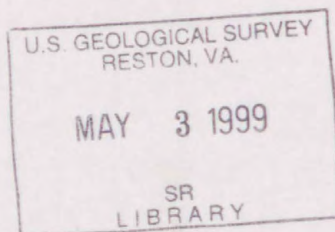


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Water Resources Data Wyoming Water Year 1997

Volume 1. Surface Water



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT WY-97-1
Prepared in cooperation with the State of Wyoming
and with other agencies



CALENDAR FOR WATER YEAR 1997

1996

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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1997

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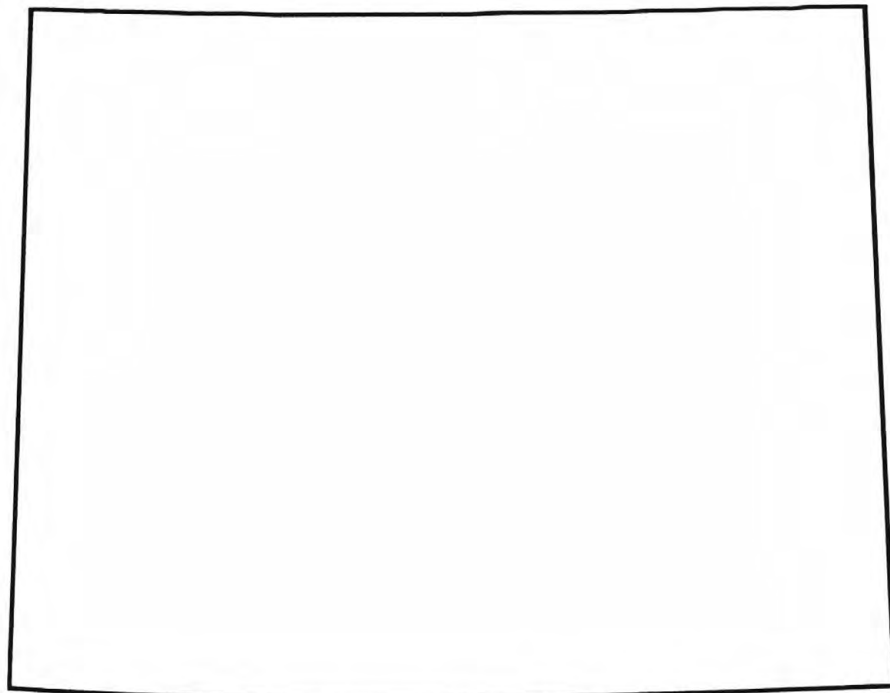
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20	21	22	23	24	25	26	17	18	19	20	21	22	23	21	22	23	24	25	26	27
27	28	29	30	31			24	25	26	27	28	29	30	28	29	30				
							31													



Water Resources Data Wyoming Water Year 1997

Volume 1: Surface Water

by M. L. Smalley, R. E. Woodruff, M. L. Clark, and W. J. Sadler



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT WY-97-1
Prepared in cooperation with the State of Wyoming
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, Secretary

GEOLOGICAL SURVEY

Thomas J. Casadevall, Acting Director

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Cheyenne, Wyoming 82001-5662

1998

WATER RESOURCES DATA - WYOMING, 1997

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 administering, developing, and managing our Nation's land and water resources. These records 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 District who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the 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 Headquarters, R. E. Woodruff, Chief and from the Riverton Field Headquarters, M. L. Smalley, Chief. The following personnel are recognized for their significant contributions to this report:

T. C. Bartke	S. L. Green	L. Littau	D. Trefren-Miller
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P. I. Brown	G. A. Laidlaw	K. Miller	T. F. Werth
J. R. Elliott	T. J. Leman	T. A. Pointon	L. D. Young
N. Friday			

S. L. Green, L. Littau, D. Trefren-Miller, and L. D. Young typed and assembled the report.

This report was prepared under the general supervision of Zelda C. Bailey, Acting District Chief, Wyoming, and in cooperation with the State of Wyoming and with other agencies.

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Water resources data for the 1997 water year for Wyoming consists 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 168 gaging stations; stage and contents for 15 lakes and reservoirs; and water quality for 28 gaging stations and 23 ungaged stations. 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 Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Wyoming.

14. SUBJECT TERMS

*Wyoming, *Hydrologic data, *Surface water, *Water quality, Flow-rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperature, Sampling Sites, Water analyses

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RECORDS ARE PUBLISHED IN THIS VOLUME

[Letters after station names designate type of data: (d) discharge, (c) chemical, (b) biological, (m) microbiological, (r) radiochemical, (s) sediment, (t) daily water temperature, (e) elevation, (v) contents]

Station
Number Page

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GALLATIN RIVER NEAR GALLATIN GATEWAY, MT (d)	06043500	33
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EAST FORK OF SMITH FORK NEAR ROBERTSON, WY (d)	09220000	331
BLACKS FORK NEAR LYMAN, WY (c,m,s)	09222000	333
HAMS FORK BELOW POLE CREEK, NEAR FRONTIER, WY (d)	09223000	334
HAMS FORK NEAR DIAMONDVILLE, WY (c,m)	09224050	336
BLACKS FORK NEAR LITTLE AMERICA, WY (d,c,t)	09224700	337
FLAMING GORGE RESERVOIR AT FLAMING GORGE DAM, UT (v)	09234400	342
GREEN RIVER NEAR GREENDALE, UT (d,c,t)	09234500	343
YAMPA RIVER:		
LITTLE SNAKE RIVER NEAR SLATER, CO (d)	09253000	350
BATTLE CREEK:		
WEST FORK BATTLE CREEK:		
HAGGARTY CREEK ABOVE BELVIDERE DITCH, NEAR ENCAMPMENT, WY (c)	09253455	352
WEST FORK BATTLE CREEK AT BATTLE CREEK CAMPGROUND, NEAR SAVERY, WY (c)	09253465	353
SLATER FORK NEAR SLATER, CO (d)	09255000	354
LITTLE SNAKE RIVER NEAR DIXON, WY (d)	09257000	356
LITTLE SNAKE RIVER BELOW BAGGS, WY (c,s)	09259050	358

GREAT SALT LAKE BASIN

BEAR RIVER BASIN

BEAR RIVER NEAR UTAH-WYOMING STATE LINE (d)	10011500	359
SULPHUR CREEK ABOVE RESERVOIR, BELOW LA CHAPPELLE CREEK, NEAR EVANSTON, WY (d)	10015700	361
SULPHUR CREEK BELOW RESERVOIR, NEAR EVANSTON, WY (d)	10015900	363
BEAR RIVER AT EVANSTON, WY (d)	10016900	365
BEAR RIVER ABOVE RESERVOIR, NEAR WOODRUFF, UT (d,c,s)	10020100	367
BEAR RIVER BELOW RESERVOIR, NEAR WOODRUFF, UT (d)	10020300	370
TWIN CREEK AT SAGE, WY (c,s)	10027000	372
BEAR RIVER BELOW PIXLEY DAM, NEAR COKEVILLE, WY (d)	10028500	373
SMITHS FORK NEAR BORDER, WY (d)	10032000	375
SMITHS FORK AT COKEVILLE, WY (c,s)	10035000	377

	Station Number	Page
<u>GREAT SALT LAKE BASIN</u>		
BEAR RIVER BASIN		
BEAR RIVER BELOW SMITHS FORK, NEAR COKEVILLE, WY (d,c,m,s)	10038000	378
BEAR RIVER AT BORDER, WY (d)	10039500	381
<u>SNAKE RIVER BASIN</u>		
SNAKE RIVER ABOVE JACKSON LAKE, AT FLAGG RANCH, WY (d,c,s)	13010065	383
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SNAKE RIVER NEAR MORAN, WY (d)	13011000	390
PACIFIC CREEK BASIN		
PACIFIC CREEK AT MORAN, WY (d)	13011500	392
BUFFALO FORK BASIN		
BUFFALO FORK ABOVE LAVA CREEK, NEAR MORAN, WY (d)	13011900	394
SNAKE RIVER AT MOOSE, WY (d,c,s)	13013650	396
GROS VENTRE RIVER BASIN		
GROS VENTRE RIVER AT ZENITH, WY (d)	13015000	402
FISH CREEK BASIN		
LAKE CREEK BELOW GRANITE CREEK SUPPLEMENTAL, NEAR MOOSE, WY (d)	13016240	404
GRANITE CREEK ABOVE GRANITE CREEK SUPPLEMENTAL, NEAR MOOSE, WY (d)	13016305	406
GRANITE CREEK SUPPLEMENTAL ABOVE LAKE CREEK, NEAR MOOSE, WY (d)	13016310	408
GRANITE CREEK SUPPLEMENTAL BELOW LAKE CREEK, NEAR MOOSE, WY (d)	13016315	410
FISH CREEK AT WILSON, WY (d)	13016450	412
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CACHE CREEK NEAR JACKSON, WY (d)	13018300	414
SNAKE RIVER BELOW FLAT CREEK, NEAR JACKSON, WY (d)	13018750	416
SNAKE RIVER ABOVE RESERVOIR, NEAR ALPINE, WY (d)	13022500	418
GREYS RIVER BASIN		
GREYS RIVER ABOVE RESERVOIR, NEAR ALPINE, WY (d)	13023000	420
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BOUNDARY CREEK NEAR BECHLER RANGER STATION, WY (d)	13046680	424

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS

The following surface-water, water-quality, sediment, and biological stations have been operated in and adjacent to Wyoming. The listing includes both discontinued and currently (1997) active stations. Reservoir stations also are included. Records have been collected and published for the period of record, expressed in calendar years, shown for each station. The listing is limited to those stations that have been part of systematic data-collection monitoring networks. Miscellaneous sites are not included. [--, drainage area not determined or no record available]

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN								
MADISON RIVER BASIN								
Firehole River (head of Madison River) near West Yellowstone, Mont.....	06036905	282	1983-95.	--	1983-93.	1988-93.	--	
Gibbon River near West Yellowstone, Mont.....	06037000	118	1913-16;1983-95.	--	1983-93.	1988-93.	--	
Madison River near West Yellowstone, Mont.....	06037500	420	1913-73;1983-86;1988-	--	1983-86; 1989-96.	1989-96.	--	
GALLATIN RIVER BASIN								
Gallatin (West Gallatin) River near Gallatin Gateway (Bozeman), Mont.....	06043500	825	1889-94;1930-81;1984-	--	--	--	--	
YELLOWSTONE RIVER BASIN								
Yellowstone Lake at Bridge Bay (Lake Hotel), Yellowstone National Park	06186000	1,006	1921a-82a.	--	--	--	--	
Yellowstone River at Yellowstone Lake outlet, Yellowstone National Park	06186500	1,006	1922-86;1988-	--	--	--	--	
Tower Creek at Tower Falls, Yellowstone National Park	06187500	50.4	1922-43.	--	--	--	--	
Yellowstone River at Tower Junction, Yellowstone National Park	06187550	1,342	1983-86.	--	--	--	--	
Soda Butte Creek near Lamar Ranger Station, Yellowstone National Park.....	06187950	99.0	1988-	--	1988-89.	1988-89.	--	
Lamar River near Tower Falls Ranger Station, Yellowstone National Park.....	06188000	660	1922-69;1985-86;1988-	--	1985-86; 1988-92.	1988-92.	--	
Blacktail Deer Creek:								
East Fork Blacktail Deer Creek near Mammoth, Yellowstone National Park.....	06188500	10.3	1937-41.	--	--	--	--	
Blacktail Deer Creek near Mammoth, Yellowstone National Park	06189000	14.3	1937-45;1988-93.	--	1988-89.	1988-89.	--	

WATER RESOURCES DATA - WYOMING, 1997

Footnote at end of the table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year				
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology
<u>MISSOURI RIVER BASIN--continued</u>							
YELLOWSTONE RIVER BASIN--continued							
Gardner River:							
Lava Creek:							
Lupine Creek near Mammoth, Yellowstone National Park	06190000	4.67	1937-41.	--	--	--	--
Gardner River above Mammoth Springs outflow near Mammoth, Yellowstone National Park	06190370	--	--	--	1988-93.	--	--
Mammoth Springs outflow at Mammoth, Yellowstone National Park	06190415	--	--	--	1988-94.	--	--
Gardner River at Mammoth (Hotel) (near Mammoth Hot Springs), Yellowstone National Park	06190500	200	1922-38.	--	--	--	--
Gardner River Sinkhole Diversion near Mammoth, Yellowstone National Park	06190525	--	--	--	1988-92.	--	--
Hot River:							
Clematic Creek at Mammoth, Yellowstone National Park	06190530	--	--	--	1990-92.	--	--
Hot River at Mammoth, Yellowstone National Park.	06190540	--	1988-95.	--	1988-94.	--	--
Gardner River near Mammoth, Yellowstone National Park	06191000	202	1938-72;1984-	--	1984-85; 1987-93.	1988-93.	--
LaDuke (Corwin) Hot Springs near Corwin Springs, Mont.....	06191400	--	--	--	1987-94.	--	--
Yellowstone River at Corwin Springs (Horr), Mont.....	06191500	2,623	1889-1893;1910-	--	1988-92.	1985-92.	--
Clarks Fork Yellowstone River at Montana-Wyoming State line, near Cooke City, Mont.....	06205450	--	--	--	1975-77; 1990-	1975-77.	--
Clarks Fork Yellowstone River (Clarks Fork) above Squaw Creek, near Painter.....	06205500	194	1945-51.	--	--	--	--
Crandall Creek:							
Lodgepole Creek at mouth, near Painter	06205950	8.51	1989.	--	--	--	--
Clarks Fork Yellowstone River (Clarks Fork) below Crandall Creek, near Painter	06206000	446	1929-32;1949-57.	--	--	--	--
Sunlight Creek near Painter.....	06206500	135	1929-32;1945-71.	--	--	--	--

WATER RESOURCES DATA - WYOMING, 1997

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year				
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology
<u>MISSOURI RIVER BASIN--continued</u>							
YELLOWSTONE RIVER BASIN--continued							
Clarks Fork Yellowstone River above Paint Creek, near Clark.....	06206600	--	--	--	1975-77.	1975-77.	--
Clarks Fork Yellowstone River (Clarks Fork) near Clark.....	06207000	912	1918-24.	--	--	--	--
Clarks Fork Yellowstone River (Clarks Fork) near Belfry (at Chance), Mont.....	06207500	1,154	1921-	--	1965-88.	1965;1971; 1984.	--
Big Sand Coulee above State ditch, near Badger Basin	06207507	98.3	1973-77.	--	1977.	1973-77.	--
Big Sand Coulee at Wyoming-Montana State line.....	06207510	134	1973-81.	--	1976-81.	1973-81.	--
Silver Tip Creek near Belfry, Mont.....	06207540	88.0	1967-75.	--	--	--	--
Wind River (head of Bighorn River) near Dubois	06218500	232	1945-92.	--	1947-50; 1953; 1965-86.	1970;1980.	1973-82.
Wagon Gulch near Dubois	06218700	4.89	--	1961-84.	--	--	--
Warm Spring Creek near Dubois.....	06219000	85.8	1911-12a.	--	1965.	--	--
Horse Creek at Dubois	06219500	120	1910-12.	--	--	--	--
Wind River at Dubois.....	06220000	486	1910-12.	--	1948-49.	--	--
East (North) Fork Wind River near Dubois	06220500	427	1950-57;1975-	--	1975-86; 1990.	1975-86.	--
Wind River above Red Creek, near Dubois	06220800	1,073	1990-	--	1986-92.	--	--
Red Creek near Dubois	06221000	--	1909a.	--	--	--	--
Wind River tributary near Burris.....	06221200	4.71	--	1961-72.	--	--	--
Dinwoody Creek above lakes, near Burris.....	06221400	88.2	1957-78;1988-	--	1988-92.	1970.	--
Dinwoody Creek near Burris (Crowheart, Lenore)... ..	06221500	100	1909;1918-30;1950-58.	--	--	--	--
Wind River near Burris	06222000	1,236	1946-53.	--	--	--	--
Upper Wind River A Canal at Headworks, near Burris	06222100	--	1997-	--	--	--	--
Dry Creek near Burris, (at Crowheart) (near Lenore)	06222500	53.7	1909a;1921-40;1988-	--	1990.	--	--
Dry Creek Canal at headgate, near Burris.....	06222510	--	1989-	--	--	1990.	--
Crow Creek near Tipperary	06222700	30.2	1962-93.	--	1974-93.	--	--
Meadow Creek near Lenore (near J. K. Ranch Post Office)	06223000	41.7	1909a;1921-23.	--	--	--	--
Willow Creek near Crowheart (at J. K. Ranch Post Office) (near Lenore)	06223500	55.4	1909;1921-23; 1925-40;1988-	--	1990.	--	--

