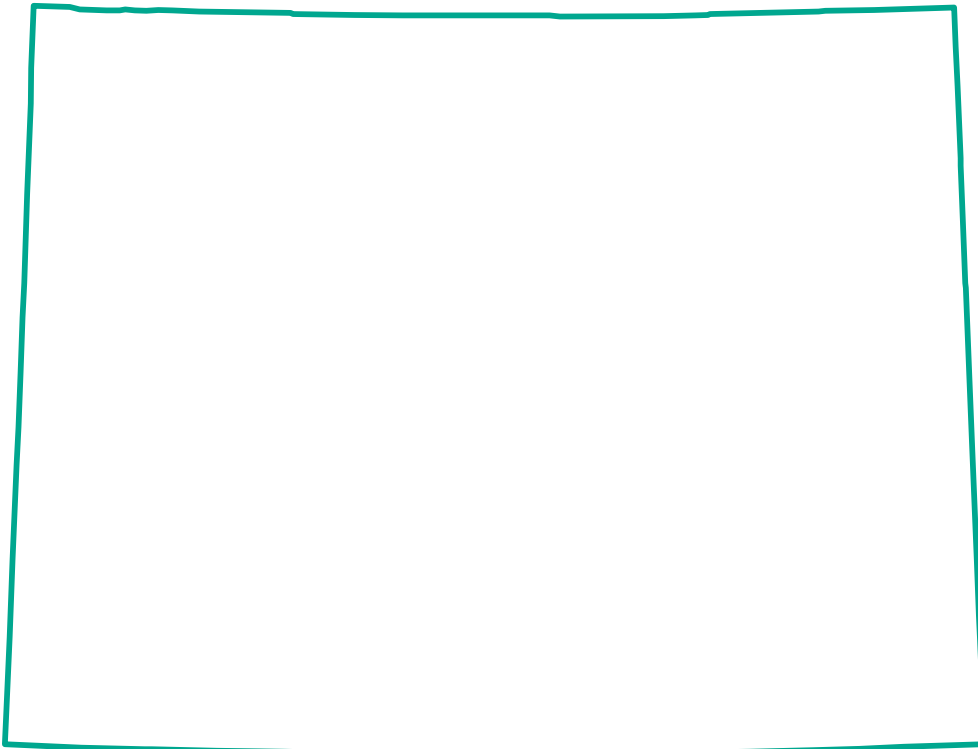


Water Resources Data Wyoming Water Year 2005

Volume 1. Surface Water

Water-Data Report WY-05-1

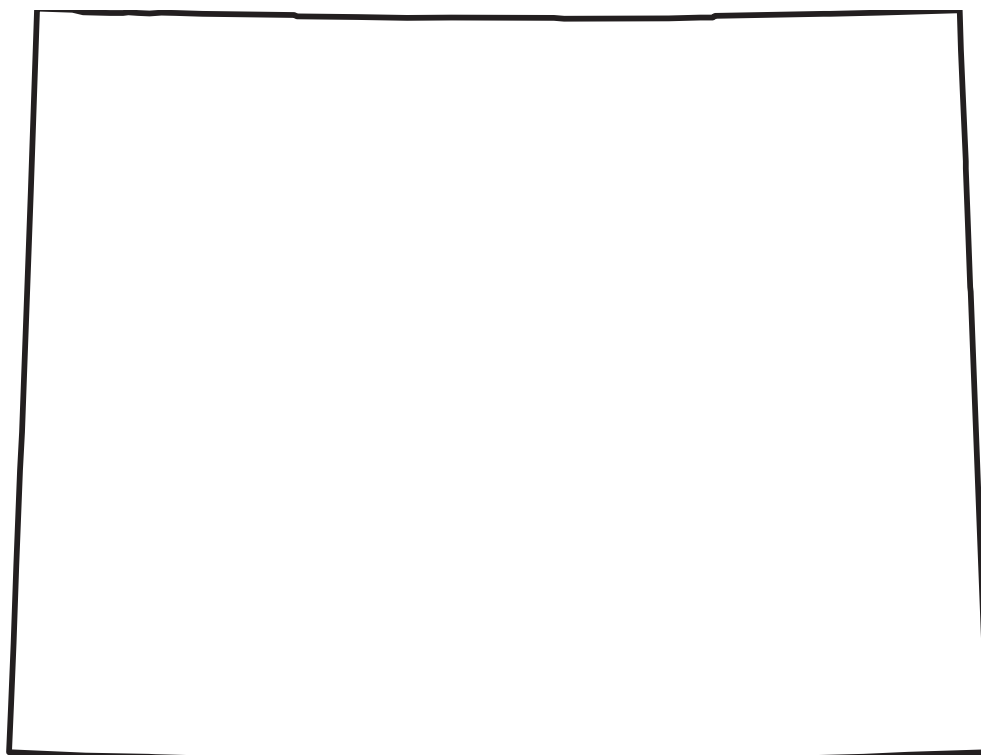


Water Resources Data Wyoming Water Year 2005

Volume 1. Surface Water

By K.R. Watson, R.E. Woodruff, G.A. Laidlaw, M.L. Clark, and K.A. Miller

Water-Data Report WY-05-1



Prepared by the USGS Wyoming Water Science Center in cooperation with the State of Wyoming and other agencies

**U.S. Department of the Interior
U.S. Geological Survey**

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U.S. Geological Survey

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PREFACE

This annual hydrologic data report of Wyoming is one of a series of annual reports that documents hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and the quality of water provide the hydrologic information needed by Federal, State, and local agencies, and the private sector for administrating, developing, and managing our Nation's land and water resources. These records for Wyoming are contained in 2 volumes:

Volume 1. Surface-Water Data

Volume 2. Ground-Water Data

These reports are the culmination of a concerted effort by personnel of the U.S. Geological Survey of the Wyoming Water Science Center who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled this report. The authors had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to U.S. Geological Survey policies and guidelines.

Most of the data were collected, computed, and processed from the Casper Field Office, Ray Woodruff, Chief and from the Riverton Field Office, Glenn Laidlaw, Chief. The following personnel are recognized for their significant contributions to this report:

Ty Blacklock	Stacy Kinsey	Kirk Miller	Jason Swanson
Eric Blajszczak	Tom Leman	Jake Neumiller	Karen Watson
Seth Davidson	Lexann Littau	Tom Pointon	Jerrod Wheeler
Nolan Friday	Jon Mason	Wil Sadler	Peter Wright

Some surface water discharge records contained in this report were collected and computed by personnel from the Wyoming State Engineer's Office and reviewed and published by the U.S. Geological Survey. Wyoming State Engineer's Office personnel who contributed significantly to this report are under the direction of the following division superintendents:

Jade Henderson	Loren Smith	Randy Tullis	Mike Whitaker
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Lexann Littau and Karen Watson typed and assembled the report. Sue Roberts provided the illustrations.

This report was prepared under the general supervision of Myron Brooks, Director, Wyoming Water Science Center, and in cooperation with the State of Wyoming and other agencies.

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13. ABSTRACT (Maximum 200 words) Water resources data for the 2005 water year for Wyoming consist of records of stage, discharge and water quality of streams; stage and contents of lakes and reservoirs; and water levels and water quality of ground water. Volume 1 of this report contains discharge records for 165 gaging stations; water quality for 43 gaging stations and 46 ungaged stations; and stage and contents for one reservoir. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements. These data together with the data in Volume 2 represent part of the National Water Information System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Wyoming.			
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Note.--Data for NAWQA station, partial record stations, and miscellaneous sites are published in separate sections of the data report.

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LA BARGE CREEK ABOVE VIOLA, WY (D)	09208400	462
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FONTENELLE CREEK NEAR HERSCHLER RANCH, NEAR FONTENELLE, WY (D)	09210500	466
GREEN RIVER BELOW FONTENELLE RESERVOIR, WY (Dc)	09211200	468
BIG SANDY RIVER NEAR FARSON, WY (D)	09213500	471
BIG SANDY RESERVOIR NEAR FARSON, WY (V)	09213700	473
BIG SANDY RIVER AT GASSON BRIDGE, NEAR EDEN, WY (D)	09216050	475
GREEN RIVER NEAR GREEN RIVER, WY (Dc)	09217000	477
GREEN RIVER BELOW GREEN RIVER, WY (c)	09217010	480
BLACKS FORK NEAR ROBERTSON, WY (D)	09217900	481
EAST FORK OF SMITHS FORK NEAR ROBERTSON, WY (D)	09220000	483
BLACKS FORK NEAR LYMAN, WY (cms)	09222000	485
HAMS FORK BELOW POLE CREEK, NEAR FRONTIER, WY (D)	09223000	486
HAMS FORK NEAR DIAMONDVILLE, WY (cm)	09224050	488
BLACKS FORK NEAR LITTLE AMERICA, WY (D)	09224700	489
HENRYS FORK NEAR MANILA, UT (D)	09229500	491
GREEN RIVER NEAR GREENDALE, UT (DT)	09234500	493
YAMPA RIVER:		
LITTLE SNAKE RIVER NEAR SLATER, CO (D)	09253000	497
BATTLE CREEK:		
WEST FORK BATTLE CREEK:		
HAGGARTY CREEK ABOVE BELVIDERE DITCH, NEAR ENCAMPMENT, WY (c)	09253455	499
WEST FORK BATTLE CREEK AT BATTLE CREEK CAMPGROUND, NEAR SAVERY, WY (c)	09253465	500
SLATER FORK NEAR SLATER, CO (D)	09255000	501
MUDDY CREEK BELOW YOUNG DRAW NEAR BAGGS, WY (DCT)	09258980	503
LITTLE SNAKE RIVER BELOW BAGGS, WY (cs)	09259050	508

GREAT SALT LAKE BASIN

BEAR RIVER BASIN

BEAR RIVER NEAR UTAH-WYOMING STATE LINE (D)	10011500	509
BEAR RIVER AT EVANSTON, WY (D)	10016900	511
BEAR RIVER ABOVE RESERVOIR, NEAR WOODRUFF, UT (Dcs)	10020100	513
BEAR RIVER BELOW RESERVOIR, NEAR WOODRUFF, UT (D)	10020300	516
BEAR RIVER BELOW PIXLEY DAM, NEAR COKEVILLE, WY (D)	10028500	518
SMITHS FORK NEAR BORDER, WY (D)	10032000	520
SMITHS FORK AT COKEVILLE, WY (cs)	10035000	522
BEAR RIVER BELOW SMITHS FORK, NEAR COKEVILLE, WY (Dcms)	10038000	523
BEAR RIVER AT BORDER, WY (D)	10039500	526

COLUMBIA RIVER BASIN

SNAKE RIVER BASIN

SNAKE RIVER ABOVE JACKSON LAKE, AT FLAGG RANCH, WY (D)	13010065	528
SNAKE RIVER NEAR MORAN, WY (D)	13011000	530
PACIFIC CREEK AT MORAN, WY (D)	13011500	532
BUFFALO FORK ABOVE LAVA CREEK, NEAR MORAN, WY (D)	13011900	534
SNAKE RIVER AT MOOSE, WY (DCPTO)	13013650	536
GROS VENTRE RIVER AT ZENITH, WY (D)	13015000	544
FISH CREEK:		
GRANITE CREEK ABOVE GRANITE CREEK SUPPLEMENTAL, NEAR MOOSE, WY (D)	13016305	546
FISH CREEK AT WILSON, WY (D)	13016450	548
FLAT CREEK:		
CACHE CREEK NEAR JACKSON, WY (D)	13018300	550
FLAT CREEK BELOW CACHE CREEK, NEAR JACKSON, WY (D)	13018350	552
SNAKE RIVER BELOW FLAT CREEK, NEAR JACKSON, WY (D)	13018750	554
SNAKE RIVER ABOVE RESERVOIR, NEAR ALPINE, WY (D)	13022500	556
GREYS RIVER ABOVE RESERVOIR, NEAR ALPINE, WY (D)	13023000	558
SALT RIVER ABOVE RESERVOIR, NEAR ETNA, WY (Dcms)	13027500	560

INTRODUCTION

The Wyoming Water Science Center of the U.S. Geological Survey (USGS), in cooperation with State, Tribal, county, municipal, and other Federal agencies, collects data each water year describing the water resources of Wyoming. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the USGS, the data are published annually in this report series entitled, "**Water Resources Data - Wyoming**".

Water resources data for water year 2005 for Wyoming in this volume consists of records of stage, discharge, and water quality of streams; and stage and contents of lakes and reservoirs. This report contains discharge records for 165 gaging stations; water quality at 43 gaging stations and 46 ungaged stations; and stage and contents for one reservoir. Locations of streamflow-gaging stations and water-quality stations are shown in figure 1. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements.

Records of discharge or stage of streams, and contents or stage of lakes and reservoirs were first published in a series of USGS water-supply papers entitled "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground-Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities of the United States or may be purchased from USGS Information Services, Box 25286, Denver Federal Center, Denver, Colorado 80225. Most water-supply papers also are available from the USGS Publications Warehouse on the World Wide Web at:

<http://infotrek.er.usgs.gov/pubs/>

For water years 1961 through 1970, streamflow data were released by the USGS in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1970 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1971 water year, water data for streamflow, water quality, and ground water have been published in official USGS reports on a State-boundary basis. These official USGS reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "**U.S. Geological Survey Water-Data Report WY-05-1.**" These water-data reports are for sale, in paper copy or on microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161. Water-data reports also are available from the USGS Publications Warehouse on the World Wide Web at:

<http://infotrek.er.usgs.gov/pubs/>

Additional information, including current prices, for ordering specific reports may be obtained from the Wyoming Water Science Center Director at the address given on the back of the title page, by telephone at (307) 775-9162, or by email to state_rep_wy@usgs.gov. Hydrologic data for Wyoming is available on the World Wide Web at:

<http://wy.water.usgs.gov/>

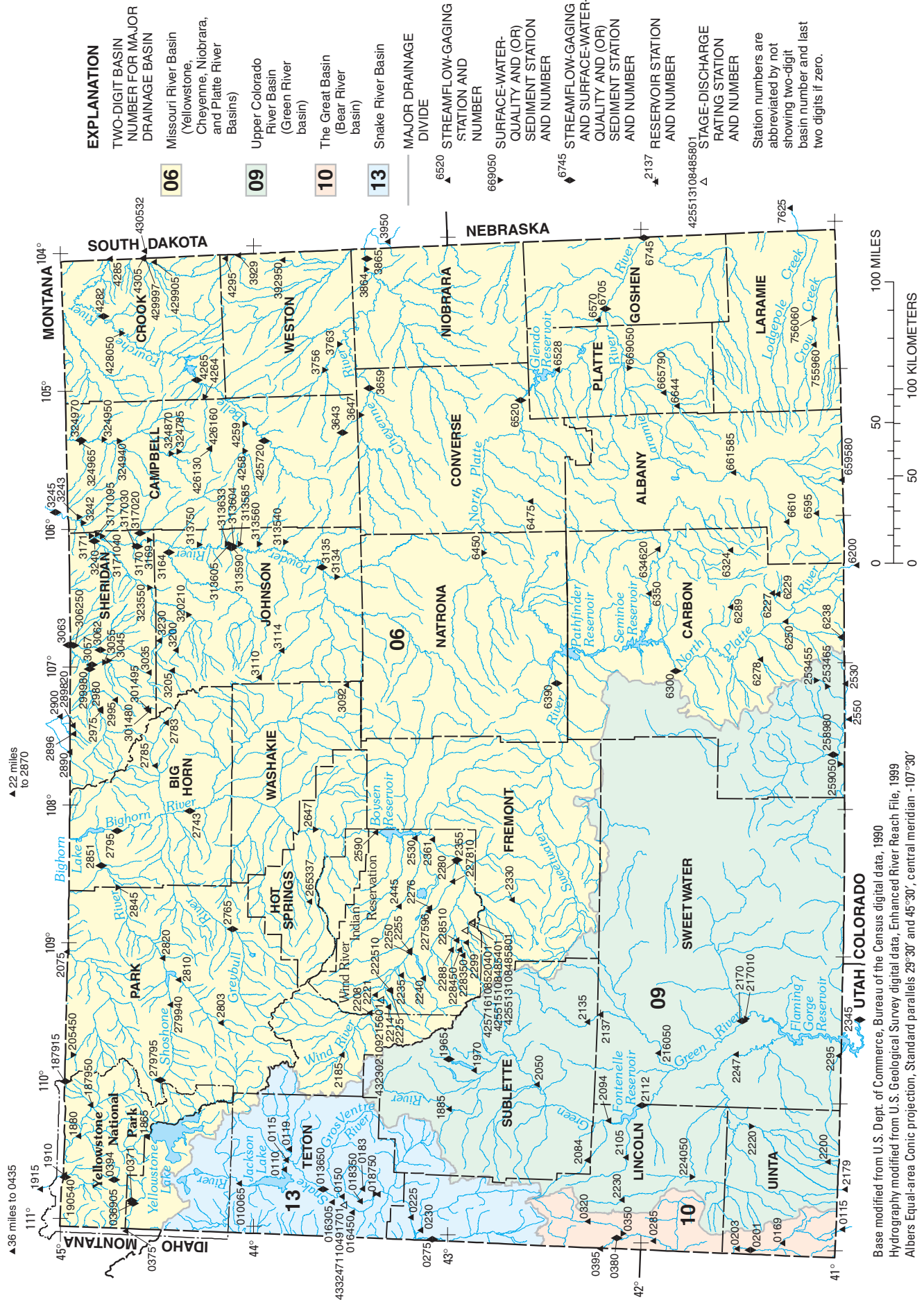


Figure 1. Location of surface-water streamflow-gaging stations, water-quality stations, and reservoir stations, 2005 water year.

Base modified from U.S. Dept. of Commerce, Bureau of the Census digital data, 1990
 Hydrography modified from U.S. Geological Survey digital data, Enhanced River Reach File, 1999
 Albers Equal-area Conic projection, Standard parallels 29°30' and 45°30', central meridian -107°30'

COOPERATION

The USGS and organizations of the State of Wyoming have had cooperative agreements for the systematic collection of streamflow records since 1895, for measurement of ground-water levels since 1940, and for collection of water-quality samples since 1946. Agencies and organizations that assisted in data collection through cooperative agreements with the USGS during water year 2005 were:

Federal Agencies

Bureau of Reclamation, U.S. Department of the Interior

Bureau of Land Management, U.S. Department of the Interior

U.S. Forest Service, U.S. Department of Agriculture

National Park Service, U.S. Department of the Interior

Corps of Engineers, U.S. Army

National Weather Service, National Oceanic and Atmospheric Administration

Tribal Governments

Eastern Shoshone and Northern Arapaho Tribes, Joint Business Council

State Agencies

Wyoming State Engineers Office, Patrick T. Tyrrell, State Engineer

Wyoming Department of Environmental Quality, John Corra, Director

Local Agencies

Teton Conservation District, Randy Williams, Executive Director

Sheridan Area Water Supply Joint Powers Board, Bruce Yates, Administrator

Sweetwater County Conservation District, Renee Roberts-Baker, District Coordinator

Municipalities

City of Gillette, Duane Evenson, Mayor

SUMMARY OF HYDROLOGIC CONDITIONS

Water year 2005 was the fifth consecutive year of drought conditions for parts of Wyoming. Statewide precipitation for the water year was about 101 percent of average; however, snowpack accumulation through May 1 2005 was about 75 percent of average. The cumulative effects of drought conditions resulted in the recording of below normal streamflows at gaging stations across the State. Water year 2005 average annual discharge at 66 percent of stations with 10 or more years of streamflow record was less than the median average annual discharge. All specific conductance measurements for samples collected at the nine stations during water year 2005 were within the range of measurements for the 10-year period of water years 1995-2004.

Precipitation

Precipitation for water year 2005 was near average for most of Wyoming. Precipitation data for the State are summarized by climate divisions as defined by the National Oceanic and Atmospheric Administration (NOAA). Divisional precipitation in water year 2005 ranged from about 113 percent of the 1971-2000 average for the Green and Bear climate division to about 79 percent of the average for the Upper Platte climate division (fig. 2; Western Regional Climate Center, 2006a). Water year 2005 precipitation for all Wyoming climate divisions averaged about 101 percent of the 1971-2000 average..

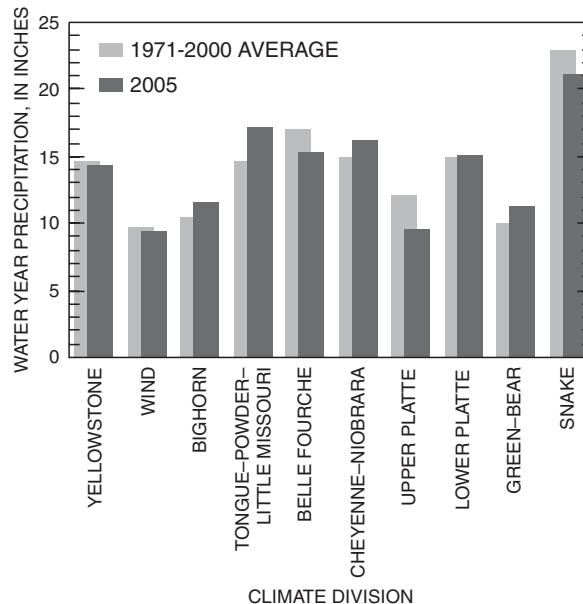


Figure 2. Water year 2005 and 1971-2000 average precipitation by climate division (Source: Western Regional Climate Center, 2006a).

Snow accumulation for water year 2005 was below average for most of Wyoming. Most runoff in the State is derived from snowmelt. Snowpack conditions are summarized by major river basins by the Natural Resources Conservation Service (NRCS). As of May 1, 2005 prior to the normal snowmelt period, basin snowpack conditions for Wyoming ranged from about 112 percent of average for parts of the Lower North Platte River basin to about 51 percent of average for parts of the same basin (table 1; Natural Resources Conservation Service, 2005). Snowpack conditions as of May 1, 2005 for all Wyoming major river basins were about 75 percent of average. The Belle Fourche and Cheyenne River basins are lower in elevation

than the other basins and the snowpack generally is mostly melted by May 1; thus, snowpack conditions for the Belle Fourche and Cheyenne River basins are not listed in table 1.

Table 1.--Summary of snowpack conditions in eight major river basins in Wyoming for water year 2005 (Source: Natural Resources Conservation Service, 2006).

Major River Basin	Range of snowpack, in percent of average snow water equivalent as of May 1, 2005	
	Low	High
Yellowstone River	64	72
Wind River	64	106
Bighorn River	54	78
Powder and Tongue Rivers	67	81
Upper North Platte River	64	91
Lower North Platte River	51	112
Green and Bear River	56	107
Snake River	58	75

Drought conditions in Wyoming continued in Wyoming during water year 2005 because of the effects of consecutive years of below normal precipitation. These cumulative effects are not quantified in annual precipitation summaries. The Standardized Precipitation Index (SPI) is a measure of the probability of recording a given amount of precipitation over a specified period (Western Regional Climate Center, 2006b). The SPI is centered such that an index value of zero equals the median precipitation. The index is increasingly negative for drought conditions in both magnitude and (or) duration. The SPI for water years 2000 through 2005 was classified as extremely dry for two of the 10 NOAA climate divisions in Wyoming and very dry for five of 10 divisions, illustrating the cumulative effect of consecutive years of below normal precipitation (fig. 3; Western Regional Climate Center, 2006b). Overall, Wyoming was one of the driest states in the country for this 60-month period.

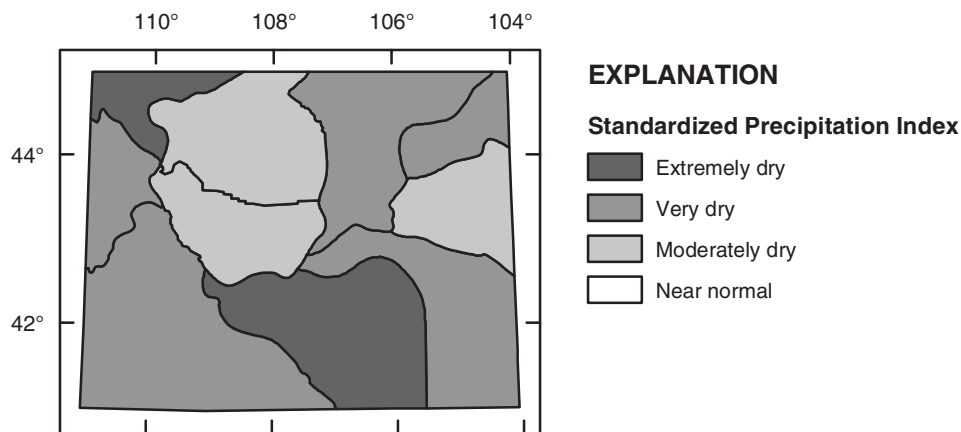


Figure 3. Sixty month Standardized Precipitation Index (SPI) by climate divisions for Wyoming, October 2000 through September 2005 (Modified from Western Regional Climate Center, 2006b).

Streamflow

Average annual discharge at five of seven long-term index gaging stations was less than the median average annual discharge for the period of record (fig. 4). Average annual discharge at the index stations ranged from about 55 percent of the median average annual discharge at 06674500 North Platte River at Wyoming-Nebraska State Line to about 112 percent of the median average annual discharge at 06630000 North Platte River above Seminole Reservoir near Sinclair. Average annual discharge was the third lowest recorded at 06674500 North Platte River at Wyoming-Nebraska State Line (76 years).

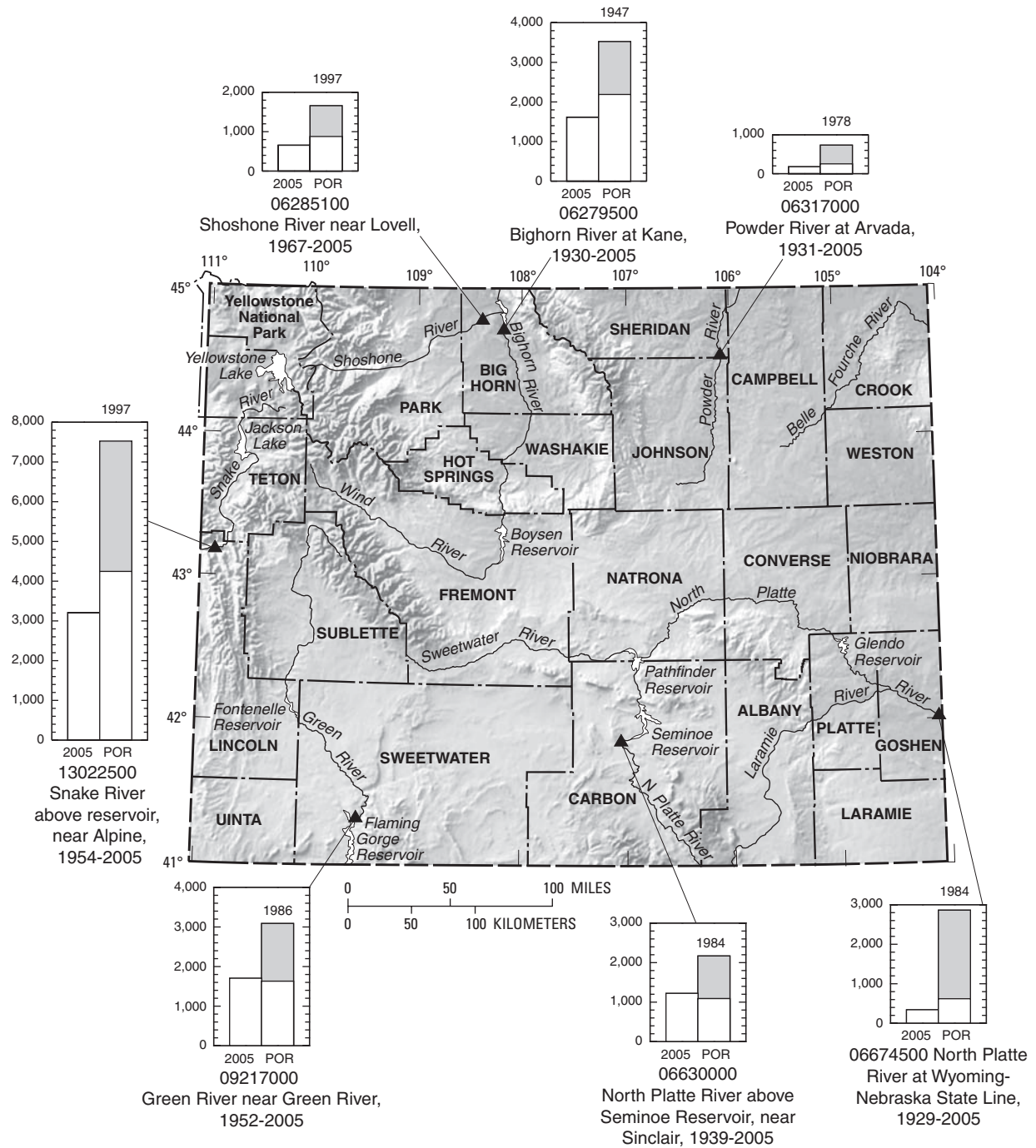
Average annual discharge at most gaging stations in and near Wyoming was less than the median annual discharge for the period of record. Water year 2005 average annual discharge was less than the period of record median average annual discharge at about 66 percent (73 of 111) of all stations with at least 10 years of annual streamflow data. About 11 percent (12 of 111) of all stations with at least 10 years of annual streamflow data recorded the third lowest or lower average annual discharge in water year 2005. The average record length for stations recording the third lowest or lower average annual discharge in water year 2004 was about 37 years.

Most average monthly discharges at seven long-term index gaging stations were less than the median average monthly discharges for the period of record (fig. 5). Average monthly discharges during five months were the lowest or tied for the lowest on record at 06674500 North Platte River at Wyoming-Nebraska State Line (76 years). Streamflows at this station are influenced by regulation from upstream reservoirs.

Chemical Quality of Stream Water

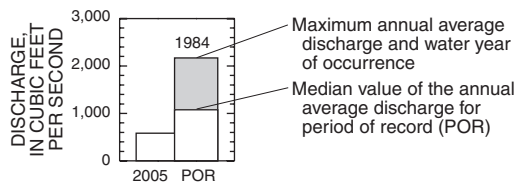
The U.S. Geological Survey operates a network of water-quality stations throughout Wyoming in cooperation with numerous Federal, State, and local agencies. The network changes from year to year as objectives are achieved or changed, or funding is changed. The sampling frequency varies from station to station; however, most stations are sampled at least four times per year. Some stations have only a few years of water-quality information, while other stations have been in operation for many years and provide a basis for the description of long-term conditions that represent a wide range of natural variability. Various water-quality measurements are made, either onsite or by laboratory analyses of samples, depending on the water-quality objectives of the investigation. Onsite-stream measurements at stations generally include specific conductance, pH, water temperature, and dissolved oxygen. In addition, bacteria is sometimes analyzed in the field. Laboratory analyses during water year 2005 may include major ions, dissolved solids, nutrients, trace elements, organic compounds, or suspended sediment.

The concentration of dissolved solids represents the total of all constituents dissolved in the water. Specific conductance typically varies directly with the dissolved-solids concentration; thus, specific conductance was chosen as an indicator of the concentration of dissolved solids and general water quality. Concentrations of dissolved solids generally are inversely related to discharge. A statistical summary of specific conductance measurements for samples collected at nine stations on selected streams in Wyoming describes the general water-quality variability of stream waters during water year 2005 (table 2). The specific conductance varies considerably in Wyoming owing to the diverse geology of the State. The maximum value measured on these streams (4,240 microsiemens per centimeter at 25 degrees Celsius) was for a sample collected at the Little Powder River above Dry Creek, near Weston, Wyoming (station 06324970); the minimum value measured (194 microsiemens per centimeter at 25 degrees Celsius) was for a sample collected at the Bear River above reservoir, near Woodruff, Utah (station 10020100).



EXPLANATION

COMPARISON OF ANNUAL AVERAGE DISCHARGE
Data for water year 2005 Data for period of record



▲ STREAMFLOW-GAGING STATION SELECTED TO TYPIFY DRAINAGE
BASIN--Station number and name shown below bar graph

Figure 4. Annual average discharge for water year 2005 and median and maximum annual average discharge for period of record for seven long-term index gaging stations in Wyoming.

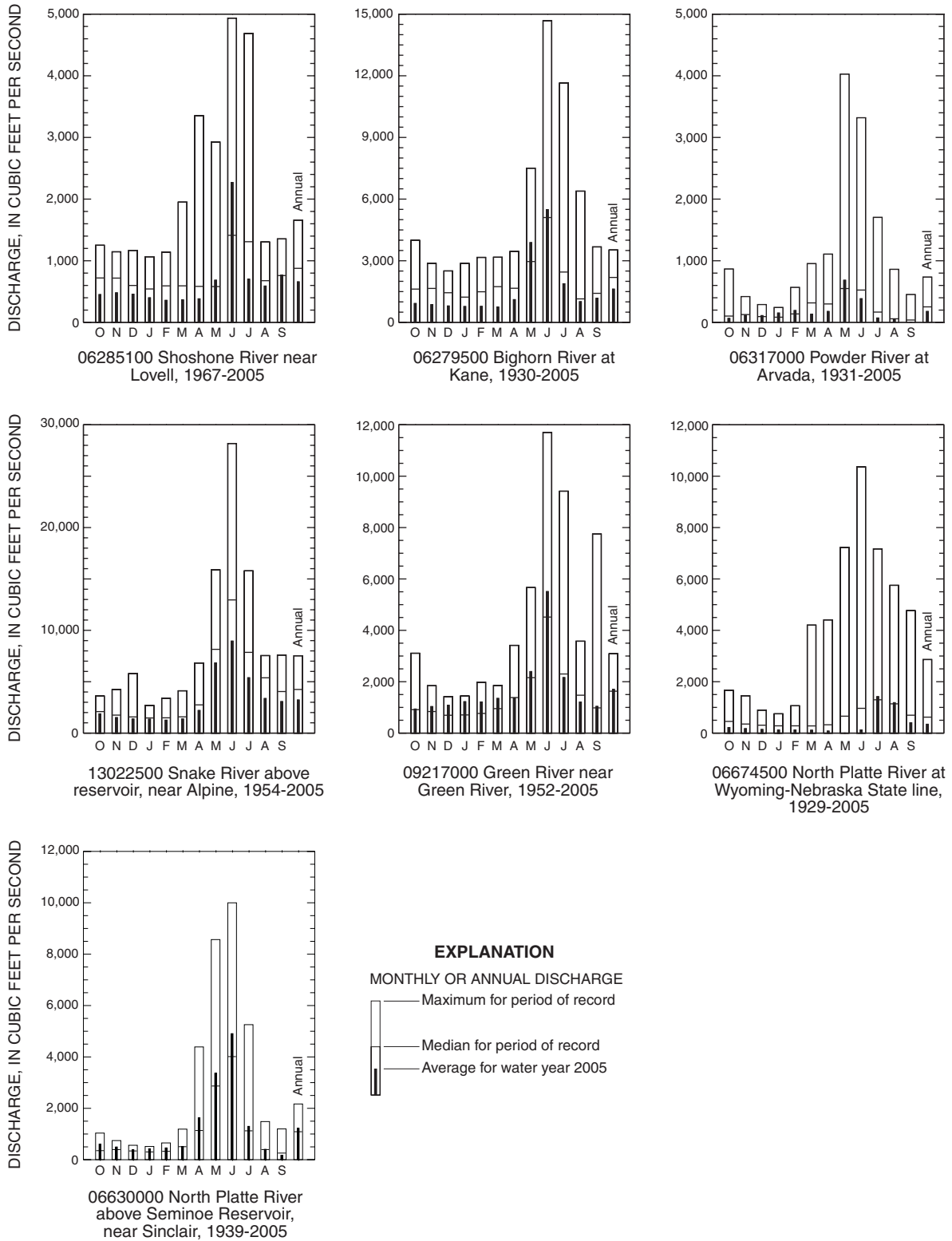


Figure 5. Average monthly and annual discharge for water year 2005 and median and maximum monthly and annual discharge for period of record for seven long-term index gaging stations in Wyoming.

To compare the current and long-term water-quality conditions, specific conductance measurements are summarized for water year 2005 and the 10-year period of water years 1995-2004. The range of specific conductance measurements is described by the minimum and maximum values. In addition, the central tendency of data collected over the 10-year period is described by the median (50th percentile). All specific conductance measurements for samples collected at the nine stations during water year 2005 were within the range of measurements for the 10-year period of water years 1995-2004.

Table 2.--Statistical summary of specific conductance measurements for samples collected at selected stations during water year 2005 and water years 1995-2004.

[Specific conductance, in microsiemens per centimeter at 25 degrees Celsius]

Station name and number	Specific conductance						
	Water year 2005			Water years 1995-2004			
	Number of samples	Maximum	Minimum	Number of samples	Maximum	Median	Minimum
Little Wind River near Riverton, Wyo. 06235500	4	836	339	45	1,240	850	161
Bighorn River at Kane, Wyo. 06279500	4	1,240	654	85	1,850	844	321
Powder River at Arvada, Wyo. 06317000	23	3,640	916	91	5,170	2,250	744
Little Powder River above Dry Creek near Weston, Wyo. 06324970	13	4,240	1,540	97	5,250	3,330	358
Belle Fourche River below Moorcroft, Wyo. 06426500	11	3,600	652	72	3,750	2,560	299
North Platte River at Wyoming-Nebraska State line 06674500	4	983	684	56	1,240	852	545
Green River below Green River, Wyo. 09217010	6	539	376	60	988	564	277
Black's Fork near Lyman, Wyo. 09222000	4	1,780	1,070	35	3,880	1,410	700
Bear River above reservoir, near Woodruff, Utah 10020100	4	513	194	40	993	428	145

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, hydrologic-station records in USGS reports have been listed in order of downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary entering between two main-stream stations is listed between those stations. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is located with respect to the stream to which it is immediately tributary is indicated by an indentation in that list of stations in the front of this report. Each indentation represents one rank. This downstream order and system of indentation indicates which stations are on tributaries between any two stations and the rank of the tributary on which each station is located.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These station numbers are in the same downstream order used in this report. In assigning a station number, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list composed of both types of stations. Gaps are consecutive. The complete 8-digit (or 10-digit) number for each station such as 09004100, which appears just to the left of the station name, includes a 2-digit part number "09" plus the 6-digit (or 8-digit) downstream order number "004100." In areas of high station density, an additional two digits may be added to the station identification number to yield a 10-digit number. The stations are numbered in downstream order as described above between stations of consecutive 8-digit numbers.

NUMBERING SYSTEM FOR MISCELLANEOUS SITES

The USGS miscellaneous site-numbering system is based on the grid system of latitude and longitude. The system provides the geographic location of the miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, and the next 7 digits denote degrees, minutes, and seconds of longitude; the last 2 digits are a sequential number for miscellaneous sites within a 1-second grid. In the event that the latitude-longitude coordinates for more than one miscellaneous site are the same, a sequential number such as "01," "02," and so forth, would be assigned (see fig. 6). The 8-digit, downstream order station numbers are not assigned to miscellaneous sites where only random water-quality samples or discharge measurements are taken.

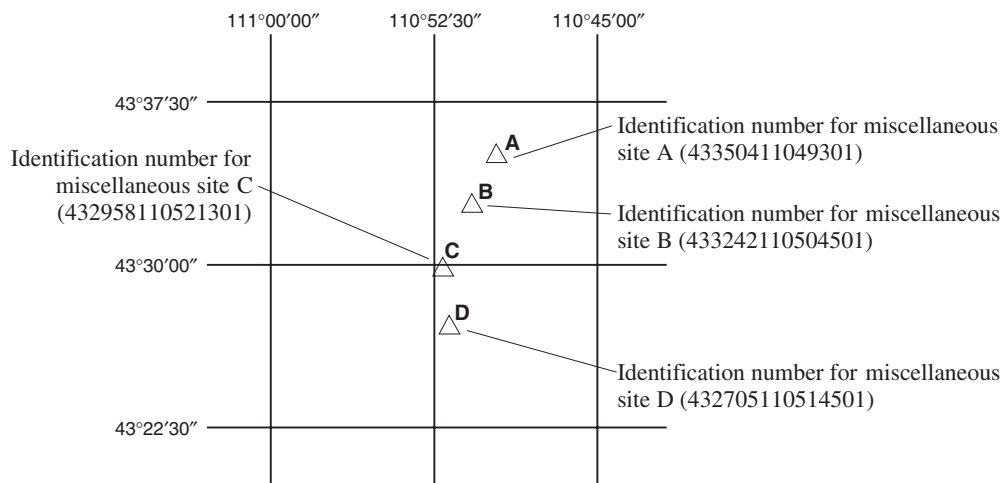


Figure 6. System for numbering miscellaneous sites (latitude and longitude).

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 61 sites in small drainage basins in 39 States that was established in 1963 to provide consistent streamflow data representative of undeveloped watersheds nationwide, and from which data could be analyzed on a continuing basis for use in comparison and contrast with conditions observed in basins more obviously affected by human activities. At selected sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the effects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program may be accessed from <http://ny.cf.er.usgs.gov/hbn/>.

National Stream-Quality Accounting Network (NASQAN) is a network of sites used to monitor the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations was operated in the Mississippi, Columbia, Colorado, and Rio Grande River basins. For the period 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia Rivers so that a network of five stations could be implemented on the Yukon River. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment (NAWQA) Program; (3) to characterize processes unique to large-river systems such as storage and remobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals. Additional information about the NASQAN Program may be accessed from <http://water.usgs.gov/nasqan/>.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) is a network of monitoring sites that provides continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead Federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from this network of 250 precipitation-chemistry monitoring sites. The USGS supports 74 of these 250 sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as data from the individual sites, may be accessed from <http://bqs.usgs.gov/acidrain/>.

The USGS National Water-Quality Assessment (NAWQA) Program is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; to provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and to provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 42 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents is measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a

wide range of spatial and temporal scales will provide information for water-resources managers to use in making decisions and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and Federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key Federal, State, and local water-resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities for collaboration among the agencies. Additional information about the NAWQA Program may be accessed from <http://water.usgs.gov/nawqa/>.

The USGS National Streamflow Information Program (NSIP) is a long-term program with goals to provide framework streamflow data across the Nation. Included in the program are creation of a permanent Federally funded streamflow network, research on the nature of streamflow, regional assessments of streamflow data and databases, and upgrades in the streamflow information delivery systems. Additional information about NSIP may be accessed from <http://water.usgs.gov/nsip/>.

EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS

Data Collection and Computation

The base data collected at gaging stations (fig. 1) consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and volume 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 is either downloaded electronically in the field to a laptop computer or similar device or is transmitted using telemetry such as GOES satellite, land-line or cellular-phone modems, or by radio transmission. Measurements of discharge are made with a current meter or acoustic Doppler current profiler, using the general methods adopted by the USGS. These methods are described in standard textbooks, USGS Water-Supply Paper 2175, and the Techniques of Water-Resources Investigations of the United States Geological Survey (TWRIs), Book 3, Chapters A1 through A19 and Book 8, Chapters A2 and B2, which may be accessed from <http://water.usgs.gov/pubs/twri/>. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standardization (ISO).

For stream-gaging stations, discharge-rating tables for any stage are prepared from stage-discharge curves. If extensions to the rating curves are necessary to express discharge greater than measured, the extensions are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, or computation of flow over dams and weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily values. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features of the stream channel, the daily mean discharge is computed by the shifting-control method in which correction factors that are based on individual discharge measurements and notes by engineers and observers are used when 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 controlling section, the daily mean discharge is computed by the shifting-control method.

The stage-discharge relation at some stream-gaging stations is affected by backwater from reservoirs, tributary streams, or other sources. Such an occurrence necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage at some distance from the base gage.

An index velocity is measured using ultrasonic or acoustic instruments at some stream-gaging stations, and this index velocity is used to calculate an average velocity for the flow in the stream. This average velocity along with a stage-area relation is then used to calculate average discharge.

At some stations, the stage-discharge relation is affected by changing stage. At these stations, the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations in the northern United States, the stage-discharge relation is affected by ice in the winter; therefore, computation of the discharge in the usual manner is impossible. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter-discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge from other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the volume or 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 changes are computed.

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

For some stream-gaging stations, periods of time occur when no gage-height record is obtained or the recorded gage height is faulty and cannot be used to compute daily discharge or contents. Such a situation can happen when the recorder stops or otherwise fails to operate properly, the 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, prior and subsequent records, discharge measurements, weather records, and comparison with records from other stations in the same or nearby basins. Likewise, lake or reservoir volumes may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

Data Presentation

The records published for each continuous-record surface-water discharge station (stream-gaging station) consist of five parts: (1) the station manuscript or description; (2) the data table of daily mean values of discharge for the current water year with summary data; (3) a tabular statistical summary of monthly mean flow data for a designated period, by water year; (4) a summary statistics table that includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration; and (5) a hydrograph of discharge.

Station Manuscript

The manuscript provides, under various headings, descriptive information, such as station location; period of record; historical extremes outside the period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments follow that clarify information presented under the various headings of the station description.

LOCATION.—Location information is obtained from the most accurate maps available. The location of the gaging station with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in “River Mileage Measurement,” Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.—Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.—This term indicates the time period for which records have been published for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not and whose location was such that its flow reasonably can be considered equivalent to flow at the present station.

REVISED RECORDS.—If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

GAGE.—The type of gage in current use, the datum of the current gage referred to a standard datum, and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.—All periods of estimated daily discharge either will be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See section titled Identifying Estimated Daily Discharge.) Information is presented relative to the accuracy of the records, to special methods of computation, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, the outlet works and spillway, and the purpose and use of the reservoir.

COOPERATION.—Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

EXTREMES OUTSIDE PERIOD OF RECORD.—Information here documents major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the USGS.

REVISIONS.—Records are revised if errors in published records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based national data system, NWISWeb (<http://water.usgs.gov/nwis/nwis>). Users are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent data updates. Updates to NWISWeb are made on an annual basis.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because no current or, possibly, future station manuscript would be published for these stations to document the revision in a REVISED RECORDS entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the USGS Water Science Center (address given on the back of the title page of this report) to determine if the published records were revised after the station was discontinued. If, however, the data for a discontinued station were obtained by computer retrieval, the data would be current. Any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the REMARKS and in the inclusion of a stage-capacity table when daily volumes are given.

Peak Discharge Greater than Base Discharge

Tables of peak discharge above base discharge are included for some stations where secondary instantaneous peak discharge data are used in flood-frequency studies of highway and bridge design, flood-control structures, and other flood-related projects. The base discharge value is selected so an average of three peaks a year will be reported. This base discharge value has a recurrence interval of approximately 1.1 years or a 91-percent chance of exceedence in any 1 year.

Data Table of Daily Mean Values

The daily table of discharge records for stream-gaging stations gives mean discharge for each day of the water year. In the monthly summary for the table, the line headed TOTAL gives the sum of the daily figures for each month; the line headed MEAN gives the arithmetic average flow in cubic feet per second for the month; and the lines headed MAX and MIN give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month is expressed in cubic feet per second per square mile (line headed CFMS); or in inches (line headed IN); or in acre-feet (line headed AC-FT). Values for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if extensive regulation or diversion is in effect or if the drainage area includes large noncontributing areas. At some stations, monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir volumes are given. These values are identified by a symbol and a corresponding footnote.

Statistics of Monthly Mean Data

A tabular summary of the mean (line headed MEAN), maximum (MAX), and minimum (MIN) of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those values. The designated period will be expressed as FOR WATER YEARS __-__, BY WATER YEAR (WY), and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. The designated period will consist of all of the station record within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station. The water years for which the statistics are computed are consecutive, unless a break in the station record is indicated in the manuscript.

Summary Statistics

A table titled SUMMARY STATISTICS follows the statistics of monthly mean data tabulation. This table consists of four columns with the first column containing the line headings of the statistics being

reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, WATER YEARS __-__, will consist of all of the station records within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station. The water years for which the statistics are computed are consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the ANNUAL 7-DAY MINIMUM statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When the dates of occurrence do not fall within the selected water years listed in the heading, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration-curve statistics and runoff data also are given. Runoff data may be omitted if extensive regulation or diversion of flow is in effect in the drainage basin.

The following summary statistics data are provided with each continuous record of discharge. Comments that follow clarify information presented under the various line headings of the SUMMARY STATISTICS table.

ANNUAL TOTAL.—The sum of the daily mean values of discharge for the year.

ANNUAL MEAN.—The arithmetic mean for the individual daily mean discharges for the year noted or for the designated period.

HIGHEST ANNUAL MEAN.—The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.—The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.—The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.—The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.—The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. This value should not be confused with the 7-day 10-year low-flow statistic.

MAXIMUM PEAK FLOW.—The maximum instantaneous peak discharge occurring for the water year or designated period. Occasionally the maximum flow for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak flow is given in the table and the maximum flow may be reported in a footnote or in the REMARKS paragraph in the manuscript.

MAXIMUM PEAK STAGE.—The maximum instantaneous peak stage occurring for the water year or designated period. Occasionally the maximum stage for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak stage is given in the table and the maximum stage may be reported in the REMARKS paragraph in the manuscript or in a footnote. If the dates of occurrence of the maximum peak stage and maximum peak flow are different, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

INSTANTANEOUS LOW FLOW.—The minimum instantaneous discharge occurring for the water year or for the designated period.

ANNUAL RUNOFF.—Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

Acre-foot (AC-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 about 326,000 gallons or 1,233 cubic meters.

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

Inches (INCHES) indicate the depth to which the drainage area would be covered if all of the runoff for a given time period were uniformly distributed on it.

10 PERCENT EXCEEDS.—The discharge that has been exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.—The discharge that has been exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.—The discharge that has been exceeded 90 percent of the time for the designated period.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first table lists annual maximum stage and discharge at crest-stage stations, and the second table lists discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are often made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for a special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified. This identification is shown either by flagging individual daily values with the letter “e” and noting in a table footnote, “e–Estimated,” or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of Field Data and Computed Results

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

The degree of accuracy of the records is stated in the REMARKS in the station description. “Excellent” indicates that about 95 percent of the daily discharges are within 5 percent of the true value; “good” within 10 percent; and “fair,” within 15 percent. “Poor” indicates that daily discharges have less than “fair” accuracy. Different accuracies may be attributed to different parts of a given record.

Values 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 ft³/s; to the nearest tenths between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to three significant figures above 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharge values listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, values of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. 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 losses are large in comparison with the observed discharge.

Other Data Records Available

Information of a more detailed nature than that published for most of the stream-gaging stations such as discharge measurements, gage-height records, and rating tables is available from the USGS Water Science Center. Also, most stream-gaging station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the USGS Water Science Center (see address that is shown on the back of the title page of this report).

EXPLANATION OF PRECIPITATION RECORDS

Data Collection and Computation

Rainfall data generally are collected using electronic data loggers that measure the rainfall in 0.01-inch increments every 15 minutes using either a tipping-bucket rain gage or a collection well gage. Twenty-four hour rainfall totals are tabulated and presented. A 24-hour period extends from just past midnight of the previous day to midnight of the current day. Snowfall-affected data can result during cold weather when snow fills the rain-gage funnel and then melts as temperatures rise. Snowfall-affected data are subject to errors. Missing values are indicated by this symbol “---” in the table.

Data Presentation

Precipitation records collected at surface-water gaging stations are identified with the same station number and name as the stream-gaging station. Where a surface-water daily-record station is not available, the precipitation record is published with its own name and latitude-longitude identification number.

Information pertinent to the history of a precipitation station is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, period of record, and general remarks.

The following information is provided with each precipitation station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.—See Data Presentation in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

PERIOD OF RECORD.—See Data Presentation in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

INSTRUMENTATION.—Information on the type of rainfall collection system is given.

REMARKS.—Remarks provide added information pertinent to the collection, analysis, or computation of records.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

Surface-water samples for analysis usually are collected at or near stream-gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, water temperature, sediment discharge, and so forth); extremes for the current year; and general remarks.

Water Analysis

Most of the methods used for collecting and analyzing water samples are described in the TWRIIs, which may be accessed from <http://water.usgs.gov/pubs/twri/>.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled at several verticals to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum and minimum values (and sometimes mean or median values) for each constituent measured and are based on 15-minute or 1-hour intervals of recorded data beginning at 0000 hours and ending at 2400 hours for the day of record.

SURFACE-WATER-QUALITY RECORDS

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because discharge data are useful in the interpretation of surface-water quality. Records of surface-water quality in this report involve a variety of types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A *continuous-record station* is a site where data are collected on a regularly scheduled basis. Frequency may be one or more times daily, weekly, monthly, or quarterly. A *partial-record station* is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A *miscellaneous sampling site* is a location other than a continuous- or partial-record station, where samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between *continuous records* as used in this report and *continuous recordings* that refer to a continuous graph or a series of discrete values recorded at short intervals. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figure 1.

Accuracy of the Records

One of four accuracy classifications is applied for measured physical properties at continuous-record stations on a scale ranging from poor to excellent (table 3). The accuracy rating is based on data values recorded before any shifts or corrections are made. Additional consideration also is given to the amount of publishable record and to the amount of data that have been corrected or shifted.

Table 3.--Rating classifications for continuous water-quality records

[≤, less than or equal to; ±, plus or minus value shown; °C, degree Celsius; >, greater than; %, percent; mg/L, milligram per liter; pH unit, standard pH unit]

Measured physical property	Rating			
	Excellent	Good	Fair	Poor
Water temperature	≤ ±0.2 °C	> ±0.2-0.5 °C	> ±0.5-0.8 °C	> ±0.8 °C
Specific conductance	≤ ±3%	> ±3-10%	> ±10-15%	> ±15%
Dissolved oxygen	≤ ±0.3 mg/L	> ±0.3-0.5 mg/L	> ±0.5-0.8 mg/L	> ±0.8 mg/L
pH	≤ ±0.2 unit	> ±0.2-0.5 unit	> ±0.5-0.8 unit	> ±0.8 unit
Turbidity	≤ ±5 turbidity units or ≤ ±5%, whichever is greater	> ±5-10 turbidity units or > ±5-10%, whichever is greater	> ±10-15 turbidity units or > ±10-15%, whichever is greater	> ±15 turbidity units or > ±15%, which- ever is greater

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

Onsite Measurements and Sample Collection

In obtaining water-quality data, a major concern is assuring that the data obtained represent the naturally occurring quality of the water. To ensure this, certain measurements, such as water temperature, pH, and dissolved oxygen, must be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the naturally occurring water, carefully prescribed procedures must be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in TWRI's Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1-A9. Most of the methods used for collecting and analyzing water samples are described in the TWRI's, which may be accessed from <http://water.usgs.gov/pubs/twri/>. Also, detailed information on collecting, treating, and shipping samples can be obtained from the USGS Water Science Center (see address that is shown on the back of title page in this report).

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at the time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the Water Science Center.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross section.

During periods of rapidly changing flow or rapidly changing concentration, samples may be collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration are computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples are collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observation, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

Laboratory Measurements

Samples for biochemical oxygen demand (BOD) and indicator bacteria are analyzed locally. All other samples are analyzed in the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chapter C1. Methods used by the USGS laboratories are given in the TWRI, Book 1, Chapter D2; and Book 5, Chapters A1, A3, and A4. The TWRI publications may be accessed from <http://water.usgs.gov/pubs/twri/>. These methods are consistent with ASTM standards and generally follow ISO standards.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of “daily values” of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.—See Data Presentation information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

DRAINAGE AREA.—See Data Presentation information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

PERIOD OF RECORD.—This indicates the time periods for which published water-quality records for the station are available. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.—Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.—Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.—Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

EXTREMES.—Maximums and minimums are given only for parameters measured daily or more frequently. For parameters measured weekly or less frequently, true maximums or minimums may not have been obtained. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.—Records are revised if errors in published water-quality records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based national data system, NWISWeb (<http://waterdata.usgs.gov/nwis>). Users of USGS water-quality data are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent updates. Updates to the NWISWeb are made on an annual basis.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No

descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

Remark codes may appear with the water-quality data in this section (table 4).

Table 4.--Water-quality data remark codes.

Printed Output	Remark
E	Value is estimated.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
M	Presence of material verified, but not quantified.
N	Presumptive evidence of presence of material.
U	Material specifically analyzed for, but not detected.
A	Value is an average.
V	Analyte was detected in both the environmental sample and the associated blanks.
S	Most probable value.

Water-Quality Control Data

The USGS National Water Quality Laboratory collects quality-control data on a continuing basis to evaluate selected analytical methods to determine long-term method detection levels (LT-MDLs) and laboratory reporting levels (LRLs). These values are re-evaluated each year on the basis of the most recent quality-control data and, consequently, may change from year to year.

This reporting procedure limits the occurrence of false positive error. Falsely reporting a concentration greater than the LT-MDL for a sample in which the analyte is not present is 1 percent or less. Application of the LRL limits the occurrence of false negative error. The chance of falsely reporting a nondetection for a sample in which the analyte is present at a concentration equal to or greater than the LRL is 1 percent or less.

Accordingly, concentrations are reported as less than LRL for samples in which the analyte either was not detected or did not pass identification. Analytes detected at concentrations between the LT-MDL and the LRL and that pass identification criteria are estimated. Estimated concentrations will be noted with a remark code of "E." These data should be used with the understanding that their uncertainty is greater than that of data reported without the E remark code.

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected by this USGS Water Science Center are described in the following section. Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples. These data are not presented in this report but are available from the USGS Water Science Center.

Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated in the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. Many types of blank samples are possible; each is designed to segregate a different part of the overall data-collection process. The types of blank samples collected in this USGS Water Science Center are:

Field blank—A blank solution that is subjected to all aspects of sample collection, field processing, preservation, transportation, and laboratory handling as an environmental sample.

Trip blank—A blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Equipment blank—A blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office).

Sampler blank—A blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Filter blank—A blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank—A blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank—A blank solution that is treated with the sampler preservatives used for an environmental sample.

Reference Samples

Reference material is a solution or material prepared by a laboratory. The reference material composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

Replicate Samples

Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. Many types of replicate samples are possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this district are:

Concurrent samples—A type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating the collection of samples into two or more compositing containers.

Sequential samples—A type of replicate sample in which the samples are collected one after the other, typically over a short time.

Split sample—A type of replicate sample in which a sample is split into subsamples, each subsample contemporaneous in time and space.

Spike Samples

Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

ACCESS TO USGS WATER DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily mean and peak-flow discharge data for most current or discontinued gaging stations through the World Wide Web (WWW). These data may be accessed from <http://water.usgs.gov>.

Water-quality data and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on various media. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each USGS Water Science Center (See address that is shown on the back of the title page of this report).

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DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Terms such as algae, water level, and precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting English units to International System (SI) Units. Other glossaries that also define water-related terms are accessible from <http://water.usgs.gov/glossaries.html>.

Acid neutralizing capacity (ANC) is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point. This term designates titration of an “unfiltered” sample (formerly reported as alkalinity).

Acre-foot (AC-FT, acre-ft) is a unit of volume, commonly used to measure quantities of water used or stored, equivalent to the volume of water required to cover 1 acre to a depth of 1 foot and equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters. (See also “Annual runoff”)

Adenosine triphosphate (ATP) is an organic, phosphate-rich compound important in the transfer of energy in organisms. Its central role in living cells makes ATP an excellent indicator of the presence of living material in water. A measurement of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter.

Adjusted discharge is discharge data that have been mathematically adjusted (for example, to remove the effects of a daily tide cycle or reservoir storage).

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample. (See also “Biomass” and “Dry weight”)

Alkalinity is the capacity of solutes in an aqueous system to neutralize acid. This term designates titration of a “filtered” sample.

Annual runoff is the total quantity of water that is discharged (“runs off”) from a drainage basin in a year. Data reports may present annual runoff data as volumes in acre-feet, as discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches.

Annual 7-day minimum is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 through September 30). Most low-flow frequency analyses use a climatic year (April 1-March 31), which tends to prevent the low-flow period from being artificially split between adjacent years. The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day, 10-year low-flow statistic.)

Aroclor is the registered trademark for a group of poly-chlorinated biphenyls that were manufactured by the Monsanto Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type, and the last two digits represent the percentage weight of the hydrogen-substituted chlorine.

Artificial substrate is a device that purposely is placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is collected. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection. (See also “Substrate”)

Ash mass is the mass or amount of residue present after the residue from a dry-mass determination has been ashed in a muffle furnace at a temperature of 500 °C for 1 hour. Ash mass of zooplankton and phytoplankton is expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2). (See also “Biomass” and “Dry mass”)

Aspect is the direction toward which a slope faces with respect to the compass.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, whereas others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Bankfull stage, as used in this report, is the stage at which a stream first overflows its natural banks formed by floods with 1- to 3-year recurrence intervals.

Base discharge (for peak discharge) is a discharge value, determined for selected stations, above which peak discharge data are published. The base discharge at each station is selected so that an average of about three peak flows per year will be published. (See also “Peak flow”)

Base flow is sustained flow of a stream in the absence of direct runoff. It includes natural and human-induced streamflows. Natural base flow is sustained largely by ground-water discharge.

Bed material is the sediment mixture of which a stream-bed, lake, pond, reservoir, or estuary bottom is composed. (See also “Bedload” and “Sediment”)

Bedload is material in transport that primarily is supported by the streambed. In this report, bedload is considered to consist of particles in transit from the bed to the top of the bedload sampler nozzle (an elevation ranging from 0.25 to 0.5 foot). These particles are retained in the bedload sampler. A sample collected with a pressure-differential bedload sampler also may contain a component of the suspended load.

Bedload discharge (tons per day) is the rate of sediment moving as bedload, reported as dry weight, that passes through a cross section in a given time. NOTE: Bedload discharge values in this report may include a component of the suspended-sediment discharge. A correction may be necessary when computing the total sediment discharge by summing the bedload discharge and the suspended-sediment discharge. (See also “Bedload,” “Dry weight,” “Sediment,” and “Suspended-sediment discharge”)

Benthic organisms are the group of organisms inhabiting the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are useful as indicators of water quality.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as mass per unit area or volume of habitat.

Biomass pigment ratio is an indicator of the total proportion of periphyton that are autotrophic (plants). This also is called the Autotrophic Index.

Blue-green algae (*Cyanophyta*) are a group of phytoplankton and periphyton organisms with a blue pigment in addition to a green pigment called chlorophyll. Blue-green algae can cause nuisance water-quality conditions in lakes and slow-flowing rivers; however, they are found commonly in streams throughout the year. The abundance of blue-green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter ($\mu\text{m}^3/\text{mL}$). The abundance of blue-green algae in periphyton samples is given in

cells per square centimeter (cells/cm²) or biovolume per square centimeter (μm³/cm²). (See also “Phytoplankton” and “Periphyton”)

Bottom material (See “Bed material”)

Bulk electrical conductivity is the combined electrical conductivity of all material within a doughnut-shaped volume surrounding an induction probe. Bulk conductivity is affected by different physical and chemical properties of the material including the dissolved-solids content of the pore water, and the lithology and porosity of the rock.

Canadian Geodetic Vertical Datum 1928 is a geodetic datum derived from a general adjustment of Canada’s first order level network in 1928.

Cell volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are used frequently in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume (μm³) is determined by obtaining critical cell measurements or cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

$$\text{sphere } \frac{4}{3} \pi r^3 \quad \text{cone } \frac{1}{3} \pi r^2 h \quad \text{cylinder } \pi r^2 h.$$

pi (π) is the ratio of the circumference to the diameter of a circle; pi = 3.14159....

From cell volume, total algal biomass expressed as biovolume (μm³/mL) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes for all species.

Cells/volume refers to the number of cells of any organism that is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample volume, and generally are reported as cells or units per milliliter (mL) or liter (L).

Cfs-day (See “Cubic foot per second-day”)

Channel bars, as used in this report, are the lowest prominent geomorphic features higher than the channel bed.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with BOD or with carbonaceous organic pollution from sewage or industrial wastes. [See also “Biochemical oxygen demand (BOD)”]

Clostridium perfringens (*C. perfringens*) is a spore-forming bacterium that is common in the feces of human and other warmblooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and the presence of microorganisms that are resistant to disinfection and environmental stresses. (See also “Bacteria”)

Coliphages are viruses that infect and replicate in coliform bacteria. They are indicative of sewage contamination of water and of the survival and transport of viruses in the environment.

Color unit is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Confined aquifer is a term used to describe an aquifer containing water between two relatively impermeable boundaries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be

higher or lower than the water table that may be present in the material above it. In some cases, the water level can rise above the ground surface, yielding a flowing well.

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.

Continuous-record station is a site where data are collected with sufficient frequency to define daily mean values and variations within a day.

Control designates a feature in the channel that physically affects the water-surface elevation and thereby determines the stage-discharge relation at the gage. This feature may be a constriction of the channel, a bedrock outcrop, a gravel bar, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure, as used in this report, is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of saltwater.

Cubic foot per second (CFS, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term “second-foot” sometimes is used synonymously with “cubic foot per second” but is now obsolete.

Cubic foot per second-day (CFS-DAY, Cfs-day, [$\text{ft}^3/\text{s}/\text{d}$]) 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, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily mean discharges reported in the daily value data tables numerically are equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

Cubic foot per second per square mile [CFSM, $(\text{ft}^3/\text{s})/\text{mi}^2$] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area. (See also “Annual runoff”)

Daily mean suspended-sediment concentration is the time-weighted mean concentration of suspended sediment passing a stream cross section during a 24-hour day. (See also “Sediment” and “Suspended-sediment concentration”)

Daily record station is a site where data are collected with sufficient frequency to develop a record of one or more data values per day. The frequency of data collection can range from continuous recording to data collection on a daily or near-daily basis.

Data collection platform (DCP) is an electronic instrument that collects, processes, and stores data from various sensors, and transmits the data by satellite data relay, line-of-sight radio, and/or landline telemetry.

Data logger is a microprocessor-based data acquisition system designed specifically to acquire, process, and store data. Data usually are downloaded from onsite data loggers for entry into office data systems.

Datum is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or Universal Transverse Mercator (UTM) coordinates. (See also “Gage datum,” “Land-surface datum,” “National Geodetic Vertical Datum of 1929,” and “North American Vertical Datum of 1988”)

Diatoms (*Bacillariophyta*) are unicellular or colonial algae with a siliceous cell wall. The abundance of diatoms in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic microme-

ters per milliliter ($\mu\text{m}^3/\text{mL}$). The abundance of diatoms in periphyton samples is given in cells per square centimeter (cells/cm^2) or biovolume per square centimeter ($\mu\text{m}^3/\text{cm}^2$). (See also “Phytoplankton” and “Periphyton”)

Diel is of or pertaining to a 24-hour period of time; a regular daily cycle.

Discharge, or **flow**, is the rate that matter passes through a cross section of a stream channel or other water body per unit of time. The term commonly refers to the volume of water (including, unless otherwise stated, any sediment or other constituents suspended or dissolved in the water) that passes a cross section in a stream channel, canal, pipeline, and so forth, within a given period of time (cubic feet per second). Discharge also can apply to the rate at which constituents, such as suspended sediment, bedload, and dissolved or suspended chemicals, pass through a cross section, in which cases the quantity is expressed as the mass of constituent that passes the cross section in a given period of time (tons per day).

Dissolved refers to that material in a representative water sample that passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal and State agencies that collect water-quality data. Determinations of “dissolved” constituent concentrations are made on sample water that has been filtered.

Dissolved oxygen (DO) is the molecular oxygen (oxygen gas) dissolved in water. The concentration in water is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved-solids concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved-solids concentration in water is the quantity of dissolved material in a sample of water. It is determined either analytically by the “residue-on-evaporation” method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4917 to convert it to carbonate. Alternatively, alkalinity concentration (as $\text{mg}/\text{L CaCO}_3$) can be converted to carbonate concentration by multiplying by 0.60.

Diversity index (H) (Shannon index) is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = - \sum_{i \approx 1}^s \frac{n_i}{n} \log_2 \frac{n_i}{n},$$

where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area upstream from the location, measured in a horizontal plane, that has a common outlet at the site for its surface runoff from precipitation that normally drains by gravity into a stream. Drainage areas given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the Earth’s surface that contains a drainage system with a common outlet for its surface runoff. (See “Drainage area”)

Dry mass refers to the mass of residue present after drying in an oven at 105 °C, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass. (See also “Ash mass,” “Biomass,” and “Wet mass”)

Dry weight refers to the weight of animal tissue after it has been dried in an oven at 65 °C until a constant weight is achieved. Dry weight represents total organic and inorganic matter in the tissue. (See also “Wet weight”)

Embeddedness is the degree to which gravel-sized and larger particles are surrounded or enclosed by finer-sized particles. (See also “Substrate embeddedness class”)

Enterococcus bacteria commonly are found in the feces of humans and other warmblooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria that produce pink to red colonies with black or reddish-brown precipitate after incubation at 41 °C on mE agar (nutrient medium for bacterial growth) and subsequent transfer to EIA medium. Enterococci include *Streptococcus feacalis*, *Streptococcus feacium*, *Streptococcus avium*, and their variants. (See also “Bacteria”)

EPT Index is the total number of distinct taxa within the insect orders Ephemeroptera, Plecoptera, and Trichoptera. This index summarizes the taxa richness within the aquatic insects that generally are considered pollution sensitive; the index usually decreases with pollution.

Escherichia coli (*E. coli*) are bacteria present in the intestine and feces of warmblooded animals. *E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5 °C on mTEC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also “Bacteria”)

Estimated (E) value of a concentration is reported when an analyte is detected and all criteria for a positive result are met. If the concentration is less than the method detection limit (MDL), an E code will be reported with the value. If the analyte is identified qualitatively as present, but the quantitative determination is substantially more uncertain, the National Water Quality Laboratory will identify the result with an E code even though the measured value is greater than the MDL. A value reported with an E code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less than sign (<). For bacteriological data, concentrations are reported as estimated when results are based on non-ideal colony counts.

Euglenoids (*Euglenophyta*) are a group of algae that usually are free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark. (See also “Phytoplankton”)

Extractable organic halides (EOX) are organic compounds that contain halogen atoms such as chlorine. These organic compounds are semivolatile and extractable by ethyl acetate from air-dried streambed sediment. The ethyl acetate extract is combusted, and the concentration is determined by microcoulometric determination of the halides formed. The concentration is reported as micrograms of chlorine per gram of the dry weight of the streambed sediment.

Fecal coliform bacteria are present in the intestines or feces of warmblooded animals. They often are used as indicators of the sanitary quality of the water. In the laboratory, they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5 °C plus or minus 0.2 °C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also “Bacteria”)

Fecal streptococcal bacteria are present in the intestines of warmblooded animals and are ubiquitous in the environment. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35 °C plus or minus 1.0 °C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also “Bacteria”)

Filtered pertains to constituents in a water sample passed through a filter of specified pore diameter, most commonly 0.45 micrometer or less for inorganic analytes and 0.7 micrometer for organic analytes.

Filtered, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that has passed through a filter has been extracted. Complete recovery is not achieved

by the extraction procedure and thus the analytical determination represents something less than 95 percent of the total constituent concentration in the sample. To achieve comparability of analytical data, equivalent extraction procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results.

Fire algae (*Pyrrophyta*) are free-swimming unicells characterized by a red pigment spot. (See also “Phytoplankton”)

Flow-duration percentiles are values on a scale of 100 that indicate the percentage of time for which a flow is exceeded. For example, the 90th percentile of river flow is the streamflow exceeded 90 percent of the time in the period of interest.

Gage datum is a horizontal surface used as a zero point for measurement of stage or gage height. This surface usually is located slightly below the lowest point of the stream bottom such that the gage height is usually slightly greater than the maximum depth of water. Because the gage datum is not an actual physical object, the datum is usually defined by specifying the elevations of permanent reference marks such as bridge abutments and survey monuments, and the gage is set to agree with the reference marks. Gage datum is a local datum that is maintained independently of any national geodetic datum. However, if the elevation of the gage datum relative to the national datum (North American Vertical Datum of 1988 or National Geodetic Vertical Datum of 1929) has been determined, then the gage readings can be converted to elevations above the national datum by adding the elevation of the gage datum to the gage reading.

Gage height (G.H.) is the water-surface elevation, in feet above the gage datum. If the water surface is below the gage datum, the gage height is negative. Gage height often is used interchangeably with the more general term “stage,” although gage height is more appropriate when used in reference to a reading on a gage.

Gage values are values that are recorded, transmitted, and/or computed from a gaging station. Gage values typically are collected at 5-, 15-, or 30-minute intervals.

Gaging station is a site on a stream, canal, lake, or reservoir where systematic observations of stage, discharge, or other hydrologic data are obtained.

Gas chromatography/flame ionization detector (GC/FID) is a laboratory analytical method used as a screening technique for semivolatile organic compounds that are extractable from water in methylene chloride.

Geomorphic channel units, as used in this report, are fluvial geomorphic descriptors of channel shape and stream velocity. Pools, riffles, and runs are types of geomorphic channel units considered for National Water-Quality Assessment (NAWQA) Program habitat sampling.

Green algae (*Chlorophyta*) are unicellular or colonial algae with chlorophyll pigments similar to those in terrestrial green plants. Some forms of green algae produce mats or floating “moss” in lakes. The abundance of green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter ($\mu\text{m}^3/\text{mL}$). The abundance of green algae in periphyton samples is given in cells per square centimeter (cells/cm²) or biovolume per square centimeter ($\mu\text{m}^3/\text{cm}^2$). (See also “Phytoplankton” and “Periphyton”)

Habitat, as used in this report, includes all nonliving (physical) aspects of the aquatic ecosystem, although living components like aquatic macrophytes and riparian vegetation also are usually included. Measurements of habitat typically are made over a wider geographic scale than are measurements of species distribution.

Habitat quality index is the qualitative description (level 1) of instream habitat and riparian conditions surrounding the reach sampled. Scores range from 0 to 100 percent with higher scores indicative of desirable habitat conditions for aquatic life. Index only applicable to wadable streams.

Hardness of water is a physical-chemical characteristic that commonly is recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate (CaCO₃).

High tide is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. See NOAA Web site: <http://www.csc.noaa.gov/text/glossary.html> (see “High water”)

Hilsenhoff’s Biotic Index (HBI) is an indicator of organic pollution that uses tolerance values to weight taxa abundances; usually increases with pollution. It is calculated as follows:

$$HBI = \text{sum} \frac{(n)(a)}{N},$$

where n is the number of individuals of each taxon, a is the tolerance value of each taxon, and N is the total number of organisms in the sample.

Horizontal datum (See “Datum”)

Hydrologic index stations referred to in this report are continuous-record gaging stations that have been selected as representative of streamflow patterns for their respective regions. Station locations are shown on index maps.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as defined by the former Office of Water Data Coordination and delineated on the State Hydrologic Unit Maps by the USGS. Each hydrologic unit is identified by an 8-digit number.

Inch (IN., in.), in reference to streamflow, as used in this report, refers to the depth to which the drainage area would be covered with water if all of the runoff for a given time period were distributed uniformly on it. (See also “Annual runoff”)

Instantaneous discharge is the discharge at a particular instant of time. (See also “Discharge”)

International Boundary Commission Survey Datum refers to a geodetic datum established at numerous monuments along the United States-Canada boundary by the International Boundary Commission.

Island, as used in this report, is a mid-channel bar that has permanent woody vegetation, is flooded once a year, on average, and remains stable except during large flood events.

Laboratory reporting level (LRL) generally is equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a nondetection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a “less than” (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory (NWQL) collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually on the basis of the most current quality-control data and, therefore, may change. The LRL replaces the term ‘non-detection value’ (NDV).

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Latent heat flux (often used interchangeably with latent heat-flux density) is the amount of heat energy that converts water from liquid to vapor (evaporation) or from vapor to liquid (condensation) across a specified cross-sectional area per unit time. Usually expressed in watts per square meter.

Light-attenuation coefficient, also known as the extinction coefficient, is a measure of water clarity. Light is attenuated according to the Lambert-Beer equation:

$$I = I_o e^{-\lambda L},$$

where I_o is the source light intensity, I is the light intensity at length L (in meters) from the source, λ is the light-attenuation coefficient, and e is the base of the natural logarithm. The light-attenuation coefficient is defined as

$$\lambda = -\frac{1}{L} \log_e \frac{I}{I_o}.$$

Lipid is any one of a family of compounds that are insoluble in water and that make up one of the principal components of living cells. Lipids include fats, oils, waxes, and steroids. Many environmental contaminants such as organochlorine pesticides are lipophilic.

Long-term method detection level (LT-MDL) is a detection level derived by determining the standard deviation of a minimum of 24 method detection limit (MDL) spike-sample measurements over an extended period of time. LT-MDL data are collected on a continuous basis to assess year-to-year variations in the LT-MDL. The LT-MDL controls false positive error. The chance of falsely reporting a concentration at or greater than the LT-MDL for a sample that did not contain the analyte is predicted to be less than or equal to 1 percent.

Low tide is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. See NOAA Website: <http://www.csc.noaa.gov/text/glossary.html> (see “Low water”)

Macrophytes are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that usually are arranged in zones in aquatic ecosystems and restricted in the area by the extent of illumination through the water and sediment deposition along the shoreline.

Mean concentration of suspended sediment (Daily mean suspended-sediment concentration) is the time-weighted concentration of suspended sediment passing a stream cross section during a given time period. (See also “Daily mean suspended-sediment concentration” and “Suspended-sediment concentration”)

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period. (See also “Discharge”)

Mean high or low tide is the average of all high or low tides, respectively, over a specific period.

Mean sea level is a local tidal datum. It is the arithmetic mean of hourly heights observed over the National Tidal Datum Epoch. Shorter series are specified in the name; for example, monthly mean sea level and yearly mean sea level. In order that they may be recovered when needed, such datums are referenced to fixed points known as benchmarks. (See also “Datum”)

Measuring point (MP) is an arbitrary permanent reference point from which the distance to water surface in a well is measured to obtain water level.

Megahertz is a unit of frequency. One megahertz equals one million cycles per second.

Membrane filter is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Method code is a one-character code that identifies the analytical or field method used to determine a value stored in the National Water Information System (NWIS).

Method detection limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte. At the MDL concentration, the risk of a false positive is predicted to be less than or equal to 1 percent.

Method of Cubatures is a method of computing discharge in tidal estuaries based on the conservation of mass equation.

Methylene blue active substances (MBAS) indicate the presence of detergents (anionic surfactants). The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (UG/G, $\mu\text{g/g}$) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per kilogram (UG/KG, $\mu\text{g/kg}$) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

Micrograms per liter (UG/L, $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

Microsiemens per centimeter (US/CM, $\mu\text{S/cm}$) is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of Units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in water as the mass (milligrams) of constituent per unit volume (liter) of water. Concentration of suspended sediment also is expressed in milligrams per liter and is based on the mass of dry sediment per liter of water-sediment mixture.

Minimum reporting level (MRL) is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method.

Miscellaneous site, miscellaneous station, or miscellaneous sampling site is a site where streamflow, sediment, and/or water-quality data or water-quality or sediment samples are collected once, or more often on a random or discontinuous basis to provide better areal coverage for defining hydrologic and water-quality conditions over a broad area in a river basin.

Most probable number (MPN) is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. MPN is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

Multiple-plate samplers are artificial substrates of known surface area used for obtaining benthic invertebrate samples. They consist of a series of spaced, hardboard plates on an eyebolt.

Nanograms per liter (NG/L, ng/L) is a unit expressing the concentration of chemical constituents in solution as mass (nanograms) of solute per unit volume (liter) of water. One million nanograms per liter is equivalent to 1 milligram per liter.

National Geodetic Vertical Datum of 1929 (NGVD 29) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It formerly was called “Sea Level Datum of 1929” or “mean sea level.”

Although the datum was derived from the mean sea level at 26 tide stations, it does not necessarily represent local mean sea level at any particular place. *See NOAA Web site: <http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88>* (See “North American Vertical Datum of 1988”)

Natural substrate refers to any naturally occurring immersed or submersed solid surface, such as a rock or tree, upon which an organism lives. (See also “Substrate”)

Nekton are the consumers in the aquatic environment and consist of large, free-swimming organisms that are capable of sustained, directed mobility.

Nonfilterable refers to the portion of the total residue retained by a filter.

North American Datum of 1927 (NAD 27) is the horizontal control datum for the United States that was defined by a location and azimuth on the Clarke spheroid of 1866.

North American Datum of 1983 (NAD 83) is the horizontal control datum for the United States, Canada, Mexico, and Central America that is based on the adjustment of 250,000 points including 600 satellite Doppler stations that constrain the system to a geocentric origin. NAD 83 has been officially adopted as the legal horizontal datum for the United States by the Federal government.

North American Vertical Datum of 1988 (NAVD 88) is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the United States. This datum was established in 1991 by minimum-constraint adjustment of the Canadian, Mexican, and United States first-order terrestrial leveling networks.

Open or screened interval is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.

Organic carbon (OC) is a measure of organic matter present in aqueous solution, suspension, or bottom sediment. May be reported as dissolved organic carbon (DOC), particulate organic carbon (POC), or total organic carbon (TOC).

Organic mass or **volatile mass** of a living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. Organic mass is expressed in the same units as for ash mass and dry mass. (See also “Ash mass,” “Biomass,” and “Dry mass”)

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m²), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Organochlorine compounds are any chemicals that contain carbon and chlorine. Organochlorine compounds that are important in investigations of water, sediment, and biological quality include certain pesticides and industrial compounds.

Parameter code is a 5-digit number used in the USGS computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent or property.

Partial-record station is a site where discrete measurements of one or more hydrologic parameters are obtained over a period of time without continuous data being recorded or computed. A common example is a crest-stage gage partial-record station at which only peak stages and flows are recorded.

Particle size is the diameter, in millimeters (mm), of a particle determined by sieve or sedimentation methods. The sedimentation method uses the principle of Stokes Law to calculate sediment particle sizes. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube, sedigraph) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification, as used in this report, agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay	>0.00024 - 0.004	Sedimentation
Silt	>0.004 - 0.062	Sedimentation
Sand	>0.062 - 2.0	Sedimentation/sieve
Gravel	>2.0 - 64.0	Sieve
Cobble	>64 - 256	Manual measurement
Boulder	>256	Manual measurement

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. For the sedimentation method, most of the organic matter is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Peak flow (peak stage) is an instantaneous local maximum value in the continuous time series of streamflows or stages, preceded by a period of increasing values and followed by a period of decreasing values. Several peak values ordinarily occur in a year. The maximum peak value in a year is called the annual peak; peaks lower than the annual peak are called secondary peaks. Occasionally, the annual peak may not be the maximum value for the year; in such cases, the maximum value occurs at midnight at the beginning or end of the year, on the recession from or rise toward a higher peak in the adjoining year. If values are recorded at a discrete series of times, the peak recorded value may be taken as an approximation of the true peak, which may occur between the recording instants. If the values are recorded with finite precision, a sequence of equal recorded values may occur at the peak; in this case, the first value is taken as the peak.

Percent composition or percent of total is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, weight, mass, or volume.

Percent shading is a measure of the amount of sunlight potentially reaching the stream. A clinometer is used to measure left and right bank canopy angles. These values are added together, divided by 180, and multiplied by 100 to compute percentage of shade.

Periodic-record station is a site where stage, discharge, sediment, chemical, physical, or other hydrologic measurements are made one or more times during a year but at a frequency insufficient to develop a daily record.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. Although primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7.0 standard units are termed “acidic,” and solutions with a pH greater than 7.0 are termed “basic.” Solutions with a pH of 7.0 are neutral. The presence and concentration of many dissolved chemical constituents found in water are affected, in part, by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms also are affected, in part, by the hydrogen-ion activity of water.

Phytoplankton is the plant part of the plankton. They usually are microscopic, and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment and commonly are known as algae. (See also “Plankton”)

Picocurie (PC, pCi) is one-trillionth (1×10^{-12}) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields 3.7×10^{10} radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Polychlorinated naphthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

Pool, as used in this report, is a small part of a stream reach with little velocity, commonly with water deeper than surrounding areas.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photo-synthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated (carbon method) by the plants.

Primary productivity (carbon method) is expressed as milligrams of carbon per area per unit time [$\text{mg C}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg C}/(\text{m}^3/\text{time})$] for phytoplankton. The carbon method defines the amount of carbon dioxide consumed as measured by radioactive carbon (carbon-14). The carbon-14 method is of greater sensitivity than the oxygen light- and dark-bottle method and is preferred for use with unenriched water samples. Unit time may be either the hour or day, depending on the incubation period. (See also “Primary productivity”)

Primary productivity (oxygen method) is expressed as milligrams of oxygen per area per unit time [$\text{mg O}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg O}/(\text{m}^3/\text{time})$] for phytoplankton. The oxygen method defines production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light- and dark-bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period. (See also “Primary productivity”)

Radioisotopes are isotopic forms of elements that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, and the natural mixture has an atomic weight of about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been pro-

duced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

Reach, as used in this report, is a length of stream that is chosen to represent a uniform set of physical, chemical, and biological conditions within a segment. It is the principal sampling unit for collecting physical, chemical, and biological data.

Recoverable is the amount of a given constituent that is in solution after a representative water sample has been extracted or digested. Complete recovery is not achieved by the extraction or digestion and thus the determination represents something less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent extraction or digestion procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results. (See also "Bed material")

Recurrence interval, also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or nonexceedance of a specified low flow). The terms "return period" and "recurrence interval" do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most of the times being less than the average and a few being substantially greater than the average. For example, the 100-year flood is the flow rate that is exceeded by the annual maximum peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance, and about one-eighth occur more than 200 years after the previous exceedance. Similarly, the 7-day, 10-year low flow ($7Q_{10}$) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the nonexceedances of the $7Q_{10}$ occur less than 10 years after the previous nonexceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous nonexceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the $7Q_{10}$.

Replicate samples are a group of samples collected in a manner such that the samples are thought to be essentially identical in composition.

Return period (See "Recurrence interval")

Riffle, as used in this report, is a shallow part of the stream where water flows swiftly over completely or partially submerged obstructions to produce surface agitation.

River mileage is the curvilinear distance, in miles, measured upstream from the mouth along the meandering path of a stream channel in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council and typically is used to denote location along a river.

Run, as used in this report, is a relatively shallow part of a stream with moderate velocity and little or no surface turbulence.

Runoff is the quantity of water that is discharged ("runs off") from a drainage basin during a given time period. Runoff data may be presented as volumes in acre-feet, as mean discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches. (See also "Annual runoff")

Salinity is the total quantity of dissolved salts, measured by weight in parts per thousand. Values in this report are calculated from specific conductance and temperature. Seawater has an average salinity of about 35 parts per thousand (for additional information, refer to: Miller, R.L., Bradford, W.L., and Peters, N.E., 1988, Specific conductance: theoretical considerations and application to analytical quality control: U.S. Geological Survey Water-Supply Paper 2311, 16 p.)

Sea level, as used in this report, refers to one of the two commonly used national vertical datums (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums.

Sediment is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as “fluvial sediment.” Sediment includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are affected by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

Sensible heat flux (often used interchangeably with latent sensible heat-flux density) is the amount of heat energy that moves by turbulent transport through the air across a specified cross-sectional area per unit time and goes to heating (cooling) the air. Usually expressed in watts per square meter.

Seven-day, 10-year low flow ($7Q_{10}$) is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-term average. The recurrence interval of the $7Q_{10}$ is 10 years; the chance that the annual 7-day minimum flow will be less than the $7Q_{10}$ is 10 percent in any given year. (See also “Annual 7-day minimum” and “Recurrence interval”)

Shelves, as used in this report, are streambank features extending nearly horizontally from the flood plain to the lower limit of persistent woody vegetation.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

Soil heat flux (often used interchangeably with soil heat-flux density) is the amount of heat energy that moves by conduction across a specified cross-sectional area of soil per unit time and goes to heating (or cooling) the soil. Usually expressed in watts per square meter.

Soil-water content is the water lost from the soil upon drying to constant mass at 105 °C; expressed either as mass of water per unit mass of dry soil or as the volume of water per unit bulk volume of soil.

Specific electrical conductance (conductivity) is a measure of the capacity of water (or other media) to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C. Specific electrical conductance is a function of the types and quantity of dissolved substances in water and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stable isotope ratio (per MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific water, to evaluate mixing of different water, as an aid in determining reaction rates, and other chemical or hydrologic processes.

Stage (See “Gage height”)

Stage-discharge relation is the relation between the water-surface elevation, termed stage (gage height), and the volume of water flowing in a channel per unit time.

Streamflow is the discharge that occurs in a natural channel. Although the term “discharge” can be applied to the flow of a canal, the word “streamflow” uniquely describes the discharge in a surface stream course. The term “streamflow” is more general than “runoff” as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Substrate embeddedness class is a visual estimate of riffle streambed substrate larger than gravel that is surrounded or covered by fine sediment (<2 mm, sand or finer). Below are the class categories expressed as the percentage covered by fine sediment:

0	no gravel or larger substrate	3	26-50 percent
1	> 75 percent	4	5-25 percent
2	51-75 percent	5	< 5 percent

Surface area of a lake is that area (acres) encompassed by the boundary of the lake as shown on USGS topographic maps, or other available maps or photographs. Because surface area changes with lake stage, surface areas listed in this report represent those determined for the stage at the time the maps or photographs were obtained.

Surficial bed material is the upper surface (0.1 to 0.2 foot) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Surrogate is an analyte that behaves similarly to a target analyte, but that is highly unlikely to occur in a sample. A surrogate is added to a sample in known amounts before extraction and is measured with the same laboratory procedures used to measure the target analyte. Its purpose is to monitor method performance for an individual sample.

Suspended is the amount (concentration) of undissolved material in a water-sediment mixture. Most commonly refers to that material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer filter has been extracted or digested. Complete recovery is not achieved by the extraction or digestion procedures and thus the determination represents less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent extraction or digestion procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results. (See also "Suspended")

Suspended sediment is sediment carried in suspension by the turbulent components of the fluid or by the Brownian movement (a law of physics). (See also "Sediment")

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 foot above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also "Sediment" and "Suspended sediment")

Suspended-sediment discharge (tons/d) is the rate of sediment transport, as measured by dry mass or volume, that passes a cross section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft³/s) x 0.0027. (See also "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

Suspended-sediment load is a general term that refers to a given characteristic of the material in suspension that passes a point during a specified period of time. The term needs to be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It is not synonymous with either suspended-sediment discharge or concentration. (See also "Sediment")

Suspended solids, total residue at 105 °C concentration is the concentration of inorganic and organic material retained on a filter, expressed as milligrams of dry material per liter of water (mg/L). An aliquot of the sample is used for this analysis.

Suspended, total is the total amount of a given constituent in the part of a water-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at

least 95 percent of the constituent determined. Knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as “suspended, total.” Determinations of “suspended, total” constituents are made either by directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, on the basis of determinations of (1) dissolved and (2) total concentrations of the constituent. (See also “Suspended”)

Synoptic studies are short-term investigations of specific water-quality conditions during selected seasonal or hydrologic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

Taxa (Species) richness is the number of species (taxa) present in a defined area or sampling unit.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata*, is the following:

Kingdom:	Animal
Phylum:	Arthropoda
Class:	Insecta
Order:	Ephemeroptera
Family:	Ephemeridae
Genus:	<i>Hexagenia</i>
Species:	<i>Hexagenia limbata</i>

Thalweg is the line formed by connecting points of minimum streambed elevation (deepest part of the channel).

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term “temperature recorder” is used in the table descriptions and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water resulting from the mixing of flow proportionally to the duration of the concentration.

Tons per acre-foot (T/acre-ft) is the dry mass (tons) of a constituent per unit volume (acre-foot) of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY, tons/d) is a common chemical or sediment discharge unit. It is the quantity of a substance in solution, in suspension, or as bedload that passes a stream section during a 24-hour period. It is equivalent to 2,000 pounds per day, or 0.9072 metric ton per day.

Total is the amount of a given constituent in a representative whole-water (unfiltered) sample, regardless of the constituent’s physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as “total.” (Note that the word “total” does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined at least 95 percent of the constituent in the sample.)

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution.

This group includes coliforms that inhabit the intestine of warmblooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria that ferment lactose with gas formation within 48 hours at 35 °C. In the laboratory, these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35 °C plus or minus 1.0 °C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 milliliters of sample. (See also “Bacteria”)

Total discharge is the quantity of a given constituent, measured as dry mass or volume, that passes a stream cross section per unit of time. When referring to constituents other than water, this term needs to be qualified, such as “total sediment discharge,” “total chloride discharge,” and so on.

Total in bottom material is the amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as “total in bottom material.”

Total length (fish) is the straight-line distance from the anterior point of a fish specimen’s snout, with the mouth closed, to the posterior end of the caudal (tail) fin, with the lobes of the caudal fin squeezed together.

Total load refers to all of a constituent in transport. When referring to sediment, it includes suspended load plus bed load.

Total organism count is the number of organisms collected and enumerated in any particular sample. (See also “Organism count/volume”)

Total recoverable is the amount of a given constituent in a whole-water sample after a sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the “total” amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

Total sediment discharge is the mass of suspended-sediment plus bed-load transport, measured as dry weight, that passes a cross section in a given time. It is a rate and is reported as tons per day. (See also “Bedload,” “Bedload discharge,” “Sediment,” “Suspended sediment,” and “Suspended-sediment concentration”)

Total sediment load or **total load** is the sediment in transport as bedload and suspended-sediment load. The term may be qualified, such as “annual suspended-sediment load” or “sand-size suspended-sediment load,” and so on. It differs from total sediment discharge in that load refers to the material, whereas discharge refers to the quantity of material, expressed in units of mass per unit time. (See also “Sediment,” “Suspended-sediment load,” and “Total load”)

Transect, as used in this report, is a line across a stream perpendicular to the flow and along which measurements are taken, so that morphological and flow characteristics along the line are described from bank to bank. Unlike a cross section, no attempt is made to determine known elevation points along the line.

Turbidity is an expression of the optical properties of a liquid that causes light rays to be scattered and absorbed rather than transmitted in straight lines through water. Turbidity, which can make water appear cloudy or muddy, is caused by the presence of suspended and dissolved matter, such as clay, silt, finely divided organic matter, plankton and other microscopic organisms, organic acids, and dyes (ASTM International, 2003, D1889–00 Standard test method for turbidity of water, *in* ASTM International, Annual Book of ASTM Standards, Water and Environmental Technology, v. 11.01: West Conshohocken, Pennsylvania, 6 p.). The color of water, whether resulting from dis-

solved compounds or suspended particles, can affect a turbidity measurement. To ensure that USGS turbidity data can be understood and interpreted properly within the context of the instrument used and site conditions encountered, data from each instrument type are stored and reported in the National Water Information System (NWIS) using parameter codes and measurement reporting units that are specific to the instrument type, with specific instruments designated by the method code. The respective measurement units, many of which also are in use internationally, fall into two categories: (1) the designations NTU, NTRU, BU, AU, and NTMU signify the use of a broad spectrum incident light in the wavelength range of 400-680 nanometers (nm), but having different light detection configurations; (2) The designations FNU, FNRU, FBU, FAU, and FNMU generally signify an incident light in the range between 780-900 nm, also with varying light detection configurations. These reporting units are equivalent when measuring a calibration solution (for example, formazin or polymer beads), but their respective instruments may not produce equivalent results for environmental samples. Specific reporting units are as follows:

NTU (Nephelometric Turbidity Units): white or broadband [400-680 nm] light source, 90 degree detection angle, one detector.

NTRU (Nephelometric Turbidity Ratio Units): white or broadband [400-680 nm] light source, 90 degree detection angle, multiple detectors with ratio compensation.

BU (Backscatter Units): white or broadband [400-680 nm] light source, 30 ± 15 degree detection angle (backscatter).

AU (Attenuation Units): white or broadband [400-680 nm] light source, 180 degree detection angle (attenuation).

NTMU (Nephelometric Turbidity Multibeam Units): white or broadband [400-680 nm] light source, multiple light sources, detectors at 90 degrees and possibly other angles to each beam.

FNU (Formazin Nephelometric Units): near infrared [780-900 nm] or monochrome light source, 90 degree detection angle, one detector.

FNRU (Formazin Nephelometric Ratio Units): near infrared [780-900 nm] or monochrome light source, 90 degree detection angle, multiple detectors, ratio compensation.

FBU (Formazin Backscatter Units): near infrared [780-900 nm] or monochrome light source, 30 ± 15 degree detection angle.

FAU (Formazin Attenuation Units): near infrared [780-900 nm] light source, 180 degree detection angle.

FNMU (Formazin Nephelometric Multibeam Units): near infrared [780-900 nm] or monochrome light source, multiple light sources, detectors at 90 degrees and possibly other angles to each beam.

For more information please see http://water.usgs.gov/owq/FieldManual/Chapter6/6.7_contents.html.

Ultraviolet (UV) absorbance (absorption) at 254 or 280 nanometers is a measure of the aggregate concentration of the mixture of UV absorbing organic materials dissolved in the analyzed water, such as lignin, tannin, humic substances, and various aromatic compounds. UV absorbance (absorption) at 254 or 280 nanometers is measured in UV absorption units per centimeter of path length of UV light through a sample.

Unconfined aquifer is an aquifer whose upper surface is a water table free to fluctuate under atmospheric pressure. (See "Water-table aquifer")

Unfiltered pertains to the constituents in an unfiltered, representative water-suspended sediment sample.

Unfiltered, recoverable is the amount of a given constituent in a representative water-suspended sediment sample that has been extracted or digested. Complete recovery is not achieved by the extraction or digestion treatment and thus the determination represents less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent extraction or digestion procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results.

Vertical datum (See "Datum")

Volatile organic compounds (VOCs) are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and, subsequently, analyzed by gas chromatography. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They often are components of fuels, solvents, hydraulic fluids, paint thinners, and dry-cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human-health concern because many are toxic and are known or suspected human carcinogens.

Water table is that surface in a ground-water body at which the water pressure is equal to the atmospheric pressure.

Water-table aquifer is an unconfined aquifer within which the water table is found.

Water year in USGS reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 2002, is called the “2002 water year.”

Watershed (See “Drainage basin”)

WDR is used as an abbreviation for “Water-Data Report” in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports. (WRD was used as an abbreviation for “Water-Resources Data” in reports published prior to 1976.)

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

Wet mass is the mass of living matter plus contained water. (See also “Biomass” and “Dry mass”)

Wet weight refers to the weight of animal tissue or other substance including its contained water. (See also “Dry weight”)

WSP is used as an acronym for “Water-Supply Paper” in reference to previously published reports.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and often are large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers. (See also “Plankton”)

06036905 FIREHOLE RIVER NEAR WEST YELLOWSTONE, MT

LOCATION.--Lat 44°37'13", long 110°51'44"(NAD 27), Hydrologic Unit 10020007, Yellowstone National Park, on right bank 1.6 mi south of Madison Junction, 12 mi east of West Yellowstone, and at river mile 1.8.

DRAINAGE AREA.--282 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1983 to March 1996, October 2002 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,050 ft above NGVD of 1929. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good. No regulation or diversions upstream from station. Station operated and record provided by the Montana Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	250	258	252	261	247	246	251	288	533	290	263	247
2	248	262	250	258	243	244	255	297	562	283	261	245
3	247	268	251	260	244	244	271	308	443	275	259	243
4	247	266	251	257	246	245	281	332	409	271	252	243
5	248	263	250	257	250	242	262	365	402	268	251	242
6	247	262	249	256	249	244	258	386	528	267	248	242
7	247	260	256	260	250	244	290	411	462	263	245	242
8	247	260	257	272	245	245	310	406	401	259	246	242
9	246	263	254	268	245	251	281	412	385	259	248	245
10	256	265	254	265	243	256	266	466	372	270	252	256
11	255	266	266	263	243	255	262	448	355	271	259	251
12	249	260	262	253	248	257	273	393	427	261	258	257
13	248	258	254	240	246	249	308	368	421	255	250	255
14	248	255	256	248	259	245	322	406	367	248	250	252
15	250	256	258	256	249	246	283	466	362	248	248	250
16	252	254	254	263	244	246	287	604	372	243	247	250
17	249	258	252	261	248	247	316	621	364	243	255	263
18	267	254	251	260	247	246	346	495	348	244	285	266
19	266	260	252	263	250	252	304	778	333	242	368	254
20	287	255	250	267	253	252	297	810	322	241	269	251
21	288	245	246	263	253	249	292	782	320	242	258	252
22	270	249	244	257	250	251	285	653	329	242	255	253
23	278	252	237	254	248	258	320	638	372	247	255	258
24	280	252	249	251	247	260	346	585	372	254	250	287
25	269	256	251	250	247	253	374	512	321	266	248	271
26	272	254	249	250	246	248	366	459	304	255	248	259
27	278	255	248	250	244	250	367	441	325	247	245	258
28	283	253	251	251	244	263	319	435	321	245	244	256
29	275	239	254	250	---	270	302	433	319	247	243	256
30	274	252	259	248	---	264	295	419	304	251	243	254
31	272	---	268	245	---	250	---	407	---	273	248	---
TOTAL	8,093	7,710	7,835	7,957	6,928	7,772	8,989	14,824	11,455	7,970	7,951	7,600
MEAN	261	257	253	257	247	251	300	478	382	257	256	253
MAX	288	268	268	272	259	270	374	810	562	290	368	287
MIN	246	239	237	240	243	242	251	288	304	241	243	242
AC-FT	16,050	15,290	15,540	15,780	13,740	15,420	17,830	29,400	22,720	15,810	15,770	15,070

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2005, BY WATER YEAR (WY)*

MEAN	276	273	266	262	260	269	327	482	422	291	270	270
MAX	356	348	316	298	304	336	298	613	756	415	371	368
(WY)	(1984)	(1984)	(1984)	(1985)	(1986)	(1986)	(1986)	(1986)	(1986)	(1986)	(1986)	(1986)
MIN	225	227	220	223	226	239	276	367	273	221	212	217
(WY)	(1989)	(1993)	(1993)	(1993)	(1993)	(1992)	(1993)	(1987)	(1992)	(1988)	(1994)	(1988)

MADISON RIVER BASIN

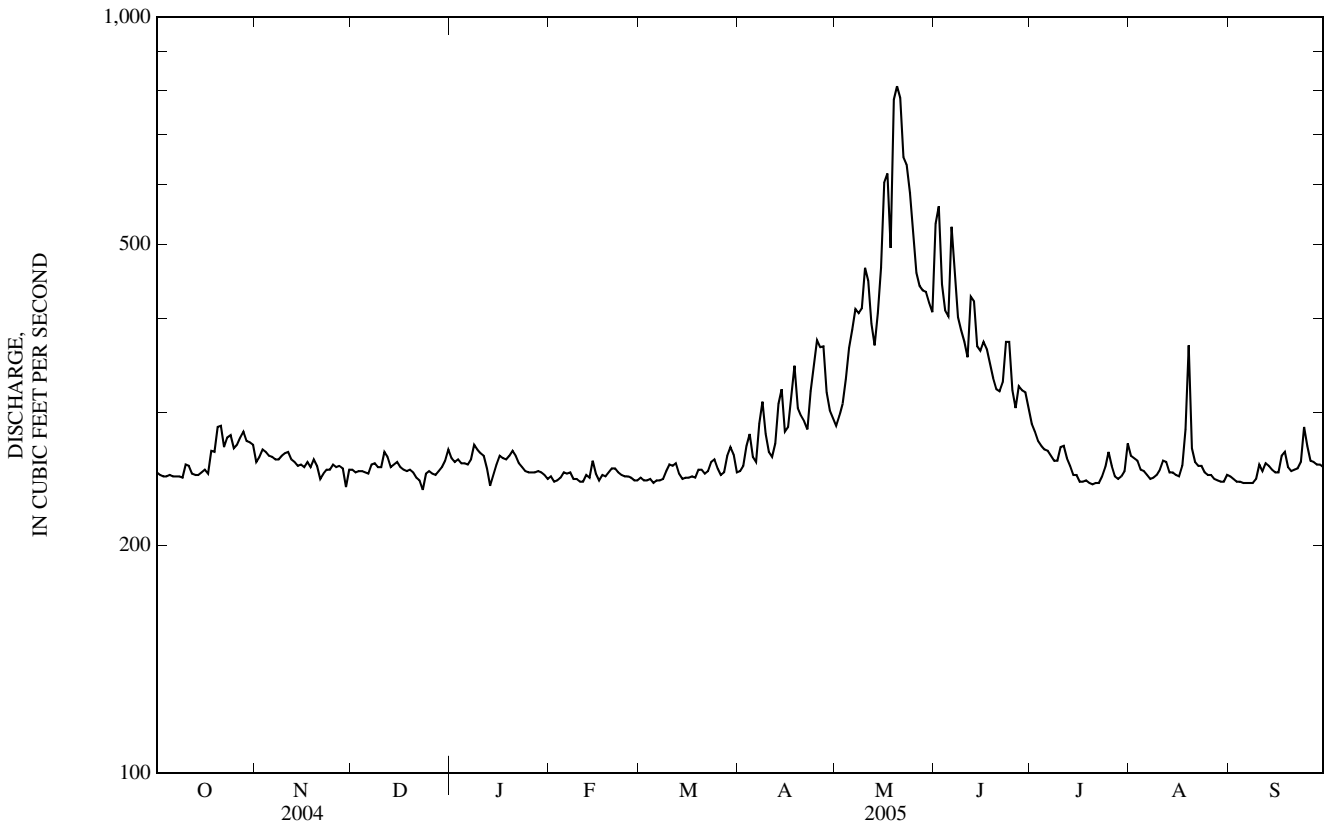
06036905 FIREHOLE RIVER NEAR WEST YELLOWSTONE, MT—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1984 - 2005*	
ANNUAL TOTAL	103,705		105,084		--	
ANNUAL MEAN	283		288		305	
HIGHEST ANNUAL MEAN	--		--		399 1986	
LOWEST ANNUAL MEAN	--		--		264 1988	
HIGHEST DAILY MEAN	579	May 29	810	May 20	1,240	May 31, 1986
LOWEST DAILY MEAN	226	Mar 6	237	Dec 23	201	Dec 4, 1992
ANNUAL SEVEN-DAY MINIMUM	235	Mar 1	242	Jul 16	205	Aug 15, 1994
MAXIMUM PEAK FLOW	--		1,070	May 20	2,050 ^a	May 18, 1996
MAXIMUM PEAK STAGE	--		4.75	May 20	6.10 ^b	May 18, 1996
ANNUAL RUNOFF (AC-FT)	205,700		208,400		221,000	
10 PERCENT EXCEEDS	371		378		416	
50 PERCENT EXCEEDS	258		256		271	
90 PERCENT EXCEEDS	240		245		234	

* For period of operation.

a From rating curve extended above 1,540 ft³/s.

b From floodmarks.



06036905 FIREHOLE RIVER NEAR WEST YELLOWSTONE, MT—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1983 to 1993, October 2002 to September 2003.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: August 1983 to September 1986, October 1987 to September 1988.

WATER TEMPERATURE: October 1983 to September 1993, October 2002 to current year.

INSTRUMENTATION.--Temperature recorder installed Sept. 18, 2002.

REMARKS.--Daily water temperature records excellent except those for May 30 to June 15, which are good. Several unpublished observations of specific conductance and water temperature were made during the year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 633 microsiemens per centimeter ($\mu\text{S}/\text{cm}$) at 25.0°C, Apr. 1, 1988; minimum daily, 140 $\mu\text{S}/\text{cm}$ at 25.0°C, June 5, 1986.

WATER TEMPERATURE: Maximum daily, 30.0°C, June 24, 1988; minimum daily, 0.5°C Dec. 21, 1990.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 29.0°C, July 12, 14, and 21; minimum, 3.0°C, Dec. 23 and Jan. 13.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	19.0	15.0	17.0	11.0	8.0	9.5	8.5	7.0	7.5	10.0	7.5	8.5
2	20.0	14.5	17.5	13.0	9.0	11.0	9.5	8.0	8.5	10.5	7.5	9.0
3	20.0	14.5	17.5	13.0	11.0	12.0	10.0	7.5	8.5	11.0	9.5	10.0
4	19.0	14.5	17.0	15.0	10.5	12.5	11.0	8.0	9.5	10.5	7.0	9.0
5	20.0	14.5	17.0	14.0	10.5	12.5	9.0	7.0	8.0	9.5	6.5	8.0
6	19.5	14.5	17.0	14.0	10.0	12.0	8.5	7.0	8.0	8.0	6.5	7.0
7	18.0	15.0	16.5	14.5	10.0	12.0	8.0	7.0	7.5	8.5	6.5	7.5
8	18.5	13.5	16.0	14.5	10.0	12.5	8.5	7.5	7.5	8.5	5.5	7.0
9	18.0	14.0	16.0	16.5	13.0	14.5	10.0	7.5	9.0	9.0	7.5	8.0
10	16.5	14.5	15.5	15.0	13.0	14.0	11.5	9.5	10.5	11.5	9.0	10.0
11	18.0	14.0	15.5	15.0	12.5	13.5	11.5	10.0	11.0	11.0	9.5	10.0
12	17.0	14.5	15.5	14.0	11.0	12.5	12.5	9.5	11.5	9.5	4.0	7.0
13	17.5	12.5	15.0	13.5	10.5	12.0	11.0	8.5	9.5	5.5	3.0	4.0
14	17.5	13.0	15.5	12.5	10.5	11.5	12.0	10.5	11.0	5.5	4.0	4.5
15	16.5	14.5	15.5	13.0	10.5	11.5	12.0	10.5	11.0	8.0	4.0	5.5
16	16.0	13.5	14.5	13.0	9.5	11.5	11.5	10.0	10.5	9.5	6.0	8.0
17	15.5	12.5	14.0	14.5	12.0	13.5	11.0	9.0	10.0	12.0	9.0	10.5
18	14.5	10.0	12.5	12.5	10.5	12.0	12.0	10.5	11.0	11.5	10.5	11.0
19	14.5	10.0	12.0	11.5	9.5	10.5	11.0	9.5	10.5	13.0	11.0	12.0
20	14.0	12.5	13.0	10.5	8.5	10.0	10.5	6.0	7.5	14.5	10.5	12.5
21	13.5	13.0	13.5	10.0	7.5	8.5	8.5	6.5	7.5	13.5	11.0	12.5
22	14.0	11.5	13.0	10.5	7.5	9.0	8.0	5.5	6.5	13.0	10.0	11.5
23	12.5	10.5	11.5	11.5	10.0	10.5	6.5	3.0	5.0	13.0	9.5	11.5
24	12.5	9.5	11.0	10.0	9.0	9.5	8.5	6.0	7.0	12.0	8.5	10.5
25	13.0	9.0	11.0	10.5	9.0	10.0	10.5	8.0	9.0	11.5	8.0	10.0
26	13.5	10.5	12.0	10.5	8.0	9.5	11.0	8.0	9.5	12.5	9.0	10.5
27	15.5	12.5	13.5	10.0	8.0	8.5	12.0	10.0	11.0	12.5	10.0	11.0
28	14.0	12.5	13.5	8.5	5.5	7.0	13.0	11.5	12.5	13.5	12.0	12.5
29	13.0	11.5	12.0	7.0	4.0	5.5	13.0	11.0	12.0	13.5	11.0	12.0
30	11.5	10.5	11.0	8.0	5.5	7.0	11.0	6.0	8.0	12.5	10.0	11.5
31	12.0	9.5	11.0	---	---	---	9.0	7.0	8.0	11.0	7.5	9.5
MONTH	20.0	9.0	14.5	16.5	4.0	11.0	13.0	3.0	9.0	14.5	3.0	9.5

MADISON RIVER BASIN

06036905 FIREHOLE RIVER NEAR WEST YELLOWSTONE, MT—Continued

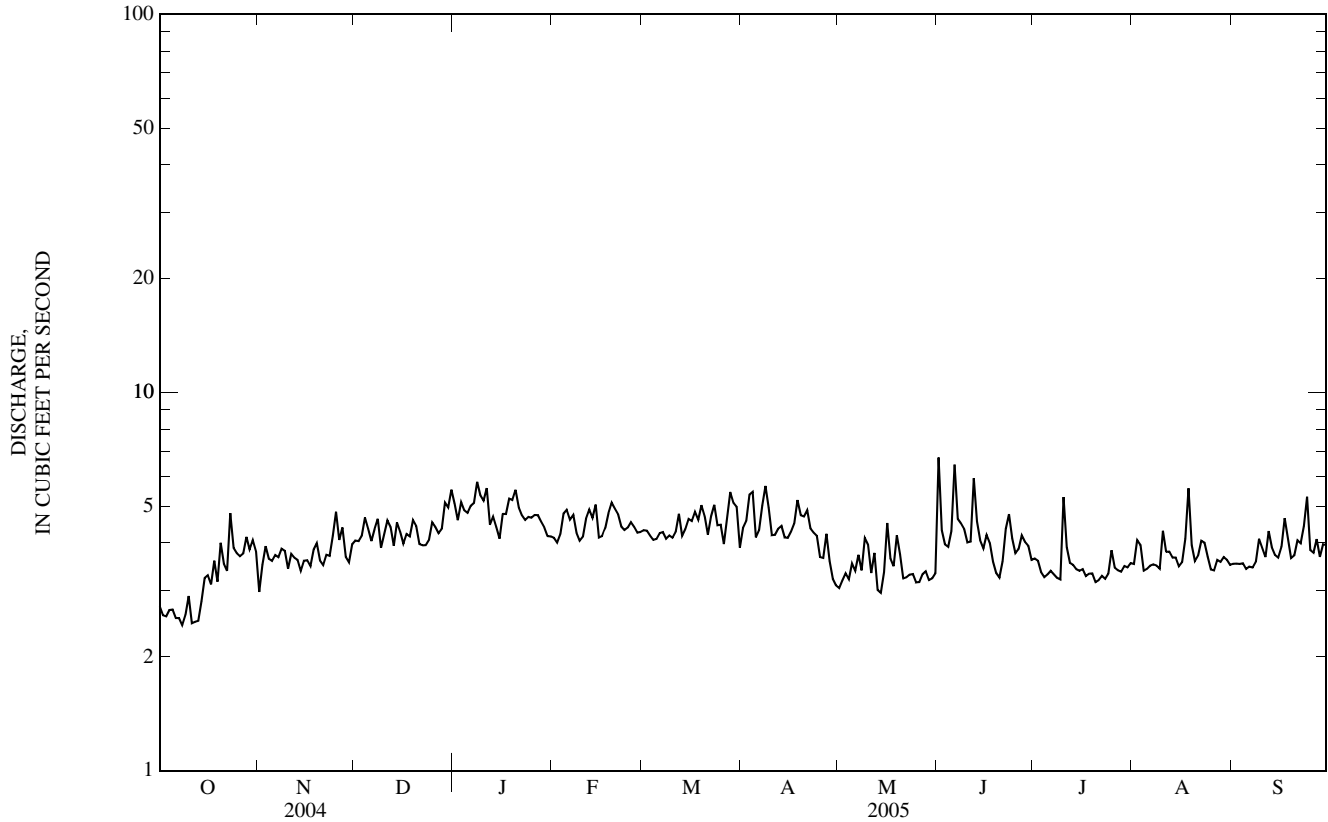
TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	12.5	9.5	11.0	15.5	11.5	12.5	16.0	9.5	12.5	19.5	11.0	15.0
2	11.5	7.5	9.5	15.0	9.0	12.0	17.5	11.0	14.0	18.5	12.5	15.5
3	12.5	8.0	10.0	15.0	9.5	12.0	15.0	12.0	14.0	19.5	13.5	16.0
4	12.0	8.5	10.5	15.5	10.0	12.5	14.5	12.5	13.5	21.0	14.0	17.0
5	11.0	8.0	9.5	15.5	9.5	12.5	15.5	12.0	13.5	18.0	15.0	16.5
6	11.0	7.5	9.0	15.5	10.0	12.5	20.0	11.0	15.0	18.5	13.5	16.0
7	12.5	9.0	10.5	13.5	10.0	12.0	19.5	13.0	16.0	17.0	12.5	14.5
8	10.5	8.0	9.0	16.5	10.5	13.0	15.5	13.0	14.0	16.5	13.5	15.0
9	11.0	8.0	9.0	17.0	12.0	14.5	16.0	11.5	13.5	15.5	13.5	14.5
10	11.5	7.0	9.5	17.0	12.0	14.5	16.5	11.5	14.0	14.5	12.0	13.5
11	11.5	6.5	9.0	16.0	10.5	13.5	17.5	10.5	14.0	14.0	10.5	12.5
12	12.5	10.5	11.0	13.5	9.5	12.0	18.0	12.5	15.0	15.5	11.5	13.5
13	11.0	7.5	9.0	12.5	8.0	10.0	18.5	12.0	15.0	19.0	12.5	15.5
14	10.5	7.5	8.5	11.5	7.5	9.5	14.0	8.0	11.0	20.0	13.0	17.0
15	9.5	5.0	7.0	12.5	8.5	10.5	18.0	9.0	13.0	18.0	12.0	15.0
16	9.0	4.0	7.0	13.0	10.0	11.5	19.5	11.0	15.0	15.5	12.0	13.0
17	10.0	4.5	7.5	12.5	7.0	9.5	19.0	12.0	15.5	13.5	9.5	11.5
18	11.0	6.0	8.5	12.0	8.0	10.0	15.5	12.0	13.5	14.5	10.5	12.5
19	12.5	10.0	11.0	15.0	10.0	12.5	15.0	11.5	13.0	15.0	10.5	13.5
20	13.5	11.0	12.0	15.0	12.5	13.5	17.0	10.5	13.5	16.5	10.0	13.0
21	12.5	9.5	11.0	14.5	11.0	12.5	15.5	12.5	14.0	16.0	11.5	13.5
22	13.5	9.5	11.5	15.0	11.5	13.0	21.0	12.5	16.5	17.0	11.5	14.5
23	13.0	8.0	10.5	14.0	10.5	13.0	19.5	13.0	16.0	17.5	13.0	15.5
24	13.5	7.5	10.5	13.5	7.5	10.5	19.5	13.0	16.0	16.0	12.0	14.0
25	14.0	8.0	11.0	15.5	9.5	12.0	19.0	11.5	15.0	16.5	11.5	14.0
26	13.5	8.0	11.0	14.5	10.0	12.0	18.0	11.5	15.0	19.0	12.0	15.5
27	13.5	8.0	11.0	12.5	10.5	11.5	16.0	11.5	13.5	20.0	13.0	16.5
28	14.0	8.5	11.0	15.0	11.0	13.0	17.5	9.5	13.0	19.0	14.5	17.0
29	---	---	---	13.5	9.5	11.0	16.5	10.0	13.0	19.0	15.5	17.0
30	---	---	---	14.5	9.5	11.5	17.0	11.5	14.0	18.0	14.0	16.0
31	---	---	---	16.0	8.5	12.0	---	---	---	17.0	13.0	15.0
MONTH	14.0	4.0	10.0	17.0	7.0	12.0	21.0	8.0	14.0	21.0	9.5	15.0
	JUNE			JULY			AUGUST			SEPTEMBER		
1	16.5	11.5	14.0	25.5	18.5	22.0	25.0	19.5	22.0	23.5	16.0	19.5
2	15.0	10.0	12.0	24.0	19.0	21.0	26.5	21.5	23.5	23.0	16.0	19.5
3	15.5	13.0	14.5	24.5	17.5	20.5	26.0	20.5	23.0	22.5	17.5	20.0
4	18.5	14.5	16.0	25.5	18.0	22.0	27.0	19.5	23.5	23.0	17.5	20.0
5	19.5	15.0	17.5	26.5	19.0	23.0	26.5	19.5	23.5	22.5	17.0	19.5
6	18.5	13.0	15.0	26.5	19.5	23.0	26.5	20.0	23.5	23.0	16.5	19.5
7	14.0	11.5	12.5	27.0	20.0	23.5	26.5	20.5	23.5	23.0	16.0	19.5
8	15.5	11.0	13.0	27.5	20.5	24.0	26.0	20.5	23.0	23.0	17.0	20.0
9	16.0	13.5	14.5	26.5	20.5	23.5	25.5	20.0	23.0	20.5	18.0	19.5
10	17.0	13.5	15.5	23.5	21.0	22.0	25.5	20.5	22.5	19.0	16.0	17.0
11	18.5	14.5	16.5	27.5	19.5	23.0	23.5	19.5	21.5	17.0	14.5	15.5
12	18.5	14.5	16.0	29.0	20.0	24.5	23.0	18.5	20.5	17.0	15.0	16.0
13	19.0	13.0	15.5	28.5	21.5	25.0	24.0	17.5	20.5	17.5	14.0	15.5
14	21.0	14.5	17.5	29.0	21.5	25.0	24.0	17.5	20.5	20.0	13.5	16.5
15	23.0	17.5	20.0	28.5	21.5	25.0	25.5	17.5	21.5	20.5	14.5	17.5
16	21.5	17.0	19.5	25.0	21.5	23.0	22.0	18.0	20.0	20.5	14.5	17.5
17	23.0	17.0	19.5	26.5	19.0	22.5	22.0	19.0	20.5	17.0	15.5	16.5
18	20.5	17.5	19.0	26.5	19.0	23.0	20.5	18.5	19.5	17.5	14.5	16.0
19	23.0	16.0	19.5	26.5	19.5	23.0	22.5	16.0	19.0	19.5	13.5	16.5
20	24.0	18.0	21.0	27.5	20.0	23.5	25.5	17.5	21.5	20.0	14.5	17.0
21	24.0	19.0	21.5	29.0	20.5	24.5	27.0	18.5	23.0	19.0	17.0	18.0
22	25.0	18.5	21.5	26.5	23.5	25.0	26.0	19.5	23.0	19.5	15.5	17.5
23	25.0	18.5	21.5	28.0	21.0	24.0	25.0	20.0	22.0	19.0	17.0	17.5
24	25.0	18.0	21.5	27.5	20.5	24.0	23.0	19.0	20.5	17.5	16.0	16.5
25	24.5	18.5	21.5	25.0	20.5	22.5	23.5	16.5	20.0	17.0	14.5	15.5
26	22.0	19.0	20.5	26.5	18.5	22.0	23.5	16.5	20.0	19.5	13.0	16.0
27	22.5	17.0	19.5	26.5	19.0	23.0	24.5	17.0	20.5	17.5	15.5	16.5
28	20.0	17.5	19.0	24.5	19.5	22.5	25.0	18.0	21.5	20.0	14.5	17.0
29	22.0	17.5	19.5	24.0	20.0	21.5	24.5	17.5	21.0	20.0	14.0	17.0
30	24.5	18.5	21.0	26.0	20.0	23.0	21.0	17.5	19.0	17.5	15.0	16.0
31	---	---	---	24.0	20.0	22.0	22.5	14.5	18.5	---	---	---
MONTH	25.0	10.0	18.0	29.0	17.5	23.0	27.0	14.5	21.5	23.5	13.0	17.5

06036940 TANTALUS CREEK AT NORRIS JUNCTION, YELLOWSTONE NATIONAL PARK—Continued

SUMMARY STATISTICS	FOR 2005 WATER YEAR	WATER YEARS 2004 - 2005
ANNUAL TOTAL	1,468.0	--
ANNUAL MEAN	4.02	4.02
HIGHEST ANNUAL MEAN	--	4.02 2005
LOWEST ANNUAL MEAN	--	4.02 2005
HIGHEST DAILY MEAN	6.7 Jun 1	9.7 Sep 14, 2004
LOWEST DAILY MEAN	2.4 Oct 8	2.4 Oct 8, 2004
ANNUAL SEVEN-DAY MINIMUM	2.6 Oct 6	2.6 Oct 6, 2004
MAXIMUM PEAK FLOW	18 Jul 10	22 Jul 3, 2004
MAXIMUM PEAK STAGE	2.39 Jul 10	2.60 ^a Jul 3, 2004
ANNUAL RUNOFF (AC-FT)	2,910	2,910
10 PERCENT EXCEEDS	4.9	4.9
50 PERCENT EXCEEDS	4.0	4.0
90 PERCENT EXCEEDS	3.2	3.2

a For period of U.S. Geological Survey record only.



06036940 TANTALUS CREEK AT NORRIS JUNCTION, YELLOWSTONE NATIONAL PARK—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June 2004 to current year.

REMARKS.--Daily water temperature records rated excellent, except those for Feb. 1-28 and May 15 to Sept. 30, which are fair, and those for Mar. 1-May 14, which are poor. Several unpublished observations of specific conductance and water temperature were made during the year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 37.5°C, July 16, 2004; minimum, 11.0°C, Jan. 13, 2005.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 37.0°C, July 21; minimum, 11.0°C, Jan. 13.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	28.0	22.5	24.0	22.5	15.0	17.5	19.5	16.5	17.5	19.5	16.5	18.5
2	29.5	22.0	24.0	23.0	16.5	19.5	18.0	15.0	17.0	22.5	15.5	19.0
3	31.0	22.0	24.5	24.0	20.5	21.5	19.5	15.5	17.5	22.0	19.5	20.5
4	30.0	22.5	24.5	27.0	19.0	22.0	23.5	18.5	20.0	20.5	16.5	18.5
5	29.5	22.5	24.5	25.5	20.0	21.5	21.5	17.0	18.5	21.5	17.0	18.5
6	29.0	22.0	24.0	25.0	19.0	21.5	19.5	14.5	17.5	18.0	15.5	17.0
7	27.0	22.0	23.5	26.5	20.0	22.0	17.5	15.5	16.5	20.5	17.0	18.5
8	28.0	21.0	23.5	28.0	20.0	23.5	18.0	15.0	17.0	19.5	13.0	17.0
9	26.5	21.5	23.5	28.5	23.0	25.0	19.5	14.0	17.5	19.5	16.0	18.5
10	25.0	21.0	23.0	25.0	22.5	23.5	21.5	18.0	19.5	22.5	17.0	20.0
11	29.0	21.5	24.0	28.0	21.5	23.5	22.0	17.5	19.0	23.0	19.0	21.0
12	25.0	21.5	23.0	27.5	21.0	23.0	23.0	17.0	20.0	19.5	14.5	17.5
13	27.0	20.0	23.0	27.0	21.0	23.0	22.5	16.5	19.5	17.5	11.0	15.5
14	25.5	21.5	23.0	25.5	19.5	21.5	23.0	19.5	21.5	19.0	12.0	16.0
15	26.5	23.0	24.5	25.0	19.0	21.5	21.5	19.5	20.5	21.0	15.0	16.5
16	25.5	20.5	24.0	25.5	20.0	22.0	21.5	19.5	20.0	20.0	16.5	18.5
17	25.5	22.0	23.0	25.0	21.0	22.5	22.5	19.5	20.5	20.5	17.5	19.0
18	23.0	18.5	20.5	26.0	18.0	21.0	22.5	19.0	20.5	21.5	18.0	19.0
19	24.0	19.5	22.0	23.5	18.5	21.0	22.0	15.0	20.0	23.0	18.5	21.0
20	24.0	22.0	23.0	20.5	17.0	19.5	19.0	14.5	17.0	26.5	22.0	23.5
21	24.0	20.5	22.0	22.5	16.5	18.5	20.0	15.5	17.5	25.0	21.0	22.5
22	23.5	17.0	20.5	23.0	18.0	19.5	19.0	13.0	16.5	26.5	20.5	22.5
23	21.0	17.5	19.5	20.0	18.5	19.0	17.5	13.5	15.5	26.5	20.5	22.5
24	21.5	17.0	19.5	20.0	16.5	18.5	18.0	14.5	17.0	27.0	20.0	22.0
25	24.5	18.5	21.0	20.5	17.5	19.0	20.5	16.5	19.0	26.0	19.5	22.0
26	25.5	19.5	22.0	20.5	16.0	18.0	23.0	18.5	20.5	26.5	20.5	22.5
27	28.5	22.0	24.0	22.0	16.5	19.0	24.5	19.5	21.5	25.5	20.5	23.0
28	25.5	20.0	22.5	18.0	14.0	16.5	22.5	20.5	21.5	24.5	22.5	23.5
29	23.5	18.5	21.0	19.5	12.5	15.5	24.0	17.5	22.0	26.5	21.0	23.0
30	21.0	15.5	19.0	18.0	15.5	16.5	20.0	14.0	17.5	23.0	19.5	21.5
31	23.5	17.0	19.5	---	---	---	21.0	15.5	19.5	24.5	18.5	20.5
MONTH	31.0	15.5	22.5	28.5	12.5	20.5	24.5	13.0	19.0	27.0	11.0	20.0

06036940 TANTALUS CREEK AT NORRIS JUNCTION, YELLOWSTONE NATIONAL PARK—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	25.0	19.0	21.0	24.0	18.5	21.0	26.0	18.5	21.0	30.0	20.5	24.0
2	24.5	18.5	20.5	27.0	19.0	22.0	25.0	18.5	21.5	31.5	21.0	25.0
3	26.0	18.0	21.5	27.0	19.0	22.0	26.0	20.0	22.5	31.0	21.5	25.0
4	25.5	20.0	21.5	27.5	19.0	22.0	25.0	21.0	22.5	29.0	22.5	25.0
5	21.5	16.0	18.5	27.0	19.0	22.0	24.5	20.5	22.0	29.5	24.0	26.5
6	22.5	18.0	20.0	25.0	18.5	21.0	31.0	21.0	25.0	30.0	24.5	26.5
7	24.5	18.5	20.5	23.5	19.0	20.5	30.0	22.5	25.0	29.5	24.0	26.0
8	21.0	17.0	19.0	25.0	18.0	21.5	26.0	22.0	24.0	28.0	24.5	25.5
9	20.0	17.5	18.5	26.0	20.5	22.5	27.0	22.5	24.0	29.0	24.5	26.0
10	23.5	17.0	19.5	27.0	20.5	23.0	27.5	22.0	24.0	28.5	22.0	25.5
11	26.0	17.0	20.5	25.5	19.5	22.0	26.5	21.0	23.0	25.5	20.0	22.0
12	23.0	19.0	21.0	23.0	15.0	20.5	27.5	22.5	24.0	30.0	20.5	23.0
13	20.0	15.0	18.0	24.0	17.0	19.5	27.5	19.5	24.0	31.0	21.0	24.5
14	21.0	15.0	17.5	22.5	17.5	19.5	22.5	15.5	18.5	34.0	23.0	26.5
15	21.5	15.0	17.0	21.0	17.0	19.0	28.5	19.5	23.0	29.0	22.5	25.0
16	22.5	14.5	17.5	22.5	15.5	18.5	29.0	21.0	24.0	29.0	24.0	26.0
17	23.5	15.0	18.5	21.5	13.5	18.5	28.0	23.0	24.5	25.5	19.0	23.0
18	24.5	16.5	19.5	23.0	17.0	19.5	27.5	23.0	25.0	24.0	19.0	22.0
19	23.5	19.0	21.0	24.5	19.5	21.5	25.5	19.5	22.5	27.0	21.5	23.5
20	22.5	17.5	20.5	24.0	18.5	21.5	27.0	19.5	22.5	30.0	22.5	25.5
21	22.5	18.0	19.5	24.0	19.0	21.0	26.0	22.5	24.0	28.5	21.0	24.0
22	26.5	19.0	21.5	23.5	20.5	22.0	31.5	22.0	26.0	30.0	20.5	25.0
23	26.5	17.0	20.5	26.0	17.0	21.5	31.0	23.0	26.0	30.5	20.0	25.0
24	27.0	17.5	21.0	23.0	16.0	19.5	29.5	22.0	25.5	27.5	21.5	24.0
25	26.5	18.0	21.0	28.5	19.0	22.0	31.5	22.5	25.5	30.5	21.0	24.5
26	27.0	18.0	21.0	24.0	16.5	20.0	28.0	23.0	25.0	33.0	21.5	25.5
27	26.0	17.5	20.5	20.5	16.5	18.5	26.5	20.5	23.5	35.0	22.0	27.5
28	26.0	18.0	20.5	23.0	13.0	19.5	29.0	17.0	22.5	34.0	24.5	28.0
29	---	---	---	21.0	15.0	19.0	28.5	19.0	22.5	32.5	22.0	26.5
30	---	---	---	23.0	18.0	20.0	28.5	20.0	23.0	32.5	22.0	25.5
31	---	---	---	25.0	16.5	19.5	---	---	---	28.5	23.0	25.5
MONTH	27.0	14.5	20.0	28.5	13.0	20.5	31.5	15.5	23.5	35.0	19.0	25.0
	JUNE			JULY			AUGUST			SEPTEMBER		
1	26.0	19.0	23.5	32.5	23.0	28.0	33.0	26.0	29.0	32.0	23.0	26.5
2	26.5	21.0	23.0	31.5	20.0	25.5	36.0	24.5	29.5	32.0	23.0	26.0
3	27.5	22.0	24.5	32.5	23.5	27.0	35.5	26.5	29.5	31.0	23.0	25.5
4	31.5	23.5	26.5	33.5	24.0	27.5	35.5	25.5	30.0	30.5	21.0	25.0
5	31.5	24.0	27.0	34.5	24.5	28.5	34.5	26.0	29.5	29.5	23.0	25.0
6	27.5	22.0	25.5	33.5	25.5	28.5	34.5	26.0	29.5	31.5	22.0	25.5
7	30.0	19.5	24.5	33.5	25.0	28.5	35.5	24.5	29.5	32.0	22.0	25.5
8	26.5	20.0	22.5	34.5	26.0	29.0	34.0	26.0	29.5	31.0	23.0	26.0
9	27.5	20.5	24.5	32.5	24.0	28.0	35.0	25.0	29.0	28.5	21.0	25.5
10	29.0	23.5	25.5	29.5	24.5	26.5	36.0	20.0	29.0	25.0	20.5	22.5
11	31.5	24.5	26.5	34.5	26.5	29.5	34.0	25.0	28.0	25.5	21.0	22.5
12	27.0	23.5	25.5	36.5	25.5	30.0	34.5	22.5	26.5	28.5	21.5	24.0
13	30.0	22.0	26.0	36.0	24.5	29.5	31.5	23.0	26.0	28.0	22.5	24.0
14	33.0	24.0	27.5	36.0	27.0	30.0	33.5	23.5	27.0	28.5	21.0	24.0
15	31.0	24.0	27.5	34.0	26.5	30.0	34.5	23.5	27.5	28.0	21.5	24.0
16	34.0	24.5	28.0	30.5	22.0	27.0	32.0	24.0	26.5	30.5	22.5	24.5
17	31.5	23.0	27.5	35.0	22.0	28.0	29.5	20.5	26.5	26.5	21.0	24.0
18	31.0	23.0	25.5	31.5	24.5	27.5	29.0	24.0	26.5	26.0	22.5	24.0
19	32.5	23.5	27.0	31.5	24.5	27.5	31.0	25.0	27.5	27.0	19.5	23.5
20	31.0	24.5	27.5	33.0	24.5	28.0	33.0	24.0	28.0	28.5	20.5	24.0
21	34.5	24.5	28.5	37.0	25.0	30.5	35.5	24.5	29.5	28.0	23.0	25.0
22	33.0	21.5	28.0	34.0	24.5	29.5	35.0	25.5	28.5	27.5	22.0	25.0
23	32.5	22.5	28.5	33.0	25.0	29.0	32.0	23.0	27.5	29.0	23.5	25.0
24	33.0	22.0	28.0	33.5	25.5	28.5	28.0	23.0	25.5	27.0	23.0	25.0
25	32.0	24.5	28.0	34.5	23.0	27.5	31.0	22.5	25.5	24.0	21.0	23.0
26	30.0	21.5	27.0	35.0	25.5	28.5	30.5	22.5	26.0	29.0	22.0	24.5
27	32.0	23.0	27.0	33.0	24.5	28.5	33.0	23.5	27.0	28.5	21.5	24.5
28	30.0	23.0	26.5	32.0	25.0	28.0	33.0	23.5	27.0	30.0	22.0	24.5
29	30.0	24.0	26.5	33.0	26.0	28.0	32.5	23.5	26.5	29.5	22.0	24.5
30	32.0	25.5	27.5	36.5	26.5	29.5	26.5	21.5	24.5	27.0	22.0	24.0
31	---	---	---	34.0	26.5	29.0	32.0	21.5	26.0	---	---	---
MONTH	34.5	19.0	26.5	37.0	20.0	28.5	36.0	20.0	27.5	32.0	19.5	24.5

06037100 GIBBON RIVER AT MADISON JUNCTION, YELLOWSTONE NATIONAL PARK

LOCATION.--Lat 44°38'26", long 110°51'38" (NAD 27), Hydrologic Unit 10020007, Yellowstone National Park, on left bank 40 ft downstream from highway, 0.4 mi south of Madison Junction, 14 mi east of West Yellowstone, and at river mile 0.2.

DRAINAGE AREA.--126 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 2001 to September 2001, October 2002 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,800 ft above NGVD of 1929. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good. No regulation or diversions upstream from station. Station operated and records provided by the Montana Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	95	92	95	85	83	81	117	195	133	100	92
2	92	100	91	91	81	81	82	120	250	129	101	90
3	91	103	91	93	82	81	87	127	197	125	106	89
4	91	100	92	92	84	81	93	142	170	120	99	89
5	91	99	90	86	87	80	88	166	164	117	96	89
6	90	98	88	93	83	81	84	190	238	115	95	88
7	90	99	92	92	86	82	95	207	218	112	95	88
8	91	99	94	97	84	81	107	226	196	e110	95	88
9	91	101	94	95	83	82	99	230	195	e110	95	89
10	95	103	92	95	81	84	91	267	181	e120	99	92
11	98	102	99	95	81	84	88	249	164	e125	104	92
12	94	98	98	89	85	86	90	206	197	e120	99	94
13	93	94	88	90	86	81	101	189	241	e115	99	95
14	93	94	94	90	88	79	115	179	193	e115	97	92
15	94	94	93	e82	e80	83	102	197	165	106	95	90
16	100	92	90	89	e78	83	100	258	156	104	94	89
17	97	94	90	91	e80	84	115	295	165	102	97	96
18	103	92	90	94	82	80	140	233	150	102	112	100
19	103	96	90	94	84	86	123	312	144	101	129	93
20	108	92	90	95	85	85	114	328	137	99	104	90
21	118	84	84	94	85	83	110	298	133	98	99	89
22	108	89	85	90	84	83	105	248	142	98	98	90
23	108	92	e80	89	81	85	122	228	175	97	102	94
24	114	92	85	86	82	82	147	211	178	96	97	105
25	105	96	88	85	83	82	182	192	146	98	95	103
26	105	96	87	87	82	80	185	172	136	103	94	93
27	105	90	87	88	81	80	178	160	139	99	93	92
28	108	94	88	88	81	84	149	153	153	97	92	91
29	108	e85	89	87	---	84	133	146	154	98	91	89
30	104	91	93	86	---	85	123	140	145	99	92	89
31	107	---	94	81	---	78	---	136	---	98	93	---
TOTAL	3,089	2,854	2,798	2,799	2,324	2,553	3,429	6,322	5,217	3,361	3,057	2,760
MEAN	99.6	95.1	90.3	90.3	83.0	82.4	114	204	174	108	98.6	92.0
MAX	118	103	99	97	88	86	185	328	250	133	129	105
MIN	90	84	80	81	78	78	81	117	133	96	91	88
AC-FT	6,130	5,660	5,550	5,550	4,610	5,060	6,800	12,540	10,350	6,670	6,060	5,470

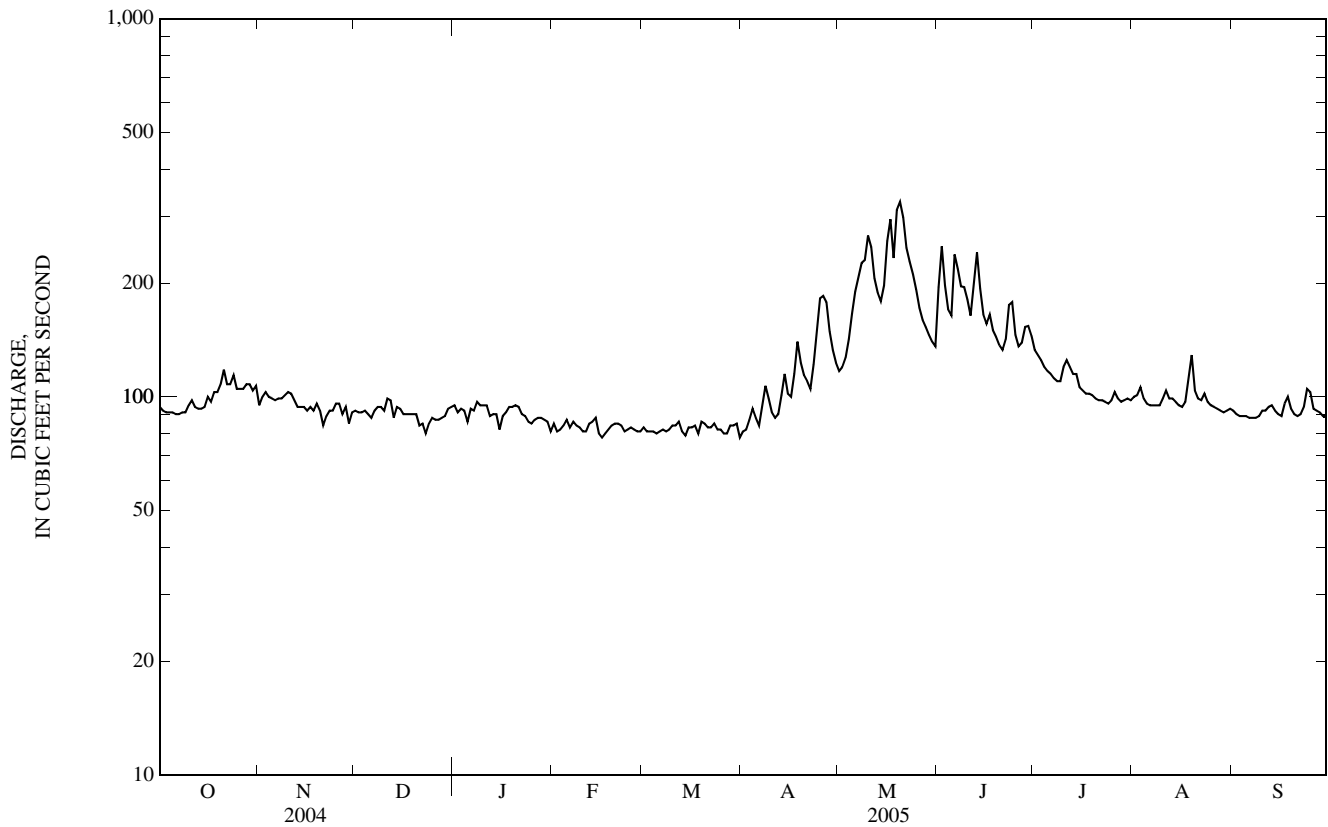
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2005, BY WATER YEAR (WY)*

MEAN	95.4	90.8	89.8	89.1	88.1	89.1	134	239	169	110	93.8	92.6
MAX	99.6	95.1	92.5	94.2	93.6	93.6	152	315	216	114	98.6	104
(WY)	(2005)	(2005)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2005)	(2004)
MIN	89.9	84.7	86.7	82.9	83.0	82.4	114	190	137	108	87.7	82.6
(WY)	(2004)	(2004)	(2004)	(2004)	(2005)	(2005)	(2005)	(2004)	(2001)	(2004)	(2001)	(2001)

06037100 GIBBON RIVER AT MADISON JUNCTION, YELLOWSTONE NATIONAL PARK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2001 - 2005*	
ANNUAL TOTAL	40,528		40,563		--	
ANNUAL MEAN	111		111		116	
HIGHEST ANNUAL MEAN	--		--		129 2003	
LOWEST ANNUAL MEAN	--		--		109 2004	
HIGHEST DAILY MEAN	301	May 23	328	May 20	584	May 16, 2001
LOWEST DAILY MEAN	75	Jan 5	78	Feb 16	75	Jan 5, 2004
ANNUAL SEVEN-DAY MINIMUM	79	Jan 16	81	Mar 2	79	Jan 16, 2004
MAXIMUM PEAK FLOW	--		373	May 20	674	May 16, 2001
MAXIMUM PEAK STAGE	--		5.08	May 20	5.93	May 16, 2001
ANNUAL RUNOFF (AC-FT)	80,390		80,460		84,300	
10 PERCENT EXCEEDS	159		173		182	
50 PERCENT EXCEEDS	96		95		95	
90 PERCENT EXCEEDS	83		83		84	

* For period of operation.
 e Estimated.



06037100 GIBBON RIVER AT MADISON JUNCTION, YELLOWSTONE NATIONAL PARK—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2002 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 2002 to current year.

INSTRUMENTATION.--Temperature recorder installed Sept. 19, 2002.

REMARKS.--Daily water temperature records rated excellent. Missing daily water temperature data for July 8-14 due to equipment problems. Several unpublished observations of specific conductance and water temperature were made during the year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 25.5°C, July 21, 2003; minimum, 0.0°C, several days during winter months.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 25.0°C, July 14, 15, and 21; minimum, 0.0°C, several days November through February.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	15.5	11.0	13.0	6.0	2.5	4.5	3.5	0.5	2.0	5.0	4.0	4.5
2	15.0	10.0	12.5	7.5	4.0	5.5	4.5	3.0	3.5	4.5	3.0	4.0
3	16.0	10.0	12.5	8.0	6.0	7.0	4.0	2.5	3.5	5.0	4.0	4.5
4	14.5	10.0	12.5	9.0	5.0	7.0	5.0	2.5	3.5	4.5	1.0	3.0
5	15.0	9.5	12.0	9.0	5.5	7.0	3.5	1.0	2.5	2.5	0.5	1.5
6	15.0	9.0	12.0	8.5	5.0	6.5	4.0	1.5	3.0	2.5	1.5	2.0
7	14.5	10.5	12.0	8.5	4.5	6.5	4.0	3.5	3.5	3.5	1.0	2.0
8	14.5	9.0	11.5	8.5	5.0	7.0	4.5	4.0	4.0	3.0	1.5	2.5
9	14.0	9.0	11.5	11.0	7.5	9.0	5.0	3.0	4.0	5.0	2.5	3.5
10	12.5	10.0	11.0	10.5	8.5	9.5	7.5	5.0	6.5	6.5	4.0	5.0
11	14.0	9.0	11.0	10.0	7.0	8.5	8.0	7.0	7.0	6.0	3.5	4.5
12	12.5	9.0	11.0	9.0	5.5	7.5	8.0	4.5	7.0	3.5	1.0	2.5
13	12.5	8.0	10.5	8.0	5.0	6.5	5.0	2.5	4.0	1.5	0.0	1.0
14	13.5	8.0	10.5	7.0	4.5	6.0	6.5	4.0	5.5	1.5	0.0	0.5
15	12.5	9.5	11.0	8.0	5.5	6.5	7.0	5.5	6.5	1.0	0.0	0.5
16	12.0	10.0	11.0	8.0	4.5	6.5	6.5	5.5	5.5	4.5	0.5	2.0
17	11.0	8.0	9.5	9.5	7.0	8.5	6.5	4.5	5.5	6.5	4.0	5.0
18	10.0	7.5	9.0	8.0	5.0	6.5	6.5	5.5	6.0	6.0	5.5	6.0
19	10.0	7.0	8.5	6.5	5.0	6.0	6.0	4.5	5.5	8.5	6.0	7.0
20	10.0	8.5	9.0	6.0	3.5	5.0	6.0	2.5	3.5	9.0	5.5	7.5
21	9.5	8.5	9.0	4.5	1.5	3.0	3.0	1.0	2.0	8.5	6.0	7.5
22	9.5	7.5	8.5	5.5	2.0	3.5	2.5	0.0	1.5	7.5	4.0	6.0
23	8.0	6.0	7.0	6.0	4.5	5.0	0.5	0.0	0.0	7.0	4.0	5.5
24	8.5	5.5	6.5	5.0	4.5	4.5	1.5	0.5	1.0	6.0	2.5	4.5
25	7.0	3.5	5.5	6.5	5.0	5.5	4.5	1.5	3.5	5.5	2.0	4.0
26	9.0	5.5	7.0	6.0	3.0	4.5	5.0	2.0	3.5	7.0	3.0	4.5
27	10.5	7.5	8.5	4.5	2.5	3.5	6.5	4.0	5.5	7.0	3.5	5.5
28	9.0	8.0	8.5	3.5	0.5	2.5	7.5	6.5	7.0	8.0	6.5	7.0
29	8.5	6.5	7.5	1.0	0.0	0.5	8.0	6.0	6.5	8.0	5.5	7.0
30	7.5	6.5	7.0	1.5	0.5	1.0	6.5	4.0	5.0	7.5	4.5	6.5
31	7.5	4.5	6.5	---	---	---	4.5	4.0	4.0	5.5	2.0	4.0
MONTH	16.0	3.5	10.0	11.0	0.0	5.5	8.0	0.0	4.0	9.0	0.0	4.0

06037100 GIBBON RIVER AT MADISON JUNCTION, YELLOWSTONE NATIONAL PARK—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	7.0	4.0	5.0	9.5	5.5	7.0	11.0	4.0	7.5	15.0	6.5	10.0
2	5.5	1.5	3.5	9.5	3.0	6.0	13.0	6.5	9.5	13.5	7.5	10.5
3	6.5	1.5	4.0	9.5	3.5	6.5	11.5	7.5	9.5	14.5	8.0	11.0
4	7.0	2.5	4.5	10.5	4.0	7.0	10.5	8.0	9.0	15.5	9.5	12.0
5	5.5	2.0	4.5	10.5	4.0	7.0	11.0	7.5	9.0	12.5	10.5	11.5
6	5.5	1.5	3.5	10.5	4.5	7.5	15.0	6.0	10.5	13.5	8.5	11.0
7	6.5	3.5	4.5	8.5	4.5	6.5	15.0	8.0	11.5	11.5	8.5	10.0
8	5.5	2.5	4.0	11.5	5.0	8.0	11.5	9.0	10.0	11.0	9.0	9.5
9	5.5	2.5	4.0	12.5	7.0	9.5	12.0	7.5	9.5	10.0	8.5	9.5
10	5.5	0.5	3.0	13.0	7.5	10.0	12.0	8.0	9.5	9.5	8.0	9.0
11	5.5	0.0	3.0	11.0	5.5	8.5	13.0	6.0	9.5	10.0	6.5	8.0
12	6.5	4.5	5.5	9.0	5.0	7.5	14.0	8.0	11.0	10.0	7.0	8.5
13	6.0	4.5	5.5	8.0	2.5	5.0	15.5	8.0	11.5	13.5	7.5	10.5
14	5.5	3.0	4.0	7.0	2.0	4.5	11.5	6.5	8.5	15.5	10.0	12.5
15	3.0	0.0	1.5	8.0	4.0	5.5	13.5	5.0	8.5	13.5	10.5	12.0
16	2.0	0.0	1.0	8.5	5.0	7.0	15.5	6.5	11.0	12.0	11.0	11.5
17	3.0	0.0	1.5	8.0	4.0	6.0	15.5	8.0	11.5	11.0	9.0	9.5
18	5.0	0.0	2.5	7.0	3.0	5.5	11.5	8.0	9.5	10.5	8.5	9.0
19	7.0	4.0	5.5	11.0	5.5	8.0	11.0	7.0	9.0	13.5	10.0	11.5
20	8.5	6.0	7.0	10.0	8.0	9.0	11.5	6.0	8.5	14.5	11.0	12.5
21	9.0	5.5	7.0	10.5	7.0	8.5	11.5	7.5	9.0	15.0	11.0	13.0
22	9.0	4.0	6.0	10.5	7.5	8.5	16.5	7.5	11.5	16.5	10.5	13.5
23	8.0	2.0	5.0	9.5	6.5	8.5	15.5	9.0	12.0	16.0	12.5	14.0
24	8.0	1.5	5.0	8.5	4.0	6.0	15.5	9.0	12.0	14.0	11.0	12.5
25	8.5	2.0	5.0	11.0	4.5	7.5	15.0	8.0	11.0	14.5	9.0	11.5
26	8.5	2.0	5.0	10.0	5.5	7.5	12.0	7.5	9.5	17.0	9.0	12.5
27	8.5	2.0	5.0	7.5	6.5	7.0	10.0	7.0	8.5	18.5	10.0	14.0
28	8.5	2.5	5.5	11.5	7.0	8.0	12.5	4.5	8.0	19.0	11.5	15.0
29	---	---	---	9.0	5.0	7.0	12.0	5.0	8.5	18.0	13.0	15.5
30	---	---	---	9.5	4.5	6.5	12.0	6.5	9.0	17.5	11.5	14.0
31	---	---	---	10.5	2.5	6.5	---	---	---	15.5	10.5	13.0
MONTH	9.0	0.0	4.5	13.0	2.0	7.0	16.5	4.0	10.0	19.0	6.5	11.5
	JUNE			JULY			AUGUST			SEPTEMBER		
1	13.5	8.5	11.0	21.5	14.0	17.5	21.5	15.0	18.0	19.5	11.0	15.0
2	12.5	7.5	9.5	20.0	14.5	17.0	23.0	17.0	19.0	19.5	11.5	15.5
3	14.0	9.5	11.0	20.0	12.5	16.0	24.0	16.0	19.5	19.5	13.0	16.0
4	15.5	11.0	13.0	21.5	13.5	17.5	24.5	15.5	19.5	18.5	12.5	15.5
5	17.5	11.5	14.5	22.0	14.0	18.0	24.0	15.5	19.5	18.5	12.0	15.5
6	14.5	10.5	12.0	22.5	14.5	18.5	22.5	15.5	19.5	19.0	11.5	15.5
7	11.5	9.0	10.0	23.0	15.5	19.5	22.5	15.5	19.0	19.0	11.5	15.0
8	12.0	8.0	10.0	---	16.0	---	23.0	15.5	19.0	19.5	12.0	15.5
9	12.5	9.0	10.5	---	---	---	21.5	16.0	19.0	18.0	13.5	15.5
10	15.0	10.0	12.0	---	---	---	20.5	16.5	18.5	15.5	12.0	13.5
11	15.0	11.0	13.0	---	---	---	20.0	15.0	17.5	13.0	11.0	11.5
12	13.5	10.5	11.5	---	---	---	19.0	14.0	16.5	13.0	10.0	11.5
13	15.0	9.0	11.5	---	---	---	21.0	13.0	16.5	13.5	9.0	11.0
14	18.0	10.5	14.0	25.0	---	---	20.5	12.5	16.5	15.5	9.0	12.0
15	19.5	13.5	16.5	25.0	16.5	20.5	22.0	13.0	17.5	16.5	9.5	13.0
16	18.0	13.0	15.5	22.5	17.5	20.0	18.0	13.5	16.0	16.5	10.0	13.0
17	20.0	13.0	16.0	23.0	15.0	18.5	19.5	15.0	16.5	13.0	11.0	12.0
18	18.0	14.0	15.5	23.0	14.5	18.5	16.5	14.5	15.5	13.0	10.0	11.5
19	19.5	12.0	15.5	23.0	14.5	19.0	20.5	12.5	16.0	16.0	9.0	12.0
20	21.0	13.0	17.0	23.5	15.5	19.5	22.0	13.5	17.5	16.5	9.5	13.0
21	20.5	14.5	17.5	25.0	16.0	20.0	23.5	14.0	18.5	15.0	13.0	14.0
22	21.5	15.0	18.0	23.0	18.5	20.5	21.5	15.0	18.0	16.5	10.5	13.5
23	20.5	15.0	17.5	24.5	17.0	20.5	21.5	15.0	18.0	15.5	11.5	13.5
24	21.5	14.5	18.0	23.0	15.5	19.5	20.0	15.0	17.0	13.0	11.5	12.5
25	21.0	14.5	17.5	21.0	16.0	18.0	19.5	12.0	15.5	12.5	10.0	11.0
26	18.0	14.5	16.5	22.5	13.0	17.5	20.0	12.0	16.0	15.5	8.5	12.0
27	18.0	13.0	15.5	23.0	14.0	18.5	21.0	12.5	16.5	13.5	11.0	12.0
28	16.5	13.0	15.0	21.5	14.5	18.0	21.0	13.0	17.0	15.5	9.5	12.0
29	17.5	13.0	15.0	20.0	15.0	17.0	21.0	13.0	17.0	15.5	9.0	12.5
30	19.5	14.0	16.5	23.0	15.0	18.5	17.5	13.5	15.5	14.0	10.0	12.0
31	---	---	---	20.0	15.5	18.0	18.5	10.0	14.0	---	---	---
MONTH	21.5	7.5	14.0	---	---	---	24.5	10.0	17.5	19.5	8.5	13.5

06037500 MADISON RIVER NEAR WEST YELLOWSTONE, MT

LOCATION.--Lat 44°39'25", long 111°04'03"(NAD 27), in NE¹/₄NW¹/₄SW¹/₄ sec.36, T.13 S., R.5 E., Gallatin County, Hydrologic Unit 10020007, Yellowstone National Park, on left bank 0.7 mi downstream of Montana-Wyoming state line, 1.5 mi east of West Yellowstone, 16.4 mi downstream from Gibbon River, and at river mile 132.7.

DRAINAGE AREA.--420 mi².

PERIOD OF RECORD.--June 1913 to December 1917, July 1918 to October 1921, June 1922 to September 1973, August 1983 to September 1986, October 1988 to current year. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Elevation of gage is 6,650 ft above NGVD of 1929, from topographic map. Prior to October 20, 1918, nonrecording gage, and October 20, 1918 to June 29, 1930, nonrecording gage or water-stage recorder at sites 2.5 mi upstream from station at different datums. Supplementary nonrecording gage at site 0.3 mi downstream from station at different datum used at time during 1927-30. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. No regulation or diversions upstream from station. Station operated and record provided by the Montana Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	390	395	382	389	370	380	383	494	705	466	419	363
2	387	393	381	381	367	375	387	506	901	454	405	362
3	384	400	381	381	367	377	402	525	734	436	404	358
4	381	401	381	381	369	375	421	566	675	430	395	358
5	381	396	380	378	372	374	410	605	639	424	392	358
6	385	395	379	385	370	371	394	671	750	418	380	358
7	387	392	384	387	378	372	417	710	795	411	375	356
8	387	390	388	402	375	371	459	738	697	405	375	357
9	387	392	389	403	378	375	440	762	687	403	375	358
10	389	396	387	398	377	381	415	832	666	411	385	369
11	400	397	396	398	377	381	405	865	612	453	398	369
12	392	392	398	391	385	383	405	807	655	426	394	370
13	387	388	387	372	386	378	435	783	761	406	387	374
14	387	382	385	e350	395	372	481	768	667	399	383	369
15	387	378	387	e370	388	373	444	820	611	397	375	363
16	392	379	384	e390	e380	377	430	950	602	397	372	363
17	389	380	381	384	e385	381	452	1,130	579	395	378	371
18	400	378	379	385	386	383	499	1,040	540	395	411	391
19	409	380	375	387	388	389	482	1,070	522	393	526	372
20	423	381	376	393	389	388	459	1,160	496	389	420	364
21	438	371	370	392	389	386	453	1,080	484	387	393	363
22	420	372	362	386	387	385	436	951	496	387	387	363
23	417	375	e350	381	384	391	461	890	568	387	388	369
24	431	375	e360	378	381	396	498	841	587	387	383	396
25	412	375	e370	373	383	390	546	779	523	388	375	409
26	411	375	372	372	382	386	562	715	490	404	375	377
27	413	372	369	372	381	381	577	674	495	396	369	370
28	420	375	374	374	378	394	536	655	512	392	363	369
29	418	e360	375	373	---	406	505	648	509	392	363	367
30	411	e380	381	375	---	404	500	625	492	392	363	363
31	410	---	391	369	---	388	---	607	---	401	363	---
TOTAL	12,425	11,515	11,754	11,850	10,647	11,863	13,694	24,267	18,450	12,621	12,071	11,049
MEAN	401	384	379	382	380	383	456	783	615	407	389	368
MAX	438	401	398	403	395	406	577	1,160	901	466	526	409
MIN	381	360	350	350	367	371	383	494	484	387	363	356
AC-FT	24,640	22,840	23,310	23,500	21,120	23,530	27,160	48,130	36,600	25,030	23,940	21,920

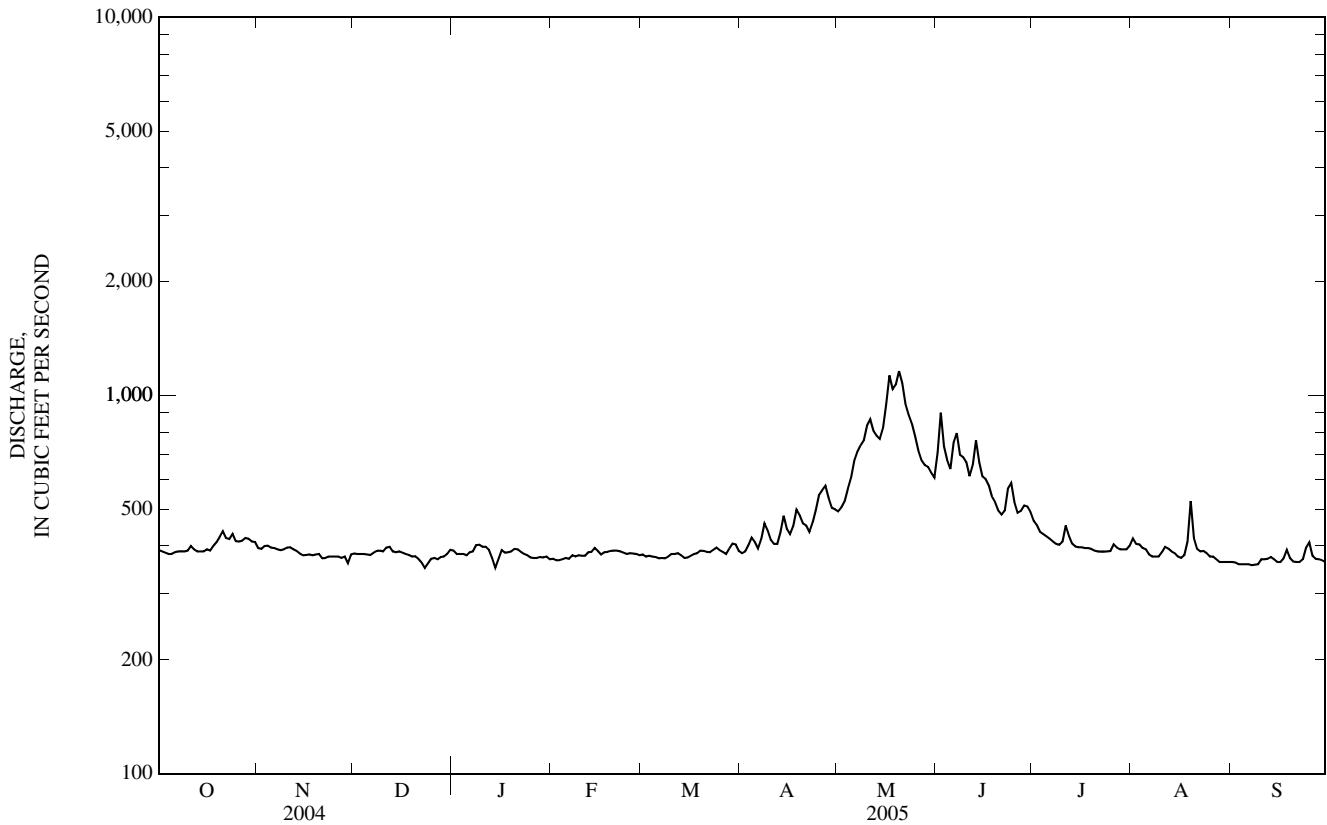
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2005, BY WATER YEAR (WY)*

MEAN	432	423	414	403	398	405	495	847	806	496	432	425
MAX	710	697	641	586	572	539	671	1,725	1,479	917	759	704
(WY)	(1914)	(1914)	(1997)	(1914)	(1917)	(1925)	(1925)	(1997)	(1997)	(1913)	(1913)	(1913)
MIN	297	297	304	304	303	313	369	388	341	282	273	282
(WY)	(1935)	(1932)	(1932)	(1932)	(1932)	(1943)	(1941)	(1934)	(1931)	(1931)	(1934)	(1934)

06037500 MADISON RIVER NEAR WEST YELLOWSTONE, MT—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1913 - 2005*	
ANNUAL TOTAL	155,270		162,206		--	
ANNUAL MEAN	424		444		497	
HIGHEST ANNUAL MEAN	--		--		789 1997	
LOWEST ANNUAL MEAN	--		--		337 1934	
HIGHEST DAILY MEAN	864	May 23	1,160	May 20	2,750	May 18, 1996
LOWEST DAILY MEAN	250	Jan 6	350	Dec 23	245	Jan 1, 1942
ANNUAL SEVEN-DAY MINIMUM	311	Jan 5	358	Sep 3	267	Aug 6, 1931
MAXIMUM PEAK FLOW	--		1,260	May 20	2,820 ^a	May 18, 1996
MAXIMUM PEAK STAGE	--		2.68	May 20	10.0 ^b	Jan 8, 1937
ANNUAL RUNOFF (AC-FT)	308,000		321,700		35,900	
10 PERCENT EXCEEDS	570		643		739	
50 PERCENT EXCEEDS	389		389		430	
90 PERCENT EXCEEDS	341		370		339	

* For period of operation.
 a Gage height, 3.78 ft.
 b About, backwater from ice.
 e Estimated.



06043500 GALLATIN RIVER NEAR GALLATIN GATEWAY, MT

LOCATION.--Lat 45°29'51", long 111°16'11" (NAD 27), in SE¹/₄ SE¹/₄ SE¹/₄ sec.7, T.4 S., R.4 E., Gallatin County, Hydrologic Unit 10020008, on left bank 0.3 mi downstream from Spanish Creek, 7.3 mi south of Gallatin Gateway, and at river mile 47.7.

DRAINAGE AREA.--825 mi².

PERIOD OF RECORD.--August 1889 to September 1894, June 1930 to September 1969, annual maximum, water years 1970-71, October 1971 to September 1981, October 1984 to current year. Monthly discharge only for some periods, published in WSP 1309. Published as West Gallatin River near Bozeman 1889-94.

REVISED RECORDS.--WSP 1389: 1892(M), 1893-94. WSP 1559: Drainage area. WDR MT-85-1 (M), WDR MT-02-1: 1970-71(M).

GAGE.--Water-stage recorder. Elevation of gage is 5,167.67 ft above NGVD of 1929. Prior to October 20, 1932, nonrecording gages at several different sites and elevations within 0.8 mi of present site. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diversions for irrigation of about 1,400 acres upstream from station. Station operated and record provided by the Montana Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	416	323	259	260	255	255	248	449	2,360	1,930	657	441
2	410	333	261	264	254	257	264	453	2,200	1,880	656	427
3	404	353	260	262	247	255	275	468	2,040	1,780	733	417
4	401	350	238	269	255	251	283	516	2,040	1,600	642	411
5	395	349	247	242	265	255	281	590	2,120	1,500	603	408
6	389	355	249	223	244	258	274	744	2,620	1,450	582	405
7	391	346	266	e230	252	263	311	889	2,440	1,420	570	397
8	399	352	278	e240	256	262	360	986	2,390	1,410	578	390
9	382	365	287	e250	249	272	340	1,140	2,230	1,340	591	384
10	399	372	289	e250	242	284	305	1,230	2,100	1,340	588	409
11	401	358	311	264	235	276	285	1,150	2,060	1,410	586	420
12	395	345	312	266	244	281	298	988	2,360	1,200	558	405
13	389	325	266	e240	263	258	342	890	2,390	1,120	580	405
14	382	317	278	e230	267	255	404	925	2,310	1,080	552	400
15	382	326	313	e220	242	259	345	1,110	2,710	1,010	528	391
16	379	344	295	e230	210	262	340	1,480	3,240	974	511	388
17	372	339	286	e250	227	264	378	2,080	3,570	934	506	395
18	378	314	289	e270	234	249	485	1,690	3,650	884	539	413
19	380	335	299	e280	245	263	428	2,150	3,240	842	567	394
20	381	315	295	282	257	272	386	2,950	3,230	810	509	375
21	388	234	277	279	265	274	371	3,390	3,440	779	487	369
22	378	282	265	268	256	267	356	3,110	3,820	759	481	371
23	381	327	220	260	248	265	408	3,630	3,850	751	512	388
24	381	325	234	257	239	247	468	3,380	3,370	725	485	460
25	339	323	231	246	245	235	588	2,700	3,040	724	465	426
26	364	326	281	249	247	255	639	2,320	2,770	729	458	392
27	382	261	280	257	246	260	613	2,270	2,500	691	447	381
28	381	286	275	266	248	280	534	2,390	2,340	666	441	372
29	415	219	285	270	---	269	489	2,630	2,220	654	431	367
30	382	223	300	272	---	260	473	2,490	2,000	646	443	363
31	372	---	279	260	---	244	---	2,290	---	635	461	---
TOTAL	11,988	9,622	8,505	7,906	6,937	8,107	11,571	53,478	80,650	33,673	16,747	11,964
MEAN	387	321	274	255	248	262	386	1,725	2,688	1,086	540	399
MAX	416	372	313	282	267	284	639	3,630	3,850	1,930	733	460
MIN	339	219	220	220	210	235	248	449	2,000	635	431	363
AC-FT	23,780	19,090	16,870	15,680	13,760	16,080	22,950	106,100	160,000	66,790	33,220	23,730

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1889 - 2005, BY WATER YEAR (WY)*

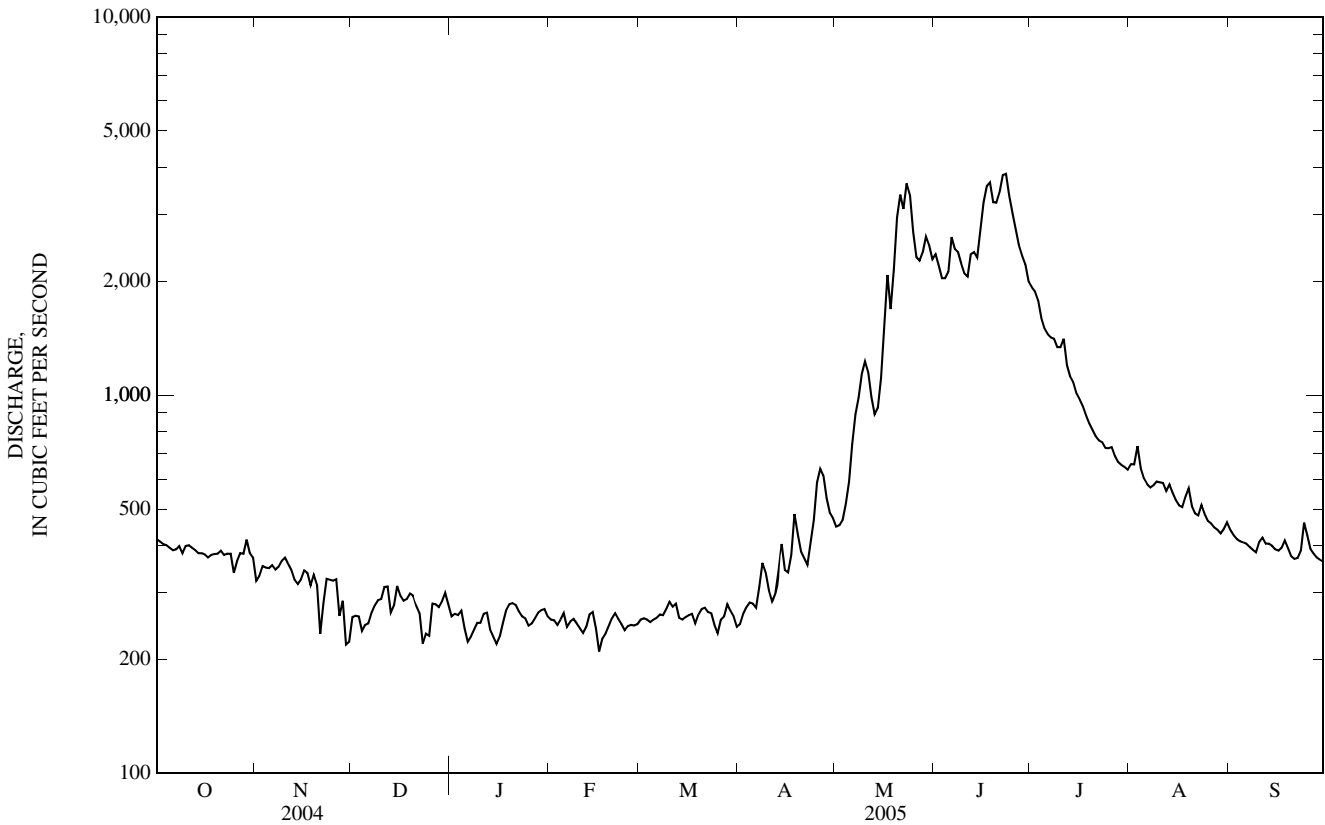
MEAN	452	380	319	306	302	310	500	1,793	2,923	1,280	606	488
MAX	743	589	549	468	430	465	899	3,135	5,110	3,669	1,162	788
(WY)	(1893)	(1960)	(1893)	(1893)	(1893)	(1960)	(1990)	(1976)	(1997)	(1975)	(1993)	(1968)
MIN	238	247	214	200	220	206	263	873	643	345	269	233
(WY)	(1932)	(1937)	(1935)	(1931)	(1935)	(1935)	(1937)	(1953)	(1934)	(1934)	(1934)	(1931)

GALLATIN RIVER BASIN

06043500 GALLATIN RIVER NEAR GALLATIN GATEWAY, MT—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1889 - 2005*	
ANNUAL TOTAL	228,285		261,148		--	
ANNUAL MEAN	624		715		807	
HIGHEST ANNUAL MEAN	--		--		1,184	1976
LOWEST ANNUAL MEAN	--		--		408	1934
HIGHEST DAILY MEAN	3,330	Jun 10	3,850	Jun 23	8,970	Jun 17, 1974
LOWEST DAILY MEAN	180	Jan 5	210	Feb 16	153	Dec 24, 2002
ANNUAL SEVEN-DAY MINIMUM	223	Jan 2	240	Feb 15	182	Jan 18, 1931
MAXIMUM PEAK FLOW	--		4,220	Jun 23	9,160 ^a	Jun 2, 1997
MAXIMUM PEAK STAGE	--		4.52	Jun 23	7.38	Jun 17, 1974
ANNUAL RUNOFF (AC-FT)	452,800		518,000		584,800	
10 PERCENT EXCEEDS	1,540		2,170		2,030	
50 PERCENT EXCEEDS	400		380		428	
90 PERCENT EXCEEDS	243		248		266	

* For period of operation.
 a Gage height, 6.71 ft.
 e Estimated.



06186500 YELLOWSTONE RIVER AT YELLOWSTONE LAKE OUTLET, YELLOWSTONE NATIONAL PARK

LOCATION.--Lat 44°34'03", long 110°22'48" (NAD 27), Hydrologic Unit 10070001, Yellowstone National Park, on left bank 450 ft downstream from Fishing Bridge, 0.3 mi downstream from outlet of Yellowstone Lake, and at river mile 616.4.

DRAINAGE AREA.--991 mi².

PERIOD OF RECORD.--December 1922 to September 1982, October 1983 to September 1986, October 1988 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.

REVISED RECORDS.--WSP 1309: See PERIOD OF RECORD. WSP 1729: Drainage area. WDR MT-03-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,729.58 ft above NGVD of 1929. Prior to October 2, 1928, nonrecording gage at site 450 ft upstream at datum 1.07 ft higher. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. No artificial regulation. Station operated and record provided by the Montana Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,000	811	619	e400	e330	e360	e450	588	2,760	3,470	1,970	1,170
2	998	800	612	e400	e330	e360	e450	593	2,790	3,450	1,950	1,150
3	991	791	601	e380	e330	e370	e450	602	2,790	3,420	1,930	1,120
4	983	788	592	e380	e330	e370	e450	616	2,790	3,380	1,910	1,100
5	977	789	590	e360	e330	e380	e450	636	2,790	3,330	1,870	1,090
6	971	780	589	e350	e330	e380	e460	660	2,860	3,290	1,830	1,060
7	953	770	587	e340	e330	e400	e460	697	2,900	3,240	1,780	1,040
8	946	765	e580	e340	e330	e400	e460	734	2,910	3,190	1,740	1,020
9	936	764	e580	e340	e330	e420	e460	768	2,910	3,150	1,710	1,010
10	922	762	e560	e340	e330	e420	e460	826	2,910	3,110	1,680	1,000
11	915	754	e560	e330	e330	e420	e460	861	2,870	3,080	1,650	978
12	905	751	e560	e330	e330	e430	e460	897	2,890	3,020	1,610	958
13	894	743	e540	e330	e330	e430	e460	922	2,910	2,970	1,560	959
14	886	741	e540	e330	e330	e430	e470	942	2,880	2,920	1,540	946
15	880	734	e540	e330	e320	e430	e470	973	2,870	2,850	1,520	926
16	874	729	e520	e330	e320	e430	472	1,020	2,860	2,820	1,480	906
17	858	726	e520	e330	e320	e440	472	1,100	2,900	2,730	1,470	893
18	867	719	e520	e330	e320	e440	475	1,150	2,950	2,680	1,480	887
19	850	710	e500	e330	e320	e440	477	1,220	3,000	2,620	1,520	874
20	845	702	e500	e330	e330	e440	481	1,290	3,060	2,550	1,490	858
21	843	695	e480	e340	e330	e440	486	1,270	3,140	2,490	1,470	854
22	837	686	e480	e340	e330	e440	488	1,740	3,230	2,440	1,440	844
23	845	679	e460	e340	e340	e450	490	1,940	3,330	2,410	1,440	847
24	849	677	e460	e340	e340	e450	494	2,120	3,420	2,340	1,410	848
25	841	677	e440	e340	e340	e450	506	2,270	3,490	2,270	1,360	849
26	831	661	e440	e340	e350	e450	522	2,370	3,530	2,220	1,330	837
27	825	651	e440	e340	e350	e450	546	2,440	3,530	2,180	1,300	825
28	823	637	e440	e340	e350	e450	563	2,510	3,540	2,130	1,270	814
29	827	636	e420	e340	---	e450	574	2,570	3,530	2,080	1,250	805
30	828	628	e420	e340	---	e450	581	2,620	3,500	2,040	1,230	795
31	814	---	e420	e340	---	e450	---	2,670	---	2,010	1,190	---
TOTAL	27,614	21,756	16,110	10,670	9,280	13,120	14,497	41,615	91,840	85,880	48,380	28,263
MEAN	891	725	520	344	331	423	483	1,342	3,061	2,770	1,561	942
MAX	1,000	811	619	400	350	450	581	2,670	3,540	3,470	1,970	1,170
MIN	814	628	420	330	320	360	450	588	2,760	2,010	1,190	795
AC-FT	54,770	43,150	31,950	21,160	18,410	26,020	28,750	82,540	182,200	170,300	95,960	56,060

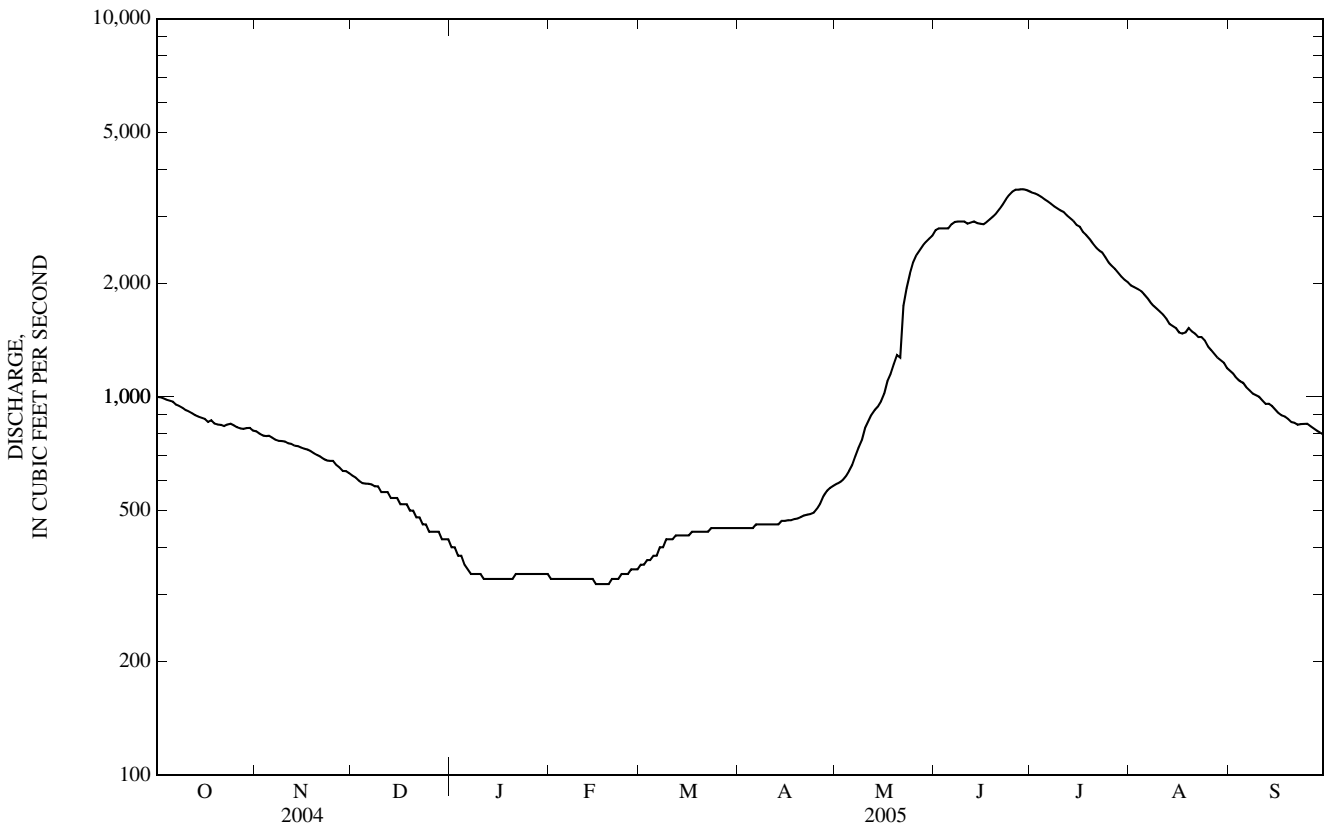
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2005, BY WATER YEAR (WY)*

MEAN	797	604	473	396	386	444	540	1,164	3,678	3,995	2,188	1,202
MAX	1,259	984	775	699	637	717	801	2,214	8,574	7,160	4,031	1,954
(WY)	(1973)	(1951)	(1951)	(1998)	(1998)	(1962)	(1952)	(1997)	(1997)	(1982)	(1982)	(1982)
MIN	327	276	246	168	122	130	175	605	1,707	1,272	812	538
(WY)	(1989)	(1989)	(1932)	(1989)	(1989)	(1935)	(1937)	(1953)	(1934)	(1934)	(1934)	(1934)

06186500 YELLOWSTONE RIVER AT YELLOWSTONE LAKE OUTLET, YELLOWSTONE NATIONAL PARK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1927 - 2005*	
ANNUAL TOTAL	369,433		409,025		--	
ANNUAL MEAN	1,009		1,121		1,327	
HIGHEST ANNUAL MEAN	--		--		2,253 1997	
LOWEST ANNUAL MEAN	--		--		682 1934	
HIGHEST DAILY MEAN	2,600	Jul 2	3,540	Jun 28	9,930	Jun 19, 1997
LOWEST DAILY MEAN	340	Jan 4	320	Feb 21	100	Feb 18, 1993
ANNUAL SEVEN-DAY MINIMUM	344	Jan 1	323	Feb 13	113	Feb 11, 1989
MAXIMUM PEAK FLOW	--		3,610	Jun 26	9,950	Jun 18, 1997
MAXIMUM PEAK STAGE	--		5.82	Jun 26	8.90	Jun 18, 1997
ANNUAL RUNOFF (AC-FT)	732,800		811,300		961,600	
10 PERCENT EXCEEDS	2,330		2,870		3,460	
50 PERCENT EXCEEDS	788		768		676	
90 PERCENT EXCEEDS	350		340		340	

* For period of operation.
 e Estimated.



06187915 SODA BUTTE CREEK AT PARK BOUNDARY, AT SILVER GATE, MT

LOCATION.--Lat 45°00'11", long 110°00'04"(NAD 27), in SW ¼ NW ¼ SW ¼ sec.33, T.9 S., R.14 E., Park County, Hydrologic Unit 10070001, at Yellowstone National park boundary, 0.25 mi downstream from Silver Creek, 0.75 mi southwest of Silver Gate, and at river mile 17.8.

DRAINAGE AREA.--31.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1998 to current year. October 1998 to September 2002 records collected by the National Park Service and U.S. Department of Agriculture, Forest Service, under the general supervision of the U.S. Geological Survey.

GAGE.--Water-stage recorder. Elevation of gage is 7,340 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except for those discharges greater than 600 ft³/s, which are fair, and those for estimated daily discharges, which are poor. No known regulation or diversion upstream of station. Station operated and record provided by the Montana Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	12	e9.0	6.8	e4.0	e2.5	3.0	17	188	255	34	13
2	29	13	e10	6.9	e4.0	e2.5	3.1	18	159	240	33	13
3	28	14	e10	6.8	e4.0	e2.3	3.3	19	143	209	32	12
4	27	14	e8.5	e5.0	e4.5	e2.3	3.1	20	141	186	30	12
5	26	14	e7.5	e5.5	e4.5	e2.5	2.9	29	e160	182	28	12
6	25	15	e8.0	e7.0	e4.0	e2.8	3.2	43	e270	180	26	11
7	24	14	e8.5	e7.0	e4.0	e3.0	5.0	48	e220	170	25	11
8	23	15	e9.0	e7.5	e4.0	e3.2	6.0	50	e180	172	24	11
9	22	14	e9.0	e7.5	e4.0	3.4	4.5	55	e160	157	24	11
10	22	14	9.1	e6.5	e3.5	3.5	4.0	58	e150	205	24	12
11	21	13	8.9	e6.0	e3.5	3.5	4.0	50	e160	188	27	12
12	20	15	8.1	e5.5	e4.0	3.5	4.6	46	e180	139	27	13
13	19	15	8.8	e6.0	e4.5	3.5	6.2	43	e160	134	28	12
14	19	13	9.2	e6.5	e3.5	e3.2	6.9	53	e160	122	23	11
15	21	14	8.4	e6.5	e2.5	e3.2	5.6	73	218	111	21	11
16	20	15	7.8	e6.0	e2.0	e3.2	7.1	154	e310	102	20	11
17	19	16	8.6	e6.5	e2.0	3.4	10	150	e380	91	21	11
18	18	13	8.4	6.6	e2.5	3.6	11	115	e360	82	40	12
19	18	e12	8.1	6.0	e3.0	3.5	9.0	308	e330	75	31	10
20	18	e10	7.7	5.5	e3.5	3.3	8.1	403	e380	69	22	9.7
21	18	e11	e6.0	5.1	e3.0	3.3	7.9	439	e430	64	20	9.5
22	18	e12	e5.0	4.7	e2.5	3.2	8.7	388	e480	59	20	9.5
23	17	e13	e4.0	e4.5	e2.2	3.2	13	408	517	57	19	10
24	16	e13	e5.0	e4.0	e2.2	3.1	18	341	485	52	18	16
25	18	e13	e6.0	e4.0	e2.2	3.2	24	257	418	60	17	15
26	17	e12	e6.0	e4.0	e2.2	3.1	25	221	337	52	16	11
27	16	e11	e6.5	e4.0	e2.2	3.1	20	219	308	45	16	13
28	16	e9.0	e7.0	e4.5	e2.2	3.1	17	243	299	42	15	15
29	16	e7.0	7.1	e4.5	---	3.1	17	238	258	40	14	11
30	15	e8.0	7.0	e4.5	---	3.0	17	201	243	38	14	11
31	15	---	6.9	e4.0	---	2.9	---	178	---	35	14	---

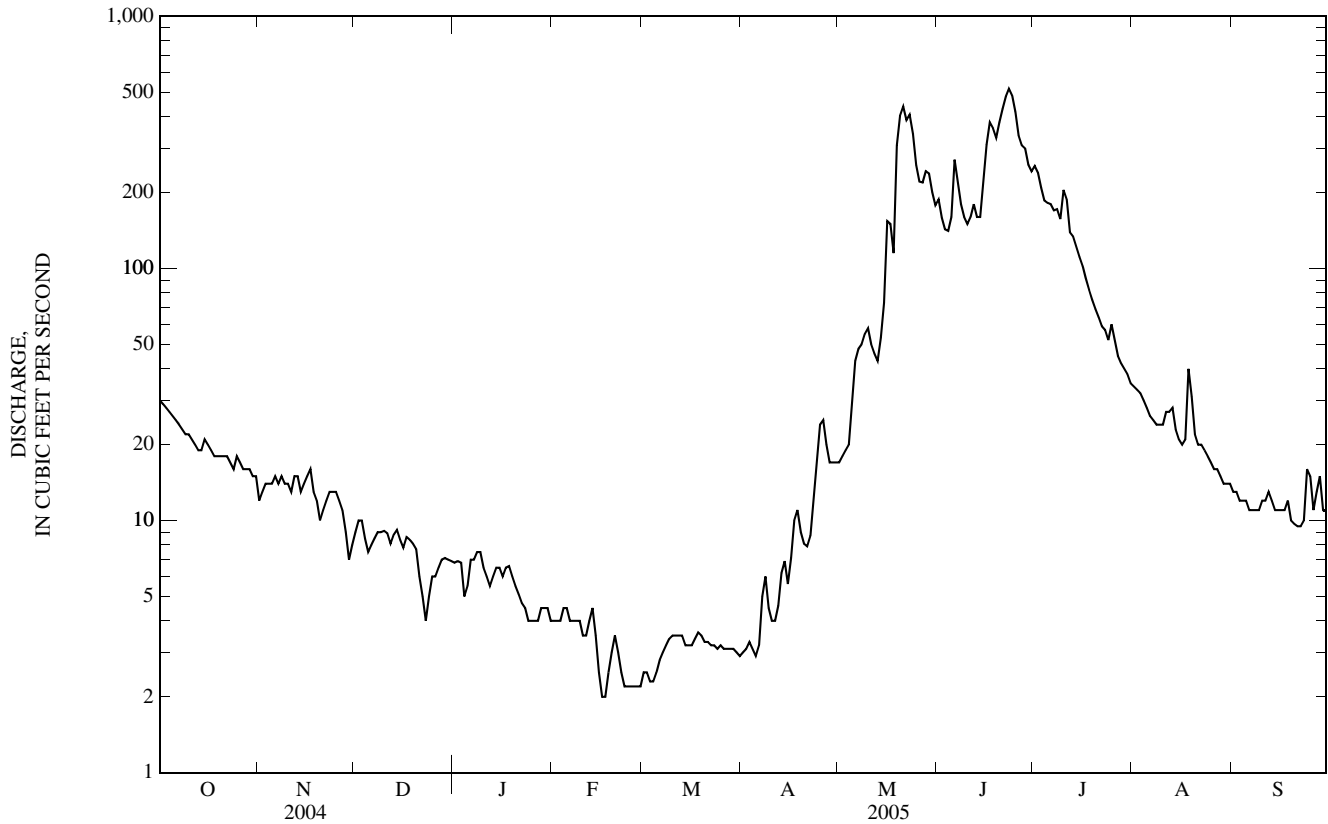
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2005, BY WATER YEAR (WY)

MEAN	10.4	6.46	4.15	2.91	2.09	1.90	10.0	137	132	130	27.5	15.3
MAX	20.4	12.8	7.71	5.66	3.22	3.10	19.3	167	408	212	45.0	27.9
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2001)	(2003)	(1999)	(1999)	(2004)
MIN	5.14	4.30	2.85	2.01	1.57	1.13	4.23	95.9	176	61.6	15.5	8.27
(WY)	(2002)	(2003)	(2001)	(2000)	(2004)	(2003)	(1999)	(1999)	(2001)	(2001)	(2001)	(2001)

06187915 SODA BUTTE CREEK AT PARK BOUNDARY, AT SILVER GATE, MT—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1999 - 2005	
ANNUAL TOTAL	19,397		19,650.8		--	
ANNUAL MEAN	53		53.8		55.0	
HIGHEST ANNUAL MEAN	--		--		65.4 2003	
LOWEST ANNUAL MEAN	--		--		38.5 2001	
HIGHEST DAILY MEAN	496	Jun 9	517	Jun 23	735	Jun 1, 2002
LOWEST DAILY MEAN	0.90	Mar 2	2.0	Feb 16	0.80	Feb 23, 2003
ANNUAL SEVEN-DAY MINIMUM	1.1	Feb 28	2.2	Feb 22	0.99	Mar 23, 2003
MAXIMUM PEAK FLOW	--		604	Jun 23	912	Jun 1, 2002
MAXIMUM PEAK STAGE	--		2.84	Jun 23	3.49	Jun 1, 2002
ANNUAL RUNOFF (AC-FT)	38,470		38,980		39,820	
10 PERCENT EXCEEDS	168		187		200	
50 PERCENT EXCEEDS	18		13		8.7	
90 PERCENT EXCEEDS	1.5		3.2		1.9	

e Estimated.



06187915 SODA BUTTE CREEK AT PARK BOUNDARY, AT SILVER GATE, MT—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1999 to 2001, April 2003 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: April 2003 to current year.

INSTRUMENTATION.--Temperature recorder installed April 23, 2003.

REMARKS.--Daily water temperature record good except for the period June 24 to July 20, which is poor. Several unpublished observations of specific conductance and water temperature were made during the year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 17.5°C, Aug. 15, 2003; minimum, 0.0°C, many days October through May.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 16.0°C, Aug. 4-7 and 21; minimum, 0.0°C, many days October through May.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.5	3.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	9.5	3.0	5.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	8.5	2.5	5.0	1.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
4	6.5	2.0	4.5	2.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
5	7.5	2.0	4.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	7.5	1.5	4.5	1.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
7	6.0	2.5	4.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	7.5	1.0	4.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	7.0	2.0	4.5	2.5	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0
10	6.0	3.0	4.5	2.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
11	7.5	2.5	4.5	1.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
12	5.5	2.0	3.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
13	5.5	1.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	5.0	1.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	5.0	4.0	4.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
16	4.5	3.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	5.0	1.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	3.5	1.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	3.5	0.5	2.0	0.0	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.0
20	3.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
21	3.5	1.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
22	3.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	1.5	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
24	1.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	1.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	3.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	3.5	0.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	2.5	0.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	2.0	0.0	1.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
30	1.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
31	1.5	0.0	0.5	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
MONTH	9.5	0.0	3.0	2.5	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.0

YELLOWSTONE RIVER BASIN

06187915 SODA BUTTE CREEK AT PARK BOUNDARY, AT SILVER GATE, MT—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	1.0	7.5	0.0	2.5
2	0.0	0.0	0.0	0.5	0.0	0.0	3.5	0.5	2.0	6.0	0.0	2.5
3	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.5	1.5	6.5	0.0	3.0
4	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.5	1.5	6.0	1.5	3.5
5	0.0	0.0	0.0	0.5	0.0	0.0	3.0	0.5	1.5	6.5	1.5	3.5
6	0.0	0.0	0.0	0.5	0.0	0.0	5.0	0.0	2.0	7.5	0.5	3.0
7	0.0	0.0	0.0	0.5	0.0	0.0	5.5	0.0	2.0	4.5	1.0	2.5
8	0.0	0.0	0.0	1.0	0.0	0.5	2.5	0.5	1.0	7.0	1.5	3.0
9	0.0	0.0	0.0	1.5	0.0	0.5	4.0	0.5	2.0	5.0	1.5	3.0
10	0.0	0.0	0.0	2.0	0.0	0.5	4.5	0.5	2.0	4.5	1.5	3.0
11	0.0	0.0	0.0	1.5	0.0	0.5	5.5	0.0	2.0	5.5	1.5	3.0
12	0.0	0.0	0.0	1.0	0.0	0.5	5.0	1.0	3.0	4.0	0.5	2.0
13	0.0	0.0	0.0	0.5	0.0	0.0	6.5	0.5	2.5	7.5	0.0	3.5
14	0.0	0.0	0.0	0.5	0.0	0.0	2.0	0.0	1.0	7.5	1.5	4.0
15	0.0	0.0	0.0	0.5	0.0	0.0	6.5	0.0	2.0	7.0	1.0	3.5
16	0.0	0.0	0.0	1.0	0.0	0.5	7.0	0.0	3.0	4.0	1.5	2.5
17	0.0	0.0	0.0	0.5	0.0	0.5	5.5	0.5	2.5	3.0	1.5	2.0
18	0.0	0.0	0.0	0.5	0.0	0.0	3.5	1.0	2.0	4.5	1.5	2.5
19	0.0	0.0	0.0	1.0	0.0	0.5	3.5	0.5	1.5	4.0	1.5	2.5
20	0.0	0.0	0.0	2.0	0.5	1.0	6.0	0.5	2.5	4.5	2.0	3.0
21	0.0	0.0	0.0	2.0	0.0	1.0	2.5	1.0	1.5	6.0	1.5	3.0
22	0.0	0.0	0.0	2.0	0.5	1.0	8.5	0.5	3.5	7.5	1.0	3.5
23	0.0	0.0	0.0	2.5	0.0	1.0	7.0	0.5	3.0	5.5	2.5	3.5
24	0.0	0.0	0.0	1.0	0.0	0.5	6.0	0.5	3.0	4.5	1.5	3.0
25	0.0	0.0	0.0	1.5	0.0	0.5	7.0	0.0	2.5	6.0	0.5	3.0
26	0.0	0.0	0.0	2.5	0.0	1.0	5.0	0.0	2.0	7.0	0.5	3.5
27	0.0	0.0	0.0	1.5	0.0	1.0	3.5	0.5	1.5	8.5	0.5	4.0
28	0.0	0.0	0.0	1.5	0.5	1.0	6.5	0.0	2.0	8.5	1.5	4.0
29	---	---	---	1.5	0.0	0.5	5.5	0.0	2.0	6.0	1.5	3.5
30	---	---	---	1.5	0.0	0.5	4.5	0.0	1.5	5.5	2.0	3.5
31	---	---	---	2.5	0.0	1.0	---	---	---	5.0	1.5	3.5
MONTH	0.0	0.0	0.0	2.5	0.0	0.5	8.5	0.0	2.0	8.5	0.0	3.0
	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	3.5	1.5	3.0	11.0	3.5	6.5	15.5	6.5	10.5	13.0	4.0	8.0
2	4.0	1.5	2.5	8.5	4.0	5.5	14.5	8.0	10.5	12.5	4.0	8.5
3	5.5	2.0	3.5	9.5	3.0	6.0	15.5	8.0	10.5	11.5	5.0	8.5
4	7.0	2.5	4.5	10.5	3.0	6.5	16.0	6.0	10.5	11.0	5.5	8.0
5	8.0	2.5	4.5	11.0	3.5	7.0	16.0	6.5	11.0	10.5	5.0	8.0
6	5.0	2.5	4.0	12.0	4.0	7.5	16.0	7.0	11.0	12.5	5.0	8.5
7	5.5	0.5	3.0	11.0	4.5	7.5	16.0	7.0	11.0	12.5	4.5	8.5
8	4.5	0.5	2.5	12.5	5.0	8.0	14.0	7.5	10.5	13.5	5.0	9.5
9	5.5	2.0	3.0	11.5	5.0	8.0	15.5	8.0	11.5	11.0	6.5	9.0
10	7.5	2.0	4.0	8.0	6.0	6.5	14.0	7.5	10.5	9.0	6.5	7.5
11	9.0	2.5	5.0	12.0	5.0	8.0	11.0	7.0	9.0	7.0	4.5	5.5
12	5.0	2.5	3.5	13.0	4.5	8.5	11.5	6.0	8.0	5.5	3.0	4.5
13	7.0	2.0	4.0	13.5	6.0	9.0	12.0	5.5	8.0	7.5	3.0	5.0
14	10.5	2.0	5.5	13.5	6.0	9.5	15.0	6.0	9.5	9.0	2.0	6.0
15	9.0	3.0	5.5	13.5	6.0	9.5	15.0	5.5	10.0	9.5	3.0	6.5
16	8.5	2.5	4.5	13.0	7.0	9.5	13.0	6.0	9.5	7.5	3.0	5.5
17	8.0	3.0	5.0	12.0	5.5	8.5	13.0	8.0	10.0	7.0	4.0	5.5
18	5.5	3.0	4.0	13.5	4.5	8.5	10.0	6.5	8.0	6.0	4.0	5.0
19	8.5	2.5	4.5	13.5	5.5	9.5	15.5	6.0	9.5	9.5	2.0	5.5
20	9.5	2.5	5.5	14.5	6.0	10.0	15.5	5.0	10.0	10.5	2.5	6.5
21	8.5	3.0	5.0	15.5	6.0	10.5	16.0	6.0	10.5	8.5	6.0	7.0
22	9.0	3.0	5.5	12.5	7.0	10.0	13.0	7.0	10.0	8.5	4.5	6.0
23	9.0	3.0	5.0	15.0	7.5	11.0	13.5	7.0	10.0	8.0	5.0	6.0
24	9.5	3.0	5.5	14.5	6.5	10.0	12.0	7.5	9.5	6.0	4.5	5.0
25	8.5	3.0	5.5	11.5	6.5	8.5	12.5	4.0	8.0	6.0	3.5	4.5
26	6.0	3.5	4.5	14.5	5.5	9.0	14.0	4.0	8.5	9.5	3.0	6.0
27	8.0	3.5	5.5	14.5	4.5	9.5	14.0	5.0	9.0	6.0	3.0	5.0
28	7.5	3.5	5.0	13.5	5.5	9.5	14.5	5.5	9.5	9.0	3.5	5.5
29	7.5	3.5	5.0	12.0	6.0	9.0	14.5	5.5	10.0	8.5	1.5	5.0
30	10.5	3.5	6.0	14.0	6.5	10.0	10.5	6.0	8.0	8.0	3.0	5.5
31	---	---	---	12.5	7.0	9.5	12.5	3.0	7.5	---	---	---
MONTH	10.5	0.5	4.5	15.5	3.0	8.5	16.0	3.0	9.5	13.5	1.5	6.5

06187950 SODA BUTTE CREEK NEAR LAMAR RANGER STATION, YELLOWSTONE NATIONAL PARK

LOCATION.--Lat 44°52'06", long 110°09'53" (NAD 27), Hydrologic Unit 10070001, Yellowstone National Park, on left bank, 4 mi southeast of Lamar Ranger Station and at river mile 1.5.

DRAINAGE AREA.--99 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,630 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. No regulation or diversion upstream of station. Station operated and record provided by the Montana Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	40	33	e28	e25	23	e23	71	419	375	94	52
2	76	40	32	e28	e25	e22	26	73	390	371	92	51
3	74	46	33	30	e25	e20	27	77	350	339	92	50
4	73	44	e31	e25	e24	e20	28	80	346	299	87	50
5	71	43	e30	e27	e22	e20	26	87	364	289	83	48
6	69	43	32	e28	e22	e21	26	115	505	284	81	47
7	69	42	34	e28	e22	e22	32	133	466	276	78	46
8	67	42	35	30	e22	23	37	137	435	270	77	45
9	65	46	36	30	e24	23	34	157	399	259	76	45
10	65	47	37	30	e20	23	31	175	382	288	76	47
11	64	46	38	e28	e22	21	30	161	394	359	85	47
12	62	42	e35	e25	24	22	33	151	421	250	87	53
13	60	40	e32	e29	24	e20	37	139	383	236	91	51
14	59	38	33	e28	e20	e21	43	150	374	222	79	48
15	61	37	34	e25	e16	23	37	191	458	206	74	46
16	62	40	e31	e26	e15	24	39	381	563	196	70	45
17	59	45	e32	e28	e17	e23	50	434	630	184	70	47
18	59	38	e32	30	e20	e22	58	326	641	168	99	49
19	57	42	34	29	24	25	52	604	597	159	110	47
20	57	e40	e32	30	24	23	49	817	627	149	79	44
21	59	e32	e30	30	24	23	51	960	684	137	72	44
22	56	e34	e25	e28	e22	22	49	821	714	131	69	43
23	58	35	e20	28	e18	22	59	829	797	126	68	45
24	56	35	e25	e25	e19	22	77	720	736	120	65	55
25	50	36	e27	e23	e19	22	94	571	622	131	63	59
26	51	36	e28	e24	e20	e22	104	500	533	142	61	50
27	51	e32	30	e25	e22	23	93	475	470	116	59	50
28	51	e28	31	26	e23	24	81	498	452	109	57	57
29	52	e25	31	27	---	24	76	504	413	105	55	50
30	51	e30	e31	27	---	23	73	445	375	101	54	46
31	50	---	e30	e25	---	e22	---	398	---	97	54	---
TOTAL	1,893	1,164	974	850	604	690	1,475	11,180	14,940	6,494	2,357	1,457
MEAN	61.1	38.8	31.4	27.4	21.6	22.3	49.2	361	498	209	76.0	48.6
MAX	79	47	38	30	25	25	104	960	797	375	110	59
MIN	50	25	20	23	15	20	23	71	346	97	54	43
AC-FT	3,750	2,310	1,930	1,690	1,200	1,370	2,930	22,180	29,630	12,880	4,680	2,890

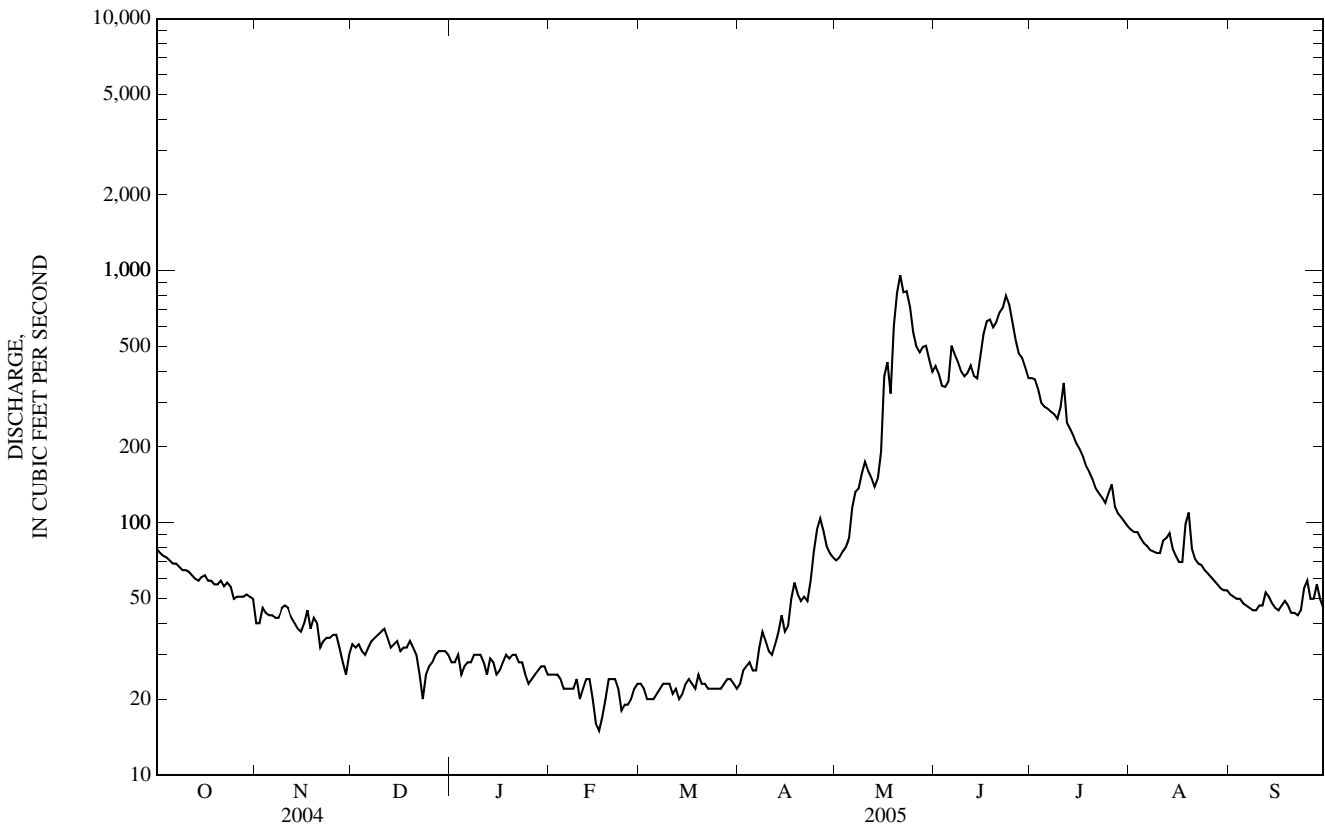
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2005, BY WATER YEAR (WY)

MEAN	44.2	31.7	25.5	25.1	23.1	23.5	62.2	395	672	281	92.3	57.6
MAX	68.8	40.3	31.4	33.3	32.0	32.0	127	580	1,251	447	162	92.0
(WY)	(1998)	(1997)	(2005)	(1997)	(2000)	(1997)	(1990)	(1993)	(1996)	(1998)	(1997)	(1997)
MIN	27.8	21.4	16.0	16.7	16.2	17.2	32.3	217	338	106	51.0	36.1
(WY)	(1989)	(1995)	(1989)	(1989)	(2002)	(2002)	(1993)	(1995)	(2001)	(1994)	(2001)	(2001)

06187950 SODA BUTTE CREEK NEAR LAMAR RANGER STATION, YELLOWSTONE NATIONAL PARK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1989 - 2005	
ANNUAL TOTAL	44,711		44,078		--	
ANNUAL MEAN	122		121		145	
HIGHEST ANNUAL MEAN	--		--		204 1996	
LOWEST ANNUAL MEAN	--		--		96.5 2001	
HIGHEST DAILY MEAN	963	Jun 10	960	May 21	2,070	Jun 9, 1996
LOWEST DAILY MEAN	13	Feb 12	15	Feb 16	12	Feb 4, 1989
ANNUAL SEVEN-DAY MINIMUM	17	Feb 9	19	Feb 12	13	Feb 2, 1989
MAXIMUM PEAK FLOW	--		1,070		2,450 ^a Jun 8, 1996	
MAXIMUM PEAK STAGE	--		6.71		7.20 May 28, 2003	
ANNUAL RUNOFF (AC-FT)	88,680		87,430		104,900	
10 PERCENT EXCEEDS	360		392		464	
50 PERCENT EXCEEDS	64		48		42	
90 PERCENT EXCEEDS	20		23		21	

a Gage height, 5.61 ft.
 e Estimated.



06187950 SODA BUTTE CREEK NEAR LAMAR RANGER STATION, YELLOWSTONE NATIONAL PARK—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1988.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: April 2005 to September 2005.

INSTRUMENTATION.--Temperature recorder installed April 20, 2005.

REMARKS.--Daily water temperature record rated excellent. Several unpublished observations of specific conductance and water temperature were made during the year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 19.5°C, Aug. 5, 2005; minimum, during reporting period, 0.0°C, Apr. 28 to May 1, 2005.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 19.5°C, Aug. 5; minimum, during reporting period, 0.0°C, Apr. 28 to May 1.

TEMPERATURE, WATER, DEGREES CELSIUS WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	APRIL			MAY			JUNE			JULY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	9.5	0.0	4.0	5.5	3.5	4.5	14.5	5.5	9.5
2	---	---	---	9.5	0.5	4.5	5.5	2.5	4.0	12.0	5.5	8.5
3	---	---	---	7.0	1.0	4.5	8.0	3.0	5.0	12.0	5.0	8.5
4	---	---	---	9.5	3.0	5.5	10.0	4.0	6.5	14.0	5.0	9.5
5	---	---	---	8.5	4.0	6.0	11.0	4.0	7.0	14.5	5.5	10.0
6	---	---	---	8.0	2.5	5.0	7.0	4.5	5.5	16.0	6.0	10.5
7	---	---	---	6.5	3.0	5.0	7.5	3.0	4.5	14.0	6.5	10.5
8	---	---	---	8.0	3.5	5.5	7.0	1.5	4.0	16.5	7.0	11.5
9	---	---	---	6.5	2.5	4.5	7.0	2.5	4.5	14.5	7.0	11.0
10	---	---	---	6.0	3.0	4.5	9.0	2.5	5.5	11.5	8.0	9.5
11	---	---	---	7.0	3.0	4.5	11.0	4.0	6.5	16.5	7.0	11.0
12	---	---	---	5.5	1.5	3.5	6.5	4.0	5.0	17.5	7.0	12.0
13	---	---	---	9.5	1.0	5.0	9.5	3.0	5.5	17.5	8.0	12.5
14	---	---	---	11.5	3.5	7.0	12.5	3.0	7.5	18.0	8.5	13.0
15	---	---	---	9.5	3.0	6.0	12.5	4.5	8.0	18.0	8.5	13.0
16	---	---	---	6.5	3.5	4.5	11.0	3.5	7.0	17.0	9.5	13.0
17	---	---	---	4.5	2.5	3.5	13.0	4.5	8.0	16.5	8.5	12.0
18	---	---	---	5.5	2.5	4.0	9.5	4.5	7.0	17.0	7.0	12.0
19	---	---	---	9.0	3.5	5.5	11.0	3.5	7.0	17.5	8.0	12.5
20	---	---	---	7.5	3.0	4.5	13.0	4.0	8.0	18.0	9.0	13.0
21	4.0	2.5	3.0	9.5	2.5	5.5	11.5	4.0	8.0	19.0	9.0	14.0
22	11.0	2.0	5.5	11.0	1.5	5.5	12.0	5.0	8.0	17.0	10.5	13.5
23	10.5	1.5	5.5	9.5	3.5	5.5	13.0	5.0	8.5	19.0	10.0	14.0
24	10.5	1.5	5.5	7.0	3.0	4.5	13.0	5.0	8.5	17.5	9.5	13.5
25	10.5	1.0	5.0	8.0	1.5	4.5	11.5	4.5	8.0	14.0	9.5	11.5
26	6.5	1.0	3.5	9.5	1.5	5.0	8.0	5.0	6.5	17.5	8.0	12.0
27	5.0	2.0	3.0	11.5	1.5	6.0	11.0	4.5	7.5	17.5	7.5	12.5
28	9.5	0.0	3.5	10.5	2.5	6.5	10.5	5.0	7.5	15.5	8.5	12.5
29	7.0	0.0	3.0	7.5	3.0	5.5	11.0	5.5	7.5	15.0	9.0	11.5
30	7.0	0.0	2.5	7.0	3.0	5.0	14.0	5.0	9.0	17.0	9.5	12.5
31	---	---	---	8.0	2.5	5.5	---	---	---	17.5	9.5	13.0
MONTH	---	---	---	11.5	0.0	5.0	14.0	1.5	6.5	19.0	5.0	11.5

YELLOWSTONE RIVER BASIN

06187950 SODA BUTTE CREEK NEAR LAMAR RANGER STATION, YELLOWSTONE NATIONAL PARK—Continued

TEMPERATURE, WATER, DEGREES CELSIUS WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	AUGUST			SEPTEMBER								
1	17.5	9.0	13.0	16.0	5.5	10.5						
2	17.0	10.5	13.5	14.5	6.0	10.0						
3	18.0	10.5	13.5	14.5	7.0	10.5						
4	19.0	8.5	13.5	14.5	7.0	10.5						
5	19.5	9.0	14.0	15.0	6.5	10.5						
6	17.0	9.5	13.5	15.0	6.5	10.5						
7	17.5	9.5	13.5	15.5	5.5	10.0						
8	17.0	9.5	13.0	16.5	7.0	11.0						
9	16.5	9.5	13.5	14.5	7.5	11.0						
10	16.5	10.0	13.0	12.5	7.5	9.5						
11	15.0	9.5	12.0	9.0	6.0	7.5						
12	14.0	8.0	10.5	8.5	5.5	6.5						
13	16.5	8.0	11.5	10.0	4.0	7.0						
14	18.0	8.0	12.5	12.5	4.5	8.0						
15	17.0	8.0	12.5	13.0	4.5	8.5						
16	15.0	8.0	11.5	11.0	5.0	7.5						
17	16.5	10.5	12.5	10.0	5.5	7.0						
18	11.5	8.5	10.0	9.5	5.5	7.0						
19	16.5	7.5	11.0	12.5	3.0	7.5						
20	18.0	7.5	12.5	13.5	4.0	8.5						
21	19.0	8.0	13.5	11.0	7.5	8.5						
22	15.0	9.5	12.0	12.5	6.0	8.5						
23	17.5	9.5	13.0	11.0	6.5	8.0						
24	15.5	9.0	12.0	8.0	6.5	7.0						
25	15.0	6.0	10.5	11.0	5.0	7.0						
26	16.0	6.0	11.0	13.0	4.5	8.0						
27	16.5	7.0	11.5	8.0	5.0	6.5						
28	17.0	7.5	12.0	12.5	4.5	7.5						
29	17.0	7.5	12.0	12.5	3.5	7.5						
30	11.5	7.5	9.5	10.0	4.0	7.0						
31	15.0	4.5	9.5	---	---	---						
MONTH	19.5	4.5	12.0	16.5	3.0	8.5						

06188000 LAMAR RIVER NEAR TOWER FALLS RANGER STATION, YELLOWSTONE NATIONAL PARK

LOCATION.--Lat 44°55'40", long 110°23'35" (NAD 27), Hydrologic Unit 10070001, Yellowstone National Park, on left bank 0.5 mi north of the Cooke City highway, 1.6 mi northeast of Tower Falls Ranger Station, 2.7 mi downstream from Slough Creek, and at river mile 0.5.

DRAINAGE AREA.--660 mi².

PERIOD OF RECORD.--September 1922, April 1923 to September 1969, May 1985 to September 1986 (seasonal records only), October 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,000 ft above NGVD of 1929, from topographic map. Prior to September 16, 1925, nonrecording gage and September 16, 1925 to July 29, 1927, water-stage recorder at same site at datum 1.00 ft higher. July 29, 1927 to September 30, 1969, water-stage recorder at same site and datum. May 1985 to September 1986, nonrecording gage at same site and datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. No regulation or diversion upstream of station. Station operated and record provided by the Montana Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	475	246	e180	e150	e100	e120	127	738	3,160	1,960	358	183
2	446	252	e200	e150	e100	e110	147	780	2,960	1,900	345	175
3	423	302	e170	e160	e100	e105	178	838	2,500	1,860	396	168
4	410	285	e150	e100	e100	e105	202	987	2,400	1,530	358	166
5	396	269	e140	e110	e95	e105	188	1,340	2,520	1,410	310	163
6	382	272	e150	e120	e95	e110	173	2,000	3,760	1,330	288	160
7	371	277	e160	e120	e90	e120	248	2,240	3,480	1,260	275	156
8	372	275	e180	e130	e90	e130	381	2,050	3,150	1,190	266	152
9	352	312	e180	e130	e100	e130	346	2,390	2,960	1,120	267	149
10	344	330	e200	e120	e85	e130	287	2,620	2,740	1,080	270	160
11	344	298	e200	e100	e85	e120	244	2,250	2,730	1,480	306	171
12	330	263	e170	e90	e100	e120	271	1,870	2,960	1,040	303	180
13	323	246	e160	e110	e130	e110	339	1,570	2,870	921	313	204
14	315	241	e170	e100	e110	e100	522	1,740	2,530	855	288	200
15	319	251	e180	e90	e80	e105	401	2,590	2,970	778	256	184
16	346	281	e160	e100	e70	e110	388	4,160	3,760	708	238	170
17	335	284	e170	e120	e80	e105	551	4,650	4,090	664	234	171
18	327	233	e180	e150	e90	e100	783	3,250	4,370	606	304	194
19	322	248	e180	e150	e100	e120	628	5,250	3,870	560	662	191
20	322	e200	e180	e130	e130	e140	529	7,190	3,920	515	365	171
21	344	e180	e160	e110	e120	e130	542	8,580	4,090	488	283	161
22	333	e200	e120	e110	e100	e130	479	6,770	4,010	456	253	161
23	326	e210	e90	e100	e90	e120	680	7,070	4,470	437	255	165
24	332	e220	e110	e100	e90	e110	1,070	6,210	4,060	421	235	207
25	285	e220	e130	e100	e90	e110	1,500	4,580	3,450	410	221	304
26	303	e180	e150	e110	e95	e100	1,670	3,800	2,960	493	213	247
27	310	e160	e160	e120	e95	e115	1,360	3,720	2,640	404	204	215
28	318	e140	e170	e130	e100	e130	1,030	3,900	2,510	375	196	228
29	326	e120	e180	e120	---	e130	906	4,000	2,290	356	188	204
30	315	e140	e180	e120	---	e120	813	3,520	2,160	348	182	186
31	304	---	e170	e100	---	e110	---	3,060	---	336	187	---
TOTAL	10,750	7,135	5,080	3,650	2,710	3,600	16,983	105,713	96,340	27,291	8,819	5,546
MEAN	347	238	164	118	96.8	116	566	3,410	3,211	880	284	185
MAX	475	330	200	160	130	140	1,670	8,580	4,470	1,960	662	304
MIN	285	120	90	90	70	100	127	738	2,160	336	182	149
AC-FT	21,320	14,150	10,080	7,240	5,380	7,140	33,690	209,700	191,100	54,130	17,490	11,000

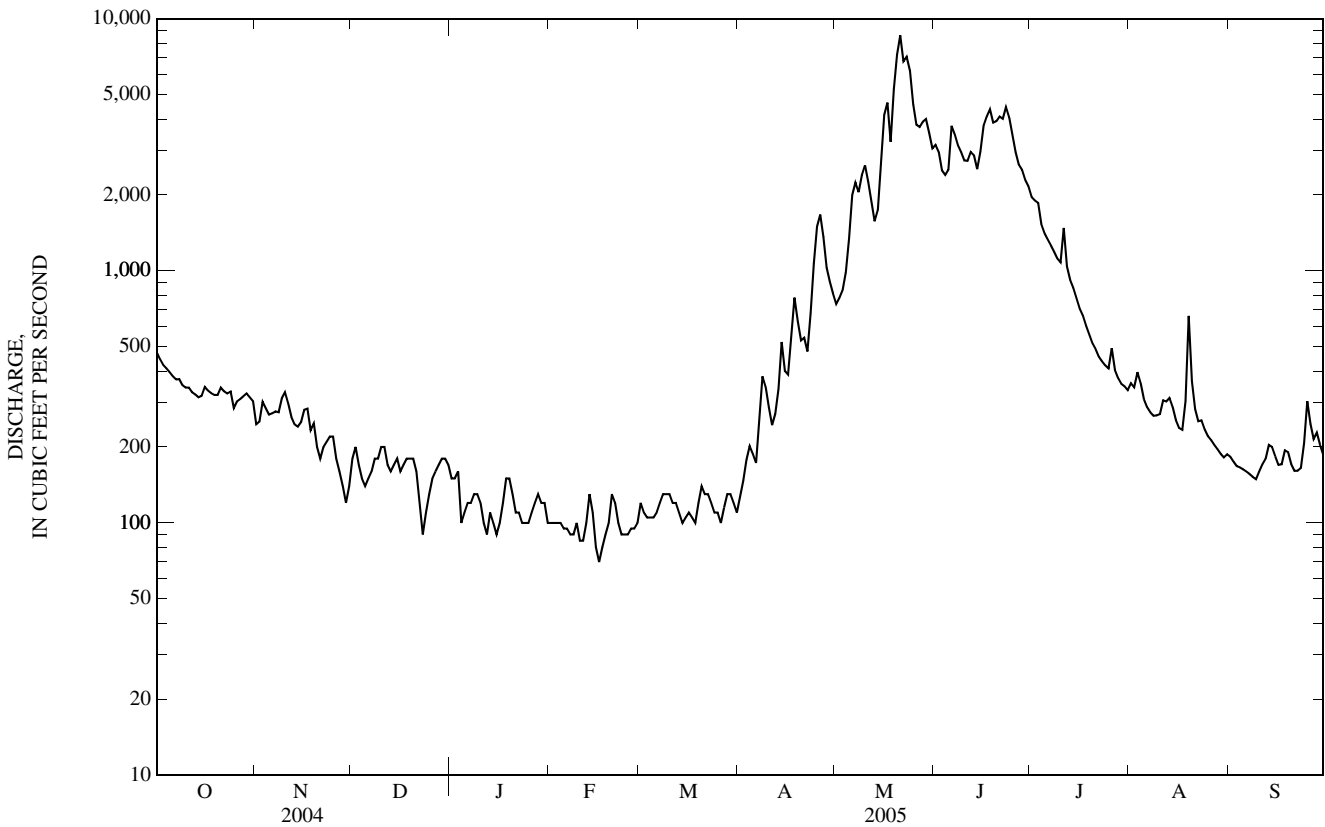
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 2005, BY WATER YEAR (WY)*

MEAN	213	157	120	106	102	114	477	2,868	4,213	1,335	350	230
MAX	485	330	202	200	171	204	1,684	6,885	9,044	3,256	886	518
(WY)	(1942)	(1928)	(1951)	(1969)	(1969)	(1999)	(1990)	(1928)	(1996)	(1943)	(1968)	(1968)
MIN	109	88.1	75.5	71.8	70.0	67.9	106	969	1,408	344	173	115
(WY)	(1989)	(1937)	(1953)	(1989)	(1942)	(1964)	(1945)	(1933)	(1934)	(1931)	(1940)	(1988)

06188000 LAMAR RIVER NEAR TOWER FALLS RANGER STATION, YELLOWSTONE NATIONAL PARK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1923 - 2005*	
ANNUAL TOTAL	280,696		293,617		--	
ANNUAL MEAN	767		804		863	
HIGHEST ANNUAL MEAN	--		--		1,531	1997
LOWEST ANNUAL MEAN	--		--		525	1934
HIGHEST DAILY MEAN	5,130	Jun 10	8,580	May 21	15,600	Jun 10, 1996
LOWEST DAILY MEAN	65	Jan 5	70	Feb 16	45	Mar 23, 1964
ANNUAL SEVEN-DAY MINIMUM	76	Feb 9	91	Feb 5	57	Mar 5, 1964
MAXIMUM PEAK FLOW	--		9,610	May 21	19,500	Jun 10, 1996
MAXIMUM PEAK STAGE	--		8.55	May 21	12.15	Jun 10, 1996
ANNUAL RUNOFF (AC-FT)	556,800		582,400		625,300	
10 PERCENT EXCEEDS	2,240		2,790		2,900	
50 PERCENT EXCEEDS	319		248		183	
90 PERCENT EXCEEDS	85		100		90	

* For period of operation.
 e Estimated.



06190540 BOILING RIVER AT MAMMOTH, YELLOWSTONE NATIONAL PARK

LOCATION.--Lat 44°59'07", long 110°41'18" (NAD 27), Hydrologic Unit 10070001, Yellowstone National Park, on left bank 50 ft downstream from outfall, 150 ft upstream of mouth, and 0.8 mi northeast of U.S. Post Office at Mammoth.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1988 to September 1995, October 2002 to current year. Published as "Hot River" at Mammoth from 1989-94.

GAGE.--Water-stage recorder. Elevation of gage is 5,666.11 ft above NGVD of 1929. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good. No regulation or diversion upstream from station, however, flow is added from sinkholes upstream from spring. Station operation by and record provided by the Montana Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	23	23	21	22	22	23	24	29	28	28	28
2	24	24	23	22	22	22	23	24	29	28	28	28
3	24	24	23	22	21	22	23	24	29	28	28	28
4	24	24	23	22	22	22	23	25	28	28	28	28
5	24	24	22	22	22	22	23	25	28	28	28	28
6	24	24	23	22	21	23	23	27	29	28	28	28
7	24	24	23	22	21	23	23	28	29	28	27	28
8	24	24	23	22	22	23	24	28	29	28	27	28
9	24	24	23	22	21	23	24	28	29	28	27	28
10	24	24	23	22	21	23	23	28	29	28	27	28
11	24	24	23	22	21	23	23	28	29	28	27	28
12	24	23	23	21	22	23	23	29	29	28	27	28
13	24	23	22	22	23	23	24	28	29	28	27	28
14	24	23	23	22	23	22	24	29	29	28	27	28
15	24	23	23	22	21	23	24	29	29	28	27	28
16	24	23	23	23	22	23	24	29	29	28	27	28
17	24	23	23	23	22	23	24	29	29	28	27	27
18	24	23	23	23	22	23	24	29	29	28	27	27
19	24	23	23	22	23	23	24	29	29	28	28	27
20	24	23	23	23	23	23	24	29	29	28	28	27
21	25	21	22	23	23	23	24	30	29	28	28	27
22	24	23	21	23	23	23	24	29	29	27	28	27
23	24	23	21	22	22	23	24	29	29	27	28	27
24	24	23	22	22	22	22	24	29	29	27	28	27
25	24	23	23	22	21	22	24	29	29	28	28	27
26	24	23	23	22	22	23	24	29	29	28	28	27
27	24	22	23	22	22	22	25	28	29	28	28	27
28	24	22	23	23	22	23	25	28	29	28	28	27
29	24	20	23	23	---	23	24	28	29	28	28	27
30	24	22	23	23	---	23	24	28	28	28	28	27
31	24	---	22	22	---	22	---	29	---	28	28	---
TOTAL	745	692	704	689	614	703	712	865	867	865	856	826
MEAN	24.0	23.1	22.7	22.2	21.9	22.7	23.7	27.9	28.9	27.9	27.6	27.5
MAX	25	24	23	23	23	23	25	30	29	28	28	28
MIN	24	20	21	21	21	22	23	24	28	27	27	27
AC-FT	1,480	1,370	1,400	1,370	1,220	1,390	1,410	1,720	1,720	1,720	1,700	1,640

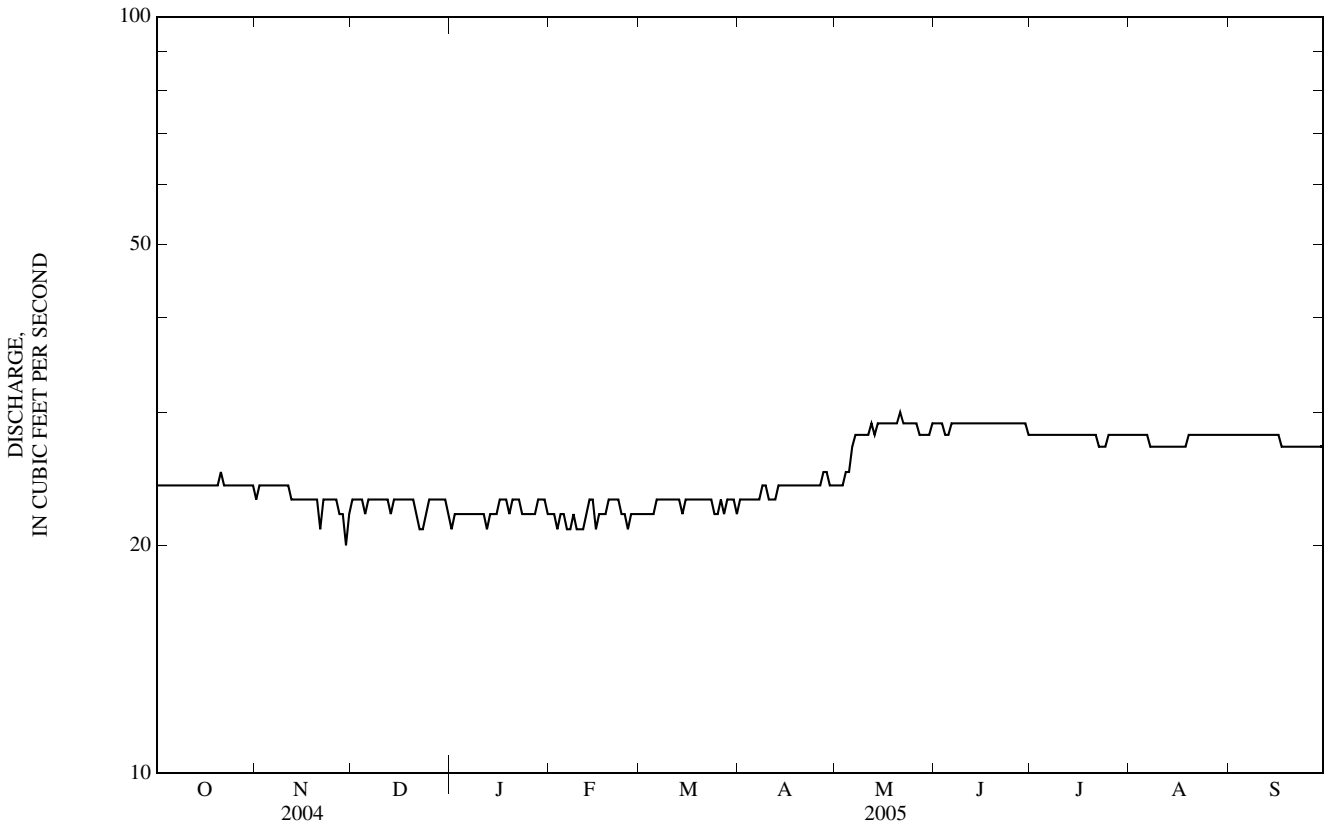
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2005, BY WATER YEAR (WY)*

MEAN	26.4	25.4	25.2	25.5	24.7	25.0	26.4	29.2	29.0	27.5	26.6	26.1
MAX	29.9	29.1	28.3	29.8	29.6	30.8	31.5	33.1	33.0	31.2	29.1	28.6
(WY)	(1989)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(1995)	(1995)	(1995)	(1995)	(1995)
MIN	21.3	21.4	21.9	21.0	20.9	21.6	23.7	25.5	26.9	25.0	23.5	21.3
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2004)	(2003)

06190540 BOILING RIVER AT MAMMOTH, YELLOWSTONE NATIONAL PARK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1989 - 2005*	
ANNUAL TOTAL	8,641		9,138		--	
ANNUAL MEAN	23.6		25.0		26.4	
HIGHEST ANNUAL MEAN	--		--		28.5 2003	
LOWEST ANNUAL MEAN	--		--		23.2 2004	
HIGHEST DAILY MEAN	27	May 29	30	May 21	36	May 20, 1995
LOWEST DAILY MEAN	19	Aug 15	20	Nov 29	19	Nov 23, 1993
ANNUAL SEVEN-DAY MINIMUM	20	Aug 10	21	Feb 5	20	Aug 10, 2004
MAXIMUM PEAK FLOW	--		30	May 14	36 ^a	May 20, 1995
MAXIMUM PEAK STAGE	--		1.36	May 14	1.50	May 17, 1993
ANNUAL RUNOFF (AC-FT)	17,140		18,130		19,130	
10 PERCENT EXCEEDS	27		29		30	
50 PERCENT EXCEEDS	24		24		27	
90 PERCENT EXCEEDS	21		22		22	

* For period of operation.
 a Gage height, 1.45 ft.



06190540 BOILING RIVER AT MAMMOTH, YELLOWSTONE NATIONAL PARK—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1988 to September 1994, October 2002 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1988 to September 1990.

WATER TEMPERATURE: October 1988 to September 1994, October 2002 to current year.

INSTRUMENTATION.--Temperature recorder installed Sept. 25, 2002.

REMARKS.--Daily water temperature record rated good except for Jan. 20 to July 30, which is fair. Several unpublished observations of specific conductance and water temperature were made during the year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 2,410 microsiemens per centimeter ($\mu\text{S}/\text{cm}$) at 25.0°C, Jan. 29, 1990; minimum daily, 1,500 $\mu\text{S}/\text{cm}$ at 25.0°C, July, 17, 22, 23, 1990.

WATER TEMPERATURE: Maximum, 59.0°C, many days October 2003 to January 2004 and August 2004; minimum, 38.0°C, June 16, 27, 1989, Apr. 19, 1990.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 58.5°C, Feb. 25; minimum, 41.5°C, May 21.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	49.0	48.5	49.0	53.0	46.5	49.5	49.5	49.0	49.5	56.5	51.5	54.5
2	49.5	48.5	49.0	48.0	47.0	47.5	49.5	49.0	49.0	51.5	51.5	51.5
3	49.5	48.5	49.0	48.0	47.0	47.5	49.0	49.0	49.0	51.5	51.5	51.5
4	49.5	48.5	49.0	48.5	47.0	47.5	49.5	49.0	49.5	54.5	51.5	53.0
5	49.5	49.0	49.0	48.0	47.0	47.5	56.5	49.5	51.0	55.0	51.0	53.5
6	49.5	49.0	49.5	48.5	47.5	48.0	49.5	49.5	49.5	53.0	51.0	52.0
7	49.5	48.5	49.0	49.0	47.0	48.0	49.5	49.5	49.5	52.0	51.0	51.5
8	49.0	48.0	48.5	49.0	47.5	48.0	50.0	49.5	49.5	51.0	51.0	51.0
9	49.5	48.5	49.0	48.5	48.0	48.5	50.0	49.5	49.5	51.0	51.0	51.0
10	49.0	47.5	48.0	48.5	48.0	48.0	49.5	49.5	49.5	53.5	51.0	51.5
11	48.5	47.5	48.0	48.5	48.0	48.0	50.0	49.5	50.0	56.0	51.0	51.5
12	48.0	47.5	48.0	48.5	48.0	48.0	55.5	50.0	50.0	56.5	51.5	54.0
13	48.5	47.5	48.0	50.0	47.5	48.5	55.5	49.0	52.5	54.5	51.0	52.5
14	48.5	47.5	48.0	51.0	47.5	49.0	50.0	49.5	50.0	55.5	51.0	52.5
15	48.5	48.0	48.5	50.0	48.0	49.0	50.0	50.0	50.0	56.5	50.0	53.0
16	48.5	48.0	48.0	49.0	48.0	48.5	50.0	50.0	50.0	56.5	50.0	50.5
17	48.5	47.5	48.0	49.0	48.5	48.5	50.0	50.0	50.0	50.5	50.0	50.5
18	48.0	47.0	47.5	51.0	48.0	49.0	50.0	50.0	50.0	51.5	50.5	51.0
19	47.5	47.0	47.0	49.5	48.5	48.5	50.5	50.0	50.0	51.5	51.0	51.5
20	47.5	46.0	47.0	54.5	48.5	49.0	51.5	49.5	50.5	51.5	51.0	51.5
21	47.0	46.0	46.5	56.5	49.5	53.5	54.0	50.0	50.5	51.5	51.5	51.5
22	47.5	46.0	46.5	51.0	49.0	50.0	56.5	51.0	54.5	51.5	51.5	51.5
23	47.0	45.5	46.5	49.5	49.0	49.5	56.0	52.5	54.5	51.5	51.5	51.5
24	48.5	46.0	46.5	49.5	49.5	49.5	52.5	50.5	51.5	56.5	51.0	52.0
25	50.5	46.0	47.5	49.5	49.5	49.5	50.5	50.0	50.0	56.5	51.0	52.5
26	48.5	46.5	47.5	55.0	49.0	49.5	50.0	50.0	50.0	57.0	51.0	52.0
27	48.0	46.5	47.0	55.5	48.5	50.5	50.5	50.0	50.0	56.5	51.0	51.5
28	47.5	47.0	47.0	56.5	49.0	52.5	50.5	50.5	50.5	51.5	51.0	51.5
29	47.0	46.5	47.0	58.0	54.5	56.0	50.5	50.5	50.5	51.5	51.0	51.5
30	47.5	47.0	47.0	54.5	49.5	52.0	51.0	50.5	50.5	51.5	51.0	51.5
31	48.5	46.5	47.0	---	---	---	55.5	50.5	51.5	56.0	51.0	53.0
MONTH	50.5	45.5	48.0	58.0	46.5	49.5	56.5	49.0	50.5	57.0	50.0	52.0

YELLOWSTONE RIVER BASIN

06190540 BOILING RIVER AT MAMMOTH, YELLOWSTONE NATIONAL PARK—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	56.5	51.0	51.5	52.5	52.5	52.5	53.5	52.0	52.5	50.5	49.5	50.0
2	57.5	51.0	54.0	53.0	52.5	52.5	52.5	52.0	52.5	50.5	49.5	50.0
3	57.5	51.0	54.0	56.5	52.0	53.5	52.5	52.0	52.0	50.5	49.5	49.5
4	52.5	51.5	52.0	56.5	52.0	53.0	52.0	52.0	52.0	50.0	48.5	49.5
5	56.0	51.5	52.0	56.0	52.0	53.0	52.5	51.5	52.0	49.0	47.5	48.5
6	57.0	51.5	54.5	53.0	52.0	52.5	52.5	51.5	52.0	47.5	43.0	44.5
7	57.5	52.0	55.5	52.5	52.0	52.5	52.5	51.0	51.5	43.5	42.5	43.0
8	55.5	51.5	53.0	53.0	52.5	52.5	51.0	50.5	50.5	44.0	42.0	43.0
9	58.0	51.5	54.5	53.0	52.5	52.5	51.0	50.5	51.0	43.0	42.0	42.5
10	57.5	51.5	54.5	53.0	52.5	52.5	51.5	50.5	51.0	42.5	42.0	42.0
11	57.5	51.5	54.5	52.5	52.5	52.5	51.5	50.5	51.0	43.5	42.0	42.5
12	55.0	51.5	51.5	52.5	52.0	52.5	51.5	51.0	51.0	43.5	42.5	43.0
13	52.0	51.5	52.0	56.0	52.0	52.5	51.5	50.5	51.0	45.0	43.0	44.0
14	55.5	51.5	52.0	56.0	52.0	53.0	51.0	50.0	50.5	45.5	43.5	44.5
15	57.5	52.0	56.0	56.0	52.0	52.5	51.0	50.5	50.5	44.5	43.5	44.0
16	56.0	51.0	53.5	52.5	52.0	52.5	51.5	50.5	51.0	44.0	42.5	43.0
17	56.0	50.5	52.5	52.5	52.0	52.5	51.0	50.5	50.5	43.0	42.0	42.5
18	56.0	51.0	53.5	55.5	52.0	53.0	50.5	50.0	50.0	44.0	42.5	43.0
19	51.5	51.0	51.0	52.5	52.5	52.5	50.5	50.0	50.5	43.5	42.5	43.0
20	52.0	51.5	51.5	52.5	52.5	52.5	51.0	50.0	50.5	43.5	42.0	42.5
21	52.0	51.5	52.0	52.5	52.0	52.5	50.5	50.5	50.5	43.5	41.5	42.5
22	52.0	51.5	51.5	52.5	52.0	52.5	51.5	50.5	51.0	44.5	42.0	43.5
23	57.0	51.0	54.0	52.5	52.0	52.0	51.5	50.5	50.5	44.0	43.0	43.5
24	57.5	51.5	54.5	54.5	52.0	53.0	51.0	50.0	50.5	43.5	42.5	43.0
25	58.5	51.5	55.0	56.5	52.0	53.5	51.0	49.5	50.0	44.0	42.5	43.0
26	57.0	51.5	54.0	55.5	52.0	53.0	50.5	49.0	50.0	44.5	42.5	43.5
27	57.0	51.5	54.0	53.0	52.5	52.5	49.0	48.5	49.0	45.0	43.0	44.0
28	57.5	51.5	54.0	52.5	52.0	52.0	49.5	49.0	49.0	45.0	43.5	44.0
29	---	---	---	52.5	52.0	52.0	50.0	49.0	49.5	45.0	43.5	44.5
30	---	---	---	52.0	51.5	52.0	50.5	49.5	50.0	45.0	43.5	44.0
31	---	---	---	55.5	51.5	53.0	---	---	---	44.5	43.5	44.0
MONTH	58.5	50.5	53.5	56.5	51.5	52.5	53.5	48.5	51.0	50.5	41.5	44.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	44.5	43.0	43.5	46.5	44.5	45.5	48.0	46.5	47.5	47.0	45.0	46.0
2	44.0	42.5	43.0	46.0	45.0	45.5	48.0	47.0	47.5	47.0	45.0	46.0
3	44.5	43.5	44.0	46.0	44.5	45.0	47.5	46.5	47.0	47.0	45.5	46.5
4	45.0	43.5	44.5	46.5	44.5	45.5	48.0	46.5	47.5	47.0	45.5	46.5
5	45.0	44.0	44.5	47.0	45.0	46.0	48.5	47.0	47.5	47.0	45.5	46.0
6	45.0	43.0	43.5	47.0	45.0	46.0	48.5	47.0	48.0	47.0	45.5	46.0
7	43.5	42.5	43.0	47.0	45.5	46.5	48.5	47.5	48.0	47.0	45.0	46.0
8	44.0	42.5	43.0	47.5	45.5	46.5	48.5	47.5	48.0	47.0	45.5	46.0
9	44.0	43.0	43.5	47.5	45.5	46.5	48.5	47.5	48.0	47.0	46.0	46.5
10	44.5	43.0	43.5	47.0	45.5	46.5	48.5	47.5	48.0	46.5	45.5	46.0
11	44.5	43.5	44.0	47.0	45.0	46.0	48.0	47.5	48.0	46.0	45.0	45.5
12	44.0	42.5	43.5	47.5	45.5	46.5	48.0	47.0	47.5	45.5	45.0	45.0
13	44.0	42.5	43.0	48.0	46.0	47.0	47.5	46.5	47.0	45.5	44.5	45.0
14	45.0	43.0	44.0	48.0	46.5	47.0	48.0	46.5	47.5	46.0	44.5	45.5
15	45.5	44.0	44.5	48.0	46.0	47.0	48.5	47.0	48.0	46.0	45.0	45.5
16	45.0	43.5	44.5	48.0	46.5	47.0	48.5	47.0	48.0	46.0	45.0	45.5
17	45.0	43.5	44.5	47.5	46.0	47.0	48.5	47.5	48.0	46.0	45.0	45.5
18	45.0	43.5	44.5	47.5	46.0	46.5	48.0	46.5	47.0	46.0	45.0	45.5
19	45.5	43.5	44.5	48.0	46.0	47.0	47.5	46.0	46.5	46.0	44.5	45.5
20	45.5	44.0	45.0	48.0	46.5	47.0	47.5	46.0	47.0	46.0	45.0	45.5
21	45.5	44.0	45.0	48.0	46.5	47.5	48.0	46.0	47.0	46.0	45.5	46.0
22	46.0	44.0	45.0	48.0	47.0	47.5	47.0	46.5	47.0	46.0	45.0	45.5
23	45.5	44.0	45.0	48.5	47.0	48.0	47.5	46.5	47.0	46.0	45.5	45.5
24	46.0	44.0	45.0	48.5	46.5	47.5	47.5	46.5	46.5	45.5	45.0	45.0
25	46.0	44.0	45.0	47.5	46.5	47.0	47.0	45.5	46.0	45.5	44.5	45.0
26	45.5	44.5	45.0	47.5	46.0	47.0	47.5	45.5	46.5	45.5	44.5	45.0
27	45.5	44.0	45.0	48.0	46.0	47.0	47.5	46.0	46.5	45.5	45.0	45.0
28	45.0	44.0	45.0	47.5	46.5	47.0	47.5	46.0	46.5	45.5	44.5	45.0
29	45.5	44.5	45.0	48.0	46.5	47.5	47.5	45.5	46.5	45.5	44.5	45.0
30	46.5	44.5	45.5	48.0	47.0	47.5	47.0	45.5	46.0	46.0	45.0	45.5
31	---	---	---	48.0	47.0	47.5	46.5	45.0	45.5	---	---	---
MONTH	46.5	42.5	44.5	48.5	44.5	46.5	48.5	45.0	47.0	47.0	44.5	45.5

06191000 GARDNER RIVER NEAR MAMMOTH, YELLOWSTONE NATIONAL PARK

LOCATION.--Lat 44°59'33", long 110°41'26" (NAD 27), Hydrologic Unit 10070001, Yellowstone National Park, on left bank at Wyoming-Montana state line, 400 ft upstream from highway bridge, 0.5 mi downstream from Boiling River (formerly Hot River), 1.5 mi north of Mammoth, and at river mile 2.9.

DRAINAGE AREA.--202 mi².

PERIOD OF RECORD.--October 1938 to September 1972, April 1984 to current year. Prior to October 1959, published as Gardiner River near Mammoth.

REVISED RECORDS.--WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,623.97 ft above NGVD of 1929 (levels by National Park Service). U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good. No regulation or diversion upstream of station. Station operated and record provided by the Montana Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	95	88	88	88	89	86	142	587	342	155	121
2	115	105	92	92	84	88	88	148	566	333	159	119
3	112	106	93	93	86	88	90	163	485	314	169	117
4	112	105	94	88	87	88	93	186	452	292	157	116
5	112	107	88	77	87	88	92	220	460	278	149	115
6	112	106	92	86	86	90	91	259	584	267	145	115
7	115	104	94	87	86	90	97	287	548	259	143	113
8	115	105	94	89	86	90	104	295	509	256	143	113
9	112	106	95	91	86	91	99	353	479	245	143	114
10	113	107	98	92	84	92	95	396	441	255	146	116
11	112	104	101	92	79	90	93	349	417	293	148	117
12	113	101	98	82	94	90	96	294	457	247	149	119
13	115	99	89	83	88	87	106	268	445	230	154	119
14	112	97	97	87	88	88	114	296	398	219	142	117
15	112	98	96	87	72	90	105	384	412	211	137	114
16	115	99	94	91	73	90	106	568	480	204	132	113
17	115	101	93	94	86	89	120	620	500	200	132	118
18	115	95	92	92	88	88	134	506	514	195	147	122
19	112	97	92	93	99	90	121	897	481	189	157	117
20	116	92	87	94	93	91	117	968	480	183	140	113
21	119	74	86	93	90	90	115	1,010	509	179	134	111
22	113	91	75	90	89	90	113	870	521	177	131	112
23	116	100	68	90	85	90	131	903	611	173	134	114
24	113	95	82	88	86	89	158	820	557	170	129	128
25	108	98	92	87	86	89	184	647	492	169	128	122
26	110	97	93	88	86	89	207	554	457	173	126	115
27	112	89	95	88	85	88	200	526	437	166	124	113
28	113	84	94	90	86	91	167	523	422	160	123	112
29	112	61	93	89	---	89	154	531	387	158	121	109
30	110	79	89	89	---	89	146	521	364	157	122	108
31	109	---	92	85	---	86	---	488	---	155	124	---
TOTAL	3,505	2,897	2,826	2,755	2,413	2,767	3,622	14,992	14,452	6,849	4,343	3,472
MEAN	113	96.6	91.2	88.9	86.2	89.3	121	484	482	221	140	116
MAX	119	107	101	94	99	92	207	1,010	611	342	169	128
MIN	108	61	68	77	72	86	86	142	364	155	121	108
AC-FT	6,950	5,750	5,610	5,460	4,790	5,490	7,180	29,740	28,670	13,580	8,610	6,890

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2005, BY WATER YEAR (WY)*

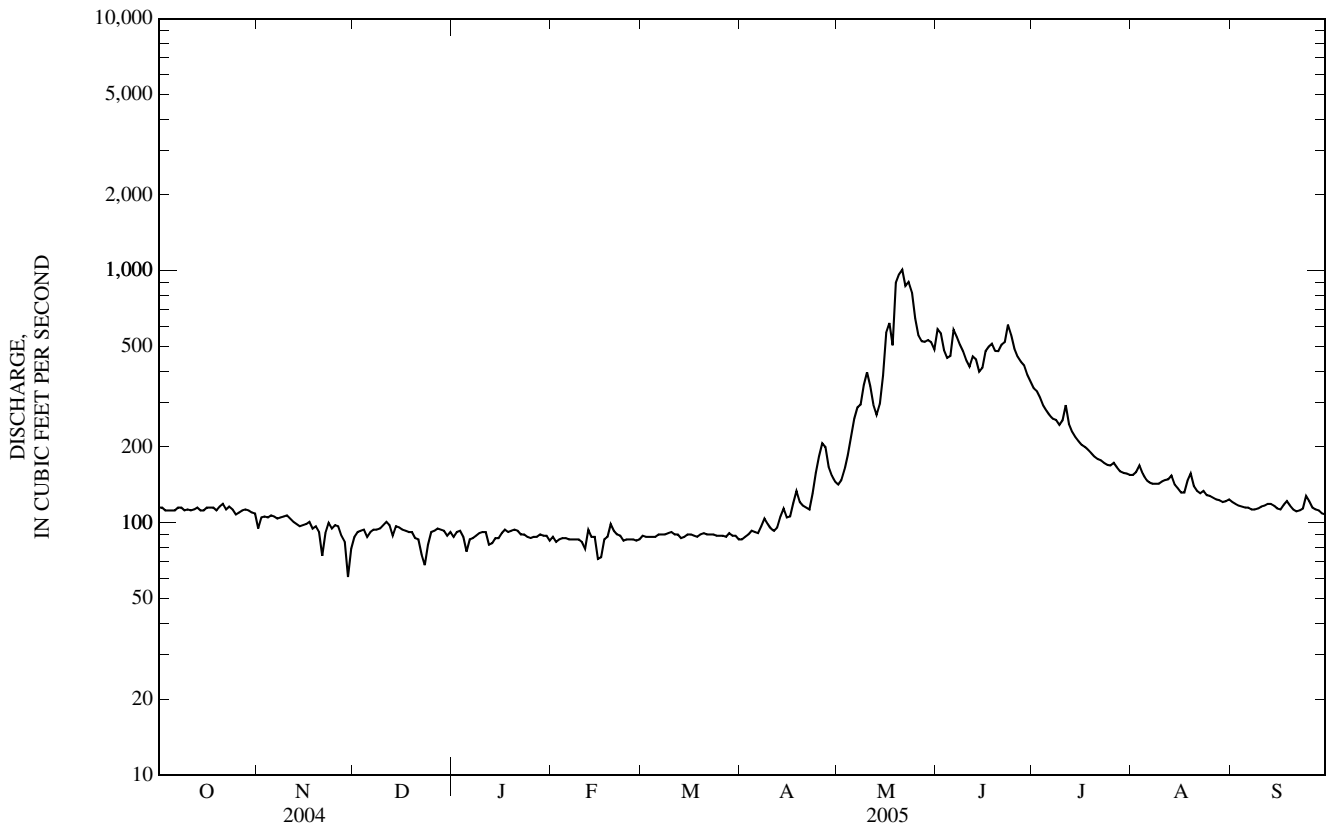
MEAN	126	112	102	96.8	92.8	93.7	141	507	703	298	161	136
MAX	175	151	135	134	128	128	304	1,067	1,354	662	236	190
(WY)	(1969)	(1998)	(198)	(1998)	(1998)	(1998)	(1990)	(1997)	(1971)	(1943)	(1943)	(1968)
MIN	94.9	85.5	79.3	77.6	75.0	75.4	84.1	283	212	133	103	93.4
(WY)	(2002)	(1940)	(1941)	(1941)	(1940)	(1942)	(1945)	(1960)	(1987)	(1988)	(1988)	(1988)

YELLOWSTONE RIVER BASIN

06191000 GARDNER RIVER NEAR MAMMOTH, YELLOWSTONE NATIONAL PARK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1939 - 2005*	
ANNUAL TOTAL	61,962		64,893		--	
ANNUAL MEAN	169		178		214	
HIGHEST ANNUAL MEAN	--		--		324 1997	
LOWEST ANNUAL MEAN	--		--		138 1988	
HIGHEST DAILY MEAN	677	Jun 10	1,010	May 21	1,830	May 29, 1956
LOWEST DAILY MEAN	61	Nov 29	61	Nov 29	53	Dec 15, 1988
ANNUAL SEVEN-DAY MINIMUM	80	Mar 2	83	Feb 10	61	Feb 1, 1989
MAXIMUM PEAK FLOW	--		1,130	May 20	2,080 ^a	Jun 4, 1956
MAXIMUM PEAK STAGE	--		4.02	May 20	5.03	Jun 2, 1997
ANNUAL RUNOFF (AC-FT)	122,900		128,700		155,300	
10 PERCENT EXCEEDS	360		454		502	
50 PERCENT EXCEEDS	115		112		121	
90 PERCENT EXCEEDS	85		87		87	

* For period of operation.
 a Gage height, 4.46 ft.



06191500 YELLOWSTONE RIVER AT CORWIN SPRINGS, MT

LOCATION.--Lat 45°06'43", long 110°47'37" (NAD 27), in NW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.30, T.8 S., R.8 E., Park County, Hydrologic Unit 10070002, on left bank 20 ft downstream from county road bridge at Corwin Springs, 1.3 mi upstream from Mol Heron Creek, 7 mi northwest of Gardiner, and at river mile 549.7.

DRAINAGE AREA.--2,619 mi².

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.

REVISED RECORDS.--WSP 1309: 1912. WSP 1509: 1889-94, 1911, 1913, 1916-18, 1920-21, 1925, 1927. WSP 1559: Drainage area. WDR MT-04-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,079.09 ft above NGVD of 1929. August 12, 1889 to November 4, 1893, nonrecording gages at site 2 mi upstream at different datums. September 2, 1910 to April 19, 1935, nonrecording gages on bridge at present datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good. Natural storage in Yellowstone Lake. Diversions for irrigation of about 960 acres of which 40 acres lies downstream from station. Station operated and record provided by the Montana Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,930	1,440	e1,150	e850	805	849	900	1,940	8,320	7,080	2,980	1,790
2	1,890	1,430	1,170	816	777	860	912	2,000	8,390	6,920	2,990	1,760
3	1,860	1,510	1,150	789	771	860	956	2,110	7,510	6,820	3,050	1,720
4	1,830	1,470	1,090	e800	786	858	1,000	2,330	7,290	6,280	2,940	1,690
5	1,800	1,460	1,080	e750	815	865	1,010	2,790	7,400	6,010	2,820	1,670
6	1,780	1,450	1,060	e700	787	874	973	3,850	9,350	5,820	2,730	1,640
7	1,760	1,440	1,100	e800	804	896	1,020	4,380	9,270	5,660	2,660	1,610
8	1,760	1,430	1,080	858	783	914	1,230	4,110	8,580	5,520	2,610	1,580
9	1,720	1,460	1,060	827	787	933	1,250	4,770	8,260	5,340	2,580	1,550
10	1,720	1,480	1,120	823	770	949	1,140	5,120	7,850	5,210	2,550	1,570
11	1,710	1,450	1,150	819	753	945	1,070	4,730	7,680	5,760	2,560	1,590
12	1,690	1,390	1,150	784	794	955	1,070	4,030	7,880	5,100	2,510	1,570
13	1,650	1,340	1,020	758	805	887	1,160	3,610	8,140	4,820	2,470	1,600
14	1,630	1,320	1,080	e740	818	817	1,430	3,770	7,380	4,660	2,390	1,580
15	1,630	1,290	1,100	e720	780	880	1,340	4,950	7,800	4,490	2,320	1,530
16	1,670	1,310	1,050	e750	744	902	1,280	7,410	9,170	4,330	2,250	1,480
17	1,660	1,380	1,040	790	773	914	1,440	9,220	9,790	4,230	2,210	1,480
18	1,630	1,310	1,050	808	786	860	1,840	6,780	10,600	4,050	2,320	1,540
19	1,650	1,320	1,050	820	806	910	1,730	9,500	9,680	3,940	2,780	1,490
20	1,620	1,250	1,040	822	808	929	1,550	13,500	9,780	3,810	2,440	1,430
21	1,670	1,110	960	830	811	934	1,520	15,300	10,300	3,700	2,270	1,390
22	1,640	1,130	934	814	810	926	1,460	12,900	10,300	3,600	2,190	1,380
23	1,630	1,230	e800	805	804	935	1,660	13,900	11,500	3,530	2,190	1,390
24	1,670	1,240	e820	794	802	907	2,140	12,900	10,800	3,460	2,130	1,510
25	1,570	1,260	e850	779	812	890	2,870	10,200	9,740	3,370	2,070	1,670
26	1,580	1,250	879	783	819	891	3,270	8,760	8,940	3,430	2,010	1,550
27	1,580	1,120	900	796	822	901	2,920	8,550	8,410	3,260	1,960	1,460
28	1,580	1,140	992	806	827	913	2,410	8,890	8,180	3,170	1,920	1,440
29	1,610	950	986	810	---	939	2,180	9,360	7,740	3,090	1,880	1,400
30	1,570	e1,050	978	802	---	887	2,060	8,780	7,450	3,050	1,850	1,360
31	1,570	---	986	786	---	867	---	8,060	---	3,000	1,830	---
TOTAL	52,260	39,410	31,875	24,629	22,259	27,847	46,791	218,500	263,480	142,510	74,460	46,420
MEAN	1,686	1,314	1,028	794	795	898	1,560	7,048	8,783	4,597	2,402	1,547
MAX	1,930	1,510	1,170	858	827	955	3,270	15,300	11,500	7,080	3,050	1,790
MIN	1,570	950	800	700	744	817	900	1,940	7,290	3,000	1,830	1,360
AC-FT	103,700	78,170	63,220	48,850	44,150	55,230	92,810	433,400	522,600	282,700	147,700	92,070

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1889 - 2005, BY WATER YEAR (WY)*

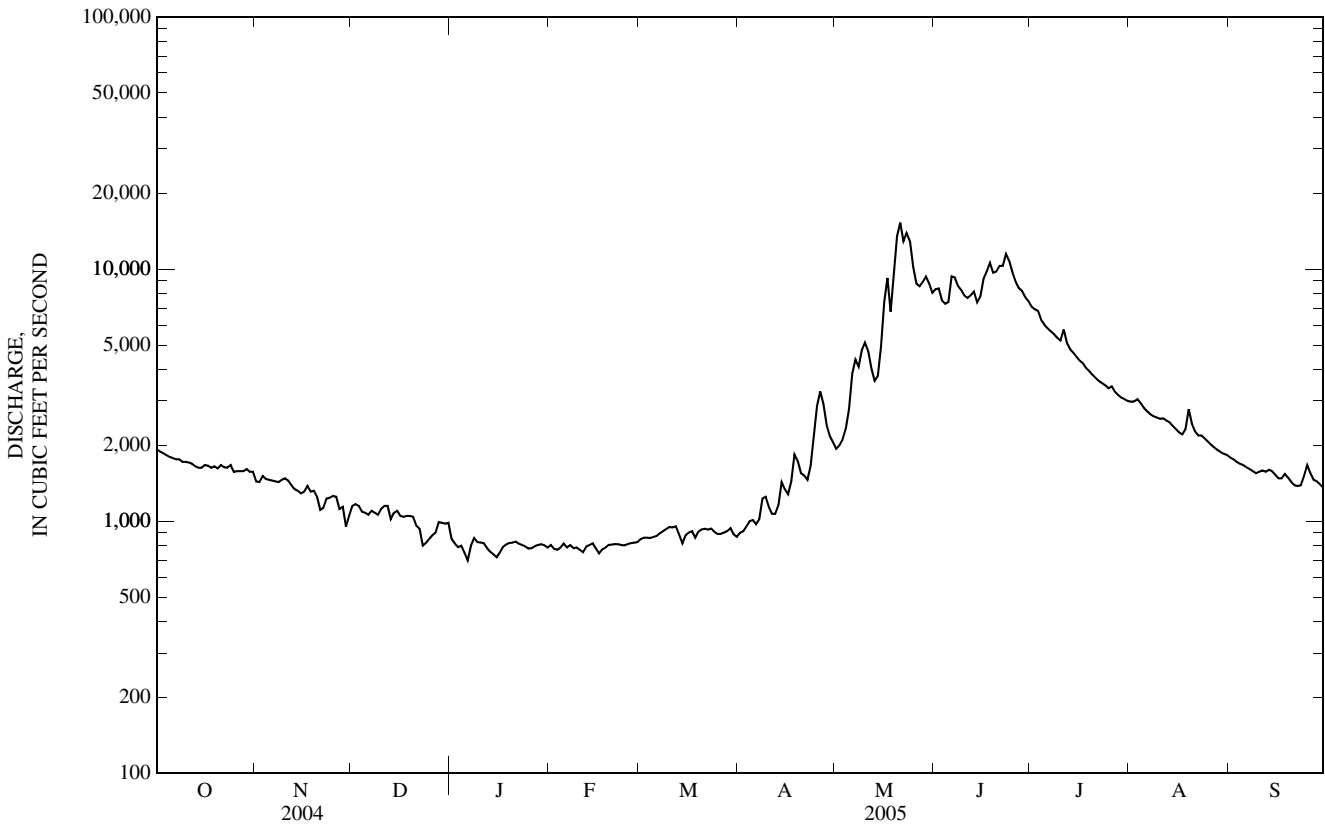
MEAN	1,515	1,185	961	848	837	919	1,553	6,104	11,400	6,734	3,159	1,942
MAX	2,429	2,058	1,424	1,361	1,340	1,376	3,542	13,590	22,540	13,260	5,688	3,207
(WY)	(1973)	(1928)	(1984)	(1997)	(1997)	(1997)	(1990)	(1928)	(1997)	(1982)	(1982)	(1968)
MIN	781	702	551	448	411	412	576	2,575	4,245	2,025	1,319	938
(WY)	(1989)	(1989)	(1937)	(1937)	(1937)	(1937)	(1937)	(1975)	(1934)	(1919)	(1919)	(1988)

YELLOWSTONE RIVER BASIN

06191500 YELLOWSTONE RIVER AT CORWIN SPRINGS, MT—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1889 - 2005*	
ANNUAL TOTAL	899,907		990,441		--	
ANNUAL MEAN	2,459		2,714		3,105	
HIGHEST ANNUAL MEAN	--		--		5,158 1997	
LOWEST ANNUAL MEAN	--		--		1,903 1934	
HIGHEST DAILY MEAN	11,100	Jun 10	15,300	May 21	32,000	Jun 14, 1918
LOWEST DAILY MEAN	660	Jan 5	700	Jan 6	380	Feb 5, 1989
ANNUAL SEVEN-DAY MINIMUM	719	Jan 1	764	Jan 12	393	Feb 4, 1937
MAXIMUM PEAK FLOW	--		16,800	May 21	32,200 ^a	Jun 10, 1996
MAXIMUM PEAK STAGE	--		7.86	May 21	11.50	Jun 14, 1918
ANNUAL RUNOFF (AC-FT)	1,785,000		1,965,000		2,249,000	
10 PERCENT EXCEEDS	6,000		7,820		8,460	
50 PERCENT EXCEEDS	1,760		1,530		1,400	
90 PERCENT EXCEEDS	752		805		760	

* For period of operation.
 a Gage height, 10.92 ft.
 e Estimated.



