	179
Big Sandy River at Leckie Ranch, near Big Sandy, Wyo	180
Big Sandy River near Farson, Wyo	182
Little Sandy Creek near Elkhorn, Wyo	183
Little Sandy Creek above Eden, Wyo	184
Pacific Creek near Farson, Wyo	185
Big Sandy River below Eden, Wyo.	186
Green River near Green River, Wyo.	187
Blacks Fork near Robertson, Wyo.	188
Blacks Fork near Millburne, Wyo.	189
East Fork of Smith Fork, near Robertson, Wyo	190
West Fork of Smith Fork, near Robertson, Wyo	191

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED

IX

Page

COLORADO RIVER BASIN--Continued

GREEN RIVER BASIN--Continued

Blacks Fork near Lyman, Wyo	192
Hams Fork below Pole Creek, near Frontier, Wyo.	193
Hams Fork near Frontier, Wyo.	194
Blacks Fork near Little America, Wyo.	195
Henrys Fork near Lonetree, Wyo.	196
Burnt Fork near Burntfork, Wyo.	197
Henrys Fork at Linwood, Utah.	198
Flaming Gorge Reservoir at Flaming Gorge Dam, Utah.	199
Green River near Greendale, Utah.	200
Yampa River:	
Little Snake River near Slater, Colo.	201
Slater Fork near Slater, Colo	202
Savery Creek at upper station, near Savery, Wyo	203
Savery Creek near Savery, Wyo	204
Little Snake River near Dixon, Wyo.	205
Willow Creek near Dixon, Wyo.	206

GREAT SALT LAKE BASIN

BEAR RIVER BASIN

Bear River:

 East Fork Bear River:

Hilliard-East Fork Canal near State line, near Evanston, Wyo. .	207
West Fork Bear River at Whitney Dam, near Oakley, Utah.	208
Bear River near Utah-Wyoming State line	209
Sulphur Creek above reservoir, near Evanston, Wyo	210
Sulphur Creek below reservoir, near Evanston, Wyo	211
Yellow Creek near Evanston, Wyo	212
Chapman Canal at State line, near Evanston, Wyo	213
Bear River above reservoir, near Woodruff, Utah	214
Woodruff Narrows Reservoir near Woodruff, Utah.	215
Bear River below reservoir, near Woodruff, Utah	216
Bear River near Randolph, Utah.	217
Bear River below Pixley Dam, near Cokeville, Wyo.	218
Smiths Fork near Border, Wyo.	219
Bear River below Smiths Fork, near Cokeville, Wyo	220
Bear River at Border, Wyo	221
Thomas Fork near Wyoming-Idaho State line	222

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED

Page

SNAKE RIVER BASIN

Snake River:

Jackson Lake near Moran, Wyo. 223

Snake River near Moran, Wyo. 224

PACIFIC CREEK BASIN

Pacific Creek at Moran, Wyo. 225

BUFFALO FORK BASIN

Buffalo Fork above Lava Creek, near Moran, Wyo. 226

FLAT CREEK BASIN

Flat Creek:

Cache Creek near Jackson, Wyo. 227

Snake River above reservoir, near Alpine, Wyo. 228

GREYS RIVER BASIN

Greys River above reservoir, near Alpine, Wyo. 229

SALT RIVER BASIN

Salt River:

Swift Creek near Afton, Wyo. 230

Salt River above reservoir, near Etna, Wyo. 231

HENRYS FORK BASIN

Small Reservoir in Henrys Fork basin 232

Discharge at partial-record stations and miscellaneous sites

Crest-stage partial-record stations. 233

Discharge measurements at miscellaneous sites. 248

Index. 257

WATER RESOURCES DATA FOR WYOMING, 1971

PART 1. SURFACE-WATER RECORDS

INTRODUCTION

Surface-water records for the 1971 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. 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. 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.

Through September 30, 1960, the records of discharge and stage of streams and canals, and contents and stage of lakes or reservoirs, were published in an annual series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States."

Beginning with the 1961 water year, surface-water records have been released by the Geological Survey in annual reports on a State-boundary basis. Distribution of these reports is limited; they are designed primarily for rapid release of data shortly after the end of the water year to meet local needs. Records of discharge and reservoir storage for 1961-65 have been published in a Geological Survey water-supply paper series entitled "Surface Water Supply of the United States 1961-65." Records of discharge and reservoir storage for 1966-70 also will be published in a Geological Survey water-supply paper series entitled "Surface Water Supply of the United States 1966-70."

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

Wyoming Game and Fish Commission, James B. White, commissioner

City of Casper, Board of Public Utilities, Roel K. Stratton,
superintendent

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, and by the National Park Service, Department of the Interior, 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:

Columbia-Geneva Steel Division, U.S. 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

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

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

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

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

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, 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 basin.

DOWNSTREAM ORDER AND STATION NUMBERS

Records are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all 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 1971 water year is shown on the reverse side of the front cover to facilitate finding the day of the week for any date.

The description of the 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.

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

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

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

The monthly summary is given below the daily table. For stream-gaging stations 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 of cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average rainfall on the drainage basin is usually less than 20 inches.

For reservoir stations the monthly summary gives the elevation (or gage height) at the end of the month and the change in contents during the month.

In the yearly summary below the monthly summary, the figures following "MAX" are the maximum daily discharges for the calendar and water years; likewise, those following "MIN" are the minimum daily discharges.

For reservoir stations the yearly summary gives the change in contents for the calendar year and for the water year.

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

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

Accuracy of Data

The accuracy of 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

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

Records through September 1950 for Wyoming have been compiled and published in Water-Supply Papers 1309, 1310, 1313, 1314, and 1317; records for October 1950 to September 1960 have been compiled and published in Water-Supply Papers 1729, 1730, 1733, 1734, and 1737. 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.

Wyoming streamflow records for October 1960 to September 1965 have been published in Water-Supply Papers 1916, 1917, 1918, 1925, 1927, and 1934. Records for October 1965 to September 1970 will be published in Water-Supply Papers 2116, 2117, 2118, 2125, 2127, and 2134. These reports contain values of daily discharge, summaries of monthly and annual discharge, and monthend storage for all records previously published in the annual series of State reports. All records were reexamined and revised where warranted.

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

Other Data Available

Data collected at partial-record stations and at miscellaneous sites are given in 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.

More detailed information than that published for most of the gaging stations, such as discharge measurements, gage-height records, and rating tables, is on file in the district office. Many gaging-station records in 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 1971 water year was above average in all major river basins in Wyoming. Average or below average runoff was recorded at a few gaging stations on small streams in the Nowood and Tongue River basins.

Flow in most of the larger streams was above average at the beginning of the water year and declined to near average in late fall. Snow accumulation during the winter was the heaviest on record in the mountain headwaters of the Green and Snake River basins and in areas of the Wind and North Platte River basins. Below average temperatures over most of the State during April and early May delayed the spring snowmelt, and above average temperatures in late May and June caused high runoff from the record snowpack. Yellowstone Lake reached the highest level on record. Record high peaks were recorded at several gaging stations in the upper Yellowstone, Wind, Green, Bear, and Snake River basins.

Heavy rains on May 5 in the lower North Platte River and lower Laramie River basins caused flooding in parts of Goshen and Platte Counties. Heavy rains on May 23 caused record high flows in the Cheyenne River basin.

Reservoir storage in the upper Yellowstone River basin increased 185,200 acre-feet during the year. Storage in Keyhole Reservoir, on the Belle Fourche River, increased 34,600 acre-feet during the year and reached a record high level. In the North Platte River basin, storage in the major reservoirs increased 374,200 acre-feet. Glendo Reservoir, on the North Platte River, reached a record high during the year. Storage in the Green River basin increased 1,220,700 acre-feet, and Flaming Gorge 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. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29 p.

SURFACE-WATER RECORDS

MISSOURI RIVER BASIN

MADISON RIVER BASIN

06037500 MADISON RIVER NEAR WEST YELLOWSTONE, MONT.

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 mile upstream from Riverside ranger station, 1.6 miles east of West Yellowstone and west boundary of Yellowstone National Park, 12.5 miles downstream from confluence of Firehole and Gibbon Rivers, and at mile 120.

DRAINAGE AREA.--420 sq mi.

PERIOD OF RECORD.--June 1913 to December 1917, July 1918 to October 1921, June 1922 to current year. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 6,650 ft (from topographic map). Prior to Oct. 21, 1918, nonrecording gage, and Oct. 20, 1918, to June 29, 1930, nonrecording gage or water-stage recorder, at sites 2.5 miles upstream at different datums. Supplementary nonrecording gage at site 0.3 mile downstream at different datum used at times during 1927-30.

AVERAGE DISCHARGE.--56 years (1913-17, 1918-21, 1922-71), 485 cfs (15.68 inches per year, 351,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, about 2,050 cfs June 15; minimum, 372 cfs Dec. 23.

Period of record: Maximum discharge, 2,150 cfs May 24, 1956 (gage height, 3.44 ft); maximum gage height, about 10.0 ft Jan. 8, 1937 (ice jam); minimum discharge, 100 cfs (estimated) Feb. 7, 1933.

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

REVISIONS (WATER YEARS).--WSP 1439: 1942.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	448	448	511	450	463	448	448	633	1,650	935	633	591
2	448	448	455	441	455	434	441	714	1,600	905	633	575
3	441	441	487	448	450	448	448	795	1,500	1,070	642	633
4	441	441	479	450	435	463	434	815	1,300	1,050	651	723
5	441	441	471	450	435	455	434	805	1,350	905	642	651
6	471	448	479	450	435	441	441	835	1,400	865	633	599
7	471	455	479	455	440	434	470	895	1,450	835	669	600
8	463	455	487	460	455	441	495	975	1,500	825	651	600
9	463	448	487	463	441	441	479	965	1,550	815	624	600
10	471	479	471	471	448	441	511	975	1,650	805	599	605
11	471	463	471	471	463	441	487	1,020	1,750	786	591	607
12	471	471	455	471	448	455	471	1,110	1,600	768	591	590
13	487	455	448	463	455	470	455	1,260	1,450	750	583	575
14	463	448	455	463	455	455	471	1,260	1,750	741	583	559
15	455	455	463	463	471	441	551	1,230	2,000	732	575	551
16	455	455	471	471	455	448	575	1,350	1,750	723	575	551
17	455	455	471	479	455	463	551	1,350	1,500	714	567	551
18	455	471	471	463	463	455	535	1,180	1,300	705	575	551
19	455	471	463	455	463	455	511	1,080	1,200	696	567	543
20	455	463	455	455	455	455	519	1,020	1,150	696	559	551
21	455	455	463	455	434	455	519	965	1,240	741	559	543
22	463	441	471	463	448	455	527	1,060	1,300	732	559	543
23	463	441	427	463	448	463	535	1,050	1,330	741	559	543
24	479	471	441	463	448	463	575	1,070	1,270	705	551	535
25	471	591	455	463	455	471	633	1,150	1,220	687	551	535
26	471	559	455	463	455	479	591	1,280	1,140	678	543	551
27	455	527	455	463	448	479	567	1,450	1,220	669	543	551
28	448	519	455	455	455	463	551	1,670	1,240	660	543	551
29	448	503	471	455	-----	455	559	1,850	1,120	660	599	543
30	448	535	463	463	-----	463	583	1,850	985	651	795	575
31	448	-----	455	463	-----	471	-----	1,750	-----	642	660	-----
TOTAL	14,229	14,153	14,480	14,261	12,631	14,101	15,367	35,412	42,465	23,887	18,605	17,276
MEAN	459	472	467	460	451	455	512	1,142	1,416	771	600	576
MAX	487	591	511	479	471	479	633	1,850	2,000	1,070	795	723
MIN	441	441	427	441	434	434	434	633	985	642	543	535
CFSM	1.09	1.12	1.11	1.10	1.07	1.08	1.22	2.72	3.37	1.84	1.43	1.37
IN.	1.26	1.25	1.28	1.26	1.12	1.25	1.36	3.14	3.76	2.12	1.65	1.53
AC-FT	28,220	28,070	28,720	28,290	25,050	27,970	30,480	70,240	84,230	47,380	36,900	34,270
CAL YR	970	TOTAL 199,249	MEAN 546	MAX 1,630	MIN 350	CFSM 1.30	IN 17.65	AC-FT 395,200				
WTR YR	971	TOTAL 236,867	MEAN 649	MAX 2,000	MIN 427	CFSM 1.55	IN 20.98	AC-FT 469,800				

PEAK DISCHARGE (BASE, 950 CFS)

NOTE.--No gage-height record May 30 to June 20.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-16	1200	2.89	1,410	6-15	--	--	a 2,050
5-30	--	--	a 1,900	7- 3	1800	2.75	1,180

a About.

YELLOWSTONE RIVER BASIN

13

06186000 YELLOWSTONE LAKE AT BRIDGE BAY, YELLOWSTONE NATIONAL PARK

LOCATION.--Lat 44°32'00", long 110°26'20", Yellowstone National Park, at marina at Bridge Bay and 3.7 miles southwest of lake outlet.

DRAINAGE AREA.--1,006 sq mi.

PERIOD OF RECORD.--October 1921 to current year. Prior to October 1966, published as Yellowstone Lake at Lake Hotel.

GAGE.--Nonrecording gage usually read once daily except during winter months when it is read occasionally. Datum of gage is 7,729.45 ft above mean sea level. Prior to Oct. 1, 1966, nonrecording gages at Lake Hotel dock at same datum.

EXTREMES.--Current year: Maximum gage height observed, 7.06 ft June 30; minimum observed, 1.40 ft Apr. 24.

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

REMARKS.--No regulation.

REVISIONS.--WSP 1916: Drainage area.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										7.04	5.40	
2										7.02	5.38	3.50
3							1.46			6.88	5.22	
4										6.82	5.16	3.48
5										6.78	5.10	
6										6.76	5.04	
7		1.68								6.72	4.98	
8								1.54		6.68	4.90	
9										6.66	4.86	
10										6.64	4.78	
11										6.62	4.72	
12										6.58	4.68	
13					1.58				4.88	6.52	4.60	
14						1.48			5.08	6.48	4.52	
15									5.28	6.42	4.46	
16				1.68					5.38	6.34	4.38	
17									5.48	6.30	4.36	
18									5.58	6.28	4.28	
19			1.50						5.78	6.24	4.20	
20									5.98	6.20	4.12	
21									6.08	6.12	4.00	
22								2.28	6.30	6.08	3.98	2.78
23									6.34	6.00	3.94	
24		1.47					1.40		6.52	5.98	3.88	
25								2.46	6.72	5.88		
26									6.86	5.82		
27									6.88	5.74	3.74	
28	1.82								6.96	5.68	3.66	
29		1.60							7.02	5.60	3.66	
30				1.54	-----				7.06	5.52		
31		-----			-----		-----		-----	5.44		-----
MEAN										6.32		
MAX										7.04		
MIN										5.44		

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 downstream from Fishing Bridge, 0.2 mile downstream from outlet of Yellowstone Lake, and at mile 594.8.

DRAINAGE AREA.--1,006 sq mi.

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 above mean sea level. Prior to Oct. 2, 1928, nonrecording gage at site 450 ft upstream at datum 1.07 ft higher.

AVERAGE DISCHARGE.--45 years (1926-71), 1,312 cfs (17.71 inches per year, 950,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,250 cfs June 28 (gage height, 7.95 ft); minimum, 572 cfs Dec. 11, but may have been less during period of ice effect.

Period of record: Maximum discharge, 8,250 cfs June 28, 1971 (gage height, 7.95 ft); minimum daily, 130 cfs Mar. 1-31, 1935, but may have been less during periods of ice effect; minimum gage height, 1.45 ft 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,150	798	744	630	640	610	687	665	2,450	7,940	5,000	2,330
2	1,140	786	756	630	640	610	687	665	2,570	7,830	4,860	2,230
3	1,120	774	726	630	640	610	687	665	2,660	7,890	4,730	2,270
4	1,100	762	704	630	640	610	682	665	2,760	7,790	4,620	2,240
5	1,100	756	720	630	640	610	576	670	2,870	7,720	4,540	2,210
6	1,100	756	720	630	640	610	670	682	3,000	7,640	4,440	2,170
7	1,060	756	738	630	640	610	660	682	3,080	7,620	4,350	2,130
8	1,050	750	750	630	630	610	560	704	3,200	7,520	4,260	2,110
9	1,030	744	738	630	630	610	654	720	3,360	7,450	4,130	2,060
10	1,000	744	738	630	630	610	654	738	3,540	7,370	4,060	2,030
11	1,020	750	665	640	630	610	654	756	3,810	7,300	3,930	1,980
12	995	744	670	640	630	610	548	792	4,000	7,260	3,830	1,930
13	995	738	660	640	630	610	643	834	4,200	7,200	3,720	1,890
14	980	726	660	640	630	610	543	882	4,420	7,070	3,600	1,820
15	966	720	660	640	630	610	654	931	4,640	6,970	3,520	1,760
16	959	720	660	640	630	600	665	1,010	4,920	6,880	3,410	1,690
17	952	714	660	640	620	600	670	1,090	5,130	6,760	3,310	1,670
18	938	704	650	640	620	600	676	1,140	5,400	6,650	3,230	1,650
19	938	709	650	640	620	600	670	1,180	5,720	6,550	3,140	1,610
20	938	704	650	640	620	600	670	1,200	6,020	6,460	3,050	1,560
21	931	704	640	640	620	600	670	1,210	5,280	6,400	2,980	1,520
22	910	682	640	640	620	600	670	1,240	6,630	6,300	2,870	1,500
23	896	682	640	640	620	600	570	1,270	6,930	6,170	2,830	1,480
24	882	704	640	640	620	600	670	1,320	7,260	6,040	2,720	1,460
25	875	726	640	640	620	620	670	1,370	7,580	5,900	2,650	1,440
26	868	732	640	650	620	640	682	1,430	7,840	5,780	2,580	1,410
27	861	744	640	650	620	660	587	1,530	8,040	5,640	2,520	1,390
28	847	726	640	650	620	680	682	1,680	8,140	5,500	2,460	1,360
29	828	720	640	650	-----	692	682	1,870	8,140	5,380	2,420	1,330
30	816	720	640	650	-----	682	676	2,070	8,060	5,240	2,420	1,330
31	804	-----	630	650	-----	682	-----	2,300	-----	5,110	2,370	-----
TOTAL	30,049	21,995	20,949	19,800	17,590	19,206	20,069	33,961	152,650	209,330	108,550	53,560
MEAN	969	733	676	639	628	620	669	1,096	5,088	6,753	3,502	1,785
MAX	1,150	798	756	650	640	692	687	2,300	8,140	7,940	5,000	2,330
MIN	804	682	630	630	620	600	643	665	2,450	5,110	2,370	1,330
CFSM	.96	.73	.67	.64	.62	.62	.67	1.09	5.06	6.71	3.48	1.77
IN.	1.11	.81	.77	.73	.65	.71	.74	1.26	5.64	7.74	4.01	1.98
AC-FT	59,600	43,630	41,550	39,270	34,890	38,100	39,310	67,360	302,800	415,200	215,300	106,200

CAL YR 1970 TOTAL 548,624 MEAN 1,503 MAX 6,460 MIN 360 CFSM 1.49 IN 20.29 AC-FT 1,088,000
WTR YR 1971 TOTAL 707,709 MEAN 1,939 MAX 8,140 MIN 600 CFSM 1.93 IN 26.17 AC-FT 1,404,000

NOTE.--Stage-discharge relation affected by ice Dec. 12 to Mar. 28 (no gage-height record Mar. 8-13).

YELLOWSTONE RIVER BASIN

15

06191000 GARDNER RIVER NEAR MAMMOTH, YELLOWSTONE NATIONAL PARK

LOCATION.--Lat 44°59'35", long 110°41'25", Park County, Yellowstone National Park, on left bank at Wyoming-Montana State line, 400 ft upstream from highway bridge, 0.5 mile downstream from Hot River (formerly Boiling River), 1.5 miles north of Mammoth, and 3 miles upstream from mouth.

DRAINAGE AREA.--202 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Prior to October 1959, published as Gardiner River near Mammoth.

GAGE.--Water-stage recorder. Altitude of gage is 5,620 ft (from topographic map).

AVERAGE DISCHARGE.--33 years, 217 cfs (14.59 inches per year, 157,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,660 cfs June 11, 23 (gage height, 4.05 ft); minimum, 59 cfs Feb. 21 (gage height, 1.73 ft), but may have been less during period of no gage-height record.

Period of record: Maximum discharge, 2,080 cfs June 4, 1956 (gage height, 4.46 ft); maximum gage height, 4.78 ft June 16, 1962 (backwater from log and debris); minimum discharge, 35 cfs Mar. 28, 1942 (gage height, 1.08 ft).

REMARKS.--Records good. No regulation or diversion.

REVISIONS.--WSP 1729: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	151	140	112	103	112	90	92	168	1,240	859	283	188
2	151	131	117	88	109	90	90	196	1,120	842	276	182
3	151	128	112	90	106	106	92	217	1,070	985	272	205
4	151	126	109	90	90	100	90	224	1,030	877	268	211
5	151	131	114	90	92	98	92	233	1,150	794	261	199
6	156	134	114	90	95	92	95	291	1,240	770	258	185
7	151	131	117	90	112	98	103	410	1,170	738	254	193
8	151	128	120	90	114	98	103	458	1,240	698	243	188
9	151	131	118	106	103	98	106	496	1,480	674	236	179
10	156	134	110	117	106	98	109	626	1,530	658	230	173
11	154	120	100	114	109	95	106	650	1,570	642	224	168
12	156	134	95	114	106	98	100	738	1,540	603	217	165
13	154	128	92	112	106	100	98	802	1,520	573	214	165
14	148	120	106	109	106	92	103	802	1,510	550	208	162
15	145	123	120	109	106	95	123	794	1,550	516	205	162
16	145	126	115	106	103	95	120	931	1,510	496	199	162
17	145	126	105	106	100	95	117	778	1,510	490	196	162
18	145	126	95	109	106	88	112	618	1,480	490	202	162
19	145	123	85	112	103	95	109	535	1,470	464	191	159
20	142	120	92	120	98	95	109	509	1,370	464	188	162
21	145	120	105	106	77	95	109	490	1,400	483	188	156
22	142	85	106	92	98	95	112	558	1,490	446	182	156
23	142	112	95	109	106	98	117	503	1,550	410	179	154
24	148	145	112	112	109	100	123	610	1,470	394	173	154
25	137	165	114	106	103	98	128	722	1,360	377	173	154
26	140	142	112	106	106	106	123	940	1,290	355	173	162
27	128	131	114	112	90	95	114	1,120	1,420	337	174	165
28	131	128	123	109	103	92	117	1,220	1,280	328	180	165
29	134	123	120	109	-----	95	128	1,350	1,120	310	205	165
30	137	128	114	106	-----	98	145	1,250	940	302	254	162
31	137	-----	112	112	-----	95	-----	1,330	-----	291	208	-----
TOTAL	4,520	3,839	3,375	3,244	2,874	2,983	3,285	20,569	40,620	17,216	6,714	5,125
MEAN	146	128	109	105	103	96.2	110	664	1,354	555	217	171
MAX	156	165	123	120	114	106	145	1,350	1,570	985	283	211
MIN	128	85	85	88	77	88	90	168	940	291	173	154
CFSM	.72	.63	.54	.52	.51	.48	.54	3.29	6.70	2.75	1.07	.85
IN.	.83	.71	.62	.60	.53	.55	.60	3.79	7.48	3.17	1.24	.94
AC-FT	8,970	7,610	6,690	6,430	5,700	5,920	6,520	40,800	80,570	34,150	13,320	10,170

CAL YR 1970	TOTAL	86,333	MEAN	237	MAX	1,420	MIN	83	CFSM	1.17	IN	15.90	AC-FT	171,200
WTR YR 1971	TOTAL	114,364	MEAN	313	MAX	1,570	MIN	77	CFSM	1.55	IN	21.06	AC-FT	226,800

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-15	2315	3.41	985	6-11	0245	4.05	1,660
5-29	0915	3.83	1,430	6-23	0445	4.05	1,660

YELLOWSTONE RIVER BASIN

06191500 YELLOWSTONE RIVER AT CORWIN SPRINGS, MONT.

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 downstream from highway bridge at Corwin Springs, 1.3 miles upstream from Mol Herron Creek, 7 miles northwest of Gardiner, and at mile 530.5.

DRAINAGE AREA.--2,623 sq mi.

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 above mean sea level. Aug. 12, 1889, to Nov. 4, 1893, nonrecording gages at site 2 miles upstream at different datums. Sept. 2, 1910, to Apr. 19, 1935, nonrecording gages on bridge at present datum.

AVERAGE DISCHARGE.--65 years, 3,097 cfs (16.03 inches per year, 2,244,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 25,200 cfs June 23 (gage height, 9.73 ft); minimum, 708 cfs Dec. 13 (gage height, 0.65 ft), result of freezeup.

Period of record: Maximum discharge observed, 32,000 cfs June 14, 15, 1918 (gage height, 11.5 ft), from rating curve extended above 18,000 cfs; minimum observed, 389 cfs Feb. 23, Mar. 5, 9, 1937 (gage height, 0.05 ft).

REMARKS.--Records excellent. Natural storage in Yellowstone Lake. Diversions above station for irrigation of about 960 acres, of which 40 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,970	1,430	1,270	1,100	1,310	1,040	1,100	1,780	11,900	14,600	6,600	3,250
2	1,920	1,360	1,240	1,020	1,280	1,010	1,150	2,180	10,700	14,800	6,420	3,160
3	1,880	1,330	1,170	986	1,240	1,060	1,170	2,710	11,000	16,800	6,270	3,320
4	1,840	1,320	962	962	1,110	1,050	1,100	3,030	11,200	15,700	6,120	3,560
5	1,820	1,360	771	960	1,080	1,040	1,150	3,140	11,100	14,600	5,980	3,420
6	1,840	1,390	881	970	1,070	1,020	1,220	3,580	11,800	14,300	5,930	3,320
7	1,820	1,370	1,090	990	1,110	1,020	1,310	4,280	12,000	14,000	5,790	3,240
8	1,770	1,330	1,230	1,020	1,150	1,060	1,360	5,210	14,100	13,300	5,670	3,250
9	1,770	1,340	1,270	1,120	1,130	1,070	1,330	5,170	16,500	12,900	5,400	3,040
10	1,800	1,370	1,270	1,080	1,150	1,090	1,380	5,150	17,700	12,800	5,210	2,920
11	1,750	1,290	1,230	1,100	1,180	1,100	1,360	6,080	18,200	12,600	5,080	2,820
12	1,760	1,360	909	1,150	1,170	1,140	1,320	7,140	17,100	12,200	4,950	2,760
13	1,780	1,320	860	1,080	1,200	1,180	1,210	8,620	17,300	11,700	4,800	2,760
14	1,730	1,290	1,200	1,030	1,200	1,130	1,280	7,800	17,500	11,400	4,650	2,620
15	1,640	1,230	1,230	1,050	1,200	1,130	1,460	7,450	18,800	11,100	4,550	2,540
16	1,660	1,290	1,270	1,070	1,180	1,100	1,550	8,870	18,600	10,700	4,440	2,470
17	1,660	1,300	1,230	1,100	1,150	1,120	1,480	8,040	19,100	10,400	4,340	2,400
18	1,670	1,300	1,210	1,100	1,160	994	1,450	6,370	19,000	10,200	4,260	2,370
19	1,680	1,240	1,200	1,140	1,190	1,050	1,400	5,330	19,700	9,790	4,100	2,360
20	1,640	1,270	1,180	1,260	1,150	1,070	1,390	4,930	18,300	9,490	4,000	2,340
21	1,630	1,210	1,140	1,200	1,010	1,110	1,380	4,570	20,300	9,370	3,910	2,240
22	1,600	1,000	1,170	1,030	1,040	1,110	1,400	5,100	22,400	9,160	3,790	2,210
23	1,570	1,020	1,090	930	1,080	1,130	1,490	4,650	23,500	8,870	3,740	2,180
24	1,580	1,330	1,160	1,070	1,120	1,150	1,570	5,650	22,600	8,560	3,630	2,170
25	1,520	1,540	1,200	1,100	1,130	1,160	1,700	6,270	21,200	8,340	3,520	2,140
26	1,490	1,460	1,150	1,130	1,060	1,200	1,620	8,310	19,600	7,990	3,440	2,120
27	1,420	1,360	1,120	1,160	1,060	1,220	1,510	11,200	19,700	7,690	3,350	2,130
28	1,410	1,320	1,110	1,200	1,070	1,160	1,490	13,900	18,300	7,450	3,300	2,080
29	1,440	1,320	1,140	1,200	-----	1,190	1,500	15,100	16,500	7,190	3,400	2,040
30	1,440	1,380	1,120	1,210	-----	1,260	1,560	13,700	14,900	7,010	3,610	2,090
31	1,440	-----	1,110	1,240	-----	1,280	-----	13,000	-----	6,820	3,490	-----
TOTAL	51,940	39,430	35,183	33,758	31,980	34,444	41,390	208,310	510,600	341,830	143,740	79,320
MEAN	1,675	1,314	1,135	1,089	1,142	1,111	1,380	6,720	17,020	11,030	4,637	2,644
MAX	1,970	1,540	1,270	1,260	1,310	1,280	1,700	15,100	23,500	16,800	6,600	3,560
MIN	1,410	1,000	771	930	1,010	994	1,100	1,780	10,700	6,820	3,300	2,040
CFSM	.64	.50	.43	.42	.44	.42	.53	2.56	6.49	4.21	1.77	1.01
IN.	.74	.56	.50	.48	.45	.49	.59	2.95	7.24	4.85	2.04	1.12
AC-FT	103,000	78,210	69,790	66,960	63,430	68,320	82,100	413,200	1,013M	678,000	285,100	157,300
CAL YR 1970	TOTAL 1,298,623	MEAN 3,558	MAX 18,600	MIN 680	CFSM 1.36	IN 18.42	AC-FT 2,576,000					
WTR YR 1971	TOTAL 1,551,925	MEAN 4,252	MAX 23,500	MIN 771	CFSM 1.62	IN 22.01	AC-FT 3,078,000					

PEAK DISCHARGE (BASE, 12,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-29	0600	7.53	16,100	6-23	0500	9.73	25,200

YELLOWSTONE RIVER BASIN

17

06206500 SUNLIGHT CREEK NEAR PAINTER, WYO.

LOCATION.--Lat 44°45'00", long 109°30'20", in NE¼ sec.16, T.55 N., R.105 W., Park County, Shoshone National Forest, on left bank 1.5 miles downstream from Painter Gulch and 4.5 miles west of Painter.

DRAINAGE AREA.--135 sq mi.

PERIOD OF RECORD.--August 1929 to September 1932, July 1945 to September 1971 (discontinued). Monthly discharge only for some periods, published in WSP 1309. Daily discharge for periods December 1950 to April 1951 and December 1951 to March 1952, published in WSP 1916.

GAGE.--Water-stage recorder. Altitude of gage is 6,700 ft (by barometer).

AVERAGE DISCHARGE.--29 years, 126 cfs (91,290 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,840 cfs June 23 (gage height, 3.52 ft); maximum gage height, 3.62 ft June 22; minimum daily discharge, 14 cfs Jan. 4.

Period of record: Maximum discharge, 2,110 cfs June 26, 1932 (gage height, 4.31 ft), from rating curve extended above 1,200 cfs; minimum observed, 8.0 cfs Feb. 20, 1957 (discharge measurement).

Maximum stage known, about 5.8 ft in 1918 (discharge, about 4,000 cfs).

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

REVISIONS (WATER YEARS).--WSP 1309: 1930-31(M). WSP 1389: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	35	26	19	34	22	34	75	614	366	293	148
2	75	40	24	16	32	23	32	123	578	420	297	133
3	70	41	25	15	33	25	23	164	602	465	301	175
4	80	46	27	14	31	23	26	169	626	451	289	164
5	75	40	28	15	30	21	27	175	596	420	281	150
6	70	40	29	16	26	20	34	169	566	446	281	146
7	65	38	30	17	26	21	37	189	608	465	265	138
8	65	38	28	20	27	23	37	231	782	433	261	146
9	65	38	25	19	31	26	44	231	964	495	231	128
10	70	35	23	18	31	27	50	207	1,030	590	220	116
11	70	38	21	16	32	28	42	242	1,020	608	210	107
12	67	37	20	17	33	29	33	317	1,010	560	207	103
13	61	25	20	16	34	29	35	420	1,080	540	201	99
14	55	30	22	16	32	29	44	388	1,080	602	198	97
15	52	39	22	20	33	24	68	348	1,140	632	198	95
16	50	38	23	24	31	22	54	397	1,150	596	195	91
17	50	35	22	26	30	22	46	309	1,300	572	192	87
18	50	33	20	26	29	19	47	224	1,310	555	183	87
19	50	32	17	27	28	20	39	189	1,190	545	175	83
20	49	26	18	28	27	21	36	175	1,110	525	166	82
21	49	24	19	30	28	20	34	164	1,350	493	161	78
22	48	22	15	29	29	19	37	156	1,480	402	158	76
23	46	18	17	27	29	19	43	148	1,490	392	158	73
24	44	19	16	26	32	21	58	177	1,230	392	153	70
25	43	20	17	27	31	24	54	234	999	388	146	68
26	43	23	19	29	30	25	47	392	894	366	143	68
27	39	23	20	30	27	23	42	602	740	352	138	68
28	52	23	21	32	24	22	44	768	560	348	138	65
29	41	25	22	34	-----	27	52	775	415	325	136	65
30	40	27	23	34	-----	47	57	680	348	313	189	67
31	40	-----	22	35	-----	29	-----	680	-----	305	164	-----
TOTAL	1,754	948	681	718	840	750	1,256	9,518	27,862	14,362	6,328	3,073
MEAN	56.6	31.6	22.0	23.2	30.0	24.2	41.9	307	929	463	204	102
MAX	80	46	30	35	34	47	68	775	1,490	632	301	175
MIN	39	18	15	14	24	19	23	75	348	305	136	65
AC-FT	3,480	1,880	1,350	1,420	1,670	1,490	2,490	18,880	55,260	28,490	12,550	6,100

CAL YR 1970 TOTAL 56,492 MEAN 155 MAX 1,150 MIN 11 AC-FT 112,100
WTR YR 1971 TOTAL 68,090 MEAN 187 MAX 1,490 MIN 14 AC-FT 135,100

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-29	0030	2.65	964	7-11	0030	2.20	754
6-23	0245	3.52	1,840				

YELLOWSTONE RIVER BASIN

06207500 CLARKS FORK YELLOWSTONE RIVER NEAR BELFRY, MONT.

LOCATION.--Lat 45°00'40", long 109°04'00", in E1/4 sec.31, T.9 S., R.22 E., Carbon County, on left bank 0.4 mile upstream from county road bridge and Big Sand Coulee, 0.8 mile north of Wyoming-Montana State line, 9.5 miles southwest of Belfry, and at mile 78.5.

DRAINAGE AREA.--1,154 sq mi.

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 (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 mile downstream at different datum. July 27, 1951, to Sept. 30, 1953, water-stage recorder at present site at datum 0.98 ft higher.

AVERAGE DISCHARGE.--50 years, 941 cfs (681,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 10,200 cfs June 23 (gage height, 8.09 ft); minimum, 168 cfs Mar. 2 (gage height, 1.05 ft).

Period of record: Maximum discharge observed, 10,900 cfs May 26, 1928 (gage height, 6.5 ft, site and datum then in use); minimum observed, 32 cfs Apr. 26, 1961, result of discharge measurement.

REMARKS.--Records good. Diversions for irrigation of about 11,000 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	423	275	382	284	417	210	256	475	4,100	3,460	1,680	939
2	398	273	367	255	395	210	232	698	3,680	3,840	1,590	811
3	381	281	371	230	357	210	240	1,040	3,590	4,710	1,610	920
4	364	257	371	225	301	220	228	1,290	3,880	5,080	1,750	1,170
5	351	263	354	225	271	220	217	1,430	3,760	4,430	1,730	956
6	356	285	385	230	250	222	236	1,500	3,610	4,270	1,760	873
7	366	291	374	235	230	225	297	1,400	3,700	4,490	1,600	776
8	357	280	368	240	250	233	335	1,840	4,580	4,200	1,530	820
9	359	269	361	220	321	231	348	1,780	5,840	3,910	1,480	733
10	356	279	346	210	326	234	394	1,600	6,340	4,020	1,360	677
11	346	272	301	200	357	232	423	1,800	6,750	4,260	1,280	635
12	343	270	250	205	316	239	363	2,260	6,370	4,290	1,190	583
13	401	313	215	210	346	247	319	2,860	6,500	4,080	1,120	530
14	372	290	250	220	326	230	303	2,850	6,520	4,000	1,030	503
15	346	273	306	230	311	221	414	2,590	7,080	3,940	969	485
16	323	292	316	250	284	224	545	2,810	6,830	3,870	928	468
17	323	306	336	316	255	221	461	2,750	7,180	3,840	887	454
18	322	309	301	306	263	206	442	2,200	7,260	3,910	857	435
19	322	295	280	316	276	209	402	1,700	7,490	3,780	824	406
20	315	292	270	417	267	228	370	1,440	6,720	3,440	770	385
21	292	302	260	341	210	224	347	1,250	7,750	3,150	734	368
22	289	230	240	306	200	214	374	1,180	8,590	3,020	699	348
23	291	200	235	276	210	227	410	1,060	9,600	2,950	679	318
24	294	358	230	311	230	234	446	1,130	9,460	2,690	662	302
25	288	437	235	326	240	240	956	1,370	8,590	2,690	623	290
26	265	438	240	341	210	249	565	2,100	7,670	2,620	588	283
27	251	402	250	362	200	305	498	3,140	6,740	2,470	561	281
28	239	393	260	357	200	255	465	4,280	5,760	2,220	543	277
29	265	404	260	351	-----	233	465	5,070	4,500	2,040	561	273
30	273	396	267	341	-----	256	444	4,700	3,600	1,890	867	283
31	271	-----	288	341	-----	346	-----	4,540	-----	1,800	955	-----
TOTAL	10,142	9,225	9,269	8,677	7,819	7,255	11,795	66,133	184,040	109,360	33,417	16,582
MEAN	327	308	299	280	279	234	393	2,133	6,135	3,528	1,078	553
MAX	423	438	385	417	417	346	956	5,070	9,600	5,080	1,760	1,170
MIN	239	200	215	200	200	206	217	475	3,590	1,800	543	273
AC-FT	20,120	18,300	18,390	17,210	15,510	14,390	23,400	131,200	365,000	216,900	66,280	32,890
CAL YR 1970	TOTAL 383,722		MEAN 1,051	MAX 8,040	MIN 120	AC-FT 761,100						
WTR YR 1971	TOTAL 473,714		MEAN 1,298	MAX 9,600	MIN 200	AC-FT 939,600						

PEAK DISCHARGE (BASE, 5,400 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-23	0700	8.09	10,200	7- 4	0500	5.63	5,470

YELLOWSTONE RIVER BASIN

19

06207540 SILVER TIP CREEK NEAR BELFRY, MONT.

LOCATION.--Lat 45°09'30", long 108°58'30", in N½ sec.12, T.8 S., R.22 E., Carbon County, 2.0 miles upstream from mouth and 2.0 miles northeast of Belfry.

DRAINAGE AREA.--87.6 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 3,900 ft (from topographic map). Prior to May 12, 1971, at datum 1.00 ft higher.

EXTREMES.--Current year: Maximum discharge, about 20 cfs Feb. 13; maximum gage height, 4.37 ft Feb. 13 (backwater from ice); no flow at times.

Period of record: Maximum discharge, 571 cfs June 25, 1969 (gage height, 8.56 ft); maximum gage height, 8.80 ft Aug. 22, 1968; no flow at times.

REMARKS.--Records 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.70	.30		0	0	2.1	0	1.9	.53	0	1.1
2	.10	.50	.40		0	0	2.5	0	4.6	.65	.04	.54
3	.50	.18	.50		0	0	1.4	0	1.1	1.3	.05	2.7
4	.66	.64	.40		0	0	1.3	0	.75	.75	0	7.4
5	.62	1.6	.30		0	0	1.3	.22	.08	.35	0	1.5
6	.66	1.0	.40		0	0	1.5	0	.04	.20	.88	.92
7	.62	.80	.50		0	0	1.1	0	.22	0	0	.75
8	.62	.66	.50		0	.20	.80	0	.31	0	0	.68
9	.70	.85	.40		0	3.0	.40	.16	.32	.19	0	.58
10	.90	1.1	.35		0	9.0	.30	0	.03	0	0	.32
11	1.2	.75	.20		0	13	.20	0	0	0	0	.40
12	1.3	1.1	0		.10	8.0	.30	.15	.05	0	0	.05
13	1.3	.85	0		17	4.5	.40	0	.01	0	0	.36
14	.66	.50	0		16	3.5	.50	0	0	0	0	.10
15	.34	.62	0		16	2.5	.46	0	0	0	0	.44
16	.66	1.2	0		5.0	1.5	.46	0	.11	0	0	.58
17	.66	.85	0		1.0	.50	.46	0	.19	.07	0	1.1
18	1.1	1.0	0		.90	0	.46	.40	.19	.04	0	1.1
19	1.1	1.1	0		.70	.10	.42	.38	.38	0	.05	1.1
20	1.3	1.4	0		.50	.30	.75	.33	.15	0	.09	1.4
21	.70	.40	0		.40	.20	.80	.33	.06	0	.04	1.8
22	.62	0	0		.30	0	1.4	4.9	.10	.16	.12	1.2
23	.50	0	0		.20	0	1.7	4.7	.18	.43	.12	1.3
24	.66	.05	0		0	1.0	1.3	.92	.03	.07	0	1.5
25	.62	.30	0		0	2.3	1.6	.56	.02	0	.24	1.3
26	.46	0	0		0	2.3	1.9	.13	.06	0	.34	1.5
27	.34	0	0		0	2.5	2.2	.09	.29	0	.25	1.3
28	.58	0	0		0	2.1	.54	.02	.40	0	.44	1.5
29	1.1	.10	0		-----	2.1	.05	0	.25	.23	.63	1.4
30	.90	.30	0		-----	2.1	.14	.72	.35	.36	1.9	1.6
31	.90	-----	0		-----	2.5	-----	1.5	-----	.12	1.1	-----
TOTAL	22.47	18.55	4.25	0	58.10	63.20	28.74	15.51	12.17	5.45	6.29	37.52
MEAN	.72	.62	.14	0	2.08	2.04	.96	.50	.41	.18	.20	1.25
MAX	1.3	1.6	.50	0	17	13	2.5	4.9	4.6	1.3	1.9	7.4
MIN	.09	0	0	0	0	0	.05	0	0	0	0	.05
AC-FT	45	37	8.4	0	115	125	57	31	24	11	12	74

CAL YR 1970 TOTAL 342.36 MEAN .94 MAX 50 MIN 0 AC-FT 679
WTR YR 1971 TOTAL 272.25 MEAN .75 MAX 17 MIN 0 AC-FT 540

PEAK DISCHARGE (BASE, 60 CFS).--No peak above base.

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 miles upstream from Warm Springs Creek and 7 miles northwest of Dubois.

DRAINAGE AREA.--232 sq mi.

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

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

AVERAGE DISCHARGE.--26 years, 176 cfs (127,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,680 cfs June 18 (gage height, 5.22 ft); minimum daily, 39 cfs Jan. 5.
Period of record: Maximum discharge, 1,910 cfs June 2, 1956 (gage height, 5.66 ft); minimum daily, 30 cfs Dec. 12, 1949, Jan. 5, 1950, Nov. 20, 1957.

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are poor. Diversions above station for irrigation of about 2,300 acres, of which about 110 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	80	67	48	76	63	71	128	866	626	238	155
2	71	74	64	45	76	60	74	175	796	650	238	141
3	70	70	63	43	73	58	76	235	734	680	246	169
4	70	62	64	42	68	62	73	272	768	668	246	169
5	71	78	68	39	62	65	76	250	698	614	246	158
6	86	69	72	40	61	70	92	235	704	608	238	146
7	84	69	72	44	63	73	100	224	747	602	231	138
8	83	69	71	48	67	74	110	246	887	572	231	152
9	80	76	69	53	70	75	120	250	1,010	538	231	136
10	84	69	68	56	75	77	130	296	1,130	533	207	128
11	74	56	67	56	80	83	120	284	1,090	533	197	123
12	81	65	65	55	82	86	93	343	1,020	522	191	118
13	76	75	64	53	83	87	82	435	1,120	494	182	113
14	82	82	62	52	85	87	109	440	1,210	478	178	111
15	72	87	65	52	86	85	136	440	1,340	450	169	109
16	78	78	63	55	86	83	131	494	1,370	435	169	111
17	80	76	60	58	83	77	121	425	1,490	450	166	111
18	76	72	60	62	80	73	131	330	1,540	461	163	118
19	82	67	57	61	77	70	106	276	1,430	430	155	116
20	74	70	53	63	74	73	93	264	1,280	420	152	121
21	78	68	54	62	68	76	89	231	1,400	472	146	126
22	74	65	56	61	65	80	89	272	1,430	415	144	121
23	70	63	55	59	65	80	85	250	1,490	381	144	118
24	82	69	53	57	68	79	116	321	1,440	357	138	113
25	72	77	52	60	74	77	106	376	1,340	339	133	111
26	66	75	52	64	73	80	85	483	1,280	312	131	111
27	60	70	53	69	68	78	87	650	1,140	300	128	109
28	68	65	55	77	65	75	82	817	998	288	131	106
29	74	66	55	75	-----	77	83	990	803	276	158	106
30	74	67	54	77	-----	78	102	1,090	656	261	238	116
31	80	-----	52	77	-----	75	-----	1,030	-----	253	178	-----
TOTAL	2,344	2,129	1,885	1,763	2,053	2,336	2,968	12,552	33,207	14,418	5,743	3,780
MEAN	75.6	71.0	60.8	56.9	73.3	75.4	98.9	405	1,107	465	185	126
MAX	86	87	72	77	86	87	136	1,090	1,540	680	246	169
MIN	60	56	52	39	61	58	71	128	656	253	128	106
AC-FT	4,650	4,220	3,740	3,500	4,070	4,630	5,890	24,900	65,870	28,600	11,390	7,500
CAL YR 1970	TOTAL 58,531	MEAN 160	MAX 943	MIN 31	AC-FT 116,100							
WTR YR 1971	TOTAL 65,178	MEAN 233	MAX 1,540	MIN 39	AC-FT 169,000							

PEAK DISCHARGE (BASE, 850 CFS)

NOTE.--No gage-height record Dec. 17 to Jan. 29, Feb. 7 to Apr. 5.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-30	0700	4.65	1,170	6-18	0400	5.22	1,680

YELLOWSTONE RIVER BASIN

21

06221400 DINWOODY CREEK ABOVE LAKES, NEAR BURRIS, WYO.

LOCATION.--Lat 43°20'44", long 109°24'34", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.1, T.4 N., R.6 W., Fremont County, Wind River Indian Reservation, on left bank 0.5 mile upstream from Upper Dinwoody Lake, 7.0 miles west of Burris, and 17 miles southeast of Dubois.

DRAINAGE AREA.--88.2 sq mi. Drainage area at mouth, 100 sq mi.

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

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

AVERAGE DISCHARGE.--14 years, 144 cfs (104,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,400 cfs June 18 (gage height, 4.57 ft); minimum daily, 7.5 cfs Jan. 4.

Period of record: Maximum discharge, 1,400 cfs June 18, 1971 (gage height, 4.57 ft); minimum daily, 2.2 cfs Mar. 4, 1963.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	16	17	9.4	13	10	11	34	510	427	414	420
2	31	15	17	8.5	13	9.8	10	47	410	476	414	355
3	31	13	16	8.0	12	9.1	10	60	346	597	441	320
4	32	15	15	7.5	11	9.1	10	73	313	562	469	263
5	32	15	16	7.6	10	9.3	10	87	330	462	579	212
6	34	16	17	8.0	10	9.1	11	74	320	476	546	171
7	31	15	18	8.5	11	9.0	12	58	320	490	476	171
8	31	14	19	9.0	11	9.2	12	53	448	490	448	190
9	33	15	18	9.5	12	9.3	12	62	647	469	462	164
10	35	15	17	10	12	9.2	13	73	749	476	427	153
11	27	14	16	10	12	9.6	13	76	727	530	408	169
12	35	13	15	10	12	10	12	100	586	588	396	183
13	27	14	14	10	12	9.9	11	141	670	615	384	166
14	29	15	15	10	12	9.5	12	173	730	633	366	155
15	24	16	14	10	11	9.3	14	166	830	615	366	125
16	29	14	13	11	12	9.1	14	208	932	615	360	112
17	26	14	12	11	11	8.9	14	193	1,210	642	350	97
18	26	13	11	12	11	9.4	15	178	1,210	670	345	86
19	28	14	10	11	11	9.5	16	138	1,040	633	340	87
20	24	12	9.5	11	11	9.2	16	109	992	660	320	82
21	26	14	10	11	11	9.4	16	93	944	740	306	77
22	22	13	9.5	11	11	9.4	18	85	968	780	325	72
23	20	12	9.3	11	11	10	18	82	1,060	670	320	71
24	17	14	9.5	12	10	11	23	89	1,090	624	315	67
25	12	15	10	12	10	11	22	127	992	588	298	63
26	14	14	11	11	10	11	22	213	944	546	294	59
27	15	14	12	12	10	10	24	387	956	522	302	56
28	16	15	12	12	9.8	11	24	580	830	506	315	53
29	17	16	11	13	-----	11	25	706	597	469	462	55
30	17	16	11	16	-----	13	28	765	455	434	790	58
31	16	-----	10	17	-----	11	-----	668	-----	434	562	-----
TOTAL	788	431	414.8	330.0	312.8	305.3	468	5,898	22,156	17,439	12,600	4,312
MEAN	25.4	14.4	13.4	10.6	11.2	9.85	15.6	190	739	563	406	144
MAX	35	16	19	17	13	13	28	765	1,210	780	790	420
MIN	12	12	9.3	7.5	9.8	8.9	10	34	313	427	294	53
AC-FT	1,560	855	823	655	620	606	928	11,700	43,950	34,590	24,990	8,550
CAL YR 1970	TOTAL 49,393.0		MEAN 135	MAX 980	MIN 2.5	AC-FT 97,970						
WTR YR 1971	TOTAL 65,454.9		MEAN 179	MAX 1,210	MIN 7.5	AC-FT 129,800						

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-30	0230	4.13	820	7-22	0700	4.09	820
6-18	0600	4.57	1,400	8-30	1330	4.13	860

YELLOWSTONE RIVER BASIN

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 upstream from mouth of Crow Creek Canyon, 5 miles north of Tipperary, and 19 miles north of Crowheart.

DRAINAGE AREA.--30 sq mi, approximately.

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

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

AVERAGE DISCHARGE.--9 years, 23.1 cfs (16,740 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 334 cfs June 16 (gage height, 4.79 ft); minimum daily, 1.8 cfs Jan. 4.
Period of record: Maximum discharge, 568 cfs June 16, 1965 (gage height, 5.20 ft), from rating curve extended above 220 cfs on basis of velocity-area study; maximum gage height, 5.54 ft Feb. 18, 1966 (backwater from ice); minimum daily discharge, 0.50 cfs Feb. 2, 1970.

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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	4.1	3.6	2.7	3.0	2.2	3.4	7.2	74	76	19	12
2	5.5	3.8	3.5	2.4	2.7	2.1	3.2	10	69	77	20	10
3	5.5	3.5	3.6	2.2	2.5	2.1	3.4	16	71	80	20	15
4	5.5	3.4	3.6	1.8	2.4	2.1	3.0	21	89	63	21	13
5	5.5	3.5	3.7	1.9	2.3	2.0	3.1	31	98	60	20	11
6	5.8	3.8	3.9	2.0	2.2	2.0	3.5	28	96	65	18	10
7	5.6	3.7	4.1	2.1	2.3	2.1	3.8	26	110	63	17	10
8	5.4	3.8	4.0	2.3	2.5	2.2	4.3	29	160	55	16	10
9	5.7	3.7	3.8	2.6	2.6	2.1	4.2	33	225	51	16	9.8
10	6.0	3.6	3.7	2.9	2.7	2.2	4.5	32	220	56	14	9.8
11	6.3	3.4	3.6	2.7	2.8	2.3	4.4	37	205	59	14	9.4
12	6.5	3.4	3.5	2.6	2.8	2.4	4.0	62	185	56	14	8.7
13	6.0	3.5	3.2	2.5	2.9	2.4	4.0	77	218	53	12	8.3
14	5.8	3.7	3.3	2.4	2.9	2.3	4.7	106	230	50	12	8.3
15	5.3	3.8	3.2	2.3	3.0	2.2	5.2	100	235	46	12	7.2
16	5.4	3.9	3.1	2.4	2.7	2.2	5.5	93	244	44	10	7.5
17	5.5	3.8	3.0	2.5	2.6	2.1	5.8	63	259	44	10	6.8
18	5.4	3.7	2.8	2.7	2.6	2.0	6.0	46	235	47	11	6.5
19	5.2	3.5	2.7	2.6	2.5	2.1	5.7	36	202	41	9.4	6.5
20	5.0	3.5	2.6	2.8	2.4	2.2	5.6	27	188	41	9.0	6.8
21	5.1	3.7	2.7	2.6	2.3	2.3	5.8	23	205	51	7.9	6.8
22	5.2	3.2	2.8	2.4	2.3	2.4	5.8	24	210	46	7.9	6.8
23	4.8	3.0	2.6	2.5	2.4	2.5	5.5	26	210	35	7.2	6.5
24	4.4	3.2	2.7	2.5	2.3	2.8	5.8	36	180	32	7.2	6.8
25	4.0	3.8	2.7	2.6	2.4	2.9	5.5	52	156	29	6.8	6.5
26	4.1	3.7	2.8	2.7	2.3	3.0	5.5	82	140	28	6.8	6.8
27	3.9	3.6	2.9	2.7	2.3	2.9	5.5	148	110	28	6.5	7.2
28	4.1	3.5	2.9	2.7	2.2	3.0	5.2	208	84	27	6.8	6.5
29	4.2	3.6	2.8	2.8	-----	3.1	5.0	220	60	24	14	6.3
30	4.5	3.7	2.8	3.0	-----	3.4	5.5	144	66	23	42	6.5
31	4.5	-----	2.8	3.2	-----	3.5	-----	98	-----	22	15	-----
TOTAL	161.2	108.1	99.0	78.1	70.9	75.1	142.4	1,941.2	4,834	1,472	422.5	253.3
MEAN	5.20	3.60	3.19	2.52	2.53	2.42	4.75	62.6	161	47.5	13.6	8.44
MAX	6.5	4.1	4.1	3.2	3.0	3.5	6.0	220	259	80	42	15
MIN	3.9	3.0	2.6	1.8	2.2	2.0	3.0	7.2	60	22	6.5	6.3
AC-FT	320	214	196	155	141	149	282	3,850	9,590	2,920	838	502
CAL YR 1970	TOTAL 6,422.13		MEAN 17.6		MAX 192		MIN .50		AC-FT 12,740			
WTR YR 1971	TOTAL 9,657.80		MEAN 26.5		MAX 259		MIN 1.8		AC-FT 19,160			

PEAK DISCHARGE (BASE, 180 CFS)

NOTE.--No gage-height record Feb. 24 to Apr. 15.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-28	2400	4.66	289	6-16	2200	4.79	334

YELLOWSTONE RIVER BASIN

23

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 miles upstream from high-water line of Bull Lake and 9 miles south of Crowheart.

DRAINAGE AREA.--187 sq mi.

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 (from topographic map).

AVERAGE DISCHARGE.--17 years (1941-53, 1966-71), 308 cfs (223,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,420 cfs June 18 (gage height, 7.05 ft); minimum, 6.4 cfs Mar. 1 (gage height, 1.49 ft).
Period of record: Maximum discharge, 3,420 cfs June 18, 1971 (gage height, 7.05 ft); minimum, 5.2 cfs Jan. 28, 1970 (gage height, 1.44 ft).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	41	59	33	35	22	22	110	1,180	974	702	777
2	70	42	62	33	33	22	25	143	972	1,040	672	601
3	68	38	65	33	31	24	26	188	865	1,180	671	505
4	66	35	68	34	24	22	22	217	782	1,180	690	449
5	67	41	74	36	27	21	23	290	847	1,040	719	382
6	71	38	66	37	23	21	25	212	900	982	722	318
7	71	38	63	39	25	22	25	166	969	1,020	672	273
8	70	39	60	39	31	22	25	154	1,210	1,030	630	268
9	70	39	60	37	28	22	26	169	1,590	983	644	262
10	72	41	61	33	28	22	28	188	1,860	979	647	245
11	71	35	53	33	28	21	29	181	1,860	1,030	617	231
12	71	45	48	38	28	21	26	223	1,740	1,100	588	230
13	71	36	46	42	28	22	25	270	1,840	1,130	560	230
14	71	32	51	45	27	22	27	335	1,980	1,150	526	221
15	67	37	53	47	27	23	33	364	2,220	1,130	502	210
16	65	43	50	44	24	23	33	463	2,530	1,100	482	198
17	62	38	49	41	25	24	33	394	2,990	1,100	466	188
18	60	36	45	42	25	24	39	328	3,120	1,130	453	174
19	58	31	37	45	25	26	42	282	2,850	1,150	441	161
20	56	33	36	47	26	27	54	256	2,660	1,080	430	152
21	55	33	40	30	22	25	55	238	2,640	1,110	411	147
22	53	25	44	41	25	24	68	250	2,630	1,240	400	137
23	50	25	36	43	26	23	62	245	2,820	1,190	394	130
24	50	50	38	39	26	24	79	267	2,880	1,150	387	123
25	47	56	40	36	24	24	97	368	2,610	1,060	379	116
26	43	54	40	35	23	25	89	577	2,500	959	369	109
27	45	53	40	34	21	27	79	881	2,420	908	359	107
28	47	56	38	35	24	26	81	1,110	1,830	874	368	106
29	50	57	37	36	-----	26	88	1,460	1,360	833	451	102
30	47	57	36	38	-----	27	95	1,780	1,070	782	857	100
31	44	-----	35	38	-----	27	-----	1,520	-----	731	1,010	-----
TOTAL	1,880	1,224	1,530	1,183	739	731	1,381	13,629	57,725	32,345	17,219	7,252
MEAN	60.6	40.8	49.4	38.2	26.4	23.6	46.0	440	1,924	1,043	555	242
MAX	72	57	74	47	35	27	97	1,780	3,120	1,240	1,010	777
MIN	43	25	35	30	21	21	22	110	782	731	359	100
AC-FT	3,730	2,430	3,030	2,350	1,470	1,450	2,740	27,030	114,500	64,160	34,150	14,380
CAL YR 1970	TOTAL	95,266	MEAN 261	MAX 1,930	MIN 16	AC-FT 189,000						
WTR YR 1971	TOTAL	136,838	MEAN 375	MAX 3,120	MIN 21	AC-FT 271,400						

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-31	0300	5.45	1,840	6-18	0530	7.05	3,420

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 upstream from mouth, 2.8 miles downstream from Bull Lake, and 8.5 miles southeast of Lenore.

DRAINAGE AREA.--213 sq mi, of which 12 sq mi is probably noncontributing.

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

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

AVERAGE DISCHARGE.--53 years, 279 cfs (202,100 acre-ft per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 2,740 cfs June 24 (gage height, 5.02 ft); minimum daily, 5.4 cfs Apr. 8, 9.

Period of record: Maximum discharge, 6,200 cfs Aug. 8, 1951 (gage height, 7.09 ft), result of automatic spillway gates releasing on Bull Lake Dam, from rating curve extended above 2,000 cfs 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. Flow completely regulated by Bull Lake 2.8 miles upstream since April 1938. (See page 100.) Diversions above station for irrigation of about 730 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	145	32	28	27	36	35	6.4	310	505	254	694	505
2	169	32	28	27	36	35	6.4	314	515	575	664	505
3	171	32	28	30	36	35	6.4	314	520	676	626	505
4	170	31	28	30	36	35	6.8	314	520	992	626	505
5	170	31	26	33	36	35	5.9	310	505	1,280	626	505
6	179	32	16	36	36	35	5.9	298	485	1,180	626	505
7	198	34	15	36	35	35	5.6	298	485	984	626	446
8	149	32	12	35	34	35	5.4	294	485	737	626	282
9	148	26	12	34	34	35	5.4	298	485	758	626	137
10	96	26	13	33	34	35	5.6	276	490	912	626	133
11	16	26	16	32	35	35	67	212	500	968	626	153
12	15	26	19	32	35	31	68	200	510	968	626	151
13	15	26	27	32	34	14	38	193	515	1,020	626	153
14	16	26	27	33	34	12	38	190	520	1,070	626	153
15	15	26	27	34	34	12	38	239	520	1,070	626	151
16	15	26	27	34	34	12	38	370	540	1,070	626	153
17	15	27	27	34	34	12	38	460	907	1,070	626	153
18	15	26	27	33	34	11	38	500	1,550	1,070	626	151
19	15	27	27	33	34	11	39	560	2,000	1,060	626	151
20	15	27	27	34	34	12	39	495	2,180	1,090	626	151
21	14	27	27	33	34	10	38	490	2,350	1,110	626	151
22	15	27	27	33	34	8.1	39	495	2,420	1,100	626	156
23	14	28	27	34	34	8.1	38	485	2,480	1,120	626	164
24	14	28	27	34	34	8.1	38	485	2,600	1,160	626	129
25	14	27	27	34	34	7.8	47	485	2,690	1,150	626	70
26	23	27	27	35	34	6.8	49	485	2,690	1,070	626	45
27	32	27	27	36	34	6.4	56	485	2,590	863	620	40
28	32	27	27	36	35	6.1	56	490	2,230	610	620	62
29	31	28	27	36	-----	6.4	153	495	1,200	632	600	108
30	31	28	27	37	-----	6.4	280	510	167	676	495	108
31	32	-----	27	38	-----	6.4	-----	505	-----	694	505	-----
TOTAL	1,999	847	754	1,038	968	592.6	1,294.8	11,795	36,154	28,989	19,222	6,581
MEAN	64.5	28.2	24.3	33.5	34.6	19.1	43.2	380	1,205	935	620	219
MAX	198	34	28	38	36	35	280	510	2,690	1,280	694	505
MIN	14	26	12	27	34	6.1	5.4	190	167	254	495	40
AC-FT	3,970	1,680	1,500	2,060	1,920	1,180	2,570	23,400	71,710	57,500	38,130	13,050
CAL YR 1970	TOTAL	63,447.6	MEAN	174	MAX	1,260	MIN	3.1	AC-FT	125,800		
WTR YR 1971	TOTAL	110,234.4	MEAN	302	MAX	2,690	MIN	5.4	AC-FT	218,600		

YELLOWSTONE RIVER BASIN

25

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 mile downstream from Bull Lake Creek and 9 miles southeast of Crowheart.

DRAINAGE AREA.--1,891 sq mi.

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

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

AVERAGE DISCHARGE.--26 years, 1,240 cfs (898,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,300 cfs June 24 (gage height, 10.04 ft); minimum daily, 260 cfs Jan. 7.

Period of record: Maximum discharge, 13,000 cfs June 16, 1963 (gage height, 9.16 ft); minimum daily, 200 cfs Dec. 9, 1961, Dec. 30, 1962.

Flood of June 29, 1927, reached a discharge of 13,000 cfs, result of discharge measurement made by Bureau of Reclamation at site 1 mile downstream.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. Some regulation by Bull Lake on Bull Lake Creek. (See page 100.) Diversions for irrigation of about 25,000 acres above station.

REVISIONS (WATER YEARS).--WSP 1116: 1946-47. WSP 1709: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	668	449	373	375	525	290	333	783	5,140	3,440	2,380	2,080
2	722	450	408	360	440	290	309	882	4,280	3,880	2,290	1,820
3	706	437	384	330	410	310	274	1,090	3,800	4,120	2,220	1,800
4	690	400	400	305	400	325	277	1,370	3,680	4,520	2,250	1,860
5	682	403	376	300	385	330	275	1,500	3,580	4,440	2,280	1,660
6	722	434	387	275	370	325	292	1,400	3,400	4,260	2,340	1,520
7	794	450	396	260	360	335	345	1,240	3,500	4,160	2,320	1,370
8	714	445	386	270	365	340	374	1,260	4,120	3,880	2,260	1,310
9	706	414	376	290	375	340	378	1,390	5,380	3,700	2,320	1,050
10	647	431	384	320	385	340	410	1,480	6,420	3,840	2,160	982
11	555	413	345	335	395	340	504	1,370	6,670	3,980	2,050	944
12	524	383	335	350	410	340	453	1,660	6,000	4,000	1,970	897
13	537	424	335	340	415	345	359	2,030	6,560	4,000	1,890	870
14	524	381	330	335	420	315	343	2,220	6,780	4,000	1,820	843
15	520	374	330	330	420	310	409	2,150	7,430	3,940	1,750	825
16	497	394	335	345	415	310	452	2,520	7,990	3,880	1,710	843
17	506	414	350	365	400	310	435	2,360	9,530	3,920	1,670	888
18	498	402	355	390	390	305	480	2,040	10,900	4,040	1,640	888
19	492	393	340	425	380	315	502	1,770	10,600	3,960	1,600	879
20	501	394	335	450	370	315	497	1,570	9,890	3,840	1,560	861
21	484	408	325	470	360	311	487	1,420	10,800	4,080	1,510	897
22	485	340	310	450	340	311	504	1,480	10,700	4,220	1,470	897
23	462	315	290	435	330	315	443	1,510	11,300	4,140	1,470	879
24	453	350	300	430	350	336	479	1,580	11,300	3,840	1,440	834
25	464	400	310	405	370	344	634	1,840	10,700	3,680	1,430	744
26	438	445	320	425	350	330	600	2,280	10,300	3,420	1,380	703
27	421	407	335	445	320	350	560	3,080	9,620	3,110	1,370	687
28	401	403	320	465	310	319	562	4,120	7,960	2,680	1,370	695
29	413	409	335	480	-----	297	622	5,340	5,770	2,620	1,580	735
30	462	415	355	495	-----	315	731	6,080	3,660	2,600	2,700	735
31	464	-----	380	520	-----	396	-----	6,640	-----	2,510	2,410	-----
TOTAL	17,152	12,177	10,840	11,770	10,760	10,054	13,323	67,455	217,760	116,700	58,610	31,996
MEAN	553	406	350	380	384	324	444	2,176	7,259	3,765	1,891	1,067
MAX	794	450	408	520	525	396	731	6,640	11,300	4,520	2,700	2,080
MIN	401	315	290	260	310	290	274	783	3,400	2,510	1,370	687
AC-FT	34,020	24,150	21,500	23,350	21,340	19,940	26,430	133,800	431,900	231,500	116,300	63,460

CAL YR 1970 TOTAL 376,427 MEAN 1,031 MAX 5,140 MIN 204 AC-FT 746,600
 WTR YR 1971 TOTAL 578,597 MEAN 1,585 MAX 11,300 MIN 260 AC-FT 1,148,000

NOTE.--No gage-height record Jan. 7 to Mar. 2.

YELLOWSTONE RIVER BASIN

06226000 WYOMING CANAL NEAR LENORE, WYO.

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 miles downstream from diversion dam on Wind River and 15 miles 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 above mean sea level. May 1, 1941, to Sept. 30, 1945, nonrecording gage at site 3.2 miles upstream at different datum. May 3, 1949, to Oct. 2, 1952, Apr. 12 to May 15, 1971, water-stage recorder at site 3.0 miles upstream at different datum.

AVERAGE DISCHARGE.--22 years (1949-71), 543 cfs (393,400 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 1,710 cfs June 17, 1959; 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	564						0	433	756	1,560	1,460	888
2	592						0	455	732	1,400	1,390	850
3	604						0	605	805	1,520	1,520	920
4	600						0	665	900	1,550	1,420	868
5	594						0	648	912	1,550	1,480	842
6	572						0	867	912	1,520	1,400	815
7	618						0	912	800	1,580	1,470	764
8	612						0	940	646	1,460	1,480	732
9	608						70	950	748	1,490	1,400	688
10	465						105	946	935	1,590	1,460	684
11	77						108	750	1,040	1,590	1,370	696
12	44						110	595	982	1,490	1,480	692
13	0						113	550	900	1,640	1,350	692
14	0						112	538	965	1,540	1,430	674
15	0						115	516	1,060	1,620	1,440	658
16	0						105	482	1,010	1,530	1,310	648
17	0						119	471	1,170	1,630	1,290	640
18	0						119	486	1,340	1,610	1,220	658
19	0						115	518	1,330	1,530	1,250	662
20	0						115	604	1,290	1,620	1,160	646
21	0						115	680	1,270	1,530	1,070	626
22	0						112	692	1,370	1,610	1,040	588
23	0						103	692	1,590	1,510	1,000	572
24	0						113	664	1,630	1,590	935	586
25	0						130	698	1,600	1,590	935	620
26	0						63	748	1,550	1,460	948	632
27	0						0	1,020	1,580	1,490	930	654
28	0						94	1,160	1,530	1,440	910	648
29	0						302	915	1,660	1,550	968	664
30	0						399	722	1,540	1,370	1,020	668
31	0	-----			-----		-----	774	-----	1,450	922	-----
TOTAL	5,950	0	0	0	0	0	2,737	21,696	34,553	47,610	38,458	20,975
MEAN	192	0	0	0	0	0	91.2	700	1,152	1,536	1,241	699
MAX	618	0	0	0	0	0	399	1,160	1,660	1,640	1,520	920
MIN	0	0	0	0	0	0	0	433	646	1,370	910	572
AC-FT	11,800	0	0	0	0	0	5,430	43,030	68,540	94,430	76,280	41,600
CAL YR 1970	TCTAL 196,664.00		MEAN 537		MAX 1,680	MIN 0	AC-FT 388,900					
WTR YR 1971	TCTAL 171,579.00		MEAN 471		MAX 1,660	MIN 0	AC-FT 341,100					

YELLOWSTONE RIVER BASIN

27

06228000 WIND RIVER AT RIVERTON, WYO.

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 downstream from bridge on State Highway 789, 1.1 miles southeast of post office in Riverton, and 1.5 miles upstream from Little Wind River.

DRAINAGE AREA.--2,309 sq mi.

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.

GAGE.--Water-stage recorder. Datum of gage is 4,903.56 ft above mean sea level. See WSP 1729 for history of changes prior to Oct. 13, 1930. Oct. 13, 1930, to Apr. 15, 1968, water-stage recorder at site 280 ft upstream at same datum. Apr. 16, 1968, to Nov. 17, 1968, water-stage recorder at site 880 ft upstream at same datum. Nov. 18, 1968, to July 28, 1970, water-stage recorder at site 225 ft upstream at same datum.

EXTREMES.--Current year: Maximum discharge, 9,380 cfs June 24 (gage height, 8.46 ft); minimum daily, 114 cfs Aug. 23.
Period of record: Maximum discharge, 13,300 cfs June 15, 1935 (gage height, 8.15 ft), from rating curve extended above 7,200 cfs; minimum daily, 10 cfs May 18, 1955.

REMARKS.--Records good except those for winter period, which are poor. Some regulation by Bull Lake beginning in 1938 (see page 100) and Pilot Butte Reservoir beginning in 1926 (combined capacity, 182,000 acre-ft). Diversions above station for irrigation of about 128,000 acres 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 wasteway. 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.

REVISIONS (WATER YEARS).--WSP 1509: 1935. WSP 1709: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	476	437	409	485	364	402	364	5,530	1,740	728	1,090
2	142	466	429	411	450	372	308	401	4,710	2,140	605	860
3	156	473	430	416	420	378	286	472	4,070	2,360	525	982
4	144	452	401	392	410	363	298	512	3,660	2,910	464	1,060
5	136	438	414	350	400	350	287	1,010	3,530	3,050	440	1,080
6	133	452	379	332	385	360	286	819	3,400	2,830	520	916
7	189	483	413	326	375	364	311	513	3,460	2,590	535	800
8	207	505	449	348	365	362	371	383	3,910	2,320	505	700
9	168	468	430	340	356	360	320	426	4,730	2,030	535	620
10	171	458	421	352	368	350	377	559	5,370	1,970	510	496
11	292	469	419	362	380	353	432	552	5,690	2,170	452	450
12	439	426	345	362	388	356	515	868	5,530	2,300	341	424
13	491	454	336	354	396	360	438	1,270	5,460	2,150	299	371
14	489	451	351	347	388	380	368	1,680	5,880	2,230	221	335
15	491	412	353	354	372	400	313	1,730	5,980	2,160	177	300
16	523	426	372	370	364	430	417	1,970	6,460	2,100	141	320
17	521	447	385	387	360	450	344	2,220	6,750	1,980	272	350
18	522	456	404	400	360	470	369	2,010	7,900	2,150	296	340
19	515	437	390	430	367	450	441	1,680	8,920	2,220	252	330
20	521	407	372	450	379	400	540	1,290	8,730	1,960	241	540
21	509	451	350	470	366	322	524	982	8,480	2,120	147	575
22	503	411	352	470	348	326	576	887	8,960	2,400	122	635
23	499	339	359	450	350	293	545	1,070	8,770	2,430	114	680
24	484	334	331	440	368	302	469	1,010	8,990	2,240	138	620
25	486	510	326	420	366	319	578	1,130	8,840	1,920	162	472
26	481	498	348	430	360	327	782	1,450	8,270	1,800	146	444
27	458	457	360	440	352	315	703	1,760	7,820	1,400	123	436
28	406	424	376	450	358	330	652	2,260	6,970	984	122	402
29	418	439	389	470	-----	295	450	3,720	5,150	686	205	396
30	456	458	397	480	-----	283	379	5,320	2,850	776	913	368
31	481	-----	418	500	-----	319	-----	6,320	-----	812	1,530	-----
TOTAL	11,565	13,377	11,936	12,512	10,636	11,103	13,081	46,638	184,770	62,928	11,781	17,392
MEAN	373	446	385	404	380	358	436	1,504	6,159	2,030	380	580
MAX	523	510	449	500	485	470	782	6,320	8,990	3,050	1,530	1,090
MIN	133	334	326	326	348	283	286	364	2,850	686	114	300
AC-FT	22,940	26,530	23,680	24,820	21,100	22,020	25,950	92,510	366,500	124,800	23,370	34,500

CAL YR 1970 TOTAL 152,434 MEAN 418 MAX 3,620 MIN 24 AC-FT 302,400
WTR YR 1971 TOTAL 407,719 MEAN 1,117 MAX 8,990 MIN 114 AC-FT 808,700

YELLOWSTONE RIVER BASIN

06232800 LITTLE POPO AGIE RIVER NEAR ATLANTIC CITY, WYO.

LOCATION.--Lat 42°35'32", long 108°55'08", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.8, T.30 N., R.101 W., Fremont County, Shoshone National Forest, on left bank 200 ft downstream from Gustave Lake and 11.6 miles northwest of Atlantic City.

DRAINAGE AREA.--5.99 sq mi.

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

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

AVERAGE DISCHARGE.--14 years, 8.84 cfs (6,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 175 cfs June 26 (gage height, 2.86 ft); minimum daily, 0.30 cfs Feb. 5.

Period of record: Maximum discharge, 175 cfs June 26, 1971 (gage height, 2.86 ft); maximum gage height, 3.44 ft May 25, 1967 (backwater from snow); minimum daily discharge, 0.20 cfs many days December 1958 to February 1959, but could have been less on individual days during ice period.

REMARKS.--Records poor. Flow regulated by Christina Lake 0.6 mile upstream (capacity, 3,860 acre-ft). No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	1.6	.90	.58	.37	.35	.44	.77	2.9	62	16	6.2
2	2.3	1.7	.85	.56	.35	.35	.45	.84	2.8	64	15	6.4
3	2.3	1.7	.83	.52	.32	.34	.46	.93	2.7	66	15	5.1
4	2.2	1.6	.80	.50	.31	.35	.48	1.0	2.7	67	14	4.7
5	2.3	1.7	.76	.48	.30	.36	.50	.95	3.1	60	13	4.2
6	2.4	1.7	.78	.46	.31	.35	.53	.90	3.5	58	12	4.8
7	2.6	1.6	.80	.47	.34	.34	.55	.83	3.9	56	11	5.4
8	2.4	1.6	.76	.49	.36	.35	.57	.80	5.0	57	11	5.1
9	2.4	1.5	.80	.50	.37	.36	.60	.84	6.3	56	11	8.3
10	2.3	1.4	.78	.50	.39	.37	.60	.80	7.5	53	11	21
11	2.3	1.4	.74	.48	.40	.38	.60	.82	7.9	46	10	22
12	2.2	1.3	.72	.46	.40	.39	.59	.83	8.1	41	9.7	22
13	2.0	1.3	.70	.44	.40	.40	.61	.90	8.5	38	8.9	22
14	2.1	1.2	.68	.43	.40	.40	.65	1.0	8.8	35	8.3	21
15	2.0	1.2	.68	.45	.39	.39	.67	1.2	11	32	7.8	21
16	2.0	1.1	.69	.47	.38	.38	.67	1.4	14	30	7.5	21
17	2.0	1.1	.70	.48	.39	.37	.65	1.5	17	28	7.1	21
18	2.0	1.0	.69	.45	.40	.37	.63	1.5	19	36	6.6	20
19	1.8	1.0	.66	.43	.39	.39	.60	1.4	20	57	6.3	20
20	1.7	1.0	.64	.41	.38	.42	.62	1.3	39	56	5.9	20
21	1.8	.95	.64	.38	.37	.44	.65	1.2	95	46	5.7	20
22	1.8	1.0	.64	.36	.36	.47	.65	1.2	127	41	5.6	20
23	1.9	1.1	.62	.35	.37	.48	.65	1.2	153	45	5.7	20
24	1.8	1.1	.60	.36	.38	.50	.63	1.3	155	40	5.1	20
25	1.7	1.0	.62	.37	.38	.50	.60	1.4	154	33	4.8	19
26	1.9	1.0	.62	.37	.37	.47	.56	1.6	157	28	4.6	19
27	2.2	.95	.60	.37	.37	.46	.57	1.8	144	25	4.5	10
28	2.0	1.0	.60	.38	.36	.48	.60	2.4	103	23	4.4	6.0
29	1.9	1.0	.58	.40	-----	.50	.64	3.2	82	21	4.5	4.0
30	1.7	.95	.60	.42	-----	.50	.69	3.3	67	19	5.1	3.0
31	1.6	-----	.60	.40	-----	.47	-----	3.1	-----	18	5.4	-----
TOTAL	63.9	37.75	21.68	13.72	10.31	12.68	17.71	42.21	1,430.7	1,337	262.5	422.2
MEAN	2.06	1.26	.70	.44	.37	.41	.59	1.36	47.7	43.1	8.47	14.1
MAX	2.6	1.7	.90	.58	.40	.50	.69	3.3	157	67	16	22
MIN	1.6	.95	.58	.35	.30	.34	.44	.77	2.7	18	4.4	3.0
AC-FT	127	75	43	27	20	25	35	84	2,840	2,650	521	837

CAL YR 1970 TOTAL 2,358.98 MEAN 6.46 MAX 60 MIN .48 AC-FT 4,680
WTR YR 1971 TOTAL 3,672.36 MEAN 10.1 MAX 157 MIN .30 AC-FT 7,280

NOTE.--No gage-height record Oct. 31 to May 27.

YELLOWSTONE RIVER BASIN

29

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 downstream from bridge on State Highway 28, 2.5 miles downstream from Red Canyon Creek, and 9.5 miles southeast of post office in Lander.

DRAINAGE AREA.--125 sq mi.

PERIOD OF RECORD.--March 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,436.49 ft above mean sea level.

AVERAGE DISCHARGE.--25 years, 80.3 cfs (58,180 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 960 cfs June 18 (gage height, 5.33 ft); minimum daily, 17 cfs Jan. 5.
Period of record: Maximum discharge, 2,010 cfs June 16, 1963 (gage height, 6.64 ft); minimum daily, 12 cfs Jan. 20, 21, Feb. 26 to Mar. 2, 1960, Jan. 10, 11, 18, 19, 1963.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 540 acres above station. Slight regulation by Christina Lake (capacity, about 3,860 acre-ft).

REVISIONS.--WSP 1709: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	29	29	24	28	20	29	60	529	296	102	47
2	25	30	30	23	21	22	30	73	494	299	99	45
3	25	25	29	21	21	23	27	99	470	299	97	48
4	25	25	28	19	20	22	26	118	431	296	97	56
5	25	27	28	17	19	21	25	145	442	278	99	56
6	27	27	27	18	18	19	26	120	452	255	90	47
7	34	28	27	20	19	18	28	113	459	250	85	48
8	30	29	27	22	20	19	30	115	498	250	82	76
9	34	29	27	24	20	20	32	127	574	248	82	59
10	37	30	27	27	21	21	38	137	634	228	79	60
11	31	28	27	27	21	22	45	137	662	208	76	64
12	38	32	28	26	20	23	39	163	682	197	75	60
13	37	32	27	26	21	25	35	202	678	186	71	59
14	34	29	26	24	22	23	38	253	646	178	66	57
15	27	31	27	24	22	22	51	275	658	163	64	57
16	32	32	28	26	21	22	55	317	738	155	62	59
17	30	31	27	28	22	21	53	288	795	149	61	63
18	28	32	25	28	22	20	54	245	850	155	60	64
19	31	31	23	29	22	21	48	215	760	302	59	63
20	30	31	22	29	21	22	47	202	670	238	56	65
21	30	30	21	28	20	22	47	197	678	200	53	64
22	29	28	22	26	19	23	52	213	694	202	51	62
23	27	27	23	24	20	24	53	202	738	200	51	63
24	31	30	22	23	22	27	56	193	722	184	50	63
25	22	32	23	23	23	25	66	215	670	163	50	60
26	23	31	24	24	22	25	59	258	642	147	48	58
27	26	31	24	25	21	30	60	317	618	137	50	57
28	28	30	24	26	21	28	57	374	452	126	48	56
29	31	30	25	26	-----	26	56	547	380	122	53	55
30	31	31	25	27	-----	29	57	674	326	117	55	56
31	30	-----	25	28	-----	29	-----	594	-----	109	48	-----
TOTAL	913	888	797	762	589	714	1,319	7,188	18,042	6,337	2,119	1,747
MEAN	29.5	29.6	25.7	24.6	21.0	23.0	44.0	232	601	204	68.4	58.2
MAX	38	32	30	29	28	30	66	674	850	302	102	76
MIN	22	25	21	17	18	18	25	60	326	109	48	45
AC-FT	1,810	1,760	1,580	1,510	1,170	1,420	2,620	14,260	35,790	12,570	4,200	3,470
CAL YR 1970	TOTAL 26,159		MEAN 71.7	MAX 395	MIN 18	AC-FT 51,890						
WTR YR 1971	TOTAL 41,415		MEAN 113	MAX 850	MIN 17	AC-FT 82,150						

PEAK DISCHARGE (BASE, 350 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
5-30	1100	4.89	742	7-19	0530	3.87	380
6-18	0500	5.33	960				

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 miles upstream from mouth and 1.9 miles southeast of Riverton.

DRAINAGE AREA.--1,904 sq mi.

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 above mean sea level. Prior to Sept. 19, 1956, at site 600 ft downstream at same datum.

AVERAGE DISCHARGE.--30 years, 585 cfs (423,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,670 cfs June 19 (gage height, 8.11 ft); minimum daily, 125 cfs Jan. 5.
Period of record: Maximum discharge, 14,700 cfs June 17, 1963 (gage height, 10.85 ft); minimum daily, 41 cfs Aug. 7, 1960.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 62,900 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	185	294	205	185	280	260	236	475	4,560	2,270	545	342
2	208	292	160	160	260	250	232	465	3,780	2,170	457	299
3	215	292	200	145	240	250	226	510	3,230	2,310	459	293
4	218	278	205	135	220	260	218	607	2,870	2,340	391	436
5	212	269	165	125	200	270	201	918	2,740	2,410	345	436
6	204	276	200	135	180	240	174	1,340	2,710	2,110	345	395
7	226	289	205	145	170	260	165	933	2,790	1,970	340	367
8	254	308	220	160	180	280	162	781	2,930	1,910	302	437
9	266	306	220	170	200	290	168	722	3,500	1,950	321	566
10	278	294	220	180	210	300	171	760	4,190	1,800	347	451
11	290	288	190	190	230	310	174	760	4,810	1,650	353	383
12	278	258	190	180	250	314	201	748	4,980	1,580	334	359
13	274	314	175	170	240	302	215	863	5,030	1,490	316	338
14	270	302	175	180	250	270	212	995	5,170	1,430	291	319
15	274	262	190	190	260	236	204	1,140	5,200	1,330	279	298
16	262	258	205	200	270	226	218	1,260	5,630	1,210	265	304
17	262	274	205	210	260	222	236	1,400	6,320	1,120	248	442
18	266	261	165	220	250	208	246	1,250	7,180	1,130	234	467
19	258	245	185	220	240	204	282	1,080	7,520	1,570	251	455
20	262	236	170	210	230	222	345	940	6,830	1,860	243	443
21	254	230	160	220	210	226	375	852	6,090	1,570	242	465
22	250	210	160	210	230	229	405	817	5,760	1,370	231	475
23	250	200	155	200	250	232	534	864	5,710	1,350	225	455
24	246	190	160	210	270	232	435	802	6,000	1,300	223	450
25	246	210	160	220	300	246	430	809	5,920	1,160	223	450
26	236	230	165	230	320	240	860	983	5,360	1,060	276	430
27	229	220	170	240	300	254	712	1,250	5,160	923	227	400
28	254	210	175	260	280	262	764	1,550	4,550	863	246	395
29	262	210	190	280	-----	274	642	2,450	3,290	807	252	390
30	274	220	200	300	-----	240	540	4,080	2,600	688	527	385
31	282	-----	210	310	-----	226	-----	5,340	-----	604	461	-----
TOTAL	7,745	7,726	5,835	6,190	6,780	7,835	9,983	37,744	142,410	47,305	9,789	12,125
MEAN	250	258	188	200	242	253	333	1,218	4,747	1,526	316	404
MAX	290	314	220	310	320	314	860	5,340	7,520	2,410	545	566
MIN	185	190	155	125	170	204	162	465	2,600	604	223	293
AC-FT	15,360	15,320	11,570	12,280	13,450	15,540	19,800	74,870	282,500	93,830	19,420	24,050
CAL YR 1970	TOTAL 178,042	MEAN 488	MAX 3,780	MIN 98	AC-FT 353,100							
WTR YR 1971	TOTAL 301,467	MEAN 826	MAX 7,520	MIN 125	AC-FT 598,000							

PEAK DISCHARGE (BASE, 3,200 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-31	1200	7.07	5,430	6-19	0515	8.11	7,670

YELLOWSTONE RIVER BASIN

31

06239000 MUSKRAT CREEK NEAR SHOSHONI, WYO.

LOCATION.--Lat 43°08'55", long 108°09'30", in NW¼SW¼ sec.15, T.2 N., R.6 E., Fremont County, Wind River Indian Reservation, on right bank 2 miles upstream from mouth and 7 miles southwest of Shoshoni.

DRAINAGE AREA.--733 sq mi.

PERIOD OF RECORD.--June 1950 to September 1958, October 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,770 ft (from topographic map).

AVERAGE DISCHARGE.--20 years, 2.42 cfs (1,750 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,580 cfs June 1 (gage height, 3.25 ft), from rating curve extended above 200 cfs on basis of slope-area measurement of peak flow; no flow for most of year.

Period of record: Maximum discharge, 13,300 cfs Feb. 10, 1962 (gage height, 6.44 ft, from floodmarks), 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 1970 TO SEPTEMBER 1971

DAY	CCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	0	184			0
2							0	0	0			0
3							0	0	0			0
4							0	5.0	0			0
5							0	6.2	0			0
6							0	6.0	0			0
7							0	5.0	0			90
8							0	4.0	0			9.4
9							0	3.0	0			0
10							0	2.0	0			0
11							0	1.0	0			0
12							0	.50	0			0
13							0	.10	0			0
14							0	0	0			0
15							0	0	0			0
16							0	0	0			0
17							0	0	0			0
18							0	0	0			0
19							0	0	0			0
20							0	0	0			0
21							.10	0	0			0
22							.50	0	0			0
23							1.0	0	0			0
24							2.0	0	0			0
25							3.0	0	0			0
26							3.0	0	0			0
27							2.0	0	0			0
28							1.0	4.0	0			0
29							.40	30	0			0
30							0	50	0			0
31							-----	767	-----			-----
TOTAL	0	0	0	0	0	0	13.00	883.80	184	0	0	99.4
MEAN	0	0	0	0	0	0	.43	28.5	6.13	0	0	3.31
MAX	0	0	0	0	0	0	3.0	767	184	0	0	90
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	26	1,750	365	0	0	197
CAL YR 1970	TOTAL	96.90	MEAN	.27	MAX	81	MIN	0	AC-FT	192		
WTR YR 1971	TOTAL	1,180.20	MEAN	3.23	MAX	767	MIN	0	AC-FT	2,340		

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6- 1	0730	3.25	2,580	9- 7	2000	2.89	1,320

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 upstream from Wyoming Canal siphon and 4 miles north of Pavillion.

DRAINAGE AREA.--118 sq mi.

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

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

AVERAGE DISCHARGE.--22 years, 1.99 cfs (1,440 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 44 cfs May 30 (gage height, 1.17 ft); maximum gage height recorded, 1.93 ft Feb. 5 (backwater from ice); minimum daily discharge, 0.01 cfs July 7-9, 11-28, Aug. 30.

Period of record: Maximum discharge, 1,750 cfs Sept. 6, 1951 (gage height, 5.60 ft, from floodmarks), from rating curve extended above 350 cfs; no flow at times in most years.

Flood in September 1948 reached a stage of about 6.1 ft (discharge, 2,600 cfs, by slope-area measurement of peak flow).

REMARKS.--Records poor. Flow regulated by Bureau of Indian Affairs reservoir system approximately 10.5 miles upstream. Diversions for irrigation of about 320 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	3.6	4.3	1.0	9.0	2.5	4.4	4.3	15	.02	.06	.23
2	1.1	3.4	3.9	.90	9.0	2.6	4.0	4.0	11	.02	.06	.23
3	1.1	3.5	3.7	.80	8.3	3.0	4.3	3.8	8.4	.02	.06	1.8
4	1.4	3.8	4.0	.70	7.0	2.8	4.2	5.6	6.7	.02	.06	4.0
5	1.4	4.0	4.3	.60	5.0	2.5	4.0	11	5.3	.06	.06	6.0
6	1.4	4.0	4.0	.70	3.0	2.8	4.2	6.7	4.6	.06	.06	4.6
7	1.6	4.0	3.8	.80	2.0	3.2	4.4	5.7	4.3	.01	.06	2.8
8	2.0	4.0	4.0	.90	2.0	3.5	4.6	4.6	4.3	.01	.06	2.0
9	2.0	4.0	4.4	1.0	2.3	3.9	4.0	4.0	4.0	.01	.13	1.4
10	2.0	3.8	4.0	1.1	2.6	4.0	3.2	4.0	3.8	.02	.06	1.0
11	2.0	4.0	3.8	1.2	3.0	4.4	3.5	3.8	3.5	.01	.13	.58
12	1.8	5.0	3.5	1.3	3.3	4.5	3.5	3.5	3.5	.01	.13	.58
13	1.8	3.3	3.3	1.2	3.5	4.2	3.2	3.2	2.8	.01	.13	.58
14	2.0	3.1	3.5	1.1	3.7	3.7	3.2	3.0	2.2	.01	.13	.58
15	2.3	2.8	3.8	1.2	3.7	3.3	3.2	2.8	1.8	.01	.13	.74
16	2.4	2.9	3.5	1.5	3.5	2.8	3.2	2.8	1.6	.01	.13	1.1
17	2.4	3.0	3.0	1.9	3.2	2.4	3.0	2.8	1.5	.01	.13	1.6
18	2.7	2.9	2.0	2.5	2.9	2.2	3.0	2.8	.66	.01	.13	2.0
19	2.6	2.7	1.2	3.0	2.7	2.4	3.5	3.5	.82	.01	.13	1.6
20	2.6	2.4	1.0	3.5	2.5	2.8	6.0	3.5	.66	.01	.13	2.0
21	2.6	2.3	.90	3.0	2.4	3.1	6.4	3.5	.35	.01	.13	2.0
22	2.8	2.1	.95	3.0	2.6	3.4	6.7	4.6	.42	.01	.13	2.0
23	3.2	2.4	.95	3.5	2.8	3.8	5.0	4.3	.42	.01	.13	2.4
24	3.0	3.0	.89	4.0	3.0	4.0	4.3	4.0	.09	.01	.13	2.4
25	2.9	3.7	.85	5.0	3.0	4.4	6.4	3.5	.02	.01	.13	2.4
26	2.7	4.0	.90	6.0	2.7	4.7	8.8	3.2	.02	.01	.13	2.4
27	2.6	3.8	1.0	7.0	2.4	4.5	8.4	3.0	.02	.01	.13	2.4
28	2.8	3.6	1.0	8.0	2.3	4.3	6.4	2.8	.02	.01	.13	2.4
29	3.1	4.0	1.1	8.5	-----	4.5	5.3	18	.02	.02	.13	2.4
30	3.5	4.5	1.1	9.0	-----	4.9	4.6	24	.02	.06	.01	2.6
31	3.8	-----	1.2	9.5	-----	4.8	-----	22	-----	.06	.23	-----
TOTAL	70.7	103.6	79.84	93.40	103.4	109.9	138.9	178.3	87.84	.57	3.38	58.82
MEAN	2.28	3.45	2.58	3.01	3.69	3.55	4.63	5.75	2.93	.018	.11	1.96
MAX	3.8	5.0	4.4	9.5	9.0	4.9	8.8	24	15	.06	.23	6.0
MIN	1.1	2.1	.85	.60	2.0	2.2	3.0	2.8	.02	.01	.01	.23
AC-FT	140	205	158	185	205	218	276	354	174	1.1	6.7	117

CAL YR 1970 TOTAL 997.12 MEAN 2.73 MAX 10 MIN .02 AC-FT 1,980
WTR YR 1971 TOTAL 1,028.65 MEAN 2.82 MAX 24 MIN .01 AC-FT 2,040

NOTE.--No gage-height record Dec. 14 to Jan. 17, Feb. 6 to Apr. 8.

33

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 miles upstream from normal high-water line of Boysen Reservoir at elevation 4,725 ft and 5 miles west of Shoshoni.

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

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

AVERAGE DISCHARGE.--24 years, 147 cfs (106,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 924 cfs Aug. 29 (gage height, 4.79 ft); maximum gage height, 7.47 ft Dec. 23 (backwater from ice); minimum daily discharge, 27 cfs Apr. 15, 16.

Period of record: Maximum discharge, 3,390 cfs June 15, 1962 (gage height, 7.85 ft), from rating curve extended above 2,500 cfs; maximum gage height, 9.61 ft Dec. 27, 1954 (backwater from ice); minimum daily discharge, 1.0 cfs Jan. 4-6, 1942. Flood of July 24, 1923 (discharge, 3,500 cfs, 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	216	83	66	62	71	42	39	106	304	318	434	395
2	216	81	64	58	66	41	38	114	269	311	446	370
3	222	77	64	54	60	44	39	90	236	318	430	360
4	227	74	64	52	54	47	38	57	220	342	416	367
5	226	82	63	49	48	44	37	123	215	364	378	356
6	232	83	63	48	46	43	37	106	236	339	353	367
7	245	84	63	51	45	44	38	81	233	346	350	367
8	263	86	63	54	46	45	38	117	242	350	360	346
9	271	81	64	58	48	48	37	101	266	356	384	308
10	252	82	63	62	53	50	36	96	268	350	395	300
11	245	78	60	61	56	51	35	91	239	350	395	297
12	214	79	54	60	53	53	32	115	220	346	388	287
13	152	79	47	58	57	57	31	141	225	360	395	284
14	120	77	47	57	59	48	29	139	228	370	388	269
15	117	75	45	56	58	42	27	121	251	367	395	263
16	107	77	43	58	55	42	27	143	251	381	398	266
17	105	77	51	61	52	40	32	135	220	388	416	275
18	102	75	51	64	54	35	59	119	203	412	423	281
19	102	75	49	65	52	37	79	108	269	426	395	284
20	101	73	48	64	48	40	96	99	266	406	384	290
21	100	75	45	66	45	41	82	90	269	398	381	300
22	98	66	46	63	44	44	78	101	257	395	374	297
23	97	66	44	62	45	47	67	131	287	406	370	278
24	95	65	45	64	47	48	56	127	322	426	364	254
25	94	69	47	66	48	47	70	105	336	438	356	284
26	91	68	48	68	45	45	157	114	314	450	339	269
27	90	67	49	70	44	46	141	159	325	430	350	257
28	87	66	53	73	43	44	129	200	339	392	342	254
29	87	67	57	76	-----	42	120	259	342	420	436	248
30	87	68	60	80	-----	43	110	420	336	426	475	245
31	85	-----	63	80	-----	43	-----	397	-----	426	420	-----
TOTAL	4,746	2,255	1,694	1,920	1,442	1,383	1,834	4,305	7,993	11,807	12,130	9,018
MEAN	153	75.2	54.6	61.9	51.5	44.6	61.1	139	266	381	391	301
MAX	271	86	66	80	71	57	157	420	342	450	475	395
MIN	85	65	44	48	43	35	27	57	208	311	339	245
AC-FT	9,410	4,470	3,360	3,810	2,860	2,740	3,640	8,540	15,850	23,420	24,060	17,890
CAL YR 1970	TOTAL	61,795	MEAN	169	MAX	535	MIN	28	AC-FT	122,600		
WTR YR 1971	TOTAL	60,527	MEAN	166	MAX	475	MIN	27	AC-FT	120,100		

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 miles upstream from Bridger Creek and 0.4 mile southwest of Lysite. Prior to Oct. 26, 1970, at site 0.1 mile upstream.

DRAINAGE AREA.--415 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 5,240 ft (from topographic map). Prior to Oct. 26, 1970, at site 0.1 mile upstream at datum 6.01 ft higher.

AVERAGE DISCHARGE.--5 years, 19.6 cfs (14,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 533 cfs May 5 (gage height, 7.02 ft); minimum daily, 0.62 cfs Aug. 21-23, Sept. 2. Period of record: Maximum discharge, 6,240 cfs June 8, 1968 (gage height, 7.92 ft, site and datum then in use), from rating curve extended above 630 cfs on basis of slope-area measurement of peak flow; minimum daily, 0.04 cfs Jan. 26, 1966.

REMARKS.--Records fair except those for winter period, which are poor. Several small reservoirs for irrigation, railroad, and domestic use above station. Diversions for irrigation of about 1,700 acres above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	2.5	8.0	6.3	11	6.3	12	2.5	62	2.5	1.8	.70
2	2.1	2.7	7.8	5.8	10	6.1	9.0	3.4	43	1.8	2.2	.62
3	2.1	2.8	7.8	5.6	9.9	7.0	13	3.7	39	2.5	2.8	.70
4	2.1	2.7	7.5	5.1	8.7	7.0	10	8.0	33	1.8	3.0	.88
5	2.1	2.8	7.1	5.3	8.0	7.2	9.4	260	30	2.0	1.8	.79
6	2.2	2.0	7.2	4.8	7.4	6.7	10	95	26	1.5	2.0	.70
7	2.2	2.0	7.4	5.3	8.0	7.3	10	58	26	1.8	3.4	.79
8	2.2	2.8	7.6	5.6	8.7	7.4	8.0	45	16	2.2	4.0	1.6
9	2.2	8.0	7.6	6.2	9.4	7.9	5.4	54	12	2.2	4.0	.88
10	2.2	8.4	7.1	6.5	9.8	8.4	5.8	50	13	2.2	3.4	1.3
11	2.1	6.8	6.2	6.8	10	8.0	9.4	31	12	2.5	1.5	1.2
12	2.2	7.0	5.7	7.0	10	10	8.4	20	16	2.0	1.2	1.1
13	2.2	7.7	5.9	6.6	11	13	3.4	24	14	2.0	.98	.98
14	2.2	8.0	6.0	6.2	11	9.4	2.5	31	10	2.0	.88	.88
15	2.2	7.4	6.1	6.4	10	8.9	4.0	34	9.0	2.0	.88	.88
16	2.2	9.0	6.3	6.8	9.3	8.2	5.8	34	7.0	2.0	.79	1.2
17	2.2	8.0	6.0	7.1	9.4	7.7	3.0	35	10	2.0	.98	1.3
18	2.2	7.5	5.8	7.4	9.4	7.3	4.0	30	11	1.8	.70	1.5
19	2.2	6.8	5.4	7.2	8.5	7.8	4.6	33	5.8	1.6	.70	1.1
20	2.2	6.8	5.0	7.5	8.0	8.3	8.4	24	5.0	1.6	.70	1.5
21	2.3	7.0	5.4	7.3	7.8	8.5	4.3	11	6.2	1.8	.62	1.6
22	2.3	6.4	5.7	7.0	7.2	8.5	3.0	15	8.0	1.6	.62	1.6
23	2.3	6.0	5.4	7.2	7.7	9.0	2.5	14	8.4	2.0	.62	1.5
24	2.4	8.2	5.5	7.6	8.5	12	2.8	13	6.6	1.8	.88	1.5
25	2.4	11	5.6	8.2	7.9	14	4.3	11	5.8	2.2	.88	1.3
26	2.3	9.3	6.0	8.7	7.2	13	4.3	14	6.6	2.0	1.5	1.3
27	2.4	8.7	6.3	9.1	6.9	35	3.4	13	5.4	1.8	.98	1.5
28	2.5	9.4	6.5	9.5	6.6	22	3.4	13	5.8	1.8	.88	1.3
29	2.7	10	6.6	9.8	-----	14	2.8	74	5.8	2.5	1.2	1.5
30	2.8	10	6.3	11	-----	14	2.2	112	5.8	2.8	.79	1.3
31	3.0	-----	6.9	11	-----	24	-----	202	-----	3.4	.70	-----
TOTAL	70.8	197.7	199.7	221.9	247.3	333.9	179.1	1,367.6	464.2	63.7	47.38	35.00
MEAN	2.28	6.59	6.44	7.16	8.83	10.8	5.97	44.1	15.5	2.05	1.53	1.17
MAX	3.0	11	8.0	11	11	35	13	260	62	3.4	4.0	1.6
MIN	2.1	2.0	5.0	4.8	6.6	6.1	2.2	2.5	5.0	1.5	.62	.62
AC-FT	140	392	396	440	491	662	355	2,710	921	126	94	69

CAL YR 1970 TOTAL 7,249.38 MEAN 19.9 MAX 372 MIN .30 AC-FT 14,380
WTR YR 1971 TOTAL 3,428.28 MEAN 9.39 MAX 260 MIN .62 AC-FT 6,800

PEAK DISCHARGE (BASE, 110 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
5-5	1600	7.02	533	5-31	0500	6.58	296

YELLOWSTONE RIVER BASIN

35

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 mile upstream from mouth and 2.2 miles northwest of Lysite. Prior to Oct. 27, 1970, at site 800 ft upstream.

DRAINAGE AREA.--182 sq mi.

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

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

AVERAGE DISCHARGE.--5 years, 14.8 cfs (10,720 acre-ft per year).

EXTREMES.--Current year: Maximum discharge observed, 295 cfs Mar. 28 (gage height, 4.84 ft, from floodmark); maximum gage height, 5.75 ft Feb. 10 (backwater from ice); no flow for many days.

Period of record: Maximum discharge, 880 cfs June 9, 1968 (gage height, 7.52 ft, site and datum then in use); no flow for many days in 1966, 1971.

REMARKS.--Records poor. Diversions for irrigation of about 1,100 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	12	10	8.6	14	8.7	50	8.4	22	1.5	.02	0
2	12	12	9.6	8.0	13	8.6	30	7.4	12	1.7	0	0
3	12	12	9.5	7.6	12	9.0	20	7.1	8.9	1.7	0	0
4	12	13	9.3	7.4	11	10	25	7.1	7.1	.90	0	.01
5	12	14	9.3	7.4	10	11	23	4.4	7.1	1.2	0	.01
6	12	13	9.6	7.4	10	10	25	35	7.4	1.9	0	.01
7	12	12	10	7.6	11	9.9	25	20	5.8	1.4	0	.01
8	12	12	10	7.8	12	9.8	20	15	4.6	.80	0	.01
9	12	12	10	8.6	13	11	18	13	4.2	.35	0	.01
10	14	12	9.5	9.4	14	12	14	12	3.5	.60	0	.10
11	14	12	9.1	10	15	14	15	10	4.1	.80	0	.08
12	14	10	8.7	10	15	16	15	10	5.1	1.5	0	.05
13	14	11	8.7	11	16	18	8.9	9.8	1.4	.90	0	.04
14	14	12	8.7	10	16	18	7.1	8.4	.45	.95	0	.04
15	14	12	9.0	9.0	17	16	7.7	6.8	.90	1.7	0	.04
16	13	12	9.5	9.5	17	14	7.7	6.8	.60	1.2	0	.04
17	13	13	9.4	10	16	12	8.1	6.4	.26	1.4	0	.05
18	13	13	9.0	11	14	11	7.7	6.8	.17	1.4	0	.08
19	13	12	8.6	11	13	12	7.4	7.4	.17	1.2	0	.14
20	13	12	8.8	12	12	13	8.9	7.4	.20	.17	0	.20
21	13	11	9.0	11	11	14	9.8	7.1	.20	.56	0	.26
22	13	11	8.7	10	10	16	9.3	7.1	.14	.40	0	.26
23	13	10	8.4	11	11	19	12	7.4	.60	.14	0	.30
24	13	11	8.2	12	12	19	12	7.7	.70	.50	0	.23
25	13	13	8.3	12	11	46	12	5.8	1.0	.90	0	.20
26	13	14	8.7	13	10	44	12	4.0	.90	1.2	0	.20
27	13	13	9.0	13	9.5	60	11	3.5	2.5	1.4	0	.22
28	13	12	9.4	14	9.2	100	11	2.6	.80	1.4	0	.28
29	14	12	9.5	14	-----	80	9.8	3.5	1.7	1.0	.02	.22
30	13	11	9.5	15	-----	70	8.9	26	2.6	1.0	0	.20
31	13	-----	9.0	15	-----	80	-----	22	-----	.40	0	-----
TOTAL	401	361	284.0	323.3	354.7	792.0	451.3	345.5	107.09	32.17	.04	3.29
MEAN	12.9	12.0	9.16	10.4	12.7	25.5	15.0	11.1	3.57	1.04	.001	.11
MAX	14	14	10	15	17	100	50	44	22	1.9	.02	.30
MIN	12	10	8.2	7.4	9.2	8.6	7.1	2.6	.14	.14	0	0
AC-FT	795	716	563	641	704	1,570	895	685	212	64	.08	6.5
CAL YR 1970	TOTAL 7,178.10		MEAN 19.7		MAX 94	MIN 2.5	AC-FT 14,240					
WTR YR 1971	TOTAL 3,455.39		MEAN 9.47		MAX 100	MIN 0	AC-FT 6,850					

PEAK DISCHARGE (BASE, 35 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
3-28	Unknown	4.84	295	5-30	1700	3.24	38
5-5	0930	3.53	67				

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 mile upstream from mouth and 8 miles east of Bonneville.

DRAINAGE AREA.--52.6 sq mi.

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

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

AVERAGE DISCHARGE.--6 years, 2.94 cfs (2,130 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 123 cfs May 30 (gage height, 5.86 ft); no flow for many days.

Period of record: Maximum discharge, 1,650 cfs June 17, 1967 (gage height, 12.41 ft), from rating curve extended above 67 cfs 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 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	0	.02	0	.03	0	15			
2		0	.02	0	.01	0	.01	0	11			
3		0	.01	0	.01	0	0	0	7.3			
4		0	.01	0	0	0	0	0	2.2			
5		0	.04	0	0	0	0	41	1.4			
6		0	.02	0	0	0	0	13	.85			
7		0	.02	0	0	0	0	9.8	.35			
8		0	0	0	0	0	0	8.6	.28			
9		0	0	0	0	0	0	7.6	.24			
10		0	.01	0	0	0	0	6.4	.16			
11		.01	0	0	0	.01	0	5.2	.09			
12		0	0	0	0	.03	0	2.7	.05			
13		0	0	0	.01	.06	0	2.6	.01			
14		0	0	0	.01	.02	0	.55	0			
15		0	0	0	.01	.01	0	.26	0			
16		0	.01	0	.01	0	0	.15	0			
17		0	.02	0	0	0	0	.05	0			
18		0	.01	0	0	0	0	.01	0			
19		0	0	0	0	0	0	0	0			
20		0	0	0	0	0	0	0	0			
21		0	0	0	0	0	0	0	0			
22		0	0	0	0	0	0	0	0			
23		0	0	0	0	0	0	0	0			
24		0	0	0	.01	.01	0	0	0			
25		.02	0	0	0	.02	0	0	0			
26		0	0	0	0	.04	0	0	0			
27		0	0	0	0	.04	0	0	0			
28		.01	0	.01	0	.03	0	0	0			
29		.01	0	.02	-----	.04	0	5.7	0			
30		.01	0	.03	-----	.08	0	41	0			
31		-----	0	.04	-----	.08	-----	26	-----			
TOTAL	0	.06	.17	.10	.09	.47	.04	170.62	38.93	0	0	0
MEAN	0	.002	.006	.003	.003	.015	.001	5.50	1.30	0	0	0
MAX	0	.02	.04	.04	.02	.08	.03	41	15	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	.1	.3	.2	.2	.9	.08	338	77	0	0	0
CAL YR 1970	TOTAL	1,100.72	MEAN	3.02	MAX	45	MIN	0	AC-FT	2,180		
WTR YR 1971	TOTAL	210.48	MEAN	.58	MAX	41	MIN	0	AC-FT	417		

PEAK DISCHARGE (BASE, 50 CFS)

NOTE.--No gage-height record Dec. 19 to Apr. 19.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5- 5	0600	5.73	102	5-30	2000	5.86	123

YELLOWSTONE RIVER BASIN

37

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 mile west of Bonneville and 3 miles upstream from normal high-water line of Boysen Reservoir at elevation 4,725 ft.

DRAINAGE AREA.--808 sq mi.

PERIOD OF RECORD.--April 1947 to current year.

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

AVERAGE DISCHARGE.--24 years, 18.8 cfs (13,620 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,720 cfs May 30 (gage height, 3.03 ft); no flow for many days.

Period of record: Maximum discharge, 8,490 cfs June 9, 1968 (gage height, 7.64 ft); no flow for many days in each year.

Flood of July 24, 1923, reached a discharge of 18,600 cfs, from slope-area measurement of peak flow.

REMARKS.--Records poor. Diversions for irrigation of about 3,100 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	64	14	0	35	8.0	102	2.8	142			0
2	31	31	15	0	34	8.0	86	2.8	118			0
3	38	51	15	0	33	9.0	86	2.8	94			0
4	18	24	15	0	33	11	51	10	94			0
5	14	24	14	0	30	15	24	883	64			0
6	38	14	13	0	20	20	24	222	78			0
7	51	70	13	0	10	19	31	110	78			5.9
8	18	142	14	0	5.0	26	58	86	24			0
9	18	58	14	0	2.0	31	14	94	18			0
10	24	14	13	0	3.0	37	13	102	24			0
11	24	8.3	11	0	5.0	41	21	70	4.8			0
12	24	4.8	8.0	0	7.0	45	24	31	10			0
13	14	7.0	6.0	0	9.0	45	18	18	3.0			0
14	18	10	5.0	0	10	40	14	31	1.0			0
15	24	13	4.0	0	10	35	1.0	18	1.0			0
16	51	14	3.0	.50	10	30	1.0	24	.80			0
17	51	14	2.0	1.0	9.0	25	1.0	24	.50			0
18	18	15	1.0	2.0	8.0	21	1.0	44	0			0
19	10	15	.50	3.0	7.6	24	10	24	0			0
20	10	13	.10	4.7	7.0	30	24	18	0			0
21	38	11	0	4.6	7.0	42	10	5.0	0			0
22	14	8.0	0	4.0	8.0	58	7.0	14	0			0
23	10	6.0	0	6.0	9.0	110	1.0	18	0			0
24	38	5.0	0	9.0	10	174	1.0	38	0			0
25	31	6.0	0	12	10	174	7.0	24	0			0
26	10	7.0	0	16	9.0	210	44	10	0			0
27	8.0	9.0	0	22	9.0	198	18	4.1	0			0
28	51	10	0	28	8.0	234	1.0	1.7	0			0
29	58	12	0	31	-----	126	2.8	314	0			0
30	64	13	0	34	-----	70	1.0	877	0			0
31	64	-----	0	35	-----	110	-----	606	-----			-----
TOTAL	924.0	693.1	180.40	212.80	357.6	2,026.0	696.8	3,729.2	755.10	0	0	5.9
MEAN	29.8	23.1	5.83	6.86	12.8	65.4	23.2	120	25.2	0	0	.20
MAX	64	142	15	35	35	234	102	883	142	0	0	5.9
MIN	8.0	4.8	0	0	2.0	8.0	1.0	1.7	0	0	0	0
AC-FT	1,830	1,370	358	422	709	4,020	1,380	7,400	1,500	0	0	12
CAL YR 1970	TOTAL	15,625.80	MEAN	42.8	MAX	414	MIN	0	AC-FT	30,990		
WTR YR 1971	TOTAL	9,581.10	MEAN	26.2	MAX	883	MIN	0	AC-FT	19,000		

PEAK DISCHARGE (BASE, 1,000 CFS)

NOTE.--No gage-height record Dec. 17 to Mar. 26.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-5	0800	3.02	1,690	5-30	1530	3.03	1,720

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 upstream from Wyoming Canal siphon, 4.1 miles downstream from Sheep Creek, and 9.2 miles northeast of Pavillion.

DRAINAGE AREA.--267 sq mi.

PERIOD OF RECORD.--March 1949 to December 1953, October 1954 to September 1958, October 1959 to December 1964, July 1965 to current year.

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

AVERAGE DISCHARGE.--19 years (1949-53, 1954-58, 1959-64, 1965-71), 4.84 cfs (3,510 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 200 cfs Aug. 30 (gage height, 2.51 ft); no flow for many days.

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

REMARKS.--Records poor. Flow regulated by Bureau of Indian Affairs reservoir systems, the nearest of which is approximately 6.5 miles upstream on Sheep Creek and the other approximately 18.6 miles upstream on main stem. The flow is also affected by several small spreader dike systems and diversions for irrigation of about 1,500 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	2.7	3.2	1.4	6.0	5.2	6.2	4.2	14		0	4.6
2	0	2.5	3.0	1.4	5.8	5.5	6.5	4.0	7.8		0	3.6
3	0	2.2	2.8	1.3	5.6	5.8	6.2	3.8	5.8		0	8.5
4	0	2.0	2.7	1.2	5.2	5.6	6.0	7.5	4.6		0	15
5	0	2.6	2.7	1.1	4.5	5.2	6.3	57	3.8		0	5.5
6	0	3.5	2.8	1.1	3.6	4.9	6.7	15	3.2		0	4.2
7	0	4.4	2.8	1.2	3.3	5.2	6.8	6.2	2.7		0	4.2
8	0	4.4	2.9	1.2	3.3	5.5	6.8	5.8	2.6		0	.50
9	0	3.6	3.0	1.3	3.8	5.6	6.8	4.6	3.1		0	.10
10	0	3.4	2.9	1.3	4.5	6.0	6.8	3.6	3.9		0	.02
11	0	3.2	2.8	1.4	5.2	6.2	6.8	3.0	2.0		0	0
12	0	3.5	2.6	1.6	5.6	5.9	6.8	2.4	1.3		11	0
13	.05	4.0	2.5	1.6	6.2	5.4	6.5	2.1	.90		.44	0
14	.30	3.5	2.5	1.5	6.2	4.9	6.5	2.0	.60		0	0
15	1.0	2.8	2.6	1.4	5.9	4.5	6.2	1.8	.35		0	.86
16	2.4	3.5	2.7	1.5	5.5	4.3	6.0	2.1	.25		0	3.4
17	4.8	4.5	2.6	1.6	5.0	4.0	6.0	2.2	.20		3.3	2.8
18	3.0	4.1	2.3	1.8	4.7	4.4	6.0	2.4	1.1		3.0	3.0
19	2.2	3.7	2.0	2.0	4.4	4.8	6.2	2.4	.30		.80	3.4
20	2.0	3.7	1.8	2.4	4.3	5.0	7.0	1.8	.25		0	3.0
21	2.2	3.8	1.5	2.8	4.5	5.3	6.2	1.6	.25		0	4.5
22	2.2	3.9	1.4	2.7	4.9	5.0	6.0	1.5	0		0	3.2
23	1.9	3.6	1.3	2.6	5.4	5.2	5.5	1.4	0		0	1.6
24	2.6	3.4	1.2	2.8	6.0	5.3	5.0	1.3	0		0	1.4
25	1.7	3.8	1.1	3.2	5.8	5.5	5.8	1.3	0		0	1.4
26	1.5	3.7	1.2	3.7	5.7	5.6	6.0	1.3	0		0	1.3
27	1.4	3.5	1.2	4.1	5.4	5.4	5.8	1.2	0		0	1.3
28	1.4	3.2	1.3	4.6	5.3	6.0	5.0	1.1	0		0	1.3
29	1.5	3.3	1.3	5.2	-----	6.4	4.8	27	0		0	1.5
30	1.9	3.4	1.4	5.8	-----	6.8	4.4	50	0		80	1.6
31	2.3	-----	1.5	6.2	-----	6.4	-----	43	-----		20	-----
TOTAL	36.35	103.4	67.6	73.0	141.6	166.8	183.6	264.6	59.00	0	118.54	81.78
MEAN	1.17	3.45	2.18	2.35	5.06	5.38	6.12	8.54	1.97	0	3.82	2.73
MAX	4.8	4.5	3.2	6.2	6.2	6.8	7.0	57	14	0	80	15
MIN	0	2.0	1.1	1.1	3.3	4.0	4.4	1.1	0	0	0	0
AC-FT	72	205	134	145	281	331	364	525	117	0	235	162

CAL YR 1970 TOTAL 1,110.31 MEAN 3.04 MAX 111 MIN 0 AC-FT 2,200
WTR YR 1971 TOTAL 1,296.27 MEAN 3.55 MAX 80 MIN 0 AC-FT 2,570

NOTE.--No gage-height record Dec. 20 to Apr. 8.

YELLOWSTONE RIVER BASIN

39

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 mile downstream from Boysen Dam and 13 miles north of Shoshoni.

DRAINAGE AREA.--7,701 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 4,608.58 ft above mean sea level.

AVERAGE DISCHARGE.--20 years, 1,376 cfs (996,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,250 cfs June 29 (gage height, 10.64 ft); minimum daily, 765 cfs Oct. 3.
Period of record: Maximum discharge, 13,500 cfs July 7, 1967 (gage height, 13.35 ft); minimum daily, 4.7 cfs Apr. 3, 1962.

REMARKS.--Records good. Flow regulated by Boysen Reservoir since October 1951. (See page 100.) Natural flow also affected by Bull Lake, Pilot Butte Reservoir, and several small reservoirs (combined capacity, 190,000 acre-ft), and diversions for irrigation of about 196,000 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	769	775	1,090	1,200	1,200	1,900	1,830	1,950	2,100	8,050	2,480	1,660
2	770	775	1,100	1,210	1,200	1,880	1,830	1,950	2,100	7,470	2,340	1,660
3	765	772	1,100	1,210	1,220	1,870	1,830	1,960	2,110	6,990	2,270	1,670
4	770	772	1,100	1,200	1,200	1,880	1,830	1,960	2,160	6,950	2,260	1,660
5	770	780	1,100	1,200	1,230	1,880	1,870	1,960	2,240	6,930	2,250	1,670
6	775	778	1,100	1,200	1,330	1,870	1,950	1,970	2,240	6,920	2,250	1,670
7	780	778	1,100	1,210	1,420	1,870	1,950	1,990	2,240	6,900	2,250	1,670
8	785	777	1,160	1,210	1,520	1,870	1,950	1,990	2,230	5,950	2,250	1,660
9	780	777	1,200	1,210	1,620	1,870	1,950	2,010	2,230	4,950	1,870	1,660
10	785	780	1,210	1,210	1,730	1,870	1,950	2,010	2,240	4,950	1,640	1,670
11	780	771	1,200	1,210	1,820	1,860	1,950	2,000	2,250	4,950	1,650	1,660
12	785	778	1,200	1,210	1,890	1,860	1,950	2,000	2,250	3,650	1,640	1,660
13	785	776	1,200	1,200	1,900	1,860	1,940	2,010	2,260	2,970	1,640	1,670
14	780	772	1,210	1,200	1,900	1,860	1,940	2,020	2,260	3,270	1,640	1,680
15	780	773	1,210	1,200	1,900	1,860	1,950	2,020	2,270	3,440	1,650	1,700
16	780	777	1,200	1,200	1,900	1,850	1,940	2,030	2,280	3,450	1,640	1,680
17	775	922	1,200	1,200	1,900	1,870	1,950	2,040	2,280	3,450	1,650	1,690
18	775	1,100	1,200	1,200	1,910	1,860	1,950	2,060	2,280	3,450	1,650	1,680
19	775	1,090	1,200	1,200	1,900	1,840	1,950	2,050	2,280	3,450	1,650	1,690
20	775	1,070	1,210	1,200	1,910	1,840	1,960	2,060	2,260	3,630	1,650	1,700
21	780	1,090	1,210	1,200	1,900	1,850	1,940	2,080	3,480	3,940	1,650	1,690
22	780	1,090	1,220	1,200	1,900	1,830	1,940	2,080	5,300	3,950	1,650	1,690
23	770	1,090	1,200	1,210	1,900	1,840	1,950	2,070	6,590	3,960	1,660	1,710
24	775	1,080	1,200	1,210	1,900	1,830	1,950	2,060	7,050	3,960	1,650	1,700
25	770	1,080	1,200	1,210	1,890	1,830	1,950	2,060	7,590	3,960	1,660	1,720
26	775	1,090	1,200	1,210	1,890	1,840	1,950	2,060	7,950	3,960	1,640	1,720
27	775	1,080	1,210	1,210	1,890	1,840	1,950	2,070	8,030	3,290	1,650	1,700
28	775	1,080	1,210	1,200	1,890	1,840	1,950	2,070	8,110	2,950	1,650	1,700
29	775	1,080	1,200	1,200	-----	1,840	1,950	2,060	8,120	2,770	1,650	1,710
30	780	1,090	1,200	1,210	-----	1,830	1,950	2,070	8,090	2,590	1,640	1,720
31	775	-----	1,210	1,210	-----	1,840	-----	2,090	-----	2,470	1,660	-----
TOTAL	24,069	27,443	36,550	37,350	47,760	57,530	57,900	62,810	114,870	139,570	56,480	50,500
MEAN	776	915	1,179	1,205	1,706	1,856	1,930	2,026	3,829	4,502	1,822	1,693
MAX	785	1,100	1,220	1,210	1,910	1,900	1,960	2,090	8,120	8,050	2,480	1,720
MIN	765	771	1,090	1,200	1,200	1,830	1,830	1,950	2,100	2,470	1,640	1,660
AC-FT	47,740	54,430	72,500	74,080	94,730	114,100	114,800	124,600	227,800	276,800	112,000	100,200
CAL YR 1970	TOTAL 438,934			MEAN 1,203	MAX 1,950	MIN 338	AC-FT 870,600					
WTR YR 1971	TOTAL 712,832			MEAN 1,953	MAX 8,120	MIN 765	AC-FT 1,414,000					

YELLOWSTONE RIVER BASIN

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 right bank 0.9 mile upstream from normal high-water line of Anchor Reservoir, 2.3 miles upstream from Anchor Dam, 3.2 miles southwest of Anchor, and 34 miles west of Thermopolis.

DRAINAGE AREA.--87 sq mi, 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 6,504.33 ft 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 mile downstream at different datum. Nov. 4, 1968, to June 5, 1970, on left bank at present site at datum 0.14 ft higher.

AVERAGE DISCHARGE.--13 years (1940-41, 1959-71), 35.0 cfs (25,360 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 392 cfs June 10 (gage height, 5.58 ft); minimum daily, 1.1 cfs Jan. 4.
Period of record: Maximum discharge, 1,940 cfs July 25, 1941 (gage height, 8.59 ft, present site and datum), from rating curve extended above 190 cfs on basis of slope-area measurement of peak flow; minimum daily, 0.10 cfs Jan. 11-22, 1960.

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

REVISIONS.--WSP 1729: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	6.8	6.0	1.5	2.2	1.4	2.7	10	83	108	35	19
2	11	6.2	5.6	1.4	2.0	1.4	2.9	20	81	112	35	16
3	11	6.2	5.6	1.4	1.8	1.5	2.7	34	87	115	32	24
4	11	6.0	5.8	1.1	1.7	1.6	2.8	52	107	95	37	25
5	10	5.8	6.0	1.2	1.5	1.8	3.5	55	125	92	40	21
6	11	6.0	6.2	1.3	1.4	2.0	6.0	41	107	100	34	19
7	8.0	6.0	6.2	1.3	1.4	2.1	5.4	33	135	97	44	19
8	8.4	5.8	6.4	1.2	1.5	2.2	5.4	35	226	84	42	21
9	8.0	5.6	6.2	1.3	1.6	2.3	7.0	44	313	76	38	20
10	8.2	5.6	6.0	1.4	1.7	2.5	10	36	327	81	28	18
11	8.2	5.6	5.8	1.4	1.9	2.5	13	52	263	89	27	18
12	8.6	6.0	5.6	1.3	1.9	2.4	12	77	207	84	27	18
13	8.6	6.0	5.6	1.4	1.8	2.5	14	108	252	80	23	18
14	7.6	6.2	5.6	1.5	1.7	2.6	13	107	257	76	22	19
15	7.0	6.4	5.8	1.6	1.7	2.5	19	94	260	71	22	18
16	7.4	6.4	5.8	1.8	1.6	2.4	14	100	276	70	20	15
17	7.4	6.4	5.6	1.9	1.6	2.3	16	73	249	69	19	16
18	7.4	6.4	5.2	2.0	1.5	2.3	16	56	234	71	25	16
19	7.8	6.2	4.5	2.2	1.5	2.5	9.7	43	184	62	20	17
20	7.8	5.8	3.0	2.2	1.5	2.4	8.9	36	161	60	19	16
21	7.6	5.4	3.2	2.0	1.4	2.6	7.3	33	188	84	18	16
22	7.4	4.7	3.1	1.5	1.4	2.6	6.5	34	234	88	17	15
23	7.0	4.5	3.0	1.7	1.5	2.5	6.0	30	260	64	16	16
24	7.4	5.0	2.9	1.7	1.6	2.8	6.5	42	239	56	16	16
25	5.0	6.4	2.8	1.8	1.7	3.3	6.2	71	200	51	15	16
26	2.0	6.0	2.0	2.0	1.6	3.2	6.5	105	190	45	14	15
27	3.0	6.0	1.9	2.1	1.6	3.1	5.2	172	166	46	16	14
28	5.0	6.0	1.8	2.1	1.5	3.0	5.0	240	114	47	15	15
29	7.0	6.0	1.7	2.2	-----	2.7	5.0	290	78	49	24	14
30	8.0	6.0	1.5	2.2	-----	2.6	6.4	172	89	38	90	16
31	7.4	-----	1.6	2.3	-----	2.6	-----	112	-----	41	28	-----
TOTAL	242.2	177.4	138.0	52.0	45.8	74.2	244.6	2,407	5,692	2,301	858	526
MEAN	7.81	5.91	4.45	1.68	1.64	2.39	8.15	77.6	190	74.2	27.7	17.5
MAX	11	6.8	6.4	2.3	2.2	3.3	19	290	327	115	90	25
MIN	2.0	4.5	1.5	1.1	1.4	1.4	2.7	10	78	38	14	14
AC-FT	480	352	274	103	91	147	485	4,770	11,290	4,560	1,700	1,040
CAL YR 1970	TOTAL 10,827.60	MEAN 29.7	MAX 278	MIN 20	AC-FT 21,480							
WTR YR 1971	TOTAL 12,758.20	MEAN 35.0	MAX 327	MIN 1.1	AC-FT 25,310							

PEAK DISCHARGE (BASE, 200 CFS)

NOTE.--No gage-height record Nov. 8 to Dec. 15.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-28	2230	5.51	369	6-23	2130	5.55	382
6-10	2230	5.58	392	8-30	0700	--	269

YELLOWSTONE RIVER BASIN

41

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 miles downstream from Anchor Dam and 30 miles west of Thermopolis.

DRAINAGE AREA.--133 sq mi.

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

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

AVERAGE DISCHARGE.--12 years, 20.9 cfs (15,140 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 184 cfs June 26 (gage height, 3.24 ft); no flow for many days.