Footnote at end of the table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
YELLOWSTONE RIVER BASIN--continued								
Wind River--continued								
Sand Draw near Crowheart	06223700	12.8	--	1961-77.	--	--	--	
Wind River above Bull Lake Creek, near Crowheart ...	06223750	--	--	--	1990-91.	1990-91.	--	
Wind River tributary No. 2 near Crowheart.....	06223800	3.16	--	1961-81.	--	--	--	
Bull Lake Creek above Bull Lake (Bull Lake Reservoir).....	06224000	187	1941-53;1966-	--	1974-	--	--	
Bull Lake (Bull Lake Reservoir) near Lenore.....	06224500	b210	1938-a	--	--	--	--	
Bull Lake Creek near Lenore	06225000	b213	1918-	--	1990.	--	--	
Wind River near Crowheart	06225500	1,891	1945-	--	1976;1978; 1987-92.	1970-82; 1990-92.	--	
Wyoming Canal near Lenore.....	06226000	--	1941-45;1949-82;1988-	--	1988.	1974-82; 1988.	--	
Dry Creek:								
Little Dry Creek near Crowheart.....	06226200	10.5	--	1961-81.	--	--	--	
Dry Creek near Crowheart	06226300	97.9	--	1959; 1961-81.	--	--	--	
Pilot Canal:								
Pilot wasteway near Morton	06226500	--	1949-53.	--	--	--	--	
Pilot Canal near Morton	06227000	--	1949-53.	--	1977.	--	--	
Wyoming Canal below Pilot diversion, near Morton.	06227500	--	1949-53.	--	--	1975-82.	--	
Johnstown Ditch at Headworks, near Kinnear	06227596	--	1991-	--	--	--	--	
Wind River near Kinnear	06227600	2,194	1974-79;1991-	--	1985-92.	1990-92.	--	
LeClair Canal near Riverton	06227700	--	--	--	--	1976-77.	--	
Lefthand Ditch at Headworks, near Riverton.....	06227810	--	1991-	--	--	--	--	
Wind (Big Wind) River at (near) Riverton (near Arapahoe Agency)	06228000	2,309	1906-8;1911-	--	1947-50; 1965-95.	1949-51; 1959-65; 1971;1977; 1985-95.	1973-78; 1986-95.	
South Fork Little Wind River above Washakie Reservoir, near Fort Washakie								
South Fork Little Wind River below Washakie Reservoir, near Fort Washakie	06228350	90.3	1976-	--	1976-92.	--	--	
South Fork Little Wind River below Washakie Reservoir, near Fort Washakie	06228450	93.5	1988-	--	1990.	--	--	

WATER RESOURCES DATA - WYOMING, 1997

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
YELLOWSTONE RIVER BASIN--continued								
Wind River--continued								
(South Fork) Little Wind River near Fort Washakie ..	06228500	117	1921-40.	--	--	--	--	
Ray Canal at headworks, near Fort Washakie	06228510	--	1989-	--	--	--	--	
North Fork Little Wind River near Fort Washakie ..	06228800	112	1988-	--	1990.	--	--	
North Fork Little Wind River at Fort Washakie.....	06229000	128	1921-40.	--	--	--	--	
Little Wind River at Fort Washakie.....	06229500	249	1908-9.	--	--	--	--	
Sage Creek above Norkok Meadows Creek, near Fort Washakie	06229680	118	1990-95.	--	1990.	--	--	
Norkok Meadows Creek near Fort Washakie.....	06229700	15.4	--	1965-81.	--	--	--	
Sand Draw near Fort Washakie	06229800	99	--	1961-81.	--	--	--	
Trout Creek near Fort Washakie.....	06229900	16.1	1990-	1961-68; 1970-84.	1990.	--	--	
Trout Creek at Wind River	06230000	33.6	1909.	--	--	--	--	
Mill Creek above Ray Lake outlet canal, near Fort Washakie.....	06230190	15.8	1990-96.	--	1990.	--	--	
Ray Lake near outlet, near Fort Washakie.....	06230300	--	--	--	1960-70.	--	--	
Little Wind River near Arapahoe	06230500	618	1950-53.	--	1992.	--	1992.	
Little Wind River tributary near Hudson.....	06230800	2.98	--	1961-71.	--	--	--	
Little Wind River above Arapahoe (Agency)	06231000	660	1906-9;1911-18; 1979-95.	--	1966-92.	--	1973-77; 1989-92.	
Middle (Middle Fork) Popo Agie River (Popo Agie River) near Lander	06231500	86.5	1911-12;1918-24.	--	--	--	--	
Middle Popo Agie River below The Sinks, near Lander.....	06231600	87.5	1959-68.	1969-74.	--	1965.	--	
Baldwin Creek below Dickinson Creek, at Lander.....	06231930	--	--	--	1989-	1989-	--	
Little Dickinson Creek at Lander (formerly Baldwin Creek at Lander).....	06231950	--	--	--	1981.	--	1981.	
North Popo Agie River near Milford.....	06232000	98.4	1945-63.	--	1990.	--	--	
North (North Fork) Popo Agie River near Lander.....	06232500	134	1938-53.	--	--	--	--	
Popo Agie River at Hudson Siding, near Lander ...	06232600	--	--	--	1983-	--	1983-89.	
Little Popo Agie River near Atlantic City	06232800	5.99	1957-73.	--	--	--	--	
Little Popo Agie River near Lander	06233000	125	1946-	--	--	--	--	

WATER RESOURCES DATA - WYOMING, 1997

Footnote at end of the table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
YELLOWSTONE RIVER BASIN--continued								
Wind River--continued								
Little Wind River--continued								
Popo Agie River--continued								
Little Popo Agie River--continued								
Government Draw:								
Monument Draw at upper station, near Hudson.....								
	06233340	5.50	--	1965-72.	--	--	--	
Monument Draw at lower station, near Hudson.....								
	06233360	8.38	--	1965-84.	--	--	--	
Coal Mine Draw:								
Coal Mine Draw tributary near Hudson								
	06233440	63	--	1965-72.	--	--	--	
Little Popo Agie River at Hudson								
	06233500	384	1907-9;1911-17; 1938-53.	--	--	--	--	
Popo Agie River at Hudson.....								
	06233600	--	--	--	1966-69; 1984.	--	--	
Popo Agie River near Arapahoe.....								
	06233900	796	1979-95.	--	1980-92.	--		1983; 1989.
Little Wind (Popo Agie) River below Arapahoe (Agency)								
	06234000	1,464	1906-9;1911-18.	--	--	--	--	
Beaver Creek near Lander								
	06234500	113	1938-41.	--	--	--	--	
South Fork Hall Creek near Lander.....								
	06234700	3.88	--	1960-72.	--	--	--	
Big Sand Draw:								
Bobcat Draw near Sand Draw								
	06234800	62.89	--	1969; 1971-81.	--	--	--	
Beaver Creek near Arapahoe.....								
	06235000	354	1950-53.	--	1951; 1967-81; 1985-92.	1989-92.	--	
Little Wind River (Popo Agie River) near Riverton ..								
	06235500	1,904	1941-	--	1953-54; 1965-	1959-65; 1971; 1989-93.	1987-	
Haymaker Creek near Riverton.....								
	06235700	9.52	--	1961-64; 1966-73.	--	--	--	
Kirby Draw near Riverton.....								
	06236000	129	1951-53.	1961-84.	--	--	--	
Wind River above Boysen Reservoir, near Shoshoni...								
	06236100	4,390	1990-	--	1973-93.	1991-	1974-89.	

Footnotes at end of table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
YELLOWSTONE RIVER BASIN--continued								
Wind River--continued								
Muskrat Creek:								
Lower Fraser diversion reservoir (on Fraser Draw)	06236500	27.4	1953-67c.	--	--	--	--	
Mahoney Reservoir (on Mahoney Draw)	06237000	9.82	1952-57d.	--	--	--	--	
Conant Creek:								
Horseshoe Creek:								
Signor Reservoir (on Signor Draw).....	06237500	7.15	1952-60d.	--	--	--	--	
Rongis Reservoir (on Logan Draw)	06238000	37.0	1954-60d;1961-70c.	--	--	--	--	
Rongis Reservoir Canal	06238500	--	1953-67c.	--	--	--	--	
Dry Cheyenne Creek:								
West Fork Dry Cheyenne Creek at upper station, near Riverton	06238760	.69	--	1965-84.	--	--	--	
West Fork Dry Cheyenne Creek tributary near Riverton		1.85	--	1965-72.	--	--	--	
West Fork Dry Cheyenne Creek near Riverton...	06238790	3.52	--	1965-70.	--	--	--	
Muskrat Creek near Shoshoni	06239000	733	1950-73.	--	--	1950;1961; 1964; 1967-68; 1971-73.	--	
Maverick Springs Draw (head of Fivemile Creek):								
Coal Draw:								
Reservoir No. 9 (on Paintrock Draw)	06239500	.64	1953-60d.	--	--	--	--	
Reservoir No. 8	06240000	1.00	1953-60d.	--	--	--	--	
Reservoir No. 7	06240500	4.57	1952-56d.	--	--	--	--	
Reservoir No. 10	06241000	.13	1954-60d.	--	--	--	--	
Reservoir No. 6	06241500	5.07	1954-57d.	--	--	--	--	
Reservoir No. 5	06242000	5.14	1954-60d.	--	--	--	--	
Reservoir No. 4	06242500	5.77	1954-57d.	--	--	--	--	
Reservoir No. 3	06243000	5.84	1952-57d.	--	--	--	--	
Reservoir No. 1	06243500	5.91	1954-57d.	--	--	--	--	
Fivemile Creek Reservoir.....	06244000	72.8	1956-70c.	--	--	--	--	
Lower Teapot Reservoir (on Teapot Draw).....	06244200	13.5	1954-65c.	--	--	--	--	

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
<u>MISSOURI RIVER BASIN--continued</u>								
YELLOWSTONE RIVER BASIN--continued								
Wind River--continued								
Fivemile Creek above Wyoming Canal, near Pavillion	06244500	118	1949-75;1988-	--	1949-51; 1969; 1974-75; 1987-92.	1949-51; 1960-61; 1964-68; 1970-75; 1989-92.	--	
Fivemile Creek near Pavillion.....	06245000	118	1948-49.	--	--	--	--	
Powerline wasteway near Pavillion.....	06245500	--	1949-50.	--	--	1950.	--	
Pavillion drain near Pavillion	06246000	--	1948-50.	--	1988.	1949-50; 1988.	--	
Ocean drain at Ocean Lake outlet, near Pavillion ..	06246500	--	1948-53;1978-83.	--	1950-51; 1978-83; 1986;1988.	1950-51.	--	
Ocean drain near Midvale	06246800	--	1979-82.	--	--	1979-82.	--	
Ocean drain near Pavillion	06247000	--	1948-53.	--	--	1949-50.	--	
Dudley wasteway near Pavillion	06247500	--	1949-50.	--	--	--	--	
Kellett drain near Pavillion.....	06248000	--	1948-50.	--	--	1950.	--	
Dewey drain near Pavillion	06248500	--	1948-50.	--	--	--	--	
Fivemile 76 drain near Riverton.....	06249000	--	1949-50.	--	--	--	--	
Sand Gulch drain and wasteway near Riverton.....	06249500	--	1949-50.	--	--	--	--	
Fivemile Creek near Riverton	06250000	b356	1949-65.	--	1950-51.	1949-51; 1959-61; 1963-65.	--	
Lost Wells Butte drain near Riverton	06250500	--	1949-50.	--	--	--	--	
Coleman drain near Shoshoni.....	06251000	--	1948-50.	--	--	1950.	--	
Sand Gulch near Shoshoni.....	06251500	18.6	1948-53.	--	1988.	1949-50; 1988.	--	
Eagle drain near Shoshoni	06252000	--	1948-50.	--	--	--	--	
Lateral P-34.9 wasteway near Shoshoni.....	06252500	--	1949-50.	--	--	--	--	

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
<u>MISSOURI RIVER BASIN--continued</u>								
<u>YELLOWSTONE RIVER BASIN--continued</u>								
Wind River--continued								
Fivemile Creek near Shoshoni	06253000	b418	1941-42;1948-83;1988-	--	1948-51; 1953; 1965-86; 1988.	1949-51; 1959-61; 1963-68; 1972; 1974-75; 1978-85; 1988.	--	
Lateral P-36.8 wasteway near Shoshoni.....	06253500	--	1949-50.	--	--	--	--	
Poison Creek:								
Graham Draw:								
East Fork Reservoir	06254000	.81	1949-60d.	--	--	--	--	
West Fork Reservoir	06254500	.38	1947-60d.	--	--	--	--	
Graham Reservoir.....	06255000	3.12	1947-60d.	--	--	--	--	
Dead Man Gulch:								
Dead Man Gulch tributary near Lysite	06255160	.54	--	1965-68; 1970-72.	--	--	--	
Dead Man Gulch near Lysite.....	06255190	4.11	--	1965-73.	--	--	--	
Dead Man Gulch near Moneta	06255200	4.46	--	1958-69.	--	1966.	--	
Poison Creek tributary near Shoshoni	06255300	.39	--	1959-81.	--	--	--	
Poison Creek near Shoshoni.....	06255500	500	1949-53;1955-56.	1961-68.	1951.	1949-51; 1964.	--	
Badwater Creek at Lybyer Ranch, near Lost Cabin ...	06256000	131	1948-68.	--	--	--	--	
Badwater Creek at Lost Cabin	06256500	166	1945-48.	--	--	--	--	
Alkali Creek:								
E-K Creek:								
E-K Creek tributary near Arminto	06256550	.14	--	1960-68.	--	--	--	
Red Creek near Arminto.....	06256600	7.15	--	1963-81.	--	1965.	--	
Badwater Creek at Lysite	06256650	415	1965-73.	--	--	1966-68; 1970-73.	--	
Badwater Creek tributary near Lysite.....	06256670	5.86	--	1966-73.	--	--	--	
Bridger Creek:								
South Bridger Creek near Lysite	06256700	10.0	--	1960-81.	--	--	--	

Footnote at end of the table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
<u>MISSOURI RIVER BASIN--continued</u>								
YELLOWSTONE RIVER BASIN--continued								
Wind River--continued								
Badwater Creek--continued								
Bridger Creek near Lysite.....	06256800	182	1965-73.	--	--	1966-68; 1970-73.	--	
Dry Creek near Bonneville.....	06256900	52.6	1965-81.	--	1976-81.	1966-68; 1970-81.	--	
Badwater Creek at Bonneville.....	06257000	808	1947-73.	--	--	1949-51; 1960-61; 1963-68; 1970-73.	--	
Muddy Creek:								
Holland Creek:								
Warm Springs Creek near Pavillion	06257200	5.44	--	1961-69.	--	--	--	
Shotgun Creek:								
Shotgun Creek tributary near Pavillion.....	06257300	2.57	--	1961-81.	--	--	--	
Muddy Creek near Pavillion	06257500	267	1949-73.	--	1949-51; 1988-92.	1949-51; 1961; 1964-68; 1970-72.	--	
Muddy Creek near Shoshoni	06258000	332	1949-68;1972-83.	--	1953; 1982-84; 1986;1988.	1949-51; 1960-61; 1964-68; 1982-85; 1988.	--	
Cottonwood Creek drain near Shoshoni.....	06258010	--	--	--	--	1979-82.	--	
Birdseye Creek near Shoshoni	06258400	13.2	--	1959-72.	--	--	--	
Cottonwood (Dry Cottonwood) Creek near Bonneville	06258500	165	1949-53.	--	1949-50; 1976.	--	--	
Boysen Reservoir	06258900	7,700	1951-a	--	--	--	--	
Wind River below Boysen Reservoir.....	06259000	7,701	1951-	--	1953-54; 1956; 1960-92.	1979-86.	1973-87.	