06205450 CLARKS FORK YELLOWSTONE RIVER NEAR MONTANA-WYOMING STATE LINE, NEAR COOKE CITY, MT

LOCATION.--Lat 44°57'28", long 109°48'21" (NAD 27), Park County, WY, Hydrologic Unit 10070006, Shoshone National Forest, at bridge on U.S. Highway 212, 300 ft upstream from Pilot Creek, 0.9 mi downstream from Rock Creek, 1.8 mi northwest of Crazy Creek Campground, and 7.5 mi southeast of Cooke City, MT.

PERIOD OF RECORD.--August 1975 to October 1977, November 1990 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
NOV 18...	0845	17	596	11.2	98	7.8	98	-6.0	.0	46	14.1	2.48	.44
FEB 01...	0900	11	594	12.4	109	8.2	114	-8.0	.0	56	17.7	2.74	.43
JUN 16...	1515	481	588	10.0	114	7.4	46	20.0	9.5	20	5.80	1.21	.26
AUG 31...	0830	31	596	8.8	93	7.8	89	-1.0	7.0	42	13.3	2.11	.35

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat fltrd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV 18...	.1	1.62	7	45	.22	<.1	5.0	5.8	57	.08	2.59	<.04	E.03
FEB 01...	.1	1.52	6	52	.39	<.2	5.2	6.3	66	.09	1.95	<.04	.10
JUN 16...	.1	1.15	11	21	E.16	<.1	4.1	3.6	--	--	--	<.04	<.06
AUG 31...	.1	1.26	6	42	<.20	<.1	3.7	4.5	--	--	--	<.04	<.06

Date	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic, water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium, water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt, water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)
NOV 18...	<.008	<.02	4	<.20	.3	18	<.06	E4.6	.06	<.8	.045	.8	E4
FEB 01...	<.008	<.02	2	<.20	.3	18	<.06	E4.0	.17	<.8	.042	.6	E5
JUN 16...	<.008	<.02	19	<.20	.2	11	<.06	<.7.0	.12	<.8	.039	10.4	14
AUG 31...	<.008	<.02	6	<.20	.2	15	<.06	E4.4	.04	.08	.039	2.2	8

Date	Lead, water, fltrd, ug/L (01049)	Lithium, water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Mercury, water, fltrd, ug/L (71890)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)
NOV 18...	<.08	<.2	1.1	.01	E.2	.10	<.4	<.2	49.0	E1	.8	.11
FEB 01...	<.08	<.2	.7	E.01	<.4	.45	E.3	<.2	51.4	<.2	.9	.13
JUN 16...	.46	<.2	1.9	.01	<.4	1.88	<.4	<.2	25.8	<.2	7.2	.07
AUG 31...	E.05	<.2	.9	.01	<.4	.64	<.4	<.2	39.8	<.2	2.4	.08

< -- Less than.
E -- Estimated.

06207500 CLARKS FORK YELLOWSTONE RIVER NEAR BELFRY, MT

LOCATION.--Lat 45°00'37", long 109°03'53" (NAD 27), in NW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.32, T.9 S., R.22 E., Carbon County, Hydrologic Unit 10070006, on left bank 0.2 mi upstream from county road bridge and Big Sand Coulee, 0.8 mi north of Wyoming-Montana State line, 9.5 mi southwest of Belfry, and at river mile 71.2.

DRAINAGE AREA.--1,154 mi².

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.

REVISED RECORDS.--WSP 1309: 1922 (M). WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 3,986.24 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to November 15, 1934, nonrecording gage, and November 15, 1934 to July 26, 1951, water-stage recorder at bridge 0.4 mi downstream of different datum. July 27, 1951 to September 30, 1953, water-stage recorder at present site at datum 0.98 ft higher. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversions for irrigation of about 11,100 acres upstream from station. Station operated and record provided by the Montana Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	432	327	e160	e220	215	206	161	441	1,970	2,440	379	143
2	412	250	e170	e210	211	203	163	421	1,930	2,540	366	132
3	373	340	e200	e220	212	203	171	424	1,680	2,560	526	125
4	351	346	e230	e210	214	200	181	461	1,510	2,280	420	119
5	333	355	e220	e220	212	196	187	499	1,530	2,000	366	117
6	313	350	e230	e230	204	197	182	705	1,860	1,880	334	114
7	292	345	e240	e220	e170	202	179	927	2,330	1,920	308	108
8	282	336	e250	e210	e170	209	258	941	2,160	1,980	285	93
9	264	337	e260	e220	e180	205	309	1,010	1,870	2,040	282	88
10	251	358	e270	e230	e180	211	242	1,290	1,610	2,030	272	87
11	247	361	e260	e220	e190	214	215	2,070	1,430	2,260	275	88
12	229	326	e240	e210	e200	212	201	1,350	1,470	2,310	276	93
13	222	287	e250	e200	219	215	220	1,060	1,590	1,930	276	102
14	215	274	e260	e190	214	183	279	1,120	1,380	1,750	274	108
15	222	275	e260	e180	198	181	301	1,380	1,600	1,670	244	106
16	239	272	e250	e190	e170	211	230	1,870	2,470	1,530	222	99
17	248	278	e260	e200	e170	195	243	2,650	3,280	1,420	213	94
18	249	300	e250	e210	e180	191	337	2,260	4,320	1,270	242	94
19	250	268	e260	e230	e190	182	371	2,660	4,270	1,040	553	95
20	246	276	e250	e260	e200	196	325	4,480	4,400	861	444	93
21	249	221	e230	263	e210	192	313	6,420	4,840	750	350	87
22	252	209	e210	237	206	193	316	5,630	5,010	670	315	86
23	243	261	e200	232	197	193	324	5,700	5,750	630	294	89
24	251	303	e210	232	196	193	455	5,650	5,900	600	278	111
25	247	293	e220	215	202	180	555	4,150	5,080	580	249	188
26	228	294	e230	207	201	190	628	3,020	4,130	675	230	165
27	240	269	e240	208	201	187	614	2,590	3,230	567	205	133
28	240	253	e250	223	202	186	547	2,580	2,990	490	190	143
29	348	e205	e240	226	---	188	495	2,870	2,800	424	173	173
30	262	e160	e230	225	---	187	463	2,650	2,540	383	156	146
31	263	---	e220	220	---	175	---	2,200	---	361	152	---
TOTAL	8,493	8,729	7,250	6,768	5,514	6,076	9,465	71,479	86,930	43,841	9,149	3,419
MEAN	274	291	234	218	197	196	316	2,306	2,898	1,414	295	114
MAX	432	361	270	263	219	215	628	6,420	5,900	2,560	553	188
MIN	215	160	160	180	170	175	161	421	1,380	361	152	86
AC-FT	16,850	17,310	14,380	13,420	10,940	12,050	18,770	141,800	172,400	86,960	18,150	6,780

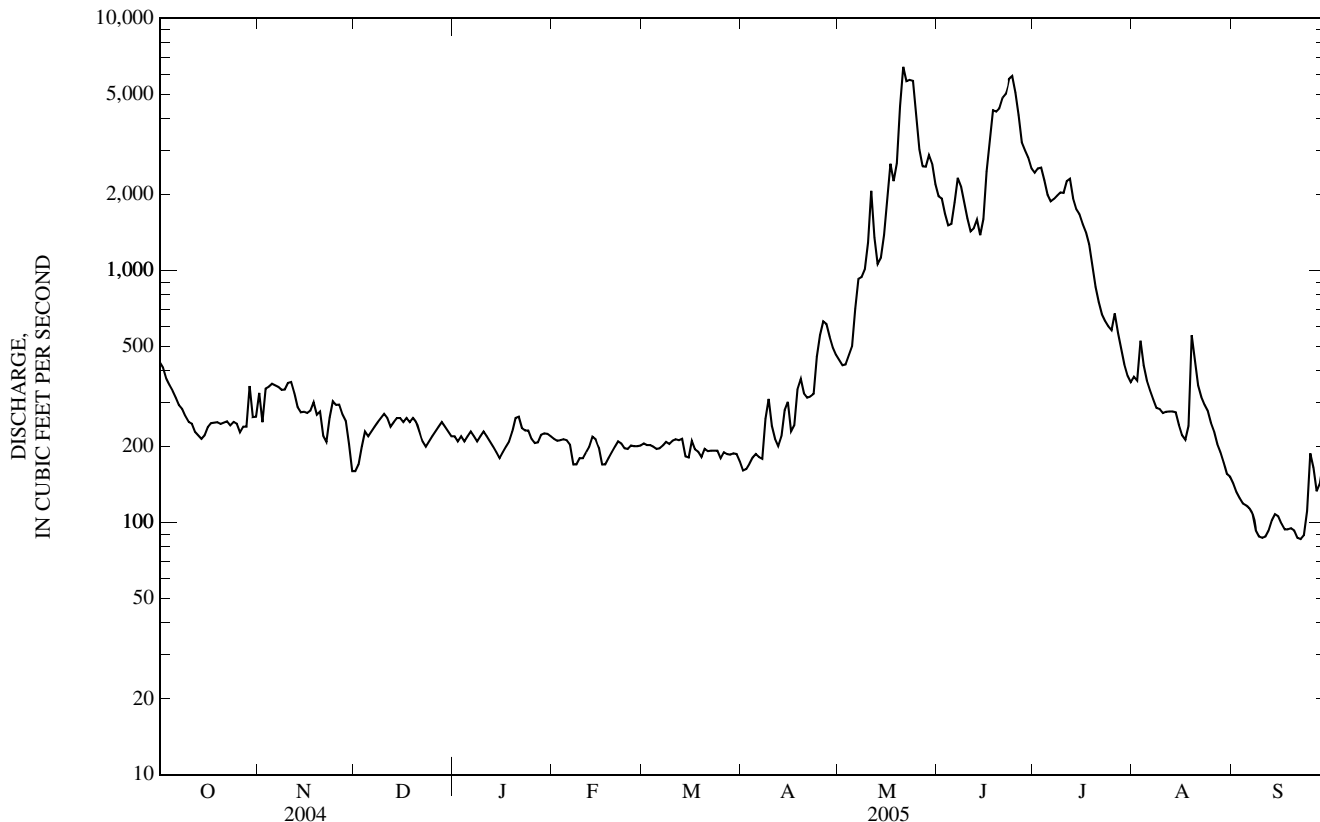
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2005, BY WATER YEAR (WY)

MEAN	276	294	262	231	222	222	426	2,040	4,078	2,173	605	311
MAX	725	648	379	359	329	364	1,167	5,704	7,225	5,744	1,453	834
(WY)	(1931)	(1928)	(1951)	(1997)	(1963)	(1972)	(1943)	(1928)	(1997)	(1975)	(1951)	(1941)
MIN	45.5	115	110	110	100	96.3	110	839	1,607	349	66.5	50.1
(WY)	(1989)	(1989)	(1922)	(1922)	(1922)	(1922)	(1961)	(1968)	(1987)	(1988)	(1988)	(1988)

06207500 CLARKS FORK YELLOWSTONE RIVER NEAR BELFRY, MT—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1921 - 2005	
ANNUAL TOTAL	254,798		267,113		--	
ANNUAL MEAN	696		732		930	
HIGHEST ANNUAL MEAN	--		--		1,485	1997
LOWEST ANNUAL MEAN	--		--		547	1977
HIGHEST DAILY MEAN	5,640	Jun 10	6,420	May 21	12,300	Jun 9, 1981
LOWEST DAILY MEANS	160	Jan 5	86	Sep 22	33	Apr 26, 1961
ANNUAL SEVEN-DAY MINIMUM	187	Jan 1	91	Sep 17	37	Oct 8, 1988
MAXIMUM PEAK FLOW	--		7,090	May 21	14,800.	Jun 9, 1981
MAXIMUM PEAK STAGE	--		6.62	May 21	9.97	Jun 9, 1981
ANNUAL RUNOFF (AC-FT)	505,400		529,800		673,600	
10 PERCENT EXCEEDS	1,880		2,220		2,860	
50 PERCENT EXCEEDS	298		250		300	
90 PERCENT EXCEEDS	205		170		170	

e Estimated.



YELLOWSTONE RIVER BASIN

06218500 WIND RIVER NEAR DUBOIS, WY

LOCATION.--Lat 43°34'43", long 109°45'33" (NAD 27), in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25. T.42N., R.108 W., Fremont County, Hydrologic Unit 10080001, on left bank 2.5 mi upstream from Warm Springs Creek and 6.7 mi northwest of Dubois.

DRAINAGE AREA.--232 mi².

PERIOD OF RECORD.--October 1945 to September 1992, May 2001 to current year.

REVISED RECORDS.--WSP 1709: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,188.71 ft above NGVD of 1929 (levels by Bureau of Reclamation). U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 2,300 acres.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	53	e56	e45	38	41	42	65	497	324	112	74
2	79	64	e58	e42	e37	e41	52	68	429	340	107	74
3	75	73	e60	e42	e39	e39	56	70	371	324	104	71
4	73	76	e65	e44	e42	41	58	75	366	271	96	70
5	73	67	e65	e47	e41	e40	51	83	378	250	96	67
6	72	64	e61	e44	e38	e40	54	101	453	244	94	67
7	70	65	e56	e44	40	42	70	114	392	242	93	65
8	70	71	e56	e47	e36	47	76	111	347	236	90	66
9	71	72	e58	e48	e37	51	63	140	318	232	86	63
10	67	64	e60	e49	39	49	54	151	292	189	84	63
11	69	62	e62	54	39	49	53	164	287	191	91	70
12	67	63	e62	e50	44	53	61	139	302	179	84	72
13	67	59	e60	e49	40	45	65	135	300	168	77	83
14	68	63	e59	e50	41	55	63	151	285	171	86	78
15	66	58	60	e47	e40	51	50	158	357	164	83	73
16	69	e54	e54	e46	e38	53	60	197	449	152	76	69
17	66	e56	e50	e48	e40	47	74	261	506	147	103	68
18	65	e60	e54	e54	e42	64	82	219	645	130	127	70
19	63	e56	59	50	e45	52	75	272	597	123	172	69
20	72	51	e55	50	42	50	66	524	639	118	117	67
21	80	e60	e50	45	41	48	58	770	675	110	101	64
22	73	e62	e45	e40	e40	52	61	764	699	102	92	79
23	74	e64	e46	45	e38	52	65	841	705	106	91	72
24	70	e66	e40	e44	e37	44	79	844	658	105	88	108
25	60	e64	e43	e47	e38	45	91	675	552	97	82	109
26	66	e56	e44	e48	e38	43	94	555	477	99	82	89
27	73	e60	e46	e46	e40	47	89	537	402	96	80	80
28	72	e50	e48	43	e40	52	78	554	354	93	79	79
29	69	e50	e50	e43	---	47	72	546	361	86	78	76
30	66	e54	e48	44	---	42	72	455	306	93	69	73
31	66	---	e48	e43	---	36	---	429	---	106	74	---
TOTAL	2,173	1,837	1,678	1,438	1,110	1,458	1,984	10,168	13,399	5,288	2,894	2,228
MEAN	70.1	61.2	54.1	46.4	39.6	47.0	66.1	328	447	171	93.4	74.3
MAX	82	76	65	54	45	64	94	844	705	340	172	109
MIN	60	50	40	40	36	36	42	65	285	86	69	63
AC-FT	4,310	3,640	3,330	2,850	2,200	2,890	3,940	20,170	26,580	10,490	5,740	4,420

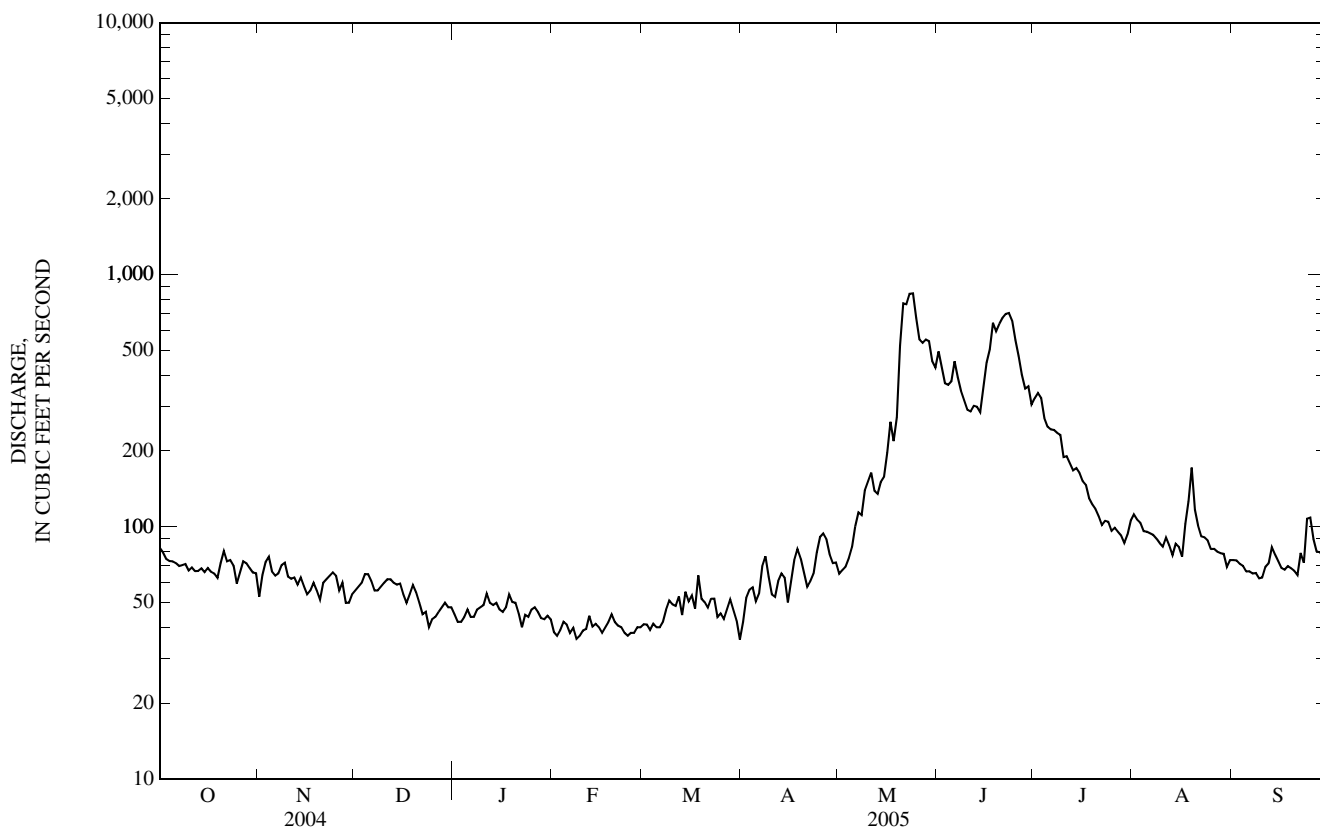
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2005, BY WATER YEAR (WY)

MEAN	85.7	70.1	61.0	55.8	54.7	60.7	102	356	632	302	133	97.8
MAX	158	103	88.3	88.4	77.6	105	192	628	1,181	796	290	171
(WY)	(1987)	(1951)	(1951)	(1965)	(1972)	(1972)	(1946)	(1951)	(1972)	(1975)	(1951)	(1986)
MIN	43.8	39.8	36.1	36.2	35.3	39.8	56.4	160	143	66.0	52.7	51.5
(WY)	(2002)	(2002)	(2002)	(1989)	(2002)	(2002)	(1961)	(1953)	(2001)	(1977)	(2001)	(1977)

06218500 WIND RIVER NEAR DUBOIS, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1946 - 2005	
ANNUAL TOTAL	40,733		45,655		--	
ANNUAL MEAN	111		125		169	
HIGHEST ANNUAL MEAN	--		--		280 1951	
LOWEST ANNUAL MEAN	--		--		90.0 1977	
HIGHEST DAILY MEAN	617	Jun 10	844	May 24	1,870	Jun 8, 1972
LOWEST DAILY MEAN	40	Jan 4	36	Feb 8, Mar 31	26	Feb 5, 1982
ANNUAL SEVEN-DAY MINIMUM	43	Feb 7	39	Feb 5	28	Feb 3, 1982
MAXIMUM PEAK FLOW	--		1,020	May 24	1,940 ^a	Jun 8, 1972
MAXIMUM PEAK STAGE	--		4.41	May 24	5.66	Jun 2, 1956
ANNUAL RUNOFF (AC-FT)	80,790		90,560		122,500	
10 PERCENT EXCEEDS	267		330		434	
50 PERCENT EXCEEDS	72		67		82	
90 PERCENT EXCEEDS	46		42		50	

a Gage height, 5.48 ft.
 e Estimated.



YELLOWSTONE RIVER BASIN

06220800 WIND RIVER ABOVE RED CREEK, NEAR DUBOIS, WY

LOCATION.--Lat 43°26'30", long 109°27'29" (NAD 27), in NW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.3, T.5 N., R.6 W., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, 400 ft downstream from East Fork Wind River and 12.1 mi southeast of Dubois.

DRAINAGE AREA.--1,073 mi².

PERIOD OF RECORD.--October 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,400 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversions for irrigation of about 15,000 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	429	215	e165	181	176	172	155	265	1,670	1,560	634	289
2	396	196	e175	177	171	168	172	259	1,530	1,670	607	269
3	377	265	e180	180	176	168	184	259	1,300	1,630	581	262
4	378	292	e190	e175	177	173	188	258	1,360	1,390	530	259
5	374	254	196	e180	181	167	179	301	1,440	1,280	532	259
6	367	250	183	e175	159	168	188	383	1,690	1,260	482	252
7	364	242	185	e170	177	174	240	472	1,640	1,300	456	246
8	361	249	186	e180	164	178	287	397	1,310	1,250	434	242
9	353	280	188	190	178	178	232	476	1,190	1,270	421	245
10	354	264	194	190	175	185	196	630	1,090	1,210	408	256
11	390	253	202	189	166	182	184	902	1,050	1,240	467	259
12	388	254	210	183	176	197	196	729	1,170	1,160	419	285
13	327	227	200	189	180	179	223	654	1,150	1,090	402	323
14	287	219	195	186	176	163	241	683	1,130	1,110	402	300
15	288	211	202	179	155	161	201	688	1,590	1,060	374	290
16	289	203	189	187	153	174	212	964	2,180	985	354	280
17	282	237	188	184	169	169	272	1,500	2,570	1,010	398	278
18	286	219	191	185	187	153	334	1,050	3,180	903	544	286
19	277	228	194	190	172	170	284	1,350	2,900	849	791	272
20	292	186	196	190	175	167	252	2,630	3,070	782	533	256
21	326	166	187	186	174	160	240	3,670	3,070	732	475	251
22	315	177	160	180	164	159	231	2,950	3,310	679	437	284
23	295	202	163	184	158	163	227	3,360	3,220	678	418	272
24	295	202	150	182	160	159	318	3,280	2,970	677	399	404
25	253	228	e150	181	162	152	365	2,580	2,590	655	372	484
26	262	226	e160	185	163	163	418	1,990	2,300	733	352	361
27	298	175	175	190	167	159	426	1,990	1,890	639	338	321
28	291	187	181	191	167	168	340	2,080	1,740	568	328	309
29	285	150	185	180	---	163	299	2,200	1,810	523	316	291
30	278	156	184	185	---	160	292	1,830	1,480	521	298	273
31	270	---	185	165	---	149	---	1,610	---	619	300	---
TOTAL	10,027	6,613	5,689	5,669	4,758	5,201	7,576	42,390	58,590	31,033	13,802	8,658
MEAN	323	220	184	183	170	168	253	1,367	1,953	1,001	445	289
MAX	429	292	210	191	187	197	426	3,670	3,310	1,670	791	484
MIN	253	150	150	165	153	149	155	258	1,050	521	298	242
AC-FT	19,890	13,120	11,280	11,240	9,440	10,320	15,030	84,080	116,200	61,550	27,380	17,170

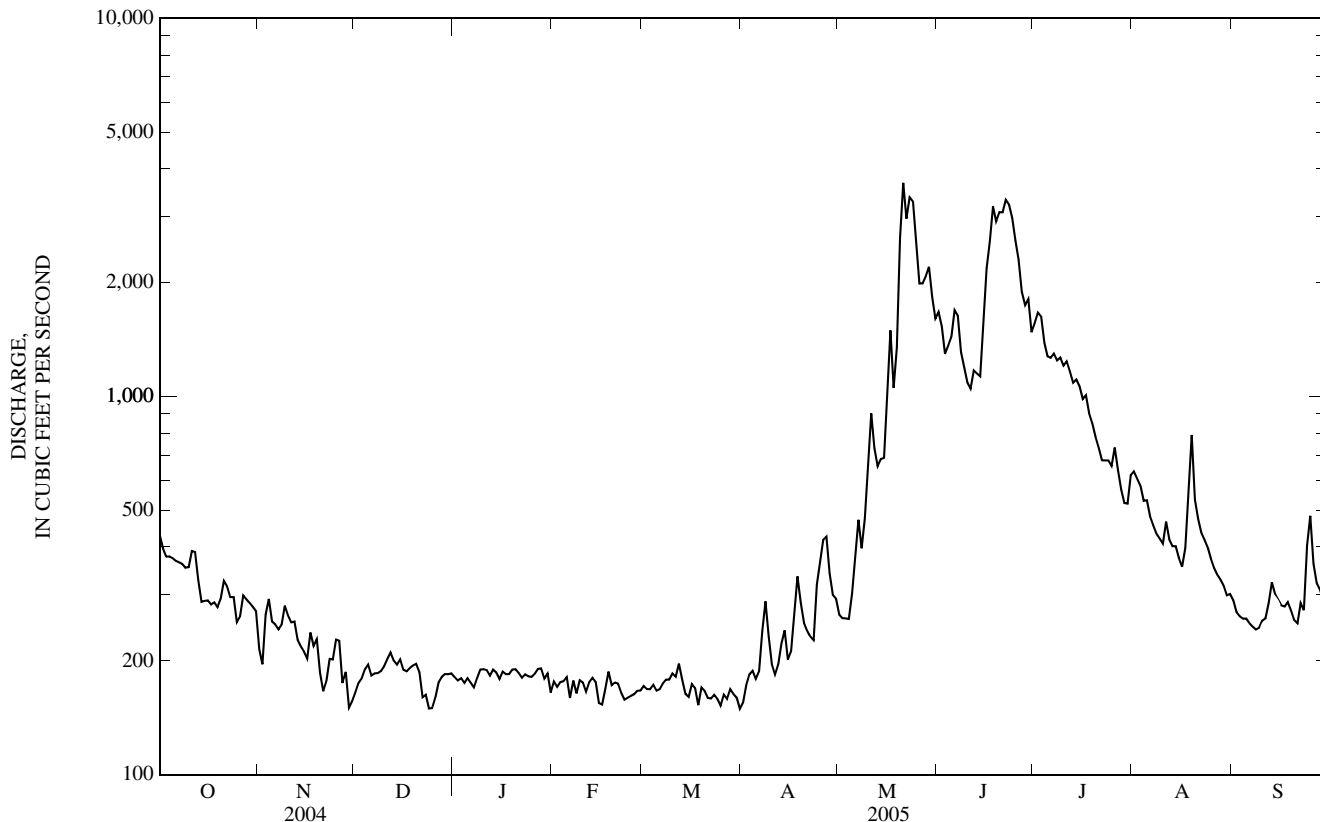
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2005, BY WATER YEAR (WY)

MEAN	301	232	191	179	175	200	314	1,274	2,348	1,268	547	378
MAX	421	303	242	222	218	246	429	2,121	4,559	2,473	1,020	663
(WY)	(1998)	(1999)	(1998)	(1998)	(1999)	(1999)	(1994)	(1997)	(1997)	(1995)	(1997)	(1997)
MIN	214	171	146	122	142	155	213	621	698	386	261	197
(WY)	(2002)	(1993)	(1993)	(1993)	(2002)	(2002)	(1995)	(1995)	(2001)	(1994)	(2001)	(2001)

06220800 WIND RIVER ABOVE RED CREEK, NEAR DUBOIS, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1991 - 2005	
ANNUAL TOTAL	166,269		200,006		--	
ANNUAL MEAN	454		548		618	
HIGHEST ANNUAL MEAN	--		--		982 1997	
LOWEST ANNUAL MEAN	--		--		345 2001	
HIGHEST DAILY MEAN	2,200	Jun 10	3,670	May 21	8,770	Jun 9, 1997
LOWEST DAILY MEAN	140	Feb 13	149	Mar 31	90	Jan 13, 1993
ANNUAL SEVEN-DAY MINIMUM	150	Feb 10	159	Mar 25	96	Jan 9, 1993
MAXIMUM PEAK FLOW	--		4,700	May 21	11,300	Jun 9, 1997
MAXIMUM PEAK STAGE	--		7.04	May 21	9.97	Jun 9, 1997
ANNUAL RUNOFF (AC-FT)	329,800		396,700		448,000	
10 PERCENT EXCEEDS	1,030		1,460		1,600	
50 PERCENT EXCEEDS	301		264		275	
90 PERCENT EXCEEDS	160		167		163	

e Estimated.



YELLOWSTONE RIVER BASIN

06221400 DINWOODY CREEK ABOVE LAKES, NEAR BURRIS, WY

LOCATION.--Lat 43°20'44", long 109°24'34" (NAD 27), in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.1, T.4 N., R.6 W., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, on left bank 0.5 mi upstream from Upper Dinwoody Lake, 7.0 mi west of Burris, and 17 mi southeast of Dubois.

DRAINAGE AREA.--88.2 mi².

PERIOD OF RECORD.--October 1957 to September 1978, October 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,500 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. No diversion upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	25	e18	13	11	8.8	8.1	35	322	429	424	154
2	79	e30	e18	13	11	8.7	8.0	33	259	482	403	153
3	72	e37	e17	e13	10	8.8	8.3	31	209	522	395	160
4	69	e35	e16	13	10	8.6	8.5	34	205	472	381	178
5	65	e32	e16	e14	9.8	8.6	8.0	41	226	456	345	177
6	61	32	e16	e13	e9.6	9.1	8.3	50	302	471	328	149
7	58	31	e15	e12	9.2	9.2	9.5	60	306	513	315	148
8	53	31	15	e13	9.2	9.3	11	57	218	548	310	141
9	53	32	15	13	e9.2	9.9	10	76	178	566	305	182
10	50	31	16	13	9.0	9.7	9.5	112	156	564	301	212
11	55	29	17	13	e9.0	9.9	8.9	113	156	609	296	125
12	54	30	17	13	8.4	9.4	9.6	135	194	561	271	114
13	52	23	16	e14	8.2	9.0	10	137	175	533	234	101
14	49	23	16	e14	8.1	10	12	165	177	e540	216	89
15	47	24	16	e14	e8.0	10	11	202	245	e550	216	83
16	44	27	16	e13	e7.6	9.0	11	256	385	e566	210	75
17	41	26	15	13	e8.2	8.1	13	382	509	e550	222	70
18	40	21	15	13	e8.2	8.4	18	289	616	e560	229	67
19	31	21	15	14	8.2	8.4	23	343	604	e570	276	60
20	50	e23	16	14	8.0	8.3	23	505	645	e560	214	58
21	54	e21	e15	14	8.3	8.2	20	662	697	e540	224	54
22	58	e20	e14	14	8.6	8.3	24	514	754	504	232	57
23	49	23	e13	14	9.8	8.4	21	528	810	550	242	53
24	49	21	e12	13	9.8	8.1	33	623	764	579	228	70
25	42	21	e12	13	9.9	8.2	34	499	698	572	200	78
26	55	20	12	13	9.8	8.3	40	383	631	471	180	63
27	49	e20	12	12	9.2	8.4	44	333	553	400	180	60
28	47	20	12	12	9.0	8.7	40	330	535	368	183	56
29	44	e15	12	12	---	8.2	43	380	548	372	190	51
30	40	e18	12	11	---	8.1	38	374	451	391	205	49
31	40	---	12	11	---	7.9	---	323	---	420	153	---
TOTAL	1,638	762	459	404	254.3	272.0	565.7	8,005	12,528	15,789	8,108	3,087
MEAN	52.8	25.4	14.8	13.0	9.08	8.77	18.9	258	418	509	262	103
MAX	88	37	18	14	11	10	44	662	810	609	424	212
MIN	31	15	12	11	7.6	7.9	8.0	31	156	368	153	49
AC-FT	3,250	1,510	910	801	504	540	1,120	15,880	24,850	31,320	16,080	6,120

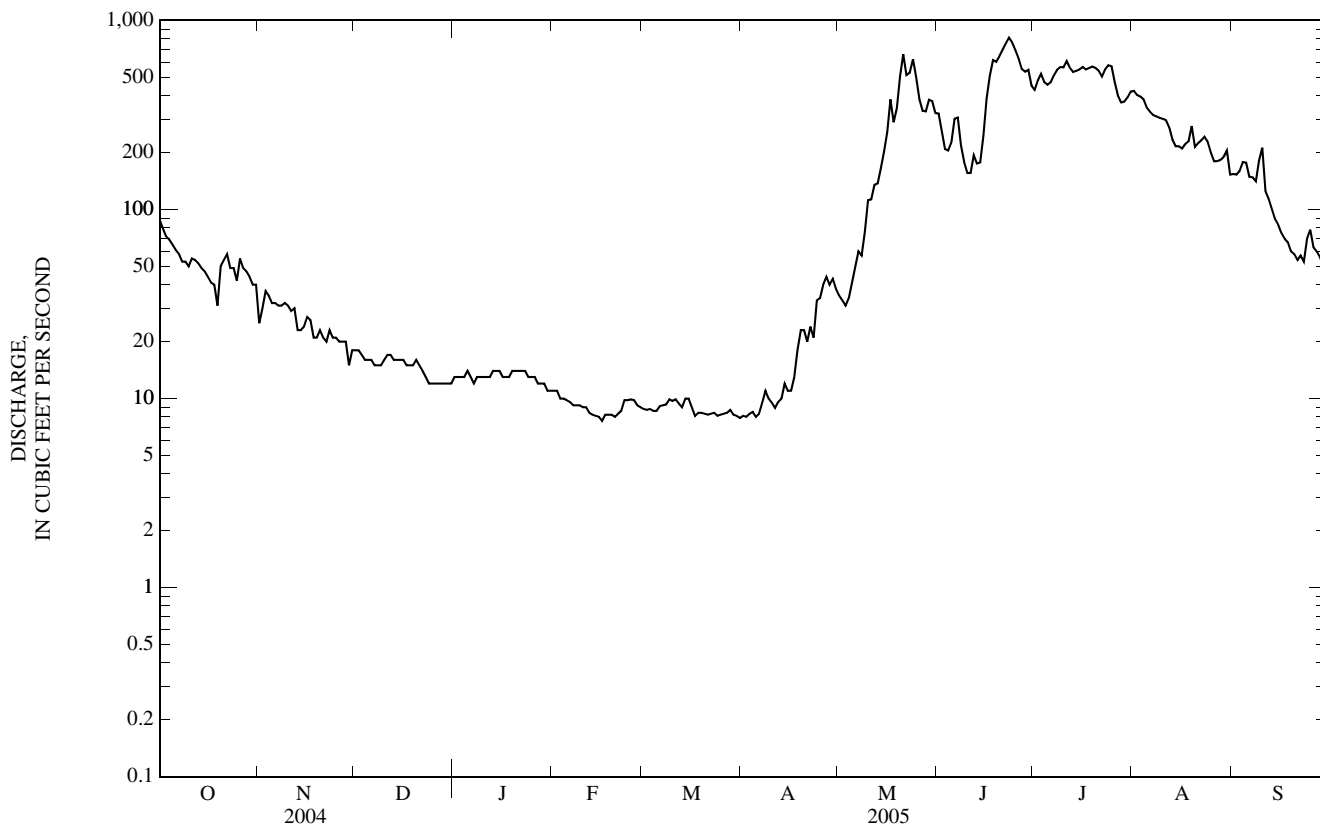
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2005, BY WATER YEAR (WY)

MEAN	42.4	20.0	12.3	8.53	7.46	8.50	20.3	166	447	478	315	138
MAX	72.5	40.6	22.8	19.2	12.5	13.6	60.3	299	739	794	406	250
(WY)	(1968)	(1974)	(1974)	(1962)	(1962)	(1972)	(1962)	(1958)	(1971)	(1975)	(1971)	(1973)
MIN	22.8	9.74	3.79	1.53	2.12	2.31	8.48	71.1	251	280	224	59.2
(WY)	(1989)	(1977)	(1977)	(1977)	(1977)	(1977)	(1970)	(1959)	(2001)	(1992)	(2002)	(1964)

06221400 DINWOODY CREEK ABOVE LAKES, NEAR BURRIS, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1958 - 2005	
ANNUAL TOTAL	46,569.8		51,872.0		--	
ANNUAL MEAN	127		142		139	
HIGHEST ANNUAL MEAN	--		--		179 1971	
LOWEST ANNUAL MEAN	--		--		95.2 1992	
HIGHEST DAILY MEAN	1,160	Jun 30	810	Jun 23	1,250	Jun 15, 1995
LOWEST DAILY MEAN	4.8	Feb 16	7.6	Feb 16	1.0	Jan 9, 1977
ANNUAL SEVEN-DAY MINIMUM	5.0	Feb 12	8.0	Feb 14	1.3	Jan 4, 1977
MAXIMUM PEAK FLOW	--		926	Jun 23	1,530	Jun 30, 2004
MAXIMUM PEAK STAGE	--		3.90	Jun 23	4.50	Jul 13, 1995
ANNUAL RUNOFF (AC-FT)	92,370		102,900		101,000	
10 PERCENT EXCEEDS	386		507		438	
50 PERCENT EXCEEDS	44		40		29	
90 PERCENT EXCEEDS	6.3		8.8		7.0	

e Estimated.



YELLOWSTONE RIVER BASIN

06222100 UPPER WIND RIVER A CANAL AT HEADWORKS, NEAR BURRIS, WY

LOCATION.--Lat 43°24'59", long 109°19'40" (NAD 27), in NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.14, T.5 N., R.5 W., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, on left bank 30 ft downstream from headworks, 2 mi southeast of Wilderness, and 4 mi northwest of Burris.

PERIOD OF RECORD.--May 1997 to September 1999, April 2001 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 6,150 ft above NGVD of 1929, from topographic map. Miscellaneous measurements (July 1988 to September 1996) published at equivalent site previously identified as 432609109205001 at different datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good. Flow completely regulated by headworks.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	45	51	42	37
2	---	---	---	---	---	---	---	---	45	51	41	36
3	---	---	---	---	---	---	---	e18	44	51	40	36
4	---	---	---	---	---	---	---	35	44	50	40	56
5	---	---	---	---	---	---	---	48	44	49	40	73
6	---	---	---	---	---	---	---	59	44	49	39	72
7	---	---	---	---	---	---	---	62	44	48	39	71
8	---	---	---	---	---	---	---	71	43	47	38	71
9	---	---	---	---	---	---	---	79	41	48	38	70
10	---	---	---	---	---	---	---	77	40	46	38	71
11	---	---	---	---	---	---	---	26	40	47	38	71
12	---	---	---	---	---	---	---	18	39	47	37	73
13	---	---	---	---	---	---	---	16	38	45	37	74
14	---	---	---	---	---	---	---	16	38	45	37	73
15	---	---	---	---	---	---	---	19	52	45	36	71
16	---	---	---	---	---	---	---	19	63	44	35	71
17	---	---	---	---	---	---	---	15	43	44	36	70
18	---	---	---	---	---	---	---	12	44	44	36	71
19	---	---	---	---	---	---	---	13	58	44	37	70
20	---	---	---	---	---	---	---	7.3	54	45	39	68
21	---	---	---	---	---	---	---	3.6	56	47	38	68
22	---	---	---	---	---	---	---	24	58	47	37	44
23	---	---	---	---	---	---	---	44	57	48	37	26
24	---	---	---	---	---	---	---	45	56	48	37	27
25	---	---	---	---	---	---	---	48	56	48	36	28
26	---	---	---	---	---	---	---	47	56	48	35	26
27	---	---	---	---	---	---	---	46	55	45	35	26
28	---	---	---	---	---	---	---	46	53	42	38	26
29	---	---	---	---	---	---	---	47	54	41	38	26
30	---	---	---	---	---	---	---	46	52	41	38	25
31	---	---	---	---	---	---	---	45	---	42	38	---
TOTAL	---	---	---	---	---	---	---	---	1,456	1,437	1,170	1,627
MEAN	---	---	---	---	---	---	---	---	48.5	46.4	37.7	54.2
MAX	---	---	---	---	---	---	---	---	63	51	42	74
MIN	---	---	---	---	---	---	---	---	38	41	35	25
AC-FT	---	---	---	---	---	---	---	---	2,890	2,850	2,320	3,230

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2005, BY WATER YEAR (WY)*

MEAN	---	---	---	---	---	---	---	68.1	60.9	54.3	57.0	46.7
MAX	---	---	---	---	---	---	---	79.1	76.7	65.4	71.6	62.2
(WY)	---	---	---	---	---	---	---	(2003)	(2001)	(1997)	(2004)	(1998)
MIN	---	---	---	---	---	---	---	59.7	48.5	45.5	37.7	26.0
(WY)	---	---	---	---	---	---	---	(1998)	(2005)	(2001)	(2005)	(2002)

06222100 UPPER WIND RIVER A CANAL AT HEADWORKS, NEAR BURRIS, WY—Continued

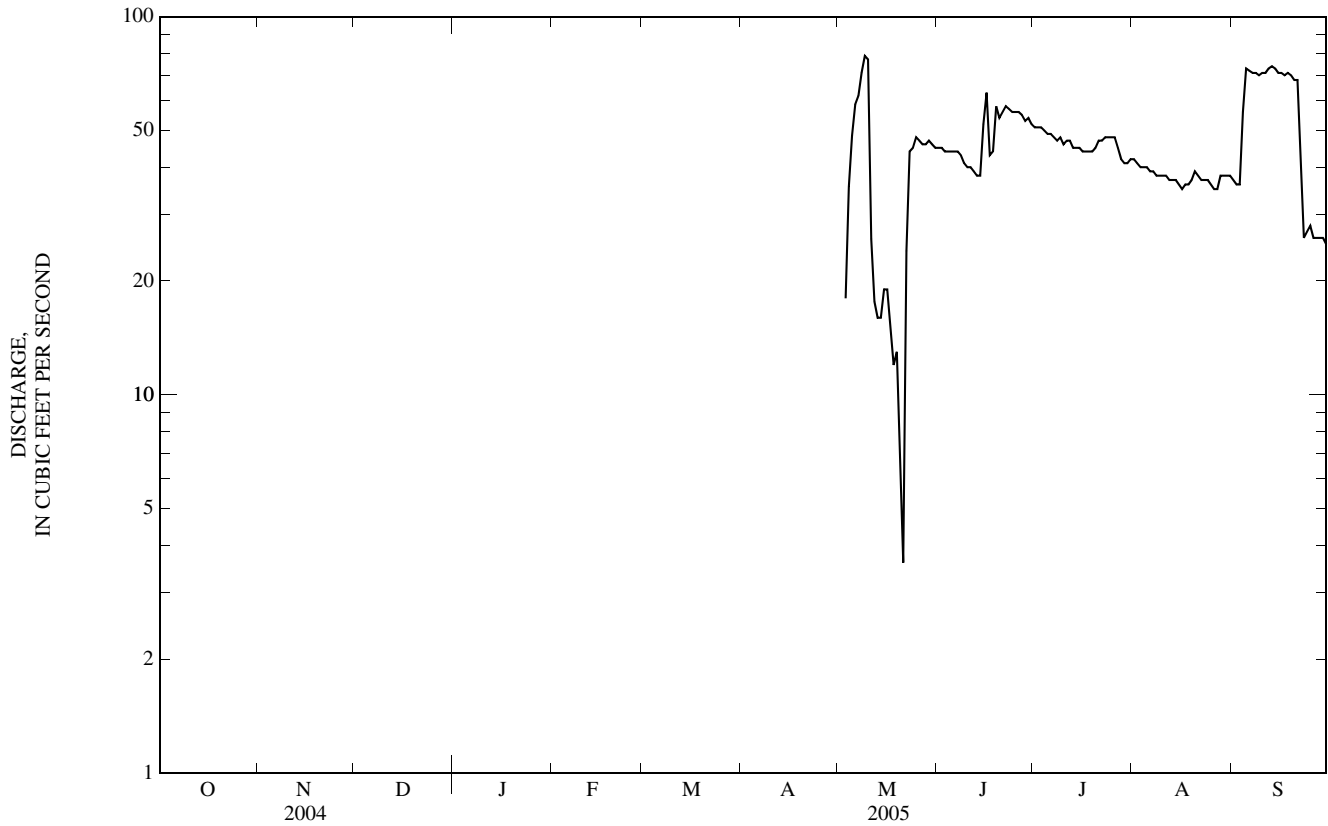
SUMMARY STATISTICS

FOR 2005 WATER YEAR*

WATER YEARS 1997 - 2005*

HIGHEST DAILY MEAN	79	May 9	105	Jun 3, 1998
LOWEST DAILY MEAN	3.6	May 21	0.27	Apr 26, 2003
MAXIMUM PEAK FLOW	91	May 8	250	May 1, 1998
MAXIMUM PEAK STAGE	2.19	Sep 13	2.52	May 1, 1998

* For period of operation.
e Estimated.



YELLOWSTONE RIVER BASIN

06222500 DRY CREEK NEAR BURRIS, WY

LOCATION.--Lat 43°20'11", long 109°17'55" (NAD 27), in NW¼ NE¼ SW¼ sec. 12, T.4 N., R.5 W., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, on left bank 0.9 mi upstream from Dry Creek Canal headgate and 2.4 mi southwest of Burris.

DRAINAGE AREA.--57 mi².

PERIOD OF RECORD.--June 1921 to September 1940, October 1988 to current year (no winter records since 1995). Published as "near Lenore" 1921 to 1924.

GAGE.--Water-stage recorder. Elevation of gage is 6,430 ft above NGVD of 1929, from topographic map. Prior to November 5, 1934, at site 50 ft downstream at datum 4.07 ft higher. November 5, 1934 to September 1940, at site 5 ft downstream at datum 3.00 ft higher. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.-- Records good. Adjudicated diversion upstream from station for irrigation of 267 acres. Result of discharge measurement, in cubic feet per second, made during the period when the station was not in operation, is given below:

Oct. 14 . . . 21.6

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	1.9	14	228	150	50	20
2	---	---	---	---	---	---	2.0	12	181	152	48	19
3	---	---	---	---	---	---	2.0	12	132	154	47	18
4	---	---	---	---	---	---	2.2	11	121	142	46	18
5	---	---	---	---	---	---	2.3	13	122	134	44	18
6	---	---	---	---	---	---	2.4	15	165	138	42	17
7	---	---	---	---	---	---	2.7	21	183	147	42	17
8	---	---	---	---	---	---	3.3	20	123	152	39	17
9	---	---	---	---	---	---	3.3	23	91	151	38	17
10	---	---	---	---	---	---	3.6	36	68	149	37	18
11	---	---	---	---	---	---	3.1	53	70	138	37	20
12	---	---	---	---	---	---	3.0	46	74	130	36	21
13	---	---	---	---	---	---	3.1	41	70	123	36	22
14	---	---	---	---	---	---	3.5	49	69	132	35	21
15	---	---	---	---	---	---	3.6	63	82	137	32	21
16	---	---	---	---	---	---	3.7	84	144	123	30	21
17	---	---	---	---	---	---	4.0	124	231	138	34	20
18	---	---	---	---	---	---	4.8	131	320	122	37	20
19	---	---	---	---	---	---	7.6	173	309	98	43	19
20	---	---	---	---	---	---	8.3	349	307	88	38	18
21	---	---	---	---	---	---	8.3	542	343	86	33	17
22	---	---	---	---	---	---	8.8	345	383	81	32	17
23	---	---	---	---	---	---	8.1	410	394	79	32	16
24	---	---	---	---	---	---	11	514	388	84	31	18
25	---	---	---	---	---	---	11	400	327	78	29	18
26	---	---	---	---	---	---	13	305	259	74	26	17
27	---	---	---	---	---	---	16	264	218	69	23	16
28	---	---	---	---	---	---	17	255	185	58	22	16
29	---	---	---	---	---	---	17	285	170	49	20	14
30	---	---	---	---	---	---	15	245	160	46	20	13
31	---	---	---	---	---	---	---	206	---	51	20	---
TOTAL	---	---	---	---	---	---	195.6	5,061	5,917	3,453	1,079	544
MEAN	---	---	---	---	---	---	6.52	163	197	111	34.8	18.1
MAX	---	---	---	---	---	---	17	542	394	154	50	22
MIN	---	---	---	---	---	---	1.9	11	68	46	20	13
AC-FT	---	---	---	---	---	---	388	10,040	11,740	6,850	2,140	1,080

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2005, BY WATER YEAR (WY)*

MEAN	17.3	10.3	5.97	4.10	2.71	2.91	8.69	86.7	195	120	54.6	30.5
MAX	50.0	25.4	15.0	10.0	7.00	10.0	25.7	163	525	328	164	64.6
(WY)	(1924)	(1928)	(1926)	(1926)	(1923)	(1923)	(1926)	(2005)	(1921)	(1995)	(1930)	(1927)
MIN	5.16	1.76	0.55	0.30	0.20	0.00	0.88	29.5	51.4	33.8	18.0	12.2
(WY)	(1934)	(1934)	(1934)	(1934)	(1934)	(1934)	(1940)	(1935)	(1934)	(1940)	(2002)	(1934)

06222500 DRY CREEK NEAR BURRIS, WY—Continued

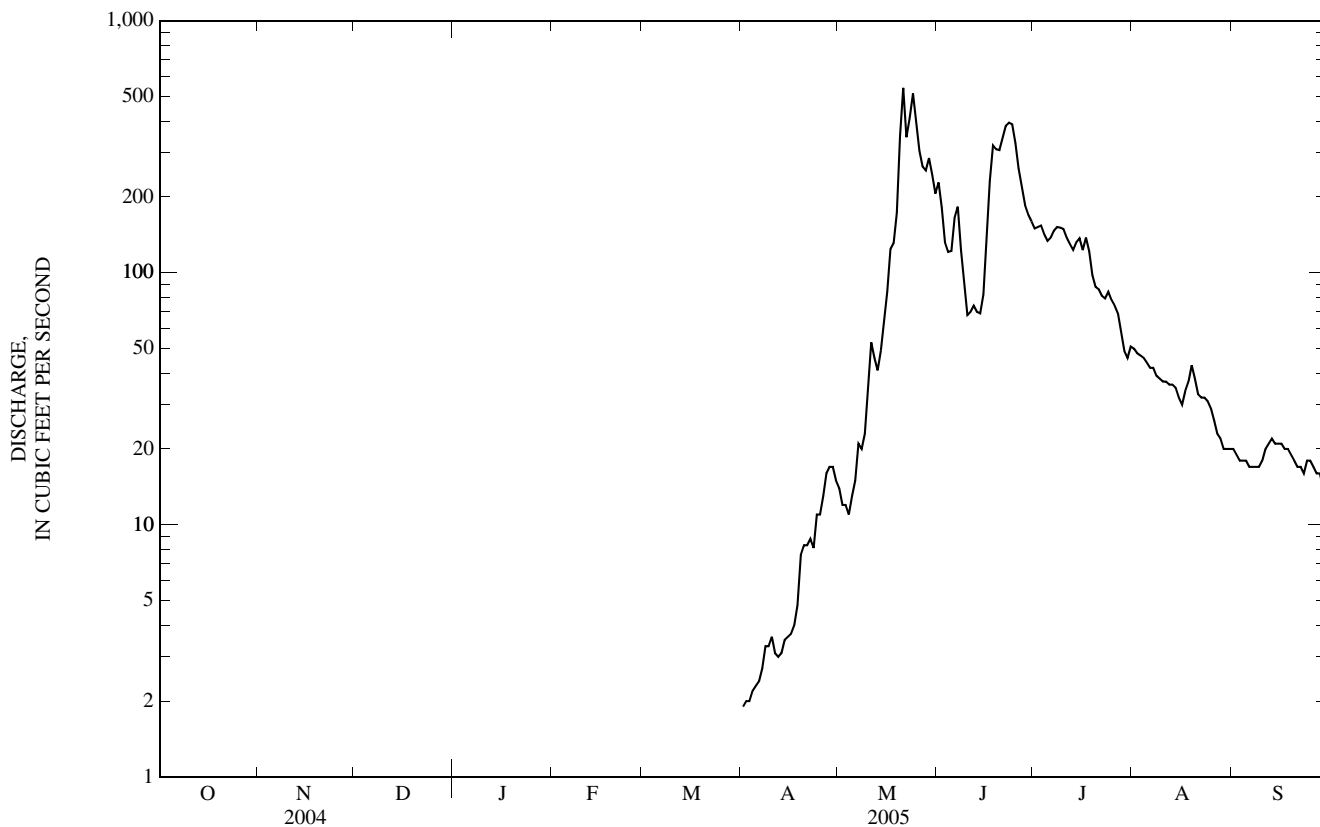
SUMMARY STATISTICS

	FOR 2005 WATER YEAR*		WATER YEARS 1921 - 2005*	
ANNUAL MEAN	--		44.6	
HIGHEST ANNUAL MEAN	--		73.0	1995
LOWEST ANNUAL MEAN	--		20.1	1940
HIGHEST DAILY MEAN	542	May 21	1,240	Jun 7, 1921
LOWEST DAILY MEAN	1.9	Apr 1	0.00	Mar 1, to Apr 11, 1934
MAXIMUM PEAK FLOW	612	May 24	1,400 ^a	Jun 12, 1921
MAXIMUM PEAK STAGE	4.96	May 24	5.95 ^b	Jun 17, 1999
ANNUAL RUNOFF (AC-FT)	--		32,290	

* For period of operation.

a Gage height, 3.9 ft, from floodmarks, site and datum then in use, from rating curve extended above 580 ft³/s.

b From floodmarks.



YELLOWSTONE RIVER BASIN

06222510 DRY CREEK CANAL AT HEADGATE, NEAR BURRIS, WY

LOCATION.--Lat 43°20'38", long 109°17'25" (NAD 27), in NW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.12, T.4 S., R.5 W., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, on left bank 200 ft downstream from headgate and 1.7 miles southwest of Burris.

PERIOD OF RECORD.--April 1989 to September 1999, April 2003 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of the gage is 6,360 ft above NGVD of 1929, from topographic map. Prior to April 1, 1990, at datum 1.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow is diverted from Dry Creek and Dinwoody Canal for irrigation.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e0.00	17	133	e210	241	170
2	---	---	---	---	---	---	e0.00	29	127	e220	245	179
3	---	---	---	---	---	---	e0.00	44	111	e220	243	172
4	---	---	---	---	---	---	e0.00	41	105	e210	243	163
5	---	---	---	---	---	---	e0.00	39	105	e200	239	150
6	---	---	---	---	---	---	e0.00	37	123	e210	234	152
7	---	---	---	---	---	---	e0.00	42	127	e220	225	159
8	---	---	---	---	---	---	e0.00	43	114	e230	213	153
9	---	---	---	---	---	---	e0.00	48	e160	e220	209	151
10	---	---	---	---	---	---	e0.00	57	e160	e220	211	151
11	---	---	---	---	---	---	e0.00	39	e150	e220	202	139
12	---	---	---	---	---	---	e0.00	43	e150	e210	199	128
13	---	---	---	---	---	---	e0.00	37	e160	e210	188	132
14	---	---	---	---	---	---	e0.00	29	e160	e200	182	139
15	---	---	---	---	---	---	e0.00	18	e160	e210	177	129
16	---	---	---	---	---	---	e0.00	42	e160	223	176	116
17	---	---	---	---	---	---	e0.00	59	e180	206	179	103
18	---	---	---	---	---	---	e0.00	142	e180	232	182	92
19	---	---	---	---	---	---	e0.00	106	e180	248	185	84
20	---	---	---	---	---	---	e0.00	110	e190	254	176	78
21	---	---	---	---	---	---	e0.00	115	e220	258	159	70
22	---	---	---	---	---	---	e0.00	115	e230	261	163	66
23	---	---	---	---	---	---	e0.00	115	e230	257	167	62
24	---	---	---	---	---	---	e0.00	117	e230	258	170	64
25	---	---	---	---	---	---	e0.00	115	e220	256	180	65
26	---	---	---	---	---	---	e40	120	e210	258	150	66
27	---	---	---	---	---	---	e49	136	e200	248	142	65
28	---	---	---	---	---	---	31	135	e200	235	137	63
29	---	---	---	---	---	---	19	137	e200	234	136	60
30	---	---	---	---	---	---	17	135	e210	231	141	56
31	---	---	---	---	---	---	---	131	---	235	148	---
TOTAL	---	---	---	---	---	---	156.00	2,393	5,085	7,104	5,842	3,377
MEAN	---	---	---	---	---	---	5.20	77.2	170	229	188	113
MAX	---	---	---	---	---	---	49	142	230	261	245	179
MIN	---	---	---	---	---	---	0.00	17	105	200	136	56
AC-FT	---	---	---	---	---	---	309	4,750	10,090	14,090	11,590	6,700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2005, BY WATER YEAR (WY)*

MEAN	1.44	---	---	---	---	---	3.47	98.5	192	208	191	130
MAX	2.29	---	---	---	---	---	6.24	154	247	240	217	188
(WY)	(1993)	---	---	---	---	---	(1989)	(1994)	(1994)	(2003)	(1994)	(1990)
MIN	0.60	---	---	---	---	---	0.00	53.8	116	155	169	90.2
(WY)	(1994)	---	---	---	---	---	(1991)	(1991)	(1995)	(1989)	(1998)	(1992)

06222510 DRY CREEK CANAL AT HEADGATE, NEAR BURRIS, WY—Continued

SUMMARY STATISTICS

HIGHEST DAILY MEAN
 LOWEST DAILY MEAN

FOR 2005 WATER YEAR*

WATER YEARS 1988 - 2005*

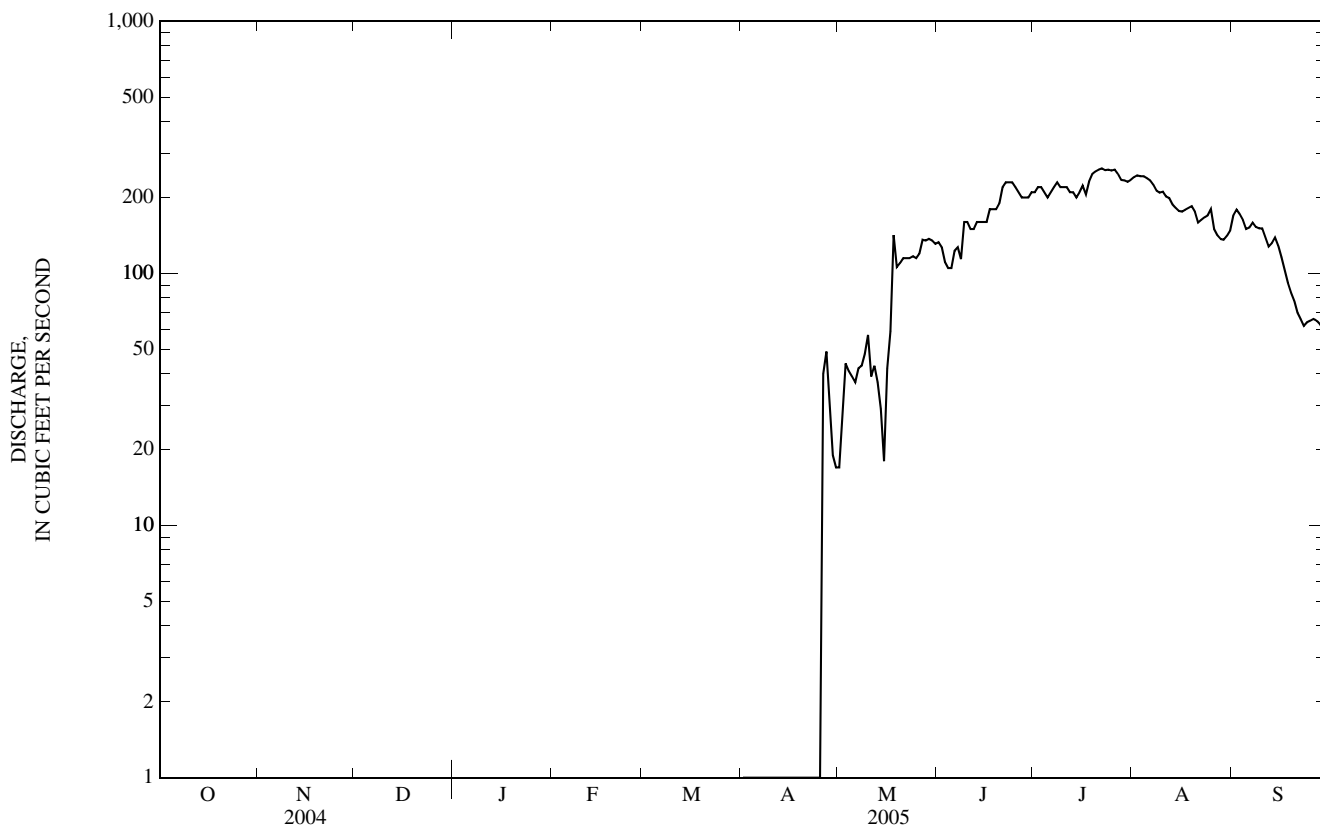
261	Jul 22	285	Jun 23, 1994
0.00	Apr 1-27	0.00	Many days, most years
269 ^a	Jun 18,21	301	Jun 23, 1994
3.15	Jun 26	3.88	Jun 23, 1994

MAXIMUM PEAK FLOW
 MAXIMUM PEAK STAGE

* For period of operation.

a Peak may have been higher during estimated period.

e Estimated.



YELLOWSTONE RIVER BASIN

06223500 WILLOW CREEK NEAR CROWHEART, WY

LOCATION.--Lat 43°17'00", long 109°11'08" (NAD 27), in SE¹/₄ NW¹/₄ NW¹/₄ sec.36, T.4 N., R.4 W., Fremont County, Hydrologic Unit 10080002, Wind River Indian Reservation, on left bank 1000 ft upstream from Willow Creek Canal diversion and 2.0 mi south of Crowheart.

DRAINAGE AREA.--55.4 mi².

PERIOD OF RECORD.--June to October 1909 (published as "J. K. Ranch Post Office"), June 1921 to September 1922 (published as "near Lenore"), May and June 1923, May 1925 to September 1940, October 1988 to current year (no winter record since 1995).

REVISED RECORDS.--WSP 1309: 1939 (M).

GAGE.--Water-stage recorder. Elevation of gage is 6,080 ft above NGVD of 1929, from topographic map. May 17 to October 31, 1909, nonrecording gage 1.9 mi downstream at different datum, May 16, 1921 to August 24, 1923, nonrecording gage 200 ft upstream from station at different datum, and May 1925 to September 1940, water-stage recorder 600 ft downstream from station at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversions for irrigation of 60.1 acres upstream from station. Results of discharge measurements, in cubic feet per second, made during the period station was not in operation, are given below:

Oct. 14 . . . 9.68

Mar. 29 . . . 4.65

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e4.50	6.6	86	45	10	8.2
2	---	---	---	---	---	---	e4.70	6.4	70	44	11	8.0
3	---	---	---	---	---	---	e4.70	6.4	63	45	10	8.0
4	---	---	---	---	---	---	e4.90	6.4	62	34	10	7.9
5	---	---	---	---	---	---	e5.00	6.4	66	32	10	7.8
6	---	---	---	---	---	---	e5.10	6.5	e85	30	9.8	7.9
7	---	---	---	---	---	---	e5.20	6.6	e70	30	9.8	8.0
8	---	---	---	---	---	---	e5.40	6.9	58	28	9.8	7.9
9	---	---	---	---	---	---	e5.20	7.0	54	26	9.6	7.9
10	---	---	---	---	---	---	e5.40	8.7	53	24	9.5	8.0
11	---	---	---	---	---	---	e5.00	14	55	22	9.5	7.9
12	---	---	---	---	---	---	e4.80	11	67	20	9.4	8.2
13	---	---	---	---	---	---	e4.80	11	57	18	9.6	8.2
14	---	---	---	---	---	---	e5.40	9.9	63	19	9.5	8.1
15	---	---	---	---	---	---	e5.50	10	83	18	9.2	8.0
16	---	---	---	---	---	---	e5.60	9.8	124	15	9.4	7.9
17	---	---	---	---	---	---	e5.70	9.1	161	16	9.7	8.0
18	---	---	---	---	---	---	e5.80	8.7	188	14	9.8	8.1
19	---	---	---	---	---	---	e5.90	13	174	12	9.6	8.0
20	---	---	---	---	---	---	e6.00	94	169	11	9.2	7.8
21	---	---	---	---	---	---	e6.00	140	152	11	9.0	8.0
22	---	---	---	---	---	---	e6.40	109	162	11	8.9	8.2
23	---	---	---	---	---	---	e6.00	134	154	10	8.9	8.0
24	---	---	---	---	---	---	e6.10	164	123	10	8.8	8.9
25	---	---	---	---	---	---	e6.20	136	97	10	8.9	8.6
26	---	---	---	---	---	---	e6.20	108	84	10	8.7	8.2
27	---	---	---	---	---	---	e6.26	110	62	10	8.5	8.0
28	---	---	---	---	---	---	e6.40	114	59	9.9	8.5	8.0
29	---	---	---	---	---	---	e6.20	122	56	9.9	8.4	7.9
30	---	---	---	---	---	---	6.7	89	45	10	8.3	7.8
31	---	---	---	---	---	---	---	77	---	11	8.5	---
TOTAL	---	---	---	---	---	---	167.06	1,561.4	2,802	615.8	289.8	241.4
MEAN	---	---	---	---	---	---	5.57	50.4	93.4	19.9	9.35	8.05
MAX	---	---	---	---	---	---	6.7	164	188	45	11	8.9
MIN	---	---	---	---	---	---	4.5	6.4	45	9.9	8.3	7.8
AC-FT	---	---	---	---	---	---	331	3,100	5,560	1,220	575	479

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2005, BY WATER YEAR (WY)*

MEAN	9.03	7.53	6.15	5.25	4.76	4.96	6.33	29.7	77.3	28.7	12.1	8.93
MAX	17.6	13.3	10.0	8.00	7.00	8.00	9.40	79.6	242	112	45.4	21.9
(WY)	(1931)	(1927)	(1927)	(1927)	(1922)	(1922)	(1999)	(1999)	(1999)	(1995)	(1930)	(1930)
MIN	5.15	2.50	2.00	2.00	2.00	2.50	3.97	6.85	8.94	5.68	3.50	4.60
(WY)	(1989)	(1940)	(1940)	(1940)	(1940)	(1940)	(1940)	(1935)	(2001)	(1940)	(1940)	(2001)

06223500 WILLOW CREEK NEAR CROWHEART, WY—Continued

SUMMARY STATISTICS

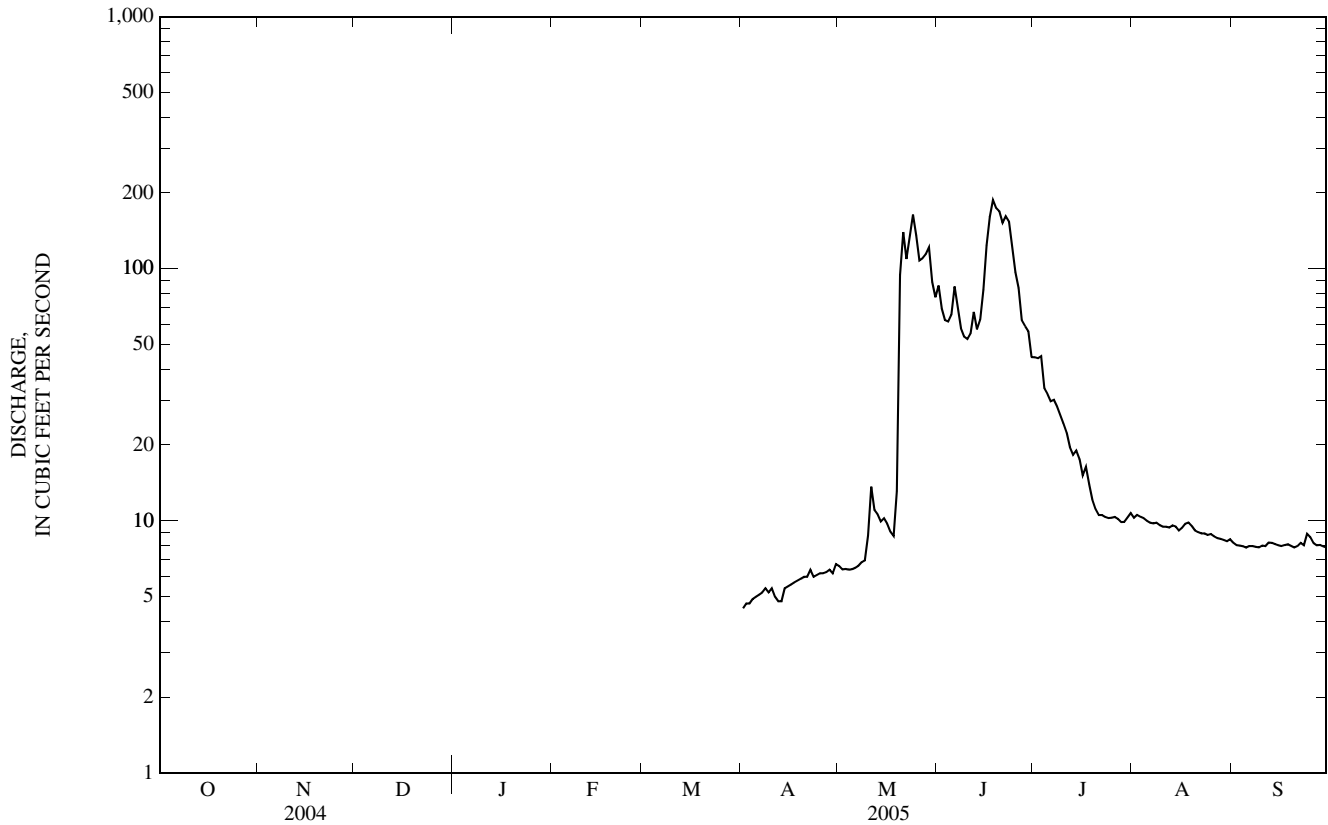
	FOR 2005 WATER YEAR*		WATER YEARS 1922 - 2005*	
ANNUAL MEAN	--		16.5	
HIGHEST ANNUAL MEAN	--		31.0	1995
LOWEST ANNUAL MEAN	--		4.60	1940
HIGHEST DAILY MEAN	188	Jun 18	468	Jun 12, 1991
LOWEST DAILY MEAN	4.5	Apr 1	2.0	Dec 1, 1939
MAXIMUM PEAK FLOW	234	Jun 18	1,100 ^a	May 31, 1939
MAXIMUM PEAK STAGE	3.62	Jun 18	5.40 ^b	May 31, 1939
ANNUAL RUNOFF (AC-FT)	--		11,930	

* For period of operation.

a On basis of flow-over-dam measurement of peak flow.

b Site and datum then in use.

c Estimated.



YELLOWSTONE RIVER BASIN

06224000 BULL LAKE CREEK ABOVE BULL LAKE, WY

LOCATION.--Lat 43°10'37", long 109°12'08" (NAD 27), in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.2, T.2 N., R.4 W., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, on right bank 1.2 mi upstream from high-water line of Bull Lake and 9.0 mi south of Crowheart.

DRAINAGE AREA.--187 mi².

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. Elevation of gage is 5,874 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. No diversions upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	222	133	64	48	36	26	27	116	1,080	995	483	160
2	235	171	55	51	33	25	25	109	892	1,050	489	150
3	227	128	62	50	36	25	26	106	677	1,170	491	e145
4	215	125	65	50	33	25	27	108	585	1,100	489	e142
5	202	120	63	38	32	24	24	117	562	1,010	472	e148
6	190	114	60	44	23	24	25	144	710	982	427	e152
7	179	110	57	48	37	23	28	174	796	1,020	389	e155
8	169	107	58	52	26	22	33	167	657	1,060	361	e155
9	159	108	61	56	27	22	37	215	545	1,080	351	e145
10	150	111	63	60	32	22	35	336	479	e1,080	352	e155
11	148	109	64	60	30	22	33	472	453	1,020	352	e160
12	147	111	58	58	31	23	34	361	494	970	335	e160
13	147	107	57	48	29	23	38	319	494	920	305	e150
14	144	103	56	45	29	22	41	347	505	968	274	129
15	140	99	55	45	25	19	39	385	617	1,040	247	116
16	135	96	51	52	24	24	40	509	922	1,000	241	106
17	126	96	51	51	32	22	45	764	1,290	1,050	252	e95
18	126	92	49	50	32	19	61	633	1,750	1,050	261	90
19	123	89	49	51	32	25	86	825	1,920	899	338	83
20	144	87	46	47	32	23	91	1,230	2,040	783	332	77
21	184	86	31	46	31	24	85	1,660	2,240	761	288	e70
22	185	83	35	44	29	22	82	1,480	2,250	735	259	e72
23	182	81	33	43	28	23	83	1,500	2,370	720	246	e68
24	180	77	45	42	28	24	99	1,660	2,320	776	237	e72
25	170	79	49	41	28	23	121	1,480	2,100	762	220	e80
26	166	73	44	39	28	27	133	1,220	1,840	697	204	e74
27	162	58	42	40	27	26	136	1,100	1,510	600	188	e70
28	158	65	40	39	26	26	135	1,070	1,290	512	177	e66
29	155	44	39	36	---	26	129	1,180	1,170	458	172	64
30	148	56	40	35	---	27	122	1,150	1,060	444	171	57
31	143	---	42	35	---	23	---	993	---	466	170	---
TOTAL	5,161	2,918	1,584	1,444	836	731	1,920	21,930	35,618	27,178	9,573	3,366
MEAN	166	97.3	51.1	46.6	29.9	23.6	64.0	707	1,187	877	309	112
MAX	235	171	65	60	37	27	136	1,660	2,370	1,170	491	160
MIN	123	44	31	35	23	19	24	106	453	444	170	57
AC-FT	10,240	5,790	3,140	2,860	1,660	1,450	3,810	43,500	70,650	53,910	18,990	6,680

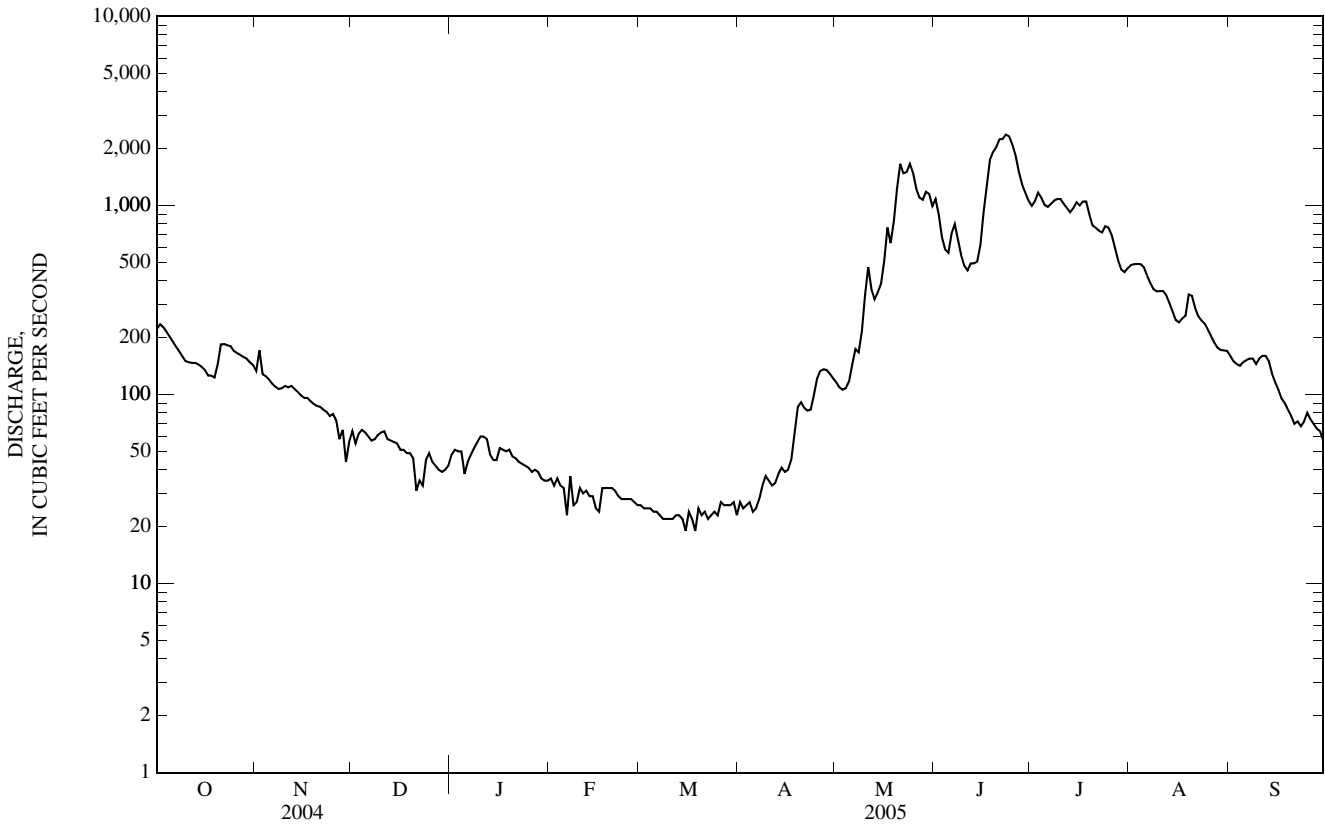
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2005, BY WATER YEAR (WY)

MEAN	97.7	54.8	36.9	28.6	24.7	26.2	65.6	471	1,135	895	419	202
MAX	222	109	62.2	57.1	41.4	57.4	199	777	2,104	1,581	655	533
(WY)	(1983)	(1951)	(1951)	(1997)	(1943)	(1986)	(1943)	(1969)	(1986)	(1975)	(1982)	(1973)
MIN	32.9	29.5	14.6	7.29	6.88	6.69	24.9	170	544	337	145	109
(WY)	(1989)	(1977)	(1977)	(1977)	(1977)	(1977)	(1970)	(1975)	(2001)	(1994)	(1985)	(1988)

06224000 BULL LAKE CREEK ABOVE BULL LAKE, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1942 - 2005	
ANNUAL TOTAL	96,638		112,259		--	
ANNUAL MEAN	264		308		289	
HIGHEST ANNUAL MEAN	--		--		415 1986	
LOWEST ANNUAL MEAN	--		--		174 1977	
HIGHEST DAILY MEAN	1,950	Jun 30	2,370	Jun 23	3,560	Jun 9, 1981
LOWEST DAILY MEAN	12	Several days	19	Mar 15,18	6.2	Jan 9, 1977
ANNUAL SEVEN-DAY MINIMUM	12	Feb 21	22	Mar 12	6.5	Mar 10, 1977
MAXIMUM PEAK FLOW	--		2,490	Jun 23	4,470	Jun 9, 1981
MAXIMUM PEAK STAGE	--		6.07	Jun 23	7.98	Jun 9, 1981
ANNUAL RUNOFF (AC-FT)	191,700		222,700		209,500	
10 PERCENT EXCEEDS	743		1,020		893	
50 PERCENT EXCEEDS	127		109		75	
90 PERCENT EXCEEDS	15		26		22	

e Estimated.



YELLOWSTONE RIVER BASIN

06225000 BULL LAKE CREEK NEAR LENORE, WY

LOCATION.--Lat 43°14'33", long 109°01'20" (NAD 27), in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.17, T.3 N., R.2 W., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, on left bank 700 ft upstream from mouth, 2.8 mi downstream from Bull Lake, and 8.5 mi southeast of Lenore.

DRAINAGE AREA.--213 mi², of which 12 mi² probably is noncontributing.

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

REVISED RECORDS.--WSP 1309: 1921 (M, date only), 1925(M), 1926(M), 1930(M). WSP 1709: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,654 ft above NGVD of 1929, from topographic map. May 18, 1918 to March 25, 1922, at site 10 ft upstream from station at datum 0.86 ft higher, March 26, 1922 to October 3, 1934, at present site at datum 2.00 ft lower. Bureau of Reclamation data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow completely regulated by Bull Lake 2.8 mi upstream since April 1938. Diversions upstream from station for irrigation of about 730 acres downstream.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	23	e23	22	21	23	23	99	77	775	640	895
2	16	23	e23	e22	21	23	23	122	113	773	610	894
3	16	23	23	e22	21	23	23	161	165	784	578	930
4	16	23	23	e22	21	23	23	221	198	868	555	926
5	22	22	23	e22	21	23	23	310	198	879	599	961
6	23	22	23	e22	21	22	19	366	197	926	612	997
7	23	23	23	e22	22	22	14	366	276	922	662	1,130
8	23	23	23	e22	21	22	19	362	524	919	707	1,210
9	24	23	23	22	21	22	20	361	495	916	732	1,200
10	23	23	23	21	21	22	21	335	444	931	722	1,220
11	24	23	23	21	21	22	17	230	380	992	679	1,230
12	24	23	23	e21	21	22	14	70	318	970	646	1,220
13	29	23	23	e21	21	23	18	35	318	879	641	1,180
14	31	23	23	e21	21	23	24	35	318	835	639	1,130
15	26	23	23	e21	21	23	24	32	320	848	646	1,140
16	26	23	23	e21	21	23	24	27	386	896	706	1,090
17	26	23	23	21	23	23	24	27	715	891	730	1,060
18	27	23	23	21	21	23	25	28	1,360	881	682	1,000
19	30	23	23	22	21	23	29	27	1,820	875	496	992
20	32	24	e23	21	21	23	27	28	1,790	809	428	980
21	32	e23	e23	21	21	22	46	28	2,250	712	523	979
22	32	23	e23	21	21	23	91	28	2,390	780	576	960
23	32	23	e23	21	22	23	113	26	2,330	785	639	916
24	32	23	e23	21	23	23	122	22	2,250	778	653	866
25	32	23	e23	21	23	23	123	26	2,070	775	704	778
26	30	23	e23	21	23	23	122	43	1,830	720	733	677
27	23	e23	23	21	23	23	107	45	1,360	655	787	601
28	22	e23	23	21	23	23	71	47	1,060	669	776	543
29	22	e23	23	21	---	23	44	49	990	740	770	377
30	23	e23	23	21	---	22	63	53	855	792	784	224
31	23	---	23	21	---	22	---	52	---	753	843	---
TOTAL	793	689	713	661	602	703	1,336	3,661	27,797	25,728	20,498	28,306
MEAN	25.6	23.0	23.0	21.3	21.5	22.7	44.5	118	927	830	661	944
MAX	32	24	23	22	23	23	123	366	2,390	992	843	1,230
MIN	16	22	23	21	21	22	14	22	77	655	428	224
AC-FT	1,570	1,370	1,410	1,310	1,190	1,390	2,650	7,260	55,140	51,030	40,660	56,140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 2005, BY WATER YEAR (WY)

MEAN	133	67.8	68.3	84.0	71.2	58.7	93.1	235	543	797	671	438
MAX	782	467	241	267	219	197	601	831	2,265	1,645	1,027	982
(WY)	(1952)	(1969)	(1972)	(1954)	(1951)	(1951)	(1965)	(1928)	(1918)	(1923)	(1969)	(1976)
MIN	4.16	8.34	13.8	11.0	12.0	0.00	3.59	6.01	10.6	85.6	193	46.3
(WY)	(1941)	(1965)	(1978)	(1931)	(1931)	(1937)	(1941)	(1940)	(1941)	(1941)	(1977)	(2001)

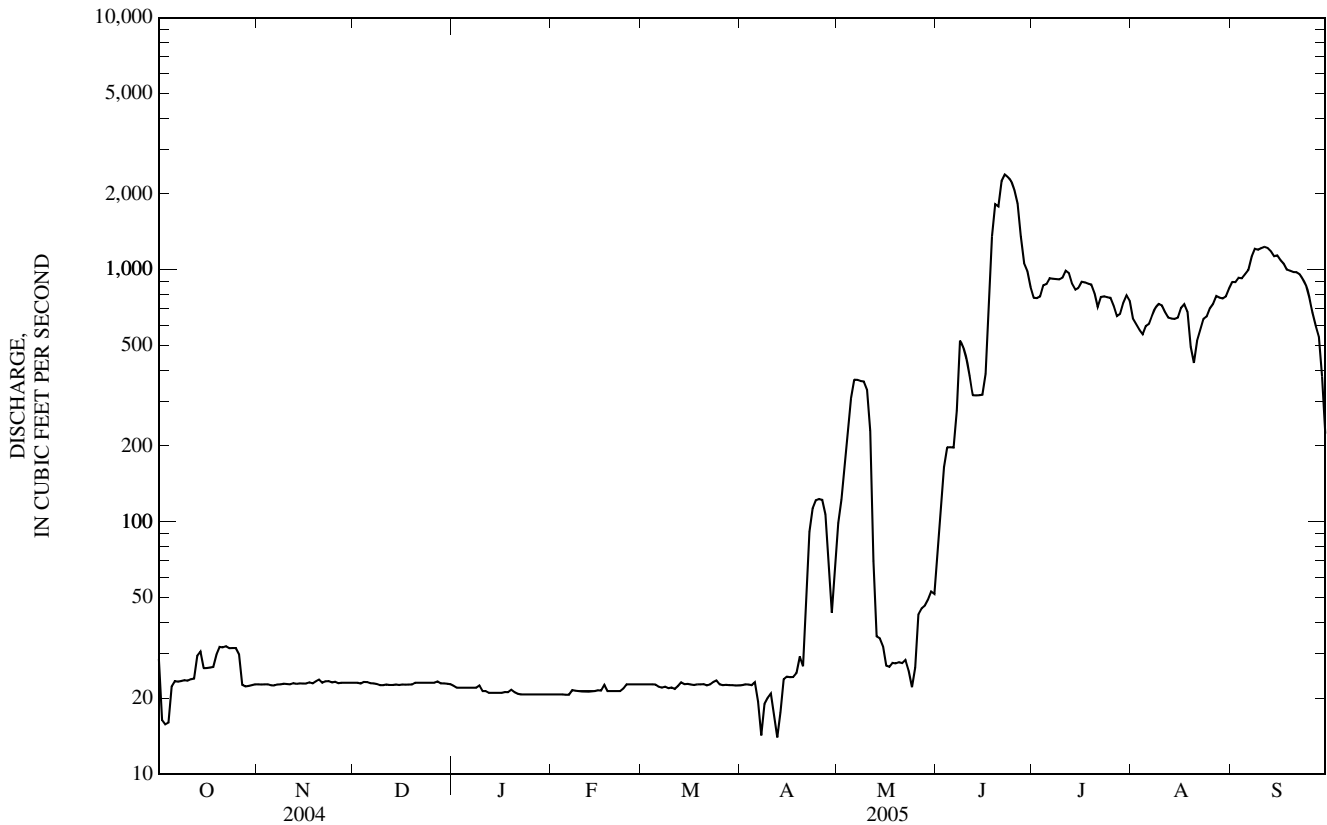
06225000 BULL LAKE CREEK NEAR LENORE, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1918 - 2005	
ANNUAL TOTAL	61,189		111,487		--	
ANNUAL MEAN	167		305		272	
HIGHEST ANNUAL MEAN	--		--		427 1969	
LOWEST ANNUAL MEAN	--		--		100 1941	
HIGHEST DAILY MEAN	1,000	Aug 21	2,390	Jun 22	3,900	Jun 16, 1918
LOWEST DAILY MEAN	16	Several days	14	Several days	0.00 ^a	Feb 28 to Apr 7, 1937
ANNUAL SEVEN-DAY MINIMUM	16	Apr 11	18	Apr 7	0.00 ^a	Feb 28, 1937
MAXIMUM PEAK FLOW	--	--	2,630	Jun 21	6,200 ^b	Aug 8, 1951
MAXIMUM PEAK STAGE	--	--	4.80	Jun 21	7.09	Aug 8, 1951
ANNUAL RUNOFF (AC-FT)	121,400		221,100		197,000	
10 PERCENT EXCEEDS	617		924		802	
50 PERCENT EXCEEDS	24		24		101	
90 PERCENT EXCEEDS	22		21		20	

a Result of regulation.

b From rating curve extended above 2,000 ft³/s on basis of slope-area measurement of peak flow. Result of automatic spillway gates releasing at Bull Lake Dam.

c Estimated.



06225500 WIND RIVER NEAR CROWHEART, WY

LOCATION.--Lat 43°14'33", long 109°00'35" (NAD 27), in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.16, T.3 N., R.2 W., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, on right bank 0.9 mi downstream from Bull Lake Creek and 9.0 mi southeast of Crowheart.

DRAINAGE AREA.--1,891 mi².

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

REVISED RECORDS.--WSP 1116: 1946-47. WSP 1709: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,635 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some regulation by Bull Lake on Bull Lake Creek. Diversions for irrigation of about 25,000 acres upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 29, 1927, reached a discharge of 13,000 ft³/s; discharge measurement made by Bureau of Reclamation at site 1.0 mi downstream.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	641	496	373	e280	242	205	233	512	2,820	2,750	1,630	1,440
2	581	411	e380	e270	247	206	240	499	2,820	2,800	1,570	1,400
3	546	479	e390	e270	244	209	258	522	2,470	2,840	1,530	1,390
4	538	510	e380	e280	234	212	276	577	2,430	2,770	1,470	1,370
5	537	503	e380	e290	233	214	272	671	2,430	2,640	1,490	1,400
6	553	471	e340	e250	221	207	263	759	2,580	2,640	1,440	1,430
7	530	461	e340	e280	229	208	283	830	2,770	2,680	1,440	1,550
8	563	454	e340	e290	244	220	356	839	2,700	2,620	1,460	1,620
9	576	466	e350	e290	234	223	367	834	2,410	2,630	1,480	1,600
10	564	461	e360	e280	231	224	314	968	2,220	2,580	1,440	1,640
11	567	455	e360	e280	236	229	284	1,580	2,020	2,690	1,430	1,680
12	567	457	e370	e270	219	236	266	1,170	1,950	2,630	1,390	1,700
13	578	447	e360	e260	218	252	291	966	2,020	2,440	1,340	1,720
14	563	417	e330	e260	224	234	322	932	1,880	2,390	1,310	1,660
15	549	406	e330	e230	205	223	321	889	2,150	2,410	1,280	1,660
16	547	389	e320	e250	208	227	292	1,060	2,800	2,400	1,300	1,620
17	537	396	e310	e260	215	237	326	1,550	3,240	2,390	1,360	1,560
18	532	414	e310	e260	218	229	409	1,490	e4,500	2,380	1,350	1,510
19	532	385	e300	e250	209	222	482	1,410	e5,600	2,230	1,480	1,480
20	529	378	291	e260	208	243	431	2,120	5,830	2,020	1,230	1,460
21	572	346	e280	e270	210	231	423	4,600	6,200	1,780	1,220	1,440
22	573	368	e270	e260	207	234	427	4,820	6,620	1,810	1,230	1,450
23	550	359	e260	e250	197	243	430	4,970	6,790	1,780	1,270	1,410
24	551	377	e240	e240	195	253	463	5,070	6,410	1,820	1,280	1,410
25	524	376	e250	e250	196	243	559	4,240	5,660	1,830	1,290	1,490
26	490	391	e260	e250	196	243	635	3,780	4,950	1,810	1,280	1,290
27	517	378	e280	e260	198	239	664	3,530	3,940	1,680	1,340	1,120
28	525	366	e290	e260	202	244	636	3,450	3,290	1,560	1,320	1,030
29	521	372	e290	e257	---	249	535	3,590	3,180	1,550	1,310	828
30	522	350	e290	e241	---	245	512	3,410	2,890	1,600	1,290	612
31	519	---	e290	e243	---	242	---	2,990	---	1,630	1,360	---
TOTAL	16,994	12,539	9,914	8,141	6,120	7,126	11,570	64,628	107,570	69,780	42,610	42,970
MEAN	548	418	320	263	219	230	386	2,085	3,586	2,251	1,375	1,432
MAX	641	510	390	290	247	253	664	5,070	6,790	2,840	1,630	1,720
MIN	490	346	240	230	195	205	233	499	1,880	1,550	1,220	612
AC-FT	33,710	24,870	19,660	16,150	12,140	14,130	22,950	128,200	213,400	138,400	84,520	85,230

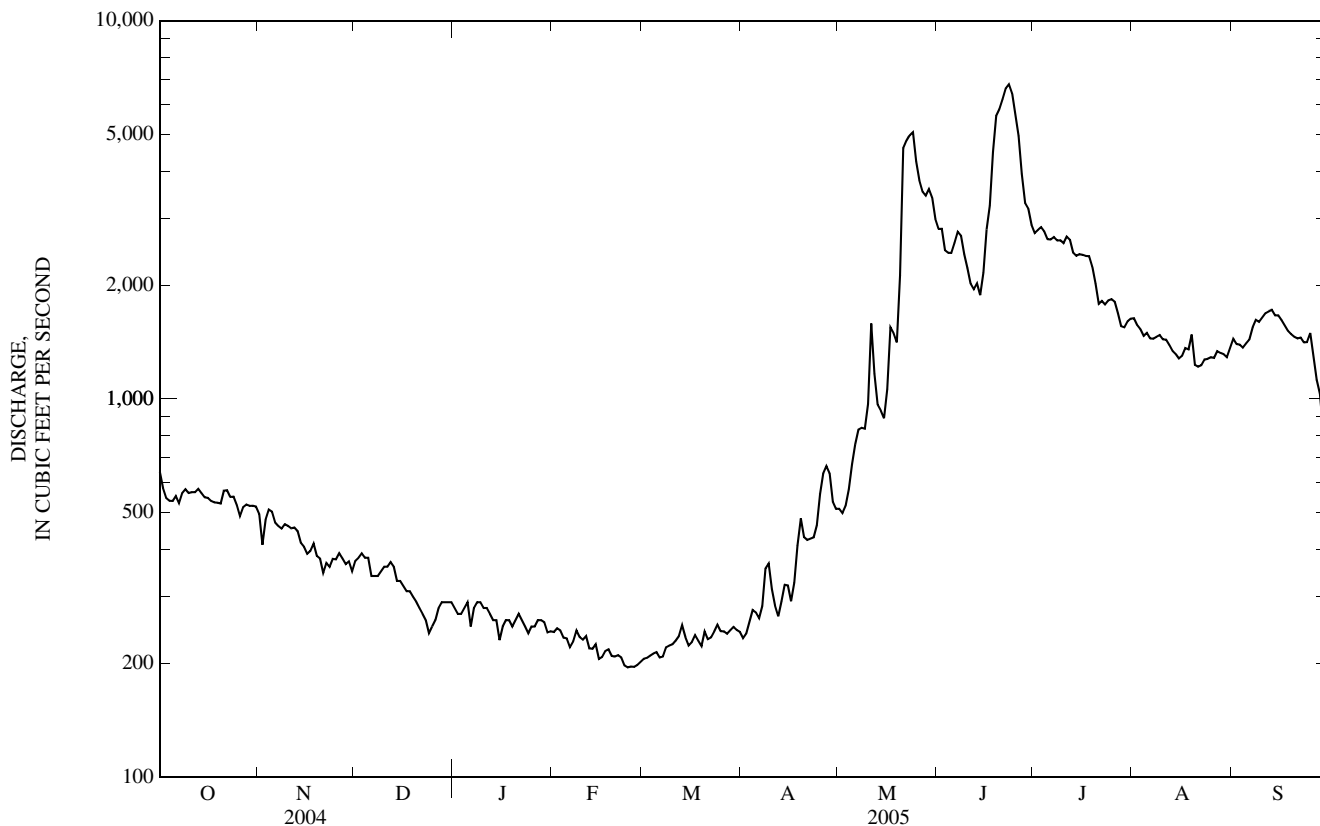
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2005, BY WATER YEAR (WY)

MEAN	672	472	380	359	346	357	546	1,759	3,666	2,831	1,654	1,147
MAX	1,415	932	625	560	538	616	1,284	2,938	7,259	5,694	2,483	1,774
(WY)	(1952)	(1969)	(1972)	(1954)	(1951)	(1972)	(1952)	(1956)	(1971)	(1967)	(1951)	(1997)
MIN	371	298	215	179	202	226	309	729	1,466	1,362	853	380
(WY)	(1989)	(1978)	(1982)	(1982)	(1989)	(1977)	(1993)	(1977)	(2001)	(1992)	(1977)	(2001)

06225500 WIND RIVER NEAR CROWHEART, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1946 - 2005	
ANNUAL TOTAL	324,173		399,962		--	
ANNUAL MEAN	886		1,096		1,186	
HIGHEST ANNUAL MEAN	--		--		1,657 1999	
LOWEST ANNUAL MEAN	--		--		658 2001	
HIGHEST DAILY MEAN	3,600	Jul 1	6,790	Jun 23	11,400	Jun 18, 1999
LOWEST DAILY MEAN	220	Feb 13	195	Feb 24	130	Feb 5, 1982
ANNUAL SEVEN-DAY MINIMUM	236	Feb 9	198	Feb 23	143	Dec 30, 1981
MAXIMUM PEAK FLOW	--		7,480	Jun 23	14,300 ^a	Jun 13, 1991
MAXIMUM PEAK STAGE	--		9.72	Jun 23	11.23	Jun 19, 1999
ANNUAL RUNOFF (AC-FT)	643,000		793,300		859,000	
10 PERCENT EXCEEDS	1,840		2,660		2,710	
50 PERCENT EXCEEDS	516		522		570	
90 PERCENT EXCEEDS	249		231		290	

a Gage height, 11.04 ft, from floodmarks.
 e Estimated.



YELLOWSTONE RIVER BASIN

06227596 JOHNSTOWN DITCH AT HEADWORKS, NEAR KINNENAR, WY

LOCATION.--Lat 43°09'02", long 108°43'41" (NAD 27), in SW¹/₄ SE¹/₄ NW¹/₄ sec.14, T.2 N., R.1 E., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, on left bank, 450 ft downstream from headgate, 1.6 mi upstream from bridge on State Highway 132, and 2.5 mi west of Kinnear.

PERIOD OF RECORD.--May 1991 to September 1999, May 2002 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 5,310 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow is diverted from the Wind River for irrigation.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	0.00	16	e30	34	28	22
2	---	---	---	---	---	---	0.00	16	e31	35	27	22
3	---	---	---	---	---	---	0.00	16	e32	35	28	22
4	---	---	---	---	---	---	0.00	16	e32	34	27	22
5	---	---	---	---	---	---	0.00	17	e32	34	27	22
6	---	---	---	---	---	---	0.00	17	e33	34	25	22
7	---	---	---	---	---	---	0.00	17	e34	35	25	22
8	---	---	---	---	---	---	0.00	18	e35	35	26	21
9	---	---	---	---	---	---	0.00	18	33	35	26	21
10	---	---	---	---	---	---	0.00	18	32	35	26	21
11	---	---	---	---	---	---	0.00	20	30	36	26	21
12	---	---	---	---	---	---	0.00	18	29	36	26	21
13	---	---	---	---	---	---	0.00	15	30	35	26	21
14	---	---	---	---	---	---	0.00	14	29	34	26	20
15	---	---	---	---	---	---	0.00	14	31	35	25	20
16	---	---	---	---	---	---	0.00	14	33	34	26	20
17	---	---	---	---	---	---	0.00	17	30	25	25	20
18	---	---	---	---	---	---	0.00	19	25	24	24	20
19	---	---	---	---	---	---	0.00	15	18	24	23	20
20	---	---	---	---	---	---	0.00	18	19	23	23	20
21	---	---	---	---	---	---	10	15	19	24	23	20
22	---	---	---	---	---	---	17	12	31	26	23	19
23	---	---	---	---	---	---	17	12	32	25	23	19
24	---	---	---	---	---	---	17	12	21	26	23	19
25	---	---	---	---	---	---	17	11	20	25	23	20
26	---	---	---	---	---	---	18	14	18	25	23	19
27	---	---	---	---	---	---	17	29	19	25	23	17
28	---	---	---	---	---	---	17	28	28	24	23	17
29	---	---	---	---	---	---	16	27	36	27	22	19
30	---	---	---	---	---	---	16	e28	36	28	22	26
31	---	---	---	---	---	---	---	e30	---	28	22	---
TOTAL	---	---	---	---	---	---	162.00	551	858	935	765	615
MEAN	---	---	---	---	---	---	5.40	17.8	28.6	30.2	24.7	20.5
MAX	---	---	---	---	---	---	18	30	36	36	28	26
MIN	---	---	---	---	---	---	0.00	11	18	23	22	17
AC-FT	---	---	---	---	---	---	321	1,090	1,700	1,850	1,520	1,220

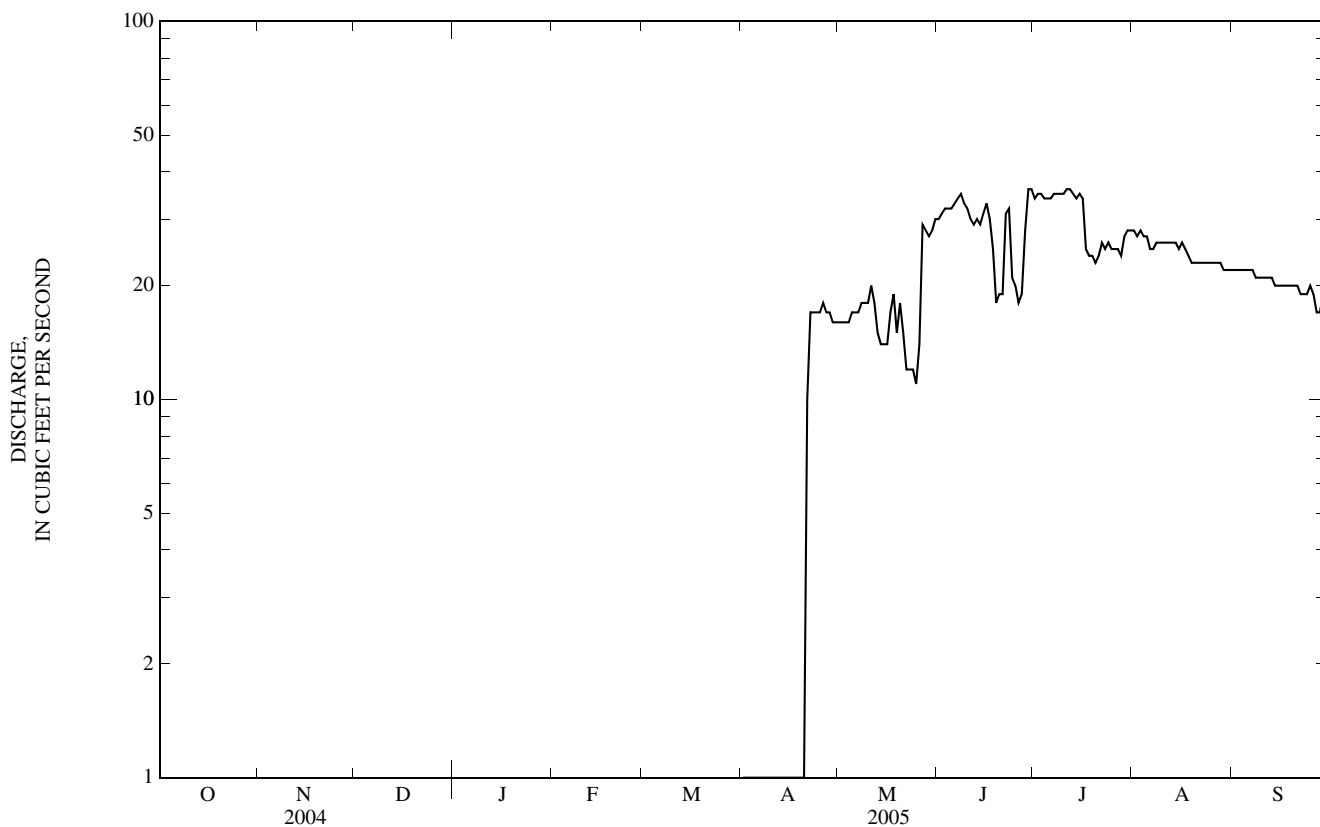
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2005, BY WATER YEAR (WY)*

MEAN	1.25	---	---	---	---	---	5.40	15.6	23.8	25.2	24.7	20.1
MAX	1.73	---	---	---	---	---	5.40	26.1	33.6	32.6	33.5	29.5
(WY)	(1993)	---	---	---	---	---	(2005)	(1994)	(1999)	(1999)	(1999)	(2001)
MIN	0.76	---	---	---	---	---	5.40	6.98	11.5	12.7	17.7	10.9
(WY)	(1994)	---	---	---	---	---	(2005)	(1999)	(1995)	(1992)	(2002)	(1993)

06227596 JOHNSTOWN DITCH AT HEADWORKS, NEAR KINNEAR, WY—Continued

SUMMARY STATISTICS	FOR 2005 WATER YEAR*		WATER YEARS 1991 - 2005*	
HIGHEST DAILY MEAN	36	Jun 29-30, Jul 11-12	48	Jun 25, 1991
LOWEST DAILY MEAN	0.00	Apr 1-21	0.00	Many days, most years
MAXIMUM PEAK FLOW	49	Jun 28	58	May 30, 2003
MAXIMUM PEAK STAGE	2.40	Jun 28	2.50	May 30, 2003

* For period of operation.
e Estimated.



YELLOWSTONE RIVER BASIN

06227600 WIND RIVER NEAR KINNEAR, WY

LOCATION.--Lat 43°08'38", long 108°42'26" (NAD 27), in SE¹/₄ SE¹/₄ SW¹/₄ sec.13, T.2 N., R.1 E., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, on left bank, downstream side of bridge on Wyoming State Secondary Highway 132 and 1.6 mi southwest of Kinnear.

DRAINAGE AREA.--2,194 mi².

PERIOD OF RECORD.--April 1974 to September 1979 (no winter records), April 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,280 ft above NGVD of 1929, from topographic map. April 1974 to September 1979 and March 28, 1991 to June 8, 1997, at site 300 ft upstream from station on right bank at same datum. June 9, 1997 to April 21, 1998, at present site on right bank at same datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some regulation by Bull Lake beginning in 1938 and Pilot-Butte Reservoir beginning in 1926, combined capacity, 182,000 acre-ft. Diversions upstream from station for irrigation of about 102,100 acres lying both upstream and downstream from 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 upstream from station through Pilot Wasteway. Additional wastewater returns to river downstream from station through Fivemile Creek and Muddy Creek.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	658	498	e360	e290	e230	265	229	137	1,090	1,700	378	311
2	606	416	e370	e290	e240	263	226	134	1,370	1,770	372	330
3	550	453	e380	e290	e230	262	194	163	881	1,900	373	347
4	535	507	e370	e270	e220	264	104	166	794	1,810	362	344
5	542	519	371	e280	e220	268	264	192	816	1,560	349	341
6	564	471	e330	e240	e210	259	259	193	1,030	1,540	354	356
7	548	461	e330	e270	e220	255	106	193	1,450	1,500	357	370
8	564	452	e330	e280	e230	262	98	193	1,580	1,400	350	367
9	614	463	e340	e280	e240	267	99	192	1,100	1,330	335	354
10	552	491	e350	e270	e250	265	95	197	805	1,180	328	357
11	339	466	e350	e270	e250	271	85	797	566	1,240	320	359
12	119	465	e360	e260	e240	268	80	551	499	1,160	313	364
13	102	463	e350	e250	e240	289	76	160	597	837	310	364
14	96	425	e320	e250	e250	275	74	142	484	691	310	363
15	89	408	e320	e220	e230	251	76	131	730	751	309	356
16	87	388	e310	e240	e230	253	99	146	1,710	866	323	336
17	84	382	e300	e250	e240	262	114	450	3,130	830	326	341
18	80	413	e300	e250	e240	256	120	611	5,130	919	324	343
19	75	385	e290	e240	e250	247	167	235	6,070	708	326	334
20	76	386	e290	e250	e260	263	156	1,830	6,340	482	322	331
21	75	336	271	e260	e260	260	143	4,590	6,670	449	314	327
22	352	334	272	e250	e270	248	133	5,000	7,420	451	308	308
23	563	360	e250	e240	e270	254	130	4,720	7,810	450	310	297
24	569	366	e230	e230	275	268	129	5,070	7,460	466	312	317
25	560	e360	e240	e240	269	257	130	3,950	6,650	477	321	336
26	518	e380	e250	e240	261	248	167	2,600	5,760	474	312	313
27	535	e320	e270	e250	263	252	182	1,970	4,360	448	300	198
28	563	e310	e280	e250	263	245	185	1,800	3,150	428	297	172
29	556	e300	e280	e250	---	249	157	1,990	2,610	396	299	151
30	535	e300	e280	e230	---	244	153	2,020	2,270	387	289	126
31	529	---	e280	e230	---	240	---	1,480	---	381	308	---
TOTAL	12,235	12,278	9,624	7,910	6,851	8,030	4,230	42,003	90,332	28,981	10,111	9,513
MEAN	395	409	310	255	245	259	141	1,355	3,011	935	326	317
MAX	658	519	380	290	275	289	264	5,070	7,810	1,900	378	370
MIN	75	300	230	220	210	240	74	131	484	381	289	126
AC-FT	24,270	24,350	19,090	15,690	13,590	15,930	8,390	83,310	179,200	57,480	20,060	18,870

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2005, BY WATER YEAR (WY)

MEAN	339	390	310	282	283	312	244	954	2,503	1,564	542	389
MAX	850	625	380	360	378	418	758	2,356	6,611	4,802	1,230	564
(WY)	(1998)	(1998)	(1996)	(1996)	(1998)	(1996)	(1974)	(1999)	(1999)	(1995)	(1976)	(1976)
MIN	141	119	228	193	196	194	72.9	283	373	346	325	216
(WY)	(2004)	(2002)	(2002)	(1993)	(2002)	(1992)	(1978)	(2002)	(2001)	(2001)	(2001)	(1977)

06227600 WIND RIVER NEAR KINNEAR, WY—Continued

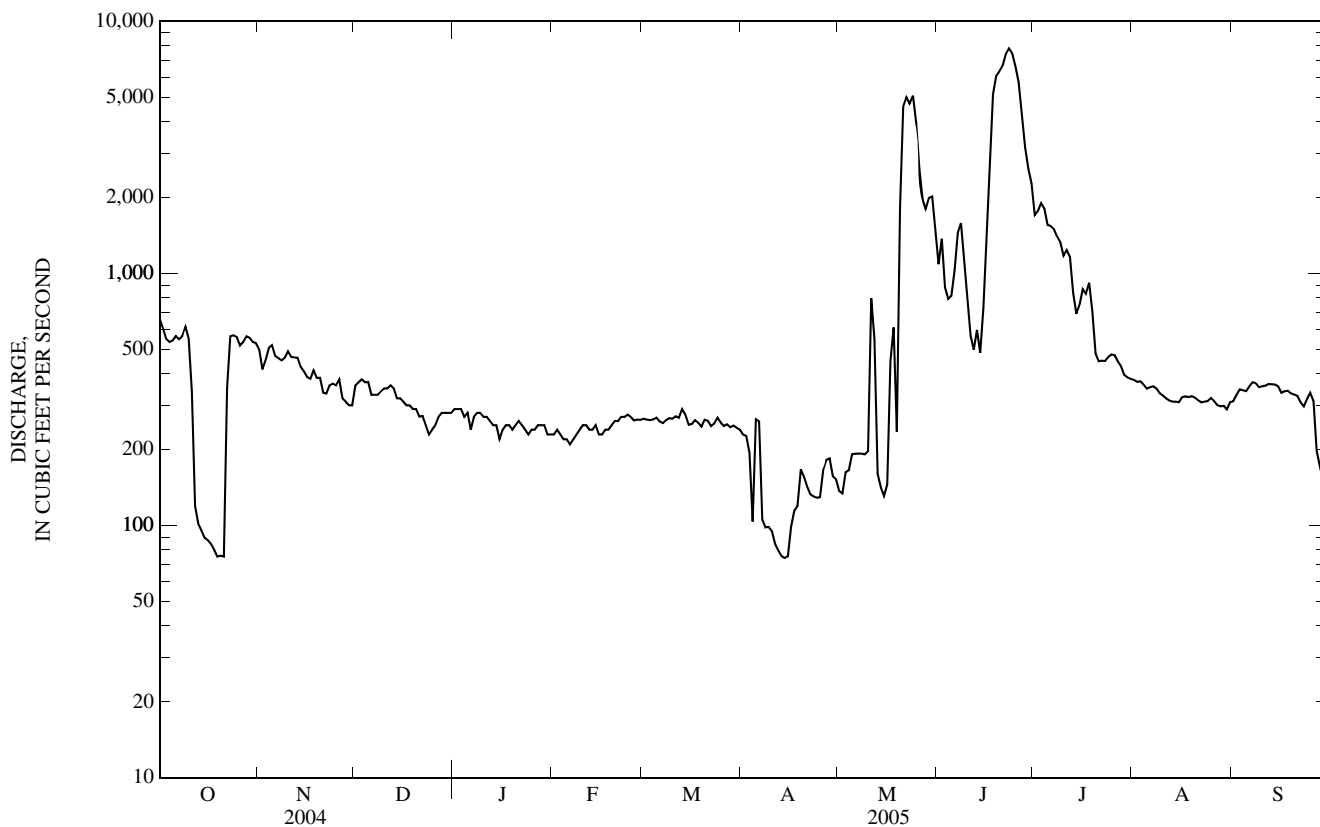
SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1974 - 2005*	
ANNUAL TOTAL	134,803		242,098		--	
ANNUAL MEAN	368		663		642	
HIGHEST ANNUAL MEAN	--		--		1,272	1999
LOWEST ANNUAL MEAN	--		--		277	2001
HIGHEST DAILY MEAN	3,500	Jul 1	7,810	Jun 23	11,100	Jun 20, 1999
LOWEST DAILY MEAN	58	Apr 27	74	Apr 14	28	Apr 24, 1978
ANNUAL SEVEN-DAY MINIMUM	63	Apr 26	81	Oct 15	35	Apr 19, 1978
MAXIMUM PEAK FLOW	--		8,480	Jun 23	13,900 ^a	Jun 13, 1991
MAXIMUM PEAK STAGE	--		7.74	Jun 23	8.79 ^b	Jun 10, 1997
ANNUAL RUNOFF (AC-FT)	267,400		480,200		465,100	
10 PERCENT EXCEEDS	536		1,420		991	
50 PERCENT EXCEEDS	320		312		346	
90 PERCENT EXCEEDS	119		155		172	

* For period of operation.

a Gage height, 8.03 ft, from floodmarks.

b From floodmarks, discharge, 11,600 ft³/s.

e Estimated.



YELLOWSTONE RIVER BASIN

06227810 LEFTHAND DITCH AT HEADWORKS, NEAR RIVERTON, WY

LOCATION.--Lat 43°01'34", long 108°31'12" (NAD 27), in NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.33, T.1 N., R.3 E., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, on left bank 0.6 mi downstream from headgates and 6.9 mi west of Riverton.

PERIOD OF RECORD.--May 1991 to September 1999, May 2001 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 5,060 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good. Flow is diverted from Wind River for irrigation.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	0.00	7.9	26	28	38	23
2	---	---	---	---	---	---	0.00	7.3	28	29	34	24
3	---	---	---	---	---	---	0.00	9.0	26	29	29	24
4	---	---	---	---	---	---	0.00	11	25	29	29	24
5	---	---	---	---	---	---	0.00	11	25	27	28	24
6	---	---	---	---	---	---	0.00	11	26	26	28	25
7	---	---	---	---	---	---	0.00	9.9	29	26	27	26
8	---	---	---	---	---	---	0.00	9.4	30	25	27	27
9	---	---	---	---	---	---	0.00	9.0	28	25	26	27
10	---	---	---	---	---	---	0.00	8.6	25	25	26	27
11	---	---	---	---	---	---	0.00	7.3	23	24	25	27
12	---	---	---	---	---	---	0.00	8.5	20	24	25	28
13	---	---	---	---	---	---	0.00	9.4	21	24	24	28
14	---	---	---	---	---	---	0.00	9.2	19	26	26	28
15	---	---	---	---	---	---	0.00	7.4	22	31	25	29
16	---	---	---	---	---	---	0.00	7.1	23	36	24	27
17	---	---	---	---	---	---	0.00	9.0	20	36	24	27
18	---	---	---	---	---	---	0.00	8.7	17	37	23	27
19	---	---	---	---	---	---	2.0	6.4	29	34	23	27
20	---	---	---	---	---	---	5.4	6.0	37	26	21	28
21	---	---	---	---	---	---	9.7	5.6	40	24	20	28
22	---	---	---	---	---	---	11	5.3	36	24	19	28
23	---	---	---	---	---	---	11	6.2	41	23	19	27
24	---	---	---	---	---	---	11	8.7	40	23	18	27
25	---	---	---	---	---	---	11	7.6	40	27	18	28
26	---	---	---	---	---	---	9.9	19	39	36	18	24
27	---	---	---	---	---	---	9.8	23	37	41	17	13
28	---	---	---	---	---	---	9.4	25	34	40	17	11
29	---	---	---	---	---	---	8.9	30	31	40	17	11
30	---	---	---	---	---	---	8.5	30	31	39	18	8.2
31	---	---	---	---	---	---	---	29	---	39	21	---
TOTAL	---	---	---	---	---	---	107.60	362.5	868	923	734	732.2
MEAN	---	---	---	---	---	---	3.59	11.7	28.9	29.8	23.7	24.4
MAX	---	---	---	---	---	---	11	30	41	41	38	29
MIN	---	---	---	---	---	---	0.00	5.3	17	23	17	8.2
AC-FT	---	---	---	---	---	---	213	719	1,720	1,830	1,460	1,450

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2005, BY WATER YEAR (WY)*

MEAN	0.60	---	---	---	---	---	2.09	19.4	27.2	28.7	26.3	26.2
MAX	0.87	---	---	---	---	---	3.59	35.3	41.6	44.6	47.7	42.9
(WY)	(1994)	---	---	---	---	---	(2005)	(1992)	(2001)	(1994)	(1994)	(1994)
MIN	0.33	---	---	---	---	---	0.60	7.67	12.8	19.4	8.74	10.3
(WY)	(1993)	---	---	---	---	---	(1992)	(2004)	(1995)	(1993)	(1998)	(1999)

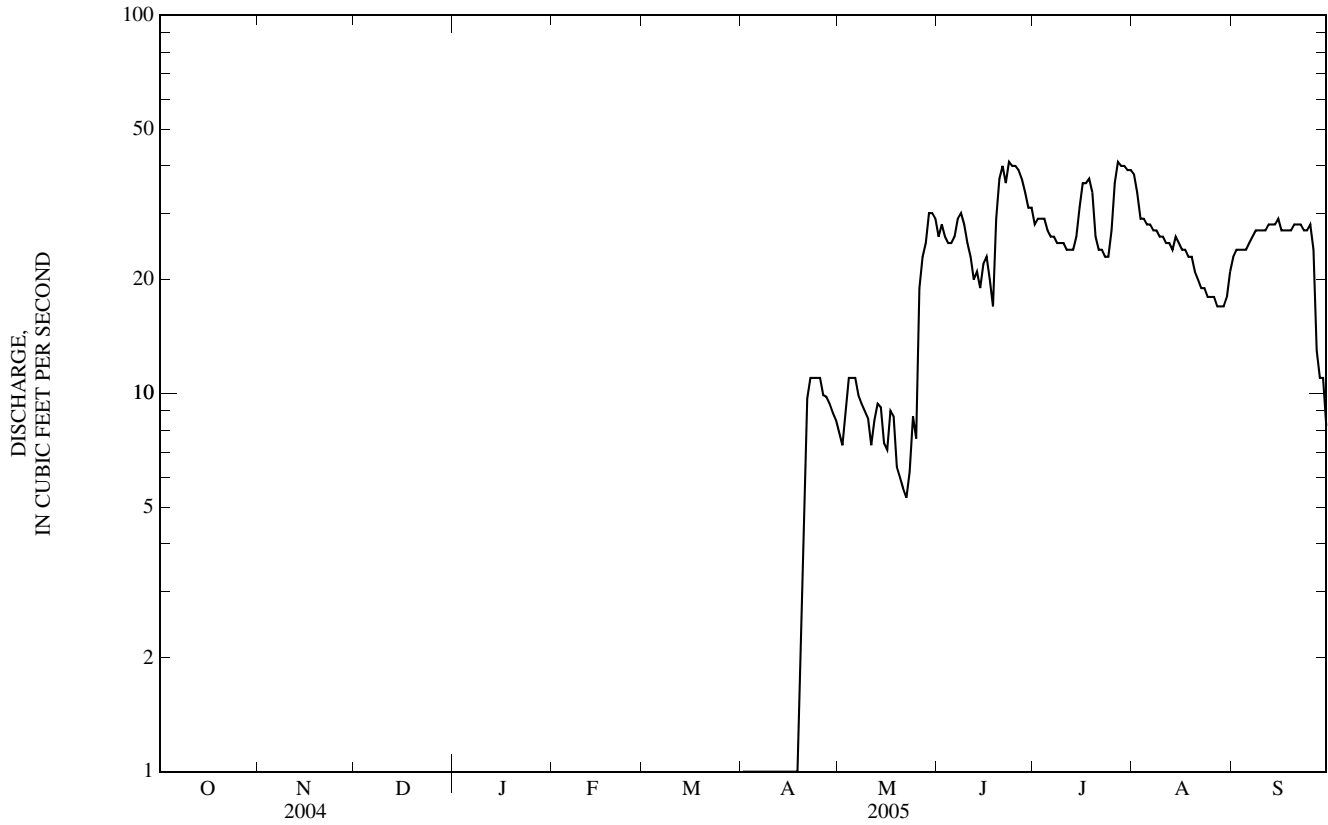
06227810 LEFTHAND DITCH AT HEADWORKS, NEAR RIVERTON, WY—Continued

SUMMARY STATISTICS

	FOR 2005 WATER YEAR*		WATER YEARS 1991 - 2005*	
HIGHEST DAILY MEAN	41	Jun 23, Jul 27	66	May 25, 1997
LOWEST DAILY MEAN	0.00	Apr 1-18	0.00	Many days, most years
MAXIMUM PEAK FLOW	72	Jun 19	74 ^a	Jun 13, 1991, May 24, 1997
MAXIMUM PEAK STAGE	2.89	Jun 19	3.19	Sep 8, 1997

* For period of operation.

a Gage height, 2.73 ft in 1991, 3.09 ft in 1997.



06228000 WIND RIVER AT RIVERTON, WY

LOCATION.--Lat 43°00'38", long 108°22'34" (NAD 27), in NE¹/₄ NW¹/₄ NW¹/₄ sec.2, T.1 S., R.4 E., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, on left bank 20 ft downstream from bridge on State Highway 789, 1.1 mi southeast of post office in Riverton, and 1.5 mi upstream from Little Wind River.

DRAINAGE AREA.--2,309 mi².

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.

REVISED RECORDS.--WSP 1509: 1935. WSP 1709: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,901.56 ft above NGVD of 1929. See WSP 1729 for history of changes prior to October 13, 1930. October 13, 1930 to April 15, 1968, water-stage recorder at site 280 ft upstream from station at datum 2.00 ft higher. April 16 to November 17, 1968, water-stage recorder at site 155 ft upstream from station at datum 2.00 ft higher. November 18, 1968 to July 28, 1970, water-stage recorder at site 20 ft downstream at datum 2.00 ft higher. July 29, 1970 to September 30, 1977, water-stage recorder at site 245 ft downstream from station at datum 2.00 ft higher. October 1, 1977 to October 23, 1997 at site 245 ft downstream from station at same datum. U.S. Army Corp of Engineers data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Some regulation by Bull Lake beginning in 1938 and Pilot Butte Reservoir beginning in 1926, combined capacity, 182,000 acre-ft. Diversions upstream from station for irrigation of about 128,000 acres upstream and downstream from 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 upstream from station through Pilot Wasteway. Additional wastewater returns to river downstream from station through Fivemile Creek and Muddy Creek.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	472	547	e370	e290	e220	e320	294	70	670	1,290	64	15
2	607	485	e380	e290	e230	e310	287	55	839	1,290	58	17
3	589	467	e390	e275	e210	e310	255	49	599	1,340	70	16
4	630	529	e400	e250	e210	e300	161	51	439	1,380	e76	19
5	618	552	e380	e220	e210	e300	225	65	445	1,210	e72	18
6	644	515	e380	e180	e200	305	344	50	586	1,120	e66	20
7	586	499	e320	e210	e210	279	218	49	907	1,100	e66	21
8	570	493	e320	e240	e220	279	112	64	1,080	1,070	e56	25
9	615	509	e330	e280	e230	286	112	54	758	934	52	33
10	601	595	e330	e290	e240	280	113	71	499	802	49	26
11	439	591	e320	e280	e240	284	107	407	311	772	58	24
12	118	552	e330	e280	e230	285	93	767	183	763	53	24
13	86	567	e320	e270	e230	309	64	136	198	545	46	36
14	76	549	e300	e240	e220	312	32	59	167	391	55	46
15	70	524	e300	e250	e230	280	27	40	133	372	49	56
16	67	511	e300	e250	e230	264	29	28	761	445	46	54
17	65	471	e300	e245	e230	271	35	78	1,630	422	50	48
18	62	500	e290	e245	e240	285	30	511	3,440	493	55	48
19	59	494	e290	e250	e250	315	53	129	4,510	401	58	48
20	58	482	e290	e250	e270	319	87	663	4,770	170	53	56
21	58	430	e280	e245	e280	334	68	2,540	4,610	61	50	83
22	146	387	e280	e240	e300	314	57	3,610	5,310	56	43	82
23	627	399	e265	e230	e320	318	50	3,100	5,730	55	40	77
24	584	407	e250	e230	e330	340	33	3,470	5,540	55	41	79
25	586	430	e250	e220	e340	340	33	2,840	5,040	57	39	98
26	550	423	e260	e230	e340	314	36	1,840	4,210	70	25	117
27	534	387	e270	e240	e330	319	54	1,290	3,550	82	26	129
28	576	361	e255	e240	e320	313	87	1,090	2,330	67	20	78
29	572	e350	e285	e240	---	317	98	1,130	1,800	74	17	71
30	545	e340	e280	e220	---	313	87	1,360	1,710	63	16	90
31	551	---	e280	e220	---	308	---	1,010	---	63	16	---
TOTAL	12,361	14,346	9,595	7,640	7,110	9,423	3,281	26,676	62,755	17,013	1,485	1,554
MEAN	399	478	310	246	254	304	109	861	2,092	549	47.9	51.8
MAX	644	595	400	290	340	340	344	3,610	5,730	1,380	76	129
MIN	58	340	250	180	200	264	27	28	133	55	16	15
AC-FT	24,520	28,460	19,030	15,150	14,100	18,690	6,510	52,910	124,500	33,750	2,950	3,080

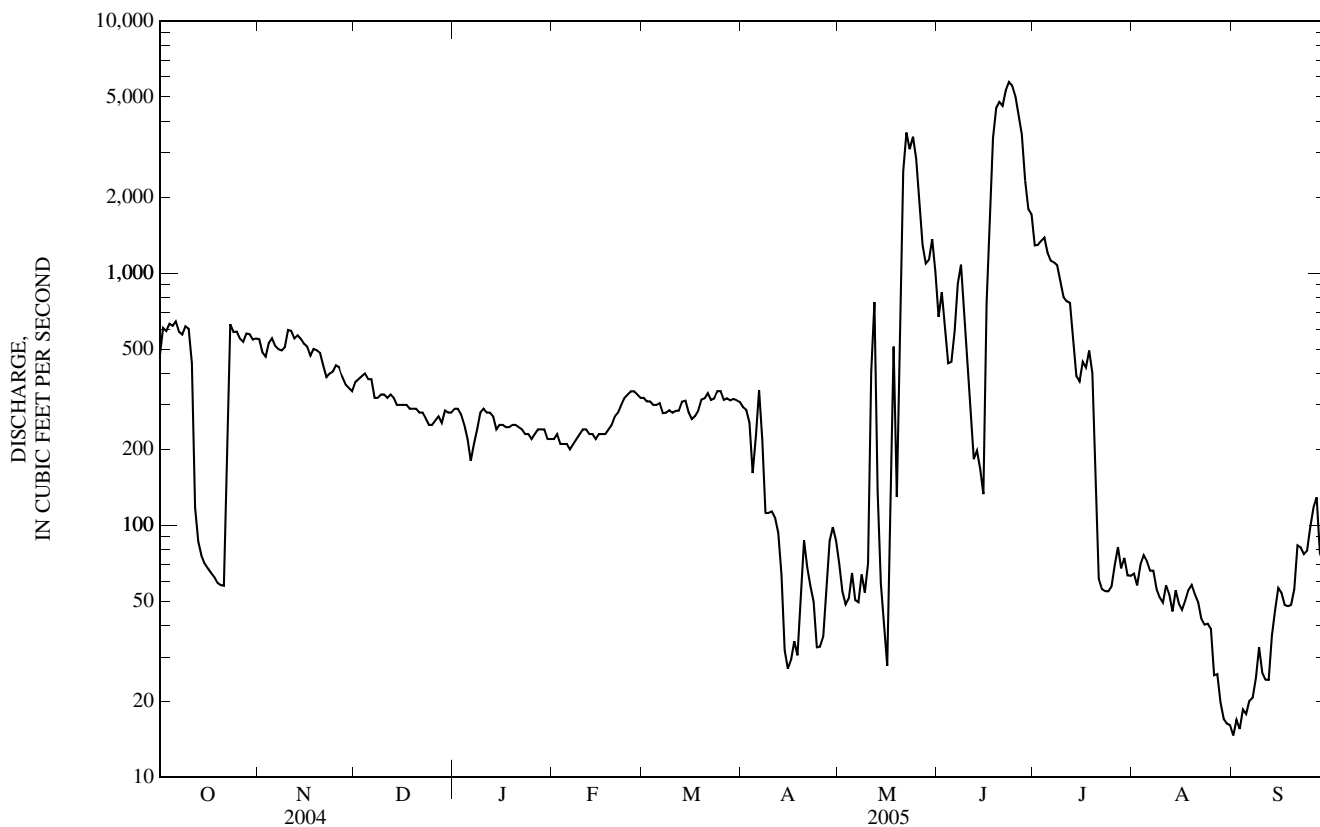
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 2005, BY WATER YEAR (WY)

MEAN	581	445	347	327	330	350	397	1,177	2,745	1,669	649	465
MAX	1,500	895	559	539	531	650	1,234	4,618	7,194	5,802	3,052	1,794
(WY)	(1952)	(1969)	(1972)	(1972)	(1948)	(1916)	(1943)	(1928)	(1921)	(1917)	(1930)	(1927)
MIN	149	161	200	151	196	74.9	53.8	45.5	28.0	20.3	26.2	35.7
(WY)	(2001)	(2002)	(1932)	(1938)	(1981)	(1981)	(1989)	(2004)	(2001)	(1994)	(2001)	(1988)

06228000 WIND RIVER AT RIVERTON, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1912 - 2005	
ANNUAL TOTAL	90,947		173,239		--	
ANNUAL MEAN	248		475		781	
HIGHEST ANNUAL MEAN	--		--		1,626	1913
LOWEST ANNUAL MEAN	--		--		156	2001
HIGHEST DAILY MEAN	2,220	Jul 1	5,730	Jun 23	11,400	Jun 14, 1935
LOWEST DAILY MEAN	13	Jun 17	15	Sep 1	9.8	May 28, 1977
ANNUAL SEVEN-DAY MINIMUM	17	May 1	17	Aug 29	12	Jul 13, 1977
MAXIMUM PEAK FLOW	--		6,200	Jun 23	13,300 ^a	Jun 15, 1935
MAXIMUM PEAK STAGE	--		8.87	Jun 23	10.86 ^b	Jun 10, 1997
ANNUAL RUNOFF (AC-FT)	180,400		343,600		566,000	
10 PERCENT EXCEEDS	547		866		1,920	
50 PERCENT EXCEEDS	240		271		390	
90 PERCENT EXCEEDS	27		47		143	

a Gage height, 10.15 ft, site and datum then in use.
 b Discharge, 10,000 ft³/s, present datum.
 e Estimated.



06228350 SOUTH FORK LITTLE WIND RIVER ABOVE WASHAKIE RESERVOIR, NEAR FORT WASHAKIE, WY

LOCATION.--Lat 42°58'06", long 109°02'13" (NAD 27), in SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.18, T.1 S., R.2 W., Fremont County, Hydrologic Unit 10080002, Wind River Indian Reservation, on right bank 1.9 mi upstream from Washakie Dam and 8.0 mi southwest of Fort Washakie.

DRAINAGE AREA.--90.3 mi².

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,440 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	159	80	e36	29	23	19	22	63	567	484	136	47
2	142	73	e37	29	e22	19	24	60	452	511	135	45
3	122	76	e36	31	23	20	25	59	364	540	136	43
4	112	70	e35	e31	22	20	27	62	361	489	135	42
5	104	65	e35	e30	22	19	26	76	360	456	141	41
6	97	62	34	e28	e18	19	28	111	429	441	132	40
7	91	60	33	e29	21	20	34	114	434	452	122	39
8	85	59	34	30	27	20	40	95	363	459	112	38
9	81	62	35	30	e19	20	39	134	310	457	106	36
10	77	63	37	31	20	21	35	181	273	443	100	39
11	76	60	40	33	20	21	33	201	263	414	98	40
12	74	60	37	35	20	23	35	161	295	380	95	40
13	80	54	34	e33	20	22	40	162	277	356	89	41
14	79	50	33	e32	20	22	45	192	295	378	87	39
15	77	50	32	e30	20	21	36	208	394	397	81	37
16	73	53	31	33	e17	22	39	308	536	364	77	35
17	68	51	31	30	22	21	51	434	726	375	82	33
18	70	45	30	29	22	20	69	305	999	355	81	32
19	70	44	30	28	21	22	78	467	1,030	296	97	31
20	95	42	e27	27	22	21	62	686	1,070	262	90	29
21	126	38	e19	27	22	21	57	873	1,130	247	84	28
22	118	e41	e22	25	22	21	57	714	1,080	238	80	29
23	108	45	e21	26	e20	22	58	755	1,120	228	76	28
24	111	48	e25	25	e19	21	81	843	1,090	225	72	32
25	103	45	e26	24	e20	22	106	740	972	216	68	34
26	99	e37	27	24	e20	23	92	603	825	206	65	32
27	93	e32	26	24	20	23	90	568	660	185	60	30
28	89	e35	26	24	20	23	76	569	587	164	57	29
29	87	e26	25	22	---	22	72	620	554	149	54	28
30	79	e33	25	23	---	23	66	555	498	141	50	28
31	78	---	26	23	---	21	---	485	---	139	48	---
TOTAL	2,923	1,559	945	875	584	654	1,543	11,404	18,314	10,447	2,846	1,065
MEAN	94.3	52.0	30.5	28.2	20.9	21.1	51.4	368	610	337	91.8	35.5
MAX	159	80	40	35	27	23	106	873	1,130	540	141	47
MIN	68	26	19	22	17	19	22	59	263	139	48	28
AC-FT	5,800	3,090	1,870	1,740	1,160	1,300	3,060	22,620	36,330	20,720	5,650	2,110

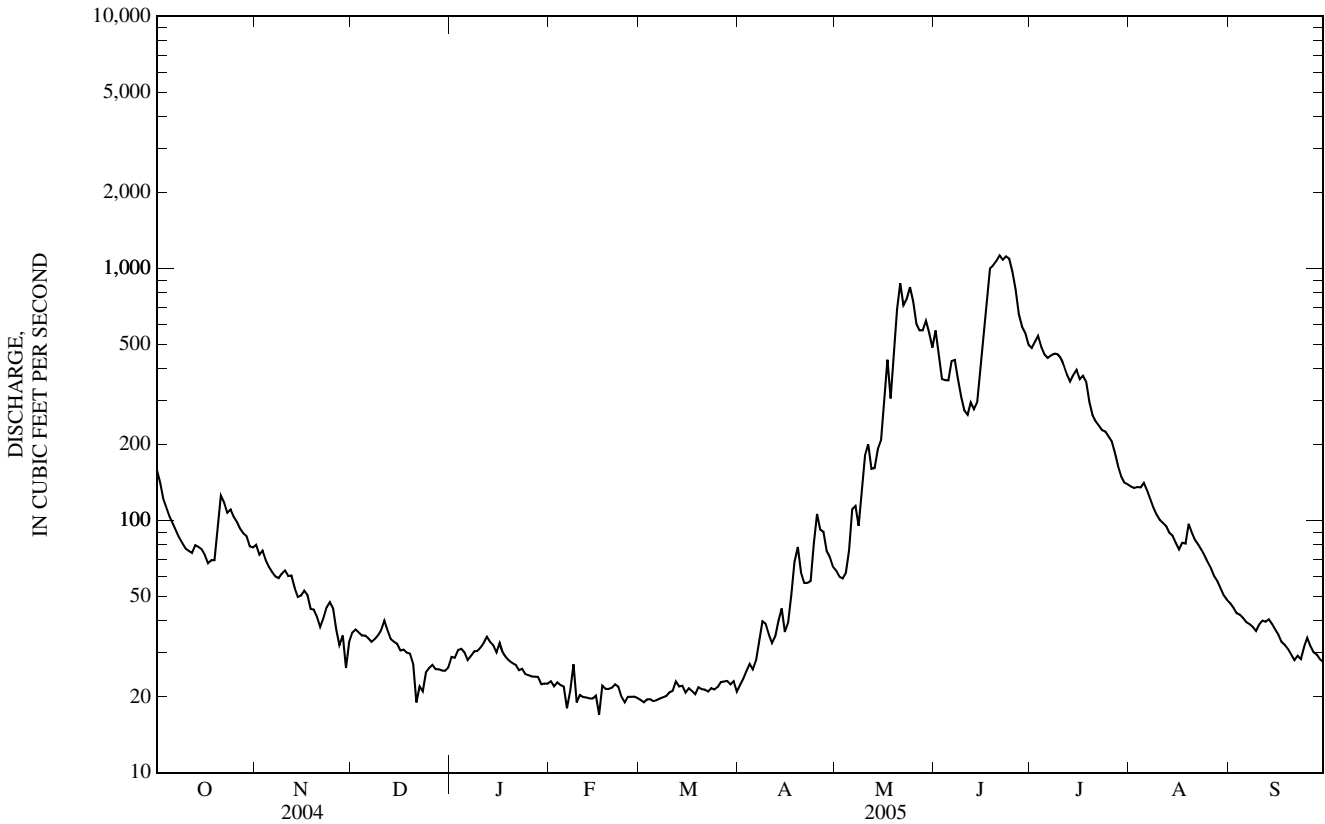
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2005, BY WATER YEAR (WY)

MEAN	42.1	28.6	22.6	17.1	14.6	17.6	48.5	257	567	320	104	56.2
MAX	94.3	52.0	34.6	30.9	26.1	34.1	94.6	403	1,067	791	197	113
(WY)	(2005)	(2005)	(1996)	(1997)	(1986)	(1986)	(1987)	(1987)	(1986)	(1995)	(1982)	(2004)
MIN	12.7	12.7	10.4	6.05	6.72	9.60	25.3	111	187	80.5	30.7	20.0
(WY)	(2002)	(2003)	(2003)	(1977)	(1977)	(1977)	(2002)	(1995)	(2001)	(2001)	(1988)	(1988)

06228350 SOUTH FORK LITTLE WIND RIVER ABOVE WASHAKIE RESERVOIR, NEAR FORT WASHAKIE, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1977 - 2005	
ANNUAL TOTAL	48,826		53,159		--	
ANNUAL MEAN	133		146		125	
HIGHEST ANNUAL MEAN	--		--		188 1986	
LOWEST ANNUAL MEAN	--		--		60.5 2001	
HIGHEST DAILY MEAN	990	Jun 30	1,130	Jun 21	1,960	Jun 13, 1991
LOWEST DAILY MEAN	11	Feb 12	17	Feb 16	4.5	Feb 1, 1977
ANNUAL SEVEN-DAY MINIMUM	12	Jan 30	19	Feb 28	4.5	Feb 1, 1977
MAXIMUM PEAK FLOW	--		1,250	Jun 21	2,230	Jun 13, 1991
MAXIMUM PEAK STAGE	--		6.65	Jun 21	8.48	Jun 13, 1991
ANNUAL RUNOFF (AC-FT)	96,850		105,400		90,470	
10 PERCENT EXCEEDS	350		454		371	
50 PERCENT EXCEEDS	76		50		37	
90 PERCENT EXCEEDS	15		21		14	

e Estimated.



06228450 SOUTH FORK LITTLE WIND RIVER BELOW WASHAKIE RESERVOIR, NEAR FORT WASHAKIE, WY

LOCATION.--Lat 42°59'04", long 108°59'57"(NAD 27), in SW¹/₄ SW¹/₄ SE¹/₄ sec.9, T.1 S., R.2 W., Fremont County, Hydrologic Unit 10080002, Wind River Indian Reservation, on right bank 0.7 mi downstream from Washakie Reservoir, 2.3 mi upstream from Timmoco Creek, and 6.2 mi west of Fort Washakie.

DRAINAGE AREA.--93.5 mi².

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,280 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good. Flow regulated by Washakie Reservoir.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

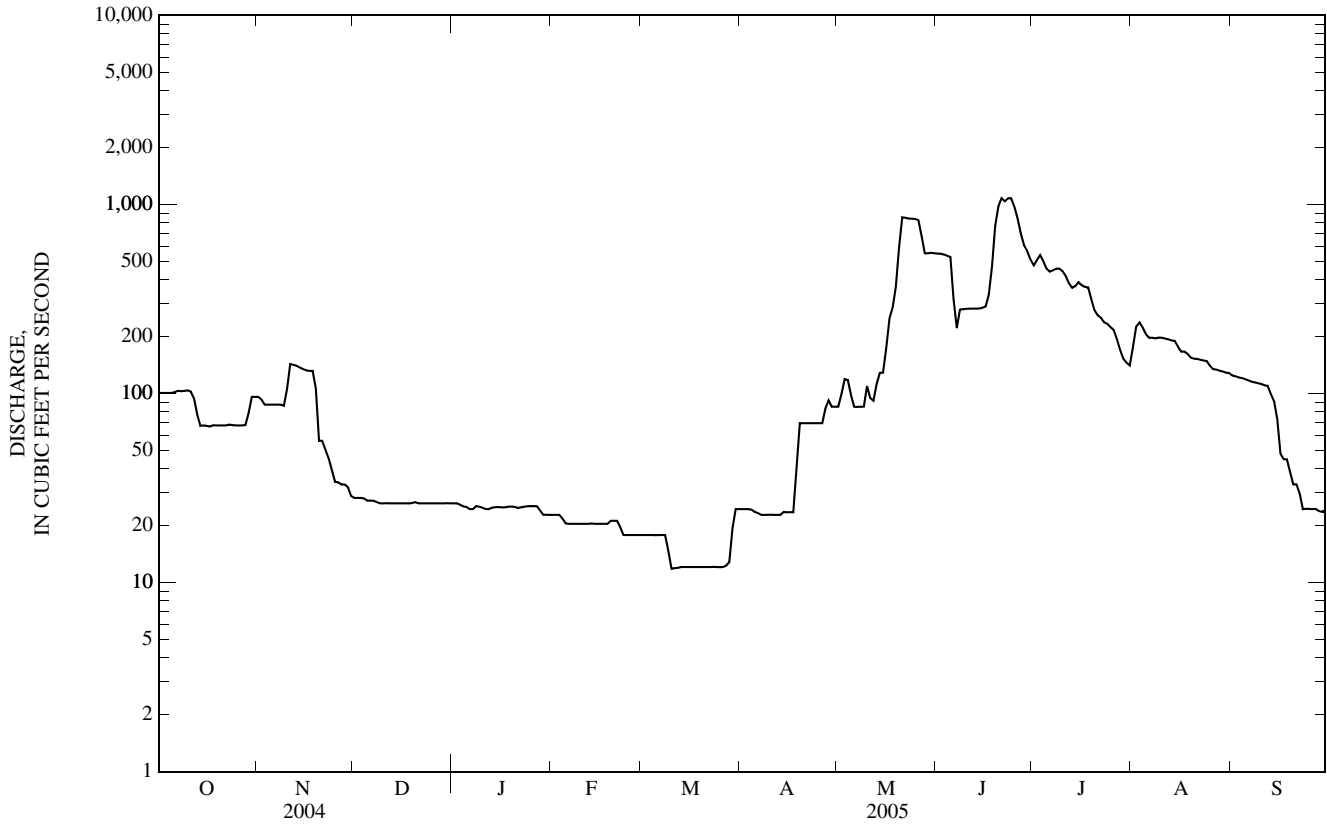
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	96	28	26	23	18	24	85	550	476	176	125
2	101	93	28	26	23	18	24	99	549	508	225	123
3	101	87	28	26	23	18	24	119	544	540	237	122
4	101	87	28	25	22	18	24	118	535	502	224	121
5	101	87	27	25	21	18	24	98	528	458	206	119
6	102	87	27	24	20	18	23	85	314	441	197	117
7	103	87	27	24	20	18	23	85	222	448	197	115
8	103	87	27	25	20	18	23	85	278	458	196	114
9	103	86	26	25	20	15	23	85	279	458	198	114
10	104	105	26	25	20	12	23	109	281	444	197	112
11	102	143	26	24	20	12	23	95	281	418	195	110
12	94	142	26	24	20	12	23	92	281	383	193	110
13	77	140	26	25	21	12	23	112	281	363	191	100
14	68	137	26	25	20	12	24	129	282	369	190	91
15	68	135	26	25	20	12	24	129	284	388	177	73
16	67	133	26	25	20	12	24	174	288	374	167	48
17	67	132	26	25	20	12	24	248	333	366	167	45
18	68	132	26	25	20	12	41	284	470	364	162	45
19	68	106	26	25	21	12	70	367	770	315	155	39
20	68	56	27	25	21	12	70	591	978	276	153	33
21	68	56	26	25	21	12	70	854	1,080	259	152	33
22	68	51	26	25	20	12	70	850	1,040	252	151	30
23	69	45	26	25	18	12	70	843	1,080	238	150	24
24	68	39	26	25	18	12	70	841	1,080	234	148	25
25	68	34	26	25	18	12	70	838	972	224	140	25
26	68	34	26	25	18	12	70	826	843	216	135	24
27	68	33	26	25	18	12	83	681	703	194	134	25
28	68	33	26	24	18	13	92	551	607	170	132	24
29	79	32	26	23	---	19	85	552	564	153	131	24
30	96	29	26	23	---	24	85	555	511	146	129	24
31	96	---	26	23	---	24	---	552	---	141	128	---
TOTAL	2,583	2,544	819	767	564	455	1,346	11,132	16,808	10,576	5,333	2,134
MEAN	83.3	84.8	26.4	24.7	20.1	14.7	44.9	359	560	341	172	71.1
MAX	104	143	28	26	23	24	92	854	1,080	540	237	125
MIN	67	29	26	23	18	12	23	85	222	141	128	24
AC-FT	5,120	5,050	1,620	1,520	1,120	902	2,670	22,080	33,340	20,980	10,580	4,230

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2005, BY WATER YEAR (WY)

MEAN	44.6	29.5	22.5	18.6	15.3	14.7	31.3	196	513	332	144	80.1
MAX	119	84.8	36.7	34.5	29.0	21.8	71.4	359	897	774	264	146
(WY)	(2003)	(2005)	(1991)	(1997)	(1997)	(1994)	(1994)	(2005)	(1991)	(1995)	(1993)	(1993)
MIN	11.1	4.68	5.19	6.18	7.19	6.65	5.07	65.6	244	126	26.7	17.1
(WY)	(2002)	(1989)	(1989)	(1989)	(1989)	(1991)	(1991)	(2002)	(1992)	(2001)	(2001)	(2001)

06228450 SOUTH FORK LITTLE WIND RIVER BELOW WASHAKIE RESERVOIR, NEAR FORT WASHAKIE, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1989 - 2005	
ANNUAL TOTAL	47,614.2		55,061		--	
ANNUAL MEAN	130		151		120	
HIGHEST ANNUAL MEAN	--		--		189 1999	
LOWEST ANNUAL MEAN	--		--		58.5 2001	
HIGHEST DAILY MEAN	967	Jun 30	1,080	Jun 21	1,930	Jun 13, 1991
LOWEST DAILY MEAN	9.9	Feb 2	12	Mar 10	3.5	Mar 17, 1991
ANNUAL SEVEN-DAY MINIMUM	9.9	Feb 2	12	Mar 10	3.6	Mar 16, 1991
MAXIMUM PEAK FLOW	--		1,160	Jun 21	2,120	Jun 13, 1991
MAXIMUM PEAK STAGE	--		4.86	Jun 21	6.43	Jun 13, 1991
ANNUAL RUNOFF (AC-FT)	94,440		109,200		87,240	
10 PERCENT EXCEEDS	345		458		320	
50 PERCENT EXCEEDS	68		70		33	
90 PERCENT EXCEEDS	10		20		11	



YELLOWSTONE RIVER BASIN

06228510 RAY CANAL AT HEADWORKS, NEAR FORT WASHAKIE, WY

LOCATION.--Lat 43°00'02", long 108°55'56"(NAD 27), in NW¹/₄ SW¹/₄ SW¹/₄ sec.6, T.1 S., R.1 W., Fremont County, Hydrologic Unit 10080002, Wind River Indian Reservation, on right bank 160 ft downstream from headgate, 300 ft upstream from culvert on County Road 43, 2.0 mi upstream from Crooked Creek, and 2.4 mi west of Fort Washakie.

PERIOD OF RECORD.--April 1989 to September 1999, April 2001 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 5,710 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow is diverted from the South Fork Little Wind River for irrigation. Result of discharge measurement, in cubic feet per second, made during the period when station was not in operation, is given below:

Oct. 12 . . . 4.61

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	1.4	39	205	322	e184	144
2	---	---	---	---	---	---	1.5	58	193	331	e218	142
3	---	---	---	---	---	---	1.5	72	193	335	e258	140
4	---	---	---	---	---	---	1.5	72	193	311	259	138
5	---	---	---	---	---	---	1.5	70	192	314	243	135
6	---	---	---	---	---	---	1.4	54	164	317	232	132
7	---	---	---	---	---	---	1.5	48	211	319	231	129
8	---	---	---	---	---	---	1.4	48	267	323	229	127
9	---	---	---	---	---	---	1.5	48	261	324	226	123
10	---	---	---	---	---	---	1.6	49	255	321	222	120
11	---	---	---	---	---	---	1.6	25	252	320	219	120
12	---	---	---	---	---	---	1.5	7.0	250	318	216	120
13	---	---	---	---	---	---	1.6	5.7	276	319	215	113
14	---	---	---	---	---	---	1.4	5.0	290	e300	214	100
15	---	---	---	---	---	---	1.3	4.9	291	e300	204	92
16	---	---	---	---	---	---	1.3	33	295	e300	195	64
17	---	---	---	---	---	---	1.2	41	290	e300	196	60
18	---	---	---	---	---	---	4.2	21	230	e300	192	59
19	---	---	---	---	---	---	12	16	298	e300	188	57
20	---	---	---	---	---	---	15	6.4	296	e300	183	48
21	---	---	---	---	---	---	15	2.2	282	e290	181	48
22	---	---	---	---	---	---	11	1.6	310	e284	179	47
23	---	---	---	---	---	---	9.9	1.3	312	e278	179	40
24	---	---	---	---	---	---	10	1.2	316	e272	178	42
25	---	---	---	---	---	---	11	45	316	e265	173	44
26	---	---	---	---	---	---	30	95	318	e260	164	42
27	---	---	---	---	---	---	50	115	317	e248	160	41
28	---	---	---	---	---	---	48	131	321	e224	156	40
29	---	---	---	---	---	---	39	130	317	e200	153	36
30	---	---	---	---	---	---	39	110	317	e194	149	30
31	---	---	---	---	---	---	---	139	---	e189	146	---
TOTAL	---	---	---	---	---	---	318.8	1,494.3	8,028	8,978	6,142	2,573
MEAN	---	---	---	---	---	---	10.6	48.2	268	290	198	85.8
MAX	---	---	---	---	---	---	50	139	321	335	259	144
MIN	---	---	---	---	---	---	1.2	1.2	164	189	146	30
AC-FT	---	---	---	---	---	---	632	2,960	15,920	17,810	12,180	5,100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2005, BY WATER YEAR (WY)*

MEAN	33.4	21.6	---	---	---	---	19.3	105	225	232	158	95.0
MAX	73.2	28.9	---	---	---	---	47.5	199	320	290	241	167
(WY)	(1998)	(1995)	---	---	---	---	(1989)	(1992)	(1990)	(2005)	(1995)	(1997)
MIN	0.81	14.2	---	---	---	---	0.97	21.3	29.5	100	38.5	21.4
(WY)	(1994)	(1993)	---	---	---	---	(1992)	(1991)	(1995)	(1992)	(2001)	(2001)

06228510 RAY CANAL AT HEADWORKS, NEAR FORT WASHAKIE, WY—Continued

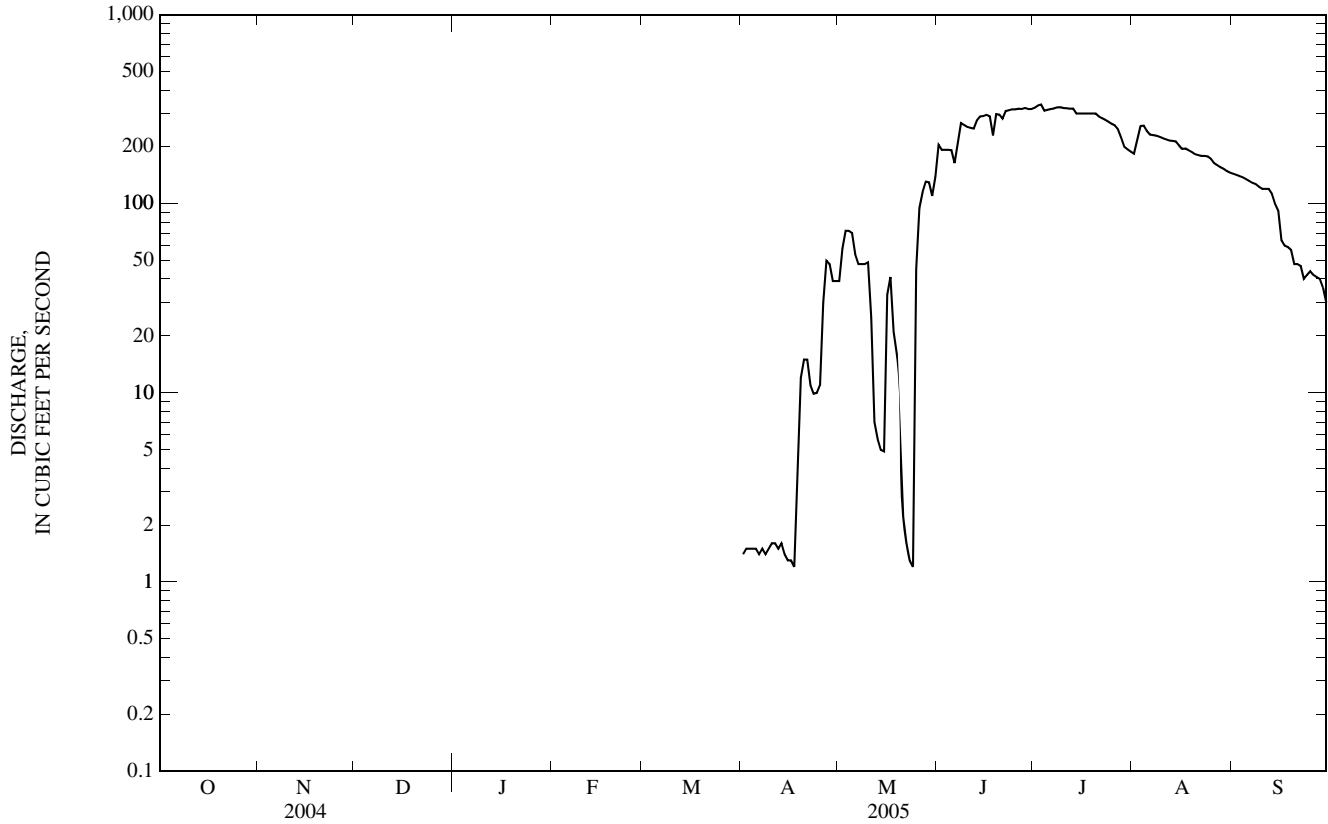
SUMMARY STATISTICS

FOR 2005 WATER YEAR*

WATER YEARS 1989 - 2005*

HIGHEST DAILY MEAN	3.35	Jul 3	390	Jun 29, 1996
LOWEST DAILY MEAN	1.2	Apr 17, May 24	0.00	Apr 1, 1991
MAXIMUM PEAK FLOW	372	Jun 24	446	Jun 12, 1996
MAXIMUM PEAK STAGE	3.94	Jun 24	4.11	Jun 24, 1999

* For period of operation.
e Estimated.



YELLOWSTONE RIVER BASIN

06228800 NORTH FORK LITTLE WIND RIVER NEAR FORT WASHAKIE, WY

LOCATION.--Lat 43°01'43", long 109°00'02" (NAD 27), in NW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.28, T.1 N., R.2 W., Fremont County, Hydrologic Unit 10080002, Wind River Indian Reservation, on left bank 0.2 mi upstream from North Fork Diversion Canal and 5.9 mi northeast of Fort Washakie.

DRAINAGE AREA.--112 mi².

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,120 ft above NGVD of 1929, from topographic map. Prior to October 21, 1993, at site 2,000 ft upstream from station at different datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversions for irrigation of 80 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152	98	e55	33	27	22	23	69	617	564	142	61
2	141	97	e53	e36	e25	22	23	64	509	532	136	57
3	137	98	e56	e35	26	22	25	61	419	480	133	54
4	133	95	e58	e35	25	22	28	65	393	461	135	50
5	130	92	e56	e32	24	22	26	75	371	426	128	47
6	126	88	e54	e34	e20	22	28	88	424	407	124	44
7	122	85	e52	e37	e23	22	34	103	483	392	122	42
8	118	83	e50	39	e26	22	39	91	425	390	119	40
9	113	82	e52	46	e22	22	42	111	369	388	115	39
10	109	81	e54	50	e23	22	38	163	329	385	111	40
11	106	78	e56	50	e26	22	32	202	307	379	110	39
12	104	79	55	50	23	24	33	159	333	357	106	39
13	106	76	49	e40	22	e23	38	156	326	333	104	39
14	103	75	47	e36	23	e21	46	182	328	321	103	39
15	101	72	41	e40	e21	e18	36	203	392	313	98	39
16	99	69	39	e45	e19	e20	35	248	563	312	95	38
17	95	68	38	e43	e25	e17	43	271	831	301	98	36
18	97	65	36	42	e25	e18	55	251	1,120	297	98	36
19	94	62	36	41	e24	e20	67	372	1,210	289	105	35
20	106	60	34	39	24	21	57	594	1,180	268	100	33
21	122	58	e26	36	25	21	53	932	1,210	251	101	32
22	117	71	e28	34	24	21	50	894	1,170	227	100	34
23	120	62	e27	33	25	22	49	878	1,170	220	100	33
24	120	60	e31	32	25	22	65	950	1,120	212	98	37
25	116	58	e32	31	24	23	91	906	1,030	207	93	40
26	117	53	e33	30	24	23	96	737	927	208	88	36
27	116	45	31	29	23	23	88	663	825	204	82	33
28	114	53	30	28	23	23	79	644	737	190	77	32
29	110	39	29	27	---	23	74	706	673	172	72	31
30	106	e52	29	26	---	23	71	674	616	159	69	30
31	103	---	31	27	---	22	---	596	---	151	65	---
TOTAL	3,553	2,154	1,298	1,136	666	670	1,464	12,108	20,407	9,796	3,227	1,185
MEAN	115	71.8	41.9	36.6	23.8	21.6	48.8	391	680	316	104	39.5
MAX	152	98	58	50	27	24	96	950	1,210	564	142	61
MIN	94	39	26	26	19	17	23	61	307	151	65	30
AC-FT	7,050	4,270	2,570	2,250	1,320	1,330	2,900	24,020	40,480	19,430	6,400	2,350

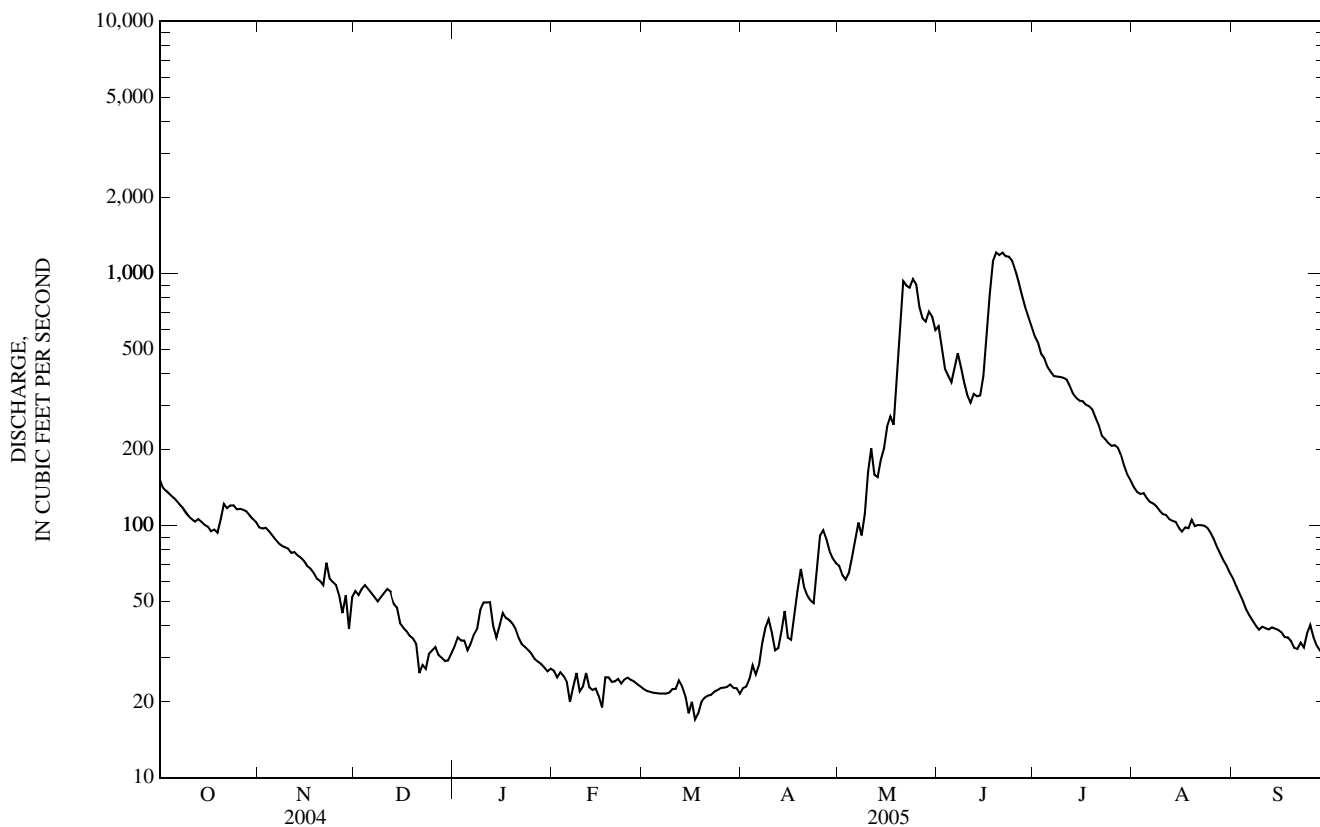
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2005, BY WATER YEAR (WY)

MEAN	48.9	33.7	24.4	19.6	17.7	24.6	51.2	272	589	310	114	66.7
MAX	115	71.8	50.1	36.6	29.5	38.8	84.5	420	1,091	758	227	156
(WY)	(2005)	(2005)	(1996)	(2005)	(1999)	(1995)	(1994)	(2000)	(1999)	(1995)	(1997)	(2004)
MIN	13.5	14.7	12.6	8.95	8.53	13.1	27.5	141	176	74.9	34.3	24.5
(WY)	(1989)	(1989)	(2004)	(1989)	(1989)	(2001)	(1993)	(2002)	(2001)	(1994)	(2002)	(2001)

06228800 NORTH FORK LITTLE WIND RIVER NEAR FORT WASHAKIE, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1989 - 2005	
ANNUAL TOTAL	47,846.5		57,664		--	
ANNUAL MEAN	131		158		131	
HIGHEST ANNUAL MEAN	--		--		208 1999	
LOWEST ANNUAL MEAN	--		--		61.7 2001	
HIGHEST DAILY MEAN	808	Jun 30	1,210	Jun 19	2,070	Jun 13, 1991
LOWEST DAILY MEAN	7.8 ^c	Feb 12	17 ^c	Mar 17	6.5	Feb 3, 1989
ANNUAL SEVEN-DAY MINIMUM	9.5	Feb 21	19	Mar 14	7.4	Feb 2, 1989
MAXIMUM PEAK FLOW	--		1,280 ^a	Jun 19	2,360 ^b	Jun 13, 1991
MAXIMUM PEAK STAGE	--		6.82 ^c	Jun 23	7.19	Jun 17, 1999
ANNUAL RUNOFF (AC-FT)	94,900		114,400		95,070	
10 PERCENT EXCEEDS	294		424		365	
50 PERCENT EXCEEDS	94		61		42	
90 PERCENT EXCEEDS	12		23		15	

- a Gage height, 6.64 ft.
- b Gage height, 6.20 ft, site and datum then in use.
- c Affected by backwater from log jam.
- e Estimated.



YELLOWSTONE RIVER BASIN

06229900 TROUT CREEK NEAR FORT WASHAKIE, WY

LOCATION.--Lat 42°57'04", long 108°56'54" (NAD 27), in SE¹/₄ NW¹/₄ NW¹/₄ sec.25, T.1 S., R.2 W., Fremont County, Hydrologic Unit 10080002, Wind River Indian Reservation, 50 ft upstream of Blue Trail Crossing and 5.0 miles southwest of Fort Washakie.

DRAINAGE AREA.--16.1 mi².

PERIOD OF RECORD.--Annual maximum, water years 1961-68, 1970-84. May 1990 to current year (no winter records since 1997).

GAGE.--Water-stage recorder. Elevation of gage is 5,935 ft above NGVD of 1929, from topographic map. October 1, 1961 to September 30, 1968, crest-stage gage at site 100 ft downstream from station at datum 1.05 ft lower. October 1, 1969 to September 30, 1984, crest-stage gage at present site at datum 1.05 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Results of discharge measurements, in cubic feet per second, made during the period station was not in operation, are given below:

Oct. 04 . . . 5.34

Mar. 28 . . . 3.38

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	3.8	7.1	50	13	e7.0	5.4
2	---	---	---	---	---	---	3.8	6.9	43	13	e7.2	5.4
3	---	---	---	---	---	---	3.9	7.0	41	12	e7.0	5.3
4	---	---	---	---	---	---	4.0	6.9	43	12	e6.8	5.3
5	---	---	---	---	---	---	3.9	7.1	41	12	e6.7	5.3
6	---	---	---	---	---	---	4.0	7.1	41	11	e6.6	5.3
7	---	---	---	---	---	---	4.1	7.7	40	11	e6.6	5.2
8	---	---	---	---	---	---	4.4	8.2	37	10	e6.7	5.2
9	---	---	---	---	---	---	4.4	9.4	35	10	e6.4	5.2
10	---	---	---	---	---	---	4.4	12	33	9.7	e6.3	5.2
11	---	---	---	---	---	---	4.2	20	31	9.5	e6.6	5.2
12	---	---	---	---	---	---	4.2	17	32	9.3	e6.3	5.3
13	---	---	---	---	---	---	4.4	17	29	9.0	e6.3	5.3
14	---	---	---	---	---	---	4.6	17	28	8.8	e6.2	5.3
15	---	---	---	---	---	---	4.4	18	29	8.4	e6.0	5.2
16	---	---	---	---	---	---	4.7	21	31	8.3	5.9	5.2
17	---	---	---	---	---	---	4.9	31	33	8.2	6.0	5.1
18	---	---	---	---	---	---	5.3	33	34	8.2	6.0	5.2
19	---	---	---	---	---	---	5.7	46	31	8.0	6.0	5.1
20	---	---	---	---	---	---	5.7	68	29	7.6	5.7	5.1
21	---	---	---	---	---	---	5.6	87	27	7.5	5.7	5.1
22	---	---	---	---	---	---	5.5	82	25	7.4	5.6	5.1
23	---	---	---	---	---	---	5.6	83	23	7.4	5.6	5.0
24	---	---	---	---	---	---	5.8	83	21	e7.4	5.6	5.3
25	---	---	---	---	---	---	6.2	73	19	e7.4	5.6	5.2
26	---	---	---	---	---	---	6.4	63	18	e7.8	5.6	5.1
27	---	---	---	---	---	---	6.9	57	17	e7.6	5.6	5.0
28	---	---	---	---	---	---	7.0	54	16	e7.4	5.5	5.0
29	---	---	---	---	---	---	7.1	53	15	e7.2	5.4	5.0
30	---	---	---	---	---	---	7.1	49	14	e7.2	5.4	5.0
31	---	---	---	---	---	---	---	47	---	e7.0	5.4	---
TOTAL	---	---	---	---	---	---	152.0	1,098.4	906	280.3	189.3	155.6
MEAN	---	---	---	---	---	---	5.07	35.4	30.2	9.04	6.11	5.19
MAX	---	---	---	---	---	---	7.1	87	50	13	7.2	5.4
MIN	---	---	---	---	---	---	3.8	6.9	14	7.0	5.4	5.0
AC-FT	---	---	---	---	---	---	301	2,180	1,800	556	375	309

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1996, BY WATER YEAR (WY)*

MEAN	5.79	5.28	4.79	4.57	4.38	4.54	5.55	18.4	39.7	13.4	6.91	5.89
MAX	8.45	7.37	6.26	5.97	5.15	5.52	7.47	32.4	105	37.1	11.3	9.37
(WY)	(1996)	(1996)	(1996)	(1996)	(1996)	(1996)	(1996)	(1991)	(1995)	(1995)	(1995)	(1995)
MIN	3.77	4.12	3.78	3.71	3.44	3.78	4.05	12.3	7.71	4.43	3.65	3.65
(WY)	(1991)	(1991)	(1995)	(1991)	(1991)	(1991)	(1991)	(1992)	(1994)	(1994)	(1994)	(1994)

06229900 TROUT CREEK NEAR FORT WASHAKIE, WY—Continued

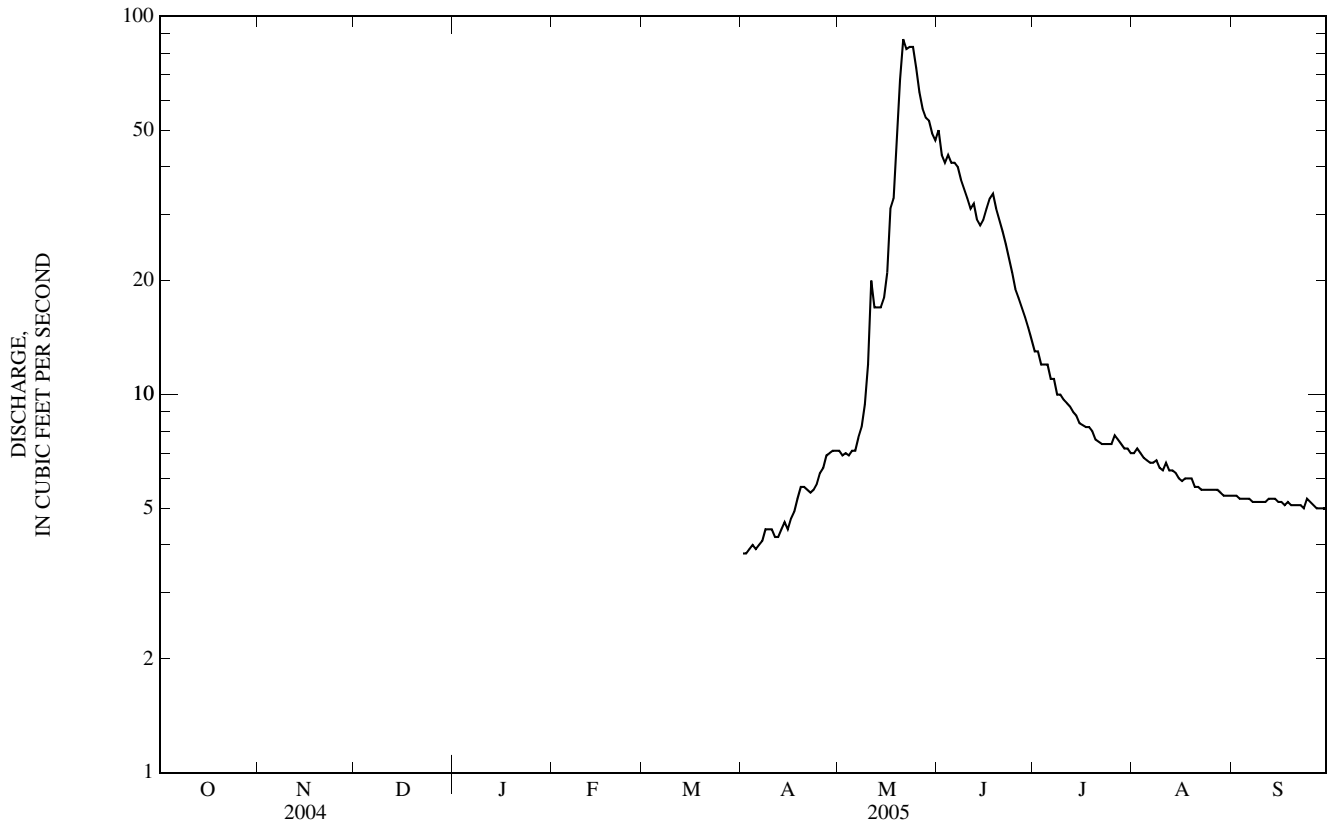
SUMMARY STATISTICS

	FOR 2005 WATER YEAR*	WATER YEARS 1990 - 1996*
ANNUAL MEAN	--	10.4
HIGHEST ANNUAL MEAN	--	17.3 1995
LOWEST ANNUAL MEAN	--	5.95 1994
HIGHEST DAILY MEAN	87 May 21	316 Jun 2, 1991
LOWEST DAILY MEAN	4.1 Apr 4,5	3.0 Dec 22, 1990
MAXIMUM PEAK FLOW	98 May 20	500 ^a Jun 2, 1991
MAXIMUM PEAK STAGE	6.80 May 20	7.49 Jun 2, 1991
ANNUAL RUNOFF (AC-FT)	--	7,550

* For period of operation.

a From rating curve extended above 160 ft³/s on basis of slope-conveyance computation of peak flow.

e Estimated.



YELLOWSTONE RIVER BASIN

06233000 LITTLE POPO AGIE RIVER NEAR LANDER, WY

LOCATION.--Lat 42°43'00", long 108°38'34" (NAD 27), in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.27, T.32 N., R.99 W., Fremont County, Hydrologic Unit 10080003, on left bank 700 ft downstream from bridge on State Highway 28, 2.5 mi downstream from Red Canyon Creek, and 9.5 mi southeast of post office in Lander.

DRAINAGE AREA.--125 mi².

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

REVISED RECORDS.--WSP 1709: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,436.49 ft above NGVD of 1929.

REMARKS.--Records good. Diversions for irrigation of about 540 acres upstream from station. Slight regulation by Christina Lake, capacity, about 3,860 acre-ft. Results of discharge measurements, in cubic feet per second, made during period when station was not in operation, are given below:

Oct. 14 . . . 58.9

Mar. 21 . . . 26.7

COOPERATION.--Station operated and record provided by the Wyoming State Engineer's Office; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	---	---	---	---	---	26	81	370	252	78	42
2	90	---	---	---	---	---	27	78	330	249	76	41
3	82	---	---	---	---	---	28	78	288	250	80	41
4	77	---	---	---	---	---	32	79	275	225	79	40
5	67	---	---	---	---	---	30	84	271	208	79	40
6	63	---	---	---	---	---	32	113	299	199	78	40
7	60	---	---	---	---	---	38	137	306	198	76	40
8	58	---	---	---	---	---	48	140	262	188	71	39
9	56	---	---	---	---	---	47	160	234	181	69	39
10	54	---	---	---	---	---	43	188	221	177	71	41
11	52	---	---	---	---	---	40	265	208	168	76	40
12	53	---	---	---	---	---	40	235	229	158	69	40
13	56	---	---	---	---	---	45	215	227	150	66	40
14	---	---	---	---	---	---	52	205	213	148	66	40
15	---	---	---	---	---	---	47	208	247	147	60	50
16	---	---	---	---	---	---	50	247	306	138	59	59
17	---	---	---	---	---	---	62	322	372	140	64	59
18	---	---	---	---	---	---	83	292	455	132	73	59
19	---	---	---	---	---	---	87	327	467	120	69	58
20	---	---	---	---	---	---	79	445	472	111	60	56
21	---	---	---	---	---	---	74	608	489	108	57	56
22	---	---	---	---	---	---	70	593	506	104	55	58
23	---	---	---	---	---	---	72	605	541	102	55	56
24	---	---	---	---	---	27	84	656	549	103	52	57
25	---	---	---	---	---	26	96	590	464	102	49	59
26	---	---	---	---	---	27	96	466	411	100	47	55
27	---	---	---	---	---	27	101	423	351	95	44	53
28	---	---	---	---	---	27	94	409	313	84	44	49
29	---	---	---	---	---	26	89	431	291	79	44	45
30	---	---	---	---	---	27	84	396	271	79	42	43
31	---	---	---	---	---	26	---	330	---	79	42	---
TOTAL	---	---	---	---	---	---	1,796	9,406	10,238	4,574	1,950	1,435
MEAN	---	---	---	---	---	---	59.9	303	341	148	62.9	47.8
MAX	---	---	---	---	---	---	101	656	549	252	80	59
MIN	---	---	---	---	---	---	26	78	208	79	42	39
AC-FT	---	---	---	---	---	---	3,560	18,660	20,310	9,070	3,870	2,850

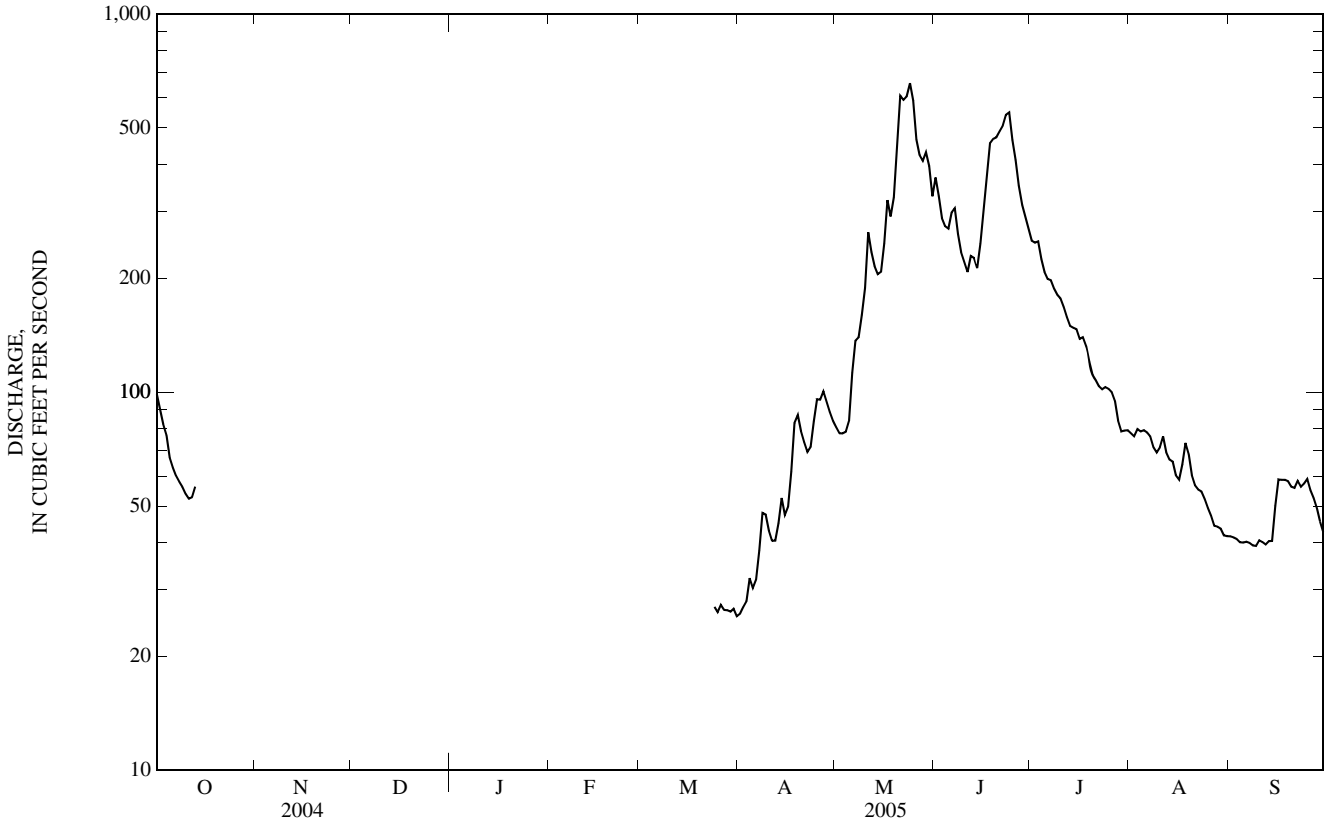
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2005, BY WATER YEAR (WY)*

	35.6	29.7	25.6	23.4	23.7	24.6	48.2	200	330	133	55.5	46.3
MEAN												
MAX	50.7	41.8	35.8	32.9	42.5	33.9	109	398	856	404	98.6	114
(WY)	(1972)	(1951)	(1951)	(1948)	(1962)	(1948)	(1987)	(1980)	(1986)	(1995)	(1950)	(1973)
MIN	22.5	21.4	17.5	13.9	17.4	18.8	24.4	73.5	73.4	32.2	21.9	19.7
(WY)	(1961)	(1963)	(1960)	(1963)	(1960)	(1957)	(2002)	(2002)	(1977)	(2001)	(1960)	(2002)

06233000 LITTLE POPO AGIE RIVER NEAR LANDER, WY—Continued

SUMMARY STATISTICS	FOR 2005 WATER YEAR*		WATER YEARS 1946 - 2005*	
ANNUAL MEAN	--		80.4	
HIGHEST ANNUAL MEAN	--		131	1965
LOWEST ANNUAL MEAN	--		37.0	1960
HIGHEST DAILY MEAN	480	Jun 27	1,590	Jun 16, 1963
LOWEST DAILY MEAN	19	Oct 12	12	Several days, 1960, 1963
MAXIMUM PEAK FLOW	739	May 24	2,010	Jun 16, 1963
MAXIMUM PEAK STAGE	4.54	May 24	6.64	Jun 16, 1963
ANNUAL RUNOFF (AC-FT)	--		58,230	

* For period of operation.



YELLOWSTONE RIVER BASIN

06235500 LITTLE WIND RIVER NEAR RIVERTON, WY

LOCATION.--Lat 42°59'51", long 108°22'29" (NAD 27), in NE¼ NW¼ sec.11, T.1 S., R.4 E., Fremont County, Hydrologic Unit 10080002, Wind River Indian Reservation, on right bank 1.8 mi upstream from mouth and 1.9 mi southeast of Riverton.

DRAINAGE AREA.--1,904 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,901.84 ft above NGVD of 1929. Prior to September 19, 1956, at site 600 ft downstream from station at same datum. U.S. Army Corp of Engineers data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversions for irrigation of about 62,900 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	675	513	e220	e250	e260	328	198	454	2,440	1,610	257	154
2	724	475	e210	e240	e270	329	198	431	2,580	1,480	254	138
3	632	504	e200	e258	e260	319	201	400	2,120	1,510	276	131
4	572	515	e210	e270	e270	308	203	396	1,840	1,520	298	122
5	568	498	e220	e250	e270	291	219	397	1,780	1,380	321	113
6	538	478	e240	e200	e230	279	211	422	1,700	1,240	337	99
7	546	465	e240	e220	e220	271	209	497	1,710	1,150	307	90
8	558	455	e230	e240	e220	266	224	584	1,530	1,130	275	89
9	535	456	e240	e260	e228	259	247	582	1,320	1,120	262	84
10	517	467	e250	e260	e230	253	259	638	1,160	1,080	247	79
11	496	480	e270	e260	e240	221	260	1,270	1,030	1,070	253	77
12	493	504	e270	e250	e270	215	252	1,880	958	964	266	86
13	500	502	e260	e240	e280	230	246	1,230	1,040	888	256	95
14	496	e490	e260	e220	e290	230	248	1,130	955	811	254	102
15	478	e470	e250	e200	e280	219	261	1,140	960	772	268	101
16	478	e440	e240	e210	e260	209	256	1,210	1,260	773	256	103
17	469	e450	e240	e230	e250	214	264	1,540	1,740	715	262	102
18	450	e460	e240	e240	e250	213	277	1,740	2,470	734	276	109
19	448	e460	e230	e260	e240	205	338	1,680	3,230	709	295	118
20	448	e450	e240	e280	e270	209	461	2,310	3,650	620	301	120
21	497	e440	e230	e270	e280	206	480	3,400	3,910	516	269	124
22	571	e430	e220	e260	e280	203	454	4,190	4,020	444	250	126
23	620	430	e210	e250	e290	203	402	4,140	4,080	373	233	126
24	543	383	e200	e240	e300	219	381	4,260	4,210	360	222	141
25	521	382	e210	e230	e300	216	405	4,250	3,960	353	217	171
26	525	373	e230	e230	e300	212	453	3,760	3,380	364	210	177
27	519	339	e240	e220	e310	219	455	3,200	2,870	422	199	164
28	516	299	e260	e230	e320	211	499	2,800	2,340	382	185	159
29	514	188	e260	e240	---	204	501	2,720	2,050	317	174	170
30	501	204	e260	e250	---	201	480	3,010	1,860	272	166	180
31	506	---	e250	e250	---	204	---	2,770	---	256	156	---
TOTAL	16,454	13,000	7,330	7,508	7,468	7,366	9,542	58,431	68,153	25,335	7,802	3,650
MEAN	531	433	236	242	267	238	318	1,885	2,272	817	252	122
MAX	724	515	270	280	320	329	501	4,260	4,210	1,610	337	180
MIN	448	188	200	200	220	201	198	396	955	256	156	77
AC-FT	32,640	25,790	14,540	14,890	14,810	14,610	18,930	115,900	135,200	50,250	15,480	7,240

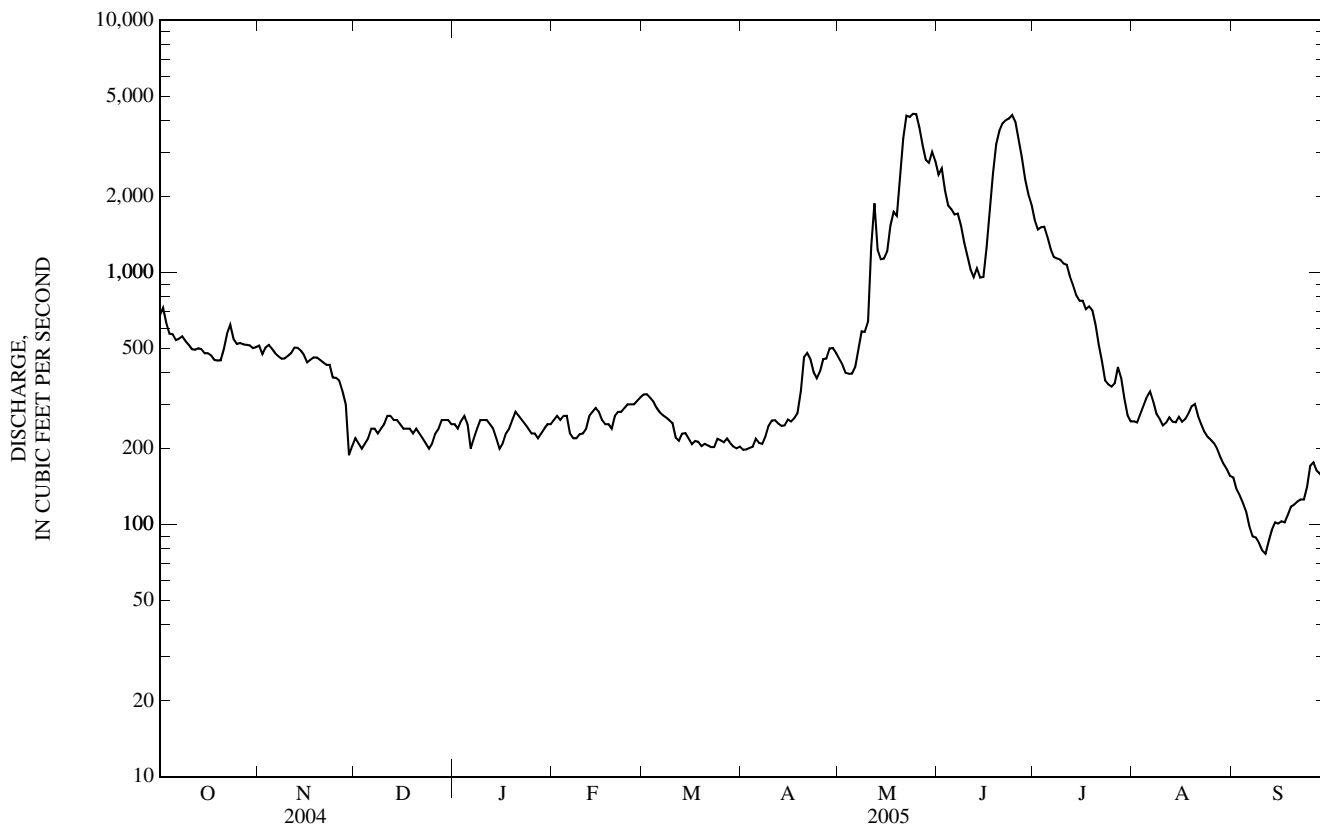
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2005, BY WATER YEAR (WY)

MEAN	321	280	211	186	209	267	365	1,107	2,335	975	262	253
MAX	728	501	351	302	728	579	1,044	2,351	5,109	3,345	699	1,323
(WY)	(1983)	(1974)	(1974)	(1974)	(1962)	(1998)	(1973)	(1958)	(1983)	(1995)	(1965)	(1973)
MIN	73.5	122	129	95.0	123	177	148	203	233	84.4	22.1	33.0
(WY)	(2002)	(2002)	(1959)	(1961)	(1959)	(2001)	(1989)	(2002)	(2001)	(2001)	(2001)	(2001)

06235500 LITTLE WIND RIVER NEAR RIVERTON, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1941 - 2005	
ANNUAL TOTAL	204,719		232,039		--	
ANNUAL MEAN	559		636		565	
HIGHEST ANNUAL MEAN	--		--		1,021	1983
LOWEST ANNUAL MEAN	--		--		175	2001
HIGHEST DAILY MEAN	3,830	Jul 1	4,260	May 24	12,800	Jun 17, 1963
LOWEST DAILY MEAN	99	Aug 17	77	Sep 11	17	Aug 30, 2001
ANNUAL SEVEN-DAY MINIMUM	114	Aug 11	86	Sep 7	18	Aug 27, 2001
MAXIMUM PEAK FLOW	--		4,520	May 24	14,700	Jun 17, 1963
MAXIMUM PEAK STAGE	--		6.96	May 24	10.85	Jun 17, 1963
ANNUAL RUNOFF (AC-FT)	406,100		460,200		409,400	
10 PERCENT EXCEEDS	1,250		1,640		1,400	
50 PERCENT EXCEEDS	385		280		260	
90 PERCENT EXCEEDS	140		198		140	

e Estimated.



06235500 LITTLE WIND RIVER NEAR RIVERTON, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1949-58, 1960-64, 1966 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	E coli, modif. m-TEC, water, col/100 mL (90902)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)
NOV											
10...	1550	473	649	11.5	103	8.6	576	4.0	4.0	<1	E15
FEB											
09...	1145	228	641	13.9	113	8.5	836	3.0	.0	E2	E7
JUN											
13...	1215	1,040	642	8.4	98	7.8	339	15.0	14.0	63	98
AUG											
11...	1145	244	640	8.2	111	8.4	748	23.5	21.0	E170	E180

< -- Less than.

E -- Estimated value; for bacteria, estimated values are counts outside the acceptable range (non-ideal colony count).

06236100 WIND RIVER ABOVE BOYSEN RESERVOIR, NEAR SHOSHONI, WY

LOCATION.--Lat 43°07'45", long 108°13'24" (NAD 27), in SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.24, T.2 N., R.5 E., Fremont County, Hydrologic Unit 10080001, on left bank 5.3 mi upstream from Boysen Reservoir and 9.4 mi southwest of Shoshoni.

DRAINAGE AREA.--4,390 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,775 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow affected by Bull Lake, Pilot Butte Reservoir, and several small reservoirs, combined capacity, 190,000 acre-ft, and diversions for irrigation of about 191,000 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,100	1,110	e600	e560	e490	e670	485	591	3,460	2,960	410	289
2	1,420	1,020	e610	e550	e520	e650	471	549	3,630	2,760	417	292
3	1,310	975	e620	e565	e500	e650	457	514	3,080	2,840	455	282
4	1,260	1,070	e640	e550	e510	e630	425	522	2,590	2,940	496	287
5	1,230	1,080	e630	e500	e520	e620	393	520	2,500	2,650	513	275
6	1,210	1,040	e650	e440	e460	534	502	542	2,420	2,360	523	262
7	1,200	1,010	e600	e400	e450	522	465	587	2,730	2,240	507	253
8	1,190	982	e580	e480	e460	526	367	735	2,810	2,220	473	259
9	1,200	983	e550	e550	e480	530	378	717	2,330	2,060	447	257
10	1,180	1,020	e600	e570	e490	533	392	756	1,930	1,950	430	252
11	1,050	1,030	e620	e560	e510	531	388	1,320	1,580	1,880	442	252
12	776	1,040	e620	e550	e525	529	379	2,980	1,310	1,770	448	268
13	694	1,050	e600	e540	e530	541	359	1,550	1,380	1,510	431	302
14	673	1,010	e590	e490	e540	557	348	1,230	1,320	1,240	438	318
15	648	969	e580	e475	e540	531	348	1,160	1,200	1,130	461	325
16	634	954	e560	e480	e525	504	347	1,190	1,890	1,180	422	325
17	626	939	e550	e490	e510	510	365	1,570	3,410	1,130	427	316
18	604	953	e550	e510	e530	513	382	2,490	5,270	1,190	454	320
19	589	945	e540	e540	e520	504	435	2,090	7,380	1,120	477	333
20	586	926	e550	e550	e550	500	609	2,740	8,000	866	483	339
21	619	842	e540	e535	e580	511	629	5,350	8,440	630	454	347
22	743	728	e530	e520	e600	499	603	7,830	9,240	552	429	364
23	1,210	804	e500	e510	e550	498	538	7,340	9,690	492	400	357
24	1,170	828	e480	e500	e630	517	490	7,630	9,910	475	377	358
25	1,130	893	e480	e475	e660	526	495	7,510	9,380	480	374	415
26	1,110	812	e510	e480	e670	507	518	6,210	8,120	495	375	429
27	1,090	747	e580	e490	e660	509	571	4,830	6,760	572	360	421
28	1,120	708	e540	e490	e650	504	639	4,170	5,040	541	338	346
29	1,120	566	e560	e500	---	494	668	4,020	4,090	485	304	336
30	1,090	e565	e570	e500	---	492	623	4,680	3,830	429	298	350
31	1,090	---	e550	e510	---	490	---	4,170	---	404	284	---
TOTAL	30,672	27,599	17,680	15,860	15,160	16,632	14,069	88,093	134,720	43,551	13,147	9,529
MEAN	989	920	570	512	541	537	469	2,842	4,491	1,405	424	318
MAX	1,420	1,110	650	570	670	670	668	7,830	9,910	2,960	523	429
MIN	586	565	480	400	450	490	347	514	1,200	404	284	252
AC-FT	60,840	54,740	35,070	31,460	30,070	32,990	27,910	174,700	267,200	86,380	26,080	18,900

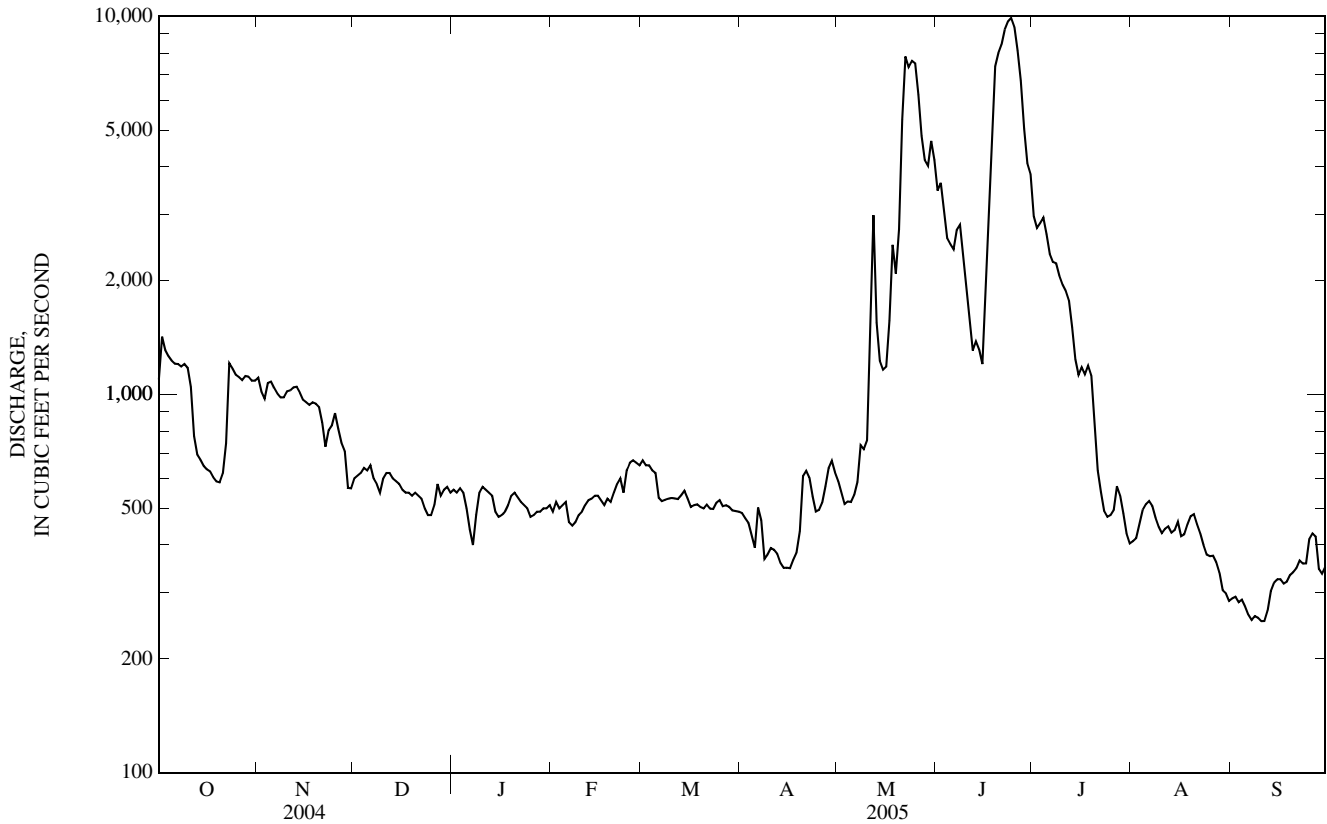
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2005, BY WATER YEAR (WY)

MEAN	712	742	555	521	531	665	586	1,657	4,143	1,807	574	517
MAX	1,455	1,212	719	665	755	1,096	1,074	4,175	9,432	6,650	1,696	860
(WY)	(1999)	(1999)	(1996)	(1996)	(1996)	(1998)	(1999)	(1999)	(1999)	(1995)	(1997)	(1997)
MIN	309	300	427	356	324	472	347	325	342	163	130	252
(WY)	(2002)	(2002)	(2001)	(1993)	(2002)	(2002)	(2002)	(2002)	(2001)	(2001)	(2001)	(2001)

06236100 WIND RIVER ABOVE BOYSEN RESERVOIR, NEAR SHOSHONI, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1990 - 2005	
ANNUAL TOTAL	305,693		426,712		--	
ANNUAL MEAN	835		1,169		1,106	
HIGHEST ANNUAL MEAN	--		--		2,063 1999	
LOWEST ANNUAL MEAN	--		--		372 2001	
HIGHEST DAILY MEAN	5,640	Jul 1	9,910	Jun 24	17,900	Jun 14, 1991
LOWEST DAILY MEAN	243	Aug 17	252	Sep 10	113	Aug 29, 2001
ANNUAL SEVEN-DAY MINIMUM	252	Aug 11	258	Sep 6	121	Aug 27, 2001
MAXIMUM PEAK FLOW	--		10,400	Jun 24	18,700	Jun 14, 1991
MAXIMUM PEAK STAGE	--		6.90	Jun 24	9.31	Jun 14, 1991
ANNUAL RUNOFF (AC-FT)	606,300		846,400		801,400	
10 PERCENT EXCEEDS	1,320		2,680		2,060	
50 PERCENT EXCEEDS	616		550		590	
90 PERCENT EXCEEDS	430		365		310	

e Estimated.



06244500 FIVEMILE CREEK ABOVE WYOMING CANAL, NEAR PAVILLION, WY

LOCATION.--Lat 43°18'05", long 108°42'08" (NAD 27), in SE¹/₄ SW¹/₄ SE¹/₄ sec.24, T.4 N., R.1 E., Fremont County, Hydrologic Unit 10080005, on left bank 1,700 ft upstream from Wyoming Canal siphon and 4.0 mi north of Pavillion.

DRAINAGE AREA.--118 mi².

PERIOD OF RECORD.--October 1949 to September 1975, October 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,500 ft above NGVD of 1929, from topographic map. August 27, 1948 to March 28, 1950, at site 0.2 mi downstream from station at different datum. March 29, 1950 to April 23, 1974 at site 325 ft downstream from station at present datum. April 24, 1974 to September 30, 1975, at site 25 ft downstream from station at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by reservoir system about 10.5 mi upstream from station. Diversion for irrigation of about 320 acres upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in September 1948 reached a stage of about 6.1 ft, discharge, 2,600 ft³/s, on basis of slope-area measurement of peak flow.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	e6.6	e3.6	e5.2	e12	e14	7.5	11	11	1.2	0.10	1.1
2	17	e6.8	e3.8	e5.4	e12	11	7.5	9.5	6.2	0.97	0.17	1.2
3	9.6	e7.6	e4.0	e5.0	e14	10	7.6	8.7	4.7	0.77	0.58	1.2
4	8.3	e8.2	e4.3	e4.5	e12	e8.2	7.8	8.5	4.4	0.76	1.0	1.2
5	7.7	e8.8	e4.1	e4.2	e14	e8.6	8.0	8.1	4.4	0.78	0.95	1.2
6	8.3	e8.6	e4.5	e4.0	e10	e9.0	7.7	7.6	4.0	0.74	0.67	1.2
7	7.5	e8.0	e4.4	e4.3	e9.0	e10	8.0	7.9	4.1	0.64	0.51	1.2
8	7.2	e8.4	e4.7	e4.5	e8.0	e9.5	8.3	9.5	4.4	0.58	0.42	1.3
9	7.0	e8.0	e4.8	e4.6	e7.6	e8.8	8.5	9.3	4.0	0.52	0.35	1.3
10	7.1	e7.6	e4.2	e4.5	e8.0	e9.6	8.5	62	3.5	0.50	0.31	1.5
11	7.1	e7.8	e4.3	e4.7	e9.4	e7.7	8.5	69	3.3	0.54	0.70	1.7
12	7.2	e8.0	e4.5	e4.3	e11	e7.0	8.2	101	3.8	0.55	4.9	2.0
13	7.2	e7.4	e4.8	e4.1	e12	e8.6	8.0	80	3.8	0.46	4.3	2.4
14	7.3	e6.8	e4.3	e3.8	e13	e9.2	7.2	27	3.4	0.33	2.4	2.7
15	7.5	e6.4	e4.0	e3.7	e12	e8.8	6.4	14	3.0	0.24	2.1	2.8
16	7.4	e6.2	e3.9	e3.6	e14	7.4	6.7	11	3.1	0.15	1.8	2.8
17	7.6	e6.0	e4.1	e4.0	e15	8.3	7.4	13	5.7	0.12	2.1	2.9
18	7.7	e5.6	e3.9	e4.3	e14	7.9	7.4	11	3.2	0.11	2.5	3.1
19	7.7	e5.8	e4.1	e4.2	e14	7.4	11	8.4	2.4	0.11	2.5	3.1
20	7.7	e5.4	e4.0	e4.7	e13	7.6	14	7.2	2.2	0.11	2.0	3.1
21	7.8	e5.4	e3.8	e6.0	e15	7.8	13	5.9	1.9	0.11	1.6	3.1
22	8.1	e5.0	e3.6	e7.0	e16	8.0	13	5.0	1.8	0.11	1.4	3.6
23	7.9	e5.4	e3.4	e6.8	e15	8.0	11	4.6	1.8	0.11	1.4	4.0
24	7.6	e5.6	e3.4	e8.0	e16	8.3	9.4	4.3	1.7	0.11	1.5	4.9
25	7.8	e6.0	e3.9	e8.4	e15	8.3	8.7	4.1	1.5	0.11	1.4	7.9
26	7.8	e5.0	e4.4	e8.0	e16	8.4	8.1	3.9	1.5	0.11	1.3	11
27	e7.7	e4.3	e4.8	e8.6	e15	8.1	8.4	3.7	1.5	0.11	1.1	7.6
28	e7.6	e3.9	e5.2	e9.0	e13	7.9	10	3.5	1.5	0.11	0.99	6.0
29	e8.0	e3.6	e5.6	e10	---	8.0	11	4.1	1.4	0.10	0.99	6.0
30	e7.6	e3.5	e5.4	e9.4	---	7.7	11	11	1.3	0.10	0.97	5.6
31	e7.0	---	e5.8	e10	---	7.6	---	15	---	0.10	0.98	---
TOTAL	259.0	191.7	133.6	178.8	355.0	266.7	267.8	548.8	100.5	11.36	43.99	98.7
MEAN	8.35	6.39	4.31	5.77	12.7	8.60	8.93	17.7	3.35	0.37	1.42	3.29
MAX	20	8.8	5.8	10	16	14	14	101	11	1.2	4.9	11
MIN	7.0	3.5	3.4	3.6	7.6	7.0	6.4	3.5	1.3	0.10	0.10	1.1
AC-FT	514	380	265	355	704	529	531	1,090	199	23	87	196

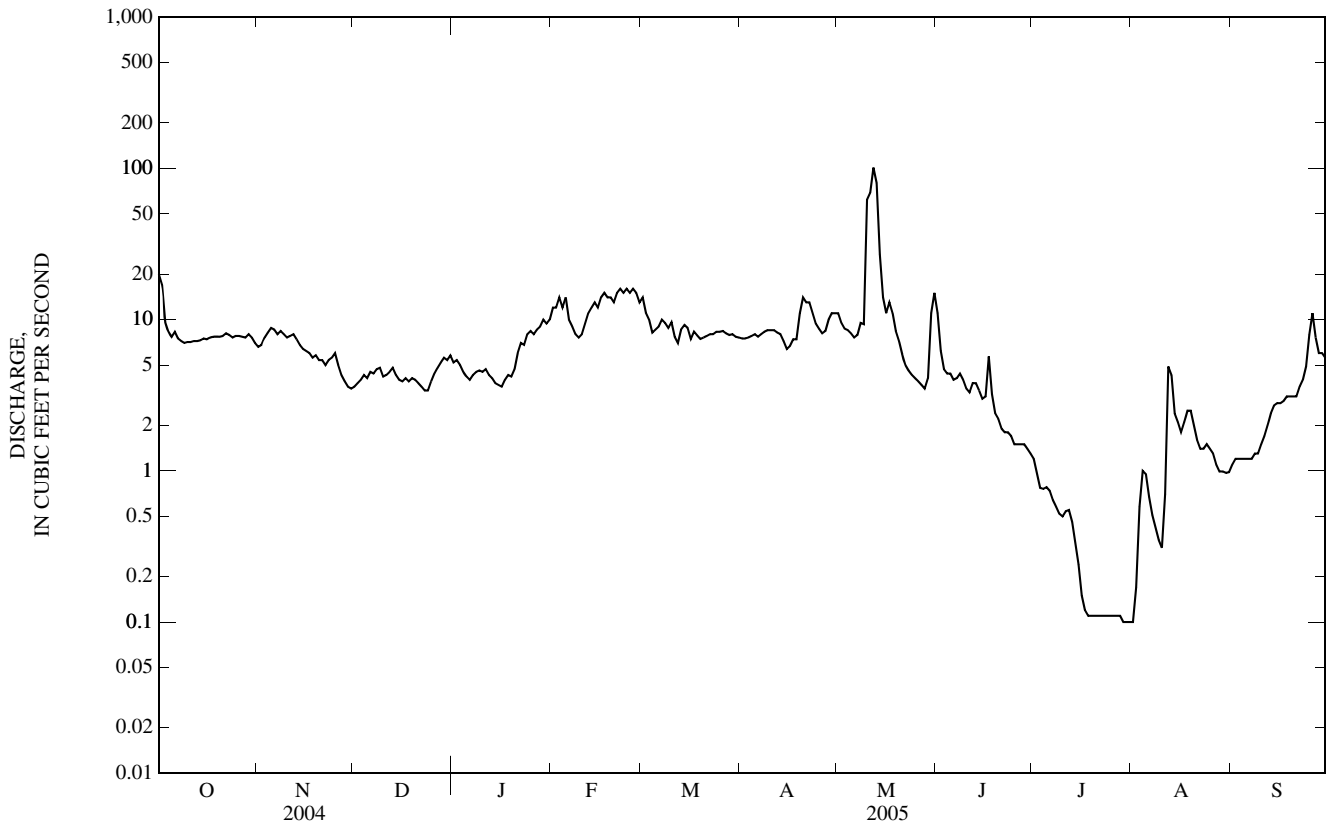
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2005, BY WATER YEAR (WY)

MEAN	3.39	3.72	2.72	2.81	4.39	6.16	5.11	5.68	5.64	2.11	1.15	2.97
MAX	8.35	10.2	6.69	8.04	12.7	13.3	8.97	53.4	48.8	17.8	7.53	14.5
(WY)	(2005)	(1992)	(1993)	(2003)	(2005)	(1993)	(2002)	(1991)	(1991)	(1997)	(1997)	(1973)
MIN	0.00	0.00	0.00	0.00	0.00	0.27	0.10	0.38	0.04	0.00	0.00	0.00
(WY)	(1955)	(1955)	(1953)	(1951)	(1956)	(1954)	(1954)	(1955)	(1952)	(1956)	(1954)	(1952)

06244500 FIVEMILE CREEK ABOVE WYOMING CANAL, NEAR PAVILLION, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1950 - 2005	
ANNUAL TOTAL	2,292.07		2,455.95		--	
ANNUAL MEAN	6.26		6.73		3.81	
HIGHEST ANNUAL MEAN	--		--		12.4 1991	
LOWEST ANNUAL MEAN	--		--		0.25 1955	
HIGHEST DAILY MEAN	24	Sep 28	101	May 12	273	Sep 20, 1950
LOWEST DAILY MEAN	0.41	Jul 22	0.10	Jul 29 to Aug 1	0.00	Oct 1, 1949
ANNUAL SEVEN-DAY MINIMUM	0.71	Aug 11	0.10	Jul 26	0.00	Dec 4, 1949
MAXIMUM PEAK FLOW	--		112	May 12	1,750 ^a	Sep 6, 1951
MAXIMUM PEAK STAGE	--		3.49	May 12	5.60 ^b	Sep 6, 1951
ANNUAL RUNOFF (AC-FT)	4,550		4,870		2,760	
10 PERCENT EXCEEDS	9.4		11		8.0	
50 PERCENT EXCEEDS	5.9		5.6		2.6	
90 PERCENT EXCEEDS	2.2		0.77		0.00	

- a From rating curve extended above 350 ft³/s.
- b From floodmarks.
- e Estimated.



06253000 FIVEMILE CREEK NEAR SHOSHONI, WY

LOCATION.--Lat 43°13'20", long 108°13'06" (NAD 27), in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.19, T.3 N., R.6 E., Fremont County, Hydrologic Unit 10080005, on right bank 1.2 mi upstream from normal high-water line of Boysen Reservoir at elevation 4,725 ft and 5.0 mi west of Shoshoni.

DRAINAGE AREA.--418 mi², of which 133 mi² probably is noncontributing.

PERIOD OF RECORD.--May 1941 to September 1942, August 1948 to September 1983, October 1988 to current year.

REVISED RECORDS.--WSP 1709: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,750 ft above NGVD of 1929, from topographic map. May 10, 1941 to September 30, 1942, nonrecording gage at site 1.0 mi downstream from station at different datum. August 28, 1948 to September 30, 1983, at same site and datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow of stream affected by regulation from reservoir system in the headwaters, diversions for irrigation, and return flow from irrigated areas.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 24, 1923, discharge, 3,500 ft³/s, from estimate provided by Bureau of Reclamation, gage height not determined.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	345	97	e68	66	56	e47	50	143	221	226	293	276
2	265	95	e67	e67	57	e46	50	142	213	225	279	270
3	227	96	e68	e70	57	e45	49	139	198	227	274	272
4	213	94	e67	e68	57	e47	49	133	190	226	267	279
5	207	95	e70	e64	57	e47	59	125	194	222	256	285
6	189	93	e72	e62	58	e47	95	126	195	216	248	275
7	144	90	e70	e58	e54	e46	67	141	197	217	247	267
8	128	88	e74	e61	e52	e44	67	151	197	226	237	266
9	127	88	e72	e63	e56	e42	68	139	176	238	238	272
10	125	86	e70	e66	e62	42	79	145	173	238	248	268
11	122	85	71	e63	e66	47	102	301	177	249	273	274
12	122	85	e80	e60	e68	53	107	292	180	256	262	285
13	120	84	e90	e58	e64	50	87	252	191	266	257	292
14	119	83	80	e58	e60	46	76	215	197	253	257	303
15	118	83	90	e54	e52	46	88	186	198	244	248	284
16	119	81	85	e56	e50	46	98	171	194	241	248	279
17	125	81	e84	e56	e58	46	97	175	198	243	254	270
18	119	80	e83	e58	e58	46	101	197	187	255	244	281
19	115	81	e86	e58	e56	46	125	179	183	250	251	296
20	112	80	e90	e60	e60	46	144	168	182	254	252	296
21	111	80	e84	e61	e56	46	136	154	198	248	263	288
22	114	81	e80	e63	e50	49	153	156	210	269	264	303
23	114	79	e74	e58	e44	50	156	168	205	272	249	302
24	109	79	e70	e64	e44	50	156	228	205	272	253	315
25	106	81	e66	e66	e45	48	147	217	202	296	247	349
26	105	79	e68	e70	e46	49	139	186	208	333	250	359
27	104	77	e70	e64	e47	50	139	171	218	324	260	352
28	103	e74	e70	e60	e46	43	148	173	213	320	268	350
29	102	e72	e72	e64	---	42	143	174	214	286	277	335
30	99	e70	e70	e60	---	47	143	218	225	267	285	300
31	99	---	e68	57	---	51	---	225	---	282	274	---
TOTAL	4,327	2,517	2,329	1,913	1,536	1,450	3,118	5,590	5,939	7,941	8,023	8,843
MEAN	140	83.9	75.1	61.7	54.9	46.8	104	180	198	256	259	295
MAX	345	97	90	70	68	53	156	301	225	333	293	359
MIN	99	70	66	54	44	42	49	125	173	216	237	266
AC-FT	8,580	4,990	4,620	3,790	3,050	2,880	6,180	11,090	11,780	15,750	15,910	17,540

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2005, BY WATER YEAR (WY)

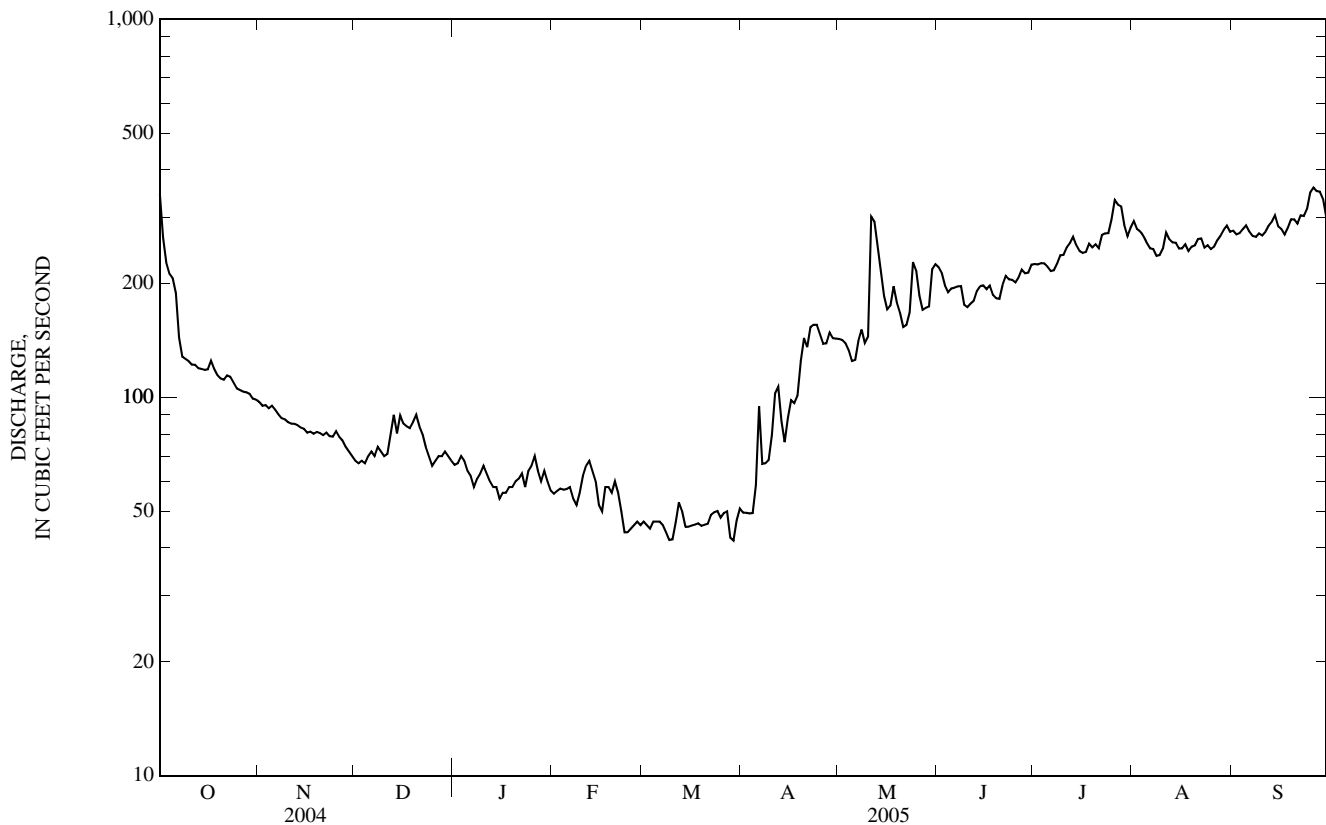
MEAN	143	78.7	58.8	50.5	48.3	52.3	82.5	178	272	321	328	285
MAX	298	135	114	89.9	79.5	87.2	201	275	442	524	525	527
(WY)	(2000)	(1998)	(1998)	(1998)	(1959)	(1963)	(1999)	(1999)	(1976)	(1983)	(1983)	(1999)
MIN	18.0	14.8	8.25	2.60	6.24	17.8	12.7	28.1	97.4	141	139	88.4
(WY)	(1942)	(1942)	(1942)	(1942)	(1942)	(1942)	(1942)	(1942)	(1941)	(1977)	(1977)	(1941)

YELLOWSTONE RIVER BASIN

06253000 FIVEMILE CREEK NEAR SHOSHONI, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1941 - 2005	
ANNUAL TOTAL	49,633		53,526		--	
ANNUAL MEAN	136		147		160	
HIGHEST ANNUAL MEAN	--		--		253 1999	
LOWEST ANNUAL MEAN	--		--		54.8 1942	
HIGHEST DAILY MEAN	345	Oct 1	359	Sep 26	964	Sep 11, 1973
LOWEST DAILY MEAN	34	Apr 5	42	Mar 9	1.0	Jan 4, 1942
ANNUAL SEVEN-DAY MINIMUM	37	Mar 30	45	Mar 4	1.4	Jan 1, 1942
MAXIMUM PEAK FLOW	--		410 ^a	May 11	3,390 ^b	Jun 15, 1962
MAXIMUM PEAK STAGE	--		5.64 ^c	Dec 27	9.61 ^c	Dec 27, 1954
ANNUAL RUNOFF (AC-FT)	98,450		106,200		115,900	
10 PERCENT EXCEEDS	255		274		358	
50 PERCENT EXCEEDS	114		118		101	
90 PERCENT EXCEEDS	44		50		40	

- a Gage height, 3.43 ft.
b Gage height, 7.85 ft.
c Backwater from ice.
e Estimated.



06259000 WIND RIVER BELOW BOYSEN RESERVOIR, WY

LOCATION.--Lat 43°25'30", long 108°10'42" (NAD 27), in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.9, T.5 N., R.6 E., Fremont County, Hydrologic Unit 10080005, on right bank 0.6 mi downstream from Boysen Dam and 13 mi north of Shoshoni.

DRAINAGE AREA.--7,701 mi².

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

REVISED RECORDS.--WSP 1709: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,608.58 ft above NGVD of 1929. Bureau of Reclamation data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Boysen Reservoir since October 1951. 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 upstream from station.

COOPERATION.--Station operated and data provided by Bureau of Reclamation from April 1998; record computed and reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	395	407	e420	421	364	386	488	959	3,560	2,930	1,330	1,290
2	399	398	e420	423	372	390	588	957	3,550	3,300	1,330	1,290
3	400	408	e420	426	371	395	611	1,040	3,550	3,960	1,340	1,290
4	399	408	420	434	365	392	715	1,090	3,550	3,940	1,340	1,290
5	396	402	424	425	361	393	874	1,090	3,540	3,390	1,330	1,270
6	396	398	421	425	364	395	922	1,100	3,540	2,600	1,330	1,200
7	398	397	420	428	366	398	922	1,100	3,530	2,330	1,330	1,220
8	396	400	418	428	e365	396	920	1,100	3,540	2,200	1,310	1,210
9	399	402	417	426	e365	387	925	1,100	3,530	1,920	1,290	1,200
10	399	403	416	429	362	391	935	1,250	3,520	1,930	1,290	1,210
11	390	405	423	427	362	385	920	1,380	3,520	1,930	1,300	1,210
12	397	404	432	425	365	394	3,470	1,010	3,510	1,930	1,310	1,210
13	391	403	425	426	367	396	1,960	1,010	3,210	1,900	1,290	1,200
14	397	404	423	424	371	392	928	1,000	2,770	1,880	1,290	1,210
15	395	401	429	416	364	390	925	1,000	2,740	1,870	1,290	1,210
16	393	399	424	420	374	390	928	1,140	2,860	1,890	1,280	1,210
17	394	409	421	421	363	390	923	1,740	3,090	1,900	1,280	1,200
18	396	418	422	429	366	390	928	2,250	3,080	1,710	1,290	1,200
19	392	423	427	429	363	390	918	2,310	3,090	1,530	1,300	1,200
20	392	424	424	428	364	390	932	2,310	3,100	1,530	1,300	1,180
21	393	422	430	427	364	389	927	2,320	3,430	1,440	1,290	1,060
22	405	422	438	423	361	389	919	2,330	4,440	1,340	1,290	1,070
23	407	422	430	417	358	397	917	2,330	5,120	1,330	1,280	1,070
24	404	417	430	389	357	395	922	2,330	5,500	1,330	1,280	1,080
25	406	416	430	366	363	391	920	2,620	5,510	1,340	1,290	1,080
26	402	419	430	367	391	387	926	3,500	5,540	1,340	1,290	1,060
27	402	416	429	368	388	387	958	3,530	5,510	1,330	1,290	1,070
28	403	424	429	368	391	388	954	3,530	5,460	1,340	1,290	1,060
29	402	e420	429	367	---	393	962	3,550	4,750	1,330	1,280	1,080
30	399	e420	435	372	---	393	958	3,560	3,560	1,330	1,290	1,060
31	402	---	438	366	---	386	---	3,570	---	1,320	1,290	---
TOTAL	12,339	12,311	13,194	12,740	10,287	12,125	30,095	59,106	115,200	61,340	40,310	35,190
MEAN	398	410	426	411	367	391	1,003	1,907	3,840	1,979	1,300	1,173
MAX	407	424	438	434	391	398	3,470	3,570	5,540	3,960	1,340	1,290
MIN	390	397	416	366	357	385	488	957	2,740	1,320	1,280	1,060
AC-FT	24,470	24,420	26,170	25,270	20,400	24,050	59,690	117,200	228,500	121,700	79,950	69,800

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2005, BY WATER YEAR (WY)

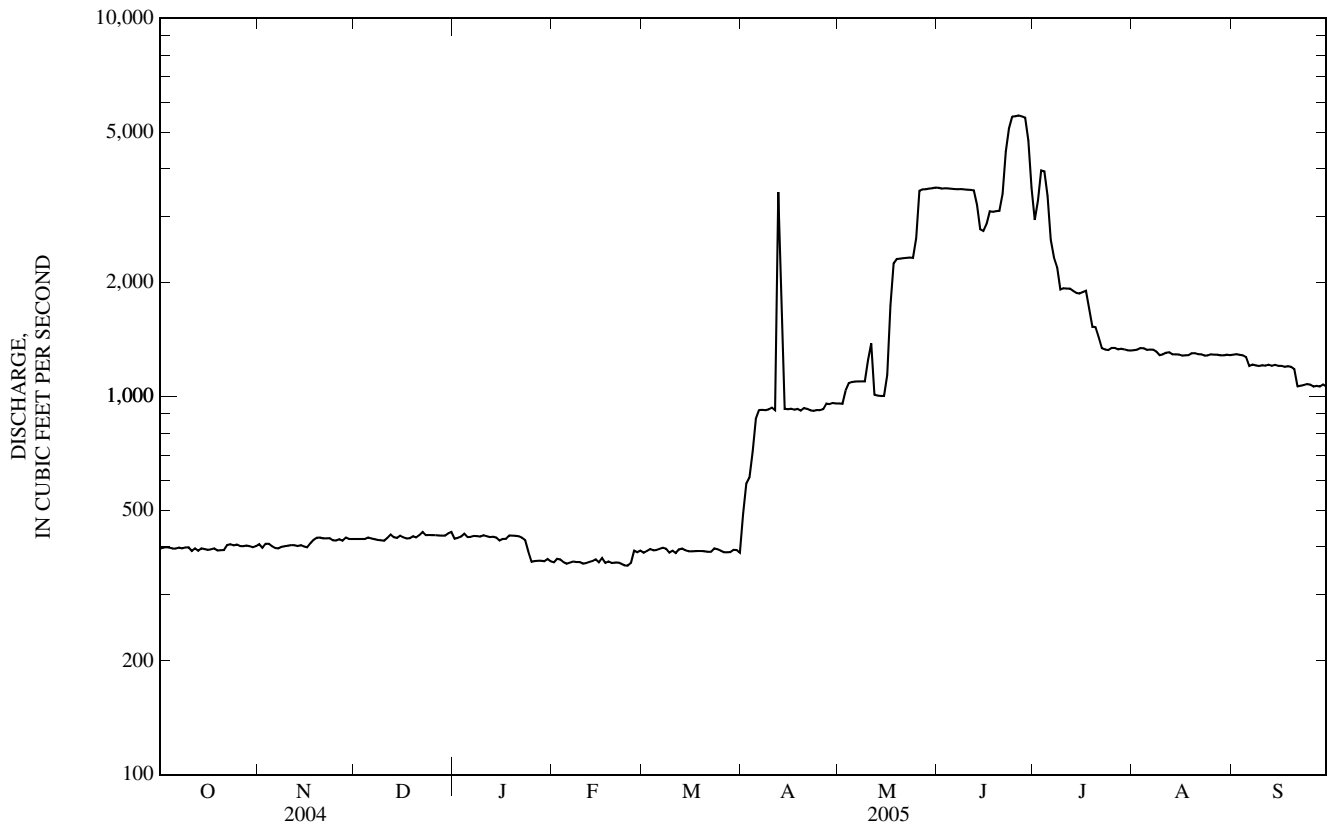
MEAN	1,137	1,110	1,106	1,044	1,009	1,085	1,217	1,479	2,282	2,434	1,488	1,270
MAX	2,846	2,086	2,005	2,208	2,202	2,035	2,259	4,314	7,252	8,816	2,789	2,502
(WY)	(1983)	(1959)	(1959)	(1958)	(1958)	(1997)	(1998)	(1999)	(1991)	(1967)	(1997)	(1973)
MIN	299	298	301	299	210	213	389	777	980	935	909	703
(WY)	(2003)	(2003)	(1989)	(1989)	(1952)	(1952)	(1952)	(1952)	(1992)	(1992)	(1992)	(2002)

YELLOWSTONE RIVER BASIN

06259000 WIND RIVER BELOW BOYSEN RESERVOIR, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1951 - 2005	
ANNUAL TOTAL	241,032		414,237		--	
ANNUAL MEAN	659		1,135		1,379	
HIGHEST ANNUAL MEAN	--		--		2,349 1983	
LOWEST ANNUAL MEAN	--		--		603 2003	
HIGHEST DAILY MEAN	1,150	Jul 1,2,5	5,540	Jun 26	13,200	Jul 7, 1967
LOWEST DAILY MEAN	347	Jan 27	357	Feb 24	4.7	Apr 3, 1962
ANNUAL SEVEN-DAY MINIMUM	348	Jan 27	361	Feb 19	106	Oct 12, 1951
MAXIMUM PEAK FLOW	--		5,590	Jun 27	13,500	Jul 7, 1967
MAXIMUM PEAK STAGE	--		8.89	Jun 27	13.35	Jul 7, 1967
ANNUAL RUNOFF (AC-FT)	478,100		821,600		999,400	
10 PERCENT EXCEEDS	1,080		3,090		2,160	
50 PERCENT EXCEEDS	430		488		1,130	
90 PERCENT EXCEEDS	356		387		572	

e Estimated.



06264700 BIGHORN RIVER AT LUCERNE, WY

LOCATION.--Lat 43°44'10", long 108°09'38" (NAD 27), in SE $\frac{1}{4}$ sec.32, T.44 N., R.94 W., Hot Springs County, Hydrologic Unit 10080007, at bridge on Black Mountain road, 0.7 mi upstream from Kirby Creek, 0.8 mi east of Lucerne, and 1.0 mi downstream from Owl Creek.

PERIOD OF RECORD.--Water years 1966 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, filtered, mg/L as N (00608)	Nitrite + nitrate water filtered, mg/L as N (00631)	Nitrite water, filtered, mg/L as N (00613)	Orthophosphate, water, filtered, mg/L as P (00671)
NOV 17...	0905	500	660	10.2	93	8.1	792	2.0	5.0	<.04	<.06	<.008	<.02
JAN 31...	0910	409	658	11.0	94	8.2	845	.0	2.5	<.04	E.06	E.007	<.02
JUN 15...	0945	2,830	648	8.4	98	7.8	654	23.0	15.0	<.04	<.06	<.008	<.02
AUG 30...	0935	1,270	648	7.8	100	8.3	563	15.0	19.5	<.04	<.06	<.008	<.02

Date	E coli, modified, m-TEC, water, col/100 mL (90902)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)
NOV 17...	36	E42
JAN 31...	E16	E17
JUN 15...	E11	E12
AUG 30...	100	150

< -- Less than.

E -- Estimated value; for bacteria, estimated values are counts outside the acceptable range (non-ideal colony count).

06265337 COTTONWOOD CREEK AT HIGH ISLAND RANCH, NEAR HAMILTON DOME, WY

LOCATION.--Lat 43°45'46", long 108°40'34" (NAD 27), in SW¹/₄ NE¹/₄ SE¹/₄ sec.24, T.44 N., R.99 W., Hot Springs County, Hydrologic Unit 10080007, on right bank 15 ft upstream from county bridge, 5.2 miles west of Hamilton Dome, and 12 miles south of Grass Creek.

DRAINAGE AREA.--81.4 mi².

PERIOD OF RECORD.--May 1977 to September 1978 (discharge measurements and water quality only), April 1993 to current year. Prior to April 1993, published as Cottonwood Creek at county bridge, near Hamilton Dome.

GAGE.--Water-stage recorder. Elevation of gage is 5,677 ft above NGVD of 1929, from topographic map. October 2004 to September 1996, at same site at different datum. September 1996 to May 1977, at site 9 ft downstream at datum 3.00 ft lower than previous datum. Wyoming State Engineer's Office data collection platform with satellite telemetry at station.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	0.20	e0.00	e0.00	e0.00	e0.30	0.53	4.0	22	12	8.7	0.28
2	2.8	0.16	e0.00	e0.00	e0.02	e0.30	0.98	3.1	17	10	7.7	0.21
3	2.1	0.47	e0.00	e0.00	e0.05	e0.30	1.1	3.9	14	9.2	13	0.06
4	2.1	1.0	e0.10	e0.00	e0.05	e0.40	3.3	5.7	14	8.9	6.8	e0.00
5	2.1	0.57	e0.10	e0.00	e0.00	e0.40	4.8	8.0	17	8.3	3.7	e0.00
6	1.9	0.54	e0.00	e0.00	e0.00	e0.40	3.4	12	22	6.8	2.4	e0.00
7	1.9	0.55	e0.00	e0.00	e0.00	e0.40	3.5	20	25	6.4	1.8	e0.00
8	1.9	0.57	e0.00	e0.00	e0.00	e0.50	3.2	23	e40	6.0	1.8	e0.00
9	1.7	1.4	e0.00	e0.00	e0.00	e1.5	2.8	20	e30	5.1	3.4	e0.00
10	1.7	0.95	e0.00	e0.00	e0.00	e1.2	1.2	49	e27	5.5	29	e0.00
11	e1.8	0.68	e0.10	e0.00	e0.05	e0.60	0.83	138	e31	7.1	17	e0.00
12	e1.7	0.74	e0.10	e0.00	e0.05	e0.50	0.80	49	e56	4.7	7.0	e1.5
13	e1.7	0.40	e0.10	e0.00	e0.05	e0.30	1.5	57	e45	3.6	8.3	3.6
14	e1.6	0.24	e0.05	e0.00	e0.05	e0.30	2.7	55	e37	2.9	6.0	1.4
15	e1.6	0.20	e0.05	e0.00	e0.05	e0.40	1.8	47	e32	2.9	4.5	0.74
16	e1.6	0.25	e0.05	e0.00	e0.05	e0.40	1.7	68	e30	2.2	3.3	0.41
17	e1.6	0.30	e0.05	e0.00	e0.10	e0.40	2.9	132	e28	2.5	3.5	0.25
18	e2.0	0.26	e0.05	e0.00	e0.10	e0.40	5.8	96	25	4.0	3.5	0.48
19	e1.8	0.34	e0.05	e0.00	e0.10	e0.40	5.0	113	23	2.3	5.3	0.52
20	e1.6	0.24	e0.05	e0.00	e0.10	e1.5	3.7	145	21	1.6	2.6	0.33
21	e1.5	0.37	e0.00	e0.00	e0.20	e0.80	4.8	137	20	1.3	1.7	0.13
22	e1.5	0.23	e0.00	e0.00	e0.20	e0.70	2.8	93	19	1.1	1.3	0.50
23	e1.2	0.32	e0.00	e0.00	e0.20	e0.50	5.4	85	18	1.1	1.3	0.63
24	e0.80	0.34	e0.00	e0.00	e0.20	0.15	8.0	74	18	0.83	1.3	9.0
25	e0.60	0.48	e0.00	e0.00	e0.30	0.17	7.8	50	16	3.0	0.91	8.8
26	e0.40	0.60	e0.00	e0.00	e0.30	0.27	7.2	35	15	12	1.1	4.8
27	0.78	0.29	e0.00	e0.00	e0.30	0.28	7.1	27	14	8.4	0.71	2.1
28	1.4	0.31	e0.00	e0.00	e0.30	0.44	4.9	24	14	4.5	0.52	1.6
29	1.2	0.14	e0.00	e0.00	---	2.3	3.4	25	15	2.9	0.32	1.5
30	0.69	e0.10	e0.00	e0.00	---	2.0	3.5	44	13	3.0	0.11	1.2
31	0.88	---	e0.00	e0.00	---	0.54	---	25	---	6.2	0.14	---
TOTAL	48.95	13.24	0.85	0.00	2.82	19.05	106.44	1,667.7	718	156.33	148.71	40.04
MEAN	1.58	0.44	0.03	0.00	0.10	0.61	3.55	53.8	23.9	5.04	4.80	1.33
MAX	2.8	1.4	0.10	0.00	0.30	2.3	8.0	145	56	12	29	9.0
MIN	0.40	0.10	0.00	0.00	0.00	0.15	0.53	3.1	13	0.83	0.11	0.00
AC-FT	97	26	1.7	0.00	5.6	38	211	3,310	1,420	310	295	79

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2005, BY WATER YEAR (WY)

MEAN	3.68	1.98	0.85	0.69	1.04	5.56	10.3	33.0	39.2	11.8	3.89	3.14
MAX	14.7	6.91	2.96	2.83	3.30	26.9	30.2	84.1	142	30.6	8.95	9.11
(WY)	(1999)	(1994)	(1998)	(1997)	(1996)	(1998)	(1999)	(1999)	(1997)	(1997)	(1998)	(1998)
MIN	0.14	0.00	0.00	0.00	0.00	0.61	2.92	4.03	2.05	1.01	0.00	0.00
(WY)	(2002)	(2002)	(2001)	(2001)	(2001)	(2005)	(2004)	(2001)	(2002)	(2000)	(2001)	(2000)

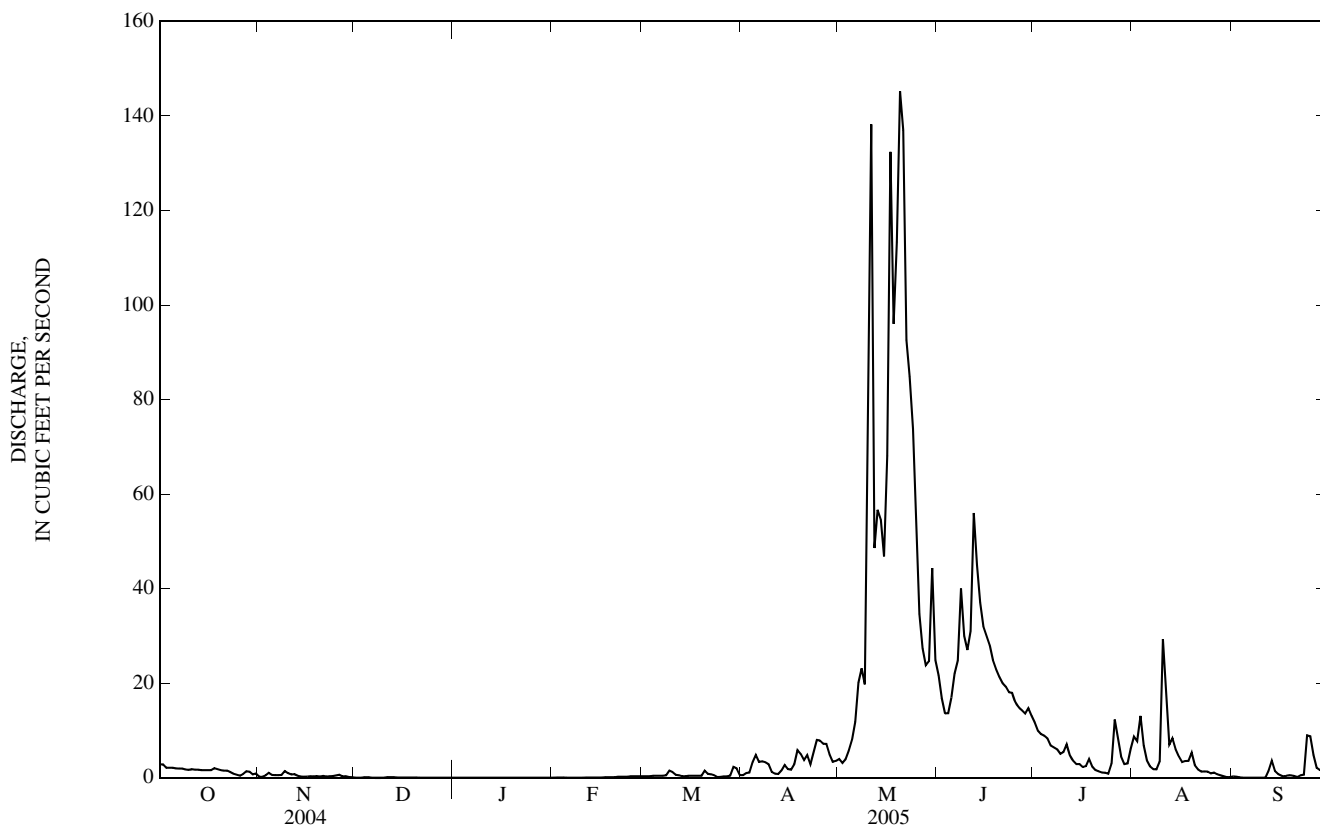
06265337 COTTONWOOD CREEK AT HIGH ISLAND RANCH, NEAR HAMILTON DOME, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1993 - 2005	
ANNUAL TOTAL	870.13		2,922.13		--	
ANNUAL MEAN	2.38		8.01		8.02	
HIGHEST ANNUAL MEAN	--		--		21.0 1997	
LOWEST ANNUAL MEAN	--		--		1.85 2002	
HIGHEST DAILY MEAN	38	Jul 1	145	May 20	895	Jun 11, 1997
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days, most years
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Dec 21	0.00	Sep 12, 1994
MAXIMUM PEAK FLOW	--	--	271	May 11	3,410 ^a	Jul 10, 2001
MAXIMUM PEAK STAGE	--	--	4.53	May 11	10.76 ^b	Jul 10, 2001
ANNUAL RUNOFF (AC-FT)	1,730		5,800		5,810	
10 PERCENT EXCEEDS	5.5		23		20	
50 PERCENT EXCEEDS	1.5		1.1		1.9	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From rating curve extended above 1,000 ft³/s on basis of slope-area determination of peak flow.

b From floodmarks.

c Estimated.



YELLOWSTONE RIVER BASIN

06274300 BIGHORN RIVER AT BASIN, WY

LOCATION.--Lat 44°23'00", long 108°02'08" (NAD 27), in SE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.21, T.51 N., R.93 W., Big Horn County, Hydrologic Unit 10080007, on left bank 10 ft downstream from county bridge on E Street, 0.2 mi northeast of Big Horn County Courthouse in Basin, and 1.8 mi downstream from Antelope Creek.

DRAINAGE AREA.--13,223 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,821.29 ft above NGVD of 1929. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for April to July, which are fair, and those for estimated daily discharges, which are poor. Diversions for irrigation of about 226,000 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	806	809	e640	e600	e660	e720	482	1,040	4,240	4,230	942	829
2	770	762	e660	e560	e640	e700	471	1,030	4,150	3,320	960	847
3	667	756	e640	e540	e640	e680	545	975	4,040	3,500	1,010	862
4	640	754	e660	e520	e660	674	642	931	3,980	4,170	1,030	869
5	673	767	e680	e500	e680	670	557	968	3,990	4,050	1,020	888
6	600	748	e660	e480	e660	673	707	954	4,210	3,410	975	844
7	616	733	e640	e500	e640	676	824	1,010	4,600	2,590	928	760
8	664	773	e660	e540	e620	675	755	2,680	4,710	2,200	921	746
9	670	762	e660	e600	e640	681	974	2,070	4,550	2,110	887	763
10	749	755	e680	e560	e660	673	1,180	1,890	4,260	1,770	805	780
11	750	754	e680	e540	e660	659	1,000	6,600	4,090	1,730	832	806
12	730	762	e700	e520	e660	652	827	8,170	4,050	1,640	911	841
13	713	756	e660	e540	e660	652	2,590	3,930	4,370	1,500	893	895
14	720	744	e620	e580	e660	646	2,340	2,070	4,150	1,430	908	944
15	733	739	e640	e520	e680	646	922	1,870	3,750	1,340	937	1,010
16	763	733	e640	e470	e640	649	828	1,770	3,870	1,350	865	992
17	770	723	e660	e490	e620	654	811	2,120	4,400	1,320	819	991
18	775	726	e680	e520	e620	643	821	3,390	5,690	1,260	793	1,000
19	768	734	e720	e520	e620	663	856	3,790	5,860	1,240	841	1,010
20	764	742	e700	e540	e640	720	1,060	4,120	5,540	942	861	1,010
21	770	733	e680	e540	e660	717	1,350	5,130	5,240	885	855	973
22	785	717	e720	e600	e680	662	1,460	6,010	4,930	847	861	951
23	804	746	e520	e660	e660	574	1,190	5,660	5,790	724	808	934
24	817	758	e400	e680	e680	615	1,080	5,630	6,650	767	807	1,020
25	809	763	e370	e700	e680	649	1,040	5,160	6,770	810	828	1,210
26	797	757	e520	e700	e680	624	1,030	4,190	6,390	903	815	1,310
27	802	735	e560	e680	e680	620	1,010	4,290	6,380	1,070	806	1,210
28	800	726	e580	e660	e700	613	1,080	4,020	6,170	1,080	831	1,170
29	817	e660	e600	e660	---	575	1,110	4,060	6,070	1,000	825	1,140
30	829	e620	e620	e660	---	521	1,080	4,320	5,700	957	787	1,130
31	811	---	e600	e660	---	500	---	4,470	---	956	788	---
TOTAL	23,182	22,247	19,450	17,840	18,380	20,076	30,622	104,318	148,590	55,101	27,149	28,735
MEAN	748	742	627	575	656	648	1,021	3,365	4,953	1,777	876	958
MAX	829	809	720	700	700	720	2,590	8,170	6,770	4,230	1,030	1,310
MIN	600	620	370	470	620	500	471	931	3,750	724	787	746
AC-FT	45,980	44,130	38,580	35,390	36,460	39,820	60,740	206,900	294,700	109,300	53,850	57,000

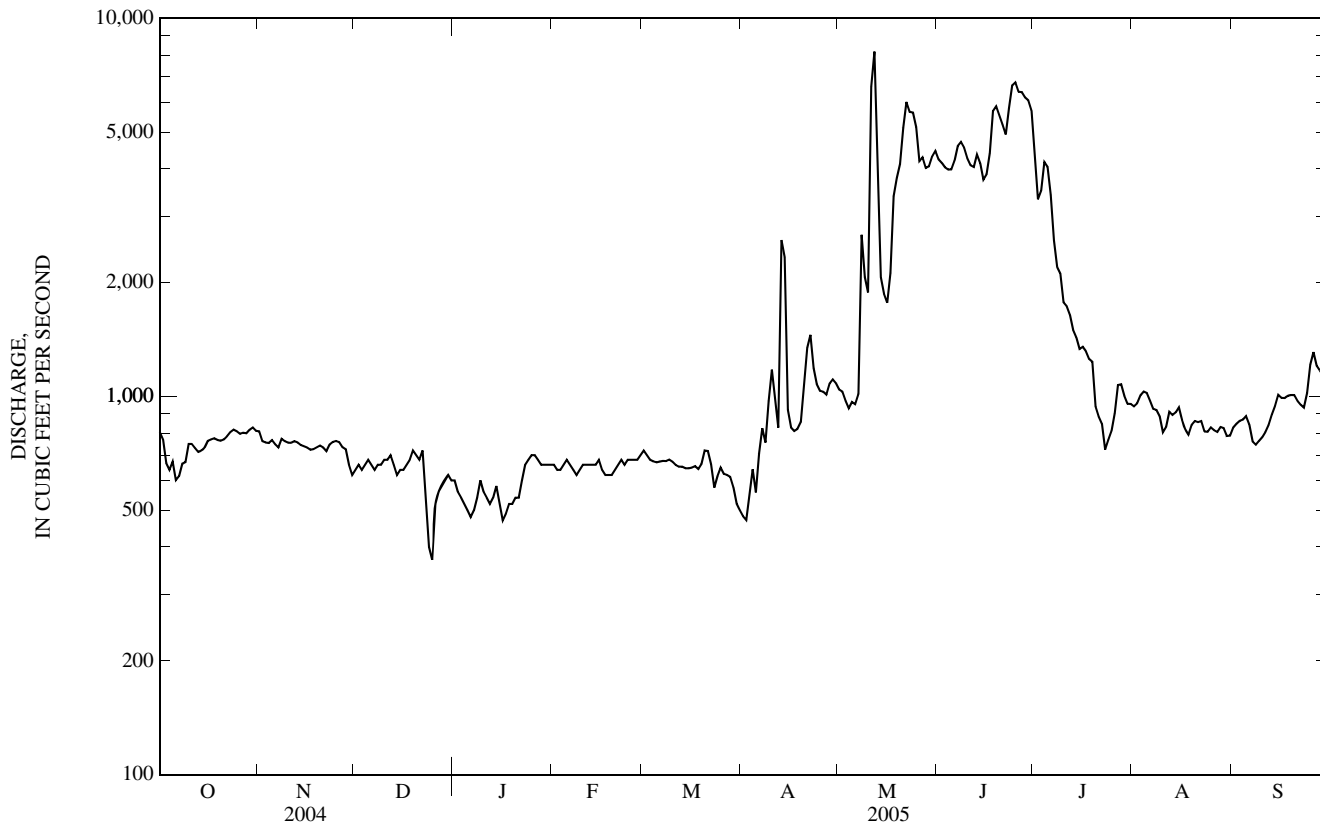
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2005, BY WATER YEAR (WY)

	1984	1984	1985	1992	1997	1998	1998	1999	1999	1995	1997	1998
MEAN	1,399	1,300	1,190	1,111	1,158	1,396	1,321	2,343	3,728	2,157	1,071	1,223
MAX	2,346	2,439	1,933	1,975	1,772	2,753	2,929	6,252	11,210	8,574	2,627	2,326
(WY)	(1984)	(1984)	(1985)	(1992)	(1997)	(1998)	(1998)	(1999)	(1991)	(1995)	(1997)	(1998)
MIN	582	564	522	533	504	634	574	690	928	357	380	531
(WY)	(2003)	(2003)	(2003)	(2004)	(1989)	(1989)	(2003)	(2002)	(2004)	(1988)	(2002)	(2002)

06274300 BIGHORN RIVER AT BASIN, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1984 - 2005	
ANNUAL TOTAL	263,985		515,690		--	
ANNUAL MEAN	721		1,413		1,617	
HIGHEST ANNUAL MEAN	--		--		2,913 1999	
LOWEST ANNUAL MEAN	--		--		686 2004	
HIGHEST DAILY MEAN	1,740	Jul 2	8,170	May 12	16,600	Jun 8, 1991
LOWEST DAILY MEAN	370	Dec 25	370	Dec 25	276	Jul 27, 1988
ANNUAL SEVEN-DAY MINIMUM	427	Jan 3	507	Dec 23	292	Jul 24, 1988
MAXIMUM PEAK FLOW	--		11,300	May 11	19,500	Jun 7, 1991
MAXIMUM PEAK STAGE	--		8.72	May 11	10.49	Jun 7, 1991
ANNUAL RUNOFF (AC-FT)	523,600		1,023,000		1,171,000	
10 PERCENT EXCEEDS	942		4,130		2,810	
50 PERCENT EXCEEDS	680		780		1,200	
90 PERCENT EXCEEDS	540		600		590	

e Estimated.



YELLOWSTONE RIVER BASIN

06274300 BIGHORN RIVER AT BASIN, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)
NOV 17...	1105	729	670	12.0	100	8.5	1,030	10.0	2.5	.04	.21	<.008	<.02
JAN 31...	1245	660	670	11.4	89	8.2	1,060	8.5	.0	.05	.32	E.007	<.02
JUN 15...	1300	3,790	657	8.3	101	7.9	671	28.0	17.5	<.04	.17	<.008	<.02
AUG 30...	1200	799	657	8.2	104	8.4	850	23.5	19.5	<.04	.40	E.006	<.02

Date	E coli, modif. m-TEC, water, col/100 mL (90902)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
NOV 17...	E11	E16	46	91
JAN 31...	26	28	128	228
JUN 15...	380	440	449	4,590
AUG 30...	280	270	126	272

< -- Less than.

E -- Estimated value; for bacteria, estimated values are counts outside the acceptable range (non-ideal colony count).

06276500 GREYBULL RIVER AT MEETEETSE, WY

LOCATION.--Lat 44°09'20" (NAD 27), long 108°52'35", in sec.4, T.48 N., R.100 W., Park County, Hydrologic Unit 10080009, on right bank at Meeteetse, 0.3 mi upstream from bridge on State Highway 120, and 3.0 mi upstream from Meeteetse Creek.

DRAINAGE AREA.--681 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June to December 1897, April to October 1903 (gage heights and discharge measurements only), July 1920 to current year (no winter records since 1971). Partial records only for some periods prior to 1931, published in WSP 1309.

REVISED RECORDS.--WSP 1309: 1923(M), 1924, 1925(M). WSP 1709: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,739.42 ft above NGVD of 1929. See WSP 1916 for history of changes prior to April 28, 1938. April 28, 1938 to May 24, 1961, at site on left bank at datum 3.00 ft higher. May 25, 1961 to May 9, 1967, at site 100 ft downstream from station at previous datum. May 10, 1967 to March 1, 2005 at datum 1.0 ft higher at present site. Wyoming State Engineer's data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for March 23 to July 15, which are poor. Some regulation by Sunshine Reservoir beginning May 1940, capacity, 52,990 acre-ft, and Lower Sunshine Reservoir beginning December 1972, capacity, 58,900 acre-ft. Diversions for irrigation of about 10,600 acres upstream from station. Several diversions upstream from station for irrigation downstream from station.

COOPERATION.--Station operated and record provided by the Wyoming State Engineer's Office; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	149	---	---	---	---	---	19	112	e555	612	266	191	
2	64	---	---	---	---	---	24	106	479	718	249	191	
3	48	---	---	---	---	---	22	111	e399	780	248	189	
4	45	---	---	---	---	---	29	127	e320	e732	238	189	
5	43	---	---	---	---	---	64	148	e190	e545	242	189	
6	41	---	---	---	---	---	53	185	e445	769	227	188	
7	39	---	---	---	---	---	52	269	e477	1,040	214	232	
8	37	---	---	---	---	---	53	208	e285	1,030	208	293	
9	38	---	---	---	---	---	65	211	e345	e1,060	216	287	
10	40	---	---	---	---	---	60	281	e313	e1,080	213	287	
11	39	---	---	---	---	---	53	332	353	1,020	263	288	
12	35	---	---	---	---	---	59	93	420	973	223	315	
13	35	---	---	---	---	---	75	64	340	1,000	217	315	
14	32	---	---	---	---	---	82	60	357	1,070	217	289	
15	32	---	---	---	---	---	68	49	531	1,060	199	288	
16	31	---	---	---	---	---	69	61	605	1,010	184	286	
17	30	---	---	---	---	---	86	146	623	1,010	206	290	
18	30	---	---	---	---	---	120	126	e701	992	282	294	
19	29	---	---	---	---	---	119	274	e543	912	311	295	
20	30	---	---	---	---	---	100	1,320	e559	495	225	291	
21	---	---	---	---	---	---	101	1,690	e614	378	198	290	
22	---	---	---	---	---	---	92	602	e876	287	185	288	
23	---	---	---	---	---	---	e22	103	646	e634	284	180	271
24	---	---	---	---	---	---	e22	105	440	e535	278	197	311
25	---	---	---	---	---	---	e22	84	e190	e614	275	208	316
26	---	---	---	---	---	---	e22	131	e276	e616	310	211	290
27	---	---	---	---	---	---	e23	162	483	e627	280	203	268
28	---	---	---	---	---	---	e18	132	490	e660	257	197	269
29	---	---	---	---	---	---	22	119	e568	e637	247	189	266
30	---	---	---	---	---	---	18	121	e460	528	241	191	213
31	---	---	---	---	---	---	16	---	e320	---	258	193	---
TOTAL	---	---	---	---	---	---	2,422	10,448	15,181	21,003	6,800	7,969	
MEAN	---	---	---	---	---	---	80.7	337	506	678	219	266	
MAX	---	---	---	---	---	---	162	1,690	876	1,080	311	316	
MIN	---	---	---	---	---	---	19	49	190	241	180	188	
AC-FT	---	---	---	---	---	---	4,800	20,720	30,110	41,660	13,490	15,810	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2005, BY WATER YEAR (WY)*

MEAN	167	107	78.3	64.5	63.7	77.3	130	556	1,126	789	481	267
MAX	593	248	134	105	104	117	441	1,422	3,185	2,219	1,704	662
(WY)	(1924)	(1942)	(1931)	(1943)	(1962)	(1942)	(1952)	(1924)	(1957)	(1965)	(1941)	(1941)
MIN	72.5	52.8	45.0	27.0	33.9	35.1	26.8	154	284	188	137	84.2
(WY)	(1956)	(1956)	(1970)	(1963)	(1960)	(1963)	(1978)	(1978)	(1934)	(1934)	(1940)	(1939)

06276500 GREYBULL RIVER AT MEETEETSE, WY—Continued

SUMMARY STATISTICS

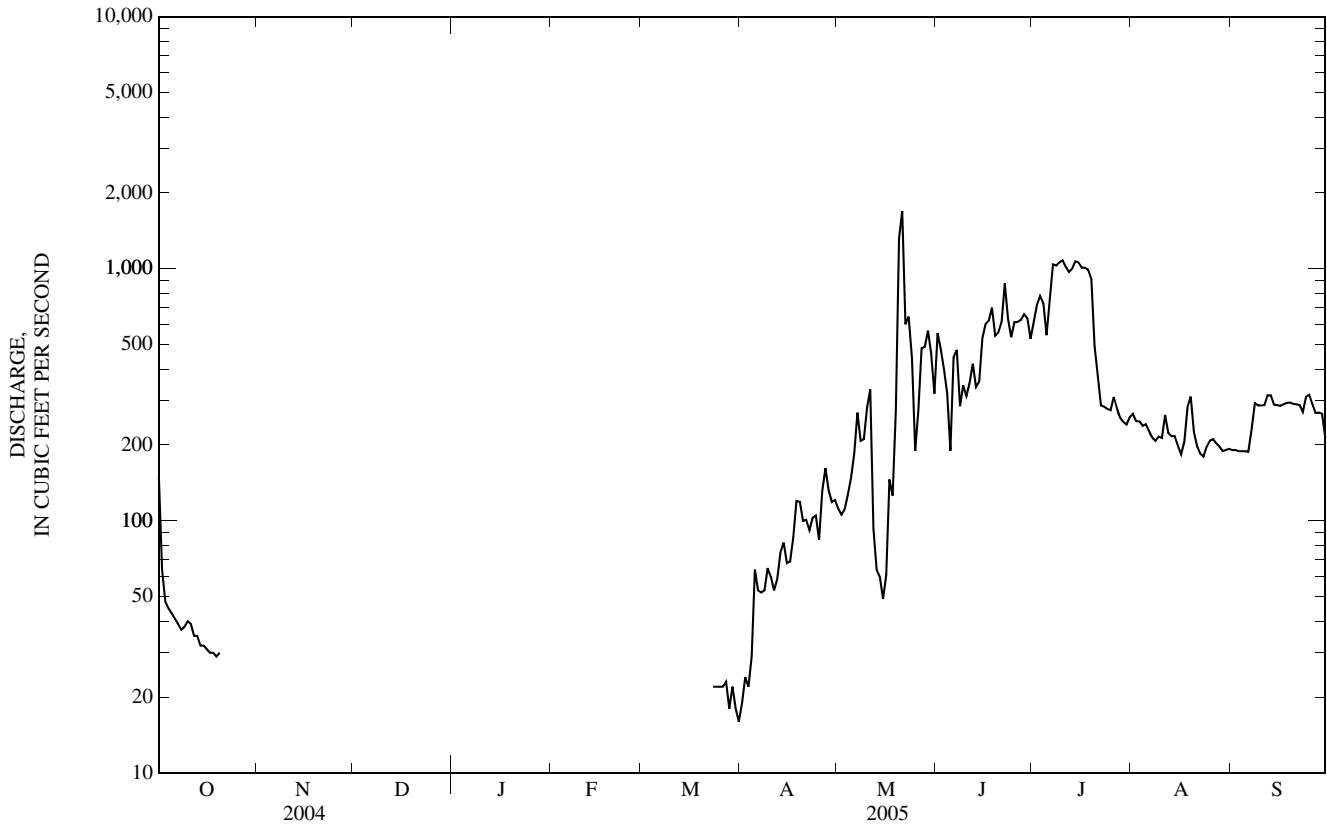
	FOR 2005 WATER YEAR*		WATER YEARS 1921 - 2005*	
ANNUAL MEAN	--		333	
HIGHEST ANNUAL MEAN	--		566	1957
LOWEST ANNUAL MEAN	--		130	1940
HIGHEST DAILY MEAN	1,690	May 21	6,770	Jun 6, 1957
LOWEST DAILY MEAN	16	Mar 31	13	Apr 18, 1989
MAXIMUM PEAK FLOW	3,000 ^c	May 21	13,600 ^a	Jun 15, 1963
MAXIMUM PEAK STAGE	4.92 ^c	May 21	9.20 ^b	Jun 15, 1963
ANNUAL RUNOFF (AC-FT)	--		241,200	

* For period of operation.

a From rating curve extended above 4,600 ft³/s on basis of velocity-area study.

b From floodmarks.

c Estimated.