Period of record: Maximum discharge, 373 cfs May 26, 1967 (gage height, 3.64 ft); no flow at times in most years.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. Some regulation at high flows by Anchor Dam. (See page 100.) No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	.30	.70	.10		0	0	14	27	147	27	20
2	6.5	.20	.60	.20		0	.40	15	27	144	24	14
3	6.5	.30	.50	.10		0	.40	15	32	142	24	16
4	6.2	1.0	.40	.10		0	.20	16	49	142	24	20
5	6.2	1.0	.50	0		0	1.2	18	112	131	25	16
6	6.8	.90	.80	0		0	3.0	29	110	114	26	14
7	5.4	.80	1.0	0		0	4.5	28	109	114	25	13
8	4.6	.70	1.2	0		0	8.0	27	101	109	29	14
9	5.0	.60	1.0	0		0	6.0	26	59	107	29	13
10	5.2	.50	.60	0		0	7.0	25	93	105	27	11
11	5.4	.40	.40	0		0	5.0	26	116	101	24	9.8
12	5.6	.80	.20	0		0	4.0	36	142	98	22	9.1
13	5.0	.70	.20	0		0	4.0	48	144	99	19	8.7
14	4.0	.70	.30	0		0	6.0	57	144	114	13	8.4
15	3.5	.80	.30	0		0	9.0	66	147	107	11	7.7
16	4.0	1.0	.30	0		0	8.0	70	147	98	12	7.7
17	4.1	.60	.30	0		0	7.0	89	150	92	11	7.4
18	4.3	.80	.30	0		0	7.0	98	150	110	11	6.8
19	4.3	.60	.20	0		0	6.0	52	152	91	11	6.8
20	4.3	.60	.20	0		0	5.0	25	152	69	10	7.1
21	4.3	.60	.10	0		0	4.0	22	154	61	9.1	6.8
22	4.0	.40	.10	0		0	3.5	22	154	81	8.0	6.5
23	3.2	.20	.10	0		0	3.0	20	152	78	6.8	5.9
24	3.5	.20	.10	0		0	3.0	23	150	61	12	5.9
25	2.5	.80	.10	0		.40	2.5	40	162	48	6.8	5.7
26	.40	.70	0	0		1.0	2.5	62	178	36	5.4	5.9
27	.20	.60	0	0		.80	2.5	118	175	35	4.9	5.9
28	.20	.70	0	0		.80	3.0	91	167	35	5.7	5.7
29	.40	.80	0	0	-----	.80	3.5	99	154	36	6.8	4.9
30	.60	.70	0	0	-----	.60	3.5	56	150	33	93	5.4
31	.40	-----	0	0	-----	.40	-----	27	-----	31	50	-----
TOTAL	123.40	19.00	10.50	.50	0	4.80	122.70	1,360	3,759	2,769	612.5	289.1
MEAN	3.98	.63	.34	.016	0	.15	4.09	43.9	125	89.3	19.8	9.64
MAX	6.8	1.0	1.2	.20	0	1.0	9.0	118	178	147	93	20
MIN	.20	.20	0	0	0	0	0	14	27	31	4.9	4.9
AC-FT	245	38	21	1.0	0	9.5	243	2,700	7,460	5,490	1,210	573

CAL YR 1970 TOTAL 8,161.30 MEAN 22.4 MAX 193 MIN 0 AC-FT 16,190
WTR YR 1971 TOTAL 9,070.50 MEAN 24.9 MAX 178 MIN 0 AC-FT 17,990

NOTE.--No gage-height record Dec. 12 to May 11.

YELLOWSTONE RIVER BASIN

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

LOCATION.--Lat 43°41'23", long 108°49'51", in NW¼SW¼SW¼ sec.14, T.43 N., R.100 W., Hot Springs County, on left bank 0.6 mile downstream from Anchor Dam road, 0.7 mile southwest of Anchor, and 31 miles west of Thermopolis.

DRAINAGE AREA.--61 sq mi, approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,300 ft (from topographic map). Prior to Oct. 1, 1967, at site 0.6 mile upstream at different datum.

AVERAGE DISCHARGE.--9 years, 13.8 cfs (10,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 193 cfs May 28 (gage height, 2.43 ft); maximum gage height, 2.53 ft May 15; no flow Jan. 7-13.

Period of record: Maximum discharge, 1,370 cfs June 15, 1963, computation of peak flow through culvert and over embankment; no flow for many days in 1964-67, 1970-71.

REMARKS.--Records poor. Several small reservoirs above station used for storage of stock and irrigation water. Diversions above station into Basin Ranch ditch for irrigation of about 820 acres below station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	2.5	1.4	.60	2.2	.60	5.0	18	60	8.0	5.0	3.1
2	3.1	1.7	1.2	.50	2.4	.60	6.0	30	62	7.0	4.5	2.5
3	3.4	2.2	1.2	.40	2.2	1.0	6.4	37	64	6.4	5.0	16
4	3.4	.70	1.4	.30	2.1	.80	5.4	46	50	6.0	4.6	10
5	3.4	3.4	1.2	.30	1.8	.60	6.0	43	54	5.6	4.4	6.5
6	3.8	2.2	1.4	.20	1.4	.60	8.0	30	54	6.2	3.8	4.7
7	3.4	2.5	1.6	0	1.4	.80	12	28	40	6.8	9.6	3.8
8	2.8	2.2	2.0	0	1.4	1.2	12	30	70	6.5	12	4.1
9	3.1	1.2	1.8	0	1.6	1.2	11	33	66	6.0	6.1	3.4
10	5.0	2.2	1.2	0	1.8	1.6	14	25	62	6.0	4.4	3.1
11	3.4	.70	.80	0	2.0	2.2	13	29	62	5.6	3.4	2.8
12	4.7	1.6	.40	0	1.8	2.1	11	44	54	5.6	3.8	2.5
13	4.1	1.4	.60	0	2.0	2.0	11	53	56	5.2	3.1	2.5
14	4.4	1.4	.80	.20	2.4	2.0	14	46	52	5.2	2.8	2.2
15	2.5	1.5	1.0	.60	2.0	2.0	17	53	46	5.0	1.9	2.2
16	3.8	1.8	1.2	.80	1.8	1.6	15	68	45	4.5	1.9	2.8
17	3.1	1.2	1.0	1.2	1.6	1.4	12	59	45	4.5	2.2	3.4
18	2.5	1.4	.60	1.2	1.4	2.0	11	50	41	4.7	2.8	2.2
19	4.1	1.2	.40	1.2	1.3	2.4	9.0	33	34	4.7	1.7	3.4
20	3.4	1.2	.40	1.2	1.2	2.2	7.0	27	32	5.2	1.2	3.8
21	2.8	1.2	.60	.80	.80	2.0	6.0	30	30	5.2	1.5	3.8
22	1.7	1.0	.60	.60	1.0	2.2	6.0	30	28	5.6	1.2	3.1
23	2.5	.60	.50	.50	1.0	2.3	6.8	28	26	5.6	1.2	3.8
24	2.8	.60	.40	.50	1.2	2.7	8.0	34	23	5.6	1.0	4.1
25	1.7	1.4	.30	.50	1.2	3.0	8.0	43	18	5.2	.86	4.1
26	1.2	1.2	.20	.50	1.0	5.0	7.4	100	16	5.8	.86	4.1
27	1.2	1.0	.20	.80	.80	5.5	7.4	120	14	7.0	.86	3.8
28	2.5	1.2	.20	1.0	.80	5.6	9.0	140	10	7.0	.86	3.4
29	4.7	1.6	.20	2.0	-----	5.4	11	130	6.8	7.0	3.4	3.1
30	4.1	1.6	.40	2.2	-----	5.2	14	100	6.1	6.2	28	5.0
31	2.5	-----	.50	2.5	-----	5.0	-----	64	-----	5.4	5.4	-----
TOTAL	98.2	45.60	25.70	20.60	43.60	72.80	289.4	1,601	1,226.9	180.3	129.34	123.3
MEAN	3.17	1.52	.83	.66	1.56	2.35	9.65	51.6	40.9	5.82	4.17	4.11
MAX	5.0	3.4	2.0	2.5	2.4	5.6	17	140	70	8.0	28	16
MIN	1.2	.60	.20	0	.80	.60	5.0	18	6.1	4.5	.86	2.2
AC-FT	195	90	51	41	86	144	574	3,180	2,430	358	257	245

CAL YR 1970 TOTAL 3,734.65 MEAN 10.2 MAX 176 MIN 0 AC-FT 7,410
WTR YR 1971 TCTAL 3,856.74 MEAN 10.6 MAX 140 MIN 0 AC-FT 7,650

PEAK DISCHARGE (BASE, 160 CFS)

NOTE.--No gage-height record Jan. 6 to Apr. 30, May 26 to June 16, July 2 to Aug. 5.

DATE	TIME	G.HT	DISCHARGE	DATE	TIME	G.HT	DISCHARGE
5-28	--	2.43	193				

YELLOWSTONE RIVER BASIN

43

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 mile downstream from Middle Creek, and 0.8 mile northwest of Dickie.

DRAINAGE AREA.--95.0 sq mi.

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

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

AVERAGE DISCHARGE.--14 years, 12.1 cfs (8,770 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 338 cfs May 31 (gage height, 4.91 ft); minimum daily, 0.10 cfs Dec. 25, Jan. 5, 6.
Period of record: Maximum discharge, 1,130 cfs June 15, 1963 (gage height, 5.66 ft), from rating curve extended above 170 cfs 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 and period of no gage-height record, which are poor. No diversion above station.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	3.5	2.8	.30	.90	1.0	4.0	20	186	12	5.3	4.0
2	2.6	3.2	2.5	.20	.80	1.2	4.1	33	172	10	4.7	3.0
3	2.6	3.2	2.5	.20	.60	1.4	4.2	56	141	10	4.5	8.7
4	2.6	3.3	2.6	.20	.50	1.6	4.4	72	121	9.6	4.5	12
5	2.8	3.5	2.7	.10	.40	1.4	4.5	98	107	8.8	4.2	6.2
6	2.5	3.6	2.8	.10	.20	1.2	6.0	69	93	8.0	4.0	4.2
7	2.3	3.7	2.9	.20	.30	1.4	10	58	79	7.6	3.4	3.6
8	2.2	3.7	2.8	.30	.40	1.6	18	55	79	7.6	2.8	4.2
9	2.2	3.7	2.5	.30	.50	1.8	14	53	79	7.3	3.2	3.6
10	2.5	3.5	2.0	.20	1.0	2.1	21	47	73	6.6	2.6	2.8
11	3.0	3.3	1.4	.20	1.6	2.3	19	41	80	5.6	2.3	2.5
12	2.8	3.4	1.4	.20	2.2	2.5	10	52	69	5.3	2.2	2.2
13	2.6	3.5	1.6	.30	2.5	2.8	7.6	65	62	4.7	2.2	2.0
14	3.0	3.5	1.8	.40	2.5	3.3	8.8	74	57	4.2	1.9	2.0
15	3.5	3.5	2.0	.40	2.4	3.2	14	65	51	4.0	1.8	2.6
16	4.0	3.5	1.6	.40	2.3	3.1	14	66	43	3.8	1.8	3.8
17	4.2	3.5	1.0	.40	2.2	3.0	11	57	38	5.3	2.0	4.7
18	4.3	3.3	.60	.50	2.1	2.5	12	47	35	8.0	2.0	5.0
19	4.5	3.1	.40	.60	2.0	3.0	9.6	40	32	8.0	1.8	4.2
20	4.5	3.0	.60	.60	1.9	3.2	8.0	33	28	6.2	1.8	4.5
21	4.2	2.8	.80	.60	1.9	3.2	7.6	30	24	7.0	1.6	6.2
22	3.9	2.0	.60	.60	2.0	3.0	11	35	20	8.8	1.6	6.6
23	3.7	2.1	.40	.60	2.1	3.2	10	34	20	8.8	1.6	5.6
24	3.5	2.3	.20	.70	2.2	3.5	14	38	17	7.3	1.5	5.0
25	3.2	2.5	.10	.70	2.1	3.7	17	33	16	8.4	1.4	4.7
26	3.0	3.0	.20	.80	2.0	3.7	7.3	42	15	9.2	1.5	4.5
27	2.9	2.7	.20	.80	1.4	3.5	10	66	14	7.3	1.5	4.5
28	3.0	2.8	.30	.90	1.2	4.0	13	88	14	6.6	1.6	4.2
29	3.2	2.9	.40	.90	-----	4.3	13	137	13	7.6	2.0	4.2
30	3.5	3.0	.40	1.0	-----	4.5	16	174	12	6.6	13	4.2
31	3.6	-----	.40	1.0	-----	4.3	-----	248	-----	6.2	7.6	-----
TOTAL	99.0	94.6	42.50	14.70	42.20	84.5	323.1	2,026	1,790	226.4	93.9	135.5
MEAN	3.19	3.15	1.37	.47	1.51	2.73	10.8	65.4	59.7	7.30	3.03	4.52
MAX	4.5	3.7	2.9	1.0	2.5	4.5	21	248	186	12	13	12
MIN	2.2	2.0	.10	.10	.20	1.0	4.0	20	12	3.8	1.4	2.0
AC-FT	196	188	84	29	84	168	641	4,020	3,550	449	186	269
CAL YR 1970	TOTAL 4,028.10		MEAN 11.0		MAX 104		MIN 0		AC-FT 7,990			
WTR YR 1971	TOTAL 4,972.40		MEAN 13.6		MAX 248		MIN .10		AC-FT 9,860			

PEAK DISCHARGE (BASE, 150 CFS)

NOTE.--No gage-height record Jan. 1 to Apr. 7.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-31	0100	2.91	338				

YELLOWSTONE RIVER BASIN

06268500 FIFTEEN MILE CREEK NEAR WORLAND, WYO.

LOCATION.--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.

DRAINAGE AREA.--518 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,080 ft (by barometer). Prior to Oct. 1, 1956, at site 400 ft upstream at datum 5.52 ft higher. Oct. 1, 1956, to Sept. 30, 1969, at present site at datum 2.00 ft higher.

AVERAGE DISCHARGE.--20 years, 10.3 cfs (7,460 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,630 cfs Aug. 31 (gage height, 6.00 ft); no flow for many days.

Period of record: Maximum discharge, 3,300 cfs May 22, 1952 (gage height, 5.77 ft, site and datum then in use); no flow for many days in each year.

REMARKS.--Records poor. Bureau of Land Management has extensive spreader 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 SECCND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0	0	0	.70	24		0	204
2					0	0	0	.30	11		0	120
3					0	0	0	.10	13		0	80
4					0	0	0	0	5.8		0	210
5					0	0	0	0	2.0		0	77
6					0	0	0	0	.50		0	39
7					0	0	0	0	0		0	23
8					0	0	0	0	0		0	21
9					0	0	0	0	0		0	20
10					0	0	0	0	0		0	19
11					0	4.0	0	0	103		0	17
12					0	7.2	0	0	142		0	13
13					0	9.0	0	0	52		0	7.5
14					0	2.0	0	0	53		0	1.6
15					8.5	.10	0	0	32		0	.21
16					14	0	0	0	13		0	.10
17					5.0	0	0	0	13		0	0
18					2.3	0	0	0	13		0	0
19					.75	0	0	0	17		0	0
20					.25	0	.15	0	8.0		0	0
21					.20	0	3.9	0	.30		0	0
22					.15	0	8.3	12	0		0	0
23					.10	0	13	80	0		0	0
24					.10	0	5.8	15	0		0	0
25					0	14	15	8.6	0		0	0
26					0	18	101	5.4	0		0	0
27					0	9.2	67	.80	0		0	0
28					0	5.4	16	17	0		0	0
29					-----	2.0	5.4	25	0		0	0
30					-----	.10	2.0	70	0		824	0
31		-----			-----	0	-----	66	-----		643	-----
TOTAL	0	0	0	0	31.35	71.00	237.55	300.90	502.60	0	1,467	852.41
MEAN	0	0	0	0	1.12	2.29	7.92	9.71	16.8	0	47.3	28.4
MAX	0	0	0	0	14	18	101	80	142	0	824	210
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	62	141	471	597	997	0	2,910	1,690
CAL YR 1970	TOTAL	954.45	MEAN	2.61	MAX	253	MIN	0	AC-FT	1,890		
WTR YR 1971	TOTAL	3,462.81	MEAN	9.49	MAX	824	MIN	0	AC-FT	6,870		

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-12	0230	3.78	413	8-31	0430	6.00	1,630

YELLOWSTONE RIVER BASIN

45

06270450 CANYON CREEK BELOW COOKS CANYON, NEAR TEN SLEEP, WYO.

LOCATION.--Lat 44°00'30", long 107°17'40", in NW¼SE¼ sec.27, T.47 N., R.87 W., Washakie County, on right bank 0.4 mile downstream from Cooks Canyon, 8 miles east of Ten Sleep, and 9.5 miles upstream from mouth.

DRAINAGE AREA.--72 sq mi.

PERIOD OF RECORD.--April 1969 to September 1971 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 5,080 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 255 cfs May 30 (gage height, 3.86 ft), from rating curve extended above 140 cfs; minimum daily, 6.2 cfs Mar. 2-25, Apr. 9-23.

Period of record: Maximum discharge, 478 cfs May 19, 1970 (gage height, 4.36 ft), from rating curve extended above 140 cfs; minimum daily, 5.2 cfs Sept. 4-7, 17-20, 1969.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	7.2	7.2	6.5	6.5	6.5	6.5	6.5	78	12	7.2	7.6
2	8.4	7.2	7.2	6.5	6.5	6.2	6.5	6.5	78	12	7.2	7.2
3	8.4	7.2	7.2	6.5	6.5	6.2	6.5	13	77	11	7.2	7.6
4	8.4	7.2	7.2	6.5	6.5	6.2	6.5	33	75	11	7.2	7.6
5	8.4	7.2	7.2	6.5	6.5	6.2	6.5	55	68	11	7.6	7.6
6	8.0	7.2	7.2	6.5	6.5	6.2	6.5	54	68	9.3	7.6	7.6
7	7.4	7.2	7.2	6.5	6.5	6.2	6.5	60	64	9.3	7.6	7.6
8	7.2	7.2	7.2	6.5	6.5	6.2	6.5	62	62	9.0	12	7.6
9	7.2	7.2	7.2	6.5	6.5	6.2	6.2	64	71	8.6	13	7.6
10	7.2	7.2	7.2	6.5	6.5	6.2	6.2	50	68	8.2	8.6	7.6
11	7.2	7.2	7.2	6.5	6.5	6.2	6.2	50	77	7.6	7.9	7.6
12	7.2	7.2	7.2	6.5	6.5	6.2	6.2	73	61	6.8	7.9	7.6
13	7.2	7.2	7.2	6.5	6.5	6.2	6.2	93	60	6.8	7.9	7.6
14	7.2	7.2	7.2	6.5	6.5	6.2	6.2	109	55	6.8	7.9	7.6
15	7.2	7.2	7.2	6.5	6.5	6.2	6.2	100	52	6.8	7.9	7.2
16	7.2	7.2	7.2	6.5	6.5	6.2	6.2	84	47	6.8	7.9	7.2
17	7.2	7.2	7.2	6.5	6.5	6.2	6.2	66	45	6.8	7.9	7.2
18	7.2	7.2	6.8	6.5	6.5	6.2	6.2	52	41	6.8	7.9	7.2
19	7.2	7.2	6.8	6.5	6.5	6.2	6.2	47	41	6.8	7.9	7.2
20	7.2	7.2	6.8	6.5	6.5	6.2	6.2	42	34	6.8	7.9	7.2
21	7.2	7.2	6.8	6.5	6.5	6.2	6.2	43	31	6.8	7.9	7.2
22	7.2	7.2	6.8	6.5	6.5	6.2	6.2	66	29	6.8	7.9	7.2
23	7.2	7.2	6.8	6.5	6.5	6.2	6.2	61	28	6.8	7.6	7.2
24	7.2	7.2	6.8	6.5	6.5	6.2	6.5	54	25	6.8	7.6	7.2
25	7.2	7.2	6.8	6.5	6.5	6.2	6.5	55	23	6.8	7.6	7.2
26	7.2	7.2	6.8	6.5	6.5	7.2	6.5	58	22	6.8	7.6	7.2
27	7.2	7.2	6.8	6.5	6.5	6.5	6.5	75	19	6.8	7.6	7.2
28	7.2	7.2	6.8	6.5	6.5	6.5	6.5	91	18	7.2	7.6	7.2
29	7.2	7.2	6.8	6.5	-----	6.5	6.5	180	15	7.2	7.6	7.2
30	7.2	7.2	6.5	6.5	-----	6.5	6.5	141	13	7.2	7.6	7.2
31	7.2	-----	6.5	6.5	-----	6.5	-----	104	-----	7.2	7.6	-----
TOTAL	230.2	216.0	217.0	201.5	182.0	195.0	190.5	2,048.0	1,445	246.6	248.4	221.2
MEAN	7.43	7.20	7.00	6.50	6.50	6.29	6.35	66.1	48.2	7.95	8.01	7.37
MAX	8.4	7.2	7.2	6.5	6.5	7.2	6.5	180	78	12	13	7.6
MIN	7.2	7.2	6.5	6.5	6.5	6.2	6.2	6.5	13	6.8	7.2	7.2
AC-FT	457	428	430	400	361	387	378	4,060	2,870	489	493	439

CAL YR 1970 TOTAL 5,430.2 MEAN 14.9 MAX 270 MIN 5.4 AC-FT 10,770
WTR YR 1971 TOTAL 5,641.4 MEAN 15.5 MAX 180 MIN 6.2 AC-FT 11,190

NOTE.--No gage-height record Jan. 24 to Mar. 1.

YELLOWSTONE RIVER BASIN

06271000 TENSLEEP CREEK NEAR TEN SLEEP, WYO.

LOCATION.--Lat 44°03'28", long 107°23'14", in NW¼SW¼NW¼ sec.12, T.47 N., R.88 W., Washakie County, on left bank 0.3 mile downstream from Canyon Creek and 3.2 miles northeast of Ten Sleep.

DRAINAGE AREA.--247 sq mi.

PERIOD OF RECORD.--September 1910 to December 1912, October 1914 to November 1924, October 1943 to current year. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 4,667.59 ft above mean sea level. Prior to Oct. 1, 1916, nonrecording gage at datum 1.00 ft higher. Oct. 1, 1916, to May 10, 1918, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--40 years (1910-12, 1914-24, 1943-71), 146 cfs (105,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,650 cfs May 29 (gage height, 5.75 ft); minimum daily, 33 cfs Dec. 23.
Period of record: Maximum discharge, 2,890 cfs June 15, 1924 (gage height, 7.05 ft); minimum daily, 26 cfs Sept. 12, 1966.

REMARKS.--Records fair. Diversions for irrigation of about 350 acres above station.

REVISIONS (WATER YEARS).--WSP 1239: 1916, 1918(M), 1924(M), 1945(M), 1948(M). WSP 1709: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	47	46	41	44	42	42	49	710	236	86	59
2	50	47	46	41	44	41	41	52	672	242	88	56
3	50	46	46	41	44	42	42	63	694	236	92	57
4	50	44	44	36	41	42	41	88	744	242	86	66
5	49	46	44	35	46	42	41	124	694	206	152	68
6	50	46	44	36	38	41	41	129	688	197	131	63
7	54	47	44	36	42	41	41	136	615	203	126	61
8	50	47	44	37	47	41	41	149	510	194	119	74
9	52	46	44	40	46	41	41	165	766	188	119	80
10	56	47	44	40	44	42	42	157	832	176	110	70
11	50	46	43	42	44	42	44	176	1,110	179	103	63
12	56	47	42	42	42	46	42	219	978	182	97	59
13	52	46	42	44	44	52	41	270	1,040	176	92	56
14	54	46	42	44	46	46	44	326	1,050	171	84	52
15	49	46	42	42	46	42	46	354	1,020	157	80	50
16	52	46	44	40	46	42	46	366	990	139	78	50
17	50	46	44	39	44	42	44	315	1,090	131	76	52
18	49	46	42	42	44	42	47	260	1,090	136	76	52
19	50	47	38	44	42	42	47	219	1,070	146	78	52
20	52	47	39	44	42	42	50	200	808	117	70	52
21	50	47	41	44	39	42	50	191	856	110	63	52
22	49	39	39	41	42	42	49	229	900	105	59	50
23	49	41	33	44	42	41	46	260	938	119	56	50
24	50	52	41	44	44	42	49	296	814	110	54	49
25	52	49	39	42	44	47	50	311	727	126	54	47
26	47	47	42	42	42	50	52	370	672	162	52	47
27	47	46	42	42	41	50	52	500	590	129	52	47
28	49	46	42	42	42	44	49	705	406	117	50	47
29	50	46	41	42	-----	42	49	1,470	342	105	54	49
30	49	47	42	44	-----	44	49	1,290	274	97	61	49
31	49	-----	42	44	-----	46	-----	900	-----	88	63	-----
TOTAL	1,568	1,386	1,308	1,277	1,212	1,343	1,359	10,339	23,690	4,922	2,561	1,679
MEAN	50.6	46.2	42.2	41.2	43.3	43.3	45.3	334	790	159	82.6	56.0
MAX	56	52	46	44	47	52	52	1,470	1,110	242	152	80
MIN	47	39	33	35	38	41	41	49	274	88	50	47
AC-FT	3,110	2,750	2,590	2,530	2,400	2,660	2,700	20,510	46,990	9,760	5,080	3,330
CAL YR 1970	TOTAL 45,095	MEAN 124	MAX 1,040	MIN 33	AC-FT 89,450							
WTR YR 1971	TOTAL 52,644	MEAN 144	MAX 1,470	MIN 33	AC-FT 104,400							

PEAK DISCHARGE (BASE, 1,300 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
5-29	1230	5.75	1,650	6-18	0500	5.40	1,370

YELLOWSTONE RIVER BASIN

47

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 mile downstream from Dry Medicine Lodge Creek and 4.5 miles northeast of Hyattville.

DRAINAGE AREA.--86.8 sq mi.

PERIOD OF RECORD.--October 1942 to current year. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 4,780 ft (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 higher.

AVERAGE DISCHARGE.--29 years, 34.6 cfs (25,070 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 432 cfs May 29 (gage height, 3.98 ft); minimum daily, 9.4 cfs on many days.

Period of record: Maximum discharge, 1,160 cfs June 24, 1945 (gage height, 6.10 ft, present datum, from floodmark), from rating curve extended above 550 cfs; minimum daily, 4.1 cfs Feb. 2, 1963.

REMARKS.--Records fair. Diversion for irrigation of about 40 acres above station.

REVISIONS (WATER YEARS).--WSP 1239: 1945, 1946(M). WSP 1709: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	12	11	10	10	9.4	9.8	10	194	60	22	15
2	14	11	11	10	10	9.4	9.8	11	206	59	22	14
3	14	11	11	10	10	9.4	9.8	14	227	58	21	14
4	14	11	11	9.8	9.8	9.4	9.8	15	252	58	20	16
5	13	11	11	9.8	9.8	9.4	9.8	18	202	52	40	16
6	13	11	11	9.4	9.8	9.4	9.8	19	194	49	31	15
7	14	11	11	9.8	9.8	9.4	9.8	20	194	47	27	14
8	13	11	11	9.8	9.8	9.4	9.8	22	174	45	24	16
9	13	11	11	10	9.8	9.4	9.8	25	245	43	25	16
10	14	11	11	10	9.8	9.4	10	26	239	41	22	15
11	13	11	11	10	9.8	9.8	10	27	273	40	21	15
12	14	11	11	10	9.8	9.8	10	42	235	38	20	14
13	13	11	11	10	9.8	9.8	9.8	84	239	36	19	14
14	13	11	11	10	9.8	9.4	9.8	103	227	34	19	14
15	12	11	11	10	9.8	9.4	10	100	213	33	18	14
16	13	11	11	10	9.8	9.4	11	99	208	31	18	14
17	13	11	11	10	9.8	9.4	10	79	221	30	18	14
18	12	11	11	10	9.8	9.4	11	58	210	30	18	14
19	13	11	10	10	9.8	9.4	11	49	206	29	18	14
20	12	11	10	10	9.8	9.4	11	42	163	27	17	14
21	12	11	10	10	9.8	9.4	11	40	167	26	16	14
22	12	11	10	10	9.8	9.4	11	48	160	25	16	14
23	12	11	10	10	9.8	9.4	10	63	162	30	16	14
24	12	11	10	10	9.8	9.4	11	67	138	29	15	14
25	12	11	10	10	9.8	9.8	12	80	124	28	15	14
26	11	11	10	9.8	9.8	9.8	11	102	114	34	15	14
27	11	11	10	9.8	9.4	9.8	11	151	100	30	15	14
28	12	11	10	9.8	9.4	9.4	11	212	84	27	15	14
29	12	11	10	10	-----	9.4	10	382	76	26	15	14
30	12	11	10	10	-----	9.4	10	312	65	24	16	14
31	12	-----	10	10	-----	9.8	-----	241	-----	23	16	-----
TOTAL	394	331	328	308.0	274.2	294.2	309.8	2,561	5,512	1,142	610	432
MEAN	12.7	11.0	10.6	9.94	9.79	9.49	10.3	82.6	184	36.8	19.7	14.4
MAX	14	12	11	10	10	9.8	12	382	273	60	40	16
MIN	11	11	10	9.4	9.4	9.4	9.8	10	65	23	15	14
AC-FT	782	657	651	611	544	584	614	5,080	10,930	2,270	1,210	857
CAL YR 1970	TOTAL 12,737.0	MEAN 34.9	MAX 300	MIN 10	AC-FT 25,260							
WTR YR 1971	TOTAL 12,496.2	MEAN 34.2	MAX 382	MIN 9.4	AC-FT 24,790							

PEAK DISCHARGE (BASE, 350 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-29	0900	3.98	432				

YELLOWSTONE RIVER BASIN

06274500 GREYBULL RIVER NEAR PITCHFORK, WYO.

LOCATION.--Lat 44°06'31", long 109°09'36", in SE¼ sec.24, T.48 N., R.103 W., Park County, on left bank at downstream side of Z Bar T Ranch bridge, 0.1 mile upstream from Rose Creek, and 4 miles west of Pitchfork.

DRAINAGE AREA.--282 sq mi.

PERIOD OF RECORD.--April 1946 to September 1949, May 1951 to October 1971 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 6,709.33 ft above mean sea level. Prior to May 9, 1951, at site 300 ft downstream at different datum. May 9, 1951, to June 7, 1952, at site 30 ft upstream at present datum.

AVERAGE DISCHARGE.--23 years, 182 cfs (131,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,010 cfs June 22 (gage height, 7.30 ft); minimum daily, 16 cfs Jan. 4.
Period of record: Maximum discharge, 8,610 cfs June 15, 1963 (gage height, 7.68 ft), from rating curve extended above 2,500 cfs on basis of slope-area measurement of peak flow; minimum daily, 8 cfs Mar. 17-23, Apr. 12-14, 1953.

REMARKS.--Records fair except those for winter period, which are poor. Diversions for irrigation of about 1,850 acres, of which about 650 acres lies below station.

REVISIONS (WATER YEARS).--WSP 1309: 1949(M). WSP 1709: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	37	36	26	25	17	26	91	716	730	333	219
2	37	36	35	23	23	18	26	122	644	860	325	188
3	37	37	36	21	22	19	26	167	648	992	320	206
4	37	36	37	16	20	21	27	206	730	870	308	188
5	36	41	37	17	19	22	29	208	780	743	290	172
6	37	42	38	17	17	24	33	174	805	830	268	163
7	37	41	40	19	17	25	41	162	870	825	275	160
8	38	41	39	25	18	27	41	186	1,150	712	292	167
9	36	41	37	28	20	28	42	226	1,470	712	268	155
10	39	41	35	27	23	28	46	198	1,570	761	235	150
11	38	32	32	25	24	28	42	204	1,430	805	217	145
12	40	35	29	23	23	29	38	312	1,600	743	208	142
13	39	36	29	24	22	29	33	486	1,720	707	194	136
14	40	37	32	25	21	31	41	514	1,830	689	183	132
15	37	39	30	28	21	30	51	430	1,930	656	177	125
16	40	39	32	29	20	29	45	514	2,230	660	172	120
17	39	39	29	30	20	27	44	333	2,300	689	167	115
18	39	38	24	30	19	23	45	248	2,240	648	165	110
19	41	36	22	31	19	25	41	198	2,150	576	155	105
20	38	34	23	29	18	24	39	177	2,200	576	148	100
21	38	30	25	26	18	24	36	162	2,140	596	143	98
22	38	25	22	23	19	25	38	170	2,280	539	143	95
23	36	23	21	24	21	26	37	158	2,440	508	137	92
24	37	30	22	24	22	26	42	208	2,500	486	136	90
25	32	40	23	25	21	26	41	322	2,620	490	130	88
26	26	35	25	25	20	27	38	616	2,490	452	125	86
27	26	36	26	25	19	26	38	986	2,130	444	118	84
28	28	36	27	25	18	27	39	1,170	2,020	414	158	82
29	40	36	28	25	-----	28	50	1,240	738	384	246	82
30	40	37	29	26	-----	30	73	1,050	616	375	672	81
31	38	-----	30	26	-----	29	-----	870	-----	363	262	-----
TOTAL	1,141	1,086	930	767	569	798	1,188	12,108	48,987	19,835	6,970	3,876
MEAN	36.8	36.2	30.0	24.7	20.3	25.7	39.6	391	1,633	640	225	129
MAX	41	42	40	31	25	31	73	1,240	2,620	992	672	219
MIN	26	23	21	16	17	17	26	91	616	363	118	81
AC-FT	2,260	2,150	1,840	1,520	1,130	1,580	2,360	24,020	97,170	39,340	13,830	7,690
CAL YR 1970	TOTAL 65,642		MEAN 180	MAX 1,830	MIN 14	AC-FT 130,200						
WTR YR 1971	TOTAL 98,255		MEAN 269	MAX 2,620	MIN 16	AC-FT 194,900						

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
5-27	2300	5.34	1,330	7-6	2300	5.63	1,320
6-22	2130	7.30	3,010	8-29	2400	6.19	1,770

YELLOWSTONE RIVER BASIN

49

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 mile upstream from Cascade Creek, 0.8 mile southwest of Kirwin, and 1.1 miles downstream from Horse Creek.

DRAINAGE AREA.--7.66 sq mi.

PERIOD OF RECORD.--October 1970 to September 1971.

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

EXTREMES.--Current year: Maximum discharge, 338 cfs June 23 (gage height, 5.27 ft); minimum daily, 0.50 cfs Jan. 13.

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

DISCHARGE, IN CUBIC FEET PER SECCND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	2.1	1.3	1.2	1.1	.79	.79	1.2	13	46	29	12
2	3.0	1.8	1.3	1.2	1.1	.79	.79	2.4	13	46	28	10
3	3.0	1.8	1.3	1.1	.93	.79	.79	3.0	14	48	26	10
4	3.0	1.8	1.3	1.1	.93	.79	.79	3.6	16	44	26	10
5	3.0	1.8	1.2	1.1	.93	.79	.79	4.4	25	50	28	9.0
6	2.6	2.1	1.2	1.1	.93	.79	.93	2.6	21	57	23	9.0
7	2.6	1.6	1.2	1.1	.93	.66	1.1	3.3	22	46	22	10
8	2.8	1.8	1.2	1.1	.92	.66	.93	4.3	29	46	23	10
9	3.0	1.8	1.2	1.1	.93	.66	1.1	9.0	46	48	22	10
10	3.0	1.8	1.2	.93	.93	.66	1.1	6.4	31	55	19	10
11	3.0	1.8	1.2	1.1	.93	.66	.93	9.0	23	40	19	9.7
12	3.0	1.8	1.2	.79	.93	.66	.93	19	44	44	18	9.7
13	3.0	1.8	1.2	.50	.93	.66	.92	26	53	48	17	9.0
14	2.8	1.8	1.2	2.0	.93	.60	1.1	26	134	48	16	9.0
15	3.6	1.8	1.2	1.1	.93	.60	1.1	22	139	46	16	7.0
16	4.4	1.8	1.2	1.1	.93	.60	1.1	23	143	48	15	7.0
17	4.4	1.8	1.2	.93	.93	.55	.93	14	140	44	15	6.4
18	4.0	1.8	1.2	.93	.93	.60	.93	10	112	44	14	7.0
19	3.6	1.8	1.2	.93	.93	.60	.93	7.6	130	44	13	7.6
20	3.3	1.8	1.2	.93	.79	.60	.93	5.9	152	48	12	5.9
21	3.0	1.6	1.2	.93	.79	.60	.93	4.9	148	48	11	5.9
22	3.0	1.1	1.2	1.1	.79	.60	.93	5.4	105	44	11	6.4
23	3.0	1.2	1.2	1.1	.79	.70	.93	4.6	180	42	11	6.4
24	2.6	1.4	1.2	1.1	.79	.70	.93	11	143	42	10	5.4
25	2.1	1.4	1.2	1.1	.79	.70	.93	26	134	40	9.7	5.4
26	2.1	1.3	1.2	1.1	.79	.60	.93	36	91	40	9.7	5.4
27	2.1	1.3	1.2	1.1	.79	.60	.93	42	60	40	8.3	5.4
28	2.1	1.3	1.2	1.1	.79	.60	.93	22	44	34	9.0	4.9
29	2.4	1.3	1.2	.53	-----	.70	.93	21	44	34	15	4.9
30	2.4	1.3	1.2	1.1	-----	.79	.93	19	40	32	22	4.9
31	2.4	-----	1.2	1.1	-----	.79	-----	18	-----	31	14	-----
TOTAL	90.9	49.6	37.6	33.10	25.12	20.89	28.22	412.6	2,289	1,367	531.7	233.3
MEAN	2.93	1.65	1.21	1.07	.90	.67	.94	13.3	76.3	44.1	17.2	7.78
MAX	4.4	2.1	1.3	2.0	1.1	.79	1.1	42	180	57	29	12
MIN	2.1	1.1	1.2	.50	.79	.55	.79	1.2	13	31	8.3	4.9
AC-FT	180	98	75	66	50	41	56	818	4,540	2,710	1,050	463

WTR YR 1971 TOTAL 5,119.03 MEAN 14.0 MAX 180 MIN .50 AC-FT 10,150

YELLOWSTONE RIVER BASIN

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 mile downstream from Ernest May Ranch, 5.2 miles downstream from Dick Creek, and 10 miles southwest of Meeteetse.

DRAINAGE AREA.--194 sq mi, approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,450 ft (from topographic map). Prior to Sept. 18, 1952, and Oct. 28, 1953, to June 15, 1963, water-stage recorder at site 2 miles upstream at different datum. Sept. 18, 1952, to Oct. 27, 1953, nonrecording gage at site 2 miles upstream at different datum. June 16, 1963, to Aug. 13, 1967, water-stage recorder at site 1.4 miles upstream at different datum. Aug. 14, 1967, to Oct. 5, 1967, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--26 years, 116 cfs (84,040 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,560 cfs May 27 (gage height, 7.21 ft); maximum gage height, 8.39 ft June 17; minimum daily discharge, 19 cfs Mar. 6.

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

REMARKS.--Records poor. Diversions above station for irrigation of about 3,200 acres, of which about 1,000 acres lies below station.

REVISIONS (WATER YEARS).--WSP 1309: 1947(M). WSP 1709: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	52	43	33	37	25	32	82	460	256	160	154
2	55	50	44	30	35	25	32	137	432	262	154	132
3	57	49	39	28	37	27	32	234	432	291	148	170
4	57	48	40	26	35	27	30	308	444	262	162	150
5	57	52	39	25	32	23	33	380	436	199	160	137
6	59	54	57	25	29	19	46	276	429	219	154	130
7	59	52	52	26	31	21	57	241	472	219	156	134
8	59	52	59	30	33	23	59	276	615	250	190	139
9	59	49	57	29	33	25	62	353	765	242	174	126
10	64	52	44	28	37	26	77	241	868	226	154	119
11	62	43	39	27	37	27	64	241	820	270	150	113
12	64	42	36	25	37	28	48	446	770	267	146	108
13	62	44	30	23	37	28	42	770	868	264	139	105
14	60	46	29	25	35	30	60	787	880	256	137	103
15	55	48	31	28	37	28	77	650	904	237	134	101
16	60	50	33	31	35	27	64	695	958	237	132	103
17	57	49	32	33	35	26	60	516	1,040	242	129	105
18	55	48	30	35	35	23	60	391	814	232	129	98
19	57	46	28	36	31	25	48	276	820	188	124	106
20	55	43	30	34	30	27	43	234	838	209	124	109
21	57	39	31	30	31	26	42	204	868	259	118	106
22	55	35	31	28	32	26	42	209	886	270	116	106
23	54	33	30	30	32	28	44	220	850	250	113	106
24	57	35	31	31	34	30	50	276	798	202	110	108
25	50	38	30	32	33	30	50	435	690	209	110	106
26	48	42	30	33	29	30	39	680	625	197	103	105
27	52	44	30	34	26	29	42	1,020	508	202	98	103
28	54	46	31	35	28	31	44	906	417	202	93	98
29	57	46	32	36	-----	34	49	855	356	192	120	97
30	54	49	33	37	-----	37	64	740	285	164	484	97
31	52	-----	35	38	-----	40	-----	683	-----	166	199	-----
TOTAL	1,762	1,376	1,136	941	933	851	1,492	13,762	20,348	7,141	4,620	3,474
MEAN	56.8	45.9	36.6	30.4	33.3	27.5	49.7	444	678	230	149	116
MAX	64	54	59	38	37	40	77	1,020	1,040	291	484	170
MIN	48	33	28	23	26	19	30	82	285	164	93	97
AC-FT	3,490	2,730	2,250	1,870	1,850	1,690	2,960	27,300	40,360	14,160	9,160	6,890
CAL YR 1970	TOTAL 39,045	MEAN 107	MAX 978	MIN 17	AC-FT 77,450							
WTR YR 1971	TOTAL 57,836	MEAN 158	MAX 1,040	MIN 19	AC-FT 114,700							

PEAK DISCHARGE (BASE, 830 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-13	2130	7.08	1,290	6-17	0200	8.39	1,310
5-27	2315	7.21	1,560	8-30	0130	7.26	856

YELLOWSTONE RIVER BASIN

51

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, 1,800 ft upstream from bridge on State Highway 120, and 3 miles upstream from Meeteetse Creek.

DRAINAGE AREA.--681 sq mi.

PERIOD OF RECORD.--June to December 1897, April to October 1903 (gage heights and discharge measurements only), July 1920 to current year. Monthly discharge only for some periods, published in WSP 1309.

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

AVERAGE DISCHARGE.--51 years (1920-71), 347 cfs (251,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,760 cfs June 23 (gage height, 5.88 ft); minimum daily, 37 cfs Mar. 6.

Period of record: Maximum discharge, 13,600 cfs June 15, 1963 (gage height, 9.20 ft, from floodmark), from rating curve extended above 4,600 cfs on basis of velocity-area study; minimum daily, 16 cfs Mar. 4, 1963.

REMARKS.--Records poor. Slight regulation by Sunshine Reservoir beginning May 1940 (capacity, 53,000 acre-ft). Diversions for irrigation of about 10,600 acres above station. Several diversions above station for irrigation below station.

REVISIONS (WATER YEARS).--WSP 1309: 1923(M), 1924, 1925(M). WSP 1709: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119	88	84	64	52	40	65	101	772	986	650	346
2	119	84	82	60	50	41	56	158	680	1,120	629	255
3	119	77	80	56	51	41	57	249	595	1,280	608	249
4	115	73	80	50	49	40	50	320	590	1,130	629	205
5	113	80	80	40	47	40	52	344	675	942	615	190
6	115	80	90	41	45	37	63	267	675	1,050	601	183
7	115	82	87	45	44	39	80	258	660	1,040	608	181
8	117	80	92	50	45	42	82	330	862	962	685	188
9	107	75	88	52	47	43	82	380	1,130	954	636	186
10	111	82	75	56	50	44	92	348	1,890	987	550	195
11	107	70	63	54	55	45	90	362	1,980	1,080	526	218
12	110	70	60	50	54	45	75	502	2,370	1,010	544	190
13	111	74	60	52	52	46	60	690	2,590	971	544	178
14	111	80	60	52	50	48	75	695	2,710	845	520	215
15	99	86	60	54	50	47	94	542	2,830	744	526	231
16	103	90	66	56	50	45	90	675	3,190	768	514	234
17	103	90	64	58	50	42	80	550	3,340	920	504	237
18	99	86	60	60	48	40	84	482	3,050	930	514	198
19	99	82	54	58	47	43	75	369	2,970	768	532	202
20	99	76	52	54	46	48	71	358	3,040	760	498	200
21	95	70	58	50	48	48	70	386	3,010	872	460	193
22	94	64	52	45	49	47	84	402	3,170	872	460	170
23	90	60	50	44	50	48	84	320	3,290	736	435	172
24	94	70	52	42	52	50	90	369	3,300	678	430	170
25	88	80	54	42	55	52	117	474	3,310	650	415	170
26	80	80	58	42	50	52	88	690	3,120	608	402	168
27	80	82	58	43	48	50	86	887	2,490	692	397	172
28	86	82	62	43	45	68	77	1,030	2,290	692	455	181
29	92	84	64	47	-----	64	73	1,160	1,090	706	470	175
30	92	86	64	50	-----	80	84	1,000	901	692	1,480	170
31	86	-----	66	54	-----	79	-----	915	-----	692	465	-----
TOTAL	3,168	2,363	2,075	1,564	1,379	1,494	2,326	15,613	62,570	27,137	17,302	6,022
MEAN	102	78.8	66.9	50.5	49.3	48.2	77.5	504	2,086	875	558	201
MAX	119	90	92	64	55	80	117	1,160	3,340	1,280	1,480	346
MIN	80	60	50	40	44	37	50	101	590	608	397	168
AC-FT	6,280	4,690	4,120	3,100	2,740	2,960	4,610	30,970	124,100	53,830	34,320	11,940

CAL YR 1970 TOTAL 108,155 MEAN 296 MAX 2,420 MIN 35 AC-FT 214,500
WTR YR 1971 TOTAL 143,013 MEAN 392 MAX 3,340 MIN 37 AC-FT 283,700

PEAK DISCHARGE (BASE, 1,700 CFS)

NOTE.--No gage-height record June 10 to July 14.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-23	0015	5.88	4,760	8-30	0215	5.50	2,960

YELLOWSTONE RIVER BASIN

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 miles upstream from Dorsey Creek, and 8 miles west of Basin.

DRAINAGE AREA.--1,115 sq mi.

PERIOD OF RECORD.--April 1930 to current year. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 4,000 ft (from topographic map). Prior to Sept. 30, 1930, nonrecording gage at site 250 ft downstream at datum 2.92 ft 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 downstream at datum 1.92 ft higher. Apr. 15, 1936, to Aug. 13, 1951, at site 100 ft downstream at present datum. Aug. 14, 1951, to June 17, 1970, at site 300 ft downstream at present datum.

AVERAGE DISCHARGE.--41 years, 181 cfs (131,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,020 cfs June 17 (gage height, 6.06 ft); maximum gage height, 6.11 ft June 24; minimum daily discharge, 16 cfs May 21.

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

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Slight regulation by Sunshine Reservoir beginning May 1940 (capacity, 53,000 acre-ft). Diversions above station for irrigation of about 63,300 acres, of which about 2,600 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	109	162	90	105	93	160	25	714	400	50	150
2	22	116	160	78	110	91	130	22	624	228	47	80
3	21	121	135	76	100	86	138	20	540	231	40	50
4	25	112	145	74	80	84	130	59	410	279	44	45
5	27	116	120	72	86	84	107	121	328	234	39	44
6	27	130	120	64	80	80	112	138	250	201	34	44
7	31	125	130	72	74	82	140	59	283	234	29	45
8	36	125	140	80	90	88	186	37	380	225	37	47
9	40	123	145	84	80	90	170	40	840	172	49	48
10	44	121	109	82	86	92	158	50	1,190	168	36	50
11	46	128	100	74	100	94	172	33	1,140	170	33	50
12	50	123	98	64	110	94	158	36	1,390	172	36	44
13	52	132	93	60	120	96	123	96	1,700	152	33	40
14	50	128	91	58	130	100	105	186	1,900	135	31	28
15	50	121	98	80	140	98	125	112	2,000	70	28	21
16	52	123	123	76	130	94	142	89	2,100	41	28	23
17	52	128	118	96	120	90	105	91	2,150	41	29	31
18	52	125	114	105	110	84	102	74	2,210	49	32	37
19	52	118	100	100	105	82	91	39	2,100	47	37	41
20	52	123	70	105	100	100	93	18	2,000	26	36	43
21	64	130	74	100	80	100	80	16	2,000	29	32	54
22	74	110	80	90	82	100	74	84	2,050	41	31	59
23	74	100	74	86	84	100	64	116	2,100	40	31	59
24	70	110	80	90	92	104	47	49	2,200	40	29	59
25	70	130	74	105	110	110	70	32	2,000	41	29	54
26	72	125	74	106	115	110	50	41	1,450	49	29	43
27	70	115	76	108	100	110	45	175	1,170	43	31	36
28	84	130	82	110	82	140	40	346	819	43	26	37
29	114	140	88	120	-----	135	35	896	576	39	23	33
30	118	145	94	115	-----	160	30	990	420	44	240	41
31	112	-----	90	110	-----	216	-----	1,010	-----	47	155	-----
TOTAL	1,739	3,682	3,257	2,730	2,801	3,187	3,182	5,100	39,034	3,731	1,384	1,436
MEAN	56.1	123	105	88.1	100	103	106	165	1,301	120	44.6	47.9
MAX	118	145	162	120	140	216	186	1,010	2,210	400	240	150
MIN	21	100	70	58	74	80	30	16	250	26	23	21
AC-FT	3,450	7,300	6,460	5,410	5,560	6,320	6,310	10,120	77,420	7,400	2,750	2,850

CAL YR 1970 TOTAL 43,097 MEAN 118 MAX 1,710 MIN 10 AC-FT 85,480
WTR YR 1971 TOTAL 71,263 MEAN 195 MAX 2,210 MIN 16 AC-FT 141,400

PEAK DISCHARGE (BASE, 1,300 CFS)

NOTE.--No gage-height record Dec. 20 to Mar. 31.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-29	2115	4.52	1,310	6-17	1600	6.06	3,020

YELLOWSTONE RIVER BASIN

53

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 mile upstream from Shell Reservoir, 1.1 miles downstream from Buckley Creek, 6 miles southeast of Shell Creek ranger station, and 19 miles east of Shell.

DRAINAGE AREA.--23.1 sq mi.

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 (from topographic map).

AVERAGE DISCHARGE.--15 years, 37.0 cfs (26,810 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 702 cfs May 29 (gage height, 5.69 ft); minimum daily, 1.2 cfs Mar. 1-9, 18-23.

Period of record: Maximum discharge, 1,870 cfs June 15, 1963 (gage height, 7.84 ft, from floodmarks), from rating curve extended above 550 cfs on basis of velocity-area study; minimum daily, 0.60 cfs Mar. 7, 1967.

REMARKS.--Records good except those for winter period and period 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	4.3	3.5	1.7	1.7	1.2	1.3	4.0	136	70	18	7.2
2	4.9	4.1	3.3	1.6	1.7	1.2	1.3	5.0	156	68	17	6.6
3	4.9	4.3	3.2	1.6	1.6	1.2	1.3	6.0	206	71	16	7.0
4	4.7	4.3	3.2	1.6	1.5	1.2	1.3	7.5	248	67	17	7.8
5	4.6	4.3	3.1	1.5	1.5	1.2	1.3	10	173	59	18	7.6
6	4.5	4.3	3.1	1.5	1.5	1.2	1.4	14	181	54	19	6.8
7	4.2	4.3	3.0	1.6	1.5	1.2	1.4	16	179	52	17	6.8
8	4.3	4.3	2.9	1.6	1.6	1.2	1.4	17	232	50	17	7.8
9	4.5	4.3	2.8	1.6	1.6	1.2	1.5	19	421	47	18	7.0
10	4.7	4.3	2.7	1.6	1.6	1.3	1.6	22	450	44	16	6.6
11	4.6	4.3	2.5	1.6	1.5	1.3	1.8	22	488	42	15	6.0
12	4.6	4.3	2.4	1.6	1.4	1.3	1.7	27	450	41	14	5.6
13	4.9	4.2	2.4	1.6	1.4	1.3	1.6	37	468	38	13	5.4
14	4.8	4.0	2.2	1.5	1.4	1.3	1.6	81	426	36	12	5.2
15	4.7	4.0	2.2	1.5	1.4	1.3	1.9	114	387	33	12	5.1
16	4.8	4.0	2.1	1.6	1.4	1.3	2.0	109	407	31	11	4.9
17	4.5	4.0	2.1	1.6	1.4	1.3	1.9	96	418	30	11	5.1
18	4.5	3.9	2.0	1.6	1.3	1.2	1.9	72	376	31	12	5.1
19	4.5	3.7	1.8	1.7	1.3	1.2	1.9	60	332	29	11	5.1
20	4.3	3.9	1.8	1.8	1.3	1.2	1.9	51	290	27	10	5.1
21	4.0	3.9	1.8	1.7	1.3	1.2	2.0	41	278	26	9.3	5.1
22	4.0	3.7	1.7	1.7	1.3	1.2	2.0	44	274	30	8.6	4.9
23	4.0	3.4	1.7	1.7	1.3	1.2	2.1	60	251	34	8.3	4.9
24	4.0	3.5	1.7	1.7	1.3	1.3	2.5	72	208	28	7.8	4.5
25	4.0	3.6	1.7	1.7	1.4	1.3	2.5	82	175	37	7.6	4.5
26	3.8	3.6	1.8	1.7	1.3	1.3	2.4	125	149	33	7.2	4.9
27	3.8	3.5	1.8	1.7	1.3	1.3	2.3	247	124	28	8.3	4.9
28	4.0	3.5	1.8	1.8	1.3	1.3	2.3	392	104	24	8.8	5.2
29	4.3	3.5	1.8	1.8	-----	1.3	2.5	614	92	22	8.3	4.7
30	4.3	3.6	1.8	1.8	-----	1.3	3.0	294	77	20	9.5	4.9
31	4.3	-----	1.8	1.8	-----	1.3	-----	159	-----	19	8.1	-----
TOTAL	137.1	118.9	71.7	51.1	40.1	38.8	55.6	2,919.5	8,156	1,221	385.8	172.3
MEAN	4.42	3.96	2.31	1.65	1.43	1.25	1.85	94.2	272	39.4	12.4	5.74
MAX	5.1	4.3	3.5	1.8	1.7	1.3	3.0	614	488	71	19	7.8
MIN	3.8	3.4	1.7	1.5	1.3	1.2	1.3	4.0	77	19	7.2	4.5
AC-FT	272	236	142	101	80	77	110	5,790	16,180	2,420	765	342
CAL YR 1970	TOTAL	13,494.30	MEAN	37.0	MAX	445	MIN	.90	AC-FT	26,770		
WTR YR 1971	TOTAL	13,367.90	MEAN	36.6	MAX	614	MIN	1.2	AC-FT	26,520		

PEAK DISCHARGE (BASE, 400 CFS)

NOTE.--No gage-height record Feb. 5 to May 2.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-29	0600	5.69	702	6-10	2400	5.61	674

YELLOWSTONE RIVER BASIN

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, on right bank 0.9 mile upstream from White Creek and 5 miles northeast of Shell.

DRAINAGE AREA.--145 sq mi.

PERIOD OF RECORD.--October 1940 to current year. Prior to December 1940 monthly discharge only, published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 4,370.05 ft above mean sea level.

AVERAGE DISCHARGE.--31 years, 119 cfs (86,220 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,450 cfs May 29 (gage height, 5.15 ft); minimum daily, 24 cfs Nov. 22.

Period of record: Maximum discharge, 3,020 cfs June 24, 1945 (gage height, 7.49 ft), from rating curve extended above 1,600 cfs; minimum daily, 18 cfs Mar. 5, 7, 1950, Jan. 30, 31, 1951.

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

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	44	44	39	39	35	34	48	529	230	135	77
2	62	42	42	35	38	34	32	62	553	218	131	76
3	61	43	45	38	38	36	35	73	621	225	130	81
4	56	40	44	36	30	36	33	88	740	220	141	85
5	53	44	40	36	34	35	34	108	608	198	139	82
6	56	44	45	37	32	34	36	113	577	182	133	80
7	53	43	43	40	35	35	37	108	578	172	131	78
8	50	43	44	40	42	36	37	115	577	165	139	78
9	53	42	43	40	39	36	37	123	917	159	137	74
10	56	44	42	40	41	36	41	113	952	150	130	73
11	53	39	41	39	39	36	41	121	1,060	142	128	72
12	56	45	36	39	38	37	38	148	948	139	124	71
13	54	42	38	40	39	38	35	188	960	133	123	69
14	47	41	43	40	38	35	39	238	894	128	121	69
15	44	40	43	40	38	34	43	246	846	124	120	69
16	50	42	44	40	37	35	42	246	780	120	118	71
17	47	42	42	40	36	34	42	232	834	116	118	68
18	46	42	40	40	38	34	45	274	768	116	118	64
19	48	42	35	40	36	35	45	204	710	113	115	66
20	46	42	37	40	35	35	44	176	585	108	98	64
21	46	40	42	38	28	35	45	165	570	107	91	64
22	43	24	41	36	37	35	43	183	545	116	89	63
23	45	36	37	41	38	35	43	196	530	116	89	63
24	47	61	41	39	37	37	49	220	472	110	88	62
25	46	49	40	39	37	38	47	271	420	121	88	61
26	37	46	41	39	36	42	45	348	382	123	85	62
27	41	45	41	39	35	37	45	517	340	110	85	62
28	47	44	41	38	36	35	43	802	312	104	85	62
29	47	44	42	38	-----	35	43	1,360	282	98	81	61
30	47	47	40	39	-----	39	43	951	252	94	87	61
31	45	-----	41	39	-----	37	-----	646	-----	130	80	-----
TOTAL	1,544	1,282	1,278	1,204	1,026	1,111	1,216	8,683	19,142	4,387	3,477	2,088
MEAN	49.8	42.7	41.2	38.8	36.6	35.8	40.5	280	638	142	112	69.6
MAX	62	61	45	41	42	42	49	1,360	1,060	230	141	85
MIN	37	24	35	35	28	34	32	48	252	94	80	61
AC-FT	3,060	2,540	2,530	2,390	2,040	2,200	2,410	17,220	37,970	8,700	6,900	4,140

CAL YR 1970 TOTAL 47,252 MEAN 129 MAX 1,090 MIN 24 AC-FT 93,720
WTR YR 1971 TOTAL 46,438 MEAN 127 MAX 1,360 MIN 24 AC-FT 92,110

PEAK DISCHARGE (BASE, 750 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-29	1030	5.15	1,450	6-11	0315	4.97	1,310

YELLOWSTONE RIVER BASIN

55

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 upstream from Bighorn Canyon National Recreation Area boundary, 0.5 mile upstream from normal high-water line of Bighorn Lake at elevation 3,660 ft, 1.3 miles upstream from Five Springs Creek, and 5.9 miles south of Kane.

DRAINAGE AREA.--15,765 sq mi. Area at sites used prior to May 17, 1956, 15,846 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 3,660 ft (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 miles downstream at different datum.

AVERAGE DISCHARGE.--43 years, 2,260 cfs (1,637,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 11,500 cfs June 26 (gage height, 6.53 ft); minimum daily, 1,030 cfs Aug. 25.

Period of record: Maximum discharge, 25,200 cfs June 16, 1935 (gage height, 11.10 ft, site and datum then in use); minimum daily, 179 cfs July 22, 1934.

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

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Some regulation by Boysen Reservoir since October 1951. (See page 100.) Diversions for irrigation of about 376,000 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,190	1,570	1,810	1,540	1,750	2,300	2,590	2,220	7,430	9,420	2,400	2,400
2	1,180	1,530	1,780	1,600	1,700	2,300	2,420	2,200	6,510	8,960	2,380	2,060
3	1,160	1,530	1,790	1,600	1,600	2,300	2,420	2,200	5,980	8,420	2,380	1,960
4	1,170	1,490	1,760	1,540	1,600	2,300	2,470	2,250	5,800	7,830	2,050	2,400
5	1,130	1,500	1,750	1,450	1,600	2,300	2,440	2,420	5,750	7,810	1,980	2,520
6	1,110	1,530	1,750	1,450	1,600	2,400	2,410	2,690	5,230	7,590	1,920	2,350
7	1,130	1,560	1,760	1,400	1,700	2,400	2,470	2,980	5,030	7,430	1,890	2,290
8	1,200	1,560	1,790	1,400	1,800	2,500	2,540	2,850	4,810	7,370	1,900	2,250
9	1,220	1,560	1,830	1,400	1,900	2,950	2,500	2,670	5,230	6,870	1,890	2,300
10	1,280	1,520	1,920	1,450	2,000	2,950	2,500	2,670	6,110	5,350	1,880	2,220
11	1,320	1,500	1,800	1,450	2,100	2,980	2,500	2,610	6,570	5,170	1,350	2,160
12	1,320	1,490	1,700	1,450	2,300	3,020	2,520	2,560	7,100	5,190	1,210	2,060
13	1,450	1,500	1,620	1,450	2,500	3,190	2,500	2,560	6,800	4,520	1,160	1,960
14	1,500	1,530	1,600	1,450	2,600	3,020	2,500	2,850	7,170	3,190	1,140	1,850
15	1,460	1,480	1,600	1,400	2,650	2,800	2,500	3,140	6,970	3,250	1,130	1,800
16	1,450	1,480	1,600	1,350	2,700	2,640	2,460	3,050	6,840	3,410	1,110	1,850
17	1,530	1,500	1,600	1,370	2,750	2,620	2,460	3,020	6,930	3,410	1,070	1,920
18	1,500	1,530	1,700	1,400	2,800	2,520	2,420	2,880	7,500	3,480	1,040	1,980
19	1,460	1,710	1,740	1,450	2,700	2,540	2,410	2,690	7,320	3,500	1,080	2,060
20	1,450	1,790	1,700	1,500	2,600	2,560	2,420	2,470	6,780	3,430	1,070	2,080
21	1,450	1,780	1,600	1,550	2,600	2,610	2,470	2,340	6,340	3,440	1,060	2,130
22	1,460	1,720	1,500	1,600	2,600	2,530	2,460	2,280	6,680	3,860	1,040	2,180
23	1,460	1,710	1,500	1,600	2,400	2,500	2,480	2,620	8,750	3,890	1,080	2,130
24	1,450	1,660	1,500	1,550	2,300	2,530	2,380	2,640	9,940	3,930	1,040	2,110
25	1,450	1,800	1,500	1,580	2,300	2,860	2,340	2,540	10,400	3,910	1,030	2,090
26	1,450	1,920	1,500	1,650	2,400	2,740	2,500	2,580	10,500	4,010	1,060	2,060
27	1,450	1,800	1,500	1,700	2,400	2,780	2,770	2,770	10,700	4,120	1,060	2,040
28	1,450	1,780	1,500	1,750	2,300	2,780	2,560	3,460	10,500	3,880	1,060	2,040
29	1,520	1,780	1,500	1,750	-----	2,780	2,380	6,060	10,100	3,050	1,100	2,060
30	1,530	1,800	1,500	1,750	-----	2,660	2,250	8,520	9,660	2,950	2,060	2,090
31	1,540	-----	1,500	1,750	-----	2,610	-----	8,320	-----	2,620	4,790	-----
TOTAL	42,420	48,610	51,200	47,330	62,250	81,970	74,040	97,110	221,430	155,260	48,450	63,400
MEAN	1,368	1,620	1,652	1,527	2,223	2,644	2,468	3,133	7,381	5,008	1,563	2,113
MAX	1,540	1,920	1,920	1,750	2,800	3,190	2,770	8,520	10,700	9,420	4,790	2,520
MIN	1,110	1,480	1,500	1,350	1,600	2,300	2,250	2,200	4,810	2,620	1,030	1,800
AC-FT	84,140	56,420	101,600	93,880	123,500	162,600	146,900	192,600	439,200	308,000	96,100	125,800

CAL YR 1970 TOTAL 697,513 MEAN 1,911 MAX 4,990 MIN 491 AC-FT 1,384,000
WTR YR 1971 TOTAL 993,470 MEAN 2,722 MAX 10,700 MIN 1,030 AC-FT 1,971,000

NOTE.--No gage-height record Dec. 11 to Mar. 7.

YELLOWSTONE RIVER BASIN

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 downstream from U.S. Forest Service bridge, 0.4 mile downstream from Boulder Creek, 3.2 miles northeast of Valley, and 34 miles southwest of Cody.

DRAINAGE AREA.--297 sq mi.

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

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

AVERAGE DISCHARGE.--14 years, 430 cfs (311,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,790 cfs June 22 (gage height, 7.60 ft); minimum daily, 51 cfs Mar. 6.

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

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Diversions for irrigation of about 450 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138	115	98	85	106	58	59	174	1,240	1,400	878	445
2	137	110	98	77	94	58	52	335	1,050	1,640	870	386
3	134	103	96	75	86	62	57	523	1,000	1,900	886	510
4	130	103	94	70	78	60	55	623	1,040	1,820	902	460
5	134	107	83	72	70	54	55	539	966	1,620	894	394
6	157	110	96	74	62	51	62	479	1,050	1,760	878	362
7	141	105	98	76	60	62	77	471	1,200	1,850	886	350
8	144	91	98	78	64	64	83	619	1,670	1,670	878	398
9	138	96	94	80	66	66	105	656	2,030	1,660	788	334
10	142	105	94	80	70	68	117	589	2,230	1,790	711	312
11	137	96	85	60	73	74	110	646	2,150	1,840	660	295
12	153	110	79	56	76	72	98	903	2,170	1,780	624	284
13	161	105	71	70	76	70	87	1,100	2,710	1,730	582	270
14	158	96	69	74	76	68	110	1,020	2,810	1,690	534	264
15	142	94	77	86	74	66	170	885	2,970	1,610	510	251
16	151	105	81	90	70	62	136	1,010	3,200	1,610	495	248
17	154	105	81	96	66	60	126	718	3,660	1,740	480	242
18	151	103	83	100	68	56	142	541	3,630	1,670	465	230
19	151	100	73	104	69	58	126	433	3,290	1,500	435	225
20	142	100	67	98	70	60	123	385	3,220	1,490	410	222
21	139	96	67	92	66	58	117	338	3,620	1,510	394	222
22	136	81	68	86	60	56	128	387	3,740	1,400	390	220
23	131	79	70	90	62	56	123	338	3,920	1,250	386	212
24	131	110	70	94	64	57	158	469	3,660	1,220	370	210
25	126	131	71	96	66	57	174	654	3,480	1,180	342	205
26	115	115	79	98	66	59	142	1,200	3,240	1,100	334	202
27	112	105	83	100	64	66	134	1,570	2,720	1,060	326	198
28	105	98	87	102	60	62	131	1,740	2,140	1,000	425	195
29	110	103	87	104	-----	57	131	1,780	1,510	939	684	195
30	115	103	89	106	-----	59	142	1,570	1,290	912	1,080	205
31	112	-----	87	106	-----	66	-----	1,460	-----	894	528	-----
TOTAL	4,227	3,080	2,573	2,675	1,982	1,902	3,330	24,155	72,606	46,235	19,025	8,546
MEAN	136	103	83.0	86.3	70.8	61.4	111	779	2,420	1,491	614	285
MAX	161	131	98	106	106	74	174	1,780	3,920	1,900	1,080	510
MIN	105	79	67	56	60	51	52	174	966	894	326	195
AC-FT	8,380	6,110	5,100	5,310	3,930	3,770	6,610	47,910	144,000	91,710	37,740	16,950
CAL YR 1970	TOTAL 157,994	MEAN 433	MAX 3,680	MIN 43	AC-FT 313,400							
WTR YR 1971	TOTAL 190,336	MEAN 521	MAX 3,920	MIN 51	AC-FT 377,500							

PEAK DISCHARGE (BASE, 2,500 CFS)

NOTE.--No gage-height record Jan. 8 to Mar. 24.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-22	2400	7.60	4,790				

YELLOWSTONE RIVER BASIN

57

06282000 SHOSHONE RIVER BELOW BUFFALO BILL RESERVOIR, WYO.

LOCATION.--Lat 44°31'00", long 109°05'50", in lot 71, NE¼ sec.3, T.52 N., R.102 W., Park County, on left bank 0.5 mile downstream from Trail Creek, 1 mile west of Cody city limits, and 5.5 miles downstream from Buffalo Bill Reservoir.

DRAINAGE AREA.--1,538 sq mi. Area at site prior to Oct. 1, 1949, 1,502 sq mi.

PERIOD OF RECORD.--January 1921 to current year. Prior to October 1944, published as "below Shoshone Reservoir."

GAGE.--Water-stage recorder. Altitude of gage is 4,900 ft (from topographic map). Prior to Oct. 1, 1949, at site 2.5 miles upstream at different datum.

AVERAGE DISCHARGE.--21 years (1921-42), prior to Heart Mountain diversion, 1,256 cfs (909,300 acre-ft per year); 29 years (1942-71), 1,155 cfs (836,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,620 cfs June 28 (gage height, 8.30 ft); minimum daily, 482 cfs Mar. 14, 15.

Period of record: Maximum discharge, 14,700 cfs May 28, 1928 (gage height, 10.62 ft, site and datum then in use), from rating curve extended above 11,000 cfs; minimum daily, 14 cfs Nov. 19, 1933.

Maximum flood known since construction of Buffalo Bill Reservoir, 18,700 cfs June 15, 1918, by computation of flow over dam.

REMARKS.--Records good. Flow completely regulated by Buffalo Bill Reservoir. (See page 100.) Diversions above station for irrigation of about 56,100 acres, of which about 37,900 acres lies below station. Diversion, 2.1 miles upstream, to Heart Mountain Canal began in 1943. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	921	900	603	598	523	491	500	1,350	3,060	5,120	1,700	914
2	921	900	598	588	523	491	500	1,350	2,880	3,760	1,670	942
3	914	756	593	588	523	491	500	1,350	2,730	3,560	1,720	893
4	914	514	593	588	523	491	500	1,350	2,740	4,540	1,630	928
5	914	552	588	593	523	491	500	1,530	2,740	4,880	1,560	900
6	914	852	588	588	523	491	500	1,830	2,760	4,370	1,560	886
7	914	839	588	593	523	491	500	1,830	2,740	4,800	1,490	879
8	907	839	588	598	518	491	500	1,840	2,760	5,080	1,470	886
9	900	845	593	598	518	491	500	1,840	2,780	5,080	1,440	879
10	886	812	593	603	518	491	495	1,840	2,800	5,180	1,330	858
11	832	652	593	562	514	491	495	1,840	2,840	5,350	1,260	845
12	865	662	593	548	509	486	495	2,060	2,870	5,390	1,290	865
13	893	652	593	548	505	486	720	2,580	2,900	5,240	1,240	865
14	893	652	593	548	500	482	928	2,870	2,900	5,080	1,170	893
15	893	624	593	548	495	482	1,100	2,850	2,880	4,920	1,160	900
16	886	577	598	548	491	567	1,090	2,850	2,910	4,740	1,180	907
17	893	588	593	548	491	486	1,090	2,880	2,930	4,640	1,200	900
18	893	588	598	548	491	514	1,090	2,870	2,950	4,680	1,220	900
19	886	588	593	548	491	819	1,090	2,910	2,980	4,490	1,220	900
20	900	593	588	548	491	819	1,090	2,790	2,990	4,180	1,240	907
21	900	593	593	548	491	819	1,090	2,610	3,010	3,920	1,230	907
22	900	593	593	548	491	640	1,080	2,610	3,550	3,740	1,220	907
23	928	588	588	543	491	572	1,240	2,600	3,960	3,510	1,220	886
24	907	588	593	543	491	708	1,360	2,580	4,000	3,260	1,160	900
25	900	603	593	518	495	839	1,370	2,580	4,030	3,030	1,130	907
26	858	598	588	538	491	832	1,360	2,580	4,090	2,790	1,180	907
27	825	603	593	538	491	839	1,360	2,600	5,040	2,560	1,190	914
28	832	598	593	538	491	845	1,360	2,730	6,270	2,350	1,150	921
29	749	598	593	528	-----	674	1,360	3,010	6,380	2,170	1,130	921
30	879	598	593	528	-----	505	1,350	3,030	5,620	1,990	1,130	921
31	907	-----	598	523	-----	505	-----	3,030	-----	1,840	1,120	-----
TOTAL	27,524	19,945	18,378	17,322	14,125	18,320	27,113	72,570	103,090	126,240	40,610	26,938
MEAN	888	665	593	559	504	591	904	2,341	3,436	4,072	1,310	898
MAX	928	900	603	603	523	845	1,370	3,030	6,380	5,390	1,720	942
MIN	749	514	588	518	491	482	495	1,350	2,730	1,840	1,120	845
AC-FT	54,590	39,560	36,450	34,360	28,020	36,340	53,780	143,900	204,500	250,400	80,550	53,430
CAL YR 1970	TOTAL	437,761	MEAN	1,199	MAX	10,800	MIN	374	AC-FT	868,300		
WTR YR 1971	TOTAL	512,175	MEAN	1,403	MAX	6,380	MIN	482	AC-FT	1,016,000		

YELLOWSTONE RIVER BASIN

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 downstream from bridge on county road, 600 ft downstream from Penrose Dam, 1.3 miles upstream from Bitter Creek, 4.3 miles southeast of Garland, and 8 miles east of Powell.

DRAINAGE AREA.--2,036 sq mi.

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

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

AVERAGE DISCHARGE.--13 years, 647 cfs (468,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, not determined, occurred about June 29; minimum daily, 102 cfs Aug. 15.

Period of record: Maximum discharge, 13,300 cfs July 1, 1967 (gage height, 8.76 ft, from floodmark, site and datum then in use); minimum daily, 5.0 cfs May 25, 26, 1959.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Flow regulated by Buffalo Bill Reservoir. (See page 100.) Diversions above station for irrigation of about 143,000 acres, of which about 37,000 acres lies below station.

REVISIONS.--WSP 1709: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	592	848	758	620	644	561	579	350	2,180	3,780	611	306
2	579	848	765	600	630	561	531	350	2,140	2,890	543	280
3	585	840	765	600	618	573	514	350	2,030	2,160	630	400
4	561	573	765	600	618	573	508	360	1,940	2,980	537	600
5	543	460	758	600	624	567	549	370	1,900	3,500	465	540
6	561	706	758	600	570	567	573	735	1,900	3,150	465	510
7	592	772	765	600	580	567	567	750	1,820	3,130	425	490
8	568	780	765	600	600	573	567	765	1,750	3,590	365	480
9	615	780	750	600	611	573	573	728	1,590	4,280	346	460
10	621	760	735	600	611	579	567	637	1,600	4,170	280	400
11	593	720	750	580	630	579	525	561	1,600	4,190	196	337
12	567	680	750	570	624	579	514	567	1,650	4,300	184	264
13	592	680	742	600	624	579	323	894	1,700	4,250	203	230
14	555	680	742	620	637	573	549	1,450	1,700	4,190	132	187
15	543	680	750	640	618	567	611	1,370	1,700	4,230	102	224
16	537	660	758	660	592	567	579	1,370	1,700	4,050	132	250
17	543	660	742	660	579	630	579	1,480	1,700	3,640	148	290
18	543	660	720	664	579	573	579	1,530	1,700	3,010	177	320
19	585	660	604	685	579	713	592	1,510	1,750	3,040	216	340
20	579	660	580	685	579	910	537	1,370	1,800	2,820	238	380
21	579	660	560	657	567	902	486	1,200	1,800	2,570	238	410
22	579	600	580	637	567	878	415	1,670	1,900	2,370	257	440
23	585	610	580	650	573	699	328	1,710	2,200	2,210	264	450
24	508	640	580	637	579	706	400	1,560	2,500	1,970	220	460
25	476	700	580	624	579	910	600	1,450	2,500	1,760	154	460
26	481	720	590	624	573	982	500	1,520	2,550	1,620	157	470
27	825	760	590	650	561	1,010	450	1,530	2,600	1,410	213	486
28	780	740	590	650	567	950	390	1,560	3,400	1,200	177	503
29	788	740	590	644	-----	926	360	1,920	4,200	1,070	249	480
30	765	740	610	637	-----	742	360	2,120	3,900	894	503	490
31	855	-----	620	604	-----	650	-----	2,160	-----	750	486	-----
TOTAL	18,675	21,017	21,192	19,398	16,713	21,319	15,205	35,897	63,400	89,174	9,313	11,937
MEAN	602	701	684	626	597	688	507	1,158	2,113	2,877	300	398
MAX	855	848	765	685	644	1,010	611	2,160	4,200	4,300	630	600
MIN	476	460	560	570	561	561	323	350	1,590	750	102	187
AC-FT	37,040	41,690	42,030	38,480	33,150	42,290	30,160	71,200	125,800	176,900	18,470	23,680

CAL YR 1970 TOTAL 272,291 MEAN 746 MAX 8,030 MIN 23 AC-FT 540,100
WTR YR 1971 TOTAL 343,240 MEAN 940 MAX 4,300 MIN 102 AC-FT 680,800

NOTE.--No gage-height record June 10-30.

YELLOWSTONE RIVER BASIN

59

06284500 BITTER CREEK NEAR GARLAND, WYO.

LOCATION.--Lat 44°45'13", long 108°35'29", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.7, T.55 N., R.97 W., Big Horn County, on left bank 100 ft downstream from bridge on county road, 1 mile upstream from mouth, 4 miles southeast of Garland, and 5 miles southwest of Byron.

DRAINAGE AREA.--80.5 sq mi.

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 (from topographic map).

AVERAGE DISCHARGE.--9 years (1950-53, 1957-60, 1968-71), 144 cfs (104,300 acre-ft per year).

EXTREMES.--Current year: Maximum recorded discharge, 645 cfs May 22 (gage height, 3.29 ft); minimum daily, 12 cfs Jan. 6, 7.
Period of record: Maximum discharge, 1,510 cfs June 10, 1960 (gage height, 4.48 ft), from rating curve extended above 390 cfs; minimum daily, 0.50 cfs Jan. 30 to Feb. 3, 1969.

REMARKS.--Records fair except those for winter period and period of no gage-height record, 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	262	57	32	18	23	16	16	220	289	292	380	358
2	258	54	30	16	21	14	16	230	255	277	383	355
3	250	53	30	15	19	13	16	220	260	301	358	433
4	248	51	29	14	16	13	32	220	252	346	313	449
5	245	51	29	14	16	14	29	260	242	346	328	390
6	250	48	29	12	16	14	19	230	238	307	316	362
7	254	47	29	12	17	15	17	240	218	255	301	346
8	263	46	29	13	17	17	17	255	186	255	313	319
9	263	46	29	15	17	17	17	280	180	268	313	319
10	266	44	28	14	18	19	16	286	210	262	286	304
11	264	44	24	13	18	18	16	258	222	250	289	298
12	254	41	21	13	19	20	17	260	212	255	301	274
13	238	34	20	14	20	20	23	245	222	248	316	268
14	232	34	18	14	21	18	30	252	235	238	322	250
15	232	37	18	15	21	18	68	262	232	240	328	240
16	235	30	18	17	19	17	81	277	242	245	352	230
17	228	30	20	17	18	17	90	301	258	258	331	255
18	225	30	18	19	18	16	97	316	271	262	328	286
19	232	30	16	19	18	17	100	322	289	292	316	292
20	230	29	16	22	18	18	100	295	304	289	328	301
21	232	31	16	22	16	18	97	310	298	292	343	322
22	235	29	16	21	15	17	100	465	292	304	369	313
23	235	26	16	20	15	17	107	331	295	319	355	304
24	232	28	16	22	16	18	127	280	274	316	343	301
25	232	31	16	24	16	19	400	252	268	304	340	289
26	238	30	16	24	16	20	300	242	262	325	340	295
27	140	29	15	25	16	20	290	250	268	292	349	307
28	68	29	15	25	16	18	200	245	295	298	352	319
29	64	30	16	25	-----	18	210	265	295	328	394	313
30	60	32	17	27	-----	19	220	280	283	334	394	307
31	59	-----	17	25	-----	19	-----	307	-----	346	390	-----
TOTAL	6,724	1,131	659	566	496	534	2,868	8,456	7,647	8,944	10,471	9,399
MEAN	217	37.7	21.3	18.3	17.7	17.2	95.6	273	255	289	338	313
MAX	266	57	32	27	23	20	400	465	304	346	394	449
MIN	59	26	15	12	15	13	16	220	180	238	286	230
AC-FT	13,340	2,240	1,310	1,120	984	1,060	5,690	16,770	15,170	17,740	20,770	18,640

CAL YR 1970 TOTAL 62,286 MEAN 171 MAX 507 MIN 15 AC-FT 123,500
WTR YR 1971 TOTAL 57,895 MEAN 159 MAX 465 MIN 12 AC-FT 114,800

NOTE.--No gage-height record Apr. 24 to May 5.

YELLOWSTONE RIVER BASIN

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 upstream from Elk-Lovell Canal, 5.6 miles southeast of Garland, and 6.3 miles southwest of Byron.

DRAINAGE AREA.--101 sq mi.

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

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

EXTREMES.--Current year: Maximum discharge, 702 cfs May 5 (gage height, 4.59 ft); minimum daily, 0.05 cfs Jan. 12.
Period of record: Maximum discharge, 1,260 cfs June 25, 1969 (gage height, 6.19 ft); minimum daily, 0.05 cfs Jan. 12, 1971.
Flood of Sept. 19, 1961, reached a discharge of 4,260 cfs, at site 6.5 miles upstream.

REMARKS.--Records fair except those for winter period, 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 SECCND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	CCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	2.2	1.9	.32	.33	.90	.91	42	73	59	56	71
2	28	2.8	1.9	.25	.35	.80	.77	47	56	61	56	69
3	24	3.0	2.2	.20	.37	.90	.63	44	50	62	56	130
4	31	3.0	2.0	.14	.35	1.2	.63	44	42	62	64	148
5	39	2.5	2.0	.08	.33	1.1	.63	92	39	67	62	97
6	35	2.2	2.0	.08	.30	1.0	.57	77	36	53	57	92
7	39	2.2	2.2	.08	.31	1.1	.45	50	30	44	53	76
8	39	2.2	2.3	.10	.34	1.2	.45	48	26	47	48	73
9	42	2.3	2.0	.14	.38	1.4	.40	44	26	53	61	73
10	41	2.3	2.0	.12	.38	1.6	.35	42	23	54	62	75
11	34	2.0	1.7	.08	.45	1.8	.40	37	30	61	62	61
12	33	2.5	1.2	.05	.50	2.0	.40	34	61	56	54	46
13	28	2.5	1.0	.06	.60	2.2	.40	47	67	44	54	50
14	27	2.2	1.0	.08	.70	2.0	.40	53	65	46	54	44
15	26	2.5	1.1	.12	.80	1.9	.51	48	64	48	50	48
16	26	2.5	1.2	.20	1.0	1.8	4.8	43	65	59	44	53
17	27	2.2	1.1	.22	.96	1.7	42	44	64	46	43	57
18	26	2.2	.80	.24	.90	1.6	50	48	64	53	51	56
19	26	2.2	.50	.26	.94	1.7	51	50	65	51	50	57
20	12	2.0	.30	.30	1.0	1.8	46	54	65	47	59	62
21	3.8	2.6	.25	.29	.90	1.9	41	51	64	53	64	64
22	3.6	1.9	.30	.27	.90	1.6	38	206	67	59	62	61
23	3.3	1.8	.28	.25	.94	1.4	38	113	65	59	59	65
24	3.1	1.9	.26	.26	.98	1.5	56	76	65	51	59	62
25	3.1	2.2	.27	.30	1.0	18	193	65	62	59	57	57
26	3.1	2.1	.29	.32	.90	19	86	56	61	71	48	64
27	3.0	2.0	.27	.34	.80	9.1	84	56	62	57	48	67
28	3.0	2.0	.25	.38	.84	2.3	56	57	69	51	54	71
29	2.8	2.1	.27	.40	-----	1.4	39	54	67	56	56	75
30	2.8	2.3	.30	.42	-----	1.2	41	59	57	51	82	76
31	2.8	-----	.30	.35	-----	.83	-----	103	-----	47	71	-----
TOTAL	654.4	68.4	33.44	6.70	18.55	87.93	873.70	1,884	1,650	1,687	1,756	2,100
MEAN	21.1	2.28	1.08	.22	.66	2.84	29.1	60.8	55.0	54.4	56.6	70.0
MAX	42	3.0	2.3	.42	1.0	19	193	206	73	71	82	148
MIN	2.8	1.8	.25	.05	.30	.80	.35	34	23	44	43	44
AC-FT	1,300	136	66	13	37	174	1,730	3,740	3,270	3,350	3,480	4,170
CAL YR 1970	TOTAL	11,647.69	MEAN	31.9	MAX	215	MIN	.10	AC-FT	23,100		
WTR YR 1971	TOTAL	10,820.12	MEAN	29.6	MAX	206	MIN	.05	AC-FT	21,460		

YELLOWSTONE RIVER BASIN

61

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 upstream from bridge on U.S. Highway 310 and 1.5 miles west of Lovell.

DRAINAGE AREA.--2,350 sq mi, approximately.

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

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

AVERAGE DISCHARGE.--5 years, 1,070 cfs (775,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge observed, 5,900 cfs June 28 (gage height, 4.12 ft); minimum daily, 315 cfs Apr. 13.
Period of record: Maximum discharge, 13,400 cfs July 1, 1967 (gage height, 6.49 ft); minimum daily, 199 cfs July 25, 1968.

REMARKS.--Records poor. Flow regulated by Buffalo Bill Reservoir. (See page 100.) Natural flow of stream affected by storage reservoirs, power development, diversions above station for irrigation of about 143,000 acres, of which about 8,000 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,110	1,280	760	680	760	674	590	702	2,970	4,710	1,070	1,020
2	1,070	1,260	760	660	738	667	541	674	2,950	3,840	980	798
3	1,080	1,260	768	650	723	695	499	688	2,700	2,400	990	1,370
4	1,020	856	760	650	723	667	485	674	2,530	3,280	926	2,200
5	971	688	752	650	720	660	527	716	2,490	3,500	917	1,600
6	969	953	752	640	680	646	534	1,270	2,460	3,500	864	1,290
7	1,050	1,150	760	620	680	653	534	1,240	2,230	3,560	830	1,260
8	1,070	1,150	805	640	720	667	534	1,250	2,100	3,600	790	1,200
9	1,050	1,150	760	660	702	660	548	1,240	2,020	3,990	760	1,160
10	1,050	1,240	716	640	674	660	534	1,120	1,880	4,240	667	908
11	1,010	990	752	620	660	681	478	962	1,850	4,200	555	760
12	944	890	738	600	653	695	471	899	1,870	4,310	541	611
13	1,050	882	730	600	653	723	315	1,270	1,980	3,990	604	548
14	1,050	839	752	600	716	695	730	2,480	2,020	3,910	541	408
15	1,010	830	768	620	839	667	962	2,320	2,010	3,660	506	438
16	1,010	782	745	680	730	660	899	2,290	1,990	3,600	625	492
17	1,010	760	738	740	688	745	1,050	2,340	2,050	3,540	619	569
18	1,000	768	709	740	674	681	1,070	2,410	2,140	3,600	541	653
19	1,060	839	646	760	681	830	1,040	2,460	2,230	3,410	569	745
20	1,100	798	580	780	674	1,210	990	2,240	2,320	3,300	597	775
21	1,050	738	580	760	660	1,210	935	1,800	2,320	2,930	681	830
22	1,040	752	600	740	674	1,180	926	2,720	2,380	2,740	864	882
23	1,020	702	600	700	674	873	768	2,670	3,180	2,690	899	908
24	953	768	600	710	674	856	1,010	2,190	3,060	2,400	830	899
25	839	822	600	720	681	1,190	2,100	1,970	3,090	2,200	667	848
26	822	822	600	740	667	1,340	1,440	2,040	3,160	1,970	548	856
27	1,180	822	600	745	653	1,390	1,200	2,040	3,910	1,770	611	890
28	1,060	890	600	775	674	1,270	926	2,100	5,420	1,560	625	935
29	1,100	856	640	760	-----	1,170	798	2,560	5,780	1,390	716	917
30	962	830	680	775	-----	864	768	2,800	5,400	1,300	1,400	944
31	1,200	-----	680	723	-----	716	-----	3,070	-----	1,180	1,340	-----
TOTAL	31,910	27,367	21,531	21,378	19,445	26,295	24,262	55,205	82,490	96,270	23,673	27,714
MEAN	1,029	912	695	690	694	848	807	1,781	2,750	3,105	764	924
MAX	1,200	1,280	805	780	839	1,390	2,100	3,070	5,780	4,710	1,400	2,200
MIN	822	688	580	600	653	646	315	674	1,850	1,180	506	408
AC-FT	63,290	54,280	42,710	42,400	38,570	52,160	48,000	109,500	163,600	191,000	46,960	54,970
CAL YR 1970	TOTAL 396,735											
WTR YR 1971	TOTAL 457,480											
	MEAN 1,087											
	MAX 10,300											
	MIN 290											
	AC-FT 786,900											
	MAX 5,780											
	MIN 315											
	AC-FT 907,400											

NOTE.--No gage-height record June 23 to July 1.

YELLOWSTONE RIVER BASIN

06285400 SAGE CREEK AT SIDON CANAL, NEAR DEAVER, WYO.

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 downstream from Polecat Creek, 800 ft upstream from Sidon Canal crossing, and 2.4 miles east of Deaver.

DRAINAGE AREA.--341 sq mi.

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

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

EXTREMES.--Current year: Maximum discharge, 257 cfs Sept. 4 (gage height, 3.83 ft); minimum daily, 5.8 cfs Mar. 6.

Period of record: Maximum discharge, 2,250 cfs June 8, 1958 (gage height, 9.22 ft, from floodmark), on basis of slope-area measurement of peak flow; minimum daily, 0.5 cfs Feb. 2-6, Feb. 21 to Mar. 5, 1960.

REMARKS.--Records 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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	38	27	16	16	7.5	30	97	192	75	68	137
2	136	37	33	15	17	6.5	27	99	200	71	71	139
3	146	37	24	14	17	6.5	28	85	177	79	69	188
4	141	34	27	14	16	7.0	26	76	177	75	72	218
5	137	35	31	13	16	7.0	25	77	184	81	72	183
6	127	35	27	12	14	5.8	26	72	163	79	71	171
7	131	34	25	11	10	6.8	26	73	146	70	68	163
8	136	33	25	11	10	7.0	27	61	119	75	73	170
9	141	31	25	12	10	6.4	25	55	119	85	74	166
10	141	31	25	13	11	7.6	25	60	116	86	66	142
11	130	33	24	13	11	14	24	56	123	86	61	124
12	139	33	22	12	12	32	22	60	105	71	60	116
13	146	30	20	11	12	37	21	58	89	65	58	116
14	146	29	20	12	12	32	24	59	78	66	57	94
15	150	29	20	12	13	26	26	61	68	69	64	98
16	150	29	21	13	13	26	39	59	68	70	65	98
17	144	30	22	15	12	22	101	60	64	66	65	106
18	145	29	21	16	11	13	128	66	66	62	72	111
19	146	28	17	16	11	12	115	64	68	60	72	122
20	152	28	12	17	11	12	117	64	70	56	71	127
21	146	27	13	17	9.0	12	95	70	77	59	71	130
22	145	23	13	16	9.0	11	82	135	70	57	71	132
23	146	21	13	14	9.4	11	74	132	65	65	71	126
24	157	22	14	15	9.6	13	81	124	59	70	69	111
25	153	24	14	16	10	13	79	128	52	75	73	98
26	149	24	14	16	8.5	16	88	141	52	72	78	97
27	146	23	14	17	8.0	30	91	140	55	63	72	97
28	82	23	14	17	8.5	70	89	137	65	68	75	106
29	52	25	15	18	-----	54	88	163	71	69	89	110
30	45	27	16	20	-----	41	89	209	70	65	113	104
31	40	-----	16	18	-----	30	-----	218	-----	66	133	-----
TOTAL	4,071	882	624	452	327.0	595.1	1,738	2,959	3,028	2,176	2,264	3,900
MEAN	131	29.4	20.1	14.6	11.7	19.2	57.9	95.5	101	70.2	73.0	130
MAX	157	38	33	20	17	70	128	218	200	86	133	219
MIN	40	21	12	11	8.0	5.8	21	55	52	56	57	94
AC-FT	8,070	1,750	1,240	897	649	1,180	3,450	5,870	6,010	4,320	4,490	7,740

CAL YR 1970 TOTAL 26,090.0 MEAN 71.5 MAX 216 MIN 12 AC-FT 51,750
 WTR YR 1971 TOTAL 23,016.1 MEAN 63.1 MAX 218 MIN 5.8 AC-FT 45,650

NOTE.--No gage-height record Jan. 2 to Feb. 19.

YELLOWSTONE RIVER BASIN

63

06286258 BIG COULEE NEAR LOVELL, WYO.

LOCATION.--Lat 44°58'04", long 108°17'24", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.34, T.58 N., R.95 W., Big Horn County, on right bank 300 ft downstream from county road, 0.6 mile upstream from mouth, and 10 miles northeast of Lovell.

DRAINAGE AREA.--30.1 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 3,750 ft (from topographic map).

EXTREMES.--April to September 1970: Maximum discharge during period, 8.5 cfs July 22 (gage height, 1.76 ft), from rating curve extended above 4.0 cfs on basis of velocity-area study; no flow most of period.

Water year 1971: Maximum discharge, 4.6 cfs Mar. 9 (gage height, 1.58 ft); maximum gage height, 2.46 ft Feb. 14 (backwater from ice); no flow most of year.

REMARKS.--Records poor. Low flows affected by storage in gravel pit 0.3 mile upstream since April 1971. Water-quality records for the 1970 and 1971 water years are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0	0	
2										0	0	
3										0	0	
4										0	0	
5										0	0	
6										0	0	
7										0	0	
8										0	0	
9										0	0	
10										0	0	
11										0	0	
12										0	0	
13										0	0	
14										0	0	
15										0	0	
16										0	0	
17										0	0	
18										0	0	
19										0	0	
20										0	0	
21										0	0	
22										.15	0	
23										0	0	
24										0	0	
25										0	0	
26										0	.15	
27										0	0	
28										0	0	
29										0	0	
30										0	0	
31		-----			-----		-----		-----	0	0	-----
TOTAL							0	0	0	.15	.15	0
MEAN							0	0	0	.005	.005	0
MAX							0	0	0	.15	.15	0
MIN							0	0	0	0	0	0
AC-FT							0	0	0	.3	.3	0

Table of Daily Discharge for Water Year October 1970 to September 1971 is listed on the following page.

YELLOWSTONE RIVER BASIN

06286258 BIG COULEE NEAR LOVELL, WYO.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0	0						0
2					0	0						0
3					0	0						0
4					0	0						0
5					0	0						0
6					0	0						0
7					0	0						0
8					0	.10						0
9					0	1.7						0
10					0	.67						0
11					.10	0						0
12					.40	0						0
13					.85	0						0
14					1.0	0						0
15					1.0	0						0
16					.50	0						0
17					0	0						0
18					0	0						0
19					0	0						0
20					0	0						0
21					0	0						.10
22					0	0						0
23					0	0						0
24					0	0						0
25					0	0						0
26					0	0						0
27					0	0						0
28					0	0						0
29					-----	0						0
30					-----	0						0
31		-----			-----	0	-----		-----			-----
TOTAL	0	0	0	0	3.85	2.47	0	0	0	0	0	.10
MEAN	0	0	0	0	.14	.080	0	0	0	0	0	.003
MAX	0	0	0	0	1.0	1.7	0	0	0	0	0	.10
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	7.6	4.9	0	0	0	0	0	.2
WTR YR 1971	TOTAL 6.42	MEAN .018	MAX 1.7	MIN 0	AC-FT 13							

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 miles upstream from Grapevine Creek, 15.5 miles southeast of St. Xavier, and at mile 81.0.

DRAINAGE AREA.--19,626 sq mi.

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, 1,075,000 acre-ft Oct. 24 (elevation, 3,638.24 ft); minimum, 698,400 acre-ft May 28 (elevation, 3,591.16 ft).

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

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 between elevation 3,296.5 ft (river outlet invert) and 3,657.0 ft (top of flood control). Elevation of spillway crest, 3,593 ft. Normal maximum operating level, 1,097,000 acre-ft (elevation, 3,640 ft). Minimum operating level, 483,400 acre-ft (elevation, 3,547 ft). Dead storage, 18,970 acre-ft below elevation 3,296.5 ft. 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 1970 TO SEPTEMBER 1971

Date	Elevation (feet)†	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	3,636.18	1,051,000	-
Oct. 31	3,638.07	1,073,000	+22,000
Nov. 30	3,636.87	1,059,000	-14,000
Dec. 31	3,628.82	973,300	-85,700
CAL YR 1970	-	-	+182,500
Jan. 31	3,622.54	916,900	-56,400
Feb. 28	3,622.02	912,500	-4,400
Mar. 31	3,615.65	862,500	-50,000
Apr. 30	3,603.67	776,600	-85,900
May 31	3,596.60	731,000	-45,600
June 30	3,622.01	912,500	+181,500
July 31	3,636.34	1,053,000	+140,500
Aug. 31	3,633.35	1,019,000	-34,000
Sept. 30	3,638.09	1,073,000	+54,000
WTR YR 1971	-	-	+22,000

† Readings made at 2400 hours.

YELLOWSTONE RIVER BASIN

06287000 BIGHORN RIVER NEAR ST. XAVIER, MONT.

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 downstream from Yellowtail afterbay dam, 1,500 ft downstream from Lime Kiln Creek, and 14 miles southwest of St. Xavier.

DRAINAGE AREA.--19,667 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 3,100 ft 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 miles 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 downstream at present datum.

AVERAGE DISCHARGE.--37 years, 3,552 cfs (2,552,000 acre-ft per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 8,620 cfs May 20; minimum daily, 907 cfs Oct. 23.

Period of record: Maximum discharge, 37,400 cfs June 16, 1935; minimum observed, 49 cfs Mar. 29, 1966, result of discharge measurement (dam closure); minimum daily, 112 cfs Apr. 2, 1967.

REMARKS.--Records good. Figures of discharge given herein are sum of river flow and flow of Bighorn Canal. Flow regulated since Nov. 3, 1965, by Bighorn Lake (see preceding page). Diversions for irrigation of about 375,000 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,710	3,060	2,770	4,640	3,550	4,040	5,280	5,640	7,820	7,760	5,060	2,800
2	2,430	3,270	2,770	4,660	3,540	4,040	5,030	5,640	8,180	7,660	4,240	2,810
3	2,510	3,440	2,770	4,660	3,540	4,020	5,360	5,660	8,180	6,580	3,620	2,740
4	2,510	3,430	2,760	4,640	3,540	4,040	5,380	5,660	8,200	6,510	3,650	2,590
5	2,510	3,430	2,750	4,640	3,540	4,250	5,460	5,680	7,600	6,450	3,660	2,520
6	2,490	3,430	2,750	4,640	3,540	4,460	5,760	5,680	7,530	6,610	3,690	2,230
7	2,510	3,410	3,020	4,070	3,540	4,460	5,760	5,000	7,980	6,120	3,710	2,670
8	2,480	2,970	3,730	3,620	3,660	4,460	5,480	5,680	7,930	6,020	3,660	2,650
9	2,510	3,380	3,730	3,620	3,820	4,460	5,800	5,680	8,000	6,020	3,650	2,560
10	2,430	3,410	3,730	3,620	3,880	4,460	5,830	5,680	8,080	6,120	3,670	2,570
11	2,490	3,400	3,730	3,620	3,960	4,440	5,850	5,700	8,190	6,140	3,780	2,570
12	2,820	3,400	3,730	3,610	4,170	4,440	5,870	6,180	8,130	6,110	3,940	2,570
13	2,630	3,400	3,730	3,610	4,270	4,440	5,800	7,310	8,050	6,580	3,490	2,570
14	2,640	3,380	4,020	3,610	4,270	4,440	5,890	7,650	8,100	6,920	3,360	2,570
15	2,600	3,380	4,220	3,620	4,270	4,440	5,890	7,670	8,040	7,170	3,470	2,570
16	2,390	3,410	4,220	3,610	3,240	4,440	5,890	7,690	8,020	7,190	3,580	2,530
17	2,390	3,410	4,510	3,610	1,860	4,200	5,890	7,720	8,060	6,350	3,400	2,580
18	2,390	2,840	4,730	3,610	1,860	3,800	4,680	7,750	7,520	5,900	3,640	2,580
19	2,640	2,810	4,710	3,610	2,440	4,090	4,920	8,230	7,880	5,990	3,680	2,580
20	3,020	2,790	4,710	3,600	2,860	4,480	4,510	8,370	7,920	5,610	3,100	2,580
21	3,240	2,790	4,710	3,600	2,860	4,550	5,130	8,240	7,970	5,980	2,660	2,590
22	1,050	2,790	4,710	3,600	3,370	4,550	5,580	8,220	7,420	4,950	2,680	2,590
23	907	3,160	4,690	3,580	3,800	4,550	5,580	8,180	8,090	5,570	2,680	2,590
24	2,990	3,450	4,660	3,580	3,840	4,980	5,580	8,190	8,070	4,940	2,680	2,580
25	3,060	3,270	4,660	3,570	3,840	5,200	5,580	8,190	8,040	4,540	2,700	2,590
26	3,060	2,790	4,660	3,570	3,930	5,220	5,870	8,170	8,120	5,010	2,700	2,610
27	3,060	2,770	4,680	3,570	4,040	5,220	5,680	8,020	8,120	5,100	2,700	2,610
28	3,060	2,770	4,660	3,550	4,040	5,260	5,620	7,310	7,910	5,010	2,700	2,610
29	3,060	2,770	4,640	3,550	-----	5,260	5,640	7,190	7,890	4,730	2,720	2,610
30	3,060	2,760	4,640	3,570	-----	5,260	5,640	7,290	7,820	4,500	2,720	2,600
31	3,060	-----	4,640	3,550	-----	5,200	-----	7,280	-----	5,080	2,770	-----
TOTAL	79,707	94,770	124,440	118,210	99,070	141,150	166,230	216,550	238,860	185,220	103,760	77,820
MEAN	2,571	3,159	4,014	3,813	3,538	4,553	5,541	6,985	7,962	5,975	3,347	2,594
MAX	3,240	3,450	4,730	4,660	4,270	5,260	5,890	8,370	8,200	7,760	5,060	2,810
MIN	907	2,760	2,750	3,550	1,860	3,800	4,510	5,000	7,420	4,500	2,660	2,230
AC-FT	158,100	188,000	246,800	234,500	196,500	280,000	329,700	429,500	473,800	367,400	205,800	154,400
CAL YR 1970	TOTAL 1,210,212		MEAN 3,316		MAX 15,500		MIN 516		AC-FT 2,400,000			
WTR YR 1971	TOTAL 1,645,787		MEAN 4,509		MAX 8,370		MIN 907		AC-FT 3,264,000			

YELLOWSTONE RIVER BASIN

67

06288960 LITTLE BIGHORN RIVER NEAR PARKMAN, WYO.

LOCATION.--Lat 44°58'55", long 107°38'42", in SE¼SE¼ sec.19, T.58 N., R.89 W., Sheridan County, on left bank at park bridge on Dry Fork Trail, 1.7 miles upstream from Wyoming-Montana State line, and 15.5 miles west of Parkman.

DRAINAGE AREA.--137 sq mi.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,600 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 959 cfs May 29 (gage height, 4.73 ft); minimum daily, 30 cfs Feb. 7, 8, Mar. 2.
Period of record: Maximum discharge, 1,230 cfs June 9, 1970 (gage height, 5.30 ft); minimum daily, 30 cfs Jan. 5, 1970, Feb. 7, 8, Mar. 2, 1971.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	74	68	56	53	35	48	69	553	275	127	83
2	88	71	65	48	53	30	47	90	576	266	125	81
3	88	73	66	51	53	49	49	111	610	268	125	92
4	87	69	64	50	50	53	48	130	649	248	124	95
5	87	73	64	50	40	50	47	157	638	237	120	87
6	91	73	65	50	35	49	50	175	635	222	119	83
7	85	74	64	60	30	47	53	171	624	214	116	87
8	85	73	65	68	30	47	53	190	666	210	116	85
9	83	71	64	62	48	48	53	204	757	202	117	80
10	88	74	63	55	50	48	59	180	761	198	112	78
11	84	69	59	50	46	47	60	186	757	192	111	76
12	87	73	59	50	45	48	55	220	698	186	108	74
13	83	71	56	50	45	49	51	266	709	182	106	74
14	78	69	60	55	45	47	56	320	691	179	104	74
15	77	68	62	60	45	47	64	310	656	173	103	76
16	83	69	62	60	45	46	63	318	638	168	101	76
17	78	69	63	57	44	46	63	272	632	166	101	76
18	80	69	55	55	44	47	66	228	600	162	98	71
19	81	68	50	55	44	46	60	204	562	159	97	76
20	80	69	50	55	44	47	59	190	526	157	95	78
21	80	66	55	54	45	47	62	180	496	157	92	74
22	77	40	55	53	40	45	63	182	475	155	91	71
23	76	45	55	56	45	47	62	173	454	152	91	71
24	80	80	55	55	46	48	71	186	427	148	90	71
25	74	77	60	54	45	48	73	222	402	152	88	71
26	64	71	62	53	45	50	66	305	375	144	87	71
27	69	69	62	53	40	50	64	459	358	141	87	70
28	76	69	62	53	40	49	63	613	342	139	85	70
29	78	68	60	53	-----	47	64	893	312	135	85	68
30	77	69	57	55	-----	51	63	694	290	130	88	70
31	76	-----	57	50	-----	53	-----	586	-----	128	85	-----
TOTAL	2,510	2,073	1,864	1,686	1,235	1,461	1,755	8,484	16,869	5,645	3,194	2,309
MEAN	81.0	69.1	60.1	54.4	44.1	47.1	58.5	274	562	182	103	77.0
MAX	91	80	68	68	53	53	73	893	761	275	127	95
MIN	64	40	50	48	30	30	47	69	290	128	85	68
AC-FT	4,980	4,110	3,700	3,340	2,450	2,900	3,480	16,830	33,460	11,200	6,340	4,580

CAL YR 1970 TOTAL 63,727 MEAN 175 MAX 1,040 MIN 30 AC-FT 126,400
WTR YR 1971 TOTAL 49,085 MEAN 134 MAX 893 MIN 30 AC-FT 97,360

PEAK DISCHARGE (BASE, 350 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-15	2230	3.07	382	6-10	2030	4.58	897
5-29	1000	4.73	959				

YELLOWSTONE RIVER BASIN

06288990 WEST FORK LITTLE BIGHORN RIVER NEAR PARKMAN, WYO.

LOCATION.--Lat 44°59'55", long 107°37'45", in SE¼ sec.17, T.58 N., R.89 W., Sheridan County, on right bank 0.1 mile upstream from Wyoming-Montana State line, 0.15 mile upstream from mouth, and 15 miles west of Parkman.

DRAINAGE AREA.--38.6 sq mi.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,400 ft (from topographic map). Prior to May 11, 1971, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum discharge, 200 cfs May 29 (gage height, 2.22 ft); maximum gage height, 2.50 ft Jan. 1-5 (backwater from ice); minimum daily discharge, 6.0 cfs Feb. 8.

Period of record: Maximum discharge observed, 395 cfs June 10, 1970 (gage height, 2.65 ft); maximum gage height observed, 2.90 ft Jan. 9, 10, 1970 (backwater from ice); minimum daily discharge, 6.0 cfs Jan. 5, 1970, Feb. 8, 1971.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	17	15	12	9.0	7.0	12	21	104	46	25	18
2	20	17	15	12	9.3	8.0	12	26	117	45	25	18
3	20	17	15	11	9.0	10	12	33	127	44	25	19
4	19	17	15	10	8.8	10	13	42	145	41	25	19
5	19	16	15	10	9.0	10	13	46	137	41	25	18
6	19	16	15	11	8.0	9.9	13	53	140	41	24	18
7	19	16	15	14	7.0	10	13	55	127	40	24	19
8	19	16	15	16	6.0	10	14	55	132	38	24	18
9	19	16	14	15	8.0	10	14	59	151	36	23	18
10	19	16	14	14	8.8	10	14	55	163	36	23	17
11	19	16	14	13	8.6	10	14	54	157	35	23	17
12	19	16	15	11	9.0	11	14	72	135	34	22	18
13	18	16	15	9.0	8.8	11	15	89	132	32	22	18
14	18	16	15	7.0	8.8	11	16	119	135	31	22	18
15	18	15	15	8.0	9.0	11	16	117	132	30	20	18
16	18	16	15	9.0	9.0	11	19	119	127	30	20	18
17	18	16	15	9.0	8.0	10	22	101	122	29	20	19
18	18	16	14	9.0	8.0	11	22	78	122	28	20	18
19	18	15	12	8.8	8.0	11	22	62	112	28	20	19
20	18	15	10	8.8	8.0	11	23	54	101	27	20	19
21	18	14	12	9.0	7.0	11	23	46	95	27	19	19
22	17	10	13	9.3	8.0	11	18	45	89	27	19	18
23	17	14	14	8.8	9.0	11	20	40	86	26	19	18
24	17	17	14	9.0	9.0	11	19	38	80	26	19	18
25	17	16	14	9.0	9.0	11	19	40	76	28	18	18
26	17	15	14	9.3	9.0	11	19	53	70	27	18	19
27	17	15	14	8.8	8.0	12	20	80	67	26	18	18
28	17	15	13	8.8	7.0	12	21	129	64	26	18	18
29	17	15	12	8.8	-----	12	21	182	55	26	19	18
30	17	15	12	8.8	-----	12	21	151	50	25	19	18
31	17	-----	12	8.8	-----	12	-----	117	-----	26	18	-----
TOTAL	563	467	432	316.0	234.1	328.9	514	2,231	3,350	1,002	656	546
MEAN	18.2	15.6	13.9	10.2	8.36	10.6	17.1	72.0	112	32.3	21.2	18.2
MAX	20	17	15	16	9.3	12	23	182	163	46	25	19
MIN	17	10	10	7.0	6.0	7.0	12	21	50	25	18	17
AC-FT	1,120	926	857	627	464	652	1,020	4,430	6,640	1,990	1,300	1,080

CAL YR 1970 TOTAL 17,948.0 MEAN 49.2 MAX 370 MIN 6.0 AC-FT 35,600

WTR YR 1971 TOTAL 10,640.0 MEAN 29.2 MAX 182 MIN 6.0 AC-FT 21,100

PEAK DISCHARGE (BASE, 210 CFS).--No peak above base.

YELLOWSTONE RIVER BASIN

69

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

LOCATION.--Lat 45°00'25", long 107°37'05", in SW¼NW¼ sec.36, T.9 S., R.33 E., Big Horn County, on right bank 20 ft downstream from county bridge, 0.5 mile north of Wyoming-Montana State line, 1 mile downstream from West Fork, and 13 miles southwest of Wyola.

DRAINAGE AREA.--193 sq mi.

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 (from topographic map).

AVERAGE DISCHARGE.--32 years, 150 cfs (108,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,180 cfs May 29 (gage height, 3.83 ft); minimum, 45 cfs Mar. 2.

Period of record: Maximum discharge, 2,730 cfs June 3, 1944 (gage height, 4.87 ft), from rating curve extended above 1,400 cfs; maximum gage height recorded, 5.93 ft June 9, 1944 (log jam); minimum discharge, 21 cfs Dec. 27, 1954, result of freezeup.

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

REVISIONS.--WSP 1729: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	94	87	74	74	60	69	98	615	335	148	112
2	115	93	84	64	76	55	67	114	648	321	146	110
3	115	93	86	62	76	76	69	138	708	321	143	117
4	112	91	86	57	73	76	66	175	764	304	140	119
5	112	93	84	62	67	73	66	225	736	286	138	112
6	117	93	84	64	64	71	69	240	729	274	136	108
7	112	94	84	77	64	71	74	232	722	261	136	114
8	114	93	84	91	73	73	76	253	743	253	136	112
9	110	93	83	81	76	71	74	278	884	244	136	106
10	114	94	81	74	76	71	81	240	940	236	132	105
11	110	89	80	62	74	71	84	240	916	232	132	103
12	112	93	78	61	73	73	80	282	828	225	130	101
13	108	91	76	71	74	73	74	355	828	217	127	101
14	103	89	80	73	74	71	78	430	799	210	125	101
15	103	89	81	81	73	69	87	414	750	202	123	101
16	106	91	80	86	73	67	86	430	729	195	123	103
17	101	91	81	83	71	67	86	381	743	192	123	105
18	103	93	73	80	71	69	91	316	708	188	123	101
19	105	91	62	78	70	69	84	274	674	185	121	103
20	103	91	65	78	71	69	83	248	635	182	119	105
21	103	83	69	76	64	69	84	232	602	178	117	101
22	101	54	71	71	65	67	87	236	570	178	117	99
23	101	60	69	77	71	69	86	217	557	175	117	99
24	103	101	76	77	73	70	94	225	532	171	115	99
25	99	96	78	76	71	70	99	274	490	175	114	99
26	89	91	80	76	71	70	94	360	460	165	114	101
27	93	89	81	74	62	70	93	502	448	162	114	99
28	98	87	80	74	66	70	91	602	425	160	112	99
29	99	87	81	74	-----	67	91	988	381	157	114	98
30	98	89	77	74	-----	71	91	820	355	151	117	99
31	96	-----	77	74	-----	74	-----	680	-----	148	114	-----
TOTAL	3,272	2,676	2,438	2,282	1,986	2,162	2,454	10,499	19,919	6,683	3,902	3,132
MEAN	106	89.2	78.6	73.6	70.9	69.7	81.8	339	664	216	126	104
MAX	117	101	87	91	76	76	99	988	940	335	148	119
MIN	89	54	62	57	62	55	66	98	355	148	112	98
AC-FT	6,490	5,318	4,840	4,530	3,940	4,290	4,870	20,820	39,510	13,260	7,740	6,210

CAL YR 1970 TOTAL 86,934 MEAN 222 MAX 1,370 MIN 47 AC-FT 160,500
WTR YR 1971 TOTAL 61,435 MEAN 168 MAX 988 MIN 54 AC-FT 121,800

PEAK DISCHARGE (BASE, 510 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-29	0945	3.83	1,180	6-10	2130	3.68	1,060
6-3	2215	3.43	860				

YELLOWSTONE RIVER BASIN

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

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 miles north of Wyola and 6 miles downstream from Pass Creek.

DRAINAGE AREA.--428 sq mi.

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 (from topographic map).

AVERAGE DISCHARGE.--31 years, 204 cfs (147,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,240 cfs May 29 (gage height, 4.60 ft); maximum gage height, 6.96 ft Feb. 11 (back-water from ice); minimum discharge, 96 cfs Aug. 26, 27, but may have been less during period of ice effect.

Period of record: Maximum discharge, 3,630 cfs June 14, 1963 (gage height, 7.43 ft), from rating curve extended above 2,800 cfs; minimum, 12 cfs Aug. 5, 7, 8, 1961 (gage height, 0.89 ft).

REMARKS.--Records excellent except those for winter period, which are poor. Diversions for irrigation of about 7,700 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	153	170	150	135	130	201	284	870	350	141	115
2	162	150	153	140	140	135	193	284	835	332	143	108
3	165	148	153	130	140	135	190	305	885	341	148	113
4	157	145	148	125	140	135	180	338	945	332	153	150
5	150	145	141	120	140	141	175	368	915	311	150	136
6	155	150	143	125	125	139	172	413	935	299	145	121
7	155	148	148	135	120	139	188	419	885	275	139	134
8	155	153	148	140	140	134	215	422	860	253	136	143
9	153	148	145	135	150	143	193	452	970	253	143	132
10	170	162	139	130	160	180	190	437	990	242	141	125
11	162	160	145	125	200	255	198	410	1,010	231	141	119
12	170	155	150	120	400	267	185	425	915	225	139	115
13	175	165	155	115	500	278	175	476	885	212	130	117
14	162	160	160	110	400	228	172	562	875	198	125	117
15	150	153	160	125	350	190	177	587	830	193	123	123
16	157	153	150	140	250	177	183	602	782	185	121	132
17	155	150	139	145	225	165	177	576	778	170	119	139
18	153	153	143	150	175	150	183	510	755	165	119	139
19	153	153	130	150	160	148	183	446	702	162	117	136
20	155	155	125	150	145	167	188	404	650	155	119	143
21	155	155	130	145	135	201	198	380	626	150	117	150
22	153	130	135	140	130	155	329	443	569	143	117	141
23	153	100	135	145	140	155	281	413	548	143	117	136
24	153	185	140	145	145	162	255	374	520	148	117	134
25	155	177	150	145	150	234	905	380	485	162	106	132
26	148	160	150	145	145	247	666	422	458	160	104	132
27	143	157	155	145	140	311	482	545	443	153	100	134
28	145	153	155	145	135	244	383	733	437	157	102	132
29	148	155	160	140	-----	207	326	1,060	413	162	106	130
30	150	165	160	140	-----	215	302	1,150	377	155	128	132
31	153	-----	160	135	-----	242	-----	995	-----	148	123	-----
TOTAL	4,832	4,596	4,575	4,230	5,315	5,809	7,845	15,615	22,148	6,565	3,929	3,910
MEAN	156	153	148	136	190	187	262	504	738	212	127	130
MAX	175	185	170	150	500	311	905	1,150	1,010	350	153	150
MIN	143	100	125	110	120	130	172	284	377	143	100	108
AC-FT	9,580	9,120	9,070	8,390	10,540	11,520	15,560	30,970	43,930	13,020	7,790	7,760
CAL YR 1970	TOTAL 128,332	MEAN 352	MAX 1,730	MIN 80	AC-FT 254,500							
WTR YR 1971	TOTAL 89,369	MEAN 245	MAX 1,150	MIN 100	AC-FT 177,300							

PEAK DISCHARGE (BASE, 580 CFS)

NOTE.--Stage-discharge relation affected by ice Dec. 19 to Mar. 4.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
2-13	--	--	a 700	5-29	2045	4.60	1,240
4-25	0900	4.58	1,230	6-11	0900	4.35	1,090
5-16	0645	3.37	630				

a About.

YELLOWSTONE RIVER BASIN

71

06297000 SOUTH TONGUE RIVER NEAR DAYTON, WYO.

LOCATION.--Lat 44°47'02", long 107°28'10", in sec.33, T.56 N., R.88 W., Sheridan County, Bighorn National Forest, on left bank 60 ft downstream from Johnson Creek and 12 miles southwest of Dayton.

DRAINAGE AREA.--85.0 sq mi.

PERIOD OF RECORD.--September 1945 to current year. Prior to October 1960, published as South Fork Tongue River near Dayton. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 7,621.78 ft above mean sea level (Bureau of Reclamation bench mark).

AVERAGE DISCHARGE.--26 years, 78.8 cfs (57,090 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 940 cfs May 29 (gage height, 5.15 ft); minimum daily, 7.0 cfs Feb. 7.

Period of record: Maximum discharge, 1,910 cfs June 4, 1968 (gage height, 6.20 ft); minimum daily, 7.0 cfs Mar. 25, Apr. 4, 1955, Feb. 7, 1971.

Maximum discharge for the 1970 water year has been found to be 1,130 cfs, about June 14 (gage height, 5.41 ft, from floodmarks).

Maximum stage known, about 6.36 ft, from floodmarks (date unknown).

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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	23	28	20	8.8	7.2	12	25	551	159	53	28
2	31	23	28	19	8.8	7.2	12	40	571	150	51	26
3	30	23	28	17	8.4	7.6	13	55	588	160	50	30
4	29	23	28	15	7.6	7.6	12	70	609	146	49	36
5	29	23	28	14	7.2	7.6	12	100	551	132	47	33
6	31	26	30	13	7.2	7.6	12	110	555	125	48	29
7	27	25	30	12	7.0	7.6	12	120	527	119	44	31
8	26	25	30	13	7.4	7.6	13	130	539	113	44	34
9	24	25	30	14	8.0	7.6	13	150	605	108	46	29
10	29	25	30	15	8.8	7.6	15	130	613	103	43	26
11	28	25	30	14	8.6	7.6	15	150	626	97	41	25
12	30	25	28	14	8.6	8.4	14	180	558	94	39	24
13	29	25	27	14	8.6	9.0	14	255	565	90	39	24
14	28	25	27	14	8.6	8.6	15	330	538	86	36	23
15	29	24	28	13	8.0	8.0	16	339	507	83	36	24
16	29	25	28	13	7.6	8.4	17	323	474	80	35	24
17	29	26	26	13	7.4	8.4	16	253	467	77	36	26
18	28	26	24	13	8.0	8.2	17	207	439	76	36	24
19	28	24	23	13	7.6	8.8	16	171	404	73	34	28
20	28	24	24	14	7.6	9.0	16	155	363	70	32	28
21	24	23	23	12	7.4	9.0	16	147	345	70	31	27
22	21	23	21	10	7.6	9.0	16	151	337	70	30	24
23	23	21	20	11	8.0	9.4	16	141	308	70	29	28
24	24	23	21	11	8.0	10	17	153	273	66	29	27
25	21	25	21	11	8.0	10	17	194	248	76	29	25
26	20	24	21	10	7.6	10	16	271	228	71	28	25
27	20	24	21	10	7.6	10	16	410	212	63	29	24
28	20	24	22	9.0	7.4	10	16	567	204	61	29	24
29	22	26	22	8.6	-----	9.4	16	854	187	60	30	24
30	23	28	21	8.6	-----	11	16	662	168	56	39	24
31	23	-----	20	8.8	-----	13	-----	563	-----	54	32	-----
TOTAL	815	731	788	397.0	221.4	270.4	444	7,406	13,160	2,858	1,174	804
MEAN	26.3	24.4	25.4	12.8	7.91	8.72	14.8	239	439	92.2	37.9	26.8
MAX	32	28	30	20	8.8	13	17	854	626	160	53	36
MIN	20	21	20	8.6	7.0	7.2	12	25	168	54	28	23
AC-FT	1,620	1,450	1,560	787	439	536	881	14,690	26,100	5,670	2,330	1,590
CAL YR 1970	TOTAL	34,397.0	MEAN	94.2	MAX	750	MIN	11	AC-FT	68,230		
WTR YR 1971	TOTAL	29,068.8	MEAN	79.6	MAX	854	MIN	7.0	AC-FT	57,660		

PEAK DISCHARGE (BASE, 650 CFS)

NOTE.--No gage-height record Dec. 18 to May 12.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-29	0800	5.15	940				

YELLOWSTONE RIVER BASIN

06298000 TONGUE RIVER NEAR DAYTON, WYO.

LOCATION.--Lat 44°50'58", long 107°18'14", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.11, T.56 N., R.87 W., Sheridan County, on left bank 0.5 mile upstream from Crystal Draw, 0.6 mile downstream from intake of Highline ditch, and 2.5 miles southwest of Dayton.

DRAINAGE AREA.--204 sq mi.

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 (from topographic map).

AVERAGE DISCHARGE.--42 years (1918-29, 1940-71), 187 cfs (135,500 acre-ft per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 1,750 cfs May 29 (gage height, 4.77 ft); minimum daily, 35 cfs Nov. 23.

Period of record: Maximum discharge, 3,400 cfs June 3, 1944 (gage height, 6.45 ft); minimum daily, 18 cfs Nov. 29, 1919.

REMARKS.--Records excellent. Small diversion above station for Dayton municipal supply. Figures of daily discharge do not include water diverted 0.6 mile 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	82	69	62	65	56	58	106	1,040	330	115	71
2	74	74	66	59	65	55	50	148	1,010	314	113	68
3	72	82	66	59	62	62	59	205	1,010	326	108	74
4	72	63	65	59	50	59	55	282	1,060	306	104	89
5	71	79	66	59	44	58	51	354	972	278	102	80
6	76	84	74	59	48	56	58	435	958	260	104	72
7	74	84	74	63	52	56	60	440	909	249	98	74
8	69	82	74	63	62	58	66	480	909	238	98	82
9	65	71	72	60	65	56	63	517	1,010	232	102	74
10	91	86	68	60	69	56	74	425	1,010	222	95	69
11	74	60	65	59	65	56	74	430	1,050	222	91	66
12	100	87	59	60	65	56	68	539	965	215	89	65
13	82	82	58	63	66	59	58	671	965	205	87	63
14	84	74	62	66	63	56	71	797	923	193	86	63
15	76	63	66	68	62	53	86	751	874	185	87	65
16	91	82	68	63	59	56	84	719	811	180	98	66
17	86	79	66	65	52	56	87	588	790	175	87	69
18	87	76	58	65	59	53	100	490	758	170	86	66
19	93	66	52	65	55	55	93	430	707	168	82	77
20	89	68	62	65	55	56	87	386	641	165	80	76
21	91	65	65	56	48	55	86	372	623	160	77	74
22	79	39	62	46	51	53	86	382	600	155	74	69
23	80	35	62	56	56	56	82	368	578	150	74	74
24	91	89	66	62	60	59	106	377	528	145	76	72
25	82	82	71	60	60	58	108	465	485	140	71	71
26	50	74	71	62	56	59	98	561	460	138	69	71
27	62	72	69	62	51	59	91	784	435	135	69	71
28	70	72	66	62	56	55	84	1,020	420	133	69	71
29	79	69	65	63	-----	52	86	1,590	382	133	72	69
30	87	72	65	59	-----	59	87	1,280	350	123	86	71
31	80	-----	65	63	-----	62	-----	1,100	-----	117	79	-----
TOTAL	2,454	2,193	2,037	1,893	1,621	1,755	2,316	17,492	23,233	6,162	2,728	2,142
MEAN	79.2	73.1	65.7	61.1	57.9	56.6	77.2	564	774	199	88.0	71.4
MAX	100	89	74	68	69	62	108	1,590	1,060	330	115	89
MIN	50	35	52	46	44	52	50	106	350	117	69	63
AC-FT	4,870	4,350	4,040	3,750	3,220	3,480	4,590	34,700	46,080	12,220	5,410	4,250
†	353	0	0	0	0	0	0	125	974	1,380	1,350	1,100

ADJUSTED FOR DIVERSION BY HIGHLINE DITCH

MEAN	85.1	73.1	65.7	61.1	57.9	56.6	77.2	566	791	221	110	89.9
AC-FT	5,220	4,350	4,040	3,750	3,220	3,480	4,590	34,820	47,060	13,600	6,760	5,350

UNADJUSTED

CAL YR 1970	TOTAL 84,254	MEAN 231	MAX 1,700	MIN 35	AC-FT 167,100	MEAN 236	AC-FT 171,010
WTR YR 1971	TOTAL 66,026	MEAN 181	MAX 1,590	MIN 35	AC-FT 131,000	MEAN 188	AC-FT 136,250

PEAK DISCHARGE (BASE, 980 CFS)

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

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
5-29	0930	4.77	1,750				

YELLOWSTONE RIVER BASIN

73

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 mile downstream from South Fork, 0.2 mile upstream from East Fork, and 4.5 miles south of Dayton.

DRAINAGE AREA.--25.1 sq mi.

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

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

AVERAGE DISCHARGE.--18 years, 12.8 cfs (9,270 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 135 cfs May 30 (gage height, 2.48 ft); minimum daily, 1.7 cfs Feb. 6.