WATER RESOURCES DATA - WYOMING, 1997

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
YELLOWSTONE RIVER BASIN--continued								
Bighorn River at (near) Thermopolis	06259500	8,020	1900-5;1910-53.	--	1949-51; 1953-54; 1969-70.	1949-53.	--	
South Fork Owl Creek near Anchor.....	06260000	85.5	1932;1939-43;1959-85; 1991-95.	--	1974-85.	1965; 1977-78.	1977-78.	
Middle Fork Owl Creek above Anchor Reservoir .	06260200	33.6	1959-65.	--	--	--	--	
Anchor Reservoir	06260300	131	1960-a	--	--	--	--	
South Fork Owl Creek below Anchor Reservoir	06260400	131	1959-	--	1974-86.	--	--	
South Fork Owl Creek above Curtis Ranch, near Thermopolis	06260500	144	1943-59.	--	--	--	--	
South Fork Owl Creek at Curtis Ranch, near Thermopolis	06261000	149	1931-32;1938-43.	--	--	--	--	
South Fork Owl Creek near Thermopolis (Owl Creek near Embar).....	06261500	180	1921-22;1929-32.	--	--	--	--	
North Fork Owl Creek near Anchor	06262000	54.8	1941-62.	--	--	--	--	
North Fork Owl Creek above Basin Ranch (below Cup Creek), near Anchor.....	06262300	e61	1962-75;1991-95.	--	--	--	--	
North Fork Owl Creek at Crann Ranch, near Thermopolis.....	06262500	94.2	1938-39.	--	--	--	--	
North Fork Owl Creek near Thermopolis	06263000	102	1930-32.	--	--	--	--	
Mud Creek near Thermopolis.....	06263500	101	1938-39.	--	--	--	--	
Owl Creek near Thermopolis	06264000	478	1910-17;1931-32; 1938-69.	--	1976.	1965.	1975.	
Owl Creek near Lucerne	06264500	509	1932-33;1938-53.	--	--	--	--	
Bighorn River at Lucerne.....	06264700	--	--	--	1966-	1990-92.	1978-	
Kirby Creek near Lucerne	06265000	199	1941-45.	--	--	--	--	
Sand Draw near Thermopolis.....	06265200	6.33	--	1960-81.	--	--	--	
Cottonwood Creek at High Island Ranch (at county bridge), near Hamilton Dome	06265337	81.4	1993-	--	1977-78.	1977-78.	1977-78.	
Cottonwood Creek at State Highway 120, near Hamilton Dome.....	06265410	--	--	--	1977-78.	1977-78.	1977-78.	
Grass Creek above Little Grass Creek, near Grass Creek	06265435	--	--	--	1977-78.	1977-78.	1977-78.	
Grass Creek near mouth, near Hamilton Dome	06265492	--	--	--	1977-78.	1977-78.	1977-78.	

WATER RESOURCES DATA - WYOMING, 1997

Footnote at end of the table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
<u>MISSOURI RIVER BASIN--continued</u>								
YELLOWSTONE RIVER BASIN--continued								
Bighorn River--continued								
Cottonwood Creek at Winchester.....	06265500	416	1941-49;1977-78.	--	1977-78.	1965-66; 1977-78.	1977-78.	
Tie Down Gulch near Worland.....	06265600	1.78	--	1961-84.	--	--	--	
Gooseberry Creek at Dickie	06265800	95	1957-78.	--	1977-78.	1977-78.	1977-78.	
Gooseberry Creek near Grass Creek	06266000	142	1945-57.	--	--	--	--	
Gillies Draw:								
Gillies Draw tributary near Grass Creek	06266320	1.30	--	1965-73.	--	--	--	
Gooseberry Creek at State Highway 431, near Grass Creek	06266450	--	1977-78.	--	1977-78.	1977-78.	1977-78.	
Murphy Draw near Grass Creek.....	06266460	2.32	--	1965-81.	--	--	--	
Gooseberry Creek near Dickie	06266500	289	1938-41.	--	1983.	--	--	
Gooseberry Creek at Neiber (Pulliam).....	06267000	361	1941-53.	--	--	1965-66.	--	
Bighorn River at Neiber	06267050	--	--	--	1965-69; 1976.	--	--	
Nowater Creek:								
East Fork Nowater Creek:								
North Prong East Fork Nowater Creek near Worland.....	06267260	3.77	--	1964-84.	--	--	--	
North Prong East Fork Nowater Creek tributary near Worland.....	06267270	2.11	--	1965-73.	--	--	--	
Denver Jake Reservoir (on unnamed tributary of East Fork)	06267300	--	1958-67f.	--	--	--	--	
East Fork Nowater Creek near Colter	06267400	149	1971-91.	--	1977-81.	1977-81.	--	
Fifteenmile Creek:								
Red Spires Reservoir (on Rock Waterhole Creek)	06267500	5.24	1954-59d;1960-67c.	--	--	--	--	
Middle Fork Fifteenmile Creek near Worland	06267900	--	--	--	1978-82.	1978-82.	1978-82.	
Big Gin Reservoir (on unnamed tributary).....	06268000	.94	1954-59d;1960-67c.	--	--	--	--	

WATER RESOURCES DATA - WYOMING, 1997

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
<u>MISSOURI RIVER BASIN--continued</u>								
YELLOWSTONE RIVER BASIN--continued								
Bighorn River--continued								
Fifteenmile Creek near Worland	06268500	518	1951-72;1978-86.	1973-78.	1965; 1978-81; 1983-86; 1989-92.	1949-51; 1959-61; 1963-68; 1970-72; 1978-86; 1989-92.	1978-81.	
Bighorn River at Worland	06268600	10,810	1965-69.	--	1964-86.	1965-68.		
Slick Creek near Worland.....	06268640	--	--	--	1981-86.	--	--	
Bighorn River near Manderson	06269000	11,020	1949-53;1955-56.	--	1950-51; 1966-71.	1949-51.	--	
Bighorn River at Manderson.....	06269500	11,048	1941-49.	--	1976.	--	--	
Nowood River:								
Spring Creek near Ten Sleep	06269700	57.9	--	1961-74.	--	1967.	--	
Nowood River (Creek) tributary near Ten Sleep....	06269750	.42	--	1960-81.	--	--	--	
Nowood River (Creek) near Ten Sleep	06270000	803	1938-43;1950-55; 1972-92.	--	1967-86.	1971-82.	--	
Tensleep Creek:								
Leigh Creek near Ten Sleep.....	06270200	2.54	--	1961-74.	--	--	--	
Canyon Creek:								
Canyon Creek tributary near Ten Sleep	06270300	.52	--	1961-74.	--	--	--	
Canyon Creek below Cooks Canyon, near Ten Sleep	06270450	72	1969-71.	--	1969-71.	1969-71.	--	
Canyon Creek near Ten Sleep	06270500	86.1	1939-44.	--	--	--	--	
Tensleep Creek near Ten Sleep.....	06271000	247	1910-12;1914-24; 1943-72.	--	1967.	--	--	
Brokenback Creek near Ten Sleep	06271200	55.0	--	1961-70.	--	--	--	
Paintrock Creek below Lake Solitude	06271500	16.0	1946-53.	--	--	--	--	
Paintrock Creek at Longview ranger station, near Hyattville	06272000	79.9	1911-12a.	--	--	--	--	
Paintrock Creek near Hyattville	06272500	164	1920-27;1941-53.	--	1951.	--	--	
Medicine Lodge Creek near Hyattville	06273000	86.8	1942-73.	--	1951;1968.	--	--	

Footnote at end of the table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
YELLOWSTONE RIVER BASIN--continued								
Bighorn River--continued								
Nowood River--continued								
Paint Rock Creek near mouth (near Bonanza), below Hyattville	06273500	376	1910-13;1915-22.	--	1951-53; 1967-84.	--	--	
Nowood River (Creek) at Bonanza	06274000	1,730	1910-28.	--	--	--	--	
Sand Creek:								
East Fork Sand Creek near Worland.....	06274100	19.1	--	1960-71.	--	--	--	
Nowood River tributary No. 2 near Basin.....	06274190	1.51	--	1965-84.	--	--	--	
Nowood River tributary No. 2 near Manderson.....	06274200	1.59	--	1961-71.	1978.	1967.	--	
Nowood River at Manderson	06274220	e2,000	--	--	1965-86.	1950; 1965-67.	--	
Elk Creek near Basin.....	06274250	96.9	--	1959-81.	--	1967.	--	
Bighorn River at Basin.....	06274300	13,223	1983-	--	1983-	1989-92.	1983-	
Greybull River near Pitchfork	06274500	282	1946-49;1951-71.	--	--	--	--	
Wood River near Kirwin	06274800	7.66	1970-75.	--	--	1975.	--	
Wood River at Kirwin	06274810	11.4	1970-78.	--	--	1975.	--	
Wood River at Sunshine	06275000	e194	1945-92.	--	--	1975.	--	
Wood River near Meeteetse.....	06275500	211	1910-12;1914-17; 1929-49.	--	--	--	--	
Greybull River near Meeteetse.....	06276000	659	1910-12;1915-16;1920.	--	--	--	--	
Greybull River at Meeteetse.....	06276500	681	1897;1903;1920-	--	1996-	1975.	--	
Bench Canal near Burlington	06277000	--	1930-38.	--	--	--	--	
Greybull River near Basin.....	06277500	1,115	1930-73.	--	1951-53; 1965-92.	1950; 1965-66; 1972; 1989-92.	--	
Dry Creek:								
Twentyfour Mile Creek near Emblem.....	06277700	12.8	--	1960-81.	--	--	--	
Dry Creek tributary near Emblem	06277750	.65	--	1960-68; 1970-81.	--	--	--	
Dry Creek near Greybull	06277950	432	1979-81.	--	1979-81.	1979-80.	1979-81.	

Footnotes at end of table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
<u>MISSOURI RIVER BASIN--continued</u>								
YELLOWSTONE RIVER BASIN--continued								
Bighorn River--continued								
Dry Creek at Greybull	06278000	433	1951-53;1955-60.	--	1950-51; 1957-60; 1965; 1979-80.	1949-51; 1959-60; 1979-80.	1979-80.	
Shell Creek above Shell (Creek) Reservoir.....	06278300	23.1	1956-	--	--	--	--	
Granite Creek near Shell Creek ranger station, near Shell (formerly Granite Creek near Shell ranger station, near Shell).....	06278400	11.1	--	1961-74.	--	--	--	
Shell Creek near Shell	06278500	145	1940-	--	1951;1976; 1982.	1967.	--	
Shell Creek at Shell	06279000	256	1911-23.	--	--	--	1973-74.	
Red Gulch near Shell	06279020	47.8	--	1967; 1970-81.	--	--	--	
Shell Creek at Porter Gulch, near Greybull.....	06279050	--	--	--	1983-89.	--	1989-90.	
Shell Creek near Greybull	06279090	e560	--	--	1951; 1965-86.	1965-67.	1973-78.	
Bighorn River at Kane	06279500	15,765	1928-	--	1947-53; 1955-57; 1960-97.	1949-51; 1959-61; 1964; 1969-92.	1972-81; 1984-89.	
Willow Creek near Kane	06279700	14.0	--	1961-75.	--	--	--	
North Fork Shoshone River:								
Jones Creek at mouth, near Pahaska.....	06279790	24.8	1989-93.	--	1989-93.	1989-93.	--	
Crow Creek at mouth, near Pahaska.....	06279795	19.1	1989-93.	--	1989-93.	1989-93.	--	
North Fork Shoshone River at Pahaska.....	06279800	108	1989-90.	--	--	--	--	
Middle Creek at East Entrance, Yellowstone National Park	06279850	32.6	1981-84.	--	1968-70.	--	--	
North Fork Shoshone River at Wapiti	06279940	669	1990-	--	1989-90.	--	1989-90.	
Trout Creek near Wapiti	06279950	49.4	--	1961-74.	--	--	--	
North Fork Shoshone River near Wapiti	06280000	775	1921-26;1979-89.	--	1981-86.	--	--	
South Fork Shoshone River near Valley.....	06280300	297	1956-	--	1984.	1958-64.	--	
South Fork Shoshone River (Shoshone River) near Ishawooa.....	06280500	541	1915-24.	--	--	--	--	

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
YELLOWSTONE RIVER BASIN--continued								
Bighorn River--continued								
Shoshone River--continued								
South Fork Shoshone River (Shoshone River) above Buffalo Bill Reservoir (at Marquette).	06281000	585	1903;1905-8;1921-26; 1973-	--	1982-92.	--	--	
Diamond Creek near mouth, near Cody	06281400	7.34	1980-92.	--	--	--	--	
Buffalo Bill (Shoshone) Reservoir near Cody	06281500	1,498	1909-	--	--	--	--	
Shoshone River above Demaris Springs, near Cody..	06281700	--	--	--	1987-	1989.	1989.	
Shoshone River below Buffalo Bill (Shoshone) Reservoir	06282000	1,538	1921-	--	1947-49; 1964-86.	--	1973-78.	
Shoshone River at (near) Cody	06282500	1,603	1902-9.	--	--	--	--	
Cottonwood Creek:								
Cottonwood Creek tributary near Cody.....	06282700	.76	--	1961-73.	--	--	--	
Shoshone River above Dry Creek, near Cody.....	06282900	--	--	--	1974-89.	--	1974-89.	
Shoshone River at Corbett Dam.....	06283000	1,793	1908-25.	--	--	--	--	
Garland Canal (Corbett Tunnel) at Corbett Dam ...	06283500	--	1909-20;1922-26.	--	--	--	--	
Shoshone River above Willwood Dam, near Willwood.....								
Willwood.....	06283800	1,830	1979-82.	--	--	1979-82.	--	
Shoshone River at Willwood Dam	06284000	1,833	1925-26.	--	--	--	--	
Willwood Canal near Ralston.....	06284005	--	--	--	--	1981-83.	--	
Shoshone River below Willwood Dam, near Ralston	06284010	--	--	--	--	1972; 1981-83.	--	
Shoshone River at Willwood.....								
Roan Wash near Garland	06284200	1,980	1974-79.	--	1976.	--	--	
Shoshone River near Garland.....	06284380	--	--	--	1985-92.	--	--	
	06284400	2,036	1958-79.	--	1958-59; 1967-71; 1974-92.	--	--	
Bitter Creek below sewage lagoon, near Powell	06284450	--	--	--	1981-92.	--	1981-89.	
Bitter Creek near Garland.....	06284500	80.5	1951-53;1958-61; 1969-87.	--	1949-53; 1958-60; 1969-	1950-51.	1973-78; 1984-89; 1993-	
Whistle Creek near Garland	06284800	101	1958-60;1968-87.	--	1959-60; 1969-87.	--	--	

Footnotes at end of table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
YELLOWSTONE RIVER BASIN--continued								
Bighorn River--continued								
Shoshone River at Byron.....	06285000	2,345	1929-66.	--	1964-66; 1976.	1950.	--	
Shoshone River near Lovell	06285100	e2,350	1966-	--	1966-97.	1971-82; 1990-92.	1978-81; 1987-89.	
Sage Creek at Sidon Canal, near Deaver.....	06285400	341	1958-60;1968-87.	--	1958-60; 1969-87.	--	--	
Sage Creek near Lovell	06285500	381	1951-60.	--	1965;1967; 1969-71.	--	--	
Shoshone River at Lovell	06286000	2,832	1897-98;1899a.	--	--	--	--	
Shoshone River at Kane	06286200	2,989	1957-58.	--	1958-68; 1976-89.	1959-61; 1964.	1982-89.	
Bighorn River near Lovell	06286250	e18,900	1964-66.	--	--	--	--	
Crooked Creek:								
Big Coulee near Lovell.....	06286258	30.1	1970-78.	--	--	1970-74; 1976-77.	--	
Crooked Creek near Lovell	06286260	e119	1964-67.	--	--	--	--	
Porcupine Creek near Lovell.....	06286270	e135	1964-67.	--	--	--	--	
Bighorn Lake (Yellowtail Reservoir) near St. Xavier, Mont.....	06286400	19,626	1965-	--	--	--	--	
Bighorn River near St. Xavier, Mont	06287000	19,667	1934-	--	1966-81.	--	--	
Little Bighorn River below Dayton Gulch, near Burgess Junction	06288600	15.9	1982-87.	--	--	--	--	
Dry Fork below Lick Creek, near Burgess Junction.....	06288700	54.1	1982-87;1992-95.	--	--	--	--	
Little Bighorn River near Parkman	06288960	137	1969-72.	--	--	--	--	
Elkhorn Creek above Fuller Ranch Ditch, near Parkman.....	06288975	4.58	1982-87.	--	--	--	--	
West Fork Little Bighorn River near Parkman.....	06288990	38.6	1969-72;1982-87.	--	--	--	--	
Little Bighorn (Little Horn) River at State line, near Wyola, Mont	06289000	193	1939-	--	1992-	1992-	1992-	
Powers Upper Ditch (Spring Creek):								
Red Canyon Creek near Parkman.....	06289100	3.20	1983-90.	--	--	--	--	
Little Bighorn (Little Horn) River near Wyola, Mont	06289500	251	1911-24.	--	--	--	--	