06276500 GREYBULL RIVER AT MEETEETSE, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	E coli, modif. m-TEC, water, col/100 mL (90902)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
NOV 19...	0930	20	619	11.7	99	8.3	881	-5	.0	E7	E3	29	1.6
FEB 02...	1035	16	622	12.6	106	8.6	1,010	5.5	.0	<1	E1	37	1.6
JUN 17...	0755	555	610	9.3	98	7.4	177	17.5	8.0	730	670	889	1,330
SEP 01...	0740	195	622	9.9	105	8.1	329	10.0	9.0	55	54	10	5.3

< -- Less than.

E -- Estimated value; for bacteria, estimated values are counts outside the acceptable range (non-ideal colony count).

06278300 SHELL CREEK ABOVE SHELL RESERVOIR, WY

LOCATION.--Lat 44°30'29", long 107°24'11" (NAD 27), in sec.1, T.52 N., R.88 W., Big Horn County, Hydrologic Unit 10080010, Bighorn National Forest, on right bank 0.2 mi upstream from Shell Reservoir, 1.1 mi downstream from Buckley Creek, 6.0 mi southeast of Shell Creek ranger station, and 19 mi east of Shell.

DRAINAGE AREA.--23.1 mi².

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

REVISED RECORD.--WSP 1629: 1958. WSP 1709: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 9,050 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. No diversions upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	e8.0	e7.4	e3.5	e2.8	2.0	2.0	8.6	68	100	13	4.9
2	12	e8.5	e7.4	e3.5	2.8	2.1	2.2	7.8	67	99	12	4.8
3	12	e9.0	e7.3	e3.5	2.8	2.0	2.2	7.2	80	93	12	4.6
4	11	e8.5	e7.3	3.8	2.7	2.0	2.1	7.4	104	76	11	4.4
5	11	e8.0	7.3	3.6	2.7	2.0	2.1	e8.0	143	67	11	4.4
6	11	e7.8	6.9	3.4	2.8	2.1	2.2	e12	261	61	9.9	4.2
7	10	e7.8	6.6	3.4	2.7	2.2	3.0	e17	262	57	9.5	4.1
8	10	e7.7	6.5	3.5	2.7	2.2	3.2	19	136	53	8.9	3.9
9	10	e7.8	6.4	e3.4	2.6	2.3	2.9	e21	105	50	9.3	3.8
10	9.6	e7.8	6.3	e3.5	2.5	2.2	2.9	e25	87	46	9.0	3.5
11	9.3	e7.0	6.4	3.5	2.5	2.1	2.7	e23	88	43	9.5	3.5
12	9.4	e6.8	6.3	3.4	2.5	2.1	2.7	22	114	38	10	3.9
13	9.7	e6.8	5.9	3.3	2.5	2.2	2.9	21	139	36	9.3	4.7
14	10	e6.5	5.7	3.4	2.5	2.2	3.1	22	133	33	8.7	4.6
15	e10	e5.9	5.6	3.2	e2.5	2.3	2.6	e25	191	32	8.0	4.3
16	e10	e6.2	5.3	3.2	2.5	2.3	2.7	40	370	30	7.5	4.0
17	11	6.8	5.1	3.3	2.4	2.3	e3.0	73	606	27	8.1	3.8
18	e10	6.5	4.7	3.2	2.4	2.3	e5.0	e90	586	25	8.4	3.8
19	e11	e6.4	4.6	3.2	2.4	2.3	e8.0	e130	469	24	9.2	3.8
20	11	e6.4	4.5	3.2	2.4	2.2	e6.0	e300	454	21	7.9	3.6
21	12	e6.5	4.5	3.1	2.4	e2.1	e5.4	e500	342	e19	7.2	3.6
22	11	e6.3	4.4	3.0	2.4	e2.1	e5.0	388	295	18	7.0	4.1
23	e11	e6.1	4.1	2.9	2.3	e2.2	e6.0	480	276	17	7.3	3.8
24	e11	e6.0	3.9	2.9	2.2	e2.2	e7.0	432	261	16	7.1	4.8
25	e10	e5.8	4.0	2.8	2.1	2.2	e12	233	181	17	6.4	5.1
26	e9.5	e6.5	3.8	2.8	2.1	2.1	e11	128	165	20	6.3	4.6
27	9.5	e7.0	3.7	2.9	2.1	2.1	e10	96	141	17	5.9	4.2
28	9.7	e7.0	3.6	2.9	2.1	2.2	e9.8	109	118	16	5.7	4.1
29	9.8	e7.5	3.5	2.9	---	2.2	e9.5	119	152	15	5.5	3.9
30	e9.5	e7.4	3.6	2.9	---	2.1	e9.0	83	121	15	5.2	3.8
31	e9.0	---	e3.5	e2.9	---	2.1	---	69	---	13	5.1	---
TOTAL	322.0	212.3	166.1	100.0	69.4	67.0	148.2	3,516.0	6,515	1,194	260.9	124.6
MEAN	10.4	7.08	5.36	3.23	2.48	2.16	4.94	113	217	38.5	8.42	4.15
MAX	12	9.0	7.4	3.8	2.8	2.3	12	500	606	100	13	5.1
MIN	9.0	5.8	3.5	2.8	2.1	2.0	2.0	7.2	67	13	5.1	3.5
AC-FT	639	421	329	198	138	133	294	6,970	12,920	2,370	517	247

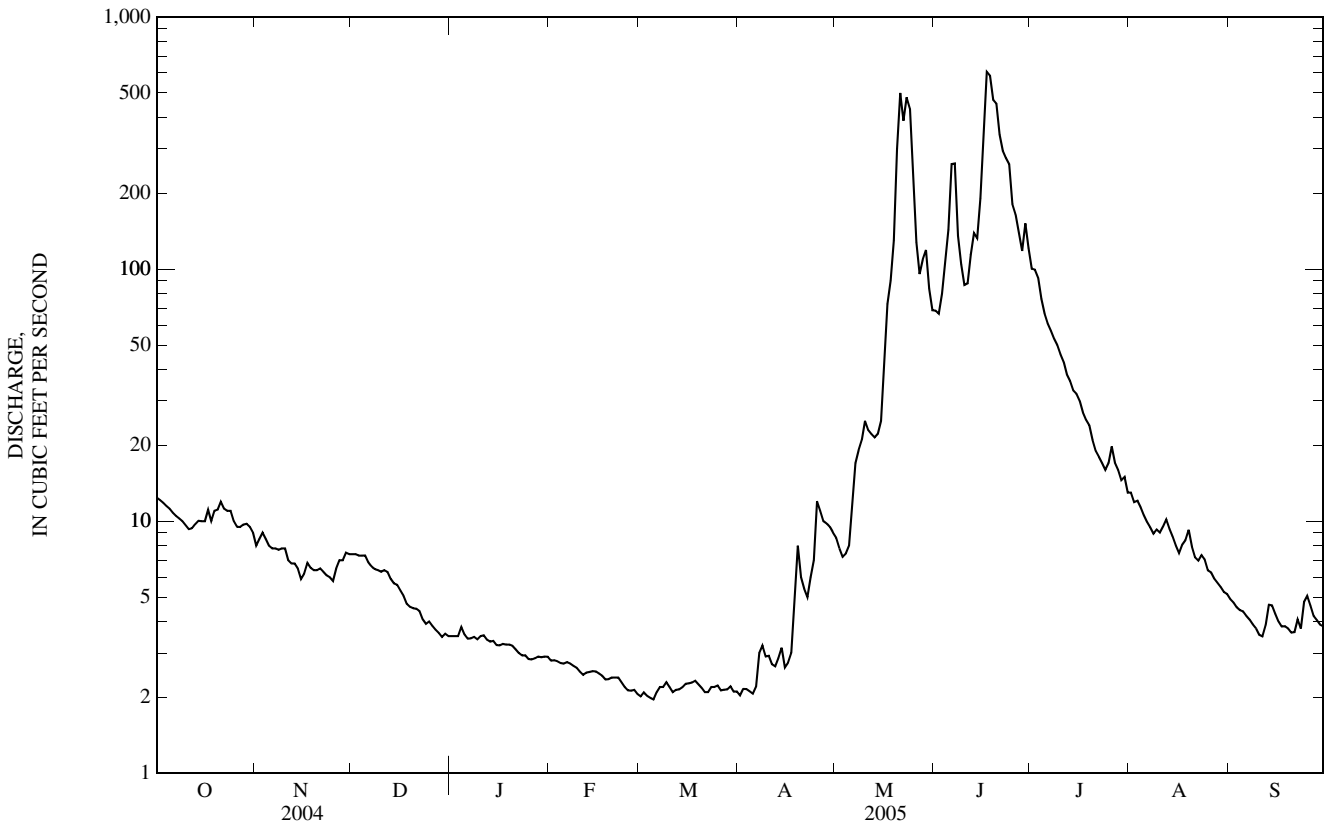
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2005, BY WATER YEAR (WY)

MEAN	8.34	5.78	3.82	2.72	2.25	2.15	5.72	104	198	46.6	12.7	9.50
MAX	17.6	11.2	7.18	4.50	3.68	3.76	28.4	289	353	188	45.6	44.9
(WY)	(1962)	(1962)	(1995)	(1995)	(1998)	(1999)	(1987)	(1958)	(1968)	(1975)	(1968)	(1968)
MIN	3.10	2.91	1.95	1.55	1.09	1.14	1.23	15.2	48.9	11.5	3.66	2.77
(WY)	(1989)	(1976)	(1970)	(1980)	(1980)	(1961)	(1970)	(1975)	(1994)	(2001)	(2001)	(1988)

06278300 SHELL CREEK ABOVE SHELL RESERVOIR, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1957 - 2005	
ANNUAL TOTAL	8,374.4		12,695.5		--	
ANNUAL MEAN	22.9		34.8		33.5	
HIGHEST ANNUAL MEAN	--		--		50.2 1968	
LOWEST ANNUAL MEAN	--		--		17.9 2001	
HIGHEST DAILY MEAN	243	Jun 6	606	Jun 17	1,010	Jun 15, 1963
LOWEST DAILY MEAN	2.5	Feb 22-25	2.0	Several days	0.60	Mar 7, 1967
ANNUAL SEVEN-DAY MINIMUM	2.6	Feb 20	2.0	Feb 27	0.90	Jan 27, 1980
MAXIMUM PEAK FLOW	--		1,060	Jun 17	1,870 ^a	Jun 15, 1963
MAXIMUM PEAK STAGE	--		6.65	Jun 17	7.84 ^b	Jun 15, 1963
ANNUAL RUNOFF (AC-FT)	16,610		25,180		24,240	
10 PERCENT EXCEEDS	65		99		93	
50 PERCENT EXCEEDS	8.5		6.5		5.7	
90 PERCENT EXCEEDS	2.8		2.3		2.0	

- a From rating curve extended above 725 ft³/s on basis of velocity-area study.
- b From floodmarks.
- e Estimated.



YELLOWSTONE RIVER BASIN

06278500 SHELL CREEK NEAR SHELL, WY

LOCATION.--Lat 44°33'54", long 107°42'44" (NAD 27), in SE¹/₄ SW¹/₄ sec.17, T.53 N., R.90 W., Big Horn County, Hydrologic Unit 10080010, on right bank 0.9 mi upstream from White Creek and 5.0 mi northeast of Shell.

DRAINAGE AREA.--145 mi².

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

REVISED RECORDS.--WSP 1239: 1941, 1945(M), WSP 1709: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,370.05 ft above NGVD of 1929. Wyoming State Engineer's data collection platform with satellite telemetry at station.

REMARKS.--Records good. Some regulation by two small reservoirs, capacity, 3,650 acre-ft. Diversions upstream from station for irrigation of about 80 acres downstream from station. Results of discharge measurements, in cubic feet per second, made during the periods when station was not in operation, are given below:

Oct. 6 . . . 49.9

Mar. 30 . . . 23.7

COOPERATION.--Station operated and record provided by the Wyoming State Engineer's Office; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	---	---	---	---	---	22	56	274	285	128	94
2	51	---	---	---	---	---	23	56	268	263	116	93
3	51	---	---	---	---	---	23	56	272	251	116	91
4	50	---	---	---	---	---	24	59	325	229	114	91
5	49	---	---	---	---	---	24	68	348	209	111	89
6	49	---	---	---	---	---	24	105	506	195	108	88
7	49	---	---	---	---	---	26	126	640	183	107	87
8	49	---	---	---	---	---	31	99	432	174	105	86
9	48	---	---	---	---	---	36	95	372	164	105	85
10	48	---	---	---	---	---	28	142	327	159	104	85
11	48	---	---	---	---	---	25	133	313	161	111	85
12	48	---	---	---	---	---	26	104	335	147	114	87
13	50	---	---	---	---	---	27	93	428	139	115	90
14	50	---	---	---	---	---	32	102	382	132	113	88
15	55	---	---	---	---	---	28	125	453	127	109	84
16	45	---	---	---	---	---	27	174	648	120	107	83
17	36	---	---	---	---	---	32	273	911	99	111	80
18	37	---	---	---	---	---	74	235	1,040	106	113	78
19	33	---	---	---	---	---	96	339	860	105	118	77
20	34	---	---	---	---	---	79	611	855	101	109	76
21	40	---	---	---	---	---	68	1,180	731	96	105	75
22	---	---	---	---	---	---	63	921	613	93	103	75
23	---	---	---	---	---	---	64	957	568	90	104	75
24	---	---	---	---	---	---	75	970	528	87	103	78
25	---	---	---	---	---	---	86	639	448	86	101	80
26	---	---	---	---	---	---	75	414	402	97	100	77
27	---	---	---	---	---	---	67	336	376	119	99	74
28	---	---	---	---	---	---	62	356	322	120	98	73
29	---	---	---	---	---	---	59	370	360	118	97	72
30	---	---	---	---	---	---	58	309	341	117	95	71
31	---	---	---	---	---	---	---	271	---	116	95	---
TOTAL	---	---	---	---	---	---	1,384	9,774	14,678	4,488	3,334	2,467
MEAN	---	---	---	---	---	---	46.1	315	489	145	108	82.2
MAX	---	---	---	---	---	---	96	1,180	1,040	285	128	94
MIN	---	---	---	---	---	---	22	56	268	86	95	71
AC-FT	---	---	---	---	---	---	2,750	19,390	29,110	8,900	6,610	4,890

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2005, BY WATER YEAR (WY)*

MEAN	57.0	47.2	41.5	36.9	35.2	35.1	49.8	271	489	166	98.9	77.5
MAX	95.2	76.4	60.4	48.7	44.6	48.0	138	553	990	473	158	134
(WY)	(1942)	(1969)	(1969)	(1948)	(1947)	(1946)	(1946)	(1988)	(1968)	(1975)	(1979)	(1968)
MIN	35.3	31.5	30.0	28.3	26.9	25.9	29.0	80.4	116	69.2	57.7	36.0
(WY)	(1955)	(1955)	(1941)	(1967)	(1961)	(1961)	(1961)	(1995)	(2001)	(1961)	(1966)	(1954)

06278500 SHELL CREEK NEAR SHELL, WY—Continued

SUMMARY STATISTICS

ANNUAL MEAN
 HIGHEST ANNUAL MEAN
 LOWEST ANNUAL MEAN
 HIGHEST DAILY MEAN
 LOWEST DAILY MEAN
 MAXIMUM PEAK FLOW
 MAXIMUM PEAK STAGE
 ANNUAL RUNOFF (AC-FT)

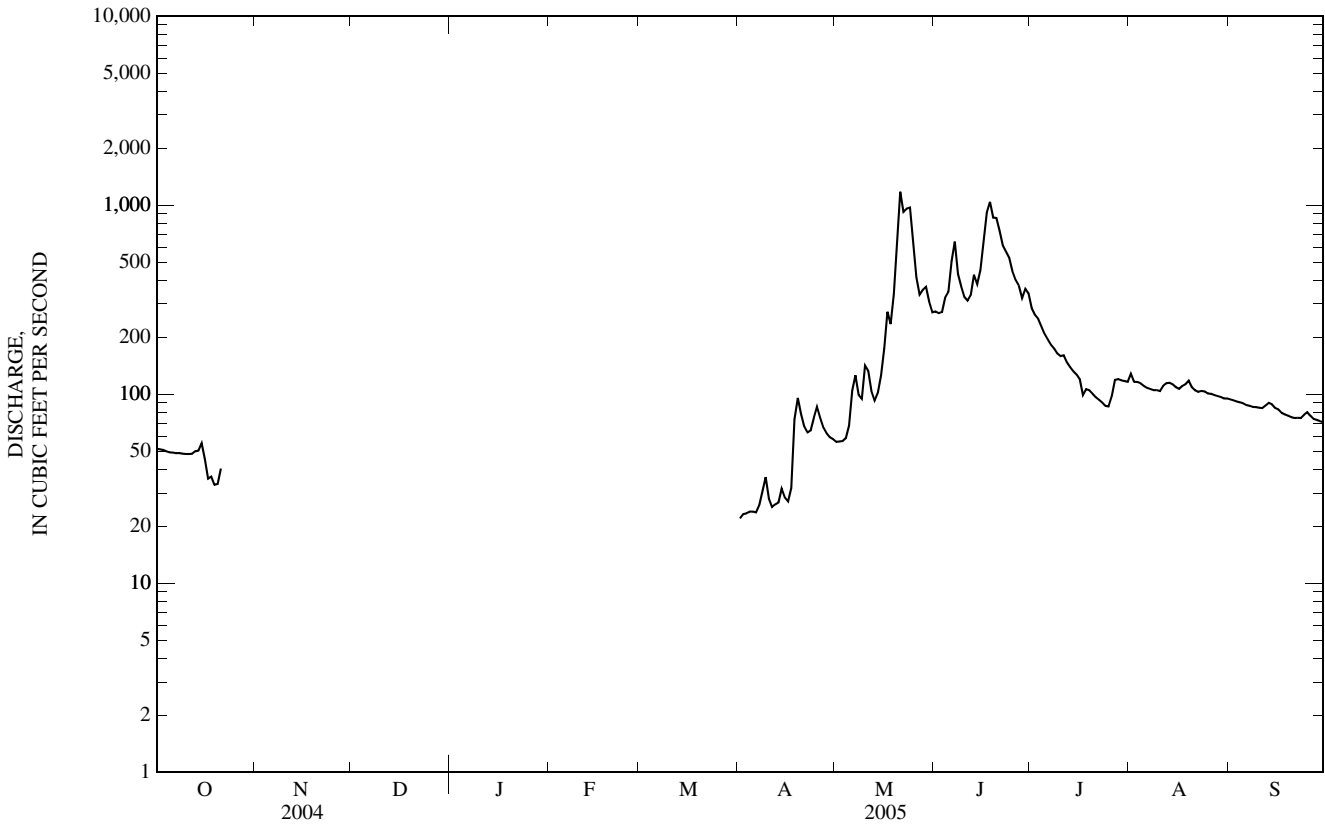
FOR 2005 WATER YEAR*

WATER YEARS 1941 - 2005*

--		119	
--		160	1968
--		77.3	1966
920	May 30	1,980	Jun 4, 1968
23	Apr 2,3	13	Apr 10, 1989
1420	Jun 18	3,020 ^a	Jun 24, 1945
5.38	Jun 18	7.49	Jun 24, 1945
--		85,900	

* For period of operation.

a From rating curve extended above 1,600 ft³/s.



YELLOWSTONE RIVER BASIN

06279500 BIGHORN RIVER AT KANE, WY

LOCATION.--Lat 44°45'31", long 108°10'51" (NAD 27), in NW¼ NE¼ SW¼ sec.9, T.55 N., R.94 W., Big Horn County, Hydrologic Unit 10080010, on right bank 180 ft upstream from Bighorn Canyon National Recreation Area boundary, 0.5 mi upstream from normal high-water line of Bighorn Lake at elevation 3,660 ft, 1.3 mi upstream from Five Springs Creek, and 5.9 mi south of Kane.

DRAINAGE AREA.--15,762 mi². Area at sites used prior to May 17, 1956, 15,846 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1309: 1929(M). WSP 1509: 1929. WSP 1709: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 3,660 ft above NGVD of 1929, from topographic map. August 29, 1928 to April 25, 1932, nonrecording gage, and April 25, 1932 to May 16, 1956, water-stage recorder at site 12.5 mi downstream from station at different datum. U.S. Army Corps of Engineers data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Some regulation by Boysen Reservoir since October 1951. Diversions for irrigation of about 376,000 acres upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1923, 14.8 ft, September 30, 1923, site and datum in use April 1932 to May 1956.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,050	924	869	934	811	840	571	1,130	4,670	4,870	1,040	975
2	1,020	907	868	869	818	860	550	1,090	4,580	3,620	1,030	1,000
3	973	887	e860	713	792	853	529	1,030	4,390	3,410	1,090	1,010
4	922	891	e780	680	796	847	656	930	4,350	4,290	1,150	1,020
5	912	900	e780	e620	808	867	629	932	4,340	4,210	1,140	1,020
6	890	905	e760	e660	841	865	592	949	4,560	3,780	1,070	1,010
7	877	895	e800	701	e800	854	729	1,160	5,180	2,740	1,040	924
8	867	883	861	700	e730	810	797	2,820	5,920	2,110	1,040	854
9	864	881	878	e660	e700	784	1,020	3,090	5,280	2,010	1,000	883
10	889	889	878	e640	758	790	1,330	2,030	4,900	1,740	949	902
11	911	884	e860	e640	808	761	1,240	4,890	4,580	1,650	915	950
12	902	885	e780	e660	780	760	1,030	10,200	4,430	1,630	982	986
13	870	882	e720	e700	780	740	1,630	5,770	4,770	1,550	1,030	1,040
14	878	870	e740	e620	e780	733	2,840	2,530	4,780	1,450	1,060	1,140
15	867	863	772	e620	e760	715	1,430	2,150	4,070	1,370	1,100	1,150
16	894	858	e800	e600	e700	732	938	2,010	4,330	1,330	1,020	1,190
17	917	847	e820	e560	e720	734	875	2,400	4,920	1,300	905	1,190
18	917	843	887	e700	741	711	826	4,110	6,260	1,320	913	1,220
19	927	848	893	e800	735	707	862	4,270	6,740	1,320	1,000	1,250
20	907	842	838	926	745	699	1,130	4,630	6,370	1,290	1,060	1,250
21	894	828	e820	959	767	724	1,570	5,870	6,130	e1,050	1,060	1,240
22	907	805	e800	967	784	735	1,770	7,830	5,510	958	1,020	1,260
23	920	820	e740	981	797	687	1,550	6,880	6,130	869	974	1,200
24	932	858	e440	971	791	659	1,260	6,790	6,980	856	951	1,260
25	929	860	e400	930	796	692	1,120	6,540	7,260	904	995	1,460
26	923	855	e560	907	795	675	1,090	5,020	6,870	966	948	1,680
27	914	848	e700	854	795	668	1,060	4,740	6,850	1,140	928	1,570
28	918	e820	e860	818	819	673	1,140	4,480	6,580	1,220	947	1,510
29	934	e770	969	835	---	646	1,200	4,430	6,310	1,160	961	1,490
30	954	e800	952	818	---	600	1,190	4,610	6,380	1,070	935	1,470
31	938	---	1,000	823	---	589	---	4,960	---	1,050	923	---
TOTAL	28,417	25,848	24,685	23,866	21,747	23,010	33,154	120,271	164,420	58,233	31,176	35,104
MEAN	917	862	796	770	777	742	1,105	3,880	5,481	1,878	1,006	1,170
MAX	1,050	924	1,000	981	841	867	2,840	10,200	7,260	4,870	1,150	1,680
MIN	864	770	400	560	700	589	529	930	4,070	856	905	854
AC-FT	56,370	51,270	48,960	47,340	43,140	45,640	65,760	238,600	326,100	115,500	61,840	69,630

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2005, BY WATER YEAR (WY)*

MEAN	1,762	1,637	1,428	1,341	1,504	1,785	1,769	3,131	5,685	3,069	1,416	1,503
MAX	3,994	2,871	2,506	2,871	3,164	3,171	3,454	7,505	14,680	11,650	6,388	3,673
(WY)	(1983)	(1984)	(1983)	(1972)	(1983)	(1972)	(1943)	(1947)	(1944)	(1967)	(1930)	(1973)
MIN	524	680	627	580	550	740	677	744	1,032	501	305	386
(WY)	(1936)	(2004)	(1961)	(1937)	(1933)	(1989)	(2004)	(2002)	(1934)	(1961)	(1940)	(1935)

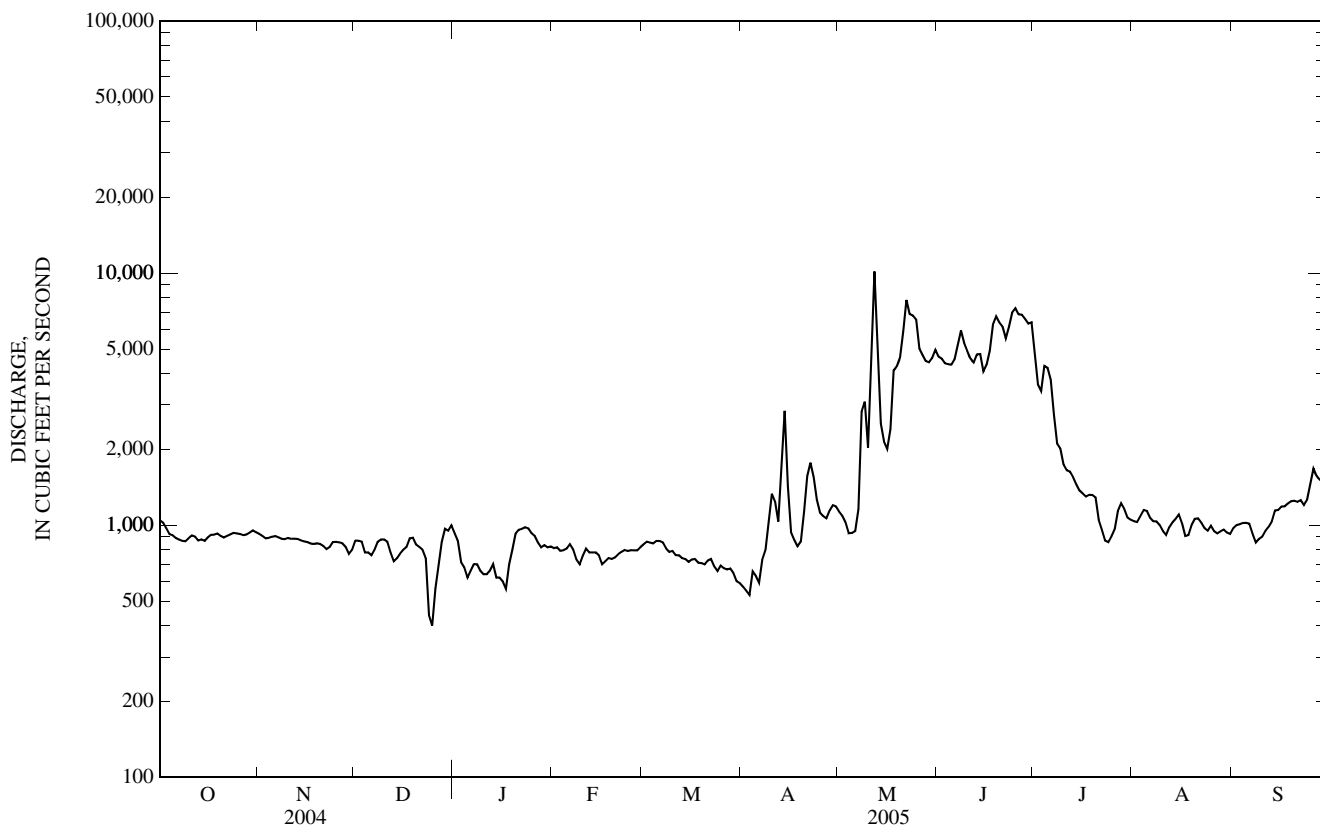
06279500 BIGHORN RIVER AT KANE, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1930 - 2005*	
ANNUAL TOTAL	307,099		589,931		--	
ANNUAL MEAN	839		1,616		2,169	
HIGHEST ANNUAL MEAN	--		--		3,524 1947	
LOWEST ANNUAL MEAN	--		--		781 2002	
HIGHEST DAILY MEAN	1,870	Jul 25	10,200	May 12	24,800	Jun 15, 1935
LOWEST DAILY MEAN	390	Jan 6	400	Dec 25	179	Jul 22, 1934
ANNUAL SEVEN-DAY MINIMUM	485	Jan 3	588	Mar 31	184	Jul 18, 1934
MAXIMUM PEAK FLOW	--		11,700	May 12	25,200 ^a	Jun 16, 1935
MAXIMUM PEAK STAGE	--		6.95	May 12	11.1 ^a	Jun 16, 1935
ANNUAL RUNOFF (AC-FT)	609,100		1,170,000		1,571,000	
10 PERCENT EXCEEDS	1,070		4,580		3,910	
50 PERCENT EXCEEDS	812		923		1,600	
90 PERCENT EXCEEDS	620		701		740	

* August 1928 to September 1929 not included in computations, monthly only for selected months.

a Site and datum then in use.

e Estimated.



YELLOWSTONE RIVER BASIN

06279500 BIGHORN RIVER AT KANE, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--1947-1977, 1999 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)
NOV													
17...	1330	835	672	--	--	8.0	1,240	19.5	6.5	<.04	.30	<.008	<.02
JAN													
31...	1520	831	668	11.3	89	8.3	1,070	10.0	.0	.04	.39	E.007	<.02
JUN													
15...	1720	4,100	660	8.1	100	8.1	654	29.0	18.5	<.04	.18	<.008	<.02
AUG													
30...	1640	895	664	8.8	110	8.4	900	15.0	19.0	<.04	.44	E.005	<.02
31...	1805	896	--	--	--	--	--	--	--	--	--	--	--

Date	E coli, modif. m-TEC, water, col/100 mL (90902)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
NOV				
17...	E4	E1	29	65
JAN				
31...	E13	E9	146	328
JUN				
15...	270	450	466	5,150
AUG				
30...	51	54	--	--
31...	--	--	72	174

< -- Less than.

E -- Estimated value; for bacteria, estimated values are counts outside the acceptable range (non-ideal colony count).

06279795 CROW CREEK AT MOUTH, AT PAHASKA, WY

LOCATION.--Lat 44°30'48", long 109°58'22" (NAD 27), Park County, Hydrologic Unit 10080012, Shoshone National Forest, on right bank 0.3 mi upstream from mouth and 0.8 mi northwest of Pahaska.

DRAINAGE AREA.--19.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1989 to September 1993, March 2001 to September 2005, (no winter records) (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 6,760 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for April 1 to June 30, which are poor. No diversion upstream from station. Results of discharge measurements, in cubic feet per second, made during period when station was not in operation, are given below:

Oct. 6 . . . 21.0

Mar. 16 . . . 6.86

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	---	---	---	---	---	6.1	23	94	69	21	13
2	24	---	---	---	---	---	6.3	24	79	64	23	13
3	23	---	---	---	---	---	6.5	26	69	60	23	13
4	22	---	---	---	---	---	6.5	30	68	56	20	12
5	21	---	---	---	---	---	6.3	35	69	53	19	12
6	---	---	---	---	---	---	6.5	41	80	52	18	12
7	---	---	---	---	---	---	e7.5	44	83	51	18	12
8	---	---	---	---	---	---	e8.5	44	77	50	17	12
9	---	---	---	---	---	---	e8.0	47	72	48	17	12
10	---	---	---	---	---	---	e7.5	49	66	47	17	13
11	---	---	---	---	---	---	e7.5	47	61	46	17	12
12	---	---	---	---	---	---	e8.0	43	60	44	17	14
13	---	---	---	---	---	---	e9.0	39	57	42	16	13
14	---	---	---	---	---	---	e12	41	58	41	16	13
15	---	---	---	---	---	---	e11	48	67	41	16	12
16	---	---	---	---	---	---	12	63	83	45	15	11
17	---	---	---	---	---	---	16	68	93	42	16	12
18	---	---	---	---	---	---	19	60	97	38	21	12
19	---	---	---	---	---	---	18	107	97	36	31	11
20	---	---	---	---	---	---	17	135	92	34	18	11
21	---	---	---	---	---	---	17	162	105	33	16	12
22	---	---	---	---	---	---	16	145	128	32	16	11
23	---	---	---	---	---	---	17	156	133	30	16	13
24	---	---	---	---	---	---	25	151	119	27	15	15
25	---	---	---	---	---	---	34	139	107	26	15	14
26	---	---	---	---	---	---	34	119	95	25	15	13
27	---	---	---	---	---	---	33	103	82	23	14	12
28	---	---	---	---	---	---	30	109	79	23	14	12
29	---	---	---	---	---	---	27	107	77	23	14	11
30	---	---	---	---	---	---	25	105	74	22	14	e11
31	---	---	---	---	---	---	---	92	---	22	14	---
TOTAL	---	---	---	---	---	---	457.2	2,402	2,521	1,245	539	369
MEAN	---	---	---	---	---	---	15.2	77.5	84.0	40.2	17.4	12.3
MAX	---	---	---	---	---	---	34	162	133	69	31	15
MIN	---	---	---	---	---	---	6.1	23	57	22	14	11
AC-FT	---	---	---	---	---	---	907	4,760	5,000	2,470	1,070	732

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2005, BY WATER YEAR (WY)*

MEAN	---	---	---	---	---	---	13.9	63.8	111	48.4	17.5	12.7
MAX	---	---	---	---	---	---	21.7	107	155	80.9	30.7	24.6
(WY)	---	---	---	---	---	---	(2004)	(2001)	(1991)	(1993)	(1993)	(2004)
MIN	---	---	---	---	---	---	6.49	36.0	59.8	22.5	9.57	7.83
(WY)	---	---	---	---	---	---	(1991)	(1990)	(1992)	(2001)	(2001)	(2001)

06279795 CROW CREEK AT MOUTH, AT PAHASKA, WY—Continued

SUMMARY STATISTICS

HIGHEST DAILY MEAN
 LOWEST DAILY MEAN
 MAXIMUM PEAK FLOW
 MAXIMUM PEAK STAGE

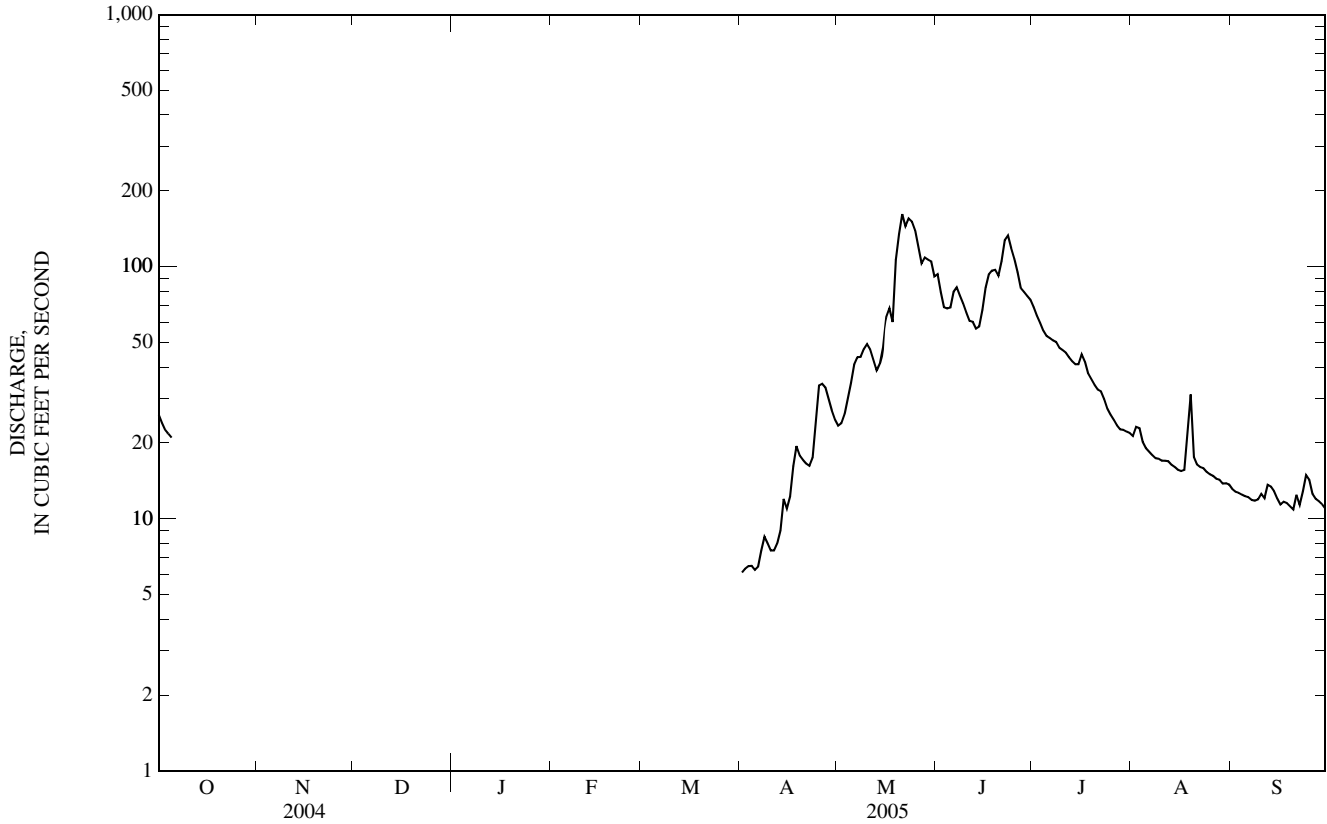
FOR 2005 WATER YEAR*

162 May 21
 6.1 Apr 1
 203 May 22
 2.13 May 22

WATER YEARS 1989 - 2005*

294 May 29, 2003
 3.7 Mar 20, 1993
 355 May 29, 2003
 2.74 Jun 12, 1991

* For period of operation.
 e Estimated.



06279795 CROW CREEK AT MOUTH, AT PAHASKA, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1989 to September 1993, March 2001 to September 2005 (no winter records) (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1989 to September 1993, March 2001 to September 2005 (no winter records) (discontinued).

pH: June 1989 to September 1993, March 2001 to September 2005 (no winter records) (discontinued).

WATER TEMPERATURE: July 1989 to September 1993, March 2001 to September 2005 (no winter records) (discontinued).

DISSOLVED OXYGEN: March 2001 to September 2005 (no winter records) (discontinued).

SUSPENDED-SEDIMENT DISCHARGE: March 1989 to September 1993, March 2001 to September (no winter records) (discontinued).

INSTRUMENTATION: Water-quality monitor and sediment pumping sampler.

REMARKS.--Specific conductance records excellent October 1-5, March 17 to April 6, April 16,17, May 3-6, 12-27, June 3 to July 8, July 28 to September 30; and good April 7, 15, April 28 to May 2, May 7-11, 28-31, June 2, and July 9, 27. PH records good October 1-5, March 17 to April 6, April 16-25, April 29 to May 22, and June 3 to September 14; fair March 16, April 7, 26-28, May 23-29, June 2, and September 15-24; and poor May 30 and September 25-30. Water temperature records excellent. Dissolved oxygen records excellent March 17-28, April 1-12, 16-18, April 20 to May 10, June 3, 13-21, June 30 to July 2, and July 8-11, 28, 29; good March 29-31, April 13-15, 19-23, June 4, 5, 24-29, July 3-7, 12-15, July 30 to August 1, and August 13 to September 7; fair April 24-27, June 6, 7, July 16-20, and August 2-5; and poor June 8, 9, July 21-25, and August 6-8. Water-temperature records represent water temperature at sensor within 0.2°C.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 112 microsiemens per centimeter at 25°C (µS/cm), May 5, 1990; minimum recorded, 25 µS/cm, September 20, 2002.

pH: Maximum recorded, 9.2, July 17, 1991; minimum recorded, 6.5, July 22, 1992.

WATER TEMPERATURE: Maximum recorded, 14.9°C, August 8, 1990; minimum recorded, 0.0°C, on many days during March and April most years.

DISSOLVED OXYGEN: Maximum recorded 15.4 mg/L, August 31, 2005; minimum recorded, 6.0 mg/L, October 7, 2003.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 981 mg/L, May 19, 2005; minimum daily mean, 0.0 mg/L, September 27-30, 1989.

SEDIMENT LOADS: Maximum daily, 312 tons, May 19, 2005; minimum daily, 0 tons, September 27-30, 1989 and March 20 to April 25, June 26, 27, July 4-7, August 2-4, 6-11, July 14 to September 5, and September 8-30, 2001.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 102 µS/cm, March 31, April 6; minimum recorded, 45 µS/cm, May 23.

pH: Maximum recorded, 8.0, October 1-5, April 2; minimum recorded, 7.2, June 19-23.

WATER TEMPERATURE: Maximum recorded, 14.2°C, July 21, minimum recorded, 0.0°C, March 17, April 1, 28.

DISSOLVED OXYGEN: Maximum recorded, 15.4 mg/L, August 31; minimum recorded, 8.6 mg/L, July 22.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 981 mg/L, May 19; minimum daily mean, 1 mg/L, September 30.

SEDIMENT LOADS: Maximum daily, 312 tons, May 19; minimum daily, 0.02 tons, September 30.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd, std units (00400)	Specific conductance, wat unfiltered, uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
MAR													
16...	1100	6.9	587	10.8	99	8.0	93	4.0	1.0	27	7.50	2.08	.73
APR													
15...	1330	11	559	11.6	115	7.6	88	6.0	2.0	26	7.02	1.97	.72
28...	1330	30	592	12.0	109	7.8	74	3.0	.9	23	6.17	1.83	.72
MAY													
11...	1300	45	590	11.3	109	7.7	66	1.5	3.0	21	5.80	1.66	.63
20...	1240	120	596	10.3	105	7.4	57	16.5	5.5	19	5.06	1.55	.73
31...	1300	79	593	11.2	113	7.6	58	12.0	5.0	19	5.16	1.47	.63
JUN													
11...	1330	64	591	10.8	111	7.5	63	12.5	5.5	20	5.33	1.54	.53
29...	1400	57	598	10.8	114	7.7	55	12.0	7.0	17	4.79	1.33	.50
JUL													
07...	1300	52	599	10.0	112	7.4	60	28.0	9.5	19	5.20	1.42	.42
27...	1400	23	603	11.3	130	8.0	74	23.5	11.0	22	6.06	1.69	.65
AUG													
12...	1200	20	597	9.4	100	7.9	81	22.5	7.5	24	6.63	1.84	.71
SEP													
30...	1100	11	597	10.7	107	7.9	85	15.0	5.0	26	7.05	1.94	.70

06279795 CROW CREEK AT MOUTH, AT PAHASKA, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Organic carbon, water, unfltrd mg/L (00680)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)
MAR 16...	.8	9.44	42	45	.35	.1	27.5	3.6	79	.11	1.46	79	<.10
APR 15...	.7	8.23	40	39	.40	.1	25.7	2.6	71	.09	1.81	63	<.10
APR 28...	.5	5.91	35	32	.41	E.1	23.7	2.2	62	.09	5.19	63	E.06
MAY 11...	.5	5.22	34	29	.43	E.1	22.4	2.0	57	.08	7.55	62	E.08
MAY 20...	.5	4.62	33	25	.40	<.1	20.8	1.8	52	.09	21.4	66	.12
MAY 31...	.5	4.85	35	27	.28	<.1	20.4	1.5	52	.07	11.1	52	E.06
JUN 11...	.5	5.16	36	30	.34	E.1	21.9	2.0	56	.08	10.2	59	E.06
JUN 29...	.5	4.52	35	27	.26	<.1	20.2	1.9	50	.07	7.75	50	E.07
JUL 07...	.5	5.27	37	30	.22	<.1	20.8	2.1	54	.05	5.50	39	E.05
JUL 27...	.6	6.27	37	37	E.19	E.1	22.3	2.6	--	--	--	65	E.06
AUG 12...	.6	7.33	39	39	E.14	E.1	23.6	2.7	--	--	--	73	E.06
SEP 30...	.7	7.73	39	43	.36	.1	24.5	3.2	72	.10	2.21	72	<.10
MAR 16...	E.06	<.04	.14	<.008	.05	.055	.061	1.1	2	<.20	.7	4	<.06
APR 15...	E.08	<.04	.14	<.008	.04	.048	.063	--	2	<.20	.8	4	<.06
APR 28...	.14	<.04	.41	<.008	.04	.041	.078	2.7	6	<.20	.5	5	<.06
MAY 11...	.14	<.04	.29	<.008	.03	.039	.075	--	--	--	--	--	--
MAY 20...	.28	<.04	.32	<.008	.03	.044	.26	6.6	18	<.20	.4	6	<.06
MAY 31...	E.09	<.04	.17	<.008	.03	.037	.093	--	--	--	--	--	--
JUN 11...	E.06	<.04	.08	<.008	.03	.036	.055	2.5	7	<.20	.4	4	<.06
JUN 29...	E.08	<.04	E.04	<.008	.02	.032	.057	--	--	--	--	--	--
JUL 07...	E.08	<.04	<.06	<.008	.03	.035	.053	1.6	4	<.20	.4	5	<.06
JUL 27...	E.08	<.04	<.06	<.008	.03	.042	.047	--	--	--	--	--	--
AUG 12...	E.10	<.04	<.06	<.008	.03	.039	.050	2.0	2	<.20	.6	4	<.06
SEP 30...	E.06	<.04	<.06	<.008	.04	.047	.047	1.4	3	<.20	.65	5	<.06

06279795 CROW CREEK AT MOUTH, AT PAHASKA, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chrom- ium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Mangan- ese, water, fltrd, ug/L (01056)	Molyb- denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selen- ium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)
MAR 16...	24	<.04	E.6	.026	.5	E3	<.08	.6	.3	1.0	.29	<.4	<.2
APR 15...	15	<.04	E.6	.027	.6	6	<.08	E.4	.5	.8	.41	<.4	<.2
28...	9	<.04	E.5	.031	1.0	9	<.08	E.4	1.0	.4	.23	<.4	<.2
MAY 11...	--	--	--	--	--	11	--	--	1.0	--	--	--	--
20...	E6	<.04	<.8	.064	1.2	22	<.08	E.5	3.7	E.2	.57	<.4	<.2
31...	--	--	--	--	--	8	--	--	.9	--	--	--	--
JUN 11...	E6	<.04	E.6	.029	.5	8	<.08	E.4	1.0	E.3	.38	<.4	<.2
29...	--	--	--	--	--	6	--	--	1.0	--	--	--	--
JUL 07...	11	<.04	E.4	.020	.6	E3	<.08	E.4	.9	E.4	.24	<.4	<.2
27...	--	--	--	--	--	E3	--	--	.7	--	--	--	--
AUG 12...	11	<.04	E.5	.023	E.3	7	<.08	E.5	.9	.7	.31	<.4	<.2
SEP 30...	14	.10	.43	<.04	E.3	8	<.08	E.4	.7	.8	.10	<.08	<.2

Date	Stront- ium, water, fltrd, ug/L (01080)	Thall- ium, water, fltrd, ug/L (01057)	Vanad- ium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)
MAR 16...	40.3	<.04	5.3	1.0	E.04
APR 15...	43.3	<.04	4.4	1.1	E.04
28...	46.2	<.04	3.6	.7	E.04
MAY 11...	--	--	--	--	--
20...	36.5	<.04	2.9	.6	E.04
31...	--	--	--	--	--
JUN 11...	41.0	<.04	3.6	1.1	E.03
29...	--	--	--	--	--
JUL 07...	37.9	<.04	3.8	1.1	E.02
27...	--	--	--	--	--
AUG 12...	40.4	<.04	4.2	.7	E.03
SEP 30...	49.4	<.04	4.0	E.43	E.03

< -- Less than.
E -- Estimated.

06279795 CROW CREEK AT MOUTH, AT PAHASKA, WY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	71	69	70	---	---	---	---	---	---	---	---	---
2	72	70	71	---	---	---	---	---	---	---	---	---
3	72	71	72	---	---	---	---	---	---	---	---	---
4	73	71	72	---	---	---	---	---	---	---	---	---
5	73	72	73	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	101	98	99	74	72	73
2	---	---	---	---	---	---	100	96	99	73	71	72
3	---	---	---	---	---	---	100	97	99	73	69	72
4	---	---	---	---	---	---	99	98	99	71	68	70
5	---	---	---	---	---	---	100	99	100	70	63	68
6	---	---	---	---	---	---	102	97	100	67	59	64
7	---	---	---	---	---	---	99	---	---	67	61	65
8	---	---	---	---	---	---	---	---	---	68	62	66
9	---	---	---	---	---	---	---	---	---	66	62	65
10	---	---	---	---	---	---	---	---	---	67	63	66
11	---	---	---	---	---	---	---	---	---	67	65	67
12	---	---	---	---	---	---	---	---	---	69	67	68
13	---	---	---	---	---	---	---	---	---	69	67	69
14	---	---	---	---	---	---	---	---	---	70	62	68
15	---	---	---	---	---	---	---	83	---	67	59	64
16	---	---	---	---	---	---	86	78	83	59	52	58
17	---	---	---	94	93	94	80	70	76	62	53	58
18	---	---	---	97	94	95	76	70	74	63	62	62
19	---	---	---	95	94	94	77	75	76	62	48	54
20	---	---	---	95	94	95	78	76	78	57	48	54
21	---	---	---	96	94	95	79	78	78	53	48	51
22	---	---	---	97	95	96	79	76	78	56	48	53
23	---	---	---	97	95	96	77	68	75	54	45	51
24	---	---	---	98	96	97	72	61	69	52	49	50
25	---	---	---	98	96	97	69	57	65	53	51	52
26	---	---	---	99	97	98	68	57	65	56	53	55
27	---	---	---	98	97	98	69	66	68	56	52	55
28	---	---	---	98	96	97	71	69	70	55	50	54
29	---	---	---	98	96	97	72	71	71	55	52	54
30	---	---	---	99	97	98	74	72	73	56	55	56
31	---	---	---	102	97	99	---	---	---	---	56	---
MONTH	---	---	---	---	---	---	---	---	---	74	45	61

06279795 CROW CREEK AT MOUTH, AT PAHASKA, WY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	56	55	56	78	76	77	84	83	84
2	59	---	---	56	54	56	78	67	75	84	83	84
3	60	59	60	57	55	56	78	73	76	85	83	84
4	61	60	60	59	56	58	79	74	78	85	83	84
5	61	58	60	60	59	59	80	78	79	85	84	85
6	58	56	57	60	59	60	80	78	79	85	84	85
7	58	57	58	60	59	60	80	79	80	86	84	85
8	59	58	59	61	59	60	81	79	80	86	84	85
9	61	59	60	64	61	62	81	76	80	86	83	85
10	62	61	61	---	---	---	81	69	80	86	83	84
11	63	62	62	---	---	---	81	69	80	85	84	85
12	63	60	61	---	---	---	81	79	80	86	80	82
13	63	62	63	---	---	---	80	79	80	85	82	84
14	64	60	63	---	---	---	81	79	80	85	82	84
15	62	53	60	---	---	---	82	80	81	85	84	85
16	58	52	56	---	---	---	82	80	81	86	84	85
17	54	49	52	---	---	---	81	79	81	86	83	85
18	51	50	51	---	---	---	79	67	77	86	84	85
19	52	49	51	---	---	---	79	53	68	86	85	86
20	51	47	50	---	---	---	81	79	79	87	85	86
21	50	47	49	---	---	---	82	80	81	87	80	83
22	49	46	48	---	---	---	82	80	81	86	85	85
23	48	46	47	---	---	---	82	81	81	87	81	84
24	49	47	48	---	---	---	83	81	82	84	79	81
25	50	49	50	---	---	---	83	81	82	84	79	82
26	53	50	51	---	---	---	83	81	82	85	84	84
27	54	53	54	76	---	---	83	82	83	85	84	85
28	55	54	54	76	74	75	84	82	83	86	85	85
29	55	54	55	76	74	75	84	82	83	86	85	86
30	56	54	55	77	75	76	84	81	83	87	---	---
31	---	---	---	77	76	76	84	82	83	---	---	---
MONTH	---	---	---	---	---	---	84	53	80	---	---	---

YELLOWSTONE RIVER BASIN

06279795 CROW CREEK AT MOUTH, AT PAHASKA, WY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH					
1	8.0	7.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2	8.0	7.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3	8.0	7.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4	8.0	7.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---
5	8.0	7.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7.9	7.9
18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7.9	7.9
19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7.9	7.9
20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7.9	7.9
21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7.9	7.9
22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7.9	7.9
23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7.9	7.9
24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7.9	7.9
25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7.9	7.9
26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7.9	7.9
27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7.9	7.9
28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7.9	7.9
29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7.9	7.9
30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7.9	7.9
31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7.9	7.9
MONTH	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER					
1	7.9	7.9	7.7	7.5	---	---	7.7	7.5	8.0	7.7	8.0	7.8	---	---	---	---
2	8.0	7.9	7.7	7.5	---	---	7.7	7.5	7.9	7.7	8.0	7.8	---	---	---	---
3	7.9	7.8	7.7	7.6	7.6	7.5	7.8	7.5	7.9	7.7	8.0	7.8	---	---	---	---
4	7.9	7.8	7.7	7.5	7.6	7.5	7.8	7.6	8.0	7.7	8.0	7.8	---	---	---	---
5	7.9	7.8	7.7	7.5	7.7	7.5	7.8	7.6	8.0	7.7	8.0	7.8	---	---	---	---
6	7.9	7.8	7.7	7.5	7.6	7.5	7.8	7.6	8.0	7.7	8.0	7.8	---	---	---	---
7	---	---	7.6	7.5	7.6	7.5	7.8	7.4	8.0	7.7	7.9	7.7	---	---	---	---
8	---	---	7.7	7.5	7.6	7.5	7.7	7.4	8.0	7.7	7.9	7.7	---	---	---	---
9	---	---	7.6	7.5	7.6	7.5	7.7	7.4	8.0	7.8	8.0	7.7	---	---	---	---
10	---	---	7.6	7.5	7.7	7.5	7.7	7.4	8.0	7.7	7.9	7.8	---	---	---	---
11	---	---	7.8	7.5	7.6	7.4	7.8	7.5	8.0	7.8	7.9	7.8	---	---	---	---
12	---	---	7.8	7.7	7.5	7.4	7.8	7.5	7.9	7.8	7.8	7.8	---	---	---	---
13	---	---	7.9	7.7	7.6	7.4	7.8	7.5	7.9	7.7	7.9	7.8	---	---	---	---
14	---	---	7.9	7.6	7.6	7.4	7.8	7.5	7.9	7.7	7.9	7.8	---	---	---	---
15	---	---	7.9	7.6	7.6	7.4	7.8	7.5	7.9	7.7	7.9	7.8	---	---	---	---
16	7.8	7.7	7.7	7.5	7.5	7.3	7.8	7.5	7.9	7.7	7.9	7.8	---	---	---	---
17	7.8	7.6	7.7	7.5	7.5	7.3	7.8	7.5	7.9	7.7	7.9	7.8	---	---	---	---
18	7.8	7.6	7.7	7.6	7.4	7.3	7.8	7.5	7.9	7.7	7.9	7.8	---	---	---	---
19	7.8	7.8	7.6	7.5	7.5	7.2	7.8	7.5	7.8	7.5	7.9	7.8	---	---	---	---
20	7.9	7.8	7.6	7.3	7.5	7.2	7.8	7.5	7.9	7.7	7.8	7.7	---	---	---	---
21	7.8	7.8	7.6	7.3	7.5	7.2	7.8	7.5	7.9	7.7	7.9	7.7	---	---	---	---
22	7.9	7.8	7.5	7.3	7.5	7.2	7.9	7.5	7.9	7.7	7.9	7.7	---	---	---	---
23	7.9	7.7	7.5	7.3	7.4	7.2	7.8	7.6	7.9	7.7	7.9	7.7	---	---	---	---
24	7.9	7.7	7.7	7.5	7.5	7.3	7.8	7.6	7.9	7.7	7.8	7.7	---	---	---	---
25	7.9	7.7	7.9	7.7	7.5	7.3	7.9	7.6	7.9	7.7	7.8	7.7	---	---	---	---
26	7.9	7.7	7.9	7.7	7.5	7.3	7.8	7.6	7.9	7.7	7.8	7.7	---	---	---	---
27	7.8	7.8	7.7	7.6	7.6	7.4	8.0	7.6	7.9	7.7	7.9	7.7	---	---	---	---
28	---	---	7.8	7.6	7.6	7.4	8.0	7.7	7.9	7.7	7.8	7.7	---	---	---	---
29	7.7	7.5	7.7	7.6	7.7	7.5	7.9	7.7	7.9	7.8	7.8	7.7	---	---	---	---
30	7.7	7.5	7.6	7.6	7.7	7.5	7.9	7.7	7.9	7.7	---	---	---	---	---	---
31	---	---	---	---	---	---	7.9	7.7	8.0	7.8	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	8.0	7.5	---	---	---	---	---	---

06279795 CROW CREEK AT MOUTH, AT PAHASKA, WY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.9	4.2	5.4	---	---	---	---	---	---	---	---	---
2	7.0	4.2	5.4	---	---	---	---	---	---	---	---	---
3	6.7	3.2	4.9	---	---	---	---	---	---	---	---	---
4	6.2	3.3	4.9	---	---	---	---	---	---	---	---	---
5	6.1	3.0	4.6	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	1.7	0.0	0.7	5.3	0.1	2.3
2	---	---	---	---	---	---	2.4	1.1	1.7	5.7	0.1	2.6
3	---	---	---	---	---	---	2.4	1.2	1.9	5.9	1.4	3.5
4	---	---	---	---	---	---	2.5	1.8	2.1	6.1	2.6	4.0
5	---	---	---	---	---	---	2.4	1.8	2.1	6.0	3.0	4.2
6	---	---	---	---	---	---	2.9	0.5	1.7	7.0	2.2	4.0
7	---	---	---	---	---	---	---	1.3	---	5.0	2.3	3.6
8	---	---	---	---	---	---	---	---	---	6.9	3.0	4.4
9	---	---	---	---	---	---	---	---	---	6.0	3.1	4.1
10	---	---	---	---	---	---	---	---	---	4.8	2.9	3.7
11	---	---	---	---	---	---	---	---	---	4.3	2.0	3.1
12	---	---	---	---	---	---	---	---	---	4.2	1.6	2.7
13	---	---	---	---	---	---	---	---	---	7.0	1.8	4.0
14	---	---	---	---	---	---	---	1.2	---	6.9	2.6	4.5
15	---	---	---	---	---	---	3.4	---	---	7.5	2.1	4.5
16	---	---	---	---	---	---	4.2	0.4	2.4	5.3	3.2	4.2
17	---	---	---	1.4	0.7	1.0	4.5	1.1	2.9	3.9	2.6	3.1
18	---	---	---	0.9	0.0	0.3	3.6	1.6	2.6	7.2	2.5	4.0
19	---	---	---	1.8	0.8	1.2	2.9	1.8	2.3	5.0	3.2	4.0
20	---	---	---	2.0	1.4	1.7	4.5	1.0	2.4	7.2	2.6	4.1
21	---	---	---	2.0	1.5	1.7	3.5	1.8	2.5	6.9	2.8	4.3
22	---	---	---	2.0	0.8	1.3	5.6	1.6	3.4	8.3	2.4	4.6
23	---	---	---	1.9	1.4	1.8	6.3	1.7	3.6	7.7	3.5	4.9
24	---	---	---	1.4	0.1	0.6	5.9	1.7	3.3	7.3	2.5	4.2
25	---	---	---	1.2	0.2	0.6	6.4	1.1	3.1	6.0	1.9	3.7
26	---	---	---	1.2	0.1	0.6	5.1	1.0	2.9	7.6	1.8	4.2
27	---	---	---	1.7	0.9	1.2	3.0	0.6	1.8	8.3	2.0	4.5
28	---	---	---	2.1	1.5	1.8	4.1	0.0	1.5	8.6	2.5	5.0
29	---	---	---	1.8	0.6	1.0	3.8	0.1	1.6	6.0	3.3	4.5
30	---	---	---	1.1	0.5	0.8	4.3	0.1	1.9	6.2	3.3	4.3
31	---	---	---	0.8	0.0	0.3	---	---	---	---	2.8	---
MONTH	---	---	---	---	---	---	---	---	---	8.6	0.1	4.0

YELLOWSTONE RIVER BASIN

06279795 CROW CREEK AT MOUTH, AT PAHASKA, WY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	11.2	4.3	7.1	12.9	7.0	10	9.6	4.2	7.0
2	5.2	---	---	10.2	4.7	7.0	12.4	8.0	10.1	10.1	4.5	7.4
3	6.2	3.1	4.2	10.0	4.2	6.8	11.1	7.6	9.4	10.3	5.5	8.1
4	6.7	3.6	4.8	10.4	4.0	6.8	11.9	6.3	9.4	10.7	6.0	8.4
5	8.1	3.0	5.2	11.6	4.1	7.3	13.3	6.9	10.1	9.5	5.5	7.8
6	5.9	3.3	4.7	12.3	4.7	8.1	13.0	7.2	10.2	9.9	4.8	7.4
7	4.4	2.5	3.2	12.5	5.4	8.5	12.9	7.4	10.3	10.1	4.8	7.5
8	5.4	2.4	3.6	12.9	5.9	9.0	12.7	7.3	10.1	10.3	5.2	7.9
9	5.3	2.1	3.5	12.5	5.6	8.8	13.2	7.8	10.6	9.9	6.2	8.3
10	6.8	2.4	4.2	9.7	6.7	7.9	11.8	8.7	10.4	8.8	6.2	7.5
11	7.8	2.6	4.9	12.7	5.7	8.6	12.5	7.3	9.7	7.2	4.9	6.0
12	5.4	3.8	4.5	13.4	5.4	9.1	10.8	6.6	8.8	5.6	2.4	4.2
13	7.3	2.8	4.7	13.7	6.3	9.7	10.1	6.8	8.3	6.4	3.2	4.7
14	10.1	2.6	6.0	13.9	6.8	10	11.4	6.5	8.7	7.0	2.9	4.7
15	9.8	4.1	6.6	13.9	6.2	9.8	12.0	5.8	9.0	7.2	2.9	5.0
16	8.9	3.8	6.1	13.9	7.2	10.3	10.5	6.6	8.8	7.7	3.3	5.5
17	10.7	4.1	6.6	12.7	6.6	9.6	11.2	8.0	9.5	6.4	4.0	5.2
18	8.1	4.0	5.6	13.2	5.4	9.2	9.5	7.4	8.5	6.4	3.7	5.0
19	10.5	3.5	6.3	13.7	5.9	9.7	11.2	6.1	8.3	6.6	2.8	4.7
20	10.5	3.9	6.6	13.9	6.6	10.1	11.8	5.6	8.7	7.6	3.2	5.4
21	9.5	4.1	6.3	14.2	6.7	10.4	12.0	6.2	9.1	8.0	6.2	7.0
22	10.3	4.3	6.8	13.4	7.8	10.5	10.5	7.1	9.0	7.4	4.3	6.1
23	8.6	4.4	6.3	13.5	7.9	10.6	11.5	7.7	9.6	6.9	5.2	6.0
24	9.5	4.4	6.4	13.6	6.6	10.1	10.4	7.6	9.0	6.2	4.4	5.4
25	9.6	4.2	6.5	11.4	7.2	9.3	9.0	4.8	7.1	5.4	3.9	4.8
26	6.6	4.7	5.5	12.2	5.7	8.8	10.4	4.4	7.5	6.2	3.5	4.8
27	8.3	3.9	5.9	13.1	5.2	9.1	10.8	5.2	8.1	6.7	3.7	5.2
28	7.9	4.2	5.9	13.2	5.8	9.6	11.2	5.6	8.5	5.9	3.2	4.7
29	7.9	4.7	5.9	10.8	7.1	9.1	11.5	5.7	8.7	6.2	2.3	4.2
30	8.9	4.8	6.5	10.4	7.2	8.9	9.6	5.9	7.8	---	3.2	---
31	---	---	---	11.4	6.7	9.2	9.2	3.6	6.3	---	---	---
MONTH	---	---	---	14.2	4.0	9.0	13.3	3.6	9.0	---	2.3	---

06279795 CROW CREEK AT MOUTH, AT PAHASKA, WY—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)				Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
				Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)			
APRIL									
1	6.1	3	0.06	23	15	0.95	94	35	9.0
2	6.3	4	0.06	24	13	0.81	79	24	5.2
3	6.5	4	0.07	26	10	0.69	69	21	3.9
4	6.5	4	0.07	30	11	0.88	68	17	3.1
5	6.3	4	0.07	35	16	1.5	69	16	2.9
6	6.5	7	0.14	41	22	2.5	80	20	4.3
7	e7.5	14	e0.28	44	28	3.3	83	15	3.3
8	e8.5	10	e0.23	44	24	2.9	77	14	3.0
9	e8.0	7	e0.15	47	26	3.4	72	10	1.9
10	e7.5	6	e0.11	49	26	3.4	66	12	2.1
11	e7.5	10	e0.20	47	21	2.7	61	21	3.4
12	e8.0	10	e0.22	43	15	1.7	60	e23	e3.9
13	e9.0	11	e0.27	39	16	1.7	57	e18	e2.8
14	e12	7	e0.23	41	18	2.0	58	e16	e2.5
15	e11	7	e0.21	48	70	9.9	67	e32	e6.7
16	12	12	0.40	63	162	29	83	e55	e12
17	16	19	0.87	68	135	25	93	78	20
18	19	24	1.3	60	84	14	97	91	24
19	18	16	0.79	107	981	312	97	68	18
20	17	12	0.58	135	442	173	92	86	22
21	17	11	0.48	162	463	205	105	129	37
22	16	12	0.52	145	269	110	128	128	44
23	17	17	0.87	156	285	122	133	122	44
24	25	28	1.9	151	172	72	119	84	27
25	34	33	3.1	139	130	49	107	51	15
26	34	35	3.3	119	83	27	95	35	9.1
27	33	21	1.9	103	56	16	82	36	8.0
28	30	21	1.7	109	54	17	79	23	4.9
29	27	19	1.4	107	43	12	77	20	4.2
30	25	15	0.99	105	37	10	74	22	4.4
31	---	---	---	92	41	10	---	---	---
TOTAL	457.2	---	22.47	2,402	---	1,241.33	2,521	---	351.6
JULY									
AUGUST									
SEPTEMBER									
1	69	18	3.3	21	7	0.39	13	3	0.11
2	64	11	2.0	23	10	0.62	13	3	0.11
3	60	11	1.8	23	10	0.66	13	3	0.10
4	56	10	1.5	20	5	0.27	12	4	0.13
5	53	11	1.6	19	4	0.22	12	3	0.12
6	52	12	1.7	18	5	0.27	12	3	0.11
7	51	11	1.5	18	6	0.27	12	3	0.10
8	50	10	1.3	17	5	0.23	12	4	0.12
9	48	10	1.2	17	6	0.26	12	5	0.17
10	47	10	1.3	17	6	0.28	13	6	0.21
11	46	10	1.2	17	5	0.22	12	5	0.15
12	44	10	1.2	17	4	0.20	14	6	0.22
13	42	11	1.2	16	3	0.15	13	8	0.29
14	41	9	1.1	16	3	0.14	13	5	0.17
15	41	9	0.98	16	4	0.19	12	3	0.10
16	45	7	0.90	15	5	0.20	11	2	0.06
17	42	8	0.88	16	6	0.25	12	3	0.10
18	38	7	0.71	21	14	0.87	12	3	0.08
19	36	6	0.58	31	32	2.8	11	3	0.08
20	34	5	0.46	18	10	0.47	11	3	0.09
21	33	7	0.57	16	6	0.28	12	8	0.26
22	32	7	0.62	16	5	0.21	11	4	0.12
23	30	16	1.3	16	5	0.22	13	5	0.18
24	27	10	0.77	15	6	0.24	15	7	0.29
25	26	9	0.61	15	5	0.20	14	e7	e0.26
26	25	7	0.50	15	5	0.20	13	e5	e0.17
27	23	5	0.34	14	5	0.19	12	e5	e0.16
28	23	6	0.37	14	5	0.17	12	e5	e0.16
29	23	9	0.55	14	3	0.10	11	e3	e0.10
30	22	7	0.40	14	e3	e0.11	e11	1	e0.02
31	22	6	0.38	14	3	0.12	---	---	---
TOTAL	1,245	---	32.82	539	---	11.00	369	---	4.34

06279940 NORTH FORK SHOSHONE RIVER AT WAPITI, WY

LOCATION.--Lat 44°28'10", long 109°25'49" (NAD 27), in SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.19, T.52 N., R.104 W., Park County, Hydrologic Unit 10080012, on left bank 1,000 ft downstream from bridge on U.S. Highway 14-20, 0.3 mi upstream from Jim Creek, and 0.3 mi downstream from Wapiti.

DRAINAGE AREA.--699 mi².

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,580 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversion for irrigation of about 1,500 acres upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 9, 1981, at station 06280000 North Fork Shoshone River near Wapiti, 4.2 mi downstream, reached a discharge of 20,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	654	322	e200	173	159	169	149	448	2,050	2,050	598	295
2	590	333	e250	169	145	160	168	457	1,830	2,180	567	286
3	560	388	e290	161	156	159	207	454	1,580	2,090	598	281
4	542	381	e250	e170	162	171	202	501	1,490	1,760	522	276
5	522	394	215	e150	169	174	191	612	1,500	1,660	506	271
6	502	391	207	e135	148	186	204	922	1,920	1,640	485	263
7	486	380	241	e150	148	190	354	1,110	1,870	1,650	478	261
8	478	386	238	e170	143	181	450	991	1,680	1,660	482	260
9	458	406	240	e180	154	189	306	1,060	1,540	1,580	476	261
10	448	435	249	e185	e135	219	255	1,300	1,410	1,480	438	268
11	435	391	256	e170	e130	207	228	1,330	1,320	1,390	469	278
12	425	350	239	e160	e150	213	247	1,130	1,450	1,270	445	307
13	425	326	174	e150	e160	169	313	1,090	1,350	1,220	424	351
14	405	322	215	e150	e150	162	406	1,120	1,280	1,220	431	350
15	405	296	229	e145	e125	176	287	1,330	1,720	1,100	390	312
16	439	285	184	e140	e105	180	307	1,700	2,510	1,040	349	306
17	407	340	179	e170	e120	171	449	2,100	3,000	1,040	349	296
18	398	285	196	194	e140	158	565	1,510	3,610	866	650	301
19	380	311	217	191	e150	172	505	2,920	3,460	819	1,530	289
20	403	263	194	179	161	167	428	4,160	3,770	862	616	287
21	434	193	172	173	153	165	420	5,520	3,770	826	485	317
22	416	232	150	164	e140	165	396	4,460	4,160	791	459	329
23	396	319	148	164	135	162	501	4,930	4,290	876	442	365
24	406	282	130	168	138	156	700	4,700	3,900	784	405	877
25	353	287	211	e160	150	153	800	3,600	3,420	727	379	914
26	396	269	204	e170	156	158	839	2,810	2,930	690	355	666
27	414	238	203	e170	159	159	706	2,610	2,330	624	325	584
28	437	240	201	e175	159	159	584	2,640	2,400	592	313	507
29	429	e140	190	161	---	161	549	2,590	2,150	575	303	458
30	415	e135	187	161	---	153	515	2,210	2,090	562	296	433
31	415	---	179	147	---	141	---	1,990	---	592	302	---
TOTAL	13,873	9,320	6,438	5,105	4,100	5,305	12,231	64,305	71,780	36,216	14,867	11,249
MEAN	448	311	208	165	146	171	408	2,074	2,393	1,168	480	375
MAX	654	435	290	194	169	219	839	5,520	4,290	2,180	1,530	914
MIN	353	135	130	135	105	141	149	448	1,280	562	296	260
AC-FT	27,520	18,490	12,770	10,130	8,130	10,520	24,260	127,500	142,400	71,830	29,490	22,310

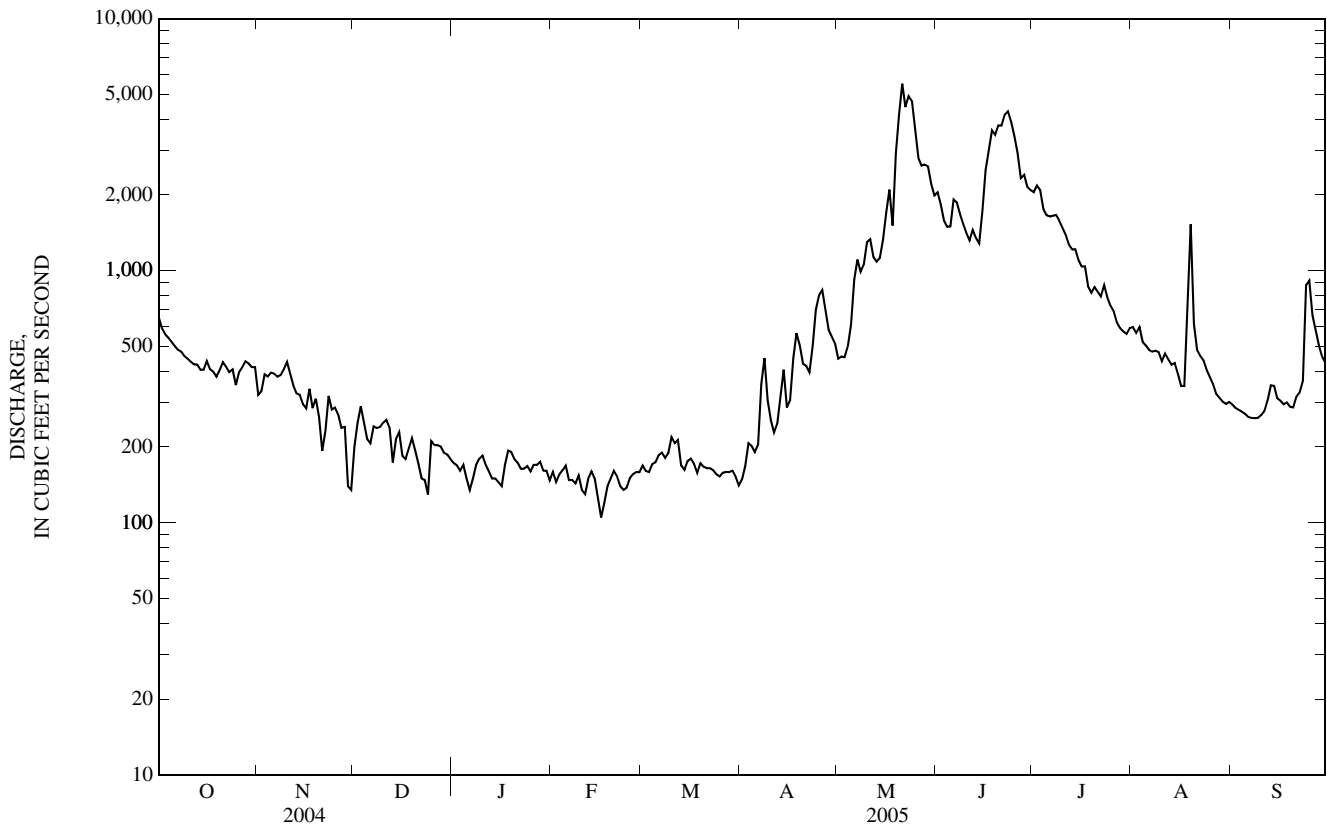
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2005, BY WATER YEAR (WY)

MEAN	262	207	159	143	140	200	517	1,999	3,381	1,756	559	341
MAX	448	311	283	199	184	294	792	3,459	6,251	3,130	1,015	640
(WY)	(2005)	(2005)	(1996)	(1997)	(1997)	(1997)	(1990)	(1997)	(1997)	(1996)	(1997)	(2004)
MIN	183	139	124	107	98.6	114	282	1,040	1,506	595	249	170
(WY)	(2002)	(2003)	(2003)	(2001)	(2001)	(2002)	(1993)	(2004)	(2001)	(1994)	(1994)	(1994)

06279940 NORTH FORK SHOSHONE RIVER AT WAPITI, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1990 - 2005	
ANNUAL TOTAL	229,163		254,789		--	
ANNUAL MEAN	626		698		807	
HIGHEST ANNUAL MEAN	--		--		1,324	1997
LOWEST ANNUAL MEAN	--		--		502	2001
HIGHEST DAILY MEAN	3,720	Jun 10	5,520	May 21	8,940	Jun 10, 1997
LOWEST DAILY MEAN	96	Feb 13	105	Feb 16	60	Dec 25, 2002
ANNUAL SEVEN-DAY MINIMUM	102	Feb 8	134	Feb 11	81	Dec 19, 1996
MAXIMUM PEAK FLOW	--		6,710	May 21	11,200	May 30, 2003
MAXIMUM PEAK STAGE	--		7.32	May 21	9.54 ^a	Jun 13, 1991
ANNUAL RUNOFF (AC-FT)	454,500		505,400		584,500	
10 PERCENT EXCEEDS	1,460		1,790		2,400	
50 PERCENT EXCEEDS	432		350		267	
90 PERCENT EXCEEDS	116		155		130	

a Discharge 9,640 ft³/s.
 e Estimated.



06280300 SOUTH FORK SHOSHONE RIVER NEAR VALLEY, WY

LOCATION.--Lat 44°12'30", long 109°33'15" (NAD 27), in NE¼ NE¼ sec.24, T.49 N., R.106 W., Park County, Hydrologic Unit 10080013, Shoshone National Forest, on left bridge abutment of U.S. Forest Service bridge, 0.4 mi downstream from Boulder Creek, 3.2 mi northeast of Valley, and 34 mi southwest of Cody.

DRAINAGE AREA.--297 mi².

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

REVISED RECORDS.--WRD WY 1974: 1963.

GAGE.--Water-stage recorder. Elevation of gage is 6,200 ft above NGVD of 1929, from topographic map. Prior to November 22, 1961, at site 75 ft upstream from station at same datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records fair. Diversions for irrigation of about 450 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	214	123	58	91	88	82	69	154	883	1,250	380	192
2	199	120	56	87	84	79	74	159	742	1,440	350	187
3	192	130	56	86	87	79	78	157	649	1,320	324	183
4	191	132	57	88	88	80	78	164	643	1,090	310	180
5	189	135	61	80	88	78	77	201	664	1,040	301	177
6	182	137	60	79	81	77	81	281	917	1,110	282	175
7	183	133	56	69	86	78	107	298	868	1,110	270	171
8	180	136	58	72	78	78	124	247	729	1,150	270	167
9	176	140	67	76	79	77	104	296	642	1,060	277	166
10	174	138	80	83	69	80	97	361	565	943	276	171
11	176	133	94	86	68	80	90	432	521	948	337	176
12	173	127	96	82	80	83	94	334	581	865	282	190
13	177	120	87	79	80	79	105	318	510	863	273	194
14	171	117	90	77	82	76	111	421	513	894	276	184
15	172	111	96	75	74	76	98	603	876	797	247	175
16	174	108	92	73	67	77	106	829	1,490	772	233	169
17	166	120	90	80	58	78	138	1,030	1,910	777	240	169
18	167	112	93	87	59	75	161	694	2,290	623	616	167
19	160	115	97	93	66	77	146	1,240	2,170	570	542	160
20	170	103	96	93	71	76	133	2,230	2,500	542	354	156
21	178	90	90	92	73	75	126	2,330	2,660	505	298	159
22	168	90	80	89	73	75	126	1,750	2,940	467	283	167
23	167	101	76	93	73	76	164	2,050	3,050	529	264	198
24	166	99	65	91	73	76	199	1,870	2,760	482	250	343
25	142	104	74	89	74	75	204	1,430	2,170	446	239	263
26	152	102	77	93	78	74	237	1,140	1,810	414	225	208
27	154	95	82	95	79	74	219	1,070	1,410	374	215	200
28	160	92	90	96	79	75	174	1,120	1,340	354	209	188
29	159	68	93	89	---	75	165	1,130	1,250	347	201	178
30	157	56	94	91	---	72	167	894	1,060	344	197	174
31	157	---	93	87	---	71	---	784	---	431	195	---
TOTAL	5,346	3,387	2,454	2,641	2,135	2,383	3,852	26,017	41,113	23,857	9,016	5,587
MEAN	172	113	79.2	85.2	76.2	76.9	128	839	1,370	770	291	186
MAX	214	140	97	96	88	83	237	2,330	3,050	1,440	616	343
MIN	142	56	56	69	58	71	69	154	510	344	195	156
AC-FT	10,600	6,720	4,870	5,240	4,230	4,730	7,640	51,600	81,550	47,320	17,880	11,080

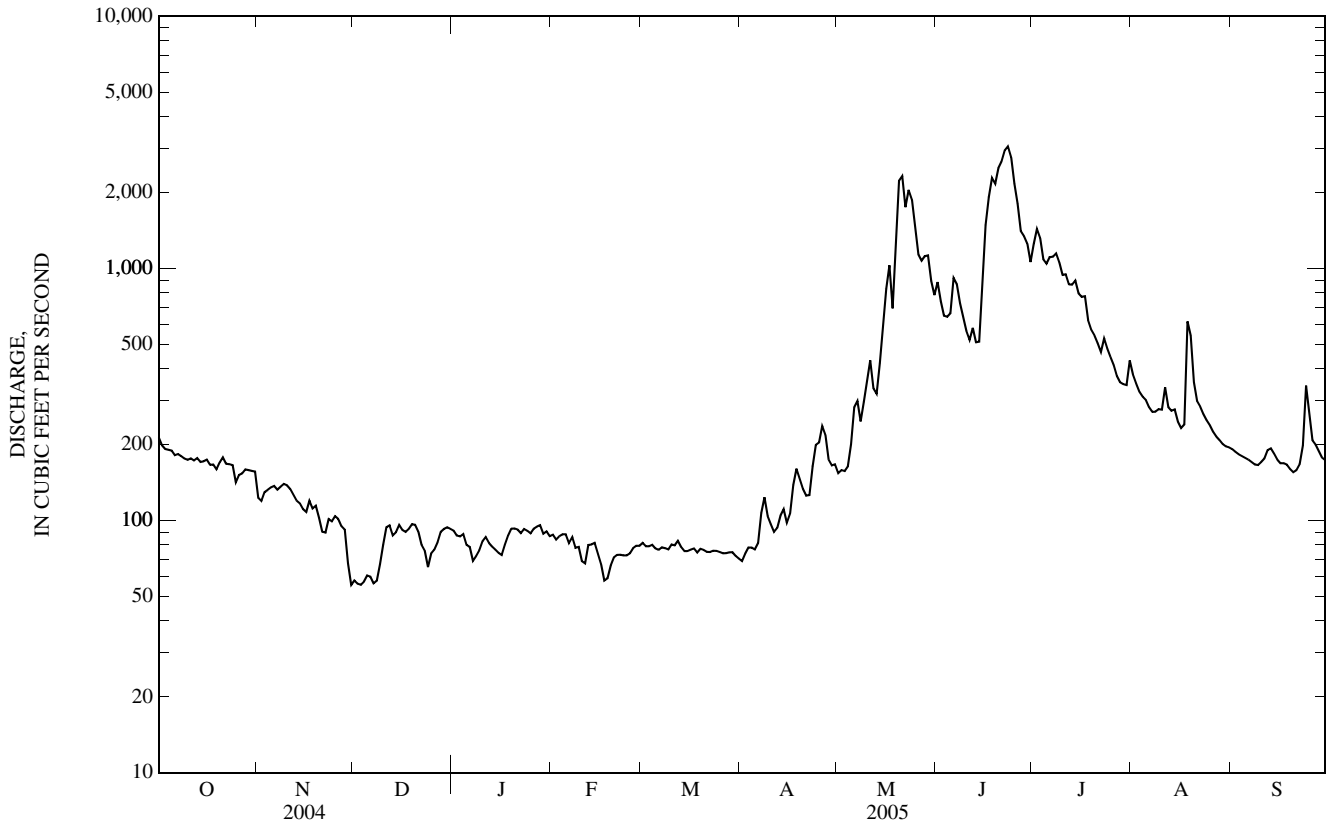
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2005, BY WATER YEAR (WY)

MEAN	154	107	82.5	76.6	72.5	79.7	163	741	1,696	1,090	367	210
MAX	244	147	109	100	93.8	128	341	1,387	2,920	2,287	834	341
(WY)	(1983)	(1985)	(1966)	(1997)	(1962)	(1986)	(1962)	(1958)	(1997)	(1975)	(1982)	(1982)
MIN	92.5	70.6	56.2	55.2	54.8	59.8	69.6	252	828	308	127	110
(WY)	(1989)	(1980)	(1989)	(1989)	(1989)	(1975)	(1970)	(1977)	(2001)	(1988)	(2001)	(1988)

06280300 SOUTH FORK SHOSHONE RIVER NEAR VALLEY, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1957 - 2005	
ANNUAL TOTAL	97,525		127,788		--	
ANNUAL MEAN	266		350		404	
HIGHEST ANNUAL MEAN	--		--		609 1997	
LOWEST ANNUAL MEAN	--		--		221 1977	
HIGHEST DAILY MEAN	1,790	Jun 10	3,050	Jun 23	6,100	Jun 9, 1981
LOWEST DAILY MEAN	56	Several days	56	Several days	31	Dec 21, 1998
ANNUAL SEVEN-DAY MINIMUM	58	Nov 30	58	Nov 30	40	Dec 18, 1990
MAXIMUM PEAK FLOW	--		3,840		10,000	
MAXIMUM PEAK STAGE	--		7.61		9.24 ^a	
ANNUAL RUNOFF (AC-FT)	193,400		253,500		292,800	
10 PERCENT EXCEEDS	662		981		1,220	
50 PERCENT EXCEEDS	168		159		138	
90 PERCENT EXCEEDS	66		75		67	

a From floodmarks.



06281000 SOUTH FORK SHOSHONE RIVER ABOVE BUFFALO BILL RESERVOIR, WY

LOCATION.--Lat 44°25'09", long 109°15'26" (NAD 27), in lot 5, SE¹/₄ NE¹/₄ SE¹/₄ sec. 5, T.51 N., R.103 W., Park County, Hydrologic Unit 10080013, on right bank at old diversion structure 0.2 miles downstream from Cody Canal diversion, 1 mile upstream from normal pool of Buffalo Bill Reservoir at elevation 5,364 ft, and 12.5 miles southwest of Cody.

DRAINAGE AREA.--585 mi².

PERIOD OF RECORD.--May to November 1903, May 1905 to September 1908, January 1921 to September 1926, October 1973 to current year (gage heights only June to September 1908). No winter records 1906, 1908, 1922. Published as "at Marquette" 1903, 1905-8, and as Shoshone River above Shoshone Reservoir 1921-26.

REVISED RECORDS.--WSP 1309: 1907.

GAGE.--Water-stage recorder. Elevation of gage is 5,410 ft above NGVD of 1929, from topographic map. April 26 to November 30, 1903, and May 1905 to May 30, 1908, nonrecording gages at sites within about 6.0 mi downstream from station at different datums. Prior to October 3, 1989, recording gage at site 1.1 mile downstream from station at different datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Diversions for irrigation of about 11,000 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	200	101	e160	e120	117	104	70	875	1,100	63	4.6
2	63	181	103	e150	121	116	107	66	751	1,320	18	4.5
3	60	205	113	e140	122	115	114	68	577	1,330	12	4.3
4	53	210	120	e150	124	115	118	78	557	1,010	11	4.3
5	44	210	126	e140	125	114	114	96	562	831	11	4.2
6	41	212	118	e140	118	112	106	154	797	821	10	4.2
7	38	210	118	e120	122	112	123	268	794	856	9.5	4.4
8	36	211	123	e125	121	115	156	e240	605	829	9.3	4.3
9	33	214	127	e130	118	112	151	e300	478	810	8.8	4.2
10	30	214	140	e135	113	115	135	e400	361	667	9.8	4.2
11	33	210	158	e130	109	116	123	e500	291	621	43	4.4
12	38	198	161	e140	114	121	105	459	319	565	13	5.0
13	45	191	149	e135	120	117	37	393	278	505	11	6.5
14	55	183	154	e130	123	113	18	466	231	546	12	4.7
15	53	174	161	e130	117	113	13	614	402	485	10	4.4
16	65	168	162	e125	102	116	11	810	1,070	404	8.8	4.3
17	63	175	159	e130	100	117	29	1,270	1,480	449	10	4.3
18	75	171	163	e135	101	114	72	772	2,230	289	109	4.3
19	85	171	166	e135	105	114	83	1,320	1,930	217	253	4.2
20	80	158	166	e140	109	116	71	2,480	2,360	177	91	4.0
21	78	125	140	e135	112	114	66	3,240	2,650	140	69	3.9
22	75	129	140	e140	109	113	72	2,090	2,720	81	48	4.2
23	70	149	122	e145	109	113	78	2,340	3,060	90	38	4.1
24	135	160	121	e140	108	114	114	2,290	2,930	97	18	7.2
25	170	165	139	e135	109	110	119	1,690	2,210	77	14	9.1
26	175	168	161	e135	111	110	127	1,250	1,840	57	13	3.8
27	208	148	164	e135	115	110	115	1,110	1,280	27	6.7	2.0
28	213	150	166	e140	116	112	93	1,080	1,220	14	4.9	2.1
29	214	113	176	e135	---	112	79	1,260	1,190	13	4.7	1.3
30	228	102	172	e130	---	109	80	955	964	13	4.6	8.8
31	230	---	e170	e125	---	106	---	820	---	43	4.6	---
TOTAL	2,852	5,275	4,459	4,215	3,193	3,523	2,733	28,949	37,012	14,484	948.7	365.3
MEAN	92.0	176	144	136	114	114	91.1	934	1,234	467	30.6	12.2
MAX	230	214	176	160	125	121	156	3,240	3,060	1,330	253	91
MIN	30	102	101	120	100	106	11	66	231	13	4.6	3.9
AC-FT	5,660	10,460	8,840	8,360	6,330	6,990	5,420	57,420	73,410	28,730	1,880	725

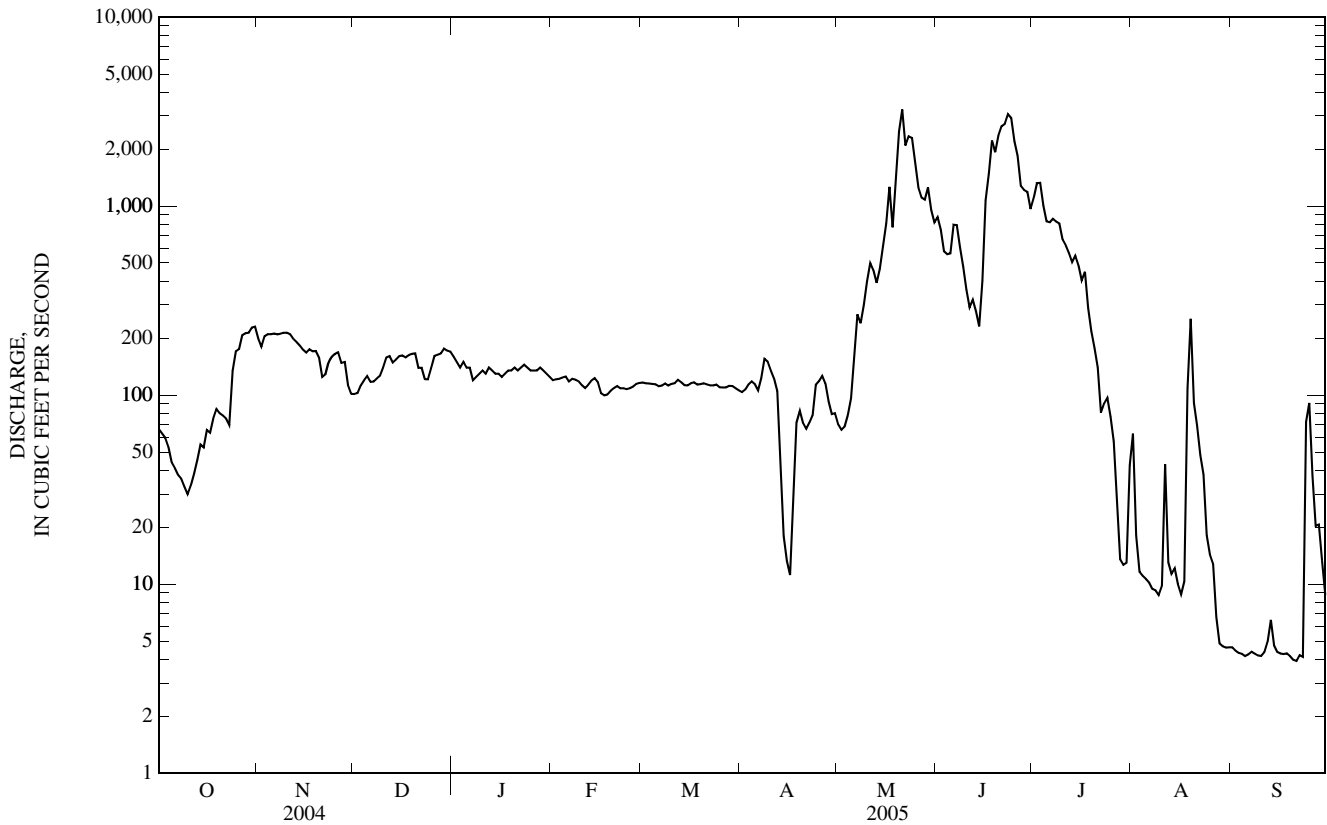
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 2005, BY WATER YEAR (WY)

MEAN	104	152	117	103	100	113	184	676	1,679	1,000	172	77.6
MAX	407	268	167	158	145	174	387	1,281	3,813	3,033	1,083	381
(WY)	(1924)	(1924)	(1998)	(1997)	(1998)	(1986)	(1925)	(1991)	(1997)	(1907)	(1907)	(1907)
MIN	18.0	71.2	54.5	51.9	72.9	76.8	52.9	74.9	495	18.9	0.74	0.04
(WY)	(1979)	(1980)	(1925)	(1995)	(1985)	(1924)	(2001)	(2004)	(1994)	(1994)	(2001)	(1992)

06281000 SOUTH FORK SHOSHONE RIVER ABOVE BUFFALO BILL RESERVOIR, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1903 - 2005	
ANNUAL TOTAL	66,489.74		108,009.0		--	
ANNUAL MEAN	182		296		364	
HIGHEST ANNUAL MEAN	--		--		705 1907	
LOWEST ANNUAL MEAN	--		--		148 2001	
HIGHEST DAILY MEAN	2,030	Jun 10	3,240	May 21	7,370	Jun 9, 1981
LOWEST DAILY MEAN	0.04	Sep 12	3.9	Sep 21	0.00	Several days, 1992-1993
ANNUAL SEVEN-DAY MINIMUM	1.0	Sep 10	4.1	Sep 17	0.00	Sep 15, 1992
MAXIMUM PEAK FLOW	--		4,180	May 21	9,960	Jun 9, 1981
MAXIMUM PEAK STAGE	--		7.90	May 21	9.41 ^a	Jun 9, 1981
ANNUAL RUNOFF (AC-FT)	131,900		214,200		264,000	
10 PERCENT EXCEEDS	453		824		1,100	
50 PERCENT EXCEEDS	105		121		120	
90 PERCENT EXCEEDS	3.3		10		17	

a Site and datum then in use.
 e Estimated.



06282000 SHOSHONE RIVER BELOW BUFFALO BILL RESERVOIR, WY

LOCATION.--Lat 44°31'00", long 109°05'50" (NAD 27), in lot 71, NE¹/₄ sec.3, T.52 N., R.102 W., Park County, Hydrologic Unit 10080014, on left bank 0.5 mi downstream from Trail Creek, 1.0 mi west of Cody city limits, and 5.5 mi downstream from Buffalo Bill Reservoir.

DRAINAGE AREA.--1,538 mi². Area at site prior to October 1, 1949, 1,502 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 4,900 ft above NGVD of 1929, from topographic map. Prior to October 1, 1949, at site 2.5 mi upstream from station at different datum. Bureau of Reclamation data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow completely regulated by Buffalo Bill Reservoir. Diversions upstream from station for irrigation of about 56,100 acres, of which about 37,900 acres are downstream from station. Diversion, 2.1 mi upstream, to Heart Mountain Canal began in 1943.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood since construction of Buffalo Bill Reservoir in 1909, 18,700 ft³/s, June 15, 1918, by computation of flow over Corbett Dam, 10 mi downstream.

COOPERATION.--Station operated and data provided by Bureau of Reclamation from January 2005; record computed and reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	532	234	233	237	249	261	250	498	1,830	2,180	1,180	1,080
2	531	236	233	239	248	261	248	494	1,830	2,520	1,140	1,080
3	536	233	235	239	247	261	247	618	1,840	3,400	1,150	1,080
4	487	226	236	239	248	261	247	703	1,860	3,130	1,110	1,070
5	471	224	239	241	249	260	246	758	1,850	2,140	1,110	1,070
6	464	224	239	239	253	259	246	766	1,840	1,750	1,140	987
7	460	226	243	238	253	260	243	730	1,820	1,580	1,140	954
8	470	226	245	243	253	261	241	726	1,830	1,550	1,130	969
9	465	226	247	243	253	261	244	689	1,770	1,250	1,110	989
10	461	236	247	245	252	261	243	661	1,780	1,200	1,130	988
11	466	234	251	245	253	261	247	950	1,790	1,150	1,120	980
12	466	234	253	248	253	259	256	e890	1,790	1,110	1,120	981
13	468	231	255	250	253	258	235	411	1,570	1,110	1,130	978
14	461	231	256	251	254	258	264	410	1,290	1,100	1,130	975
15	462	229	255	250	250	260	497	410	1,280	1,140	1,120	976
16	463	229	255	250	246	261	511	415	1,250	1,170	1,060	912
17	455	224	257	250	246	e260	508	469	1,210	1,160	1,060	886
18	340	225	258	252	245	e250	624	482	1,670	1,120	1,070	893
19	227	219	260	252	244	250	539	482	1,740	1,130	1,070	893
20	201	219	264	248	244	250	e450	483	1,710	1,180	1,060	884
21	229	225	261	242	244	250	333	481	2,010	1,180	1,060	883
22	228	229	258	240	244	253	311	482	3,480	1,190	1,060	828
23	229	229	241	239	244	254	310	471	5,060	1,170	1,060	808
24	231	228	228	240	249	253	309	486	6,050	1,180	1,050	811
25	232	227	230	251	251	252	316	784	6,030	1,200	1,050	816
26	233	227	231	250	261	254	395	1,510	6,050	1,200	1,050	809
27	234	229	232	250	259	255	476	1,170	4,620	1,180	1,040	769
28	246	229	233	248	261	254	491	1,060	3,170	1,200	1,040	707
29	238	230	237	244	---	252	490	1,810	3,140	1,190	1,080	647
30	238	230	237	245	---	252	495	1,860	e2,690	1,190	1,080	e615
31	237	---	237	248	---	249	---	1,860	---	e1,190	1,080	---
TOTAL	11,461	6,849	7,586	7,596	7,006	7,951	10,512	24,019	75,850	45,140	33,930	27,318
MEAN	370	228	245	245	250	256	350	775	2,528	1,456	1,095	911
MAX	536	236	264	252	261	261	624	1,860	6,050	3,400	1,180	1,080
MIN	201	219	228	237	244	249	235	410	1,210	1,100	1,040	615
AC-FT	22,730	13,580	15,050	15,070	13,900	15,770	20,850	47,640	150,400	89,540	67,300	54,190

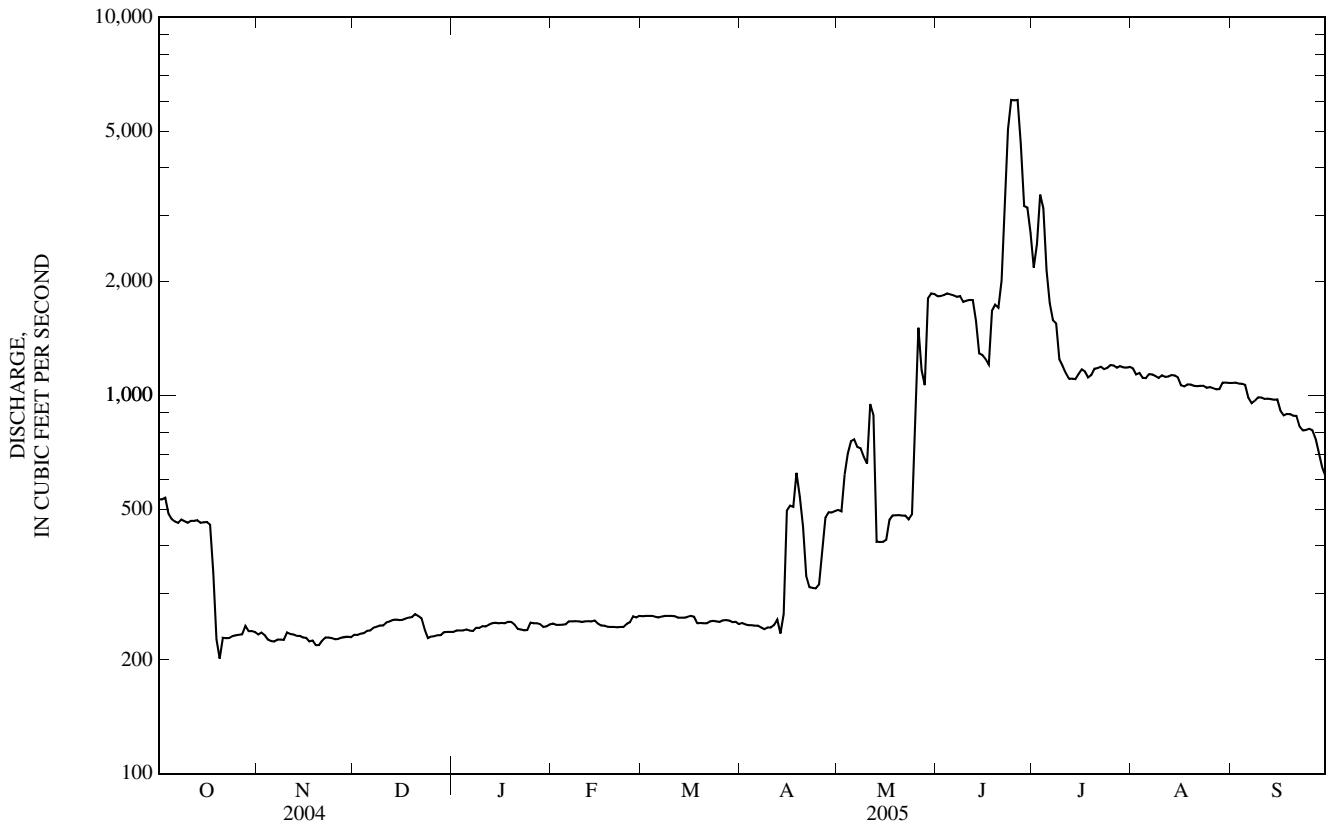
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2005, BY WATER YEAR (WY)*

MEAN	659	505	504	475	473	502	824	1,424	2,405	2,486	1,290	933
MAX	1,198	966	944	894	904	1,638	3,013	3,162	6,440	6,556	3,397	2,113
(WY)	(1953)	(1952)	(1951)	(1952)	(1997)	(1997)	(1997)	(1997)	(1943)	(1943)	(1958)	(1958)
MIN	187	128	111	115	65.4	72.5	113	775	807	1,006	685	582
(WY)	(1989)	(1989)	(1989)	(1989)	(1959)	(1959)	(1959)	(2005)	(1992)	(2004)	(1977)	(1988)

06282000 SHOSHONE RIVER BELOW BUFFALO BILL RESERVOIR, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1943 - 2005*	
ANNUAL TOTAL	205,942		265,218		--	
ANNUAL MEAN	563		727		1,043 ^a	
HIGHEST ANNUAL MEAN	--		--		1,764 1943	
LOWEST ANNUAL MEAN	--		--		556 1988	
HIGHEST DAILY MEAN	1,180	May 3-10	6,050	Jun 24,26	15,100	Jun 9, 1981
LOWEST DAILY MEAN	153	Mar 2	201	Oct 20	59	Nov 19, 1933#
ANNUAL SEVEN-DAY MINIMUM	159	Feb 1	224	Nov 15	64	Jan 21, 1959
MAXIMUM PEAK FLOW	--		6,110	Jun 24	17,300	Jun 9, 1981#
MAXIMUM PEAK STAGE	--		8.01	Jun 24	11.57	Jun 9, 1981
ANNUAL RUNOFF (AC-FT)	408,500		526,100		755,500	
10 PERCENT EXCEEDS	1,050		1,560		1,820	
50 PERCENT EXCEEDS	462		333		827	
90 PERCENT EXCEEDS	162		233		248	

* For period of record following Heart Mountain Diversion, see REMARKS.
 # For period of record through 2005.
 a Average discharge (water years 1922-1942) prior to Heart Mountain Diversion 1,256 ft³/s.
 e Estimated.



06284500 BITTER CREEK NEAR GARLAND, WY

LOCATION.--Lat 44°45'13", long 108°35'29" (NAD 27), in SW¹/₄ SW¹/₄ SW¹/₄ sec.7, T.55 N., R.97 W., Big Horn County, Hydrologic Unit 10080014, 100 ft downstream from bridge on county road, 1.0 mi upstream from mouth, 4.0 mi southeast of Garland, and 5.0 mi southwest of Byron.

DRAINAGE AREA.--80.5 mi².

PERIOD OF RECORD.--Water years 1951-53, 1958-61, 1969 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1969 to September 1983.

WATER TEMPERATURES: July 1969 to September 1983.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)
NOV 17...	1540	35	664	--	--	8.6	1,290	9.0	8.5	<.04	4.21	.012	<.02
FEB 01...	1200	21	661	13.6	117	8.7	1,410	8.0	3.0	<.04	4.57	.021	E.01
JUN 16...	1025	388	653	10.3	118	8.0	533	28.0	14.5	<.04	1.24	E.004	.07
AUG 30...	1850	356	657	10.5	119	8.0	607	15.0	14.0	<.04	2.23	.008	.04

Date	E coli, modif. m-TEC, water, col/100 mL (90902)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)
NOV 17...	110	100
FEB 01...	24	E17
JUN 16...	290	300
AUG 30...	210	280

< -- Less than.

E -- Estimated value; for bacteria, estimated values are counts outside the acceptable range (non-ideal colony count).

YELLOWSTONE RIVER BASIN

06285100 SHOSHONE RIVER NEAR LOVELL, WY

LOCATION.--Lat 44°50'19", long 108°26'04" (NAD 27), in NW¼ NE¼ NE¼ sec.17, T.56 N., R.96 W., Big Horn County, Hydrologic Unit 10080014, on left bank 20 ft downstream from bridge on County Road 9 and 1.5 mi west of Lovell.

DRAINAGE AREA.--2,350 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Elevation of gage is 3,850 ft above NGVD of 1929, from topographic map. Prior to October 1, 1976, at site 500 ft downstream from station, at datum 2.00 ft higher. October 1, 1976 to September 30, 1980, at site 500 ft downstream from station at datum 1.00 ft higher. October 1, 1981 to November 13, 1986, at site 500 ft downstream from station at same datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow regulated by Buffalo Bill Reservoir. Natural flow of stream affected by storage reservoirs, power development, diversions upstream from station for irrigation of about 143,000 acres, of which about 8,000 acres are downstream from station, and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	529	361	e500	400	381	346	362	228	1,290	1,800	638	541
2	537	352	e490	397	380	351	352	228	1,250	1,590	579	580
3	507	443	e480	440	379	351	364	142	1,100	2,930	551	626
4	471	428	483	408	379	352	336	222	1,110	3,260	533	694
5	427	435	475	e390	377	351	312	328	1,160	2,270	515	802
6	396	468	474	e400	372	354	274	381	1,270	1,340	520	734
7	372	443	476	e410	370	357	259	392	1,410	901	545	556
8	375	439	478	e410	e360	367	252	1,190	1,940	711	546	496
9	373	430	475	e420	e370	371	349	543	1,900	429	461	520
10	344	410	473	e410	e370	377	312	655	1,890	241	493	576
11	354	422	474	e400	367	379	245	2,730	1,980	284	717	619
12	379	486	482	e400	362	378	239	2,170	2,030	243	620	755
13	375	544	475	e410	365	368	136	652	2,150	188	696	842
14	409	539	e470	e400	369	367	162	513	1,300	150	827	856
15	462	535	479	e380	361	363	292	523	1,170	135	801	866
16	519	518	476	e400	352	372	316	356	1,120	160	663	883
17	485	526	472	e400	353	375	384	377	913	200	574	797
18	557	523	461	e400	364	371	474	709	991	274	537	793
19	576	514	465	e400	354	363	709	442	1,420	198	675	818
20	586	509	466	e390	337	364	774	389	1,440	149	634	738
21	520	489	463	e390	331	372	788	377	1,300	158	673	752
22	483	506	460	e390	332	368	683	354	2,640	193	704	810
23	441	520	418	e390	329	361	924	331	4,130	256	609	768
24	425	528	e390	e390	329	341	605	285	5,390	241	527	935
25	417	510	e420	e390	328	359	358	265	5,670	341	478	1,080
26	394	507	e420	e390	333	366	229	1,120	5,820	474	522	1,040
27	376	496	e410	e390	340	370	194	1,080	5,690	521	525	1,010
28	363	489	e410	e390	342	370	360	634	3,110	500	517	981
29	644	e490	412	e390	---	366	191	914	2,970	504	556	856
30	478	e500	416	e380	---	365	204	1,360	2,480	503	502	722
31	381	---	411	e380	---	364	---	1,290	---	536	506	---
TOTAL	13,955	14,360	14,154	12,335	9,986	11,279	11,439	21,180	68,034	21,680	18,244	23,046
MEAN	450	479	457	398	357	364	381	683	2,268	699	589	768
MAX	644	544	500	440	381	379	924	2,730	5,820	3,260	827	1,080
MIN	344	352	390	380	328	341	136	142	913	135	461	496
AC-FT	27,680	28,480	28,070	24,470	19,810	22,370	22,690	42,010	134,900	43,000	36,190	45,710

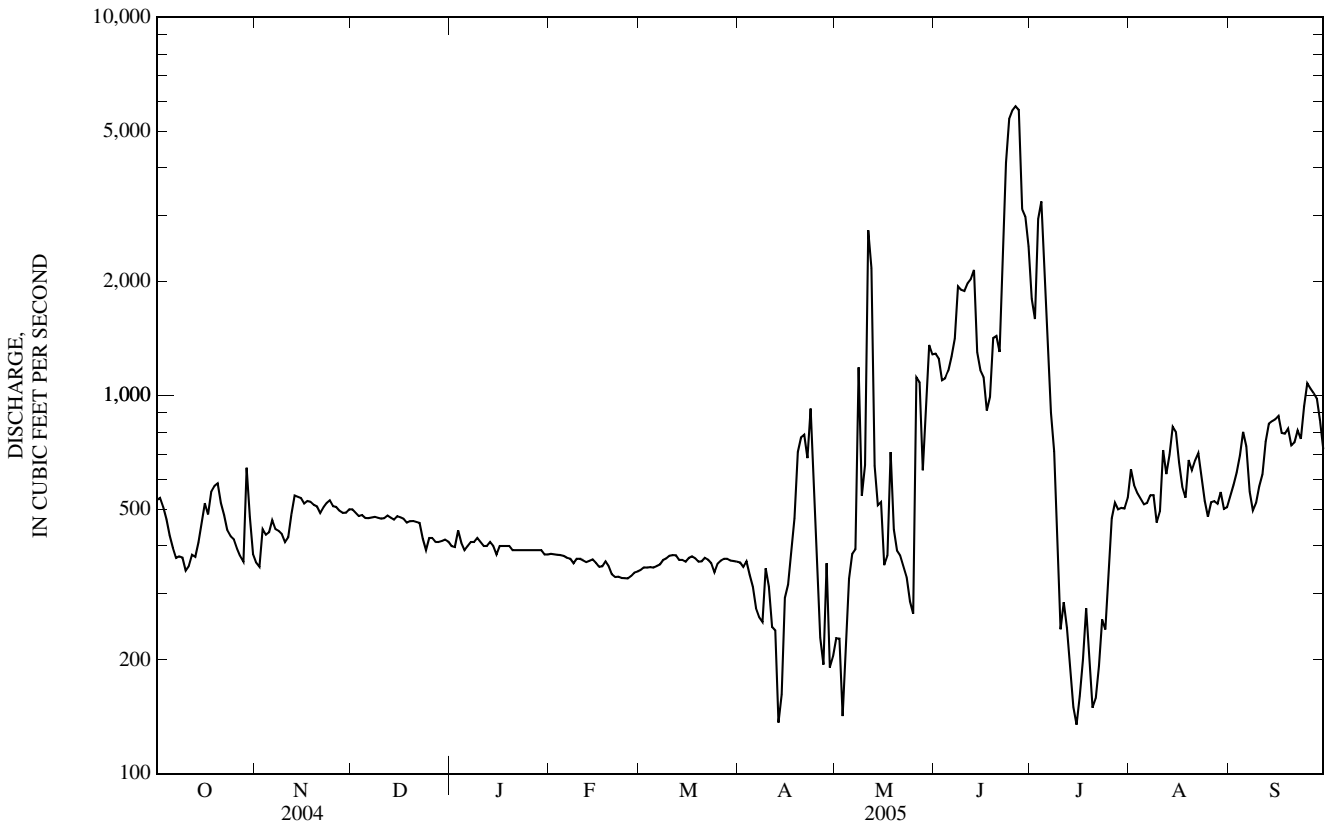
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2005, BY WATER YEAR (WY)

MEAN	743	693	626	560	580	648	764	849	1,834	1,653	715	762
MAX	1,251	1,146	1,168	1,065	1,139	1,951	3,353	2,925	4,935	4,686	1,305	1,354
(WY)	(1972)	(1969)	(1969)	(1973)	(1973)	(1997)	(1997)	(1996)	(1981)	(1982)	(1982)	(1991)
MIN	369	297	306	226	228	243	234	193	203	149	207	245
(WY)	(1989)	(1986)	(1995)	(1991)	(1989)	(1995)	(2004)	(1977)	(1977)	(1977)	(1977)	(1977)

06285100 SHOSHONE RIVER NEAR LOVELL, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1967 - 2005	
ANNUAL TOTAL	141,649		239,692		--	
ANNUAL MEAN	387		657		870	
HIGHEST ANNUAL MEAN	--		--		1,659	1997
LOWEST ANNUAL MEAN	--		--		356	2002
HIGHEST DAILY MEAN	726	Aug 27	5,820	Jun 26	15,200	Jun 10, 1981
LOWEST DAILY MEAN	101	Apr 9	135	Jul 15	27	May 31, 1977
ANNUAL SEVEN-DAY MINIMUM	165	Apr 8	181	Jul 14	48	May 30, 1977
MAXIMUM PEAK FLOW	--		6,100 ^a	Jun 27	16,400 ^b	Jun 10, 1981
MAXIMUM PEAK STAGE	--		10.49 ^c	Jan 7	11.27	Jun 13, 2001
ANNUAL RUNOFF (AC-FT)	281,000		475,400		630,000	
10 PERCENT EXCEEDS	536		1,140		1,390	
50 PERCENT EXCEEDS	380		460		640	
90 PERCENT EXCEEDS	260		323		310	

- a Gage height, 9.92 ft.
- b Gage height, 9.16 ft, site then in use, at present datum.
- c Backwater from ice.
- e Estimated.



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967-97, October 1999 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1966 to September 1983.

WATER TEMPERATURES: October 1966 to September 1983.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered, uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, filtered, mg/L as N (00608)	Nitrite + nitrate water, filtered, mg/L as N (00631)	Nitrite water, filtered, mg/L as N (00613)	Orthophosphate, water, filtered, mg/L as P (00671)
NOV 17...	1455	518	669	--	--	8.1	1,070	14.5	8.5	<.04	1.34	E.004	<.02
JAN 31...	1725	378	665	11.5	100	8.5	1,070	6.0	3.5	E.04	1.01	.011	<.02
JUN 16...	0745	1,170	659	8.6	99	8.0	557	19.5	15.0	<.04	.85	E.006	.03
AUG 30...	1440	539	659	10.8	127	8.5	704	15.0	16.0	<.04	1.53	.010	<.02

Date	E coli, modified, m-TEC, water, col/100 mL (90902)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)
NOV 17...	110	65
JAN 31...	28	22
JUN 16...	780	700
AUG 30...	300	340

< -- Less than.
E -- Estimated.

06287000 BIGHORN RIVER NEAR ST. XAVIER, MT

LOCATION.--Lat 45°19'00", long 107°55'05" (NAD 27), in NW¼ NW¼ NE¼ sec.16, T.6 S., R.31 E., Big Horn County, Hydrologic Unit 10080015, on right bank 800 ft downstream from Yellowtail Dam, 1,500 ft downstream from Lime Kiln Creek, 14 mi southwest of St. Xavier, and at river mile 83.9.

DRAINAGE AREA.--19,667 mi². Area at site used prior to April 16, 1963, 19,626 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 3,158.38 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to April 16, 1963, and June 13, 1964 to March 31, 1965, water-stage recorder at site 1.2 mi upstream from station at different datum. April 1, 1965 to July 31, 1966, water-stage recorder at site 1,300 ft downstream from station at present datum. Bureau of Reclamation data collection platform with satellite telemetry at station.

REMARKS.--Records fair. Figures of discharge given herein are sum of river flow and flow of Bighorn Canal. Some regulation by 14 reservoirs in Wyoming with combined capacity of 1,400,000 acre-ft and complete regulation by Bighorn Lake since November 3, 1965. Diversions for irrigation of about 375,000 acres upstream from station. Station operated and record provided by the Montana Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,390	1,540	1,670	1,520	1,560	1,590	1,470	1,460	1,920	6,910	2,750	2,720
2	1,460	1,520	1,670	1,510	1,570	1,490	1,490	1,470	2,470	6,920	2,760	2,720
3	1,460	1,550	1,680	1,540	1,580	1,500	1,480	1,470	2,560	6,950	2,770	2,700
4	1,450	1,560	1,680	1,550	1,590	1,480	1,480	1,460	2,540	6,920	2,750	2,700
5	1,440	1,550	1,690	1,560	1,500	1,480	1,470	1,460	2,540	6,950	2,750	2,670
6	1,400	1,540	1,710	1,570	1,500	1,480	1,480	1,460	2,570	6,940	2,710	2,600
7	1,430	1,550	1,710	1,580	1,510	1,480	1,500	1,460	2,680	6,920	2,700	2,570
8	1,490	1,560	1,720	1,580	1,520	1,490	1,500	1,460	2,800	6,970	2,670	2,570
9	1,480	1,560	1,720	1,590	1,530	1,480	1,500	1,460	3,300	6,890	2,660	2,560
10	1,470	1,570	1,730	1,600	1,530	1,480	1,500	1,460	3,800	6,850	2,620	2,540
11	1,470	1,570	1,730	1,610	1,530	1,480	1,490	1,470	4,260	6,490	2,520	2,530
12	1,460	1,580	1,740	1,620	1,530	1,490	1,500	1,470	4,310	5,410	2,450	2,490
13	1,440	1,580	1,740	1,630	1,530	1,480	1,500	1,460	4,340	4,410	2,450	2,470
14	1,440	1,600	1,740	1,640	1,540	1,490	1,580	1,460	4,380	3,790	2,430	2,440
15	1,440	1,590	1,750	1,470	1,540	1,490	1,520	1,460	4,390	3,200	2,430	2,410
16	1,440	1,590	1,750	1,480	1,550	1,480	1,480	1,460	4,400	2,800	2,540	2,380
17	1,440	1,600	1,760	1,480	1,550	1,490	1,480	1,460	4,480	2,780	2,710	2,370
18	1,430	1,600	1,760	1,490	1,540	1,490	1,480	1,460	4,560	2,750	2,830	2,360
19	1,420	1,600	1,770	1,490	1,560	1,490	1,460	1,450	4,640	2,740	2,790	2,310
20	1,420	1,630	1,770	1,510	1,550	1,490	1,480	1,450	4,660	2,720	2,750	2,320
21	1,410	1,630	1,790	1,510	1,560	1,490	1,490	1,450	4,630	2,700	2,730	2,480
22	1,410	1,630	1,800	1,540	1,570	1,490	1,500	1,450	5,140	2,680	2,710	2,720
23	1,400	1,640	1,790	1,530	1,570	1,490	1,500	1,450	5,660	2,860	2,690	2,730
24	1,400	1,630	1,790	1,540	1,570	1,490	1,500	1,450	6,300	2,840	2,800	2,720
25	1,460	1,640	1,810	1,540	1,570	1,490	1,470	1,440	7,050	2,830	2,790	2,730
26	1,490	1,640	1,820	1,530	1,580	1,490	1,480	1,440	7,070	2,860	2,760	2,690
27	1,500	1,650	1,770	1,530	1,590	1,480	1,430	1,450	7,110	2,840	2,740	2,630
28	1,500	1,650	1,670	1,550	1,590	1,480	1,490	1,440	7,200	2,820	2,720	2,570
29	1,510	1,660	1,490	1,560	---	1,480	1,470	1,440	7,290	2,800	2,720	2,530
30	1,530	1,660	1,500	1,560	---	1,480	1,470	1,450	6,940	2,780	2,690	2,500
31	1,530	---	1,510	1,570	---	1,480	---	1,910	---	2,760	2,720	---
TOTAL	45,010	47,870	53,230	47,980	43,410	46,160	44,640	45,590	135,990	137,080	83,110	76,730
MEAN	1,452	1,596	1,717	1,548	1,550	1,489	1,488	1,471	4,533	4,422	2,681	2,558
MAX	1,530	1,660	1,820	1,640	1,590	1,590	1,580	1,910	7,290	6,970	2,830	2,730
MIN	1,390	1,520	1,490	1,470	1,500	1,480	1,430	1,440	1,920	2,680	2,430	2,310
AC-FT	89,280	94,950	105,600	95,170	86,100	91,560	88,540	90,430	269,700	271,900	164,800	152,200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2005, BY WATER YEAR (WY)

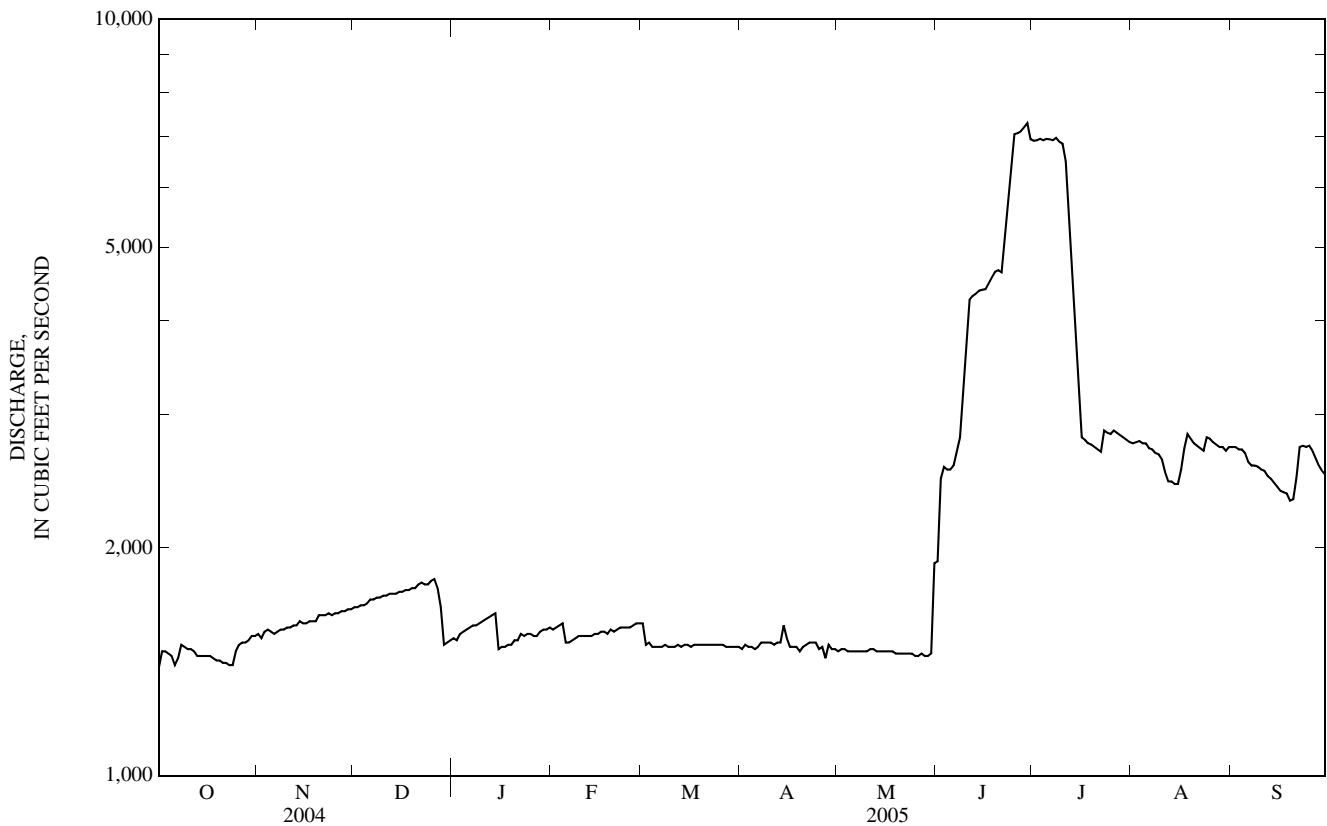
MEAN	2,890	2,849	2,673	2,546	2,609	2,850	2,835	3,735	6,871	5,398	2,844	2,688
MAX	5,142	5,151	4,999	5,267	4,384	4,809	6,675	8,744	17,900	18,890	6,784	4,544
(WY)	(1972)	(1983)	(1968)	(1968)	(1976)	(1976)	(1972)	(1947)	(1935)	(1967)	(1997)	(1973)
MIN	1,224	856	1,095	1,090	888	327	678	900	1,078	1,144	1,260	1,074
(WY)	(1978)	(1966)	(1935)	(1935)	(1936)	(1966)	(1966)	(1966)	(1966)	(1960)	(1966)	(1966)

YELLOWSTONE RIVER BASIN

06287000 BIGHORN RIVER NEAR ST. XAVIER, MT—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1935 - 2005	
ANNUAL TOTAL	591,340		806,800		--	
ANNUAL MEAN	1,616		2,210		3,400	
HIGHEST ANNUAL MEAN	--		--		5,059	1947
LOWEST ANNUAL MEAN	--		--		1,649	2002
HIGHEST DAILY MEAN	2,140	Jan 25	7,290	Jun 29	37,400	Jun 16, 1935
LOWEST DAILY MEAN	1,270	Sep 6	1,390	Oct 1	112	Apr 2, 1967
ANNUAL SEVEN-DAY MINIMUM	1,340	Sep 24	1,410	Oct 18	195	Mar 25, 1966
MAXIMUM PEAK FLOW	--		7,600	Jun 29	37,400	Jun 16, 1935
MAXIMUM PEAK STAGE	--		62.58	Jun 29	--	
ANNUAL RUNOFF (AC-FT)	1,173,000		1,600,000		2,463,000	
10 PERCENT EXCEEDS	1,800		3,240		5,700	
50 PERCENT EXCEEDS	1,600		1,580		2,770	
90 PERCENT EXCEEDS	1,440		1,460		1,500	
SUMMARY STATISTICS	WATER YEARS 1935- 1961*				WATER YEARS 1967 - 2005**	
ANNUAL MEAN	3,426				3,356	
HIGHEST ANNUAL MEAN	5,059	1947			4,839	1999
LOWEST ANNUAL MEAN	1,706	1961			1,649	2002
HIGHEST DAILY MEAN	37,400	Jun 16, 1935			24,800	Jul 6, 1967
LOWEST DAILY MEAN	300	Dec 20, 1951			11	Apr 2, 1967
ANNUAL SEVEN-DAY MINIMUM	656	Dec 25, 1934			518	Mar 25, 1970
MAXIMUM PEAK FLOW	37,400	Jun 19, 1935			25,300	Jul 5, 1967
ANNUAL RUNOFF (AC-FT)	2,482,000				2,432,000	
10 PERCENT EXCEEDS	6,640				5,360	
50 PERCENT EXCEEDS	2,450				3,000	
90 PERCENT EXCEEDS	1,370				1,620	

* Prior to construction of Yellowtail Dam.
 ** After completion of Yellowtail Dam.



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

LOCATION.--Lat 45°00'25", long 107°36'52" (NAD 27), in SW¹/₄ NW¹/₄ sec.36, T.9 S., R.33 E., Bighorn County, Hydrologic Unit 10080016, on right bank 20 ft downstream from county bridge, 0.5 mi north of Wyoming-Montana State line, 1 mi downstream from West Fork, 13 mi southwest of Wyola, and at river mile 115.2.

DRAINAGE AREA.--182 mi².

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

REVISED RECORDS.--WSP 1729: Drainage area. WDR MT-04-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,350 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair. Diversions for irrigation of 163 acres upstream from station. Station operated and record by the Montana Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	45	44	29	41	52	48	61	281	200	105	85
2	53	47	48	30	40	52	50	60	272	192	102	84
3	51	53	51	35	40	52	52	61	260	183	102	83
4	50	50	50	34	40	52	52	63	269	174	101	82
5	50	49	48	33	40	52	53	72	277	166	100	82
6	50	49	47	33	37	52	52	102	312	161	97	82
7	50	49	45	35	36	52	54	153	313	158	96	82
8	50	48	45	39	33	53	57	195	289	154	96	82
9	50	49	45	41	40	52	64	148	270	149	96	81
10	50	48	45	40	41	53	57	174	248	148	97	81
11	50	47	45	43	42	52	53	199	241	151	103	82
12	50	44	45	43	42	54	54	170	264	144	99	83
13	53	48	37	41	41	53	55	153	282	138	100	84
14	53	46	46	41	41	52	60	153	261	135	98	83
15	54	45	46	41	39	51	55	170	278	131	94	83
16	53	44	44	41	41	52	54	238	299	128	93	80
17	53	46	44	44	49	52	58	366	343	127	93	79
18	53	46	44	51	49	51	69	325	348	126	94	81
19	50	46	44	51	55	51	63	448	330	121	99	80
20	52	43	44	47	55	50	61	750	317	118	93	80
21	57	36	44	47	55	50	61	903	302	117	91	78
22	55	46	40	45	55	50	58	710	291	115	91	77
23	52	46	24	45	53	50	60	721	302	115	92	77
24	52	46	43	45	53	49	68	624	316	112	91	83
25	47	47	48	44	53	48	77	450	274	114	89	80
26	52	47	47	43	53	48	75	358	267	118	89	78
27	51	41	45	42	52	50	69	324	250	112	87	77
28	52	44	44	42	52	50	65	335	231	109	87	77
29	53	26	44	42	---	51	62	337	224	106	86	74
30	50	35	43	41	---	49	62	297	213	104	86	73
31	51	---	39	40	---	48	---	271	---	105	87	---
TOTAL	1,602	1,356	1,368	1,268	1,268	1,583	1,778	9,391	8,424	4,231	2,934	2,413
MEAN	51.7	45.2	44.1	40.9	45.3	51.1	59.3	303	281	136	94.6	80.4
MAX	57	53	51	51	55	54	77	903	348	200	105	85
MIN	47	26	24	29	33	48	48	60	213	104	86	73
AC-FT	3,180	2,690	2,710	2,520	2,520	3,140	3,530	18,630	16,710	8,390	5,820	4,790

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2005, BY WATER YEAR (WY)

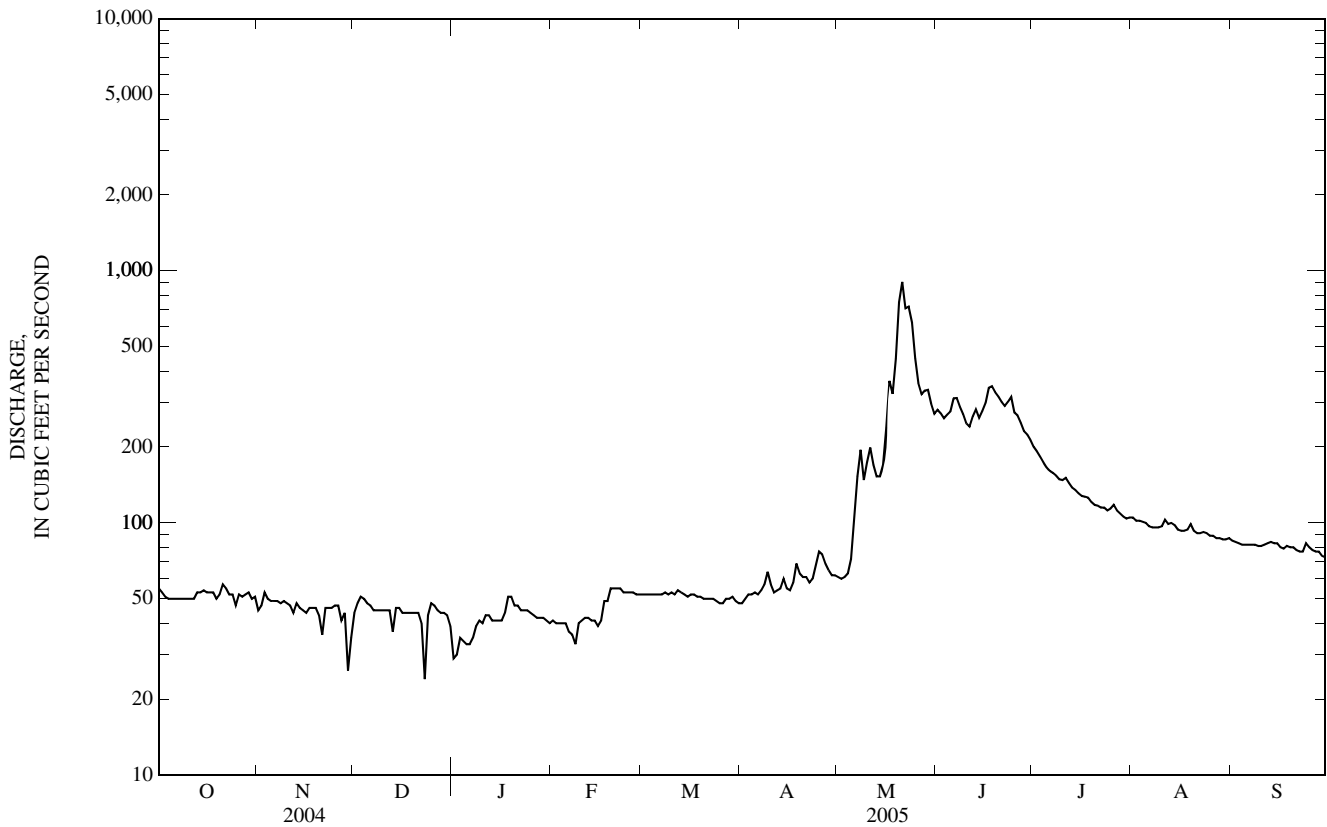
MEAN	85.6	74.8	67.2	62.2	61.1	61.3	84.2	321	507	215	121	96.8
MAX	120	104	91.2	84.9	88.0	86.4	172	533	1,125	689	228	151
(WY)	(1976)	(1942)	(1976)	(1946)	(1946)	(1946)	(1946)	(1977)	(1975)	(1975)	(1975)	(1975)
MIN	51.7	45.2	44.1	40.9	40.2	46.8	50.7	127	135	87.6	62.0	53.9
(WY)	(2005)	(2005)	(2005)	(2005)	(2003)	(2003)	(1961)	(1953)	(2004)	(2004)	(2004)	(2004)

06289000 LITTLE BIGHORN RIVER AT STATE LINE, NEAR WYOLA, MT—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1940 - 2005	
ANNUAL TOTAL	26,165	37,616	--	
ANNUAL MEAN	71.5	103	147	
HIGHEST ANNUAL MEAN	--	--	253	1975
LOWEST ANNUAL MEAN	--	--	76.0	2004
HIGHEST DAILY MEAN	185 May 8	903 May 21	2,340	Jun 4, 1944
LOWEST DAILY MEAN	24 Dec 23	24 Dec 23	18	Feb 2, 1989
ANNUAL SEVEN-DAY MINIMUM	40 Jan 1	33 Jan 1	27	Dec 18, 1983
MAXIMUM PEAK FLOW	--	1,180 May 20	2,730 ^a	Jun 3, 1944
MAXIMUM PEAK STAGE	--	3.75 May 20	5.93 ^b	Jun 9, 1944
ANNUAL RUNOFF (AC-FT)	51,900	74,610	106,200	
10 PERCENT EXCEEDS	130	265	328	
50 PERCENT EXCEEDS	59	54	82	
90 PERCENT EXCEEDS	45	41	56	

a Gage height, 4.97 ft, from rating curve extended above 1,400 ft³/s.

b Result of log jam.



06289600 WEST PASS CREEK NEAR PARKMAN, WY

LOCATION.--Lat 44°59'16", long 107°28'56" (NAD 27), in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.21, T.58 N., R.88 W., Sheridan County, Hydrologic Unit 10080016, on right bank, anchored to concrete headwall of culvert on county road and 7.6 mi northwest of Parkman.

DRAINAGE AREA.--15.4 mi².

PERIOD OF RECORD.--October 1982 to current year (no winter records water years 1985-87).

GAGE.--Water-stage recorder. Elevation of gage is 4,540 ft above NGVD of 1929, from topographic map. Prior to April 2, 1985, at site 100 ft north (on abandoned channel) at datum 4.28 ft lower. April 2, 1985 to March 27, 1986, at site 300 ft upstream from station at datum 0.95 ft higher. April 2, 1985 to September 30, 1998, at same site at datum 1.00 ft lower. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	4.8	4.9	4.5	4.1	4.0	4.4	6.8	16	9.2	6.8	5.3
2	4.3	4.7	5.1	e4.3	4.1	4.0	4.3	6.8	16	9.2	6.8	5.3
3	4.3	4.9	4.8	e4.2	4.1	4.0	4.4	7.0	15	9.1	7.0	5.3
4	4.3	4.9	5.1	e4.1	4.0	4.0	4.5	7.0	14	8.7	6.8	5.3
5	4.7	4.8	5.3	e3.9	4.1	4.0	4.5	7.3	14	8.3	6.7	5.3
6	4.3	4.7	5.2	e3.8	e3.8	3.9	4.5	7.8	15	8.0	6.6	5.3
7	4.3	4.9	5.2	e4.0	e3.5	3.9	4.6	25	16	7.9	6.6	5.3
8	4.3	4.9	5.2	e4.2	e3.3	4.1	4.9	27	17	8.1	6.5	5.3
9	4.3	5.0	5.1	e4.4	e3.6	4.0	7.3	15	14	7.9	6.4	5.3
10	4.2	4.9	5.2	e4.3	e3.8	4.1	5.4	26	14	8.0	6.4	4.9
11	4.3	4.9	5.3	e4.2	e4.0	3.9	5.3	68	13	7.9	6.4	4.9
12	4.3	4.9	5.6	e4.0	4.1	4.0	5.3	40	13	7.8	6.6	5.0
13	4.2	4.9	e5.4	e3.8	4.1	4.1	5.3	36	17	7.7	6.5	4.9
14	4.5	5.0	5.3	e3.6	4.2	4.0	5.3	31	14	7.6	6.3	4.9
15	4.9	5.1	5.6	e3.8	e4.0	4.1	5.3	29	14	7.5	6.1	4.9
16	4.5	5.1	5.3	e4.0	e3.8	4.3	5.3	29	14	7.4	5.9	4.9
17	4.5	5.1	5.3	e4.2	e3.8	4.3	5.3	34	13	7.3	5.7	4.9
18	5.2	5.1	5.2	e4.4	e3.7	4.1	5.5	33	13	7.6	6.1	5.1
19	4.5	5.1	5.2	e4.7	e3.8	4.1	5.8	30	13	7.2	5.9	4.9
20	4.5	5.2	5.1	4.9	e3.9	4.2	6.2	33	13	7.2	5.7	4.9
21	4.6	e5.0	e5.0	4.7	4.1	4.5	6.6	34	12	7.2	5.7	4.9
22	4.5	5.1	e4.8	4.3	4.0	4.3	8.2	32	11	7.2	5.7	4.9
23	4.5	5.3	e4.6	4.5	4.0	4.1	7.1	31	11	7.1	5.7	4.9
24	4.7	5.0	e4.8	4.4	4.0	4.0	6.9	29	11	7.1	5.6	5.3
25	4.5	5.1	e5.2	4.3	4.0	4.3	6.8	26	10	7.5	5.5	5.1
26	4.5	5.0	5.3	4.3	4.0	4.2	6.7	23	10	7.8	5.5	5.0
27	4.6	e5.0	4.7	4.3	4.0	4.4	7.0	20	10	7.3	5.5	4.9
28	4.7	e4.6	4.8	4.3	4.0	4.3	7.1	19	10	7.1	5.5	5.1
29	5.4	e4.0	4.8	4.2	---	4.3	6.9	18	10	7.1	5.5	5.0
30	4.9	4.7	4.8	4.2	---	4.3	6.9	18	9.7	7.0	5.5	4.9
31	5.0	---	4.6	4.1	---	4.3	---	17	---	7.0	5.3	---
TOTAL	140.8	147.7	157.8	130.9	109.9	128.1	173.6	765.7	392.7	239.0	188.8	151.9
MEAN	4.54	4.92	5.09	4.22	3.92	4.13	5.79	24.7	13.1	7.71	6.09	5.06
MAX	5.4	5.3	5.6	4.9	4.2	4.5	8.2	68	17	9.2	7.0	5.3
MIN	4.2	4.0	4.6	3.6	3.3	3.9	4.3	6.8	9.7	7.0	5.3	4.9
AC-FT	279	293	313	260	218	254	344	1,520	779	474	374	301

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2005, BY WATER YEAR (WY)*

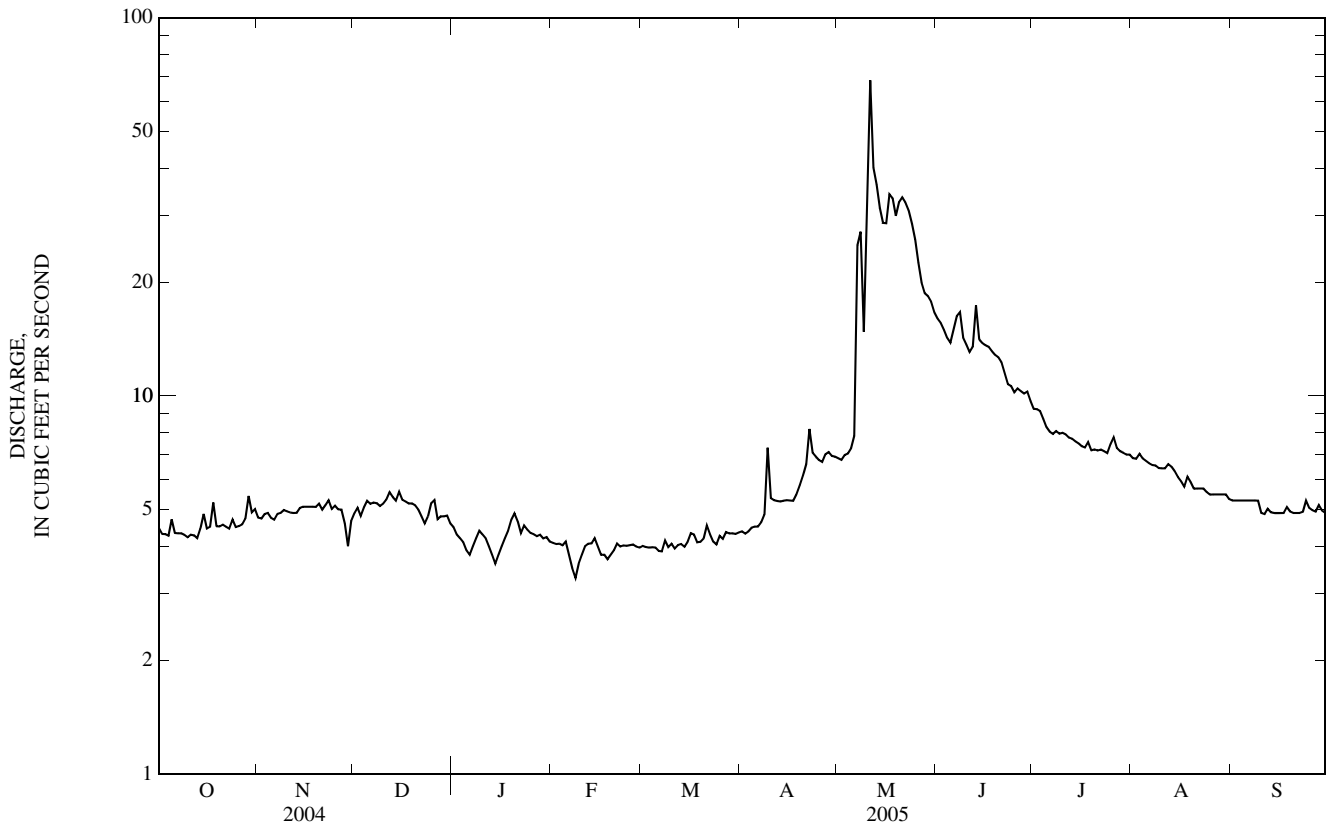
MEAN	7.39	7.07	6.31	6.11	5.92	7.15	12.5	31.3	23.2	12.2	8.35	7.39
MAX	9.95	9.30	9.02	8.10	7.98	10.5	25.2	79.9	60.6	26.9	14.9	11.6
(WY)	(1996)	(1996)	(1996)	(1996)	(1996)	(1997)	(1994)	(1995)	(1995)	(1995)	(1995)	(1995)
MIN	4.54	4.42	4.64	4.22	3.92	4.13	5.79	7.62	6.38	5.21	4.21	4.00
(WY)	(2005)	(2002)	(2003)	(2005)	(2005)	(2005)	(2005)	(2004)	(2004)	(1985)	(2004)	(2004)

YELLOWSTONE RIVER BASIN

06289600 WEST PASS CREEK NEAR PARKMAN, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1983 - 2005*	
ANNUAL TOTAL	1,961.8		2,726.9		--	
ANNUAL MEAN	5.36		7.47		11.6	
HIGHEST ANNUAL MEAN	--		--		21.2 1995	
LOWEST ANNUAL MEAN	--		--		5.56 2004	
HIGHEST DAILY MEAN	9.5	May 13,14	68	May 11	291	May 9, 1995
LOWEST DAILY MEAN	3.7	Aug 27	3.3	Feb 8	0.00 ^a	Dec 25, 1998
ANNUAL SEVEN-DAY MINIMUM	3.8	Sep 4	3.7	Feb 4	0.81	Feb 3, 1989
MAXIMUM PEAK FLOW	--		114	May 11	340 ^b	May 9, 1995
MAXIMUM PEAK STAGE	--		3.24	May 11	4.76 ^c	Apr 28, 1984
ANNUAL RUNOFF (AC-FT)	3,890		5,410		8,430	
10 PERCENT EXCEEDS	6.9		14		23	
50 PERCENT EXCEEDS	5.1		5.1		7.6	
90 PERCENT EXCEEDS	4.1		4.0		5.0	

* For period of operation.
 a Result of channel blockage or diversion upstream.
 b Gage height, 3.97 ft.
 c Backwater from ice, site and datum then in use.
 e Estimated.



06289820 EAST PASS CREEK NEAR DAYTON, WY

LOCATION.--Lat 44°59'26", long 107°25'20" (NAD 27), in NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.24, T.58 N., R.88 W., Sheridan County, Hydrologic Unit 10080016, on right bank 0.4 mi downstream from bridge on Sheridan County Road 144, 5.0 mi northwest of Parkman, and 11.2 mi northwest of Dayton.

DRAINAGE AREA.--21.7 mi².

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,405 ft above NGVD of 1929, from topographic map. October 1982 to August 1995, at site 270 ft upstream from station at different datum. August 1995 to April 1996, at site 0.3 mi downstream from station at different datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several small reservoirs upstream from station, combined capacity, 415 acre-ft, for irrigation. Diversions for irrigation of about 2,900 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	5.5	e4.9	4.6	6.2	5.7	5.3	6.4	20	9.8	4.7	3.0
2	5.3	5.2	5.1	4.7	6.1	5.6	5.0	6.3	19	10	4.5	4.4
3	5.3	5.4	5.0	e4.6	6.1	5.6	5.1	6.4	20	11	4.9	5.3
4	5.3	5.6	4.9	e4.5	6.1	5.6	5.4	6.4	17	8.4	4.9	5.0
5	5.3	5.3	4.9	e4.2	6.2	5.6	5.5	6.6	17	8.8	4.7	5.0
6	5.2	5.1	4.7	e4.0	5.7	5.6	5.2	6.8	19	6.8	4.6	5.0
7	5.2	5.0	4.7	e4.2	e5.4	5.6	4.8	14	21	5.4	4.6	4.9
8	5.2	4.9	4.9	e4.6	e5.2	5.8	5.2	50	21	5.5	4.6	4.9
9	5.0	4.9	4.9	e4.9	e5.0	5.6	8.9	35	19	5.1	4.7	4.8
10	4.9	5.2	4.9	e4.8	e5.4	5.7	7.5	34	18	6.2	4.8	4.7
11	4.8	5.1	4.9	e4.6	e5.8	5.5	7.2	98	17	5.0	5.1	4.9
12	4.9	5.3	e4.6	e4.4	6.1	5.5	7.2	78	18	5.3	5.3	5.5
13	5.0	5.0	e4.4	e4.2	6.1	5.6	7.4	55	20	6.7	5.4	5.4
14	4.7	5.0	5.0	e4.0	6.3	5.6	7.5	44	19	6.5	5.2	5.3
15	5.6	4.9	4.9	e4.4	5.9	5.5	7.6	41	19	6.1	5.0	5.2
16	5.1	4.9	4.9	e4.7	e6.0	5.6	7.0	42	16	5.4	4.8	5.1
17	5.1	4.9	4.7	e5.2	e5.8	5.6	6.5	51	16	5.6	4.8	5.3
18	5.2	4.9	4.7	e5.6	e5.8	5.6	6.7	48	14	5.1	5.2	5.5
19	5.0	5.0	4.8	e6.2	e6.0	5.5	7.5	46	13	4.6	5.5	5.4
20	4.9	4.9	e4.9	e7.0	e6.2	5.5	6.7	54	13	4.9	4.5	5.0
21	5.0	4.7	e4.6	7.8	6.0	5.7	6.6	55	13	4.8	4.7	4.7
22	5.0	4.9	e4.2	7.2	5.9	5.7	6.8	52	12	4.9	3.9	4.8
23	5.0	5.2	e4.3	7.2	5.8	5.7	7.1	48	12	4.8	3.5	4.9
24	5.6	5.3	e4.6	7.1	5.9	5.8	6.8	41	12	4.7	4.0	5.3
25	5.3	5.3	e5.2	6.9	6.0	5.5	6.7	37	12	5.2	3.8	5.2
26	5.3	5.3	e5.6	6.8	6.0	5.6	6.7	33	9.9	5.9	3.3	5.0
27	5.3	5.0	6.0	6.6	5.9	5.5	7.1	29	11	5.4	3.0	5.4
28	5.5	e4.9	5.8	6.6	5.8	5.3	6.9	27	10	5.1	3.3	5.6
29	6.6	e4.2	5.8	6.6	---	5.5	6.8	26	10	4.9	3.7	5.3
30	6.0	e4.6	5.7	6.6	---	5.5	6.6	24	11	4.8	3.0	5.2
31	5.8	---	5.4	6.5	---	5.5	---	22	---	4.8	3.7	---
TOTAL	163.0	151.4	153.9	171.3	164.7	173.2	197.3	1,122.9	468.9	187.5	137.7	151.0
MEAN	5.26	5.05	4.96	5.53	5.88	5.59	6.58	36.2	15.6	6.05	4.44	5.03
MAX	6.6	5.6	6.0	7.8	6.3	5.8	8.9	98	21	11	5.5	5.6
MIN	4.7	4.2	4.2	4.0	5.0	5.3	4.8	6.3	9.9	4.6	3.0	3.0
AC-FT	323	300	305	340	327	344	391	2,230	930	372	273	300

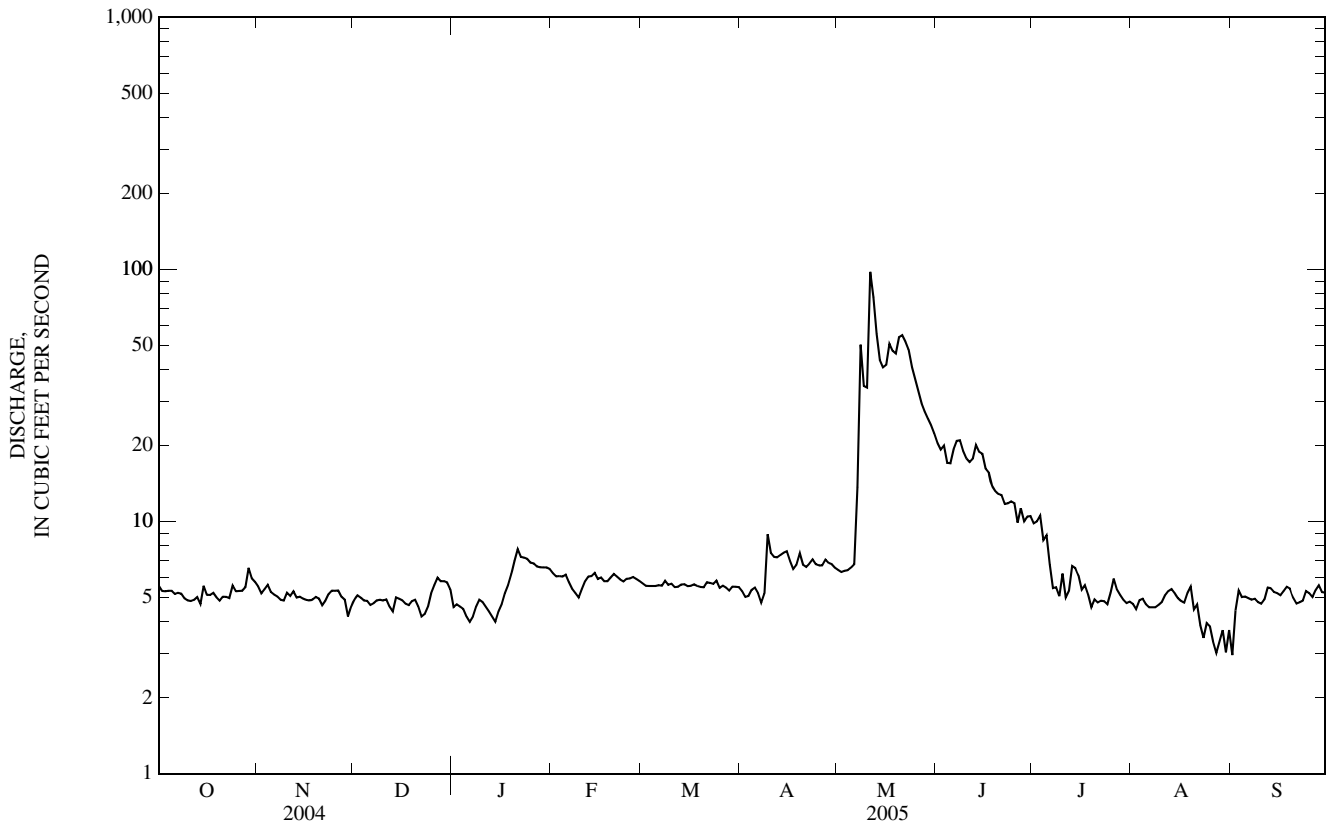
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2005, BY WATER YEAR (WY)

	8.35	8.48	8.05	8.25	8.21	9.52	15.5	41.1	32.6	12.1	6.80	6.94
MEAN	8.35	8.48	8.05	8.25	8.21	9.52	15.5	41.1	32.6	12.1	6.80	6.94
MAX	13.9	11.4	10.5	10.5	10.6	14.2	32.4	90.8	82.8	32.9	14.8	14.8
(WY)	(1996)	(1996)	(1996)	(1996)	(1996)	(1997)	(1994)	(1995)	(1995)	(1992)	(1993)	(1995)
MIN	5.26	5.05	4.96	5.53	5.88	5.59	6.58	8.15	5.86	4.83	2.73	3.92
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(2004)	(2004)	(1988)	(2002)

06289820 EAST PASS CREEK NEAR DAYTON, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1983 - 2005	
ANNUAL TOTAL	2,152.7		3,242.8		--	
ANNUAL MEAN	5.88		8.88		13.8	
HIGHEST ANNUAL MEAN	--		--		23.6 1984	
LOWEST ANNUAL MEAN	--		--		6.00 2004	
HIGHEST DAILY MEAN	13	May 10	98	May 11	304	May 9, 1995
LOWEST DAILY MEAN	3.0	Several days	3.0	Several days	0.84 ^a	Nov 14, 2002
ANNUAL SEVEN-DAY MINIMUM	3.1	Aug 14	3.3	Aug 26	1.9	Sep 10, 2002
MAXIMUM PEAK FLOW	--	--	128	May 11	511 ^b	May 9, 1995
MAXIMUM PEAK STAGE	--	--	6.54	May 11	9.00 ^c	Feb 6, 1996
ANNUAL RUNOFF (AC-FT)	4,270		6,430		10,030	
10 PERCENT EXCEEDS	8.1		17		26	
50 PERCENT EXCEEDS	5.7		5.5		8.8	
90 PERCENT EXCEEDS	4.0		4.6		5.3	

- a Result of pumping upstream.
- b Gage height, 4.47 ft, site and datum then in use, from rating curve extended above 221 ft³/s.
- c Ice jam, site and datum then in use.
- e Estimated.



06290000 PASS CREEK NEAR WYOLA, MT

LOCATION.--Lat 45°03'23", long 107°21'19" (NAD 27), in NE¹/₄ NE¹/₄ SE¹/₄ sec.13, T.9S., R.35 E., Big Horn County, Hydrologic Unit 10080016, on right bank 125 ft downstream from bridge on U.S. Highway 87, 2.0 mi downstream from Twin Creek, 5.5 mi south of Wyola, and at river mile 10.2.

DRAINAGE AREA.--111 mi². Drainage area at site used prior to September 30, 1956 119 mi².

PERIOD OF RECORD.--June 1935 to September 1956 (no winter records prior to 1939), October 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,920 ft above NGVD of 1929, from topographic map. December 21, 1950 to September 30, 1956, water-stage recorder, and June 4, 1935 to December 20, 1950, nonrecording gage at site 0.3 mi upstream from station at different datum. Flow is equivalent. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for October 1 to April 23, which are poor. Diversions for irrigation of about 2,500 acres upstream from station. Station operated and record provided by the Montana Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	e9.0	e9.0	e5.0	e8.0	e8.0	e9.0	13	40	12	4.7	2.3
2	1.5	e10	e10	e6.0	e8.0	e8.0	e9.0	12	40	10	4.6	3.1
3	1.5	e11	e10	e7.0	e8.0	e8.0	e10	12	37	14	4.7	2.3
4	1.5	e10	e9.0	e7.0	e8.0	e8.0	e10	11	34	12	5.2	2.5
5	1.5	e10	e9.0	e7.0	e8.0	e8.0	e10	10	32	11	5.2	3.2
6	1.5	e10	e9.0	e7.0	e7.0	e8.0	e10	10	32	9.4	4.6	3.4
7	1.5	e10	e8.0	e8.0	e7.0	e8.0	e10	19	42	7.7	4.2	3.5
8	1.5	e10	e9.0	e8.0	e6.0	e9.0	e10	151	53	6.6	4.1	3.5
9	1.5	e10	e9.0	e9.0	e7.0	e9.0	e15	104	42	5.6	4.0	3.3
10	1.0	e10	e9.0	e9.0	e8.0	e9.0	e10	72	39	4.6	3.9	3.7
11	1.5	e10	e9.0	e9.0	e8.0	e10	e10	345	36	6.3	4.3	3.7
12	2.0	e9.0	e9.0	e9.0	e8.0	e10	e10	351	35	6.1	5.3	4.4
13	3.0	e9.0	e8.0	e8.0	e8.0	e10	e10	209	47	5.4	6.8	6.1
14	2.5	e9.0	e9.0	e8.0	e8.0	e10	e15	153	41	5.2	6.8	5.5
15	5.0	e9.0	e9.0	e8.0	e8.0	e13	e10	111	36	6.0	6.3	4.5
16	e10	e9.0	e9.0	e8.0	e7.0	e15	e10	97	32	5.4	5.6	5.0
17	e9.0	e9.0	e8.0	e8.0	e8.0	e15	e9.0	101	28	4.8	5.2	4.8
18	e8.0	e9.0	e8.0	e9.0	e8.0	e15	e15	106	26	5.7	5.5	6.1
19	e8.0	e9.0	e8.0	e9.0	e8.0	e15	e10	92	23	5.8	6.2	6.5
20	e8.0	e9.0	e8.0	e10	e8.0	e10	e10	93	22	5.1	5.8	6.3
21	e9.0	e8.0	e8.0	e10	e8.0	e10	e10	93	20	4.2	4.7	5.9
22	e10	e9.0	e8.0	e9.0	e8.0	e10	e10	87	13	4.1	3.4	5.9
23	e10	e9.0	e7.0	e9.0	e8.0	e10	e15	84	13	3.8	3.7	6.4
24	e10	e9.0	e8.0	e9.0	e8.0	e10	21	76	14	3.8	3.5	7.2
25	e9.0	e9.0	e9.0	e9.0	e8.0	e10	19	67	14	3.9	3.0	7.7
26	e10	e9.0	e8.0	e9.0	e8.0	e10	14	60	12	5.6	2.8	7.6
27	e10	e9.0	e8.0	e8.0	e8.0	e10	14	51	14	6.2	2.3	8.6
28	e10	e9.0	e8.0	e8.0	e8.0	e10	14	47	13	5.2	2.0	9.3
29	e11	e7.0	e8.0	e8.0	---	e10	14	44	13	5.4	2.3	9.5
30	e10	e8.0	e8.0	e8.0	---	e10	13	44	12	4.6	2.2	9.3
31	e10	---	e7.0	e8.0	---	e9.0	---	42	---	4.3	2.2	---
TOTAL	180.5	277.0	263.0	254.0	218.0	315.0	356.0	2,767	855	199.8	135.1	161.1
MEAN	5.82	9.23	8.48	8.19	7.79	10.2	11.9	89.3	28.5	6.45	4.36	5.37
MAX	11	11	10	10	8.0	15	21	351	53	14	6.8	9.5
MIN	1.0	7.0	7.0	5.0	6.0	8.0	9.0	10	12	3.8	2.0	2.3
AC-FT	358	549	522	504	432	625	706	5,490	1,700	396	268	320

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2005, BY WATER YEAR (WY)*

MEAN	17.0	17.8	16.3	17.4	24.3	37.7	49.6	98.9	84.5	28.2	12.5	12.9
MAX	27.8	27.9	33.6	32.3	57.8	115	106	324	375	92.6	38.5	29.1
(WY)	(1945)	(1946)	(1943)	(1984)	(1948)	(1947)	(1994)	(1984)	(1944)	(1944)	(1944)	(1944)
MIN	5.73	4.76	5.73	6.55	7.79	8.81	11.9	10.2	6.46	4.75	1.08	1.22
(WY)	(1955)	(2004)	(2002)	(2001)	(2005)	(2002)	(2005)	(2004)	(2004)	(2004)	(2004)	(2004)

YELLOWSTONE RIVER BASIN

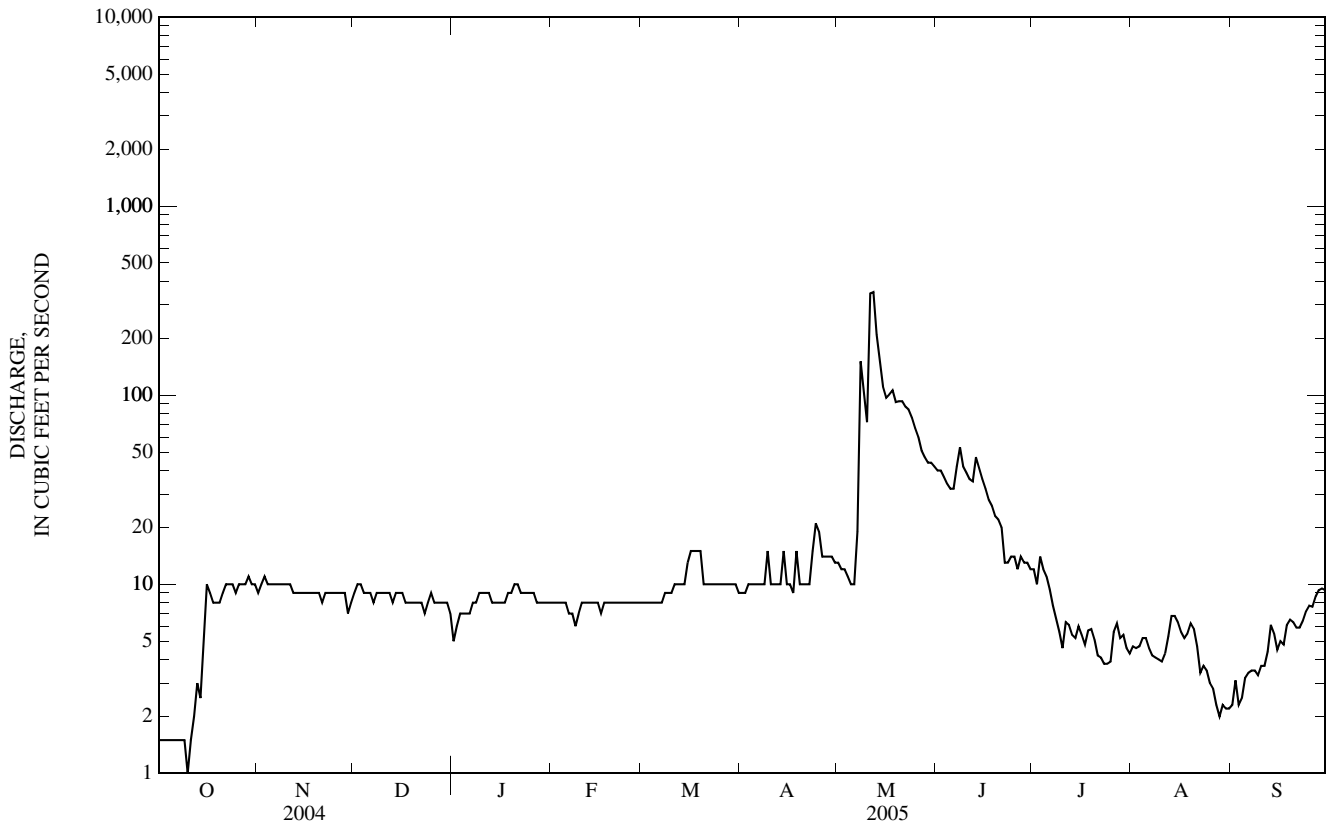
06290000 PASS CREEK NEAR WYOLA, MT—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1939 - 2005*	
ANNUAL TOTAL	2,968.41	5,981.5	--	
ANNUAL MEAN	8.11	16.4	34.8	
HIGHEST ANNUAL MEAN	--	--	76.8	1944
LOWEST ANNUAL MEAN	--	--	8.53	2004
HIGHEST DAILY MEAN	52 Mar 19	351 May 12	1,120	Jun 20, 1947
LOWEST DAILY MEAN	0.70 Aug 18	1.0 Oct 10	0.00	Sep 1, 2002
ANNUAL SEVEN-DAY MINIMUM	0.89 Aug 13	1.4 Oct 4	0.00	Sep 1, 2002
MAXIMUM PEAK FLOW	--	606 May 11	1,150 ^a	Jun 4, 1944
MAXIMUM PEAK STAGE	--	5.40 May 11	6.96	May 9, 1995
ANNUAL RUNOFF (AC-FT)	5,890	11,860	25,190	
10 PERCENT EXCEEDS	13	34	76	
50 PERCENT EXCEEDS	9.0	9.0	20	
90 PERCENT EXCEEDS	1.0	3.8	7.5	

* For period of operation.

a Gage height, 4.83 ft, from rating curve extended above 400 ft³/s.

e Estimated.



06297500 HIGHLINE DITCH NEAR DAYTON, WY

LOCATION.--Lat 44°51'11", long 107°18'14" (NAD 27), in NE¹/₄ SE¹/₄ SE¹/₄ sec. 2, T.56 N., R87 W., Sheridan County, Hydrologic Unit 10090101, on right bank 0.8 mi downstream from diversion from Tongue River and 2.3 mi southwest of Dayton.

PERIOD OF RECORD.--September 1920 to September 1923, June 1941 to current year (no winter records water years 1941-44, 1982, 1991, 1994-95, 1997 to current year).

GAGE.--Water-stage recorder. Elevation of gage is 4,100 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow diverted from Tongue River for irrigation. Prior to water year 2002, figures for this station were included in 06298000 Tongue River near Dayton, WY.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e0.00	18	14	11	24	e15
2	---	---	---	---	---	---	e0.00	18	14	15	24	e15
3	---	---	---	---	---	---	e0.00	18	14	16	24	e14
4	---	---	---	---	---	---	e0.00	18	14	16	24	e14
5	---	---	---	---	---	---	4.6	19	14	16	23	e14
6	---	---	---	---	---	---	10	20	14	16	23	e14
7	---	---	---	---	---	---	12	13	14	17	23	e14
8	---	---	---	---	---	---	12	4.4	14	19	23	e14
9	---	---	---	---	---	---	13	12	14	20	23	e14
10	---	---	---	---	---	---	12	4.0	14	21	24	e14
11	---	---	---	---	---	---	12	0.00	14	21	e22	e14
12	---	---	---	---	---	---	12	0.00	14	21	e20	e14
13	---	---	---	---	---	---	12	0.00	14	21	e17	e10
14	---	---	---	---	---	---	16	0.00	14	21	e17	e2.5
15	---	---	---	---	---	---	18	0.00	14	21	e16	e2.5
16	---	---	---	---	---	---	18	5.6	14	21	e16	e2.5
17	---	---	---	---	---	---	19	9.6	15	21	e16	e2.5
18	---	---	---	---	---	---	19	9.5	15	21	e16	e2.5
19	---	---	---	---	---	---	19	12	19	21	e14	e2.5
20	---	---	---	---	---	---	18	17	21	21	e14	e2.5
21	---	---	---	---	---	---	18	17	21	21	e18	e2.4
22	---	---	---	---	---	---	8.0	15	21	21	e18	e2.4
23	---	---	---	---	---	---	0.05	14	20	21	e17	e2.4
24	---	---	---	---	---	---	0.02	13	17	21	e15	e2.4
25	---	---	---	---	---	---	13	13	17	21	e15	e2.4
26	---	---	---	---	---	---	19	13	17	21	e15	e2.4
27	---	---	---	---	---	---	19	13	17	21	e15	e2.3
28	---	---	---	---	---	---	19	13	17	21	e15	e2.3
29	---	---	---	---	---	---	18	14	8.4	21	e15	e2.3
30	---	---	---	---	---	---	18	14	4.8	22	e15	e2.2
31	---	---	---	---	---	---	---	14	---	23	e15	---
TOTAL	---	---	---	---	---	---	358.67	351.10	454.2	611	576	221.0
MEAN	---	---	---	---	---	---	12.0	11.3	15.1	19.7	18.6	7.37
MAX	---	---	---	---	---	---	19	20	21	23	24	15
MIN	---	---	---	---	---	---	0.00	0.00	4.8	11	14	2.2
AC-FT	---	---	---	---	---	---	711	696	901	1,210	1,140	438

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2005, BY WATER YEAR (WY)*

MEAN	5.41	0.29	0.00	0.00	0.00	0.00	0.85	7.44	17.2	19.3	19.6	14.6
MAX	20.7	5.00	0.00	0.00	0.00	0.01	13.3	28.5	30.5	30.9	27.6	23.7
(WY)	(1955)	(1944)	(1921)	(1921)	(1921)	(1989)	(2004)	(2004)	(1996)	(1996)	(1983)	(1952)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.82	8.33	3.16
(WY)	(1921)	(1921)	(1921)	(1921)	(1921)	(1921)	(1922)	(1922)	(1957)	(1992)	(1923)	(1923)

06297500 HIGHLINE DITCH NEAR DAYTON, WY—Continued

SUMMARY STATISTICS

HIGHEST DAILY MEAN
 LOWEST DAILY MEAN

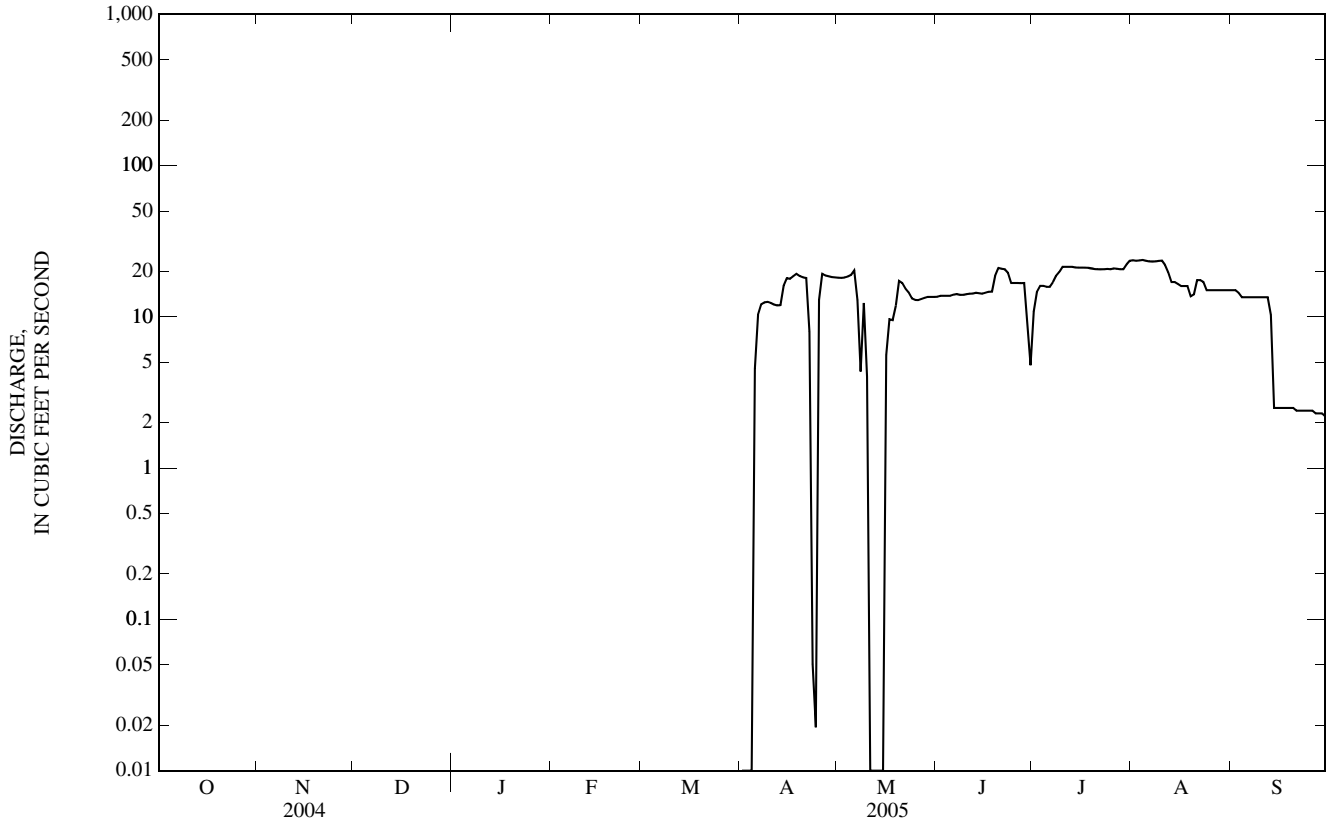
FOR 2005 WATER YEAR*

24 Aug 1-4,10
 0.00 Many days

WATER YEARS 1920 - 2005*

35
 0.00 Many days,
 each year

* For period of operation.
 e Estimated.



06298000 TONGUE RIVER NEAR DAYTON, WY

LOCATION.--Lat 44°50'58", long 107°18'14" (NAD 27), in NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.11, T.56 N., R.87 W., Sheridan County, Hydrologic Unit 10090101, on left bank 0.5 mi upstream from Crystal Draw, 0.6 mi downstream from intake of Highline Ditch, and 2.5 mi southwest of Dayton.

DRAINAGE AREA.--206 mi².

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

REVISED RECORDS.--WSP 1309: 1921.

GAGE.--Water-stage recorder. Elevation of gage is 4,060 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Small diversion upstream from station for Dayton municipal supply. Prior to water year 2002, figures of adjustments for diversion by Highline Ditch near Dayton were included with this station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	43	50	34	37	35	32	71	515	332	127	65
2	52	38	50	36	34	36	42	72	519	307	117	63
3	51	58	54	45	37	34	46	78	485	289	116	62
4	49	55	55	42	37	33	49	93	497	273	119	62
5	48	51	53	38	38	34	49	122	497	261	108	61
6	48	52	51	43	30	34	41	266	575	247	100	59
7	44	50	49	46	31	37	60	377	629	233	98	58
8	42	54	49	47	34	35	84	461	564	220	95	57
9	41	60	48	48	39	35	101	360	526	213	99	56
10	43	54	47	48	40	37	71	526	484	212	105	56
11	43	48	51	46	38	33	56	618	467	207	116	56
12	44	37	51	44	38	41	54	425	502	191	109	58
13	52	44	39	38	39	32	66	375	592	183	112	70
14	54	41	45	e35	38	30	107	412	503	178	106	80
15	64	36	49	e30	34	35	74	487	528	176	96	75
16	62	36	49	e35	29	39	65	658	577	174	91	71
17	61	42	49	48	37	39	113	881	696	171	97	69
18	59	41	48	45	37	37	151	756	748	168	101	69
19	50	44	47	44	39	35	110	846	671	163	116	69
20	55	34	47	44	38	36	89	1,150	628	152	94	66
21	68	19	46	42	38	38	82	1,400	578	140	81	66
22	66	37	43	40	37	33	79	1,150	540	138	77	68
23	56	46	28	40	34	36	96	1,180	520	135	81	66
24	56	47	55	40	35	34	145	1,110	505	133	82	71
25	39	54	49	37	34	31	166	880	455	134	77	72
26	56	54	47	37	35	32	136	675	439	163	77	70
27	54	40	46	37	35	36	105	598	427	142	72	66
28	59	39	44	39	34	38	86	603	380	130	70	70
29	61	27	44	38	---	42	77	598	400	124	68	67
30	49	43	43	38	---	36	74	538	374	120	67	64
31	59	---	41	35	---	36	---	501	---	121	68	---
TOTAL	1,637	1,324	1,467	1,259	1,006	1,099	2,506	18,267	15,821	5,830	2,942	1,962
MEAN	52.8	44.1	47.3	40.6	35.9	35.5	83.5	589	527	188	94.9	65.4
MAX	68	60	55	48	40	42	166	1,400	748	332	127	80
MIN	39	19	28	30	29	30	32	71	374	120	67	56
AC-FT	3,250	2,630	2,910	2,500	2,000	2,180	4,970	36,230	31,380	11,560	5,840	3,890

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 2005, BY WATER YEAR (WY)

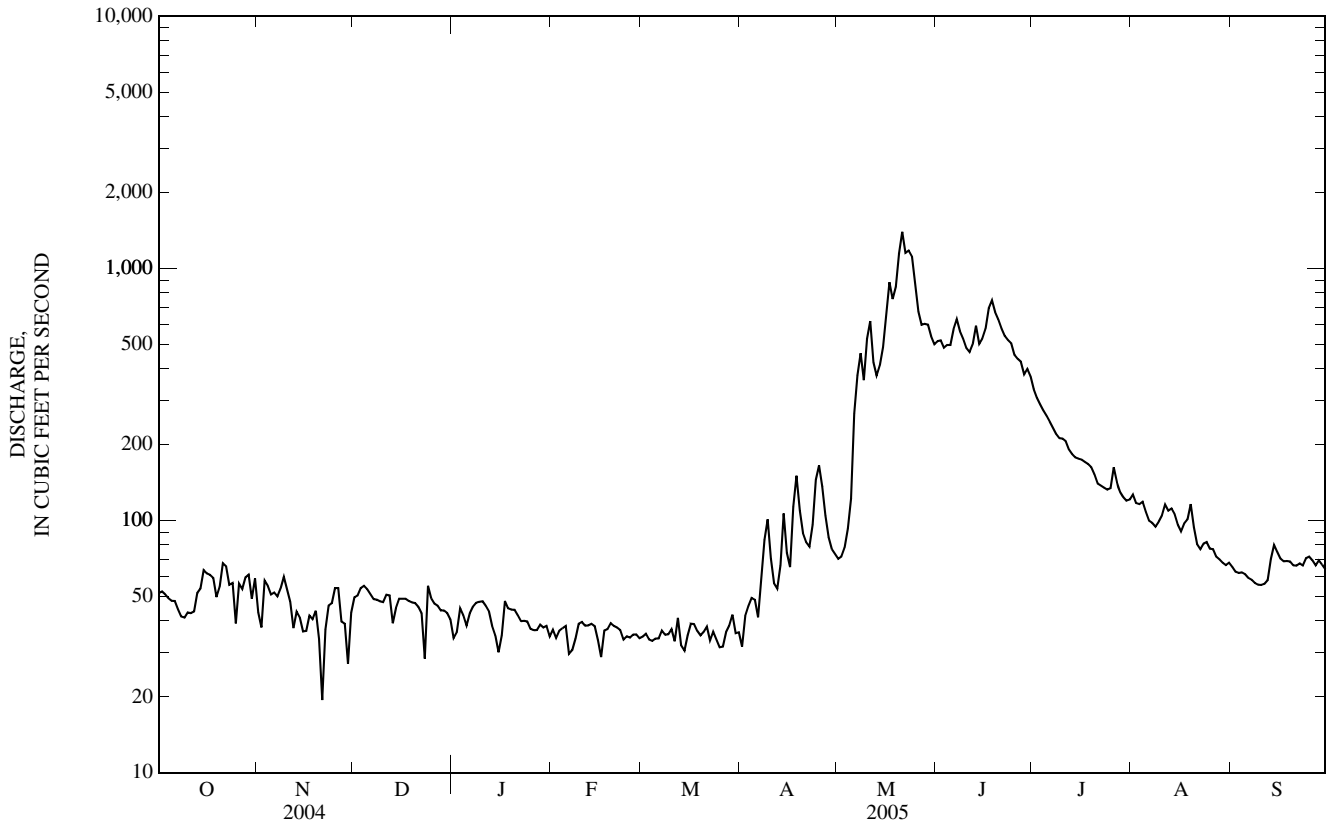
MEAN	80.9	66.9	60.3	55.1	51.8	51.2	107	513	680	236	109	83.1
MAX	284	155	108	88.9	80.8	72.0	354	1,048	1,482	767	244	163
(WY)	(1924)	(1924)	(1924)	(1924)	(1924)	(1924)	(1926)	(1926)	(1978)	(1975)	(1927)	(1968)
MIN	49.6	41.1	38.0	36.1	34.1	35.5	44.2	179	138	68.1	42.1	42.8
(WY)	(1955)	(1941)	(2002)	(1941)	(1941)	(2005)	(1975)	(2004)	(2001)	(2001)	(2004)	(1966)

YELLOWSTONE RIVER BASIN

06298000 TONGUE RIVER NEAR DAYTON, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1919 - 2005	
ANNUAL TOTAL	25,915		55,120		--	
ANNUAL MEAN	70.8		151		176	
HIGHEST ANNUAL MEAN	--		--		316 1924	
LOWEST ANNUAL MEAN	--		--		71.2 2004	
HIGHEST DAILY MEAN	262	May 6	1,400	May 21	2,590	Jun 5, 1968
LOWEST DAILY MEAN	19	Nov 21	19	Nov 21	18	Nov 29, 1919
ANNUAL SEVEN-DAY MINIMUM	32	Sep 6	34	Feb 28	31	Nov 9, 1940
MAXIMUM PEAK FLOW	--		1,710	May 20	3,400	Jun 3, 1944
MAXIMUM PEAK STAGE	--		4.97	May 20	6.45	Jun 3, 1944
ANNUAL RUNOFF (AC-FT)	51,400		109,300		127,400	
10 PERCENT EXCEEDS	152		501		470	
50 PERCENT EXCEEDS	50		57		72	
90 PERCENT EXCEEDS	36		35		47	

e Estimated.



YELLOWSTONE RIVER BASIN

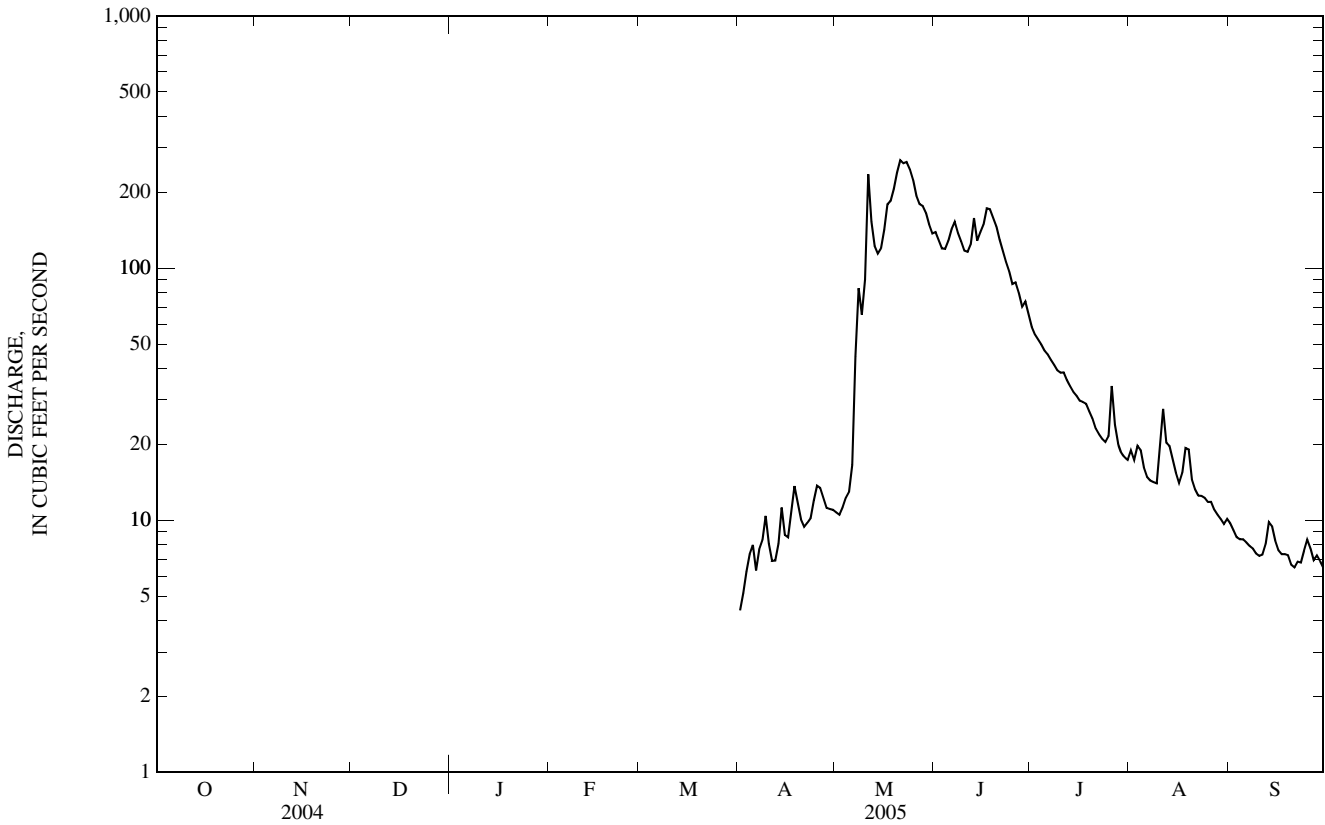
06299500 WOLF CREEK AT WOLF, WY—Continued

SUMMARY STATISTICS

SUMMARY STATISTICS	FOR 2005 WATER YEAR*		WATER YEARS 1946 - 2005*	
ANNUAL MEAN	--		29.3	
HIGHEST ANNUAL MEAN	--		45.0	1964
LOWEST ANNUAL MEAN	--		13.8	1960
HIGHEST DAILY MEAN	268	May 21	601	Jun 9, 1964
LOWEST DAILY MEAN	4.4	Apr 1	1.8	Feb 26, 1947
MAXIMUM PEAK FLOW	303	May 22	1,130 ^a	Jun 15, 1963
MAXIMUM PEAK STAGE	2.88	May 22	4.60	Jun 15, 1963
ANNUAL RUNOFF (AC-FT)	--		21,220	

* For period of operation.

a From rating curve extended above 500 ft³/s.



06299980 TONGUE RIVER AT MONARCH, WY

LOCATION.--Lat 44°54'01", long 107°01'13" (NAD 27), in NW¹/₄ NW¹/₄ SE¹/₄ sec.20, T.57 N., R.84 W., Sheridan County, Hydrologic Unit 10090101, on right bank at county bridge, 0.4 mi downstream from South Dry Creek, and 0.9 mi east of Monarch.

DRAINAGE AREA.--478 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 2004 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,620 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Numerous diversions for irrigation upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	82	e64	e52	e62	46	52	112	748	438	92	73
2	70	68	e64	e54	e56	47	49	112	779	406	97	69
3	70	73	e70	e64	e60	48	59	110	704	383	95	64
4	66	84	e74	e62	e60	46	65	123	698	362	111	64
5	65	81	e72	e58	e62	46	65	159	686	341	97	55
6	63	81	e70	e62	e50	47	63	272	746	315	91	54
7	61	77	e68	e66	e52	46	63	590	840	287	89	53
8	56	76	e68	e70	e56	54	84	1,450	842	256	78	53
9	60	78	e68	e72	e60	52	141	747	755	229	61	52
10	59	82	e66	e72	e62	56	118	912	697	219	72	48
11	59	78	e72	e72	e58	54	90	2,660	650	227	163	49
12	62	70	e72	e70	e58	52	79	1,450	644	212	124	57
13	67	59	e60	e60	e60	57	75	877	822	194	125	69
14	73	62	e66	e54	e58	49	112	797	721	178	129	80
15	93	58	e70	e50	e46	47	112	803	705	169	122	76
16	96	55	e70	e54	e54	55	88	939	750	157	109	73
17	86	53	e70	e74	e54	58	99	1,210	850	146	105	71
18	87	59	e68	e70	e56	55	e180	1,190	934	141	123	73
19	87	58	e66	e70	e56	53	170	1,170	872	128	137	73
20	78	57	e66	e70	e56	52	157	1,410	815	116	132	73
21	82	e44	e66	e70	e54	54	155	1,840	765	114	102	68
22	97	e50	e64	e68	e48	54	146	1,710	710	103	100	69
23	89	e60	e50	e68	e49	52	153	1,620	669	103	97	71
24	84	e66	e66	e69	e48	53	183	1,610	658	102	97	76
25	81	e68	e62	e62	e49	50	250	1,300	598	100	96	87
26	70	e72	e60	e62	e49	49	223	1,080	555	134	92	82
27	80	e66	e60	e62	e46	49	188	927	570	140	90	77
28	81	e60	e58	e64	47	53	148	892	496	122	81	75
29	92	e46	e58	e62	---	58	130	891	517	110	75	76
30	93	e60	e56	e62	---	58	117	823	525	99	70	74
31	85	---	e54	e58	---	54	---	773	---	95	70	---
TOTAL	2,364	1,983	2,018	1,983	1,526	1,604	3,614	30,559	21,321	6,126	3,122	2,034
MEAN	76.3	66.1	65.1	64.0	54.5	51.7	120	986	711	198	101	67.8
MAX	97	84	74	74	62	58	250	2,660	934	438	163	87
MIN	56	44	50	50	46	46	49	110	496	95	61	48
AC-FT	4,690	3,930	4,000	3,930	3,030	3,180	7,170	60,610	42,290	12,150	6,190	4,030

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)*

MEAN	76.3	66.1	65.1	64.0	54.5	51.7	120	580	434	151	70.4	59.1
MAX	76.3	66.1	65.1	64.0	54.5	51.7	120	986	711	198	101	67.8
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)
MIN	76.3	66.1	65.1	64.0	54.5	51.7	120	174	157	104	40.1	50.4
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(2004)	(2004)	(2004)	(2004)

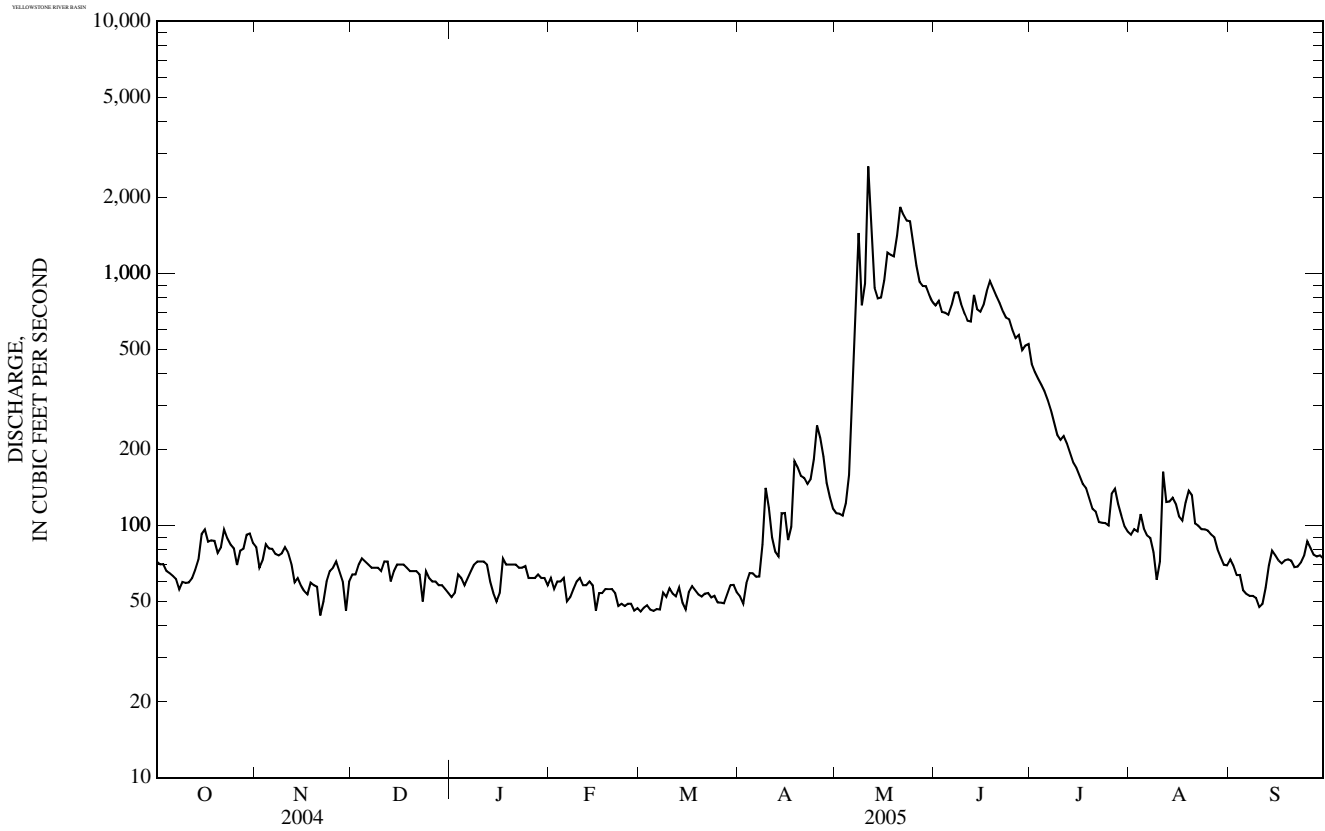
YELLOWSTONE RIVER BASIN

06299980 TONGUE RIVER AT MONARCH, WY—Continued

SUMMARY STATISTICS

	FOR 2005 WATER YEAR		WATER YEARS 2004 - 2005*	
ANNUAL TOTAL	78,254		--	
ANNUAL MEAN	214		214	
HIGHEST ANNUAL MEAN	--		214	2005
LOWEST ANNUAL MEAN	--		214	2005
HIGHEST DAILY MEAN	2,660	May 11	2,660	May 11, 2005
LOWEST DAILY MEAN	44	Nov 21	23	Sep 1, 2004
ANNUAL SEVEN-DAY MINIMUM	47	Feb 27	31	Aug 29, 2004
MAXIMUM PEAK FLOW	3,350	May 11	3,350	May 11, 2005
MAXIMUM PEAK STAGE	7.91	May 11	7.91	May 11, 2005
ANNUAL RUNOFF (AC-FT)	155,200		155,300	

* For period of operation.
e Estimated.



06299980 TONGUE RIVER AT MONARCH, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974-80, 1982-83, January 2004 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 2004 to current year.

INSTRUMENTATION.--Specific conductance probe installed in late April 2004.

REMARKS.--Seasonal specific conductance records are rated good to excellent except for May 12-17, which are poor. Missing specific conductance data for April 18 due to equipment malfunction. Water quality samples and record provided by the Montana Water Science Center.

EXTREMES FOR PERIOD OF DAILY RECORDS.--

SPECIFIC CONDUCTANCE: Maximum recorded, 582 microsiemens per centimeter at 25°C ($\mu\text{S}/\text{cm}$), September 4, 2004; minimum recorded, 146 $\mu\text{S}/\text{cm}$, May 24, 2005.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 455 $\mu\text{S}/\text{cm}$, September 12; minimum recorded, 146 $\mu\text{S}/\text{cm}$, May 24.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT													
13...	1700	69	673	11.3	116	8.5	432	14.0	11.0	230	51.0	24.1	1.52
NOV													
04...	1545	88	--	--	--	8.4	400	11.0	6.0	210	50.1	20.4	1.37
DEC													
02...	1630	E64	667	13.4	105	8.2	430	3.0	.0	210	50.8	21.0	1.32
FEB													
09...	1345	E60	670	15.0	117	8.0	495	13.0	.0	250	57.7	26.0	1.71
MAR													
09...	1105	52	667	11.6	107	8.3	430	21.0	6.0	220	49.7	22.2	1.53
APR													
06...	1030	60	676	10.4	102	8.3	406	17.0	9.0	210	47.5	21.1	1.36
20...	0815	161	670	9.7	86	7.9	286	2.5	5.0	140	35.1	12.5	1.75
MAY													
03...	1500	128	670	11.5	122	8.4	379	19.0	12.0	190	45.1	18.4	1.39
12...	1600	1,150	668	10.1	88	7.8	347	3.0	4.0	150	34.1	16.4	4.20
JUN													
09...	0930	781	667	9.6	96	7.8	200	13.0	9.5	93	24.5	7.71	.85
23...	0830	676	665	7.2	83	7.9	193	26.0	15.5	94	24.7	7.87	.72
JUL													
14...	1515	174	669	8.5	117	8.5	296	29.0	25.0	130	31.3	11.5	.82
AUG													
04...	1220	112	676	9.0	110	8.4	377	27.5	19.0	190	44.2	19.6	1.66
25...	0820	96	671	7.0	80	8.2	414	13.5	15.5	200	46.6	20.9	1.51

06299980 TONGUE RIVER AT MONARCH, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
OCT 13...	.4	12.9	11	192	1.37	.2	6.64	48.2	262	.36	48.7	<.010	<.016
NOV 04...	.3	10.4	10	180	1.33	.2	7.61	43.7	243	.33	57.8	--	--
DEC 02...	.3	10.9	10	191	1.24	.2	8.58	47.6	256	.35	--	<.010	.026
FEB 09...	.4	14.1	11	212	1.85	.2	7.36	63.1	300	.41	--	E.007	.049
MAR 09...	.4	11.9	11	181	1.54	.2	4.37	52.9	253	.34	35.5	--	--
APR 06...	.3	10.7	10	175	1.34	.2	4.37	44.9	237	.32	38.4	E.005	<.016
20...	.2	6.07	9	120	1.11	.1	6.15	24.7	159	.22	69.2	--	--
MAY 03...	.3	9.66	10	154	1.35	.2	4.84	39.5	213	.29	73.5	--	--
12...	.5	13.4	16	112	2.31	.1	9.54	55.7	204	.28	634	.044	.222
JUN 09...	.2	3.86	8	89	.71	.1	7.42	15.5	114	.15	240	--	--
23...	.2	3.46	7	90	.60	E.1	7.70	11.9	111	.15	202	--	--
JUL 14...	.2	5.05	8	136	.87	.1	4.84	22.2	158	.21	74.2	--	--
AUG 04...	.3	8.82	9	167	1.11	.2	5.28	35.5	217	.29	65.5	<.010	<.016
25...	.3	11.0	11	182	1.21	.2	6.88	44.3	242	.33	62.8	E.005	E.008

Date	Nitrite water, fltrd, mg/L as N (00613)	Total nitrogen, wat unfltrd by analysis, mg/L (62855)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Aluminum, water, fltrd, ug/L (01106)	Aluminum, water, unfltrd recover-able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Barium, water, fltrd, ug/L (01005)	Barium, water, unfltrd recover-able, ug/L (01007)	Beryllium, water, fltrd, ug/L (01010)	Beryllium, water, unfltrd recover-able, ug/L (01012)	Boron, water, fltrd, ug/L (01020)
OCT 13...	<.002	.10	<.006	.008	<2	27	.4	<2	43	45	<.06	<.06	38
NOV 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 02...	.002	.11	<.006	.005	<2	28	.2	<2	45	40	<.06	<.06	33
FEB 09...	.002	.16	<.006	.008	<2	22	.3	<2	43	48	<.06	<.06	37
MAR 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 06...	<.002	.18	<.006	.014	E1	36	.4	<2	48	46	<.06	<.06	31
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	.004	1.21	.035	.26	5	2,810	.7	2	45	90	<.06	.32	35
JUN 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 04...	<.002	.22	<.006	.026	<2	141	.5	<2	45	46	<.06	<.06	31
25...	E.001	.25	<.006	.032	3	228	.5	.60	42	49	E.03	<.06	32

06299980 TONGUE RIVER AT MONARCH, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Chrom- ium, water, unfltrd recover- able, ug/L (01034)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover- able, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover- able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover- able, ug/L (01051)	Lithium water, fltrd, ug/L (01130)	Mangan- ese, water, fltrd, ug/L (01056)	Mangan- ese, water, unfltrd recover- able, ug/L (01055)	Mercury water, unfltrd recover- able, ug/L (71900)
OCT 13...	<.04	<.04	<2	1.0	1.1	15	60	<.08	E.04	11.6	1.8	3	<.01
NOV 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 02...	<.04	<.04	<2	.7	1.7	E6	60	<.08	E.05	9.5	2.4	5	<.01
FEB 09...	<.04	<.04	E1	1.0	1.7	14	80	.08	.06	11.6	2.5	5	<.01
MAR 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 06...	<.04	<.04	E1	83.7	1.0	29	90	3.21	.08	10.0	9.7	13	--
MAY 20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 12...	<.04	.12	3	1.6	6.9	31	2,450	E.08	5.43	9.2	24.5	87	--
JUN 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 04...	<.04	<.04	E1	1.0	1.3	16	280	.11	.29	8.4	5.6	25	--
AUG 25...	<.04	<.04	E1	1.8	1.0	17	350	.43	.42	9.0	6.7	30	--

Date	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recover- able, ug/L (01067)	Selen- ium, water, fltrd, ug/L (01145)	Selen- ium, water, unfltrd ug/L (01147)	Stront- ium, water, fltrd, ug/L (01080)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover- able, ug/L (01092)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment dis- charge, tons/d (80155)
OCT 13...	1.59	1.36	E.3	.6	217	E.6	<2	83	11	2.0
NOV 04...	--	--	--	--	--	--	--	80	10	2.4
DEC 02...	.23	1.16	E.2	E.3	203	E.6	<2	74	10	--
FEB 09...	1.09	.99	.4	.6	253	1.3	E1	69	20	--
MAR 09...	--	--	--	--	--	--	--	78	5	.70
APR 06...	4.18	.90	E.3	E.2	237	8.2	E1	80	4	.65
MAY 20...	--	--	--	--	--	--	--	92	6	2.6
MAY 03...	--	--	--	--	--	--	--	92	6	2.1
JUN 12...	1.79	5.34	.8	1.2	164	1.1	19	97	266	826
JUN 09...	--	--	--	--	--	--	--	93	48	101
JUN 23...	--	--	--	--	--	--	--	90	40	73
JUL 14...	--	--	--	--	--	--	--	97	15	7.0
AUG 04...	2.08	2.02	<.4	E.4	189	3.3	E1	94	19	5.7
AUG 25...	2.04	2.31	<.4	<.4	195	3.0	3	99	22	5.7

YELLOWSTONE RIVER BASIN

06299980 TONGUE RIVER AT MONARCH, WY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	400	385	395	437	405	417	---	---	---	---	---	---
2	409	399	404	---	---	---	---	---	---	---	---	---
3	414	400	409	457	336	448	---	---	---	---	---	---
4	424	413	420	---	---	---	---	---	---	---	---	---
5	428	421	423	---	---	---	---	---	---	---	---	---
6	423	417	420	---	---	---	---	---	---	---	---	---
7	422	415	419	---	---	---	---	---	---	---	---	---
8	439	417	428	---	---	---	---	---	---	---	---	---
9	440	435	438	---	---	---	---	---	---	---	---	---
10	447	436	442	---	---	---	---	---	---	---	---	---
11	446	430	440	---	---	---	---	---	---	---	---	---
12	449	438	445	---	---	---	---	---	---	---	---	---
13	449	435	445	---	---	---	---	---	---	---	---	---
14	443	433	436	---	---	---	---	---	---	---	---	---
15	433	412	421	---	---	---	---	---	---	---	---	---
16	415	399	406	---	---	---	---	---	---	---	---	---
17	410	400	407	---	---	---	---	---	---	---	---	---
18	412	405	409	---	---	---	---	---	---	---	---	---
19	414	402	410	---	---	---	---	---	---	---	---	---
20	409	401	406	---	---	---	---	---	---	---	---	---
21	424	403	413	---	---	---	---	---	---	---	---	---
22	414	380	399	---	---	---	---	---	---	---	---	---
23	385	377	381	---	---	---	---	---	---	---	---	---
24	400	385	395	---	---	---	---	---	---	---	---	---
25	403	395	399	---	---	---	---	---	---	---	---	---
26	429	398	414	---	---	---	---	---	---	---	---	---
27	441	400	424	---	---	---	---	---	---	---	---	---
28	411	400	406	---	---	---	---	---	---	---	---	---
29	422	398	407	---	---	---	---	---	---	---	---	---
30	422	400	409	---	---	---	---	---	---	---	---	---
31	446	422	438	---	---	---	---	---	---	---	---	---
MONTH	449	377	416	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	424	417	421	384	363	373
2	---	---	---	---	---	---	432	421	425	394	369	382
3	---	---	---	---	---	---	437	428	434	392	364	378
4	---	---	---	---	---	---	448	408	432	382	363	373
5	---	---	---	---	---	---	408	387	400	378	340	357
6	---	---	---	---	---	---	405	386	396	340	250	302
7	---	---	---	---	---	---	410	395	403	287	178	216
8	---	---	---	---	---	---	451	373	407	329	245	272
9	---	---	---	---	---	---	375	317	346	323	288	298
10	---	---	---	---	---	---	344	307	326	310	253	272
11	---	---	---	---	---	---	378	342	357	298	183	236
12	---	---	---	---	---	---	406	370	389	380	279	334
13	---	---	---	---	---	---	421	399	410	279	248	258
14	---	---	---	---	---	---	419	373	401	264	253	258
15	---	---	---	446	429	439	373	325	333	260	225	240
16	---	---	---	447	434	444	355	329	342	234	210	220
17	---	---	---	440	431	435	371	355	366	218	194	206
18	---	---	---	441	434	438	---	---	---	218	191	207
19	---	---	---	442	433	438	295	253	271	214	184	196
20	---	---	---	441	437	439	309	279	293	197	162	176
21	---	---	---	441	436	439	335	309	322	175	160	165
22	---	---	---	441	437	440	385	335	359	173	152	162
23	---	---	---	449	433	440	402	356	384	171	155	161
24	---	---	---	449	438	445	370	310	353	165	146	156
25	---	---	---	438	430	433	321	256	294	182	164	173
26	---	---	---	446	434	438	293	260	277	199	179	189
27	---	---	---	448	440	444	324	271	299	207	191	196
28	---	---	---	445	438	443	329	307	318	202	189	195
29	---	---	---	438	428	432	357	327	347	202	184	193
30	---	---	---	429	412	422	377	348	362	212	195	201
31	---	---	---	419	407	413	---	---	---	216	207	212
MONTH	---	---	---	---	---	---	---	---	---	394	146	244

06299980 TONGUE RIVER AT MONARCH, WY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	217	201	212	241	232	238	392	377	384	436	426	430
2	216	200	208	259	239	250	389	377	382	434	427	431
3	215	209	212	255	244	250	391	378	385	437	430	434
4	216	198	206	261	247	255	389	377	383	434	425	430
5	210	196	204	260	248	256	414	389	402	433	424	429
6	205	181	192	263	254	259	411	402	406	441	427	436
7	190	172	180	264	256	260	416	401	407	432	421	426
8	212	181	205	272	256	264	421	402	414	429	418	423
9	211	200	205	280	269	276	446	411	428	430	420	423
10	214	206	209	282	277	279	446	427	439	437	429	432
11	216	207	211	284	275	280	435	378	411	451	436	440
12	213	202	208	289	281	286	428	423	425	455	424	439
13	207	191	200	300	288	296	429	424	427	433	421	426
14	209	200	204	301	299	300	437	423	429	426	409	421
15	211	194	202	308	301	304	434	424	430	414	404	409
16	201	186	192	327	305	311	449	431	440	421	406	414
17	193	166	179	332	314	320	450	438	443	419	410	416
18	176	154	165	326	318	321	442	406	429	418	408	414
19	176	163	170	331	323	327	420	406	413	428	407	414
20	184	166	177	343	327	338	406	389	396	425	409	413
21	185	176	180	350	340	344	420	394	413	417	405	412
22	193	182	188	352	341	346	425	414	421	414	406	411
23	198	188	193	361	345	354	441	422	435	410	402	407
24	201	197	198	363	349	357	433	415	427	417	403	410
25	210	201	206	364	342	355	420	408	415	424	410	418
26	219	210	215	366	346	360	431	408	416	415	407	411
27	218	207	213	365	348	356	419	408	413	421	407	416
28	225	215	223	363	350	359	419	408	414	423	413	418
29	243	225	233	375	363	370	436	417	426	414	406	411
30	232	226	229	380	369	375	434	427	429	448	404	412
31	---	---	---	394	371	383	440	431	434	---	---	---
MONTH	243	154	201	394	232	311	450	377	417	455	402	421

YELLOWSTONE RIVER BASIN

06301480 CONEY CREEK ABOVE TWIN LAKES, NEAR BIG HORN, WY

LOCATION.--Lat 44°36'05", long 107°19'01" (NAD 27), unsurveyed, Sheridan County, Hydrologic Unit 10090101, Bighorn National Forest, 0.2 mi upstream from Twin Lakes, and 17.0 mi southwest of Big Horn.

DRAINAGE AREA.--3.41 mi².

PERIOD OF RECORD.--October 1990 to current year (no winter records 1993 to 1996, 1998 to current year).

GAGE.--Water-stage recorder. Elevation of gage is 8,690 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. No diversion upstream from station. Result of discharge measurements, in cubic feet per second, made when station was not in operation, are given below:

Oct. 6 . . . 0.70

Apr. 15. . . 0.24

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	2.0	12	12	2.2	0.21
2	---	---	---	---	---	---	---	1.9	12	11	2.0	0.19
3	---	---	---	---	---	---	---	1.9	13	11	1.9	0.17
4	---	---	---	---	---	---	---	2.3	17	9.3	1.7	0.16
5	---	---	---	---	---	---	---	2.7	20	8.0	1.6	0.15
6	---	---	---	---	---	---	---	2.9	31	7.3	1.4	0.14
7	---	---	---	---	---	---	---	e3.0	39	6.7	1.2	0.13
8	---	---	---	---	---	---	---	e3.5	26	6.2	1.1	0.12
9	---	---	---	---	---	---	---	e4.0	21	5.8	0.94	0.11
10	---	---	---	---	---	---	---	e4.5	17	5.5	0.82	0.10
11	---	---	---	---	---	---	---	e5.0	16	5.6	0.77	0.09
12	---	---	---	---	---	---	---	5.4	18	5.1	0.88	0.10
13	---	---	---	---	---	---	---	5.2	26	4.5	0.98	0.11
14	---	---	---	---	---	---	---	4.6	22	4.0	0.93	0.10
15	---	---	---	---	---	---	---	4.6	27	3.9	0.87	0.10
16	---	---	---	---	---	---	---	6.7	36	3.5	0.74	0.10
17	---	---	---	---	---	---	---	15	56	3.2	0.70	0.10
18	---	---	---	---	---	---	---	32	56	3.1	0.70	0.10
19	---	---	---	---	---	---	---	32	45	2.8	0.90	0.10
20	---	---	---	---	---	---	---	62	40	2.4	0.91	0.09
21	---	---	---	---	---	---	---	90	36	2.1	0.86	0.09
22	---	---	---	---	---	---	---	63	30	1.8	0.77	0.10
23	---	---	---	---	---	---	---	66	28	1.6	0.71	0.11
24	---	---	---	---	---	---	---	60	26	1.5	0.57	0.12
25	---	---	---	---	---	---	---	34	21	1.5	0.45	0.14
26	---	---	---	---	---	---	---	22	17	1.9	0.40	0.15
27	---	---	---	---	---	---	---	17	16	1.9	0.33	0.15
28	---	---	---	---	---	---	---	17	13	1.7	0.30	0.15
29	---	---	---	---	---	---	---	19	17	1.5	0.28	0.14
30	---	---	---	---	---	---	---	15	16	1.4	0.25	0.14
31	---	---	---	---	---	---	---	12	---	1.5	0.23	---
TOTAL	---	---	---	---	---	---	---	616.2	770	139.3	28.39	3.76
MEAN	---	---	---	---	---	---	---	19.9	25.7	4.49	0.92	0.13
MAX	---	---	---	---	---	---	---	90	56	12	2.2	0.21
MIN	---	---	---	---	---	---	---	1.9	12	1.4	0.23	0.09
AC-FT	---	---	---	---	---	---	---	1,220	1,530	276	56	7.5

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2005, BY WATER YEAR (WY)*

	0.57	0.50	0.27	0.16	0.13	0.14	0.58	18.2	24.4	5.81	1.18	0.55
MEAN	0.57	0.50	0.27	0.16	0.13	0.14	0.58	18.2	24.4	5.81	1.18	0.55
MAX	0.71	0.61	0.36	0.22	0.20	0.21	1.59	27.4	50.9	14.1	3.50	1.26
(WY)	(1993)	(1993)	(1993)	(1992)	(1992)	(1992)	(1992)	(1992)	(1995)	(1995)	(1993)	(1998)
MIN	0.52	0.43	0.17	0.12	0.09	0.06	0.15	8.58	6.46	1.01	0.07	0.10
(WY)	(1992)	(1997)	(1991)	(1997)	(1997)	(1997)	(1997)	(1995)	(2001)	(2001)	(2001)	(2001)

06301480 CONEY CREEK ABOVE TWIN LAKES, NEAR BIG HORN, WY—Continued

SUMMARY STATISTICS

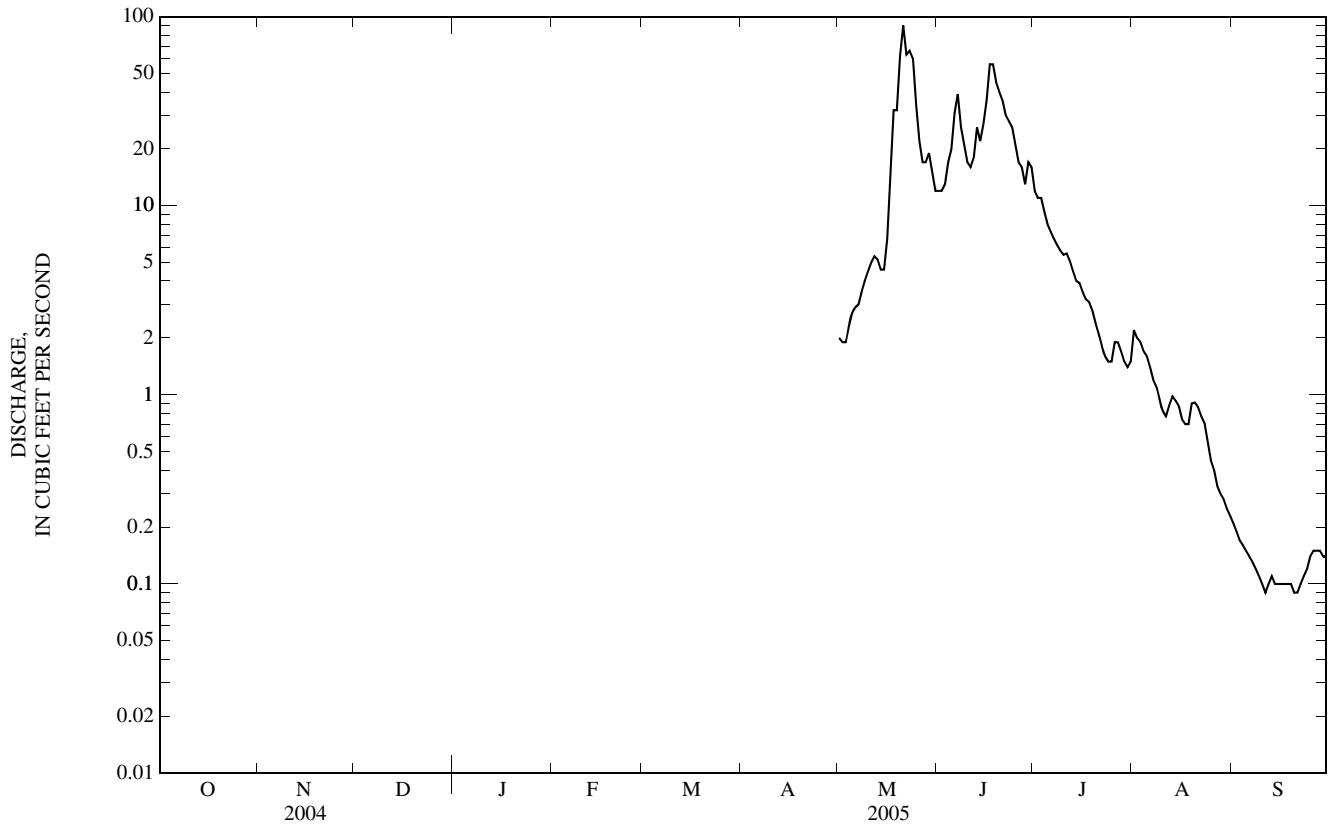
	FOR 2005 WATER YEAR*	WATER YEARS 1991 - 2005*	
ANNUAL MEAN	--	5.43	
HIGHEST ANNUAL MEAN	--	5.84	1992
LOWEST ANNUAL MEAN	--	4.83	1991
HIGHEST DAILY MEAN	90 May 21	105	Jun 16, 1995
LOWEST DAILY MEAN	0.09 Sept 11,20,21	0.00	Sep 4, 2001
MAXIMUM PEAK FLOW	99 May 21	135 ^a	Jun 15, 1995
MAXIMUM PEAK STAGE	4.00 May 21	5.05 ^b	May 14, 1991
ANNUAL RUNOFF (AC-FT)	--	3,940	

* For period of operation.

a Gage height, 4.35 ft.

b Backwater from snow and ice, site and datum then in use.

c Estimated.



YELLOWSTONE RIVER BASIN

06301495 CONEY CREEK BELOW TWIN LAKES, NEAR BIG HORN, WY

LOCATION.--Lat 44°36'33", long 107°18'32" (NAD 27), unsurveyed, Sheridan County, Hydrologic Unit 10090101, Bighorn National Forest, 30 ft downstream from Twin Lakes Reservoir, 0.4 mi upstream from mouth, and 16.2 mi southwest of Big Horn.

DRAINAGE AREA.--8.07 mi².

PERIOD OF RECORD.--October 1990 to September 1994, October 1995 to current year (no winter records 1993, 1994, 1996, 1998-2003).

GAGE.--Water-stage recorder and concrete weir. Elevation of gage is 8,560 ft above NGVD of 1929, from topographic map. October 1990 to September 1998, at site 0.2 mi downstream from station at different datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Twin Lakes Reservoir, capacity, 3,400 acre-ft. Seasonal records collected by State of Wyoming at site 0.2 mi downstream from station, at different datum, 1971-90. Result of discharge measurements, in cubic feet per second, made when station was not in operation, are given below:

Oct. 6 . . . 4.02

Apr. 15 . . . 0.36

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	0.33	0.34	0.32	1.1	4.9
2	---	---	---	---	---	---	---	0.33	0.34	0.31	1.8	5.9
3	---	---	---	---	---	---	---	0.34	0.37	0.32	1.8	5.9
4	---	---	---	---	---	---	---	0.36	0.37	0.32	1.8	5.9
5	---	---	---	---	---	---	---	0.39	0.39	0.32	2.3	5.9
6	---	---	---	---	---	---	---	0.41	0.40	0.32	2.6	5.9
7	---	---	---	---	---	---	---	0.39	0.38	0.31	2.6	5.9
8	---	---	---	---	---	---	---	0.40	0.37	0.32	2.6	5.9
9	---	---	---	---	---	---	---	0.39	0.37	0.32	2.6	5.9
10	---	---	---	---	---	---	---	0.39	0.38	0.32	2.6	5.8
11	---	---	---	---	---	---	---	0.36	0.36	0.32	2.6	5.9
12	---	---	---	---	---	---	---	e0.35	0.35	0.32	2.6	5.8
13	---	---	---	---	---	---	---	e0.34	0.34	0.32	2.6	5.9
14	---	---	---	---	---	---	---	0.32	0.33	0.32	2.6	5.9
15	---	---	---	---	---	---	---	0.36	0.34	0.32	2.6	5.8
16	---	---	---	---	---	---	---	0.40	0.34	0.32	2.6	5.8
17	---	---	---	---	---	---	---	0.39	0.33	0.32	2.6	5.8
18	---	---	---	---	---	---	---	0.38	0.32	0.32	2.6	5.7
19	---	---	---	---	---	---	---	0.43	0.32	0.32	2.6	5.5
20	---	---	---	---	---	---	---	0.41	0.32	0.32	2.6	6.4
21	---	---	---	---	---	---	---	0.36	0.32	0.33	2.7	7.5
22	---	---	---	---	---	---	---	0.34	0.32	0.33	2.6	7.6
23	---	---	---	---	---	---	---	0.34	0.32	0.33	3.2	7.6
24	---	---	---	---	---	---	---	0.31	0.32	0.34	3.8	7.8
25	---	---	---	---	---	---	---	0.31	0.31	0.35	3.8	e7.7
26	---	---	---	---	---	---	---	0.31	0.31	0.35	3.8	e7.6
27	---	---	---	---	---	---	---	0.32	0.31	0.35	3.8	e7.6
28	---	---	---	---	---	---	---	0.33	0.31	0.35	3.8	7.6
29	---	---	---	---	---	---	---	0.32	0.32	0.36	3.8	7.8
30	---	---	---	---	---	---	---	0.31	0.32	0.37	3.5	8.0
31	---	---	---	---	---	---	---	0.32	---	0.40	3.4	---
TOTAL	---	---	---	---	---	---	---	11.04	10.22	10.24	86.0	193.2
MEAN	---	---	---	---	---	---	---	0.36	0.34	0.33	2.77	6.44
MAX	---	---	---	---	---	---	---	0.43	0.40	0.40	3.8	8.0
MIN	---	---	---	---	---	---	---	0.31	0.31	0.31	1.1	4.9
AC-FT	---	---	---	---	---	---	---	22	20	20	171	383

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2005, BY WATER YEAR (WY)*

MEAN	1.68	0.38	0.20	0.14	0.17	0.23	0.52	20.2	31.6	10.6	7.52	5.68
MAX	4.50	0.56	0.32	0.26	0.32	0.51	1.32	54.4	81.3	27.1	18.7	12.7
(WY)	(1991)	(1997)	(1992)	(1992)	(1992)	(1992)	(1992)	(1993)	(1997)	(1992)	(1998)	(1999)
MIN	0.50	0.14	0.13	0.05	0.04	0.04	0.20	0.21	0.21	0.33	2.03	0.78
(WY)	(1992)	(1993)	(1997)	(1997)	(1997)	(1997)	(1993)	(2002)	(2002)	(2005)	(1996)	(1996)

06301495 CONEY CREEK BELOW TWIN LAKES, NEAR BIG HORN, WY—Continued

SUMMARY STATISTICS

	FOR 2005 WATER YEAR*	WATER YEARS 1991 - 2005*
ANNUAL MEAN	--	12.0
HIGHEST ANNUAL MEAN	--	12.6 1992
LOWEST ANNUAL MEAN	--	11.2 1991
HIGHEST DAILY MEAN	8.0 Sep 30	172 May 29, 1993
LOWEST DAILY MEAN	0.31 Several days	0.03 Jan 20, 1997
MAXIMUM PEAK FLOW	62 ^a Sep 30	223 ^b May 29, 1993
MAXIMUM PEAK STAGE	2.07 ^a Sep 30	4.32 ^c May 1, 1997
ANNUAL RUNOFF (AC-FT)	--	8,710

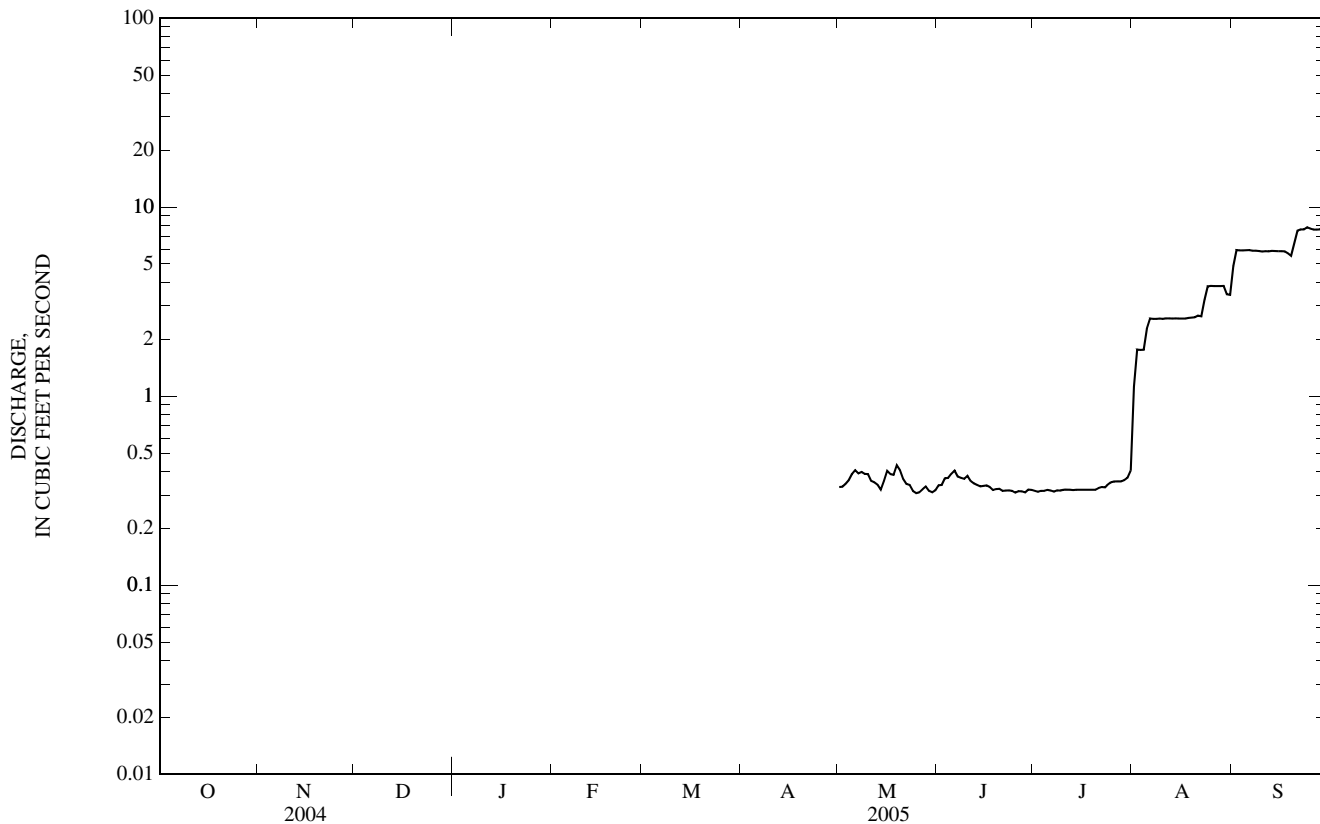
* For period of operation.

a May have been greater during short duration reservoir release on this date.

b Gage height, 3.16 ft site and datum then in use.

c Backwater from snow and ice, site and datum then in use.

e Estimated.



YELLOWSTONE RIVER BASIN

06303500 LITTLE GOOSE CREEK IN CANYON, NEAR BIG HORN, WY

LOCATION.--Lat 44°35'46", long 107°02'22" (NAD 27), in SE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.1, T.53 N., R.85 W., Sheridan County, Hydrologic Unit 10090101, on left bank 100 ft upstream from headgate of Lower Peralta ditch and 6.5 mi southwest of Big Horn.

DRAINAGE AREA.--51.6 mi².

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

REVISED RECORDS.--WDR WY-76-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,860 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good. Three small reservoirs upstream from station, combined capacity, 860 acre-ft, two of which store some imported water. Water imported into drainage basin upstream from station from East Goose Creek basin is diverted downstream from station for irrigation. Result of discharge measurement, in cubic feet per second, made when station was not in operation, is given below:

Oct. 4 . . . 14.4

COOPERATION.--Station operated and record provided by the Wyoming State Engineer's Office; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	8.8	28	181	184	84	56
2	---	---	---	---	---	---	13	29	174	163	81	57
3	---	---	---	---	---	---	17	29	172	156	84	60
4	---	---	---	---	---	---	21	31	176	129	82	59
5	---	---	---	---	---	---	22	33	177	126	77	59
6	---	---	---	---	---	---	19	40	201	123	72	58
7	---	---	---	---	---	---	22	100	220	115	71	59
8	---	---	---	---	---	---	27	253	200	109	71	59
9	---	---	---	---	---	---	32	211	192	102	71	59
10	---	---	---	---	---	---	24	260	189	98	69	63
11	---	---	---	---	---	---	19	352	203	94	66	64
12	---	---	---	---	---	---	19	294	224	79	66	66
13	---	---	---	---	---	---	21	250	269	75	65	64
14	---	---	---	---	---	---	27	233	230	83	63	63
15	---	---	---	---	---	---	24	233	262	84	60	62
16	---	---	---	---	---	---	23	254	307	88	56	60
17	---	---	---	---	---	---	28	297	357	88	57	57
18	---	---	---	---	---	---	31	302	371	89	57	57
19	---	---	---	---	---	---	28	316	344	91	56	57
20	---	---	---	---	---	---	27	346	344	89	53	57
21	---	---	---	---	---	---	25	391	334	88	52	56
22	---	---	---	---	---	---	26	374	324	81	52	56
23	---	---	---	---	---	---	28	375	305	77	53	56
24	---	---	---	---	---	---	31	366	285	76	54	58
25	---	---	---	---	---	---	35	305	253	83	60	57
26	---	---	---	---	---	---	35	257	247	103	59	55
27	---	---	---	---	---	---	34	231	227	89	58	55
28	---	---	---	---	---	---	32	219	208	76	58	57
29	---	---	---	---	---	---	31	208	236	76	57	61
30	---	---	---	---	---	---	29	196	203	78	57	53
31	---	---	---	---	---	---	---	185	---	80	57	---
TOTAL	---	---	---	---	---	---	758.8	6,998	7,415	3,072	1,978	1,760
MEAN	---	---	---	---	---	---	25.3	226	247	99.1	63.8	58.7
MAX	---	---	---	---	---	---	35	391	371	184	84	66
MIN	---	---	---	---	---	---	8.8	28	172	75	52	53
AC-FT	---	---	---	---	---	---	1,510	13,880	14,710	6,090	3,920	3,490

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2005, BY WATER YEAR (WY)*

MEAN	23.6	13.1	10.4	8.58	8.11	8.48	34.5	174	232	102	80.4	51.3
MAX	46.0	26.5	17.5	12.3	13.9	14.1	106	339	502	209	124	90.0
(WY)	(1959)	(1962)	(1942)	(1942)	(1962)	(1962)	(1943)	(1944)	(1995)	(1975)	(1968)	(1978)
MIN	12.7	8.51	6.49	4.99	5.37	5.76	9.46	60.0	50.5	57.9	41.1	20.4
(WY)	(1954)	(1955)	(1950)	(1950)	(1950)	(1950)	(1970)	(2004)	(2001)	(2004)	(1981)	(1960)

06303500 LITTLE GOOSE CREEK IN CANYON, NEAR BIG HORN, WY—Continued

SUMMARY STATISTICS

ANNUAL MEAN
 HIGHEST ANNUAL MEAN
 LOWEST ANNUAL MEAN
 HIGHEST DAILY MEAN
 LOWEST DAILY MEAN
 MAXIMUM PEAK FLOW
 MAXIMUM PEAK STAGE
 ANNUAL RUNOFF (AC-FT)

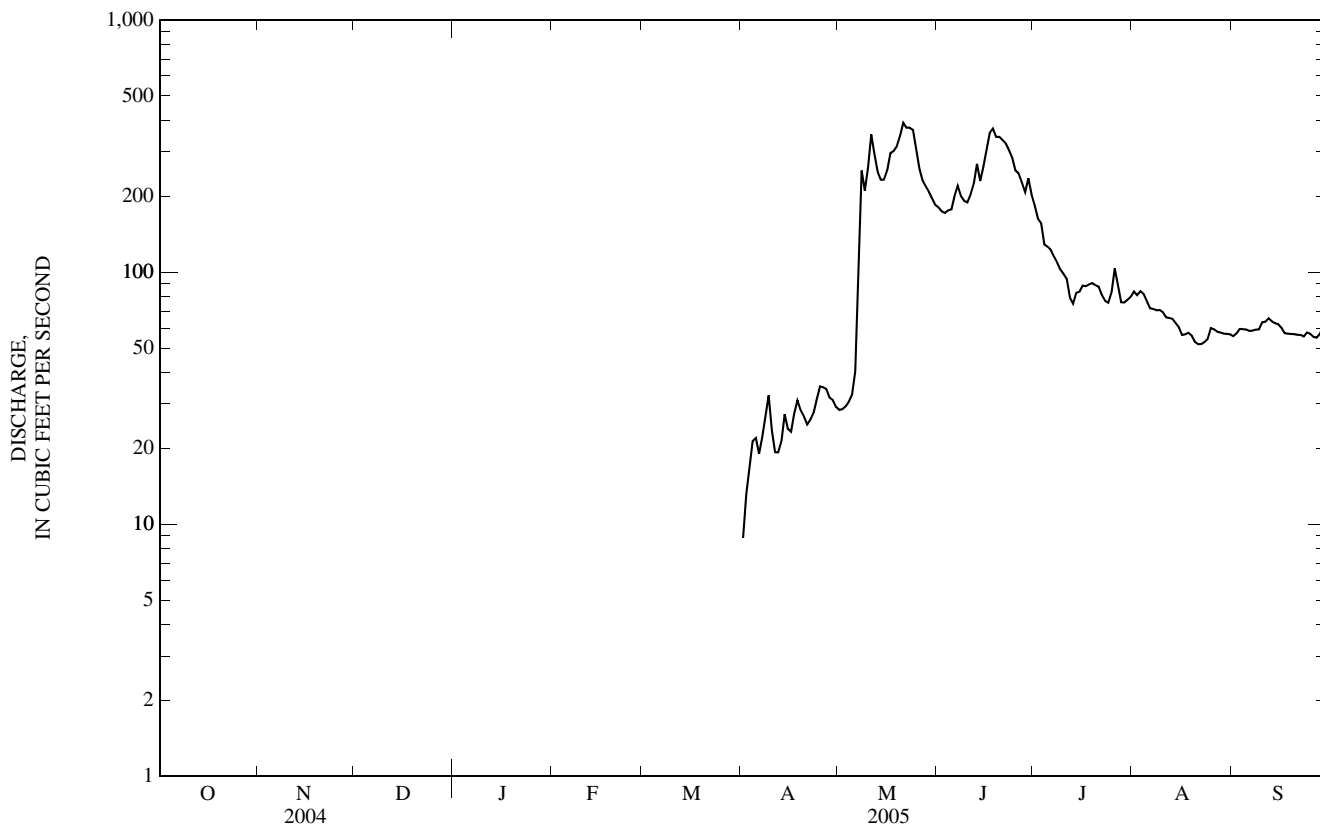
FOR 2005 WATER YEAR*

WATER YEARS 1941 - 2005*

--		63.4	
--		83.9	1970
--		40.6	1960
391	May 21	837	Jun 15, 1963
8.8	Apr 1	3.0	Jan 3, 1950
449	Jun 17	1,350 ^a	Jun 15, 1963
4.23	Jun 17	6.78	Jun 15, 1963
--		45,900	

* For period of operation.

a From rating curve extended above 900 ft³/s.



06304500 LITTLE GOOSE CREEK AT SHERIDAN, WY

LOCATION.--Lat 44°48'10", long 106°57'10" (NAD 27), in NE¹/₄ NW¹/₄ SW¹/₄ sec.26, T.56 N., R.84 W., Sheridan County, Hydrologic Unit 10090101, at bridge on Sheridan Avenue in Sheridan and 0.6 mi upstream from mouth.

PERIOD OF RECORD.--March 1979 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
Date		Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO ₃ (29801)	Alkalinity, wat flt inc tit field, mg/L as CaCO ₃ (39086)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT 27...	0810		29	662	11.4	103	8.4	604	2.0	5.0	340	67.8	42.2	2.17
NOV 23...	0835		34	666	13.4	107	8.3	658	-2.0	.5	350	65.7	44.1	2.06
JAN 27...	1400		31	657	13.2	105	8.5	668	7.0	.0	350	66.9	45.4	2.52
FEB 23...	1335		22	667	13.8	121	8.6	690	5.0	4.0	350	66.3	44.7	1.95
MAR 30...	0800		22	656	10.8	102	8.3	666	7.5	6.5	360	68.1	45.5	1.99
APR 12...	1720		17	662	11.0	126	8.7	720	23.0	15.0	360	64.5	48.1	2.19
MAY 26...	1140		298	673	10.8	103	7.9	219	11.0	8.0	100	20.3	12.8	1.04
JUN 15...	1620		304	664	9.7	110	8.3	235	28.0	14.5	110	21.9	13.9	1.01
JUL 26...	1050		42	673	8.3	96	8.1	703	--	16.0	350	64.7	46.7	2.71
AUG 09...	1245		18	671	11.9	160	8.4	661	32.0	23.5	340	63.7	43.3	2.38
SEP 26...	1500		37	668	11.8	128	8.4	562	21.0	13.0	290	55.0	36.8	2.30
OCT 27...		.5	19.2	11	265	--	3.70	.4	10.4	84.3	389	.50	29.0	370
NOV 23...		.5	20.9	12	279	--	3.73	.3	12.0	84.0	400	.56	37.7	411
JAN 27...		.5	22.0	12	285	--	4.68	.3	11.3	99.8	424	.58	36.2	430
FEB 23...		.5	20.5	11	285	268	4.45	.3	8.25	91.3		.56	24.3	409
MAR 30...		.5	21.1	11	279	--	4.34	.3	7.56	95.2	411	.56	24.4	411
APR 12...		.5	23.3	12	244	--	5.02	.3	6.96	109	406	.57	19.4	423
MAY 26...		.3	7.31	13	87	--	1.57	E.1	11.5	26.3	133	.19	113	140
JUN 15...		.3	7.01	12	94	--	1.35	.1	10.7	25.1	138	.18	110	133
JUL 26...		.5	22.3	12	260	--	5.61	.4	9.17	119	427	.61	50.7	447
AUG 09...		.5	20.8	12	198	--	4.73	.3	6.58	118	379	.56	20.0	408
SEP 26...		.4	15.8	11	206	--	3.55	.3	10.0	74.5	322	.50	36.6	366

06304500 LITTLE GOOSE CREEK AT SHERIDAN, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	E coli, modif. m-TEC, water, col/ 100 mL (90902)	Fecal coli- form, M-FC 0.7u MF col/ 100 mL (31625)	Alum- inum, water, unfltrd recover- able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recover- able, ug/L (01007)	Beryll- ium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)	Selen- ium, water, unfltrd ug/L (01147)
OCT 27...	--	--	--	--	--	--	66	.4	65	<.06	21	13.1	.5
NOV 23...	<.04	.15	<.008	<.02	63	51	182	.4	70	<.06	24	12.7	.5
JAN 27...	--	--	--	--	--	--	173	.4	69	<.06	15	26.4	.6
FEB 23...	<.04	.07	<.008	<.02	E3	E2	276	.4	69	<.06	28	35.8	.8
MAR 30...	--	--	--	--	--	--	79	.5	67	<.06	34	35.0	E.4
APR 12...	--	--	--	--	--	--	38	.5	63	<.06	28	23.4	.6
MAY 26...	--	--	--	--	65	40	363	.4	27	E.03	33	22.8	.6
JUN 15...	--	--	--	--	--	--	538	.4	29	E.03	27	12.3	.5
JUL 26...	--	--	--	--	E2,800	E3,100	383	.8	63	E.04	16	16.8	.7
AUG 09...	<.04	<.06	<.008	<.02	--	--	79	.8	56	<.06	E5	5.0	1.1
SEP 26...	--	--	--	--	--	--	175	.52	58	<.06	8	12.6	--

< -- Less than.

E -- Estimated value; for bacteria, estimated values are counts outside the acceptable range (non-ideal colony count).

06305500 GOOSE CREEK BELOW SHERIDAN, WY

LOCATION.--Lat 44°49'25", long 106°57'40" (NAD 27), in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.15, T.56 N., R.84 W., Sheridan County, Hydrologic Unit 10090101, 700 ft north of Sheridan city limits and 0.2 mi downstream from Soldier Creek.

DRAINAGE AREA.--392 mi².

PERIOD OF RECORD.--Water years 1959-65, 1968 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
Date		Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO ₃ (29801)	Alkalinity, wat flt inc tit field, mg/L as CaCO ₃ (39086)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT 27...	1045	.6	24.6	13	277	--	5.48	.4	9.98	122	448	.61	76.2	448
NOV 23...	0950	.6	26.8	14	286	--	6.24	.4	11.1	125	461	.65	84.7	475
JAN 27...	1600	.6	26.2	14	252	--	7.10	.3	11.0	123	433	.59	69.0	437
FEB 23...	1440	.6	24.1	14	244	240	7.46	.4	8.00	114		.58	64.8	429
MAR 30...	0930	.6	24.5	14	238	--	6.22	.3	6.64	118	406	.60	57.2	438
APR 13...	0750	.7	28.7	15	249	--	8.80	.3	6.08	148	457	.66	20.8	482
MAY 26...	0935	.3	6.21	15	64	--	1.58	E.1	9.65	24.5	106	.16	271	117
JUN 13...	1550	.3	8.34	14	91	--	1.60	.1	10.0	36.2	149	.21	327	157
JUL 26...	1155	.6	25.5	13	235	--	8.14	.3	7.93	143	441	.64	86.1	469
AUG 09...	1140	.7	28.2	15	249	--	8.22	.3	5.43	138	444	.62	36.9	455
SEP 26...	1320	.5	18.6	12	224	--	4.97	.3	9.71	98.0	362	.52	89.6	379

06305500 GOOSE CREEK BELOW SHERIDAN, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro- gen, wat unfl- trd, mg/L by anal- ysis, (62855)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	E coli, modif. m-TEC, water, col/ 100 mL (90902)	Fecal coli- form, M-FC 0.7u MF col/ 100 mL (31625)	Alum- inum, water, unfltrd recover- able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recover- able, ug/L (01007)	Beryll- ium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)
OCT 27...	--	--	--	--	--	--	--	203	.5	59	<.06	17	16.8
NOV 23...	<.04	.43	<.008	--	.10	E72	90	160	.3	59	<.06	19	15.2
JAN 27...	--	--	--	--	--	--	--	89	.4	55	<.06	16	22.1
FEB 23...	<.04	.41	<.008	--	.12	59	120	218	.4	53	<.06	25	29.3
MAR 30...	--	--	--	--	--	--	--	51	.5	53	<.06	35	33.9
APR 13...	--	--	--	--	--	--	--	285	.6	58	<.06	20	52.7
MAY 26...	--	--	--	--	--	180	140	366	.3	25	E.04	45	17.3
JUN 13...	--	--	--	--	--	--	--	722	.4	34	.06	34	14.9
JUL 26...	--	--	--	--	--	2,400	E3,700	290	.8	58	E.04	19	21.7
AUG 09...	--	--	--	--	--	--	--	129	.8	55	E.04	13	11.6
SEP 26...	<.04	.39	<.008	.74	.10	--	--	244	.50	52	<.06	6	13.3

Date	Selen- ium, water, unfltrd ug/L (01147)
OCT 27...	.7
NOV 23...	.8
JAN 27...	.7
FEB 23...	.9
MAR 30...	.5
APR 13...	1.0
MAY 26...	.5
JUN 13...	.6
JUL 26...	.6
AUG 09...	1.2
SEP 26...	--

< -- Less than.

E -- Estimated value; for bacteria, estimated values are counts outside the acceptable range (non-ideal colony count).

YELLOWSTONE RIVER BASIN

06305700 GOOSE CREEK NEAR ACME, WY

LOCATION.--Lat 44°53'11", long 106°59'18" (NAD 27), in SE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.28, T.57 N., R.84 W., Sheridan County, Hydrologic Unit 10090101, on right bank 0.2 mi north of county road, 1.6 mi south of Acme, and 3.4 mi upstream from mouth.

DRAINAGE AREA.--413 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,620 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, 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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	81	e54	e40	e60	54	44	54	458	424	49	59
2	83	73	e52	e35	e56	55	41	49	436	366	59	54
3	70	72	e52	e43	e55	55	46	49	406	348	59	55
4	71	81	e57	e38	e56	54	45	48	390	320	68	54
5	66	76	e52	e36	e55	53	48	44	392	283	61	51
6	65	75	e54	e37	e50	53	51	39	455	253	49	52
7	58	76	e52	e40	e47	52	43	143	604	232	41	57
8	59	72	e52	e46	e44	57	45	749	683	218	40	53
9	56	72	e50	e40	e50	59	92	561	581	196	38	50
10	58	72	e48	e45	e55	61	79	642	503	177	50	43
11	57	74	e52	e45	e70	58	44	2,000	470	183	63	33
12	59	70	e49	e46	e60	55	34	1,610	458	174	65	40
13	58	66	e45	e45	e60	61	29	916	670	131	81	59
14	60	69	e40	e44	e55	57	24	771	654	97	87	57
15	80	69	e44	e37	e55	51	26	699	612	83	77	56
16	88	65	e45	e43	e52	55	26	696	709	87	72	55
17	77	64	e48	e50	e60	56	21	753	952	88	69	50
18	73	68	e50	e56	e60	55	22	801	1,220	78	66	55
19	76	66	e53	e65	e65	51	36	786	1,200	68	78	58
20	72	e67	e49	e60	e60	49	46	819	1,140	56	77	58
21	68	e54	e46	e57	e56	50	86	1,040	1,100	45	68	57
22	70	e60	e40	e53	e58	50	103	1,110	906	32	61	60
23	72	e56	e35	e65	e56	49	90	959	811	37	59	60
24	83	e57	e45	e75	e55	49	80	996	770	35	57	68
25	84	e60	e44	e66	e55	48	75	865	702	38	56	81
26	80	e56	e43	e60	57	47	75	719	602	77	65	88
27	82	e54	e40	e54	56	48	76	622	575	88	64	86
28	82	e50	e46	e60	55	51	74	565	472	63	63	87
29	86	e52	e42	e57	---	49	66	555	506	54	58	88
30	90	e54	e44	e54	---	50	60	509	497	46	55	88
31	84	---	e42	e58	---	47	---	475	---	41	59	---
TOTAL	2,256	1,981	1,465	1,550	1,573	1,639	1,627	20,644	19,934	4,418	1,914	1,812
MEAN	72.8	66.0	47.3	50.0	56.2	52.9	54.2	666	664	143	61.7	60.4
MAX	90	81	57	75	70	61	103	2,000	1,220	424	87	88
MIN	56	50	35	35	44	47	21	39	390	32	38	33
AC-FT	4,470	3,930	2,910	3,070	3,120	3,250	3,230	40,950	39,540	8,760	3,800	3,590

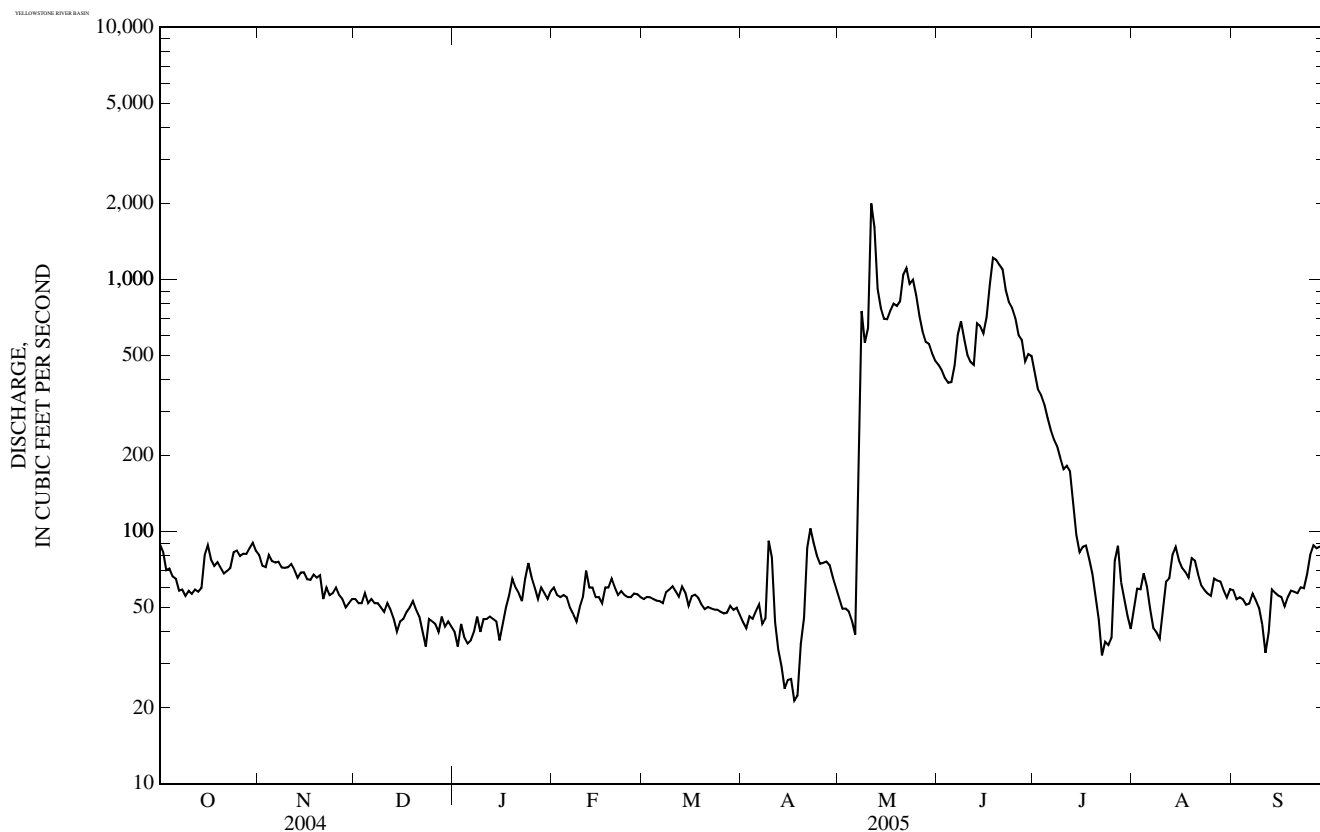
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2005, BY WATER YEAR (WY)

MEAN	95.8	89.3	74.0	67.3	80.6	95.2	126	379	549	141	57.6	81.5
MAX	156	144	107	109	137	185	195	891	1,592	547	157	158
(WY)	(1985)	(1999)	(1996)	(1990)	(1996)	(1994)	(1994)	(1984)	(1995)	(1995)	(1998)	(1998)
MIN	41.6	47.1	42.3	43.5	36.7	46.0	54.2	32.6	39.2	9.51	15.6	28.0
(WY)	(2002)	(2003)	(2002)	(2002)	(1989)	(2002)	(2005)	(2004)	(2001)	(2001)	(1988)	(2001)

06305700 GOOSE CREEK NEAR ACME, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1984 - 2005	
ANNUAL TOTAL	20,264.1		60,813		--	
ANNUAL MEAN	55.4		167		148	
HIGHEST ANNUAL MEAN	--		--		303 1995	
LOWEST ANNUAL MEAN	--		--		50.4 2002	
HIGHEST DAILY MEAN	176	Jul 6	2,000	May 11	3,040	Jun 17, 1995
LOWEST DAILY MEAN	7.5	May 11	21	Apr 17	3.0	Aug 24, 2001
ANNUAL SEVEN-DAY MINIMUM	10	May 5	26	Apr 12	4.3	Aug 22, 2001
MAXIMUM PEAK FLOW	--		2,930	May 11	3,330	Jun 17, 1995
MAXIMUM PEAK STAGE	--		7.02	May 11	7.65 ^a	Feb 25, 1986
ANNUAL RUNOFF (AC-FT)	40,190		120,600		107,000	
10 PERCENT EXCEEDS	84		577		306	
50 PERCENT EXCEEDS	52		59		85	
90 PERCENT EXCEEDS	29		43		37	

a From floodmarks, backwater from ice.
e Estimated.



06305700 GOOSE CREEK NEAR ACME, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1983-89, February 2004 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 21, 2004 to current year.

INSTRUMENTATION.--Specific conductance probe installed late April 2004.

REMARKS.--Specific conductance record rated good to excellent except for the period May 28 to June 29, which is rated fair to poor. Water quality samples and records provided by the Montana Water Science Center.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 996 microsiemens per centimeter at 25°C (µS/cm), May 11, 2004; minimum recorded, 132 µS/cm, June 21, 2005.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 958 µS/cm, March 25; minimum recorded, 132 µS/cm, June 21.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
OCT														
14...	0815	58	669	6.0	62	8.1	772	15.0	10.5	410	76.2	52.6	3.61	
DEC														
02...	1545	E52	667	15.9	125	8.3	700	4.5	.0	350	70.3	42.9	2.57	
FEB														
09...	1220	E50	671	14.0	109	8.0	771	4.5	.0	390	74.8	49.1	2.96	
MAR														
09...	1000	57	669	13.1	122	8.4	704	17.0	6.5	360	68.7	45.0	2.72	
APR														
06...	1130	50	676	12.6	129	8.5	569	15.0	11.0	280	54.4	34.6	2.30	
20...	0915	37	671	9.9	89	8.2	749	1.0	5.5	350	67.0	45.1	3.51	
MAY														
03...	1400	43	669	14.4	156	8.7	716	19.0	13.0	320	54.3	43.8	3.74	
12...	1455	1,350	670	11.1	98	7.9	423	4.0	4.5	190	36.3	23.6	4.60	
JUN														
09...	1050	580	667	9.4	97	7.8	217	15.0	10.5	88	17.9	10.6	1.05	
22...	1730	891	675	9.4	109	8.0	130	30.0	16.5	57	13.2	5.76	.83	
JUL														
14...	1330	100	669	11.1	154	8.5	588	39.0	25.0	260	52.3	32.1	2.48	
AUG														
04...	1045	69	676	7.5	92	8.2	566	18.0	19.0	280	54.1	34.5	3.46	
Date		Sodium adsorption ratio (00931)	Sodium water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)
OCT														
14...	.6	30.0	14	297	6.45	.4	5.80	141	495	.67	77.6	E.005	.024	
DEC														
02...	.6	24.9	13	274	5.22	.4	11.2	123	447	.61	--	.010	.276	
FEB														
09...	.7	30.5	14	284	11.0	.3	10.2	141	493	.67	--	.017	.521	
MAR														
09...	.6	27.6	14	252	7.33	.3	4.75	135	443	.60	68.1	--	--	
APR														
06...	.6	22.0	15	211	5.97	.3	7.76	99.1	355	.48	47.9	.027	.150	
20...	.7	31.0	16	238	9.46	.3	6.83	148	453	.62	45.3	--	--	
MAY														
03...	1	48.2	25	219	5.01	.4	1.55	168	457	.62	53.0	--	--	
12...	.5	14.6	14	126	3.86	.2	11.4	78.5	251	.34	914	.044	.407	
JUN														
09...	.3	6.36	13	78	1.45	.1	8.49	29.7	123	.17	192	--	--	
22...	.2	3.96	13	50	.88	E.1	7.96	13.8	77	.10	184	--	--	
JUL														
14...	.5	19.8	14	202	6.39	.2	5.62	112	352	.48	95.2	--	--	
AUG														
04...	.5	20.2	13	194	6.37	.3	6.69	100	343	.47	63.9	<.010	<.016	

06305700 GOOSE CREEK NEAR ACME, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Nitrite water, fltrd, mg/L as N (00613)	Total nitrogen, wat unfltrd, mg/L (62855)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd, mg/L (00665)	Aluminum, water, fltrd, ug/L (01106)	Aluminum, water, unfltrd recoverable, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd, ug/L (01002)	Barium, water, fltrd, ug/L (01005)	Barium, water, unfltrd recoverable, ug/L (01007)	Beryllium, water, fltrd, ug/L (01010)	Beryllium, water, unfltrd recoverable, ug/L (01012)	Boron, water, fltrd, ug/L (01020)
OCT 14...	.003	.33	.098	.122	M	13	.6	<2	60	60	<.06	<.06	115
DEC 02...	.004	.64	.077	.146	M	156	.4	<2	56	59	<.06	<.06	80
FEB 09...	.005	.88	.115	.194	E1	118	.4	<2	50	61	<.06	<.06	87
MAR 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 06...	.007	.57	.108	.18	2	101	.6	<2	48	52	<.06	<.06	68
APR 20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 12...	.006	1.32	.053	.112	6	2,090	.7	E2	42	68	<.06	.22	46
JUN 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 22...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 04...	<.002	.55	.072	.161	<2	230	.9	<2	50	54	<.06	<.06	82

Date	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd, ug/L (01027)	Chromium, water, unfltrd recoverable, ug/L (01034)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recoverable, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Lithium water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recoverable, ug/L (01055)	Mercury water, unfltrd recoverable, ug/L (71900)
OCT 14...	<.04	<.04	<2	1.5	2.0	36	70	E.06	.09	21.8	6.7	9	E.01
DEC 02...	<.04	<.04	<2	1.3	3.7	16	410	E.04	.44	22.1	12.5	57	<.01
FEB 09...	<.04	E.03	E2	1.3	2.7	27	430	E.06	.42	18.6	34.2	73	<.01
MAR 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 06...	<.04	<.04	2	2.2	3.4	30	350	.17	.41	15.7	67.1	97	--
APR 20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 12...	E.02	.10	4	2.0	6.7	37	3,180	.24	3.53	9.4	35.3	118	--
JUN 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 22...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 04...	<.04	<.04	E2	1.8	1.8	12	470	E.07	.78	12.7	15.6	59	--

YELLOWSTONE RIVER BASIN

06305700 GOOSE CREEK NEAR ACME, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recover- able, ug/L (01067)	Selen- ium, water, fltrd, ug/L (01145)	Selen- ium, water, unfltrd ug/L (01147)	Stront- ium, water, fltrd, ug/L (01080)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover- able, ug/L (01092)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment dis- charge, tons/d (80155)
OCT 14...	2.14	2.58	.5	.8	505	2.5	4	43	23	3.6
DEC 02...	.57	2.16	.7	.6	454	2.0	5	64	60	--
FEB 09...	1.91	2.15	.6	.8	504	4.0	6	77	26	--
MAR 09...	--	--	--	--	--	--	--	75	6	.92
APR 06...	4.63	1.55	.5	.7	434	13.7	5	86	13	1.8
20...	--	--	--	--	--	--	--	96	8	.80
MAY 03...	--	--	--	--	--	--	--	89	12	1.4
12...	2.23	5.21	1.3	1.6	228	4.3	17	88	216	787
JUN 09...	--	--	--	--	--	--	--	86	35	55
22...	--	--	--	--	--	--	--	82	50	120
JUL 14...	--	--	--	--	--	--	--	95	7	1.9
AUG 04...	2.95	3.09	E.4	.4	365	3.1	5	96	21	3.9

< -- Less than.

E -- Estimated.

M-- Presence verified but not quantified.