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

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	3.1	2.4	2.0	2.0	2.0	2.4	8.9	120	22	5.6	2.4
2	3.4	3.1	2.4	1.9	2.0	2.0	2.3	13	115	20	5.3	2.4
3	3.4	3.1	2.4	1.8	2.0	2.1	2.3	18	110	21	5.0	2.6
4	3.1	3.1	2.4	1.8	1.9	2.0	2.1	23	120	18	4.8	2.9
5	3.0	3.1	2.3	1.8	1.8	2.0	2.1	32	110	17	4.2	2.4
6	3.2	3.1	2.4	1.8	1.7	2.0	2.3	40	100	16	4.2	2.3
7	3.4	3.1	2.3	1.9	1.9	2.0	4.0	42	90	15	4.0	2.6
8	3.4	3.1	2.3	1.9	2.0	2.0	4.2	43	90	14	3.7	2.6
9	3.3	2.9	2.3	1.9	2.2	2.1	4.2	45	100	14	3.4	2.4
10	3.7	3.1	2.1	1.9	2.6	2.0	6.2	43	107	13	3.4	2.3
11	3.2	2.9	2.3	1.9	3.0	1.8	5.6	45	112	12	3.4	2.3
12	3.7	2.9	2.1	1.9	2.8	1.8	4.0	52	103	11	3.1	2.3
13	3.6	2.9	2.3	1.9	3.5	2.0	3.4	61	98	11	2.9	2.3
14	3.1	2.9	2.3	1.9	3.3	1.8	4.0	72	94	10	2.9	2.3
15	3.1	2.9	2.3	2.0	2.8	1.8	5.5	74	91	9.8	2.9	2.3
16	3.8	2.9	2.1	1.9	2.4	1.8	6.4	74	88	8.9	2.9	2.4
17	3.7	2.9	2.1	1.9	2.2	1.8	6.8	72	84	8.4	2.9	2.6
18	3.7	2.9	2.0	1.9	2.1	1.8	7.5	71	80	8.1	2.9	2.4
19	3.8	2.9	1.9	1.9	2.1	1.8	6.8	67	76	8.1	2.9	2.4
20	3.7	2.9	1.8	1.9	2.0	1.8	6.3	66	72	7.8	2.6	2.4
21	3.7	2.6	2.2	1.8	2.0	1.8	6.1	64	68	7.5	2.6	2.4
22	3.7	2.6	2.1	1.8	2.0	2.1	6.9	64	65	7.5	2.6	2.4
23	3.7	2.9	2.1	1.8	2.0	1.8	6.3	60	60	7.2	2.6	2.4
24	3.7	3.4	2.1	1.8	2.1	2.0	8.3	57	52	6.8	2.6	2.4
25	3.4	3.4	2.2	1.9	2.0	2.0	11	60	42	7.5	2.4	2.4
26	2.9	2.9	2.2	1.9	2.0	2.1	8.0	70	36	7.8	2.4	2.4
27	2.9	2.6	2.2	1.9	1.9	2.9	7.0	80	30	6.8	2.4	2.3
28	2.9	2.6	2.1	1.9	2.0	2.3	7.3	90	27	6.5	2.4	2.4
29	2.9	2.4	2.0	1.9	-----	2.1	7.6	110	25	6.5	2.4	2.4
30	3.1	2.6	2.0	1.9	-----	2.4	7.5	130	23	6.2	3.1	2.4
31	3.1	-----	2.0	1.9	-----	3.7	-----	125	-----	5.9	2.6	-----
TOTAL	104.8	87.8	67.7	58.3	62.3	63.6	164.4	1,871.9	2,388	341.3	101.1	72.5
MEAN	3.38	2.93	2.18	1.88	2.23	2.05	5.48	60.4	79.6	11.0	3.26	2.42
MAX	3.8	3.4	2.4	2.0	3.5	3.7	11	130	120	22	5.6	2.9
MIN	2.9	2.4	1.8	1.8	1.7	1.8	2.1	8.9	23	5.9	2.4	2.3
AC-FT	208	174	134	116	124	126	326	3,710	4,740	677	201	144

CAL YR 1970 TOTAL 8,230.1 MEAN 22.5 MAX 252 MIN 1.2 AC-FT 16,320
WTR YR 1971 TOTAL 5,383.7 MEAN 14.7 MAX 130 MIN 1.7 AC-FT 10,680

PEAK DISCHARGE (BASE, 100 CFS)

NOTE.--No gage-height record Dec. 23 to Mar. 8,
May 25 to June 11.

DATE	TIME	G.HT	DISCHARGE	DATE	TIME	G.HT	DISCHARGE
5-30	1530	2.48	135				

YELLOWSTONE RIVER BASIN

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 mile downstream from Red Canyon Creek.

DRAINAGE AREA.--37.8 sq mi.

PERIOD OF RECORD.--January 1945 to current year. Monthly discharge for January to March 1945, published in WSP 1309.

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

AVERAGE DISCHARGE.--26 years, 29.3 cfs (21,230 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 318 cfs May 30 (gage height, 2.87 ft); minimum daily, 3.9 cfs Feb. 5.
 Period of record: Maximum discharge, 1,130 cfs June 15, 1963 (gage height, 4.60 ft), from rating curve extended above 500 cfs; 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 May 18, 1944.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	8.0	7.0	5.0	4.8	4.3	4.7	22	258	44	15	8.3
2	9.2	7.6	6.7	5.0	5.0	4.2	4.6	28	245	42	15	7.6
3	8.9	8.0	6.7	4.7	4.7	4.6	5.8	36	243	43	14	8.3
4	8.6	7.3	6.7	4.6	4.3	4.5	5.8	44	247	40	14	11
5	8.3	7.3	6.2	4.7	3.9	4.4	5.6	54	229	37	13	9.6
6	8.9	7.3	7.0	4.7	4.3	4.3	6.4	52	221	35	13	8.3
7	8.9	7.3	6.7	4.7	4.7	4.3	7.0	52	206	33	12	8.6
8	8.6	7.3	6.7	5.0	4.9	4.4	8.0	56	207	32	12	10
9	8.3	7.3	6.4	4.8	5.0	4.4	7.8	59	213	31	12	8.3
10	9.9	7.6	5.9	4.7	5.6	4.4	10	57	208	29	11	7.6
11	8.6	6.7	6.2	4.4	5.5	4.4	11	59	216	28	11	7.3
12	9.9	8.0	5.7	4.2	5.2	4.5	10	67	197	27	11	7.0
13	8.9	7.3	5.9	4.0	5.2	4.6	9.8	86	199	26	11	6.7
14	8.6	7.0	6.2	4.0	5.2	4.3	12	116	189	24	10	6.7
15	8.6	6.7	6.2	4.2	5.0	4.3	14	123	178	24	9.9	7.0
16	9.6	7.3	6.2	4.5	5.0	4.5	15	125	165	23	9.6	7.6
17	8.6	7.0	5.9	4.6	4.6	4.3	14	112	155	22	9.9	8.6
18	8.9	7.0	4.7	4.4	4.8	4.3	16	99	146	22	9.9	7.6
19	8.9	6.4	5.0	4.4	4.5	4.5	14	88	131	21	9.6	8.6
20	8.6	7.3	5.4	4.5	4.5	4.7	13	81	114	20	9.2	9.2
21	8.9	6.2	5.7	4.2	4.3	4.5	13	76	103	20	8.9	8.6
22	8.0	4.3	5.4	4.0	4.4	4.3	15	76	95	19	8.3	8.3
23	8.0	5.7	5.2	4.2	4.5	4.5	14	71	85	19	8.3	9.2
24	8.6	8.6	5.2	4.8	4.6	4.5	17	70	76	18	8.3	8.9
25	8.0	8.0	5.4	4.6	4.6	4.5	19	80	68	21	8.0	8.9
26	6.2	7.0	5.2	4.7	4.5	4.5	17	94	63	19	7.6	8.6
27	7.6	7.0	5.2	4.7	4.2	4.5	16	123	59	18	7.6	8.0
28	8.3	6.7	5.2	4.7	4.3	4.5	16	174	56	18	7.6	8.0
29	8.3	6.7	5.0	5.0	-----	4.3	16	264	51	18	8.3	7.6
30	8.6	7.0	5.0	4.5	-----	4.6	17	269	47	16	11	7.3
31	8.3	-----	5.0	4.7	-----	4.9	-----	267	-----	16	9.9	-----
TOTAL	267.2	212.9	180.9	141.2	132.1	137.8	354.5	2,980	4,670	805	325.9	247.3
MEAN	8.62	7.10	5.84	4.55	4.72	4.45	11.8	96.1	156	26.0	10.5	8.24
MAX	9.9	8.6	7.0	5.0	5.6	4.9	19	269	258	44	15	11
MIN	6.2	4.3	4.7	4.0	3.9	4.2	4.6	22	47	16	7.6	6.7
AC-FT	530	422	359	280	262	273	703	5,910	9,260	1,600	646	491
CAL YR 1970	TOTAL	14,916.8	MEAN	40.9	MAX	370	MIN	3.3	AC-FT	29,590		
WTR YR 1971	TOTAL	10,454.8	MEAN	28.6	MAX	269	MIN	3.9	AC-FT	20,740		

PEAK DISCHARGE (BASE, 180 CFS)

NOTE.--No gage-height record Jan. 6 to Apr. 14.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-30	1645	2.87	318				

YELLOWSTONE RIVER BASIN

75

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

LOCATION.--Lat 44°32'18", long 107°13'33", in SE¼SE¼NW¼ sec.28, T.53 N., R.86 W., Johnson County, Bighorn National Forest, on right bank 0.7 mile upstream from Park Reservoir and 16 miles southwest of Big Horn.

DRAINAGE AREA.--20.1 sq mi. Area at site used June 28, 1960, to July 14, 1970, 20.3 sq mi (revised).

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

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

AVERAGE DISCHARGE.--18 years, 32.2 cfs (23,330 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 566 cfs June 14 (gage height, 5.47 ft); minimum daily, 1.0 cfs Mar. 18.

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

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	3.3	2.7	2.0	2.1	1.2	1.2	4.0	127	81	25	11
2	5.4	3.0	2.7	1.9	2.0	1.2	1.1	6.0	136	87	25	9.8
3	5.2	3.4	2.7	1.8	1.9	1.2	1.1	8.0	160	83	24	9.8
4	5.2	3.5	2.7	1.7	1.8	1.2	1.1	9.0	182	78	24	11
5	5.2	3.5	2.7	1.6	1.8	1.2	1.1	10	155	69	24	11
6	5.4	3.7	2.7	1.6	1.7	1.2	1.1	15	162	68	27	9.8
7	5.2	3.6	2.7	1.7	1.7	1.2	1.1	16	162	70	25	9.8
8	5.4	3.5	2.7	1.8	1.8	1.2	1.1	18	178	66	26	14
9	4.7	3.5	2.6	1.9	1.9	1.2	1.1	20	281	62	30	12
10	5.4	3.6	2.5	1.9	2.0	1.2	1.3	25	312	57	26	11
11	4.8	3.3	2.5	1.8	2.0	1.2	1.8	25	373	59	23	10
12	5.2	3.2	2.3	1.8	2.0	1.1	1.7	30	341	59	21	9.2
13	5.4	3.1	2.3	1.8	2.0	1.1	1.5	45	401	54	19	8.5
14	4.2	3.0	2.4	1.7	1.9	1.1	1.7	60	389	51	18	8.2
15	4.0	2.8	2.4	1.7	1.5	1.1	1.9	70	342	47	16	8.2
16	4.2	2.9	2.4	1.8	1.5	1.1	2.2	60	344	43	15	8.2
17	4.1	2.8	2.4	1.9	1.4	1.1	2.0	50	395	44	15	8.2
18	4.1	2.7	2.3	1.9	1.4	1.0	2.0	45	369	43	16	8.2
19	4.4	2.7	2.1	1.9	1.4	1.1	2.0	40	339	40	16	8.2
20	4.4	2.7	2.1	2.1	1.4	1.1	2.0	35	276	36	15	8.5
21	4.2	2.7	2.0	2.0	1.4	1.1	2.1	30	284	35	13	8.5
22	4.0	2.7	1.9	1.9	1.4	1.1	2.0	28	290	37	12	7.8
23	3.6	2.7	1.9	1.8	1.4	1.1	2.0	26	295	42	12	7.5
24	3.9	2.7	1.9	1.9	1.3	1.1	2.3	25	249	36	11	7.5
25	3.7	2.8	1.9	1.9	1.3	1.1	2.4	35	216	61	10	7.1
26	3.7	2.8	2.0	1.9	1.3	1.1	2.3	70	193	59	10	7.1
27	3.7	2.8	2.1	2.0	1.2	1.2	2.2	150	162	45	9.8	7.3
28	3.9	2.7	2.1	2.1	1.2	1.2	2.2	244	131	38	10	7.8
29	3.6	2.7	2.1	2.1	-----	1.2	2.4	424	115	32	10	7.5
30	3.6	2.7	2.1	2.1	-----	1.2	2.8	217	94	29	12	6.9
31	3.6	-----	2.1	2.1	-----	1.2	-----	150	-----	26	12	-----
TOTAL	138.8	91.1	72.0	58.1	45.7	35.6	52.8	1,990.0	7,453	1,637	551.8	269.6
MEAN	4.48	3.04	2.32	1.87	1.63	1.15	1.76	64.2	248	52.8	17.8	8.99
MAX	5.4	3.7	2.7	2.1	2.1	1.2	2.8	424	401	87	30	14
MIN	3.6	2.7	1.9	1.6	1.2	1.0	1.1	4.0	94	26	9.8	6.9
AC-FT	275	181	143	115	91	71	105	3,950	14,780	3,250	1,090	535

CAL YR 1970 TOTAL 11,457.1 MEAN 31.4 MAX 300 MIN 1.5 AC-FT 22,730
WTR YR 1971 TOTAL 12,395.5 MEAN 34.0 MAX 424 MIN 1.0 AC-FT 24,590

PEAK DISCHARGE (BASE, 180 CFS)

NOTE.--No gage-height record Dec. 10 to Feb. 10, Apr. 12 to May 27.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-29	0545	5.42	544	6-14	0015	5.47	566

YELLOWSTONE RIVER BASIN

06300900 CROSS CREEK ABOVE BIGHORN RESERVOIR, NEAR BIG HORN, WYO.

LOCATION.--Lat 44°31'02", long 107°12'15", in NW¼SW¼SE¼ sec.34, T.53 N., R.86 W., Johnson County, Bighorn National Forest, on left bank 0.4 mile upstream from Bighorn Reservoir and 15.5 miles southwest of Big Horn.

DRAINAGE AREA.--9.29 sq mi.

PERIOD OF RECORD.--October 1960 to September 1971 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 8,790 ft (from topographic map).

AVERAGE DISCHARGE.--11 years, 13.2 cfs (9,560 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 175 cfs June 17 (gage height, 4.83 ft); maximum gage height, 5.64 ft May 29 (backwater from ice); minimum daily discharge, 0.40 cfs Feb. 7.

Period of record: Maximum discharge, 285 cfs June 15, 1963 (gage height, 6.02 ft); no flow Aug. 3-8, 10, 1966.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. Some regulation 1.1 miles upstream by Cross Creek Reservoir (capacity, 796 acre-ft). No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	2.1	2.0	1.2	1.0	.50	.80	2.6	33	35	11	5.5
2	1.8	2.1	2.0	1.0	1.0	.50	.80	3.0	34	31	10	5.3
3	1.9	2.0	2.0	1.0	1.0	.50	.90	3.5	44	31	9.8	5.6
4	1.9	2.0	2.0	1.0	.80	.60	.90	3.7	61	31	9.8	5.9
5	2.1	2.0	2.0	1.0	.70	.50	.90	3.5	50	27	9.2	5.9
6	2.3	2.1	2.1	.80	.60	.50	.90	3.5	52	25	9.2	5.6
7	2.2	2.1	2.2	.80	.40	.50	.90	3.6	53	25	9.2	5.9
8	2.3	2.2	2.2	1.0	.50	.60	.90	3.8	58	24	9.8	6.4
9	2.3	2.2	2.0	1.0	.60	.70	1.1	4.5	101	23	9.8	5.9
10	2.4	2.3	2.0	1.0	.70	.80	2.0	4.0	118	21	9.2	5.6
11	2.4	2.2	1.8	1.0	.70	.80	1.6	4.5	136	20	8.6	5.4
12	2.5	2.0	1.6	1.0	.70	.90	1.5	5.0	129	20	8.6	5.2
13	2.6	2.1	1.6	1.0	.70	1.0	1.4	6.0	146	19	7.9	4.9
14	2.4	2.1	1.6	1.0	.70	.90	1.6	7.0	148	18	7.5	5.0
15	2.3	2.0	1.6	.90	.60	.90	1.8	10	142	18	7.2	4.9
16	2.3	2.0	1.6	.80	.60	.90	2.0	8.5	143	16	7.0	5.0
17	2.3	2.1	1.4	1.0	.60	.90	1.8	7.5	156	17	6.8	4.9
18	2.3	2.0	1.2	1.0	.60	.80	1.8	7.0	147	17	7.1	4.8
19	2.2	2.0	1.2	1.0	.60	.80	1.8	6.5	139	47	6.8	4.9
20	2.3	2.0	1.2	1.2	.60	.80	1.8	6.0	125	85	6.7	4.9
21	2.4	2.0	1.2	1.2	.50	.80	2.0	5.6	130	76	6.6	4.6
22	2.4	1.8	1.2	1.0	.60	.70	1.8	6.5	128	63	6.2	4.5
23	2.4	1.6	1.0	1.0	.60	.80	1.8	7.5	124	50	5.9	4.4
24	2.4	1.8	1.0	1.0	.60	.90	2.2	8.5	107	27	5.8	4.3
25	2.3	1.8	1.0	.90	.60	1.0	2.0	9.0	94	26	5.5	4.2
26	2.3	1.8	1.2	.80	.60	.90	2.0	10	82	27	5.5	4.3
27	2.1	1.8	1.2	1.0	.60	.90	2.0	15	71	20	5.5	4.2
28	2.2	1.8	1.2	1.0	.60	.90	2.0	18	56	17	5.5	4.5
29	2.3	2.0	1.2	1.0	-----	.90	2.2	100	48	14	5.6	4.2
30	2.3	2.2	1.2	1.0	-----	.90	2.3	86	39	12	6.1	4.2
31	2.2	-----	1.2	1.2	-----	.90	-----	46	-----	12	5.8	-----
TOTAL	69.9	60.2	47.9	30.80	18.40	24.00	47.50	415.8	2,894	894	235.2	150.9
MEAN	2.25	2.01	1.55	.99	.66	.77	1.58	13.4	96.5	28.8	7.59	5.03
MAX	2.6	2.3	2.2	1.2	1.0	1.0	2.3	100	156	85	11	6.4
MIN	1.8	1.6	1.0	.80	.40	.50	.80	2.6	33	12	5.5	4.2
AC-FT	139	119	95	61	37	48	94	825	5,740	1,770	467	299

CAL YR 1970 TOTAL 4,932.59 MEAN 13.5 MAX 165 MIN .70 AC-FT 9,780
WTR YR 1971 TOTAL 4,888.60 MEAN 13.4 MAX 156 MIN .40 AC-FT 9,700

NOTE.--No gage-height record Mar. 8 to May 28.

YELLOWSTONE RIVER BASIN

77

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 0.30 mile downstream from Twin Lakes Branch and 16 miles west of Big Horn.

DRAINAGE AREA.--24.4 sq mi.

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

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

AVERAGE DISCHARGE.--18 years, 34.4 cfs (24,920 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 473 cfs June 13 (gage height, 4.11 ft); minimum daily, 1.0 cfs Apr. 2.
Period of record: Maximum discharge, 1,030 cfs June 15, 1963 (gage height, 5.37 ft), from rating curve extended above 410 cfs on basis of velocity-area study; minimum daily, 0.80 cfs Dec. 14, 26, 1963, Jan. 15, 16, Feb. 26, 1964.

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are poor. Some regulation by Twin Lakes (capacity, 1,200 acre-ft) and Dome Lake (capacity, 1,800 acre-ft). No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	6.2	5.8	3.5	2.2	1.9	1.2	4.0	243	98	45	26
2	6.6	6.2	5.6	3.3	2.1	1.9	1.0	6.0	239	82	39	25
3	6.4	6.2	5.6	2.8	2.1	1.7	1.2	8.0	223	82	36	25
4	6.4	6.2	5.6	2.6	2.0	1.7	1.2	10	223	85	33	24
5	6.2	6.0	5.8	2.4	2.0	1.7	1.2	12	215	80	36	24
6	6.2	6.0	5.8	2.3	2.0	1.7	2.0	15	206	76	33	25
7	6.2	6.0	6.0	2.4	2.0	1.7	2.5	18	192	74	33	28
8	6.2	6.0	5.8	2.5	2.1	1.7	2.3	20	170	70	33	28
9	6.4	6.0	5.8	2.5	2.2	1.7	2.0	25	185	65	33	28
10	6.0	6.0	5.6	2.5	2.2	1.7	2.3	22	230	65	31	28
11	6.0	6.0	5.4	2.5	2.2	1.7	2.2	25	265	64	29	28
12	6.0	6.0	5.4	2.5	2.2	1.7	2.0	30	359	62	33	28
13	6.4	6.0	5.2	2.5	2.2	1.7	1.8	35	437	61	33	27
14	6.4	6.0	5.2	2.4	2.2	1.7	2.1	50	432	60	33	25
15	6.6	6.0	5.4	2.5	2.2	1.7	2.4	64	402	57	33	24
16	6.4	6.0	5.0	2.5	2.2	1.7	2.6	66	370	54	33	24
17	6.4	6.0	4.6	2.5	2.1	1.5	2.5	60	354	52	33	24
18	6.2	6.0	4.4	2.5	2.1	1.4	2.8	55	366	52	33	24
19	6.2	6.0	4.2	2.5	2.1	1.4	2.6	50	367	59	33	24
20	6.0	6.0	4.0	2.6	2.1	1.4	2.6	46	328	68	33	24
21	6.9	6.0	3.9	2.5	2.1	1.4	2.7	43	326	58	33	26
22	9.5	6.0	3.8	2.4	2.0	1.4	2.7	40	276	50	33	29
23	9.5	6.0	3.5	2.3	1.9	1.4	2.7	34	262	43	32	28
24	9.5	6.0	3.7	2.2	1.9	1.4	3.0	28	254	38	31	23
25	9.2	6.0	3.7	2.1	1.9	1.4	3.5	31	253	48	30	9.8
26	9.2	6.0	3.7	2.1	1.9	1.4	3.3	50	236	49	30	8.6
27	8.6	6.0	3.7	2.1	1.9	1.4	3.3	65	176	49	29	8.6
28	8.6	6.0	3.7	2.1	1.9	1.4	3.3	76	92	48	28	8.6
29	8.6	6.0	3.7	2.1	-----	1.4	3.4	96	71	46	28	8.6
30	7.9	6.0	3.7	2.1	-----	1.4	3.5	98	101	46	28	8.6
31	6.9	-----	3.7	2.2	-----	1.4	-----	157	-----	46	27	-----
TOTAL	220.0	180.8	147.0	76.0	58.0	48.7	71.9	1,339.0	7,853	1,887	1,007	671.8
MEAN	7.10	6.03	4.74	2.45	2.07	1.57	2.40	43.2	262	60.9	32.5	22.4
MAX	9.5	6.2	6.0	3.5	2.2	1.9	3.5	157	437	98	45	29
MIN	6.0	6.0	3.5	2.1	1.9	1.4	1.0	4.0	71	38	27	8.6
AC-FT	436	359	292	151	115	97	143	2,660	15,580	3,740	2,000	1,330

CAL YR 1970 TOTAL 12,930.4 MEAN 35.4 MAX 330 MIN 1.9 AC-FT 25,650
WTR YR 1971 TOTAL 13,560.2 MEAN 37.2 MAX 437 MIN 1.0 AC-FT 26,900

NOTE.--No gage-height record Dec. 15 to Feb. 10, Mar. 14 to May 20.

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 mile upstream from Cave Creek and 14 miles southwest of Sheridan.

PERIOD OF RECORD.--September 1929 to current year. Prior to October 1960, published as Goose Creek near Sheridan. Monthly discharge only for some periods, published in WSP 1309.

AVERAGE DISCHARGE.--42 years, 79.6 cfs (57,670 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,020 cfs June 13 (gage height, 4.04 ft); minimum daily, 5.0 cfs Sept. 26.
Period of record: Maximum discharge, 3,160 cfs June 15, 1963 (gage height, 5.83 ft), from rating curve extended above
1,600 cfs; minimum daily, 1.6 cfs Nov. 29, 1954.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	19	17	13	11	10	12	33	672	130	22	21
2	19	17	16	13	12	11	9.2	44	660	104	20	21
3	15	19	16	13	12	11	13	60	592	104	14	20
4	14	16	17	12	7.6	11	11	78	555	104	8.5	25
5	13	19	17	12	10	11	9.2	104	515	93	9.5	21
6	16	19	18	12	8.8	11	21	114	488	75	21	19
7	16	19	17	12	10	11	38	112	460	64	29	22
8	19	19	16	12	12	11	31	122	428	60	31	27
9	19	18	15	12	12	11	30	127	444	52	31	26
10	20	19	14	12	12	11	36	117	484	48	29	26
11	19	16	16	12	12	11	33	120	515	50	25	23
12	22	21	12	12	12	11	22	140	738	50	26	20
13	21	19	16	12	12	11	14	151	987	46	27	18
14	19	18	16	12	12	10	17	202	992	46	26	19
15	19	16	15	12	12	10	24	215	971	42	27	19
16	22	19	15	12	11	10	25	218	940	37	26	19
17	20	18	15	13	10	10	24	202	906	28	25	18
18	20	18	13	13	11	10	29	181	906	25	26	17
19	21	15	13	13	11	11	24	168	857	22	28	13
20	19	18	13	13	10	11	22	159	714	32	25	14
21	19	16	14	11	10	10	22	149	708	32	22	15
22	20	8.2	13	11	12	10	23	147	570	29	22	17
23	21	16	13	12	12	10	22	129	436	22	24	15
24	21	28	13	13	11	11	28	99	448	24	23	12
25	21	21	13	12	11	11	31	108	480	27	22	8.8
26	12	19	13	12	10	13	25	127	452	50	21	5.0
27	16	18	13	12	10	14	22	162	380	48	21	7.5
28	23	18	13	12	11	12	22	208	231	47	22	11
29	24	18	13	12	-----	12	23	424	151	40	22	10
30	23	19	13	11	-----	14	25	452	153	32	26	10
31	20	-----	13	10	-----	16	-----	500	-----	25	24	-----
TOTAL	593	543.2	451	375	307.4	347	687.4	5,172	17,833	1,588	725.0	519.3
MEAN	19.1	18.1	14.5	12.1	11.0	11.2	22.9	167	594	51.2	23.4	17.3
MAX	24	28	18	13	12	16	38	500	992	130	31	27
MIN	12	8.2	12	10	7.6	10	9.2	33	151	22	8.5	5.0
AC-FT	1,180	1,080	895	744	610	688	1,360	10,260	35,370	3,150	1,440	1,030
CAL YR 1970	TOTAL	33,424.2	MEAN	91.6	MAX	882	MIN	7.9	AC-FT	66,300		
WTR YR 1971	TOTAL	29,141.3	MEAN	79.8	MAX	992	MIN	5.0	AC-FT	57,800		

YELLOWSTONE RIVER BASIN

79

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 upstream from headgate of Lower Peralta ditch and 6.5 miles southwest of Big Horn.

DRAINAGE AREA.--55 sq mi, approximately.

PERIOD OF RECORD.--April 1941 to current year.

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

AVERAGE DISCHARGE.--30 years, 63.4 cfs (45,930 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 556 cfs May 30 (gage height, 4.67 ft); minimum daily, 5.2 cfs Jan. 12.
Period of record: Maximum discharge, 1,350 cfs June 15, 1963 (gage height, 6.78 ft), from rating curve extended above 900 cfs; minimum recorded, 2.2 cfs Dec. 4, 1949 (gage height, 0.71 ft).

REMARKS.--Records fair except those for winter period, which are poor. Three small reservoirs above station (combined capacity, 860 acre-ft), two of which store some of the imported water. Water imported into drainage basin above station from East Goose Creek basin is diverted below station for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	12	10	7.2	6.2	6.0	9.5	45	422	110	112	60
2	35	11	10	6.8	6.6	6.0	8.2	62	382	104	112	56
3	35	12	10	6.4	6.4	6.4	8.9	85	356	103	115	56
4	35	9.5	9.8	6.2	6.4	6.2	7.9	109	348	99	115	56
5	34	13	10	6.2	5.8	6.4	7.6	132	310	92	119	53
6	28	12	10	6.0	5.4	5.8	9.2	143	294	83	119	50
7	26	12	10	6.2	5.8	5.9	12	147	274	77	125	55
8	16	13	9.8	6.6	6.4	5.9	15	148	272	70	126	56
9	14	11	9.5	6.4	6.4	5.9	16	154	310	65	123	53
10	15	12	9.2	6.0	6.4	5.9	28	146	316	70	120	51
11	14	9.5	9.5	5.6	6.4	5.9	31	146	334	68	121	47
12	15	14	9.2	5.2	6.4	6.2	22	155	306	68	123	45
13	16	16	9.2	5.4	6.6	6.6	19	172	322	87	121	40
14	14	11	9.2	5.8	6.6	5.9	22	200	310	89	120	34
15	13	8.9	9.2	6.2	6.6	5.4	33	206	292	101	118	35
16	15	13	9.2	6.6	6.6	5.9	36	206	283	96	112	35
17	13	11	8.9	6.8	6.4	5.9	36	192	283	100	100	35
18	13	11	8.4	6.8	6.9	6.4	42	171	258	97	99	32
19	15	8.9	7.8	6.8	6.4	6.2	34	154	233	96	100	31
20	13	12	8.0	6.8	6.4	6.4	31	141	213	109	99	32
21	14	11	8.0	6.4	6.0	6.2	30	130	205	111	104	32
22	13	8.5	7.8	6.0	6.2	6.0	32	137	214	118	99	30
23	13	8.0	7.2	6.2	6.4	6.2	35	129	211	117	90	30
24	13	15	7.4	6.2	6.6	6.2	43	125	209	115	96	30
25	13	13	7.4	6.3	6.6	6.6	46	133	198	124	90	28
26	8.9	11	7.4	6.3	6.6	8.5	40	143	184	111	91	27
27	11	11	7.2	6.3	6.4	10	36	170	177	108	86	25
28	14	11	7.1	6.3	6.2	8.2	34	228	151	109	76	25
29	13	10	7.4	6.3	-----	7.9	34	472	125	113	77	25
30	13	11	7.4	6.0	-----	11	35	465	117	112	77	25
31	12	-----	7.5	6.0	-----	13	-----	458	-----	113	63	-----
TOTAL	551.9	342.3	268.7	194.3	178.1	211.0	793.3	5,504	7,909	3,035	3,248	1,189
MEAN	17.8	11.4	8.67	6.27	6.36	6.81	26.4	178	264	97.9	105	39.6
MAX	35	16	10	7.2	6.9	13	46	472	422	124	126	60
MIN	8.9	8.0	7.1	5.2	5.4	5.4	7.6	45	117	65	63	25
AC-FT	1,090	679	533	385	353	419	1,570	10,920	15,690	6,020	6,440	2,360
CAL YR 1970	TOTAL 30,637.6	MEAN 83.9	MAX 599	MIN 4.7	AC-FT 60,770							
WTR YR 1971	TOTAL 23,424.6	MEAN 64.2	MAX 472	MIN 5.2	AC-FT 46,460							

PEAK DISCHARGE (BASE, 420 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-30	1430	4.67	556				

YELLOWSTONE RIVER BASIN

06305500 GOOSE CREEK BELOW SHERIDAN, WYO.

LOCATION.--Lat 44°49'25", long 106°57'40", in SE¼SW¼ sec.15, T.56 N., R.84 W., Sheridan County, on right bank 700 ft north of Sheridan city limits and 0.2 mile downstream from Soldier Creek.

DRAINAGE AREA.--392 sq mi.

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 above mean sea level. Prior to Aug. 3, 1951, nonrecording gage at site 600 ft upstream at datum 2.18 ft lower.

AVERAGE DISCHARGE.--30 years, 181 cfs (131,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,460 cfs June 14 (gage height, 4.31 ft); minimum daily, 25 cfs Aug. 7.
Period of record: Maximum discharge, 5,450 cfs June 16, 1963 (gage height, 7.82 ft); minimum daily, 4.0 cfs Aug. 11, 1957.

REMARKS.--Records good except those for December to May, which are poor. Some regulation by many small reservoirs (combined capacity, about 15,000 acre-ft). 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	99	112	74	66	100	108	208	1,330	202	40	50
2	78	93	99	68	75	98	96	226	1,290	154	39	42
3	75	96	97	66	74	98	97	270	1,160	150	34	43
4	74	92	94	66	62	105	94	316	1,080	162	33	64
5	74	91	78	64	62	105	87	388	1,010	150	37	59
6	76	91	110	64	57	100	89	436	926	134	29	51
7	80	92	108	66	54	100	106	440	872	110	25	54
8	90	103	99	68	56	100	120	432	766	112	26	66
9	91	94	97	68	57	100	114	464	794	108	29	66
10	94	98	89	66	61	110	120	436	805	94	30	57
11	100	99	62	64	150	120	141	404	849	87	28	60
12	120	95	75	64	250	120	130	416	926	87	33	56
13	120	98	72	64	450	115	114	448	1,330	75	33	60
14	110	95	84	64	550	105	110	541	1,380	69	29	52
15	98	89	99	66	300	100	118	585	1,320	69	28	59
16	100	90	101	68	199	98	130	580	1,240	59	27	66
17	96	87	90	70	128	97	126	560	1,200	47	27	78
18	96	87	70	72	114	96	134	505	1,180	43	27	85
19	100	85	60	74	87	95	139	424	1,160	43	30	82
20	94	83	65	80	82	96	150	372	944	44	27	96
21	98	83	70	85	85	101	157	344	902	44	29	105
22	98	59	70	80	87	96	242	376	827	43	26	97
23	100	59	70	76	99	97	211	352	655	40	29	94
24	101	111	70	78	103	96	199	288	625	39	26	89
25	105	126	72	76	118	108	615	270	675	54	27	84
26	98	120	74	74	103	118	487	277	635	89	32	78
27	92	118	74	74	103	130	344	326	590	64	34	78
28	96	108	74	80	103	120	266	384	444	66	29	80
29	101	112	74	100	-----	110	235	872	274	66	29	78
30	107	112	78	120	-----	106	214	1,110	232	54	68	80
31	103	-----	78	82	-----	120	-----	1,300	-----	48	60	-----
TOTAL	2,945	2,865	2,565	2,281	3,735	3,260	5,293	14,350	27,421	2,606	1,000	2,109
MEAN	95.0	95.5	82.7	73.6	133	105	176	463	914	84.1	32.3	70.3
MAX	120	126	112	120	550	130	615	1,300	1,380	202	68	105
MIN	74	59	60	64	54	95	87	208	232	39	25	42
AC-FT	5,840	5,680	5,090	4,520	7,410	6,470	10,500	28,460	54,390	5,170	1,980	4,180

CAL YR 1970 TOTAL 86,570 MEAN 237 MAX 1,590 MIN 25 AC-FT 171,700
WTR YR 1971 TOTAL 70,430 MEAN 193 MAX 1,380 MIN 25 AC-FT 139,700

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-31	0030	4.28	1,440	6-14	0630	4.31	1,460

YELLOWSTONE RIVER BASIN

81

06306250 PRAIRIE DOG CREEK NEAR ACME, WYO.

LOCATION.--Lat 44°59'02", long 106°50'21", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.23, T.58 N., R.83 W., Sheridan County, on right bank 600 ft upstream from county bridge, 0.9 mile upstream from mouth, 2.8 miles downstream from Coutant Creek, and 7.6 miles northeast of Acme.

DRAINAGE AREA.--358 sq mi.

PERIOD OF RECORD.--October 1970 to September 1971. 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 (from topographic map).

EXTREMES.--Current year: Maximum discharge, 567 cfs Mar. 28 (gage height, 5.21 ft), from rating curve extended above 90 cfs on basis of step-backwater computation; maximum gage height, 5.62 ft Feb. 16 (backwater from ice); minimum discharge, 6.4 cfs Aug. 17 (gage height, 0.68 ft).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	43	37	25	22	28	178	108	91	18	10	27
2	35	43	38	23	23	32	132	91	71	16	9.8	25
3	34	43	35	21	23	35	93	81	55	12	9.8	25
4	32	40	33	20	24	35	80	73	48	13	9.5	33
5	27	36	25	20	23	33	69	68	46	13	9.8	34
6	31	34	20	22	22	30	64	63	41	16	9.5	36
7	32	36	25	23	20	30	63	58	38	15	8.5	30
8	36	38	42	25	20	35	65	54	35	11	8.5	24
9	39	41	35	24	25	50	71	52	28	10	8.3	21
10	40	41	30	23	30	70	65	46	28	13	7.6	20
11	42	38	22	20	40	80	62	46	32	16	7.4	18
12	48	38	18	18	50	85	61	44	34	19	7.4	15
13	52	37	22	16	60	90	58	41	31	15	7.6	15
14	57	37	25	15	80	85	54	40	30	13	8.3	15
15	60	38	25	16	90	90	54	37	26	12	8.3	15
16	57	37	25	18	150	85	51	36	22	12	7.8	14
17	54	36	23	20	250	80	48	33	18	10	7.4	15
18	52	35	21	23	150	70	47	30	16	9.5	10	17
19	52	34	18	25	80	65	46	28	15	9.5	14	19
20	49	34	15	26	70	65	47	20	15	9.5	16	21
21	49	32	16	25	55	60	54	17	16	9.5	16	26
22	50	12	17	25	45	60	69	16	18	9.8	15	35
23	50	15	19	25	40	70	96	16	18	11	12	39
24	49	25	21	25	35	75	93	27	18	10	8.8	38
25	47	32	23	26	30	84	146	28	19	9.5	8.8	39
26	46	33	25	27	28	137	333	22	15	10	10	36
27	46	35	26	27	28	251	303	17	13	11	9.8	34
28	44	34	28	30	28	457	225	13	14	9.2	8.8	34
29	43	35	30	29	-----	290	168	13	16	10	11	36
30	43	35	30	27	-----	178	129	17	17	9.8	14	38
31	44	-----	28	23	-----	149	-----	51	-----	10	18	-----
TOTAL	1,378	1,047	797	712	1,541	2,984	3,024	1,286	1,884	372.3	317.7	794
MEAN	44.5	34.9	25.7	23.0	55.0	96.3	101	41.5	29.5	12.0	10.2	26.5
MAX	60	43	42	30	250	457	333	108	91	19	18	39
MIN	27	12	15	15	20	28	46	13	13	9.2	7.4	14
AC-FT	2,730	2,080	1,580	1,410	3,060	5,920	6,000	2,550	1,750	738	630	1,570

WTR YR 1971 TOTAL 15,137.0 MEAN 41.5 MAX 457 MIN 7.4 AC-FT 30,020

NOTE.--Stage-discharge relation affected by ice Nov. 22 to Mar. 24 (no gage-height record Jan. 3, 4, 6-26, Feb. 1-3, 5-13).

YELLOWSTONE RIVER BASIN

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

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 mile north of Wyoming-Montana State line, 1.5 miles upstream from Badger Creek, and 1.4 miles southeast of Decker.

DRAINAGE AREA.--1,477 sq mi.

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 (from topographic map).

AVERAGE DISCHARGE.--11 years, 494 cfs (357,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,110 cfs May 31 (gage height, 6.99 ft); maximum gage height, 10.93 ft Feb. 15 (backwater from ice); minimum discharge, 42 cfs Nov. 23, result of freezeup.

Period of record: Maximum discharge, 7,480 cfs June 15, 1967 (gage height, 10.86 ft); maximum gage height, 10.94 ft Feb. 6, 1963 (backwater from ice jam); minimum discharge, 3.9 cfs Aug. 23, 1961 (gage height, 1.83 ft).

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). Diversions for irrigation of about 57,000 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	262	283	255	230	500	260	505	635	2,730	634	158	150
2	252	277	260	200	350	255	404	617	2,710	560	141	138
3	256	266	250	180	250	250	346	663	2,560	514	126	129
4	252	274	240	160	200	250	338	760	2,490	529	123	151
5	242	252	230	150	180	260	314	879	2,450	511	115	183
6	245	262	240	160	160	240	300	1,030	2,290	471	105	176
7	242	273	260	165	150	230	316	1,100	2,210	424	96	165
8	252	288	260	170	140	250	370	1,100	2,070	401	95	165
9	259	291	250	165	150	300	402	1,190	2,090	408	97	176
10	262	275	230	160	160	350	390	1,160	2,150	404	94	170
11	288	297	220	155	350	500	411	1,060	2,180	400	97	158
12	284	272	210	150	1,000	850	444	1,090	2,220	401	93	150
13	332	283	210	145	1,500	900	396	1,240	2,390	382	91	143
14	324	288	220	140	2,500	800	341	1,450	2,550	360	94	142
15	308	277	230	145	2,700	700	354	1,620	2,440	347	92	134
16	288	259	250	150	2,200	600	372	1,610	2,310	332	89	138
17	295	269	270	160	1,500	550	393	1,510	2,210	309	93	156
18	286	263	260	190	1,000	475	375	1,330	2,150	286	97	178
19	286	262	230	250	700	430	415	1,160	2,060	280	94	191
20	290	250	200	300	500	400	414	1,010	1,880	270	96	204
21	285	240	210	300	400	450	425	911	1,710	240	98	232
22	284	150	225	260	350	525	504	903	1,620	229	94	242
23	275	110	230	270	300	400	682	917	1,460	235	89	239
24	281	170	240	280	325	315	558	842	1,300	211	82	238
25	287	300	250	270	350	375	1,860	818	1,270	196	82	231
26	285	280	260	280	330	491	1,910	877	1,210	213	85	221
27	256	250	270	280	300	623	1,380	1,050	1,130	234	89	212
28	249	240	265	280	270	845	1,010	1,350	1,040	203	87	211
29	253	230	260	350	-----	622	793	1,850	874	195	84	213
30	276	240	260	600	-----	475	730	2,720	705	187	106	216
31	291	-----	250	900	-----	472	-----	2,890	-----	172	145	-----
TOTAL	8,527	7,671	7,495	7,595	18,815	14,443	17,452	37,342	58,459	10,538	3,127	5,452
MEAN	275	256	242	245	672	466	582	1,205	1,949	340	101	182
MAX	332	300	270	900	2,700	900	1,910	2,890	2,730	634	158	242
MIN	242	110	200	140	140	230	300	617	705	172	82	129
AC-FT	16,910	15,220	14,870	15,060	37,320	28,650	34,620	74,070	116,000	20,900	6,200	10,810
CAL YR 1970	TOTAL 243,501	MEAN 667	MAX 3,900	MIN 100	AC-FT 483,000							
WTR YR 1971	TOTAL 196,916	MEAN 539	MAX 2,890	MIN 82	AC-FT 390,600							

PEAK DISCHARGE (BASE, 2,000 CFS)

NOTE.--Stage-discharge relation affected by ice Nov. 21 to Mar. 23.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
2-15	--	--	a 3,100	5-31	1215	6.99	3,110
4-25	1515	6.75	2,920	6-14	1730	6.53	2,650

a About.

YELLOWSTONE RIVER BASIN

83

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 downstream from Rock Creek and 13 miles southwest of Barnum. Prior to Oct. 1, 1970, at site 900 ft upstream.

DRAINAGE AREA.--46 sq mi, approximately.

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

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

AVERAGE DISCHARGE.--10 years, 34.5 cfs (25,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 600 cfs May 30 (gage height, 4.00 ft); minimum daily, 5.5 cfs Jan. 5, 6.

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

REVISIONS.--Figures of maximum discharge and gage height for the water year 1964 have been revised to 1,050 cfs June 9, 1964 (gage height, 5.28 ft), superseding figures published in WSP 1916.

REMARKS.--Records fair above 10 cfs and poor below. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	6.9	7.0	6.5	6.0	6.9	8.0	29	247	23	9.0	6.6
2	7.6	6.6	7.0	6.5	6.0	6.9	7.0	39	228	22	9.4	6.3
3	7.6	6.9	7.0	6.5	6.0	6.9	7.2	49	211	22	9.4	6.9
4	7.6	6.9	7.0	6.0	6.0	6.9	7.2	65	192	20	9.4	9.0
5	7.6	7.6	7.0	5.5	6.0	6.9	7.5	107	181	19	8.6	8.3
6	7.9	6.9	7.0	5.5	6.0	6.9	7.9	91	168	18	9.0	7.2
7	7.9	6.9	7.0	6.0	6.0	6.9	9.0	96	152	17	8.6	7.2
8	7.9	6.6	7.0	6.0	6.0	6.9	10	117	143	17	8.6	9.4
9	7.9	6.5	7.0	6.0	6.0	6.6	11	138	137	17	7.9	9.0
10	7.9	6.3	7.0	6.0	6.5	6.6	16	135	125	16	7.9	8.0
11	9.0	6.5	7.0	6.0	6.5	6.6	17	161	113	16	7.9	8.0
12	9.4	7.2	7.0	6.0	6.5	6.9	14	190	101	15	7.6	7.0
13	9.0	6.9	7.0	6.0	6.5	7.2	14	245	92	14	7.2	6.6
14	8.6	6.6	7.0	6.0	6.5	7.0	14	339	81	14	7.2	6.9
15	9.0	6.5	6.6	6.5	6.5	7.0	20	347	70	14	6.9	7.2
16	8.6	6.9	6.6	6.5	6.0	6.9	24	347	60	13	6.9	8.3
17	8.3	6.9	6.6	6.5	6.0	6.9	25	285	60	13	6.9	9.0
18	8.3	6.5	6.6	6.5	6.0	6.9	26	213	50	13	6.9	9.4
19	7.9	6.5	6.6	6.5	6.0	6.9	22	173	50	12	6.9	9.0
20	7.6	6.5	6.3	6.5	6.0	6.9	19	156	44	12	6.9	9.0
21	7.9	6.5	6.0	6.5	6.0	6.9	15	176	41	11	6.6	9.0
22	7.6	6.5	6.0	6.0	6.0	6.9	13	193	39	12	6.6	8.6
23	7.6	6.5	6.0	6.0	6.0	6.9	15	173	36	11	6.6	8.3
24	7.9	6.5	6.0	6.0	6.0	7.2	22	185	33	11	6.6	7.9
25	8.3	6.5	6.0	6.0	6.3	7.6	18	209	30	12	6.6	7.6
26	8.3	6.5	6.5	6.5	6.6	8.3	17	226	27	11	6.6	7.2
27	6.6	6.5	6.5	6.5	6.6	9.7	14	278	29	10	6.6	8.3
28	7.0	6.5	6.5	6.5	6.9	8.6	16	285	27	10	6.3	8.3
29	7.0	7.0	6.5	6.5	-----	8.0	16	302	26	10	7.6	7.9
30	7.6	7.0	6.5	6.5	-----	8.6	21	348	25	10	8.3	7.6
31	6.9	-----	6.5	6.0	-----	8.6	-----	278	-----	9.4	6.9	-----
TOTAL	246.2	201.1	206.3	192.5	173.4	224.9	452.8	5,975	2,818	444.4	234.4	239.0
MEAN	7.94	6.70	6.65	6.21	6.19	7.25	15.1	193	93.9	14.3	7.56	7.97
MAX	9.4	7.6	7.0	6.5	6.9	9.7	26	348	247	23	9.4	9.4
MIN	6.6	6.3	6.0	5.5	6.0	6.6	7.0	29	25	9.4	6.3	6.3
AC-FT	488	399	409	382	344	446	998	11,850	5,590	881	465	474

CAL YR 1970 TOTAL 14,907.4 MEAN 40.8 MAX 778 MIN 2.8 AC-FT 29,570
 WTR YR 1971 TOTAL 11,408.0 MEAN 31.3 MAX 348 MIN 5.5 AC-FT 22,630

PEAK DISCHARGE (BASE, 200 CFS)

NOTE.--No gage-height record Dec. 21 to Feb. 22.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-14	2100	3.45	419	5-30	1230	4.00	600

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 mile downstream from Twin Creek, 0.7 mile upstream from Dullknife Reservoir, 7.2 miles southwest of Hazelton, and 19 miles northwest of Mayoworth.

DRAINAGE AREA.--24.5 sq mi.

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 (from topographic map). Prior to Oct. 1, 1966, at site 0.8 mile downstream at different datum.

AVERAGE DISCHARGE.--25 years, 14.5 cfs (10,510 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 387 cfs May 29 (gage height, 3.99 ft); minimum daily, 1.0 cfs Jan. 4.

Period of record: Maximum discharge, 886 cfs June 15, 1953 (gage height, 4.34 ft, site and datum then in use), from rating curve extended above 110 cfs on basis of slope-area measurement of peak flow; minimum daily, 0.60 cfs 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 winter period and 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	3.1	2.3	1.4	2.6	1.6	2.3	5.0	148	22	7.2	3.6
2	3.6	3.0	2.1	1.2	2.6	1.4	2.4	6.0	146	20	9.3	3.3
3	3.4	2.9	1.9	1.1	2.3	1.7	2.5	8.0	146	20	9.6	3.8
4	3.4	2.8	1.9	1.0	2.0	1.9	2.3	10	140	20	7.4	6.1
5	3.3	2.8	2.0	1.1	1.7	1.8	2.4	13	122	19	7.4	6.1
6	2.9	3.0	2.1	1.1	1.6	1.7	2.6	17	121	18	7.4	4.6
7	2.5	3.0	2.1	1.1	1.5	1.6	2.6	18	109	17	6.4	4.2
8	2.6	2.9	2.2	1.4	1.7	2.0	2.5	22	107	16	8.4	5.6
9	2.7	2.9	2.1	1.8	2.0	1.9	3.0	25	124	16	6.7	4.4
10	2.8	3.0	2.0	2.1	2.3	2.1	3.3	27	120	15	5.9	3.6
11	2.9	2.8	2.0	2.0	2.4	2.3	3.3	30	124	14	5.6	3.4
12	3.0	2.9	1.7	2.0	2.3	2.5	3.1	80	101	13	5.4	3.3
13	2.8	2.7	1.6	1.9	2.4	2.7	2.8	120	97	12	5.1	3.2
14	2.3	2.6	1.7	1.7	2.4	2.6	3.1	90	89	11	4.6	3.2
15	2.2	2.6	1.8	1.9	2.4	2.5	4.0	114	80	11	4.4	3.1
16	2.3	2.8	1.9	2.1	2.3	2.4	3.9	96	73	11	4.4	3.1
17	2.5	2.7	1.8	2.1	2.1	2.3	3.6	62	67	11	4.6	3.3
18	2.7	2.6	1.6	2.1	2.0	2.2	3.7	41	61	12	5.4	3.1
19	3.0	2.5	1.4	2.3	1.9	2.1	3.6	37	57	11	4.9	3.1
20	3.2	2.5	1.5	2.5	1.7	2.0	3.5	34	49	10	4.6	3.5
21	3.2	2.6	1.5	2.4	1.4	2.0	3.7	50	44	9.9	4.4	4.0
22	3.2	2.2	1.3	1.9	1.6	2.0	3.6	82	41	12	4.2	3.8
23	3.1	1.9	1.1	1.9	1.7	2.0	3.7	67	38	11	4.2	3.6
24	3.0	2.1	1.2	2.0	1.9	2.5	4.0	65	34	9.6	4.0	3.5
25	3.0	2.2	1.2	2.1	2.2	2.6	3.8	69	31	15	4.0	4.0
26	2.9	2.0	1.2	2.3	2.0	2.6	3.6	84	28	12	4.0	3.8
27	2.5	2.0	1.3	2.5	1.7	2.6	3.8	114	28	8.7	4.0	3.7
28	2.7	2.1	1.5	2.6	1.5	2.4	3.8	138	27	8.0	4.0	5.0
29	3.0	2.1	1.6	2.7	-----	2.3	4.1	292	25	8.0	4.4	4.8
30	3.1	2.3	1.6	2.7	-----	2.5	4.5	242	23	7.7	5.4	4.5
31	3.1	-----	1.6	2.9	-----	2.8	-----	178	-----	7.2	4.2	-----
TOTAL	90.5	77.6	52.8	59.9	56.2	67.6	99.1	2,236.0	2,400	408.1	171.5	118.3
MEAN	2.92	2.59	1.70	1.93	2.01	2.18	3.30	72.1	80.0	13.2	5.53	3.94
MAX	3.6	3.1	2.3	2.9	2.6	2.8	4.5	292	148	22	9.6	6.1
MIN	2.2	1.9	1.1	1.0	1.4	1.4	2.3	5.0	23	7.2	4.0	3.1
AC-FT	180	154	105	119	111	134	197	4,440	4,760	809	340	235

CAL YR 1970 TOTAL 5,060.80 MEAN 13.9 MAX 227 MIN .80 AC-FT 10,040
WTR YR 1971 TOTAL 5,837.60 MEAN 16.0 MAX 292 MIN 1.0 AC-FT 11,580

PEAK DISCHARGE (BASE, 190 CFS)

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

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-29	0130	3.99	387				

YELLOWSTONE RIVER BASIN

85

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 miles downstream from Pass Creek, 6 miles northwest of Mayoworth, and 14 miles downstream from Dullknife Reservoir.

DRAINAGE AREA.--106 sq mi.

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 (from topographic map). Prior to May 12, 1948, at site 300 ft downstream at datum 4.43 ft lower.

AVERAGE DISCHARGE.--31 years, 32.7 cfs (23,690 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 940 cfs May 30 (gage height, 6.31 ft); minimum daily, 15 cfs Jan. 6.

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

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

REVISIONS.--WSP 1209: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	20	20	19	20	18	18	20	450	38	40	25
2	20	20	20	19	20	17	18	20	350	37	42	26
3	20	20	20	18	20	18	18	20	300	37	41	28
4	20	20	19	16	20	19	18	20	300	36	39	32
5	20	22	19	16	19	19	18	23	250	36	38	38
6	20	24	19	15	17	17	19	26	200	34	37	38
7	20	22	20	16	19	17	19	25	200	33	35	38
8	20	21	20	18	20	18	19	25	200	33	35	38
9	20	21	19	19	20	18	18	27	153	33	34	38
10	20	21	19	19	21	18	19	25	160	29	34	38
11	19	21	19	18	21	18	19	23	171	26	33	37
12	20	20	18	18	20	18	18	28	153	26	32	37
13	20	20	18	19	20	19	18	40	144	26	31	37
14	20	20	19	18	21	18	18	56	134	26	31	37
15	19	20	20	19	20	18	18	42	119	26	31	37
16	19	20	19	19	20	18	18	38	94	27	31	37
17	19	20	19	19	20	18	18	33	90	31	31	34
18	19	20	19	19	20	18	18	28	89	47	31	31
19	19	20	17	19	20	18	19	26	81	50	31	30
20	19	19	16	20	20	18	22	25	72	49	31	30
21	20	20	17	20	20	18	21	26	66	49	31	31
22	20	17	18	19	19	18	23	30	61	49	31	30
23	20	16	17	20	19	18	21	28	62	49	31	28
24	20	21	18	20	20	19	21	26	54	49	31	25
25	20	23	18	20	20	19	23	26	49	51	30	22
26	19	22	19	20	19	19	21	26	46	49	29	22
27	20	21	20	20	18	19	20	26	45	47	29	22
28	19	21	20	20	18	19	20	26	44	44	29	22
29	20	21	20	20	-----	19	20	100	43	43	30	21
30	20	21	19	20	-----	19	20	750	40	41	30	21
31	20	-----	19	20	-----	19	-----	550	-----	40	27	-----
TOTAL	610	614	584	582	551	566	580	2,184	4,220	1,191	1,016	930
MEAN	19.7	20.5	18.8	18.8	19.7	18.3	19.3	70.5	141	38.4	32.8	31.0
MAX	20	24	20	20	21	19	23	750	450	51	42	38
MIN	19	16	16	15	17	17	18	20	40	26	27	21
AC-FT	1,210	1,220	1,160	1,150	1,090	1,120	1,150	4,330	8,370	2,360	2,020	1,840

CAL YR 1970 TOTAL 10,655 MEAN 29.2 MAX 140 MIN 16 AC-FT 21,130
WTR YR 1971 TOTAL 13,628 MEAN 37.3 MAX 750 MIN 15 AC-FT 27,030

NOTE.--No gage-height record May 29 to June 8.

YELLOWSTONE RIVER BASIN

06312500 POWDER RIVER NEAR KAYCEE, WYO.

LOCATION.--Lat 43°41'35", long 106°31'48", in NE¼NW¼SW¼ sec.13, T.43 N., R.81 W., Johnson County, on left bank 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.

DRAINAGE AREA.--980 sq mi, approximately.

PERIOD OF RECORD.--October to December 1933, March to August 1934, November 1934, May 1935, April 1938 to June 1940, October 1940 to September 1971 (discontinued). Monthly discharge only for some periods, published in WSP 1309. Prior to October 1960, published as Middle Fork Powder River near Kaycee.

GAGE.--Water-stage recorder. Datum of gage is 4,533.76 ft above mean sea level. Prior to Nov. 16, 1940, nonrecording gage at site 50 ft upstream at same datum.

AVERAGE DISCHARGE.--32 years (1938-39, 1940-71), 129 cfs (93,460 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,290 cfs May 30 (gage height, 7.78 ft); minimum daily, 1.2 cfs July 21.

Period of record: Maximum discharge, 5,230 cfs Aug. 11, 1941 (gage height, 12.57 ft), from rating curve extended above 1,900 cfs on basis of slope-area measurements at gage heights 8.98, 11.17, and 12.57 ft; no flow July 14-16, Aug. 1-11, 14, 1938, Aug. 8, 1953.

Flood of Sept. 30, 1923, reached a stage of about 18.0 ft (discharge not determined) and flood of June 3, 1936, reached a stage of 14.3 ft (discharge not determined).

REMARKS.--Records fair except those for winter period and those below 70 cfs, which are poor. Diversions above station for irrigation of about 14,900 acres, of which about 4,600 acres lies below station. Diversion to Sussex Irrigation Canal 600 ft upstream. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1309: 1934.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	96	110	110	120	100	100	144	1,020	53	1.3	19
2	78	96	100	100	120	100	110	160	816	49	1.3	18
3	82	94	100	90	120	100	113	189	723	50	1.4	16
4	82	96	90	70	110	100	110	228	658	54	1.3	23
5	75	88	100	70	100	100	100	404	604	56	1.5	31
6	71	97	110	70	90	100	111	539	548	51	1.8	34
7	71	104	120	70	80	100	113	499	497	42	1.8	29
8	87	107	127	80	80	110	118	487	444	25	1.9	42
9	87	103	125	80	100	120	120	511	447	13	1.9	54
10	90	97	100	80	110	130	115	516	399	7.5	2.5	46
11	93	103	80	80	120	140	129	474	364	7.1	2.5	34
12	91	94	80	80	120	140	146	494	346	6.7	2.8	30
13	94	102	80	80	120	142	133	560	308	4.1	3.2	28
14	94	97	80	90	120	133	125	700	268	2.2	3.7	26
15	96	96	90	100	120	118	124	831	237	2.0	3.5	27
16	93	91	120	120	120	116	135	775	208	1.7	3.0	39
17	94	97	120	120	120	118	150	789	171	1.6	2.2	54
18	91	96	120	120	120	100	145	658	154	1.3	2.2	61
19	87	96	90	120	120	111	162	559	141	1.3	2.2	59
20	88	95	70	120	110	118	185	462	129	1.3	2.2	65
21	87	95	90	120	100	110	189	393	113	1.2	2.3	78
22	87	80	90	110	100	100	279	409	95	1.3	2.2	80
23	87	60	90	100	100	116	204	409	94	1.5	2.2	73
24	90	110	80	110	100	126	152	363	85	1.3	2.2	71
25	94	140	80	120	100	135	164	355	80	1.3	2.3	68
26	91	120	90	120	100	132	216	360	78	1.6	2.3	63
27	87	120	110	120	100	126	219	373	61	1.8	2.4	54
28	85	120	110	120	100	132	218	466	47	1.4	2.4	50
29	79	126	110	120	-----	124	156	734	49	1.3	2.6	54
30	90	127	110	120	-----	115	145	1,510	52	1.4	3.9	47
31	97	-----	110	120	-----	110	-----	1,470	-----	1.3	15	-----
TOTAL	2,696	3,043	3,082	3,130	3,020	3,622	4,486	16,821	9,236	445.2	84.0	1,373
MEAN	87.0	101	99.4	101	108	117	150	543	308	14.4	2.71	45.8
MAX	97	140	127	120	120	142	279	1,510	1,020	56	15	80
MIN	71	60	70	70	80	100	100	144	47	1.2	1.3	16
AC-FT	5,350	6,040	6,110	6,210	5,990	7,180	8,900	33,360	18,320	883	167	2,720
CAL YR 1970	TOTAL 58,344.40		MEAN 160		MAX 1,650		MIN .96		AC-FT 115,700			
WTR YR 1971	TOTAL 51,038.20		MEAN 140		MAX 1,510		MIN 1.2		AC-FT 101,200			

PEAK DISCHARGE (BASE, 930 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-15	1300	4.81	944	5-30	1700	7.78	2,290
5-28	2230	5.22	1,180				

YELLOWSTONE RIVER BASIN

87

06314500 NORTH FORK CRAZY WOMAN CREEK BELOW SPRING DRAW, NEAR BUFFALO, WYO.

LOCATION.--Lat 44°11'38", long 106°46'47", in NW¼NW¼NW¼ sec.30, T.49 N., R.82 W., Johnson County, on right bank 1.1 miles downstream from Spring Draw and 11 miles southwest of Buffalo.

DRAINAGE AREA.--51.7 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 5,360 ft (from topographic map).

AVERAGE DISCHARGE.--22 years, 18.5 cfs (13,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,270 cfs May 31 (gage height, 6.25 ft); minimum daily, 1.5 cfs Jan. 5-7, 11, 12.
Period of record: Maximum discharge, 1,290 cfs June 9, 1968 (gage height, 6.03 ft); minimum daily, 1.0 cfs Nov. 27, 1952, Dec. 28, 1966, Jan. 6-9, 1967.

REMARKS.--Records poor. Diversions for irrigation of about 50 acres above station. Several diversions above station for irrigation of land below station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	4.9	4.3	3.2	3.6	2.0	4.8	5.1	700	53	17	7.5
2	5.1	4.3	4.3	3.0	3.4	2.0	4.6	7.4	500	52	23	6.7
3	5.1	4.6	4.0	2.8	3.3	2.5	4.4	13	400	51	20	6.5
4	4.9	4.1	3.5	2.0	3.0	2.5	4.3	31	400	48	18	8.6
5	4.9	4.6	3.5	1.5	3.0	2.5	4.1	62	300	45	20	9.2
6	4.8	4.9	4.0	1.5	2.5	2.5	4.1	66	300	42	17	8.1
7	4.5	4.9	4.1	1.5	2.0	2.5	4.3	71	250	40	15	7.1
8	4.9	4.9	4.1	2.0	2.5	2.5	4.0	74	200	39	14	11
9	5.1	4.9	4.1	2.0	3.0	2.6	4.0	81	200	37	14	9.5
10	6.5	4.9	4.0	2.0	3.0	2.6	4.3	79	164	34	14	7.5
11	5.2	4.8	4.0	1.5	3.0	3.1	5.4	74	182	32	13	6.9
12	6.7	5.1	4.0	1.5	3.0	3.4	5.1	80	157	31	13	6.5
13	6.5	4.9	4.0	2.0	3.2	3.7	4.4	102	154	29	12	6.2
14	6.7	4.9	5.0	2.0	3.2	3.6	4.4	125	145	28	11	6.2
15	5.2	4.8	6.0	2.0	3.3	3.4	4.9	105	136	27	11	6.7
16	6.0	4.9	7.0	2.0	3.2	3.3	6.6	96	129	24	10	7.5
17	5.6	4.8	5.4	2.0	3.2	3.3	12	80	129	25	10	7.5
18	5.4	4.8	3.8	2.0	3.2	3.0	16	62	120	26	12	8.3
19	5.8	4.6	3.5	2.0	3.1	3.0	11	52	118	26	11	9.5
20	5.8	4.4	3.5	2.0	3.0	3.6	7.8	56	103	25	10	10
21	6.5	4.3	4.0	2.0	2.5	3.6	5.1	58	97	23	9.2	9.2
22	5.2	3.0	4.0	2.0	3.0	3.5	4.0	104	97	39	8.6	7.5
23	5.4	3.5	3.0	2.0	3.3	3.5	3.8	85	96	41	8.6	8.9
24	6.0	4.5	3.0	2.0	3.6	3.7	5.6	73	85	27	8.6	9.2
25	6.0	5.1	3.5	2.0	3.4	3.8	6.4	87	84	38	8.3	9.2
26	4.4	4.8	4.0	2.0	3.4	4.6	4.4	94	77	41	7.5	8.9
27	4.1	4.4	4.0	2.5	2.5	4.9	3.8	110	74	25	7.1	8.6
28	4.6	4.4	4.4	2.5	2.5	4.4	4.1	131	70	22	7.1	8.1
29	5.1	4.3	4.6	3.0	-----	4.4	4.3	358	64	21	7.5	8.1
30	5.6	4.4	4.3	3.0	-----	4.6	4.4	596	57	19	10	7.8
31	5.2	-----	4.0	3.3	-----	4.8	-----	900	-----	17	9.2	-----
TOTAL	168.6	137.7	128.9	66.8	84.9	103.4	166.4	3,917.5	5,588	1,027	376.7	242.5
MEAN	5.44	4.59	4.16	2.15	3.03	3.34	5.55	126	186	33.1	12.2	8.08
MAX	6.7	5.1	7.0	3.3	3.6	4.9	16	900	700	53	23	11
MIN	4.1	3.0	3.0	1.5	2.0	2.0	3.8	5.1	57	17	7.1	6.2
AC-FT	334	273	256	133	168	205	330	7,770	11,080	2,040	747	481
CAL YR 1970	TOTAL	5,144.0	MEAN	14.1	MAX	115	MIN	1.5	AC-FT	10,200		
WTR YR 1971	TOTAL	12,008.4	MEAN	32.9	MAX	900	MIN	1.5	AC-FT	23,820		

PEAK DISCHARGE (BASE, 160 CFS)

NOTE.--No gage-height record May 31 to June 9.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-31	Unknown	6.25	1,270				

YELLOWSTONE RIVER BASIN

06315500 MIDDLE FORK CRAZY WOMAN CREEK NEAR GREUB, WYO.

LOCATION.--Lat 44°03'29", long 106°48'07", in W $\frac{1}{2}$ sec.11, T.47 N., R.83 W., Johnson County, on left bank 0.3 mile downstream from Poison Creek, 2.4 miles west of Greub, and 21 miles southwest of Buffalo.

DRAINAGE AREA.--82.7 sq mi.

PERIOD OF RECORD.--April 1942 to current year. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 5,190 ft (from topographic map). Prior to Sept. 23, 1943, nonrecording gage at site 430 ft downstream at about the same datum. Water-stage recorder Sept. 23, 1943, to June 6, 1952, at site 30 ft downstream at datum 0.67 ft lower.

AVERAGE DISCHARGE.--29 years, 22.3 cfs (16,160 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 982 cfs May 31 (gage height, 4.37 ft); minimum daily, 4.0 cfs Jan. 6, 7, Feb. 27 to Mar. 9.

Period of record: Maximum discharge, 1,590 cfs May 2, 1947 (gage height, 5.64 ft, site and datum then in use), from rating curve extended above 110 cfs; minimum daily, 1.7 cfs Aug. 31, 1966.

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

REVISIONS (WATER YEARS).--WRD Wyo. 1970: 1947, 1948-50(P), 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	6.4	5.8	4.8	5.7	4.0	8.0	22	450	40	16	8.1
2	6.6	5.7	5.3	4.8	5.8	4.0	8.0	31	400	38	26	6.8
3	6.6	6.8	5.2	4.7	5.5	4.0	8.0	50	350	38	33	6.8
4	6.3	5.9	5.8	4.5	5.3	4.0	8.0	77	300	37	23	9.9
5	6.3	6.6	5.6	4.2	5.2	4.0	8.0	113	250	36	21	11
6	6.6	6.6	5.8	4.0	5.0	4.0	9.0	89	250	32	18	9.2
7	7.2	6.7	5.8	4.0	4.7	4.0	10	81	200	30	15	8.1
8	6.9	6.8	6.0	4.2	4.9	4.0	11	81	200	30	14	12
9	7.0	6.4	6.1	4.3	4.8	4.0	12	77	200	28	15	11
10	8.1	7.0	5.8	4.3	4.9	4.8	15	62	156	27	15	8.5
11	7.4	6.0	6.0	4.4	4.8	4.8	15	53	150	25	13	7.4
12	8.7	7.3	5.4	4.6	4.8	5.0	15	62	127	24	12	6.9
13	8.7	6.6	5.4	4.8	5.0	5.0	15	73	122	23	12	6.5
14	8.9	6.4	5.7	4.8	5.1	5.0	15	96	119	22	11	6.6
15	7.2	6.3	5.7	4.8	5.2	5.0	27	86	111	21	10	7.1
16	7.9	6.3	5.6	4.8	5.1	5.0	27	77	103	20	9.7	8.7
17	7.7	6.3	5.6	4.8	5.0	5.0	28	69	94	19	10	10
18	7.3	6.3	5.2	4.8	5.1	5.0	29	59	88	22	11	11
19	7.8	6.0	5.2	4.9	5.0	5.0	21	54	83	23	10	14
20	7.2	6.1	5.3	5.2	4.9	5.0	15	53	75	19	9.5	14
21	7.6	5.7	5.2	5.1	4.7	5.0	15	57	70	18	8.7	13
22	6.9	4.5	5.1	5.0	4.9	5.0	13	92	66	32	7.9	11
23	7.1	5.0	4.9	4.9	4.9	5.0	14	74	61	41	8.1	11
24	7.6	6.3	4.8	4.8	5.0	5.0	19	60	57	24	8.1	10
25	7.2	6.7	4.8	4.8	5.0	6.0	17	64	54	30	7.8	9.9
26	5.6	6.3	4.8	4.8	5.0	7.0	13	73	50	35	7.6	9.5
27	6.3	6.0	4.8	4.8	4.0	8.0	13	80	50	23	7.6	9.4
28	6.5	5.7	4.8	4.8	4.0	8.0	12	90	49	20	7.8	9.6
29	6.7	5.6	4.6	4.9	-----	8.0	14	200	47	20	8.3	9.7
30	7.3	5.9	4.6	5.0	-----	8.0	17	400	43	18	11	9.1
31	6.9	-----	4.8	5.5	-----	8.0	-----	560	-----	16	10	-----
TOTAL	222.9	186.2	165.5	146.1	139.3	163.6	451.0	3,115	4,375	831	397.1	285.8
MEAN	7.19	6.21	5.34	4.71	4.98	5.28	15.0	100	146	26.8	12.8	9.53
MAX	8.9	7.3	6.1	5.5	5.8	8.0	29	560	450	41	33	14
MIN	5.6	4.5	4.6	4.0	4.0	4.0	8.0	22	43	16	7.6	6.5
AC-FT	442	369	328	290	276	325	895	6,180	8,680	1,650	788	567

CAL YR 1970 TOTAL 5,718.1 MEAN 15.7 MAX 148 MIN 2.2 AC-FT 11,340
WTR YR 1971 TOTAL 10,478.5 MEAN 28.7 MAX 560 MIN 4.0 AC-FT 20,780

PEAK DISCHARGE (BASE, 140 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-5	2100	2.25	167	5-31	Unknown	4.37	982

NOTE.--No gage-height record Mar. 12 to Apr. 14, May 28 to June 9.

YELLOWSTONE RIVER BASIN

89

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 mile upstream from bridge on county road, 0.5 mile southwest of Arvada, and 0.8 mile upstream from Wild Horse Creek.

DRAINAGE AREA.--6,050 sq mi, 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 above mean sea level. Prior to Oct. 24, 1938, nonrecording gage at bridge 0.5 mile downstream at datum 0.14 ft lower.

AVERAGE DISCHARGE.--40 years (1930-33, 1934-71), 271 cfs (196,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,480 cfs May 6 (gage height, 8.20 ft, from floodmarks); no flow Aug. 12 to Sept. 14. Period of record: Maximum discharge, about 100,000 cfs Sept. 29, 1923 (gage height, 23.7 ft, from floodmarks, site and datum then in use), from rating curve extended above 20,000 cfs; no flow at times most years.

REMARKS.--Records poor. Numerous small reservoirs and diversions for irrigation of about 29,000 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	112	180	74	80	160	350	264	3,920	231	22	0
2	22	106	190	70	70	160	300	195	2,740	242	14	0
3	22	118	180	67	65	200	250	185	2,180	210	11	0
4	26	154	170	63	66	190	220	175	1,530	180	5.7	0
5	30	162	190	60	66	170	200	180	1,380	150	9.0	0
6	35	146	190	56	66	160	200	2,000	1,350	124	6.3	0
7	50	154	190	70	60	160	220	2,670	1,130	124	4.2	0
8	40	142	190	80	70	160	220	1,190	1,090	115	3.6	0
9	60	146	180	80	90	200	210	800	993	118	1.7	0
10	70	175	140	75	110	340	220	623	1,090	115	.82	0
11	82	170	120	72	130	500	210	560	916	95	.36	0
12	95	118	100	60	150	600	242	560	993	85	0	0
13	106	118	90	52	200	1,000	231	560	971	65	0	0
14	106	118	75	52	400	1,100	242	552	872	54	0	0
15	92	112	75	55	350	900	226	496	800	49	0	.01
16	92	124	80	58	300	750	220	730	700	48	0	.64
17	98	146	80	62	270	500	236	780	614	37	0	1.3
18	103	138	70	64	230	400	226	800	520	30	0	2.8
19	103	146	55	68	190	450	231	800	442	27	0	6.1
20	109	140	55	70	170	480	264	690	349	26	0	12
21	121	130	60	70	170	440	270	560	323	23	0	20
22	109	90	60	72	150	370	370	560	299	23	0	39
23	100	60	55	75	160	480	512	512	317	20	0	57
24	100	80	50	75	200	800	605	578	323	19	0	67
25	109	130	55	76	190	1,200	391	578	370	20	0	71
26	127	120	60	80	190	1,500	281	536	329	26	0	67
27	127	110	64	84	190	2,000	264	496	329	22	0	63
28	124	140	66	100	180	1,100	311	504	329	23	0	61
29	150	160	68	100	-----	900	342	938	391	25	0	61
30	109	170	72	90	-----	700	363	3,000	287	22	0	67
31	109	-----	76	90	-----	500	-----	4,220	-----	26	0	-----
TOTAL	2,648	3,935	3,286	2,220	4,563	18,570	8,427	27,292	27,877	2,374	82.68	595.85
MEAN	85.4	131	106	71.6	163	599	281	880	929	76.6	2.67	19.9
MAX	150	175	190	100	400	2,000	605	4,220	3,920	242	22	71
MIN	22	60	50	52	60	160	200	175	287	19	0	0
AC-FT	5,250	7,810	6,520	4,400	9,050	36,830	16,710	54,130	55,290	4,710	164	1,180
CAL YR 1970	TOTAL	98,445.47	MEAN	270	MAX	6,860	MIN	0	AC-FT	195,300		
WTR YR 1971	TOTAL	101,870.53	MEAN	279	MAX	4,220	MIN	0	AC-FT	202,100		

PEAK DISCHARGE (BASE, 3,800 CFS)

NOTE.--No gage-height record Jan. 12 to Apr. 6.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-6	a 2100	8.20	7,480	5-31	Unknown a 7.10	a 5,340	

a About.

YELLOWSTONE RIVER BASIN

06318500 CLEAR CREEK NEAR BUFFALO, WYO.

LOCATION.--Lat 44°20'00", long 106°46'10", in sec.6, T.50 N., R.82 W., Johnson County, on left bank at mouth of canyon, 500 ft up-stream from abandoned Pacific Power & Light Company powerplant, and 4 miles west of Buffalo.

DRAINAGE AREA.--120 sq mi, 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 above mean sea level. See WSP 1916 for history of changes prior to 1961.

AVERAGE DISCHARGE.--45 years (1897-99, 1917-27, 1938-71), 62.3 cfs (45,140 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,650 cfs May 30 (gage height, 5.10 ft); minimum daily, 3.3 cfs Feb. 7.

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

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 330 acres, of which about 320 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	9.8	8.8	6.5	5.4	3.7	5.7	42	416	164	58	35
2	14	5.6	8.8	6.5	5.4	3.8	5.6	70	391	162	56	32
3	14	6.0	8.5	6.2	5.0	3.8	5.4	102	360	155	57	32
4	14	8.0	8.5	5.8	4.4	3.8	5.4	96	391	151	56	36
5	13	11	9.0	5.4	4.0	3.7	5.6	90	335	134	72	34
6	12	12	8.5	4.9	3.6	3.7	5.8	89	314	125	62	32
7	13	11	8.5	4.7	3.3	3.7	6.2	94	301	126	56	32
8	12	10	8.3	4.7	3.5	3.8	6.4	90	301	124	55	38
9	12	9.6	8.0	5.4	3.6	3.9	6.8	92	449	119	55	35
10	14	8.0	8.0	5.2	4.0	3.9	7.0	93	530	110	53	32
11	12	7.0	8.0	5.2	4.7	3.8	7.4	95	609	110	51	30
12	13	11	8.0	5.0	5.0	3.6	6.8	116	555	115	49	29
13	13	9.6	8.0	5.0	5.0	3.9	6.8	149	565	110	47	28
14	13	10	8.0	5.2	4.7	4.1	7.4	194	570	109	45	27
15	11	10	8.0	5.4	4.7	4.5	10	204	540	103	42	28
16	14	11	8.0	5.6	4.5	4.5	11	202	515	93	41	30
17	12	10	8.0	5.8	4.9	4.1	12	174	555	93	41	30
18	12	10	7.6	5.8	4.7	4.7	13	139	545	97	45	30
19	12	8.5	7.2	6.0	4.5	4.9	12	109	540	98	45	31
20	12	9.0	7.0	5.8	4.1	4.7	13	99	428	85	41	31
21	13	8.8	7.2	5.6	4.0	4.5	14	101	470	83	39	30
22	11	8.0	7.2	5.6	4.0	4.7	16	168	492	94	38	28
23	12	7.4	6.8	5.8	4.2	4.8	23	141	530	101	36	28
24	12	8.8	5.6	5.6	4.0	5.0	25	142	474	87	36	27
25	12	10	5.6	5.6	4.0	5.2	20	172	457	122	34	27
26	5.6	9.0	6.2	5.6	4.0	5.4	19	196	395	130	33	26
27	5.8	9.1	5.8	5.6	3.6	5.5	17	249	360	98	32	25
28	10	8.5	5.8	5.6	3.6	5.6	18	349	288	84	32	25
29	12	8.5	6.7	5.4	-----	5.8	19	1,020	243	78	33	24
30	14	9.1	7.2	5.4	-----	6.0	21	806	187	68	45	24
31	11	-----	6.5	5.4	-----	5.8	-----	555	-----	62	39	-----
TOTAL	375.4	274.3	233.3	171.3	120.4	138.9	351.3	6,238	13,106	7,200	1,426	896
MEAN	12.1	9.14	7.53	5.53	4.30	4.48	11.7	201	437	260	46.0	29.9
MAX	15	12	9.0	6.5	5.4	6.0	25	1,020	609	106	72	38
MIN	5.6	5.6	5.6	4.7	3.3	3.6	5.4	42	187	62	32	24
AC-FT	745	544	463	340	255	276	697	12,370	26,000	6,720	2,830	1,780
CAL YR 1970	TOTAL 15,027.4	MEAN 41.2	MAX 46.0	MIN 1.0	AC-FT 29,810							
WTR YR 1971	TOTAL 26,720.9	MEAN 73.2	MAX 1,030	MIN 3.3	AC-FT 53,000							

PEAK DISCHARGE (BASE, 380 CFS)

NOTE.--No gage-height record Mar. 22 to Apr. 23.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-30	1615	5.10	1,650	6-11	0800	3.97	693

91

LOCATION.--Lat 44°27'22", long 106°52'42", in NW¹/₄NW¹/₄NW¹/₄ sec.29, T.52 N., R.83 W., Johnson County, on left bank 300 ft downstream from confluence of North and South Forks and 11.5 miles northwest of Buffalo.

PERIOD OF RECORD.--April to August 1941, April to December 1942, May 1943 to November 1944, April 1945 to current year. Monthly discharge only for some periods, published in WSP 1309.

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

EXTREMES.--Current year: Maximum discharge, 1,650 cfs May 30 (gage height, 7.76 ft), from rating curve extended above 450 cfs on basis of slope-area measurement of peak flow; minimum daily, 2.6 cfs Jan. 12.

Period of record: Maximum discharge, 1,860 cfs June 15, 1963 (gauge height, 7.98 ft), from rating curve extended above 450 cfs on basis of slope-area measurement of peak flow; minimum daily, 0.5 cfs Sept. 19, 1954.
Maximum stage known, about 8.05 ft, probably during 1944.

REMARKS.--Records good except those for winter period, which are poor. Water is imported into drainage basin above station from South Piney Creek. Diversions for irrigation of about 250 acres above station.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	6.1	3.6	3.0	3.3	3.6	4.5	15	373	59	47	36
2	7.0	6.3	3.6	2.9	3.3	3.5	4.1	22	306	58	46	33
3	6.7	5.6	3.5	2.9	3.3	3.5	3.9	30	278	59	42	26
4	6.5	5.4	3.3	2.9	3.1	3.5	3.9	43	268	68	41	29
5	6.3	6.0	3.3	2.8	3.3	3.5	4.0	57	225	61	43	29
6	6.7	6.1	3.3	2.7	3.3	3.5	4.2	54	212	58	53	28
7	7.4	6.0	3.3	2.9	3.0	3.5	4.5	50	200	58	53	28
8	7.0	6.0	3.3	3.0	3.2	3.5	4.8	52	196	55	53	29
9	6.3	6.0	3.3	2.9	3.5	3.5	5.2	60	235	53	53	28
10	7.6	6.0	3.5	2.9	4.1	3.7	6.6	62	232	50	52	25
11	7.0	5.6	3.3	2.8	4.1	4.1	7.0	61	248	50	48	24
12	7.4	6.0	3.3	2.6	4.3	4.3	6.2	67	212	50	49	23
13	7.9	5.8	3.3	2.8	4.6	4.6	5.6	85	222	45	51	22
14	6.7	5.4	3.3	2.9	5.0	4.2	5.8	112	208	33	49	23
15	5.8	5.2	3.2	3.1	5.0	3.8	7.0	106	194	32	50	25
16	7.6	5.6	3.2	3.2	4.9	3.8	9.5	101	192	43	50	24
17	6.5	5.6	3.2	3.2	4.4	3.7	11	83	188	45	50	28
18	6.5	5.4	3.2	3.2	4.2	3.7	13	68	178	56	51	28
19	7.2	5.2	3.1	3.3	4.1	3.7	11	58	162	56	53	28
20	6.6	5.2	3.1	3.4	4.0	4.1	11	56	137	52	53	27
21	6.7	4.8	3.1	3.4	4.0	4.0	11	60	135	53	51	24
22	6.3	4.0	3.1	3.3	3.8	3.8	10	94	146	58	52	31
23	6.3	3.5	3.0	3.3	3.8	3.7	10	76	142	66	50	30
24	6.7	4.2	2.8	3.2	3.8	4.0	13	71	127	60	44	26
25	6.5	5.0	3.0	3.2	3.7	4.4	16	87	122	78	42	26
26	4.2	4.2	3.0	3.2	3.8	4.8	12	98	105	71	38	26
27	6.5	3.8	3.0	3.4	3.7	5.0	10	131	101	63	36	26
28	7.4	3.8	3.0	3.6	3.7	4.7	9.9	170	84	60	37	27
29	6.5	3.7	3.1	3.7	-----	4.4	11	725	74	58	38	26
30	6.7	3.8	3.1	3.6	-----	5.4	11	720	64	50	46	26
31	6.5	-----	3.1	3.4	-----	5.2	-----	486	-----	49	39	-----
TOTAL	208.2	155.3	99.5	96.7	108.3	124.7	246.7	3,960	5,566	1,707	1,460	811
MEAN	6.72	5.18	3.21	3.12	3.87	4.02	8.22	128	186	55.1	47.1	27.0
MAX	7.9	6.3	3.6	3.7	5.0	5.4	16	725	373	78	53	36
MIN	4.2	3.5	2.8	2.6	3.0	3.5	3.9	15	64	32	36	22
AC-FT	413	308	197	192	215	247	489	7,850	11,040	3,390	2,900	1,610
CAL YR 1970	TOTAL	15,955.8	MEAN	43.7	MAX	460	MIN	2.8	AC-FT	31,650		
WTR YR 1971	TOTAL	14,543.4	MEAN	39.8	MAX	725	MIN	2.6	AC-FT	28,850		

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 downstream from Willow Park Dam, 1.4 miles upstream from Kearny Creek, and 10 miles southwest of Story.

DRAINAGE AREA.--33.6 sq mi.

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

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

AVERAGE DISCHARGE.--22 years (1947-57, 1959-71), 42.4 cfs (30,720 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 618 cfs about June 19 (gage height, 4.45 ft); minimum daily, 5.0 cfs Dec. 31 to Jan. 8.

Period of record: Maximum discharge, 1,620 cfs June 15, 1963 (gage height, 5.68 ft, present datum), from rating curve extended above 360 cfs on basis of slope-area measurement of peak flow; minimum daily, 0.30 cfs 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 cfs Mar. 1 to Apr. 5, 1955, but may have been less during years of no winter records.

REMARKS.--Records good 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) and Willow Park Reservoir (capacity, 4,457 acre-ft). 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.

REVISIONS (WATER YEARS).--WSP 1309: 1949(M). WSP 1709: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	7.6	5.8	5.0	6.0	7.1	7.6	8.2	9.7	119	108	76
2	7.4	7.6	5.6	5.0	6.0	7.1	7.6	8.2	10	109	105	71
3	7.4	7.6	5.4	5.0	6.0	7.1	7.6	8.2	10	112	104	68
4	7.4	7.6	5.4	5.0	6.0	7.4	7.6	8.2	12	118	103	76
5	7.4	7.6	5.4	5.0	6.0	7.4	7.6	8.2	14	115	108	81
6	7.4	7.6	5.4	5.0	6.0	7.4	7.6	8.2	20	105	119	81
7	7.6	7.6	5.4	5.0	6.0	7.4	7.6	8.2	30	102	118	72
8	7.6	7.6	5.4	5.0	6.0	7.4	7.6	8.2	50	103	130	60
9	7.6	7.6	5.4	5.2	6.0	7.6	7.6	8.2	80	103	134	57
10	7.6	7.6	5.4	5.2	6.2	7.6	7.8	8.2	100	94	130	54
11	7.6	7.6	5.4	5.2	6.4	7.6	8.0	8.2	130	94	125	46
12	7.6	7.6	5.4	5.2	6.5	7.6	8.2	8.2	130	95	122	43
13	7.6	7.6	5.2	5.2	6.5	7.6	8.2	8.2	150	105	122	43
14	7.6	7.6	5.2	5.2	6.5	7.6	8.2	8.2	175	107	128	40
15	7.6	7.4	5.2	5.2	6.5	7.6	8.2	8.2	200	94	134	40
16	7.6	7.4	5.2	5.4	6.5	7.6	8.2	8.2	250	83	132	40
17	7.6	7.4	5.2	5.4	6.5	7.6	8.2	8.2	290	99	130	42
18	7.6	7.4	5.2	5.4	6.5	7.6	8.2	8.2	400	115	130	43
19	7.9	7.4	5.2	5.4	6.5	7.6	8.2	8.2	550	108	128	45
20	7.9	7.2	5.2	5.4	6.5	7.6	8.2	8.2	475	108	126	42
21	7.9	7.0	5.2	5.4	6.5	7.6	8.2	8.2	425	107	118	46
22	7.6	6.8	5.2	5.4	6.5	7.6	8.2	8.2	425	114	115	55
23	7.6	6.6	5.2	5.4	6.8	7.6	8.2	8.2	410	130	111	53
24	7.6	6.4	5.2	5.4	6.8	7.6	8.2	8.2	400	130	102	52
25	7.6	6.4	5.2	5.4	6.8	7.6	8.2	8.2	350	128	93	52
26	7.6	6.2	5.2	5.6	6.8	7.6	8.2	8.2	299	154	80	52
27	7.6	6.2	5.2	5.6	7.1	7.6	8.2	8.2	275	168	74	52
28	7.6	6.0	5.2	5.6	7.1	7.6	8.2	8.2	237	157	75	45
29	7.6	6.0	5.2	5.6	-----	7.6	8.2	8.7	194	136	76	40
30	7.6	6.0	5.2	5.8	-----	7.6	8.2	9.4	151	111	80	38
31	7.6	-----	5.0	5.8	-----	7.6	-----	9.4	-----	108	81	-----
TOTAL	235.3	214.2	164.0	164.4	179.5	233.1	240.0	257.1	6,251.7	3,531	3,441	1,605
MEAN	7.59	7.14	5.29	5.30	6.41	7.52	8.00	8.29	208	114	111	53.5
MAX	7.9	7.6	5.8	5.8	7.1	7.6	8.2	9.4	550	168	134	81
MIN	7.4	6.0	5.0	5.0	6.0	7.1	7.6	8.2	9.7	83	74	38
AC-FT	467	425	325	326	356	462	476	510	12,400	7,000	6,830	3,180

CAL YR 1970 TOTAL 15,109.3 MEAN 41.4 MAX 350 MIN 4.7 AC-FT 29,970
WTR YR 1971 TOTAL 16,516.3 MEAN 45.3 MAX 550 MIN 5.0 AC-FT 32,760

NOTE.--No gage-height record Jan. 5 to Feb. 12, June 4-25.

YELLOWSTONE RIVER BASIN

93

06321000 SOUTH PINEY CREEK NEAR STORY, WYO.

LOCATION.--Lat 44°33'26", long 106°56'11", in NW¼NE¼ sec.23, T.53 N., R.84 W., Johnson County, Bighorn National Forest, on left bank 2.3 miles southwest of Story and 3.3 miles upstream from confluence with North Piney Creek.

DRAINAGE AREA.--69.4 sq mi.

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

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

AVERAGE DISCHARGE.--20 years, 75.3 cfs (54,550 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,120 cfs June 19 (gage height, 3.99 ft); minimum daily, 14 cfs Jan. 6, 7.

Period of record: Maximum discharge, 2,090 cfs June 15, 1963 (gage height, 4.37 ft, site and datum then in use), from rating curve extended above 1,050 cfs; maximum gage height, 5.30 ft June 15, 1963 (backwater from slide, site and datum then in use); minimum daily discharge, 0.40 cfs Nov. 14, 1964.

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

REVISIONS.--WSP 1916: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	23	20	17	17	16	17	21	180	222	155	92
2	25	22	20	16	17	15	17	23	170	208	152	92
3	25	23	22	16	17	16	17	27	172	211	152	90
4	25	22	22	15	17	17	17	33	166	211	152	110
5	24	23	22	15	16	16	17	39	158	208	152	100
6	23	22	25	14	15	16	17	40	194	200	148	86
7	22	22	24	14	16	17	18	40	218	194	148	88
8	22	23	23	15	17	17	19	40	229	187	155	92
9	23	22	22	16	18	18	20	40	280	175	166	76
10	23	23	22	16	19	18	21	45	315	172	169	69
11	23	21	22	15	19	19	19	44	357	166	169	62
12	24	23	19	15	19	20	19	48	339	166	169	55
13	23	22	18	15	19	19	18	54	375	172	169	53
14	22	22	18	15	19	19	18	58	488	197	169	49
15	22	22	19	15	19	18	19	64	530	187	169	49
16	23	22	18	16	18	18	20	62	580	166	169	49
17	23	22	17	16	18	18	19	60	590	166	169	47
18	23	22	17	16	18	18	19	56	707	169	168	49
19	23	21	17	17	17	18	19	54	912	169	168	49
20	23	21	17	17	16	18	19	52	848	166	167	50
21	23	21	17	16	15	19	19	50	764	166	160	53
22	23	19	16	15	16	18	19	54	788	166	155	55
23	23	16	15	16	17	18	19	52	788	175	152	55
24	24	17	15	17	18	18	21	50	740	175	150	56
25	23	18	15	17	19	19	20	60	718	175	140	56
26	20	16	16	16	18	19	20	80	600	194	130	56
27	20	16	17	17	17	18	20	100	504	225	120	56
28	21	17	17	18	17	17	20	150	410	218	100	55
29	24	19	17	19	-----	17	20	250	351	194	98	45
30	24	21	18	18	-----	17	20	230	290	160	110	28
31	23	-----	18	17	-----	18	-----	200	-----	155	102	-----
TOTAL	714	623	585	497	488	549	567	2,176	13,761	5,715	4,652	1,922
MEAN	23.0	20.8	18.9	16.0	17.4	17.7	18.9	70.2	459	184	150	64.1
MAX	25	23	25	19	19	20	21	250	912	225	169	110
MIN	20	16	15	14	15	15	17	21	158	155	98	28
AC-FT	1,420	1,240	1,160	986	968	1,090	1,120	4,320	27,290	11,340	9,230	3,810

CAL YR 1970 TOTAL 30,893 MEAN 84.6 MAX 516 MIN 11 AC-FT 61,280
WTR YR 1971 TOTAL 32,249 MEAN 88.4 MAX 912 MIN 14 AC-FT 63,970

NOTE.--No gage-height record Dec. 13 to Mar. 18, Apr. 14 to June 2.

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 miles west of Story and 3.2 miles upstream from confluence with South Piney Creek.

DRAINAGE AREA.--36.8 sq mi.

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

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

AVERAGE DISCHARGE.--20 years, 37.2 cfs (26,950 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 815 cfs May 30 (gage height, 3.73 ft); minimum daily, 4.4 cfs Jan. 6, 7.
Period of record: Maximum discharge, 1,820 cfs June 15, 1963 (gage height, 5.04 ft) from rating curve extended above 1,000 cfs; minimum daily, 3.0 cfs Mar. 12, 1956, Jan. 20, 21, 24, 25, Mar. 3, 1966.

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

REVISIONS.--WSP 1916: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	8.0	7.3	4.9	5.4	5.4	8.0	37	363	41	13	9.0
2	9.3	8.2	7.2	4.8	5.0	5.4	8.0	49	324	39	13	8.2
3	9.0	7.7	6.9	4.7	4.9	5.4	6.7	63	296	39	12	8.8
4	8.8	7.7	6.6	4.6	5.0	5.4	6.4	87	287	37	12	13
5	8.5	8.2	6.6	4.5	5.2	5.4	7.2	114	249	33	11	11
6	10	8.2	6.7	4.4	5.0	5.2	7.4	120	232	31	11	9.0
7	9.6	8.2	6.7	4.4	5.0	5.3	8.9	127	216	29	11	10
8	9.5	8.5	6.7	4.5	5.2	5.3	8.8	136	208	28	11	12
9	8.9	8.2	6.5	4.6	5.2	5.2	10	139	230	27	12	9.3
10	10	8.5	7.2	4.6	5.2	5.0	16	135	221	25	10	8.5
11	9.5	8.0	6.4	4.7	5.1	5.1	17	139	231	24	9.9	8.2
12	12	9.0	6.4	4.8	5.1	5.2	14	154	199	23	9.6	7.7
13	10	8.5	6.3	4.8	5.2	5.2	13	182	212	21	9.3	7.7
14	9.9	8.2	6.3	4.8	5.2	4.8	14	222	198	20	8.9	7.5
15	9.3	7.7	6.2	4.8	5.1	4.6	19	226	179	20	8.7	8.5
16	11	8.8	6.1	4.8	5.0	4.6	20	217	166	19	8.6	9.3
17	9.9	8.5	6.0	4.8	5.0	4.5	22	189	162	18	9.3	11
18	9.9	8.2	5.8	4.7	5.0	5.1	27	160	153	18	10	9.3
19	11	8.0	5.7	4.7	5.0	4.8	24	142	136	17	9.1	10
20	9.9	8.2	5.6	4.6	5.0	4.9	21	129	120	17	8.5	12
21	10	7.2	5.5	4.5	5.0	4.9	22	124	111	17	8.2	11
22	9.3	6.6	5.5	4.7	5.2	4.8	26	148	104	17	8.0	10
23	9.3	6.0	5.4	4.6	5.2	4.8	29	141	95	16	7.8	11
24	9.6	7.5	5.4	4.5	5.2	4.7	33	143	84	16	7.7	12
25	8.2	9.0	5.3	4.5	5.4	4.8	34	161	77	20	7.6	12
26	7.0	8.3	5.3	4.6	5.4	5.8	30	183	67	19	7.4	12
27	8.2	7.8	5.3	4.6	5.4	7.1	28	217	63	16	7.3	10
28	8.8	7.6	5.2	4.8	5.4	6.6	27	280	58	16	7.3	11
29	9.0	7.4	5.2	4.9	-----	6.5	28	604	51	15	7.8	11
30	9.0	7.7	5.1	4.8	-----	7.8	29	565	45	14	14	9.6
31	8.5	-----	5.1	5.0	-----	9.4	-----	417	-----	13	10	-----
TOTAL	292.9	239.6	187.5	145.0	144.0	169.0	564.4	5,750	5,137	705	301.0	299.6
MEAN	9.45	7.99	6.05	4.68	5.14	5.45	18.8	185	171	22.7	9.71	9.99
MAX	12	9.0	7.3	5.0	5.4	9.4	34	604	363	41	14	13
MIN	7.0	6.0	5.1	4.4	4.9	4.5	6.4	37	45	13	7.3	7.5
AC-FT	581	475	372	288	286	335	1,120	11,410	10,190	1,400	597	594
CAL YR 1970	TOTAL	18,223.2	MEAN	49.9	MAX	438	MIN	3.9	AC-FT	36,150		
WTR YR 1971	TOTAL	13,935.0	MEAN	38.2	MAX	604	MIN	4.4	AC-FT	27,640		

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-15	1900	2.50	261	5-30	1500	3.73	815

YELLOWSTONE RIVER BASIN

95

06323000 PINEY CREEK AT KEARNY, WYO.

LOCATION.--Lat 44°32'10", long 106°49'20", in sec.26, T.53 N., R.83 W., Johnson County, on right bank 1,000 ft south of Kearny and 0.5 mile upstream from Little Piney Creek.

DRAINAGE AREA.--118 sq mi.

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 above mean sea level. Sept. 6, 1902, to June 30, 1906, nonrecording gage at site 50 ft 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 upstream at present datum.

AVERAGE DISCHARGE.--31 years (1940-71), 85.0 cfs (61,580 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,210 cfs May 30 (gage height, 4.49 ft); minimum daily, 5.8 cfs Sept. 14, 15.
Period of record: Maximum discharge, 3,410 cfs June 15, 1963 (gage height, 6.05 ft), from rating curve extended above 1,800 cfs; minimum daily, 2 cfs Oct. 10, 1922.

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

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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	19	33	33	35	23	28	92	515	114	9.0	9.5
2	7.0	21	32	30	34	23	28	106	460	93	9.0	8.6
3	6.5	32	31	27	33	24	28	127	408	82	12	9.0
4	6.1	33	31	26	31	26	28	160	408	77	12	10
5	6.0	36	32	22	29	25	29	203	352	75	12	9.5
6	7.5	34	35	20	27	24	30	200	376	69	11	9.5
7	10	35	35	22	26	25	32	203	388	52	16	9.5
8	8.9	39	34	24	29	26	34	212	348	34	26	10
9	9.0	38	34	26	31	27	40	218	450	21	32	9.5
10	12	42	33	27	33	28	45	206	480	18	26	8.3
11	8.5	40	33	28	33	29	52	209	544	16	26	7.6
12	13	43	32	28	33	29	47	218	495	16	24	6.9
13	15	42	32	26	33	29	45	252	532	30	19	6.6
14	11	40	34	25	33	28	48	308	658	53	16	5.8
15	9.0	43	35	25	33	27	58	312	688	48	25	5.8
16	13	42	35	26	32	27	62	300	664	23	19	6.2
17	10	40	35	27	31	27	66	265	688	21	20	6.9
18	10	40	34	27	30	27	82	228	778	21	21	6.9
19	10	37	33	28	30	27	84	203	834	21	18	8.0
20	9.4	40	33	28	29	28	84	183	700	16	17	22
21	9.4	37	33	26	28	29	96	175	640	19	15	24
22	8.6	33	32	24	30	28	93	197	634	16	14	24
23	10	29	30	23	32	27	88	172	652	20	12	22
24	12	31	31	26	34	28	97	160	592	17	10	23
25	15	35	32	27	35	29	127	172	532	20	9.5	22
26	12	34	34	28	30	29	99	197	455	26	9.5	23
27	18	31	36	30	26	28	90	243	384	44	8.6	23
28	18	31	37	32	24	27	85	316	300	38	7.6	25
29	19	32	37	34	-----	28	86	778	224	33	8.0	16
30	22	33	37	35	-----	28	85	772	170	15	20	7.6
31	20	-----	38	36	-----	30	-----	634	-----	10	10	-----
TOTAL	352.7	1,062	1,043	846	864	840	1,896	8,021	15,349	1,158	494.2	385.7
MEAN	11.4	35.4	33.6	27.3	30.9	27.1	63.2	259	512	37.4	15.9	12.9
MAX	22	43	38	36	35	30	127	778	834	114	32	25
MIN	6.0	19	30	20	24	23	28	92	170	10	7.6	5.8
AC-FT	700	2,110	2,070	1,680	1,710	1,670	3,760	15,910	30,440	2,300	980	765

CAL YR 1970 TOTAL 40,975.2 MEAN 112 MAX 904 MIN 5.7 AC-FT 81,270
WTR YR 1971 TOTAL 32,311.6 MEAN 88.5 MAX 834 MIN 5.8 AC-FT 64,090

NOTE.--No gage-height record Feb. 21 to Apr. 22.

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 upstream from bridge on U.S. Highways 14 and 16, and 1 mile upstream from mouth.

DRAINAGE AREA.--267 sq mi.

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

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

AVERAGE DISCHARGE.--21 years (1950-71), 81.8 cfs (59,260 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,080 cfs May 31 (gage height, 4.97 ft, in gage well, 5.3 ft, from floodmarks); minimum daily, 0.82 cfs July 11.

Period of record: Maximum discharge, 3,570 cfs June 16, 1963 (gage height, 7.33 ft); minimum daily, 0.60 cfs Oct. 12-26, 1955, Sept. 28, Oct. 1, 2, 1956.

Maximum stage known, 10.9 ft (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 winter period and period of no gage-height record, which are poor. Some regulation by Cloud Peak Reservoir (capacity, 3,385 acre-ft), Willow Park Reservoir (capacity, 4,457 acre-ft), Kearny Lake (capacity, 1,860 acre-ft), and Lake De Smet (capacity, 32,250 acre-ft). Diversion above station from South Piney Creek into Rock Creek basin for irrigation. Diversions for irrigation of about 9,800 acres above station.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	28	52	43	60	45	72	130	554	86	48	67
2	14	24	50	40	62	46	70	139	498	74	48	67
3	14	25	50	36	56	46	70	160	432	59	52	66
4	14	34	50	34	52	46	72	193	415	50	64	69
5	14	38	52	32	46	48	74	203	394	49	67	69
6	11	40	56	31	40	50	75	118	387	46	62	67
7	9.7	36	58	33	36	52	77	94	394	40	61	64
8	9.7	43	54	36	38	54	80	94	366	24	66	62
9	9.7	42	52	40	41	58	80	94	390	10	70	61
10	11	43	52	40	47	61	85	94	401	2.2	69	52
11	14	48	50	40	50	66	82	95	404	.82	69	49
12	14	46	48	39	50	70	82	95	384	4.8	67	48
13	17	55	49	38	52	72	80	100	384	22	67	46
14	12	50	50	37	52	67	86	106	384	70	66	45
15	9.7	45	52	36	52	64	94	110	458	81	69	41
16	7.5	50	50	39	51	62	96	110	656	69	69	42
17	9.1	46	48	39	49	62	97	111	649	52	74	42
18	8.0	45	48	39	48	60	101	111	714	48	95	45
19	10	42	48	39	47	60	99	111	548	48	86	38
20	13	42	47	41	46	60	101	110	700	45	66	46
21	15	41	42	40	44	63	106	110	615	15	64	62
22	24	37	37	38	47	62	116	118	586	19	62	59
23	17	39	34	35	49	64	112	114	614	29	62	59
24	11	42	37	39	50	70	172	110	587	32	62	56
25	16	52	40	43	50	76	211	106	534	36	61	59
26	15	56	45	47	50	76	160	106	464	36	61	53
27	14	50	48	50	48	76	139	108	373	41	59	58
28	22	52	50	54	43	74	126	112	276	50	61	62
29	24	54	50	56	-----	76	122	359	124	56	62	53
30	30	54	50	59	-----	76	120	670	93	61	83	43
31	31	-----	48	60	-----	82	-----	735	-----	48	72	-----
TOTAL	454.4	1,299	1,497	1,273	1,356	1,944	3,057	5,026	13,778	1,303.82	2,044	1,650
MEAN	14.7	43.3	48.3	41.1	48.4	62.7	102	162	459	42.1	65.9	55.0
MAX	31	56	58	60	62	82	211	735	714	86	95	69
MIN	7.5	24	34	31	36	45	70	94	93	.82	48	38
AC-FT	901	2,580	2,970	2,530	2,690	3,860	6,060	9,970	27,330	2,590	4,050	3,270
CAL YR 1970	TOTAL 48,315.10		MEAN 132		MAX 885		MIN 3.7		AC-FT 95,830			
WTR YR 1971	TOTAL 34,682.22		MEAN 95.0		MAX 735		MIN .82		AC-FT 68,790			

PEAK DISCHARGE (BASE, 750 CFS)

NOTE.--No gage-height record Jan. 9 to Apr. 16.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-31	0100	4.97	1,080	6-18	2100	4.45	825

YELLOWSTONE RIVER BASIN

97

06324000 CLEAR CREEK NEAR ARVADA, WYO.

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 downstream from Cabin Creek, 1.8 miles upstream from mouth, and 16 miles north of Arvada.

DRAINAGE AREA.--1,110 sq mi, approximately.

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 above mean sea level. July 21, 1915, to Apr. 30, 1919, nonrecording gage at same site at different datum. Apr. 15, 1928, to May 26, 1929, nonrecording gage at site 0.2 mile upstream at different datum. Sept. 13, 1939, to Jan. 14, 1951, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--32 years (1939-71), 179 cfs (129,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,510 cfs June 1 (gage height, 6.36 ft); maximum gage height, 7.62 ft Feb. 15 (back-water from ice); minimum daily discharge, 2.6 cfs July 23.

Period of record: Maximum discharge, 9,600 cfs Aug. 5, 1954 (gage height, 10.45 ft), from rating curve extended above 2,500 cfs on basis of slope-area measurement at gage height 10.17 ft; 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 poor. Some regulation by Cloud Peak Reservoir (capacity, 3,385 acre-ft), Willow Park Reservoir (capacity, 4,457 acre-ft), Kearny Lake (capacity, 1,860 acre-ft), and Lake De Smet (capacity, 32,250 acre-ft). Diversions for irrigation of about 35,000 acres above station. Diversion to Kendrick Canal about 4.5 miles upstream; results of discharge measurements, in cubic feet per second, of flow in canal are given below:

June 8		21.8
July 8		12.0
Aug. 12		10.4
Sept. 1		14.6

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

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	75	115	70	85	120	230	230	2,000	230	28	7.3
2	59	74	100	68	90	125	220	225	1,500	180	23	20
3	62	75	90	66	90	150	220	220	1,200	127	13	15
4	61	74	86	62	80	145	220	240	1,000	98	5.3	7.3
5	57	77	84	60	70	140	230	280	900	75	2.9	8.3
6	57	82	86	62	60	140	240	220	850	67	4.3	14
7	58	87	90	64	54	150	250	150	870	50	10	19
8	57	91	92	70	60	160	250	140	790	33	6.8	15
9	57	93	84	68	70	170	255	140	840	25	7.3	14
10	55	98	75	66	80	170	260	140	920	20	9.5	24
11	54	96	70	60	100	170	250	140	1,000	17	8.8	27
12	54	102	68	62	110	180	240	140	950	14	5.3	23
13	58	94	66	62	120	190	240	150	950	6.8	8.8	16
14	52	106	68	62	130	180	250	160	950	5.3	24	12
15	54	110	68	64	140	180	260	165	1,100	3.8	20	12
16	56	102	68	70	140	170	250	170	1,300	3.2	25	15
17	58	98	62	75	135	165	250	170	1,300	9.5	26	18
18	60	102	56	78	130	170	250	170	1,500	11	27	26
19	64	100	54	78	125	180	270	170	1,200	6.8	29	35
20	66	100	52	78	110	190	320	170	1,500	4.3	42	41
21	66	98	50	76	100	180	350	165	1,300	2.9	16	40
22	64	80	48	72	105	160	300	165	1,250	2.9	12	46
23	60	70	49	76	120	170	270	175	1,300	2.6	8.8	54
24	67	76	50	80	150	200	250	170	1,200	8.3	10	55
25	70	80	52	80	140	210	280	165	1,080	24	9.5	52
26	72	76	54	84	130	230	300	160	970	34	11	55
27	72	74	58	88	120	220	270	160	815	36	9.5	58
28	69	80	60	92	120	220	250	145	685	66	8.8	61
29	64	100	64	96	-----	230	240	297	510	61	8.8	70
30	66	120	70	90	-----	250	235	1,600	312	52	7.8	66
31	70	-----	72	80	-----	250	-----	2,070	-----	50	3.8	-----
TOTAL	1,897	2,690	2,161	2,259	2,964	5,565	7,700	8,862	32,042	1,326.4	432.0	925.9
MEAN	61.2	89.7	69.7	72.9	106	180	257	286	1,068	42.8	13.9	30.9
MAX	72	120	115	96	150	250	350	2,070	2,000	230	42	70
MIN	52	70	48	60	54	120	220	140	312	2.6	2.9	7.3
AC-FT	3,760	5,340	4,290	4,480	5,880	11,040	15,270	17,580	63,560	2,630	857	1,840
CAL YR 1970	TOTAL 76,847.38		MEAN 211		MAX 1,450		MIN .45		AC-FT 152,400			
WTR YR 1971	TOTAL 68,824.30		MEAN 189		MAX 2,070		MIN 2.6		AC-FT 136,500			

NOTE.--No gage-height record Feb. 23 to Mar. 24, Mar. 27 to May 27, June 1-24.

LOCATION.--Lat 45°04'10", long 105°52'00", in NW¼ sec.8, T.9 S., R.48 E., Powder River County, on left bank 500 ft downstream from discontinued post office at Moorhead, 6.2 miles upstream from Buffalo Creek, and at mile 184.8.

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

GAGE.--Water-stage recorder. Datum of gage is 3,334.6 ft above mean sea level. Prior to Aug. 28, 1931, nonrecording gage at site 0.3 mile upstream at different datum. Aug. 28, 1931, to Mar. 21, 1956, water-stage recorder at site 1.2 miles upstream at different datum. Mar. 22 to July 24, 1956, nonrecording gage at site 0.3 mile downstream at different datum. July 25 to Sept. 12, 1956, nonrecording gage at present site and datum.

EXTREMES.--Current year: Maximum discharge, 8,340 cfs June 1 (gage height, 7.70 ft); maximum gage height, 8.21 ft Feb. 16 (ice jam); minimum discharge, 7.0 cfs Sept. 2.

Period of record: Maximum discharge, 23,000 cfs June 17, 1962 (gage height, 12.77 ft, from graph based on gage readings), from rating curve extended above 7,000 cfs on basis of slope-area measurement of peak flow; maximum gage height, 17.7 ft Mar. 21, 1956, site and datum then in use (ice jam); no flow at times.

Flood of Sept. 30, 1923, reached a stage of 19 ft, site and datum used 1931-56, from information by local residents.

REMARKS.--Records good except those for winter period, which are poor. Some regulation by three reservoirs in Wyoming with combined usable capacity of 36,800 acre-ft. Diversions for irrigation of about 50,000 acres above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1309: 1932(M). WSP 1729: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	202	180	140	170	330	820	810	7,160	569	82	10
2	103	196	250	135	165	300	614	680	4,600	473	58	8.0
3	96	196	220	130	155	320	512	596	3,680	404	48	14
4	100	202	180	125	150	352	496	552	3,010	364	36	19
5	96	214	140	120	145	345	480	569	2,620	326	30	16
6	100	220	110	130	140	326	459	641	2,490	300	23	14
7	96	226	120	135	140	319	459	4,060	2,280	280	20	16
8	110	232	150	135	160	332	452	2,060	2,020	256	20	23
9	103	226	140	140	175	332	438	1,420	1,850	238	20	22
10	115	238	130	135	200	371	417	1,140	1,910	220	15	19
11	125	250	120	125	250	445	417	1,070	1,950	220	14	24
12	130	262	110	115	400	660	424	1,030	2,120	178	14	30
13	145	262	100	110	600	1,170	452	1,020	1,880	155	14	27
14	160	250	70	105	1,300	1,440	424	971	1,770	130	12	22
15	160	262	80	105	4,000	1,590	410	949	1,740	106	17	20
16	160	256	90	110	3,000	1,390	431	1,080	1,690	96	21	22
17	166	256	95	115	2,000	1,120	417	1,290	1,730	82	23	24
18	166	250	100	120	1,440	949	424	1,240	1,710	70	27	23
19	172	244	95	125	1,000	800	417	1,210	1,730	68	26	31
20	172	244	90	135	641	680	452	1,120	1,550	60	27	42
21	172	244	85	140	424	800	504	949	1,550	48	38	46
22	172	100	80	145	352	720	552	872	1,430	47	20	44
23	172	60	90	150	378	650	740	850	1,380	42	17	48
24	178	80	95	155	424	578	960	800	1,420	40	12	65
25	184	110	100	160	404	1,010	960	770	1,370	41	9.4	92
26	190	140	110	165	400	2,120	1,000	770	1,260	55	9.4	96
27	196	170	100	170	380	3,340	905	700	1,110	60	8.0	103
28	190	210	100	170	370	2,900	830	700	938	70	10	110
29	178	200	120	170	-----	1,440	850	750	820	120	12	110
30	190	150	140	170	-----	1,260	894	3,580	750	115	15	120
31	196	-----	150	170	-----	1,040	-----	5,490	-----	100	14	-----
TOTAL	4,603	6,152	3,740	4,255	19,363	29,429	17,610	39,739	61,518	5,333	711.8	1,260.0
MEAN	14.8	20.5	12.1	13.7	6.92	94.9	5.87	1,282	2,051	172	23.0	42.0
MAX	196	262	250	170	4,000	3,340	1,000	5,490	7,160	569	82	120
MIN	96	60	70	105	140	300	410	552	750	40	8.0	8.0
AC-FIT	9,130	12,200	7,420	8,440	38,410	58,370	34,330	78,820	122,000	10,580	1,410	2,500

CAL YR 1970	TOTAL 173,571.7	MEAN 476	MAX 7,310	MIN 6.0	AC-FT 344,300
878 YR 1971	TOTAL 193,713.8	MEAN 531	MAX 7,160	MIN 8.0	AC-FT 384,200

PEAK DISCHARGE (BASE, 3,700 CFS)

NOTE.--Stage-discharge relation affected by ice
Nov. 22 to Feb. 17.

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
a 2-15	--	--	b 5,000	5- 7	b 0800	b 6.55	b 5,900
3-27	1500	5.34	3,770	6- 1	b 1500	7.70	8,340
a Feb. 15 or 16.							
b About.							

YELLOWSTONE RIVER BASIN

99

06325500 LITTLE POWDER RIVER NEAR BROADUS, MONT.

LOCATION.--Lat 45°23'25", long 105°18'15", in NW¼NE¼ sec.21, T.5 S., R.52 E., Powder River County, on left bank 1.5 miles downstream from East Fork, 5.5 miles southeast of Broadus, and 8 miles upstream from mouth.

DRAINAGE AREA.--1,974 sq mi.

PERIOD OF RECORD.--May 1947 to September 1953, water year 1956 (annual maximum), March 1957 to current year (fragmentary record March to September 1962). Monthly discharge only for May 1947, published in WSP 1309.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 3,020 ft (by barometer). Prior to Dec. 10, 1962, water-stage recorder at site 0.8 mile upstream at different datum.

AVERAGE DISCHARGE.--19 years (1947-53, 1957-61, 1962-71), 37.3 cfs (27,020 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,940 cfs Mar. 13 (gage height, 7.6 ft, from floodmark); maximum gage height observed, 7.84 ft Feb. 17 (backwater from ice); no flow Feb. 8-11.

Period of record: Maximum discharge, 2,440 cfs Mar. 21, 1969 (gage height, 8.3 ft, from graph based on gage readings); maximum gage height, 9.36 ft Mar. 19 or 20, 1960 (from high-water mark in gage well, backwater from ice, site and datum then in use); no flow at times.

REMARKS.--Records fair except those for the period Nov. 21 to Mar. 31, which are poor. Small diversions for irrigation of hay meadows above station.

REVISIONS (WATER YEARS).--WSP 1116: 1947. WSP 1729: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	4.3	4.0	.50	3.0	37	1,240	131	90	40	9.4	6.0
2	13	3.9	4.0	.50	2.5	31	1,020	114	153	35	9.1	4.1
3	13	3.5	4.0	.50	2.0	49	536	103	135	38	8.8	3.5
4	13	3.7	4.0	.50	1.5	47	308	94	108	34	8.2	3.7
5	9.4	3.5	4.0	.50	1.0	36	238	86	98	37	7.6	5.0
6	3.1	4.8	4.0	.50	.50	26	200	78	103	34	6.5	23
7	2.7	2.7	4.0	.70	.20	34	182	72	94	28	6.2	12
8	2.7	1.5	4.0	.60	0	51	186	68	100	26	5.5	5.5
9	2.7	3.5	4.0	.50	0	68	210	63	81	23	5.0	4.5
10	2.7	4.8	4.0	.50	0	105	222	60	90	20	4.3	4.1
11	2.7	3.9	4.0	.50	0	273	192	56	79	20	4.1	4.1
12	3.1	6.8	4.0	.40	10	543	169	54	229	16	4.1	3.7
13	3.1	5.8	4.0	.30	50	1,370	146	50	152	18	3.9	3.7
14	3.1	4.1	4.5	.20	200	1,350	129	49	164	18	3.5	3.7
15	3.1	5.8	4.5	.20	600	1,340	111	48	133	18	3.1	3.9
16	2.9	5.2	4.5	.20	1,200	1,340	102	46	81	18	3.1	4.1
17	3.1	5.0	4.5	.30	1,800	1,110	95	44	65	16	3.1	4.1
18	3.1	4.8	4.0	.40	1,700	504	89	43	57	14	3.1	4.3
19	3.1	4.5	3.5	.60	1,600	271	87	42	49	11	3.1	4.5
20	3.1	4.5	3.0	.80	1,250	169	105	42	45	10	2.7	4.5
21	3.1	4.0	2.5	1.0	262	262	105	41	41	10	2.5	4.5
22	3.1	3.7	2.0	1.4	206	260	111	48	39	10	2.4	4.5
23	3.3	3.5	1.5	2.0	147	212	118	65	38	9.7	2.5	4.5
24	3.3	3.8	1.2	10	131	198	138	158	34	8.5	2.4	4.0
25	3.5	4.0	1.0	30	114	249	135	118	33	9.1	2.4	3.9
26	3.1	4.0	.70	20	98	420	135	108	31	11	2.4	3.7
27	3.5	4.0	.50	15	86	550	165	103	29	11	2.4	3.7
28	4.5	4.0	.50	10	60	1,510	245	94	58	11	2.4	4.1
29	3.7	4.0	.50	7.0	-----	1,700	245	78	65	12	2.4	4.5
30	3.7	4.0	.50	5.0	-----	1,590	164	76	49	12	4.3	4.5
31	3.5	-----	.50	4.0	-----	1,610	-----	76	-----	11	11	-----
TOTAL	144.0	125.6	91.90	114.60	9,524.70	17,315	7,128	2,308	2,523	589.3	141.5	153.9
MEAN	4.65	4.19	2.96	3.70	340	559	238	74.5	84.1	19.0	4.56	5.13
MAX	13	6.8	4.5	30	1,800	1,700	1,240	158	229	40	11	23
MIN	2.7	1.5	.50	.20	0	26	87	41	29	8.5	2.4	3.5
AC-FT	286	249	182	227	18,890	34,340	14,140	4,580	5,000	1,170	281	305
CAL YR 1970	TOTAL	9,842.62	MEAN	27.0	MAX	560	MIN	0	AC-FT	19,520		
WTR YR 1971	TOTAL	40,159.50	MEAN	110	MAX	1,800	MIN	0	AC-FT	79,660		

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
2-17	--	ab7.8	a1,800	3-31	1330	7.49	1,890
3-13	--	c7.6	1,940				

NOTE.--Stage-discharge relation affected by ice Nov. 21 to Feb. 19 (no gage-height record Dec. 30 to Jan. 10).

a About.

b Backwater from ice.

c From floodmark.

YELLOWSTONE RIVER BASIN

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 miles upstream from mouth of Bull Lake Creek, and 9.8 miles 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, 152,100 acre-ft July 4 (elevation, 5,804.90 ft); minimum daily, 98,430 acre-ft May 26 (elevation, 5,786.55 ft). Extremes for period of record: Maximum daily contents, 154,200 acre-ft Aug. 10, 1965 (elevation, 5,805.70 ft); minimum daily (since appreciable storage was attained), 5,540 acre-ft Mar. 15, 1950 (elevation, 5,742.56 ft).

Reservoir is formed by rock-fill dam completed by Bureau of Reclamation July 22, 1938. Capacity, 152,500 acre-ft below elevation 5,805.00 ft (top of spillway gates). Dead storage, 722 acre-ft. Figures given herein represent total contents. Water used for irrigation near Riverton. Records furnished by Midvale Irrigation District and 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 miles 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, 844,400 acre-ft June 29 (elevation, 4,727.12 ft); minimum daily, 357,700 acre-ft May 12 (elevation, 4,695.66 ft). Extremes for period of record: Maximum daily contents, 922,400 acre-ft July 6, 7, 1967 (elevation, 4,730.83 ft); minimum daily (since normal use of water started), 251,800 acre-ft Mar. 18, 19, 1956 (elevation, 4,684.18 ft).

Reservoir is formed by rock-fill dam completed by Bureau of Reclamation in October 1951. Capacity, 802,000 acre-ft below elevation 4,725.00 ft (top of spillway gate). Includes 59,880 acre-ft dead storage below elevation 4,657.00 ft (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 miles downstream from Middle Fork, 3 miles southeast of Anchor, and 32 miles 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, 3,640 acre-ft June 24 (elevation, 6,393.32 ft); no storage on many days. Extremes for period of record: Maximum daily contents, 9,250 acre-ft July 4, 1967 (elevation, 6,418.52 ft); no storage on many days each year.

Reservoir is formed by concrete arch dam completed by Bureau of Reclamation in 1960. Capacity, 17,350 acre-ft, below elevation 6,441.00 ft (crest of spillway). Includes 149 acre-ft below elevation 6,343.75 ft (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 miles upstream from Trail Creek, and 6 miles 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, 442,000 acre-ft July 11, 12 (elevation, 5,363.05 ft); minimum daily, 152,000 acre-ft May 25 (elevation, 5,304.95 ft). Extremes for period of record: Maximum daily contents, 507,000 acre-ft June 15, 1918 (elevation, 5,367.3 ft); minimum daily, 19,000 acre-ft Jan. 23-25, 1941 (elevation, 5,225.3 ft).

Reservoir is formed by masonry dam completed by Bureau of Reclamation in 1909. Capacity, 421,300 acre-ft between elevations 5,140.00 (gate sill) and 5,360.00 ft (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.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)
06224500 Bull Lake				06258900 Boysen Reservoir		
Sept. 30	5,789.10	105,400	-	4,717.42	663,100	-
Oct. 31	5,788.30	103,200	-2,200	4,717.31	661,200	-1,900
Nov. 30	5,788.37	103,400	+200	4,716.83	653,000	-8,200
Dec. 31	5,788.70	104,300	+900	4,714.39	612,700	-40,300
CAL YR 1970	-	-	+43,960	-	-	-37,300
Jan. 31	5,788.80	104,500	+200	4,711.80	572,000	-40,700
Feb. 28	5,788.60	104,000	-500	4,707.68	510,800	-61,200
Mar. 31	5,788.60	104,000	0	4,701.83	431,300	-79,500
Apr. 30	5,788.80	104,500	+500	4,696.33	365,200	-66,100
May 31	5,789.45	106,300	+1,800	4,701.60	428,400	+63,200
June 30	5,803.67	148,300	+42,000	4,726.91	840,100	+411,700
July 31	5,804.80	151,800	+3,500	4,724.62	794,600	-45,500
Aug. 31	5,802.65	145,100	-6,700	4,722.69	757,700	-36,900
Sept. 30	5,802.97	146,100	+1,000	4,721.77	740,600	-17,100
WTR YR 1971	-	-	+40,700	-	-	+77,500
06260300 Anchor Reservoir				06281500 Buffalo Bill Reservoir		
Sept. 30	6,304.30	0	-	5,338.30	291,000	-
Oct. 31	6,304.30	0	0	5,330.88	253,800	-37,200
Nov. 30	6,304.30	0	0	5,327.80	239,600	-14,200
Dec. 31	6,304.30	0	0	5,324.20	223,700	-15,900
CAL YR 1970	-	-	0	-	-	+15,500
Jan. 31	6,304.30	0	0	5,320.90	209,900	-13,800
Feb. 28	6,304.30	0	0	5,318.24	199,200	-10,700
Mar. 31	6,304.30	0	0	5,313.30	180,500	-18,700
Apr. 30	6,304.30	0	0	5,307.26	159,500	-21,000
May 31	6,372.40	1,260	+1,260	5,313.32	180,600	+21,100
June 30	6,385.27	2,510	+1,250	5,361.30	430,100	+249,500
July 31	6,346.00	184	-2,326	5,361.40	430,800	+700
Aug. 31	6,351.50	297	+113	5,355.70	393,100	-37,700
Sept. 30	6,344.00	153	-144	5,350.09	358,000	-35,100
WTR YR 1971	-	-	+153	-	-	+67,000

CHEYENNE RIVER BASIN

101

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 mile north of Spencer, 1 mile upstream from mouth, and 34 miles south of Newcastle.

DRAINAGE AREA.--2,070 sq mi, 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 (from map prepared by Army Map Service, Corps of Engineers). Prior to Aug. 14, 1948, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--21 years, 27.2 cfs (19,710 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,410 cfs May 24 (gage height, 9.67 ft); no flow for many days.

Period of record: Maximum discharge, 7,410 cfs May 24, 1971 (gage height, 9.67 ft); 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). Diversions for irrigation of about 3,500 acres above station.

REVISIONS (WATER YEARS).--WSP 1209: 1948(P), 1950.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.01			0	.05	81	1,460	23	2.0	0
2		0	.01			0	.03	47	1,160	20	1.5	0
3		0	.01			0	.03	30	507	19	1.5	0
4		0	.01			0	.03	24	327	19	1.0	0
5		0	.01			0	.03	20	484	139	.80	0
6		0	.01			0	.04	516	330	128	.60	0
7		0	.01			0	.05	538	265	61	.40	0
8		.01	.01			0	.05	181	196	39	.30	0
9		.01	.01			.02	.06	111	153	28	.20	0
10		.01	.01			.03	.06	76	126	23	.10	0
11		.01	0			.03	.06	57	108	20	0	0
12		.01	0			.03	.06	59	91	18	0	0
13		.01	0			.03	.06	63	396	16	0	0
14		.01	0			.03	.06	39	208	15	0	0
15		.01	0			.03	.08	26	128	14	0	0
16		.01	0			.03	.08	23	91	13	0	0
17		.01	0			.03	.06	18	77	11	0	0
18		.01	0			.03	61	15	68	10	0	0
19		.01	0			.03	129	13	60	9.0	0	0
20		.01	0			.03	488	12	53	8.0	0	.05
21		.01	0			.03	165	11	55	7.0	0	.05
22		.01	0			.05	143	26	50	7.0	0	.05
23		.01	0			.03	141	1,440	44	6.0	0	.05
24		.01	0			.03	129	5,540	37	5.0	0	.05
25		.01	0			.05	101	2,690	32	5.0	0	.05
26		.01	0			.03	64	1,270	29	4.0	0	.05
27		.01	0			.03	59	1,050	27	4.0	0	.05
28		.01	0			.03	330	412	26	4.0	0	.05
29		.01	0		-----	.03	393	283	23	3.0	0	.05
30		.01	0		-----	.05	143	290	25	3.0	0	.05
31		-----	0		-----	.05	-----	2,340	-----	2.0	0	-----
TOTAL	0	.23	.10	0	0	.76	2,346.89	17,301	6,636	683.0	8.40	.55
MEAN	0	.008	.003	0	0	.025	78.2	558	221	22.0	.27	.018
MAX	0	.01	.01	0	0	.05	488	5,540	1,460	139	2.0	.05
MIN	0	0	0	0	0	0	.03	11	23	2.0	0	0
AC-FT	0	.5	.2	0	0	1.5	4,660	34,320	13,160	1,350	17	1.1
CAL YR 1970	TOTAL	1,674.66	MEAN	4.59	MAX	215	MIN	0	AC-FT	3,320		
WTR YR 1971	TOTAL	26,976.93	MEAN	73.9	MAX	5,540	MIN	0	AC-FT	53,510		

PEAK DISCHARGE (BASE, 750 CFS)

NOTE.--No gage-height record Dec. 12 to Mar. 15, July 15 to Sept. 30.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-19	2400	Unknown	a 900	5-26	2400	6.10	2,530
4-28	2100	4.25	832	5-31	2130	6.60	3,040
5- 6	2000	4.58	1,060	6- 2	1700	5.27	1,790
5-24	1430	9.67	7,410				

a About.

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 miles downstream from Robbers Roost Creek, 7.5 miles northeast of Spencer, and 30 miles south of Newcastle.

DRAINAGE AREA.--5,270 sq mi, 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 (from topographic map). Prior to Oct. 18, 1955, water-stage recorder at site 400 ft upstream, Oct. 18, 1955, to Aug. 1, 1961, at site 2,500 ft upstream, and Aug. 1, 1961, to Aug. 22, 1962, at site 2,200 ft upstream, all at different datums.