Footnote at end of the table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
YELLOWSTONE RIVER BASIN--continued								
Bighorn River--continued								
Little Bighorn River--continued								
Pass Creek:								
West Pass Creek near Parkman.....	06289600	15.4	1982-	--	--	--	--	
East Pass Creek near Parkman.....	06289800	11.6	1974-76.	--	--	--	--	
East Pass Creek near Dayton.....	06289820	21.7	1982-	--	--	--	--	
Twin Creek near Parkman	06289870	27.0	1982-90.	--	--	--	--	
Pass Creek near Wyola, Mont	06290000	111	1935-56.	--	--	--	--	
Little Bighorn (Little Horn) River below Pass Creek, near Wyola, Mont.....	06290500	428	1939-75.	--	--	--	--	
Lodge Grass Creek at State line, near Wyola, Mont	06291200	16.7	1982-89.	--	--	--	--	
North Tongue River:								
Hideout Creek near Dayton.....	06296400	2.89	--	1961-67.	--	--	--	
North (Fork) Tongue River near Dayton.....	06296500	32.4	1945-57.	--	--	--	--	
Big Willow Creek near Dayton	06296700	7.08	--	1961-73.	--	--	--	
South (Fork) Tongue River near Dayton.....	06297000	85	1945-72.	--	--	--	--	
Tongue River at Tongue Canyon Campground, near Dayton.....	06297480	202	1974-79.	--	--	--	--	
Highland ditch near Dayton	06297500	--	1919-23;1940-	--	--	--	--	
Tongue River near Dayton	06298000	204	1918-29;1940-	--	1966-81; 1987-88.	--	1973-77; 1980.	
Little Tongue River at Steamboat Point, near Dayton	06298480	11.4	1974-76.	--	--	--	--	
Little Tongue River above South Fork Little Tongue River, near Dayton.	06298490	14.1	1975-76.	--	--	--	--	
Little Tongue River near Dayton.....	06298500	25.1	1951-53;1955-74.	--	1971.	--	--	
Tongue River at Dayton	06299000	259	1903.	--	--	--	--	
Wolf Creek below Alden Creek, near Wolf.....	06299480	32.8	1974-76.	--	--	--	--	
Wolf Creek above Red Canyon Creek, at Wolf.....	06299490	33.8	1974-76.	--	--	--	--	
Wolf Creek at Wolf.....	06299500	37.8	1945-	--	1985.	--	--	
Slater Creek near Monarch.....	06299900	18.0	--	1967-81.	--	1967.	--	
Tongue River at Monarch.....	06299980	--	--	--	1974-80; 1982-83.	1976-77.	1976-80; 1982-83.	
Tongue River at Carneyville	06300000	495	1911-13;1915-17.	--	--	--	--	

Footnotes at end of table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
YELLOWSTONE RIVER BASIN--continued								
Tongue River--continued								
East Fork Big Goose (East Goose) Creek near Big Horn	06300500	20.1	1953-	--	--	--	--	
Cross Creek above Big Horn Reservoir, near Big Horn	06300900	9.29	1960-71.	--	--	--	--	
Cross Creek near Big Horn.....	06301000	9.63	1953-60.	--	--	--	--	
West Fork Big Goose Creek:								
Coney Creek above Twin Lakes, near Big Horn .	06301480	3.41	1990-	--	--	--	--	
Lost Lake Creek near Big Horn.....	06301485	2.14	1990-93.	--	--	--	--	
Snail Creek near Big Horn.....	06301490	1.36	1990-93.	--	--	--	--	
Coney Creek below Twin Lakes, near Big Horn..	06301495	8.07	1990-94;1995-	--	--	--	--	
West Fork Big Goose (West Goose) Creek near Big Horn	06301500	24.4	1953-	--	--	--	--	
Big Goose (Goose) Creek near Sheridan	06302000	120	1929-	--	1987-89.	1989-92.	1989-	
Goose Creek at Sheridan	06302500	182	1909-13;1915-16.	--	--	--	--	
Little Goose Creek:								
Willow Creek near Big Horn.....	06303000	2.99	1953-55.	--	--	--	--	
Little Goose Creek in canyon, near Big Horn	06303500	51.6	1941-	--	--	--	--	
Little Goose Creek near Big Horn.....	06304000	71	1919-21.	--	--	--	--	
Little Goose Creek at Sheridan.....	06304500	159	1896-97;1911-12.	--	1979-	1990-92.	1979-	
Goose (Big Goose) Creek below Little Goose Creek, at Sheridan	06305000	341	1895;1896-97.	--	--	--	--	
Goose Creek below Sheridan	06305500	392	1941-84.	--	1959-64; 1967-	1971-82; 1989-92.	1973-	
Goose Creek near Acme.....	06305700	411	1984-	--	1983-89.	--	1983-87.	
Tongue River near Acme.....	06306000	894	1938-57.	--	--	--	--	
Squirrel Creek near Decker, Mont.....	06306100	33.6	1975-85.	--	1975-85.	--	--	
Prairie Dog Creek near Acme	06306250	358	1970-79.	--	1976-92.	1976-77.	1976-77.	
Tongue River at State line, near Decker, Mont	06306300	1,477	1960-	--	1965-	1976-77; 1979-83.	1973-89.	
Deer Creek near Decker, Mont.....	06306800	38.3	--	--	1975-77.	1975-76.	--	
Middle Fork Powder River near Barnum.....	06309200	45.2	1961-	--	--	--	--	
Buffalo Creek above North Fork Buffalo Creek, near Arminto	06309260	8.80	1974-79.	--	--	--	--	

Footnote at end of the table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
YELLOWSTONE RIVER BASIN--continued								
Middle Fork Powder River--continued								
Buffalo Creek--continued								
North Fork Buffalo Creek near Arminto	06309270	8.10	1974-79.	--	--	--	--	
Buffalo Creek below North Fork Buffalo Creek, near Arminto	06309280	18.6	1974-79.	--	--	--	--	
Beaver Creek below Bayer Creek, near Barnum	06309450	10.9	1974-89.	--	--	--	--	
Beaver Creek above White Panther Ditch, near Barnum.....	06309460	24.2	1974-89.	--	--	--	--	
Middle Fork Powder River above Kaycee	06309500	e450	1949-70;1984-92.	--	1949; 1952-54; 1984-92.	1966-68; 1970.	1984-92.	
Red Fork near Barnum	06310000	e142	1929-32;1950-53.	--	1988-89.	--	--	
Middle Fork Powder River at Kaycee.....	06310500	647	1911-12;1929-32.	--	1977.	--	--	
North Fork Powder River near Hazelton.....	06311000	24.5	1946-	--	--	--	--	
North Fork Powder River below Bull Creek, near Hazelton	06311060	32.3	1974-92.	--	1970-71.	--	--	
North Fork Powder River below Pass Creek, near Mayoworth.....	06311400	100	1973-	--	--	--	--	
North Fork Powder River near Mayoworth	06311500	106	1940-73.	--	1971.	--	--	
North Fork Powder River near Kaycee.....	06312000	244	1911;1929-32.	--	1988-89.	--	--	
Powder River near Kaycee.....	06312500	e980	1933-35;1938-71.	--	1946; 1949-50; 1952-54; 1968-91.	--	1973-89.	
South Fork Powder River near Powder River	06312700	262	--	1961-84.	--	--	--	
Cottonwood Creek:								
North Fork Cottonwood Creek:								
Sanchez Creek above reservoir, near Arminto .	06312795	5.53	--	1970-81.	--	--	--	
Sanchez Creek near Arminto	06312800	5.95	--	1961-76.	--	--	--	
Dead Horse Creek:								
Dead Horse Creek tributary near Midwest.....	06312910	1.53	--	1965-72.	--	--	--	
Dead Horse Creek tributary No. 2 near Midwest	06312920	1.34	--	1965-72.	--	--	--	

Footnotes at end of table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
YELLOWSTONE RIVER BASIN--continued								
Powder River--continued								
South Fork Powder River near Kaycee.....	06313000	e1,150	1911;1938-40; 1950-69; 1978-80; 1983-84.	--	1949; 1951-53; 1968-81; 1983-89; 1992.	1950-51; 1983-84; 1986-87.	1975-80.	
Salt Creek:								
Bobcat Creek near Edgerton.....	06313020	8.29	--	1965-81.	--	--	--	
Coopers Draw near Edgerton	06313030	1.11	--	1965-73.	--	--	--	
Seven L Creek near Edgerton.....	06313040	7.10	--	1965-73.	--	--	--	
Teapot Creek:								
East Teapot Creek near Edgerton	06313050	5.44	--	1965-72; 1974-79.	--	--	--	
Coal Draw near Midwest.....	06313100	11.4	--	1961-84.	--	--	--	
Dugout Creek:								
Dugout Creek tributary near Midwest.....	06313180	b.8	1975-83.	1965-74.	--	1982-83.	--	
Hay Draw near Midwest.....	06313200	1.60	--	1958-70.	--	--	--	
Salt Creek near Sussex	06313400	769	1976-81;1982-93.	--	1967-	1975-81; 1983-87.	1976-77; 1980.	
North Spring Draw near Sussex	06313450	5.21	--	1980-81.	--	--	--	
Powder River at Sussex.....	06313500	e3,090	1938-40;1950-57; 1977-84; 1985-	--	1966-68; 1976-	1967; 1976-87.	1976-81.	
Bugher Draw near Buffalo	06313600	4.57	--	1961-71.	--	--	--	
Van Houten Draw near Buffalo	06313630	10.8	--	1971-81.	--	--	--	
Powder River above Dead Horse Creek, near Buffalo (formerly 441252106090801).....	06313665	--	--	--	1978; 1988-89.	--	--	
Dead Horse Creek near Buffalo	06313700	151	1971-90.	1958-71.	1976; 1980-81; 1989.	1976.	1976; 1978.	
North Fork Crazy Woman Creek:								
Caribou Creek near Buffalo.....	06313900	5.08	--	1961-74.	--	--	--	
North Fork Crazy Woman Creek below Pole Creek, near Buffalo.....	06313950	43.4	1973-84.	--	--	--	--	

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
YELLOWSTONE RIVER BASIN--continued								
Powder River--continued								
North Fork Crazy Woman Creek near Buffalo.....	06314000	44.9	1942-49;1973-84.	--	--	--	--	
North Fork Crazy Woman Creek below Spring Draw, near Buffalo.....	06314500	51.7	1949-79.	--	--	--	--	
North Fork Crazy Woman Creek near Greub.....	06315000	174	1950-68.	--	--	1966-68.	1978.	
Middle Fork Crazy Woman Creek:								
Poison Creek below Tetley Spring, near Mayoworth.....	06315480	19.0	1974-76.	--	--	--	--	
Poison Creek near Mayoworth	06315490	24.7	1974-76.	--	--	--	--	
Middle Fork Crazy Woman Creek near Greub.....	06315500	82.7	1942-72.	--	--	--	1983.	
Crazy Woman Creek near Buffalo	06316000	464	1929-32.	--	--	--	1976-81	
Crazy Woman Creek at upper station, near Arvada ...	06316400	e945	1963-70;1977-81.	--	1949-50; 1966-	1950; 1966-67; 1976-81; 1990-	1976-81.	
Headgate Draw at upper station, near Buffalo	06316480	1.1	--	1965-73.	--	--	--	
Headgate Draw at lower station, near Buffalo	06316490	e2.6	--	1965-73.	--	--	--	
Crazy Woman Creek near Arvada.....	06316500	956	1939-43;1950-64.	--	--	--	--	
Coal Draw near Buffalo (formerly Powder River tributary near Buffalo)	06316700	1.64	--	1965-84.	--	--	--	
Powder River at Arvada	06317000	e6,050	1919-	--	1946; 1948-53; 1955;1967-	1968; 1970-79; 1983-84; 1986-87.	1972-82.	
Spotted Horse Creek:								
Spotted Horse Creek tributary near Spotted Horse	06317050	3.98	--	1961-81.	--	--	--	
Powder River near Arvada	06317100	e6,580	1915-19.	--	--	--	--	
Clear Creek:								
Sourdough Creek near Buffalo	06317300	5.80	1985-90.	--	--	--	--	
Little Sourdough Creek near Buffalo	06317340	4.53	1985-88.	--	--	--	--	
North Fork Clear Creek near Buffalo	06317500	29.0	1949-68.	--	--	--	--	
Clear Creek at Camp Comfort, near Buffalo.....	06318000	e110	1911-12a.	--	--	--	--	
Clear Creek near (at) Buffalo	06318500	120	1894;1896-99;1917-27; 1938-92.	--	1977-78.	1977-78.	1976-78.	

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DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
YELLOWSTONE RIVER BASIN--continued								
Powder River--continued								
Clear Creek at Buffalo.....	06319000	e130	1902a;1903-4;1911-12.	--	--	--	--	
Bull Creek:								
Sand Creek near Buffalo.....	06319100	10.8	--	1969-84.	--	--	--	
South Rock Creek (head of Rock Creek) at forest boundary, near Buffalo	06319470	40.3	1974-76.	--	--	--	--	
South Rock Creek above Red Canyon, near Buffalo	06319480	40.5	1974-76.	--	--	--	--	
South Fork Rock Creek near Buffalo	06319500	43.8	1941-43;1950-53.	--	--	--	--	
Rock Creek near Buffalo	06320000	60.0	1941-	--	1978.	--	--	
Clear Creek below Rock Creek, near Buffalo	06320200	322	1971-81.	--	1975-91.	1975-81.	1976-89.	
Clear Creek near Kumer Draw, near Buffalo	06320210	--	--	--	1993-	--	1993-	
Clear Creek at Ucross.....	06320400	409	1976-81.	--	1975-81; 1983-92.	1975-81.	1976; 1978.	
South Piney Creek (head of Piney Creek) at Willow Park	06320500	33.6	1945-57;1959-	--	--	--	--	
South Piney Creek near Story.....	06321000	69.4	1951-80.	--	--	--	--	
Mead-Coffeen ditch above fish hatchery, near Story.....	06321020	--	1974-79.	--	--	--	--	
Mead-Coffeen ditch below fish hatchery, near Story.....	06321040	--	1974-79.	--	--	--	--	
South Piney Creek below Mead-Coffeen ditch, near Story.....	06321100	69.5	1974-79.	--	--	--	--	
North Piney Creek near Story.....	06321500	36.8	1951-82.	--	1976-77.	1976-78.	1976.	
Spring Creek near Story	06321800	--	1974-79.	--	--	--	--	
Cruetz ditch near Story.....	06322000	--	1903a.	--	--	--	--	
Prairie Dog ditch near Story.....	06322500	--	1903a.	--	--	--	--	
Piney Creek at Kearney	06323000	118	1902-6;1910-17; 1919-23;1940-	--	1975-78.	1976-78.	1975-76; 1978.	
Piney Creek at Ucross	06323500	267	1917-23;1950-82.	--	1975-92.	1976-78.	1975-80.	
Clear Creek near Arvada	06324000	e1,110	1915-19;1928-29; 1939-82.	--	1949-54; 1966-92.	1966-67; 1975-83.	1975-80.	