06305700 GOOSE CREEK NEAR ACME, WY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	694	614	659	---	---	---	---	---	---	---	---	---
2	706	677	697	---	---	---	---	---	---	---	---	---
3	721	669	698	---	---	---	---	---	---	---	---	---
4	710	680	696	---	---	---	---	---	---	---	---	---
5	725	688	707	---	---	---	---	---	---	---	---	---
6	734	687	713	---	---	---	---	---	---	---	---	---
7	727	694	710	---	---	---	---	---	---	---	---	---
8	743	710	725	---	---	---	---	---	---	---	---	---
9	747	711	728	---	---	---	---	---	---	---	---	---
10	752	721	736	---	---	---	---	---	---	---	---	---
11	762	726	744	---	---	---	---	---	---	---	---	---
12	762	733	751	---	---	---	---	---	---	---	---	---
13	765	740	752	---	---	---	---	---	---	---	---	---
14	782	748	770	---	---	---	---	---	---	---	---	---
15	766	632	703	---	---	---	---	---	---	---	---	---
16	765	668	738	---	---	---	---	---	---	---	---	---
17	765	733	747	---	---	---	---	---	---	---	---	---
18	738	719	729	---	---	---	---	---	---	---	---	---
19	743	684	709	---	---	---	---	---	---	---	---	---
20	738	711	727	---	---	---	---	---	---	---	---	---
21	745	682	726	---	---	---	---	---	---	---	---	---
22	743	706	727	---	---	---	---	---	---	---	---	---
23	736	705	724	---	---	---	---	---	---	---	---	---
24	738	683	717	---	---	---	---	---	---	---	---	---
25	743	720	733	---	---	---	---	---	---	---	---	---
26	745	700	725	---	---	---	---	---	---	---	---	---
27	721	659	691	---	---	---	---	---	---	---	---	---
28	711	684	699	---	---	---	---	---	---	---	---	---
29	707	675	691	---	---	---	---	---	---	---	---	---
30	708	681	697	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	782	614	718	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	650	630	637	701	670	685
2	---	---	---	---	---	---	664	650	657	719	693	703
3	---	---	---	---	---	---	664	631	651	735	694	712
4	---	---	---	---	---	---	635	614	623	742	703	723
5	---	---	---	---	---	---	614	587	599	823	721	739
6	---	---	---	---	---	---	587	560	578	790	722	754
7	---	---	---	---	---	---	601	579	586	803	450	734
8	---	---	---	---	---	---	623	601	612	590	392	483
9	---	---	---	---	---	---	615	539	572	400	382	391
10	---	---	---	---	---	---	586	551	567	410	374	393
11	---	---	---	---	---	---	641	586	613	456	376	411
12	---	---	---	---	---	---	680	641	657	423	407	418
13	---	---	---	---	---	---	716	680	696	424	398	415
14	---	---	---	---	---	---	740	716	730	398	362	371
15	---	---	---	925	671	756	746	735	740	368	326	338
16	---	---	---	713	667	693	739	728	735	332	280	298
17	---	---	---	708	683	695	758	732	746	290	252	263
18	---	---	---	700	671	686	774	758	766	257	225	239
19	---	---	---	697	677	690	782	761	776	241	217	227
20	---	---	---	699	683	692	761	705	733	226	186	198
21	---	---	---	704	682	695	731	670	715	191	152	162
22	---	---	---	709	691	700	743	622	701	160	148	153
23	---	---	---	705	694	699	764	736	748	158	144	150
24	---	---	---	702	688	694	785	750	770	152	139	144
25	---	---	---	958	690	782	751	731	742	173	147	160
26	---	---	---	705	689	698	734	684	709	184	165	175
27	---	---	---	693	679	685	684	616	651	191	173	180
28	---	---	---	691	681	687	648	631	640	193	179	186
29	---	---	---	718	678	697	656	633	648	203	189	195
30	---	---	---	678	657	663	670	655	663	210	200	204
31	---	---	---	657	634	643	---	---	---	226	210	216
MONTH	---	---	---	---	---	---	785	539	675	823	139	368

YELLOWSTONE RIVER BASIN

06305700 GOOSE CREEK NEAR ACME, WY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	237	221	227	241	221	232	751	713	742	654	636	648
2	248	232	238	261	241	252	733	678	712	660	641	653
3	243	236	240	267	259	264	684	665	678	649	640	645
4	247	231	240	271	262	265	665	571	637	659	630	649
5	259	233	247	296	270	284	679	654	661	663	630	648
6	238	209	222	318	296	308	718	679	702	649	612	636
7	216	168	188	335	318	326	742	711	728	648	608	635
8	201	169	184	348	335	341	770	742	756	660	596	635
9	222	187	203	373	344	356	782	764	769	658	621	642
10	223	203	213	401	373	387	769	728	752	667	623	647
11	224	215	219	426	400	411	728	560	649	694	653	677
12	230	215	225	435	420	426	700	677	689	724	684	706
13	238	227	233	543	434	484	684	666	673	713	611	677
14	261	235	245	634	542	586	681	651	668	699	662	681
15	252	214	232	708	634	672	673	650	661	677	642	659
16	227	194	207	730	704	718	668	650	660	695	661	673
17	197	158	175	706	680	697	668	642	652	716	695	710
18	160	151	156	680	638	652	670	645	653	732	716	725
19	153	145	148	673	650	664	656	604	635	740	722	733
20	154	142	148	703	666	683	656	623	643	745	736	741
21	144	132	138	740	698	726	663	624	648	754	726	744
22	147	142	145	784	739	757	673	639	656	727	660	704
23	152	142	147	812	783	794	669	646	655	683	669	678
24	147	132	136	828	801	813	669	655	661	676	650	663
25	158	135	143	841	817	826	694	663	679	673	650	665
26	185	158	171	819	581	696	686	664	675	667	626	646
27	183	170	176	716	639	671	669	646	652	636	619	626
28	205	183	195	661	638	648	646	626	635	640	624	633
29	218	199	208	677	656	668	635	623	627	645	635	641
30	221	204	211	717	677	696	625	615	620	650	634	642
31	---	---	---	748	716	734	644	612	630	---	---	---
MONTH	248	132	195	841	221	550	782	560	673	754	596	669

06306200 PRAIRIE DOG CREEK AT WAKELEY SIDING, NEAR SHERIDAN, WY

LOCATION.--Lat 44°50'16", long 106°52'50" (NAD 27), NE¼ NE¼ SW¼ sec.8, T.56 N., R.83 W., Sheridan County, Hydrologic Unit 10090101, on right bank at county bridge, 1.2 mi upstream from Wildcat Creek and 4.0 mi northeast of Sheridan.

DRAINAGE AREA.--88.3 mi², of which 0.37 mi² probably is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 2004 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,596 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Numerous ditches/diversions upstream and downstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	12	e13	e13	e13	9.2	8.0	10	27	29	13	39
2	30	11	14	e11	e13	9.0	8.1	9.4	24	25	21	31
3	24	11	13	e11	e12	9.1	8.0	9.5	19	21	23	29
4	23	11	e14	e10	e12	9.1	7.9	9.5	15	21	27	29
5	22	11	e13	10	e11	9.1	7.9	11	15	23	29	30
6	20	11	e14	10	e9.8	8.9	7.2	19	15	23	26	26
7	20	10	e15	11	e9.6	8.8	7.1	21	17	22	25	26
8	18	10	e14	11	e9.0	9.1	7.0	78	29	19	26	25
9	18	9.8	e14	12	e10	9.8	8.6	120	32	15	28	23
10	17	9.8	e15	13	e11	10	19	126	36	15	26	21
11	16	9.5	e14	13	e12	10	15	270	34	13	31	22
12	15	9.5	e13	e12	e11	9.6	11	378	30	11	31	24
13	14	9.4	e13	e11	e12	9.6	8.5	210	41	9.6	37	25
14	14	9.6	e13	e10	e12	9.0	8.7	162	50	8.6	43	28
15	16	9.4	e13	e9.0	e11	8.7	8.9	127	45	7.1	41	26
16	18	9.2	e14	e10	e10	11	9.0	106	48	5.6	41	27
17	16	9.0	e14	e11	e11	9.7	8.7	94	47	5.2	36	27
18	15	9.0	e14	e13	e11	10	9.1	88	47	5.1	34	29
19	14	9.0	e15	e15	e11	9.6	9.8	80	36	5.2	35	30
20	14	8.9	e13	e15	e12	9.8	12	73	31	4.9	40	29
21	13	e8.8	e12	e14	e11	9.8	14	64	30	2.5	36	30
22	13	e9.2	e12	e15	e11	10	15	61	29	2.7	27	27
23	13	e9.5	e11	e18	e10	9.9	18	57	27	4.6	26	22
24	14	9.6	e12	e21	e10	9.2	21	49	27	5.5	35	21
25	14	9.4	e14	e17	e10	8.5	18	46	27	5.4	39	24
26	13	9.6	e15	e14	9.8	10	13	44	28	10	40	26
27	12	e9.9	e14	e11	9.5	9.5	11	37	26	24	37	25
28	12	e9.5	e15	e15	e9.0	9.8	11	34	26	19	33	24
29	11	e10	e14	e14	---	9.3	11	30	27	13	31	26
30	12	e11	e14	e14	---	8.9	11	24	31	8.7	31	24
31	13	---	e14	e13	---	8.3	---	29	---	11	34	---
TOTAL	510	295.6	422	397.0	303.7	292.3	332.5	2,476.4	916	394.7	982	795
MEAN	16.5	9.85	13.6	12.8	10.8	9.43	11.1	79.9	30.5	12.7	31.7	26.5
MAX	30	12	15	21	13	11	21	378	50	29	43	39
MIN	11	8.8	11	9.0	9.0	8.3	7.0	9.4	15	2.5	13	21
AC-FT	1,010	586	837	787	602	580	660	4,910	1,820	783	1,950	1,580

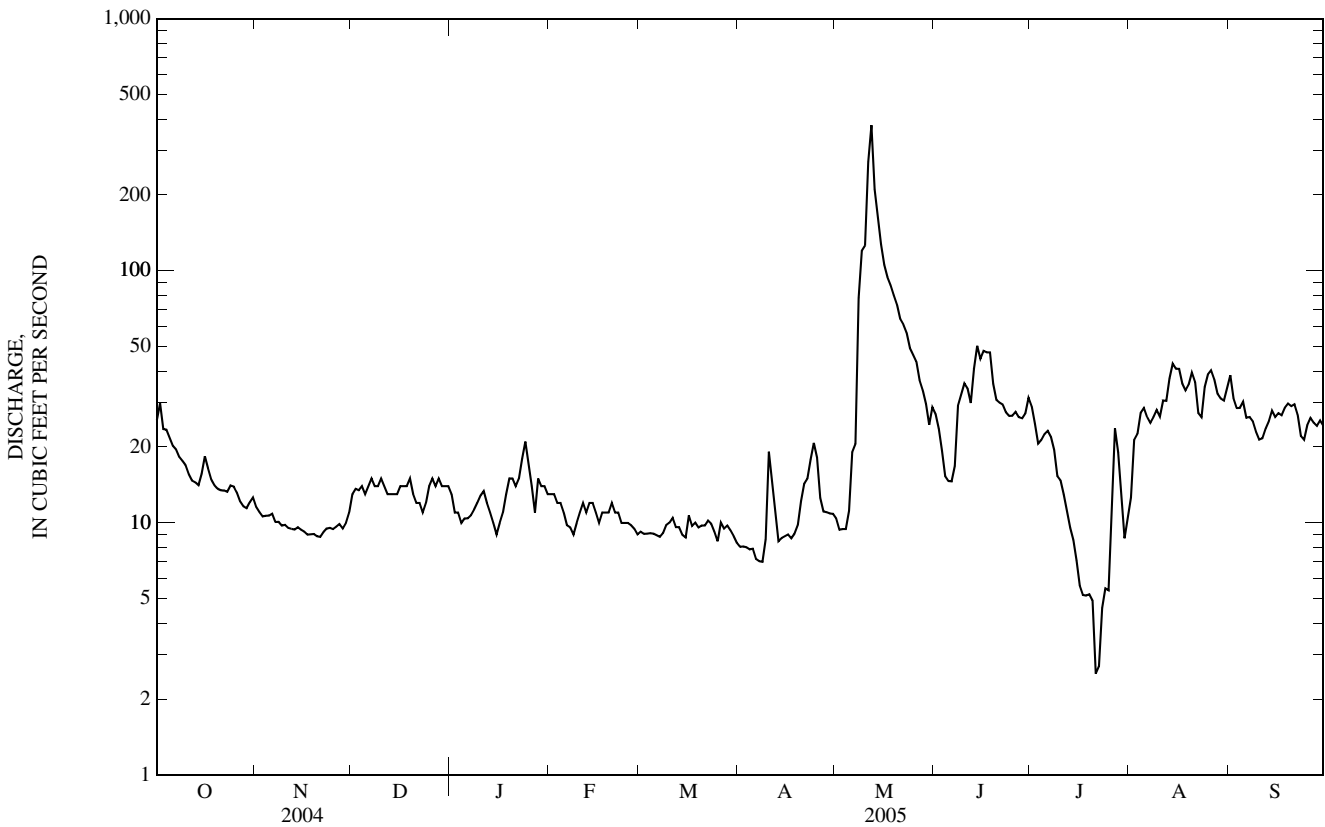
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)*

MEAN	16.5	9.85	13.6	12.8	10.8	9.43	11.1	79.9	30.5	14.5	25.6	23.2
MAX	16.5	9.85	13.6	12.8	10.8	9.43	11.1	79.9	30.5	16.2	31.7	26.5
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(2005)	(2005)
MIN	16.5	9.85	13.6	12.8	10.8	9.43	11.1	79.9	30.5	12.7	19.6	19.9
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(2004)

06306200 PRAIRIE DOG CREEK AT WAKELY SIDING, NEAR SHERIDAN, WY—Continued

SUMMARY STATISTICS	FOR 2005 WATER YEAR		WATER YEARS 2004 - 2005*	
ANNUAL TOTAL	8,117.2		--	
ANNUAL MEAN	22.2		22.2	
HIGHEST ANNUAL MEAN	--		22.2	2005
LOWEST ANNUAL MEAN	--		22.2	2005
HIGHEST DAILY MEAN	378	May 12	378	May 12, 2005
LOWEST DAILY MEAN	2.5	Jul 21	2.5	Jul 21, 2005
ANNUAL SEVEN-DAY MINIMUM	4.3	Jul 17	4.3	Jul 17, 2005
MAXIMUM PEAK FLOW	478	May 12	478	May 12, 2005
MAXIMUM PEAK STAGE	8.19	May 12	8.19	May 12, 2005
ANNUAL RUNOFF (AC-FT)	16,100		16,110	
10 PERCENT EXCEEDS	36		36	
50 PERCENT EXCEEDS	14		14	
90 PERCENT EXCEEDS	9.0		9.0	

* For period of operation.
 e Estimated.



06306200 PRAIRIE DOG CREEK AT WAKELY SIDING, NEAR SHERIDAN, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2003 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered, uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
Date		Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, water fltrd end lab, mg/L as CaCO3 (29801)	Alkalinity, water fltrd inc tit field, mg/L as CaCO3 (39086)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat fltrd mg/L (70300)
OCT 27...	0930													
NOV 19...	0810													
JAN 27...	1230													
FEB 24...	1600													
MAR 29...	1700													
APR 12...	1350													
MAY 26...	1930													
JUN 13...	1410													
JUL 26...	0930													
AUG 09...	1415													
SEP 26...	1600													
OCT 27...		.5	25.9	9	284	--	2.71	.3	12.4	230	622	.86	19.6	632
NOV 19...		.5	26.3	9	292	--	2.73	.3	12.9	249	648	.93	20.4	687
JAN 27...		.6	29.5	11	327	--	3.35	.3	13.0	223	639	.89	--	653
FEB 24...		.6	29.7	10	338	--	3.11	.3	11.7	229	658	.90	18.6	662
MAR 29...		.6	32.1	12	310	--	3.26	.3	9.08	246	647	.94	16.6	692
APR 12...		.6	32.8	12	320	--	3.49	.3	11.0	223	628	.89	19.3	651
MAY 26...		.4	14.9	11	--	--	1.84	.2	12.4	107	--	--	--	352
JUN 13...		.4	13.9	9	177	--	1.63	.2	12.1	131	362	.52	40.3	382
JUL 26...		.4	15.3	9	191	175	2.10	.2	12.0	162		.61	10.8	448
AUG 09...		.3	11.1	9	148	133	1.20	.2	10.8	93.9	277	.39	22.7	290
SEP 26...		.4	17.6	9	203	225	2.04	.3	11.9	167	459	.68	35.0	499

06306200 PRAIRIE DOG CREEK AT WAKELY SIDING, NEAR SHERIDAN, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Aluminum, water, unfltrd recover- able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recover- able, ug/L (01007)	Beryllium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Selenium, water, unfltrd ug/L (01147)
OCT 27...	84	.6	34	<.06	10	34.4	.7
NOV 19...	172	.5	36	<.06	10	51.4	.9
JAN 27...	235	.6	42	<.06	12	31.1	.8
FEB 24...	563	.6	42	E.05	E4	21.4	1.1
MAR 29...	141	.6	44	<.06	E5	18.6	.7
APR 12...	96	.8	41	<.06	E6	18.4	1.0
MAY 26...	1,690	.6	48	.16	24	20.6	.7
JUN 13...	2,040	.5	50	.17	9	18.7	.8
JUL 26...	934	.7	39	.10	12	56.2	.8
AUG 09...	1,930	.6	45	.17	E5	13.1	1.2
SEP 26...	300	.50	40	E.05	E4	13.3	--

< -- Less than.
E -- Estimated.

06306250 PRAIRIE DOG CREEK NEAR ACME, WY

LOCATION.--Lat 44°59'02", long 106°50'21" (NAD 27), in NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 23, T.58 N., R.83 W., Sheridan County, Hydrologic Unit 10090101, on right bank 600 ft upstream from county bridge, 0.9 mi upstream from mouth, 2.8 mi downstream from Coutant Creek, and 7.6 mi northeast of Acme.

DRAINAGE AREA.--358 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1970 to September 1979, June 2000 to current year. Records for May 1965 to September 1970 in files of Wyoming State Engineer's Office.

GAGE.--Water-stage recorder. Elevation of gage is 3,450 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Diversions for irrigation of about 13,600 acres upstream from station, of which about 60 acres are downstream from station. Flow supplemented by 3 transbasin diversions from North Piney Creek and South Piney Creek via Prairie Dog Creek ditch, Piney and Cruse ditch, and Mead-Coffeen ditch.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	21	18	e13	e16	e14	11	14	33	46	8.1	38
2	34	20	e18	e13	e16	14	10	13	30	44	13	40
3	36	19	e17	e12	e16	14	10	12	27	38	22	31
4	33	18	e19	e12	e15	14	10	12	26	33	26	26
5	32	18	e17	e11	e15	14	9.7	7.3	23	33	33	27
6	31	18	e16	e11	e15	14	9.5	8.4	22	33	36	29
7	29	19	e14	e12	e14	14	9.0	17	22	33	30	31
8	29	19	e15	e12	e13	14	8.6	41	30	29	31	31
9	29	19	e16	e13	e12	15	9.4	99	40	27	33	32
10	27	19	e17	e15	e13	15	10	122	43	24	35	31
11	25	22	e19	e16	e15	15	15	230	45	22	37	31
12	24	20	e17	e15	e16	15	7.2	354	43	17	36	32
13	23	17	e14	e14	e15	15	4.4	298	50	14	34	34
14	22	16	10	e13	e16	15	3.7	202	64	12	46	35
15	23	e16	e14	e11	e16	14	3.6	152	64	8.6	52	35
16	25	e16	e19	e13	e15	13	4.9	122	60	6.8	50	33
17	27	16	e16	e15	e12	16	5.1	100	60	5.5	49	31
18	25	16	e16	e17	e12	14	6.9	91	57	4.5	46	32
19	23	16	e16	e19	e15	14	9.0	84	55	4.8	46	33
20	22	16	e17	e21	e17	14	13	77	45	5.1	47	35
21	22	e14	e15	e19	e18	14	17	71	44	6.2	47	35
22	21	e13	e12	e18	e17	14	21	66	43	3.8	43	36
23	21	e14	7.7	e22	e17	14	21	62	42	2.2	35	33
24	21	e16	8.0	e25	e16	14	22	58	40	0.95	34	30
25	22	17	e15	e30	e16	13	23	52	40	1.7	41	29
26	22	17	e20	e25	e16	13	19	50	40	3.7	48	30
27	21	e16	e17	e20	e15	14	15	46	43	8.1	50	31
28	20	e13	e15	e16	e15	14	14	41	41	23	46	31
29	21	e12	e17	e19	---	14	14	37	42	14	41	29
30	20	9.9	e15	e17	---	13	14	32	43	8.3	39	30
31	21	---	e15	e17	---	12	---	30	---	6.2	36	---
TOTAL	783	502.9	481.7	506	424	436	350.0	2,600.7	1,257	518.45	1,170.1	961
MEAN	25.3	16.8	15.5	16.3	15.1	14.1	11.7	83.9	41.9	16.7	37.7	32.0
MAX	36	22	20	30	18	16	23	354	64	46	52	40
MIN	20	9.9	7.7	11	12	12	3.6	7.3	22	0.95	8.1	26
AC-FT	1,550	998	955	1,000	841	865	694	5,160	2,490	1,030	2,320	1,910

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2005, BY WATER YEAR (WY)*

MEAN	35.5	26.9	21.7	17.4	30.5	68.0	52.6	75.7	33.6	18.7	25.7	37.4
MAX	59.5	43.6	32.3	26.7	82.7	167	101	384	86.2	45.0	45.7	79.0
(WY)	(1974)	(1974)	(1976)	(1974)	(1974)	(1972)	(1971)	(1978)	(1978)	(1975)	(1978)	(1973)
MIN	15.5	12.3	10.9	8.55	9.49	14.1	11.7	5.75	3.09	4.39	3.00	13.4
(WY)	(2002)	(2002)	(2002)	(2002)	(2003)	(2005)	(2005)	(2004)	(2002)	(2001)	(2001)	(2001)

YELLOWSTONE RIVER BASIN

06306250 PRAIRIE DOG CREEK NEAR ACME, WY—Continued

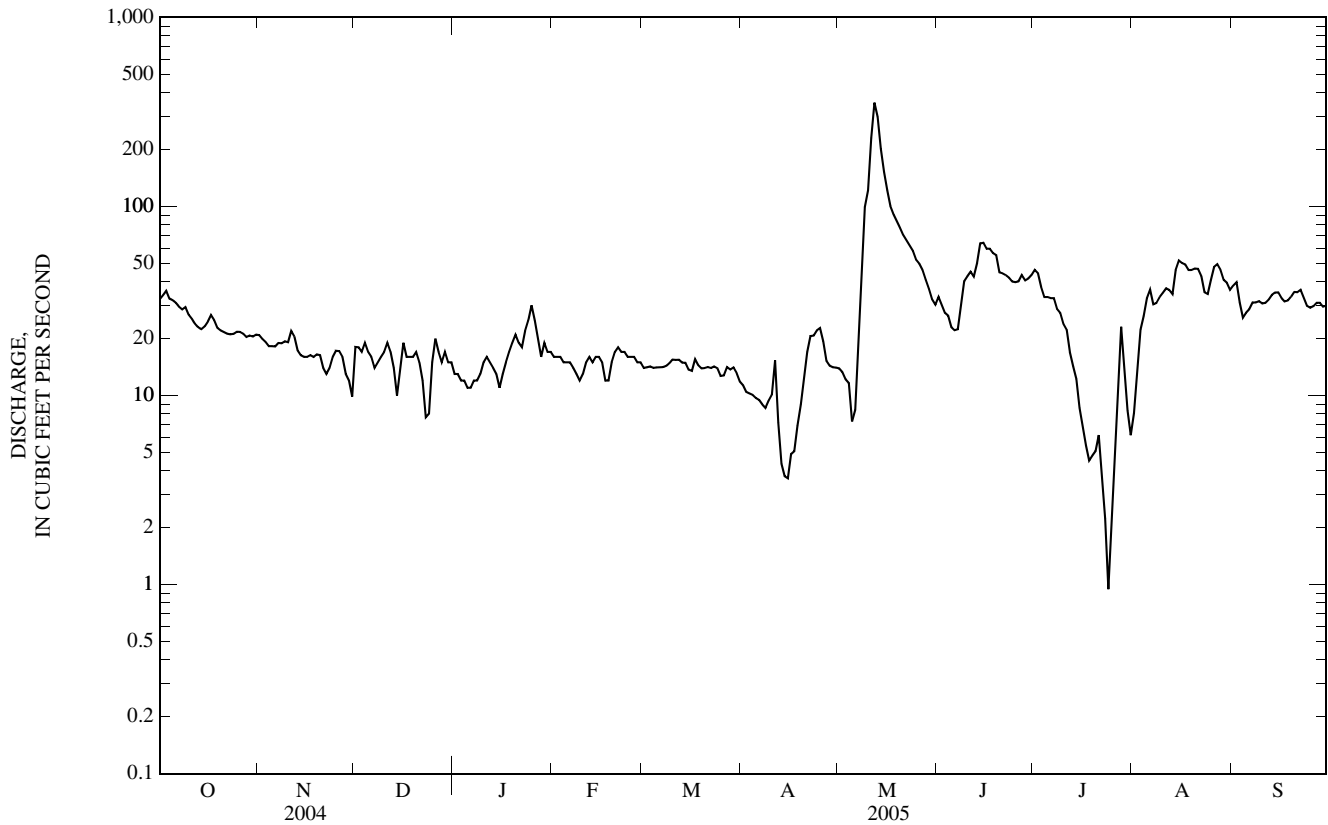
SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1971 - 2005*	
ANNUAL TOTAL	5,606.0		9,990.85		--	
ANNUAL MEAN	15.3		27.4		37.1	
HIGHEST ANNUAL MEAN	--		--		72.8 1978	
LOWEST ANNUAL MEAN	--		--		15.0 2004	
HIGHEST DAILY MEAN	36	Oct 3	354	May 12	3,090	May 19, 1978
LOWEST DAILY MEAN	1.0	Jun 9	0.95	Jul 24	0.48	Jul 7, 2001
ANNUAL SEVEN-DAY MINIMUM	1.3	Jun 4	3.4	Jul 20	0.70	Jul 5, 2001
MAXIMUM PEAK FLOW	--		395	May 12	3,940 ^a	May 18, 1978
MAXIMUM PEAK STAGE	--		5.80	May 12	12.60 ^b	May 18, 1978
ANNUAL RUNOFF (AC-FT)	11,120		19,820		26,900	
10 PERCENT EXCEEDS	27		46		63	
50 PERCENT EXCEEDS	14		19		26	
90 PERCENT EXCEEDS	4.9		10		10	

* For period of operation.

a From rating curve extended above 760 ft³/s on basis of slope-area determination of peak flow.

b From floodmarks.

e Estimated.



06306250 PRAIRIE DOG CREEK NEAR ACME, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976-1992, April 2000 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 2004 to current year (seasonal).

INSTRUMENTATION.--Specific conductance probe installed April 30, 2004.

REMARKS.--Daily specific conductance records rated good to excellent except for period May 3 to July 14 and Spetember 7-30, which are rated fair to poor. Water quality samples and record provided by the Montana Water Science Center.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 2,510 microsiemens per centimeter at 25°C (µS/cm), June 10, 2004; minimum recorded, 702 µS/cm, June 14, 2005.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 2,220 µS/cm, July 25; minimum recorded, 702 µS/cm, June 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
Date		Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, sum of constituents, mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)
OCT 13...	1545		23	679	11.2	112	8.4	1,160	15.5	10.0	600	123	70.5	5.79
NOV 03...	1600		19	686	12.3	110	8.3	1,340	13.0	6.0	700	139	85.4	7.23
DEC 02...	1430		E18	670	14.5	113	8.1	1,430	8.0	.0	750	151	89.5	7.08
FEB 09...	0900		E12	677	12.0	93	7.8	1,720	-5.0	.0	890	174	110	8.55
MAR 08...	1700		14	675	11.5	109	8.4	1,580	12.5	7.5	840	160	106	8.67
APR 06...	0815		9.8	682	10.3	94	8.3	1,460	3.5	6.5	720	130	94.2	7.40
APR 19...	1545		9.0	675	10.8	105	8.3	1,600	3.0	8.5	800	155	99.6	8.17
MAY 03...	1210		12	673	12.6	124	8.4	1,790	14.5	9.0	880	160	116	9.23
MAY 17...	0830		102	656	7.5	89	8.1	980	15.5	16.0	440	84.5	56.5	7.22
JUN 07...	1700		23	665	7.8	91	8.1	1,400	12.0	16.0	660	124	85.7	7.38
JUN 22...	1600		44	680	7.9	107	8.2	902	33.0	24.5	420	81.5	52.7	4.89
JUL 14...	1030		13	673	7.4	99	8.3	1,400	39.0	23.0	620	123	76.1	6.64
AUG 10...	0835		35	675	7.7	94	8.1	807	20.0	19.0	360	74.8	41.8	4.41

06306250 PRAIRIE DOG CREEK NEAR ACME, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitrogen, wat unfltrd by analysis, mg/L (62855)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Aluminum, water, fltrd, ug/L (01106)	Aluminum, water, unfltrd recover-able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Barium, water, fltrd, ug/L (01005)	Barium, water, unfltrd recover-able, ug/L (01007)	Beryllium, water, fltrd, ug/L (01010)	Beryllium, water, unfltrd recover-able, ug/L (01012)
OCT 13...	.127	E.001	.68	.013	.159	<2	1,310	1.0	E1	34	52	<.06	.13
NOV 03...	--	--	--	--	--	--	314	.8	--	--	42	--	<.06
DEC 02...	.314	.002	.69	E.005	.035	<2	233	.6	<2	41	38	<.06	<.06
FEB 09...	.493	.005	.83	.012	.026	<2	59	.8	<2	44	49	<.06	<.06
MAR 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 06...	<.016	E.001	.29	<.006	.020	2	94	.7	<2	40	40	<.06	<.06
MAY 19...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 17...	.282	.003	1.48	.020	.33	2	3,890	1.1	3	41	101	<.06	.33
JUN 07...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 22...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	.191	.002	.87	.021	.23	3	2,300	.9	E2	27	65	<.06	.28

Date	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Chromium, water, unfltrd recover-able, ug/L (01034)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Lithium water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recover-able, ug/L (01055)
OCT 13...	112	<.04	.06	E2	2.5	6.5	8	3,210	<.08	2.02	25.7	34.9	249
NOV 03...	--	--	--	--	--	--	7	--	--	--	--	52.6	--
DEC 02...	132	<.04	E.03	<2	2.5	9.0	7	480	<.08	.34	32.4	53.3	83
FEB 09...	130	<.04	<.04	3	3.3	6.0	15	200	<.08	.14	43.5	85.4	88
MAR 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 06...	127	<.04	<.04	4	4.6	9.9	E6	240	.13	.14	42.7	95.7	118
MAY 19...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 17...	81	<.04	.18	9	5.1	14.6	7	8,170	E.06	6.54	20.5	24.2	537
JUN 07...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 22...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	70	<.04	.10	5	3.2	6.5	E5	4,880	.33	3.55	21.4	16.0	402

06306250 PRAIRIE DOG CREEK NEAR ACME, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Mercury water, unfltrd recover- able, ug/L (71900)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recover- able, ug/L (01067)	Selen- ium, water, fltrd, ug/L (01145)	Selen- ium, water, unfltrd ug/L (01147)	Stront- ium, water, fltrd, ug/L (01080)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover- able, ug/L (01092)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment dis- charge, tons/d (80155)
OCT 13...	<.01	3.54	5.79	1.1	1.3	1,400	1.2	11	92	208	13
NOV 03...	--	--	--	--	1.6	--	--	--	88	78	4.0
DEC 02...	<.01	1.46	4.00	1.4	1.5	1,780	1.6	8	82	74	--
FEB 09...	<.01	2.70	4.22	1.7	1.8	2,090	2.5	3	52	52	--
MAR 08...	--	--	--	--	--	--	--	--	97	85	3.2
APR 06...	--	3.55	6.76	1.3	1.4	1,940	E1.6	11	82	57	1.5
APR 19...	--	--	--	--	--	--	--	--	62	26	.63
MAY 03...	--	--	--	--	--	--	--	--	82	53	1.7
MAY 17...	--	2.98	10.9	1.2	2.0	946	2.2	27	90	431	119
JUN 07...	--	--	--	--	--	--	--	--	92	118	7.3
JUN 22...	--	--	--	--	--	--	--	--	95	229	27
JUL 14...	--	--	--	--	--	--	--	--	91	120	4.2
AUG 10...	--	3.80	7.62	.7	1.2	920	15.9	16	96	223	21

< -- Less than.
E -- Estimated.

YELLOWSTONE RIVER BASIN

06306250 PRAIRIE DOG CREEK NEAR ACME, WY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1,110	1,090	1,110	---	---	---	---	---	---	---	---	---
2	1,110	1,040	1,100	---	---	---	---	---	---	---	---	---
3	1,080	1,010	1,040	---	---	---	---	---	---	---	---	---
4	1,130	1,050	1,090	---	---	---	---	---	---	---	---	---
5	1,130	1,080	1,120	---	---	---	---	---	---	---	---	---
6	1,080	1,020	1,060	---	---	---	---	---	---	---	---	---
7	1,030	1,020	1,030	---	---	---	---	---	---	---	---	---
8	1,050	1,030	1,040	---	---	---	---	---	---	---	---	---
9	1,060	1,030	1,050	---	---	---	---	---	---	---	---	---
10	1,080	1,050	1,070	---	---	---	---	---	---	---	---	---
11	1,100	1,080	1,090	---	---	---	---	---	---	---	---	---
12	1,130	1,100	1,110	---	---	---	---	---	---	---	---	---
13	1,160	1,120	1,140	---	---	---	---	---	---	---	---	---
14	1,140	1,090	1,120	---	---	---	---	---	---	---	---	---
15	1,090	1,050	1,070	---	---	---	---	---	---	---	---	---
16	1,070	1,050	1,060	---	---	---	---	---	---	---	---	---
17	1,070	1,040	1,060	---	---	---	---	---	---	---	---	---
18	1,100	1,040	1,070	---	---	---	---	---	---	---	---	---
19	1,140	1,100	1,120	---	---	---	---	---	---	---	---	---
20	1,190	1,140	1,170	---	---	---	---	---	---	---	---	---
21	1,210	1,190	1,200	---	---	---	---	---	---	---	---	---
22	1,210	1,200	1,210	---	---	---	---	---	---	---	---	---
23	1,230	1,210	1,220	---	---	---	---	---	---	---	---	---
24	1,230	1,210	1,220	---	---	---	---	---	---	---	---	---
25	1,210	1,200	1,210	---	---	---	---	---	---	---	---	---
26	1,230	1,210	1,220	---	---	---	---	---	---	---	---	---
27	1,230	1,220	1,220	---	---	---	---	---	---	---	---	---
28	1,260	1,230	1,250	---	---	---	---	---	---	---	---	---
29	1,270	1,240	1,260	---	---	---	---	---	---	---	---	---
30	1,280	1,260	1,260	---	---	---	---	---	---	---	---	---
31	1,290	1,260	1,280	---	---	---	---	---	---	---	---	---
MONTH	1,290	1,010	1,140	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	1,590	1,560	1,570	1,690	1,670	1,680
2	---	---	---	---	---	---	1,610	1,460	1,550	1,740	1,690	1,700
3	---	---	---	---	---	---	1,460	1,440	1,450	1,820	1,720	1,760
4	---	---	---	---	---	---	1,460	1,440	1,450	2,160	1,700	1,840
5	---	---	---	---	---	---	1,480	1,440	1,460	1,980	1,770	1,820
6	---	---	---	---	---	---	1,450	1,430	1,440	1,780	1,670	1,770
7	---	---	---	---	---	---	1,500	1,440	1,480	1,670	1,150	1,360
8	---	---	---	---	---	---	1,590	1,490	1,510	1,460	1,200	1,230
9	---	---	---	---	---	---	1,500	1,440	1,480	1,240	1,060	1,170
10	---	---	---	---	---	---	1,440	1,400	1,420	1,160	1,080	1,130
11	---	---	---	---	---	---	1,400	1,060	1,200	1,080	903	971
12	---	---	---	---	---	---	1,370	1,130	1,260	913	795	845
13	---	---	---	---	---	---	1,530	1,370	1,470	942	794	863
14	---	---	---	---	---	---	1,780	1,530	1,620	1,000	942	970
15	---	---	---	1,600	1,550	1,580	1,930	1,780	1,870	1,020	1,000	1,010
16	---	---	---	1,760	1,540	1,650	1,830	1,650	1,770	1,020	975	1,000
17	---	---	---	1,620	1,480	1,550	1,820	1,680	1,770	976	848	919
18	---	---	---	1,550	1,500	1,530	1,830	1,640	1,730	848	770	798
19	---	---	---	1,560	1,470	1,510	1,640	1,510	1,590	776	766	771
20	---	---	---	1,620	1,510	1,560	1,540	1,440	1,490	805	770	784
21	---	---	---	1,540	1,480	1,510	1,450	1,340	1,390	856	805	830
22	---	---	---	1,550	1,510	1,530	1,460	1,330	1,380	857	838	849
23	---	---	---	1,570	1,530	1,560	1,400	1,290	1,350	858	834	847
24	---	---	---	1,540	1,490	1,520	1,470	1,360	1,440	858	849	854
25	---	---	---	1,600	1,520	1,560	1,430	1,330	1,370	900	857	877
26	---	---	---	1,660	1,570	1,600	1,510	1,340	1,430	920	900	909
27	---	---	---	1,660	1,500	1,580	1,620	1,510	1,540	923	888	906
28	---	---	---	1,560	1,520	1,540	1,680	1,590	1,630	979	923	950
29	---	---	---	1,550	1,520	1,530	1,660	1,580	1,630	1,020	979	1,000
30	---	---	---	1,580	1,550	1,570	1,670	1,580	1,630	1,050	1,020	1,030
31	---	---	---	1,590	1,550	1,570	---	---	---	1,100	1,050	1,080
MONTH	---	---	---	---	---	---	1,930	1,060	1,510	2,160	766	1,110

06306250 PRAIRIE DOG CREEK NEAR ACME, WY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1,110	1,090	1,100	913	894	903	1,580	1,430	1,500	815	797	806
2	1,140	1,100	1,120	919	891	905	1,430	1,140	1,290	798	781	789
3	1,210	1,140	1,170	960	916	933	1,140	926	1,010	850	780	812
4	1,260	1,210	1,230	1,000	959	983	940	901	928	883	850	869
5	1,340	1,260	1,290	1,010	996	1,000	901	843	863	890	874	884
6	1,400	1,340	1,370	998	984	990	843	816	824	874	840	852
7	1,410	1,320	1,390	985	959	968	855	819	831	878	844	861
8	1,330	964	1,180	1,030	969	995	854	839	847	893	859	872
9	1,120	936	986	1,060	1,020	1,040	840	815	830	874	831	846
10	936	893	911	1,120	1,060	1,090	815	762	793	867	856	861
11	895	834	862	1,190	1,120	1,150	832	799	815	870	850	858
12	852	833	845	1,300	1,190	1,220	841	800	823	889	870	880
13	888	758	842	1,400	1,300	1,340	882	841	858	883	854	869
14	871	702	808	1,490	1,380	1,420	868	830	846	862	837	853
15	789	705	754	1,710	1,490	1,610	864	794	827	855	819	840
16	813	774	797	1,830	1,710	1,760	795	768	782	878	851	868
17	779	762	770	1,960	1,830	1,910	808	777	792	882	860	869
18	775	760	766	2,070	1,960	2,010	806	791	801	884	865	873
19	768	747	754	2,090	2,040	2,070	791	777	784	866	836	853
20	878	768	822	2,040	1,960	2,010	804	788	794	836	812	821
21	891	860	875	1,980	1,900	1,940	798	779	789	832	812	821
22	899	843	879	1,940	1,870	1,900	810	787	795	829	811	817
23	861	832	840	2,110	1,940	2,050	857	809	831	909	816	862
24	857	839	847	2,210	2,110	2,150	884	856	870	969	903	931
25	853	840	848	2,220	2,030	2,170	886	860	880	1,000	969	988
26	841	832	836	2,030	1,880	1,910	860	812	823	1,000	966	983
27	846	813	824	1,960	1,280	1,710	817	762	789	966	954	959
28	886	846	868	1,280	808	915	768	751	758	976	961	968
29	888	864	873	1,050	814	911	799	768	779	987	972	980
30	906	883	894	1,330	1,050	1,190	806	798	801	985	962	970
31	---	---	---	1,610	1,330	1,480	816	800	806	---	---	---
MONTH	1,410	702	945	2,220	808	1,440	1,580	751	863	1,000	780	877

06306300 TONGUE RIVER AT STATE LINE, NEAR DECKER, MT

LOCATION.--Lat 45°00'32", long 106°50'08" (NAD 27), in NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.33, T.9 S., R.40 E., Big Horn County, Hydrologic Unit 10090101, on left bank 1 mi north of Wyoming-Montana State line, 1.4 mi southeast of Decker, 1.6 mi upstream from Badger Creek, and at river mile 200.9.

DRAINAGE AREA.--1,453 mi².

WATER-DISCHARGE RECORDS

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. Elevation of gage is 3,429.14 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by many small reservoirs in Wyoming, combined capacity, about 15,000 acre-ft. Diversions for irrigation of about 64,300 acres upstream from station. Station operated and record provided by the Montana Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	165	169	e120	e100	e100	122	117	154	1,330	1,100	136	168
2	173	159	e150	e90	e95	120	112	148	1,330	963	131	175
3	169	147	e140	e80	e90	121	108	144	1,260	863	142	166
4	161	155	e140	e70	e90	121	119	145	1,180	801	148	154
5	157	165	e140	e80	e90	120	122	145	1,160	733	167	152
6	152	161	e130	e90	e85	120	123	164	1,180	654	164	143
7	148	160	e120	e90	e80	119	123	313	1,370	588	154	141
8	139	158	e130	e90	e75	121	118	1,370	1,700	529	144	141
9	137	156	e140	e80	e65	130	145	1,470	1,580	472	134	139
10	133	157	e150	e90	e65	131	208	1,210	1,420	422	127	132
11	134	159	e140	e90	e65	133	172	2,580	1,290	396	158	128
12	132	159	e130	e90	e70	128	133	4,740	1,220	395	225	120
13	136	147	e110	e90	e70	128	115	2,520	1,410	358	199	139
14	138	136	e100	e90	e70	134	106	1,860	1,660	304	212	162
15	153	140	e100	e90	e80	123	124	1,670	1,480	261	223	175
16	179	135	e110	e90	e90	117	122	1,710	e1,500	244	209	168
17	182	132	e110	e90	e90	130	110	1,940	e1,800	235	196	161
18	171	131	e110	e90	e80	132	109	2,140	e2,000	229	190	159
19	165	137	e110	e100	e80	126	177	2,060	e2,200	223	213	161
20	164	136	e110	e110	e80	123	183	2,190	e2,100	206	232	167
21	155	e110	e110	e100	e90	124	190	2,590	e2,000	188	223	164
22	157	e90	e100	e100	e90	123	225	3,070	e1,900	176	198	162
23	164	e110	e100	e110	e90	123	212	2,820	1,830	163	183	161
24	161	e125	e90	e110	e100	123	210	2,760	1,750	157	180	165
25	166	e143	e90	e100	e100	119	233	2,620	1,660	154	182	180
26	159	e145	e100	e100	e100	116	246	2,180	1,480	155	186	195
27	154	e130	e100	e100	e110	118	230	1,850	1,400	193	193	197
28	160	e110	e100	e100	e120	118	204	1,680	1,260	225	195	191
29	165	e110	e100	e100	---	124	181	1,600	1,130	196	187	188
30	178	e90	e100	e100	---	123	166	1,530	1,240	166	177	192
31	173	---	e100	e100	---	122	---	1,430	---	146	166	---
TOTAL	4,880	4,162	3,580	2,910	2,410	3,832	4,743	52,803	45,820	11,895	5,574	4,846
MEAN	157	139	115	93.9	86.1	124	158	1,703	1,527	384	180	162
MAX	182	169	150	110	120	134	246	4,740	2,200	1,100	232	197
MIN	132	90	90	70	65	116	106	144	1,130	146	127	120
AC-FT	9,680	8,260	7,100	5,770	4,780	7,600	9,410	104,700	90,880	23,590	11,060	9,610

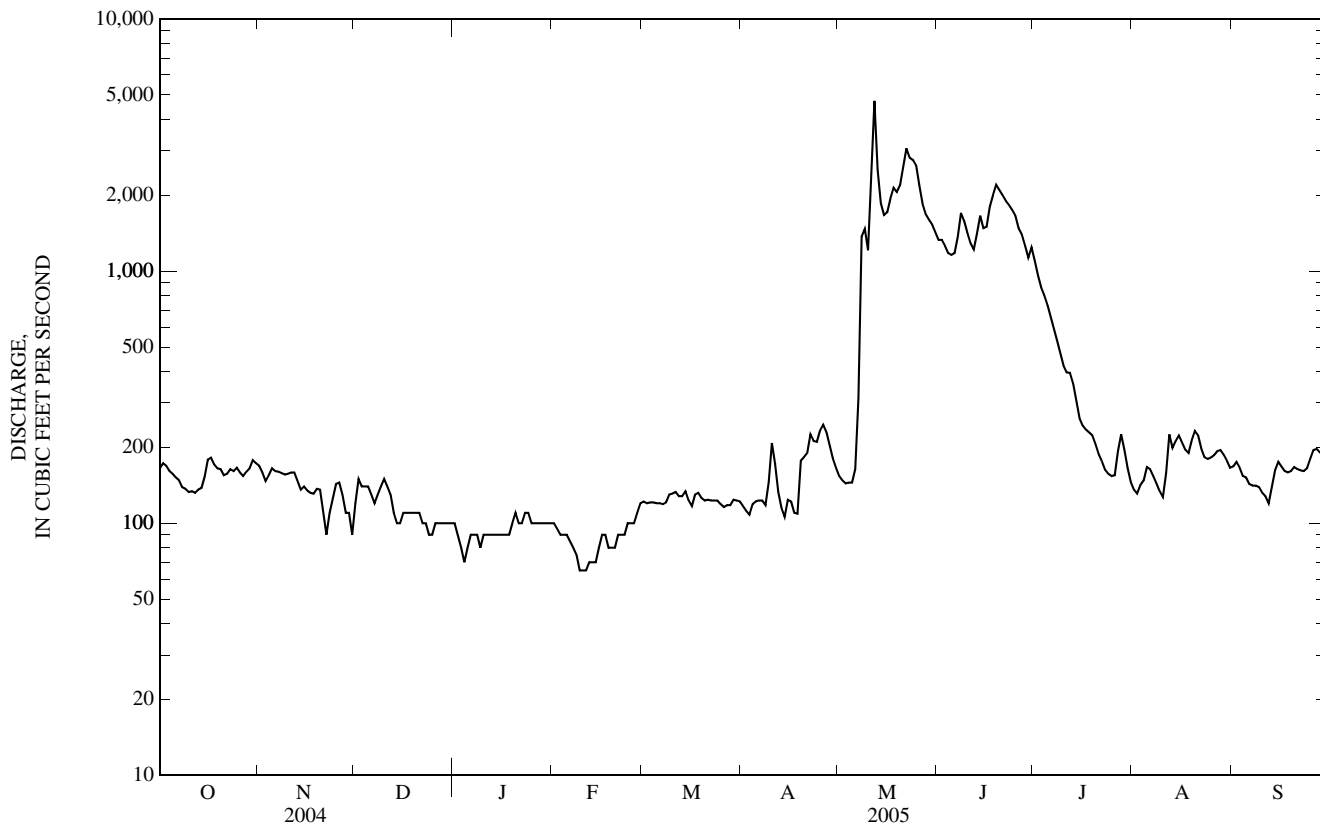
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2005, BY WATER YEAR (WY)

MEAN	247	219	176	173	222	299	345	1,124	1,595	448	171	213
MAX	403	324	271	330	672	855	676	3,283	3,570	1,674	475	615
(WY)	(1969)	(1974)	(1976)	(1974)	(1971)	(1972)	(1977)	(1978)	(1978)	(1975)	(1968)	(1968)
MIN	116	126	102	78.7	79.8	88.5	124	192	176	54.7	13.1	73.3
(WY)	(1961)	(2002)	(1985)	(2002)	(2002)	(2002)	(1961)	(2004)	(2001)	(2001)	(2001)	(2001)

06306300 TONGUE RIVER AT STATE LINE, NEAR DECKER, MT—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1961 - 2005	
ANNUAL TOTAL	52,095	147,455	--	
ANNUAL MEAN	142	404	436	
HIGHEST ANNUAL MEAN	--	--	862 1978	
LOWEST ANNUAL MEAN	--	--	138 2002	
HIGHEST DAILY MEAN	313 Jul 6	4,740 May 12	15,400	May 19, 1978
LOWEST DAILY MEAN	47 Aug 19	65 Feb 9	5.4	Aug 24, 1961
ANNUAL SEVEN-DAY MINIMUM	49 Aug 16	69 Feb 8	7.2	Aug 22, 1961
MAXIMUM PEAK FLOW	--	5,440 May 12	17,500	May 12, 1978
MAXIMUM PEAK STAGE	--	9.19 May 12	14.25	May 12, 1978
ANNUAL RUNOFF (AC-FT)	103,300	292,500	315,800	
10 PERCENT EXCEEDS	193	1,450	1,030	
50 PERCENT EXCEEDS	146	150	230	
90 PERCENT EXCEEDS	73	90	110	

e Estimated.



06306300 TONGUE RIVER AT STATE LINE, NEAR DECKER, MT—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1965 to September 1976, November 1980 to December 1986 (observer daily samples), August 2000 to current year (seasonal electronic records).

WATER TEMPERATURE: October 1965 to September 1976.

INSTRUMENTATION: Specific conductance probe installed Aug. 21, 2000.

REMARKS.--Specific conductance record is rated good. Missing conductance data for Nov. 23 due to ice conditions and Feb. 19, 20, and 28 and May 4-13 due to erroneous values. Several unpublished observations of specific conductance and water temperature were made during the year. Low-level mercury analysis on July 14; result is reported in nanograms per liter (ng/L).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,490 microsiemens per centimeter ($\mu\text{S}/\text{cm}$) at 25.0°C, Aug. 12, 1966, Jan. 11, 1972; minimum daily, 161 $\mu\text{S}/\text{cm}$ at 25.0°C, May 30 and June 1, 2003.

WATER TEMPERATURE: Maximum, 30.5°C, July 16, 1966; minimum, 0.0°C on many days during winter.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE (seasonal records) : Maximum, 909 microsiemens per centimeter ($\mu\text{S}/\text{cm}$) at 25.0°C, Aug. 27; minimum, 384 $\mu\text{S}/\text{cm}$ at 25.0°C, June 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT													
13...	1400	137	681	10.4	105	8.5	707	13.0	10.5	340	66.5	42.0	3.07
NOV													
04...	1330	159	*	*	*	8.5	690	15.0	6.0	330	66.8	38.8	2.84
DEC													
02...	1245	E150	674	14.8	115	8.3	775	8.0	.0	370	75.5	43.8	3.10
FEB													
09...	1030	E65	678	14.1	108	8.0	792	4.0	.0	370	73.9	44.4	3.25
MAR													
09...	0830	128	675	10.8	96	8.3	735	7.0	5.0	350	68.4	43.2	3.13
21...	1515	125	670	11.7	121	8.5	757	14.0	11.0	360	69.5	44.3	3.05
APR													
06...	1315	122	680	9.3	100	8.5	661	15.5	13.5	300	57.9	38.6	2.67
20...	1145	181	675	11.6	107	8.3	455	4.0	6.5	210	45.0	22.8	2.28
MAY													
03...	0840	149	678	9.4	89	8.4	633	9.0	7.5	300	60.9	35.8	2.69
12...	1030	5,430	668	9.7	88	7.7	406	7.0	5.5	170	33.5	20.7	7.34
JUN													
08...	1545	1,730	667	9.5	103	8.0	236	17.5	13.0	100	22.2	10.8	1.17
22...	1400	E1,900	675	8.8	106	8.1	186	34.0	18.5	83	20.1	7.84	1.00
JUL													
14...	0915	306	675	5.6	76	8.4	465	37.0	24.0	210	46.0	23.4	1.79
27...	0900	185	676	6.7	80	8.2	553	19.0	18.0	250	51.5	28.5	2.35
AUG													
10...	1025	125	674	7.6	99	8.3	659	23.0	22.0	280	57.7	32.6	3.04
24...	1720	181	670	6.9	90	8.7	629	25.0	22.0	280	55.5	33.5	2.84
SEP													
08...	1030	137	675	9.7	116	8.4	675	24.0	18.0	280	54.2	35.7	2.92
19...	1145	162	676	9.9	106	8.3	634	23.5	13.0	310	62.9	36.6	2.80

*--Equipment problems.

E--Estimated.

06306300 TONGUE RIVER AT STATE LINE, NEAR DECKER, MT—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Suspnd. sedi-ment, percent <.063mm (70331)	Sus-pended sedi-ment concentration mg/L (80154)	Sus-pended sedi-ment discharge, tons/d (80155)
OCT 13...	.8	33.1	235	3.84	.3	5.17	139	434	.60	163	71	44	16
NOV 04...	.7	30.9	237	3.80	.3	6.51	134	426	.59	186	64	32	14
DEC 02...	.8	36.0	270	4.81	.3	8.43	150	485	.68	E196	66	31	E12.6
FEB 09...	1	42.5	276	5.67	.3	6.68	166	510	.71	E89.5	52	27	E4.74
MAR 09...	.9	39.4	248	4.56	.3	2.80	166	476	.71	181	87	12	4.1
MAR 21...	.9	38.5	243	5.14	.3	3.75	167	478	.65	161	85	18	6.1
APR 06...	1	38.6	234	4.46	.3	2.37	138				78	35	12
APR 20...	.5	17.9	156	2.42	.2	4.50	76.0	265	.38	137	85	11	5.4
MAY 03...	.8	32.1	207	3.59	.3	3.15	131	394	.54	158	85	30	12
MAY 12...	.6	17.5	108	3.05	.2	9.83	85.1	244	.33	3,580	92	697	10,200
JUN 08...	.3	7.68	84	1.23	.1	8.27	30.7	133	.18	620	92	90	420
JUN 22...	.3	5.74	73	.83	.1	7.90	20.5	108	.15	E554	93	61	E313
JUL 14...	.6	19.8	170	2.60	.2	5.47	78.7	280	.38	231	97	20	17
JUL 27...	.8	27.4	194	3.19	.2	3.09	97.7	330	.47	174	92	37	18
AUG 10...	.8	32.1	221	3.44	.3	6.62	132	401	.54	135	92	58	20
AUG 24...	.8	31.1	197	3.13	.3	6.14	120	371	.52	187	78	66	32
SEP 08...	.8	30.8	208	3.53	.3	4.89	136	393	.57	155	79	49	18
SEP 19...	.7	29.0	204	3.44	.3	4.96	126	389	.56	180	86	35	15

Date	Time	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitrogen, wat unfltrd by analysis, mg/L (62855)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Alum-inum, water, fltrd, ug/L (01106)	Alum-inum, water, unfltrd recover-able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Barium, water, fltrd, ug/L (01005)	Barium, water, unfltrd recover-able, ug/L (01007)
OCT 13...	1400	E.007	<.016	<.002	.22	<.006	.029	<2	131	.6	<2	44	47
DEC 02...	1245	.015	.056	.003	.28	.013	.033	<1	87	.4	<2	57	58
FEB 09...	1030	.040	.080	.002	.29	E.003	.019	<1	18	.4	<2	54	59
APR 06...	1315	.011	<.016	E.001	.38	E.003	.044	E1	129	.6	<2	57	60
MAY 12...	1030	.062	.306	.009	1.99	.057	.53	4	5,810	.9	3	47	155
AUG 24...	1720	E.005	<.016	E.001	.33	<.006	.049	3	283	.6	.76	50	57

E--Estimated.

06306300 TONGUE RIVER AT STATE LINE, NEAR DECKER, MT—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Beryllium, water, fltrd, ug/L (01010)	Beryllium, water, unfltrd recover-able, ug/L (01012)	Boron, water, fltrd, ug/L (01020)	Cadmium, water, fltrd, ug/L (01025)	Cadmium, water, unfltrd ug/L (01027)	Chromium, water, unfltrd recover-able, ug/L (01034)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Lithium, water, fltrd, ug/L (01130)
OCT 13...	<.06	<.06	77	<.04	<.04	<2	1.5	2.1	13	290	<.08	.22	20.4
DEC 02...	<.06	<.06	77	<.04	<.04	<2	1.3	3.3	12	180	<.08	.14	22.8
FEB 09...	<.06	<.06	69	.05	<.04	E2	1.2	2.2	19	70	<.08	E.06	23.4
APR 06...	<.06	<.06	67	<.04	<.04	3	2.2	3.8	30	310	E.07	.27	21.8
MAY 12...	<.06	.75	53	<.04	.35	7	1.7	15.2	43	7,530	E.08	10.8	11.8
JUL 14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 24...	<.06	<.06	62	<.04	<.04	E2	1.5	1.4	9	530	.16	.46	15.6

Date	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recover-able, ug/L (01055)	Mercury, water, unfltrd ng/L (50286)	Mercury, water, unfltrd recover-able, ug/L (71900)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recover-able, ug/L (01067)	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd ug/L (01147)	Strontium, water, fltrd, ug/L (01080)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)
OCT 13...	9.2	29		<.01	2.13	2.43	.5	1.1	525	4.8	9
DEC 02...	9.5	22		<.01	.22	2.22	.5	.5	530	1.8	3
FEB 09...	12.7	14		<.01	2.05	1.99	.5	.6	567	1.8	E2
APR 06...	32.7	60		--	3.06	1.71	.6	.5	524	--	2
MAY 12...	27.8	290		--	2.56	12.1	1.0	1.6	219	1.3	44
JUL 14...	--	--	1.3	--	--	--	--	--	--	--	--
AUG 24...	5.3	50		--	2.18	2.42	E.3	<.4	425	3.6	3

E--Estimated.

06306300 TONGUE RIVER AT STATE LINE, NEAR DECKER, MT—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	648	633	642	712	689	701	851	789	822	748	698	722
2	653	634	637	721	696	706	797	768	781	840	721	784
3	672	645	658	776	715	733	787	746	766	881	814	859
4	695	661	675	739	691	711	761	706	734	889	823	869
5	698	674	684	708	693	698	775	692	717	848	817	831
6	709	676	691	721	701	709	714	686	704	859	821	846
7	702	678	689	719	696	706	740	699	720	846	814	833
8	726	684	696	717	688	701	770	703	738	819	778	799
9	742	702	716	749	687	710	764	691	731	785	760	769
10	754	714	729	748	683	709	741	689	717	763	732	747
11	795	708	733	725	702	710	721	688	704	734	717	726
12	798	729	742	727	704	719	704	688	696	721	708	716
13	742	712	727	747	723	733	757	653	723	724	705	715
14	746	718	735	871	724	778	748	653	713	728	712	723
15	755	711	729	860	731	768	749	692	734	738	718	727
16	747	688	697	904	734	793	729	659	705	758	724	740
17	703	677	691	855	734	777	786	648	723	741	718	731
18	708	679	695	851	735	767	710	596	674	725	689	712
19	717	698	710	840	732	777	674	543	632	711	683	696
20	708	687	700	808	745	768	703	668	686	691	657	684
21	726	694	711	---	---	---	712	690	698	790	649	708
22	750	687	722	---	---	---	731	693	717	653	590	620
23	751	695	723	---	---	---	800	722	764	625	618	622
24	744	675	706	791	745	761	844	787	808	644	625	632
25	742	685	715	784	755	764	865	772	826	664	641	652
26	738	691	714	791	749	766	802	729	755	676	656	665
27	787	713	745	753	713	739	778	726	754	687	662	678
28	812	705	754	778	710	729	755	694	727	699	670	686
29	780	694	723	830	720	758	724	674	702	707	674	691
30	705	675	689	880	800	833	701	658	679	710	674	695
31	696	674	684	---	---	---	731	672	707	716	676	696
MONTH	812	633	705	---	---	---	---	543	728	889	590	728
	FEBRUARY			MARCH			APRIL			MAY		
1	719	675	698	807	673	743	777	762	771	651	620	632
2	757	682	716	783	733	748	775	757	766	658	640	649
3	737	670	717	756	742	749	774	745	758	700	638	664
4	730	680	713	760	746	752	747	717	730	699	654	680
5	740	704	716	767	752	757	735	719	726	699	622	653
6	743	728	736	777	755	765	724	693	711	646	602	618
7	772	731	756	778	759	769	697	675	686	625	428	540
8	864	734	792	782	767	774	692	661	683	447	390	423
9	810	768	794	775	759	769	680	624	652	452	409	434
10	803	750	774	780	760	771	630	556	586	456	387	436
11	836	757	794	779	761	770	603	556	584	420	366	388
12	820	745	783	800	776	788	609	558	579	479	414	449
13	778	685	741	798	769	786	608	551	574	540	479	505
14	731	675	701	783	763	773	605	571	589	---	---	---
15	728	649	696	788	737	772	607	554	582	---	---	---
16	755	677	718	798	763	774	590	530	562	---	---	---
17	826	698	760	812	770	790	598	511	563	---	---	---
18	886	708	808	806	770	781	611	583	596	---	---	---
19	865	715	785	778	752	765	613	490	550	---	---	---
20	859	688	750	778	763	770	510	455	479	---	---	---
21	795	679	742	774	751	763	541	506	523	---	---	---
22	771	685	727	775	756	767	632	540	561	---	---	---
23	748	675	722	798	766	785	676	617	647	---	---	---
24	786	665	710	799	779	789	715	645	680	---	---	---
25	804	644	699	789	772	781	718	633	677	---	---	---
26	776	663	711	809	776	786	648	554	597	---	---	---
27	755	672	709	825	786	805	559	542	549	---	---	---
28	792	669	725	829	795	814	568	545	553	---	---	---
29	---	---	---	800	786	793	604	565	587	---	---	---
30	---	---	---	799	779	790	621	599	606	---	---	---
31	---	---	---	785	756	766	---	---	---	---	---	---
MONTH	886	644	739	829	673	774	777	455	624	---	---	---

YELLOWSTONE RIVER BASIN

06306300 TONGUE RIVER AT STATE LINE, NEAR DECKER, MT—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	285	269	277	656	626	646	651	628	640
2	287	277	282	310	285	295	657	628	645	639	627	633
3	297	278	290	321	310	315	657	629	642	653	632	639
4	297	288	294	327	318	322	651	637	642	664	651	658
5	289	284	286	345	327	337	638	620	627	675	656	667
6	284	259	279	366	345	356	628	617	621	673	647	662
7	259	225	246	378	366	371	643	617	629	679	654	667
8	246	219	228	394	377	384	650	631	640	673	659	667
9	257	244	252	417	394	403	659	640	649	685	666	677
10	265	250	261	433	417	423	670	633	656	694	672	685
11	278	265	273	439	422	432	678	632	657	691	683	687
12	276	269	272	451	429	438	669	637	648	715	691	704
13	276	266	270	467	445	454	639	629	632	705	657	688
14	273	257	267	483	467	474	644	630	638	660	635	652
15	265	252	260	500	483	491	645	634	640	657	638	647
16	---	---	---	513	500	506	649	644	647	647	634	642
17	---	---	---	522	501	510	650	642	647	647	633	640
18	---	---	---	559	522	545	656	643	651	647	633	640
19	---	---	---	578	550	568	648	631	642	642	623	635
20	---	---	---	591	568	574	635	616	625	639	615	628
21	---	---	---	646	576	608	621	613	617	642	623	631
22	---	---	---	621	571	597	637	620	626	646	628	639
23	196	188	192	605	586	595	651	637	646	648	633	642
24	199	192	195	589	561	576	657	631	648	654	643	649
25	207	198	203	575	555	561	656	625	641	654	639	645
26	231	206	218	593	573	582	632	612	624	648	619	634
27	240	227	231	620	538	574	618	601	612	640	625	631
28	256	231	242	646	593	619	632	618	626	645	625	635
29	263	256	261	600	582	588	641	621	633	638	622	630
30	270	262	266	610	588	595	653	627	642	639	618	628
31	---	---	---	626	608	615	648	633	641	---	---	---
MONTH	---	---	---	646	269	483	678	601	638	715	615	651

06309200 MIDDLE FORK POWDER RIVER NEAR BARNUM, WY

LOCATION.--Lat 43°34'40", long 107°08'16" (NAD 27), in SE¹/₄ SW¹/₄ NE¹/₄ sec.26, T.42 N., R.86 W., Washakie County, Hydrologic Unit 10090201, on left bank 1,100 ft downstream from Rock Creek and 13 mi southwest of Barnum.

DRAINAGE AREA.--45.2 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 7,220 ft above NGVD of 1929, from topographic map. Prior to October 1, 1970, at site 1,000 ft upstream from station at different datum. October 1, 1970 to August 17, 1987, at site 100 ft upstream from station at datum 6.78 ft higher (gage operated concurrently with present site September 15, 1983 to August 17, 1987). U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. No diversion upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	e5.5	4.6	3.4	e3.1	e3.2	e4.4	31	65	12	6.4	4.6
2	6.4	e6.0	4.5	3.6	e3.1	e3.2	4.5	29	54	11	5.6	4.5
3	4.9	e6.0	4.3	3.6	e3.1	e3.2	5.6	29	48	11	7.3	4.4
4	4.5	e5.9	4.2	3.6	e3.2	e3.2	6.9	35	45	10	7.0	4.3
5	4.3	e5.7	4.0	3.6	e3.1	3.2	7.1	56	42	10	5.8	4.3
6	4.4	e5.6	3.9	3.5	e3.0	e3.2	7.5	117	40	9.7	5.3	4.3
7	4.6	e5.6	3.9	3.6	3.2	e3.1	13	138	48	9.3	5.2	4.3
8	4.6	e5.5	3.9	3.6	e3.0	e3.1	30	145	42	8.9	5.1	4.2
9	4.6	e5.7	3.9	3.4	e3.2	e3.1	18	132	35	8.5	5.0	4.2
10	4.6	e6.0	3.8	3.4	e3.4	e3.0	13	170	31	8.6	7.2	4.3
11	4.6	e5.7	e3.7	3.4	e3.4	e3.1	12	211	29	8.5	6.7	4.3
12	4.8	e5.3	e3.7	3.3	e3.4	e3.1	9.9	163	46	8.1	6.1	4.9
13	5.1	e5.1	e3.7	3.3	3.4	e4.5	14	139	39	7.7	6.5	5.0
14	4.6	e5.0	3.8	e3.3	3.3	e4.2	20	138	31	7.6	5.9	4.7
15	5.1	e4.9	3.7	e3.1	3.2	4.1	13	164	29	7.5	5.4	4.6
16	5.1	e4.8	3.7	e3.2	e3.1	3.9	18	221	28	7.0	5.3	4.5
17	5.2	e4.6	3.6	e3.2	e3.3	3.7	45	244	27	6.9	5.3	4.5
18	4.8	e4.5	3.6	e3.1	e3.4	3.9	81	226	23	6.9	5.2	4.5
19	4.6	e4.4	3.6	e3.1	e3.4	3.7	71	282	22	6.7	5.2	4.4
20	4.7	e4.3	3.6	e3.1	e3.4	3.6	48	241	21	6.3	5.0	4.2
21	4.9	e4.0	3.6	e3.0	e3.4	3.6	42	198	18	6.1	4.9	4.3
22	5.9	e4.1	3.6	e3.0	3.4	e3.6	36	164	17	6.0	4.9	4.8
23	5.7	4.2	3.6	e3.0	e3.3	3.6	39	143	17	5.7	4.9	4.5
24	5.7	4.2	3.6	e3.0	e3.3	e3.5	65	125	16	5.7	4.8	4.9
25	5.2	4.0	3.7	e3.0	e3.4	e3.2	93	108	15	6.6	4.8	5.0
26	5.0	4.2	3.6	e3.0	e3.5	e3.4	81	87	14	8.9	4.7	4.7
27	5.1	e4.0	3.6	e3.1	e3.4	e3.6	68	76	14	6.7	4.7	4.5
28	e5.0	4.3	3.5	3.1	e3.2	e4.0	56	69	13	5.9	4.6	4.5
29	e5.0	4.6	3.4	e3.0	---	e4.3	46	68	18	5.8	4.5	4.3
30	e5.0	4.6	e3.4	e3.1	---	e4.0	40	72	14	5.7	4.5	4.1
31	e5.2	---	3.5	e3.1	---	e4.2	---	76	---	5.8	4.6	---
TOTAL	159.2	148.3	116.8	100.8	91.6	110.3	1,007.9	4,097	901	241.1	168.4	134.6
MEAN	5.14	4.94	3.77	3.25	3.27	3.56	33.6	132	30.0	7.78	5.43	4.49
MAX	10	6.0	4.6	3.6	3.5	4.5	93	282	65	12	7.3	5.0
MIN	4.3	4.0	3.4	3.0	3.0	3.0	4.4	29	13	5.7	4.5	4.1
AC-FT	316	294	232	200	182	219	2,000	8,130	1,790	478	334	267

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2005, BY WATER YEAR (WY)

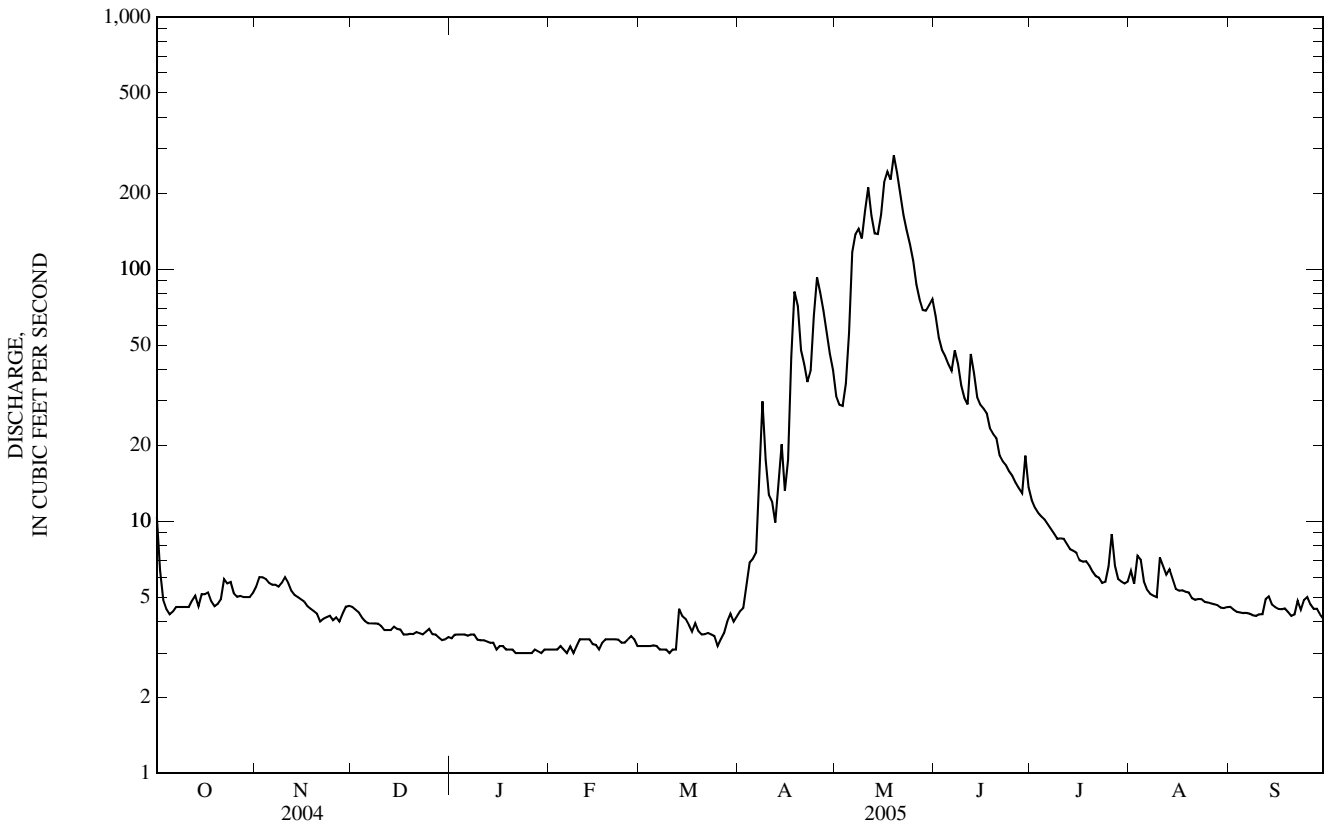
MEAN	6.93	6.45	5.59	5.07	5.20	6.55	34.1	153	85.2	17.2	8.35	7.08
MAX	15.1	22.9	10.3	7.78	10.1	14.2	106	326	299	39.9	18.3	17.0
(WY)	(1999)	(1999)	(1999)	(1983)	(1969)	(1972)	(1987)	(1999)	(1975)	(1975)	(1968)	(1968)
MIN	2.45	2.00	2.75	2.48	2.87	3.47	8.00	42.0	13.0	5.09	4.25	4.16
(WY)	(1963)	(1963)	(1962)	(1962)	(2002)	(2002)	(1970)	(2003)	(2001)	(2003)	(2003)	(1969)

YELLOWSTONE RIVER BASIN

06309200 MIDDLE FORK POWDER RIVER NEAR BARNUM, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1962 - 2005	
ANNUAL TOTAL	5,052.6		7,277.0		--	
ANNUAL MEAN	13.8		19.9		28.5	
HIGHEST ANNUAL MEAN	--		--		51.4 1999	
LOWEST ANNUAL MEAN	--		--		10.6 2003	
HIGHEST DAILY MEAN	176	May 5	282	May 19	954	Apr 29, 1999
LOWEST DAILY MEAN	3.4	Dec 29,30	3.0	Many days	1.0	Dec 15, 1964
ANNUAL SEVEN-DAY MINIMUM	3.5	Dec 25	3.0	Jan 20	1.2	Jan 22, 1966
MAXIMUM PEAK FLOW	--	--	448	May 19	7,110 ^a	Jun 15, 1963
MAXIMUM PEAK STAGE	--	--	7.80	May 19	12.60 ^b	Jun 15, 1963
ANNUAL RUNOFF (AC-FT)	10,020		14,430		20,630	
10 PERCENT EXCEEDS	39		50		68	
50 PERCENT EXCEEDS	4.9		4.8		7.0	
90 PERCENT EXCEEDS	4.0		3.2		4.3	

- a On basis of slope-area measurement of peak flow.
- b From floodmarks, site and datum then in use.
- e Estimated.



06311000 NORTH FORK POWDER RIVER NEAR HAZELTON, WY

LOCATION.--Lat 44°01'40", long 107°04'49" (NAD 27), in SW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.21, T.47 N., R.85 W., Johnson County, Hydrologic Unit 10090201, on left bank 0.5 mi upstream from Dullknife Reservoir, 0.6 mi downstream from Twin Creek, 7.2 mi southwest of Hazelton, and 19 mi northwest of Mayoworth.

DRAINAGE AREA.--24.5 mi².

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

REVISED RECORDS.--WSP 1279: 1947-48(M), 1949, 1950-51(M), 1952. WDR WY-98: 1997.

GAGE.--Water-stage recorder. Elevation of gage is 8,180 ft above NGVD of 1929, from topographic map. Prior to October 1, 1966, at site 0.7 mi downstream from station at different datum. October 1, 1966 to August 26, 1986, at site 0.1 mi upstream from station at different datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for May 19-23, which are fair, and those for estimated daily discharges, which are poor. No diversion upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	e4.6	e3.7	e2.6	2.0	1.8	1.7	e11	85	26	15	4.1
2	5.4	e4.6	e3.5	e2.5	2.0	1.8	1.8	e9.5	66	24	9.6	4.1
3	4.8	e5.0	e3.4	e2.5	2.0	1.8	1.9	e9.0	57	22	8.3	4.0
4	4.6	e5.0	e3.3	e2.4	2.0	1.8	2.1	e17	55	21	9.0	3.7
5	4.4	e4.8	e3.0	e2.4	2.0	1.8	2.1	e30	56	20	7.9	3.4
6	4.3	e4.6	e3.2	e2.5	2.0	1.8	e2.5	e50	60	18	6.9	3.1
7	4.2	e4.6	e3.0	e2.5	2.0	1.9	e2.2	e32	67	17	6.5	3.0
8	4.1	e4.7	e2.9	2.4	2.0	1.9	e2.0	24	83	17	6.2	3.0
9	4.1	e4.7	e2.9	2.3	2.0	1.9	e1.8	27	77	15	6.7	3.0
10	4.0	e5.0	e2.9	2.4	2.0	1.9	e1.7	e40	61	15	7.4	2.9
11	3.9	e4.8	e2.9	2.5	2.0	1.9	1.5	e35	53	20	7.8	2.9
12	4.1	e4.5	e3.0	2.4	2.0	1.9	e1.7	e30	70	15	7.1	3.4
13	4.2	e4.4	e2.9	2.4	2.1	1.8	e2.3	e28	90	14	8.0	4.6
14	4.2	e4.4	e2.8	2.3	2.1	1.8	e3.0	37	60	13	7.8	4.4
15	e4.0	e4.2	e2.9	2.2	2.0	1.8	e3.9	65	58	12	6.8	3.6
16	e4.2	e4.0	e2.7	2.2	2.0	1.8	e8.0	109	59	12	6.5	3.4
17	e4.6	e3.8	e2.7	2.2	1.9	1.8	e20	108	61	11	7.5	3.2
18	e4.4	e3.7	e2.7	2.3	1.9	1.8	e60	108	57	11	7.1	3.3
19	e4.2	e3.6	e2.7	2.4	1.9	1.8	e50	e182	50	10	6.9	3.3
20	e4.4	e3.5	e2.8	2.4	2.0	1.8	e40	e279	47	9.4	6.3	3.0
21	e4.4	e3.6	e2.7	2.5	2.0	1.8	e35	215	42	8.9	6.0	3.0
22	e4.4	e3.6	e2.7	2.5	1.9	1.8	e30	e143	42	8.6	5.2	3.8
23	e4.4	e3.6	e2.6	2.5	1.9	1.7	e36	e140	41	8.4	5.3	3.4
24	e4.3	e3.6	e2.4	2.4	1.9	1.7	e43	129	43	8.2	5.1	3.9
25	e4.0	e3.6	e2.6	2.3	1.9	1.7	e50	99	34	8.7	4.9	4.9
26	e4.2	e3.5	e2.6	2.3	1.9	1.7	e40	74	31	16	4.9	5.0
27	e4.4	e3.5	e2.7	2.2	1.8	1.7	e30	67	29	10	4.8	3.9
28	e4.7	e3.5	e2.6	2.2	1.8	1.8	e20	68	27	8.6	4.7	4.0
29	e4.7	e3.3	e2.6	2.2	---	1.8	e15	69	47	7.9	4.4	3.5
30	e4.6	e3.4	e2.6	2.1	---	1.7	e13	65	34	7.9	4.1	3.3
31	e4.6	---	e2.6	2.1	---	1.6	---	71	---	8.0	4.1	---
TOTAL	136.2	123.7	88.6	73.1	55.0	55.6	522.2	2,370.5	1,642	423.6	208.8	108.1
MEAN	4.39	4.12	2.86	2.36	1.96	1.79	17.4	76.5	54.7	13.7	6.74	3.60
MAX	5.4	5.0	3.7	2.6	2.1	1.9	60	279	90	26	15	5.0
MIN	3.9	3.3	2.4	2.1	1.8	1.6	1.5	9.0	27	7.9	4.1	2.9
AC-FT	270	245	176	145	109	110	1,040	4,700	3,260	840	414	214

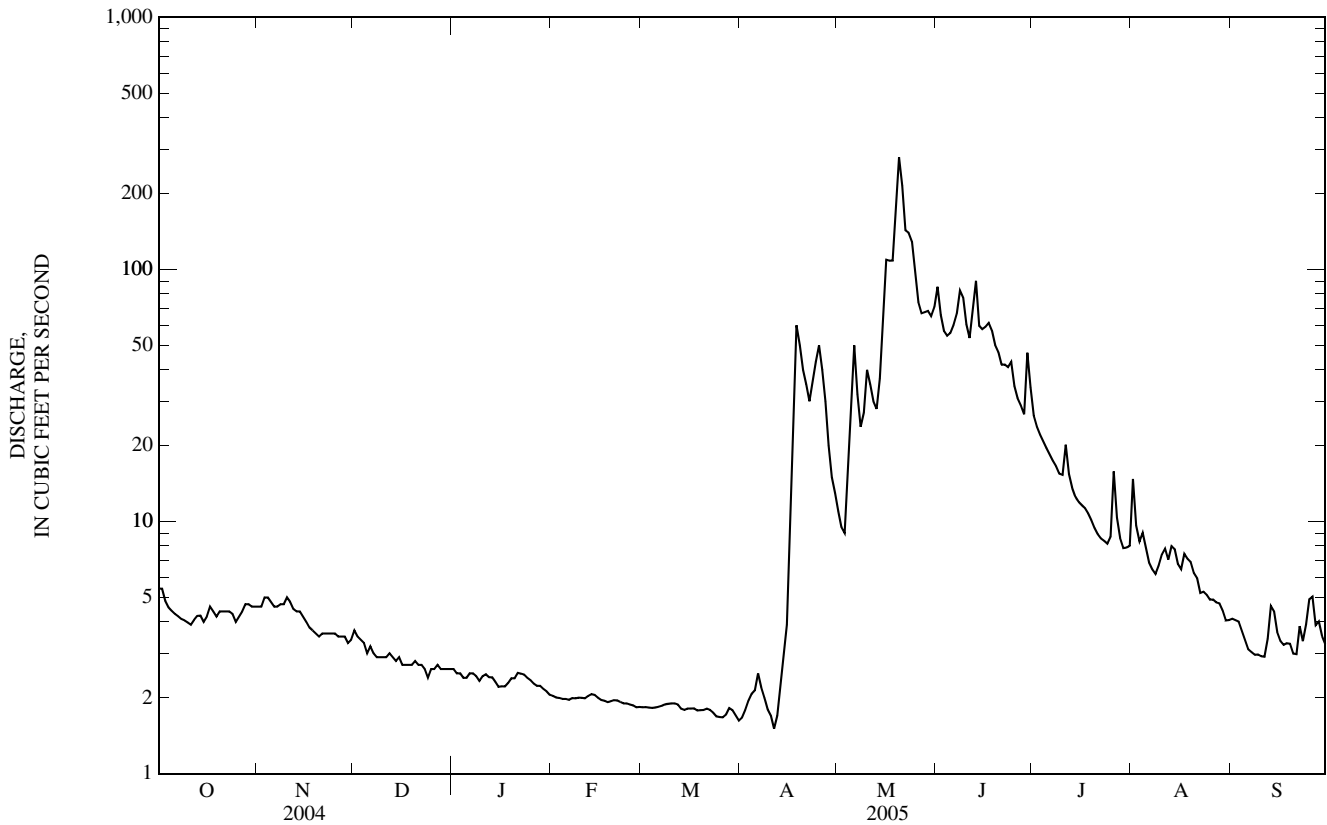
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2005, BY WATER YEAR (WY)

MEAN	4.30	3.47	2.78	2.29	2.11	2.23	10.2	59.9	62.0	16.7	6.94	4.97
MAX	10.4	10.1	6.96	4.50	4.00	4.99	45.3	119	178	46.8	13.3	9.74
(WY)	(1983)	(1983)	(1983)	(1958)	(1958)	(1960)	(2003)	(1947)	(1967)	(1975)	(1997)	(1982)
MIN	2.03	1.70	1.41	0.80	1.00	1.19	1.09	20.7	9.08	4.88	2.66	2.47
(WY)	(1961)	(1981)	(1967)	(1949)	(1959)	(1967)	(1961)	(2001)	(2001)	(1960)	(2001)	(1960)

06311000 NORTH FORK POWDER RIVER NEAR HAZELTON, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1946 - 2005	
ANNUAL TOTAL	3,140.0		5,807.4		--	
ANNUAL MEAN	8.58		15.9		14.9	
HIGHEST ANNUAL MEAN	--		--		26.7	1967
LOWEST ANNUAL MEAN	--		--		5.05	2001
HIGHEST DAILY MEAN	66	May 5	279	May 20	354	Jun 15, 1953
LOWEST DAILY MEAN	1.8	Feb 29	1.5	Apr 11	0.60 ^a	Oct 30, 1960
ANNUAL SEVEN-DAY MINIMUM	1.9	Feb 23	1.7	Mar 25	0.64	Apr 12, 1961
MAXIMUM PEAK FLOW	--		393	May 19	886 ^b	Jun 15, 1953
MAXIMUM PEAK STAGE	--		4.37	May 19	6.21 ^c	May 14, 1984
ANNUAL RUNOFF (AC-FT)	6,230		11,520		10,770	
10 PERCENT EXCEEDS	22		51		42	
50 PERCENT EXCEEDS	4.7		4.1		3.9	
90 PERCENT EXCEEDS	2.0		1.9		1.9	

- a May have been less during winter months of water years 1947 and 1948.
- b Gage height, 4.34 ft, site and datum then in use, from rating extension above 110 ft³/s on basis of slope-area measurement of peak flow.
- c Backwater from ice, site and datum then in use.
- e Estimated.



06311400 NORTH FORK POWDER RIVER BELOW PASS CREEK, NEAR MAYOWORTH, WY

LOCATION.--Lat 43°54'41", long 106°53'20" (NAD 27), in NW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.36, T.46 N., R.84 W., Johnson County, Hydrologic Unit 10090201, on left bank 0.8 mi downstream from Pass Creek, 1.2 mi upstream from Hat Ranch, 7.2 mi northwest of Mayoworth, and 13 mi downstream from Dullknife Reservoir.

DRAINAGE AREA.--100 mi².

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,700 ft above NGVD of 1929, from topographic map. Prior to September 15, 1983, at site 60 ft downstream from station at same datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some regulation for irrigation by Dullknife Reservoir 13 mi upstream from station, capacity, 4,350 acre-ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	17	16	14	16	15	15	16	118	48	50	29
2	17	16	15	14	16	15	15	16	110	42	47	29
3	17	16	15	e13	16	14	15	16	93	38	47	29
4	17	16	15	e13	16	15	16	16	87	35	47	29
5	17	16	15	e13	16	14	21	18	85	34	47	29
6	17	16	14	e14	16	15	26	20	84	32	46	29
7	17	16	14	14	16	15	52	22	92	31	45	28
8	17	16	14	15	e15	15	66	18	106	29	44	28
9	17	16	14	19	15	15	41	19	115	28	43	27
10	17	16	14	18	16	15	23	36	96	27	46	27
11	17	16	14	17	17	15	19	42	84	27	43	26
12	17	16	14	17	17	16	18	26	88	27	42	27
13	17	16	14	e15	16	15	23	24	124	27	40	27
14	17	16	14	e13	16	15	30	28	93	25	38	27
15	19	16	14	e11	e15	15	19	39	82	24	37	27
16	18	16	14	e12	e14	16	18	44	84	37	36	27
17	17	15	14	12	14	16	21	41	86	42	37	27
18	18	15	14	13	15	15	25	55	85	43	36	27
19	17	15	14	17	17	15	24	177	78	44	35	24
20	17	15	14	18	16	15	19	256	72	44	34	22
21	17	15	14	17	16	16	18	264	65	44	34	22
22	18	15	e13	17	16	15	17	190	64	44	34	21
23	17	15	e12	17	16	15	16	168	61	47	34	21
24	17	15	e11	17	16	15	20	165	66	65	33	21
25	17	15	e11	17	15	15	21	142	59	68	33	21
26	17	15	11	17	15	15	18	119	53	70	33	20
27	17	15	15	17	15	15	18	105	48	68	31	20
28	17	15	15	17	15	15	17	99	45	67	31	20
29	17	e14	14	17	---	15	16	102	58	66	30	20
30	17	14	14	16	---	16	16	110	64	50	e30	19
31	17	---	14	16	---	15	---	106	---	48	29	---
TOTAL	532	465	430	477	439	468	683	2,499	2,445	1,321	1,192	750
MEAN	17.2	15.5	13.9	15.4	15.7	15.1	22.8	80.6	81.5	42.6	38.5	25.0
MAX	19	17	16	19	17	16	66	264	124	70	50	29
MIN	17	14	11	11	14	14	15	16	45	24	29	19
AC-FT	1,060	922	853	946	871	928	1,350	4,960	4,850	2,620	2,360	1,490

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2005, BY WATER YEAR (WY)

MEAN	21.4	19.2	18.6	18.3	18.0	18.0	26.8	73.4	85.6	44.9	38.5	30.8
MAX	31.5	25.3	23.1	21.0	22.0	21.1	47.9	176	193	80.5	52.4	53.8
(WY)	(1983)	(1999)	(1977)	(2000)	(2000)	(2000)	(1977)	(1978)	(1995)	(1975)	(1998)	(1997)
MIN	16.1	15.5	13.9	15.1	14.2	14.6	16.7	18.0	29.7	26.2	26.1	18.2
(WY)	(1990)	(2005)	(2005)	(1991)	(1991)	(1991)	(2004)	(2004)	(2001)	(2004)	(1985)	(2001)

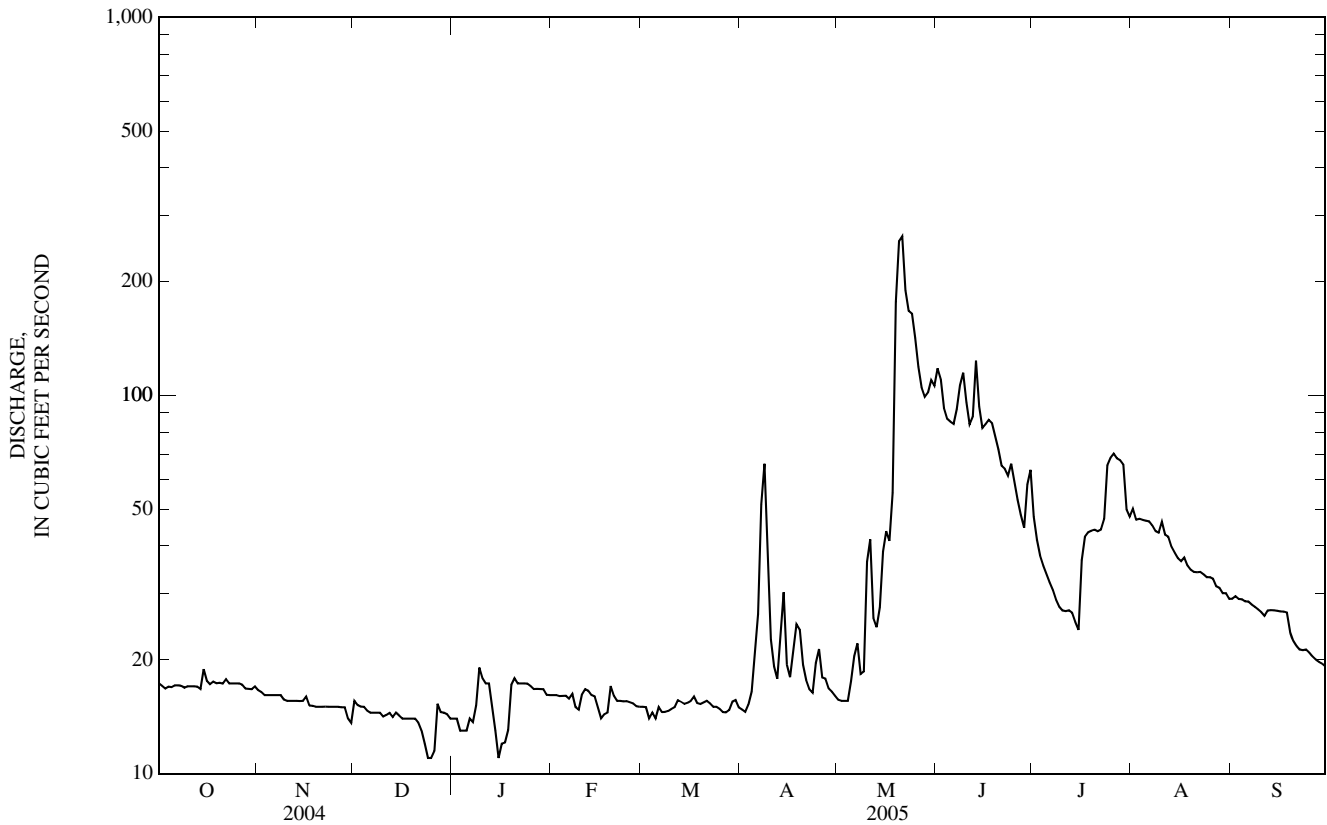
06311400 NORTH FORK POWDER RIVER BELOW PASS CREEK, NEAR MAYOWORTH, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1974 - 2005	
ANNUAL TOTAL	7,370		11,701		--	
ANNUAL MEAN	20.1		32.1		34.5	
HIGHEST ANNUAL MEAN	--		--		51.6 1978	
LOWEST ANNUAL MEAN	--		--		20.4 2004	
HIGHEST DAILY MEAN	44	Jun 12	264	May 21	379	Jun 5, 1995
LOWEST DAILY MEAN	11	Dec 24-26	11	Dec 24-26, Jan 15	9.5	Feb 6, 1991
ANNUAL SEVEN-DAY MINIMUM	12	Dec 20	12	Dec 20	11	Feb 5, 1991
MAXIMUM PEAK FLOW	--		293	May 21	1,590 ^a	Aug 1, 1984
MAXIMUM PEAK STAGE	--		5.32	May 21	8.89 ^b	Aug 1, 1984
ANNUAL RUNOFF (AC-FT)	14,620		23,210		25,010	
10 PERCENT EXCEEDS	29		67		60	
50 PERCENT EXCEEDS	17		17		21	
90 PERCENT EXCEEDS	15		14		17	

a From rating curve extended above 400 ft³/s on basis of slope-area measurement of peak flow.

b From floodmarks.

c Estimated.



06313400 SALT CREEK NEAR SUSSEX, WY

LOCATION.--Lat 43°37'19", long 106°22'04" (NAD 27), in NE¹/₄ NE¹/₄ SE¹/₄ sec.8, T.42 N., R.79 W., Johnson County, Hydrologic Unit 10090204, on left bank 200 ft upstream from bridge on West Sussex Dugout oil field road, 6.3 mi southwest of Sussex, and 12.6 mi upstream from mouth.

DRAINAGE AREA.--769 mi².

PERIOD OF RECORD.--Water years 1949, 1952, 1968 to 1981, October 1982 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT 18...	0830	15	635	9.2	91	8.5	5,950	7.0	6.0	510	117	52.7	37.5
NOV 26...	0920	16	643	--	--	8.3	6,820	.0	3.0	510	117	51.8	32.0
DEC 16...	1545	18	655	11.0	91	8.1	5,820	.0	.5	690	175	61.2	30.9
JAN 26...	0810	23	650	11.5	94	8.5	5,080	5.0	.0	770	164	86.2	23.1
FEB 23...	0820	18	649	10.9	91	8.5	6,860	-2.0	.5	600	138	62.7	32.6
MAR 28...	0820	18	635	10.8	105	8.4	6,580	7.0	5.5	690	158	71.2	33.8
APR 27...	1040	21	645	10.2	102	8.5	6,980	.0	7.0	700	128	91.9	29.0
MAY 25...	1145	17	652	8.6	106	8.3	5,960	11.0	17.0	530	91.0	73.7	31.0
JUN 23...	1245	11	644	8.5	124	8.5	7,360	29.5	24.5	410	56.1	66.5	28.5
JUL 28...	0825	13	650	6.5	82	8.2	5,960	23.0	17.5	920	183	112	26.0
AUG 24...	0820	8.0	644	7.3	90	8.4	6,360	15.5	16.0	450	89.4	55.3	36.8
SEP 21...	0955	9.1	648	8.3	96	8.2	6,490	15.0	13.5	420	83.0	50.5	35.4

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO ₃ (29801)	Alkalinity, wat flt inc tit field, mg/L as CaCO ₃ (39086)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT 18...	23	1,190	82	326	--	1,190	2.4	25.7	951	3,760	5.07	151	3,720
NOV 26...	23	1,210	83	444	--	1,220	2.5	31.0	966	3,890	5.39	171	3,960
DEC 16...	19	1,130	77	443	--	1,040	2.4	31.1	1,110	3,850	5.17	185	3,800
JAN 26...	15	968	73	423	--	643	1.6	19.3	1,490	3,650	4.96	226	3,650
FEB 23...	22	1,250	81	521	546	1,220	2.3	29.0	1,060		5.69	203	4,180
MAR 28...	21	1,250	79	491	525	1,160	2.3	24.9	1,200		5.72	208	4,210
APR 27...	23	1,370	80	442	--	1,060	2.0	10.7	1,650	4,600	6.44	269	4,740
MAY 25...	28	1,490	85	443	--	1,300	2.2	24.1	1,260	4,540	6.18	209	4,540
JUN 23...	30	1,400	87	430	--	1,440	2.2	19.1	1,200	4,460	6.28	137	4,620
JUL 28...	15	1,050	71	225	--	816	1.4	12.6	1,800	4,130	5.76	149	4,230
AUG 24...	24	1,180	84	241	--	1,330	2.7	16.9	1,070	3,920	5.46	86.8	4,020
SEP 21...	27	1,280	86	311	--	1,360	2.7	22.1	953	3,970	5.54	100	4,080

06313400 SALT CREEK NEAR SUSSEX, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro- gen, wat unfl- trd, mg/L by anal- ysis, mg/L (62855)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Alum- inum, water, unfltrd recover- able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recover- able, ug/L (01007)	Beryll- ium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)	Selen- ium, water, fltrd, ug/L (01145)	Selen- ium, water, unfltrd ug/L (01147)
OCT 18...	--	--	--	--	--	555	E.6	101	<.18	E12	19.8	4.8	3.5
NOV 26...	--	--	--	--	--	1,270	1.7	96	<.18	E21	34.7	<1.2	6.3
DEC 16...	--	--	--	--	--	2,060	4.4	137	E.15	21	66.5	7.8	6.4
JAN 26...	--	--	--	--	--	5,100	2.0	354	.42	E17	186	2.6	7.0
FEB 23...	--	--	--	--	--	1,980	2.5	196	E.15	20	76.0	5.0	9.8
MAR 28...	--	--	--	--	--	913	2.6	159	<.18	18	79.9	<1.2	3.1
APR 27...	--	--	--	--	--	570	5.5	109	<.18	57	88.6	1.3	6.3
MAY 25...	--	--	--	--	--	1,140	5.4	125	<.18	<30	67.0	9.8	6.5
JUN 23...	--	--	--	--	--	1,020	3.8	92	<.18	E19	18.3	3.2	8.5
JUL 28...	<.04	.13	.016	.77	<.02	2,590	2.1	122	.20	E11	17.5	4.3	4.4
AUG 24...	--	--	--	--	--	1,780	2.2	128	<.18	E27	16.8	<1.2	6.5
SEP 21...	--	--	--	--	--	1,020	1.8	104	E.10	<30	12.1	.29	--

< -- Less than.

E -- Estimated.

06313500 POWDER RIVER AT SUSSEX, WY

LOCATION.--Lat 43°41'44", long 106°18'24" (NAD 27), in SW¹/₄ SW¹/₄ NW¹/₄ sec.13, T.43 N., R.79 W., Johnson County, Hydrologic Unit 10090202, on left bank 0.5 mi upstream from bridge on State Highway 192, 0.6 mi west of Sussex, and 2.7 mi downstream from Salt Creek.

DRAINAGE AREA.--3,090 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1938 to June 1940, February 1950 to September 1957, October 1977 to September 1984, October 1985 to September 1998, November 2002 to current year.

REVISED RECORDS.--WDR WY-80-1: 1979(M), 1979.

GAGE.--Water-stage recorder. Elevation of gage is 4,365.16 ft above NGVD of 1929. Prior to June 30, 1940, nonrecording gage about 500 ft downstream from State Highway 192 at datum 4,363.23 ft. February 8, 1950 to September 30, 1957, water-stage recorder about 600 ft downstream from State Highway 192 at datum 4,362.16 ft. October 1977 to April 8, 1983, water-stage recorder 10 ft downstream from State Highway 192 at datum 4,362.95 ft. April 9, 1983 to October 21, 1987, at site 300 ft upstream from station at same datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Numerous small reservoirs and diversions for irrigation of about 17,000 acres upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of September 30, 1923, reached an elevation of 4,375.75 ft at site about 600 ft downstream from State Highway 192, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	141	e75	e100	e115	133	125	175	372	37	19	11
2	39	136	e110	e92	e120	133	118	164	301	33	14	11
3	41	149	e100	e100	e125	131	115	151	242	25	17	10
4	38	160	e100	e105	e130	126	116	138	206	21	21	9.6
5	35	136	e96	e86	e130	130	124	128	181	20	14	9.6
6	36	136	e90	e80	e120	131	131	134	164	20	9.7	10
7	34	133	e90	e84	e110	128	127	136	153	20	7.7	10
8	36	129	e86	e90	e100	125	129	253	136	18	7.2	9.8
9	41	129	e94	e100	e110	122	162	293	150	16	7.3	7.6
10	42	124	e104	e90	e115	126	169	293	149	17	20	5.6
11	46	123	e115	e90	e115	129	108	1,390	139	17	52	6.1
12	53	121	e125	e90	e120	130	84	2,400	123	17	112	7.9
13	59	121	e110	e88	e125	133	82	1,240	127	18	93	10
14	61	118	e105	e84	e130	140	74	747	160	16	49	10
15	72	124	e110	e74	e120	e125	78	535	148	16	36	9.5
16	114	124	e120	e81	e110	e115	82	471	114	15	25	9.5
17	109	115	e120	e91	103	e100	64	469	100	13	19	12
18	100	104	e120	e100	116	88	50	514	93	13	17	10
19	88	112	e115	e108	141	89	75	490	84	13	19	11
20	84	114	e130	e115	153	90	152	539	80	13	20	9.5
21	82	118	e117	e130	149	105	177	594	77	11	17	9.2
22	134	116	e110	e120	146	103	219	576	68	9.6	15	9.3
23	239	122	e100	e140	134	109	220	491	53	8.4	15	8.6
24	141	124	e86	e155	140	112	162	407	43	7.0	15	9.0
25	118	128	e95	e165	142	109	143	356	37	6.3	15	12
26	107	136	e105	e160	141	115	177	305	34	15	15	14
27	107	146	e120	e145	141	138	193	252	29	27	14	19
28	109	118	e110	e135	139	156	226	208	28	18	15	20
29	108	45	e115	e135	---	186	236	179	30	15	15	21
30	124	e56	e115	e130	---	132	209	192	30	10	14	22
31	131	---	e110	e120	---	128	---	478	---	9.6	11	---
TOTAL	2,571	3,658	3,298	3,383	3,540	3,817	4,127	14,698	3,651	514.9	739.9	333.8
MEAN	82.9	122	106	109	126	123	138	474	122	16.6	23.9	11.1
MAX	239	160	130	165	153	186	236	2,400	372	37	112	22
MIN	34	45	75	74	100	88	50	128	28	6.3	7.2	5.6
AC-FT	5,100	7,260	6,540	6,710	7,020	7,570	8,190	29,150	7,240	1,020	1,470	662

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2005, BY WATER YEAR (WY)

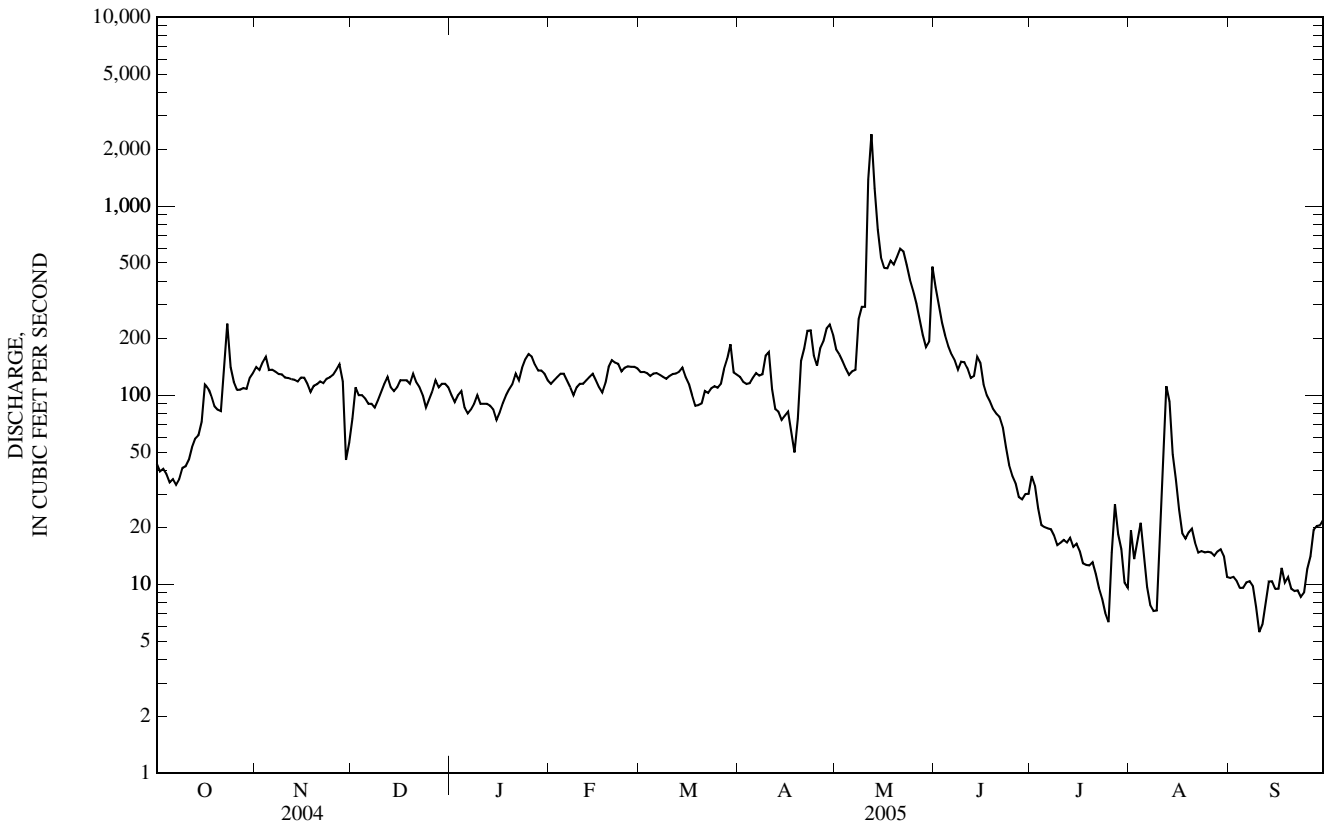
MEAN	139	127	115	114	166	266	269	554	342	124	54.8	69.1
MAX	838	202	176	177	335	701	553	2,553	1,477	374	125	448
(WY)	(1995)	(1987)	(1995)	(1983)	(1980)	(1987)	(1987)	(1978)	(1995)	(1978)	(1983)	(1982)
MIN	24.2	77.7	79.5	58.6	69.4	110	136	72.0	22.2	16.6	3.54	4.90
(WY)	(1957)	(1953)	(1991)	(1940)	(1939)	(1940)	(1953)	(1992)	(1954)	(2005)	(1939)	(1939)

YELLOWSTONE RIVER BASIN

06313500 POWDER RIVER AT SUSSEX, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1938 - 2005	
ANNUAL TOTAL	33,721.8		44,331.6		--	
ANNUAL MEAN	92.1		121		198	
HIGHEST ANNUAL MEAN	--		--		486 1978	
LOWEST ANNUAL MEAN	--		--		86.0 2004	
HIGHEST DAILY MEAN	1,040	Jul 24	2,400	May 12	14,100	May 23, 1952
LOWEST DAILY MEAN	6.8	Sep 2	5.6	Sep 10	1.5	Aug 25, 1939
ANNUAL SEVEN-DAY MINIMUM	9.0	Aug 19	8.1	Sep 9	2.6	Aug 23, 1939
MAXIMUM PEAK FLOW	--		3,640	May 12	32,500 ^a	May 23, 1952
MAXIMUM PEAK STAGE	--		6.70	May 12	4,374.76 ^b	May 23, 1952
ANNUAL RUNOFF (AC-FT)	66,890		87,930		143,600	
10 PERCENT EXCEEDS	160		180		392	
50 PERCENT EXCEEDS	90		109		125	
90 PERCENT EXCEEDS	13		12		24	

- a From rating curve extended above 1,500 ft³/s on basis of slope-area measurement of peak flow.
- b From floodmarks, site and datum then in use.
- e Estimated.



06313500 POWDER RIVER AT SUSSEX, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1949-53, 1967-68, 1976 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1983 to September 1984, April 2003 to current year (seasonal).

WATER TEMPERATURE: October 1982 to September 1984, April 2003 to current year (seasonal).

SUSPENDED-SEDIMENT DISCHARGE: May 1983 to September 1984.

INSTRUMENTATION.--Water-quality monitor for specific conductance and water temperature.

REMARKS.--Specific conductance records excellent October 8-10, 19-21, April 16-20, May 18, 26, June 9, 24-28, July 15-20, 29, 30, August 12-15, 25-27, and September 10, 11; good October 1-3, 11-16, 22-27, April 21-27, May 1-5, 19, 27, June 10, 11, June 29 to July 9, July 21-28, July 31 to August 5, August 16-24, August 28 to September 2, and September 12-15, 22; fair October 4-7, 17, 18, October 28 to November 1, May 6-10, 20, 28, June 12, July 10-14, August 6-9, and September 3-6; and poor November 2-12, May 11-17, 21-25, May 29 to June 8, June 13-23, August 10, 11, and September 7-9, 19-21, 24-30. Water temperature records excellent except those for June 16 to September 11, which are good. Water-temperature records represent water temperature at sensor within 0.2°C.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 7,980 microsiemens per centimeter at 25°C (µS/cm), August 17, 2003; minimum recorded, 756 µS/cm, May 21, 22, 2005.

WATER TEMPERATURE: Maximum recorded, 34.7°C, July 24, 2005; minimum recorded, -0.1°C, October 30 to November 2, November 4-10, 2003.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 6,940 µS/cm, July 27; minimum recorded, 756 µS/cm, May 21, 22.

WATER TEMPERATURE: Maximum recorded, 34.7°C, July 24; minimum recorded, 0.0°C, November 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT													
07...	1340	35	649	9.4	109	8.5	3,170	25.5	14.0	640	154	62.1	14.8
18...	1015	95	637	9.6	96	8.3	2,350	18.5	7.0	510	126	47.2	9.87
NOV													
12...	1455	122	655	--	--	8.4	2,170	8.5	4.5	550	134	52.0	7.64
26...	1115	136	645	--	--	8.3	2,510	-2.5	2.0	560	139	51.0	8.06
DEC													
10...	0800	104	654	12.6	101	8.1	2,110	1.5	.0	540	140	47.4	8.03
21...	1600	117	652	12.0	97	8.3	2,220	-4.0	.0	630	160	55.6	7.79
JAN													
19...	0915	108	653	11.7	94	7.8	2,580	9.0	.0	650	167	55.6	10.2
26...	1010	160	652	11.7	94	8.3	1,960	9.0	.0	610	158	52.6	7.15
FEB													
11...	1245	115	651	11.4	93	8.4	2,420	9.0	.5	610	153	55.3	7.26
23...	0950	138	652	12.9	107	8.5	2,450	.0	1.0	580	144	52.8	8.39
MAR													
09...	1310	119	647	11.1	113	8.4	2,500	15.0	8.5	600	147	56.7	9.37
28...	1000	138	636	11.1	111	8.4	2,640	15.0	7.0	640	159	58.6	9.07
APR													
15...	1330	73	652	10.7	119	8.3	2,910	22.0	12.5	560	135	54.4	11.8
27...	1240	201	648	10.4	104	8.2	1,580	1.0	8.0	370	88.4	35.9	5.59
MAY													
17...	0900	454	636	8.0	95	8.1	1,270	16.0	14.5	320	80.3	29.8	4.38
25...	0950	356	654	9.4	107	8.0	1,020	10.0	14.0	260	64.8	25.0	3.97
JUN													
08...	1630	135	644	8.0	103	8.3	2,230	22.5	19.0	490	115	50.3	7.61
23...	1045	50	647	7.8	105	8.3	2,850	28.0	21.0	560	126	58.8	9.38
JUL													
14...	1135	16	652	7.6	110	8.1	4,810	35.0	25.0	610	122	74.2	18.1
28...	1010	19	651	7.6	100	8.3	5,240	26.0	20.0	570	114	70.2	23.2
AUG													
11...	1240	55	651	6.1	84	7.8	2,870	25.0	22.5	430	117	34.2	11.6
24...	1015	15	646	7.9	99	8.3	4,520	19.5	17.5	680	152	72.0	19.8
SEP													
09...	0845	7.7	644	6.5	81	8.2	6,140	16.0	16.5	510	99.2	62.6	29.7
21...	1135	8.8	650	8.6	103	8.2	5,710	16.0	15.5	560	114	66.7	25.6

YELLOWSTONE RIVER BASIN

06313500 POWDER RIVER AT SUSSEX, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO ₃ (29801)	Alkalinity, wat flt inc tit field, mg/L as CaCO ₃ (39086)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT													
07...	8	464	61	198	--	416	1.2	11.6	794	2,040	2.94	204	2,160
18...	6	317	57	215	--	252	.8	9.77	644	1,530	2.21	416	1,620
NOV													
12...	5	261	50	217	--	219	.7	10.2	587	1,400	2.01	487	1,480
26...	5	289	53	208	--	237	.8	11.7	603	1,460	2.10	566	1,540
DEC													
10...	5	266	51	257	--	229	.7	14.4	485	1,340	1.90	392	1,390
21...	5	291	50	246	--	212	.7	13.1	611	1,500	2.14	498	1,580
JAN													
19...	6	347	53	296	--	317	.9	16.1	589	1,680	2.39	512	1,750
26...	4	244	46	208	--	133	.6	10.8	667	1,400	1.96	621	1,440
FEB													
11...	5	283	50	240	256	221	.8	12.6	627	1,510	2.18	497	1,600
23...	6	317	54	250	258	249	.8	12.3	611		2.18	598	1,610
MAR													
09...	6	333	54	233	246	272	.8	9.84	675		2.30	543	1,690
28...	6	341	53	244	264	247	.9	9.98	776		2.55	699	1,880
APR													
15...	8	446	63	244	--	363	.9	9.46	709	1,880	2.60	377	1,910
27...	5	203	54	156	--	135	.5	8.01	427	996	1.42	568	1,050
MAY													
17...	3	141	48	129	--	65.0	.4	9.55	407	814	1.19	1,080	878
25...	3	128	51	132	--	92.9	.3	10.6	261	666	.94	661	688
JUN													
08...	6	289	56	224	--	214	.6	11.3	606	1,430	2.05	549	1,510
23...	7	401	61	227	--	341	.8	12.4	727	1,810	2.61	259	1,920
JUL													
14...	14	785	73	275	--	768	1.3	8.72	1,070	3,010	4.33	137	3,180
28...	16	898	76	286	--	943	1.6	12.1	979	3,210	4.53	171	3,330
AUG													
11...	9	437	68	133	--	255	1.2	6.46	915	1,860	2.66	291	1,960
24...	11	686	68	221	--	716	1.5	10.2	1,080	2,870	4.10	122	3,010
SEP													
09...	21	1,090	81	298	--	1,170	2.0	13.0	1,080		5.29	80.9	3,890
21...	19	1,010	79	284	--	1,070	2.0	13.9	1,040	3,510	4.93	86.2	3,630

06313500 POWDER RIVER AT SUSSEX, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro- gen, wat unfl- trd, mg/L by anal- ysis, (62855)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Alum- inum, water, unfltrd recover- able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recover- able, ug/L (01007)	Beryll- ium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)	Selen- ium, water, fltrd, ug/L (01145)	Selen- ium, water, unfltrd ug/L (01147)
OCT													
07...	--	--	--	--	--	505	1.4	62	<.12	E11	67.5	--	3.8
18...	--	--	--	--	--	8,380	.9	183	1.19	<18	12.4	2.4	3.2
NOV													
12...	--	--	--	--	--	1,300	.9	64	.10	<6	35.9	2.0	3.6
26...	--	--	--	--	--	1,230	1.3	59	.08	<18	40.0	2.9	3.7
DEC													
10...	--	--	--	--	--	934	1.6	61	.08	E3	33.5	3.6	3.8
21...	--	--	--	--	--	1,370	.8	73	.14	<18	37.0	3.2	4.6
JAN													
19...	--	--	--	--	--	1,390	1.3	81	.14	E11	37.4	3.1	3.6
26...	--	--	--	--	--	3,470	1.1	111	.32	<6	40.8	4.3	5.7
FEB													
11...	--	--	--	--	--	2,980	1.3	116	.29	21	40.0	4.7	5.2
23...	--	--	--	--	--	2,210	1.0	83	.18	<18	27.1	3.0	5.0
MAR													
09...	--	--	--	--	--	646	1.5	63	.06	<18	33.5	4.7	4.4
28...	--	--	--	--	--	5,630	1.6	137	.56	<18	31.8	7.6	7.6
APR													
15...	--	--	--	--	--	225	.8	56	<.12	<18	58.2	E.8	4.7
27...	--	--	--	--	--	4,050	1.1	113	.49	6	8.6	2.3	3.4
MAY													
17...	--	--	--	--	--	10,900	.9	230	1.37	E4	4.1	2.7	3.7
25...	--	--	--	--	--	5,010	1.1	174	.64	10	5.4	1.6	2.2
JUN													
08...	--	--	--	--	--	1,170	1.1	75	.10	E4	20.9	2.9	4.0
23...	--	--	--	--	--	315	1.5	55	<.12	<18	63.8	2.3	3.5
JUL													
14...	<.04	<.06	<.008	.42	<.02	158	1.8	58	<.12	E13	78.6	2.9	3.7
28...	--	--	--	--	--	538	2.6	71	<.18	E10	61.7	6.0	3.8
AUG													
11...	--	--	--	--	--	72,500	1.4	945	17.1	<18	E1.1	6.8	13.2
24...	--	--	--	--	--	1,600	1.5	82	<.12	E10	70.5	2.8	1.9
SEP													
09...	--	--	--	--	--	1,090	1.8	81	<.18	E27	82.2	1.9	3.9
21...	--	--	--	--	--	651	1.3	68	<.18	<18	84.5	1.5	--

< -- Less than.

E -- Estimated.

06313500 POWDER RIVER AT SUSSEX, WY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1,820	1,490	1,600	3,990	3,170	3,610	5,640	4,660	5,120	4,920	4,600	4,730
2	1,560	1,490	1,540	3,780	3,210	3,450	4,680	3,420	3,630	5,150	4,600	4,900
3	1,520	1,420	1,460	4,350	3,770	4,050	3,960	3,440	3,640	5,380	5,040	5,180
4	1,600	1,490	1,540	4,730	4,290	4,540	3,850	3,230	3,570	5,440	5,180	5,330
5	1,800	1,600	1,690	4,710	3,940	4,240	3,590	2,830	3,260	5,660	5,200	5,440
6	1,920	1,790	1,850	4,600	4,440	4,520	3,780	3,320	3,510	5,700	5,400	5,600
7	2,000	1,890	1,930	4,730	4,390	4,560	4,180	3,780	3,980	5,650	5,190	5,410
8	2,190	1,970	2,060	4,920	4,630	4,810	4,130	3,960	4,090	6,000	5,470	5,760
9	1,990	1,510	1,710	4,970	4,780	4,860	3,960	3,680	3,830	6,120	5,760	5,950
10	1,530	1,440	1,510	4,960	4,670	4,860	5,030	3,540	4,070	5,980	5,590	5,790
11	1,680	1,440	1,570	4,750	4,640	4,700	3,850	2,800	3,110	6,080	5,550	5,850
12	1,800	1,670	1,750	4,850	4,600	4,730	3,910	2,650	3,320	5,980	5,140	5,650
13	2,190	1,780	1,940	4,910	4,760	4,810	2,980	2,560	2,720	5,370	4,790	5,120
14	2,180	1,810	2,000	4,910	4,730	4,850	2,630	2,530	2,570	5,620	5,180	5,420
15	1,880	1,710	1,790	5,340	4,720	4,880	2,980	2,620	2,770	5,880	5,380	5,640
16	1,930	1,840	1,880	5,350	4,840	5,120	3,370	2,980	3,160	5,730	5,270	5,570
17	2,210	1,920	2,040	5,070	4,780	4,970	3,820	3,370	3,580	5,470	4,230	4,910
18	2,230	2,160	2,190	4,940	4,700	4,840	3,900	3,820	3,860	5,520	4,620	5,150
19	2,300	2,150	2,210	4,970	4,660	4,830	3,970	3,610	3,910	5,200	4,550	4,880
20	2,400	2,290	2,330	4,790	4,640	4,700	4,060	3,510	3,700	5,150	4,790	4,960
21	2,560	2,350	2,430	5,270	4,660	4,990	4,230	3,920	4,130	5,180	4,870	5,040
22	2,760	2,540	2,630	5,840	5,270	5,550	4,180	3,900	4,080	5,430	4,980	5,120
23	3,220	2,740	2,910	6,420	5,840	6,110	4,510	4,100	4,360	5,830	5,080	5,510
24	3,600	3,120	3,270	6,460	6,200	6,340	4,490	4,100	4,360	5,680	5,380	5,540
25	3,890	3,360	3,560	6,560	6,010	6,250	4,250	3,940	4,170	5,660	4,840	5,380
26	3,970	3,580	3,730	6,560	5,620	5,860	4,220	3,790	4,070	6,880	5,210	6,250
27	4,400	3,970	4,190	6,940	5,450	6,050	4,230	3,640	4,000	6,450	5,890	6,130
28	4,280	4,080	4,210	5,600	4,620	5,350	4,100	3,780	3,990	6,300	5,870	6,060
29	4,160	3,790	4,010	5,100	3,840	4,460	4,200	3,770	3,990	6,810	5,790	6,230
30	4,290	3,990	4,110	5,590	4,570	5,060	4,210	3,890	4,040	6,630	5,880	6,220
31	---	---	---	5,590	4,800	5,230	4,770	4,080	4,490	---	---	---
MONTH	4,400	1,420	2,390	6,940	3,170	4,940	5,640	2,530	3,780	6,880	4,230	5,490

06313500 POWDER RIVER AT SUSSEX, WY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	JUNE			JULY			AUGUST			SEPTEMBER		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	16.8	12.0	14.0	30.8	17.3	23.7	32.6	19.7	25.4	25.9	11.1	18.0			
2	18.5	11.8	14.9	28.6	17.7	22.6	31.3	19.0	24.4	25.9	12.4	19.0			
3	19.7	12.9	16.0	29.7	16.3	22.0	27.9	19.9	22.8	24.8	13.7	19.3			
4	18.2	14.3	16.4	29.7	15.6	22.0	30.2	17.0	22.6	26.5	16.3	20.3			
5	22.5	13.2	17.6	32.2	15.9	23.4	31.4	17.4	23.7	27.7	15.6	20.7			
6	21.8	15.6	18.7	31.7	18.3	24.7	33.2	17.8	24.9	27.3	13.7	19.8			
7	18.0	13.5	15.9	31.5	17.7	24.3	31.6	18.4	24.8	28.3	14.5	20.6			
8	19.6	10.0	14.6	32.0	18.5	25.0	29.6	17.7	23.3	26.3	14.8	20.5			
9	19.8	14.0	17.0	31.4	18.1	24.6	31.8	17.6	23.6	27.4	17.0	20.7			
10	19.9	12.8	16.5	25.6	19.3	22.7	29.3	18.8	23.1	24.2	13.6	18.2			
11	23.1	13.9	18.3	32.5	17.9	24.5	27.3	18.4	22.1	25.6	12.2	17.8			
12	18.9	15.7	17.0	34.2	18.8	26.2	24.1	17.3	20.8	22.9	12.1	16.2			
13	20.1	13.2	15.9	33.1	20.0	26.3	17.3	14.5	15.3	20.4	9.3	14.9			
14	23.1	14.2	18.4	32.9	19.8	25.8	25.2	13.9	18.4	21.1	9.2	15.0			
15	23.8	16.2	19.7	34.6	20.4	27.0	28.4	15.9	21.8	22.0	9.8	15.7			
16	27.5	16.6	21.6	31.7	20.3	25.2	27.5	17.9	22.0	20.9	10.2	15.7			
17	26.1	18.8	22.5	29.9	16.9	22.3	24.1	16.2	19.7	21.6	10.7	15.7			
18	28.3	17.1	22.2	30.7	15.6	22.8	27.0	15.5	20.7	20.9	11.8	15.8			
19	30.2	18.9	24.3	29.7	16.7	23.4	27.8	15.9	21.3	21.1	10.1	15.5			
20	30.7	20.7	25.4	32.4	17.4	24.6	29.5	15.5	22.1	21.8	9.7	15.7			
21	32.0	20.4	25.9	32.3	19.0	25.4	30.3	16.1	23.0	17.1	12.5	15.1			
22	31.5	20.6	25.7	32.7	18.3	24.5	30.6	17.1	23.3	21.4	11.6	15.9			
23	30.8	18.8	23.7	33.3	19.7	25.8	30.2	17.7	23.0	20.5	11.6	15.8			
24	29.0	18.5	23.1	34.7	20.2	27.1	27.8	15.2	20.8	14.8	11.3	12.2			
25	28.3	17.4	22.4	26.5	18.2	21.9	26.3	14.6	19.4	15.5	10.5	12.5			
26	28.2	17.5	21.7	23.8	15.2	18.8	26.2	12.7	18.9	17.8	7.3	12.6			
27	29.0	15.2	21.7	30.0	15.2	21.9	26.6	13.0	19.5	18.5	8.9	13.6			
28	24.5	17.2	21.0	31.9	17.1	23.9	28.0	14.0	20.7	18.0	9.5	13.1			
29	25.6	16.6	20.2	28.2	17.9	22.6	27.8	14.6	20.9	19.3	7.8	13.5			
30	28.0	15.0	21.4	30.9	18.8	24.3	25.4	15.0	19.0	20.4	9.9	14.9			
31	---	---	---	32.5	20.1	25.0	24.5	10.3	16.9	---	---	---			
MONTH	32.0	10.0	19.8	34.7	15.2	24.0	33.2	10.3	21.6	28.3	7.3	16.5			

YELLOWSTONE RIVER BASIN

06313540 WILLOW CREEK NEAR MOUTH, NEAR SUSSEX, WY

LOCATION.--Lat 43°53'33", long 106°07'37" (NAD 83), in NW¹/₄ NW¹/₄ NW¹/₄ sec.9, T.45 N., R.77 W., Johnson County, Hydrologic Unit 10090202, at culvert on private road and 16.0 mi northeast of Sussex.

PERIOD OF RECORD.--July 2004 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)
OCT		
18...	1115	.00
NOV		
12...	1300	.00
DEC		
21...	1730	.00
JAN		
19...	1040	.00
FEB		
23...	1130	.00
MAR		
28...	1130	.00
APR		
27...	1420	.00
MAY		
25...	0755	.00
JUN		
23...	0915	.00
JUL		
27...	1530	.00
AUG		
24...	1145	.00
SEP		
21...	1255	.00

06313560 PUMPKIN CREEK NEAR MOUTH, NEAR SUSSEX, WY

LOCATION.--Lat 44°01'40", long 106°08'24" (NAD 83), in SE¹/₄ NE¹/₄ SW¹/₄ sec.20, T.47 N., R.77 W., Johnson County, Hydrologic Unit 10090202, on private road and 23.5 mi northeast of Sussex.

PERIOD OF RECORD.--July 2004 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)
OCT 18...	1440	1.7	643	16.2	187	8.6	3,850	17.0	13.5	260	28.6	46.6	28
NOV 04...	1500	1.6	--	--	--	8.4	3,700	16.5	10.0	200	22.6	35.1	26
DEC 08...	1350	2.4	643	12.4	114	8.6	3,780	6.0	4.0	230	26.5	40.6	27
JAN 12...	1230	2.9	649	10.7	97	8.4	3,790	4.5	4.0	250	31.9	41.0	25
FEB 09...	1600	2.7	656	12.7	136	8.4	3,900	8.5	11.0	240	32.3	38.2	26
MAR 08...	1030	2.2	656	11.7	118	8.5	3,860	5.0	8.5	250	32.5	41.5	26
APR 14...	1105	.11	650	11.8	132	8.4	4,710	21.0	12.5	500	48.0	92.0	20
MAY 10...	1155	1.3	648	9.3	106	8.2	5,250	12.0	13.0	1,100	161	174	12
JUN 07...	1045	.10	648	4.2	52	8.4	4,600	15.0	17.0	380	29.0	74.1	22
JUL 13...	1040	.00	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	0715	.00	--	--	--	--	--	--	--	--	--	--	--
SEP 08...	1115	.00	--	--	--	--	--	--	--	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT 18...	1,040	2,580
NOV 04...	857	2,500
DEC 08...	935	2,510
JAN 12...	913	2,540
FEB 09...	934	2,560
MAR 08...	954	2,590
APR 14...	1,040	3,440
MAY 10...	908	4,220
JUN 07...	975	3,250
JUL 13...	--	--
AUG 10...	--	--
SEP 08...	--	--

06313585 BEAVER CREEK AT MOUTH, NEAR SUSSEX, WY

LOCATION.--Lat 44°07'04", long 106°07'58" (NAD 83), in NE¼ NE¼ SE¼ sec.20, T.48 N., R.77 W., Johnson County, Hydrologic Unit 10090202, at bridge on county road 159 and 29.6 mi northeast of Sussex.

PERIOD OF RECORD.--July 2004 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)
OCT 06...	1515	.67	656	9.7	119	8.5	2,560	25.0	17.5	160	13.3	31.1	20
NOV 04...	1600	1.1	661	9.8	95	8.6	2,840	15.5	7.5	290	32.5	49.6	16
DEC 08...	1450	.83	647	10.8	88	8.3	3,110	6.0	.0	350	48.1	56.2	16
JAN 12...	1335	.77	652	7.8	63	8.2	3,080	.0	.0	350	52.7	52.8	16
FEB 09...	1430	1.3	659	9.7	78	8.6	2,990	2.0	.0	330	44.3	52.1	15
MAR 08...	1130	.45	659	11.4	104	8.7	2,780	5.5	5.0	340	41.7	57.7	14
APR 14...	1200	1.4	654	9.9	114	8.6	3,440	20.0	14.0	390	39.3	71.0	17
MAY 10...	1255	1.7	654	9.9	111	8.6	2,800	12.0	13.0	370	44.1	63.2	13
JUN 07...	1140	1.3	652	10.0	124	8.8	2,980	16.0	17.5	260	20.1	50.8	17
JUL 13...	1120	.93	658	11.1	162	8.8	2,780	32.0	26.5	160	12.0	31.3	22
AUG 10...	0800	1.1	659	7.1	90	8.3	2,410	24.0	19.0	300	47.2	44.9	11
SEP 08...	1200	1.9	657	9.1	118	8.4	3,550	22.0	20.0	160	20.9	25.5	26

Date	Sodium, water, fltrd, mg/L (00930)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitrogen, wat unfltrd by analysis, mg/L (62855)	Orthophosphate, water, fltrd, mg/L as P (00671)
OCT 06...	592	1,680	--	--	--	--	--
NOV 04...	636	1,940	--	--	--	--	--
DEC 08...	674	2,120	--	--	--	--	--
JAN 12...	684	2,120	--	--	--	--	--
FEB 09...	631	1,960	--	--	--	--	--
MAR 08...	599	1,890	--	--	--	--	--
APR 14...	771	2,410	--	--	--	--	--
MAY 10...	588	1,900	--	--	--	--	--
JUN 07...	643	2,020	--	--	--	--	--
JUL 13...	643	1,810	<.04	<.06	<.008	.80	<.02
AUG 10...	452	1,610	--	--	--	--	--
SEP 08...	738	2,130	--	--	--	--	--

< -- Less than.

06313590 POWDER RIVER ABOVE BURGER DRAW, NEAR BUFFALO, WY

LOCATION.--Lat 44°08'40", long 106°08'19" (NAD 83), in NW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 8, T.48 N., R.77 W., Johnson County, Hydrologic Unit 10090202, on right bank at bridge on Johnson County Road 204 (Schoonover Road) bridge, 0.2 mi upstream from Burger Draw, and 30.7 mi southeast of Buffalo.

DRAINAGE AREA.--4,290 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.-- June 2003 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,000 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Numerous small reservoirs and diversions for irrigation upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	e125	e82	e110	e165	116	107	215	476	58	20	8.1
2	61	e120	e120	e105	e150	114	105	196	378	53	12	6.3
3	59	e120	e115	e100	e145	109	101	160	338	57	11	4.8
4	58	122	e110	e110	e140	126	96	146	279	59	15	3.9
5	57	118	e105	e100	e125	129	93	153	243	52	16	3.7
6	50	119	e100	e90	e100	126	97	134	225	45	15	2.8
7	44	113	e96	e88	e84	121	102	128	210	37	14	2.9
8	42	106	e94	e96	e74	125	108	145	188	29	12	3.2
9	38	104	e90	e105	e78	124	122	174	177	26	11	2.0
10	34	104	e96	e100	e84	124	125	281	173	22	8.8	1.2
11	39	107	e105	e94	e90	114	146	356	185	22	25	0.87
12	42	111	e115	e92	e120	115	131	2,530	178	21	32	1.1
13	46	114	e110	e86	e150	114	108	2,240	167	21	51	1.2
14	49	112	e105	e82	e130	112	101	1,550	170	20	105	1.2
15	66	108	e110	e74	e110	114	102	816	174	17	93	0.96
16	72	103	e115	e70	e90	118	99	640	202	16	68	1.1
17	80	103	e115	e86	e100	116	97	573	180	16	45	0.90
18	111	103	e115	e98	e96	112	96	550	156	15	34	1.1
19	95	103	e110	e105	e96	112	87	573	135	16	27	1.0
20	88	e100	e125	e115	e110	114	91	544	124	13	22	0.99
21	82	e98	e120	e150	e125	118	144	573	116	12	19	1.2
22	107	e94	e115	e130	e150	114	198	632	114	9.8	20	1.2
23	102	e98	e105	e210	167	116	231	611	108	9.2	19	1.3
24	256	e105	e94	e340	143	131	243	515	97	8.5	16	2.3
25	176	e110	e94	e300	132	124	220	427	96	7.7	13	3.7
26	151	e110	e105	e280	125	115	161	383	84	16	11	5.2
27	136	e120	e120	e250	116	109	161	319	75	15	9.2	5.9
28	123	e110	e115	e220	115	109	190	285	72	15	9.8	8.9
29	128	e66	e120	e200	---	116	192	251	62	12	11	15
30	131	e62	e120	e190	---	114	220	243	61	18	11	16
31	131	---	e115	e175	---	111	---	244	---	18	8.9	---
TOTAL	2,726	3,188	3,356	4,351	3,310	3,632	4,074	16,587	5,243	756.2	784.7	110.02
MEAN	87.9	106	108	140	118	117	136	535	175	24.4	25.3	3.67
MAX	256	125	125	340	167	131	243	2,530	476	59	105	16
MIN	34	62	82	70	74	109	87	128	61	7.7	8.8	0.87
AC-FT	5,410	6,320	6,660	8,630	6,570	7,200	8,080	32,900	10,400	1,500	1,560	218

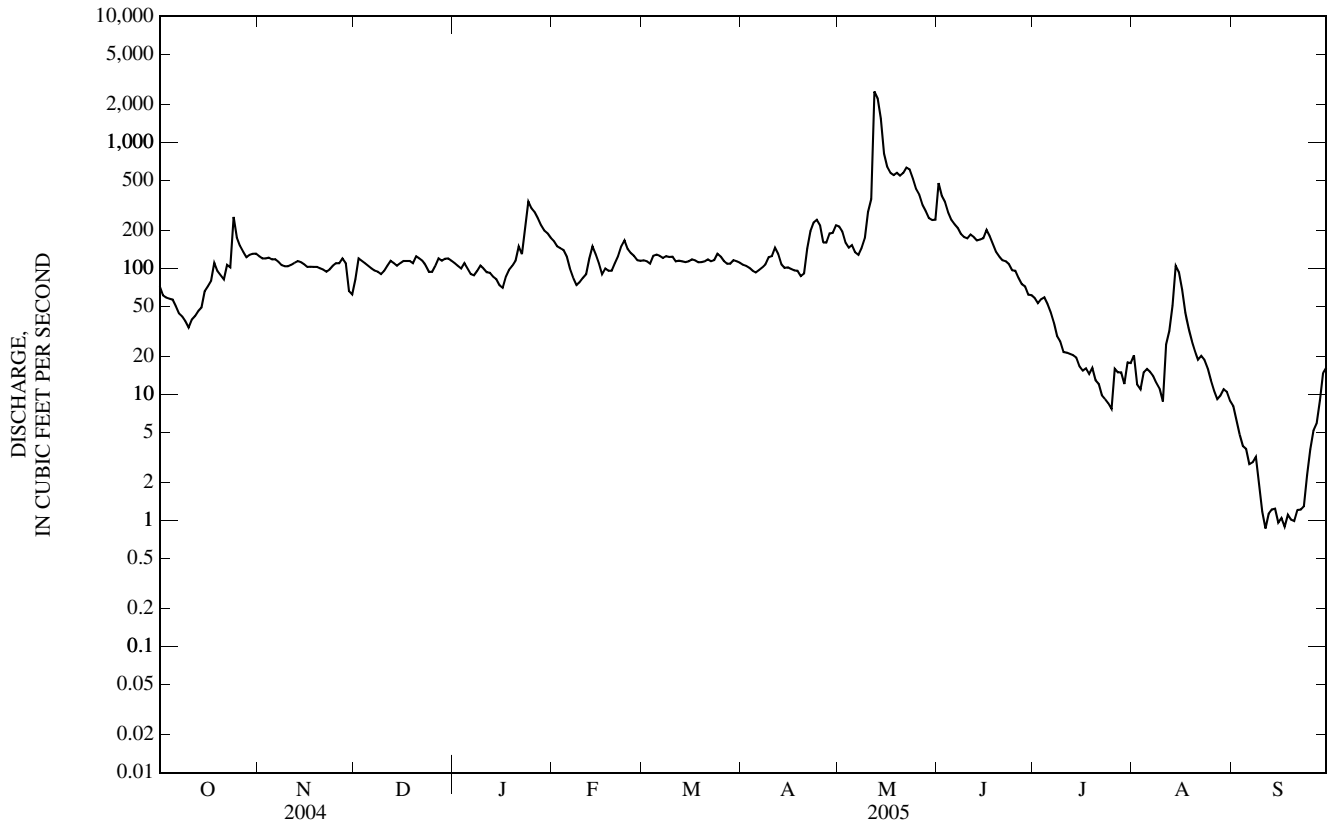
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2005, BY WATER YEAR (WY)

MEAN	68.4	110	107	104	125	175	142	330	103	47.8	20.9	16.5
MAX	87.9	114	108	140	132	233	148	535	175	78.9	27.4	32.3
(WY)	(2005)	(2004)	(2005)	(2005)	(2004)	(2004)	(2004)	(2005)	(2005)	(2004)	(2003)	(2003)
MIN	48.9	106	106	68.2	118	117	136	125	30.3	24.4	9.82	3.67
(WY)	(2004)	(2005)	(2004)	(2004)	(2005)	(2005)	(2005)	(2004)	(2004)	(2005)	(2004)	(2005)

06313590 POWDER RIVER ABOVE BURGER DRAW, NEAR BUFFALO, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2003 - 2005	
ANNUAL TOTAL	34,834.9		48,117.92		--	
ANNUAL MEAN	95.2		132		112	
HIGHEST ANNUAL MEAN	--		--		132 2005	
LOWEST ANNUAL MEAN	--		--		92.3 2004	
HIGHEST DAILY MEAN	724	Mar 12	2,530	May 12	2,530	May 12, 2005
LOWEST DAILY MEAN	1.9	Aug 25,26	0.87	Sep 11	0.03	Aug 16, 2003
ANNUAL SEVEN-DAY MINIMUM	2.5	Aug 20	1.0	Sep 14	0.10	Aug 10, 2003
MAXIMUM PEAK FLOW	--		3,740	May 12	3,740	May 12, 2005
MAXIMUM PEAK STAGE	--		7.00	May 12	7.00	May 12, 2005
ANNUAL RUNOFF (AC-FT)	69,100		95,440		81,170	
10 PERCENT EXCEEDS	178		220		190	
50 PERCENT EXCEEDS	94		105		100	
90 PERCENT EXCEEDS	11		11		11	

e Estimated.



06313590 POWDER RIVER ABOVE BURGER DRAW, NEAR BUFFALO, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 2003 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered, uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT 06...	1200	51	660	9.5	108	8.0	2,800	20.0	14.0	600	137	63.6	13.5
NOV 05...	1340	115	--	--	--	8.3	2,370	21.5	8.5	590	142	57.0	9.41
DEC 08...	1600	100	643	11.2	92	8.1	2,280	5.5	.0	590	144	56.4	9.71
FEB 11...	0940	89	661	12.1	97	8.3	3,060	5.5	.0	700	170	67.9	10.6
MAR 08...	1230	127	659	11.6	109	8.4	2,560	8.0	6.0	580	133	59.6	9.70
APR 14...	1300	101	654	10.0	112	8.3	2,190	17.0	13.0	510	121	50.2	9.29
MAY 10...	1350	291	654	8.9	99	8.4	1,720	15.5	13.0	370	84.6	38.0	7.39
JUN 07...	1240	223	650	8.3	103	8.4	1,870	21.0	17.5	480	114	47.5	6.55
JUL 13...	1245	20	657	6.8	106	8.2	4,090	38.5	29.5	760	151	93.9	15.3
AUG 10...	0900	7.9	659	7.7	98	8.2	4,290	25.0	19.0	650	125	82.9	16.9
SEP 08...	1240	3.5	656	9.8	137	8.2	4,630	29.0	23.5	680	122	90.7	19.1

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, water fltrd end lab, mg/L as CaCO3 (29801)	Alkalinity, water fltrd inc tit field, mg/L as CaCO3 (39086)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat fltrd mg/L (70300)
OCT 06...	7	388	58	179	--	301	1.0	7.16	814	1,830	2.59	262	1,900
NOV 05...	6	326	54	222	--	211	.7	10.1	709	1,600	2.26	516	1,660
DEC 08...	5	291	51	281	--	216	.7	12.8	558	1,460	2.06	409	1,510
FEB 11...	7	404	55	317	--	272	.9	12.9	815	1,940	2.76	488	2,030
MAR 08...	7	366	57	240	256	270	.8	9.22	695		2.36	595	1,740
APR 14...	6	315	57	190	--	218	.7	8.19	586	1,420	1.97	395	1,450
MAY 10...	5	227	57	181	--	149	.6	7.67	461	1,080	1.52	879	1,120
JUN 07...	4	223	50	196	--	133	.5	10.9	574	1,230	1.77	783	1,300
JUL 13...	11	668	65	211	--	502	.8	9.65	1,210	2,780	3.92	156	2,880
AUG 10...	12	707	69	335	--	531	1.1	2.80	1,130	2,790	3.95	61.9	2,900
SEP 08...	13	753	70	407	--	485	1.1	2.43	1,260	2,980	4.16	28.9	3,060

YELLOWSTONE RIVER BASIN

06313590 POWDER RIVER ABOVE BURGER DRAW, NEAR BUFFALO, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro- gen, wat un- f by anal- ysis, mg/L (62855)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Alum- inum, water, unfltrd recover- able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recover- able, ug/L (01007)	Beryll- ium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)	Selen- ium, water, unfltrd ug/L (01147)
OCT 06...	--	--	--	--	--	1,400	1.2	54	E.11	<18	4.1	4.2
NOV 05...	--	--	--	--	--	6,860	.9	156	.82	<18	3.0	4.3
DEC 08...	--	--	--	--	--	1,220	1.3	61	.08	<18	4.8	3.8
FEB 11...	--	--	--	--	--	626	1.4	73	E.06	E12	5.1	6.6
MAR 08...	--	--	--	--	--	1,920	1.5	81	.16	<18	5.9	5.2
APR 14...	--	--	--	--	--	2,140	1.7	66	.16	<18	4.9	5.1
MAY 10...	--	--	--	--	--	12,200	.7	265	1.08	<6	1.3	3.8
JUN 07...	--	--	--	--	--	5,800	1.1	134	.56	<6	2.0	4.7
JUL 13...	<.04	<.06	<.008	.35	<.02	60	1.2	75	<.12	<18	11.8	3.9
AUG 10...	--	--	--	--	--	302	1.4	54	<.12	<18	31.5	4.5
SEP 08...	--	--	--	--	--	207	1.2	58	<.12	E11	33.4	2.3

< -- Less than.
E -- Estimated.

06313604 BURGER DRAW AT MOUTH, NEAR BUFFALO, WY

LOCATION.--Lat 44°08'50", long 106°08'34" (NAD 83), in NE¹/₄ NE¹/₄ SW¹/₄ sec.8, T.48 N., R.77 W., Johnson County, Hydrologic Unit 10090202, 10 ft upstream from mouth and 30.7 mi southeast of Buffalo.

PERIOD OF RECORD.--September 2001, July 2004 to current year. Prior to 2004, station was published as 440849106083101 Burger Draw at mouth, near Buffalo, WY.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)
OCT													
06...	1320	.99	658	9.5	112	8.3	3,770	22.0	15.5	160	17.7	27.6	32
NOV													
04...	1650	1.6	661	7.0	77	8.5	3,760	6.0	12.5	180	25.6	28.8	30
DEC													
09...	1600	.67	658	9.7	92	8.4	3,700	6.0	6.0	190	26.9	30.6	29
JAN													
12...	1520	1.1	654	11.6	102	8.5	3,590	.0	3.0	200	28.1	30.4	26
FEB													
09...	1740	1.5	659	11.8	120	8.5	3,640	-1.0	9.0	190	27.8	29.4	28
MAR													
08...	1425	1.8	659	11.5	120	8.7	3,640	8.0	10.0	190	21.9	31.9	29
APR													
14...	1455	1.0	654	14.2	167	8.6	3,860	17.0	15.0	180	20.6	31.9	32
MAY													
10...	1500	1.9	654	9.3	112	8.6	3,770	12.0	16.0	170	19.1	30.8	26
JUN													
07...	1435	2.3	648	9.9	133	8.6	3,900	21.0	21.0	160	13.8	30.7	30
JUL													
13...	1410	1.6	657	9.4	142	8.5	3,850	36.5	28.0	160	12.2	31.8	22
AUG													
10...	1040	1.8	660	7.6	100	8.6	3,680	25.0	21.0	150	15.4	26.0	31
SEP													
08...	1345	1.1	656	8.2	114	8.3	3,770	29.0	23.5	140	17.8	22.1	27

Date	Sodium, water, fltrd, mg/L (00930)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitrogen, wat unfltrd, by analysis, mg/L (62855)	Orthophosphate, water, fltrd, mg/L as P (00671)
OCT							
06...	916	2,450	--	--	--	--	--
NOV							
04...	934	2,480	--	--	--	--	--
DEC							
09...	927	2,380	--	--	--	--	--
JAN							
12...	844	2,360	--	--	--	--	--
FEB							
09...	889	2,360	--	--	--	--	--
MAR							
08...	912	2,400	--	--	--	--	--
APR							
14...	1,010	2,470	--	--	--	--	--
MAY							
10...	792	2,470	--	--	--	--	--
JUN							
07...	875	2,530	--	--	--	--	--
JUL							
13...	651	2,540	.14	2.57	.456	3.28	<.02
AUG							
10...	852	2,400	--	--	--	--	--
SEP							
08...	723	2,380	--	--	--	--	--

< -- Less than.

06313605 POWDER RIVER BELOW BURGER DRAW, NEAR BUFFALO, WY

LOCATION.--Lat 44°08'50", long 106°08'34" (NAD 27), in NE¹/₄ NE¹/₄ SW¹/₄ sec.8, T.48 N., R.77 W., Johnson County, Hydrologic Unit 10090202, 20 ft downstream of Burger Draw, 0.4 mi downstream of bridge on county road 204, and 24 mi southeast of Buffalo.

PERIOD OF RECORD.--November 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
Date		Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO ₃ (29801)	Alkalinity, wat flt inc tit field, mg/L as CaCO ₃ (39086)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT 06...	1250		52	658	9.1	107	8.0	2,820	20.5	15.5	600	137	62.8	13.5
NOV 04...	1705		117	662	9.4	92	8.4	2,310	6.0	8.0	510	125	48.5	9.90
DEC 09...	1530		101	658	12.3	98	8.0	2,250	6.0	.0	570	138	53.9	10.0
JAN 12...	1450		92	654	10.7	86	8.0	2,620	.0	.0	670	166	61.4	10.7
FEB 09...	1710		90	659	13.7	110	8.3	2,850	-1.0	.0	660	159	64.2	10.2
MAR 08...	1345		129	659	11.4	110	8.4	2,580	8.0	7.0	570	131	59.1	10.2
APR 14...	1415		102	654	9.8	112	8.4	2,220	17.0	14.0	480	113	47.2	9.44
MAY 10...	1530		293	654	9.0	101	8.3	1,780	15.0	13.5	370	84.3	37.9	7.32
JUN 07...	1400		225	648	7.8	99	8.3	1,940	21.0	18.5	480	113	47.7	7.76
JUL 13...	1345		22	657	6.9	109	8.1	4,090	40.0	30.5	690	134	87.1	17.6
AUG 10...	1010		9.7	660	7.7	101	8.3	4,230	25.0	20.5	590	110	77.2	20.2
SEP 08...	1330		4.6	656	8.9	130	8.1	4,480	28.5	26.0	560	95.6	76.8	23.3
OCT 06...		7	404	59	204	--	290	1.0	6.84	815	1,850	2.61	270	1,920
NOV 04...		6	319	57	241	--	198	.8	9.65	650	1,500	2.13	496	1,570
DEC 09...		6	303	53	283	--	210	.7	12.6	533	1,430	2.00	401	1,470
JAN 12...		6	342	52	354	--	258	.9	13.5	644	1,710	2.39	437	1,760
FEB 09...		7	404	57	337	371	242	.8	11.5	762		2.61	467	1,920
MAR 08...		7	368	58	271	298	266	.7	9.21	681		2.35	603	1,730
APR 14...		6	304	57	217	--	217	.7	8.17	580	1,410	1.98	400	1,450
MAY 10...		5	224	56	181	--	148	.6	7.68	455	1,070	1.53	891	1,130
JUN 07...		5	253	53	237	244	131	.6	11.0	562		1.80	806	1,330
JUL 13...		11	679	67	335	359	459	.8	9.70	1,120		3.79	166	2,790
AUG 10...		13	743	72	504	606	470	1.1	3.41	984		3.78	72.7	2,780
SEP 08...		14	772	74	681	--	389	1.1	3.92	1,020	2,790	3.95	36.1	2,910

06313605 POWDER RIVER BELOW BURGER DRAW, NEAR BUFFALO, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro- gen, wat un- f by anal- ysis, mg/L (62855)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Alum- inum, water, unfltrd recover- able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recover- able, ug/L (01007)	Beryll- ium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)	Selen- ium, water, unfltrd ug/L (01147)
OCT 06...	--	--	--	--	--	1,350	1.0	68	.12	<18	3.8	3.5
NOV 04...	--	--	--	--	--	11,400	1.0	209	1.37	<18	2.5	5.0
DEC 09...	--	--	--	--	--	1,010	1.2	74	.08	E14	5.4	3.8
JAN 12...	--	--	--	--	--	976	1.1	87	E.07	<18	4.5	5.6
FEB 09...	--	--	--	--	--	1,470	1.2	98	.15	21	10.1	5.7
MAR 08...	--	--	--	--	--	1,870	1.4	91	.15	<18	5.9	5.0
APR 14...	--	--	--	--	--	2,010	1.4	71	.18	<18	4.8	5.0
MAY 10...	--	--	--	--	--	12,300	.8	264	1.20	<6	1.1	3.9
JUN 07...	--	--	--	--	--	5,630	1.2	154	.48	E4	2.3	4.0
JUL 13...	E.02	.21	.040	.57	<.02	189	1.8	131	<.12	E13	9.0	3.4
AUG 10...	--	--	--	--	--	407	1.8	137	<.12	<18	23.5	4.2
SEP 08...	--	--	--	--	--	401	1.5	209	<.12	<18	21.9	2.9

< -- Less than.

E -- Estimated.

06313750 BARBER CREEK AT MOUTH, NEAR BUFFALO, WY

LOCATION.--Lat 44°19'28", long 106°07'57" (NAD 27), in NE¹/₄ SE¹/₄ NW¹/₄ sec.9, T.50 N., R.77 W., Johnson County, Hydrologic Unit 10090202, 100 ft upstream from mouth and 27.6 mi east of Buffalo.

PERIOD OF RECORD.--July 2004 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Sodium adsorption ratio (00931)
OCT 18...	1545	.00	--	--	--	--	--	--	--	--	--	--	--
NOV 24...	0900	.00	--	--	--	--	--	--	--	--	--	--	--
DEC 21...	0715	.00	--	--	--	--	--	--	--	--	--	--	--
JAN 26...	1300	.00	--	--	--	--	--	--	--	--	--	--	--
FEB 24...	1530	.00	--	--	--	--	--	--	--	--	--	--	--
MAR 28...	1320	.00	--	--	--	--	--	--	--	--	--	--	--
APR 28...	0730	.00	--	--	--	--	--	--	--	--	--	--	--
MAY 24...	0910	.00	--	--	--	--	--	--	--	--	--	--	--
JUN 22...	0910	.04	662	4.4	61	8.4	2,820	29.5	24.0	84	11.7	13.3	29
JUL 27...	1300	1.4	663	6.0	78	8.3	2,560	23.0	21.0	110	24.4	12.0	25
AUG 24...	1400	.42	658	10.9	151	8.3	2,950	25.0	23.5	270	34.0	45.5	16
SEP 21...	1455	.00	--	--	--	--	--	--	--	--	--	--	--

Date	Sodium, water, filtered, mg/L (00930)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia water, filtered, mg/L as N (00608)	Nitrite + nitrate water filtered, mg/L as N (00631)	Nitrite water, filtered, mg/L as N (00613)	Total nitrogen, wat unfiltered by analysis, mg/L (62855)	Orthophosphate, water, filtered, mg/L as P (00671)
OCT 18...	--	--	--	--	--	--	--
NOV 24...	--	--	--	--	--	--	--
DEC 21...	--	--	--	--	--	--	--
JAN 26...	--	--	--	--	--	--	--
FEB 24...	--	--	--	--	--	--	--
MAR 28...	--	--	--	--	--	--	--
APR 28...	--	--	--	--	--	--	--
MAY 24...	--	--	--	--	--	--	--
JUN 22...	610	1,800	--	--	--	--	--
JUL 27...	598	1,640	.07	E.04	.013	.83	<.02
AUG 24...	619	1,780	--	--	--	--	--
SEP 21...	--	--	--	--	--	--	--

< -- Less than.
E -- Estimated.

YELLOWSTONE RIVER BASIN

06316400 CRAZY WOMAN CREEK AT UPPER STATION, NEAR ARVADA, WY

LOCATION.--Lat 44°29'28", long 106°10'38" (NAD 27), in NE¹/₄ SW¹/₄ SW¹/₄ sec.7, T.52 N., R.77 W., Johnson County, Hydrologic Unit 10090205, on left bank 1.1 mi upstream from Jewell Draw, 5.0 mi upstream from mouth, and 11 mi south of Arvada.

DRAINAGE AREA.--937 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1963 to September 1970, October 1977 to September 1981, October 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,780 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversions for irrigation of about 12,000 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	8.8	e9.0	e16	e10	e14	5.1	20	206	92	19	3.4
2	1.4	11	e9.4	e14	e10	e16	4.9	18	215	107	22	3.2
3	2.2	11	e9.4	e12	e10	e16	5.1	17	251	89	13	2.9
4	1.9	9.9	e10	e11	e10	e16	5.1	17	233	77	10	2.4
5	2.0	9.5	e11	e10	e12	e16	5.0	15	183	70	11	2.1
6	1.8	7.7	e10	e8.8	e10	e16	5.5	13	172	67	12	1.8
7	1.6	8.9	e11	e8.8	e9.8	e16	6.4	13	202	62	11	1.9
8	1.4	10	e12	e9.2	e9.0	e16	31	31	166	57	12	1.8
9	1.3	10	e12	e10	e11	15	34	35	172	51	12	1.7
10	0.95	9.9	e12	e8.8	e13	12	73	94	198	49	30	1.4
11	0.76	9.0	e14	e9.2	e14	11	52	106	189	44	14	1.0
12	0.67	8.6	e14	e9.3	e14	12	33	370	149	39	9.9	0.99
13	0.46	e11	e12	e9.3	e16	12	22	559	136	36	11	1.3
14	0.41	e16	e13	e8.0	e16	12	15	305	139	38	9.4	1.3
15	0.44	e13	e14	e6.6	e16	e10	12	255	215	31	10	1.0
16	0.52	e12	e16	e7.4	e14	11	10	239	207	26	13	0.80
17	0.47	e13	e16	e8.0	e14	11	11	238	170	21	13	0.70
18	1.3	e14	e17	e8.8	e12	9.5	14	230	157	18	13	0.61
19	4.4	e13	e19	e9.6	e12	9.4	11	226	161	16	13	0.52
20	5.1	e10	e18	e10	e12	8.6	15	209	167	15	11	0.43
21	4.9	e8.8	e17	e9.8	e14	9.7	19	186	159	15	12	0.39
22	6.2	9.9	e15	e9.4	e16	9.7	30	223	149	14	12	0.36
23	7.7	e10	e14	e11	e18	9.0	27	254	134	13	11	0.86
24	9.5	e11	12	e12	e20	e8.8	23	255	150	12	10	1.3
25	9.0	e14	e14	e14	e18	e8.9	22	239	191	11	9.3	1.2
26	10	e13	e16	e13	e15	8.9	19	250	142	16	7.1	1.2
27	9.2	e12	e16	e12	e15	8.1	23	242	122	14	6.0	1.2
28	8.3	e10	e18	e11	e14	7.2	33	221	106	15	4.9	1.1
29	9.7	e10	e16	e10	---	6.6	28	175	105	25	4.4	1.2
30	8.8	e9.0	e16	e10	---	5.8	25	166	92	24	3.9	1.1
31	8.6	---	e18	e10	---	5.4	---	168	---	19	3.5	---
TOTAL	122.08	324.0	430.8	317.0	374.8	347.6	619.1	5,389	5,038	1,183	353.4	41.16
MEAN	3.94	10.8	13.9	10.2	13.4	11.2	20.6	174	168	38.2	11.4	1.37
MAX	10	16	19	16	20	16	73	559	251	107	30	3.4
MIN	0.41	7.7	9.0	6.6	9.0	5.4	4.9	13	92	11	3.5	0.36
AC-FT	242	643	854	629	743	689	1,230	10,690	9,990	2,350	701	82

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2005, BY WATER YEAR (WY)*

MEAN	13.9	17.0	16.3	12.9	17.0	40.6	31.5	101	184	51.1	14.8	11.1
MAX	39.5	42.1	39.7	26.3	41.3	101	71.6	629	590	183	68.6	54.9
(WY)	(1969)	(1979)	(1979)	(1980)	(1968)	(1978)	(1980)	(1978)	(1967)	(1967)	(1968)	(1968)
MIN	0.10	3.19	8.62	4.14	7.55	11.2	7.29	5.50	1.78	0.13	0.00	0.06
(WY)	(2002)	(2002)	(2002)	(1970)	(1966)	(2005)	(1967)	(2004)	(2004)	(1966)	(1966)	(2001)

06316400 CRAZY WOMAN CREEK AT UPPER STATION, NEAR ARVADA, WY—Continued

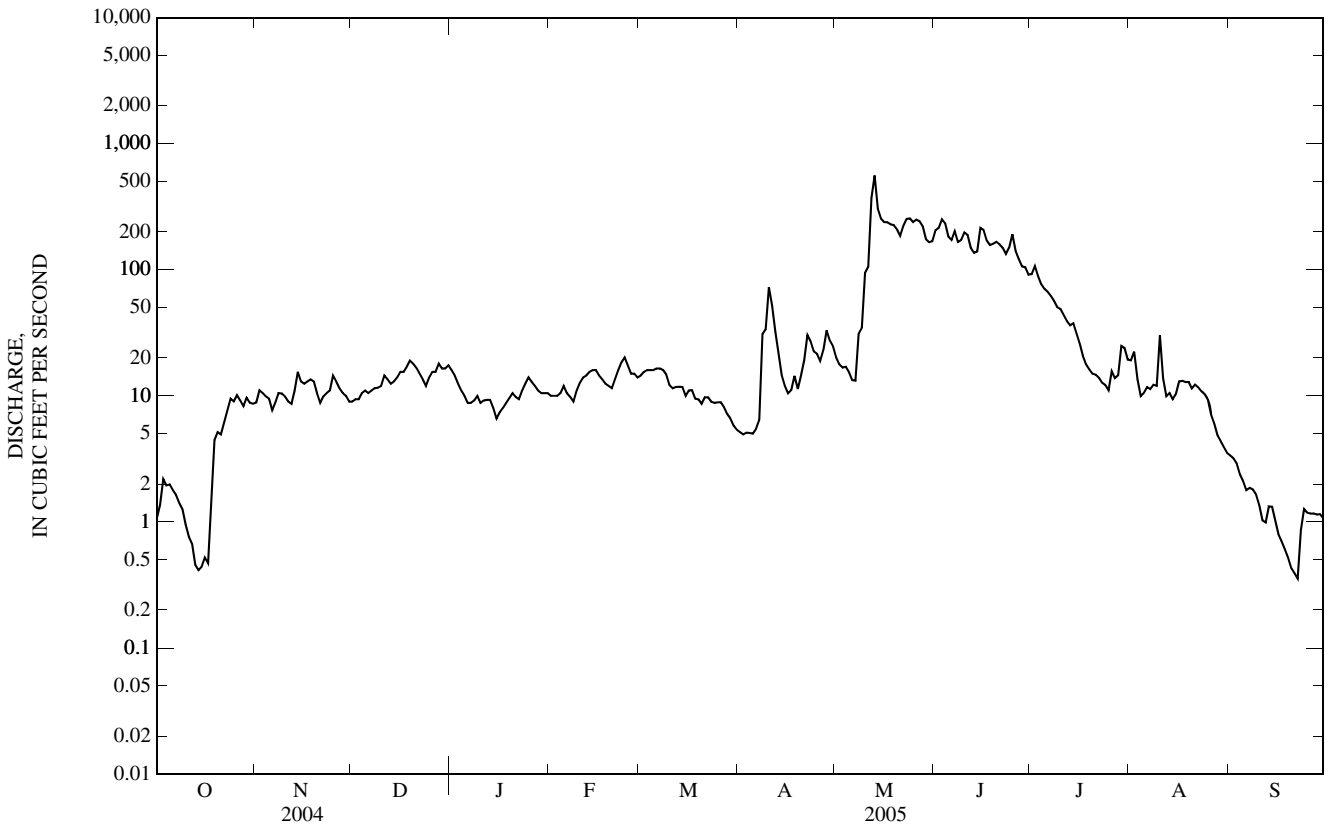
SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1963 - 2005*	
ANNUAL TOTAL	3,343.71		14,539.94		--	
ANNUAL MEAN	9.14		39.8		41.2	
HIGHEST ANNUAL MEAN	--		--		119	1978
LOWEST ANNUAL MEAN	--		--		8.02	2002
HIGHEST DAILY MEAN	90	Mar 14	559	May 13	2,030	May 20, 1978
LOWEST DAILY MEAN	0.01	Aug 23	0.36	Sep 22	0.00	Many days, some years
ANNUAL SEVEN-DAY MINIMUM	0.02	Aug 19	0.53	Oct 11	0.00	Some years
MAXIMUM PEAK FLOW	--		830	May 13	15,800 ^a	Jun 15, 1965
MAXIMUM PEAK STAGE	--		6.70	May 13	16.02 ^b	Jun 15, 1965
ANNUAL RUNOFF (AC-FT)	6,630		28,840		29,810	
10 PERCENT EXCEEDS	19		163		84	
50 PERCENT EXCEEDS	7.9		12		15	
90 PERCENT EXCEEDS	0.13		1.8		1.2	

* For period of operation.

a From rating curve extended above 1,300 ft³/s on basis of slope-area measurement of peak flow.

b From floodmarks.

c Estimated.



06316400 CRAZY WOMAN CREEK AT UPPER STATION, NEAR ARVADA, WY—Continued

WATER-QUALITY RECORDS.

PERIOD OF RECORD.--Water years 1967 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 2001 to current year (seasonal).

WATER TEMPERATURE: July 2001 to current year (seasonal).

INSTRUMENTATION.--Water-quality monitor for specific conductance and water temperature.

REMARKS.--Specific conductance records excellent October 1-29, April 14-19, April 20 to May 8, May 10-14, June 6, July 8-23, July 29 to August 10, and August 25 to September 18; good October 30 to November 5, April 20-28, May 9, 15, 16, June 5, 7-26, July 24-27, August 11-13, and September 19-30. Water temperature records excellent. Water-temperature records represent water temperature at sensor within 0.2°C.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 3,280 microsiemens per centimeter at 25°C (µS/cm), September 4-7, 2001, July 18, 2002, and October 2, 2004; minimum recorded, 360 µS/cm April 27, 2003.

WATER TEMPERATURE: Maximum recorded, 32.0°C, July 18, 2004; minimum recorded, 0.0°C, several days, some years.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 3,280 µS/cm, October 2; minimum recorded, 394 µS/cm, May 29.

WATER TEMPERATURE: Maximum recorded, 28.3°C, July 15; minimum recorded, 1.6°C, November 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT													
06...	1710	1.7	661	8.7	86	8.0	2,840	25.0	8.0	1,200	241	156	10.7
18...	1725	3.7	656	9.0	93	8.0	2,690	7.5	9.5	1,200	248	140	10.1
NOV													
05...	1125	9.5	--	--	--	8.2	1,670	13.5	4.5	750	152	90.7	5.01
24...	0755	11	662	--	--	8.0	--	-1.5	.0	590	128	65.8	3.27
DEC													
09...	1230	12	663	12.0	95	8.2	1,810	8.5	.0	900	199	98.6	5.03
21...	0835	17	664	11.4	90	8.2	1,460	-4.0	.0	690	153	75.7	3.53
JAN													
13...	1400	9.3	668	9.4	74	7.7	1,560	-15.0	.0	770	172	83.7	3.75
26...	1400	13	664	10.6	84	7.8	1,280	11.0	.0	620	139	67.6	3.28
FEB													
10...	1210	13	669	12.1	95	8.1	1,420	4.0	.0	610	132	67.1	2.91
24...	1420	20	665	13.8	109	8.2	1,380	15.0	.0	600	130	67.3	2.87
MAR													
08...	1600	16	664	11.1	100	8.3	1,220	9.5	5.0	540	120	59.3	2.87
28...	1420	6.9	646	11.3	125	8.3	2,160	20.0	12.0	1,000	217	115	5.47
APR													
14...	1740	13	662	9.4	106	8.0	940	12.0	14.0	390	84.7	43.9	4.78
28...	0900	37	663	11.3	104	8.3	1,640	.0	5.5	760	155	91.6	5.40
MAY													
09...	1915	36	658	9.3	105	8.4	1,650	14.5	14.0	760	153	91.8	5.33
24...	1015	257	664	9.3	110	7.6	442	16.5	16.5	190	41.6	21.3	2.32
JUN													
08...	1230	161	659	7.8	94	7.8	587	20.0	17.0	230	51.1	24.8	2.08
22...	1040	149	663	6.4	89	7.9	508	30.0	24.5	210	46.2	22.1	1.88
JUL													
13...	1615	36	659	7.0	104	8.2	956	40.0	28.0	400	87.5	43.6	3.19
27...	1130	14	666	8.0	99	8.2	1,520	20.5	19.0	660	149	69.3	4.71
AUG													
10...	1250	17	665	7.1	95	8.0	1,390	28.0	22.5	630	143	65.1	4.91
24...	1540	9.7	659	10.1	134	8.4	1,630	26.0	21.5	730	148	87.5	5.16
SEP													
08...	1550	1.7	659	8.8	119	8.0	1,990	29.0	22.5	900	190	103	6.37
21...	1605	.40	665	9.4	108	7.6	2,380	18.0	15.0	1,000	216	114	7.02

06316400 CRAZY WOMAN CREEK AT UPPER STATION, NEAR ARVADA, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT													
06...	3	251	30	206	--	13.7	.4	1.55	1,450	2,250	3.50	11.8	2,570
18...	3	228	29	250	--	13.3	.4	4.23	1,380	2,170	3.35	24.6	2,460
NOV													
05...	2	123	26	218	--	8.88	.3	5.97	733	1,250	1.87	35.3	1,380
24...	2	90.3	25	207	--	6.00	.3	9.06	539	966	1.41	30.9	1,040
DEC													
09...	2	127	23	256	--	8.62	.3	13.6	784	1,390	2.06	49.1	1,510
21...	2	104	24	233	--	6.35	.3	11.2	608	1,100	1.63	54.9	1,200
JAN													
13...	2	106	23	262	--	7.85	.3	14.3	630	1,170	1.70	31.5	1,250
26...	1	84.7	23	220	--	6.00	.3	13.4	512	958	1.39	36.0	1,030
FEB													
10...	2	92.0	25	204	191	6.27	.3	9.65	531		1.47	38.0	1,080
24...	2	92.7	25	194	191	6.11	<.5	9.02	531		1.39	55.2	1,020
MAR													
08...	2	89.1	26	163	167	5.42	.2	6.73	496		1.26	40.0	925
28...	2	171	27	238	242	10.5	.4	4.20	992		2.48	34.0	1,820
APR													
14...	1	61.9	25	132	--	4.31	.2	7.94	346	632	.91	24.3	673
28...	2	126	26	195	--	7.75	.3	6.39	728	1,240	1.86	136	1,360
MAY													
09...	2	113	24	198	--	8.28	.3	5.83	710	1,210	1.81	130	1,330
24...	1	34.4	28	84	--	2.58	.2	12.4	169	334	.51	260	375
JUN													
08...	1	35.6	25	90	92	2.76	.1	13.7	198		.56	180	414
22...	.9	29.3	23	92	92	2.23	.2	13.8	156		.48	141	350
JUL													
13...	1	60.9	25	159	149	4.37	.2	12.1	349		.98	69.8	719
27...	2	96.7	24	177	161	6.27	.3	8.39	656		1.64	45.4	1,200
AUG													
10...	2	99.9	26	168	132	6.24	E.4	3.06	590		1.48	50.1	1,090
24...	2	112	25	192	202	7.50	.3	1.85	712		1.79	34.5	1,320
SEP													
08...	2	159	28	216	230	9.28	.4	1.71	916		2.22	7.51	1,640
21...	3	208	31	247	262	10.7	.4	3.29	1,130		2.81	2.23	2,060

06316400 CRAZY WOMAN CREEK AT UPPER STATION, NEAR ARVADA, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro- gen, wat unfl- trd, mg/L by anal- ysis, mg/L (62855)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Alum- inum, water, unfltrd recover- able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recover- able, ug/L (01007)	Beryll- ium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)	Selen- ium, water, unfltrd ug/L (01147)	Sus- pended sedi- ment concen- tration mg/L (80154)
OCT													
06...	--	--	--	--	--	184	.9	73	<.12	74	84.6	1.3	--
18...	--	--	--	--	--	370	.7	69	<.12	114	272	1.3	--
NOV													
05...	--	--	--	--	--	317	.6	36	E.03	E3	48.3	1.7	--
24...	--	--	--	--	--	237	.6	28	<.06	8	59.4	1.4	--
DEC													
09...	--	--	--	--	--	373	.8	44	E.05	7	44.0	2.0	--
21...	--	--	--	--	--	326	.4	36	E.04	7	30.2	2.2	--
JAN													
13...	--	--	--	--	--	165	.5	40	<.06	21	62.6	1.6	--
26...	--	--	--	--	--	200	.5	35	<.06	8	39.8	2.0	--
FEB													
10...	--	--	--	--	--	123	.5	33	<.06	10	45.2	1.7	--
24...	--	--	--	--	--	442	.5	32	E.05	E4	36.3	1.9	--
MAR													
08...	--	--	--	--	--	830	.6	41	.11	6	118	1.5	--
28...	--	--	--	--	--	120	.9	49	<.06	28	164	1.5	--
APR													
14...	<.04	<.06	<.008	--	<.02	1,110	.6	43	.12	25	75.0	1.8	81
28...	--	--	--	--	--	631	.7	50	.08	8	27.5	1.7	--
MAY													
09...	<.04	<.06	<.008	--	<.02	483	.8	47	E.04	E5	24.1	1.9	43
24...	--	--	--	--	--	8,810	.8	189	1.04	33	3.4	1.4	--
JUN													
08...	<.04	<.06	<.008	--	<.02	6,480	1.0	146	.78	19	5.2	1.5	859
22...	--	--	--	--	--	4,570	1.2	103	.54	12	2.9	1.3	--
JUL													
13...	<.04	<.06	<.008	.72	<.02	1,420	1.4	78	.10	7	15.7	1.1	--
27...	--	--	--	--	--	551	1.0	84	.07	7	45.0	1.9	--
AUG													
10...	--	--	--	--	--	4,150	.9	117	.35	<6	11.3	2.2	--
24...	--	--	--	--	--	501	.9	79	.08	10	41.5	.8	--
SEP													
08...	--	--	--	--	--	365	.72	89	.07	7	174	1.2	--
21...	--	--	--	--	--	252	.67	94	E.03	21	433	--	--

06316400 CRAZY WOMAN CREEK AT UPPER STATION, NEAR ARVADA, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Suspended sediment discharge, tons/d (80155)
OCT	
06...	--
18...	--
NOV	
05...	--
24...	--
DEC	
09...	--
21...	--
JAN	
13...	--
26...	--
FEB	
10...	--
24...	--
MAR	
08...	--
28...	--
APR	
14...	2.9
28...	--
MAY	
09...	4.2
24...	--
JUN	
08...	373
22...	--
JUL	
13...	--
27...	--
AUG	
10...	--
24...	--
SEP	
08...	--
21...	--

< -- Less than.

E -- Estimated.

YELLOWSTONE RIVER BASIN

06316400 CRAZY WOMAN CREEK AT UPPER STATION, NEAR ARVADA, WY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	2,840	2,420	2,510	1,980	1,900	1,930	---	---	---	---	---	---
2	3,280	2,580	3,120	1,900	1,810	1,870	---	---	---	---	---	---
3	3,210	2,990	3,090	1,810	1,720	1,760	---	---	---	---	---	---
4	2,990	2,820	2,880	1,730	1,700	1,720	---	---	---	---	---	---
5	2,850	2,790	2,820	---	---	---	---	---	---	---	---	---
6	2,850	2,780	2,820	---	---	---	---	---	---	---	---	---
7	2,780	2,730	2,750	---	---	---	---	---	---	---	---	---
8	2,750	2,730	2,740	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	2,740	2,710	2,720	---	---	---	---	---	---	---	---	---
11	2,780	2,730	2,750	---	---	---	---	---	---	---	---	---
12	2,820	2,770	2,790	---	---	---	---	---	---	---	---	---
13	2,850	2,810	2,830	---	---	---	---	---	---	---	---	---
14	2,890	2,810	2,850	---	---	---	---	---	---	---	---	---
15	2,830	2,770	2,790	---	---	---	---	---	---	---	---	---
16	2,790	2,730	2,760	---	---	---	---	---	---	---	---	---
17	2,780	2,740	2,760	---	---	---	---	---	---	---	---	---
18	2,800	2,700	2,750	---	---	---	---	---	---	---	---	---
19	2,760	2,710	2,740	---	---	---	---	---	---	---	---	---
20	2,750	2,470	2,600	---	---	---	---	---	---	---	---	---
21	2,480	2,460	2,470	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	2,660	2,260	2,380	---	---	---	---	---	---	---	---	---
24	2,310	2,200	2,260	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	2,210	2,110	2,160	---	---	---	---	---	---	---	---	---
27	2,110	2,050	2,070	---	---	---	---	---	---	---	---	---
28	2,440	2,110	2,280	---	---	---	---	---	---	---	---	---
29	2,440	2,070	2,240	---	---	---	---	---	---	---	---	---
30	2,230	2,120	2,180	---	---	---	---	---	---	---	---	---
31	2,120	1,980	2,040	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	2,110	2,000	2,040
2	---	---	---	---	---	---	---	---	---	2,010	1,980	2,000
3	---	---	---	---	---	---	---	---	---	1,980	1,790	1,870
4	---	---	---	---	---	---	---	---	---	1,800	1,630	1,740
5	---	---	---	---	---	---	---	---	---	1,630	1,510	1,550
6	---	---	---	---	---	---	---	---	---	1,580	1,520	1,550
7	---	---	---	---	---	---	---	---	---	1,600	1,570	1,590
8	---	---	---	---	---	---	---	---	---	1,600	1,540	1,580
9	---	---	---	---	---	---	---	---	---	1,640	1,590	1,610
10	---	---	---	---	---	---	---	---	---	1,620	1,220	1,410
11	---	---	---	---	---	---	---	---	---	1,220	980	1,090
12	---	---	---	---	---	---	---	---	---	980	789	894
13	---	---	---	---	---	---	---	---	---	789	751	756
14	---	---	---	---	---	---	---	---	---	852	753	782
15	---	---	---	---	---	---	1,080	958	1,010	906	852	890
16	---	---	---	---	---	---	1,260	1,080	1,170	887	798	850
17	---	---	---	---	---	---	1,300	1,260	1,290	800	733	758
18	---	---	---	---	---	---	---	---	---	733	600	637
19	---	---	---	---	---	---	1,440	1,370	1,420	638	586	614
20	---	---	---	---	---	---	1,420	1,330	1,360	635	569	608
21	---	---	---	---	---	---	1,350	1,280	1,320	598	553	570
22	---	---	---	---	---	---	1,400	1,300	1,310	596	559	571
23	---	---	---	---	---	---	1,730	1,400	1,550	564	460	507
24	---	---	---	---	---	---	1,770	1,660	1,720	460	438	443
25	---	---	---	---	---	---	1,830	1,630	1,750	439	422	427
26	---	---	---	---	---	---	1,800	1,690	1,720	432	425	430
27	---	---	---	---	---	---	1,740	1,670	1,700	428	410	416
28	---	---	---	---	---	---	1,800	1,670	1,700	412	403	407
29	---	---	---	---	---	---	1,980	1,800	1,890	411	394	404
30	---	---	---	---	---	---	2,300	1,980	2,160	438	411	421
31	---	---	---	---	---	---	---	---	---	449	427	439
MONTH	---	---	---	---	---	---	---	---	---	2,110	394	963

06316400 CRAZY WOMAN CREEK AT UPPER STATION, NEAR ARVADA, WY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	456	443	449	694	680	686	1,620	1,460	1,520	1,740	1,640	1,690
2	467	453	460	722	693	712	1,650	1,520	1,570	1,780	1,730	1,750
3	481	446	467	719	710	715	1,530	1,490	1,510	1,820	1,770	1,790
4	446	426	436	710	691	697	1,500	1,460	1,480	1,860	1,800	1,830
5	468	441	455	749	695	721	1,490	1,360	1,430	1,890	1,850	1,870
6	535	467	499	783	748	763	1,490	1,450	1,470	1,920	1,880	1,900
7	692	535	568	792	779	785	1,550	1,430	1,480	1,950	1,890	1,930
8	695	586	612	841	779	802	1,510	1,390	1,430	2,030	1,920	1,960
9	586	575	580	834	815	823	1,450	1,390	1,410	2,060	2,000	2,030
10	580	551	567	861	828	844	2,120	1,370	1,580	2,100	2,010	2,060
11	551	504	521	922	861	882	1,920	1,820	1,860	2,140	2,040	2,100
12	504	495	499	954	920	941	1,820	1,750	1,780	2,170	2,040	2,120
13	520	501	510	986	950	967	1,750	1,700	1,720	2,160	2,120	2,140
14	557	514	536	1,020	985	1,010	1,700	1,680	1,690	2,180	2,140	2,160
15	599	554	572	1,060	1,020	1,030	1,680	1,660	1,670	2,210	2,150	2,180
16	589	559	574	1,120	1,050	1,090	1,660	1,650	1,660	2,250	2,140	2,210
17	569	549	558	1,180	1,120	1,150	1,660	1,650	1,660	2,250	2,180	2,230
18	592	557	571	1,230	1,180	1,200	1,670	1,660	1,660	2,270	2,170	2,230
19	591	573	581	1,290	1,230	1,260	1,680	1,660	1,670	2,320	2,160	2,260
20	574	547	560	1,340	1,290	1,320	1,680	1,670	1,670	2,380	2,280	2,320
21	547	518	526	1,380	1,340	1,360	1,670	1,650	1,660	2,470	2,310	2,380
22	526	502	517	1,410	1,380	1,390	1,670	1,650	1,660	2,470	2,370	2,430
23	528	519	524	1,440	1,410	1,430	1,670	1,650	1,660	2,480	2,380	2,430
24	546	526	536	1,450	1,430	1,440	1,650	1,600	1,630	2,430	2,370	2,400
25	542	496	530	1,460	1,450	1,450	1,620	1,610	1,610	2,420	2,300	2,370
26	555	511	535	1,490	1,460	1,470	1,620	1,580	1,600	2,420	2,350	2,390
27	587	555	570	1,510	1,460	1,490	1,590	1,560	1,580	2,480	2,360	2,450
28	690	587	654	1,480	1,440	1,460	1,590	1,570	1,580	2,480	2,380	2,450
29	697	686	691	1,500	1,440	1,480	1,620	1,590	1,600	2,510	2,350	2,460
30	705	685	695	1,470	1,430	1,450	1,660	1,620	1,640	2,460	2,310	2,390
31	---	---	---	1,470	1,450	1,460	1,690	1,630	1,660	---	---	---
MONTH	705	426	545	1,510	680	1,110	2,120	1,360	1,610	2,510	1,640	2,160

06316400 CRAZY WOMAN CREEK AT UPPER STATION, NEAR ARVADA, WY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	14.6	9.7	11.9	5.6	2.5	4.1	---	---	---	---	---	---
2	15.6	8.1	11.5	4.8	1.6	3.1	---	---	---	---	---	---
3	15.2	8.9	12.1	5.7	2.6	4.2	---	---	---	---	---	---
4	15.8	9.7	12.8	6.7	4.1	5.1	---	---	---	---	---	---
5	16.0	9.7	13.0	---	---	---	---	---	---	---	---	---
6	15.6	9.5	12.7	---	---	---	---	---	---	---	---	---
7	13.3	9.5	11.6	---	---	---	---	---	---	---	---	---
8	14.2	7.8	11.2	---	---	---	---	---	---	---	---	---
9	15.0	8.4	11.8	---	---	---	---	---	---	---	---	---
10	14.3	9.7	11.8	---	---	---	---	---	---	---	---	---
11	15.1	7.7	11.0	---	---	---	---	---	---	---	---	---
12	10.5	8.1	9.4	---	---	---	---	---	---	---	---	---
13	10.8	5.8	8.5	---	---	---	---	---	---	---	---	---
14	10.6	8.5	9.5	---	---	---	---	---	---	---	---	---
15	10.4	7.7	8.7	---	---	---	---	---	---	---	---	---
16	10.8	6.8	8.6	---	---	---	---	---	---	---	---	---
17	11.1	7.4	9.2	---	---	---	---	---	---	---	---	---
18	11.5	7.8	9.2	---	---	---	---	---	---	---	---	---
19	8.1	5.2	6.8	---	---	---	---	---	---	---	---	---
20	11.3	4.9	7.8	---	---	---	---	---	---	---	---	---
21	9.8	7.7	8.8	---	---	---	---	---	---	---	---	---
22	9.9	7.8	8.8	---	---	---	---	---	---	---	---	---
23	9.2	6.0	7.5	---	---	---	---	---	---	---	---	---
24	9.7	6.5	7.7	---	---	---	---	---	---	---	---	---
25	8.3	5.3	6.6	---	---	---	---	---	---	---	---	---
26	9.5	6.8	7.8	---	---	---	---	---	---	---	---	---
27	9.4	6.8	7.9	---	---	---	---	---	---	---	---	---
28	12.1	8.5	10	---	---	---	---	---	---	---	---	---
29	10.1	5.5	7.5	---	---	---	---	---	---	---	---	---
30	6.8	3.7	5.3	---	---	---	---	---	---	---	---	---
31	6.2	4.7	5.6	---	---	---	---	---	---	---	---	---
MONTH	16.0	3.7	9.4	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	7.8	4.9	6.3
2	---	---	---	---	---	---	---	---	---	10.8	4.0	7.5
3	---	---	---	---	---	---	---	---	---	14.0	7.1	10.7
4	---	---	---	---	---	---	---	---	---	15.9	10.2	13.3
5	---	---	---	---	---	---	---	---	---	18.4	12.4	15.5
6	---	---	---	---	---	---	---	---	---	19.9	14.9	17.2
7	---	---	---	---	---	---	---	---	---	17.1	12.6	14.6
8	---	---	---	---	---	---	---	---	---	12.6	10.5	11.0
9	---	---	---	---	---	---	---	---	---	14.1	10.0	11.9
10	---	---	---	---	---	---	---	---	---	14.0	11.7	12.4
11	---	---	---	---	---	---	---	---	---	11.8	7.1	9.4
12	---	---	---	---	---	---	---	---	---	7.7	6.4	7.0
13	---	---	---	---	---	---	---	---	---	8.9	5.5	7.1
14	---	---	---	---	---	---	---	---	---	12.5	8.5	10.2
15	---	---	---	---	---	---	13.1	7.5	10.4	15.3	10.8	12.8
16	---	---	---	---	---	---	15.6	8.4	11.7	17.3	13.7	15.3
17	---	---	---	---	---	---	17.6	9.9	13.5	17.4	15.2	16.4
18	---	---	---	---	---	---	15.6	12.3	14.0	18.2	14.2	16.0
19	---	---	---	---	---	---	12.4	6.4	9.5	19.6	15.5	17.4
20	---	---	---	---	---	---	6.4	3.8	4.7	21.4	16.7	18.9
21	---	---	---	---	---	---	4.9	2.2	3.3	20.8	18.2	19.4
22	---	---	---	---	---	---	10.4	2.8	6.2	20.6	16.9	18.7
23	---	---	---	---	---	---	13.1	6.9	10.2	19.8	17.4	18.5
24	---	---	---	---	---	---	15.8	9.8	13.1	18.3	16.6	17.3
25	---	---	---	---	---	---	15.4	11.7	13.7	17.0	14.9	15.9
26	---	---	---	---	---	---	13.2	10.6	11.8	16.5	14.1	15.4
27	---	---	---	---	---	---	11.1	7.1	9.0	16.5	13.5	15.0
28	---	---	---	---	---	---	7.5	5.4	6.6	17.4	13.3	15.3
29	---	---	---	---	---	---	6.7	4.6	5.8	16.2	14.0	14.7
30	---	---	---	---	---	---	7.2	3.5	5.5	14.3	13.2	13.6
31	---	---	---	---	---	---	---	---	---	15.6	11.7	13.5
MONTH	---	---	---	---	---	---	---	---	---	21.4	4.0	13.8

06316400 CRAZY WOMAN CREEK AT UPPER STATION, NEAR ARVADA, WY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	15.8	13.1	14.2	24.8	19.4	21.8	26.6	20.7	23.5	20.4	13.5	16.8
2	17.3	13.1	15.0	24.3	20.4	22.2	25.8	22.8	24.5	21.5	14.5	17.8
3	18.1	14.7	16.3	23.6	19.8	21.7	23.8	20.2	22.0	22.2	15.1	18.6
4	18.0	15.6	16.7	24.4	19.5	21.8	24.6	18.1	21.1	22.0	16.5	19.1
5	19.9	15.5	17.5	25.0	19.4	22.1	26.1	19.5	22.7	22.6	17.2	19.7
6	20.5	16.8	18.6	26.3	20.8	23.4	25.4	20.6	23.2	22.2	16.6	19.2
7	19.0	15.8	17.7	26.1	21.7	24.0	26.6	20.3	23.3	23.7	17.1	20.1
8	18.3	15.5	16.8	27.4	21.7	24.5	25.4	20.7	23.0	23.3	16.7	19.8
9	18.4	16.2	17.2	27.6	22.2	25.0	25.5	20.9	23.1	23.3	17.4	19.9
10	18.8	15.2	17.0	26.0	22.2	23.4	25.4	19.8	22.5	21.9	16.7	19.1
11	19.2	16.2	17.6	26.4	20.6	23.3	22.2	19.1	20.8	23.0	16.0	18.7
12	18.3	16.7	17.2	27.4	21.3	24.3	21.0	17.6	19.5	19.5	14.3	16.3
13	16.7	14.3	15.3	28.3	23.2	25.8	17.6	15.7	16.3	17.6	11.6	14.6
14	19.3	13.6	16.2	27.4	22.6	25.1	19.9	15.0	17.0	18.4	11.4	14.8
15	19.9	16.6	18.1	28.3	22.7	25.5	22.8	16.4	19.3	19.2	11.8	15.2
16	22.0	17.5	19.6	27.2	23.7	25.7	22.8	18.3	20.6	20.3	11.7	15.7
17	23.3	19.7	21.3	25.0	20.2	22.3	22.6	19.6	21.0	18.6	13.2	15.8
18	24.0	19.9	21.8	24.7	18.1	21.3	21.1	18.8	19.8	16.2	12.1	14.1
19	25.1	20.7	22.8	26.4	19.8	23.1	22.3	16.8	19.4	18.7	10.2	14.1
20	26.6	22.3	24.2	26.8	20.8	23.8	23.5	17.4	20.3	19.6	10.2	14.5
21	27.4	23.1	25.1	27.1	22.5	24.6	24.1	18.1	21.0	15.1	13.2	14.0
22	27.2	23.9	25.4	25.9	21.5	23.7	24.5	19.3	21.9	19.9	12.0	15.3
23	26.3	22.9	24.4	27.8	22.7	25.1	22.4	19.7	21.1	18.3	12.5	15.3
24	26.1	22.3	24.0	28.1	22.9	25.5	22.1	17.2	19.5	14.9	11.9	13.1
25	23.9	20.5	22.0	25.9	19.7	22.4	21.4	16.5	18.8	14.2	11.2	12.1
26	22.4	18.8	20.5	20.4	17.3	18.8	21.4	14.5	18.0	15.4	8.6	11.9
27	23.3	18.9	20.9	23.8	16.8	20.2	21.4	14.7	18.3	15.8	10.1	12.7
28	23.5	19.7	21.5	26.0	19.7	22.6	22.1	15.4	18.8	16.2	10.7	12.8
29	21.9	18.9	20.4	23.8	21.3	22.7	22.6	16.1	19.4	16.0	8.6	12.2
30	22.9	17.8	20.2	24.4	20.8	22.7	20.8	16.1	18.2	15.9	10.3	13.1
31	---	---	---	24.0	20.5	22.1	19.8	13.3	16.4	---	---	---
MONTH	27.4	13.1	19.5	28.3	16.8	23.2	26.6	13.3	20.5	23.7	8.6	15.9

06316900 COTTONWOOD CREEK AT MOUTH, NEAR ARVADA, WY

LOCATION.--Lat 44°34'43", long 106°05'52" (NAD 83), in SW¹/₄ SW¹/₄ sec.11, T.53 N., R.77 W., Sheridan County, Hydrologic Unit 10090202, at bridge on county road 273 and 5.3 mi southeast of Arvada.

PERIOD OF RECORD.--July 2004 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)
OCT 18...	1830	.03	658	6.2	61	9.0	2,840	5.5	8.0	61	9.81	8.85	40
NOV 23...	1645	.05	666	--	--	9.2	2,630	1.0	1.5	56	8.78	8.27	36
DEC 21...	0940	.01	667	6.5	51	8.6	3,460	-3.0	.0	92	13.6	14.1	43
JAN 26...	1520	.01	663	10.6	84	8.5	2,270	15.5	.0	350	63.2	45.7	10
FEB 24...	1300	.02	667	10.0	80	9.0	1,550	11.5	.5	27	4.16	4.10	32
MAR 28...	1525	.01	647	12.2	131	9.3	1,960	20.0	11.0	38	6.59	5.20	33
APR 28...	1015	.01	664	12.0	100	8.6	1,820	2.0	2.0	370	52.0	58.1	7
MAY 24...	1150	.00	--	--	--	--	--	--	--	--	--	--	--
JUN 22...	1130	.00	--	--	--	--	--	--	--	--	--	--	--
JUL 27...	1010	.01	668	4.8	57	8.5	1,660	23.0	17.0	54	10.2	6.84	23
AUG 24...	1630	.00	--	--	--	--	--	--	--	--	--	--	--
SEP 21...	1645	.00	--	--	--	--	--	--	--	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitrogen, wat unfiltered by analysis, mg/L (62855)	Orthophosphate, water, fltrd, mg/L as P (00671)
OCT 18...	722	1,870	--	--	--	--	--
NOV 23...	619	1,590	--	--	--	--	--
DEC 21...	953	2,380	--	--	--	--	--
JAN 26...	432	1,640	--	--	--	--	--
FEB 24...	387	985	--	--	--	--	--
MAR 28...	465	1,310	--	--	--	--	--
APR 28...	289	1,320	--	--	--	--	--
MAY 24...	--	--	--	--	--	--	--
JUN 22...	--	--	--	--	--	--	--
JUL 27...	385	1,080	.05	<.06	E.006	2.46	.13
AUG 24...	--	--	--	--	--	--	--
SEP 21...	--	--	--	--	--	--	--

< -- Less than.
E -- Estimated.

06317000 POWDER RIVER AT ARVADA, WY

LOCATION.--Lat 44°39'00", long 106°07'37" (NAD 27), in SW¹/₄ SE¹/₄ sec.16, T.54 N., R.77 W., Sheridan County, Hydrologic Unit 10090202, on right bank 0.1 mi downstream from bridge on county road, 0.2 mi southeast of Arvada, and 0.2 mi upstream from Wild Horse Creek.

DRAINAGE AREA.--6,050 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--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.

GAGE.--Water-stage recorder. Elevation of gage is 3,620 ft above NGVD of 1929, from topographic map. Prior to October 24, 1938, non-contributing gage at bridge 0.2 mi upstream from station at datum 3,621.87 ft. October 24, 1938 to April 27, 1983, at site 0.7 mi upstream from station at different datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Numerous small reservoirs and diversions for irrigation of about 29,000 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e9.4	91	e110	e120	e220	187	124	294	469	150	86	2.5
2	11	91	e120	e110	e190	180	122	319	690	151	121	1.4
3	28	101	e130	e100	e170	175	125	289	711	147	64	0.76
4	33	103	e120	e115	e150	169	132	247	591	121	44	e0.50
5	36	96	e110	e120	e125	168	124	222	508	118	31	e0.35
6	39	92	e110	e100	e105	161	117	206	432	122	25	e0.45
7	42	93	e94	e94	e86	152	118	179	427	112	24	e0.52
8	43	94	e86	e100	e70	142	124	189	441	97	23	e0.50
9	40	e90	e76	e110	e62	138	183	196	392	87	23	0.47
10	41	101	e88	e115	e68	131	197	252	403	79	52	0.06
11	40	e90	e96	e100	e90	122	215	535	395	75	73	0.00
12	40	91	e110	e90	e150	121	200	858	377	69	41	0.03
13	41	89	e120	e84	e230	119	201	3,080	371	63	42	0.29
14	47	115	e101	e80	e260	116	155	1,750	344	55	46	0.08
15	56	141	e100	e72	e330	123	123	1,280	359	54	45	0.01
16	63	139	e110	e66	e290	116	106	915	403	48	78	0.00
17	70	137	e110	e80	e270	115	102	775	371	44	82	0.00
18	76	142	e110	e90	e240	114	99	710	352	39	75	0.00
19	71	142	e100	e100	e220	102	99	717	317	34	65	0.00
20	85	144	e120	e120	e200	109	112	760	308	30	56	0.00
21	76	e130	e130	e170	e220	127	142	674	299	25	46	0.00
22	77	e110	e120	e140	e220	123	164	760	292	23	34	0.00
23	73	e120	e110	e150	e248	112	284	873	274	155	30	0.00
24	81	135	e100	e200	e295	120	295	862	471	73	26	0.00
25	99	124	e92	e400	e230	e115	322	784	411	40	23	0.00
26	144	122	e100	e344	e180	e115	315	693	296	39	18	0.00
27	120	137	e120	e300	242	120	269	646	230	36	12	0.00
28	110	142	e130	e270	202	e125	220	609	190	27	9.2	0.00
29	104	e120	e120	e250	---	128	252	540	188	23	6.4	0.00
30	98	e100	e125	e250	---	127	251	485	179	30	3.6	0.00
31	94	---	e125	e240	---	130	---	469	---	27	3.0	---
TOTAL	1,987.4	3,422	3,393	4,680	5,363	4,102	5,292	21,168	11,491	2,193	1,307.2	7.92
MEAN	64.1	114	109	151	192	132	176	683	383	70.7	42.2	0.26
MAX	144	144	130	400	330	187	322	3,080	711	155	121	2.5
MIN	9.4	89	76	66	62	102	99	179	179	23	3.0	0.00
AC-FT	3,940	6,790	6,730	9,280	10,640	8,140	10,500	41,990	22,790	4,350	2,590	16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2005, BY WATER YEAR (WY)

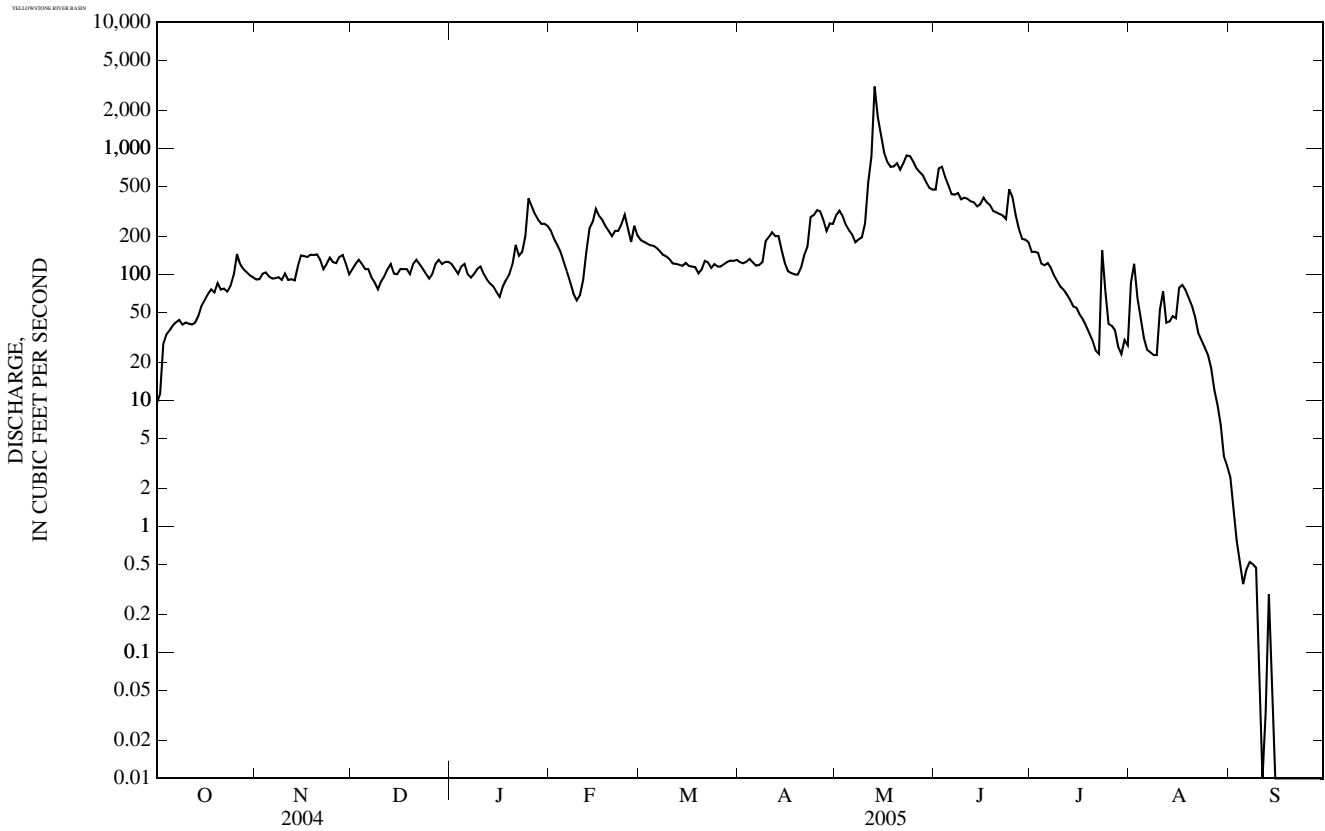
MEAN	133	129	100	90.9	167	385	351	716	722	251	94.0	73.1
MAX	865	419	290	242	567	953	1,107	4,025	3,319	1,703	861	451
(WY)	(1995)	(1999)	(1974)	(1974)	(1972)	(1978)	(1941)	(1978)	(1962)	(1937)	(1941)	(1982)
MIN	0.00	11.4	23.0	15.0	10.0	132	99.0	51.3	30.6	15.8	0.00	0.00
(WY)	(1961)	(1936)	(1950)	(1933)	(1933)	(2005)	(1961)	(1936)	(1954)	(1974)	(1932)	(1932)

YELLOWSTONE RIVER BASIN

06317000 POWDER RIVER AT ARVADA, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1931 - 2005	
ANNUAL TOTAL	33,643.01		64,406.52		--	
ANNUAL MEAN	91.9		176		269	
HIGHEST ANNUAL MEAN	--		--		735 1978	
LOWEST ANNUAL MEAN	--		--		70.3 1961	
HIGHEST DAILY MEAN	649	Mar 13	3,080	May 13	22,600	May 20, 1978
LOWEST DAILY MEAN	0.00	Many days	0.00	Several days	0.00	Many days, some years
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 24	0.00	Sep 16	0.00	Some years
MAXIMUM PEAK FLOW	--		3,740	May 13	100,000 ^a	Sep 29, 1923
MAXIMUM PEAK STAGE	--		5.97	May 13	23.70 ^b	Sep 29, 1923
ANNUAL RUNOFF (AC-FT)	66,730		127,800		194,900	
10 PERCENT EXCEEDS	175		383		576	
50 PERCENT EXCEEDS	90		115		127	
90 PERCENT EXCEEDS	0.49		12		15	

- a About, from rating curve extended above 20,000 ft³/s.
- b From floodmarks.
- e Estimated.



06317000 POWDER RIVER AT ARVADA, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro- gen, wat un- f by anal- ysis, mg/L (62855)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Alum- inum, water, unfltrd recover- able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recover- able, ug/L (01007)	Beryll- ium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)	Selen- ium, water, unfltrd ug/L (01147)
OCT												
07...	--	--	--	--	--	4,550	.9	109	.45	<18	E1.4	3.3
19...	--	--	--	--	--	6,310	.7	154	.66	<18	E1.4	4.2
NOV												
05...	--	--	--	--	--	12,900	.7	220	1.14	<18	E1.7	4.7
23...	--	--	--	--	--	8,080	.9	151	.61	<18	4.3	4.1
DEC												
09...	--	--	--	--	--	1,510	1.9	70	.12	<18	12.2	5.3
20...	--	--	--	--	--	2,820	.7	70	.22	<6	3.3	4.1
JAN												
13...	--	--	--	--	--	1,680	1.0	71	.12	<18	6.3	5.0
26...	--	--	--	--	--	5,430	.8	121	.47	<6	4.1	5.3
FEB												
10...	--	--	--	--	--	719	1.1	44	E.05	19	6.6	4.5
24...	--	--	--	--	--	7,390	.7	156	.64	<18	6.7	4.9
MAR												
09...	--	--	--	--	--	5,920	.9	144	.59	<18	2.8	4.4
29...	--	--	--	--	--	5,440	1.3	126	.44	<18	2.3	3.8
APR												
15...	--	--	--	--	--	5,190	1.3	119	.54	<18	2.2	4.5
28...	--	--	--	--	--	16,300	1.2	387	2.50	<18	E1.3	6.2
MAY												
09...	--	--	--	--	--	6,310	.9	146	.70	<18	E1.6	4.2
24...	--	--	--	--	--	19,600	1.0	443	2.44	438	24.6	2.8
JUN												
08...	--	--	--	--	--	23,400	.9	435	2.60	6	1.6	3.5
22...	--	--	--	--	--	4,300	1.2	110	.45	E5	1.9	3.0
JUL												
14...	<.04	<.06	<.008	.56	<.02	1,000	1.4	67	.09	E10	2.3	2.5
27...	--	--	--	--	--	4,190	1.0	117	.44	<6	2.7	2.6
AUG												
10...	<.04	<.06	<.008	.66	<.02	1,260	1.1	86	<.12	<18	4.0	3.4
25...	--	--	--	--	--	3,880	1.1	106	.14	E9	2.8	3.5
SEP												
08...	--	--	--	--	--	207	.74	74	<.12	<18	14.4	1.7
21...	--	--	--	--	--	--	--	--	--	--	--	--

< -- Less than.

E -- Estimated.

YELLOWSTONE RIVER BASIN

06317020 WILD HORSE CREEK NEAR ARVADA, WY

LOCATION.--Lat 44° 37' 57", long 106° 01' 53" (NAD 27), in NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 29, T.54 N., R.76 W., Sheridan County, Hydrologic Unit 10090202, on left bank 1.0 mi upstream from Sheridan County Road 38, 0.4 mi upstream from Middle Prong Wildhorse Creek and 5.0 mi southeast of Arvada.

DRAINAGE AREA.--250 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,730 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow of stream affected by numerous small reservoirs and coalbed methane production water.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	e0.00	e0.35	1.0	1.9	1.8	e0.00	e0.00	e0.00
2	0.00	0.00	0.00	0.00	e0.00	e0.40	0.93	1.4	1.7	e0.00	e0.00	e0.00
3	0.00	0.00	0.00	0.00	e0.00	0.52	0.86	1.3	1.7	e0.00	e0.00	e0.00
4	0.00	0.00	0.00	0.00	e0.00	0.58	0.81	1.2	1.8	e0.00	e0.00	e0.00
5	0.00	0.00	0.00	0.00	e0.01	0.56	0.71	1.2	1.6	e0.00	e0.00	0.00
6	0.00	0.00	0.00	e0.00	e0.00	0.63	0.68	0.96	1.4	e0.00	e0.00	0.00
7	0.00	0.00	0.00	e0.00	e0.00	0.63	0.71	0.88	e1.3	e0.00	e0.00	0.00
8	0.00	0.00	0.00	0.00	e0.00	0.61	0.66	1.5	e1.3	e0.00	e0.00	0.00
9	0.00	0.00	0.00	0.00	e0.01	0.54	0.90	1.8	e11	e0.00	e0.00	0.00
10	0.00	0.00	0.00	0.00	e0.02	0.67	0.77	5.3	e12	e0.00	e0.00	0.00
11	0.00	0.00	0.00	e0.00	e0.03	0.75	0.62	11	e10	e0.00	e0.00	0.00
12	0.00	0.00	0.00	e0.00	e0.05	0.70	1.1	16	e7.0	e0.00	e0.00	0.00
13	0.00	0.00	0.00	e0.00	e0.04	0.66	1.4	20	e3.0	e0.00	e0.00	0.00
14	0.00	0.00	0.00	e0.00	e0.05	0.67	0.96	18	e3.5	e0.00	e0.00	0.00
15	0.00	0.00	0.00	e0.00	e0.04	0.61	0.88	13	e2.5	e0.00	e0.00	0.00
16	0.00	0.00	0.00	e0.00	e0.04	0.63	0.73	8.8	e1.0	e0.00	e0.00	0.00
17	0.00	0.00	0.00	0.00	e0.03	0.65	0.48	6.1	e0.70	e0.00	e0.00	0.00
18	0.00	0.00	0.00	0.00	e0.03	0.66	0.33	4.9	e0.30	e0.00	e0.00	0.00
19	0.00	0.00	0.00	0.00	e0.04	0.59	0.24	4.1	e0.15	e0.00	e0.00	0.00
20	0.00	0.00	0.00	0.00	e0.05	0.63	0.43	3.4	e0.09	e0.00	e0.00	0.00
21	0.00	0.00	0.00	0.00	e0.06	0.91	0.54	2.7	e0.05	e0.00	e0.00	0.00
22	0.00	0.00	0.00	0.00	e0.08	1.0	1.6	2.1	e0.03	e0.00	e0.00	0.00
23	0.00	0.00	0.00	0.00	e0.10	1.1	3.2	1.8	e0.02	e0.00	e0.00	0.00
24	0.00	0.00	0.00	0.00	e0.20	1.1	4.7	1.5	e0.01	e0.00	e0.00	0.00
25	0.00	0.00	0.00	0.00	e0.15	1.00	6.7	1.6	e0.00	e0.00	e0.00	0.00
26	0.00	0.00	0.00	0.00	e0.16	1.0	6.1	1.5	e0.00	e0.00	e0.00	0.00
27	0.00	0.00	0.00	e0.00	e0.20	1.00	4.8	1.6	e0.00	e0.00	e0.00	0.00
28	0.00	0.00	0.00	e0.00	e0.25	0.88	4.1	1.6	e0.00	e0.00	e0.00	0.00
29	0.00	0.00	0.00	e0.00	---	0.70	3.2	1.6	e0.00	e0.00	e0.00	0.00
30	0.00	0.00	0.00	e0.00	---	0.91	2.4	1.7	e0.00	e0.00	e0.00	0.00
31	0.00	---	0.00	e0.00	---	1.1	---	1.8	---	e0.00	e0.00	---
TOTAL	0.00	0.00	0.00	0.00	1.64	22.74	52.54	142.24	63.95	0.00	0.00	0.00
MEAN	0.00	0.00	0.00	0.00	0.06	0.73	1.75	4.59	2.13	0.00	0.00	0.00
MAX	0.00	0.00	0.00	0.00	0.25	1.1	6.7	20	12	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.35	0.24	0.88	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	3.3	45	104	282	127	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2005, BY WATER YEAR (WY)

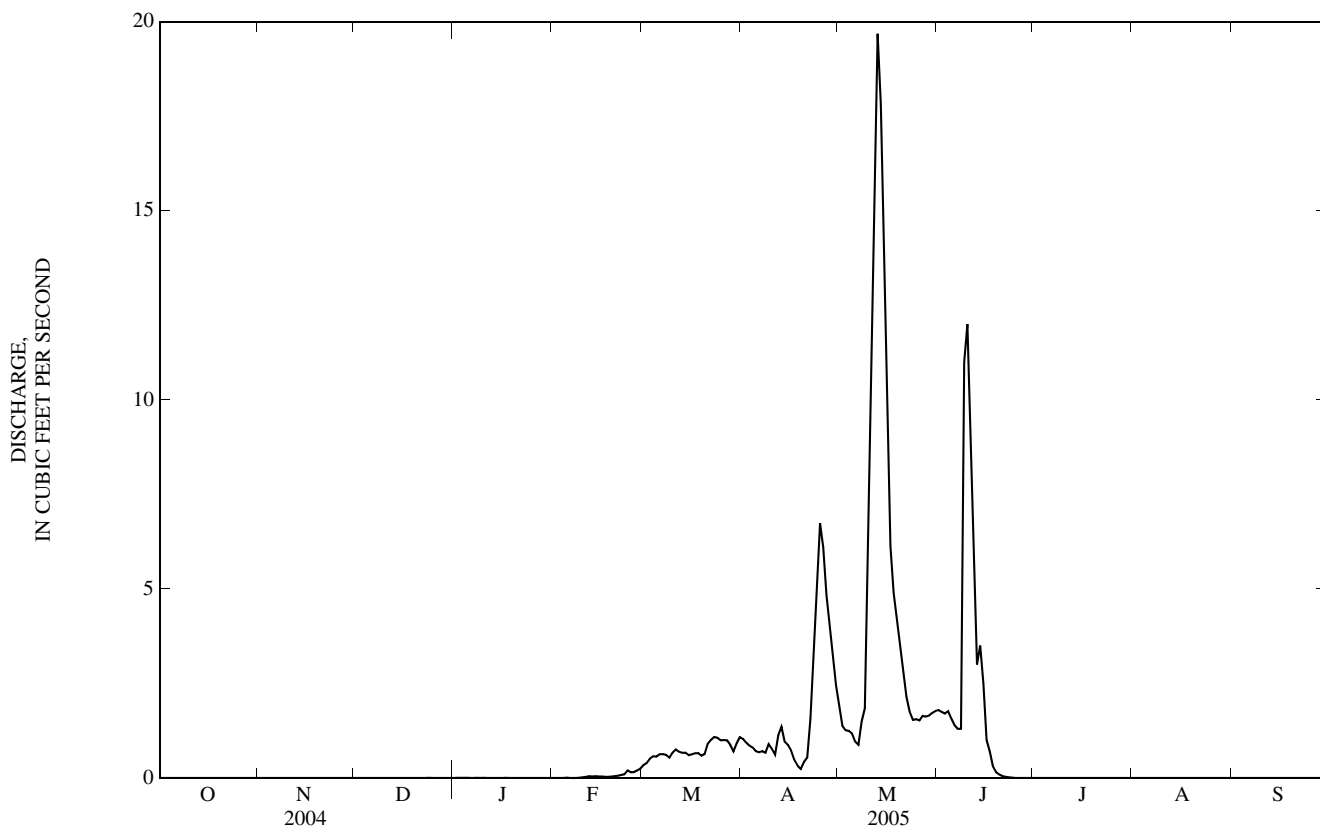
MEAN	0.00	0.00	0.02	0.01	0.04	1.56	0.56	1.15	0.36	0.31	0.00	0.00
MAX	0.00	0.00	0.09	0.02	0.14	6.36	1.75	4.59	2.13	1.87	0.00	0.00
(WY)	(2001)	(2001)	(2004)	(2001)	(2004)	(2003)	(2005)	(2005)	(2005)	(2004)	(2004)	(2000)
MIN	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.01	0.00	0.00	0.00	0.00
(WY)	(2001)	(2001)	(2001)	(2002)	(2002)	(2002)	(2004)	(2002)	(2000)	(2000)	(2000)	(2000)

06317020 WILD HORSE CREEK NEAR ARVADA, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2000 - 2005	
ANNUAL TOTAL	67.39		283.11		--	
ANNUAL MEAN	0.18		0.78		0.35	
HIGHEST ANNUAL MEAN	--		--		0.78 2005	
LOWEST ANNUAL MEAN	--		--		0.01 2002	
HIGHEST DAILY MEAN	37	Jul 23	20	May 13	37	Jul 23, 2004
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days, each year
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 8	0.00	Oct 1	0.00	May 23, 2000
MAXIMUM PEAK FLOW	--		22	May 13	362 ^a	Jul 23, 2004
MAXIMUM PEAK STAGE	--		2.13	May 13	3.18	Jul 23, 2004
ANNUAL RUNOFF (AC-FT)	134		562		253	
10 PERCENT EXCEEDS	0.09		1.7		0.47	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From rating curve extended above 10 ft³/s based on straight-line extension.

e Estimated.



06317020 WILD HORSE CREEK NEAR ARVADA, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Aluminum, water, unfltrd recover- able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recover- able, ug/L (01007)	Beryllium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Selenium, water, unfltrd ug/L (01147)
OCT 19...	--	--	--	--	--	--	--
NOV 23...	--	--	--	--	--	--	--
DEC 21...	--	--	--	--	--	--	--
JAN 27...	--	--	--	--	--	--	--
FEB 24...	76	1.9	84	<.12	131	115	1.6
MAR 28...	84	1.7	70	<.12	31	18.9	.9
APR 28...	144	2.5	83	<.12	95	17.7	2.1
MAY 24...	83	3.1	96	<.12	62	44.5	1.7
JUN 22...	35	3.4	63	<.12	39	1,550	2.8
JUL 27...	--	--	--	--	--	--	--
AUG 24...	--	--	--	--	--	--	--
SEP 21...	--	--	--	--	--	--	--

< -- Less than.

06317030 WILD HORSE CREEK AT MOUTH, AT ARVADA, WY

LOCATION.--Lat 44°39'01", long 106°07'19" (NAD 83), in SE¹/₄ SE¹/₄ sec.16, T.54 N., R.77 W., Sheridan County, Hydrologic Unit 10090202, at bridge on county road 40 and 1.0 mi southeast of Arvada.

PERIOD OF RECORD.--October 1978, July 2004 to current year. Prior to 2004, station was published as 4439021061701.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)
OCT 19...	1030	.20	666	8.8	84	8.6	4,060	6.0	7.0	860	79.8	159	13
NOV 23...	1555	.47	668	--	--	8.4	3,820	3.0	2.5	570	58.1	104	13
DEC 21...	1050	.34	669	11.8	95	8.3	4,800	-3.0	.5	910	91.4	166	14
JAN 27...	0810	.34	666	12.6	102	8.3	3,950	-1.0	.5	790	95.0	133	11
FEB 24...	1030	.60	670	12.8	106	8.5	4,540	8.0	1.5	1,000	115	182	11
MAR 28...	1735	1.7	646	9.9	107	8.5	3,650	14.0	11.0	910	118	148	8
APR 28...	1230	6.0	666	8.9	88	8.2	2,690	--	8.5	700	99.7	109	7
MAY 24...	1605	2.6	667	6.5	84	8.0	4,260	16.5	20.5	1,500	211	226	7
JUN 22...	1250	.35	665	6.5	98	8.0	3,860	33.0	28.5	1,200	186	173	6
JUL 27...	0800	.24	672	4.9	60	8.3	5,120	15.0	18.0	1,200	131	216	12
AUG 24...	1735	E.002	663	8.7	122	8.6	5,410	26.0	24.0	990	69.1	198	13
SEP 21...	1715	.12	668	8.5	97	8.6	4,920	17.0	14.5	840	49.3	174	14

Date	Sodium, water, fltrd, mg/L (00930)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitrogen, wat unfiltered by analysis, mg/L (62855)	Orthophosphate, water, fltrd, mg/L as P (00671)
OCT 19...	880	3,120	--	--	--	--	--
NOV 23...	719	2,660	--	--	--	--	--
DEC 21...	994	3,700	--	--	--	--	--
JAN 27...	713	2,980	--	--	--	--	--
FEB 24...	792	3,470	--	--	--	--	--
MAR 28...	586	2,820	--	--	--	--	--
APR 28...	408	2,120	--	--	--	--	--
MAY 24...	620	3,660	--	--	--	--	--
JUN 22...	503	3,220	--	--	--	--	--
JUL 27...	932	4,160	<.04	<.06	<.008	1.71	<.02
AUG 24...	971	4,350	--	--	--	--	--
SEP 21...	936	3,850	--	--	--	--	--

< -- Less than.
E -- Estimated.

06317040 IVY CREEK AT MOUTH, NEAR ARVADA, WY

LOCATION.--Lat 44°49'16", long 106°03'56" (NAD83), in NE¹/₄ NE¹/₄ NE¹/₄ sec.24 T.56 N., R.77 W., Sheridan County, Hydrologic Unit 10090202, at culvert on private road and 11.9 mi northeast of Arvada.

PERIOD OF RECORD.--July 2004 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instan- taneous dis- charge, cfs (00061)
OCT		
26...	1445	.00
NOV		
18...	1005	.00
DEC		
20...	1145	.00
JAN		
26...	1755	.00
FEB		
24...	1026	.00
MAR		
29...	1028	.00
APR		
11...	0940	.00
MAY		
26...	1311	.00
JUN		
15...	0945	.00
JUL		
07...	1625	.00
AUG		
10...	1050	.00
SEP		
27...	1145	.00

06317095 SPOTTED HORSE CREEK AT MOUTH, NEAR ARVADA, WY

LOCATION.--Lat 44°50'48", long 106°02'59" (NAD 83), in NE¼ SW¼ NE¼ sec.7 T.56 N., R.76 W., Sheridan County, Hydrologic Unit 10090202, at culvert on private road and 13.8 mi northeast of Arvada.

PERIOD OF RECORD.--July 2004 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)
OCT 26...	1410	.43	667	9.5	95	8.8	2,950	12.0	9.0	270	22.4	51.7	18
NOV 18...	1045	E.27	671	10.8	85	8.7	3,260	13.5	.0	340	28.9	65.0	19
DEC 20...	1125	.08	665	6.2	49	8.3	4,020	3.0	.0	410	33.8	80.0	21
JAN 26...	1730	.00	--	--	--	--	--	--	--	--	--	--	--
FEB 24...	1100	E.10	671	8.2	65	8.4	3,060	10.0	.0	480	43.2	89.3	12
MAR 29...	1100	.27	657	9.0	95	8.4	4,780	10.5	10.5	1,200	110	213	12
APR 12...	1010	E.05	667	9.9	95	8.5	5,960	17.0	7.0	1,300	101	265	13
MAY 26...	1330	1.3	674	8.4	95	8.4	5,240	15.5	14.5	1,900	166	354	9
JUN 15...	1010	1.6	671	6.7	81	8.2	4,030	25.0	18.0	1,500	199	242	6
JUL 07...	1620	.00	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	1100	E.02	673	8.5	109	8.5	1,900	29.0	21.0	57	10.1	7.74	25
SEP 27...	1200	E.01	669	9.2	--	8.6	--	22.0	11.0	44	8.00	5.74	32

Date	Sodium, water, fltrd, mg/L (00930)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT 26...	666	2,030
NOV 18...	788	2,340
DEC 20...	968	2,920
JAN 26...	--	--
FEB 24...	597	2,150
MAR 29...	908	3,890
APR 12...	1,100	4,870
MAY 26...	889	4,570
JUN 15...	505	3,490
JUL 07...	--	--
AUG 10...	441	1,200
SEP 27...	479	1,170

E -- Estimated.

06317100 POWDER RIVER ABOVE CLEAR CREEK, NEAR ARVADA, WY

LOCATION.--Lat 44°52'48", long 106°03'43" (NAD 83), in SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.31 T.57 N., R.76 W., Sheridan County, Hydrologic Unit 10090202, at bridge on county road 269 and 17.0 mi north of Arvada.

PERIOD OF RECORD.--July 2004 to current year. Prior to 2004, station was published as 445249106034201 Powder River near Arvada.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)
OCT 26...	1255	179	668	10.0	98	8.4	2,680	11.0	8.0	600	128	67.7	7
NOV 18...	1145	116	671	12.4	105	8.4	2,320	15.0	2.5	540	117	59.5	6
DEC 20...	1230	113	666	11.7	92	8.2	2,210	5.0	.0	580	138	58.5	5
JAN 26...	1630	106	668	11.3	89	8.2	2,110	6.5	.0	560	136	53.3	5
FEB 24...	1150	--	671	13.8	108	8.4	2,350	14.0	.0	540	125	55.5	6
MAR 29...	1130	147	655	9.7	105	8.4	2,570	12.0	11.5	590	126	65.8	7
APR 12...	1110	190	668	10.3	104	8.3	2,700	17.5	9.5	780	162	91.0	5
MAY 26...	1515	779	673	8.6	99	8.4	988	15.5	16.0	220	52.1	21.9	3
JUN 15...	1110	304	667	7.8	101	8.3	1,500	28.0	21.0	390	90.8	40.5	4
JUL 07...	1530	137	672	7.5	99	8.2	1,930	34.0	22.5	460	110	46.2	5
AUG 10...	1145	20	673	8.2	114	8.3	2,160	30.0	25.5	670	160	65.5	4
SEP 27...	1050	4.5	670	11.0	120	8.4	1,500	17.5	13.0	650	141	72.9	2

Date	Sodium, water, fltrd, mg/L (00930)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitrogen, wat unfiltered by analysis, mg/L (62855)	Orthophosphate, water, fltrd, mg/L as P (00671)
OCT 26...	380	1,890	--	--	--	--	--
NOV 18...	329	1,630	--	--	--	--	--
DEC 20...	302	1,500	--	--	--	--	--
JAN 26...	294	1,470	--	--	--	--	--
FEB 24...	315	1,550	--	--	--	--	--
MAR 29...	376	1,800	--	--	--	--	--
APR 12...	343	2,030	--	--	--	--	--
MAY 26...	91.0	580	--	--	--	--	--
JUN 15...	182	1,010	--	--	--	--	--
JUL 07...	248	1,330	<.04	<.06	<.008	.81	<.02
AUG 10...	255	1,600	--	--	--	--	--
SEP 27...	95.9	1,210	--	--	--	--	--

< -- Less than.

YELLOWSTONE RIVER BASIN

06320000 ROCK CREEK NEAR BUFFALO, WY

LOCATION.--Lat 44°27'22", long 106°52'42" (NAD 27), in NW¹/₄ NW¹/₄ NW¹/₄ sec.29, T.52 N., R.83 W., Johnson County, Hydrologic Unit 10090206, on left bank 300 ft downstream from confluence of North and South Forks and 11.5 mi northwest of Buffalo.

DRAINAGE AREA.--60 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 5,280 ft above NGVD of 1929, from topographic map. Prior to January 8, 1944, nonrecording gages 600 ft upstream from station on North and South Forks at different datums, January 8, 1944 to September 30, 1952, water-stage recorder at present site at datum 0.72 ft lower. Wyoming State Engineer's data collection platform with satellite telemetry at station.

REMARKS.--Records good. Water is imported into drainage basin upstream from station from South Piney Creek. Diversions for irrigation of about 250 acres upstream from station. Result of discharge measurement, in cubic feet per second, made during period when station was not in operation, is given below:

Oct. 5 . . . 12.5

COOPERATION.--Station operated and recorded provided by the Wyoming State Engineer's Office; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	3.8	8.1	137	76	48	21
2	---	---	---	---	---	---	3.0	7.7	127	72	45	28
3	---	---	---	---	---	---	5.2	7.0	115	68	45	28
4	---	---	---	---	---	---	7.0	8.1	122	61	47	28
5	---	---	---	---	---	---	8.1	9.3	129	56	41	27
6	---	---	---	---	---	---	6.2	16	161	53	40	21
7	---	---	---	---	---	---	8.6	98	169	56	38	21
8	---	---	---	---	---	---	11	336	128	54	37	21
9	---	---	---	---	---	---	16	143	117	51	34	20
10	---	---	---	---	---	---	7.0	296	109	50	34	20
11	---	---	---	---	---	---	4.7	318	107	48	33	21
12	---	---	---	---	---	---	4.7	200	120	43	37	19
13	---	---	---	---	---	---	6.1	174	220	40	41	20
14	---	---	---	---	---	---	11	180	150	40	39	17
15	---	---	---	---	---	---	7.2	202	158	49	37	16
16	---	---	---	---	---	---	6.0	249	173	48	35	18
17	---	---	---	---	---	---	8.0	302	231	47	34	20
18	---	---	---	---	---	---	12	279	219	43	34	21
19	---	---	---	---	---	---	10	293	185	43	32	21
20	---	---	---	---	---	---	7.7	399	170	41	30	20
21	---	---	---	---	---	---	6.5	469	148	42	28	20
22	---	---	---	---	---	---	5.9	327	142	46	28	21
23	---	---	---	---	---	---	6.6	316	127	44	27	24
24	---	---	---	---	---	---	9.6	278	119	44	27	26
25	---	---	---	---	---	---	15	201	102	49	26	27
26	---	---	---	---	---	---	14	171	96	81	24	25
27	---	---	---	---	---	---	11	147	89	60	23	23
28	---	---	---	---	---	---	8.5	145	79	49	22	23
29	---	---	---	---	---	---	7.6	142	93	48	21	22
30	---	---	---	---	---	---	7.8	130	78	48	20	21
31	---	---	---	---	---	---	---	125	---	49	20	---
TOTAL	---	---	---	---	---	---	245.8	5,976.2	4,120	1,599	1,027	660
MEAN	---	---	---	---	---	---	8.19	193	137	51.6	33.1	22.0
MAX	---	---	---	---	---	---	16	469	231	81	48	28
MIN	---	---	---	---	---	---	3.0	7.0	78	40	20	16
AC-FT	---	---	---	---	---	---	488	11,850	8,170	3,170	2,040	1,310

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2005, BY WATER YEAR (WY)*

	9.23	7.11	5.57	4.58	4.43	4.81	15.2	99.2	142	60.2	40.4	20.3
MEAN	9.23	7.11	5.57	4.58	4.43	4.81	15.2	99.2	142	60.2	40.4	20.3
MAX	20.1	12.7	8.75	6.40	6.57	7.13	46.7	256	352	142	69.2	57.3
(WY)	(1969)	(1969)	(1969)	(1965)	(1969)	(1960)	(1994)	(1978)	(1995)	(1975)	(1968)	(1982)
MIN	3.44	2.74	3.08	1.88	2.27	2.22	4.63	24.7	23.9	28.3	4.22	1.57
(WY)	(1955)	(1955)	(1967)	(1950)	(1957)	(1966)	(1966)	(2001)	(2001)	(1958)	(1954)	(1954)

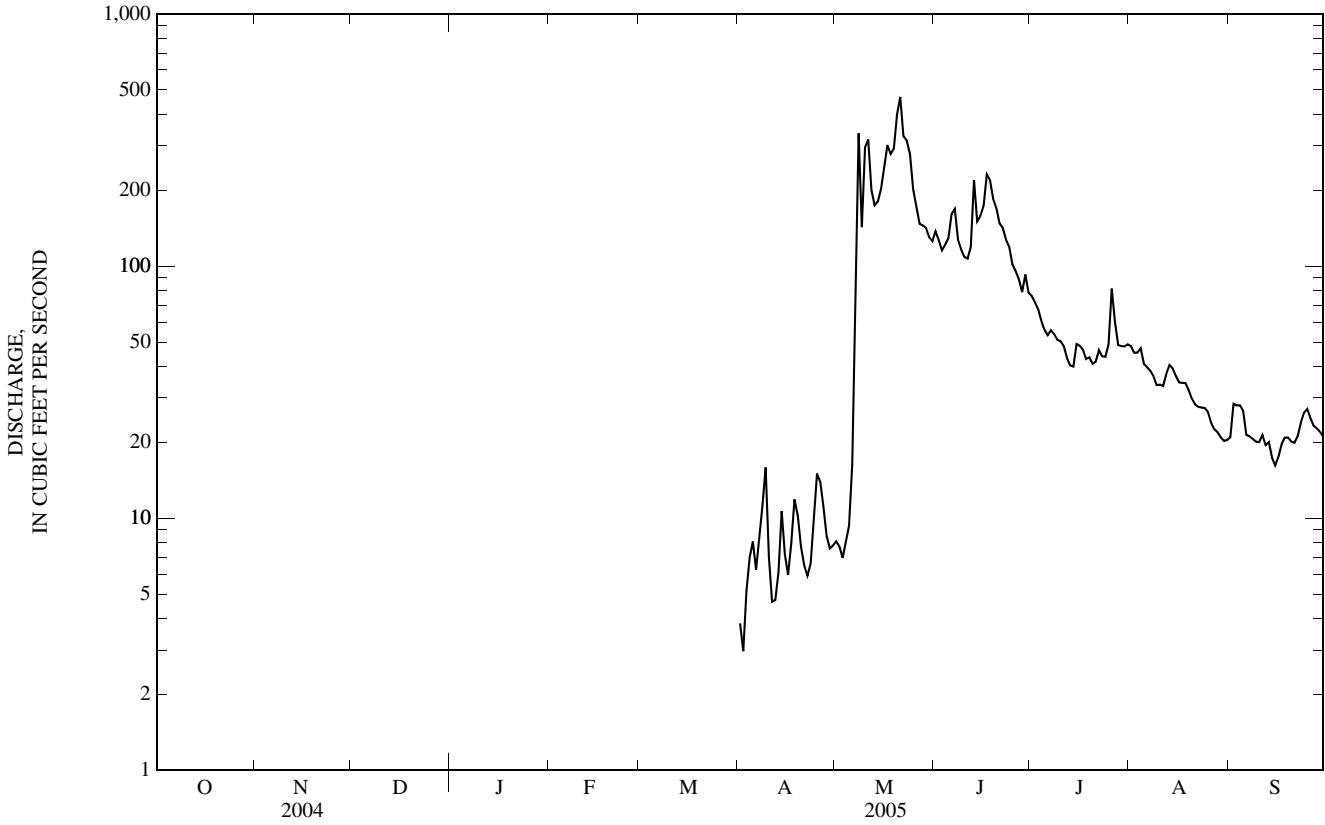
06320000 ROCK CREEK NEAR BUFFALO, WY—Continued

SUMMARY STATISTICS

	FOR 2005 WATER YEAR*		WATER YEARS 1945 - 2005*	
ANNUAL MEAN	--		34.7	
HIGHEST ANNUAL MEAN	--		54.7	1963
LOWEST ANNUAL MEAN	--		16.1	1954
HIGHEST DAILY MEAN	469	May 21	1,110	Jun 8, 1997
LOWEST DAILY MEAN	3.0	Apr 2	0.50	Sep 19, 1954
MAXIMUM PEAK FLOW	680	May 10	2,080 ^a	Jun 8, 1997
MAXIMUM PEAK STAGE	6.41	May 10	8.80	Jun 8, 1997
ANNUAL RUNOFF (AC-FT)	--		25,120	

* For period of operation.

a From rating curve extended above 610 ft³/s.



06320210 CLEAR CREEK ABOVE KUMOR DRAW, NEAR BUFFALO, WY

LOCATION.--Lat 44°23'21", long 106°37'23" (NAD 27), in NW¼ NE¼ SE¼ sec.17, T.51 N., R.81 W., Johnson County, Hydrologic Unit 10090206, 10 ft upstream from bridge on State Highway 16, 0.7 mi upstream from Kumor Draw, and 5 mi northeast of Buffalo.

PERIOD OF RECORD.--January 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT 19...	0740	59	646	9.2	86	7.9	551	-2.0	5.5	230	53.2	23.8	2.26
NOV 24...	0955	48	646	--	--	7.8	--	8.0	2.5	240	56.9	23.9	1.90
DEC 21...	1320	37	649	12.9	104	8.2	680	-4.0	.0	300	72.0	29.6	2.35
JAN 27...	1100	37	649	12.2	98	8.2	795	4.5	.0	350	83.2	34.0	2.68
FEB 23...	1705	33	649	12.0	105	8.5	796	5.0	3.0	340	81.8	33.9	2.29
MAR 29...	0710	44	636	7.9	78	8.2	784	5.0	7.0	350	84.2	34.6	2.39
APR 28...	1600	52	646	12.4	124	8.5	613	2.0	8.0	260	58.3	28.3	2.27
MAY 26...	1350	400	655	10.4	105	7.7	198	13.5	9.0	74	17.7	7.23	1.10
JUN 23...	0700	504	644	9.0	105	7.5	161	18.5	14.5	66	16.2	6.31	.93
JUL 26...	1840	133	654	8.3	100	8.1	371	20.0	17.0	160	35.5	16.2	1.90
AUG 26...	0850	37	651	7.9	90	7.9	829	14.5	14.0	390	86.6	41.6	3.19
SEP 22...	0850	32	652	8.8	95	8.1	810	11.0	11.5	360	84.2	35.9	2.93

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat fltrd end lab, mg/L as CaCO3 (29801)	Alkalinity, wat fltrd inc tit field, mg/L as CaCO3 (39086)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat fltrd mg/L (70300)
OCT 19...	.8	27.0	20	114	--	2.93	.2	10.3	160	348	.51	59.6	374
NOV 24...	.8	28.2	20	134	--	2.47	.2	12.1	162	368	.52	49.5	382
DEC 21...	.9	36.6	21	155	--	3.40	.2	12.7	206	456	.65	47.8	478
JAN 27...	.9	39.9	20	163	--	4.41	.2	12.6	245	519	.73	53.7	537
FEB 23...	.9	39.0	20	167	168	4.21	.2	11.7	235		.72	47.4	532
MAR 29...	.9	39.3	19	154	153	4.09	.2	11.0	251		.75	65.7	553
APR 28...	.9	32.6	21	108	--	3.79	.2	11.4	201	403	.60	61.5	438
MAY 26...	.5	9.91	22	41	--	1.50	<.1	9.65	52.2	124	.19	152	141
JUN 23...	.4	7.11	19	38	--	1.03	E.1	7.70	39.2	101	.16	156	115
JUL 26...	.6	15.9	18	80	--	2.12	E.1	9.25	99.5	229	.33	88.4	246
AUG 26...	.9	42.6	19	180	--	4.51	.2	5.87	266	558	.81	59.3	594
SEP 22...	.9	41.2	20	176	--	4.73	.2	9.70	253	537	.80	50.6	585

06320210 CLEAR CREEK ABOVE KUMOR DRAW, NEAR BUFFALO, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	E coli, modif. m-TEC, water, col/ 100 mL (90902)	Fecal coli- form, M-FC 0.7u MF col/ 100 mL (31625)	Alum- inum, water, unfltrd recover- able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recover- able, ug/L (01007)	Beryll- ium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)	Selen- ium, water, unfltrd ug/L (01147)
OCT 19...	--	--	--	--	--	--	43	.2	26	<.06	35	39.8	E.2
NOV 24...	E.03	E.04	<.008	<.02	25	21	55	.2	31	<.06	24	29.6	.5
DEC 21...	--	--	--	--	--	--	24	.2	37	<.06	25	51.9	1.3
JAN 27...	--	--	--	--	--	--	44	.3	36	<.06	31	63.2	.7
FEB 23...	.30	.14	E.004	.06	E1	E3	42	.3	35	<.06	22	64.4	.8
MAR 29...	--	--	--	--	--	--	68	.4	37	<.06	48	140	E.4
APR 28...	--	--	--	--	--	--	161	.3	30	<.06	36	62.9	1.0
MAY 26...	<.04	.06	<.008	<.02	39	42	609	.3	27	E.04	65	29.5	.5
JUN 23...	--	--	--	--	--	--	532	.2	20	E.03	39	13.9	.7
JUL 26...	--	--	--	--	1,400	1,400	665	.3	34	E.05	26	31.3	.5
AUG 26...	--	--	--	--	--	--	29	.5	36	<.06	33	25.1	<.4
SEP 22...	--	--	--	--	--	--	32	.43	36	<.06	44	57.0	--

< -- Less than.

E -- Estimated value; for bacteria, estimated values are counts outside the acceptable range (non-ideal colony count).

YELLOWSTONE RIVER BASIN

06320500 SOUTH PINEY CREEK AT WILLOW PARK, WY

LOCATION.--Lat 44°27'59", long 107°02'03" (NAD 27), in NW $\frac{1}{4}$ sec.24, T.52 N., R.85 W., Johnson County, Hydrologic Unit 10090206, Bighorn National Forest, on left bank about 300 ft downstream from Willow Park Dam, 1.4 mi upstream from Kearny Creek, and 10 mi southwest of Storey.

DRAINAGE AREA.--33.6 mi².

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

REVISED RECORDS.--WSP 1309: 1949(M). WSP 1709: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,540 ft above NGVD of 1929, from topographic map. Prior to October 1, 1957, at site about 600 ft upstream from station at different datum. October 1, 1959 to September 30, 1965, at present site at datum 1.00 ft higher.

REMARKS.--Records good. Includes record for 2004 water year. 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 downstream from station into Rock Creek basin. Result of discharge measurement, in cubic feet per second, made during period when station was not in operation, is given below:

Oct. 7 . . . 30.9

COOPERATION.--Station operated and record provided by the Wyoming State Engineer's Office; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	19	73	107	52
2	---	---	---	---	---	---	---	---	19	76	102	50
3	---	---	---	---	---	---	---	---	28	76	100	46
4	---	---	---	---	---	---	---	---	42	76	98	43
5	---	---	---	---	---	---	---	---	42	76	99	41
6	---	---	---	---	---	---	---	---	46	76	102	42
7	---	---	---	---	---	---	---	---	54	75	98	42
8	---	---	---	---	---	---	---	---	53	75	97	42
9	---	---	---	---	---	---	---	---	51	75	98	43
10	---	---	---	---	---	---	---	---	59	74	98	47
11	---	---	---	---	---	---	---	42	70	68	98	48
12	---	---	---	---	---	---	---	41	71	64	98	48
13	---	---	---	---	---	---	---	28	68	65	96	48
14	---	---	---	---	---	---	---	24	64	65	96	48
15	---	---	---	---	---	---	---	20	64	72	96	48
16	---	---	---	---	---	---	---	12	62	85	96	49
17	---	---	---	---	---	---	---	12	61	86	93	52
18	---	---	---	---	---	---	---	12	63	86	83	51
19	---	---	---	---	---	---	---	12	62	84	78	51
20	---	---	---	---	---	---	---	12	62	82	77	50
21	---	---	---	---	---	---	---	18	61	82	76	50
22	---	---	---	---	---	---	---	26	60	94	73	49
23	---	---	---	---	---	---	---	23	59	109	73	44
24	---	---	---	---	---	---	---	22	59	109	73	37
25	---	---	---	---	---	---	---	20	64	109	70	36
26	---	---	---	---	---	---	---	14	65	109	64	36
27	---	---	---	---	---	---	---	13	65	108	60	36
28	---	---	---	---	---	---	---	12	68	107	55	36
29	---	---	---	---	---	---	---	12	71	109	52	36
30	---	---	---	---	---	---	---	15	71	112	52	36
31	---	---	---	---	---	---	---	19	---	111	52	---
TOTAL	---	---	---	---	---	---	---	---	1,703	2,668	2,610	1,337
MEAN	---	---	---	---	---	---	---	---	56.8	86.1	84.2	44.6
MAX	---	---	---	---	---	---	---	---	71	112	107	52
MIN	---	---	---	---	---	---	---	---	19	64	52	36
AC-FT	---	---	---	---	---	---	---	---	3,380	5,290	5,180	2,650

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2004, BY WATER YEAR (WY)*

MEAN	15.0	9.77	8.20	6.93	6.21	6.29	10.0	49.5	157	112	86.4	50.0
MAX	26.8	16.8	14.2	12.4	11.7	10.6	27.0	153	332	281	130	118
(WY)	(1962)	(1960)	(1968)	(1968)	(1968)	(1968)	(1949)	(1948)	(1995)	(1975)	(1998)	(1998)
MIN	6.47	0.52	1.94	1.26	1.27	1.58	1.27	2.77	50.1	74.1	30.9	17.0
(WY)	(1967)	(1967)	(1964)	(1964)	(1964)	(1964)	(1960)	(1967)	(2001)	(1956)	(1954)	(1954)

06320500 SOUTH PINEY CREEK AT WILLOW PARK, WY—Continued

SUMMARY STATISTICS

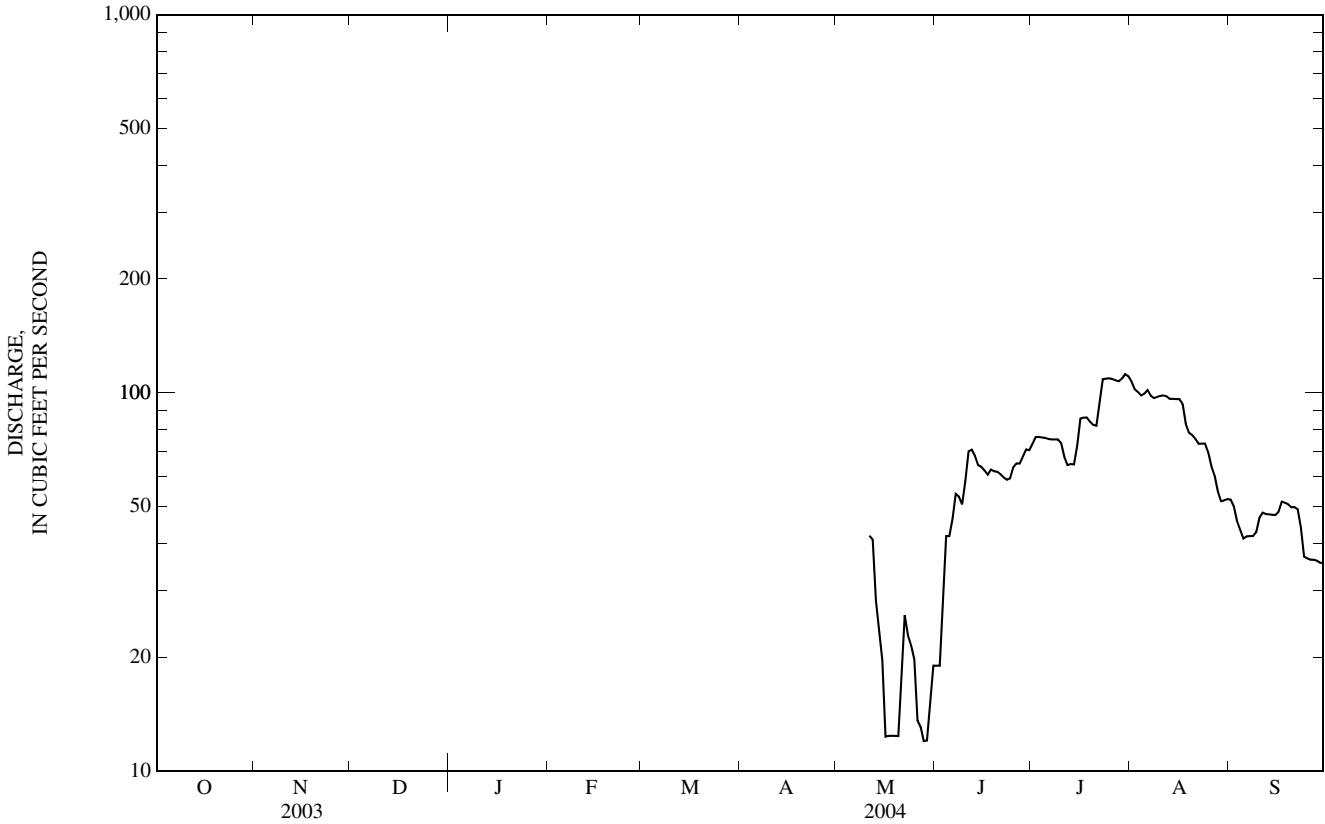
	FOR 2004 WATER YEAR*		WATER YEARS 1947 - 2004*	
ANNUAL MEAN	--		42.4 ^a	
HIGHEST ANNUAL MEAN	--		55.9 1963	
LOWEST ANNUAL MEAN	--		27.5 1960	
HIGHEST DAILY MEAN	112	Jul 12	1,100	Jun 8, 1997
LOWEST DAILY MEAN	12	May 16-20	0.13 ^b	May 1, 1989
MAXIMUM PEAK FLOW	114	Jul 29	1,620 ^c	Jun 15, 1963
MAXIMUM PEAK STAGE	2.65	Jul 29	5.68	Jun 15, 1963
ANNUAL RUNOFF (AC-FT)	--		30,700	

* For period of operation.

a Unadjusted for regulation by reservoirs.

b Minimum daily, prior to construction of Willow Park Reservoir, 4.5 ft³/s, March 1 to April 5, 1955.

c From rating curve extended above 360 ft³/s on basis of slope-area measurement of peak flow.



YELLOWSTONE RIVER BASIN

06320500 SOUTH PINEY CREEK AT WILLOW PARK, WY—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	143	112	55
2	---	---	---	---	---	---	---	---	---	123	112	67
3	---	---	---	---	---	---	---	---	---	123	111	73
4	---	---	---	---	---	---	---	---	---	118	111	79
5	---	---	---	---	---	---	---	---	---	111	110	73
6	---	---	---	---	---	---	---	---	---	105	109	67
7	---	---	---	---	---	---	---	---	---	101	108	66
8	---	---	---	---	---	---	---	---	---	100	98	64
9	---	---	---	---	---	---	---	---	---	101	82	62
10	---	---	---	---	---	---	---	---	---	101	82	61
11	---	---	---	---	---	---	---	---	---	105	79	58
12	---	---	---	---	---	---	---	---	---	104	74	50
13	---	---	---	---	---	---	---	---	---	100	75	48
14	---	---	---	---	---	---	---	---	---	98	74	46
15	---	---	---	---	---	---	---	---	---	101	72	42
16	---	---	---	---	---	---	---	---	201	103	72	47
17	---	---	---	---	---	---	---	---	330	100	71	50
18	---	---	---	---	---	---	---	---	441	94	68	51
19	---	---	---	---	---	---	---	---	432	89	65	50
20	---	---	---	---	---	---	---	---	379	83	65	48
21	---	---	---	---	---	---	---	---	328	86	63	47
22	---	---	---	---	---	---	---	---	307	91	63	48
23	---	---	---	---	---	---	---	---	292	90	62	50
24	---	---	---	---	---	---	---	---	282	88	62	50
25	---	---	---	---	---	---	---	---	251	88	59	50
26	---	---	---	---	---	---	---	---	213	88	53	48
27	---	---	---	---	---	---	---	---	185	89	52	45
28	---	---	---	---	---	---	---	---	163	91	51	43
29	---	---	---	---	---	---	---	---	166	107	49	42
30	---	---	---	---	---	---	---	---	170	114	49	40
31	---	---	---	---	---	---	---	---	---	113	48	---
TOTAL	---	---	---	---	---	---	---	---	---	3,148	2,361	1,620
MEAN	---	---	---	---	---	---	---	---	---	102	76.2	54.0
MAX	---	---	---	---	---	---	---	---	---	143	112	79
MIN	---	---	---	---	---	---	---	---	---	83	48	40
AC-FT	---	---	---	---	---	---	---	---	---	6,240	4,680	3,210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2005, BY WATER YEAR (WY)*

MEAN	15.0	9.77	8.20	6.93	6.21	6.29	10.0	49.5	157	112	86.3	50.0
MAX	26.8	16.8	14.2	12.4	11.7	10.6	27.0	153	332	281	130	118
(WY)	(1962)	(1960)	(1968)	(1968)	(1968)	(1968)	(1949)	(1948)	(1995)	(1975)	(1998)	(1998)
MIN	6.47	0.52	1.94	1.26	1.27	1.58	1.27	2.77	50.1	74.1	30.9	17.0
(WY)	(1967)	(1967)	(1964)	(1964)	(1964)	(1964)	(1960)	(1967)	(2001)	(1956)	(1954)	(1954)

06320500 SOUTH PINEY CREEK AT WILLOW PARK, WY—Continued

SUMMARY STATISTICS

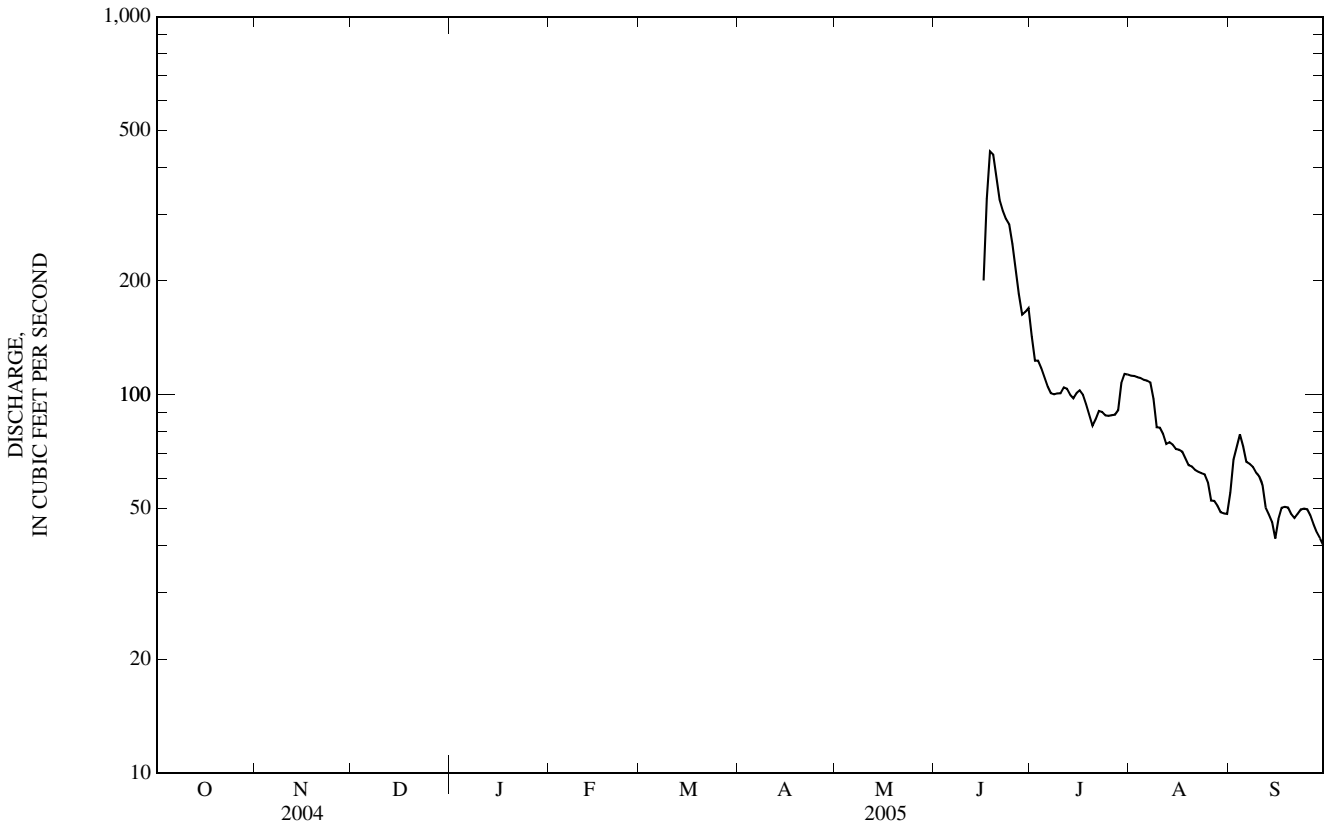
	FOR 2005 WATER YEAR*		WATER YEARS 1947 - 2005*	
ANNUAL MEAN	--		42.4 ^a	
HIGHEST ANNUAL MEAN	--		55.9	1963
LOWEST ANNUAL MEAN	--		27.5	1960
HIGHEST DAILY MEAN	441	Jun 18	1,100	Jun 8, 1997
LOWEST DAILY MEAN	40	Sep 30	0.13 ^b	May 1, 1989
MAXIMUM PEAK FLOW	495	Jun 18	1,620 ^c	Jun 15, 1963
MAXIMUM PEAK STAGE	4.28	Jun 18	5.68	Jun 15, 1963
ANNUAL RUNOFF (AC-FT)			30,700	

* For period of operation.

a Unadjusted for regulation by reservoirs.

b Minimum daily, prior to construction of Willow Park Reservoir, 4.5 ft³/s, March 1 to April 5, 1955.

c From rating curve extended above 360 ft³/s on basis of slope-area measurement of peak flow.



YELLOWSTONE RIVER BASIN

06323000 PINEY CREEK AT KEARNY, WY

LOCATION.--Lat 44°32'08", long 106°49'18" (NAD 27), in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.26, T.53 N., R.83 W., Johnson County, Hydrologic Unit 10090206, on right bank at Kearny, 300 ft northeast of Historical Monument and 2.0 mi upstream from Little Piney Creek.

DRAINAGE AREA.--118 mi².

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 September 1998, October 1998 to current year (no winter record). Monthly discharge only for some periods, published in WSP 1309.

REVISED RECORDS.--WSP 1176: 1944. WSP 1309: 1913(M). WSP 1509: 1906, 1920(M), 1941(M), 1942, 1943(M). WSP 1916: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,655.11 ft above NGVD of 1929. September 6, 1902 to June 30, 1906, nonrecording gage at site 50 ft upstream from station at different datum. May 14, 1911 to July 31, 1917, and May 1, 1919 to September 30, 1923, nonrecording gage at site 50 ft upstream from station at present datum.

REMARKS.--Records good. Includes record for the 2004 water year. 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 upstream from station from South Piney Creek into Rock Creek basin for irrigation. Diversions upstream from station for irrigation of about 240 acres, of which about 90 acres are downstream from station. Record includes flow in bypass channel (Spring Creek), 300 ft left of main channel. Result of discharge measurement, in cubic feet per second, made during period when station was not in operation, is given below:

Oct. 4 . . . 26.0

COOPERATION.--Station operated and record provided by the Wyoming State Engineer's Office; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	40	15	7.8	13	34	8.1
2	---	---	---	---	---	---	40	19	5.6	28	26	7.1
3	---	---	---	---	---	---	35	21	5.1	53	28	13
4	---	---	---	---	---	---	36	40	5.9	53	27	12
5	---	---	---	---	---	---	45	42	6.4	67	23	11
6	---	---	---	---	---	---	49	35	5.3	61	18	11
7	---	---	---	---	---	---	54	35	24	55	12	11
8	---	---	---	---	---	---	54	37	17	27	8.5	13
9	---	---	---	---	---	---	53	55	16	27	8.8	14
10	---	---	---	---	---	---	42	55	19	23	9.2	17
11	---	---	---	---	---	---	41	59	25	21	8.8	18
12	---	---	---	---	---	---	41	52	22	14	6.8	18
13	---	---	---	---	---	---	44	33	20	10	8.8	21
14	---	---	---	---	---	---	50	22	17	7.2	9.6	26
15	---	---	---	---	---	---	49	18	14	11	14	30
16	---	---	---	---	---	---	43	11	13	24	14	31
17	---	---	---	---	---	---	25	7.8	13	18	14	32
18	---	---	---	---	---	---	34	12	13	19	17	33
19	---	---	---	---	---	---	29	10	11	20	16	32
20	---	---	---	---	---	---	28	9.2	11	30	15	41
21	---	---	---	---	---	---	28	13	13	23	20	50
22	---	---	---	---	---	---	23	14	10	22	21	52
23	---	---	---	---	---	---	21	13	8.8	50	22	60
24	---	---	---	---	---	---	23	12	7.8	74	18	40
25	---	---	---	---	---	---	19	9.6	13	72	18	19
26	---	---	---	---	---	---	14	6.2	12	51	20	15
27	---	---	---	---	---	---	13	6.8	15	46	20	17
28	---	---	---	---	---	---	21	5.9	9.7	67	15	26
29	---	---	---	---	---	---	17	7.4	7.8	59	11	20
30	---	---	---	---	---	---	14	9.9	6.5	58	10	21
31	---	---	---	---	---	---	---	9.2	---	44	8.8	---
TOTAL	---	---	---	---	---	---	1,025	695.0	374.7	1,147.2	502.3	719.2
MEAN	---	---	---	---	---	---	34.2	22.4	12.5	37.0	16.2	24.0
MAX	---	---	---	---	---	---	54	59	25	74	34	60
MIN	---	---	---	---	---	---	13	5.9	5.1	7.2	6.8	7.1
AC-FT	---	---	---	---	---	---	2,030	1,380	743	2,280	996	1,430

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 2004, BY WATER YEAR (WY)*

MEAN	30.4	36.1	31.1	27.3	26.3	30.8	69.8	267	363	92.2	29.8	25.3
MAX	85.4	76.9	53.6	44.3	54.4	72.8	204	683	911	413	153	185
(WY)	(1913)	(1999)	(1977)	(1997)	(1962)	(1972)	(1943)	(1944)	(1995)	(1975)	(1998)	(1923)
MIN	8.84	13.0	13.4	12.3	10.7	16.7	15.8	22.4	12.5	13.0	7.98	3.47
(WY)	(1965)	(1955)	(1966)	(1967)	(1960)	(1957)	(1981)	(2004)	(2004)	(1985)	(1980)	(1981)

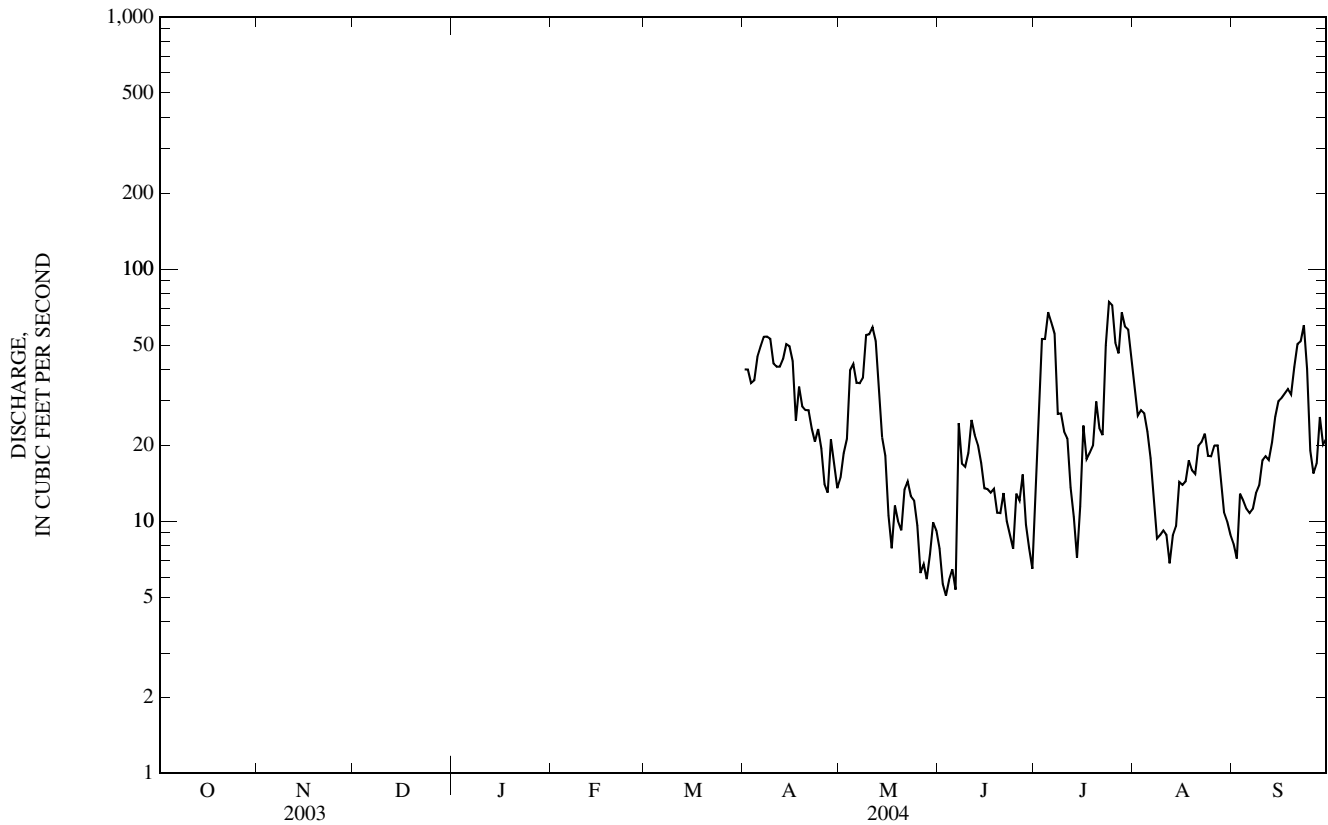
06323000 PINEY CREEK AT KEARNY, WY—Continued

SUMMARY STATISTICS

	FOR 2004 WATER YEAR*		WATER YEARS 1903 - 2004*	
ANNUAL MEAN	--		86.4	
HIGHEST ANNUAL MEAN	--		168	1944
LOWEST ANNUAL MEAN	--		27.8	1985
HIGHEST DAILY MEAN	74	Jul 24	1,780	Jun 15, 1963
LOWEST DAILY MEAN	5.1	Jun 3	1.9	Oct 3, 1981,
	75	Jul 24		Sep 14-18, 1985
MAXIMUM PEAK FLOW	1.75	Jul 24	3,410 ^a	Jun 15, 1963
MAXIMUM PEAK STAGE	--		6.05	Jun 15, 1963
ANNUAL RUNOFF (AC-FT)	--		62,560	

* For period of operation.

a From rating curve extended above 1,800 ft³/s.