AVERAGE DISCHARGE.--23 years, 60.9 cfs (44,120 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 14,400 cfs May 24 (gage height, 9.80 ft); no flow for many days.

Period of record: Maximum discharge, 16,000 cfs May 27, 1962 (gage height, 8.74 ft, 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). Diversions above station for irrigation of about 6,860 acres, of which about 140 acres lies below station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0	0	0	139	5,970	24	2.0	
2					0	0	0	101	2,090	24	1.5	
3					0	0	0	85	1,510	22	1.5	
4					0	0	0	67	1,070	21	1.0	
5					0	0	0	56	1,130	85	.80	
6					0	0	0	392	775	193	.60	
7					0	0	0	774	679	96	.60	
8					0	0	0	497	701	59	.40	
9					0	0	0	274	625	39	.40	
10					50	0	0	200	364	20	.40	
11					50	0	0	189	304	15	.20	
12					50	50	0	147	250	14	.20	
13					50	50	0	127	753	13	.20	
14					100	10	0	90	473	12	.20	
15					100	10	0	58	300	12	.20	
16					200	5.0	0	50	239	12	.20	
17					200	1.0	0	40	186	11	.10	
18					150	1.0	13	30	173	9.3	.10	
19					100	0	248	25	158	8.2	.10	
20					50	0	439	20	144	7.7	.10	
21					10	0	208	20	127	6.6	.10	
22					10	0	189	23	115	5.1	.10	
23					10	0	186	4,540	105	4.7	.10	
24					10	0	139	10,700	88	4.3	.10	
25					50	0	85	6,970	75	3.9	.10	
26					10	0	59	1,900	64	3.5	.10	
27					5.0	0	109	2,140	43	3.0	.10	
28					1.0	0	439	1,130	29	3.0	.10	
29					-----	0	572	791	25	2.5	.10	
30					-----	0	283	1,880	22	2.5	.10	
31		-----			-----	0	-----	7,150	-----	2.0	.10	-----
TOTAL	0	0	0	0	1,206.0	127.0	2,969	40,605	18,587	738.3	11.90	0
MEAN	0	0	0	0	43.1	4.10	99.0	1,310	620	23.8	.38	0
MAX	0	0	0	0	200	50	572	10,700	5,970	193	2.0	0
MIN	0	0	0	0	0	0	0	20	22	2.0	.10	0
AC-FT	0	0	0	0	2,390	252	5,890	80,540	36,870	1,460	24	0
CAL YR 1970	TOTAL	2,561.50	MEAN	7.0	MAX	362	MIN	0	AC-FT	5,080		
WTR YR 1971	TOTAL	64,244.20	MEAN	176	MAX	10,700	MIN	0	AC-FT	127,400		

PEAK DISCHARGE (BASE, 2,000 CFS)

NOTE.--No gage-height record July 26 to Aug. 31.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-24	2300	9.80	14,400	6- 1	0100	8.60	10,000
5-27	0500	5.65	3,070				

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 miles downstream from Sheep Creek, and 23 miles south of Newcastle.

DRAINAGE AREA.--1,320 sq mi, approximately.

PERIOD OF RECORD.--February to September 1943, October 1944 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,660 ft (from topographic map). Prior to Nov. 1, 1945, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--27 years (1944-71), 32.7 cfs (23,690 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,550 cfs Apr. 19 (gage height, 12.30 ft); minimum daily, 0.71 cfs Sept. 14.

Period of record: Maximum discharge, 11,900 cfs June 16, 1962 (gage height, 19.98 ft); no flow at times in 1943, 1945, 1950, 1952-61, 1966.

REMARKS.--Records fair except those for winter period, 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). Diversions for irrigation of about 4,900 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	20	20	15	15	40	467	85	236	12	5.7	1.7
2	5.6	21	15	10	15	50	433	65	268	12	5.5	1.4
3	5.8	20	15	10	15	60	182	53	155	11	5.2	.98
4	6.2	18	15	10	15	70	100	50	108	13	4.6	1.4
5	6.2	20	15	10	15	70	88	39	99	15	4.0	1.8
6	8.1	20	15	10	10	70	86	35	156	12	4.3	1.6
7	11	16	15	10	10	70	89	31	288	12	4.2	2.3
8	13	23	15	15	10	80	87	28	107	9.6	4.6	3.8
9	18	18	15	15	15	100	111	28	80	8.4	4.6	3.3
10	18	17	15	15	15	120	120	30	42	8.7	4.3	2.0
11	19	16	15	15	20	140	101	30	31	8.2	4.8	1.5
12	19	15	15	15	20	160	74	26	90	7.5	3.5	1.0
13	20	17	15	15	30	200	67	31	50	7.2	2.1	.79
14	20	17	15	15	40	250	67	22	52	6.4	2.1	.71
15	19	17	15	15	50	300	59	16	344	6.0	2.0	2.6
16	19	19	15	15	50	350	39	14	80	5.4	1.8	1.7
17	16	17	15	15	50	300	46	14	36	4.5	1.9	1.5
18	15	17	15	15	50	250	294	14	28	4.1	1.9	1.1
19	15	15	15	15	50	200	892	14	25	2.8	2.3	1.8
20	15	18	15	15	40	194	238	12	22	2.4	2.2	4.2
21	15	18	15	15	30	175	1,140	10	21	1.8	2.0	3.2
22	15	15	15	15	30	136	554	9.8	19	2.9	2.0	3.1
23	14	10	15	15	30	152	177	49	18	2.9	3.8	3.9
24	13	12	15	15	30	174	122	83	16	2.3	2.2	3.7
25	13	15	15	15	40	140	87	281	13	1.9	2.1	1.8
26	13	15	15	15	40	116	122	161	12	4.2	1.9	1.5
27	13	15	15	15	40	143	398	56	15	5.6	1.3	1.7
28	13	15	20	15	40	283	571	30	12	5.8	1.1	6.0
29	14	20	20	15	-----	594	486	22	12	5.7	1.3	7.1
30	14	20	20	15	-----	745	161	26	13	5.8	2.0	6.6
31	15	-----	20	15	-----	540	-----	120	-----	5.7	2.1	-----
TOTAL	426.5	516	490	435	815	6,272	7,458	1,484.8	2,448	212.8	93.4	75.78
MEAN	13.8	17.2	15.8	14.0	29.1	202	249	47.9	81.6	6.86	3.01	2.53
MAX	20	23	20	15	50	745	1,140	281	344	15	5.7	7.1
MIN	5.6	10	15	10	10	40	39	9.8	12	1.8	1.1	.71
AC-FT	846	1,020	972	863	1,620	12,440	14,790	2,950	4,860	422	185	150
CAL YR 1970	TOTAL 11,453.49											
WTR YR 1971	TOTAL 20,727.28											
MEAN 31.4				MAX 460				MIN .01				AC-FT 22,720
MEAN 56.8				MAX 1,140				MIN .71				

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-30	0800	8.08	771	4-29	0100	7.32	647
4-19	0300	12.30	1,550	6-6	2400	7.28	641
4-21	1400	11.26	1,350				

CHEYENNE RIVER BASIN

06395000 CHEYENNE RIVER AT EDMONT, S. DAK.

LOCATION.--Lat 43°18'20", long 103°49'14", in SW¼SE¼ 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 downstream from Chicago, Burlington and Quincy Railroad bridge, and 600 ft upstream from Cottonwood Creek.

DRAINAGE AREA.--7,143 sq mi.

PERIOD OF RECORD.--June 1903 to November 1906 (no winter records), April 1928 to February 1933, October 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,416.56 ft above mean sea level. Prior to Nov. 30, 1906, nonrecording gage 20 ft upstream at datum 2.7 ft 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 and datum.

AVERAGE DISCHARGE.--29 years (1928-32, 1946-71), 109 cfs (78,970 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 13,800 cfs May 25 (gage height, 8.57 ft); no flow part of each day Oct. 31, Nov. 1, 2, 15, 21, Dec. 4.

Period of record: Maximum discharge, 13,800 cfs May 25, 1971 (gage height, 8.57 ft); no flow at times most years.

Flood of May 1, 1920 reached a stage of 12.0 ft (present datum), from floodmarks at railroad bridge. Flood of May 12, 1920, reached a stage of 11.0 ft (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). 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	9.9	9.0	5.5	1.0	20	413	348	7,890	57	7.5	.56
2	6.2	9.4	7.0	2.5	1.5	16	387	245	2,560	61	6.9	.48
3	6.2	14	7.0	1.0	1.0	18	290	201	2,160	56	6.2	.48
4	6.2	16	7.0	.50	.50	20	140	167	1,080	53	4.3	7.7
5	6.8	15	6.0	.20	.40	18	108	140	1,160	50	4.0	6.9
6	7.7	15	8.0	.20	.20	12	98	111	882	125	3.6	3.2
7	19	16	9.0	.30	.10	5.0	100	739	819	123	3.2	2.2
8	17	14	10	.50	.20	6.0	84	596	648	72	2.9	4.0
9	13	17	8.0	1.0	1.0	7.0	78	344	747	54	2.6	4.0
10	16	13	5.0	.80	2.0	7.5	113	271	530	46	2.9	2.6
11	18	14	5.0	.50	2.5	10	94	221	437	40	2.9	2.2
12	18	13	5.5	.40	2.5	15	80	207	344	32	2.9	.80
13	16	9.9	5.0	.50	3.0	25	56	178	491	27	2.6	.72
14	14	9.9	6.0	.70	10	35	50	147	530	24	2.2	.64
15	14	13	7.0	1.0	50	45	56	120	416	21	1.2	.64
16	14	13	8.0	2.0	150	50	26	96	530	18	1.2	.72
17	14	11	7.0	2.5	100	70	22	74	291	15	.80	.64
18	12	11	5.0	1.8	100	80	139	55	238	15	2.2	1.5
19	12	12	3.0	2.0	70	70	766	49	195	12	3.2	1.2
20	11	13	5.0	3.0	60	80	851	48	151	11	2.6	.80
21	11	11	10	2.5	40	90	667	41	131	11	1.5	1.2
22	11	8.0	11	2.0	30	60	1,160	50	148	9.4	.80	1.5
23	11	1.2	8.0	2.5	25	45	470	2,720	128	8.1	1.2	1.5
24	8.6	1.2	5.0	3.0	30	50	317	8,920	117	8.8	.80	2.2
25	5.6	5.0	5.0	3.0	35	65	234	9,850	109	9.4	.80	2.2
26	6.2	3.0	5.5	2.5	25	100	194	2,050	93	10	.80	1.8
27	11	5.0	4.0	3.0	20	249	330	2,160	77	8.1	.72	1.8
28	13	10	5.0	4.0	25	197	725	1,150	70	7.5	.64	2.6
29	12	11	5.5	5.0	-----	371	1,370	785	68	8.8	.64	5.6
30	11	11	6.0	4.0	-----	638	660	1,190	63	8.8	.64	4.9
31	11	-----	5.5	2.0	-----	603	-----	4,840	-----	7.5	.64	-----
TOTAL	359.8	325.5	203.0	60.40	785.90	3,077.5	10,078	38,113	23,103	1,009.4	75.08	67.28
MEAN	11.6	10.9	6.55	1.95	28.1	99.3	336	1,229	770	32.6	2.42	2.24
MAX	19	17	11	5.5	150	638	1,370	9,850	7,890	125	7.5	7.7
MIN	5.6	1.2	3.0	.20	.10	5.0	22	41	63	7.5	.64	.48
AC-FT	714	646	403	120	1,560	6,100	19,990	75,600	45,820	2,000	149	133
CAL YR 1970	TOTAL 11,376.16	MEAN 31.2	MAX 345	MIN 0	AC-FT 22,560							
WTR YR 1971	TOTAL 77,257.86	MEAN 212	MAX 9,850	MIN .10	AC-FT 153,200							

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-29	1030	3.43	1,800	6- 1	0700	7.54	10,500
5-25	0800	8.57	13,800	6- 3	0100	4.36	3,350
5-27	0800	4.09	2,920				

CHEYENNE RIVER BASIN

105

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 miles northeast of Moorcroft.

DRAINAGE AREA.--2,000 sq mi, 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 contents, 173,300 acre-ft June 30, July 1 (elevation, 4,096.31 ft); minimum, 117,000 acre-ft Nov. 30, Dec. 17 (elevation, 4,088.47 ft).

Period of record: Maximum contents, 173,300 acre-ft June 30, July 1, 1971 (elevation, 4,096.31 ft); minimum daily contents (since appreciable storage was attained), 6,030 acre-ft Mar. 8, 9, 1955 (elevation, 4,046.35 ft).

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), 1,170 acre-ft. Inactive storage (between elevations 4,036.0 ft and 4,051.0 ft), 8,310 acre-ft. Total capacity below elevation 4,099.3 ft (crest of spillway), 199,900 acre-ft. 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 1970 TO SEPTEMBER 1971

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	4,088.76	118,800	-
Oct. 31	4,088.52	117,300	-1,500
Nov. 30	4,088.47	117,000	-300
Dec. 31	4,088.48	117,100	+100
CAL YR 1970	-	-	-3,300
Jan. 31	4,088.59	117,700	+600
Feb. 28	4,089.42	122,900	+5,200
Mar. 31	4,091.66	137,800	+14,900
Apr. 30	4,094.85	161,400	+23,600
May 31	4,095.70	168,300	+6,900
June 30	4,096.31	173,300	+5,000
July 31	4,095.36	165,500	-7,800
Aug. 31	4,094.16	156,000	-9,500
Sept. 30	4,093.81	153,400	-2,600
WTR YR 1971	-	-	+34,600

CHEYENNE RIVER BASIN

06427500 BELLE FOURCHE RIVER BELOW KEYHOLE RESERVOIR, WYO.

LOCATION.--Lat 44°23'05", long 104°46'50", in NE¼SE¼SE¼ sec.21, T.51 N., R.66 W., Crook County, on right bank 0.2 mile downstream from Keyhole Dam, 1 mile downstream from Mule Creek, 2.5 miles upstream from Spring Creek, and 12 miles northeast of Moorcroft.

DRAINAGE AREA.--2,000 sq mi, approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 4,031.26 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 294 cfs Sept. 1 (gage height, 3.36 ft); minimum daily, 1.4 cfs on many days (seepage flow).

Period of record: Maximum discharge, 1,020 cfs Sept. 5, 1951 (gage height, 6.30 ft); minimum daily since appreciable storage in Keyhole Reservoir, 0.30 cfs Feb. 6-20, 1960; no flow at times in 1951-52.

REMARKS.--Records good above 2 cfs and poor below. Flow completely regulated by Keyhole Reservoir 0.2 mile upstream. (See sta 06427000.) Diversions for irrigation of about 820 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.8	106	49
2	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.8	108	2.0
3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.8	108	2.0
4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.8	108	2.0
5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.8	108	2.0
6	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.9	108	2.0
7	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.9	108	2.0
8	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.9	108	2.0
9	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.9	108	2.0
10	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.9	108	2.0
11	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.6	2.0	108	2.0
12	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.6	2.0	108	2.0
13	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.6	2.0	106	2.0
14	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.6	59	106	2.0
15	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.6	104	106	2.0
16	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.6	104	106	2.0
17	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.6	106	106	2.0
18	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.6	108	106	2.0
19	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.6	106	93	2.0
20	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.6	106	84	2.0
21	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.7	108	83	2.0
22	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.7	108	83	2.0
23	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.7	106	81	2.0
24	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.7	106	79	2.0
25	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.7	106	77	2.0
26	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.7	106	77	2.0
27	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.7	106	77	2.0
28	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.7	106	77	2.0
29	1.4	1.4	1.4	1.4	-----	1.4	1.4	1.4	1.7	106	77	2.0
30	1.4	1.4	1.4	1.4	-----	1.4	1.4	1.4	1.7	106	76	2.0
31	1.4	-----	1.4	1.4	-----	1.4	-----	1.4	-----	106	76	-----
TOTAL	43.4	42.0	43.4	43.4	39.2	43.4	42.0	43.4	48.0	1,887.5	2,970	107.0
MEAN	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.60	60.9	95.8	3.57
MAX	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.7	108	108	49
MIN	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.8	76	2.0
AC-FT	86	83	86	86	78	86	83	86	95	3,740	5,890	212

CAL YR 1970 TOTAL 5,502.6 MEAN 15.1 MAX 104 MIN 1.0 AC-FT 10,910
WTR YR 1971 TOTAL 5,352.7 MEAN 14.7 MAX 108 MIN 1.4 AC-FT 10,620

NOTE.--No gage-height record Jan. 13 to Apr. 6.

CHEYENNE RIVER BASIN

107

06428500 BELLE FOURCHE RIVER AT WYOMING-SOUTH DAKOTA STATE LINE

LOCATION.--Lat 44°44'59", long 104°02'49", in NE¼NW¼NW¼ sec.18, T.9 N., R.1 E., Butte County, South Dakota, on left bank 0.3 mile downstream from State line, 3.7 miles downstream from Oak Creek, and 11 miles northwest of Belle Fourche, S. Dak.

DRAINAGE AREA.--3,280 sq mi, approximately.

PERIOD OF RECORD.--December 1946 to current year. Records for water year 1947 incomplete, yearly estimate published in WSP 1729.

GAGE.--Water-stage recorder. Datum of gage is 3,095.7 ft above mean sea level.

AVERAGE DISCHARGE.--25 years, 82.5 cfs (59,770 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,400 cfs June 4 (gage height, 11.32 ft); minimum daily, 7.0 cfs Jan. 6, 12-15.
Period of record: Maximum discharge, 4,400 cfs June 18, 1962 (gage height, 15.59 ft); no flow at times most years.

REMARKS (revised).--Records good except those for winter periods, which are poor. Diversions above station for irrigation of about 5,400 acres. Flow regulated by Keyhole Reservoir (usable capacity, 191,600 acre-ft), 143 miles upstream since Oct. 25, 1952. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	24	40	16	17	60	1,170	398	295	188	112	68
2	8.7	24	41	12	20	55	1,020	352	245	144	109	66
3	16	18	40	9.0	22	60	656	320	217	116	102	61
4	16	27	34	8.0	21	60	523	301	605	96	103	66
5	15	24	30	7.5	22	55	416	298	832	86	102	147
6	15	28	30	7.0	20	50	369	299	416	81	100	87
7	16	28	31	8.0	18	50	374	296	295	76	99	61
8	16	29	33	10	15	55	645	287	233	71	100	52
9	16	28	30	10	18	60	1,240	255	207	67	98	45
10	16	30	26	8.0	20	65	1,550	262	402	65	95	40
11	17	33	20	7.5	30	70	1,540	270	359	60	95	37
12	19	33	23	7.0	250	80	1,430	269	347	57	96	33
13	25	32	26	7.0	300	85	1,180	245	325	52	94	29
14	23	31	23	7.0	600	100	814	223	302	50	92	26
15	21	30	24	7.0	400	150	503	207	235	50	90	23
16	21	31	25	9.0	300	200	392	192	188	46	89	24
17	20	29	25	12	250	152	367	182	163	43	86	21
18	20	27	20	10	150	119	363	171	173	85	91	22
19	20	27	15	12	80	101	441	164	143	103	97	21
20	20	27	10	13	60	92	768	162	130	102	94	23
21	20	25	11	13	50	98	1,800	156	169	112	96	24
22	20	20	12	12	45	100	1,840	153	176	110	89	24
23	19	19	13	14	50	97	1,030	192	134	107	74	25
24	19	20	15	16	60	87	763	236	117	105	68	25
25	20	25	17	16	70	87	591	717	110	110	68	23
26	21	24	18	15	70	134	591	396	102	112	65	22
27	22	22	16	18	66	175	705	276	136	109	63	22
28	24	20	17	20	65	367	595	226	237	107	63	22
29	23	25	18	20	-----	523	580	194	141	109	66	20
30	24	31	19	18	-----	415	446	205	116	118	70	20
31	24	-----	20	17	-----	705	-----	520	-----	116	70	-----
TOTAL	589.7	791	722	366.0	3,089	4,507	24,702	8,434	7,550	2,853	2,736	1,179
MEAN	19.0	26.4	23.3	11.8	110	145	823	272	252	92.0	88.3	39.3
MAX	25	33	41	20	600	705	1,840	717	832	188	112	147
MIN	8.7	18	10	7.0	15	50	363	153	102	43	63	20
AC-FT	1,170	1,570	1,430	726	6,130	8,940	49,000	16,730	14,980	5,660	5,430	2,340
CAL YR 1970	TOTAL	36,191.7	MEAN	99.2	MAX	1,160	MIN	8.7	AC-FT	71,790		
WTR YR 1971	TOTAL	57,518.7	MEAN	158	MAX	1,840	MIN	7.0	AC-FT	114,100		

LOCATION.--Lat 44°34'35", long 104°02'58", in SW¹/₄SW¹/₄ sec.7, T.7 N., R.1 E., Butte County, South Dakota, on right bank 15 ft downstream from State line and 12 miles southwest of Belle Fourche, S. Dak.

GAGE.--Water-stage recorder. Altitude of gage is 3,440 ft (from topographic map).

EXTREMES.--Period of record: Maximum daily discharge, 33 cfs Oct. 4-6, 1970; no flow for long periods in each year.

REMARKS.--Records fair. Ditch diverts water from left bank of Redwater Creek, 2 miles upstream, for irrigation of about 700 acres. Flow maintained during irrigation season only.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	2.1							0	0	6.7	13
2	3.7	2.1							0	0	6.9	12
3	3.0	2.1							0	0	7.8	14
4	3.0	2.1							0	0	13	12
5	3.0	2.1							0	1.1	13	11
6	2.7	2.1							0	2.8	13	11
7	2.7	2.1							0	2.6	13	11
8	2.7	2.1							0	2.4	13	7.8
9	2.6	2.1							0	2.4	12	7.6
10	2.4	1.8							0	2.1	18	7.4
11	2.2	1.7							0	2.1	17	7.8
12	2.1	1.7							0	2.1	16	7.6
13	2.1	1.6							0	4.8	16	7.6
14	2.1	1.6							0	8.4	16	7.8
15	2.0	1.6							0	15	17	7.7
16	2.0	1.6							0	24	17	7.9
17	2.0	.09							0	23	17	8.4
18	2.7	0							0	23	11	8.4
19	2.5	0							0	25	13	9.1
20	2.6	0							0	28	24	9.5
21	2.4	0							0	25	20	8.3
22	2.4	0							0	23	22	6.9
23	2.4	0							0	22	25	6.3
24	2.3	0							0	22	25	6.3
25	2.2	0							0	19	21	6.2
26	2.2	0							0	21	17	6.0
27	2.2	0							0	24	18	5.4
28	2.2	0							.06	22	19	.67
29	2.2	0			-----				.13	22	19	.05
30	2.2	0			-----				0	23	16	0
31	2.1	-----			-----		-----		-----	15	14	-----
TOTAL	76.6	30.59	0	0	0	0	0	0	.19	406.8	496.4	234.72
MEAN	2.47	1.02	0	0	0	0	0	0	.006	13.1	16.0	7.82
MAX	3.7	2.1	0	0	0	0	0	0	.13	28	25	14
MIN	2.0	0	0	0	0	0	0	0	0	0	6.7	0
AC-FT	152	61	0	0	0	0	0	0	.4	807	985	466

CAL YR 1970	TOTAL 1,132.90	MEAN 3.10	MAX 26	MIN 0	AC-FT 2,250
WTR YR 1971	TOTAL 1,245.30	MEAN 3.41	MAX 28	MIN 0	AC-FT 2,470

06430500 REDWATER CREEK AT WYOMING-SOUTH DAKOTA STATE LINE

LOCATION.--Lat 44°34'26", long 104°02'54", in NW¼NW¼ sec.18, T.7 N., R.1 E., Butte County, South Dakota, on left bank 800 ft downstream from State line, 5.7 miles upstream from Crow Creek, and 12 miles southwest of Belle Fourche, S. Dak.

DRAINAGE AREA.--471 sq mi.

PERIOD OF RECORD.--April 1929 to September 1931 and February 1936 to July 1937 (published as "near Beulah, Wyo."), June 1954 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,410 ft (from topographic map). Apr. 25, 1929, to Sept. 30, 1931, and Feb. 28, 1936, to July 31, 1937, nonrecording gage at site 2 miles upstream at different datum.

AVERAGE DISCHARGE.--19 years (1929-31, 1954-71), 34.0 cfs (24,630 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 391 cfs Feb. 13 (gage height, 4.80 ft); minimum, 5.3 cfs July 15 (gage height, 1.62 ft).

Period of record: Maximum discharge, 2,340 cfs June 16, 1962 (gage height, 11.95 ft, from floodmark), from rating curve extended above 940 cfs on basis of slope-area measurement of peak flow; no flow Aug. 13-15, 1929.

REMARKS.--Records good except those for winter periods, which are fair. Large diversions for irrigation above station. Total flow passing State line may be obtained by adding flow of Murray ditch. (See sta 06430000.)

REVISIONS (WATER YEARS).--WSP 1309: 1931(M), 1936-37(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	33	39	31	33	40	45	67	77	63	32	23
2	30	35	38	31	33	39	44	67	74	61	30	22
3	31	34	37	30	33	39	43	75	72	60	28	23
4	31	34	36	32	33	40	42	110	71	58	21	29
5	32	34	36	30	32	40	42	103	73	57	22	35
6	32	35	36	28	30	38	41	89	70	56	21	31
7	34	36	37	30	28	38	43	78	71	54	21	31
8	35	37	37	31	30	39	48	77	69	51	22	34
9	35	36	37	31	33	40	49	74	68	51	25	33
10	35	37	36	31	33	39	49	130	69	51	19	35
11	35	36	35	30	79	40	60	182	68	51	22	38
12	35	36	35	29	81	40	55	140	76	49	23	37
13	35	36	35	29	224	45	47	111	66	43	22	37
14	35	36	35	29	183	55	46	94	64	37	22	37
15	35	35	35	30	133	43	50	83	63	26	21	37
16	35	38	34	31	90	39	57	73	62	15	21	37
17	35	38	35	31	54	39	55	68	62	19	21	37
18	34	38	35	30	49	38	58	65	62	19	22	37
19	34	38	34	30	44	37	72	67	62	19	17	37
20	34	38	32	54	42	38	84	62	61	19	11	38
21	35	37	30	37	41	40	115	58	61	18	12	39
22	35	36	31	32	40	38	99	60	62	17	13	38
23	35	35	33	32	40	38	87	173	64	17	14	38
24	35	37	34	32	41	39	75	211	63	17	14	38
25	35	40	34	32	41	42	77	157	63	16	16	38
26	35	38	32	31	40	58	81	124	63	15	16	36
27	34	38	32	33	39	121	71	104	62	14	17	39
28	32	37	32	36	40	95	62	89	63	14	19	42
29	32	37	31	37	-----	53	61	80	68	14	19	43
30	33	39	31	39	-----	50	69	81	66	15	21	42
31	33	-----	31	34	-----	51	-----	82	-----	24	23	-----
TOTAL	1,046	1,094	1,065	1,003	1,619	1,431	1,827	3,034	1,995	1,040	627	1,061
MEAN	33.7	36.5	34.4	32.4	57.8	46.2	60.9	97.9	66.5	33.5	20.2	35.4
MAX	35	40	39	54	224	121	115	211	77	63	32	43
MIN	30	33	30	28	28	37	41	58	61	14	11	22
AC-FT	2,070	2,170	2,110	1,990	3,210	2,840	3,620	6,020	3,960	2,060	1,240	2,100
CAL YR 1970	TOTAL 16,523		MEAN 45.3		MAX 498		MIN 10		AC-FT 32,770			
WTR YR 1971	TOTAL 16,842		MEAN 46.1		MAX 224		MIN 11		AC-FT 33,410			

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
2-13	1700	4.80	391	5-11	0015	3.75	202
3-27	0700	3.51	164	5-23	1530	4.20	282

NIOBRARA RIVER BASIN

06454000 NIOBRARA RIVER AT WYOMING-NEBRASKA STATE LINE

LOCATION.--Lat 42°39'33", long 104°03'54", in SW¼ sec.15, T.31 N., R.60 W., Niobrara County, Wyoming, on left bank 0.2 mile downstream from Van Tassel Creek, 0.3 mile upstream from Wyoming-Nebraska State line, and 3 miles east of Van Tassel, Wyo.

DRAINAGE AREA.--450 sq mi, approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 4,687.70 ft above mean sea level, datum of 1956.

AVERAGE DISCHARGE.--16 years, 4.34 cfs (3,140 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 24 cfs June 1 (gage height, 1.98 ft); maximum gage height, 6.66 ft Mar. 26 (backwater from ice); minimum daily discharge, 1.7 cfs Aug. 29.

Period of record: Maximum discharge, 800 cfs July 17, 1969 (gage height, 6.92 ft in gage well, 6.75 ft, from floodmarks), from rating curve extended above 63 cfs on basis of computation of peak flow through culvert and over road; minimum daily, 1.4 cfs 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 above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	2.7	3.2	2.8	3.8	4.4	6.7	6.8	11	3.6	2.4	1.9
2	2.2	2.5	2.9	2.8	4.1	4.0	7.9	6.7	9.2	3.6	2.4	2.0
3	2.1	2.5	2.8	2.8	3.9	4.0	7.4	6.3	8.1	3.8	2.4	1.9
4	2.4	2.7	3.4	2.9	3.9	4.2	6.8	5.6	14	4.8	2.4	3.7
5	2.3	2.8	4.9	2.7	3.8	4.2	6.3	7.9	12	4.2	2.5	4.3
6	2.4	2.7	4.0	2.7	3.6	4.2	6.0	8.8	9.9	4.2	2.4	3.5
7	2.8	2.7	2.8	2.4	3.6	4.0	5.9	7.8	8.3	4.0	2.6	3.4
8	2.8	2.7	2.8	2.4	3.5	4.0	5.4	6.9	7.4	4.0	2.5	4.7
9	2.8	2.8	3.0	2.4	3.6	4.0	4.6	6.8	7.2	4.0	2.4	3.4
10	2.9	3.0	2.9	2.5	4.2	4.2	4.4	7.2	7.0	3.8	2.4	3.0
11	3.2	3.1	2.8	2.4	3.9	5.0	3.5	6.7	6.7	3.8	2.4	2.9
12	3.1	3.1	2.8	2.4	6.5	6.0	3.2	6.6	7.0	3.6	2.3	2.8
13	2.9	3.1	2.8	2.4	6.0	8.0	3.0	6.3	12	3.2	2.2	2.8
14	2.7	3.2	2.7	2.4	8.0	10	3.2	6.0	11	3.2	2.2	2.9
15	2.5	3.0	2.8	2.4	8.0	7.0	3.1	5.6	10	3.0	1.9	3.0
16	2.5	3.1	2.8	2.4	8.9	5.8	3.0	5.2	9.0	3.0	1.9	3.0
17	2.4	3.1	2.8	2.5	6.8	6.0	3.0	4.0	8.0	3.0	1.9	3.3
18	2.5	3.1	3.0	2.5	5.9	7.0	3.6	3.8	6.0	2.7	2.0	3.6
19	2.5	3.2	2.9	2.6	4.6	7.5	4.9	3.6	7.2	2.7	2.0	3.6
20	2.3	3.3	2.8	3.6	4.4	4.7	4.9	3.5	7.0	2.7	2.1	3.8
21	2.2	3.3	2.8	3.3	4.5	5.7	5.4	3.4	6.4	2.7	2.1	4.4
22	2.4	2.8	2.8	3.1	6.7	5.6	5.6	4.2	6.2	2.7	2.1	3.9
23	2.4	2.5	2.6	3.1	6.0	5.7	4.7	14	6.0	2.6	2.2	3.2
24	2.4	2.7	2.7	3.3	5.0	5.3	4.9	18	5.4	2.7	2.1	2.9
25	2.5	2.9	2.5	3.3	4.8	5.3	6.6	9.9	5.2	3.0	2.1	3.4
26	2.5	2.8	2.5	2.9	4.8	6.0	7.6	7.8	4.8	3.0	2.0	3.3
27	2.6	2.8	2.4	2.9	4.5	9.0	8.8	7.4	4.6	2.6	1.9	3.4
28	2.8	2.8	2.5	3.2	4.5	9.7	8.6	7.7	4.2	2.7	1.8	3.7
29	2.8	2.8	2.7	3.4	-----	7.9	8.0	7.0	4.2	2.7	1.7	3.6
30	2.7	2.9	2.7	3.8	-----	7.8	7.0	8.0	3.8	2.7	2.1	3.3
31	2.6	-----	2.8	3.6	-----	8.2	-----	8.2	-----	2.5	2.0	-----
TOTAL	79.4	86.7	89.9	87.9	141.8	184.4	164.0	217.7	228.8	100.8	67.4	98.6
MEAN	2.56	2.89	2.90	2.84	5.06	5.95	5.47	7.02	7.63	3.25	2.17	3.29
MAX	3.2	3.3	4.9	3.8	8.9	10	8.8	18	14	4.8	2.6	4.7
MIN	2.1	2.5	2.4	2.4	3.5	4.0	3.0	3.4	3.8	2.5	1.7	1.9
AC-FT	157	172	178	174	281	366	325	432	454	200	134	196

CAL YR 1970 TOTAL 1,364.3 MEAN 3.74 MAX 16 MIN 1.5 AC-FT 2,710
WTR YR 1971 TOTAL 1,547.4 MEAN 4.24 MAX 18 MIN 1.7 AC-FT 3,070

PEAK DISCHARGE (BASE, 20 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-24	0130	1.94	23	6-1	1900	1.98	24

NIOBRARA RIVER BASIN

111

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 upstream from timber farm-vehicle bridge, 300 ft upstream from bridge on State Highway 29, 0.2 mile northwest of Agate, and 14.5 miles upstream from Whistle Creek.

DRAINAGE AREA.--840 sq mi, approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,440 ft (from topographic map). Prior to Nov. 3, 1960, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--14 years, 14.9 cfs (10,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 141 cfs Mar. 14, 28; maximum gage height, 4.50 ft Mar. 14; minimum daily discharge, 5.5 cfs Oct. 5.

Period of record: Maximum discharge, 181 cfs June 23, 1959 (gage height, 5.00 ft, from floodmark); minimum daily, 1.8 cfs Apr. 4, 1968, result of freezeup.

REMARKS.--Records good. Diversions for irrigation of about 6,700 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	11	18	14	17	21	30	16	22	11	10	10
2	6.0	11	17	14	17	16	28	15	27	9.9	9.9	12
3	5.9	12	17	10	16	20	28	15	31	10	9.6	9.9
4	5.7	12	16	12	14	22	27	14	32	14	9.6	12
5	5.5	12	16	13	16	20	27	22	29	15	9.4	13
6	5.7	12	16	13	12	21	27	23	28	12	9.4	13
7	6.8	13	16	13	12	17	26	20	26	11	9.1	15
8	10	16	16	12	14	20	25	18	23	10	9.1	16
9	11	17	17	12	11	21	24	19	21	11	8.9	16
10	11	17	16	13	14	20	17	19	20	11	9.4	16
11	12	17	12	13	16	21	16	19	19	11	9.1	13
12	11	16	15	13	20	21	17	18	17	11	9.1	11
13	11	16	14	13	20	22	17	18	17	14	9.1	11
14	11	16	13	13	21	56	16	18	16	14	9.1	10
15	10	15	15	13	26	104	15	17	15	13	8.6	11
16	10	16	15	13	93	68	14	16	14	13	8.4	11
17	9.9	16	16	14	66	52	14	16	13	12	9.4	12
18	9.9	16	15	15	45	19	15	15	14	11	9.9	12
19	9.9	16	12	15	28	20	16	15	13	11	9.4	12
20	9.9	16	13	16	25	19	17	14	12	11	9.4	12
21	9.9	16	14	17	23	24	17	14	12	11	9.1	10
22	9.9	12	14	16	20	27	18	13	11	11	9.4	9.9
23	9.6	9.9	10	15	21	29	16	20	12	11	9.1	9.9
24	9.6	14	9.6	16	22	28	17	22	12	11	8.9	9.4
25	9.6	18	12	16	22	26	18	23	11	11	9.1	9.1
26	9.9	19	12	16	20	29	18	21	10	11	9.1	8.6
27	9.6	18	12	16	16	31	18	20	10	11	9.1	8.6
28	9.6	18	13	16	22	60	18	19	9.9	11	9.1	8.9
29	12	17	13	17	-----	102	18	19	9.9	11	9.1	8.2
30	12	17	13	17	-----	63	18	24	10	11	11	8.0
31	12	-----	14	17	-----	35	-----	28	-----	11	9.9	-----
TOTAL	291.9	451.9	441.6	443	669	1,054	592	570	516.8	356.9	288.8	338.5
MEAN	9.42	15.1	14.2	14.3	23.9	34.0	19.7	18.4	17.2	11.5	9.32	11.3
MAX	12	19	18	17	93	104	30	28	32	15	11	16
MIN	5.5	9.9	9.6	10	11	16	14	13	9.9	9.9	8.4	8.0
AC-FT	579	896	876	879	1,330	2,090	1,170	1,130	1,030	708	573	671
CAL YR 1970	TOTAL 5,019.2 MEAN 13.8 MAX 34 MIN 5.5 AC-FT 9,960											
WTR YR 1971	TOTAL 6,014.4 MEAN 16.5 MAX 104 MIN 5.5 AC-FT 11,930											

PEAK DISCHARGE (BASE, 35 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
2-16	1045	4.30	126	3-28	2030	4.48	141
3-14	2200	4.50	141				

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 downstream from bridge on State Highway 125, 0.8 mile upstream from Camp Creek, 4.2 miles northwest of Northgate, and 4.4 miles south of Colorado-Wyoming State line.

DRAINAGE AREA.--1,431 sq mi.

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 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 mile downstream at datum 3.36 ft lower.

AVERAGE DISCHARGE.--56 years, 433 cfs (313,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,250 cfs Mar. 31 (gage height, 5.79 ft); maximum gage height, 8.76 ft Mar. 30 (ice jam); minimum daily discharge, 83 cfs Jan. 28 to Feb. 1.

Period of record: Maximum discharge, 6,720 cfs June 11, 1923 (gage height, 6.24 ft, site and datum then in use); maximum gage height recorded, 8.84 ft Apr. 9, 1962 (ice jam); minimum daily discharge, 19 cfs July 17-19, 1934.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 130,000 acres of hay meadows above station. Transbasin diversions above station to Cache la Poudre River basin (see page 162). 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	175	195	138	100	83	94	2,310	766	2,030	1,570	422	241
2	167	170	145	100	88	98	1,710	886	1,710	1,400	395	213
3	162	167	159	100	92	102	1,310	1,050	1,240	1,210	405	203
4	156	180	159	97	92	105	937	1,260	1,130	1,120	390	213
5	148	203	157	95	92	110	694	1,470	1,250	1,070	410	230
6	156	210	158	93	92	110	678	1,570	1,290	991	385	227
7	256	220	140	93	92	108	628	1,390	1,230	946	347	213
8	307	220	148	93	86	108	806	1,270	1,140	894	324	245
9	291	175	140	90	84	115	886	1,260	1,250	937	303	279
10	271	181	138	90	84	128	1,120	1,230	1,600	910	365	271
11	287	192	120	90	85	130	1,090	1,140	1,810	910	390	237
12	295	189	118	90	86	130	1,850	1,020	1,720	878	329	210
13	324	213	120	91	93	130	1,880	991	1,820	806	311	175
14	338	181	120	88	98	130	1,760	1,090	1,880	806	291	153
15	307	159	115	88	100	130	1,590	1,230	1,900	814	267	136
16	279	160	100	88	100	132	1,580	1,370	1,960	822	252	131
17	252	162	100	88	100	135	1,610	1,520	2,130	798	248	133
18	237	164	110	88	100	140	1,580	1,690	2,310	742	248	159
19	227	164	110	90	100	140	1,490	1,700	2,440	838	245	186
20	203	160	110	88	100	140	1,370	1,350	2,480	870	237	217
21	197	158	110	88	98	140	1,200	1,090	2,500	838	234	230
22	217	160	110	88	96	140	1,090	822	2,530	902	227	241
23	230	162	110	87	94	145	1,050	854	2,490	1,040	220	241
24	227	166	100	86	94	180	991	928	2,440	919	227	230
25	213	167	100	86	92	210	991	814	2,370	822	220	220
26	203	161	100	86	92	240	982	678	2,280	734	220	203
27	172	162	100	84	92	255	1,000	670	2,140	649	267	192
28	138	160	100	83	90	370	902	710	1,930	593	315	162
29	164	151	100	83	-----	560	846	846	1,840	544	299	151
30	245	143	100	83	-----	1,300	798	1,220	1,750	505	303	143
31	227	-----	100	83	-----	2,700	-----	1,830	-----	462	271	-----
TOTAL	7,071	5,255	3,735	2,777	2,595	8,655	36,729	35,715	56,590	27,340	9,367	6,085
MEAN	228	175	120	89.6	92.7	279	1,224	1,152	1,886	882	302	203
MAX	338	220	159	100	100	2,700	2,310	1,830	2,530	1,570	422	279
MIN	138	143	100	83	83	94	628	670	1,130	462	220	131
AC-FT	14,030	10,420	7,410	5,510	5,150	17,170	72,850	70,840	112,200	54,230	18,580	12,070
CAL YR 1970	TOTAL	193,558	MEAN 530	MAX 3,740	MIN 100	AC-FT 383,900						
WTR YR 1971	TOTAL	201,914	MEAN 553	MAX 2,700	MIN 83	AC-FT 400,500						

PLATTE RIVER BASIN

113

06621000 DOUGLAS CREEK NEAR FOX PARK, WYO.

LOCATION.--Lat 41°04'52", long 106°18'25", in NE¼SE¼ sec.19, T.13 N., R.79 W., Albany County, Medicine Bow National Forest, on left bank 0.8 mile downstream from Pelton Creek and 8 miles west of Foxpark.

DRAINAGE AREA.--120 sq mi. Area at mouth, 153 sq mi.

PERIOD OF RECORD.--July 1946 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,200 ft (from topographic map).

AVERAGE DISCHARGE (unadjusted).--25 years, 78.7 cfs (57,020 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,460 cfs May 29 (gage height, 4.55 ft); minimum daily, 8.0 cfs Jan. 5.

Period of record: Maximum discharge, 1,630 cfs June 7, 1957 (gage height, 4.66 ft); minimum daily, 2.3 cfs Aug. 26, 27, Sept. 6, 7, 1967.

REMARKS.--Records good except those for winter period, which are poor. Flow regulated by Rob Roy Reservoir (capacity, 8,900 acre-ft). Transbasin diversions above station to Lake Owen for municipal use by cities of Cheyenne and Laramie began November 1963.

REVISIONS.--WSP 1710: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	25	15	13	16	10	23	148	994	229	15	41
2	16	25	15	12	16	10	21	212	959	201	17	41
3	15	25	15	11	14	10	18	310	1,030	177	22	41
4	14	25	15	9.0	12	11	16	378	1,110	162	19	47
5	14	26	15	8.0	11	10	16	366	980	148	19	49
6	25	27	15	9.0	11	10	25	310	904	128	14	44
7	61	27	15	9.0	10	10	45	306	856	117	13	55
8	38	25	15	10	10	11	80	318	898	110	12	115
9	27	27	15	11	11	11	110	306	931	106	13	108
10	31	26	14	12	12	11	150	286	917	93	16	102
11	33	25	14	13	12	11	130	274	862	76	14	91
12	36	25	14	14	12	12	100	382	826	62	20	67
13	44	25	14	13	12	12	100	513	802	55	25	65
14	38	25	14	13	12	11	130	660	838	49	24	75
15	37	22	14	13	12	11	190	760	844	45	20	102
16	37	22	15	14	12	11	250	880	868	41	18	87
17	37	22	13	15	12	11	306	790	892	40	17	18
18	36	20	13	16	12	10	270	610	802	52	17	16
19	35	18	13	16	12	10	184	522	730	44	18	17
20	35	18	13	17	11	11	130	482	685	38	18	18
21	32	19	13	16	10	11	110	545	645	31	17	20
22	33	17	13	14	10	11	95	630	605	41	17	32
23	32	15	13	13	10	11	91	575	513	39	17	48
24	32	17	13	13	11	11	102	555	455	40	23	31
25	32	19	13	13	12	11	121	640	438	31	23	23
26	33	19	13	13	11	12	123	760	398	31	25	17
27	31	17	13	13	10	13	106	952	358	25	38	14
28	28	15	13	13	10	12	100	1,090	326	23	43	12
29	32	15	13	14	-----	12	95	1,230	294	20	33	11
30	28	15	13	15	-----	13	106	1,340	262	20	30	11
31	29	-----	14	16	-----	17	-----	1,180	-----	17	27	-----
TOTAL	968	648	430	401.0	326	348	3,343	18,310	22,022	2,291	644	1,418
MEAN	31.2	21.6	13.9	12.9	11.6	11.2	111	591	734	73.9	20.8	47.3
MAX	61	27	15	17	16	17	306	1,340	1,110	229	43	115
MIN	14	15	13	8.0	10	10	16	148	262	17	12	11
AC-FT	1,920	1,290	853	795	647	690	6,630	36,320	43,680	4,540	1,280	2,810
CAL YR 1970	TOTAL	41,530.4	MEAN	114	MAX	1,110	MIN	3.2	AC-FT	82,380		
WTR YR 1971	TOTAL	51,149.0	MEAN	140	MAX	1,340	MIN	8.0	AC-FT	101,500		

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 downstream from logging road bridge, 0.7 mile downstream from Lincoln Creek, 1.6 miles upstream from South Brush Creek, and 16 miles southeast of Saratoga. Prior to June 17, 1971, at site 110 ft downstream on right bank. June 17 to Sept. 27, 1971, at site 10 ft downstream on right bank.

DRAINAGE AREA.--37.4 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 8,020 ft (from topographic map). Prior to June 17, 1971, at site 110 ft downstream at different datum. June 17 to Sept. 21, 1971, at site 10 ft downstream at present datum.

AVERAGE DISCHARGE.--11 years, 52.4 cfs (37,960 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, about 900 cfs June 16 (gage height, 4.5 ft, present site and datum); minimum daily, 5.0 cfs Aug. 25.

Period of record: Maximum discharge, 1,120 cfs June 7, 1964 (gage height, 5.75 ft, site and datum then in use), from rating curve extended above 480 cfs; minimum daily, 5.0 cfs Aug. 25, 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	14	11	13	8.5	10	15	51	299	230	25	13
2	9.9	13	10	11	9.0	9.5	15	68	305	225	23	8.7
3	9.9	14	9.5	9.6	8.6	10	15	93	356	225	22	10
4	9.9	12	11	8.4	8.0	12	14	103	374	215	22	20
5	9.9	13	12	7.5	7.6	11	14	93	338	210	22	29
6	15	14	13	7.0	7.0	10	15	88	335	200	20	30
7	22	14	13	6.5	7.0	10	16	99	341	196	14	27
8	17	13	14	7.0	9.0	11	16	113	422	200	11	43
9	15	15	13	7.8	10	10	20	106	440	196	21	26
10	14	13	13	8.9	10	11	25	94	447	184	20	21
11	22	14	12	10	11	12	31	88	422	168	19	17
12	21	15	12	11	12	13	33	93	387	142	23	13
13	24	14	12	10	13	14	33	115	398	136	21	10
14	19	13	14	9.5	14	12	38	157	464	125	17	8.7
15	20	13	15	10	14	11	45	201	628	103	14	8.7
16	21	14	15	11	13	11	46	231	721	82	13	10
17	19	14	15	12	14	10	47	201	687	80	12	12
18	18	14	15	12	13	10	48	173	566	94	11	13
19	19	15	14	11	12	10	42	144	555	70	8.7	19
20	16	15	14	9.8	11	11	39	125	566	56	6.9	16
21	16	14	14	9.4	10	11	35	129	550	50	6.0	16
22	16	14	14	9.0	9.6	12	32	146	566	63	5.5	17
23	16	13	13	9.6	10	12	32	142	528	54	5.5	15
24	16	13	13	10	11	12	38	129	490	50	5.5	14
25	17	12	13	9.9	12	11	46	138	450	43	5.0	12
26	17	12	13	9.9	11	12	50	186	415	40	7.8	11
27	15	12	13	9.9	10	13	44	266	380	37	117	11
28	16	11	13	11	10	12	42	353	335	35	27	11
29	16	12	13	11	-----	13	38	412	290	33	22	12
30	15	12	13	10	-----	14	42	426	245	30	19	12
31	17	-----	14	9.4	-----	15	-----	338	-----	27	15	-----
TOTAL	508.6	401	403.5	302.1	295.3	355.5	966	5,101	13,300	3,599	580.9	486.1
MEAN	16.4	13.4	13.0	9.75	10.5	11.5	32.2	165	443	116	18.7	16.2
MAX	24	15	15	13	14	15	50	426	721	230	117	43
MIN	9.9	11	9.5	6.5	7.0	9.5	14	51	245	27	5.0	8.7
AC-FT	1,010	795	800	599	586	705	1,920	10,120	26,380	7,140	1,150	964
CAL YR 1970	TOTAL 21,147.1	MEAN 57.9	MAX 429	MIN 5.2	AC-FT 41,950							
WTR YR 1971	TOTAL 26,299.0	MEAN 72.1	MAX 721	MIN 5.0	AC-FT 52,160							

PEAK DISCHARGE (BASE, 350 CFS)

NOTE.--No gage-height record June 14-17.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-29	2100	4.95	492	6-16	2000	a 4.5	b 900

a Present site and datum.

b About.

PLATTE RIVER BASIN

115

06622900 SOUTH BRUSH CREEK NEAR SARATOGA, WYO.

LOCATION.--Lat 41°20'38", long 106°31'33", in NE¼ sec.20, T.16 N., R.81 W., Carbon County, Medicine Bow National Forest, on left bank 300 ft upstream from culvert on State Highway 130, 1.6 miles upstream from North Brush Creek, and 17 miles southeast of Saratoga.

DRAINAGE AREA.--22.8 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 8,100 ft (from topographic map).

AVERAGE DISCHARGE.--11 years, 32.6 cfs (23,620 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 442 cfs June 23 (gage height, 3.81 ft); minimum daily, 3.5 cfs Jan. 7.
Period of record: Maximum discharge, 559 cfs June 10, 1965 (gage height, 4.09 ft); minimum daily, 0.8 cfs Aug. 15-20, 28, 29, 1963.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. Transbasin diversion 0.3 mile above station for irrigation in North Brush Creek basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	8.5	8.8	7.3	4.9	6.0	8.0	26	125	146	14	5.1
2	6.3	9.4	8.6	7.0	5.0	5.8	8.2	34	114	138	15	4.8
3	6.3	7.9	8.0	7.0	4.8	6.0	8.2	54	136	140	17	5.1
4	6.1	8.3	8.5	6.0	4.6	6.2	7.6	74	158	129	19	6.5
5	6.1	8.8	9.4	5.0	4.4	6.0	7.3	71	129	114	19	11
6	8.6	8.8	9.1	4.0	4.7	5.8	7.3	65	121	101	14	9.3
7	12	8.8	9.1	3.5	5.0	5.8	7.3	64	129	98	11	9.1
8	9.5	8.5	9.1	3.9	5.4	6.2	7.0	74	185	108	9.1	13
9	9.2	9.4	8.5	4.4	5.6	5.8	8.2	71	204	89	9.7	8.0
10	7.7	9.1	8.2	5.0	5.6	6.2	10	64	215	82	8.6	6.4
11	14	9.5	8.2	6.0	6.0	6.6	14	57	218	76	7.8	5.7
12	13	10	7.9	6.5	6.2	7.0	16	59	207	71	17	5.3
13	14	9.4	7.9	6.3	6.4	7.6	17	71	215	69	11	5.1
14	12	9.4	7.9	6.3	6.6	7.2	20	103	260	65	8.4	4.8
15	12	8.6	7.9	6.3	6.6	6.8	23	133	277	61	7.5	4.7
16	12	8.8	8.2	6.3	6.4	6.8	26	133	306	56	7.1	4.7
17	12	9.1	8.2	6.4	6.6	6.6	27	104	314	53	6.7	4.7
18	11	9.4	8.5	6.8	6.4	6.6	30	92	325	58	6.6	5.0
19	11	9.4	8.5	6.4	6.2	6.6	30	79	325	43	6.2	5.0
20	9.6	10	8.2	6.1	6.0	7.0	27	70	341	37	6.1	4.9
21	9.3	9.7	7.9	5.8	5.8	7.0	24	70	362	35	5.9	8.0
22	9.1	9.1	7.3	5.6	5.6	7.0	22	62	341	38	5.4	10
23	9.4	9.1	8.2	5.8	5.8	6.8	21	54	379	33	5.4	9.7
24	8.8	9.4	8.2	5.9	6.0	6.6	24	47	366	29	5.3	9.4
25	8.2	9.4	7.6	6.0	6.4	6.1	26	56	321	25	4.9	9.0
26	7.8	9.4	7.3	5.6	6.2	6.5	29	85	291	22	8.0	8.7
27	7.8	8.8	7.3	5.2	6.1	7.5	26	129	291	20	16	8.5
28	8.2	8.4	7.3	5.0	6.0	8.5	25	177	263	19	8.0	8.9
29	8.5	8.8	7.3	5.0	-----	8.0	23	215	212	18	7.2	8.6
30	9.1	9.7	7.3	5.0	-----	8.5	23	204	169	16	6.3	9.3
31	8.5	-----	7.3	4.9	-----	8.5	-----	151	-----	15	5.6	-----
TOTAL	293.6	272.9	251.7	176.3	161.3	209.6	552.1	2,748	7,299	2,004	298.8	218.3
MEAN	9.47	9.10	8.12	5.69	5.76	6.76	18.4	88.6	243	64.6	9.64	7.28
MAX	14	10	9.4	7.3	6.6	8.5	30	215	379	146	19	13
MIN	6.1	7.9	7.3	3.5	4.4	5.8	7.0	26	114	15	4.9	4.7
AC-FT	582	541	499	350	320	416	1,100	5,450	14,480	3,970	593	433

CAL YR 1970 TOTAL 14,022.2 MEAN 38.4 MAX 321 MIN 3.8 AC-FT 27,810
WTR YR 1971 TOTAL 14,485.6 MEAN 39.7 MAX 379 MIN 3.5 AC-FT 28,730

NOTE.--No gage-height record Feb. 7 to Mar. 22.

PLATTE RIVER BASIN

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 mile upstream from Hog Park Creek and 13 miles south of Encampment.

DRAINAGE AREA.--72.7 sq mi. Area at mouth, 265 sq mi.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,270 ft (from topographic map).

AVERAGE DISCHARGE.--7 years, 114 cfs (82,590 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,280 cfs June 21 (gage height, 5.00 ft); minimum daily, 21 cfs Mar. 18.

Period of record: Maximum discharge, 1,680 cfs about June 13, 1965 (gage height, not determined), from slope-area measurement of peak flow; minimum daily, 9.5 cfs Dec. 31, 1968.

REMARKS.--Records good except those for winter period, which are 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	30	31	30	27	26	24	70	546	785	87	41
2	30	29	30	29	29	26	25	92	546	750	87	38
3	33	28	30	27	29	26	25	128	590	740	87	38
4	35	28	31	27	27	26	24	159	600	705	86	49
5	38	29	31	27	26	26	26	154	562	655	81	57
6	47	28	31	27	29	25	26	140	582	586	75	55
7	67	34	31	27	29	25	26	154	600	570	70	52
8	51	33	32	27	29	25	28	147	690	578	67	77
9	47	33	32	27	29	25	31	133	745	554	70	49
10	45	32	32	27	29	25	34	117	780	514	77	43
11	47	30	32	27	29	25	45	114	770	470	65	38
12	47	29	31	28	29	25	48	142	790	420	71	36
13	54	31	29	29	29	25	41	190	840	395	67	33
14	43	33	30	29	29	24	48	260	900	377	57	32
15	36	31	31	29	29	23	59	317	942	347	54	32
16	36	29	30	29	28	24	70	359	1,010	308	52	32
17	36	30	30	28	29	24	83	338	1,090	280	51	33
18	36	31	30	27	29	21	81	275	1,100	265	52	40
19	37	32	29	26	29	23	76	235	1,100	242	48	41
20	39	30	29	28	28	23	68	204	1,120	215	47	43
21	40	31	29	29	26	24	59	223	1,130	204	46	43
22	40	31	29	30	27	24	56	258	1,120	210	45	43
23	39	32	29	31	28	24	53	232	1,100	198	49	42
24	38	32	30	32	28	24	54	219	1,100	170	50	46
25	38	32	30	32	27	25	59	250	1,080	148	43	46
26	37	33	30	32	27	26	67	308	1,050	133	45	47
27	31	33	30	32	27	25	60	402	1,030	124	77	40
28	30	32	30	32	26	24	55	534	1,000	114	77	38
29	29	31	30	31	-----	24	55	680	936	108	81	36
30	30	31	30	30	-----	24	58	755	835	101	54	41
31	29	-----	30	29	-----	24	-----	625	-----	94	47	-----
TOTAL	1,216	928	939	895	787	760	1,464	8,214	26,284	11,360	1,965	1,281
MEAN	39.2	30.9	30.3	28.9	28.1	24.5	48.8	265	876	366	63.4	42.7
MAX	67	34	32	32	29	26	83	755	1,130	785	87	77
MIN	29	28	29	26	26	21	24	70	546	94	43	32
AC-FT	2,410	1,840	1,860	1,780	1,560	1,510	2,900	16,290	52,130	22,530	3,900	2,540
CAL YR 1970	TOTAL 49,031	MEAN 134	MAX 966	MIN 19	AC-FT 97,250							
WTR YR 1971	TOTAL 56,093	MEAN 154	MAX 1,130	MIN 21	AC-FT 111,300							

PEAK DISCHARGE (BASE, 750 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
5-29	2300	4.33	858	6-21	2130	5.00	1,280

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 mile upstream from mouth and 8 miles northeast of Encampment.

DRAINAGE AREA.--265 sq mi.

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 (from topographic map). Prior to June 28, 1961, water-stage recorder at site 660 ft upstream at datum 2.00 ft higher.

AVERAGE DISCHARGE.--31 years, 236 cfs (171,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,020 cfs June 23 (gage height, 6.54 ft); minimum daily, 46 cfs Sept. 14-16.

Period of record: Maximum discharge, 4,510 cfs June 1, 1943 (gage height, 8.25 ft, site and datum then in use); maximum gage height, 8.33 ft June 4, 1952, site and datum then in use; minimum daily discharge, 5.2 cfs Aug. 15, 16, 1940.

REMARKS.--Records good except those for winter period, which are poor. Five small reservoirs above station for irrigation (total capacity, about 400 acre-ft). Slight regulation by Hog Park Creek Reservoir (capacity, about 2,970 acre-ft). Diversions for irrigation of about 8,800 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	94	86	93	72	68	86	232	1,550	1,290	128	58
2	71	78	80	88	68	64	79	293	1,390	1,190	120	53
3	74	94	84	73	64	66	80	385	1,450	1,190	118	52
4	72	90	76	64	68	68	79	501	1,490	1,140	103	58
5	69	87	84	66	74	64	73	526	1,360	1,040	97	66
6	90	102	80	58	66	66	75	482	1,360	955	92	66
7	169	96	82	47	60	66	82	510	1,360	887	82	66
8	121	96	80	57	64	62	86	501	1,510	930	77	99
9	121	87	80	65	68	62	90	486	1,630	881	86	75
10	121	92	79	76	68	63	110	453	1,860	806	118	58
11	128	84	82	83	72	64	135	402	1,810	732	92	53
12	119	94	90	84	70	65	146	429	1,860	659	84	50
13	135	92	97	86	74	71	165	526	1,930	595	90	47
14	112	89	105	82	76	75	182	695	2,150	569	77	46
15	100	84	100	78	73	80	213	924	2,330	496	71	46
16	96	100	96	82	70	82	242	1,110	2,480	439	69	46
17	94	94	98	86	66	53	281	1,130	2,800	407	71	52
18	94	89	100	84	68	75	300	918	2,740	394	63	56
19	94	84	94	81	64	106	285	744	2,660	351	61	55
20	94	90	86	76	65	88	278	617	2,620	323	59	59
21	100	85	88	70	62	56	245	585	2,590	304	59	58
22	98	84	93	66	60	56	232	654	2,610	326	58	67
23	96	80	90	72	64	59	213	654	2,670	311	55	75
24	108	94	92	74	68	75	210	569	2,550	308	58	75
25	94	96	86	76	74	69	216	595	2,500	259	55	75
26	94	96	82	80	70	86	245	713	2,290	229	63	75
27	75	90	86	78	66	106	239	912	2,150	200	84	71
28	84	85	90	74	72	92	219	1,240	1,930	193	79	66
29	89	92	94	77	-----	82	216	1,610	1,800	168	90	63
30	90	90	96	80	-----	84	210	2,100	1,440	152	73	59
31	80	-----	99	76	-----	97	-----	1,810	-----	135	59	-----
TOTAL	3,057	2,708	2,755	2,332	1,906	2,270	5,312	23,306	60,870	17,859	2,491	1,845
MEAN	98.6	90.3	88.9	75.2	68.1	73.2	177	752	2,029	576	80.4	61.5
MAX	169	102	105	93	76	106	300	2,100	2,800	1,290	128	99
MIN	69	78	76	47	60	53	73	232	1,360	135	55	46
AC-FT	6,060	5,370	5,460	4,630	3,780	4,500	10,540	46,230	120,700	35,420	4,940	3,660
CAL YR 1970	TOTAL 113,884	MEAN 312	MAX 2,130	MIN 44	AC-FT 225,900							
WTR YR 1971	TOTAL 126,711	MEAN 347	MAX 2,800	MIN 46	AC-FT 251,300							

PEAK DISCHARGE (BASE, 1,700 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-30	0800	5.65	2,220	6-23	0500	6.54	3,020

06628900 PASS CREEK NEAR ELK MOUNTAIN, WYO.

LOCATION.--Lat 41°35'10", long 106°36'37", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.27, T.19 N., R.82 W., Carbon County, on right bank 235 ft downstream from Lone Tree Creek, 1,000 ft upstream from Brush Creek, 12 miles southwest of Elk Mountain, and 14 miles northeast of Saratoga.

DRAINAGE AREA.--91.5 sq mi. Area at mouth, 279 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 7,230 ft (from topographic map). Prior to Oct. 6, 1966, 15 ft downstream at present datum.

AVERAGE DISCHARGE.--14 years, 37.4 cfs (27,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 605 cfs May 31 (gage height, 4.53 ft); minimum daily, 7.0 cfs Jan. 7.

Period of record: Maximum discharge, 854 cfs June 13, 1957 (gage height, 5.21 ft), from rating curve extended above 460 cfs; minimum daily, 1.5 cfs Sept. 11, 12, 1959.

REMARKS.--Records fair except those for winter period and period of no gage-height record, which are poor. Diversions for irrigation of about 6,300 acres above station. Diversion to Kerr ditch 7.5 miles upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	17	19	13	17	11	160	138	311	84	18	10
2	10	15	18	11	15	11	120	166	299	80	10	9.5
3	10	18	17	9.0	13	11	100	202	313	81	11	9.5
4	10	23	16	8.0	11	12	90	220	324	68	17	15
5	10	25	17	8.0	11	11	94	184	282	72	16	23
6	18	17	17	7.5	11	11	100	145	282	61	15	14
7	35	19	19	7.0	10	11	110	160	274	48	14	14
8	21	19	20	8.0	10	11	130	164	286	62	14	27
9	18	19	18	10	11	12	156	160	292	68	18	18
10	22	17	18	11	12	12	266	188	294	53	21	14
11	22	19	16	11	12	12	313	160	272	39	18	13
12	31	18	16	12	12	13	242	174	276	33	17	11
13	55	18	16	12	12	14	202	180	260	30	17	10
14	30	18	17	11	13	14	202	272	250	27	15	9.5
15	19	14	17	11	13	13	214	318	250	31	14	10
16	21	15	17	12	13	13	204	351	250	41	13	13
17	20	16	15	14	12	13	204	322	244	38	13	14
18	19	16	13	13	12	12	194	208	234	45	12	16
19	18	13	13	13	12	13	149	166	216	39	12	16
20	18	18	14	13	11	13	131	136	204	37	12	17
21	20	18	13	13	11	14	108	138	194	40	12	17
22	20	15	13	12	11	15	99	210	178	48	11	18
23	20	15	13	12	11	16	110	214	172	44	11	18
24	20	22	13	12	11	16	153	156	154	47	12	17
25	21	39	13	12	12	16	163	143	141	35	11	16
26	20	26	14	13	11	22	149	212	127	31	12	15
27	20	26	14	13	11	40	97	270	115	28	33	15
28	22	28	13	13	11	50	88	332	113	27	17	17
29	21	24	13	13	-----	120	91	414	110	31	14	17
30	18	20	13	15	-----	200	105	493	104	26	15	15
31	18	-----	14	18	-----	240	-----	425	-----	21	13	-----
TOTAL	637	587	479	360.5	332	992	4,544	7,021	6,821	1,415	458	448.5
MEAN	20.5	19.6	15.5	11.6	11.9	32.0	151	226	227	45.6	14.8	15.0
MAX	55	39	20	18	17	240	313	493	324	84	33	27
MIN	10	13	13	7.0	10	11	88	136	104	21	10	9.5
AC-FT	1,260	1,160	950	715	659	1,970	9,010	13,930	13,530	2,810	908	890
CAL YR 1970	TOTAL 18,649.1	MEAN 51.1	MAX 481	MIN 6.8	AC-FT 36,990							
WTR YR 1971	TOTAL 24,055.0	MEAN 66.0	MAX 493	MIN 7.0	AC-FT 47,790							

PEAK DISCHARGE (BASE, 300 CFS)

NOTE.--No gage-height record Jan. 13 to Apr. 8.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
a 3-31	Unknown	Unknown	a 350	5-17	0100	4.02	467
4-10	2230	4.04	492	5-31	0300	4.53	605

a About.

119

LOCATION.--Lat 41°52'20", long 107°03'25", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.13, T.22 N., R.86 W., Carbon County, on left bank 6.5 miles northeast of Sinclair and 14 miles upstream from high-water line of Seminole Reservoir at elevation 6,357 ft.

DRAINAGE AREA.--8,134 sq mi, of which 4,073 sq mi (including 3,959 sq mi 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 above mean sea level.

AVERAGE DISCHARGE.--32 years, 1,088 cfs (788,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 10,300 cfs June 21 (gage height, 8.47 ft); minimum daily, 230 cfs Jan. 7.
Period of record: Maximum discharge, 14,500 cfs June 15, 1957 (gage height, 9.72 ft); minimum daily, 70 cfs Sept. 17, 1944.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 215,000 acres above station. Transbasin diversions above station. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Twelve 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	458	588	540	370	540	400	3,710	1,930	8,070	5,310	921	508
2	451	588	500	330	540	380	3,060	2,010	7,110	4,650	867	472
3	437	516	460	290	500	420	2,360	2,300	6,350	4,250	813	437
4	409	472	410	270	440	480	2,040	2,860	6,050	3,850	786	430
5	388	423	450	280	400	500	1,780	3,380	5,990	3,570	759	451
6	381	437	500	260	370	500	1,500	3,550	5,770	3,280	732	472
7	416	556	540	230	350	490	1,390	3,450	5,850	3,000	759	500
8	588	636	580	250	400	515	1,450	3,380	5,990	2,850	714	548
9	741	628	530	290	450	495	1,730	3,320	6,410	2,740	687	628
10	741	572	500	320	480	510	1,940	3,380	6,650	2,610	678	636
11	741	556	465	330	500	520	2,310	3,160	7,230	2,400	723	596
12	768	532	395	350	520	540	2,700	2,860	7,410	2,210	723	556
13	768	540	340	340	540	555	3,030	2,840	7,530	2,100	687	493
14	813	572	350	320	550	515	3,080	3,150	7,590	1,960	644	437
15	831	548	340	350	550	490	3,020	3,930	8,130	1,840	604	402
16	759	451	400	370	540	480	2,980	4,690	8,450	1,780	556	381
17	705	409	425	390	520	480	3,090	5,430	8,900	1,700	524	395
18	660	548	445	400	500	460	3,150	5,470	9,480	1,670	493	402
19	636	612	405	410	480	450	3,200	5,030	9,780	1,630	479	381
20	620	612	370	420	460	460	3,080	4,490	9,620	1,570	472	388
21	604	564	350	390	430	480	2,850	3,670	9,700	1,570	458	451
22	580	540	380	360	400	490	2,580	3,340	9,680	1,580	451	479
23	588	520	350	370	430	520	2,370	3,260	9,550	1,720	437	516
24	556	580	330	390	450	615	2,250	3,270	9,480	1,760	430	548
25	636	636	350	420	480	720	2,220	3,150	8,980	1,680	423	556
26	636	714	370	430	460	1,000	2,310	3,120	8,620	1,510	416	532
27	604	750	350	450	420	2,000	2,380	3,280	7,950	1,370	444	508
28	532	665	340	470	400	2,730	2,280	3,890	7,450	1,220	493	486
29	486	564	340	500	-----	2,550	2,080	4,910	6,850	1,150	516	472
30	500	572	350	500	-----	2,600	1,960	6,170	6,130	1,070	588	444
31	524	-----	390	500	-----	3,240	-----	7,970	-----	1,000	556	-----
TOTAL	18,597	16,905	12,845	11,350	13,100	26,585	73,880	116,640	232,750	70,600	18,833	14,505
MAX	600	564	414	366	468	858	2,463	3,763	7,758	2,277	608	484
MEAN	831	750	580	500	550	3,240	3,710	7,970	9,780	5,210	921	636
MIN	381	409	330	230	350	380	1,390	1,930	5,770			

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 upstream from point of diversion to King Canyon Canal, 0.4 mile downstream from Overland Creek, 1.0 mile southwest of Arlington, and 6.9 miles southwest of McFadden.

DRAINAGE AREA.--62.9 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 7,790 ft (from topographic map).

AVERAGE DISCHARGE.--17 years (1954-71), 79.7 cfs (57,740 acre-ft per year), (includes records for station 06632500 Rock Creek at Arlington 1954-65, adjusted for diversion by King Canyon Canal).

EXTREMES.--Current year: Maximum discharge, 2,590 cfs June 19 (gage height, 5.83 ft); minimum daily, 6.0 cfs Jan. 5.
Period of record: Maximum discharge, 2,590 cfs June 19, 1971 (gage height, 5.83 ft); minimum daily, 5.5 cfs Dec. 21, 1967.

REMARKS.--Records fair except those for winter period and period of no gage-height record, which are poor. Minor regulation by Sand Lake (capacity, 1,100 acre-ft) on Deep Creek, 12 miles upstream. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	20	15	9.5	14	9.5	36	56	530	722	62	22
2	16	18	13	9.0	13	9.0	30	72	535	697	59	21
3	15	20	11	8.5	11	9.5	25	96	637	697	57	21
4	15	21	10	7.5	10	9.5	29	117	661	637	54	22
5	14	22	10	6.0	9.5	9.5	29	109	578	556	50	28
6	17	21	10	7.0	8.5	10	29	102	578	530	47	29
7	25	20	11	8.0	10	11	23	92	551	515	44	22
8	19	21	12	9.5	11	10	24	90	673	546	42	38
9	19	20	13	11	12	10	26	89	822	465	54	30
10	21	18	10	12	14	10	30	80	836	413	50	22
11	22	18	8.0	11	14	11	38	74	780	377	40	20
12	22	18	8.0	10	14	11	43	80	760	326	38	20
13	26	20	9.5	10	14	12	46	100	801	314	38	18
14	21	20	11	10	14	12	48	134	944	292	35	17
15	16	17	13	12	15	12	55	170	1,010	254	32	16
16	16	19	11	13	14	11	63	204	1,360	228	31	17
17	16	20	10	14	14	11	68	213	1,410	201	30	18
18	18	19	9.0	15	14	11	70	183	1,350	228	30	41
19	19	16	8.5	15	14	11	68	158	1,690	189	28	87
20	19	14	9.0	14	14	11	59	141	1,450	158	26	85
21	20	14	8.0	13	14	11	52	139	1,240	146	25	82
22	18	12	7.5	12	15	10	48	170	1,340	144	24	77
23	20	10	7.5	12	14	10	47	158	1,350	130	25	72
24	18	12	7.0	13	13	10	47	144	1,440	117	25	75
25	18	13	7.5	13	12	10	51	150	1,450	107	22	75
26	18	11	8.0	12	11	11	52	195	1,350	100	22	69
27	20	10	8.0	12	11	11	51	272	1,340	94	47	57
28	16	12	8.0	13	10	12	50	377	1,300	85	35	44
29	21	14	7.5	14	-----	14	46	535	1,100	90	34	32
30	23	17	9.0	15	-----	14	46	619	857	75	29	25
31	21	-----	10	15	-----	18	-----	525	-----	68	25	-----
TOTAL	587	507	300.0	356.0	354.0	342.0	1,329	5,644	30,723	9,501	1,160	1,202
MEAN	18.9	16.9	9.68	11.5	12.6	11.0	44.3	182	1,024	306	37.4	40.1
MAX	26	22	15	15	15	18	70	619	1,690	722	62	87
MIN	14	10	7.0	6.0	8.5	9.0	23	56	530	68	22	16
AC-FT	1,160	1,010	595	706	702	678	2,640	11,190	60,940	18,850	2,300	2,380
CAL YR 1970	TOTAL 44,509.3		MEAN 122	MAX 1,420	MIN 6.0	AC-FT 88,280						
WTR YR 1971	TOTAL 52,005.0		MEAN 142	MAX 1,690	MIN 6.0	AC-FT 103,200						

PEAK DISCHARGE (BASE, 700 CFS)

NOTE.--No gage-height record Oct. 28 to Dec. 14.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-19	2100	5.83	2,590				

121

LOCATION.--Lat 42°00'35", long 106°30'45", in SE 1/4 sec.34, T.24 N., R.81 W., Carbon County, on left bank 15 ft downstream from county highway bridge, 2 miles upstream from Troublesome Creek, 9 miles upstream from high-water line of Seminole Reservoir at elevation 6.357 ft. and 10 miles north of Hanna.

PERIOD OF RECORD.--July 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,415.40 ft above mean sea level.

AVERAGE DISCHARGE.--32 years, 165 cfs (119,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,050 cfs June 26 (gage height, 3.80 ft); minimum daily, 27 cfs Jan. 7.
Period of record: Maximum discharge, 6,590 cfs Mar. 29, 1943 (gage height, 5.23 ft), from rating curve extended above 2,500 cfs; maximum gage height, 6.10 ft Feb. 12, 1962 (backwater from ice); minimum daily discharge, 1.1 cfs Sept. 7-14, 1959, Aug. 7, 1963.

REMARKS.--Records good except those for winter period, which are poor. Many small reservoirs above station (total capacity, about 6,000 acre-ft) for irrigation. Diversions for irrigation of about 43,000 acres above station. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Twelve discharge measurements furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 956: 1941(M). WSP 1440: 1940(M), 1941. WSP 1710: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	80	90	44	100	74	1,140	382	1,700	1,390	117	55
2	67	66	90	40	100	70	664	370	1,700	1,250	112	43
3	64	54	85	36	94	80	442	382	1,470	1,110	103	38
4	62	70	80	32	80	90	352	448	1,410	968	98	37
5	60	87	90	30	75	95	295	572	1,410	840	92	37
6	60	95	100	29	70	95	260	784	1,400	768	90	35
7	71	106	112	27	70	90	226	856	1,280	680	85	33
8	78	112	117	30	75	95	222	912	1,250	616	83	35
9	87	100	117	34	88	95	270	1,020	1,230	572	81	36
10	106	103	110	40	100	98	315	984	1,240	593	95	40
11	98	98	100	45	100	100	340	1,360	1,310	579	98	43
12	100	85	85	45	100	100	436	1,080	1,390	565	81	48
13	106	95	75	41	100	100	436	960	1,450	495	76	44
14	106	90	71	38	95	95	358	920	1,470	436	65	40
15	114	76	70	38	95	90	300	936	1,460	394	65	38
16	124	71	75	44	95	90	290	1,110	1,490	370	62	38
17	112	85	75	50	95	90	310	1,210	1,560	340	58	38
18	100	100	70	50	95	86	325	1,290	1,620	330	53	38
19	95	90	60	48	90	84	358	1,210	1,660	295	51	40
20	92	82	50	52	84	90	400	968	1,720	275	48	40
21	92	80	43	48	80	100	388	800	1,810	270	47	43
22	90	90	48	48	80	123	376	712	1,880	245	44	48
23	87	95	44	52	80	190	358	768	1,930	218	41	51
24	87	87	42	57	86	200	346	960	1,960	209	40	51
25	85	94	45	62	90	300	376	936	1,990	200	40	51
26	85	105	48	67	84	360	474	848	2,000	191	38	50
27	83	110	44	72	79	420	544	824	1,960	171	37	48
28	65	105	44	78	75	1,060	502	896	1,860	155	37	48
29	51	95	44	84	-----	1,350	436	1,050	1,670	145	53	47
30	68	90	47	90	-----	880	394	1,230	1,520	134	43	45
31	90	-----	49	96	-----	856	-----	1,410	-----	124	62	-----
TOTAL	2,656	2,696	2,220	1,547	2,455	7,646	11,933	28,188	47,800	14,928	2,095	1,278
MEAN	85.7	89.9	71.6	49.9	87.7	247	398	909	1,593	482	67.6	42.6
MAX	124	112	117	96	100	1,350	1,140	1,410	2,000	1,390	117	55
MIN	51	54	42	27	70	70	222	370	1,230	124	37	33
AC-FT	5,270	5,350	4,400	3,070	4,870	15,170	23,670	55,910	94,810	29,610	4,160	2,530
CAL YR 1970	TOTAL	118,914	MEAN	326	MAX	2,630	MIN	12	AC-FT	235,900		
WTR YR 1971	TOTAL	125,442	MEAN	344	MAX	2,00						

06635500 SEMINOLE 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 miles upstream from high-water line of Pathfinder Reservoir at elevation 5,850.1 ft, and 9 miles southwest of Leo.

DRAINAGE AREA.--11,189 sq mi, of which 4,548 sq mi (including 3,959 sq mi 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 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, 979,800 acre-ft July 12, 14 (elevation, 6,355.43 ft); minimum daily, 331,500 acre-ft Mar. 25 (elevation, 6,307.38 ft).

Period of record: Maximum daily contents, 1,073,000 acre-ft June 20, 1949 (elevation, 6,359.29 ft); minimum daily (since appreciable storage was attained), 19,040 acre-ft Sept. 1, 1939 (elevation, 6,228.00 ft).

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 below elevation 6,357 ft (top of spillway gates). Figures given herein represent total contents, of which 30,100 acre-ft (capacity below elevation 6,239 ft, minimum operating level for power development) are not available for power development and 325 acre-ft (below elevation 6,185.09 ft, 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-feet)

6,307	328,200	6,340	712,300
6,310	354,700	6,350	877,900
6,320	453,900	6,356	990,900
6,330	572,200		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	839,100	791,200	751,500	644,600	520,000	413,400	355,800	384,300	570,000	946,400	954,400	927,300
2	837,700	789,000	749,600	640,500	516,600	409,600	360,000	383,600	583,700	953,200	952,800	926,500
3	835,600	786,700	747,100	636,600	513,800	405,100	361,900	383,700	596,100	958,600	952,400	925,200
4	834,600	784,100	744,100	632,700	509,800	400,800	362,200	386,300	608,100	963,400	952,000	924,500
5	831,800	782,100	741,100	628,100	506,000	396,500	362,000	388,700	619,100	966,700	951,300	923,500
6	829,600	779,300	738,900	624,100	502,200	392,400	361,700	392,500	630,400	969,800	950,500	922,600
7	828,000	777,200	736,900	619,800	498,500	388,400	360,900	395,800	640,400	972,500	950,100	922,600
8	826,500	776,700	734,500	614,800	494,600	384,000	359,200	399,400	648,600	974,900	949,400	922,400
9	825,500	776,100	730,600	610,500	491,300	380,000	359,400	403,100	657,800	977,000	948,800	921,700
10	824,300	775,900	726,800	605,900	486,900	376,000	359,400	407,200	667,300	978,600	948,100	920,500
11	824,100	777,500	722,800	601,900	483,100	371,900	360,200	412,300	678,800	979,400	947,900	918,900
12	821,600	776,700	718,900	597,200	479,500	367,200	362,200	416,400	690,700	979,800	946,700	918,100
13	820,400	776,700	714,000	593,100	475,700	364,500	365,200	420,200	702,400	979,600	945,800	915,700
14	819,700	777,700	709,900	589,400	472,400	360,700	367,300	425,000	714,600	979,800	945,200	914,000
15	819,300	777,900	706,300	584,900	468,100	356,900	369,300	431,700	727,500	979,200	944,600	912,300
16	818,700	777,400	701,800	580,900	464,800	353,900	370,200	439,200	741,400	978,600	944,300	910,000
17	818,800	777,400	697,600	576,500	460,900	351,200	372,300	448,700	756,000	977,200	943,500	908,300
18	819,000	776,900	694,000	573,500	457,200	349,400	374,200	458,200	771,400	976,600	942,200	907,700
19	818,700	775,900	692,400	570,400	453,300	346,700	376,700	467,200	788,200	975,600	940,700	904,600
20	817,700	772,700	690,200	565,800	449,500	343,900	379,200	474,700	804,700	973,900	939,900	901,900
21	815,800	769,900	689,000	562,600	445,800	340,300	380,600	479,800	821,400	972,900	939,500	898,400
22	813,900	767,300	687,500	558,600	442,000	336,900	381,500	485,200	838,200	971,700	939,100	895,400
23	812,100	765,400	683,300	554,000	438,200	334,200	381,700	490,300	855,100	970,600	937,000	894,200
24	810,400	763,200	678,800	550,000	433,900	332,700	382,400	495,000	872,200	969,400	935,000	894,000
25	807,800	762,200	674,700	546,000	430,100	331,500	382,500	499,500	888,400	968,200	933,400	893,300
26	805,000	760,600	670,000	541,900	426,100	332,400	383,400	504,600	900,800	966,500	931,700	892,000
27	803,300	758,600	665,700	537,700	421,800	333,800	384,800	510,800	911,400	964,400	930,100	890,500
28	800,500	757,500	662,000	534,000	417,400	338,300	385,300	517,600	922,000	962,300	929,300	888,700
29	798,000	755,200	657,700	530,700	-----	342,900	385,300	527,600	930,800	959,400	929,100	886,900
30	795,800	754,200	653,600	527,200	-----	346,100	384,900	540,200	938,900	957,100	929,100	884,000
31	793,500	-----	649,300	523,300	-----	349,900	-----	553,300	-----	955,300	928,800	-----
MAX	839,100	791,200	751,500	644,600	520,000	413,400	385,300	555,300	938,900	979,800	954,400	927,300
MIN	793,500	754,200	649,300	523,300	417,400	331,500	355,800	383,600	570,000	946,400	928,800	884,000
(†)	6,345.11	6,342.69	6,335.70	6,326.08	6,316.53	6,309.47	6,313.24	6,328.67	6,353.31	6,354.17	6,352.77	6,350.34
(+)	-47,100	-39,300	-104,900	-126,000	-105,900	-67,500	+35,000	+170,400	+383,600	+16,400	-26,500	-44,800

CAL YR 1970..... † +153,000

WTR YR 1971..... † +43,400

† Elevation, in feet, at end of month.

+ Change in contents, in acre-feet.

PLATTE RIVER BASIN

123

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 downstream from small tributary, 0.8 mile downstream from Fog Gulch, 1.2 miles downstream from State Highway 28, and 7.6 miles southwest of South Pass City.

DRAINAGE AREA.--177 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 7,420 ft (from topographic map).

AVERAGE DISCHARGE.--13 years, 61.4 cfs (44,480 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 669 cfs June 18 (gage height, 6.32 ft); minimum daily, 5.5 cfs Jan. 5.

Period of record: Maximum discharge, 1,150 cfs June 10, 1965 (gage height, 7.53 ft); minimum daily, 1.5 cfs 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 cfs (priorities 1903-12) for irrigation of about 950 acres, adjudicated for diversion above station. Transbasin diversion by Continental Divide ditch which 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 cfs, but no discharge records are available.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	9.6	12	8.0	14	9.5	21	91	490	182	75	26
2	11	9.0	11	7.5	13	10	21	132	421	179	71	24
3	11	9.0	10	6.5	12	10	22	219	379	178	70	24
4	11	10	9.7	5.6	11	11	23	252	339	174	67	30
5	11	12	10	5.5	10	10	25	204	345	175	77	30
6	12	11	11	6.3	9.5	9.6	28	164	375	160	65	26
7	14	10	11	7.3	9.0	9.0	28	169	373	154	60	25
8	14	9.0	12	8.4	9.0	9.5	30	195	373	153	59	39
9	12	10	12	9.2	9.5	10	33	189	425	153	73	34
10	16	9.5	12	9.7	11	11	35	192	478	140	63	28
11	14	9.0	11	10	11	11	33	222	492	130	56	25
12	14	10	11	10	12	12	32	252	490	123	53	23
13	16	9.6	10	10	12	12	33	278	452	117	53	21
14	15	9.2	11	9.5	13	11	37	313	472	111	48	20
15	11	9.6	11	10	13	10	41	319	495	104	46	19
16	9.0	10	11	11	13	9.6	40	357	530	99	43	20
17	13	10	11	11	12	9.3	43	333	558	96	42	22
18	12	9.5	10	12	11	9.1	50	249	568	102	40	23
19	12	9.1	10	12	11	9.5	47	225	520	187	38	23
20	14	9.0	9.5	12	10	10	45	214	445	217	37	25
21	14	9.5	9.5	12	9.5	12	44	196	425	147	35	25
22	13	9.9	9.8	11	9.0	14	47	210	401	130	34	24
23	8.0	11	9.6	10	9.5	15	48	204	407	143	32	25
24	8.0	12	9.3	11	10	16	49	200	379	141	31	23
25	7.8	12	9.7	11	10	17	47	214	327	118	30	22
26	7.6	11	9.7	12	9.7	17	50	236	307	108	30	22
27	7.4	12	9.4	12	9.4	16	55	268	291	101	30	22
28	7.2	13	9.0	13	9.0	18	60	329	237	94	29	20
29	7.7	12	8.8	13	-----	20	70	472	213	90	30	20
30	9.0	13	8.7	14	-----	21	80	612	193	88	32	21
31	10	-----	8.4	15	-----	20	-----	576	-----	80	30	-----
TOTAL	352.7	309.5	318.1	315.5	302.1	389.1	1,217	8,086	12,200	4,174	1,479	731
MEAN	11.4	10.3	10.3	10.2	10.8	12.6	40.6	261	407	135	47.7	24.4
MAX	16	13	12	15	14	21	80	612	568	217	77	39
MIN	7.2	9.0	8.4	5.5	9.0	9.0	21	91	193	80	29	19
AC-FT	700	614	631	626	599	772	2,410	16,040	24,200	8,280	2,930	1,450

CAL YR 1970 TOTAL 14,611.2 MEAN 40.0 MAX 275 MIN 4.1 AC-FT 28,980
WTR YR 1971 TOTAL 29,874.0 MEAN 81.8 MAX 612 MIN 5.5 AC-FT 59,260

PEAK DISCHARGE (BASE, 200 CFS)

NOTE.--No gage-height record Feb. 22 to Apr. 1.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-4	1200	4.50	268	6-18	1330	6.32	669
5-17	0200	5.15	393	7-20	0600	4.58	321
5-30	0630	6.22	642				

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 upstream from high-water line of Rock Creek Reservoir, 2.7 miles downstream from Little Rock Creek, and 4.3 miles northwest of Atlantic City.

DRAINAGE AREA.--9.2 sq mi, approximately.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 8,330 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 9.14 cfs (6,620 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 137 cfs June 11 (gage height, 6.81 ft); minimum daily, 1.2 cfs Nov. 4.
Period of record: Maximum discharge, 214 cfs June 9, 1965 (gage height, 7.26 ft); maximum gage height, 8.54 ft Apr. 22, 1965 (backwater from ice); minimum daily discharge, 0.5 cfs Jan. 12-14, 1963.

REMARKS.--Records good except those for October, which are poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	1.6	1.7	1.6	1.6	1.4	1.5	5.7	90	25	5.7	2.4
2	1.8	1.6	1.8	1.6	1.6	1.4	1.5	8.3	89	23	5.5	2.4
3	1.8	1.4	1.8	1.6	1.5	1.4	1.5	12	83	21	5.7	2.9
4	2.1	1.2	1.8	1.5	1.5	1.4	1.5	15	86	23	6.0	4.5
5	1.5	1.4	1.8	1.5	1.6	1.4	1.5	14	90	20	5.9	4.1
6	2.0	1.7	1.8	1.6	1.6	1.4	1.6	12	91	18	4.9	3.1
7	2.0	1.7	1.8	1.6	1.5	1.4	1.6	12	91	17	4.6	4.9
8	1.9	1.8	1.8	1.6	1.5	1.4	1.6	12	99	16	4.5	7.9
9	2.0	1.7	1.8	1.6	1.5	1.4	1.8	12	106	15	4.6	3.6
10	2.0	1.8	1.8	1.5	1.5	1.4	2.2	13	112	14	4.2	3.0
11	2.2	1.8	1.8	1.5	1.5	1.4	2.3	15	111	12	4.1	2.9
12	2.7	1.8	1.7	1.6	1.5	1.5	2.2	20	109	11	4.3	2.7
13	2.7	1.8	1.7	1.5	1.5	1.5	2.4	25	103	11	3.8	2.5
14	2.1	1.8	1.7	1.7	1.5	1.4	2.6	33	98	9.9	3.6	2.5
15	2.0	1.7	1.7	1.4	1.5	1.4	2.9	36	102	9.4	3.6	2.5
16	2.0	1.8	1.7	1.6	1.5	1.4	2.8	43	103	9.0	3.5	2.9
17	2.0	1.8	1.8	1.6	1.5	1.4	3.0	38	105	9.0	3.4	3.2
18	2.0	1.8	1.7	1.7	1.5	1.4	2.9	32	100	13	3.5	3.2
19	2.0	1.7	1.7	1.6	1.5	1.4	2.7	28	90	14	3.1	3.6
20	2.0	1.7	1.7	1.6	1.5	1.4	2.8	26	82	9.7	3.0	3.9
21	2.0	1.7	1.6	1.6	1.5	1.4	2.9	29	75	17	2.9	3.9
22	2.0	1.8	1.6	1.6	1.4	1.4	2.8	33	69	13	2.9	3.8
23	1.8	1.7	1.6	1.6	1.4	1.5	2.9	31	63	12	2.8	4.3
24	1.9	1.8	1.6	1.6	1.4	1.5	3.2	34	56	11	2.8	4.2
25	1.7	2.0	1.6	1.6	1.4	1.5	3.1	39	49	8.5	2.7	3.7
26	1.6	1.9	1.6	1.6	1.4	1.5	3.1	47	44	7.9	2.8	3.2
27	1.4	1.8	1.6	1.6	1.4	1.4	2.9	57	39	7.3	2.9	3.0
28	1.5	1.8	1.6	1.6	1.4	1.4	3.0	67	35	6.9	2.9	2.9
29	1.6	1.8	1.6	1.6	-----	1.4	3.5	95	29	7.1	3.0	2.8
30	1.7	1.8	1.6	1.6	-----	1.5	4.2	102	26	6.7	3.0	2.9
31	1.7	-----	1.6	1.6	-----	1.5	-----	95	-----	6.0	2.7	-----
TOTAL	59.5	51.7	52.7	49.1	41.7	44.2	74.5	1,041.0	2,425	403.4	118.9	103.4
MEAN	1.92	1.72	1.70	1.58	1.49	1.43	2.48	33.6	80.8	13.0	3.84	3.45
MAX	2.7	2.0	1.8	1.7	1.6	1.5	4.2	102	112	25	6.0	7.9
MIN	1.4	1.2	1.6	1.4	1.4	1.4	1.5	5.7	26	6.0	2.7	2.4
AC-FT	118	103	105	97	83	88	148	2,060	4,810	800	236	205
CAL YR 1970	TOTAL 2,684.3 MEAN 7.35 MAX 65 MIN 1.2 AC-FT 5,320											
WTR YR 1971	TOTAL 4,465.1 MEAN 12.2 MAX 112 MIN 1.2 AC-FT 8,860											

PEAK DISCHARGE (BASE, 66 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-11	1945	6.81	137				

PLATTE RIVER BASIN

125

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 upstream from Rock Creek and 1.6 miles northwest of Atlantic City.

DRAINAGE AREA.--5.92 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 7,880 ft (from topographic map). Prior to Oct. 1, 1963, at datum 1.00 ft higher.

EXTREMES.--Current year: Maximum discharge, 153 cfs June 10 (gage height, 3.08 ft); minimum daily, 0.53 cfs Jan. 5.
Period of record: Maximum discharge, 296 cfs June 10, 1965 (gage height, 4.02 ft), from rating curve extended above 130 cfs; minimum daily, 0.1 cfs for many days during 1959-61.

REMARKS.--Records fair except those for winter period and period of no gage-height record, which are 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.0	.95	.75	1.0	.66	.96	6.4	77	19	4.5	1.3
2	1.1	.95	.90	.67	.90	.63	.90	6.8	124	19	4.5	1.2
3	1.1	1.0	.90	.62	.80	.67	.95	7.3	122	17	5.2	1.3
4	1.1	1.0	.86	.57	.75	.70	.99	7.9	120	17	4.8	2.4
5	1.1	.95	.90	.53	.70	.63	.95	9.4	126	17	5.9	3.0
6	1.2	.95	.94	.55	.70	.60	1.0	9.1	130	14	6.6	2.0
7	1.3	.90	.97	.60	.75	.63	1.1	8.5	125	14	5.9	2.3
8	1.3	.94	1.0	.67	.80	.66	1.3	8.2	129	12	5.5	3.9
9	1.2	1.0	1.0	.75	.84	.70	1.5	9.1	141	12	5.5	2.1
10	1.2	.95	.97	.80	.86	.73	1.8	10	140	11	4.8	1.5
11	1.4	.90	.94	.77	.90	.75	2.0	11	132	7.1	4.6	1.2
12	1.5	.95	.90	.73	.96	.76	1.9	12	128	7.9	5.0	1.1
13	1.6	.90	.93	.67	1.0	.76	2.0	17	121	8.8	4.5	1.0
14	1.4	.85	.95	.65	1.0	.74	2.2	19	111	9.7	3.6	.98
15	1.4	.90	.91	.67	1.0	.70	2.4	21	107	8.5	2.7	.99
16	1.4	.95	.95	.73	.95	.67	2.4	25	109	7.3	2.4	1.2
17	1.2	1.0	.98	.80	.90	.66	2.4	20	108	6.8	2.2	1.9
18	1.2	1.1	.95	.90	.95	.64	2.3	18	99	10	2.1	2.1
19	1.2	1.2	.87	.95	.95	.64	2.5	17	89	13	2.0	2.0
20	1.1	1.2	.80	1.0	.90	.67	2.5	17	78	11	1.9	2.4
21	1.2	1.1	.83	1.1	.86	.73	2.8	19	72	10	1.8	2.5
22	1.2	1.0	.83	1.0	.80	.76	3.2	23	65	13	1.7	2.2
23	1.2	1.1	.75	.90	.74	.80	3.7	22	58	7.9	1.7	2.0
24	1.1	1.1	.70	.85	.70	.86	4.2	22	49	9.4	1.5	2.0
25	1.1	1.2	.75	.80	.73	.85	4.2	24	41	4.6	1.5	1.9
26	1.0	1.2	.80	.74	.75	.90	4.0	25	34	3.7	1.4	1.8
27	1.0	1.1	.80	.74	.72	.90	4.6	29	28	3.4	1.5	1.8
28	1.1	1.1	.76	.80	.70	.87	5.2	31	26	3.2	1.4	1.8
29	1.1	1.0	.76	.85	-----	.85	5.5	47	23	3.0	1.6	1.8
30	1.2	1.0	.77	.90	-----	.90	5.7	50	21	3.2	1.7	1.8
31	1.1	-----	.80	1.0	-----	.96	-----	45	-----	4.6	1.5	-----
TOTAL	37.4	30.49	27.12	24.06	23.61	22.98	77.15	596.7	2,733	308.1	101.5	55.47
MEAN	1.21	1.02	.87	.78	.84	.74	2.57	19.2	91.1	9.94	3.27	1.85
MAX	1.6	1.2	1.0	1.1	1.0	.96	5.7	50	141	19	6.6	3.9
MIN	1.0	.85	.70	.53	.70	.60	.90	6.4	21	3.0	1.4	.98
AC-FT	74	60	54	48	47	46	153	1,180	5,420	611	201	110

CAL YR 1970 TOTAL 1,726.68 MEAN 4.73 MAX 67 MIN .47 AC-FT 3,420
WTR YR 1971 TOTAL 4,037.58 MEAN 11.1 MAX 141 MIN .53 AC-FT 8,010

NOTE.--No gage-height record Nov. 12 to Mar. 23.

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 downstream from Slate Creek and 1.4 miles northwest of Atlantic City.

DRAINAGE AREA.--21.3 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 7,850 ft (from topographic map). Prior to Oct. 4, 1957, at site 35 ft upstream at different datum.

AVERAGE DISCHARGE.--14 years, 11.4 cfs (8,260 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 175 cfs June 11 (gage height, 3.14 ft); maximum gage height, 4.30 ft Sept. 28 (backwater from beaver dam); minimum daily discharge, 2.0 cfs Jan. 26.

Period of record: Maximum discharge, 340 cfs June 10, 1965 (gage height, 3.85 ft); maximum gage height, 4.30 ft Sept. 28, 1971 (backwater from beaver dam); minimum daily discharge, 0.62 cfs Aug. 31, 1966.

REMARKS.--Records fair. Flow regulated by Rock Creek Reservoir 3 miles upstream since October 1961 (capacity, 2,800 acre-ft). Diversion into Slate Creek basin above station during some periods since 1963. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	11	5.3	4.5	9.4	5.1	12	18	100	22	14	7.6
2	3.8	4.8	8.8	4.0	9.4	5.2	11	19	148	24	11	12
3	3.6	4.1	9.9	3.6	8.1	5.4	12	19	148	21	8.1	15
4	3.2	4.6	9.1	3.0	4.6	4.9	11	19	135	15	8.3	19
5	2.1	9.0	8.8	2.6	2.9	4.3	10	22	142	16	9.9	14
6	2.4	12	8.5	3.0	2.9	6.0	7.8	22	142	14	12	17
7	2.4	8.1	5.8	5.0	2.9	7.2	10	20	140	13	14	16
8	4.1	6.0	3.9	6.4	4.1	8.3	14	20	140	12	15	12
9	7.7	4.8	4.2	7.5	7.4	8.4	15	23	152	12	16	7.4
10	10	5.4	5.5	7.5	6.3	8.0	16	25	160	13	11	5.0
11	5.7	8.1	8.1	6.7	7.7	8.4	14	24	158	10	6.8	6.6
12	3.0	14	6.3	5.5	6.7	9.5	14	27	158	8.1	6.7	7.5
13	3.0	9.0	3.5	6.5	6.3	8.1	15	29	152	8.1	9.9	7.0
14	2.9	5.4	3.5	9.0	5.4	7.9	15	31	145	9.9	9.2	5.1
15	2.7	4.3	5.3	9.3	6.3	7.4	14	32	140	9.9	5.3	3.3
16	5.4	4.1	7.9	10	8.1	7.4	14	36	142	9.9	3.2	2.7
17	7.4	3.8	8.3	7.4	8.1	7.0	14	32	138	9.4	4.3	2.8
18	3.0	7.4	6.4	7.4	8.5	7.7	14	31	132	7.0	6.5	2.8
19	4.1	10	5.2	6.3	7.7	8.2	14	31	120	11	6.8	2.8
20	4.6	11	4.3	7.7	6.5	9.1	13	31	110	8.1	7.6	2.8
21	4.8	4.7	4.1	10	5.0	10	13	31	102	10	5.8	2.8
22	3.4	4.5	4.7	7.7	4.8	9.5	14	31	98	24	2.3	2.3
23	6.0	5.3	7.1	2.7	4.9	12	16	32	90	19	2.7	2.4
24	9.9	9.2	6.0	2.3	5.0	12	18	33	74	17	2.6	3.1
25	9.4	12	3.7	2.1	5.0	13	18	41	61	12	3.6	3.8
26	5.7	10	2.2	2.0	5.0	12	12	42	52	13	4.8	3.8
27	4.8	7.9	3.0	4.0	5.0	10	13	46	44	16	4.5	5.5
28	5.3	3.7	2.6	6.0	5.0	11	15	54	36	16	4.0	7.9
29	5.4	3.3	3.7	8.1	-----	11	15	74	31	16	4.5	8.4
30	7.4	3.3	6.2	6.7	-----	13	17	83	26	14	4.7	6.1
31	11	-----	5.7	7.0	-----	12	-----	74	-----	14	4.6	-----
TOTAL	161.6	210.8	177.6	181.5	169.0	269.0	410.8	1,052	3,416	424.4	229.7	214.5
MEAN	5.21	7.03	5.73	5.85	6.04	8.68	13.7	33.9	114	13.7	7.41	7.15
MAX	11	14	9.9	10	9.4	13	18	83	160	24	16	19
MIN	2.1	3.3	2.2	2.0	2.9	4.3	7.8	18	26	7.0	2.3	2.3
AC-FT	321	418	352	360	335	534	815	2,090	6,780	842	456	425

CAL YR 1970 TOTAL 4,196.2 MEAN 11.5 MAX 74 MIN 2.0 AC-FT 8,320
WTR YR 1971 TOTAL 6,916.9 MEAN 19.0 MAX 160 MIN 2.0 AC-FT 13,720

127

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 mile downstream from Schounmaker ditch diversion dam, 13 miles upstream from high-water line of Pathfinder Reservoir at elevation 5,850 ft. and 25 miles southwest of Alcova.

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 (from topographic map). Aug. 28, 1913, to Sept. 30, 1924, nonrecording gages at site 0.4 mile upstream at different datums.

EXTREMES.--Current year: Maximum discharge, 930 cfs June 5 (gage height, 5.13 ft); minimum daily, 8.4 cfs Aug. 28.

Period of record: Maximum discharge observed, 4,290 cfs Apr. 13, 1924 (gage height, 8.36 ft, site and datum then in use); minimum daily, 0.5 cfs July 30 to Aug. 12, 1940.

REMARKS.--Records good above 70 cfs and poor below. Several small reservoirs above station (combined capacity, about 5,000 acre-ft) for irrigation. Diversions for irrigation of about 24,000 acres above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1310: 1921, 1923-24. WSP 1710: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	40	50	25	35	50	141	201	623	331	111	9.2
2	22	39	50	20	35	50	137	202	687	303	106	8.6
3	21	39	50	20	30	50	123	208	746	272	104	8.5
4	21	36	50	20	30	50	113	225	836	244	100	9.0
5	21	38	50	20	25	50	102	259	911	220	97	8.9
6	25	41	55	20	25	50	105	325	885	207	90	8.7
7	34	41	55	20	25	55	102	356	811	197	83	9.5
8	43	44	55	20	30	60	96	383	728	187	80	14
9	44	44	50	20	35	65	92	373	683	181	74	13
10	46	45	40	20	40	65	91	366	689	173	71	12
11	36	51	40	20	45	65	90	372	701	156	75	12
12	38	50	40	20	45	65	92	380	680	155	60	14
13	32	50	40	20	45	63	105	374	683	147	55	15
14	33	50	40	20	45	58	123	372	713	138	49	18
15	34	50	40	25	45	59	140	374	732	129	43	20
16	34	45	40	25	45	53	143	386	724	122	36	21
17	35	48	40	25	45	50	151	411	706	116	33	22
18	36	50	30	25	45	50	161	432	664	113	28	21
19	36	51	30	25	45	50	181	446	632	110	29	22
20	38	49	30	25	45	55	193	462	618	106	30	23
21	38	50	30	25	45	55	204	447	622	103	31	28
22	38	36	25	25	50	61	199	377	631	103	31	33
23	35	40	25	25	50	64	186	348	634	114	32	41
24	39	50	30	30	50	74	186	341	604	140	27	44
25	39	50	30	30	50	74	190	330	531	133	17	51
26	40	40	30	30	50	76	203	335	475	128	12	63
27	40	40	30	30	50	115	230	321	437	129	12	66
28	40	45	30	35	50	162	237	319	415	134	8.4	67
29	39	46	30	35	-----	261	206	347	386	127	10	66
30	40	48	30	35	-----	218	202	454	356	120	11	64
31	40	-----	30	35	-----	180	-----	583	-----	116	10	-----
TOTAL	1,082	1,346	1,195	770	1,155	2,453	4,524	11,109	19,543	4,954	1,555.4	812.4
MEAN	34.9	44.9	38.5	24.8	41.3	79.1	151	358	651	160	50.2	27.1
MAX	46	51	55	35	50	261	237	583	911	331	111	67
MIN	21	36	25	20	25	50	90	201	356	103	8.4	8.5
AC-FT	2,150	2,670	2,370	1,530	2,290	4,870	8,970	22,030	38,760	9,830	3,090	1,610
CAL YR 1970	TOTAL	31,853.3	MEAN	87.3	MAX	793	MIN	4.9	AC-FT	63,180		
WTR YR 1971	TOTAL	50,498.8	MEAN	138	MAX	911	MIN	8.4	AC-FT	100,200		

FLATTE 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 miles southwest of Alcovia.

DRAINAGE AREA.--14,670 sq mi, of which 4,659 sq mi (including 3,959 sq mi 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 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 lower than mean sea level. Prior to Apr. 12, 1950, nonrecording gages near present site at datum 1.9 ft lower.

EXTREMES.--Current year: Maximum daily contents, 915,900 acre-ft June 1, 2 (elevation, 5,845.40 ft); minimum daily, 517,800 acre-ft Oct. 1 (elevation, 5,821.52 ft).

Period of record: Maximum daily contents, 1,182,000 acre-ft June 25-27, 1917 (elevation, 5,858.86 ft, 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 between elevations 5,668.1 ft (north outlet trashrack sill) and 5,850.1 ft (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 project. 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)

5,821	511,100	5,840	809,500
5,825	564,300	5,845	907,700
5,830	637,800	5,846	928,300
5,835	719,500		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	517,800	560,900	581,500	659,000	756,000	845,900	906,100	891,500	915,900	876,700	864,300	795,700
2	519,300	562,400	583,000	662,500	759,900	848,600	905,700	892,300	915,900	875,500	863,200	793,600
3	520,800	564,000	584,100	665,700	762,400	852,200	906,300	892,700	915,100	874,300	860,800	791,600
4	522,400	566,000	584,700	668,900	765,300	855,300	906,700	892,300	913,500	873,100	858,000	790,500
5	524,200	567,700	586,100	672,200	768,900	858,800	906,500	895,500	911,800	872,300	855,300	789,400
6	526,300	568,500	587,600	674,800	772,200	862,000	905,700	898,400	910,200	871,100	852,500	789,400
7	528,100	570,200	589,000	678,400	776,200	865,100	904,500	902,000	909,400	871,100	849,000	789,400
8	529,700	572,700	590,400	681,300	778,400	868,700	902,400	904,100	909,800	870,700	845,900	789,700
9	531,600	573,000	593,900	684,900	781,700	871,900	900,000	906,900	908,500	870,700	843,600	789,400
10	532,600	571,600	597,200	688,200	785,000	875,100	898,800	908,500	907,700	871,100	841,600	789,000
11	534,500	570,200	600,700	690,200	789,000	878,200	896,800	908,900	906,100	871,100	839,300	788,600
12	535,800	569,100	603,900	694,500	792,300	881,400	894,900	909,400	904,900	870,700	838,200	788,300
13	536,800	567,700	606,600	698,500	796,100	882,600	893,100	909,800	903,200	870,700	835,900	787,500
14	538,700	567,700	610,500	701,200	799,100	885,000	891,900	909,400	902,400	870,300	832,800	786,400
15	540,100	567,500	613,800	705,600	802,400	887,000	891,100	909,400	900,400	871,100	829,700	785,700
16	541,400	566,000	616,800	708,300	805,000	888,200	889,500	908,500	897,200	871,500	828,100	784,600
17	541,900	564,600	620,400	711,000	809,100	890,700	887,800	907,700	895,100	870,700	825,100	784,200
18	541,900	564,600	624,000	713,400	811,800	891,700	887,800	906,900	893,100	869,900	823,200	784,600
19	542,500	566,000	624,600	716,800	815,600	892,700	887,000	906,500	891,100	869,500	822,000	785,700
20	543,800	567,400	624,600	720,900	818,300	893,900	887,400	905,700	888,600	869,900	819,200	786,100
21	544,900	568,800	625,600	723,700	820,900	895,500	887,400	904,500	886,600	870,300	816,500	787,200
22	546,200	570,200	626,500	725,800	823,900	898,000	888,200	903,700	885,400	869,500	813,700	787,900
23	548,400	570,200	628,000	728,900	827,400	899,200	888,600	903,700	883,800	869,500	811,800	788,600
24	549,200	571,300	632,900	731,700	830,400	900,000	889,100	904,100	882,200	869,500	809,300	788,300
25	550,600	573,000	636,300	735,100	833,500	900,000	888,200	906,100	879,400	867,900	806,900	786,600
26	551,100	574,400	640,000	738,300	836,200	901,200	890,300	907,700	877,900	868,300	805,000	786,800
27	553,000	577,000	643,200	741,400	839,700	902,800	889,900	908,100	876,700	867,500	804,700	787,500
28	554,700	577,800	646,300	745,000	842,400	904,500	890,300	911,000	877,100	867,900	803,500	787,900
29	556,100	579,200	649,500	747,500	-----	905,700	890,700	910,600	875,500	867,500	801,500	788,600
30	557,200	580,700	653,200	750,300	-----	905,300	891,100	913,100	875,900	867,500	799,600	788,600
31	559,400	-----	656,100	752,400	-----	906,100	-----	915,100	-----	865,900	797,600	-----
MAX	559,400	580,700	656,100	752,400	842,400	906,100	906,700	915,100	915,900	876,700	864,300	795,700
MIN	517,800	560,900	581,500	659,000	756,000	845,900	887,000	891,500	875,500	865,900	797,600	784,200
(†)	5,824.64	5,826.16	5,831.16	5,836.88	5,841.72	5,844.92	5,844.18	5,845.36	5,843.42	5,842.92	5,839.36	5,838.88
(‡)	+42,900	+21,300	+75,400	+96,300	+90,000	+63,700	-15,000	+24,000	-39,200	-10,000	-68,300	-9,000

CAL YR 1970..... ‡ +499,900

WTR YR 1971..... ‡ +272,100

† 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 SE $\frac{1}{4}$ 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 mile southwest of Alcova.

DRAINAGE AREA.--14,735 sq mi, of which 4,659 sq mi (including 3,959 sq mi 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. Datum of gage is 5,320 ft 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, 181,900 acre-ft Apr. 21 (elevation, 5,499.04 ft); minimum daily, 154,400 acre-ft Nov. 8 (elevation, 5,487.33 ft).

Period of record: Maximum daily contents, 190,300 acre-ft Aug. 14, 15, 1952 (elevation, 5,499.92 ft); minimum daily (since appreciable storage was attained), 1,980 acre-ft Sept. 30, 1940 (elevation, 5,353.56 ft). 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, 184,300 acre-ft at elevation 5,500.00 ft (top of spillway gates). Dead storage, 155 acre-ft. 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	178,500	156,400	156,500	155,600	155,900	156,300	174,100	180,000	178,500	178,400	179,300	178,400
2	177,000	156,300	157,000	155,600	156,000	156,400	175,200	179,800	178,700	178,500	179,300	178,500
3	175,900	156,100	156,800	155,600	156,200	156,500	176,900	179,600	179,100	178,500	179,200	178,400
4	174,600	155,900	156,400	156,000	156,200	156,500	178,400	179,400	178,800	178,700	179,000	178,400
5	173,300	156,200	156,200	156,100	156,200	156,500	178,900	180,100	178,800	178,600	179,000	178,200
6	172,400	156,200	156,300	156,300	156,100	156,600	177,200	180,500	178,700	178,400	178,900	178,100
7	171,100	156,200	156,700	156,300	156,100	156,500	175,000	180,300	178,600	178,300	178,900	178,200
8	170,000	154,400	156,700	155,900	156,000	156,400	174,400	180,100	178,000	178,400	178,600	178,300
9	168,900	154,900	156,600	156,000	155,900	156,300	172,700	180,200	177,800	178,300	178,500	178,200
10	168,000	155,900	156,700	155,900	155,700	156,400	173,100	180,100	177,700	178,200	178,300	178,200
11	166,400	156,700	156,500	156,100	155,600	156,200	173,500	179,600	177,600	178,200	178,400	178,000
12	165,400	157,400	156,400	156,000	155,500	156,700	174,100	179,300	178,000	178,100	178,100	178,100
13	164,300	157,600	156,300	155,900	155,100	157,300	175,100	179,000	178,200	177,900	178,100	178,000
14	163,300	157,300	156,200	155,900	155,100	157,800	176,200	178,600	178,300	177,600	178,200	178,000
15	162,400	156,400	156,100	155,100	155,300	158,200	177,300	178,300	178,200	177,200	178,200	178,000
16	161,600	156,600	155,600	155,000	155,100	158,500	178,300	178,100	178,100	177,200	178,300	178,000
17	160,600	157,200	155,600	155,000	155,300	158,600	179,100	177,700	178,100	177,000	178,400	178,100
18	159,600	157,000	155,900	155,100	155,600	158,700	180,000	177,500	178,200	177,000	178,700	178,200
19	158,800	156,200	156,100	154,900	155,700	158,700	181,000	177,300	178,300	177,000	178,900	177,900
20	158,300	156,000	156,400	154,900	155,800	158,800	181,800	177,100	178,400	177,200	178,900	177,900
21	158,400	155,800	156,700	154,900	156,200	158,900	181,900	177,000	178,600	177,400	178,900	177,700
22	158,100	155,600	156,700	155,300	156,200	159,300	181,700	177,200	178,900	177,600	178,700	177,700
23	158,000	156,700	156,800	155,700	156,300	160,700	181,600	178,300	178,900	177,800	178,700	177,800
24	157,700	156,600	156,400	155,800	156,600	162,300	181,400	179,000	178,600	178,100	178,700	177,900
25	157,400	156,400	156,000	155,700	156,700	163,700	181,100	178,700	178,600	178,200	178,700	177,700
26	157,100	156,300	155,700	155,700	156,800	165,600	181,000	178,500	178,900	178,300	178,800	177,700
27	156,900	156,200	155,700	155,600	156,500	167,400	180,800	178,300	179,200	178,400	178,700	177,700
28	156,700	156,500	155,700	155,600	156,300	168,800	180,500	178,100	179,400	178,600	178,500	177,600
29	156,500	156,800	155,700	155,600	-----	169,700	180,400	178,100	179,000	178,800	178,600	177,600
30	156,400	156,500	155,800	155,500	-----	171,200	180,200	178,200	178,500	179,000	178,500	177,500
31	156,300	-----	155,700	155,800	-----	172,700	-----	178,100	-----	179,100	178,400	-----
MAX	178,500	157,600	157,000	156,300	156,800	172,700	181,900	180,500	179,400	179,100	179,300	178,500
MIN	156,300	154,400	155,600	154,900	155,100	156,200	172,700	177,000	177,600	177,000	178,100	177,500
(+)	5,488.15	5,488.24	5,487.88	5,487.95	5,488.17	5,495.24	5,498.32	5,497.49	5,497.64	5,497.90	5,497.60	5,497.23
(#)	-22,700	+200	-800	+100	+500	+16,400	+7,500	-2,100	+400	+600	-700	-900

CAL YR 1970..... + -5,800

WTR YR 1971..... + -1,500

+ Elevation, in feet, at end of month.

Change in contents, in acre-feet.

PLATTE RIVER BASIN

06642000 NORTH PLATTE RIVER AT ALCOVA, WYO.

LOCATION.--Lat 42°34'27", long 106°41'31", in NW¼NW¼ sec.17, T.30 N., R.82 W., Natrona County, on left bank 0.5 mile downstream from Hogback Draw, 0.8 mile downstream from Grey Reef Dam, 1.9 miles northeast of Alcova, and 3.8 miles downstream from Alcova Dam.

DRAINAGE AREA.--14,771 sq mi, of which 4,659 sq mi (including 3,959 sq mi in Great Divide Basin in southern Wyoming) is probably noncontributing. Area at site used prior to Apr. 28, 1961, 14,736 sq mi.

PERIOD OF RECORD.--February 1904 to December 1905, October 1934 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 5,299.40 ft above mean sea level. Feb. 19, 1904, to Dec. 31, 1905, nonrecording gage at site 3.7 miles upstream at different datum. June 1, 1935, to Apr. 27, 1961, water-stage recorder at site 3.5 miles upstream at different datum.

EXTREMES.--Current year: Maximum discharge, 4,080 cfs June 16 (gage height, 4.89 ft); minimum daily, 333 cfs Mar. 27.
Period of record: Maximum discharge observed, 13,400 cfs June 6, 10, 11, 1905 (gage height, 11.5 ft, site and datum then in use); minimum not determined.

REMARKS.--Records good. Flow completely regulated by Seminole, Pathfinder, and Alcova Reservoirs. (See sta 06635500, 06640500, 06641500.) 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.

COOPERATION.--Twenty-two discharge measurements furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 1310: 1937-38, 1945. WSP 1918: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	CCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	955	946	928	834	859	921	1,210	2,680	1,650	2,850	1,910	1,190
2	1,070	937	928	834	860	902	1,210	2,680	2,300	2,840	1,970	1,190
3	1,080	937	928	834	861	851	1,210	2,690	2,310	2,840	2,030	1,190
4	1,060	937	928	834	860	859	1,220	2,680	2,630	2,840	2,030	868
5	1,060	937	928	834	859	860	1,910	1,550	2,880	2,860	2,040	538
6	1,060	937	928	834	861	861	3,270	1,070	2,910	2,620	2,040	688
7	1,070	937	937	834	861	860	3,740	1,610	2,980	2,220	2,050	590
8	1,060	928	928	834	861	860	3,820	1,850	3,380	2,080	2,060	681
9	1,060	928	928	834	858	868	3,280	1,850	3,600	2,090	1,930	681
10	1,060	928	928	834	859	867	2,810	2,140	3,630	2,080	1,710	861
11	1,050	928	928	834	860	869	2,810	2,400	3,590	2,080	1,650	991
12	1,060	928	928	834	859	927	2,770	2,400	3,510	2,120	1,650	1,000
13	1,050	928	928	834	859	967	2,690	2,380	3,530	2,170	1,640	1,030
14	1,010	928	928	850	859	975	2,680	2,380	3,550	2,180	1,660	1,060
15	982	919	928	859	860	1,050	2,680	2,380	3,780	2,060	1,660	1,080
16	973	919	928	859	860	1,170	2,680	2,370	4,070	1,990	1,650	1,090
17	973	919	928	859	858	1,170	2,680	2,460	4,030	1,990	1,620	1,070
18	964	919	876	859	860	1,170	2,680	2,580	3,980	1,930	1,620	1,070
19	964	919	834	861	859	1,170	2,680	2,560	3,960	1,910	1,630	1,070
20	964	919	834	862	860	1,180	2,680	2,560	3,950	1,890	1,630	1,060
21	964	919	834	861	858	1,180	2,680	2,460	3,740	1,860	1,620	1,030
22	964	919	834	858	858	1,180	2,680	2,340	3,350	1,860	1,710	1,040
23	964	919	834	859	859	1,180	2,680	1,900	3,350	1,860	1,690	1,020
24	964	919	834	859	860	1,190	2,680	1,450	3,320	1,870	1,680	1,030
25	955	919	834	861	858	1,200	2,680	1,230	3,440	1,880	1,680	1,030
26	955	919	834	860	902	1,070	2,680	975	3,650	1,880	1,680	1,030
27	955	919	834	861	923	333	2,680	966	3,640	1,880	1,320	1,020
28	955	928	834	859	924	542	2,680	965	3,670	1,880	1,180	1,000
29	955	928	834	858	-----	1,200	2,680	965	3,530	1,900	1,180	1,000
30	964	928	834	855	-----	1,210	2,680	956	3,180	1,890	1,180	1,000
31	955	-----	834	859	-----	1,220	-----	951	-----	1,910	1,190	-----
TOTAL	31,075	27,795	27,503	26,305	24,235	30,862	77,510	60,428	101,090	66,310	52,290	29,443
MEAN	1,002	927	887	849	866	996	2,584	1,949	3,370	2,139	1,687	982
MAX	1,080	946	937	962	924	1,220	3,820	2,690	4,070	2,860	2,060	1,930
MIN	955	919	834	834	858	333	1,210	951	1,650	1,860	1,180	531
AC-FT	61,640	55,130	54,550	52,180	48,070	61,210	153,700	119,900	200,500	131,500	103,700	58,410
CAL YR 1970	TOTAL	305,363	MEAN	837	MAX	1,500	MIN	175	AC-FT	605,700		
WTR YR 1971	TOTAL	554,851	MEAN	1,520	MAX	4,070	MIN	333	AC-FT	1,101,000		

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 downstream from bridge on U.S. Highways 20 and 87, and 0.5 mile upstream from mouth.

DRAINAGE AREA.--213 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,980 ft (from topographic map).

AVERAGE DISCHARGE.--10 years, 73.5 cfs (53,250 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,100 cfs May 10 (gage height, 7.10 ft); minimum daily, 0.06 cfs Aug. 27.

Period of record: Maximum discharge, 14,200 cfs June 12, 1970 (gage height, 9.45 ft); no flow at times in 1961-63, 1965.

REMARKS.--Records fair except those below 8.0 cfs, which are poor. One small reservoir above station (capacity, about 60 acre-ft) for irrigation. Diversions above station for irrigation of about 3,700 acres, of which about 400 acres lies below station. Water is diverted to Millar ditch 0.3 mile upstream and bypasses the station; observations of no flow and results of discharge measurements, in cubic feet per second, of flow in ditch are given below:

Oct. 5 .. 2.37	Apr. 7 .. 0	May 18 .. 0
Nov. 6 .. 0	Apr. 20 .. 0	June 2 .. 0
Dec. 3 .. 0	May 5 .. 0	June 25 .. 3.04
Dec. 30 .. 0	May 7 .. 0	July 22 .. 0
Feb. 3 .. 0	May 10 .. 0	Aug. 18 .. 0
Mar. 11 .. 0	May 13 .. 0	Sept. 30 .. 0

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

REVISIONS.--WRD Wyo. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	19	20	26	31	20	96	480	637	11	.43	.36
2	4.8	20	20	26	29	20	77	509	574	6.8	.43	.24
3	4.2	21	20	25	30	25	79	601	531	6.1	.43	.24
4	4.0	21	19	20	25	25	64	709	552	6.1	.43	.30
5	4.8	22	21	20	20	25	53	1,210	463	5.0	.51	.43
6	6.8	23	22	20	20	20	49	820	402	2.9	.51	.30
7	10	26	22	20	20	20	62	860	371	2.1	.51	.30
8	13	30	22	25	25	20	129	800	335	2.0	.59	.68
9	15	28	22	25	25	20	128	916	293	1.8	.78	.59
10	15	26	23	25	25	25	286	1,800	268	1.6	1.0	6.4
11	16	30	20	25	30	26	601	1,050	252	1.3	1.0	8.0
12	16	26	20	25	30	29	293	950	222	.78	1.0	4.5
13	19	26	20	25	30	31	174	920	225	.59	1.0	4.5
14	22	26	20	25	30	32	177	980	187	.43	1.0	4.0
15	20	25	20	30	29	30	356	1,030	160	.36	.43	2.6
16	19	24	20	30	27	32	426	960	132	.36	.24	4.0
17	15	25	24	30	25	30	346	935	104	.30	.15	12
18	19	25	22	30	29	27	346	759	87	.30	.15	18
19	18	24	21	30	27	22	277	624	73	.30	.15	22
20	18	22	30	30	26	25	214	501	60	.30	.19	26
21	22	23	30	30	26	26	222	422	48	.30	.11	38
22	24	18	25	30	25	22	206	467	43	.30	.11	40
23	23	17	25	30	25	24	197	642	39	.19	.11	39
24	23	20	25	30	25	28	360	624	34	.19	.11	37
25	23	18	25	30	25	30	426	825	30	.24	.08	33
26	22	20	25	30	25	27	314	704	24	.43	.08	31
27	19	20	30	29	20	121	280	696	18	.43	.06	30
28	19	20	30	27	20	200	222	736	18	.43	.19	30
29	18	20	29	26	-----	117	264	768	17	.43	1.0	30
30	19	20	28	26	-----	108	387	930	14	.51	1.2	31
31	19	-----	26	26	-----	194	-----	815	-----	.36	.68	-----
TOTAL	499.1	685	726	826	724	1,401	7,111	25,043	6,213	54.23	14.66	454.44
MEAN	16.1	22.8	23.4	26.6	25.9	45.2	237	808	207	1.75	.47	15.1
MAX	24	30	30	30	31	200	601	1,800	637	11	1.2	40
MIN	4.0	17	19	20	20	20	49	422	14	.19	.06	.24
AC-FT	990	1,360	1,440	1,640	1,440	2,780	14,100	49,670	12,320	108	29	901

CAL YR 1970	TOTAL 52,417.38	MEAN 144	MAX 3,920	MIN .78	AC-FT 104,000
WTR YR 1971	TOTAL 43,751.43	MEAN 120	MAX 1,800	MIN .06	AC-FT 86,780

PEAK DISCHARGE (BASE, 450 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-27	2300	3.24	501	5-5	0600	4.71	1,460
4-11	0500	3.75	880	5-10	0330	7.10	3,100
4-16	0500	3.27	606	5-25	0230	4.46	1,100
4-25	0600	3.07	501	5-30	1900	4.62	1,150

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 mile downstream from Sand Creek, 1.0 mile downstream from Dave Johnston powerplant, and 5.8 miles east of Glenrock city limits.

DRAINAGE AREA.--17,497 sq mi, of which 5,132 sq mi (including 3,959 sq mi 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 (from topographic map). Prior to Oct. 1, 1965, at datum 1.00 ft higher.

EXTREMES.--Current year: Maximum discharge, 6,030 cfs May 10 (gage height, 4.71 ft); minimum daily, 429 cfs Dec. 24.

Period of record: Maximum discharge, 16,000 cfs May 14, 1965 (gage height, 6.10 ft); minimum daily, 176 cfs Dec. 11, 1961.

REMARKS.--Records fair. Flow regulated by Seminoe, Pathfinder, and Alcova Reservoirs. (See sta 06635500, 06640500, 06641500.)