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
YELLOWSTONE RIVER BASIN--continued								
Powder River at Moorhead, Mont.....	06324500	8,088	1929-72;1974-	--	1950-53; 1955-57; 1968-72; 1974-92.	1974-	--	
Little Powder River:								
Little Powder River tributary near Gillette.....	06324800	.81	--	1960-81.	--	--	--	
Rawhide Creek:								
Box Draw:								
Box Draw tributary near Gillette.....	06324810	.5	--	1965-72.	--	--	--	
Rawhide Creek tributary near Gillette	06324820	2.6	--	1965-72.	--	--	--	
Little Powder River below Corral Creek, near Weston.....	06324890	204	1975;1977-83.	--	1975-83.	1975-83.	1976-82.	
Cedar Draw near Gillette (formerly Little Powder River tributary No. 2 near Gillette)	06324900	3.45	--	1959-81.	--	--	--	
Cow Creek:								
Cow Creek tributary near Weston.....	06324910	.72	--	1971-84.	--	--	--	
Little Powder River near Weston	06324925	540	1977-81.	--	1969; 1975-81.	1975-81.	1975-81.	
Little Powder River above Dry Creek, near Weston. .	06324970	1,235	1972-	--	1975-82; 1985-	1975-82.	1975-82.	
Little Powder River near Wyoming-Montana State line.....	06324985	--	--	--	1969-70.	--	--	
LITTLE MISSOURI RIVER BASIN								
Little Missouri River near New Haven.....	06332800	--	--	--	1976-77.	--	1976-77.	
CHEYENNE RIVER BASIN								
Antelope Creek (head of Cheyenne River):								
Wind Creek:								
Reservoir No. 13.....	06361500	.60	1951-54g.	--	--	--	--	
Sand Creek:								
Reservoir No. 35A.....	06362000	.61	1952-54g.	--	--	--	--	
Reservoir No. 13A.....	06363000	.28	1952-54g.	--	--	--	--	

Footnotes at end of table.

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DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
CHEYENNE RIVER BASIN--continued								
Antelope Creek--continued								
Porcupine Creek:								
Reservoir No. 10B.....	06363500	0.20	1952-54.	--	--	--	--	
Porcupine Creek near Turnercrest.....	06363700	31.5	--	1959-76.	--	--	--	
Reservoir No. 10A.....	06364000	.43	1952-54g.	--	--	--	--	
Reservoir No. 11.....	06364500	2.46	1951-54g.	--	--	--	--	
Antelope Creek near Teckla.....	06364700	959	1977-81.	--	1977-81.	1977-81.	1977-81.	
Dry Fork:								
Reservoir No. 40.....	06365000	.71	1951-54g.	--	--	--	--	
Bear Creek:								
Reservoir No. 36.....	06365200	.48	1951-54g.	--	--	--	--	
Dry Fork Cheyenne River near Bill	06365300	128	1976-81;1985-87.	--	1977-81; 1987.	1977-81; 1987.	1979.	
Reservoir No. 33A.....	06365500	.44	1952-54g.	--	--	--	--	
Cheyenne River near Dull Center.....	06365900	1,527	1976-81;1985-87.	--	1975-81; 1987.	1975-81; 1987.	1978-81.	
Reservoir No. 14	06366000	10.9	1950-51g;1953-54g.	--	--	--	--	
Reservoir No. 31	06366500	.35	1951-52g.	--	--	--	--	
Reservoir No. 30	06367000	1.31	1951-52g.	--	--	--	--	
Reservoir No. 32	06367500	.59	1951-52g.	--	--	--	--	
Reservoir No. 26	06368000	1.51	1951-52g.	--	--	--	--	
Reservoir No. 22	06368500	.02	1951g.	--	--	--	--	
Reservoir No. 28	06369000	.68	1951-52g.	--	--	--	--	
Reservoir No. 27	06369500	1.09	1951-52g.	--	--	--	--	
Reservoir No. 24	06370000	.52	1951-52g.	--	--	--	--	
Reservoir No. 23	06370500	2.67	1951-52g.	--	--	--	--	
Reservoir No. 21	06371000	.31	1951-52g.	--	--	--	--	
Reservoir No. 18	06371500	.30	1951-52g.	--	--	--	--	
Reservoir No. 17	06372000	.06	1951-54g.	--	--	--	--	
Reservoir No. 25	06372500	.56	1951-54g.	--	--	--	--	
Reservoir No. 20	06373000	.11	1951-52g.	--	--	--	--	
Reservoir No. 19	06373500	.92	1951-54g.	--	--	--	--	
Reservoir No. 16	06374000	.18	1951-52g.	--	--	--	--	
Reservoir No. 15	06374500	9.58	1951-54g.	--	--	--	--	

Footnote at end of the table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
CHEYENNE RIVER BASIN--continued								
Cheyenne River--continued								
Black Thunder Creek:								
Little Thunder Creek:								
Reservoir No. 10.....	06375000	0.66	1951-54g.	--	--	--	--	
Reservoir No. 12.....	06375500	.28	1951-52g.	--	--	--	--	
Little Thunder Creek near Hampshire.....	06375600	234	1977-81;1987-	--	1977-81; 1988; 1990-97.	1977-81; 1988; 1990-97.	1977-81.	
Reservoir No. 7A.....	06376000	.23	1952-54g.	--	--	--	--	
Black Thunder Creek near Hampshire.....	06376300	e535	1972-90.	--	1980-81.	1980-81; 1986-87; 1989.	1980-81.	
Lodgepole Creek:								
Reservoir No. 9.....	06376500	.94	1951-54g.	--	--	--	--	
Reservoir No. 7.....	06377000	2.68	1951-54g.	--	--	--	--	
Reservoir No. 8.....	06377500	.10	1951-54g.	--	--	--	--	
Reservoir No. 7B.....	06378000	1.40	1952-54g.	--	--	--	--	
Lodgepole Creek near Hampshire.....	06378300	354	1977-81.	--	1978-81.	1978-81.	1978-81.	
Boggy Creek:								
Reservoir No. 35.....	06378500	7.52	1950-54g.	--	--	--	--	
Lance Creek:								
Lance Creek tributary near Lance Creek.....	06378640	1.20	--	1965-73.	--	--	--	
Lightning Creek:								
Reservoir No. 55.....	06379000	.05	1953-54g.	--	--	--	--	
Box Creek:								
Reservoir No. 41	06379500	1.27	1951-54g.	--	--	--	--	
Box Creek near Bill	06379600	112	1956-58.	1959; 1961-81.	--	--	--	
Walker Creek:								
Reservoir No. 56	06380000	.70	1953-54g.	--	--	--	--	
Reservoir No. 57	06380500	.21	1953-54g.	--	--	--	--	
Dry Creek:								
Reservoir No. 36A	06381000	.41	1953-54g.	--	--	--	--	
Twentymile Creek:								

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DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
CHEYENNE RIVER BASIN--continued								
Lance Creek--continued								
Lightning Creek--continued								
Twentymile Creek--continued								
Reservoir No. 58	06381500	.07	1953-54g.	--	--	--	--	
Reservoir No. 42 (on Twentymile Draw).....	06382000	0.33	1951-54g.	--	--	--	--	
Pritchard Draw near Lance Creek	06382200	5.10	--	1964-81.	--	--	--	
Cow Creek:								
Reservoir No. 34.....	06382500	.34	1951-54g.	--	--	--	--	
Reservoir No. 37.....	06383000	2.47	1951-54g.	--	--	--	--	
Reservoir No. 38.....	06383500	1.70	1951-54g.	--	--	--	--	
Dogie Creek:								
Reservoir No. 33.....	06384000	.73	1951-54g.	--	--	--	--	
Crazy Woman Creek:								
Reservoir No. 43.....	06384500	1.26	1951-54g.	--	--	--	--	
Reservoir No. 43A.....	06385000	.18	1953-54g.	--	--	--	--	
Old Woman Creek:								
Sage Creek:								
Cottonwood Creek at Hat Creek	06385400	14.5	--	1972-79.	--	--	--	
Reservoir No. 44	06385500	.92	1951-54g.	--	--	--	--	
Lance Creek (at Spencer) near Riverview	06386000	e2,070	1948-54;1956-83.	--	1975-83.	1971; 1975-83.	1978.	
Reservoir No. 39.....	06386200	.52	1951-54g.	--	--	--	--	
Cheyenne River at Riverview	06386400	e5,160	--	--	1980-92.	1981-82.	1980-82.	
(South Fork) Cheyenne River near Spencer	06386500	e5,270	1948-74.	--	1969-70; 1975-80.	1971-74.	1975-80.	
Beaver Creek:								
Turner Creek near Osage.....	06387500	47.8	--	1959-84.	--	--	--	
Reservoir No. 3.....	06388000	.25	1951-54g.	--	--	--	--	
Stockade Beaver Creek:								
Reservoir No. 1.....	06388200	.08	1951-54g.	--	--	--	--	
Skull Creek:								
Oil Creek:								
Reservoir No. 4	06388500	.11	1951-54g.	--	--	--	--	

Footnote at end of the table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
CHEYENNE RIVER BASIN--continued								
Cheyenne River--continued								
Beaver Creek--continued								
Blacktail Creek:								
Blacktail Creek tributary near Newcastle.....	06388800	0.25	--	1960-81.	--	--	--	
Reservoir No. 6	06389000	3.80	1951-54g.	--	--	--	--	
Reservoir No. 6A	06389500	.44	1952-54g.	--	--	--	--	
Reservoir No. 6C.....	06390000	.16	1954g.	--	--	--	--	
Reservoir No. 6B.....	06390500	1.52	1953-54g.	--	--	--	--	
Reservoir No. 5A	06391500	1.39	1953-54g.	--	--	--	--	
Reservoir No. 2	06392000	6.06	1951-53g.	--	--	--	--	
Reservoir No. 5	06392500	.54	1951-54g.	--	--	--	--	
Beaver Creek at Mallo Camp, near Four Corners.....	06392900	10.3	1974-82;1991-	--	--	--	--	
Stockade Beaver Creek near Newcastle.....	06392950	107	1974-82;1991-	--	--	--	--	
Redbird Canyon:								
Gillette Canyon:								
Reservoir No. 45, S. Dak	06393000	1.02	1951-54.	--	--	--	--	
Beaver Creek near Newcastle	06394000	e1,320	1943;1945-	--	1946-47; 1949-53; 1967-86.	1977-78.	1978.	
Beaver Creek near Burdock (Edgemont), S. Dak								
Reservoir No. 39A.....	06394700	.12	1904-6;1928-32.	--	--	--	--	
Reservoir No. 46, S. Dak.....	06394800	.30	1953-54g.	--	--	--	--	
Reservoir No. 46, S. Dak.....	06394800	.30	1951-54g.	--	--	--	--	
Cheyenne River at Edgemont, S. Dak	06395000	7,143	1903-6;1928-33;1946-	--	--	--	--	
Cottonwood Creek:								
Reservoir No. 47B.....	06395500	.05	1952-54g.	--	--	--	--	
Reservoir No. 47A, S. Dak.....	06396000	.05	1952-54g.	--	--	--	--	
Belle Fourche River:								
Belle Fourche River tributary near Turnercrest.....	06425700	.35	--	1961-71.	--	--	--	
Belle Fourche River below Rattlesnake Creek, near Piney								
Piney	06425720	495	1975-83.	--	1975-83.	1976-79; 1981-83.	1976-77; 1980-82.	
Coal Creek near Piney	06425750	71.8	1980-83.	--	1981-83.	1981-83.	1981.	
Belle Fourche River above Dry Creek, near Piney	06425780	594	1975-83.	--	1975-83.	1976-83.	1976-77; 1980-82.	

Footnotes at end of table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year				
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology
<u>MISSOURI RIVER BASIN--continued</u>							
CHEYENNE RIVER BASIN--continued							
Belle Fourche River--continued							
Caballo Creek near Gillette	06425800	122	--	1959-69.	--	--	--
Caballo Creek at mouth, near Piney	06425900	260	1977-83.	--	1977-80; 1982-83.	1977-80; 1982-83.	1978-80.
Raven Creek near Moorcroft.....	06425950	76	1977-83.	--	1978-80.	1977-79.	1978-79.
Belle Fourche River near Moorcroft	06426000	e1,380	1923-33.	--	--	--	--
Donkey Creek:							
Stonepile Creek:							
Burlington Lake Ditch at Gillette	06426095	--	1988-90.	--	--	--	--
Stonepile Creek at Gillette.....	06426100	11.2	1988-92.	--	1988-92.	1988-92.	1988-92.
Donkey Creek tributary above reservoir, near Gillette	06426195	.2	--	1970-84.	--	--	--
Donkey Creek tributary near Gillette	06426200	.28	--	1960-76.	--	--	--
Donkey Creek near Moorcroft	06426400	246	1977-81.	--	1977-89.	1977-81.	1977-81; 1983-89.
Belle Fourche River below Moorcroft	06426500	1,690	1943-70;1975-83; 1985-87;1990-	--	1975-93; 1995-	1976-83; 1986-87; 1990-93.	1975-93; 1995-
Keyhole Reservoir near Moorcroft	06427000	1,953	1952-	--	--	--	--
Belle Fourche River below Keyhole Reservoir	06427500	1,954	1951-95.	--	1969; 1984-90.	--	--
Inyan Kara Creek near Upton.....	06427700	96.5	--	1959-84.	1968;1974.	--	--
Belle Fourche River at Devils Tower	06427850	--	--	--	1967-92.	--	1973-77.
Barlow Creek near Devils Tower	06427880	21.9	--	1971-76.	--	--	--
Blacktail Creek near Hulett	06427900	42.3	--	1962-69.	--	--	--
Belle Fourche River at Hulett	06428000	e2,800	1929-32;1938-51.	--	--	--	--
Belle Fourche River below Hulett.....	06428050	--	--	--	1981-	--	1981-89; 1993-
Belle Fourche River tributary No. 2 near Hulett.....	06428100	10.2	--	1962-84.	--	--	--
Belle Fourche River near Alva.....	06428200	2,948	1988-	--	--	--	--
Belle Fourche River at Wyoming-South Dakota State line	06428500	e3,280	1946-	--	1960; 1965-88.	1960.	1970-81.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year				
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology
MISSOURI RIVER BASIN--continued							
CHEYENNE RIVER BASIN--continued							
Belle Fourche River--continued							
Redwater Creek:							
Rocky Ford Creek:							
Ogden Creek near Sundance.....	06429300	8.42	--	1962-81.	--	--	--
Sundance Creek:							
Sundance Creek tributary above forest boundary, at Sundance.....	06429375	.76	--	1969-72.	--	--	--
Sundance Creek tributary at Sundance.....	06429380	1.40	--	1965-68.	--	--	--
Sundance Creek tributary near Sundance.....	06429400	1.80	--	1962-71.	--	--	--
Cold Springs Creek (head of Sand Creek) at							
Buckhorn	06429500	19.0	1974-82;1991-	--	--	--	--
Sand Creek above Ranch A, near Beulah.....	06429898	--	--	--	1987-91.	--	--
Sand Creek at Ranch A, near Beulah	06429900	260	1974-76.	--	1987-91.	--	--
Sand Creek near Ranch A, near Beulah	06429905	267	1976-83;1991-	--	1981-83.	--	1981-83.
Murray ditch above headgate, at Wyoming-South Dakota State line.....							
Dakota State line.....	06429997	--	1987-	--	--	--	--
Murray ditch at Wyoming-South Dakota State line							
Redwater Creek at Wyoming-South Dakota State line.....	06430000	--	1954-87.	--	--	--	--
Redwater Creek at Wyoming-South Dakota State line.....	06430500	471	1929-31;1936-37;1954-	--	1969-70.	1971-83.	--
NIOBRARA RIVER BASIN							
Niobrara River at Wyoming-Nebraska State line	06454000	e450	1955-94.	--	--	--	--
PLATTE RIVER BASIN							
North Platte River near Northgate (Pinkhampton), Colo .	06620000	1,431	1904;1915-	--	1965-86.	1971-74.	1973-82.
Douglas Creek above Keystone	06620400	22.1	1955-65.	--	--	--	--
Douglas Creek near Keystone.....	06620500	25.6	1912;1914-16.	--	--	--	--
Douglas Creek near Foxpark.....	06621000	120	1946-72.	--	--	--	--
Mullen Creek:							
North Fork Mullen (Mullen) Creek near French.....	06621500	--	1911a.	--	--	--	--
Big Creek at Big Creek ranger station (near							
Downington, Big Creek).....	06622000	106	1911a;1912-24.	--	--	--	--
French Creek near French	06622500	59.6	1909-24.	--	--	--	--
North Brush Creek near Saratoga	06622700	37.4	1960-	--	--	--	--
South Brush Creek near Saratoga.....	06622900	22.8	1960-74;1976-77;1979-	--	--	--	--