YELLOWSTONE RIVER BASIN

06323000 PINEY CREEK AT KEARNY, WY—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	21	75	273	273	29	10
2	---	---	---	---	---	---	24	80	256	234	29	10
3	---	---	---	---	---	---	26	77	217	226	32	9.8
4	---	---	---	---	---	---	29	64	223	210	30	12
5	---	---	---	---	---	---	32	49	214	198	27	12
6	---	---	---	---	---	---	30	71	219	180	22	11
7	---	---	---	---	---	---	35	220	245	155	23	11
8	---	---	---	---	---	---	38	709	219	136	22	11
9	---	---	---	---	---	---	76	447	205	122	19	9.9
10	---	---	---	---	---	---	53	536	200	116	20	9.0
11	---	---	---	---	---	---	43	693	202	113	19	8.7
12	---	---	---	---	---	---	43	462	216	105	19	8.5
13	---	---	---	---	---	---	43	389	365	101	19	9.3
14	---	---	---	---	---	---	54	364	285	97	18	9.6
15	---	---	---	---	---	---	45	357	332	78	17	8.4
16	---	---	---	---	---	---	39	428	406	67	15	7.3
17	---	---	---	---	---	---	46	478	563	66	15	7.8
18	---	---	---	---	---	---	66	478	672	63	15	8.2
19	---	---	---	---	---	---	59	519	664	58	15	8.5
20	---	---	---	---	---	---	53	586	683	45	14	7.9
21	---	---	---	---	---	---	54	697	725	23	13	4.5
22	---	---	---	---	---	---	62	817	709	13	13	12
23	---	---	---	---	---	---	69	902	656	14	13	10
24	---	---	---	---	---	---	80	875	622	15	14	12
25	---	---	---	---	---	---	93	762	555	17	14	14
26	---	---	---	---	---	---	87	579	486	27	13	12
27	---	---	---	---	---	---	81	492	384	19	11	9.5
28	---	---	---	---	---	---	87	461	312	17	11	11
29	---	---	---	---	---	---	86	399	349	21	9.7	9.1
30	---	---	---	---	---	---	81	366	316	27	10	7.5
31	---	---	---	---	---	---	---	288	---	28	11	---
TOTAL	---	---	---	---	---	---	1,635	13,720	11,773	2,864	551.7	291.5
MEAN	---	---	---	---	---	---	54.5	443	392	92.4	17.8	9.72
MAX	---	---	---	---	---	---	93	902	725	273	32	14
MIN	---	---	---	---	---	---	21	49	200	13	9.7	4.5
AC-FT	---	---	---	---	---	---	3,240	27,210	23,350	5,680	1,090	578

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 2005, BY WATER YEAR (WY)*

MEAN	30.4	36.1	31.1	27.3	26.3	30.8	69.6	269	363	92.2	29.7	25.1
MAX	85.4	76.9	53.6	44.3	54.4	72.8	204	683	911	413	153	185
(WY)	(1913)	(1999)	(1977)	(1997)	(1962)	(1972)	(1943)	(1944)	(1995)	(1975)	(1998)	(1923)
MIN	8.84	13.0	13.4	12.3	10.7	16.7	15.8	22.4	12.5	13.0	7.98	3.47
(WY)	(1965)	(1955)	(1966)	(1967)	(1960)	(1957)	(1981)	(2004)	(2004)	(1985)	(1980)	(1981)

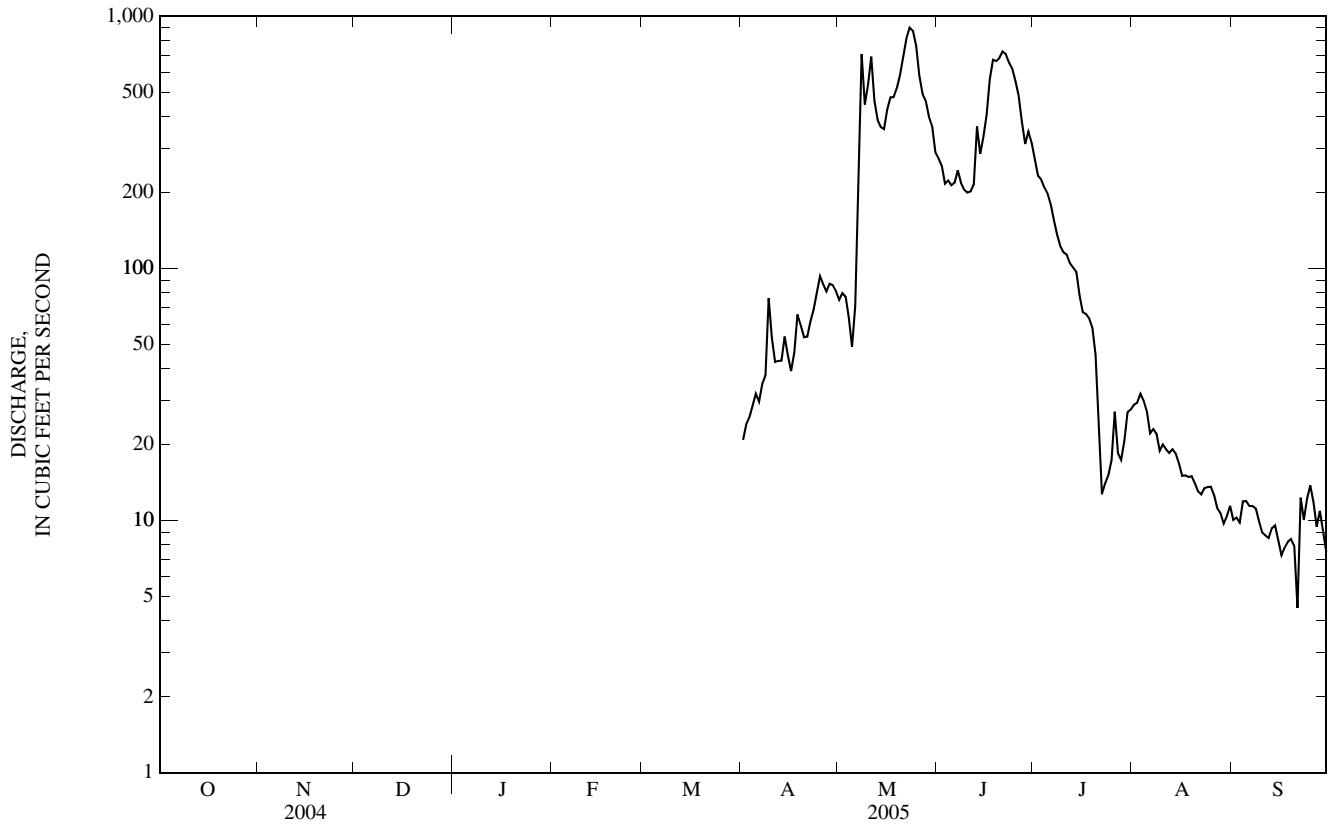
06323000 PINEY CREEK AT KEARNY, WY—Continued

SUMMARY STATISTICS

	FOR 2005 WATER YEAR*	WATER YEARS 1903 - 2005*
ANNUAL MEAN	--	86.4
HIGHEST ANNUAL MEAN	--	168 1944
LOWEST ANNUAL MEAN	--	27.8 1985
HIGHEST DAILY MEAN	902 May 23	1,780 Jun 15, 1963
LOWEST DAILY MEAN	4.5 Sep 21	1.9 Oct 3, 1981, Sep 14-18, 1985
MAXIMUM PEAK FLOW	999 May 22	3,410 ^a Jun 15, 1963
MAXIMUM PEAK STAGE	4.15 May 22	6.05 Jun 15, 1963
ANNUAL RUNOFF (AC-FT)	--	62,560

* For period of operation.

a From rating curve extended above 1,800 ft³/s.



06323550 CLEAR CREEK ABOVE DOUBLE CROSSING CREEK, NEAR CLEARMONT, WY

LOCATION.--Lat 44°34'55", long 106°26'17" (NAD 83), in NW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.12 T.53 N., R.80 W., Sheridan County, Hydrologic Unit 10090206, 50 ft upstream from bridge on county road 197 and 4.8 mi southwest of Clearmont.

PERIOD OF RECORD.--July 2004 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Sodium adsorption ratio (00931)
OCT 19...	0850	90	658	9.6	89	8.2	767	-1.0	5.5	330	77.1	34.4	.9
NOV 23...	1225	67	660	13.0	104	8.4	762	4.5	.5	340	81.6	33.8	.9
DEC 21...	1200	56	661	12.2	97	8.2	771	.5	.0	350	83.6	33.9	.9
JAN 27...	0940	62	657	13.5	108	8.0	872	3.0	.0	390	93.3	38.5	1
FEB 24...	0745	27	658	10.9	87	8.2	904	-3.0	.0	400	94.4	39.5	1
MAR 29...	0830	50	648	9.3	93	8.3	928	7.5	8.0	440	104	43.9	1
APR 27...	1920	84	658	11.7	115	8.5	887	1.5	8.0	390	86.4	41.2	1
MAY 24...	1715	1,460	658	8.2	86	7.7	158	8.0	11.0	58	14.9	5.04	.4
JUN 22...	1615	1,080	656	7.9	100	7.8	167	32.0	19.5	67	17.2	5.92	.4
JUL 26...	1720	146	665	9.2	114	8.2	713	24.0	19.0	290	80.6	22.0	.7
AUG 25...	1245	170	661	9.1	110	8.4	744	22.5	17.5	330	83.1	29.8	.8
SEP 22...	0715	52	663	8.3	89	8.0	936	7.0	12.0	430	102	41.2	1

Date	Sodium, water, filtered, mg/L (00930)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT 19...	38.3	531
NOV 23...	40.3	552
DEC 21...	40.7	550
JAN 27...	43.4	598
FEB 24...	45.3	606
MAR 29...	50.5	675
APR 27...	50.7	655
MAY 24...	6.34	110
JUN 22...	6.91	114
JUL 26...	28.1	498
AUG 25...	32.2	508
SEP 22...	47.4	686

06324000 CLEAR CREEK NEAR ARVADA, WY

LOCATION.--Lat 44°52'18", long 106°04'56" (NAD 27), in SE ¼ sec.36, T.57 N., R.77 W., Sheridan County, Hydrologic Unit 10090206, on right bank 600 ft downstream from Cabin Creek, 1.8 mi upstream from mouth, and 16 mi north of Arvada.

DRAINAGE AREA.--1,110 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1915 to April 1919 and April 1928 to May 1929 (no winter records), September 1939 to September 1982, January 2003 to current year.

REVISED RECORDS.--WSP 1309: 1928(M).

GAGE.--Water-stage recorder. Elevation of gage is 3,506.51 ft above NGVD of 1929. July 21, 1915 to April 30, 1919, nonrecording gage at same site at different datum. April 15, 1928 to May 26, 1929, nonrecording gage at site 0.2 mi upstream from station at different datum. September 13, 1939 to January 14, 1951, nonrecording gage at present site and datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, 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, 135,500 acre-ft. Diversions for irrigation of about 35,000 acres upstream from station. Diversion to Kendrick canal about 4.5 mi upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	73	e48	e52	e100	e78	53	85	252	511	103	90
2	94	67	e54	e46	e96	79	53	82	223	436	120	86
3	115	66	e66	e42	e90	82	53	79	229	385	101	76
4	104	64	e80	e42	e86	66	52	74	193	369	100	76
5	106	69	e84	e42	e80	63	51	69	176	333	100	77
6	87	70	e80	e40	e80	62	53	66	182	299	106	78
7	81	68	e80	e42	e74	60	53	62	195	269	102	69
8	82	67	e80	e43	e62	60	53	77	275	231	96	36
9	79	68	e81	e45	e52	61	61	720	281	210	90	34
10	72	67	70	e45	e62	62	79	556	243	180	98	32
11	69	66	72	e44	e66	60	83	935	234	158	107	27
12	69	63	73	e44	e70	61	74	1,910	214	151	121	35
13	70	64	70	e44	e70	61	67	910	233	146	127	35
14	69	64	79	e43	e70	62	60	642	579	133	140	36
15	82	64	e80	e42	e66	63	54	611	434	127	151	42
16	80	63	e80	e40	e62	59	52	e621	391	111	154	41
17	91	61	e70	e45	e70	62	53	e727	447	74	149	33
18	89	63	e80	e50	e70	62	51	876	705	55	133	37
19	99	63	e78	e54	e74	61	54	811	966	54	122	42
20	98	63	e78	e60	e76	59	74	801	1,040	83	129	42
21	94	63	e78	e65	e78	65	109	1,130	1,020	61	124	29
22	94	e58	e62	e72	e78	67	112	1,450	930	32	112	19
23	93	e52	e42	e78	e80	63	107	1,350	949	19	105	17
24	96	e58	e62	e84	e79	62	94	1,270	950	11	102	19
25	98	e64	e64	e84	e80	59	94	1,290	917	19	120	24
26	96	66	e66	e88	e76	60	85	940	818	23	120	36
27	75	65	e66	e88	e78	59	84	617	704	41	116	48
28	72	e54	e66	e92	e78	58	84	430	578	100	113	51
29	76	e48	e64	e96	---	57	88	355	477	115	115	48
30	83	e41	e62	e100	---	56	85	308	500	92	105	51
31	80	---	e56	e100	---	54	---	304	---	88	96	---
TOTAL	2,688	1,882	2,171	1,852	2,103	1,943	2,125	20,158	15,335	4,916	3,577	1,366
MEAN	86.7	62.7	70.0	59.7	75.1	62.7	70.8	650	511	159	115	45.5
MAX	115	73	84	100	100	82	112	1,910	1,040	511	154	90
MIN	69	41	42	40	52	54	51	62	176	11	90	17
AC-FT	5,330	3,730	4,310	3,670	4,170	3,850	4,210	39,980	30,420	9,750	7,090	2,710

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 2005, BY WATER YEAR (WY)*

MEAN	95.1	104	85.8	70.7	81.1	153	173	430	671	184	63.9	78.8
MAX	246	286	296	292	232	450	436	1,427	2,229	863	256	274
(WY)	(1981)	(1981)	(1981)	(1981)	(1962)	(1943)	(1965)	(1978)	(1944)	(1928)	(1968)	(1915)
MIN	17.5	31.6	25.0	22.8	25.0	37.2	20.4	1.79	1.00	4.79	0.98	2.04
(WY)	(1956)	(1917)	(1917)	(1980)	(1917)	(1982)	(1961)	(1960)	(2004)	(1960)	(1966)	(1955)

YELLOWSTONE RIVER BASIN

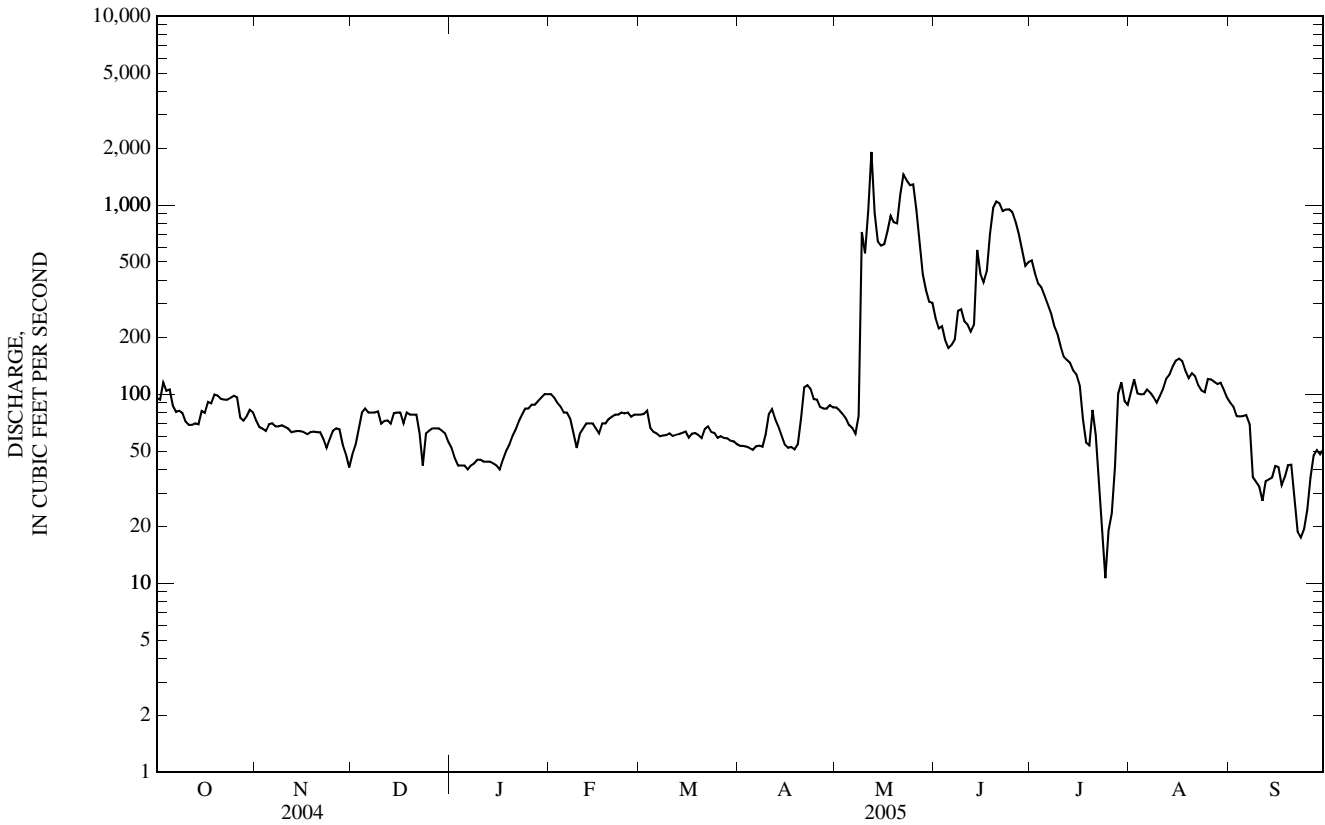
06324000 CLEAR CREEK NEAR ARVADA, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1915 - 2005*	
ANNUAL TOTAL	18,031.72		60,116		--	
ANNUAL MEAN	49.3		165		178	
HIGHEST ANNUAL MEAN	--		--		408 1944	
LOWEST ANNUAL MEAN	--		--		45.6 2004	
HIGHEST DAILY MEAN	202	Jul 26	1,910	May 12	4,880	Jun 17, 1963
LOWEST DAILY MEAN	0.35	Jul 21	11	Jul 24	0.00	Many days, several years
ANNUAL SEVEN-DAY MINIMUM	0.48	May 31	27	Sep 20	0.00	Several years
MAXIMUM PEAK FLOW	--		2,370	May 12	9,600 ^a	Aug 5, 1954
MAXIMUM PEAK STAGE	--		5.96	May 12	10.45	Aug 5, 1954
ANNUAL RUNOFF (AC-FT)	35,770		119,200		129,200	
10 PERCENT EXCEEDS	89		435		375	
50 PERCENT EXCEEDS	54		78		85	
90 PERCENT EXCEEDS	0.86		44		20	

* For period of operation.

a From rating curve extended above 2,500 ft³/s on basis of slope-area measurement of peak flow.

e Estimated.



06324000 CLEAR CREEK NEAR ARVADA, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1949-54, 1967-92, October 2000 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 2003 to current year (seasonal).

WATER TEMPERATURE: April 2003 to current year (seasonal).

INSTRUMENTATION.--Water-quality monitor for specific conductance and water temperature.

REMARKS.--Specific conductance excellent October 1-24, 27, 28, April 16-26, 28, 29, May 10 to June 6, June 9-22, July 8-24, and July 27 to September 30; good October 25, 26, 29, 30, April 27, 30, May 1, June 7, 8, June 23 to July 7, and June 25, 26; fair October 31, November 1, and May 2, 3; and poor November 2-4 and May 4-9. Water temperature records are excellent. Water-temperature records represent water temperature at sensor within 0.2°C.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 2080 microsiemens per centimeter at 25°C (µS/cm), June 10, 11, 2004; minimum recorded, 196 µS/cm, May 25, 2005.

WATER TEMPERATURE: Maximum recorded, 33.8°C, July 19, 2003; minimum recorded, -0.1°C, October 31 to November 2, and November 4-6, 2003.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,380 µS/cm, September 28; minimum recorded, 196 µS/cm, May 25.

WATER TEMPERATURE: Maximum recorded, 30.6°C, July 24; minimum recorded, 2.5°C, November 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT													
07...	0810	80	670	9.8	104	8.2	917	7.0	12.0	410	96.2	42.4	3.87
26...	1525	97	667	11.2	111	8.5	1,000	11.0	9.0	460	108	47.0	4.08
NOV													
05...	0730	72	673	--	--	8.2	1,070	.5	4.0	500	117	51.7	4.50
18...	1330	63	671	12.7	108	8.3	1,080	15.0	3.0	500	115	51.0	4.12
DEC													
09...	0830	81	666	13.2	104	8.2	1,170	4.5	.0	570	135	56.0	4.42
20...	1350	78	666	12.3	97	8.3	1,040	4.5	.0	490	117	48.4	3.80
JAN													
13...	0830	44	677	9.9	77	7.9	1,190	-15.0	.0	590	141	58.6	4.40
27...	1000	88	664	12.6	99	8.3	985	3.0	.0	470	112	47.5	5.35
FEB													
10...	0800	62	670	12.2	95	8.3	1,240	-7.0	.0	550	130	55.1	4.12
24...	1300	79	671	13.9	110	8.4	1,150	14.5	.5	530	123	54.0	3.98
MAR													
09...	0805	58	669	11.0	99	8.5	1,140	6.5	5.0	550	127	55.7	4.28
29...	1300	59	655	10.2	112	8.4	1,160	12.5	12.5	540	123	57.4	4.22
APR													
12...	1235	73	669	10.6	112	8.4	974	20.0	12.0	420	95.4	45.4	3.79
27...	1735	85	670	10.7	110	8.3	973	2.0	10.5	430	96.1	46.5	4.46
MAY													
09...	1520	924	667	8.4	86	7.9	383	--	10.5	150	36.1	13.8	3.65
27...	0930	634	672	9.7	101	8.2	279	16.0	11.5	110	27.1	10.5	1.56
JUN													
08...	0830	235	666	8.4	95	8.2	732	18.0	14.5	310	69.9	33.5	3.45
15...	1230	434	670	8.6	105	8.2	643	30.0	18.5	280	60.8	30.4	4.10
JUL													
07...	1415	273	672	8.6	120	8.1	432	34.0	25.5	180	45.4	17.4	1.72
26...	1530	27	677	8.5	111	8.3	983	23.0	22.5	430	96.2	45.1	4.08
AUG													
10...	0915	95	673	7.7	102	8.3	954	24.0	22.5	450	107	44.8	4.98
25...	0815	113	674	7.7	93	8.3	941	15.0	18.5	430	104	42.3	4.91
SEP													
08...	1930	28	664	7.9	109	8.1	1,060	21.0	24.0	470	109	46.9	5.27
27...	0915	46	668	9.8	102	8.3	1,280	13.5	11.0	580	128	64.1	5.76

06324000 CLEAR CREEK NEAR ARVADA, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO ₃ (29801)	Alkalinity, wat flt inc tit field, mg/L as CaCO ₃ (39086)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT													
07...	1	49.3	20	178	--	2.71	.2	5.19	311	617	.90	143	663
26...	1	54.4	20	186	--	3.19	.2	5.55	344	677	.98	188	720
NOV													
05...	1	64.0	21	214	--	3.60	.2	6.75	394	770	1.11	159	819
18...	1	61.2	21	209	--	3.19	.2	7.84	390	758	1.12	141	826
DEC													
09...	1	66.2	20	238	--	3.83	.2	12.1	407	828	1.21	194	889
20...	1	59.8	21	219	--	3.29	.2	10.3	362	736	1.06	164	777
JAN													
13...	1	65.7	19	255	--	4.56	.2	13.4	422	863	1.26	110	924
27...	1	55.6	20	201	--	4.90	.2	11.4	343	700	1.01	176	741
FEB													
10...	1	67.9	21	242	238	4.59	.2	9.45	405		1.23	152	908
24...	1	62.1	20	217	--	3.94	.2	8.74	391	778	1.13	178	829
MAR													
09...	1	65.9	21	207	205	3.71	.2	2.60	416		1.15	133	847
29...	1	67.8	21	210	--	4.26	.2	3.31	432	818	1.20	140	882
APR													
12...	1	53.8	21	182	--	3.37	.2	3.41	331	645	.95	138	700
27...	1	57.1	22	169	--	3.58	.2	1.34	342	652	.97	163	710
MAY													
09...	.6	15.5	18	83	--	1.70	.1	7.22	101	229	.35	634	254
27...	.5	12.5	19	65	--	1.13	E.1	9.27	67.1	168	.25	312	182
JUN													
08...	.9	37.2	20	138	151	3.28	.1	10.5	240		.70	326	514
15...	.9	34.5	21	109	--	2.72	.1	12.0	223	433	.62	535	456
JUL													
07...	.6	19.9	19	99	--	1.36	.1	6.69	114	266	.38	205	279
26...	1	56.8	22	149	132	2.70	.2	1.83	364		.96	51.5	706
AUG													
10...	1	50.1	19	113	167	2.68	.2	2.48	345	658	.96	182	708
25...	1	46.3	19	172	171	2.65	.2	4.61	334		.94	210	689
SEP													
08...	1	55.6	20	154	165	3.10	.3	4.22	404		1.06	59.1	782
27...	1	68.2	20	150	199	3.94	.2	5.23	513	908	1.37	120	1,010

06324000 CLEAR CREEK NEAR ARVADA, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro- gen, wat un- f by anal- ysis, mg/L (62855)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Alum- inum, water, unfltrd recover- able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recover- able, ug/L (01007)	Beryll- ium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)	Selen- ium, water, unfltrd ug/L (01147)
OCT												
07...	--	--	--	--	--	81	.6	33	<.06	30	11.2	.8
26...	--	--	--	--	--	43	.6	30	<.06	29	9.8	.7
NOV												
05...	--	--	--	--	--	25	.5	29	<.06	43	11.7	1.3
18...	--	--	--	--	--	29	.4	29	<.06	36	12.0	1.0
DEC												
09...	--	--	--	--	--	31	.6	38	<.06	19	10.5	1.1
20...	--	--	--	--	--	31	.4	34	<.06	20	11.0	1.1
JAN												
13...	--	--	--	--	--	20	.4	40	<.06	16	18.4	1.0
27...	--	--	--	--	--	52	.4	33	<.06	20	19.5	.7
FEB												
10...	--	--	--	--	--	27	.4	35	<.06	20	12.9	1.0
24...	--	--	--	--	--	73	.5	31	<.06	12	14.6	1.2
MAR												
09...	--	--	--	--	--	52	.5	36	<.06	45	26.3	1.1
29...	--	--	--	--	--	73	.7	38	<.06	47	28.6	.9
APR												
12...	--	--	--	--	--	85	.6	30	<.06	53	21.8	.6
27...	--	--	--	--	--	44	.6	31	<.06	61	20.5	1.0
MAY												
09...	--	--	--	--	--	8,820	.5	197	.83	35	9.9	1.1
27...	--	--	--	--	--	1,150	.5	39	.13	54	16.0	.6
JUN												
08...	--	--	--	--	--	551	.7	55	E.05	21	10.0	1.2
15...	--	--	--	--	--	1,220	.7	58	.13	19	8.8	.9
JUL												
07...	<.04	<.06	<.008	.32	<.02	223	.7	30	<.06	23	7.3	.5
26...	--	--	--	--	--	83	.6	53	<.06	9	20.5	.8
AUG												
10...	--	--	--	--	--	120	.8	46	E.03	9	5.4	1.3
25...	--	--	--	--	--	166	.7	44	E.04	E5	6.6	E.3
SEP												
08...	--	--	--	--	--	66	.71	43	<.06	8	14.6	.7
27...	--	--	--	--	--	62	.58	42	<.06	<6	10.6	--

< -- Less than.

E -- Estimated.

06324000 CLEAR CREEK NEAR ARVADA, WY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	581	550	564	359	339	348	944	912	931	994	964	980
2	696	581	631	366	356	360	962	929	945	1,010	977	995
3	742	696	725	389	366	375	930	905	912	1,030	995	1,010
4	729	709	717	398	389	394	936	908	928	1,040	1,010	1,030
5	765	727	746	410	392	399	950	926	940	1,060	1,030	1,050
6	792	765	777	426	409	417	948	932	942	1,070	1,050	1,060
7	794	760	783	447	426	434	956	916	940	1,070	1,050	1,060
8	760	668	727	486	447	468	927	915	921	1,090	1,060	1,070
9	668	577	603	536	486	513	948	919	938	1,090	1,070	1,090
10	579	554	563	552	532	541	---	---	---	1,140	1,070	1,090
11	622	571	600	586	552	564	993	969	979	1,220	1,140	1,180
12	668	622	643	617	586	606	993	970	986	1,230	1,210	1,220
13	666	645	655	634	617	627	970	936	951	1,230	1,200	1,220
14	664	493	564	654	634	644	962	934	949	1,240	1,200	1,230
15	677	571	638	688	654	672	965	946	955	1,290	1,240	1,270
16	610	562	591	710	686	697	946	916	932	1,300	1,260	1,280
17	562	471	520	736	708	719	951	926	936	1,270	1,250	1,260
18	471	328	394	779	736	753	946	927	937	1,250	1,220	1,240
19	328	267	292	836	779	810	931	916	925	1,220	1,210	1,220
20	267	251	257	875	834	856	---	---	---	1,250	1,220	1,240
21	258	243	248	890	874	879	---	---	---	1,240	1,230	1,240
22	249	236	242	886	871	878	932	924	927	1,230	1,220	1,230
23	250	230	240	927	878	902	952	932	943	1,220	1,200	1,210
24	238	227	232	990	927	962	948	935	941	1,200	1,190	1,190
25	239	232	236	996	978	988	961	935	949	1,280	1,190	1,230
26	285	238	246	1,040	996	1,010	954	920	936	1,370	1,280	1,340
27	369	255	288	1,190	1,040	1,120	960	923	943	1,370	1,290	1,320
28	314	281	297	1,190	1,080	1,150	978	953	965	1,380	1,310	1,360
29	352	314	330	1,080	924	986	968	953	961	1,360	1,320	1,350
30	365	352	360	964	925	946	968	953	959	1,320	1,220	1,260
31	---	---	---	929	911	920	969	956	963	---	---	---
MONTH	794	227	490	1,190	339	708	---	---	---	1,380	964	1,180

06324000 CLEAR CREEK NEAR ARVADA, WY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	15.8	12.1	13.6	22.6	19.0	20.7	27.7	21.3	24.3	21.0	14.8	17.6
2	17.9	11.6	14.7	23.9	19.6	21.5	27.2	23.7	25.4	22.4	16.1	18.9
3	19.8	14.6	17.2	23.1	19.6	21.4	24.4	20.9	22.9	23.1	16.9	19.7
4	19.4	15.9	17.7	23.3	19.0	21.2	25.5	18.9	21.9	23.7	18.4	20.5
5	22.2	16.0	19.0	25.0	19.6	22.3	26.6	20.8	23.5	23.0	18.5	20.4
6	22.4	17.9	20.2	26.6	21.0	23.8	27.2	21.6	24.2	22.8	17.7	19.9
7	20.3	17.2	18.6	26.7	22.2	24.6	27.3	21.9	24.3	24.2	18.6	21.0
8	18.3	14.7	16.7	28.3	22.5	25.5	26.2	21.6	23.7	24.5	17.4	20.8
9	18.6	15.5	17.0	28.7	23.4	26.2	26.8	21.7	24.0	24.2	18.7	21.4
10	19.9	14.6	17.3	26.9	23.0	24.4	25.9	22.2	23.5	23.6	18.3	20.7
11	20.6	16.4	18.5	26.5	21.1	23.9	23.7	20.3	22.1	22.7	17.5	19.8
12	18.9	16.2	17.2	28.7	22.6	25.7	21.6	17.7	19.9	19.6	16.1	17.6
13	18.0	14.2	16.1	29.9	24.5	27.1	18.5	16.3	17.3	18.3	12.8	15.8
14	18.5	14.3	16.5	28.5	23.4	26.0	20.8	15.3	17.9	18.7	12.5	15.8
15	20.8	15.9	18.4	29.6	23.5	26.3	23.0	17.5	20.2	19.7	12.8	16.4
16	24.1	18.6	21.3	29.0	24.5	26.8	23.4	19.3	21.2	20.2	13.2	16.9
17	24.5	20.8	22.6	24.5	20.9	22.6	23.9	19.8	21.6	18.1	14.4	15.6
18	22.8	20.1	21.5	26.7	18.1	22.4	21.9	19.1	20.6	15.6	12.2	14.0
19	22.4	19.4	20.9	28.2	19.8	24.1	22.6	17.7	19.9	17.8	10.8	14.3
20	23.6	20.0	21.7	28.8	22.1	25.3	24.0	18.7	21.3	18.7	11.3	15.2
21	23.9	20.8	22.4	28.7	23.2	25.8	25.1	19.6	22.3	16.8	13.9	14.9
22	23.1	21.1	22.1	28.3	22.1	25.2	25.5	20.7	22.9	18.7	13.1	15.6
23	22.4	20.2	21.2	29.0	23.2	25.8	23.0	20.7	22.0	17.7	14.2	15.8
24	22.2	19.4	20.9	30.6	22.4	26.1	23.1	18.4	20.5	15.1	12.1	13.4
25	21.8	19.4	20.6	25.7	20.1	23.0	22.2	18.3	20.0	13.5	11.6	12.3
26	20.4	18.6	19.3	23.6	17.6	20.3	22.0	17.0	19.4	15.7	9.4	12.4
27	20.9	17.0	18.9	25.5	18.0	21.7	21.6	16.9	19.2	15.6	10.6	13.2
28	22.3	18.7	20.4	26.6	19.6	23.4	22.6	17.0	19.6	16.0	11.5	13.4
29	21.3	19.1	20.3	26.8	22.1	24.3	23.5	17.9	20.5	16.0	10.1	13.2
30	22.1	17.9	20.0	27.4	22.5	24.8	21.7	17.8	19.7	16.9	11.9	14.4
31	---	---	---	24.8	22.6	23.6	19.9	15.4	17.5	---	---	---
MONTH	24.5	11.6	19.1	30.6	17.6	24.1	27.7	15.3	21.4	24.5	9.4	16.7

06324200 L X BAR CREEK AT MOUTH, NEAR MOORHEAD, MT

LOCATION.--Lat 44°55'19", long 105°57'57" (NAD 83), in SE¹/₄ NW¹/₄ SE¹/₄ sec.14 T.57 N., R.76 W., Campbell County, Hydrologic Unit 10090207, at culvert on county road 269 and 10.9 mi southwest of Moorhead, MT.

PERIOD OF RECORD.--July 2004 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)
OCT 26...	1210	.00	--	--	--	--	--	--	--	--	--	--	--
NOV 18...	0945	.00	--	--	--	--	--	--	--	--	--	--	--
DEC 20...	0955	.00	--	--	--	--	--	--	--	--	--	--	--
JAN 26...	1505	.00	--	--	--	--	--	--	--	--	--	--	--
FEB 24...	1005	.00	--	--	--	--	--	--	--	--	--	--	--
MAR 29...	1000	.00	--	--	--	--	--	--	--	--	--	--	--
APR 11...	1430	.00	--	--	--	--	--	--	--	--	--	--	--
MAY 26...	1249	.00	--	--	--	--	--	--	--	--	--	--	--
JUN 14...	0900	.36	672	8.2	87	8.2	3,400	20.0	12.0	1,000	145	163	6
JUL 07...	1650	.00	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	1230	.00	--	--	--	--	--	--	--	--	--	--	--
SEP 27...	1250	.25	665	10.2	112	8.7	3,260	22.5	13.0	310	28.4	57.0	17

Date	Sodium, water, fltrd, mg/L (00930)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT 26...	--	--
NOV 18...	--	--
DEC 20...	--	--
JAN 26...	--	--
FEB 24...	--	--
MAR 29...	--	--
APR 11...	--	--
MAY 26...	--	--
JUN 14...	447	2,810
JUL 07...	--	--
AUG 10...	--	--
SEP 27...	665	2,300

06324300 S A CREEK AT MOUTH, NEAR MOORHEAD, MT

LOCATION.--Lat 44°56'30", long 106°55'34" (NAD 83), in NE¹/₄ SW¹/₄ NE¹/₄ sec.7 T.57 N., R.75 W., Campbell County, Hydrologic Unit 10090207, at bridge on county road 269 and 9.0 mi southwest of Moorhead, MT.

PERIOD OF RECORD.--July 2004 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Sodium adsorption ratio (00931)
OCT 26...	1135	E.03	670	10.2	100	8.0	7,440	9.5	7.5	2,600	353	422	10
NOV 18...	0915	E2.1	673	12.3	97	8.4	5,240	-1.5	.0	1,400	143	256	12
DEC 20...	1025	.28	667	9.4	75	7.8	6,600	3.0	.0	2,100	251	350	11
JAN 26...	1420	3.2	669	11.4	91	8.2	6,470	10.0	.0	2,100	272	356	10
FEB 23...	1730	7.7	675	12.4	97	8.6	3,110	3.5	.0	700	76.9	123	9
MAR 29...	0900	.95	658	8.0	80	8.2	6,560	8.0	8.0	2,200	230	396	10
APR 12...	1350	.74	668	11.6	121	8.2	6,980	14.0	10.0	2,700	276	486	11
MAY 26...	1200	.40	676	7.1	78	8.1	7,300	17.0	13.0	2,500	244	462	10
JUN 15...	0900	1.6	651	9.2	115	8.3	5,130	22.0	17.5	1,800	197	308	8
JUL 07...	1710	.01	674	8.5	129	7.8	6,940	34.5	29.0	1,900	209	346	11
AUG 10...	1300	E.02	677	7.0	99	7.9	8,130	30.0	25.5	2,800	320	489	11
SEP 27...	1400	.04	674	9.7	126	7.9	7,990	24.0	20.5	2,600	314	436	10

Date	Sodium, water, filtered, mg/L (00930)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, filtered, mg/L as N (00608)	Nitrite + nitrate water filtered, mg/L as N (00631)	Nitrite water, filtered, mg/L as N (00613)	Total nitrogen, wat unfiltered by analysis, mg/L (62855)	Orthophosphate, water, filtered, mg/L as P (00671)
OCT 26...	1,240	6,980	--	--	--	--	--
NOV 18...	993	4,370	--	--	--	--	--
DEC 20...	1,160	5,870	--	--	--	--	--
JAN 26...	1,050	5,760	--	--	--	--	--
FEB 23...	537	2,330	--	--	--	--	--
MAR 29...	1,110	5,890	--	--	--	--	--
APR 12...	1,350	7,340	--	--	--	--	--
MAY 26...	1,160	6,540	--	--	--	--	--
JUN 15...	802	4,420	--	--	--	--	--
JUL 07...	1,100	6,110	<.04	<.06	<.008	1.10	<.02
AUG 10...	1,310	7,870	--	--	--	--	--
SEP 27...	1,140	7,820	--	--	--	--	--

< -- Less than.
E -- Estimated.

YELLOWSTONE RIVER BASIN

06324500 POWDER RIVER AT MOORHEAD, MT

LOCATION.--Lat 45°03'25", long 105°52'39" (NAD 27), in NE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.18, T.9 S., R.48 E., Powder River County, Hydrologic Unit 10090207, on left bank 25 ft downstream from bridge on Powder River, 7.3 mi upstream from Buffalo Creek, and at river mile 183.7.

DRAINAGE AREA.--8,088 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1929 to September 1972, October 1974 to current year. Monthly discharge only for some periods, published in WSP 1309.

REVISED RECORDS.--WSP 1309: 1932(M). WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 3,334.6 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to August 28, 1931, nonrecording gage at site 0.3 mi upstream from station at different datum. August 28, 1931 to March 21, 1956, water-stage recorder at site 1.2 mi upstream from station at different datum. March 22 to July 24, 1956, nonrecording gage at site 0.3 mi downstream from station at different datum. July 25 to September 12, 1956, nonrecording gage at present site and datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Some regulation by three reservoirs in Wyoming with combined usable capacity of 36,800 acre-ft. Diversions for irrigation of about 66,300 acres upstream from station. Station operated and record provided by the Montana Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	258	e85	e130	e170	e180	182	314	908	861	118	88
2	86	243	e100	e100	e160	e200	183	357	853	744	134	83
3	92	244	e150	e120	e170	e240	184	365	1,070	644	251	78
4	110	243	e200	e130	e170	e230	187	304	978	608	170	67
5	122	254	e200	e100	e150	e255	176	270	844	531	144	65
6	123	248	e180	e100	e140	246	170	277	718	452	130	63
7	108	232	e160	e150	e120	234	171	271	689	380	122	62
8	111	231	e150	e150	e110	220	164	323	841	341	111	57
9	116	236	e160	e130	e140	221	172	798	857	278	106	39
10	104	218	e160	e140	e140	206	229	1,190	748	225	114	35
11	102	216	e160	e110	e150	207	270	1,180	683	197	118	33
12	95	214	e160	e100	e170	188	301	2,430	622	189	182	29
13	96	212	e150	e90	e200	186	268	2,900	589	134	177	37
14	95	217	e130	e80	e180	182	250	2,880	887	92	168	37
15	112	223	e100	e70	e150	184	208	2,280	858	85	171	38
16	124	229	e120	e90	e150	191	185	1,930	793	81	189	42
17	131	224	e150	e120	e150	185	172	1,800	866	60	226	40
18	149	226	e150	e160	e140	185	154	1,830	1,010	48	234	37
19	165	227	e150	e200	e150	186	139	1,780	1,300	42	221	40
20	173	221	e140	e180	e170	179	178	1,720	1,320	45	193	45
21	205	233	e130	e160	e170	193	247	1,850	1,300	51	185	42
22	211	230	e120	e150	e150	204	306	2,050	1,320	41	162	36
23	206	232	e100	e170	e160	195	298	2,090	1,270	93	137	27
24	205	286	e110	e160	e170	187	383	2,050	1,350	182	127	28
25	226	325	e130	e150	e170	189	381	2,060	1,460	99	119	31
26	262	277	e150	e150	e180	187	398	1,820	1,330	76	134	35
27	332	e200	e150	e150	e180	193	386	1,530	1,150	68	121	43
28	286	e100	e150	e150	e170	195	311	1,310	995	72	117	55
29	259	e70	e140	e170	---	181	290	1,120	842	118	115	54
30	273	e80	e130	e170	---	165	312	1,010	784	109	106	54
31	275	---	e130	e170	---	169	---	965	---	94	92	---
TOTAL	5,030	6,649	4,395	4,200	4,430	6,163	7,255	43,054	29,235	7,040	4,694	1,420
MEAN	162	222	142	135	158	199	242	1,389	974	227	151	47.3
MAX	332	325	200	200	200	255	398	2,900	1,460	861	251	88
MIN	76	70	85	70	110	165	139	270	589	41	92	27
AC-FT	9,980	13,190	8,720	8,330	8,790	12,220	14,390	85,400	57,990	13,960	9,310	2,820

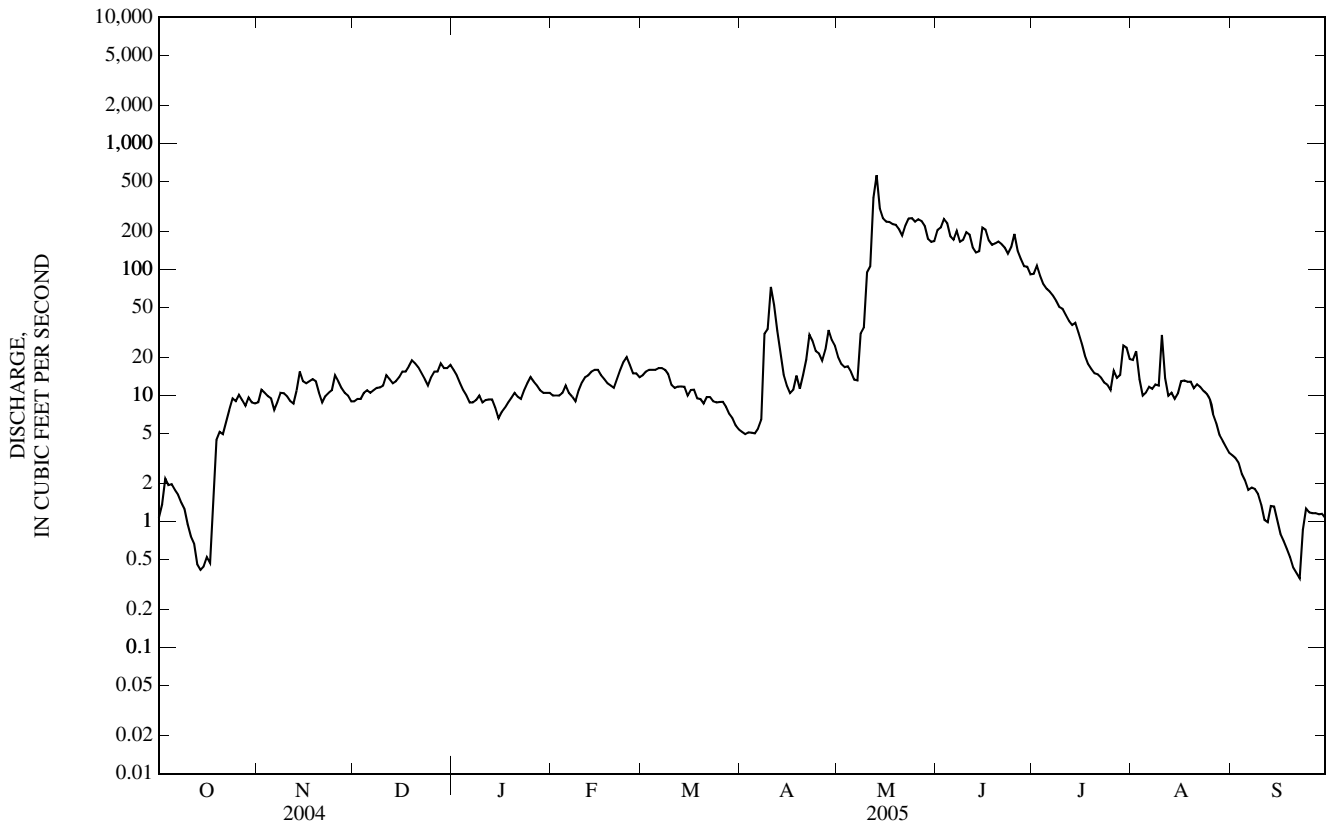
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2005, BY WATER YEAR (WY)*

MEAN	223	223	159	152	282	603	501	1,042	1,333	454	171	142
MAX	897	660	326	445	1,200	2,290	1,314	5,553	4,131	2,500	1,219	686
(WY)	(1995)	(1999)	(1981)	(1981)	(1930)	(1947)	(1965)	(1978)	(1967)	(1937)	(1941)	(1982)
MIN	16.1	80.0	56.2	27.2	20.9	185	117	82.6	31.1	33.9	0.60	1.28
(WY)	(1955)	(1936)	(1933)	(1950)	(1933)	(2002)	(1961)	(1934)	(2004)	(1961)	(1966)	(1960)

06324500 POWDER RIVER AT MOORHEAD, MT—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1930 - 2005*	
ANNUAL TOTAL	48,989.8		123,565		--	
ANNUAL MEAN	134		339		440	
HIGHEST ANNUAL MEAN	--		--		1,091	1978
LOWEST ANNUAL MEAN	--		--		109	1961
HIGHEST DAILY MEAN	975	Mar 13	2,900	May 13	27,500	May 20, 1978
LOWEST DAILY MEAN	5.0	Aug 24	27	Sep 23	0.00	Jul 15, 1931
ANNUAL SEVEN-DAY MINIMUM	7.8	Aug 19	35	Sep 21	0.00	Sep 4, 1960
MAXIMUM PEAK FLOW	--		3,610	May 13	33,000 ^a	May 20, 1978
MAXIMUM PEAK STAGE	--		6.33	May 13	17.70 ^b	Mar 21, 1956
ANNUAL RUNOFF (AC-FT)	97,170		245,100		319,000	
10 PERCENT EXCEEDS	265		895		1,020	
50 PERCENT EXCEEDS	100		173		214	
90 PERCENT EXCEEDS	23		71		45	

* For period of operation.
 a Gage height, 15.24 ft.
 b Ice jam, site and datum then in use.
 e Estimated.



06324500 POWDER RIVER AT MOORHEAD, MT—Continued

PERIOD OF RECORD.--Water years 1951-53, 1956-67, 1969-72, 1975-77, 2001 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1986 to November 1989, May 2001 to current year (seasonal operation).

WATER TEMPERATURE: February 1951 to September 1953, October 1955 to September 1957, October 1974 to September 1977, March 1978 to September 1981 (seasonal records only).

SUSPENDED-SEDIMENT DISCHARGE: October 1974 to September 1977, March 1978 to September 1996 (seasonal records only).

INSTRUMENTATION.--Specific conductance probe installed May 20, 2001.

REMARKS.--Specific conductance record is rated good to excellent except for the period June 2-4, which is rated fair, and June 5, 6, 10-29 and July 1-5 and 12, which are rated poor. Missing specific conductance data on May 11-31, July 6-9 and July 24 are due to equipment malfunction or sensor fouling.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE : Maximum daily, 5,920 microsiemens per centimeter ($\mu\text{S}/\text{cm}$) at 25.0°C, July 16, 2002; minimum, 406 $\mu\text{S}/\text{cm}$ at 25.0°C, June 24, 2005.

WATER TEMPERATURE: Maximum daily, 33.0°C, July 14, 1981; minimum daily 0.0°C on many days during winter.

SEDIMENT CONCENTRATION: Maximum daily mean, 53,500 mg/L May 27, 1980; minimum daily mean, 3 mg/L Sept. 16-18, 1996.

SEDIMENT LOAD: Maximum daily, 2,230,000 tons May 20, 1978; minimum daily, 0.17 ton Aug. 1, 1988 and Sept. 16, 1996.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 2,890 microsiemens per centimeter ($\mu\text{S}/\text{cm}$) at 25.0°C, July 25; minimum, 406 $\mu\text{S}/\text{cm}$ at 25.0°C, June 24.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT													
12...	1330	97	680	10.5	105	8.4	1,680	11.0	10.0	540	117	59.8	7.36
26...	0955	226	672	13.1	124	8.5	1,790	7.5	7.0	490	109	53.9	8.19
NOV													
03...	1300	268	677	12.2	108	8.4	1,900	17.5	5.0	570	128	59.4	8.43
17...	1720	226	678	11.9	102	8.4	1,910	5.0	3.5	540	118	58.4	7.61
DEC													
01...	1345	E85	678	13.7	106	8.3	2,540	9.0	0.0	680	146	77.1	9.64
23...	1030	E100	679	14.0	108	8.0	1,970	-15.0	0.0	640	151	62.8	8.22
JAN													
18...	1400	E160	675	10.7	83	7.7	2,220	13.0	0.0	700	171	65.9	8.65
26...	1315	150	672	11.8	92	8.3	1,660	7.0	0.0	540	131	53.0	7.47
FEB													
08...	1230	E110	671	13.4	105	8.4	1,870	-2.0	0.0	550	133	53.5	7.20
23...	1610	E160	675	12.6	98	8.4	1,940	6.0	0.0	580	137	58.4	7.20
MAR													
08...	1400	221	674	10.9	104	8.5	2,040	11.0	7.5	560	129	58.6	8.00
28...	1700	205	658	9.7	106	8.4	2,180	16.0	12.5	590	130	65.3	8.63
APR													
05...	1430	180	677	9.8	109	8.4	2,330	14.5	14.5	580	116	71.2	10.4
11...	1200	289	671	10.9	108	8.4	2,200	11.0	9.0	590	123	68.1	8.46
MAY													
05...	1300	275	674	9.1	107	8.5	1,870	21.0	17.0	500	113	54.1	8.21
25...	1540	2,050	680	9.3	102	8.3	500	13.0	14.5	140	33.6	13.8	2.65
JUN													
07...	1340	688	668	7.6	95	8.2	1,270	21.0	19.0	320	74.0	32.8	4.78
14...	1030	985	675	8.6	100	8.4	1,170	21.0	16.5	350	81.1	36.8	4.48
JUL													
07...	1825	382	676	6.6	97	8.3	953	32.5	28.5	270	64.7	26.1	3.41
12...	1445	200	677	7.6	113	8.4	1,170	41.0	29.5	350	79.9	36.1	4.17
AUG													
03...	1430	256	677	7.1	94	8.2	1,810	18.0	23.0	620	152	58.6	8.51
10...	1400	112	679	8.7	123	8.4	1,260	29.5	26.5	500	117	50.6	6.36
SEP													
06...	1730	73	681	9.6	124	8.4	1,150	25.0	22.0	470	102	51.1	5.79
27...	1530	46	675	9.9	117	8.4	1,320	21.0	17.0	530	110	62.5	5.93

06324500 POWDER RIVER AT MOORHEAD, MT—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Sodium adsorp- tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unf fixed end pt, lab, mg/L as CaCO ₃ (90410)	Alka- linity, wat flt fxd end lab, mg/L as CaCO ₃ (29801)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti- tuents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT													
12...	4	193	43	201	198	106	.4	3.90	547	1,150	1.68	323	1,230
26...	4	215	48	268	204	113	.5	5.41	577	1,210	1.72	773	1,270
NOV													
03...	4	232	47	280	217	117	.6	7.31	642	1,330	1.88	1,000	1,380
17...	4	220	47	285	225	126	.5	7.71	594	1,270	1.82	819	1,340
DEC													
01...	5	329	51	314	305	182	.6	10.2	807	1,750	2.51	E401	1,850
23...	5	265	47	326	327	140	.6	11.9	599	1,440	2.01	E388	1,480
JAN													
18...	4	264	45	354	356	160	.6	13.8	621	1,520	2.15	E657	1,580
26...	4	197	44	278	274	101	.4	10.9	493	1,160	1.62	483	1,190
FEB													
08...	4	226	47	--	253	120	.6	8.89	588	1,290	1.84	E384	1,350
23...	4	245	47	--	260	135	.6	14.1	591	1,350	1.88	E581	1,380
MAR													
08...	5	274	51	296	243	152	.6	7.78	619	1,400	1.93	849	1,420
28...	5	290	51	279	244	165	.6	6.39	664	1,480	2.12	861	1,560
APR													
05...	6	359	57	263	223	173	.6	5.79	761	1,630	2.25	806	1,660
11...	5	280	50	280	216	154	.6	5.13	734	1,500	2.12	1,220	1,560
MAY													
05...	5	257	52	261	208	119	.6	7.06	597	1,280	1.82	994	1,340
25...	2	46.7	41	119	81	18.0	.2	8.83	129	302	.43	1,740	314
JUN													
07...	3	130	46	186	150	54.8	.4	9.91	412	809	1.21	1,650	886
14...	3	123	43	180	153	58.8	.3	9.91	365	772	1.09	2,140	803
JUL													
07...	2	91.3	42	--	126	51.3	.2	7.51	269	589	.85	642	622
12...	3	118	42	154	153	59.0	.3	7.21	350	747	1.07	425	787
AUG													
03...	3	183	39	265	184	74.2	.4	5.99	683	1,280	1.87	951	1,380
10...	2	101	30	131	140	29.1	.3	3.27	476	867	1.27	283	935
SEP													
06...	2	75.7	26	--	139	11.4	.3	3.13	447	780	1.16	168	852
27...	2	87.4	26	156	153	10.0	.2	2.04	543	914	1.43	130	1,050

06324500 POWDER RIVER AT MOORHEAD, MT—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro- gen, wat unfl- trd, mg/L by anal- ysis, (62855)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, unfltrd mg/L (00665)	Alum- inum, water, unfltrd recover- able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recover- able, ug/L (01007)	Beryll- ium, water, unfltrd recover- able, ug/L (01012)	Boron, water, unfltrd recover- able, ug/L (01022)
OCT												
12...	<.010	<.016	<.002	.33	<.006	.033	311	.8	<2	37	<.06	201
26...	E.008	.151	E.001	1.06	<.006	.015	7,530	.7	--	174	.91	--
NOV												
03...	.022	.264	.002	1.19	E.003	.29	14,000	.8	7	164	.84	201
17...	.032	.207	.002	.81	E.004	.24	5,460	.8	--	116	.55	--
DEC												
01...	.059	.322	.004	.64	E.004	.064	1,100	1.3	E1	47	.10	283
23...	.054	.440	.007	.76	<.006	.068	1,600	.6	--	52	.11	--
JAN												
18...	.138	.597	.017	.96	<.006	.083	1,750	.7	E1	67	.15	268
26...	.098	.485	.016	.86	<.006	.166	860	.6	--	44	.08	--
FEB												
08...	.065	.536	.013	.82	E.003	.078	2,660	.9	E1	53	.12	195
23...	.041	.441	.011	.86	E.005	.19	4,150	.7	--	88	.32	--
MAR												
08...	.015	.245	.004	.87	E.005	.32	9,340	1.1	5	153	.53	213
28...	.014	.072	.003	.58	<.006	.25	5,170	1.0	--	116	.39	--
APR												
05...	E.006	.128	.002	.76	<.006	.23	5,050	1.7	4	129	.45	279
11...	.020	.021	E.001	.92	E.004	.40	6,450	1.2	--	165	.64	--
MAY												
05...	E.006	.357	.002	1.38	<.006	.54	7,650	1.2	4	156	1.07	212
25...	.013	.162	E.001	.94	E.003	.97	11,400	.9	--	264	1.30	--
JUN												
07...	E.009	.320	.002	1.53	.007	.56	12,600	.9	9	263	1.43	163
14...	<.010	<.016	E.001	.93	E.003	.44	7,870	.9	--	193	.83	--
JUL												
07...	E.006	<.016	E.001	.51	E.003	.176	1,750	.9	--	60	.18	--
12...	.010	<.016	E.001	.40	<.006	.092	698	1.1	E1	52	.06	125
AUG												
03...	<.010	.081	.004	2.64	<.006	.72	21,600	1.0	13	443	2.59	183
10...	<.010	<.016	<.002	.39	<.006	.035	404	.8	--	53	E.06	--
SEP												
06...	<.010	<.016	<.002	.42	<.006	.023	246	.62	.72	47	<.06	104
27...	<.010	E.011	<.002	.31	<.006	.010	94	.49	--	44	<.06	--

06324500 POWDER RIVER AT MOORHEAD, MT—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Cadmium water, unfltrd ug/L (01027)	Chrom- ium, water, unfltrd recover- able, ug/L (01034)	Copper, water, unfltrd recover- able, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover- able, ug/L (01045)	Lead, water, unfltrd recover- able, ug/L (01051)	Mangan- ese, water, fltrd, ug/L (01056)	Mangan- ese, water, unfltrd recover- able, ug/L (01055)	Mercury water, unfltrd recover- able, ug/L (71900)	Nickel, water, unfltrd recover- able, ug/L (01067)	Selen- ium, water, unfltrd ug/L (01147)	Zinc, water, unfltrd recover- able, ug/L (01092)
OCT												
12...	E.02	E.5	5.7	7	510	.62	5.2	20.4	--	4.53	1.9	4
26...	--	--	--	<6	--	--	.6	--	--	--	2.3	--
NOV												
03...	.40	11.5	24.8	<6	14,400	14.0	1.5	364	--	17.7	2.9	58
17...	--	--	--	<6	--	--	3.0	--	--	--	3.7	--
DEC												
01...	.06	1.4	13.9	<18	1,450	1.35	14.1	44.4	--	7.46	3.6	12
23...	--	--	--	E5	--	--	6.3	--	--	--	3.1	--
JAN												
18...	.08	5.0	12.6	E4	2,580	2.19	6.2	56.0	--	5.79	3.3	15
26...	--	--	--	7	--	--	6.6	--	--	--	2.3	--
FEB												
08...	.08	1.8	8.4	<6	2,060	1.87	6.4	40.1	--	5.30	3.8	12
23...	--	--	--	<30	--	--	4.2	--	--	--	3.9	--
MAR												
08...	.36	8.0	20.7	<6	11,600	11.2	4.0	246	--	14.9	3.5	57
28...	--	--	--	<6	--	--	3.9	--	--	--	2.5	--
APR												
05...	.26	5.6	25.0	<18	8,140	7.94	3.1	187	--	11.5	4.6	43
11...	--	--	--	<18	--	--	2.5	--	--	--	3.6	--
MAY												
05...	.46	8.1	29.5	<6	11,300	14.0	1.6	415	--	19.9	4.7	71
25...	--	--	--	19	--	--	1.3	--	--	--	1.8	--
JUN												
07...	.51	10.5	30.7	9	20,700	18.7	1.3	569	.04	27.3	3.2	105
14...	--	--	--	E4	--	--	3.3	--	--	--	2.0	--
JUL												
07...	--	--	--	8	--	--	1.2	--	--	--	1.1	--
12...	E.04	.9	3.2	E6	1,220	1.20	3.5	54.7	--	5.40	1.7	5
AUG												
03...	1.35	28.4	56.9	<6	47,100	40.9	E.6	902	--	55.3	2.9	179
10...	--	--	--	E5	--	--	4.1	--	--	--	1.7	--
SEP												
06...	E.03	.30	2.6	<6	410	.35	3.9	14.4	--	3.60	1.0	2
27...	--	--	--	<6	--	--	3.0	--	--	--	.38	--

YELLOWSTONE RIVER BASIN

06324500 POWDER RIVER AT MOORHEAD, MT—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment dis- charge, tons/d (80155)
OCT			
12...	96	51	13
26...	99	898	548
NOV			
03...	99	927	671
17...	98	571	348
DEC			
01...	97	186	E42.7
23...	83	169	E45.6
JAN			
18...	90	188	E81.2
26...	87	107	E43
FEB			
08...	94	179	E53.2
23...	91	417	E180
MAR			
08...	98	715	427
28...	98	478	265
APR			
05...	99	528	257
11...	98	851	664
MAY			
05...	98	1,100	817
25...	69	1,960	10,900
JUN			
07...	86	1,590	2,950
14...	57	1,560	4,150
JUL			
07...	*	*	*
12...	89	66	36
AUG			
03...	99	3,170	2,190
10...	97	57	17
SEP			
06...	98	52	10
27...	93	18	2.2

*--Sediment sample not collected.

E--Estimated.

06324500 POWDER RIVER AT MOORHEAD, MT—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
SEASON OCTOBER 2004 TO OCTOBER 2005

DAY	OCTOBER 2004			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1,010	945	973	1,800	1,680	1,740	---	---	*2,620	---	---	*2,160
2	1,050	965	1,000	1,880	1,770	1,840	---	---	---	---	---	---
3	1,040	906	971	---	---	*1,950	---	---	---	---	---	---
4	979	912	948	---	---	---	---	---	---	---	---	*2,680
5	1,550	855	1,010	---	---	---	---	---	*2,010	---	---	---
6	1,720	1,550	1,660	---	---	*2,000	---	---	---	---	---	---
7	1,830	1,650	1,720	---	---	---	---	---	---	---	---	*2,170
8	1,870	1,630	1,770	---	---	---	---	---	---	---	---	---
9	1,630	1,550	1,590	---	---	*2,010	---	---	---	---	---	---
10	1,680	1,600	1,620	---	---	---	---	---	*2,150	---	---	---
11	1,680	1,640	1,660	---	---	---	---	---	---	---	---	*2,150
12	1,760	1,680	1,710	---	---	*2,000	---	---	---	---	---	---
13	1,770	1,720	1,740	---	---	---	---	---	---	---	---	---
14	1,720	1,640	1,700	---	---	---	---	---	*2,230	---	---	*2,270
15	1,660	1,570	1,630	---	---	---	---	---	---	---	---	---
16	1,780	1,660	1,720	---	---	*1,980	---	---	---	---	---	---
17	1,820	1,770	1,800	---	---	**1,910	---	---	---	---	---	---
18	1,890	1,820	1,860	---	---	---	---	---	*1,850	---	---	*2,230
19	1,990	1,880	1,960	---	---	*2,060	---	---	---	---	---	---
20	1,930	1,820	1,870	---	---	---	---	---	---	---	---	---
21	2,040	1,820	1,900	---	---	---	---	---	---	---	---	*1,980
22	2,040	1,940	1,980	---	---	---	---	---	*1,940	---	---	---
23	1,940	1,880	1,910	---	---	*2,240	---	---	**1,970	---	---	---
24	1,880	1,720	1,810	---	---	---	---	---	---	---	---	---
25	1,830	1,710	1,760	---	---	---	---	---	---	---	---	*1,640
26	1,820	1,780	1,800	---	---	*1,960	---	---	*1,980	---	---	**1,660
27	2,170	1,800	2,090	---	---	---	---	---	---	---	---	---
28	2,180	2,070	2,150	---	---	---	---	---	---	---	---	---
29	2,070	1,670	1,840	---	---	---	---	---	---	---	---	*1,700
30	1,760	1,620	1,680	---	---	---	---	---	---	---	---	---
31	1,760	1,680	1,720	---	---	---	---	---	---	---	---	---
MONTH	2,180	855	1,660	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	*1,790	2,230	2,210	2,220	2,290	2,160	2,210
2	---	---	*1,660	---	---	---	2,270	2,230	2,250	2,160	1,880	2,030
3	---	---	---	---	---	---	2,270	2,250	2,260	1,880	1,790	1,820
4	---	---	---	---	---	---	2,340	2,260	2,300	1,810	1,780	1,790
5	---	---	*1,700	---	---	*2,050	2,350	2,240	2,320	2,020	1,780	1,900
6	---	---	---	---	---	---	2,320	2,260	2,290	2,190	2,020	2,110
7	---	---	---	---	---	---	2,260	2,220	2,240	2,190	2,080	2,140
8	---	---	---	---	---	---	2,260	2,240	2,250	2,080	2,000	2,020
9	---	---	*2,080	2,150	2,050	2,100	2,260	2,110	2,170	2,100	875	1,730
10	---	---	---	2,130	2,060	2,100	2,300	2,190	2,230	---	---	#767
11	---	---	---	2,140	2,080	2,110	2,280	2,110	2,190	---	---	---
12	---	---	*1,920	2,140	2,090	2,110	2,260	2,100	2,190	---	---	---
13	---	---	---	2,120	2,080	2,100	2,280	2,100	2,150	---	---	---
14	---	---	---	2,120	2,090	2,110	1,960	1,870	1,910	---	---	---
15	---	---	*2,100	2,140	2,090	2,120	1,980	1,940	1,970	---	---	---
16	---	---	---	2,150	2,100	2,130	1,940	1,850	1,890	---	---	---
17	---	---	---	2,170	2,140	2,150	1,850	1,780	1,830	---	---	---
18	---	---	---	2,170	2,120	2,150	1,890	1,750	1,800	---	---	---
19	---	---	*2,000	2,200	2,160	2,180	1,910	1,880	1,900	---	---	---
20	---	---	---	2,180	2,120	2,150	1,950	1,830	1,890	---	---	---
21	---	---	---	2,120	2,070	2,100	1,850	1,640	1,750	---	---	---
22	---	---	---	2,130	2,100	2,110	1,720	1,630	1,680	---	---	---
23	---	---	*2,000	2,140	2,050	2,090	1,840	1,710	1,790	---	---	---
24	---	---	---	2,130	2,070	2,100	2,080	1,830	1,940	---	---	---
25	---	---	---	2,130	2,060	2,080	2,260	2,080	2,170	---	---	**500
26	---	---	*1,880	2,140	2,070	2,100	2,260	1,940	2,090	---	---	---
27	---	---	---	2,160	2,090	2,130	2,010	1,920	1,950	---	---	---
28	---	---	---	2,190	2,130	2,160	2,030	2,000	2,010	---	---	*712
29	---	---	---	2,180	2,140	2,160	2,130	2,030	2,090	---	---	---
30	---	---	---	2,180	2,150	2,160	2,290	2,050	2,170	---	---	---
31	---	---	---	2,220	2,140	2,170	---	---	---	---	---	*952
MONTH	---	---	---	2,220	2,050	2,110	2,350	1,630	2,060	---	---	---

*--Instantaneous value from observer grab sample.

**--Instantaneous value from USGS cross-section sample.

YELLOWSTONE RIVER BASIN

06324500 POWDER RIVER AT MOORHEAD, MT—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
SEASON OCTOBER 2004 TO OCTOBER 2005

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	#1,040	813	699	745	1,350	1,250	1,300	1,210	1,190	1,200
2	1,210	1,080	1,140	817	693	749	1,430	1,350	1,390	1,190	1,180	1,190
3	1,390	1,110	1,290	851	760	814	1,880	1,250	1,640	1,200	1,180	1,190
4	1,380	1,270	1,330	876	752	813	1,720	1,540	1,610	1,220	1,180	1,200
5	1,360	1,270	1,320	---	---	813	1,580	1,490	1,540	1,220	1,200	1,210
6	1,380	1,290	1,340	---	---	---	1,490	1,330	1,400	1,210	1,170	1,190
7	1,320	1,270	1,280	---	---	**953	1,340	1,260	1,290	1,170	1,150	1,160
8	1,360	1,060	1,200	---	---	---	1,300	1,270	1,290	1,160	1,140	1,150
9	1,180	1,050	1,100	---	---	---	1,300	1,260	1,280	1,200	1,160	1,170
10	1,170	1,040	1,120	1,130	833	1,030	1,290	1,140	1,260	1,240	1,200	1,220
11	1,240	1,060	1,180	1,180	1,080	1,120	1,270	1,100	1,230	1,260	1,200	1,240
12	1,160	1,070	1,110	1,190	1,080	1,150	2,060	1,260	1,470	1,240	1,230	1,240
13	1,280	1,130	1,160	1,190	1,180	1,190	2,040	1,320	1,590	1,260	1,210	1,220
14	1,280	954	1,060	1,220	1,180	1,200	1,320	1,180	1,230	1,310	1,210	1,250
15	1,100	812	925	---	---	#1,220	1,330	1,190	1,290	1,340	1,260	1,300
16	1,080	915	989	1,260	1,240	1,250	1,420	1,300	1,370	1,350	1,300	1,330
17	1,010	881	970	1,350	1,260	1,320	1,320	1,210	1,260	1,320	1,300	1,310
18	894	752	838	1,470	1,330	1,400	1,810	1,300	1,660	1,350	1,320	1,340
19	765	663	718	1,530	1,400	1,470	1,970	1,560	1,830	1,360	1,340	1,360
20	695	650	676	1,630	1,520	1,570	1,960	1,720	1,830	1,340	1,300	1,340
21	676	541	617	1,570	1,380	1,470	1,880	1,560	1,660	1,320	1,300	1,310
22	545	508	529	1,440	1,400	1,420	1,560	1,480	1,510	1,340	1,260	1,310
23	534	415	502	---	---	#1,470	1,490	1,410	1,450	1,400	1,290	1,340
24	497	406	450	---	---	---	1,410	1,370	1,390	1,370	1,310	1,330
25	784	488	661	2,890	1,600	2,600	1,380	1,340	1,360	1,410	1,290	1,350
26	783	663	751	2,360	1,880	2,010	1,350	1,260	1,300	1,340	1,250	1,290
27	663	595	619	1,890	1,660	1,790	1,290	1,260	1,270	1,310	1,240	1,270
28	647	618	631	1,660	1,580	1,610	1,280	1,250	1,270	1,380	1,250	1,300
29	695	643	663	1,620	1,410	1,540	1,270	1,240	1,260	1,360	1,280	1,320
30	807	677	733	1,410	1,320	1,360	1,270	1,220	1,250	1,370	1,270	1,330
31	---	---	---	1,320	1,280	1,290	1,220	1,190	1,200	---	---	---
MONTH	1,390	406	931	---	---	---	2,060	1,100	1,410	1,410	1,140	1,270

#-- Value computed from partial day with greater than 50 percent of day recorded.

**-- Instantaneous value from USGS sample.

06324785 DRY FORK LITTLE POWDER RIVER AT MOUTH, NEAR GILLETTE, WY

LOCATION.--Lat 44°25'14", long 105°27'25" (NAD 83), in NE¼ NW¼ NE¼ sec.12 T.51 N., R.72 W., Campbell County, Hydrologic Unit 10090208, 8.7 mi northeast of Gillette.

PERIOD OF RECORD.--July 2004 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)
OCT 19...	1350	.91	652	11.7	109	8.2	1,890	13.0	5.5	930	236	82.5	1
NOV 12...	1040	.61	663	--	--	8.0	1,990	5.5	.0	1,000	263	91.2	1
DEC 09...	0915	.89	634	10.8	90	7.8	2,140	6.0	.0	1,200	316	91.0	1
JAN 20...	0720	.83	652	10.8	87	8.0	1,580	1.5	.0	810	216	64.8	.9
FEB 10...	1125	1.1	662	11.4	90	6.8	1,960	1.0	.0	1,100	291	90.7	1
MAR 16...	1140	.84	649	11.7	97	8.0	2,110	6.0	1.0	1,100	298	96.1	1
APR 08...	1215	.59	641	9.1	92	8.0	2,070	16.0	8.0	1,100	296	95.9	1
MAY 05...	1315	.77	653	10.5	--	7.9	--	17.0	12.0	1,100	263	109	1
JUN 03...	1105	.71	652	9.5	104	7.4	2,200	18.5	12.0	1,100	236	116	2
JUL 08...	1255	.41	657	9.1	117	7.5	2,020	40.0	20.0	980	250	86.9	1
AUG 03...	1240	.64	658	7.2	91	7.7	2,040	22.0	19.0	930	227	88.0	2
SEP 12...	1120	.68	653	9.3	104	7.8	1,950	12.5	13.0	980	255	83.5	1

Date	Sodium, water, fltrd, mg/L (00930)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitrogen, wat unfiltered by analysis, mg/L (62855)	Orthophosphate, water, fltrd, mg/L as P (00671)
OCT 19...	80.7	1,570	--	--	--	--	--
NOV 12...	87.1	1,680	--	--	--	--	--
DEC 09...	89.6	1,710	--	--	--	--	--
JAN 20...	60.6	1,240	--	--	--	--	--
FEB 10...	91.3	1,650	--	--	--	--	--
MAR 16...	93.4	1,710	--	--	--	--	--
APR 08...	99.5	1,670	--	--	--	--	--
MAY 05...	112	1,830	--	--	--	--	--
JUN 03...	117	1,890	--	--	--	--	--
JUL 08...	92.5	1,650	<.04	<.06	<.008	.37	E.01
AUG 03...	111	1,680	--	--	--	--	--
SEP 12...	80.4	1,620	--	--	--	--	--

< -- Less than.
E -- Estimated.

YELLOWSTONE RIVER BASIN

06324870 RAWHIDE CREEK AT MOUTH, NEAR GILLETTE, WY

LOCATION.--Lat 44°27'42", long 105°28'22" (NAD 83), in NE¹/₄ SW¹/₄ NE¹/₄ sec.26 T.52 N., R.72 W., Campbell County, Hydrologic Unit 10090208, 11.8 mi north of Gillette.

PERIOD OF RECORD.--July 2004 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)
OCT		
19...	1315	.00
NOV		
12...	1015	.00
DEC		
09...	0850	.00
JAN		
20...	0800	.00
FEB		
10...	1105	.00
MAR		
16...	1115	.00
APR		
08...	1130	.00
MAY		
05...	1245	.00
JUN		
03...	1130	.00
JUL		
08...	0855	.00
AUG		
03...	1210	.00
SEP		
12...	1100	.00

06324940 HORSE CREEK AT MOUTH, NEAR WESTON, WY

LOCATION.--Lat 44°43'49", long 105°22'42" (NAD 83), in NW¼ SW¼ SE¼ sec.22 T.55 N., R.71 W., Campbell County, Hydrologic Unit 10090208, at bridge on state highway 59 and 6.6 mi north of Weston.

PERIOD OF RECORD.--July 2004 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, filtered, mg/L (00915)	Magnesium water, filtered, mg/L (00925)	Sodium adsorption ratio (00931)
OCT 25...	1450	.00	--	--	--	--	--	--	--	--	--	--	--
NOV 17...	1130	.00	--	--	--	--	--	--	--	--	--	--	--
DEC 16...	0845	.00	--	--	--	--	--	--	--	--	--	--	--
JAN 25...	1140	.00	--	--	--	--	--	--	--	--	--	--	--
FEB 23...	1130	.00	--	--	--	--	--	--	--	--	--	--	--
MAR 28...	1210	.00	--	--	--	--	--	--	--	--	--	--	--
APR 11...	1900	.00	--	--	--	--	--	--	--	--	--	--	--
MAY 26...	0830	4.4	671	7.3	82	8.3	3,400	14.5	14.5	1,200	148	191	6
JUN 14...	1745	.03	670	12.5	168	8.4	3,640	26.0	23.0	1,500	219	224	6
JUL 08...	1200	.00	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	0945	.00	--	--	--	--	--	--	--	--	--	--	--
SEP 28...	1010	.00	--	--	--	--	--	--	--	--	--	--	--

Date	Sodium, water, filtered, mg/L (00930)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT 25...	--	--
NOV 17...	--	--
DEC 16...	--	--
JAN 25...	--	--
FEB 23...	--	--
MAR 28...	--	--
APR 11...	--	--
MAY 26...	507	2,790
JUN 14...	513	3,290
JUL 08...	--	--
AUG 11...	--	--
SEP 28...	--	--

06324950 LITTLE POWDER RIVER BELOW ELK CREEK, NEAR WESTON, WY

LOCATION.--Lat 44°48'33", long 105°21'58" (NAD 83), in SW¹/₄ SE¹/₄ NW¹/₄ sec.26 T.56 N., R.71 W., Campbell County, Hydrologic Unit 10090208, 11.8 mi north of Weston.

PERIOD OF RECORD.--July 2004 to current year. Prior to July 2004 station was published as 444836105215601 Little Powder River above Antelope Creek, near Weston.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)
OCT 25...	1515	6.8	667	10.4	100	8.4	2,380	10.0	7.5	420	83.2	52.5	8
NOV 17...	1300	.90	676	13.1	114	8.1	1,910	13.5	4.0	540	116	60.6	4
DEC 16...	1110	.88	682	13.3	103	8.2	3,590	1.0	.0	920	188	109	8
JAN 26...	0800	2.9	670	12.3	96	8.0	1,050	2.0	.0	210	44.8	23.4	4
FEB 24...	0840	1.3	671	12.8	101	8.3	2,960	6.0	.0	720	149	84.4	7
MAR 28...	1300	44	655	7.9	81	8.0	1,470	22.5	9.5	310	64.7	37.0	5
APR 11...	1800	1.6	666	11.3	127	8.4	2,410	10.5	14.0	630	130	73.8	6
MAY 26...	0950	7.2	674	8.7	96	8.4	2,610	15.0	13.5	810	132	117	6
JUN 14...	1620	3.5	673	9.4	126	8.3	3,050	24.0	23.0	860	162	111	7
JUL 08...	1120	1.5	678	6.9	95	8.1	2,510	34.5	25.0	550	111	65.8	7
AUG 11...	0915	.27	675	6.8	84	8.1	1,410	19.0	19.5	430	96.4	46.3	3
SEP 28...	0940	.03	677	9.3	95	8.3	3,100	12.0	10.5	1,100	221	131	4

Date	Sodium, water, fltrd, mg/L (00930)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitrogen, wat unfltrd, by analysis, mg/L (62855)	Orthophosphate, water, fltrd, mg/L as P (00671)
OCT 25...	388	1,720	--	--	--	--	--
NOV 17...	230	1,410	--	--	--	--	--
DEC 16...	592	2,930	--	--	--	--	--
JAN 26...	141	722	--	--	--	--	--
FEB 24...	442	2,200	--	--	--	--	--
MAR 28...	217	1,040	--	--	--	--	--
APR 11...	352	1,810	--	--	--	--	--
MAY 26...	372	2,070	--	--	--	--	--
JUN 14...	447	2,300	--	--	--	--	--
JUL 08...	396	1,840	<.04	<.06	<.008	.89	<.02
AUG 11...	166	1,030	--	--	--	--	--
SEP 28...	309	2,710	--	--	--	--	--

< -- Less than.

06324965 OLMSTEAD CREEK AT MOUTH, NEAR WESTON, WY

LOCATION.--Lat 44°55'10", long 105°22'12" (NAD 83), in NE¼ SW¼ NW¼ sec.23 T.57 N., R.71 W., Campbell County, Hydrologic Unit 10090208, at bridge on state highway 59 and 19.5 mi north of Weston.

PERIOD OF RECORD.--July 2004 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)
OCT 25...	1620	.00	--	--	--	--	--	--	--	--	--	--	--
NOV 17...	1430	.00	--	--	--	--	--	--	--	--	--	--	--
DEC 16...	1020	.01	685	9.6	75	7.8	5,200	.0	.0	2,200	438	277	7
JAN 26...	0935	.00	--	--	--	--	--	--	--	--	--	--	--
FEB 23...	1225	E.19	673	9.9	81	7.8	4,580	8.0	1.5	2,100	386	270	6
MAR 28...	1400	.16	658	9.6	101	8.0	4,500	23.5	10.5	1,900	366	245	6
APR 11...	1700	.10	668	8.9	97	8.1	5,080	12.5	12.5	2,000	361	269	6
MAY 25...	1940	1.2	678	7.7	90	8.0	5,650	13.5	16.0	1,700	307	226	9
JUN 14...	1445	.33	674	8.6	116	8.1	5,940	24.0	23.0	1,900	328	260	8
JUL 05...	1055	.00	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	0920	.00	--	--	--	--	--	--	--	--	--	--	--
SEP 28...	0910	.00	--	--	--	--	--	--	--	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT 25...	--	--
NOV 17...	--	--
DEC 16...	718	4,970
JAN 26...	--	--
FEB 23...	607	4,660
MAR 28...	571	4,170
APR 11...	632	4,690
MAY 25...	846	4,450
JUN 14...	756	4,800
JUL 05...	--	--
AUG 11...	--	--
SEP 28...	--	--

E -- Estimated.

06324970 LITTLE POWDER RIVER ABOVE DRY CREEK, NEAR WESTON, WY

LOCATION.--Lat 44°55'37", long 105°21'10" (NAD 27), in NW¼ SW¼ sec.13, T.57 N., R.71 W., Campbell County, Hydrologic Unit 10090208, on left bank 3.1 mi upstream from Dry Creek, 5.0 mi south of the Wyoming-Montana State line, and 20 mi north of Weston.

DRAINAGE AREA.--1,237 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR WY-77-1: Drainage area. WDR WY-78-1: 1976(M).

GAGE.--Water-stage recorder. Elevation of gage is 3,410 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Diversion upstream from station for irrigation of about 80 acres downstream from station. Flow occasionally affected by contributions from mine dewatering.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.52	0.71	0.80	1.0	e2.2	e2.0	4.8	6.7	5.8	5.1	1.8	0.00
2	e0.52	6.9	0.83	0.90	e2.0	e1.9	3.8	5.5	5.5	4.0	1.3	0.00
3	e0.52	15	0.83	e0.30	e2.3	e1.9	2.9	4.7	4.7	3.2	0.88	0.00
4	e0.30	6.7	0.92	e0.25	2.4	2.1	2.5	4.5	4.3	2.5	3.3	0.00
5	e0.25	3.6	0.94	e0.20	2.1	2.1	2.3	4.5	4.1	2.2	8.7	0.00
6	e0.25	2.4	0.91	e0.30	2.2	2.1	2.2	4.3	3.9	2.9	4.6	0.00
7	e0.25	1.5	0.84	e0.50	1.7	2.0	1.9	4.8	3.8	3.1	2.6	0.00
8	e0.25	1.3	0.93	0.65	1.5	2.1	1.7	7.1	3.8	2.2	1.5	0.00
9	e0.25	1.1	1.0	0.70	1.8	2.0	2.3	39	3.8	1.8	0.68	0.00
10	e0.25	0.86	1.0	0.83	1.8	1.8	2.3	148	3.7	1.4	0.36	0.00
11	e0.25	0.60	1.1	0.88	1.6	1.6	1.8	126	3.3	1.1	0.18	0.00
12	e0.25	0.60	1.1	0.94	1.6	1.7	1.7	158	3.2	0.85	0.05	0.00
13	e0.30	0.55	0.91	e0.80	2.0	1.8	1.5	319	3.8	0.51	0.05	0.01
14	e0.30	0.44	0.84	e0.50	2.3	1.9	1.4	415	3.3	0.72	0.04	0.01
15	e0.30	0.45	1.0	e0.30	1.9	1.9	1.3	264	3.0	0.44	0.04	0.01
16	e0.30	0.40	1.1	e0.25	1.8	1.7	1.2	146	3.1	0.32	0.02	0.01
17	e0.06	0.36	1.1	0.28	1.8	1.8	1.3	101	2.6	0.29	0.02	0.01
18	e0.03	0.34	1.1	0.51	1.7	2.0	1.2	75	2.2	0.16	0.05	0.02
19	0.03	0.40	1.1	0.86	1.7	2.1	1.2	42	1.9	0.11	0.04	0.02
20	0.03	0.41	e1.0	1.0	1.7	1.9	1.7	27	2.0	0.07	0.03	0.02
21	0.03	0.48	e0.90	1.4	1.9	1.9	3.4	21	1.9	0.07	0.02	0.02
22	0.04	0.49	0.96	1.3	1.8	2.1	5.0	15	6.7	0.05	0.01	0.03
23	0.03	0.61	0.73	1.4	e1.7	3.6	31	11	5.2	0.03	0.01	0.03
24	0.03	0.59	0.51	1.5	e1.8	13	88	9.4	3.6	0.03	0.01	0.03
25	0.77	0.72	0.72	3.2	e1.9	8.0	91	9.9	4.1	0.04	0.01	e0.02
26	5.3	0.87	1.1	7.5	e2.0	5.1	65	9.9	4.1	0.22	0.00	e0.02
27	2.6	0.62	1.2	4.9	e1.9	3.9	40	8.6	31	0.10	0.01	e0.04
28	1.4	e0.50	1.2	4.7	e2.0	3.9	22	8.0	13	6.0	0.01	e0.07
29	0.98	e0.60	1.2	4.4	---	18	12	7.1	8.2	5.7	0.00	e0.09
30	0.69	e0.70	e1.2	3.4	---	14	8.5	6.5	6.6	4.2	0.00	e0.11
31	0.74	---	e1.1	e2.4	---	7.5	---	6.3	---	2.5	0.00	---
TOTAL	17.82	50.80	30.17	48.05	53.1	119.4	406.9	2,014.8	156.2	51.91	26.32	0.57
MEAN	0.57	1.69	0.97	1.55	1.90	3.85	13.6	65.0	5.21	1.67	0.85	0.02
MAX	5.3	15	1.2	7.5	2.4	18	91	415	31	6.0	8.7	0.11
MIN	0.03	0.34	0.51	0.20	1.5	1.6	1.2	4.3	1.9	0.03	0.00	0.00
AC-FT	35	101	60	95	105	237	807	4,000	310	103	52	1.1

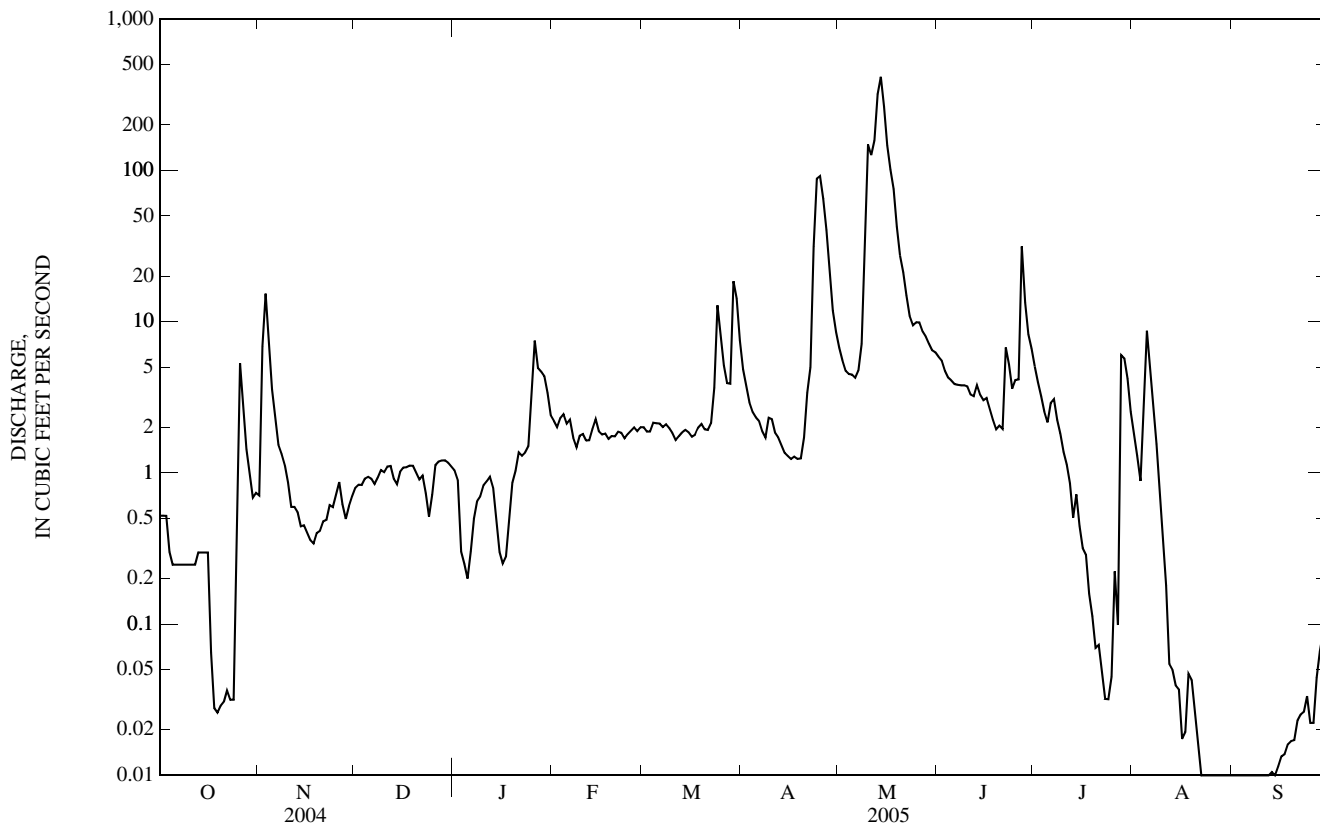
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2005, BY WATER YEAR (WY)

MEAN	10.3	3.56	2.40	7.42	34.6	56.6	22.4	55.1	26.2	10.2	5.06	3.64
MAX	172	25.4	9.97	89.0	336	613	99.3	703	187	68.8	44.8	60.8
(WY)	(1995)	(1999)	(1995)	(1974)	(1997)	(1978)	(1999)	(1978)	(1984)	(1982)	(1993)	(1986)
MIN	0.01	0.01	0.21	0.10	0.46	1.34	0.75	1.04	0.23	0.04	0.00	0.00
(WY)	(1992)	(1982)	(1982)	(1991)	(1989)	(1981)	(1981)	(1992)	(2004)	(1980)	(1991)	(1991)

06324970 LITTLE POWDER RIVER ABOVE DRY CREEK, NEAR WESTON, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1973 - 2005	
ANNUAL TOTAL	790.60		2,976.04		--	
ANNUAL MEAN	2.16		8.15		19.7	
HIGHEST ANNUAL MEAN	--		--		127	1978
LOWEST ANNUAL MEAN	--		--		1.49	1992
HIGHEST DAILY MEAN	90	Feb 22	415	May 14	5,000	May 19, 1978
LOWEST DAILY MEAN	0.01	Jul 17-22,24	0.00	Many days	0.00	Many days, some years
ANNUAL SEVEN-DAY MINIMUM	0.01	Jul 16	0.00	Aug 29	0.00	Some years
MAXIMUM PEAK FLOW	--		485	May 14	5,300 ^a	May 19, 1978
MAXIMUM PEAK STAGE	--		6.89	May 14	11.63	Mar 20, 1978
ANNUAL RUNOFF (AC-FT)	1,570		5,900		14,310	
10 PERCENT EXCEEDS	5.1		8.0		32	
50 PERCENT EXCEEDS	0.52		1.4		2.6	
90 PERCENT EXCEEDS	0.05		0.03		0.02	

a Gage height, 11.62 ft.
e Estimated.



06324970 LITTLE POWDER RIVER ABOVE DRY CREEK, NEAR WESTON, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975-82, 1985 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT 25...	1800	.03	669	6.3	62	8.2	3,290	9.5	8.0	940	183	117	18.6
NOV 17...	1500	.34	677	12.1	109	8.0	1,540	13.0	5.5	340	70.5	38.6	11.8
DEC 16...	0930	.88	685	10.9	84	8.0	3,200	.0	.0	890	188	102	19.3
JAN 26...	1000	6.6	672	12.9	101	8.4	3,290	5.0	.0	840	169	101	20.9
FEB 23...	1330	1.7	674	13.6	108	8.3	2,870	7.0	.5	690	141	82.4	15.5
MAR 28...	1500	4.1	658	10.4	107	8.3	2,270	22.0	10.0	460	90.8	55.5	13.3
APR 11...	1630	1.8	668	11.9	131	8.4	2,070	13.5	13.0	490	102	57.9	12.0
MAY 25...	1820	9.9	678	8.6	101	8.4	2,820	15.0	17.0	840	145	117	18.8
JUN 14...	1345	3.3	674	10.5	133	8.3	3,590	24.0	20.5	1,100	189	145	21.4
JUL 08...	1000	2.4	679	6.4	84	8.0	1,940	32.5	22.5	470	102	53.2	13.6
AUG 11...	0745	.28	675	4.6	55	8.0	2,290	20.0	18.0	560	109	70.1	16.8
SEP 28...	0900	E.07	679	8.4	86	8.1	4,240	9.0	10.5	1,400	247	186	25.2

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)
OCT 25...	6	446	50	412	98.1	.9	10.7	1,320	2,440	3.53	.21	2,600	--
NOV 17...	5	226	58	218	27.2	.5	8.93	542	1,060	1.47	.99	1,080	--
DEC 16...	7	480	53	419	43.3	.8	11.0	1,410	2,510	3.63	6.35	2,670	--
JAN 26...	8	504	56	425	80.0	.9	10.2	1,400	2,540	3.54	46.3	2,600	--
FEB 23...	7	435	57	367	65.1	.7	8.02	1,130	2,100	2.96	10.2	2,180	--
MAR 28...	8	370	63	312	36.9	.7	6.25	826	1,590	2.23	18.2	1,640	--
APR 11...	6	306	57	275	27.2	.6	6.02	797	1,470	2.06	7.36	1,510	--
MAY 25...	5	353	47	315	72.2	.6	11.0	1,130	2,030	2.94	57.8	2,160	--
JUN 14...	7	528	51	344	87.9	.7	11.2	1,540	2,730	3.90	25.8	2,870	--
JUL 08...	5	254	53	248	29.5	.6	7.49	720	1,330	1.87	8.89	1,370	<.04
AUG 11...	6	326	55	259	49.2	.7	7.15	907	1,640	2.34	1.30	1,720	<.04
SEP 28...	7	595	48	282	298	.6	6.52	1,960	3,490	5.18	--	3,810	<.04

06324970 LITTLE POWDER RIVER ABOVE DRY CREEK, NEAR WESTON, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitrogen, wat unfltrd recover-able, mg/L (62855)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Aluminum, water, unfltrd recover-able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd recover-able, ug/L (01002)	Barium, water, unfltrd recover-able, ug/L (01007)	Beryllium, water, unfltrd recover-able, ug/L (01012)	Boron, water, unfltrd recover-able, ug/L (01022)	Cadmium water, unfltrd recover-able, ug/L (01027)	Chromium, water, unfltrd recover-able, ug/L (01034)	Copper, water, unfltrd recover-able, ug/L (01042)
OCT 25...	--	--	--	--	1,450	1.3	E2	74	.14	156	.14	1.7	23.1
NOV 17...	--	--	--	--	986	.8	<2	48	.09	100	E.03	.9	19.1
DEC 16...	--	--	--	--	109	.6	<2	61	<.12	193	<.08	<.8	28.9
JAN 26...	--	--	--	--	261	.9	<2	41	<.12	203	<.08	.8	32.1
FEB 23...	--	--	--	--	139	.9	<2	34	<.12	167	<.08	E.6	14.9
MAR 28...	--	--	--	--	2,470	1.2	E1	44	.16	141	.04	1.7	14.5
APR 11...	--	--	--	--	1,420	1.0	<2	57	.11	121	E.04	1.3	8.9
MAY 25...	--	--	--	--	1,040	2.3	E2	134	.13	234	E.07	3.1	19.6
JUN 14...	--	--	--	--	412	1.3	E1	80	<.12	302	E.04	.9	18.6
JUL 08...	<.06	<.008	2.73	<.02	2,080	1.2	E2	97	.17	111	.05	1.4	6.4
AUG 11...	<.06	<.008	.79	<.02	2,030	1.3	<2	64	.19	131	.04	1.4	4.9
SEP 28...	<.06	<.008	.50	<.02	535	.78	--	41	<.12	222	--	--	--

Date	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, unfltrd recover-able, ug/L (01051)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recover-able, ug/L (01055)	Nickel, water, unfltrd recover-able, ug/L (01067)	Selenium, water, unfltrd recover-able, ug/L (01147)	Zinc, water, unfltrd recover-able, ug/L (01092)	Suspnd. sediment, sieve diametr <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
OCT 25...	45	3,430	4.48	508	664	9.10	1.1	26	--	--	--
NOV 17...	13	930	1.86	105	123	6.14	2.5	10	--	67	.06
DEC 16...	<18	290	.21	190	186	14.1	1.7	18	--	--	--
JAN 26...	E17	100	.33	121	119	5.49	1.4	11	--	116	2.1
FEB 23...	E20	270	.20	122	129	7.88	1.6	7	--	47	.22
MAR 28...	7	1,430	2.83	143	173	6.90	1.1	14	--	154	1.7
APR 11...	E6	1,200	2.26	162	218	5.70	1.6	11	--	146	.71
MAY 25...	<18	1,740	3.41	79.1	172	8.69	1.9	16	97	214	5.7
JUN 14...	E9	680	.94	160	208	10.0	2.0	10	91	155	1.4
JUL 08...	<6	1,590	3.24	100	190	5.77	2.2	12	--	--	--
AUG 11...	<18	1,520	2.44	233	276	8.13	2.1	10	100	148	.11
SEP 28...	<18	--	--	178	202	--	--	--	98	47	--

< -- Less than.
E -- Estimated.

CHEYENNE RIVER BASIN

06364300 PORCUPINE CREEK NEAR TECKLA, WY

LOCATION.--Lat 43°34'41", long 105°20'19" (NAD 27), in SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 25, T.42 N., R.71 W., Campbell County Hydrologic Unit 10120101, on left bank 0.2 mi downstream from culvert on County Road 69, 0.6 mi upstream from Boss Draw, and 1.2 mi northeast of Teckla.

DRAINAGE AREA.--78.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 2003 to current year.

GAGE.--Water stage recorder. Elevation of gage is 4,685 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.00	e0.00	e0.00	e0.15	e0.16	0.05	0.44	0.51	0.45	0.02	0.00	0.00
2	e0.00	e0.00	e0.02	e0.14	e0.15	0.06	0.32	0.46	0.40	0.02	0.00	0.00
3	e0.00	e0.00	e0.07	e0.13	e0.14	0.05	0.32	0.42	0.38	0.01	0.12	0.00
4	e0.00	e0.00	e0.15	e0.13	e0.14	0.05	0.37	0.60	0.40	0.19	1.8	0.00
5	e0.00	e0.00	e0.17	e0.13	0.13	0.05	0.38	0.85	0.36	0.42	0.77	0.00
6	e0.00	e0.00	e0.16	e0.13	0.10	0.08	0.23	0.29	0.29	0.23	0.00	0.00
7	e0.00	e0.00	e0.16	e0.14	0.11	0.11	0.19	0.28	0.23	0.12	0.00	0.00
8	e0.00	e0.00	e0.17	e0.15	e0.10	0.12	0.21	0.49	0.18	0.07	0.03	0.00
9	e0.00	e0.00	e0.17	e0.15	e0.10	0.10	0.25	0.44	0.19	0.04	0.00	0.00
10	e0.00	e0.00	e0.18	0.15	e0.10	0.08	0.28	0.32	0.18	0.03	0.00	0.11
11	e0.00	e0.00	e0.19	0.16	e0.10	0.06	0.25	0.55	0.33	0.02	0.00	7.9
12	e0.00	e0.00	e0.18	e0.13	e0.10	0.07	0.23	0.40	0.28	0.01	0.08	0.87
13	e0.00	e0.00	e0.17	e0.13	e0.10	0.08	0.19	0.80	0.53	0.01	0.11	0.15
14	e0.00	e0.00	e0.16	e0.12	0.08	0.07	0.16	0.96	0.45	0.00	0.09	0.03
15	e0.00	e0.00	e0.16	e0.12	0.10	0.08	0.17	2.3	0.32	0.00	0.08	0.00
16	e0.00	e0.00	e0.17	e0.13	0.10	0.06	0.15	1.5	0.28	0.00	0.06	0.00
17	e0.00	e0.00	e0.18	e0.14	0.09	0.10	0.13	1.2	0.26	0.00	0.04	0.02
18	e0.00	e0.00	e0.18	e0.15	0.08	0.28	0.18	0.58	0.26	0.00	0.13	0.03
19	e0.00	e0.00	e0.18	e0.17	0.07	0.27	0.12	1.0	0.22	0.00	0.07	0.44
20	e0.00	e0.00	e0.17	e0.18	0.08	0.21	0.12	0.95	0.20	0.00	0.06	0.12
21	e0.00	e0.00	e0.16	e0.20	0.08	0.23	0.55	0.81	0.17	0.00	0.06	0.04
22	e0.00	e0.00	e0.15	e0.19	0.05	0.30	1.0	0.77	0.14	0.00	0.04	0.05
23	e0.00	e0.00	e0.14	e0.18	0.05	0.28	1.0	0.87	0.11	0.00	0.03	0.05
24	e0.00	e0.00	e0.15	e0.20	0.07	0.29	0.97	0.77	0.07	0.00	0.00	0.07
25	e0.00	e0.00	e0.16	e0.21	0.07	0.33	1.0	0.68	0.04	0.00	0.00	0.07
26	e0.00	e0.00	e0.17	e0.20	0.06	0.43	1.1	0.53	0.03	0.00	0.00	0.06
27	e0.00	e0.00	e0.18	e0.19	0.05	0.53	6.0	0.35	0.03	0.00	0.00	0.05
28	e0.00	e0.00	e0.19	e0.19	0.04	0.54	7.8	0.20	0.03	1.3	0.00	0.06
29	e0.00	e0.00	e0.19	e0.18	---	0.47	4.5	0.14	0.02	0.02	0.00	0.05
30	e0.00	e0.00	e0.18	e0.18	---	0.39	0.59	0.20	0.02	0.00	0.00	0.07
31	e0.00	---	e0.17	e0.17	---	0.45	---	0.39	---	0.06	0.00	---
TOTAL	0.00	0.00	4.83	4.92	2.60	6.27	29.20	20.61	6.85	2.57	3.57	10.24
MEAN	0.00	0.00	0.16	0.16	0.09	0.20	0.97	0.66	0.23	0.08	0.12	0.34
MAX	0.00	0.00	0.19	0.21	0.16	0.54	7.8	2.3	0.53	1.3	1.8	7.9
MIN	0.00	0.00	0.00	0.12	0.04	0.05	0.12	0.14	0.02	0.00	0.00	0.00
AC-FT	0.00	0.00	9.6	9.8	5.2	12	58	41	14	5.1	7.1	20

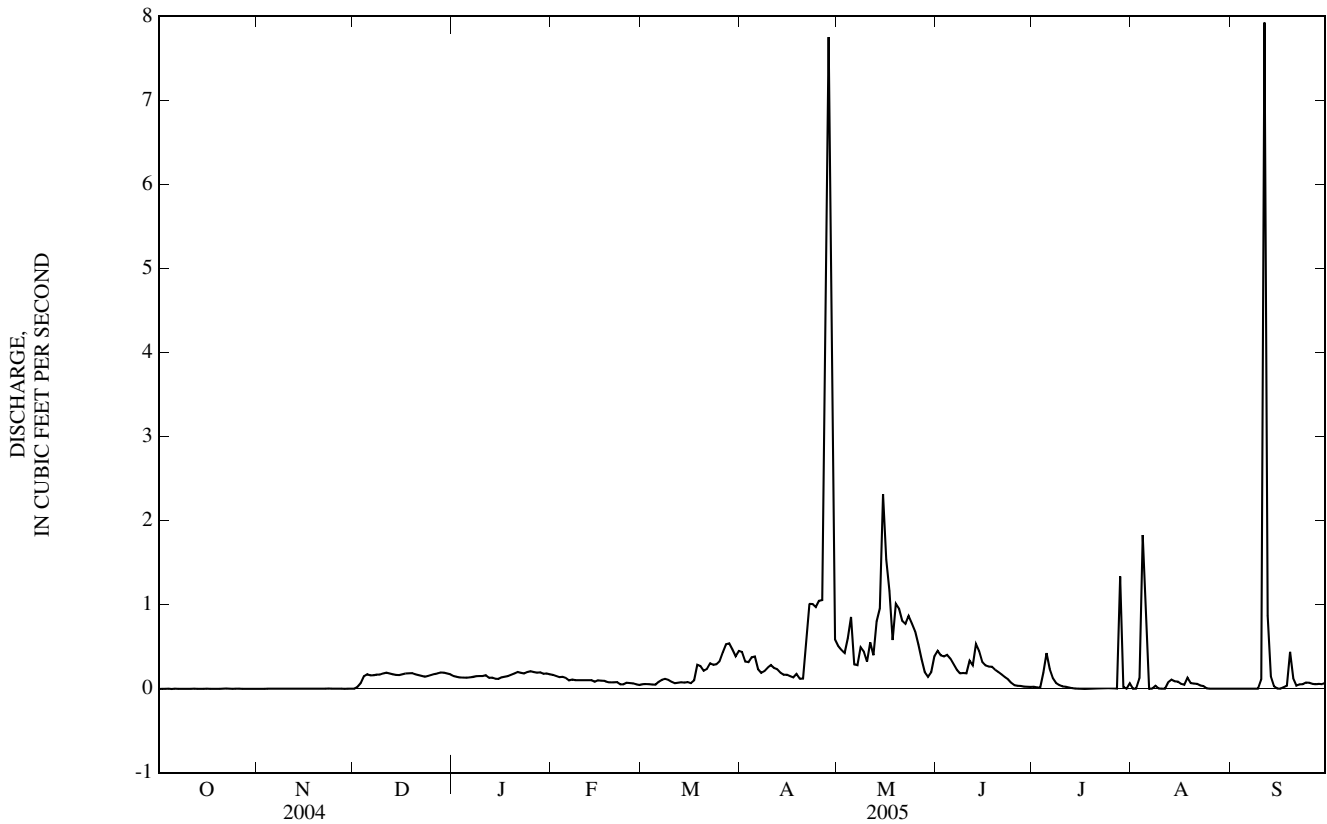
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2005, BY WATER YEAR (WY)

MEAN	0.23	0.62	0.57	0.45	0.43	0.45	0.62	0.39	0.12	0.08	0.04	0.12
MAX	0.46	1.23	0.98	0.74	0.76	0.69	0.97	0.66	0.23	0.13	0.12	0.34
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2005)	(2005)	(2005)	(2003)	(2005)	(2005)
MIN	0.00	0.00	0.16	0.16	0.09	0.20	0.26	0.12	0.01	0.04	0.00	0.00
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(2004)	(2004)	(2004)	(2003)	(2004)

06364300 PORCUPINE CREEK NEAR TECKLA, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 2003 - 2005	
ANNUAL TOTAL	84.47	91.66	--	
ANNUAL MEAN	0.23	0.25	0.35	
HIGHEST ANNUAL MEAN	--	--	0.44	2004
LOWEST ANNUAL MEAN	--	--	0.25	2005
HIGHEST DAILY MEAN	2.1 Mar 10	7.9 Sep 11	7.9	Sep 11, 2005
LOWEST DAILY MEAN	0.00 Many days	0.00 Many days	0.00	Many days, each year
MAXIMUM PEAK FLOW	--	13 Sep 11	13	Sep 11, 2005
MAXIMUM PEAK STAGE	--	1.39 Sep 11	1.39	Sep 11, 2005
ANNUAL RUNOFF (AC-FT)	168	182	251	
10 PERCENT EXCEEDS	0.76	0.50	0.93	
50 PERCENT EXCEEDS	0.08	0.10	0.15	
90 PERCENT EXCEEDS	0.00	0.00	0.00	

e Estimated.



06364300 PORCUPINE CREEK NEAR TECKLA, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Aluminum, water, unfltrd recover- able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recover- able, ug/L (01007)	Beryllium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Selenium, water, unfltrd ug/L (01147)
OCT 05...	--	--	--	--	--	--	--
NOV 03...	--	--	--	--	--	--	--
DEC 07...	754	2.9	38	E.07	E9	140	1.5
FEB 08...	524	1.3	51	E.04	28	89.0	1.1
MAR 07...	251	2.0	60	<.12	E12	118	1.6
APR 13...	116	1.7	62	<.12	32	144	1.7
MAY 19...	106	1.9	38	<.06	29	47.2	1.2
JUN 06...	73	2.0	26	<.12	49	118	1.8
15...	--	--	--	--	--	--	--
JUL 12...	55	4.5	26	<.12	117	515	1.3
AUG 09...	--	--	--	--	--	--	--
SEP 07...	--	--	--	--	--	--	--

< -- Less than.
E -- Estimated.

06364700 ANTELOPE CREEK NEAR TECKLA, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Aluminum, water, unfltrd recover- able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recover- able, ug/L (01007)	Beryllium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Selenium, water, unfltrd ug/L (01147)
OCT 05...	--	--	--	--	--	--	--
NOV 03...	15	.8	27	<.12	E14	918	2.0
DEC 07...	15	1.0	32	<.12	541	2,620	1.0
JAN 11...	11	.7	33	<.12	604	3,210	1.5
FEB 08...	59	.7	44	<.18	374	2,040	2.4
MAR 07...	46	.7	25	<.12	E17	1,440	1.8
APR 13...	59	.8	25	<.12	21	1,120	1.8
MAY 19...	40	.7	30	<.12	22	402	1.1
JUN 06...	30	.6	31	<.12	28	666	1.4
JUL 12...	--	--	--	--	--	--	--
AUG 09...	--	--	--	--	--	--	--
SEP 07...	--	--	--	--	--	--	--

< -- Less than.

E -- Estimated.

CHEYENNE RIVER BASIN

06365900 CHEYENNE RIVER NEAR DULL CENTER, WY

LOCATION.--Lat 43°25'45", long 105°02'43" (NAD 27), in SE¹/₄ SW¹/₄ NE¹/₄ sec.20, T.40 N., R.68 W., Converse County, Hydrologic Unit 10120103, Thunder Basin National Grassland, on right bank at the Fiddleback Ranch, 1.2 mi downstream from confluence of Antelope Creek and Dry Fork Cheyenne River, and 3.0 mi west of Dull Center.

DRAINAGE AREA.--1,527 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1976 to September 1981, October 1985 to September 1987, July 2004 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,310 ft above NGVD of 1929, from topographic map. Prior to June 16, 1978, at datum 2.00 ft higher. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.01	0.05	e0.02	0.04	0.05	0.03	0.03	0.01	0.07	0.00	0.00	0.00
2	0.01	0.05	0.03	0.03	0.05	0.03	0.04	0.01	0.04	0.00	0.00	0.00
3	0.01	0.05	0.03	0.04	0.05	0.03	0.03	0.02	0.04	0.00	0.00	0.00
4	0.00	0.04	0.03	0.04	0.05	0.03	0.03	0.02	0.04	0.00	0.00	0.00
5	0.00	0.04	0.03	0.04	0.05	0.03	0.03	0.01	0.03	0.00	0.00	0.00
6	0.00	0.04	0.03	0.04	0.05	0.03	0.03	0.01	0.03	0.00	0.00	0.00
7	0.00	0.04	0.03	0.04	0.05	0.02	0.03	0.07	0.02	0.00	0.00	0.00
8	0.01	0.04	0.03	0.04	0.05	0.03	0.03	0.29	0.02	0.00	0.00	0.00
9	0.01	0.04	0.04	0.04	0.05	0.03	0.04	0.07	0.02	0.00	0.00	0.00
10	0.01	0.04	0.03	0.04	0.05	0.03	0.04	0.10	0.02	0.00	0.00	0.00
11	0.01	0.04	0.04	0.04	0.05	0.02	0.03	0.45	0.05	0.00	0.00	0.00
12	0.01	0.03	0.03	e0.03	0.05	0.03	0.03	0.54	0.07	0.00	0.00	0.00
13	0.01	0.05	0.03	e0.02	0.05	0.03	0.03	0.05	0.96	0.00	0.00	0.00
14	0.01	0.03	0.03	e0.02	0.05	0.03	0.03	0.02	0.12	0.00	0.00	0.00
15	0.01	0.04	e0.03	e0.02	0.05	0.04	0.03	0.02	3.0	0.00	0.00	0.00
16	0.01	0.03	0.04	e0.03	0.04	0.03	0.03	0.02	2.2	0.00	0.00	0.00
17	0.02	0.03	0.03	0.05	0.05	0.03	0.03	0.02	0.08	0.00	0.00	0.00
18	0.02	0.03	0.03	0.05	0.05	0.04	0.03	0.02	0.02	0.00	0.00	0.00
19	0.02	0.04	0.03	0.06	0.05	0.03	0.03	0.05	0.00	0.00	0.00	0.00
20	0.02	0.04	0.04	0.06	0.05	0.03	0.03	0.05	0.00	0.00	0.00	0.00
21	0.02	0.03	0.03	0.07	0.05	0.04	0.05	0.04	0.00	0.00	0.00	0.00
22	0.03	0.03	0.03	0.06	0.04	0.04	0.16	0.04	0.00	0.00	0.00	0.00
23	0.03	0.04	0.04	0.05	0.04	0.04	0.04	0.04	0.00	0.00	0.00	0.00
24	0.03	0.04	0.04	0.05	0.04	0.05	0.02	0.04	0.00	0.00	0.00	0.00
25	0.03	0.04	0.04	e0.05	0.04	0.05	0.02	0.08	0.00	0.00	0.00	0.00
26	0.04	0.03	0.04	0.05	0.04	0.04	0.01	0.05	0.00	0.00	0.00	0.00
27	0.04	0.03	0.03	0.05	0.04	0.04	0.02	0.05	0.00	0.00	0.00	0.00
28	0.04	e0.02	0.04	0.05	0.03	0.04	0.02	0.03	0.00	0.00	0.00	0.00
29	0.05	e0.02	0.04	0.05	---	0.03	0.01	0.03	0.00	0.00	0.00	0.00
30	0.05	e0.02	0.04	0.05	---	0.04	0.01	0.06	0.00	0.00	0.00	0.00
31	0.05	---	0.04	0.05	---	0.04	---	0.13	---	0.00	0.00	---
TOTAL	0.61	1.09	1.04	1.35	1.31	1.05	0.99	2.44	6.83	0.00	0.00	0.00
MEAN	0.02	0.04	0.03	0.04	0.05	0.03	0.03	0.08	0.23	0.00	0.00	0.00
MAX	0.05	0.05	0.04	0.07	0.05	0.05	0.16	0.54	3.0	0.00	0.00	0.00
MIN	0.00	0.02	0.02	0.02	0.03	0.02	0.01	0.01	0.00	0.00	0.00	0.00
AC-FT	1.2	2.2	2.1	2.7	2.6	2.1	2.0	4.8	14	0.00	0.00	0.00

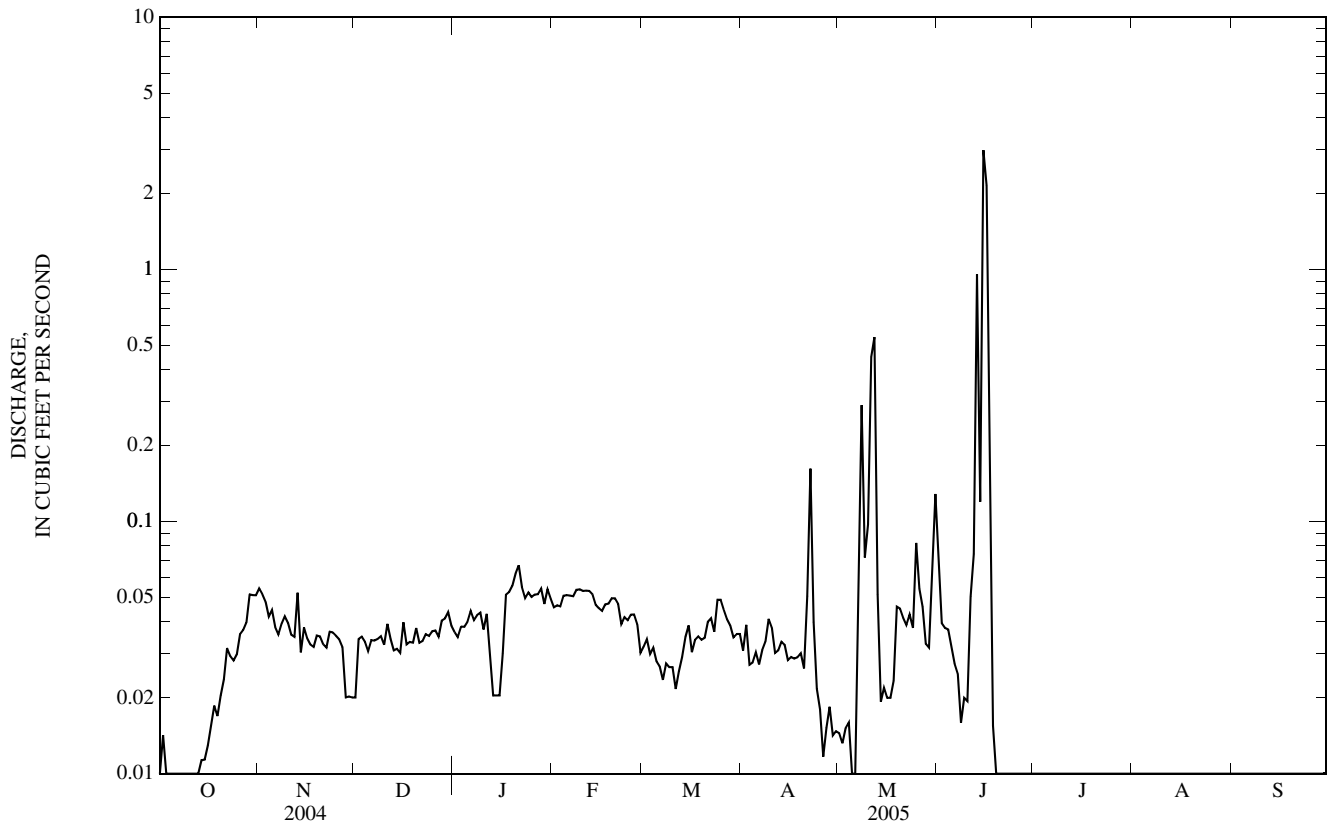
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2005, BY WATER YEAR (WY)*

MEAN	2.56	0.27	0.17	0.15	2.32	18.0	8.15	83.3	26.1	22.3	10.0	1.22
MAX	19.3	0.99	0.23	0.41	8.37	83.4	24.4	633	75.2	123	39.0	5.64
(WY)	(1987)	(1987)	(1980)	(1987)	(1980)	(1978)	(1987)	(1978)	(1986)	(1978)	(1979)	(1986)
MIN	0.02	0.04	0.03	0.04	0.05	0.03	0.03	0.08	0.04	0.00	0.00	0.00
(WY)	(2005)	(2005)	(2005)	(1980)	(2005)	(2005)	(2005)	(2005)	(1977)	(2005)	(2005)	(2005)

06365900 CHEYENNE RIVER NEAR DULL CENTER, WY—Continued

SUMMARY STATISTICS	FOR 2005 WATER YEAR		WATER YEARS 1976 - 2005*	
ANNUAL TOTAL	16.71		--	
ANNUAL MEAN	0.05		15.7	
HIGHEST ANNUAL MEAN	--		76.2	1978
LOWEST ANNUAL MEAN	--		0.05	2005
HIGHEST DAILY MEAN	3.0	Jun 15	9,610	May 18, 1978
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days, most years
MAXIMUM PEAK FLOW	30	Jun 15	11,800 ^a	May 18, 1978
MAXIMUM PEAK STAGE	3.13	Jun 15	14.00 ^b	May 18, 1978
ANNUAL RUNOFF (AC-FT)	33		11,350	
10 PERCENT EXCEEDS	0.05		16	
50 PERCENT EXCEEDS	0.03		0.20	
90 PERCENT EXCEEDS	0.00		0.03	

* For period of operation.
 a From rating curve extended above 2,500 ft³/s on basis of slope-area measurement of peak flow.
 b From floodmarks, at present datum.
 e Estimated.



06365900 CHEYENNE RIVER NEAR DULL CENTER, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Aluminum, water, unfltrd recover- able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recover- able, ug/L (01007)	Beryllium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Selenium, water, unfltrd ug/L (01147)
OCT 05...	194	1.4	26	<.12	2,540	2,110	1.2
NOV 03...	33	1.0	35	<.12	698	446	2.4
DEC 07...	8	1.0	33	<.12	606	807	1.1
JAN 11...	20	.8	28	<.12	533	1,310	1.4
FEB 08...	11	.9	27	<.12	780	895	1.6
MAR 07...	34	1.0	23	<.12	509	857	1.8
APR 13...	25	1.3	23	<.12	1,190	845	2.2
MAY 19...	52	1.0	32	<.12	51	216	1.4
JUN 06...	45	.8	32	<.12	82	386	1.7
JUL 12...	--	--	--	--	--	--	--
AUG 09...	--	--	--	--	--	--	--
SEP 07...	--	--	--	--	--	--	--
< --	Less than.						
E --	Estimated.						

06375600 LITTLE THUNDER CREEK NEAR HAMPSHIRE, WY

LOCATION.--Lat 43°39'18", long 104°54'33" (NAD 83), in SW¹/₄ SE¹/₄ sec.33 T.43 N., R.67 W., Weston County, Hydrologic Unit 10121203, Thunder Basin National Grassland, on left bank 1.2 mi downstream from county bridge, 2.7 mi upstream from mouth, 12 mi northwest of Hampshire, and 38 mi southwest of Newcastle.

DRAINAGE AREA.--234 mi².

PERIOD OF RECORD.--September 1977 to September 1981, October 1987 to September 1997, July 2004 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)
OCT 05...	1330	.00	--	--	--	--	--	--	--	--	--	--	--
NOV 03...	1345	.00	--	--	--	--	--	--	--	--	--	--	--
DEC 07...	1325	.00	--	--	--	--	--	--	--	--	--	--	--
JAN 11...	1430	.00	--	--	--	--	--	--	--	--	--	--	--
FEB 08...	1410	.00	--	--	--	--	--	--	--	--	--	--	--
MAR 07...	1315	.00	--	--	--	--	--	--	--	--	--	--	--
APR 13...	1320	.00	--	--	--	--	--	--	--	--	--	--	--
MAY 17...	1200	7.7	640	6.9	87	8.2	1,130	13.5	17.5	240	49.5	29.1	4
JUN 06...	1400	.07	642	8.0	113	8.4	1,840	25.0	23.5	380	64.9	52.4	6
JUL 12...	1140	.00	--	--	--	--	--	--	--	--	--	--	--
AUG 09...	1050	.00	--	--	--	--	--	--	--	--	--	--	--
SEP 07...	1045	.00	--	--	--	--	--	--	--	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT 05...	--	--
NOV 03...	--	--
DEC 07...	--	--
JAN 11...	--	--
FEB 08...	--	--
MAR 07...	--	--
APR 13...	--	--
MAY 17...	151	760
JUN 06...	255	1,240
JUL 12...	--	--
AUG 09...	--	--
SEP 07...	--	--

CHEYENNE RIVER BASIN

06376300 BLACK THUNDER CREEK NEAR HAMPSHIRE, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recover- able, ug/L (01007)	Beryll- ium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)	Selen- ium, water, unfltrd ug/L (01147)
OCT 05...	--	--	--	--	--	--
NOV 03...	--	--	--	--	--	--
DEC 07...	--	--	--	--	--	--
JAN 11...	--	--	--	--	--	--
FEB 08...	--	--	--	--	--	--
MAR 07...	--	--	--	--	--	--
APR 13...	--	--	--	--	--	--
MAY 17...	.8	146	.53	23	1.4	2.1
JUN 06...	--	--	--	--	--	--
JUL 12...	--	--	--	--	--	--
AUG 09...	--	--	--	--	--	--
SEP 07...	--	--	--	--	--	--

06386400 CHEYENNE RIVER AT RIVERVIEW, WY

LOCATION.--Lat 43°25'41", long 104°11'45" (NAD 27), in NW¼ NE¼ SW¼ sec. 21, T.40 N., R.61 W., Niobrara County, Hydrologic Unit 10120106, at bridge on U.S. Highway 85, 0.5 mi north of Riverview, 0.9 mi upstream from Bobcat Creek, 4.7 mi upstream from former gaging station, and 30 mi south of Newcastle.

DRAINAGE AREA.--5,160 mi², approximately.

PERIOD OF RECORD.--Water years 1951-54, 1969-70, 1972-92 October 2001 to June 2005 (discontinued). Published as South Fork Cheyenne River near Spencer prior to October 1951, as Cheyenne River near Spencer 1952-76, and as Cheyenne River near Riverview 1977-79.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT 05...	1455	.00	--	--	--	--	--	--	--	--	--	--	--
NOV 03...	1520	.05	668	11.3	118	7.9	6,560	16.0	10.5	1,700	398	170	12.9
JAN 11...	1615	.00	--	--	--	--	--	--	--	--	--	--	--
APR 13...	1505	.20	667	10.0	127	8.1	6,040	20.0	19.5	1,400	319	154	16.3
MAY 17...	1505	19	657	6.8	83	8.0	759	16.5	17.5	160	40.2	14.1	6.21
JUN 06...	1545	.25	655	9.7	148	8.2	5,090	25.0	28.0	830	166	101	11.8

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)	Aluminum, water, unfltrd recoverable, ug/L (01105)
OCT 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 03...	13	1,190	60	324	115	.5	10.7	3,570	5,660	7.83	.78	5,760	42
JAN 11...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 13...	13	1,140	63	299	129	.8	1.70	3,000	4,940	6.85	2.72	5,040	189
MAY 17...	3	88.8	54	127	7.32	.4	8.34	224	466	.69	26.2	510	13,400
JUN 06...	14	913	70	411	111	1.1	5.66	2,210	3,770	5.38	2.67	3,960	536

Date	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recoverable, ug/L (01007)	Beryllium, water, unfltrd recoverable, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Selenium, water, unfltrd ug/L (01147)
OCT 05...	--	--	--	--	--	--
NOV 03...	1.4	15	<.18	E19	200	4.6
JAN 11...	--	--	--	--	--	--
APR 13...	2.5	19	<.18	26	370	4.7
MAY 17...	.8	184	1.39	19	14.2	1.9
JUN 06...	2.5	56	<.12	E11	394	4.1

< -- Less than.
E -- Estimated.

CHEYENNE RIVER BASIN

06386500 CHEYENNE RIVER NEAR SPENCER, WY

LOCATION.--Lat 43°25'16", long 104°07'52" (NAD 27), in NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.25, T.40 N., R.61 W., Niobrara County, Hydrologic Unit 10120106, on right bank at downstream side of old highway bridge, 0.1 mi downstream from Sage Creek, 1.8 mi downstream from Robbers Roost Creek, and 17 mi northwest of Edgemont, SD.

DRAINAGE AREA.--5,270 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1948 to September 1974, October 2003 to current year. Published as South Fork Cheyenne River near Spencer October 1949 to September 1951.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 3,600 ft above NGVD of 1929, from topographic map. Prior to October 18, 1955 water stage recorder at site 400 ft upstream from station. October 1955 to August 1, 1961, at site 2,500 ft upstream from station, and August 1, 1961 to August 22, 1962, at site 2,000 ft upstream from station, all at different datums. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Many small reservoirs upstream from station used for stock and irrigation water, total capacity, about 45,000 acre-ft. Station operated by Wyoming District from October 1948 to September 1974. Station operated and record provided by the South Dakota Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.01	e0.03	e0.03	e0.02	0.11	0.18	1.8	e5.8	7.8	0.68	1.2
2	0.00	0.01	e0.03	e0.02	e0.03	0.11	0.16	1.8	e5.7	9.5	0.63	1.2
3	0.00	0.01	e0.03	e0.01	e0.04	0.12	0.16	2.0	e5.8	9.7	0.61	1.3
4	0.00	0.01	e0.03	e0.01	e0.04	0.12	0.16	2.3	e5.9	11	0.60	1.2
5	0.00	0.01	e0.03	e0.01	e0.03	0.13	0.20	2.4	e6.0	12	0.57	1.2
6	0.00	0.01	e0.03	e0.01	e0.03	0.13	0.20	2.2	e6.4	12	0.55	1.1
7	0.00	0.01	e0.03	e0.01	e0.02	0.14	1.4	2.7	e6.9	16	0.52	1.1
8	0.00	0.01	e0.03	e0.00	e0.02	0.13	0.61	3.6	e7.3	17	0.48	1.0
9	0.00	0.01	e0.03	e0.00	e0.02	0.13	0.64	4.1	e7.3	10	0.45	0.99
10	0.00	0.02	e0.03	e0.00	e0.03	0.14	0.63	5.6	e7.2	6.9	0.46	0.91
11	0.00	0.02	e0.04	e0.00	e0.04	0.15	0.64	5.5	e7.2	5.1	0.46	0.81
12	0.00	0.02	e0.04	e0.00	e0.05	0.15	0.64	6.5	e15	3.6	0.64	0.74
13	0.00	0.02	e0.04	e0.00	e0.06	0.14	0.61	5.9	236	2.2	4.7	0.70
14	0.00	0.02	e0.03	e0.00	e0.07	0.14	0.73	7.0	227	1.3	2.2	0.67
15	0.00	0.02	e0.03	e0.00	e0.08	0.15	0.79	23	105	0.73	33	0.62
16	0.00	0.02	e0.03	e0.00	e0.08	0.15	0.69	41	26	0.62	51	0.55
17	0.00	0.02	e0.04	e0.00	e0.08	0.15	0.59	24	17	0.59	21	0.49
18	0.00	0.02	e0.04	e0.00	e0.08	0.15	0.53	15	16	0.57	12	0.45
19	0.00	0.03	e0.04	e0.00	e0.08	0.16	0.62	11	17	0.58	8.3	0.52
20	0.00	0.03	e0.04	e0.00	e0.08	0.20	1.4	e9.5	16	0.55	5.7	0.49
21	0.00	0.03	e0.04	e0.00	0.08	0.16	5.9	e8.3	12	0.51	3.5	0.45
22	0.00	0.03	e0.04	e0.00	0.08	0.16	15	e7.4	9.9	0.47	2.4	0.39
23	0.00	0.03	e0.03	e0.00	0.09	0.16	6.5	e6.8	7.2	0.43	2.1	0.35
24	0.00	0.03	e0.02	e0.00	0.09	0.17	3.4	e6.4	4.9	0.58	2.7	0.34
25	0.00	0.03	e0.02	e0.00	0.08	0.18	2.6	e6.1	9.7	0.63	2.4	0.36
26	0.00	0.04	e0.03	e0.00	0.09	0.18	2.2	e6.0	11	0.73	2.1	0.34
27	0.00	0.04	e0.03	e0.00	0.09	0.18	2.2	e6.0	18	0.77	21	0.31
28	0.00	0.04	e0.03	e0.00	0.10	0.18	2.1	e6.0	16	0.77	11	0.27
29	0.01	e0.03	e0.03	e0.00	---	0.18	2.0	e5.9	14	0.73	2.5	0.24
30	0.01	e0.03	e0.03	e0.01	---	0.18	1.8	e5.8	9.5	0.69	1.5	0.22
31	0.01	---	e0.03	e0.02	---	0.18	---	e5.8	---	0.69	1.3	---
TOTAL	0.03	0.66	1.00	0.13	1.68	4.71	55.28	247.4	858.7	134.74	197.05	20.51
MEAN	0.00	0.02	0.03	0.00	0.06	0.15	1.84	7.98	28.6	4.35	6.36	0.68
MAX	0.01	0.04	0.04	0.03	0.10	0.20	15	41	236	17	51	1.3
MIN	0.00	0.01	0.02	0.00	0.02	0.11	0.16	1.8	4.9	0.43	0.45	0.22
AC-FT	0.06	1.3	2.0	0.3	3.3	9.3	110	491	1,700	267	391	41

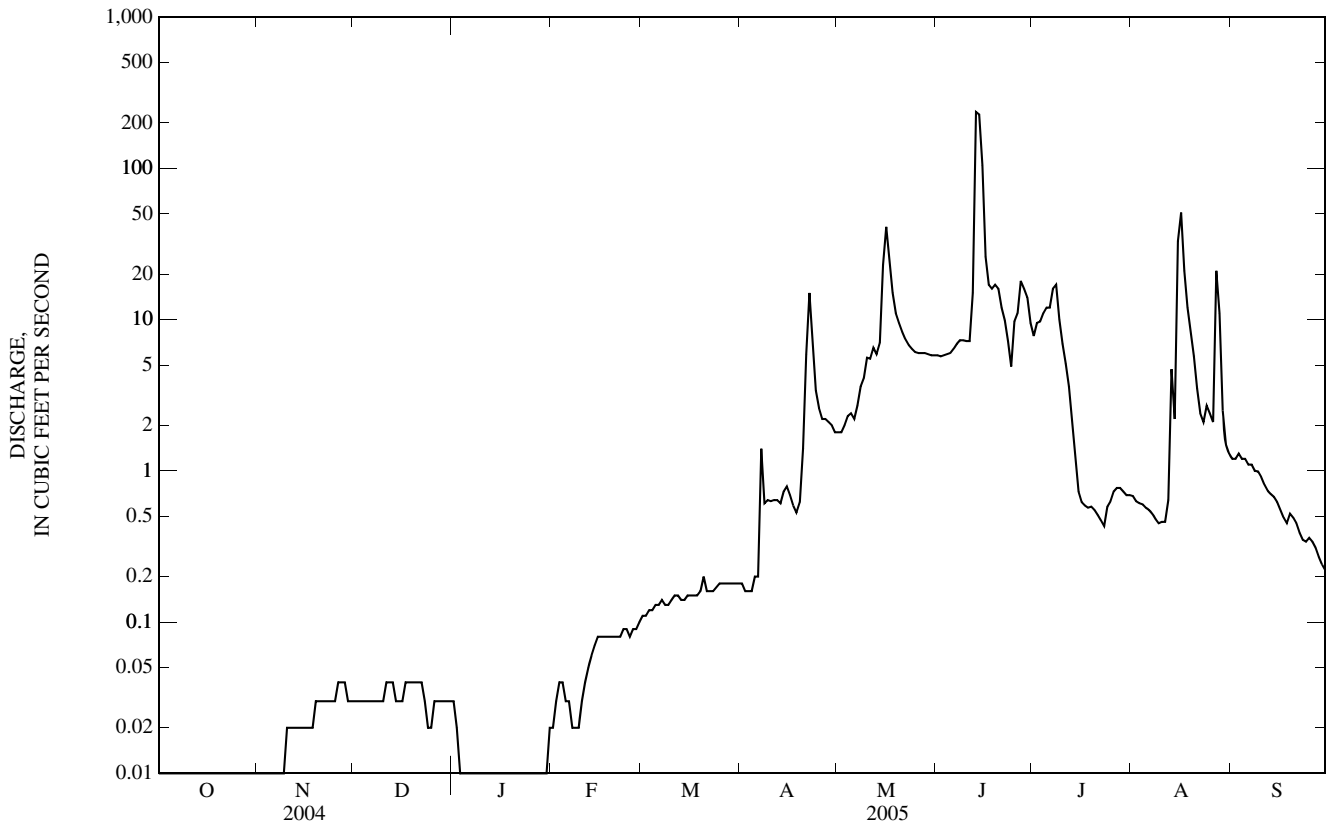
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2005, BY WATER YEAR (WY)

MEAN	2.31	0.91	0.35	3.21	15.0	15.6	31.5	175	216	113	48.5	27.3
MAX	28.4	19.9	5.94	84.9	120	80.0	502	1,663	1,260	680	409	292
(WY)	(1963)	(1974)	(1974)	(1974)	(1963)	(1955)	(1955)	(1962)	(1962)	(1958)	(1955)	(1973)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
(WY)	(1951)	(1950)	(1949)	(1949)	(1950)	(1951)	(1951)	(1951)	(1966)	(2004)	(1959)	(1953)

06386500 CHEYENNE RIVER NEAR SPENCER, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1949 - 2005	
ANNUAL TOTAL	25.95	1,521.89	--	
ANNUAL MEAN	0.07	4.17	54.2	
HIGHEST ANNUAL MEAN	--	--	280	1962
LOWEST ANNUAL MEAN	--	--	0.09	2004
HIGHEST DAILY MEAN	1.8 Mar 11	236 Jun 13	12,100	May 27, 1962
LOWEST DAILY MEAN	0.00 Jan 26	0.00 Oct 1	0.00 ^a	Oct 4, 1948
ANNUAL SEVEN-DAY MINIMUM	0.00 Jan 26	0.00 Oct 1	0.00	Oct 4, 1948
MAXIMUM PEAK FLOW	--	703 Jun 13	16,000	May 27, 1962
MAXIMUM PEAK STAGE	--	8.00 Jun 13	13.74 ^b	May 27, 1962
ANNUAL RUNOFF (AC-FT)	51	3,020	39,240	
10 PERCENT EXCEEDS	0.20	9.5	66	
50 PERCENT EXCEEDS	0.03	0.18	0.00	
90 PERCENT EXCEEDS	0.00	0.00	0.00	

a No flow at times in most years.
 b Site and datum then in use.
 e Estimated.



WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951-54, 1951-54, 1969-79, 2004 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 2004 to current year (seasonal).

PH: March 2004 to current year (seasonal).

WATER TEMPERATURE: March 2004 to current year (seasonal).

DISSOLVED OXYGEN: March 2004 to current year (seasonal).

TURBIDITY: March 2004 to current year (seasonal).

REMARKS.--Data published in the tables below are rated as follows: temperature, good; specific conductance, good; pH, good; dissolved oxygen, fair; and turbidity, fair. Daily records are collected at 15-minute intervals using multi-parameter instrument from March to November. Satellite data-collection platform at station operated by the South Dakota Water Science Center. Daily specific conductance, pH, water temperature, dissolved oxygen, turbidity, and sediment records provided by the South Dakota Water Science Center.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 8,760 microsiemens per centimeter at 25°C (µS/cm), April 21, 2005; minimum recorded, 471 µS/cm, August 28, 2005.

PH: Maximum recorded, 9.4, August 13, 14, 2005; minimum recorded, 6.8, June 15, 2005.

WATER TEMPERATURE: Maximum recorded, 34.8°C, June 22, 2005; minimum recorded, 2.3°C, April 12, 2004.

DISSOLVED OXYGEN: Maximum recorded, 16.6 mg/L, June 16, 2004; minimum recorded, 1.6 mg/L, July 1, 2004.

TURBIDITY: Maximum recorded, >1,500 FN units, many days 2005; minimum daily, 2.0 FN units, June 30, 2004.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 8,760 µS/cm, April 21; minimum recorded, 741 µS/cm, August 28.

PH: Maximum recorded, 9.4, August 13, 14; minimum recorded, 6.8, June 15.

WATER TEMPERATURE: Maximum recorded, 34.8°C, June 22; minimum recorded, 3.5°C, April 22.

DISSOLVED OXYGEN: Maximum recorded, 12.4 mg/L, July 26; minimum recorded, 1.8 mg/L, June 9.

TURBIDITY: Maximum recorded, >1,500 FN units, many days; minimum daily, 3.0 FN units, May 3, 4, 12, 13.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
DEC 07...	1610	.02	662	7.1	57	7.6	6,300	4.5	.0	1,700	407	171	14.2
FEB 08...	1555	.06	668	5.4	43	7.6	5,720	-3.0	.0	1,400	335	134	11.1
MAR 07...	1455	.08	666	10.9	108	8.4	5,500	8.5	8.0	1,400	323	132	11.1
APR 22...	1110	18	--	--	--	--	4,900	--	13.0	--	--	--	--
MAY 17...	1405	24	--	--	--	--	--	--	17.5	--	--	--	--
JUN 13...	1125	31	--	--	--	--	1,590	12.5	13.5	--	--	--	--
JUL 12...	1325	2.9	672	7.7	118	8.2	2,200	30.0	30.5	490	116	48.5	10.0
JUL 15...	1510	.62	--	--	--	--	31.0	29.0	31.0	--	--	--	--
AUG 09...	1245	.02	670	7.5	110	8.0	5,150	--	27.5	1,100	238	117	14.9
AUG 23...	1449	1.9	--	--	--	--	--	--	--	--	--	--	--
SEP 07...	1510	.07	669	7.7	109	8.1	3,380	28.5	25.5	750	177	75.2	11.9

06386500 CHEYENNE RIVER NEAR SPENCER, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)
DEC 07...	12	1,140	59	310	--	134	.5	10.4	3,400	5,460	7.62	.30	5,600
FEB 08...	11	984	60	294	282	110	.5	9.47	2,830		6.42	.76	4,720
MAR 07...	11	970	61	281	264	108	.5	8.35	2,750		6.21	.99	4,570
APR 22...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 12...	6	312	58	214	--	36.0	.6	8.78	862	1,520	2.15	12.4	1,580
JUL 15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 09...	11	837	62	241	--	89.5	.7	10.2	2,510	3,960	5.56	.22	4,090
AUG 23...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 07...	8	503	59	218	--	56.1	.6	8.38	1,510	2,470	3.55	.49	2,610

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitrogen, wat unfltrd by analysis, mg/L (62855)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Aluminum, water, unfltrd recover-able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recover-able, ug/L (01007)	Beryllium, water, unfltrd recover-able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Selenium, water, unfltrd ug/L (01147)	Suspended sediment concentration mg/L (80154)	Suspended sediment concentration mg/L (80155)
DEC 07...	--	--	--	--	--	72	2.2	21	<.18	55	788	3.3	--	--
FEB 08...	--	--	--	--	--	87	1.7	18	<.18	140	1,620	2.9	--	--
MAR 07...	--	--	--	--	--	186	2.0	17	<.18	E18	702	3.2	--	--
APR 22...	--	--	--	--	--	--	--	--	--	--	--	--	30	1.5
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--	1,230	81
JUN 13...	--	--	--	--	--	--	--	--	--	--	--	--	348	29
JUL 12...	<.04	<.06	<.008	.60	<.02	1,470	1.2	60	.12	E16	79.0	1.6	--	--
JUL 15...	--	--	--	--	--	--	--	--	--	--	--	--	81	.14
AUG 09...	--	--	--	--	--	69	1.6	36	<.18	<30	261	2.7	--	--
AUG 23...	--	--	--	--	--	--	--	--	--	--	--	--	93	.47
SEP 07...	<.04	<.06	<.008	.53	<.02	224	.90	80	<.12	<18	247	--	--	--

< -- Less than.
E -- Estimated.

CHEYENNE RIVER BASIN

06386500 CHEYENNE RIVER NEAR SPENCER, WY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	5,600	5,400	5,460	5,980	5,390	5,570
2	---	---	---	---	---	---	5,620	5,390	5,440	6,030	5,470	5,660
3	---	---	---	---	---	---	5,560	5,440	5,460	5,910	5,500	5,640
4	---	---	---	---	---	---	5,530	5,450	5,490	5,930	5,590	5,750
5	---	---	---	---	---	---	5,520	5,470	5,490	6,010	5,670	5,770
6	---	---	---	---	---	---	5,590	5,490	5,520	5,860	5,750	5,810
7	---	---	---	---	---	---	5,740	5,500	5,670	5,950	5,730	5,810
8	---	---	---	---	---	---	5,710	5,610	5,690	5,830	5,720	5,780
9	---	---	---	---	---	---	5,670	5,640	5,660	7,140	5,690	6,270
10	---	---	---	---	---	---	---	5,650	---	5,740	5,570	5,620
11	---	---	---	---	---	---	5,770	5,700	5,740	5,940	5,500	5,580
12	---	---	---	---	---	---	5,790	5,740	5,760	8,700	5,600	7,770
13	---	---	---	---	---	---	5,820	5,750	5,790	8,730	6,150	7,920
14	---	---	---	---	---	---	5,890	5,790	5,840	7,470	5,630	6,200
15	---	---	---	---	---	---	5,920	5,860	5,890	5,780	5,090	5,570
16	---	---	---	---	---	---	5,920	5,860	5,890	5,090	930	2,010
17	---	---	---	---	---	---	---	5,880	---	988	908	933
18	---	---	---	---	---	---	5,970	5,890	5,920	1,240	988	1,100
19	---	---	---	---	---	---	5,950	5,690	5,880	1,480	1,240	1,380
20	---	---	---	---	---	---	5,830	5,660	5,760	1,600	1,480	1,540
21	---	---	---	---	---	---	8,760	5,540	7,620	1,750	1,590	1,660
22	---	---	---	---	---	---	8,540	4,520	5,110	1,980	1,750	1,870
23	---	---	---	---	---	---	5,310	4,640	5,180	2,210	1,980	2,100
24	---	---	---	---	---	---	---	---	---	2,410	2,200	2,310
25	---	---	---	---	---	---	---	---	---	2,540	2,370	2,470
26	---	---	---	---	---	---	---	---	---	2,770	2,540	2,650
27	---	---	---	---	---	---	---	---	---	4,380	2,730	2,970
28	---	---	---	---	---	---	---	---	---	3,810	2,970	3,250
29	---	---	---	---	---	---	---	---	---	3,380	3,130	3,240
30	---	---	---	---	---	---	---	---	---	3,390	3,240	3,320
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	8,730	908	4,120
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	2,060	1,840	1,950	4,850	4,710	4,760	1,630	1,350	1,490
2	---	---	---	2,330	2,060	2,190	4,960	4,790	4,870	1,960	1,630	1,810
3	---	---	---	2,550	2,320	2,440	4,990	4,910	4,950	2,240	1,960	2,100
4	---	---	---	2,720	2,530	2,620	5,080	4,940	5,010	2,550	2,240	2,380
5	---	---	---	2,970	2,720	2,830	5,160	5,000	5,080	2,810	2,540	2,630
6	---	---	---	3,160	2,940	3,030	5,240	5,070	5,140	3,060	2,800	2,900
7	---	---	---	3,220	2,940	3,140	5,290	5,150	5,220	3,300	3,030	3,110
8	---	---	---	2,940	2,130	2,660	5,380	5,210	5,280	3,560	3,050	3,340
9	---	---	---	2,130	1,520	1,740	5,370	5,210	5,320	3,660	3,300	3,510
10	---	---	---	1,730	1,510	1,600	5,350	5,060	5,200	3,800	3,580	3,710
11	---	---	---	2,000	1,700	1,890	5,360	5,080	5,250	3,880	3,510	3,800
12	7,810	3,600	5,280	2,260	2,000	2,120	5,330	4,010	4,740	3,960	3,650	3,800
13	6,090	744	1,820	2,610	2,260	2,450	4,480	1,480	3,330	4,180	3,830	4,050
14	2,480	1,700	2,250	2,950	2,610	2,740	2,250	1,350	1,770	4,280	4,130	4,200
15	2,400	1,130	1,740	3,230	2,870	3,060	2,650	1,610	2,280	4,360	4,010	4,250
16	1,490	1,300	1,410	3,530	3,230	3,380	1,610	641	923	4,350	4,180	4,270
17	1,480	1,410	1,440	3,850	3,530	3,680	684	642	658	4,490	4,320	4,420
18	1,600	1,470	1,560	4,060	3,840	3,930	693	661	672	4,520	3,990	4,290
19	1,680	1,460	1,550	4,270	3,970	4,090	905	693	798	4,430	4,200	4,340
20	1,860	1,670	1,760	4,490	4,200	4,310	1,130	905	1,010	4,420	4,340	4,380
21	2,340	1,860	2,100	4,660	4,340	4,510	1,430	1,130	1,280	4,410	4,360	4,380
22	2,610	2,340	2,470	4,740	4,450	4,620	1,730	1,410	1,580	4,420	4,360	4,380
23	2,870	2,600	2,750	4,940	4,400	4,770	2,040	1,700	1,900	4,470	4,330	4,390
24	3,130	2,840	2,990	4,740	4,400	4,580	2,390	2,040	2,200	4,480	4,340	4,410
25	3,060	2,620	2,850	4,780	4,250	4,470	2,660	2,390	2,530	4,500	4,330	4,420
26	2,780	2,610	2,720	4,360	3,830	3,990	2,910	2,630	2,730	4,560	4,430	4,470
27	2,770	2,210	2,520	4,240	3,910	4,080	3,020	580	1,770	4,580	4,480	4,510
28	2,210	1,190	1,480	4,400	4,160	4,250	604	471	539	4,500	4,460	4,480
29	1,720	1,220	1,450	4,560	4,320	4,400	717	588	634	4,540	4,480	4,500
30	1,860	1,700	1,770	4,680	4,460	4,550	1,100	717	917	4,570	4,500	4,530
31	---	---	---	4,790	4,630	4,680	1,350	1,100	1,240	---	---	---
MONTH	---	---	---	4,940	1,510	3,380	5,380	471	2,890	4,580	1,350	3,780

06386500 CHEYENNE RIVER NEAR SPENCER, WY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.3	8.2	8.4	7.8	7.5	7.0	8.0	7.4	8.2	7.9	8.3	7.9
2	8.2	8.1	8.3	7.7	7.7	7.4	8.0	7.5	8.1	7.9	8.9	7.9
3	8.2	8.1	8.3	7.8	7.6	7.4	7.9	7.5	8.3	8.0	8.4	8.1
4	8.2	8.1	8.0	7.9	7.9	7.4	7.8	7.5	8.2	7.9	8.2	7.6
5	8.3	8.1	8.1	7.8	7.9	7.6	7.9	7.5	8.1	7.8	8.1	7.3
6	8.2	8.0	8.1	8.0	8.0	7.7	8.2	7.6	8.1	7.8	8.0	7.4
7	8.2	8.0	8.2	8.0	8.0	7.6	8.2	7.8	8.0	7.7	8.1	7.5
8	8.1	8.0	8.3	8.1	8.1	7.9	8.0	7.8	8.0	7.7	8.0	7.4
9	8.2	8.0	8.3	7.7	8.0	7.5	7.9	7.6	8.1	7.8	7.9	7.4
10	8.3	8.2	8.3	8.1	7.8	7.6	7.8	7.4	8.1	7.9	7.8	7.1
11	8.3	8.2	8.3	7.7	8.0	7.5	7.8	7.4	8.1	7.9	7.8	7.2
12	8.3	8.2	8.0	7.7	7.9	7.5	8.1	7.4	8.2	7.9	7.8	7.3
13	8.2	8.2	8.0	7.5	8.3	6.9	8.1	7.6	9.4	7.8	7.6	7.2
14	8.2	8.2	8.1	7.5	7.6	7.2	8.0	7.6	9.4	8.6	7.6	7.1
15	8.2	8.1	8.6	7.8	7.2	6.8	8.1	7.6	8.6	8.0	7.6	7.2
16	8.2	8.1	8.3	7.6	7.7	6.9	8.1	7.8	8.0	7.6	7.4	7.0
17	8.2	8.1	7.8	7.6	7.5	7.3	8.2	8.0	7.8	7.7	7.5	7.0
18	8.1	8.0	7.8	7.6	8.4	7.3	8.2	7.8	7.8	7.7	7.6	7.2
19	8.1	8.0	7.7	7.6	8.1	7.8	8.2	7.8	7.8	7.7	7.5	7.2
20	8.1	8.0	7.8	7.6	7.9	7.6	8.2	7.9	8.0	7.8	7.6	7.3
21	8.1	7.8	7.9	7.6	8.0	7.6	8.2	7.6	8.2	7.8	7.6	7.3
22	8.2	8.0	7.8	7.7	8.0	7.6	8.2	7.8	8.8	8.0	7.8	7.2
23	9.2	8.2	8.0	7.7	7.9	7.7	8.1	7.8	8.3	---	7.8	7.4
24	9.2	---	7.9	7.8	7.9	7.6	8.2	7.8	8.1	7.9	7.6	7.2
25	---	---	8.0	7.8	7.9	7.6	8.2	7.8	8.1	7.6	7.6	7.3
26	---	---	8.1	7.8	7.9	7.6	8.2	7.9	8.0	7.8	7.6	7.3
27	---	---	8.1	7.6	7.8	7.6	8.2	7.9	7.9	7.5	7.6	7.2
28	8.4	7.7	8.1	7.6	7.7	7.4	8.2	8.0	7.6	7.5	7.6	7.4
29	8.3	7.6	8.0	7.8	7.8	7.3	8.2	7.8	7.6	7.5	7.6	7.3
30	8.3	7.8	8.0	7.9	7.9	7.3	8.1	7.9	8.0	7.6	7.6	7.3
31	---	---	8.0	7.1	---	---	8.2	7.9	8.2	7.8	---	---
MONTH	---	---	8.6	7.1	8.4	6.8	8.2	7.4	9.4	7.5	8.9	7.0

CHEYENNE RIVER BASIN

06386500 CHEYENNE RIVER NEAR SPENCER, WY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	12.4	---	---	8.8	4.4	6.6
2	---	---	---	---	---	---	14.9	7.8	10.5	12.5	5.1	8.2
3	---	---	---	---	---	---	15.5	8.2	11.4	14.1	6.4	9.7
4	---	---	---	---	---	---	14.6	9.6	11.7	16.4	10.0	12.9
5	---	---	---	---	---	---	12.6	9.3	10.8	20.9	11.3	15.4
6	---	---	---	---	---	---	14.2	7.1	10.5	20.5	13.4	16.8
7	---	---	---	---	---	---	19.3	8.7	13.5	19.0	14.6	16.7
8	---	---	---	---	---	---	16.3	9.8	12.9	15.5	10.1	12.4
9	---	---	---	---	---	---	12.9	8.8	10.6	18.2	9.4	12.4
10	---	---	---	---	---	---	11.0	7.2	9.0	16.3	12.0	13.1
11	---	---	---	---	---	---	11.5	4.9	8.0	12.0	6.5	9.0
12	---	---	---	---	---	---	14.0	5.7	9.9	16.0	5.5	9.7
13	---	---	---	---	---	---	16.3	7.6	11.7	14.9	7.8	10.7
14	---	---	---	---	---	---	15.5	8.5	11.6	17.8	10.1	13.4
15	---	---	---	---	---	---	16.2	7.7	11.3	22.3	11.1	15.9
16	---	---	---	---	---	---	17.9	8.4	12.9	22.9	15.6	19.0
17	---	---	---	---	---	---	19.0	11.1	14.8	18.8	13.6	17.2
18	---	---	---	---	---	---	18.8	12.1	15.4	21.8	11.7	16.4
19	---	---	---	---	---	---	16.8	12.5	14.7	26.1	14.4	19.9
20	---	---	---	---	---	---	13.8	10.7	12.2	26.9	17.4	22.1
21	---	---	---	---	---	---	10.7	5.6	7.6	24.6	18.2	21.3
22	---	---	---	---	---	---	16.4	3.5	9.3	25.8	16.2	20.9
23	---	---	---	---	---	---	17.4	6.7	11.8	26.1	18.3	21.5
24	---	---	---	---	---	---	19.5	9.3	13.8	25.8	18.2	20.9
25	---	---	---	---	---	---	16.6	10.1	13.1	20.1	14.5	17.1
26	---	---	---	---	---	---	11.5	7.5	9.1	19.1	13.0	15.9
27	---	---	---	---	---	---	8.8	6.7	7.7	18.9	12.0	15.3
28	---	---	---	---	---	---	8.8	5.9	7.3	21.9	12.5	16.8
29	---	---	---	---	---	---	10.6	6.6	8.1	19.4	14.6	16.8
30	---	---	---	---	---	---	11.1	6.5	8.5	15.6	12.2	13.5
31	---	---	---	---	---	---	---	---	---	20.5	11.5	15.3
MONTH	---	---	---	---	---	---	19.5	---	---	26.9	4.4	15.3
	JUNE			JULY			AUGUST			SEPTEMBER		
1	18.0	14.1	16.3	31.5	17.8	23.8	28.1	21.3	24.2	26.0	12.5	18.7
2	20.4	13.7	16.4	32.0	19.2	24.5	27.2	21.9	24.5	28.2	15.9	21.5
3	21.2	14.5	17.8	30.2	17.8	23.1	25.6	21.1	23.2	28.2	16.9	22.1
4	20.2	16.7	17.8	31.5	18.4	23.5	26.9	19.3	22.4	25.7	19.3	21.8
5	23.9	14.6	18.1	30.8	17.6	23.1	27.2	18.1	22.2	24.3	18.4	21.2
6	23.7	16.7	20.2	31.0	17.8	23.8	28.4	19.3	22.8	23.3	17.1	20.0
7	21.6	15.1	18.6	32.7	20.1	25.7	26.7	19.9	22.8	25.0	16.3	20.5
8	20.6	12.1	16.2	30.9	21.7	25.8	27.5	18.9	22.7	27.0	18.1	22.3
9	21.7	15.3	18.0	32.3	21.3	26.0	28.5	21.2	24.0	27.2	20.6	23.2
10	20.3	16.5	18.3	30.5	20.7	24.8	25.8	19.7	22.0	23.3	18.9	20.8
11	24.2	16.9	19.4	32.8	20.6	25.7	27.0	19.5	22.4	24.1	15.3	19.5
12	20.7	14.6	16.9	33.4	20.8	26.6	28.5	19.5	22.0	22.1	17.2	19.8
13	16.2	11.4	13.6	32.0	21.5	26.3	19.5	15.3	17.6	19.0	12.9	16.3
14	21.3	11.9	16.6	30.3	20.6	24.9	20.7	14.7	17.0	19.2	12.1	15.7
15	23.1	17.9	20.2	29.7	19.1	24.2	30.2	14.7	20.6	21.5	12.4	16.5
16	27.3	17.5	22.1	29.8	21.2	25.0	25.2	19.1	22.1	19.8	12.9	16.9
17	26.4	19.3	22.8	24.5	17.3	21.0	23.7	19.4	21.6	20.0	13.5	16.9
18	30.6	19.4	24.7	26.0	16.1	20.5	24.9	17.9	21.2	21.9	13.8	17.4
19	31.4	21.8	26.3	27.8	19.5	22.8	27.7	19.3	22.6	20.5	14.6	17.2
20	31.4	23.1	27.2	27.7	18.9	22.6	29.5	18.7	23.5	19.9	12.4	16.1
21	34.3	23.8	28.2	30.4	21.3	25.2	29.7	18.7	23.8	18.6	13.5	16.2
22	34.8	23.3	28.3	28.6	21.3	24.8	29.9	19.8	23.9	16.2	13.2	14.7
23	31.3	22.3	26.8	28.7	21.1	24.1	27.7	18.4	22.5	19.7	11.6	15.4
24	30.0	20.5	23.8	31.2	21.2	24.9	29.1	17.0	22.1	17.4	12.8	14.9
25	30.2	19.0	23.4	26.9	20.8	23.2	27.6	18.7	22.4	15.5	12.3	13.6
26	29.6	19.4	23.3	21.9	17.5	19.2	25.2	16.9	20.7	16.1	10.4	13.2
27	27.7	19.0	22.8	26.4	14.8	19.7	23.4	17.3	20.7	19.2	10.9	14.4
28	27.6	18.6	22.8	30.1	19.3	24.3	23.4	16.2	19.8	16.8	12.0	14.3
29	24.5	18.6	21.2	29.9	20.7	24.0	25.4	16.7	20.7	16.0	9.3	12.5
30	27.2	16.3	21.5	27.7	21.3	24.0	26.8	15.1	20.7	16.9	11.1	14.1
31	---	---	---	28.5	21.7	24.4	24.5	13.3	18.1	---	---	---
MONTH	34.8	11.4	21.0	33.4	14.8	23.9	30.2	13.3	21.8	28.2	9.3	17.6

CHEYENNE RIVER BASIN

06386500 CHEYENNE RIVER NEAR SPENCER, WY—Continued

TURBIDITY, WATER, MONOCHROME NEAR INFRA-RED LED LIGHT, 780-900 NM, DETECTION ANGLE 90 +/- 2.5 DEGREES, FNU
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	12	---	19	10	15
2	---	---	---	---	---	---	72	13	31	19	6.0	11
3	---	---	---	---	---	---	101	12	28	11	3.0	6.0
4	---	---	---	---	---	---	118	15	39	28	3.0	11
5	---	---	---	---	---	---	54	15	31	29	11	17
6	---	---	---	---	---	---	153	14	48	77	16	29
7	---	---	---	---	---	---	102	18	28	38	20	26
8	---	---	---	---	---	---	35	16	24	55	20	34
9	---	---	---	---	---	---	46	14	24	35	10	18
10	---	---	---	---	---	---	25	10	18	120	10	25
11	---	---	---	---	---	---	17	9.0	11	76	10	24
12	---	---	---	---	---	---	22	9.0	13	31	3.0	8.0
13	---	---	---	---	---	---	24	14	19	15	3.0	8.0
14	---	---	---	---	---	---	34	10	18	51	7.0	15
15	---	---	---	---	---	---	98	11	18	208	12	43
16	---	---	---	---	---	---	34	12	17	>1,500	86	---
17	---	---	---	---	---	---	30	10	16	>1,500	1,500	---
18	---	---	---	---	---	---	55	14	28	>1,500	568	---
19	---	---	---	---	---	---	53	12	26	607	272	440
20	---	---	---	---	---	---	49	18	33	410	194	289
21	---	---	---	---	---	---	90	14	31	320	157	235
22	---	---	---	---	---	---	46	11	20	260	109	177
23	---	---	---	---	---	---	191	16	110	186	97	142
24	---	---	---	---	---	---	141	32	86	150	85	113
25	---	---	---	---	---	---	171	18	34	192	90	132
26	---	---	---	---	---	---	56	12	24	150	89	108
27	---	---	---	---	---	---	22	9.0	13	137	47	81
28	---	---	---	---	---	---	17	5.0	8.0	104	36	67
29	---	---	---	---	---	---	13	4.0	7.0	100	37	59
30	---	---	---	---	---	---	22	4.0	12	75	47	60
31	---	---	---	---	---	---	---	---	---	80	32	52
MONTH	---	---	---	---	---	---	---	4.0	---	1,500	3.0	---
	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	412	163	261	1,080	35	111	341	97	199
2	---	---	---	237	90	165	193	46	56	186	33	86
3	---	---	---	200	69	132	87	45	55	123	24	69
4	---	---	---	178	42	98	67	42	50	125	30	64
5	---	---	---	167	70	e105	70	44	53	96	31	58
6	---	---	---	598	38	e139	71	46	54	78	34	55
7	---	---	---	---	---	---	76	48	59	77	28	51
8	---	---	---	375	204	277	78	47	61	85	25	46
9	---	---	---	326	174	235	145	56	74	113	26	52
10	---	---	---	323	159	216	146	74	100	196	36	63
11	---	---	---	237	60	e140	155	97	118	79	22	37
12	---	---	---	147	41	e95	810	104	183	113	30	49
13	>1,500	---	---	---	---	---	>1,500	254	---	97	18	29
14	>1,500	538	---	---	---	---	>1,500	230	---	37	16	21
15	>1,500	452	---	---	---	---	>1,500	123	---	46	16	24
16	>1,500	>1,500	---	58	28	40	>1,500	904	---	49	15	27
17	>1,500	1,090	---	65	20	31	>1,500	>1,500	---	59	18	28
18	1,160	698	---	34	12	19	>1,500	>1,500	---	135	17	43
19	1,200	707	948	152	18	29	>1,500	>1,500	---	81	24	41
20	1,140	570	810	51	17	26	>1,500	817	---	71	16	39
21	672	301	477	64	16	27	878	432	630	138	26	56
22	365	162	268	61	15	30	526	217	343	97	32	46
23	248	156	203	191	17	31	363	101	174	59	19	31
24	228	131	170	149	28	51	163	55	98	169	27	46
25	304	228	258	87	22	45	127	40	85	137	26	50
26	305	171	214	1,010	20	53	112	32	76	139	25	49
27	407	298	344	40	14	23	>1,500	51	---	130	26	48
28	>1,500	407	1,100	56	17	26	>1,500	>1,500	---	144	22	46
29	1,240	534	851	43	15	23	>1,500	1,420	---	103	18	39
30	818	307	493	56	17	25	>1,500	469	849	200	22	55
31	---	---	---	112	20	34	521	240	372	---	---	---
MONTH	---	---	---	---	---	---	1,500	32	---	340	15	52

> Actual value is known to be greater than the value shown
e Estimated

06392900 BEAVER CREEK AT MALLO CAMP, NEAR FOUR CORNERS, WY

LOCATION.--Lat 44°05'06", long 104°03'36" (NAD 27), in SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.4, T.47 N., R.60 W., Weston County, Hydrologic Unit 10120107, on right bank in Mallo Campgrounds, 250 ft upstream from mouth, 750 ft upstream from dam on Stockade Beaver Creek, and 3.8 mi east of Four Corners.

DRAINAGE AREA.--10.3 mi².

PERIOD OF RECORD.--October 1974 to September 1982, April 1991 to current year.

REVISED RECORD.--WDR-85-1: 1981, 1982.

GAGE.--Water-stage recorder. Elevation of gage is 6,030 ft above NGVD of 1929, from topographic map. October 1974 to September 1982, at site 50 ft upstream from station at datum 3.11 ft lower. U.S. Geological Survey data collection with satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. No diversions upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.4	e1.4	1.5	1.5	1.7	1.5	1.0	1.2	2.4	1.3	0.96
2	1.6	1.5	e1.4	1.4	e1.6	1.7	1.7	1.00	1.1	2.2	1.2	0.97
3	1.6	1.3	e1.5	e1.4	1.7	1.6	1.7	0.97	1.1	2.0	1.2	0.94
4	1.6	1.3	e1.5	e1.4	1.7	1.6	1.7	0.94	0.99	2.0	1.2	0.92
5	1.6	1.3	1.6	1.4	1.7	1.6	1.8	0.93	1.1	1.9	1.2	0.90
6	1.6	1.3	1.6	e1.4	1.7	1.6	1.7	0.87	1.0	2.0	1.2	0.89
7	1.5	1.3	1.6	e1.4	1.7	1.5	1.6	0.92	0.99	1.7	1.2	0.89
8	1.5	1.3	1.6	e1.5	1.6	1.5	1.7	1.1	0.95	0.96	1.1	0.93
9	1.5	1.3	1.6	1.5	1.6	1.6	1.8	1.1	1.0	0.99	1.1	0.93
10	1.5	1.3	1.5	1.5	1.6	1.5	1.6	0.96	0.99	0.82	1.0	0.91
11	1.4	1.3	1.6	1.5	1.7	1.6	1.6	0.90	0.94	0.80	1.0	0.88
12	1.4	1.3	1.5	e1.4	1.7	1.6	1.5	0.93	0.98	1.5	0.94	0.87
13	1.4	1.3	e1.5	e1.3	1.7	1.6	1.5	0.92	0.90	1.6	0.98	0.84
14	1.5	1.3	e1.4	e1.2	1.6	1.5	1.5	0.88	0.82	1.3	1.0	0.77
15	1.4	1.7	e1.5	e1.4	1.5	1.5	1.4	0.82	0.78	1.0	1.0	0.77
16	1.2	1.7	1.5	e1.5	1.4	1.6	1.4	0.81	0.70	0.97	1.00	1.3
17	1.3	1.7	1.5	1.7	e1.5	1.5	1.4	0.68	0.66	1.1	1.00	1.3
18	1.3	1.7	1.5	1.7	1.6	1.5	1.3	0.69	1.3	1.0	1.0	1.4
19	1.5	1.7	1.5	1.7	e1.6	1.5	1.2	0.69	1.2	0.84	1.0	1.3
20	1.6	e1.6	1.5	1.7	e1.6	1.6	1.2	0.68	1.2	0.85	1.0	1.3
21	1.6	e1.6	1.5	1.6	1.6	1.5	1.3	0.62	1.2	0.77	1.0	1.3
22	1.3	e1.6	1.4	e1.5	1.6	1.5	1.1	0.58	1.2	0.55	1.0	1.3
23	1.3	e1.6	e1.2	1.6	1.6	1.6	1.0	0.57	1.1	0.95	0.96	1.3
24	1.3	e1.5	e1.3	1.6	1.6	1.5	1.0	0.57	1.2	0.83	0.94	1.3
25	1.4	1.6	e1.4	1.6	1.7	1.5	1.1	0.58	1.4	0.71	0.97	1.4
26	1.4	1.6	1.5	1.6	1.7	1.5	1.1	0.54	1.3	0.68	0.97	1.3
27	e1.4	e1.5	1.5	1.6	1.7	1.6	1.1	0.51	1.4	0.68	0.96	1.2
28	1.4	1.5	1.5	1.6	1.6	1.7	1.1	0.51	1.5	1.2	0.96	1.2
29	1.4	e1.5	1.5	1.7	---	1.7	1.1	0.98	1.7	1.3	0.99	1.2
30	1.3	e1.4	1.5	1.7	---	1.6	1.1	1.2	2.0	1.3	0.98	1.2
31	1.4	---	1.5	1.7	---	1.6	---	1.2	---	1.2	0.95	---
TOTAL	44.8	44.0	46.1	47.3	45.4	48.7	41.8	25.65	33.90	38.10	32.30	32.67
MEAN	1.45	1.47	1.49	1.53	1.62	1.57	1.39	0.83	1.13	1.23	1.04	1.09
MAX	1.6	1.7	1.6	1.7	1.7	1.7	1.8	1.2	2.0	2.4	1.3	1.4
MIN	1.2	1.3	1.2	1.2	1.4	1.5	1.0	0.51	0.66	0.55	0.94	0.77
AC-FT	89	87	91	94	90	97	83	51	67	76	64	65

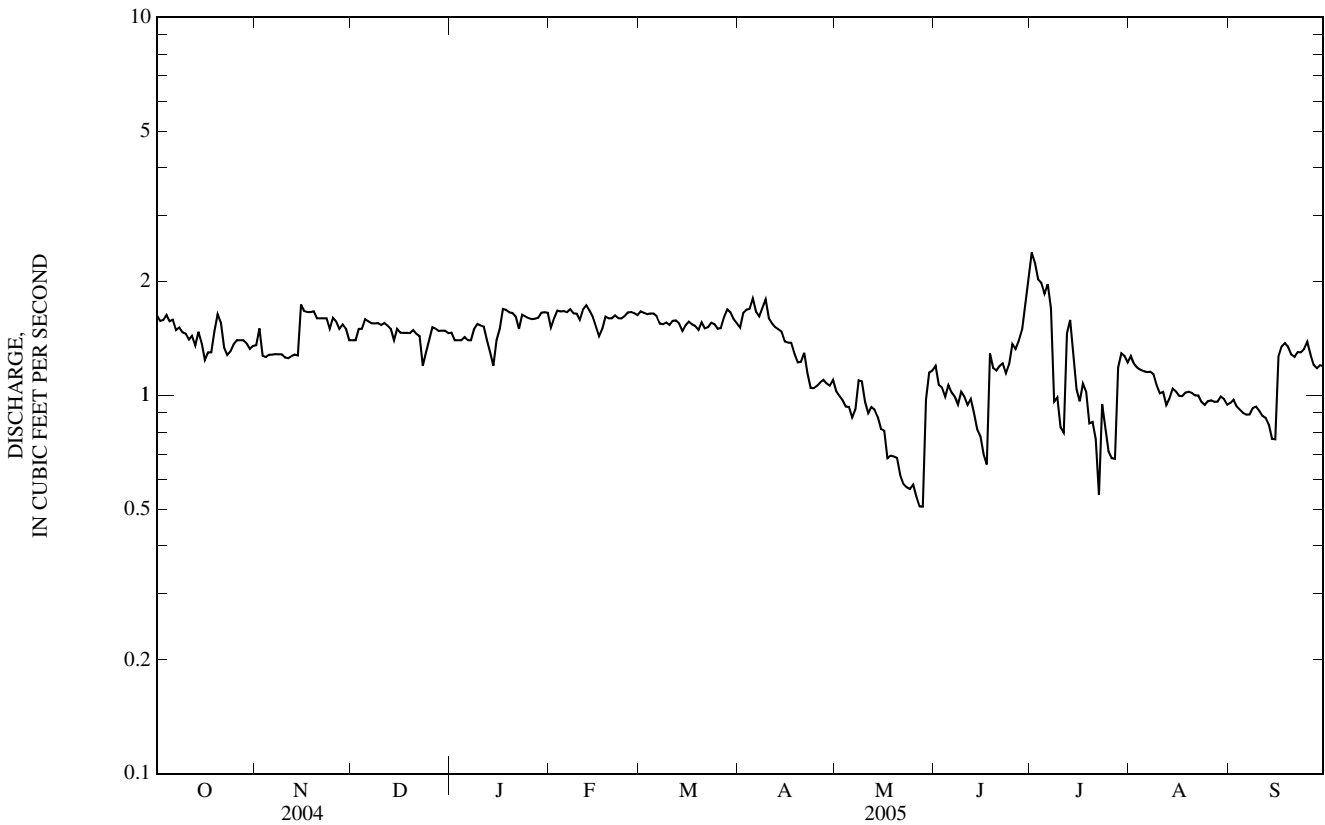
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2005, BY WATER YEAR (WY)

MEAN	1.85	1.71	1.62	1.56	1.71	1.97	2.20	2.10	2.27	2.04	1.93	1.84
MAX	3.16	3.30	2.68	2.95	2.90	5.83	4.07	3.44	4.05	3.09	2.89	3.08
(WY)	(2000)	(2000)	(1999)	(1999)	(1999)	(1999)	(1994)	(1978)	(1980)	(1979)	(1978)	(2000)
MIN	0.31	0.47	0.44	0.42	0.46	0.71	0.88	0.81	1.13	1.23	0.75	0.62
(WY)	(1977)	(1977)	(1977)	(1993)	(1977)	(1977)	(1993)	(1993)	(2005)	(2005)	(1976)	(1976)

06392900 BEAVER CREEK AT MALLO CAMP, NEAR FOUR CORNERS, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1975 - 2005	
ANNUAL TOTAL	495.21		480.72		--	
ANNUAL MEAN	1.35		1.32		1.91	
HIGHEST ANNUAL MEAN	--		--		3.20	1999
LOWEST ANNUAL MEAN	--		--		0.94	1977
HIGHEST DAILY MEAN	2.0	Mar 27	2.4	Jul 1	34	Mar 26, 1999
LOWEST DAILY MEAN	0.54	Jun 21	0.51	May 27-28	0.10	Jan 20, 1993
ANNUAL SEVEN-DAY MINIMUM	0.77	Apr 16	0.55	May 22	0.12	Jan 17, 1993
MAXIMUM PEAK FLOW	--		9.1 ^a	Sep 16	103 ^b	Apr 22, 1994
MAXIMUM PEAK STAGE	--		1.80 ^c	Dec 14	2.88 ^c	Dec 25, 1998
ANNUAL RUNOFF (AC-FT)	982		954		1,380	
10 PERCENT EXCEEDS	1.6		1.7		2.8	
50 PERCENT EXCEEDS	1.4		1.4		1.8	
90 PERCENT EXCEEDS	0.91		0.89		1.0	

- a Gage height, 1.43 ft.
- b From rating curve extended above 8.5 ft³/s.
- c Backwater from ice.
- e Estimated.



06392950 STOCKADE BEAVER CREEK NEAR NEWCASTLE, WY

LOCATION.--Lat 43°51'32", long 104°06'24" (NAD 27), in SW¹/₄ SW¹/₄ SE¹/₄ sec.19, T.45 N., R.60 W., Weston County, Hydrologic Unit 10120107, on right bank 20 ft upstream from culverts on county road, 0.6 mi ¹/₄ upstream from South Draw, 2.5 mi upstream from LAK Reservoir Dam, and 4.7 mi east of Newcastle.

DRAINAGE AREA.--107 mi².

PERIOD OF RECORD.--October 1974 to September 1982, April 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,460 ft above NGVD of 1929, from topographic map. October 1974 to September 1982, at same site and datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. A few small diversions upstream from station for irrigation.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	10	11	12	13	13	12	8.1	11	9.4	11	12
2	10	10	11	12	13	13	12	8.0	11	9.4	11	12
3	10	10	11	12	13	13	12	7.9	10	9.1	11	12
4	10	10	11	11	13	13	12	7.9	10	9.1	11	12
5	10	10	11	e11	13	13	13	7.9	10	9.2	9.4	12
6	10	10	11	e12	13	13	12	7.9	10	9.2	9.6	12
7	10	10	11	13	13	13	12	8.8	10	9.1	9.1	12
8	10	10	11	13	14	13	11	9.2	10	9.0	9.2	12
9	10	10	11	12	14	12	10	8.4	11	9.0	14	12
10	10	10	12	12	14	12	10	8.7	10	8.8	11	12
11	10	10	12	13	14	12	10	11	10	7.1	12	12
12	10	10	12	13	14	12	10	14	11	7.5	39	12
13	10	10	11	12	14	12	8.8	13	11	7.3	14	12
14	10	10	11	13	14	12	8.7	12	10	7.7	13	12
15	10	10	12	e12	13	12	8.6	12	10	7.5	12	12
16	10	10	12	13	13	11	8.5	11	9.8	6.8	12	12
17	10	11	12	e12	13	8.9	8.4	9.5	9.6	7.2	12	12
18	10	11	12	13	13	9.0	8.4	9.9	9.5	7.5	12	12
19	10	11	12	13	14	9.5	8.4	9.7	9.4	7.1	12	12
20	10	11	12	13	14	9.9	8.7	11	9.5	6.6	12	12
21	10	11	11	13	13	11	9.5	11	9.5	6.6	12	12
22	11	11	11	13	13	12	8.8	11	9.3	6.6	12	12
23	10	11	11	13	13	12	8.5	10	9.3	6.7	12	12
24	10	11	12	13	13	13	8.5	11	9.5	7.2	12	12
25	10	11	12	13	13	12	8.4	13	9.2	8.2	12	13
26	10	11	12	13	13	12	8.1	11	9.1	12	11	12
27	10	11	12	13	13	12	8.1	11	9.2	8.6	10	12
28	10	11	12	13	13	12	8.0	11	9.2	7.7	11	12
29	10	11	12	13	---	12	8.0	11	9.6	7.6	12	12
30	10	11	12	13	---	12	8.1	11	9.5	7.8	12	12
31	10	---	12	13	---	12	---	11	---	9.2	12	---
TOTAL	311	314	358	390	373	368.3	288.5	317.9	296.2	251.8	384.3	361
MEAN	10.0	10.5	11.5	12.6	13.3	11.9	9.62	10.3	9.87	8.12	12.4	12.0
MAX	11	11	12	13	14	13	13	14	11	12	39	13
MIN	10	10	11	11	13	8.9	8.0	7.9	9.1	6.6	9.1	12
AC-FT	617	623	710	774	740	731	572	631	588	499	762	716

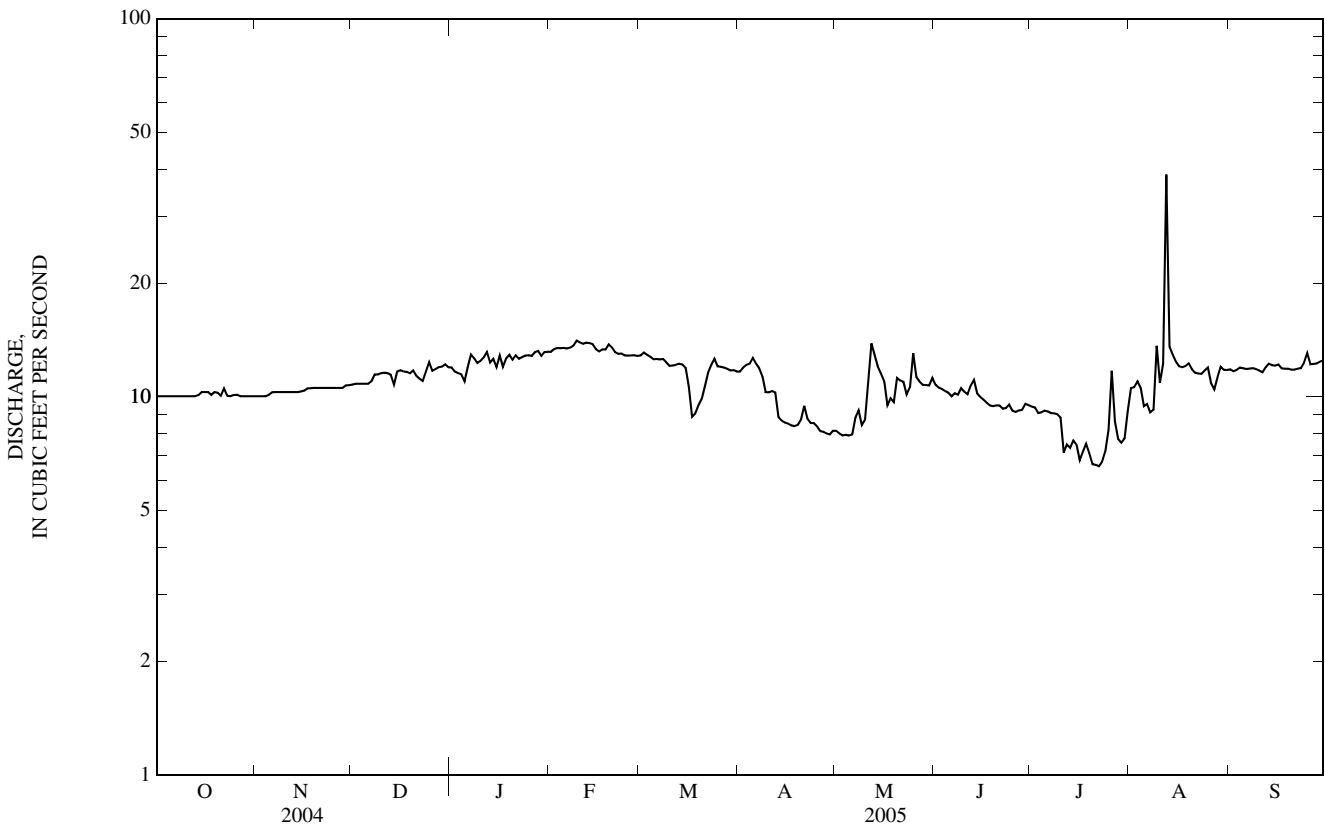
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2005, BY WATER YEAR (WY)

MEAN	13.4	13.6	13.5	13.2	13.5	14.9	13.7	11.6	11.7	11.5	12.3	12.7
MAX	18.9	19.0	18.1	17.6	17.6	21.3	19.4	18.5	17.8	17.0	20.9	20.0
(WY)	(2000)	(2001)	(2000)	(2000)	(2000)	(1996)	(2000)	(2000)	(1999)	(1999)	(1999)	(1999)
MIN	9.40	9.74	10.2	9.52	10.6	10.8	9.53	6.45	5.92	8.12	6.33	8.89
(WY)	(1982)	(1994)	(1993)	(1980)	(1993)	(1993)	(1981)	(1992)	(1992)	(2005)	(1992)	(1991)

06392950 STOCKADE BEAVER CREEK NEAR NEWCASTLE, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1975 - 2005	
ANNUAL TOTAL	4,240.9		4,014.0		--	
ANNUAL MEAN	11.6		11.0		13.0	
HIGHEST ANNUAL MEAN	--		--		17.4 2000	
LOWEST ANNUAL MEAN	--		--		9.80 1992	
HIGHEST DAILY MEAN	17	Jan 11	39	Aug 12	143	Jul 16, 1993
LOWEST DAILY MEAN	6.8	Jul 18	6.6	Jul 20-22	3.9	May 21, 1992
ANNUAL SEVEN-DAY MINIMUM	7.4	Jul 17	6.9	Jul 17	4.6	Aug 2, 1992
MAXIMUM PEAK FLOW	--		374	Aug 12	776 ^a	Jul 16, 1993
MAXIMUM PEAK STAGE	--		9.41	Aug 12	12.44	Jul 16, 1993
ANNUAL RUNOFF (AC-FT)	8,410		7,960		9,420	
10 PERCENT EXCEEDS	15		13		17	
50 PERCENT EXCEEDS	11		11		13	
90 PERCENT EXCEEDS	9.5		8.5		9.1	

a From rating curve extended above 18 ft³/s on basis of culvert backwater computation.
 e Estimated.



06395000 CHEYENNE RIVER AT EDMONT, SD

LOCATION.--Lat 43°18'20", long 103°49'14" (NAD 27), in SW¹/₄ SE¹/₄ sec.36, T.8 S., R.2 E., Fall River County, Hydrologic Unit 10120106, on right bank at downstream side of bridge on U.S. Highway 18, at Edgemont, 300 ft downstream from Burlington Northern Railroad bridge, and 600 ft upstream from Cottonwood Creek.

DRAINAGE AREA.--7,143 mi².

PERIOD OF RECORD.--June 1903 to November 1906 (no winter records), April 1928 to February 1933 (monthly discharge only), October 1946 to current year.

REVISED RECORDS.--WSP 1086: Drainage area. WSP 1116: 1947. WDR SD-78-1: 1977.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 3,414.56 ft above NGVD of 1929. Prior to December 1, 1906, nonrecording gage 20 ft upstream from station at datum 0.7 ft lower. April 11, 1928 to February 28, 1933, October 4, 1946 to October 23, 1947 and January 11, 1961, to April 24, 1963, nonrecording gage, and October 24, 1947, to January 10, 1961 and April 25, 1963 to September 30, 1972, water-stage recorder all at present site at datum 2.00 ft higher. Bureau of Reclamation data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Many small reservoirs upstream from station used for stock and irrigation water, total capacity, about 45,000 acre-ft. Station operated and record provided by the South Dakota Water Science Center.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 12, 1920, reached a stage of 13.0 ft, present datum, from floodmarks at railroad bridge.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.00	e3.1	e11	e8.5	e40	e13	4.9	6.5	e16	13	1.0	7.6
2	e0.00	e3.3	e11	e8.7	e28	e14	10	6.1	e16	8.7	0.94	6.9
3	e0.00	e2.9	e10	e9.3	e28	e13	7.7	6.1	e14	5.1	1.3	5.4
4	e0.00	e2.7	e10	e9.1	e29	e13	4.8	6.7	e14	4.6	1.2	5.9
5	e0.00	e6.0	e11	e9.3	e29	e12	6.1	5.8	e14	8.5	1.2	6.3
6	e0.00	e11	e12	e9.9	e27	11	4.6	5.8	e14	8.3	1.1	6.3
7	e0.00	e9.0	e12	e11	e23	8.9	3.9	12	e16	7.3	1.3	5.7
8	e0.00	e10	e13	e10	e21	7.1	4.1	13	e18	7.4	0.74	4.9
9	e0.00	e9.1	e14	e10	e21	6.1	4.4	13	e18	12	0.49	5.1
10	e0.00	9.0	e13	e10	e23	6.7	4.1	16	e18	9.3	0.67	4.8
11	e0.00	9.8	e15	e11	e24	5.9	3.8	17	e18	7.6	1.2	4.6
12	e0.00	9.1	e14	e10	e23	5.8	3.6	e20	e82	6.4	2.6	5.2
13	e0.01	8.5	e12	e9.0	e29	5.1	3.8	e30	473	5.4	134	5.0
14	e0.01	10	e12	e9.0	e29	5.0	4.1	e40	464	4.7	44	5.8
15	e0.02	11	e12	e9.0	e26	5.7	4.2	e66	188	4.1	39	6.5
16	e0.02	12	e11	e9.0	e21	6.0	3.8	e76	139	5.4	85	8.1
17	e0.04	12	e10	e12	e20	6.6	3.8	e67	80	4.5	119	7.0
18	e0.04	13	e11	e12	e20	6.4	4.3	e49	69	4.0	78	6.2
19	e0.05	13	e13	e12	e18	6.6	4.4	e30	63	4.2	56	5.5
20	e0.07	12	e12	e12	e18	6.1	5.4	e18	57	4.2	38	8.9
21	e0.42	12	e8.5	e12	e18	5.4	16	e14	48	2.2	28	8.5
22	e1.4	11	e8.8	e12	e21	5.6	59	e12	40	1.0	21	8.2
23	e1.1	13	e9.2	e12	e19	5.4	47	e12	32	0.64	17	8.3
24	e1.4	14	e8.3	e12	e15	6.0	18	e14	27	2.9	15	8.4
25	e1.4	14	e7.6	e13	e15	6.1	14	e16	25	1.8	11	9.2
26	e1.3	14	e7.9	e13	e14	6.4	9.2	e16	20	2.8	10	9.0
27	e1.1	e12	e7.9	e15	e14	6.2	8.0	e14	19	2.2	8.1	8.8
28	e1.9	e12	e8.5	e15	e14	8.0	8.6	e14	31	1.7	26	8.2
29	e2.5	e9.2	e9.2	e15	---	7.0	7.9	e14	29	1.2	25	8.3
30	e2.5	e9.9	e9.1	e19	---	6.0	7.0	e16	21	1.3	16	7.7
31	e3.2	---	e8.8	e33	---	6.0	---	e16	---	1.2	11	---
TOTAL	18.48	297.6	332.8	371.8	627	232.1	290.5	662.0	2,083	153.64	794.84	206.3
MEAN	0.60	9.92	10.7	12.0	22.4	7.49	9.68	21.4	69.4	4.96	25.6	6.88
MAX	3.2	14	15	33	40	14	59	76	473	13	134	9.2
MIN	0.00	2.7	7.6	8.5	14	5.0	3.6	5.8	14	0.64	0.49	4.6
AC-FT	37	590	660	737	1,240	460	576	1,310	4,130	305	1,580	409

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2005, BY WATER YEAR (WY)

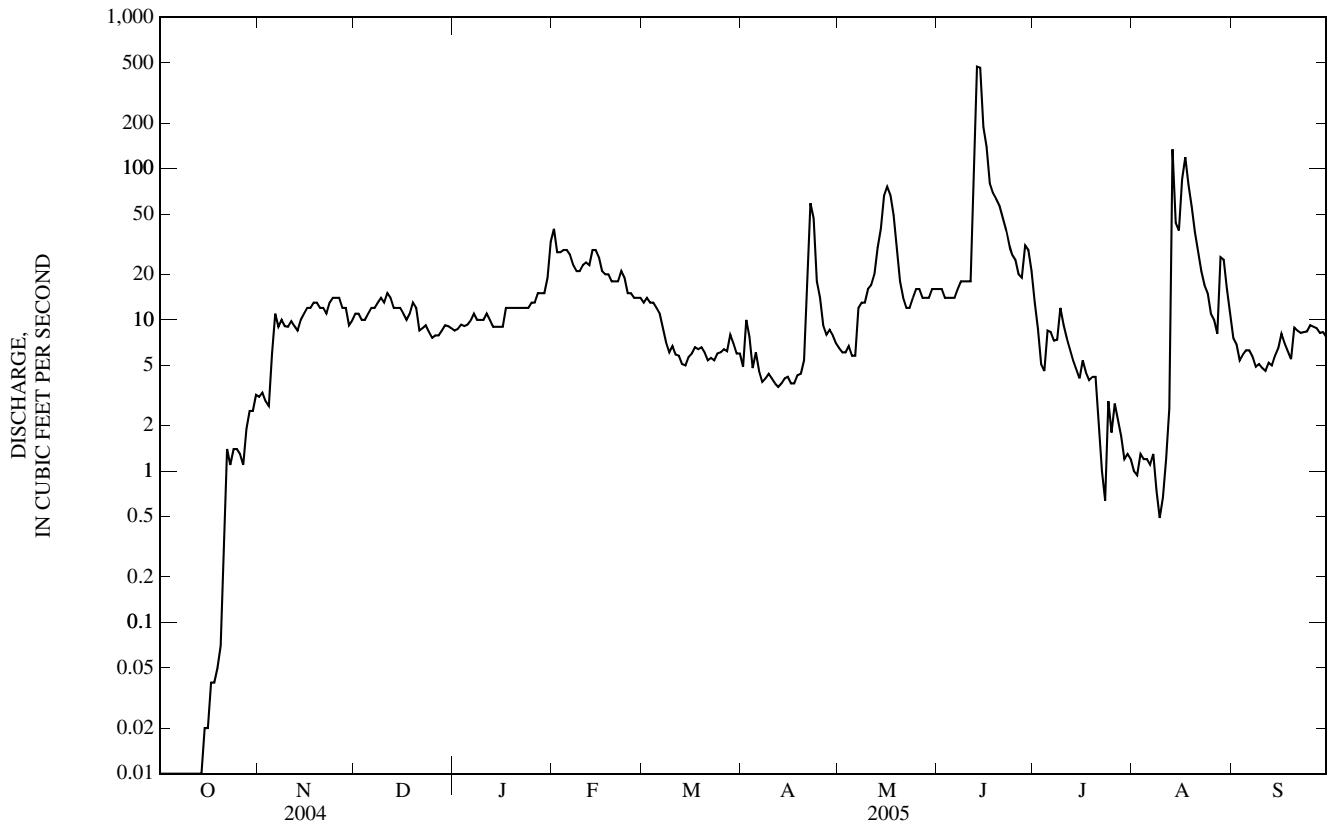
MEAN	20.8	16.4	9.30	9.17	40.5	120	64.9	200	238	117	62.7	25.2
MAX	291	266	50.5	37.3	302	506	558	2,192	2,084	806	388	275
(WY)	(1999)	(1999)	(1999)	(1999)	(1997)	(1994)	(1955)	(1978)	(1962)	(1958)	(1955)	(1973)
MIN	0.00	0.02	0.00	0.00	0.00	3.39	0.22	0.27	1.28	0.15	0.00	0.00
(WY)	(1961)	(1962)	(1960)	(1950)	(1960)	(1961)	(1961)	(1960)	(2004)	(1985)	(1960)	(1956)

CHEYENNE RIVER BASIN

06395000 CHEYENNE RIVER AT EDGEMONT, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1929 - 2005	
ANNUAL TOTAL	3,049.68	6,070.06	--	
ANNUAL MEAN	8.33	16.6	85.5 ^a	
HIGHEST ANNUAL MEAN	--	--	434	1962
LOWEST ANNUAL MEAN	--	--	9.10	2004
HIGHEST DAILY MEAN	80 Feb 25	473 Jun 13	24,000	May 20, 1978
LOWEST DAILY MEAN	0.00 Jul 21	0.00 Oct 1	0.00 ^b	Jan 5, 1947
ANNUAL SEVEN-DAY MINIMUM	0.00 Jul 27	0.00 Oct 1	0.00 ^c	Aug 31, 1947
MAXIMUM PEAK FLOW	--	1,460 Jun 13	28,000	May 20, 1978
MAXIMUM PEAK STAGE	--	6.88 Jun 13	13.65	May 20, 1978
ANNUAL RUNOFF (AC-FT)	6,050	12,040	62,000	
10 PERCENT EXCEEDS	16	29	145 ^c	
50 PERCENT EXCEEDS	3.8	9.2	12 ^c	
90 PERCENT EXCEEDS	0.00	1.3	0.12 ^c	

- a Median of annual mean discharge, 62 ft³/s.
- b No flow at most times each year.
- c Reflects water years 1947-2004 daily.
- e Estimated.



06425720 BELLE FOURCHE RIVER BELOW RATTLESNAKE CREEK, NEAR PINEY, WY

LOCATION.--Lat 43°59'04", long 105°23'16" (NAD 27), in NW¼ NE¼ NE¼ sec.9, T.46 N., R.71 W., Campbell County, Hydrologic Unit 10120201, on right bank 200 ft downstream from culverts on county road, 1.2 mi downstream from Rattlesnake Creek, 10.0 mi southwest of Piney, 15.5 mi north of Reno Junction, and 22 mi south of Gillette.

DRAINAGE AREA.--495 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to April 1983, March 2001 to current year.

REVISED RECORD.--WDR WY-78-1.

GAGE.--Water-stage recorder and metal v-notch weir. Elevation of gage is 4,540 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. No diversions upstream from station. Several small stockwater reservoirs upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.61	1.6	e1.2	e1.3	e3.6	e1.9	2.6	4.1	2.6	0.16	0.00	0.00
2	0.63	1.6	e1.2	e1.3	e3.6	e1.8	2.3	3.8	2.3	0.12	0.00	0.00
3	0.64	1.5	e1.2	e1.4	e3.7	e1.7	2.2	3.5	2.0	0.08	0.00	0.00
4	0.63	1.4	e1.3	e1.3	e3.3	e1.7	2.1	3.2	1.9	0.09	0.00	0.00
5	0.69	1.4	e1.2	e1.1	e3.0	e1.7	1.9	3.1	1.9	0.10	0.00	0.00
6	0.64	1.3	e1.3	e1.0	e2.9	e1.8	1.8	3.0	1.6	0.05	0.00	0.00
7	0.58	1.3	e1.4	e1.1	e2.8	e1.9	1.7	3.1	1.5	0.01	0.00	0.00
8	0.58	1.3	e1.4	e1.2	e2.8	e1.9	1.6	3.9	1.3	0.00	0.00	0.00
9	0.55	1.3	e1.4	e1.1	e2.9	e1.8	1.9	4.0	1.2	0.00	0.00	0.00
10	0.51	1.3	e1.5	e1.1	e3.0	e1.7	1.9	4.3	1.2	0.00	0.00	0.00
11	0.50	1.3	e1.6	e1.1	e2.8	e1.6	2.0	5.1	1.1	0.00	0.00	0.00
12	0.55	1.3	e1.6	e1.1	e2.6	e1.5	2.1	9.4	1.3	0.00	0.00	0.00
13	0.52	1.3	e1.5	e1.0	e2.6	e1.6	1.9	18	1.8	0.00	0.00	0.00
14	0.55	1.3	e1.6	e0.96	e2.7	e1.7	1.6	17	1.8	0.00	0.00	0.00
15	0.88	1.3	1.8	e1.0	e2.7	e1.8	1.5	12	1.6	0.00	0.00	0.00
16	1.0	1.3	1.8	e1.2	e2.6	e1.9	1.4	10	1.4	0.00	0.00	0.00
17	1.0	1.3	1.7	e1.4	e2.5	e2.2	1.4	8.5	1.3	0.00	0.00	0.00
18	1.0	1.3	1.6	e1.6	e2.3	e2.6	1.4	7.2	1.1	0.00	0.00	0.00
19	0.98	1.3	1.7	e1.8	e2.1	e2.8	1.4	6.3	0.98	0.00	0.00	0.00
20	0.82	1.2	e1.6	e2.0	e2.1	e3.0	1.7	5.5	1.0	0.00	0.00	0.00
21	0.73	1.3	e1.5	e1.8	e2.1	e3.1	2.4	4.9	1.1	0.00	0.00	0.00
22	1.0	1.3	e1.3	e2.4	e2.1	e3.1	3.8	4.4	1.0	0.00	0.00	0.00
23	1.1	1.4	e1.1	e2.7	e2.2	e3.0	4.6	3.9	0.80	0.00	0.00	0.00
24	1.0	1.6	e1.5	e2.9	e2.2	e2.9	4.8	3.4	0.86	0.00	0.00	0.00
25	1.0	1.7	e1.6	e3.2	e2.2	e2.6	5.5	3.2	0.64	0.00	0.00	0.00
26	1.0	1.6	e1.7	e3.3	e2.2	e2.4	6.5	3.0	0.47	0.00	0.00	0.00
27	0.98	e1.3	e1.6	e3.7	e2.1	e2.3	6.2	2.7	0.35	0.00	0.00	0.00
28	0.99	e1.2	e1.7	e4.5	e2.0	e2.2	5.4	2.4	0.29	0.00	0.00	0.00
29	1.2	e1.1	e1.7	e3.8	---	2.4	4.9	2.2	0.27	0.00	0.00	0.00
30	1.4	e1.2	e1.6	e3.7	---	2.6	4.5	2.4	0.23	0.00	0.00	0.00
31	1.4	---	e1.4	e3.7	---	2.7	---	2.6	---	0.00	0.00	---
TOTAL	25.66	40.6	46.3	60.76	73.7	67.9	85.0	170.1	36.89	0.61	0.00	0.00
MEAN	0.83	1.35	1.49	1.96	2.63	2.19	2.83	5.49	1.23	0.02	0.00	0.00
MAX	1.4	1.7	1.8	4.5	3.7	3.1	6.5	18	2.6	0.16	0.00	0.00
MIN	0.50	1.1	1.1	0.96	2.0	1.5	1.4	2.2	0.23	0.00	0.00	0.00
AC-FT	51	81	92	121	146	135	169	337	73	1.2	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2005, BY WATER YEAR (WY)*

MEAN	0.39	0.58	53.5	17.4	5.50	4.59	2.24	9.03	3.73	1.39	1.69	0.38
MAX	1.20	2.14	635	197	43.9	15.8	5.62	88.3	15.6	6.22	15.8	2.71
(WY)	(2004)	(2003)	(2004)	(2004)	(2004)	(1978)	(2001)	(1978)	(1979)	(1982)	(1982)	(1982)
MIN	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.00	0.00	0.00	0.00	0.00
(WY)	(1976)	(1976)	(1982)	(1977)	(1978)	(1981)	(1981)	(1981)	(1981)	(1976)	(1976)	(1976)

06425720 BELLE FOURCHE RIVER BELOW RATTLESNAKE CREEK, NEAR PINEY, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1976 - 2005*	
ANNUAL TOTAL	1,324.65		607.52		--	
ANNUAL MEAN	3.63		1.66		2.42	
HIGHEST ANNUAL MEAN	--		--		9.76 1978	
LOWEST ANNUAL MEAN	--		--		0.19 1976	
HIGHEST DAILY MEAN	500 ^e	Jul 14	18	May 13	2,740	Dec 28, 2003
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days, most years
MAXIMUM PEAK FLOW	--		21 ^a	May 13	4,100 ^b	May 18, 1978
MAXIMUM PEAK STAGE	--		3.04 ^c	Jan 22	11.33 ^d	May 18, 1978
ANNUAL RUNOFF (AC-FT)	2,650		1,210		1,750	
10 PERCENT EXCEEDS	--		3.4		4.0	
50 PERCENT EXCEEDS	--		1.3		0.10	
90 PERCENT EXCEEDS	--		0.00		0.00	

* For period of operation.

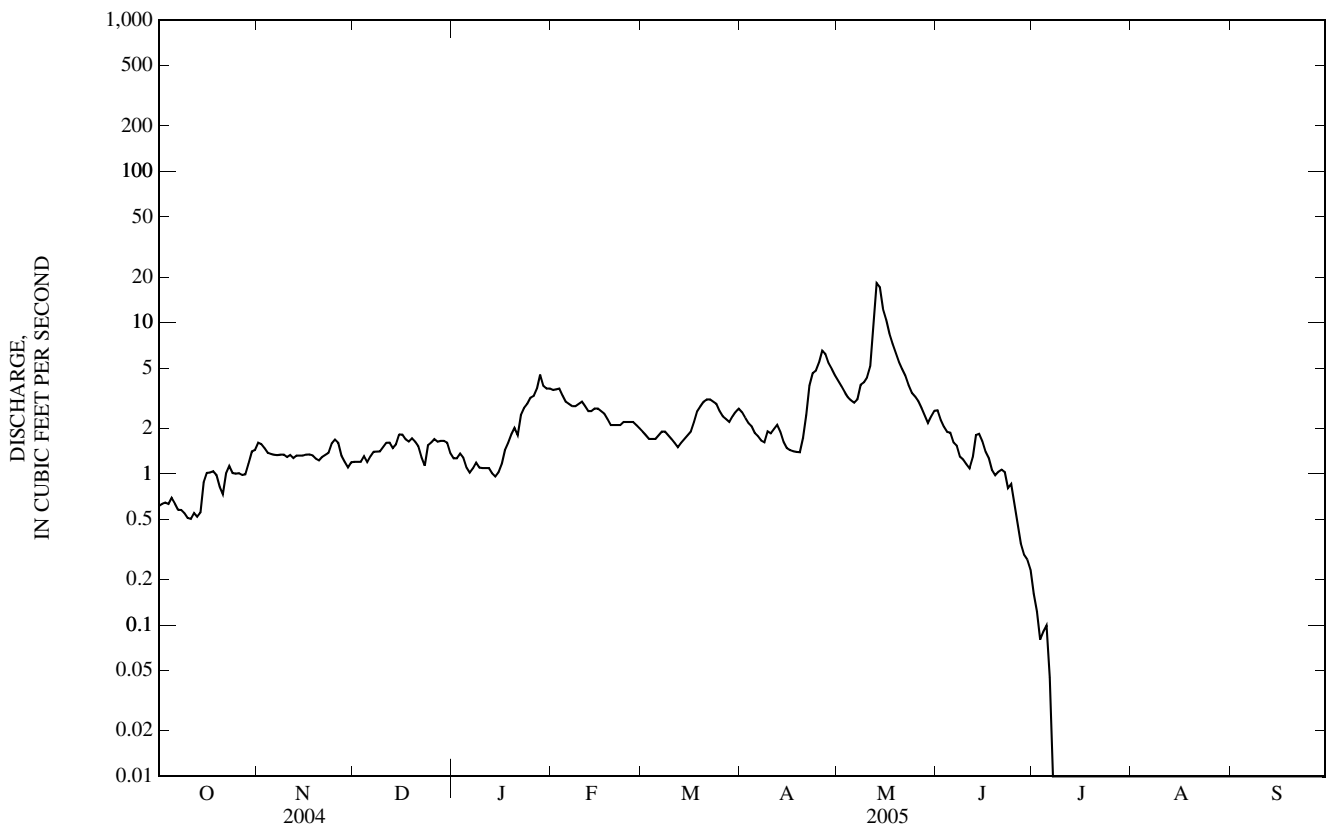
a Gage height, 2.29 ft.

b From rating curve extended above 1,200 ft³/s on basis of flow over road and culvert computations.

c Backwater from ice.

d From floodmarks.

e Estimated.



06425720 BELLE FOURCHE RIVER BELOW RATTLESNAKE CREEK, NEAR PINEY, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recover -able, ug/L (01007)	Beryll- ium, water, unfltrd recover -able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)	Selen- ium, water, unfltrd ug/L (01147)
OCT 05...	--	--	--	--	--	--
NOV 03...	--	--	--	--	--	--
DEC 07...	--	--	--	--	--	--
JAN 11...	--	--	--	--	--	--
FEB 08...	--	--	--	--	--	--
MAR 07...	--	--	--	--	--	--
APR 13...	2.0	48	<.12	61	455	1.8
MAY 19...	1.8	45	<.12	47	95.9	1.1
JUN 06...	1.8	30	<.12	54	102	1.7
JUL 12...	--	--	--	--	--	--
AUG 09...	--	--	--	--	--	--
SEP 07...	--	--	--	--	--	--

< -- Less than.

06425800 CABALLO CREEK NEAR GILLETTE, WY

LOCATION.--Lat 44°04'52", long 105°27'50" (NAD 83), in SW¹/₄ SW¹/₄ NW¹/₄ sec.1 T.47 N., R.72 W., Campbell County, Hydrologic Unit 10120201, 50 ft downstream of bridge on state highway 59 and 14.0 mi south of Gillette.

PERIOD OF RECORD.--July 2004 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium water, filtered, mg/L (00915)	Magnesium water, filtered, mg/L (00925)	Sodium adsorption ratio (00931)
OCT 19...	1445	.00	--	--	--	--	--	--	--	--	--	--	--
NOV 12...	0810	.00	--	--	--	--	--	--	--	--	--	--	--
DEC 09...	0810	.00	--	--	--	--	--	--	--	--	--	--	--
JAN 20...	0845	.00	--	--	--	--	--	--	--	--	--	--	--
FEB 10...	0710	.00	--	--	--	--	--	--	--	--	--	--	--
MAR 16...	0815	.00	--	--	--	--	--	--	--	--	--	--	--
APR 08...	0830	.00	--	--	--	--	--	--	--	--	--	--	--
MAY 05...	0830	.01	645	5.6	62	7.8	7,330	18.0	11.0	3,800	488	627	5
JUN 03...	0850	.01	643	7.9	89	7.8	7,330	15.0	12.0	3,900	442	683	5
JUL 08...	0700	.00	--	--	--	--	--	--	--	--	--	--	--
AUG 03...	0830	.00	--	--	--	--	--	--	--	--	--	--	--
SEP 12...	0845	.00	--	--	--	--	--	--	--	--	--	--	--

Date	Sodium, water, filtered, mg/L (00930)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT 19...	--	--
NOV 12...	--	--
DEC 09...	--	--
JAN 20...	--	--
FEB 10...	--	--
MAR 16...	--	--
APR 08...	--	--
MAY 05...	764	7,480
JUN 03...	740	7,700
JUL 08...	--	--
AUG 03...	--	--
SEP 12...	--	--

06425900 CABALLO CREEK AT MOUTH, NEAR PINEY, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Aluminum, water, unfltrd recover- able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recover- able, ug/L (01007)	Beryllium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Selenium, water, unfltrd ug/L (01147)
OCT 06...	--	--	--	--	--	--	--
NOV 04...	80	3.3	84	<.18	E16	258	11.6
DEC 08...	--	--	--	--	--	--	--
JAN 19...	--	--	--	--	--	--	--
FEB 10...	72	1.1	36	<.06	16	55.9	1.8
MAR 16...	186	1.2	40	<.06	E13	103	1.7
APR 08...	284	2.0	44	<.12	E10	143	2.2
MAY 05...	185	1.6	43	<.12	E13	109	2.7
JUN 03...	697	1.3	62	<.12	18	213	2.5
JUL 08...	--	--	--	--	--	--	--
AUG 03...	--	--	--	--	--	--	--
SEP 12...	--	--	--	--	--	--	--

< -- Less than.

E -- Estimated.

CHEYENNE RIVER BASIN

06426130 DONKEY CREEK NEAR GILLETTE, WY

LOCATION.--Lat 44°16'00", long 105°26'17" (NAD 27), in SW¹/₄ NW¹/₄ SW¹/₄ sec. 31, T.50 N., R.71 W., Campbell County, Hydrologic Unit 10120201, on left bank 0.3 mi upstream from Stonepile Creek and 3.0 mi southeast of Gillette.

DRAINAGE AREA.--63.4 mi².

PERIOD OF RECORD.--July 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,460 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for October to June, which are poor. Natural flow of stream affected by numerous small reservoirs and diversions for irrigation and coalbed methane production water.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	5.6	0.20	0.40	0.88	0.71	1.0	1.6	2.5	1.8	0.07	0.26
2	0.00	3.0	0.29	0.39	0.85	0.66	0.75	1.4	1.5	0.77	0.02	0.16
3	0.00	e1.5	0.27	0.37	0.80	0.65	0.69	1.4	e1.1	0.38	0.00	0.14
4	0.00	e0.50	0.28	0.23	e0.83	0.65	e0.60	e1.2	e1.0	0.32	0.11	0.19
5	0.00	e0.20	0.30	0.17	0.85	0.65	e0.50	e1.0	e0.90	0.30	0.25	0.07
6	0.00	e0.30	0.35	0.16	1.00	0.62	e0.45	0.99	e0.70	0.28	0.28	0.00
7	0.00	e0.40	0.39	0.15	0.94	0.57	e0.45	e1.0	0.77	0.43	0.30	0.00
8	0.00	e0.80	0.41	0.20	0.96	0.57	0.44	e5.0	0.81	0.28	0.33	0.04
9	0.00	e0.40	0.42	0.17	1.1	0.52	e0.56	e10	0.81	0.39	0.34	0.10
10	0.00	e0.30	0.40	0.14	0.97	0.52	e3.4	7.0	0.74	0.21	0.51	0.06
11	0.00	e0.30	0.45	0.15	0.93	0.70	e2.0	14	0.74	0.18	18	0.01
12	0.00	e0.25	0.50	0.23	e1.2	0.83	2.1	17	0.76	0.25	9.3	0.02
13	0.00	e0.30	0.56	e0.16	1.4	0.94	1.9	13	2.4	0.16	9.1	0.16
14	0.00	e0.40	0.41	e0.12	e1.5	0.98	1.3	8.2	6.0	0.09	6.2	0.18
15	0.00	e0.50	0.34	e0.06	e1.4	1.1	1.2	4.7	2.5	0.09	3.2	0.10
16	0.08	e1.0	0.40	e0.02	1.5	0.99	e0.99	3.5	1.4	0.10	1.8	0.02
17	0.09	e0.70	0.44	0.03	1.3	1.1	0.91	2.6	0.98	0.04	1.1	0.00
18	0.05	e0.50	0.48	0.10	1.1	1.1	0.81	2.1	0.75	0.03	1.3	0.00
19	0.07	e0.40	0.49	0.25	1.0	1.1	0.67	2.2	0.64	0.10	1.0	0.00
20	0.26	0.34	0.50	e0.50	0.93	1.5	0.68	1.5	0.59	0.14	0.84	0.00
21	0.27	0.28	0.50	e0.40	0.88	1.6	e8.5	1.5	0.56	0.15	0.78	0.00
22	0.32	0.23	0.38	e0.30	0.84	1.5	e9.5	1.3	0.56	0.11	0.73	0.00
23	1.7	0.22	e0.30	e0.40	0.82	1.4	e13	1.2	0.49	0.09	0.50	0.00
24	e2.5	0.24	0.36	e0.70	0.82	1.4	e10	1.2	3.4	0.11	0.29	0.00
25	e1.2	0.29	0.38	e0.90	0.81	1.3	e7.0	1.2	3.2	0.08	0.28	0.26
26	e0.65	0.34	0.45	1.3	0.81	1.5	4.8	1.1	3.2	0.10	0.32	0.28
27	0.53	0.37	0.35	1.0	0.82	2.0	3.5	1.0	2.5	0.15	0.27	0.31
28	0.44	0.36	0.33	0.97	0.78	2.2	4.2	0.88	0.83	0.23	0.26	0.30
29	0.49	e0.25	0.31	0.94	---	1.9	2.5	0.77	0.62	0.23	0.35	0.24
30	2.7	e0.20	0.33	0.99	---	1.6	2.3	0.95	1.8	0.19	0.36	0.26
31	3.3	---	0.39	0.93	---	1.3	---	1.8	---	0.11	0.35	---
TOTAL	14.65	20.47	11.96	12.83	28.02	34.16	86.70	112.29	44.75	7.89	58.54	3.16
MEAN	0.47	0.68	0.39	0.41	1.00	1.10	2.89	3.62	1.49	0.25	1.89	0.11
MAX	3.3	5.6	0.56	1.3	1.5	2.2	13	17	6.0	1.8	18	0.31
MIN	0.00	0.20	0.20	0.02	0.78	0.52	0.44	0.77	0.49	0.03	0.00	0.00
AC-FT	29	41	24	25	56	68	172	223	89	16	116	6.3

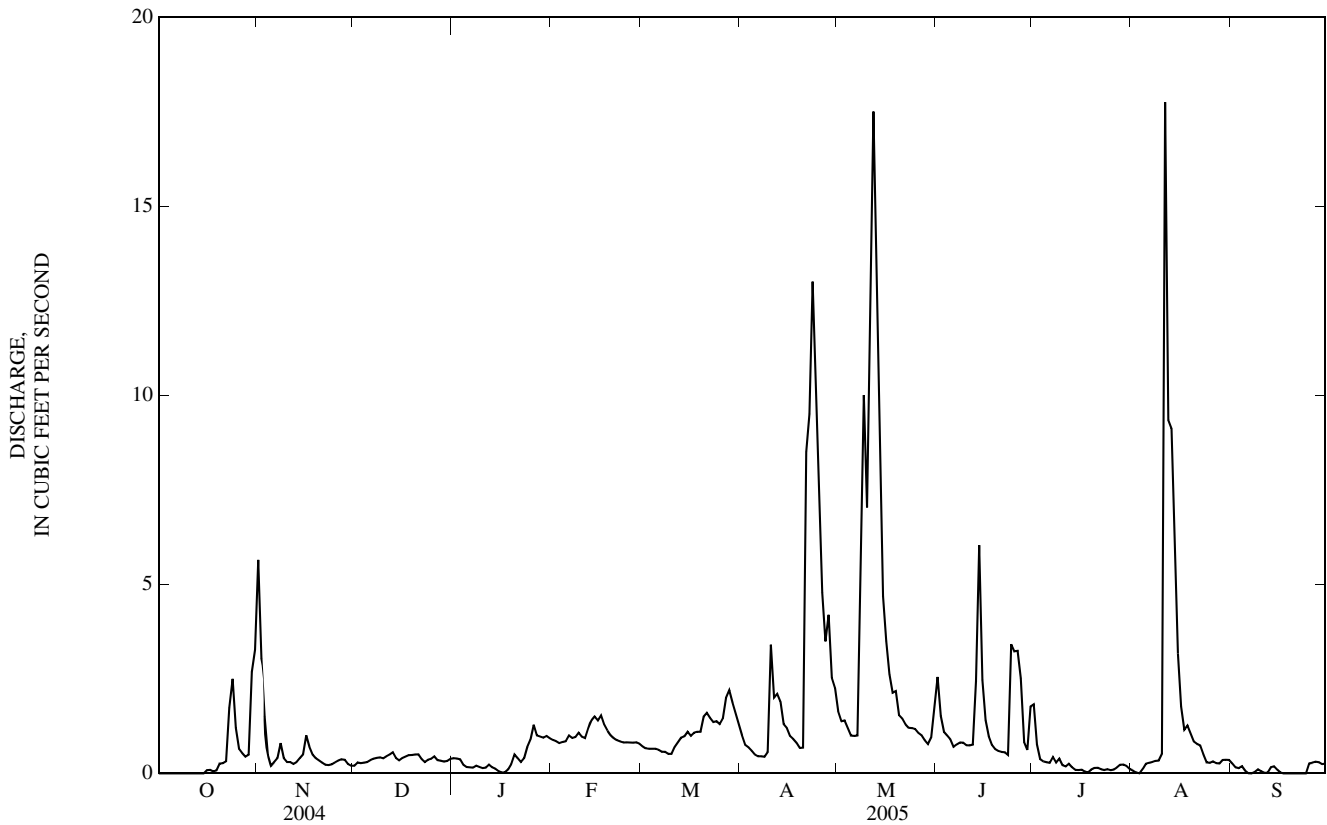
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2005, BY WATER YEAR (WY)

MEAN	0.30	0.49	0.49	0.72	1.21	2.18	1.69	5.21	1.53	0.41	0.32	0.09
MAX	0.51	0.68	0.67	1.44	2.46	4.77	2.99	18.8	3.38	1.27	1.89	0.24
(WY)	(2003)	(2005)	(2004)	(2004)	(2004)	(2003)	(2001)	(2001)	(2001)	(2004)	(2005)	(2002)
MIN	0.06	0.38	0.39	0.30	0.29	0.40	0.34	0.70	0.02	0.08	0.00	0.00
(WY)	(2004)	(2004)	(2005)	(2002)	(2002)	(2002)	(2004)	(2004)	(2004)	(2002)	(2000)	(2001)

06426130 DONKEY CREEK NEAR GILLETTE, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2000 - 2005	
ANNUAL TOTAL	255.66		435.42		--	
ANNUAL MEAN	0.70		1.19		1.23	
HIGHEST ANNUAL MEAN	--		--		2.70 2001	
LOWEST ANNUAL MEAN	--		--		0.44 2002	
HIGHEST DAILY MEAN	13	Jul 24	18	Aug 11	442	May 29, 2001
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days, each year
MAXIMUM PEAK FLOW	--		39	Aug 11	3,400 ^a	May 28, 2001
MAXIMUM PEAK STAGE	--		3.36	Aug 11	10.89 ^b	May 28, 2001
ANNUAL RUNOFF (AC-FT)	507		864		891	
10 PERCENT EXCEEDS	1.7		2.5		2.0	
50 PERCENT EXCEEDS	0.32		0.50		0.40	
90 PERCENT EXCEEDS	0.00		0.06		0.00	

- a From rating curve extended above 150 ft³/s on basis of slope-area measurement of peak flow.
- b From floodmarks.
- e Estimated.



06426160 STONEPILE CREEK AT MOUTH NEAR GILLETTE, WY

LOCATION.--Lat 44°16'04", long 105°26'17" (NAD 27), in NW¼ NW¼ SW¼ sec. 31. T.50 N., R.71 W., Campbell County, Hydrologic Unit 10120201, on right bank 0.2 mi upstream from mouth and 3.0 mi southeast of Gillette.

DRAINAGE AREA.--14.5 mi².

PERIOD OF RECORD.--July 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,460 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records poor. Natural flow of stream affected by City of Gillette Wastewater Treatment Facility.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	5.9	e4.1	4.1	3.6	2.9	3.5	4.4	3.6	3.2	2.8	3.4
2	3.3	4.2	e4.0	4.5	3.9	3.3	3.4	4.7	3.5	2.3	2.8	3.3
3	3.3	4.0	e4.0	4.2	3.6	3.2	3.6	4.3	3.4	2.1	4.9	3.3
4	3.4	3.8	e4.2	4.2	3.7	3.2	3.5	4.2	3.1	2.3	3.6	e3.2
5	3.5	3.6	e4.0	4.1	3.6	3.0	3.6	3.9	3.7	2.4	2.6	e3.2
6	3.5	3.9	e3.8	4.3	3.7	3.1	3.5	3.9	3.2	2.5	2.9	e3.2
7	3.5	3.7	e4.0	4.1	3.5	3.1	3.9	4.8	3.1	2.6	2.5	e3.3
8	2.9	3.4	e3.9	4.5	3.5	3.0	3.7	16	3.2	2.5	2.8	e3.3
9	2.7	3.5	e4.0	4.5	3.4	2.9	7.6	5.7	3.0	2.0	2.5	e3.5
10	3.2	3.4	e4.1	4.5	3.2	2.9	4.8	6.5	3.2	2.4	5.3	e3.3
11	3.2	3.5	e4.2	4.6	3.5	2.9	4.1	14	3.2	2.3	23	e3.3
12	3.0	3.5	e4.3	4.4	4.0	3.2	3.9	13	3.9	2.4	3.4	e3.8
13	3.3	3.6	e4.2	4.7	4.2	3.2	3.9	8.8	8.9	2.4	5.6	3.5
14	3.3	3.7	e4.1	4.6	3.8	3.7	4.2	6.1	3.5	2.2	2.9	3.5
15	5.8	3.3	e4.1	4.6	3.9	3.9	4.5	4.7	2.9	2.2	2.6	3.5
16	4.1	3.4	e4.0	4.5	3.9	3.3	4.0	4.3	2.8	2.2	2.6	3.5
17	3.5	3.2	e4.0	4.6	3.4	3.1	4.2	4.2	3.0	2.2	3.2	3.6
18	3.5	3.2	4.0	4.6	3.4	3.2	4.4	4.8	2.7	2.5	3.0	3.6
19	3.8	3.3	4.1	6.1	3.2	4.3	4.5	4.3	2.6	2.6	2.6	3.6
20	3.6	3.6	3.8	6.9	3.2	3.5	7.0	4.0	2.9	2.4	2.6	3.5
21	2.5	3.9	4.0	5.4	3.1	3.5	8.5	4.0	2.8	2.4	2.6	3.6
22	7.5	3.7	4.2	4.9	3.1	3.3	14	3.9	2.7	2.4	2.6	3.6
23	4.9	3.6	4.0	5.1	3.3	3.2	13	3.9	5.0	2.4	2.6	3.6
24	3.9	4.3	4.1	4.5	3.1	3.1	8.6	3.8	5.4	2.5	2.6	3.7
25	3.6	3.8	3.6	4.3	2.7	3.3	5.7	4.2	3.0	2.4	2.8	5.0
26	3.5	3.6	4.1	4.2	3.0	4.6	4.9	4.0	5.3	5.5	2.8	4.0
27	3.5	3.4	4.1	4.1	3.0	4.5	5.2	3.8	2.9	3.5	3.0	3.9
28	3.7	3.6	4.1	4.1	3.2	4.0	5.2	3.6	2.5	2.6	3.1	3.7
29	6.1	e3.6	4.2	4.2	---	3.7	4.7	3.4	3.9	2.4	3.1	3.8
30	6.5	e4.4	4.2	4.3	---	3.9	4.6	6.0	3.6	2.4	3.2	3.8
31	7.3	---	4.1	4.1	---	3.6	---	5.9	---	2.5	3.4	---
TOTAL	122.7	111.6	125.6	141.8	96.7	105.6	160.2	173.1	106.5	78.7	116.0	107.1
MEAN	3.96	3.72	4.05	4.57	3.45	3.41	5.34	5.58	3.55	2.54	3.74	3.57
MAX	7.5	5.9	4.3	6.9	4.2	4.6	14	16	8.9	5.5	23	5.0
MIN	2.5	3.2	3.6	4.1	2.7	2.9	3.4	3.4	2.5	2.0	2.5	3.2
AC-FT	243	221	249	281	192	209	318	343	211	156	230	212

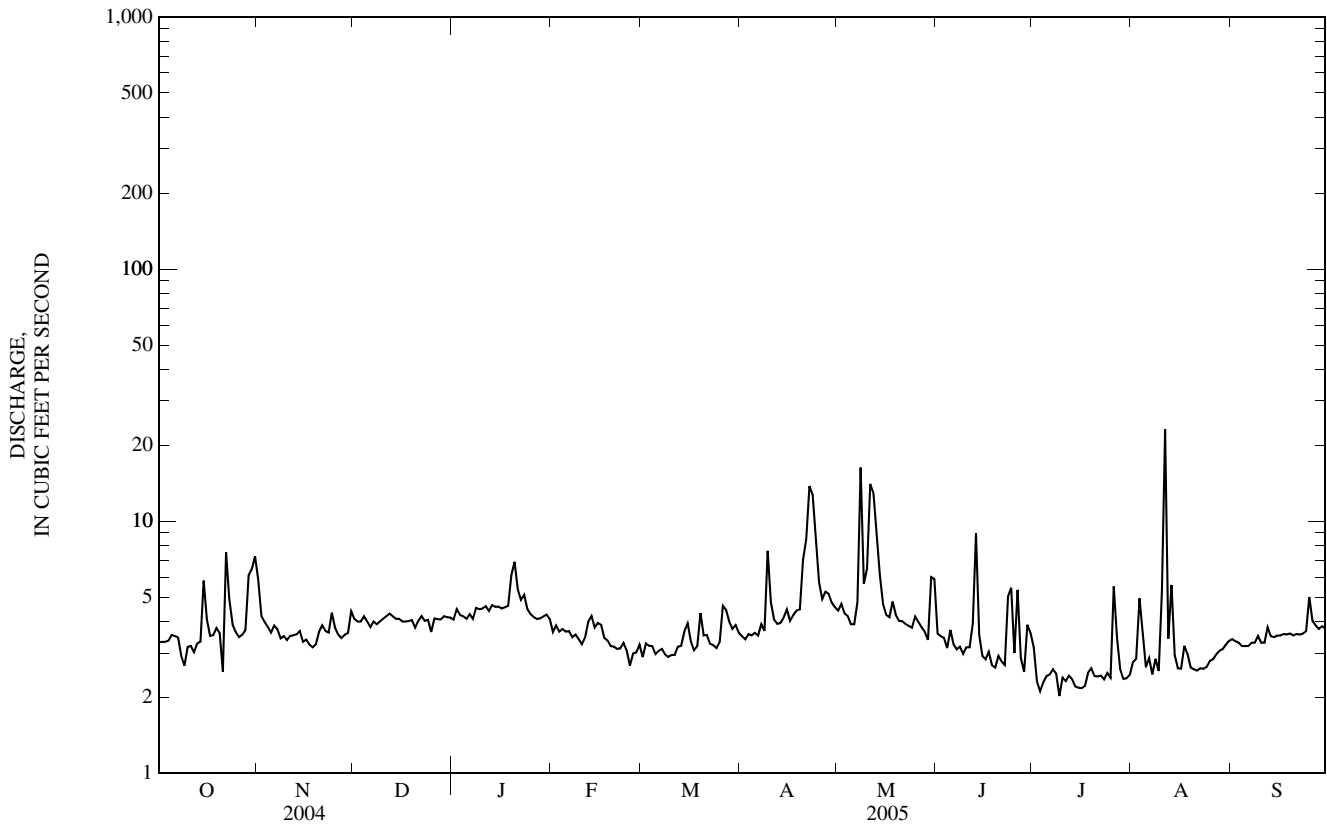
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2005, BY WATER YEAR (WY)

MEAN	3.28	3.36	3.35	3.43	3.30	4.25	4.18	5.31	4.31	3.92	3.65	3.13
MAX	3.96	4.11	4.05	4.57	4.61	6.36	5.34	10.9	5.63	5.09	4.34	4.13
(WY)	(2005)	(2004)	(2005)	(2005)	(2003)	(2003)	(2005)	(2001)	(2003)	(2004)	(2002)	(2003)
MIN	2.67	2.81	2.92	2.81	2.76	2.55	3.02	2.96	3.09	2.54	2.87	2.15
(WY)	(2002)	(2003)	(2002)	(2004)	(2004)	(2004)	(2004)	(2004)	(2002)	(2005)	(2000)	(2001)

06426160 STONEPILE CREEK AT MOUTH NEAR GILLETTE, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2000 - 2005	
ANNUAL TOTAL	1,290.4		1,445.6		--	
ANNUAL MEAN	3.53		3.96		3.81	
HIGHEST ANNUAL MEAN	--		--		4.25 2001	
LOWEST ANNUAL MEAN	--		--		3.35 2002	
HIGHEST DAILY MEAN	23	Jul 23	23	Aug 11	192	May 29, 2001
LOWEST DAILY MEAN	1.5	Mar 25, Apr 3	2.0	Jul 9	1.2	Sep 14, 2001
ANNUAL SEVEN-DAY MINIMUM	1.7	Mar 28	2.3	Jul 9	1.7	Sep 10, 2001
MAXIMUM PEAK FLOW	--		91	Aug 11	800 ^a	May 28, 2001
MAXIMUM PEAK STAGE	--		4.01	Aug 11	9.14 ^b	May 28, 2001
ANNUAL RUNOFF (AC-FT)	2,560		2,870		2,760	
10 PERCENT EXCEEDS	5.0		5.0		4.9	
50 PERCENT EXCEEDS	3.2		3.6		3.3	
90 PERCENT EXCEEDS	2.2		2.6		2.5	

- a From rating curve extended above 39 ft³/s on basis of slope-area measurement of peak flow.
- b From floodmarks.
- c Estimated.



06426400 DONKEY CREEK NEAR MOORCROFT, WY

LOCATION.--Lat 44°16'58", long 105°03'48" (NAD 27), in SE¹/₄ NE¹/₄ SE¹/₄ sec.30, T.50 N., R.68 W., Crook County, Hydrologic Unit 10120201, 25 ft upstream from county bridge, 1.2 mi downstream from Well Creek, and 6.0 mi west of Moorcroft.

PERIOD OF RECORD.--Water years 1977-89, 2001 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
Date		Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO ₃ (29801)	Alkalinity, wat flt inc tit field, mg/L as CaCO ₃ (39086)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT 06...	0845		1.9	663	9.9	--	8.3	--	10.0	8.0	590	113	76.0	13.3
NOV 04...	1110		9.7	661	--	--	8.6	1,960	7.5	4.0	700	121	97.1	13.4
DEC 08...	1040		2.9	646	14.1	115	8.4	2,710	7.0	.0	800	145	107	17.7
JAN 19...	1355		1.9	654	11.2	90	7.9	2,910	12.0	.0	830	148	111	16.1
FEB 10...	0945		3.0	661	9.1	72	7.5	2,490	-3.0	.0	690	122	94.0	10.8
MAR 16...	1005		3.2	648	14.3	121	8.9	2,480	6.0	1.5	690	110	101	11.1
APR 08...	1020		3.2	641	12.5	138	9.2	3,290	17.0	11.5	900	130	141	13.1
MAY 05...	1035		5.2	653	12.5	--	8.6	--	18.0	13.5	1,100	183	161	14.3
JUN 07...	0840		4.0	648	6.6	76	8.1	2,800	13.5	14.0	1,100	173	162	13.6
JUL 13...	0830		1.4	656	5.7	75	8.0	2,820	26.0	20.5	1,000	165	145	16.5
AUG 03...	1110		.55	657	6.5	82	8.0	2,880	14.5	19.0	780	114	121	16.7
SEP 12...	0945		.05	652	5.6	63	7.9	4,510	11.0	13.0	830	115	133	14.1
OCT 06...	5	254	48	311	--	225	1.3	.39	531	1,400	2.06	7.76	1,510	
NOV 04...	3	189	36	222	--	136	1.0	5.91	631	1,330	1.97	38.0	1,450	
DEC 08...	5	318	46	333	--	259	1.3	4.50	712	1,760	2.64	15.2	1,940	
JAN 19...	5	339	47	376	--	240	1.4	14.2	721	1,820	2.68	10.1	1,970	
FEB 10...	4	244	43	307	304	215	1.1	4.91	722		2.50	14.9	1,840	
MAR 16...	5	282	47	245	240	209	1.1	1.58	748		2.38	15.1	1,750	
APR 08...	6	400	49	250	--	375	1.4	5.98	974	2,190	3.23	20.7	2,370	
MAY 05...	3	262	33	302	--	167	1.1	2.03	1,050	2,020	3.05	31.5	2,240	
JUN 07...	3	237	32	306	--	161	1.0	1.63	1,100	2,030	3.04	24.1	2,240	
JUL 13...	4	280	37	352	--	206	1.2	1.30	965	1,990	2.93	8.15	2,160	
AUG 03...	6	387	51	299	--	266	1.6	.57	887	1,970	2.86	3.12	2,100	
SEP 12...	12	782	67	570	--	81.9	2.0	4.64	1,870	3,340	4.74	.47	3,490	

06426400 DONKEY CREEK NEAR MOORCROFT, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro- gen, wat un- f by anal- ysis, mg/L (62855)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Alum- inum, water, unfltrd recover- able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recover- able, ug/L (01007)	Beryll- ium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)	Selen- ium, water, unfltrd ug/L (01147)
OCT 06...	--	--	--	--	--	299	2.3	30	E.03	E15	92.8	2.0
NOV 04...	--	--	--	--	--	618	2.1	36	E.05	8	65.7	2.0
DEC 08...	--	--	--	--	--	205	2.9	36	<.12	25	92.5	2.1
JAN 19...	--	--	--	--	--	404	2.4	39	<.12	39	173	1.9
FEB 10...	--	--	--	--	--	202	1.9	35	<.06	33	176	2.1
MAR 16...	--	--	--	--	--	323	2.4	29	<.06	41	177	2.4
APR 08...	--	--	--	--	--	375	4.0	37	<.12	42	159	2.2
MAY 05...	--	--	--	--	--	628	2.9	59	E.09	E12	240	2.7
JUN 07...	--	--	--	--	--	931	2.7	71	E.07	E12	197	3.1
JUL 13...	<.04	<.06	<.008	2.07	.20	233	5.8	48	<.12	25	294	1.6
AUG 03...	--	--	--	--	--	187	4.9	40	<.12	42	410	2.2
SEP 12...	--	--	--	--	--	433	3.5	44	<.12	E10	842	1.8

< -- Less than.

E -- Estimated.

06426500 BELLE FOURCHE RIVER BELOW MOORCROFT, WY

LOCATION.--Lat 44°19'19", long 104°56'24" (NAD 27), in NW¼ NW¼ sec.17, T.50 N., R.67 W., Crook County, Hydrologic Unit 10120201, on right bank 3.1 mi upstream from bridge on Highway 14, and 4.0 mi northeast of Moorcroft.

DRAINAGE AREA.--1,690 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1943 to September 1970, October 1975 to September 1983, October 1985 to September 1987, October 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,110 ft above NGVD of 1929, from topographic map. Prior to March 28, 1947, nonrecording gage, and March 28, 1947, to January 16, 1951, water-stage recorder at site 4 mi downstream from station at different datum. January 17, 1951, to September 1970, water-stage recorder at site 7.9 mi upstream from station at different datum. September 1970 to October 22, 1993, water-stage recorder at site 8.0 mi upstream from station at different datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Numerous small stockwater and soil conservation reservoirs upstream from station. Diversions for irrigation upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	6.0	e3.6	e3.3	e8.0	e8.0	11	16	8.9	6.2	0.79	1.7
2	1.9	6.2	e3.5	e3.3	e8.0	e7.8	9.8	14	8.1	4.7	0.65	1.8
3	1.9	8.3	e3.5	e3.2	e8.0	e7.6	9.4	12	9.4	4.0	1.1	1.9
4	1.6	8.5	e3.5	e3.2	e8.0	e8.0	8.8	11	10	4.2	1.3	1.7
5	1.5	10	e3.5	e3.1	e7.6	e9.0	8.5	9.5	8.9	2.5	0.77	1.6
6	1.5	9.7	e3.5	e3.0	e7.2	e10	7.9	8.6	7.1	1.6	0.53	1.3
7	1.5	8.2	e3.5	e2.9	e6.8	e9.5	7.4	8.5	6.6	1.0	0.34	0.69
8	1.5	6.9	e3.5	e2.8	e7.0	e8.8	6.4	12	6.1	0.71	0.23	0.37
9	1.5	6.9	e3.6	e3.1	e7.0	e8.4	7.1	27	5.9	4.4	0.05	0.11
10	1.6	7.0	e3.7	e3.2	e6.8	e8.2	7.8	116	5.9	2.2	0.00	0.00
11	1.6	6.5	e3.8	e3.2	e6.0	7.5	6.6	75	5.0	1.3	0.00	0.00
12	1.6	6.8	e3.9	e3.2	e7.0	7.2	6.1	130	5.7	0.87	0.00	0.00
13	1.6	e7.6	e4.0	e3.3	e7.4	6.9	9.0	397	7.4	0.52	1.2	0.00
14	1.7	e6.0	e3.9	e3.0	e8.0	6.9	10	322	7.8	0.25	31	0.00
15	1.7	e7.0	e3.8	e2.5	e7.6	6.1	6.9	148	37	0.84	35	0.00
16	1.7	e7.6	e3.7	e2.0	e8.0	6.7	5.7	78	23	0.50	14	0.00
17	1.6	e5.4	e3.6	e2.5	e7.6	5.9	5.0	49	17	0.20	7.2	0.00
18	1.5	e5.8	e3.5	e3.0	e7.4	8.9	4.6	35	13	0.03	10	0.00
19	1.3	e5.4	e3.4	e3.2	e7.0	10	4.6	28	11	0.82	7.1	0.00
20	1.2	e6.2	e3.3	e3.5	e7.2	7.5	5.9	24	7.6	0.90	3.4	0.00
21	0.97	e5.4	e3.2	e4.0	e7.2	11	7.7	23	6.0	0.81	1.6	0.00
22	1.1	e5.2	e3.2	e5.0	e7.6	12	9.7	17	5.0	0.77	0.99	0.00
23	1.1	e5.0	e3.1	e5.2	e8.0	13	12	14	4.1	0.81	5.4	0.00
24	1.4	e5.2	e2.5	e5.6	e8.0	13	37	14	3.8	0.70	5.2	0.00
25	2.2	e5.6	e2.7	e6.0	e7.8	12	117	11	3.6	0.46	2.6	0.24
26	8.3	e5.4	e3.1	e6.4	e7.8	10	139	11	3.3	1.2	1.4	0.56
27	6.2	e5.8	e3.2	e7.0	e8.0	11	62	9.4	4.1	1.1	0.93	6.6
28	4.8	e5.0	e3.2	e10	e7.8	11	43	8.4	6.6	0.92	0.66	4.4
29	5.0	e4.0	e3.3	e9.0	---	11	26	6.6	6.7	1.6	0.48	4.5
30	6.3	e3.5	e3.3	e8.6	---	13	19	8.9	7.2	1.4	0.48	4.4
31	8.5	---	e3.3	e8.2	---	12	---	10	---	0.93	0.44	---
TOTAL	77.77	192.1	106.4	135.5	209.8	287.9	620.9	1,653.9	261.8	48.44	134.84	31.87
MEAN	2.51	6.40	3.43	4.37	7.49	9.29	20.7	53.4	8.73	1.56	4.35	1.06
MAX	8.5	10	4.0	10	8.0	13	139	397	37	6.2	35	6.6
MIN	0.97	3.5	2.5	2.0	6.0	5.9	4.6	6.6	3.3	0.03	0.00	0.00
AC-FT	154	381	211	269	416	571	1,230	3,280	519	96	267	63

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2005, BY WATER YEAR (WY)

MEAN	5.61	2.64	2.52	3.58	17.4	57.3	26.7	64.7	59.5	18.7	10.1	5.16
MAX	68.0	23.1	22.3	53.5	260	374	190	1,057	509	72.5	57.3	63.5
(WY)	(1995)	(1999)	(1956)	(1997)	(1962)	(1978)	(1944)	(1978)	(1964)	(1948)	(1993)	(1951)
MIN	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.05	0.10	0.00	0.00	0.00
(WY)	(1944)	(1944)	(1944)	(1944)	(1944)	(1951)	(1961)	(1958)	(1966)	(1954)	(1944)	(1944)

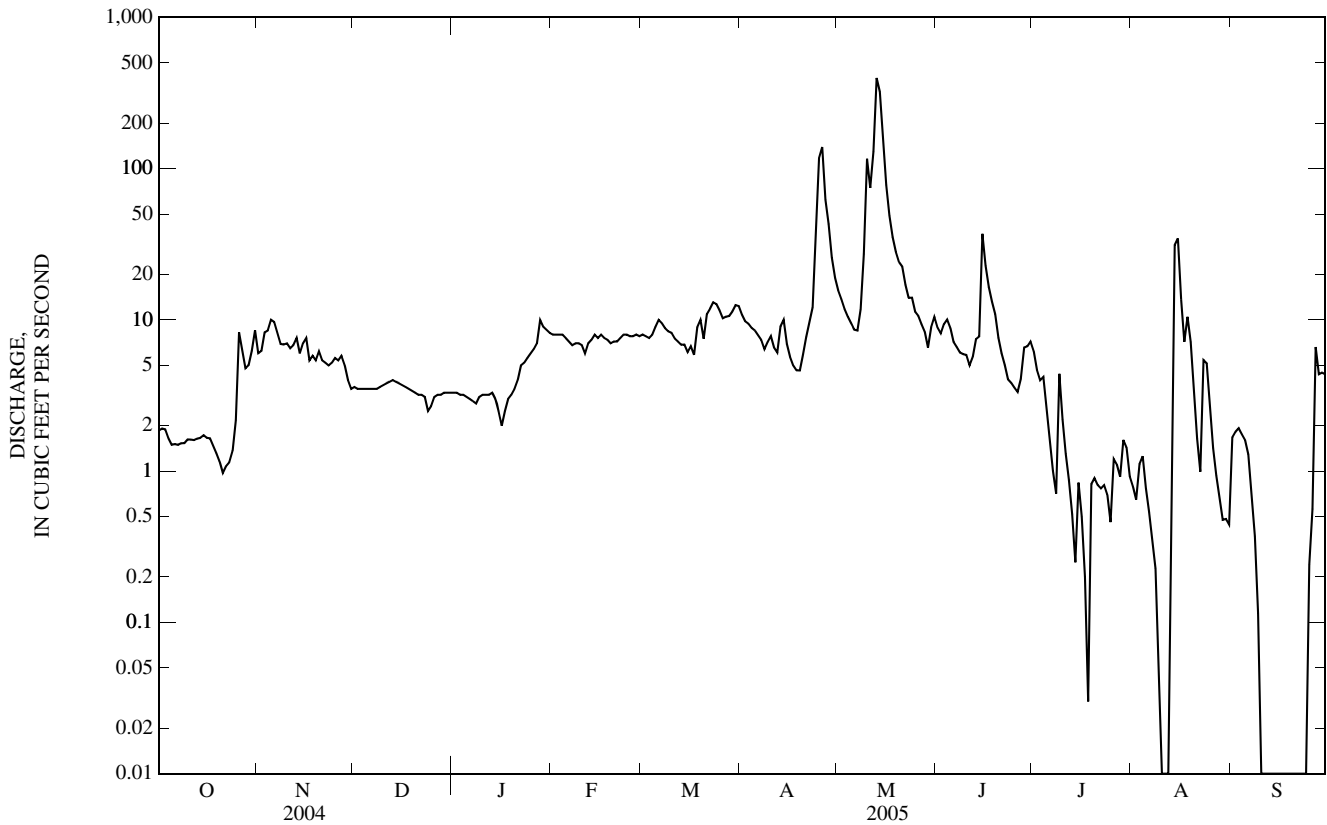
06426500 BELLE FOURCHE RIVER BELOW MOORCROFT, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1944 - 2005	
ANNUAL TOTAL	2,235.56		3,761.22		--	
ANNUAL MEAN	6.11		10.3		22.8	
HIGHEST ANNUAL MEAN	--		--		136	1978
LOWEST ANNUAL MEAN	--		--		1.14	1961
HIGHEST DAILY MEAN	108	Jul 16	397	May 13	10,300	May 19, 1978
LOWEST DAILY MEAN	0.36	Sep 25	0.00	Several days	0.00	Several days, most years
ANNUAL SEVEN-DAY MINIMUM	0.77	Sep 20	0.00	Sep 10	0.00	Most years
MAXIMUM PEAK FLOW	--		506	May 13	15,300 ^a	May 19, 1978
MAXIMUM PEAK STAGE	--		8.25	May 13	14.60 ^b	May 19, 1978
ANNUAL RUNOFF (AC-FT)	4,430		7,460		16,550	
10 PERCENT EXCEEDS	11		12		33	
50 PERCENT EXCEEDS	3.7		5.4		2.0	
90 PERCENT EXCEEDS	1.3		0.66		0.00	

a From rating curve extended above 11,000 ft³/s, site and datum then in use.

b From floodmarks in shelter, site and datum then in use.

c Estimated.



06426500 BELLE FOURCHE RIVER BELOW MOORCROFT, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1947-57, 1975-93, October 1994 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT 06...	0750	1.6	655	9.6	--	8.3	--	3.5	9.0	650	109	91.0	15.8
NOV 04...	0940	7.5	666	--	--	8.7	2,540	4.5	3.0	760	131	104	14.3
DEC 08...	0915	3.5	650	16.4	133	8.5	3,370	4.5	.0	980	172	135	19.2
JAN 12...	0940	3.2	649	5.7	46	7.8	3,230	2.0	.0	1,000	194	132	17.5
FEB 09...	1130	6.9	662	11.6	92	8.5	2,290	7.0	.0	660	124	86.3	11.5
MAR 08...	0740	8.7	655	11.4	91	8.8	1,910	2.5	.0	560	102	74.9	9.39
APR 14...	0800	9.8	650	9.0	90	8.9	3,010	10.0	8.0	840	126	128	15.2
MAY 10...	1815	96	653	8.1	87	7.9	652	12.0	11.5	190	36.4	22.9	6.80
JUN 07...	0730	6.8	650	6.2	75	8.2	2,620	10.0	16.0	880	140	129	13.2
JUL 13...	0720	.51	658	3.5	46	7.8	2,550	25.0	20.5	860	130	131	14.9
AUG 09...	1745	.02	656	9.8	143	8.4	3,600	27.0	26.0	1,000	116	178	21.6
SEP 08...	0720	.42	656	4.6	55	8.0	2,850	7.0	16.0	870	135	130	17.4

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT 06...	5	307	50	293	--	232	1.3	.21	600	1,530	2.14	6.79	1,570
NOV 04...	5	320	47	280	--	184	1.0	1.18	874	1,820	2.61	38.9	1,920
DEC 08...	6	461	50	392	--	248	1.2	.29	1,130	2,400	3.47	24.1	2,550
JAN 12...	6	418	46	481	--	184	1.2	8.09	1,090	2,330	3.36	21.4	2,470
FEB 09...	5	285	48	292	279	121	.9	2.62	737		2.22	30.4	1,630
MAR 08...	4	228	46	228	227	125	.9	1.40	580		1.82	31.4	1,340
APR 14...	6	414	51	267	--	255	1.2	2.24	1,000	2,100	3.02	58.7	2,220
MAY 10...	2	63.7	42	91	--	14.9	.4	7.10	198	406	.60	114	440
JUN 07...	4	266	39	111	--	127	.9	.80	1,030	1,770	2.79	37.6	2,050
JUL 13...	4	272	40	278	--	174	1.0	.89	892	1,780	2.63	2.66	1,930
AUG 09...	6	454	49	289	--	304	1.3	.36	1,240	2,490	3.54	.14	2,610
SEP 08...	5	323	44	280	--	222	1.5	.20	959	1,960	2.80	2.33	2,060

06426500 BELLE FOURCHE RIVER BELOW MOORCROFT, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro- gen, wat unf by anal ysis, mg/L (62855)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	E coli, modif. m-TEC, water, col/ 100 mL (90902)	Fecal coli- form, M-FC 0.7u MF col/ 100 mL (31625)	Alum- inum, water, unfltrd recover- able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recover- able, ug/L (01007)	Beryll- ium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)
OCT 06...	--	--	--	--	--	--	--	540	1.4	52	E.03	E5	40.8
NOV 04...	<.04	3.63	.034	--	.18	24	24	389	1.8	39	<.06	<18	39.3
DEC 08...	--	--	--	--	--	--	--	104	2.6	44	<.12	E15	71.2
JAN 12...	--	--	--	--	--	--	--	128	2.2	46	<.12	21	115
FEB 09...	.16	3.16	.014	--	.37	41	34	158	1.5	31	<.06	13	59.8
MAR 08...	--	--	--	--	--	--	--	267	1.8	27	<.06	11	91.1
APR 14...	--	--	--	--	--	--	--	411	3.5	38	<.12	20	104
MAY 10...	.06	.27	.009	--	.04	>2,700	>2,000	11,700	1.1	196	1.65	24	10.5
JUN 07...	--	--	--	--	--	--	--	778	1.5	88	.08	<18	67.9
JUL 13...	<.04	<.06	<.008	1.55	<.02	--	--	964	2.2	81	E.09	E11	387
AUG 09...	<.04	.09	<.008	1.51	<.02	E17	E36	159	2.6	78	<.12	<18	108
SEP 08...	<.04	<.06	<.008	1.20	<.02	--	--	600	1.7	84	E.08	<18	141

Date	Selen- ium, water, unfltrd ug/L (01147)
OCT 06...	1.7
NOV 04...	1.8
DEC 08...	3.0
JAN 12...	2.8
FEB 09...	1.3
MAR 08...	1.5
APR 14...	2.8
MAY 10...	1.7
JUN 07...	2.9
JUL 13...	1.0
AUG 09...	1.8
SEP 08...	--

< -- Less than.

E -- Estimated value; for bacteria, estimated values are counts outside the acceptable range (non-ideal colony count).

06428050 BELLE FOURCHE RIVER BELOW HULETT, WY

LOCATION.--Lat 44°42'04", long 104°35'07" (NAD 27), in SW¹/₄ NE¹/₄ sec.6, T.54 N., R.64 W., Crook County, Hydrologic Unit 10120201, at bridge, 1.3 mi northeast of Hulett, and 4.7 mi downstream from Blacktail Creek.

PERIOD OF RECORD.--February 1981 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
Date		Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO ₃ (29801)	Alkalinity, wat flt inc tit field, mg/L as CaCO ₃ (39086)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT 05...	1715		6.8	663	14.9	183	8.5	2,070	22.5	18.0	930	234	84.3	10.4
NOV 04...	0710		9.7	675	10.0	83	8.0	1,870	-2.0	2.5	900	244	71.4	8.36
DEC 08...	0725		5.9	659	10.9	87	7.8	2,270	-4.0	.0	1,200	324	89.4	9.25
JAN 12...	0730		6.9	655	8.3	67	7.4	2,330	-10.0	.0	1,300	366	89.5	8.55
FEB 09...	0815		6.9	664	9.6	76	7.9	2,050	-4.0	.0	1,100	338	73.1	7.50
MAR 07...	1805		9.0	661	14.2	143	8.4	1,840	8.0	9.0	960	273	68.0	8.11
APR 13...	1805		8.0	661	12.7	158	8.5	2,070	18.5	18.5	930	239	80.2	8.66
MAY 11...	0730		65	667	9.3	91	8.1	727	2.0	8.5	200	53.9	17.1	5.43
JUN 06...	1820		9.7	652	10.3	142	8.6	1,980	18.5	23.0	1,000	264	83.6	8.65
JUL 12...	1630		71	667	9.0	132	8.4	1,880	30.0	27.5	500	87.4	68.8	13.7
AUG 09...	1550		163	667	7.0	99	8.2	1,950	26.5	25.5	550	94.4	76.1	14.3
SEP 07...	1750		29	665	10.4	146	8.3	2,070	23.0	25.0	740	161	83.0	13.1
OCT 05...	2	154	26	119	--	49.2	.5	4.32	974	1,580	2.37	32.0	1,740	
NOV 04...	2	119	22	165	--	18.1	.4	5.88	915	1,480	2.19	42.2	1,610	
DEC 08...	2	137	20	215	--	26.3	.5	11.3	1,110	1,840	2.74	32.1	2,010	
JAN 12...	1	123	17	272	--	38.7	.6	14.6	1,110	1,910	2.81	38.5	2,070	
FEB 09...	1	107	17	214	209	26.8	.5	8.61	924		2.32	31.7	1,700	
MAR 07...	2	108	19	169	163	15.3	.4	4.76	871		2.12	37.9	1,560	
APR 13...	2	126	23	127	--	45.1	.5	4.92	990	1,570	2.36	37.5	1,740	
MAY 11...	2	69.6	42	74	--	5.89	.4	6.31	266	469	.68	88.0	501	
JUN 06...	1	106	18	73	--	24.1	.4	1.71	1,040	1,580	2.33	44.9	1,720	
JUL 12...	5	232	49	178	172	54.4	.8	.68	708		1.83	258	1,340	
AUG 09...	4	241	48	211	157	56.4	.8	1.77	720		1.85	600	1,360	
SEP 07...	3	187	35	137	175	44.3	.7	.99	893		2.06	119	1,520	

06428050 BELLE FOURCHE RIVER BELOW HULETT, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitrogen, wat unfltrd by analysis, mg/L (62855)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	E coli, modif. m-TEC, water, col/100 mL (90902)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Aluminum, water, unfltrd recoverable, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recoverable, ug/L (01007)	Beryllium, water, unfltrd recoverable, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)
OCT 05...	--	--	--	--	--	--	--	23	.7	32	<.06	30	6.5
NOV 04...	<.04	<.06	<.008	--	<.02	E20	E16	12	.5	23	<.06	23	8.3
DEC 08...	--	--	--	--	--	--	--	11	.8	23	<.06	22	13.4
JAN 12...	--	--	--	--	--	--	--	5	.6	23	<.06	37	36.2
FEB 09...	.28	.07	<.008	--	.03	1,700	E3,300	18	.6	20	<.06	31	20.1
MAR 07...	--	--	--	--	--	--	--	7	.8	18	<.06	45	13.4
APR 13...	--	--	--	--	--	--	--	6	.8	18	<.06	40	11.2
MAY 11...	<.04	<.06	<.008	--	<.02	3,300	4,100	13,200	.5	144	1.39	12	8.9
JUN 06...	--	--	--	--	--	--	--	25	.7	33	<.06	28	10.5
JUL 12...	<.04	<.06	<.008	.74	<.02	--	--	71	1.1	53	<.06	9	8.9
AUG 09...	E.03	E.04	<.008	--	<.02	E55	E110	1,240	1.1	83	.10	<6	5.3
SEP 07...	--	--	--	--	--	--	--	38	.8	55	<.06	17	12.1

Date	Selenium, water, unfltrd ug/L (01147)
OCT 05...	2.3
NOV 04...	2.5
DEC 08...	3.4
JAN 12...	4.1
FEB 09...	3.3
MAR 07...	2.9
APR 13...	3.3
MAY 11...	1.6
JUN 06...	2.6
JUL 12...	1.3
AUG 09...	1.8
SEP 07...	1.6

< -- Less than.

E -- Estimated value; for bacteria, estimated values are counts outside the acceptable range (non-ideal colony count).

CHEYENNE RIVER BASIN

06428200 BELLE FOURCHE RIVER NEAR ALVA, WY

LOCATION.--Lat 44°47'22", long 104°28'51" (NAD 27), in NE¹/₄ NE¹/₄ sec.1, T.55 N., R.64 W., Crook County, Hydrologic Unit 10120201, on right bank 0.3 mi downstream from Beaver Creek and 6.7 miles north of Alva.

DRAINAGE AREA.--2,948 mi².

PERIOD OF RECORD.--October 1988 to 1998, 2001, 2002, and 2004 (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 3,600 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair. Major regulation by Keyhole Reservoir. Streamflow also affected by diversions for irrigation and return flow from irrigated areas. Results of discharge measurements, in cubic feet per second, made during period when station was not in operation, are given below:

Oct. 23 . . . 14.8

Apr. 9 . . . 66.0

COOPERATION.--Station operated and record provided by Office of the Wyoming State Engineer's Office; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	20	16	14	8.1	60	112
2	---	---	---	---	---	---	20	17	14	50	59	112
3	---	---	---	---	---	---	19	16	13	146	65	75
4	---	---	---	---	---	---	19	15	12	134	62	59
5	---	---	---	---	---	---	18	14	11	140	48	57
6	---	---	---	---	---	---	17	13	10	146	46	55
7	---	---	---	---	---	---	17	12	10	138	44	53
8	---	---	---	---	---	---	17	12	8.2	67	43	52
9	---	---	---	---	---	---	16	13	8.5	32	42	52
10	---	---	---	---	---	---	16	15	8.2	22	44	52
11	---	---	---	---	---	---	16	12	7.6	18	44	51
12	---	---	---	---	---	---	16	11	7.0	16	44	51
13	---	---	---	---	---	---	16	11	7.2	12	45	53
14	---	---	---	---	---	---	16	12	7.8	11	39	57
15	---	---	---	---	---	---	15	11	7.5	11	22	58
16	---	---	---	---	---	---	15	11	7.4	29	15	46
17	---	---	---	---	---	---	15	13	7.6	31	13	27
18	---	---	---	---	---	---	15	13	9.0	31	12	20
19	---	---	---	---	---	---	16	12	9.3	30	11	16
20	---	---	---	---	---	---	16	38	8.1	30	9.9	15
21	---	---	---	---	---	---	16	110	7.7	30	8.4	14
22	---	---	---	---	---	---	18	130	8.3	31	7.0	13
23	---	---	---	---	---	---	18	103	8.0	43	69	13
24	---	---	---	---	---	---	17	67	7.3	65	104	13
25	---	---	---	---	---	---	16	59	6.5	64	110	12
26	---	---	---	---	---	---	16	49	6.2	60	111	12
27	---	---	---	---	---	---	15	30	6.4	59	102	11
28	---	---	---	---	---	---	15	22	6.9	65	113	12
29	---	---	---	---	---	---	15	19	6.4	62	114	11
30	---	---	---	---	---	---	16	18	6.6	61	115	10
31	---	---	---	---	---	---	---	16	---	61	113	---
TOTAL	---	---	---	---	---	---	497	910	257.7	1,703.1	1,734.3	1,194
MEAN	---	---	---	---	---	---	16.6	29.4	8.59	54.9	55.9	39.8
MAX	---	---	---	---	---	---	20	130	14	146	115	112
MIN	---	---	---	---	---	---	15	11	6.2	8.1	7.0	10
AC-FT	---	---	---	---	---	---	986	1,800	511	3,380	3,440	2,370

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2004, BY WATER YEAR (WY)*

MEAN	12.4	---	---	---	---	---	106	116	94.6	79.8	65.0	31.9
MAX	14.4	---	---	---	---	---	360	404	204	177	123	71.4
(WY)	(1989)	---	---	---	---	---	(1997)	(1995)	(1993)	(2002)	(2002)	(2002)
MIN	10.3	---	---	---	---	---	8.82	25.0	8.59	40.4	22.2	14.6
(WY)	(1990)	---	---	---	---	---	(1992)	(2002)	(2004)	(1998)	(1996)	(2001)

06428200 BELLE FOURCHE RIVER NEAR ALVA, WY—Continued

SUMMARY STATISTICS

HIGHEST DAILY MEAN
 LOWEST DAILY MEAN
 MAXIMUM PEAK FLOW
 MAXIMUM PEAK STAGE

FOR 2004 WATER YEAR*

130 May 22
 6.2 Jun 26
 200 May 22
 2.66 May 22

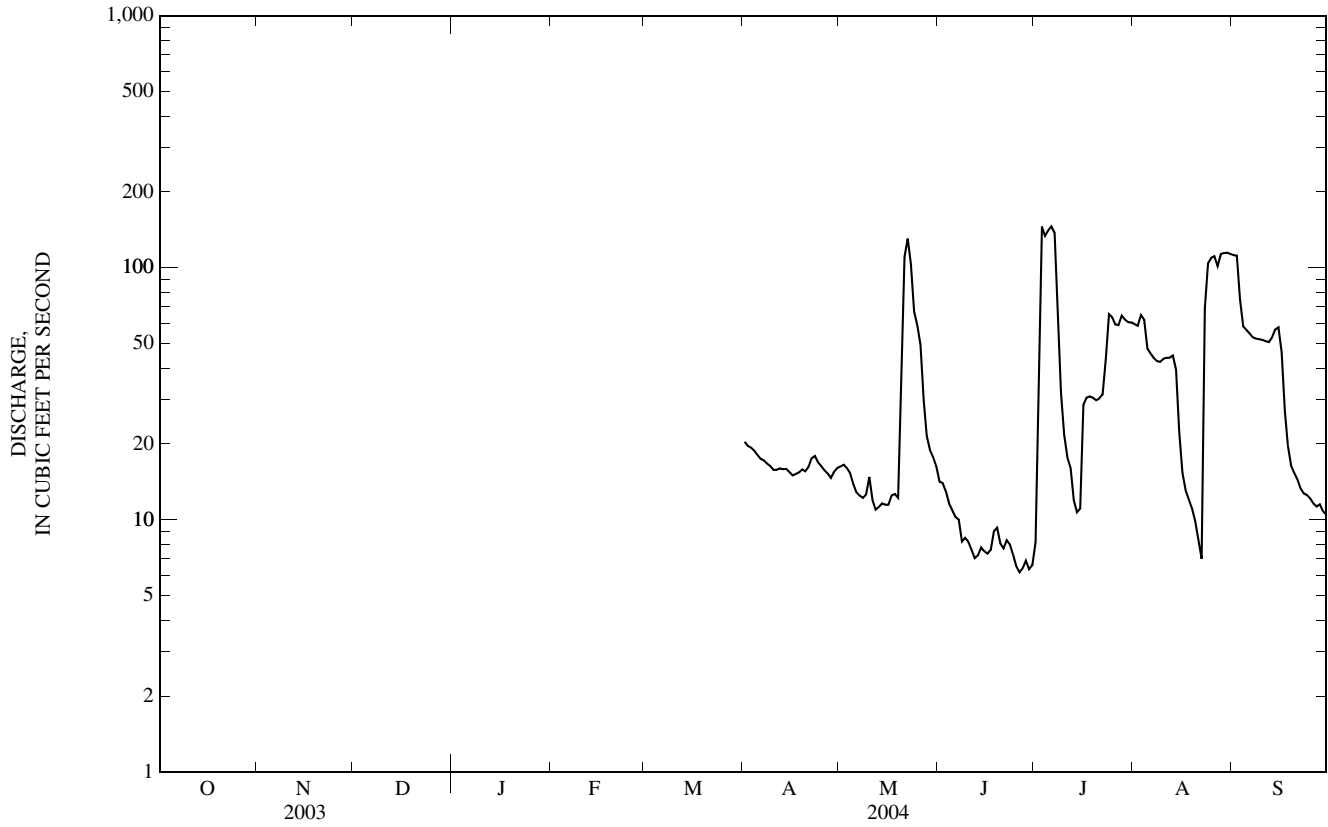
WATER YEARS 1989 - 2004*

2,000 May 9, 1995
 3.1 Jun 11, 1992
 2,690^a May 8, 1995
 8.15^b Mar 20, 1996

* For period of operation.

a From floodmarks, gage height, 6.76 ft.

b From floodmarks, backwater from ice.