Slight regulation 1.0 mile upstream by storage pond for Dave Johnston powerplant (capacity, 755 acre-ft). 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,030	1,140	1,160	1,080	1,320	941	1,780	3,320	2,400	3,410	2,000	1,340
2	1,050	1,140	1,160	1,080	1,340	888	1,600	3,330	2,490	3,010	2,010	1,330
3	1,130	1,160	1,150	941	1,270	992	1,520	3,410	3,180	2,970	2,050	1,340
4	1,170	1,150	1,080	730	1,090	1,150	1,500	3,570	3,160	2,980	2,130	1,350
5	1,170	1,150	1,180	763	930	1,190	1,460	4,940	3,250	2,930	2,130	1,230
6	1,180	1,140	1,160	841	862	1,090	1,840	4,870	3,510	2,910	2,140	987
7	1,250	1,160	1,170	824	803	1,030	3,090	3,500	3,500	2,740	2,130	895
8	1,220	1,220	1,160	832	757	1,270	3,430	3,360	3,490	2,410	2,180	967
9	1,220	1,190	1,170	906	896	1,190	3,700	3,350	3,770	2,230	2,200	956
10	1,230	1,180	1,200	1,030	1,060	1,190	3,670	4,700	4,040	2,210	2,100	939
11	1,230	1,200	1,120	1,120	1,280	1,280	3,560	4,180	4,080	2,190	1,910	967
12	1,210	1,180	1,150	1,100	1,330	1,150	3,600	4,040	4,000	2,210	1,790	1,140
13	1,220	1,180	1,080	1,130	1,450	1,140	3,290	3,870	3,880	2,250	1,800	1,150
14	1,240	1,180	1,160	1,090	1,500	1,220	3,040	3,860	3,880	2,310	1,800	1,160
15	1,220	1,170	1,160	991	1,470	1,200	3,080	3,910	3,840	2,340	1,800	1,190
16	1,160	1,160	1,190	1,020	1,330	1,200	3,250	3,840	3,920	2,270	1,810	1,200
17	1,140	1,170	1,230	1,180	1,170	1,360	3,210	3,750	4,280	2,170	1,810	1,230
18	1,150	1,170	1,130	1,200	1,180	1,320	3,170	3,630	4,260	2,150	1,770	1,240
19	1,150	1,180	802	1,200	1,160	1,390	3,280	3,590	4,200	2,110	1,770	1,250
20	1,140	1,160	570	1,290	1,150	1,370	3,550	3,440	4,180	2,060	1,770	1,260
21	1,140	1,220	658	1,240	1,090	1,370	3,360	3,330	4,160	2,070	1,760	1,320
22	1,140	1,230	681	1,150	1,030	1,370	3,350	3,280	4,050	2,010	1,750	1,270
23	1,150	1,160	580	1,040	1,030	1,380	3,310	3,510	3,590	2,000	1,820	1,260
24	1,140	1,170	429	1,030	1,170	1,410	3,330	3,150	3,530	2,000	1,840	1,240
25	1,140	1,170	484	1,140	1,150	1,450	3,410	2,880	3,490	2,010	1,790	1,240
26	1,140	1,160	812	1,170	1,000	1,460	3,410	2,610	3,560	2,030	1,870	1,240
27	1,140	1,160	930	1,230	947	1,470	3,360	2,160	3,830	2,000	1,800	1,240
28	1,130	1,160	1,090	1,220	866	1,410	3,260	2,160	3,820	1,990	1,620	1,250
29	1,130	1,160	1,080	1,240	-----	1,070	3,210	2,380	3,820	1,990	1,370	1,220
30	1,140	1,160	1,030	1,270	-----	1,450	3,230	2,770	3,730	2,000	1,350	1,210
31	1,150	-----	1,040	1,120	-----	1,640	-----	2,870	-----	1,990	1,330	-----
TOTAL	36,050	35,130	30,996	33,198	31,631	39,041	89,850	107,560	110,890	71,950	57,400	35,611
MEAN	1,163	1,171	1,000	1,071	1,130	1,259	2,995	3,470	3,696	2,321	1,852	1,187
MAX	1,250	1,230	1,230	1,290	1,500	1,640	3,700	4,940	4,280	3,410	2,200	1,350
MIN	1,030	1,140	429	730	757	888	1,460	2,160	2,400	1,990	1,330	895
AC-FT	71,510	69,680	61,480	65,850	62,740	77,440	178,200	213,300	220,000	142,700	113,900	70,630
CAL YR 1970	TOTAL 433,104		MEAN 1,187	MAX 5,480	MIN 345	AC-FT 859,100						
WTR YR 1971	TOTAL 679,307		MEAN 1,861	MAX 4,940	MIN 429	AC-FT 1,347,000						

PLATTE RIVER BASIN

133

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 mile upstream from La Prele Reservoir and 13.5 miles southwest of Douglas.

DRAINAGE AREA.--135 sq mi.

PERIOD OF RECORD.--August 1919 to current year.

GAGE.--Water-stage recorder. Altitude of gage is about 5,600 ft (from nearby line of levels).

AVERAGE DISCHARGE.--52 years, 40.4 cfs (29,270 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,440 cfs May 9 (gage height, 11.35 ft); minimum daily, 0.70 cfs Aug. 18-21.

Period of record: Maximum discharge, 17,300 cfs June 12, 1970 (gage height, 13.01 ft), from rating curve extended above 2,700 cfs on basis of slope-area measurement of peak flow; no flow at times in 1936, 1939-40, 1943.

REMARKS.--Records fair above 70 cfs and poor below. Several small reservoirs above station (combined capacity, about 140 acre-ft) for irrigation. Diversions for irrigation of about 4,600 acres 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.

REVISIONS (WATER YEARS).--WSP 1710: Drainage area. WSP 1918: 1920(M), 1952(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	9.1	8.1	11	14	10	71	530	517	16	12	1.1
2	4.0	9.1	7.9	11	15	10	60	533	492	15	12	1.1
3	4.4	9.1	7.8	11	15	10	51	512	470	16	12	1.1
4	4.4	9.1	6.3	11	15	10	41	518	457	16	8.5	2.1
5	4.4	9.1	8.3	12	15	9.9	35	1,310	399	16	8.0	1.8
6	6.0	9.1	8.4	12	13	10	31	854	361	16	8.0	1.5
7	8.1	9.1	8.4	12	14	10	43	868	316	14	8.5	1.8
8	10	9.1	8.8	12	14	9.7	65	874	270	16	6.7	3.0
9	10	9.1	8.8	12	14	9.7	72	1,260	260	14	11	4.2
10	10	9.1	8.8	12	15	9.4	119	1,580	256	16	6.3	3.8
11	10	8.8	9.1	12	15	8.7	164	830	245	15	5.0	6.3
12	9.7	8.8	9.1	12	14	9.2	107	713	224	16	4.2	6.3
13	9.7	8.8	9.1	12	14	9.4	74	664	222	18	3.0	9.4
14	9.7	8.8	9.4	12	14	9.7	81	665	191	20	2.7	9.8
15	9.7	8.8	9.4	12	14	9.3	125	636	170	14	2.1	11
16	9.7	8.8	9.4	12	14	9.4	141	602	146	19	1.8	11
17	9.7	8.8	9.7	12	12	9.4	139	552	123	19	.90	13
18	9.7	8.8	9.0	13	14	9.5	157	476	105	19	.70	16
19	9.4	8.8	9.0	13	13	9.5	201	408	85	14	.70	15
20	9.4	8.8	10	13	12	10	220	349	71	16	.70	17
21	9.4	8.8	10	13	11	9.4	237	330	62	17	.70	22
22	9.4	8.8	10	13	11	9.4	215	385	50	16	.90	20
23	9.4	8.8	9.0	13	11	9.2	261	496	45	15	.90	19
24	9.4	8.8	10	13	11	9.4	442	502	35	17	.90	19
25	9.4	8.4	10	14	9.7	9.4	462	531	28	17	.90	15
26	9.4	8.4	10	13	10	10	349	493	22	16	1.1	12
27	9.1	8.4	10	13	10	88	276	488	21	14	1.8	13
28	9.1	8.4	10	14	10	104	240	504	21	15	2.1	12
29	9.1	8.1	10	14	-----	71	296	517	20	13	2.4	11
30	9.1	8.1	10	14	-----	91	429	930	16	13	1.5	11
31	9.1	-----	10	14	-----	125	-----	616	-----	13	1.5	-----
TOTAL	263.9	264.0	283.8	387	363.7	728.6	5,204	20,526	5,700	491	129.50	290.3
MEAN	8.51	8.80	9.15	12.5	13.0	23.5	173	662	190	15.8	4.18	9.68
MAX	10	9.1	10	14	15	125	462	1,580	517	20	12	22
MIN	4.0	8.1	6.3	11	9.7	8.7	31	330	16	13	.70	1.1
AC-FT	523	524	563	768	721	1,450	10,320	40,710	11,310	974	257	576
CAL YR 1970	TOTAL	36,262.10	MEAN	99.3	MAX	5,530	MIN	2.9	AC-FT	71,930		
WTR YR 1971	TOTAL	34,631.80	MEAN	94.9	MAX	1,580	MIN	.70	AC-FT	68,690		

PLATTE RIVER BASIN

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 downstream from bridge on U.S. Highway 87, 0.2 mile upstream from Shawnee Creek, and 1.5 miles east of Orin.

DRAINAGE AREA.--18,847 sq mi, of which 5,152 sq mi (including 3,959 sq mi 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 (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 miles downstream at different datum.

EXTREMES.--Current year: Maximum discharge, 14,000 cfs May 5 (gage height, 8.18 ft); minimum daily, 400 cfs Dec. 25, 26. Period of record: Maximum discharge, 23,800 cfs May 15, 1965 (gage height, 10.00 ft); maximum gage height, 10.45 ft June 12, 1970; minimum daily discharge determined, 170 cfs Sept. 11-14, 1899.

REMARKS.--Records good except those for winter period, which are poor. 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.--Thirty-two 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,080	1,170	1,150	1,100	1,150	966	1,930	4,570	5,610	3,670	1,740	1,230
2	1,080	1,170	1,140	1,100	1,350	989	1,900	4,860	4,720	3,310	1,790	1,210
3	1,090	1,170	1,140	800	1,360	976	1,660	5,120	4,970	2,990	1,830	1,210
4	1,190	1,150	1,100	500	1,250	1,010	1,600	5,390	5,530	3,010	2,070	1,270
5	1,220	1,140	1,060	500	1,150	1,190	1,520	11,200	5,240	3,000	2,000	1,340
6	1,240	1,120	1,160	600	922	1,210	1,450	10,500	5,280	2,900	1,990	1,240
7	1,340	1,130	1,160	800	800	1,070	2,360	8,230	5,230	2,830	2,030	952
8	1,360	1,280	1,160	900	700	1,060	3,460	6,900	5,000	2,600	2,050	888
9	1,300	1,230	1,150	900	600	1,280	4,090	6,810	4,890	2,230	2,190	915
10	1,330	1,210	1,180	1,000	800	1,220	4,320	9,640	5,180	2,040	2,220	879
11	1,320	1,200	1,240	1,100	1,000	1,220	3,870	8,830	5,140	2,020	2,070	842
12	1,300	1,220	1,160	1,100	1,200	1,280	3,990	8,160	5,020	1,970	1,820	1,160
13	1,290	1,180	1,130	1,100	1,390	1,150	3,630	7,840	4,780	1,970	1,700	1,250
14	1,300	1,180	1,060	1,100	1,500	1,130	3,170	7,570	4,600	2,010	1,710	1,130
15	1,330	1,180	1,240	1,100	1,540	1,210	3,100	7,580	4,430	2,050	1,680	1,090
16	1,290	1,170	1,260	1,000	1,480	1,180	3,330	7,400	4,270	2,080	1,690	1,130
17	1,240	1,150	1,200	1,000	1,300	1,190	3,490	7,220	4,470	2,040	1,680	1,160
18	1,210	1,170	1,250	1,100	1,190	1,330	3,480	6,690	4,620	1,930	1,650	1,220
19	1,200	1,180	1,130	1,200	1,210	1,250	3,990	6,260	4,550	1,910	1,610	1,250
20	1,210	1,180	802	1,200	1,180	1,350	5,300	5,770	4,430	1,880	1,590	1,270
21	1,200	1,170	600	1,200	1,160	1,330	4,510	5,140	4,370	1,830	1,580	1,330
22	1,190	1,150	600	1,200	1,070	1,320	4,080	4,850	4,320	1,830	1,590	1,380
23	1,190	1,040	600	1,200	1,040	1,330	3,980	6,210	3,970	1,790	1,640	1,340
24	1,190	1,090	500	1,100	1,060	1,350	4,230	6,220	3,640	1,770	1,700	1,330
25	1,180	1,300	400	1,100	1,210	1,400	4,670	5,700	3,540	1,790	1,720	1,290
26	1,170	1,180	400	1,100	1,150	1,410	4,690	5,090	3,480	1,820	1,720	1,290
27	1,180	1,190	800	1,200	1,000	1,460	4,460	4,500	3,670	1,810	1,810	1,300
28	1,180	1,190	900	1,200	1,010	1,700	4,160	4,160	3,810	1,770	1,810	1,300
29	1,170	1,180	1,100	1,300	-----	1,520	4,030	4,240	3,830	1,740	1,630	1,290
30	1,170	1,150	1,100	1,340	-----	1,220	4,170	5,690	3,860	1,740	1,360	1,280
31	1,140	-----	1,100	1,330	-----	1,730	-----	7,090	-----	1,760	1,270	-----
TOTAL	37,880	35,220	30,972	32,470	31,772	39,031	104,620	205,430	136,450	68,090	54,940	35,766
MEAN	1,222	1,174	999	1,047	1,135	1,259	3,487	6,627	4,548	2,196	1,772	1,192
MAX	1,360	1,300	1,260	1,340	1,540	1,730	5,300	11,200	5,610	3,670	2,220	1,380
MIN	1,080	1,040	400	500	600	966	1,450	4,160	3,480	1,740	1,270	842
AC-FT	75,130	69,860	61,430	64,400	63,020	77,420	207,500	407,500	270,600	135,100	109,000	70,940
CAL YR 1970	TOTAL 558,599		MEAN 1,530	MAX 16,700	MIN 400	AC-FT 1,108,000						
WTR YR 1971	TOTAL 812,641		MEAN 2,226	MAX 11,200	MIN 400	AC-FT 1,612,000						

PLATTE RIVER BASIN

135

06652700 GLENDO RESERVOIR NEAR GLENDO, 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 mile southwest of Glendo Dam and 5 miles southeast of Glendo.

DRAINAGE AREA.--19,504 sq mi, of which 5,174 sq mi (including 3,959 sq mi 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. Datum of gage is 4,543.50 ft 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, 727,100 acre-ft May 24 (elevation, 4,649.08 ft); minimum daily, 76,440 acre-ft Oct. 1 (elevation, 4,573.48 ft).

Period of record: Maximum daily contents, 727,100 acre-ft May 24, 1971 (elevation, 4,649.08 ft); minimum daily (since appreciable storage was attained), 15,140 acre-ft Sept. 28, 1966 (elevation, 4,548.10 ft).

REMARKS.--Reservoir is formed by rock-fill dam; completed in October 1957. Storage began (ct. 17, 1957. Capacity, 795,200 acre-ft at elevation 4,653.00 ft (spillway crest). Dead storage, 11,500 acre-ft. 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)

4,573	74,760	4,620	363,400
4,580	100,900	4,630	464,700
4,590	146,900	4,640	588,600
4,600	206,000	4,650	742,700
4,610	278,300		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76,440	150,000	224,000	284,500	355,100	417,100	470,100	552,900	714,500	605,900	413,200	217,400
2	76,750	152,500	226,500	286,900	357,400	418,600	473,500	556,800	710,700	599,200	408,200	211,300
3	77,340	155,000	228,600	288,900	360,200	420,300	476,800	561,700	708,400	592,400	403,100	205,300
4	79,250	157,300	230,900	290,600	362,500	422,900	479,900	567,900	706,300	585,500	398,000	200,000
5	81,210	159,800	233,100	291,800	365,100	426,000	481,400	588,800	703,500	579,000	393,000	194,900
6	84,000	162,300	235,600	293,000	366,200	428,600	480,900	609,900	700,800	571,900	388,400	189,600
7	86,620	164,900	237,900	294,600	367,100	430,400	481,600	626,000	697,200	564,700	383,500	184,100
8	89,300	167,500	240,400	296,000	368,500	432,300	484,300	640,100	693,000	556,700	378,800	179,100
9	91,980	170,300	242,700	297,700	369,900	434,400	488,200	653,900	691,300	548,300	374,100	174,700
10	94,690	173,000	245,300	300,300	371,800	436,800	493,000	672,300	689,300	539,100	367,300	170,100
11	97,350	176,100	247,500	302,400	374,600	439,100	496,400	689,300	687,400	530,100	359,500	165,700
12	100,100	178,100	249,700	304,700	378,100	441,600	500,300	703,900	685,100	522,700	351,300	160,800
13	102,700	180,600	251,700	307,100	381,000	443,900	503,200	711,500	683,500	517,200	342,900	156,700
14	105,300	183,000	253,300	309,500	384,000	446,100	503,400	714,200	681,600	512,000	334,500	152,300
15	108,000	185,500	255,700	310,500	387,100	447,700	504,200	716,200	678,500	507,200	326,000	148,500
16	110,700	188,000	257,800	314,000	389,900	448,100	505,000	719,500	674,500	501,800	317,700	145,100
17	113,300	190,400	260,600	316,500	392,500	449,100	506,200	721,800	672,000	496,200	310,200	142,000
18	115,700	193,000	263,000	319,100	394,700	449,900	508,600	723,000	667,000	490,000	304,000	139,300
19	118,300	195,300	264,900	321,800	397,000	450,800	511,000	723,500	663,900	483,700	297,700	136,800
20	120,800	197,800	266,000	325,200	399,400	452,000	516,000	723,500	660,300	476,900	291,500	134,800
21	123,200	200,400	266,900	327,600	401,700	453,100	519,300	722,800	656,700	469,600	285,300	132,900
22	125,600	202,700	268,200	330,300	403,900	454,200	522,600	724,100	652,900	462,200	279,000	131,000
23	128,100	204,200	269,200	332,400	405,800	455,300	524,600	726,300	649,100	454,500	272,700	129,200
24	130,500	206,600	270,000	334,600	407,800	456,700	527,300	727,100	645,400	447,100	266,500	127,300
25	133,100	209,700	271,000	336,900	410,200	457,900	531,100	727,000	641,300	441,300	260,400	125,400
26	135,600	212,100	271,800	339,400	412,200	459,400	535,400	725,600	635,700	438,300	254,200	123,600
27	138,000	214,000	273,100	341,800	413,700	460,600	539,300	722,800	630,400	435,500	248,300	122,600
28	140,300	216,400	275,100	344,300	415,400	462,300	542,700	719,300	624,300	432,500	242,300	123,400
29	143,400	218,100	277,300	347,000	-----	463,800	545,700	717,700	618,500	430,100	236,200	125,600
30	145,100	221,900	279,700	349,700	-----	464,800	549,800	716,500	612,600	424,300	229,900	128,000
31	147,500	-----	282,100	352,400	-----	466,600	-----	716,700	-----	418,400	223,500	-----
MAX	147,500	221,900	282,100	352,400	415,400	466,600	549,800	727,100	714,500	605,900	413,200	217,400
MIN	76,440	150,000	224,000	284,500	355,100	417,100	470,100	552,900	612,600	418,400	223,500	122,600
(+)	4,590.12	4,602.35	4,610.48	4,618.80	4,625.37	4,630.17	4,637.09	4,648.45	4,641.70	4,625.66	4,602.58	4,586.20
(+)	+71,380	+74,400	+60,200	+70,300	+63,000	+51,200	+83,200	+166,900	-104,100	-194,200	-194,900	-95,500

CAL YR 1970..... + +24,100

WTR YR 1971..... + +51,880

+ Elevation, in feet, at end of month.

+ Change in contents, in acre-feet.

LOCATION.--Lat 42°27'25", long 104°56'50", in SW¹/₄SW¹/₄NW¹/₄ sec.30, T.29 N., R.67 W., Platte County, on right bank opposite Sand Draw, 1.3 miles upstream from Horseshoe Creek, 3.1 miles downstream from Glendo Dam, and 5.2 miles southeast of Glendo.

DRAINAGE AREA.--19,507 sq mi, of which 5,174 sq mi (including 3,959 sq mi in Great Divide Basin in southern Wyoming) is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 4,488.94 ft above mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum discharge, 7,260 cfs June 8 (gage height, 9.99 ft); minimum daily, 1.7 cfs Jan. 7.
Period of record: Maximum discharge, 9,200 cfs June 19, 1959 (gage height, 10.94 ft); minimum daily, 0.80 cfs Oct. 5, Dec. 3, 1966.

REMARKS.--Records good except those below 40 cfs, which are poor. Flow completely regulated by Glendo Reservoir since Oct. 17, 1957. (See sta 06652700.) 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.--Thirty discharge measurements furnished by Bureau of Reclamation.

REVISIONS.--WSP 1918: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	952	2.7	7.5	2.1	2.9	3.2	27	3,110	6,730	6,970	4,480	4,380
2	980	2.8	7.6	1.9	3.1	4.4	13	2,970	6,670	6,840	4,410	4,270
3	854	2.7	7.6	1.9	2.9	3.9	12	2,640	6,750	6,690	4,400	4,240
4	257	2.7	7.4	1.9	2.6	3.9	13	2,530	6,420	6,710	4,460	4,040
5	251	2.8	7.3	1.9	2.6	3.9	749	1,180	6,580	6,580	4,480	3,870
6	14	2.8	7.4	1.8	2.5	3.9	1,740	16	6,620	6,490	4,240	3,850
7	13	2.8	7.4	1.7	2.5	3.9	1,750	13	6,800	6,710	4,400	3,850
8	9.0	3.9	6.2	2.0	2.7	3.9	2,000	13	6,600	6,860	4,480	3,580
9	5.5	3.0	5.5	2.4	2.8	3.7	1,820	13	6,030	6,860	4,590	3,290
10	5.9	2.9	5.8	2.6	2.9	3.9	1,880	15	5,940	6,930	5,530	3,250
11	5.5	2.8	5.8	2.8	3.0	3.9	1,900	13	5,960	6,970	6,010	3,270
12	6.2	3.4	5.6	2.7	3.4	3.7	2,110	554	5,810	5,980	6,030	3,270
13	5.5	6.5	5.4	2.7	3.2	3.7	2,340	3,420	5,510	4,780	6,010	3,270
14	5.9	7.2	5.5	2.8	3.4	3.7	3,180	6,430	5,390	4,710	6,010	3,230
15	5.5	7.2	5.6	2.9	3.2	312	2,980	6,450	5,720	4,560	6,010	3,030
16	5.9	6.9	5.6	2.8	3.2	1,030	3,020	5,850	6,200	4,830	5,980	2,930
17	5.9	7.0	5.6	2.8	3.1	825	2,930	5,670	6,420	4,940	5,650	2,750
18	5.9	7.0	5.6	2.6	3.2	827	2,960	5,700	6,420	5,070	4,780	2,550
19	6.2	7.1	6.0	2.8	3.2	803	2,840	5,700	5,940	5,140	4,780	2,510
20	3.4	7.1	6.2	3.1	3.2	813	2,670	5,680	6,230	5,310	4,760	2,470
21	3.4	7.0	6.2	2.8	3.4	777	2,940	5,410	6,180	5,630	4,780	2,400
22	3.2	7.0	5.8	2.6	3.7	784	2,700	5,170	6,160	5,680	4,760	2,300
23	3.2	7.2	5.4	2.6	3.7	778	3,150	5,440	5,850	5,700	4,780	2,270
24	3.1	7.8	3.5	2.6	3.4	783	3,140	5,600	5,450	5,720	4,780	2,270
25	2.9	7.4	2.1	3.4	3.4	779	3,140	5,500	5,790	4,900	4,780	2,260
26	2.9	7.6	2.2	2.9	3.4	775	3,060	5,790	6,160	3,290	4,780	2,130
27	2.8	7.3	2.1	2.9	3.7	767	2,740	5,960	6,490	3,290	4,760	1,870
28	2.6	7.4	2.1	3.1	3.7	771	2,610	6,030	6,930	3,290	4,760	875
29	2.6	7.4	2.0	3.1	-----	771	2,940	6,010	6,910	2,890	4,690	248
30	2.7	7.6	2.0	3.2	-----	774	2,180	6,270	6,930	4,760	4,610	158
31	2.6	-----	2.1	2.9	-----	765	-----	6,710	-----	4,690	4,450	-----
TOTAL	3,429.3	165.0	162.5	80.3	88.0	13,187.6	65,534	121,857	187,590	169,770	153,420	84,681
MEAN	111	5.50	5.24	2.59	3.14	425	2,184	3,931	6,253	5,476	4,949	2,823
MAX	980	7.8	7.6	3.4	3.7	1,030	3,180	6,710	6,930	6,970	6,030	4,380
MIN	2.6	2.7	2.0	1.7	2.5	3.2	12	13	5,390	2,890	4,240	158
AC-FT	6,800	327	322	159	175	26,160	130,000	241,700	372,100	336,700	304,300	168,000
CAL YR 1970	TOTAL	527,272.4	MEAN	1,445	MAX	5,960	MIN	1.5	AC-FT	1,046,000		
WTR YR 1971	TOTAL	799,964.7	MEAN	2,192	MAX	6,970	MIN	1.7	AC-FT	1,587,000		

06655500 GUERNSEY RESERVOIR NEAR GUERNSEY, WYO.

LOCATION.--Lat 42°17'23", long 104°45'48", in NE¼ 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 miles northwest of Guernsey.

DRAINAGE AREA.--20,183 sq mi, of which 5,175 sq mi (including 3,959 sq mi 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 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, 42,240 acre-ft May 8 (elevation, 4,418.72 ft); minimum daily, 40 acre-ft Oct. 28 to Nov. 9 (elevation, 4,368.41 ft).

Period of record: Maximum daily contents, 73,240 acre-ft Oct. 17, 1929 (elevation, 4,420.95 ft); minimum daily, 30 acre-ft Oct. 5, 6, 1958 (elevation, 4,361.50 ft) and Oct. 18 to Nov. 3, 1969 (elevation, 4,367.70 ft).

REMARKS.--Reservoir is formed by rock-fill dam; completed in July 1927. Capacity, 45,230 acre-ft at elevation, 4,420 ft (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)

4,368	30	4,385	2,010	4,405	15,940
4,370	100	4,390	3,530	4,410	24,140
4,375	480	4,395	5,870	4,415	34,040
4,380	1,070	4,400	9,840	4,419	42,880

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11,090	40	2,130	4,390	6,380	8,320	34,830	35,900	36,260	35,880	10,180	21,560
2	10,980	40	2,210	4,470	6,450	8,330	34,830	36,530	35,790	36,200	9,390	21,420
3	10,930	40	2,300	4,510	6,510	8,400	35,070	36,770	35,300	36,010	8,470	21,280
4	9,900	40	2,380	4,560	6,570	8,420	35,130	36,700	35,220	36,220	8,010	21,540
5	8,470	40	2,460	4,610	6,620	8,510	34,340	39,480	34,620	35,750	7,690	21,630
6	6,840	40	2,540	4,650	6,680	8,580	33,330	40,780	33,810	35,090	7,010	21,690
7	5,130	40	2,630	4,710	6,730	8,650	32,790	41,870	33,330	34,530	6,020	21,850
8	3,360	40	2,700	4,750	6,790	8,710	32,190	42,240	34,000	34,430	5,580	22,230
9	1,910	40	2,780	4,770	6,840	8,760	32,170	41,780	34,730	34,280	5,110	22,490
10	1,110	160	2,850	4,810	6,940	8,820	32,000	41,120	35,190	34,230	5,770	22,680
11	400	300	2,900	4,870	7,040	8,880	31,570	38,760	35,640	34,320	8,360	22,890
12	150	380	3,000	4,940	7,130	8,930	31,330	34,430	35,960	35,390	10,740	23,090
13	150	500	3,050	5,020	7,220	9,020	31,750	30,800	35,540	35,470	13,080	23,470
14	150	610	3,130	5,070	7,310	9,080	34,040	33,600	34,700	35,260	15,280	23,700
15	150	720	3,220	5,130	7,420	9,090	35,470	35,730	34,090	35,070	17,360	23,880
16	150	830	3,310	5,190	7,490	10,920	36,310	36,740	34,280	34,600	19,620	23,940
17	150	940	3,390	5,290	7,550	12,560	36,460	37,070	34,960	34,730	21,680	23,900
18	140	1,050	3,470	5,360	7,640	14,130	36,720	37,200	35,770	34,850	21,750	23,610
19	140	1,140	3,500	5,460	7,700	15,690	36,880	37,140	35,840	35,110	21,710	23,230
20	140	1,220	3,560	5,550	7,790	17,320	36,770	36,850	35,410	35,110	21,680	22,980
21	140	1,310	3,650	5,630	7,850	18,830	36,850	36,480	35,130	35,190	21,690	22,820
22	140	1,360	3,720	5,690	7,910	20,340	36,570	36,220	34,980	35,370	21,660	22,800
23	100	1,400	3,780	5,750	7,950	21,870	36,570	36,500	35,860	35,430	21,640	22,750
24	100	1,520	3,850	5,820	8,080	23,510	36,770	37,030	35,300	35,560	21,560	22,710
25	50	1,650	3,910	5,870	8,110	25,040	36,850	37,290	34,920	35,130	21,570	22,690
26	50	1,720	3,970	5,950	8,140	26,630	37,070	37,180	34,750	30,430	21,540	22,930
27	50	1,800	4,040	6,030	8,200	28,080	37,030	36,920	34,490	25,710	21,540	23,430
28	40	1,880	4,110	6,110	8,260	29,590	36,550	36,630	34,410	20,730	21,630	23,230
29	40	1,970	4,180	6,190	-----	31,180	36,530	36,290	35,020	14,970	21,810	21,420
30	40	2,060	4,240	6,250	-----	32,750	35,220	36,330	35,490	12,180	21,880	19,660
31	40	-----	4,320	6,310	-----	34,340	-----	36,630	-----	10,910	21,710	-----
MAX	11,090	2,060	4,320	6,310	8,260	34,340	37,070	42,240	36,260	36,220	21,880	23,940
MIN	40	40	2,130	4,390	6,380	8,320	31,330	30,800	33,330	10,910	5,110	19,660
(+)	4,368.41	4,385.21	4,391.94	4,395.70	4,398.30	4,415.14	4,415.55	4,416.21	4,415.68	4,401.01	4,408.64	4,407.42
(#)	-11,300	+2,020	+2,260	+1,990	+1,950	+26,080	+880	+1,410	-1,140	-24,580	+10,800	-2,050

CAL YR 1970..... + 1,240

WTR YR 1971..... + 8,320

+ Elevation, in feet, at end of month.

Change in contents, in acre-feet.

PLATTE RIVER BASIN

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 mile northwest of Guernsey and 1.1 miles downstream from Guernsey Dam.

DRAINAGE AREA.--20,196 sq mi, of which 5,175 sq mi (including 3,959 sq mi in Great Divide Basin in southern Wyoming) is probably noncontributing. Area at site used May 1909 to December 1927, 20,277 sq mi.

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 (from topographic map). Prior to Nov. 17, 1908, and Mar. 30 to Oct. 31, 1912, nonrecording gages downstream at several sites within 0.8 mile 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 miles downstream. Jan. 1, 1928, to Sept. 30, 1964, water-stage recorder at present site at datum 1.50 ft higher.

EXTREMES.--Current year: Maximum discharge, 8,160 cfs June 2 (gage height, 7.29 ft); minimum daily, 1.2 cfs Nov. 13-23, Dec. 2. Period of record: Maximum discharge, 30,000 cfs June 2 or 3, 1908 (gage height, 11.5 ft, from floodmark, site and datum then in use), from rating curve extended above 13,000 cfs; no flow Feb. 28, 1927, Nov. 19 to Dec. 8, Dec. 10-12, 14, 15, 1951.

REMARKS.--Records good above 500 cfs and poor below. 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.--Thirty-two 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,040	43	1.3	1.6	1.6	2.0	4.9	3,410	7,830	6,700	4,960	4,470
2	1,020	41	1.2	1.6	1.6	1.6	6.0	3,400	7,800	6,750	4,940	4,360
3	1,020	43	1.4	2.1	1.6	1.8	5.3	3,410	7,920	6,780	4,900	4,280
4	1,020	47	1.4	2.1	1.6	2.1	5.7	3,400	7,560	6,830	4,820	4,070
5	1,020	45	1.4	2.1	1.6	2.1	773	2,570	7,710	6,830	4,740	3,890
6	1,020	47	1.4	2.1	1.6	2.1	1,940	1,650	7,650	6,800	4,760	3,850
7	1,020	45	1.4	2.1	1.6	2.1	2,010	1,330	7,620	6,830	4,800	3,800
8	1,020	50	1.6	2.2	1.5	2.1	2,010	1,480	6,930	6,880	4,800	3,580
9	866	53	1.4	2.5	1.5	2.1	2,000	1,720	6,250	6,900	4,820	3,260
10	506	26	1.4	2.2	1.6	2.1	2,020	2,680	6,200	6,880	4,840	3,140
11	404	2.1	1.4	1.7	2.2	1.9	2,020	3,550	6,200	6,880	4,860	3,160
12	213	1.5	1.4	1.6	2.1	1.8	2,030	4,250	6,200	5,930	4,840	3,140
13	87	1.2	1.6	1.6	2.1	1.9	2,040	5,400	6,230	4,860	4,840	3,120
14	78	1.2	1.6	1.6	2.1	1.4	2,050	6,030	6,250	4,920	4,860	3,090
15	72	1.2	1.6	1.6	1.7	1.5	2,330	6,500	6,280	4,800	4,860	3,030
16	69	1.2	1.6	2.0	1.6	1.8	2,670	6,480	6,250	5,020	4,880	3,030
17	66	1.2	1.6	2.1	1.6	3.6	2,920	6,480	6,230	4,960	4,840	3,010
18	66	1.2	1.6	2.0	1.5	8.9	2,980	6,450	6,250	5,000	4,800	2,910
19	66	1.2	1.6	1.5	1.5	13	2,970	6,450	6,250	5,100	4,780	2,800
20	59	1.2	1.6	1.8	1.6	16	3,130	6,450	6,480	5,260	4,760	2,770
21	59	1.2	1.6	1.8	1.5	20	3,350	6,230	6,500	5,620	4,780	2,690
22	56	1.2	1.6	1.6	1.5	22	3,190	5,950	6,330	5,640	4,800	2,490
23	92	1.2	1.6	1.5	1.6	14	3,520	6,230	5,730	5,680	4,760	2,340
24	56	1.3	1.6	1.7	1.8	8.4	3,690	6,480	5,830	5,730	4,760	2,270
25	47	1.5	1.6	1.5	1.8	7.8	3,830	6,500	6,030	5,730	4,760	2,260
26	47	1.3	1.6	1.4	1.3	7.2	3,740	6,700	6,250	5,730	4,760	2,090
27	47	1.3	1.6	1.5	2.0	5.2	3,510	6,880	6,580	5,780	4,740	1,750
28	50	1.4	1.6	1.5	2.5	5.0	3,390	6,980	6,830	5,780	4,720	1,410
29	50	1.4	2.5	1.6	-----	5.6	3,400	6,980	6,600	5,780	4,640	1,250
30	45	1.4	2.1	1.6	-----	6.0	3,400	7,260	6,630	5,780	4,610	1,120
31	43	-----	2.1	1.6	-----	4.3	-----	7,800	-----	5,560	4,530	-----
TOTAL	11,324	466.4	49.0	55.4	47.8	177.4	70,934.9	157,080	199,400	183,720	148,560	88,430
MEAN	365	15.5	1.58	1.79	1.71	5.72	2,364	5,067	6,647	5,926	4,792	2,948
MAX	1,040	53	2.5	2.5	2.5	22	3,830	7,800	7,920	6,900	4,960	4,470
MIN	43	1.2	1.2	1.4	1.3	1.4	4.9	1,330	5,730	4,800	4,530	1,120
AC-FT	22,460	925	97	110	95	352	140,700	311,600	395,500	364,400	294,700	175,400

CAL YR 1970 TOTAL 576,562.9 MEAN 1,58C MAX 4,980 MIN 1.2 AC-FT 1,144,000
WTR YR 1971 TOTAL 860,244.9 MEAN 2,357 MAX 7,920 MIN 1.2 AC-FT 1,706,000

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 mile downstream from Cottonwood Draw, 2.5 miles downstream from Whalen Dam, and 4.8 miles northwest of Fort Laramie.

DRAINAGE AREA.--20,384 sq mi, of which 5,178 sq mi (including 3,959 sq mi in Great Divide Basin in southern Wyoming) is probably noncontributing. Area at site used prior to Apr. 16, 1938, 20,277 sq mi.

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 (from topographic map). Prior to Apr. 16, 1938, nonrecording gages at Whalen Dam and canals 2.5 miles upstream at different datums. Apr. 16, 1938, to Nov. 17, 1955, water-stage recorder at site 200 ft downstream at present datum.

EXTREMES.--Current year: Maximum discharge, 8,280 cfs June 4 (gage height, 6.31 ft); no flow Jan. 4-8, Jan. 29 to Feb. 8, Mar. 4. Period of record: Maximum discharge determined, 22,000 cfs June 26, 1955 (gage height, 9.85 ft), from rating curve extended above 4,500 cfs 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 except those for period of no gage-height record, which are poor. Flow regulated by Whalen Dam 2.5 miles 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 1970 and 1971 water years are published in Part 2 of this report.

COOPERATION.--Twenty-one 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144	62	3.5	2.0	0	.02	4.7	2,470	6,580	3,520	1,360	1,010
2	126	59	2.6	1.0	0	.02	4.9	2,470	6,580	3,550	1,320	873
3	91	59	3.0	.50	0	.01	4.8	2,470	6,630	3,530	1,310	829
4	82	56	3.0	0	0	0	4.8	2,490	6,280	3,530	1,190	686
5	69	59	2.6	0	0	.01	52	2,090	6,680	3,500	1,110	520
6	65	56	2.6	0	0	.01	1,700	1,020	6,780	3,480	1,130	510
7	91	59	3.0	0	0	.05	1,990	490	6,850	3,480	1,150	580
8	56	60	3.0	0	0	.22	2,030	570	6,410	3,520	1,180	460
9	82	55	2.6	.15	.20	.40	2,080	829	5,690	3,430	1,210	330
10	77	50	2.6	.25	.70	.40	2,090	1,540	5,650	3,370	1,250	322
11	322	35	3.0	.40	1.0	.70	2,100	2,430	5,630	3,320	1,270	330
12	339	25	3.0	.40	1.0	.70	2,120	2,790	5,580	2,740	1,260	322
13	126	16	3.5	.60	.90	1.2	2,140	4,180	5,630	1,490	1,270	306
14	150	15	3.5	.75	.85	.55	2,130	5,410	5,600	1,470	1,310	250
15	115	14	4.1	.70	.85	.15	2,120	6,390	5,670	1,340	1,310	208
16	106	12	4.0	.80	.80	.02	2,180	6,730	5,710	1,510	1,300	258
17	101	10	3.0	.80	.75	.01	2,210	6,480	5,740	1,400	1,270	187
18	96	8.0	1.8	.80	.70	.02	2,210	6,350	5,740	1,410	1,230	194
19	91	7.0	1.0	.80	.11	.01	2,210	6,350	5,710	1,540	1,210	201
20	86	6.0	2.0	.80	.05	2.3	2,270	6,320	5,690	1,640	1,190	187
21	82	5.3	2.0	.80	.03	6.0	2,510	6,250	5,560	1,950	1,170	180
22	77	3.5	2.0	.80	.05	9.2	2,250	6,070	5,050	2,000	1,170	156
23	77	2.3	2.6	.80	.08	15	2,560	6,300	4,080	2,030	1,140	156
24	91	5.3	2.4	1.5	.11	15	2,610	6,510	3,920	2,080	1,140	150
25	72	4.7	2.0	2.0	.11	9.2	2,790	6,460	3,960	2,100	1,140	132
26	69	2.6	2.0	.40	.30	7.5	2,770	6,510	3,900	2,100	1,140	156
27	69	3.0	2.0	.30	.15	7.5	2,580	6,580	3,900	2,160	1,130	187
28	65	3.0	3.0	.20	.03	6.0	2,450	6,560	4,000	2,160	1,140	339
29	62	3.5	3.5	0	-----	5.3	2,440	6,530	3,570	2,140	1,120	229
30	62	3.5	2.6	0	-----	5.3	2,440	6,530	3,480	2,160	1,090	243
31	65	-----	3.0	0	-----	4.1	-----	6,510	-----	2,030	1,050	-----
TOTAL	3,206	759.7	84.5	17.55	8.77	96.90	57,051.2	140,679	162,250	75,680	37,260	10,491
MEAN	103	25.3	2.73	.57	.31	3.13	1,902	4,538	5,408	2,441	1,202	350
MAX	339	62	4.1	2.0	1.0	15	2,790	6,730	6,850	3,550	1,360	1,010
MIN	56	2.3	1.0	0	0	0	4.7	490	3,480	1,340	1,050	132
AC-FT	6,360	1,510	168	35	17	192	113,200	279,000	321,800	150,100	73,910	20,810

CAL YR 1970 TOTAL 160,204.05 MEAN 439 MAX 2,440 MIN 0 AC-FT 317,800
WTR YR 1971 TOTAL 487,584.62 MEAN 1,336 MAX 6,850 MIN 0 AC-FT 967,100

NOTE.--No gage-height record Jan. 1 to Feb. 9.

LOCATION.--Lat 40°48'02", long 105°52'40", in NW¼ sec.36, T.10 N., R.76 W., Larimer County, on left bank 200 ft downstream from bridge on county road, 350 ft downstream from Nunn Creek, 1,300 ft upstream from Stub Creek, and 3.0 miles 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.--62 years, 73.8 cfs (53,470 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 950 cfs June 20 (gage height, 3.60 ft); minimum daily, 15 cfs Feb. 25, 26, Mar. 22-24. Period of record: Maximum discharge, 2,240 cfs June 9, 1923 (gage height, 4.55 ft, site and datum then in use, from flood-marks), from rating curve extended above 1,400 cfs; minimum daily recorded, 5.0 cfs 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	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	26	25	20	17	16	21	65	395	227	43	17
2	40	25	25	20	17	16	21	72	488	210	41	17
3	37	28	24	19	17	16	20	95	566	203	39	17
4	36	34	24	19	16	16	18	121	612	197	38	20
5	34	32	24	19	16	16	20	129	498	173	35	23
6	37	28	23	19	16	16	20	111	515	168	33	31
7	55	28	24	19	16	16	20	99	558	165	31	29
8	44	27	22	19	16	16	21	95	666	160	29	53
9	41	29	22	19	17	16	25	98	677	144	29	37
10	45	28	22	19	17	16	32	95	702	132	31	29
11	44	28	22	19	16	16	38	97	706	118	28	27
12	46	28	22	19	17	17	45	110	650	109	27	25
13	52	28	22	18	16	16	48	127	633	104	25	24
14	45	26	21	18	16	16	53	150	704	99	23	22
15	33	32	21	18	16	16	60	166	773	91	22	22
16	34	28	21	18	16	16	66	184	840	87	21	22
17	34	27	22	18	16	16	70	237	887	80	21	27
18	32	30	22	18	17	16	68	182	860	83	22	44
19	32	29	22	18	17	16	62	162	858	79	21	50
20	32	27	22	18	17	16	57	147	868	72	21	50
21	33	24	22	18	16	16	52	143	842	66	22	50
22	32	23	22	18	16	15	52	172	833	79	20	49
23	32	26	21	18	16	15	51	172	809	71	21	47
24	32	27	21	18	16	15	56	153	810	69	25	55
25	32	26	21	18	15	16	59	159	786	66	19	58
26	32	25	21	17	15	18	58	193	741	62	19	59
27	29	27	21	16	16	21	53	285	725	54	36	51
28	32	26	21	16	16	21	55	357	681	52	31	45
29	32	25	21	16	-----	22	56	429	564	50	30	40
30	29	25	21	16	-----	23	59	492	300	50	24	39
31	27	-----	32	17	-----	24	-----	401	-----	45	19	-----
TOTAL	1,137	822	696	562	455	527	1,336	5,498	20,547	3,365	846	1,079
MEAN	36.7	27.4	22.5	18.1	16.3	17.0	44.5	177	685	109	27.3	36.0
MAX	55	34	32	20	17	24	70	492	887	227	43	59
MIN	27	23	21	16	15	15	18	65	300	45	19	17
AC-FT	2,260	1,630	1,380	1,110	902	1,050	2,650	10,910	40,750	6,670	1,680	2,140
CAL YR 1970	TOTAL	36,648	MEAN	100	MAX	765	MIN	15	AC-FT	72,690		
WTR YR 1971	TOTAL	36,870	MEAN	101	MAX	887	MIN	15	AC-FT	73,130		

141

LOCATION.--Lat 41°00'08", long 106°00'51", in SE₂SE₂ sec.15, T.12 N., R.77 W., Albany County, on right bank 35 ft downstream from bridge on county road, 0.2 mile north of Colorado-Wyoming State line, 0.5 mile upstream from Johnson Creek, and 4 miles south of Jelm.

PERIOD OF RECORD.--June 1904 to October 1905, October 1910 to September 1971 (discontinued). Monthly discharge only for some periods, published in WSP 1310.

AVERAGE DISCHARGE.--62 years, 160 cfs (115,900 acre-ft per year).

Period of record: Maximum discharge, 4,200 cfs June 9, 1923 (gage height, 4.15 ft); minimum recorded, 5.6 cfs Dec. 2, 1933.

REVISIONS (WATER YEARS).--WSP 1440: 1912, 1918(M). WSP 1710: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	63	39	37	47	25	100	127	960	551	119	49
2	61	58	38	33	43	25	110	147	1,060	489	129	45
3	59	50	36	28	36	27	110	183	1,210	455	124	45
4	58	54	36	24	29	30	100	243	1,310	428	119	56
5	51	66	37	23	26	28	90	266	1,170	374	106	61
6	60	66	39	24	24	25	94	247	1,150	326	101	63
7	100	61	39	25	24	24	85	221	1,170	313	95	61
8	85	60	39	28	26	26	77	228	1,330	300	90	101
9	77	48	39	31	28	29	77	255	1,390	283	90	88
10	83	50	36	33	33	35	85	266	1,470	262	95	65
11	81	54	36	34	36	37	97	243	1,470	232	85	56
12	85	60	36	33	38	40	101	258	1,420	200	81	52
13	98	62	36	30	38	40	106	313	1,380	174	83	47
14	91	52	36	30	38	37	109	380	1,390	167	77	44
15	73	45	36	32	38	35	124	438	1,520	167	71	42
16	70	54	38	35	36	35	135	472	1,590	152	67	44
17	70	58	36	38	35	38	147	592	1,780	155	65	56
18	68	56	33	37	33	32	147	496	1,780	149	67	58
19	66	50	33	35	32	35	149	433	1,720	152	65	73
20	66	46	33	40	28	39	132	374	1,720	144	63	81
21	69	56	33	36	25	43	119	349	1,740	141	63	79
22	69	52	31	32	24	43	124	405	1,680	183	59	79
23	67	48	31	34	25	47	114	449	1,640	180	61	79
24	66	65	31	36	28	43	124	390	1,550	158	83	83
25	65	80	35	38	32	43	124	400	1,490	158	65	90
26	70	72	38	42	28	60	132	484	1,390	155	58	97
27	64	60	35	43	25	110	122	685	1,330	129	79	88
28	52	50	35	45	25	100	122	882	1,250	122	88	75
29	66	45	35	46	-----	90	124	1,110	1,110	119	77	67
30	72	40	35	47	-----	110	116	1,290	756	116	69	63
31	68	-----	38	52	-----	130	-----	1,120	-----	111	58	-----
TOTAL	2,193	1,681	1,108	1,081	880	1,461	3,396	13,746	41,926	7,045	2,552	1,987
MEAN	70.7	56.0	35.7	34.9	31.4	47.1	113	443	1,398	227	82.3	66.2
MAX	100	80	39	52	47	130	149	1,290	1,780	551	129	101
MIN	51	40	31	23	24	24	77	127	756	111	58	42
AC-FT	4,350	3,330	2,200	2,140	1,750	2,900	6,740	27,270	83,160	13,970	5,060	3,940
CAL YR 1970	TOTAL	73,503	MEAN 201	MAX 1,410	MIN 22	AC-FT 145,800						
WTR YR 1971	TOTAL	79,056	MEAN 217	MAX 1,780	MIN 23	AC-FT 156,800						

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 upstream from diversion dam for Pioneer Canal, 2.2 miles downstream from Fox Creek, 2.5 miles northeast of Woods, and 23 miles 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 downstream from headgate.

DRAINAGE AREA.--434 sq mi. Drainage area at mouth, 4,565 sq mi.

PERIOD OF RECORD.--April 1912 to September 1924, October 1926 to September 1927, October 1931 to current year. 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 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 downstream between dam crest and canal headgates at datum 1.00 ft higher. Sept. 23, 1915, to Sept. 30, 1924, Apr. 19 to Sept. 30, 1927, and Apr. 11, 1932, to July 13, 1950, water-stage recorder at site 50 ft downstream (prior to Oct. 1, 1935, at datum 1.00 ft higher) at present datum.

Canal: Water-stage recorder and Parshall flume. Altitude of gage is 7,390 ft (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 miles downstream at different datums. Apr. 27, 1966, to May 8, 1967, at present site, at datum 0.06 ft lower.

EXTREMES (combined flow river and canal).--Current year: Maximum discharge, 1,860 cfs June 17; minimum daily, 20 cfs Jan. 5-7.

Period of record: Maximum discharge, 5,060 cfs June 10, 1923 (river discharge by computation of peak flow over dam); minimum daily (1950-71), 10 cfs Aug. 30, Sept. 2-5, 1954.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. Pioneer Canal diverts from left bank of river at diversion dam 100 ft 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) for irrigation, stock water, and domestic use. Diversions for irrigation of about 5,200 acres above station. Transbasin diversions above station to Cache la Poudre River and tributaries (see page 162).

REVISIONS (WATER YEARS).--WSP 1310: 1918-20, 1922, 1924. WSP 1710: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	CCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEI
1	70	68	44	36	54	32	109	231	1,310	603	114	51
2	65	61	47	31	50	32	94	278	1,310	519	118	48
3	63	50	47	26	44	34	111	357	1,420	477	126	45
4	60	49	47	21	36	38	91	465	1,480	451	116	52
5	60	71	47	20	30	35	87	497	1,400	407	111	63
6	60	83	49	20	26	32	87	450	1,300	357	101	63
7	104	75	49	20	24	34	87	404	1,280	337	93	68
8	106	73	49	24	26	38	98	406	1,370	320	87	90
9	97	59	49	31	28	41	96	446	1,470	309	85	105
10	100	67	46	35	33	43	123	481	1,550	282	92	75
11	96	73	40	37	38	48	139	417	1,590	251	90	62
12	99	70	38	39	41	48	139	425	1,520	221	80	57
13	114	68	38	36	44	43	150	545	1,450	183	80	50
14	113	68	40	33	44	41	156	702	1,440	174	76	47
15	92	50	40	34	44	41	186	807	1,540	175	68	43
16	82	60	40	37	44	41	204	851	1,650	162	63	44
17	82	72	38	43	44	44	230	998	1,760	158	61	60
18	82	78	35	45	42	38	229	824	1,760	156	64	67
19	82	66	35	43	40	42	223	719	1,670	157	62	80
20	79	66	35	47	36	45	196	641	1,690	155	60	92
21	82	74	33	42	32	47	179	625	1,680	141	61	92
22	82	68	33	35	28	47	184	707	1,620	174	61	96
23	82	58	33	33	28	49	170	743	1,550	196	55	96
24	81	74	31	35	32	47	191	667	1,470	169	75	96
25	78	91	33	38	37	47	197	682	1,410	156	68	104
26	78	80	37	43	35	73	211	759	1,320	163	56	110
27	65	72	34	46	32	164	196	970	1,230	140	73	105
28	54	66	34	48	32	135	190	1,220	1,150	122	96	91
29	67	58	34	48	-----	139	201	1,400	1,030	116	87	81
30	75	56	34	50	-----	151	199	1,640	823	116	76	74
31	77	-----	38	58	-----	158	-----	1,550	-----	107	63	-----
TOTAL	2,527	2,024	1,227	1,134	1,024	1,847	4,753	21,907	43,243	7,454	2,518	2,207
MEAN	81.5	67.5	39.6	36.6	36.6	59.6	158	707	1,441	240	81.2	73.6
MAX	114	91	49	58	54	164	230	1,640	1,760	603	126	110
MIN	54	49	31	20	24	32	87	231	823	107	55	43
AC-FT	5,010	4,010	2,430	2,250	2,030	3,660	9,430	43,450	85,770	14,790	4,990	4,380

CAL YR 1970 TOTAL 86,567 MEAN 237 MAX 1,800 MIN 31 AC-FT 171,700
WTR YR 1971 TOTAL 91,865 MEAN 252 MAX 1,760 MIN 20 AC-FT 182,200

NOTE.--No gage-height record Dec. 11 to Jan. 11.

PLATTE RIVER BASIN

143

06659580 SAND CREEK AT COLORADO-WYOMING STATE LINE

LOCATION.--Lat 40°59'44", long 105°45'36", in NE 1/4 sec.1, T.12 N., R.75 W., Larimer County, Colorado, on left bank 200 ft south of Colorado-Wyoming State line, and 17 miles southwest of Tie Siding.

DRAINAGE AREA.--29.2 sq mi.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,620 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 191 cfs June 17 (gage height, 4.26 ft); minimum daily, 1.2 cfs Sept. 14-16.
Period of record: Maximum discharge, 250 cfs June 15, 1970 (gage height, 4.41 ft); minimum daily, 0.22 cfs Dec. 29, 1969.

REMARKS.--Records good except those for winter period, which are poor. Natural flow affected by diversion above station to Cache la Poudre River basin through Wilson Supply ditch (see page 162). Water imported above station from Deadman Creek in Laramie River basin is redirected through Wilson Supply ditch but is wasted down Sand Creek at times. Diversions for irrigation of about 170 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	4.5	3.5	2.8	3.9	2.2	4.2	19	107	14	3.7	1.8
2	3.2	3.7	3.4	2.4	3.6	2.2	4.2	24	118	19	4.0	1.6
3	3.0	3.7	3.2	2.2	3.5	2.4	4.5	32	140	19	4.0	1.3
4	2.8	4.8	3.4	2.0	3.2	2.5	3.7	42	138	18	3.7	1.4
5	2.8	5.4	3.7	1.8	3.0	2.2	3.4	46	122	16	3.4	2.0
6	2.6	6.0	4.1	1.7	2.8	2.0	4.2	38	125	14	3.4	1.8
7	4.8	5.4	4.0	1.8	2.7	2.2	4.0	30	128	13	3.0	1.8
8	4.8	4.5	3.9	1.9	3.0	2.2	4.5	27	143	12	2.8	4.0
9	4.2	3.7	3.4	2.1	3.2	2.2	5.9	29	143	13	2.8	4.0
10	4.2	4.1	3.0	2.4	3.4	2.2	8.1	31	149	12	3.0	3.0
11	4.5	4.5	2.8	2.7	3.8	2.4	9.6	32	143	11	3.2	2.0
12	4.8	4.8	2.8	2.7	3.8	2.6	11	40	135	10	2.8	1.8
13	7.0	4.2	3.0	2.4	3.7	3.0	12	52	130	8.9	3.0	1.4
14	5.9	4.0	3.0	2.3	3.5	2.7	12	64	132	7.7	2.6	1.2
15	4.8	3.5	2.8	2.2	3.5	2.5	14	76	146	7.3	2.4	1.2
16	3.4	4.0	3.1	2.4	3.4	2.5	16	83	149	5.6	2.0	1.2
17	3.2	4.5	3.1	2.5	3.6	2.7	18	90	152	5.4	1.8	3.0
18	3.2	5.0	2.7	2.7	3.6	2.3	18	68	146	7.0	2.0	4.0
19	3.2	4.2	2.3	2.7	3.4	2.3	17	61	138	5.6	2.8	4.0
20	3.2	4.2	2.3	2.9	3.2	2.5	15	54	138	5.4	2.4	4.5
21	3.4	4.7	2.3	2.7	3.0	2.5	14	54	120	5.1	2.2	5.1
22	3.4	4.2	2.3	2.5	2.7	2.3	14	61	113	8.1	1.8	4.5
23	3.2	3.7	2.3	2.5	2.7	2.2	14	64	102	8.9	2.0	4.8
24	3.2	4.7	2.3	2.6	2.9	2.2	18	64	92	9.2	3.2	4.8
25	3.2	5.6	2.6	2.7	2.8	2.4	19	68	78	7.3	3.0	5.1
26	3.0	5.0	3.0	2.8	2.7	4.0	20	61	67	6.6	2.6	5.6
27	2.8	4.5	2.7	2.8	2.5	5.4	15	68	57	6.6	3.0	5.9
28	3.0	4.0	2.7	2.9	2.2	4.5	14	73	47	5.6	3.7	5.4
29	3.2	3.7	2.7	3.1	-----	4.5	16	74	41	5.6	3.0	4.5
30	3.4	3.5	2.7	3.4	-----	5.1	16	74	37	5.4	3.0	4.0
31	3.4	-----	3.1	3.7	-----	5.4	-----	80	-----	4.2	2.4	-----
TOTAL	114.2	132.3	92.2	78.3	89.3	88.3	349.3	1,679	3,476	296.5	88.7	96.7
MEAN	3.68	4.41	2.97	2.53	3.19	2.85	11.6	54.2	116	9.56	2.86	3.22
MAX	7.0	6.0	4.1	3.7	3.9	5.4	20	90	152	19	4.0	5.9
MIN	2.6	3.5	2.3	1.7	2.2	2.0	3.4	19	37	4.2	1.8	1.2
AC-FT	227	262	183	155	177	175	693	3,330	6,890	588	176	192
CAL YR 1970	TOTAL 5,124.60		MEAN 14.0		MAX 193		MIN .80		AC-FT 10,160			
WTR YR 1971	TOTAL 6,580.80		MEAN 18.0		MAX 152		MIN 1.2		AC-FT 13,050			

PLATTE RIVER BASIN

06660000 LARAMIE RIVER AT LARAMIE, WYO.

LOCATION.--Lat 41°19'36", long 105°36'27", in NE¼SW¼ sec.29, T.16 N., R.73 W., Albany County, on left bank 400 ft upstream from bridge on access road to Interstate Highway 80, 1.2 miles northwest of city hall in Laramie, and 5 miles downstream from Five-mile Creek.

DRAINAGE AREA.--1,071 sq mi, of which 151 sq mi is probably noncontributing. Drainage area at mouth, 4,565 sq mi.

PERIOD OF RECORD.--April 1933 to current year. Irrigation seasons only prior to 1952. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 7,125 ft (from river-profile map). Prior to Apr. 10, 1936, nonrecording gage on bridge on State Highways 130 and 230, 1.4 miles upstream at different datum. Apr. 10, 1936, to Apr. 7, 1951, nonrecording gage, and Apr. 8, 1951, to Apr. 22, 1965, water-stage recorder on bridge pier, at present site and datum.

AVERAGE DISCHARGE.--20 years (1951-71), 105 cfs (76,070 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,430 cfs June 20 (gage height, 5.30 ft); minimum daily, 10 cfs Sept. 6.
Period of record: Maximum discharge, 3,250 cfs June 15, 1957 (gage height, 6.83 ft); minimum daily, 0.1 cfs Sept. 7-9, 1950.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by transbasin diversions, storage reservoirs, diversions for irrigation of about 45,000 acres above station, and return flow from irrigated areas.

REVISIONS.--WSP 1710: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	81	52	36	60	30	124	59	1,100	442	58	17
2	30	68	52	30	56	30	102	59	1,100	326	59	13
3	31	62	52	25	52	35	83	53	950	287	54	12
4	35	70	52	21	46	38	75	66	900	244	51	12
5	38	76	52	20	40	35	74	78	945	220	50	11
6	41	76	54	20	35	35	66	87	1,030	198	46	10
7	50	86	54	21	32	35	63	82	1,060	175	44	12
8	52	90	54	24	36	40	59	70	955	159	43	15
9	64	90	54	32	45	43	55	69	868	154	39	12
10	74	80	50	37	52	45	52	91	922	145	38	13
11	80	77	45	41	54	47	50	115	1,040	135	34	16
12	82	82	43	41	54	49	58	127	1,120	118	36	15
13	80	78	45	38	54	50	60	126	1,190	103	34	17
14	82	83	46	35	50	50	61	132	1,220	102	32	19
15	84	59	46	35	49	50	62	134	1,160	101	30	16
16	86	66	46	39	47	50	59	150	1,100	91	28	16
17	84	70	42	46	47	52	59	170	1,120	87	25	18
18	82	70	37	48	47	50	59	253	1,180	81	24	21
19	84	66	37	50	46	50	70	280	1,270	80	23	26
20	85	62	37	54	40	54	71	231	1,400	75	22	28
21	85	64	34	50	35	54	66	198	1,380	74	21	34
22	85	54	34	45	32	54	60	192	1,330	71	20	39
23	84	47	34	40	32	56	58	242	1,340	80	18	42
24	85	54	32	42	34	54	57	290	1,310	91	18	43
25	83	60	34	42	36	68	56	257	1,250	86	16	44
26	83	58	37	46	34	100	61	255	1,140	83	17	45
27	80	52	34	46	31	130	64	268	1,020	80	20	50
28	63	52	34	46	30	170	68	329	872	75	21	54
29	74	56	34	49	-----	147	68	430	740	70	18	52
30	82	54	34	56	-----	124	61	610	602	68	22	49
31	83	-----	38	64	-----	118	-----	900	-----	62	21	-----
TOTAL	2,160	2,043	1,329	1,219	1,206	1,943	1,981	6,403	32,614	4,163	982	771
MEAN	69.7	68.1	42.9	39.3	43.1	62.7	66.0	207	1,087	134	31.7	25.7
MAX	86	90	54	64	60	170	124	900	1,400	442	59	54
MIN	29	47	32	20	30	30	50	53	602	62	16	10
AC-FT	4,280	4,050	2,640	2,420	2,390	3,850	3,930	12,700	64,690	8,260	1,950	1,530
CAL YR 1970	TOTAL 60,705		MEAN 166		MAX 2,020		MIN 12		AC-FT 120,400			
WTR YR 1971	TOTAL 56,814		MEAN 156		MAX 1,400		MIN 10		AC-FT 112,700			

145

LOCATION.--Lat 41°28'22", long 105°43'30", in NW¼NE¼SW¼ sec.5, T.17 N., R.74 W., Albany County, on left bank at old Two Rivers Post Office, 0.6 mile upstream from Little Laramie River, and 14 miles northwest of Laramie.

PERIOD OF RECORD.--October 1908 to October 1927, October 1932 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 7,058.85 ft above mean sea level. See WSP 1918 for history of changes prior to May 1, 1920.

EXTREMES.--Current year: Maximum discharge, 950 cfs June 22 (gage height, 5.32 ft); minimum daily, 5.6 cfs Oct. 1.
Period of record: Maximum discharge, 3,930 cfs June 13, 1923 (gage height, 7.48 ft), from rating curve extended above 2,500 cfs; no flow Sept. 22-25, 1911, Aug. 17 to Sept. 6, Sept. 9-22, 1939.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by transbasin diversions, storage reservoirs, diversions above station for irrigation of about 51,200 acres, of which about 3,200 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	91	68	43	64	30	125	64	574	426	72	21
2	18	72	68	35	60	31	130	60	704	315	65	18
3	28	72	68	28	54	32	104	60	831	254	64	14
4	31	81	68	23	50	36	90	42	844	209	57	13
5	35	102	68	21	44	34	88	54	759	180	54	11
6	39	94	70	21	36	31	76	68	711	164	50	10
7	54	88	70	21	32	29	67	74	751	147	44	10
8	55	98	70	24	34	27	64	62	791	138	41	13
9	67	90	70	29	36	29	61	46	731	134	37	17
10	78	98	68	35	39	30	55	58	662	126	36	10
11	86	84	62	38	44	35	51	85	662	117	31	8.6
12	86	85	58	40	50	40	51	104	723	103	29	8.0
13	90	91	58	36	55	45	60	106	787	91	31	7.4
14	88	82	60	34	52	48	62	103	826	78	29	6.2
15	91	70	60	33	50	48	62	103	818	74	25	8.6
16	96	80	62	38	50	48	64	103	787	72	23	8.6
17	90	90	56	45	50	52	60	123	739	68	21	11
18	86	94	50	48	50	47	61	152	731	67	18	10
19	94	82	50	52	50	50	65	233	791	61	17	12
20	94	80	50	56	44	54	79	235	849	61	16	13
21	92	80	45	52	37	54	78	200	890	55	16	15
22	91	72	45	49	33	54	71	170	940	53	15	18
23	90	66	45	47	32	58	65	178	926	53	14	22
24	90	74	42	46	35	56	61	237	912	62	13	24
25	91	84	43	48	37	54	62	258	908	71	13	24
26	86	80	45	52	35	80	62	233	872	62	12	30
27	91	72	43	55	31	120	68	233	791	68	11	36
28	90	68	43	60	30	154	72	244	697	68	14	41
29	67	68	43	60	-----	183	74	298	598	85	18	45
30	92	72	43	63	-----	149	72	380	515	86	18	42
31	96	-----	46	68	-----	133	-----	470	-----	81	18	-----
TOTAL	2,287.6	2,460	1,737	1,300	1,214	1,871	2,160	4,836	23,120	3,629	922	527.4
MEAN	73.8	82.0	56.0	41.9	43.4	60.4	72.0	156	771	117	29.7	17.6
MAX	96	102	70	68	64	183	130	470	940	426	72	45
MIN	5.6	66	42	21	30	27	51	42	515	53	11	6.2
AC-FT	4,540	4,880	3,450	2,580	2,410	3,710	4,280	9,590	45,860	7,200	1,830	1,050
CAL YR 1970	TOTAL	54,206.7	MEAN	149	MAX	1,580	MIN	3.4	AC-FT	107,500		
WTR YR 1971	TOTAL	46,064.0	MEAN	126	MAX	940	MIN	5.6	AC-FT	91,370		

PLATTE RIVER BASIN

147

06661500 LITTLE LARAMIE RIVER AT TWO RIVERS, WYO.

LOCATION.--Lat 41°28'07", long 105°43'56", in SE¼SE¼SE¼ sec.6, T.17 N., R.74 W., Albany County, on right bank at old Two Rivers Post Office, 0.5 mile upstream from mouth, and 14 miles northwest of Laramie.

DRAINAGE AREA.--376 sq mi, of which 58 sq mi is probably noncontributing.

PERIOD OF RECORD.--March to September 1903 (gage heights and discharge measurements only), October 1910 to October 1927, May to November 1933, May 1934 to current year. Published as "at Haley's Ranch, near Laramie" 1903.

GAGE.--Water-stage recorder. Datum of gage is 7,060.62 ft above mean sea level. See WSP 1918 for history of changes prior to Apr. 21, 1915.

AVERAGE DISCHARGE.--54 years (1910-27, 1934-71), 44.0 cfs (31,880 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 960 cfs June 20 (gage height, 6.49 ft); minimum daily, 1.2 cfs Sept. 5.
Period of record: Maximum discharge, 2,440 cfs June 11, 1965 (gage height, 7.50 ft); no flow at times in most years.

REMARKS.--Records good except those for winter period, which are poor. Fifteen small reservoirs above station (combined capacity, about 1,300 acre-ft) for irrigation, stock water, recreation, and domestic use. Diversions for irrigation of about 43,000 acres above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1310: 1912, 1914(M), 1917, 1921, 1924-26. WSP 1710: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	43	31	12	23	14	92	79	202	612	98	11
2	13	34	35	9.0	20	14	66	65	240	548	89	4.5
3	12	39	31	7.0	17	14	58	62	218	472	84	2.1
4	11	34	32	5.0	16	16	50	63	210	400	83	1.8
5	10	39	33	4.5	15	16	52	80	224	360	76	1.2
6	11	49	35	4.5	14	14	45	94	256	340	69	1.4
7	27	44	36	5.0	13	14	44	88	286	322	60	2.7
8	37	49	38	5.5	14	16	46	74	282	308	54	12
9	40	47	36	6.0	15	18	47	68	280	298	51	22
10	48	52	35	8.0	17	20	47	98	314	280	51	22
11	57	40	29	10	18	22	56	128	392	265	44	17
12	63	43	25	9.0	19	24	61	97	466	244	39	14
13	76	38	25	8.0	20	23	58	76	510	247	47	13
14	68	33	26	7.6	20	20	58	62	517	228	47	8.4
15	63	32	27	8.0	21	20	58	56	510	218	49	4.5
16	56	40	25	9.0	21	20	59	64	524	209	47	5.4
17	52	43	23	14	21	21	58	71	608	192	43	16
18	47	40	20	14	21	19	60	82	730	204	42	27
19	45	33	20	14	20	20	63	82	885	210	47	38
20	45	30	20	16	18	23	73	72	930	210	42	49
21	47	32	15	16	15	25	74	62	895	193	35	58
22	48	23	15	12	12	23	76	56	906	182	27	56
23	44	25	15	11	13	23	88	82	912	181	24	52
24	39	30	12	14	16	25	100	94	890	176	16	47
25	38	40	12	14	17	25	115	69	885	164	9.4	42
26	37	45	14	15	17	50	106	58	870	149	5.4	39
27	38	40	12	17	16	92	108	49	835	139	6.2	34
28	34	37	12	18	15	99	107	56	775	126	16	28
29	43	35	12	20	-----	180	100	67	680	132	27	26
30	44	33	12	23	-----	129	99	123	640	127	19	22
31	40	-----	14	24	-----	111	-----	170	-----	113	16	-----
TOTAL	1,247	1,142	727	360.1	484	1,150	2,124	2,447	16,872	7,849	1,363.0	677.0
MEAN	40.2	38.1	23.5	11.6	17.3	37.1	70.8	78.9	562	253	44.0	22.6
MAX	76	52	38	24	23	180	115	170	930	612	98	58
MIN	10	23	12	4.5	12	14	44	49	202	113	5.4	1.2
AC-FT	2,470	2,270	1,440	714	960	2,280	4,210	4,850	33,470	15,570	2,700	1,340
CAL YR 1970	TOTAL 27,370.6		MEAN 75.0		MAX 1,380		MIN 1.0		AC-FT 54,290			
WTR YR 1971	TOTAL 36,442.1		MEAN 99.8		MAX 930		MIN 1.2		AC-FT 72,280			

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 downstream from bridge on county road, 1 mile upstream from Wheatland Reservoir No. 2, and 9 miles northeast of Lookout.

DRAINAGE AREA.--2,174 sq mi, of which 603 sq mi is probably noncontributing. Drainage area at mouth, 4,565 sq mi.

PERIOD OF RECORD.--May 1912 to December 1917, January 1921 to December 1927, April 1932 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 6,962.68 ft 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 upstream at same datum. Oct. 14, 1931, to Sept. 17, 1938, at site 125 ft upstream at same datum.

AVERAGE DISCHARGE.--50 years, 131 cfs (94,910 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,730 cfs June 26, 27 (gage height, 5.08 ft); maximum gage height, 5.14 ft Mar. 26 (backwater from ice); minimum daily discharge, 18 cfs Sept. 6, 7.
Period of record: Maximum discharge, 3,340 cfs June 17, 1957 (gage height, 6.41 ft); no flow at times in 1934-35, 1939-40, 1954-55.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by transbasin diversions, storage reservoirs, diversions for irrigation of about 108,000 acres above station, and return flow from irrigated areas.

REVISIONS (WATER YEARS).--WSP 1310: 1913-17. WSP 1710: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	114	90	66	150	45	420	177	519	1,240	182	33
2	30	94	90	54	130	45	350	156	622	1,080	163	34
3	25	83	90	45	110	47	300	143	720	982	145	31
4	36	80	90	37	90	49	230	139	834	779	136	25
5	37	86	90	35	70	54	190	132	880	670	128	21
6	40	94	90	32	60	48	168	150	839	585	117	18
7	45	110	93	32	52	44	143	168	834	532	107	18
8	54	120	94	32	47	42	130	168	868	501	95	21
9	70	110	94	35	52	45	128	152	910	473	87	21
10	89	100	94	40	60	50	124	141	898	449	86	27
11	107	100	90	48	72	55	117	175	856	418	80	34
12	122	100	82	56	76	60	122	212	892	389	75	30
13	130	96	82	56	80	64	128	207	952	365	75	22
14	145	86	86	50	82	62	136	190	994	348	73	21
15	139	72	86	47	82	58	134	170	1,060	329	71	20
16	134	76	90	52	80	58	134	161	1,100	312	68	19
17	132	90	90	62	78	58	136	154	1,130	304	66	21
18	126	100	80	76	76	54	132	175	1,150	288	63	22
19	117	96	70	90	74	58	141	215	1,210	277	78	31
20	122	86	70	110	64	66	150	275	1,330	283	58	40
21	122	86	62	110	56	78	163	272	1,470	275	56	63
22	122	86	62	94	48	90	163	249	1,580	262	53	82
23	122	78	62	86	45	96	161	238	1,670	244	46	87
24	119	80	56	86	48	96	163	259	1,700	233	42	89
25	108	93	56	93	58	96	172	299	1,710	225	37	89
26	106	110	60	100	56	170	182	291	1,720	233	34	86
27	90	104	66	110	50	250	175	267	1,710	215	31	84
28	100	97	60	120	45	350	182	259	1,660	202	27	87
29	110	92	60	120	-----	420	185	272	1,550	200	25	86
30	85	90	60	130	-----	500	182	326	1,380	205	42	86
31	100	-----	68	160	-----	470	-----	412	-----	200	40	-----
TOTAL	2,918	2,809	2,413	2,264	1,991	3,678	5,241	6,604	34,748	13,098	2,386	1,348
MEAN	94.1	93.6	77.8	73.0	71.1	119	175	213	1,158	423	77.0	44.9
MAX	145	120	94	160	150	500	420	412	1,720	1,240	182	89
MIN	25	72	56	32	45	42	117	132	519	200	25	18
AC-FT	5,790	5,570	4,790	4,490	3,950	7,300	10,400	13,100	68,920	25,980	4,730	2,670

CAL YR 1970 TOTAL 76,988 MEAN 211 MAX 2,190 MIN 24 AC-FT 152,700
WTR YR 1971 TOTAL 79,498 MEAN 218 MAX 1,720 MIN 18 AC-FT 157,700

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 mile downstream from Mule Creek, 2.3 miles upstream from Bluegrass Creek, and 19.5 miles southwest of Wheatland.

DRAINAGE AREA.--219 sq mi.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,325 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 505 cfs Mar. 27; maximum gage height, 6.34 ft May 10; minimum daily discharge, 11 cfs Jan. 4.

Period of record: Maximum discharge, 1,270 cfs July 26, 24, 1969 (gage height, 8.06 ft), from rating curve extended above 160 cfs on basis of slope-area measurement of peak flow; minimum daily, 1.6 cfs Jan. 23, 1969.

REVISIONS.--The maximum discharge for the water year 1970 has been revised to 409 cfs June 12, 1970 (gage height, 6.53 ft), superseding figure published in WRD Wyo, 1970.

REMARKS.--Records poor. Seven small reservoirs above station (combined capacity, about 400 acre-ft) for irrigation. Diversions above station for irrigation of about 2,020 acres, of which about 80 acres lies below station.

REVISIONS (WATER YEARS).--WRD Wyo, 1970: 1969. Revised figures of discharge, in cubic feet per second, for the water year 1970, superseding those published in WRD Wyo, 1970, are given below:

Date	Discharge	Date	Discharge
1970		1970-Con.	
June 12	273	June 15	180
13	263	16	169
14	197	17	154

	Cfs-days	Maximum	Minimum	Mean	Acre-feet
June 1970...	2,891	273	21	96.4	5,730
WTR YR 1970.	11,394.5	273	2.4	31.2	22,600

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	23	21	18	33	21	80	221	201	77	44	22
2	17	23	21	16	26	21	54	218	182	75	42	22
3	17	24	19	13	21	24	55	215	179	72	41	21
4	16	23	18	11	21	18	52	210	198	72	41	20
5	16	23	22	12	21	18	50	249	174	72	39	20
6	17	22	23	12	21	17	46	275	160	67	38	19
7	23	22	22	12	21	18	45	254	154	67	36	19
8	26	24	22	12	20	20	44	242	155	72	36	26
9	25	23	23	13	20	20	46	263	152	73	38	25
10	28	23	22	16	20	19	54	318	159	65	37	23
11	28	23	18	18	21	18	75	289	152	61	36	21
12	27	23	17	18	22	18	78	278	146	57	34	18
13	27	24	16	16	21	21	76	266	140	55	33	14
14	28	24	16	15	20	23	63	258	134	54	32	14
15	27	21	18	18	20	22	58	251	128	51	31	15
16	26	21	22	21	19	23	57	241	122	50	30	19
17	26	23	21	23	18	22	56	234	118	50	30	23
18	25	23	20	23	18	19	64	233	116	50	29	24
19	25	23	16	23	20	21	91	229	107	49	34	26
20	24	22	14	24	20	23	152	215	105	49	32	26
21	24	23	17	21	20	23	125	212	101	47	30	27
22	26	19	16	19	18	21	115	229	100	50	28	29
23	26	16	13	19	17	20	130	282	98	52	27	26
24	25	24	13	21	19	21	160	241	95	46	26	25
25	24	23	14	23	22	22	210	225	91	45	25	24
26	26	23	16	24	20	29	200	218	89	48	25	23
27	26	23	15	23	20	255	198	202	82	45	24	22
28	25	23	15	23	21	198	212	195	84	48	23	21
29	24	23	17	23	-----	95	217	189	80	54	23	21
30	24	23	17	23	-----	84	221	241	77	50	23	21
31	23	-----	18	32	-----	123	-----	225	-----	46	22	-----
TOTAL	738	677	562	585	580	1,297	3,084	7,418	3,879	1,769	989	656
MEAN	23.8	22.6	18.1	18.9	20.7	41.8	103	239	129	57.1	31.9	21.9
MAX	28	24	23	32	33	255	221	318	201	77	44	29
MIN	16	16	13	11	17	17	44	189	77	45	22	14
AC-FT	1,460	1,340	1,110	1,160	1,150	2,570	6,120	14,710	7,690	3,510	1,960	1,300
CAL YR 1970	TOTAL	12,706.6	MEAN	34.8	MAX	273	MIN	2.4	AC-FT	25,200		
WTR YR 1971	TOTAL	22,234.0	MEAN	60.9	MAX	318	MIN	11	AC-FT	44,100		

PLATTE RIVER BASIN

06664900 BLUEGRASS CREEK NEAR WHEATLAND, WYO.

LOCATION.--Lat 41°52'14", long 105°12'51", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.22, T.22 N., R.70 W., Platte County, on right bank 150 ft upstream from State Highway 34, 0.2 mile upstream from Sybille Creek, and 18.2 miles southwest of Wheatland.

DRAINAGE AREA.--139 sq mi.

PERIOD OF RECORD.--August 1958 to September 1963, October 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,250 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 1,310 cfs Mar. 27 (gage height, 4.80 ft); maximum gage height, 4.89 ft Mar. 26 (backwater from debris); minimum daily discharge, 3.0 cfs Mar. 11.

Period of record: Maximum discharge, 1,420 cfs Apr. 10, 1970 (gage height, 4.90 ft); minimum daily, 0.35 cfs Jan. 8, 1970.

Flood of June 8, 1968, reached a discharge of about 3,400 cfs, 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, 98,930 acre-ft) on the Laramie River and diverted through a tunnel 15 miles upstream. Diversions for irrigation of about 210 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	14	9.0	9.5	20	4.2	25	53	52	340	500	420
2	24	13	9.0	8.0	29	4.2	16	53	48	380	495	420
3	19	12	7.0	6.4	22	4.5	17	53	52	380	495	420
4	15	12	5.6	5.0	9.5	4.0	15	54	58	384	495	396
5	14	12	7.0	4.2	9.0	3.5	14	91	49	380	495	384
6	14	15	7.0	4.2	10	3.5	11	94	46	376	490	376
7	21	14	7.0	4.2	9.5	3.5	10	104	45	372	524	324
8	19	18	7.0	4.2	8.0	3.5	11	80	43	376	524	328
9	19	15	7.0	5.0	8.0	3.5	12	85	41	400	548	138
10	21	13	6.6	6.0	7.6	3.2	14	87	41	420	590	54
11	20	15	5.8	7.0	8.5	3.0	19	78	40	400	578	41
12	18	13	5.4	7.0	7.6	3.5	17	75	39	405	572	33
13	16	17	5.4	6.5	7.6	5.0	16	70	38	435	560	28
14	16	16	5.4	6.0	7.6	11	16	66	37	475	554	24
15	15	10	5.8	6.4	7.2	11	16	62	36	485	542	24
16	15	10	6.6	7.0	6.5	8.0	17	59	34	490	530	25
17	15	14	7.7	9.0	5.3	6.1	17	54	34	475	530	28
18	14	12	7.4	9.0	7.2	4.6	19	54	115	495	524	28
19	14	12	6.6	9.0	6.9	4.6	33	54	124	490	524	28
20	14	11	5.4	11	6.1	4.6	73	52	108	518	506	24
21	14	14	6.2	12	5.3	5.7	54	49	108	536	490	25
22	14	9.0	5.8	9.0	4.5	5.3	48	53	231	542	485	26
23	14	9.5	5.2	7.6	4.5	5.0	45	60	217	536	485	25
24	15	13	5.0	8.0	4.6	5.0	46	53	228	542	480	24
25	12	18	5.2	10	5.3	5.3	46	49	270	536	470	22
26	12	19	6.0	9.5	4.5	192	52	48	266	536	465	21
27	13	14	6.0	8.5	4.0	584	52	46	266	524	445	20
28	9.0	14	6.0	8.5	4.0	218	54	45	266	512	440	21
29	9.0	14	7.0	8.0	-----	56	60	46	276	518	440	20
30	14	16	7.6	8.5	-----	40	56	68	328	500	435	20
31	14	-----	7.0	9.5	-----	59	-----	62	-----	495	425	-----
TOTAL	499.0	408.5	202.7	233.7	239.8	1,274.3	901	1,957	3,536	14,253	15,636	3,767
MEAN	16.1	13.6	6.54	7.54	8.56	41.1	30.0	63.1	118	460	504	126
MAX	36	19	9.0	12	29	584	73	104	328	542	590	420
MIN	9.0	9.0	5.0	4.2	4.0	3.0	10	45	34	340	425	20
AC-FT	990	810	402	464	476	2,530	1,790	3,880	7,010	28,270	31,010	7,470

CAL YR 1970 TOTAL 47,145.55 MEAN 129 MAX 545 MIN .35 AC-FT 93,510
WTR YR 1971 TOTAL 42,908.00 MEAN 118 MAX 590 MIN 3.0 AC-FT 85,110

NOTE.--No gage-height record Dec. 1 to Jan. 20.

06667500 NORTH LARAMIE RIVER NEAR WHEATLAND, WYO.

LOCATION.--Lat 42°09'58", long 105°12'23", in NE¼SE¼ sec.2, T.25 N., R.70 W., Platte County, on left bank 1,800 ft upstream from headgate of North Laramie Land Company canal, 1.2 miles downstream from Spring Creek, and 15 miles northwest of Wheatland.

DRAINAGE AREA.--370 sq mi. Drainage area at mouth, 530 sq mi.

PERIOD OF RECORD.--October 1914 to September 1923, July 1939 to September 1971 (discontinued). Monthly discharge only for some periods, published in WSP 1310. Published as "at upper station near Wheatland" in WSP 469. January 1912 to November 1914 at site 1.2 miles downstream; records not equivalent owing to diversion.

GAGE.--Water-stage recorder. Altitude of gage is 4,840 ft (from topographic map). Nov. 6, 1914, to Sept. 30, 1923, water-stage recorder at present site at different datum; July 25, 1939, to Aug. 12, 1954, at site 460 ft downstream at datum 1.84 ft lower.

AVERAGE DISCHARGE.--41 years, 41.1 cfs (29,780 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,000 cfs May 10 (gage height, 7.66 ft); minimum daily, 7.5 cfs Jan. 5.
Period of record: Maximum discharge, 9,260 cfs July 27, 1951 (gage height, 12.9 ft, from floodmarks, present site and datum), from rating curve extended above 800 cfs on basis of slope-area measurements at gage heights 8.09 and 12.9 ft; no flow Nov. 29, 1915, at times July to September 1919, Aug. 3 to Oct. 24, 1954, Oct. 1-6, 1956, Aug. 25 to Sept. 8, 1960.

REMARKS.--Records good except those for winter period, which are poor. Seven small reservoirs above station (total capacity, about 290 acre-ft) for irrigation and stock water. Diversions for irrigation of about 4,800 acres above station.

REVISIONS (WATER YEARS).--WSP 1310: 1915-22. WSP 1710: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	14	14	14	21	19	111	324	674	82	36	19
2	11	13	13	13	27	19	66	365	607	80	36	19
3	11	13	12	11	25	20	69	407	551	77	38	19
4	11	13	11	9.0	18	18	51	503	560	74	36	19
5	11	14	14	7.5	17	16	43	1,220	494	72	36	19
6	12	16	16	8.5	15	16	39	1,130	444	69	34	19
7	15	15	16	9.6	12	17	42	1,260	415	65	32	19
8	16	18	16	11	15	16	52	1,300	378	66	32	24
9	15	17	15	13	17	16	60	1,220	340	74	33	24
10	15	17	15	15	19	15	69	1,750	316	71	35	24
11	16	16	9.3	17	20	14	105	1,390	290	66	37	22
12	15	16	8.2	18	20	16	105	1,240	277	60	33	21
13	15	16	10	18	21	21	80	1,160	440	57	31	19
14	16	17	13	20	22	57	72	1,120	290	55	29	19
15	16	11	14	21	23	46	77	1,080	245	52	28	19
16	16	13	14	19	21	44	82	1,020	219	52	27	21
17	15	18	13	20	20	38	82	960	205	51	27	22
18	15	16	13	18	17	25	87	824	197	50	27	24
19	15	17	14	17	16	24	98	715	183	48	34	24
20	15	13	12	18	16	34	175	622	168	46	26	24
21	15	17	12	18	16	21	186	546	158	44	25	26
22	15	12	12	15	16	18	183	536	150	43	24	26
23	14	8.2	11	16	17	21	191	801	137	45	23	26
24	14	18	11	19	20	20	294	705	122	44	22	24
25	14	18	12	20	20	19	353	648	115	43	22	23
26	14	19	13	21	22	48	294	601	105	45	21	22
27	13	19	13	19	19	715	277	570	94	43	21	21
28	13	16	12	18	19	274	271	551	89	40	21	21
29	12	17	12	18	-----	122	316	555	89	40	21	21
30	15	17	13	18	-----	105	308	947	84	42	21	21
31	15	-----	14	21	-----	186	-----	892	-----	38	20	-----
TOTAL	436	464.2	397.5	500.6	531	2,040	4,238	26,962	8,436	1,734	888	651
MEAN	14.1	15.5	12.8	16.1	19.0	65.8	141	870	281	55.9	28.6	21.7
MAX	16	19	16	21	27	715	353	1,750	674	82	38	26
MIN	11	8.2	8.2	7.5	12	14	39	324	84	38	20	19
AC-FT	865	921	788	993	1,050	4,050	8,410	53,480	16,730	3,440	1,760	1,290
CAL YR 1970	TOTAL	24,369.1	MEAN	66.8	MAX	1,380	MIN	1.8	AC-FT	48,340		
WTR YR 1971	TOTAL	47,278.3	MEAN	130	MAX	1,750	MIN	7.5	AC-FT	93,780		

PEAK DISCHARGE (BASE, 170 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-27	0045	7.61	1,960	5-23	0415	6.13	848
3-31	0815	4.96	272	5-30	1700	6.61	1,160
5-10	0700	7.66	2,000	6-13	0315	5.58	550

PLATTE RIVER BASIN

06670500 LARAMIE RIVER NEAR FORT LARAMIE, WYO.

LOCATION.--Lat 42°12'05", long 104°32'06", in NW¼SW¼NW¼ sec.27, T.26 N., R.64 W., Goshen County, on left bank 0.7 mile upstream from mouth, 0.8 mile southwest of Fort Laramie, 1.0 mile east of Old Fort Laramie, 1.4 miles downstream from Deer Creek, and 5.5 miles downstream from point of diversion to Gering-Fort Laramie Canal. Prior to Nov. 2, 1970, at site 0.5 mile upstream.

DRAINAGE AREA.--4,564 sq mi (corrected), of which 631 sq mi is probably noncontributing. Drainage area at mouth, 4,565 sq mi.

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."

GAGE.--Water-stage recorder. Altitude of gage is 4,220 ft (from topographic map). Apr. 4, 1915, to Mar. 31, 1925, nonrecording gage at present site at different datum. Apr. 1, 1925, to Sept. 30, 1932, nonrecording gage and Oct. 1, 1932, to Aug. 20, 1935, water-stage recorder, at Gering-Fort Laramie Canal siphon 4.5 miles upstream at different datum. Aug. 21, 1935, to Nov. 2, 1970, water stage recorder, 0.5 mile upstream at different datum.

AVERAGE DISCHARGE.--15 years (1956-71), 127 cfs (92,010 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,610 cfs May 6 (gage height, 8.04 ft); minimum daily, 54 cfs Aug. 29.

Period of record: Maximum discharge, 5,610 cfs May 6, 1971 (gage height, 8.04 ft); 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 and period of no gage-height record, 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 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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	134	136	125	145	125	480	1,330	3,150	876	147	64
2	74	134	132	110	147	125	453	1,340	2,650	892	134	60
3	72	132	134	100	155	130	357	1,350	2,260	800	132	61
4	72	134	132	100	164	139	321	1,330	2,230	700	132	61
5	74	147	126	94	130	158	309	1,580	2,450	668	132	59
6	77	153	128	90	105	155	300	3,500	2,120	616	125	66
7	91	143	132	85	95	145	294	4,150	2,030	540	109	67
8	97	141	134	95	110	147	276	3,640	1,990	465	98	84
9	120	145	132	110	130	160	273	3,470	1,900	429	89	95
10	134	147	132	120	150	160	264	3,200	1,750	400	95	108
11	146	145	134	130	179	162	240	3,840	1,690	380	105	108
12	150	145	120	130	195	164	312	3,740	1,590	360	100	103
13	148	145	100	125	172	164	357	3,400	1,510	340	101	109
14	142	147	110	125	168	166	372	3,150	1,490	312	108	114
15	140	149	130	130	166	183	384	2,980	1,420	288	103	109
16	140	149	150	126	168	200	372	2,930	1,310	279	98	113
17	142	143	150	126	164	190	375	2,850	1,200	276	92	116
18	144	143	140	143	162	200	378	2,730	1,100	261	82	134
19	142	145	110	160	162	188	390	2,470	1,010	240	76	143
20	140	145	100	170	164	175	477	2,280	924	232	82	153
21	140	145	110	170	162	177	925	2,110	840	220	111	177
22	138	141	120	160	149	186	1,080	1,960	756	205	86	190
23	136	130	110	140	135	181	988	1,980	658	186	82	195
24	136	135	110	150	135	190	988	2,290	588	181	72	179
25	138	150	110	150	140	192	1,040	2,610	558	170	61	170
26	138	158	110	150	160	198	1,150	2,340	717	160	59	166
27	138	147	110	160	136	208	1,320	2,140	860	151	56	155
28	138	147	120	166	125	513	1,330	2,030	880	147	56	149
29	136	147	130	164	-----	908	1,320	1,970	876	143	54	155
30	136	143	125	158	-----	672	1,320	1,940	876	153	56	153
31	136	-----	125	151	-----	483	-----	2,230	-----	162	60	-----
TOTAL	3,832	4,309	3,842	4,113	4,173	7,144	18,445	78,860	43,383	11,232	2,893	3,616
MEAN	124	144	124	133	149	230	615	2,544	1,446	362	93.3	121
MAX	150	158	150	170	195	908	1,330	4,150	3,150	892	147	195
MIN	72	130	100	85	95	125	240	1,330	558	143	54	59
AC-FT	7,600	8,550	7,620	8,160	8,280	14,170	36,590	156,400	86,050	22,280	5,740	7,170

CAL YR 1970 TOTAL 75,780 MEAN 208 MAX 2,650 MIN 22 AC-FT 150,300
WTR YR 1971 TOTAL 185,842 MEAN 509 MAX 4,150 MIN 54 AC-FT 368,600

NOTE.--No gage-height record May 5-7.

PLATTE RIVER BASIN

153

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 miles upstream from mouth of Rawhide Creek, and 2.1 miles south of Lingle.

DRAINAGE AREA.--25,095 sq mi, of which 5,809 sq mi (including 3,959 sq mi 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 above mean sea level.

EXTREMES.--Current year: Maximum discharge, 9,480 cfs May 16; minimum daily, 139 cfs Jan. 6.

Period of record: Maximum discharge, 9,480 cfs May 16, 1971; minimum daily, 106 cfs Jan. 6, 1970.

REMARKS.--Records good. 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 mile upstream. Diversion from north channel to Torrington ditch 1.4 miles 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	295	304	231	190	202	186	502	3,620	9,170	4,440	1,800	1,170
2	298	301	230	190	203	182	523	3,630	9,020	4,440	1,520	1,070
3	285	298	225	160	207	182	436	3,630	8,660	4,460	1,380	1,010
4	276	294	220	149	202	192	386	3,590	8,780	4,260	1,310	1,010
5	273	294	222	141	188	198	360	3,790	8,960	4,230	1,220	904
6	273	304	219	139	179	204	1,130	3,740	8,990	4,140	1,200	803
7	316	297	222	141	158	200	1,980	5,100	8,780	4,030	1,220	703
8	307	292	222	155	163	199	2,130	4,350	8,700	3,920	1,230	744
9	307	292	220	171	177	204	2,220	4,340	7,900	3,860	1,240	653
10	342	295	223	175	192	211	2,270	4,410	7,560	3,770	1,270	633
11	385	288	219	170	209	211	2,270	5,710	7,460	3,750	1,300	607
12	600	273	219	158	217	211	2,330	6,530	7,330	3,670	1,300	602
13	516	263	211	157	220	209	2,420	7,240	7,230	2,120	1,300	587
14	427	260	193	164	214	209	2,450	7,810	7,200	1,790	1,320	552
15	427	256	215	171	212	214	2,430	8,830	7,160	1,660	1,320	511
16	396	253	213	173	212	224	2,450	9,190	7,020	1,560	1,320	531
17	387	250	222	178	212	228	2,480	9,230	6,870	1,640	1,310	541
18	371	245	218	182	206	228	2,490	9,120	6,790	1,530	1,270	541
19	359	240	190	192	205	228	2,530	8,990	6,660	1,580	1,250	531
20	350	238	179	208	212	220	2,540	8,750	6,500	1,590	1,240	516
21	347	238	181	216	209	217	3,010	8,620	6,390	1,850	1,260	536
22	339	229	192	218	204	221	3,170	7,990	5,990	1,940	1,260	542
23	329	223	176	201	197	227	3,270	8,120	5,310	1,960	1,250	542
24	336	216	165	202	194	236	3,360	8,700	4,400	2,030	1,230	527
25	329	240	158	204	198	236	3,600	9,210	4,460	2,040	1,230	512
26	325	240	176	204	201	236	3,760	9,020	4,580	2,050	1,220	507
27	314	240	186	210	194	239	3,830	8,810	4,760	2,080	1,210	502
28	312	238	191	214	183	301	3,720	8,750	4,880	2,130	1,200	551
29	312	232	186	214	-----	743	3,620	8,650	4,710	2,200	1,220	541
30	311	232	193	208	-----	835	3,620	8,600	4,430	2,270	1,210	521
31	307	-----	191	205	-----	577	-----	8,620	-----	2,290	1,170	-----
TOTAL	10,751	7,865	6,308	5,660	5,570	8,208	71,287	216,690	206,650	85,280	39,780	19,500
MEAN	347	262	203	183	199	265	2,376	6,990	6,888	2,751	1,283	650
MAX	600	304	231	218	220	835	3,830	9,230	9,170	4,460	1,800	1,170
MIN	273	216	158	139	158	182	360	3,590	4,400	1,530	1,170	502
AC-FT	21,320	15,600	12,510	11,230	11,050	16,280	141,400	429,800	409,900	169,200	78,900	38,680
CAL YR 1970	TOTAL 235,388		MEAN 645	MAX 4,400	MIN 106	AC-FT 466,900						
WTR YR 1971	TOTAL 683,549		MEAN 1,873	MAX 9,230	MIN 139	AC-FT 1,356,000						

PLATTE RIVER BASIN

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 upstream from bridge on U.S. Highway 26, 1 mile east of Lingle, and 1 mile upstream from mouth.

DRAINAGE AREA.--522 sq mi.

PERIOD OF RECORD.--May 1928 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 4,160 ft (from topographic map). See WSP 1918 for history of changes prior to May 16, 1955.

AVERAGE DISCHARGE.--43 years, 21.5 cfs (15,580 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 450 cfs June 5 (gage height, 6.95 ft); no flow Apr. 13.

Period of record: Maximum discharge, 3,970 cfs Sept. 7, 1946 (gage height, 11.76 ft); no flow July 5-7, 1961, Apr. 12, 29, 1966, Mar. 20-28, 1967, Apr. 13, 1971.

REMARKS.--Records fair. 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) for irrigation. Diversions for irrigation of about 1,600 acres above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1440: 1932, 1936(M). WSP 1918: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	19	16	13	11	9.0	12	23	34	8.8	12	14
2	24	19	16	13	11	7.8	11	20	92	14	10	14
3	23	19	16	13	11	8.8	11	18	105	16	9.3	15
4	15	19	16	13	11	9.3	8.0	18	88	13	11	26
5	14	19	16	12	11	9.9	.95	90	278	14	12	27
6	15	19	16	12	11	9.6	.80	66	157	16	14	28
7	21	18	16	12	9.9	9.3	.85	33	82	17	15	31
8	22	18	15	12	9.9	9.6	1.1	35	57	21	14	34
9	26	18	15	12	9.9	9.6	1.1	36	44	18	12	33
10	31	19	16	12	11	9.9	.95	34	37	12	12	32
11	34	19	15	12	11	10	1.1	27	33	12	11	30
12	31	19	15	12	11	12	.67	29	42	13	10	32
13	32	18	15	12	11	12	0	25	56	11	9.9	31
14	28	18	15	11	11	13	5.8	22	39	14	14	31
15	27	18	15	11	12	14	10	21	32	8.2	15	29
16	27	18	15	11	11	15	11	20	28	7.0	15	29
17	26	19	15	11	11	16	17	19	27	8.8	14	32
18	26	19	15	10	12	13	42	18	28	10	14	30
19	25	19	14	10	12	13	74	17	27	12	12	33
20	25	19	15	10	13	14	83	16	25	11	9.3	36
21	24	21	14	10	12	13	93	16	20	12	10	39
22	25	19	14	10	10	12	74	26	18	13	11	42
23	23	17	14	11	9.6	11	67	47	18	12	11	37
24	22	17	14	11	10	12	66	50	14	11	11	37
25	21	17	14	11	10	12	66	43	6.1	13	10	39
26	22	17	14	11	9.6	14	60	45	5.1	14	10	39
27	23	17	14	11	9.0	13	60	48	5.9	13	12	40
28	21	17	13	11	8.8	13	42	42	4.5	11	14	40
29	20	17	13	11	-----	12	26	36	8.8	14	16	38
30	19	17	13	11	-----	11	24	35	10	13	15	39
31	20	-----	13	11	-----	12	-----	34	-----	11	14	-----
TOTAL	735	549	457	353	300.7	359.8	870.32	1,009	1,421.4	393.8	379.5	957
MEAN	23.7	18.3	14.7	11.4	10.7	11.6	29.0	32.5	47.4	12.7	12.2	31.9
MAX	34	21	16	13	13	16	93	90	278	21	16	42
MIN	14	17	13	10	8.8	7.8	0	16	4.5	7.0	9.3	14
AC-FT	1,460	1,090	906	700	596	714	1,730	2,000	2,820	781	753	1,900
CAL YR 1970	TOTAL 5,912.80		MEAN 16.2	MAX 109	MIN 2.3	AC-FT 11,730						
WTR YR 1971	TOTAL 7,785.52		MEAN 21.3	MAX 278	MIN 0	AC-FT 15,440						

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 downstream from bridge on county road, 0.6 mile upstream from mouth, and 2 miles southeast of Torrington.

DRAINAGE AREA.--356 sq mi.

PERIOD OF RECORD.--May to September 1931, May to September 1932, May 1935 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 4,080 ft (from topographic map). Prior to June 12, 1935, nonrecording gage at site 1 mile upstream at different datum. June 12, 1935, to Nov. 27, 1950, at site 100 ft downstream (at datum 2.00 ft higher June 12, 1945, to Sept. 30, 1945, and at present datum thereafter).

AVERAGE DISCHARGE.--36 years (1935-71), 21.6 cfs (15,650 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 944 cfs May 5 (gage height, 5.98 ft); minimum daily, 5.8 cfs Jan. 7.

Period of record: Maximum discharge, 2,420 cfs June 27, 1955 (gage height, 10.31 ft, from floodmark); minimum daily, 0.40 cfs Jan. 28, 29, 1949.

REMARKS.--Records poor. Flow is mainly return water from irrigation. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	15	10	10	9.0	8.5	7.0	12	29	50	63	70
2	34	15	9.5	9.0	9.0	8.0	6.0	12	32	52	68	80
3	20	15	9.0	9.5	9.0	8.5	6.2	12	26	48	66	80
4	19	15	9.7	8.6	8.5	9.0	6.2	12	31	44	63	86
5	18	15	9.8	7.6	7.9	9.5	6.5	413	30	51	59	85
6	18	15	9.0	7.2	7.5	8.0	6.5	229	63	53	53	74
7	20	15	9.0	5.8	7.0	7.0	6.9	97	64	43	54	70
8	19	15	9.5	7.0	6.5	8.0	7.2	72	65	40	53	92
9	19	14	9.5	8.0	7.0	9.0	7.2	57	44	40	51	85
10	21	14	10	8.6	8.2	10	7.4	44	30	38	49	65
11	24	14	9.0	8.0	12	11	7.7	32	27	37	50	56
12	22	14	9.0	7.6	13	11	7.7	22	26	36	49	53
13	18	15	9.0	8.6	13	11	7.7	27	25	36	48	50
14	16	15	9.0	9.2	14	11	8.2	24	23	40	48	48
15	15	14	9.4	10	14	11	8.7	24	23	41	54	48
16	14	13	9.8	10	14	11	8.4	18	21	39	54	52
17	14	13	9.4	10	13	10	8.7	16	19	39	49	51
18	14	13	9.0	10	13	9.0	10	15	18	42	47	48
19	14	12	8.6	10	13	10	13	15	16	43	48	46
20	15	12	9.2	11	14	11	12	14	14	41	49	43
21	16	12	9.4	10	14	11	11	13	12	41	51	44
22	16	10	9.4	10	13	10	21	9.5	17	43	53	43
23	16	9.0	9.2	10	13	9.0	21	9.8	29	47	51	36
24	16	10	9.0	10	10	10	22	13	39	47	50	33
25	16	11	9.0	9.6	12	10	15	19	40	50	53	31
26	16	10	9.0	9.2	9.8	11	17	21	40	56	57	28
27	15	10	9.5	9.2	9.0	12	22	18	44	58	56	28
28	15	10	10	9.2	8.5	11	17	17	45	57	59	26
29	16	10	10	9.0	-----	10	14	17	49	63	60	24
30	16	10	11	9.0	-----	9.0	13	17	50	59	67	22
31	15	-----	11	9.0	-----	7.7	-----	18	-----	60	66	-----
TOTAL	570	385.0	292.9	279.9	301.9	302.2	332.2	1,339.3	991	1,434	1,698	1,597
MEAN	18.4	12.8	9.45	9.03	10.8	9.75	11.1	43.2	33.0	46.3	54.8	53.2
MAX	43	15	11	11	14	12	22	413	65	63	68	92
MIN	14	9.0	8.6	5.8	6.5	7.0	6.0	9.5	12	36	47	22
AC-FT	1,130	764	581	555	599	599	659	2,660	1,970	2,840	3,370	3,170
CAL YR 1970	TOTAL	10,239.0	MEAN	28.1	MAX	896	MIN	6.9	AC-FT	20,310		
WTR YR 1971	TOTAL	9,523.4	MEAN	26.1	MAX	413	MIN	5.8	AC-FT	18,890		

NOTE.--No gage-height record Feb. 27 to Apr. 2.

PLATTE RIVER BASIN

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 downstream from bridge on county road, 0.6 mile upstream from mouth, and 1.6 miles southwest of Henry.

DRAINAGE AREA.--45.9 sq mi, of which 8.2 sq mi is probably noncontributing.

PERIOD OF RECORD.--May 1928 to current year (no winter records prior to 1932).

GAGE.--Water-stage recorder. Altitude of gage is 4,050 ft (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 miles upstream at different datum.

AVERAGE DISCHARGE.--40 years (1931-71), 19.6 cfs (14,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 598 cfs May 5 (gage height, 6.90 ft); minimum daily, 5.7 cfs Apr. 1.

Period of record: Maximum discharge, 1,230 cfs May 19, 1938 (gage height, 9.47 ft, site and datum then in use), from rating curve extended above 330 cfs on basis of slope-area measurement of peak flow; minimum daily, 0.50 cfs Jan. 14, 1937.

REMARKS.--Records poor. Flow is mainly return water from land irrigated by Fort Laramie Canal.

REVISIONS.--WSP 1710: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	10	18	19	8.1	7.1	5.7	36	9.0	48	58	67
2	16	9.8	19	17	8.1	6.8	5.9	36	12	44	67	66
3	13	9.8	19	14	8.1	7.1	6.3	36	11	39	59	68
4	12	9.5	19	10	7.6	7.5	6.1	37	11	38	54	68
5	11	9.5	18	8.0	7.0	8.3	6.1	249	13	40	56	88
6	12	9.5	19	6.5	7.4	8.1	6.1	209	20	42	50	80
7	15	9.1	19	7.0	7.6	7.7	5.9	60	21	41	52	82
8	14	9.3	19	7.7	7.6	8.2	6.7	45	23	46	52	110
9	14	9.5	18	8.5	7.7	8.7	7.3	35	24	51	50	112
10	15	9.5	19	8.0	7.8	9.5	7.1	27	18	44	49	90
11	16	9.5	20	7.6	7.9	9.5	7.1	20	16	49	59	82
12	15	10	20	8.0	7.7	9.3	6.7	15	16	50	52	71
13	13	9.8	19	8.0	8.5	9.3	7.1	15	18	40	46	70
14	13	9.8	19	8.5	11	8.7	7.1	15	18	32	42	69
15	12	10	20	8.5	10	8.1	7.7	15	22	28	44	74
16	12	10	20	9.0	9.5	8.1	7.9	12	19	30	50	77
17	12	10	19	9.0	8.9	8.5	8.5	10	20	27	48	79
18	11	11	20	8.6	9.1	8.1	12	9.5	20	30	49	90
19	11	11	19	8.1	9.1	8.6	14	9.3	20	30	52	86
20	11	11	18	11	9.1	9.1	14	8.6	21	33	52	79
21	10	12	19	10	8.9	9.3	18	7.5	21	38	55	90
22	10	13	19	9.1	8.3	8.7	45	6.5	22	42	56	76
23	10	15	18	13	8.0	8.9	35	7.0	25	48	56	68
24	10	16	17	8.1	7.6	10	41	8.0	35	54	52	64
25	10	17	17	8.1	7.3	10	45	9.0	37	57	50	59
26	10	17	17	8.1	7.0	10	53	10	40	65	52	56
27	10	17	17	8.5	6.8	11	54	8.5	42	56	55	56
28	9.8	17	18	8.7	7.0	7.7	44	8.0	45	61	62	50
29	9.8	17	18	9.1	-----	6.7	39	8.0	47	62	66	42
30	10	17	19	9.1	-----	6.7	37	8.2	48	61	69	30
31	10	-----	19	8.1	-----	6.7	-----	8.6	-----	59	68	-----
TOTAL	385.6	355.6	579	291.9	228.7	262.0	566.3	988.7	714.0	1,385	1,682	2,199
MEAN	12.4	11.9	18.7	9.42	8.17	8.45	18.9	31.9	23.8	44.7	54.3	73.3
MAX	28	17	20	19	11	11	54	249	48	65	69	112
MIN	9.8	9.1	17	6.5	6.8	6.7	5.7	6.5	9.0	27	42	30
AC-FT	765	705	1,150	579	454	520	1,120	1,960	1,420	2,750	3,340	4,360
CAL YR 1970	TOTAL	11,691.3	MEAN	32.0	MAX	570	MIN	6.4	AC-FT	23,190		
WTR YR 1971	TOTAL	9,637.8	MEAN	26.4	MAX	249	MIN	5.7	AC-FT	19,120		

157

LOCATION.--Lat 41°59'14", long 104°03'25", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.3, T.23 N., R.60 W., Goshen County, Wyoming, on left bank 0.3 mile downstream from Gering-Mitchell Canal; 0.3 mile upstream from Wyoming-Nebraska State line, and 1.0 mile southwest of Henry, Nebraska.

PERIOD OF RECORD.--April 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,024.77 ft above mean sea level. Prior to Nov. 6, 1929, nonrecording gage and Nov. 6, 1929, to Dec. 14, 1942, water-stage recorder at site 200 ft upstream, at datum 1.00 ft higher. Dec. 15, 1942, to Oct. 1, 1959, water-stage recorder at present site, at datum 1.00 ft higher.

EXTREMES.--Current year: Maximum discharge, 9,860 cfs June 6 (gage height, 6.32 ft); minimum daily, 250 cfs Feb. 7.
Period of record: Maximum discharge observed, 17,900 cfs June 2, 1929 (gage height, 7.04 ft, present datum, site then in use); minimum daily, 13 cfs May 12, 1961.

REMARKS.--Records fair. 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 0.3 mile upstream. 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	614	488	380	330	320	265	558	3,940	8,940	4,720	1,940	1,100
2	572	482	386	335	310	255	558	3,920	9,580	4,720	1,570	1,070
3	551	470	374	315	315	255	530	3,900	9,300	4,680	1,450	1,010
4	530	476	374	280	305	255	482	3,900	9,340	4,460	1,390	1,020
5	518	476	374	270	305	270	458	4,600	9,220	4,420	1,290	968
6	506	482	374	270	285	280	518	4,700	9,700	4,340	1,200	866
7	544	482	368	290	250	280	1,350	5,390	9,300	4,180	1,170	838
8	558	470	368	356	260	275	1,720	5,000	9,220	4,060	1,170	936
9	551	464	368	315	265	275	1,870	4,900	8,660	4,040	1,150	888
10	572	458	368	320	295	285	1,980	4,960	7,950	3,920	1,190	831
11	586	458	356	320	315	290	2,040	5,450	7,780	3,920	1,210	796
12	677	458	356	290	325	285	2,140	6,700	7,700	3,880	1,200	747
13	747	446	345	325	335	290	2,220	6,920	7,700	2,990	1,170	726
14	677	440	335	310	330	290	2,290	7,670	7,570	2,010	1,170	691
15	642	434	340	305	325	285	2,330	8,620	7,570	1,750	1,190	663
16	621	428	350	315	320	290	2,360	9,100	7,470	1,510	1,190	656
17	607	422	362	330	315	305	2,400	9,420	7,340	1,520	1,180	684
18	593	422	362	330	315	305	2,470	9,380	7,220	1,400	1,160	670
19	572	416	350	330	315	305	2,600	9,300	7,100	1,390	1,120	670
20	558	410	340	345	315	300	2,620	9,140	6,920	1,430	1,110	663
21	544	404	325	356	310	295	2,780	9,060	6,780	1,560	1,120	719
22	537	392	325	356	300	295	3,300	8,740	6,490	1,810	1,110	768
23	530	380	300	345	295	295	3,520	8,620	5,940	1,900	1,110	775
24	524	380	280	330	290	310	3,630	8,780	5,020	1,980	1,100	761
25	530	386	305	325	285	315	3,790	9,140	4,820	2,040	1,090	740
26	524	392	305	320	280	320	4,020	9,260	4,720	2,110	1,090	719
27	518	392	310	325	280	325	4,220	8,940	4,940	2,140	1,090	712
28	512	392	320	335	275	320	4,180	8,740	5,140	2,190	1,090	691
29	506	392	325	340	-----	452	4,060	8,660	5,140	2,250	1,100	796
30	500	392	330	335	-----	726	3,980	8,620	4,760	2,220	1,110	796
31	494	-----	335	325	-----	663	-----	8,540	-----	2,240	1,100	-----
TOTAL	17,515	12,984	10,690	9,973	8,435	9,956	70,974	224,010	219,330	87,780	37,330	23,970
MEAN	565	433	345	322	301	321	2,366	7,226	7,311	2,832	1,204	799
MAX	747	488	386	356	335	726	4,220	9,420	9,700	4,720	1,940	1,100
MIN	494	380	280	270</								

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 mile upstream from Hawk Springs ditch, 1.4 miles downstream from WyCross ditch, 2.7 miles upstream from Bear Creek, and 3.3 miles northwest of La Grange.

DRAINAGE AREA.--680 sq mi, approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,490 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 24.3 cfs (17,610 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 156 cfs May 11 (gage height, 4.55 ft); minimum daily, 1.2 cfs Aug. 25.

Period of record: Maximum discharge, 480 cfs June 11, 1967 (gage height, 6.27 ft); minimum daily, 0.14 cfs Aug. 29, Sept. 7, 8, 1969.

REMARKS.--Records good. Diversions above station for irrigation of about 9,000 acres. Except for extreme high flow WyCross ditch diverts all water from Bear Creek to Horse Creek 1.4 miles upstream. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WRD Wyo. 1970: 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	6.3	31	21	37	18	29	87	97	13	2.3	1.3
2	4.6	5.8	27	23	36	19	31	83	114	12	2.4	1.3
3	3.6	34	26	22	33	20	33	81	119	12	3.7	1.4
4	3.9	40	26	21	32	24	36	81	113	9.6	1.8	1.7
5	4.3	38	28	20	24	25	37	106	114	6.5	1.8	1.7
6	4.5	41	28	18	22	22	40	132	118	7.5	1.7	1.8
7	5.0	40	25	16	21	19	40	121	114	6.0	1.6	1.9
8	6.0	41	25	17	26	19	39	108	107	3.2	1.6	2.4
9	8.7	38	20	20	35	22	36	115	96	3.4	1.5	2.8
10	17	34	13	22	44	25	33	133	84	4.1	1.5	2.7
11	22	33	10	20	54	25	30	150	78	3.9	1.7	2.4
12	18	32	11	18	53	25	29	129	77	3.6	1.9	1.8
13	13	32	13	18	48	24	29	122	81	3.6	1.7	1.8
14	11	33	14	21	48	22	26	126	86	3.6	1.7	1.8
15	7.5	34	20	26	44	22	24	128	82	3.2	1.5	1.8
16	11	33	19	35	40	22	23	117	73	2.8	1.5	2.2
17	12	33	20	46	31	22	24	103	67	2.6	1.5	3.2
18	11	32	21	49	28	25	22	95	58	2.4	1.3	4.3
19	11	32	17	55	27	26	27	87	50	2.6	1.4	4.8
20	11	32	17	69	28	41	31	73	47	2.8	1.4	4.6
21	11	31	18	70	28	60	31	66	42	2.7	1.3	5.5
22	11	21	16	58	22	54	43	62	35	2.7	2.6	6.0
23	11	14	13	53	19	42	47	87	26	2.9	2.7	9.6
24	9.6	24	14	47	22	41	62	113	20	2.7	1.3	18
25	7.5	31	17	46	30	40	82	114	16	2.6	1.2	15
26	8.1	33	16	56	26	39	90	97	15	2.8	1.9	14
27	8.1	32	17	60	21	35	100	96	14	2.7	1.3	14
28	7.0	31	17	60	20	32	98	103	13	2.2	1.3	14
29	6.8	31	16	51	-----	31	87	101	12	2.2	1.3	14
30	6.0	31	18	41	-----	29	85	101	13	3.1	1.4	16
31	7.0	-----	20	39	-----	27	-----	97	-----	3.9	1.5	-----
TOTAL	282.8	923.1	593	1,138	899	897	1,344	3,214	1,981	138.9	53.3	173.8
MEAN	9.12	30.8	19.1	36.7	32.1	28.9	44.8	104	66.0	4.48	1.72	5.79
MAX	22	41	31	70	54	60	100	150	119	13	3.7	18
MIN	3.6	5.8	10	16	19	18	22	62	12	2.2	1.2	1.3
AC-FT	561	1,830	1,180	2,260	1,780	1,780	2,670	6,370	3,930	276	106	345
CAL YR 1970	TOTAL	8,574.55	MEAN	23.5	MAX	154	MIN	.69	AC-FT	17,010		
WTR YR 1971	TOTAL	11,637.90	MEAN	31.9	MAX	150	MIN	1.2	AC-FT	23,080		

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-11	1100	4.55	156	6-2	1015	4.13	127

PLATTE RIVER BASIN

159

06677010 HORSE CREEK AT LOWER STATION, NEAR YODER, WYO.

LOCATION.--Lat 41°53'10", long 104°14'53", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.12, T.22 N., R.62 W., Goshen County, on left bank 1.5 miles upstream from Fort Laramie Canal siphon, 3.2 miles southeast of Yoder, and 3.8 miles downstream from Lone Tree Creek.

DRAINAGE AREA.--1,320 sq mi, approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,230 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 178 cfs June 9 (gage height, 4.46 ft); no flow Aug. 14-23.

Period of record: Maximum discharge, 1,140 cfs June 10, 1967 (gage height, 6.65 ft), from rating curve extended above 320 cfs on basis of slope-area measurement of peak flow; no flow at times in most years.

REMARKS.--Records fair. Flow regulated 22 miles upstream by Hawk Springs Reservoir (capacity, 19,400 acre-ft). Natural flow of stream also affected by diversions for irrigation of about 4,000 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.17	.51	.27	.79	1.4	.45	.57	19	96	10	1.6	.36
2	.15	.47	.72	.70	1.3	.55	.57	17	99	38	1.6	4.3
3	.17	.55	.82	.60	1.2	.65	.57	17	109	29	.43	3.1
4	.21	.55	.68	.45	1.1	.77	.55	14	111	9.8	.15	1.3
5	.22	.53	.78	.35	.90	.83	.58	25	108	7.2	.81	1.9
6	.25	.58	.72	.30	.75	.78	.58	64	99	5.1	.38	.88
7	1.0	.62	.68	.25	.70	.72	.53	40	101	3.1	.14	.19
8	1.2	.67	.60	.40	.80	.72	.45	27	106	3.1	.07	2.6
9	.81	.61	.56	.63	.93	.77	.47	21	107	3.7	.04	3.3
10	.81	.60	.57	.69	1.0	.85	.46	20	85	2.2	.03	1.2
11	1.0	.58	.59	.87	1.2	.78	.39	24	76	2.0	.02	.70
12	.90	.59	.61	.70	1.3	.76	.40	28	65	1.8	.02	.56
13	.90	.53	.55	.60	1.1	.70	.48	23	66	1.6	.01	.51
14	1.0	.52	.51	.60	1.0	.60	.51	20	66	1.6	0	.34
15	.90	.56	.44	.80	.93	.53	.51	18	67	1.4	0	.45
16	.81	.52	.26	.90	.72	.50	.47	17	65	1.6	0	.82
17	.73	.47	.23	1.0	.63	.45	.55	18	60	1.4	0	1.2
18	.60	.54	.22	1.2	.65	.51	1.4	16	51	1.4	0	.94
19	.60	.55	.20	1.4	.60	.64	1.2	16	51	1.4	0	.93
20	.55	.48	.20	5.3	.55	.67	1.4	14	42	1.1	0	.81
21	.51	.51	.22	2.5	.45	.67	1.3	13	39	1.4	0	1.1
22	.51	.48	.26	1.7	.40	.77	3.0	13	42	1.8	0	1.3
23	.47	.40	.31	2.4	.35	.73	2.5	20	38	1.2	0	1.0
24	.47	.58	.35	2.5	.40	.86	2.7	29	33	.55	.54	.92
25	.47	.65	.40	1.9	.50	.94	2.9	24	27	.23	4.0	.85
26	.55	.66	.37	2.9	.43	.95	3.6	22	23	.23	2.0	.81
27	.60	.88	.49	2.3	.40	.89	3.5	61	19	.19	.38	.82
28	.51	.83	.63	2.3	.40	.79	2.7	83	14	.81	.10	.79
29	.51	.66	.71	2.1	-----	.71	15	94	13	2.0	.04	.76
30	.47	.57	.75	1.6	-----	.60	20	93	12	.60	.04	.86
31	.51	-----	.79	1.7	-----	.61	-----	98	-----	1.1	.03	-----
TOTAL	18.56	17.25	15.49	42.43	22.09	21.75	69.84	1,008	1,890	136.61	12.43	35.60
MEAN	.60	.58	.50	1.37	.79	.70	2.33	32.5	63.0	4.41	.40	1.19
MAX	1.2	.88	.82	5.3	1.4	.95	20	98	111	38	4.0	4.3
MIN	.15	.40	.20	.25	.35	.45	.39	13	12	.19	0	.19
AC-FT	37	34	31	84	44	43	139	2,000	3,750	271	25	71
CAL YR 1970	TOTAL	476.91	MEAN	1.31	MAX	52	MIN	0	AC-FT	946		
WTR YR 1971	TOTAL	3,290.05	MEAN	9.01	MAX	111	MIN	0	AC-FT	6,530		

LOCATION.--Lat 41°54'53", long 104°03'29", in SE₄SW₄SE₄ sec.34, T.23 N., R.60 W., Goshen County, Wyoming, on right bank at downstream side of bridge on State Highway 92, 0.6 mile upstream from Wyoming-Nebraska State line, and 0.7 mile west of Lyman, Nebraska.

PERIOD OF RECORD.--May 1969 to September 1971 (discontinued).

EXTREMES.--Current year: Maximum discharge, 412 cfs May 5 (gage height, 5.50 ft); minimum daily, 4.0 cfs Apr. 11.
Period of record: Maximum discharge, 463 cfs June 12, 1970 (gage height, 5.84 ft); minimum daily, 3.4 cfs May 18, 1970.

REMARKS.--Records fair. Natural flow of stream affected by storage reservoirs, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	139	19	12	10	13	11	9.4	32	101	130	26	36
2	96	18	12	9.0	14	10	8.7	30	235	137	26	38
3	65	18	11	8.0	13	11	8.0	28	327	182	27	40
4	55	18	12	8.0	12	11	7.5	27	350	172	28	46
5	49	18	12	8.0	12	11	7.0	171	320	148	29	72
6	44	19	12	7.0	11	10	6.2	199	309	124	24	69
7	45	18	12	6.0	11	9.0	5.2	159	313	93	22	81
8	42	19	12	6.0	11	9.0	4.4	97	341	85	22	120
9	42	18	12	7.0	12	9.6	4.2	74	348	95	22	133
10	40	18	11	8.0	14	10	4.2	61	309	74	21	114
11	35	17	10	8.0	16	12	4.0	63	279	70	22	104
12	33	17	10	7.0	15	11	4.2	64	258	66	22	119
13	34	17	10	7.1	15	11	4.4	62	248	60	24	129
14	34	17	11	8.0	14	12	4.2	55	267	55	25	128
15	31	16	11	9.5	13	11	4.2	49	257	47	25	133
16	30	16	11	11	12	9.4	4.4	46	240	35	24	135
17	29	16	12	12	11	8.7	4.2	45	230	28	22	128
18	29	16	11	15	11	8.4	5.5	44	220	26	22	129
19	28	16	10	14	11	8.2	6.2	40	210	25	22	133
20	27	15	10	22	11	9.7	6.2	38	200	24	22	159
21	26	15	10	17	10	9.7	6.0	37	190	23	25	181
22	24	13	10	14	10	9.4	17	35	183	23	25	232
23	22	11	9.0	13	10	11	11	45	208	22	24	247
24	22	12	9.0	13	11	9.7	10	49	225	23	25	233
25	20	14	9.0	13	12	8.2	11	52	213	23	25	196
26	21	15	9.0	14	11	8.7	19	46	212	24	26	185
27	21	16	9.0	14	11	9.0	18	47	196	25	24	185
28	20	15	9.5	15	11	11	17	78	177	27	25	172
29	21	14	10	17	-----	12	21	87	177	28	26	160
30	20	14	10	16	-----	13	28	96	154	29	28	155
31	19	-----	10	13	-----	12	-----	95	-----	27	32	-----
TOTAL	1,163	485	328.5	349.6	338	316.7	270.3	2,051	7,297	1,950	762	3,992
MEAN	37.5	16.2	10.6	11.3	12.1	10.2	9.01	66.2	243	62.9	24.6	133
MAX	139	19	12	22	16	13	28	199	350	182	32	247
MIN	19	11	9.0	6.0	10	8.2	4.0	27	101	22	21	36
AC-FT	2,310	962	652	693	670	628	536	4,070	14,470	3,870	1,510	7,920
CAL YR 1970	TOTAL 15,829.9	MEAN 43.4	MAX 416	MIN 3.4	AC-FT 31,400							
WTR YR 1971	TOTAL 19,303.1	MEAN 52.9	MAX 350	MIN 4.0	AC-FT 38,290							

161

LOCATION.--Lat 41°55'55", long 103°48'10", in SW¼ sec.27, T.23 N., R.56 W., Scotts Bluff County, near center of main channel on downstream side of pier of bridge on State Highway 29, and 0.5 mile south of Mitchell.

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.

EXTREMES.--Current year: Maximum discharge, 12,200 cfs June 2 (gage height, 8.28 ft); minimum daily, 282 cfs Aug. 27-29.
Period of record: Maximum discharge, 27,500 cfs June 3, 1909 (gage height, 6.45 ft, datum then in use, from graph based on gage readings), from rating curve extended above 17,000 cfs; minimum daily observed, 25 cfs Sept. 25-29, 1908.

REVISIONS.--WRD Wyo. 1967: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,250	770	600	544	541	544	855	4,480	9,100	3,550	1,170	381
2	1,110	761	593	544	537	534	810	4,480	11,400	3,590	855	369
3	1,010	756	590	527	537	534	805	4,430	11,000	3,550	714	378
4	954	761	586	516	530	541	750	4,220	9,930	3,570	662	427
5	914	765	586	480	520	551	701	4,730	9,890	3,430	595	494
6	882	761	586	470	506	544	670	6,160	9,890	3,360	518	487
7	954	761	590	460	502	541	1,300	5,040	9,480	3,240	462	480
8	963	756	593	430	492	541	1,910	5,840	9,480	3,180	405	571
9	968	738	586	425	485	548	2,270	5,060	8,580	3,470	363	662
10	977	734	593	432	513	555	2,470	4,970	7,780	3,220	342	658
11	1,010	720	579	432	534	562	2,590	5,030	7,750	3,150	327	670
12	1,020	720	583	460	541	558	2,680	6,600	7,590	3,100	351	642
13	1,090	704	579	453	555	558	2,780	7,350	7,940	2,750	342	634
14	1,060	696	576	467	562	551	2,910	7,810	7,380	1,740	327	623
15	995	692	576	455	562	544	3,000	8,580	7,430	1,420	339	616
16	972	684	586	492	565	544	2,980	9,580	7,200	1,180	357	634
17	945	672	579	506	565	555	3,000	10,000	7,000	968	366	670
18	918	664	579	513	572	555	3,150	9,780	6,800	915	366	706
19	905	652	569	513	576	558	3,260	9,480	6,620	825	345	726
20	882	640	569	530	583	565	3,400	9,060	6,320	726	332	730
21	873	636	562	544	590	558	3,420	8,790	6,100	718	320	820
22	860	620	558	541	583	551	4,040	8,790	5,700	855	319	940
23	855	600	523	544	579	555	4,310	7,880	5,230	935	315	1,030
24	842	616	527	541	576	569	4,380	8,420	4,450	962	312	1,110
25	833	628	516	541	572	579	4,510	8,930	3,880	1,020	298	1,110
26	824	620	527	541	558	586	4,750	9,490	3,770	1,060	288	1,120
27	819	624	534	544	548	604	4,930	8,780	3,820	1,100	282	1,140
28	810	616	537	555	555	590	4,800	8,630	3,920	1,110	282	1,140
29	797	612	544	562	-----	620	4,670	8,750	3,910	1,190	282	1,240
30	783	612	544	562	-----	860	4,480	8,920	3,650	1,200	342	1,420
31	779	-----	548	544	-----	976	-----	8,970	-----	1,200	384	-----
TOTAL	28,854	20,591	17,598	15,668	15,339	18,031	86,581	229,030	212,990	62,284	12,962	22,628
MEAN	931	686	568	505	548	582	2,886	7,388	7,100	2,009	418	754
MAX	1,250	770	600	562	590	976	4,930	10,000	11,400	3,590	1,170	1,420
MIN	779	600	516	425	485	534	670	4,220	3,650			

PLATTE RIVER BASIN

TRANSBASIN DIVERSIONS FROM NORTH PLATTE RIVER BASIN TO
CACHE LA POUDE 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 State engineer of Colorado.

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 1970 TO SEPTEMBER 1971

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	0	0	0	501	501
June.....	0	0	161	555	0	0	66	782
July.....	0	0	1,650	8,500	0	0	286	10,440
August.....	0	0	0	3,960	0	0	0	3,960
September.....	0	0	0	1,100	0	0	0	1,100
Water year 1971	0	0	1,810	14,110	0	0	853	16,770

COLORADO RIVER BASIN

163

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 upstream from bridge on U.S. Highways 187 and 189, 3.4 miles upstream from Beaver Creek, and 12 miles north of Daniel.

DRAINAGE AREA.--468 sq mi.

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 above mean sea level.

AVERAGE DISCHARGE.--40 years, 510 cfs (369,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,780 cfs June 25 (gage height, 5.74 ft); minimum daily, 83 cfs Feb. 27.

Period of record: Maximum discharge, 4,780 cfs June 25, 1971 (gage height, 5.74 ft); minimum recorded, 31 cfs Nov. 26, 1933 (gage height, 0.70 ft), from rating curve extended below 120 cfs.