Footnotes at end of table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
PLATTE RIVER BASIN--continued								
North Platte River--continued								
Brush Creek at upper station, near Saratoga (near Saratoga)	06623000	77.0	1941-47.	--	--	--	--	
Brush Creek at lower station, near Saratoga (near Saratoga)	06623500	107	1909-15.	--	--	--	--	
Encampment River above East Fork, near Encampment	06623750	--	--	--	1991-92.	1991-92	1991-92.	
East Fork Encampment River at mouth, near Encampment	06623790	--	--	--	1991-92.	1991-92.	1991-92.	
Encampment River above Hog Park Creek, near Encampment	06623800	72.7	1964-	--	1964-96.	1970-96.	1973-96.	
Encampment River near Encampment	06623900	105	1956-64.	--	--	--	--	
Encampment River above Encampment	06624000	207	1940-44.	--	--	--	--	
Encampment River (Grand Encampment Creek) at Encampment (Perym's ranch)	06624500	211	1900;1909-24;1928-32.	--	--	--	--	
Encampment River at mouth, near Encampment	06625000	265	1940-	--	1965-89.	--	1973-78; 1982-83; 1987-89.	
Cow Creek near Saratoga	06625500	58.9	1911-12.	--	--	--	--	
North Platte River at Highway 130, near Saratoga (formerly 412117106433201)	06625650	--	--	--	1977; 1984-91.	--	--	
Spring Creek:								
North Spring Creek near Saratoga	06626000	24.5	1913-15.	--	--	--	--	
Spring Creek near Saratoga	06626500	114	1911-12.	--	--	--	--	
North Platte River at Saratoga	06627000	2,840	1903-6;1909-70.	--	1967.	--	--	
Jack Creek at Jack Creek Park, near Saratoga	06627300	12.2	1966-68.	--	--	--	--	
Jack Creek at Matheson Ranch, near Saratoga	06627500	41.2	1913-24.	--	--	--	--	
Jack Creek below Little Jack (Willow) Creek, near Saratoga	06627600	98.2	1956-58;1966-68.	--	--	--	--	
Jack Creek above Coyote Draw, near Saratoga	06627800	109	1989-	--	--	--	--	
Jack Creek at Blydenburgh's ranch, near Saratoga	06628000	113	1912-14.	--	--	--	--	
Jack Creek near Saratoga	06628500	138	1911-12.	--	--	--	--	
North Platte River near Saratoga	06628550	--	--	--	1971-74.	--	--	

WATER RESOURCES DATA - WYOMING, 1997

Footnote at end of the table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year				
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology
MISSOURI RIVER BASIN--continued							
PLATTE RIVER BASIN--continued							
North Platte River--continued							
Sage Creek below Adams Reservoir, near Rawlins.....	06628700	24.3	1966-68.	--	--	--	--
Sage Creek near Rawlins	06628750	52.0	1966-68.	--	--	--	--
Sage Creek near Saratoga.....	06628800	263	1973-81.	--	1972-81.	1972-81.	--
Pass Creek near Elk Mountain	06628900	91.5	1957-	--	1983.	--	--
Pass Creek near Saratoga	06629000	106	1929-32.	--	--	--	--
Rattlesnake Creek near Walcott	06629100	13.9	--	1962-74.	1983.	--	--
Coal Bank Draw:							
Coal Bank Draw tributary near Walcott	06629150	3.65	--	1962-81.	--	--	--
Coal Bank Draw tributary No. 2 near Walcott	06629200	2.41	--	1962-81.	--	--	--
Pass Creek tributary near Walcott	06629300	.66	--	1963-67.	--	--	--
Pass Creek near Walcott.....	06629500	230	1911.	--	--	--	--
St. Mary Creek:							
St. Mary Creek tributary No. 2 near Hanna	06629600	3.90	--	1963-67.	--	--	--
Kenny Creek near Hanna	06629650	.46	--	1963-67.	--	--	--
St. Mary Creek tributary near Sinclair	06629700	.46	--	1959-71.	--	--	--
Sugar Creek:							
Coal Creek near Rawlins.....	06629800	7.32	--	1959-81.	--	--	--
Great Divide basin:							
Delaney Draw near Red Desert.....	06629850	32.8	--	1961-75.	--	--	--
North Platte River above Seminoe Reservoir, near Sinclair (Parco)	06630000	b4,175	1939-	--	1960-	1974; 1986-94.	1973-
Big Ditch:							
Big Ditch tributary near Hanna	06630200	7.42	--	1959-81.	--	--	--
Big Ditch near Coyote Springs	06630300	110	1975-81.	--	1976; 1978-81.	1976; 1978-81.	--
North Ditch near Coyote Springs	06630330	22.6	1976-81.	--	1976; 1978-81.	1976;1980.	--
Medicine Bow River at Bow Ranger Station, near Elk Mountain.....							
East Fork Medicine Bow River near Elk Mountain...	06630440	28.7	1972-75.	--	--	--	--
Medicine Bow River near Elk Mountain	06630480	17.8	1972-75.	--	--	--	--
Medicine Bow River near Elk Mountain	06630500	65.6	1946-47.	--	--	--	--
Mill Creek near Elk Mountain	06630600	25.8	--	1963-65.	--	--	--
Bear Creek near Elk Mountain.....	06630800	8.93	--	1962-74.	--	--	--

Footnotes at end of table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
PLATTE RIVER BASIN--continued								
North Platte River--continued								
Medicine Bow River near Medicine Bow.....	06631000	190	1911-17;1919-24.	--	--	--	--	
Wagonhound Creek near Elk Mountain	06631100	25.6	--	1962-74.	--	--	--	
Third Sand Creek:								
Third Sand Creek tributary near Medicine Bow	06631140	.78	--	1965-73.	--	--	--	
Third Sand Creek near Medicine Bow	06631150	10.8	--	1965-81.	--	--	--	
Foote Creek near Arlington.....	06631200	5.49	--	1962-69.	--	--	--	
Foote Creek tributary No. 2 near Arlington	06631230	1.43	--	1962-65.	--	--	--	
Foote Creek tributary near Arlington	06631260	2.10	--	1962-70.	--	--	--	
Medicine Bow River above Rock Creek, near								
Medicine Bow.....	06631500	b436	1951-63.	--	--	--	--	
Rock Creek:								
Deep Creek near Arlington.....	06632000	3.13	1914-18.	--	--	--	--	
Carlson Creek ditch near Arlington.....	06632050	--	1992-95.	--	--	--	--	
Carlson Creek ditch above Wagonhound Creek, near Arlington.....	06632055	--	1994-95.	--	--	--	--	
Rock Creek above King Canyon Canal, near								
Arlington.....	06632400	62.9	1965-	--	1967.	--	--	
Rock Creek at (near) Arlington.....	06632500	64.5	1910-18;1939-65.	--	--	--	--	
Threemile Creek near Arlington.....	06632600	6.31	--	1962-74.	--	--	--	
Onemile Creek near Arlington	06632700	3.59	--	1962-74.	--	--	--	
Rock Creek near Rock River.....	06633000	187	1911-12;1928-33.	--	--	--	--	
Rock Creek below Rock River.....	06633500	218	1940-42;1951-68.	--	1965-68.	--	--	
Medicine Bow River at Medicine Bow.....	06634000	1,030	1901.	--	--	--	--	
Little Medicine Bow River at Heward Ranch.....	06634030	--	--	--	1972-73.	--	--	
Little Medicine Bow River near Shirley Basin	06634100	--	--	--	1972-73.	--	--	
Sheep Creek near Marshall.....	06634200	61.0	--	1961-81.	--	--	--	
Sheep Creek near Medicine Bow	06634300	174	--	1961-81.	--	--	--	
Muddy Creek near Shirley.....	06634500	76.6	1915-16.	--	--	--	--	
Little Medicine Bow River near Medicine Bow	06634600	963	1973-84.	--	1965-84.	1971-82.	--	
Little Medicine Bow River at Boles Spring, near								
Medicine Bow	06634620	969	1973-	--	1985-89.	--	--	
Medicine Bow River tributary near Hanna	06634910	3.01	--	1965-84.	--	--	--	

Footnote at end of the table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
PLATTE RIVER BASIN--continued								
North Platte River--continued								
Medicine Bow River--continued								
Willow Springs Draw:								
Willow Springs Draw tributary near Hanna	06634950	1.98	--	1965-73.	--	--	--	
Hanna Draw near Hanna	06634990	21.6	1975-81.	--	1975-81.	1975-81.	--	
Medicine Bow River above Seminole Reservoir, near Hanna	06635000	b2,338	1939-	--	1965-93.	1971-82; 1987-89.	--	
Seminole Reservoir near Leo.....	06635500	b7,230	1939-	--	1972-78h.	--	1975-78h.	
North Platte River above Pathfinder Reservoir	06636000	b7,241	1913-39;1950-59.	--	1969-82; 1987-89.	1987-89.		
Sage Creek above Pathfinder Reservoir.....	06636500	190	1915-25.	--	--	--	--	
Deweese Creek near Alcova	06637000	16.4	1918;1923-24.	--	--	--	--	
Sand Creek near Alcova.....	06637500	51.0	1915-24.	--	--	--	--	
Sweetwater River near South Pass City	06637550	177	1958-73.	1974-81.	1975-78.	1975-78.	--	
Willow Creek near Atlantic City	06637600	3.08	1957-58.	--	--	--	--	
Willow Creek near South Pass City	06637700	9.21	1957-58.	--	--	--	--	
Sweetwater River above Rock Creek, near Atlantic City.....	06637740	--	--	--	--	1981.	--	
Rock Creek above Rock Creek Reservoir.....	06637750	e9.2	1962-95.	--	1978.	1975.	--	
Rock Creek near South Pass City.....	06637800	9.87	1957-60.	--	--	--	--	
Rock Creek near Atlantic City	06637850	14.6	1957.	--	--	--	--	
Slate Creek near Atlantic City	06637900	5.92	1957-73.	--	--	--	--	
Rock Creek at Atlantic City	06637910	21.3	1957-76.	--	1957-59; 1966-67; 1969-71; 1976.	1964-66; 1968; 1971-72; 1976.	--	
Rock Creek at Oregon Trail Crossing, near Atlantic City.....	06637950	--	--	--	--	1981.	--	
Sweetwater River near Atlantic City.....	06638000	438	1946-51.	--	--	--	--	
Sweetwater River near Sweetwater Station	06638090	849	1973-92.	--	--	--	--	
Sweetwater River at Sweetwater Station, near Lander .	06638100	889	--	1965-73.	--	--	--	
Crooks Creek:								
West Fork Crooks Creek near Jeffrey City.....	06638300	11.6	--	1961-81.	1976-78.	1976-78.	--	

Footnotes at end of table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year				
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology
MISSOURI RIVER BASIN--continued							
PLATTE RIVER BASIN--continued							
North Platte River--continued							
Sweetwater River--continued							
Muddy Creek:							
Coal Creek near Muddy Gap.....	06638350	6.08	--	1961-81.	--	--	--
Cherry Creek near Lamont.....	06638400	29.4	--	1960-70.	--	--	--
Sweetwater River at Devils Gate, near Splitrock (near Splitrock)	06638500	2,290	1902-3.	--	--	--	--
Sweetwater River near Alcova.....	06639000	2,327	1913-24;1938-	--	1964-90.	1975-82. 1973-82.	
Horse Creek at Highway 220, near Alcova.....	06639480	--	--	--	1982-90.	--	--
Horse Creek near Alcova	06639500	117	1915-20;1923-24.	--	--	--	--
Canyon Creek near Alcova	06640000	97.1	1915-24.	--	--	--	--
Pathfinder Reservoir near Alcova.....	06640500	b10,711	1909-	--	1975-77h.	--.	1975-77h.
North Platte River below Pathfinder Reservoir (at Pathfinder).....	06641000	b14,671	1905-60.	--	--	--	--
Bear Springs Creek near Alcova	06641400	9.33	--	1960-84.	--	--	--
Alcova Reservoir at Alcova.....	06641500	b10,766	1938-	--	1975-76h.	--	1975-76h.
North Platte River at Alcova.....	06642000	b10,812	1904-5;1934-	--	1965-88; 1992-95.	1976; 1980-86; 1988.	1973-87.
Bates Creek near Freeland	06642500	118	1940-41;1945-51.	--	1981-86.	--	--
Stinking Creek near Alcova	06642650	91.8	1983-84.	--	1983-84.	1983-84.	--
Lawn Creek near Alcova.....	06642700	11.5	--	1961-84.	--	--	--
Stinking Creek tributary near Alcova.....	06642730	1.34	--	1961-71.	--	--	--
Stinking Creek near Alcova	06642760	117	--	1961-81.	--	--	--
Bates Creek near Alcova (Casper)	06643000	393	1916-24;1935-61.	--	1965; 1968-86; 1988; 1993.	1988.	--
Coal Creek near Goose Egg	06643300	5.39	--	1960-84.	--	--	--
North Platte River near Goose Egg (Casper).....	06643500	b11,423	1917-19;1924;1947; 1950-60;1983-86; 1988-95.	--	1957-60. 1985-87; 1989.	1985-87.	1987.
North Platte River near Goose Egg	06643510	--	--	--	1977-79; 1982-89; 1992-95.	1983;1988.	1977-79; 1982-87.

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DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
PLATTE RIVER BASIN--continued								
North Platte River--continued								
Poison Spider Creek near Goose Egg	06644000	301	1950-56.	--	1965; 1967-70; 1979;1986; 1988; 1992-95.	1988.	--	
North Platte River at Mills.....	06644085	--	--	--	1970-89.	1988.	1974-77; 1982-87.	
Casper Creek:								
Middle Fork Casper Creek near Bucknam.....	06644120	--	--	--	1967-75; 1988; 1992-94.	--	--	
South Fork Casper Creek:								
Clarks Gulch near Natrona	06644200	2.64	--	1961-72.	--	--	--	
Casper Creek at Casper	06644500	668	1946-56.	--	1965; 1967-88; 1992-95.	1988.	1974; 1982-87.	
North Platte River at Casper	06644550	--	--	--	1971-94.	1971-82.	1982-87.	
Reefs Draw:								
Reefs Draw tributary near Casper	06644700	.47	--	1959-71.	--	--	--	
Sand Spring Creek:								
McKenzie Draw:								
McKenzie Draw tributary near Casper	06644840	2.02	--	1965-81.	--	--	--	
North Platte River below (at) Casper.....	06645000	b12,574	1929-59.	--	1949-53; 1957-59; 1967-	1971;1988.	1970-89.	
Smith Creek above Otter Creek, near Casper	06645150	9.91	1974-79;1987-96.	--	--	--	--	
Smith Creek at Otter Creek, near Casper	06645160	10.9	1974-79.	--	--	--	--	
Otter Creek at mouth, near Casper	06645164	6.50	1987-96.	--	--	--	--	
Smith Creek below Otter Creek, near Casper	06645166	18.5	1987-96.	--	--	--	--	
Beaver Creek above Pole Creek, near Casper.....	06645174	4.67	1987-96.	--	--	--	--	
Pole Creek near Casper	06645178	2.70	1987-96.	--	--	--	--	
North Platte River at Parkerton.....	06645500	b17,135	1919-24.	--	--	--	--	
Deer Creek in Canyon, near Glenrock	06646000	139	1946-51;1985-	--	1985-91.	1985-91.	1985-91.	