06428500 BELLE FOURCHE RIVER AT WYOMING-SOUTH DAKOTA STATE LINE

LOCATION.--Lat 44°44'59", long 104°02'49" (NAD 27), in NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.18, T.9 N., R.1 E., Butte County, Hydrologic Unit 10120202, on left bank 0.3 mi downstream from State line, 3.7 mi downstream from Oak Creek, and 11 mi northwest of Belle Fourche, South Dakota.

DRAINAGE AREA.--3,280 mi².

PERIOD OF RECORD.--December 1946 to current year. Records for water year 1947 incomplete, yearly estimate published in WSP 1729.

GAGE.--Water-stage recorder. Elevation of gage is 3,095.7 ft above NGVD of 1929. Bureau of Reclamation data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversion upstream from station for irrigation of about 5,000 acres. Flow regulated by Keyhole Dam, useable capacity, 191,600 acre-ft, 143 mi upstream from station since October 25, 1952. Maximum discharge prior to regulation, 3,620 ft³/s, June 23, 1947, gage height, 12.51 ft; maximum gage height, 14.33 ft, March 22, 1949, backwater from ice; no flow at times some years. Station operated and record provided by the South Dakota Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	23	e6.7	e3.0	e6.5	15	12	16	16	7.9	170	59
2	10	17	e7.2	e2.8	e6.5	18	11	14	11	7.1	144	50
3	9.8	16	e7.6	e2.8	e6.1	15	11	14	11	10	138	40
4	9.5	15	e7.6	e2.7	e6.0	14	11	13	10	47	142	34
5	9.3	14	e7.5	e2.7	e5.8	14	11	12	9.5	51	140	33
6	9.1	13	e7.4	e2.6	e5.3	13	11	11	8.4	52	139	32
7	8.8	13	e7.1	e2.6	e3.0	13	10	11	5.1	52	132	26
8	8.6	12	e7.0	e2.5	e4.2	14	10	14	4.9	52	129	23
9	8.4	12	e7.0	e2.5	e4.9	14	9.9	28	5.5	50	128	20
10	7.8	12	e7.0	e2.5	e5.4	13	10	30	5.8	49	128	17
11	7.3	11	e7.0	e2.4	e5.6	12	10	113	13	49	130	16
12	7.2	10	e6.8	e2.4	e6.0	12	10	171	13	44	137	15
13	7.3	9.9	e5.4	e2.3	e7.0	12	11	206	14	46	125	14
14	7.2	12	e6.0	e2.2	e7.0	13	10	120	13	35	102	13
15	7.6	11	e6.5	e2.2	e6.8	11	9.9	84	12	33	98	12
16	7.5	11	e6.8	e2.3	e6.5	14	9.6	93	13	40	94	12
17	7.4	12	e7.0	e2.3	e6.1	15	9.1	79	12	74	92	11
18	7.5	11	e7.0	e2.4	e6.0	14	8.5	63	10	90	99	11
19	8.2	10	e7.0	e3.0	e5.9	13	8.7	52	9.7	109	103	10
20	9.3	9.8	e5.5	e4.0	e5.8	13	9.7	44	9.8	115	101	9.5
21	9.3	8.2	e4.0	e7.5	e5.9	13	14	40	9.3	116	98	9.0
22	11	8.3	e3.4	e5.0	e6.0	14	28	38	7.8	119	95	8.8
23	14	e7.6	e3.0	e4.2	e6.8	13	19	32	3.9	122	95	8.4
24	12	e7.0	e3.4	e4.2	e7.0	14	17	19	5.3	126	111	8.6
25	12	e8.2	e3.7	e4.3	e14	14	15	20	4.3	125	98	8.8
26	13	e8.2	e3.7	e12	27	14	13	17	4.3	127	70	8.3
27	13	e8.0	e3.6	e8.0	24	16	16	20	2.9	145	175	7.5
28	12	e8.0	e3.5	e7.3	16	14	23	21	5.9	150	98	8.3
29	14	e5.0	e3.5	e7.0	---	13	20	20	7.4	142	74	8.6
30	21	e6.0	e3.3	e7.0	---	12	18	20	8.3	141	66	8.3
31	21	---	e3.1	e6.5	---	12	---	19	---	141	61	---
TOTAL	321.1	329.2	175.3	125.2	223.1	421	386.4	1,454	266.1	2,467.0	3,512	542.1
MEAN	10.4	11.0	5.65	4.04	7.97	13.6	12.9	46.9	8.87	79.6	113	18.1
MAX	21	23	7.6	12	27	18	28	206	16	150	175	59
MIN	7.2	5.0	3.0	2.2	3.0	11	8.5	11	2.9	7.1	61	7.5
AC-FT	637	653	348	248	443	835	766	2,880	528	4,890	6,970	1,080

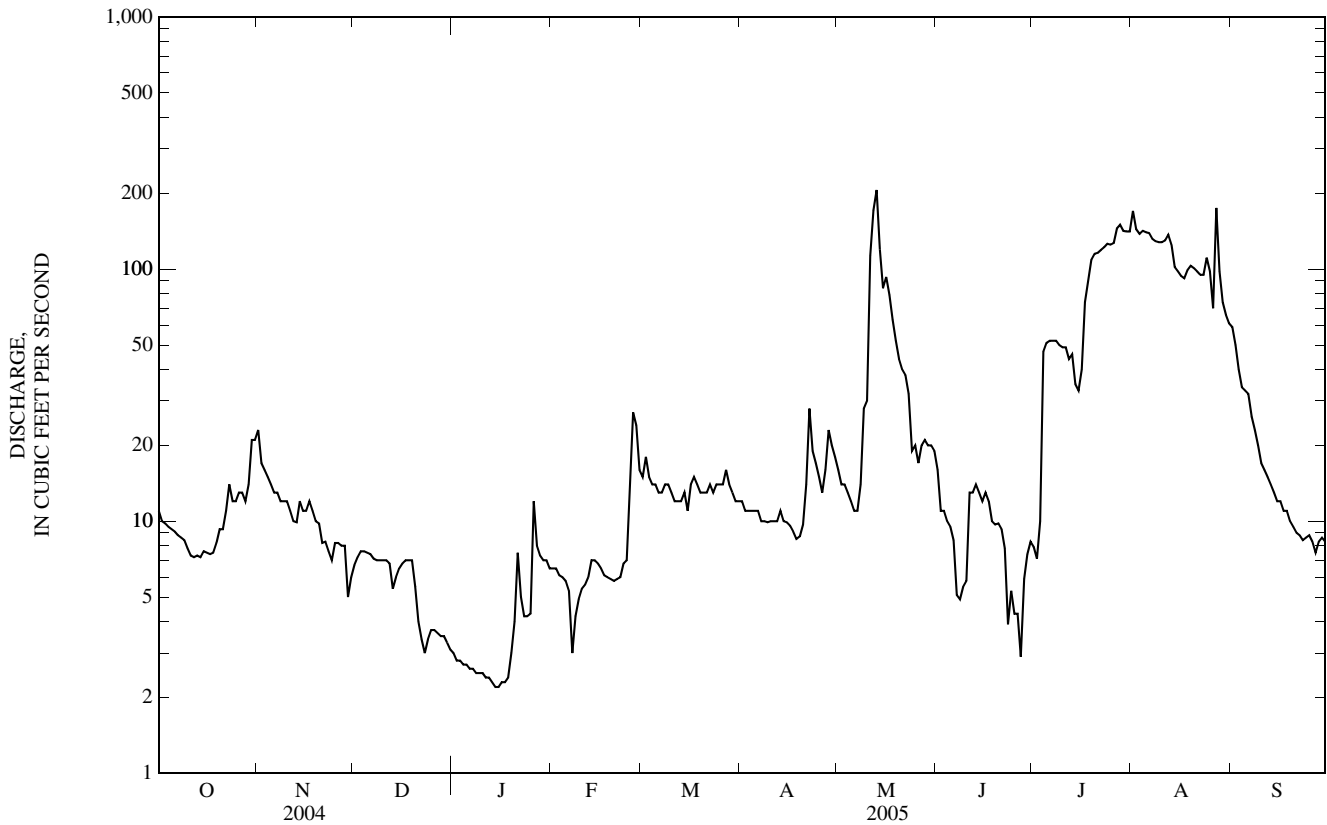
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2005, BY WATER YEAR (WY)*

MEAN	27.9	27.3	17.4	20.3	42.4	151	156	208	174	95.0	73.2	34.3
MAX	134	277	51.5	247	459	931	823	1,104	812	303	271	109
(WY)	(1999)	(1999)	(1999)	(1997)	(1996)	(1972)	(1971)	(1978)	(1984)	(1981)	(1980)	(1955)
MIN	0.00	0.00	0.00	0.00	0.20	13.6	12.9	3.10	8.07	2.94	0.10	0.00
(WY)	(1955)	(1961)	(1961)	(1961)	(1959)	(2005)	(2005)	(1961)	(2004)	(1960)	(1961)	(1954)

06428500 BELLE FOURCHE RIVER AT WYOMING-SOUTH DAKOTA STATE LINE—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1954 - 2005*	
ANNUAL TOTAL	9,631.1		10,222.5		--	
ANNUAL MEAN	26.3		28.0		85.9	
HIGHEST ANNUAL MEAN	--		--		229	1978
LOWEST ANNUAL MEAN	--		--		7.69	1961
HIGHEST DAILY MEAN	511	Jul 6	206	May 13	4,760	May 9, 1995
LOWEST DAILY MEAN	1.3	Aug 24	2.2	Jan 14	0.00 ^a	Jul 30, 1954
MAXIMUM PEAK FLOW	--		327	May 13	6,320 ^b	May 10, 1995
MAXIMUM PEAK STAGE	--		5.80	May 13	16.33	May 10, 1995
ANNUAL RUNOFF (AC-FT)	19,100		20,280		62,200	
10 PERCENT EXCEEDS	58		98		189	
50 PERCENT EXCEEDS	13		11		35	
90 PERCENT EXCEEDS	5.0		4.2		5.5	

* Regulated period only (1954-2004). See REMARKS.
 a No flow at times in some years.
 b Based on slope-area measurement of peak flow.
 e Estimated.



CHEYENNE RIVER BASIN

06429500 COLD SPRINGS CREEK AT BUCKHORN, WY

LOCATION.--Lat 44°09'15", long 104°04'37" (NAD 27), in NW¹/₄ NW¹/₄ SW¹/₄ sec.9, T.48 N., R.60 W., Weston County, Hydrologic Unit 10120303, on right bank at downstream end of culvert at U.S. Highway 85 and 0.5 mi northeast of Buckhorn.

DRAINAGE AREA.--19 mi².

PERIOD OF RECORD.--October 1974 to September 1982, April 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,050 ft above NGVD of 1929, from topographic map. October 1974 to September 1982, 200 ft upstream from station at different datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. No diversion upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	e4.2	e4.1	3.8	e3.7	e3.4	e3.3	3.4	3.2	e3.2	3.5	3.3
2	4.2	e4.3	e4.1	e3.9	e3.8	e3.4	e3.8	3.5	3.2	e3.2	3.4	3.2
3	4.2	e4.4	e4.1	3.9	3.8	e3.4	e4.2	3.3	3.2	e3.2	3.5	3.2
4	4.2	4.4	e4.2	e3.8	e3.7	e3.4	e4.5	3.4	3.2	e3.2	3.5	3.2
5	4.2	e4.2	4.2	e3.6	3.8	e3.4	e4.9	3.4	3.2	e3.3	3.5	3.2
6	4.3	4.2	4.1	e3.5	e3.7	e3.4	4.5	3.3	3.2	e3.3	3.5	3.3
7	4.2	4.2	e4.0	e3.6	3.8	3.4	4.5	3.4	e3.2	e3.3	3.5	3.3
8	4.2	4.2	e4.1	e3.7	e3.7	3.3	4.3	4.0	3.2	e3.3	3.5	3.2
9	4.2	4.2	4.1	3.8	e3.6	e3.3	4.2	3.6	e3.2	e3.3	3.5	3.2
10	4.2	4.1	4.2	3.8	e3.6	3.5	3.8	3.6	e3.2	e3.3	3.6	3.2
11	4.2	e4.0	4.1	3.7	e3.6	e3.4	3.7	3.6	e3.2	e3.3	3.6	3.2
12	4.2	e4.1	4.0	3.7	e3.6	3.5	3.7	3.6	e3.2	e3.3	3.6	3.3
13	4.2	4.2	e4.0	e3.4	3.8	e3.2	3.6	3.6	e3.2	e3.3	3.6	3.2
14	4.3	4.2	e4.1	e3.3	3.6	e3.4	3.5	3.5	e3.2	e3.3	3.4	3.0
15	4.3	e4.1	e4.1	e3.2	e3.1	e3.4	3.6	3.4	e3.2	e3.3	3.4	3.1
16	4.3	e4.2	4.1	e3.4	e3.3	e3.3	3.6	3.4	e3.2	e3.3	3.4	3.0
17	4.2	4.2	e4.0	e3.6	e3.3	3.3	3.6	3.4	e3.2	e3.3	3.4	3.0
18	4.2	e4.1	4.1	3.8	e3.1	3.3	3.5	3.5	e3.2	3.3	3.4	3.0
19	4.3	4.1	4.1	3.8	e3.5	e3.2	3.6	3.3	e3.2	3.4	3.4	2.9
20	4.2	e4.1	3.3	3.8	3.6	e3.3	3.6	3.3	e3.2	3.4	3.3	2.8
21	4.2	e4.1	e3.2	3.7	3.5	e3.4	3.7	3.3	e3.2	3.4	3.3	2.9
22	4.3	e4.1	e3.1	3.4	3.5	e3.5	3.6	3.3	e3.2	3.4	3.3	2.9
23	4.3	e4.1	e3.0	3.8	3.6	e3.6	3.5	3.3	e3.2	3.4	3.4	2.9
24	4.3	e4.1	e3.3	3.9	e3.4	3.5	3.5	3.3	e3.2	3.5	3.4	2.7
25	4.3	4.1	e3.7	3.8	e3.5	3.4	3.5	3.5	e3.2	3.6	3.3	2.5
26	4.3	4.1	4.0	3.8	e3.5	3.4	3.5	3.3	e3.2	3.6	3.3	2.5
27	4.3	e4.1	4.0	3.8	3.5	e3.5	3.5	3.3	e3.2	3.5	3.3	2.4
28	4.3	e4.1	4.0	3.8	e3.4	e3.7	3.5	3.2	e3.2	3.4	3.3	2.5
29	e4.3	e4.1	e3.9	3.8	---	e4.1	3.2	3.3	e3.2	3.5	3.3	2.5
30	e4.3	e4.1	3.9	3.7	---	4.0	3.3	3.3	e3.2	3.4	3.3	2.5
31	4.3	---	3.9	3.7	---	3.8	---	3.4	---	3.5	3.3	---
TOTAL	131.7	124.7	121.1	114.3	99.6	107.1	112.8	106.0	96.0	104.0	106.0	89.1
MEAN	4.25	4.16	3.91	3.69	3.56	3.45	3.76	3.42	3.20	3.35	3.42	2.97
MAX	4.3	4.4	4.2	3.9	3.8	4.1	4.9	4.0	3.2	3.6	3.6	3.3
MIN	4.2	4.0	3.0	3.2	3.1	3.2	3.2	3.2	3.2	3.2	3.3	2.4
AC-FT	261	247	240	227	198	212	224	210	190	206	210	177

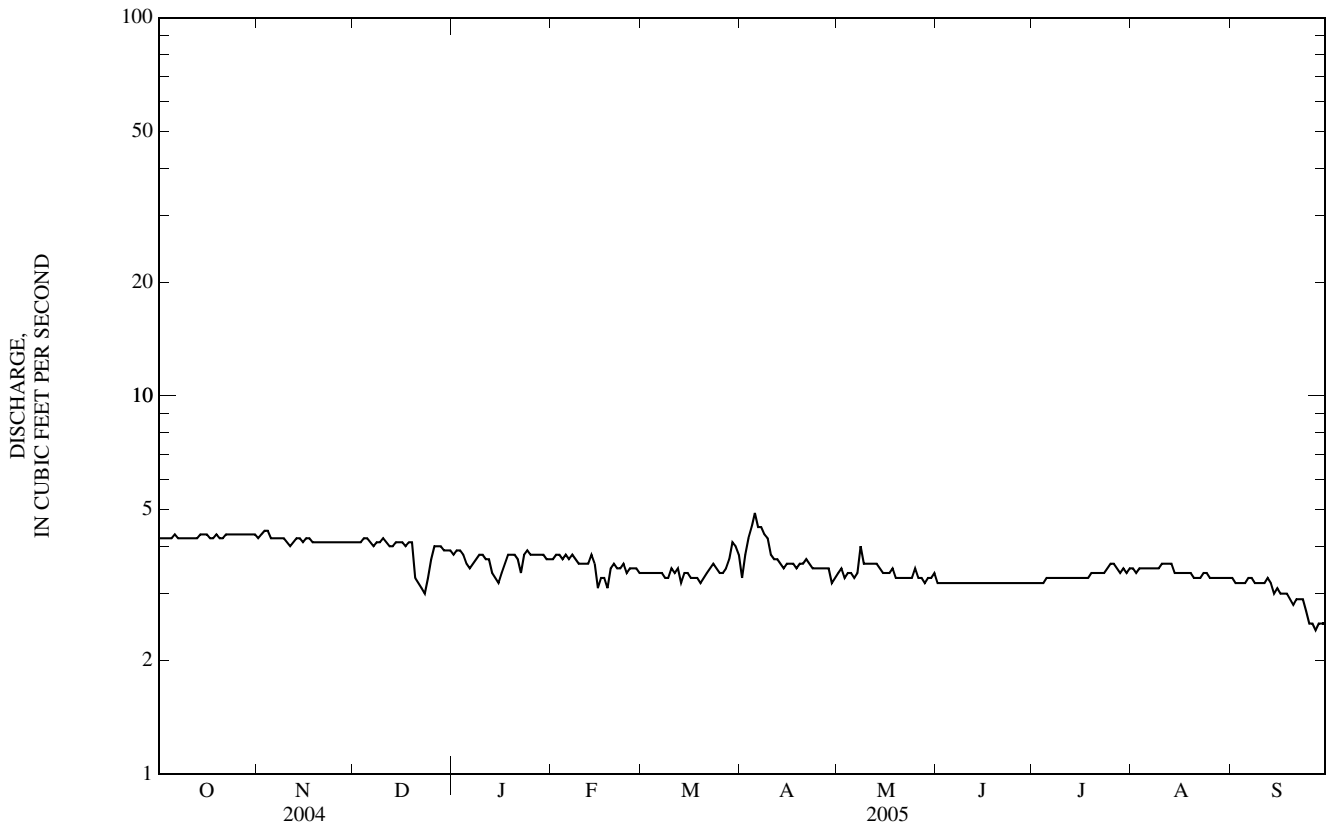
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2005, BY WATER YEAR (WY)

MEAN	4.50	4.31	4.19	4.14	4.29	4.63	4.93	4.65	4.73	4.60	4.66	4.58
MAX	7.00	7.15	7.04	7.01	6.75	8.03	7.43	7.29	7.77	7.58	7.28	7.14
(WY)	(2000)	(2000)	(2000)	(2000)	(2000)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)
MIN	2.53	2.09	2.06	2.50	2.61	2.91	3.07	2.48	2.98	2.62	2.71	2.92
(WY)	(1975)	(1993)	(1993)	(1994)	(1993)	(1993)	(1993)	(2004)	(2004)	(1995)	(1995)	(1994)

06429500 COLD SPRINGS CREEK AT BUCKHORN, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1975 - 2005	
ANNUAL TOTAL	1,254.4	1,312.4	--	
ANNUAL MEAN	3.43	3.60	4.54	
HIGHEST ANNUAL MEAN	--	--	7.06	1999
LOWEST ANNUAL MEAN	--	--	2.92	1993
HIGHEST DAILY MEAN	5.8 Mar 26	4.9 Apr 5	22	Mar 26, 1999
LOWEST DAILY MEAN	1.6 Jan 5	2.4 Sep 27	0.30	Dec 20, 1996
ANNUAL SEVEN-DAY MINIMUM	2.2 May 4	2.5 Sep 24	0.75	Dec 18, 1996
MAXIMUM PEAK FLOW	--	5.0 ^a Apr 5	42 ^b	Mar 26, 1999
MAXIMUM PEAK STAGE	--	3.47 ^c Jan 6	8.61 ^d	Jan 12, 1978
ANNUAL RUNOFF (AC-FT)	2,490	2,600	3,290	
10 PERCENT EXCEEDS	4.2	4.2	6.5	
50 PERCENT EXCEEDS	3.4	3.5	4.4	
90 PERCENT EXCEEDS	2.7	3.2	3.0	

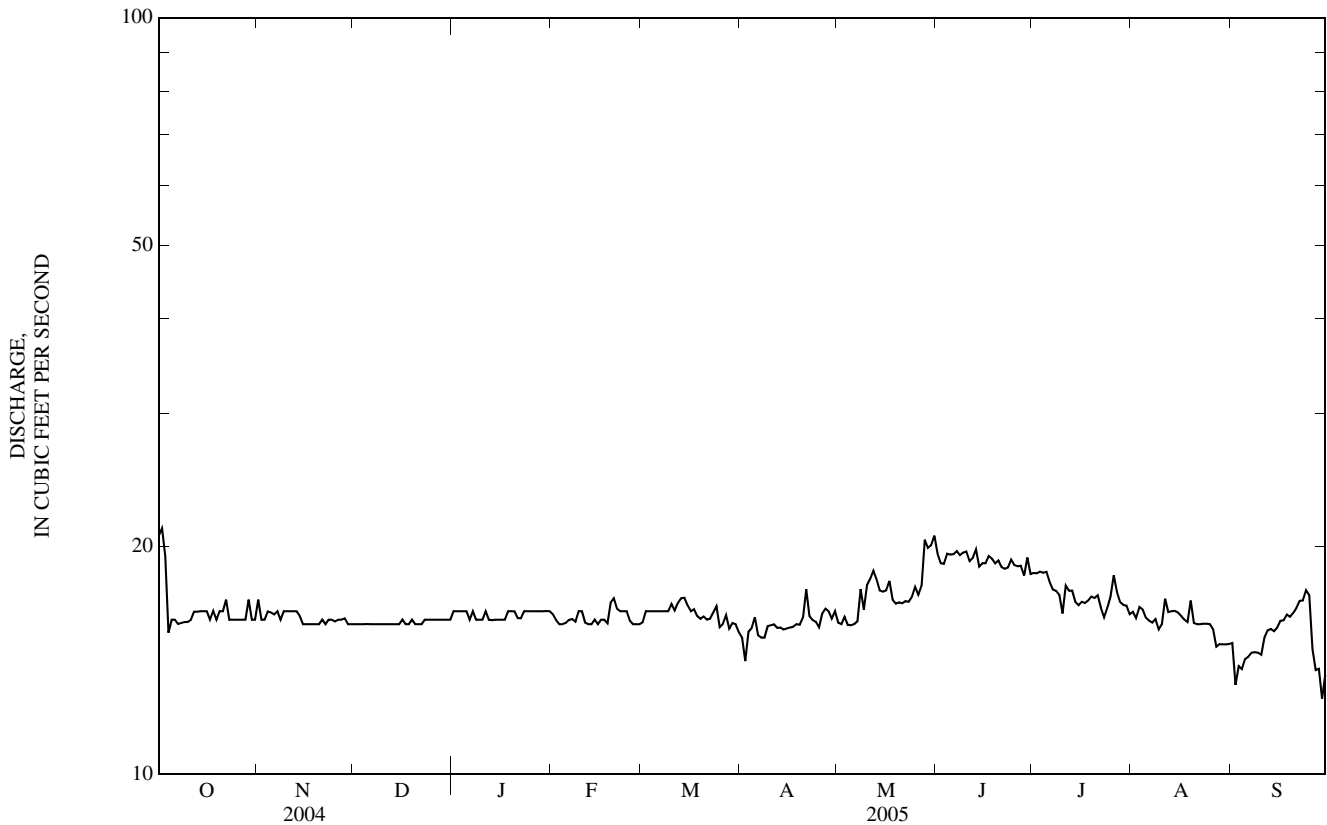
- a Gage height, 2.26 ft.
- b Gage height, 3.33 ft.
- c Backwater from ice.
- d Backwater from ice, site and datum then in use.
- e Estimated.



06429905 SAND CREEK NEAR RANCH A, NEAR BEULAH, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1977 - 2005	
ANNUAL TOTAL	6,428		6,011		--	
ANNUAL MEAN	17.6		16.5		22.7	
HIGHEST ANNUAL MEAN	--		--		30.5 1999	
LOWEST ANNUAL MEAN	--		--		15.7 1992	
HIGHEST DAILY MEAN	23	Jul 1	21	Oct 1,2, May 31	455	May 9, 1995
LOWEST DAILY MEAN	15	Mar 5	13	Sep 2,29	12	Mar 10, 1992
ANNUAL SEVEN-DAY MINIMUM	16	Oct 4	14	Sep 2	13	Mar 8, 1992
MAXIMUM PEAK FLOW	--		25 ^a		1,230	May 8, 1995
MAXIMUM PEAK STAGE	--		1.99 ^b		3.80 ^c	May 8, 1995
ANNUAL RUNOFF (AC-FT)	12,750		11,920		16,440	
10 PERCENT EXCEEDS	19		19		30	
50 PERCENT EXCEEDS	18		16		22	
90 PERCENT EXCEEDS	16		16		16	

- a Gage height, 1.70 ft.
- b Backwater from ice.
- c From floodmarks, present site and datum.
- e Estimated.



06429997 MURRAY DITCH ABOVE HEADGATE AT WYOMING-SOUTH DAKOTA STATE LINE

LOCATION.--Lat 44°34'35", long 104°03'20" (NAD 27), in SW¹/₄ SW¹/₄ sec.7, T.7 N., R.1 E., Butte County, Hydrologic Unit 10120203, on right bank at State line and 12 mi southwest of Belle Fourche, SD.

PERIOD OF RECORD.--April 1987 to current year.

REVISED RECORDS.--WDR SD-96-1: September 1995 daily discharges, monthly, and water year statistics.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 3,440 ft above NGVD of 1929, from topographic map. Prior to April 23, 1987, published as 06430000 (below diversion at site 15 ft downstream from station).

REMARKS.--Records fair. Ditch diverts water from left bank of Redwater Creek, 2.0 mi upstream from station, for irrigation of about 700 acres. Flow maintained during irrigation season only. Station operated and record provided by the South Dakota Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	3.2	0.00	0.00	0.00	0.00	0.00	6.9	13	12	10	5.3
2	4.7	3.1	0.00	0.00	0.00	0.00	0.00	6.7	13	11	18	5.8
3	14	3.0	0.00	0.00	0.00	0.00	0.00	6.4	13	11	22	13
4	e16	3.0	0.00	0.00	0.00	0.00	0.00	6.1	12	11	12	13
5	e14	2.9	0.00	0.00	0.00	0.00	0.00	6.1	13	10	12	12
6	e7.0	2.8	0.00	0.00	0.00	0.00	0.00	6.3	13	10	12	11
7	6.9	2.8	0.00	0.00	0.00	0.00	0.00	6.6	12	14	12	11
8	7.1	1.9	0.00	0.00	0.00	0.00	0.00	8.6	13	17	12	12
9	7.2	0.16	0.00	0.00	0.00	0.00	0.00	8.6	12	20	11	12
10	7.6	0.00	0.00	0.00	0.00	0.00	0.00	8.7	12	22	12	13
11	7.7	0.00	0.00	0.00	0.00	0.00	0.00	9.1	12	20	12	13
12	7.8	0.00	0.00	0.00	0.00	0.00	0.00	4.8	12	21	12	14
13	e7.7	0.00	0.00	0.00	0.00	0.00	0.00	4.4	12	22	12	15
14	e8.7	0.00	0.00	0.00	0.00	0.00	9.4	4.2	12	27	12	15
15	e9.6	0.00	0.00	0.00	0.00	0.00	13	4.2	12	20	13	14
16	e10	0.00	0.00	0.00	0.00	0.00	17	4.4	11	22	13	8.4
17	e10	0.00	0.00	0.00	0.00	0.00	22	4.2	12	22	13	8.4
18	e10	0.00	0.00	0.00	0.00	0.00	22	4.0	12	22	13	8.4
19	e10	0.00	0.00	0.00	0.00	0.00	17	4.4	11	23	5.7	8.5
20	e10	0.00	0.00	0.00	0.00	0.00	18	7.9	5.8	23	5.3	6.4
21	e9.0	0.00	0.00	0.00	0.00	0.00	14	7.8	0.19	21	5.3	2.8
22	e17	0.00	0.00	0.00	0.00	0.00	14	7.4	0.00	22	5.0	2.8
23	11	0.00	0.00	0.00	0.00	0.00	15	9.1	0.00	22	5.1	2.8
24	4.2	0.00	0.00	0.00	0.00	0.00	14	18	0.00	23	5.0	2.8
25	4.0	0.00	0.00	0.00	0.00	0.00	13	26	0.00	30	5.0	2.7
26	4.0	0.00	0.00	0.00	0.00	0.00	13	17	0.00	33	5.0	2.4
27	3.9	0.00	0.00	0.00	0.00	0.00	12	11	0.00	20	5.0	2.4
28	3.8	0.00	0.00	0.00	0.00	0.00	12	12	12	5.6	5.0	2.4
29	3.5	0.00	0.00	0.00	---	0.00	12	12	20	5.6	5.0	2.5
30	3.3	0.00	0.00	0.00	---	0.00	8.7	12	17	5.5	5.1	2.6
31	3.2	---	0.00	0.00	---	0.00	---	12	---	5.4	5.3	---
TOTAL	247.6	22.86	0.00	0.00	0.00	0.00	246.10	266.9	286.99	553.1	299.8	245.4
MEAN	7.99	0.76	0.00	0.00	0.00	0.00	8.20	8.61	9.57	17.8	9.67	8.18
MAX	17	3.2	0.00	0.00	0.00	0.00	22	26	20	33	22	15
MIN	3.2	0.00	0.00	0.00	0.00	0.00	0.00	4.0	0.00	5.4	5.0	2.4
AC-FT	491	45	0.00	0.00	0.00	0.00	488	529	569	1,100	595	487

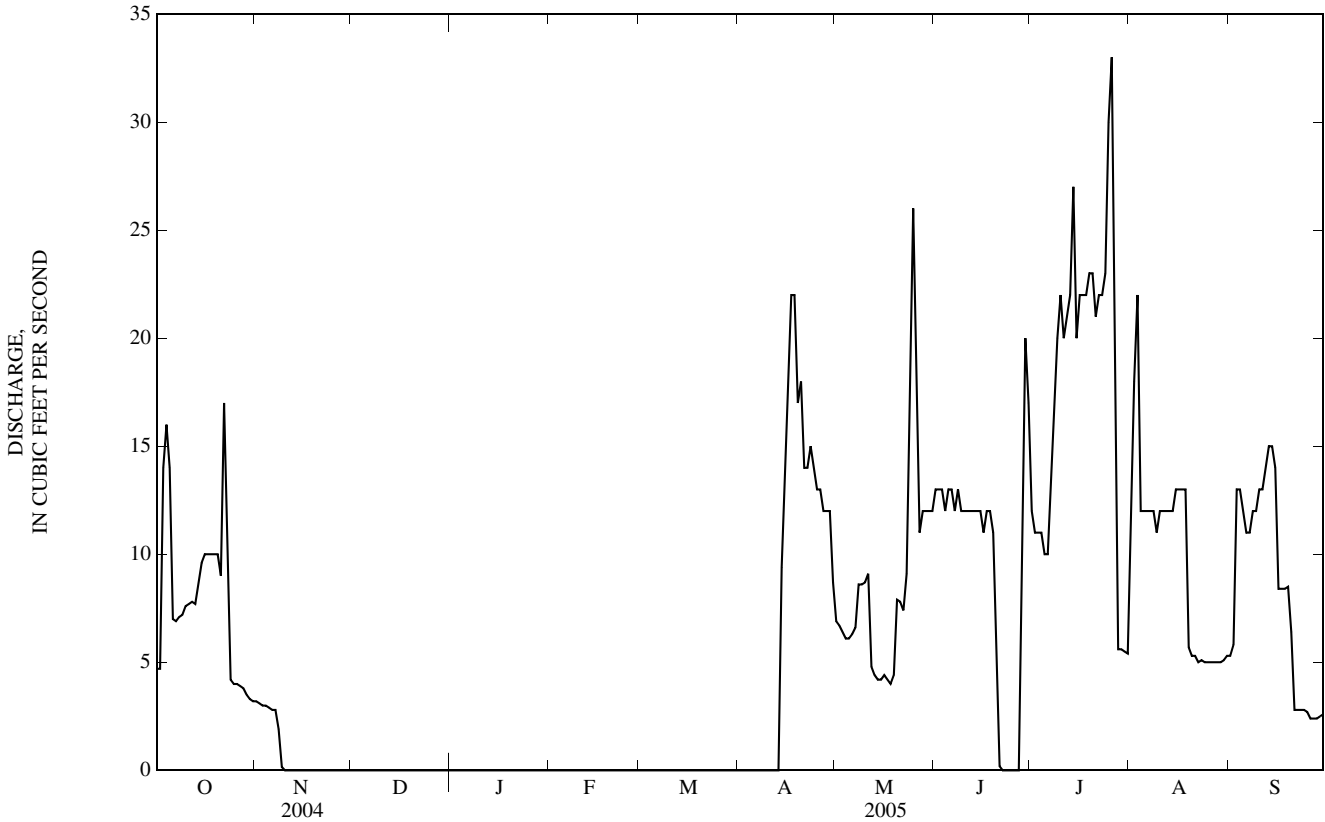
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2005, BY WATER YEAR (WY)

MEAN	6.21	0.42	0.00	0.00	0.00	0.00	0.68	2.48	5.78	10.4	8.85	7.92
MAX	20.6	2.52	0.00	0.00	0.00	0.00	8.20	8.61	13.9	17.8	18.2	18.8
(WY)	(1991)	(2004)	(1988)	(1988)	(1988)	(1988)	(1988)	(2005)	(1988)	(2005)	(1991)	(1994)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.84	2.24	0.80
(WY)	(1988)	(1988)	(1988)	(1988)	(1988)	(1988)	(1988)	(1990)	(191)	(1993)	(1998)	(1993)

06429997 MURRAY DITCH ABOVE HEADGATE AT WYOMING-SOUTH DAKOTA STATE LINE—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1988 - 2005	
ANNUAL TOTAL	1,532.12		2,168.75		--	
ANNUAL MEAN	4.19		5.94		3.59	
HIGHEST ANNUAL MEAN	--		--		5.94 2005	
LOWEST ANNUAL MEAN	--		--		0.92 1993	
HIGHEST DAILY MEAN	26	Jul 13	33	Jul 26	46	Oct 8, 1990
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Nov 10	0.00 ^a	Oct 1, 1987
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Nov 10	0.00	Oct 1, 1987
ANNUAL RUNOFF (AC-FT)	3,040		4,300		2,600	
10 PERCENT EXCEEDS	13		15		12	
50 PERCENT EXCEEDS	2.7		3.3		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a No flow for many days in each year.
 e Estimated.



06430500 REDWATER CREEK AT WYOMING-SOUTH DAKOTA STATE LINE

LOCATION.--Lat 44°34'26", long 104°02'54" (NAD 27), in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.18 T.7 N., R.1 E., Butte County, Hydrologic Unit 10120203, on left bank 800 ft downstream from State line, 5.7 mi upstream from Crow Creek, and 12 mi southwest of Belle Fourche, SD.

DRAINAGE AREA.--471 mi².

PERIOD OF RECORD.--April 1929 to September 1931 and February 1936 to July 1937 (published as "near Beulah, WY"), June 1954 to current year.

REVISED RECORDS.--WSP 1309: 1931(M), 1936-37(M).

GAGE.--Water-stage recorder. Elevation of gage is 3,410 ft above NGVD of 1929, from topographic map. April 25, 1929 to September 30, 1931, and February 28, 1936 to July 31, 1937, nonrecording gage at site 2 mi upstream from station at different datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good. Large diversions for irrigation upstream from station. Total flow passing State line may be obtained by adding flow of Murray Ditch. Station operated and record provided by the South Dakota Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	22	27	26	25	24	25	22	15	17	14	15
2	19	22	26	e24	24	24	25	22	14	17	9.8	15
3	14	22	27	e22	25	24	25	22	16	17	8.3	9.0
4	9.3	22	27	e20	27	24	26	22	17	16	10	8.8
5	11	21	27	e21	28	24	27	22	18	16	10	8.4
6	17	20	26	e24	26	24	25	22	16	16	12	7.6
7	17	21	26	e28	e23	23	23	23	18	12	12	6.6
8	17	22	26	e28	e23	22	24	23	18	8.3	12	6.5
9	17	24	26	e26	e24	22	27	24	19	6.9	10	6.2
10	16	23	26	e25	25	22	28	25	20	6.2	9.3	6.9
11	15	23	26	e26	26	23	28	26	21	6.1	11	6.7
12	14	23	26	e26	26	22	26	34	22	5.8	11	7.2
13	15	23	26	e20	26	22	26	32	24	5.9	11	7.7
14	14	23	26	e19	26	24	19	30	23	5.5	12	7.8
15	14	23	26	e17	26	25	13	29	22	5.0	13	9.2
16	14	23	26	e20	25	25	9.9	28	22	4.9	13	13
17	13	23	26	e24	26	25	2.9	28	22	4.7	15	13
18	13	24	26	e30	25	22	2.7	27	21	4.9	15	14
19	14	26	26	27	26	23	3.2	25	19	5.0	21	14
20	14	26	26	26	25	23	3.7	19	27	5.0	16	15
21	15	26	26	26	25	24	5.9	19	33	4.7	15	19
22	16	26	26	25	25	23	7.1	19	32	4.6	16	19
23	16	27	e22	25	25	22	4.3	19	31	4.0	19	19
24	14	28	e23	26	25	25	5.9	18	32	3.7	21	20
25	17	28	27	25	25	24	8.9	15	31	4.3	21	20
26	18	27	26	26	25	25	9.1	16	31	5.0	21	20
27	18	27	26	25	24	25	11	15	30	7.8	21	19
28	19	27	26	25	24	25	16	15	21	14	21	18
29	20	27	26	e24	---	25	19	14	12	14	21	18
30	20	27	27	25	---	25	24	15	14	14	20	19
31	22	---	26	25	---	25	---	16	---	14	18	---
TOTAL	491.3	726	805	756	705	735	500.6	686	661	275.3	459.4	388.6
MEAN	15.8	24.2	26.0	24.4	25.2	23.7	16.7	22.1	22.0	8.88	14.8	13.0
MAX	22	28	27	30	28	25	28	34	33	17	21	20
MIN	9.3	20	22	17	23	22	2.7	14	12	3.7	8.3	6.2
AC-FT	974	1,440	1,600	1,500	1,400	1,460	993	1,360	1,310	546	911	771

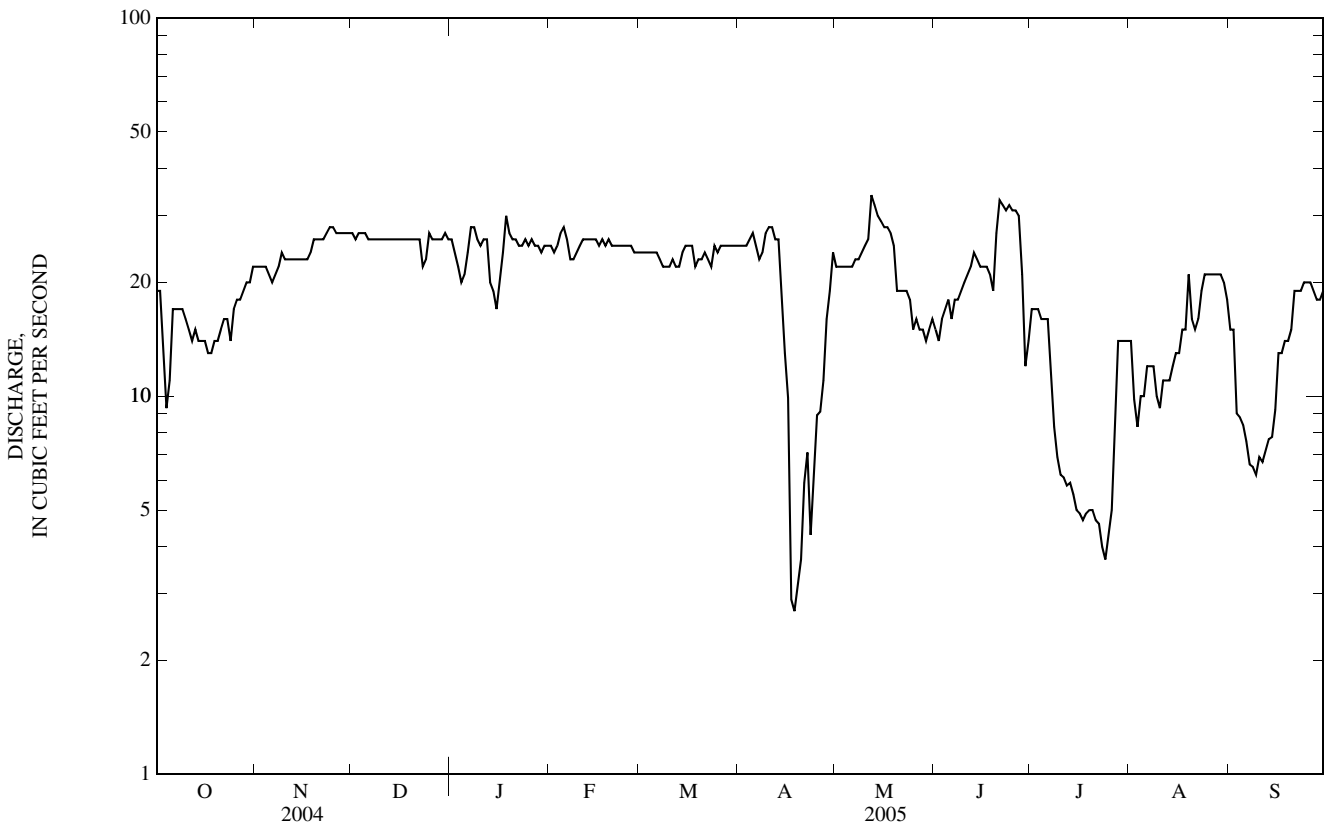
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2005, BY WATER YEAR (WY)*

MEAN	28.5	32.9	32.7	31.9	33.1	34.6	37.3	51.7	44.7	23.2	22.9	25.1
MAX	45.0	47.9	48.0	48.5	57.8	66.0	65.4	168	128	54.9	58.9	50.4
(WY)	(1973)	(1974)	(1999)	(1999)	(1971)	(1996)	(1999)	(1995)	(1976)	(1976)	(1973)	(1973)
MIN	14.2	20.8	21.5	20.7	21.2	22.1	16.7	7.44	6.29	7.62	6.78	11.8
(WY)	(1991)	(1961)	(1993)	(1993)	(1993)	(1962)	(2005)	(1985)	(1961)	(1990)	(1985)	(1985)

06430500 REDWATER CREEK AT WYOMING-SOUTH DAKOTA STATE LINE—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1955 - 2005*	
ANNUAL TOTAL	7,918.7	7,189.2	--	
ANNUAL MEAN	21.6	19.7	33.2	
HIGHEST ANNUAL MEAN	--	--	56.0	1973
LOWEST ANNUAL MEAN	--	--	17.9	1961
HIGHEST DAILY MEAN	34 Apr 3	34 May 12	1,330	May 9, 1995
LOWEST DAILY MEAN	3.3 Aug 26	2.7 Apr 18	1.3 ^a	May 22, 1985
ANNUAL SEVEN-DAY MINIMUM	4.4 Aug 23	4.3 Apr 17	1.9	May 21, 1985
MAXIMUM PEAK FLOW	--	48 ^b Feb 5	2,440 ^c	Aug 22, 1973
MAXIMUM PEAK STAGE	--	3.82 ^d Jan 3	12.19	Aug 22, 1973
ANNUAL RUNOFF (AC-FT)	15,710	14,260	24,060	
10 PERCENT EXCEEDS	29	27	47	
50 PERCENT EXCEEDS	23	22	30	
90 PERCENT EXCEEDS	13	8.1	15	

- * Period using present site and datum. See GAGE.
- a No flow August 13-15, 1929, during partial year.
- b Gage height, 3.44 ft.
- c From rating curve extended above 1,000 ft³/s on basis of slope-area measurement.
- d Backwater from ice.
- e Estimated.



BELLE FOURCHE RIVER BASIN

06430532 CROW CREEK NEAR BEULAH, WY

LOCATION.--Lat 44°34'14", long 104°00'19" (NAD 27), in NW¹/₄ SE¹/₄ NW¹/₄ sec.16, T.7 N., R.1 E., Lawrence County, Hydrologic Unit 10120203, on left bank 1,500 ft upstream from confluence with Redwater River, 0.8 mi north of McNenny Fish Hatchery, and approximately 4.4 mi east of Beulah.

DRAINAGE AREA.--40.8 mi².

PERIOD OF RECORD.--April 1992 to current year.

REVISED RECORDS.--WDR SD-97-1: 1996.

GAGE.--Water-stage recorder. Elevation of gage is 3,360 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	40	32	34	35	33	33	31	34	33	e34	e32
2	41	40	32	33	35	34	33	31	33	33	e34	e32
3	41	39	32	33	35	34	33	31	33	32	e33	e32
4	41	39	32	34	35	34	33	31	33	32	e30	e32
5	40	39	32	34	35	34	34	31	33	32	e30	e30
6	40	39	32	35	35	34	33	31	32	31	e31	e31
7	40	38	32	34	35	34	33	31	32	31	e31	e31
8	41	38	31	34	36	34	33	33	32	31	e32	e31
9	40	38	32	34	36	34	33	34	32	31	e32	e32
10	41	38	31	34	36	34	33	37	32	31	e31	e32
11	41	38	31	34	35	34	33	34	32	31	e31	e32
12	40	37	31	34	36	34	33	36	32	31	e31	e32
13	41	37	31	34	35	35	33	37	33	31	e31	e32
14	41	37	31	34	35	35	33	34	34	31	e32	e32
15	41	37	31	34	34	35	33	33	33	31	e33	e31
16	42	36	32	34	34	35	33	32	33	31	e33	e32
17	42	36	32	34	34	35	33	32	33	31	e32	e31
18	41	35	32	35	34	35	33	32	33	31	e32	e32
19	41	35	31	35	34	35	33	32	33	e31	e33	e32
20	41	35	32	35	34	35	33	32	35	e28	e32	e33
21	41	35	32	34	34	34	35	32	34	e28	e32	e33
22	42	35	32	34	34	34	35	32	34	e28	e32	e33
23	41	34	32	35	34	34	34	32	33	e27	e33	e33
24	41	34	32	35	34	35	33	32	34	e27	e33	e33
25	40	34	32	35	34	35	33	33	34	e29	e33	e33
26	40	34	32	35	34	35	32	32	33	e32	e33	e33
27	40	33	33	35	34	34	32	33	33	e31	e33	e32
28	40	33	33	35	34	34	32	32	33	e31	e33	e33
29	40	33	33	34	---	34	32	32	34	e31	e33	e32
30	40	32	34	35	---	34	32	32	33	e33	e32	e32
31	41	---	34	35	---	34	---	34	---	e32	e31	---
TOTAL	1,264	1,088	991	1,064	970	1,064	991	1,011	992	953	996	961
MEAN	40.8	36.3	32.0	34.3	34.6	34.3	33.0	32.6	33.1	30.7	32.1	32.0
MAX	42	40	34	35	36	35	35	37	35	33	34	33
MIN	40	32	31	33	34	33	32	31	32	27	30	30
AC-FT	2,510	2,160	1,970	2,110	1,920	2,110	1,970	2,010	1,970	1,890	1,980	1,910

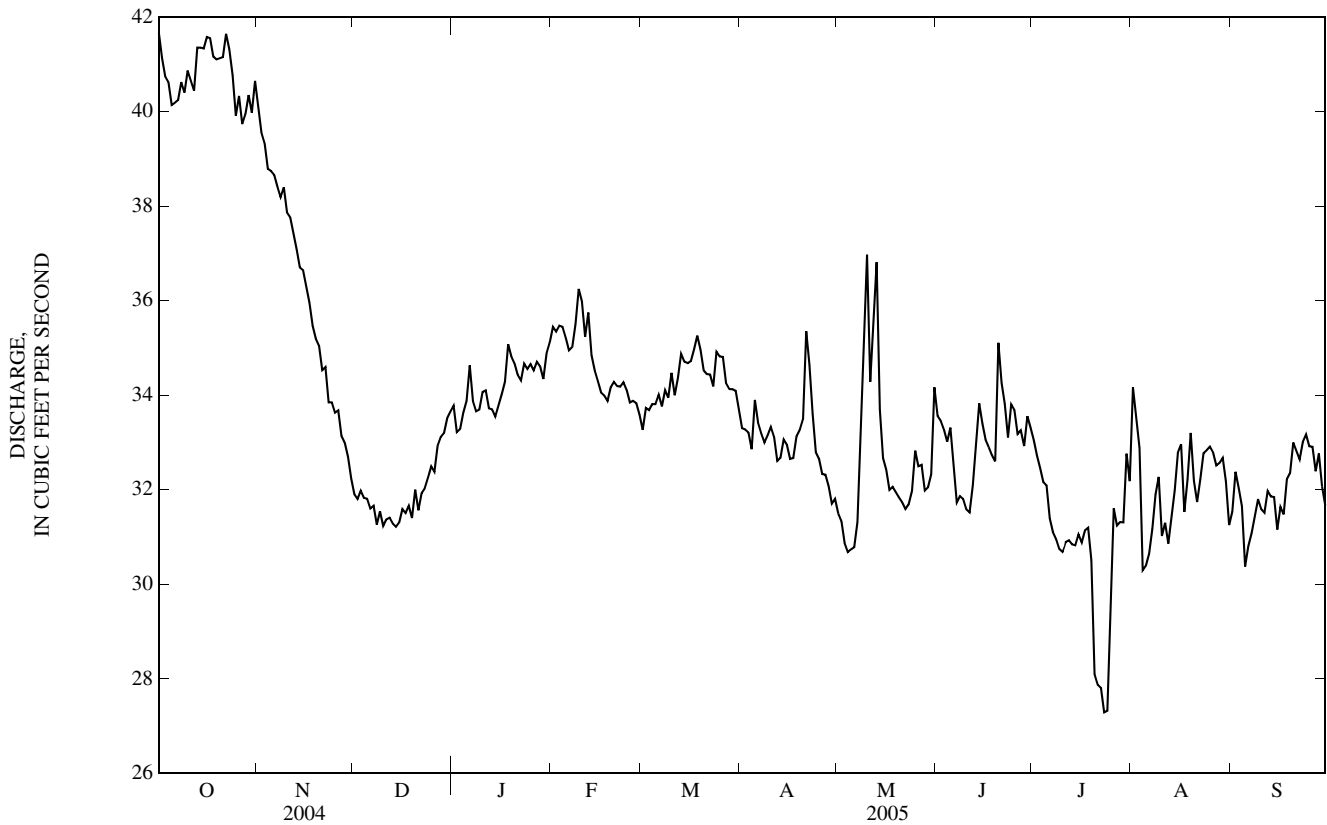
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2005, BY WATER YEAR (WY)

MEAN	37.8	37.0	35.8	36.1	35.8	37.2	43.5	47.6	39.8	34.5	35.6	37.5
MAX	50.0	46.7	48.3	44.8	41.7	42.7	60.3	118	54.9	43.3	41.8	42.8
(WY)	(1999)	(1999)	(1996)	(1996)	(1996)	(1996)	(1994)	(1995)	(1993)	(1999)	(1999)	(2004)
MIN	31.8	30.7	31.9	31.2	33.0	33.4	32.6	30.2	30.8	30.7	30.3	32.0
(WY)	(2000)	(2000)	(1995)	(1995)	(2000)	(2004)	(2004)	(1992)	(2002)	(2005)	(2003)	(2005)

06430532 CROW CREEK NEAR BEULAH, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1992 - 2005	
ANNUAL TOTAL	12,656	12,345	--	
ANNUAL MEAN	34.6	33.8	38.4	
HIGHEST ANNUAL MEAN	--	--	44.7 1999	
LOWEST ANNUAL MEAN	--	--	33.4 2002	
HIGHEST DAILY MEAN	44 Several days	42 Several days	502	May 9, 1995
LOWEST DAILY MEAN	29 Several days	27 Jul 23,24	21	Jul 1, 1998
ANNUAL SEVEN-DAY MINIMUM	29 May 7	28 Jul 19	22	Jun 28, 1998
MAXIMUM PEAK FLOW	--	43 ^a Oct 1	530	May 9, 1995
MAXIMUM PEAK STAGE	--	5.16 ^b Sep 23	10.17	May 9, 1995
ANNUAL RUNOFF (AC-FT)	25,100	24,490	27,800	
10 PERCENT EXCEEDS	41	39	45	
50 PERCENT EXCEEDS	33	33	36	
90 PERCENT EXCEEDS	31	31	32	

- a Gage height, 4.45 ft.
- b Backwater from aquatic plant growth.
- e Estimated.



06620000 NORTH PLATTE RIVER NEAR NORTHGATE, CO

LOCATION.--Lat 40°56'15", long 106°20'16" (NAD 27), in NE¼ SW¼ SE¼ sec.11, T.11 N., R.80 W., Jackson County, Hydrologic Unit 10180001, on right bank 1,000 ft downstream from bridge on State Highway 125, 0.7 mi upstream from Camp Creek, 4.2 mi northwest of Northgate, and 4.4 mi south of Colorado-Wyoming State line.

DRAINAGE AREA.--1,431 mi².

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.

REVISED RECORDS.--WSP 1310: 1916-21, 1929(M), 1930-32. WSP 1730: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,810.39 ft above NGVD of 1929. See WSP 1730 for history of changes prior to April 8, 1918. April 8, 1918 to August 21, 1961, water-stage recorder at site 0.7 mi downstream from station at datum 3.36 ft lower. August 22, 1961 to September 18, 1984, at site 650 ft upstream from station at same datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversions for irrigation of about 130,000 acres of hay meadows upstream from station. Transbasin diversions upstream from station to Cache la Poudre River basin.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	390	e165	e140	e125	e110	e104	e172	982	1,840	1,460	308	75
2	491	e149	e143	e120	e110	e108	e190	830	2,130	1,200	303	72
3	455	e147	e145	e117	e110	e104	e260	709	2,800	1,110	297	70
4	376	e161	e148	e120	e114	e100	e380	624	3,910	1,160	310	69
5	340	e175	e143	e120	e113	e108	e510	586	4,990	1,020	317	68
6	296	e184	e137	e116	e110	e110	e574	577	4,980	896	281	66
7	277	e189	e135	e113	e110	e117	e698	669	4,040	861	249	65
8	265	e191	e140	e116	e107	e123	e1,070	829	2,850	864	220	65
9	246	e198	e144	e120	e104	e126	e1,280	907	2,200	845	200	66
10	227	e198	e147	e130	e100	e129	1,200	797	2,110	771	203	70
11	210	e200	e153	e130	e99	e130	814	781	2,470	724	229	74
12	191	e201	e158	e126	e102	e140	636	1,030	2,340	676	252	68
13	188	e203	e155	e120	e106	e150	641	1,010	1,990	623	230	55
14	190	e201	e153	e115	e110	e140	768	858	1,630	619	203	56
15	188	e203	e147	e115	e108	e130	943	775	1,290	612	190	57
16	171	196	e140	e120	e100	e134	1,080	726	1,070	599	185	54
17	157	194	e130	e123	e96	e137	1,100	770	1,050	548	185	49
18	154	193	e130	e129	e95	e136	1,150	887	1,110	519	189	44
19	158	182	e133	e133	e100	e141	1,220	873	1,160	522	173	43
20	169	e180	e135	e137	e106	e149	1,190	885	1,320	487	156	42
21	171	e180	e127	e137	e111	e145	1,120	1,050	1,450	442	143	43
22	169	e168	e120	e133	e111	e145	1,010	1,350	1,510	405	137	44
23	167	e161	e117	e128	e106	e153	855	1,720	1,600	382	134	63
24	166	e159	e114	e124	e100	e147	796	1,930	1,770	407	127	68
25	169	e164	e119	e120	e97	e143	935	2,090	1,920	423	122	65
26	175	e167	e123	e118	e95	e140	977	2,150	1,930	489	120	64
27	173	e164	e129	e120	e95	e149	839	2,010	1,860	495	116	64
28	162	e156	e133	e125	e100	e172	900	1,630	1,740	476	107	73
29	162	e149	e130	e123	---	e191	1,120	1,370	1,570	412	101	89
30	168	e144	e130	e115	---	e186	1,130	1,510	1,620	353	93	86
31	180	---	e130	e114	---	e181	---	1,820	---	322	81	---
TOTAL	7,001	5,322	4,228	3,802	2,925	4,268	25,558	34,735	64,250	20,722	5,961	1,887
MEAN	226	177	136	123	104	138	852	1,120	2,142	668	192	62.9
MAX	491	203	158	137	114	191	1,280	2,150	4,990	1,460	317	89
MIN	154	144	114	113	95	100	172	577	1,050	322	81	42
AC-FT	13,890	10,560	8,390	7,540	5,800	8,470	50,690	68,900	127,400	41,100	11,820	3,740

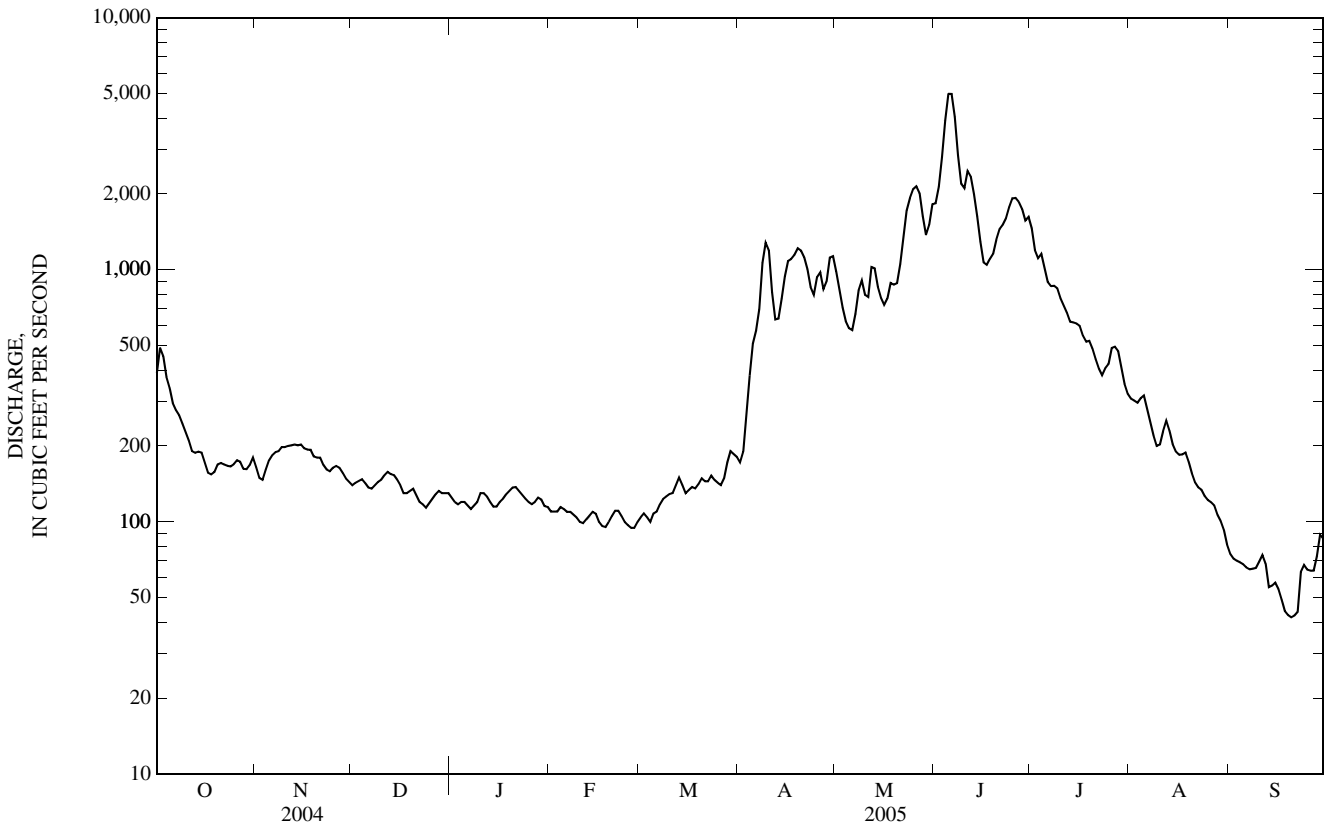
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 2005, BY WATER YEAR (WY)

MEAN	159	151	104	84.0	89.1	176	738	1,111	1,456	625	258	146
MAX	538	366	215	177	199	722	2,444	3,649	3,296	2,367	763	712
(WY)	(1962)	(1962)	(1998)	(1984)	(1986)	(1986)	(1962)	(1984)	(1983)	(1957)	(1983)	(1997)
MIN	31.7	54.2	33.9	27.5	35.7	47.8	131	96.1	89.4	26.7	33.3	23.8
(WY)	(1935)	(1935)	(1977)	(1977)	(1933)	(1964)	(1981)	(2002)	(1934)	(1934)	(2002)	(1934)

06620000 NORTH PLATTE RIVER NEAR NORTHGATE, CO—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1904 - 2005	
ANNUAL TOTAL	82,597		180,659		--	
ANNUAL MEAN	226		495		426	
HIGHEST ANNUAL MEAN	--		--		878	
LOWEST ANNUAL MEAN	--		--		91.5	
HIGHEST DAILY MEAN	1,150	Jun 22	4,990	Jun 5	6,450	Jun 10, 1923
LOWEST DAILY MEAN	65	Aug 17	42	Sep 20	15	Sep 6,7, 2002
ANNUAL SEVEN-DAY MINIMUM	72	Aug 12	46	Sep 16	16	Sep 2, 2002
MAXIMUM PEAK FLOW	--		5,200 ^a	Jun 5	6,720 ^b	Jun 11, 1923
MAXIMUM PEAK STAGE	--		7.24 ^c	Apr 8	9.65 ^d	Apr 25, 1980
ANNUAL RUNOFF (AC-FT)	163,800		358,300		308,700	
10 PERCENT EXCEEDS	455		1,300		1,190	
50 PERCENT EXCEEDS	166		169		160	
90 PERCENT EXCEEDS	84		97		68	

- a Gage height, 7.07 ft.
- b Gage height, 6.34 ft, site and datum then in use.
- c Backwater from ice.
- d Backwater from ice, site and datum then in use.
- e Estimated.



06622700 NORTH BRUSH CREEK NEAR SARATOGA, WY

LOCATION.--Lat 41°22'13", long 106°31'12" (NAD 27), in NW¼ SW¼ NE¼ sec.8, T.16 N., R.81 W., Carbon County, Hydrologic Unit 10180002, Medicine Bow National Forest, on right bank 0.2 mi upstream from bridge on logging road, 0.5 mi downstream from Lincoln Creek, 1.6 mi upstream from South Brush Creek, and 16 mi southeast of Saratoga.

DRAINAGE AREA.--37.4 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 8,020 ft above NGVD of 1929, from topographic map. Prior to June 17, 1971, at site 0.02 mi downstream from station at different datum. June 17, 1971 to August 2, 1984, at site 0.2 mi downstream from station at different datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. No diversion upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	17	e11	9.7	9.8	9.9	e8.9	32	302	112	15	7.1
2	33	e15	e10	9.7	10	9.9	e9.1	31	257	105	16	6.9
3	26	e15	e11	9.6	9.7	e9.6	11	31	208	103	18	6.8
4	22	e16	e11	9.6	9.9	e9.6	13	33	232	91	15	7.0
5	19	e17	e12	9.4	10	e9.7	13	37	285	74	14	6.9
6	18	e19	e12	9.3	10	e9.8	e13	51	283	68	11	6.8
7	16	e22	e12	9.2	10	10	e14	59	291	63	11	6.8
8	15	e19	e12	9.5	10	9.6	16	58	260	59	11	6.8
9	14	15	e12	9.4	9.5	9.1	16	66	243	54	11	7.1
10	14	14	e12	9.6	9.4	9.0	14	76	212	50	12	9.2
11	13	14	e12	9.7	9.4	e10	14	89	177	45	14	8.3
12	12	14	13	e10	9.6	e11	e14	79	200	39	11	7.3
13	14	e13	11	e9.8	9.4	9.8	17	74	173	35	11	7.4
14	14	e12	11	e9.7	9.3	e9.6	20	74	165	31	12	7.5
15	15	e13	11	e9.6	9.3	e9.2	24	82	202	28	9.8	7.5
16	15	e14	10	e9.6	e9.4	e9.3	28	117	241	25	9.5	7.4
17	15	12	9.9	e9.6	e9.2	9.2	34	155	284	23	11	7.3
18	14	e12	10	e9.7	e9.3	9.0	38	139	335	21	10	7.1
19	14	e12	9.9	e9.7	e9.6	9.0	39	203	337	19	9.5	6.9
20	16	15	10	10	e9.7	9.1	42	349	313	18	9.1	6.9
21	18	18	9.7	9.9	9.7	e11	37	512	301	16	8.7	12
22	16	e17	9.4	9.9	9.3	e11	33	589	308	15	9.3	22
23	15	e16	9.3	10	9.3	9.6	34	599	308	17	10	10
24	16	e17	9.2	10	9.8	9.3	39	566	268	27	8.6	8.9
25	16	15	9.3	11	9.9	9.1	40	544	214	29	8.4	8.4
26	16	14	9.3	11	10	9.0	37	428	196	29	8.9	8.0
27	16	e15	9.3	11	10	e9.2	35	364	170	19	7.9	8.1
28	17	15	9.4	10	10	9.4	36	348	148	15	7.5	10
29	17	e13	9.5	9.8	---	9.3	35	335	175	14	7.3	8.8
30	16	e12	9.7	9.9	---	9.0	32	585	125	13	7.1	8.3
31	16	---	9.5	9.7	---	e9.1	---	467	---	13	6.9	---
TOTAL	551	452	326.4	304.6	270.5	296.4	756.0	7,172	7,213	1,270	331.5	249.5
MEAN	17.8	15.1	10.5	9.83	9.66	9.56	25.2	231	240	41.0	10.7	8.32
MAX	53	22	13	11	10	11	42	599	337	112	18	22
MIN	12	12	9.2	9.2	9.2	9.0	8.9	31	125	13	6.9	6.8
AC-FT	1,090	897	647	604	537	588	1,500	14,230	14,310	2,520	658	495

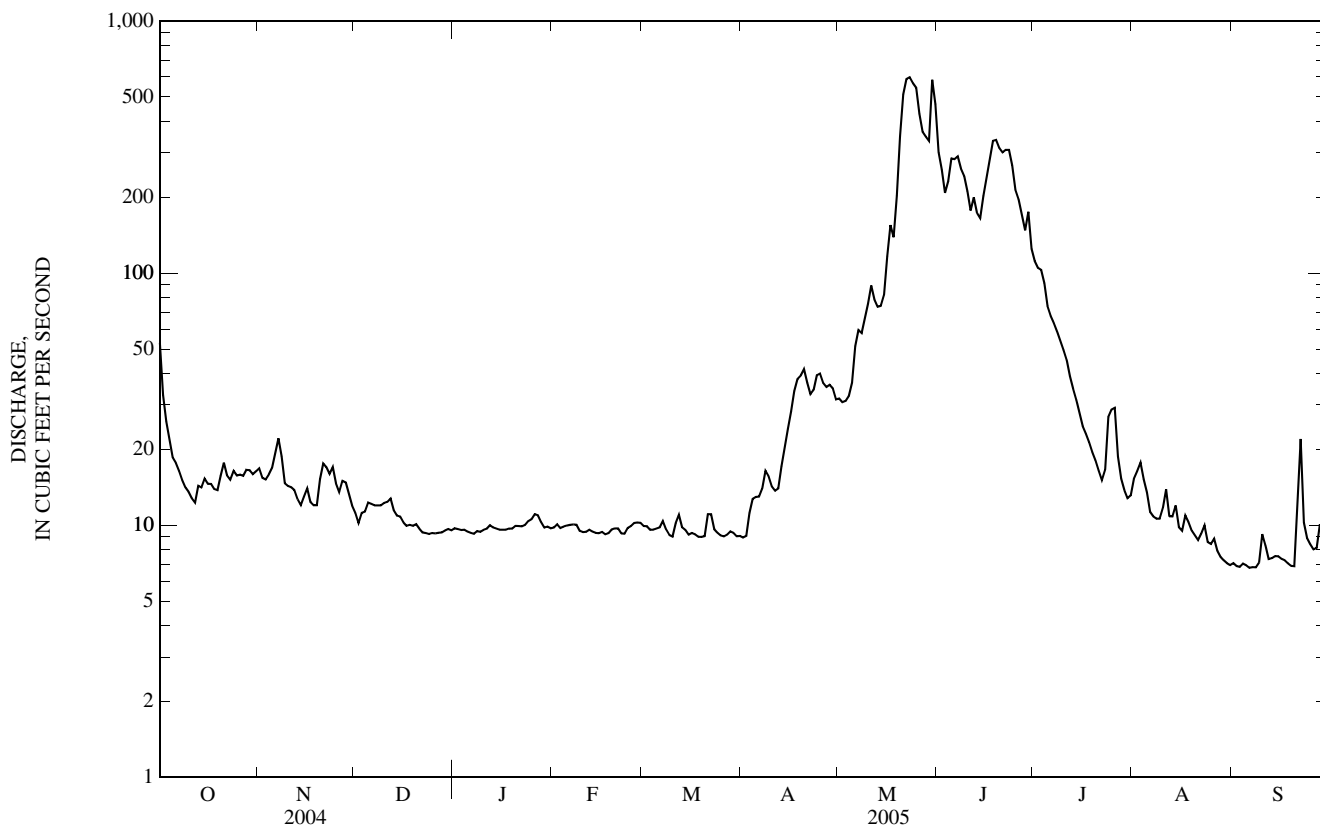
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2005, BY WATER YEAR (WY)

MEAN	13.7	11.4	9.97	9.24	9.17	10.4	23.6	168	250	53.5	13.3	12.3
MAX	38.7	21.3	15.1	14.0	12.7	20.1	73.4	272	534	224	29.5	27.2
(WY)	(1966)	(1962)	(1984)	(1999)	(1999)	(1966)	(1962)	(2000)	(1983)	(1983)	(1983)	(1965)
MIN	7.68	7.59	6.67	6.15	6.55	6.80	12.3	53.5	52.0	6.17	5.10	6.12
(WY)	(2004)	(2003)	(1991)	(1970)	(1970)	(1970)	(1993)	(1995)	(2002)	(2002)	(2002)	(2002)

06622700 NORTH BRUSH CREEK NEAR SARATOGA, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1961 - 2005	
ANNUAL TOTAL	10,144.3		19,192.9		--	
ANNUAL MEAN	27.7		52.6		48.7	
HIGHEST ANNUAL MEAN	--		--		82.0 1983	
LOWEST ANNUAL MEAN	--		--		17.8 2002	
HIGHEST DAILY MEAN	187	May 8	599	May 23	982	May 31, 2003
LOWEST DAILY MEAN	6.7	Aug 16	6.8	Sep 3, 6-8	3.7	Aug 18, 2002
ANNUAL SEVEN-DAY MINIMUM	6.9	Aug 11	6.9	Sep 2	4.0	Aug 14, 2002
MAXIMUM PEAK FLOW	--		916	May 30	1,380 ^a	May 31, 2003
MAXIMUM PEAK STAGE	--		4.46	May 30	5.75 ^b	Jun 7, 1964
ANNUAL RUNOFF (AC-FT)	20,120		38,070		35,310	
10 PERCENT EXCEEDS	77		185		150	
50 PERCENT EXCEEDS	14		12		12	
90 PERCENT EXCEEDS	8.8		9.0		8.0	

a Gage height, 4.96 ft.
 b Site and datum then in use.
 e Estimated.



PLATTE RIVER BASIN

06622900 SOUTH BRUSH CREEK NEAR SARATOGA, WY

LOCATION.--Lat 41°20'38", long 106°31'33" (NAD 27), in NE¼ NW¼ sec.20, T.16 N., R.81 W., Carbon County, Hydrologic Unit 10180002, Medicine Bow National Forest, on left bank 300 ft upstream from culvert on State Highway 130, 1.6 mi upstream from North Brush Creek, and 17 mi southeast of Saratoga.

DRAINAGE AREA.--22.8 mi².

PERIOD OF RECORD.--May 1960 to September 1974, May 1976 to September 1977, May 1979 to current year (no winter records since 1972). All values of discharge greater than 200 ft³/s April, 1973 through September, 2002, are unreliable and should not be used.

GAGE.--Water-stage recorder. Elevation of gage is 8,100 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair. Transbasin diversion 0.3 mi upstream from station for irrigation in North Brush Creek basin.

COOPERATION.--Station operated and record provided by the Wyoming State Engineer's Office; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	18	266	63	10	5.2
2	---	---	---	---	---	---	---	18	236	54	10	5.2
3	---	---	---	---	---	---	---	18	194	49	10	5.1
4	---	---	---	---	---	---	---	21	209	41	10	5.2
5	---	---	---	---	---	---	---	26	216	26	9.8	5.2
6	---	---	---	---	---	---	---	37	168	21	8.9	5.0
7	---	---	---	---	---	---	---	42	145	16	8.6	4.9
8	---	---	---	---	---	---	---	36	137	12	8.7	4.9
9	---	---	---	---	---	---	---	50	120	9.4	8.7	4.9
10	---	---	---	---	---	---	---	46	95	7.9	9.7	6.1
11	---	---	---	---	---	---	---	40	70	23	11	5.6
12	---	---	---	---	---	---	---	33	78	40	9.0	5.1
13	---	---	---	---	---	---	---	26	56	40	8.3	4.9
14	---	---	---	---	---	---	---	27	73	37	8.5	4.9
15	---	---	---	---	---	---	13	35	124	34	7.8	4.9
16	---	---	---	---	---	---	15	54	154	31	7.3	4.9
17	---	---	---	---	---	---	20	70	224	28	8.9	4.8
18	---	---	---	---	---	---	26	56	358	26	8.5	4.8
19	---	---	---	---	---	---	28	93	401	24	7.9	4.7
20	---	---	---	---	---	---	32	167	367	23	7.0	4.7
21	---	---	---	---	---	---	25	284	346	21	6.6	6.9
22	---	---	---	---	---	---	20	387	358	19	6.8	12
23	---	---	---	---	---	---	23	522	315	18	7.6	6.8
24	---	---	---	---	---	---	31	454	244	20	6.8	6.1
25	---	---	---	---	---	---	29	379	190	22	6.3	5.8
26	---	---	---	---	---	---	25	303	173	20	6.3	5.7
27	---	---	---	---	---	---	24	227	145	13	5.8	5.4
28	---	---	---	---	---	---	22	217	110	12	5.6	7.3
29	---	---	---	---	---	---	23	204	123	11	5.4	5.9
30	---	---	---	---	---	---	22	349	78	10	5.3	5.6
31	---	---	---	---	---	---	---	399	---	10	5.1	---
TOTAL	---	---	---	---	---	---	---	4,638	5,773	781.3	246.2	168.5
MEAN	---	---	---	---	---	---	---	150	192	25.2	7.94	5.62
MAX	---	---	---	---	---	---	---	522	401	63	11	12
MIN	---	---	---	---	---	---	---	18	56	7.9	5.1	4.7
AC-FT	---	---	---	---	---	---	---	9,200	11,450	1,550	488	334

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2005, BY WATER YEAR (WY)*

MEAN	11.7	9.02	7.14	5.83	6.01	6.63	15.1	91.1	145	39.2	9.66	7.88
MAX	33.8	25.9	17.2	9.61	9.46	11.3	54.2	181	295	139	29.4	24.8
(WY)	(1962)	(1962)	(1962)	(1962)	(1962)	(1966)	(1962)	(2003)	(1968)	(1983)	(1983)	(1961)
MIN	3.59	5.41	4.04	2.40	3.71	4.61	7.53	34.9	20.9	1.26	1.10	1.27
(WY)	(1965)	(1964)	(1965)	(1965)	(1965)	(1963)	(1968)	(1982)	(1987)	(2001)	(2001)	(1998)

06622900 SOUTH BRUSH CREEK NEAR SARATOGA, WY—Continued

SUMMARY STATISTICS

FOR 2005 WATER YEAR*

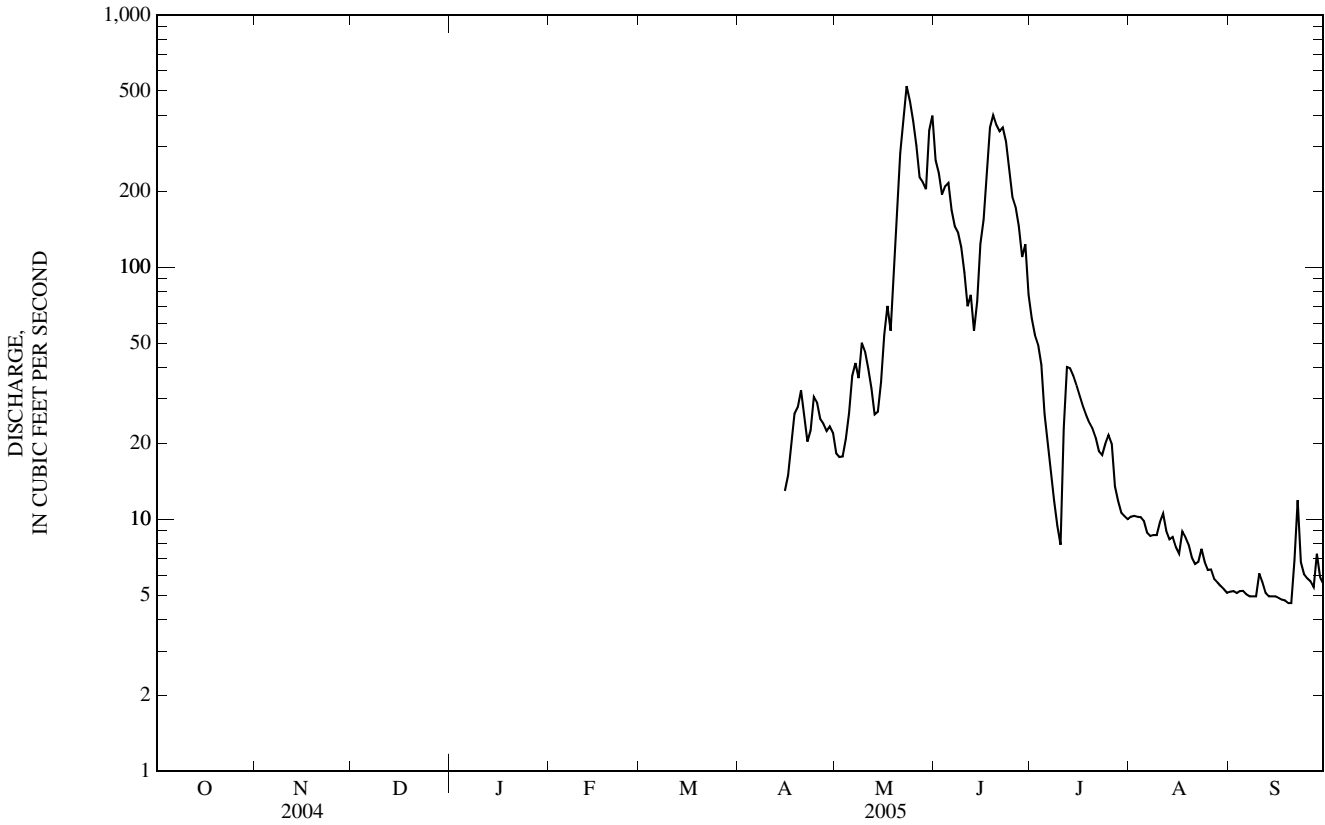
WATER YEARS 1961 - 2005**

HIGHEST DAILY MEAN	522	May 23	725 ^a	May 31, 2003
LOWEST DAILY MEAN	4.7	Sep 19,20	0.43	Aug 5, 2001
MAXIMUM PEAK FLOW	639	May 30	1,230 ^a	May 31, 2003
MAXIMUM PEAK STAGE	3.31	May 30	4.09	Jun 10, 1965

* For period of operation.

** All values of discharge greater than 200 ft³/s April 1973 to September 2002 are unreliable and should not be used.

a May have been higher 1973-2002.



PLATTE RIVER BASIN

06623800 ENCAMPMENT RIVER ABOVE HOG PARK CREEK, NEAR ENCAMPMENT, WY
(Hydrologic Benchmark Station)

LOCATION.--Lat 41°01'25", long 106°49'27" (NAD 27), in NE¹/₄ SW¹/₄ sec.10, T.12 N., R.84 W., Carbon County, Hydrologic Unit 10180002, Medicine Bow National Forest, on left bank 0.6 mi upstream from Hog Park Creek and 13 mi south of Encampment.

DRAINAGE AREA.--72.7 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,270 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. No diversion upstream from gage.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	37	e17	26	23	22	e20	60	634	361	67	27
2	68	e39	e19	27	24	22	e20	58	663	340	59	26
3	62	e49	e21	27	23	21	e21	59	555	323	62	26
4	55	e48	e23	28	24	22	23	63	597	291	56	26
5	50	e46	e25	28	24	22	23	79	634	263	53	26
6	50	e43	e26	27	24	22	e25	108	604	247	50	25
7	45	e44	e25	26	24	22	e25	121	607	230	49	25
8	42	e45	e26	26	24	22	e28	108	555	212	48	25
9	40	46	e28	25	24	22	e30	118	544	198	49	28
10	38	42	e30	25	23	22	33	148	481	183	53	35
11	37	e36	e31	24	24	21	31	153	434	170	54	29
12	35	35	e32	23	24	23	e28	129	514	164	46	25
13	39	e31	e31	23	24	22	e29	123	426	149	42	24
14	39	e24	e29	24	24	e20	40	134	434	135	41	24
15	40	e25	e27	25	22	e23	e48	168	507	124	39	24
16	37	e27	e26	25	24	24	e58	232	600	114	38	23
17	34	e25	e26	26	25	22	e74	271	663	107	48	22
18	35	e20	e28	27	25	22	e90	270	746	100	44	22
19	38	e20	29	26	25	22	e97	356	791	94	40	21
20	43	e22	28	26	25	22	97	539	776	89	37	21
21	45	e22	26	26	24	22	78	795	759	84	37	24
22	43	e22	25	26	23	22	69	889	759	80	39	37
23	39	e20	25	25	22	20	84	928	790	79	41	27
24	43	e20	24	25	21	19	101	982	755	110	39	26
25	41	e22	24	25	23	e17	91	916	632	112	35	23
26	41	e21	24	25	22	e17	81	796	639	91	33	22
27	41	e20	24	25	22	e18	79	734	532	76	31	24
28	48	e21	24	24	22	18	79	698	474	70	30	32
29	39	e16	24	23	---	18	69	690	501	65	29	25
30	43	e15	24	23	---	18	61	871	395	61	28	23
31	44	---	25	24	---	16	---	756	---	64	27	---
TOTAL	1,381	903	796	785	658	645	1,632	12,352	18,001	4,786	1,344	767
MEAN	44.5	30.1	25.7	25.3	23.5	20.8	54.4	398	600	154	43.4	25.6
MAX	87	49	32	28	25	24	101	982	791	361	67	37
MIN	34	15	17	23	21	16	20	58	395	61	27	21
AC-FT	2,740	1,790	1,580	1,560	1,310	1,280	3,240	24,500	35,700	9,490	2,670	1,520

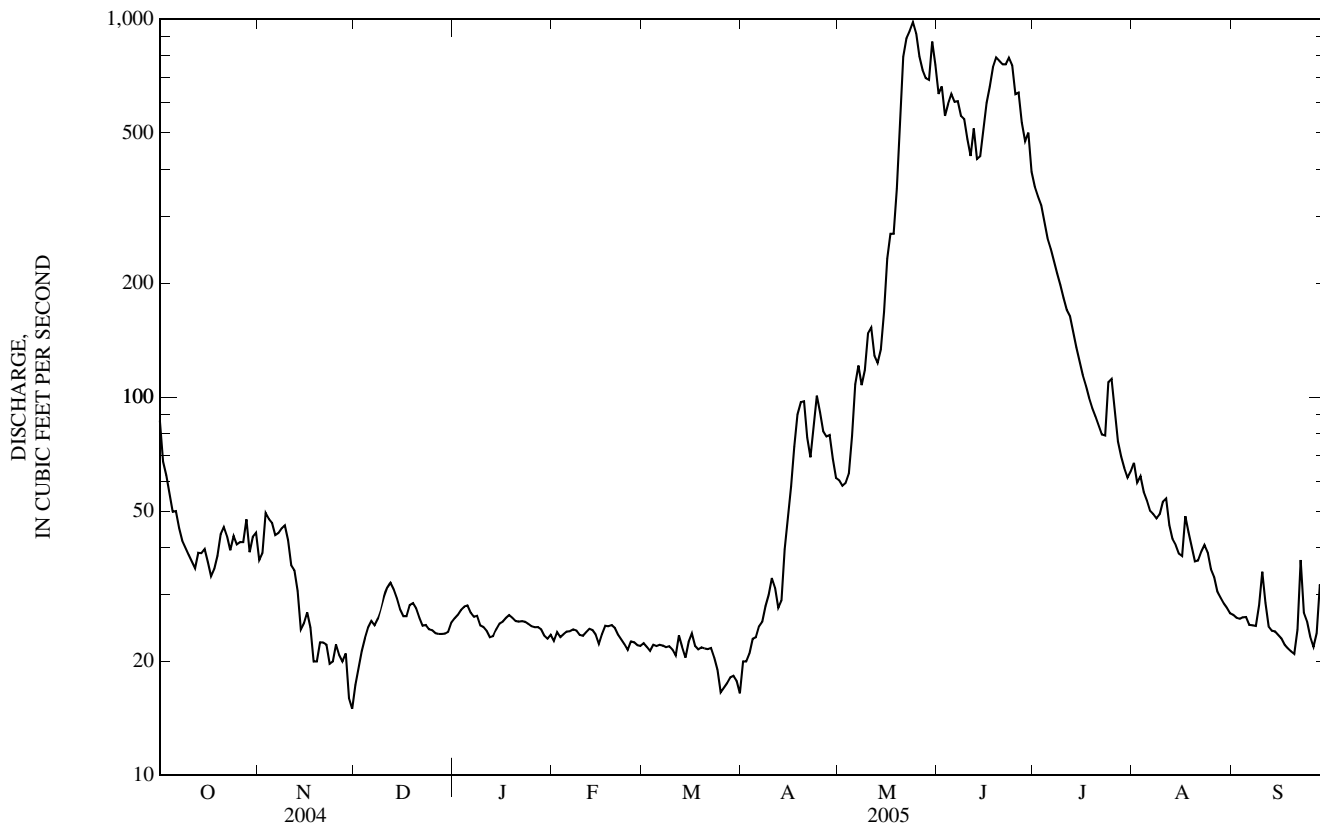
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2005, BY WATER YEAR (WY)

MEAN	30.7	24.7	22.1	19.7	18.7	19.9	42.1	287	584	194	45.7	32.3
MAX	71.5	45.2	33.9	28.9	28.1	31.4	76.5	471	919	581	83.3	82.2
(WY)	(1998)	(1998)	(1998)	(1971)	(1971)	(1997)	(1989)	(2000)	(1997)	(1995)	(1995)	(1997)
MIN	17.5	15.6	11.7	10.9	10.8	10.9	19.3	120	162	29.5	15.6	17.8
(WY)	(1992)	(1978)	(1969)	(1969)	(1969)	(1969)	(1975)	(1995)	(2002)	(2002)	(2002)	(2002)

06623800 ENCAMPMENT RIVER ABOVE HOG PARK CREEK, NEAR ENCAMPMENT, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1965 - 2005	
ANNUAL TOTAL	31,770		44,050		--	
ANNUAL MEAN	86.8		121		110	
HIGHEST ANNUAL MEAN	--		--		159 1982	
LOWEST ANNUAL MEAN	--		--		45.5 2002	
HIGHEST DAILY MEAN	534	Jun 7	982	May 24	1,360	Jun 25, 1983
LOWEST DAILY MEAN	11 ^e	Feb 13	15 ^e	Nov 30	9.5	Dec 31, 1968
ANNUAL SEVEN-DAY MINIMUM	13	Jan 15	17	Mar 25	10	Mar 8, 1969
MAXIMUM PEAK FLOW	--		1,240	May 30	1,680 ^a	Jun 13, 1965
MAXIMUM PEAK STAGE	--		4.68	May 30	5.04 ^b	Jun 1, 2003
ANNUAL RUNOFF (AC-FT)	63,020		87,370		79,790	
10 PERCENT EXCEEDS	302		489		365	
50 PERCENT EXCEEDS	38		32		28	
90 PERCENT EXCEEDS	16		22		16	

a About June 13, 1965; from slope-area measurement; gage height not determined.
 b Highest recorded.
 e Estimated.



06625000 ENCAMPMENT RIVER AT MOUTH, NEAR ENCAMPMENT, WY

LOCATION.--Lat 41°18'12", long 106°42'53" (NAD 27), in NE¼ NW¼ sec.3, T.15 N., R.83 W., Carbon County, Hydrologic Unit 10180002, on left bank 0.5 mi upstream from mouth and 8.0 mi northeast of Encampment.

DRAINAGE AREA.--265 mi².

PERIOD OF RECORD.--April 1940 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1710: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,970 ft above NGVD of 1929, from topographic map. Prior to June 28, 1961, water-stage recorder at site 660 ft upstream from station at datum 2.00 ft higher. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Five small reservoirs upstream from 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 upstream from station. Transbasin diversion upstream from station into Hog Park Creek (tributary to Encampment River) from North Fork Little Snake River for municipal, industrial, and irrigation uses began September 1964.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	213	128	e84	e110	e85	e96	121	315	1,450	554	70	52
2	169	e108	e92	e107	e83	e96	149	308	1,430	526	80	40
3	146	e112	e104	e102	e82	e98	156	295	1,210	504	75	27
4	135	127	e105	e101	e80	e100	168	287	1,210	465	71	29
5	126	124	e116	e98	e88	e101	173	299	1,190	410	60	28
6	133	122	e119	e94	e90	e102	175	331	1,100	364	52	26
7	129	118	e116	e89	e84	e107	187	393	1,100	346	48	27
8	122	121	e113	e94	e82	110	209	393	1,030	334	46	27
9	116	125	e119	e102	e79	117	212	402	995	304	35	29
10	115	126	e126	e105	e78	119	210	445	928	271	51	35
11	113	120	e134	e105	e78	119	200	536	803	258	61	36
12	112	124	e139	e103	84	126	193	476	877	236	51	28
13	134	117	e138	e97	83	126	199	447	834	213	47	28
14	123	115	e131	e94	81	110	219	424	736	179	43	29
15	119	110	e114	e94	e78	114	238	465	790	145	35	29
16	118	113	e104	e96	e74	114	260	575	927	139	32	40
17	112	118	e96	e98	e68	104	295	800	1,030	127	39	34
18	110	107	e94	e103	e71	121	353	774	1,180	112	42	25
19	117	108	e102	e109	e73	114	397	905	1,310	115	38	24
20	131	114	e107	e109	86	117	437	1,230	1,310	108	37	23
21	131	107	e104	e110	86	116	403	1,680	1,310	107	32	28
22	133	114	e97	e104	86	115	363	2,010	1,320	100	31	58
23	123	107	e91	e99	86	132	362	2,140	1,450	95	30	48
24	132	105	e86	e89	e86	132	427	2,310	1,390	106	31	39
25	129	107	e88	e95	e83	126	424	2,290	1,160	134	33	35
26	127	110	e89	e87	e87	128	394	1,960	1,090	136	32	32
27	128	105	e93	e86	e91	126	375	1,710	968	99	30	31
28	133	e105	e98	88	e101	131	406	1,510	767	87	29	38
29	141	e99	e105	e85	---	131	371	1,390	813	71	32	56
30	124	e89	e111	e82	---	128	326	1,520	653	38	54	63
31	136	---	e110	86	---	125	---	1,750	---	55	57	---
TOTAL	4,030	3,405	3,325	3,021	2,313	3,601	8,402	30,370	32,361	6,738	1,404	1,044
MEAN	130	114	107	97.5	82.6	116	280	980	1,079	217	45.3	34.8
MAX	213	128	139	110	101	132	437	2,310	1,450	554	80	63
MIN	110	89	84	82	68	96	121	287	653	38	29	23
AC-FT	7,990	6,750	6,600	5,990	4,590	7,140	16,670	60,240	64,190	13,360	2,780	2,070

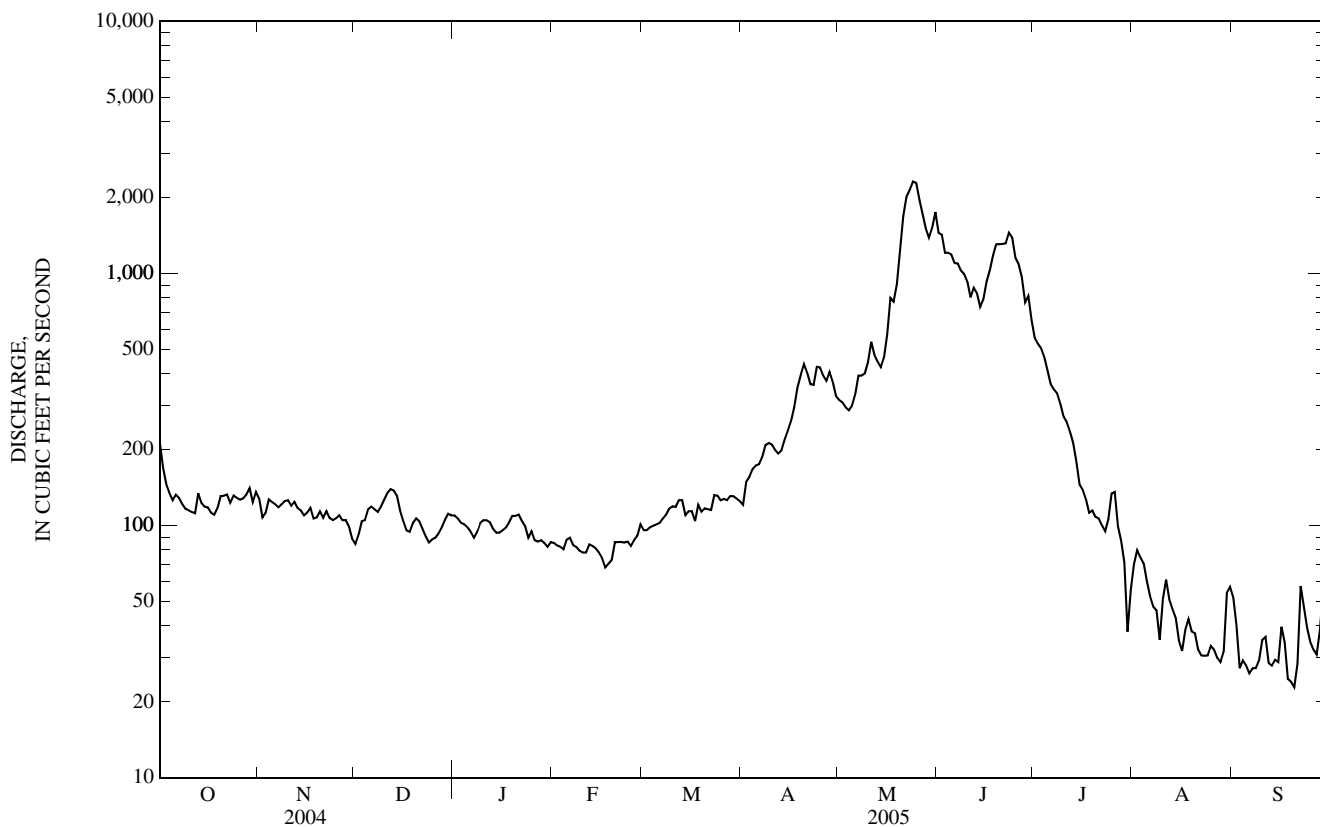
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2005, BY WATER YEAR (WY)

MEAN	79.4	79.5	70.3	62.6	63.2	72.4	154	763	1,152	273	65.6	55.1
MAX	167	156	131	122	115	117	352	1,258	2,029	942	178	174
(WY)	(1998)	(1998)	(1998)	(1998)	(1962)	(1989)	(1962)	(1952)	(1971)	(1995)	(1982)	(1997)
MIN	29.4	42.6	49.2	34.2	35.8	44.5	71.3	209	162	23.1	19.7	14.2
(WY)	(1980)	(1977)	(1964)	(1963)	(1955)	(1964)	(1944)	(2002)	(2002)	(2002)	(2002)	(1954)

06625000 ENCAMPMENT RIVER AT MOUTH, NEAR ENCAMPMENT, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1941 - 2005	
ANNUAL TOTAL	66,791		100,014		--	
ANNUAL MEAN	182		274		241	
HIGHEST ANNUAL MEAN	--		--		375 1997	
LOWEST ANNUAL MEAN	--		--		83.4 2002	
HIGHEST DAILY MEAN	970	May 11	2,310	May 24	3,640	Jun 4, 1952
LOWEST DAILY MEAN	18	Aug 15	23	Sep 20	8.0 ^a	Sep 1, 1954
ANNUAL SEVEN-DAY MINIMUM	20	Aug 11	28	Sep 3	8.9	Aug 28, 1954
MAXIMUM PEAK FLOW	--		2,540	May 25	4,510 ^b	Jun 1, 1943
MAXIMUM PEAK STAGE	--		5.90	May 25	10.33 ^c	Jun 4, 1952
ANNUAL RUNOFF (AC-FT)	132,500		198,400		174,500	
10 PERCENT EXCEEDS	486		851		766	
50 PERCENT EXCEEDS	106		114		75	
90 PERCENT EXCEEDS	36		38		41	

- a Minimum daily discharge for period of record, 5.2 ft³/s, August 15, 16, 1940.
- b Gage height, 10.25 ft, present datum.
- c Present datum.
- e Estimated.



PLATTE RIVER BASIN

06627800 JACK CREEK ABOVE COYOTE DRAW, NEAR SARATOGA, WY

LOCATION.--Lat 41°26'21", long 106°58'16" (NAD 27), in NW¼ NE¼ NW¼ sec.21, T.17 N., R.85 W., Carbon County, Hydrologic Unit 10180002, on left bank 1.2 mi upstream from Coyote Draw and Blydenburg and Morgan Ditches, 2.0 mi downstream from Gartman Creek, and 8.2 mi west of Saratoga.

DRAINAGE AREA.-- 109 mi².

PERIOD OF RECORD.--April 1990 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 7,050 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except those for discharges greater than 300 ft³/s, which are poor. Diversions for irrigation of about 2,000 acres upstream from station.

COOPERATION.--Station operated and record provided by Office of the Wyoming State Engineer; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	13	52	212	64	7.9	2.7
2	---	---	---	---	---	---	15	53	172	60	8.2	2.6
3	---	---	---	---	---	---	19	60	152	57	8.3	2.6
4	---	---	---	---	---	---	27	62	168	54	7.9	2.5
5	---	---	---	---	---	---	30	60	165	47	7.0	2.5
6	---	---	---	---	---	---	26	73	117	44	6.2	2.4
7	---	---	---	---	---	---	25	93	101	41	5.8	2.6
8	---	---	---	---	---	---	33	144	88	39	5.6	2.6
9	---	---	---	---	---	---	36	143	86	35	5.1	2.7
10	---	---	---	---	---	---	34	154	85	33	5.7	3.8
11	---	---	---	---	---	---	28	194	78	31	6.4	4.6
12	---	---	---	---	---	---	27	152	80	28	5.5	3.9
13	---	---	---	---	---	---	28	121	98	25	4.8	3.7
14	---	---	---	---	---	---	31	114	76	23	5.1	3.7
15	---	---	---	---	---	---	28	126	71	21	4.9	3.7
16	---	---	---	---	---	---	30	172	75	19	4.5	3.7
17	---	---	---	---	---	---	35	280	80	17	4.7	3.7
18	---	---	---	---	---	---	46	213	89	16	4.8	3.6
19	---	---	---	---	---	---	52	237	103	15	4.4	3.4
20	---	---	---	---	---	---	53	299	110	14	4.2	3.2
21	---	---	---	---	---	---	46	370	112	14	3.9	3.3
22	---	---	---	---	---	---	39	410	110	13	3.7	4.6
23	---	---	---	---	---	---	39	374	133	11	3.7	5.4
24	---	---	---	---	---	---	52	351	134	11	3.6	4.7
25	---	---	---	---	---	---	58	303	115	12	3.2	4.2
26	---	---	---	---	---	---	53	243	99	15	3.1	3.9
27	---	---	---	---	---	---	52	195	88	13	2.7	3.7
28	---	---	---	---	---	---	62	163	78	10	2.7	3.9
29	---	---	---	---	---	---	63	144	89	8.7	2.8	4.5
30	---	---	---	---	---	---	57	208	74	7.7	2.6	4.7
31	---	---	---	---	---	---	---	310	---	7.4	2.4	---
TOTAL	---	---	---	---	---	---	1,137	5,873	3,238	805.8	151.4	107.1
MEAN	---	---	---	---	---	---	37.9	189	108	26.0	4.88	3.57
MAX	---	---	---	---	---	---	63	410	212	64	8.3	5.4
MIN	---	---	---	---	---	---	13	52	71	7.4	2.4	2.4
AC-FT	---	---	---	---	---	---	2,260	11,650	6,420	1,600	300	212

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2005, BY WATER YEAR (WY)*

MEAN	---	---	---	---	---	---	30.6	102	87.7	22.1	6.00	5.10
MAX	---	---	---	---	---	---	44.0	189	230	84.0	14.0	10.9
(WY)	---	---	---	---	---	---	(1997)	(2005)	(1995)	(1995)	(1995)	(1997)
MIN	---	---	---	---	---	---	15.6	33.5	24.9	2.94	0.40	1.90
(WY)	---	---	---	---	---	---	(1991)	(2002)	(2002)	(2002)	(2002)	(2002)

06627800 JACK CREEK ABOVE COYOTE DRAW, NEAR SARATOGA, WY—Continued

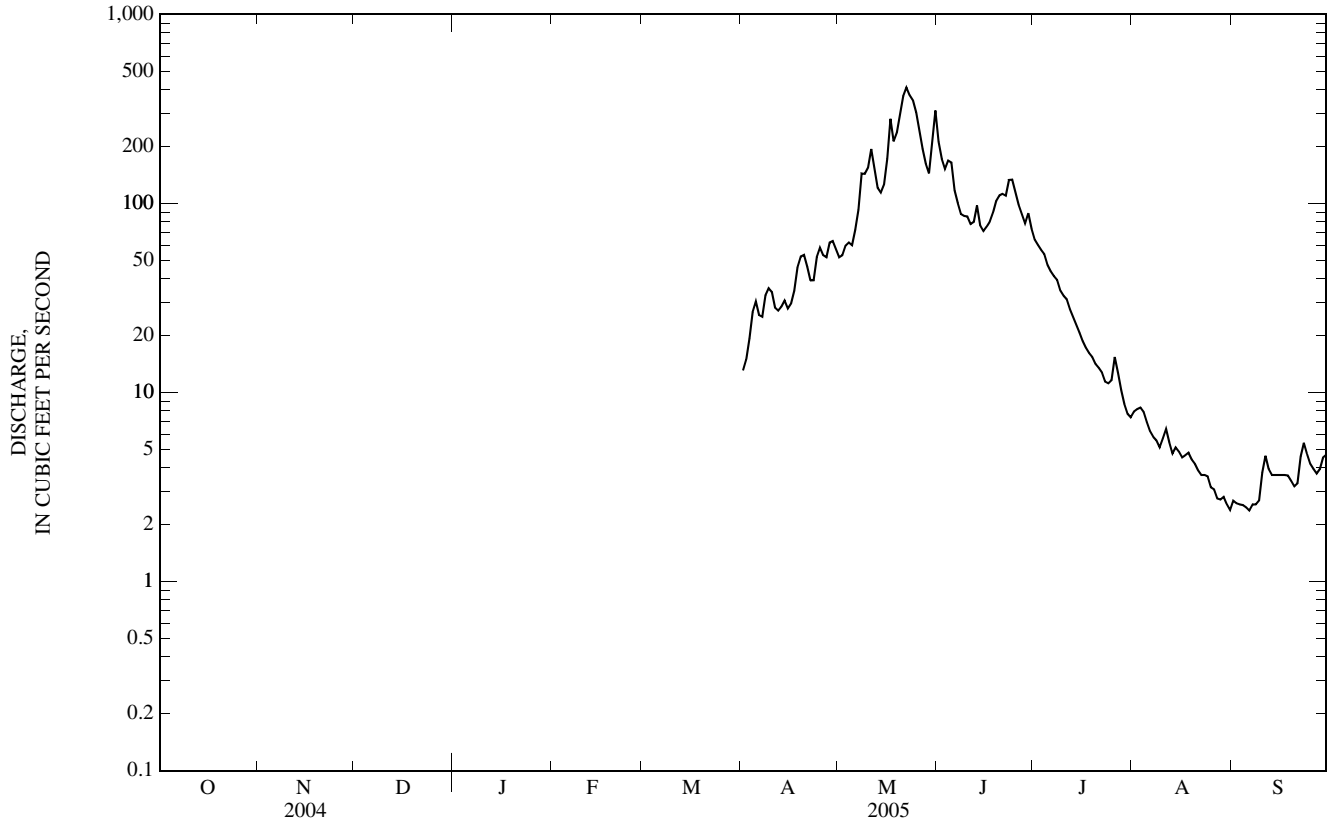
SUMMARY STATISTICS

FOR 2005 WATER YEAR*

WATER YEARS 1990 - 2005*

HIGHEST DAILY MEAN	410	May 22	410	May 22, 2005
LOWEST DAILY MEAN	2.4	Aug 31, Sep 6	0.00	Aug 17-29, 2002
MAXIMUM PEAK FLOW	479	May 22	479	May 22, 2005
MAXIMUM PEAK STAGE	6.65	May 22	7.22	Jun 9, 1995

* For period of operation.



06628900 PASS CREEK NEAR ELK MOUNTAIN, WY

LOCATION.--Lat 41°35'12", long 106°36'40" (NAD 27), in NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.28, T.19 N., R.82 W., Carbon County, Hydrologic Unit 10180002, on right bank 500 ft upstream from bridge on county road, 700 ft upstream from Brush Creek, 12 mi southwest of town of Elk Mountain, and 14 mi northeast of Saratoga.

DRAINAGE AREA.--91.5 mi². Area at mouth, 279 mi².

PERIOD OF RECORD.--April 1957 to current year (no winter records since 1992).

GAGE.--Water-stage recorder. Elevation of gage is 7,230 ft above NGVD of 1929, from topographic map. April 18, 1957 to October 6, 1966, 274 ft upstream from station at datum 6.00 ft higher. October 7, 1966 to September 23, 1987, at site 289 ft upstream from station at datum 6.00 ft higher.

REMARKS.--Records fair except those for discharges greater than 400 ft³/s and those for estimated daily discharges, which are poor. Diversions for irrigation of about 6,300 acres upstream from station. Diversion to Kerr Ditch 7.5mi upstream.

COOPERATION.--Station operated and record provided by the Wyoming State Engineer's Office; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	22	46	190	35	22	e2.9
2	---	---	---	---	---	---	23	51	169	32	22	e2.8
3	---	---	---	---	---	---	47	72	169	33	17	e2.7
4	---	---	---	---	---	---	107	74	436	33	12	e2.7
5	---	---	---	---	---	---	120	66	293	30	10	e2.6
6	---	---	---	---	---	---	92	78	219	28	8.0	e2.6
7	---	---	---	---	---	---	131	112	168	21	7.1	e2.9
8	---	---	---	---	---	---	150	387	137	19	6.4	e3.4
9	---	---	---	---	---	---	111	235	137	20	6.7	e4.0
10	---	---	---	---	---	---	71	165	139	19	7.4	e4.7
11	---	---	---	---	---	---	48	255	116	18	8.4	e3.8
12	---	---	---	---	---	---	47	233	120	16	8.2	e3.3
13	---	---	---	---	---	---	74	259	128	15	6.5	e3.5
14	---	---	---	---	---	---	88	179	94	14	6.8	e3.9
15	---	---	---	---	---	---	74	131	81	12	5.6	4.1
16	---	---	---	---	---	---	80	162	77	10	4.9	4.4
17	---	---	---	---	---	---	103	211	78	9.4	5.4	4.6
18	---	---	---	---	---	---	113	154	68	9.0	5.3	4.8
19	---	---	---	---	---	---	92	169	64	14	5.4	4.8
20	---	---	---	---	---	---	91	226	61	17	5.2	4.8
21	---	---	---	---	---	---	67	275	58	18	4.6	5.1
22	---	---	---	---	---	---	53	268	63	18	4.6	10
23	---	---	---	---	---	---	57	241	101	17	4.6	8.5
24	---	---	---	---	---	---	67	218	113	18	3.7	10
25	---	---	---	---	---	---	65	184	64	19	3.4	10
26	---	---	---	---	---	---	49	161	53	23	3.5	9.9
27	---	---	---	---	---	---	46	133	43	20	3.3	9.8
28	---	---	---	---	---	---	46	116	36	18	e3.1	13
29	---	---	---	---	---	---	41	111	71	17	e3.1	12
30	---	---	---	---	---	---	41	293	44	17	e3.0	11
31	---	---	---	---	---	---	---	341	---	19	e2.9	---
TOTAL	---	---	---	---	---	---	2,216	5,606	3,590	608.4	220.1	172.6
MEAN	---	---	---	---	---	---	73.9	181	120	19.6	7.10	5.75
MAX	---	---	---	---	---	---	150	387	436	35	22	13
MIN	---	---	---	---	---	---	22	46	36	9.0	2.9	2.6
AC-FT	---	---	---	---	---	---	4,400	11,120	7,120	1,210	437	342

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2005, BY WATER YEAR (WY)*

MEAN	12.1	11.8	10.2	9.56	10.2	18.1	64.0	172	125	28.7	12.0	9.69
MAX	20.5	24.9	17.6	15.3	23.6	44.5	151	540	360	85.9	31.9	23.8
(WY)	(1971)	(1974)	(1974)	(1984)	(1962)	(1960)	(1971)	(1984)	(1983)	(1983)	(1983)	(1982)
MIN	4.98	5.20	6.87	5.43	4.37	7.31	14.8	24.9	28.6	2.39	1.44	3.37
(WY)	(1964)	(1978)	(1978)	(1981)	(1982)	(1965)	(1966)	(2002)	(2002)	(2002)	(2002)	(1977)

06628900 PASS CREEK NEAR ELK MOUNTAIN, WY—Continued

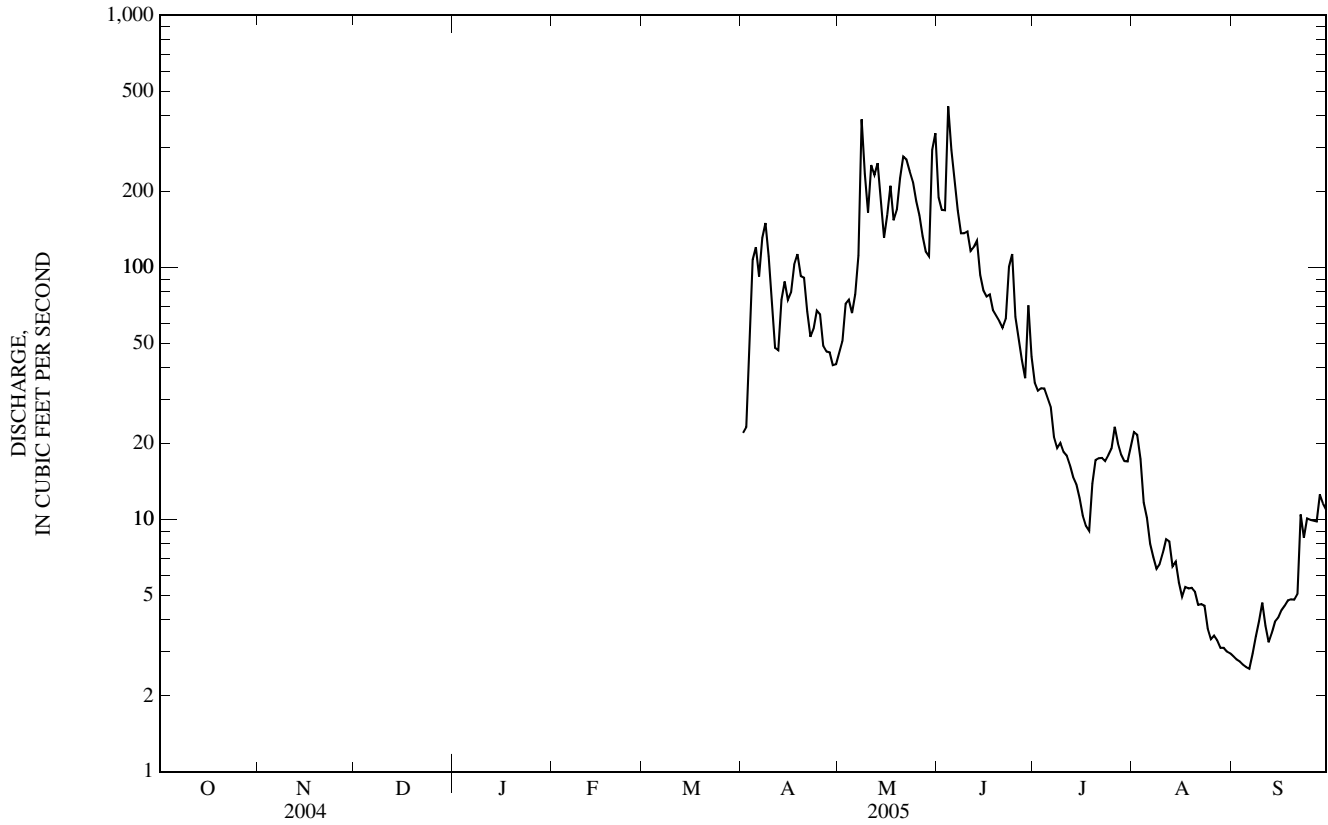
SUMMARY STATISTICS

FOR 2005 WATER YEAR*

WATER YEARS 1957 - 2005*

HIGHEST DAILY MEAN	436	Jun 4	1,780	May 12, 1984
LOWEST DAILY MEAN	2.6 ^e	Sep 5,6	0.29	Aug 20, 2002
MAXIMUM PEAK FLOW	709	Jun 4	4,660 ^a	May 12, 1984
MAXIMUM PEAK STAGE	8.20	Jun 4	9.12 ^b	May 12, 1984

- * For period of operation.
- a From rating curve extended above 1,600 ft³/s on basis of slope-area measurement of peak flow.
- b From floodmarks, site and datum then in use.
- e Estimated.



06630000 NORTH PLATTE RIVER ABOVE SEMINOE RESERVOIR, NEAR SINCLAIR, WY

LOCATION.--Lat 41°52'20", long 107°03'25" (NAD 27), in SW¹/₄ SW¹/₄ sec.13, T.22 N., R.86 W., Carbon County, Hydrologic Unit 10180002, on left bank 6.5 mi northeast of Sinclair and 14 mi upstream from high-water line of Seminoe Reservoir at elevation 6,357 ft.

DRAINAGE AREA.--4,175 mi², of which 114 mi² probably is non-contributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1939 to current year. Prior to October 1943, published as "near Parco."

REVISED RECORDS.--WDR-76-1: Drainage area.

GAGE.--Water-stage recorder. Sharp-crested weir since March 25, 1993. Elevation of gage is 6,400.75 ft above NGVD of 1929. Wyoming State Engineer's Office data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversions for irrigation of about 215,000 acres upstream from station. Transbasin diversions upstream from station.

COOPERATION.--Six discharge measurements provided by the Wyoming State Engineer's Office, and six discharge measurements provided by the Bureau of Reclamation.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	822	526	e348	e394	e441	e493	637	1,970	6,000	3,100	589	209
2	1,050	526	e353	e380	e435	e476	683	1,800	5,370	2,820	603	200
3	958	443	e376	e371	e441	e471	803	1,660	5,590	2,530	610	182
4	921	404	e395	e367	e461	e471	894	1,540	5,930	2,340	596	162
5	811	502	e386	e354	e475	e482	1,070	1,430	7,710	2,220	586	152
6	718	523	e373	e345	e468	e488	1,470	1,370	8,540	1,980	561	145
7	686	557	e373	e354	e454	e499	1,610	1,430	8,400	1,760	515	140
8	643	551	e381	e367	e444	512	1,880	1,610	7,280	1,660	471	133
9	609	564	e391	e385	e434	500	2,390	1,940	5,670	1,620	440	140
10	582	579	e405	e409	e439	492	2,440	2,230	5,040	1,530	425	162
11	557	577	e419	e427	e455	524	1,940	2,240	4,830	1,440	409	155
12	534	576	e409	e410	e465	500	1,520	2,580	4,850	1,350	473	166
13	525	590	e394	e392	e476	559	1,240	2,650	4,780	1,300	467	179
14	520	579	e399	e398	e493	604	1,180	2,560	4,240	1,170	457	168
15	533	569	e404	e404	e476	503	1,360	2,310	3,740	1,070	447	162
16	513	542	e394	e410	e465	480	1,560	2,200	3,460	1,000	397	153
17	509	517	e404	e428	e449	493	1,780	2,260	3,390	988	368	148
18	491	532	e409	e441	e449	479	1,940	2,610	3,450	919	369	160
19	482	506	e419	e461	e460	458	2,030	2,740	3,780	834	370	156
20	485	481	e414	e482	e471	484	2,130	3,060	3,990	815	372	139
21	499	e469	e394	e489	e482	512	2,170	3,770	4,140	796	360	137
22	504	e477	e376	e482	e471	516	1,990	4,930	4,250	737	328	139
23	522	e441	e354	e489	e455	508	1,790	5,980	4,580	680	300	159
24	532	e441	e345	e489	e444	549	1,660	6,610	4,760	643	281	223
25	522	e462	e362	e482	e449	557	1,690	6,990	4,580	645	271	221
26	543	e441	e376	e482	e460	529	1,750	6,900	4,250	720	263	209
27	532	e420	e394	e468	e471	530	1,790	6,270	4,080	783	260	210
28	537	e401	e404	e461	e482	519	1,740	5,610	3,670	771	243	198
29	531	e332	e404	e475	---	581	1,800	4,810	3,440	716	232	202
30	537	e343	e404	e461	---	651	1,940	4,490	3,400	687	218	217
31	527	---	e404	e448	---	625	---	5,720	---	608	201	---
TOTAL	18,735	14,871	12,063	13,205	12,865	16,045	48,877	104,270	147,190	40,232	12,482	5,126
MEAN	604	496	389	426	459	518	1,629	3,364	4,906	1,298	403	171
MAX	1,050	590	419	489	493	651	2,440	6,990	8,540	3,100	610	223
MIN	482	332	345	345	434	458	637	1,370	3,390	608	201	133
AC-FT	37,160	29,500	23,930	26,190	25,520	31,830	96,950	206,800	292,000	79,800	24,760	10,170

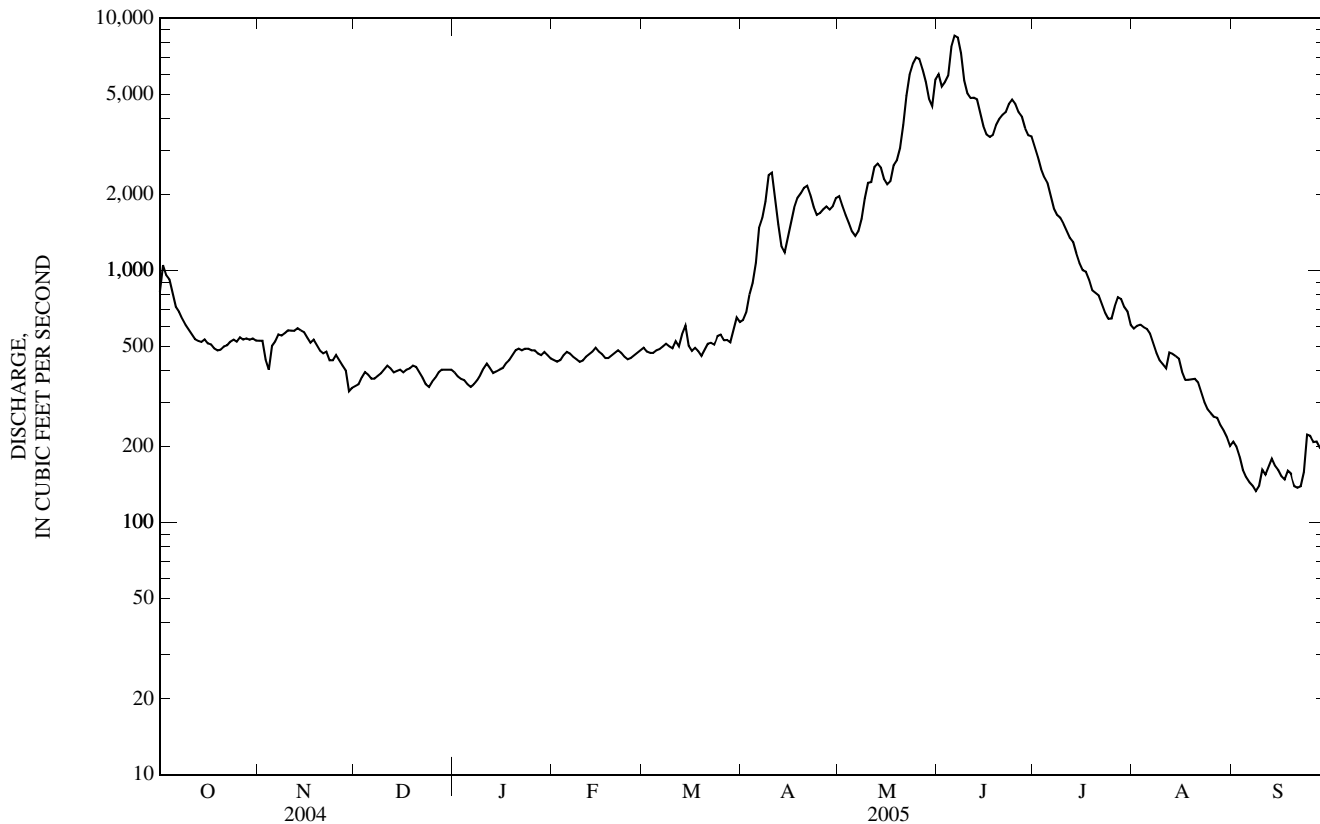
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2005, BY WATER YEAR (WY)

MEAN	408	423	349	317	347	551	1,393	3,078	4,276	1,368	486	308
MAX	1,036	745	562	515	654	1,190	4,390	8,568	9,999	5,256	1,484	1,198
(WY)	(1966)	(1966)	(1998)	(1998)	(1996)	(1986)	(1962)	(1984)	(1983)	(1983)	(1983)	(1997)
MIN	157	240	224	181	191	205	492	384	471	107	67.9	59.7
(WY)	(1957)	(1953)	(2003)	(1963)	(2002)	(1964)	(1995)	(2002)	(2002)	(2002)	(2002)	(2002)

06630000 NORTH PLATTE RIVER ABOVE SEMINOE RESERVOIR, NEAR SINCLAIR, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1939 - 2005	
ANNUAL TOTAL	234,376		445,961		--	
ANNUAL MEAN	640		1,222		1,111	
HIGHEST ANNUAL MEAN	--		--		2,169 1984	
LOWEST ANNUAL MEAN	--		--		270 2002	
HIGHEST DAILY MEAN	2,110	Jun 23	8,540	Jun 6	14,800	Jun 11, 1986
LOWEST DAILY MEAN	132	Aug 18	133	Sep 8	37	Sep 9, 2002
ANNUAL SEVEN-DAY MINIMUM	157	Aug 12	147	Sep 5	39	Sep 5, 2002
MAXIMUM PEAK FLOW	--		8,720	Jun 7	16,200	Jun 11, 1986
MAXIMUM PEAK STAGE	--		8.23	Jun 7	11.30	Jun 11, 1986
ANNUAL RUNOFF (AC-FT)	464,900		884,600		805,000	
10 PERCENT EXCEEDS	1,290		3,540		3,070	
50 PERCENT EXCEEDS	492		512		440	
90 PERCENT EXCEEDS	278		268		225	

e Estimated.



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1961-2001, October 2003 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: March to October 1978.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)
NOV 17...	1040	537	608	10.6	100	8.3	352	6.0	3.5	<.04	<.06	<.008	<.02
MAR 08...	1210	459	606	11.0	102	8.6	388	12.0	2.5	<.04	<.06	<.008	<.02
MAY 24...	1040	6,300	605	7.8	94	7.9	185	22.0	13.0	<.04	<.06	<.008	E.01
AUG 15...	1100	451	609	7.9	110	8.6	373	24.5	20.0	<.04	<.06	<.008	<.02

Date	E coli, modif. m-TEC, water, col/100 mL (90902)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
NOV 17...	<1	E7	17	25
MAR 08...	<1	<1	16	20
MAY 24...	230	250	147	2,500
AUG 15...	E8	E12	6	7.3

< -- Less than.

E -- Estimated value; for bacteria, estimated values are counts outside the acceptable range (non-ideal colony count).

06632400 ROCK CREEK ABOVE KING CANYON CANAL, NEAR ARLINGTON, WY

LOCATION.--Lat 41°35'07", long 106°13'20" (NAD 27), in SE¹/₄ SW¹/₄ sec. 25, T.19 N., R.79 W., Carbon County, Hydrologic Unit 10180004, on left bank 200 ft upstream from point of diversion to King Canyon Canal, 0.4 mi downstream from Overland Creek, 1.0 mi southwest of Arlington, and 6.9 mi southwest of McFadden.

DRAINAGE AREA.--62.9 mi².

PERIOD OF RECORD.--October 1954 to current year. Prior to 1965, includes records for 06632500 Rock Creek at Arlington, adjusted for diversion by King Canyon Canal.

REVISED RECORDS.--WDR WY-86: 1985(m). WDR WY-87: 1985.

GAGE.--Water-stage recorder. Elevation of gage is 7,790 ft above NGVD of 1929, from topographic map. October 1955 to September 1965, records from 06625000, Rock Creek at Arlington, collected at non-equivalent site 500 ft downstream from station (see PERIOD OF RECORD). U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Minor regulation by Sand Lake, capacity 1,100 acre-ft, on Deep Creek, 12 mi upstream from station. No diversion upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	e23	e13	11	e9.7	e9.6	e9.7	e27	466	182	30	10
2	50	e18	e13	11	e9.6	e9.6	e11	e27	424	175	27	10
3	49	e18	e13	11	e9.7	e9.6	e13	e27	333	174	26	10
4	44	e19	e15	11	e10	e9.8	14	28	314	160	30	11
5	37	20	16	11	e11	e9.8	14	32	426	146	28	10
6	35	19	15	11	e10	e9.8	e14	45	466	138	22	9.7
7	31	19	15	e10	e10	e9.8	e15	58	431	131	20	9.8
8	27	19	15	e10	e10	e9.8	18	59	373	126	22	9.5
9	25	19	15	e11	e9.8	e9.6	e18	61	355	120	20	9.7
10	24	19	14	11	e10	e10	16	82	334	108	33	11
11	23	e17	13	11	e10	e10	e16	121	285	105	39	11
12	22	e16	13	e12	e10	e12	e15	106	292	107	25	9.6
13	25	e14	e12	e11	e9.7	e11	e17	94	285	94	21	9.6
14	24	e11	e11	e11	e9.5	e10	19	87	257	70	21	9.6
15	28	e9.5	12	e10	e9.4	e9.8	e21	94	301	60	19	9.8
16	26	e11	e12	e9.7	e9.3	e10	e21	136	358	55	18	9.5
17	28	e12	e11	e10	e9.3	e10	26	191	418	50	18	9.2
18	26	e12	11	e11	e9.7	e10	33	203	502	48	18	8.9
19	22	e12	11	11	e11	e10	36	313	528	44	17	8.7
20	26	e12	12	11	e11	e11	e46	474	485	42	16	8.5
21	26	e13	e13	11	e10	e11	e44	719	458	39	15	10
22	25	e14	e12	e10	e9.6	e11	31	817	484	37	14	21
23	20	15	e10	10	e9.4	11	30	875	480	37	16	13
24	26	e15	e9.5	10	e9.6	e11	36	794	421	39	14	11
25	23	15	e9.8	e11	e10	e10	37	749	355	39	13	10
26	24	15	e10	e11	e10	e9.7	33	604	322	43	13	9.6
27	23	e14	e11	10	e10	e9.7	32	513	276	36	12	9.4
28	24	e14	11	e10	e9.7	e9.7	e32	481	237	31	12	12
29	20	e13	10	e10	---	e10	e30	465	235	28	11	10
30	18	e14	10	e9.8	---	e11	e28	743	194	26	11	9.8
31	26	---	11	e9.7	---	e10	---	567	---	27	10	---
TOTAL	884	461.5	379.3	328.2	277.0	315.3	725.7	9,592	11,095	2,517	611	310.9
MEAN	28.5	15.4	12.2	10.6	9.89	10.2	24.2	309	370	81.2	19.7	10.4
MAX	57	23	16	12	11	12	46	875	528	182	39	21
MIN	18	9.5	9.5	9.7	9.3	9.6	9.7	27	194	26	10	8.5
AC-FT	1,750	915	752	651	549	625	1,440	19,030	22,010	4,990	1,210	617

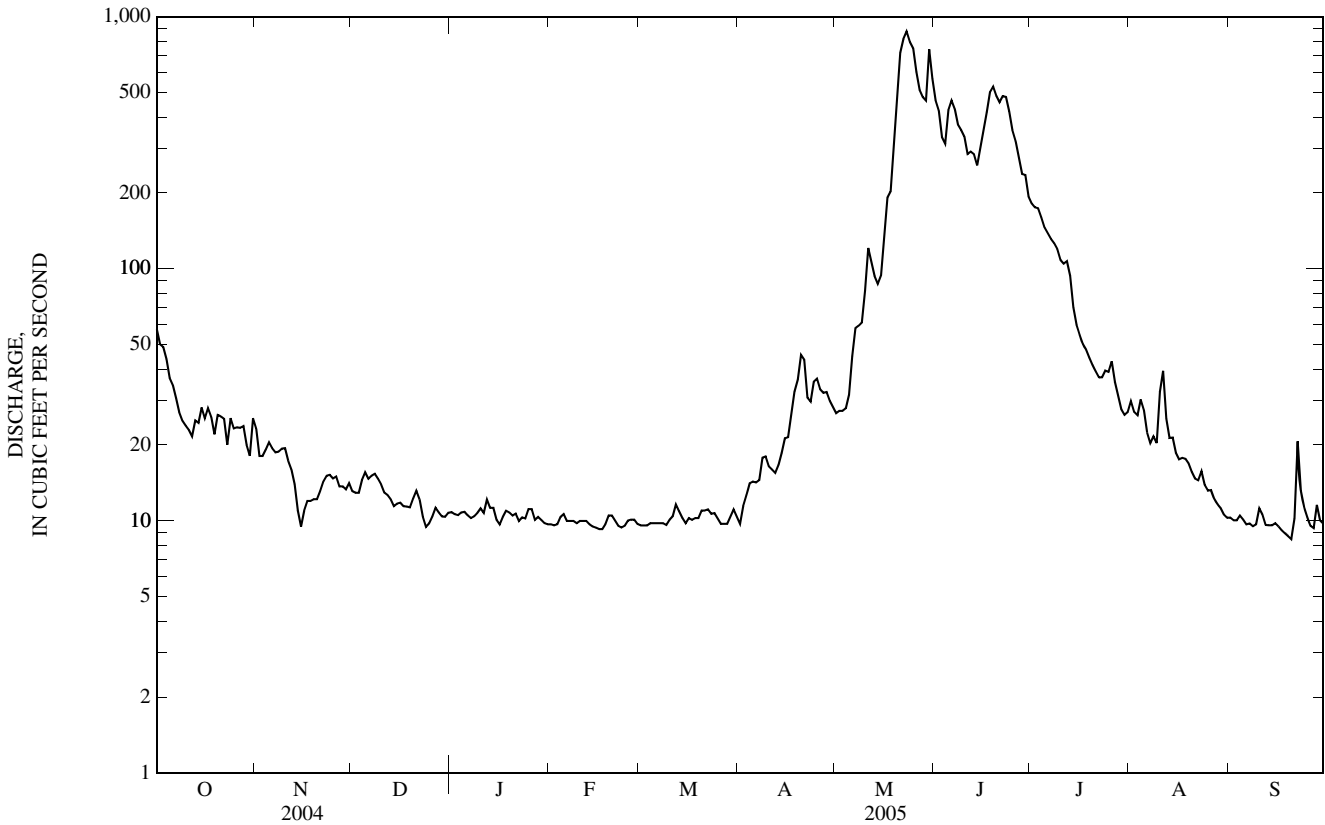
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2005, BY WATER YEAR (WY)

MEAN	15.8	12.7	11.0	10.1	9.80	10.0	22.4	230	469	116	28.3	19.7
MAX	40.0	23.3	18.8	15.3	17.0	15.6	56.4	409	1,024	420	66.9	40.1
(WY)	(1983)	(1999)	(1973)	(1966)	(1974)	(1979)	(1962)	(1974)	(1971)	(1982)	(1982)	(1971)
MIN	7.71	5.65	6.64	6.01	5.56	6.65	10.9	59.3	141	21.3	9.39	7.19
(WY)	(1957)	(1955)	(1955)	(1955)	(1955)	(1955)	(1995)	(1968)	(2002)	(2002)	(2002)	(2002)

06632400 ROCK CREEK ABOVE KING CANYON CANAL, NEAR ARLINGTON, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1955 - 2005	
ANNUAL TOTAL	17,937.2		27,496.9		--	
ANNUAL MEAN	49.0		75.3		79.5	
HIGHEST ANNUAL MEAN	--		--		142	1971
LOWEST ANNUAL MEAN	--		--		31.0	2002
HIGHEST DAILY MEAN	362	Jun 7	875	May 23	1,690	Jun 19, 1971
LOWEST DAILY MEAN	6.4	Feb 12	8.5	Sep 20	3.8	Nov 1, 1963
ANNUAL SEVEN-DAY MINIMUM	6.9	Feb 10	9.2	Sep 14	4.4	Nov 26, 1954
MAXIMUM PEAK FLOW	--		1,180	May 23	2,590 ^a	Jun 19, 1971
MAXIMUM PEAK STAGE	--		4.44	May 23	5.92	Jun 24, 1983
ANNUAL RUNOFF (AC-FT)	35,580		54,540		57,610	
10 PERCENT EXCEEDS	167		288		257	
50 PERCENT EXCEEDS	18		15		15	
90 PERCENT EXCEEDS	7.6		9.7		8.0	

a Gage height, 5.83 ft.
e Estimated.



06634620 LITTLE MEDICINE BOW RIVER AT BOLES SPRING, NEAR MEDICINE BOW, WY

LOCATION.--Lat 41°57'40", long 106°12'31" (NAD 27), in NW¼ SW¼ SW¼ sec.17, T.23 N., R.78 W., Carbon County, Hydrologic Unit 10180005, on right bank 50 ft downstream from Boles Spring, 3.9 mi downstream from State Highway 487, 4.3 mi north of Medicine Bow, and 8.7 mi downstream from Muddy Creek.

DRAINAGE AREA.--969 mi².

PERIOD OF RECORD.--October 1973 to current year. Records for October 1973 to September 1984 at site 5.5 mi upstream from station published as "near Medicine Bow" (station 06634600) does not include flow of Boles Spring. Discharge records considered equivalent except for low flow.

GAGE.--Water-stage recorder. Elevation of gage is 6,570 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	e6.6	e0.63	0.76	1.7	14	30	49	56	3.4	1.4	0.44
2	7.9	e4.8	e0.67	0.64	e3.7	16	32	58	75	2.9	0.72	0.45
3	7.0	e4.5	e0.72	0.64	e4.2	16	26	60	63	2.4	0.65	0.44
4	6.1	8.7	e0.79	0.67	e4.6	17	23	59	59	2.1	6.1	0.41
5	8.2	13	e0.84	0.54	e5.0	18	23	58	54	1.7	6.5	0.42
6	9.3	12	0.74	0.43	e4.9	18	24	53	49	1.5	7.7	0.43
7	7.1	12	0.72	0.27	e4.8	21	29	54	51	1.3	4.3	0.45
8	6.0	11	0.83	0.26	e4.5	19	29	64	42	1.3	3.0	0.48
9	5.3	9.4	1.5	0.38	e4.4	18	28	94	34	1.3	1.9	0.45
10	4.7	9.2	1.5	0.84	e5.4	21	44	140	29	1.1	1.6	0.51
11	4.4	6.8	2.5	0.82	e6.9	18	38	196	26	1.0	0.96	0.38
12	4.3	6.4	1.8	e0.90	8.5	22	31	217	25	0.97	0.62	0.39
13	4.6	e7.0	1.3	e0.78	8.6	e18	27	230	24	0.85	0.56	0.34
14	4.7	7.7	1.1	0.59	9.4	e18	24	254	22	0.80	0.56	0.38
15	4.7	6.1	1.2	0.47	6.0	e17	25	257	21	9.6	0.52	0.37
16	4.7	5.7	1.1	0.41	7.5	e18	38	224	23	8.0	0.54	0.38
17	4.5	7.1	0.99	0.47	e8.6	e20	38	203	20	4.3	0.49	0.38
18	4.6	e6.1	0.85	0.63	e9.2	e21	35	195	17	3.0	0.47	0.38
19	4.9	e4.7	0.90	0.75	9.6	23	38	182	14	2.2	0.49	0.38
20	5.9	1.2	0.83	1.1	e8.3	25	46	155	12	1.5	0.50	0.36
21	6.5	1.3	0.62	1.2	e8.6	26	50	139	10	1.0	1.5	0.45
22	6.8	2.1	0.28	0.91	11	25	48	127	8.8	0.83	4.6	0.42
23	6.7	3.3	0.10	0.92	13	24	45	115	7.9	0.77	1.3	0.44
24	7.2	2.2	0.07	1.0	13	24	43	102	7.0	0.76	0.68	0.44
25	7.7	4.0	0.03	0.92	14	17	44	89	6.3	0.71	0.50	0.42
26	8.3	4.4	0.11	1.0	13	23	45	79	5.2	0.72	0.37	0.38
27	8.7	e2.2	0.12	1.5	14	21	48	69	4.6	0.66	0.36	0.40
28	9.0	e1.4	0.27	2.4	15	23	e70	60	4.2	0.63	0.37	0.41
29	8.8	e1.00	0.46	2.4	---	24	e60	52	4.2	0.60	0.36	0.44
30	8.4	e0.71	0.63	2.9	---	22	54	52	3.7	0.60	0.37	0.38
31	8.4	---	0.63	3.6	---	24	---	54	---	0.63	0.38	---
TOTAL	204.9	172.61	24.83	31.10	227.4	631	1,135	3,740	777.9	59.13	50.37	12.40
MEAN	6.61	5.75	0.80	1.00	8.12	20.4	37.8	121	25.9	1.91	1.62	0.41
MAX	9.5	13	2.5	3.6	15	26	70	257	75	9.6	7.7	0.51
MIN	4.3	0.71	0.03	0.26	1.7	14	23	49	3.7	0.60	0.36	0.34
AC-FT	406	342	49	62	451	1,250	2,250	7,420	1,540	117	100	25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2005, BY WATER YEAR (WY)

MEAN	8.69	9.55	4.52	2.15	10.5	61.2	113	152	71.7	14.8	6.42	6.06
MAX	18.0	36.0	11.5	7.50	110	286	246	388	419	46.0	22.1	19.5
(WY)	(1985)	(1999)	(1987)	(1997)	(1986)	(1997)	(1988)	(1995)	(1995)	(1995)	(1990)	(1985)
MIN	2.74	2.87	0.80	0.56	0.48	8.96	28.5	17.5	4.90	1.38	0.39	0.41
(WY)	(2004)	(2003)	(2005)	(2001)	(2001)	(2002)	(1992)	(2004)	(2002)	(2002)	(2003)	(2005)

06634620 LITTLE MEDICINE BOW RIVER AT BOLES SPRING, NEAR MEDICINE BOW, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1985 - 2005	
ANNUAL TOTAL	5,579.40		7,066.64		--	
ANNUAL MEAN	15.2		19.4		38.5 ^a	
HIGHEST ANNUAL MEAN	--		--		90.1 1999	
LOWEST ANNUAL MEAN	--		--		12.7 1992	
HIGHEST DAILY MEAN	201	Mar 21	257	May 15	1,450	Mar 20, 1997
LOWEST DAILY MEAN	0.03	Dec 25	0.03	Dec 25	0.03 ^b	Dec 25, 2004
ANNUAL SEVEN-DAY MINIMUM	0.14	Dec 22	0.14	Dec 22	0.14	Dec 22, 2004
MAXIMUM PEAK FLOW	--		278 ^c	May 14	9,500 ^d	May 17, 1978
MAXIMUM PEAK STAGE	--		3.54 ^f	Apr 29	14.10 ^g	May 17, 1978
ANNUAL RUNOFF (AC-FT)	11,070		14,020		27,900	
10 PERCENT EXCEEDS	46		52		114	
50 PERCENT EXCEEDS	3.8		4.8		7.8	
90 PERCENT EXCEEDS	0.37		0.43		1.1	

a Average discharge, water years 1974-2004, 47.7 ft³/s, unadjusted for flow from Boles Spring.

b No flow at times, water years 1974-84, site then in use.

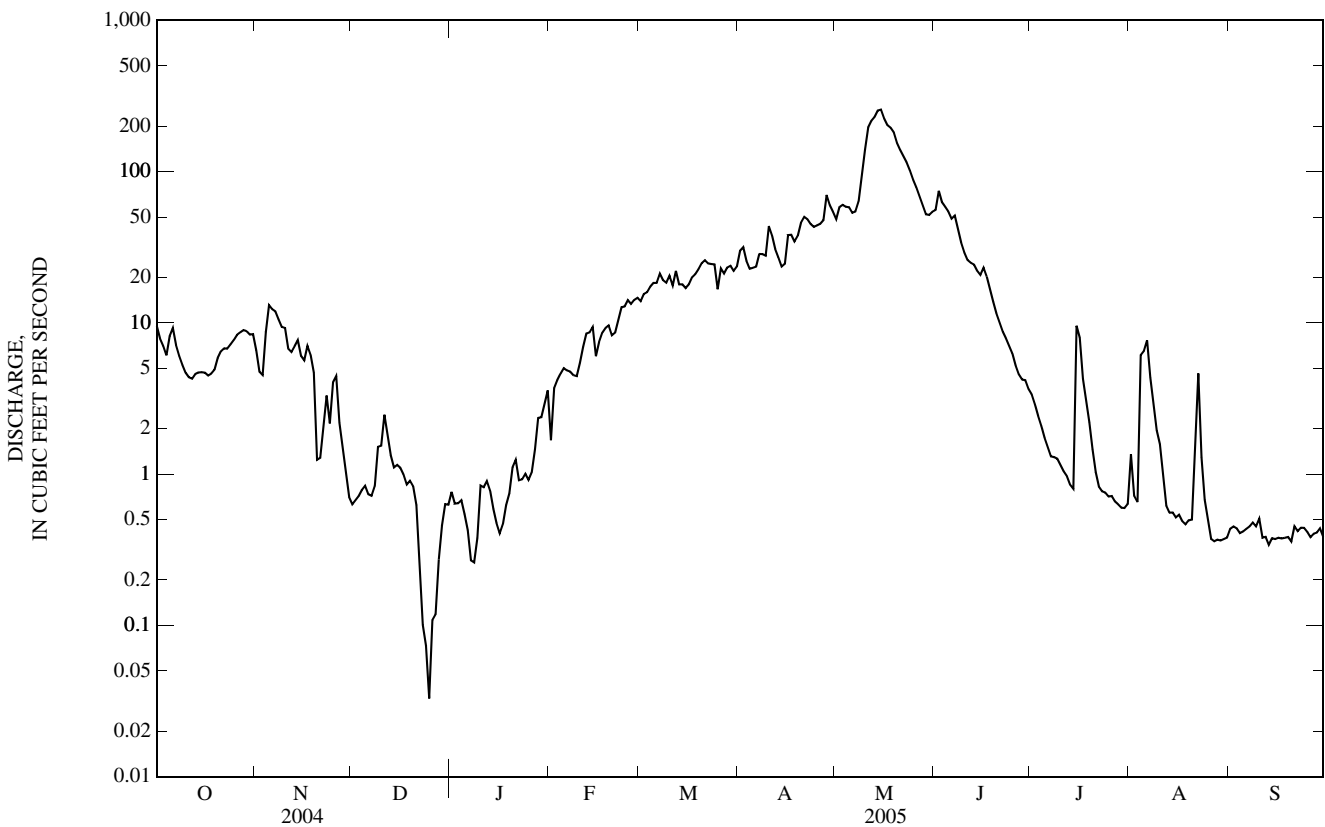
c Gage height, 3.36 ft.

d From slope-area measurement of peak flow, site then in use.

e Estimated.

f Backwater from ice.

g From floodmarks, site and datum then in use.



06635000 MEDICINE BOW RIVER ABOVE SEMINOE RESERVOIR, NEAR HANNA, WY

LOCATION.--Lat 42°00'35", long 106°30'45" (NAD 27), in SE¹/₄ NW¹/₄ sec.34, T.24 N., R.81 W., Carbon County, Hydrologic Unit 10180004, on left bank 25 ft upstream from county highway bridge, 2.0 mi upstream from Troublesome Creek, 9.0 mi upstream from high-water line of Seminoe Reservoir at elevation 6,357 ft, and 10 mi north of Hanna.

DRAINAGE AREA.--2,338 mi², of which 396 mi² probably is non-contributing.

PERIOD OF RECORD.--July 1939 to current year.

REVISED RECORDS.--WSP 956: 1941(M), WSP 1440: 1940(M), 1941. WSP 1710: Drainage area. WDR WY-83-1: 1943.

GAGE.--Water-stage recorder. Concrete control since November 20, 1990. Elevation of gage is 6,415.40 ft above NGVD of 1929. Wyoming State Engineer's Office data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Many small reservoirs upstream from station, total capacity, about 6,000 acre-ft, for irrigation. Diversions for irrigation of about 43,000 acres upstream from station.

COOPERATION.--Five discharge measurements provided by the Wyoming State Engineer's Office and seven discharge measurements provided by the Bureau of Reclamation.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	47	e21	48	e58	81	95	161	924	274	10	5.6
2	31	28	e21	e43	e55	84	99	163	992	232	9.5	5.5
3	47	30	e23	e38	e57	81	96	167	779	186	10	5.3
4	72	57	e28	e36	e61	78	88	153	796	154	10	5.4
5	60	63	e30	e33	e62	84	89	150	793	135	22	5.2
6	56	59	e31	e30	e65	88	104	162	1,120	134	54	5.5
7	57	58	e28	e32	e65	108	119	142	894	135	33	5.5
8	56	57	e32	e34	e60	126	117	156	738	114	27	5.3
9	52	55	e38	e36	e55	120	107	212	615	84	23	5.3
10	49	53	e48	e38	e59	112	111	281	441	71	21	5.8
11	46	50	e62	e40	e66	99	124	356	382	68	19	5.6
12	43	51	55	e48	e79	106	117	429	342	57	16	5.4
13	42	52	51	e44	e84	99	108	528	313	53	19	6.0
14	41	55	54	e41	90	96	97	516	275	53	17	5.9
15	42	51	57	e38	e77	101	94	545	250	51	14	5.9
16	40	51	53	e37	e71	83	102	469	222	50	12	6.1
17	37	53	48	e38	e66	91	115	384	195	55	11	6.3
18	37	48	51	e40	e68	88	112	380	194	45	11	6.2
19	39	40	55	e51	e79	92	120	450	230	38	9.6	5.8
20	42	38	60	e60	82	89	150	393	294	34	8.9	5.9
21	39	23	e58	e67	76	95	168	405	393	31	8.7	7.0
22	40	25	e48	e69	75	96	180	474	410	27	8.7	7.6
23	39	39	e38	e74	75	104	173	575	386	25	8.7	7.5
24	41	43	e34	e74	81	105	154	637	406	21	14	8.1
25	42	49	e32	e74	84	104	133	688	471	18	11	8.0
26	46	49	e34	e71	81	96	143	729	553	17	8.0	8.1
27	47	37	e35	e69	78	97	158	695	444	18	7.0	7.8
28	50	24	37	e68	81	91	165	620	349	15	6.7	8.0
29	48	e23	41	e66	---	91	150	598	289	12	6.2	7.8
30	47	e22	44	e64	---	93	181	551	251	10	5.7	7.6
31	50	---	46	e62	---	101	---	620	---	10	5.7	---
TOTAL	1,414	1,330	1,293	1,563	1,990	2,979	3,769	12,789	14,741	2,227	447.4	191.0
MEAN	45.6	44.3	41.7	50.4	71.1	96.1	126	413	491	71.8	14.4	6.37
MAX	72	63	62	74	90	126	181	729	1,120	274	54	8.1
MIN	31	22	21	30	55	78	88	142	194	10	5.7	5.2
AC-FT	2,800	2,640	2,560	3,100	3,950	5,910	7,480	25,370	29,240	4,420	887	379

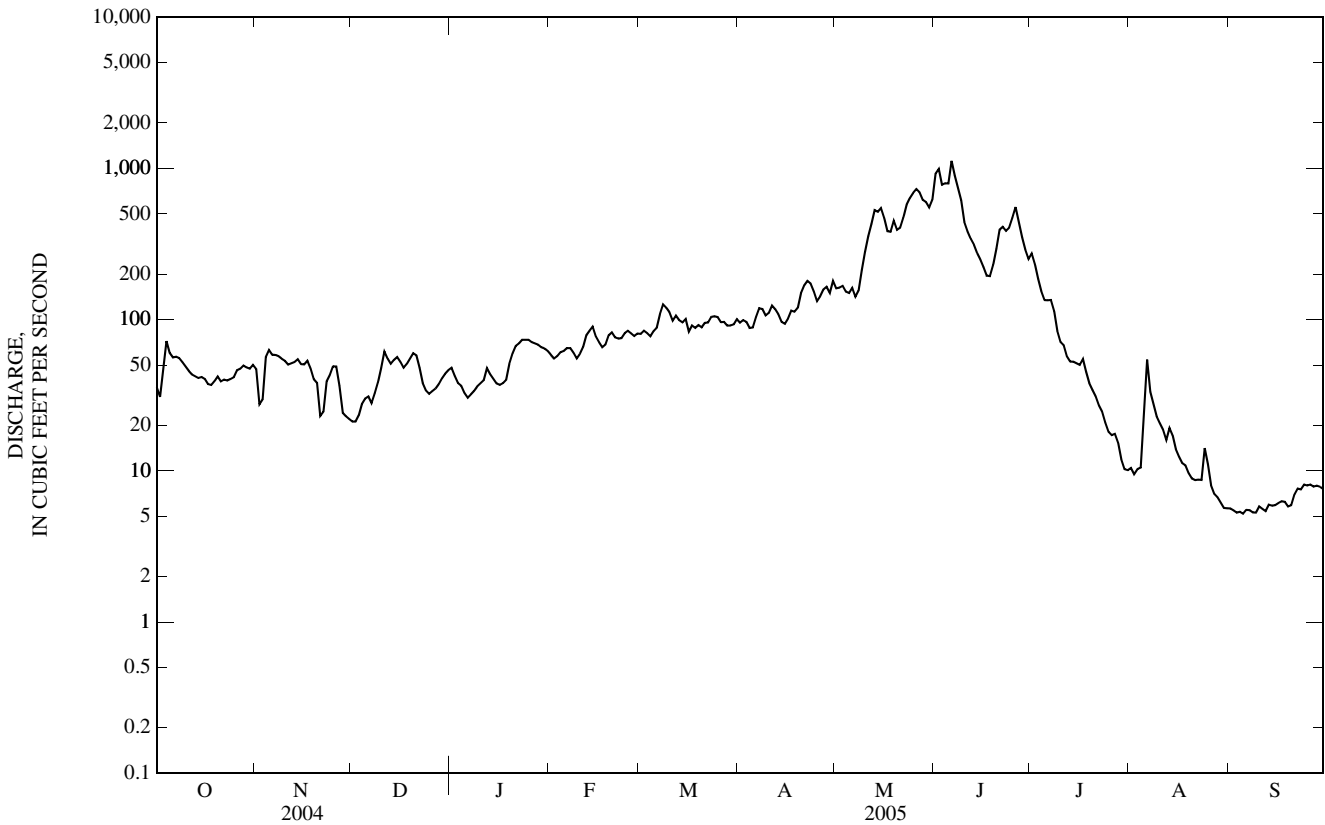
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2005, BY WATER YEAR (WY)

MEAN	42.3	50.0	38.1	32.2	48.4	139	317	547	648	171	51.6	28.4
MAX	132	121	72.9	69.0	397	516	950	3,059	2,076	1,030	246	236
(WY)	(1963)	(1999)	(1974)	(1997)	(1962)	(1943)	(1983)	(1973)	(1983)	(1983)	(1983)	(1973)
MIN	9.65	16.3	8.70	7.76	10.0	20.4	66.4	45.6	32.8	5.71	1.53	3.78
(WY)	(1957)	(1940)	(1979)	(1979)	(1949)	(1944)	(1995)	(2002)	(2002)	(1939)	(2000)	(1956)

06635000 MEDICINE BOW RIVER ABOVE SEMINOE RESERVOIR, NEAR HANNA, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1939 - 2005	
ANNUAL TOTAL	19,551.3		44,733.4		--	
ANNUAL MEAN	53.4		123		176	
HIGHEST ANNUAL MEAN	--		--		531 1973	
LOWEST ANNUAL MEAN	--		--		35.8 2002	
HIGHEST DAILY MEAN	294	Mar 22	1,120	Jun 6	5,330	May 11, 1973
LOWEST DAILY MEAN	4.8	Aug 17	5.2	Sep 5	0.04	Aug 26, 2002
ANNUAL SEVEN-DAY MINIMUM	5.1	Aug 11	5.4	Sep 3	0.33	Aug 19, 2000
MAXIMUM PEAK FLOW	--		1,190	Jun 6	6,010 ^a	May 12, 1973
MAXIMUM PEAK STAGE	--		4.27	Jun 6	8.20 ^b	Feb 26, 1986
ANNUAL RUNOFF (AC-FT)	38,780		88,730		127,900	
10 PERCENT EXCEEDS	137		383		518	
50 PERCENT EXCEEDS	36		57		51	
90 PERCENT EXCEEDS	11		8.5		14	

- a Gage height, 6.74 ft.
- b Backwater from ice.
- e Estimated.



06639000 SWEETWATER RIVER NEAR ALCOVA, WY

LOCATION.--Lat 42°29'24", long 107°08'00" (NAD 27), in SE¹/₄ NE¹/₄ NE¹/₄ sec.16, T.29 N., R.86 W., Natrona County, Hydrologic Unit 10180006, on left bank 270 ft upstream from State Highway 220, 0.2 mi southwest of Independence Rock, 7 mi upstream from high-water line of Pathfinder Reservoir at elevation 5,850 ft, and 22 mi southwest of Alcova.

DRAINAGE AREA.--2,338 mi². Area at site prior to April 1, 1992, 2,327 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1913 to September 1924, October 1938 to current year (no winter records during 1974, 1975, 1977-81, and since 1983). Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1310: 1921, 1923-24. WSP 1710: Drainage area.

GAGE.--Water-stage recorder and sharp-crested weir. Elevation of gage is 5,890 ft above NGVD of 1929, from topographic map. August 28, 1913 to September 30, 1924, nonrecording gages at site 7.0 mi upstream from station at different datums. October 1, 1938 to March 31, 1992, at site 6.6 mi upstream from station at different datum. Wyoming State Engineer's office data collection platform with satellite telemetry at station.

REMARKS.--Records good. Several small reservoirs upstream from station, combined capacity, about 5,000 acre-ft, for irrigation. Diversions for irrigation of about 24,000 acres upstream from station.

COOPERATION.--Station operated and record provided by the Wyoming State Engineer's Office; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	77	292	648	267	65	24
2	---	---	---	---	---	---	77	259	626	238	61	23
3	---	---	---	---	---	---	79	233	627	215	56	23
4	---	---	---	---	---	---	79	213	619	198	54	22
5	---	---	---	---	---	---	79	199	586	181	52	21
6	---	---	---	---	---	---	79	184	584	175	51	21
7	---	---	---	---	---	---	91	167	547	168	50	21
8	---	---	---	---	---	---	122	162	479	161	47	21
9	---	---	---	---	---	---	146	170	444	152	46	20
10	---	---	---	---	---	---	163	205	412	142	46	20
11	---	---	---	---	---	---	195	266	394	132	45	20
12	---	---	---	---	---	---	219	275	372	127	42	19
13	---	---	---	---	---	---	249	283	359	119	42	20
14	---	---	---	---	---	---	234	308	337	108	47	21
15	---	---	---	---	---	---	214	356	323	102	46	20
16	---	---	---	---	---	---	211	369	300	95	42	20
17	---	---	---	---	---	---	242	346	278	87	40	20
18	---	---	---	---	---	---	272	322	263	93	40	20
19	---	---	---	---	---	---	264	327	250	94	40	19
20	---	---	---	---	---	---	235	342	250	86	40	18
21	---	---	---	---	---	---	267	368	270	82	38	19
22	---	---	---	---	---	---	331	398	296	80	36	21
23	---	---	---	---	---	---	340	405	351	76	33	21
24	---	---	---	---	---	---	304	420	378	74	31	23
25	---	---	---	---	---	---	272	450	370	71	30	25
26	---	---	---	---	---	---	241	489	362	70	29	23
27	---	---	---	---	---	---	240	532	349	69	28	22
28	---	---	---	---	---	---	281	578	340	63	28	23
29	---	---	---	---	---	---	330	631	326	59	27	23
30	---	---	---	---	---	---	320	695	298	59	25	23
31	---	---	---	---	---	---	---	705	---	64	24	---
TOTAL	---	---	---	---	---	---	6,253	10,949	12,038	3,707	1,281	636
MEAN	---	---	---	---	---	---	208	353	401	120	41.3	21.2
MAX	---	---	---	---	---	---	340	705	648	267	65	25
MIN	---	---	---	---	---	---	77	162	250	59	24	18
AC-FT	---	---	---	---	---	---	12,400	21,720	23,880	7,350	2,540	1,260

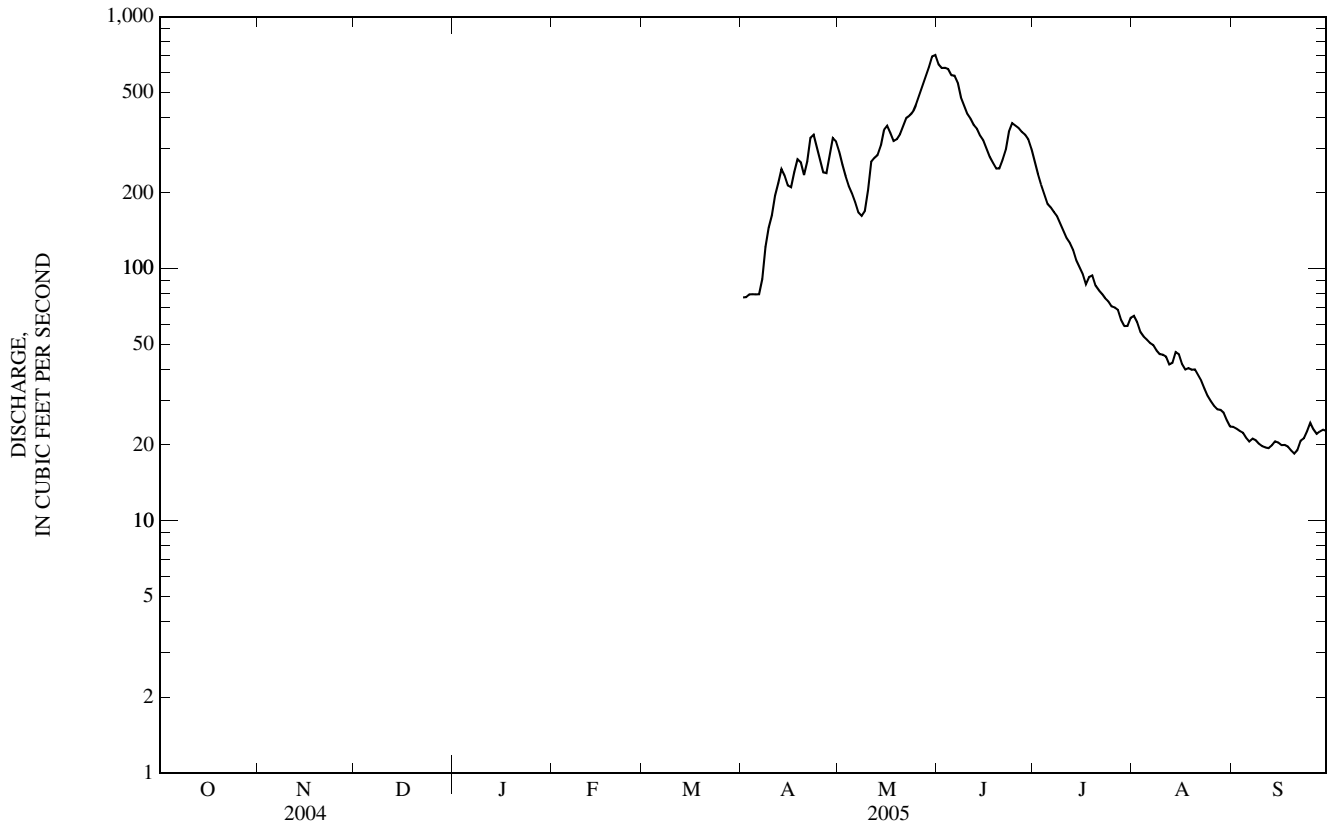
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2005, BY WATER YEAR (WY)*

MEAN	45.8	50.2	38.7	31.6	36.9	80.0	243	400	379	107	41.1	29.0
MAX	86.6	83.3	59.4	54.5	69.1	210	1,869	1,296	1,130	436	104	114
(WY)	(1916)	(1972)	(1972)	(1953)	(1968)	(1916)	(1924)	(1980)	(1983)	(1995)	(1998)	(1973)
MIN	16.0	20.0	20.0	10.8	12.3	33.0	74.4	20.7	12.6	5.01	0.92	1.90
(WY)	(1941)	(1961)	(1941)	(1962)	(1949)	(1924)	(1963)	(1940)	(1977)	(1940)	(1940)	(1940)

SUMMARY STATISTICS

	FOR 2005 WATER YEAR*		WATER YEARS 1914 - 2005*	
ANNUAL MEAN	--		126	
HIGHEST ANNUAL MEAN	--		312	1924
LOWEST ANNUAL MEAN	--		25.8	1940
HIGHEST DAILY MEAN	705	May 31	4,290	Apr 13, 1924
LOWEST DAILY MEAN	18	Sep 20	0.50	Jul 30, 1940
MAXIMUM PEAK FLOW	722	May 30	4,290	Apr 13, 1924
MAXIMUM PEAK STAGE	4.27	May 30	9.90	Apr 27, 1983
ANNUAL RUNOFF (AC-FT)	--		91,260	
10 PERCENT EXCEEDS	--		339	
50 PERCENT EXCEEDS	--		48	
90 PERCENT EXCEEDS	--		18	

* For period of operation.



06639000 SWEETWATER RIVER NEAR ALCOVA, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-90, October 2003 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT 27...	0905	80	615	10.3	102	8.2	371	4.0	5.5	120	37.7	6.97	5.06
FEB 17...	0930	12	617	10.3	87	8.3	480	-1.0	.0	150	44.6	8.25	5.25
MAY 04...	1140	206	614	9.2	105	8.0	227	18.0	11.5	81	24.8	4.73	3.30
AUG 18...	0850	41	614	8.0	96	8.2	413	13.0	13.5	140	41.3	8.36	5.92

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat fltrd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
OCT 27...	.9	24.1	29	125	10.9	.3	21.6	44.9	226	.31	48.8	<.04	<.06
FEB 17...	1	31.1	31	156	17.2	.4	33.3	51.9	286	.39	9.26	<.04	E.06
MAY 04...	.6	12.0	23	80	5.10	.2	17.1	18.7	134	.18	74.6	<.04	<.06
AUG 18...	1	32.4	33	140	14.6	.4	23.6	48.4	259	.35	28.7	<.04	<.06

Date	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
OCT 27...	<.008	<.02	25	5.4
FEB 17...	<.008	<.02	7	.23
MAY 04...	<.008	<.02	42	23
AUG 18...	<.008	<.02	11	1.2

< -- Less than.
E -- Estimated.

06645000 NORTH PLATTE RIVER BELOW CASPER, WY

LOCATION.--Lat 42°51'32", long 106°12'41" (NAD 83), in SE¹/₄ SE¹/₄ NW¹/₄ sec.4, T.33 N., R.78 W., Natrona County, Hydrologic Unit 10180007, at New Mystery Bridge, 0.1 mi upstream from Claude Creek, 0.6 mi north of U.S. Highways 20 and 87, 5.8 mi east of city hall in Casper, and 9.5 mi downstream from Casper Creek.

DRAINAGE AREA.--12,574 mi², of which 831 mi² probably is noncontributing.

PERIOD OF RECORD.--Water years 1947-52, 1957-59, 1968-89, October 1990 to current year.

REVISED RECORDS.--WDR WY-76-1: Drainage area.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, water, fltrd, mg/L as P (00671)
DEC 14...	1330	630	636	12.6	104	7.9	736	5.0	.0	E.02	.52	.029	.05
MAR 01...	1245	538	630	14.7	138	8.9	700	22.0	4.5	.14	.22	.023	.03
JUN 01...	1140	2,760	624	8.6	97	8.1	572	17.0	11.5	<.04	.11	.008	E.01
SEP 13...	1030	494	636	10.0	116	8.7	678	9.0	13.5	<.04	.12	.013	E.01

Date	E coli, modif. m-TEC, water, col/100 mL (90902)	Fecal coli-form, M-FC 0.7u MF col/100 mL (31625)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)
DEC 14...	100	73	2	E.15	2.0	51	<.06	84	E.02	<.8	.278	1.6	E4
MAR 01...	<1	E1	E1	E.16	2.1	45	<.06	82	.06	<.8	.169	1.4	E4
JUN 01...	39	25	3	E.14	2.1	47	<.06	61	.30	<.8	.186	5.4	<6
SEP 13...	48	57	3	E.13	1.6	45	<.06	75	.35	E.03	.247	5.3	11

Date	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Mercury water, fltrd, ug/L (71890)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	Oil and grease, water, unfltrd freon extract mg/L (00556)	Uranium natural water, fltrd, ug/L (22703)
DEC 14...	<.08	42	25.6	.01	3.3	3.24	4.5	<.2	587	2	2.2	<7	10.6
MAR 01...	<.08	44	23.3	.01	2.8	.74	3.9	<.2	575	3	2.0	<7	8.75
JUN 01...	.11	35	3.4	E.01	2.8	4.74	2.9	<.2	426	3	7.4	<7	6.73
SEP 13...	.12	37	11.6	.01	2.5	2.67	3.0	<.2	501	E1	4.8	9	6.96

< -- Less than.

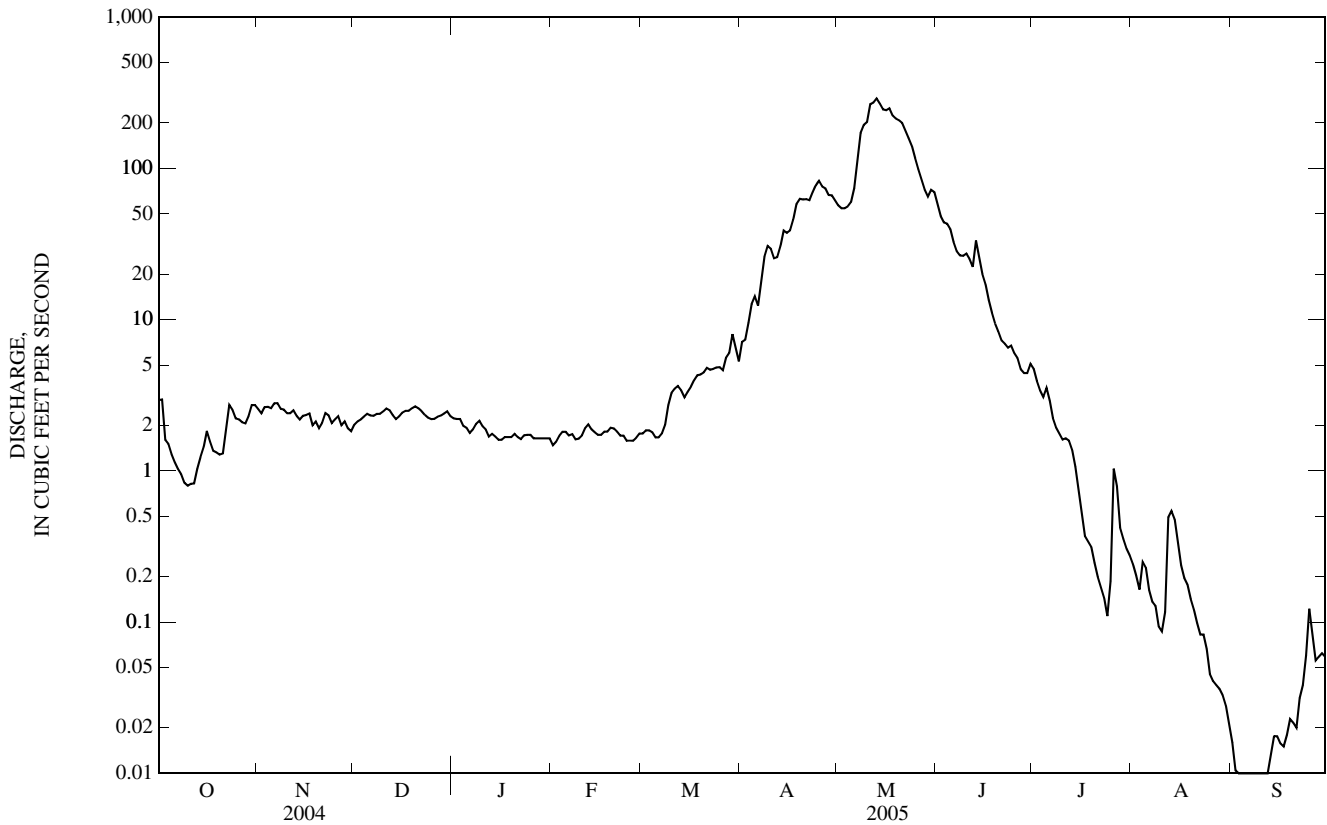
E -- Estimated value; for bacteria, estimated values are counts outside the acceptable range (non-ideal colony count).

PLATTE RIVER BASIN

06647500 BOX ELDER CREEK AT BOXELDER, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1946 - 2005	
ANNUAL TOTAL	3,949.11		7,128.59		--	
ANNUAL MEAN	10.8		19.5		34.7	
HIGHEST ANNUAL MEAN	--		--		85.8 1983	
LOWEST ANNUAL MEAN	--		--		6.95 1989	
HIGHEST DAILY MEAN	65	Apr 7	289	May 13	2,460	May 14, 1965
LOWEST DAILY MEAN	0.05	Aug 21, Sep 3	0.00	Sep 3-10	0.00	Several days, some years
ANNUAL SEVEN-DAY MINIMUM	0.08	Aug 20	0.00	Sep 3	0.00	Some years
MAXIMUM PEAK FLOW	--		335	May 12	4,530	May 14, 1965
MAXIMUM PEAK STAGE	--		3.86	May 12	8.58 ^a	May 14, 1965
ANNUAL RUNOFF (AC-FT)	7,830		14,140		25,140	
10 PERCENT EXCEEDS	48		61		101	
50 PERCENT EXCEEDS	2.3		2.2		2.9	
90 PERCENT EXCEEDS	0.19		0.08		0.40	

a Site and datum then in use.
 e Estimated.



06652000 NORTH PLATTE RIVER AT ORIN, WY

LOCATION.--Lat 42°39'09", long 105°09'31" (NAD 27), in NE¼ SE¼ SW¼ sec.17, T.31 N., R.69 W., Converse County, Hydrologic Unit 10180008, on right bank 0.5 mi downstream from bridge on State Highway 319, 0.1 mi downstream from Shawnee Creek, and 1.5 mi east of Orin. Prior to Mar. 6, 1994, at site 0.3 mi upstream from station.

DRAINAGE AREA.--15,025 mi², of which 1,203 mi² probably is noncontributing.

WATER-DISCHARGE RECORDS

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.

REVISED RECORDS.--WSP 1310: 1896, 1899. WDR WY-76-1: Drainage area.

GAGE.--Water-stage recorder, and concrete weir since March 6, 1994. Elevation of gage is 4,660 ft above NGVD of 1929, from topographic map. January 1, 1895 to November 30, 1899, and May 1 to September 30, 1924, nonrecording gage at railroad bridge just upstream from State Highway 319 at different datum. April 1, 1917 to September 30, 1918, nonrecording gage at site 1.9 mi downstream from station at different datum. April 1958 to March 5, 1994, at site 0.3 mi upstream from station at different datum. Wyoming State Engineer's Office data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Major regulation began after completion of Pathfinder Reservoir in April 1909. Natural flow of stream affected by storage reservoirs, power development, diversions for irrigation, and return flow from irrigated areas.

COOPERATION.--Twelve discharge measurements provided by the Wyoming State Engineer's Office.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	578	572	326	588	622	548	611	1,030	2,620	2,130	2,390	731
2	582	597	327	550	630	572	586	967	2,600	2,120	2,380	746
3	570	576	433	514	619	568	565	929	2,580	2,120	2,330	752
4	541	560	522	591	632	562	569	896	2,580	2,120	2,580	753
5	535	553	595	407	626	568	611	1,140	2,570	2,120	2,710	749
6	529	549	618	194	610	567	626	1,540	2,520	2,130	2,430	738
7	528	544	562	e170	604	562	609	1,680	2,480	2,170	2,400	730
8	523	548	556	243	597	577	581	1,930	2,450	2,160	2,400	695
9	524	554	590	706	576	1,270	616	2,090	2,440	2,110	2,370	633
10	527	556	641	790	578	1,310	615	2,140	2,440	1,990	2,140	560
11	522	553	629	840	588	1,350	585	2,220	2,430	1,980	1,700	505
12	525	560	720	763	615	1,340	570	2,650	2,440	1,990	1,450	495
13	533	559	705	633	593	1,260	552	2,810	2,560	2,030	1,590	501
14	538	563	565	e400	588	715	550	2,740	2,450	2,080	1,480	493
15	548	567	596	e350	598	659	550	2,610	2,070	2,160	1,430	498
16	555	564	657	355	584	629	557	2,500	1,810	2,160	1,390	503
17	563	557	633	463	559	619	648	2,390	1,780	2,140	1,340	497
18	563	552	624	721	531	614	804	2,340	1,760	2,140	1,110	483
19	552	560	618	901	573	593	820	2,280	1,720	2,160	973	490
20	548	563	622	906	601	592	861	2,200	1,720	2,160	997	492
21	552	565	603	787	587	599	959	2,140	1,670	2,080	958	472
22	553	569	558	750	565	603	981	2,120	1,660	2,050	915	479
23	556	573	e500	717	564	623	951	2,080	1,650	2,080	890	493
24	552	571	e450	722	556	626	939	2,030	1,870	2,130	896	527
25	538	580	267	705	545	647	932	1,970	1,960	2,170	844	539
26	541	584	264	690	540	617	920	2,020	2,100	2,430	810	590
27	551	593	651	664	537	598	936	2,300	2,090	2,500	783	579
28	564	605	729	668	536	589	987	2,360	2,100	2,310	753	534
29	569	549	726	629	---	574	1,050	2,410	2,150	2,260	734	528
30	564	459	713	631	---	576	1,040	2,550	2,140	2,240	716	523
31	570	---	659	620	---	616	---	2,690	---	2,280	709	---
TOTAL	16,994	16,855	17,659	18,668	16,354	22,143	22,181	63,752	65,410	66,700	46,598	17,308
MEAN	548	562	570	602	584	714	739	2,057	2,180	2,152	1,503	577
MAX	582	605	729	906	632	1,350	1,050	2,810	2,620	2,500	2,710	753
MIN	522	459	264	170	531	548	550	896	1,650	1,980	709	472
AC-FT	33,710	33,430	35,030	37,030	32,440	43,920	44,000	126,500	129,700	132,300	92,430	34,330

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1895 - 2005, BY WATER YEAR (WY)

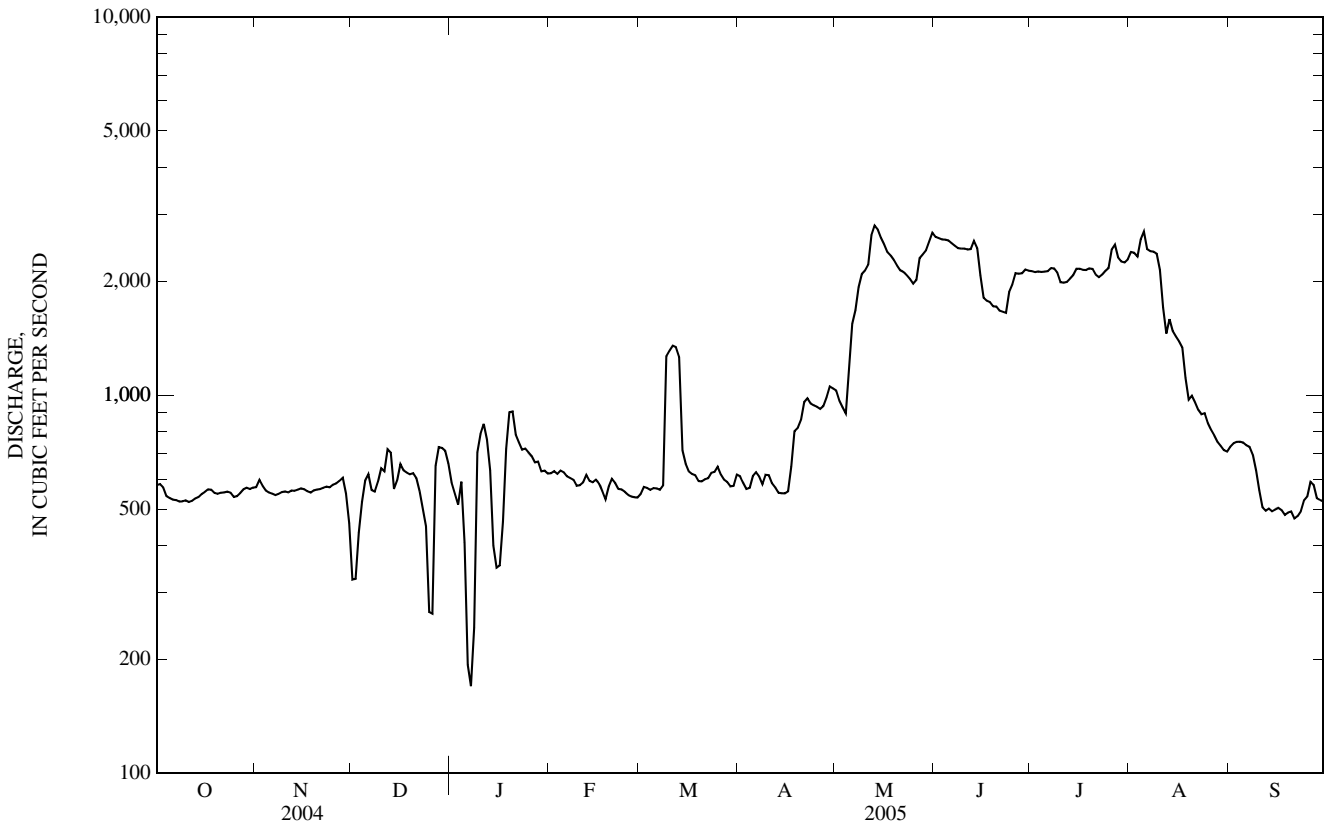
MEAN	1,131	1,024	863	874	954	1,185	1,844	3,160	3,134	2,600	2,219	1,549
MAX	1,708	2,191	1,223	1,171	1,472	2,911	4,578	9,274	14,430	9,970	5,258	4,150
(WY)	(1986)	(1987)	(1974)	(1986)	(1980)	(1984)	(1974)	(1973)	(1917)	(1917)	(1924)	(1917)
MIN	535	516	472	490	472	618	670	626	958	982	583	399
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(1981)	(1981)	(2002)	(1990)	(1967)	(1898)	(1898)

PLATTE RIVER BASIN

06652000 NORTH PLATTE RIVER AT ORIN, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1895 - 2005	
ANNUAL TOTAL	303,215		390,622		--	
ANNUAL MEAN	828		1,070		1,588	
HIGHEST ANNUAL MEAN	--		--		3,110 1984	
LOWEST ANNUAL MEAN	--		--		824 2004	
HIGHEST DAILY MEAN	2,430	Jun 20,30	2,810	May 13	20,300	Jun 27, 1917
LOWEST DAILY MEAN	264	Dec 26	170	Jan 7	140	Dec 21, 1990
ANNUAL SEVEN-DAY MINIMUM	404	Jan 1	381	Jan 2	324	Sep 25, 1966
MAXIMUM PEAK FLOW	--	--	3,430	Aug 4	23,800 ^a	May 15, 1965
MAXIMUM PEAK STAGE	--	--	5.25	Aug 4	10.45 ^b	Jun 12, 1970
ANNUAL RUNOFF (AC-FT)	601,400		774,800		1,150,000	
10 PERCENT EXCEEDS	1,660		2,320		2,840	
50 PERCENT EXCEEDS	611		630		1,200	
90 PERCENT EXCEEDS	515		526		650	

- a Gage height, 10.0 ft, site and datum then in use.
- b Backwater from ice, site and datum then in use.
- e Estimated.



06652000 NORTH PLATTE RIVER AT ORIN, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-89, October 2003 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May to September 1979.

SUSPENDED-SEDIMENT DISCHARGE: May to September 1979.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered, uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, filtered, mg/L as N (00608)	Nitrite + nitrate water, filtered, mg/L as N (00631)	Nitrite water, filtered, mg/L as N (00613)	Orthophosphate, water, filtered, mg/L as P (00671)
NOV 09...	0855	557	643	9.3	91	8.2	813	5.0	7.0	<.04	<.06	<.008	<.02
MAR 02...	1645	549	640	12.5	132	8.9	778	18.0	10.0	<.04	<.06	<.008	<.02
JUN 22...	1715	1,670	658	6.6	95	8.7	573	26.5	25.5	<.04	<.06	<.008	<.02
AUG 16...	1320	1,350	651	8.2	111	8.3	620	29.5	22.0	E.03	.14	<.008	<.02

Date	E coli, modified, m-TEC, water, col/100 mL (90902)	Fecal coliform, M-FC, 0.7u MF, col/100 mL (31625)
NOV 09...	26	26
MAR 02...	E3	E5
JUN 22...	E17	33
AUG 16...	30	34

< -- Less than.

E -- Estimated value; for bacteria, estimated values are counts outside the acceptable range (non-ideal colony count).

06652800 NORTH PLATTE RIVER BELOW GLENDO RESERVOIR, WY

LOCATION.--Lat 42°27'25", long 104°56'50" (NAD 27), in SW¹/₄ SW¹/₄ NW¹/₄ sec.30, T.29 N., R.67 W., Platte County, Hydrologic Unit 10180008, on right bank opposite Sand Draw, 1.3 mi upstream from Horseshoe Creek, 3.1 mi downstream from Glendo Dam, and 5.2 mi southeast of Glendo.

DRAINAGE AREA.--15,548 mi², of which 1,215 mi² probably is non-contributing.

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

REVISED RECORDS.--WDR WY-76-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,488.94 ft above NGVD of 1929 (levels by Bureau of Reclamation). Bureau of Reclamation data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow completely regulated by Glendo Reservoir since October 17, 1957. Natural flow of stream affected by transbasin diversions, storage reservoirs, power generation, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

COOPERATION.--Nineteen discharge measurements provided by the Bureau of Reclamation.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	28	28	e29	28	28	29	39	948	5,240	7,220	2,320
2	25	27	29	e27	28	28	28	38	940	5,640	7,210	2,300
3	25	28	29	29	28	28	29	33	937	5,060	7,410	2,300
4	25	28	29	e29	28	28	29	37	923	5,140	7,210	2,300
5	25	28	30	e25	28	28	28	41	993	5,090	4,990	2,310
6	24	28	29	e26	28	28	27	41	993	4,000	4,580	2,300
7	25	28	30	e27	e27	27	28	41	1,060	1,990	4,530	1,050
8	25	28	30	e28	29	28	28	42	1,100	1,990	4,440	249
9	25	27	30	e29	29	28	28	41	1,100	1,980	4,390	214
10	25	25	30	30	29	28	28	175	1,090	4,220	4,390	32
11	25	28	30	29	29	28	27	374	1,100	5,430	4,360	33
12	26	28	30	29	29	28	28	373	1,110	5,090	4,280	29
13	25	28	30	e25	29	28	27	455	1,030	5,040	4,260	27
14	26	28	30	e26	29	28	26	594	941	5,080	4,220	28
15	27	28	30	e26	29	28	24	599	940	5,120	4,070	28
16	26	28	30	e27	29	27	25	841	971	5,250	3,960	28
17	27	28	30	e28	28	27	26	1,250	982	5,330	3,920	28
18	27	29	29	e28	28	27	30	1,410	1,020	5,410	3,930	28
19	27	29	29	28	28	27	33	1,370	1,020	5,390	3,990	29
20	27	29	29	28	28	27	29	1,210	1,020	5,280	3,980	28
21	27	29	e29	28	28	29	32	1,020	1,850	5,410	4,010	28
22	28	29	e28	28	28	28	28	1,000	1,780	5,430	4,070	30
23	27	29	e26	28	27	29	27	959	1,750	5,410	4,160	30
24	27	29	e27	28	27	30	28	937	2,480	5,450	4,070	30
25	35	29	e29	28	27	29	28	942	2,930	5,460	4,340	29
26	28	30	31	28	27	29	30	965	3,390	4,980	4,400	29
27	28	29	29	28	27	29	40	1,000	3,740	4,680	4,250	29
28	29	30	29	29	27	29	42	1,060	4,070	4,920	4,110	29
29	30	e28	29	29	---	28	41	1,060	4,230	4,880	2,360	30
30	28	29	29	29	---	28	40	1,030	4,630	4,970	2,300	30
31	28	---	29	28	---	28	---	942	---	7,200	2,330	---
TOTAL	828	849	906	864	786	870	893	19,919	51,068	151,560	137,740	15,955
MEAN	26.7	28.3	29.2	27.9	28.1	28.1	29.8	643	1,702	4,889	4,443	532
MAX	35	30	31	30	29	30	42	1,410	4,630	7,200	7,410	2,320
MIN	24	25	26	25	27	27	24	33	923	1,980	2,300	27
AC-FT	1,640	1,680	1,800	1,710	1,560	1,730	1,770	39,510	101,300	300,600	273,200	31,650

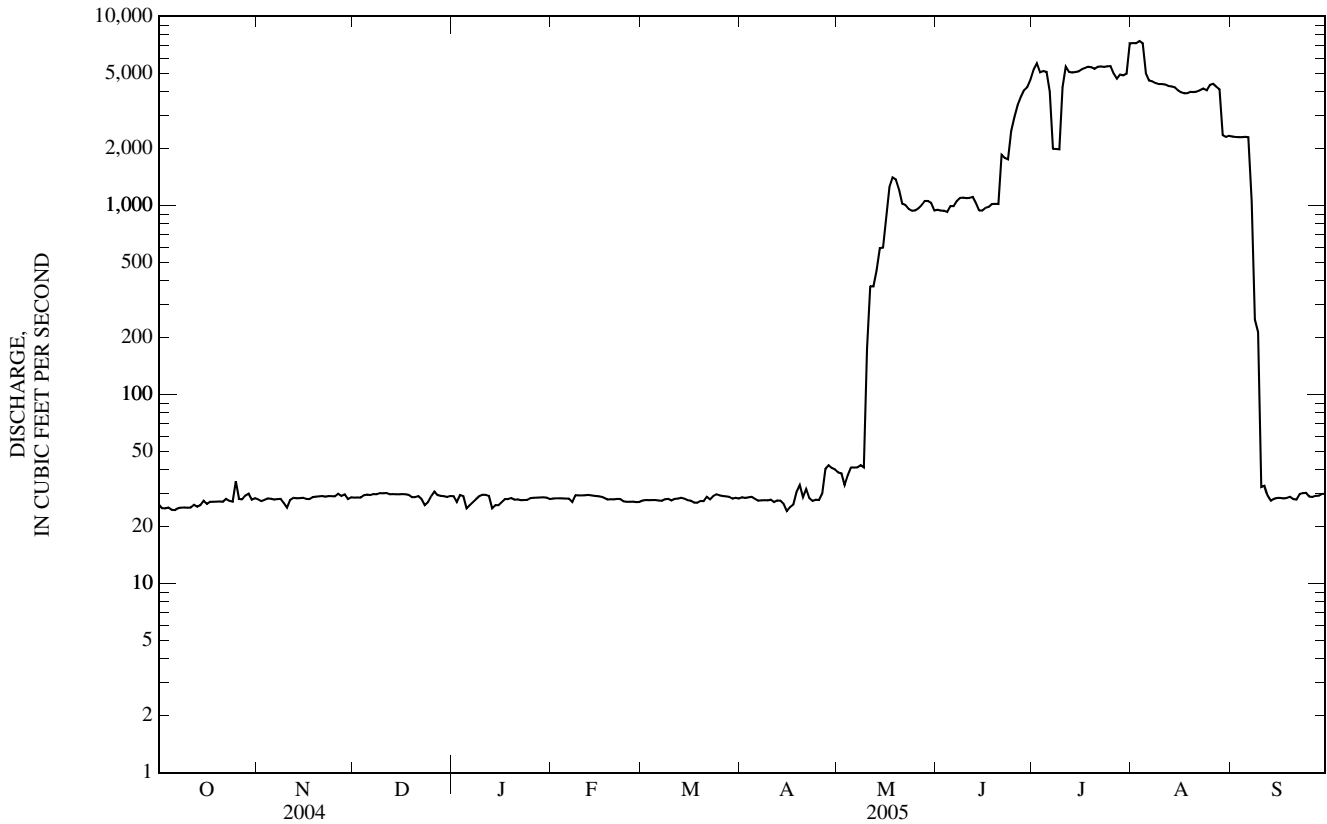
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2005, BY WATER YEAR (WY)

MEAN	64.0	29.9	17.7	16.0	95.4	453	1,099	2,099	2,753	4,909	4,830	2,299
MAX	951	857	324	173	1,054	3,837	3,868	4,688	8,916	8,681	8,923	6,027
(WY)	(1987)	(1987)	(1959)	(1963)	(1984)	(1974)	(1974)	(1984)	(1973)	(1983)	(1983)	(1983)
MIN	1.51	1.09	1.00	1.30	1.33	1.58	24.9	15.4	66.1	3,104	2,428	30.1
(WY)	(1992)	(1991)	(1991)	(1992)	(1990)	(1990)	(2004)	(1990)	(1962)	(1962)	(2002)	(2003)

06652800 NORTH PLATTE RIVER BELOW GLENDON RESERVOIR, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1958 - 2005	
ANNUAL TOTAL	313,094		382,238		--	
ANNUAL MEAN	855		1,047		1,566	
HIGHEST ANNUAL MEAN	--		--		3,126 1984	
LOWEST ANNUAL MEAN	--		--		855 2004	
HIGHEST DAILY MEAN	7,470	Aug 2	7,410	Aug 3	10,300	Jun 30, 1984
LOWEST DAILY MEAN	24	Jan 4	24	Oct 6, Apr 15	0.41	Oct 17, 1977
ANNUAL SEVEN-DAY MINIMUM	25	Feb 9	25	Oct 2	0.64	Dec 20, 1990
MAXIMUM PEAK FLOW	--		7,620	Aug 3	10,300	Jun 29, 1984
MAXIMUM PEAK STAGE	--		9.98	Aug 3	11.16	Jun 29, 1984
ANNUAL RUNOFF (AC-FT)	621,000		758,200		1,135,000	
10 PERCENT EXCEEDS	4,250		4,390		4,920	
50 PERCENT EXCEEDS	28		29		43	
90 PERCENT EXCEEDS	25		27		2.2	

e Estimated.



06657000 NORTH PLATTE RIVER BELOW WHALEN DIVERSION DAM, WY

LOCATION.--Lat 42°14'28", long 104°37'39" (NAD 27), in NW¼ NE¼ SW¼ sec.11, T.26 N., R.65 W., Goshen County, Hydrologic Unit 10180009, on left bank 0.7 mi downstream from Whalen diversion dam, and 6.0 mi northwest of Fort Laramie.

DRAINAGE AREA.--16,237 mi², of which 1,219 mi² probably is noncontributing.

PERIOD OF RECORD.--May 1909 to current year. Monthly discharge only, prior to January 1915, published in WSP 1910. Prior to April 16, 1938, published as "below Whalen", and April 16, 1938, to September 30, 1974, as "at recorder station, below Whalen".

REVISED RECORDS.--WSP 1310: 1924. WDR WY-76-1: Drainage area.

GAGE.--Water-stage recorder and sheet piling weir since April 25, 1994. Elevation of gage is 4,280 ft above NGVD of 1929, from topographic map. Prior to April 16, 1938, nonrecording gages at Whalen Diversion Dam and canals 0.7 mi upstream from station at different datums. April 16, 1938, to November 17, 1955, water-stage recorder at site 1.9 mi downstream from station, and November 18, 1955, to April 25, 1994, at site 1.8 mi downstream from station at different datum. Bureau of Reclamation data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Whalen Diversion Dam 0.7 mi upstream from station. 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.

COOPERATION.--Nine discharge measurements provided by the Wyoming State Engineer's Office and six discharge measurements provided by the Bureau of Reclamation.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	8.9	e10	e8.6	12	14	8.7	9.0	11	1,980	1,530	961
2	17	8.6	11	e8.6	12	15	8.4	8.2	11	2,120	1,580	848
3	14	8.3	11	e8.6	12	15	8.3	7.6	11	1,920	1,580	788
4	12	8.1	11	e8.0	12	16	8.6	6.4	12	1,790	1,570	709
5	12	8.2	10	e7.2	e10	16	9.4	6.6	11	1,700	1,480	351
6	12	7.9	10	e6.6	e9.4	16	8.9	6.4	11	1,680	1,400	75
7	11	7.8	9.2	e8.0	e11	16	8.0	6.3	12	1,730	1,390	46
8	11	8.2	9.5	e10	14	16	7.7	6.4	22	1,890	1,410	112
9	10	8.4	8.7	e11	12	15	7.8	6.2	38	1,970	1,440	545
10	9.8	9.2	8.3	13	12	14	7.4	6.0	39	2,000	1,440	659
11	9.4	9.3	e8.6	12	12	14	8.1	6.1	41	2,020	1,430	278
12	9.2	8.7	8.3	12	13	13	7.5	6.8	57	1,890	1,380	89
13	9.1	8.4	7.8	e8.0	13	14	7.0	6.6	56	1,740	1,330	68
14	9.0	8.4	8.7	e7.6	12	14	6.6	6.3	22	1,740	1,290	55
15	10	8.4	9.1	e7.6	12	14	6.5	9.3	15	1,740	1,180	46
16	10	8.4	9.0	e7.4	12	14	6.3	44	13	1,780	1,120	41
17	9.1	8.4	9.5	e7.6	12	14	6.6	49	14	1,800	1,120	36
18	8.9	8.4	9.7	e8.6	12	13	6.7	218	11	1,850	1,130	32
19	8.4	8.6	9.7	e9.4	12	12	7.1	236	11	1,820	1,130	29
20	8.1	9.0	9.5	e10	13	12	8.9	202	11	1,830	1,090	26
21	7.8	9.5	e9.0	e11	13	13	14	72	32	1,830	1,080	24
22	8.9	9.4	e8.2	11	12	13	11	41	28	1,870	1,100	23
23	9.8	8.7	e7.6	10	13	11	8.3	30	28	1,870	1,160	21
24	8.9	9.3	e7.0	10	12	13	7.7	19	157	1,880	1,190	21
25	8.0	9.2	e8.2	11	13	12	7.5	16	506	1,940	1,230	20
26	7.4	9.2	e10	11	13	11	7.2	16	1,040	1,910	1,210	19
27	7.1	e9.0	11	11	14	11	7.7	13	1,160	1,660	1,090	17
28	6.7	e9.0	11	e11	14	10	11	12	1,450	1,660	1,080	15
29	7.3	e9.0	10	12	---	9.6	12	12	1,710	1,600	1,060	14
30	8.0	e9.0	e10	12	---	9.7	10	13	1,770	1,600	1,100	14
31	8.0	---	e9.0	12	---	9.2	---	11	---	1,580	1,090	---
TOTAL	323.9	260.9	289.6	301.8	343.4	409.5	250.9	1,108.2	8,310	56,390	39,410	5,982
MEAN	10.4	8.70	9.34	9.74	12.3	13.2	8.36	35.7	277	1,819	1,271	199
MAX	36	9.5	11	13	14	16	14	236	1,770	2,120	1,580	961
MIN	6.7	7.8	7.0	6.6	9.4	9.2	6.3	6.0	11	1,580	1,060	14
AC-FT	642	517	574	599	681	812	498	2,200	16,480	111,800	78,170	11,870

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 2005, BY WATER YEAR (WY)*

MEAN	178	90.2	58.4	52.1	76.2	257	483	1,196	1,915	1,851	1,376	659
MAX	1,389	1,130	405	494	604	3,885	5,410	6,175	14,360	8,330	5,465	3,976
(WY)	(1918)	(1987)	(1930)	(1927)	(1930)	(1974)	(1924)	(1924)	(1917)	(1917)	(1983)	(1983)
MIN	4.20	0.71	0.30	0.24	0.01	0.00	2.83	13.6	126	559	86.6	40.5
(WY)	(1967)	(1967)	(1967)	(1962)	(1967)	(1976)	(1954)	(1990)	(1982)	(1934)	(1934)	(2004)

06657000 NORTH PLATTE RIVER BELOW WHALEN DIVERSION DAM, WY—Continued

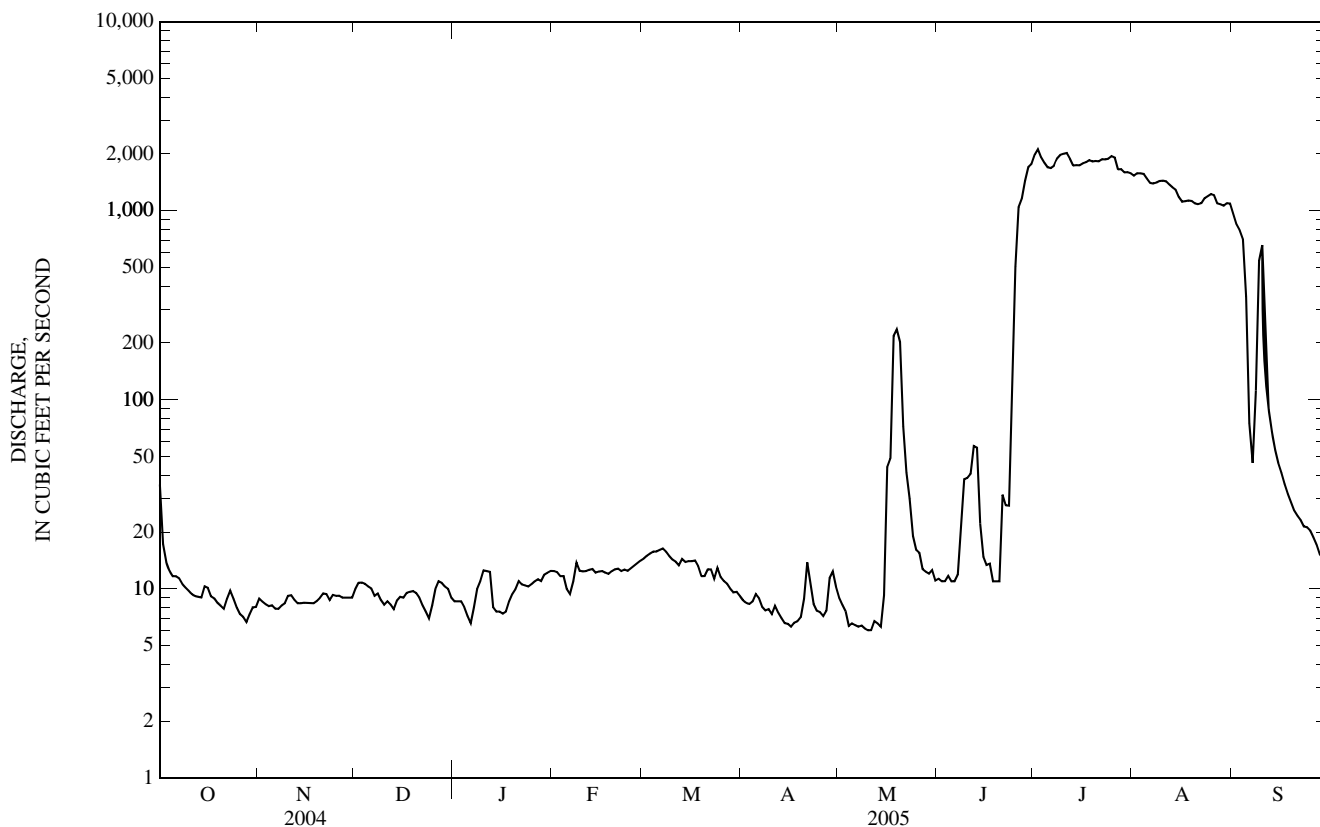
SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1917 - 2005*	
ANNUAL TOTAL	98,918.4		113,380.2		--	
ANNUAL MEAN	270		311		686	
HIGHEST ANNUAL MEAN	--		--		2,992	1917
LOWEST ANNUAL MEAN	--		--		178	1954
HIGHEST DAILY MEAN	2,160	Jul 8	2,120	Jul 2	19,500	Jun 28, 1917
LOWEST DAILY MEAN	1.7	May 11	6.0	May 10	0.00	Many days, several years
ANNUAL SEVEN-DAY MINIMUM	2.4	May 5	6.3	May 5	0.00	Several years
MAXIMUM PEAK FLOW	--		2,270	Jul 25	22,000 ^a	Jun 26, 1955
MAXIMUM PEAK STAGE	--		7.04	Jul 25	9.85 ^b	Jun 26, 1955
ANNUAL RUNOFF (AC-FT)	196,200		224,900		497,100	
10 PERCENT EXCEEDS	1,480		1,550		1,840	
50 PERCENT EXCEEDS	10		12		125	
90 PERCENT EXCEEDS	4.6		7.7		4.0	

* Period of record 1917 not used in computation, monthly and seasonal only.

a From rating curve extended above 4,500 ft³/s on basis of peak-flow measurement of upstream floods.

b Site and datum then in use.

c Estimated.



06659500 LARAMIE RIVER AND PIONEER CANAL NEAR WOODS, WY

LOCATION.-- River: Lat 41°08'17", long 105°58'49" (NAD 27), in NW¼ SE¼ sec.36, T.14 N., R.77 W., Albany County, Hydrologic Unit 10180010, on left bank 100 ft upstream from diversion dam for Pioneer Canal, 2.2 mi downstream from Fox Creek, 2.5 mi northeast of Woods, and 23 mi southwest of Laramie.

Canal: Lat 41°08'21", long 105°58'45" (NAD 27), in SE¼ NE¼ sec.36, T.14 N., R.77 W., Albany County, on left bank 400 ft downstream from headgate.

DRAINAGE AREA.--434 mi².

PERIOD OF RECORD.--April 1912 to September 1924, October 1926 to September 1927, October 1931 to current year (no winter records for river since 1972; no winter records for canal 1972 to 1996). Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1310: 1918-20, 1922, 1924. WSP 1710: Drainage area. WDR WY-84-1: 1983.

GAGE.-- River: Water-stage recorder and concrete control. Elevation of gage is 7,388.99 ft above NGVD of 1929. April 16 to November 15, 1912, nonrecording gage and November 16, 1912 to September 22, 1915, water-stage recorder 90 ft downstream from station between dam crest and canal headgates at datum 1.00 ft higher. September 23, 1915 to September 30, 1924, April 19 to September 30, 1927, and April 11, 1932 to September 30, 1935, water-stage recorder at site 50 ft downstream from station at datum 1.00 ft higher. October 1, 1935 to July 13, 1950, water-stage recorder at site 50 ft downstream from station at present datum.

Canal: Water-stage recorder and Parshall flume. Elevation of gage is 7,390 ft above NGVD of 1929, from topographic map. April 16, 1912 to April 10, 1923, nonrecording gage; April 11, 1923 to September 30, 1924, and April 19 to June 9, 1927, water-stage recorder; June 10 to September 30, 1927, and April 11, 1932 to May 8, 1938, nonrecording gage; May 9, 1938 to April 26, 1966, water-stage recorder at site 1.5 mi downstream from station at different datums. April 27, 1966 to May 8, 1967, at present site, at datum 0.06 ft lower. The City of Laramie pipeline diversion, installed in 2002, is immediately adjacent and merges with Pioneer Canal just below the flume.

REMARKS.--Records fair. Pioneer Canal diverts from left bank of river at diversion dam 100 ft downstream from station for irrigation in vicinity of Laramie. Records show combined flow of river and canal. Three small reservoirs upstream from station in Wyoming, total capacity, about 600 acre-ft for irrigation, stock water, and domestic use. Diversions for irrigation of about 5,200 acres upstream from station. Transbasin diversions upstream from station to Cache la Poudre River and tributaries. National Weather Service, in cooperation with Wyoming State Engineer's Office, has data collection platform with satellite telemetry at station.

COOPERATION.--Station operated and record provided by the Wyoming State Engineer's Office; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e49	135	782	337	85	52
2	---	---	---	---	---	---	e59	141	941	304	95	51
3	---	---	---	---	---	---	66	148	1,180	286	101	49
4	---	---	---	---	---	---	80	154	1,570	275	97	48
5	---	---	---	---	---	---	89	171	1,630	246	129	48
6	---	---	---	---	---	---	75	202	1,920	220	147	46
7	---	---	---	---	---	---	83	255	1,650	198	129	45
8	---	---	---	---	---	---	114	285	1,410	187	120	45
9	---	---	---	---	---	---	119	272	1,240	172	116	43
10	---	---	---	---	---	---	114	276	1,240	158	118	47
11	---	---	---	---	---	---	89	369	1,190	149	132	48
12	---	---	---	---	---	---	84	422	999	133	125	46
13	---	---	---	---	---	---	91	416	924	122	115	42
14	---	---	---	---	---	---	110	385	791	119	114	43
15	---	---	---	---	---	---	134	372	755	115	116	45
16	---	---	---	---	---	---	140	420	780	110	104	45
17	---	---	---	---	---	---	155	502	820	106	101	42
18	---	---	---	---	---	---	184	533	839	97	105	39
19	---	---	---	---	---	---	201	606	900	89	104	38
20	---	---	---	---	---	---	212	801	917	82	94	37
21	---	---	---	---	---	---	202	1,000	907	77	87	37
22	---	---	---	---	---	---	178	1,180	843	70	88	43
23	---	---	---	---	---	---	151	1,260	821	64	89	53
24	---	---	---	---	---	---	152	1,280	727	71	85	48
25	---	---	---	---	---	---	169	1,240	636	90	79	45
26	---	---	---	---	---	---	156	1,090	558	119	77	41
27	---	---	---	---	---	---	141	929	528	102	73	38
28	---	---	---	---	---	---	155	812	450	84	64	44
29	---	---	---	---	---	---	160	756	421	69	60	67
30	---	---	---	---	---	---	155	878	412	73	57	e56
31	---	---	---	---	---	---	---	958	---	79	54	---
TOTAL	---	---	---	---	---	---	3,867	18,248	28,781	4,403	3,060	1,371
MEAN	---	---	---	---	---	---	129	589	959	142	98.7	45.7
MAX	---	---	---	---	---	---	212	1,280	1,920	337	147	67
MIN	---	---	---	---	---	---	49	135	412	64	54	37
AC-FT	---	---	---	---	---	---	7,670	36,190	57,090	8,730	6,070	2,720

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 2005, BY WATER YEAR (WY)*

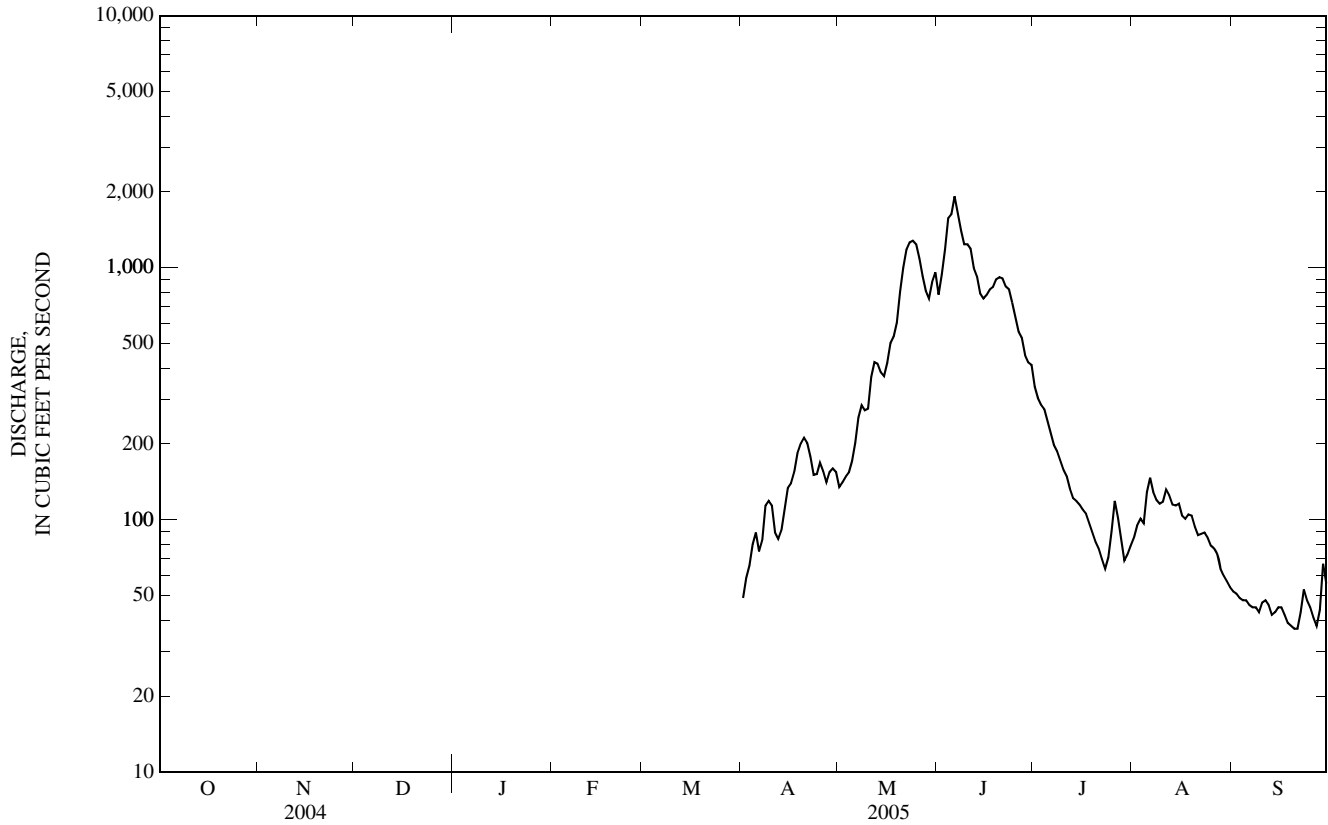
MEAN	63.4	51.9	42.0	38.5	40.1	51.0	126	546	782	195	78.6	57.7
MAX	160	94.9	77.4	57.1	74.5	84.9	355	1,131	2,441	1,019	194	190
(WY)	(1962)	(1962)	(1966)	(1966)	(1962)	(1966)	(1962)	(1984)	(1983)	(1983)	(1983)	(1997)
MIN	33.7	32.0	28.3	24.3	24.6	27.7	51.7	63.5	55.8	19.6	18.9	15.1
(WY)	(1953)	(1934)	(1961)	(1961)	(1955)	(1964)	(1995)	(2002)	(2002)	(2002)	(2002)	(1934)

06659500 LARAMIE RIVER AND PIONEER CANAL NEAR WOODS, WY—Continued

SUMMARY STATISTICS

	FOR 2005 WATER YEAR*		WATER YEARS 1912 - 2005*	
ANNUAL MEAN	-		170	
HIGHEST ANNUAL MEAN	--		319	1957
LOWEST ANNUAL MEAN	--		64.9	1934
HIGHEST DAILY MEAN	1,920	Jun 6	3,320	Jun 14, 1957
LOWEST DAILY MEAN	37	Sep 20,21	0.00	May 1, 1912
MAXIMUM PEAK FLOW	2,200	Jun 6	5,060	Jun 10, 1923
ANNUAL RUNOFF (AC-FT)	--		123,100	

* For period of operation.
e Estimated.



06659580 SAND CREEK AT COLORADO-WYOMING STATE LINE

LOCATION.--Lat 40°59'37", long 105°45'35" (NAD 27), in NW¹/₄ NW¹/₄ SW¹/₄ sec.24, T.12 N., R.75 W., Larimer County, CO, Hydrologic Unit 10180010, on right bank 1,200 ft south of Colorado-Wyoming State line and 17 mi southwest of Tie Siding, WY.

DRAINAGE AREA.--29.2 mi².

PERIOD OF RECORD.--October 1968 to current year (no winter records since 1971).

GAGE.--Water-stage recorder. Elevation of gage is 7,580 ft above NGVD of 1929, from topographic map. Prior to July 19, 1977, gage at site 700 ft upstream from station at different datum. State of Colorado data collection platform with satellite telemetry at station.

REMARKS.--Records good. Natural flow affected by diversion upstream from station to Cache la Poudre River basin through Wilson Supply ditch. Water imported upstream from station from Deadman Creek in Laramie River basin is rediverted through Wilson Supply ditch, but is wasted down Sand Creek at times. Diversions for irrigation of about 170 acres upstream from station.

COOPERATION.--Station operated and record provided by the Wyoming State Engineer's Office; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	4.0	13	37	15	3.4	0.93
2	---	---	---	---	---	---	4.0	13	40	13	5.6	0.89
3	---	---	---	---	---	---	5.2	15	52	11	6.2	0.89
4	---	---	---	---	---	---	6.8	15	66	11	6.3	0.90
5	---	---	---	---	---	---	6.9	15	74	10	5.6	0.88
6	---	---	---	---	---	---	5.4	17	100	9.2	5.1	0.95
7	---	---	---	---	---	---	6.6	19	114	8.7	4.1	1.0
8	---	---	---	---	---	---	8.0	20	86	8.5	3.2	1.0
9	---	---	---	---	---	---	7.2	20	75	7.8	2.9	0.98
10	---	---	---	---	---	---	7.1	21	78	7.4	3.0	0.95
11	---	---	---	---	---	---	5.9	26	97	6.9	3.4	0.91
12	---	---	---	---	---	---	5.6	29	80	6.5	3.3	0.81
13	---	---	---	---	---	---	6.9	28	72	6.1	3.5	0.76
14	---	---	---	---	---	---	10	26	59	5.6	3.8	0.76
15	---	---	---	---	---	---	12	25	51	7.1	3.3	0.91
16	---	---	---	---	---	---	12	26	47	5.6	3.1	0.97
17	---	---	---	---	---	---	13	27	46	5.3	2.9	0.97
18	---	---	---	---	---	---	15	28	39	5.4	2.8	0.97
19	---	---	---	---	---	---	16	36	32	5.0	2.5	0.94
20	---	---	---	---	---	---	17	49	27	4.2	2.2	0.94
21	---	---	---	---	---	---	18	45	25	3.7	2.0	0.99
22	---	---	---	---	---	---	17	58	24	4.8	2.0	1.0
23	---	---	---	---	---	---	16	59	22	5.8	1.8	1.1
24	---	---	---	---	---	---	16	55	21	5.4	2.1	1.3
25	---	---	---	---	---	---	17	53	20	7.2	1.8	1.3
26	---	---	---	---	---	---	16	49	19	8.0	1.7	1.2
27	---	---	---	---	---	---	15	44	18	7.1	1.5	1.2
28	---	---	---	---	---	---	17	43	17	5.6	1.3	1.4
29	---	---	---	---	---	---	17	33	16	4.7	1.1	1.8
30	---	---	---	---	---	---	16	38	16	3.6	1.00	1.9
31	---	---	---	---	---	---	---	49	---	3.3	0.94	---
TOTAL	---	---	---	---	---	---	339.6	994	1,470	218.5	93.44	31.50
MEAN	---	---	---	---	---	---	11.3	32.1	49.0	7.05	3.01	1.05
MAX	---	---	---	---	---	---	18	59	114	15	6.3	1.9
MIN	---	---	---	---	---	---	4.0	13	16	3.3	0.94	0.76
AC-FT	---	---	---	---	---	---	674	1,970	2,920	433	185	62

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2005, BY WATER YEAR (WY)*

MEAN	3.13	3.34	2.66	2.27	2.46	2.73	8.71	37.9	47.7	8.85	2.29	1.73
MAX	3.68	4.41	2.97	2.53	3.19	2.85	18.7	95.0	234	72.6	8.58	6.85
(WY)	(1971)	(1971)	(1971)	(1971)	(1971)	(1971)	(1986)	(1984)	(1983)	(1977)	(1983)	(1997)
MIN	2.75	2.47	2.39	1.83	1.84	2.65	2.90	5.63	2.32	0.03	0.00	0.00
(WY)	(1970)	(1969)	(1970)	(1970)	(1969)	(1969)	(1995)	(2002)	(2002)	(2002)	(2002)	(2002)

06659580 SAND CREEK AT COLORADO-WYOMING STATE LINE—Continued

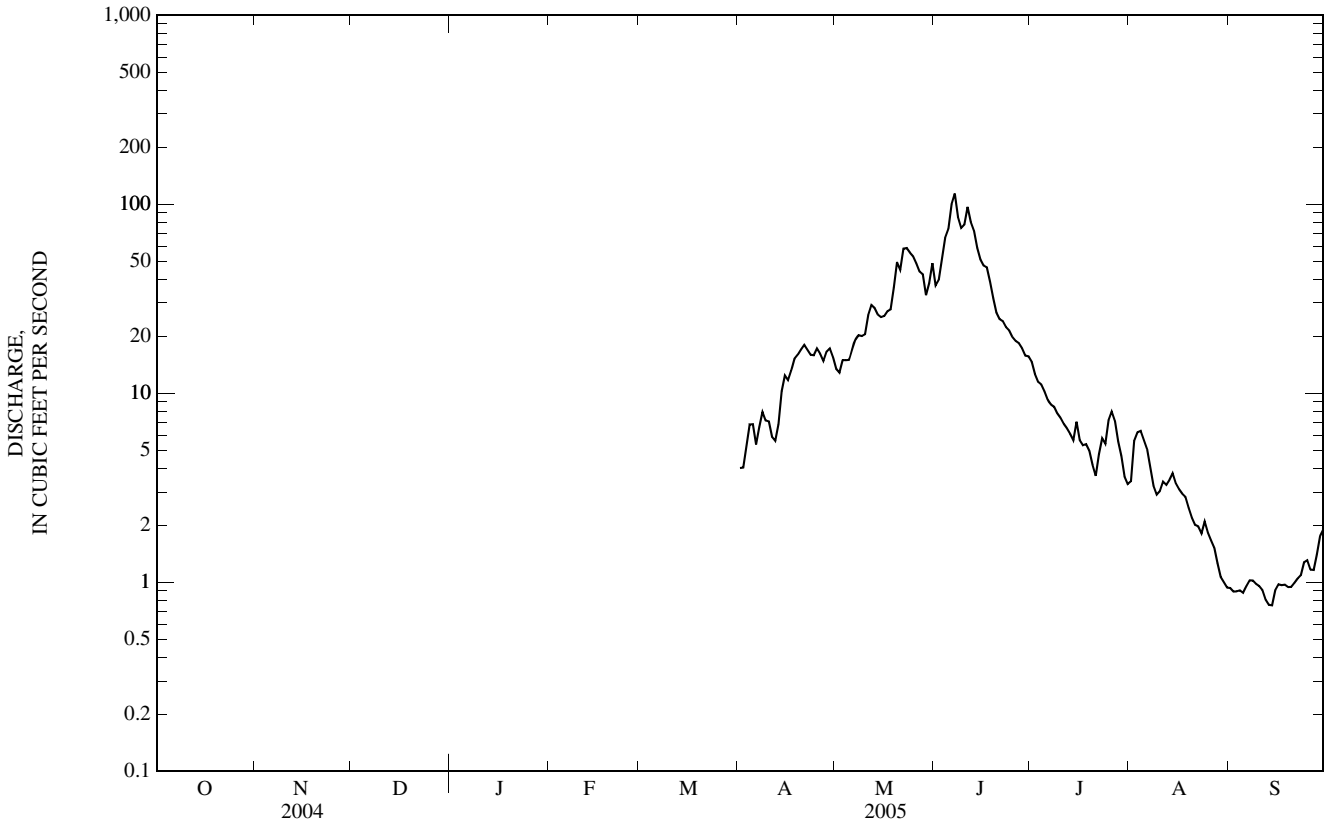
SUMMARY STATISTICS

	FOR 2005 WATER YEAR*		WATER YEARS 1969 - 2005*	
HIGHEST DAILY MEAN	114	Jun 7	12.7	
LOWEST DAILY MEAN	0.76	Sep 13,14	0.00	Jul 13, 2002
MAXIMUM PEAK FLOW	157	Jun 7	6,710 ^a	Jul 19, 1977
MAXIMUM PEAK STAGE	1.86	Jun 7	6.65 ^b	Jul 19, 1977

* For period of operation.

a From slope-area measurement of peak flow.

b From floodmarks.



PLATTE RIVER BASIN

06661000 LITTLE LARAMIE RIVER NEAR FILMORE, WY

LOCATION.--Lat 41°17'42", long 106°02'03" (NAD 27), in SE¹/₄ NE¹/₄ SE¹/₄ sec.4, T.15 N., R.77 W., Albany County, Hydrologic Unit 10180010, on right bank 40 ft downstream from State Highway 130, 1.2 mi west of Filmore, and 4.4 mi downstream from North Fork.

DRAINAGE AREA.--157 mi². Area at site used prior to September 8, 1976, 156 mi².

PERIOD OF RECORD.--July 1902 to September 1903 (published as "near Hatton"), May 1911 to November 1926, October 1932 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1310: 1903, 1914, 1922-26. WSP 1440: 1902. WSP 1730: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,610 ft above NGVD of 1929, from topographic map. Prior to September 16, 1938, nonrecording gages, and September 16, 1938 to September 7, 1976, water-stage recorder, at sites 0.7 mi upstream from station at different datums.

REMARKS.--Records fair. At least ten small reservoirs upstream from station, combined capacity, more than 160 acre-ft, for irrigation, stock water, recreation, and domestic use. Diversions upstream from station for irrigation of about 11,020 acres, of which about 20 acres are downstream from station.

COOPERATION.--Station operated and record provided by the Wyoming State Engineer's Office; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	26	42	382	173	26	17
2	---	---	---	---	---	---	24	44	405	160	25	17
3	---	---	---	---	---	---	26	56	359	155	25	17
4	---	---	---	---	---	---	27	72	539	152	28	18
5	---	---	---	---	---	---	26	86	446	137	28	18
6	---	---	---	---	---	---	23	68	384	120	25	17
7	---	---	---	---	---	---	24	76	364	111	22	17
8	---	---	---	---	---	---	27	101	337	103	22	18
9	---	---	---	---	---	---	27	74	336	98	22	18
10	---	---	---	---	---	---	26	67	363	92	26	18
11	---	---	---	---	---	---	24	160	335	85	33	18
12	---	---	---	---	---	---	27	199	287	76	26	17
13	---	---	---	---	---	---	26	180	264	71	24	17
14	---	---	---	---	---	---	24	116	242	67	27	18
15	---	---	---	---	---	---	25	100	268	67	23	19
16	---	---	---	---	---	---	24	108	297	59	22	19
17	---	---	---	---	---	---	23	134	330	52	22	18
18	---	---	---	---	---	---	25	139	370	51	22	17
19	---	---	---	---	---	---	29	186	399	46	21	17
20	---	---	---	---	---	---	37	311	380	41	19	18
21	---	---	---	---	---	---	37	417	357	40	19	18
22	---	---	---	---	---	---	32	556	355	36	19	23
23	---	---	---	---	---	---	28	605	406	33	19	23
24	---	---	---	---	---	---	27	663	358	34	19	22
25	---	---	---	---	---	---	31	666	308	40	18	22
26	---	---	---	---	---	---	30	569	272	42	18	20
27	---	---	---	---	---	---	30	509	249	39	17	20
28	---	---	---	---	---	---	40	457	218	31	15	21
29	---	---	---	---	---	---	41	440	218	27	15	22
30	---	---	---	---	---	---	45	468	197	26	13	21
31	---	---	---	---	---	---	---	503	---	26	11	---
TOTAL	---	---	---	---	---	---	861	8,172	10,025	2,290	671	565
MEAN	---	---	---	---	---	---	28.7	264	334	73.9	21.6	18.8
MAX	---	---	---	---	---	---	45	666	539	173	33	23
MIN	---	---	---	---	---	---	23	42	197	26	11	17
AC-FT	---	---	---	---	---	---	1,710	16,210	19,880	4,540	1,330	1,120

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 2005, BY WATER YEAR (WY)*

MEAN	31.1	28.2	23.9	19.6	20.5	26.4	52.6	233	518	155	49.4	28.7
MAX	77.2	50.0	40.0	35.0	53.8	47.9	136	502	1,217	572	126	74.7
(WY)	(1913)	(1913)	(1913)	(1913)	(1962)	(1971)	(1924)	(1926)	(1903)	(1917)	(1984)	(1912)
MIN	13.2	10.0	10.0	8.76	8.00	9.97	17.6	69.5	48.3	17.9	11.0	8.80
(WY)	(1936)	(1920)	(1934)	(1955)	(1955)	(1955)	(1955)	(1968)	(1934)	(1934)	(2002)	(1913)

06661000 LITTLE LARAMIE RIVER NEAR FILMORE, WY—Continued

SUMMARY STATISTICS

HIGHEST DAILY MEAN
 LOWEST DAILY MEAN
 MAXIMUM PEAK FLOW
 MAXIMUM PEAK STAGE

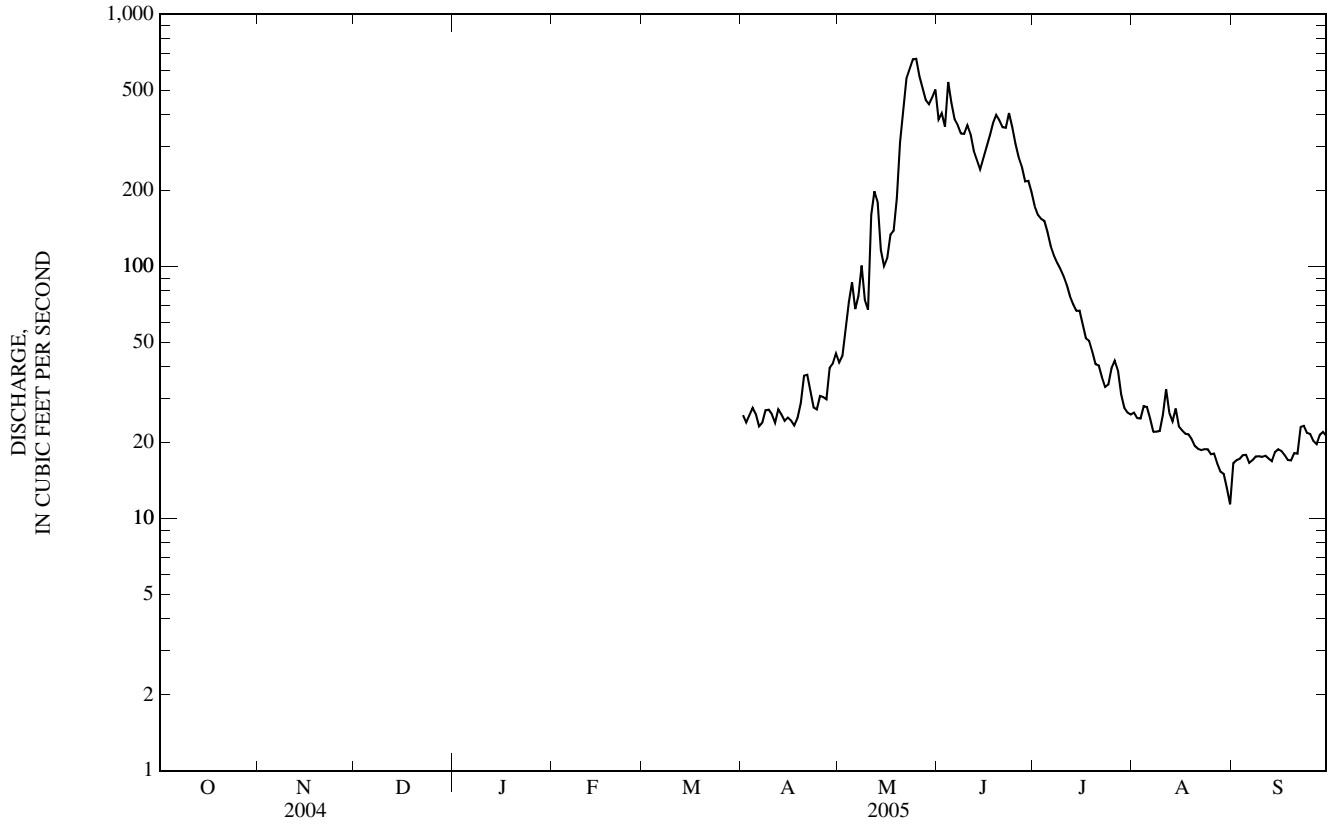
FOR 2005 WATER YEAR*

666 May 25
 11 Aug 31
 766 May 25
 3.58 May 25

WATER YEARS 1903 - 2005*

2,400. Jun 1, 1914
 1.0 Sep 17, 1913
 3,450 Jun 10, 1965
 5.33 Jun 10, 1965

* For period of operation.



PLATTE RIVER BASIN

06661585 LARAMIE RIVER NEAR BOSLER, WY

LOCATION.--Lat 41°33'17", long 105°40'58" (NAD 27), in NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.10, T.18 N., R.74 W., Albany County, Hydrologic Unit 10180010, on left bank 50 ft upstream from bridge on U.S. Highways 30 and 287, 0.2 mi northwest of Bosler Junction, 1.7 mi south of Bosler, and 2.0 mi downstream from Soil Bank Boughton Canal diversion dam.

DRAINAGE AREA.--1,790 mi², of which 283 mi² probably is noncontributing.

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

GAGE.--Water-stage recorder. Elevation of gage is 7,030 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow of stream affected by transbasin diversions, storage reservoirs, diversion upstream from station for irrigation of about 54,700 acres, of which about 2,300 acres are downstream from station, and return flow from irrigated areas.

COOPERATION.--Station operated and record provided by the Wyoming State Engineer's Office; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	e79	e33	e56	e50	e61	72	38	712	348	39	17
2	141	e65	e35	e52	e48	e62	72	50	700	311	37	17
3	126	e71	e36	e49	e50	e64	68	65	781	297	36	16
4	135	e95	e41	e46	e54	e67	66	71	e860	268	41	15
5	148	109	e47	e42	e58	e71	64	78	e900	247	61	14
6	141	108	e49	e38	e56	e77	64	82	e1,100	227	55	13
7	133	114	e46	e36	e53	e84	65	80	e1,560	220	50	13
8	134	113	e49	e38	e48	e84	64	75	2,030	190	45	12
9	121	113	e52	e41	e47	e90	63	68	2,030	157	51	13
10	111	112	e56	e43	e50	e81	58	65	1,930	138	53	12
11	105	e110	e65	e42	e54	e85	63	73	1,680	125	50	11
12	100	e108	e67	e41	e56	e90	74	87	1,550	118	48	10
13	102	e108	e64	e39	e58	e78	76	120	1,440	112	47	9.6
14	103	e109	e62	e39	e55	e68	69	157	1,370	102	52	9.8
15	97	e110	e64	e40	e48	e62	57	143	1,340	109	58	9.8
16	97	e110	e63	e43	e44	e66	51	115	1,230	132	54	15
17	100	e110	e60	e45	e46	e72	42	80	1,110	92	53	16
18	96	e105	e59	e50	e51	63	36	62	986	80	46	16
19	95	e96	e66	e57	e62	80	35	55	853	69	41	16
20	94	e87	e69	e66	e67	81	41	67	787	59	38	16
21	90	e50	e66	e72	e67	82	47	111	750	52	36	16
22	89	e56	e53	e72	e60	79	62	266	732	47	33	17
23	86	e80	e41	e74	e58	82	71	379	741	44	34	21
24	87	e87	e41	e71	e61	81	71	463	753	41	30	22
25	88	e101	e46	e68	e65	77	59	556	788	44	26	22
26	90	e101	e51	e67	e67	78	39	650	803	42	25	23
27	93	e61	e57	e67	e66	75	31	744	743	41	22	25
28	95	e50	e62	e67	e65	74	28	e804	600	38	22	25
29	91	e39	e61	e63	---	73	33	e850	509	41	20	26
30	91	e33	e59	e62	---	72	40	821	422	44	18	25
31	85	---	e61	e56	---	73	---	805	---	41	17	---
TOTAL	3,278	2,690	1,681	1,642	1,564	2,332	1,681	8,080	31,790	3,876	1,238	493.2
MEAN	106	89.7	54.2	53.0	55.9	75.2	56.0	261	1,060	125	39.9	16.4
MAX	148	114	69	74	67	90	76	850	2,030	348	61	26
MIN	85	33	33	36	44	61	28	38	422	38	17	9.6
AC-FT	6,500	5,340	3,330	3,260	3,100	4,630	3,330	16,030	63,060	7,690	2,460	978

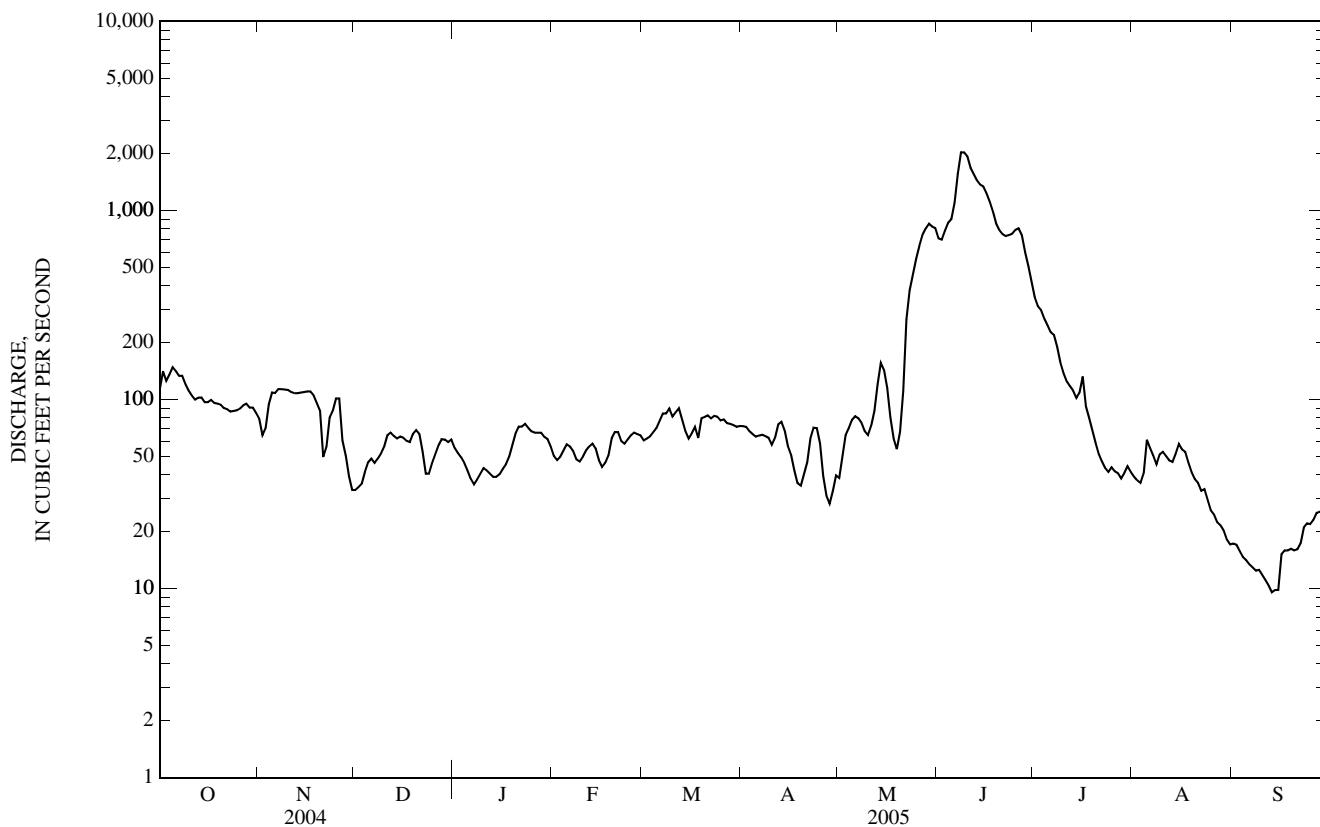
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2005, BY WATER YEAR (WY)

MEAN	55.7	72.2	54.3	45.5	54.8	104	141	264	681	228	72.4	29.7
MAX	196	155	101	92.7	120	209	531	1,198	2,512	1,529	428	140
(WY)	(1985)	(1987)	(1984)	(1986)	(1986)	(1986)	(1984)	(1984)	(1983)	(1983)	(1984)	(1984)
MIN	3.26	7.37	8.09	18.8	26.2	38.7	10.3	8.74	4.20	0.02	0.00	0.00
(WY)	(1993)	(1995)	(1995)	(1991)	(2002)	(2002)	(1995)	(2002)	(2002)	(2002)	(2002)	(2002)

06661585 LARAMIE RIVER NEAR BOSLER, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1973 - 2005	
ANNUAL TOTAL	23,731		60,345.2		--	
ANNUAL MEAN	64.8		165		150	
HIGHEST ANNUAL MEAN	--		--		475 1983	
LOWEST ANNUAL MEAN	--		--		18.9 2002	
HIGHEST DAILY MEAN	457	Jun 21	2,030	Jun 8,9	4,390	Jun 28, 1983
LOWEST DAILY MEAN	10	May 7-9	9.6	Sep 13	0.00	Some days, some years
ANNUAL SEVEN-DAY MINIMUM	13	May 3	11	Sep 9	0.00	Jul 10, 2002
MAXIMUM PEAK FLOW	--		2,240	Jun 8	4,480 ^a	Jun 11, 1986
MAXIMUM PEAK STAGE	--		6.03	Jun 8	8.40 ^b	Apr 22, 1973
ANNUAL RUNOFF (AC-FT)	47,070		119,700		108,700	
10 PERCENT EXCEEDS	110		481		336	
50 PERCENT EXCEEDS	54		65		61	
90 PERCENT EXCEEDS	26		26		13	

a Gage height, 7.39 ft.
 b Ice jam.
 e Estimated.



06664400 SYBILLE CREEK ABOVE MULE CREEK, NEAR WHEATLAND, WY

LOCATION.--Lat 41°50'39", long 105°13'15" (NAD 27), in NE¹/₄ SW¹/₄ SE¹/₄ sec.27, T.22 N., R.70 W., Platte County, Hydrologic Unit 10180011, on right bank just upstream from bridge on State Highway 34, 900 ft upstream from Mule Creek, 2.9 mi upstream from Bluegrass Creek, and 20 mi southwest of Wheatland.

DRAINAGE AREA.--194 mi².

PERIOD OF RECORD.--April 1974 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 5,340 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except those for discharges greater than 50 ft³/s, which are poor. Seven small diversions upstream from station, combined capacity, about 400 acre-ft, for irrigation. Diversions upstream from station for irrigation of about 2,020 acres, of which about 80 acres are downstream from station.

COOPERATION.--Station operated and record provided by the Wyoming State Engineer's Office; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	2.9	4.4	24	18	4.2	1.5
2	---	---	---	---	---	---	2.8	4.6	22	16	3.1	1.3
3	---	---	---	---	---	---	2.8	4.2	22	15	3.5	1.8
4	---	---	---	---	---	---	3.0	4.3	45	16	5.8	1.8
5	---	---	---	---	---	---	2.9	4.5	102	15	6.7	1.9
6	---	---	---	---	---	---	2.8	4.4	89	14	6.0	1.9
7	---	---	---	---	---	---	2.5	4.7	76	13	5.3	1.9
8	---	---	---	---	---	---	2.9	5.3	61	12	5.0	1.9
9	---	---	---	---	---	---	3.2	5.2	58	11	4.6	1.7
10	---	---	---	---	---	---	3.4	3.7	59	11	4.0	1.7
11	---	---	---	---	---	---	3.1	4.9	57	11	3.2	1.7
12	---	---	---	---	---	---	3.2	6.8	52	10	3.2	1.8
13	---	---	---	---	---	---	3.3	7.6	50	9.6	4.2	1.7
14	---	---	---	---	---	---	2.6	9.3	45	8.7	5.6	1.7
15	---	---	---	---	---	---	3.2	11	41	7.6	5.4	1.7
16	---	---	---	---	---	---	3.1	14	38	7.3	4.0	1.8
17	---	---	---	---	---	---	3.9	14	39	7.3	3.5	1.7
18	---	---	---	---	---	---	3.9	14	34	7.3	3.1	1.7
19	---	---	---	---	---	---	3.1	13	31	5.6	3.1	1.8
20	---	---	---	---	---	---	3.2	12	30	5.9	2.7	1.6
21	---	---	---	---	---	---	3.7	12	28	5.6	2.6	1.6
22	---	---	---	---	---	---	3.8	12	26	3.9	2.6	1.7
23	---	---	---	---	---	---	3.2	11	25	2.9	2.2	1.7
24	---	---	---	---	---	---	3.4	12	25	3.3	2.3	1.7
25	---	---	---	---	---	---	3.9	15	23	3.3	2.3	1.6
26	---	---	---	---	---	---	3.3	18	22	5.1	2.0	1.6
27	---	---	---	---	---	---	3.1	18	21	5.5	1.8	1.5
28	---	---	---	---	---	---	3.5	17	20	5.1	1.7	1.6
29	---	---	---	---	---	---	3.9	17	20	4.3	1.7	1.5
30	---	---	---	---	---	---	3.9	20	19	3.3	1.6	1.7
31	---	---	---	---	---	---	---	25	---	4.5	1.6	---
TOTAL	---	---	---	---	---	---	97.5	328.9	1,204	268.1	108.6	50.8
MEAN	---	---	---	---	---	---	3.25	10.6	40.1	8.65	3.50	1.69
MAX	---	---	---	---	---	---	3.9	25	102	18	6.7	1.9
MIN	---	---	---	---	---	---	2.5	3.7	19	2.9	1.6	1.3
AC-FT	---	---	---	---	---	---	193	652	2,390	532	215	101

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2005, BY WATER YEAR (WY)*

MEAN	4.24	---	---	---	---	7.75	29.4	60.2	41.6	21.7	12.2	5.60
MAX	4.24	---	---	---	---	7.75	201	533	382	193	62.7	23.3
(WY)	(1989)	---	---	---	---	(1987)	(1983)	(1983)	(1983)	(1983)	(1983)	(1983)
MIN	4.24	---	---	---	---	7.75	2.27	3.35	2.67	0.64	0.65	0.65
(WY)	(1989)	---	---	---	---	(1987)	(1977)	(2004)	(1989)	(2002)	(1989)	(2002)

06664400 SYBILLE CREEK ABOVE MULE CREEK, NEAR WHEATLAND, WY—Continued

SUMMARY STATISTICS

FOR 2005 WATER YEAR*

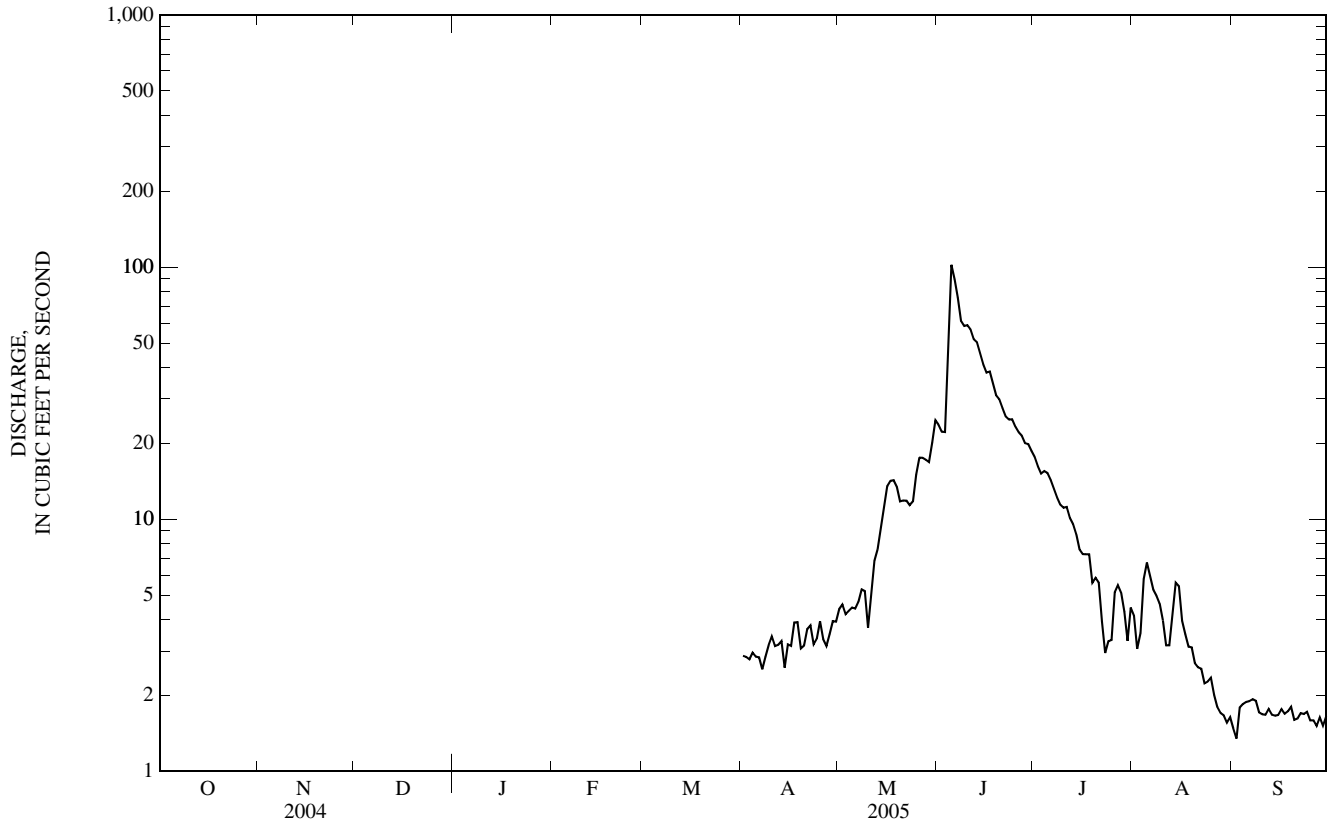
WATER YEARS 1974 - 2005*

HIGHEST DAILY MEAN	102	Jun 5	1,280	Aug 20, 1990
LOWEST DAILY MEAN	1.3	Sep 2	0.09	Sep 5, 2002
MAXIMUM PEAK FLOW	111	Jun 5	19,900 ^a	Aug 20, 1990
MAXIMUM PEAK STAGE	2.62	Jun 5	15.60 ^b	Aug 20, 1990

* For period of operation.

a On basis of slope-area measurement of peak flow at site 1.2 mi upstream.

b From floodmarks.



06665790 SYBILLE CREEK ABOVE CANAL NO. 3, NEAR WHEATLAND, WY

LOCATION.--Lat 41°54'40", long 105°07'36" (NAD 27), in NW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 4, T.22 N., R.69 W., Platte County, Hydrologic Unit 10180011, on right bank 100 ft upstream from State Highway 34, 200 ft downstream from Deadhead Creek, 2.7 mi upstream from Canal No. 3, and 19.7 mi southwest of Wheatland.

PERIOD OF RECORD.--April 1980 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 5,040 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges greater than 150 ft³/s, 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 down Bluegrass Creek for irrigation of land near Wheatland. Diversions for irrigation of about 4,400 acres upstream from station.

COOPERATION.--Station operated and recorded provided by the Wyoming State Engineer's Office; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	4.7	8.4	88	59	54	37
2	---	---	---	---	---	---	4.2	8.4	73	65	52	39
3	---	---	---	---	---	---	4.2	8.2	72	67	62	37
4	---	---	---	---	---	---	4.2	8.2	137	68	75	36
5	---	---	---	---	---	---	4.1	8.5	103	69	82	36
6	---	---	---	---	---	---	4.1	8.8	14	66	74	35
7	---	---	---	---	---	---	4.2	9.3	18	69	72	40
8	---	---	---	---	---	---	4.3	9.4	18	96	70	45
9	---	---	---	---	---	---	4.6	9.5	20	108	67	37
10	---	---	---	---	---	---	5.4	9.6	20	103	69	34
11	---	---	---	---	---	---	5.4	12	20	106	70	33
12	---	---	---	---	---	---	5.0	16	20	100	69	33
13	---	---	---	---	---	---	4.8	17	20	97	71	37
14	---	---	---	---	---	---	4.6	17	20	91	67	47
15	---	---	---	---	---	---	4.7	17	19	94	42	43
16	---	---	---	---	---	---	4.8	18	19	92	39	47
17	---	---	---	---	---	---	4.5	18	19	93	46	31
18	---	---	---	---	---	---	4.9	17	19	92	57	21
19	---	---	---	---	---	---	5.2	17	20	88	54	16
20	---	---	---	---	---	---	5.5	16	26	84	51	13
21	---	---	---	---	---	---	5.9	16	83	85	47	10
22	---	---	---	---	---	---	6.1	16	81	84	50	9.5
23	---	---	---	---	---	---	6.1	16	91	84	71	9.5
24	---	---	---	---	---	---	6.1	20	107	85	63	9.7
25	---	---	---	---	---	---	6.3	39	108	86	43	9.2
26	---	---	---	---	---	---	6.1	45	106	93	40	7.7
27	---	---	---	---	---	---	6.1	93	102	77	37	6.5
28	---	---	---	---	---	---	7.7	111	94	42	37	5.6
29	---	---	---	---	---	---	8.5	114	99	42	36	5.3
30	---	---	---	---	---	---	8.6	151	75	40	33	4.7
31	---	---	---	---	---	---	---	125	---	44	33	---
TOTAL	---	---	---	---	---	---	160.9	999.3	1,711	2,469	1,733	774.7
MEAN	---	---	---	---	---	---	5.36	32.2	57.0	79.6	55.9	25.8
MAX	---	---	---	---	---	---	8.6	151	137	108	82	47
MIN	---	---	---	---	---	---	4.1	8.2	14	40	33	4.7
AC-FT	---	---	---	---	---	---	319	1,980	3,390	4,900	3,440	1,540

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2005, BY WATER YEAR (WY)*

MEAN	29.0	---	---	---	---	25.5	49.9	98.4	77.3	79.4	65.0	32.0
MAX	29.0	---	---	---	---	25.5	260	665	347	191	192	68.3
(WY)	(1989)	---	---	---	---	(1987)	(1983)	(1983)	(1983)	(1983)	(1983)	(1983)
MIN	29.0	---	---	---	---	25.5	5.36	12.5	13.0	12.6	0.07	0.00
(WY)	(1989)	---	---	---	---	(1987)	(2005)	(2002)	(2002)	(2002)	(2002)	(2002)

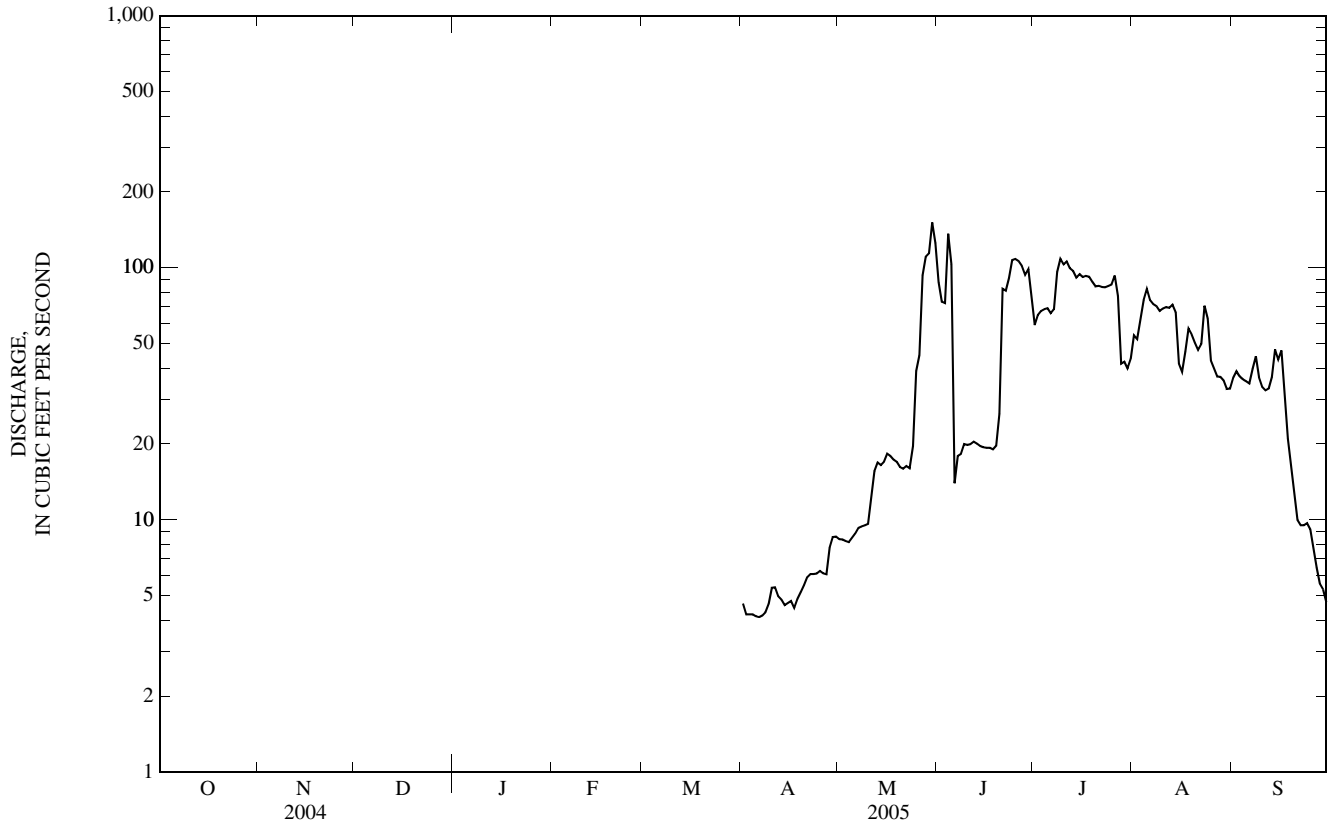
06665790 SYBILLE CREEK ABOVE CANAL NO. 3, NEAR WHEATLAND, WY—Continued

SUMMARY STATISTICS	FOR 2005 WATER YEAR*		WATER YEARS 1980 - 2005*	
HIGHEST DAILY MEAN	151	May 30	1,280	May 22, 1983
LOWEST DAILY MEAN	4.1	Apr 5,6	0.00	Sep 1, 1981
				Aug 12 to
				Sep 30, 2002
MAXIMUM PEAK FLOW	231	May 30	6,900 ^a	Aug 20, 1990
MAXIMUM PEAK STAGE	1.78	May 30	8.35 ^b	Aug 20, 1990

* For period of operation.

a From rating curve extended above 1,300 ft³/s on basis of contracted opening measurement of peak flow.

b From floodmarks.



06669050 WHEATLAND CREEK BELOW WHEATLAND, WY

LOCATION.--Lat 42°05'05", long 104°57'02" (NAD 27), in SW¹/₄ SW¹/₄ NE¹/₄ sec.1, T.24 N., R.68 W., Platte County, Hydrologic Unit 10180011, 50 ft upstream from bridge on U.S. Highway 87, 50 ft downstream from sewage lagoons, and 1.6 mi north of Wheatland city limits.

PERIOD OF RECORD.--Water years 1983 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)
NOV 22...	1210	.45	641	16.4	146	9.3	1,400	6.0	3.0	1.21	.62	.058	1.11
MAR 01...	0950	.37	644	15.9	148	9.3	1,360	5.0	5.0	.61	.51	.061	1.20
MAY 18...	0920	.27	641	12.5	142	9.5	1,460	12.0	13.0	.26	.16	.047	.49
AUG 08...	1130	.41	647	9.4	134	8.6	1,640	24.0	24.5	7.09	.95	.845	2.37

Date	E coli, modif. m-TEC, water, col/100 mL (90902)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)
NOV 22...	500	520
MAR 01...	E22	<4
MAY 18...	E110	110
AUG 08...	820	970

< -- Less than.

E -- Estimated value; for bacteria, estimated values are counts outside the acceptable range (non-ideal colony count).

06670500 LARAMIE RIVER NEAR FORT LARAMIE, WY

LOCATION.--Lat 42°12'02", long 104°32'16" (NAD 27), in NE¹/₄ SE¹/₄ NE¹/₄ sec.28, T.26 N., R.64 W., Goshen County, Hydrologic Unit 10180011, on right bank 600 ft upstream from bridge on county road, 0.6 mi upstream from mouth, and 1.1 mi southwest of Fort Laramie.

DRAINAGE AREA.--4,564 mi², of which 631 mi² probably is non-contributing. Drainage area at mouth, 4,565 mi².

WATER-DISCHARGE RECORDS

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." No diversion to Gering-Fort Laramie Canal since 1956.

REVISED RECORDS.--WSP 1918: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,220 ft above NGVD of 1929, from topographic map. April 4, 1915 to March 31, 1925, nonrecording gage at site 0.1 mi downstream from station at different datum. April 1, 1925 to September 30, 1932, nonrecording gage and October 1, 1932 to August 20, 1935, water-stage recorder at site 4.3 mi upstream from station at different datum. August 21, 1935, to November 2, 1970, water-stage recorder at site 0.3 mi upstream from station at different datum. November 3, 1970 to May 9, 1973, water-stage recorder 0.1 mi downstream from station at different datum. May 10, 1973 to April 5, 1977, water-stage recorder 4.3 mi upstream from station at different datum. U.S. Army Corps of Engineers data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Major regulation began after completion of Grey Rocks Reservoir in 1980. Diversion, at times, to Gering-Fort Laramie Canal, 5.4 mi upstream. Natural flow of stream affected by transbasin diversions, storage reservoirs, ground-water withdrawals and diversions for irrigation of about 176,000 acres upstream from station, and return flow from irrigated areas.