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 10,200 acres, of which about 6,100 acres lies below station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 979: 1932(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	183	147	161	122	115	90	140	332	2,930	1,860	992	1,020
2	179	147	153	118	109	92	144	380	2,430	1,740	1,040	838
3	176	116	155	116	106	94	150	519	1,980	1,840	1,020	726
4	171	105	153	113	103	96	150	600	1,820	1,980	1,020	691
5	169	139	168	112	99	100	145	610	1,770	1,990	1,100	628
6	177	132	180	112	95	97	130	642	1,720	1,870	1,260	556
7	185	134	170	122	86	100	129	700	1,750	1,770	1,290	508
8	180	142	160	120	86	106	129	740	1,910	1,770	1,160	480
9	177	147	150	124	90	106	135	825	2,140	1,750	1,070	460
10	183	144	140	130	100	110	142	1,000	2,460	1,650	976	440
11	183	105	140	132	103	110	153	1,150	2,790	1,630	936	415
12	177	152	134	131	110	120	150	1,320	2,950	1,690	920	387
13	183	152	139	126	110	124	170	1,520	2,870	1,740	852	359
14	179	155	149	131	106	124	160	1,540	2,800	1,800	803	330
15	174	155	152	142	100	120	177	1,560	2,900	1,800	754	317
16	166	150	160	144	100	114	178	1,760	3,060	1,750	719	286
17	167	152	154	143	99	110	189	1,620	3,420	1,690	691	282
18	162	137	145	144	102	103	200	1,290	3,940	1,660	670	271
19	161	132	137	133	98	115	192	1,070	4,290	1,710	652	252
20	159	130	130	124	100	120	193	994	4,360	1,720	622	240
21	157	134	139	116	96	115	201	917	4,350	1,660	598	238
22	160	134	146	110	94	119	200	988	4,270	1,620	574	235
23	160	140	153	112	90	134	200	993	4,350	1,620	550	222
24	160	150	151	116	85	140	222	1,060	4,570	1,540	538	211
25	164	160	146	114	90	133	238	1,290	4,720	1,450	526	203
26	133	153	141	110	87	132	242	1,680	4,580	1,340	508	197
27	94	142	141	109	83	133	232	2,150	4,220	1,240	490	192
28	94	150	130	105	87	142	225	2,510	3,860	1,190	475	189
29	169	156	130	110	-----	153	242	2,800	3,260	1,160	514	183
30	163	167	124	116	-----	141	265	3,020	2,430	1,090	684	184
31	144	-----	123	119	-----	140	-----	3,100	-----	1,020	920	-----
TOTAL	5,089	4,259	4,554	3,776	2,729	3,633	5,423	40,680	94,900	50,340	24,924	11,540
MEAN	164	142	147	122	97.5	117	181	1,312	3,163	1,624	804	385
MAX	185	167	180	144	115	153	265	3,100	4,720	1,990	1,290	1,020
MIN	94	105	123	105	83	90	129	332	1,720	1,020	475	183
AC-FT	10,090	8,450	9,030	7,490	5,410	7,210	10,760	80,690	188,200	99,850	49,440	22,890

CAL YR 1970 TOTAL 168,604 MEAN 462 MAX 3,050 MIN 66 AC-FT 334,400
WTR YR 1971 TOTAL 251,847 MEAN 690 MAX 4,720 MIN 83 AC-FT 499,500

NOTE.--No gage-height record Dec. 20 to May 13.

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 mile east of Sherman ranger station, 0.8 mile downstream from Spring Creek, 5.5 miles upstream from South Horse Creek, and 17 miles west of Daniel.

DRAINAGE AREA.--43.0 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 7,770.71 ft above mean sea level.

AVERAGE DISCHARGE.--17 years, 66.6 cfs (48,250 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,620 cfs June 19 (gage height, 6.71 ft); minimum daily, 3.8 cfs Jan. 4.

Period of record: Maximum discharge, 1,860 cfs June 1, 1956; maximum gage height, 6.71 ft June 19, 1971; minimum daily discharge, 1.4 cfs Aug. 11, 14, 15, 19, 1957.

REMARKS.--Records fair except those for winter period and period of no gage-height record, which are poor. Diversion for irrigation of about 360 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	7.0	5.0	4.6	6.7	5.7	6.4	47	600	334	40	13
2	5.8	6.6	4.8	4.3	6.2	6.0	6.6	64	458	343	36	11
3	5.6	7.0	4.5	4.0	5.8	6.3	6.4	142	530	349	35	12
4	5.6	7.5	4.3	3.8	5.6	6.5	6.0	201	535	299	34	14
5	5.8	8.0	4.1	4.1	5.4	6.2	6.4	258	565	264	33	12
6	5.9	7.0	4.3	4.5	5.3	5.8	6.6	231	525	254	37	10
7	6.2	7.6	4.5	4.7	5.4	6.0	6.7	225	570	235	37	9.2
8	6.5	7.6	4.8	4.9	5.8	6.3	7.0	250	818	219	54	9.5
9	6.6	7.3	5.0	5.0	6.2	6.7	7.2	292	890	206	55	8.7
10	7.0	7.5	4.8	5.2	6.4	7.2	7.5	330	1,090	203	33	8.1
11	7.4	7.0	4.5	5.2	6.4	7.4	7.8	330	962	193	29	7.4
12	10	6.8	4.2	5.1	6.5	7.0	7.6	390	932	179	26	7.0
13	10	7.3	4.2	4.9	6.6	6.5	7.4	422	938	172	24	6.8
14	8.7	7.7	4.5	4.7	6.5	6.4	8.0	390	1,000	161	22	6.3
15	8.4	8.0	4.7	4.9	6.3	6.4	9.0	382	1,080	145	21	7.0
16	6.9	8.5	4.7	5.2	6.3	6.2	9.0	444	1,090	136	20	8.1
17	6.9	8.5	4.6	5.5	6.2	6.0	9.5	318	1,060	130	19	9.8
18	7.1	8.2	4.4	5.5	6.0	6.5	11	244	1,120	122	18	9.8
19	7.5	7.8	4.2	5.5	5.7	7.0	12	210	1,140	111	16	9.2
20	7.1	8.0	4.1	5.4	5.6	7.5	14	201	1,040	106	15	9.2
21	7.4	7.7	4.3	5.3	5.5	7.7	16	180	1,030	131	15	9.8
22	7.2	7.3	4.5	5.1	5.3	7.4	18	207	1,010	92	14	9.8
23	7.4	7.7	4.5	5.1	5.8	7.0	20	189	980	83	14	9.8
24	7.5	8.4	4.7	5.2	6.3	6.7	23	261	860	92	13	9.2
25	7.4	8.7	4.9	5.3	6.0	6.3	25	408	765	70	12	9.2
26	7.0	8.4	4.7	5.5	5.7	6.0	23	590	790	64	11	9.2
27	6.6	7.5	4.6	5.8	5.5	6.4	22	776	679	57	11	9.8
28	7.0	6.8	4.5	6.0	5.7	6.7	24	848	494	54	11	10
29	7.5	6.3	4.6	6.3	-----	7.2	30	806	382	49	26	10
30	8.1	5.6	4.7	6.5	-----	7.0	40	764	351	46	23	11
31	7.5	-----	4.8	6.7	-----	6.6	-----	585	-----	42	16	-----
TOTAL	222.4	225.3	141.0	159.8	166.7	204.6	403.1	10,985	24,284	4,941	770	285.9
MEAN	7.17	7.51	4.55	5.15	5.95	6.60	13.4	354	809	159	24.8	9.53
MAX	10	8.7	5.0	6.7	6.7	7.7	40	848	1,140	349	55	14
MIN	5.6	5.6	4.1	3.8	5.3	5.7	6.0	47	351	42	11	6.3
AC-FT	441	447	280	317	331	406	800	21,790	48,170	9,800	1,530	567
CAL YR 1970	TOTAL 27,106.7	MEAN 74.3	MAX 842	MIN 2.2	AC-FT 53,770							
WTR YR 1971	TOTAL 42,788.8	MEAN 117	MAX 1,140	MIN 3.8	AC-FT 84,870							

PEAK DISCHARGE (BASE, 200 CFS)

NOTE.--No gage-height record Jan. 24 to Apr. 18.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-16	0500	5.12	476	6-19	0100	6.71	1,620
5-27	2400	6.09	1,020				

GREEN RIVER BASIN

165

09193000 NEW FORK RIVER BELOW NEW FORK LAKES, NEAR CORA, WYO.
(Formerly published as New Fork River below New Fork Lake, near Cora)

LOCATION (revised).--Lat 43°04'43", long 109°59'41", in sec.21, T.36 N., R.110 W., Sublette County, on left bank 1.8 miles downstream from New Fork Lakes and 9.6 miles north of Cora.

DRAINAGE AREA.--36.2 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1313. Prior to October 1943, published as New Fork below New Fork Lake, near Cora.

GAGE.--Water-stage recorder. Altitude of gage is 7,720 ft (from topographic map). Prior to Sept. 16, 1949, at site 70 ft downstream at same datum.

AVERAGE DISCHARGE.--33 years, 51.3 cfs (37,170 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 534 cfs June 27 (gage height, 5.47 ft); minimum daily, 1.0 cfs Jan. 4.

Period of record: Maximum discharge, 566 cfs June 21, 1959 (gage height, 5.56 ft); maximum gage height recorded, 5.85 ft Jan. 31, 1961 (backwater from ice); minimum daily discharge, 0.1 cfs May 13, 1941, Sept. 20-22, 1950, when gates in dam at New Fork Lakes were closed.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Flow regulated by New Fork Lakes 1.8 miles upstream (capacity, 20,300 acre-ft, revised). No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	14	1.3	1.2	1.6	1.7	2.0	2.8	21	481	27	57
2	16	14	1.3	1.1	1.6	1.6	1.9	2.9	223	426	26	56
3	17	14	1.3	1.1	1.5	1.6	1.9	2.9	223	376	25	58
4	17	14	1.3	1.0	1.5	1.7	2.0	2.8	222	375	24	57
5	17	14	1.3	1.1	1.4	1.8	2.0	2.7	219	370	23	57
6	17	14	1.3	1.2	1.4	1.8	2.1	2.6	216	365	23	56
7	17	14	1.4	1.2	1.5	1.9	2.2	2.5	213	363	23	56
8	17	11	1.4	1.2	1.6	1.9	2.2	2.4	256	360	23	56
9	17	3.8	1.4	1.1	1.7	1.9	2.1	2.4	352	354	22	56
10	17	3.4	1.4	1.2	1.8	1.9	2.2	2.5	352	352	22	56
11	17	3.0	1.3	1.2	1.8	2.0	2.3	2.4	352	351	22	56
12	17	2.7	1.3	1.2	1.8	2.0	2.3	2.3	374	349	22	55
13	17	2.6	1.2	1.2	1.8	2.0	2.2	2.3	415	346	22	55
14	17	2.4	1.2	1.2	1.9	2.0	2.3	2.1	410	343	22	55
15	17	2.2	1.3	1.2	1.9	2.0	2.3	2.0	408	339	23	55
16	16	2.0	1.3	1.3	1.9	1.9	2.3	2.1	411	337	23	55
17	16	1.9	1.3	1.3	1.9	1.9	2.3	2.0	415	335	23	55
18	16	1.9	1.2	1.3	1.8	1.9	2.3	2.0	422	333	23	55
19	16	1.9	1.2	1.3	1.8	1.9	2.2	1.9	423	329	23	55
20	16	1.9	1.2	1.3	1.8	1.9	2.2	2.1	418	327	23	55
21	16	1.8	1.2	1.2	1.8	1.8	2.3	2.0	396	324	23	55
22	17	1.7	1.2	1.2	1.7	1.8	2.4	2.4	381	319	23	55
23	17	1.7	1.2	1.3	1.7	1.8	2.5	2.1	359	317	23	54
24	17	1.6	1.2	1.3	1.8	1.8	2.6	2.0	340	154	23	54
25	17	1.5	1.3	1.4	1.8	1.8	2.6	2.0	324	30	42	54
26	17	1.4	1.3	1.4	1.8	1.8	2.5	1.9	330	29	57	54
27	17	1.4	1.2	1.4	1.7	1.9	2.5	2.0	526	28	57	54
28	17	1.4	1.2	1.4	1.7	1.9	2.5	2.0	518	27	57	54
29	17	1.4	1.3	1.4	-----	1.9	2.6	2.1	509	27	59	54
30	16	1.3	1.3	1.5	-----	2.0	2.7	2.4	492	27	58	54
31	15	-----	1.3	1.5	-----	2.0	-----	2.6	-----	27	57	-----
TOTAL	516	153.9	39.6	38.9	48.0	57.8	68.5	71.2	10,520	8,520	943	1,658
MEAN	16.6	5.13	1.28	1.25	1.71	1.86	2.28	2.30	351	275	30.4	55.3
MAX	17	14	1.4	1.5	1.9	2.0	2.7	2.9	526	481	59	58
MIN	15	1.3	1.2	1.0	1.4	1.6	1.9	1.9	21	27	22	54
AC-FT	1,020	305	79	77	95	115	136	141	20,870	16,900	1,870	3,290
CAL YR 1970	TOTAL 15,900.2 MEAN 43.6 MAX 394 MIN 1.2 AC-FT 31,540											
WTR YR 1971	TOTAL 22,634.9 MEAN 62.0 MAX 526 MIN 1.0 AC-FT 44,900											

NOTE.--No gage-height record Jan. 13 to Apr. 4, Apr. 6 to May 13.

GREEN RIVER BASIN

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 mile upstream from Fremont Lake, 0.5 mile downstream from Fremont Creek, and 12 miles northeast of Pinedale.

DRAINAGE AREA.--75.8 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 7,540 ft (from topographic map).

AVERAGE DISCHARGE.--17 years, 178 cfs (129,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,440 cfs June 24 (gage height, 7.01 ft); minimum daily, 15 cfs Mar. 10-12.
Period of record: Maximum discharge, 2,550 cfs June 16, 1959 (gage height, 7.15 ft); minimum daily, 6.0 cfs Dec. 19, 20, 1969.

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

REVISIONS.--WSP 1443: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	21	41	22	27	18	19	53	565	852	369	333
2	30	21	43	22	26	18	20	74	465	966	357	230
3	28	20	42	21	26	18	20	102	408	1,040	353	197
4	26	19	41	21	25	18	21	114	373	948	377	185
5	25	19	41	22	24	17	21	116	365	804	417	182
6	25	19	40	23	24	17	18	125	381	822	399	176
7	24	20	39	24	22	16	18	135	430	816	345	165
8	22	20	39	23	21	16	18	140	636	762	321	153
9	22	20	41	22	20	16	19	160	870	744	309	143
10	22	21	40	23	20	15	21	191	972	816	297	133
11	22	21	39	24	20	15	22	215	966	882	269	125
12	23	22	38	25	20	15	21	251	828	948	248	118
13	23	21	39	27	19	16	22	289	834	936	230	110
14	24	21	40	31	19	17	22	293	1,040	918	212	104
15	23	22	37	33	18	18	25	293	1,300	876	197	98
16	24	20	35	35	20	18	25	309	1,500	840	188	96
17	24	20	35	34	20	18	27	251	1,720	828	179	93
18	24	20	33	30	19	17	29	215	1,860	840	173	89
19	24	21	32	34	19	18	27	188	1,810	804	165	87
20	22	21	32	41	19	19	27	176	1,770	732	160	84
21	23	21	30	45	19	18	28	165	1,830	762	153	80
22	22	25	29	43	18	17	28	168	1,880	810	148	76
23	21	27	29	38	19	18	29	165	2,080	774	143	71
24	24	27	28	37	18	19	32	179	2,090	720	138	66
25	24	30	26	37	18	19	34	215	1,910	630	133	62
26	22	34	25	37	18	19	34	313	1,860	545	130	58
27	22	37	25	36	18	20	33	440	1,750	555	125	56
28	22	37	24	35	18	20	32	535	1,210	525	123	52
29	22	36	24	34	-----	22	35	642	888	470	128	48
30	22	38	23	31	-----	20	40	762	816	417	237	45
31	22	-----	22	30	-----	20	-----	684	-----	385	525	-----
TOTAL	734	721	1,052	940	574	552	767	7,958	35,407	23,767	7,548	3,515
MEAN	23.7	24.0	33.9	30.3	20.5	17.8	25.6	257	1,180	767	243	117
MAX	31	38	43	45	27	22	40	762	2,090	1,040	525	333
MIN	21	19	22	21	18	15	18	53	365	385	123	45
AC-FT	1,460	1,430	2,090	1,860	1,140	1,090	1,520	15,780	70,230	47,140	14,970	6,970
CAL YR 1970	TOTAL 57,723.4 MEAN 158 MAX 1,560 MIN 6.4 AC-FT 114,500											
WTR YR 1971	TOTAL 83,535.0 MEAN 229 MAX 2,090 MIN 15 AC-FT 165,700											

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-24	0230	7.01	2,440	7-12	0730	5.29	990

GREEN RIVER BASIN

167

09198500 POLE CREEK BELOW LITTLE HALF MOON LAKE, NEAR PINEDALE, WYO.

LOCATION.--Lat 42°53', long 109°43', in sec.26, T.34 N., R.108 W., Sublette County, on left bank 1.5 miles downstream from Little Half Moon Lake and 7 miles east of Pinedale.

DRAINAGE AREA.--87.5 sq mi.

PERIOD OF RECORD.--October 1938 to September 1971 (discontinued). Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 7,350 ft (by barometer). Prior to Oct. 27, 1948, at site 0.2 mile upstream at different datum.

AVERAGE DISCHARGE.--33 years, 109 cfs (78,970 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,280 cfs June 19 (gage height, 6.55 ft); minimum daily, 7.7 cfs Nov. 2-5.

Period of record: Maximum discharge, 1,300 cfs June 17, 1959 (gage height, 6.74 ft); minimum daily, 2.0 cfs Oct. 27, 1964.

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are poor. Natural regulation by several lakes above station. Diversion for irrigation of about 100 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	8.0	13	17	19	14	16	26	667	507	188	54
2	14	7.7	13	16	18	13	15	30	583	451	173	70
3	14	7.7	13	15	18	13	14	43	511	444	160	92
4	13	7.7	14	15	17	12	13	54	454	461	150	103
5	13	7.7	15	14	17	12	12	63	430	472	142	103
6	13	8.0	16	14	16	11	12	68	437	440	138	101
7	13	8.7	16	13	17	11	12	72	451	409	134	99
8	12	9.0	17	13	17	11	12	84	483	391	132	97
9	12	9.4	18	14	16	11	13	100	571	377	130	91
10	11	9.4	19	14	16	11	14	120	703	361	124	84
11	11	9.4	20	15	16	10	13	150	835	346	118	78
12	10	9.9	21	15	15	10	12	190	860	346	112	70
13	10	9.4	22	16	15	11	13	198	800	352	107	64
14	10	9.3	23	17	15	11	13	228	780	361	101	58
15	9.9	9.1	23	17	15	11	13	260	865	361	96	52
16	9.4	9.0	24	18	15	11	13	292	997	358	91	45
17	9.4	9.0	24	18	15	11	14	313	1,140	346	85	41
18	9.0	9.0	23	19	16	12	14	301	1,250	328	79	38
19	9.0	9.0	22	19	17	12	13	273	1,270	322	73	35
20	8.7	8.7	21	20	18	12	14	245	1,210	334	67	34
21	8.7	8.6	22	20	16	12	15	220	1,180	340	63	31
22	8.7	8.6	23	20	15	12	16	198	1,180	331	57	30
23	8.7	8.6	22	21	14	12	17	183	1,190	334	51	29
24	9.9	9.0	21	21	14	14	18	169	1,220	331	47	28
25	9.9	9.2	20	21	14	13	19	167	1,200	328	45	26
26	9.4	9.0	19	21	13	13	19	180	1,120	316	44	25
27	9.4	8.9	18	20	13	14	20	222	1,040	292	42	24
28	9.1	9.5	18	20	14	14	21	307	947	265	41	24
29	8.7	11	17	19	-----	14	23	426	780	242	44	23
30	8.3	12	18	19	-----	15	23	571	613	225	50	21
31	8.0	-----	18	20	-----	15	-----	698	-----	205	49	-----
TOTAL	324.2	269.5	593	541	441	378	456	6,451	25,767	10,976	2,933	1,670
MEAN	10.5	8.98	19.1	17.5	15.8	12.2	15.2	208	859	354	94.6	55.7
MAX	14	12	24	21	19	15	23	698	1,270	507	188	103
MIN	8.0	7.7	13	13	13	10	12	26	430	205	41	21
AC-FT	643	535	1,180	1,070	875	750	904	12,800	51,110	21,770	5,820	3,310

CAL YR 1970 TOTAL 34,938.8 MEAN 95.7 MAX 974 MIN 4.8 AC-FT 69,300
WTR YR 1971 TOTAL 50,799.7 MEAN 139 MAX 1,270 MIN 7.7 AC-FT 100,800

NOTE.--No gage-height record Jan. 21 to Apr. 4, Apr. 7 to May 12.

GREEN RIVER BASIN

09199500 FALL CREEK NEAR PINEDALE, WYO.

LOCATION.--Lat 42°51'21", long 109°43'12", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.2, T.33 N., R.108 W., Sublette County, on right bank at McBride Ranch, 0.5 mile downstream from Meadow Creek, 3 miles downstream from Burnt Lake, and 8 miles east of Pinedale.

DRAINAGE AREA.--37.2 sq mi.

PERIOD OF RECORD.--October 1938 to September 1971 (discontinued). Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 7,240 ft (from topographic map). Prior to Apr. 4, 1942, at datum 2.00 ft higher.

AVERAGE DISCHARGE.--33 years, 40.0 cfs (28,980 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 576 cfs June 19 (gage height, 7.69 ft); minimum daily, 0.30 cfs Nov. 3, 4.

Period of record: Maximum discharge, 707 cfs June 15, 1953 (gage height, 8.56 ft); minimum daily, 0.1 cfs Sept. 21, 1942, Oct. 13-20, Nov. 30, 1962, Jan. 12-29, 1963, Sept. 25, 1964.

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

REVISIONS (WATER YEARS).--WRD Wyo.1970: 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.42	.31	2.1	6.5	8.6	6.3	7.5	13	294	198	49	2.6
2	.40	.31	2.6	6.3	8.4	6.1	7.5	15	258	194	44	2.8
3	.37	.30	3.0	5.9	8.1	5.9	6.5	21	235	200	40	3.1
4	.35	.30	3.5	5.5	7.9	5.5	6.1	27	218	200	38	3.7
5	.33	.31	4.0	5.4	7.9	5.4	5.7	31	214	184	38	4.0
6	.32	.32	4.5	5.4	7.5	5.2	5.7	33	220	170	40	3.9
7	.31	.33	4.8	5.0	7.9	5.2	5.7	35	228	168	33	3.7
8	.31	.33	5.2	4.8	7.7	5.2	5.7	40	253	164	30	3.6
9	.32	.38	5.8	5.2	7.2	5.0	5.9	47	321	156	28	3.5
10	.32	.45	6.4	5.4	7.2	5.0	6.5	50	387	148	22	3.3
11	.33	.50	6.7	5.5	7.2	4.8	5.9	57	411	142	21	3.2
12	.33	.56	7.0	5.9	7.2	5.0	5.5	71	393	141	19	3.1
13	.33	.60	7.2	6.1	7.0	5.2	5.9	99	372	139	14	3.0
14	.33	.60	7.3	6.5	7.0	5.2	5.9	127	393	135	12	2.9
15	.33	.60	7.5	7.0	7.0	5.2	6.1	151	432	127	8.1	2.8
16	.34	.58	7.7	7.2	7.0	5.2	6.1	162	488	120	7.0	2.7
17	.35	.57	7.7	7.7	7.0	5.4	6.5	166	528	112	6.2	2.7
18	.35	.56	7.7	8.6	7.7	5.5	6.5	158	532	107	5.5	2.7
19	.35	.56	7.6	9.2	8.1	5.5	6.3	146	516	108	4.8	2.6
20	.34	.56	7.5	9.2	8.4	5.5	6.5	134	508	117	4.4	2.6
21	.33	.60	7.5	9.2	7.2	5.5	7.5	115	528	121	4.0	2.6
22	.33	.65	7.3	9.2	6.5	5.5	7.7	94	536	120	3.6	2.5
23	.33	.70	7.1	9.5	6.5	5.7	8.1	90	520	115	3.3	2.5
24	.33	.80	6.8	9.8	6.5	6.3	8.9	84	512	109	3.0	2.5
25	.34	.90	6.7	9.5	6.3	6.1	9.2	84	488	102	2.7	2.5
26	.35	1.0	6.8	9.5	6.3	6.3	9.2	95	440	95	2.5	2.5
27	.35	1.2	6.5	9.2	6.3	6.8	9.8	124	411	88	2.5	2.5
28	.34	1.4	6.5	9.2	6.5	6.8	10	176	348	78	2.5	2.5
29	.33	1.5	6.5	8.9	-----	6.8	11	252	276	69	2.5	2.5
30	.32	1.7	6.5	8.9	-----	7.0	11	330	225	64	2.5	2.5
31	.31	-----	6.5	8.9	-----	6.8	-----	342	-----	55	2.5	-----
TOTAL	10.49	19.48	190.5	230.1	204.1	176.9	216.4	3,369	11,485	4,046	495.6	87.6
MEAN	.34	.65	6.15	7.42	7.29	5.71	7.21	109	383	131	16.0	2.92
MAX	.42	1.7	7.7	9.8	8.6	7.0	11	342	536	200	49	4.0
MIN	.31	.30	2.1	4.8	6.3	4.8	5.5	13	214	55	2.5	2.5
AC-FT	21	39	378	456	405	351	429	6,680	22,780	8,030	983	174

CAL YR 1970 TOTAL 12,805.50 MEAN 35.1 MAX 402 MIN .14 AC-FT 25,400
WTR YR 1971 TOTAL 20,531.17 MEAN 56.2 MAX 536 MIN .30 AC-FT 40,720

NOTE.--No gage-height record Oct. 1 to Dec. 3, Aug. 15 to Sept. 30.

GREEN RIVER BASIN

169

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, on right bank 1.5 miles downstream from outlet of Boulder Lake and 5 miles north of Boulder.

DRAINAGE AREA.--130 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 7,180 ft (from topographic map).

AVERAGE DISCHARGE.--32 years, 195 cfs (141,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,330 cfs June 19 (gage height, 5.71 ft); minimum daily, 2.4 cfs Jan. 6.

Period of record: Maximum discharge, 2,810 cfs June 15, 1953 (gage height, 6.12 ft); no flow Nov. 28, 1939, to Apr. 15, 1940, Nov. 18, 1944.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Flow regulated 1.5 miles upstream by Boulder Lake (capacity, about 22,300 acre-ft, revised). One diversion above station for irrigation of about 700 acres below station.

BOULDER CREEK BELOW BOULDER LAKE NR. BOULDER, WY NUMBER 09202000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	4.6	6.0	4.4	5.0	4.2	4.0	63	720	565	255	189
2	29	4.6	5.9	3.8	4.8	4.2	3.9	63	690	597	237	189
3	29	4.6	5.8	3.6	4.7	4.4	4.0	63	650	648	222	189
4	29	4.6	6.0	2.8	4.5	4.5	4.0	63	620	684	210	189
5	30	4.6	6.1	2.9	4.3	4.5	4.1	63	620	694	204	186
6	30	4.6	6.2	2.4	4.2	4.7	4.3	63	670	666	198	186
7	30	5.0	6.4	2.6	4.4	4.7	4.5	63	770	654	186	186
8	30	4.8	6.7	2.8	4.6	4.8	4.8	63	870	645	180	183
9	28	4.6	6.7	3.1	4.8	4.8	5.2	63	1,010	622	171	180
10	7.0	4.8	6.7	3.6	5.0	4.9	5.6	63	1,170	596	165	180
11	6.4	4.6	6.0	4.0	5.2	5.0	5.3	64	1,340	580	158	180
12	15	4.8	5.4	3.9	5.4	4.8	5.0	80	1,420	572	150	177
13	26	4.6	5.0	3.7	5.4	4.6	5.5	147	1,440	560	140	177
14	26	4.6	5.2	3.5	5.2	4.5	6.2	212	1,510	552	129	174
15	26	4.6	5.4	3.9	5.0	4.5	7.0	379	1,710	536	120	171
16	25	4.8	5.4	4.3	4.8	4.4	11	411	1,930	512	128	168
17	25	4.6	5.4	4.9	4.7	4.3	17	436	2,130	488	129	165
18	25	4.6	5.0	5.1	4.6	4.4	26	436	2,270	464	116	165
19	25	4.8	4.5	5.0	4.7	4.4	43	411	2,310	472	108	134
20	25	4.6	4.0	4.8	4.9	4.5	63	386	2,250	512	108	96
21	25	80	4.5	4.4	4.7	4.6	63	374	2,220	528	108	94
22	25	110	4.3	4.5	4.5	4.6	63	357	2,180	512	129	94
23	25	6.1	3.8	4.7	4.2	4.4	63	414	2,190	492	118	94
24	25	6.1	4.0	4.9	4.2	4.2	63	499	2,210	492	108	94
25	21	6.1	4.3	4.8	4.2	4.1	63	488	2,110	448	104	94
26	4.8	6.1	4.1	5.1	4.2	4.1	63	488	1,980	416	102	94
27	4.6	6.1	4.2	5.2	4.1	4.1	63	580	1,890	380	134	94
28	4.6	6.1	4.0	5.1	4.1	4.2	63	649	1,690	350	195	94
29	4.6	6.1	4.2	5.0	-----	4.3	63	690	1,380	325	195	94
30	4.6	6.1	4.5	5.3	-----	4.3	63	720	774	297	192	92
31	4.6	-----	4.8	5.4	-----	4.3	-----	740	-----	272	189	-----
TOTAL	644.2	332.2	160.5	129.5	130.4	138.3	863.4	9,591	44,724	16,131	4,888	4,402
MEAN	20.8	11.1	5.18	4.18	4.66	4.46	28.8	309	1,491	520	158	147
MAX	30	110	6.7	5.4	5.4	5.0	63	740	2,310	694	255	189
MIN	4.6	4.6	3.8	2.4	4.1	4.1	3.9	63	620	272	102	92
AC-FT	1,280	659	318	257	259	274	1,710	19,020	88,710	32,000	9,700	8,730
CAL YR 1970	TOTAL 57,891.5 MEAN 159 MAX 1,730 MIN 1.9 AC-FT 114,800											
WTR YR 1971	TOTAL 82,134.5 MEAN 225 MAX 2,310 MIN 2.4 AC-FT 162,900											

NOTE.--No gage-height record Jan. 10 to May 12.

GREEN RIVER BASIN

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 mile downstream from Jim Creek and 4 miles northeast of Big Sandy.

DRAINAGE AREA.--79.2 sq mi.

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 (by barometer).

AVERAGE DISCHARGE.--33 years, 102 cfs (73,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,480 cfs June 17 (gage height, 6.69 ft); minimum daily, 6.0 cfs Nov. 5.
period of record: Maximum discharge, 1,790 cfs June 11, 1965 (gage height, 7.16 ft), from rating curve extended above 1,200 cfs on basis of slope-area measurement at gage height 6.88 ft; minimum observed, 1.2 cfs 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	9.4	12	9.0	18	7.9	12	28	590	346	91	40
2	6.8	8.7	13	9.1	16	7.5	11	38	530	386	85	34
3	6.9	8.0	13	8.7	15	7.6	11	53	475	384	81	32
4	6.9	7.4	14	8.7	14	8.0	12	68	465	370	84	37
5	6.4	6.0	15	9.0	14	7.5	12	64	578	361	91	35
6	6.4	6.2	16	9.5	12	7.0	13	61	646	324	84	30
7	8.2	7.0	17	10	12	6.6	13	71	618	322	76	28
8	7.9	8.5	18	9.5	12	6.9	14	78	776	321	71	33
9	8.4	8.5	17	9.2	11	7.1	15	82	978	296	78	33
10	9.8	8.7	17	9.5	11	7.3	16	104	1,100	274	74	29
11	8.4	8.7	16	9.7	11	7.9	15	131	996	274	66	26
12	10	9.0	15	10	11	8.5	13	174	949	271	61	24
13	9.7	8.7	16	11	11	8.6	14	214	920	254	57	22
14	9.3	8.5	17	12	11	8.0	14	244	1,070	242	52	20
15	7.6	9.0	16	13	10	7.5	15	298	1,220	224	47	19
16	7.8	8.4	15	14	9.6	7.1	15	387	1,270	207	44	18
17	8.4	8.0	15	14	9.3	6.8	16	307	1,310	195	42	18
18	8.1	8.3	14	15	9.3	6.5	16	240	1,270	216	41	18
19	8.4	9.0	14	16	9.6	6.2	15	201	1,160	268	40	18
20	7.4	8.7	13	16	9.6	6.4	15	179	1,070	284	37	18
21	7.6	9.0	13	15	9.3	7.0	14	159	1,090	218	34	17
22	7.9	10	12	15	9.2	7.4	15	174	1,040	198	32	16
23	7.0	10	12	14	8.9	8.0	16	174	1,110	216	31	16
24	9.5	9.1	11	14	8.3	8.5	17	205	1,050	200	30	16
25	8.5	9.0	11	14	8.2	9.0	18	258	903	168	28	15
26	7.7	8.5	11	15	8.2	8.5	17	368	878	149	27	14
27	7.3	10	10	16	8.2	9.0	17	521	822	138	27	14
28	8.0	11	10	17	8.2	9.7	17	690	499	126	26	13
29	8.6	13	9.5	18	-----	10	18	835	386	116	31	13
30	9.1	12	9.4	19	-----	11	21	885	347	105	50	13
31	10	-----	9.1	19	-----	12	-----	715	-----	98	47	-----
TOTAL	250.8	266.3	421.0	398.9	304.9	247.0	447	8,006	26,116	7,551	1,665	679
MEAN	8.09	8.88	13.6	12.9	10.9	7.97	14.9	258	871	244	53.7	22.6
MAX	10	13	18	19	18	12	21	885	1,310	386	91	40
MIN	6.4	6.0	9.1	8.7	8.2	6.2	11	28	347	98	26	13
AC-FT	497	528	835	791	605	490	887	15,880	51,800	14,980	3,300	1,350
CAL YR 1970	TOTAL 30,762.2	MEAN 84.3	MAX 1,000	MIN 3.5	AC-FT 61,020							
WTR YR 1971	TOTAL 46,352.9	MEAN 127	MAX 1,310	MIN 6.0	AC-FT 91,940							

PEAK DISCHARGE (BASE, 700 CFS)

NOTE.--No gage-height record Mar. 2 to Apr. 7.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-30	0030	5.87	998	6-17	0430	6.69	1,480

GREEN RIVER BASIN

171

09204000 SILVER CREEK NEAR BIG SANDY, WYO.

LOCATION.--Lat 42°45', long 109°31', in sec.17, T.32 N., R.106 W., Sublette County, on right bank at Miller Ranch, 1 mile downstream from South Fork, 8 miles northwest of Big Sandy, and 11 miles east of Boulder.

DRAINAGE AREA.--45.4 sq mi.

PERIOD OF RECORD.--October 1938 to September 1971 (discontinued). Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 7,500 ft (by barometer).

AVERAGE DISCHARGE.--33 years, 44.1 cfs (31,950 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 824 cfs June 17 (gage height, 6.84 ft); minimum daily, 0.40 cfs Aug. 28.
Period of record: Maximum discharge, 1,030 cfs May 28, 1951 (gage height, 7.53 ft); no flow at times in most years.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Some regulation 9.5 miles upstream by Silver Lake (capacity, 2,150 acre-ft). Diversion above station for irrigation of about 90 acres above and below station.

REVISIONS (WATER YEARS).--WSP 1213 (corrected): 1950.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.56	1.1	1.4	.90	1.3	.95	2.5	21	375	83	2.1	.62
2	.50	.90	1.6	.80	1.2	.95	2.4	27	349	73	1.8	.50
3	.50	.80	1.8	.74	1.1	1.0	2.5	30	345	67	1.5	.62
4	.56	.70	2.1	.68	1.0	1.0	2.7	43	352	67	3.0	.74
5	.45	.86	2.5	.65	.95	.90	2.9	41	404	72	33	.68
6	.68	1.1	3.0	.67	.90	.85	2.6	39	417	60	35	.56
7	1.1	1.2	3.3	.70	.95	.81	2.1	38	418	52	21	.45
8	1.0	1.3	3.8	.71	1.0	.85	2.0	42	528	48	12	.50
9	1.2	1.3	3.6	.75	1.0	.90	2.1	45	608	44	5.6	1.4
10	1.6	1.5	3.8	.80	1.1	.95	3.2	52	620	38	3.6	44
11	1.5	1.0	3.6	.85	1.2	1.0	2.8	62	538	40	3.0	47
12	2.0	1.0	2.5	.90	1.3	.96	2.6	91	492	61	2.1	46
13	2.1	1.0	2.2	.87	1.3	.90	3.2	116	488	56	1.8	45
14	2.1	1.1	2.2	.84	1.3	.85	3.8	144	540	54	1.4	44
15	2.0	1.2	2.3	.87	1.2	.80	3.8	150	550	51	1.2	43
16	2.0	1.4	2.5	.94	1.2	.90	3.7	182	525	49	1.1	43
17	2.3	1.5	2.3	1.0	1.1	1.0	3.8	173	563	49	.94	42
18	2.1	1.5	2.1	1.0	1.1	1.1	3.7	151	680	48	.86	41
19	2.3	1.4	1.9	1.1	1.0	1.3	3.9	141	528	24	.80	40
20	2.4	1.5	1.8	1.1	1.1	1.4	4.2	135	459	7.3	.74	39
21	2.6	1.5	1.7	1.0	1.1	1.5	4.0	122	435	3.7	.74	38
22	2.8	1.4	1.6	.95	1.1	1.6	4.5	126	392	2.5	.68	36
23	3.0	1.3	1.4	.99	1.0	1.7	5.0	139	376	4.2	.68	34
24	3.4	1.3	1.3	1.0	1.1	1.9	5.4	152	330	3.6	.62	32
25	3.6	1.1	1.3	1.1	1.0	2.1	6.5	186	274	2.4	.56	31
26	3.4	1.4	1.2	1.2	.94	2.0	7.4	248	239	3.5	.50	26
27	3.1	1.1	1.1	1.2	.90	1.9	8.5	327	208	4.6	.45	19
28	2.4	1.2	1.2	1.3	.90	2.0	10	420	162	3.7	.40	15
29	2.0	1.4	1.2	1.3	-----	2.2	12	502	128	3.3	.50	11
30	1.6	1.5	1.1	1.4	-----	2.4	15	520	100	3.0	.80	10
31	1.3	-----	1.0	1.4	-----	2.7	-----	435	-----	2.5	.74	-----
TOTAL	58.15	36.56	64.4	29.71	30.34	41.37	138.8	4,900	12,423	1,080.3	139.21	732.07
MEAN	1.88	1.22	2.08	.96	1.08	1.33	4.63	158	414	34.8	4.49	24.4
MAX	3.6	1.5	3.8	1.4	1.3	2.7	15	520	680	83	35	47
MIN	.45	.70	1.0	.65	.90	.80	2.0	21	100	2.4	.40	.45
AC-FT	115	73	128	59	60	82	275	9,720	24,640	2,140	276	1,450

CAL YR 1970 TOTAL 12,989.74 MEAN 35.6 MAX 587 MIN .31 AC-FT 25,770
WTR YR 1971 TOTAL 19,673.91 MEAN 53.9 MAX 680 MIN .40 AC-FT 39,020

NOTE.--No gage-height record Dec. 12 to Apr. 6.

GREEN RIVER BASIN

09205000 NEW FORK RIVER NEAR BIG PINEY, WYO.

LOCATION.--Lat 42°34'02", long 109°55'46", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.22, T.30 N., R.110 W., Sublette County, on right bank 35 ft downstream from old highway bridge, 3.4 miles upstream from mouth, and 9.5 miles northeast of Big Piney.

DRAINAGE AREA.--1,230 sq mi approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,800 ft (from topographic map).

AVERAGE DISCHARGE.--17 years, 703 cfs (509,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,760 cfs June 19 (gage height, 6.81 ft); minimum daily, 145 cfs Jan. 6.

Period of record: Maximum discharge, 8,940 cfs June 27, 1965 (gage height, 7.84 ft); minimum daily, 90 cfs Jan. 13, 1963.

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, power development, and diversions for irrigation of about 62,100 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	256	276	261	200	234	163	370	514	2,690	3,110	1,110	409
2	255	272	247	186	218	160	378	522	2,420	2,700	1,040	404
3	254	262	236	172	204	168	400	530	2,180	2,590	981	429
4	253	252	242	152	190	168	420	530	2,030	2,600	938	495
5	248	256	194	154	180	168	470	539	1,970	2,720	895	483
6	253	262	228	145	180	166	520	548	2,140	2,650	859	471
7	263	279	244	150	185	173	600	539	2,230	2,390	819	466
8	263	288	263	159	186	176	675	548	2,210	2,290	831	514
9	258	280	250	163	183	177	600	564	2,570	2,240	836	513
10	271	283	238	168	190	180	666	573	3,200	2,080	767	491
11	280	277	225	170	194	180	800	590	3,870	1,900	703	484
12	279	272	199	170	198	187	641	624	4,290	1,830	678	482
13	273	279	192	162	200	182	573	694	4,270	1,860	650	488
14	267	252	190	162	200	178	530	790	4,180	1,800	608	470
15	266	251	200	170	197	180	564	948	4,430	1,820	574	454
16	260	284	212	183	195	180	582	1,140	4,890	1,800	551	452
17	276	278	213	196	187	180	573	1,320	5,400	1,790	538	459
18	277	272	202	208	183	173	632	1,450	5,970	1,780	506	460
19	277	275	188	210	180	180	616	1,500	6,610	1,810	479	454
20	274	300	180	210	178	184	522	1,420	6,670	2,150	454	444
21	272	280	195	202	178	197	514	1,360	6,560	2,290	435	444
22	275	317	188	194	165	204	573	1,180	6,590	2,260	425	443
23	278	324	175	204	160	218	582	1,150	6,490	2,190	411	432
24	284	330	192	210	166	230	607	1,160	6,580	2,150	391	410
25	287	275	205	213	162	224	624	1,060	6,660	2,040	374	401
26	272	278	210	223	162	248	573	997	6,370	1,860	365	390
27	244	274	207	228	160	267	539	1,070	5,950	1,660	357	385
28	196	262	203	228	160	283	514	1,390	5,690	1,500	350	390
29	267	253	201	222	-----	320	514	1,720	5,030	1,380	368	389
30	317	270	204	225	-----	380	505	2,230	4,190	1,280	443	381
31	285	-----	212	237	-----	353	-----	2,740	-----	1,200	421	-----
TOTAL	8,280	8,313	6,596	5,876	5,175	6,427	16,677	31,940	134,330	63,720	19,157	13,387
MEAN	267	277	213	190	185	207	556	1,030	4,478	2,055	618	446
MAX	317	330	263	237	234	380	800	2,740	6,670	3,110	1,110	514
MIN	196	251	175	145	160	160	370	514	1,970	1,200	350	381
AC-FT	16,420	16,490	13,080	11,660	10,260	12,750	33,080	63,350	266,400	126,400	38,000	26,550

CAL YR 1970 TOTAL 199,420 MEAN 546 MAX 4,400 MIN 140 AC-FT 395,500
WTR YR 1971 TOTAL 319,878 MEAN 876 MAX 6,670 MIN 145 AC-FT 634,500

NOTE.--No gage-height record Dec. 25 to Apr. 1.

GREEN RIVER BASIN

173

09205500 NORTH PINEY CREEK NEAR MASON, WYO.

LOCATION.--Lat 42°39'30", long 110°20'30", in SE¼ sec.19, T.31 N., R.113 W., Sublette County, on left bank 3 miles west of Mason and 15 miles northwest of Big Piney. Prior to Oct. 6, 1970, at site 600 ft upstream.

DRAINAGE AREA.--58 sq mi, approximately.

PERIOD OF RECORD.--May 1915 to October 1916, October 1931 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "near Marbleton" 1915-16.

GAGE.--Water-stage recorder. Altitude of gage is 7,520 ft (from topographic map). Prior to Oct. 6, 1970, at site 600 ft upstream at different datums.

AVERAGE DISCHARGE.--41 years, 57.1 cfs (41,370 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 747 cfs June 22; maximum gage height, 5.52 ft June 27; minimum daily discharge, 8.0 cfs Jan. 6.

Period of record: Maximum discharge, 747 cfs June 22, 1971; maximum gage height, 5.52 ft June 27, 1971; minimum daily discharge, 3.1 cfs Mar. 15, 1967.

REMARKS.--Records poor. Diversions above station for irrigation of about 610 acres above and below station. Hidden ditch No. 1 bypasses the station; results of discharge measurements, in cubic feet per second, are given below:

June 16 ... 45.7

July 7 ... 34.0

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	21	18	11	13	11	19	39	300	398	129	67
2	16	20	17	10	12	12	18	51	297	392	122	62
3	18	18	16	9.2	11	13	19	62	285	410	119	62
4	21	19	15	8.6	10	13	19	67	273	412	117	66
5	22	19	14	8.2	9.4	12	20	67	276	344	116	70
6	25	18	14	8.0	9.0	11	20	63	276	325	111	64
7	24	19	15	8.5	8.5	12	21	63	267	330	100	56
8	24	20	16	9.0	9.0	13	20	72	308	325	101	55
9	24	21	16	9.4	10	14	19	81	365	308	105	53
10	26	21	15	10	11	15	20	102	435	300	97	50
11	24	20	14	11	12	16	21	102	498	297	94	49
12	25	19	13	11	12	17	21	125	524	290	91	48
13	26	18	12	10	13	18	20	156	487	277	88	47
14	24	17	13	9.5	13	17	22	174	510	277	84	46
15	24	18	13	9.2	12	16	24	180	586	266	82	46
16	22	20	13	9.7	12	16	24	231	620	253	81	50
17	22	20	14	11	11	16	27	183	683	233	78	54
18	22	19	14	12	11	15	28	138	708	231	77	60
19	22	18	13	12	12	14	25	121	719	239	73	60
20	21	17	12	12	11	15	24	128	721	220	71	58
21	21	18	11	11	10	16	24	108	725	229	70	60
22	22	17	11	12	9.7	18	25	135	727	225	67	60
23	22	16	10	9.5	9.4	20	24	114	701	220	66	58
24	22	17	9.5	10	10	21	26	142	721	197	63	56
25	22	19	9.4	10	11	20	27	192	712	178	62	54
26	20	21	9.9	11	10	21	24	216	697	169	62	54
27	20	19	10	12	10	20	24	288	679	159	59	57
28	21	18	10	12	11	19	24	348	613	151	59	60
29	22	17	11	11	-----	18	26	352	503	148	88	62
30	22	18	11	12	-----	19	29	352	442	143	85	64
31	21	-----	12	13	-----	20	-----	310	-----	135	73	-----
TOTAL	692	562	401.8	322.8	303.0	498	684	4,762	15,658	8,081	2,690	1,708
MEAN	22.3	18.7	13.0	10.4	10.8	16.1	22.8	154	522	261	86.8	56.9
MAX	26	21	18	13	13	21	29	352	727	412	129	70
MIN	16	16	9.4	8.0	8.5	11	18	39	267	135	59	46
AC-FT	1,370	1,110	797	640	601	988	1,360	9,450	31,060	16,030	5,340	3,390

CAL YR 1970 TOTAL 20,237.0 MEAN 55.4 MAX 394 MIN 7.7 AC-FT 40,140
WTR YR 1971 TOTAL 36,362.6 MEAN 99.6 MAX 727 MIN 8.0 AC-FT 72,130

NOTE.--No gage-height record Nov. 6 to Dec. 6, Sept. 1-30.

GREEN RIVER BASIN

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 miles upstream from mouth and 16.3 miles southwest of Big Piney.

DRAINAGE AREA.--67 sq mi, approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 7,150 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 2.72 cfs (1,970 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 70 cfs June 11 (gage height, 5.04 ft); maximum observed gage height, 6.61 ft Mar. 26 (backwater from ice); no flow for many days.

Period of record: Maximum discharge, 98 cfs June 8, 1969 (gage height, 5.75 ft), from rating curve extended above 13 cfs on basis of slope-area measurement of peak flow; maximum observed gage height, 6.61 ft Mar. 26, 1971 (backwater from ice); no flow for many days each year.

REMARKS.--Records fair except those for winter period, which are poor. Diversions for irrigation of about 50 acres 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	.01	.21	.03	0	.50	0	13	21	34	23	4.5	2.4
2	.01	.18	.03	0	.25	0	11	20	33	21	4.2	2.1
3	.01	.17	.03	0	.05	0	13	27	32	20	4.2	2.3
4	.01	.15	.03	0	0	0	12	31	32	20	4.2	2.6
5	.01	.17	.03	0	0	0	15	25	32	18	4.4	2.4
6	.02	.20	.02	0	0	0	23	22	33	16	4.1	2.1
7	.04	.16	.01	0	0	0	29	16	33	15	3.9	2.1
8	.04	.12	0	0	0	0	24	15	32	14	3.9	2.7
9	.05	.08	0	0	0	0	22	20	36	14	4.0	2.3
10	.10	.07	0	0	0	0	22	28	42	13	3.5	1.7
11	.12	.06	0	0	0	0	14	26	62	11	3.2	1.8
12	.12	.07	0	0	0	.55	9.7	26	51	11	3.1	1.2
13	.12	.08	0	0	.40	1.1	8.3	26	49	10	3.0	1.2
14	.12	.06	0	0	.63	.50	9.9	31	48	10	2.7	.91
15	.08	.04	0	0	.20	.09	15	23	47	9.6	2.7	.99
16	.10	.05	0	0	0	.03	14	28	47	9.1	2.7	1.5
17	.12	.04	0	0	0	0	13	21	48	10	2.6	2.8
18	.10	.04	0	0	0	0	13	21	48	9.0	2.6	3.2
19	.10	.03	0	.02	0	0	11	19	45	11	2.3	2.8
20	.08	.03	0	.03	0	0	11	21	44	7.7	2.0	2.3
21	.08	.03	0	.01	0	.01	9.1	22	43	8.5	1.9	3.7
22	.10	.03	0	.01	0	.05	12	24	41	7.0	1.8	3.7
23	.13	.03	0	0	0	.10	14	21	39	7.4	1.7	3.0
24	.15	.03	0	0	0	1.5	17	18	37	7.4	1.5	2.6
25	.14	.04	0	0	0	2.5	15	18	34	6.2	1.5	2.3
26	.11	.03	0	0	0	6.3	14	19	32	5.6	1.6	2.1
27	.12	.02	0	0	0	8.5	13	24	30	5.6	1.5	2.2
28	.14	.02	0	0	0	11	12	33	30	5.2	1.4	2.8
29	.22	.02	0	0	-----	13	9.8	34	26	5.2	4.3	2.7
30	.30	.03	0	0	-----	15	11	38	24	5.0	4.3	2.6
31	.44	-----	0	.30	-----	14	-----	34	-----	4.8	3.0	-----
TOTAL	3.29	2.29	.18	.37	2.03	74.23	428.8	752	1,164	340.3	92.3	69.30
MEAN	.11	.076	.006	.012	.073	2.39	14.3	24.3	38.8	11.0	2.98	2.31
MAX	.44	.21	.03	.30	.63	15	28	38	62	23	4.5	3.7
MIN	.01	.02	0	0	0	0	8.3	15	24	4.8	1.4	.91
AC-FT	6.5	4.5	.4	.7	4.0	147	851	1,490	2,310	675	183	137
CAL YR 1970	TOTAL	196.31	MEAN	.54	MAX	6.0	MIN	0	AC-FT	389		
WTR YR 1971	TOTAL	2,929.09	MEAN	8.02	MAX	62	MIN	0	AC-FT	5,310		

PEAK DISCHARGE (BASE, 20 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-7	2000	4.43	51	5-4	0015	4.46	48
4-15	2230	3.60	27	5-14	0400	4.19	40
4-24	0100	3.24	20	6-11	0700	5.04	70

GREEN RIVER BASIN

175

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 left bank 0.5 mile upstream from Crystal Creek, 2 miles southeast of La Barge Meadows ranger station, and 29 miles northwest of La Barge.

DRAINAGE AREA.--6.3 sq mi 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 (from topographic map). Oct. 1, 1940, to Sept. 30, 1942, at site 300 ft upstream at different datum.

AVERAGE DISCHARGE.--23 years, 14.2 cfs (10,290 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 191 cfs June 16 (gage height, 5.54 ft); maximum gage height, 6.10 ft May 26 (backwater from snow); minimum daily discharge, 2.2 cfs Jan. 6.

Period of record: Maximum discharge, 192 cfs June 6, 1964 (gage height, 5.33 ft); maximum gage height, 7.08 ft Nov. 25, 1967 (backwater from snow); minimum daily discharge, 1.3 cfs Jan. 29 to Feb. 2, 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	3.9	3.5	3.3	3.2	2.5	3.5	7.1	86	70	18	9.6
2	5.5	3.9	3.7	3.1	3.2	2.5	3.5	10	87	67	17	9.2
3	5.1	3.9	3.5	2.8	3.2	2.8	3.5	13	86	68	16	9.6
4	5.5	3.7	3.7	2.6	3.2	3.0	2.8	15	83	66	16	10
5	5.5	3.7	3.7	2.4	3.2	2.8	3.0	15	81	62	16	9.6
6	6.2	3.9	3.7	2.2	3.2	2.8	2.8	16	83	57	16	8.8
7	5.1	4.2	3.5	2.4	3.2	2.9	3.0	17	93	54	16	9.6
8	4.8	4.2	3.5	2.8	3.2	3.1	3.0	19	103	52	15	9.2
9	5.1	3.7	3.5	2.9	3.2	3.2	3.5	21	117	50	15	8.8
10	5.9	3.9	3.7	2.9	3.2	3.2	3.7	23	122	48	15	8.8
11	5.1	3.7	3.7	2.9	3.4	3.6	3.7	27	132	48	15	9.2
12	5.5	3.7	3.3	2.8	3.6	3.9	3.9	27	127	47	14	8.8
13	5.5	3.5	3.3	2.6	3.6	3.8	3.9	32	122	44	14	8.8
14	4.8	3.2	3.2	2.4	3.5	3.6	3.9	36	136	42	14	8.4
15	4.8	3.7	3.3	2.7	3.6	3.3	4.8	39	148	39	14	8.8
16	4.8	3.9	3.3	2.8	3.5	3.3	4.5	45	150	36	13	8.4
17	4.8	3.9	3.3	3.0	3.4	3.2	4.8	42	161	34	13	8.8
18	4.8	3.9	3.2	3.2	3.5	3.2	4.5	38	166	38	13	8.4
19	4.8	3.7	3.0	3.2	3.4	3.1	4.2	33	160	41	13	7.6
20	4.8	3.7	2.9	3.1	3.3	3.0	3.7	30	155	45	12	8.8
21	5.1	3.9	3.1	2.9	3.0	3.1	3.8	28	152	40	12	8.0
22	4.8	4.8	3.0	2.8	2.9	3.2	3.8	26	151	37	12	7.6
23	4.2	4.5	2.8	2.9	3.0	3.3	3.7	24	153	38	12	8.0
24	4.5	4.5	3.0	2.9	3.0	3.6	3.9	30	152	34	12	8.4
25	4.5	4.4	3.1	3.0	2.9	3.8	3.8	41	141	30	12	7.1
26	4.2	4.3	3.1	3.1	2.7	3.9	3.4	58	133	27	12	6.7
27	3.9	4.1	3.2	3.1	2.5	3.8	3.6	78	121	24	11	8.0
28	3.9	4.0	3.3	3.1	2.6	3.7	3.7	94	107	22	11	8.0
29	4.2	3.9	3.3	3.0	-----	3.7	4.0	100	92	21	14	8.0
30	3.9	3.7	3.4	3.2	-----	3.5	5.5	95	78	20	12	8.4
31	3.9	-----	3.4	3.2	-----	3.7	-----	88	-----	19	11	-----
TOTAL	151.0	118.0	103.2	89.3	89.4	102.1	113.4	1,167.1	3,678	1,320	426	257.4
MEAN	4.87	3.93	3.33	2.88	3.19	3.29	3.78	37.6	123	42.6	13.7	8.58
MAX	6.2	4.8	3.7	3.3	3.6	3.9	5.5	100	166	70	18	10
MIN	3.9	3.2	2.8	2.2	2.5	2.5	2.8	7.1	78	19	11	6.7
AC-FT	300	234	205	177	177	203	225	2,310	7,300	2,620	845	511
CAL YR 1970	TOTAL 4,507.5	MEAN 12.3	MAX 105	MIN 2.1	AC-FT 8,940							
WTR YR 1971	TOTAL 7,614.9	MEAN 20.9	MAX 166	MIN 2.2	AC-FT 15,100							

PEAK DISCHARGE (BASE, 120 CFS)

NOTE.--No gage-height record Feb. 13 to Mar. 29.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-16	1730	5.54	191				

LOCATION.--Lat 42°11'34", long 110°09'45", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.33, T.26 N., R.112 W., Lincoln County, on right bank 4 miles upstream from Muddy Creek and 5 miles south of La Barge.

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).

AVERAGE DISCHARGE.--8 years, 1,732 cfs (1,255,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 14,400 cfs June 22 (gage height, 9.54 ft); minimum daily, 400 cfs Jan. 5-7.
Period of record: Maximum discharge, 15,800 cfs June 28, 1965 (gage height, 9.76 ft); minimum daily, 280 cfs Dec. 29, 1969.

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 198,000 acres 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	650	720	640	480	650	435	1,470	1,690	8,030	8,680	2,740	1,380
2	640	695	600	460	600	450	1,190	1,890	7,740	6,600	2,610	1,480
3	620	680	590	435	560	450	938	2,110	7,160	5,770	2,580	1,410
4	601	660	570	410	520	460	890	2,440	6,340	5,620	2,520	1,390
5	601	690	560	400	500	470	902	2,880	5,740	5,890	2,460	1,390
6	610	731	540	430	490	465	950	3,120	5,620	5,830	2,430	1,320
7	640	731	570	430	500	470	1,080	3,170	5,770	5,350	2,510	1,250
8	650	731	580	420	510	485	1,200	3,210	5,500	5,070	2,540	1,240
9	662	710	560	430	500	500	1,340	3,390	5,740	5,060	2,480	1,260
10	659	720	540	450	510	510	1,420	3,780	6,600	5,020	2,370	1,190
11	682	700	530	460	520	530	1,540	4,410	8,140	4,570	2,150	1,140
12	700	670	500	460	540	550	1,590	4,650	9,520	4,230	2,010	1,090
13	705	660	480	435	540	560	1,410	4,740	10,500	4,110	1,950	1,060
14	685	650	465	440	540	550	1,280	5,100	10,600	4,070	1,840	1,030
15	680	630	485	460	540	530	1,310	5,300	10,200	4,020	1,730	968
16	670	640	500	510	530	520	1,500	5,530	10,300	4,050	1,650	952
17	660	700	500	540	510	520	1,540	5,890	10,700	4,060	1,560	964
18	700	731	480	580	500	540	1,790	5,890	11,500	4,120	1,480	985
19	700	742	470	570	495	560	1,980	5,100	12,600	4,290	1,410	989
20	700	710	470	560	485	600	1,660	4,280	13,700	4,420	1,350	970
21	680	842	465	550	470	700	1,480	4,150	14,100	4,820	1,290	966
22	680	742	480	550	460	800	1,510	3,640	14,300	4,950	1,270	968
23	695	650	460	580	440	900	1,710	3,710	14,300	4,910	1,220	957
24	700	630	470	580	440	1,000	1,890	3,900	14,000	4,740	1,180	928
25	720	819	480	600	455	1,200	2,110	3,660	14,100	4,560	1,140	889
26	720	770	490	620	450	1,400	2,030	3,660	14,200	4,170	1,110	856
27	705	760	500	620	440	1,600	1,840	4,020	14,000	3,790	1,080	837
28	680	730	485	600	440	1,800	1,630	4,760	13,400	3,480	1,040	850
29	720	680	500	610	-----	1,700	1,530	5,680	12,700	3,260	1,080	863
30	750	640	510	640	-----	1,600	1,540	6,660	11,100	3,150	1,200	858
31	770	-----	510	640	-----	1,500	-----	7,710	-----	2,930	1,310	-----
TOTAL	21,035	21,164	15,980	15,890	14,135	24,355	44,250	130,120	308,200	145,590	55,290	32,430
MEAN	679	705	515	513	505	786	1,475	4,197	10,270	4,696	1,784	1,081
MAX	770	842	640	640	650	1,800	2,110	7,710	14,300			

GREEN RIVER BASIN

177

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 miles downstream from Dutch George Creek and 14 miles west of Fontenelle.

DRAINAGE AREA.--152 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,950 ft (from topographic map). Prior to May 5, 1970, at site 300 ft downstream at present datum.

AVERAGE DISCHARGE.--20 years, 68.5 cfs (49,630 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 688 cfs June 11 (gage height, 8.99 ft); minimum daily, 11 cfs Jan. 5, 6.

Period of record: Maximum discharge, 821 cfs June 13, 1965 (gage height, 6.87 ft, site then in use); maximum gage height, 7.93 ft Dec. 24, 1955 (backwater from ice), site then in use; minimum daily discharge, 10 cfs Dec. 10, 1963.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 780 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

CAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	26	26	17	38	28	52	257	483	270	76	51
2	22	25	27	16	37	29	47	296	464	248	73	47
3	22	27	27	14	33	30	42	350	450	232	73	47
4	22	30	28	12	30	32	42	362	442	228	75	51
5	21	33	30	11	28	31	42	310	440	218	79	49
6	24	30	28	11	27	28	44	279	448	204	75	47
7	26	30	27	12	28	26	48	252	458	192	70	47
8	25	27	28	12	30	25	50	252	474	183	70	47
9	26	25	29	13	31	26	64	283	510	176	73	46
10	32	26	30	14	31	27	101	308	558	170	72	42
11	32	28	27	16	30	25	206	301	661	158	64	41
12	27	26	25	19	29	24	178	341	650	153	63	40
13	27	25	24	20	28	26	151	346	600	142	63	38
14	26	24	23	20	28	26	170	377	569	139	61	36
15	26	25	22	22	27	25	242	368	565	132	59	36
16	26	26	23	24	27	26	257	386	589	120	57	38
17	26	26	23	27	28	25	257	334	602	114	59	42
18	26	25	21	29	27	24	262	279	617	112	58	42
19	26	24	18	28	26	23	185	264	605	142	57	42
20	26	25	16	27	25	24	150	260	577	120	56	42
21	26	25	15	25	26	25	140	283	545	118	55	44
22	26	24	16	24	28	26	161	361	518	112	53	45
23	26	27	16	26	30	27	154	339	497	109	53	42
24	25	31	17	27	32	35	182	350	465	109	50	42
25	24	31	16	29	31	43	177	375	436	102	49	42
26	23	29	16	31	30	48	145	407	412	93	49	42
27	23	27	17	33	29	48	132	452	385	90	47	42
28	25	25	18	35	29	46	145	494	361	87	47	44
29	26	26	19	37	-----	45	167	507	324	83	53	44
30	28	27	20	37	-----	50	202	536	292	83	60	43
31	26	-----	18	38	-----	52	-----	492	-----	78	54	-----
TOTAL	788	805	690	706	823	975	4,195	10,801	14,997	4,517	1,903	1,301
MEAN	25.4	26.8	22.3	22.8	29.4	31.5	140	348	500	146	61.4	43.4
MAX	32	33	30	38	38	52	262	536	661	270	79	51
MIN	21	24	15	11	25	23	42	252	292	78	47	36
AC-FT	1,560	1,600	1,370	1,400	1,630	1,930	8,320	21,420	29,750	8,960	3,770	2,580
CAL YR 1970	TOTAL 18,740	MEAN 51.3	MAX 260	MIN 15	AC-FT 37,170							
WTR YR 1971	TOTAL 42,501	MEAN 116	MAX 661	MIN 11	AC-FT 84,300							

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-18	2300	7.44	364	5-30	0230	8.42	562
5-3	2330	7.67	406	6-11	1800	8.99	688
5-14	1530	7.78	426				

GREEN RIVER BASIN

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 miles north of Fontenelle and 3.5 miles upstream from Slate Creek.

DRAINAGE AREA.--4,280 sq mi, approximately (revised).

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, 348,300 acre-ft Aug. 12, 13 (elevation, 6,506.35 ft); minimum daily, 171,200 acre-ft Apr. 10 (elevation, 6,480.83 ft).

Period of record: Maximum daily contents, 387,000 acre-ft June 29, 1965 (elevation, 6,511.01 ft); minimum daily, 5,680 acre-ft July 28, 1967.

REMARKS.--Reservoir is formed by earth-fill dam completed by Bureau of Reclamation in April 1964. Capacity, 344,800 acre-ft between elevations 6,506.0 ft (crest of spillway) and 6,408.0 ft (invert of outlet pipe). Dead storage (below elevation 6,408.0 ft), 563 acre-ft. Figures given herein represent total contents. Water used for irrigation and power development.

COOPERATION.--Records furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	6,492.75	246,400	-
Oct. 31	6,489.51	224,400	-22,000
Nov. 30	6,488.75	219,300	-5,100
Dec. 31	6,486.91	207,500	-11,800
CAL YR 1970	-	-	-17,500
Jan. 31	6,485.97	201,500	-6,000
Feb. 28	6,484.35	191,600	-9,900
Mar. 31	6,481.95	177,500	-14,100
Apr. 30	6,482.15	178,700	+1,200
May 31	6,482.08	178,300	-400
June 30	6,503.17	323,000	+144,700
July 31	6,506.00	345,400	+22,400
Aug. 31	6,505.05	337,800	-7,600
Sept. 30	6,503.69	327,100	-10,700
WTR YR 1971	-	-	+80,700

179

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 mile downstream from Fontenelle Dam, 2.5 miles upstream from Slate Creek, and 6 miles southeast of Fontenelle.

PERIOD OF RECORD.--November 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,378.13 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 10,500 cfs June 30 (gage height, 16.55 ft); minimum daily, 438 cfs Oct. 1.
Period of record: Maximum discharge, 19,400 cfs Sept. 5, 1965 (gage height, 18.74 ft, from floodmarks), caused by emergency release from Fontenelle Reservoir; minimum daily, 209 cfs Nov. 22-24, 1968.

REMARKS.--Records good. Flow completely regulated by Fontenelle Reservoir 1.0 mile upstream. (See sta 09211150.) Natural flow of stream affected by storage reservoirs and diversions for irrigation of about 202,000 acres above station. Water-quality records for the current year are published in Part 2 of this report.

DAY	CCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	438	588	680	576	760	784	1,470	1,660	5,760	9,950	2,660	1,250
2	501	595	696	588	768	784	1,470	1,660	6,260	9,080	2,680	1,230
3	644	588	704	588	760	784	1,460	1,660	6,900	8,250	2,580	1,240
4	637	595	704	590	768	776	1,440	1,710	7,210	8,200	2,300	1,260
5	816	588	680	590	768	800	1,440	1,980	7,080	8,200	2,160	1,280
6	1,180	569	680	595	760	768	1,430	2,380	7,100	7,580	2,190	1,280
7	1,370	576	688	588	768	752	1,420	2,680	7,100	6,570	2,160	1,280
8	1,400	576	680	569	760	784	1,420	2,780	7,080	5,820	2,140	1,260
9	1,420	615	680	588	768	800	1,400	2,780	7,080	4,940	2,140	1,280
10	1,420	673	680	588	760	792	1,400	2,990	7,060	3,860	2,370	1,260
11	1,410	680	680	582	760	792	1,400	3,400	7,080	2,750	2,090	1,250
12	1,400	736	680	588	752	792	1,380	3,560	7,120	1,800	1,610	1,260
13	1,400	867	696	588	752	800	1,340	3,790	7,230	752	1,770	1,250
14	1,460	1,170	704	608	760	800	1,400	4,300	7,300	1,110	1,710	1,250
15	1,400	1,360	704	602	760	792	1,370	4,660	7,360	1,100	1,710	1,250
16	1,380	1,240	680	588	760	792	1,360	4,660	7,430	1,080	1,710	1,250
17	1,380	1,010	658	595	752	792	1,360	4,760	7,520	1,090	1,680	1,260
18	1,380	704	651	588	760	824	1,340	5,200	7,560	1,120	1,650	1,260
19	1,310	666	666	582	760	912	1,340	5,660	7,610	1,350	1,620	1,260
20	1,110	666	680	582	768	980	1,470	5,740	7,670	1,730	1,620	1,240
21	921	673	680	582	768	980	1,600	5,740	7,630	2,430	1,610	1,230
22	680	666	615	582	752	1,010	1,680	5,660	7,630	3,240	1,610	1,220
23	602	673	602	588	792	1,120	1,660	5,660	7,630	3,690	1,610	1,220
24	595	666	582	595	784	1,230	1,620	5,660	7,740	4,640	1,610	1,220
25	602	673	595	622	784	1,340	1,620	5,620	8,480	4,660	1,420	1,230
26	582	673	595	688	784	1,410	1,650	5,580	9,050	4,600	1,290	1,230
27	576	673	595	736	784	1,480	1,700	5,580	9,000	4,280	1,320	1,230
28	576	666	588	760	784	1,480	1,690	5,560	9,420	3,860	1,340	1,210
29	582	673	566	752	-----	1,480	1,680	5,560	10,300	3,430	1,340	1,200
30	588	680	562	760	-----	1,490	1,680	5,600	10,300	2,880	1,320	1,200
31	595	-----	576	760	-----	1,480	-----	5,660	-----	2,680	1,320	-----
TOTAL	30,295	21,778	20,227	19,188	21,488	30,600	44,690	129,890	229,690	126,722	56,330	37,340
MEAN	977	726	652	619	767	987	1,490	4,190	7,656	4,088		

GREEN RIVER BASIN

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 mile downstream from Squaw Creek, and 9 miles southeast of Big Sandy.

DRAINAGE AREA.--94 sq mi, approximately.

PERIOD OF RECORD.--July to November 1910, May to August 1911, July 1939 to current year. 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 (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 downstream at present datum.

AVERAGE DISCHARGE.--32 years (1939-71), 86.0 cfs (62,310 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,190 cfs June 17, 18 (gage height, 8.32 ft); minimum daily, 8.5 cfs Mar. 19. Period of record: Maximum discharge, 1,580 cfs (revised) June 10, 1965 (gage height, 9.06 ft), from rating curve extended above 800 cfs; minimum daily, 3.0 cfs Dec. 17, 1964.

REVISIONS.--The figures of maximum discharge for some water years have been revised, as shown in the following table. They supersede figures published in the water-supply paper indicated.

WSP	Water year	Date	Discharge (cfs)	Gage height (feet)
1925	1963	June 16, 1963	1,300	8.49
1925	1964	June 7, 1964	881	7.54
1925	1965	June 10, 1965	1,580	9.06

REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. Diversions for irrigation of about 750 acres above station.

REVISIONS.--Revised figures of discharge, in cubic feet per second, for water years 1963 and 1965, superseding those published in WSP 1925 are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge
1963		1965-Con.		1965-Con.	
June 15	816	June 12	1,130	June 20	602
16	1,070	13	1,140	21	739
17	655	14	925	22	830
		15	753	23	802
		16	795	24	781
1965		17	852	25	877
June 9	733	18	587	26	965
10	1,430	19	560	27	676
11	1,270				
Month	Cfs-days	Maximum	Minimum	Mean	Runoff in acre-feet
June 1963	13,351	1,070	210	445	26,480
WTR YR 1963	31,278	1,070	6.0	85.7	62,040
CAL YR 1963	31,410.5	1,070	6.0	86.1	62,300
June 1965	22,259	1,430	442	742	44,150
WTR YR 1965	48,999.9	1,430	3.0	134	97,190
CAL YR 1965	50,627.5	1,430	8.0	139	100,400

REVISED PEAK DISCHARGE.--1963: June 16 (0600) 1,300 cfs (8.49 ft).
 1964: May 22 (0100) 816 cfs (7.36 ft); June 7 (1130) 881 cfs (7.54 ft); June 28 (0900) 781 cfs (7.26 ft).
 1965: June 10 (1300) 1,580 cfs (9.06 ft); June 26 (0600) 1,100 cfs (8.06 ft).

Table of Daily Discharge for Water Year October 1970 to September 1971 is listed on the following page.

GREEN RIVER BASIN

181

09212500 BIG SANDY RIVER AT LECKIE RANCH, NEAR BIG SANDY, WYO.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	16	15	14	21	10	16	43	438	282	87	39
2	15	15	14	13	20	9.7	15	53	385	297	82	35
3	15	15	14	13	19	10	15	62	352	300	78	35
4	14	15	13	12	18	10	16	72	328	293	77	42
5	13	14	14	12	17	10	17	80	354	280	96	40
6	14	13	15	13	16	9.7	17	84	362	251	83	36
7	18	14	16	14	15	9.0	18	92	355	242	78	36
8	14	15	16	14	15	9.3	19	97	445	257	75	50
9	16	16	17	15	16	9.7	19	103	582	243	93	48
10	19	14	17	16	16	10	19	114	642	220	87	43
11	18	15	16	16	17	11	20	141	623	204	76	39
12	20	14	16	17	18	12	20	179	601	200	69	35
13	18	15	15	16	18	12	21	230	576	197	65	32
14	18	17	16	16	17	11	22	282	684	193	59	30
15	14	18	16	17	17	10	23	319	805	180	55	28
16	15	16	16	18	16	10	25	344	885	168	52	28
17	14	14	16	19	16	9.4	26	257	973	163	50	28
18	14	15	15	20	17	9.0	28	194	969	184	48	28
19	14	16	15	20	16	8.5	27	163	865	282	45	28
20	14	16	14	20	16	9.0	26	146	807	278	42	28
21	16	14	13	19	15	10	27	140	826	229	41	28
22	14	14	14	18	14	11	27	155	777	200	39	28
23	14	15	13	17	13	12	28	149	841	194	37	28
24	15	14	12	16	12	13	30	180	782	173	35	27
25	16	14	13	17	12	14	32	244	666	150	34	25
26	15	12	14	18	11	13	32	326	616	135	35	25
27	14	14	13	19	10	14	32	423	582	125	35	25
28	15	16	12	19	11	15	31	512	410	116	34	24
29	17	17	13	20	-----	16	32	634	334	109	39	23
30	18	16	14	21	-----	15	35	676	290	102	47	24
31	17	-----	14	22	-----	16	-----	552	-----	93	41	-----
TOTAL	484	449	451	521	439	348.3	715	7,046	18,155	6,340	1,814	965
MEAN	15.6	15.0	14.5	16.8	15.7	11.2	23.8	227	605	205	58.5	32.2
MAX	20	18	17	22	21	16	35	676	973	300	96	50
MIN	13	12	12	12	10	8.5	15	43	290	93	34	23
AC-FT	960	891	895	1,030	871	691	1,420	13,980	36,010	12,580	3,600	1,910
CAL YR 1970	TOTAL 25,807.2		MEAN 70.7	MAX 637	MIN 8.4	AC-FT 51,190						
WTR YR 1971	TOTAL 37,727.3		MEAN 103	MAX 973	MIN 8.5	AC-FT 74,830						

PEAK DISCHARGE (BASE, 400 CFS)

NOTE.--No gage-height record Feb. 16 to Apr. 6.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-15	2000	6.15	412	6-17	0630	8.32	1,190
5-30	0230	7.35	788				

09213500 BIG SANDY RIVER NEAR FARSON, WYO.

LOCATION (revised).--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 mile upstream from high-water line of Big Sandy Reservoir, 14.5 miles north of Farson, and 24.5 miles upstream from Little Sandy Creek.

DRAINAGE AREA.--322 sq mi.

PERIOD OF RECORD.--October 1914 to September 1917, October 1920 to October 1924, October 1926 to September 1934, April 1953 to current year. 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 (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 mile upstream at different datum. Apr. 17, 1953, to Nov. 11, 1954, water-stage recorder at site 1.5 miles upstream at different datum.

AVERAGE DISCHARGE.--33 years, 86.5 cfs (62,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,010 cfs June 19 (gage height, 7.56 ft); minimum daily, 5.0 cfs Jan. 7.
Period of record: Maximum discharge, 1,460 cfs June 12, 1965 (gage height, 8.08 ft); no flow Jan. 27-31, 1963, may have also reached no flow in previous years during periods of ice effect.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. Diversions for irrigation of about 1,000 acres above station. The Eden Canal, which would bypass the station, has not been used since station was established at present site in November 1954.

REVISIONS.--WSP 1733: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	14	8.6	8.0	21	15	55	34	492	290	98	40
2	13	15	9.0	7.5	23	14	48	42	410	279	92	36
3	13	14	9.1	6.7	21	15	45	58	368	292	86	34
4	13	13	9.6	6.3	20	17	41	70	343	296	81	33
5	12	12	9.9	5.7	19	18	38	76	324	291	77	34
6	13	12	9.0	5.3	18	17	39	72	353	281	88	35
7	15	13	8.2	5.0	17	16	43	65	359	251	86	36
8	16	15	8.0	5.4	16	17	48	67	346	249	79	36
9	18	16	7.6	6.3	15	18	55	86	418	262	74	36
10	20	16	7.2	7.0	15	19	60	86	525	247	82	42
11	21	15	6.6	8.0	16	21	62	95	578	227	86	40
12	22	16	6.4	9.0	17	23	54	115	555	213	75	36
13	20	17	6.4	9.5	18	24	44	151	543	206	68	33
14	22	15	6.8	9.0	18	25	40	209	534	198	60	31
15	20	14	7.2	8.3	19	23	38	264	622	193	56	30
16	22	15	7.6	8.7	19	20	40	306	730	182	52	29
17	19	14	8.1	9.5	19	19	36	334	804	171	50	28
18	18	13	8.4	10	18	18	44	257	888	171	48	29
19	18	13	8.0	11	17	17	47	199	906	195	43	29
20	17	14	7.2	11	16	17	46	166	792	278	40	29
21	18	13	6.9	10	15	19	45	148	745	281	40	29
22	17	14	6.6	10	14	23	49	130	750	243	38	29
23	18	15	6.3	9.8	15	30	50	143	715	219	35	28
24	22	16	6.4	9.5	16	38	49	137	762	206	32	28
25	16	15	6.6	9.0	17	45	46	154	700	188	32	28
26	13	14	6.8	10	16	53	43	213	593	160	32	28
27	11	12	7.0	12	15	60	40	299	552	141	32	28
28	9.6	11	7.4	14	16	67	36	390	517	131	32	28
29	8.3	9.7	7.8	16	-----	53	32	459	390	120	34	28
30	9.0	9.0	8.3	18	-----	45	30	590	331	114	36	30
31	11	-----	8.5	20	-----	57	-----	582	-----	107	40	-----
TOTAL	497.9	414.7	237.5	295.5	486	863	1,343	5,997	16,945	6,682	1,804	960
MEAN	16.1	13.8	7.66	9.53	17.4	27.8	44.8	193	565	216	58.2	32.0
MAX	22	17	9.9	20	23	67	62	590	906	296	98	42
MIN	8.3	9.0	6.3	5.0	14	14	30	34	324	107	32	28
AC-FT	988	823	471	586	964	1,710	2,660	11,900	33,610	13,250	3,580	1,900
CAL YR 1970	TOTAL 24,540.9		MEAN 67.2	MAX 582	MIN 4.2	AC-FT 48,680						
WTR YR 1971	TOTAL 36,525.6		MEAN 100	MAX 906	MIN 5.0	AC-FT 72,450						

PEAK DISCHARGE (BASE, 350 CFS)

NOTE.--No gage-height record Dec. 13 to Mar. 30.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-16	2100	5.91	362	6-19	1100	7.56	1,010
5-30	2200	6.98	675				

GREEN RIVER BASIN

183

09214000 LITTLE SANDY CREEK NEAR ELKHORN, WYO.

LOCATION.--Lat 42°32'02", long 109°12'15", in NE¼NW¼ sec.36, T.30 N., R.104 W., Sublette County, on left bank 500 ft upstream from road bridge, 1.5 miles downstream from Continental Divide ditch diversion, and 7 miles northeast of Elkhorn.

DRAINAGE AREA.--20.9 sq mi.

PERIOD OF RECORD.--July 1939 to September 1971 (discontinued). Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 8,000 ft (estimated on basis of nearby bench mark).

AVERAGE DISCHARGE.--32 years, 21.2 cfs (15,360 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 238 cfs June 24 (gage height, 3.55 ft); minimum daily, 2.5 cfs Oct. 16.

Period of record: Maximum discharge, 425 cfs June 16, 1963 (gage height, 4.52 ft); maximum gage height, 4.66 ft Apr. 29, 1955 (backwater from ice); minimum daily discharge, 0.5 cfs Sept. 13, 18, 1955, but may have been less during periods of ice effect.

REMARKS.--Records fair except those for winter period and period of no gage-height record, which are poor. Transbasin diversion above station by Continental Divide ditch which diverts water from Little Sandy Creek in SE¼NW¼ sec.25, T.30 N., R.104 W., to land along Lander Creek (tributary to Sweetwater River in Platte River basin). The appropriation permit is for 22.71 cfs, but no discharge record is available. Diversion for irrigation of about 680 acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	4.5	6.1	4.5	5.8	3.5	6.0	16	55	87	34	17
2	5.3	4.2	5.8	4.4	5.7	3.3	5.7	18	60	92	35	15
3	5.3	3.9	5.6	3.9	5.3	3.1	5.5	19	66	99	36	12
4	5.1	3.6	5.2	2.8	4.8	3.2	5.6	16	61	95	32	13
5	5.1	3.6	5.4	2.8	4.4	3.4	6.0	15	65	86	33	15
6	4.9	3.6	5.8	3.4	4.0	3.3	6.2	16	68	72	35	16
7	5.3	3.6	6.2	3.9	3.7	3.2	6.5	21	67	82	30	17
8	3.5	3.8	6.4	4.2	3.7	3.2	6.7	27	75	94	29	17
9	3.4	3.9	6.6	4.6	4.0	3.3	6.8	19	95	98	36	14
10	3.5	4.1	6.5	5.0	4.5	3.5	7.2	20	120	91	36	10
11	3.5	4.0	6.4	5.2	4.8	3.8	7.0	23	138	85	30	11
12	4.0	3.8	6.2	5.2	5.3	3.7	6.7	33	139	83	29	12
13	4.0	3.8	6.6	4.8	5.3	3.5	6.3	41	135	85	29	12
14	3.7	4.0	6.8	4.6	5.0	3.3	6.1	46	147	86	28	13
15	2.9	4.5	6.6	4.7	5.0	3.4	6.7	44	178	82	25	14
16	2.5	4.2	6.3	5.0	4.9	3.2	7.0	48	198	75	23	14
17	2.9	3.9	6.0	5.3	4.8	3.1	6.8	30	211	72	21	14
18	2.9	3.8	5.7	5.7	4.9	2.9	6.6	23	213	81	20	14
19	2.9	3.8	5.4	5.7	4.7	2.7	6.3	22	198	111	20	14
20	2.9	4.0	5.3	5.6	4.6	3.0	6.2	19	181	116	19	14
21	2.9	3.9	5.3	5.4	4.4	3.3	6.3	19	182	91	17	14
22	2.9	4.2	5.3	5.2	4.4	3.8	6.4	23	192	84	17	13
23	2.9	4.5	5.3	4.9	4.3	4.3	6.6	22	212	79	17	9.3
24	4.4	5.0	5.4	4.7	3.8	4.8	7.0	27	215	74	16	9.1
25	4.5	5.6	5.3	4.9	3.6	4.7	7.3	34	189	66	16	9.0
26	3.4	6.0	5.2	5.2	3.6	4.6	7.2	40	179	65	16	8.7
27	3.6	5.3	5.0	5.4	3.5	4.9	7.0	48	179	59	16	8.6
28	4.1	5.6	4.9	5.4	3.6	5.3	7.5	57	134	55	16	8.8
29	4.7	6.0	4.8	5.6	-----	5.7	8.7	79	98	44	17	9.2
30	5.2	6.4	4.6	5.8	-----	6.0	11	78	87	44	18	9.5
31	5.0	-----	4.6	6.0	-----	6.2	-----	68	-----	38	17	-----
TOTAL	122.8	131.1	176.6	149.8	126.4	119.2	202.9	1,011	4,137	2,471	763	377.2
MEAN	3.96	4.37	5.70	4.83	4.51	3.85	6.76	32.6	138	79.7	24.6	12.6
MAX	5.6	6.4	6.8	6.0	5.8	6.2	11	79	215	116	36	17
MIN	2.5	3.6	4.6	2.8	3.5	2.7	5.5	15	55	38	16	8.6
AC-FT	244	260	350	297	251	236	402	2,010	8,210	4,900	1,510	748

CAL YR 1970 TOTAL 6,761.5 MEAN 18.5 MAX 152 MIN 1.1 AC-FT 13,410
WTR YR 1971 TOTAL 9,788.0 MEAN 26.8 MAX 215 MIN 2.5 AC-FT 19,410

NOTE.--No gage-height record Jan. 7 to Apr. 16.

GREEN RIVER BASIN

09214500 LITTLE SANDY CREEK ABOVE EDEN, WYO.

LOCATION (revised).--Lat 42°14'12", long 109°18'44", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.11, T.26 N., R.105 W., Sweetwater County, on right bank 1.6 miles upstream from diversion to Eden No. 2 Reservoir, 11 miles northeast of Farson, 14 miles northeast of Eden, and 18 miles upstream from Pacific Creek.

DRAINAGE AREA.--170 sq mi, approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,750 ft (from topographic map).

AVERAGE DISCHARGE.--17 years, 16.9 cfs (12,240 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 208 cfs June 26 (gage height, 7.78 ft); minimum daily, 1.7 cfs Oct. 1, 2.

Period of record: Maximum discharge, 386 cfs June 17, 1963 (gage height, 8.57 ft); maximum gage height, 9.42 ft Apr. 5, 1969 (backwater from ice); no flow at times in most years.

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 1,220 acres, of which about 150 acres lies below station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	6.0	5.2	3.9	5.6	4.7	95	17	67	74	29	13
2	1.7	5.9	4.8	3.7	5.4	5.0	90	19	48	65	24	12
3	1.9	5.8	4.6	3.4	5.0	5.3	80	25	39	60	23	10
4	2.0	6.0	4.3	3.2	4.7	5.0	70	28	41	66	24	11
5	2.0	6.2	4.2	3.0	4.5	4.8	60	29	40	67	26	9.6
6	2.0	6.4	4.0	3.3	4.3	4.5	55	28	40	64	24	9.4
7	2.0	6.4	4.1	3.7	4.4	4.4	57	25	41	55	23	11
8	2.0	6.5	4.3	4.0	4.5	4.7	55	24	52	52	22	11
9	2.0	6.6	4.7	4.5	4.5	5.2	42	30	46	63	20	12
10	2.0	6.6	4.7	4.7	4.7	6.0	35	25	47	71	21	11
11	2.0	6.4	4.5	4.5	5.0	7.2	36	25	65	63	24	9.9
12	2.0	6.8	4.0	4.2	5.4	8.0	23	26	81	57	21	8.1
13	2.1	6.7	3.7	4.0	5.7	8.6	18	30	92	53	19	8.1
14	2.1	6.5	3.8	3.8	6.0	8.4	17	37	93	53	18	8.1
15	2.7	6.4	4.0	4.0	5.6	7.6	18	43	91	51	18	7.9
16	3.3	6.7	4.2	4.3	5.4	7.8	19	44	102	50	17	8.4
17	3.3	6.5	4.2	4.6	5.7	7.4	19	47	120	46	16	9.4
18	3.4	6.2	3.9	5.0	5.5	7.2	19	41	139	45	14	9.9
19	3.4	6.5	3.6	5.4	5.3	7.2	19	35	162	50	12	10
20	3.4	6.8	3.3	5.6	5.0	9.0	19	30	182	66	11	11
21	3.4	6.6	3.4	5.4	4.7	13	20	28	173	87	11	10
22	3.4	6.3	3.5	4.6	4.6	18	21	24	151	79	10	10
23	3.4	6.6	3.4	4.2	5.0	25	23	24	153	61	9.9	10
24	3.4	7.0	3.2	4.0	5.2	35	23	27	162	60	9.9	9.9
25	5.1	6.5	3.4	4.2	5.3	55	23	26	185	54	9.7	8.6
26	5.8	6.0	3.5	4.3	5.1	80	21	27	200	48	9.7	7.9
27	6.0	5.6	3.6	4.2	4.9	100	21	31	191	44	9.7	7.5
28	6.0	5.3	3.7	4.1	4.7	120	20	36	169	41	9.9	7.5
29	6.0	5.0	3.8	4.5	-----	100	18	42	158	37	11	7.5
30	6.3	5.2	3.9	5.0	-----	90	17	49	104	33	19	7.7
31	6.0	-----	4.0	5.4	-----	99	-----	79	-----	30	14	-----
TOTAL	101.8	188.0	123.5	132.7	141.7	863.0	1,053	1,001	3,234	1,745	529.8	287.4
MEAN	3.28	6.27	3.98	4.28	5.06	27.8	35.1	32.3	108	56.3	17.1	9.58
MAX	6.3	7.0	5.2	5.6	6.0	120	95	79	200	87	29	13
MIN	1.7	5.0	3.2	3.0	4.3	4.4	17	17	39	30	9.7	7.5
AC-FT	202	373	245	263	281	1,710	2,090	1,990	6,410	3,460	1,050	570

CAL YR 1970 TOTAL 4,602.36 MEAN 12.6 MAX 128 MIN 0 AC-FT 9,130
 WTR YR 1971 TOTAL 9,400.90 MEAN 25.8 MAX 200 MIN 1.7 AC-FT 18,650

NOTE.--No gage-height record Feb. 3 to Mar. 31.

GREEN RIVER BASIN

185

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 upstream from Eden Canal siphon, 6.3 miles east of Farson, and 7.2 miles upstream from mouth.

DRAINAGE AREA.--500 sq mi, approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,660 ft (from topographic map). Prior to Oct. 30, 1963, at site 1 mile upstream at different datum.

AVERAGE DISCHARGE.--17 years, 4.59 cfs (3,330 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 972 cfs Mar. 27 (gage height, 7.34 ft); no flow for many days.

Period of record: Maximum discharge, 972 cfs Mar. 27, 1971 (gage height, 7.34 ft); no flow for many days each year.

CORRECTIONS.--The maximum discharge for the water year 1970 has been corrected to 56 cfs July 24 (gage height, 3.76 ft), superseding figure published in WRD Wyo 1970.

REMARKS.--Records poor. Some regulation by Pacific No. 2 Reservoir (capacity, 1,400 acre-ft). Diversions for irrigation of about 50 acres above station. Water is imported into basin from Sweetwater River in Platte River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0	0	79	4.6	32	.50		0
2					2.0	0	37	4.4	12	.41		0
3					4.0	0	29	3.8	7.6	.37		0
4					3.0	0	22	3.6	5.3	.33		0
5					1.0	0	18	3.8	5.3	.33		0
6					.50	0	19	4.0	10	.37		0
7					.20	0	34	5.3	8.2	.29		0
8					.10	0	36	5.3	6.6	.25		0
9					0	0	23	4.6	3.8	.25		0
10					0	0	21	3.8	3.4	.22		0
11					0	0	21	3.6	2.9	.13		0
12					0	0	16	3.4	2.4	0		0
13					0	0	9.2	3.6	2.3	0		0
14					0	0	6.3	4.0	1.9	0		0
15					0	0	5.8	3.8	1.6	0		0
16					0	0	5.8	3.0	1.2	0		.34
17					0	0	5.8	1.9	1.1	0		.04
18					0	0	4.6	1.3	1.0	0		0
19					0	0	3.6	1.3	.95	.54		0
20					0	1.0	4.6	1.2	.88	3.0		0
21					0	2.0	5.0	1.0	.88	.76		0
22					0	3.5	6.8	.88	.82	.37		0
23					0	5.0	7.9	.88	.65	.22		0
24					0	10	11	.88	.55	.19		0
25					0	40	6.8	.82	.50	.12		0
26					0	100	8.2	.70	.45	0		0
27					0	450	6.0	.60	.45	0		0
28					0	316	5.6	.45	.55	0		0
29					-----	115	7.6	.41	.55	0		0
30					-----	116	5.3	2.5	.50	0		0
31					-----	252	-----	66	-----	0		-----
TOTAL	0	0	0	0	10.80	1,410.5	470.9	145.42	116.33	8.65	0	.38
MEAN	0	0	0	0	.39	45.5	15.7	4.69	3.88	.28	0	.013
MAX	0	0	0	0	4.0	450	79	66	32	3.0	0	.34
MIN	0	0	0	0	0	0	3.6	.41	.45	0	0	0
AC-FT	0	0	0	0	21	2,800	934	288	231	17	0	.8
CAL YR 1970	TOTAL	345.87	MEAN	.95	MAX	28	MIN	0	AC-FT	686		
WTR YR 1971	TOTAL	2,162.98	MEAN	5.93	MAX	450	MIN	0	AC-FT	4,290		

PEAK DISCHARGE (BASE, 120 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
3-27	1045	7.34	972	3-31	1100	5.49	466

09216000 BIG SANDY RIVER BELOW EDEN, WYO.

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 mile downstream from Simpson Gulch, 8.0 miles southwest of Eden, and 12.5 miles downstream from Little Sandy Creek.

DRAINAGE AREA.--1,610 sq mi, approximately.

PERIOD OF RECORD.--October 1954 to current year. Prior to October 1968, published as Big Sandy Creek below Eden.

GAGE.--Water-stage recorder. Altitude of gage is 6,450 ft (from topographic map).

AVERAGE DISCHARGE.--17 years, 40.6 cfs (29,410 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,440 cfs Mar. 28 (gage height, 6.47 ft, from floodmarks); minimum daily, 8.0 cfs Jan. 7.

Period of record: Maximum discharge, 1,440 cfs Mar. 28, 1971 (gage height, 6.47 ft, from floodmarks); maximum gage height, 7.22 ft Mar. 20, 1956 (backwater from ice); minimum daily discharge, 0.1 cfs Feb. 24, Feb. 26 to Mar. 1, 1960.

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 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	28	29	17	22	29	253	29	53	65	68	57
2	28	27	30	16	20	31	101	28	62	56	68	54
3	27	28	30	14	18	33	75	27	54	52	64	53
4	28	28	31	12	17	33	58	25	43	53	61	51
5	27	30	32	10	16	31	50	27	41	54	70	50
6	28	34	34	9.0	16	30	47	28	51	58	74	48
7	30	33	35	8.0	17	28	57	27	52	53	71	51
8	29	36	30	8.7	19	26	112	28	48	53	65	57
9	30	33	32	9.5	21	26	106	28	46	54	62	53
10	31	34	32	10	23	25	112	28	40	61	64	50
11	30	29	31	11	26	26	130	27	37	62	59	47
12	31	30	28	11	27	26	128	26	38	62	53	49
13	30	29	24	13	29	26	79	25	40	60	51	50
14	29	28	21	12	31	27	57	27	42	57	50	47
15	28	26	21	11	29	27	46	25	46	51	48	45
16	29	27	22	12	27	26	45	26	47	51	49	46
17	28	30	23	13	27	25	48	25	43	51	53	44
18	28	29	21	14	28	23	45	25	45	50	57	44
19	29	28	19	15	27	24	41	26	59	71	53	44
20	28	27	18	16	25	26	41	28	73	70	51	44
21	29	27	17	15	23	29	41	27	95	60	49	43
22	29	26	16	14	22	31	46	27	106	54	48	44
23	28	27	14	15	23	35	48	28	88	53	50	42
24	30	32	13	16	25	90	47	27	79	53	49	42
25	28	35	14	17	27	170	46	24	68	52	48	42
26	27	34	15	18	26	450	37	24	78	53	50	41
27	26	32	16	17	25	630	36	24	93	58	53	40
28	25	28	17	18	27	325	34	23	109	60	53	40
29	27	29	18	20	-----	220	32	25	94	65	59	40
30	29	30	19	22	-----	160	32	35	75	71	62	41
31	29	-----	19	23	-----	300	-----	45	-----	69	59	-----
TOTAL	883	894	721	437.2	663	2,988	2,030	844	1,845	1,792	1,771	1,399
MEAN	28.5	29.8	23.3	14.1	23.7	96.4	67.7	27.2	61.5	57.8	57.1	46.6
MAX	31	36	35	23	31	630	253	45	109	71	74	57
MIN	25	26	13	8.0	16	23	32	23	37	50	48	40
AC-FT	1,750	1,770	1,430	867	1,320	5,930	4,030	1,670	3,660	3,550	3,510	2,770
CAL YR 1970	TOTAL 10,808.0		MEAN 29.6	MAX 114	MIN 11	AC-FT 21,440						
WTR YR 1971	TOTAL 16,267.2		MEAN 44.6	MAX 630	MIN 8.0	AC-FT 32,270						

NOTE.--No gage-height record Mar. 24-30.

187

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 mile downstream from Bitter Creek, 1 mile southeast of town of Green River, and 4 miles upstream from high-water line of Flaming Gorge Reservoir.

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

AVERAGE DISCHARGE.--20 years, 1,655 cfs (1,199,000 acre-ft per year), unadjusted.

Fontenelle Reservoir; minimum daily, 170 cfs Nov. 16, 1955.

Maximum discharge observed, 22,200 cfs June 19, 1918, at site 1.5 miles upstream.

REVISIONS (WATER YEARS).--WSP 1713: 1957.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	375	626	780	625	860	860	1,850	2,160	6,250	11,200	2,840	1,420
2	348	626	780	630	870	860	1,890	2,160	6,570	10,600	2,860	1,340
3	348	625	760	630	860	860	1,700	2,160	7,140	9,360	2,860	1,290
4	556	631	745	620	850	860	1,650	2,160	7,610	9,000	2,730	1,300
5	566	632	735	595	830	880	1,610	2,310	7,630	8,940	2,560	1,300
6	729	638	725	625	830	850	1,590	2,620	7,610	8,860	2,430	1,320
7	1,250	661	730	650	830	820	1,570	2,930	7,550	7,840	2,290	1,370
8	1,440	656	725	660	830	870	1,570	3,130	7,550	6,960	2,310	1,340
9	1,450	651	740	680	830	880	1,610	3,150	7,530	6,150	2,370	1,320
10	1,510	675	740	690	830	880	1,620	3,190	7,550	5,120	2,430	1,300
11	1,490	747	740	660	880	880	1,620	3,440	7,530	4,060	2,730	1,290
12	1,510	764	740	650	910	880	1,650	3,790	7,530	3,170	2,160	1,270
13	1,550	809	745	650	920	880	1,620	3,880	7,580	2,320	1,890	1,260
14	1,450	991	750	660	910	880	1,620	4,230	7,630	1,750	1,990	1,250
15	1,450	1,390	760	655	850	880	1,620	4,850	7,680	1,620	2,010	1,250
16	1,450	1,580	745	650	825	890	1,590	5,020	7,760	1,590	1,990	1,260
17	1,450	1,440	710	645	820	890	1,610	5,020	7,790	1,560	1,940	1,280
18	1,450	1,180	705	665	815	940	1,610	5,190	7,870	1,590	1,890	1,290
19	1,450	850	715	700	805	1,010	1,640	5,840	7,940	1,820	1,850	1,290
20	1,360	780	745	740	760	1,080	1,800	6,100	8,020	1,990	1,810	1,290
21	1,150	750	725	740	780	1,100	1,990	6,120	8,100	2,430	1,780	1,280
22	951	760	680	705	810	1,070	2,080	6,180	8,070	3,170	1,780	1,280
23	774	760	650	680	850	1,160	2,070	6,200	8,160	3,840	1,780	1,260
24	675	760	630	675	860	1,820	2,100	6,120	8,130	4,080	1,770	1,250
25	689	760	635	680	860	2,130	2,070	6,100	8,460	4,590	1,750	1,250
26	689	755	645	740	860	2,400	2,070	6,100	9,470	4,590	1,530	1,260
27	675	750	645	800	860	2,080	2,160	6,050	9,740	4,520	1,390	1,280
28	654	740	640	820	860	2,430	2,190	6,050	9,770	4,020	1,420	1,280
29	682	755	630	820	-----	2,310	2,160	6,050	10,500	3,790	1,440	1,250
30	626	760	615	840	-----	1,950	2,160	6,360	11,100	3,260	1,440	1,240
31	626	-----	620	850	-----	1,840	-----	6,410	-----	2,930	1,430	-----
TOTAL	31,373	24,502	21,930	21,430	23,655	38,120	54,090	141,070	241,820	146,720	63,450	38,660
MEAN	1,012	817	707	691	845	1,230	1,803	4,551	8,061	4,733	2,047	1,289
MAX	1,55											

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 mile downstream from East Fork, 2.5 miles south of Utah-Wyoming State line, and 17 miles south of Robertson.

DRAINAGE AREA.--130 sq mi, 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 above mean sea level (levels by Bureau of Reclamation). Prior to July 29, 1966, water-stage recorder at site 0.5 mile downstream at different datum.

AVERAGE DISCHARGE.--6 years (1938, 1966-71), 170 cfs (123,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,080 cfs June 18 (gage height, 4.36 ft); minimum, 22 cfs Mar. 24-26, 28, but may have been less during other periods of ice effect.

Period of record: Maximum discharge, 2,160 cfs June 6, 1968 (gage height, 4.91 ft); minimum indicated, 13 cfs Feb. 25, 1968.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	54	52	37	39	27	35	112	475	782	172	80
2	53	52	52	36	37	27	37	163	447	728	169	75
3	52	51	51	33	36	27	38	232	452	741	156	82
4	51	50	50	30	35	27	39	257	461	707	206	84
5	51	47	49	29	34	27	40	224	456	667	199	75
6	65	46	49	28	33	27	42	196	480	634	166	71
7	58	46	49	28	33	27	44	196	547	583	166	133
8	58	48	49	28	34	28	47	192	707	565	206	107
9	61	48	48	29	35	28	58	175	782	541	206	82
10	56	47	44	29	35	28	68	196	1,020	508	159	64
11	75	47	43	30	35	29	82	245	889	456	136	71
12	68	47	42	30	36	29	91	311	707	428	139	70
13	66	46	43	30	36	28	104	364	802	423	130	66
14	53	47	44	31	36	27	139	486	1,020	423	119	64
15	55	47	45	33	36	26	159	547	1,350	399	112	63
16	57	48	45	35	36	26	192	541	1,590	385	119	63
17	57	50	45	38	36	25	199	395	1,760	373	112	63
18	55	51	46	39	35	24	169	327	1,730	409	159	61
19	52	51	46	40	35	24	136	294	1,650	404	109	60
20	51	50	45	39	35	24	127	270	1,650	360	114	64
21	51	48	43	39	32	24	112	282	1,560	327	107	61
22	49	47	42	38	30	24	99	319	1,670	319	107	60
23	53	46	41	37	29	24	95	315	1,650	303	102	60
24	52	46	40	38	28	24	89	360	1,580	278	80	58
25	47	47	40	39	28	25	89	480	1,420	249	84	54
26	49	48	40	41	27	28	78	654	1,310	237	82	53
27	52	52	40	42	27	31	76	853	1,200	220	86	53
28	55	53	40	42	27	34	76	940	1,030	196	86	49
29	57	53	39	42	-----	36	76	810	972	196	99	52
30	57	51	39	41	-----	36	84	680	846	192	93	57
31	56	-----	38	40	-----	34	-----	565	-----	182	86	-----
TOTAL	1,726	1,464	1,379	1,091	935	855	2,720	11,981	32,213	13,215	4,066	2,055
MEAN	55.7	48.8	44.5	35.2	33.4	27.6	90.7	386	1,074	426	131	68.5
MAX	75	54	52	42	39	36	199	940	1,760	782	206	133
MIN	47	46	38	28	27	24	35	112	447	182	80	49
AC-FT	3,420	2,900	2,740	2,160	1,850	1,700	5,400	23,760	63,890	26,210	8,060	4,080

CAL YR 1970 TOTAL 56,290 MEAN 154 MAX 1,100 MIN 23 AC-FT 111,700
WTR YR 1971 TOTAL 73,700 MEAN 202 MAX 1,760 MIN 24 AC-FT 146,200

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
5-27	2300	3.40	1,120	6-18	0100	4.36	2,080
6-10	0100	3.42	1,140				

GREEN RIVER BASIN

189

09218500 BLACKS FORK NEAR MILLBURNE, WYO.

LOCATION.--Lat 41°03'26", long 110°34'27", in NE¼SE¼SW¼ sec.35, T.13 N., R.117 W., Uinta County, on right bank 2.3 miles downstream from Meeks Cabin Dam, 4.0 miles north of Utah-Wyoming State line, and 15 miles southwest of Millburne.

DRAINAGE AREA.--156 sq mi.

PERIOD OF RECORD.--July 1939 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 8,370 ft (from topographic map). Prior to Nov. 4, 1948, at site 150 ft upstream at different datum. Nov. 5, 1948, to Sept. 30, 1952, at present site at datum 2.00 ft higher.

AVERAGE DISCHARGE.--32 years, 159 cfs (115,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,400 cfs Apr. 19 (gage height, 5.49 ft); minimum daily, 3.7 cfs Nov. 12, due to regulation by Meeks Cabin Dam.

Period of record: Maximum discharge, 2,530 cfs June 7, 1957, from rating curve extended above 1,500 cfs; maximum gage height, 6.46 ft in gage well, 6.76 ft from floodmarks, June 12, 1965; minimum daily discharge, 3.7 cfs Nov. 12, 1970, due to regulation by Meeks Cabin Dam.

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are poor. Flow completely regulated by Meeks Cabin Reservoir (capacity, 39,600 acre-ft) since June 1971. No diversion above station.

COOPERATION.--Five discharge measurements furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 929: 1940.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	50	8.9	30	57	57	63	25	682	757	190	171
2	60	40	8.8	28	55	63	64	26	544	758	190	170
3	68	30	15	27	52	62	62	27	520	762	149	169
4	50	23	13	25	50	57	61	27	520	762	121	169
5	43	14	10	22	45	53	60	28	520	762	141	171
6	58	7.9	8.4	20	45	51	56	28	520	807	156	170
7	59	5.9	6.8	20	50	52	52	29	520	1,000	157	173
8	60	6.4	7.2	22	53	55	48	29	550	1,110	155	171
9	64	6.7	8.0	23	55	57	45	150	616	1,100	154	170
10	75	6.8	9.1	25	60	63	38	604	664	1,080	153	168
11	67	6.1	11	26	63	67	30	791	682	1,080	153	168
12	60	3.7	13	27	65	65	28	742	688	1,070	153	167
13	63	4.5	17	26	68	61	26	682	688	1,010	153	165
14	62	6.0	21	27	70	56	26	658	714	954	152	137
15	58	6.7	25	27	67	60	26	646	798	871	151	116
16	54	7.5	25	26	65	63	27	658	942	655	151	116
17	62	7.9	24	25	63	60	27	652	1,030	543	150	116
18	50	7.5	24	24	61	64	27	634	1,040	540	172	115
19	48	7.4	23	25	59	67	228	455	1,060	540	186	114
20	50	8.0	22	24	56	71	854	412	1,080	539	185	114
21	54	9.0	21	25	53	73	694	344	1,090	394	184	114
22	53	8.4	22	28	57	73	396	228	1,090	256	185	114
23	45	9.5	24	35	60	71	171	234	1,090	256	184	112
24	45	10	25	60	60	68	26	237	1,100	258	180	112
25	43	11	26	100	55	65	25	336	1,110	258	167	111
26	41	10	26	94	52	63	26	568	1,110	256	170	111
27	39	9.5	27	80	53	61	305	670	1,110	256	171	78
28	44	9.0	28	70	53	60	222	791	1,110	256	171	54
29	50	8.5	29	65	-----	62	24	819	985	255	171	54
30	54	8.0	30	63	-----	65	25	819	804	218	172	56
31	55	-----	31	62	-----	64	-----	812	-----	190	172	-----
TOTAL	1,699	348.9	589.2	1,181	1,602	1,929	3,762	13,161	24,977	19,553	5,099	3,946
MEAN	54.8	11.6	19.0	38.1	57.2	62.2	125	425	833	631	164	132
MAX	75	50	31	100	70	73	854	819	1,110	1,110	190	173
MIN	39	3.7	6.8	20	45	51	24	25	520	190	121	54
AC-FT	3,370	692	1,170	2,340	3,180	3,830	7,460	26,100	49,540	38,780	10,110	7,830

CAL YR 1970 TOTAL 65,627.1 MEAN 180 MAX 1,300 MIN 3.7 AC-FT 130,200
WTR YR 1971 TOTAL 77,847.1 MEAN 213 MAX 1,110 MIN 3.7 AC-FT 154,400

NOTE.--No gage-height record Nov. 13 to Dec. 3, Dec. 13 to Apr. 14.

GREEN RIVER BASIN

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 downstream from bridge, 1 mile upstream from Gilbert Creek, and 9 miles south of Robertson.

DRAINAGE AREA.--53.0 sq mi.

PERIOD OF RECORD.--July 1939 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 8,470 ft (from topographic map). Prior to July 12, 1957, at datum 3.96 ft higher.

AVERAGE DISCHARGE.--32 years, 47.1 cfs (34,120 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 996 cfs June 17 (gage height, 6.38 ft); minimum daily, 5.2 cfs Jan. 5.
Period of record: Maximum discharge, 1,450 cfs June 10, 1965 (gage height, 6.75 ft); no flow part of each day Apr. 17-22, 24, 25, 1950; minimum gage height, 3.26 ft, present datum Apr. 22, 1950.

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

REVISIONS.--WSP 979: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	16	12	6.4	8.3	6.3	6.6	36	148	197	57	33
2	18	15	13	5.8	7.6	6.7	6.4	46	139	188	53	29
3	17	15	12	5.5	7.2	7.0	6.7	64	146	194	49	30
4	17	16	13	5.3	6.6	6.6	7.2	76	142	182	54	31
5	16	17	12	5.2	6.4	6.3	7.5	67	137	172	85	29
6	19	18	12	5.3	6.2	6.4	7.8	58	146	162	63	26
7	20	19	12	5.4	6.5	6.5	8.7	58	162	151	60	31
8	19	18	11	5.7	7.0	6.5	10	59	223	142	80	37
9	19	18	11	6.3	7.5	6.8	12	56	262	142	83	29
10	20	19	10	6.5	8.0	7.3	15	60	390	132	65	25
11	21	18	10	6.5	8.5	7.6	20	65	400	120	57	23
12	21	17	9.6	6.5	8.5	7.3	25	76	252	108	51	22
13	20	15	9.0	6.2	8.6	6.7	30	85	304	108	48	20
14	18	13	8.4	6.0	8.7	6.4	35	118	356	110	45	20
15	17	13	7.5	6.2	8.6	6.5	38	140	522	106	41	18
16	17	14	7.6	6.9	8.3	6.6	49	152	710	103	41	18
17	16	15	8.0	7.5	7.7	6.3	54	107	790	97	41	19
18	16	14	7.5	8.0	7.4	6.2	48	92	758	131	48	19
19	15	14	7.0	8.4	7.3	6.3	32	83	661	150	43	20
20	15	13	6.6	8.6	7.2	6.5	38	80	696	138	41	20
21	15	12	6.5	9.0	6.6	6.5	40	82	654	106	39	20
22	14	11	6.7	8.5	6.5	6.7	34	94	661	97	38	18
23	14	12	7.0	8.0	7.0	7.0	32	92	612	95	38	18
24	13	12	7.3	7.3	7.3	7.4	30	87	546	101	36	18
25	12	13	7.5	6.6	6.8	7.2	30	121	445	83	37	17
26	12	13	7.3	7.0	6.5	7.4	28	163	385	72	37	16
27	13	13	7.5	7.5	6.6	7.1	26	220	348	68	35	16
28	14	12	7.7	8.0	6.5	6.6	25	296	266	63	37	15
29	16	12	7.3	8.0	-----	7.0	25	253	266	60	41	15
30	17	12	7.4	8.2	-----	7.6	28	214	212	58	39	15
31	17	-----	7.6	8.5	-----	7.3	-----	175	-----	55	35	-----
TOTAL	516	439	279.0	214.8	205.9	210.6	754.9	3,375	11,739	3,691	1,517	667
MEAN	16.6	14.6	9.00	6.93	7.35	6.79	25.2	109	391	119	48.9	22.2
MAX	21	19	13	9.0	8.7	7.6	54	296	790	197	85	37
MIN	12	11	6.5	5.2	6.2	6.2	6.4	36	137	55	35	15
AC-FT	1,020	871	553	426	408	418	1,500	6,690	23,280	7,320	3,010	1,320

CAL YR 1970 TOTAL 18,271.1 MEAN 50.1 MAX 445 MIN 3.7 AC-FT 36,240
WTR YR 1971 TOTAL 23,609.2 MEAN 64.7 MAX 790 MIN 5.2 AC-FT 46,830

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
5-28	0400	5.33	332	6-17	0400	6.38	996
6-11	0230	5.62	460				

GREEN RIVER BASIN

191

09220500 WEST FORK OF SMITH FORK NEAR ROBERTSON, WYO.

LOCATION.--Lat 41°01'20", long 110°28'43", in SE 1/4 NW 1/4 sec. 15, T.12 N., R.116 W., Uinta County, Wasatch National Forest, on left bank 0.8 mile downstream from Archie Creek and 11.6 miles southwest of Robertson.

DRAINAGE AREA.--37.2 sq mi.

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 8,615.0 ft above mean sea level. July 13, 1939, to Aug. 16, 1949, at site 75 ft upstream at datum 2.00 ft higher; Aug. 17, 1949, to June 13, 1965, at present site at datum 2.00 ft higher.

AVERAGE DISCHARGE.--32 years, 21.5 cfs (15,580 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 520 cfs May 27 (gage height, 3.34 ft); minimum daily, 1.9 cfs Oct. 5.
Period of record: Maximum discharge, 2,100 cfs June 10, 1965 (gage height, 3.20 ft, in gage well, 3.60 ft, from floodmarks, datum then in use); minimum observed, 0.2 cfs Aug. 13, 1940, Feb. 25, 1941 (discharge measurement).

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

REVISIONS (WATER YEARS).--WSP 929: 1940. WSP 1343, 1733: 1943.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	3.9	3.9	3.0	4.4	3.2	4.5	32	162	42	7.0	3.9
2	2.5	3.7	4.1	2.9	4.0	3.3	4.2	46	186	38	6.7	3.1
3	2.4	3.4	3.9	2.8	3.7	3.4	4.4	70	207	37	6.5	4.3
4	2.3	3.1	4.0	2.6	3.4	3.3	5.0	74	198	34	7.2	4.8
5	1.9	2.9	4.0	2.4	3.2	3.3	6.7	57	186	32	11	4.1
6	3.0	3.2	4.0	2.5	3.1	3.1	9.0	44	186	30	9.4	3.6
7	3.8	3.5	3.9	2.6	3.0	3.1	13	50	216	26	9.0	10
8	4.3	3.8	3.9	2.8	2.9	3.2	17	52	250	25	16	8.2
9	5.3	3.9	3.8	2.9	2.9	3.3	22	50	250	25	16	5.0
10	5.4	3.8	3.8	3.1	3.0	3.4	27	68	254	21	11	3.9
11	5.6	3.8	3.7	3.1	3.2	3.5	34	94	195	20	8.7	3.6
12	6.2	3.8	3.5	3.0	3.3	3.5	37	112	140	17	7.9	3.2
13	7.3	3.6	3.5	2.9	3.4	3.5	42	124	162	15	7.0	3.0
14	4.6	3.3	3.3	2.9	3.5	3.4	44	189	201	15	6.5	2.8
15	3.4	3.3	3.2	3.2	3.5	3.3	48	225	244	15	6.2	2.6
16	3.6	3.5	3.1	3.5	3.3	3.3	57	210	250	14	6.5	3.0
17	3.6	3.7	3.2	3.8	3.2	3.3	56	120	247	15	7.0	3.7
18	3.2	3.8	3.1	4.2	3.1	3.2	42	84	219	24	9.0	3.8
19	3.7	3.7	2.9	4.8	3.1	3.3	30	69	189	31	7.0	3.7
20	3.2	3.5	2.7	5.2	3.0	3.3	26	65	165	26	6.5	4.1
21	3.9	3.3	2.7	5.2	2.9	3.2	23	89	150	18	5.7	4.1
22	3.6	3.1	2.8	4.8	2.8	3.3	20	124	155	16	5.7	3.9
23	3.5	3.2	2.9	4.3	2.9	3.5	20	126	140	15	5.5	3.7
24	3.3	3.5	2.8	4.0	3.1	3.6	20	142	120	14	4.8	3.7
25	3.1	3.8	2.8	3.8	3.0	3.4	21	210	99	12	5.2	3.4
26	3.1	4.2	2.9	3.9	2.9	3.6	18	278	83	10	5.7	3.4
27	3.3	4.0	3.0	4.0	3.0	4.0	16	342	73	9.1	4.6	3.6
28	3.7	3.8	3.1	4.3	3.0	4.5	15	322	61	8.7	6.1	3.6
29	3.9	3.9	3.2	4.5	-----	5.2	18	250	55	7.9	7.3	3.7
30	4.1	3.9	3.2	4.5	-----	5.0	24	204	46	7.6	5.9	4.6
31	4.1	-----	3.2	4.6	-----	4.8	-----	160	-----	7.3	5.0	-----
TOTAL	117.5	107.9	104.1	112.1	89.8	110.3	723.8	4,082	5,089	627.6	233.6	122.1
MEAN	3.79	3.60	3.36	3.62	3.21	3.56	24.1	132	170	20.2	7.54	4.07
MAX	7.3	4.2	4.1	5.2	4.4	5.2	57	342	254	42	16	10
MIN	1.9	2.9	2.7	2.4	2.8	3.1	4.2	32	46	7.3	4.6	2.6
AC-FT	233	214	206	222	178	219	1,440	8,100	10,090	1,240	463	242

CAL YR 1970 TOTAL 8,623.6 MEAN 23.6 MAX 314 MIN 1.9 AC-FT 17,100
WTR YR 1971 TOTAL 11,519.8 MEAN 31.6 MAX 342 MIN 1.9 AC-FT 22,850

PEAK DISCHARGE (BASE, 280 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
5-15	1930	2.86	310	6-7	2130	3.04	382
5-27	2030	3.34	520	6-15	2200	2.97	354

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 downstream from bridge on old U.S. Highway 30S, 8.5 miles downstream from Smiths Fork, and 11 miles northeast of Lyman.

DRAINAGE AREA.--821 sq mi.

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 (from topographic map). Oct. 21, 1937, to Dec. 31, 1957, at site 300 ft downstream, at datum 1.51 ft higher.

AVERAGE DISCHARGE.--29 years, 146 cfs (105,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,850 cfs Apr. 22 (gage height, 8.37 ft); maximum gage height, 10.84 ft Jan. 18 (backwater from ice); minimum daily discharge, 25 cfs Oct. 3, 4.

Period of record: Maximum discharge, 7,960 cfs June 11, 1965 (gage height, 12.68 ft); 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, 39,600 acre-ft) since June 1971, several smaller reservoirs, and diversions for irrigation of about 62,200 acres above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1733: 1947, 1943(M), 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	60	43	43	203	72	181	182	776	359	61	32
2	27	55	38	40	165	76	151	195	612	297	69	26
3	25	57	35	37	56	74	146	202	555	240	62	28
4	25	47	38	35	46	68	140	240	484	190	55	33
5	26	65	44	33	48	69	140	276	474	188	48	32
6	29	72	42	32	52	73	134	291	464	178	48	33
7	49	87	45	36	55	79	160	260	432	148	48	54
8	71	97	50	42	63	86	175	276	404	222	52	81
9	72	87	48	48	74	95	164	284	488	390	52	67
10	73	79	44	55	66	100	156	291	523	394	62	55
11	81	84	41	58	100	120	164	519	668	370	69	44
12	75	72	43	70	110	140	172	709	696	373	61	37
13	69	85	45	89	115	180	164	754	575	370	61	37
14	82	69	43	120	105	200	170	754	535	336	58	34
15	66	53	40	170	54	180	188	808	535	312	52	27
16	58	52	43	270	63	165	188	890	639	264	44	31
17	53	57	40	365	73	172	188	970	804	170	42	30
18	53	52	38	590	64	185	208	812	895	115	39	34
19	52	40	37	350	55	165	228	647	895	89	39	40
20	51	41	35	200	52	150	330	547	885	135	40	40
21	49	50	35	150	52	135	1,060	453	900	267	38	44
22	50	55	38	120	55	175	1,420	354	871	282	36	51
23	47	53	42	120	59	225	1,220	422	830	261	32	51
24	46	51	43	130	63	355	871	453	794	200	31	51
25	45	48	42	135	67	284	531	345	709	125	34	46
26	44	53	40	140	63	248	378	387	668	83	32	40
27	43	55	42	145	60	629	300	511	619	72	29	44
28	42	51	40	150	65	391	408	643	647	61	29	40
29	45	48	41	160	-----	254	285	804	627	58	31	42
30	53	50	43	169	-----	248	172	925	523	62	35	38
31	65	-----	45	196	-----	276	-----	920	-----	66	36	-----
TOTAL	1,594	1,825	1,283	4,298	2,183	5,669	10,192	16,124	19,527	6,677	1,425	1,242
MEAN	51.4	60.8	41.4	139	78.0	183	340	520	651	215	46.0	41.4
MAX	82	97	50	590	203	629	1,420	970	900	394	69	81
MIN	25	40	35	32	46	68	134	182	404	58	29	26
AC-FT	3,160	3,620	2,540	8,530	4,330	11,240	20,220	31,980	38,730	13,240	2,830	2,460
CAL YR 1970	TOTAL 51,697		MEAN 142	MAX 2,000	MIN 11	AC-FT 102,500						
WTR YR 1971	TOTAL 72,039		MEAN 197	MAX 1,420	MIN 25	AC-FT 142,900						

09223000 HAMS FORK BELOW POLE CREEK, NEAR FRONTIER, WYO.
(Formerly published as Hams Fork near Elk Creek ranger station)

LOCATION (revised).--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 miles downstream from Pole Creek, 4.6 miles upstream from Taylor Creek, and 22 miles northwest of Frontier. Prior to Sept. 2, 1971, at site 120 ft upstream.

DRAINAGE AREA.--128 sq mi.

PERIOD OF RECORD.--October 1952 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,455 ft (from topographic map). Prior to Sept. 2, 1971, at site 120 ft upstream at present datum.

AVERAGE DISCHARGE.--19 years, 97.6 cfs (70,710 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,520 cfs May 28 (gage height, 8.10 ft); minimum daily, 3.3 cfs Mar. 5.
Period of record: Maximum discharge, 1,520 cfs May 28, 1971 (gage height, 8.10 ft); minimum daily, 2.0 cfs Mar. 20, 1965.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	27	20	12	7.9	3.7	80	700	1,070	350	63	36
2	18	25	20	11	7.5	3.6	90	810	882	321	62	32
3	16	23	21	9.0	7.0	3.6	100	950	904	302	60	31
4	15	25	22	8.0	6.5	3.4	120	1,050	918	296	58	34
5	17	27	22	7.0	6.0	3.3	140	950	792	278	62	34
6	19	26	24	6.0	5.4	3.5	155	830	855	263	60	32
7	20	26	25	6.0	5.4	4.0	150	750	860	248	56	30
8	20	27	25	6.5	5.6	4.3	160	750	891	232	56	31
9	22	26	24	7.0	6.0	4.5	200	840	936	215	56	30
10	30	27	22	7.5	6.4	5.0	300	900	1,030	195	51	27
11	27	26	20	8.0	6.8	6.0	450	930	1,130	182	47	26
12	27	27	18	7.9	7.1	7.0	510	980	1,060	165	46	24
13	28	27	15	7.5	7.4	8.0	450	1,050	914	155	46	22
14	25	26	13	7.0	7.6	7.5	500	1,100	878	146	44	22
15	23	27	14	6.5	7.4	7.4	600	1,130	932	137	42	22
16	24	28	14	6.8	7.2	7.0	730	1,190	968	130	41	23
17	23	27	14	7.2	7.0	7.0	750	1,100	1,020	124	41	24
18	24	26	13	7.5	6.6	8.0	760	927	1,050	120	38	26
19	24	25	13	7.7	6.2	10	590	737	1,000	128	37	26
20	24	24	12	7.3	5.8	12	450	661	968	114	38	26
21	23	25	11	6.5	5.4	14	410	609	909	112	37	26
22	24	24	10	6.2	5.0	17	475	721	850	104	36	27
23	27	26	10	6.0	4.7	23	450	685	810	99	36	28
24	30	28	10	6.2	4.3	27	475	846	757	95	35	28
25	30	27	10	6.4	4.1	32	500	981	701	86	33	28
26	28	26	11	6.7	3.9	40	450	1,120	645	80	33	28
27	26	24	11	6.9	4.2	45	385	1,300	593	75	32	28
28	27	23	12	7.0	4.0	54	415	1,420	533	72	32	28
29	28	22	12	7.2	-----	64	485	1,420	457	71	37	28
30	30	21	13	7.5	-----	74	600	1,450	390	68	43	28
31	29	-----	14	7.7	-----	83	-----	1,180	-----	66	38	-----
TOTAL	746	768	495	227.7	168.4	591.8	11,930	30,067	25,703	5,029	1,396	835
MEAN	24.1	25.6	16.0	7.35	6.01	19.1	398	970	857	162	45.0	27.8
MAX	30	28	25	12	7.9	83	760	1,450	1,130	350	63	36
MIN	15	21	10	6.0	3.9	3.3	80	609	390	66	32	22
AC-FT	1,480	1,520	982	452	334	1,170	23,660	59,640	50,980	9,980	2,770	1,660
CAL YR 1970	TOTAL 32,247.2	MEAN 88.3	MAX 828	MIN 8.2	AC-FT 63,960							
WTR YR 1971	TOTAL 77,956.9	MEAN 214	MAX 1,450	MIN 3.3	AC-FT 154,600							

PEAK DISCHARGE (BASE, 350 CFS)

NOTE.--No gage-height record Dec. 27 to Mar. 2,
Mar. 5 to May 16, June 17-20.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
a 4-18	Unknown	Unknown	Unknown	5-28	1030	8.10	1,520
a 5-4	Unknown	Unknown	Unknown	6-18	Unknown	7.70	1,200
5-16	1500	7.51	1,220				

a About.

GREEN RIVER BASIN

09223500 HAMS FORK NEAR FRONTIER, WYO.

LOCATION.--Lat 41°51'26", long 110°33'45", in lot 39, NE¼SE¼ sec.27, T.22 N., R.116 W., Lincoln County, on right bank 800 ft upstream from highway bridge, 1.5 miles upstream from Willow Creek, and 3.5 miles northwest of Frontier.

DRAINAGE AREA.--298 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,970 ft (by barometer). May 8 to July 23, 1945, nonrecording gage at highway bridge 800 ft downstream at same datum.

AVERAGE DISCHARGE.--26 years, 147 cfs (106,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,120 cfs May 16 (gage height, 6.10 ft); minimum daily, 14 cfs Jan. 5.
Period of record: Maximum discharge, 2,450 cfs May 19, 1950 (gage height, 6.74 ft); minimum daily, 3.6 cfs Apr. 26, 1961.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. Flow regulated by Lake Viva Naughton (capacity, 42,400 acre-ft) since May 1961 and Kemmerer Reservoir (capacity, 1,058 acre-ft). Diversions above station for irrigation of about 5,050 acres, of which about 90 acres lies below station. Water is pumped from river just upstream from station for use at Naughton powerplant.

REVISIONS (WATER YEARS).--WSP 1633: 1958.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	24	30	22	31	16	170	685	1,400	744	84	74
2	23	23	28	19	28	17	180	755	1,080	799	84	70
3	26	22	29	17	25	18	186	1,060	904	532	83	70
4	27	23	31	16	23	16	183	1,180	1,040	343	80	74
5	27	25	29	14	20	15	191	1,200	1,020	307	81	74
6	29	25	28	15	18	16	196	1,230	766	293	81	72
7	27	25	29	16	18	18	225	1,290	555	276	80	74
8	25	24	31	16	19	20	252	1,350	383	279	80	75
9	26	23	29	18	21	24	286	1,360	438	251	81	74
10	28	22	27	19	23	30	324	1,460	788	227	83	70
11	24	21	24	20	25	35	321	1,500	1,350	227	83	70
12	24	22	22	22	26	40	332	1,550	1,530	224	81	70
13	23	22	20	23	28	38	339	1,750	1,600	218	77	63
14	23	21	20	22	29	35	399	2,040	1,600	215	75	54
15	24	20	21	21	30	33	550	2,060	1,450	193	75	51
16	23	22	22	22	28	35	711	2,040	1,220	180	75	51
17	23	24	21	24	25	35	772	1,930	1,010	178	77	51
18	23	24	20	27	23	33	931	1,990	1,200	180	77	51
19	23	23	19	29	21	35	942	1,620	1,310	188	77	51
20	23	25	18	32	19	45	909	1,560	1,310	130	78	51
21	24	28	19	31	17	60	887	1,720	1,310	114	75	54
22	24	31	20	29	16	80	876	1,690	1,300	94	70	54
23	24	35	20	28	17	110	848	1,700	1,190	89	70	53
24	23	32	21	29	18	140	854	1,650	871	91	68	51
25	22	28	22	30	19	170	870	1,610	625	91	70	51
26	22	26	23	33	19	160	882	1,350	865	88	72	51
27	21	25	23	32	19	150	860	1,430	1,010	88	72	51
28	22	27	22	31	17	170	816	1,330	670	86	74	51
29	24	30	23	30	-----	190	810	1,160	487	81	77	50
30	26	31	24	31	-----	170	675	1,190	528	83	81	50
31	26	-----	24	33	-----	160	-----	1,370	-----	84	78	-----
TOTAL	753	753	739	751	622	2,114	16,777	45,810	30,810	6,973	2,399	1,806
MEAN	24.3	25.1	23.8	24.2	22.2	68.2	559	1,478	1,027	225	77.4	60.2
MAX	29	35	31	33	31	190	942	2,060	1,600	799	84	75
MIN	21	20	18	14	16	15	170	685	383	81	68	50
AC-FT	1,490	1,490	1,470	1,490	1,230	4,190	33,280	90,860	61,110	13,830	4,760	3,580
CAL YR 1970	TOTAL	36,766.3	MEAN	101	MAX	898	MIN	8.6	AC-FT	72,930		
WTR YR 1971	TOTAL	110,307.0	MEAN	302	MAX	2,060	MIN	14	AC-FT	218,800		

NOTE.--No gage-height record Nov. 5 to Dec. 5.