Footnotes at end of table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year				
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology
<u>MISSOURI RIVER BASIN--continued</u>							
PLATTE RIVER BASIN--continued							
North Platte River--continued							
Deer Creek--continued							
Little Deer Creek above East Cart Creek, near Glenrock.....	06646280	3.89	1974-76.	--	--	--	--
Little Deer Creek below East Cart Creek, near Glenrock.....	06646300	7.48	1974-76.	--	--	--	--
Deer Creek at Glenrock.....	06646500	212	1916-24;1928-33; 1935-61.	--	--	--	--
Deer Creek below Millar wasteway, at Glenrock	06646600	213	1961-92.	--	1965; 1967-86.	--	--
North Platte River below Deer Creek, near Glenrock	06646610	--	--	--	1979.	--	--
Dry Creek:							
East Fork Dry Creek:							
East Fork Dry Creek tributary near Glenrock	06646700	2.60	--	1961-81.	--	--	--
Sand Creek near Glenrock	06646780	79.9	1977-81.	--	1978-80.	1978-80.	1978-80.
North Platte River near Glenrock	06646800	b13,538	1959-92.	--	1960-86.	1976.	--
Running Dutchman Canal near Careyhurst.....	06647000	--	1935-50.	--	--	--	--
North Platte River near Careyhurst.....	06647020	--	--	--	1969-76.	--	--
Box Elder Creek at Boxelder	06647500	63.0	1946-51;1961-67;1971-	--	--	--	--
Box Elder Creek near Boxelder	06647800	136	1981-84.	--	--	--	--
Box Elder Creek at Converse County Park, near Careyhurst.....	06647810	138	1981-84.	--	--	--	--
Little Box Elder Creek near Careyhurst.....	06647890	7.18	1974-88.	--	--	--	--
Little Box Elder Creek at Little Box Elder Cave, near Careyhurst.....	06647900	8.47	1974-88.	--	--	--	--
Little Box Elder Spring near Careyhurst.....	06647910	--	1980-86.	--	1983.	--	--
Cottonwood Creek near Careyhurst.....	06647920	2.33	1981-84.	--	--	--	--
Box Elder Creek below Interstate 25, near Careyhurst.	06647990	--	--	--	1981-86.	--	--
Box Elder Creek near Careyhurst	06648000	202	1911;1915-24;1928-33; 1935-69.	--	1965.	--	--
Douglas (Morton) Canal near Orpha.....	06648500	--	1935-51.	--	--	--	--
Sage Creek:							
Frank Draw:							
Frank Draw tributary near Orpha	06648720	.79	--	1965-73.	--	--	--
Sage Creek tributary near Orpha.....	06648780	1.38	--	1965-84.	--	--	--

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DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year				
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology
<u>MISSOURI RIVER BASIN--continued</u>							
PLATTE RIVER BASIN--continued							
North Platte River--continued							
La Prele Creek near Douglas.....	06649000	135	1919-92.	--	--	--	--
La Prele Creek below La Prele Reservoir	06649200	152	1961-68.	--	1965.	--	--
La Prele Creek near Orpha (Fetterman)	06649500	177	1916;1918;1923-24; 1928-33;1935-70.	--	1981-86.	--	--
North Platte River at Orpha	06649520	--	--	--	1974-75.	--	--
North Platte River tributary near Douglas	06649900	8.53	--	1961-81.	--	--	--
North Platte River near (at) Douglas	06650000	b18,338	1891-94;1919-23; 1929-39;1946-59.	--	--	--	--
Wagonhound Creek near La Bonte	06650500	112	1916-24;1929-32; 1937-69.	--	1965;1979; 1981-86.	--	--
La Bonte Creek:							
West Fork La Bonte Creek near La Bonte	06651000	20.6	1946-51.	--	1979.	--	--
La Bonte Creek near La Bonte.....	06651500	287	1916-24;1928-33; 1935-69.	--	1965; 1981-86.	--	--
Sand Creek near Orin	06651800	27.8	--	1955; 1961-84.	--	--	--
North Platte River at Orin (Orin Junction) (McKinley) ...	06652000	b15,025	1895-99;1917-18;1924; 1958-	--	1966-89.	1971-82.	1973-89.
Shawnee Creek:							
Shawnee Creek tributary near Orin.....	06652200	.33	--	1961-76.	--	--	--
Lost Creek:							
Watkins (Watson) Draw near Lost Springs	06652400	6.95	--	1960-84.	--	--	--
Glendo Reservoir near Glendo	06652700	b15,545	1958-	--	1975-76h.	--	1975-76h.
North Platte River below Glendo Reservoir.....	06652800	b15,548	1957-	--	1966-88.	--	1973-82.
Horseshoe Creek near Esterbrook	06653000	45.5	1946-51.	--	--	--	--
Horseshoe Creek near Binford	06653100	e110	1961-64.	--	--	--	--
Horseshoe Creek near Cassa	06653300	195	1961-68;1988-96.	--	1965.	--	--
Horseshoe Creek near Glendo.....	06653500	211	1916-18;1921-24; 1928-33;1935-70; 1988-96.	--	--	--	--
North Platte River near Cassa.....	06654000	b19,796	1946-57.	--	1953.	--	--
Cottonwood Creek near Fletcher Park	06654500	51.1	1946-51.	--	--	--	--
Cottonwood Creek below Dagley Creek, near Binford	06654510	54.0	1974-76.	--	--	--	--

Footnotes at end of table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
PLATTE RIVER BASIN--continued								
North Platte River--continued								
Cottonwood Creek below Tunnel Outlet, near Binford	06654520	57.2	1974-76.	--	--	--	--	
Cottonwood Creek near Binford.....	06654550	61	1973-74.	--	--	--	--	
Cottonwood Creek at (near) Wendover.....	06655000	196	1916-24;1929-33; 1935-42;1946-55; 1973-74.	--	--	--	--	
Deadmans Gulch near Guernsey.....	06655360	.34	--	1965-72.	--	--	--	
Fish Canyon near Guernsey	06655380	1.06	--	1965-76.	--	--	--	
Black Canyon near Guernsey.....	06655400	.22	--	1965-70.	--	--	--	
Guernsey Reservoir near Guernsey	06655500	b16,224	1928-	--	1972-73.	--	--	
Hartville Canyon:								
Sparks Canyon near Hartville	06655750	.74	--	1965-72.	--	--	--	
North Platte River (North Platte River and Interstate Canal) below Guernsey Reservoir (near, at Guernsey) (at, above Whalen)	06656000	b16,237	1900-	--	1950-52; 1955-58; 1965-86.	1979.	1980-81.	
North Platte River near Guernsey.....	06656500	--	--	--	1981-83.	--	1981-83.	
North Platte River (at recorder station) below Whalen (below Whalen) diversion dam.....	06657000	b16,237	1909-	--	1970-76.	--	1974.	
Laramie River near (at) Glendevey, Colo	06657500	101	1904-5;1910-82.	--	--	--	--	
Laramie River near Jelm	06658500	294	1904-5;1911-71.	--	1965;1968.	--	--	
Laramie River at Woods Landing (Woods).....	06659000	392	1890-92;1895a; 1896-1911.	--	--	--	--	
Laramie River and Pioneer Canal near Woods	06659500	434	1912-24;1926-27;1931-	--	--	--	--	
Sand Creek at Colorado-Wyoming State line	06659580	29.2	1968-	--	--	--	--	
Sand Creek near Tie Siding.....	06659600	39.9	1957-68.	--	--	--	--	
Laramie River at Laramie	06660000	b1,071	1933-72.	--	1968-70.	--	--	
Laramie River above Howell	06660070	--	--	--	1980-89.	--	1980-89.	
Laramie River at Howell	06660100	--	--	--	1974-80.	1974.	1974-80.	
Laramie River at Two Rivers	06660500	b1,224	1908-27;1932-72.	--	1966-92.	--	--	
Little Laramie River near Filmore (Hatton).....	06661000	157	1902-3;1911-26;1933-	--	--	--	--	

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
<u>MISSOURI RIVER BASIN--continued</u>								
PLATTE RIVER BASIN--continued								
North Platte River--continued								
Laramie River--continued								
Little Laramie River at Two Rivers (at Haley's ranch, near Laramie)	06661500	b376	1903;1910-27;1933-72.	--	1965-87; 1990-92.	--	--	
Fourmile Creek near Centennial	06661530	7.34	--	1963-68.	--	--	--	
Onemile Creek near Centennial.....	06661550	6.12	--	1963-65.	--	--	--	
Fourmile Creek tributary near Centennial	06661570	.28	--	1963-71.	--	--	--	
Sevenmile Creek near Centennial	06661580	11.2	--	1962-84.	--	--	--	
Laramie River near Bosler	06661585	b1,790	1972-	--	1990-92.	1990-92.	--	
Dutton Creek:								
Sheep Creek near Arlington	06661590	5.46	--	1962-63.	--	--	--	
Dutton Creek near McFadden	06661600	19.9	1958-63.	--	--	--	--	
Cooper Creek near Arlington	06661700	8.51	--	1962-65.	--	--	--	
Cooper Creek tributary near Arlington.....	06661740	1.83	--	1962-65.	--	--	--	
South Fork Cooper Creek near Arlington.....	06661750	6.41	--	1962-65.	--	--	--	
Laramie River near Lookout	06662000	b2,174	1912-17;1921-27; 1932-96.	--	1965; 1976-80.	--	--	
Wheatland Reservoir No. 2 near Lookout.....	06662500	b2,221	1951-66.	--	--	--	--	
Laramie River at McGill	06663000	b2,230	1912-15.	--	--	--	--	
Laramie River below Wheatland Reservoir No. 2 (below McGill).....	06663500	b2,248	1916-17;1951-63.	--	--	--	--	
Laramie River below Luman Creek, near Wheatland...	06663900	--	--	--	1989-92.	--	--	
Laramie River near Wheatland	06664000	b2,527	1912-16;1929-33.	--	--	--	--	
Sybilie Creek above Mule Creek, near Wheatland	06664400	194	1974-	--	1984-87.	--	--	
Sybilie Creek below Mule Creek, near Wheatland	06664490	219	1968-73.	--	--	--	--	
Sybilie Creek above Bluegrass Creek, near Wheatland	06664500	225	1941-68.	--	--	--	--	
Bluegrass Creek near Wheatland.....	06664900	139	1958-63;1968-79.	--	--	--	--	
Sybilie Creek below Bluegrass Creek, near Wheatland	06665000	366	1950-68.	--	1965.	--	--	
Wheatland Canal No. 1 near Wheatland	06665500	--	1952-63.	--	1958-59.	--	--	
Sybilie Creek above Canal No. 3, near Wheatland	06665790	--	1980-	--	--	--	--	
Wheatland Canal No. 3 near Wheatland	06665800	--	1958-63.	--	1958-59.	--	--	

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Station name	Station number	Drainage area (square miles)	Period of record, by calendar year				
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology
MISSOURI RIVER BASIN--continued							
PLATTE RIVER BASIN--continued							
North Platte River--continued							
Laramie River--continued							
Sybille Creek--continued							
Wheatland Canal No. 2 near Wheatland	06666000	--	1952-63.	--	1958-59.	--	--
Sybille Creek near Muleshoe Ranch, near Wheatland	06666500	507	1950-58.	--	--	--	--
Sybille Creek at Muleshoe Ranch, near Wheatland...	06666600	508	1958-63;1966-67.	--	1959.	--	--
Sybille Creek near Wheatland.....	06667000	515	1912-16.	--	--	--	--
Laramie River above North Laramie River, near Uva..	06667060	3,131	1973-79.	--	--	--	--
North Laramie River near Garrett	06667200	e46	1963-65.	--	--	--	--
North Laramie River (at upper station) near Wheatland	06667500	370	1915-23;1939-71; 1973-74.	--	--	--	--
Piney Creek:							
Piney Creek tributary at upper station, near Wheatland	06667560	.18	--	1965-72.	--	--	--
Piney Creek tributary at lower station, near Wheatland	06667580	.58	--	1965-70.	--	--	--
North Laramie River at Wilson's ranch, near Wheatland	06668000	377	1912-14.	--	--	--	--
Rabbit Creek near Wheatland.....	06668040	1.30	--	1965-84.	--	--	--
Fish Creek near Fletcher Park	06668200	6.33	1973-74.	--	--	--	--
North Laramie River at Uva.....	06668500	530	1911-12.	--	--	--	--
Laramie River at Uva	06669000	b3,662	1895-99;1903.	--	--	--	--
Wheatland Creek below Wheatland	06669050	--	--	--	1982-	--	1982-
Wheatland Creek near Uva	06669100	56.7	1973-74.	--	--	--	--
Chugwater Creek at Platte-Laramie County line, near Chugwater (formerly 413918105021401)	06669350	--	--	--	1984-89.	--	--
Chugwater Creek at Chugwater	06669500	349	1911-21;1938-40.	--	1984-89.	--	--
Chugwater Creek tributary near Chugwater	06669600	.23	--	1960-68.	--	--	--
Chugwater Creek near Uva	06669850	654	1966-68;1973-74.	--	1958-59; 1965; 1984-85.	--	--
Laramie River near Uva	06670000	b4,440	1952-68.	--	1956-59.	--	--
Laramie River tributary near Guernsey.....	06670100	1.97	--	1971-79.	--	--	--

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Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
<u>MISSOURI RIVER BASIN--continued</u>								
PLATTE RIVER BASIN--continued								
North Platte River--continued								
Laramie River--continued								
Laramie River tributary No. 2 near Fort Laramie	06670480	8.91	--	1971-76.	--	--	--	
Laramie River near (at) Fort Laramie	06670500	b4,564	1915-	--	1965-88.	1971-82.	1973-82.	
North Platte River near Lingle.....	06670900	b25,095	1968-75.	--	1969-75.	1969-75.	--	
Rawhide Creek:								
Dry Rawhide Creek near Lingle.....	06670985	20	--	1969-81.	--	--	--	
Rawhide Creek above Interstate Canal, near Lingle.....	06670990	--	--	--	1970-73.	--	--	
Rawhide Creek near Lingle.....	06671000	522	1928-92.	--	1965; 1970-73.	--	--	
North Platte River at Vaughn.....	06671500	b25,648	1924.	--	--	--	--	
North Platte River at Torrington	06672000	b25,742	1917-24;1926-39.	--	1975-79.	--	--	
Cherry Creek drain near Torrington.....	06672500	356	1931-32;1935-92.	--	1969-72.	--	--	
Arnold drain near Torrington	06673000	--	1931;1940-42.	--	1971-72.	--	--	
Katzer drain near Henry, Nebr	06673500	b45.9	1928-92.	--	1971.	--	--	
Mitchell Canal at Wyoming-Nebraska State line.....	06674000	--	1938-41.	--	--	--	--	
North Platte River at Wyoming-Nebraska State line.....	06674500	b22,218	1929-	--	1964-	1971-82.	1970-89.	
Horse Creek:								
Horse Creek tributary near Little Bear.....	06675300	8.16	--	1961-81.	--	--	--	
Horse Creek near Meriden	06675500	425	1945-47.	--	--	--	--	
Horse Creek near Johnson Ranch, near La Grange.....	06675850	595	1978-79.	--	--	--	--	
Horse Creek near Little Horse Creek	06676000	--	1911-12.	--	--	--	--	
Horse Creek (at Wye Cross Bridge) near La Grange....	06676500	645	1912-20.	--	--	--	--	
Horse Creek at WyCross Ranch, near La Grange	06676550	651	1965-73;1978-79.	--	1965; 1969-72; 1981-83.	1969-72.	1981-83.	
Bear Creek:								
South Fork Bear Creek near Little Bear	06676700	34.2	--	1960-76.	--	--	--	
Bear Creek near La Grange.....	06676900	516	1978-79.	--	--	--	--	
Bear Creek below Lovercheck Canyon, near LaGrange.....								
LaGrange.....	06676905	--	--	--	1992.	--	--	
Horse Creek near Yoder	06677000	1,347	1928-33;1935-45.	--	--	--	--	
Horse Creek at lower station, near Yoder.....	06677010	e1,320	1965-72.	--	1969-72.	--	--	