COOPERATION.--Eight discharge measurements provided by the Wyoming State Engineer's Office.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	16	e20	22	22	20	33	43	42	43	47	38
2	28	16	e20	e21	23	20	37	43	41	44	49	36
3	23	16	e20	e21	23	20	39	39	41	44	46	36
4	19	15	e20	21	23	20	43	40	42	46	73	37
5	17	16	19	e21	23	20	47	41	38	48	47	37
6	17	16	20	e21	23	20	48	40	36	47	45	47
7	16	17	18	e20	23	20	49	40	35	45	44	40
8	15	18	22	e20	24	20	45	41	34	44	42	42
9	16	19	22	e20	23	20	44	41	40	43	41	42
10	15	18	e20	e20	22	20	44	42	42	41	41	39
11	15	18	e21	e20	22	20	44	43	43	41	45	35
12	15	18	21	e20	22	20	44	40	48	40	46	33
13	16	18	21	e20	21	21	44	36	48	36	40	31
14	16	19	e21	e19	20	20	44	35	41	36	36	32
15	16	19	e21	e19	20	21	44	35	38	42	35	34
16	16	19	e21	e19	19	21	44	36	37	38	34	33
17	16	18	21	e19	21	21	44	36	37	36	42	32
18	16	18	21	19	20	21	44	35	38	37	44	33
19	16	18	21	19	21	21	45	34	36	43	47	30
20	15	20	21	20	20	21	45	35	35	43	44	36
21	15	22	e22	20	19	21	48	37	36	42	41	32
22	16	20	e22	18	19	21	44	38	40	43	39	35
23	16	19	e23	17	20	21	42	40	38	43	39	40
24	15	20	e23	17	20	23	41	41	42	43	38	41
25	15	20	e23	17	20	23	45	40	44	41	41	43
26	16	20	e23	18	20	22	44	40	44	49	45	43
27	17	20	23	19	20	22	46	39	45	49	45	42
28	18	20	23	21	20	22	50	39	47	47	43	41
29	17	20	23	22	---	22	48	40	50	46	42	42
30	16	e20	23	22	---	22	45	46	45	46	41	41
31	16	---	22	22	---	24	---	45	---	47	39	---
TOTAL	549	553	661	614	593	650	1,324	1,220	1,223	1,333	1,341	1,123
MEAN	17.7	18.4	21.3	19.8	21.2	21.0	44.1	39.4	40.8	43.0	43.3	37.4
MAX	49	22	23	22	24	24	50	46	50	49	73	47
MIN	15	15	18	17	19	20	33	34	34	36	34	30
AC-FT	1,090	1,100	1,310	1,220	1,180	1,290	2,630	2,420	2,430	2,640	2,660	2,230

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2005, BY WATER YEAR (WY)

MEAN	67.1	77.7	83.3	81.7	86.3	100	145	365	292	125	63.6	60.8
MAX	350	388	464	360	418	425	1,056	3,145	2,967	1,925	390	245
(WY)	(1985)	(1985)	(1985)	(1985)	(1984)	(1984)	(1984)	(1973)	(1983)	(1983)	(1984)	(1973)
MIN	13.9	10.3	6.35	6.32	17.3	18.9	37.5	25.3	17.3	23.1	8.73	15.0
(WY)	(1965)	(1981)	(1981)	(1981)	(1981)	(2004)	(1981)	(1963)	(1966)	(1966)	(1975)	(1964)

PLATTE RIVER BASIN

06670500 LARAMIE RIVER NEAR FORT LARAMIE, WY—Continued

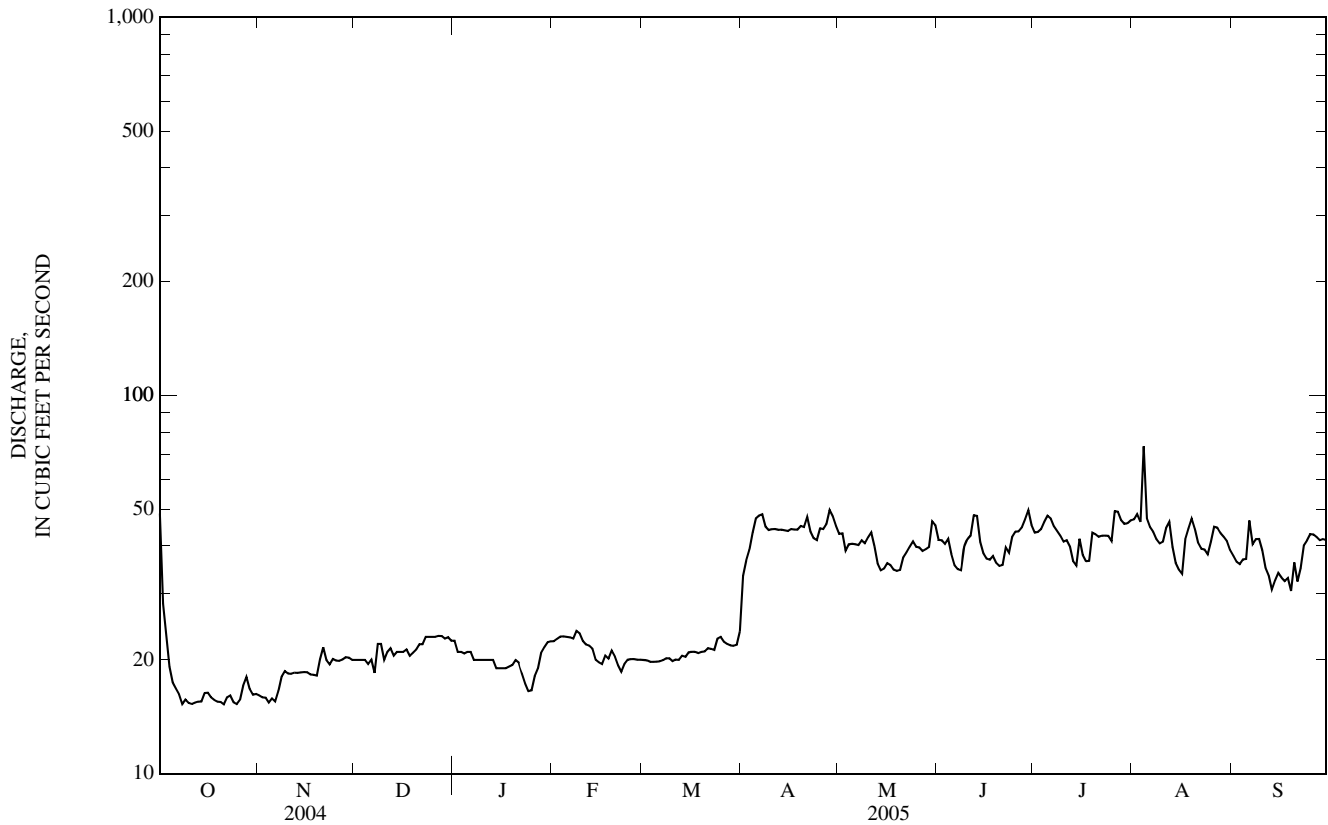
SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1957 - 2005	
ANNUAL TOTAL	11,002		11,184		--	
ANNUAL MEAN	30.1		30.6		129	
HIGHEST ANNUAL MEAN	--		--		672 1983	
LOWEST ANNUAL MEAN	--		--		26.1 1981	
HIGHEST DAILY MEAN	63	Jul 14, Sep 30	73	Aug 4	5,810	May 10, 1973
LOWEST DAILY MEAN	12	Jan 5	15	Many days	2.0 ^a	Jan 23, 1981
ANNUAL SEVEN-DAY MINIMUM	15	Jan 1	15	Oct 7	3.1	Jan 21, 1981
MAXIMUM PEAK FLOW	--		172	Aug 4	6,260	May 10, 1973#
MAXIMUM PEAK STAGE	--		3.05	Aug 4	9.40 ^b	May 10, 1973#
ANNUAL RUNOFF (AC-FT)	21,820		22,180		93,550	
10 PERCENT EXCEEDS	45		45		207	
50 PERCENT EXCEEDS	34		31		58	
90 PERCENT EXCEEDS	16		18		27	

For period of record 1915-2005.

a No flow January 31 to March 20, October 24 to December 17, 1926, March 1-26, April 14, 1938, all flows by Gering-Fort Laramie Canal.

b Site and datum then in use.

e Estimated.



06670500 LARAMIE RIVER NEAR FORT LARAMIE, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to July 1986, October 1986 to July 1988, October 2003 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)
NOV 09...	1445	18	650	12.4	126	8.6	770	16.5	9.0	<.04	.12	E.007	<.02
MAR 02...	1110	20	653	11.0	105	8.3	803	12.0	6.5	<.04	.15	<.008	<.02
JUN 22...	1415	40	654	9.1	138	8.5	790	33.5	28.5	<.04	E.03	<.008	<.02
AUG 15...	1725	34	653	11.5	159	8.4	785	27.0	23.5	<.04	E.04	E.004	<.02

Date	E coli, modif. m-TEC, water, col/100 mL (90902)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
NOV 09...	E5	E9	--	--
MAR 02...	E8	E4	89	4.8
JUN 22...	66	260	39	4.2
AUG 15...	E4	E8	--	--

< -- Less than.

E -- Estimated value; for bacteria, estimated values are counts outside the acceptable range (non-ideal colony count).

06674500 NORTH PLATTE RIVER AT WYOMING-NEBRASKA STATE LINE

LOCATION.--Lat 41°59'19", long 104°03'10" (NAD 27), in SE¹/₄ SE¹/₄ SE¹/₄ sec.3, T.23 N., R.60 W., Goshen County, Hydrologic Unit 10180009, on right bank 2000 ft upstream from bridge on NE State Highway 86, 250 ft upstream from Wyoming-Nebraska State line, and 0.7 mi southeast of Henry, NE.

DRAINAGE AREA.--22,218 mi², of which 1,929 mi² probably is non-contributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1929 to current year.

REVISED RECORDS.--WDR WY-76-1: Drainage area.

GAGE.--Water-stage recorder. Sheet-piling control since March 9, 1994. Elevation of gage is 4,025 ft above NGVD of 1929, from topographic map. Prior to November 6, 1929, non-recording gage and November 6, 1929 to September 30, 1959, water-stage recorder at site 0.2 mi upstream from station at different datum. October 7, 1959 to February 22, 1972 water-stage recorder at site 0.2 mi upstream at different datum. February 22, 1972 to March 9, 1994, water-stage recorder at site 0.3 mi downstream from station at different datum. U.S. Army Corps of Engineers data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, transbasin diversions, power development, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Gering-Mitchell Canal diverts from right bank 0.5 mi upstream from station.

COOPERATION.--Nine discharge measurements provided by Wyoming State Engineer's Office, nine discharge measurements provided by the Nebraska Department of Natural Resources, and six discharge measurements provided by the Bureau of Reclamation.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	265	193	e140	129	120	115	101	0.00	0.00	1,160	1,380	1,010
2	272	187	150	127	119	115	101	0.00	0.00	1,300	1,330	935
3	256	187	150	127	120	115	101	0.00	0.00	1,410	1,330	912
4	238	182	149	e120	122	115	102	0.00	16	1,330	1,420	932
5	231	182	150	e100	122	115	110	0.00	37	1,220	1,390	874
6	227	181	148	e90	121	112	110	0.00	20	1,140	1,300	689
7	221	176	145	e80	120	111	111	0.00	9.7	1,140	1,250	531
8	215	176	145	e100	123	111	112	0.00	7.8	1,190	1,220	389
9	211	176	145	e120	123	111	115	0.00	7.0	1,300	1,210	349
10	207	178	145	130	123	111	115	0.00	6.7	1,360	1,230	517
11	205	173	145	133	122	110	110	0.00	6.6	1,430	1,260	626
12	206	171	144	137	122	109	80	0.00	56	1,440	1,310	465
13	205	171	142	e130	121	110	30	0.00	100	1,340	1,310	353
14	205	170	140	e86	119	110	21	0.00	94	1,430	1,310	315
15	212	169	140	e82	119	109	18	0.00	81	1,440	1,270	279
16	216	166	140	e84	119	108	0.00	0.00	68	1,350	1,160	250
17	214	165	140	e100	118	109	0.00	0.00	51	1,380	1,140	238
18	210	165	140	e120	117	106	62	0.00	50	1,390	1,140	221
19	205	165	139	135	118	105	103	0.00	42	1,410	1,130	204
20	205	164	138	133	118	106	107	0.00	35	1,410	1,080	189
21	205	163	135	131	117	107	120	0.00	29	1,420	1,040	180
22	207	162	e125	127	115	106	117	0.00	14	1,540	1,020	175
23	205	160	e120	126	115	104	111	0.00	7.5	1,550	1,020	165
24	200	160	e86	125	115	110	110	0.00	16	1,530	1,060	162
25	195	160	e125	123	115	108	107	0.00	36	1,580	1,070	160
26	193	160	139	121	115	107	73	0.00	66	1,960	1,110	156
27	193	160	135	119	115	106	4.7	0.00	337	1,780	1,090	150
28	193	161	135	120	115	108	1.3	0.00	549	1,590	1,030	145
29	192	160	134	119	---	109	0.38	0.00	854	1,520	1,020	143
30	188	e130	134	121	---	107	0.00	0.00	1,050	1,440	987	237
31	189	---	129	122	---	105	---	0.00	---	1,440	999	---
TOTAL	6,586	5,073	4,272	3,617	3,328	3,390	2,253.38	0.00	3,646.30	43,920	36,616	11,951
MEAN	212	169	138	117	119	109	75.1	0.00	122	1,417	1,181	398
MAX	272	193	150	137	123	115	120	0.00	1,050	1,960	1,420	1,010
MIN	188	130	86	80	115	104	0.00	0.00	0.00	1,140	987	143
AC-FT	13,060	10,060	8,470	7,170	6,600	6,720	4,470	0.00	7,230	87,120	72,630	23,700

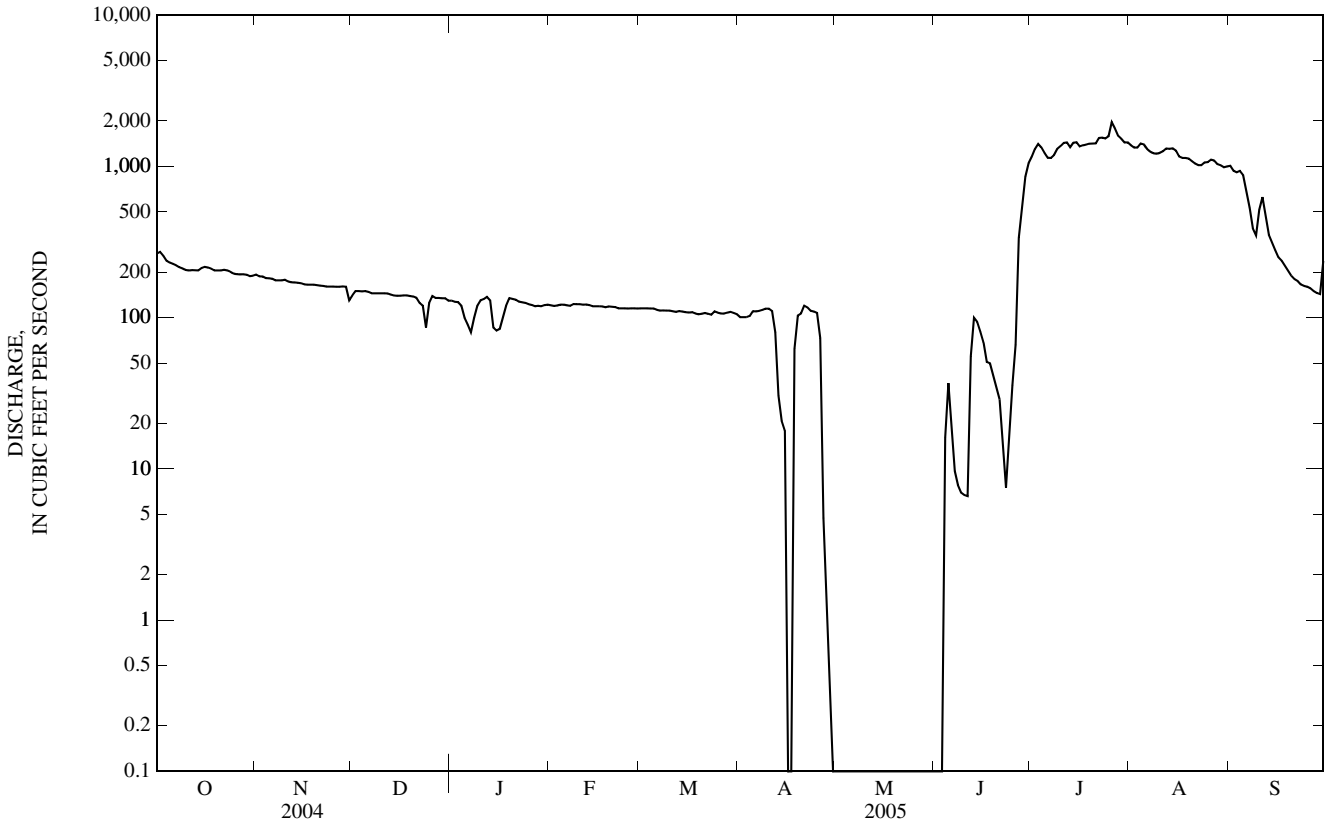
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2005, BY WATER YEAR (WY)

MEAN	491	408	361	319	323	485	632	1,131	1,610	1,540	1,252	831
MAX	1,666	1,454	895	751	1,063	4,202	4,407	7,226	10,360	7,170	5,751	4,766
(WY)	(1987)	(1987)	(1930)	(1930)	(1984)	(1974)	(1974)	(1971)	(1929)	(1983)	(1983)	(1983)
MIN	134	169	138	117	118	109	70.0	0.00	35.8	611	154	120
(WY)	(2003)	(2005)	(2005)	(2005)	(2004)	(2005)	(2004)	(2004)	(2004)	(1934)	(1934)	(2004)

06674500 NORTH PLATTE RIVER AT WYOMING-NEBRASKA STATE LINE—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1929 - 2005	
ANNUAL TOTAL	101,598.95		124,652.68		--	
ANNUAL MEAN	278		342		767	
HIGHEST ANNUAL MEAN	--		--		2,863 1984	
LOWEST ANNUAL MEAN	--		--		279 2004	
HIGHEST DAILY MEAN	1,740	Jul 24	1,960	Jul 26	17,600	Jun 2, 1929
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days, some years
MAXIMUM PEAK FLOW	--		2,060	Jul 26	17,900 ^a	Jun 2, 1929
MAXIMUM PEAK STAGE	--		3.64	Jul 26	7.04 ^b	Jun 2, 1929
ANNUAL RUNOFF (AC-FT)	201,500		247,200		555,400	
10 PERCENT EXCEEDS	1,230		1,260		1,420	
50 PERCENT EXCEEDS	124		134		464	
90 PERCENT EXCEEDS	0.00		0.00		189	

a Maximum observed.
 b Site and datum then in use.
 e Estimated.



06674500 NORTH PLATTE RIVER AT WYOMING-NEBRASKA STATE LINE—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 deg C (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)
NOV 09...	1215	176	656	11.0	110	8.5	943	6.5	8.5	.13	2.50	.035	.03
MAR 02...	0930	115	663	9.2	84	8.2	983	5.0	5.5	.14	2.31	.036	<.02
JUN 22...	1115	11	658	7.0	97	8.1	925	33.5	24.0	.05	.93	.043	<.02
AUG 15...	1305	1,250	660	8.2	106	8.3	684	29.0	20.5	<.04	.20	<.008	<.02

Date	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
NOV 09...	41	19
MAR 02...	15	4.7
JUN 22...	13	.39
AUG 15...	84	284

< -- Less than.

06755960 CROW CREEK AT 19TH STREET, AT CHEYENNE, WY

LOCATION.--Lat 41°07'52", long 104°49'41"(NAD 27), in NW¹/₄ NW¹/₄ NW¹/₄ sec.6, T.13 N., R.66 W., Laramie County, Hydrologic Unit 10190009, on right bank at upstream side of 19th Street, at Cheyenne, and 0.5 mi upstream from Clear Creek.

DRAINAGE AREA.--257 mi².

PERIOD OF RECORD.--October 1993 to current year.

REVISED RECORDS.--WDR WY-96-1: 1994; WDR WY-99-1: 1997.

GAGE.--Water-stage recorder. Elevation of gage is 6,050 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 20, 1904, stage unknown, estimated 8,500 ft³/s; flood of August 1, 1985, reached a stage of 9.6 ft, present datum, from floodmarks, discharge, 2,980 ft³/s, on basis of indirect measurement of peak flow.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	e1.4	e1.2	e2.2	e1.0	e1.7	1.4	2.5	1.6	2.4	1.2	0.70
2	1.8	1.7	e1.3	e2.0	e1.1	e1.7	1.4	2.4	3.7	2.3	2.0	0.65
3	1.4	1.6	e1.4	e1.9	e1.2	e1.7	1.4	2.2	7.6	2.3	1.4	0.63
4	1.2	1.7	e1.6	e1.8	e1.4	1.7	1.4	1.8	49	2.6	2.7	0.60
5	1.2	1.7	e1.6	e1.6	e1.4	1.5	1.4	1.7	8.1	2.2	1.5	0.57
6	3.5	1.6	e1.6	e1.5	e1.3	1.4	1.3	1.6	4.6	1.9	1.2	0.57
7	2.0	1.7	e1.9	e1.4	e1.2	2.2	1.2	2.2	3.5	1.8	1.1	0.57
8	1.4	1.7	2.5	e1.5	e1.0	2.2	1.2	1.7	2.9	1.8	0.98	0.57
9	1.3	1.8	2.3	e1.7	e0.91	1.6	1.3	1.5	2.5	1.7	0.98	0.56
10	1.2	1.9	e2.6	e1.8	e1.0	2.3	1.5	1.5	2.9	1.6	0.98	0.55
11	1.2	1.8	e3.1	e1.7	e1.2	1.8	1.3	3.0	3.5	1.5	2.7	0.55
12	1.2	2.0	e2.9	e1.6	e1.4	1.9	1.2	2.7	36	1.4	1.7	0.54
13	1.3	2.0	e2.4	e1.5	2.0	e1.6	1.2	2.0	9.3	1.3	2.1	0.54
14	1.2	2.1	e2.3	e1.3	2.0	e1.5	1.2	1.8	5.4	1.3	1.6	0.55
15	2.1	2.1	e2.2	e1.2	e1.8	1.6	1.2	1.7	3.9	9.4	1.2	0.56
16	2.2	2.1	e2.3	e1.2	e1.5	1.5	1.2	1.8	3.5	3.3	1.0	0.56
17	2.2	2.1	e2.3	e1.3	e1.5	1.5	1.2	1.5	3.1	1.7	0.93	0.53
18	2.2	2.1	e2.4	e1.6	e1.7	1.7	1.2	1.5	2.7	1.5	1.5	0.56
19	2.1	2.1	e2.5	e1.9	2.0	1.4	1.3	1.5	2.5	1.6	0.97	0.54
20	1.3	e2.2	e2.3	e2.1	2.0	1.5	3.3	1.4	2.2	1.8	0.88	0.54
21	1.2	e2.1	e2.0	2.2	1.9	5.6	4.2	1.3	2.0	1.5	0.82	0.56
22	1.2	e2.8	e1.9	e2.0	1.9	3.2	1.9	1.2	2.0	1.4	1.2	0.63
23	1.2	2.5	e2.1	e2.2	1.9	2.8	1.5	1.2	2.0	2.8	0.90	0.59
24	1.2	1.9	e2.4	2.1	e1.8	2.7	1.4	1.2	1.8	2.1	0.80	0.58
25	1.3	1.9	2.5	e1.6	e1.8	2.4	1.6	1.2	2.5	5.0	0.96	0.61
26	1.3	3.0	2.5	e1.4	e1.8	1.8	1.5	1.1	1.8	6.1	0.73	0.58
27	1.4	e2.3	2.6	e1.4	e1.7	1.6	1.5	1.1	1.5	2.2	0.73	0.98
28	1.4	e1.8	2.6	e1.3	e1.6	1.6	3.5	0.93	1.9	1.5	0.70	0.75
29	1.4	e1.6	2.7	e1.2	---	1.6	3.1	1.2	2.9	1.2	0.66	0.61
30	1.3	e1.4	2.4	e1.1	---	1.6	3.1	4.9	2.7	1.6	0.64	0.57
31	e1.4	---	e2.3	e1.0	---	1.6	---	3.6	---	1.1	0.67	---
TOTAL	52.0	58.7	68.7	50.3	43.01	60.5	51.1	56.93	179.6	71.9	37.43	17.90
MEAN	1.68	1.96	2.22	1.62	1.54	1.95	1.70	1.84	5.99	2.32	1.21	0.60
MAX	5.7	3.0	3.1	2.2	2.0	5.6	4.2	4.9	49	9.4	2.7	0.98
MIN	1.2	1.4	1.2	1.0	0.91	1.4	1.2	0.93	1.5	1.1	0.64	0.53
AC-FT	103	116	136	100	85	120	101	113	356	143	74	36

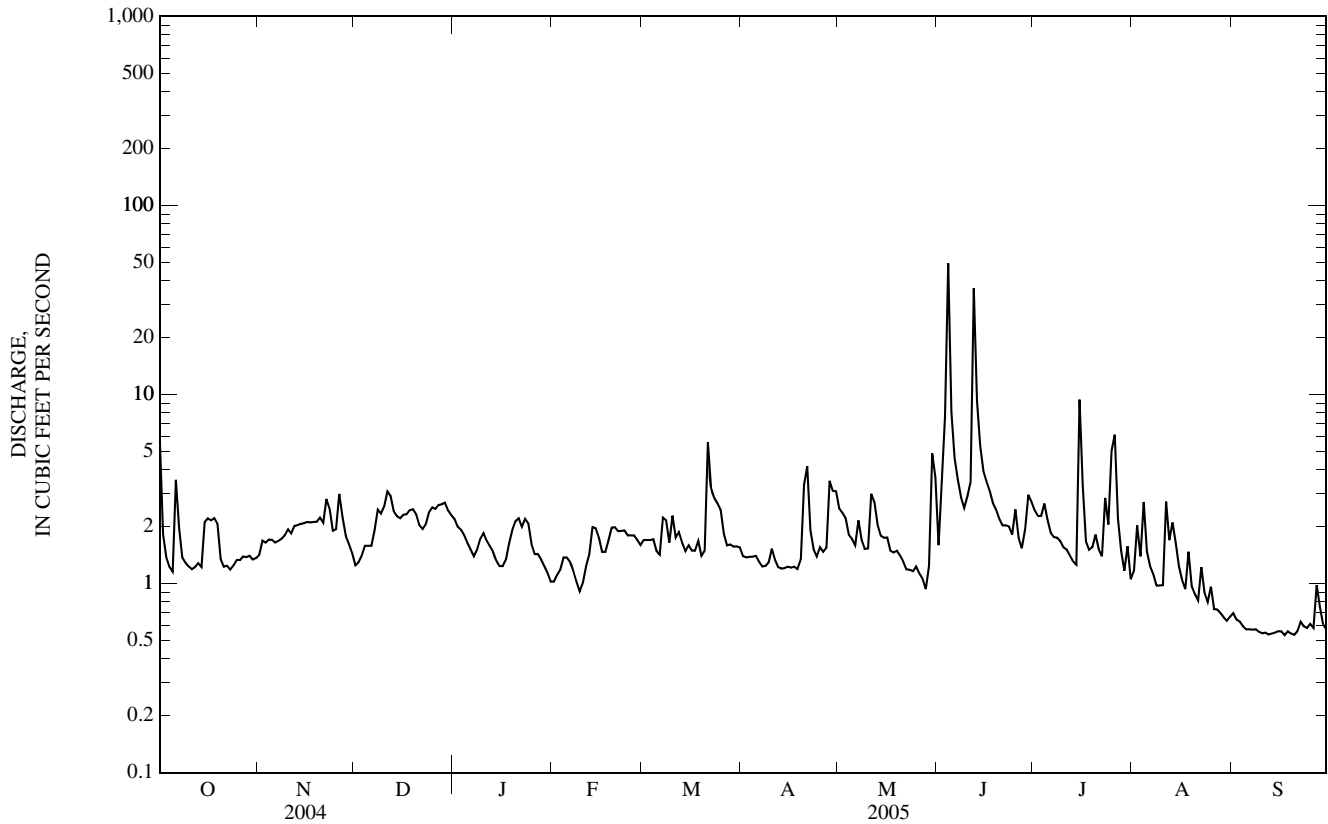
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2005, BY WATER YEAR (WY)

MEAN	5.06	6.18	5.21	5.08	5.65	6.84	9.18	29.4	19.7	5.76	5.03	3.81
MAX	26.3	29.7	19.9	14.8	13.0	17.5	27.3	252	90.1	26.7	30.0	19.4
(WY)	(1998)	(1998)	(1998)	(1998)	(1998)	(1998)	(1999)	(1999)	(1999)	(1995)	(1997)	(1997)
MIN	0.80	1.33	1.39	1.43	1.53	1.49	1.58	1.10	0.90	0.25	0.57	0.60
(WY)	(2004)	(2004)	(1995)	(2004)	(2004)	(2004)	(2004)	(2004)	(2000)	(2002)	(2004)	(2005)

06755960 CROW CREEK AT 19TH STREET, AT CHEYENNE, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1994 - 2005	
ANNUAL TOTAL	550.40	748.07	--	
ANNUAL MEAN	1.50	2.05	8.93	
HIGHEST ANNUAL MEAN	--	--	37.4	1999
LOWEST ANNUAL MEAN	--	--	1.32	2004
HIGHEST DAILY MEAN	9.6 Jun 18	49 Jun 4	579	May 1, 1999
LOWEST DAILY MEAN	0.34 Aug 12, 13	0.53 Sep 17	0.15	Aug 2, 2002
ANNUAL SEVEN-DAY MINIMUM	0.36 Aug 11	0.55 Sep 11	0.18	Jul 29, 2002
MAXIMUM PEAK FLOW	--	105 Jun 12	687	Apr 30, 1999
MAXIMUM PEAK STAGE	--	3.33 Jun 12	5.56	Apr 30, 1999
ANNUAL RUNOFF (AC-FT)	1,090	1,480	6,470	
10 PERCENT EXCEEDS	2.4	2.8	16	
50 PERCENT EXCEEDS	1.3	1.6	2.6	
90 PERCENT EXCEEDS	0.45	0.81	0.95	

e Estimated.



06756060 CROW CREEK NEAR ARCHER, WY

LOCATION.--Lat 41°07'35", long 104°39'04" (NAD 27), in NE¹/₄ SW¹/₄ NW¹/₄ sec.3, T. 13 N., R.65 W., Laramie County, Hydrologic Unit 10190009, 0.4 mi upstream from highwater line of Wyoming Hereford Ranch Reservoir No. 2, and 2.3 mi southeast of Archer.

PERIOD OF RECORD.--November 1990 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, filtered, mg/L as N (00608)	Nitrite + nitrate water, filtered, mg/L as N (00631)	Nitrite water, filtered, mg/L as N (00613)	Orthophosphate, water, filtered, mg/L as P (00671)
NOV 23...	1010	7.2	615	6.8	63	8.0	951	-2.0	3.0	8.68	1.00	.046	1.76
MAR 01...	1310	6.1	614	8.8	89	8.2	1,070	7.0	6.5	21.3	.20	.023	2.68
MAY 17...	1045	3.5	607	7.2	82	7.9	1,010	13.5	11.0	7.48	1.81	.212	2.08
AUG 09...	1010	11	620	5.4	69	8.1	846	20.0	17.0	4.22	3.32	.466	1.04

Date	E coli, modified, m-TEC, water, col/100 mL (90902)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)
NOV 23...	E12	E17
MAR 01...	39	25
MAY 17...	130	230
AUG 09...	530	550

< -- Less than.

E -- Estimated value; for bacteria, estimated values are counts outside the acceptable range (non-ideal colony count).

06762500 LODGEPOLE CREEK AT BUSHNELL, NE

LOCATION.--Lat 41°13'50" long 103°53'28" (NAD 27), in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 31, T.15 N., R.57 W., Kimball County, Hydrologic Unit 10190016, on left bank 0.1 mi south of Bushnell at north end of highway bridge on State Highway 53c.

DRAINAGE AREA.--1,350 mi².

PERIOD OF RECORD.--October 1931 to September 1991, October 2002 to current year. Records for March to September 1931 at site 1.5 mi upstream from station not equivalent owing to diversions. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1390: 1933, 1935, 1937-38, 1941, 1948-49, WSP 1730: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,843.31 ft above NGVD of 1929. Prior to March 16, 1938, nonrecording gage; March 26, 1938 to July 2, 1981, water stage recorder; July 3, 1981 to September 30, 1981, a nonrecording gage at previous site 1.7 mi downstream from station at datum 31.01 ft lower. October 1, 1981 to September 30, 1991, recording gage at present site at datum 2.00 ft higher. Data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow of stream affected by ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Diversions for irrigation of about 12,600 acres upstream from station. Station operated and record provided by the Nebraska Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.09	0.16	0.18	0.24	0.29	0.11	0.11	0.00	0.00
2	0.00	0.00	0.00	0.06	0.16	0.18	0.20	0.27	0.11	0.10	0.00	0.00
3	0.00	0.00	0.00	0.07	0.16	0.18	0.19	0.27	0.16	0.10	0.00	0.00
4	0.00	0.00	0.00	0.06	0.17	0.18	0.19	0.26	0.71	0.10	0.00	0.00
5	0.00	0.00	0.00	e0.06	0.17	0.18	0.22	0.25	0.39	0.09	0.00	0.00
6	0.00	0.00	0.00	e0.06	0.17	0.18	0.23	0.26	0.22	0.08	0.00	0.00
7	0.00	0.00	0.00	e0.08	0.18	0.17	0.21	0.27	0.17	0.06	0.00	0.00
8	0.00	0.00	0.00	e0.10	0.18	0.18	0.21	0.29	0.14	0.05	0.00	0.00
9	0.00	0.00	0.00	e0.14	0.18	0.19	0.20	0.28	0.13	0.04	0.00	0.00
10	0.00	0.00	0.00	e0.16	0.18	0.17	0.34	0.26	0.16	0.03	0.00	0.00
11	0.00	0.00	0.00	e0.17	0.18	0.17	0.36	0.21	0.16	0.02	0.00	0.00
12	0.00	0.00	0.00	e0.18	0.18	0.18	0.34	0.31	0.27	0.01	0.00	0.00
13	0.00	0.00	0.00	e0.18	0.17	0.19	0.30	0.31	0.27	0.00	0.00	0.00
14	0.00	0.00	0.00	e0.22	0.17	0.19	0.25	0.26	0.18	0.00	0.00	0.00
15	0.00	0.00	0.00	e0.22	0.19	0.19	0.22	0.28	0.16	0.00	0.00	0.00
16	0.00	0.00	0.00	e0.23	0.19	0.19	0.22	0.22	0.18	0.00	0.00	0.00
17	0.00	0.00	0.00	e0.25	0.21	0.19	0.21	0.22	0.15	0.00	0.00	0.00
18	0.00	0.00	0.00	e0.25	0.22	0.18	0.21	0.23	0.12	0.00	0.00	0.00
19	0.00	0.00	0.00	e0.28	0.23	0.19	0.20	0.22	0.11	0.00	0.00	0.00
20	0.00	0.00	0.00	e0.20	0.21	0.19	0.21	0.20	0.10	0.00	0.00	0.00
21	0.00	0.00	0.00	0.17	0.20	0.19	0.41	0.16	0.08	0.00	0.00	0.00
22	0.00	0.00	0.00	0.15	0.19	0.20	0.29	0.13	0.07	0.00	0.00	0.00
23	0.00	0.00	0.00	0.16	0.19	0.20	0.26	0.11	0.06	0.00	0.00	0.00
24	0.00	0.00	0.00	0.16	0.19	0.23	0.23	0.11	0.06	0.00	0.00	0.00
25	0.00	0.00	0.00	0.15	0.19	0.22	0.23	0.10	3.0	1.2	0.00	0.00
26	0.00	0.00	0.04	0.16	0.20	0.21	0.23	0.09	0.33	0.34	0.00	0.00
27	0.00	0.00	0.11	0.16	0.19	0.21	0.23	0.08	0.18	0.00	0.00	0.00
28	0.00	0.00	0.14	0.16	0.18	0.20	0.28	0.06	0.14	0.00	0.00	0.00
29	0.00	0.00	0.14	0.17	---	0.19	0.33	0.05	0.13	0.00	0.00	0.00
30	0.00	0.00	0.11	0.18	---	0.19	0.33	0.07	0.11	0.00	0.00	0.00
31	0.00	---	0.08	0.17	---	0.26	---	0.18	---	0.00	0.00	---
TOTAL	0.00	0.00	0.62	4.85	5.19	5.95	7.57	6.30	8.16	2.33	0.00	0.00
MEAN	0.00	0.00	0.02	0.16	0.19	0.19	0.25	0.20	0.27	0.08	0.00	0.00
MAX	0.00	0.00	0.14	0.28	0.23	0.26	0.41	0.31	3.0	1.2	0.00	0.00
MIN	0.00	0.00	0.00	0.06	0.16	0.17	0.19	0.05	0.06	0.00	0.00	0.00
AC-FT	0.00	0.00	1.2	9.6	10	12	15	12	16	4.6	0.00	0.00

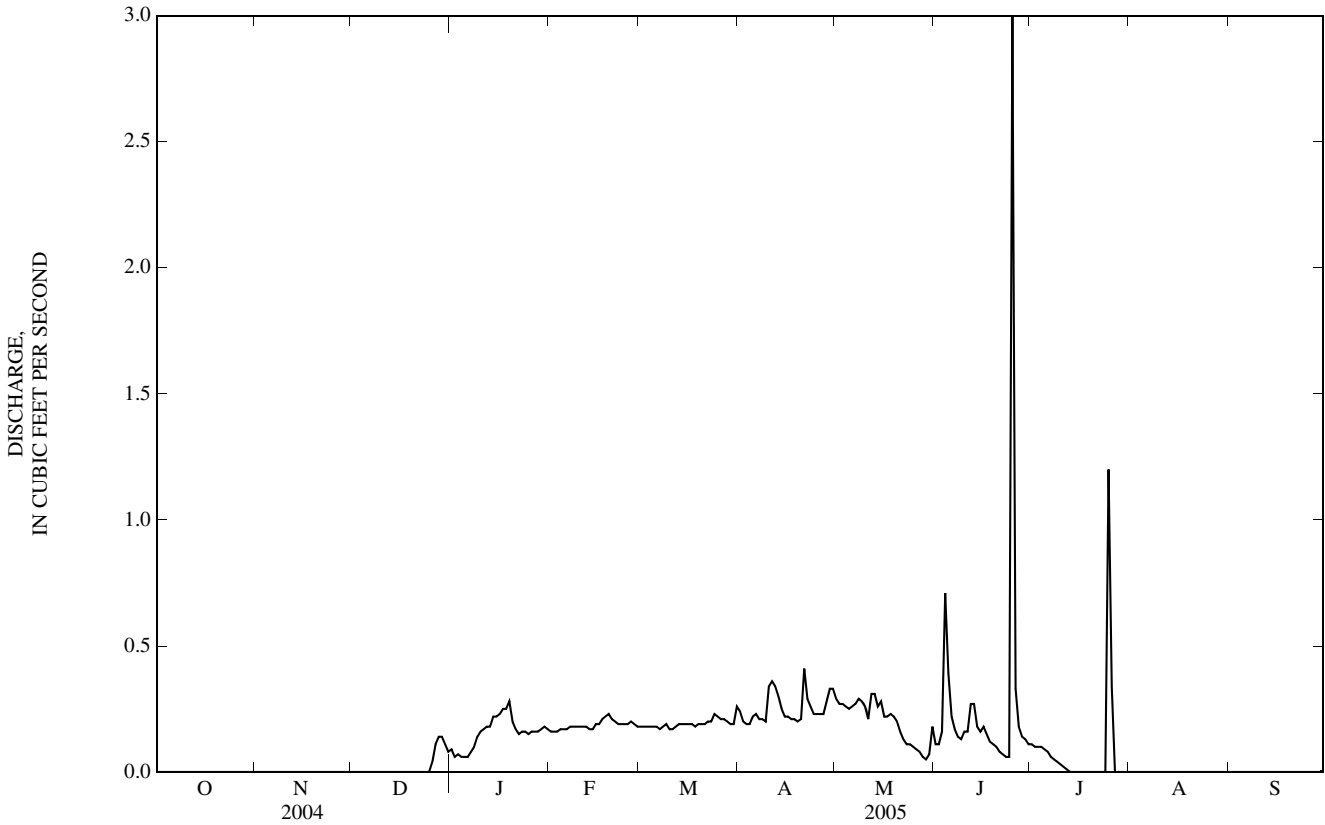
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2005, BY WATER YEAR (WY)

MEAN	7.82	8.51	8.19	8.12	9.75	11.1	11.1	11.1	12.0	9.40	7.17	8.98
MAX	15.1	18.5	15.5	16.2	17.0	21.2	21.5	40.4	69.9	56.2	18.5	58.8
(WY)	(1939)	(1936)	(1939)	(1936)	(1936)	(1949)	(1939)	(1983)	(1935)	(1981)	(1953)	(1951)
MIN	0.00	0.00	0.02	0.16	0.19	0.19	0.25	0.20	0.08	0.00	0.00	0.00
(WY)	(2003)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(2004)	(2004)	(2003)

06762500 LODGEPOLE CREEK AT BUSHNELL, NE—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1934 - 2005	
ANNUAL TOTAL	79.65	40.97	--	
ANNUAL MEAN	0.22	0.11	9.41	
HIGHEST ANNUAL MEAN	--	--	18.1	1935
LOWEST ANNUAL MEAN	--	--	0.11	2005
HIGHEST DAILY MEAN	0.85 Mar 8	3.0 Jun 25	1,170	Sep 15, 1950
LOWEST DAILY MEAN	0.00 Jun 12	0.00 Oct 1	0.00	Oct 1, 2002
ANNUAL SEVEN-DAY MINIMUM	0.00 Jun 27	0.00 Oct 1	0.00	Oct 1, 2002
MAXIMUM PEAK FLOW	--	8.5 Jun 25	16,500 ^a	Sep 15, 1950
MAXIMUM PEAK STAGE	--	4.04 Jun 25	10.06 ^b	Jul 2, 1981
ANNUAL RUNOFF (AC-FT)	158	81	6,820	
10 PERCENT EXCEEDS	0.61	0.25	15	
50 PERCENT EXCEEDS	0.00	0.08	8.3	
90 PERCENT EXCEEDS	0.00	0.00	2.8	

a Gage height, 9.98 ft, datum then in use. From rating curve extended above 2,700 ft³/s on basis of slope-area measurement.
 b Site and datum then in use.
 c Estimated.



09188500 GREEN RIVER AT WARREN BRIDGE, NEAR DANIEL, WY

LOCATION.--Lat 43°01'08", long 110°07'03" (NAD 27), in SE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.8, T.35 N., R.111 W., Sublette County, Hydrologic Unit 14040101, on right bank 100 ft upstream from bridge on U.S. Highways 189 and 191, 3.4 mi upstream from Beaver Creek, and 12 mi north of Daniel.

DRAINAGE AREA.--468 mi².

PERIOD OF RECORD.--October 1931 to September 1992, October 1993 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 979: 1932(M).

GAGE.--Water-stage recorder. Elevation of gage is 7,468.09 ft above NGVD of 1929. Prior to October 6, 1977, on left bank at same datum. National Weather Service data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 10,200 acres, of which about 6,100 acres are downstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	258	162	e120	e110	e97	e100	e105	394	1,620	1,520	456	187
2	264	124	e135	e110	e95	e100	e125	354	1,530	1,340	505	180
3	263	209	e135	e115	e100	e98	e140	349	1,230	1,470	506	172
4	262	196	e130	e120	e98	e96	e150	365	1,040	1,520	484	168
5	256	175	e120	e110	e94	e95	e140	407	961	1,440	466	164
6	243	176	e120	e100	e82	e94	e165	515	996	1,320	432	158
7	237	171	e125	e105	e86	e92	e190	571	1,120	1,260	395	156
8	223	165	e125	e110	e94	e92	e230	535	1,080	1,340	362	155
9	218	169	e130	e115	e95	e94	e210	549	908	1,420	341	152
10	212	174	e140	e110	e95	e95	e180	651	742	1,440	327	155
11	208	176	e145	e115	e92	e100	e190	725	647	1,450	319	164
12	204	177	e155	e120	e88	e110	e210	730	629	1,390	306	175
13	197	168	e145	e120	e94	e98	e270	624	698	1,280	296	186
14	188	156	e140	e110	e98	e90	e330	579	640	1,160	281	185
15	180	141	e135	e105	e92	e96	e300	542	609	1,130	258	176
16	175	127	e130	e110	e80	e100	412	665	733	1,170	235	164
17	170	148	e125	e110	e84	e100	495	951	1,080	1,140	232	157
18	172	145	e120	e105	e88	e95	604	1,110	1,590	1,130	262	157
19	176	138	e115	e105	e96	e100	459	1,070	2,000	1,120	319	155
20	181	98	e105	e100	e98	e105	415	1,430	2,240	936	362	148
21	227	e50	e94	e100	e105	e103	362	2,080	2,410	795	373	145
22	242	e125	e96	e98	e105	e105	411	2,390	2,560	768	346	144
23	222	e130	e100	e100	e100	e100	541	2,420	2,720	771	323	145
24	234	e125	e90	e110	e100	e100	651	2,520	2,820	732	306	151
25	222	e115	e98	e110	e95	e96	808	2,480	2,850	774	285	170
26	208	e105	e100	e105	e93	e100	736	2,250	2,700	723	265	168
27	218	e94	e105	e105	e92	e105	693	1,980	2,400	644	245	168
28	217	e98	e105	e110	e96	e110	583	1,910	2,110	541	227	170
29	222	e90	e100	e105	---	e100	520	1,860	1,910	472	214	166
30	216	e105	e105	e100	---	e110	453	2,070	1,760	435	200	158
31	208	---	e105	e100	---	e92	---	1,960	---	431	192	---
TOTAL	6,723	4,232	3,693	3,348	2,632	3,071	11,078	37,036	46,333	33,062	10,120	4,899
MEAN	217	141	119	108	94.0	99.1	369	1,195	1,544	1,067	326	163
MAX	264	209	155	120	105	110	808	2,520	2,850	1,520	506	187
MIN	170	50	90	98	80	90	105	349	609	431	192	144
AC-FT	13,340	8,390	7,330	6,640	5,220	6,090	21,970	73,460	91,900	65,580	20,070	9,720

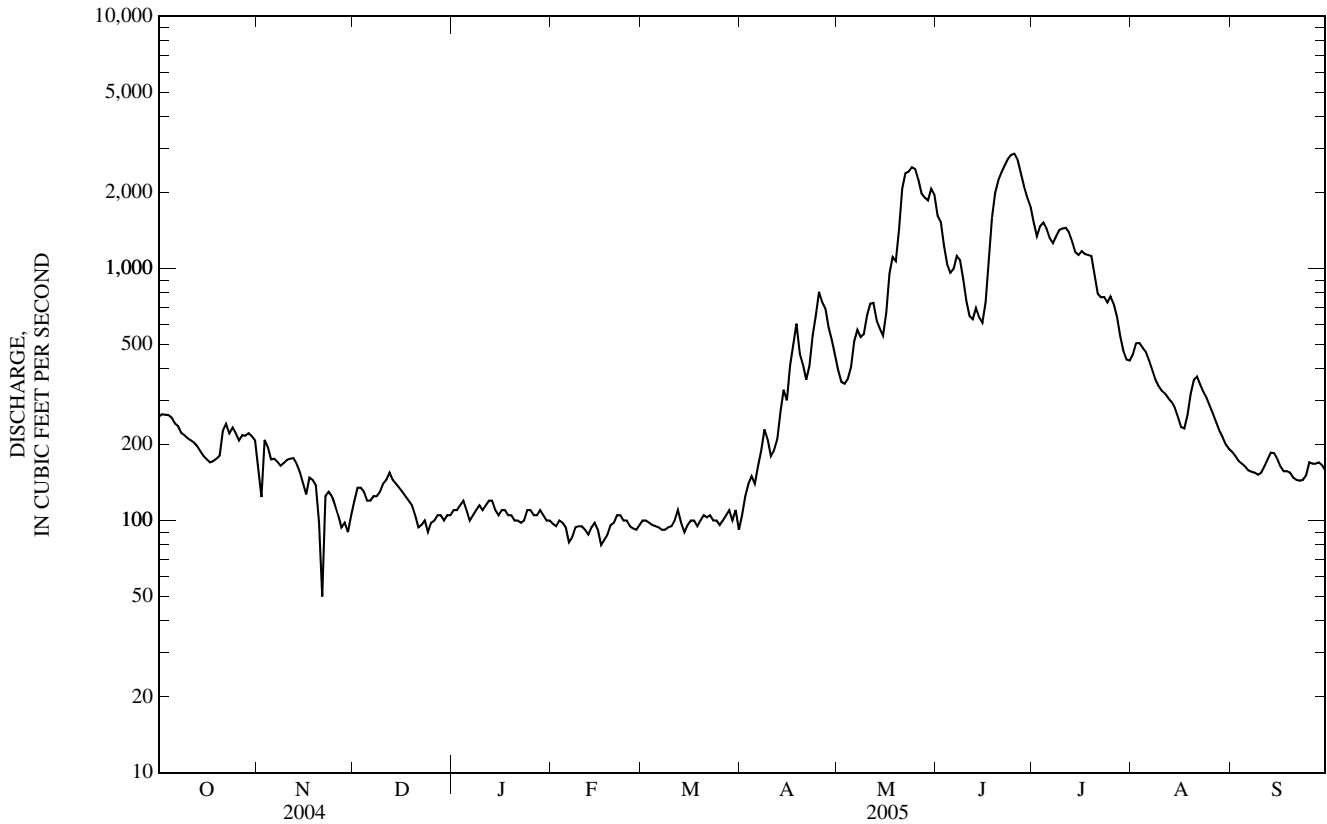
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2005, BY WATER YEAR (WY)

MEAN	198	144	124	109	109	124	290	1,015	1,771	1,240	529	300
MAX	433	223	215	176	166	240	600	1,811	3,813	2,424	997	592
(WY)	(1984)	(1983)	(1997)	(1967)	(1967)	(1932)	(1943)	(1956)	(1986)	(1975)	(1982)	(1963)
MIN	102	67.7	70.0	50.0	60.0	70.0	129	269	610	399	213	150
(WY)	(1989)	(1994)	(1933)	(1933)	(1933)	(1933)	(1970)	(1977)	(1934)	(1988)	(1988)	(1988)

09188500 GREEN RIVER AT WARREN BRIDGE, NEAR DANIEL, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1932 - 2005	
ANNUAL TOTAL	146,206		166,227		--	
ANNUAL MEAN	399		455		498	
HIGHEST ANNUAL MEAN	--		--		768 1986	
LOWEST ANNUAL MEAN	--		--		280 2001	
HIGHEST DAILY MEAN	2,090	Jun 11	2,850	Jun 25	5,620	Jun 11, 1997
LOWEST DAILY MEAN	50	Nov 21	50	Nov 21	36	Nov 26, 1933
ANNUAL SEVEN-DAY MINIMUM	87	Jan 31	89	Feb 12	43	Nov 24, 1933
MAXIMUM PEAK FLOW	--		2,920	Jun 25	5,930	Jun 11, 1997
MAXIMUM PEAK STAGE	--		4.54	Jun 25	6.04	Jun 11, 1997
ANNUAL RUNOFF (AC-FT)	290,000		329,700		360,500	
10 PERCENT EXCEEDS	1,090		1,340		1,410	
50 PERCENT EXCEEDS	248		176		200	
90 PERCENT EXCEEDS	94		96		100	

e Estimated.



09196500 PINE CREEK ABOVE FREMONT LAKE, WY

LOCATION.--Lat 43°01'50", long 109°46'10" (NAD 27), in SW¹/₄ S¹/₂ sec.5, T.35 N., R.108 W., Sublette County, Hydrologic Unit 14040102, Bridger National Forest, on right bank 0.5 mi upstream from Fremont Lake, 0.5 mi downstream from Fremont Creek, and 12 mi northeast of Pinedale.

DRAINAGE AREA.--75.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1954 to September 1997, October 2000 to current year.

REVISED RECORDS.--WSP 1443: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,450 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. No diversion upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	85	39	31	16	9.7	19	83	566	772	167	64
2	90	89	38	30	15	e9.0	15	79	485	836	167	60
3	90	86	39	30	15	8.9	15	75	395	793	166	56
4	89	83	37	30	13	8.6	15	73	362	713	159	52
5	90	80	35	29	12	8.8	15	75	389	677	155	49
6	89	78	35	e32	13	8.6	16	90	461	666	147	46
7	87	77	34	30	12	7.9	18	95	471	663	138	45
8	84	77	34	29	e12	7.5	21	94	407	657	131	46
9	81	77	36	28	12	7.5	24	103	331	657	124	47
10	78	76	37	28	12	7.4	24	119	281	646	115	50
11	76	75	37	27	12	7.6	23	137	261	601	108	46
12	73	75	36	e29	11	7.7	24	133	266	563	104	48
13	71	72	35	e30	9.8	8.2	26	122	250	533	101	48
14	68	70	35	e32	10	e8.6	28	127	247	544	98	47
15	64	67	34	29	e10	e8.2	28	149	329	571	93	49
16	62	65	38	27	e11	8.1	29	201	552	531	91	51
17	60	64	36	25	13	8.6	35	278	917	517	91	52
18	62	60	33	25	13	e10	42	256	1,350	501	93	52
19	61	58	33	25	14	10	46	241	1,390	418	95	52
20	70	54	33	24	15	11	49	338	1,660	359	93	53
21	85	53	e35	23	13	12	48	513	1,760	339	93	52
22	86	54	32	23	13	12	47	557	1,720	336	93	52
23	85	51	32	20	13	13	51	741	1,640	313	92	51
24	91	49	33	21	13	17	63	873	1,520	324	91	55
25	90	49	32	21	11	17	77	842	1,390	320	89	57
26	93	48	31	19	e10	17	89	775	1,230	270	85	55
27	92	46	31	18	10	17	101	747	991	234	82	52
28	93	45	29	18	11	16	105	786	927	207	78	51
29	95	e44	28	17	---	16	98	833	919	193	75	49
30	95	e40	29	18	---	16	90	766	799	181	71	47
31	93	---	30	18	---	23	---	614	---	172	68	---
TOTAL	2,531	1,947	1,056	786	344.8	347.9	1,281	10,915	24,266	15,107	3,353	1,534
MEAN	81.6	64.9	34.1	25.4	12.3	11.2	42.7	352	809	487	108	51.1
MAX	95	89	39	32	16	23	105	873	1,760	836	167	64
MIN	60	40	28	17	9.8	7.4	15	73	247	172	68	45
AC-FT	5,020	3,860	2,090	1,560	684	690	2,540	21,650	48,130	29,960	6,650	3,040

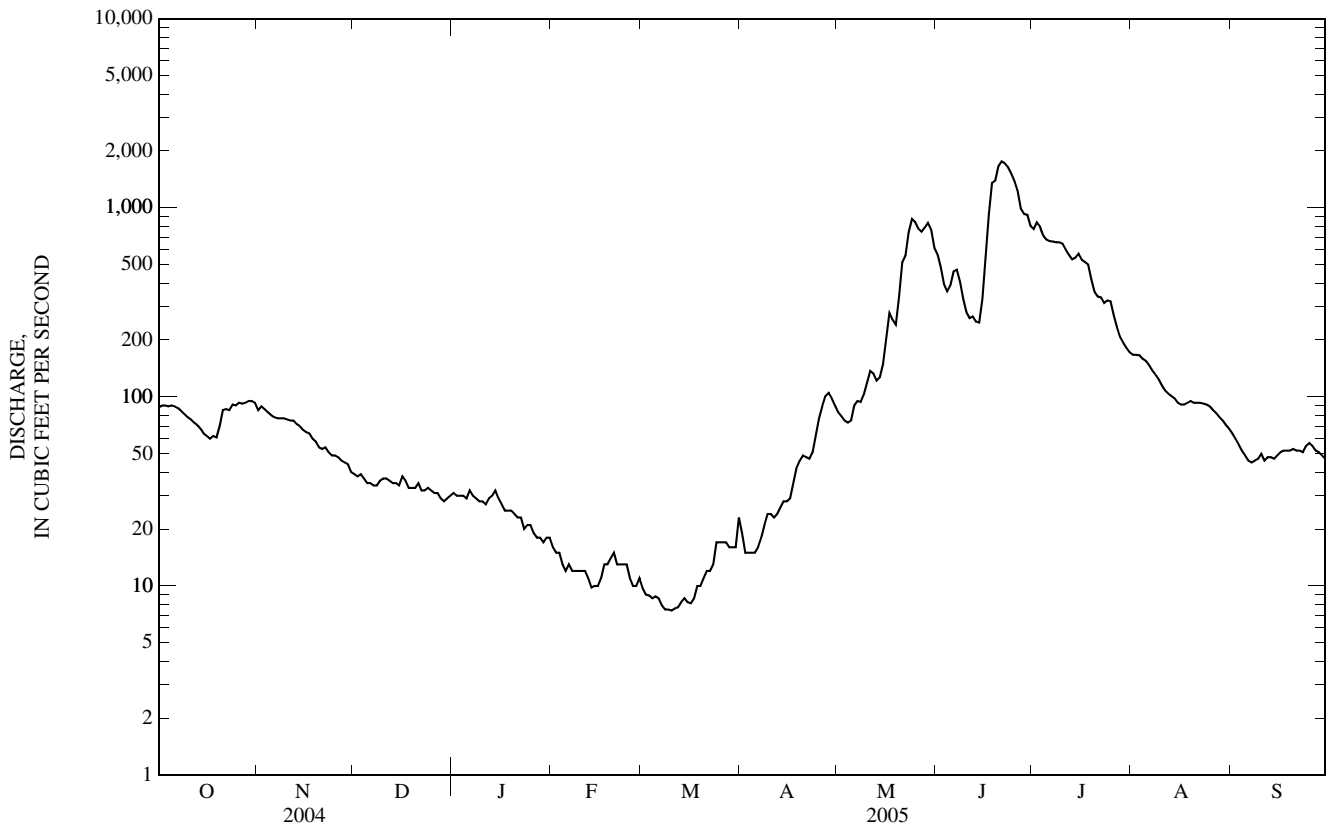
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2005, BY WATER YEAR (WY)

MEAN	53.8	32.7	24.1	19.4	16.5	16.9	38.9	296	837	506	155	87.2
MAX	165	71.8	53.0	37.6	36.7	35.0	98.4	586	1,476	1,142	350	209
(WY)	(1984)	(1984)	(1978)	(1969)	(1969)	(1986)	(1962)	(2001)	(1986)	(1965)	(1968)	(1963)
MIN	9.60	10.9	6.73	4.39	4.66	4.03	12.0	90.3	384	117	44.0	23.0
(WY)	(1989)	(1989)	(1977)	(1977)	(1977)	(1977)	(1970)	(1975)	(1992)	(1988)	(1988)	(1988)

09196500 PINE CREEK ABOVE FREMONT LAKE, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1955 - 2005	
ANNUAL TOTAL	60,329.6		63,468.7		--	
ANNUAL MEAN	165		174		174	
HIGHEST ANNUAL MEAN	--		--		253 1986	
LOWEST ANNUAL MEAN	--		--		96.7 1977	
HIGHEST DAILY MEAN	1,410	Jun 9	1,760	Jun 21	2,290	Jun 10, 1997
LOWEST DAILY MEAN	7.3	Feb 25	7.4	Mar 10	3.3	Apr 4, 1977
ANNUAL SEVEN-DAY MINIMUM	7.7	Feb 20	7.7	Mar 7	3.4	Mar 31, 1977
MAXIMUM PEAK FLOW	--		1,990	Jun 21	2,550 ^a	Jun 16, 1959
MAXIMUM PEAK STAGE	--		6.24	Jun 21	7.65	Jun 6, 1986
ANNUAL RUNOFF (AC-FT)	119,700		125,900		126,000	
10 PERCENT EXCEEDS	492		564		561	
50 PERCENT EXCEEDS	78		57		41	
90 PERCENT EXCEEDS	10		12		13	

a Gage height, 7.15 ft.
e Estimated.



09196500 PINE CREEK ABOVE FREMONT LAKE, WY—Continued

HYDROLOGIC BENCH-MARK STATION

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to 1980, 1984 to 1988, 2004 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
Date		Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat fltr Gran, lab, mg/L as CaCO3 (29803)	Chloride, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Total nitrogen, wat fltr by analysis, mg/L (62854)
JAN														
27...	1130	.1	.73	14	7.8	.21	2.67	2.23	15	.02	.77	E.005	.134	.17
FEB														
28...	1115	.1	.79	15	8.3	.22	2.90	2.33	16	.02	.78	<.010	.146	.20
MAY														
10...	1140	.1	.77	13	8.8	.24	3.56	2.39	17	.02	5.39	--	.070	.16
12...	1300	.1	.76	13	9.1	.22	3.62	2.44	17	.02	6.02	--	.058	.14
JUN														
05...	1300	.1	.55	13	6.7	.15	3.08	1.77	13	.02	13.5	--	.055	.13
13...	1300	.1	.55	12	6.8	.15	3.08	1.80	13	.02	8.87	--	.058	.13
14...	1145	.1	.54	12	6.5	--	3.11	1.79				--	.061	.13
22...	1045	.1	.44	13	4.8	.12	2.44	1.34	10	.01	45.4	--	.075	.15
28...	1300	.1	.39	13	4.0	.10	2.11	1.28	9	.01	22.1	--	.078	.14
JUL														
06...	1300	.1	.40	14	4.0	.11	1.87	1.16	8	.01	15.3	--	.074	.14
14...	1300	.1	.38	14	3.9	.10	1.71	1.13	8	.01	12.1	--	.079	.14
20...	0930	.1	.36	13	4.0	.12	1.59	1.18	8	.01	7.97	--	.079	.12
AUG														
30...	0950	.1	.45	13	4.9	.12	1.59	1.63	10	.01	1.91	--	.077	.11

09196500 PINE CREEK ABOVE FREMONT LAKE, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Organic carbon, water, fltrd, mg/L (00681)
JAN	
27...	.7
FEB	
28...	.6
MAY	
10...	2.5
12...	--
JUN	
05...	--
13...	--
14...	1.8
22...	1.6
28...	--
JUL	
06...	--
14...	--
20...	.8
AUG	
30...	.8

Remark codes used in
this table:

< -- Less than.

E -- Estimated.

09197000 PINE CREEK BELOW FREMONT LAKE, WY

LOCATION.--Lat 42°53'42", long 109°50'35" (NAD 27), in NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.27, T.34 N., R.109 W., Sublette County, Hydrologic Unit 14040102, on left bank at Lot Number 93, 0.9 mi downstream from Fremont Lake, and 2.1 mi northeast of Pinedale.

DRAINAGE AREA.--114 mi².

PERIOD OF RECORD.--October 1910 to September 1912, October 1915 to September 1918, April 1985 to September 1986, April 1988 to current year, (no winter records 1918-2004). Published as "near Pinedale" prior to October 1912 and as "at Fremont Lake Outlet" October 1915 to September 1918. Records since April 1985 equivalent to earlier records if diversions to Highland Ditch (station 09196960) are added to flow past station.

GAGE.--Water-stage recorder. Elevation of gage is 7,390 ft above NGVD of 1929, from topographic map. Prior to September 30, 1918, nonrecording gage at site 0.2 mi upstream from station at different datum.

REMARKS.--Record good. Some regulation by Fremont Lake. Fremont Ditch and Highland Ditch divert water upstream from station for irrigation downstream from station.

COOPERATION.--Station operated and record provided by Wyoming State Engineer's Office; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	34	32	27	27	27	36	163	541	782	80	66
2	33	32	31	26	27	27	56	161	562	755	81	66
3	32	32	30	26	27	27	66	161	442	749	82	65
4	33	32	30	27	27	26	99	160	465	734	80	65
5	33	32	30	27	27	26	130	158	458	706	78	65
6	33	32	30	27	27	26	129	158	452	676	76	64
7	34	32	30	27	27	26	128	158	448	655	75	64
8	34	33	30	27	27	26	129	157	413	628	74	65
9	35	34	31	27	27	26	129	155	378	610	74	65
10	35	34	31	27	27	26	128	152	352	590	74	65
11	36	36	31	27	27	26	139	153	327	568	74	63
12	36	38	30	27	27	26	166	153	326	546	74	63
13	36	38	30	27	27	26	165	152	305	519	74	63
14	36	39	29	27	27	26	163	152	289	500	73	61
15	36	39	29	27	27	26	164	150	289	484	71	61
16	36	40	29	27	28	26	162	149	289	467	70	60
17	36	39	28	27	27	27	161	150	293	451	70	55
18	37	40	28	27	27	27	160	151	303	416	71	50
19	37	39	28	27	26	27	161	152	314	361	71	50
20	37	39	28	27	26	27	160	154	327	289	70	43
21	37	38	28	27	26	27	160	155	427	224	70	37
22	37	37	27	27	26	27	163	158	562	210	70	37
23	37	36	27	27	26	26	165	160	677	140	71	37
24	37	35	27	27	26	26	165	266	779	106	70	37
25	37	35	26	27	27	26	166	351	864	108	69	37
26	37	35	26	27	27	26	165	355	900	108	69	37
27	37	34	26	27	27	27	164	360	896	107	69	33
28	37	34	26	28	27	27	166	366	875	104	68	30
29	37	33	26	28	---	27	166	372	854	100	69	30
30	36	32	26	28	---	27	164	382	823	98	68	29
31	36	---	26	27	---	26	---	426	---	89	67	---
TOTAL	1,102	1,063	886	838	751	819	4,275	6,450	15,230	12,880	2,252	1,563
MEAN	35.5	35.4	28.6	27.0	26.8	26.4	142	208	508	415	72.6	52.1
MAX	37	40	32	28	28	27	166	426	900	782	82	66
MIN	32	32	26	26	26	26	36	149	289	89	67	29
AC-FT	2,190	2,110	1,760	1,660	1,490	1,620	8,480	12,790	30,210	25,550	4,470	3,100

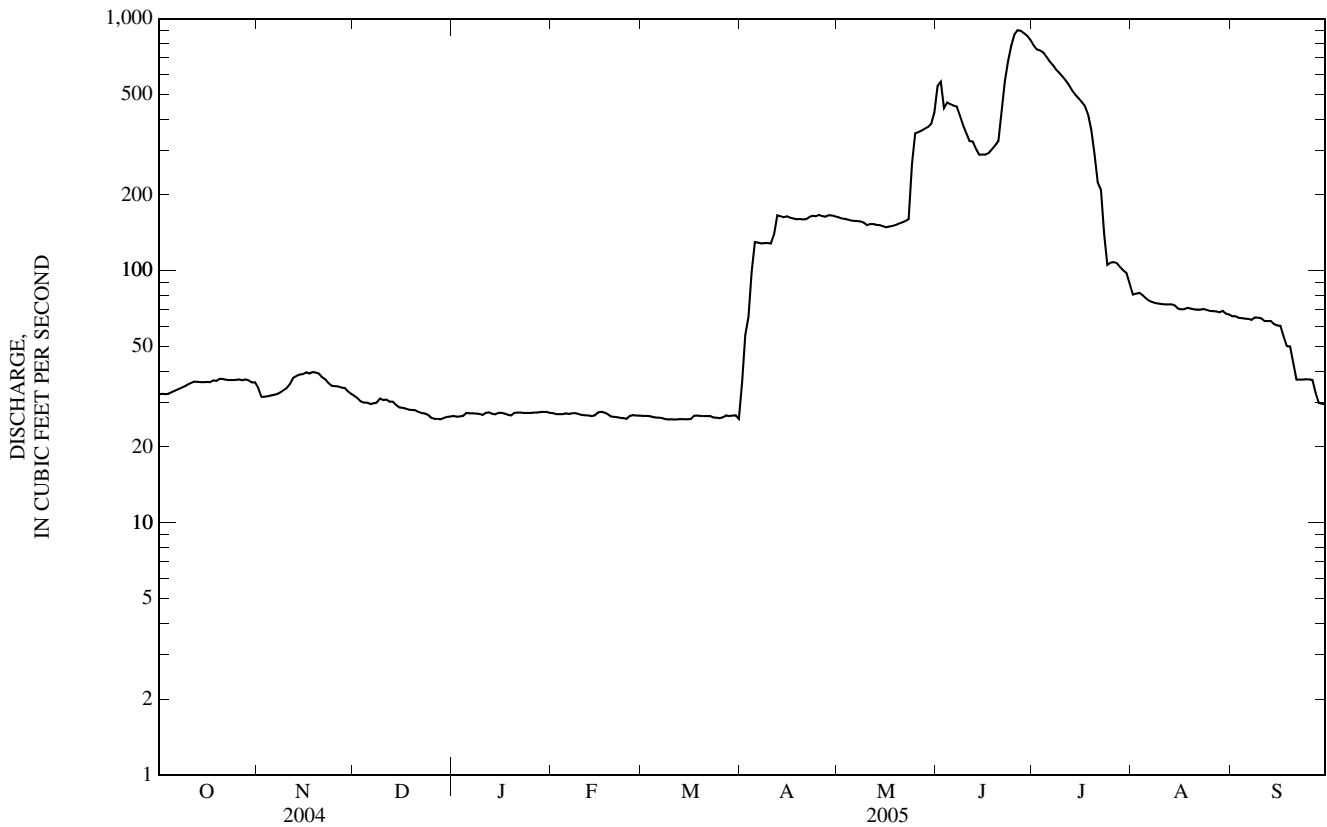
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 2005, BY WATER YEAR (WY)*

MEAN	52.9	33.9	26.1	22.5	22.7	24.2	35.0	151	587	453	137	61.9
MAX	86.2	40.0	34.2	27.0	33.0	36.0	142	299	1,273	1,258	300	131
(WY)	(1916)	(1911)	(1918)	(2005)	(1916)	(1916)	(2005)	(1997)	(1918)	(1917)	(1917)	(1917)
MIN	19.2	17.8	16.5	14.5	10.8	11.9	14.9	36.5	215	95.0	43.9	22.8
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(1988)	(2002)	(1992)	(1992)	(1988)	(1988)

09197000 PINE CREEK BELOW FREMONT LAKE, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1911 - 2005*	
ANNUAL TOTAL	34,420		48,109		--	
ANNUAL MEAN	94.0		132		169	
HIGHEST ANNUAL MEAN	--		--		211 1917	
LOWEST ANNUAL MEAN	--		--		90.2 2004	
HIGHEST DAILY MEAN	888	Jul 1	900	Jun 26	2,330	Jun 17, 1918
LOWEST DAILY MEAN	10	Jan 29	26	Dec 25	9.6	Apr 23, 1990
ANNUAL SEVEN-DAY MINIMUM	10	Jan 29	26	Dec 25	10	Jan 29, 2004
MAXIMUM PEAK FLOW	--		916	Jun 26	2,330 ^a	Jun 17, 1918
MAXIMUM PEAK STAGE	--		3.49	Jun 26	3.49	Jun 26, 2005
ANNUAL RUNOFF (AC-FT)	68,270		95,420		122,100	
10 PERCENT EXCEEDS	249		414		585	
50 PERCENT EXCEEDS	34		37		40	
90 PERCENT EXCEEDS	12		27		18	

* For period of operation.
 a Site and datum then in use.



09205000 NEW FORK RIVER NEAR BIG PINEY, WY

LOCATION.--Lat 42°34'02", long 109°55'46" (NAD 27), in SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.22, T.30 N., R.110 W., Sublette County, Hydrologic Unit 14040102, on right bank 350 ft downstream from old highway bridge, 3.4 mi upstream from mouth, and 9.5 mi northeast of Big Piney.

DRAINAGE AREA.--1,230 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 6,800 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power development, and diversions for irrigation of about 62,100 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	471	527	e260	e270	e212	e300	369	e670	3,670	3,040	629	306
2	468	532	e280	e280	e210	e310	409	e630	3,750	2,800	630	302
3	468	521	e300	e280	e200	e310	560	e590	3,190	2,530	645	292
4	462	549	e310	e270	e210	e305	652	e570	2,540	2,460	605	291
5	455	549	e300	e260	e210	e280	666	e560	2,320	2,380	570	293
6	454	536	e296	e250	e200	e270	703	e580	2,280	2,270	536	291
7	463	523	e290	e250	e180	e270	688	e650	2,380	2,150	515	290
8	455	522	e290	e260	e190	e280	642	e840	2,210	2,070	497	285
9	450	522	e300	e270	e190	e290	626	e1,040	2,000	1,990	454	281
10	443	532	e310	e260	e190	e320	671	e1,180	1,790	1,920	453	303
11	435	547	e320	e260	e180	e410	739	e1,130	1,600	1,920	447	298
12	430	566	e340	e270	e180	e530	761	1,060	1,630	1,840	433	300
13	419	570	e330	e280	e170	e640	720	1,010	1,940	1,710	415	312
14	407	550	e320	e270	e180	e730	646	926	1,850	1,550	411	312
15	396	532	e310	e250	e170	e650	590	874	1,770	1,440	391	309
16	394	513	e300	e240	e165	e520	679	931	1,920	1,370	390	310
17	391	502	e300	e250	e185	e400	718	1,120	2,290	1,300	412	314
18	403	500	e290	e250	e200	e360	685	1,350	2,920	1,250	424	330
19	423	487	e290	e240	e220	e410	640	1,360	3,760	1,220	478	326
20	458	491	e280	e240	e230	e440	637	1,470	4,310	1,220	446	323
21	621	477	e250	e230	e240	e500	657	1,910	4,770	1,070	410	325
22	603	502	e250	e230	e240	e600	697	2,650	5,260	931	393	349
23	571	442	e260	e220	e230	e530	e730	3,290	5,330	844	378	334
24	556	375	e250	e220	e230	e410	e760	3,840	5,320	806	374	338
25	538	343	e250	e220	e230	e300	e780	4,470	5,180	827	362	336
26	538	293	e260	e240	e240	e260	e740	4,930	4,940	775	348	331
27	547	260	e270	e240	e260	e250	e690	4,410	4,600	747	344	327
28	550	276	e270	e230	e280	e300	e640	4,180	4,090	717	335	321
29	554	e260	e270	e220	---	e380	e670	3,960	3,680	683	329	316
30	552	e240	e250	e220	---	e370	e680	4,180	3,340	649	315	311
31	544	---	e260	e220	---	375	---	3,910	---	656	307	---
TOTAL	14,919	14,039	8,856	7,690	5,822	12,300	19,845	60,271	96,630	47,135	13,676	9,356
MEAN	481	468	286	248	208	397	662	1,944	3,221	1,520	441	312
MAX	621	570	340	280	280	730	780	4,930	5,330	3,040	645	349
MIN	391	240	250	220	165	250	369	560	1,600	649	307	281
AC-FT	29,590	27,850	17,570	15,250	11,550	24,400	39,360	119,500	191,700	93,490	27,130	18,560

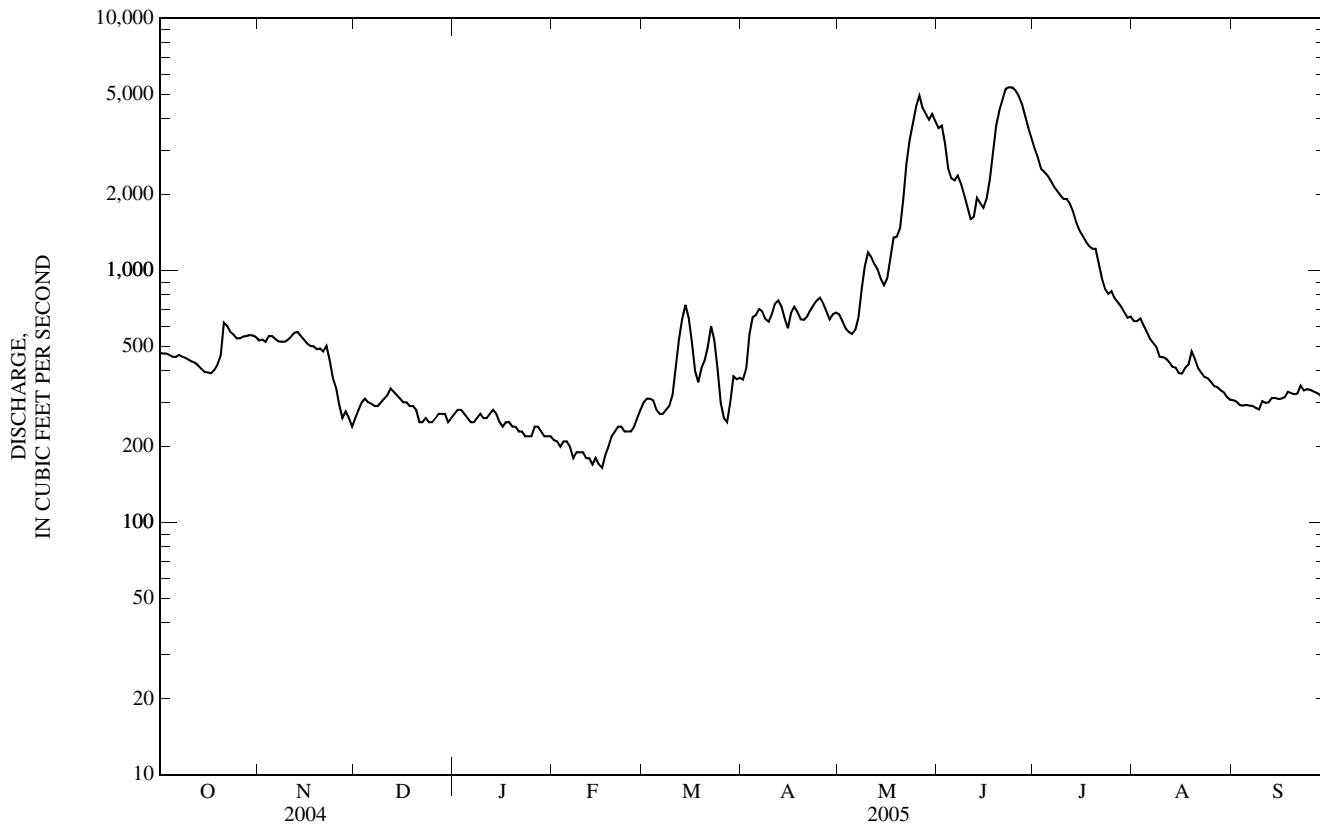
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2005, BY WATER YEAR (WY)

MEAN	372	321	238	199	209	273	431	1,139	2,941	1,600	571	370
MAX	989	608	397	277	337	597	1,114	2,539	7,065	4,155	1,279	766
(WY)	(1983)	(1984)	(1983)	(1969)	(1969)	(1972)	(1969)	(1969)	(1986)	(1982)	(1982)	(1983)
MIN	171	188	139	108	122	161	181	254	699	405	225	164
(WY)	(1989)	(1989)	(1989)	(2002)	(2002)	(1977)	(1981)	(1977)	(1992)	(1961)	(1988)	(1988)

09205000 NEW FORK RIVER NEAR BIG PINEY, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1954 - 2005	
ANNUAL TOTAL	231,131		310,539		--	
ANNUAL MEAN	632		851		723	
HIGHEST ANNUAL MEAN	--		--		1,288	1986
LOWEST ANNUAL MEAN	--		--		313	1977
HIGHEST DAILY MEAN	3,870	Jul 1	5,330	Jun 23	9,110	Jun 7, 1986
LOWEST DAILY MEAN	140	Jan 6	165	Feb 16	90	Jan 13, 1963
ANNUAL SEVEN-DAY MINIMUM	148	Jan 20	176	Feb 11	102	Jan 2, 2002
MAXIMUM PEAK FLOW	--		5,420	Jun 22	9,190	Jun 7, 1986
MAXIMUM PEAK STAGE	--		6.19	Jun 22	8.28	Jun 7, 1986
ANNUAL RUNOFF (AC-FT)	458,400		616,000		523,500	
10 PERCENT EXCEEDS	1,500		2,270		1,800	
50 PERCENT EXCEEDS	416		447		330	
90 PERCENT EXCEEDS	165		240		185	

e Estimated.



09208400 LA BARGE CREEK ABOVE VIOLA, WY

LOCATION.--Lat 42°17'38", long 110°26'24" (NAD 27), in NE¹/₄ NW¹/₄ NW¹/₄ sec.36, T.27 N., R.115 W., Sublette County, Hydrologic Unit 14040101, on left bank 1.1 mi upstream from Rock Creek, 3.7 mi northwest of Viola, and 12.2 mi west of La Barge.

DRAINAGE AREA.--122 mi².

PERIOD OF RECORD.--October 1982 to September 1984, April 2003 to current year (seasonal).

GAGE.--Water-stage recorder. Elevation of gage is 7,270 ft above NGVD of 1929, from topographic map.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge 1,080 ft³/s, May 17, 1997, gage height 4.35 ft.

COOPERATION.--Station operated and record provided by the Wyoming State Engineer's Office; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	124	473	187	70	51
2	---	---	---	---	---	---	---	128	412	180	70	50
3	---	---	---	---	---	---	---	136	354	189	71	50
4	---	---	---	---	---	---	---	155	328	163	70	49
5	---	---	---	---	---	---	---	180	324	154	69	50
6	---	---	---	---	---	---	---	239	312	e140	66	49
7	---	---	---	---	---	---	---	340	303	e143	64	49
8	---	---	---	---	---	---	---	286	286	e140	62	49
9	---	---	---	---	---	---	---	347	259	e135	61	50
10	---	---	---	---	---	---	---	332	243	e119	60	53
11	---	---	---	---	---	---	---	304	225	e116	60	52
12	---	---	---	---	---	---	---	263	246	e112	58	53
13	---	---	---	---	---	---	---	268	216	e108	58	54
14	---	---	---	---	---	---	---	302	214	e104	57	52
15	---	---	---	---	---	---	---	341	216	e100	56	50
16	---	---	---	---	---	---	---	431	243	84	57	50
17	---	---	---	---	---	---	---	446	260	81	61	51
18	---	---	---	---	---	---	---	330	293	86	61	51
19	---	---	---	---	---	---	---	363	304	87	63	50
20	---	---	---	---	---	---	---	480	323	87	58	49
21	---	---	---	---	---	---	---	598	325	87	56	50
22	---	---	---	---	---	---	88	566	309	e86	56	51
23	---	---	---	---	---	---	98	625	320	e88	56	50
24	---	---	---	---	---	---	123	652	313	e88	53	50
25	---	---	---	---	---	---	147	576	289	e97	52	50
26	---	---	---	---	---	---	182	476	279	e88	51	49
27	---	---	---	---	---	---	187	413	253	e87	51	49
28	---	---	---	---	---	---	177	403	228	e84	51	48
29	---	---	---	---	---	---	139	392	212	e78	51	48
30	---	---	---	---	---	---	135	446	184	e77	51	47
31	---	---	---	---	---	---	---	389	---	e78	51	---
TOTAL	---	---	---	---	---	---	---	11,331	8,546	3,453	1,831	1,504
MEAN	---	---	---	---	---	---	---	366	285	111	59.1	50.1
MAX	---	---	---	---	---	---	---	652	473	189	71	54
MIN	---	---	---	---	---	---	---	124	184	77	51	47
AC-FT	---	---	---	---	---	---	---	22,480	16,950	6,850	3,630	2,980

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2005, BY WATER YEAR (WY)*

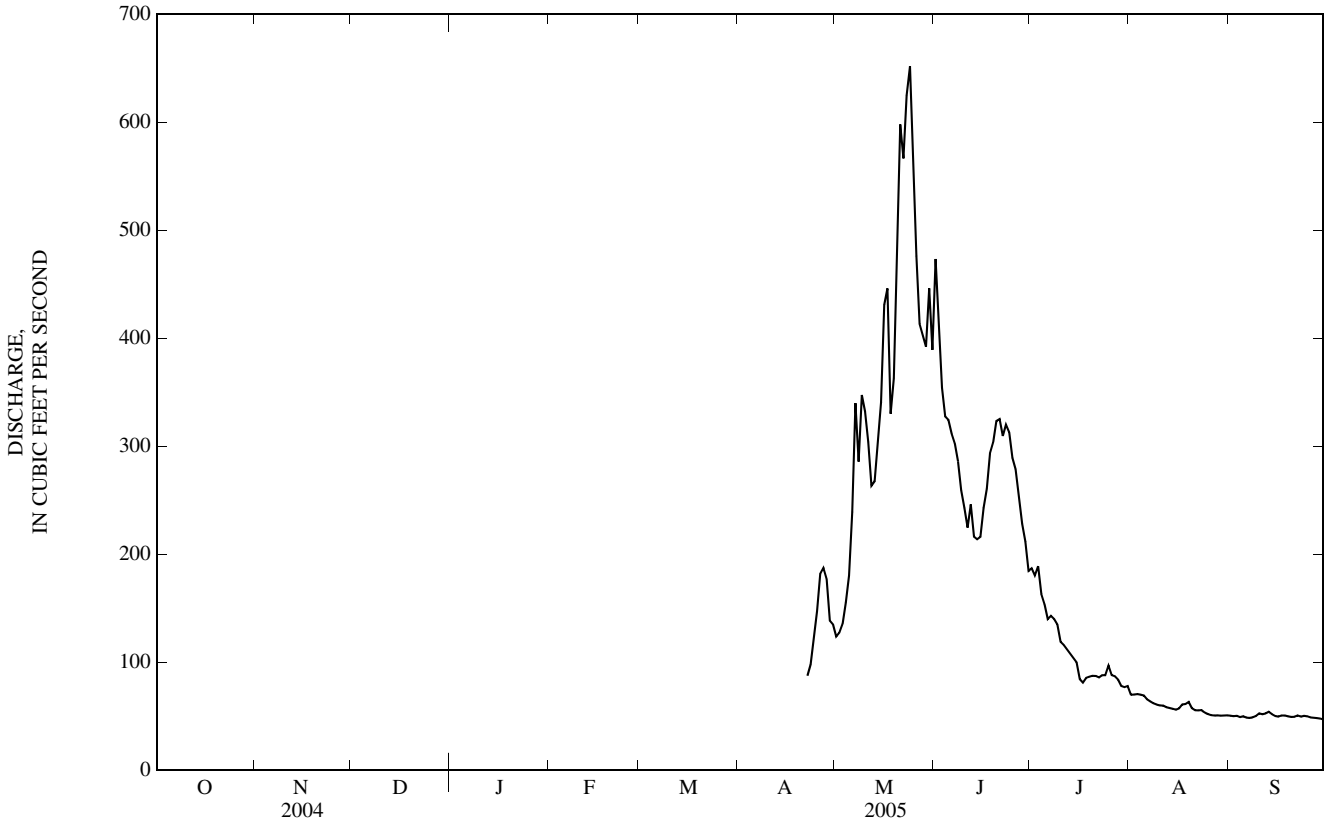
MEAN	69.6	53.5	42.5	42.4	38.0	42.0	61.4	267	298	123	66.0	54.6
MAX	69.9	60.3	44.8	43.9	41.8	44.8	68.4	426	540	226	104	79.6
(WY)	(1984)	(1984)	(1984)	(1983)	(1983)	(1983)	(1984)	(1984)	(1983)	(1983)	(1983)	(1983)
MIN	69.2	46.8	40.2	41.0	34.3	39.3	54.5	122	130	52.5	36.4	32.6
(WY)	(1983)	(1983)	(1983)	(1984)	(1984)	(1984)	(1983)	(2004)	(2004)	(2003)	(2003)	(2003)

09208400 LA BARGE CREEK ABOVE VIOLA, WY—Continued

SUMMARY STATISTICS

	FOR 2005 WATER YEAR*		WATER YEARS 1983 - 2005*	
ANNUAL MEAN	--		128	
HIGHEST ANNUAL MEAN	--		129	1983
LOWEST ANNUAL MEAN	--		126	1984
HIGHEST DAILY MEAN	652	May 24	840	May 29, 1984
LOWEST DAILY MEAN	47	Sep 30	21	Dec 23, 1983
MAXIMUM PEAK FLOW	788	May 24	1,080	May 17, 1997
MAXIMUM PEAK STAGE	3.35	May 24	4.35	May 17, 1997
ANNUAL RUNOFF	--		92,520	
10 PERCENT EXCEEDS	--		376	
50 PERCENT EXCEEDS	--		66	
90 PERCENT EXCEEDS	--		38	

* For period of operation.
e Estimated.



09209400 GREEN RIVER NEAR LA BARGE, WY

LOCATION.--Lat 42°11'34", long 110°09'45" (NAD 27), in SE¹/₄ SE¹/₄ NW¹/₄ sec.33, T.26 N., R.112 W., Lincoln County, Hydrologic Unit 14040101, on right bank 1.7 mi upstream from high-water line of Fontenelle Reservoir at elevation 6,513 ft, 4.0 mi upstream from Muddy Creek, and 5.0 mi south of La Barge.

DRAINAGE AREA.--3,910 mi².

PERIOD OF RECORD.--October 1963 to current year. Records are equivalent to those published August 1946 to March 1965 as Green River near Fontenelle (station 09209500) average annual mean 1,557 cfs.

GAGE.--Water-stage recorder. Elevation of gage is 6,520 ft above NGVD of 1929, from topographic map. National Weather Service data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs and diversions for irrigation of about 198,000 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	860	1,080	e500	e380	e450	e750	e1,200	2,100	7,380	5,190	1,410	603
2	916	965	e520	e380	e425	e830	e1,300	1,930	7,410	4,610	1,520	563
3	916	943	e540	e390	e410	e860	e1,500	1,780	6,660	4,060	1,700	551
4	905	956	e560	e430	e430	e900	e1,900	1,670	5,240	3,800	1,660	527
5	884	1,060	e570	e400	e420	e870	e2,050	1,670	4,390	3,760	1,530	522
6	868	1,020	e560	e375	e430	e870	2,060	1,800	4,010	3,640	1,390	508
7	853	981	e550	e390	e400	e860	1,970	2,170	3,900	3,480	1,290	492
8	849	945	e550	e410	e410	e860	2,040	2,390	3,950	3,370	1,210	478
9	837	936	e540	e430	e420	e880	2,180	2,230	3,830	3,250	1,150	464
10	820	960	e560	e430	e420	e910	1,960	2,240	3,500	3,180	1,100	480
11	804	980	e580	e440	e420	e1,000	1,820	2,530	3,130	3,250	1,090	506
12	792	1,010	e600	e440	400	e1,150	1,680	3,050	3,040	3,270	1,040	512
13	772	1,040	e630	e420	e420	e1,250	1,730	3,200	3,580	3,110	956	583
14	757	1,020	e590	e400	e430	e1,400	1,930	2,770	3,580	3,010	914	618
15	736	975	e580	e380	e400	e1,350	2,170	2,460	3,130	2,740	892	622
16	717	947	e560	e380	e370	e1,250	2,010	2,300	3,020	2,540	862	611
17	708	914	e520	e400	e380	e1,200	1,860	2,500	3,120	2,540	878	594
18	720	889	e500	e410	e400	e1,200	2,040	3,000	3,720	2,450	926	583
19	767	888	e470	e430	e410	e1,150	2,380	3,190	4,840	2,480	1,090	587
20	863	848	e440	e430	e430	e1,150	2,430	3,060	5,950	2,500	1,160	592
21	1,130	878	e400	e420	e500	e1,200	2,210	3,360	6,660	2,380	1,110	585
22	1,280	e630	e360	e420	e560	e1,250	1,920	4,370	7,510	2,120	1,060	597
23	1,200	e660	e370	e440	e560	e1,350	1,880	5,440	8,160	1,910	1,010	614
24	1,130	e690	e380	e450	e530	e1,300	2,120	6,100	8,450	1,860	952	592
25	1,100	e660	e350	e460	e520	e1,200	2,380	6,980	8,590	1,870	871	606
26	1,090	e620	e360	e450	e560	e1,100	2,440	7,600	8,490	1,910	836	606
27	1,080	e560	e360	e450	e600	e1,050	2,440	7,150	8,130	1,830	808	615
28	1,080	e500	e360	e470	e690	e1,000	2,420	6,290	7,350	1,730	787	611
29	1,100	e490	e350	e460	---	e1,150	2,370	5,890	6,490	1,610	757	605
30	1,130	e470	e340	e460	---	e1,200	2,270	6,420	5,780	1,490	709	596
31	1,140	---	e360	e450	---	e1,200	---	7,390	---	1,420	649	---
TOTAL	28,804	25,515	14,910	13,075	12,795	33,690	60,660	115,030	162,990	86,360	33,317	17,023
MEAN	929	850	481	422	457	1,087	2,022	3,711	5,433	2,786	1,075	567
MAX	1,280	1,080	630	470	690	1,400	2,440	7,600	8,590	5,190	1,700	622
MIN	708	470	340	375	370	750	1,200	1,670	3,020	1,420	649	464
AC-FT	57,130	50,610	29,570	25,930	25,380	66,820	120,300	228,200	323,300	171,300	66,080	33,770

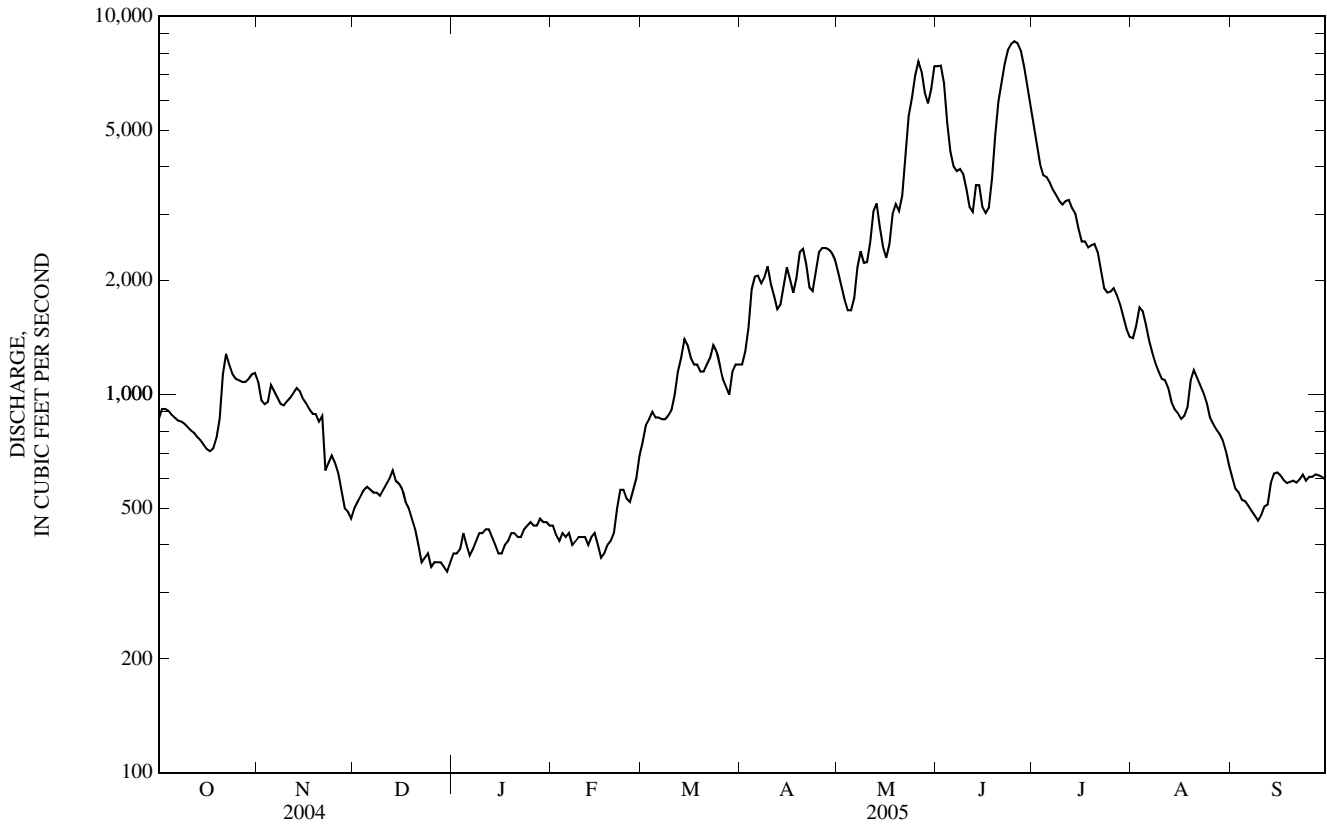
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2005, BY WATER YEAR (WY)

MEAN	810	724	519	452	485	728	1,379	2,774	5,559	3,331	1,405	863
MAX	2,049	1,306	866	608	681	1,565	2,692	5,357	14,230	7,993	3,185	1,768
(WY)	(1983)	(1984)	(1984)	(1966)	(1998)	(1972)	(1986)	(1997)	(1986)	(1982)	(1982)	(1983)
MIN	353	469	269	202	213	403	469	305	1,080	710	448	350
(WY)	(2002)	(1989)	(2002)	(2002)	(2002)	(2002)	(1977)	(1977)	(1992)	(1994)	(2001)	(2001)

09209400 GREEN RIVER NEAR LA BARGE, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1964 - 2005	
ANNUAL TOTAL	419,899		604,169		--	
ANNUAL MEAN	1,147		1,655		1,588	
HIGHEST ANNUAL MEAN	--		--		2,908 1986	
LOWEST ANNUAL MEAN	--		--		668 1977	
HIGHEST DAILY MEAN	5,540	Jun 12	8,590	Jun 25	18,800	Jun 9, 1986
LOWEST DAILY MEAN	300	Jan 5	340	Dec 30	180	Jan 31, 2002
ANNUAL SEVEN-DAY MINIMUM	314	Jan 15	354	Dec 25	188	Jan 31, 2002
MAXIMUM PEAK FLOW	--		8,670	Jun 25	18,800	Jun 9, 1986
MAXIMUM PEAK STAGE	--		8.24	Jun 25	10.50	Jun 9, 1986
ANNUAL RUNOFF (AC-FT)	832,900		1,198,000		1,151,000	
10 PERCENT EXCEEDS	2,500		3,740		3,850	
50 PERCENT EXCEEDS	850		956		792	
90 PERCENT EXCEEDS	340		420		420	

e Estimated.



09210500 FONTENELLE CREEK NEAR HERSCHLER RANCH, NEAR FONTENELLE, WY

LOCATION.--Lat 42°05'46", long 110°24'57" (NAD 27), in NW¹/₄ SW¹/₄ NE¹/₄ sec.2, T.24 N., R.115 W., Lincoln County, Hydrologic Unit 14040101, on left bank 2.0 mi downstream from Dutch George Creek and 14 mi west of Fontenelle.

DRAINAGE AREA.--152 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 6,950 ft above NGVD of 1929, from topographic map. Prior to May 5, 1970, at site 300 ft downstream from station at present datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversions for irrigation of about 780 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	33	e24	e24	e30	35	40	193	430	157	57	32
2	29	40	e26	e24	e31	e33	35	189	404	143	59	31
3	25	29	e25	e27	e31	e32	44	180	353	132	60	31
4	24	32	e26	e27	e33	30	55	188	325	126	55	30
5	24	30	e27	e26	e34	e29	77	210	310	121	54	30
6	25	29	e27	e24	e35	e28	82	358	310	114	52	30
7	24	31	e28	e23	e34	26	92	373	310	109	50	29
8	23	28	e30	e22	e36	25	104	297	299	103	49	29
9	23	29	e31	e22	e40	25	94	336	267	97	47	29
10	23	30	e31	e21	e41	29	90	347	248	101	46	34
11	23	31	e32	e21	e40	37	84	354	235	102	44	32
12	23	33	e31	e20	41	33	87	318	240	89	43	33
13	23	31	e30	e21	38	35	136	268	228	78	42	35
14	23	30	e26	e20	33	50	168	265	215	73	42	33
15	22	27	e25	e18	32	45	113	274	211	73	42	33
16	22	25	e24	e19	e31	28	128	330	214	73	42	32
17	22	27	e23	e20	e34	29	196	381	222	69	46	30
18	37	29	e23	e22	e35	35	252	344	228	71	45	30
19	36	27	e24	e25	35	29	216	336	233	69	45	30
20	52	e23	e21	e28	35	27	156	399	231	64	42	30
21	65	e25	e23	e27	35	33	133	478	230	64	40	31
22	38	e27	e22	e26	e33	37	132	489	231	64	40	33
23	32	e29	e24	e26	e37	29	173	490	232	61	42	32
24	35	e28	e27	e27	e36	30	237	508	221	62	38	32
25	32	e26	e28	e29	e35	28	332	506	210	63	36	32
26	31	e24	e29	e30	e37	33	293	462	200	63	35	33
27	32	e23	e30	e30	e40	29	281	422	190	59	34	34
28	35	e26	e30	e29	e36	30	315	395	184	59	35	34
29	39	e22	e28	e28	---	41	230	394	203	56	33	34
30	32	e23	e26	e30	---	42	205	482	172	56	31	34
31	31	---	e25	e32	---	45	---	422	---	58	31	---
TOTAL	933	847	826	768	988	1,017	4,580	10,988	7,586	2,629	1,357	952
MEAN	30.1	28.2	26.6	24.8	35.3	32.8	153	354	253	84.8	43.8	31.7
MAX	65	40	32	32	41	50	332	508	430	157	60	35
MIN	22	22	21	18	30	25	35	180	172	56	31	29
AC-FT	1,850	1,680	1,640	1,520	1,960	2,020	9,080	21,790	15,050	5,210	2,690	1,890

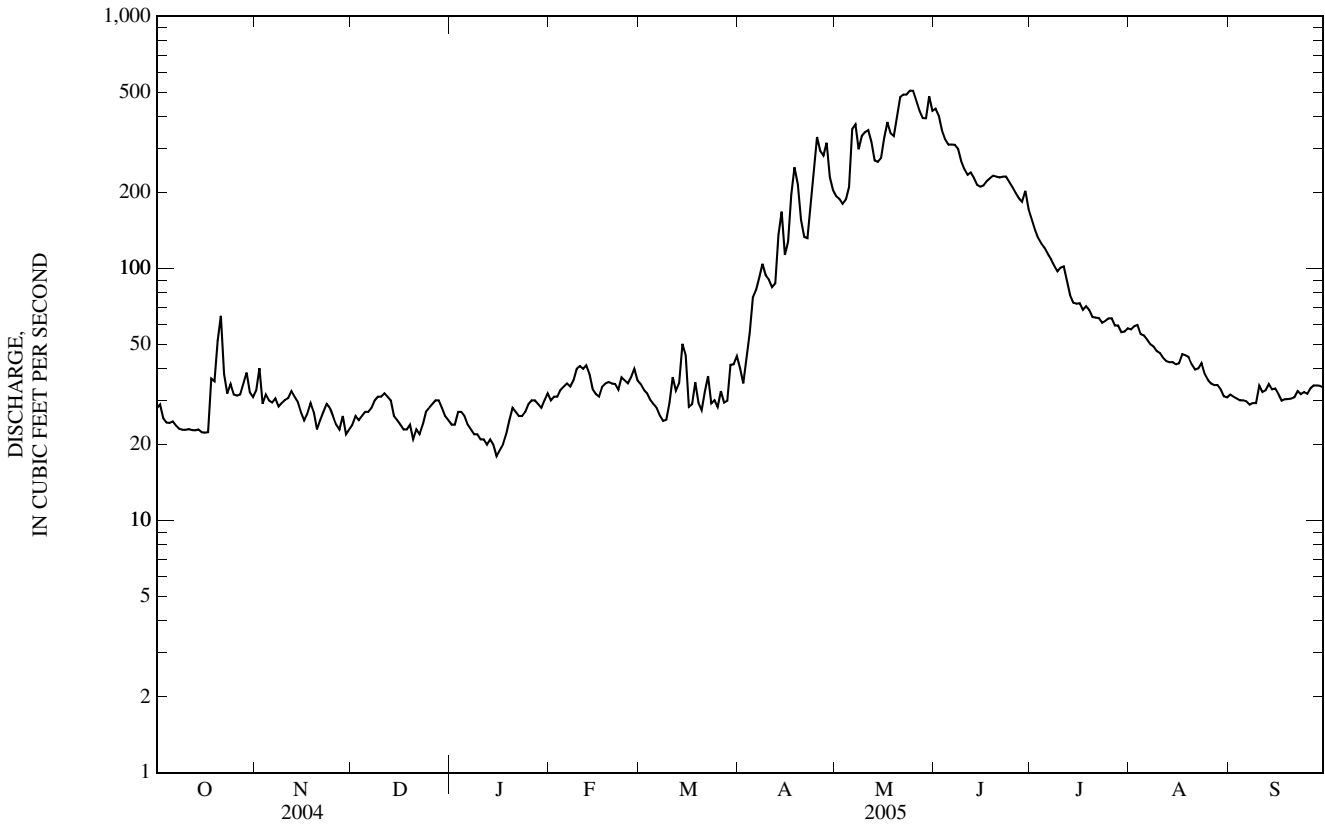
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2005, BY WATER YEAR (WY)

MEAN	31.8	29.6	25.8	25.3	26.5	33.3	99.1	213	221	75.0	37.0	30.3
MAX	55.3	47.1	42.1	41.3	51.3	76.3	280	437	628	185	76.0	63.1
(WY)	(1987)	(1998)	(1985)	(1985)	(1985)	(1986)	(1986)	(1980)	(1986)	(1975)	(1983)	(1997)
MIN	18.8	18.6	13.5	14.3	15.0	18.7	35.1	32.1	20.3	17.2	10.2	12.7
(WY)	(2004)	(1994)	(1990)	(1991)	(1958)	(1962)	(1977)	(1977)	(1977)	(1977)	(1992)	(1977)

09210500 FONTENELLE CREEK NEAR HERSCHLER RANCH, NEAR FONTENELLE, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1952 - 2005	
ANNUAL TOTAL	17,052		33,471		--	
ANNUAL MEAN	46.6		91.7		70.7	
HIGHEST ANNUAL MEAN	--		--		155	1986
LOWEST ANNUAL MEAN	--		--		24.8	1977
HIGHEST DAILY MEAN	181	May 29	508	May 24	865	Jun 6, 1986
LOWEST DAILY MEAN	13	Jan 6	18	Jan 15	5.6	Aug 14, 1992
ANNUAL SEVEN-DAY MINIMUM	14	Jan 2	20	Jan 11	6.2	Aug 10, 1992
MAXIMUM PEAK FLOW	--		535	May 24	907	Apr 23, 1986
MAXIMUM PEAK STAGE	--		8.41	May 24	9.51	Apr 23, 1986
ANNUAL RUNOFF (AC-FT)	33,820		66,390		51,240	
10 PERCENT EXCEEDS	102		270		180	
50 PERCENT EXCEEDS	29		35		33	
90 PERCENT EXCEEDS	19		24		20	

e Estimated.



09211200 GREEN RIVER BELOW FONTENELLE RESERVOIR, WY

LOCATION.--Lat 42°01'16", long 110°02'57" (NAD 27), in NW¼ NW¼ NE¼ sec.31, T.24 N., R.111 W., Sweetwater County, Hydrologic Unit 14040103, on right bank 1.0 mi downstream from Fontenelle Dam, 2.5 mi upstream from Slate Creek, and 6.0 mi southeast of Fontenelle.

DRAINAGE AREA.--4,280 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1963 to current year.

REVISED RECORDS.--WSP 2125: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,378.13 ft above NGVD of 1929. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good. Flow completely regulated by Fontenelle Reservoir 1.0 mi upstream from station. Natural flow of stream affected by storage reservoirs and diversions for irrigation of about 202,000 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	968	883	1,180	1,150	1,210	1,150	1,560	1,570	5,650	3,550	1,090	1,260
2	947	920	1,180	1,160	1,180	1,120	1,560	1,570	6,120	3,540	1,100	1,210
3	955	956	1,180	1,170	1,120	1,130	1,560	1,560	6,160	3,550	1,100	1,210
4	961	955	1,190	1,200	1,160	1,170	1,550	1,570	6,110	3,540	1,100	1,200
5	960	948	1,200	1,190	1,150	1,170	1,520	1,590	6,040	3,330	1,120	1,200
6	966	943	1,180	1,200	1,170	1,160	1,480	1,620	6,150	3,030	1,130	1,160
7	927	898	1,180	1,210	1,170	1,170	1,250	1,610	6,230	2,960	1,140	1,150
8	822	867	1,160	1,200	1,160	1,170	1,120	1,580	6,190	2,960	1,160	1,150
9	818	989	1,150	1,200	1,160	1,180	1,120	1,620	6,240	3,030	1,170	1,140
10	804	888	1,120	1,190	1,170	1,160	1,120	1,610	6,210	3,070	1,180	1,130
11	813	988	1,110	1,190	1,220	1,170	1,180	1,590	6,240	2,890	1,200	1,120
12	800	1,000	1,100	1,190	1,230	1,170	1,260	1,580	6,150	2,450	1,210	1,100
13	846	992	1,100	1,190	1,200	1,180	1,270	1,570	6,140	2,040	1,240	1,040
14	816	1,010	1,090	1,190	1,190	1,180	1,270	1,590	6,240	1,760	1,250	1,020
15	822	998	1,090	1,200	1,170	1,180	1,270	1,600	5,990	1,770	1,270	1,010
16	839	1,010	1,080	1,210	1,160	1,200	1,270	1,560	5,420	1,780	1,280	1,010
17	846	999	1,090	1,210	1,160	1,210	1,260	1,630	5,020	1,780	1,280	1,000
18	838	1,040	1,100	1,210	1,160	1,200	1,360	1,820	4,960	1,650	1,300	1,010
19	853	1,070	1,100	1,230	1,170	1,220	1,410	2,250	4,880	1,430	1,320	1,040
20	855	1,070	1,120	1,210	1,170	1,210	1,400	2,450	4,970	1,340	1,340	990
21	881	1,080	1,120	1,210	1,170	1,200	1,410	2,420	5,080	1,310	1,340	1,020
22	901	1,100	1,100	1,210	1,170	1,170	1,400	2,370	4,840	1,300	1,350	1,020
23	895	1,110	1,100	1,210	1,180	1,170	1,470	2,570	4,250	1,290	1,380	1,010
24	912	1,160	1,130	1,210	1,160	1,180	1,470	3,240	3,990	1,300	1,400	1,010
25	875	1,200	1,150	1,200	1,160	1,170	1,410	3,830	3,930	1,310	1,400	1,030
26	873	1,190	1,160	1,200	1,170	1,160	1,480	4,390	3,920	1,320	1,390	1,100
27	866	1,180	1,160	1,210	1,180	1,170	1,510	5,170	4,040	1,260	1,390	1,030
28	878	1,180	1,160	1,210	1,190	1,160	1,480	5,360	3,790	1,160	1,440	1,010
29	879	1,180	1,160	1,220	---	1,160	1,510	5,380	3,500	1,100	1,450	986
30	880	1,180	1,140	1,210	---	1,160	1,540	5,460	3,550	1,100	1,450	990
31	887	---	1,150	1,210	---	1,300	---	5,470	---	1,110	1,380	---
TOTAL	27,183	30,984	35,230	37,200	32,860	36,500	41,470	79,200	158,000	65,010	39,350	32,356
MEAN	877	1,033	1,136	1,200	1,174	1,177	1,382	2,555	5,267	2,097	1,269	1,079
MAX	968	1,200	1,200	1,230	1,230	1,300	1,560	5,470	6,240	3,550	1,450	1,260
MIN	800	867	1,080	1,150	1,120	1,120	1,120	1,560	3,500	1,100	1,090	986
AC-FT	53,920	61,460	69,880	73,790	65,180	72,400	82,260	157,100	313,400	128,900	78,050	64,180

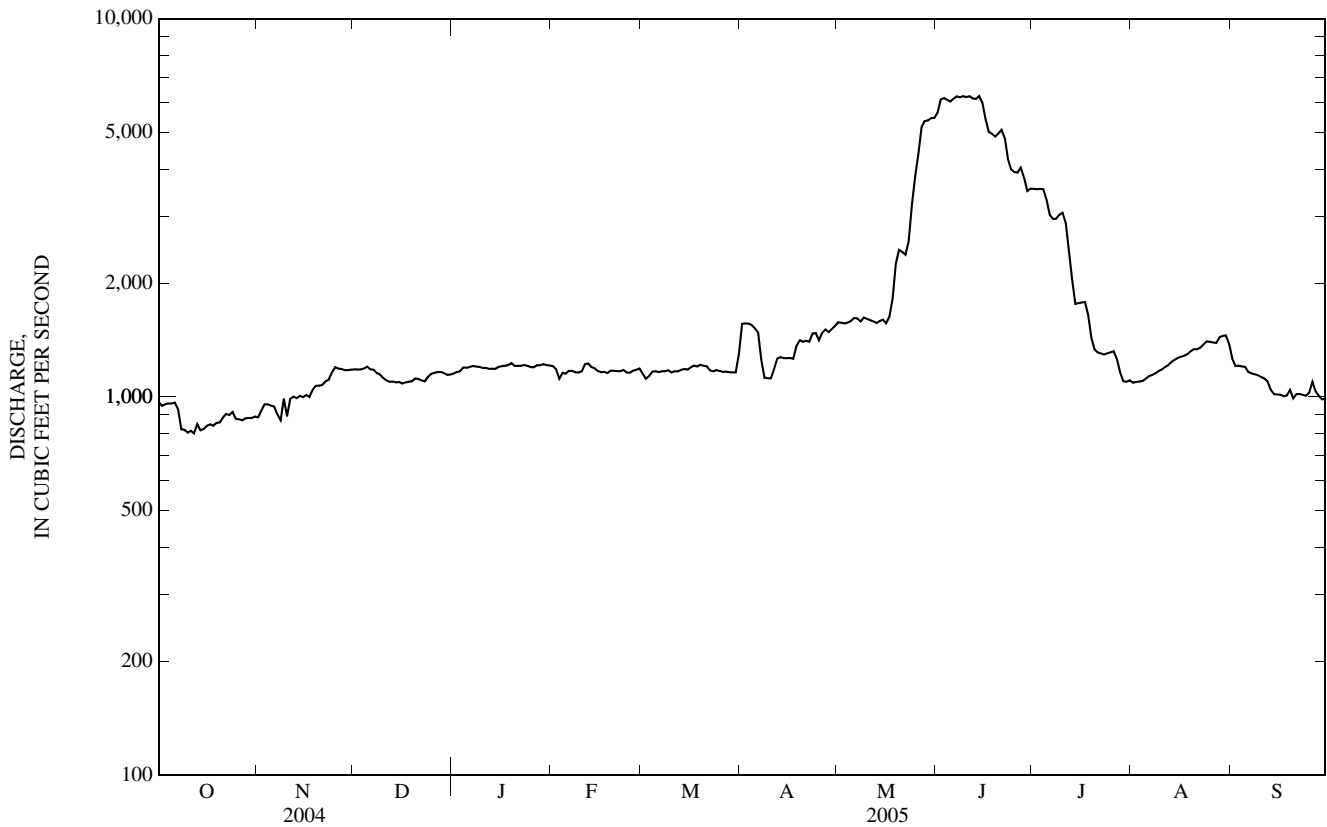
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2005, BY WATER YEAR (WY)

MEAN	994	881	824	837	881	944	1,437	2,337	4,275	3,062	1,564	1,194
MAX	3,138	1,522	1,308	1,312	1,818	1,576	3,134	5,588	11,240	8,868	3,466	7,893
(WY)	(1983)	(1984)	(1998)	(1998)	(1974)	(1986)	(1986)	(1985)	(1986)	(1986)	(1982)	(1965)
MIN	291	308	272	273	262	365	370	463	465	364	367	285
(WY)	(1989)	(1989)	(1968)	(1968)	(1968)	(1989)	(1968)	(1992)	(1977)	(1977)	(1977)	(1988)

09211200 GREEN RIVER BELOW FONTENELLE RESERVOIR, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1964 - 2005	
ANNUAL TOTAL	395,607		615,343		--	
ANNUAL MEAN	1,081		1,686		1,604	
HIGHEST ANNUAL MEAN	--		--		3,060 1986	
LOWEST ANNUAL MEAN	--		--		609 2002	
HIGHEST DAILY MEAN	3,290	Jul 5	6,240	Jun 9	18,600	Sep 6, 1965
LOWEST DAILY MEAN	740	Jan 7	800	Oct 12	209	Nov 22, 1968
ANNUAL SEVEN-DAY MINIMUM	751	Mar 7	817	Oct 8	251	Dec 25, 1967
MAXIMUM PEAK FLOW	--		6,650	Jun 9	19,400 ^a	Sep 5, 1965
MAXIMUM PEAK STAGE	--		14.92	Jun 9	18.74 ^{a,b}	Sep 5, 1965
ANNUAL RUNOFF (AC-FT)	784,700		1,221,000		1,162,000	
10 PERCENT EXCEEDS	1,700		3,550		3,300	
50 PERCENT EXCEEDS	955		1,190		1,110	
90 PERCENT EXCEEDS	765		958		508	

a Caused by emergency release from Fontenelle River.
 b From floodmarks.



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1967 to September 1976.

WATER TEMPERATURES: October 1967 to September 1976.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Residue on evap. at 180degC wat fltr mg/L (70300)	Ammonia water, mg/L as N (00608)	Nitrite + nitrate water, mg/L as N (00631)	Nitrite water, mg/L as N (00613)
OCT 25...	1325	887	600	11.3	129	8.6	320	1.0	10.5	201	<.04	<.06	<.008
DEC 02...	1515	1,180	607	13.1	121	8.5	327	-5.0	2.5	216	<.04	<.06	<.008
FEB 02...	1450	1,170	610	10.0	91	8.3	365	.0	2.0	226	E.03	<.05	<.008
MAR 21...	1205	1,210	603	10.4	97	7.9	373	7.0	2.5	249	<.04	E.04	<.008
APR 25...	1220	1,280	604	10.5	104	8.1	372	16.0	5.0	245	<.04	<.06	<.008
JUN 06...	1730	6,200	600	9.4	115	7.5	307	10.5	13.5	189	E.03	E.05	<.008
JUL 13...	1230	2,090	610	6.7	86	7.7	252	31.0	16.5	152	E.03	E.03	E.007
AUG 03...	1400	1,110	609	5.5	73	7.6	246	25.0	18.0	163	<.04	.10	<.008
SEP 13...	1345	1,030	606	7.8	102	8.3	286	17.5	17.0	169	<.04	<.06	E.005

Date	Total nitrogen, wat unfltrd by analysis, mg/L (62855)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)
OCT 25...	.30	.02	<.02	E.01
DEC 02...	.21	<.02	<.02	E.01
FEB 02...	.21	<.02	<.02	<.02
MAR 21...	.27	<.02	<.02	E.02
APR 25...	.33	<.02	E.01	.04
JUN 06...	.34	<.02	E.01	.02
JUL 13...	.33	E.01	E.02	.03
AUG 03...	.36	.04	.05	.06
SEP 13...	.25	<.02	E.01	E.01

< -- Less than.
E -- Estimated.

09213500 BIG SANDY RIVER NEAR FARSON, WY

LOCATION.--Lat 42°19'01", long 109°29'06" (NAD 27), in NW¼ SE¼ NW¼ sec.17, T.27 N., R.106 W., Sublette County, Hydrologic Unit 14040104, on left upstream side of Eden Canal diversion, about 1.0 mi upstream from high-water line of Big Sandy Reservoir, 14.5 mi north of Farson, and 24.5 mi upstream from Little Sandy Creek.

DRAINAGE AREA.--322 mi².

PERIOD OF RECORD.--October 1914 to September 1917, October 1920 to October 1924, October 1926 to September 1934, April 1953 to current year (no winter records since 1971). Prior to October 1968, published as Big Sandy Creek near Farson. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1733: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,770 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station. Prior to April 28, 1921, nonrecording gage, and April 28, 1921 to August 3, 1934, water-stage recorder at site 0.5 mi upstream from station at different datum. April 17, 1953 to November 11, 1954, water-stage recorder at site 1.5 mi upstream from station at different datum. National Weather Service data collection platform with satellite telemetry at station.

REMARKS.--Records fair April 1 to June 30, good July 1 to September 30 and those for estimated daily discharges are poor. Diversions for irrigation of about 1,000 acre upstream from station. The Eden Canal, which bypasses the station, has not been used since station was established at present site in November 1954. Result of discharge measurements, in cubic feet per second, made during the period when station was not in operation, are given below:

Oct. 5 67.8

Mar. 28 66.7

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e64	76	457	376	69	21
2	---	---	---	---	---	---	e66	74	550	366	66	21
3	---	---	---	---	---	---	72	69	403	374	77	21
4	---	---	---	---	---	---	76	68	356	366	79	19
5	---	---	---	---	---	---	79	68	354	319	74	19
6	---	---	---	---	---	---	63	77	346	289	63	19
7	---	---	---	---	---	---	60	101	377	273	58	19
8	---	---	---	---	---	---	82	124	357	266	52	18
9	---	---	---	---	---	---	103	108	319	252	48	19
10	---	---	---	---	---	---	70	130	280	239	46	20
11	---	---	---	---	---	---	64	156	246	226	43	18
12	---	---	---	---	---	---	58	167	232	205	41	21
13	---	---	---	---	---	---	57	160	271	188	39	24
14	---	---	---	---	---	---	73	126	258	176	37	22
15	---	---	---	---	---	---	97	129	245	172	35	22
16	---	---	---	---	---	---	65	148	336	167	34	21
17	---	---	---	---	---	---	59	211	465	156	33	20
18	---	---	---	---	---	---	75	277	637	152	35	20
19	---	---	---	---	---	---	98	249	823	146	37	18
20	---	---	---	---	---	---	76	260	825	135	38	17
21	---	---	---	---	---	---	71	e500	909	124	39	17
22	---	---	---	---	---	---	61	e650	926	115	36	19
23	---	---	---	---	---	---	62	e630	911	107	34	20
24	---	---	---	---	---	---	63	e690	911	105	33	22
25	---	---	---	---	---	---	73	e700	829	104	33	21
26	---	---	---	---	---	---	77	e650	714	97	32	20
27	---	---	---	---	---	---	87	583	614	95	30	19
28	---	---	---	---	---	---	102	556	479	86	28	18
29	---	---	---	---	---	---	90	581	433	77	26	18
30	---	---	---	---	---	---	80	637	403	73	25	20
31	---	---	---	---	---	---	---	549	---	74	23	---
TOTAL	---	---	---	---	---	---	2,223	9,504	15,266	5,900	1,343	593
MEAN	---	---	---	---	---	---	74.1	307	509	190	43.3	19.8
MAX	---	---	---	---	---	---	103	700	926	376	79	24
MIN	---	---	---	---	---	---	57	68	232	73	23	17
AC-FT	---	---	---	---	---	---	4,410	18,850	30,280	11,700	2,660	1,180

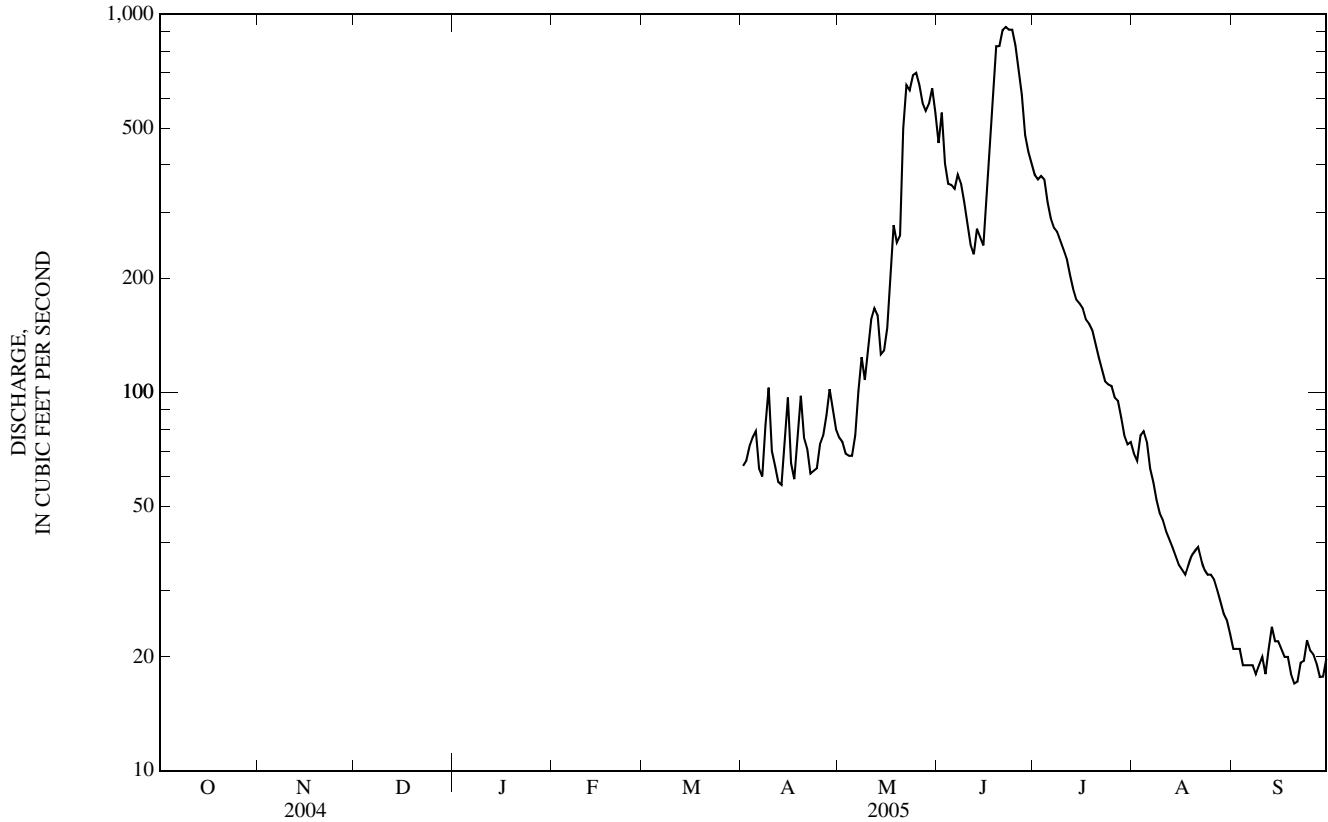
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 2005, BY WATER YEAR (WY)*

MEAN	30.2	21.2	13.2	11.1	12.1	21.8	60.5	236	413	173	48.3	30.4
MAX	75.6	41.0	21.7	22.9	26.0	46.7	148	454	905	510	155	83.9
(WY)	(1928)	(1934)	(1969)	(1969)	(1969)	(1967)	(1983)	(1928)	(1986)	(1995)	(1930)	(1927)
MIN	8.90	9.17	3.00	0.30	0.10	2.98	22.1	89.1	55.5	14.3	8.48	2.07
(WY)	(1932)	(1961)	(1960)	(1960)	(1960)	(1961)	(1975)	(1933)	(1934)	(1934)	(1931)	(1931)

09213500 BIG SANDY RIVER NEAR FARSON, WY—Continued

SUMMARY STATISTICS	FOR 2005 WATER YEAR*		WATER YEARS 1915 - 2005*	
ANNUAL MEAN	--		86.7	
HIGHEST ANNUAL MEAN	--		148	1917
LOWEST ANNUAL MEAN	--		33.0	1934
HIGHEST DAILY MEAN	926	Jun 22	1,690	Jun 4, 1986
LOWEST DAILY MEAN	17	Sep 20,21	0.00	Jan 27, 1963
ANNUAL SEVEN-DAY MINIMUM	--		0.10	Feb 1, 1960
MAXIMUM PEAK FLOW	1090	Jun 22	1,890	Jun 3, 1986
MAXIMUM PEAK STAGE	7.42	Jun 22	8.46	Jun 3, 1986
ANNUAL RUNOFF (AC-FT)	--		62,800	
10 PERCENT EXCEEDS	--		270	
50 PERCENT EXCEEDS	--		25	
90 PERCENT EXCEEDS	--		9.0	

* For period of operation.
 e Estimated.



09213700 BIG SANDY RESERVOIR NEAR FARSON, WY

LOCATION.--Lat 42°14'57", long 109°25'43" (NAD 27), in NE¹/₄ NW¹/₄ sec.11, T.26 N., R.106 W., Sweetwater County, Hydrologic Unit 14040104, 10.1 mi north of Farson and 20.5 mi upstream from Little Sandy Creek.

DRAINAGE AREA.--386 mi².

PERIOD OF RECORD.--May 1987 to current year.

REVISED. --WDR WY-98-1: 1996, 1997.

GAGE.--Water-stage recorder. Elevation of gage is 6,770.00 ft above NGVD of 1929 (levels by U.S. Bureau of Reclamation). U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated contents, which are poor. Reservoir is formed by an earthfill dam, storage began in April 1953. Total capacity, 54,385 acre-ft at elevation 6,762.8 ft, crest of spillway, including 1,425 acre-ft of dead storage in a permanent pool at elevation 6,720.0 ft, trash-rack sill. Reservoir is used for storage of irrigation water and for recreation. Figures given herein represent active storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents recorded, 41,400 acre-ft, June 12, 1997, elevation, 6,758.71 ft, June 12, 1997; minimum contents recorded, 322 acre-ft, September 15, 2000, elevation, 6,721.85 ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded 6758.36 ft, June 25, contents 40,500 acre-ft. Minimum elevation recorded 6745.73 ft, October 1, contents 15,100 acre-ft.

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

6,720 0 6,730 2,545 6,740 8,655 6,750 22,155 6,760 44,905

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15,200	18,300	20,100	20,800	22,000	22,800	27,000	e29,300	39,500	39,200	35,100	28,300
2	15,300	18,300	20,100	20,900	22,000	22,800	27,100	e29,400	39,600	39,100	34,900	28,000
3	15,500	18,400	20,100	20,900	22,000	22,800	27,200	e29,400	39,500	39,000	34,700	27,900
4	15,600	18,500	20,100	20,900	22,100	22,900	27,400	e29,500	39,300	38,900	34,600	27,500
5	15,700	18,600	20,200	21,000	22,100	22,900	27,500	e29,500	39,100	38,800	34,500	27,200
6	15,900	18,700	20,200	21,000	22,100	22,900	27,600	e29,700	39,000	38,700	34,400	26,900
7	16,000	18,800	20,200	21,000	22,200	22,900	27,600	e29,900	39,000	38,600	34,300	26,600
8	16,100	18,900	20,200	21,000	22,200	23,000	27,700	e30,100	38,900	38,600	34,000	26,200
9	16,100	19,000	20,200	21,100	22,200	e23,100	27,800	e30,200	38,800	38,500	33,700	25,800
10	16,200	19,100	20,200	21,200	22,200	e23,300	27,900	e30,400	38,700	38,400	33,400	25,500
11	16,300	19,200	20,300	21,300	22,300	e23,400	28,000	e30,600	38,500	38,300	33,200	25,100
12	16,400	19,300	20,300	21,300	22,300	e23,600	28,000	e30,900	38,300	38,300	32,900	24,700
13	16,500	19,400	20,300	21,300	22,300	e24,000	28,000	31,200	38,100	38,200	32,500	24,500
14	16,500	19,500	20,400	21,300	22,400	e24,200	28,100	31,400	37,900	38,100	32,200	24,200
15	16,500	19,600	20,400	21,400	22,400	24,400	28,200	31,600	37,700	37,900	31,900	24,000
16	16,600	19,600	20,400	21,400	22,400	24,500	28,300	31,700	37,700	37,700	31,700	23,800
17	16,600	19,700	20,500	21,400	22,400	24,600	28,400	32,100	37,900	37,500	31,400	23,500
18	16,700	19,700	20,500	21,400	22,500	24,700	28,400	32,500	38,400	37,400	31,200	23,300
19	16,800	19,800	20,500	21,500	22,500	24,800	28,500	32,900	39,000	37,100	31,100	23,100
20	16,900	19,800	20,600	21,500	22,500	25,000	28,600	33,200	39,500	36,900	31,000	23,000
21	17,000	19,800	20,600	21,600	22,500	25,300	28,700	33,800	40,000	36,700	30,900	22,900
22	17,200	19,800	20,600	21,600	22,600	25,600	28,700	34,700	40,200	36,500	30,700	22,800
23	17,300	19,900	20,600	21,700	22,600	25,900	28,800	35,700	40,400	36,400	30,500	22,700
24	17,400	19,900	20,700	21,700	22,700	26,000	28,800	36,600	40,500	36,300	30,200	22,700
25	17,600	19,900	20,700	21,700	22,700	26,100	28,900	37,600	40,400	36,100	30,000	22,700
26	17,700	20,000	20,700	21,800	22,700	26,200	28,900	38,300	40,300	35,900	29,800	22,800
27	17,800	20,000	20,700	21,800	22,700	26,300	29,000	38,700	40,100	35,800	29,500	22,800
28	17,900	20,000	20,700	21,900	22,700	26,500	e29,100	38,900	39,800	35,700	29,300	22,800
29	18,000	20,100	20,800	21,900	---	26,700	e29,200	39,100	39,600	35,500	29,100	22,800
30	18,100	20,100	20,800	21,900	---	26,900	e29,200	39,400	39,400	35,300	28,800	22,800
31	18,200	---	20,800	21,900	---	26,900	---	39,500	---	35,200	28,600	---
MAX	18,200	20,100	20,800	21,900	22,700	26,900	29,200	39,500	40,500	39,200	35,100	28,300
MIN	15,200	18,300	20,100	20,800	22,000	22,800	27,000	29,300	37,700	35,200	28,600	22,700
(#)	6,747.7	6,748.8	6,749.3	6,749.9	6,750.3	6,752.5	---	6,578.0	6,757.9	6,756.2	6,753.3	6,750.3
(*)	+3,100	+1,900	+700	+1,100	+800	+4,200	+2,300	+10,300	-100	-4,200	-6,600	-5,800

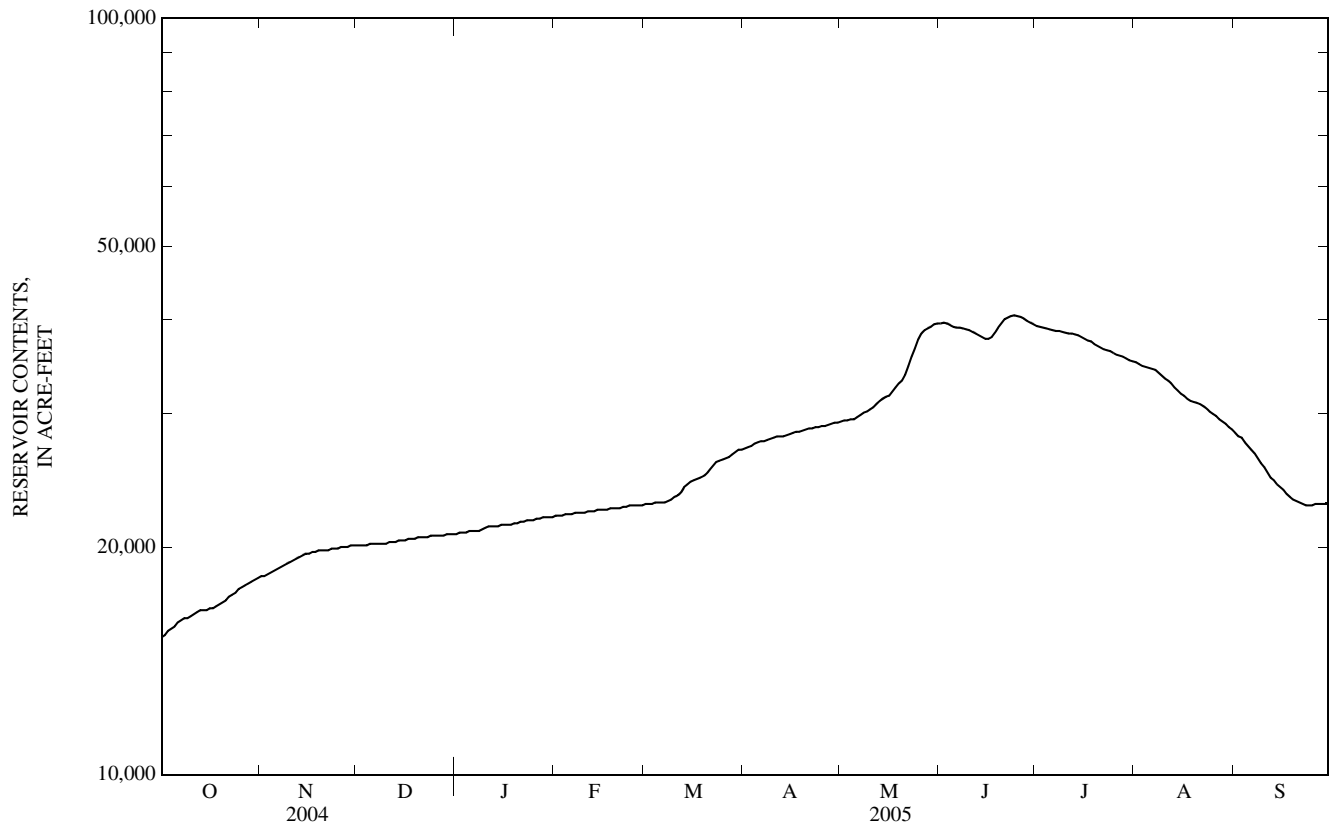
CAL YR 2004 MAX 28400 MIN 5320
WTR YR 2005 MAX 40500 MIN 15200

(#) Elevation, in feet, at end of month.

(*) Change in contents, in acre-feet.

e Estimated.

09213700 BIG SANDY RESERVOIR NEAR FARSON, WY—Continued



09216050 BIG SANDY RIVER AT GASSON BRIDGE, NEAR EDEN, WY

LOCATION.--Lat 41°56'51", long 109°41'15" (NAD 27), in NW¹/₄ NW¹/₄ NW¹/₄ sec.29, T.23 N., R.108 W., Sweetwater County, Hydrologic Unit 14040104, on right bank 20 ft downstream from Gasson Bridge and 14.5 mi southwest of Eden.

DRAINAGE AREA.--1,720 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 6,350 ft above NGVD of 1929, from topographic map. Prior to June 10, 1998, at site 1,250 ft upstream from station at present datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs and diversions for irrigation of about 19,300 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	32	e11	e11	e10	e13	81	44	184	229	51	48
2	31	29	e10	e10	e11	e13	64	42	209	192	57	51
3	29	29	e9.0	e10	e11	e14	55	35	214	159	65	52
4	30	32	e9.0	e11	e10	e15	67	31	223	139	62	63
5	29	29	e9.4	e9.4	e11	e16	99	29	191	124	54	60
6	28	28	e9.8	e8.6	e12	e17	93	41	156	114	45	53
7	27	28	e9.0	e8.8	e11	e20	69	40	134	109	41	53
8	26	28	e10	e9.6	e10	e25	60	41	123	97	37	48
9	26	29	e10	e9.4	e10	e30	55	36	115	83	38	56
10	26	29	e12	e10	e9.4	e40	49	36	105	75	44	63
11	26	29	e12	e11	e10	e80	45	58	96	75	44	61
12	25	29	e11	e12	e12	e100	37	56	88	74	43	65
13	26	28	e10	e11	e13	e200	33	53	79	78	42	62
14	25	28	e9.4	e10	e15	e300	29	52	84	70	48	67
15	25	27	e8.0	e9.0	e13	227	28	49	72	66	49	67
16	25	27	e7.2	e7.5	e12	176	26	38	70	62	47	67
17	25	26	e8.0	e8.0	e11	135	27	35	68	58	54	67
18	25	25	e8.4	e8.6	e12	93	27	34	57	55	60	63
19	26	23	e9.0	e9.2	e12	92	27	35	55	57	63	64
20	26	19	e9.4	e11	e13	94	27	37	52	56	56	65
21	28	e14	e8.6	e10	e15	206	27	36	77	55	52	67
22	31	e13	e8.0	e9.6	e16	537	27	34	179	59	51	64
23	32	e11	e7.6	e9.0	e15	390	27	35	317	55	55	62
24	40	e12	e8.0	e8.8	e14	316	27	36	390	61	58	56
25	36	e13	e8.4	e8.4	e14	184	26	34	435	63	55	52
26	33	e14	e9.0	e9.0	e13	115	24	34	462	60	52	43
27	33	e15	e9.0	e9.5	e12	95	24	31	446	58	50	43
28	33	e15	e9.2	e10	e12	89	31	38	406	55	51	49
29	33	e13	e9.6	e11	---	113	31	42	356	49	55	40
30	31	e12	e10	e10	---	137	39	66	295	51	52	37
31	33	---	e10	e10	---	112	---	125	---	50	48	---
TOTAL	899	686	289.0	300.4	339.4	3,994	1,281	1,333	5,738	2,588	1,579	1,708
MEAN	29.0	22.9	9.32	9.69	12.1	129	42.7	43.0	191	83.5	50.9	56.9
MAX	40	32	12	12	16	537	99	125	462	229	65	67
MIN	25	11	7.2	7.5	9.4	13	24	29	52	49	37	37
AC-FT	1,780	1,360	573	596	673	7,920	2,540	2,640	11,380	5,130	3,130	3,390

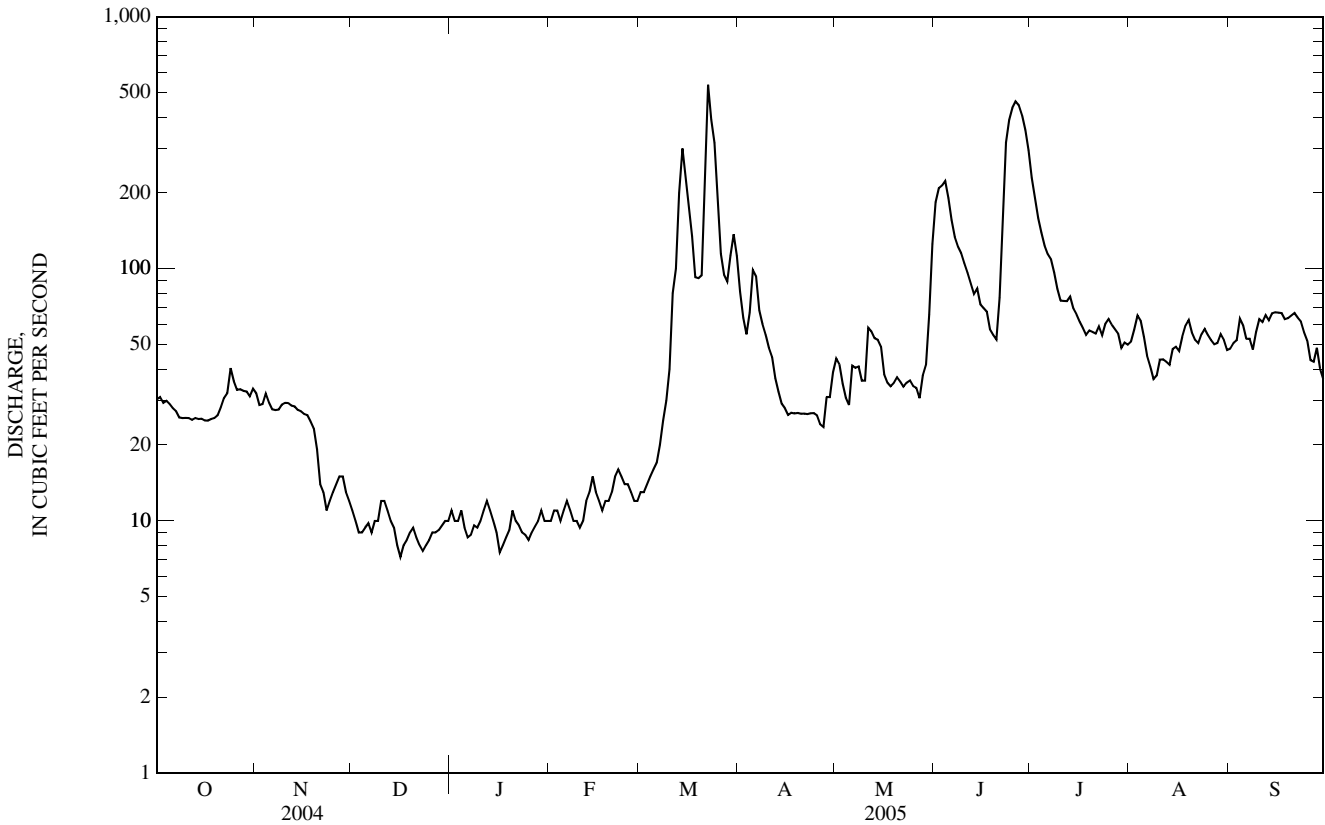
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2005, BY WATER YEAR (WY)

MEAN	57.2	50.4	35.4	28.8	31.3	82.6	102	71.5	139	99.2	73.7	67.8
MAX	102	149	60.4	55.5	74.0	393	462	208	627	340	119	100
(WY)	(1984)	(1984)	(1976)	(1984)	(1982)	(1997)	(1980)	(1984)	(1986)	(1995)	(1983)	(1983)
MIN	17.2	15.4	9.32	9.40	11.9	22.1	25.0	16.7	21.6	21.8	19.7	18.1
(WY)	(2004)	(2004)	(2005)	(2004)	(2003)	(2003)	(2003)	(2004)	(2003)	(2001)	(2003)	(2003)

09216050 BIG SANDY RIVER AT GASSON BRIDGE, NEAR EDEN, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1972 - 2005	
ANNUAL TOTAL	8,829.5		20,734.8		--	
ANNUAL MEAN	24.1		56.8		68.9	
HIGHEST ANNUAL MEAN	--		--		139	1983
LOWEST ANNUAL MEAN	--		--		19.8	2003
HIGHEST DAILY MEAN	140	Mar 26	537	Mar 22	5,530	Apr 24, 1980
LOWEST DAILY MEAN	6.4	Jan 6	7.2	Dec 16	6.4	Jan 6, 2004
ANNUAL SEVEN-DAY MINIMUM	7.4	Jan 3	8.4	Dec 15	7.4	Jan 3, 2004
MAXIMUM PEAK FLOW	--		706	Mar 21	7,430 ^a	Apr 24, 1980
MAXIMUM PEAK STAGE	--		5.90	Mar 21	10.58	Apr 24, 1980
ANNUAL RUNOFF (AC-FT)	17,510		41,130		49,940	
10 PERCENT EXCEEDS	38		114		106	
50 PERCENT EXCEEDS	23		35		50	
90 PERCENT EXCEEDS	9.4		9.6		23	

a From rating curve extended above 2,000 ft³/s on basis of slope-area measurement of peak flow.
 e Estimated.



09217000 GREEN RIVER NEAR GREEN RIVER, WY

LOCATION.--Lat 41°30'59", long 109°26'54" (NAD 27), in NW¼ NE¼ NE¼ sec.26, T.18 N., R.107 W., Sweetwater County, Hydrologic Unit 14040106, on right bank 0.1 mi downstream from Bitter Creek, 1.0 mi southeast of town of Green River, and 4.0 mi upstream from high-water line of Flaming Gorge Reservoir.

DRAINAGE AREA.--14,000 mi², of which 4,260 mi², including 3,959 mi² in Great Divide Basin in southern Wyoming, probably is noncontributing.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1713: 1957. WDR-76-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,060 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good to fair except those for estimated daily discharges, which are poor. Some regulation by Fontenelle Reservoir since August 1963. Natural flow of stream affected by transbasin diversions, storage reservoirs, power generation, and diversions for irrigation of about 223,000 acres upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge observed, 22,200 ft³/s, June 19, 1918, at site 1.5 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,010	924	1,070	e1,150	e1,230	e1,160	1,330	1,670	5,560	3,720	1,170	1,150
2	965	917	e1,100	e1,160	e1,210	e1,140	1,490	1,590	5,920	3,620	1,180	1,110
3	950	938	e1,100	e1,170	e1,170	e1,150	1,480	1,550	6,510	3,580	1,220	1,060
4	947	967	e1,100	e1,210	e1,150	e1,160	1,460	1,530	6,510	3,560	1,210	1,060
5	945	969	e1,050	e1,200	e1,150	e1,180	1,470	1,520	6,460	3,550	1,200	1,060
6	942	976	e1,050	e1,200	e1,180	e1,190	1,460	1,590	6,390	3,230	1,210	1,060
7	937	962	e1,080	e1,210	e1,190	e1,200	1,450	1,610	6,430	2,970	1,200	1,050
8	925	956	e1,100	e1,200	e1,180	e1,250	1,260	1,560	6,400	2,960	1,190	1,050
9	870	995	e1,100	e1,200	e1,200	e1,350	1,190	1,540	6,370	2,930	1,190	1,060
10	869	1,110	e1,100	e1,200	e1,220	e1,400	1,170	1,560	6,450	2,920	1,190	1,080
11	860	991	e1,100	e1,200	e1,260	e1,510	1,160	1,600	6,410	2,940	1,220	1,050
12	860	1,020	e1,100	e1,220	e1,250	e1,620	1,190	1,640	6,370	2,710	1,200	1,050
13	860	1,010	e1,100	e1,250	e1,210	2,030	1,240	1,560	6,240	2,300	1,180	1,070
14	899	1,000	e1,100	e1,240	e1,260	1,990	1,240	1,530	6,290	1,940	1,190	1,060
15	879	1,000	e1,100	e1,200	e1,200	1,620	1,240	1,560	6,440	1,690	1,180	1,030
16	883	992	e1,070	e1,200	e1,190	1,360	1,250	1,560	5,940	1,660	1,180	1,020
17	884	997	e1,040	e1,200	e1,180	1,300	1,250	1,570	5,320	1,630	e1,200	1,020
18	897	983	e1,050	e1,200	e1,190	1,240	1,250	1,570	5,050	1,620	e1,220	1,020
19	897	1,010	e1,050	e1,220	e1,200	1,230	1,330	1,760	4,990	1,560	e1,230	1,020
20	908	1,030	e1,050	e1,250	e1,200	1,240	1,380	2,120	4,820	1,430	e1,260	1,040
21	968	1,020	e1,100	e1,300	e1,200	1,240	1,370	2,250	5,090	1,360	e1,260	996
22	1,040	1,050	e1,030	e1,260	e1,220	1,350	1,370	2,240	5,190	1,350	e1,270	1,040
23	1,010	1,060	e1,040	e1,240	e1,240	1,490	1,360	2,240	e4,570	1,350	e1,250	1,010
24	1,030	1,070	e1,050	e1,240	e1,270	1,440	1,430	2,530	e4,380	1,360	e1,230	1,000
25	975	1,100	e1,000	e1,250	e1,250	1,350	1,490	3,160	e4,370	1,370	1,210	992
26	951	1,140	e1,050	e1,200	e1,240	1,260	1,390	3,740	e4,380	1,370	1,190	985
27	934	1,140	e1,100	e1,210	e1,210	1,210	1,440	4,370	e4,490	1,350	1,170	981
28	960	1,160	e1,100	e1,250	e1,220	1,270	1,570	5,240	e4,200	1,290	1,180	984
29	963	1,220	e1,120	e1,250	---	1,340	1,530	5,270	e3,860	1,220	1,180	981
30	943	1,160	e1,150	e1,250	---	1,240	1,690	5,420	3,740	1,170	1,180	973
31	955	---	e1,150	e1,250	---	1,230	---	5,510	---	1,190	1,170	---
TOTAL	28,916	30,867	33,500	37,780	33,870	41,740	40,930	74,160	165,140	66,900	37,310	31,062
MEAN	933	1,029	1,081	1,219	1,210	1,346	1,364	2,392	5,505	2,158	1,204	1,035
MAX	1,040	1,220	1,150	1,300	1,270	2,030	1,690	5,510	6,510	3,720	1,270	1,150
MIN	860	917	1,000	1,150	1,150	1,140	1,160	1,520	3,740	1,170	1,170	973
AC-FT	57,350	61,220	66,450	74,940	67,180	82,790	81,180	147,100	327,600	132,700	74,000	61,610

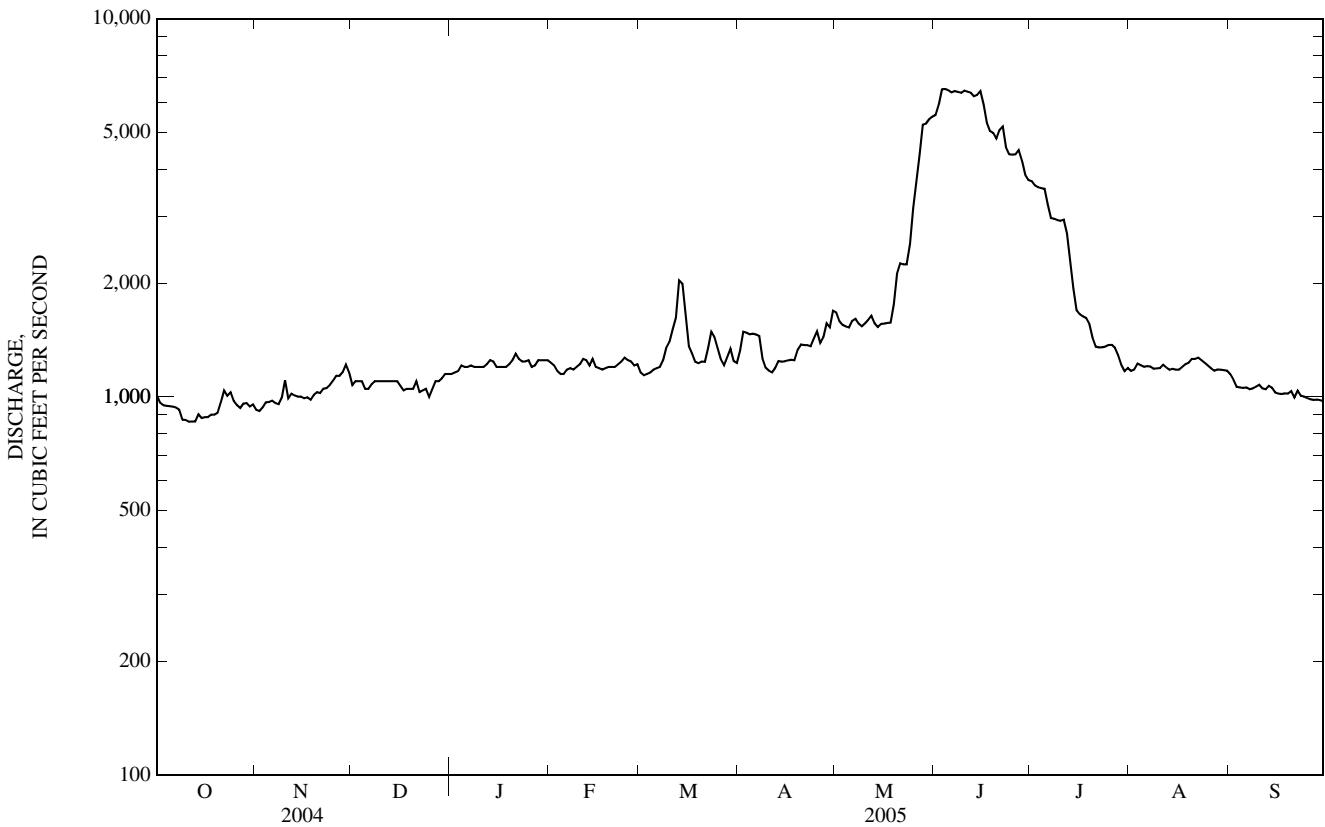
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2005, BY WATER YEAR (WY)

MEAN	951	848	741	761	828	1,035	1,589	2,498	4,616	3,099	1,521	1,107
MAX	3,109	1,844	1,419	1,442	1,980	1,852	3,416	5,665	11,700	9,415	3,577	7,746
(WY)	(1983)	(1984)	(1972)	(1996)	(1974)	(1974)	(1962)	(1952)	(1986)	(1986)	(1982)	(1965)
MIN	279	281	272	266	267	350	516	434	414	368	372	251
(WY)	(1989)	(1989)	(1989)	(1989)	(1989)	(1989)	(1968)	(1992)	(1977)	(1977)	(1977)	(1988)

09217000 GREEN RIVER NEAR GREEN RIVER, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1952 - 2005	
ANNUAL TOTAL	383,239		622,175		--	
ANNUAL MEAN	1,047		1,705		1,634	
HIGHEST ANNUAL MEAN	--		--		3,089 1986	
LOWEST ANNUAL MEAN	--		--		576 2002	
HIGHEST DAILY MEAN	3,220	Jul 5	6,510	Jun 3	16,700	Sep 7, 1965
LOWEST DAILY MEAN	711	May 9	860	Oct 11	170	Nov 16, 1955
ANNUAL SEVEN-DAY MINIMUM	733	May 5	871	Oct 9	214	Dec 24, 1962
MAXIMUM PEAK FLOW	--		6,640	Jun 3	16,800 ^a	Sep 7, 1965
MAXIMUM PEAK STAGE	--		4.94	Jun 3	8.53 ^a	Sep 7, 1965
ANNUAL RUNOFF (AC-FT)	760,200		1,234,000		1,184,000	
10 PERCENT EXCEEDS	1,490		3,730		3,550	
50 PERCENT EXCEEDS	916		1,210		1,070	
90 PERCENT EXCEEDS	764		979		464	

a Caused by emergency release from Fontenelle Reservoir.
 e Estimated.



09217000 GREEN RIVER NEAR GREEN RIVER, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1951 to September 1992.

WATER TEMPERATURES: May 1951 to September 1992.

SUSPENDED-SEDIMENT DISCHARGE: May 1951 to September 1992.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instan- taneous dis- charge, cfs (00061)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT 25...	1530	975	602	13.2	138	8.6	444	5.0	7.0	279
DEC 03...	0920	1,200	615	12.6	107	8.4	459	-4.5	.0	291
FEB 03...	1300	1,170	612	10.9	93	8.0	436	-1.0	.0	277
MAY 25...	1540	3,320	615	9.2	117	8.4	423	20.0	16.5	258
JUL 26...	1000	1,350	616	7.5	102	8.5	348	21.0	19.5	226
AUG 25...	1150	1,150	694	8.5	100	9.0	366	24.0	18.5	239

09217010 GREEN RIVER BELOW GREEN RIVER, WY

LOCATION.--Lat 41°29'46", long 109°26'17" (NAD 27), in SW¹/₄ SE¹/₄ NW¹/₄ sec.36, T.18 N., R.107 W., Sweetwater County, Hydrologic Unit 14040106, at bridge on county road, 1.7 mi downstream from Bitter Creek, 2.7 mi southeast of town of Green River, and 3.3 mi upstream from Logan Draw.

PERIOD OF RECORD.--Water years 1974 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unfiltered, 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, filtered, mg/L as N (00608)	Nitrite + nitrate water, filtered, mg/L as N (00631)	Nitrite water, filtered, mg/L as N (00613)	Total nitrogen, water unfiltered, by analysis, mg/L (62855)	Orthophosphate, water, filtered, mg/L as P (00671)	Phosphorus, water, filtered, mg/L (00666)	Phosphorus, water, unfiltered, mg/L (00665)
OCT 27...	0900	951	539	8.0	6.5	E.02	.12	E.005	.59	E.02	.03	.11
DEC 03...	0955	1,200	501	-2.0	.0	E.02	.10	E.007	.39	E.01	E.02	.03
FEB 03...	1520	1,170	490	.0	.0	.05	E.04	<.008	.29	E.01	.02	.02
MAY 25...	1720	3,320	445	20.0	16.5	<.04	<.06	<.008	.64	<.02	<.02	.15
JUL 26...	1320	1,350	376	22.0	20.5	<.04	<.06	<.008	.38	E.01	.04	.06
AUG 25...	1325	1,150	396	30.0	19.0	<.04	<.06	<.008	.31	<.02	.02	.03

< -- Less than.

E -- Estimated.

09217900 BLACKS FORK NEAR ROBERTSON, WY

LOCATION.--Lat 40°57'33", long 110°34'46" (NAD 27), in SW¹/₄ SW¹/₄ sec.27, T.3 N., R.12 E., Summit County, Utah, Hydrologic Unit 14040107, on left bank 1 mi downstream from East Fork, 2.7 mi south of Utah-Wyoming State line, and 18 mi south of Robertson.

DRAINAGE AREA.--130 mi².

PERIOD OF RECORD.--October 1937 to July 1939 (published as "at Blacks Fork Ranger Station"), July 1966 to September 1986, October 1992 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,811.3 ft above NGVD of 1929 (Bureau of Reclamation benchmark). Elevations published from October 1968 to September 1978 are incorrect. October 1937 to July 1939, at site 970 ft downstream from station at different datum, July 1966 to September 1986 and October 1992 to September 1993 at site 0.2 mi downstream from station at datum 6.5 ft lower. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	e50	e29	e21	e16	e17	e24	87	767	604	193	56
2	50	e42	e33	e22	e16	e17	e23	84	713	621	178	54
3	46	e57	e32	e23	e17	e16	e21	77	631	626	180	53
4	47	e54	e29	e25	e17	e16	20	86	559	559	174	55
5	48	e48	e26	e22	e18	e15	21	113	548	543	207	57
6	46	e50	e26	e21	e18	e15	25	173	626	528	159	51
7	44	e57	e28	e20	e17	e15	30	144	568	511	146	50
8	43	e52	e30	e18	e18	e14	28	129	508	507	143	49
9	43	e55	e31	e18	e18	e14	33	161	498	506	146	68
10	44	55	e31	e19	e19	e15	32	188	482	501	142	107
11	50	51	e32	e18	e18	e16	30	142	409	494	131	58
12	47	49	e30	e17	e17	e16	29	124	433	492	119	55
13	45	e44	e25	e16	e16	e15	32	130	355	492	114	54
14	41	e42	e23	e16	e16	e14	34	169	397	484	108	54
15	41	e40	e21	e15	e15	e15	40	261	562	452	103	51
16	40	e37	e20	e16	e14	e14	46	423	731	422	108	48
17	39	e39	e19	e17	e13	e15	62	520	894	416	111	46
18	43	e43	e19	e18	e14	e15	75	464	1,030	381	99	45
19	50	e38	e19	e20	e16	e16	78	621	1,050	331	91	44
20	58	e35	e20	e21	e17	17	72	896	1,060	305	85	41
21	66	e38	e19	e20	e18	e18	64	1,170	1,020	294	82	51
22	56	e40	e18	e19	e18	e19	63	1,280	1,080	298	84	52
23	60	e41	e16	e18	e19	e16	78	1,390	1,130	312	82	43
24	58	e36	e19	e18	e18	e15	99	1,490	983	270	76	40
25	55	e34	e21	e19	e18	e16	100	1,380	884	251	71	39
26	52	e31	e22	e19	e19	e17	124	1,150	887	221	68	37
27	51	e29	e22	e17	e19	e23	147	1,060	740	196	66	42
28	55	e32	e24	e17	e18	20	135	1,030	709	181	68	58
29	47	e27	e23	e16	---	19	109	1,010	678	171	61	42
30	55	e28	e22	e16	---	18	95	1,020	621	181	58	38
31	51	---	e20	e17	---	20	---	791	---	198	57	---
TOTAL	1,525	1,274	749	579	477	508	1,769	17,763	21,553	12,348	3,510	1,538
MEAN	49.2	42.5	24.2	18.7	17.0	16.4	59.0	573	718	398	113	51.3
MAX	66	57	33	25	19	23	147	1,490	1,130	626	207	107
MIN	39	27	16	15	13	14	20	77	355	171	57	37
AC-FT	3,020	2,530	1,490	1,150	946	1,010	3,510	35,230	42,750	24,490	6,960	3,050

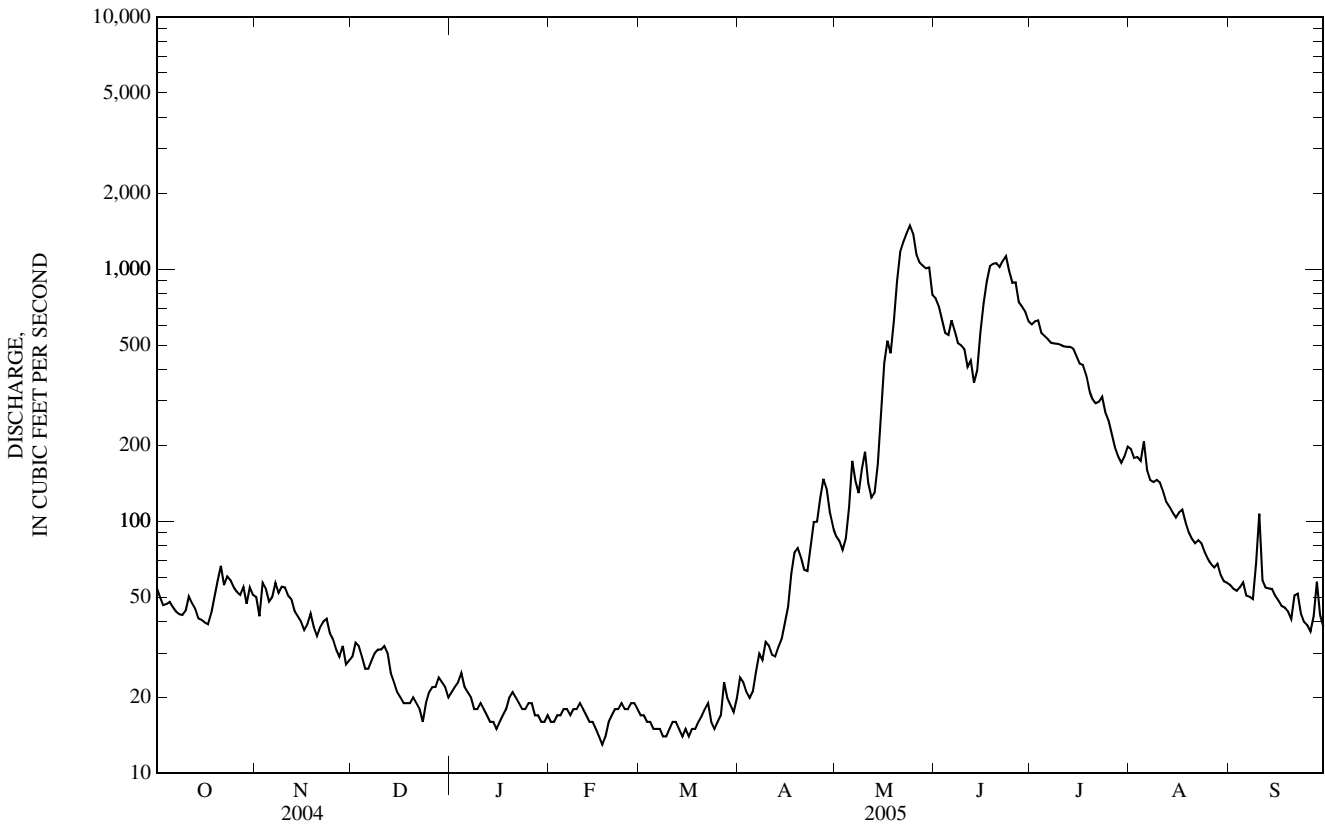
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2005, BY WATER YEAR (WY)

MEAN	51.8	39.7	31.4	26.3	22.8	23.9	52.5	402	725	316	103	65.7
MAX	136	62.0	50.0	55.7	36.9	38.6	112	789	1,273	1,003	232	157
(WY)	(1983)	(1974)	(1974)	(1997)	(1974)	(1969)	(1985)	(1984)	(1983)	(1975)	(1983)	(1982)
MIN	22.9	20.8	11.1	6.73	9.23	8.54	19.4	134	190	56.5	28.8	27.4
(WY)	(2002)	(2000)	(1977)	(1977)	(2003)	(2002)	(1975)	(1975)	(2002)	(2002)	(2002)	(2001)

09217900 BLACKS FORK NEAR ROBERTSON, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1966 - 2005	
ANNUAL TOTAL	36,291.0		63,593		--	
ANNUAL MEAN	99.2		174		155	
HIGHEST ANNUAL MEAN	--		--		228 1983	
LOWEST ANNUAL MEAN	--		--		57.1 2002	
HIGHEST DAILY MEAN	569	Jun 7	1,490	May 24	1,880	Jun 19, 1983
LOWEST DAILY MEAN	8.5	Mar 2	13	Feb 17	3.2	Apr 2, 1994
ANNUAL SEVEN-DAY MINIMUM	9.6	Feb 28	15	Feb 13	3.9	Apr 2, 1994
MAXIMUM PEAK FLOW	--		1,740	May 23	2,480 ^a	Jun 19, 1983
MAXIMUM PEAK STAGE	--		4.33	May 23	5.17 ^b	Jun 15, 1995
ANNUAL RUNOFF (AC-FT)	71,980		126,100		112,600	
10 PERCENT EXCEEDS	297		564		468	
50 PERCENT EXCEEDS	50		48		45	
90 PERCENT EXCEEDS	13		17		20	

- a Gage height, 4.91 ft, site and datum then in use.
- b Discharge, 2,210 ft³/s.
- e Estimated.



09220000 EAST FORK OF SMITHS FORK NEAR ROBERTSON, WY

LOCATION.--Lat 41°03'15", long 110°23'52" (NAD 27), in NE¹/₄NW¹/₄NE¹/₄ sec.5, T.12 N., R.115 W., Uinta County, Hydrologic Unit 14040107, Wasatch National Forest, on left bank 60 ft downstream from bridge, 1.0 mi upstream from Gilbert Creek, 6.1 mi downstream from State Line Reservoir, and 9.0 mi southeast of Robertson.

DRAINAGE AREA.--53 mi².

PERIOD OF RECORD.--July 1939 to September 1999, (no winter records 1971 to 1999), April 2001 to current year. Monthly discharge only for some periods, published in WSP 1313. Prior to October 1, 1978, published as East Fork of Smith Fork near Robertson.

REVISED RECORDS.--WSP 979: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,470 ft above NGVD of 1929, from topographic map. Prior to July 12, 1957, at datum 3.96 ft higher. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for June 5-26, which are fair and those for estimated daily discharges, which are poor. Flow completely regulated by State Line Reservoir, 6.1 mi upstream, total capacity, 14,000 acre-ft, dead storage is about 2,000 acre-ft, since May 1979.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	e8.6	e3.8	e4.5	6.5	e6.2	e4.5	3.1	108	151	116	103
2	15	e10	e4.1	e4.6	e6.0	6.3	e4.2	3.0	103	149	94	102
3	15	e8.6	e4.2	e4.8	e6.0	e6.0	e4.2	2.5	103	156	64	101
4	15	e7.4	e4.1	e5.0	e5.8	e6.0	4.2	2.1	109	152	64	101
5	15	e7.5	e3.9	e4.8	e5.7	e6.1	e4.1	2.6	139	140	64	101
6	15	e7.4	e4.1	e4.6	e5.5	e6.1	e4.2	4.6	182	134	64	103
7	15	e7.0	e4.0	e4.6	e6.0	e6.1	e4.4	4.0	183	130	64	103
8	14	6.6	e4.2	e4.5	e5.5	6.3	4.6	3.8	154	125	64	103
9	14	7.1	e4.3	e4.6	e5.3	6.3	e4.2	3.7	135	123	66	103
10	14	6.6	e4.1	e4.7	e5.7	6.4	e4.3	4.0	128	122	65	102
11	13	6.4	e3.8	e5.0	e5.8	e6.3	e4.5	3.6	121	118	64	102
12	9.3	6.4	e4.0	e5.4	e6.2	e6.2	e4.4	3.1	117	145	63	100
13	9.4	6.2	e4.2	e5.3	e6.1	e6.1	4.8	2.6	113	160	63	80
14	9.2	e6.0	e4.1	e5.8	e6.0	e6.2	4.9	2.5	105	154	63	63
15	8.9	e6.4	e4.0	6.4	e5.6	e6.0	5.1	2.3	121	147	64	62
16	8.8	e6.2	e4.0	6.4	e5.2	6.2	5.5	2.4	176	145	70	61
17	8.8	e6.8	e4.2	6.4	e5.0	e5.9	6.3	21	228	145	75	62
18	9.2	e6.2	e4.0	6.3	e5.7	e5.8	6.6	71	257	143	74	63
19	9.2	e6.0	e3.9	6.4	6.4	6.1	6.2	88	274	142	73	62
20	9.3	e5.8	e3.8	6.3	e6.0	6.2	5.6	88	282	139	73	61
21	9.8	e5.6	e3.9	e6.1	e5.8	e6.0	e5.3	89	267	137	72	62
22	10	e5.7	e3.9	e5.9	e5.8	e4.1	e5.1	90	273	137	72	61
23	9.1	e5.8	e3.7	e5.8	e5.8	4.1	5.7	91	392	137	72	61
24	9.2	e5.6	e4.1	e5.9	e5.7	4.0	6.3	97	335	137	72	61
25	9.2	e5.5	e4.2	e5.9	e5.7	4.0	6.2	103	276	135	72	61
26	8.7	e5.5	e4.3	e6.0	e5.8	e4.1	6.2	103	254	125	72	60
27	7.4	e4.9	e4.3	6.5	e5.9	e4.1	6.4	104	206	116	72	52
28	7.8	e4.2	e4.5	e6.2	e6.0	4.2	5.0	105	176	116	72	43
29	7.7	e4.0	e4.4	6.5	---	4.2	4.1	105	183	116	71	42
30	6.8	e3.7	e4.6	e6.2	---	4.1	3.6	109	162	118	90	41
31	7.3	---	e4.4	6.4	---	e4.0	---	109	---	116	105	---
TOTAL	335.1	189.7	127.1	173.8	162.5	169.7	150.7	1,422.9	5,662	4,210	2,249	2,282
MEAN	10.8	6.32	4.10	5.61	5.80	5.47	5.02	45.9	189	136	72.5	76.1
MAX	15	10	4.6	6.5	6.5	6.4	6.6	109	392	160	116	103
MIN	6.8	3.7	3.7	4.5	5.0	4.0	3.6	2.1	103	116	63	41
AC-FT	665	376	252	345	322	337	299	2,820	11,230	8,350	4,460	4,530

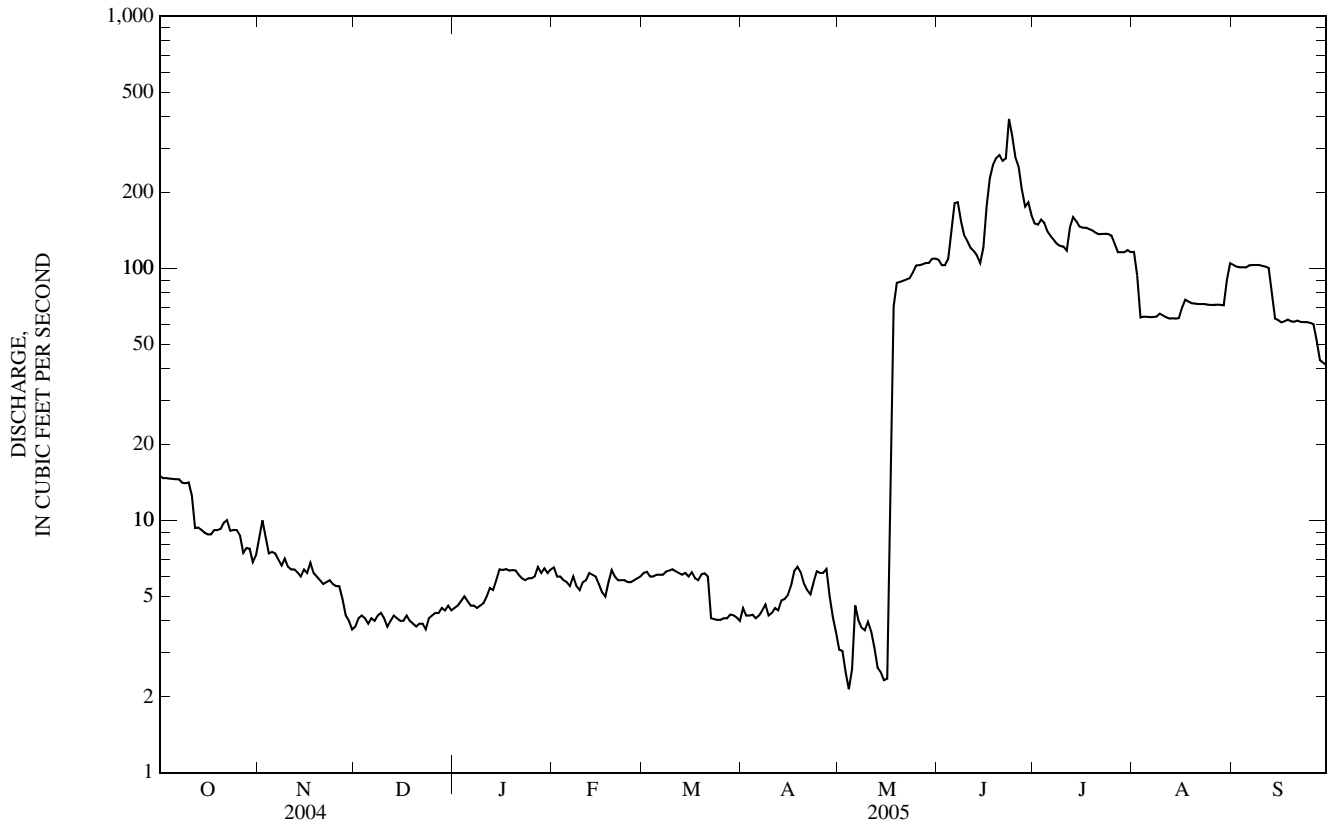
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2005, BY WATER YEAR (WY)

MEAN	15.9	10.7	7.78	7.02	6.95	7.76	18.1	101	211	105	42.4	28.6
MAX	34.8	19.0	16.9	16.4	13.4	15.0	90.0	221	628	374	120	91.2
(WY)	(1962)	(1952)	(1966)	(1966)	(1966)	(1943)	(1946)	(1974)	(1983)	(1975)	(1965)	(1995)
MIN	5.21	5.50	2.11	1.34	1.55	2.14	3.71	26.6	59.3	15.9	6.64	6.68
(WY)	(1957)	(1957)	(1963)	(1963)	(1963)	(1963)	(1982)	(1983)	(1954)	(1940)	(1940)	(1956)

09220000 EAST FORK OF SMITHS FORK NEAR ROBERTSON, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1939 - 2005	
ANNUAL TOTAL	10,085.5		17,134.5		--	
ANNUAL MEAN	27.6		46.9		45.7	
HIGHEST ANNUAL MEAN	--		--		88.9 1965	
LOWEST ANNUAL MEAN	--		--		24.1 2002	
HIGHEST DAILY MEAN	120	Jun 10	392	Jun 23	1,200	Jun 24, 1983
LOWEST DAILY MEAN	3.7	Nov 30	2.1	May 4	1.0	Dec 17, 1962
ANNUAL SEVEN-DAY MINIMUM	3.9	Dec 18	2.9	May 10	1.0	Dec 17, 1962
MAXIMUM PEAK FLOW	--		452	Jun 23	1,450	Jun 10, 1965
MAXIMUM PEAK STAGE	--		5.60	Jun 23	6.75	Jun 10, 1965
ANNUAL RUNOFF (AC-FT)	20,000		33,990		33,080	
10 PERCENT EXCEEDS	91		137		134	
50 PERCENT EXCEEDS	8.6		6.5		13	
90 PERCENT EXCEEDS	4.2		4.1		5.4	

e Estimated.



09222000 BLACKS FORK NEAR LYMAN, WY

LOCATION.--Lat 41°27'08", long 110°10'20" (NAD 27), in SW¹/₄ NW¹/₄ SW¹/₄ sec.15, T.17 N., R.113 W., Uinta County, Hydrologic Unit 14040107, 200 ft downstream from bridge on old U.S. Highway 30S, 8.5 mi downstream from Smiths Fork, and 11 mi northeast of Lyman.

DRAINAGE.--821 mi².

PERIOD OF RECORD.--Water years 1962 to 1989, October 1995 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1962 to September 1983.

WATER TEMPERATURES: May 1962 to September 1983.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	E coli, modif. m-TEC, water, col/100 mL (90902)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
OCT 26...	0940	28	602	10.9	102	9.8	1,780	3.0	2.5	140	190	2,050	156
MAR 22...	1440	32	603	10.3	108	9.1	1,500	7.0	7.0	<3	<3	66	5.8
JUN 29...	1545	374	605	7.5	98	8.1	1,070	22.0	16.5	390	520	477	482
AUG 04...	1715	103	601	6.0	93	8.1	1,580	25.0	24.5	1,900	1,600	2,040	568

< -- Less than.

09223000 HAMS FORK BELOW POLE CREEK, NEAR FRONTIER, WY

LOCATION.--Lat 42°06'38", long 110°42'32" (NAD 27), in NE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.35, T.25 N., R.117 W., Lincoln County, Hydrologic Unit 14040107, on left bank 2.0 mi downstream from Pole Creek, 4.6 mi upstream from Taylor Creek, and 22 mi northwest of Frontier.

DRAINAGE AREA.--128 mi².

PERIOD OF RECORD.--October 1952 to current year. Prior to October 1970, published as "near Elk Creek ranger station."

GAGE.--Water-stage recorder. Elevation of gage is 7,455 ft above NGVD of 1929, from topographic map. October 1952 to September 2, 1971, at site 270 ft upstream from station at present datum, September 3, 1971 to July 30, 1980, at site 150 ft upstream from station at present datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. No diversion upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	e24	e14	e9.2	e9.2	e8.4	e17	e200	817	204	42	17
2	17	e21	e15	e9.2	e9.0	e8.2	e15	e198	740	183	46	16
3	15	e20	e14	e10	e8.4	e8.0	e20	e196	626	170	45	16
4	15	22	e15	e10	e9.0	e7.8	e27	198	557	158	40	15
5	15	20	e16	e9.8	e9.4	e7.6	e40	280	525	144	38	16
6	15	20	e16	e9.2	e9.8	e7.4	e45	471	521	135	34	16
7	15	20	e17	e8.8	e9.6	e7.2	e60	458	518	126	33	15
8	15	20	e18	e8.4	e10	e7.2	e66	409	485	117	31	15
9	15	24	e18	e8.4	e11	e9.0	e60	486	429	115	30	16
10	14	24	e19	e8.0	e12	e13	e56	498	378	113	29	18
11	14	23	e19	e8.0	e11	e11	e52	457	344	105	28	18
12	14	23	e15	e7.6	e12	e12	e54	373	367	96	27	19
13	15	21	e13	e8.0	e10	e18	e80	354	338	90	27	20
14	15	20	e11	e7.8	e9.4	e17	e98	421	315	82	26	18
15	16	e18	e9.8	e7.0	e8.0	e9.6	e70	491	321	78	24	18
16	15	e19	e9.6	e7.2	e8.4	e10	e76	639	359	74	22	17
17	15	e21	e9.0	e7.6	e8.8	e12	e115	715	404	68	27	17
18	20	e19	e8.6	e8.2	e9.0	e10	e150	575	436	63	26	18
19	22	18	e8.6	e8.6	e8.8	e9.0	e140	595	448	61	26	18
20	29	e16	e8.8	e9.2	e8.8	e11	e105	842	436	57	23	17
21	34	e19	e8.0	e9.0	e8.4	e13	e94	1,030	419	54	22	17
22	26	e18	e8.6	e8.6	e9.0	e10	e90	976	414	51	21	18
23	22	e19	e8.2	e8.6	e8.8	e9.4	e145	965	407	48	22	18
24	23	e18	e8.8	e8.8	e8.6	e11	e220	1,020	373	50	21	18
25	21	e17	e9.4	e9.0	e9.0	e9.6	e370	1,010	344	53	18	18
26	21	e16	e10	e9.0	e9.8	e11	e320	905	321	50	17	18
27	21	e14	e11	e8.8	e9.0	e10	e300	803	291	47	16	18
28	24	e15	e12	e8.4	e8.6	e10	e350	755	267	43	16	18
29	26	e12	e12	e9.2	---	e16	e250	765	279	42	16	18
30	23	e13	e11	e9.0	---	e17	e210	929	230	40	16	18
31	22	---	e10	e9.2	---	e18	---	834	---	46	16	---
TOTAL	592	574	383.4	267.8	262.8	338.4	3,695	18,848	12,709	2,763	825	519
MEAN	19.1	19.1	12.4	8.64	9.39	10.9	123	608	424	89.1	26.6	17.3
MAX	34	24	19	10	12	18	370	1,030	817	204	46	20
MIN	14	12	8.0	7.0	8.0	7.2	15	196	230	40	16	15
AC-FT	1,170	1,140	760	531	521	671	7,330	37,390	25,210	5,480	1,640	1,030

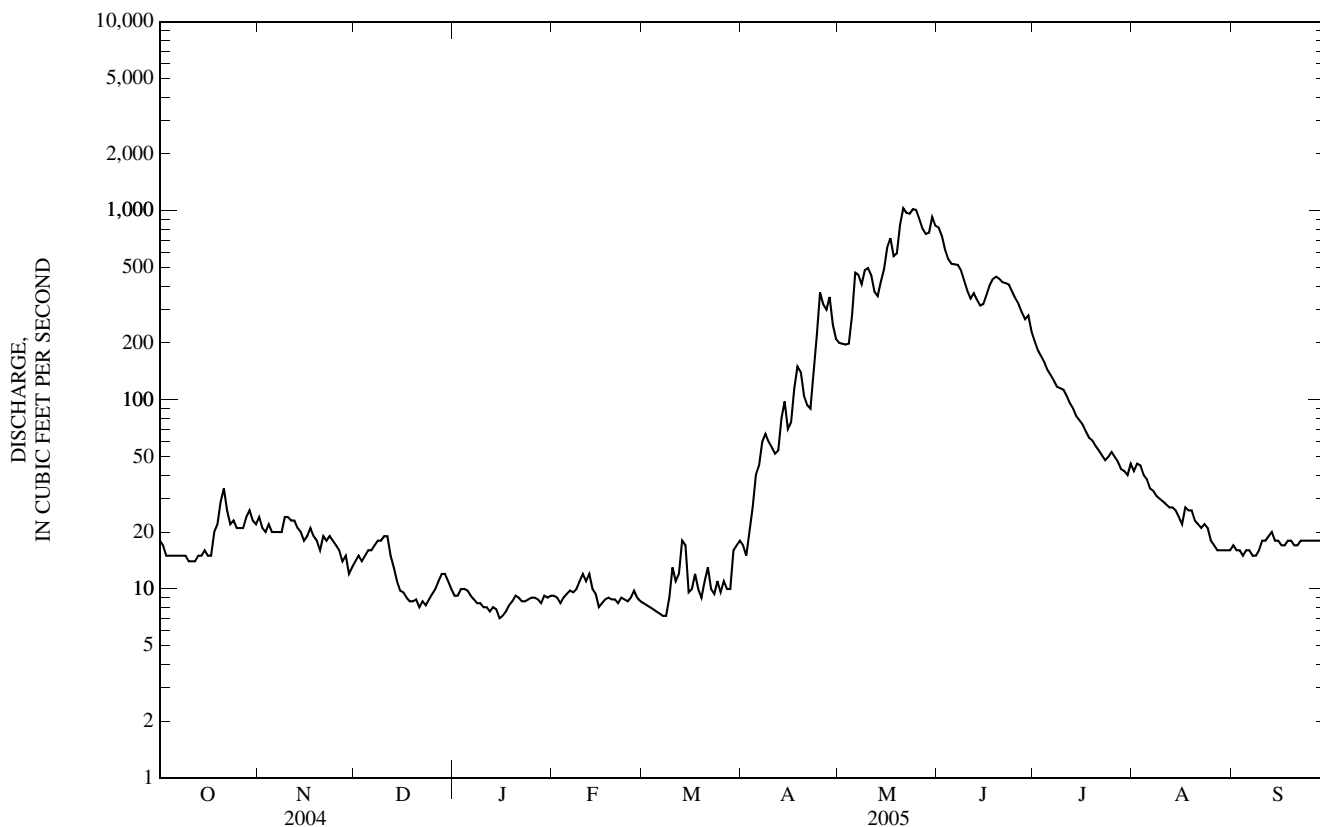
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2005, BY WATER YEAR (WY)

MEAN	21.7	19.0	15.9	14.4	14.9	21.0	102	407	380	93.2	28.6	20.8
MAX	54.2	34.4	27.8	26.4	29.1	39.9	398	970	1,039	296	64.0	51.9
(WY)	(1983)	(1983)	(1984)	(1984)	(1958)	(2004)	(1971)	(1971)	(1986)	(1975)	(1983)	(1984)
MIN	8.44	9.37	8.58	6.23	5.61	6.77	19.8	40.5	24.0	9.32	4.55	5.56
(WY)	(2002)	(1961)	(2002)	(1967)	(1967)	(1965)	(1975)	(1977)	(1977)	(1977)	(2001)	(2001)

09223000 HAMS FORK BELOW POLE CREEK, NEAR FRONTIER, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1953 - 2005	
ANNUAL TOTAL	18,448.4		41,777.4		--	
ANNUAL MEAN	50.4		114		95.1	
HIGHEST ANNUAL MEAN	--		--		214 1971	
LOWEST ANNUAL MEAN	--		--		17.7 1977	
HIGHEST DAILY MEAN	310	May 29	1,030	May 21	2,000	Jun 5, 1986
LOWEST DAILY MEAN	6.6	Jan 6	7.0	Jan 15	0.10	Aug 17, 1977
ANNUAL SEVEN-DAY MINIMUM	7.1	Jan 11	7.6	Jan 11	0.62	Aug 11, 1977
MAXIMUM PEAK FLOW	--		1,190 ^a	May 21	2,230 ^c	Jun 5, 1986
MAXIMUM PEAK STAGE	--		5.81 ^b	Dec 31	8.10 ^d	May 28, 1971
ANNUAL RUNOFF (AC-FT)	36,590		82,870		68,930	
10 PERCENT EXCEEDS	141		416		290	
50 PERCENT EXCEEDS	20		18		22	
90 PERCENT EXCEEDS	9.9		8.8		11	

- a Gage height, 5.62 ft.
- b Backwater from ice.
- c Gage height, 6.72 ft.
- d Site then in use, at current datum.
- e Estimated.



09224050 HAMS FORK NEAR DIAMONDVILLE, WY

LOCATION.--Lat 41°45'06", long 110°31'57" (NAD 27), in NW¼ SE¼ SW¼ sec.36, T.21 N., R.116 W., Lincoln County, Hydrologic Unit 14040107, at bridge on U.S. Highway 30 North, 1.9 mi south of Diamondville, and 2.8 mi south of Kemmerer.

PERIOD OF RECORD.--Water years 1974 to September 1989, October 1992 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, filtered, mg/L as N (00608)	Nitrite + nitrate water filtered, mg/L as N (00631)	Nitrite water, filtered, mg/L as N (00613)	Orthophosphate, water, filtered, mg/L as P (00671)
OCT 26...	1405	16	600	12.4	124	8.4	563	7.0	5.0	<.04	.56	E.005	.03
MAR 22...	1150	38	602	11.4	99	7.9	674	6.0	.0	E.04	.50	<.008	.04
JUN 29...	1255	780	605	8.7	108	8.2	380	17.0	14.5	<.04	<.06	<.008	<.02
AUG 04...	1420	74	600	12.2	179	8.8	428	23.5	22.0	<.04	.07	<.008	<.02

Date	E coli, modified, m-TEC, water, col/100 mL (90902)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)
OCT 26...	<1	E2
MAR 22...	E2	E1
JUN 29...	78	110
AUG 04...	32	30

< -- Less than.

E -- Estimated value; for bacteria, estimated values are counts outside the acceptable range (non-ideal colony count).

09224700 BLACKS FORK NEAR LITTLE AMERICA, WY

LOCATION.--Lat 41°32'46", long 109°41'34" (NAD 27), in NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.15, T.18 N., R.109 W., Sweetwater County, Hydrologic Unit 14040107, on right bank 200 ft upstream from bridge on U.S. Highway 30, 4.2 mi upstream from Meadow Springs Wash, and 8.5 mi east of Little America.

DRAINAGE AREA.--3,100 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 6,127.66 ft above NGVD of 1929. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow of stream affected by regulation from Meeks Cabin Reservoir, capacity, 32,470 acre-ft, since June 1971; Viva Naughton Reservoir, capacity, 42,400 acre-ft; from State Line Reservoir, capacity, 14,000 acre-ft, since April 1980; numerous smaller reservoirs; and diversions for upstream mines and irrigation of about 76,100 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	29	14	e22	e60	e58	165	822	1,230	695	143	5.9
2	13	29	13	e22	e62	e61	146	949	1,300	556	128	5.5
3	14	28	13	e22	e60	e63	131	1,030	1,270	438	153	5.4
4	12	35	13	e21	e56	e68	122	1,110	1,170	371	201	6.5
5	12	37	13	e20	e58	e72	109	1,010	1,060	332	195	11
6	12	37	12	e19	e54	e76	130	740	1,010	311	156	12
7	12	38	11	e20	e52	e82	165	758	981	298	137	11
8	14	35	11	e20	e50	e100	158	1,000	937	281	115	9.9
9	14	49	11	e21	e50	e300	149	1,010	867	249	91	11
10	14	89	14	e24	e54	e700	187	856	759	217	74	14
11	14	194	17	e27	e48	e1,100	222	790	697	199	66	13
12	13	179	22	e29	e47	2,670	200	957	630	189	60	13
13	13	115	28	e29	e49	2,750	168	1,250	568	178	54	10
14	13	87	34	e28	e50	2,190	148	1,220	517	161	54	11
15	12	85	84	e30	e54	1,140	139	1,260	521	149	50	14
16	13	69	109	e35	e57	546	176	1,300	528	147	46	16
17	13	57	86	e37	e52	401	177	1,330	507	132	45	21
18	14	45	72	e39	e46	330	149	1,400	488	120	44	26
19	15	37	64	e42	e45	298	125	1,620	465	115	43	26
20	16	21	56	e50	e55	251	116	1,460	412	102	48	25
21	31	23	47	e47	e60	309	150	1,360	366	103	48	28
22	70	21	40	e44	e64	270	170	1,490	371	104	41	46
23	97	27	e25	e41	e67	223	163	1,240	438	98	34	48
24	94	26	e18	e40	e64	207	147	1,100	517	90	28	51
25	83	33	e14	e39	e60	192	156	1,000	724	98	22	61
26	60	34	e16	e40	e58	198	143	1,040	956	121	18	66
27	52	23	e17	e44	e56	189	212	1,090	972	120	16	65
28	50	23	e18	e50	e56	180	329	974	908	122	14	67
29	46	20	e18	e58	---	165	451	922	789	122	12	66
30	39	17	e20	e69	---	166	662	910	701	108	10	68
31	39	---	e22	e64	---	178	---	934	---	113	7.5	---
TOTAL	927	1,542	952	1,093	1,544	15,533	5,665	33,932	22,659	6,439	2,153.5	833.2
MEAN	29.9	51.4	30.7	35.3	55.1	501	189	1,095	755	208	69.5	27.8
MAX	97	194	109	69	67	2,750	662	1,620	1,300	695	201	68
MIN	12	17	11	19	45	58	109	740	366	90	7.5	5.4
AC-FT	1,840	3,060	1,890	2,170	3,060	30,810	11,240	67,300	44,940	12,770	4,270	1,650

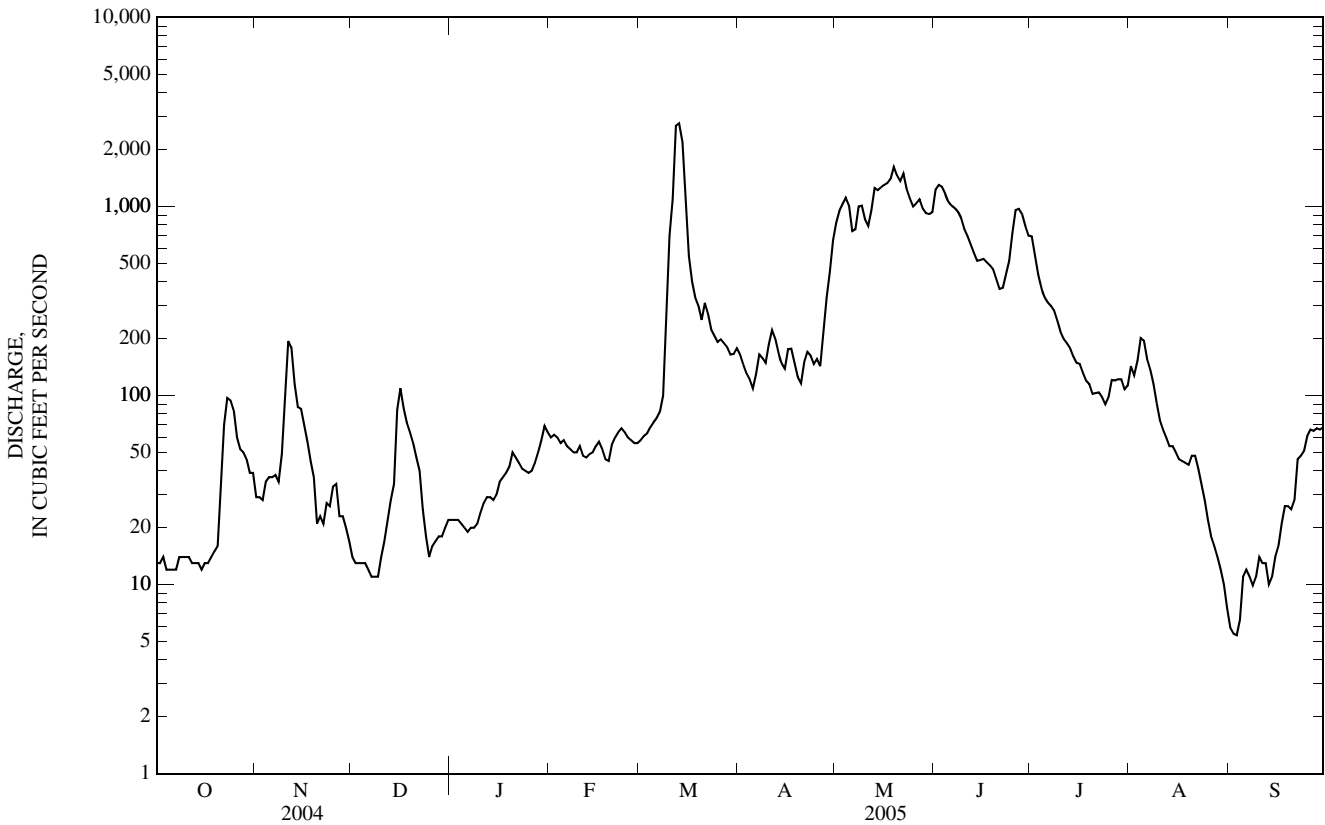
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2005, BY WATER YEAR (WY)

MEAN	92.3	99.8	72.5	75.0	104	333	465	896	1,011	301	103	80.0
MAX	376	336	230	371	318	912	1,310	2,918	4,573	1,349	542	576
(WY)	(1983)	(1983)	(1984)	(1971)	(1984)	(1997)	(1973)	(1984)	(1983)	(1975)	(1983)	(1983)
MIN	7.05	13.0	5.44	3.94	7.14	33.9	23.4	21.1	14.0	2.86	0.00	0.00
(WY)	(1980)	(2002)	(1995)	(1991)	(2004)	(1964)	(2003)	(1977)	(1977)	(2002)	(2002)	(1994)

09224700 BLACKS FORK NEAR LITTLE AMERICA, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1962 - 2005	
ANNUAL TOTAL	21,031.5		93,272.7		--	
ANNUAL MEAN	57.5		256		304	
HIGHEST ANNUAL MEAN	--		--		888 1983	
LOWEST ANNUAL MEAN	--		--		23.2 2002	
HIGHEST DAILY MEAN	900	Mar 15	2,750	Mar 13	9,340	Jun 13, 1965
LOWEST DAILY MEAN	1.1	Sep 3,4	5.4	Sep 3	0.00	Many days, several years
ANNUAL SEVEN-DAY MINIMUM	2.7	Aug 14	7.4	Aug 30	0.00	Several years
MAXIMUM PEAK FLOW	--		4,280	Mar 12	9,980 ^a	Jun 13, 1965
MAXIMUM PEAK STAGE	--		9.44	Mar 12	11.18 ^b	Mar 13, 1997
ANNUAL RUNOFF (AC-FT)	41,720		185,000		220,000	
10 PERCENT EXCEEDS	124		952		880	
50 PERCENT EXCEEDS	27		65		105	
90 PERCENT EXCEEDS	4.6		14		14	

a Gage height, 10.90 ft.
 b Backwater from ice.
 e Estimated.



09229500 HENRYS FORK NEAR MANILA, UT

LOCATION.--Lat 41°00'45", long 109°40'20" (NAD 27), in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.23, T.12 N., R. 109 W., Sweetwater County, WY, Hydrologic Unit 14040106, on right bank 0.8 mi north of Wyoming-Utah State line, 1.3 mi upstream from normal high-water line of Flaming Gorge Reservoir at elevation 6,045 ft, and 3.0 mi northeast of Manila, UT.

DRAINAGE AREA.--520 mi², approximately.

PERIOD OF RECORD.--October 1928 to September 1993, May 2001 to current year. Prior to October 1971, published as "at Linwood, UT."

REVISED RECORDS.--WSP 1443: 1955. WDR WY-76-2: 1970. WDR WY-92-1: 1991.

GAGE.--Water-stage recorder. Elevation of gage is 6,060 ft above NGVD of 1929, from topographic map. Prior to October 1, 1957, nonrecording gages or water-stage recorder at several sites and 2.0 mi downstream from station at various datums. October 1, 1957 to December 2, 1965, water-stage recorders at sites about 1.0 mi upstream from station at different datums. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges. Peoples Irrigation Canal diverts 5.9 mi upstream from station. Natural flow of stream affected by transbasin diversions, small storage reservoirs, diversions for irrigation, and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	63	e68	e72	e58	e48	50	37	264	130	123	15
2	9.2	55	e74	e72	e60	e46	55	29	241	106	171	15
3	9.2	59	e80	e76	e62	e50	56	5.1	215	109	198	13
4	8.4	63	e84	e80	e58	54	61	2.7	183	115	176	16
5	8.0	59	e84	e82	e56	54	57	2.7	136	100	133	15
6	7.9	58	e82	e86	e54	55	51	4.0	112	99	104	11
7	8.8	58	e80	e90	e50	58	46	22	114	107	90	11
8	8.7	60	e80	e88	e48	60	46	39	99	104	79	17
9	11	77	e76	e84	e52	63	46	13	98	94	76	24
10	12	116	e72	e78	e54	72	33	8.3	82	84	90	61
11	13	92	e70	e76	e58	70	28	12	63	85	108	60
12	15	82	e70	e76	e62	67	22	13	53	80	87	46
13	15	87	e68	e78	e58	72	25	6.9	51	74	74	39
14	15	76	e66	e80	e56	59	25	4.5	28	79	68	39
15	14	66	e68	e82	e56	45	12	3.6	19	77	59	37
16	13	60	e66	e76	e58	48	6.7	4.5	57	68	70	39
17	12	66	e68	e68	e60	50	10	15	136	56	83	43
18	13	63	e70	e72	e60	43	14	57	179	41	73	40
19	19	60	e68	e70	e62	49	19	52	210	42	64	40
20	22	51	e70	e74	e60	50	25	97	228	41	55	31
21	37	60	e74	e78	e56	45	20	206	234	37	51	32
22	68	54	e80	e74	e52	49	17	322	226	41	45	38
23	62	69	e86	e70	e52	54	14	419	290	55	47	36
24	63	53	e90	e72	e54	57	16	536	349	114	44	33
25	60	66	e92	e70	e52	55	50	565	303	106	36	32
26	51	61	e90	e66	e48	51	51	488	270	105	29	34
27	59	43	e86	e58	e47	55	26	427	221	73	23	39
28	86	54	e80	e56	e47	78	11	356	174	58	21	38
29	87	e60	e76	e56	---	82	18	319	234	47	19	38
30	72	e62	e74	e54	---	65	24	342	181	48	16	35
31	72	---	e74	e56	---	51	---	369	---	72	13	---
TOTAL	960.1	1,953	2,366	2,270	1,550	1,755	934.7	4,777.3	5,050	2,447	2,325	967
MEAN	31.0	65.1	76.3	73.2	55.4	56.6	31.2	154	168	78.9	75.0	32.2
MAX	87	116	92	90	62	82	61	565	349	130	198	61
MIN	7.9	43	66	54	47	43	6.7	2.7	19	37	13	11
AC-FT	1,900	3,870	4,690	4,500	3,070	3,480	1,850	9,480	10,020	4,850	4,610	1,920

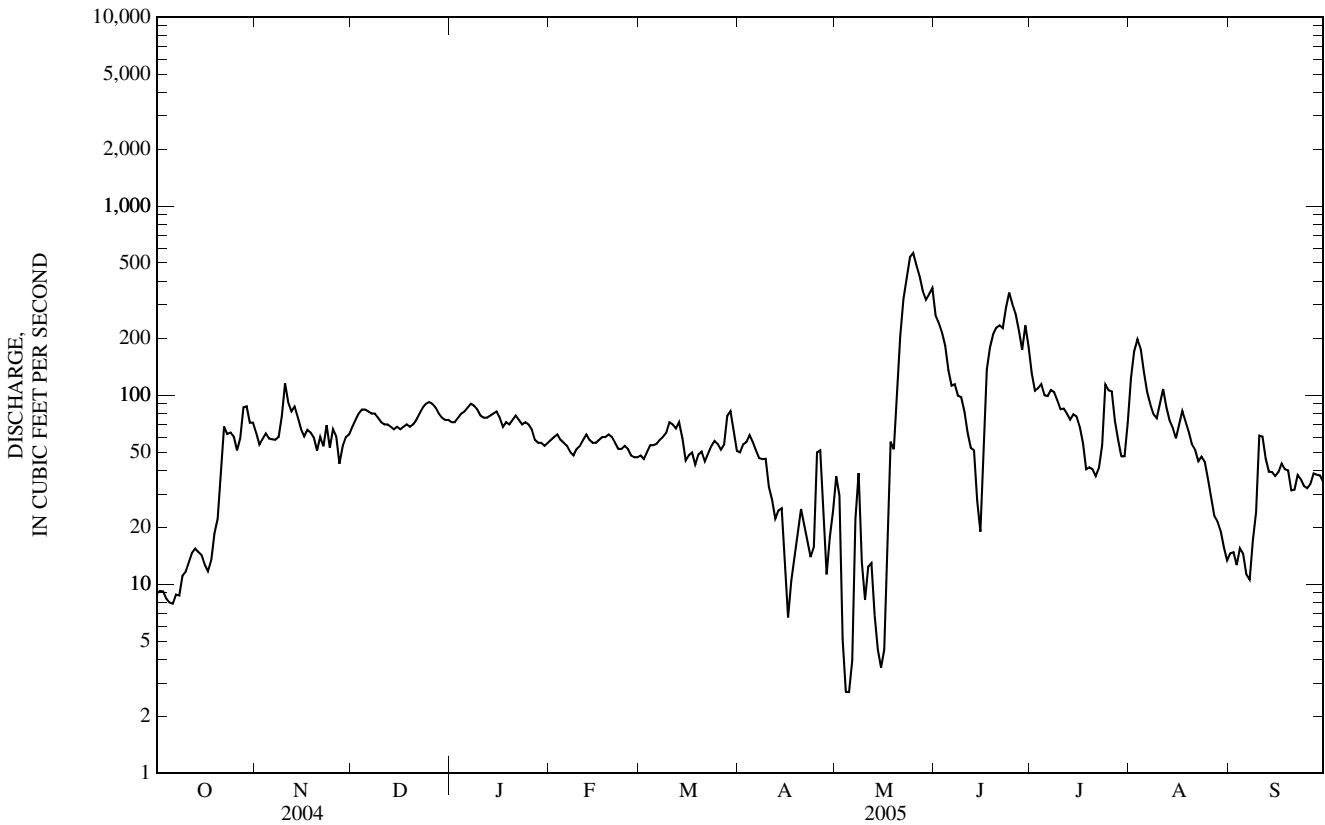
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2005, BY WATER YEAR (WY)

MEAN	45.4	54.7	48.0	43.0	46.2	69.1	81.8	151	266	90.2	48.8	33.0
MAX	176	117	105	103	88.6	165	196	541	1,375	703	323	191
(WY)	(1983)	(1984)	(1985)	(1984)	(1984)	(1929)	(1944)	(1984)	(1983)	(1975)	(1965)	(1929)
MIN	0.00	12.8	20.5	15.2	15.0	24.9	3.94	3.75	0.10	0.00	0.09	0.00
(WY)	(1935)	(1935)	(1933)	(1933)	(1933)	(1957)	(1935)	(2002)	(1934)	(1934)	(1940)	(1934)

09229500 HENRYS FORK NEAR MANILA, UT—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1929 - 2005	
ANNUAL TOTAL	12,539.1		27,355.1		--	
ANNUAL MEAN	34.3		74.9		81.4	
HIGHEST ANNUAL MEAN	--		--		273	1983
LOWEST ANNUAL MEAN	--		--		16.5	1934
HIGHEST DAILY MEAN	180	Mar 9	565	May 25	3,780	Jun 13, 1965
LOWEST DAILY MEAN	1.0	Aug 14	2.7	May 4,5	0.00	Sep 20, 1933
ANNUAL SEVEN-DAY MINIMUM	1.8	Aug 11	7.5	May 10	0.00	Jun 6, 1934
MAXIMUM PEAK FLOW	--	--	681	May 24	6,750 ^a	Aug 3, 1936
MAXIMUM PEAK STAGE	--	--	4.12	May 24	9.42 ^b	Jul 15, 1959
ANNUAL RUNOFF (AC-FT)	24,870		54,260		58,990	
10 PERCENT EXCEEDS	76		119		165	
50 PERCENT EXCEEDS	24		59		47	
90 PERCENT EXCEEDS	3.7		14		4.3	

- a Gage height, 71.9 ft, site and datum then in use; from floodmarks; from rating curve extended above 57 ft³/s on basis of slope-area measurement of peak flow.
- b Site and datum then in use. Discharge not determined.
- e Estimated.



09234500 GREEN RIVER NEAR GREENDALE, UT

LOCATION.--Lat 40°54'30", long 109°25'20" (NAD 27), in NW¹/₄ NW¹/₄ SE¹/₄ sec. 15. T. 2 N., R. 22 E., Daggett County, Hydrologic Unit 14040106, Ashley National Forest on right bank 0.5 mi downstream from Flaming Gorge Dam, 2 mi south of Dutch John, 4 mi northeast of Greendale, and 407 mi from mouth.

DRAINAGE AREA.--19,350 mi², approximately, including 4,260 mi² is probably noncontributing. This noncontributing area includes 3,959 mi² in Great Divide Basin in southern Wyoming.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR UT-76-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,594.48 ft above NGVD of 1929. Prior to September 2, 1959, water-stage recorder at site 2.2 mi upstream from station at different datum. September 3, 1959 to September 30, 1985, at datum 5.0 ft lower.

REMARKS.-- Records good. Flow completely regulated by Flaming Gorge Reservoir 0.5 mi upstream, beginning November 1, 1962. Station operated and record provided by the Utah Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	946	867	e877	e880	1,050	1,100	1,110	1,110	4,710	2,030	1,460	1,470
2	945	869	e877	887	1,060	1,100	1,120	1,110	4,690	2,030	1,460	1,470
3	945	873	e877	880	1,050	1,100	1,120	1,110	4,680	2,030	1,460	1,470
4	944	886	e877	867	1,060	1,100	1,120	1,110	4,750	2,030	1,460	1,470
5	942	891	e877	869	1,060	1,100	1,120	1,110	4,760	2,030	1,470	1,510
6	937	887	e877	872	1,050	1,100	1,120	1,110	4,730	2,030	1,470	1,500
7	938	882	877	1,000	1,050	1,100	1,120	1,110	4,670	2,030	1,470	1,460
8	937	882	878	1,000	1,050	1,100	1,120	1,110	4,670	2,080	1,470	1,450
9	938	866	878	1,000	1,060	1,100	1,110	1,110	4,670	2,090	1,480	1,440
10	937	873	878	1,000	1,050	1,100	1,110	1,110	4,660	2,090	1,470	1,450
11	941	858	878	1,000	1,060	1,090	1,110	1,110	4,660	1,740	1,470	1,450
12	941	859	884	1,000	1,060	1,090	1,110	1,030	4,270	1,580	1,460	1,460
13	916	858	885	1,000	1,060	1,090	1,110	1,100	4,260	1,580	1,470	1,540
14	858	861	881	1,000	1,050	1,090	1,110	1,100	3,900	1,580	1,470	1,470
15	854	869	877	1,000	1,060	1,110	1,110	1,110	3,490	1,570	1,480	1,440
16	851	857	888	869	1,100	1,110	1,110	2,020	3,070	1,570	1,490	1,440
17	853	865	888	869	1,120	1,110	1,110	3,650	2,620	1,460	1,470	1,440
18	857	877	889	1,000	1,130	1,110	1,110	5,060	2,240	1,440	1,470	1,500
19	855	e877	892	1,000	1,130	1,110	1,110	5,870	2,040	1,470	1,470	1,500
20	843	e877	889	1,010	1,130	1,110	1,110	5,080	2,030	1,470	1,470	1,500
21	838	e877	888	1,010	1,130	1,110	1,110	4,720	2,030	1,470	1,470	1,500
22	859	e877	877	1,020	1,130	1,120	1,100	4,720	2,030	1,470	1,470	1,430
23	859	e877	e887	888	1,130	1,110	1,100	4,720	2,110	1,470	1,470	1,510
24	859	e877	e886	1,010	1,120	1,110	1,100	4,720	2,030	1,470	1,480	1,510
25	860	e877	e885	1,010	1,120	1,120	1,110	4,720	2,030	1,470	1,470	1,510
26	861	e877	e885	1,020	1,150	1,110	1,110	4,710	2,030	1,470	1,470	1,510
27	861	e877	e884	1,030	1,120	1,110	1,100	4,720	2,030	1,470	1,480	1,520
28	861	e877	e883	1,030	1,150	912	1,100	4,980	2,030	1,470	1,470	1,540
29	866	e877	e883	1,020	---	873	1,100	6,000	2,030	1,470	1,470	1,510
30	869	e877	e882	1,060	---	1,110	1,100	6,890	2,030	1,470	1,470	1,500
31	868	---	e881	1,010	---	1,110	---	5,400	---	1,470	1,470	---
TOTAL	27,639	26,204	27,345	30,111	30,490	33,815	33,300	94,530	99,950	52,100	45,580	44,470
MEAN	892	873	882	971	1,089	1,091	1,110	3,049	3,332	1,681	1,470	1,482
MAX	946	891	892	1,060	1,150	1,120	1,120	6,890	4,760	2,090	1,490	1,540
MIN	838	857	877	867	1,050	873	1,100	1,030	2,030	1,440	1,460	1,430
AC-FT	54,820	51,980	54,240	59,730	60,480	67,070	66,050	187,500	198,300	103,300	90,410	88,210

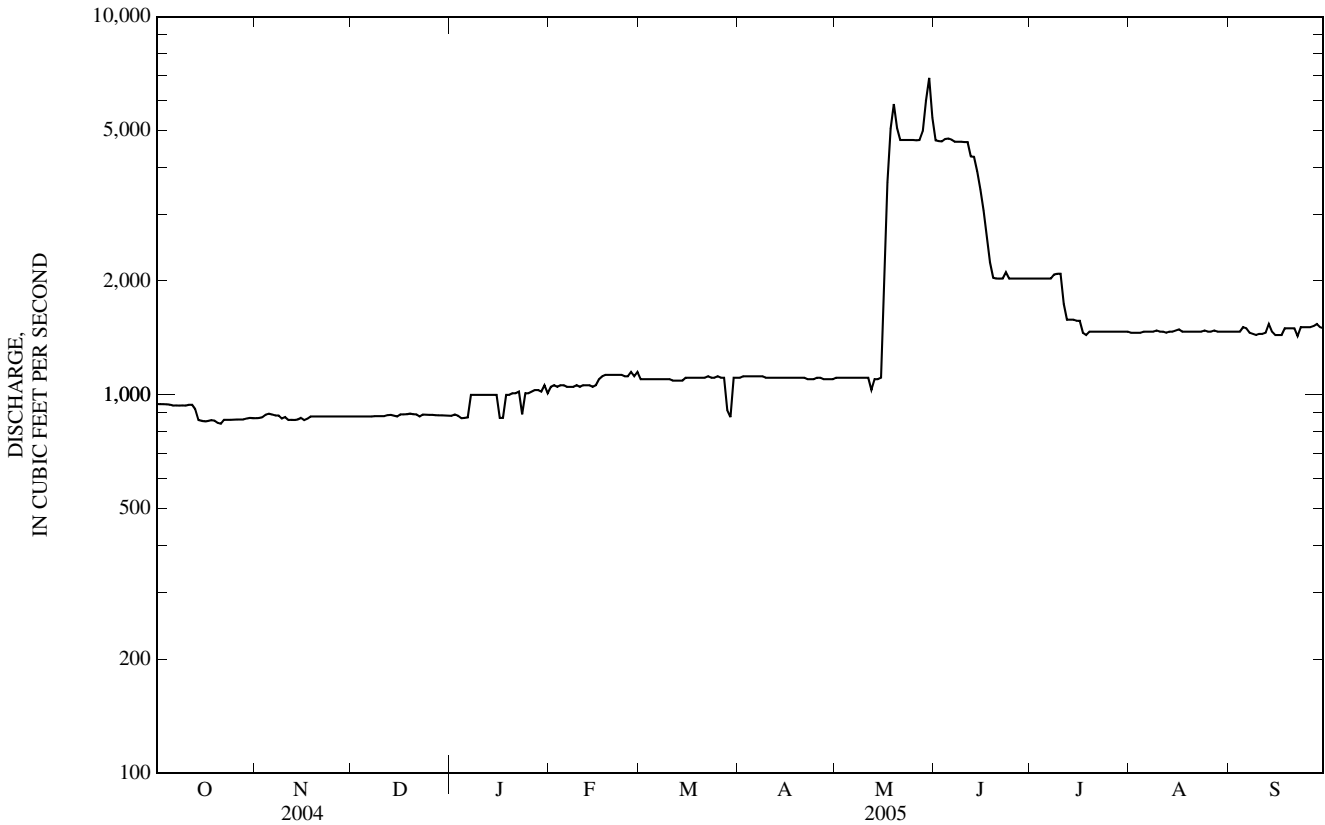
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2005, BY WATER YEAR (WY)

MEAN	1,805	1,949	2,120	2,051	2,037	1,746	1,873	2,502	2,488	2,226	1,916	1,801
MAX	3,911	3,655	3,626	4,145	4,090	3,818	4,271	7,146	8,044	10,130	5,056	3,729
(WY)	(1983)	(1983)	(1973)	(1985)	(1984)	(1977)	(1997)	(1986)	(1999)	(1983)	(1983)	(1983)
MIN	128	312	743	836	773	599	587	984	900	474	497	734
(WY)	(1964)	(1964)	(1964)	(2002)	(1971)	(1964)	(1964)	(1990)	(2002)	(1965)	(1965)	(1965)

09234500 GREEN RIVER NEAR GREENDALE, UT—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1964 - 2005	
ANNUAL TOTAL	397,345		545,534		--	
ANNUAL MEAN	1,086		1,495		2,043	
HIGHEST ANNUAL MEAN	--		--		4,270 1983	
LOWEST ANNUAL MEAN	--		--		936 2002	
HIGHEST DAILY MEAN	4,550	May 11	6,890	May 30	12,300	Jul 16, 1983
LOWEST DAILY MEAN	796	Jul 21	838	Oct 21	90	Oct 8, 1963
ANNUAL SEVEN-DAY MINIMUM	850	Oct 15	850	Oct 15	112	Oct 2, 1963
ANNUAL RUNOFF (AC-FT)	788,100		1,082,000		1,480,000	
10 PERCENT EXCEEDS	1,170		2,080		3,680	
50 PERCENT EXCEEDS	954		1,110		1,730	
90 PERCENT EXCEEDS	877		875		867	

e Estimated.



09234500 GREEN RIVER NEAR GREENDALE, UT—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1956 to September 2000, October 2001 to September 2003, February 2004 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1956 to September 1959, October 1963 to September 2000.

WATER TEMPERATURES: October 1956 to September 1959, October 1963 to September 2000, October 2001 to September 2003, February 2004 to current year.

SEDIMENT DATA: October 1956 to September 1959.

INSTRUMENTATION.--Water-quality monitor since December 1986 to September 2000. Water temperature thermister installed October 2001.

REMARKS.--Storage in Flaming Gorge Reservoir began on Nov. 1, 1962. Samples for daily records are taken inside Penstock. Extremes are given for two separate periods--water years 1957-62, and water years 1964 to current year. Extremes for the 1963 water year (October 1962 to September 1963) are not included. Temperature extremes for the 1994 water year are not included. Unpublished daily records of specific conductance obtained before 1965 were included in the determination of extremes for period of daily record and are available in files of the Utah Water Science Center. Daily records provided by Bureau of Reclamation and Utah Water Science Center. Water-quality monitor located in separate shelter 0.6 mi downstream from Flaming Gorge Dam.

EXTREMES FOR PERIOD OF DAILY RECORD.--(water years 1957-62, 1964-2000, 2002-03, February 2004 to current year).

SPECIFIC CONDUCTANCE (water years 1957-58, 1960-62): Maximum recorded, 1,340 microsiemens per centimeter at 25°C (µS/cm), Aug. 30, 1961; minimum recorded, 325 µS/cm, June 2, 1961.

WATER TEMPERATURES (water years 1957-59): Maximum recorded, 24.0°C, July 24, 25, 1959; minimum recorded, 0.0°C on many days during winter period each year.

SPECIFIC CONDUCTANCE (water years 1964 to current year): Maximum recorded, 1,060 µS/cm, Nov. 9, 1971; minimum recorded, 507 µS/cm, July 29, 1998.

WATER TEMPERATURES: Maximum recorded, 17.2°C, July 9, 1989; minimum recorded 1.6°C Mar. 1, 2, 1987.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum recorded, 15.4°C, August 31; minimum recorded, 3.3°C, February 25-28.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.9	11.6	11.7	10.2	9.9	10.0	6.9	6.7	6.8	5.0	4.9	5.0
2	11.9	11.6	11.7	10.0	9.7	9.8	6.9	6.6	6.7	5.0	4.9	4.9
3	11.9	11.6	11.7	9.9	9.5	9.7	6.7	6.6	6.6	5.0	4.9	4.9
4	11.9	11.6	11.7	9.7	8.5	9.1	6.6	6.3	6.4	5.0	4.6	4.8
5	12.5	11.4	11.9	8.8	8.5	8.6	6.4	6.3	6.4	4.7	4.6	4.7
6	12.5	11.9	12.2	8.8	8.5	8.6	6.4	6.3	6.3	4.7	4.6	4.6
7	12.5	12.2	12.3	8.6	8.5	8.5	6.3	6.1	6.3	4.6	4.4	4.5
8	12.7	12.2	12.3	8.6	8.5	8.5	6.3	6.1	6.2	4.6	4.4	4.5
9	12.3	12.0	12.2	8.5	8.3	8.4	6.4	6.1	6.3	4.7	4.4	4.6
10	12.5	12.2	12.3	8.5	8.1	8.4	6.4	6.1	6.3	4.6	4.6	4.6
11	12.7	12.2	12.4	8.5	8.3	8.4	6.3	6.1	6.1	4.6	4.4	4.6
12	12.3	12.0	12.2	8.4	8.0	8.1	6.3	5.9	6.0	4.6	4.2	4.3
13	12.2	11.7	12.0	8.5	8.1	8.4	6.1	5.9	5.9	4.4	4.2	4.2
14	12.3	11.4	11.8	8.6	8.0	8.3	6.3	5.8	6.0	4.4	4.1	4.2
15	11.7	11.3	11.5	8.5	8.0	8.3	6.1	5.9	6.1	4.2	4.1	4.1
16	11.6	11.1	11.3	8.5	8.3	8.4	6.1	5.9	6.0	4.2	4.1	4.2
17	11.4	11.1	11.2	8.7	8.4	8.5	6.1	5.8	5.9	4.4	4.2	4.2
18	11.1	10.9	11.1	8.6	8.3	8.4	5.9	5.8	5.8	4.2	4.2	4.2
19	11.1	10.8	10.9	8.4	8.3	8.3	5.9	5.8	5.8	4.4	4.2	4.2
20	10.9	10.6	10.8	8.3	8.3	8.3	5.9	5.6	5.8	4.4	4.2	4.2
21	11.3	10.6	10.9	8.3	8.1	8.3	5.8	5.6	5.6	4.4	4.2	4.2
22	11.9	11.1	11.5	8.3	8.1	8.1	5.6	5.5	5.5	4.4	4.2	4.2
23	11.7	11.1	11.3	8.3	8.0	8.1	5.5	5.3	5.3	4.6	4.2	4.2
24	11.3	10.8	11.1	8.3	8.1	8.1	5.5	5.3	5.3	4.6	4.2	4.3
25	11.1	10.6	10.8	8.1	7.8	8.0	5.5	5.2	5.3	4.4	4.2	4.2
26	10.9	10.6	10.8	8.1	7.8	7.9	5.3	5.2	5.2	4.4	4.2	4.3
27	10.6	9.9	10.4	7.8	7.5	7.6	5.3	5.2	5.2	4.4	4.2	4.3
28	10.5	10.0	10.4	7.6	7.3	7.5	5.3	5.2	5.2	4.6	4.2	4.4
29	10.6	10.3	10.4	7.5	7.2	7.4	5.2	5.0	5.2	4.4	4.2	4.3
30	10.6	10.3	10.5	7.3	6.7	7.0	5.2	5.0	5.0	4.2	4.1	4.2
31	10.5	10.0	10.3	---	---	---	5.2	4.9	5.0	4.2	4.1	4.1
MONTH	12.7	9.9	11.4	10.2	6.7	8.4	6.9	4.9	5.9	5.0	4.1	4.4

09253000 LITTLE SNAKE RIVER NEAR SLATER, CO

LOCATION.--Lat 40°59'58", long 107°08'34" (NAD 27), in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.15, T.12 N., R.87 W., Routt County, Hydrologic Unit 14050003, on left bank just downstream from highway bridge at Focus Ranch, 0.2 mi downstream from Spring Creek, and 12 mi east of Slater.

DRAINAGE AREA.--285 mi².

PERIOD OF RECORD.--October 1942 to September 1947, October 1950 to September 1999, April 2001 to current year.

REVISED RECORDS.--WSP 1733: 1960.

GAGE.--Water-stage recorder. Elevation of gage is 6,831.00 ft above NGVD of 1929. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversions for irrigation of about 2,000 acres upstream from station. Station operated and record provided by the Colorado Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	62	e40	e56	e48	e48	54	371	1,070	322	44	20
2	74	56	e41	e56	e51	e46	63	351	1,180	297	47	19
3	62	70	e44	e56	e49	e47	80	356	1,080	283	53	19
4	55	60	e49	e57	e50	e52	101	371	1,230	253	47	20
5	49	58	e51	e58	e48	e50	101	444	1,340	225	47	19
6	48	57	e52	e59	e48	e50	97	554	1,080	203	39	18
7	48	56	e50	e61	e49	e52	126	658	991	180	36	18
8	43	60	e52	e60	e48	e48	163	763	892	168	35	18
9	40	65	e53	e62	e48	e52	166	708	842	153	32	24
10	38	64	e55	e64	e46	e56	161	790	790	143	37	35
11	37	61	e55	e66	e47	e58	149	856	699	137	48	34
12	36	61	e55	e64	e49	e60	153	701	777	123	37	23
13	38	57	e53	e60	e49	e50	195	656	722	112	30	21
14	39	54	e51	e62	e50	e54	244	675	607	102	27	21
15	38	47	e49	e66	e48	e56	286	803	598	94	25	21
16	39	54	e47	e70	e46	e54	352	1,010	621	87	25	20
17	37	55	e46	e73	e48	52	471	1,190	638	81	33	19
18	37	45	e48	e73	e49	50	574	1,090	670	73	35	18
19	45	44	e49	e70	e52	47	628	1,290	683	69	30	18
20	58	53	e50	e66	e50	47	596	1,590	636	65	27	17
21	64	50	e46	e62	e52	47	449	1,860	585	61	24	20
22	68	49	e42	e56	e50	46	380	1,950	615	56	29	39
23	62	43	e44	e53	e48	50	459	1,930	803	53	27	32
24	65	45	e44	e53	e46	51	572	1,930	742	61	27	26
25	66	45	e46	e53	e47	48	571	1,800	614	66	27	24
26	64	45	e50	e53	e48	49	498	1,630	600	72	27	21
27	68	e35	e51	e54	e47	50	497	1,410	514	54	24	22
28	73	e48	e53	e52	e47	57	615	1,240	409	48	23	29
29	79	e35	e54	e50	---	63	492	1,140	455	43	22	29
30	69	e38	e56	e50	---	59	403	1,350	358	42	20	24
31	70	---	e55	e51	---	56	---	1,370	---	42	21	---
TOTAL	1,703	1,572	1,531	1,846	1,358	1,605	9,696	32,837	22,841	3,768	1,005	688
MEAN	54.9	52.4	49.4	59.5	48.5	51.8	323	1,059	761	122	32.4	22.9
MAX	94	70	56	73	52	63	628	1,950	1,340	322	53	39
MIN	36	35	40	50	46	46	54	351	358	42	20	17
AC-FT	3,380	3,120	3,040	3,660	2,690	3,180	19,230	65,130	45,310	7,470	1,990	1,360

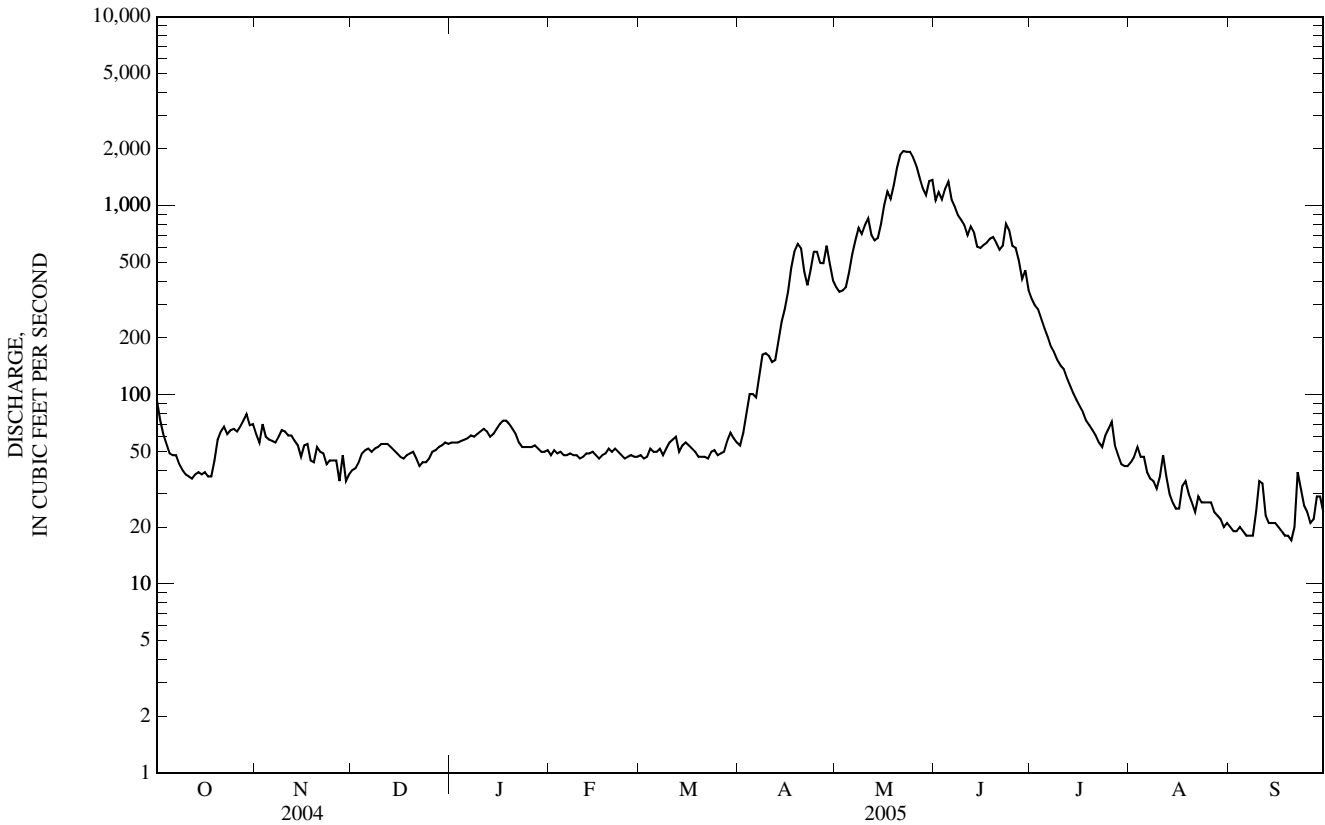
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2005, BY WATER YEAR (WY)

MEAN	38.9	36.3	32.6	32.2	32.9	51.8	264	1,064	911	155	38.6	29.1
MAX	91.8	77.8	59.4	74.5	59.5	139	842	2,122	2,231	519	97.3	80.5
(WY)	(1962)	(1962)	(1983)	(1983)	(1962)	(1989)	(1974)	(1984)	(1983)	(1983)	(1945)	(1997)
MIN	16.2	18.4	14.8	16.3	20.4	23.8	77.6	379	178	26.9	12.9	11.0
(WY)	(2003)	(1959)	(1977)	(1945)	(1945)	(1977)	(1973)	(2002)	(1987)	(2002)	(2002)	(1944)

09253000 LITTLE SNAKE RIVER NEAR SLATER, CO—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1944 - 2005	
ANNUAL TOTAL	47,517		80,450		--	
ANNUAL MEAN	130		220		226	
HIGHEST ANNUAL MEAN	--		--		423 1984	
LOWEST ANNUAL MEAN	--		--		86.4 2002	
HIGHEST DAILY MEAN	679	May 11	1,950	May 22	3,960	May 24, 1984
LOWEST DAILY MEAN	14	Aug 15	17	Sep 20	3.9	Sep 16, 2002
ANNUAL SEVEN-DAY MINIMUM	16	Aug 11	19	Sep 2	6.2	Sep 4, 1988
MAXIMUM PEAK FLOW	--		2,420	May 21	4,780	May 23, 1984
MAXIMUM PEAK STAGE	--		6.93	May 21	8.78 ^a	May 23, 1984
ANNUAL RUNOFF (AC-FT)	94,250		159,600		163,600	
10 PERCENT EXCEEDS	381		700		796	
50 PERCENT EXCEEDS	52		54		40	
90 PERCENT EXCEEDS	26		27		21	

a Maximum gage height, 9.95 ft, April 25, 1974.
 e Estimated.



09253455 HAGGARTY CREEK ABOVE BELVIDERE DITCH, NEAR ENCAMPMENT, WY

LOCATION.--Lat 41°09'02", long 107°07'06" (NAD 27), in SE¹/₄ SE¹/₄ sec.25, T.14 N., R.87 W., Carbon County, Hydrologic Unit 14050003, Medicine Bow National Forest, 0.5 mi upstream from State Highway 70, 1.6 mi upstream from mouth, and 17 mi west of Encampment, WY.

PERIOD OF RECORD.--October 1992 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
MAY 25...	0950	158	566	10.0	100	7.4	23	16.0	3.0	9	2.57	.625	.40
AUG 15...	1715	3.4	566	7.8	99	7.9	40	13.5	12.5	16	4.70	.952	.38

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic, water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)
MAY 25...	.1	.81	16	10	E.19	<.1	6.4	1.5	38	<.20	E.1	9	<.06
AUG 15...	.1	1.26	15	19	<.20	<.1	8.9	2.0	8	<.20	.2	14	<.06

Date	Boron, water, fltrd, ug/L (01020)	Cadmium, water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt, water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium, water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Mercury, water, fltrd, ug/L (71890)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)
MAY 25...	<7.0	<.04	<.8	.176	52.7	34	.23	<2	1.6	<.01	<.4	.73	<.4
AUG 15...	<7.0	E.04	1.2	.068	20.6	27	.11	<2	4.4	<.01	<.4	.72	<.4

Date	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)
MAY 25...	<.2	12.9	<2	.6	E.03
AUG 15...	<.2	19.1	<2	1.1	<.04

< -- Less than.
E -- Estimated.

09253465 WEST FORK BATTLE CREEK AT BATTLE CREEK CAMPGROUND, NEAR SAVERY, WY

LOCATION.--Lat 41°05'37", long 107°09'31" (NAD 27), in SW¹/₄ NE¹/₄ SE¹/₄ sec.15, T.13 N., R.87 W., Carbon County, Hydrologic Unit 14050003, Medicine Bow National Forest, at Battle Creek Campground, 1.1 mi upstream from mouth, and 15 mi east of Savery.

PERIOD OF RECORD.--October 1992 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
MAY 25...	1310	265	597	9.2	99	7.9	31	17.0	8.0	13	3.72	.787	.42
AUG 15...	1545	1.2	590	7.2	101	8.3	168	19.0	19.0	63	19.9	3.16	.72

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, water fltrd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)
MAY 25...	.1	1.03	15	13	.36	<.1	7.0	2.0	23	.03	16.8	34	<.20
AUG 15...	.3	5.68	16	50	2.93	.5	11.3	24.7	99	.13	.31	6	<.20

Date	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium, water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt, water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium, water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Mercury, water, fltrd, ug/L (71890)
MAY 25...	E.1	10	<.06	<7.0	<.04	<.8	.079	24.0	34	<.08	<2	1.4	<.01
AUG 15...	.3	35	<.06	14	<.04	<.8	.063	6.6	E6	.26	3	2.1	<.01

Date	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)
MAY 25...	<.4	.64	<.4	<.2	20.2	<2	E.5	.05
AUG 15...	1.0	.71	E.2	<.2	126	<2	1.7	.12

< -- Less than.
E -- Estimated.

09255000 SLATER FORK NEAR SLATER, CO

LOCATION.--Lat 40°58'57", long 107°22'56" (NAD 27), in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.21, T.12 N., R.89 W., Moffat County, Hydrologic Unit 14050003, on right bank 15 ft downstream from highway bridge, 1.0 mi upstream from mouth, and 1.5 mi south of Slater.

DRAINAGE AREA.--161 mi².

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.

REVISED RECORDS.--WSP 618: 1910-11. WSP 764: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,600 ft above NGVD of 1929, from river-profile map. May 28, 1910 to May 25, 1912, nonrecording gage at site 1.5 mi upstream from station at different datum. July 9, 1931 to May 6, 1932, nonrecording gage at site 0.2 mi downstream from station at different datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversions for irrigation of about 500 acres upstream from station. Station operated and record provided by the Colorado Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	24	18	22	18	23	21	150	439	119	12	4.3
2	21	15	20	22	22	21	25	140	502	105	12	4.3
3	17	25	18	22	20	21	31	155	462	93	16	4.4
4	16	24	19	23	21	23	44	181	463	83	17	4.8
5	16	22	20	23	20	23	41	244	606	68	16	4.5
6	16	21	21	23	20	23	32	338	466	62	15	4.5
7	15	21	21	24	21	24	45	414	464	62	13	4.6
8	14	22	21	24	20	23	74	422	392	57	11	4.4
9	14	23	21	24	21	25	68	372	374	49	9.8	8.8
10	13	23	e22	24	19	26	54	496	349	43	11	16
11	13	22	e22	24	20	27	42	507	295	35	17	14
12	13	22	e22	24	23	26	44	331	408	33	16	7.7
13	14	21	21	24	23	26	e60	268	359	30	12	7.0
14	15	20	20	24	24	19	e96	272	279	26	11	7.1
15	15	18	20	26	21	22	111	364	299	22	10	6.9
16	14	19	20	27	19	22	132	553	356	21	9.7	6.3
17	13	20	19	28	22	20	209	758	375	18	13	5.6
18	14	17	20	28	23	19	275	509	395	16	15	6.2
19	18	15	20	27	26	19	310	630	386	15	12	6.1
20	26	20	20	26	24	22	307	805	339	15	11	5.6
21	27	19	19	24	26	23	199	968	299	15	10	6.0
22	33	18	18	22	25	21	145	976	285	14	10	14
23	28	17	18	21	23	22	178	942	404	13	10	13
24	27	16	18	21	19	24	284	926	327	15	8.6	11
25	27	20	19	21	21	21	271	799	239	19	8.3	11
26	26	19	20	21	22	22	216	620	270	23	8.2	10
27	25	11	21	23	21	21	242	528	224	18	6.6	10
28	27	19	21	22	22	24	359	479	167	15	3.9	14
29	34	12	22	20	---	28	252	476	198	14	3.8	13
30	28	13	22	20	---	25	185	607	146	11	3.8	12
31	27	---	22	21	---	23	---	606	---	11	3.8	---
TOTAL	626	578	625	725	606	708	4,352	15,836	10,567	1,140	336.5	247.1
MEAN	20.2	19.3	20.2	23.4	21.6	22.8	145	511	352	36.8	10.9	8.24
MAX	34	25	22	28	26	28	359	976	606	119	17	16
MIN	13	11	18	20	18	19	21	140	146	11	3.8	4.3
AC-FT	1,240	1,150	1,240	1,440	1,200	1,400	8,630	31,410	20,960	2,260	667	490

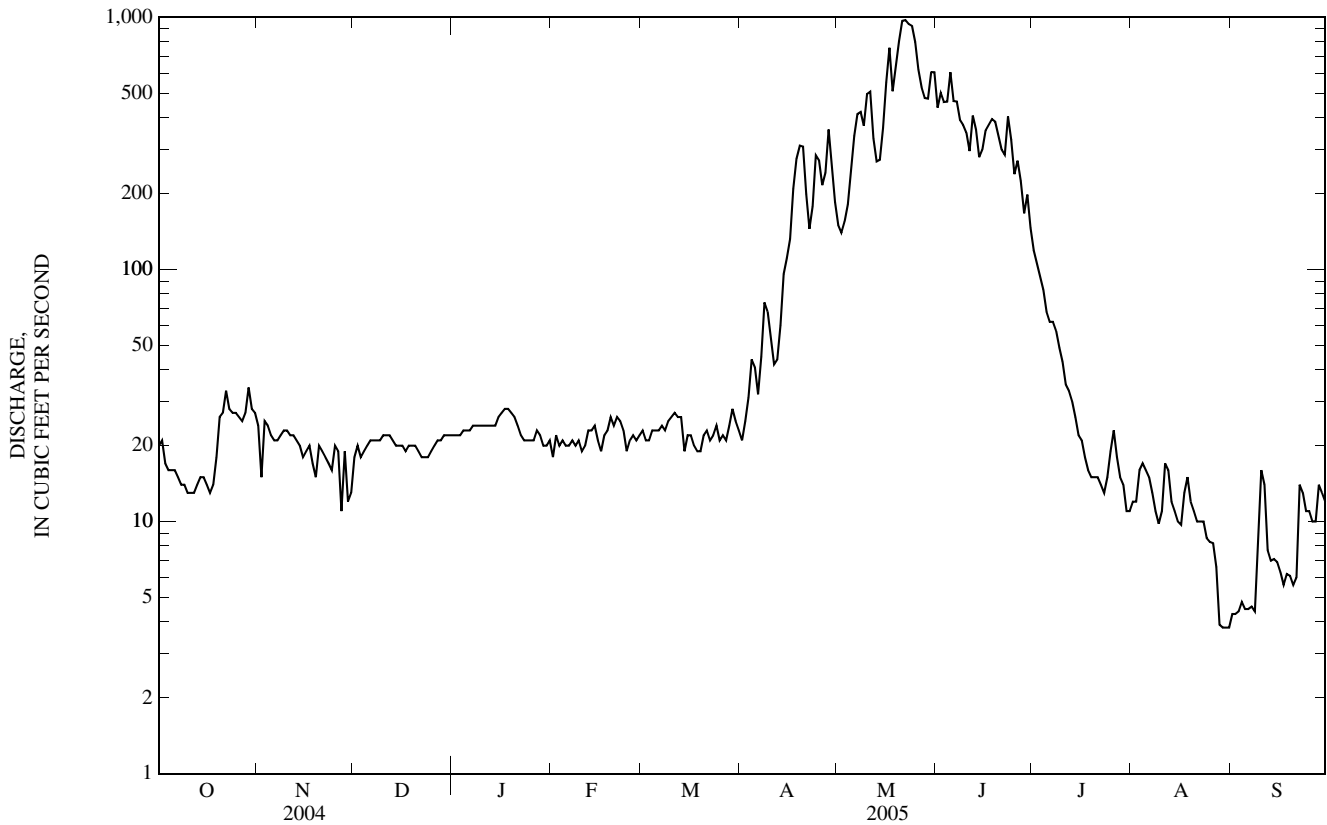
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2005, BY WATER YEAR (WY)

MEAN	19.9	19.2	17.5	17.3	18.7	29.7	120	379	246	36.6	9.72	11.4
MAX	62.4	49.2	44.1	36.9	46.5	144	323	801	660	189	38.4	55.0
(WY)	(1986)	(1985)	(1985)	(1985)	(1986)	(1998)	(1985)	(1984)	(1995)	(1983)	(1945)	(1984)
MIN	7.29	7.73	7.30	4.42	9.83	12.6	25.2	45.7	16.0	127	1.39	3.20
(WY)	(1934)	(1934)	(1932)	(1992)	(1981)	(1965)	(1933)	(1934)	(2002)	(1977)	(1994)	(1960)

09255000 SLATER FORK NEAR SLATER, CO—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1932 - 2005	
ANNUAL TOTAL	16,539	36,346.6	--	
ANNUAL MEAN	45.2	99.6	77.3	
HIGHEST ANNUAL MEAN	--	--	157	1984
LOWEST ANNUAL MEAN	--	--	20.5	1934
HIGHEST DAILY MEAN	286 May 7	976 May 22	1,500	May 16, 1984
LOWEST DAILY MEAN	2.6 Sep 3	3.8 Aug 29	0.00 ^a	Aug 2, 1934
ANNUAL SEVEN-DAY MINIMUM	4.3 Aug 9	4.0 Aug 28	0.00	Aug 2, 1934
MAXIMUM PEAK FLOW	--	1,280 May 22	2,250 ^b	May 16, 1984
MAXIMUM PEAK STAGE	--	9.36 May 22	11.78 ^c	May 16, 1984
ANNUAL RUNOFF (AC-FT)	32,810	72,090	56,020	
10 PERCENT EXCEEDS	135	361	250	
50 PERCENT EXCEEDS	18	22	20	
90 PERCENT EXCEEDS	6.6	11	7.0	

- a Also occurred several days during 1936, 1954, and 1977.
- b From rating curve extended above 1,000 ft³/s.
- c From floodmarks.
- e Estimated.



09258980 MUDDY CREEK BELOW YOUNG DRAW NEAR BAGGS, WY

LOCATION.--41°04'05", long 107°37'51" (NAD 27), in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 28, T.13 N., R.91 W., Carbon County, Hydrologic Unit 14050004, on right bank, 4.0 mi upstream from mouth and 4.0 mi northeast of Baggs.

DRAINAGE AREA.--1,200 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 2004 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,270 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records fair. Natural flow of stream possibly affected by numerous small ponds for coal bed methane production water.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.19	e12	0.76	e1.2	61	58	25	66	32	4.7	0.16	0.37
2	0.19	e7.1	0.63	e1.2	43	49	23	57	35	3.9	0.18	0.78
3	0.18	e5.6	0.34	e1.1	30	45	28	47	36	2.8	0.16	1.1
4	0.17	e4.5	0.27	0.94	30	55	42	42	34	1.7	0.16	1.3
5	0.17	e3.5	0.23	0.93	22	79	41	39	30	1.7	0.15	0.95
6	0.18	2.6	0.21	0.56	22	101	37	38	26	1.5	0.14	1.0
7	0.17	2.5	0.19	0.56	11	127	45	37	24	1.1	0.13	1.2
8	0.17	4.7	0.20	0.49	6.1	123	49	40	22	0.79	0.13	1.6
9	0.16	4.5	0.20	0.42	7.3	120	38	52	21	0.71	0.13	2.0
10	0.17	4.3	0.20	36	7.0	173	35	55	20	1.9	0.15	3.2
11	0.17	5.4	0.21	219	4.7	143	38	62	20	1.0	0.14	1.9
12	0.16	6.1	0.25	236	3.9	154	35	89	20	0.81	0.14	0.20
13	0.17	5.6	0.30	155	4.5	215	30	91	20	0.99	0.45	0.18
14	0.16	5.4	0.27	85	8.7	116	24	86	19	0.99	0.26	0.18
15	0.17	4.8	0.25	44	23	59	20	70	18	0.65	0.13	0.17
16	0.17	3.9	0.23	31	18	55	20	61	14	1.0	0.15	0.16
17	0.17	4.8	0.20	14	13	42	23	53	14	0.65	0.21	0.16
18	0.18	3.7	0.19	7.9	7.4	29	22	48	13	0.78	0.33	0.17
19	0.19	3.5	0.18	10	5.6	32	21	46	10	1.1	0.41	0.19
20	0.18	3.7	0.19	12	20	39	24	49	8.6	0.29	0.29	0.20
21	0.18	3.0	0.18	21	e41	48	34	48	8.2	0.21	0.16	0.26
22	0.19	1.9	0.16	27	e89	37	47	44	8.0	0.20	0.16	0.29
23	0.18	1.7	0.15	85	e123	40	61	41	9.9	0.19	0.16	0.27
24	0.20	e1.4	0.14	109	e103	59	62	41	3.8	1.6	0.17	0.24
25	7.7	2.1	0.15	169	78	46	55	40	2.6	0.45	0.16	0.24
26	12	e2.4	0.16	147	62	37	53	37	24	1.3	0.15	0.22
27	14	1.5	0.16	125	61	29	52	34	15	1.2	0.23	0.24
28	8.0	1.1	0.17	104	62	39	59	31	9.2	0.67	1.0	0.23
29	6.7	0.95	3.4	109	---	55	68	28	6.8	0.16	0.32	0.22
30	12	0.62	14	91	---	44	70	26	6.3	0.15	0.47	0.26
31	19	---	2.0	83	---	35	---	29	---	0.16	0.51	---
TOTAL	83.62	114.87	26.17	1,927.30	967.2	2,283	1,181	1,527	530.4	35.35	7.49	19.48
MEAN	2.70	3.83	0.84	62.2	34.5	73.6	39.4	49.3	17.7	1.14	0.24	0.65
MAX	19	12	14	236	123	215	70	91	36	4.7	1.0	3.2
MIN	0.16	0.62	0.14	0.42	3.9	29	20	26	2.6	0.15	0.13	0.16
AC-FT	166	228	52	3,820	1,920	4,530	2,340	3,030	1,050	70	15	39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)*

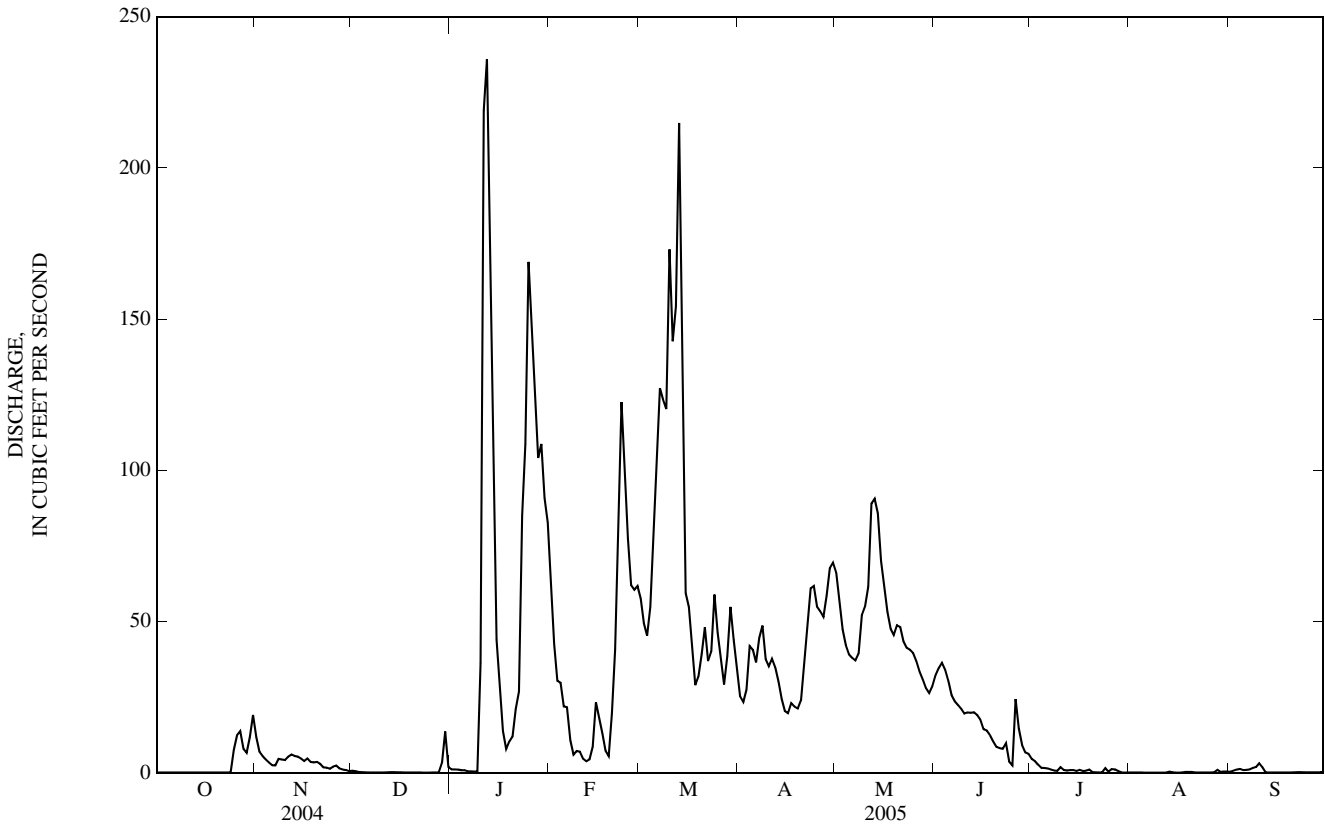
MEAN	2.70	3.83	0.84	62.2	34.5	73.6	39.4	31.2	10.0	4.67	0.24	0.64
MAX	2.70	3.83	0.84	62.2	34.5	73.6	39.4	49.3	17.7	8.19	0.24	0.65
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(2005)	(2005)
MIN	2.70	3.83	0.84	62.2	34.5	73.6	39.4	13.2	2.38	1.14	0.24	0.63
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(2004)	(2005)	(2004)	(2004)

09258980 MUDDY CREEK BELOW YOUNG DRAW NEAR BAGGS, WY—Continued

SUMMARY STATISTICS

	FOR 2005 WATER YEAR*		WATER YEARS 2004 - 2005*	
ANNUAL TOTAL	8,702.88		--	
ANNUAL MEAN	23.8		23.8	
HIGHEST ANNUAL MEAN	--		23.8 2005	
LOWEST ANNUAL MEAN	--		23.8 2005	
HIGHEST DAILY MEAN	236	Jan 12	236	Jan 12, 2005
LOWEST DAILY MEAN	0.13	Aug 7	0.13	Aug 7, 2005
ANNUAL SEVEN-DAY MINIMUM	0.14	Aug 6	0.14	Aug 6, 2005
MAXIMUM PEAK FLOW	421	Mar 13	421	Mar 13, 2005
MAXIMUM PEAK STAGE	6.15	Mar 13	6.15	Mar 13, 2005
ANNUAL RUNOFF (AC-FT)	17,260		17,270	
10 PERCENT EXCEEDS	62		62	
50 PERCENT EXCEEDS	4.8		4.8	
90 PERCENT EXCEEDS	0.17		0.17	

* For period of operation.
 e Estimated.



09258980 MUDDY CREEK BELOW YOUNG DRAW NEAR BAGGS, WY—Continued

WATER-QUALITY RECORDS.

PERIOD OF RECORD.--April to September 2005.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April to September 2005 (seasonal).

WATER TEMPERATURE: April to September 2005 (seasonal).

INSTRUMENTATION.--Water-quality monitor for specific conductance and water temperature.

REMARKS.--Specific conductance records excellent July 7-14 and August 17 to September 8; good May 27 to July 6, July 15 to August 16, and September 5-30. Water temperature records excellent May 27 to August 25 and good Aug. 26 to September 30. Water-temperature records represent water temperature at sensor within 0.2°C.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 4,940 microsiemens per centimeter at 25°C (µS/cm), September 4, 2005; minimum recorded, 533 µS/cm, September 9, 2005.

WATER TEMPERATURE: Maximum recorded, 28.3°C, July 13, 2005; minimum recorded, 7.7°C, September 29, 2005.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 4,940 µS/cm, September 4; minimum recorded, 533 µS/cm, September 9.

WATER TEMPERATURE: Maximum recorded, 28.3°C, July 13; minimum recorded, 7.7°C, September 29.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	701	680	689
29	---	---	---	---	---	---	---	---	---	713	698	702
30	---	---	---	---	---	---	---	---	---	734	713	720
31	---	---	---	---	---	---	---	---	---	744	716	725
MONTH	---	---	---	---	---	---	---	---	---	746	718	731

09258980 MUDDY CREEK BELOW YOUNG DRAW NEAR BAGGS, WY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	743	728	733	1,090	853	933	1,560	1,280	1,390	1,020	854	910
2	776	732	753	1,140	1,040	1,080	2,040	1,560	1,790	1,560	871	1,080
3	830	776	811	1,250	1,140	1,210	2,640	2,040	2,320	1,960	781	1,130
4	845	821	830	1,450	1,250	1,360	2,910	2,590	2,720	4,940	665	1,960
5	867	839	854	1,510	1,450	1,490	3,040	2,720	2,840	2,100	1,210	1,590
6	913	865	887	1,510	1,460	1,480	3,000	2,680	2,800	1,570	1,160	1,260
7	931	913	922	1,680	1,470	1,600	2,920	2,660	2,770	1,160	978	1,060
8	950	929	936	1,890	1,540	1,680	2,770	2,550	2,640	1,120	733	940
9	940	919	931	1,980	1,890	1,940	2,720	2,520	2,590	745	533	643
10	921	908	915	2,240	787	1,440	2,530	2,410	2,470	1,080	631	825
11	909	892	902	1,010	752	905	2,690	2,400	2,540	1,080	631	727
12	906	882	894	3,010	923	1,820	2,810	2,400	2,590	1,040	714	833
13	923	888	901	1,720	1,360	1,600	4,000	2,660	3,480	1,350	1,040	1,220
14	938	918	927	1,420	1,150	1,250	3,900	2,620	3,260	1,460	1,300	1,400
15	938	918	927	1,580	1,010	1,230	2,620	1,910	2,270	1,490	1,400	1,450
16	969	930	945	1,070	799	924	1,910	1,360	1,570	1,560	1,420	1,490
17	989	956	973	1,650	1,040	1,400	1,360	1,160	1,240	1,620	1,490	1,550
18	986	962	973	3,350	1,280	1,740	4,060	1,310	2,620	1,730	1,600	1,670
19	1,030	986	1,010	1,690	811	1,230	4,250	2,580	3,550	1,820	1,680	1,760
20	1,050	1,020	1,040	1,550	868	1,100	2,580	1,790	2,130	1,860	1,720	1,800
21	1,040	988	1,020	1,940	897	1,380	1,790	1,460	1,600	1,930	1,760	1,830
22	1,030	986	1,010	2,400	1,910	2,170	1,460	1,270	1,350	2,290	1,930	2,140
23	1,010	921	946	2,600	2,280	2,420	1,270	1,150	1,190	2,740	2,200	2,550
24	1,180	967	1,070	3,940	723	2,130	1,160	1,100	1,130	2,500	2,140	2,270
25	1,310	1,040	1,130	1,870	1,120	1,340	1,160	1,100	1,130	2,200	1,960	2,110
26	1,170	948	1,040	2,390	1,060	1,530	1,190	1,110	1,150	2,120	1,930	2,040
27	998	571	679	1,310	1,060	1,130	1,330	1,110	1,180	2,120	2,000	2,080
28	742	583	640	1,280	985	1,050	2,050	667	1,230	2,100	1,980	2,060
29	782	705	748	1,010	952	964	667	592	607	2,440	1,980	2,250
30	859	754	800	1,050	949	992	1,270	607	901	2,310	2,000	2,200
31	---	---	---	1,300	1,050	1,160	1,080	897	977	---	---	---
MONTH	1,310	571	905	3,940	723	1,410	4,250	592	2,000	4,940	533	1,560

09258980 MUDDY CREEK BELOW YOUNG DRAW NEAR BAGGS, WY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	19.9	13.7	16.8
28	---	---	---	---	---	---	---	---	---	20.2	13.8	17.0
29	---	---	---	---	---	---	---	---	---	18.8	14.9	16.9
30	---	---	---	---	---	---	---	---	---	16.4	13.4	15.2
31	---	---	---	---	---	---	---	---	---	15.8	11.4	13.8
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	14.4	12.7	13.5	24.4	14.2	19.2	23.0	15.7	19.3	20.0	9.9	14.7
2	13.2	10.9	11.8	22.2	15.8	18.7	24.5	16.4	19.7	20.3	11.4	15.2
3	11.2	10.2	10.6	21.3	15.6	18.1	25.7	16.1	20.7	20.3	12.5	16.4
4	13.5	9.8	11.2	23.7	13.2	18.3	25.0	16.3	20.4	22.2	14.9	18.1
5	17.4	10.6	14.0	25.7	13.8	19.4	25.9	14.8	20.1	21.3	14.4	17.4
6	17.9	13.2	15.4	26.0	14.7	20.2	24.5	15.7	20.0	21.1	12.5	17.0
7	16.4	13.0	14.6	24.8	15.5	20.3	26.4	15.0	20.1	20.7	13.4	17.2
8	16.5	11.0	13.8	25.8	16.1	21.0	25.0	15.6	19.9	19.8	13.4	17.0
9	17.2	12.3	14.5	23.4	16.4	20.1	25.2	16.8	20.1	19.6	14.7	16.9
10	18.3	12.1	14.9	21.8	15.1	18.7	20.1	16.4	18.3	19.6	12.1	15.8
11	18.5	12.2	15.4	25.3	14.1	19.4	23.6	14.7	19.0	19.2	10.9	15.1
12	15.8	12.6	14.0	27.0	15.7	20.8	23.8	14.5	19.0	15.4	11.8	13.8
13	17.6	10.2	13.8	28.3	16.9	22.4	22.2	15.3	18.1	17.2	8.9	12.7
14	20.5	11.9	16.1	27.7	18.2	22.9	23.6	13.7	18.3	17.1	8.9	12.7
15	20.3	14.6	17.1	27.4	18.1	22.9	24.3	13.6	18.8	16.7	8.8	12.6
16	22.9	14.6	18.5	25.5	16.8	21.2	19.6	15.5	17.1	15.9	8.9	12.4
17	22.0	15.8	18.6	25.4	17.8	21.0	19.6	13.6	16.7	15.7	8.9	12.4
18	22.7	14.9	18.5	25.7	14.9	20.3	22.1	13.5	17.5	16.2	8.9	12.5
19	23.8	15.4	19.4	25.2	15.9	20.5	22.2	14.0	17.7	16.8	9.2	12.9
20	24.8	15.5	20.1	26.0	17.4	21.1	23.9	13.7	18.3	17.2	9.2	13.1
21	25.8	16.0	20.9	27.3	15.5	21.2	21.8	14.8	18.1	13.5	11.1	12.4
22	25.2	17.2	21.0	26.5	16.8	21.6	23.4	13.0	17.8	18.2	10.7	13.9
23	25.5	16.7	20.4	25.0	17.2	20.9	20.9	13.5	17.2	15.7	10.5	13.3
24	25.1	16.2	20.3	23.5	16.5	20.1	20.6	12.8	16.7	16.6	11.3	13.8
25	25.1	16.1	20.0	21.8	17.2	19.5	20.6	14.0	17.4	16.5	10.8	13.3
26	21.9	17.1	19.2	24.5	15.4	19.6	21.7	13.6	17.6	15.7	8.3	11.8
27	21.8	15.2	18.3	25.2	14.6	19.9	21.8	12.4	17.1	12.4	9.9	11.3
28	18.9	14.0	16.3	25.3	15.5	20.1	23.0	14.1	18.0	15.6	9.3	12.0
29	21.1	14.2	17.1	25.2	15.1	20.1	23.6	13.8	18.2	15.6	7.7	11.5
30	24.7	13.0	18.4	25.6	15.5	20.0	21.7	13.0	17.0	16.0	8.6	12.2
31	---	---	---	25.0	15.5	19.7	20.5	10.3	15.1	---	---	---
MONTH	25.8	9.8	16.6	28.3	13.2	20.3	26.4	10.3	18.4	22.2	7.7	14.0

09259050 LITTLE SNAKE RIVER BELOW BAGGS, WY

LOCATION.--Lat 41°01'43", long 107°41'14" (NAD 27), in SE¹/₄ NW¹/₄ NW¹/₄ sec.7, T.12 N., R.92 W., Carbon County, Hydrologic Unit 14050003, 0.8 mi downstream from Ledford Slough, 1.5 mi southwest of Baggs, and 3.5 mi downstream from bridge on State Highway 789 in Baggs.