GREEN RIVER BASIN

195

09224700 BLACKS FORK NEAR LITTLE AMERICA, WYO.

LOCATION (revised).--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 upstream from bridge on U.S. Highway 30, 4.2 miles upstream from Meadow Springs Wash, and 8.5 miles east of Little America.

DRAINAGE AREA.--3,100 sq mi, approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 6,127.66 ft above mean sea level.

AVERAGE DISCHARGE.--9 years, 349 cfs (252,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,460 cfs May 18 (gage height, 7.65 ft); maximum gage height, 9.36 ft Jan. 20 (back-water from ice); minimum daily discharge, 29 cfs Oct. 4, 5.

Period of record: Maximum discharge, 9,980 cfs June 13, 1965 (gage height, 10.90 ft); 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, 39,600 acre-ft) since June 1971, Viva Naughton Reservoir (capacity, 42,400 acre-ft), numerous smaller reservoirs, and diversions for irrigation of about 76,100 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	86	66	57	750	125	1,080	1,240	2,350	1,080	124	34
2	31	120	70	53	800	130	880	1,150	2,140	950	124	38
3	31	109	76	48	700	140	668	1,150	2,040	964	124	41
4	29	94	74	43	510	130	576	1,230	2,030	971	124	43
5	29	89	78	40	400	117	550	1,380	1,690	831	117	41
6	36	108	87	38	350	120	530	1,560	1,590	626	117	56
7	43	127	80	38	350	130	530	1,600	1,570	565	114	63
8	41	130	85	39	380	140	609	1,550	1,340	500	108	77
9	58	137	90	41	400	150	740	1,630	1,140	440	104	83
10	80	144	90	41	370	155	796	1,660	1,110	565	101	98
11	104	137	80	45	300	160	852	1,720	1,140	620	92	98
12	114	127	75	50	250	170	957	2,070	1,500	570	89	92
13	108	130	70	60	250	170	971	2,300	1,730	545	92	74
14	95	120	65	70	240	180	859	2,440	1,730	540	83	63
15	86	95	62	80	230	250	824	2,560	1,860	510	80	58
16	92	88	62	100	220	400	873	2,820	2,030	470	77	58
17	89	80	60	130	210	495	992	3,220	2,220	455	68	53
18	83	86	55	250	190	425	1,150	3,320	2,390	392	58	50
19	89	86	50	500	180	410	1,230	3,200	2,230	348	56	56
20	80	76	50	1,200	170	379	1,350	3,010	2,050	312	53	58
21	74	83	55	1,100	150	460	1,650	2,860	2,070	348	53	68
22	74	78	57	1,000	140	402	2,360	2,510	2,120	361	50	83
23	74	86	60	900	140	592	2,820	2,300	2,080	410	43	83
24	77	94	60	800	150	1,160	2,240	2,460	2,020	410	41	101
25	80	105	56	700	160	1,330	1,960	2,470	1,990	356	41	98
26	74	110	53	660	140	1,120	1,680	2,350	1,690	272	41	98
27	68	100	56	700	130	1,060	1,550	2,360	1,330	224	41	95
28	65	90	53	670	120	1,550	1,480	2,480	1,350	179	40	89
29	59	80	55	670	-----	1,160	1,530	2,530	1,460	158	40	83
30	52	73	58	680	-----	908	1,380	2,620	1,360	144	40	83
31	66	-----	60	690	-----	852	-----	2,670	-----	134	34	-----
TOTAL	2,112	3,068	2,048	11,493	8,380	14,970	35,667	68,420	53,350	15,250	2,369	2,115
MEAN	68.1	102	66.1	371	299	483	1,189	2,207	1,778	492	76.4	70.5
MAX	114	144	90	1,200	800	1,550	2,820	3,320	2,390	1,080	124	101
MIN	29	73	50	38	120	117	530	1,150	1,110	134	34	34
AC-FT	4,190	6,090	4,060	22,800	16,620	29,690	70,750	135,700	105,800	30,250	4,700	4,200
CAL YR 1970	TOTAL	91,821.1	MEAN	252	MAX	2,870	MIN	8.0	AC-FT	182,100		
WTR YR 1971	TOTAL	219,242.0	MEAN	601	MAX	3,320	MIN	29	AC-FT	434,900		

GREEN RIVER BASIN

09226000 HENRYS FORK NEAR LONETREE, WYO.

LOCATION.--Lat 41°00'23", long 110°16'13", in NE¼SE¼NW¼ sec.21, T.12 N., R.14 W., Uinta County, on right bank 0.6 mile downstream from Wasatch National Forest boundary, 1 mile downstream from West Fork, 1.5 miles downstream from Utah-Wyoming State line, and 7 miles southwest of Lonetree.

DRAINAGE AREA.--56 sq mi, approximately.

PERIOD OF RECORD.--October 1942 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 8,350 ft (from topographic map). Prior to Aug. 12, 1953, at site 0.5 mile upstream at different datum.

AVERAGE DISCHARGE.--29 years, 40.8 cfs (29,560 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 980 cfs June 22 (gage height, 5.40 ft, from floodmark); minimum daily, 5.8 cfs Jan. 5. Period of record: Maximum discharge, 2,010 cfs June 10, 1965 (gage height, 5.70 ft in gage well, 6.30 ft from floodmarks), on basis of slope-area measurement of peak flow; minimum daily, 1.8 cfs Jan. 12, 19, 26, 27, 1963, but may have been less on individual days during periods of ice effect or no gage-height record.

REMARKS.--Records poor. One diversion in Utah above station for irrigation of land below station. Water-quality records for the current year are published in Part 2 of this report. Henrys Fork ditch bypasses the station; result of discharge measurement, in cubic feet per second, is given below:

June 4 8.81

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	12	10	7.6	12	8.8	9.7	29	140	150	39	18
2	11	11	9.8	6.7	11	9.6	9.1	37	130	140	37	17
3	10	11	10	6.3	11	9.8	9.5	51	135	145	36	17
4	10	12	9.9	6.1	10	9.2	10	59	140	138	42	18
5	10	13	9.9	5.8	9.2	8.8	11	51	130	130	57	18
6	11	13	10	6.0	9.0	9.0	11	46	140	120	42	17
7	11	14	9.9	6.1	9.0	9.1	12	45	160	115	39	20
8	10	14	9.5	6.5	9.2	9.2	13	46	200	108	48	23
9	13	14	9.3	7.0	10	9.5	15	44	250	105	50	19
10	13	14	8.7	7.4	11	10	17	47	310	98	39	17
11	14	14	8.4	7.2	12	11	20	52	325	92	34	17
12	18	13	7.9	7.4	12	10	22	59	225	86	32	16
13	17	12	7.6	7.0	13	9.4	26	67	250	83	31	16
14	16	11	7.0	6.8	13	9.0	29	91	285	91	29	15
15	15	10	6.3	7.2	12	9.1	32	110	400	93	28	14
16	14	10	6.4	7.7	12	9.2	38	120	525	84	27	15
17	14	11	6.6	8.5	11	8.9	42	91	580	82	29	15
18	13	12	6.2	9.0	11	8.7	36	78	540	124	34	15
19	13	12	5.9	10	10	8.9	26	71	490	138	28	15
20	12	11	6.4	11	10	9.3	30	68	510	110	25	16
21	12	10	6.9	12	9.3	9.0	31	69	470	86	23	15
22	11	9.3	7.2	11	9.1	9.1	27	79	490	80	22	14
23	11	9.5	7.2	10	9.8	9.7	25	78	450	82	22	14
24	10	10	7.7	9.2	10	9.9	24	75	360	82	20	13
25	9.1	11	8.4	8.4	9.5	10	23	105	310	67	20	13
26	9.1	11	8.3	8.8	9.1	11	22	140	260	60	21	12
27	10	11	8.7	9.4	9.3	11	21	230	230	56	20	12
28	11	11	8.9	10	9.1	12	20	260	190	51	20	11
29	12	10	8.3	11	-----	12	20	230	180	48	23	11
30	13	9.8	8.4	12	-----	11	22	200	165	44	21	12
31	13	-----	8.8	12	-----	11	-----	170	-----	43	19	-----
TOTAL	377.2	346.6	254.5	261.1	292.6	302.2	653.3	2,898	8,970	2,931	957	465
MEAN	12.2	11.6	8.21	8.42	10.5	9.75	21.8	93.5	299	94.5	30.9	15.5
MAX	18	14	10	12	13	12	42	260	580	150	57	23
MIN	9.1	9.3	5.9	5.8	9.0	8.7	9.1	29	130	43	19	11
AC-FT	748	687	505	518	580	599	1,300	5,750	17,790	5,810	1,900	922
CAL YR 1970	TOTAL 12,100.5	MEAN 33.2	MAX 413	MIN 4.2	AC-FT 24,000							
WTR YR 1971	TOTAL 18,708.5	MEAN 51.3	MAX 580	MIN 5.8	AC-FT 37,110							

PEAK DISCHARGE (BASE, 300 CFS)

NOTE.--No gage-height record Oct. 13 to July 13.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-27	1800	a4.75	500	6-22	1730	a5.40	980

a From floodmark.

GREEN RIVER BASIN

197

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 mile west of forest boundary and 6.5 miles southwest of Burntfork.

DRAINAGE AREA.--52.8 sq mi.

PERIOD OF RECORD.--April 1943 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 8,430 ft (from topographic map). Prior to June 10, 1965, water-stage recorder at site 0.5 mile downstream at different datum. June 10 to Oct. 5, 1965, water-stage recorder at site 400 ft downstream at different datum.

AVERAGE DISCHARGE.--28 years, 31.1 cfs (22,530 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 422 cfs June 17 (gage height, 3.49 ft); minimum daily, 3.3 cfs Apr. 2.
Period of record: Maximum discharge, 3,200 cfs June 10, 1965 (gage height, not determined), from slope-area measurement of peak flow; minimum daily, 0.65 cfs Mar. 31, 1967.

REMARKS.--Records fair except those for winter period and period of no gage-height record, which are poor. Flow is partially regulated by Island Lake (capacity, 797 acre-ft) and Beaver Meadows Reservoir (capacity, 1,722 acre-ft). Diversion out of basin above station into Hoop Lake (capacity, 3,920 acre-ft).

REVISIONS (WATER YEARS).--WSP 1243: 1944.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	6.7	7.1	6.4	5.7	5.5	3.6	9.0	105	118	31	18
2	18	6.3	7.5	6.1	5.6	5.5	3.3	13	112	115	29	18
3	18	5.8	8.0	5.6	5.4	5.5	3.8	21	118	120	28	20
4	17	5.9	7.7	5.3	5.2	5.5	4.5	24	110	110	31	21
5	16	6.2	7.7	5.0	5.1	5.5	5.0	17	114	102	41	19
6	18	6.3	7.7	5.3	5.0	5.5	5.5	16	129	97	35	18
7	19	6.5	7.7	5.5	5.2	5.0	5.2	14	159	93	33	23
8	19	7.0	7.7	5.7	5.5	4.8	4.8	13	188	90	37	24
9	19	7.2	7.4	6.1	5.7	5.0	4.6	13	192	84	38	19
10	19	7.4	7.0	6.3	5.7	5.1	4.9	14	250	80	33	18
11	19	7.4	6.7	6.6	5.7	5.1	5.6	13	230	75	30	17
12	20	7.0	6.5	6.6	5.7	5.1	6.4	19	188	71	29	17
13	19	7.0	6.2	6.3	5.7	5.1	6.0	26	205	68	28	16
14	14	7.5	6.0	6.6	5.7	5.0	6.4	42	230	66	26	16
15	13	7.7	6.2	7.2	5.5	4.8	7.6	53	307	63	26	15
16	12	7.5	6.6	6.9	5.5	4.3	9.0	57	304	60	25	15
17	11	7.1	6.5	6.9	5.5	4.2	10	42	307	64	29	16
18	10	6.6	6.2	6.9	5.2	4.1	8.7	32	292	74	27	16
19	9.5	6.8	6.1	7.2	4.8	4.3	7.2	26	280	85	26	16
20	9.4	7.0	5.8	6.9	4.7	4.5	7.0	28	241	77	25	16
21	9.3	6.8	6.2	6.0	4.5	4.8	7.7	36	222	70	24	16
22	9.1	6.5	6.5	5.5	4.5	5.2	8.3	46	265	63	23	16
23	8.4	6.7	6.6	5.0	4.7	5.0	7.7	42	268	58	22	16
24	7.6	6.9	6.8	5.2	5.0	5.0	7.0	41	259	55	21	16
25	7.2	6.7	7.0	5.6	4.8	4.6	6.2	68	240	48	21	15
26	6.9	6.6	7.2	5.9	4.6	4.1	5.5	91	220	43	21	14
27	6.7	6.4	7.2	6.2	4.7	3.9	5.1	138	200	39	21	14
28	6.8	5.9	7.2	6.0	5.0	4.0	5.0	147	170	36	20	13
29	6.9	6.3	6.9	5.8	-----	4.2	5.8	127	142	33	21	13
30	7.3	6.7	6.9	5.8	-----	4.1	6.8	112	125	31	20	13
31	7.4	-----	6.8	5.8	-----	3.8	-----	114	-----	30	19	-----
TOTAL	401.5	202.4	213.6	188.2	145.9	148.1	184.2	1,454.0	6,172	2,218	840	504
MEAN	13.0	6.75	6.89	6.07	5.21	4.78	6.14	46.9	206	71.5	27.1	16.8
MAX	20	7.7	8.0	7.2	5.7	5.5	10	147	307	120	41	24
MIN	6.7	5.8	5.8	5.0	4.5	3.8	3.3	9.0	105	30	19	13
AC-FT	796	401	424	373	289	294	365	2,880	12,240	4,400	1,670	1,000

CAL YR 1970 TOTAL 11,413.8 MEAN 31.3 MAX 153 MIN 1.2 AC-FT 22,640
WTR YR 1971 TOTAL 12,671.9 MEAN 34.7 MAX 307 MIN 3.3 AC-FT 25,130

NOTE.--No gage-height record June 25 to Aug. 10.

LOCATION.--Lat 41°00'45", long 109°40'20", in NW¼ sec.23, T.12 N., R.109 W., Sweetwater County, Wyoming, on right bank 0.8 mile north of Wyoming-Utah State line, 1.3 miles upstream from normal high-water line of Flaming Gorge Reservoir, 1.5 miles northwest of Linwood, and 3 miles northeast of Manila, Utah.

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

AVERAGE DISCHARGE.--43 years, 81.3 cfs (58,900 acre-ft per year).

REMARKS.--Records poor. Peoples Irrigation Canal diverts 5.9 miles 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. WRD Wyo. 1968: 1966-67.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	87	72	51	76	35	73	110	401	286	43	8.2
2	43	82	74	48	65	35	62	120	306	245	44	6.1
3	43	74	72	43	58	38	67	132	310	221	38	6.4
4	43	67	68	38	55	38	67	144	266	215	32	6.1
5	43	81	70	35	51	35	66	154	233	210	37	6.4
6	46	90	76	32	60	33	76	151	248	202	43	5.7
7	56	95	80	30	70	35	82	156	248	178	37	8.2
8	62	94	83	32	80	40	73	180	266	154	32	12
9	68	85	83	33	80	45	79	156	389	128	32	20
10	75	95	80	33	84	50	79	165	540	108	34	18
11	82	70	80	34	90	58	80	144	662	94	32	22
12	75	73	77	35	94	67	88	136	615	82	25	21
13	78	78	74	40	94	69	84	151	515	74	22	20
14	79	47	67	45	90	66	87	165	535	70	18	18
15	77	48	63	50	84	70	87	168	794	72	17	17
16	75	74	55	80	76	76	88	188	1,110	69	15	17
17	77	72	56	120	66	70	90	212	1,220	65	14	18
18	76	65	57	190	60	67	90	185	1,230	90	12	21
19	76	69	54	300	57	74	120	165	1,180	140	12	22
20	78	67	50	270	50	80	130	147	1,060	147	6.1	23
21	74	85	48	200	43	84	126	142	992	393	6.1	23
22	82	91	47	150	37	100	202	128	1,020	172	5.7	23
23	87	85	48	130	37	150	254	144	1,090	163	6.1	20
24	84	95	50	130	39	210	198	170	1,030	160	5.7	20
25	86	127	53	120	43	330	192	160	902	134	5.7	18
26	70	112	53	130	44	417	160	165	605	90	6.4	17
27	64	86	51	130	40	575	144	190	466	79	6.8	18
28	62	63	53	125	37	369	134	296	397	62	9.0	18
29	70	65	54	115	-----	338	132	365	357	49	9.0	18
30	80	67	55	100	-----	254	130	671	334	44	8.2	21
31	86	-----	56	86	-----	120	-----	590	-----	39	7.8	-----
TOTAL	2,139	2,389	1,959	2,955	1,760	4,028	3,340	6,150	19,321	4,235	621.6	492.1
MEAN	69.0	79.6	63.2	95.3	62.9	130	111	198	644	137	20.1	16.4
MAX	87	127	83	300	94	575	254	671	1,230	393	44	23
MIN	42	47	47	30	37	33	62	110	233	39	5.7	5.7
AC-FT	4,240	4,740	3,890	5,860	3,490	7,990	6,620	12,200	38,320	8,400	1,230	976
WAL YR 1970	TCTAL 32,787.0	MEAN 89.8	MAX 800	MIN 17	AC-FT 65,030							
CAL YR 1971	TCTAL 49,389.7	MEAN 135	MAX 1,230	MIN 5.7	AC-FT 97,960							

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 miles southwest of Dutch John, and 4 miles northeast of Greendale.

DRAINAGE AREA.--15,100 sq mi, 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 upstream from face of dam.

EXTREMES.--Current year: Maximum contents observed, 3,046,000 acre-ft Aug. 4 (elevation, 6,021.93 ft); minimum observed, 1,748,000 acre-ft Jan. 12 (elevation, 5,978.74 ft).

Period of record: Maximum contents observed, 3,046,000 acre-ft Aug. 4, 1971 (elevation, 6,021.93 ft); minimum, 582,900 acre-ft, 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, consisting of the following: Dead storage, 39,700 acre-ft below elevation 5,740 ft; inactive storage, 233,500 acre-ft between elevations 5,740 and 5,871 ft; usable contents, 3,516,000 acre-ft between elevations 5,871 and 6,040 ft (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)

5,975	1,658,000	6,010	2,639,000
5,980	1,780,000	6,020	2,977,000
5,990	2,042,000	6,022	3,048,000
6,000	2,327,000		

CONTENTS, IN THOUSANDS OF ACRE-Feet, AT 2400, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,789	1,802	1,794	1,761	1,780	1,807	1,878	1,992	2,350	2,871	3,043	2,999
2	1,786	1,802	1,793	1,761	1,783	1,807	1,882	1,998	2,366	2,889	3,045	2,995
3	1,786	1,802	1,792	1,760	1,787	1,807	1,885	2,003	2,383	2,905	3,045	2,993
4	1,785	1,801	1,792	1,757	1,789	1,808	1,887	2,010	2,399	2,922	3,046	2,990
5	1,784	1,801	1,791	1,755	1,790	1,808	1,888	2,016	2,416	2,936	3,045	2,988
6	1,785	1,801	1,791	1,753	1,790	1,809	1,888	2,023	2,431	2,953	3,044	2,985
7	1,786	1,802	1,790	1,751	1,790	1,809	1,889	2,029	2,446	2,966	3,044	2,984
8	1,786	1,802	1,790	1,749	1,789	1,810	1,890	2,038	2,463	2,978	3,044	2,982
9	1,787	1,801	1,790	1,745	1,790	1,811	1,891	2,046	2,478	2,986	3,042	2,979
10	1,788	1,801	1,790	1,750	1,792	1,811	1,893	2,054	2,493	2,995	3,042	2,977
11	1,789	1,800	1,789	1,749	1,793	1,812	1,896	2,060	2,509	3,000	3,043	2,974
12	1,791	1,800	1,788	1,748	1,793	1,813	1,899	2,068	2,526	3,003	3,041	2,971
13	1,793	1,800	1,788	1,749	1,795	1,814	1,901	2,078	2,542	3,005	3,039	2,967
14	1,793	1,800	1,786	1,749	1,795	1,815	1,902	2,089	2,559	3,005	3,037	2,965
15	1,795	1,800	1,784	1,749	1,797	1,816	1,904	2,101	2,575	3,004	3,036	2,962
16	1,796	1,801	1,781	1,745	1,798	1,818	1,904	2,115	2,594	3,004	3,035	2,959
17	1,797	1,801	1,781	1,751	1,800	1,819	1,905	2,129	2,613	3,003	3,034	2,956
18	1,799	1,802	1,780	1,755	1,802	1,821	1,910	2,145	2,633	3,003	3,031	2,952
19	1,800	1,800	1,778	1,757	1,804	1,821	1,915	2,160	2,652	3,003	3,029	2,950
20	1,801	1,799	1,777	1,760	1,805	1,822	1,919	2,177	2,671	3,001	3,027	2,949
21	1,802	1,799	1,775	1,763	1,805	1,823	1,925	2,193	2,689	3,003	3,025	2,947
22	1,804	1,798	1,773	1,767	1,806	1,825	1,935	2,208	2,707	3,005	3,023	2,945
23	1,805	1,797	1,771	1,768	1,807	1,827	1,941	2,221	2,725	3,008	3,021	2,943
24	1,805	1,797	1,769	1,768	1,807	1,831	1,950	2,234	2,741	3,014	3,018	2,942
25	1,805	1,796	1,768	1,769	1,808	1,837	1,959	2,245	2,758	3,021	3,016	2,943
26	1,805	1,796	1,768	1,769	1,807	1,846	1,966	2,256	2,777	3,026	3,013	2,940
27	1,804	1,796	1,767	1,770	1,807	1,853	1,970	2,270	2,795	3,031	3,011	2,937
28	1,803	1,795	1,765	1,771	1,807	1,861	1,974	2,284	2,812	3,036	3,009	2,934
29	1,803	1,795	1,764	1,772	-----	1,867	1,981	2,299	2,830	3,038	3,007	2,933
30	1,802	1,795	1,762	1,774	-----	1,871	1,986	2,318	2,850	3,041	3,004	2,931
31	1,802	-----	1,761	1,777	-----	1,874	-----	2,337	-----	3,042	3,001	-----
MAX	1,805	1,802	1,794	1,777	1,808	1,874	1,986	2,337	2,850	3,042	3,046	2,999
MIN	1,784	1,795	1,761	1,748	1,780	1,807	1,878	1,992	2,350	2,871	3,001	2,931
(+)	5,980.90	5,980.61	5,979.25	5,979.88	5,981.09	5,983.72	5,987.94	6,000.32	6,016.35	6,021.83	6,020.67	6,018.68
(+)	+11	-7	-34	+16	+30	+67	+112	+351	+513	+192	-41	-70

CAL YR 1970..... + +196

WTR YR 1971..... + +1,140

+ Elevation, in feet, at end of month.

+ Change in contents, in thousands of acre-feet.

GREEN RIVER BASIN

201

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 mile downstream from Spring Creek and 12 miles east of Slater.

DRAINAGE AREA.--285 sq mi.

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 above mean sea level.

AVERAGE DISCHARGE.--26 years, 220 cfs (159,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,680 cfs May 30 (gage height, 7.72 ft); minimum daily, 26 cfs, Feb. 21.
Period of record: Maximum discharge, 3,230 cfs June 7, 1957 (gage height, 8.27 ft); minimum daily, 8.6 cfs Sept. 10, 1944.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 2,000 acres above station.

REVISIONS (WATER YEARS).--WSP 1733: 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	42	45	36	59	32	89	848	1,750	806	58	29
2	28	33	40	37	55	32	79	1,140	1,650	694	57	27
3	27	36	40	38	51	31	72	1,400	1,680	644	57	28
4	27	30	40	39	42	30	61	1,540	1,670	602	55	44
5	28	39	43	39	45	29	60	1,330	1,540	550	60	53
6	44	45	47	40	37	29	68	1,130	1,550	490	49	50
7	99	50	49	40	34	30	81	1,140	1,520	465	41	40
8	57	53	50	41	37	32	97	1,130	1,660	450	37	72
9	57	46	50	40	35	33	129	1,060	1,740	420	40	50
10	58	46	46	39	35	35	198	918	1,870	375	42	39
11	68	46	45	40	35	36	274	904	1,790	335	37	34
12	65	48	42	44	34	36	306	1,200	1,810	292	36	30
13	78	45	42	42	33	35	390	1,450	1,880	227	36	29
14	69	40	55	41	33	34	480	1,890	1,960	208	36	28
15	51	28	50	44	32	35	596	2,040	2,050	186	34	28
16	49	58	45	50	32	35	715	2,020	2,100	165	30	28
17	45	46	43	55	31	35	813	1,790	2,140	148	30	30
18	45	41	43	58	29	36	799	1,370	2,110	138	30	30
19	49	41	41	60	28	38	708	1,200	1,990	127	30	30
20	50	46	40	58	28	40	584	1,040	1,900	120	28	36
21	58	44	40	56	26	45	530	1,030	1,830	114	28	36
22	60	39	39	54	28	49	490	1,200	1,780	122	28	38
23	61	44	37	52	30	51	490	1,150	1,700	118	28	39
24	60	46	37	55	31	51	578	1,010	1,630	118	29	36
25	54	57	36	52	30	50	694	1,140	1,520	94	28	33
26	53	54	34	51	29	50	729	1,350	1,370	89	28	31
27	30	51	34	50	30	78	572	1,640	1,260	78	38	30
28	46	48	35	48	32	84	500	1,950	1,150	74	40	30
29	50	50	35	50	-----	85	520	2,190	1,040	68	39	30
30	45	48	35	53	-----	89	596	2,410	918	67	35	29
31	40	-----	36	57	-----	97	-----	1,990	-----	62	32	-----
TOTAL	1,579	1,340	1,294	1,459	981	1,402	12,298	43,600	50,558	8,446	1,176	1,067
MEAN	50.9	44.7	41.7	47.1	35.0	45.2	410	1,406	1,685	272	37.9	35.6
MAX	99	58	55	60	59	97	813	2,410	2,140	806	60	72
MIN	27	28	34	36	26	29	60	848	918	62	28	27
AC-FT	3,130	2,660	2,570	2,890	1,950	2,780	24,390	86,480	100,300	16,750	2,330	2,120

CAL YR 1970 TOTAL 105,454 MEAN 289 MAX 2,410 MIN 25 AC-FT 209,200
WTR YR 1971 TOTAL 125,200 MEAN 343 MAX 2,410 MIN 26 AC-FT 248,300

PEAK DISCHARGE (BASE, 1,600 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5- 3	2100	6.90	1,880	5-30	0400	7.72	2,680
5-14	2300	7.39	2,390				

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 downstream from highway bridge, 1.0 mile upstream from mouth, and 1.5 miles south of Slater.

DRAINAGE AREA.--161 sq mi.

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 (from river-profile map). May 28, 1910, to May 25, 1912, nonrecording gage at site 1.5 miles upstream at different datum. July 9, 1931, to May 6, 1932, nonrecording gage at site 0.2 mile downstream at different datum.

AVERAGE DISCHARGE.--40 years (1931-71), 72.5 cfs (52,530 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 780 cfs May 14 (gage height, 8.15 ft), from rating curve extended above 800 cfs; minimum daily, 1.5 cfs Sept. 1-3.

Period of record: Maximum discharge observed, 1,700 cfs May 19, 1912 (gage height, 5.00 ft, 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 fair except those for winter period, which are poor. Diversions for irrigation of about 500 acres above station.

REVISIONS (WATER YEARS).--WSP 618: 1910-11. WSP 764: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	33	30	16	30	25	49	311	489	134	17	1.5
2	15	26	30	17	28	21	46	442	449	126	18	1.5
3	14	32	25	18	28	21	44	568	458	122	15	1.5
4	14	30	27	18	22	21	42	642	465	119	13	3.8
5	14	39	28	19	26	20	39	502	421	108	22	6.1
6	23	31	28	21	21	19	42	437	439	100	18	8.4
7	71	32	29	26	21	19	52	531	440	97	14	8.4
8	42	34	29	29	29	19	63	533	459	96	13	12
9	36	30	30	32	27	20	80	497	467	90	10	13
10	39	34	28	27	27	20	119	376	530	78	9.5	11
11	37	32	25	26	26	21	146	329	471	69	8.4	10
12	35	34	21	32	24	22	157	473	473	59	8.4	9.8
13	43	30	18	28	23	23	163	636	508	52	8.0	9.4
14	39	26	24	26	24	20	190	741	501	44	7.3	8.2
15	32	26	26	28	23	19	244	699	540	40	5.8	8.3
16	30	27	22	30	23	18	286	702	574	36	2.4	8.3
17	30	28	22	32	22	18	325	648	567	32	2.2	9.3
18	31	29	20	39	25	18	296	440	553	31	2.3	9.9
19	31	27	19	52	22	17	250	360	494	30	2.6	10
20	30	25	18	49	22	18	206	306	468	29	2.9	10
21	32	28	19	37	17	30	189	279	437	27	3.2	11
22	34	26	18	33	17	42	199	354	416	26	2.7	11
23	36	26	18	32	22	34	177	341	397	22	2.6	11
24	36	29	18	37	23	52	191	275	368	20	2.4	12
25	36	36	17	33	22	46	216	284	341	20	2.5	11
26	36	32	15	28	20	70	244	427	278	20	3.0	12
27	26	30	16	26	21	88	189	529	239	19	4.1	11
28	38	30	16	24	21	129	170	595	197	16	13	12
29	44	32	16	24	-----	73	174	626	175	15	11	12
30	34	33	16	26	-----	84	206	672	147	16	5.5	12
31	30	-----	16	28	-----	74	-----	585	-----	18	1.7	-----
TOTAL	1,003	907	684	893	656	1,121	4,794	15,140	12,761	1,711	251.5	275.4
MEAN	32.4	30.2	22.1	28.8	23.4	36.2	160	488	425	55.2	8.11	9.18
MAX	71	39	30	52	30	129	325	741	574	134	22	13
MIN	14	25	15	16	17	17	39	275	147	15	1.7	1.5
AC-FT	1,990	1,800	1,360	1,770	1,300	2,220	9,510	30,030	25,310	3,390	499	546
CAL YR 1970	TOTAL 41,071.2		MEAN 113		MAX 1,170		MIN 4.5		AC-FT 81,460			
WTR YR 1971	TOTAL 40,196.9		MEAN 110		MAX 741		MIN 1.5		AC-FT 79,730			

PEAK DISCHARGE (BASE, 430 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-3	2400	8.07	751	5-30	0400	8.03	672
5-14	0400	8.15	780				

09255500 SAVERY CREEK AT UPPER STATION, NEAR SAVERY, WYO.

LOCATION.--Lat 41°13'05", long 107°22'18", in SW¼NW¼ sec.2, T.14 N., R.89 W., Carbon County, on left bank 0.8 mile downstream from Coal Gulch, 1 mile upstream from Hayrack Draw, and 14 miles north of Savery.

DRAINAGE AREA.--200 sq mi.

PERIOD OF RECORD.--October 1940 to September 1944 (no winter records 1942-44), October 1952 to September 1971 (discontinued). Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 7,000 ft (from topographic map). Prior to July 8, 1943, water-stage recorder at present site at different datum. July 8, 1943, to Sept. 30, 1944, and Oct. 1, 1952, to Nov. 3, 1953, at site 0.3 mile downstream at different datum.

AVERAGE DISCHARGE.--20 years (1940-41, 1952-71), 45.0 cfs (32,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 760 cfs Apr. 10 (gage height, 7.07 ft); minimum daily, 8.0 cfs Jan. 6.

Period of record: Maximum discharge, 1,680 cfs Apr. 15, 1962 (gage height, 10.25 ft, from floodmark), from rating curve extended above 420 cfs; minimum daily, 0.6 cfs Aug. 30 to Sept. 1, 1954, July 20, 1961.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. Diversions for irrigation of about 470 acres above station. Natural flow slightly affected by diversion above station to Platte River basin through Ranger ditch.

REVISIONS.--WSP 1925: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	27	29	20	16	9.0	55	235	493	70	17	17
2	14	22	28	17	15	9.0	50	265	380	62	16	13
3	15	25	25	13	13	9.0	60	294	336	56	16	12
4	15	27	25	10	10	9.5	70	327	321	53	16	15
5	15	31	26	9.0	11	10	80	294	309	54	19	19
6	16	29	27	8.0	10	9.5	111	244	296	49	17	19
7	40	31	27	8.2	9.0	9.5	210	249	291	43	15	18
8	28	44	27	8.5	9.0	9.5	298	255	273	41	13	27
9	27	33	27	9.5	9.5	9.5	328	258	267	39	14	29
10	29	31	27	11	10	9.5	419	282	267	35	15	22
11	31	28	26	13	11	10	441	234	264	33	14	18
12	33	38	28	14	11	11	280	230	242	29	13	16
13	47	32	26	12	11	10	217	249	228	27	13	15
14	43	33	26	11	11	10	215	292	215	27	12	14
15	31	26	29	10	11	10	278	321	208	26	11	13
16	27	31	28	11	11	10	269	323	203	23	12	13
17	26	27	27	14	11	10	260	351	193	19	12	13
18	25	30	27	17	12	9.5	232	301	183	21	12	15
19	24	27	25	16	11	9.5	155	282	172	22	12	17
20	24	27	25	15	10	9.5	146	262	162	20	12	19
21	24	31	24	13	9.5	9.5	116	220	150	17	13	19
22	24	31	21	11	9.0	10	135	227	141	21	12	20
23	33	30	18	11	9.0	11	119	237	134	23	11	20
24	36	29	18	12	9.5	13	160	230	125	22	10	20
25	34	38	19	13	10	12	200	213	111	20	10	19
26	33	37	19	14	9.5	20	240	232	102	19	11	19
27	29	36	19	13	9.0	40	200	255	97	19	15	18
28	23	35	21	12	9.0	40	185	282	91	18	19	18
29	29	33	21	12	-----	37	193	301	83	17	38	20
30	31	31	20	13	-----	50	198	395	78	19	31	20
31	26	-----	20	15	-----	60	-----	473	-----	18	22	-----
TOTAL	846	930	755	386.2	297.0	496.0	5,920	8,613	6,415	962	473	537
MEAN	27.3	31.0	24.4	12.5	10.6	16.0	197	278	214	31.0	15.3	17.9
MAX	47	44	29	20	16	60	441	473	493	70	38	29
MIN	14	22	18	8.0	9.0	9.0	50	213	78	17	10	12
AC-FT	1,680	1,840	1,500	766	589	984	11,740	17,080	12,720	1,910	938	1,070

CAL YR 1970 TOTAL 28,295.0 MEAN 77.5 MAX 826 MIN 10 AC-FT 56,120
WTR YR 1971 TOTAL 26,630.2 MEAN 73.0 MAX 493 MIN 8.0 AC-FT 52,820

PEAK DISCHARGE (BASE, 200 CFS)

NOTE.--No gage-height record Feb. 1 to Mar. 23.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-10	2400	7.07	760	5-17	0630	5.30	381
5-4	0800	5.24	370	6-1	1000	6.20	563

09256000 SAVERY CREEK NEAR SAVERY, WYO.

LOCATION.--Lat 41°05'52", long 107°22'53", in NW¼NW¼SW¼ sec.14, T.13 N., R.89 W., Carbon County, on left bank at downstream side of bridge on county road, 0.2 mile upstream from Big Gulch, 1.7 miles downstream from Loco Creek, and 6.1 miles northeast of Savery.

DRAINAGE AREA.--330 sq mi.

PERIOD OF RECORD.--October 1941 to September 1946, October 1947 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,680 ft (from topographic map). Prior to Nov. 17, 1946, water-stage recorder at site 300 ft to right (on abandoned channel) at different datum.

AVERAGE DISCHARGE.--29 years, 104 cfs (75,350 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,270 cfs May 31 (gage height, 6.14 ft); minimum daily, 10 cfs Aug. 25.

Period of record: Maximum discharge, 2,670 cfs May 4, 1952 (gage height, 7.30 ft), from rating curve extended above 1,100 cfs on basis of slope-area measurement of peak flow; no flow Sept. 1, 2, 8-10, 1959, Aug. 7, 10-22, Sept. 15, 16, 1960.

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are poor. Diversions above station for irrigation of about 780 acres, of which about 140 acres lies below station. Transbasin diversion above station.

REVISIONS (WATER YEARS).--WRD Wyo 1970: 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	41	33	34	44	26	231	566	1,130	193	23	22
2	19	38	31	31	40	26	179	737	916	171	20	16
3	18	36	30	28	34	27	168	917	786	156	19	13
4	18	38	35	25	29	30	164	971	737	149	19	17
5	18	41	41	23	31	32	151	773	687	140	21	21
6	23	46	38	21	26	29	142	615	656	128	20	22
7	42	47	39	22	25	29	216	638	629	118	18	21
8	40	61	41	24	25	29	300	642	611	107	15	27
9	40	51	41	27	27	31	377	633	620	101	14	29
10	44	48	40	32	31	32	561	615	638	88	15	25
11	44	39	40	35	34	33	611	557	624	80	14	20
12	44	51	37	37	34	37	374	665	579	73	13	18
13	55	39	37	33	34	40	366	764	539	65	13	17
14	50	38	38	30	35	37	374	881	530	64	12	16
15	40	33	40	30	35	33	481	926	534	59	11	15
16	36	51	42	32	35	32	552	917	552	52	11	15
17	36	44	40	36	37	32	593	858	543	44	12	15
18	35	36	37	41	40	30	575	674	530	40	12	16
19	35	36	37	46	37	30	461	611	509	39	12	19
20	35	38	38	46	34	30	441	552	477	40	12	22
21	36	35	39	41	30	31	377	469	453	36	13	23
22	38	30	35	36	29	34	384	517	433	32	13	24
23	39	36	32	32	29	38	349	501	409	32	12	24
24	40	43	32	33	32	43	405	457	381	33	11	22
25	40	51	34	35	32	39	465	441	349	31	10	21
26	38	59	34	38	29	52	501	530	318	28	11	21
27	40	48	36	38	26	90	388	629	290	27	13	20
28	38	52	40	35	26	140	342	683	263	27	18	19
29	40	51	40	34	-----	155	353	728	240	25	30	20
30	42	56	37	37	-----	174	384	903	219	25	33	22
31	41	-----	37	43	-----	250	-----	1,020	-----	25	28	-----
TOTAL	1,122	1,313	1,151	1,035	900	1,671	11,265	21,390	16,182	2,228	498	602
MEAN	36.2	43.8	37.1	33.4	32.1	53.9	376	690	539	71.9	16.1	20.1
MAX	55	61	42	46	44	250	611	1,020	1,130	193	33	29
MIN	18	30	30	21	25	26	142	441	219	25	10	13
AC-FT	2,230	2,600	2,280	2,050	1,790	3,310	22,340	42,430	32,100	4,420	988	1,190
CAL YR 1970	TOTAL 53,048	MEAN 145	MAX 1,260	MIN 11	AC-FT 105,200							
WTR YR 1971	TOTAL 59,357	MEAN 163	MAX 1,130	MIN 10	AC-FT 117,700							

PEAK DISCHARGE (BASE, 300 CFS)

NOTE.--No gage-height record Dec. 24 to Mar. 23, July 20 to Sept. 30.

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-11	0315	5.27	930	5-3	2315	5.87	1,200
4-18	0145	4.71	678	5-14	2200	5.67	1,090
4-26	0330	4.45	561	5-31	2245	6.14	1,270

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 upstream from highway bridge, 1,000 ft upstream from Willow Creek, and 0.8 mile west of Dixon.

DRAINAGE AREA.--988 sq mi.

PERIOD OF RECORD.--May 1910 to September 1923, March 1938 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 6,331.22 ft above mean sea level. May 27, 1910, to Sept. 30, 1923, nonrecording gage on highway bridge 200 ft downstream at datum 2.98 ft higher. Mar. 15, 1938, to Sept. 30, 1957, water-stage recorder at site 225 ft downstream at datum 2.98 ft higher; Oct. 1, 1957, to June 6, 1968, at site 850 ft downstream at present datum; and June 7 to Sept. 30, 1968, at site 225 ft downstream at present datum.

AVERAGE DISCHARGE.--46 years, 514 cfs (372,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,750 cfs May 30 (gage height, 11.74 ft); minimum daily, 0.84 cfs Aug. 8.

Period of record: Maximum discharge observed, 9,600 cfs May 26, 1920 (gage height, 11.6 ft, present datum); minimum daily, 0.2 cfs Sept. 26, 1956.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 9,500 acres above station. One diversion above station for irrigation of about 3,000 acres below. Transbasin diversions above station.

REVISIONS (WATER YEARS).--WSP 1243: 1920(M). WRD Wyo 1970: 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	104	110	105	160	85	660	1,990	4,620	990	1.3	2.3
2	18	92	110	95	140	85	580	2,750	3,820	822	1.5	1.8
3	18	80	90	80	110	90	480	3,520	3,490	702	1.4	1.7
4	16	92	110	70	85	95	520	4,160	3,430	650	1.2	4.6
5	16	95	140	65	100	110	580	3,580	3,090	565	1.4	16
6	23	122	130	58	80	100	620	2,670	3,070	481	1.0	20
7	114	117	150	60	75	100	800	2,690	2,940	421	.98	18
8	128	143	150	65	80	100	1,100	2,820	3,150	405	.84	21
9	95	124	130	70	85	105	1,800	2,710	3,240	365	1.6	33
10	109	120	120	90	95	105	2,500	2,450	3,630	326	1.4	22
11	117	107	115	100	110	115	2,900	2,070	3,620	274	1.5	16
12	111	124	110	100	110	140	1,900	2,630	3,510	212	1.5	14
13	120	118	120	90	110	170	1,400	3,100	3,300	170	2.0	12
14	137	100	135	80	115	160	1,400	3,800	3,500	162	4.6	10
15	118	104	145	85	115	130	1,800	4,000	3,900	130	1.9	9.3
16	95	99	150	95	115	125	2,100	3,900	4,270	97	4.1	7.6
17	92	135	170	125	120	120	2,300	3,600	4,290	76	2.2	6.0
18	94	120	130	160	140	115	2,200	3,000	4,330	68	1.7	9.6
19	94	105	110	200	140	110	1,800	2,700	4,000	57	1.2	14
20	97	105	95	220	130	115	1,700	2,400	3,760	52	3.0	16
21	95	115	95	170	110	140	1,500	2,080	3,460	45	2.6	16
22	99	95	100	130	100	170	1,600	2,400	3,290	41	2.2	19
23	106	105	85	110	100	235	1,400	2,360	3,060	41	2.1	28
24	115	130	90	110	110	350	1,700	2,050	2,780	43	1.9	33
25	122	160	95	120	110	242	1,900	2,070	2,580	31	1.8	30
26	111	180	95	140	105	564	2,000	2,490	2,230	16	2.0	31
27	97	140	100	140	95	535	1,570	3,130	1,940	3.8	3.5	32
28	76	120	115	120	85	500	1,320	3,750	1,700	2.8	4.5	35
29	104	120	120	120	-----	417	1,310	4,310	1,520	1.9	5.8	38
30	115	130	110	140	-----	550	1,360	5,050	1,260	1.1	7.9	39
31	106	-----	115	170	-----	720	-----	5,050	-----	.91	4.2	-----
TOTAL	2,775	3,501	3,640	3,483	3,030	6,698	44,800	95,280	96,780	7,252.51	74.82	555.9
MEAN	89.5	117	117	112	108	216	1,493	3,074	3,226	234	2.41	18.5
MAX	137	180	170	220	160	720	2,900	5,050	4,620	990	7.9	39
MIN	16	80	85	58	75	85	480	1,990	1,260	.91	.84	1.7
AC-FT	5,500	6,940	7,220	6,910	6,010	13,290	88,860	189,000	192,000	14,390	148	1,100
CAL YR 1970	TOTAL 237,543.50	MEAN 651	MAX 5,750	MIN 1.1	AC-FT 471,200							
WTR YR 1971	TOTAL 267,870.23	MEAN 734	MAX 5,050	MIN .84	AC-FT 531,300							

PEAK DISCHARGE (BASE, 3,200 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
4-11	Unknown	Unknown	a 3,250	5-30	2200	11.74	5,750
5-4	0900	10.95	4,720	6-18	1300	11.13	4,730
5-15	Unknown	Unknown	a 4,500				

a About.

GREEN RIVER BASIN

09258000 WILLOW CREEK NEAR DIXON, WYO.

LOCATION (revised).--Lat 40°54'56", long 107°31'16", on line between secs.8 and 17, T.11 N., R.90 W., Moffat County, in Colorado on right bank 6.2 miles south of Colorado-Wyoming State line, 8.0 miles upstream from mouth, and 8.3 miles south of Dixon.

DRAINAGE AREA.--24 sq mi, approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,700 ft (from topographic map).

AVERAGE DISCHARGE.--18 years, 9.36 cfs (6,780 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 206 cfs Mar. 26 (gage height, 4.77 ft); minimum daily, 1.1 cfs Sept. 2. Period of record: Maximum discharge, 267 cfs May 6, 1970 (gage height, 5.16 ft); no flow Sept. 17-19, 1955.

REMARKS.--Records good except those for winter period, which are poor. One small ditch diverts water above gage for irrigation. Regulation by Elk Lake (capacity, 400 acre-ft).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	3.4	2.7	3.0	4.5	5.0	15	25	37	37	4.0	1.2
2	2.5	3.7	3.2	3.0	4.4	5.2	13	33	32	37	4.0	1.1
3	2.5	3.9	3.4	2.8	4.2	5.4	9.7	39	35	36	3.7	1.7
4	2.7	3.4	3.3	2.7	4.0	5.8	12	36	35	34	3.7	3.6
5	2.8	3.4	3.4	2.7	4.2	5.1	13	24	31	32	4.6	3.3
6	4.2	3.1	3.6	2.5	4.0	5.0	16	20	35	27	4.0	3.7
7	7.7	3.3	4.0	2.5	4.0	5.0	19	22	34	25	3.3	3.7
8	4.2	3.4	4.0	2.7	4.2	5.5	24	22	41	24	4.6	6.5
9	4.2	2.8	3.1	3.0	5.0	6.0	35	26	44	24	4.8	3.1
10	4.6	3.1	3.0	3.0	6.0	6.3	51	25	54	20	4.4	2.3
11	4.2	2.8	3.1	3.0	6.0	6.5	42	20	49	17	4.4	1.9
12	4.4	3.4	3.3	3.2	5.4	6.3	38	23	51	14	4.4	1.8
13	5.4	2.8	3.0	3.0	5.4	6.0	36	27	54	14	4.4	1.5
14	4.0	2.7	3.0	3.0	5.4	5.8	45	39	57	17	8.9	1.4
15	3.0	3.4	3.0	3.0	5.6	5.6	48	37	65	15	8.7	1.5
16	3.4	3.7	3.1	3.3	5.2	5.6	43	37	72	13	8.7	1.9
17	3.3	3.4	3.0	3.4	5.0	5.2	36	33	77	12	8.7	2.0
18	2.8	3.1	2.8	3.4	5.6	4.8	27	23	82	11	8.7	2.3
19	3.6	3.3	3.0	3.5	5.0	4.4	22	22	73	10	8.4	2.1
20	3.3	3.3	3.3	3.6	5.0	5.4	16	19	72	9.4	8.7	3.1
21	3.4	3.1	3.3	3.3	3.7	9.7	28	16	73	8.7	8.7	3.3
22	3.6	3.0	3.3	3.2	4.8	28	46	14	77	8.7	8.2	3.6
23	3.7	3.3	3.0	3.3	6.5	21	59	15	79	7.4	8.2	3.4
24	3.7	3.4	3.0	3.6	5.6	38	57	13	77	7.0	7.4	3.3
25	3.7	3.9	3.0	3.9	5.8	29	36	13	76	6.2	7.2	2.8
26	4.0	3.4	3.3	4.1	6.5	78	27	19	68	6.0	7.4	2.8
27	2.5	3.2	3.7	4.2	5.8	43	20	21	67	5.4	7.4	2.8
28	4.0	3.5	3.7	4.2	5.6	20	16	33	57	5.2	7.0	2.8
29	3.9	3.7	3.3	4.3	-----	14	17	38	50	4.6	6.7	2.7
30	3.9	3.9	3.1	4.3	-----	35	19	60	40	4.4	2.3	2.4
31	2.8	-----	3.1	4.4	-----	25	-----	50	-----	4.2	1.7	-----
TOTAL	114.7	99.8	100.1	103.1	142.4	450.6	885.7	844	1,694	496.2	187.3	79.6
MEAN	3.70	3.33	3.23	3.33	5.09	14.5	29.5	27.2	56.5	16.0	6.04	2.65
MAX	7.7	3.9	4.0	4.4	6.5	78	59	60	82	37	8.9	6.5
MIN	2.5	2.7	2.7	2.5	3.7	4.4	9.7	13	31	4.2	1.7	1.1
AC-FT	228	198	199	205	282	894	1,760	1,670	3,360	984	372	158

CAL YR 1970 TOTAL 5,139.4 MEAN 14.1 MAX 119 MIN 1.3 AC-FT 10,190
WTR YR 1971 TOTAL 5,197.5 MEAN 14.2 MAX 82 MIN 1.1 AC-FT 10,310

PEAK DISCHARGE (BASE, 70 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
3-26	1700	4.77	206	5-30	2030	4.06	124
4-10	2100	3.89	106	6-22	2300	3.92	104
4-23	1900	4.02	118				

10010500 HILLIARD-EAST FORK CANAL NEAR STATE LINE, NEAR EVANSTON, WYO.

REMARKS.--Records good. Canal diverts from East Fork Bear River for irrigation of about 2,600 acres in Hilliard Flat area in Wyoming.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19							0	.85	18	14	14
2	18							0	.85	18	11	18
3	18							0	.78	18	8.7	24
4	18							0	.78	17	8.7	24
5	18							0	.78	17	8.2	24
6	22							0	.71	17	7.8	24
7	22							0	.65	16	7.6	30
8	20							0	.65	15	7.1	30
9	21							0	.65	32	7.1	28
10	13							0	.50	32	5.1	27
11	.65							0	.50	30	3.7	18
12	.65							0	.44	30	3.6	1.4
13	.65							0	.44	30	3.6	1.2
14	.65							0	.39	30	5.7	1.1
15	.65							0	.31	31	5.9	.97
16	.65							0	.20	30	3.1	.55
17	.65							0	.20	30	.36	.44
18	.65							0	3.0	30	.36	.44
19	.65							0	9.0	28	.27	.39
20	.65							0	8.2	28	.27	.27
21	.65							0	8.2	27	.23	.23
22	.65							0	8.0	26	.27	.23
23	0							0	8.2	25	.20	.20
24	0							0	13	24	.18	.18
25	0							0	20	22	.18	.18
26	0							0	20	19	.15	4.3
27	0							0	20	18	.12	17
28	0							0	19	17	.15	17
29	0							0	19	16	.18	18
30	0							1.0	19	15	1.7	18
31	0	-----			-----		-----	.91	-----	14	11	-----
TOTAL	196.80	0	0	0	0	0	0	1.91	184.28	720	126.52	343.08
MEAN	6.35	0	0	0	0	0	0	.062	6.14	23.2	4.08	11.4
MAX	22	0	0	0	0	0	0	1.0	20	32	14	30
MIN	0	0	0	0	0	0	0	0	.20	14	.12	.18
AC-FT	390	0	0	0	0	0	0	3.8	366	1,430	251	681
CAL YR 1970	TOTAL 1,861.56	MEAN 5.10	MAX 36	MIN 0	AC-FT 3,690							
WTR YR 1971	TOTAL 1,572.59	MEAN 4.31	MAX 32	MIN 0	AC-FT 3,120							

BEAR RIVER BASIN

10011200 WEST FORK BEAR RIVER AT WHITNEY DAM, NEAR OAKLEY, UTAH

LOCATION.--Lat 40°50'30", long 110°55'20", in NE¼ sec.9, T.1 N., R.9 E., Summit County, on left bank, 1,380 ft below Whitney Dam, 7 miles upstream from Deer Creek, and 21.5 miles northeast of Oakley.

DRAINAGE AREA.--7.5 sq mi, approximately.

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 (from topographic map).

EXTREMES.--Current year: Maximum discharge, 115 cfs June 22 (gage height, 2.80 ft); minimum daily, 0.67 cfs Apr. 1, 2.
Period of record: Maximum discharge, 145 cfs June 13, 1965 (gage height, 1.95 ft); maximum gage height, 2.95 ft July 14, 16, 1969; 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. Dead storage 500 acre-ft. 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	7.4	1.3	1.3	1.6	.77	.67	.73	1.3	17	4.2	114
2	9.0	4.9	1.3	1.3	1.6	.77	.67	.77	1.3	27	4.1	111
3	9.0	1.4	1.3	1.3	1.6	.77	.70	.80	1.4	29	3.9	108
4	9.0	1.4	1.3	1.3	1.6	.77	.70	.77	1.4	28	4.8	109
5	9.0	1.4	1.3	1.3	1.6	.80	.70	.77	1.4	26	5.7	105
6	9.0	1.3	1.3	1.3	1.6	.80	.70	.77	1.4	24	5.7	105
7	8.9	1.3	1.3	1.3	1.6	.77	.70	.80	1.4	22	5.9	106
8	8.9	1.4	1.3	1.3	1.6	.77	.70	.80	1.5	20	5.3	99
9	8.9	1.4	1.3	1.3	1.6	.77	.70	.80	1.5	18	4.9	98
10	8.9	1.4	1.3	1.3	1.6	.77	.70	.83	1.5	16	4.4	97
11	8.7	1.4	1.3	1.3	1.6	.73	.70	.83	1.4	14	3.8	55
12	8.7	1.4	1.3	1.3	1.6	.77	.70	.86	1.2	13	3.4	6.9
13	8.7	1.4	1.3	1.3	1.6	.77	.70	.86	1.2	12	3.2	6.9
14	8.7	1.4	1.3	1.3	1.6	.77	.70	.96	1.3	11	3.2	6.9
15	8.5	1.3	1.3	1.3	1.6	.77	.70	.93	1.6	11	3.1	6.9
16	8.5	1.3	1.3	1.3	1.6	.77	.73	.96	62	9.6	3.1	6.8
17	8.5	1.3	1.3	1.3	1.6	.73	.73	.96	97	9.3	3.1	6.7
18	8.4	1.3	1.3	1.3	1.6	.70	.73	.96	103	12	3.3	6.8
19	8.4	1.3	1.3	1.3	1.6	.70	.73	.93	101	16	3.1	6.8
20	8.4	1.3	1.3	1.3	1.6	.70	.73	.93	96	13	3.0	6.8
21	8.2	1.3	1.3	1.4	1.6	.70	.73	.93	90	11	3.0	6.8
22	8.2	1.3	1.3	1.4	1.6	.70	.73	.96	109	9.2	3.0	5.6
23	8.2	1.3	1.3	1.4	1.4	.70	.73	1.0	89	8.5	3.0	3.5
24	8.2	1.3	1.3	1.4	.80	.70	.73	1.1	87	7.7	3.0	3.5
25	8.0	1.3	1.3	1.4	.79	.70	.73	1.1	86	6.9	3.2	3.5
26	8.0	1.3	1.3	1.5	.80	.70	.73	1.2	81	6.5	3.4	3.5
27	7.5	1.3	1.3	1.5	.77	.70	.73	1.3	72	5.8	3.4	3.5
28	7.2	1.3	1.3	1.5	.77	.70	.73	1.3	64	5.4	3.9	3.8
29	7.4	1.3	1.3	1.5	-----	.70	.73	1.3	57	4.8	4.6	3.8
30	7.5	1.3	1.3	1.5	-----	.70	.73	1.3	30	4.6	4.8	3.9
31	7.5	-----	1.3	1.5	-----	.70	-----	1.3	-----	4.4	110	-----
TOTAL	261.2	49.7	40.3	42.0	40.53	22.87	21.39	29.81	1,244.8	422.7	269.7	1,209.9
MEAN	8.43	1.66	1.30	1.35	1.45	.74	.71	.96	41.5	13.6	8.70	40.3
MAX	9.2	7.4	1.3	1.5	1.6	.80	.73	1.3	109	29	110	114
MIN	7.2	1.3	1.3	1.3	.77	.70	.67	.73	1.2	4.4	3.0	3.5
AC-FT	518	99	80	83	80	45	42	59	2,470	838	535	2,400
CAL YR 1970	TOTAL	2,883.64	MEAN	7.90	MAX	70	MIN	.10	AC-FT	5,720		
WTR YR 1971	TOTAL	3,654.90	MEAN	10.0	MAX	114	MIN	.67	AC-FT	7,250		

BEAR RIVER BASIN

209

10011500 BEAR RIVER NEAR UTAH-WYOMING STATE LINE

LOCATION.--Lat 40°57'58", long 110°51'04", in SE¼ sec.30, T.3 N., R.10 E., Summit County, Utah, on left bank just downstream from West Fork and 2.8 miles upstream from Utah-Wyoming State line.

DRAINAGE AREA.--176 sq mi.

PERIOD OF RECORD.--July 1942 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,965 ft (from river-profile map).

AVERAGE DISCHARGE.--29 years, 191 cfs (138,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,640 cfs June 18 (gage height, 3.86 ft); minimum, 26 cfs Nov. 11.

Period of record: Maximum discharge, 2,980 cfs June 6, 1968 (gage height, 3.79 ft); maximum gage height, 4.27 ft June 6, 1957; minimum discharge determined, 16 cfs 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. Three diversions above station for irrigation of about 265 acres above and 2,600 acres below station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

CAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	64	60	55	62	50	61	193	630	903	120	159
2	55	59	60	55	61	50	55	267	598	849	114	146
3	52	52	56	55	62	50	58	368	590	876	111	155
4	52	55	56	55	62	52	58	426	638	849	122	155
5	52	61	56	52	62	49	59	362	630	795	133	149
6	62	59	56	52	62	49	72	320	654	742	130	139
7	64	59	56	58	62	49	83	340	742	686	143	267
8	58	59	59	64	62	49	81	335	912	654	133	240
9	62	58	58	67	62	49	96	310	894	598	128	193
10	65	61	58	67	62	49	122	315	1,020	541	106	179
11	56	46	55	65	59	49	146	346	966	485	93	150
12	68	62	55	60	66	46	172	464	786	438	85	85
13	68	59	55	56	62	46	190	477	786	414	79	81
14	70	53	55	54	61	48	236	598	912	408	70	79
15	61	55	55	56	59	51	272	742	1,200	390	68	78
16	65	55	55	56	62	52	295	768	1,480	374	68	78
17	64	56	55	61	62	46	315	569	1,930	362	68	78
18	64	58	55	72	58	46	272	444	2,070	384	83	79
19	66	61	55	76	58	46	228	379	1,910	414	70	79
20	64	60	55	70	56	45	208	352	1,880	368	66	79
21	68	59	55	64	54	45	182	352	1,740	320	64	79
22	68	58	55	62	54	44	162	384	1,880	295	66	78
23	59	59	55	60	54	44	146	368	1,840	280	66	76
24	75	62	55	60	54	45	139	402	1,820	249	62	74
25	61	62	55	60	54	45	139	555	1,570	220	62	72
26	59	59	55	60	52	51	130	726	1,400	186	62	68
27	62	61	55	60	50	61	125	912	1,280	172	61	61
28	56	60	55	68	50	55	117	948	1,090	162	68	59
29	70	60	55	74	-----	54	122	903	1,060	146	91	59
30	70	60	55	62	-----	54	146	849	975	133	108	61
31	66	-----	55	62	-----	54	-----	718	-----	128	176	-----
TOTAL	1,938	1,752	1,730	1,898	1,644	1,523	4,487	15,492	35,883	13,821	2,876	3,335
MEAN	62.5	58.4	55.8	61.2	58.7	49.1	150	500	1,196	446	92.8	111
MAX	75	64	60	76	66	61	315	948	2,070	903	176	267
MIN	52	46	55	52	50	44	55	193	590	128	61	59
AC-FT	3,840	3,480	3,430	3,760	3,260	3,020	8,900	30,730	71,170	27,410	5,700	6,610
CAL YR 1970	TOTAL 69,560	MEAN 191	MAX 1,350	MIN 38	AC-FT 138,000							
WTR YR 1971	TOTAL 86,379	MEAN 237	MAX 2,070	MIN 44	AC-FT 171,300							

PEAK DISCHARGE (BASE, 1,100 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-18	0230	3.86	2,640				

BEAR RIVER BASIN

10015700 SULPHUR CREEK ABOVE RESERVOIR, NEAR EVANSTON, WYO.

LOCATION.--Lat 41°08'39", long 110°48'18", in SE¼SW¼ sec.35, T.14 N., R.119 W., Uinta County, on right bank 1.2 miles downstream from Willow Creek, 2 miles upstream from Sulphur Creek Dam, and 11.5 miles southeast of Evanston.

DRAINAGE AREA.--64 sq mi 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 (from topographic map).

AVERAGE DISCHARGE.--14 years, 14.1 cfs (10,220 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 282 cfs May 15 (gage height, 4.27 ft); minimum, 1.6 cfs Aug. 2, 3.

Period of record: Maximum discharge, 1,220 cfs Apr. 21, 1965 (gage height, 6.02 ft); no flow at times most years.

REMARKS.--Records good except those for winter months, which are fair. Several diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

CAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	12	16	5.0	5.0	5.1	68	49	53	11	2.8	6.1
2	7.2	10	15	5.0	5.0	4.9	55	65	56	11	1.9	5.1
3	7.4	9.0	15	5.0	5.0	5.4	50	94	50	7.4	1.7	5.1
4	7.7	8.0	15	5.0	5.0	6.9	55	121	55	6.9	2.2	6.7
5	7.7	8.0	14	5.0	5.0	6.9	70	101	49	7.2	4.0	8.0
6	12	9.9	14	5.0	5.0	5.9	80	78	45	6.7	3.4	8.3
7	16	11	14	5.0	5.0	5.1	95	111	47	5.1	3.0	32
8	16	12	15	5.0	5.0	5.4	80	111	55	3.6	4.3	22
9	19	10	15	5.0	5.0	5.4	61	94	46	2.5	4.7	16
10	30	15	14	5.0	5.0	5.4	68	92	56	3.2	5.1	12
11	18	12	13	6.0	5.5	6.1	60	133	66	2.2	6.1	11
12	16	11	11	6.0	5.5	12	52	134	61	2.8	4.9	9.9
13	13	10	10	6.0	5.5	13	50	135	47	3.6	4.5	8.9
14	11	9.5	10	6.0	5.5	11	56	173	44	3.6	3.6	8.0
15	11	8.6	10	6.0	5.5	9.0	59	151	44	3.4	3.4	7.7
16	8.9	7.7	10	6.0	5.5	7.5	63	215	32	3.6	3.4	8.0
17	7.4	8.3	10	6.0	5.5	13	60	134	27	3.6	3.4	8.6
18	7.2	8.3	10	6.0	5.5	19	59	90	25	7.4	3.8	8.9
19	7.4	7.7	10	6.0	5.5	25	42	75	25	11	3.8	9.6
20	9.9	9.2	10	6.0	5.5	35	54	63	22	11	4.0	10
21	11	8.6	8.0	6.0	5.5	40	76	58	20	11	4.3	10
22	14	8.6	8.0	6.0	5.5	55	81	86	17	16	3.6	9.2
23	15	10	8.0	6.0	5.5	75	73	82	16	17	3.8	10
24	12	14	8.0	6.0	5.5	55	84	78	14	23	3.8	9.9
25	14	19	8.0	6.0	5.9	120	69	116	10	20	3.8	9.2
26	12	18	8.0	6.0	5.1	130	64	133	8.6	12	4.3	8.9
27	10	16	8.0	6.0	5.1	125	59	145	8.0	9.2	4.0	8.9
28	9.0	15	8.0	6.0	5.4	120	46	126	12	8.0	4.0	9.2
29	10	17	8.0	6.0	-----	110	40	112	10	4.7	4.9	9.6
30	12	17	8.0	6.0	-----	92	39	117	10	2.8	5.4	9.2
31	13	-----	8.0	6.0	-----	80	-----	79	-----	3.0	5.1	-----
TOTAL	374.0	340.4	339.0	176.0	148.5	1,249.0	1,868	3,391	1,030.6	243.5	121.4	306.0
MEAN	12.1	11.3	10.9	5.68	5.30	40.3	62.3	109	34.4	7.85	3.92	10.2
MAX	30	19	16	6.0	5.9	130	95	215	66	23	6.1	32
MIN	7.2	7.7	8.0	5.0	5.0	4.5	39	49	8.0	2.2	1.7	5.1
AC-FT	742	675	672	349	295	2,480	3,710	6,730	2,040	483	241	607

CAL YR 1970 TOTAL 6,802.89 MEAN 18.6 MAX 182 MIN .28 AC-FT 13,490
WTR YR 1971 TCTAL 9,587.40 MEAN 26.3 MAX 215 MIN 1.7 AC-FT 19,020

BEAR RIVER BASIN

211

10015900 SULPHUR CREEK BELOW RESERVOIR, NEAR EVANSTON, WYO.

LOCATION.--Lat 41°09'22", long 110°50'04", in SE¼SE¼ sec.28, T.14 N., R.119 W., Uinta County, on left bank 400 ft downstream from Sulphur Creek Dam, 6.3 miles upstream from mouth, and 10.5 miles southeast of Evanston.

DRAINAGE AREA.--68 sq mi, 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 (from topographic map).

AVERAGE DISCHARGE.--7 years (1964-71), 24.5 cfs (17,750 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 120 cfs June 1, 2 (gage height, 3.47 ft); no flow June 29, 30.
Period of record: Maximum discharge, 343 cfs June 11, 1965 (gage height, 4.96 ft); no flow at times each year.

REMARKS.--Records good. Flow regulated by Sulphur Creek Reservoir 900 ft upstream (capacity, 7,100 acre-ft). Enlargement completed November 1964. Prior to enlargement (capacity, 4,600 acre-ft). Records prior to 1965 do not include flow over spillway of the dam.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	7.4	7.0	4.4	25	31	31	110	120	.01	11	69
2	7.1	7.4	7.1	4.3	25	31	31	109	119	.03	10	72
3	7.0	7.4	7.1	4.3	27	31	31	109	118	.10	9.3	71
4	6.9	7.4	6.9	4.2	27	30	31	109	118	.56	17	71
5	7.1	7.1	6.9	4.0	27	29	32	109	118	1.5	28	70
6	7.4	7.1	6.9	4.0	28	29	32	108	43	3.1	24	54
7	7.4	7.1	6.7	4.0	29	29	32	108	7.9	4.6	22	14
8	7.4	7.1	6.6	3.8	29	29	32	109	7.9	5.7	21	14
9	7.4	7.1	6.6	3.7	30	29	32	109	8.0	5.7	20	14
10	7.4	7.1	6.6	3.7	30	29	33	109	8.1	6.0	20	14
11	7.6	7.1	6.6	3.6	29	29	33	109	8.2	6.2	20	14
12	7.6	7.1	6.4	3.6	29	28	33	109	8.3	7.0	20	14
13	7.6	7.1	6.0	3.6	29	28	33	110	8.4	7.8	20	15
14	7.6	7.1	5.8	3.6	29	28	33	112	8.4	7.8	20	15
15	7.6	7.1	5.7	3.5	29	28	33	113	8.5	7.9	20	15
16	7.6	6.9	5.5	3.4	29	28	33	115	8.4	8.7	22	15
17	7.8	6.9	5.5	9.8	29	28	33	115	8.4	9.8	23	14
18	7.7	6.9	5.5	21	29	28	34	115	8.4	13	23	12
19	7.9	6.9	5.5	21	29	28	34	115	8.4	29	23	9.6
20	7.8	6.9	5.4	21	29	28	34	115	8.4	32	23	9.6
21	7.6	7.1	5.2	21	29	28	33	116	8.4	35	24	9.6
22	7.6	7.1	5.2	21	29	28	34	116	8.1	41	29	9.6
23	7.6	7.1	5.0	21	30	28	34	116	7.6	47	31	9.6
24	7.6	7.3	5.0	21	31	28	34	116	7.6	47	56	9.6
25	7.6	7.4	4.8	21	31	28	34	116	7.6	48	69	9.6
26	7.3	7.1	4.8	21	31	28	34	116	3.6	42	68	9.6
27	7.2	7.1	4.6	22	31	28	34	118	.04	34	67	9.6
28	7.1	7.1	4.6	23	31	28	82	118	.01	27	67	9.6
29	7.1	7.1	4.5	23	-----	30	112	118	0	21	67	9.4
30	7.1	7.1	4.4	24	-----	30	111	118	0	16	66	9.3
31	7.1	-----	4.4	24	-----	31	-----	118	-----	12	66	-----
TOTAL	229.9	213.7	178.8	376.5	810	893	1,192	3,503	794.65	526.50	1,006.3	691.7
MEAN	7.42	7.12	5.77	12.1	28.9	28.8	39.7	113	26.5	17.0	32.5	23.1
MAX	7.9	7.4	7.1	24	31	31	112	118	120	48	69	72
MIN	6.9	6.9	4.4	3.4	25	28	31	108	0	.01	9.3	9.3
AC-FT	456	424	355	747	1,610	1,770	2,360	6,950	1,580	1,040	2,000	1,370
CAL YR 1970	TOTAL	9,239.80	MEAN	25.3	MAX	167	MIN	0	AC-FT	18,330		
WTR YR 1971	TOTAL	10,416.05	MEAN	28.5	MAX	120	MIN	0	AC-FT	20,660		

BEAR RIVER BASIN

10017000 YELLOW CREEK NEAR EVANSTON, WYO.

LOCATION.--Lat 41°08'39", long 111°03'10", in NW¼NW¼ sec.28, T.5 N., R.8 E., Summit County, Utah, on left bank 600 ft downstream from Sage Creek, 1.5 miles upstream from Coyote Creek, 1.8 miles downstream from Barker Dam, and 9.8 miles southwest of Evanston.

DRAINAGE AREA.--80 sq mi, 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 miles downstream not equivalent, but would be equivalent by adding the 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 (from river-profile map). Oct. 1, 1944, to Sept. 30, 1945, at site 500 ft upstream, at different datums.

AVERAGE DISCHARGE.--23 years (1944-45, 1949-71), 9.64 cfs (6,980 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 179 cfs May 16 (gage height, 6.15 ft); no flow several days.

Period of record: Maximum discharge, 477 cfs Apr. 28, 1952 (gage height, 7.04 ft); no flow at times in each year.

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) completed in fall of 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

CAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	9.5	4.5	1.0	2.0	2.0	50	31	80	8.1	.92	0
2	0	8.5	4.5	1.0	2.0	2.0	42	25	70	6.6	.92	0
3	0	8.3	4.5	1.0	2.0	2.7	35	31	64	4.4	.92	0
4	0	7.8	4.5	1.0	2.0	3.5	33	39	63	5.2	.80	0
5	0	7.0	4.5	1.0	2.0	3.0	33	56	54	5.3	.76	0
6	0	7.6	4.5	1.0	2.0	2.5	35	75	46	5.4	.71	0
7	0	8.3	4.5	1.0	2.0	2.7	43	67	50	4.8	.71	0
8	0	9.0	4.5	1.0	2.0	2.6	47	66	54	4.4	.67	0
9	0	8.4	4.5	1.0	2.0	2.6	43	69	52	4.2	.63	0
10	0	8.8	4.5	1.0	2.0	2.5	48	73	50	3.9	.63	0
11	0	9.2	3.0	2.0	2.0	2.8	56	78	55	3.7	.58	.86
12	0	8.9	3.0	2.0	2.0	3.7	53	82	58	3.3	.54	3.3
13	.60	8.6	3.0	2.0	2.0	3.1	46	110	49	3.0	.54	3.0
14	.80	4.8	3.0	2.0	2.0	2.9	44	120	38	2.9	.54	2.9
15	.98	4.5	3.0	2.0	2.0	2.7	45	142	34	2.4	.54	2.6
16	1.0	4.8	3.0	2.0	2.0	2.7	48	171	39	2.2	.54	2.5
17	1.1	4.8	3.0	2.0	2.0	2.7	50	154	38	2.2	.54	2.5
18	1.2	4.8	3.0	2.0	2.0	3.8	50	119	36	2.2	.50	2.2
19	1.3	5.2	3.0	2.0	2.0	5.4	49	107	33	2.2	.41	1.9
20	4.0	5.4	3.0	2.0	2.0	8.0	46	81	29	2.5	.46	1.5
21	9.3	5.6	2.5	2.0	2.0	11	47	44	22	5.8	.46	1.2
22	10	5.7	2.5	2.0	2.0	15	42	50	16	6.6	.46	.86
23	9.8	5.8	2.5	2.0	2.0	22	40	57	17	2.2	.50	.41
24	10	6.0	2.5	2.0	2.0	40	45	63	17	1.3	.33	0
25	10	5.6	2.5	2.0	2.0	80	45	75	16	1.2	.33	0
26	10	5.0	2.5	2.0	2.0	110	47	102	13	1.1	.33	0
27	10	4.5	2.5	2.0	2.0	115	49	115	9.1	1.0	.50	0
28	10	4.5	2.5	2.0	2.0	110	44	113	9.1	1.0	.33	0
29	10	4.5	2.5	2.0	-----	90	38	97	8.9	1.0	.37	0
30	10	4.5	2.5	2.0	-----	80	34	88	8.3	1.0	.41	0
31	10	-----	2.5	2.0	-----	80	-----	94	-----	.92	.04	-----
TOTAL	120.08	195.5	102.5	52.0	56.0	816.9	1,327	2,594	1,128.4	102.02	16.92	25.73
MEAN	3.87	6.53	3.31	1.68	2.00	26.4	44.2	83.7	37.6	3.29	.55	.86
MAX	10	9.5	4.5	2.0	2.0	115	56	171	80	8.1	.92	3.3
MIN	0	4.5	2.5	1.0	2.0	2.0	33	25	8.3	.92	.04	0
AC-FT	238	389	203	103	111	1,620	2,630	5,150	2,240	202	34	51

CAL YR 1970 TOTAL 4,214.87 MEAN 11.5 MAX 111 MIN 0 AC-FT 8,360
WTR YR 1971 TOTAL 6,537.45 MEAN 17.9 MAX 171 MIN 0 AC-FT 12,970

BEAR RIVER BASIN

213

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 miles downstream from headgates, and 10 miles 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. Altitude of gage is 6,570 ft (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 downstream at same datum.

AVERAGE DISCHARGE.--27 years (1944-71), 19.7 cfs (14,270 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 143 cfs 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	57	8.4	4.0	1.0	0	13	44	48	51	11	13
2	0	56	5.8	1.0	1.0	0	13	48	43	46	7.1	14
3	0	51	7.4	0	1.0	0	11	52	63	41	2.4	19
4	0	45	5.1	0	1.0	0	11	57	66	48	4.3	44
5	0	53	7.1	0	1.0	0	9.7	55	69	58	1.0	52
6	0	58	5.3	0	1.0	0	10	37	66	55	1.8	50
7	0	57	7.8	0	1.0	0	11	35	64	44	5.1	47
8	0	61	6.6	0	1.0	1.0	11	36	69	38	7.4	49
9	0	60	5.8	0	1.0	1.0	10	36	81	55	7.4	41
10	0	62	6.0	0	1.0	2.0	11	35	88	57	7.1	33
11	0	65	5.5	0	1.0	2.0	11	42	105	58	6.0	30
12	0	57	5.5	0	1.0	5.0	11	78	98	49	6.0	28
13	0	62	5.0	0	1.0	10	11	80	82	41	4.5	20
14	0	62	6.0	0	1.0	10	11	74	81	37	3.6	15
15	0	62	6.0	0	1.0	10	12	84	89	39	3.1	17
16	0	58	6.0	0	0	10	12	100	97	39	2.2	20
17	0	62	6.0	0	0	10	23	112	108	41	2.2	21
18	0	55	6.0	1.0	0	10	50	87	103	26	.94	23
19	0	60	6.0	2.0	0	10	51	74	114	32	0	21
20	0	65	6.0	2.0	0	10	50	74	115	42	0	19
21	.36	65	5.0	2.0	0	14	49	73	106	43	0	21
22	11	68	5.0	2.0	0	14	48	72	92	42	0	23
23	46	57	5.0	2.0	0	14	44	72	92	49	0	27
24	49	62	5.0	2.0	0	14	46	72	74	60	0	30
25	56	95	5.0	2.0	0	14	47	76	63	51	0	30
26	49	103	4.0	2.0	0	14	47	85	52	44	0	28
27	54	85	4.0	2.0	0	14	48	97	78	39	2.0	31
28	48	49	4.0	2.0	0	14	46	96	77	33	6.8	38
29	45	11	4.0	2.0	-----	14	46	78	66	29	7.1	40
30	58	11	4.0	2.0	-----	14	44	68	59	26	7.8	41
31	57	-----	4.0	2.0	-----	14	-----	60	-----	20	7.8	-----
TOTAL	473.36	1,774	172.3	32.0	15.0	245.0	817.7	2,089	2,408	1,333	114.64	885
MEAN	15.3	59.1	5.56	1.03	.54	7.90	27.3	67.4	80.3	43.0	3.70	29.5
MAX	58	103	8.4	4.0	1.0	14	51	112	115	60	11	52
MIN	0	11	4.0	0	0	0	9.7	35	43	20	0	13
AC-FT	939	3,520	342	63	30	486	1,620	4,140	4,780	2,640	227	1,760

CAL YR 1970 TOTAL 10,882.19 MEAN 29.8 MAX 143 MIN 0 AC-FT 21,580
WTR YR 1971 TOTAL 10,359.00 MEAN 28.4 MAX 115 MIN 0 AC-FT 20,550

BEAR RIVER BASIN

10020100 BEAR RIVER ABOVE RESERVOIR, NEAR WOODRUFF, UTAH

LOCATION.--Lat 41°26'05", long 111°01'00", in NW¼NW¼ sec.29, T.17 N., R.120 W., Uinta County, Wyoming, on right bank 9.3 miles upstream from Woodruff Narrows Dam and 10 miles southeast of Woodruff.

DRAINAGE AREA.--780 sq mi, approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,455 ft (from river-profile map).

AVERAGE DISCHARGE.--10 years, 242 cfs (175,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,000 cfs June 19 (gage height, 5.28 ft); minimum, 3.1 cfs Aug. 20.

Period of record: Maximum discharge, 3,340 cfs June 13, 14, 1965 (gage height, 5.89 ft); minimum, 0.1 cfs Aug. 24, 1964.

REMARKS.--Records good except those for winter months, which are fair. Diversion for irrigation of about 43,500 acres 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	84	134	90	245	120	518	410	1,080	620	10	18
2	43	81	130	90	220	118	398	482	978	530	7.9	18
3	49	66	140	90	205	118	355	602	876	465	6.6	18
4	49	59	150	90	190	118	335	751	876	447	6.6	38
5	45	64	140	90	170	115	330	793	870	429	5.9	54
6	54	77	134	90	165	115	340	751	793	398	4.5	46
7	72	77	150	90	155	118	380	686	732	335	12	56
8	82	86	160	100	155	118	392	745	850	285	18	123
9	81	79	150	110	155	120	375	775	1,010	214	22	109
10	95	77	140	110	160	120	392	732	1,100	190	22	68
11	130	97	125	105	165	150	435	726	1,290	164	20	54
12	107	68	127	100	175	180	447	745	1,220	137	23	45
13	116	90	107	90	185	175	453	918	930	116	19	37
14	116	71	114	100	200	165	459	1,040	906	95	17	24
15	105	50	124	110	190	155	512	1,230	1,090	84	13	18
16	93	54	130	130	185	152	554	1,320	1,380	77	10	15
17	95	77	140	145	175	150	578	1,380	1,650	63	7.9	13
18	99	71	125	160	170	145	572	1,070	1,830	54	7.0	14
19	97	63	115	175	160	145	530	882	1,930	68	5.9	17
20	99	65	110	165	155	160	482	787	1,860	112	4.5	18
21	93	68	110	150	145	185	494	693	1,790	120	4.2	18
22	97	74	110	165	140	220	500	686	1,650	112	3.6	21
23	64	71	110	170	135	260	441	726	1,670	132	3.9	28
24	66	77	110	180	135	310	435	732	1,680	150	4.5	29
25	88	137	110	185	135	540	447	850	1,570	127	4.5	29
26	64	175	100	200	125	720	447	1,070	1,340	109	5.9	26
27	54	125	100	200	125	864	441	1,270	1,150	88	12	24
28	60	123	100	205	120	757	423	1,470	996	71	7.0	32
29	57	147	100	215	-----	638	429	1,570	870	50	5.5	32
30	82	164	100	230	-----	693	392	1,440	757	44	8.4	31
31	91	-----	100	260	-----	781	-----	1,270	-----	24	12	-----
TOTAL	2,484	2,617	3,795	4,390	4,640	8,725	13,286	28,602	36,724	5,910	314.3	1,073
MEAN	80.1	87.2	122	142	166	281	443	923	1,224	191	10.1	35.8
MAX	130	175	160	260	245	864	578	1,570	1,930	620	23	123
MIN	41	50	100	90	120	115	330	410	732	24	3.6	13
AC-FT	4,930	5,190	7,530	8,710	9,200	17,310	26,350	56,730	72,840	11,720	623	2,130
CAL YR 1970	TOTAL	77,534.6	MEAN	212	MAX	1,710	MIN	3.4	AC-FT	153,800		
WTR YR 1971	TOTAL	112,560.3	MEAN	308	MAX	1,930	MIN	3.6	AC-FT	223,300		

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 gatehouse on dam, 5.6 miles upstream from Wyoming-Utah State line, and 7.7 miles east of Woodruff.

DRAINAGE AREA.--810 sq mi, approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,405 ft (from levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents, 32,180 acre-ft June 20 (gage height, 37.8 ft); minimum, 11,520 acre-ft Oct. 1, 2.

Period of record: Maximum contents, 32,520 acre-ft June 23-25, 1967 (gage height, 38.0 ft); minimum, 6,480 acre-ft 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 below spillway crest, which includes 18,240 acre-ft of Compact allocation for irrigation, 4,260 acre-ft of irrigation holdover, 4,000 acre-ft for winter release for fish propagation in Utah, and 1,500 acre-ft of storage for fish propagation in Wyoming. Gage height of spillway is 35.3 ft. 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11,520	15,890		23,520	28,410	28,120	29,930	29,370	30,630	31,200	28,120	18,880
2	11,520	16,000	19,960	23,520	28,410	28,120	29,550	29,370	30,630	31,030	28,120	17,130
3	11,600	16,120	20,060	24,010	28,410	28,120	29,370	29,550	30,630	30,850	28,120	15,570
4	11,600	16,120	20,180	24,140	28,410	28,120	29,180	29,740	30,630	30,850	28,120	14,260
5	11,690	16,240	20,360	24,140	28,410	28,120	29,180	30,080	30,630	30,630	27,970	13,910
6	11,690	16,370	20,510	24,140	28,260	28,120	29,000	30,080	30,630	30,630	27,970	13,690
7	11,690	16,600	20,700	24,260	28,260	28,120	29,000	30,080	30,630	30,410	27,970	13,800
8	11,870	16,710	20,890	24,410	28,260	28,120	29,000	30,080	30,630	30,230	27,970	14,030
9	11,960	16,810	21,180	24,410	28,260	28,120	29,000	30,080	30,630	30,080	27,970	14,260
10	12,150	16,920	21,320	24,560	28,260	28,120	29,180	30,080	30,850	30,080	27,970	14,370
11	12,410	17,130	21,460	24,560	28,260	28,120	29,180	30,080	31,200	29,930	27,970	14,480
12	12,570	17,230	21,600	24,710	28,260	28,120	29,180	30,080	31,200	29,930	27,970	14,590
13	12,740	17,330	21,740	25,170	28,260	28,260	29,180	30,080	31,200	29,740	27,970	14,590
14	12,900	17,440	21,740	25,170	28,260	28,260	29,180	30,410	31,200	29,550	27,970	14,590
15	13,090	17,550	21,880	25,340	28,260	28,260	29,180	30,850	31,370	29,550	27,970	14,590
16	13,270	17,550	22,020	25,340	28,260	28,260	29,370	31,030	31,370	29,370	27,970	14,590
17	13,470	17,660	22,170	25,500	28,260	28,260	29,550	31,200	31,530	29,370	27,970	
18	13,690	17,770	22,310	25,650	28,260	28,260	29,550	31,200	31,850	29,180	27,970	
19	13,800	17,890	22,310	25,970	28,260	28,120	29,550	31,200	32,020	29,000	27,970	
20	14,140	17,890	22,310	26,140	28,260	28,120	29,550	31,200	32,180	29,000	27,970	
21	14,260	18,000	22,590	26,660	28,260	28,120	29,550	31,200	32,020	28,860	27,970	
22	14,480	18,000	22,740	26,660	28,260	28,260	29,550	31,200	31,850	28,860	27,970	
23	14,700	18,260	22,890	26,660	28,120	28,260	29,550	31,200	31,850	28,710	27,970	
24	14,700	18,390	22,890	26,660	28,120	28,410	29,550	31,200	31,690	28,710	27,970	
25	14,900	18,510	23,040	26,660	28,120	28,560	29,550	31,200	31,690	28,560	27,970	
26	15,110	18,880	23,040	26,660	28,120	28,860	29,550	31,200	31,530	28,560	27,830	
27	15,110		23,160	28,260	28,120	29,550	29,550	31,200	31,530	28,410	27,550	
28	15,340		23,160	28,260	28,120	29,930	29,370	31,370	31,370	28,260	25,340	
29	15,340		23,410	28,410	-----	29,930	29,370	31,530	31,370	28,260	23,640	
30	15,570	19,720	23,520	28,410	-----	29,930	29,370	31,530	31,200	28,260	21,880	14,700
31	15,780	-----	23,520	28,410	-----	29,930	-----	31,530	-----	28,260	20,180	-----
MAX	15,780			28,410	28,410	29,930	29,930	31,530	32,180	31,200	28,120	
MIN	11,520			23,520	28,120	28,120	29,000	29,370	30,630	28,260	20,180	
(†)	26.2	29.6	32.4	35.6	35.4	36.5	36.2	37.4	37.2	35.5	30.0	25.2
(‡)	+4,260	+3,940	+3,800	+4,890	-290	+1,810	-560	+2,160	-330	-2,940	-8,080	-5,480
CAL YR 1970.....				+5,970								
WTR YR 1971.....				+3,180								

†Gage height, in feet, at 2400 of last day of month.

‡Change in contents, in acre-feet.

BEAR RIVER BASIN

10020300 BEAR RIVER BELOW RESERVOIR, NEAR WOODRUFF, UTAH

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 below Woodruff Narrows Dam, 1.6 miles upstream from Salt Creek, 5.4 miles upstream from Wyoming-Utah State line, and 7.7 miles east of Woodruff.

DRAINAGE AREA.--810 sq mi, approximately.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,400 ft (from river-profile map). Prior to Sept. 26, 1962, at site 175 ft upstream at same datum.

AVERAGE DISCHARGE.--10 years, 234 cfs (169,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,140 cfs June 20 (gage height, 7.23 ft); minimum daily, 1.4 cfs Aug. 26. Period of record: Maximum discharge, 3,000 cfs June 14, 1965 (gage height, 7.88 ft); 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 above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	12	31	33	226	122	666	392	1,290	742	34	886
2	23	12	31	33	237	119	538	407	1,100	633	24	867
3	23	12	31	33	234	117	448	453	976	538	18	844
4	23	12	32	33	218	118	396	545	787	484	15	681
5	24	12	32	33	197	117	362	657	754	452	12	199
6	24	12	32	33	180	116	346	694	778	424	11	154
7	24	12	32	33	168	109	351	673	751	385	7.5	13
8	19	12	32	33	158	115	370	679	732	343	7.5	13
9	2.6	12	32	33	155	115	372	705	835	291	7.8	13
10	2.2	12	32	33	154	117	373	693	912	238	9.1	13
11	2.6	12	32	33	151	119	387	685	1,060	181	10	13
12	2.1	12	33	33	156	122	405	682	1,130	158	9.9	13
13	2.1	12	33	33	164	166	417	746	997	139	10	14
14	2.2	12	33	33	175	176	428	832	941	121	11	14
15	2.2	12	32	33	190	165	453	950	920	99	11	14
16	2.0	12	33	33	192	157	484	1,090	1,070	90	10	16
17	1.9	12	33	33	187	154	515	1,230	1,290	77	8.6	24
18	1.9	12	33	33	183	148	533	1,150	1,510	69	7.0	24
19	2.0	12	33	33	178	143	545	972	1,700	62	5.5	24
20	2.0	21	33	33	169	140	531	858	1,950	62	4.4	24
21	1.9	30	33	33	156	143	499	765	1,870	66	3.5	24
22	1.9	31	32	35	151	155	495	682	1,710	73	5.0	24
23	1.9	31	33	61	144	182	481	677	1,510	77	2.3	24
24	2.0	31	33	102	137	222	463	673	1,420	85	1.9	24
25	1.9	30	33	142	136	259	457	684	1,490	92	1.6	24
26	2.1	30	33	174	133	312	455	800	1,410	89	1.4	24
27	2.1	31	33	187	128	513	439	954	1,230	82	164	24
28	2.1	31	33	197	124	672	429	1,120	1,090	73	773	24
29	6.2	31	33	203	-----	680	418	1,330	962	61	763	24
30	12	31	33	204	-----	680	406	1,310	851	52	831	24
31	12	-----	33	208	-----	708	-----	1,420	-----	45	908	-----
TOTAL	254.9	556	1,007	2,206	4,781	7,181	13,462	25,508	35,026	6,383	3,688.0	4,103
MEAN	8.22	18.5	32.5	71.2	171	232	449	823	1,168	206	119	137
MAX	24	31	33	208	237	708	666	1,420	1,950	742	908	886
MIN	1.9	12	31	33	124	109	346	392	732	45	1.4	13
AC-FT	506	1,100	2,000	4,380	9,480	14,240	26,700	50,600	69,470	12,660	7,320	8,140
CAL YR 1970	TOTAL	71,507.7	MEAN	196	MAX	1,610	MIN	1.9	AC-FT	141,800		
WTR YR 1971	TOTAL	104,155.9	MEAN	285	MAX	1,950	MIN	1.4	AC-FT	206,600		

BEAR RIVER BASIN

217

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 3.5 miles upstream from Twin Creek, 4.8 miles upstream from Utah-Wyoming State line, and 11 miles northeast of Randolph.

DRAINAGE AREA.--1,640 sq mi, approximately.

PERIOD OF RECORD.--October 1943 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Altitude of gage is 6,205 ft (from river-profile map).

AVERAGE DISCHARGE.--28 years, 193 cfs (139,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,500 cfs June 24 (gage height, 7.36 ft); minimum daily, 31 cfs Aug. 27, 28.

Period of record: Maximum discharge, 2,660 cfs May 8, 1952; maximum gage height, 8.99 ft June 17, 1965; minimum discharge, 1.6 cfs Nov. 12, 1961.

REMARKS.--Records good except those for winter months, which are fair. Diversion for irrigation of about 94,500 acres above station. Flow regulated by Woodruff Narrows Reservoir beginning January 1962 (see sta 10020200).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	70	130	66	270	190	926	620	923	785	114	122
2	45	72	130	65	265	190	874	597	1,020	634	109	186
3	51	74	130	64	260	185	824	599	1,060	532	105	222
4	56	72	130	62	250	180	713	618	976	443	101	248
5	56	72	130	60	230	175	631	659	860	398	95	268
6	65	74	125	61	210	170	592	758	737	348	92	206
7	74	81	120	62	195	170	571	827	645	308	90	134
8	71	81	120	64	190	170	544	884	566	286	86	134
9	67	80	115	66	190	170	539	870	564	259	84	104
10	67	81	110	64	190	180	551	857	597	203	79	110
11	71	81	105	65	190	200	544	857	716	188	76	158
12	66	84	95	64	200	230	527	845	818	164	73	136
13	66	88	85	61	215	270	537	839	1,010	158	71	123
14	66	86	84	60	240	290	541	870	1,140	138	70	116
15	66	87	82	60	280	300	554	906	1,260	130	68	111
16	65	79	80	68	290	290	568	948	1,180	122	65	112
17	64	81	80	74	285	275	594	1,010	1,050	120	63	107
18	64	90	80	78	280	260	656	1,120	968	122	60	116
19	61	88	78	80	275	255	695	1,230	976	122	59	110
20	58	88	78	74	270	260	719	1,320	1,060	125	58	110
21	62	88	76	68	260	290	755	1,270	1,110	128	56	111
22	65	90	76	67	250	350	776	979	1,180	130	50	111
23	67	95	74	70	240	450	737	722	1,350	135	48	105
24	72	101	73	76	230	656	737	653	1,480	138	45	105
25	71	114	72	110	215	690	737	607	1,400	140	43	108
26	70	123	71	170	210	806	728	527	1,260	140	42	107
27	70	124	70	220	205	962	734	494	1,080	138	31	110
28	70	122	68	250	195	990	722	456	1,050	132	31	111
29	68	120	68	250	-----	1,030	690	529	1,010	125	43	111
30	67	125	67	250	-----	1,140	656	639	923	121	129	111
31	68	-----	67	260	-----	1,110	-----	767	-----	118	68	-----
TOTAL	1,994	2,711	2,869	3,109	6,580	12,884	19,972	24,917	29,969	7,030	2,204	4,023
MEAN	64.3	90.4	92.5	100	235	416	666	804	999	227	71.1	134
MAX	74	125	130	260	290	1,140	926	1,320	1,480	785	129	268
MIN	45	70	67	60	190	170	527	494	564	118	31	104
AC-FT	3,560	5,380	5,690	6,170	13,050	25,560	39,610	49,420	59,440	13,940	4,370	7,980
CAL YR 1970	TOTAL	50,333	MEAN	138	MAX	1,050	MIN	12	AC-FT	99,840		
WTR YR 1971	TOTAL	118,262	MEAN	324	MAX	1,480	MIN	31	AC-FT	234,600		

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 downstream from Pixley Dam, 11 miles south of Cokeville, and 17.5 miles downstream from Twin Creek.

DRAINAGE AREA.--2,040 sq mi, 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 (from river-profile map). Oct. 31, 1941, to Nov. 30, 1943, at site 200 ft downstream at different datum.

EXTREMES.--Current season: Maximum discharge, 1,200 cfs June 4 (gage height, 7.59 ft); minimum daily, 41 cfs Aug. 29.
Period of record: Maximum daily discharge, 2,300 cfs Mar. 25, 1956; minimum daily recorded, 0.3 cfs Aug. 21, 1961.

REMARKS.--Records good. Natural flow of stream affected by diversions for irrigation and return flow from irrigated areas. No diversion between station and Collett Creek Branch of Smiths Fork.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

CAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								752	772	964	177	59
2								732	945	816	167	78
3								730	1,160	687	153	126
4								747	1,200	594	147	164
5								775	1,160	533	155	218
6								832	1,080	501	147	123
7								896	894	453	134	148
8								950	752	398	124	175
9								984	732	364	114	163
10								982	618	318	92	155
11								975	612	253	98	169
12								966	663	228	94	188
13								961	730	223	88	166
14								972	814	194	79	148
15								1,000	853	150	64	148
16								1,030	850	159	59	140
17								1,060	827	156	53	132
18								1,080	874	120	53	128
19								1,110	904	116	54	134
20								1,140	845	134	52	126
21								1,180	848	152	51	123
22								1,180	861	166	52	126
23								1,070	867	180	50	126
24								869	883	174	49	129
25								767	899	172	46	129
26								708	915	172	44	129
27								608	518	183	44	129
28								564	899	200	43	132
29								579	883	199	41	132
30								610	1,020	202	42	132
31								682	-----	183	69	-----
TOTAL								27,491	26,278	9,344	2,635	4,175
MEAN								887	876	301	85.0	139
MAX								1,180	1,200	964	177	218
MIN								564	612	116	41	59
AC-FT								54,530	52,120	18,530	5,230	8,280

THE SEASON AC-FT 138,700

BEAR RIVER BASIN

219

10032000 SMITHS FORK NEAR BORDER, WYO.

LOCATION.--Lat 42°16'52", long 110°52'05", in NW¼ sec.33, T.27 N., R.118 W., Lincoln County, on left bank 4.5 miles upstream from Howland Creek, 6 miles downstream from Hobble Creek, and 12 miles northeast of Border.

DRAINAGE AREA.--165 sq mi.

PERIOD OF RECORD.--May 1942 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,650 ft (from topographic map). Prior to Oct. 16, 1945, at site 0.8 mile downstream at different datum.

AVERAGE DISCHARGE.--29 years, 195 cfs (141,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,610 cfs June 18 (gage height, 5.61 ft); minimum daily, 62 cfs Mar. 19.
Period of record: Maximum discharge, 1,610 cfs June 18, 1971 (gage height, 5.61 ft); minimum recorded, 35 cfs 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 above station.

REVISIONS (WATER YEARS).--WSP 1734: 1952(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	79	78	70	74	65	69	469	1,120	847	332	179
2	92	79	77	70	73	65	67	593	1,100	811	318	171
3	94	80	77	70	72	65	69	738	1,080	805	312	179
4	94	82	78	70	70	65	68	860	1,050	786	305	179
5	94	84	77	70	70	65	69	841	1,020	750	298	171
6	99	84	77	70	70	65	73	744	1,080	719	295	162
7	99	84	77	70	70	65	79	774	1,070	701	279	164
8	96	84	79	70	70	65	84	768	1,160	678	282	162
9	97	80	79	70	70	65	90	823	1,260	654	282	157
10	106	84	75	70	70	65	108	902	1,380	632	257	152
11	97	77	75	70	70	65	122	902	1,440	620	248	152
12	97	86	75	70	70	66	124	986	1,410	598	245	150
13	94	80	75	70	70	67	119	1,060	1,380	572	239	148
14	92	78	75	70	69	65	130	1,120	1,380	557	233	148
15	91	86	75	70	71	65	152	1,130	1,440	541	230	145
16	91	82	75	75	70	65	166	1,210	1,490	521	224	145
17	90	80	75	80	68	65	195	1,060	1,540	507	221	148
18	88	80	75	86	68	63	212	872	1,570	502	209	148
19	88	78	75	85	68	62	198	725	1,550	492	206	145
20	86	78	75	84	67	65	187	672	1,500	474	203	145
21	88	78	75	82	65	65	187	593	1,460	464	203	143
22	90	77	75	80	65	65	212	615	1,430	451	200	141
23	86	79	75	80	65	67	209	598	1,430	437	195	139
24	92	84	75	79	65	68	224	683	1,390	424	190	137
25	85	102	75	79	65	67	257	780	1,340	407	190	132
26	84	92	75	79	65	69	266	890	1,270	395	187	134
27	85	85	75	78	65	72	242	1,060	1,210	387	181	139
28	91	84	75	75	65	69	251	1,240	1,110	372	181	139
29	86	84	75	75	-----	66	282	1,270	980	364	203	137
30	84	84	75	75	-----	69	350	1,350	908	350	198	139
31	82	-----	75	74	-----	73	-----	1,160	-----	342	184	-----
TOTAL	2,830	2,478	2,349	2,316	1,920	2,048	4,861	27,488	38,548	17,160	7,330	4,530
MEAN	91.3	82.6	75.8	74.7	68.6	66.1	162	887	1,285	554	236	151
MAX	106	102	79	86	74	73	350	1,350	1,570	847	332	179
MIN	82	77	75	70	65	62	67	469	908	342	181	137
AC-FT	5,610	4,920	4,660	4,590	3,810	4,060	9,640	54,520	76,460	34,040	14,540	8,990
CAL YR 1970	TOTAL	66,069	MEAN	181	MAX	890	MIN	55	AC-FT	131,000		
WTR YR 1971	TOTAL	113,858	MEAN	312	MAX	1,570	MIN	62	AC-FT	225,800		

BEAR RIVER BASIN

10038000 BEAR RIVER BELOW SMITHS FORK, NEAR COKEVILLE, WYO.

LOCATION.--Lat 42°07'34", long 110°58'23", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.28, T.25 N., R.119 W., Lincoln County, 1.1 miles upstream from Wyman Dam, 2.8 miles northwest of Cokeville, and 3.8 miles downstream from Smiths Fork.

DRAINAGE AREA.--2,460 sq mi, approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,140 ft (from river-profile map).

AVERAGE DISCHARGE.--17 years, 407 cfs (294,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,720 cfs June 19 (gage height, 6.22 ft); minimum, 125 cfs Oct. 28.
Period of record: Maximum discharge, 3,780 cfs Mar. 26, 1956 (gage height, 7.54 ft); minimum, 63 cfs 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 1970 TO SEPTEMBER 1971

CAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	166	198	235	223	340	290	2,070	1,440	2,020	2,130	506	292
2	209	195	206	220	335	270	1,950	1,500	2,060	1,950	495	276
3	166	192	192	220	310	250	1,680	1,560	2,270	1,760	470	310
4	169	192	255	220	300	235	1,440	1,720	2,380	1,600	450	370
5	152	198	255	220	285	260	1,260	1,870	2,390	1,480	420	395
6	160	206	250	210	280	250	1,140	1,910	2,350	1,380	405	400
7	172	220	250	210	280	225	1,130	1,910	2,220	1,270	390	323
8	185	227	247	210	280	230	1,160	1,980	1,950	1,190	380	400
9	223	220	239	210	285	240	1,090	2,040	1,930	1,070	375	365
10	235	223	235	210	320	235	1,100	2,100	1,960	993	360	360
11	227	216	230	210	328	235	1,150	2,170	1,960	897	314	355
12	216	223	225	210	341	243	1,080	2,170	2,150	849	297	390
13	216	223	225	210	332	263	966	2,220	2,230	802	297	375
14	209	216	220	205	341	365	952	2,350	2,340	769	284	346
15	202	202	210	200	350	445	972	2,400	2,430	676	271	332
16	202	209	205	195	405	480	1,010	2,460	2,530	640	255	332
17	202	216	192	202	445	465	1,060	2,530	2,580	640	243	318
18	198	216	195	235	420	450	1,180	2,480	2,620	622	239	314
19	202	220	200	245	400	420	1,240	2,350	2,700	604	243	318
20	198	212	210	245	410	395	1,320	2,240	2,660	582	247	314
21	192	198	250	230	360	390	1,330	2,200	2,570	604	235	310
22	195	209	225	235	340	380	1,380	2,180	2,500	599	227	310
23	198	212	225	240	330	445	1,430	2,160	2,470	599	243	310
24	216	220	225	240	314	682	1,420	2,020	2,460	582	267	297
25	216	259	230	250	314	966	1,450	1,860	2,420	566	263	292
26	209	288	230	255	310	1,000	1,480	1,810	2,380	560	271	292
27	188	284	230	247	310	1,340	1,430	1,790	2,370	555	255	288
28	188	267	230	280	310	2,040	1,420	1,750	2,330	550	243	301
29	192	251	235	300	-----	2,180	1,400	1,850	2,200	555	243	301
30	202	267	235	315	-----	2,100	1,390	1,910	2,110	538	263	301
31	198	-----	223	320	-----	2,100	-----	1,980	-----	528	276	-----
TOTAL	6,103	6,675	7,014	7,226	9,375	19,869	39,080	62,910	69,540	28,140	9,727	9,887
MEAN	197	223	226	233	335	641	1,303	2,029	2,318	908	314	330
MAX	235	288	255	320	445	2,180	2,070	2,530	2,700	2,130	506	400
MIN	152	192	192	195	280	225	952	1,440	1,930	528	227	276
AC-FT	12,110	13,250	13,910	14,330	18,600	39,410	77,520	124,800	137,900	55,820	19,290	19,610
CAL YR 1970	TOTAL	119,517	MEAN	329	MAX	1,630	MIN	118	AC-FT	237,900		
WTR YR 1971	TOTAL	275,550	MEAN	755	MAX	2,700	MIN	152	AC-FT	546,600		

221

LOCATION.--Lat 42°12'40", long 111°03'11", in NE¹/₄NE¹/₄ sec.15, T.14 S., R.46 E., Bear Lake County, Idaho, on left bank 0.2 mile west of Wyoming-Idaho State line, 0.5 mile west of Border, and 2.1 miles upstream from Thomas Fork.

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

AVERAGE DISCHARGE.--34 years, 410 cfs (297,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,810 cfs June 20 (gage height, 8.09 ft); minimum daily, 167 cfs Oct. 6.
Period of record: Maximum discharge, 3,680 cfs May 11, 1952 (gage height, 8.89 ft); minimum daily, 30 cfs Aug. 18-22, 1940.

REMARKS.--Records good except those for winter months, which are fair. Diversions for irrigation of about 122,000 acres above station. 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	173	210	253	230	350	300	2,000	1,400	2,150	2,020	511	259
2	208	207	246	230	350	280	1,940	1,400	2,160	1,920	499	251
3	180	203	240	230	325	260	1,750	1,420	2,250	1,750	475	263
4	178	195	265	230	305	250	1,510	1,520	2,360	1,580	452	301
5	173	205	260	230	295	250	1,350	1,730	2,420	1,450	416	321
6	167	212	260	220	290	250	1,240	1,900	2,460	1,370	400	357
7	180	226	260	220	290	250	1,240	1,880	2,350	1,260	382	296
8	197	230	260	220	290	250	1,300	1,940	2,110	1,190	374	326
9	226	228	250	220	300	250	1,260	2,000	1,980	1,090	364	352
10	240	228	240	220	350	250	1,260	2,060	2,000	1,040	360	343
11	240	228	240	220	350	250	1,300	2,110	2,010	960	326	322
12	230	226	235	220	360	300	1,260	2,160	2,110	880	301	331
13	226	234	225	220	370	350	1,130	2,220	2,210	832	250	338
14	222	228	220	210	380	400	1,090	2,310	2,300	805	285	322
15	218	212	220	205	400	480	1,100	2,410	2,390	718	274	314
16	212	220	210	205	430	520	1,120	2,520	2,480	690	259	312
17	212	228	210	220	450	490	1,180	2,600	2,580	697	246	308
18	208	226	210	240	420	460	1,280	2,630	2,660	683	246	305
19	205	226	215	250	420	450	1,350	2,580	2,710	683	246	308
20	203	224	220	250	420	420	1,420	2,480	2,800	645	248	308
21	201	214	225	250	390	400	1,420	2,370	2,760	662	236	303
22	205	220	230	250	360	440	1,420	2,260	2,620	652	216	301
23	212	222	235	250	340	600	1,460	2,200	2,520	652	222	301
24	224	226	240	250	325	800	1,480	2,080	2,480	642	244	296
25	230	253	240	260	320	1,000	1,480	1,920	2,470	616	244	288
26	224	290	240	260	320	1,100	1,520	1,830	2,420	599	253	281
27	207	283	240	275	320	1,600	1,500	1,820	2,360	583	248	285
28	193	270	240	290	320	2,100	1,450	1,800	2,340	571	226	296
29	205	296	240	310	-----	2,250	1,420	1,880	2,220	571	230	296
30	218	285	240	330	-----	2,200	1,400	2,000	2,060	551	240	303
31	214	-----	240	350	-----	2,200	-----	2,100	-----	539	251	-----
TOTAL	6,431	6,955	7,345	7,565	9,840	21,400	41,630	63,530	70,740	28,901	9,564	9,187
MEAN	207	232	237	244	351	690	1,388	2,049	2,358	932	309	306
MAX	240	296	265	350	450	2,250	2,000	2,630	2,800	2,020	511	357
MIN	167	195	210	205	290	250	1,090	1,400	1,980	539	216	251
AC-FT	12,760	1										

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 miles upstream from State line, 1.5 miles downstream from Giraffe Creek, and 3.5 miles northeast of Geneva, Ida.

DRAINAGE AREA.--113 sq mi.

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

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

AVERAGE DISCHARGE.--22 years, 52.7 cfs (38,180 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,040 cfs May 14 (gage height, 3.84 ft); minimum, 6.6 cfs Nov. 22.
Period of record: Maximum discharge, 1,040 cfs May 14, 1971 (gage height, 3.84 ft); minimum, 2.6 cfs Mar. 2, 1956, result of freezeup.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	16	19	16	21	15	28	471	405	125	52	33
2	15	16	18	16	19	15	28	575	377	120	50	32
3	15	16	18	16	18	15	28	680	350	118	50	37
4	15	16	19	16	18	15	29	710	337	117	52	36
5	15	16	18	14	18	15	28	705	319	113	52	34
6	16	18	18	13	17	15	29	641	326	109	50	32
7	16	19	18	14	17	15	35	660	300	105	49	34
8	16	19	18	15	17	15	43	705	286	99	50	32
9	17	17	18	17	17	15	52	746	283	94	50	31
10	23	19	19	18	17	15	76	783	276	91	45	30
11	19	18	20	18	18	15	88	812	289	88	44	29
12	18	18	18	17	18	15	81	852	258	86	43	29
13	16	16	18	16	18	18	82	846	240	83	42	28
14	16	16	18	15	18	18	92	913	226	80	41	28
15	16	16	18	14	18	16	116	840	216	77	40	28
16	16	16	18	15	18	16	143	873	208	74	39	28
17	16	15	18	17	18	15	170	725	199	72	39	29
18	15	16	18	23	18	15	189	609	189	69	37	29
19	15	15	18	25	18	15	158	523	184	70	36	28
20	15	16	18	23	18	15	162	523	178	67	36	28
21	16	14	18	23	17	15	177	457	170	67	35	29
22	17	13	18	22	17	15	217	448	164	65	35	29
23	14	16	18	22	17	17	207	425	159	69	34	28
24	19	25	18	21	17	22	246	445	152	67	34	27
25	16	42	18	20	17	22	284	460	148	63	34	27
26	16	28	18	22	15	23	288	483	143	60	33	27
27	17	23	18	22	15	28	249	512	143	58	32	29
28	19	19	18	21	15	26	261	512	147	57	32	31
29	20	20	18	21	-----	29	294	489	136	55	42	29
30	19	22	18	21	-----	26	362	485	128	54	42	30
31	18	-----	19	21	-----	28	-----	417	-----	53	35	-----
TOTAL	516	556	564	574	489	559	4,242	19,325	6,936	2,525	1,285	901
MEAN	16.6	18.5	18.2	18.5	17.5	18.0	141	623	231	81.5	41.5	30.0
MAX	23	42	20	25	21	29	362	913	405	125	52	37
MIN	14	13	18	13	15	15	28	417	128	53	32	27
AC-FT	1,020	1,100	1,120	1,140	970	1,110	8,410	38,330	13,760	5,010	2,550	1,790
CAL YR 1970	TOTAL 14,104		MEAN 38.6	MAX 348	MIN 13	AC-FT 27,980						
WTR YR 1971	TOTAL 38,472		MEAN 105	MAX 913	MIN 13	AC-FT 76,310						

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-14	0230	3.84	1,040				

SNAKE RIVER MAIN STEM

13010500 JACKSON LAKE NEAR MORAN, WYO.

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

DRAINAGE AREA.--824 sq mi.

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

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

EXTREMES.--Current year: Maximum contents, 854,200 acre-ft July 6 (elevation, 6,769.28 ft); minimum, 390,700 acre-ft May 24 (elevation, 6,749.90 ft).

Period of record: Maximum contents, 859,530 acre-ft July 11, 1965 (elevation, 6,769.49 ft); no usable contents for several days during period August to October 1919.

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

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

REVISIONS.--WSP 1217: Drainage area.

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

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

CONTENTS, IN ACRE-FEET, AT 800, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	570,400	555,600	564,500	580,300	597,600	602,100	611,200	491,600	443,500	835,800	809,400	688,700
2	567,100	555,600	565,900	580,800	597,900	602,100	611,000	482,800	451,700	842,100	805,400	684,600
3	564,300	555,300	566,600	581,000	598,100	601,900	611,000	474,800	458,700	847,500	801,100	681,900
4	561,900	555,300	567,800	581,000	598,100	602,100	610,700	467,400	465,400	852,900	796,800	678,000
5	559,800	555,100	568,500	581,300	598,300	602,100	610,700	460,600	471,800	853,900	793,500	673,100
6	559,300	555,100	569,200	581,500	598,300	601,900	610,700	454,200	477,500	854,200	788,700	668,300
7	557,900	555,100	569,400	581,700	598,300	601,900	610,500	448,000	485,300	853,100	784,200	664,600
8	557,200	555,100	570,200	582,200	598,600	601,700	610,300	442,400	491,300	851,100	779,700	661,500
9	556,700	555,300	570,600	583,200	598,800	601,700	608,100	436,500	497,600	850,000	775,700	658,100
10	556,700	555,600	571,300	583,900	599,300	601,400	606,200	431,500	505,600	850,800	771,200	654,200
11	556,500	556,000	571,800	584,300	599,500	601,700	604,800	427,000	515,400	851,100	766,200	650,100
12	556,000	556,500	572,000	585,000	599,500	602,400	603,100	422,900	531,000	850,800	761,500	645,800
13	556,700	556,700	572,000	585,800	599,800	603,600	601,700	420,400	545,500	852,100	756,200	641,400
14	557,000	557,000	572,300	586,000	600,000	604,300	598,100	418,200	558,800	853,100	752,500	636,900
15	556,700	557,200	572,700	586,500	600,000	605,200	594,800	415,900	571,600	853,400	749,000	631,600
16	556,700	557,200	573,200	588,600	600,200	605,500	591,200	413,700	584,600	852,600	745,800	627,000
17	556,700	557,000	573,400	591,500	600,700	606,400	587,200	413,000	600,500	851,600	742,300	622,200
18	556,700	557,000	573,700	593,600	601,000	606,700	583,200	410,800	617,400	850,800	738,600	617,400
19	556,500	557,400	573,900	594,100	601,000	606,700	578,600	406,300	634,000	849,300	734,900	612,600
20	556,500	557,700	573,900	594,800	601,200	606,700	573,200	406,700	648,200	847,700	731,200	609,100
21	556,200	557,900	574,200	595,200	601,400	606,400	568,700	395,100	662,900	846,700	727,200	606,400
22	556,000	557,900	574,900	595,500	601,400	606,400	560,500	391,400	679,900	844,900	723,500	604,300
23	555,600	557,900	575,600	596,000	601,200	607,600	553,200	391,100	701,900	842,400	720,800	602,400
24	556,000	557,900	575,800	596,200	601,200	608,400	545,000	390,700	727,700	839,600	716,400	600,700
25	556,200	559,300	576,000	596,700	601,700	608,600	535,600	391,600	750,300	836,300	712,700	599,500
26	556,200	560,700	576,000	596,900	601,900	609,300	527,900	394,700	768,200	833,200	708,500	599,000
27	556,000	561,400	576,300	597,200	601,900	610,700	518,900	400,300	784,200	829,700	704,400	598,600
28	556,000	561,700	576,800	597,200	602,100	611,000	510,300	408,100	799,600	825,800	700,400	598,300
29	555,800	561,900	577,900	597,400	-----	611,000	506,100	418,000	816,500	822,300	697,500	598,300
30	555,600	563,800	578,600	597,400	-----	611,200	500,800	427,400	826,900	817,700	695,800	598,300
31	555,600	-----	579,400	597,600	-----	611,200	-----	436,000	-----	813,700	692,600	-----
MAX	570,400	563,800	579,400	597,600	602,100	611,200	611,200	491,600	826,900	854,200	809,400	688,700
MIN	555,600	555,100	564,500	580,300	597,600	601,400	500,800	390,700	443,500	813,700	692,600	598,300
(†)	6,757.10	6,757.45	6,758.11	6,758.88	6,759.07	6,759.45	6,754.75	6,751.92	6,768.21	6,767.69	6,762.82	6,758.91
(‡)	-18,300	+8,200	+15,600	+18,200	+4,500	+9,100	-110,400	-64,800	+390,900	-13,200	-121,100	-94,300

CAL YR 1970 MAX 850,600 MIN 555,100

WTR YR 1971 MAX 854,200 MIN 390,700

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.

LOCATION.--Lat 43°51'31", long 110°35'09", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.18, T.45 N., R.114 W., Teton County, in Grand Teton National Park, on left bank, 1,000 ft downstream from Jackson Lake Dam, 4.1 miles west of Moran, and at mile 1,000.1.

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

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

EXTREMES.--Current year: Maximum discharge, 6,950 cfs July 5 (gage height, 8.37 ft); minimum, 174 cfs Oct. 16 (gage height, 2.04 ft).
Period of record: Maximum discharge, 15,100 cfs June 12, 1918 (gage height, 10.41 ft, site and datum then in use); minimum,
0.30 cfs Oct. 26, 27, 28, 1969 (gage height, 0.89 ft).
Flood during early June 1894 was considerably higher than that of June 12, 1918.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,390	430	444	471	480	485	485	5,670	3,630	2,080	4,150	2,990
2	2,040	430	444	471	480	485	485	5,620	3,050	3,180	4,140	3,070
3	1,850	430	444	471	480	485	485	5,590	2,780	4,810	4,130	3,140
4	1,670	435	444	471	480	485	485	5,590	2,950	5,790	4,110	3,110
5	1,400	435	444	471	480	485	485	5,650	3,500	6,930	4,100	3,090
6	1,190	435	448	471	480	485	485	5,820	4,460	6,890	4,080	3,080
7	965	435	448	471	480	485	701	6,330	4,930	6,110	4,080	3,070
8	772	435	448	476	480	485	993	6,660	5,170	4,510	4,060	3,060
9	668	435	448	476	480	485	1,430	6,610	4,490	3,960	4,040	3,120
10	668	435	448	471	480	485	1,560	6,590	4,100	4,700	4,030	3,160
11	668	435	448	466	480	485	1,560	6,540	3,710	4,700	4,000	3,150
12	580	435	448	466	480	485	1,550	6,500	3,170	4,170	3,970	3,140
13	545	435	448	466	480	485	1,850	6,490	3,010	3,480	3,350	3,130
14	540	435	448	466	480	485	2,310	6,440	3,040	3,770	2,980	3,110
15	540	435	453	471	480	485	2,700	6,400	2,610	4,160	3,000	3,100
16	520	435	453	471	480	485	2,990	6,400	2,120	4,280	2,990	3,090
17	525	435	458	476	480	485	3,130	6,420	2,130	4,280	2,960	3,080
18	530	435	458	476	480	485	3,340	6,370	2,150	4,270	2,950	3,070
19	530	435	458	476	480	485	3,630	6,350	2,170	4,260	2,940	2,850
20	525	435	458	476	480	485	3,980	6,300	2,040	4,260	2,920	2,190
21	525	430	458	476	480	485	4,580	5,960	1,720	4,260	2,910	1,810
22	525	430	462	480	480	485	4,900	4,760	1,500	4,250	2,900	1,630
23	525	435	466	480	480	485	5,120	4,140	1,120	4,240	2,890	1,430
24	520	440	466	480	480	485	5,410	4,130	1,040	4,230	2,880	1,230
25	520	440	466	480	480	485	5,480	4,140	773	4,220	2,970	1,040
26	520	440	466	480	480	485	5,650	4,160	468	4,220	3,050	904
27	520	440	466	480	480	485	5,430	4,500	458	4,200	3,040	829
28	520	440	471	480	480	485	3,500	4,760	466	4,190	3,030	730
29	471	440	471	480	-----	485	3,300	4,820	748	4,180	3,030	663
30	430	440	471	480	-----	485	5,300	4,880	1,420	4,170	3,020	621
31	430	-----	471	480	-----	485	-----	4,800	-----	4,160	3,010	-----
TOTAL	24,622	13,060	14,124	14,706	13,440	15,035	83,304	175,390	74,923	136,910	105,710	71,687
MEAN	794	435	456	474	480	485	2,777	5,658	2,497	4,416	3,410	2,390
MAX	2,390	440	471	480	480	485	5,650	6,660	5,170	6,930	4,150	

13011500 PACIFIC CREEK AT MORAN, WYO.

LOCATION.--Lat 43°51'04", long 110°30'59", in SW 1/4 sec. 23, T.45 N., R.114 W., Teton County, in Grand Teton National Park, on right bank 6 ft upstream from bridge on U.S. Highway 287, at Moran, and at mile 0.5.

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

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

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

AVERAGE DISCHARGE.--27 years (1944-71), 267 cfs (22.66 inches per year, 193,400 acre-ft per year); 15-year base period (1952-67), 258 cfs.

EXTREMES.--Current year: Maximum discharge, 3,390 cfs June 23 (gage height, 6.35 ft); minimum daily, 35 cfs Jan. 7.

Period of record: Maximum discharge, 3,470 cfs May 21, 1954; maximum gage height, 6.35 ft June 23, 1971; minimum daily discharge, 22 cfs Nov. 18, 1969.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	70	47	72	56	57	48	70	196	2,100	1,190	228	106		
2	68	48	70	55	57	48	68	256	1,850	1,240	222	100		
3	66	49	68	52	56	47	66	358	1,860	1,320	222	124		
4	65	53	68	49	55	47	65	460	1,810	1,210	196	135		
5	68	57	66	45	54	47	65	540	1,890	1,070	187	124		
6	78	58	68	41	54	47	65	632	2,200	1,070	181	116		
7	76	58	71	35	53	47	68	710	2,380	1,070	173	110		
8	71	58	73	42	53	47	74	824	2,580	990	178	112		
9	71	58	71	47	53	47	77	870	2,680	920	173	108		
10	72	62	70	55	53	48	89	910	2,720	910	159	102		
11	71	55	69	58	53	49	89	1,090	2,640	900	154	98		
12	77	60	67	59	53	51	87	1,220	2,460	842	142	94		
13	78	56	64	58	53	54	85	1,370	2,450	762	137	89		
14	76	55	64	57	53	54	84	1,320	2,630	710	133	87		
15	66	52	66	58	53	53	100	1,340	2,580	632	128	85		
16	66	56	65	60	53	52	106	1,510	2,580	590	122	85		
17	65	58	64	60	53	51	106	1,410	2,640	584	118	85		
18	65	57	62	60	53	51	108	1,090	2,660	552	118	82		
19	66	56	61	59	53	50	106	930	2,580	512	114	80		
20	65	57	60	58	52	50	108	851	2,380	475	112	78		
21	65	57	61	58	51	52	108	824	2,630	465	106	77		
22	65	54	60	58	50	54	110	1,020	2,770	445	104	77		
23	64	62	57	58	50	59	110	910	2,880	425	108	77		
24	66	74	58	58	50	63	120	1,080	2,740	372	104	72		
25	61	89	60	58	50	63	122	1,290	2,460	363	100	74		
26	62	77	60	58	50	68	128	1,630	2,280	336	98	78		
27	57	72	59	58	49	77	131	1,850	2,090	314	94	78		
28	52	74	58	57	49	72	133	2,000	1,880	292	91	82		
29	48	71	57	57	-----	71	146	2,070	1,460	280	106	80		
30	47	72	57	57	-----	70	162	2,200	1,240	264	142	80		
31	47	-----	57	57	-----	70	-----	2,230	-----	239	114	-----		
TOTAL	2,034	1,812	1,983	1,698	1,473	1,707	2,956	34,991	70,100	21,344	4,364	2,775		
MEAN	65.6	60.4	64.0	54.8	52.6	55.1	98.5	1,129	2,337	689	141	92.5		
MAX	78	89	73	60	57	77	162	2,230	2,880	1,320	228	135		
MIN	47	47	57	35	49	47	65	196	1,240	239	91	72		
CFSM	.41	.38	.40	.34	.33	.34	.62	7.06	14.6	4.31	.88	.58		
IN.	.47	.42	.46	.39	.34	.40	.69	8.14	16.30	4.96	1.01	.65		
AC-FT	4,030	3,590	3,930	3,370	2,920	3,390	5,860	69,400	139,000	42,340	8,660	5,500		
CAL YR 1970	TOTAL	93,462	MEAN	256	MAX	2,130	MIN	28	CFSM	1.60	IN	21.73	AC-FT	185,400
WTR YR 1971	TOTAL	147,237	MEAN	403	MAX	2,880	MIN	35	CFSM	2.52	IN	34.23	AC-FT	292,000

PEAK DISCHARGE (BASE, 1,300 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
5-16	2300	5.25	1,620	6-23	0200	6.35	3,390
5-31	0400	5.75	2,360				

BUFFALO FORK BASIN

13011900 BUFFALO FORK ABOVE LAVA CREEK, NEAR MORAN, WYO.

LOCATION.--Lat 43°50'14", long 110°26'21", in SE 1/4 sec.29, T.45 N., R.113 W., Teton County, in Grand Teton National Park, on right bank, underneath bridge on U.S. Highway 26, 287, about 2 miles upstream from Lava Creek, 3.5 miles east of Moran, and 4 miles upstream from mouth.

DRAINAGE AREA.--355 sq mi.

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

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

AVERAGE DISCHARGE.--6 years (1965-71), 574 cfs (415,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,810 cfs June 23 (gage height, 7.66 ft); minimum daily, 90 cfs Jan. 7.
Period of record: Maximum discharge, 4,860 cfs June 28, 1970; maximum gage height, 7.66 ft June 23, 1971; minimum daily discharge, 82 cfs Jan. 28-31, 1969.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	225	160	195	165	112	115	120	362	2,270	2,060	989	452
2	222	162	185	158	108	115	120	438	2,000	2,390	940	417
3	216	167	180	148	105	114	120	510	1,930	2,740	933	535
4	212	175	172	132	105	114	120	600	1,940	2,820	940	510
5	216	185	170	118	104	112	120	635	1,820	2,580	919	470
6	245	192	172	100	108	108	122	660	1,850	2,580	886	470
7	232	186	180	90	112	102	132	698	2,000	2,680	834	438
8	219	183	180	100	112	118	150	758	2,400	2,550	792	443
9	216	180	180	102	112	125	200	774	2,840	2,500	758	401
10	232	186	175	108	112	118	240	840	3,090	2,560	730	385
11	216	158	170	108	112	110	245	961	3,040	2,690	686	373
12	225	194	165	108	112	108	228	1,160	2,940	2,670	650	366
13	225	197	165	108	112	112	206	1,390	3,170	2,580	615	358
14	222	200	165	108	112	112	219	1,400	3,210	2,490	600	350
15	197	166	170	115	112	112	238	1,430	3,510	2,390	590	338
16	209	206	175	115	112	110	241	1,630	3,610	2,320	570	338
17	212	206	175	117	112	110	245	1,490	4,030	2,380	580	327
18	209	194	175	117	112	110	258	1,190	4,180	2,470	570	316
19	216	189	172	117	112	110	245	1,020	4,080	2,270	535	323
20	203	192	165	117	108	110	228	954	3,660	2,120	510	308
21	212	183	162	117	100	112	245	872	4,150	2,040	500	312
22	206	169	162	117	109	115	248	1,000	4,380	1,940	490	304
23	194	200	162	117	115	120	252	940	4,610	1,570	495	301
24	206	248	162	117	118	122	272	1,080	4,650	1,560	470	301
25	197	286	160	117	118	122	283	1,200	4,540	1,510	448	294
26	192	240	162	117	118	122	279	1,530	4,500	1,420	434	301
27	172	220	165	117	118	122	279	1,990	4,060	1,330	421	294
28	168	205	165	117	118	122	276	2,500	3,560	1,250	417	294
29	162	190	165	117	-----	122	297	2,780	2,700	1,190	452	304
30	160	192	165	117	-----	122	316	2,970	2,160	1,080	610	308
31	100	-----	165	117	-----	122	-----	2,770	-----	1,050	495	-----
TOTAL	6,338	5,811	5,281	3,638	3,120	3,568	6,544	38,532	96,880	65,780	19,859	10,931
MEAN	204	194	170	117	111	115	218	1,243	3,229	2,122	641	364
MAX	245	286	195	165	118	125	316	2,970	4,650	2,820	989	535
MIN	100	158	160	90	100	102	120	362	1,820	1,050	417	294
CFSM	.57	.55	.48	.33	.31	.32	.61	3.50	9.10	5.98	1.81	1.03
IN.	.66	.61	.55	.38	.33	.37	.69	4.04	10.15	6.89	2.08	1.15
AC-FT	12,570	11,530	10,470	7,220	6,190	7,080	12,980	76,430	192,200	130,500	39,390	21,680
CAL YR 1970	TOTAL 207,146	MEAN 568	MAX 4,520	MIN 100	CFSM 1.60	IN 21.71	AC-FT 410,900					
WTR YR 1971	TOTAL 266,282	MEAN 730	MAX 4,650	MIN 90	CFSM 2.06	IN 27.90	AC-FT 528,200					

PEAK DISCHARGE (BASE, 3,100 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-30	0600	5.40	3,150	6-23	1000	7.66	4,810

FLAT CREEK BASIN

227

13018300 CACHE CREEK NEAR JACKSON, WYO.
(Hydrologic bench-mark station)

LOCATION.--Lat 43°27'08", long 110°42'12", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.1, T.40 N., R.116 W., Teton County, Teton National Forest, on right bank 0.7 mile upstream from Salt Lick Draw, 2.4 miles southeast of Jackson, and 4 miles upstream from mouth.