PERIOD OF RECORD.--Water years 1981 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
Date		Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO ₃ (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
APR 19...	1140		6.48	16	60	1.43	.1	12.7	18.4	103	.14	536	634	3,300
MAY 24...	1710	.3	3.69	18	35	.68	E.1	10.8	7.0	57	.08	583	372	3,820
JUL 06...	1420	.4	7.88	19	77	1.72	.1	11.6	11.5	106	.14	104	8	7.8
AUG 16...	0800	.7	19.6	22	159	4.83	.3	10.4	32.3	219	.30	35.5	8	1.3

E -- Estimated.

10011500 BEAR RIVER NEAR UTAH-WYOMING STATE LINE

LOCATION.--Lat 40°57'55", long 110°51'10" (NAD 27), in SE¹/₄ NW¹/₄ SE¹/₄ sec. 30, T. 3 N., R. 10 E., Summit County, Utah, Hydrologic Unit 16010101, on left bank 400 ft downstream from West Fork and 2.8 mi upstream from Utah-Wyoming State line.

DRAINAGE AREA.--172 mi².

PERIOD OF RECORD.--July 1942 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,965 ft above NGVD of 1929, from river-profile map. Prior to October 1, 1986 at datum 3.0 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated slightly by Whitney Reservoir, total capacity, 4,700 acre-ft since 1966. Three diversions upstream from station for irrigation of about 265 acres upstream from station and 2,600 acres downstream from station. Station operated and record provided by the Utah Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	53	e40	e40	e42	e43	42	179	1,080	746	153	64
2	53	51	e45	e41	e43	e44	47	183	1,000	752	145	62
3	49	68	e43	e41	e44	e48	52	177	875	772	152	62
4	47	64	e43	e40	e46	e48	52	198	728	681	144	62
5	47	60	e45	e40	e44	e47	47	260	732	629	151	63
6	48	60	e48	e40	e42	e44	50	391	926	607	141	60
7	46	60	e46	e41	e39	e45	65	354	828	549	133	59
8	45	65	e45	e42	e40	e42	73	298	692	500	130	60
9	45	78	e43	e44	e41	e40	59	346	639	482	131	73
10	47	78	e42	e43	e44	e39	61	402	590	453	127	112
11	60	75	e41	e42	e46	39	60	320	532	424	121	134
12	54	71	e41	e41	e47	42	65	280	578	405	112	134
13	51	67	e43	e40	e48	43	80	287	483	391	107	138
14	49	58	e44	e41	e48	36	86	342	521	374	101	133
15	47	57	e46	e42	e47	38	84	442	749	344	99	121
16	46	66	e44	e42	e46	41	101	655	1,020	317	101	108
17	45	62	e43	e43	e45	36	137	817	1,210	309	111	86
18	52	52	e42	e44	e44	36	169	628	1,400	292	99	84
19	59	54	e41	e45	e43	39	170	865	1,400	260	92	82
20	82	38	e40	e46	e43	42	157	1,250	1,410	237	88	80
21	98	39	e40	e47	e42	40	135	1,550	1,400	229	84	82
22	83	54	e42	e48	e41	39	132	1,610	1,400	227	88	68
23	73	56	e43	e49	e39	43	157	1,740	1,380	228	86	60
24	74	49	e40	e48	e39	43	189	1,820	1,270	213	80	57
25	71	60	e49	e47	e40	41	197	1,690	1,140	198	75	56
26	70	55	e46	e46	e40	42	234	1,440	1,210	181	73	55
27	69	43	e42	e45	e41	42	273	1,370	1,000	162	70	55
28	77	e46	e41	e44	e42	49	262	1,360	910	147	70	68
29	70	e48	e40	e43	---	45	222	1,330	843	136	67	56
30	69	e40	e41	e42	---	44	193	1,420	777	140	64	53
31	66	---	e41	e42	---	43	---	1,100	---	162	64	---
TOTAL	1,847	1,727	1,330	1,339	1,206	1,303	3,651	25,104	28,723	11,547	3,259	2,387
MEAN	59.6	57.6	42.9	43.2	43.1	42.0	122	810	957	372	105	79.6
MAX	98	78	49	49	48	49	273	1,820	1,410	772	153	138
MIN	45	38	40	40	39	36	42	177	483	136	64	53
AC-FT	3,660	3,430	2,640	2,660	2,390	2,580	7,240	49,790	56,970	22,900	6,460	4,730

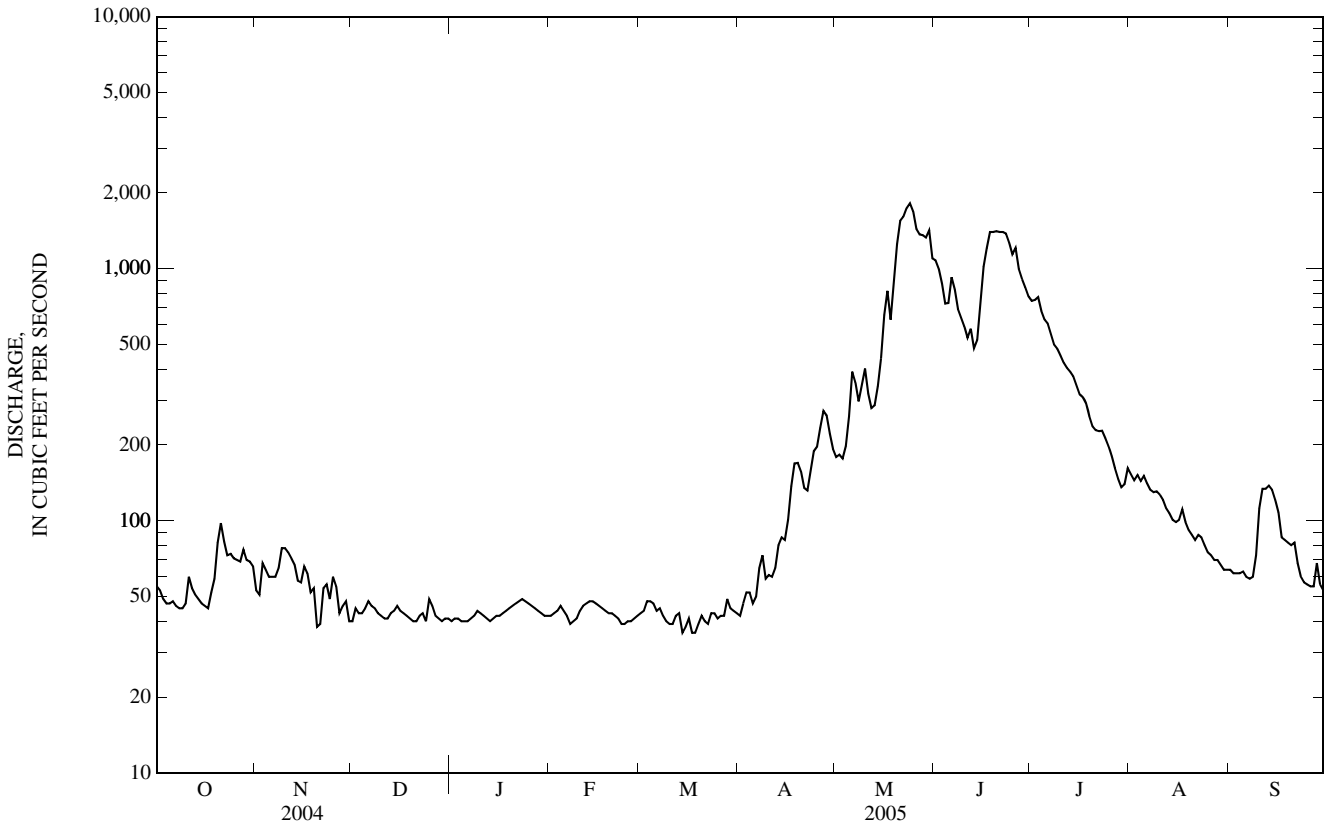
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2005, BY WATER YEAR (WY)

MEAN	63.0	54.4	46.3	41.8	39.7	43.8	112	597	839	298	93.7	73.5
MAX	208	106	94.9	72.4	64.3	69.0	316	1,044	1,990	1,105	244	229
(WY)	(1983)	(1984)	(1984)	(1984)	(1984)	(1986)	(1946)	(1984)	(1986)	(1995)	(1965)	(1983)
MIN	30.8	32.5	27.7	29.6	21.1	26.0	37.2	162	204	67.4	31.0	23.9
(WY)	(1959)	(1955)	(1960)	(1991)	(2003)	(1964)	(1944)	(1977)	(1992)	(1961)	(2002)	(1956)

10011500 BEAR RIVER NEAR UTAH-WYOMING STATE LINE—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1943 - 2005	
ANNUAL TOTAL	46,248		83,423		--	
ANNUAL MEAN	126		229		192	
HIGHEST ANNUAL MEAN	--		--		335 1986	
LOWEST ANNUAL MEAN	--		--		81.5 1977	
HIGHEST DAILY MEAN	679	May 9	1,820	May 24	2,680	Jun 4, 1986
LOWEST DAILY MEAN	35	Feb 15	36	Mar 14	13	Feb 9, 2003
ANNUAL SEVEN-DAY MINIMUM	35	Feb 14	38	Mar 14	15	Feb 6, 2003
ANNUAL RUNOFF (AC-FT)	91,730		165,500		139,100	
10 PERCENT EXCEEDS	298		750		590	
50 PERCENT EXCEEDS	64		62		59	
90 PERCENT EXCEEDS	40		41		34	

e Estimated.



10016900 BEAR RIVER AT EVANSTON, WY

LOCATION.--Lat 41°16'13", long 110°57'47" (NAD 27), in NE¹/₄ NW¹/₄ NW¹/₄ sec.21, T.15 N., R.120 W., Uinta County, Hydrologic Unit 16010101, on left bank 100 ft downstream from bridge on State Highway 89, in the City of Evanston.

DRAINAGE AREA.--433 mi².

PERIOD OF RECORD.--May 1984 to current year (no winter records 1984 to 2001).

GAGE.--Water-stage recorder. Elevation of gage is 6,730 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection with satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation, and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	58	e22	e52	e50	62	123	335	1,340	668	100	36
2	42	43	e23	e54	e54	77	143	298	1,340	635	117	37
3	39	50	e25	e52	e52	69	198	264	1,080	655	123	39
4	35	69	e24	e50	e52	72	307	266	915	580	115	41
5	26	63	e27	e54	e50	74	240	307	835	483	98	38
6	26	58	e28	e56	e45	84	214	558	979	436	94	38
7	27	56	e32	e52	e42	81	276	658	978	383	88	31
8	24	59	e34	e47	e40	92	468	593	861	292	85	31
9	19	79	e37	e47	e41	113	310	554	774	240	93	34
10	18	134	e40	e47	e41	151	219	740	661	220	101	44
11	22	146	e45	e46	e45	165	177	964	599	209	96	52
12	36	107	e48	e45	e43	223	165	871	671	186	85	42
13	32	94	e52	e46	e45	268	196	681	700	166	76	43
14	29	81	e59	e48	e47	186	200	656	586	153	65	44
15	26	70	e64	e49	e54	132	173	689	641	127	61	40
16	23	63	e62	e50	e64	135	167	861	873	120	72	36
17	18	73	e56	e52	e60	139	196	1,330	1,080	104	82	38
18	19	63	e52	e53	e58	123	257	1,050	1,310	98	79	43
19	31	55	e50	e54	e54	132	279	1,120	1,340	93	73	41
20	49	42	e46	e56	e52	189	300	1,660	1,320	86	63	40
21	91	33	e44	e58	e56	149	263	2,080	1,290	81	59	44
22	103	27	e43	e58	64	137	213	2,310	1,280	74	61	52
23	75	e26	e42	e56	76	151	223	2,370	1,330	69	67	44
24	85	e24	e43	e54	79	147	279	2,510	1,220	70	58	37
25	85	e23	e44	e52	75	133	338	2,420	1,110	72	54	37
26	77	e22	e46	e50	78	116	402	2,060	1,130	71	51	34
27	77	e20	e47	e48	79	119	438	1,790	962	68	44	34
28	84	e21	e46	e50	73	166	469	1,670	809	73	39	36
29	90	e23	e47	e50	---	184	408	1,610	808	74	38	46
30	74	e23	e48	e50	---	161	357	1,640	723	78	43	36
31	74	---	e50	e52	---	130	---	1,590	---	89	40	---
TOTAL	1,500	1,705	1,326	1,588	1,569	4,160	7,998	36,505	29,545	6,753	2,320	1,188
MEAN	48.4	56.8	42.8	51.2	56.0	134	267	1,178	985	218	74.8	39.6
MAX	103	146	64	58	79	268	469	2,510	1,340	668	123	52
MIN	18	20	22	45	40	62	123	264	586	68	38	31
AC-FT	2,980	3,380	2,630	3,150	3,110	8,250	15,860	72,410	58,600	13,390	4,600	2,360

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2005, BY WATER YEAR (WY)

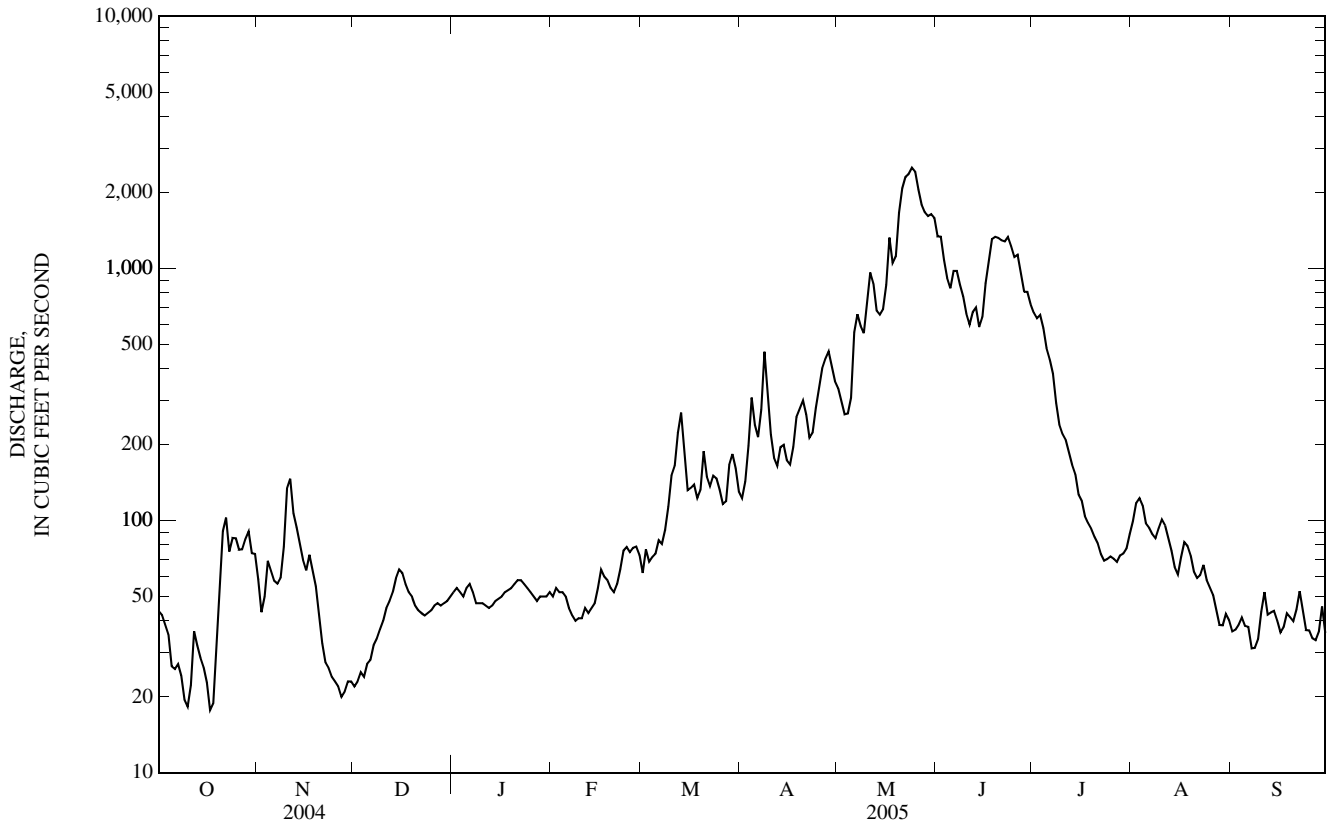
MEAN	30.6	28.3	25.9	29.1	35.8	106	292	753	746	195	64.8	53.9
MAX	48.4	56.8	42.8	51.2	56.0	150	602	1,291	1,890	980	181	225
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(1985)	(1986)	(1986)	(1995)	(1984)	(1984)
MIN	11.5	14.9	13.1	17.0	26.4	45.5	133	330	121	31.9	12.8	11.8
(WY)	(2002)	(2003)	(2003)	(2003)	(2002)	(2002)	(1995)	(1990)	(1992)	(2000)	(2002)	(1988)

BEAR RIVER BASIN

10016900 BEAR RIVER AT EVANSTON, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1984 - 2005	
ANNUAL TOTAL	45,892		96,157		--	
ANNUAL MEAN	125		263		150	
HIGHEST ANNUAL MEAN	--		--		263 2005	
LOWEST ANNUAL MEAN	--		--		81.3 2002	
HIGHEST DAILY MEAN	831	May 7	2,510	May 24	3,160	May 16, 1984
LOWEST DAILY MEAN	18	Jan 5	18	Oct 10	3.2	Oct 20, 2001
ANNUAL SEVEN-DAY MINIMUM	20	Jan 1	22	Nov 25	5.3	Aug 18, 1988
MAXIMUM PEAK FLOW	--		2,830	May 24	3,680	May 16, 1984
MAXIMUM PEAK STAGE	--		6.34	May 24	7.35	May 16, 1984
ANNUAL RUNOFF (AC-FT)	91,030		190,700		108,600	
10 PERCENT EXCEEDS	315		861		364	
50 PERCENT EXCEEDS	62		73		46	
90 PERCENT EXCEEDS	25		34		15	

e Estimated.



10020100 BEAR RIVER ABOVE RESERVOIR, NEAR WOODRUFF, UT

LOCATION.--Lat 41°26'04", long 111°01'01" (NAD 27), in NE¼ NW¼ sec. 29, T. 17 N., R. 120 W., Uinta County, Wyoming, Hydrologic Unit 16010101, on right bank 9.3 mi upstream from Woodruff Narrows Dam and 10 mi southeast of Woodruff.

DRAINAGE AREA.--752 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,455 ft above NGVD of 1929, from river-profile map.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diversion for irrigation of about 43,500 acres upstream from station. Station operated and record provided by the Utah Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	80	e18	e53	e56	e64	e92	338	1,230	523	39	33
2	32	60	e20	e53	e58	e64	81	294	1,260	443	48	31
3	31	54	e25	e53	e60	e66	115	239	1,050	422	71	28
4	30	69	e28	e54	e62	e66	203	222	863	405	73	28
5	29	75	e30	e54	e63	e66	211	237	712	336	64	29
6	24	70	e33	e54	e62	e68	165	371	747	293	54	26
7	21	68	e36	e55	e55	e78	182	570	855	263	51	26
8	20	68	e37	e56	e56	e78	320	589	749	213	48	21
9	18	79	e38	e58	e54	e79	301	497	637	170	45	23
10	15	141	e39	e57	e56	e80	195	548	521	153	54	24
11	13	169	e40	e56	e57	e79	151	986	427	144	70	34
12	12	139	e41	e55	e59	e82	122	964	462	136	57	36
13	15	120	e43	e54	e60	e86	121	733	573	120	59	33
14	18	105	e44	e55	e62	e89	132	603	449	111	53	35
15	20	89	e46	e56	e62	e89	130	598	434	91	47	31
16	20	81	e44	e56	e62	e93	112	678	598	79	45	29
17	21	82	e43	e57	e63	e89	116	939	791	71	56	29
18	21	83	e42	e58	e63	e88	153	1,040	971	60	66	28
19	21	74	e41	e59	e63	e90	189	891	1,110	59	60	30
20	39	65	e40	e60	e61	e90	204	1,200	1,090	47	52	30
21	72	60	e40	e61	e60	e89	192	1,530	1,060	33	47	30
22	106	47	e42	e62	e60	e88	164	1,760	1,060	37	46	33
23	94	53	e43	e63	e59	e89	173	1,890	1,110	35	47	36
24	78	55	e40	e62	e60	e89	198	1,940	1,070	34	48	31
25	95	33	e49	e61	e61	e88	293	2,050	950	29	41	28
26	90	41	e49	e60	e63	e87	385	2,020	910	25	39	27
27	85	47	e50	e59	e63	e87	404	1,770	860	29	32	25
28	88	e33	e50	e62	e64	e91	434	1,560	669	26	29	23
29	103	e15	e51	e61	---	e99	421	1,470	655	24	29	23
30	92	e16	e52	e57	---	e97	362	1,460	573	24	27	24
31	87	---	e52	e56	---	e95	---	1,600	---	26	32	---
TOTAL	1,429	2,171	1,246	1,777	1,684	2,583	6,321	31,587	24,446	4,461	1,529	864
MEAN	46.1	72.4	40.2	57.3	60.1	83.3	211	1,019	815	144	49.3	28.8
MAX	106	169	52	63	64	99	434	2,050	1,260	523	73	36
MIN	12	15	18	53	54	64	81	222	427	24	27	21
AC-FT	2,830	4,310	2,470	3,520	3,340	5,120	12,540	62,650	48,490	8,850	3,030	1,710

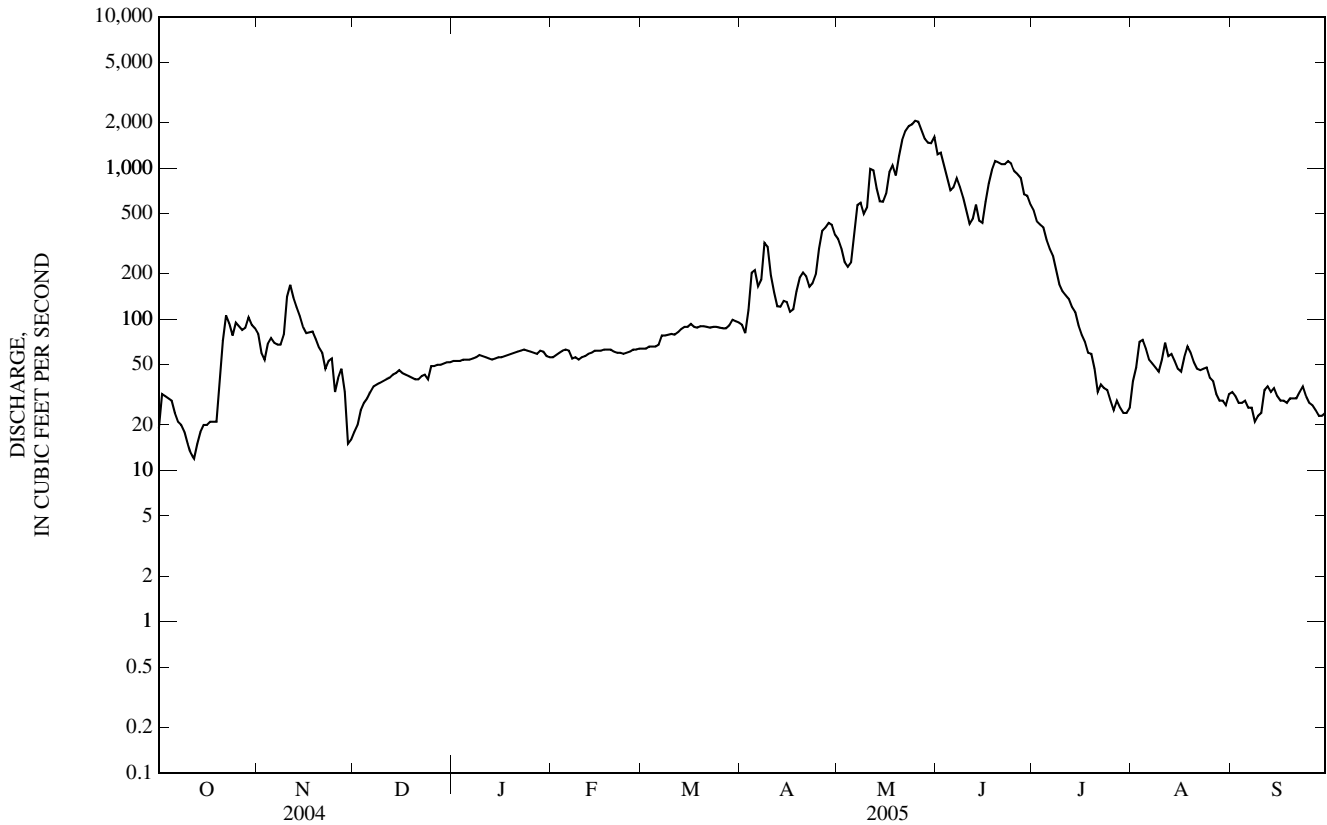
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2005, BY WATER YEAR (WY)

MEAN	69.2	70.2	68.9	65.6	80.1	161	323	786	816	189	48.7	47.1
MAX	437	198	181	147	312	627	671	1,957	2,564	1,191	340	288
(WY)	(1983)	(1974)	(1984)	(1984)	(1986)	(1986)	(1969)	(1984)	(1986)	(1995)	(1983)	(1983)
MIN	3.03	6.06	7.21	6.76	10.4	26.8	77.7	104	54.6	4.41	0.68	0.49
(WY)	(1965)	(1989)	(1989)	(1989)	(2003)	(1977)	(1977)	(1977)	(1992)	(2000)	(2000)	(1988)

10020100 BEAR RIVER ABOVE RESERVOIR, NEAR WOODRUFF, UT—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1962 - 2005	
ANNUAL TOTAL	35,337		80,098		--	
ANNUAL MEAN	96.5		219		227	
HIGHEST ANNUAL MEAN	--		--		583 1986	
LOWEST ANNUAL MEAN	--		--		45.1 1977	
HIGHEST DAILY MEAN	617	May 7	2,050	May 25	3,900	Jun 2, 1983
LOWEST DAILY MEAN	12	Oct 12	12	Oct 12	0.00	Many days, 1988
ANNUAL SEVEN-DAY MINIMUM	16	Oct 8	16	Oct 8	0.00	Aug 30, 1988
ANNUAL RUNOFF (AC-FT)	70,090		158,900		164,500	
10 PERCENT EXCEEDS	242		720		669	
50 PERCENT EXCEEDS	48		62		80	
90 PERCENT EXCEEDS	24		28		8.6	

e Estimated.



10020100 BEAR RIVER ABOVE RESERVOIR, NEAR WOODRUFF, UT—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
NOV 10...	1510	157	605	10.6	105	8.5	384	6.0	5.0	180	44.9	16.4	2.28
MAR 22...	0810	140	600	10.4	95	8.1	513	1.0	1.5	250	58.4	25.9	4.07
JUN 29...	0915	703	607	8.0	94	7.9	194	13.5	12.0	93	24.5	7.86	.88
AUG 04...	0915	81	604	7.0	95	8.0	463	18.0	18.5	220	50.8	22.6	2.78

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat fltrd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV 10...	.5	15.4	16	165	16.4	.1	6.7	11.2	213	.29	90.4	<.04	.15
MAR 22...	.6	20.9	15	220	31.0	.2	10.1	21.0	304	.41	115	.05	.06
JUN 29...	.2	4.65	10	91	5.26	E.1	5.0	5.4	108	.15	205	<.04	<.06
AUG 04...	.4	14.4	12	203	14.3	.2	5.9	19.9	252	.34	55.5	<.04	<.06

Date	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
NOV 10...	<.008	.02	36	15
MAR 22...	<.008	.03	251	95
JUN 29...	<.008	<.02	40	76
AUG 04...	<.008	<.02	6	1.3

< -- Less than.
E -- Estimated.

10020300 BEAR RIVER BELOW RESERVOIR, NEAR WOODRUFF, UT

LOCATION.--Lat 41°30'20", long 111°00'50" (NAD 27), in NE ¼ NE ¼ NW ¼ sec. 32, T. 18 N., R. 120 W., Uinta County, Wyoming, Hydrologic Unit 16010101, on right bank 1,100 ft downstream from Woodruff Narrows Dam, 1.6 mi upstream from Salt Creek, 5.4 mi upstream from Utah-Wyoming State line, and 7.7 mi east of Woodruff.

DRAINAGE AREA.--784 mi².

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

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,398.96 ft above NGVD of 1929 (levels by Utah Water Science Center from Bureau of Reclamation bench mark). Prior to September 26, 1962, at site 175 ft upstream from station at same datum.

REMARKS.--Records good. Flow regulated by Woodruff Narrows Reservoir beginning January 1962. Diversions for irrigation of about 43,500 acres upstream from station. Station operated and record provided by the Utah Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	13	e13	13	14	15	14	444	796	902	33	46
2	14	13	e13	14	15	15	14	364	702	893	42	46
3	14	13	e13	14	15	15	14	308	733	887	60	46
4	14	13	e13	14	15	15	14	247	756	883	60	32
5	14	13	e13	14	15	15	14	200	774	875	60	25
6	14	14	e13	14	15	15	14	201	775	866	60	28
7	13	14	13	13	15	15	e140	203	433	501	59	28
8	13	14	13	13	15	15	e260	301	807	278	52	29
9	13	14	13	13	15	14	e310	466	948	274	45	29
10	13	14	13	14	14	13	e360	423	946	223	45	28
11	13	14	13	13	15	13	e320	779	749	111	45	29
12	13	14	13	14	15	13	243	1,040	1,040	83	44	29
13	13	14	13	14	14	13	193	953	1,020	83	45	29
14	13	14	13	14	14	13	179	939	987	82	44	30
15	13	14	14	14	15	13	165	923	977	82	44	30
16	13	15	14	14	15	13	165	782	972	82	43	30
17	13	15	14	14	15	14	165	673	967	81	43	30
18	13	15	14	14	15	14	114	785	963	81	42	30
19	13	15	14	14	15	14	74	863	963	80	42	30
20	13	15	14	14	15	14	73	915	1,060	68	43	29
21	13	15	14	14	15	14	70	966	1,130	45	43	29
22	13	15	14	15	15	14	73	979	1,120	36	43	29
23	13	15	14	15	15	14	73	993	1,120	36	43	29
24	13	15	14	15	15	14	73	973	1,120	36	43	29
25	13	14	14	15	15	14	139	802	1,120	35	44	21
26	13	13	14	15	15	14	374	816	1,110	35	43	14
27	13	13	14	15	15	14	481	861	1,110	35	45	13
28	13	13	14	15	15	14	479	894	1,100	34	45	13
29	13	13	14	15	---	14	476	905	1,100	34	45	13
30	13	e13	14	14	---	14	476	930	1,050	33	45	13
31	13	---	14	14	---	14	---	936	---	33	46	---
TOTAL	409	419	420	437	416	435	5,559	21,864	28,448	7,807	1,436	836
MEAN	13.2	14.0	13.5	14.1	14.9	14.0	185	705	948	252	46.3	27.9
MAX	14	15	14	15	15	15	481	1,040	1,130	902	60	46
MIN	13	13	13	13	14	13	14	200	433	33	33	13
AC-FT	811	831	833	867	825	863	11,030	43,370	56,430	15,490	2,850	1,660

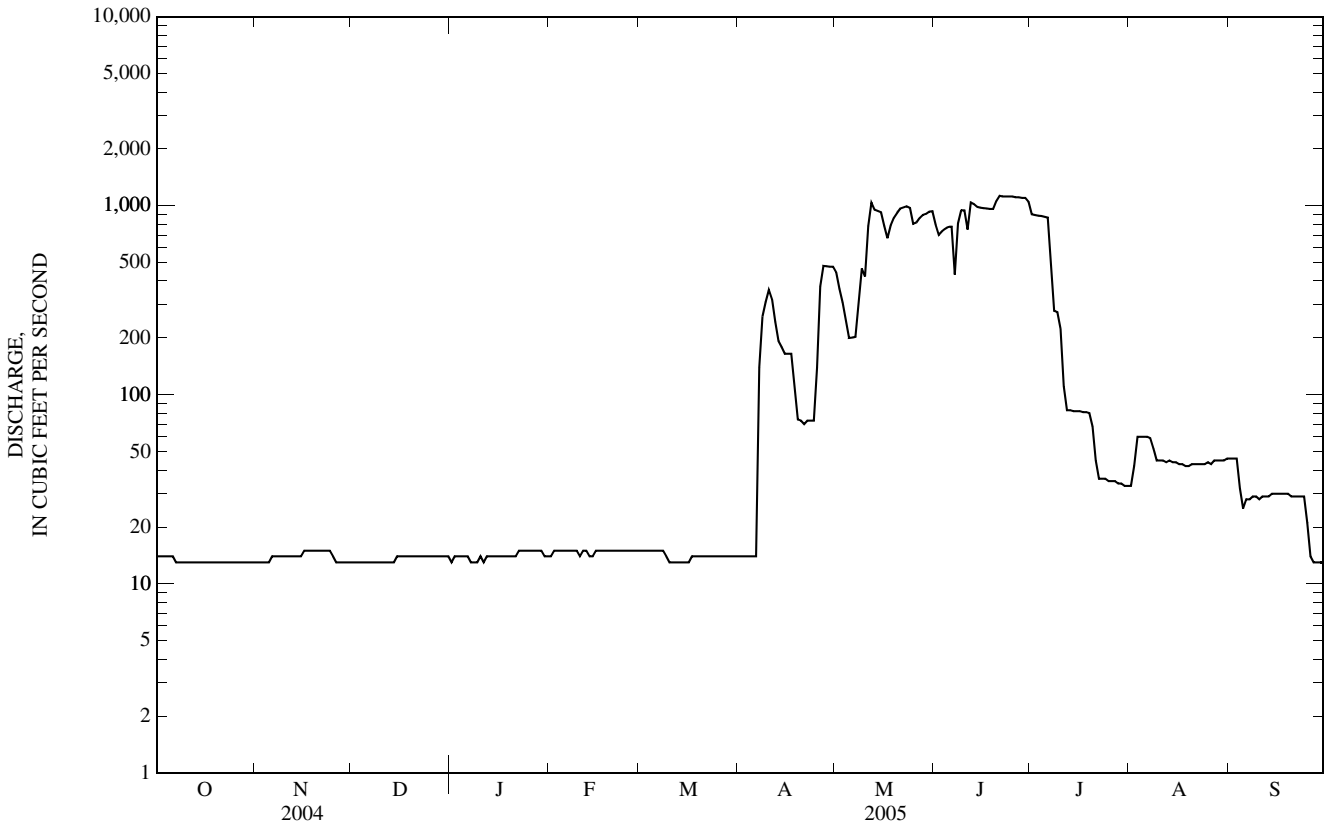
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2005, BY WATER YEAR (WY)

MEAN	55.6	51.6	45.0	42.9	45.6	91.4	265	753	960	277	75.8	58.4
MAX	425	421	184	153	171	473	891	1,828	2,437	913	331	278
(WY)	(1983)	(1983)	(1983)	(1985)	(1971)	(1972)	(1985)	(1984)	(1983)	(1975)	(1983)	(1983)
MIN	3.89	0.12	4.28	4.37	4.71	4.70	0.34	27.8	356	10.5	3.91	3.65
(WY)	(1990)	(1981)	(1978)	(1978)	(1978)	(1978)	(1977)	(1977)	(2002)	(2002)	(1979)	(1979)

10020300 BEAR RIVER BELOW RESERVOIR, NEAR WOODRUFF, UT—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1962 - 2005	
ANNUAL TOTAL	29,086.4		68,486		--	
ANNUAL MEAN	79.5		188		227	
HIGHEST ANNUAL MEAN	--		--		509 1983	
LOWEST ANNUAL MEAN	--		--		44.3 1977	
HIGHEST DAILY MEAN	869	Jun 9	1,130	Jun 21	3,630	Jun 3, 1983
LOWEST DAILY MEAN	9.7	Mar 25	13	Oct 7	0.00	Jul 4, 1962
ANNUAL SEVEN-DAY MINIMUM	9.8	Mar 25	13	Oct 7	0.07	Nov 26, 1980
ANNUAL RUNOFF (AC-FT)	57,690		135,800		164,400	
10 PERCENT EXCEEDS	224		889		786	
50 PERCENT EXCEEDS	15		15		39	
90 PERCENT EXCEEDS	13		13		9.9	

e Estimated.



10028500 BEAR RIVER BELOW PIXLEY DAM, NEAR COKEVILLE, WY

LOCATION.--Lat 41°56'20", long 110°59'05" (NAD 27), in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 25, T. 23 N., R. 120 W., Lincoln County, Hydrologic Unit 16010102, 800 ft downstream from Pixley Dam, 11 mi south of Cokeville, and 17.5 mi downstream from Twin Creek.

DRAINAGE AREA.--2,032 mi².

PERIOD OF RECORD.--October 1941 to November 1943 (published as Bear River near Cokeville), October 1952 to September 1956, May 1958 to current year (seasonal only). Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,185 ft above NGVD of 1929, from river-profile map. October 31, 1941 to November 30, 1943, at site 200 ft downstream from station at different datum.

REMARKS.--Records fair. Natural flow of stream affected by diversions for irrigation, return flow from irrigated areas, and regulation by upstream reservoirs. Station operated and record provided by the Utah Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	---	---	---	---	---	---	656	528	879	44	34
2	9.4	---	---	---	---	---	---	610	549	927	47	35
3	9.0	---	---	---	---	---	---	579	555	887	52	34
4	9.0	---	---	---	---	---	---	526	535	870	51	35
5	10	---	---	---	---	---	---	426	494	838	49	37
6	e12	---	---	---	---	---	---	339	468	847	49	35
7	---	---	---	---	---	---	---	340	489	815	66	33
8	---	---	---	---	---	---	---	449	503	842	75	32
9	---	---	---	---	---	---	---	401	514	873	59	32
10	---	---	---	---	---	---	---	342	510	809	62	33
11	---	---	---	---	---	---	---	412	523	592	69	33
12	---	---	---	---	---	---	---	481	553	463	67	32
13	---	---	---	---	---	---	---	463	583	357	61	32
14	---	---	---	---	---	---	---	534	608	274	59	33
15	---	---	---	---	---	---	---	568	678	234	57	33
16	---	---	---	---	---	---	---	583	719	203	57	32
17	---	---	---	---	---	---	---	596	718	200	52	32
18	---	---	---	---	---	---	---	577	696	185	59	31
19	---	---	---	---	---	---	---	479	670	161	60	31
20	---	---	---	---	---	---	---	387	637	144	59	31
21	---	---	---	---	---	---	---	385	622	126	58	29
22	---	---	---	---	---	---	---	418	618	116	57	28
23	---	---	---	---	---	---	---	143	462	629	106	28
24	---	---	---	---	---	---	---	138	504	651	95	28
25	---	---	---	---	---	---	---	162	527	673	74	27
26	---	---	---	---	---	---	---	286	531	717	57	26
27	---	---	---	---	---	---	---	284	495	740	60	26
28	---	---	---	---	---	---	---	332	432	755	57	25
29	---	---	---	---	---	---	---	534	414	765	57	25
30	---	---	---	---	---	---	---	613	444	812	55	25
31	---	---	---	---	---	---	---	480	---	50	36	---
TOTAL	---	---	---	---	---	---	---	14,840	18,512	12,253	1,673	927
MEAN	---	---	---	---	---	---	---	479	617	395	54.0	30.9
MAX	---	---	---	---	---	---	---	656	812	927	75	37
MIN	---	---	---	---	---	---	---	339	468	50	36	25
AC-FT	---	---	---	---	---	---	---	29,440	36,720	24,300	3,320	1,840

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2005, BY WATER YEAR (WY)*

MEAN	---	---	---	---	---	---	156	408	481	298	109	78.3
MAX	---	---	---	---	---	---	666	1,361	1,729	890	471	453
(WY)	---	---	---	---	---	---	(1998)	(1986)	(1983)	(1983)	(1983)	(1983)
MIN	---	---	---	---	---	---	1.06	0.87	1.05	1.21	0.72	0.20
(WY)	---	---	---	---	---	---	(1991)	(1977)	(2002)	(2002)	(2002)	(2002)

10028500 BEAR RIVER BELOW PIXLEY DAM, NEAR COKEVILLE, WY—Continued

SUMMARY STATISTICS

FOR 2005 WATER YEAR*

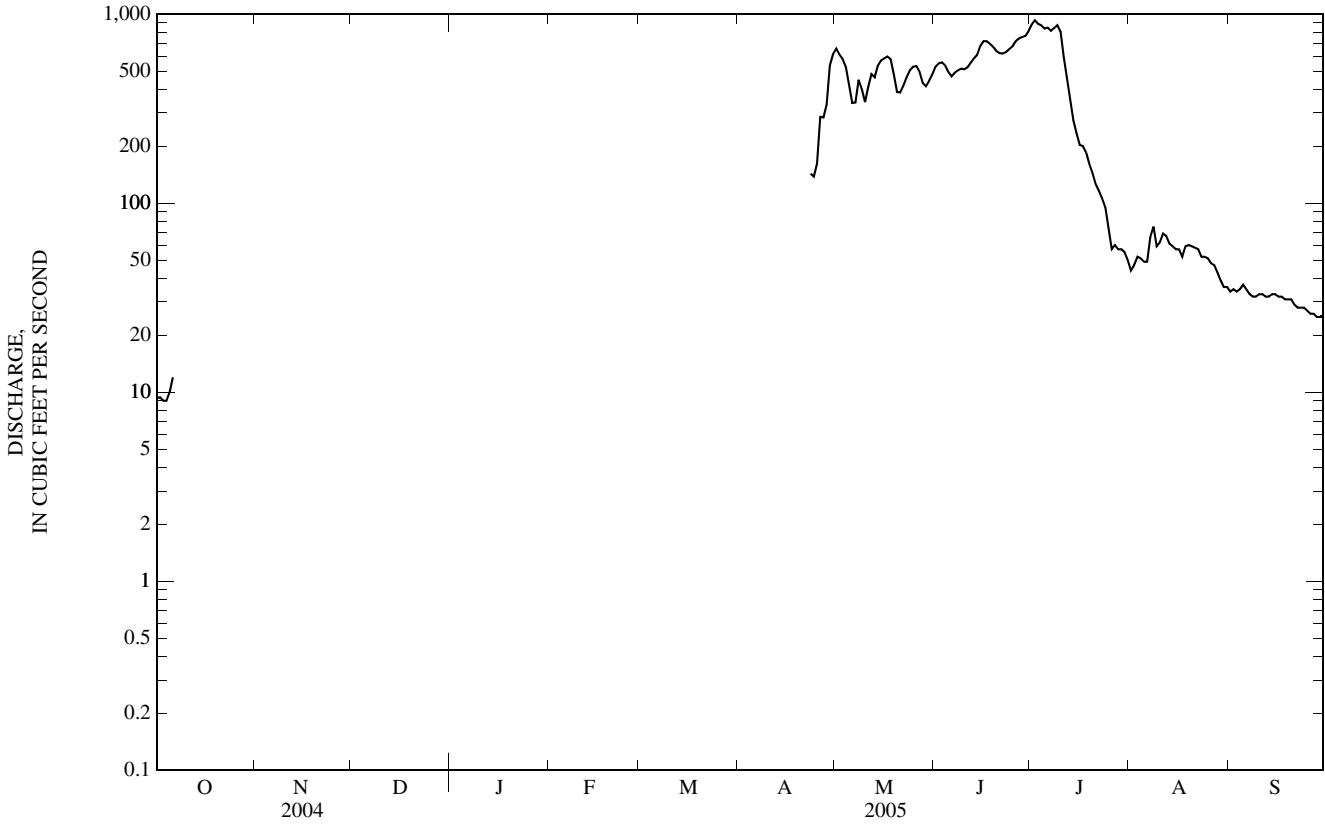
WATER YEARS 1966 - 2005*

HIGHEST DAILY MEAN
LOWEST DAILY MEAN

927 Jul 1
25 Sep 28-30

2,040 Jun 5, 1983
0.09 Sep 8, 2002

* For period of operation.
e Estimated



10032000 SMITHS FORK NEAR BORDER, WY

LOCATION.--Lat 42°17'36", long 110°51'18" (NAD 27), in NE¹/₄ SW¹/₄ sec.28, T.27 N., R.118 W.Lincoln County, Hydrologic Unit 16010102, on left bank 4.9 mi upstream from Howland Creek, 5.6 mi downstream from Hobbles Creek, and 12.4 mi northeast of Border.

DRAINAGE AREA.--165 mi².

PERIOD OF RECORD.--May 1942 to current year.

REVISED RECORDS.--WSP 1734: 1952(M).

GAGE.--Water-stage recorder. Elevation of gage is 6,720 ft above NGVD of 1929, from topographic map. Prior to October 16, 1945, at site 1.2 mi downstream from station at different datum. October 16, 1945 to November 1986 at site 0.4 mi downstream from station at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. One diversion for irrigation of about 200 acres above station. Station operated and record provided by the Utah Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	e90	e62	e73	e70	e50	55	313	871	449	200	120
2	77	e87	e61	e74	e76	e50	61	314	828	432	205	122
3	77	e84	e60	e78	e70	e50	66	324	773	419	196	116
4	77	82	e58	e70	e68	51	70	334	726	402	188	113
5	73	80	e57	e74	e66	49	68	379	703	384	186	112
6	72	80	e55	e73	e65	51	68	517	703	368	180	110
7	70	79	e55	e78	e68	53	80	542	699	356	174	109
8	69	82	e55	e83	e65	52	99	510	655	342	166	107
9	68	83	e60	e75	e64	52	97	551	615	328	163	110
10	68	82	e65	e68	e62	55	100	580	580	319	161	112
11	69	84	e70	e62	e60	57	101	567	553	306	160	113
12	69	83	e75	e62	e62	59	111	539	566	295	155	114
13	71	81	e72	e61	e64	62	135	529	523	288	150	113
14	69	77	e73	e60	e66	61	156	560	512	285	145	109
15	68	75	e72	e63	e67	61	155	592	523	278	143	107
16	68	77	e70	e63	e64	61	172	657	568	269	146	104
17	68	79	e71	e64	e61	62	218	738	613	264	151	103
18	81	74	e71	e65	e60	62	267	699	656	259	151	102
19	75	78	e72	e68	e61	62	280	704	665	252	151	101
20	107	75	e74	e72	e64	65	322	813	665	244	141	100
21	107	e75	e75	e75	e65	59	298	944	661	239	137	103
22	91	e75	e76	e77	e63	58	290	991	678	234	136	105
23	88	76	e77	e75	e57	70	329	1,060	673	233	134	103
24	90	74	e76	e74	e55	65	350	1,010	648	230	131	106
25	85	76	e75	e73	e53	61	363	984	610	237	128	105
26	87	73	e74	e72	e50	60	408	942	575	223	126	102
27	84	e72	e75	e70	e50	60	432	905	544	216	126	101
28	93	e68	e73	e65	e50	59	431	883	520	211	124	102
29	92	e70	e76	e60	---	57	367	877	501	207	122	101
30	86	e65	e73	e60	---	56	335	898	469	212	121	100
31	87	---	e76	e62	---	56	---	852	---	212	120	---
TOTAL	2,463	2,336	2,134	2,149	1,746	1,786	6,284	21,108	18,876	8,993	4,717	3,225
MEAN	79.5	77.9	68.8	69.3	62.4	57.6	209	681	629	290	152	108
MAX	107	90	77	83	76	70	432	1,060	871	449	205	122
MIN	68	65	55	60	50	49	55	313	469	207	120	100
AC-FT	4,890	4,630	4,230	4,260	3,460	3,540	12,460	41,870	37,440	17,840	9,360	6,400

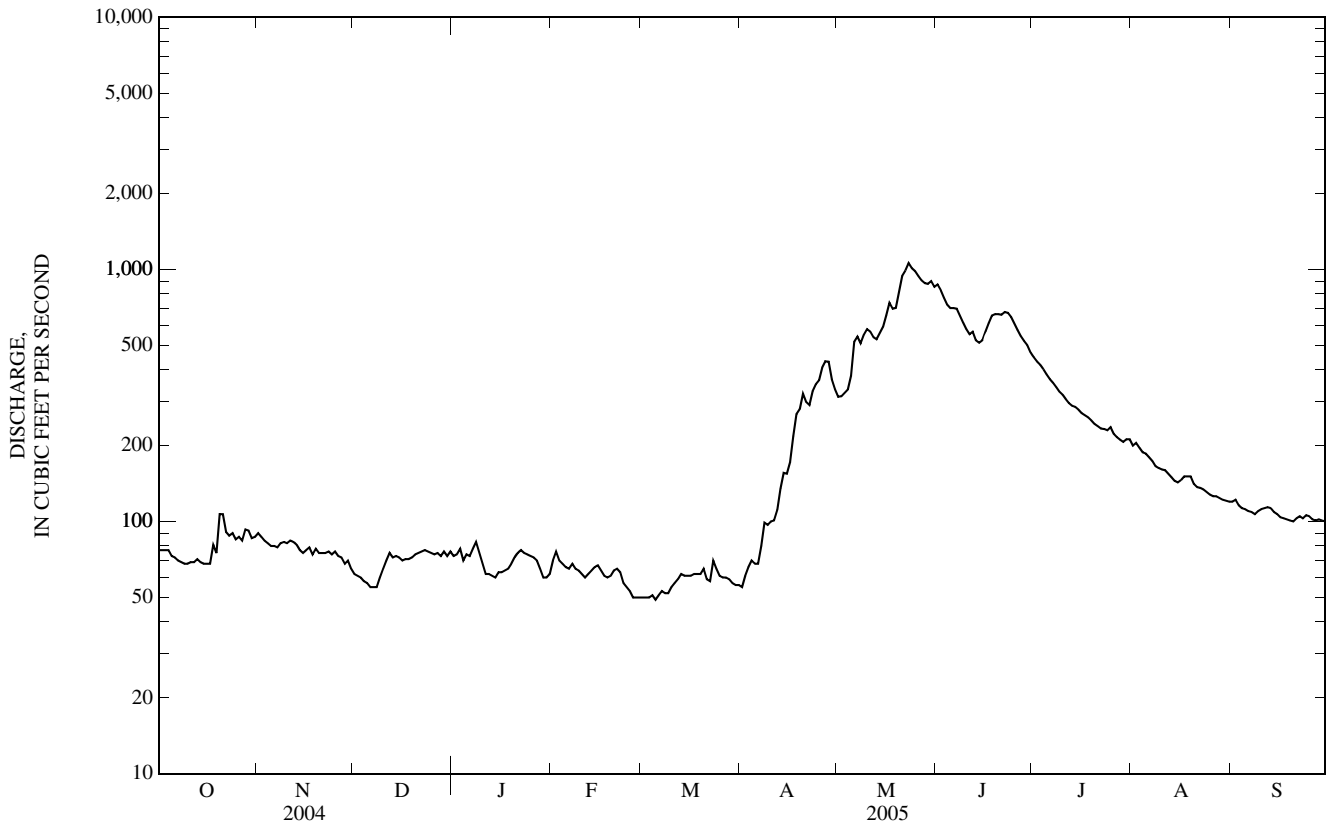
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2005, BY WATER YEAR (WY)

MEAN	89.9	77.7	68.8	63.5	60.7	62.6	160	533	617	289	150	107
MAX	156	113	88.4	85.0	82.8	99.4	385	1,072	1,377	602	242	166
(WY)	(1987)	(1986)	(1983)	(1983)	(1984)	(1986)	(1946)	(1997)	(1986)	(1975)	(1983)	(1986)
MIN	51.0	50.7	41.5	40.1	34.7	39.5	58.6	99.1	96.2	61.4	55.1	52.1
(WY)	(1978)	(1978)	(2002)	(1988)	(2003)	(1988)	(1975)	(1977)	(1977)	(1977)	(1977)	(1977)

10032000 SMITHS FORK NEAR BORDER, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1943 - 2005	
ANNUAL TOTAL	47,043		75,817		--	
ANNUAL MEAN	129		208		190	
HIGHEST ANNUAL MEAN	--		--		324	1986
LOWEST ANNUAL MEAN	--		--		71.1	1977
HIGHEST DAILY MEAN	436	Jun 10	1,060	May 23	2,000	Jun 4, 1986
LOWEST DAILY MEAN	42	Mar 7	49	Mar 5	30	Feb 13, 2003
ANNUAL SEVEN-DAY MINIMUM	46	Mar 3	50	Feb 27	31	Feb 11, 2003
ANNUAL RUNOFF (AC-FT)	93,310		150,400		138,000	
10 PERCENT EXCEEDS	270		580		503	
50 PERCENT EXCEEDS	88		90		90	
90 PERCENT EXCEEDS	56		60		58	

e Estimated.



10035000 SMITHS FORK AT COKEVILLE, WY

LOCATION.--Lat 42°05'47", long 110°56'24" (NAD 27), in NE¹/₄ NW¹/₄ NW¹/₄ sec.4, T.24 N., R.119 W., Lincoln County, Hydrologic Unit 16010102, 900 ft upstream from U.S. Highway 30N, 1 mi northeast of Cokeville, and 2 mi upstream from mouth.

DRAINAGE AREA.--275 mi².

PERIOD OF RECORD.--Water years 1983-88, 1989-1992, October 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered, uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)
NOV 10...	1200	60	610	12.4	119	8.1	390	8.0	4.0	<.04	<.06	<.008	<.02
APR 25...	1515	301	602	9.4	96	8.2	367	9.0	6.0	<.04	.12	<.008	E.02
MAY 26...	1220	1,200	610	9.3	96	7.9	300	18.0	7.0	<.04	.12	<.008	.02
JUN 28...	1405	563	605	10.1	114	8.1	330	23.5	10.5	.05	<.06	<.008	<.02

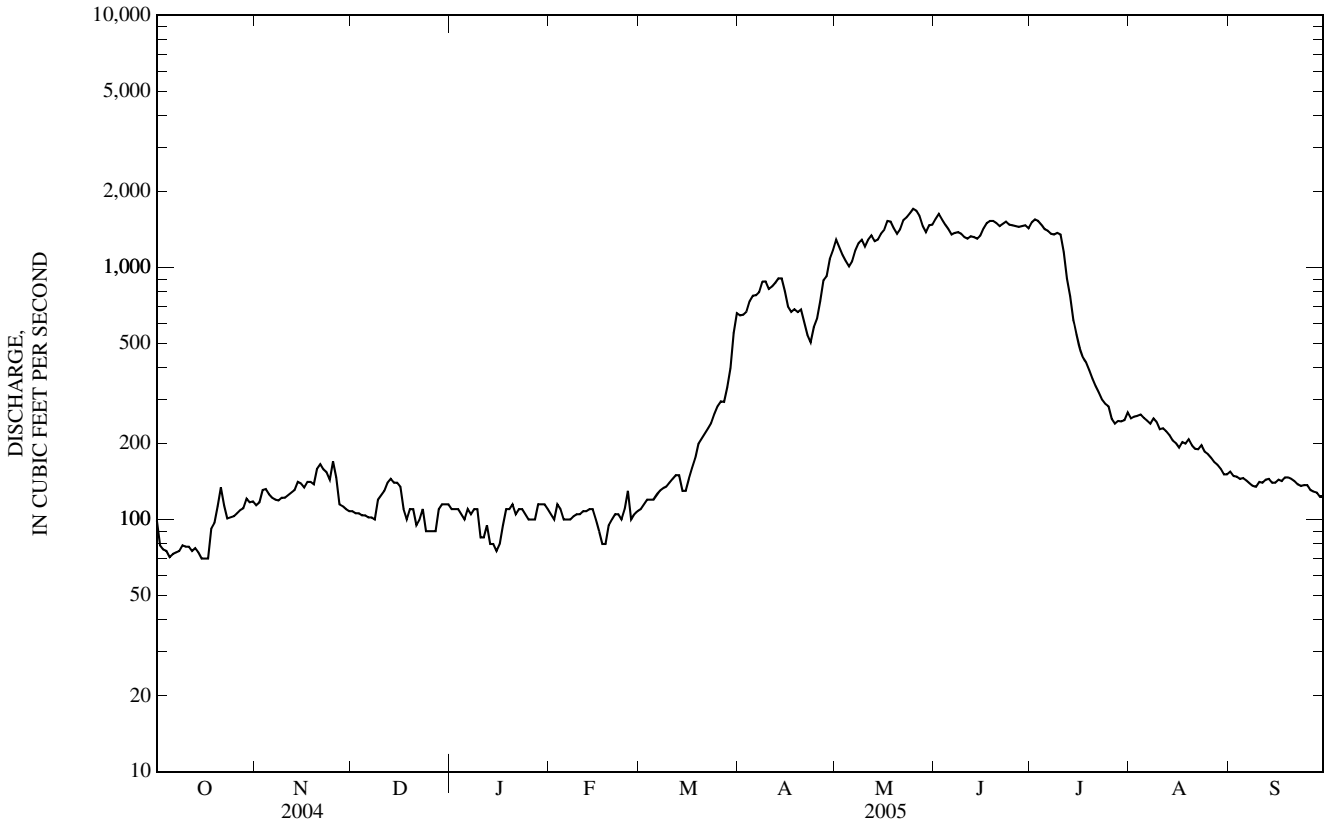
Date	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
NOV 10...	35	5.7
APR 25...	--	--
MAY 26...	333	1,080
JUN 28...	57	87

< -- Less than.
E -- Estimated.

10038000 BEAR RIVER BELOW SMITHS FORK, NEAR COKEVILLE, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1955 - 2005	
ANNUAL TOTAL	53,702		165,642		--	
ANNUAL MEAN	147		454		427	
HIGHEST ANNUAL MEAN	--		--		1,049	1984
LOWEST ANNUAL MEAN	--		--		112	1977
HIGHEST DAILY MEAN	404	Jun 11	1,710	May 25	5,400	Jun 7, 1983
LOWEST DAILY MEAN	67	Jan 7	70	Oct 15	31	Oct 5, 1977
ANNUAL SEVEN-DAY MINIMUM	72	Jan 7	73	Oct 11	36	Oct 1, 1977
ANNUAL RUNOFF (AC-FT)	106,500		328,600		309,400	
10 PERCENT EXCEEDS	252		1,420		1,050	
50 PERCENT EXCEEDS	122		145		216	
90 PERCENT EXCEEDS	83		100		105	

e Estimated.



10038000 BEAR RIVER BELOW SMITHS FORK, NEAR COKEVILLE, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1992 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 13, 1998 to September 30, 2001.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum recorded, 23.3°C, July 4-6, 2001; minimum recorded, 0.0°C, on many days during the winter period.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered, uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)
NOV 10...	1245	101	608	12.5	123	8.4	565	7.5	5.0	<.04	E.04	<.008	<.02
MAR 21...	1450	180	605	11.2	109	8.2	517	8.0	4.5	.09	.11	<.008	<.02
JUN 28...	1525	1,500	607	8.0	103	8.0	508	22.0	16.5	<.04	E.03	<.008	<.02
AUG 03...	1650	266	605	12.5	176	8.6	527	27.0	20.5	<.04	<.06	<.008	<.02

Date	E coli, modif. m-TEC, water, col/100 mL (90902)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
NOV 10...	E10	E15	23	6.3
MAR 21...	<1	E1	38	18
JUN 28...	25	50	5,230	21,200
AUG 03...	30	28	60	43

< -- Less than.

E -- Estimated value; for bacteria, estimated values are counts outside the acceptable range (non-ideal colony count).

BEAR RIVER BASIN

10039500 BEAR RIVER AT BORDER, WY

LOCATION.--Lat 42°12'40", long 111°03'11" (NAD 27), in NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.15, T.14 S., R. 46 E., Bear Lake County, Idaho, Hydrologic Unit 16010102, on left bank 0.2 mi west of Idaho-Wyoming State line, 0.5 mi west of Border, and 2.1 mi upstream from Thomas Fork.

DRAINAGE AREA.--2,486 mi².

PERIOD OF RECORD.--October 1937 to September 1996, October 1996 to 2000 (seasonal), October 2000 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,051.63 ft above NGVD of 1929, unadjusted.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow of stream affected by regulation of upstream reservoirs, diversions for irrigation, and return flow from irrigated areas. Station operated and record provided by the Utah Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	125	e108	e110	e105	e110	705	1,170	1,230	1,160	211	135
2	61	122	e106	e110	e100	e115	707	1,120	1,320	1,190	209	129
3	53	128	e106	e110	e115	e120	698	1,040	1,260	1,210	215	120
4	52	133	e104	e105	e110	e120	782	984	1,200	1,160	217	119
5	52	130	e104	e100	e100	e120	838	946	1,140	1,110	211	117
6	52	125	e102	e110	e100	e125	853	963	1,090	1,090	209	118
7	52	122	e102	e105	e100	e130	884	1,050	1,110	1,070	204	116
8	52	120	e100	e110	e103	e133	962	1,150	1,140	1,040	210	114
9	53	121	e120	e110	e105	e135	1,000	1,180	1,100	1,060	214	115
10	55	122	e125	e85	e105	e140	942	1,110	1,050	1,060	208	115
11	55	124	e130	e85	e108	e145	929	1,160	1,020	972	204	116
12	54	127	e140	e95	e108	e150	933	1,220	1,060	809	205	119
13	54	126	e145	e80	e110	e150	947	1,180	1,080	713	200	122
14	56	136	e140	e80	e110	e130	950	1,140	1,040	604	193	120
15	55	135	e140	e75	e100	e130	884	1,190	1,050	520	191	118
16	54	136	e135	e80	e90	e145	796	1,220	1,100	458	186	121
17	53	133	e110	e95	e80	e160	714	1,320	1,160	399	193	118
18	64	136	e100	e110	e80	e175	719	1,380	1,170	381	193	121
19	74	e120	e110	e110	e95	e200	715	1,290	1,180	360	198	123
20	81	e130	e110	e115	e100	e210	726	1,200	1,150	337	193	122
21	136	e140	e95	e105	e105	e220	683	1,200	1,110	326	187	120
22	131	e150	e100	e110	e105	e230	622	1,290	1,140	303	177	116
23	120	e150	e110	e110	e100	e242	572	1,310	1,170	283	180	114
24	118	e140	e90	e105	e110	e263	610	1,340	1,140	265	175	112
25	117	e140	e90	e100	e130	e282	667	1,380	1,130	255	166	112
26	119	e140	e90	e100	e100	e294	716	1,340	1,120	246	151	110
27	120	e120	e90	e100	e105	e293	852	1,290	1,110	228	147	108
28	123	e113	e110	e115	e108	e335	902	1,190	1,110	226	145	105
29	127	e110	e115	e115	---	e399	1,020	1,100	1,140	225	141	104
30	128	e108	e115	e115	---	e549	1,090	1,170	1,120	216	134	103
31	126	---	e115	e110	---	662	---	1,210	---	212	130	---
TOTAL	2,514	3,862	3,457	3,165	2,887	6,612	24,418	36,833	33,940	19,488	5,797	3,502
MEAN	81.1	129	112	102	103	213	814	1,188	1,131	629	187	117
MAX	136	150	145	115	130	662	1,090	1,380	1,320	1,210	217	135
MIN	52	108	90	75	80	110	572	946	1,020	212	130	103
AC-FT	4,990	7,660	6,860	6,280	5,730	13,110	48,430	73,060	67,320	38,650	11,500	6,950

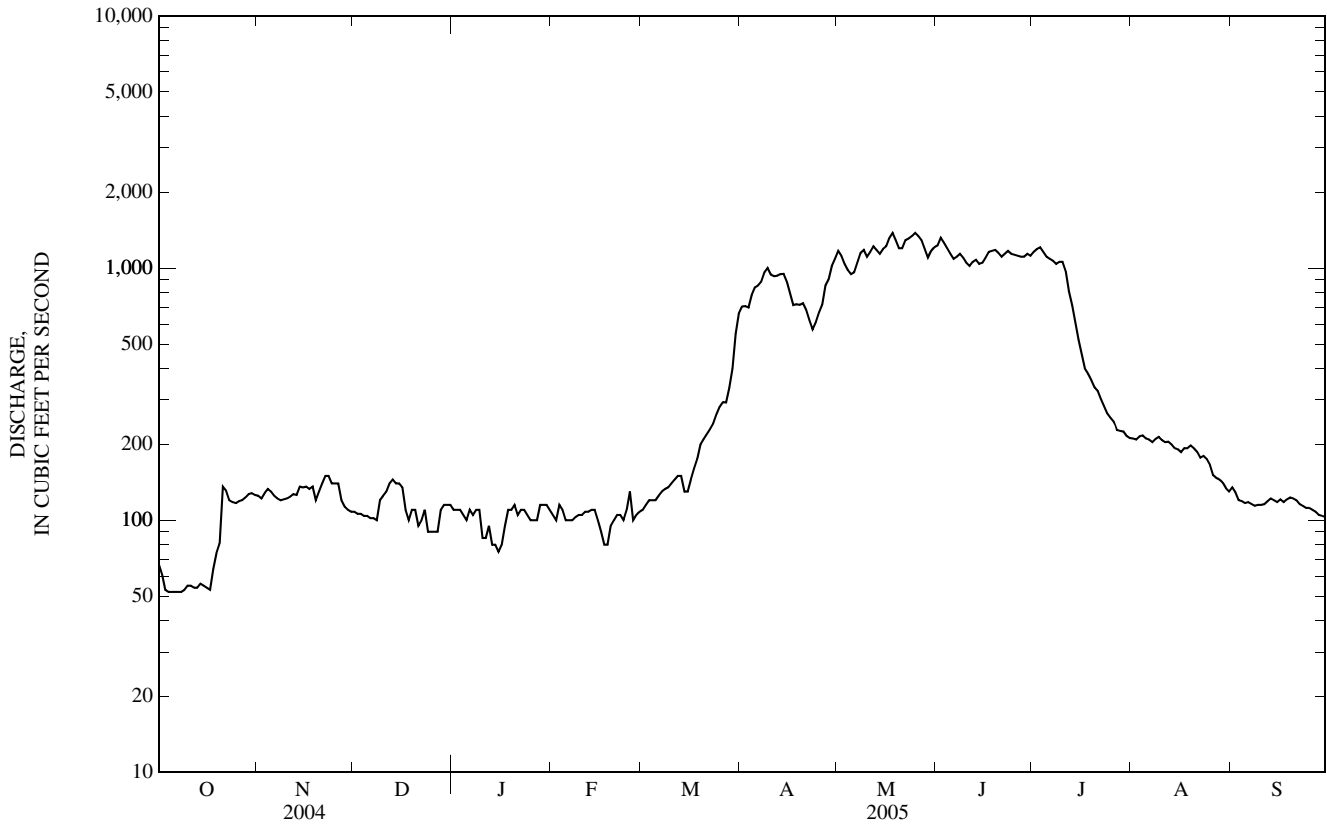
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2005, BY WATER YEAR (WY)*

MEAN	204	221	193	178	202	370	727	996	1,137	522	222	175
MAX	751	693	563	381	479	1,294	1,979	3,158	3,829	1,670	752	671
(WY)	(1983)	(1983)	(1983)	(1985)	(1986)	(1986)	(1985)	(1952)	(1983)	(1983)	(1983)	(1983)
MIN	43.5	74.6	97.2	77.6	75.2	105	71.2	74.4	62.2	54.2	42.3	38.5
(WY)	(2002)	(2002)	(2002)	(1993)	(1993)	(1988)	(1977)	(1977)	(1977)	(1977)	(1940)	(1940)

10039500 BEAR RIVER AT BORDER, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1938 - 2005*	
ANNUAL TOTAL	48,232	146,475	--	
ANNUAL MEAN	132	401	418	
HIGHEST ANNUAL MEAN	--	--	1,068	1983
LOWEST ANNUAL MEAN	--	--	103	2002
HIGHEST DAILY MEAN	422 Jun 11	1,380 May 18	4,840	Jun 8, 1983
LOWEST DAILY MEAN	52 Sep 11	52 Oct 4	25	Apr 29, 1977
ANNUAL SEVEN-DAY MINIMUM	52 Oct 3	52 Oct 3	29	Apr 28, 1977
ANNUAL RUNOFF (AC-FT)	95,670	290,500	302,900	
10 PERCENT EXCEEDS	230	1,140	1,080	
50 PERCENT EXCEEDS	119	136	214	
90 PERCENT EXCEEDS	66	95	102	

* For period of operation.
 e Estimated.



13010065 SNAKE RIVER ABOVE JACKSON LAKE, AT FLAGG RANCH, WY

LOCATION.--Lat 44°05'56", long 110°40'03" (NAD 83), in Hydrologic Unit 17040101, Grand Teton National Park, on left bank 50 ft upstream from State Highway 89 bridge, 2 mi downstream from the south boundary of Yellowstone National Park, and 600 ft downstream from the confluence with Sheffield Creek.

DRAINAGE AREA.--486 mi².

PERIOD OF RECORD.--October 1983 to current year. Prior to 1988 water year, published as station 13010200.

GAGE.--Water-stage recorder. Elevation of gage is 6,801.61 ft above NGVD of 1929, (levels by U.S. Coast and Geodetic Survey). A nonrecording cantilever chain gage was used from 1913-18 at a site 2.5 mi upstream from station at a different datum. In 1918, an auxiliary chain gage was installed at the current site and read periodically. Water-stage recorder installed July 1921 at the current site at a different datum and operated until July 1925. Records probably not comparable. Data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Station operated and record provided by the Idaho Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	406	358	e250	362	316	303	324	928	3,190	1,010	376	284
2	380	370	e260	364	300	301	337	1,010	2,610	952	397	279
3	368	380	e260	368	e290	294	348	1,110	2,210	888	420	272
4	359	380	e270	364	e300	292	365	1,350	2,120	828	382	268
5	354	368	e270	364	308	291	352	1,700	2,090	785	366	263
6	354	362	e280	359	e290	288	336	2,120	2,860	745	357	259
7	347	357	e280	356	306	290	367	2,280	2,340	709	347	255
8	343	359	e330	371	301	287	422	2,010	2,060	678	341	252
9	336	372	370	387	299	293	398	2,350	1,950	644	346	251
10	335	364	370	393	e290	296	377	2,580	1,860	678	347	259
11	336	355	375	388	e280	290	363	2,350	1,710	668	375	283
12	329	337	369	378	298	298	379	2,140	1,830	611	341	297
13	324	331	355	381	306	280	432	1,850	1,870	580	328	310
14	317	325	357	366	316	274	511	2,130	1,710	555	321	294
15	315	318	361	e360	e310	287	455	2,600	1,860	533	313	280
16	314	309	352	373	e300	289	455	3,800	2,130	509	307	271
17	310	343	344	373	e300	293	546	3,910	2,220	493	326	286
18	340	308	e340	365	e310	290	698	2,740	2,180	477	452	301
19	351	326	e340	363	321	309	619	4,640	1,950	460	532	282
20	374	309	335	362	321	309	629	6,650	1,960	443	406	270
21	397	252	328	357	328	308	595	6,960	1,890	430	372	288
22	375	266	e310	344	321	303	582	5,440	1,840	423	358	305
23	390	304	e300	340	316	313	807	5,570	1,760	447	365	317
24	415	294	e310	333	313	321	1,150	4,890	1,770	420	345	391
25	390	309	e320	e320	312	314	1,420	3,940	1,530	402	331	407
26	411	313	e320	e320	308	314	1,500	3,350	1,380	395	321	344
27	410	310	321	e320	304	311	1,420	3,180	1,310	381	312	322
28	412	e290	320	329	301	317	1,140	3,110	1,240	369	305	311
29	404	e270	321	320	---	328	1,040	3,020	1,180	366	299	300
30	403	e250	323	324	---	335	966	2,740	1,080	381	291	290
31	411	---	362	e300	---	320	---	2,520	---	386	288	---
TOTAL	11,310	9,789	10,003	11,004	8,565	9,338	19,333	94,968	57,690	17,646	10,967	8,791
MEAN	365	326	323	355	306	301	644	3,063	1,923	569	354	293
MAX	415	380	375	393	328	335	1,500	6,960	3,190	1,010	532	407
MIN	310	250	250	300	280	274	324	928	1,080	366	288	251
AC-FT	22,430	19,420	19,840	21,830	16,990	18,520	38,350	188,400	114,400	35,000	21,750	17,440

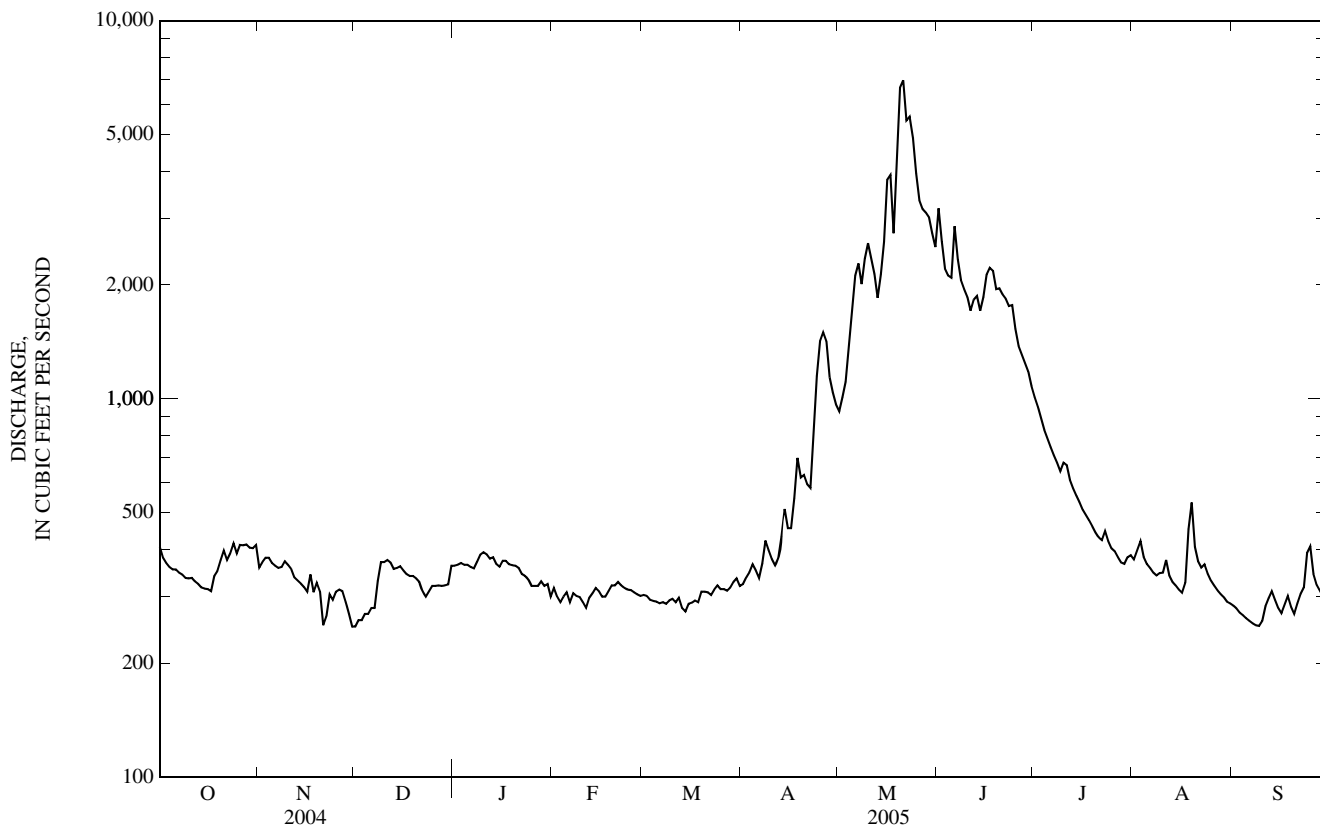
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2005, BY WATER YEAR (WY)

MEAN	346	347	356	354	345	353	723	3,034	3,022	855	415	342
MAX	679	607	531	720	469	506	1,509	5,484	6,701	1,633	861	644
(WY)	(1984)	(1984)	(1997)	(1997)	(1999)	(1986)	(1990)	(1997)	(1996)	(1995)	(1997)	(1997)
MIN	185	213	247	261	267	279	424	1,818	768	328	196	168
(WY)	(1989)	(1988)	(1988)	(2001)	(1989)	(1988)	(1993)	(1987)	(2001)	(2001)	(2001)	(1994)

13010065 SNAKE RIVER ABOVE JACKSON LAKE, AT FLAGG RANCH, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1984 - 2005	
ANNUAL TOTAL	274,891		269,404		--	
ANNUAL MEAN	751		738		876	
HIGHEST ANNUAL MEAN	--		--		1,538	1997
LOWEST ANNUAL MEAN	--		--		526	1988
HIGHEST DAILY MEAN	4,210	May 7	6,960	May 21	11,300	Jun 5, 1996
LOWEST DAILY MEAN	250	Nov 30	250	Nov 30	161	Sep 6, 1994
ANNUAL SEVEN-DAY MINIMUM	261	Nov 29	258	Sep 4	163	Sep 4, 1994
ANNUAL RUNOFF (AC-FT)	545,200		534,400		634,400	
10 PERCENT EXCEEDS	2,000		1,980		2,320	
50 PERCENT EXCEEDS	368		357		389	
90 PERCENT EXCEEDS	290		290		260	

e Estimated.



13011000 SNAKE RIVER NEAR MORAN, WY

LOCATION.--Lat 43°51'30", long 110°35'09" (NAD 83), in SW¹/₄ SE¹/₄ sec.18, T.45 N., R.114 W., Teton County, Grand Teton National Park, Hydrologic Unit 17040101, on left bank 1,000 ft downstream from Jackson Lake Dam, 4.1 mi west of Moran, and at mile 988.7.

DRAINAGE AREA.--807 mi². Mean elevation, 8,040 ft.

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

REVISED RECORDS.--WSP 1217: 1944(m). WSP 1347: 1906-10. WDR Idaho 1974: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,727.84 ft above NGVD of 1929 (levels by U.S. Bureau of Reclamation). Prior to June 13, 1917, nonrecording gage, and June 14, 1917 to May 20, 1940, water-stage recorder, at site 1.5 mi downstream from station at different datums. Data collection platform with satellite telemetry at station.

REMARKS.--Records good. Station operated and record provided by the Idaho Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

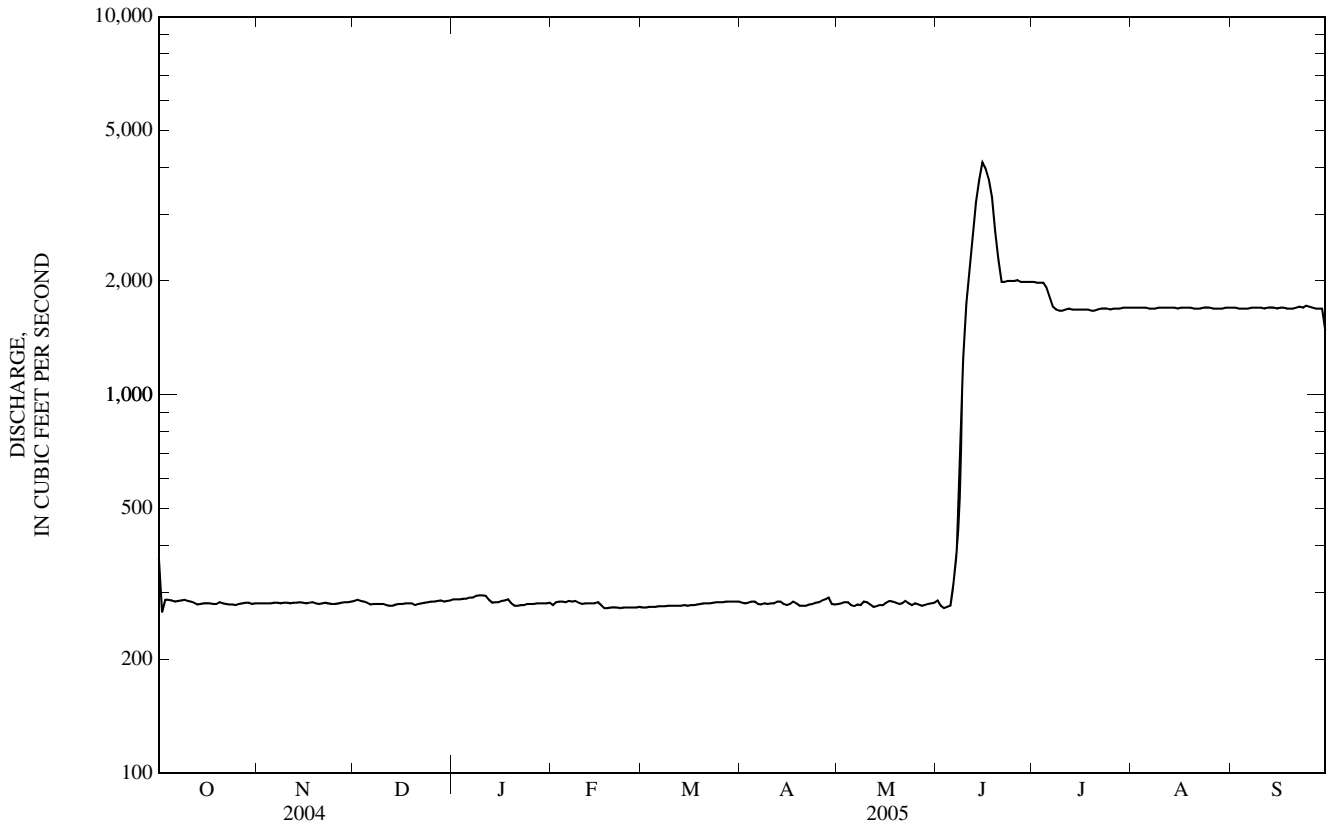
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	370	281	285	288	278	274	282	280	286	1,990	1,700	1,700
2	266	281	287	288	283	274	281	281	277	1,980	1,700	1,700
3	287	281	285	288	284	275	282	283	273	1,980	1,700	1,690
4	287	281	284	289	284	275	284	283	275	1,980	1,700	1,690
5	286	281	282	289	283	275	284	278	277	1,920	1,700	1,690
6	284	282	279	291	285	276	280	276	319	1,810	1,690	1,690
7	285	282	280	291	284	276	279	279	389	1,710	1,690	1,700
8	286	281	280	294	285	276	281	278	763	1,680	1,690	1,700
9	287	282	280	295	282	277	280	284	1,250	1,670	1,700	1,700
10	285	282	280	295	280	277	281	283	1,750	1,670	1,700	1,700
11	284	281	278	294	281	277	281	279	2,180	1,680	1,700	1,690
12	282	282	277	287	281	277	284	275	2,660	1,690	1,700	1,700
13	279	282	277	282	281	277	284	276	3,230	1,680	1,700	1,700
14	280	283	279	283	281	278	280	278	3,700	1,680	1,700	1,700
15	281	282	280	283	283	277	278	278	4,120	1,680	1,690	1,690
16	281	281	280	285	278	278	280	282	3,970	1,680	1,700	1,700
17	281	282	281	286	273	278	284	285	3,720	1,680	1,700	1,700
18	280	283	281	288	273	279	281	284	3,330	1,680	1,700	1,690
19	280	281	281	281	274	280	277	282	2,700	1,670	1,700	1,690
20	283	280	278	277	274	281	277	280	2,280	1,670	1,690	1,690
21	281	281	280	277	274	281	277	281	1,990	1,680	1,690	1,700
22	280	282	281	278	273	281	279	285	1,990	1,690	1,690	1,710
23	279	281	282	278	274	282	280	281	2,000	1,690	1,700	1,700
24	279	280	283	280	274	283	282	278	2,000	1,690	1,700	1,720
25	278	280	284	280	274	283	283	281	2,000	1,680	1,700	1,710
26	280	281	284	280	274	283	286	279	2,010	1,690	1,690	1,700
27	281	282	285	281	274	284	288	277	1,990	1,690	1,690	1,690
28	282	283	286	281	275	284	291	278	1,990	1,690	1,690	1,690
29	282	283	284	281	---	284	280	280	1,990	1,700	1,690	1,690
30	280	284	285	281	---	284	279	281	1,990	1,700	1,700	1,480
31	281	---	286	282	---	284	---	282	---	1,700	1,700	---
TOTAL	8,817	8,448	8,734	8,833	7,799	8,650	8,445	8,687	57,699	53,780	52,590	50,700
MEAN	284	282	282	285	279	279	282	280	1,923	1,735	1,696	1,690
MAX	370	284	287	295	285	284	291	285	4,120	1,990	1,700	1,720
MIN	266	280	277	277	273	274	277	275	273	1,670	1,690	1,480
AC-FT	17,490	16,760	17,320	17,520	15,470	17,160	16,750	17,230	114,400	106,700	104,300	100,600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 2005, BY WATER YEAR (WY)

MEAN	360	296	331	310	370	470	734	1,465	3,457	3,895	3,488	2,022
MAX	1,605	3,009	4,280	1,362	2,489	3,053	3,828	5,658	8,594	8,182	7,370	5,265
(WY)	(1913)	(1957)	(1957)	(1912)	(1961)	(1951)	(1974)	(1971)	(1918)	(1921)	(1918)	(1984)
MIN	5.06	3.00	2.00	2.00	2.00	2.00	2.53	648	51.7	983	987	146
(WY)	(1984)	(1949)	(1945)	(1945)	(1945)	(1945)	(1945)	(1945)	(1932)	(1989)	(1919)	(1910)

13011000 SNAKE RIVER NEAR MORAN, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1904 - 2005	
ANNUAL TOTAL	471,322		283,182		--	
ANNUAL MEAN	1,288		776		1,439	
HIGHEST ANNUAL MEAN	--		--		2,548 1997	
LOWEST ANNUAL MEAN	--		--		687 1989	
HIGHEST DAILY MEAN	6,730	Jun 11	4,120	Jun 15	14,700	Jun 13, 1918
LOWEST DAILY MEAN	243	Feb 10	266	Oct 2	0.30	Oct 28, 1969
ANNUAL SEVEN-DAY MINIMUM	254	Feb 9	274	Feb 17	1.4	Oct 24, 1969
ANNUAL RUNOFF (AC-FT)	934,900		561,700		1,042,000	
10 PERCENT EXCEEDS	2,530		1,700		4,260	
50 PERCENT EXCEEDS	282		283		486	
90 PERCENT EXCEEDS	257		277		18	



13011500 PACIFIC CREEK AT MORAN, WY

LOCATION.--Lat 43°51'01", long 110°31'04" (NAD 83), in SW¹/₄ NW¹/₄ sec.23, T.45 N., R.114 W., Teton County, Hydrologic Unit 17040101, Grand Teton National Park, on left bank 40 ft upstream from bridge on U.S. Highway 287, at Moran, and at mile 0.5.

DRAINAGE AREA.--169 mi². Mean elevation, 8,160 ft.

PERIOD OF RECORD.--July to November 1906 (gage heights only), July 1917 to September 1918 (no winter records), September 1944 to September 1975, July 1978 to current year. Published as "near Moran" prior to October 1968.

GAGE.--Water-stage recorder. Elevation of gage is 6,720 ft above NGVD of 1929, from topographic map. July 31 to November 11, 1906, nonrecording gage at site 0.4 mi downstream from station at different datum. July 20, 1917 to September 30, 1918, nonrecording gage at site 0.1 mi downstream from station at different datum. September 23, 1944 to November 13, 1959, at site 100 ft upstream from station at same datum. November 14, 1959 to September 24, 1975, at site 35 ft downstream from station at same datum. Data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. No diversion or regulation. Station operated and record provided by the Idaho Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	e70	e50	e50	e45	e35	61	320	1,030	348	83	53
2	95	e75	e55	e50	e35	e35	57	340	869	328	85	52
3	91	e80	e50	e55	e30	e35	61	357	726	297	86	52
4	88	e75	e50	e50	e30	e38	64	390	715	267	81	46
5	88	e70	e45	e50	e40	e35	61	475	653	254	77	45
6	87	e75	e55	e50	e35	e40	60	594	811	232	75	63
7	87	e80	e60	e45	e35	e50	73	684	758	217	73	68
8	86	e80	e65	e45	e30	e55	86	644	707	195	67	77
9	84	e80	e65	e50	e30	e55	82	781	686	180	66	80
10	83	e75	e70	e40	e30	e55	78	904	663	186	79	86
11	83	e75	e65	e40	e32	e55	77	920	615	186	94	91
12	82	e70	e60	e35	e35	e55	85	831	679	154	75	95
13	81	e70	e55	e45	e35	e60	103	703	708	143	75	112
14	81	e70	e50	e50	e32	e60	119	797	580	135	82	108
15	80	e70	e55	e30	e30	e55	106	1,000	581	128	76	104
16	80	e65	e55	e35	e25	e50	115	1,280	646	123	63	103
17	80	e70	e55	e45	e30	e50	142	1,530	677	116	71	109
18	83	e65	e60	e45	e35	e55	182	1,190	723	112	131	105
19	82	e70	e60	e45	e40	55	177	1,730	670	108	147	93
20	87	e60	e65	e40	e45	54	174	2,680	760	110	122	88
21	92	e50	e60	e35	e40	54	161	2,950	717	114	106	95
22	88	e55	e50	e35	e35	53	162	2,270	730	105	84	113
23	90	e60	e35	e35	e30	54	211	2,190	701	104	79	115
24	89	e55	e45	e35	e30	54	284	1,940	621	100	69	135
25	77	e55	e55	e40	e30	54	380	1,530	573	93	79	128
26	81	e55	e45	e45	e30	52	434	1,270	519	91	70	80
27	82	e60	e50	e45	e35	54	434	1,130	483	92	65	80
28	85	e50	e50	e50	e35	54	371	1,110	421	88	60	84
29	86	e45	e45	e50	---	54	348	1,070	416	87	60	77
30	89	e50	e50	e45	---	54	328	936	376	89	59	56
31	87	---	e50	e40	---	67	---	771	---	83	54	---
TOTAL	2,654	1,980	1,680	1,350	944	1,586	5,076	35,317	19,814	4,865	2,493	2,593
MEAN	85.6	66.0	54.2	43.5	33.7	51.2	169	1,139	660	157	80.4	86.4
MAX	100	80	70	55	45	67	434	2,950	1,030	348	147	135
MIN	77	45	35	30	25	35	57	320	376	83	54	45
AC-FT	5,260	3,930	3,330	2,680	1,870	3,150	10,070	70,050	39,300	9,650	4,940	5,140

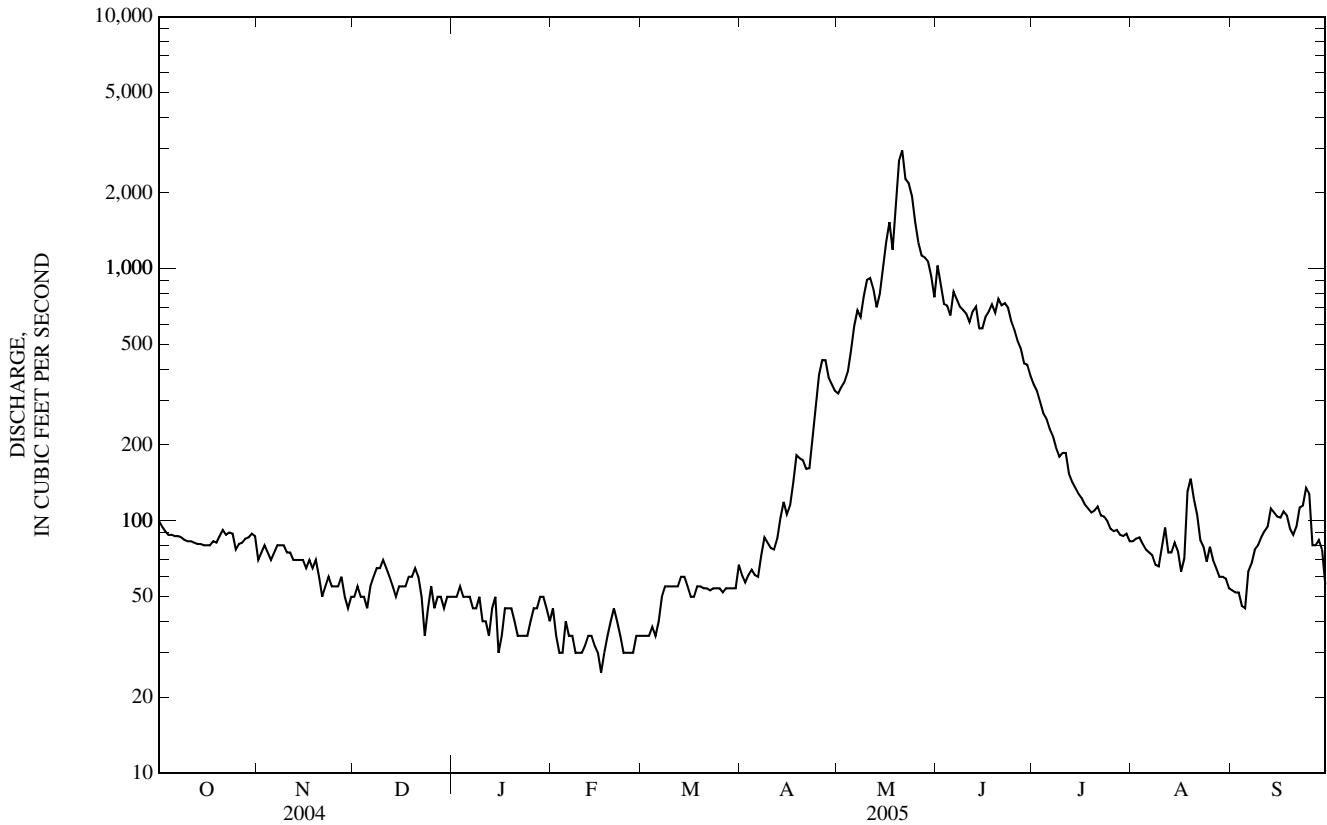
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 2005, BY WATER YEAR (WY)

MEAN	64.5	54.0	48.2	44.1	45.4	52.3	160	986	1,226	332	96.6	71.5
MAX	142	105	93.5	70.7	72.2	94.5	418	2,314	2,884	1,527	191	127
(WY)	(1973)	(1973)	(1984)	(1951)	(1995)	(1972)	(1946)	(1997)	(1997)	(1982)	(1982)	(1972)
MIN	34.6	31.7	29.0	25.3	26.4	32.3	53.3	345	238	70.0	39.3	37.2
(WY)	(1988)	(2003)	(2003)	(1979)	(2002)	(2002)	(1970)	(1975)	(1994)	(1994)	(2001)	(1994)

13011500 PACIFIC CREEK AT MORAN, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1917 - 2005	
ANNUAL TOTAL	69,425		80,352		--	
ANNUAL MEAN	190		220		265	
HIGHEST ANNUAL MEAN	--		--		560 1997	
LOWEST ANNUAL MEAN	--		--		132 1994	
HIGHEST DAILY MEAN	1,670	May 6	2,950	May 21	4,170	Jun 1, 1997
LOWEST DAILY MEAN	20	Jan 6	25	Feb 16	18	Feb 17, 2002
ANNUAL SEVEN-DAY MINIMUM	30	Feb 9	31	Feb 10	20	Feb 25, 2002
ANNUAL RUNOFF (AC-FT)	137,700		159,400		192,200	
10 PERCENT EXCEEDS	476		692		899	
50 PERCENT EXCEED	88		77		65	
90 PERCENT EXCEEDS	38		39		38	

e Estimated.



13011900 BUFFALO FORK ABOVE LAVA CREEK, NEAR MORAN, WY

LOCATION.--Lat 43°50'17", long 110°26'28" (NAD 83), in SE¹/₄ NE¹/₄ sec.29, T.45 N., R.113 W., Teton County, Hydrologic Unit 17040101, Grand Teton National Park, on right bank below bridge on U.S. Highway 26/287, about 2 mi upstream from Lava Creek, 3.5 mi east of Moran, and 4.0 mi upstream from mouth.

DRAINAGE AREA.--323 mi².

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 3 mi downstream from station.

REVISED RECORDS.--WDR Idaho 1974: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,772.78 ft above NGVD of 1929 (Federal Highway Administration bench mark). Data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Station operated and record provided by the Idaho Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	289	e190	e160	e130	e110	e90	105	228	1,320	1,380	339	212
2	269	e190	e160	e130	e100	e90	122	237	1,150	1,580	322	209
3	257	e210	e150	e130	e90	e90	128	240	1,010	1,650	312	207
4	249	e200	e140	e120	e90	e100	130	258	961	1,290	295	204
5	244	e190	e130	e120	e100	e95	123	296	950	1,180	278	202
6	239	e200	e150	e120	e95	e110	117	361	1,170	1,160	270	199
7	235	e200	e160	e120	e95	e120	147	428	1,120	1,190	263	197
8	234	e200	e170	e120	e90	e120	175	423	998	1,150	256	196
9	228	e200	e180	e130	e90	e130	163	465	917	1,110	256	195
10	225	e200	e200	e120	e90	e130	145	531	835	978	251	196
11	223	e190	e190	e120	e95	e130	135	549	791	910	270	204
12	220	e190	e180	e110	e100	e130	145	502	831	850	246	216
13	222	e180	e160	e120	e100	e140	158	443	852	798	240	228
14	220	e170	e140	e130	e95	e140	179	456	772	814	244	220
15	220	e160	e150	e85	e95	e120	157	512	867	750	229	214
16	219	e160	e140	e100	e80	e120	165	682	1,230	682	226	207
17	214	e170	e150	e110	e90	e120	195	965	1,520	690	282	206
18	221	e160	e160	e120	e95	e130	229	748	2,060	577	339	207
19	218	e170	e170	e120	e100	e130	217	841	1,970	540	403	198
20	235	e170	e170	e110	e120	e120	206	1,650	2,340	516	302	194
21	251	e170	e160	e100	e100	e120	191	2,360	2,650	488	272	197
22	232	e170	e140	e90	e95	e120	182	2,140	2,710	457	260	219
23	231	e170	e120	e90	e90	e130	208	2,270	2,870	481	256	210
24	229	e170	e130	e90	e90	e130	246	2,420	2,830	451	249	284
25	199	e160	e150	e100	e90	e120	307	2,020	2,400	416	239	299
26	e210	e170	e140	e110	e90	e120	349	1,640	2,120	395	234	242
27	e220	e170	e140	e110	e95	e120	349	1,550	1,700	372	228	223
28	227	e160	e140	e110	e95	122	308	1,570	1,520	353	223	215
29	227	e150	e130	e110	---	119	266	1,630	1,540	345	219	207
30	222	e160	e130	e100	---	115	257	1,370	1,280	349	214	203
31	219	---	e130	e100	---	111	---	1,190	---	349	214	---
TOTAL	7,148	5,350	4,720	3,475	2,665	3,682	5,804	30,975	45,284	24,251	8,231	6,410
MEAN	231	178	152	112	95.2	119	193	999	1,509	782	266	214
MAX	289	210	200	130	120	140	349	2,420	2,870	1,650	403	299
MIN	199	150	120	85	80	90	105	228	772	345	214	194
AC-FT	14,180	10,610	9,360	6,890	5,290	7,300	11,510	61,440	89,820	48,100	16,330	12,710

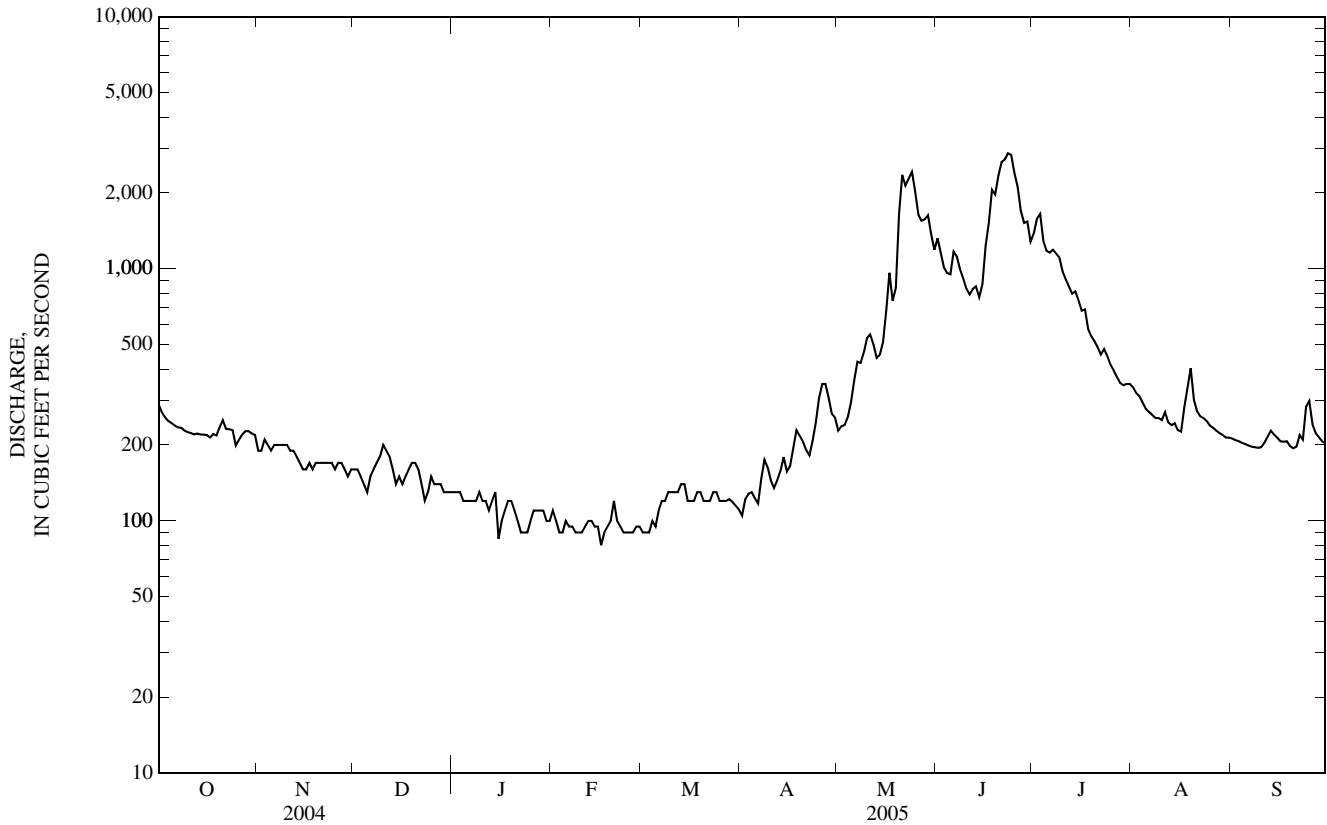
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2005, BY WATER YEAR (WY)

MEAN	212	169	137	120	116	126	220	1,016	2,248	1,303	406	256
MAX	304	229	180	145	191	175	367	1,768	4,533	3,056	946	428
(WY)	(1973)	(1984)	(1985)	(1994)	(1984)	(1984)	(1987)	(1969)	(1997)	(1975)	(1982)	(1982)
MIN	128	122	94.7	87.3	93.1	98.5	124	397	845	230	163	135
(WY)	(1988)	(1988)	(2003)	(1989)	(1969)	(1995)	(1967)	(1975)	(2001)	(1977)	(1977)	(1994)

13011900 BUFFALO FORK ABOVE LAVA CREEK, NEAR MORAN, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1966 - 2005	
ANNUAL TOTAL	142,799		147,995		--	
ANNUAL MEAN	390		405		529	
HIGHEST ANNUAL MEAN	--		--		890 1997	
LOWEST ANNUAL MEAN	--		--		286 1977	
HIGHEST DAILY MEAN	2,930	Jun 10	2,870	Jun 23	5,880	Jun 9, 1981
LOWEST DAILY MEAN	80	Jan 6	80	Feb 16	60	Dec 25, 2002
ANNUAL SEVEN-DAY MINIMUM	91	Jan 1	91	Feb 23	79	Dec 21, 2002
ANNUAL RUNOFF (AC-FT)	283,200		293,500		382,900	
10 PERCENT EXCEEDS	1,030		1,150		1,580	
50 PERCENT EXCEEDS	234		206		193	
90 PERCENT EXCEEDS	105		100		110	

e Estimated.



13013650 SNAKE RIVER AT MOOSE, WY

LOCATION.--Lat 43°39'14", long 110°42'52" (NAD 27), in NW¹/₄ NW¹/₄ NE¹/₄ sec.36, T.43 N., R.116 W., Teton County, Hydrologic Unit 17040101, Grand Teton National Park, on right bank at downstream side of bridge on Teton Park Road, 0.2 miles east of Grand Teton National Park Headquarters Visitor Center at Moose, and 0.3 miles west of U.S. Highway 191.

DRAINAGE AREA.--1,677 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1995 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,450 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

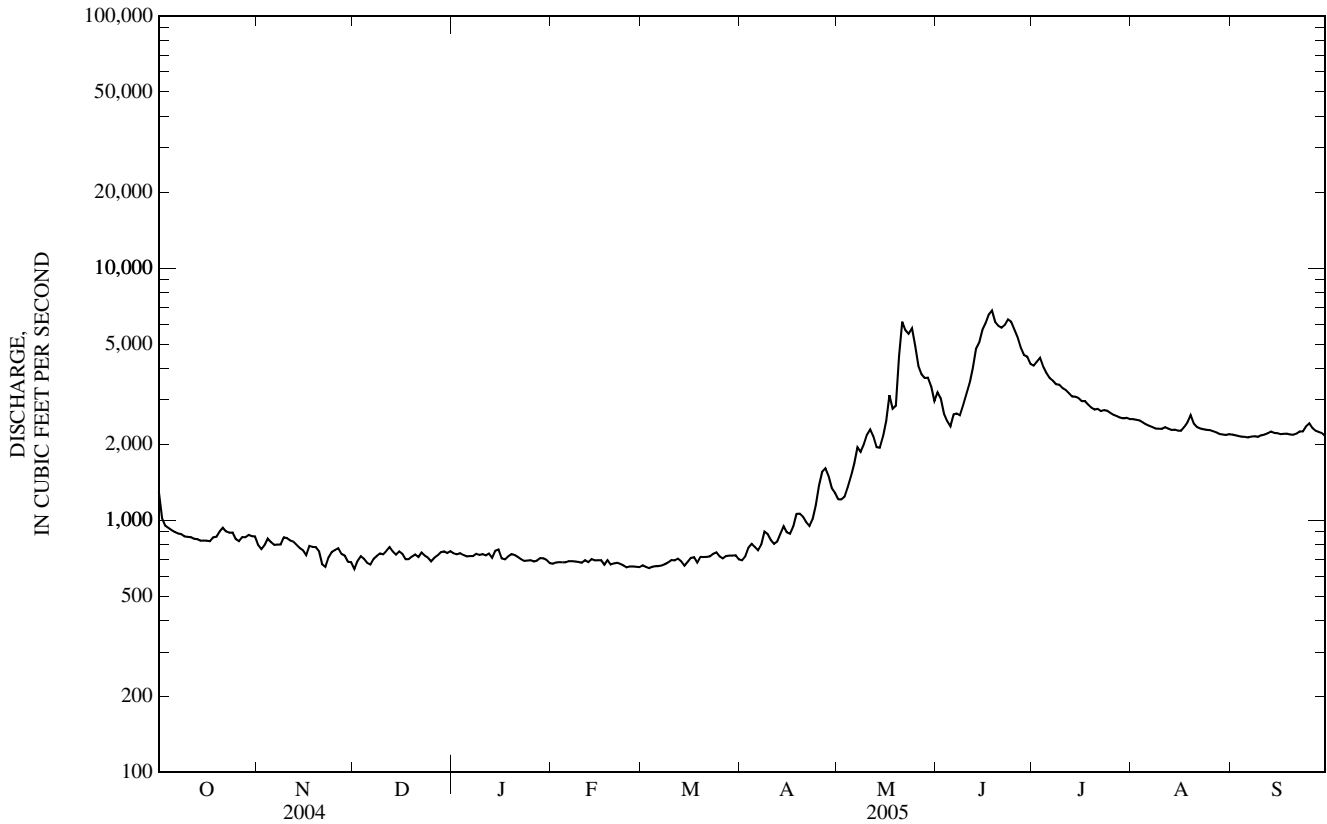
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,290	797	641	739	673	662	693	1,210	3,210	4,110	2,520	2,180
2	1,020	768	690	732	680	653	718	1,210	3,040	4,260	2,500	2,170
3	952	796	720	740	682	645	777	1,240	2,650	4,410	2,490	2,160
4	932	845	703	728	681	654	805	1,350	2,470	4,060	2,450	2,150
5	913	818	678	719	681	658	783	1,490	2,360	3,830	2,400	2,140
6	898	799	668	721	688	659	760	1,680	2,630	3,660	2,370	2,130
7	886	801	702	720	688	661	801	1,940	2,650	3,570	2,340	2,150
8	881	800	721	736	686	670	901	1,870	2,610	3,460	2,310	2,150
9	863	855	738	729	683	680	883	2,000	2,860	3,450	2,310	2,140
10	860	849	732	734	678	695	834	2,190	3,170	3,340	2,300	2,170
11	856	831	756	725	694	693	807	2,290	3,490	3,280	2,340	2,180
12	844	823	783	738	682	704	824	2,150	4,010	3,190	2,310	2,210
13	841	798	752	709	701	688	885	1,950	4,770	3,090	2,280	2,250
14	829	775	731	756	693	660	947	1,940	5,070	3,090	2,290	2,220
15	830	760	752	765	694	683	894	2,150	5,690	3,050	2,270	2,210
16	829	726	736	705	694	709	884	2,480	6,040	2,970	2,270	2,200
17	826	790	701	699	666	714	944	3,130	6,540	2,970	2,340	2,200
18	856	784	701	719	694	679	1,060	2,770	6,780	2,880	2,450	2,200
19	860	782	718	734	667	716	1,060	2,840	6,110	2,800	2,610	2,190
20	903	754	731	729	674	715	1,030	4,470	5,900	2,750	2,420	2,180
21	933	668	715	716	678	715	982	6,130	5,800	2,770	2,340	2,200
22	903	652	745	701	671	719	949	5,670	5,950	2,710	2,310	2,250
23	892	713	724	690	662	736	1,010	5,500	6,260	2,730	2,300	2,250
24	894	749	711	692	650	746	1,150	5,770	6,130	2,720	2,280	2,360
25	842	763	687	694	655	719	1,380	4,920	5,710	2,660	2,280	2,420
26	826	775	709	686	656	705	1,560	4,100	5,330	2,620	2,250	2,320
27	857	735	725	691	653	721	1,610	3,790	4,840	2,590	2,230	2,260
28	856	724	747	707	652	724	1,500	3,670	4,520	2,550	2,200	2,240
29	874	684	752	706	---	724	1,340	3,680	4,450	2,540	2,190	2,220
30	864	682	742	696	---	726	1,280	3,400	4,170	2,550	2,180	2,150
31	863	---	755	676	---	700	---	2,970	---	2,520	2,200	---
TOTAL	27,573	23,096	22,366	22,232	18,956	21,533	30,051	91,950	135,210	97,180	72,330	66,250
MEAN	889	770	721	717	677	695	1,002	2,966	4,507	3,135	2,333	2,208
MAX	1,290	855	783	765	701	746	1,610	6,130	6,780	4,410	2,610	2,420
MIN	826	652	641	676	650	645	693	1,210	2,360	2,520	2,180	2,130
AC-FT	54,690	45,810	44,360	44,100	37,600	42,710	59,610	182,400	268,200	192,800	143,500	131,400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2005, BY WATER YEAR (WY)

MEAN	1,324	995	932	954	1,013	1,245	2,038	5,312	9,270	5,552	4,038	3,524
MAX	2,124	1,382	1,315	1,615	2,083	3,205	4,600	8,620	18,150	7,574	5,723	5,089
(WY)	(1998)	(1998)	(1998)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)	(2003)	(1998)
MIN	889	748	721	684	667	659	990	2,618	4,507	3,135	2,333	2,063
(WY)	(2005)	(2004)	(2005)	(2002)	(2002)	(2002)	(2002)	(2002)	(2005)	(2005)	(2005)	(2000)

13013650 SNAKE RIVER AT MOOSE, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1995 - 2005	
ANNUAL TOTAL	855,082		628,727		--	
ANNUAL MEAN	2,336		1,723		3,011	
HIGHEST ANNUAL MEAN	--		--		4,874 1997	
LOWEST ANNUAL MEAN	--		--		1,723 2005	
HIGHEST DAILY MEAN	12,300	Jun 10	6,780	Jun 18	24,500	Jun 11, 1997
LOWEST DAILY MEAN	641	Dec 1	641	Dec 1	600	Feb 25, 2003
ANNUAL SEVEN-DAY MINIMUM	683	Nov 30	654	Feb 26	635	Mar 15, 2002
MAXIMUM PEAK FLOW	--		7,400	Jun 18	25,300	Jun 11, 1997
MAXIMUM PEAK STAGE	--		11.39	Jun 18	15.25	Jun 11, 1997
ANNUAL RUNOFF (AC-FT)	1,696,000		1,247,000		2,181,000	
10 PERCENT EXCEEDS	4,840		3,520		6,110	
50 PERCENT EXCEEDS	1,180		885		1,540	
90 PERCENT EXCEEDS	724		683		738	



13013650 SNAKE RIVER AT MOOSE, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1995 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 2002 to current year (no winter records).

pH: April 2002 to current year (no winter records).

WATER TEMPERATURE: April 2002 to current year (no winter records).

DISSOLVED OXYGEN: April 2002 to current year (no winter records).

INSTRUMENTATION: Water-quality monitor.

REMARKS.--Specific conductance records excellent March 17-23, April 21-24, May 12-15, June 8-11, June 21 to July 2, July 20-27, August 9-13, and September 8-12; good October 1 to December 7, March 24 to April 8, April 25 to May 6, May 16-27, June 12-20, July 3-19, July 28 to August 8, August 14-27, and September 13-27; fair April 9-19, May 7-11, May 28 to June 5, August 28 to September 7, and September 28-30; and poor April 20 and June 6, 7. pH records excellent March 17 to May 20, June 8-18, June 21 to July 18, July 20 to September 5, and September 8-30; good October 1 to December 7, May 21 to June 3, June 19, 20, and September 6, 7; and fair June 4-7. Water temperature record excellent May 12 to July 4 and July 20 to September 30; and good October 1 to December 7, March 17 to May 11, and July 5-19. Dissolved oxygen records excellent June 20-26; good June 27 to July 2, July 25-29, and August 17-28; fair October 4-7, 18-30, November 11, 12, July 3-9, July 30 to August 4, August 29 to September 6, and September 14-17; and poor July 10-24, August 5-16, September 7-13, and September 18-30. Water temperature records represent water temperature at sensor within 0.2°C.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 235 microsiemens per centimeter at 25°C ($\mu\text{S}/\text{cm}$), April 10-14, 2002; minimum recorded, 84 $\mu\text{S}/\text{cm}$, June 18, 19, 25, 26, July 1, 2002.

pH: Maximum recorded, 9.5, October 29-31, November 2-7, 11, 12, 2002; minimum recorded, 7.3, November 3, 4, 2004.

WATER TEMPERATURE: Maximum recorded, 21.6°C, July 30, August 1, 2003; minimum recorded, -0.2°C, November 29, 30, December 5, 6, 2004.

DISSOLVED OXYGEN: Maximum recorded, 13.4 mg/L, May 22, 2002; minimum recorded, 5.7 mg/L, August 13, 14, 2003.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 225 $\mu\text{S}/\text{cm}$, April 14; minimum recorded, 98 $\mu\text{S}/\text{cm}$, June 23, 24.

pH: Maximum recorded, 9.1, September 1, 4-6; minimum recorded, 7.3, November 3, 4.

WATER TEMPERATURE: Maximum recorded, 21.2°C, August 7; minimum recorded, -0.2°C November 29, 30, December 5, 6.

DISSOLVED OXYGEN: Maximum recorded, 12.4 mg/L, October 25; minimum recorded, 6.2 mg/L, August 9, 10.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	185	181	182	199	194	197	207	203	205	---	---	---
2	188	183	185	200	196	199	212	206	208	---	---	---
3	189	185	187	204	199	201	207	201	205	---	---	---
4	189	183	186	204	195	199	205	200	203	---	---	---
5	187	183	185	200	193	197	206	202	204	---	---	---
6	188	183	186	199	195	197	207	204	205	---	---	---
7	189	184	187	201	196	198	206	202	205	---	---	---
8	189	185	187	201	197	199	---	---	---	---	---	---
9	190	185	188	202	196	199	---	---	---	---	---	---
10	191	186	189	200	193	197	---	---	---	---	---	---
11	192	186	189	198	194	196	---	---	---	---	---	---
12	192	187	190	198	195	197	---	---	---	---	---	---
13	193	188	191	201	196	198	---	---	---	---	---	---
14	194	188	191	201	197	199	---	---	---	---	---	---
15	194	188	192	202	199	201	---	---	---	---	---	---
16	195	189	193	203	200	202	---	---	---	---	---	---
17	195	189	193	204	200	203	---	---	---	---	---	---
18	195	189	192	207	198	202	---	---	---	---	---	---
19	195	190	193	201	196	199	---	---	---	---	---	---
20	194	186	190	205	199	202	---	---	---	---	---	---
21	194	189	192	204	200	202	---	---	---	---	---	---
22	196	190	194	206	201	203	---	---	---	---	---	---
23	196	191	194	209	202	205	---	---	---	---	---	---
24	198	192	195	209	201	206	---	---	---	---	---	---
25	197	192	195	201	199	200	---	---	---	---	---	---
26	198	194	196	200	197	199	---	---	---	---	---	---
27	203	192	197	201	198	200	---	---	---	---	---	---
28	199	192	195	205	200	202	---	---	---	---	---	---
29	197	191	195	210	204	207	---	---	---	---	---	---
30	196	192	194	209	204	206	---	---	---	---	---	---
31	198	193	196	---	---	---	---	---	---	---	---	---
MONTH	203	181	191	210	193	200	---	---	---	---	---	---

13013650 SNAKE RIVER AT MOOSE, WY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	204	198	201	196	191	193
2	---	---	---	---	---	---	207	199	202	197	189	193
3	---	---	---	---	---	---	210	198	203	195	186	191
4	---	---	---	---	---	---	213	201	206	192	183	187
5	---	---	---	---	---	---	211	203	208	187	179	183
6	---	---	---	---	---	---	219	204	211	181	172	176
7	---	---	---	---	---	---	215	205	209	175	164	168
8	---	---	---	---	---	---	212	199	206	170	166	167
9	---	---	---	---	---	---	214	197	203	171	165	167
10	---	---	---	---	---	---	209	196	200	167	160	163
11	---	---	---	---	---	---	211	201	205	162	154	159
12	---	---	---	---	---	---	210	199	202	162	157	159
13	---	---	---	---	---	---	206	200	202	168	162	164
14	---	---	---	---	---	---	225	202	215	169	161	165
15	---	---	---	---	---	---	210	198	201	165	152	158
16	---	---	---	---	---	---	203	197	200	157	144	151
17	---	---	---	197	193	195	208	198	202	144	132	137
18	---	---	---	198	194	196	216	197	205	147	134	142
19	---	---	---	206	194	199	207	195	200	148	136	144
20	---	---	---	198	193	196	205	195	200	136	119	124
21	---	---	---	198	194	196	206	202	204	120	104	110
22	---	---	---	198	194	196	206	203	205	115	106	109
23	---	---	---	198	194	196	207	202	205	116	104	110
24	---	---	---	198	193	195	205	196	200	112	100	105
25	---	---	---	198	195	197	198	187	192	114	106	109
26	---	---	---	206	196	198	190	180	184	121	114	116
27	---	---	---	210	195	201	183	178	180	122	119	121
28	---	---	---	212	202	207	188	180	183	125	118	121
29	---	---	---	206	198	200	193	188	190	123	114	118
30	---	---	---	201	195	198	194	189	192	127	119	122
31	---	---	---	205	196	199	---	---	---	132	127	129
MONTH	---	---	---	---	---	---	225	178	201	197	100	147
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	132	128	130	128	121	124	158	155	157	172	170	171
2	135	129	132	125	114	118	160	157	158	172	170	172
3	141	135	138	121	108	115	160	159	160	173	171	172
4	144	141	143	126	119	122	160	159	160	173	171	172
5	146	144	145	127	123	125	160	159	160	172	170	172
6	146	134	140	128	123	125	161	159	160	172	170	171
7	142	138	140	128	119	123	161	160	161	172	169	171
8	148	141	144	128	120	124	165	164	164	171	169	170
9	152	148	150	128	120	124	166	165	165	171	170	171
10	156	152	154	129	125	127	167	166	166	172	170	171
11	158	156	157	131	128	129	166	166	166	172	171	172
12	159	156	157	134	129	131	167	165	166	172	170	171
13	159	156	157	134	131	133	168	166	167	172	171	172
14	160	159	159	134	129	132	168	167	168	173	171	172
15	160	156	158	135	132	133	169	167	168	174	172	173
16	157	146	151	138	135	137	169	166	168	174	172	173
17	148	141	144	139	135	137	169	166	168	174	172	173
18	141	127	132	141	137	140	169	164	166	174	173	174
19	132	126	128	145	141	144	169	163	166	175	173	174
20	129	117	125	148	145	147	169	165	166	176	174	175
21	110	103	107	149	146	148	169	168	169	176	174	175
22	108	102	105	149	147	148	169	168	169	176	175	176
23	106	98	102	148	146	147	170	168	169	176	173	175
24	108	98	102	148	146	147	170	168	169	176	175	175
25	111	101	106	151	148	150	172	169	170	176	174	175
26	115	105	109	152	151	152	171	169	170	177	175	176
27	120	113	116	153	151	152	171	169	170	177	176	177
28	122	117	119	155	153	154	171	169	170	178	176	177
29	123	118	120	156	154	155	172	170	171	177	176	177
30	128	123	125	157	155	156	172	170	171	179	177	178
31	---	---	---	158	156	157	172	170	171	---	---	---
MONTH	160	98	133	158	108	137	172	155	166	179	169	173

SNAKE RIVER BASIN

13013650 SNAKE RIVER AT MOOSE, WY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER				
1	8.6	7.7	8.3	7.5	8.3	7.9	---	---	---	---	---	---	---	---	---	---
2	8.6	7.7	8.2	7.5	8.3	7.9	---	---	---	---	---	---	---	---	---	---
3	8.6	7.6	8.2	7.3	8.4	7.9	---	---	---	---	---	---	---	---	---	---
4	8.5	7.6	8.1	7.3	8.3	7.7	---	---	---	---	---	---	---	---	---	---
5	8.5	7.5	8.3	7.5	8.4	7.6	---	---	---	---	---	---	---	---	---	---
6	8.5	7.5	8.4	7.5	8.4	7.6	---	---	---	---	---	---	---	---	---	---
7	8.4	7.5	8.3	7.6	8.3	7.7	---	---	---	---	---	---	---	---	---	---
8	8.4	7.4	8.3	7.6	---	---	---	---	---	---	---	---	---	---	---	---
9	8.5	7.4	8.3	7.6	---	---	---	---	---	---	---	---	---	---	---	---
10	8.4	7.5	8.4	7.7	---	---	---	---	---	---	---	---	---	---	---	---
11	8.5	7.5	8.4	7.6	---	---	---	---	---	---	---	---	---	---	---	---
12	8.4	7.4	8.4	7.7	---	---	---	---	---	---	---	---	---	---	---	---
13	8.4	7.5	8.4	7.7	---	---	---	---	---	---	---	---	---	---	---	---
14	8.4	7.4	8.4	7.7	---	---	---	---	---	---	---	---	---	---	---	---
15	8.5	7.4	8.4	7.7	---	---	---	---	---	---	---	---	---	---	---	---
16	8.4	7.4	8.4	7.7	---	---	---	---	---	---	---	---	---	---	---	---
17	8.4	7.4	8.4	7.8	---	---	---	---	---	---	---	---	8.4	8.0	---	---
18	8.5	7.4	8.4	7.8	---	---	---	---	---	---	---	---	8.5	7.9	---	---
19	8.6	7.6	8.3	7.8	---	---	---	---	---	---	---	---	8.6	8.0	---	---
20	8.3	7.5	8.2	7.8	---	---	---	---	---	---	---	---	8.6	8.0	---	---
21	8.4	7.5	8.2	7.7	---	---	---	---	---	---	---	---	8.7	8.0	---	---
22	8.4	7.5	8.3	7.7	---	---	---	---	---	---	---	---	8.7	8.0	---	---
23	8.1	7.4	8.2	7.5	---	---	---	---	---	---	---	---	8.6	8.0	---	---
24	8.3	7.5	8.3	7.5	---	---	---	---	---	---	---	---	8.7	8.1	---	---
25	8.4	7.5	8.3	7.8	---	---	---	---	---	---	---	---	8.7	8.1	---	---
26	8.2	7.4	8.4	7.8	---	---	---	---	---	---	---	---	8.7	8.1	---	---
27	8.4	7.5	8.3	7.8	---	---	---	---	---	---	---	---	8.7	8.1	---	---
28	8.2	7.4	8.4	7.8	---	---	---	---	---	---	---	---	8.7	8.1	---	---
29	8.3	7.4	8.3	7.8	---	---	---	---	---	---	---	---	8.7	8.1	---	---
30	8.1	7.4	8.3	7.8	---	---	---	---	---	---	---	---	8.7	8.1	---	---
31	8.2	7.5	---	---	---	---	---	---	---	---	---	---	8.7	8.1	---	---
MONTH	8.6	7.4	8.4	7.3	---	---	---	---	---	---	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER					
1	8.7	8.1	8.7	8.0	8.6	8.4	8.4	8.0	8.6	7.8	9.1	8.0				
2	8.7	8.1	8.6	8.0	8.7	8.4	8.3	7.9	8.6	7.8	9.0	8.0				
3	8.7	8.1	8.5	8.0	8.7	8.4	8.3	8.0	8.7	7.8	9.0	8.0				
4	8.6	8.0	8.6	8.0	8.7	8.5	8.4	7.9	8.7	7.8	9.1	8.0				
5	8.7	8.0	8.4	8.0	8.8	8.5	8.4	7.9	8.7	7.8	9.1	8.0				
6	8.6	8.0	8.3	8.0	8.7	8.5	8.4	7.9	8.7	7.8	9.1	8.1				
7	8.7	8.0	8.1	8.0	8.5	8.1	8.4	7.9	8.7	7.8	9.0	8.1				
8	8.5	8.1	8.4	8.0	8.5	8.0	8.4	7.9	8.9	7.8	8.9	8.0				
9	8.7	8.1	8.2	8.0	8.5	8.1	8.4	7.9	8.9	8.0	8.9	8.0				
10	8.7	8.1	8.1	8.0	8.5	8.1	8.4	8.0	8.8	8.0	8.8	8.0				
11	8.7	8.1	8.2	7.9	8.6	8.1	8.5	8.0	8.9	8.0	9.0	8.0				
12	8.7	8.1	8.3	7.9	8.5	8.2	8.5	7.9	8.9	8.0	8.7	8.0				
13	8.7	8.1	8.5	7.9	8.5	8.1	8.5	7.9	8.9	8.0	8.9	8.0				
14	8.7	8.2	8.5	7.9	8.4	8.1	8.6	7.9	8.9	8.0	8.9	8.0				
15	8.7	8.1	8.5	8.1	8.3	8.1	8.6	7.9	8.9	8.0	8.9	8.0				
16	8.7	8.1	8.4	8.2	8.2	8.1	8.6	7.9	8.8	8.0	8.9	8.0				
17	8.7	8.1	8.2	8.1	8.3	8.1	8.6	8.0	8.9	8.0	8.8	8.0				
18	8.5	8.1	8.5	8.2	8.2	8.1	8.6	8.0	8.7	8.0	8.9	8.0				
19	8.6	8.1	8.4	8.2	8.3	8.1	8.6	8.0	8.9	8.1	8.9	8.1				
20	8.5	8.1	8.3	8.2	8.1	7.9	8.4	7.8	8.9	8.0	8.9	8.0				
21	8.6	8.0	8.4	8.3	8.0	7.9	8.4	7.7	8.9	8.0	8.6	8.0				
22	8.6	8.0	8.4	8.3	8.1	7.9	8.5	7.7	8.9	8.0	8.9	8.1				
23	8.5	7.7	8.4	8.3	8.1	7.9	8.5	7.7	8.9	8.0	8.7	8.1				
24	8.1	7.5	8.4	8.3	8.1	7.9	8.5	7.7	9.0	8.0	8.7	8.1				
25	8.3	7.6	8.4	8.3	8.2	7.9	8.5	7.7	8.9	8.1	8.8	8.1				
26	8.3	8.0	8.4	8.3	8.1	7.9	8.6	7.8	8.9	8.0	8.8	8.1				
27	8.4	8.0	8.5	8.3	8.2	7.9	8.6	7.8	8.9	8.0	8.8	8.1				
28	8.6	8.0	8.5	8.4	8.3	7.9	8.6	7.8	8.9	8.0	8.8	8.1				
29	8.6	8.1	8.5	8.4	8.3	8.0	8.5	7.8	9.0	8.0	8.8	8.1				
30	8.6	8.0	8.6	8.4	8.3	7.9	8.6	7.8	9.0	8.0	8.8	8.1				
31	---	---	8.6	8.4	---	---	8.7	7.8	9.0	8.1	---	---				
MONTH	8.7	7.5	8.7	7.9	8.8	7.9	8.7	7.7	9.0	7.8	9.1	8.0				

13013650 SNAKE RIVER AT MOOSE, WY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.2	9.5	10.2	5.1	1.9	3.3	1.8	0.4	0.8	---	---	---
2	12.1	8.3	10.1	5.2	1.7	3.4	1.7	0.3	0.9	---	---	---
3	12.6	8.2	10.3	5.2	2.4	4.0	2.1	0.4	1.0	---	---	---
4	11.8	8.4	10.1	5.7	3.0	4.3	2.2	0.3	1.0	---	---	---
5	12.4	8.1	10.1	6.0	2.8	4.4	1.6	-0.2	0.6	---	---	---
6	12.2	8.0	10.0	5.8	2.7	4.2	0.8	-0.2	0.5	---	---	---
7	11.6	8.5	9.8	5.6	2.4	4.0	0.8	-0.1	0.3	---	---	---
8	11.6	7.5	9.5	4.3	2.3	3.5	---	---	---	---	---	---
9	11.4	7.6	9.5	5.5	3.1	4.2	---	---	---	---	---	---
10	10.6	8.7	9.7	6.2	3.8	4.8	---	---	---	---	---	---
11	11.6	7.6	9.5	6.0	3.8	4.9	---	---	---	---	---	---
12	10.0	7.7	8.8	6.3	3.6	4.7	---	---	---	---	---	---
13	10.1	6.5	8.2	5.3	2.6	3.9	---	---	---	---	---	---
14	10.4	6.4	8.4	5.0	2.2	3.5	---	---	---	---	---	---
15	9.8	7.2	8.5	4.8	2.5	3.4	---	---	---	---	---	---
16	9.8	7.6	8.4	4.4	1.5	3.1	---	---	---	---	---	---
17	8.9	6.8	7.8	5.4	2.7	4.0	---	---	---	---	---	---
18	7.6	5.7	6.7	4.5	2.0	3.3	---	---	---	---	---	---
19	6.9	5.1	5.8	4.0	2.6	3.2	---	---	---	---	---	---
20	6.4	5.1	5.8	3.5	1.5	2.4	---	---	---	---	---	---
21	6.8	5.7	6.1	2.5	0.4	1.4	---	---	---	---	---	---
22	7.6	5.1	6.0	3.0	0.7	1.9	---	---	---	---	---	---
23	5.6	5.0	5.3	3.7	2.1	2.8	---	---	---	---	---	---
24	6.3	3.5	4.7	2.6	1.5	2.1	---	---	---	---	---	---
25	5.2	3.4	4.3	3.1	2.2	2.7	---	---	---	---	---	---
26	6.0	4.1	5.0	3.0	1.7	2.5	---	---	---	---	---	---
27	7.5	4.9	6.0	1.7	0.7	1.3	---	---	---	---	---	---
28	6.6	5.3	6.1	1.9	0.1	0.9	---	---	---	---	---	---
29	6.3	4.4	5.2	0.7	-0.2	0.0	---	---	---	---	---	---
30	5.2	3.7	4.4	1.3	-0.2	0.3	---	---	---	---	---	---
31	5.9	3.5	4.3	---	---	---	---	---	---	---	---	---
MONTH	12.6	3.4	7.6	6.3	-0.2	3.1	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	7.0	1.2	4.1	10.2	4.3	7.1
2	---	---	---	---	---	---	8.5	2.7	5.6	9.0	5.2	7.1
3	---	---	---	---	---	---	6.7	3.9	5.3	9.4	6.0	7.5
4	---	---	---	---	---	---	6.8	3.0	4.9	10.5	6.2	8.0
5	---	---	---	---	---	---	7.4	2.8	5.0	8.9	7.1	7.9
6	---	---	---	---	---	---	9.0	2.4	5.6	9.7	6.3	7.9
7	---	---	---	---	---	---	8.9	3.5	6.2	8.3	5.7	6.8
8	---	---	---	---	---	---	6.9	3.8	5.3	7.9	5.2	6.4
9	---	---	---	---	---	---	8.2	2.6	4.8	8.0	5.8	6.9
10	---	---	---	---	---	---	8.1	3.2	5.5	7.2	6.1	6.6
11	---	---	---	---	---	---	8.2	2.7	5.5	7.8	5.6	6.7
12	---	---	---	---	---	---	9.5	3.9	6.6	7.3	5.8	6.5
13	---	---	---	---	---	---	9.7	4.4	7.0	9.5	4.3	6.8
14	---	---	---	---	---	---	7.4	3.7	5.6	11.1	6.3	8.7
15	---	---	---	---	---	---	8.5	2.4	5.3	9.6	7.7	8.5
16	---	---	---	---	---	---	9.8	3.3	6.4	9.0	7.8	8.4
17	---	---	---	3.9	1.9	3.1	10.1	4.5	7.3	8.0	5.2	6.1
18	---	---	---	4.7	0.6	2.5	7.7	5.7	6.8	7.8	4.5	6.0
19	---	---	---	5.8	1.6	3.8	8.0	4.4	6.1	9.3	6.6	7.9
20	---	---	---	5.7	2.7	4.1	5.8	4.3	5.0	10.5	6.6	8.7
21	---	---	---	6.6	2.3	4.3	8.5	3.4	5.7	10.1	6.8	8.5
22	---	---	---	5.8	2.2	4.1	10.2	3.9	6.9	10.3	6.5	8.5
23	---	---	---	5.3	2.8	4.0	10.1	5.5	7.8	10.8	8.1	9.4
24	---	---	---	6.2	1.6	3.5	10.6	6.2	8.1	9.7	7.1	8.6
25	---	---	---	6.6	2.3	4.4	10.1	5.6	7.7	10.1	7.0	8.6
26	---	---	---	6.8	2.6	4.6	8.8	5.6	7.2	10.8	6.6	8.7
27	---	---	---	5.5	2.5	3.9	6.6	4.6	5.5	11.4	7.2	9.3
28	---	---	---	5.8	2.8	4.1	8.0	3.7	5.5	11.5	7.6	9.5
29	---	---	---	5.1	1.4	3.4	9.0	3.9	6.2	10.0	7.7	8.7
30	---	---	---	5.9	1.8	3.7	9.7	4.5	6.8	10.4	6.7	8.3
31	---	---	---	6.8	1.5	4.0	---	---	---	10.5	7.4	9.0
MONTH	---	---	---	---	---	---	10.6	1.2	6.0	11.5	4.3	7.9

SNAKE RIVER BASIN

13013650 SNAKE RIVER AT MOOSE, WY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.0	7.5	8.2	16.0	12.0	13.9	19.8	15.9	17.7	17.5	12.8	15.1
2	10.0	6.1	8.0	15.8	12.7	13.9	19.0	16.2	17.6	16.7	12.9	14.9
3	10.8	7.4	8.9	15.1	11.9	13.4	19.7	15.4	17.5	17.6	13.4	15.4
4	11.1	7.6	9.3	15.8	11.8	13.7	20.9	15.5	18.0	17.2	13.9	15.5
5	11.9	7.7	10	16.7	12.5	14.5	20.7	15.9	18.3	17.3	13.5	15.4
6	11.0	7.8	9.6	17.2	12.9	15.0	20.7	16.0	18.3	17.2	12.9	15.0
7	7.8	5.8	6.7	17.1	13.6	15.2	21.2	16.5	18.8	16.7	12.9	14.9
8	9.0	4.7	6.9	17.4	13.6	15.4	20.0	16.6	18.4	17.1	13.2	15.2
9	9.7	6.8	8.2	17.1	14.0	15.4	21.0	16.6	18.7	16.9	13.9	15.4
10	11.2	7.5	9.3	16.1	14.8	15.3	19.5	17.1	18.4	15.3	12.8	14.0
11	12.4	8.3	10.3	18.0	13.4	15.6	20.1	15.8	18.0	14.8	12.1	13.2
12	11.0	8.9	9.7	18.7	14.0	16.2	19.2	15.6	17.4	13.4	11.3	12.4
13	12.1	8.1	9.8	19.0	14.3	16.6	18.6	15.2	17.0	13.2	10.4	11.6
14	13.3	8.8	11.1	19.4	15.1	17.2	19.3	14.7	17.0	14.3	10.3	12.2
15	14.4	11.0	12.6	19.4	15.0	17.3	19.8	14.9	17.4	14.5	10.6	12.6
16	13.3	11.3	12.3	18.6	15.2	16.9	17.7	15.3	16.4	14.0	11.0	12.5
17	13.9	10.5	12.2	19.7	15.4	17.1	18.6	15.5	16.7	13.3	11.2	12.1
18	12.6	10.8	11.8	18.6	14.1	16.4	16.8	14.7	15.4	13.8	10.1	11.9
19	13.6	10.0	11.7	19.5	14.7	16.7	17.5	13.6	15.4	14.2	10.0	12.0
20	13.6	11.0	12.2	20.1	15.5	17.7	18.6	13.9	16.2	14.5	10.5	12.5
21	12.9	11.3	12.1	20.4	15.7	18.1	19.4	14.4	16.9	13.1	11.9	12.4
22	13.6	10.8	12.1	20.5	16.4	18.4	18.7	15.1	16.8	14.5	11.4	12.6
23	13.6	11.5	12.4	20.6	16.9	18.6	18.1	15.2	16.5	12.8	11.2	11.9
24	13.4	11.3	12.3	20.4	15.9	18.1	18.0	14.6	15.9	12.1	11.1	11.6
25	13.8	11.4	12.5	19.9	15.9	17.8	17.0	13.5	15.0	12.0	9.8	11.0
26	13.1	11.2	12.1	19.3	15.5	17.3	17.8	12.8	15.2	13.0	9.2	11.0
27	13.4	10.3	11.8	19.8	14.6	17.1	18.1	13.3	15.6	12.1	10.1	11.2
28	14.2	10.9	12.3	20.1	14.9	17.4	18.3	13.5	15.9	13.4	9.4	11.3
29	13.6	11.1	12.3	18.0	15.8	16.9	18.2	13.7	15.9	13.3	9.3	11.3
30	15.2	10.9	12.9	19.5	15.3	17.2	16.4	14.0	15.2	13.4	9.9	11.6
31	---	---	---	19.6	16.1	17.8	17.2	12.0	14.6	---	---	---
MONTH	15.2	4.7	10.7	20.6	11.8	16.4	21.2	12.0	16.8	17.6	9.2	13.0

13013650 SNAKE RIVER AT MOOSE, WY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	10.4	8.0	9.2	---	---	---	---	---	---	---	---	---
5	11.2	8.3	9.5	---	---	---	---	---	---	---	---	---
6	11.5	8.4	9.6	---	---	---	---	---	---	---	---	---
7	11.7	8.7	10.0	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	11.7	11.2	11.4	---	---	---	---	---	---
12	---	---	---	12.1	11.2	11.8	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	11.3	10.8	11.1	---	---	---	---	---	---	---	---	---
19	11.6	10.9	11.3	---	---	---	---	---	---	---	---	---
20	11.6	11.1	11.3	---	---	---	---	---	---	---	---	---
21	11.3	10.9	11.2	---	---	---	---	---	---	---	---	---
22	11.6	10.6	11.2	---	---	---	---	---	---	---	---	---
23	11.6	11.4	11.5	---	---	---	---	---	---	---	---	---
24	12.3	11.1	11.8	---	---	---	---	---	---	---	---	---
25	12.4	11.5	11.9	---	---	---	---	---	---	---	---	---
26	12.1	11.2	11.7	---	---	---	---	---	---	---	---	---
27	11.7	10.6	11.2	---	---	---	---	---	---	---	---	---
28	11.4	11.0	11.2	---	---	---	---	---	---	---	---	---
29	11.9	11.0	11.5	---	---	---	---	---	---	---	---	---
30	11.2	10.0	10.7	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	12.4	8.0	10.9	12.1	11.2	11.6	---	---	---	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	8.2	7.5	7.9	8.6	7.0	7.7	8.7	6.8	7.6
2	---	---	---	8.1	7.6	7.8	8.6	7.1	7.7	8.7	6.9	7.8
3	---	---	---	8.2	7.7	7.9	8.8	7.1	7.9	8.8	7.0	7.9
4	---	---	---	8.3	7.6	7.9	8.8	7.0	7.8	8.6	7.0	7.7
5	---	---	---	8.2	7.4	7.8	8.7	7.0	7.7	9.2	7.0	7.7
6	---	---	---	8.1	7.2	7.7	8.8	7.1	7.8	8.7	7.0	7.9
7	---	---	---	8.0	7.3	7.6	8.8	7.0	7.7	8.8	7.2	7.9
8	---	---	---	7.9	7.2	7.5	9.5	7.0	7.8	9.1	7.3	8.1
9	---	---	---	7.9	7.1	7.5	7.8	6.2	7.0	9.0	7.3	8.0
10	---	---	---	7.9	7.1	7.4	7.6	6.2	6.9	9.1	7.3	8.1
11	---	---	---	8.0	7.0	7.5	8.0	6.6	7.4	9.5	7.9	8.6
12	---	---	---	8.0	6.9	7.4	8.3	7.1	7.7	9.6	7.9	8.6
13	---	---	---	7.9	6.8	7.3	8.4	6.8	7.6	10.0	8.4	9.1
14	---	---	---	7.8	6.7	7.2	8.2	6.8	7.4	9.9	8.2	9.0
15	---	---	---	7.8	6.5	7.2	8.6	7.1	7.8	9.9	8.1	8.9
16	---	---	---	7.7	6.6	7.2	9.0	7.1	8.0	9.8	8.0	8.8
17	---	---	---	7.7	6.8	7.2	8.7	7.1	7.8	9.7	8.1	8.7
18	---	---	---	7.9	6.6	7.3	8.3	7.1	7.6	9.9	8.3	9.0
19	---	---	---	7.7	6.3	7.0	8.2	7.0	7.6	9.9	8.1	8.9
20	8.4	8.0	8.2	7.5	6.3	6.9	8.5	7.0	7.7	9.7	7.9	8.8
21	8.2	8.0	8.1	7.7	6.3	7.0	8.4	6.8	7.6	9.1	7.9	8.4
22	8.3	7.9	8.1	7.8	6.3	7.0	8.3	6.8	7.4	9.7	7.9	8.6
23	8.1	7.8	8.0	7.8	6.5	7.1	8.2	6.8	7.4	9.4	7.9	8.4
24	8.2	7.9	8.0	8.0	6.5	7.2	8.4	6.9	7.6	9.4	7.9	8.5
25	8.2	7.9	8.0	8.0	6.6	7.3	8.8	7.1	7.9	9.6	8.2	8.8
26	8.1	7.9	8.0	8.2	6.8	7.5	9.2	7.3	8.2	9.7	8.0	8.8
27	8.4	8.0	8.2	8.5	6.9	7.6	8.9	7.1	8.0	9.3	7.9	8.6
28	8.4	7.8	8.1	8.5	6.9	7.6	8.6	6.9	7.7	9.5	7.9	8.6
29	8.4	7.8	8.1	8.5	6.9	7.6	8.5	6.8	7.6	9.5	8.0	8.7
30	8.4	7.6	8.1	8.6	7.0	7.7	8.5	6.8	7.6	9.6	8.0	8.7
31	---	---	---	8.7	6.9	7.7	8.5	6.8	7.7	---	---	---
MONTH	---	---	---	8.7	6.3	7.4	9.5	6.2	7.7	10.0	6.8	8.4

13015000 GROS VENTRE RIVER AT ZENITH, WY

LOCATION.--Lat 43°33'26", long 110°45'46" (NAD 83), in SW¹/₄ NW¹/₄ SW¹/₄ sec.34., T.42 N., R.116 W., Teton County, Wyoming, Hydrologic Unit 17040102, on left bank, 20 ft upstream from county road bridge, 0.5 mi southwest of Jackson Hole Country Club, and 5.5 mi north of Jackson, Wyoming.

DRAINAGE AREA.--683 mi².

PERIOD OF RECORD.--July to September 1917, July to September 1918 (monthly discharge only, published in WSP 1317), October 1987 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 6,260 ft above NGVD of 1929, from topographic map. Data collection platform with satellite telemetry at station.

REMARKS.--Records fair. Diversions of about 300 ft³/s for irrigation above station. No regulation. Station operated and record provided by the Idaho Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	31	81	753	538	78	14
2	---	---	---	---	---	---	31	72	792	584	80	12
3	---	---	---	---	---	---	33	63	637	604	73	11
4	---	---	---	---	---	---	39	64	507	550	69	9.8
5	---	---	---	---	---	---	41	68	445	420	64	9.0
6	---	---	---	---	---	---	41	75	535	344	56	8.0
7	---	---	---	---	---	---	44	100	652	298	52	13
8	---	---	---	---	---	---	53	122	608	283	48	5.7
9	---	---	---	---	---	---	59	113	524	283	45	4.2
10	---	---	---	---	---	---	59	113	457	262	43	3.4
11	---	---	---	---	---	---	56	130	349	252	41	2.8
12	---	---	---	---	---	---	54	153	331	235	37	2.4
13	---	---	---	---	---	---	56	127	397	218	35	2.0
14	---	---	---	---	---	---	62	126	376	215	30	1.6
15	---	---	---	---	---	---	62	128	350	219	27	1.2
16	---	---	---	---	---	---	56	137	453	215	26	1.0
17	---	---	---	---	---	---	56	376	714	203	31	1.0
18	---	---	---	---	---	---	61	610	1,210	199	43	0.54
19	---	---	---	---	---	---	65	498	1,480	191	53	0.11
20	---	---	---	---	---	---	68	915	1,420	168	57	0.00
21	---	---	---	---	---	---	66	1,720	1,480	153	50	0.01
22	---	---	---	---	---	---	61	2,010	1,580	160	42	0.00
23	---	---	---	---	---	---	61	1,810	1,550	158	39	0.00
24	---	---	---	---	---	---	67	2,280	1,440	151	36	0.00
25	---	---	---	---	---	---	76	2,190	1,250	135	34	0.00
26	---	---	---	---	---	---	89	1,690	1,090	128	28	0.79
27	---	---	---	---	---	---	102	1,300	857	114	24	16
28	---	---	---	---	---	---	108	1,110	688	69	21	15
29	---	---	---	---	---	---	92	1,180	598	66	17	13
30	---	---	---	---	---	---	85	1,110	545	65	15	9.5
31	---	---	---	---	---	---	---	843	---	66	15	---
TOTAL	---	---	---	---	---	---	1,834	21,314	24,068	7,546	1,309	157.05
MEAN	---	---	---	---	---	---	61.1	688	802	243	42.2	5.24
MAX	---	---	---	---	---	---	108	2,280	1,580	604	80	16
MIN	---	---	---	---	---	---	31	63	331	65	15	0.00
AC-FT	---	---	---	---	---	---	3,640	42,280	47,740	14,970	2,600	312

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 2005, BY WATER YEAR (WY)*

MEAN	64.9	64.4	29.5	---	---	---	124	760	1,100	434	130	59.3
MAX	89.4	81.3	29.5	---	---	---	231	2,954	3,189	1,410	406	214
(WY)	(1990)	(1990)	(1988)	---	---	---	(2000)	(1997)	(1997)	(1995)	(1917)	(1997)
MIN	50.3	49.2	29.5	---	---	---	41.1	163	50.3	4.90	0.00	0.00
(WY)	(1988)	(1988)	(1988)	---	---	---	(1993)	(2004)	(2001)	(2001)	(2001)	(1994)

13015000 GROS VENTRE RIVER AT ZENITH, WY—Continued

SUMMARY STATISTICS

HIGHEST DAILY MEAN
 LOWEST DAILY MEAN

FOR 2005 WATER YEAR*

2,280 May 24
 0.00 Several days

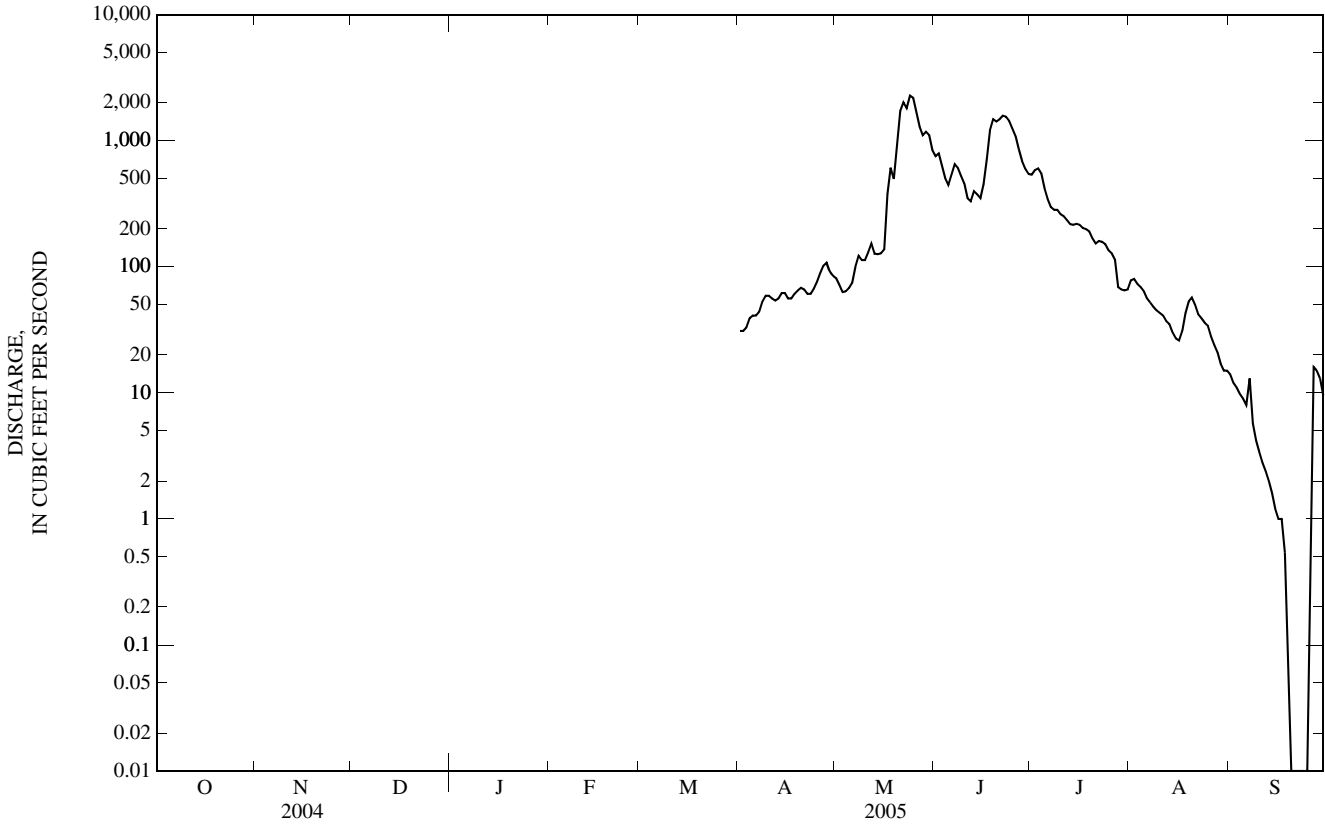
WATER YEARS 1917 - 2005*

6,710 Jun 6, 1997
 0.00 Many days,
 some years
 2,227 Jun 10, 1991

MAXIMUM PEAK STAGE

--

* For period of operation.
 e Estimated.



13016305 GRANITE CREEK ABOVE GRANITE CREEK SUPPLEMENTAL, NEAR MOOSE, WY

LOCATION.--Lat 43°36'14", long 110°48'17" (NAD 27), in SW¹/₄ SE¹/₄ NE¹/₄ sec.18, T.42 N., R.116 W., Teton County, Hydrologic Unit 17040103, Grand Teton National Park, on right bank 0.7 mi upstream from Granite Creek Supplemental and 5.7 mi southwest of Moose.

DRAINAGE AREA.--14.9 mi².

PERIOD OF RECORD.--June 1995 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,400 ft above NGVD of 1929, from topographic map. Data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. No diversions upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	e9.2	e7.4	6.0	5.3	4.9	6.5	18	169	136	26	10
2	11	e9.0	e7.6	5.9	5.3	4.8	5.8	18	144	150	25	10
3	10	9.0	e7.4	5.8	5.1	4.8	6.2	19	124	145	23	9.8
4	10	8.7	7.5	5.7	5.2	4.8	5.9	20	98	123	22	9.6
5	10	8.6	7.4	5.6	5.1	4.8	5.7	22	105	114	21	9.4
6	10	8.8	7.4	5.5	4.7	4.9	5.7	26	143	113	21	9.3
7	9.8	9.0	7.5	5.7	5.2	4.9	6.4	36	132	110	20	8.9
8	9.6	9.0	7.6	5.6	5.0	5.0	7.2	35	102	110	19	8.6
9	9.4	8.7	7.4	6.1	5.0	5.1	7.0	35	82	100	19	8.7
10	9.3	8.7	7.6	5.6	4.8	5.4	6.7	39	78	94	18	9.4
11	9.1	8.7	7.6	5.5	4.8	5.6	6.7	41	64	83	18	9.3
12	9.0	8.6	7.5	e5.4	5.4	5.9	6.8	38	67	74	17	9.2
13	8.8	8.5	7.1	5.2	5.0	7.2	7.5	34	64	69	17	9.0
14	8.7	8.5	6.9	5.1	5.0	9.6	8.2	35	69	65	16	9.0
15	8.6	9.0	7.0	5.4	4.4	8.0	8.4	40	107	59	16	8.7
16	8.4	e9.4	6.8	e5.2	4.0	6.1	8.4	69	170	60	16	8.5
17	8.4	8.0	6.5	5.3	3.8	6.2	10	97	201	61	16	9.0
18	9.1	9.0	6.5	5.2	4.8	8.2	12	71	211	57	21	8.9
19	8.9	8.1	6.5	5.3	e5.2	6.0	12	88	209	53	18	8.7
20	11	8.6	6.3	5.2	e5.8	6.0	11	189	231	50	16	8.5
21	10	e8.8	5.8	5.2	e5.2	5.9	11	238	261	46	15	9.3
22	9.3	e9.0	4.8	5.1	4.9	5.9	11	202	269	44	15	9.5
23	9.8	e8.6	4.5	5.1	4.9	6.0	12	215	229	43	14	9.8
24	9.3	e8.6	5.3	e5.0	6.0	5.9	14	225	219	39	14	11
25	8.9	8.4	6.7	e4.9	5.4	5.7	18	190	213	37	13	11
26	9.0	8.2	6.5	e5.0	4.9	5.7	22	173	193	34	12	9.9
27	9.0	e8.6	6.1	e5.2	4.9	5.7	24	181	167	32	12	9.7
28	9.4	e8.8	6.0	5.1	4.9	5.7	21	173	155	30	11	9.4
29	9.2	e7.0	6.1	5.0	---	5.7	20	188	144	29	11	9.2
30	9.4	e5.8	5.9	5.0	---	5.7	19	164	133	27	11	9.0
31	9.2	---	6.3	4.5	---	6.0	---	148	---	27	11	---
TOTAL	293.6	256.9	207.5	165.4	140.0	182.1	326.1	3,067	4,553	2,214	524	280.3
MEAN	9.47	8.56	6.69	5.34	5.00	5.87	10.9	98.9	152	71.4	16.9	9.34
MAX	12	9.4	7.6	6.1	6.0	9.6	24	238	269	150	26	11
MIN	8.4	5.8	4.5	4.5	3.8	4.8	5.7	18	64	27	11	8.5
AC-FT	582	510	412	328	278	361	647	6,080	9,030	4,390	1,040	556

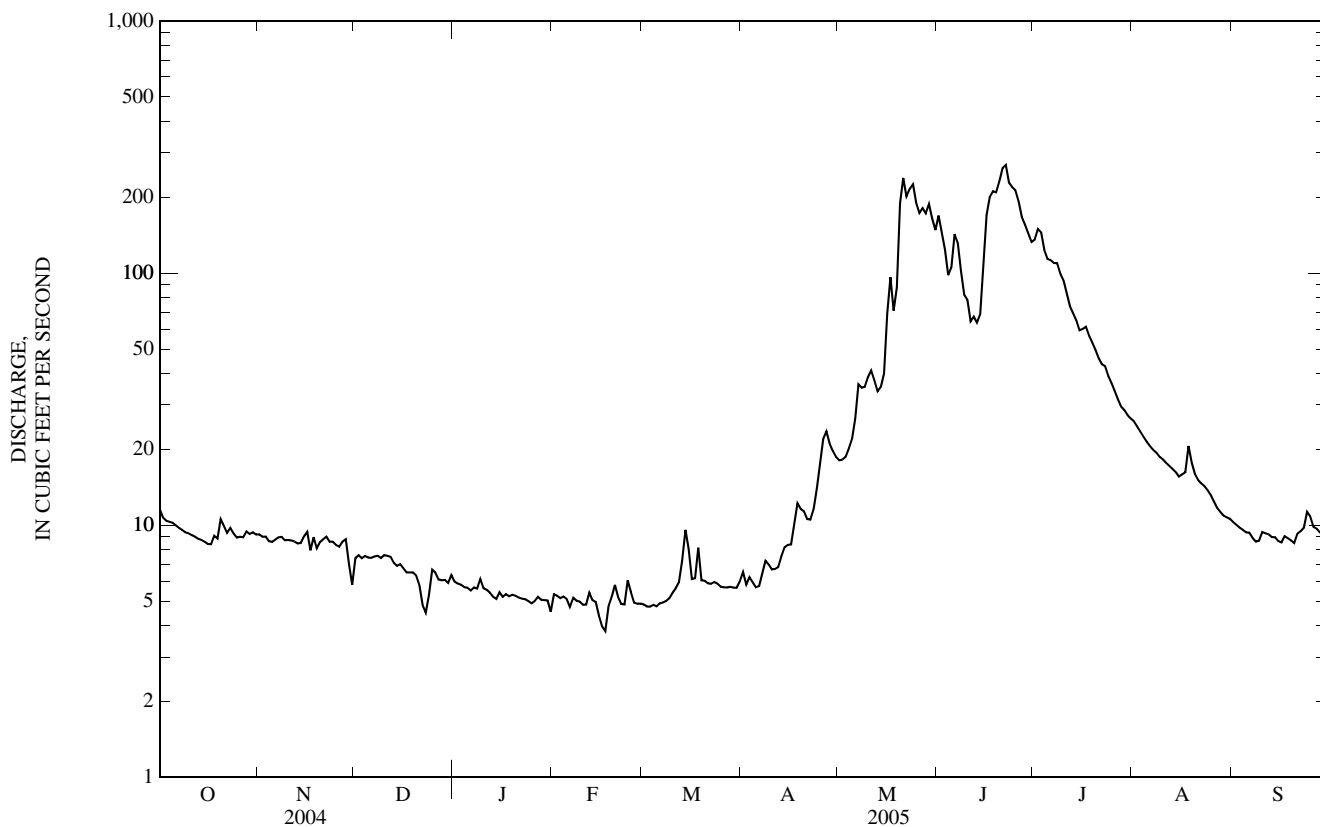
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2005, BY WATER YEAR (WY)

MEAN	9.15	7.97	6.15	4.98	4.54	4.93	12.2	91.6	191	105	25.6	12.6
MAX	16.0	14.5	8.73	8.10	6.32	6.39	20.9	149	349	184	48.7	22.5
(WY)	(1998)	(1998)	(1998)	(1998)	(1999)	(2004)	(2004)	(1997)	(1997)	(1998)	(1997)	(1997)
MIN	6.21	5.26	3.77	1.65	1.77	3.46	8.54	52.2	94.0	31.4	11.7	6.92
(WY)	(2002)	(2004)	(2001)	(2001)	(2001)	(1996)	(1999)	(1999)	(2001)	(2001)	(2001)	(2001)

13016305 GRANITE CREEK ABOVE GRANITE CREEK SUPPLEMENTAL, NEAR MOOSE, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1995 - 2005	
ANNUAL TOTAL	12,820.0		12,209.9		--	
ANNUAL MEAN	35.0		33.5		39.0	
HIGHEST ANNUAL MEAN	--		--		63.2 1997	
LOWEST ANNUAL MEAN	--		--		26.7 2001	
HIGHEST DAILY MEAN	272	Jun 6	269	Jun 22	490	Jun 9, 1997
LOWEST DAILY MEAN	2.8	Jan 6	3.8	Feb 17	1.2	Jan 9, 1996
ANNUAL SEVEN-DAY MINIMUM	3.1	Jan 22	4.6	Feb 13	1.3	Jan 5, 1996
MAXIMUM PEAK FLOW	--		315	Jun 22	599 ^{a,b}	May 16, 2001
MAXIMUM PEAK STAGE	--		5.50	Jun 22	6.58 ^b	Jun 9, 1997
ANNUAL RUNOFF (AC-FT)	25,430		24,220		28,230	
10 PERCENT EXCEEDS	108		118		131	
50 PERCENT EXCEEDS	11		9.0		9.1	
90 PERCENT EXCEEDS	3.6		5.1		4.1	

a Gage height, 5.02 ft.
 b At datum then in use.
 e Estimated.



13016450 FISH CREEK AT WILSON, WY

LOCATION.--Lat 43°30'03", long 110°52'15" (NAD 27), in NW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.22, T.41 N., R.117 W., Teton County, Hydrologic Unit 17040103, on left bank 20 ft downstream from bridge on Fish Creek Road (County Road 3) in Wilson.

DRAINAGE AREA.--71.1 mi².

PERIOD OF RECORD.--March 1994 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,150 ft above NGVD of 1929, from topographic map. Data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow of stream affected by transbasin diversion from Snake River through Granite Creek Supplemental for irrigation in Fish Creek Basin and by additional diversions upstream from station within Fish Creek Basin. See station 13016305.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	159	60	43	e40	34	33	45	62	512	561	375	274
2	136	56	43	e39	34	33	49	63	507	577	377	296
3	118	56	42	e38	34	33	55	74	434	601	369	286
4	109	56	42	e38	35	33	58	83	357	581	357	282
5	100	55	42	e37	35	32	58	91	314	552	351	268
6	93	54	41	e36	34	33	60	108	379	523	353	263
7	87	53	43	e36	34	33	62	147	427	503	340	250
8	84	53	42	e37	34	33	63	161	415	476	330	242
9	80	53	41	e38	34	34	62	167	417	464	316	247
10	78	52	40	e39	33	35	61	189	416	455	316	262
11	76	51	40	e39	33	36	61	221	417	433	315	264
12	74	51	41	e38	34	37	60	210	433	408	300	270
13	74	50	41	e37	34	37	61	195	517	399	293	278
14	72	50	40	e36	34	37	60	184	513	486	295	277
15	70	49	39	e36	33	37	59	187	519	511	292	276
16	69	49	39	e35	34	36	58	220	572	498	292	275
17	68	48	39	e37	36	37	58	297	611	466	318	275
18	68	48	39	e38	33	36	58	302	664	456	372	271
19	66	47	39	e38	32	36	57	316	598	429	413	264
20	76	46	39	e37	32	37	57	394	608	406	407	259
21	74	46	38	37	33	39	56	526	655	380	367	282
22	68	46	38	37	33	40	55	576	748	367	310	311
23	68	45	39	36	33	41	55	595	815	367	275	308
24	69	46	37	36	33	43	55	593	795	360	285	321
25	65	46	38	36	33	42	54	553	796	357	295	320
26	63	45	37	35	33	42	54	513	722	361	292	314
27	61	45	37	35	33	43	65	503	681	385	282	301
28	63	44	37	35	33	44	78	506	619	377	268	283
29	62	43	e38	35	---	46	61	530	578	367	273	277
30	62	43	e38	35	---	45	62	523	555	378	265	280
31	62	---	e39	35	---	45	---	471	---	377	262	---
TOTAL	2,474	1,486	1,231	1,141	940	1,168	1,757	9,560	16,594	13,861	9,955	8,376
MEAN	79.8	49.5	39.7	36.8	33.6	37.7	58.6	308	553	447	321	279
MAX	159	60	43	40	36	46	78	595	815	601	413	321
MIN	61	43	37	35	32	32	45	62	314	357	262	242
AC-FT	4,910	2,950	2,440	2,260	1,860	2,320	3,490	18,960	32,910	27,490	19,750	16,610

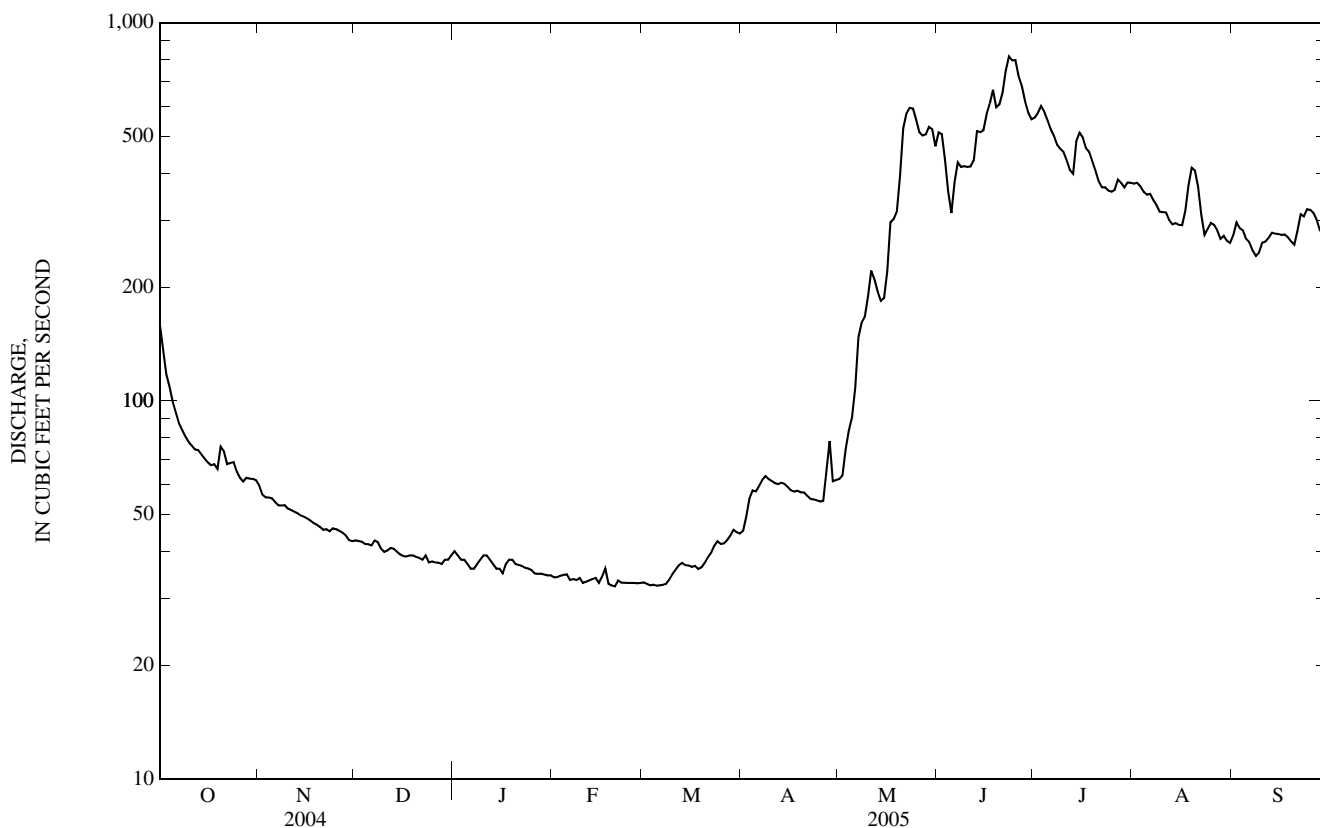
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2005, BY WATER YEAR (WY)

MEAN	84.6	51.6	42.5	39.4	38.1	43.3	69.0	233	581	437	291	218
MAX	130	71.1	57.3	57.3	45.0	51.1	102	377	962	559	385	325
(WY)	(2001)	(2001)	(1996)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)	(1999)	(2004)	(2004)
MIN	53.8	37.6	33.5	31.8	31.8	36.6	49.5	139	351	280	224	137
(WY)	(2004)	(2004)	(2004)	(2002)	(2001)	(2002)	(2001)	(1995)	(1994)	(1994)	(1996)	(1994)

13016450 FISH CREEK AT WILSON, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1994 - 2005	
ANNUAL TOTAL	69,880		68,543		--	
ANNUAL MEAN	191		188		181	
HIGHEST ANNUAL MEAN	--		--		222 1997	
LOWEST ANNUAL MEAN	--		--		161 1995	
HIGHEST DAILY MEAN	952	Jun 11	815	Jun 23	1,350	Jun 9, 1997
LOWEST DAILY MEAN	34	Jan 2	32	Feb 19	29	Jan 10, 2003
ANNUAL SEVEN-DAY MINIMUM	34	Jan 2	33	Feb 18	31	Jan 16, 2003
MAXIMUM PEAK FLOW	--	--	859	Jun 23	1,430	Jun 8, 1997
MAXIMUM PEAK STAGE	--	--	4.41	Jun 23	5.41	Jun 8, 1997
INSTANTANEOUS LOW FLOW	--	--	--	--	34	Jan 31, 1998
ANNUAL RUNOFF (AC-FT)	138,600		136,000		131,500	
10 PERCENT EXCEEDS	486		504		466	
50 PERCENT EXCEEDS	66		62		68	
90 PERCENT EXCEEDS	36		35		36	

e Estimated.



13018300 CACHE CREEK NEAR JACKSON, WY

LOCATION.--Lat 43°27'08", long 110°42'12" (NAD 27), in SW¹/₄ SW¹/₄ SE¹/₄ sec.1, T.40 N., R.116 W., Teton County, Hydrologic Unit 17040103, Teton National Forest, on right bank 0.7 mi upstream from Salt Lick Draw, 2.4 mi southeast of Jackson, and 4.0 mi upstream from mouth.

DRAINAGE AREA.--10.6 mi².

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

REVISED RECORDS.--WDR WY-76-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,750 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	6.0	e4.0	3.8	3.5	3.4	e3.5	7.5	e43	23	12	e7.1
2	6.6	7.6	e4.3	3.8	3.4	3.4	3.6	7.6	e40	23	11	e7.1
3	6.6	7.1	e4.2	3.8	3.5	3.4	3.7	7.8	e34	22	11	e7.1
4	6.6	5.2	4.1	3.8	3.5	3.4	3.7	8.4	e28	21	11	e7.0
5	6.5	5.1	4.1	3.8	3.5	3.4	3.6	9.8	e31	21	10	e7.0
6	6.4	5.0	4.1	3.8	3.4	3.4	3.7	13	e35	20	10	e6.9
7	6.4	5.0	4.2	3.7	3.5	3.4	3.8	14	e32	19	10	6.9
8	6.3	5.0	4.2	3.7	3.5	3.4	4.0	14	30	19	9.9	6.9
9	6.3	5.0	4.1	3.7	3.5	3.4	3.9	15	28	18	9.8	6.9
10	6.3	5.0	4.2	3.7	3.5	3.4	3.8	17	26	18	9.7	6.7
11	6.3	4.9	4.2	3.7	3.5	3.4	3.9	18	25	18	9.6	6.7
12	6.1	4.9	4.1	3.6	3.5	3.5	4.0	17	27	17	9.4	6.9
13	5.9	4.8	4.0	3.6	3.5	3.6	4.3	16	26	17	9.4	6.6
14	5.9	4.9	4.0	3.6	3.5	e3.5	4.6	16	25	16	9.3	6.5
15	5.9	4.7	4.0	3.6	3.4	3.5	4.7	17	26	16	9.1	6.5
16	5.9	5.5	4.0	3.6	3.3	3.4	4.7	23	29	16	9.2	6.4
17	5.9	4.7	e3.8	3.6	3.4	3.4	5.4	32	31	15	9.7	6.5
18	6.2	4.7	e3.9	3.6	3.4	e3.4	6.3	26	32	15	11	6.4
19	5.7	4.5	e3.8	3.6	3.5	3.4	6.2	30	31	15	9.9	6.2
20	6.8	4.7	4.1	3.6	3.5	3.4	5.9	e45	31	14	9.4	6.0
21	6.5	e4.9	e4.0	3.6	3.5	3.4	5.6	e63	32	14	9.2	6.2
22	5.9	e5.0	e3.6	3.6	3.4	3.4	5.7	e63	32	14	9.0	6.1
23	5.9	5.2	e3.4	3.6	3.5	3.5	6.2	e70	32	14	8.7	6.3
24	5.7	5.0	e3.8	3.6	3.4	3.5	6.9	e70	31	13	8.6	6.7
25	5.5	4.6	4.0	3.5	3.4	3.5	7.8	e59	30	13	8.3	6.2
26	5.5	4.4	3.8	3.5	3.4	3.5	8.6	e50	29	13	8.2	6.1
27	5.5	4.5	4.1	3.5	3.4	3.5	8.9	e46	28	13	8.2	6.1
28	5.9	e5.0	3.9	3.5	3.4	3.5	8.6	e45	26	13	8.1	6.0
29	5.6	e4.2	3.9	3.5	---	3.5	7.8	e47	25	13	7.9	5.8
30	5.4	e3.6	3.9	3.5	---	3.5	7.5	e44	24	12	e7.8	5.7
31	5.2	---	3.9	3.5	---	e3.5	---	e41	---	12	e7.5	---
TOTAL	188.1	150.7	123.7	112.6	96.7	106.8	160.9	952.1	899	507	291.9	195.5
MEAN	6.07	5.02	3.99	3.63	3.45	3.45	5.36	30.7	30.0	16.4	9.42	6.52
MAX	6.9	7.6	4.3	3.8	3.5	3.6	8.9	70	43	23	12	7.1
MIN	5.2	3.6	3.4	3.5	3.3	3.4	3.5	7.5	24	12	7.5	5.7
AC-FT	373	299	245	223	192	212	319	1,890	1,780	1,010	579	388

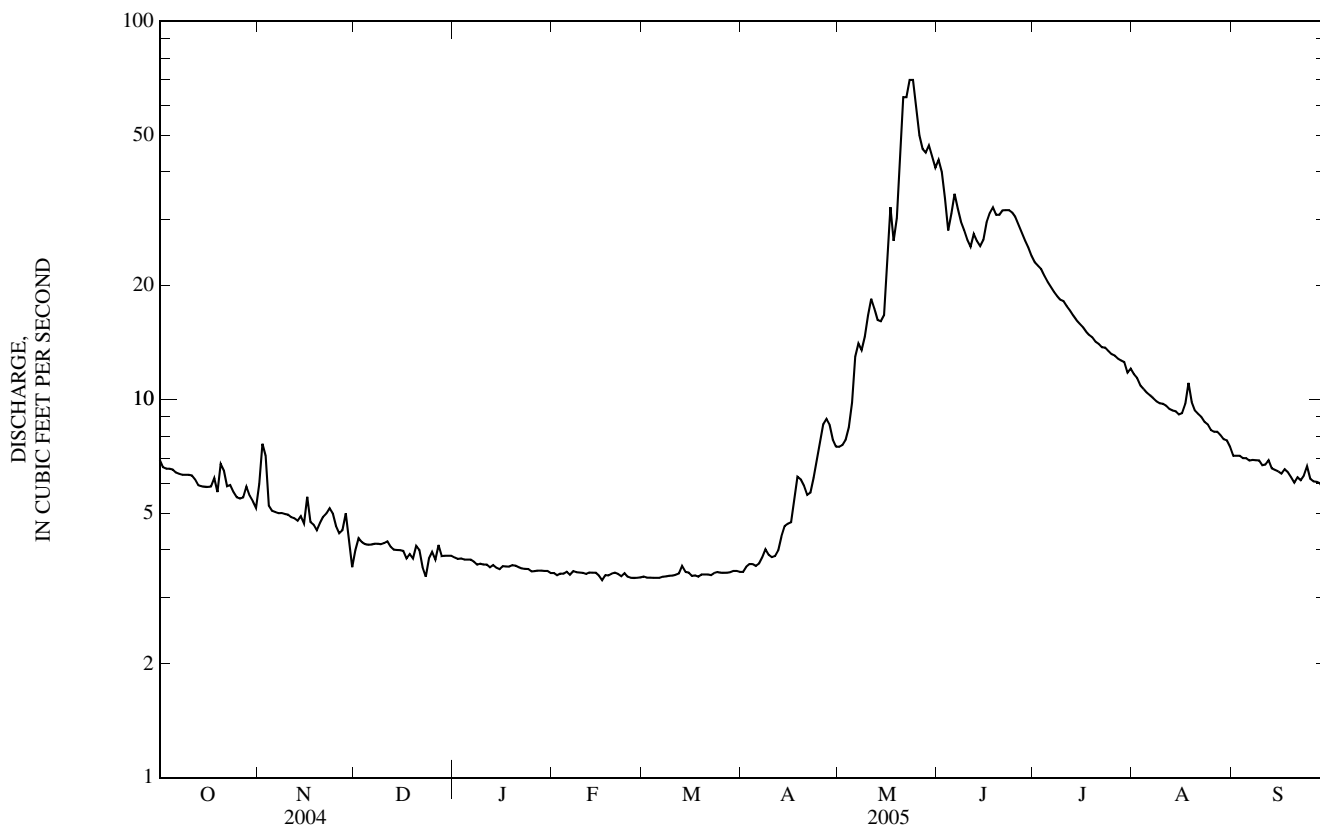
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2005, BY WATER YEAR (WY)

MEAN	6.64	5.61	4.93	4.29	3.95	3.99	6.39	25.5	47.4	23.2	11.7	8.12
MAX	9.43	7.57	6.85	5.91	6.09	7.25	14.2	52.1	103	42.0	18.5	12.3
(WY)	(1972)	(1997)	(1999)	(1981)	(1984)	(1984)	(1987)	(1997)	(1971)	(1965)	(1971)	(1971)
MIN	3.83	3.14	1.53	2.42	2.06	2.23	3.21	5.86	10.6	6.51	4.19	3.83
(WY)	(1993)	(1978)	(1991)	(1978)	(1992)	(1991)	(1991)	(1977)	(1992)	(1977)	(1992)	(1992)

13018300 CACHE CREEK NEAR JACKSON, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1962 - 2005	
ANNUAL TOTAL	3,440.3		3,785.0		--	
ANNUAL MEAN	9.40		10.4		12.7	
HIGHEST ANNUAL MEAN	--		--		20.5 1997	
LOWEST ANNUAL MEAN	--		--		5.64 1992	
HIGHEST DAILY MEAN	33	Jun 6-8	70	May 23	161	Jun 24, 1971
LOWEST DAILY MEAN	3.4	Many days	3.3	Feb 16	1.1	Dec 23, 1990
ANNUAL SEVEN-DAY MINIMUM	3.4	Feb 28	3.4	Feb 24	1.3	Dec 20, 1990
MAXIMUM PEAK FLOW	--	--	83 ^a	May 23	225 ^b	Jun 24, 1971
MAXIMUM PEAK STAGE	--	--	4.24	May 23	5.16 ^c	Oct 31, 2002
ANNUAL RUNOFF (AC-FT)	6,820		7,510		9,170	
10 PERCENT EXCEEDS	22		26		31	
50 PERCENT EXCEEDS	6.2		5.9		6.4	
90 PERCENT EXCEEDS	3.6		3.5		3.6	

- a Maximum discharge, 83 ft³/s; maximum gage height, 4.24 ft May 23, but may have been higher during period of partial gage-height record May 20-June 7.
- b Gage height, 3.90 ft, site and datum then in use.
- c Backwater from ice.
- e Estimated.



13018350 FLAT CREEK BELOW CACHE CREEK, NEAR JACKSON, WY

LOCATION.--Lat 43°27'30", long 110°47'46" (NAD 27), in SW¹/₄ SE¹/₄ NE¹/₄ sec. 6, T.40 N., R.116 W., Teton County, Hydrologic Unit 17040103, on left bank 8 ft upstream from county bridge on High School Road, 2.1 mi southwest of Post Office in Jackson, and 3.0 mi downstream from Cache Creek.

DRAINAGE AREA.--129 mi².

PERIOD OF RECORD.--April 1989 to September 1996 (no winter records), October 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,130 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	67	e62	69	66	55	52	51	177	160	88	54
2	62	68	e66	67	67	52	53	51	165	155	89	54
3	60	68	e68	66	70	53	54	75	163	152	87	54
4	65	67	e70	65	67	53	56	86	157	149	84	54
5	70	67	e70	65	59	53	54	88	154	146	82	54
6	70	66	68	66	71	53	52	95	159	137	80	53
7	70	65	65	e72	61	55	52	119	160	130	77	47
8	69	65	66	70	64	59	53	118	154	123	76	41
9	69	65	69	74	60	64	51	127	149	119	76	41
10	70	67	70	69	64	72	49	139	146	119	74	41
11	69	65	75	64	65	77	48	170	141	118	74	42
12	69	65	75	e63	61	89	48	173	148	119	73	45
13	68	65	66	e60	60	88	48	160	142	120	72	46
14	68	64	64	e61	61	71	48	145	135	116	72	43
15	69	63	67	e62	65	66	46	141	131	110	72	42
16	68	66	65	e64	e64	64	45	139	134	104	73	43
17	68	67	65	e64	e62	66	45	150	141	101	81	45
18	76	65	65	e64	e63	58	45	152	150	101	92	45
19	73	65	68	e69	e62	58	45	156	160	100	92	43
20	92	63	66	e66	61	68	49	165	168	95	91	43
21	93	65	e64	64	58	67	50	178	172	88	91	49
22	88	e66	e62	63	58	63	49	175	176	86	89	51
23	85	64	e60	62	58	66	49	168	182	86	78	52
24	82	64	e62	67	60	67	50	161	184	90	67	64
25	74	67	e62	69	59	63	49	167	184	96	64	58
26	72	65	e64	68	59	60	51	172	186	93	61	53
27	71	e64	e62	66	59	58	55	172	187	90	59	50
28	77	e63	e64	62	58	60	56	174	181	88	57	49
29	77	e60	64	61	---	56	52	175	174	87	56	50
30	72	e58	64	61	---	54	52	176	167	88	54	56
31	71	---	68	62	---	51	---	166	---	88	54	---
TOTAL	2,253	1,949	2,046	2,025	1,742	1,939	1,506	4,384	4,827	3,454	2,335	1,462
MEAN	72.7	65.0	66.0	65.3	62.2	62.5	50.2	141	161	111	75.3	48.7
MAX	93	68	75	74	71	89	56	178	187	160	92	64
MIN	60	58	60	60	58	51	45	51	131	86	54	41
AC-FT	4,470	3,870	4,060	4,020	3,460	3,850	2,990	8,700	9,570	6,850	4,630	2,900

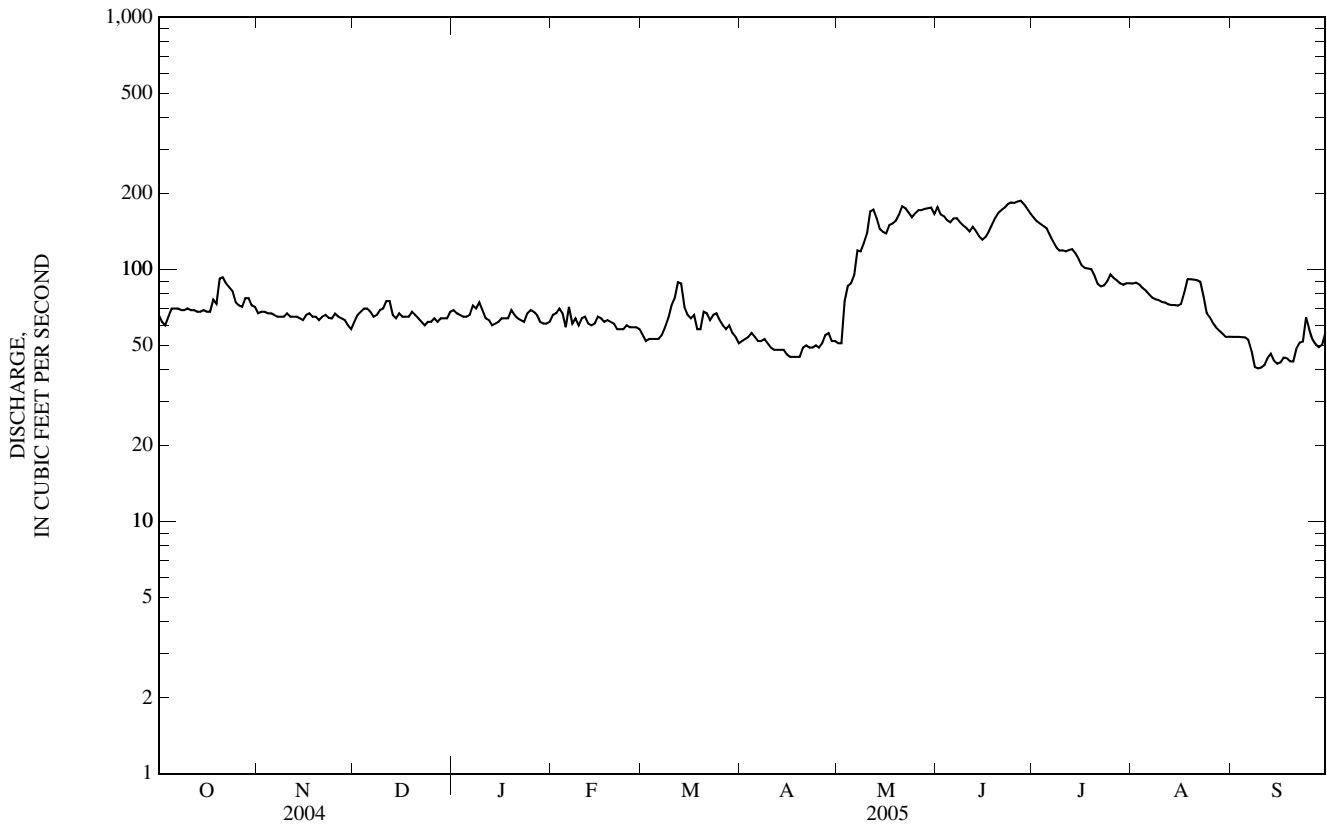
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2005, BY WATER YEAR (WY)*

MEAN	72.6	68.6	66.3	61.0	59.5	63.5	60.7	102	134	114	75.7	52.7
MAX	111	97.7	98.2	85.3	80.4	78.9	70.1	141	218	189	162	84.2
(WY)	(2000)	(2000)	(2000)	(2000)	(2000)	(2000)	(1990)	(2005)	(1996)	(1995)	(1993)	(1991)
MIN	52.1	56.2	53.9	43.1	45.6	50.2	50.0	82.1	57.1	58.3	31.4	25.7
(WY)	(2002)	(2004)	(2002)	(2002)	(2002)	(2003)	(2004)	(1989)	(1992)	(1992)	(2003)	(2001)

13018350 FLAT CREEK BELOW CACHE CREEK, NEAR JACKSON, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1989 - 2005*	
ANNUAL TOTAL	29,250		29,922		--	
ANNUAL MEAN	79.9		82.0		73.4	
HIGHEST ANNUAL MEAN	--		--		89.8	2000
LOWEST ANNUAL MEAN	--		--		62.7	2001
HIGHEST DAILY MEAN	185	Jul 7	187	Jun 27	256	Jul 13, 1995
LOWEST DAILY MEAN	32	Sep 22-26	41	Sep 8-10	14	Sep 22, 2001
ANNUAL SEVEN-DAY MINIMUM	34	Sep 20	43	Sep 8	15	Sep 19, 2001
MAXIMUM PEAK FLOW	--		203	Jun 1	277 ^a	Jul 12, 1995
MAXIMUM PEAK STAGE	--		2.59	Jun 1	4.18 ^b	Dec 8, 2001
ANNUAL RUNOFF (AC-FT)	58,020		59,350		53,180	
10 PERCENT EXCEEDS	155		154		118	
50 PERCENT EXCEEDS	65		66		64	
90 PERCENT EXCEEDS	40		51		43	

* For period of operation.
 a Gage height, 2.92 ft.
 b Backwater from ice.
 e Estimated.



13018750 SNAKE RIVER BELOW FLAT CREEK, NEAR JACKSON, WY

LOCATION.--Lat 43°22'20", long 110°44'19" (NAD 83), in NE¹/₄SE¹/₄ sec.3, T.39 N., R.116 W., Teton County, Wyoming, Hydrologic Unit 17040103, on left bank 20 ft upstream from county road bridge, about 1 mi downstream from Flat Creek, 4.8 mi upstream from Hoback River, 7.0 mi south of Jackson, and at mile 938.9.

DRAINAGE AREA.--2,627 mi².

PERIOD OF RECORD.--November 1975 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,950 ft above NGVD of 1929, from topographic map. Data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Station operated and record provided by the Idaho Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,170	e1,350	e1,000	1,210	1,120	1,090	1,210	1,780	5,440	6,380	3,240	2,740
2	1,860	e1,350	e1,000	1,180	e1,100	1,080	1,230	1,740	5,540	6,520	3,250	2,750
3	1,700	1,380	e1,050	1,190	e1,100	1,070	1,340	1,750	4,890	6,690	3,220	2,730
4	1,650	1,400	e1,000	1,170	e1,100	1,070	1,410	1,850	4,440	6,400	3,150	2,710
5	1,620	1,400	e1,050	1,160	1,130	1,070	1,400	1,970	4,160	5,940	3,090	2,690
6	1,580	1,380	e1,100	1,160	1,120	1,060	1,370	2,160	4,460	5,620	3,040	2,650
7	1,550	1,360	1,210	1,170	1,130	1,070	1,390	2,610	4,900	5,410	3,000	2,650
8	1,530	1,340	1,240	1,240	1,120	1,080	1,470	2,700	4,850	5,260	2,980	2,650
9	1,510	1,360	1,260	1,210	1,120	1,100	1,500	2,750	4,960	5,220	2,960	2,650
10	1,490	1,380	1,260	1,190	1,100	1,130	1,450	2,990	5,110	5,150	2,960	2,710
11	1,480	1,370	1,270	1,190	e1,050	1,160	1,410	3,490	5,280	5,030	2,980	2,760
12	1,460	1,360	1,300	e1,100	e1,100	1,180	1,390	3,450	5,730	4,840	2,940	2,790
13	1,450	1,330	1,270	e1,100	1,130	1,210	1,440	3,120	6,560	4,670	2,880	2,850
14	1,440	1,300	1,220	e1,150	1,130	1,150	1,490	2,910	6,940	4,500	2,890	2,840
15	1,430	1,280	1,230	e1,100	e1,000	1,140	1,490	3,050	7,310	4,480	2,860	2,840
16	1,410	1,260	1,220	e1,050	e950	1,150	1,430	3,510	7,840	4,410	2,840	2,820
17	1,400	1,270	1,190	e1,100	e1,000	1,160	1,460	4,450	8,500	4,280	3,020	2,830
18	1,460	1,300	1,180	1,150	e1,000	1,140	1,560	4,620	8,990	4,190	3,260	2,830
19	1,450	1,280	1,180	1,190	e1,050	1,140	1,610	4,380	9,040	4,030	3,490	2,810
20	1,600	e1,200	1,200	1,200	e1,050	1,180	1,600	6,110	8,690	3,870	3,340	2,770
21	1,670	e1,100	e1,150	1,180	1,100	1,200	1,550	8,470	8,690	3,740	3,170	2,830
22	1,590	e1,050	e1,100	1,160	1,100	1,210	1,480	8,990	8,890	3,680	3,080	2,910
23	1,560	e1,100	e1,000	1,150	1,080	1,240	1,490	8,570	9,340	3,670	2,970	2,940
24	1,590	e1,150	e1,050	e1,100	1,070	1,290	1,600	8,900	9,290	3,640	2,930	3,090
25	1,510	e1,200	e1,100	e1,100	1,080	1,240	1,770	8,240	8,910	3,540	2,910	3,130
26	1,450	e1,100	e1,100	e1,050	1,080	1,210	1,980	7,130	8,390	3,430	2,870	3,050
27	1,450	e1,050	1,150	e1,100	1,080	1,210	2,110	6,280	7,820	3,350	2,840	2,960
28	1,480	e1,100	1,190	e1,100	1,080	1,240	2,130	5,860	7,240	3,290	2,800	2,920
29	1,490	e1,000	1,190	1,140	---	1,270	1,930	5,940	6,930	3,240	2,780	2,880
30	1,470	e1,000	1,190	1,140	---	1,250	1,840	5,920	6,630	3,250	2,750	2,880
31	e1,400	---	1,220	1,120	---	1,220	---	5,380	---	3,220	2,730	---
TOTAL	47,900	37,500	35,870	35,550	30,270	36,010	46,530	141,070	205,760	140,940	93,220	84,660
MEAN	1,545	1,250	1,157	1,147	1,081	1,162	1,551	4,551	6,859	4,546	3,007	2,822
MAX	2,170	1,400	1,300	1,240	1,130	1,290	2,130	8,990	9,340	6,690	3,490	3,130
MIN	1,400	1,000	1,000	1,050	950	1,060	1,210	1,740	4,160	3,220	2,730	2,650
AC-FT	95,010	74,380	71,150	70,510	60,040	71,430	92,290	279,800	408,100	279,600	184,900	167,900

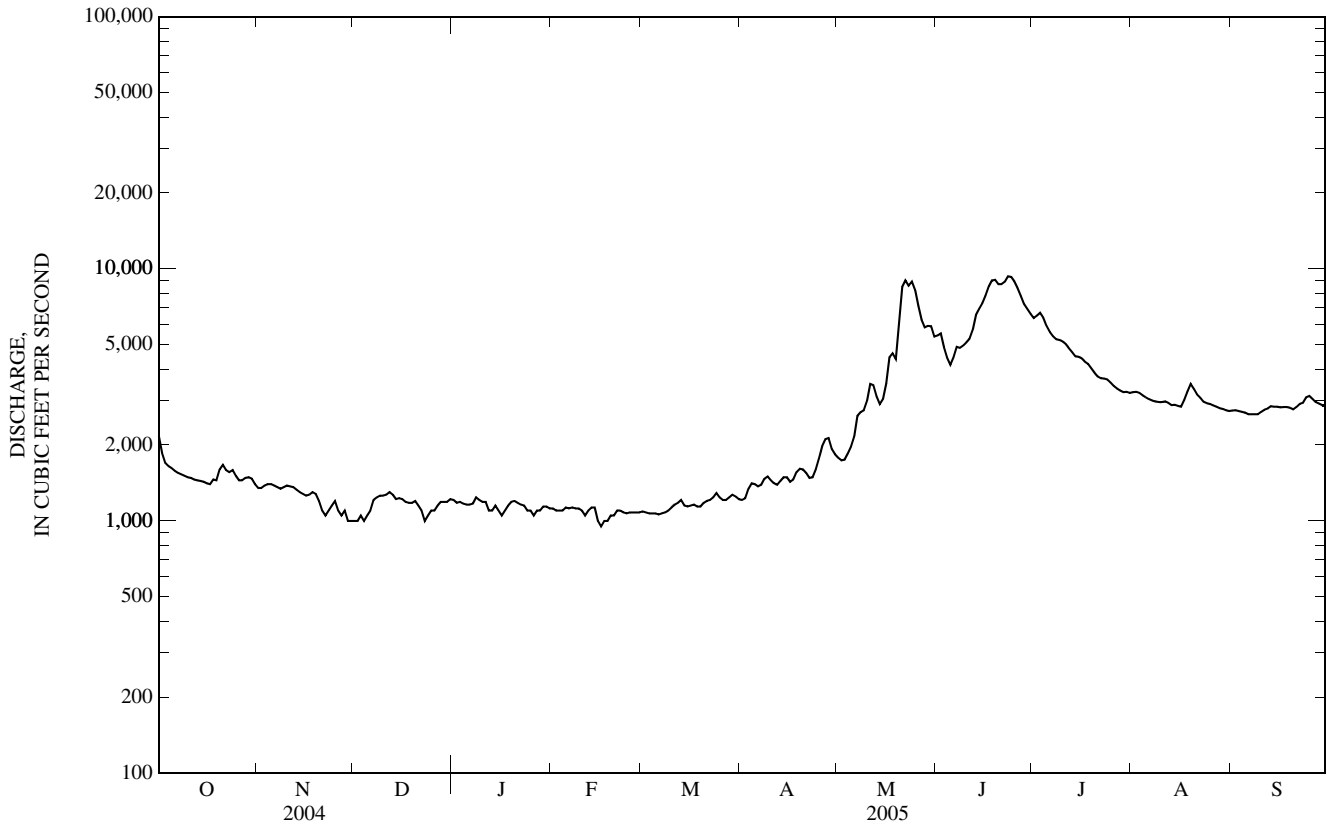
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2005, BY WATER YEAR (WY)

MEAN	1,842	1,522	1,375	1,295	1,319	1,566	2,560	6,510	10,760	6,617	4,357	3,547
MAX	3,093	2,747	1,998	2,345	2,491	3,686	5,435	12,060	22,180	14,090	7,253	6,464
(WY)	(1983)	(1984)	(1984)	(1997)	(1997)	(1997)	(1985)	(1997)	(1997)	(1982)	(1976)	(1984)
MIN	977	967	846	879	825	910	1,292	2,570	5,233	3,245	2,305	1,801
(WY)	(1989)	(1988)	(1988)	(1988)	(1989)	(1977)	(1977)	(1977)	(2001)	(1988)	(1981)	(1979)

13018750 SNAKE RIVER BELOW FLAT CREEK, NEAR JACKSON, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1976 - 2005	
ANNUAL TOTAL	1,093,330		935,280		--	
ANNUAL MEAN	2,987		2,562		3,576	
HIGHEST ANNUAL MEAN	--		--		6,110 1997	
LOWEST ANNUAL MEAN	--		--		2,469 1977	
HIGHEST DAILY MEAN	13,900	Jun 10	9,340	Jun 23	30,200	Jun 11, 1997
LOWEST DAILY MEAN	900	Feb 12	950	Feb 16	690	Jan 19, 1988
ANNUAL SEVEN-DAY MINIMUM	987	Feb 10	1,010	Nov 29	785	Feb 4, 1989
ANNUAL RUNOFF (AC-FT)	2,169,000		1,855,000		2,591,000	
10 PERCENT EXCEEDS	6,590		5,570		7,850	
50 PERCENT EXCEEDS	1,660		1,490		2,040	
90 PERCENT EXCEEDS	1,060		1,100		1,100	

e Estimated.



13022500 SNAKE RIVER ABOVE RESERVOIR, NEAR ALPINE, WY

LOCATION.--Lat 43°11'46", long 110°53'22" (NAD 83), Lincoln County, Hydrologic Unit 17040103, on right bank 0.3 mi downstream from Wolf Creek, 6.4 mi upstream from Greys River, 7.4 mi east of Alpine, 16.1 mi upstream from Palisades Dam, and at mile 917.5.

DRAINAGE AREA.--3,465 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 5,683.90 ft above NGVD of 1929, unadjusted. March 16, 1937 to March 31, 1939 at site 6.0 mi downstream from station at different datum. Data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Station operated and record provided by the Idaho Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,620	1,690	e1,200	1,420	e1,250	1,260	1,390	2,700	8,030	7,780	3,700	3,030
2	2,280	1,620	e1,200	1,370	e1,250	1,250	1,410	2,600	8,130	7,980	3,700	3,040
3	2,060	1,640	e1,250	1,380	e1,250	1,250	1,560	2,620	7,190	8,210	3,690	3,030
4	1,990	1,650	e1,200	1,390	e1,300	1,280	1,680	2,770	6,500	7,840	3,570	2,980
5	1,950	1,660	e1,300	1,380	1,320	1,240	1,710	3,030	6,150	7,230	3,500	2,950
6	1,910	1,630	e1,350	1,370	1,290	1,240	1,680	3,630	6,560	6,860	3,430	2,910
7	1,870	1,600	e1,400	1,400	1,320	1,290	1,750	4,290	7,060	6,650	3,390	2,900
8	1,840	1,590	1,480	1,460	1,260	1,240	1,890	4,390	6,810	6,470	3,350	2,890
9	1,810	1,610	1,500	1,470	1,290	1,270	1,910	4,520	6,620	6,300	3,320	2,880
10	1,780	1,650	1,480	1,420	1,240	1,330	1,860	4,760	6,610	6,190	3,290	2,930
11	1,770	1,630	1,490	1,390	e1,200	1,370	1,790	5,510	6,690	6,100	3,320	3,010
12	1,750	1,620	1,520	1,320	e1,250	1,390	1,810	5,540	7,150	5,800	3,280	3,030
13	1,730	1,600	1,500	e1,300	1,300	1,440	1,940	4,930	7,940	5,570	3,210	3,090
14	1,720	1,570	1,430	e1,300	1,320	1,400	2,150	4,580	8,350	5,320	3,210	3,060
15	1,700	1,520	1,460	e1,250	e1,200	1,340	2,060	4,710	8,740	5,270	3,180	3,060
16	1,690	1,490	1,420	e1,200	e1,150	1,360	1,990	5,530	9,700	5,140	3,150	3,040
17	1,670	1,510	1,370	e1,250	e1,200	1,380	2,130	7,190	10,700	4,970	3,340	3,040
18	1,740	1,520	1,360	e1,300	e1,200	1,330	2,390	7,060	11,500	4,840	3,560	3,040
19	1,740	1,520	1,370	1,370	e1,200	1,340	2,470	6,580	11,600	4,610	3,890	3,010
20	1,900	e1,450	1,420	1,410	e1,250	1,390	2,380	8,680	11,300	4,430	3,720	2,980
21	2,050	e1,350	1,340	1,360	e1,250	1,400	2,250	12,000	11,500	4,260	3,520	3,000
22	1,940	e1,300	e1,300	1,320	1,280	1,400	2,170	12,900	11,900	4,190	3,410	3,130
23	1,880	e1,330	e1,200	1,300	1,270	1,450	2,240	12,300	12,100	4,180	3,310	3,150
24	1,940	e1,370	e1,250	1,320	e1,200	1,540	2,440	12,800	11,900	4,140	3,250	3,320
25	1,820	e1,400	e1,300	e1,300	e1,200	1,470	2,760	11,900	11,400	4,000	3,220	3,360
26	1,760	e1,350	e1,300	e1,250	1,240	1,420	3,140	10,300	10,600	3,880	3,170	3,290
27	1,740	e1,300	e1,350	e1,300	1,250	1,410	3,340	9,150	9,760	3,770	3,140	3,200
28	1,790	e1,300	e1,400	e1,300	1,240	1,450	3,520	8,640	9,040	3,700	3,090	3,160
29	1,820	e1,200	1,420	1,340	---	1,480	3,110	8,800	8,600	3,640	3,070	3,100
30	1,790	e1,250	1,420	1,350	---	1,470	2,850	8,910	8,150	3,670	3,050	3,120
31	e1,750	---	1,430	1,280	---	1,420	---	8,050	---	3,680	3,030	---
TOTAL	57,800	44,920	42,410	41,570	34,970	42,300	65,770	211,370	268,280	166,670	104,060	91,730
MEAN	1,865	1,497	1,368	1,341	1,249	1,365	2,192	6,818	8,943	5,376	3,357	3,058
MAX	2,620	1,690	1,520	1,470	1,320	1,540	3,520	12,900	12,100	8,210	3,890	3,360
MIN	1,670	1,200	1,200	1,200	1,150	1,240	1,390	2,600	6,150	3,640	3,030	2,880
AC-FT	114,600	89,100	84,120	82,450	69,360	83,900	130,500	419,300	532,100	330,600	206,400	181,900

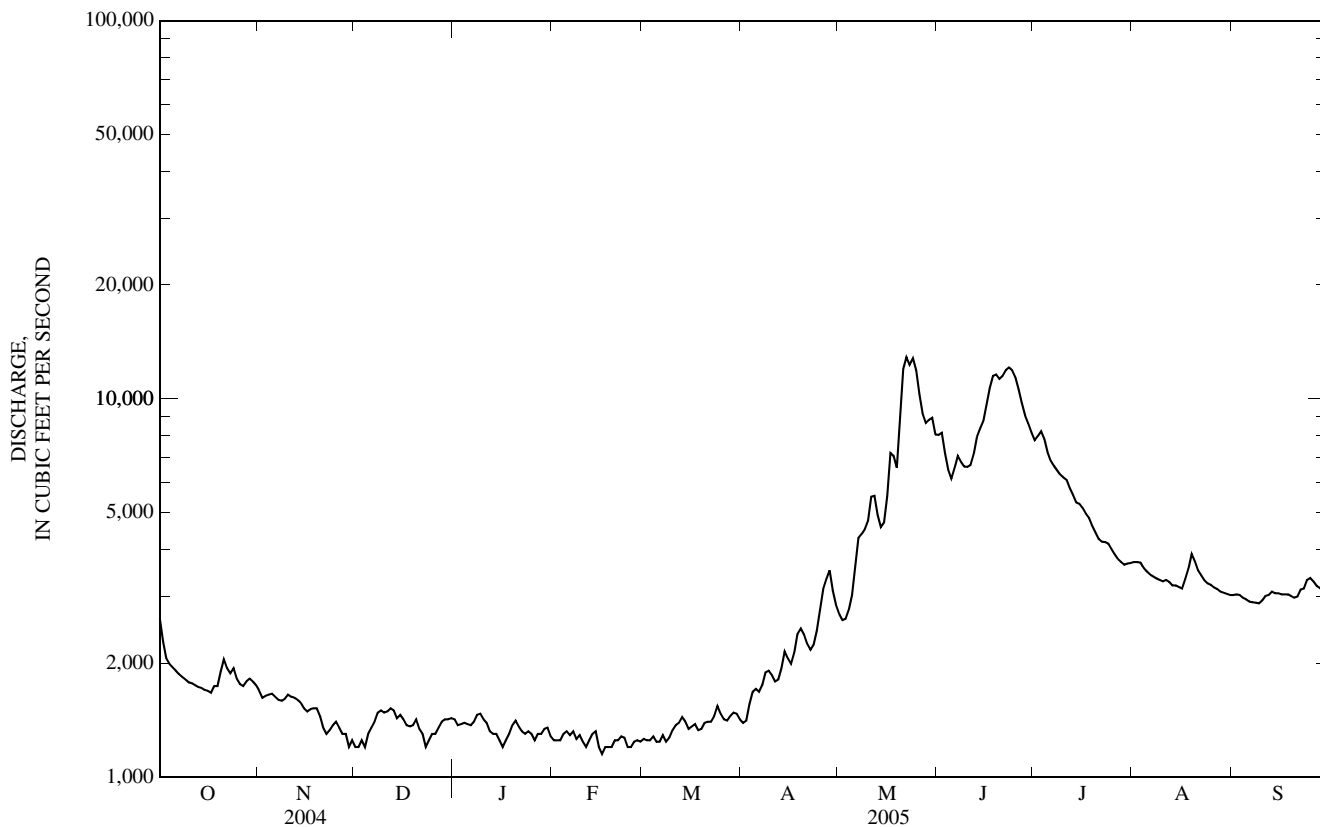
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2005, BY WATER YEAR (WY)

MEAN	2,170	1,835	1,675	1,506	1,582	1,819	3,298	8,735	13,210	8,377	5,315	4,081
MAX	3,605	4,244	5,795	2,694	3,381	4,116	6,820	15,890	28,180	15,790	7,541	7,595
(WY)	(1983)	(1957)	(1957)	(1997)	(1961)	(1997)	(1985)	(1997)	(1997)	(1982)	(1956)	(1984)
MIN	1,325	1,225	1,101	1,069	1,071	1,099	1,506	2,995	6,249	3,802	2,494	2,241
(WY)	(1978)	(1978)	(1988)	(1964)	(1938)	(1955)	(1955)	(1977)	(2001)	(1988)	(1981)	(1977)

13022500 SNAKE RIVER ABOVE RESERVOIR, NEAR ALPINE, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1937 - 2005	
ANNUAL TOTAL	1,306,610		1,171,850		--	
ANNUAL MEAN	3,570		3,211		4,490	
HIGHEST ANNUAL MEAN	--		--		7,525 1997	
LOWEST ANNUAL MEAN	--		--		2,726 1977	
HIGHEST DAILY MEAN	16,400	Jun 10	12,900	May 22	38,100	Jun 11, 1997
LOWEST DAILY MEAN	1,180	Feb 12	1,150	Feb 16	900	Dec 31, 1978
ANNUAL SEVEN-DAY MINIMUM	1,230	Feb 9	1,210	Feb 14	957	Jan 9, 1964
ANNUAL RUNOFF (AC-FT)	2,592,000		2,324,000		3,252,000	
10 PERCENT EXCEEDS	7,820		7,450		10,600	
50 PERCENT EXCEEDS	2,220		1,890		2,440	
90 PERCENT EXCEEDS	1,300		1,260		1,320	

e Estimated.



13023000 GREYS RIVER ABOVE RESERVOIR, NEAR ALPINE, WY

LOCATION.--Lat 43°08'34", long 110°58'36" (NAD 83), in SW¹/₄ SE¹/₄ sec.34, T.37 N., R.118 W. (unsurveyed), Lincoln County, Hydrologic Unit 17040103, on right bank at Bridge Campground, 3.6 mi southeast of Alpine, and 3.0 mi upstream from maximum flowline of Palisades Reservoir.

DRAINAGE AREA.--448 mi². Mean elevation, 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", 1917-1918, and as "Greys River near Alpine, Wyo.", 1937-39.

GAGE.--Water-stage recorder. Elevation of gage is 5,675.78 ft above NGVD of 1929. July 6 to September 30, 1917, and June 4 to September 30, 1918, nonrecording gage, and March 17, 1937 to March 31, 1939, water-stage recorder, at site 1.8 mi downstream from station, and October 1953 to September 22, 1965, water-stage recorder at site 1 mi downstream from station at different datums. Data collection platform from satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Less than 500 acres irrigated by diversions from Greys River and tributaries upstream from station. Station operated and record provided by the Idaho Water Science Center.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	316	269	e180	e210	e180	187	212	822	2,230	1,270	546	391
2	305	256	e190	e220	e180	181	236	812	2,070	1,240	555	385
3	298	280	e180	e210	e180	180	267	829	1,850	1,220	542	382
4	294	295	e170	e210	e180	186	294	889	1,710	1,160	523	375
5	290	279	e180	e190	e180	181	285	989	1,660	1,110	519	371
6	288	275	e190	e200	e170	182	275	1,250	1,750	1,060	505	368
7	284	270	e200	e200	e180	189	341	1,390	1,730	1,040	497	365
8	282	275	e220	e200	e170	195	412	1,300	1,630	1,010	488	364
9	279	283	e240	e210	e170	203	404	1,400	1,530	980	482	364
10	277	278	e260	e210	e160	214	402	1,480	1,420	952	477	375
11	276	279	277	e210	e150	221	400	1,620	1,350	921	475	376
12	274	282	257	e200	e170	236	441	1,470	1,460	873	465	382
13	271	274	239	e190	e180	234	547	1,380	1,390	836	461	385
14	270	259	227	e180	e170	222	637	1,330	1,330	807	454	370
15	269	248	231	e170	e160	228	559	1,390	1,380	785	446	362
16	265	e240	224	e180	e140	226	579	1,710	1,560	758	450	356
17	263	e220	197	e190	e150	234	689	2,000	1,710	736	484	357
18	305	e220	e190	e190	e150	218	818	1,690	1,800	715	508	360
19	288	e200	e200	e200	e160	223	796	1,680	1,770	691	511	350
20	346	e220	e200	e190	e160	231	746	1,960	1,790	667	450	345
21	385	e190	e190	e190	e170	222	647	2,330	1,830	649	433	346
22	333	e180	e180	e190	e170	220	616	2,210	1,890	635	426	353
23	324	e190	e170	e190	e170	236	687	2,310	1,890	633	425	354
24	338	e200	e180	e180	e170	243	806	2,380	1,840	622	421	377
25	302	e200	e180	e180	e180	225	885	2,240	1,750	614	411	352
26	301	e200	e190	e190	e180	220	1,010	2,070	1,650	598	403	343
27	295	e200	e200	e190	e180	219	1,060	1,960	1,520	584	398	339
28	311	e190	e210	e200	183	229	1,130	1,920	1,440	571	393	337
29	328	e170	e210	e190	---	230	974	1,980	1,390	563	387	330
30	309	e170	e210	e190	---	226	886	2,190	1,310	551	387	327
31	311	---	e210	e190	---	214	---	1,950	---	547	393	---
TOTAL	9,277	7,092	6,382	6,040	4,743	6,655	18,041	50,931	49,630	25,398	14,315	10,841
MEAN	299	236	206	195	169	215	601	1,643	1,654	819	462	361
MAX	385	295	277	220	183	243	1,130	2,380	2,230	1,270	555	391
MIN	263	170	170	170	140	180	212	812	1,310	547	387	327
AC-FT	18,400	14,070	12,660	11,980	9,410	13,200	35,780	101,000	98,440	50,380	28,390	21,500

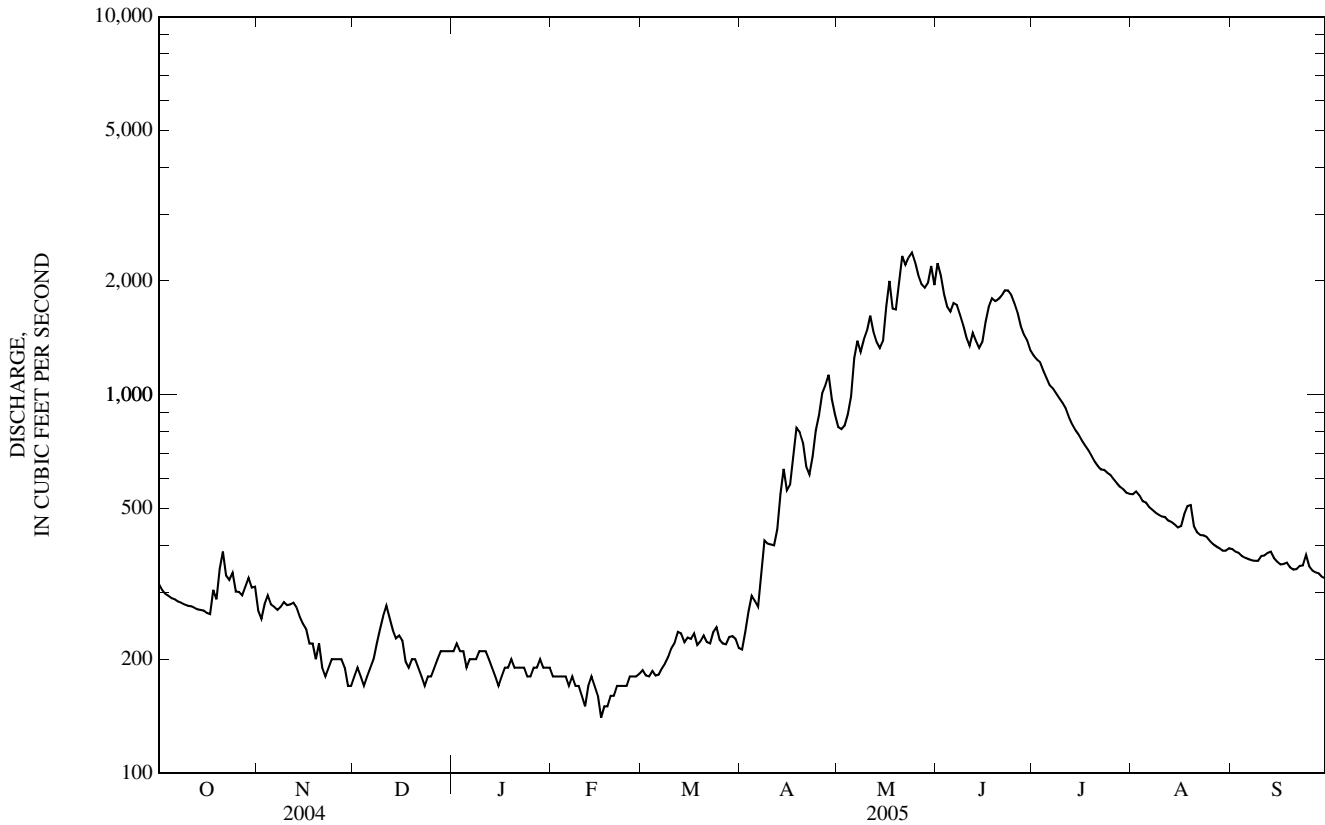
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2005, BY WATER YEAR (WY)

MEAN	312	264	228	209	201	231	637	1,752	1,971	926	478	366
MAX	472	455	366	315	293	406	1,324	3,032	3,998	1,904	809	569
(WY)	(1983)	(1984)	(1984)	(1971)	(1963)	(1986)	(1962)	(1997)	(1971)	(1975)	(1971)	(1997)
MIN	191	150	142	131	132	164	238	333	387	228	205	198
(WY)	(1993)	(1993)	(1993)	(2004)	(1993)	(2002)	(1975)	(1977)	(1977)	(1977)	(1977)	(1997)

13023000 GREYS RIVER ABOVE RESERVOIR, NEAR ALPINE, WY—Continued

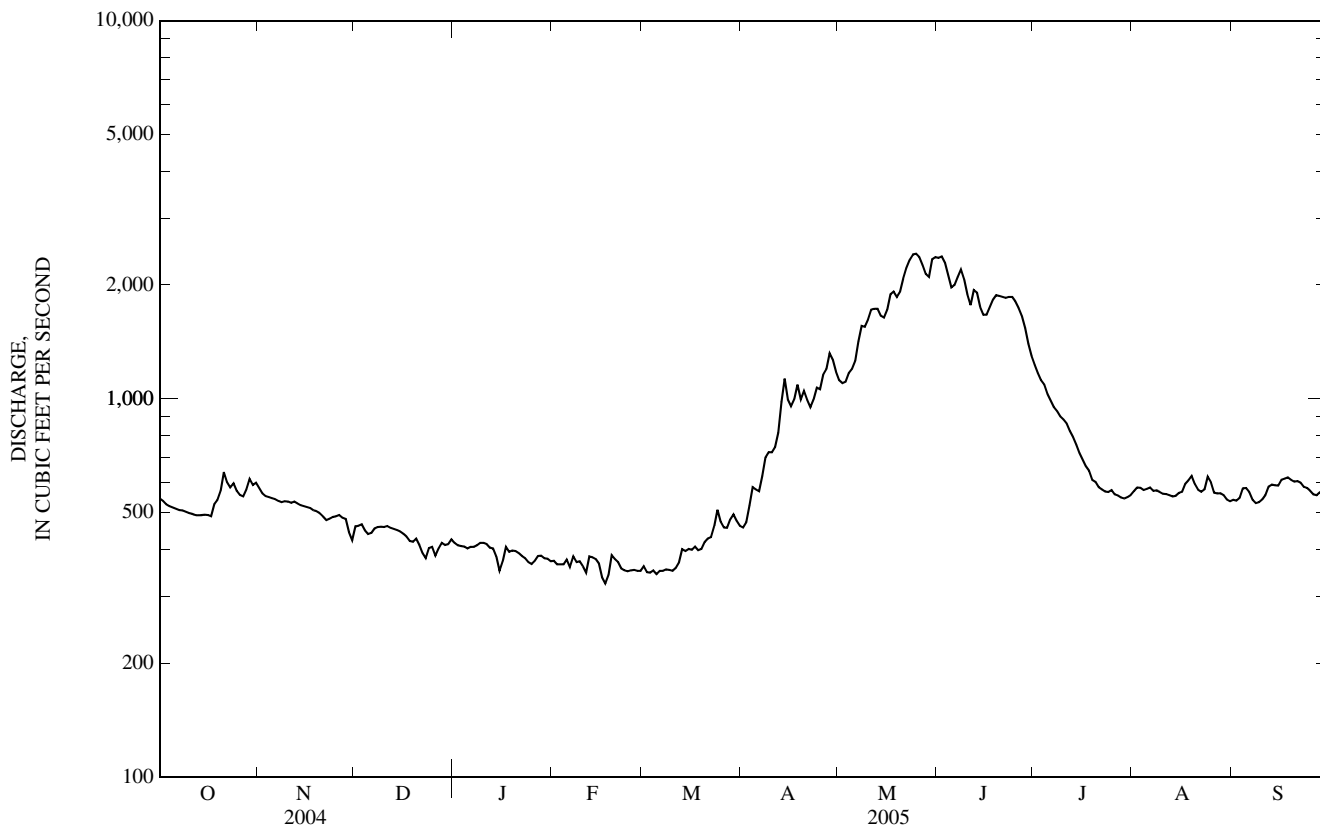
SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1937 - 2005	
ANNUAL TOTAL	178,415		209,345		--	
ANNUAL MEAN	487		574		635	
HIGHEST ANNUAL MEAN	--		--		1,022	1971
LOWEST ANNUAL MEAN	--		--		259	1977
HIGHEST DAILY MEAN	1,890	May 29	2,380	May 24	6,170	Jun 19, 1971
LOWEST DAILY MEAN	100	Jan 21	140	Feb 16	92	Jan 2, 1978
ANNUAL SEVEN-DAY MINIMUM	116	Jan 15	156	Feb 14	116	Jan 15, 2004
ANNUAL RUNOFF (AC-FT)	353,900		415,200		460,400	
10 PERCENT EXCEEDS	1,200		1,540		1,700	
50 PERCENT EXCEEDS	324		324		320	
90 PERCENT EXCEEDS	146		180		185	

e Estimated.



13027500 SALT RIVER ABOVE RESERVOIR, NEAR ETNA, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1954 - 2005	
ANNUAL TOTAL	205,645		278,244		--	
ANNUAL MEAN	562		762		765	
HIGHEST ANNUAL MEAN	--		--		1,272	1997
LOWEST ANNUAL MEAN	--		--		397	2001
HIGHEST DAILY MEAN	1,220	Jun 11	2,420	May 25	5,030	Jun 2, 1986
LOWEST DAILY MEAN	305	Feb 12	325	Feb 17	180	Jan 7, 1971
ANNUAL SEVEN-DAY MINIMUM	310	Mar 1	350	Mar 2	226	May 10, 1977
ANNUAL RUNOFF (AC-FT)	407,900		551,900		553,900	
10 PERCENT EXCEEDS	871		1,760		1,480	
50 PERCENT EXCEEDS	518		552		567	
90 PERCENT EXCEEDS	330		372		372	



13027500 SALT RIVER ABOVE RESERVOIR, NEAR ETNA, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)
DEC 08...	0930	440	603	9.6	89	8.1	511	1.5	2.5	<.04	1.20	<.008	<.02
FEB 10...	1730	350	625	12.0	110	7.9	490	-10.0	3.5	<.04	1.10	<.008	<.02
JUN 21...	1030	1,820	630	8.4	95	7.9	425	18.0	12.0	<.04	.43	<.008	<.02
SEP 06...	1200	574	620	9.1	102	7.9	497	20.0	11.0	<.04	1.13	E.004	<.02

Date	E coli, modif. m-TEC, water, col/100 mL (90902)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
DEC 08...	E6	E8	35	42
FEB 10...	<1	E3	14	13
JUN 21...	E97	E57	98	482
SEP 06...	<2	E13	6	9.3

< -- Less than.

E -- Estimated value; for bacteria, estimated values are counts outside the acceptable range (non-ideal colony count).

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 2005

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Yellowstone River Basin						
Dinwoody Canal 432302109215601	Wind River	Lat 41°23'02", long 109°21'56", in NE ¹ / ₄ SW ¹ / ₄ NW ¹ / ₄ sec.28, T.5 N., R.5 W., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, on left bank 600 ft downstream from headgate, 2.7 mi upstream from aqueduct, and 2.7 mi south of Wilderness.		1988-96 1999 2001-05	05-27-05	33.8
					06-24-05	93.1
					08-10-05	190
					09-19-05	76.2
37-C Lateral 425716108520401	Little Wind River	Lat 42°57'16", long 108°52'04", in SW ¹ / ₄ SE ¹ / ₄ SW ¹ / ₄ sec.22, T.1 S., R.1 W., Fremont County, Hydrologic Unit 10080002, Wind River Indian Reservation, on right bank at headgate, 1.1 mi upstream from crossing on unimproved dirt road, and 2.4 mi southeast of Wind River		1988-97 1999 2001-05	05-23-05	9.23
					06-24-05	65.5
					07-26-05	54.4
					09-19-05	12.5
65-C Lateral at Headworks 425515108485401	Little Wind River	Lat 42°55'15", long 108°48'54", in NE ¹ / ₄ SE ¹ / ₄ NE ¹ / ₄ sec.1, T.2 S., R.1 W., Fremont County, Hydrologic Unit 10080002, Wind River Indian Reservation, on left bank at headgate, 1.1 mi upstream from crossing on light-duty road, and 3.4 mi northwest of Milford.		1988-97 1999 2001-05	05-06-05	17.4
					06-30-05	79.3
					08-02-05	62.6
					09-07-05	18.7
Ray Canal Below 65 "C" Lateral 425513108485801	Little Wind River	Lat 42°55'13", long 108°48'58", in NE ¹ / ₄ SE ¹ / ₄ NE ¹ / ₄ sec.1, T.2 S., R.1 W., Fremont County, Hydrologic Unit 10080002, Wind River Indian Reservation, on left bank, 400 ft downstream from 65-C Lateral, 0.9 mi upstream from crossing on unimproved dirt road, and 3.4 mi northwest of Milford.		1988-97 1999 2001-05	05-06-05	1.85
					06-30-05	22.1
					06-30-05	21.2
					08-02-05	18.6
					09-07-05	8.34

AQUATIC TASK GROUP (ATG) AQUATIC ECOLOGY—Continued

AQUATIC TASK GROUP (ATG) AQUATIC ECOLOGY

YELLOWSTONE RIVER BASIN

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

06299980 -- TONGUE RIVER AT MONARCH, WY (LAT 44 54 01 LONG 107 01 13)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)	Biomass chlorophyll ratio, periphyton, number (70950)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chromofluoro, mg/m2 (70957)
AUG 15...	1000	125	30	7.5	7.5	426	14.8	9.3	350	361.8	2,360	1.4	3.9

06305700 -- GOOSE CREEK NEAR ACME, WY (LAT 44 53 11 LONG 106 59 18)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass weight, g/m2 (00572)	Periphyton biomass weight, g/m2 (00573)	Biomass chlorophyll ratio, periphyton, number (70950)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chromofluoro, mg/m2 (70957)
AUG 17...	1315	90	9.0	8.3	8.3	653	20.5	5.2	210	219.8	2,430	.8	2.1

06306250 -- PRAIRIE DOG CREEK NEAR ACME, WY (LAT 44 59 02 LONG 106 50 21)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
AUG 16...	1435	45	120	7.2	8.1	775	18.8

06306300 -- TONGUE RIVER AT STATE LINE, NEAR DECKER, MT (LAT 45 00 32 LONG 106 50 08)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)	Biomass chlorophyll ratio, periphyton, number (70950)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chromofluoro, mg/m2 (70957)
SEP 14...	1055	140	12	8.4	7.5	655	13.6	49.4	1,200	1,209	1,050	24	47.1

AQUATIC TASK GROUP (ATG) AQUATIC ECOLOGY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

434056106244101 -- POWDER RIVER ABOVE LONE TREE DRAW, NEAR SUSSEX, WY (LAT 43 40 56 LONG 106 24 41)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Noncarb hardness, wat fltr lab, mg/L as CaCO3 (00905)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
JUL 20...	1035	2.7	4.7	7.4	7.6	2,100	30.0	21.8	--	--	--	--	--
20...	1610	--	6.7	6.7	7.8	2,090	--	32.8	740	570	175	74.7	7.33
Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat fltr fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)
JUL 20...	--	--	--	--	--	--	--	--	--	--	12.4	380	393.7
20...	3	209	38	177	92.5	.5	11.9	722	1,400	1.90	--	--	--
Date	Biomass chlorophyll ratio, periphyton, number (70950)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chloro-fluoro, mg/m2 (70957)										
JUL 20...	1,230	2.2	10.1										
20...	--	--	--										

AQUATIC TASK GROUP (ATG) AQUATIC ECOLOGY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

434124106192401 -- POWDER RIVER BELOW SALT CREEK, NEAR SUSSEX, WY (LAT 43 41 24 LONG 106 19 24)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Noncarb hardness, wat fltr lab, mg/L as CaCO3 (00905)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
JUL 21...	1030	13	16	7.7	7.9	4,990	38.5	23.0	--	--	--	--	--
JUL 21...	1530	--	12	7.8	7.8	5,260	--	31.1	590	300	113	75.4	20.1
Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat fltr fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)
JUL 21...	--	--	--	--	--	--	--	--	--	--	23.3	800	821.1
JUL 21...	17	932	77	288	943	1.4	7.97	1,070	3,340	4.54	--	--	--
Date	Biomass chlorophyll ratio, periphyton, number (70950)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chloro-fluoro, mg/m2 (70957)										
JUL 21...	1,290	3.2	18.1										
JUL 21...	--	--	--										

AQUATIC TASK GROUP (ATG) AQUATIC ECOLOGY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

435453106104701 -- POWDER RIVER BELOW WILLOW CREEK, NEAR SUSSEX, WY (LAT 43 54 53 LONG 106 10 47)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Noncarb hardness, wat fltr lab, mg/L as CaCO3 (00905)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
JUL 19...	1105	9.3	2.9	7.2	8.1	4,810	39.0	24.3	--	--	--	--	--
JUL 19...	1715	--	3.1	6.2	8.1	4,940	--	29.1	920	730	183	111	19.8
Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat fltr fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)
JUL 19...	--	--	--	--	--	--	--	--	--	--	17.4	660	682.4
JUL 19...	12	843	66	187	733	1.0	9.27	1,330	3,350	4.55	--	--	--
Date	Biomass chlorophyll ratio, periphyton, number (70950)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chromofluoro, mg/m2 (70957)										
JUL 19...	6,000	.5	2.9										
JUL 19...	--	--	--										

AQUATIC TASK GROUP (ATG) AQUATIC ECOLOGY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

440919106091401 -- POWDER RIVER ABOVE VAN HOUGHTON DRAW, NEAR BUFFALO, WY (LAT 44 09 19 LONG 106 09 14)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Noncarbohydrate hardness, water fltrd lab, mg/L as CaCO3 (00905)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
JUL 22... 22...	0955 1445	7.9 --	4.1 3.2	8.0 7.5	7.9 8.0	4,600 4,610	37.5 --	20.7 30.3	-- 700	-- 380	-- 115	-- 100	-- 21.2
Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, water fltrd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)
JUL 22... 22...	-- 14	-- 866	-- 72	-- 318	-- 537	-- .8	-- 6.66	-- 1,260	-- 3,100	-- 4.21	22.0 --	510 --	536.6 --
Date	Biomass chlorophyll ratio, periphyton, number (70950)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chloro-fluoro, mg/m2 (70957)										
JUL 22... 22...	2,090 --	5.1 --	10.5 --										

AQUATIC TASK GROUP (ATG) AQUATIC ECOLOGY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

442538106082001 -- POWDER RIVER BELOW MITCHELL DRAW, NEAR ARVADA, WY (LAT 44 25 38 LONG 106 08 20)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Noncarb hardness, wat flt lab, mg/L as CaCO3 (00905)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)
JUL 13...	1030	25	28	6.6	8.8	3,500	26.1	--	--	--	--	--	--
JUL 13...	1400	--	29	5.9	7.8	3,550	32.9	600	370	122	72.6	13.1	9
Date	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)	Biomass chlorophyll ratio, periphyton, number (70950)
JUL 13...	--	--	--	--	--	--	--	--	--	<3.5	160	164.8	4,560
JUL 13...	524	65	233	365	.7	8.15	1,070	2,320	3.15	--	--	--	--
Date							Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chloro-fluoro, mg/m2 (70957)					
JUL 13...							.2	.7					
JUL 13...							--	--					

AQUATIC TASK GROUP (ATG) AQUATIC ECOLOGY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

441532106251301 -- CRAZY WOMAN CREEK BELOW INTERSTATE 90, NEAR BUFFALO, WY (LAT 44 15 32 LONG 106 25 13)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Noncarbohydrate, wat fltrd lab, mg/L as CaCO3 (00905)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)
JUL 11... 11...	1145 1430	37 --	58 240	7.0 6.8	7.9 7.9	777 827	20.8 25.4	-- 370	-- 240	-- 79.9	-- 40.5	-- 2.28	-- 1
Date	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat fltrd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)	Biomass chlorophyll ratio, periphyton, number (70950)
JUL 11... 11...	-- 51.2	-- 23	-- 122	-- 3.49	-- .3	-- 10.6	-- 318	-- 580	-- .79	21.0 --	760 --	784.6 --	12,700 --
Date	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chlorophyll a, mg/m2 (70957)											
JUL 11... 11...	1.7 --	1.6 --											

AQUATIC TASK GROUP (ATG) AQUATIC ECOLOGY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

442817106133001 -- CRAZY WOMAN CREEK NEAR UPPER STATION, NEAR ARVADA, WY (LAT 44 28 17 LONG 106 13 30)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Noncarb hardness, wat flt lab, mg/L as CaCO3 (00905)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)
JUL 12...	1100	40	120	7.0	7.7	894	22.7	--	--	--	--	--	--
12...	1525	--	120	6.7	7.9	891	27.2	370	230	82.5	40.7	2.82	1
Date	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)	Biomass chlorophyll ratio, periphyton, number (70950)
JUL 12...	--	--	--	--	--	--	--	--	--	<6.1	280	284.6	3,960
12...	58.3	25	145	3.87	.2	12.0	309	596	.81	--	--	--	--
Date	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chlorophyll a, mg/m2 (70957)											
JUL 12...	.4	1.4											
12...	--	--											

AQUATIC TASK GROUP (ATG) AQUATIC ECOLOGY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

443025106061601 -- POWDER RIVER BELOW CRAZY WOMAN CREEK, NEAR ARVADA, WY (LAT 44 30 25 LONG 106 06 16)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Noncarb hardness, wat fltr lab, mg/L as CaCO3 (00905)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
JUL 23...	1230	--	960	5.9	8.1	2,050	--	21.4	--	--	--	--	--
JUL 23...	1630	99	960	5.3	7.0	1,760	35.5	27.4	770	680	232	46.3	12.6
Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat fltr fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)
JUL 23...	--	--	--	--	--	--	--	--	--	--	--	11.7	280
JUL 23...	2	97.8	21	92	36.1	.4	7.45	866	1,350	1.84	362	--	--
Date	Periphyton biomass dry weight, g/m2 (00573)	Biomass chlorophyll ratio, periphyton, number (70950)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chromo-fluoro, mg/m2 (70957)									
JUL 23...	296.3	1,110	1.1	10.5									
JUL 23...	--	--	--	--									

AQUATIC TASK GROUP (ATG) AQUATIC ECOLOGY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

444857106030401 -- POWDER RIVER ABOVE IVY CREEK, NEAR ARVADA, WY (LAT 44 48 57 LONG 106 03 04)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Noncarbohardness, wat fltr lab, mg/L as CaCO3 (00905)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
JUL 24...	1215	149	1,000	5.6	7.7	2,280	35.5	24.0	--	--	--	--	--	
JUL 24...	1600	--	1,000	5.3	7.9	2,130	--	29.0	1,000	930	287	77.5	12.1	
Date		Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat fltr fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)
JUL 24...	--	--	--	--	--	--	--	--	--	--	--	33.7	1,500	1,562
JUL 24...	2	130	21	101	41.4	.4	8.88	1,120	1,740	2.37	--	--	--	--
Date						Biomass chlorophyll ratio, periphyton, number (70950)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chloro-fluoro, mg/m2 (70957)						
JUL 24...						4,600	2.9	7.3						
JUL 24...						--	--	--						

06324000 -- CLEAR CREEK NEAR ARVADA, WY (LAT 44 52 18 LONG 106 04 56)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)	Biomass chlorophyll ratio, periphyton, number (70950)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chloro-fluoro, mg/m2 (70957)
SEPT 13...	1030	44	4.3	8.0	8.0	1,200	13.6	21.8	870	892.3	1,780	3.3	12.3

AQUATIC TASK GROUP (ATG) AQUATIC ECOLOGY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

445339106032501 -- POWDER RIVER BELOW CLEAR CREEK, NEAR ARVADA, WY (LAT 44 53 39 LONG 106 03 25)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Noncarb hardness, wat fltr lab, mg/L as CaCO3 (00905)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
JUL 25...	1100	92	420	7.4	8.2	1,940	24.0	21.2	--	--	--	--	--
JUL 25...	1545	--	130	7.2	8.4	1,950	--	22.2	760	630	206	59.8	9.54

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat fltr fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)
JUL 25...	--	--	--	--	--	--	--	--	--	--	22.0	690	710.3
JUL 25...	2	143	29	132	61.8	.4	6.64	867	1,430	1.95	--	--	--

Date	Biomass chlorophyll ratio, periphyton, number (70950)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chloro-fluoro, mg/m2 (70957)
JUL 25...	407	3.9	54.1
JUL 25...	--	--	--

06324500 -- POWDER RIVER AT MOORHEAD, MT (LAT 45 03 25 LONG 105 52 39)

Date	Time	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)	Biomass chlorophyll ratio, periphyton, number (70950)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chloro-fluoro, mg/m2 (70957)
JUL 26...	1245	620	8.0	8.4	1,930	18.2	61.6	3,200	3,263	864	8.1	71.3

AQUATIC TASK GROUP (ATG) AQUATIC ECOLOGY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

06324790 -- LITTLE POWDER RIVER AT STATE HIGHWAY 59, NEAR GILLETTE, WY (LAT 44 26 09 LONG 105 27 17)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Noncarbohardness, wat flt lab, mg/L as CaCO3 (00905)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
JUN 14... 23...	0930 1330	.73 --	7.3 --	9.5 --	8.1 --	2,080 --	26.0 --	11.2 --	-- 1,100	-- 910	-- 239	-- 115	-- 30.3

Date	Time	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)
JUN 14... 23...	-- 2	-- 115	-- 18	-- 164	-- 41.3	-- .9	-- 23.4	-- 1,030	-- 1,690	-- 2.30	56.9 --	940 --	992.6 --	

Date	Biomass chlorophyll ratio, periphyton, number (70950)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chloro-fluoro, mg/m2 (70957)
JUN 14... 23...	1,300 --	39 --	43.8 --

06324970 -- LITTLE POWDER RIVER ABOVE DRY CREEK, NEAR WESTON, WY (LAT 44 55 37 LONG 105 21 10)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)	Biomass chlorophyll ratio, periphyton, number (70950)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chloro-fluoro, mg/m2 (70957)
JUN 13...	1130	1.5	120	7.5	6.8	3,480	13.6	<13.0	590	601.7	4,670	1.7	2.7

06364300 -- PORCUPINE CREEK NEAR TECKLA, WY (LAT 43 34 41 LONG 105 20 19)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)	Biomass chlorophyll ratio, periphyton, number (70950)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chloro-fluoro, mg/m2 (70957)
JUN 15...	1115	.33	5.0	7.8	8.1	3,110	21.0	19.4	79.2	860	935.4	1,530	34	51.7

AQUATIC TASK GROUP (ATG) AQUATIC ECOLOGY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

06364700 -- ANTELOPE CREEK NEAR TECKLA, WY (LAT 43 29 08 LONG 105 13 39)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
JUN 08...	1030	.09	9.3	7.2	7.8	3,050	21.0	14.1

06365900 -- CHEYENNE RIVER NEAR DULL CENTER, WY (LAT 43 25 45 LONG 105 02 43)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)	Biomass chlorophyll ratio, periphyton, number (70950)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chromo-fluoro, mg/m2 (70957)
JUN 27...	1045	.04	4.8	5.3	8.1	3,070	28.5	21.3	16.0	640	652.3	3,410	3.9	4.7

06375600 -- LITTLE THUNDER CREEK NEAR HAMPSHIRE, WY (LAT 43 39 18 LONG 104 54 33)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)	Biomass chlorophyll ratio, periphyton, number (70950)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chromo-fluoro, mg/m2 (70957)
JUN 09...	1230	.02	41	8.1	7.7	1,950	14.3	--	--	--	--	--	--
JUN 22...	1500	--	--	--	--	--	--	7.7	310	316.4	1,680	1.2	4.6

06376300 -- BLACK THUNDER CREEK NEAR HAMPSHIRE, WY (LAT 43 34 54 LONG 104 43 11)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)	Biomass chlorophyll ratio, periphyton, number (70950)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chromo-fluoro, mg/m2 (70957)
JUN 07...	1530	.00	48	6.5	8.1	1,410	20.2						

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

06386500 -- CHEYENNE RIVER NEAR SPENCER, WY (LAT 43 25 16 LONG 104 07 52)

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity white light, det ang 90+/-30 correctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)	Biomass chlorophyll ratio, periphyton, number (70950)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chromo-fluoro, mg/m2 (70957)
JUN 06...	0930	160	7.2	8.0	3,910	20.4	--	--	--	--	--	--	--
JUN 21...	0900	--	--	--	--	--	<6.1	280	285.6	8,550	.3	.6	

AQUATIC TASK GROUP (ATG) AQUATIC ECOLOGY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

06425720 -- BELLE FOURCHE RIVER BELOW RATTLESNAKE CREEK, NEAR PINEY, WY (LAT 43 59 04 LONG 105 23 16)

Date	Time	Sam- pling method, code (82398)	Turbdty white light, det ang 90+/-30 correctd NTRU (63676)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Biomass peri- phyton, ashfree drymass g/m2 (49954)	Peri- phyton biomass ash weight, g/m2 (00572)	Peri- phyton biomass dry weight, g/m2 (00573)	Biomass chloro- phyll ratio, peri- phyton, number (70950)	Pheo- phytin a, peri- phyton, mg/m2 (62359)	Chloro- phyll a peri- phyton, chromo- fluoro, mg/m2 (70957)
JUN 29...	0920	70	3.8	8.1	8.8	3,360	16.6	<9.3	420	430.5	5,860	1.6	1.2

06425900 -- CABALLO CREEK AT MOUTH, NEAR PINEY, WY (LAT 44 04 48 LONG 105 15 59)

Date	Time	Instan- taneous dis- charge, cfs (00061)	Turbdty white light, det ang 90+/-30 correctd NTRU (63676)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)
JUN 28...	0945	.00	160	10.0	8.0	4,240	21.7

< -- Less than.
E -- Estimated.

NATIONAL WATER-QUALITY ASSESSMENT PROGRAM—Continued

NATIONAL WATER-QUALITY ASSESSMENT PROGRAM
YELLOWSTONE RIVER BASIN

Fixed Station Network

06329500 YELLOWSTONE RIVER NEAR SIDNEY, MT (LAT 47 40 42 LONG 104 09 22)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	
Date	Time	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitrogen, wat unfltrd by analysis, mg/L (62855)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	1-Naphthol, water, fltrd 0.7u GF ug/L (49295)	2,6-Diethyl-aniline water, fltrd 0.7u GF ug/L (82660)	2-Chloro-2',6'-diethyl acetanilide wat flt ug/L (61618)	CIAT, water, fltrd, mg/L (00404)	2-Ethyl-6-methylaniline water, fltrd, mg/L (61620)
NOV 22...	1215	5,560	703	13.7	106	8.3	720	5.0	1.5	161	--	--	--	
JAN 11...	1300	1,820	699	13.2	99	8.1	941	-5.0	.0	223	171	208	.0	
MAR 09...	1230	5,760	704	12.6	94	8.0	761	13.0	.2	160	175	210	1	
MAY 17...	1330	19,800	697	8.9	97	8.0	587	20.0	15.0	114	104	127	--	
JUL 26...	1300	5,910	718	8.5	103	8.3	531	24.0	21.5	128	104	53	36	
SEP 06...	1430	3,140	719	8.9	104	8.5	671	22.5	19.8	160	145	172	2	
NOV 22...	12.2	182	<.04	.26	<.008	.44	<.006	.030	<.09	<.006	<.005	<.006	<.004	
JAN 11...	17.3	263	.08	.71	E.005	1.08	<.006	.010	<.09	<.006	<.005	<.006	<.004	
MAR 09...	18.3	211	E.02	.27	<.008	1.27	<.006	.36	<.09	<.006	<.005	<.006	<.004	
MAY 17...	9.50	154	E.02	.45	.010	2.86	.009	.84	<.09	<.006	<.005	<.006	<.004	
JUL 26...	7.45	127	<.04	<.06	<.008	.35	<.006	.091	<.09	<.006	<.005	<.006	<.004	
SEP 06...	9.85	169	<.04	<.06	<.008	.39	<.006	.030	<.09	<.006	<.005	<.006	<.004	
NOV 22...	<.004	--	<.006	<.006	<.005	--	<.009	<.07	<.050	<.010	<.041	--	<.06	
JAN 11...	<.004	--	<.006	<.006	<.005	--	<.007	<.07	<.050	<.010	<.041	--	<.06	
MAR 09...	<.004	--	<.006	<.006	<.005	--	<.007	<.07	<.050	<.010	<.041	--	<.06	
MAY 17...	<.004	--	<.006	<.006	<.005	--	.008	<.07	<.050	<.010	<.041	--	<.06	
JUL 26...	<.004	<.004	<.006	E.007	<.005	<.005	<.007	<.07	<.050	<.010	<.041	<.020	<.06	
SEP 06...	<.004	<.004	<.006	<.006	<.005	<.005	<.007	<.07	<.050	<.010	<.041	<.020	<.06	

NATIONAL WATER-QUALITY ASSESSMENT PROGRAM—Continued

06329500 YELLOWSTONE RIVER NEAR SIDNEY, MT (LAT 47 40 42 LONG 104 09 22)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	cis-Propiconazole, water, fltrd, ug/L (79846)	Cyanazine, water, fltrd, ug/L (04041)	Cyfluthrin, water, fltrd, ug/L (61585)	lambda-Cyhalothrin, water, fltrd, ug/L (61595)	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf-inyl fipronil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)	Diazinon, water, fltrd, ug/L (39572)	Dicrotophos, water, fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)
NOV 22...	<.005	<.006	--	--	<.008	--	<.009	<.003	<.012	<.01	<.005	<.08	<.009
JAN 11...	<.005	<.006	--	--	<.008	--	<.009	<.003	<.012	<.01	<.005	<.08	<.009
MAR 09...	<.005	<.006	--	--	<.027	--	<.009	<.003	<.012	<.01	<.005	<.08	<.009
MAY 17...	<.005	<.006	--	--	<.027	--	<.009	<.003	<.012	<.01	<.005	<.08	<.009
JUL 26...	<.005	<.006	<.008	<.018	<.027	<.009	<.009	<.003	<.012	--	<.005	<.08	<.009
SEP 06...	<.005	<.006	<.008	<.018	<.027	<.009	<.009	<.003	<.012	--	<.005	<.08	<.009
Date	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Disulfoton sulfone water, fltrd, ug/L (61640)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	Endosulfan sulfate water, fltrd, ug/L (61590)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulf-oxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Desulf-inyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)
NOV 22...	<.006	--	--	--	--	<.0020	<.004	--	<.049	<.04	<.03	<.029	<.013
JAN 11...	<.006	--	--	--	--	<.0020	<.004	--	<.049	<.04	<.03	<.029	<.013
MAR 09...	<.006	--	--	--	--	<.0020	<.004	--	<.049	<.04	<.03	<.029	<.013
MAY 17...	<.006	--	--	--	--	<.0020	<.004	--	<.049	<.04	<.03	<.029	<.013
JUL 26...	<.006	<.01	<.02	<.014	<.004	<.002	<.004	<.005	<.049	<.04	<.03	<.029	<.013
SEP 06...	<.006	<.01	<.02	<.014	<.004	<.002	<.004	<.005	<.049	<.04	<.03	<.029	<.013
Date	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexazinone, water, fltrd, ug/L (04025)	Iprodione, water, fltrd, ug/L (61593)	Isofenphos, water, fltrd, ug/L (61594)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	Metaxyl, water, fltrd, ug/L (61596)	Methiathion water, fltrd, ug/L (61598)	Methyl para-oxon, water, fltrd, ug/L (61664)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)
NOV 22...	<.024	<.016	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015
JAN 11...	<.024	<.016	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015
MAR 09...	<.024	<.016	--	<.003	<.013	<.538	<.003	<.030	<.027	<.010	<.006	<.03	<.015
MAY 17...	<.024	<.016	--	<.003	<.013	<.538	<.003	<.030	<.027	<.005	<.006	<.03	<.015
JUL 26...	<.024	<.016	--	<.003	<.013	<.538	<.003	<.030	<.027	<.005	<.006	<.03	<.015
SEP 06...	<.024	<.016	--	<.003	<.013	<.538	<.003	<.030	<.027	<.005	<.006	<.03	<.015

NATIONAL WATER-QUALITY ASSESSMENT PROGRAM—Continued

06329500 YELLOWSTONE RIVER NEAR SIDNEY, MT (LAT 47 40 42 LONG 104 09 22)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd, 0.7u GF ug/L (82671)	Myclobutanil, water, fltrd, ug/L (61599)	Oxyfluorfen, water, fltrd, ug/L (61600)	Pendimethalin, water, fltrd, 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd, 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propyzamide, water, fltrd, 0.7u GF ug/L (82676)
NOV 22...	.009	<.006	--	<.008	--	<.022	<.10	<.011	<.05	<.008	<.01	<.005	<.004
JAN 11...	<.010	<.006	--	<.008	--	<.022	<.10	<.011	--	<.008	<.01	<.005	<.004
MAR 09...	<.006	<.006	--	<.008	--	.025	<.10	<.011	<.05	<.008	<.01	<.005	<.004
MAY 17...	E.003	<.006	--	<.008	--	<.022	<.10	<.011	<.05	<.008	<.01	<.005	<.004
JUL 26...	.010	<.006	<.003	<.008	<.007	<.022	<.10	<.011	<.05	<.008	<.01	<.005	<.004
SEP 06...	.011	<.006	<.003	<.008	<.007	<.022	<.10	<.011	<.05	<.008	<.01	<.005	<.004

Date	Propanil, water, fltrd, 0.7u GF ug/L (82679)	Propargite, water, fltrd, 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebu-thiuron, water, fltrd, 0.7u GF ug/L (82670)	Tefluthrin, water, fltrd, ug/L (61606)	Terbufos oxon sulfone, water, fltrd, ug/L (61674)	Terbufos, water, fltrd, 0.7u GF ug/L (82675)	Terbutylazine, water, fltrd, ug/L (04022)	Thiocarb, water, fltrd, 0.7u GF ug/L (82681)	trans-Propiconazole, water, fltrd, ug/L (79847)	Tribuphos, water, fltrd, ug/L (61610)	Tri-fluralin, water, fltrd, 0.7u GF ug/L (82661)	Di-chlorvos, water, fltrd, ug/L (38775)
NOV 22...	--	--	<.005	<.02	--	<.07	<.02	<.01	--	--	--	<.009	<.01
JAN 11...	--	--	<.005	<.02	--	<.07	<.02	<.01	--	--	--	<.009	<.01
MAR 09...	--	--	<.005	<.02	--	<.07	<.02	<.01	--	--	--	<.009	<.01
MAY 17...	--	--	<.005	<.02	--	<.07	<.02	<.01	--	--	--	<.009	<.01
JUL 26...	<.011	<.02	<.005	<.02	<.008	<.07	<.02	<.01	<.010	<.01	<.004	<.009	<.01
SEP 06...	<.011	<.02	<.005	<.02	<.008	<.07	<.02	<.01	<.010	<.01	<.004	<.009	<.01

Date	Suspnd. sediment, sieve diametr <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
NOV 22...	95	33	495
JAN 11...	98	23	113
MAR 09...	96	664	10,300
MAY 17...	94	2,670	143,000
JUL 26...	91	77	1,230
SEP 06...	97	26	220

< -- Less than.
E -- Estimated.

POWDER RIVER BASIN WATER FLUX PROJECT

YELLOWSTONE RIVER BASIN

443904106052301 WILD HORSE CREEK TRIBUTARY, 0.1 MILES ABOVE MOUTH NEAR ARVADA, WY (LAT 44 39 04 LONG 106 05 23)

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.05	0.01
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.03	0.01
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.03	0.01
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.03	0.01
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.04	e0.01
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.02	0.01
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.03	0.01
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.03	0.01
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.03	0.01
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.43	e0.02
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.32	0.02
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.18	0.02
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.17	0.02
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.17	0.02
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.12	0.02
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.01	0.09
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	e0.15
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	e0.16
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	e0.15
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	e0.13
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	e0.13
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	e0.15
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.12
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	e0.07
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.01	e0.11
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.01	e0.12
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.01	0.01	0.12
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.01	0.01	e0.11
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	e0.02	0.01	e0.11
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	e0.02	0.01	0.12
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	e0.03	0.01	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	1.84	2.05
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.07
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.43	0.16
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.2	3.6	4.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)

MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.07
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(2004)	(2004)

MISCELLANEOUS HYDROLOGIC DATA COLLECTED AT SPECIAL STUDY SITE

POWDER RIVER BASIN WATER FLUX PROJECT—Continued

YELLOWSTONE RIVER BASIN

443855106051201 WILD HORSE CREEK TRIBUTARY, 0.2 MILES ABOVE MOUTH NEAR ARVADA, WY (LAT 44 38 56 LONG 106 05 18)

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.02
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.01
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.02
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.02
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.02
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.01
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.33	0.01
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.01
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.02
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.02
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.02
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.15
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.21
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.19
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.18
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.15
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.15
22	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.02	0.01	0.17
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.02	0.13
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.02	0.09
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.02	0.13
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.02	0.13
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.01	0.11
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.11
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.04	0.01	0.10
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.03	0.01	0.10
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.03	0.01	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.01	0.43	1.93	2.34
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.08
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.01	0.07	0.44	0.21
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.06	0.02	0.9	3.8	4.6

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)

MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.04
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.08
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(2004)	(2004)

POWDER RIVER BASIN WATER FLUX PROJECT—Continued

443855106051201 WILD HORSE CREEK TRIBUTARY, 0.2 MILES ABOVE MOUTH NEAR ARVADA, WY (LAT 44 38 56 LONG 106 05 18)

 PRECIPITATION, TOTAL, INCHES
 WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
 DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.03	0.00	0.00	0.00	0.00	0.01	0.09	0.00	0.07	0.02	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.04	0.01	0.00	0.00
3	0.00	0.00	0.02	0.00	0.00	0.00	0.02	0.06	0.00	0.00	0.02	0.00
4	0.00	0.00	0.04	0.00	0.02	0.01	0.00	0.02	0.00	0.00	0.00	0.00
5	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.03	0.03	0.00	0.00	0.00
6	0.00	0.00	0.00	0.03	0.00	0.00	0.04	0.01	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.02	0.00	0.00	0.02	0.36	0.36	0.00	0.00	0.00
8	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.20	0.08	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.10	0.09	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.03	0.00	0.05	0.24	0.08	0.04	0.00	0.00
11	0.00	0.18	0.00	0.00	0.05	0.00	0.04	0.98	0.03	0.00	0.00	0.00
12	0.01	0.00	0.00	0.04	0.00	0.00	0.08	0.18	0.21	0.00	0.09	0.23
13	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.14	0.20	0.00	0.02	0.00
14	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00
15	0.14	0.04	0.00	0.07	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.00
17	0.00	0.00	0.04	0.05	0.00	0.02	0.04	0.00	0.00	0.00	0.02	0.00
18	0.03	0.00	0.01	0.03	0.01	0.00	0.00	0.12	0.00	0.00	0.00	0.00
19	0.00	0.00	0.02	0.04	0.00	0.00	0.13	0.01	0.03	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.02	0.26	0.74	0.01	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.14	0.69	0.00	0.00	0.00	0.00	0.04
22	0.20	0.00	0.00	0.00	0.03	0.00	0.10	0.00	0.02	0.00	0.00	0.00
23	0.00	0.00	0.00	0.04	0.00	0.00	0.01	0.00	0.06	0.00	0.01	0.02
24	0.02	0.00	0.04	0.04	0.01	0.00	0.08	0.07	0.01	0.00	0.00	0.04
25	0.00	0.00	0.04	0.01	0.04	0.07	0.00	0.18	0.00	0.44	0.00	0.14
26	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.47	0.50	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.05	0.00	0.00	0.00	0.06
28	0.00	0.00	0.03	0.00	0.00	0.01	0.00	0.03	0.00	0.00	0.00	0.04
29	0.29	0.00	0.00	0.00	---	0.00	0.00	0.00	0.56	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.20	0.00	0.00	0.02	0.00
31	0.17	---	0.00	0.00	---	0.10	---	0.17	---	0.07	0.00	---
TOTAL	1.01	0.22	0.25	0.41	0.22	0.72	2.41	3.25	2.43	1.08	0.19	0.57

443855106051201 WILD HORSE CREEK TRIBUTARY, 0.2 MILES ABOVE MOUTH NEAR ARVADA, WY (LAT 44 38 56 LONG 106 05 18)

POTENTIAL EVAPOTRANSPIRATION (PET), CALCULATED BY PRIESTLEY-TAYLOR METHOD, MILLIMETERS PER HOUR
 WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
 DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.15	1.12	0.60	0.05	1.01	2.11	2.89	2.44	3.69	6.51	5.29	4.09
2	2.64	0.65	0.71	0.08	0.71	1.95	2.98	3.42	5.46	5.79	4.10	4.14
3	2.49	1.65	0.47	0.05	1.05	1.98	2.28	3.90	5.65	6.05	2.70	3.64
4	2.53	1.86	0.50	0.06	0.86	1.99	2.46	4.20	4.95	5.51	5.52	2.71
5	2.52	0.54	0.06	-0.04	0.26	1.47	3.58	4.07	5.62	6.24	5.45	4.11
6	2.36	1.19	0.50	0.01	0.17	2.33	3.30	4.68	5.04	6.42	4.77	4.00
7	1.12	1.12	-0.03	-0.07	0.15	1.61	3.69	0.94	3.73	5.67	5.24	3.89
8	2.16	0.56	0.11	0.39	0.01	1.95	1.03	0.82	5.59	6.01	4.30	3.90
9	2.16	0.40	0.42	0.10	-0.15	2.79	2.16	3.20	4.56	6.06	4.43	3.37
10	2.56	0.39	0.43	0.02	-0.07	1.93	3.66	1.14	5.25	3.47	4.05	3.50
11	0.74	0.52	-0.01	0.03	0.48	1.99	3.48	1.65	4.86	6.82	3.71	3.73
12	0.22	1.23	0.07	0.40	0.81	0.79	3.32	1.87	1.95	6.45	3.24	2.38
13	1.37	1.17	0.40	0.02	1.60	1.42	3.03	5.09	5.35	6.34	1.86	3.31
14	0.58	1.23	0.05	0.00	0.29	1.25	3.97	4.88	6.31	6.27	4.32	3.55
15	0.71	1.11	-0.05	-0.08	1.12	1.75	2.80	4.97	5.68	6.25	5.12	3.47
16	0.59	1.08	0.34	0.09	1.26	1.82	3.59	5.07	6.28	4.76	3.86	3.33
17	1.05	0.66	0.23	-0.09	1.67	1.46	4.07	4.55	6.31	6.04	3.54	1.60
18	0.57	0.47	0.59	0.12	1.47	1.97	2.64	5.35	6.38	5.86	2.83	1.43
19	0.75	0.60	0.37	0.33	0.29	2.06	0.88	4.59	6.63	6.08	4.64	3.28
20	0.57	0.25	0.40	0.15	1.47	1.78	1.05	5.56	6.58	6.07	4.93	3.33
21	0.62	0.47	0.24	0.45	1.08	1.41	0.63	5.73	6.99	6.19	4.85	1.09
22	0.38	0.47	0.03	0.90	1.59	2.73	2.13	5.63	5.64	4.26	4.13	3.40
23	1.65	0.26	0.02	0.94	1.75	0.43	3.95	3.91	5.93	5.44	1.97	2.89
24	0.98	0.50	0.22	0.79	1.91	0.75	4.01	3.24	5.52	5.75	4.06	0.64
25	1.17	0.26	0.31	0.54	1.72	1.48	4.89	4.96	6.02	2.41	3.62	1.09
26	1.13	0.27	0.33	0.92	1.98	3.23	2.92	4.29	5.01	4.25	4.48	3.28
27	1.13	0.27	0.26	0.39	1.71	3.20	1.87	5.75	6.68	6.27	4.45	2.62
28	0.99	0.09	0.44	0.64	1.87	3.04	1.94	5.54	5.34	5.64	4.19	2.64
29	0.45	0.47	0.17	1.30	---	2.91	2.36	2.50	5.41	3.40	4.32	3.10
30	0.41	0.43	0.37	0.73	---	1.53	2.21	1.77	6.64	4.22	4.23	2.25
31	0.27	---	0.36	0.95	---	2.63	---	3.99	---	2.92	4.28	---
TOTAL	39.02	21.29	8.91	10.17	28.07	59.74	83.77	119.70	165.05	169.42	128.48	89.76

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Conversion Factors

Multiply	By	To obtain
Length		
inch (in.)	25.4×10^{-1}	millimeter (mm)
	22.54×10^{-2}	meter (m)
foot (ft)	3.048×10^{-1}	meter (m)
mile (mi)	1.609×10^0	kilometer (km)
Area		
acre	4.047×10^3	square meter (m ²)
	4.047×10^{-1}	square hectometer (hm ²)
acre	4.047×10^{-3}	square kilometer (km ²)
square mile (mi ²)	2.590×10^0	square kilometer (km ²)
Volume		
gallon (gal)	3.785×10^0	liter (L)
	3.785×10^{-3}	cubic meter (m ³)
	3.785×10^0	cubic decimeter (dm ³)
million gallons (Mgal)	3.785×10^3	cubic meter (m ³)
	3.785×10^{-3}	cubic hectometer (hm ³)
cubic foot (ft ³)	2.832×10^{-2}	meter (dm ³)
cubic foot (ft ³)	2.832×10^1	cubic decimeter (dm ³)
cubic-foot-per-second day [(ft ³ /s/d)]	2.447×10^3	cubic meter (m ³)
	2.447×10^{-3}	cubic hectometer (hm ³)
acre-foot (acre-ft)	1.233×10^3	cubic meter (m ³)
	1.233×10^{-3}	cubic hectometer (hm ³)
	1.233×10^{-6}	cubic kilometer (km ³)
Flow		
cubic foot per second (ft ³ /s)	2.832×10^1	liter per second (L/s)
	2.832×10^{-2}	cubic meter per second (m ³ /s)
	2.832×10^1	cubic decimeter per second (dm ³ /s)
gallon per minute (gal/min)	6.309×10^{-2}	liter per second (L/s)
	6.309×10^{-5}	cubic meter per second (m ³ /s)
	6.309×10^{-2}	cubic decimeter per second (dm ³ /s)
million gallons per day (Mgal/d)	4.381×10^{-2}	cubic meter per second (m ³ /s)
	4.381×10^1	cubic decimeter per second (dm ³ /s)
Mass		
ton, short (2,000 lb)	9.072×10^{-1}	megagram (Mg) or metric ton

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

$$^{\circ}\text{F} = (1.8 \times ^{\circ}\text{C}) + 32$$



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