DRAINAGE AREA.--10 sq mi, approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,750 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 14.3 cfs (10,360 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 225 cfs June 24 (gage height, 3.90 ft); minimum daily, 2.7 cfs Jan. 5.

Period of record: Maximum discharge, 225 cfs June 24, 1971 (gage height, 3.90 ft); minimum daily, 2.7 cfs Jan. 5, 1971.

REMARKS.--Records fair 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 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	5.9	5.0	4.4	4.7	4.6	4.7	9.5	73	63	24	14
2	7.0	5.9	4.9	4.0	4.7	4.6	4.8	12	66	61	24	14
3	6.9	5.8	5.0	3.5	4.6	4.8	5.0	15	66	58	24	15
4	6.7	5.8	5.1	3.0	4.4	4.6	5.1	18	64	60	24	14
5	7.2	5.8	5.1	2.7	4.1	4.6	5.1	18	61	54	23	14
6	7.2	5.9	5.0	2.8	4.3	4.6	5.2	17	66	53	22	13
7	6.9	5.7	5.0	3.2	4.6	4.6	5.6	20	75	51	22	13
8	6.8	5.6	5.0	3.6	4.8	4.6	5.6	22	90	49	22	13
9	6.7	5.6	5.0	4.1	4.8	4.6	5.9	22	97	48	21	13
10	6.7	5.6	4.7	4.5	4.8	4.5	6.3	22	104	46	20	13
11	6.6	5.6	4.6	4.4	4.8	4.6	6.3	25	105	45	20	12
12	6.7	5.6	4.5	4.5	4.6	4.6	5.7	30	97	43	20	12
13	6.7	5.4	4.4	4.5	4.6	4.6	6.0	33	97	42	19	12
14	6.6	5.3	4.7	4.5	4.6	4.6	6.1	34	99	41	18	12
15	6.7	5.1	5.0	4.6	4.6	4.6	6.5	36	113	38	18	12
16	6.5	5.3	5.2	4.7	4.6	4.8	6.5	40	126	38	18	12
17	6.4	5.3	5.0	5.0	4.5	4.8	6.6	37	136	36	18	12
18	6.4	5.3	4.8	5.0	4.6	4.6	6.6	31	136	36	17	12
19	6.3	5.3	4.5	5.0	4.5	4.5	6.5	26	130	36	16	12
20	6.3	5.3	4.6	4.9	4.5	4.7	6.5	24	118	35	16	12
21	6.3	5.3	4.6	4.8	4.4	4.8	6.6	24	118	32	16	12
22	6.3	5.2	4.6	4.6	4.3	4.6	6.6	26	118	32	16	12
23	6.2	5.1	4.6	4.7	4.4	4.8	6.8	25	122	30	16	12
24	6.3	5.3	4.6	4.8	4.6	4.8	7.4	27	161	29	15	12
25	6.1	5.4	4.6	4.8	4.7	4.8	7.2	31	148	29	15	11
26	5.9	5.4	4.5	4.8	4.8	5.1	7.0	40	122	28	14	11
27	5.7	5.3	4.5	4.8	4.6	5.0	6.8	52	120	28	14	11
28	5.6	5.1	4.5	4.7	4.6	4.8	6.8	65	103	26	14	11
29	5.7	5.1	4.5	4.7	-----	4.8	7.2	75	84	26	16	11
30	5.9	5.1	4.4	4.7	-----	5.0	7.6	81	69	25	16	11
31	5.9	-----	4.5	4.7	-----	5.0	-----	75	-----	25	14	-----
TOTAL	200.2	163.4	147.0	135.0	128.1	146.0	186.6	1,012.5	3,084	1,243	572	370
MEAN	6.46	5.45	4.74	4.35	4.58	4.71	6.22	32.7	103	40.1	18.5	12.3
MAX	7.2	5.9	5.2	5.0	4.8	5.1	7.6	81	161	63	24	15
MIN	5.6	5.1	4.4	2.7	4.1	4.5	4.7	9.5	61	25	14	11
AC-FT	397	324	292	268	254	290	370	2,010	6,120	2,470	1,130	734
CAL YR 1970	TOTAL 5,086.1		MEAN 13.9		MAX 98	MIN 3.4	AC-FT 10,090					
WTR YR 1971	TOTAL 7,387.8		MEAN 20.2		MAX 161	MIN 2.7	AC-FT 14,650					

PEAK DISCHARGE (BASE, 52 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
5-30	0100	2.97	85	6-24	1530	3.90	225

SNAKE RIVER MAIN STEM

13022500 SNAKE RIVER ABOVE RESERVOIR, NEAR ALPINE, WYO.

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

DRAINAGE AREA.--3,465 sq mi.

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

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

AVERAGE DISCHARGE.--19 years (1937-38, 1953-71), 4,516 cfs (3,272,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 25,000 cfs June 29 (gage height, 10.87 ft); minimum daily, 1,300 cfs Jan. 7.

Period of record: Maximum discharge, 26,800 cfs June 28, 1954 (gage height, 11.68 ft); minimum, 740 cfs Nov. 16, 1955 (gage height, 2.19 ft).

REMARKS.--Records excellent except those for winter period, which are fair. Flow partly regulated by Jackson Lake. (See sta 13010500.) Some diversions from tributaries above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,390	1,880	2,020	2,080	2,020	1,500	1,890	9,290	20,100	13,700	9,500	6,040
2	4,060	1,880	1,980	1,940	1,980	1,450	1,840	10,300	17,200	14,300	9,260	5,830
3	3,780	1,840	1,940	1,600	1,890	1,440	1,840	11,300	15,800	16,200	9,110	6,270
4	3,560	1,820	1,920	1,450	1,780	1,480	1,830	12,500	15,200	17,900	9,030	6,420
5	3,410	1,830	1,860	1,380	1,830	1,530	1,840	12,800	15,300	18,300	8,940	6,170
6	3,330	1,860	1,880	1,320	1,790	1,600	1,880	12,700	16,200	18,300	8,880	6,020
7	3,080	1,870	1,890	1,300	1,750	1,630	1,990	13,400	17,500	18,100	8,860	5,880
8	2,810	1,870	1,980	1,450	1,790	1,680	2,410	15,600	18,900	16,800	8,910	5,850
9	2,600	1,860	2,020	1,600	1,790	1,640	2,900	16,200	20,600	15,100	8,740	5,730
10	2,510	1,950	1,950	1,950	1,820	1,670	3,590	16,200	21,300	15,400	8,460	5,760
11	2,400	1,880	1,860	2,100	1,830	1,670	3,820	16,000	22,200	15,700	8,220	5,710
12	2,360	1,870	1,840	2,080	1,780	1,730	3,710	17,100	21,300	15,700	8,000	5,640
13	2,350	1,880	1,850	1,980	1,780	1,840	3,540	18,000	20,400	14,500	7,810	5,520
14	2,280	1,820	2,030	1,850	1,780	1,760	3,880	17,900	20,800	13,800	6,910	5,450
15	2,200	1,780	1,980	1,950	1,790	1,730	4,580	18,000	21,900	14,000	6,680	5,450
16	2,150	1,770	1,920	2,000	1,780	1,680	5,110	18,100	22,000	13,900	6,570	5,420
17	2,120	1,840	1,940	2,050	1,730	1,750	5,520	17,800	23,100	13,900	6,470	5,420
18	2,110	1,880	1,950	2,100	1,760	1,610	5,900	15,800	24,200	14,100	6,420	5,400
19	2,090	1,860	1,980	2,100	1,740	1,620	5,920	14,300	24,700	14,200	6,270	5,400
20	2,080	1,850	1,950	2,100	1,730	1,620	6,200	13,700	23,800	13,700	6,120	5,090
21	2,080	1,870	2,000	2,050	1,640	1,660	6,600	13,100	23,200	13,900	6,020	4,600
22	2,090	1,700	2,030	1,900	1,670	1,670	6,990	13,700	23,600	13,500	5,920	4,280
23	2,080	1,760	1,870	1,900	1,720	1,750	7,220	13,000	24,100	12,700	5,950	4,000
24	2,130	1,910	1,950	1,900	1,720	1,850	7,840	12,600	24,500	12,100	5,710	3,780
25	2,120	2,690	2,050	1,900	1,730	1,860	8,190	13,400	24,000	11,600	5,640	3,570
26	2,060	2,470	2,100	1,900	1,670	1,940	8,160	15,000	22,500	11,300	5,680	3,370
27	1,970	2,180	2,100	1,880	1,630	2,230	8,330	17,000	21,200	11,000	5,660	3,240
28	1,930	2,060	2,100	1,840	1,550	1,990	7,760	19,400	19,500	10,600	5,610	3,120
29	1,950	2,000	2,110	1,820	-----	1,910	6,220	20,400	17,200	10,400	6,040	3,010
30	1,930	2,070	2,090	1,830	-----	1,950	5,950	21,600	14,600	10,000	6,500	2,990
31	1,890	-----	2,110	1,890	-----	2,000	-----	21,500	-----	9,750	6,270	-----
TOTAL	77,900	57,800	61,250	57,190	49,470	53,440	143,450	477,690	616,900	434,450	224,160	150,430
MEAN	2,513	1,927	1,976	1,845	1,767	1,724	4,782	15,410	20,560	14,010	7,231	5,014
MAX	4,390	2,690	2,110	2,100	2,020	2,230	8,330	21,600	24,700	18,300	9,500	6,420
MIN	1,890	1,700	1,840	1,300	1,550	1,440	1,830	9,290	14,600	9,750	5,610	2,990
AC-FT	154,500	114,600	121,500	113,400	98,120	106,000	284,500	947,500	1,224M	861,700	444,600	298,400
CAL YR 1970	TOTAL 1,674,950			MEAN 4,589		MAX 19,100	MIN 1,180	AC-FT 3,322,000				
WTR YR 1971	TOTAL 2,404,130			MEAN 6,587		MAX 24,700	MIN 1,300	AC-FT 4,769,000				

13023000 GREYS RIVER ABOVE RESERVOIR, NEAR ALPINE, WYO.

LOCATION.--Lat 43°08'35", long 110°58'34", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.34, T.37 N., R.118 W. (unsurveyed), Lincoln County, on right bank at Bridge Campground, 3 miles upstream from mouth, and 3.6 miles southeast of Alpine.

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

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

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

AVERAGE DISCHARGE.--19 years (1937-38, 1953-71), 644 cfs (19.51 inches per year, 466,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,230 cfs June 19 (gage height, 6.33 ft); minimum, 127 cfs Mar. 7 (gage height, 1.18 ft).
Period of record: Maximum discharge observed, 7,230 cfs June 19, 1971 (gage height, 6.33 ft); maximum gage height observed, 19.1 ft (former site and datum) about Dec. 18, 1965 (ice jam); minimum discharge, 111 cfs Dec. 7, 1960 (gage height, 2.45 ft, former site and datum).

REMARKS.--Records good. Less than 500 acres irrigated by diversions from Greys River and tributaries above station.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	371	301	352	446	320	215	233	1,310	3,710	2,520	1,080	630
2	352	286	326	384	270	210	237	1,600	3,500	2,520	1,050	620
3	343	294	318	335	247	210	244	1,980	3,500	2,600	1,010	640
4	335	294	314	300	220	200	233	2,520	3,060	2,580	970	635
5	339	314	301	250	227	189	247	2,500	2,970	2,390	943	610
6	384	309	268	200	230	177	271	2,070	2,940	2,290	936	590
7	361	309	275	180	240	183	322	2,200	3,270	2,250	908	590
8	343	305	305	210	247	227	371	2,650	3,460	2,170	978	590
9	343	301	297	240	247	237	440	2,630	3,820	2,070	964	575
10	394	330	301	270	282	214	547	2,820	3,460	2,040	887	565
11	361	297	301	300	290	177	621	2,670	3,730	2,020	856	560
12	371	326	279	320	261	186	584	3,050	3,480	1,950	838	555
13	371	301	250	320	247	201	507	3,180	3,750	1,890	820	540
14	361	286	257	320	240	192	518	3,210	4,120	1,840	820	535
15	335	268	343	310	250	192	634	3,290	4,580	1,790	802	530
16	330	301	366	340	250	189	691	3,580	4,820	1,740	772	525
17	330	301	357	360	244	192	736	3,430	4,880	1,710	760	525
18	330	301	330	360	244	165	830	2,990	5,170	1,710	754	515
19	330	294	318	355	240	171	824	2,610	6,170	1,680	742	515
20	322	290	286	350	224	174	797	2,220	5,650	1,640	724	505
21	330	294	318	345	186	171	736	1,760	4,410	1,700	712	505
22	335	268	335	340	180	171	756	2,430	4,440	1,540	706	500
23	326	297	290	330	214	168	770	2,430	4,580	1,510	688	495
24	348	380	330	325	247	211	824	2,360	4,640	1,430	676	485
25	335	530	339	320	261	211	900	2,620	4,360	1,360	670	470
26	314	425	352	315	250	217	878	2,900	4,120	1,300	652	475
27	297	380	384	310	235	244	783	3,230	3,940	1,250	640	470
28	301	335	440	310	220	230	717	3,100	3,640	1,220	635	470
29	305	335	456	330	-----	224	783	3,590	3,150	1,180	718	465
30	305	348	462	340	-----	230	921	3,640	2,620	1,150	712	470
31	305	-----	468	340	-----	247	-----	4,020	-----	1,110	652	-----
TOTAL	10,507	9,600	10,318	9,755	6,813	6,225	17,955	84,590	119,940	56,150	25,075	16,155
MEAN	339	320	333	315	243	201	599	2,729	3,998	1,811	809	539
MAX	394	530	468	446	320	247	921	4,020	6,170	2,600	1,080	640
MIN	297	268	250	180	180	165	233	1,310	2,620	1,110	635	465
CFSM	.76	.71	.74	.70	.54	.45	1.34	6.09	8.92	4.04	1.81	1.20
IN.	.87	.80	.86	.81	.57	.52	1.49	7.02	9.96	4.66	2.08	1.34
AC-FT	20,840	19,040	20,470	19,350	13,510	12,350	35,610	167,800	237,900	111,400	49,740	32,040

CAL YR 1970 TOTAL 259,249 MEAN 710 MAX 3,990 MIN 140 CFSM 1.58 IN 21.53 AC-FT 514,200
WTR YR 1971 TOTAL 373,083 MEAN 1,022 MAX 6,170 MIN 165 CFSM 2.28 IN 30.98 AC-FT 740,000

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-16	0300	5.10	4,050	6-19	0800	6.33	7,230

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 mile upstream from mouth of canyon, 1.5 miles east of Afton, and 4.5 miles upstream from mouth.

DRAINAGE AREA.--27.4 sq mi.

PERIOD OF RECORD.--October 1942 to current year. Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Altitude of gage is 6,420 ft (from topographic map).

AVERAGE DISCHARGE.--29 years, 86.9 cfs (62,960 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 770 cfs June 17 (gage height, 3.73 ft); minimum daily, 27 cfs Feb. 9.

Period of record: Maximum discharge, 775 cfs June 30, 1957 (gage height, 3.52 ft); maximum gage height, 3.73 ft June 17, 1971; minimum daily discharge, 20 cfs Dec. 30, 1958.

REMARKS.--Records fair except those for periods of no gage-height record, which are poor. Small powerplant and reservoir (adjudication, 48.45 acre-ft per year) 0.2 mile upstream. Pipeline (adjudication, 2.5 cfs) diverts water above station for town of Afton. No diversion for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	46	40	34	33	30	41	59	239	452	190	109
2	49	46	39	34	33	29	41	67	236	447	180	105
3	49	46	39	33	32	30	42	77	239	437	175	102
4	50	44	37	33	32	30	43	89	239	457	171	107
5	50	44	37	32	31	31	43	96	239	442	171	110
6	52	44	37	35	30	30	45	92	239	423	168	107
7	50	46	37	38	29	30	46	92	243	405	165	96
8	50	44	37	39	28	31	48	96	260	383	171	92
9	52	44	37	38	27	31	49	101	343	383	175	90
10	53	44	37	37	28	32	52	103	423	400	165	85
11	52	43	37	35	29	32	53	108	522	387	159	82
12	50	43	36	34	30	32	50	118	472	400	156	81
13	50	42	36	33	31	31	47	128	442	400	150	80
14	49	42	36	32	32	31	49	131	442	392	145	80
15	49	42	36	33	33	30	52	128	542	387	140	80
16	49	42	36	34	33	30	52	136	547	400	138	82
17	49	42	36	35	33	29	53	136	643	400	134	84
18	49	42	35	35	33	29	53	131	637	390	130	85
19	50	42	35	36	32	30	52	123	557	385	128	86
20	49	40	35	36	32	31	53	118	562	360	120	87
21	49	40	35	35	32	33	52	115	632	375	118	86
22	47	40	36	34	31	35	52	115	665	360	115	83
23	49	40	34	33	31	35	52	113	654	350	110	81
24	49	43	34	35	30	37	53	115	610	310	107	81
25	47	44	34	35	30	38	55	123	582	280	105	83
26	46	43	34	34	31	38	55	139	615	250	102	81
27	46	42	34	33	30	39	53	191	604	235	100	77
28	46	40	34	32	31	39	52	246	507	225	102	77
29	46	40	34	31	-----	38	53	267	442	215	118	77
30	46	40	34	32	-----	38	53	347	442	210	125	77
31	47	-----	34	33	-----	39	-----	275	-----	200	118	-----
TOTAL	1,519	1,280	1,112	1,063	867	1,018	1,494	4,175	13,819	11,140	4,351	2,633
MEAN	49.0	42.7	35.9	34.3	31.0	32.8	49.8	135	461	359	140	87.8
MAX	53	46	40	39	33	39	55	347	665	457	190	110
MIN	46	40	34	31	27	29	41	59	236	200	100	77
AC-FT	3,010	2,540	2,210	2,110	1,720	2,020	2,960	8,280	27,410	22,100	8,630	5,220
CAL YR 1970	TOTAL 31,776		MEAN 87.1	MAX 662	MIN 26	AC-FT 63,030						
WTR YR 1971	TOTAL 44,471		MEAN 122	MAX 665	MIN 27	AC-FT 88,210						

PEAK DISCHARGE (BASE, 390 CFS)

NOTE.--No gage-height record Jan. 3 to Apr. 9, Aug. 14 to Sept. 23.

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
6-17	1345	3.73	770				

231

LOCATION.--Lat 43°04'47", long 111°02'12", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.28, T.36 N., R.119 W., Lincoln County, on right bank, 3.4 miles northwest of Etna, and at mile 8.0.

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

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

AVERAGE DISCHARGE.--18 years, 736 cfs (533,200 acre-ft per year).

Period of record: Maximum discharge, 3,870 cfs June 1, 1971 (gage height, 5.30 ft); minimum, 160 cfs Jan. 7, 8, 1971 (gage height, 1.53 ft).

REMARKS.--Records excellent. Diversions above station for power developments, industry, municipal supply, and irrigation of about 60,500 acres, of which about 1,000 acres are below station (1966 determination). For details on adjudication of diversions, see Remarks for this station in WSP 1347. 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	696	613	683	541	545	453	613	2,300	3,790	2,470	1,090	1,010
2	692	607	661	503	549	435	602	2,550	3,610	2,310	1,070	997
3	685	602	655	490	544	449	599	2,810	3,430	2,240	1,050	1,070
4	684	597	647	435	521	454	594	3,120	3,340	2,220	1,030	1,100
5	687	603	638	360	508	442	603	3,270	3,230	2,210	1,020	1,050
6	705	612	626	223	507	435	625	3,090	3,220	2,140	991	1,020
7	705	628	613	180	509	422	693	3,160	3,260	2,050	987	1,020
8	697	640	653	201	505	443	823	3,250	3,230	2,010	1,030	1,020
9	702	633	658	269	486	433	929	3,400	3,240	1,960	1,020	1,030
10	764	652	650	318	508	446	1,080	3,490	3,290	1,900	1,010	1,010
11	751	645	627	397	510	448	1,250	3,480	3,590	1,850	1,000	982
12	711	647	601	443	500	456	1,180	3,530	3,770	1,800	976	971
13	697	637	546	419	499	493	1,110	3,650	3,630	1,760	966	962
14	683	629	572	381	499	486	1,160	3,650	3,470	1,730	961	945
15	672	615	585	407	505	479	1,290	3,680	3,360	1,680	958	936
16	663	621	590	460	503	469	1,400	3,750	3,340	1,610	932	937
17	660	622	583	510	496	475	1,550	3,710	3,350	1,560	922	931
18	654	624	577	654	508	450	1,540	3,540	3,350	1,530	930	930
19	649	620	571	662	502	445	1,530	3,270	3,400	1,520	931	926
20	647	615	536	608	498	444	1,480	3,040	3,440	1,490	925	924
21	648	611	560	578	479	452	1,510	2,840	3,410	1,520	943	930
22	656	593	563	567	454	456	1,650	3,110	3,360	1,500	956	923
23	663	615	515	568	471	498	1,660	3,160	3,290	1,560	955	914
24	685	706	537	557	482	554	1,800	2,960	3,310	1,490	943	900
25	684	833	528	553	483	558	1,980	2,910	3,320	1,450	940	897
26	659	818	508	551	473	571	2,000	2,930	3,270	1,400	939	894
27	634	729	537	542	460	637	1,800	3,030	3,210	1,360	936	893
28	621	690	544	535	464	612	1,760	3,250	3,230	1,310	955	907
29	621	677	539	530	-----	595	1,860	3,380	3,150	1,270	1,010	906
30	619	690	535	527	-----	606	2,060	3,720	2,790	1,200	1,070	909
31	616	-----	540	537	-----	638	-----	3,770	-----	1,120	1,050	-----
TOTAL	20,910	19,424	18,178	14,506	13,968	15,234	38,731	100,800	100,680	53,220	30,496	28,844
MEAN	675	647	586	468	499	491	1,291	3,252	3,356	1,717	984	961
MAX	764	833	683	662	549	638	2,060	3,770	3,790	2,470	1,090	1,100
MIN	616	593	508	180	454	422	594	2,300				

HENRYS FORK BASIN

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 on Grassy Creek, 0.4 mile upstream from mouth and 25.4 miles northwest of Moran, Wyo. Drainage area, 10.4 sq mi, including basin of Cascade Creek, from which water is diverted into Grassy Lake. Period of record, October 1939 to current year. Mercury pressure gage. Datum of gage is mean sea level (levels by Bureau of Reclamation). Current year: Maximum contents observed, 15,400 acre-ft June 14, 23 (maximum elevation, 7,210.80 ft June 14); minimum contents observed, 11,400 acre-ft Oct. 7, 15, 30 (elevation, 7,197.05 ft Oct. 7). Period of record: Maximum contents observed, 15,446 acre-ft July 2, 1943 (elevation, 7,210.85 ft); no contents Oct. 2-5, 1940.

Reservoir is formed by earth-fill, rock-faced dam; storage began Oct. 18, 1939. Capacity, 15,200 acre-ft between elevations 7,135.0 ft (sill of trashrack) and 7,210.0 ft (crest of spillway). Water is used for irrigation of lands in Fremont-Madison irrigation district, Idaho. Gage read about twice monthly. Records given herein represent usable contents. Gage-height record and capacity table furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	ELEVATION (FEET)	CONTENTS (ACRE- FEET)	CHANGE IN CONTENTS (ACRE-FEET)
SEPT. 30	-	a11,400	-
OCT. 31	-	a11,400	0
NOV. 30	7,198.15	11,700	+300
DEC. 31	-	a11,900	+200
CALENDAR YEAR 1970	-	-	+4,170
JAN. 31	-	a12,200	+300
FEB. 28	-	a12,300	+100
MAR. 31	-	a12,500	+200
APR. 30	-	a12,700	+200
MAY 31	-	a14,500	+1,800
JUNE 30	7,210.25	15,300	+800
JULY 31	-	a15,200	-100
AUG. 31	-	a13,900	-1,300
SEPT. 30	-	a12,800	-1,100
WATER YEAR 1970-71			+1,400

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	1961-71	6- 4-61 1962 1963 7-13-64 4- -65 1966 6-14-67 6-10-68 9-20-69 5-23-70 5- 4-71	7.67 (b) (b) 6.34 5.29 (b) 5.15 4.74 c3.90 c3.27 15.54	a360 a<80 a<80 a220 a134 a<80 a120 a95 a47 a25 115
06221200	Wind River tributary near Burris, Wyo.	Lat 43°25'09", long 109°23'18", in SW¼SW¼ sec.8, T.5 N., R.5 W., Fremont County, Wind River Indian Reservation, at culvert on U.S. Highway 26 and 6.8 miles northwest of Burris.	4.71	1961-71	8-29-71	c4.97	(+)
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	1961-71	1971		(d)
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	1961-71	8-29-71	c4.89	4
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	1961-71	8-29-71	5.10	450
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, 1961-71	8-29-71	7.19	260
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	1965-71	5-29-71	6.34	36
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	1961-71	1961 1963 1964 1965 1966 1968 1969 1971	(b) (b) (b) (b) (b) (b) (b) (b)	a<19 a<19 a<19 a<19 a<19 a<19 a<19 (d)
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, 1970-71	5-29-71	6.82	260

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)
Yellowstone River basin--Continued							
06230800	Little Wind River tributary near Hudson, Wyo. (station discontinued).	Lat 42°58'58", long 108°34'20", in SE¼SW¼ sec.7, T.1 S., R.3 E., Fremont County, Wind River Indian Reservation, at culvert 5.4 miles north of Hudson.	2.98	1961-71	6-16-62 6-23-67 1971	6.40 6.90	ae65 ae100 (d)
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+, 1969-71	6- -71	6.48	2,350
06233340	Monument Draw at upper station, near Hudson, Wyo. S	Lat 42°48'57", long 108°33'04", in NE¼SE¼ sec.22, T.33 N., R.98 W., Fremont County, on right bank 50 ft downstream from dirt road crossing and 6.3 miles south of Hudson.	5.50	1965-71	5-30-71	.86	(+)
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	1965-71	1970 5-30-71	a.31 .87	a1.3 7.3
06233440	Coal Mine Draw tributary near Hudson, Wyo. S	Lat 42°50'43", long 108°35'04", in NW¼SW¼ sec.9, T.33 N., R.98 W., Fremont County, on left bank 150 ft upstream from bridge on county road and 4.1 miles south of Hudson.	.63	1965-71	6- 4-65 6-20-67 1971	3.90 .83	f173 f8.2 (d)
06234700	South Fork Hall Creek near Lander, Wyo.	Lat 42°38'44", long 108°23'23", in NW¼SE¼ sec.23, T.31 N., R.97 W., Fremont County, 200 ft downstream from bridge on U.S. Highway 287 and 21 miles southeast of Lander. Prior to Sept. 30, 1963, at site 200 ft upstream at same datum.	3.88	1960-71	4-16-67 1968 1969 6-11-70 5-30-71	4.30 (g) (g) 4.21 (g)	ae35 ae40 ae40 ae25 185
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.	h2.89	1969,1971	1969 5-30-71	8.5 6.88	a430 139
06235700	Haymaker Creek near Riverton, Wyo.	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, 1966-71	8-29-71	16.16	1,770
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+, 1961-71	5-30-71	5.10	630
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	1965-71	6-12-67 8-29-71	3.28 2.52	f168 78
06238780	West Fork Dry Cheyenne Creek tributary near Riverton, Wyo. S	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	1965-71	5-31-71	2.38	(+)
06255160	Dead Man Gulch tributary near Lysite, Wyo. S	Lat 43°11'28", long 107°46'03", in SE¼NW¼ sec.9, T.37 N., R.91 W., Fremont County, on right bank 300 ft north of powerline road and 6.7 miles southwest of Lysite.	.54	1965-71	6- 4-65 6-14-67 7-11-68 6-12-70 5- 5-71	1.76 4.40 2.35 .21 .51	f107 a525 f157 f7.8 18
06255190	Dead Man Gulch near Lysite, Wyo. S	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	1965-71	9-13-66 5-30-71	1.45 1.43	f103 (+)

See footnotes at end of table, p. 247.

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							
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.	0.39	1959-71	5-30-71	(b)	<1
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	1963-71	5-30-71	12.57	330
06256670	Badwater Creek tributary near Lysite, Wyo. S	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 mile upstream from dim road and 1.5 miles southwest of Lysite.	5.86	1965-71	9-13-66 6-14-67 5-30-71	1.10 4.10 1.13	a64 f511 66
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	1960-71	5-31-70 4- -71	6.18 5.32	34 10
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	1961-71	8-29-71	8.16	(+)
06258400	Birdseye Creek near Shoshoni, Wyo.	Lat 43°22'27", long 108°07'38", in SW¼SW¼ sec.4, T.39 N., R.94 W., Fremont County, at culvert on U.S. Highway 20 and 9.6 miles north of Shoshoni.	13.2	1959-71	8-29-71	(g)	e3
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	1960-71	1964 5-31-69 8-30-71	(b) c3.53 6.53	a<20 a<10 305
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	1961-71	4- -71	c4.27	14
06266320	Gillies Draw tributary near Grass Creek, Wyo. S	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	1965-71	7-12-66 5-31-67 6- -8-68 6-20-69 5- -8-70 6-11-71	3.10 3.00 2.00 1.87 .50 12.8	f112 a103 a37 a31 f.9 85
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 north-east of Grass Creek.	2.32	1965-71	6-11-67 9- -69 5- -8-70 8-30-71	6.05 3.95 a1.29 4.52	f560 a150 a4.0 (+)
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.	13.8	1964-71	9-18-67 8-23-68 5-28-71	f5.47 4.96 4.72	f394 f241 193
06267270	North Prong East Fork Nowater Creek tributary near Worland, Wyo. S	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.	12.1	1965-71	7-12-66 6- -6-67 8-23-68 6-26-69 5-30-71	1.20 4.43 4.00 1.07 3.40	a6.0 a158 f115 a4.7 60
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 county road and 6.0 miles southeast of Ten Sleep.	57.9	1961-71	5-10-71	c3.57	31

See footnotes at end of table, p. 247.

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)
Yellowstone River basin--Continued							
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.	0.42	1960-71	1971		(d)
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.	2.06	1961-71	6-25-65 6- 6-67 5- -68 5- -69 5-26-70 5- -71	6.61 5.83 5.55 5.66 4.94 15.94	ae250 a130 a92 a110 a20 (+)
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	1961-71	6- -71	6.48	19
06274100	East Fork Sand Creek near Worland, Wyo. (station discontinued).	Lat 44°01'10", long 107°46'50", in NW¼NW¼ sec.28, T.47 N., R.91 W., Washakie County, at bridge on old U.S. Highway 16 and 8.6 miles east of Worland.	19.1	1960-71	6-26-69 5-21-70 5-31-71	7.04 7.26 8.26	f300 f400 350
06274190	Nowood River tributary No. 2 near Basin, Wyo. S	Lat 44°16'42", long 107°54'33", in SE¼NE¼ 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	1965-71	8-30-71	.80	11
06274200	Nowood River tributary No. 2 near Manderson, Wyo. (station discontinued).	Lat 44°16'33", long 107°54'30", in NE¼SE¼ sec.28, T.50 N., R.92 W., Big Horn County, at culvert on State Secondary Highway 0201 and 2.7 miles east of Manderson.	1.59	1961-71	6-26-69 6-11-71	c4.24 c4.75	ae<5 9
06274250	Elk Creek near Basin, Wyo.	Lat 44°18'30", long 108°01'50", in NE¼ 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	1959-71	5-31-71	8.90	2,020
06277700	Twentyfour Mile Creek near Emblem, Wyo.	Lat 44°27'32", long 108°36'30", in SE¼SW¼ 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	1960-71	1966 8-30-71	(b) c3.71	a<37 20
06277750	Dry Creek tributary near Emblem, Wyo.	Lat 44°27'42", long 108°34'12", in NW¼SW¼ 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, 1970-71	8-30-71	3.91	36
06278400	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 ranger station, and 11.8 miles east of Shell.	11.1	1961-71	1969 5-29-71	(b) 8.20	a<100 295
06279020	Red Gulch near Shell, Wyo.	Lat 44°31'59", long 107°50'05", in NE¼NW¼ sec.32, T.53 N., R.91 W., Big Horn County, 700 ft downstream from bridge on U.S. Highway 14, 0.4 mile upstream from mouth, and 2.7 miles west of Shell.	47.8	1967, 1970-71	5-22-71	c7.80	(+)
06279700	Willow Creek near Kane, Wyo.	Lat 44°49'49", long 108°09'08", in NW¼SE¼ 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	1961-71	5- 3-70 5-31-71	c3.5 4.66	ae1 33
06279950	Trout Creek near Wapiti, Wyo.	Lat 44°29'10", long 109°20'55", in NE¼NW¼ 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	1961-71	6- -71	2.48	(+)
06282700	Cottonwood Creek tributary near Cody, Wyo.	Lat 44°36'00", long 109°07'50", in NE¼SW¼ sec.3, T.53 N., R.102 W., Park County, at culvert on State Highway 120 and 6.3 miles northwest of Cody.	.76	1961-71	1961 1962 1966 1967 1968 9-21-69 5- 5-71	(b) (b) (b) (b) (b) (b) c3.90	a<37 a<37 a<37 a<37 a<37 a<37 11

See footnotes at end of table, p. 247.

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							
06296700	Big Willow Creek near Dayton, Wyo.	Lat 44°45'58", long 107°32'25", in NW¼NE¼ 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	1961-71	5-29-71	6.34	(+)
06299900	Slater Creek near Monarch, Wyo.	Lat 44°54'32", long 107°02'49", in SE¼SW¼ 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	1967-71	4-24-71	57.74	399
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	1961-71	5- 4-71	5.93	450
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	1970-71	5-30-71	14.45	6
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.	5.95	1961-71	5- 5-71	4.27	16
06312910	Dead Horse Creek tributary near Midwest, Wyo. S	Lat 43°20', long 106°32', in SE¼NW¼ sec.23, T.39 N., R.81 W., Natrona County, on right bank about 500 ft west of Dead Horse Road and 13.9 miles southwest of Midwest.	11.5	1965-71	6-22-66 6-12-70 5- 5-71	16.6 14.7 15.7	a1695 a1228 400
06312920	Dead Horse Creek tributary No. 2 near Midwest, Wyo. S	Lat 43°20', long 106°31', in NE¼NE¼ sec.23, T.39 N., R.81 W., Natrona County, on right bank 0.3 mile east of Dead Horse Road and 13.4 miles southwest of Midwest.	11.3	1965-71	6-22-66 7-15-67 6- 9-68 5-22-70 8- 9-71	2.52 5.68 1.87 f5.54 5.63	f87 f389 f67 f198 206
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	1965-71	5-23-68 5-31-69 7-12-70 5-31-71	.37 .61 1.00 2.03	f1.2 f2.5 f6.1 93
06313030	Coopers Draw near Edgerton, Wyo. S	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	1965-71	5-24-65 5-25-67 7-12-70 8- 9-71	f1.07 2.40 .33 .82	a28 a154 h3.7 17
06313040	Seven L Creek near Edgerton, Wyo. S	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	1965-71	6-10-65 6-10-69 6-12-71	3.30 2.27 1.69	f445 f108 (+)
06313050	East Teapot Creek near Edgerton, Wyo. S	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	1965-71	5-30-71	1.66	152
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	1961-71	5- -71	(b)	e20
06313180	Dugout Creek tributary near Midwest, Wyo. S	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.	1.8	1965-71	6-24-65 6- 5-66 5-23-71	5.21 1.72 3.69	f493 f50 249

See footnotes at end of table, p. 247.

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)	Discharge (cfs)
Yellowstone River basin--Continued							
06313600	Bugher Draw near Buffalo, Wyo. (station discontinued).	Lat 44°08'00", long 106°05'40", in SE¼ sec.15, T.48 N., R.77 W., Johnson County, at culvert on dirt road, 2.0 miles upstream from Buffalo-Gillette Road, and 32.5 miles southeast of Buffalo.	4.57	1961-71	7- -71	14.84	177
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	7- -71	4.82	47
06313700	Dead Horse Creek near Buffalo, Wyo. (station discontinued).	Lat 44°12'50", long 106°06'40", in SW¼ sec.15, T.49 N., R.77 W., Johnson County, at bridge on dirt road, 1.2 miles upstream from Interstate Highway 90 crossing, and 31 miles southeast of Buffalo.	155	1959-71	8-23-68 4-25-69 5-27-70 7- -71	5.53 6.13 3.48 6.23	f400 f520 a92 550
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, Big-horn National Forest, at culvert on U.S. Highway 16 and 15.8 miles southwest of Buffalo.	5.08	1961-71	1967 5-29-71	(b) 6.21	a<45 110
06316480	Headgate Draw at upper station, near Buffalo, Wyo. S	Lat 44°31', long 106°10', in SW¼SE¼ sec.31, T.53 N., R.77 W., Johnson County, on left bank 1.5 miles upstream from bridge on Crazy Woman Creek Road and about 29 miles northeast of Buffalo.	11.1	1965-71	7-15-66 7-16-69 4-24-71	4.80 9.20 1.2	f350 f1,670 6
06316490	Headgate Draw at lower station, near Buffalo, Wyo. S	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.	12.6	1965-71	6-11-71	5.87	(+)
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 upstream from bridge on Crazy Woman Creek-Arvada Road and about 30 miles northeast of Buffalo.	11.5	1965-71	6-16-65 7-15-66 6-11-71	7.86 f5.45 2.04	f2,290 f780 94
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	1961-71	5-22-72	17.03	42
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	1969-71	1971	(d)	
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	1960-71	5-14-70 4-19-71	7.00 7.69	a2 21
06324810	Box Draw tributary near Gillette, Wyo. S	Lat 44°26', long 105°37', in SE¼NW¼ sec.3, T.51 N., R.73 W., Campbell County, on right bank 0.2 mile upstream from windmill by private ranch road, 2.5 miles west of U.S. Highways 14 and 16, and about 12 miles northwest of Gillette.	1.5	1965-71	5-25-65 6- 2-67 5-22-68 5-15-69 7-22-70 1971	.25 1.57 3.40 .86 2.83 (b)	a.2 a14 a84 a2.9 a56
06324820	Rawhide Creek tributary near Gillette, Wyo. S	Lat 44°25', long 105°34', in NW¼SE¼ sec.12, T.51 N., R.73 W., Campbell County, on right bank 1.1 miles southwest of U.S. Highways 14 and 16 and 8.7 miles north of Gillette.	12.6	1965-71	1971	(d)	
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	1959-71	4-19-71	6.23	140
06324910	Cow Creek tributary 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	9-28-71	4.90	20

See footnotes at end of table, p. 247.

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)
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	1959-71	1971		(d)
06378640	Lance Creek tributary near Lance Creek, Wyo. S	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.	11.2	1965-71	7-2-66 7-11-70 7- 8-71	2.35 .35 1.19	f135 f.5 38
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 Highway 59 and 8.8 miles south of Bill.	112	1956-58*, 1959, 1961-71	5- 5-71	7.92	1,720
06382200	Pritchard Draw near Lance Creek, Wyo. S	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.	15.1	1965-71	5-24-71	3.40	198
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	1959-71	5-30-71	15.66	2,450
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	1960-71	7-12-70 5-30-71	c4.75 5.45	ae5 27
06425700	Belle Fourche River tributary near Turnercrest, Wyo. (station discontinued).	Lat 43°38'00", long 105°42'15", in NW¼NW¼ sec.12, T.42 N., R.74 W., Campbell County, at culvert on State Highway 387 and 5.2 miles northwest of Turnercrest.	.35	1961-71	1961 6-15-62 1963 1964 6-16-65 1966 6-14-67 1968 1969 1970 5-23-71	(b) 3.15 (b) (b) 2.18 (b) 2.24 (b) (b) (b) (d) 2.57	ae<20 ae70 ae<20 ae<20 ae41 ae<20 ae43 ae<20 ae<20 (d) e52
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	1970-71	7-25-71	16.22	(+)
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.	.28	1960-71	1969 4-19-71	(b) 5.42	ae<30 39
06427700	Inyan Kara Creek near Upton, Wyo.	Lat 44°13'45", long 104°26'45", in S¼ 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	1959-71	4-19-71	7.67	260
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	4-19-71	13.8	450
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	1962-71	4-19-71	3.82	(+)
06429300	Ogden Creek near Sundance, Wyo. S	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	1962-71	5-14-70 5- 9-71	1.30 1.15	h24 20

See footnotes at end of table, p. 247.

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)
Cheyenne River basin--Continued							
06429375	Sundance Creek tributary above forest boundary, at Sundance, Wyo. S	Lat 44°25'26", long 104°21'32", in SE¼NE¼ sec.12, T.51 N., R.63 W., Crook County, 0.1 mile upstream from major tributary, and 1.6 miles northwest of Sundance.	0.76	1969-71	5- 9-71	0.06	(+)
06429400	Sundance Creek tributary near Sundance, Wyo. (station discontinued).	Lat 44°25'15", long 104°20'00", in NW¼SW¼ sec.8, T.51 N., R.62 W., Crook County, at culvert on U.S. Highway 14 and 2.4 miles northeast of Sundance.	1.80	1962-71	1971		(d)
Platte River basin							
06629100	Rattlesnake Creek near Walcott, Wyo.	Lat 41°41'56", long 106°37'34", in SE¼SW¼ 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	1962-71	5-30-71	3.42	52
06629150	Coal Bank Draw tributary near Walcott, Wyo.	Lat 41°44'05", long 106°43'18", in SE¼NW¼ 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	1962-71	4- -71	11.1	760
06629200	Coal Bank Draw tributary No. 2 near Walcott, Wyo.	Lat 41°44'19", long 106°43'36", in NE¼NE¼ sec.4, T.20 N., R.83 W., Carbon County, on left bank 6.3 miles southeast of Walcott.	2.41	1962-71	4- -71	10.0	320
06629700	Saint Mary Creek tributary near Sinclair, Wyo. (station discontinued).	Lat 41°44'33", long 106°51'57", in SW¼SW¼ sec.34, T.21 N., R.84 W., Carbon County, at culvert on old U.S. Highway 30 just downstream from present location of U.S. Highway 30 and 13.6 miles east of Sinclair.	.46	1959-71	1959 6- 8-60 1961 7-27-62 6-15-63 1964 7-23-65 4-18-66 9-25-67 8- 8-68 6-24-69 4- 5-70 4- -71	(b) c4.99 (b) 11.45 5.19 (b) 5.18 5.30 5.16 5.89 5.5 c4.93 c4.91	ae<5 ae4 ae<5 282 ae11 ae<5 ae10 ae16 ae9 50 ae28 ae2 ae2
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	1959-71	4- -71	16.70	51
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	1961-71	5-30-71	8.94	151
06630200	Big Ditch tributary near Hanna, Wyo. S	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	1959-71	4-15-71	7.05	277
06630800	Bear Creek near Elk Mountain, Wyo.	Lat 41°39'11", long 106°20'41", in NE¼NE¼ 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	1962-71	4- 5-70 5-17-71	10.87 6.89	a141 44
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 confluence with the West Fork of Wagonhound Creek, and 6.4 miles southeast of Elk Mountain.	25.6	1962-71	5-30-71	7.68	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							
06631140	Third Sand Creek tributary near Medicine Bow, Wyo. S	Lat 41°45', long 106°19', in NE¼NE¼ 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.	0.78	1965-71	7-23-65 9-11-66 9- 9-67 6-10-69 9- -70 5- 9-71	0.97 1.82 3.90 f.85 .05 .30	f12 f41 f189 f8.8 a1 (+)
06631150	Third Sand Creek near Medicine Bow, Wyo. S	Lat 41°45', long 106°19', in SE¼SE¼ 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	1965-71	6-17-66 4-15-71	5.70 2.55	f880 202
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 the Canon ditch crossing and 3.3 miles southeast of Arlington.	6.31	1962-71	5-30-71	5.31	135
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	1962-71	5-17-71	1.69	(+)
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	1961-71	5-17-71	7.27	920
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 north-east of Medicine Bow.	174	1961-71	5-17-71	9.59	1,020
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 northeast of Hanna.	3.01	1965-71	7-23-65 7-11-69 8-29-71	3.82 .83 2.25	f322 f8.9 99
06634950	Willow Springs Draw tributary near Hanna, Wyo. S	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	1965-71	7-23-65 8- 9-71	f3.98 1.76	f133 16
06638100	Sweetwater River at Sweetwater Station, near Lander, Wyo.	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 south-east of Lander.	889	1965-71	5-31-71	8.77	1,250
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	1961-71	1961 3- -62 1963 1964 4- -65 1966 1967 1968 1969 4-24-70 4- -71	(b) 6.27 (b) (b) 5.10 (b) (b) (b) (b) c3.70 5.89	a<22 a128 a<26 a<26 a67 a<13 a<13 a<13 e12 108
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	1961-71	5-30-71	14.50	26
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	1960-71	4- -71	12.44	165

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							
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	1961-71	3-26-71	5.68	82
06642730	Stinking Creek tributary near Alcova, Wyo. (station discontinued).	Lat 42°31'47", long 106°27'38", in NE¼NE¼ sec.31, T.30 N., R.80 W., Natrona County, at culvert on State Highway 487 and 13.9 miles east of Alcova.	1.34	1961-71	7-18-69 5- 8-70 5-30-71	5.27 5.18 4.69	ae25 ae20 e7
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	1961-71	1969 5-30-71	(b) 5.10	a<200 230
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	1960-71	3-26-71	5.89	23
06644200	Clarks Gulch near Natrona, Wyo. S	Lat 42°57'13", long 106°48'28", in SW¼SW¼ sec.33, T.35 N., R.83 W., Natrona County, at culvert on Natrona Road and 5.2 miles south of Natrona.	2.64	1961-71	4-21-71	6.98	220
06644700	Reefs Draw tributary near Casper, Wyo. (station discontinued).	Lat 43°05'00", long 106°20'10", in SW¼ sec.16, T.36 N., R.79 W., Natrona County, at culvert on U.S. Highway 87 and 17 miles north of Casper.	.47	1959-71	4- -71	5.31	11
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	1965-71	8-20-65 4- -71	f5.45 2.39	f315 32
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	1961-71	1961 1964 5-30-71	(b) (b) 6.98	a<18 a<18 81
06648720	Frank Draw tributary near Orpha, Wyo. S	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	1965-71	8-19-66 6-11-69 5-30-71	4.21 .70 3.80	f342 f4.9 270
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	1965-71	7-25-65 8-19-66 6-15-67 6-12-70 5- 5-71	2.00 .72 .47 .35 1.20	a229 a33 a14 a7.8 89
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	1961-71	5- 5-71	4.82	76
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, 1961-71	1961 6-16-62 7-13-63 1964 8-30-67 6- 8-68 7-20-69 4- -70 5- 5-71	(b) 9.20 5.48 (b) 7.22 6.41 5.35 5.55 5.30	ae<210 ae2,100 ae310 ae<210 ae920 ae590 ae280 ae330 e270
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	1961-71	5- -71	(b)	e<1

See footnotes at end of table, p. 247.

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							
06652400	Watson Draw near Lost Springs, Wyo. S	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	1960-71	5-23-71	4.89	88
06655360	Deadmans Gulch near Guernsey, Wyo. S	Lat 42°19'20", long 104°46'05", in SW¼SW¼ sec.10, T.27 N., R.66 W., Platte County, on right bank about 400 ft upstream from Shore Road around Guernsey Reservoir and 3.9 miles northwest of Guernsey.	.34	1965-71	1971		(d)
06655380	Fish Canyon near Guernsey, Wyo. S	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	1965-71	6-19-71	1.95	77
06655750	Sparks Canyon near Hartville, Wyo. S	Lat 42°19'10", long 104°43'00", in NE¼NE¼ sec.13, T.27 N., R.66 W., Platte County, on left bank about 1,800 ft upstream from Guernsey-Hartville Road and about 0.8 mile southeast of Hartville.	.74	1965-71	6-13-71	1.48	77
06661570	Fourmile Creek tributary near Centennial, Wyo. (station discontinued).	Lat 41°29'05", long 106°01'52", in SW¼SE¼ sec.34, T.18 N., R.77 W., Albany County, 1.0 mile upstream from mouth and 13.6 miles northeast of Centennial.	.28	1963-71	1971		(d)
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	1962-71	6-20-71	5.31	58
06667560	Piney Creek tributary at upper station, near Wheatland, Wyo. S	Lat 42°11'26", long 105°12'49", in SE¼SW¼ sec.26, T.26 N., R.70 W., Platte County, on right bank 100 ft east of Fletcher Park Road and about 15 miles northwest of Wheatland.	.18	1965-71	5-30-71	.90	(+)
06668040	Rabbit Creek near Wheatland, Wyo. S	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.	11.3	1965-71	6-15-67 6-27-68 5- 5-71	f.61 .37 .48	f44 f28 35
06670100	Laramie River tributary near Guernsey, Wyo.	Lat 42°09'08", long 104°42'25", in N¼SW¼ 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	5- 5-71	10.72	e600
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	5- 5-71	8.07	388
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	1969-71	5-23-71	10.05	850
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	1961-71	1968 7-29-71	(b) 5.68	a<14 34
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	1960-71	5-24-71	c9.77	e2

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)	Discharge (cfs)
Platte River basin--Continued							
06761600	Ninemile Draw tributary near Federal, Wyo.	Lat 41°15'05", long 105°02'34", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ 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	1960-71	1971		(d)
06761700	Muddy Creek tributary near Burns, Wyo.	Lat 41°09'16", long 104°20'57", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ 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	1960-71	1971		(d)
06761900	Lodgepole Creek tributary near Pine Bluffs, Wyo.	Lat 41°15'23", long 104°04'50", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ 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	1960-71	6- 3-71	7.72	50
06762600	Lodgepole Creek tributary No. 2 near Albin, Wyo.	Lat 41°19'11", long 104°04'49", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ 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	1960-71	2- -62 2- 3-63 6-10-69 6-11-70 5- 5-71	6.38 6.21 f5.04 5.16 5.87	a113 a95 a5 a9 59
06762700	Lodgepole Creek tributary No. 3 near Albin, Wyo. (station discontinued).	Lat 41°25'07", long 104°09'40", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.23, T.17 N., R.61 W., Laramie County, at culvert on State Secondary Highway 1105 and 3.2 miles west of Albin.	.75	1960-71	5- 5-71	(g)	e<1
Green River basin							
09204700	Sand Springs Draw tributary near Boulder, Wyo.	Lat 42°35'07", long 109°37'23", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ 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	1961-71	1963 1964 1967 4- -71	(b) (b) (b) 5.75	a<13 a<13 a<13 29
09207650	Dry Basin Creek near Big Piney, Wyo.	Lat 42°25'28", long 110°06'35", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ 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	7- -71	4.04	280
09211100	Green River tributary near Fontenelle, Wyo.	Lat 42°02'40", long 110°09'40", in SE $\frac{1}{4}$ 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	1961-71	1971		(d)
09211300	Fourmile Gulch tributary near Fontenelle, Wyo.	Lat 42°03'09", long 109°59'40", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ 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	3-24-71	7.75	83
09216290	East Otterson Wash near Green River, Wyo.	Lat 41°47'04", long 109°44'03", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ 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	1969-71	7-19-71	7.66	360
09216350	Skunk Canyon Creek near Green River, Wyo.	Lat 41°43'55", long 109°30'39", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ 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	1965 7- -71	12.3 4.87	a600 19
09216400	Greasewood Canyon near Green River, Wyo.	Lat 41°33'34", long 109°30'38", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ 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	1959-71	1959 3-20-60 1961 3-27-62 8-13-63 1964 5-14-65 4- -66 3-29-67 4- 3-68 4-23-69 4-28-70 4-22-71	(b) 2.55 (b) 3.63 3.40 (b) 2.85 2.71 2.91 2.85 2.78 1.73 2.34	ae<20 ae85 ae<20 ae260 ae215 ae<80 ae120 ae96 ae130 ae120 ae110 a52 113

See footnotes at end of table, p. 247.

Annual maximum discharge at crest-stage partial-record stations--Continued

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							
09216510	Telephone Canyon near Green River, Wyo. S	Lat 41°31'07", long 109°30'14", in SE¼SE¼ sec.20, T.18 N., R.107 W., Sweetwater County, on right bank 150 ft upstream from Telephone Canyon Road and 1.9 miles southwest of Green River.	6.98	1965-71	4- -71	0.48	(+)
09216520	Telephone Canyon tributary near Green River, Wyo. S	Lat 41°31'01", long 109°31'12", in NW¼NW¼ sec.29, T.18 N., R.107 W., Sweetwater County, on left bank near shoulder of Telephone Canyon Road and 2.7 miles southwest of Green River.	3.44	1965-71	7-23-71	.67	(+)
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	1961-71	3- -71	6.46	330
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 mile south of Point of Rocks.	759	1961-71	1964 5-30-71	(b) 10.62	a<105 450
09216600	Salt Wells Creek tributary near Rock Springs, Wyo. S	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	1959-71	1966 9- -71	(b) e5.2	a<51 e46
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	1959-71	4-23-71	5.90	1,430
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	1959-71	5-30-71	4.55	(+)
09221670	Mud Spring Hollow tributary near Lyman, Wyo. S	Lat 41°22'21", long 110°09'48", in NE¼NE¼ sec.17, T.16 N., R.113 W., Uinta County, on right bank 310 ft upstream from mouth and 7.3 miles east of Lyman.	.97	1965-71	4- -71	.88	(+)
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	1965-71	9- 5-70 4- -71	1.62 .83	a111 (+)
09221700	Mud Spring Hollow near Lyman, Wyo. (station discontinued).	Lat 41°23'05", long 110°11'28", in SE¼NW¼ sec.7, T.16 N., R.113 W., Uinta County, at culvert on U.S. Highway 30S and 6.7 miles northeast of Lyman.	10.2	1959-71	9-12-67 4- -71	(g) 10.53	a166 86
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.	5.03	1959-71	4- -71	8.03	190
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, 1968-71 (revised)	3-27-62 9-22-63 1964 8-13-65 10- 2-67 4- -69 8- -71	6.01 5.41 (b) 5.53 c3.74 c4.41 2.02	ae145 ae81 ae<57 ae89 ae3 ae26 55
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	1965-71	6-10-65 3- -67 1968 4- -69 4- -71	5.82 5.21 (b) 5.91 c4.80	a49 a12 a<7 a56 e<1
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	1965-71	4- -65 7- 7-67 8-19-68 4- -69 7-23-70 8-30-71	6.14 5.53 5.66 5.89 7.40 6.41	a22 a1 a2 a9 a150 41

See footnotes at end of table, p. 247.

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							
09224840	Blacks Fork tributary No. 4 near Green River, Wyo.	Lat 41°24'40", long 109°36'05", in SE½NE½ 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	1965-71	1965 7- 7-67 8-19-68 4- -69 8-30-71	(b) 4.97 5.03 c4.80 5.32	a<7 a5 a6 a1 17
09224980	Summers Dry Creek near Green River, Wyo.	Lat 41°22'25", long 109°38'40", in NW½NE½ 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	1965-71	4-22-71	7.33	660
09225200	Squaw Hollow near Burntfork, Wyo.	Lat 41°10'14", long 109°36'34", in NE½NW½ 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	1965-71	5-30-71	12.74	83
09225300	Green River tributary No. 2 near Burntfork, Wyo.	Lat 41°03'40", long 109°37'05", in NE½SE½ sec.31, T.13 N., R.108 W., Sweetwater County, 200 ft downstream from State Highway 530, 4.8 miles northeast of Linwood, 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, 1961-71	5-30-71	8.43	7
09229450	Henrys Fork tributary near Manila, Utah	Lat 41°01'14", long 109°40'46", in NW½SE½ 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	1965-71	5-15-65 8- 4-66 1967 8-18-69 10- 9-69 1971	5.81 5.25 (b) 6.04 5.70	a31 a3 a<1 a49 a23 (d)
09258200	Dry Cow Creek near Baggs, Wyo.	Lat 41°20'24", long 107°40'14", in SE½SE½ sec.19, T.16 N., R.91 W., Carbon County, 1.6 mile upstream from county road, 4.3 miles upstream from mouth, and 21 miles north of Baggs.	49.7	1970-71	3-23-71	9.90	853
09258900	Muddy Creek above Baggs, Wyo. (station discontinued).	Lat 41°07'55", long 107°38'45", in NW½NW½ sec.4, T.13 N., R.91 W., Carbon County, on left bank 30 ft downstream from bridge, 0.2 mile upstream from Cottonwood Creek, 6.7 miles north of Baggs, and about 12 miles upstream from mouth.	1,178	1958-71	3-23-71	8.40	1,800
Bear River basin							
10019700	Whitney Canyon Creek near Evanston, Wyo.	Lat 41°25'42", long 110°58'21", in SE½NW½ sec.27, T.17 N., R.120 W., Uinta County, at culvert on dirt road and 11.1 miles north of Evanston.	8.93	1965-71	4- -71	7.46	160
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	1964-71	6-22-71	5.68	48
Hoback River basin							
13019210	Rim Draw near Bondurant, Wyo.	Lat 43°08'00", long 110°13'40", in NE½ 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	1964-71	5- -71	5.78	18
13019220	Sour Moose Creek near Bondurant, Wyo.	Lat 43°09'00", long 110°15'20", in N½ 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	1964-71	5- -71	5.97	23

See footnotes at end of table, p. 247.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

247

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)
Hoback River basin--Continued							
13019400	Cliff Creek near Bondurant, Wyo.	Lat 43°13'40", long 110°30'17", Sublette County, Teton National Forest, at bridge on Cliff Creek Road, 1.6 miles upstream from mouth, and 4.9 miles west of Bondurant.	58.6	1964-71	5-27-64 5- -65 6- -68 5- -69 5- -70 5-30-71	8.12 7.41 6.99 6.90 7.35 8.66	a700 a500 a390 a375 a480 e1,000
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† 1964-71	5-30-71	7.37	580
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† 1964-71	5-30-71	6.45	162
13022550	Red Creek near Alpine, Wyo.	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	1964-71	5-27-64 6-26-65 6-28-67 5- -68 1969 6-12-70 6-28-71	4.33 4.52 4.37 4.32 (b) 4.46 4.43	a16 a24 a18 a16 a<9 a44 42
13022570	Cottonwood Creek near Alpine, Wyo.	Lat 43°11'28", long 110°56'48", Lincoln County, Targhee National Forest, at culvert on U.S. Highway 89 and 5.0 miles east of Alpine.	2.40	1964-71	6-28-71	6.03	72
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.	13.6	1964-71	5-27-64 5- -65 5-29-67 4- -69 5-30-71	7.17 6.50 7.08 6.33 6.76	a81 a51 a77 a45 63
Henrys Fork basin							
13050700	Mail Cabin Creek near Victor, Idaho	Lat 43°29'50", long 110°59'00", in SW¼ sec.23, T.41 N., R.118 W., 6th P.M., Teton County, Wyoming, Targhee National Forest, above confluence with Trail Creek, 9.5 miles southeast of Victor.	3.27	1962-71	6-21-71	4.97	81

† Discharge not determined.

‡ Operated as a continuous-record gaging station.

a Not previously published.

b Peak stage did not reach bottom of gage.

c Maximum observed, peak stage did not reach bottom of gage.

d No evidence of flow.

e Estimate.

f Revised.

g Not determined.

h Of which 0.50 sq mi is probably noncontributing.

i Approximately.

j Peaks after 1969 affected by small stockwater reservoir 0.2 mile upstream.

k Peaks after 1968 affected by small stockwater reservoir 50 ft upstream.

m Peaks after 1966 affected by small stockwater reservoir 0.1 mile upstream.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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 1971

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 6 Madison River basin						
Firehole River 06036800	Jefferson River	Lat 44°26'33", long 110°48'15", Yellowstone National Park, 0.2 mile upstream from Kepler Cascades, about 0.2 mile upstream from diversion, and 1.5 miles southeast of Old Faithful Post Office.		1934 1967-70	10-22-70	*52.0
Iron Spring Creek 06036813	Firehole River	Lat 44°27'41", long 110°51'08", Yellowstone National Park, 300 ft east of Emerald Pool and 1.3 miles northwest of Old Faithful Post Office.		1969-70	10-22-70	*36.9
Nez Perce Creek 06036900	Firehole River	Lat 44°35'05", long 110°46'41", Yellowstone National Park, at bridge on service road, 2.7 miles northeast of Fountain Paint Pot, about 3.8 miles upstream from mouth, and 9.0 miles north of Old Faithful Post Office.		1968-70	10-22-70	*57.6
Firehole River 06036910	Jefferson River	Lat 44°38'25", long 110°51'54", Yellowstone National Park, 0.2 mile upstream from confluence of Firehole and Gibbon Rivers and 12 miles east of West Yellowstone, Mont.		1962 1969-70	10-21-70	*298
Gibbon River 06036930	Madison River	Lat 44°43'47", long 110°41'20", Yellowstone National Park, at bridge on Norris-Canyon Road, 0.3 mile east of Norris Junction, about 1 mile upstream from Solfatara Creek, and 9.8 miles west of Canyon Village.		1968-70	10-19-70	*23.6
Gallatin River basin						
Gallatin River 06042920	Missouri River	Lat 44°55'39", long 110°02'43", Yellowstone National Park, 0.5 mile east of Wyoming-Montana State line, 1 mile north of Divide Lake, and 18.5 miles north of West Yellowstone, Mont.		1969-70	10-21-70	*36.8
Yellowstone River basin						
Arnica Creek 06185955	Yellowstone Lake	Lat 44°28'40", long 110°32'30", Yellowstone National Park, at bridge on Grand Loop Road, 0.3 mile upstream from Yellowstone Lake, 4.4 miles northeast of West Thumb junction, and 8.8 miles southwest of Lake ranger station.		1969-70	10-22-70	*4.20
Cub Creek 06185970	Yellowstone Lake	Lat 44°30'15", long 110°11'40", Yellowstone National Park, at Cub Creek campground on East Entrance Road, 10.5 miles southeast of Lake junction, and 9.6 miles west of East Entrance ranger station.		1969-70	10-19-70	*1.53
Bridge Creek 06185985	Yellowstone Lake	Lat 44°31'48", long 110°26'02", Yellowstone National Park, at bridge on Grand Loop Road, 250 ft upstream from Yellowstone Lake, 3.5 miles southwest of Lake junction, and 2.4 miles southwest of Lake ranger station.		1969-70	10-22-70	*.40
Pebble Creek 06187920	Soda Butte Creek	Lat 44°55'07", long 110°06'42", Yellowstone National Park, about 0.2 mile upstream from Northeast Entrance Road, 0.8 mile upstream from mouth, 6.2 miles east of Lamar ranger station, 8.0 miles southwest of Northeast Entrance, and 15 miles east of Tower junction.		1969-70	10-20-70	*9.02
Slough Creek 06187980	Lamar River	Lat 44°56'58", long 110°18'15", Yellowstone National Park, at Slough Creek campground, 0.1 mile upstream of Buffalo Creek, 5.1 miles northwest of Lamar ranger station, and 5.9 miles northeast of Tower junction.		1969-70	10-20-70	*47.2
Lamar River 06188000	Yellowstone River	Lat 44°55'40", long 110°23'35", Yellowstone National Park, on left bank 0.5 mile northeast of Cooke City highway, 0.5 mile upstream from mouth, and 1.5 miles northeast of Tower Falls ranger station.	660	1922+ 1923-69+ 1970	10-20-70	*220

See footnotes at end of table, p. 256.

Discharge measurements made at miscellaneous sites during water year 1971

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 6 Yellowstone River basin--Continued						
Unnamed tributary 06189020	Blacktail Deer Creek	Lat 44°57'31", long 110°35'40", Yellowstone National Park, at mouth, on lower Blacktail Trail, 0.2 mile north of Grand Loop Road, and 5.2 miles east of Mammoth Post Office.		1967-1969-70	10-20-70	a0.15
Blacktail Deer Creek 06189030	Yellowstone River	Lat 44°57'42", long 110°35'26", Yellowstone National Park, at Howard Eaton Trail, 0.5 mile downstream from bridge on Grand Loop Road, and 5.3 miles east of Mammoth Post Office.		1967-70	10-20-70	*5.73
Gardner River 06189730	Yellowstone River	Lat 44°53'36", long 110°44'56", Yellowstone National Park, at diversion, 30 ft upstream from Panther Creek, and 6.2 miles south of Mammoth Post Office.		1929-30 1967-70	10-21-70	*20.9
Glen Creek 06189902	Gardner River	Lat 44°55'59", long 110°43'33", Yellowstone National Park, just downstream from unnamed right bank tributary, about 400 ft upstream from Rustic Falls, and 3.3 miles south of Mammoth Post Office.		1968-70	10-21-70	*16.1
Lava Creek 06189980	Gardner River	Lat 44°56'22", long 110°37'36", Yellowstone National Park, about 200 ft upstream from Lupine Creek and 4.3 miles southeast of Mammoth Post Office.		1967-70	10-21-70	*21.1
Little Wind River 06231000	Wind River	Lat 42°57'37", long 108°29'54", in NE¼SE¼ 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+ 1966-70	12- 8-70 1-14-71 2- 2-71 3- 5-71 4- 2-71	141 79.8 124 73.9 92.8
Beaver Creek 06235000	Little Wind River	Lat 42°57'16", long 108°25'39", in NW¼NE¼ 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+ 1968-70	11- 3-70 12- 8-70 2- 2-71 3- 5-71 4- 1-71 5-11-71 6-11-71	0 1.18 20.6 7.29 33.1 78.3 73.8
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.		1966-70	10- 2-70 1-18-71 4- 1-71	840 1,290 1,860
Bighorn River 06268600	Yellowstone River	Lat 44°00'53", long 107°58'08", in SW¼NE¼ 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	3- 8-71 8-23-71	2,060 751
Bighorn River 06269000	Yellowstone River	Lat 44°11'39", long 107°54'52", in NE¼NW¼ sec.28, T.49 N., R.92 W., Big Horn County, at bridge on county road 0.6 mile west of Rairden, 1.2 miles downstream from Fivemile Creek, and 5.8 miles southeast of Manderson.	11,020	1949-53+ 1955-56+ 1967 1970	12- 4-70 3- 2-71 6-17-71	1,300 2,020 1,790
Nowood River 06270000	Bighorn River	Lat 44°00'45", long 107°25'44", in SW¼SW¼NW¼ sec.27, T.47 N., R.88 W., Washakie County, 1.8 miles southeast of Ten Sleep, and 3 miles upstream from Tensleep Creek.	803	1938-43+ 1950-56+ 1967-70	10-20-70 11-12-70 12- 1-70 1-21-71 3- 1-71 4- 7-71 5-10-71 6-18-71 7-21-71 8-18-71 9- 9-71	96.9 96.9 107 82.1 127 89.9 576 108 34.9 24.6 56.9

Discharge measurements made at miscellaneous sites during water year 1971

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 6 Yellowstone River basin--Continued						
Paint Rock Creek 06273500	Nowood River	Lat 44°12'20", long 107°42'54", in SW¼SE¼NW¼ 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+ 1968-70	10- 8-70 11- 4-70 11-30-70 1-15-71 3- 9-71 4- 9-71 5- 4-71 8-17-71	37.7 62.4 57.1 40.4 44.3 40.8 56.9 39.3
Nowood River 06274220	Bighorn River	Lat 44°16'34", long 107°57'35", in NE¼SW¼ 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.	b2,000	1950-51 1965-70	10- 8-70 11- 4-70 11-30-70 1-25-71 3-30-71 5-24-71 6-29-71 8- 2-71	172 247 226 168 243 789 798 148
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.			10- 2-70 11- 5-70 12- 4-70 12-30-70 2-22-71 3-30-71 5- 3-71 6- 4-71 6- 9-71 6-24-71 7-13-71 8- 2-71 9- 9-71	*4.62 3.02 1.17 .84 .54 .74 3.25 20.5 90.9 199 68.1 34.3 15.9
Wood River 06274820	Greybull River	Lat 43°54'10", long 109°16'15", Park County, Shoshone National Forest, 0.2 mile downstream from Canyon Creek and 2.5 miles northeast of Kirwin.			10-22-70	*9.11
Jojo Creek 06274840	Wood River	Lat 43°56'15", long 109°12'55", Park County, Shoshone National Forest, 500 ft upstream from mouth and 6.0 miles northeast of Kirwin.			10-22-70	*1.42
Wood River 06274850	Greybull River	Lat 43°56'10", long 109°11'15", Park County, Shoshone National Forest, at Brown Mountain campground, 1.4 miles downstream from Jojo Creek, and 6.9 miles northeast of Kirwin.			10-22-70	*31.6
Shell Creek 06279090	Bighorn River	Lat 44°30'34", long 108°02'52", in NW¼SW¼ 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.	b560	1965-70	10-14-70 11- 6-70 12- 3-70 1- 8-71 2- 3-71 4-14-71 5-24-71 6-10-71 7-15-71 8- 6-71 9-16-71	88.3 101 91.4 70.7 65.6 74.1 114 1,100 44.4 44.2 49.5
Middle Creek 06279850	North Fork Shoshone River	Lat 44°29'19", long 110°00'02", at Yellowstone National Park boundary, 50 ft south of East Entrance ranger station and 19 miles east of Fishing Bridge.		1968-70	10-19-20	*22.3
Sage Creek 06285500	Shoshone River	Lat 44°50'51", long 108°26'38", in sec.8, T.56 N., R.96 W., Big Horn County, at bridge on U.S. Highway 310, 2.6 miles upstream from mouth, and 2.7 miles west of Lovell.	381	1949-50 1951-60+ 1965 1968 1970	1- 7-71 4-14-71 7-15-71	17.8 29.3 145
North Fork Powder River 06311060	Powder River	Lat 44°00'29", long 107°01'07", in NE¼SE¼SW¼ sec.25, T.47 N., R.85 W., Johnson County, 100 ft downstream from Bull Creek, 500 ft upstream from sinkhole, 2.1 miles downstream from Dullknife Dam, and 6.5 miles southwest of Hazelton.			11- 6-70 9- 3-71	23.4 30.5

See footnotes at end of table, p. 256.

Discharge measurements made at miscellaneous sites during water year 1971

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 6 Yellowstone River basin--Continued						
North Fork Powder River 06311065	Powder River	Lat 44°00'27", long 107°00'57", in NE¼SW¼SE¼ sec.25, T.47 N., R.85 W., Johnson County, 500 ft downstream from sinkhole, 1.3 miles upstream from Gammon Creek, 2.2 miles downstream from Dullknife Dam, and 6.5 miles southwest of Hazelton.			11- 6-70	3.29
North Fork Powder River 06311100	Powder River	Lat 43°58'40", long 106°59'22", in NE¼SE¼SE¼ sec.6, T.46 N., R.84 W., Johnson County, at spring, 0.8 mile downstream from Johnson Creek, 4.4 miles downstream from Dullknife Dam, 8.2 miles south of Hazelton, and 14 miles northwest of Mayoworth.		1970	11- 4-70 11- 5-70 11- 6-70	5.40 13.3 9.0
North Fork Powder River 06311150	Powder River	Lat 43°58'15", long 106°57'02", in SW¼SE¼NE¼ sec.9, T.46 N., R.84 W., Johnson County, 10 ft upstream from Gardner Creek, 6.2 miles downstream from Dullknife Dam, 8.6 miles south of Hazelton, and 13 miles northwest of Mayoworth.		1970	8-31-71	13.3
Gardner Creek 06311200	North Fork Powder River	Lat 43°58'15", long 106°57'02", in SW¼SE¼NE¼ sec.9, T.46 N., R.84 W., Johnson County, 10 ft upstream from mouth, 6.2 miles downstream from Dullknife Dam, 8.6 miles south of Hazelton, and 13 miles northwest of Mayoworth.		1970	8-31-71	*3.90
North Fork Powder River 06311220	Powder River	Lat 42°56'48", long 106°56'00", in NE¼NW¼NE¼ sec.22, T.46 N., R.84 W., Johnson County, 2 miles downstream from Gardner Creek and 10 miles northwest of Mayoworth.			8-31-71	18.5
North Fork Powder River 06311240	Powder River	Lat 42°55'56", long 106°54'27", in SE¼NE¼NE¼ sec.26, T.46 N., R.84 W., Johnson County, 1 mile upstream from Pass Creek and 8.5 miles northwest of Mayoworth.			9- 1-71	16.2
Pass Creek 06311300	North Fork Powder River	Lat 42°55'13", long 106°53'51", in SE¼SE¼SW¼ sec.25, T.46 N., R.84 W., Johnson County, at mouth and 8.0 miles northwest of Mayoworth.			9- 1-71	*3.93
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.	b1,150	1911-12+ 1938-40+ 1950-69+ 1970	11- 4-70 12- 8-70 1-11-71 3-23-71 4-28-71 5-28-71 6-23-71 7-21-71 8-25-71 8-30-71	1.26 13.7 .59 15.3 275 13.5 .29 0 0 0
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	1967-70	11- 3-70 12- 9-70 1-12-71 3-23-71 4-28-71 5-28-71 6-22-71 7-20-71 8-31-71	25.3 22.3 14.1 35.8 108 26.1 20.0 18.5 16.5
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.	b945	1963-70+	10-12-70 11-30-70 1-11-71 5-27-71 6-24-71 7-28-71	2.99 19.8 4.17 57.0 147 9.80

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1971

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 6						
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.		1968-70	10- 7-70 11- 4-70 12- 1-70 1- 7-71 2- 3-71 4- 6-71 5-11-71 6- 8-71 7- 7-71 8- 3-71 8-31-71	7.62 14.6 18.2 6.73 10.7 322 93.1 62.6 29.1 108 68.3
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.		1967-70	6-28-71 7-28-71 8-10-71 9- 9-71	111 23.3 12.1 6.97
Little Medicine 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.			10-21-70	13.2
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 1965-70	10-21-70 1-20-71 5-21-71 8-17-71 9-15-71	18.4 6.28 392 7.49 7.79
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# 1968-70	10-27-70 11-27-70 12-28-70 3- 2-71 4- 2-71 5- 3-71 6- 1-71 7- 6-71 8- 3-71 9- 7-71	10.4 25.1 21.4 38.8 82.2 103 126 .63 .35 .36
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.		1968-70	5- 3-71 6- 1-71 6-29-71 8- 3-71 9- 7-71	5.01 111 .12 0 0
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.	c668	1946-56# 1968-70	12-27-70 1-29-71 3- 2-71 4- 2-71 5- 4-71 5-10-71 5-17-71 5-24-71 6- 1-71 6- 8-71 6-14-71 6-21-71 6-29-71 7- 6-71 7-12-71 7-19-71 8- 3-71 8-16-71 8-30-71 9-14-71 9-20-71 9-27-71	3.87 10.7 7.96 8.76 25.9 96.8 24.9 22.0 148 23.7 15.1 10.3 11.5 10.9 12.3 14.9 16.8 21.5 13.1 9.40 11.4 9.89
Box Elder Creek 06648000	North Platte River	Lat 42°50'08", long 105°40'24", in NE¼NE¼ sec.13, T.33 N., R.74 W., Converse County, 0.9 mile south of Careyhurst and 2.2 miles upstream from mouth.	202	1911-12# 1916-24# 1928-33# 1935-69# 1970	5- 7-71	947

See footnotes at end of table, p. 256.

Discharge measurements made at miscellaneous sites during water year 1971

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 6 Platte River basin--Continued						
Wagon Hound Creek 06650500	North Platte River	Lat 42°39'35", long 105°22'10", in SW¼NE¼ sec.16, T.31 N., R.71 W., Converse County, 0.6 mile upstream from mouth, 3.5 miles north-east of La Bonte, and 6 miles south of Douglas.	112	1916-24# 1929-32# 1937-69# 1970	5- 5-71	1,150
Horseshoe Creek 06653500	North Platte River	Lat 42°27'09", long 104°58'11", in SE¼ sec.26, T.29 N., R.68 W., Platte County, 0.6 mile upstream from mouth and 4.4 miles southeast of Glendo.	211	1916-18# 1921-24# 1928-33# 1935-70#	5- 6-71	1,230
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.			7-17-70 7-24-70 7-31-70 8- 7-70 8-14-70 8-21-70 8-28-70 9-11-70 9-18-70 9-25-70 10- 2-70 10-16-70 10-22-70 10-30-70 11- 6-70 11-13-70 11-27-70 12- 4-70 12- 8-70 12-15-70 12-22-70 12-29-70 1-18-71 2-23-71 3-23-71 4-15-71 5-28-71 6-18-71 7- 2-71 7- 9-71 7-16-71 7-23-71 7-30-71 8- 6-71 8-13-71 8-20-71 8-27-71 9- 3-71 9-10-71 9-17-71 9-24-71	d*.87 d*.91 d*.81 d1.46 d*1.10 d*1.11 d*.98 d*.75 d*.73 d*.72 *.49 *.27 *.15 *.07 *.04 *.05 .21 .30 .38 .22 .24 .06 0 1.86 2.42 *.91 15.4 6.67 *2.51 3.34 *2.20 *1.57 *1.48 *1.33 *1.27 *.79 *.80 *.78 .85 .82 2.16
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 bridge on State Secondary Highway 1801, 1.9 miles upstream from New Fork River, 8.4 miles northeast of Big Piney, and 16.2 miles south-west of Boulder.		1965-66 1968-70	12- 6-70 1- 8-71 1-30-71	147 141 194
New Fork River 09201000	Green River	Lat 42°45'01", long 109°43'41", in NW¼NE¼NW¼ sec.16, T.32 N., R.108 W., Sublette County, on left bank 70 ft downstream from highway bridge, 700 ft upstream from Boulder Creek, and 0.5 mile northwest of Boulder.	552	1915-69# 1970	12- 8-70 1- 7-71 1-31-71	151 90.6 138
Bitter Creek 09216950	Green River	Lat 41°31'25", long 109°25'41", in NE¼SE¼ sec.24, T.18 N., R.107 W., Sweetwater County, 0.3 mile south of Interstate Highway 80, 1.7 miles east of Green River, and 1.9 miles up-stream from mouth.		1958 1966-70	10-10-70 4- 8-71 7- 9-71	4.11 15.1 15.8

See footnotes at end of table, p. 256.

Discharge measurements made at miscellaneous sites during water year 1971

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 9 Green River basin--Continued						
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.		1965-70	1- 8-71 1-29-71 4- 6-71 7-10-71 8- 8-71 9- 1-71	6.19 64.0 262 247 65.2 27.8
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.		1966-70	6-28-71 7-28-71 8-10-71 9- 9-71	5.87 7.33 5.12 1.97
Part 13 Lewis River basin						
Herron Creek 13007100	De Lacy Creek	Lat 44°26'52", long 110°42'22", Yellowstone National Park, at bridge on Grand Loop Road, 0.4 mile upstream from mouth, 6.1 miles east of Old Faithful geyser, and 6.9 miles west of West Thumb Junction.		1969-70	10-22-70	*.22
Unnamed tributary 13009200	Lewis River	Lat 44°15'20", long 110°38'28", Yellowstone National Park, at bridge on South Entrance Road, 0.8 mile south of Lewis Falls, 11.8 miles south of West Thumb Junction, and 8.6 miles north of South Entrance.		1969-70	10-22-70	*1.47
Tributary to Snake River between Lewis River and Polecat Creek						
Unnamed tributary 13010040	SNAKE RIVER	Lat 44°08'31", long 110°40'23", Yellowstone National Park, 100 ft upstream from Supply Spring, 0.2 mile west of South Entrance Road, and 0.7 mile north of south boundary of Yellowstone National Park.		1970	10-17-70	*.05
Supply Spring 13010050	SNAKE RIVER	Lat 44°08'34", long 110°40'23", Yellowstone National Park, 0.2 mile west of South Entrance Road and 0.7 mile north of south boundary of Yellowstone National Park.			10-17-70	*.30
Lizard Creek basin						
Lizard Creek 13010360	Jackson Lake	Lat 44°00'26", long 110°40'49", Grand Teton National Park, Teton County, 40 ft upstream from bridge on U.S. Highways 89 and 287, 1,800 ft upstream from mouth, and 7.5 miles north of Colter Bay Village.			6- 4-71 8-18-71	37.5 *.61
Arizona Creek basin						
Arizona Creek 13010380	Jackson Lake	Lat 43°58'21", long 110°38'41", Grand Teton National Park, Teton County, 300 ft downstream from bridge on U.S. Highways 89 and 287, 1,600 ft upstream from mouth, and 4.8 miles north of Colter Bay Village.			6- 5-71 8-18-71	319 *7.09
Pilgrim Creek basin						
Pilgrim Creek 13010390	Jackson Lake	Lat 43°55'54", long 110°33'34", Teton County, Teton National Forest, 0.1 mile upstream from Grand Teton National Park boundary, 0.4 mile upstream from East Fork, 3 miles upstream from bridge on U.S. Highways 89 and 287, 4.5 miles northeast of Colter Bay Village, and 6.7 miles northwest of Moran.		1968-69	6- 4-71	294
Pilgrim Creek 13010440	Jackson Lake	Lat 43°55'08", long 110°33'53", Grand Teton National Park, Teton County, 200 ft downstream from abandoned ford, 0.5 mile downstream from East Fork, 2.0 miles upstream from U.S. Highways 89 and 287 bridge, 4 miles northeast of Colter Bay Village, and 6.0 miles northwest of Moran.		1968-69	11-13-69 8- 5-70 10-15-70 6- 4-71 8-17-71 9-20-71	d7.63 d29.6 25.8 504 *24.8 *15.9

See footnotes at end of table, p. 256.

Discharge measurements made at miscellaneous sites during water year 1971

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 13 Pilgrim Creek basin--Continued						
Pilgrim Creek 13010445	Jackson Lake	Lat 43°54'54", long 110°34'22", Grand Teton National Park, Teton County, 0.5 mile downstream from abandoned ford, about 1.0 mile downstream from East Fork, 1.5 miles upstream from U.S. Highways 89 and 287 bridge, and 6.2 miles northwest of Moran.		1969	11-13-69 8-17-71 9-20-71	d16.5 *20.5 *13.6
Pilgrim Creek 13010455	Jackson Lake	Lat 43°54'01", long 110°35'15", in NW¼NW¼NE¼ sec.6, T.45 N., R.114 W., Grand Teton National Park, Teton County, 1,250 ft downstream from new bridge on U.S. Highways 89 and 287, 1.6 miles north of Jackson Lake Lodge, and 5.6 miles northwest of Moran.			9-20-71	*10.7
Pilgrim Creek 13010465	Jackson Lake	Lat 43°53'06", long 110°35'39", in SW¼NE¼NW¼ sec.7, T.45 N., R.114 W., Grand Teton National Park, Teton County, 4,000 ft downstream from bridge on old highway, 1.0 mile northwest of Jackson Lake Lodge, and 5.0 miles northwest of Moran.			9-20-71	*5.86
Spread Creek basin						
Spread Creek 13012500 (formerly published as Spread Creek near Elk)	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#	6- 5-71 8-18-71	469 *11.4
Cottonwood Creek basin						
Cottonwood Creek 13012800	Snake River	Lat 43°45'03", long 110°43'29", in SW¼NW¼ sec.25, T.44 N., R.116 W., Grand Teton National Park, Teton County, 0.1 mile south of Jenny Lake and 6.5 miles north of Moose.		1968-69	11-11-69 5- 4-70 8- 5-70 10-16-70 6- 9-71 8-16-71 9-21-71	d18.7 d15.8 d200 36.3 441 271 *72.0
Cottonwood Creek 13012850	Snake River	Lat 43°43'50", long 110°44'02", in SW¼SE¼ sec.35, T.44 N., R.116 W., Grand Teton National Park, Teton County, 1.5 miles downstream from Jenny Lake and 5.0 miles north of Moose.		1968-69	11-11-69 8-16-71 9-21-71	d13.2 254 *58.3
Cottonwood Creek 13012860	Snake River	Lat 43°43'17", long 110°43'52", in SE¼SW¼NE¼ sec.2, T.43 N., R.116 W., Grand Teton National Park, Teton County, 0.5 mile downstream from Glacier Gulch, 1.6 miles upstream from bridge on Teton Park Road, and 4.5 miles north of Moose.			9-21-71	*50.9
Cottonwood Creek 13012880	Snake River	Lat 43°41'53", long 110°43'42", in NW¼NE¼NE¼ sec.14, T.43 N., R.116 W., Grand Teton National Park, Teton County, 50 ft upstream from bridge on Teton Park Road, 2,000 ft upstream from Taggart Creek, and 3 miles north of Moose.			9-21-71	*28.3
Ditch Creek basin						
Ditch Creek 13013530	Snake River	Lat 43°40'43", long 110°34'58", in SE¼NE¼NE¼ sec.24, T.43 N., R.115 W., Teton County, Teton National Forest, 0.3 mile below South Fork Ditch Creek and 4.3 miles northeast of Kelly.		1969	11-12-69 8- 5-70 10-16-70 6- 7-71 8-13-71	d409 d7.49 3.81 221 *8.09
Kelly Warm Springs 13013570	Ditch Creek	Lat 43°38'24", long 110°37'04", in NW¼NE¼NW¼ sec.2, T.42 N., R.115 W., Grand Teton National Park, Teton County, at outlet of Kelly Warm Springs and 1.1 miles north of Kelly.		1969	11-11-69 5- 3-70 10-16-70 9-17-71	d7.86 5.96 8.77 *10.4

See footnotes at end of table, p. 256.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1971

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 13 Gros Ventre River basin						
Gros Ventre River 13014400	Snake River	Lat 43°37'44", long 110°32'40", in NE¼SE¼SE¼ sec.5, T.42 N., R.114 W., Teton County, Teton National Forest, at bridge on private road, 4 miles east of Kelly, and 14.5 miles north-east of Jackson.			6- 7-71	2,380
Unnamed Spring 13014460	Gros Ventre River	Lat 43°37'27", long 110°36'21", in NW¼NE¼NE¼ sec.11, T.42 N., R.115 W., Teton County, at Teton Valley Ranch, 30 ft downstream from pond, and 0.8 mile east of Kelly.			9-17-71	*4.64
Fish Creek basin						
Lake Creek 13016250	Fish Creek	Lat 43°35'43", long 110°47'19", in NE¼NW¼NE¼ sec.20, T.42 N., R.116 W., Teton County, 150 ft downstream from bridge on private road, 1.8 miles upstream from Granite Creek, 1.9 miles northeast of Teton Village, 6.0 miles upstream from mouth, and 7.5 miles north of Jackson.			6- 8-71 9-19-71	234 *12.5
Granite Creek 13016320	Lake Creek	Lat 43°35'45", long 110°48'20", in NW¼NE¼NE¼ sec.19, T.42 N., R.116 W., Teton County, 75 ft upstream from bridge on Moose-Wilson Road, 1.2 miles northeast of Teton Village, 1.4 miles upstream from mouth, and 8.2 miles north of Jackson.			6- 8-71 9-19-71	207 *15.5
Salt River basin						
Salt River 13026200	Snake River	Lat 42°50'28", long 110°59'00", in SE¼ sec.13, T.33 N., R.119 W., Lincoln County, at bridge on State Secondary Highway 1206, 1.7 miles upstream from Willow Creek, 3.3 miles north of Auburn, and 5.5 miles south of Thayne.			6-24-71	2,290

* Base flow.

† Peak flow.

Operated as a continuous-record gaging station.

a Estimate.

b Approximately.

c 98 sq mi is probably noncontributing.

d Not previously published.

INDEX

	Page		Page
Accuracy of field data and computed results.....	9	Bighorn Lake near St. Xavier, Mont.....	65
Acme, Prairie Dog Creek near.....	81	Bighorn River, at Kane.....	55
Acre-foot, definition of.....	2	at Lucerne.....	249
Afton, Swift Creek near.....	230	at Worland.....	249
Agate, Nebr., Niobrara River at.....	111	near Manderson.....	249
Alcova, Alcova Reservoir at.....	129	near St. Xavier, Mont.....	66
North Platte River at.....	130	Birdseye Creek near Shoshoni.....	235
Pathfinder Reservoir near.....	128	Bitter Creek (Green River basin), near Green River.....	253
Sweetwater River near.....	127	near Point of Rocks.....	245
Alcova Reservoir at Alcova.....	129	tributary near Green River.....	245
Alpine, Greys River above Reservoir, near.....	229	Bitter Creek (Yellowstone River basin) near Garland.....	59
Snake River above Reservoir, near.....	228	Blackrock Creek tributary near Moran.....	246
Anchor, North Fork Owl Creek above Basin Ranch, near...	42	Blacks Fork, near Little America.....	195
South Fork Owl Creek near.....	40	near Lyman.....	192
Anchor Reservoir.....	100	near Millburne.....	189
South Fork Owl Creek below.....	41	near Robertson.....	188
Arizona Creek near Colter Bay Village, Grand		tributary near Granger.....	245
Teton National Park.....	254	tributary No. 2 near Green River.....	245
Arlington, Rock Creek above King Canyon Canal, near...	120	tributary No. 3 near Green River.....	245
Arnica Creek near West Thumb, Yellowstone National Park.	248	tributary No. 4 near Green River.....	246
Arvada, Clear Creek near.....	97	Blacktail Creek tributary near Newcastle.....	239
Powder River at.....	89	Blacktail Deer Creek, below Blacktail Pond outlet,	
Atlantic City, Little Popo Agie River near.....	28	near Mammoth, Yellowstone National Park.....	249
Rock Creek at.....	126	tributary near Mammoth, Yellowstone National Park....	249
Slate Creek near.....	125	Bluegrass Creek near Wheatland.....	150
Badwater Creek, at Bonneville.....	37	Bob Creek ditch near Glendevy, Colo., diversion by...	162
at Lysite.....	34	Bobcat Creek near Edgerton.....	237
tributary near Lysite.....	235	Bobcat Draw near Sand Draw.....	234
Barlow Creek near Devils Tower.....	239	Bonneville, Badwater Creek at.....	37
Barnum, Middle Fork Powder River near.....	83	Dry Creek near.....	36
Basin, Greybull River near.....	52	Border, Bear River at.....	221
Bates Creek near Alcova.....	252	Smiths Fork near.....	219
Bear Creek (tributary to Horse Creek), South Fork,		Boulder Creek below Boulder Lake, near Boulder.....	169
near Little Bear.....	243	Box Creek near Bill.....	239
Bear Creek (tributary to Medicine Bow River) near		Box Draw tributary near Gillette.....	238
Elk Mountain.....	240	Box Elder Creek near Careyhurst.....	252
Bear River, above reservoir, near Woodruff, Utah.....	214	Boysen Reservoir.....	100
at Border.....	221	Wind River below.....	39
below Pixley Dam, near Cokeville.....	218	Bridge Creek near Bridge Bay campground,	
below reservoir, near Woodruff, Utah.....	216	Yellowstone National Park.....	248
below Smiths Fork, near Cokeville.....	220	Bridger Creek near Lysite.....	35
near Randolph, Utah.....	217	Broadus, Mont., Little Powder River near.....	99
near Utah-Wyoming State line.....	209	Buffalo, Clear Creek near.....	90
West Fork, at Whitney Dam, near Oakley, Utah.....	208	North Fork Crazy Woman Creek below Spring	
Bear River basin, crest-stage partial-record		Draw, near.....	87
station in.....	246	Rock Creek near.....	91
gaging-station records in.....	207-222	Buffalo Bill Reservoir.....	100
Bear Springs Creek near Alcova.....	241	Shoshone River below.....	57
Beaver Creek (tributary to Cheyenne River)		Buffalo Fork above Lava Creek, near Moran.....	226
near Newcastle.....	103	Buffalo Fork basin, crest-stage partial-record	
Beaver Creek (tributary to Little Wind River)		station in.....	246
near Arapahoe.....	249	gaging-station record in.....	226
Belfry, Mont., Clarks Fork Yellowstone River near.....	18	Bugher Draw near Buffalo.....	238
Silver Tip Creek near.....	19	Bull Lake Creek, above Bull Lake.....	23
Belle Fourche River, at Devils Tower.....	252	near Lenore.....	24
at Wyoming-South Dakota State line.....	107	Bull Lake.....	100
below Keyhole Reservoir.....	106	Burnt Fork near Burnt Fork.....	197
tributary near Turnercrest.....	239	Burris, Dinwoody Creek above lakes, near.....	21
tributary No. 2 near Hulett.....	239	Cabin Creek near Jackson.....	247
Big Coulee near Lovell.....	63-64	Cache Creek near Jackson.....	227
Big Ditch tributary near Hanna.....	240	Cache la Poudre River basin, transbasin diversions to,	
Big Goose Creek, East Fork, near Big Horn.....	75	from North Platte River.....	162
near Sheridan.....	78	Cameron Pass ditch at Cameron Pass, Colo., diversion by..	162
West Fork, near Big Horn.....	77	Canyon Creek, below Cooks Canyon, near Ten Sleep.....	45
Big Horn, Cross Creek above Big Horn Reservoir, near...	76	tributary near Ten Sleep.....	236
East Fork Big Goose Creek near.....	75	Caribou Creek near Buffalo.....	238
Little Goose Creek in canyon, near.....	79	Casper Creek, at Casper.....	252
West Fork Big Goose Creek near.....	77	Middle Fork, near Bucknum.....	252
Big Piney, Dry Piney Creek near.....	174	Cfs-day, definition of.....	2
New Fork River near.....	172	Chapman Canal at State line, near Evanston.....	213
Big Sandy, Big Sandy River at Leckie Ranch, near.....	180-181	Cherry Creek drain near Torrington.....	155
East Fork River near.....	170	Cheyenne River, at Edgemont, S. Dak.....	104
Silver Creek near.....	171	near Spencer.....	102
Big Sandy River, at Leckie Ranch, near Big Sandy.....	180-181	Cheyenne River basin, crest-stage partial-record	
below Eden.....	186	stations in.....	239-240
near Farson.....	182	discharge measurements at miscellaneous site in.....	252
Big Willow Creek near Dayton.....	237	gaging-station records in.....	101-109

	Page		Page
Clarks Fork Yellowstone River near Belfry, Mont.....	18	Dry Cheyenne Creek, West Fork, at upper station,	
Clarks Gulch near Natrona.....	242	near Riverton.....	234
Clear Creek, near Arvada.....	97	tributary near Riverton.....	234
near Buffalo.....	90	Dry Cow Creek near Baggs.....	246
Cliff Creek near Bondurant.....	247	Dry Creek (tributary to Badwater Creek) near	
Coal Bank Draw, tributary near Walcott.....	240	Bonneville.....	36
tributary No. 2 near Walcott.....	240	Dry Creek (tributary to Bighorn River) tributary	
Coal Creek (tributary to Muddy Creek) near Muddy Gap...	241	near Emblem.....	236
Coal Creek (tributary to North Platte River)		Dry Creek (tributary to North Platte River), East Fork,	
near Goose Egg.....	242	tributary near Glenrock.....	242
Coal Creek (tributary to Sugar Creek) near Rawlins....	240	Dry Creek (tributary to Wind River) near Crowheart....	233
Coal Draw near Midwest.....	237	Dry Piney Creek near Big Piney.....	174
Coal Mine Draw tributary near Hudson.....	234	Dry Rawhide Creek near Lingle.....	243
Cokeville, Bear River below Pixley Dam, near.....	218	Dubois, Wind River near.....	20
Bear River below Smiths Fork, near.....	220	Dugout Creek tributary near Midwest.....	237
Colombine ditch at Deadman Hill, Colo., diversion by....	162		
Contents, definition of.....	2	East Fork River near Big Sandy.....	170
Control, definition of.....	3	East Ottosson Wash near Green River.....	244
Cooperation, record of.....	1	East Teapot Creek near Edgerton.....	237
Coopers Draw near Edgerton.....	237	Eden, Big Sandy River below.....	186
Cora, New Fork River below New Fork Lakes, near.....	165	Little Sandy Creek above.....	184
Corwin Springs, Mont., Yellowstone River at.....	16	Edgemont, S. Dak., Cheyenne River at.....	104
Cottonwood Creek (tributary to Shoshone River)		Elk Creek near Basin.....	236
tributary near Cody.....	236	Elk Mountain, Pass Creek near.....	118
Cottonwood Creek (tributary to Snake River), above		Elkhorn, Little Sandy Creek near.....	183
Glacier Gulch, near Moose, Grand Teton		Encampment River, above Hog Park Creek, near Encampment.	116
National Park.....	255	at mouth, near Encampment.....	117
above Taggart Creek, near Moose, Grand Teton		Etna, Salt River above Reservoir, near.....	231
National Park.....	255	Evanston, Chapman Canal at State line, near.....	213
at outlet of Jenny Lake, near Moose, Grand Teton		Hilliard-East Fork Canal near State line, near.....	207
National Park.....	255	Sulphur Creek above Reservoir, near.....	210
below Glacier Gulch, near Moose, Grand Teton		Sulphur Creek below Reservoir, near.....	211
National Park.....	255	Yellow Creek near.....	212
near Alpine.....	247		
Cottonwood Creek basin (tributary to Snake River),		Fall Creek (Green River basin) near Pinedale.....	168
discharge measurements at miscellaneous sites in.	255	Fall Creek (Snake River basin) near Jackson.....	247
Cow Creek tributary near Weston.....	238	Farson, Big Sandy River near.....	182
Crazy Woman Creek, at upper station, near Arvada.....	251	Pacific Creek near.....	185
Middle Fork, near Greub.....	88	Fifteen Mile Creek near Worland.....	44
North Fork, below Spring Draw, near Buffalo.....	87	Filmore, Little Laramie River near.....	146
Crooks Creek, West Fork, near Jeffrey City.....	241	Firehole River, above diversion, near Old Faithful,	
Cross Creek above Big Horn Reservoir, near Big Horn....	76	Yellowstone National Park.....	248
Crow Creek near Tipperary.....	22	at Madison Junction, Yellowstone National Park.....	248
Crowheart, Wind River near.....	25	Fish Canyon near Guernsey.....	243
Cub Creek at East Entrance road, Yellowstone		Fish Creek near Smoot.....	247
National Park.....	248	Fish Creek basin, discharge measurements at	
Cubic feet per second per square mile, definition of...	3	miscellaneous sites in.....	256
Cubic foot per second, definition of.....	3	Fivemile Creek, above Wyoming Canal, near Pavillion...	32
		near Shoshoni.....	33
Daniel, Green River at Warren Bridge, near.....	163	Flaming Gorge Reservoir at Flaming Gorge Dam, Utah....	199
Data, accuracy of.....	9	Fontenelle Creek near Herschler Ranch, near Fontenelle.	177
collection and computation of.....	4	Fontenelle Reservoir, near Fontenelle.....	178
explanation of.....	4	Green River below.....	179
other available.....	10	Fort Laramie, Laramie River near.....	152
Dayton, Highline ditch, diversion by, near.....	72	Fourmile Creek tributary near Centennial.....	243
Little Tongue River near.....	73	Fourmile Gulch tributary near Fontenelle.....	244
South Tongue River near.....	71	Foxpark, Douglas Creek near.....	113
Tongue River near.....	72	Frank Draw tributary near Orpha.....	242
Dead Horse Creek (tributary to Powder River) near		Fremont Lake, Pine Creek above.....	166
Buffalo.....	238	Frontier, Hams Fork below Pole Creek, near.....	193
Dead Horse Creek (tributary to South Fork Powder		Hams Fork near.....	194
River), tributary near Midwest.....	237		
tributary No. 2 near Midwest.....	237	Gage height, definition of.....	3
Dead Man Gulch, near Lysite.....	234	Gaging station, definition of.....	3
tributary near Lysite.....	234	Gallatin River near Wyoming-Montana State line,	
Deadman Wash near Point of Rocks.....	245	Yellowstone National Park.....	248
Deadmans Gulch near Guernsey.....	243	Gardner Creek near Hazelton.....	251
Deaver, Sage Creek at Sidon Canal, near.....	62	Gardner River, above diversion, near Mammoth,	
Decker, Mont., Tongue River at State line, near.....	82	Yellowstone National Park.....	249
Deer Creek below Millar wasteway, at Glenrock.....	131	near Mammoth, Yellowstone National Park.....	15
Definition of terms.....	2	Garland, Bitter Creek near.....	59
Delaney Draw near Red Desert.....	240	Shoshone River near.....	58
Dickie, Gooseberry Creek at.....	43	Whistle Creek near.....	60
Dinwoody Creek above lakes, near Burris.....	21	Gibbon River near Norris Junction, Yellowstone	
Discharge, definition of.....	3	National Park.....	248
Ditch Creek below South Fork, near Kelly.....	255	Gillies Draw tributary near Grass Creek.....	235
Ditch Creek basin, discharge measurements at		Glen Creek above Rustic Falls, below unnamed tributary,	
miscellaneous sites in.....	255	near Mammoth, Yellowstone National Park.....	249
Dixon, Little Snake River near.....	205	Glendevey, Colo., Laramie River near.....	140
Willow Creek near.....	206	Glendo Reservoir, near Glendo.....	135
Donkey Creek tributary, above reservoir, near Gillette.	239	North Platte River below.....	136
near Gillette.....	239	Glenrock, Deer Creek below Millar wasteway, at.....	131
Douglas Creek near Foxpark.....	113	North Platte River near.....	132
Douglas, La Prele Creek near.....	133	Goose Creek below Sheridan.....	80
Drainage area, definition of.....	3	Gooseberry Creek at Dickie.....	43
Dry Basin Creek near Big Piney.....	244	Granite Creek (Fish Creek basin) near Teton Village....	256

	Page		Page
Granite Creek (Yellowstone River basin) near Shell		La Barge, Green River near.....	176
ranger station, near Shell.....	236	La Barge Creek near La Barge Meadows ranger station....	175
Grassy Lake near Moran.....	232	La Grange, Horse Creek at WyCross Ranch, near.....	158
Greasewood Canyon near Green River.....	244	La Prele Creek near Douglas.....	133
Green River, Green River near.....	187	Lake Creek near Teton Village.....	256
Green River, at Warren Bridge, near Daniel.....	163	Lakes and reservoirs:	
below Fontenelle Reservoir.....	179	Alcova Reservoir at Alcova.....	129
near Big Piney.....	253	Anchor Reservoir.....	100
near Green River.....	187	Bighorn Lake near St. Xavier, Mont.....	65
near Greendale, Utah.....	200	Boysen Reservoir.....	100
near La Barge.....	176	Buffalo Bill Reservoir.....	100
tributary near Fontenelle.....	244	Bull Lake.....	100
tributary No. 2 near Burntfork.....	246	Flaming Gorge Reservoir.....	199
Green River basin, crest-stage partial-record		Fontenelle Reservoir near Fontenelle.....	178
stations in.....	244-246	Glendo Reservoir near Glendo.....	135
discharge measurements at miscellaneous sites in....	253-254	Grassy Lake.....	232
gaging-station records in.....	163-206	Guernsey Reservoir near Guernsey.....	137
Greendale, Utah, Green River near.....	200	Jackson Lake near Moran.....	223
Greub, Middle Fork Crazy Woman Creek near.....	88	Keyhole Reservoir near Moorcroft.....	105
Greybull River, at Meeteetse.....	51	Pathfinder Reservoir near Alcova.....	128
near Basin.....	52	Seminole Reservoir near Leo.....	122
near Pitchfork.....	48	Woodruff Narrows Reservoir near Woodruff, Utah.....	215
Greys River above Reservoir, near Alpine.....	229	Yellowstone Lake at Bridge Bay, Yellowstone	
Gros Ventre River at Lower Slide Lake outlet, near		National Park.....	13
Kelly.....	256	Lamar River near Tower Falls ranger station,	
Gros Ventre River basin, discharge measurements at		Yellowstone National Park.....	248
miscellaneous sites in.....	256	Lance Creek, at Spencer.....	101
Guernsey Reservoir, near Guernsey.....	137	tributary near Lance Creek.....	239
North Plate River below.....	138	Lander, Little Popo Agie River near.....	29
Hall Creek, South Fork, near Lander.....	234	Laramie-Poudre tunnel near Chambers Lake, Colo.,	
Hams Fork, below Pole Creek, near Frontier.....	193	diversion by.....	162
near Frontier.....	194	Laramie River and Pioneer Canal near Woods.....	142
near Granger.....	254	Laramie River, at Laramie.....	144
Hanna, Medicine Bow River above Seminole Reservoir, near.	121	at Two Rivers.....	145
Haymaker Creek near Riverton.....	234	near Fort Laramie.....	152
Hazelton, North Fork Powder River near.....	84	near Glendevy, Colo.....	140
Headgate Draw, at lower station, near Buffalo.....	238	near Jelm.....	141
at upper station, near Buffalo.....	238	near Lookout.....	148
Henry, Nebr., Katzer drain near.....	156	tributary near Guernsey.....	243
Henrys Fork, at Linwood, Utah.....	198	tributary No. 2 near Fort Laramie.....	243
near Lonetree.....	196	Lava Creek above Lupine Creek, near Mammoth,	
tributary near Manila, Utah.....	246	Yellowstone National Park.....	249
Henrys Fork basin, crest-stage partial-record		Lawn Creek near Alcova.....	242
station in.....	247	Leigh Creek near Ten Sleep.....	236
reservoir in.....	232	Lenore, Bull Lake Creek near.....	24
Herron Creek near Old Faithful, Yellowstone		Wyoming Canal near.....	26
National Park.....	254	Leo, Seminole Reservoir near.....	122
Highline ditch, diversion by, near Dayton.....	72	Lewis River tributary below Lewis Falls,	
Hilliard-East Fork Canal near State line,		Yellowstone National Park.....	254
near Evanston.....	207	Lewis River basin, discharge measurements at	
Hoback River basin, crest-stage partial-record		miscellaneous sites in.....	254
stations in.....	246-247	Lingle, North Platte River near.....	153
Hog Park Creek below Hog Park Reservoir,		Rawhide Creek near.....	154
near Encampment.....	252	Linwood, Utah, Henrys Fork at.....	198
Horse Creek (Green River basin) at Sherman ranger		Little America, Blacks Fork near.....	195
station.....	164	Little Bighorn River, at State line, near Wyola.....	69
Horse Creek (Platte River basin), at lower station,		below Pass Creek, near Wyola.....	70
near Yoder.....	159	near Parkman.....	67
at WyCross Ranch, near La Grange.....	158	West Fork, near Parkman.....	68
at Wyoming-Nebraska State line.....	160	Little Dry Creek near Crowheart.....	233
tributary near Little Bear.....	243	Little Goose Creek in canyon, near Big Horn.....	79
Horseshoe Creek near Glendo.....	253	Little Laramie River, at Two Rivers.....	147
Hyattville, Medicine Lodge Creek near.....	47	near Filmore.....	146
Hydrologic bench-mark station, definition of.....	4	Little Medicine Bow River, below Sand Creek, near	
Hydrologic conditions.....	11	Shirley Basin.....	252
Introduction.....	1	near Medicine Bow.....	252
Inyan Kara Creek near Upton.....	239	Little Popo Agie River, near Atlantic City.....	28
Iron Spring Creek near Old Faithful, Yellowstone		near Lander.....	29
National Park.....	248	Little Powder River, near Broadus, Mont.....	99
Jackson, Cache Creek near.....	227	tributary near Gillette.....	238
Jackson Lake near Moran.....	223	tributary No. 2 near Gillette.....	238
Jelm, Laramie River near.....	141	Little Sandy Creek, above Eden.....	184
Jojo Creek near Kirwin.....	250	near Elkhorn.....	183
Kane, Bighorn River at.....	55	Little Snake River, near Dixon.....	205
Katzer drain near Henry, Nebr.....	156	near Slater, Colo.....	201
Kaycee, Powder River near.....	86	North Fork, diversion to Hog Park Creek, near	
Kearny, Piney Creek at.....	95	Encampment.....	254
Kelly Warm Springs near Kelly, Grand Teton National		Little Tongue River near Dayton.....	73
Park.....	255	Little Wind River, above Arapahoe.....	249
Keyhole Reservoir, near Moorcroft.....	105	near Riverton.....	30
Belle Fourche River below.....	106	tributary near Hudson.....	234
Kirby Draw near Riverton.....	234	Lizard Creek near Colter Bay Village, Grand Teton	
Kirwin, Wood River near.....	49	National Park.....	254
		Lodgepole Creek, tributary near Pine Bluffs.....	244
		tributary No. 2 near Albin.....	244
		tributary No. 3 near Albin.....	244
		Lonetree, Henrys Fork near.....	196

	Page		Page
Lookout, Laramie River near.....	148	Nowood River, at Manderson.....	250
Lovell, Big Coulee near.....	63-64	near Ten Sleep.....	249
Shoshone River near.....	61	tributary near Ten Sleep.....	236
Lyman, Blacks Fork near.....	192	tributary No. 2 near Basin.....	236
Lysite, Badwater Creek at.....	34	tributary No. 2 near Manderson.....	236
Bridger Creek near.....	35		
Madison River near West Yellowstone, Mont.....	12	Oakley, Utah, West Fork Bear River at Whitney Dam, near..	208
Madison River basin, discharge measurements at		Ogden Creek near Sundance.....	239
miscellaneous sites in.....	248	Onemile Creek near Arlington.....	241
gaging-station record in.....	12	Order, downstream, and station numbers.....	4
Mail Cabin Creek near Victor, Idaho.....	247	Orin, North Platte River at.....	134
Map of Wyoming, showing location of lake and		Owl Creek, North Fork, above Basin Ranch, near Anchor..	42
stream gaging stations.....	263	South Fork, below Anchor Reservoir.....	41
showing location of partial-record stations.....	265	near Anchor.....	40
Mason, North Piney Creek near.....	173	Pacific Creek (Green River basin) near Farson.....	185
Mayoworth, North Fork Powder River near.....	85	Pacific Creek (Snake River basin) at Moran.....	225
McKenzie Draw tributary near Casper.....	242	Paint Rock Creek near mouth, below Hyattville.....	250
Meadow Springs Wash tributary near Green River.....	245	Painter, Sunlight Creek near.....	17
Medicine Bow River, above Seminoe Reservoir,		Parkman, Little Bighorn River near.....	67
near Hanna.....	121	West Fork Little Bighorn River near.....	68
tributary near Hanna.....	241	Partial-record station, definition of.....	3
Medicine Lodge Creek near Hyattville.....	47	Partial-record stations, discharge at.....	233-247
Meeteetse, Greybull River at.....	51	Pass Creek (North Platte River basin) near	
Michigan ditch at Cameron Pass, Colo., diversion by....	162	Elk Mountain.....	118
Middle Creek at East Entrance ranger station,		Pass Creek (Yellowstone River basin) near Mayoworth....	251
Yellowstone National Park.....	250	Pathfinder Reservoir near Alcova.....	128
Middle Popo Agie River below The Sinks, near Lander...	234	Pavillion, Fivemile Creek above Wyoming Canal, near....	32
Millburne, Blacks Fork near.....	189	Muddy Creek near.....	38
Miscellaneous sites, discharge measurements at.....	248-256	Pebble Creek near Pebble Creek campground,	
Mitchell, Nebr., North Platte River at.....	161	Yellowstone National Park.....	248
Monument Draw, at lower station, near Hudson.....	234	Pilgrim Creek, above Park boundary, near Moran,	
at upper station, near Hudson.....	234	Grand Teton National Park.....	254
Moorcroft, Keyhole Reservoir near.....	105	at abandoned ford, near Moran, Grand Teton	
Moorhead, Mont., Powder River at.....	98	National Park.....	254
Moran, Buffalo Fork above Lava Creek, near.....	226	below abandoned ford, near Moran, Grand Teton	
Grassy Lake near.....	232	National Park.....	255
Jackson Lake near.....	223	below new highway bridge, near Moran, Grand Teton	
Pacific Creek at.....	225	National Park.....	255
SNAKE River near.....	224	near Jackson Lake Lodge, near Moran, Grand Teton	
Mud Spring Hollow, near Church Butte, near Lyman.....	245	National Park.....	255
near Lyman.....	245	Pilgrim Creek basin, discharge measurements at	
tributary near Lyman.....	245	miscellaneous sites in.....	254-255
Muddy Creek (Green River basin) above Baggs.....	246	Pine Creek above Fremont Lake.....	166
Muddy Creek (South Platte River basin) tributary		Pinedale, Fall Creek near.....	168
near Burns.....	244	Pole Creek below Little Half Moon Lake, near.....	167
Muddy Creek (Yellowstone River basin) near Pavillion...	38	Piney Creek (Platte River basin) tributary at upper	
Murphy Draw near Grass Creek.....	235	station, near Wheatland.....	243
Murray ditch at Wyoming-South Dakota State line.....	108	Piney Creek (Yellowstone River basin), at Kearny.....	95
Muskrat Creek near Shoshoni.....	31	at Ucross.....	96
		Pioneer Canal. See Laramie River and Pioneer Canal.	
New Fork River, below New Fork Lakes, near Cora.....	165	Pitchfork, Greybull River near.....	48
near Big Piney.....	172	Platte River basin, crest-stage partial-record	
near Boulder.....	253	stations in.....	240-244
Newcastle, Beaver Creek near.....	103	discharge measurements at miscellaneous sites in....	252-253
Nez Perce Creek above Culex basin, Yellowstone		gaging-station records in.....	112-162
National Park.....	248	Poison Creek tributary near Shoshoni.....	235
Ninemile Draw tributary near Federal.....	244	Pole Creek below Little Half Moon Lake, near Pinedale..	167
Niobrara River, at Agate, Nebr.....	111	Porcupine Creek near Turnercrest.....	239
at Wyoming-Nebraska State line.....	110	Powder River, at Arvada.....	89
Niobrara River basin, gaging station records in.....	110-111	at Moorhead, Mont.....	98
Norkok Meadows Creek near Fort Washakie.....	233	Middle Fork, near Barnum.....	83
North Brush Creek near Saratoga.....	114	near Kaycee.....	86
North Laramie River near Wheatland.....	151	North Fork, above Gammon Creek, near Hazelton.....	251
North Piney Creek (Green River basin) near Mason.....	173	above Gardner Creek, near Hazelton.....	251
North Piney Creek (Yellowstone River basin)		above Pass Creek, near Mayoworth.....	251
near Story.....	94	below Bull Creek, near Hazelton.....	250
North Platte River, above Seminoe Reservoir,		below Gardner Creek, near Mayoworth.....	251
near Sinclair.....	119	below Johnson Creek, near Hazelton.....	251
at Alcova.....	130	near Hazelton.....	84
at Mitchell, Nebr.....	161	near Mayoworth.....	85
at Orin.....	134	South Fork, near Kaycee.....	251
at recorder station, below Whalen.....	139	near Powder River.....	237
at Wyoming-Nebraska State line.....	157	tributary near Buffalo.....	238
below Glendo Reservoir.....	136	Prairie Dog Creek near Acme.....	81
below Guernsey Reservoir.....	138	Pritchard Draw near Lance Creek.....	239
near Glenrock.....	132	Publications on streamflow, by Geological Survey.....	9
near Lingle.....	153		
near Northgate, Colo.....	112	Rabbit Creek near Wheatland.....	243
tributary near Douglas.....	242	Randolph, Utah, Bear River near.....	217
North Platte River basin in Colorado, transbasin		Rattlesnake Creek near Walcott.....	240
diversions from, to Cache la Poudre River basin..	162	Rawhide Creek (Platte River basin), near Interstate	
Northgate, Colo., North Platte River near.....	112	Canal crossing, near Lingle.....	253
Nowater Creek, North Prong East Fork,		near Lingle.....	154
near Worland.....	235	Rawhide Creek (Yellowstone River basin) tributary	
tributary near Worland.....	235	near Gillette.....	238

	Page		Page
Red Creek (Snake River basin) near Alpine.....	247	Smiths Fork near Border.....	219
Red Creek (Yellowstone River basin) near Arminto.....	235	Snake River, above Reservoir, near Alpine.....	228
Red Gulch near Shell.....	236	near Moran.....	224
Redwater Creek at Wyoming-South Dakota State line.....	109	tributary above Supply Spring, at South Entrance, Yellowstone National Park.....	254
Reefs Draw tributary near Casper.....	242	Snake River basin, crest-stage partial-record stations in.....	246-247
Reservoirs. <i>See</i> lakes and reservoirs.		discharge measurements at miscellaneous sites in.....	254-256
Rim Draw near Bonduant.....	246	gaging-station records in.....	223-231
Riverton, Little Wind River near.....	30	Sour Moose Creek near Bonduant.....	246
Wind River at.....	27	South Bridger Creek near Lysite.....	235
Robertson, Blacks Fork near.....	188	South Brush Creek near Saratoga.....	115
East Fork of Smith Fork near.....	190	South Pass City, Sweetwater River near.....	123
West Fork of Smith Fork near.....	191	South Piney Creek, at Willow Park.....	92
Rock Creek (tributary to Clear Creek) near Buffalo.....	91	near Story.....	93
Rock Creek (tributary to Medicine Bow River) above King Canyon Canal, near Arlington.....	120	South Tongue River near Dayton.....	71
Rock Creek (tributary to Sweetwater River), above Rock Creek Reservoir.....	124	Sparks Canyon near Hartville.....	243
at Atlantic City.....	126	Special networks and programs.....	4
Runoff in inches, definition of.....	3	Spencer, Cheyenne River near.....	102
Sage Creek (North Platte River basin) tributary near Orpha.....	242	Lance Creek at.....	101
Sage Creek (Yellowstone River basin, at Sidon Canal, near Deaver.....	62	Spotted Horse Creek tributary near Spotted Horse.....	238
near Lovell.....	250	Spread Creek near Moran, Grand Teton National Park.....	255
Saint Mary Creek tributary near Sinclair.....	240	Spring Creek near Ten Sleep.....	235
St. Xavier, Mont., Bighorn Lake near.....	65	Squaw Hollow near Burntfork.....	246
Bighorn River near.....	66	Stage-discharge relation, definition of.....	3
Salt Creek near Sussex.....	251	Stinking Creek, near Alcova.....	242
Salt River, above Reservoir, near Etna.....	231	tributary near Alcova.....	242
near Auburn.....	256	Story, North Piney Creek near.....	94
Salt River basin, crest-stage partial-record station in discharge measurement at miscellaneous site in.....	247	South Piney Creek near.....	93
gaging-station records in.....	230-231	Sulphur Creek, above Reservoir, near Evanston.....	210
Salt Wells Creek, near Rock Springs.....	245	below Reservoir, near Evanston.....	211
tributary near Rock Springs.....	245	Summers Dry Creek near Green River.....	246
Sanchez Creek, above reservoir, near Arminto.....	237	Sundance Creek tributary, above forest boundary, at Sundance.....	240
near Arminto.....	237	near Sundance.....	240
Sand Creek (tributary to Clear Creek) near Buffalo.....	238	Sunlight Creek near Painter.....	17
Sand Creek (tributary to Laramie River) at Colorado- Wyoming State line.....	143	Sunshine, Wood River at.....	50
Sand Creek (tributary to North Platte River) near Orin.....	242	Supply Spring at South Entrance, Yellowstone National Park.....	254
Sand Creek (tributary to Nowood River), East Fork, near Worland.....	236	Sweetwater River, at Sweetwater Station, near Lander.. near Alcova.....	241
Sand Draw (tributary to Bighorn River) near Thermopolis.....	233	near South Pass City.....	123
Sand Draw (tributary to Sage Creek) near Fort Washakie.....	233	Swift Creek near Afton.....	230
Sand Draw (tributary to Wind River) near Crowheart.....	244	Sybilie Creek below Mule Creek, near Wheatland.....	149
Sand Springs Draw tributary near Boulder.....	244	Telephone Canyon, near Green River.....	245
Saratoga, North Brush Creek near.....	114	tributary near Green River.....	245
South Brush Creek near.....	115	Ten Sleep, Canyon Creek below Cooks Canyon, near.....	45
Savery Creek, at upper station, near Savery.....	203	Tensleep Creek near.....	46
near Savery.....	204	Third Sand Creek, near Medicine Bow.....	241
Selected references.....	11	tributary near Medicine Bow.....	241
Seminoe Reservoir near Leo.....	122	Thomas Fork near Wyoming-Idaho State line.....	222
Seven L Creek near Edgerton.....	237	Threemile Creek near Arlington.....	241
Sevenmile Creek near Centennial.....	243	Tie Down Gulch near Worland.....	235
Shawnee Creek tributary near Orin.....	242	Tipperary, Crow Creek near.....	22
Sheep Creek, near Marshall.....	241	Tongue River, at State line, near Decker, Mont.....	82
near Medicine Bow.....	241	near Dayton.....	72
Shell Creek, above Shell Reservoir.....	53	Torrington, Cherry Creek drain near.....	155
near Greybull.....	250	Transbasin diversions from North Platte River basin to Cache la Poudre River basin in Colorado.....	162
near Shell.....	54	Trout Creek (tributary to Little Wind River) near Fort Washakie.....	233
Shell Reservoir, Shell Creek above.....	53	Trout Creek (tributary to North Fork Shoshone River) near Wapiti.....	236
Sheridan, Big Goose Creek near.....	78	Turner Creek near Osage.....	239
Goose Creek below.....	80	Twentyfour Mile Creek near Emblem.....	236
Shoshone River, below Buffalo Bill Reservoir.....	57	Two Rivers, Laramie River at.....	145
near Garland.....	58	Little Laramie River at.....	147
near Lovell.....	61	Ucross, Piney Creek at.....	96
South Fork, near Valley.....	56	Unnamed Spring at Teton Valley Ranch, near Kelly.....	256
Shoshoni, Fivemile Creek near.....	33	Valley, South Fork Shoshone River near.....	56
Muskrat Creek near.....	31	Van Houghton Draw near Buffalo.....	238
Shotgun Creek tributary near Pavillion.....	235	Wagon Gulch near Dubois.....	233
Silver Creek near Big Sandy.....	171	Wagon Hound Creek near La Bonte.....	253
Silver Tip Creek near Belfry, Mont.....	19	Wagonhound Creek near Elk Mountain.....	240
Sinclair, North Platte River above Seminoe Reservoir, near.....	119	Watson Draw near Lost Springs.....	243
Skunk Canyon Creek near Green River.....	244	West Yellowstone, Mont., Madison River near.....	12
Skyline ditch at Chambers Lake, Colo., diversion by.....	162	Whalen, North Platte River at recorder station, below.. Wheatland, Bluegrass Creek near.....	139
Slate Creek near Atlantic City.....	125	North Laramie River near.....	151
Slater, Colo., Little Snake River near.....	201	Sybilie Creek below Mule Creek, near.....	149
Slater Fork near.....	202	Whistle Creek near Garland.....	60
Slater Creek near Monarch.....	237	Whitney Canyon Creek near Evanston.....	246
Slater Fork near Slater, Colo.....	202	Willow Creek (Green River basin) near Dixon.....	206
Slough Creek near Tower Junction, Yellowstone National Park.....	248		
Smith Fork, East Fork of, near Robertson.....	190		
West Fork of, near Robertson.....	191		

	Page		Page
Willow Creek (Yellowstone River basin) near Kane.....	236	WRD, definition of.....	3
Willow Park, South Piney Creek at.....	92	WSP, definition of.....	3
Willow Springs Draw tributary near Hanna.....	241	Wyola, Mont., Little Bighorn River at State line, near.	69
Wilson Supply ditch near Eaton Reservoir, Colo.,		Little Bighorn River below Pass Creek, near.....	70
diversion by.....	162	Wyoming Canal near Lenore.....	26
Wind River, at Riverton.....	27		
below Boysen Reservoir.....	39	Yellow Creek near Evanston.....	212
near Crowheart.....	25	Yellowstone Lake at Bridge Bay, Yellowstone	
near Dubois.....	20	National Park.....	13
tributary near Burris.....	233	Yellowstone National Park:	
tributary No. 2 near Crowheart.....	233	Gardner River near Mammoth.....	15
Wolf Creek at Wolf.....	74	Yellowstone Lake at Bridge Bay.....	13
Wood River, at Brown Mountain campground, near Kirwin..	250	Yellowstone River at Yellowstone Lake Outlet.....	14
at Kirwin.....	49	Yellowstone River, at Corwin Springs, Mont.....	16
at Sunshine.....	50	at Yellowstone Lake Outlet, Yellowstone	
below Canyon Creek near Kirwin.....	250	National Park.....	14
near Kirwin.....	250	Yellowstone River basin, crest-stage partial-record	
Woodruff, Utah, Bear River above reservoir, near.....	214	stations in.....	233-248
Bear River below reservoir, near.....	216	discharge measurements at miscellaneous sites in....	248-251
Woodruff Narrows Reservoir near.....	215	gaging-station records in.....	13-99
Woods, Laramie River and Pioneer Canal near.....	142	reservoirs in.....	100
Worland, Fifteen Mile Creek near.....	44	Yoder, Horse Creek at lower station, near.....	159

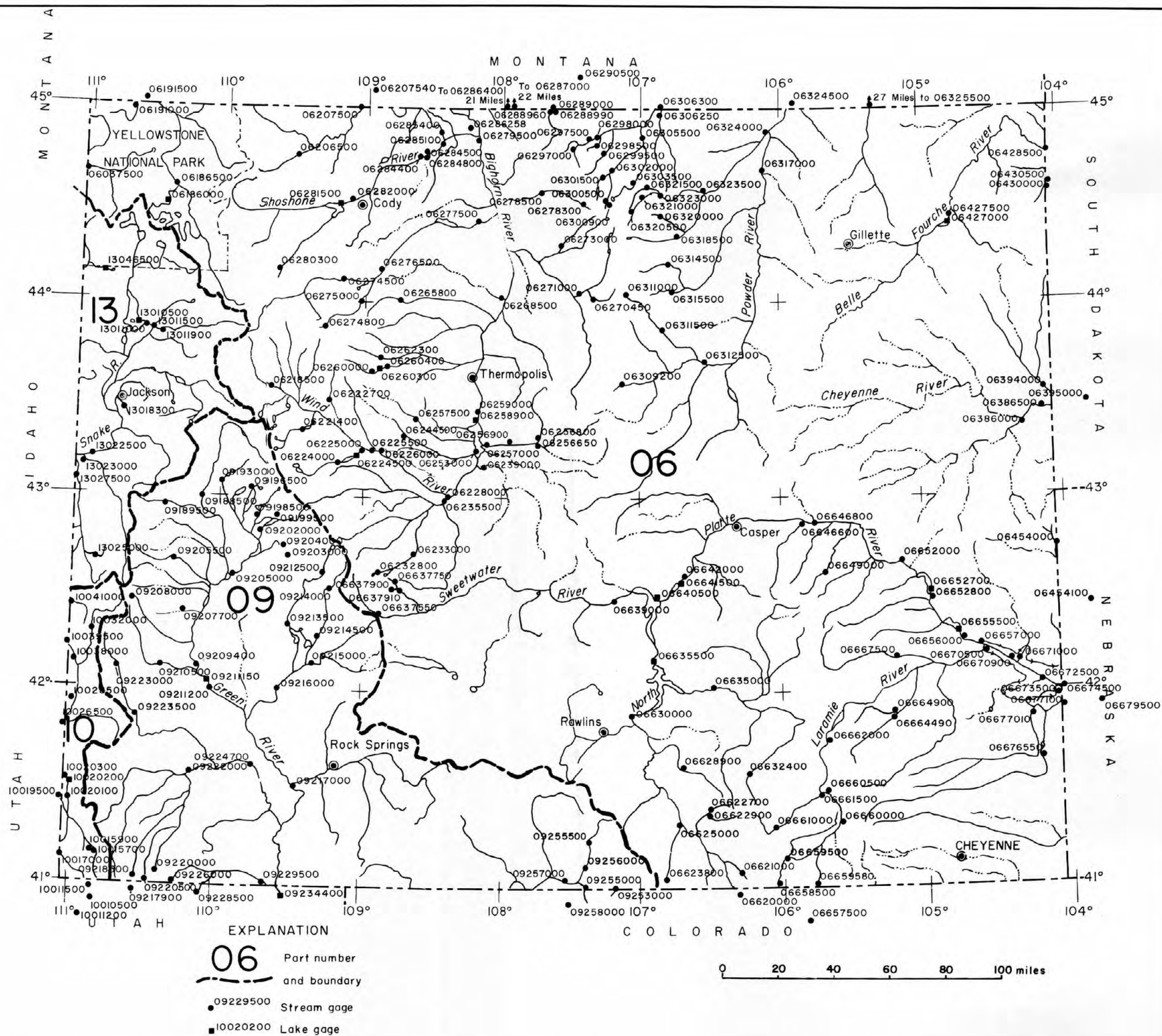


Figure 1.--Map of Wyoming showing locations of lake and stream gaging stations.



Figure 2.--Map of Wyoming showing location of partial-record stations.

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