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Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
MISSOURI RIVER BASIN--continued								
PLATTE RIVER BASIN--continued								
North Platte River--continued								
Horse Creek at Wyoming-Nebraska State line.....	06677100	1,530	1969-71.	--	--	--	--	
North Platte River at Mitchell, Nebr.....	06679500	124,300	1901-13;1916-18; 1920-94.	--	--	--	--	
South Platte River:								
Lonetree Creek at Carr, Colo.....	06753400	--	1993-95.		1993-95.	1993-95.	--	
South Platte River near (at) Kersey, Colo	06754000	9,598	1901-3;1905-	--	1993-	1993-	--	
Middle (Fork) Crow Creek near Hecla	06754500	25.8	1902-3;1933-69.	--	--	--	--	
South (Fork) Crow Creek near Hecla.....	06755000	13.9	1933-69.	--	--	--	--	
North Fork Crow Creek near Hecla.....	06755500	27.9	1933-44.	--	--	--	--	
Crow Creek at Roundtop Road, near Cheyenne	06755800	239	1994-96.	--	1986-92.	--	--	
Diamond Creek below Roundtop Road, at F. E. Warren Air Force Base								
Diamond Creek at F.E. Warren Air Force Base	06755840	10.75	1994-96.	--	--	--	--	
Diamond Creek at F.E. Warren Air Force Base	06755860	10.8	1992-96.	--	--	--	--	
Diamond Creek at mouth, at F.E. Warren Air Force Base								
Diamond Creek at mouth, at F.E. Warren Air Force Base	06755880	10.9	1992-96.	--	--	--	--	
Crow Creek at F.E. Warren Air Force Base	06755950	253	1994-96.	--	1983-94.	--	1987-94.	
Crow Creek at 19th Street, at Cheyenne	06755960	257	1994-	--	--	--	--	
Crow Creek near Cheyenne.....	06756000	297	1922-24;1951-57.	--	1972-75; 1983-92.	--	1972-75; 1987-92.	
Crow Creek near Archer	06756060	--	--	--	1990-	--	1990-	
Crow Creek near Carpenter.....	06756100	415	1990-96.	--	1990-92.	--	1990-92.	
Lodgepole Creek near Federal	06761000	25	1933-38.	--	--	--	--	
South Fork Lodgepole Creek near Federal.....	06761500	16	1933-38.	--	--	--	--	
Ninemile Draw:								
Ninemile Draw tributary near Federal.....	06761600	1.49	--	1960-76.	--	--	--	
Muddy Creek:								
Muddy Creek tributary near Burns.....	06761700	24.8	--	1960-76.	--	--	--	
Lodgepole Creek tributary near Pine Bluffs.....	06761900	.44	--	1960-81.	--	--	--	
Lodgepole Creek tributary No. 2 near Albin.....	06762600	5.69	--	1960-84.	--	--	--	
Lodgepole Creek tributary No. 3 near Albin.....	06762700	.75	--	1960-71.	--	--	--	

WATER RESOURCES DATA - WYOMING, 1997

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
COLORADO RIVER BASIN								
GREEN RIVER BASIN								
Green River near Kendall	09188000	271	1910-12;1918.	--	--	--	--	
Green River at Warren Bridge, near Daniel	09188500	468	1932-92;1994-	--	1962-64; 1967-72; 1974-82.	1975-78.	1974-82.	
Beaver Creek near Daniel	09189000	141	1938-54.	--	--	--	--	
North Horse (head of Horse Creek) Creek above Sherman Ranger Station	09189495	42.8	1982-84.	--	--	--	--	
Horse Creek at Sherman Ranger Station.....	09189500	43.0	1954-74.	--	1976-78.	1976;1978.	1976; 1978.	
South Horse Creek near Merna	09189550	33.3	1982-85.	--	--	--	--	
Horse Creek near Daniel	09190000	106	1931-54;1982-85.	--	1969;1977.	1977.	1977.	
Horse Creek at Daniel	09190500	173	1913-18.	--	--	--	--	
Green River near Daniel	09191000	932	1912-32.	--	--	--	--	
Cottonwood Creek:								
South Cottonwood Creek near Big Piney	09191300	21.4	1982-84.	--	--	--	--	
Cottonwood Creek near Daniel	09191500	202	1938-54.	--	--	--	--	
Cottonwood Creek near Big Piney (North channel and South channel)	09192000	227	1915-19;1931-32.	--	--	--	--	
Cottonwood Creek near mouth, near Big Piney.....	09192500	238	1938-40.	--	--	--	--	
Green River near Big Piney	09192600	e1,260	--	--	1967-86.	1975-78.	--	
New Fork River above New Fork Lakes.....	09192750	21.8	1985.	--	--	--	--	
New Fork River (New Fork) below New Fork Lake, near Cora	09193000	36.2	1938-72.	--	--	--	--	
New Fork River at Alexander's Ranch, near Cora (near Cora)	09193500	47.3	1910-11.	--	--	--	--	
New Fork River at Pinedale crossing, near Cora (near Cora)	09194000	e72	1905.	--	--	--	--	
Willow Creek near Cora	09194500	41.8	1938-41.	--	--	--	--	
Lake Creek near Cora	09195000	31.6	1938-41.	--	--	--	--	
Duck Creek at Cora	09195500	e27	1938-41.	--	--	--	--	
New Fork River (New Fork) near Pinedale	09196000	241	1938-44.	--	1975.	--	--	
Pine Creek above Fremont Lake	09196500	75.8	1954-97.	--	1975-78; 1980; 1985-88.	1975-78.	1976.	

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DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
COLORADO RIVER BASIN--continued								
GREEN RIVER BASIN--continued								
Green River--continued								
New Fork River--continued								
Pine Creek--continued								
Fremont Ditch near Pinedale.....	09196940	--	1985-86;1988-95.	--	--	--	--	
Highland Ditch near Pinedale.....	09196960	--	1985-86;1988-95.	--	--	--	--	
Pine Creek below Fremont Lake (at Fremont Lake outlet) (near Pinedale).....	09197000	114	1910-12;1915-18; 1985-86;1988-	--	--	--	--	
Pine Creek near Pinedale.....	09197500	118	1904-6.	--	--	--	--	
Pine Creek at Pinedale.....	09198000	118	1903-4;1914-54.	--	--	--	--	
Pole Creek below Little Half Moon Lake, near Pinedale.....	09198500	87.5	1938-1971.	--	--	--	--	
Pole Creek at Fayette.....	09199000	126	1904-6.	--	--	--	--	
Fall Creek near Pinedale.....	09199500	37.2	1938-1971.	--	--	--	--	
Fall Creek near (at) Fayette.....	09200000	e38	1904-5.	--	--	--	--	
Pole Creek near Pinedale.....	09200500	167	1910a.	--	--	--	--	
New Fork River (New Fork) near Boulder	09201000	552	1914-69.	--	1965; 1967-71.	--	--	
Boulder Creek above Boulder Lake, near Boulder	09201500	115	1938-39.	--	--	--	--	
Boulder Creek below Boulder Lake, near Boulder	09202000	130	1938-73.	--	--	--	--	
Boulder Creek near Boulder (New Fork).....	09202500	135	1903-6;1914-24; 1930-32.	--	--	--	--	
East Fork River (East Fork) near Big Sandy.....	09203000	79.2	1938-92.	--	1965;1968; 1971; 1975-78.	1975-78.	1976-77.	
East Fork at East Fork Canal.....	09203500	106	1915-17;1920-23.	--	--	--	--	
Silver Creek near Big Sandy	09204000	45.4	1938-1971.	--	1965;1977.	1977.	--	
East Fork at Newfork	09204500	348	1904-6;1914-24; 1930-32.	--	--	--	--	
Sand Springs Draw:								
Sand Springs Draw tributary near Boulder	09204700	2.77	--	1961-81.	--	--	--	
New Fork River near Big Piney	09205000	e1,230	1954-	--	1965-86.	1975-78.	1975-78.	
North Piney Creek above Apperson Creek, near Mason.....	09205490	29.6	1982-84.	--	--	--	--	

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DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
COLORADO RIVER BASIN--continued								
GREEN RIVER BASIN--continued								
Green River--continued								
North Piney Creek near Mason (Marbleton).....	09205500	e58	1915-16;1931-1972.	--	1977.	1977.	1977.	
Middle Piney Creek below South Fork, near Big Piney	09206000	34.3	1939-54.	--	--	1981.	--	
Middle Piney Creek above Springman Creek, near Big Piney	09206500	42.1	1938-39.	--	--	--	--	
Middle Piney Creek near Big Piney.....	09207000	e46	1914-18;1931-32.	--	--	--	--	
South Piney Creek near Big Piney	09207500	117	1938-42.	--	--	--	--	
Dry Basin Creek near Big Piney	09207650	47.2	--	1971-81.	1975-76; 1978.	1965; 1975-76; 1978.	--	
Dry Piney Creek near Big Piney	09207700	e67	1965-73.	--	1990-93.	1965-68; 1971-73; 1990-93.	--	
La Barge Creek near La Barge Meadows ranger station.....	09208000	e6.3	1940-42;1950-81.	--	1975-78.	1975-78.	1976-78.	
La Barge Creek above Viola	09208400	122	1982-84.	--	--	--	--	
La Barge Creek near Viola (La Barge).....	09208500	172	1913-16;1940-49.	--	1977-78.	1978.	1977-78.	
La Barge Creek near La Barge (Tulsa).....	09209000	193	1931-39.	--	1963.	--	--	
Green River near La Barge	09209400	e3,910	1963-	--	1963-94.	1975-82; 1986-94.	1973-80; 1986-94.	
Green River near Fontenelle.....	09209500	3,970	1946-65.	--	1962-63.	--	--	
Fontenelle Creek at upper station, near Fontenelle	09210000	e58	1941-42.	--	--	--	--	
Fontenelle Creek near Herschler Ranch, near Fontenelle.....	09210500	152	1951-	--	1975-78.	1975-78.	1977.	
Fontenelle Creek near Fontenelle.....	09211000	224	1914-19;1931-53.	--	--	--	--	
Green River tributary near Fontenelle.....	09211100	3.75	--	1961-74.	--	--	--	
Fontenelle Reservoir near Fontenelle	09211150	e4,280	1964-	--	1975.	--	--	
Green River below Fontenelle Reservoir	09211200	e4,280	1963-	--	1967-	1975-78; 1980.	1973-80.	
Fourmile Gulch:								
Fourmile Gulch tributary near Fontenelle.....	09211300	14.2	--	1971-81.	--	--	--	
Big Sandy River (Creek):								
Squaw Creek near Big Sandy.....	09211500	e28	1911-12.	--	--	--	--	

Footnotes at end of table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
COLORADO RIVER BASIN--continued								
GREEN RIVER BASIN--continued								
Green River--continued								
Big Sandy River--continued								
Squaw Creek--continued								
Dutch Joe Creek near Big Sandy	09212000	17.0	1911-12.	--	--	--	--	
Big Sandy River (Creek) at Leckie Ranch, near Big Sandy (near Big Sandy)	09212500	e94	1910-11;1939-87.	--	1961-62; 1975-78.	1974-78.	1977.	
Big Sandy Creek near Eden	09213000	265	1911;1912a.	--	--	--	--	
Big Sandy River (Creek) near Farson	09213500	322	1914-17;1920-24; 1926-34;1953-	--	1962;1972; 1975-82.	1971-82.	1977.	
Big Sandy Reservoir near Farson.....	09213700	386	1987-	--	--	--	--	
Big Sandy River below Big Sandy Reservoir	09213705	--	--	--	1981-86.	--	--	
Big Sandy River at Farson	09213800	--	--	--	1981-86.	--	--	
Little Sandy Creek near Elkhorn.....	09214000	20.9	1939-71.	--	1961-62; 1977.	1977.	1977.	
Little Sandy Creek above Eden.....	09214500	134	1954-81.	--	1962; 1975-81.	1972; 1975-81.	1977.	
Jack Morrow Creek near Farson.....	09214955	--	--	--	1981.	--	--	
Pacific Creek near Farson.....	09215000	e500	1954-73.	--	1976-78.	1969; 1976-78.	1976-77.	
Little Sandy Creek near Eden.....	09215500	823	1911-12.	--	1981-86.	--	--	
Big Sandy River below Farson	09215550	b1,097	1981-	--	1982-	--	--	
Simpson Gulch near Farson	09215990	78.5	--	1961-69.	--	--	--	
Big Sandy River (Creek) below Eden.....	09216000	e1,610	1954-81.	--	1961-64; 1967-81.	1971-81.	1975-80.	
Big Sandy River at Gasson Bridge, near Eden	09216050	e1,720	1972-	--	1975-	1975-79; 1981-82; 1990-93.	1976-78.	
East Otterman Wash near Green River	09216290	16.6	--	1969-84.	--	1976.	--	
Green River at Big Island, near Green River.....	09216300	e7,300	--	--	1966-81.	1975-79.	1973-78.	
Skunk Canyon Creek near Green River	09216350	15.7	--	1965; 1971-81.	--	--	--	
Greasewood Canyon near Green River.....	09216400	45.1	--	1959-74.	--	--	--	

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DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year				
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology
COLORADO RIVER BASIN--continued							
GREEN RIVER BASIN--continued							
Green River at Green River.....	09216500	e7,670	1891;1894-1906; 1914-45.	--	--	--	--
Telephone Canyon near Green River	09216510	6.98	--	1965-72.	--	--	--
Telephone Canyon tributary near Green River.....	09216520	3.44	--	1965-72.	--	--	--
Bitter Creek:							
Great Divide basin:							
Separation Creek at upper station, near Riner	09216525	41.8	--	--	1975-76.	1975-76.	1976.
Separation Creek near Riner.....	09216527	55.3	1976-81.	--	1976-81.	1976; 1980-81.	1976.
Delaney Draw near Red Desert.....	09216537	34.5	--	1961-84.	1976-78.	1976-78.	--
Bitter Creek near Bitter Creek.....	09216545	308	1975-81.	--	1975-81.	1975-81.	1976-78.
Deadman Wash near Point of Rocks	09216550	152	--	1961-81.	1976-78.	1976-78.	--
Bitter Creek near Point of Rocks	09216560	765	--	1961-75.	1975-76.	1975-76.	--
Bitter Creek above Salt Wells Creek, near Salt Wells...	09216562	836	1976-81.	--	1975-81.	1975-81.	--
Salt Wells Creek near South Baxter	09216565	34.7	1976-81.	--	1975-81.	1975-81.	1976.
Gap Creek above Beans Spring Creek, near South Baxter	09216570	22.0	--	--	1976;1978.	1975-76; 1978.	1976.
Beans Spring Creek near South Baxter	09216572	4.92	--	--	1975-76; 1978.	1975-76; 1978.	1975-76.
Beans Spring Creek at mouth, near South Baxter	09216574	13.1	--	--	1975-1976; 1978.	1976;1978.	1975-76.
Gap Creek below Beans Spring Creek, near South Baxter	09216576	35.9	1975-76.	1976-81.	1975-76; 1978.	1975-76; 1978.	1975-76.
Dry Canyon Creek near South Baxter	09216578	3.69	1976-80.	--	1980.	1979-80.	--
Big Flat Draw near Rock Springs.....	09216580	19.5	--	1973-81.	1976.	1976-77.	--
Cutthroat Draw near Rock Springs (formerly Salt Wells Creek tributary near Rock Springs).....	09216600	7.88	--	1959-81.	--	--	--
No Name Creek near Rock Springs.....	09216695	18.2	--	1973-81.	1975.	1975; 1977-78.	--
Salt Wells Creek near Rock Springs.....	09216700	515	--	1959-76.	1975-76.	1968; 1975-76.	--
Salt Wells Creek near Salt Wells.....	09216750	526	1976-81.	--	1975-81.	1975-81.	1976.

Footnotes at end of table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
COLORADO RIVER BASIN--continued								
GREEN RIVER BASIN--continued								
Green River--continued								
Bitter Creek above Killpecker Creek, at Rock Springs.	09216790	--	--	--	1983-93.	1989-93.	1989-93.	
Killpecker Creek at Rock Springs.....	09216810	--	--	--	1975-80; 1983-87.	--	1975-80; 1982-83.	
Bitter Creek below Little Bitter Creek, near Kanda.....	09216880	--	--	--	1975-83.	1978; 1980-82.	1975-82.	
Bitter Creek tributary near Green River.....	09216900	1.65	--	1959-82.	--	--	--	
Bitter Creek near Green River.....	09216950	--	--	--	1966-72.	1966-72.	--	
Green River near Green River	09217000	114,000	1951-	--	1951-	1960-66; 1970-71; 1973-84; 1990-92.	1973-87.	
Green River below Green River	09217010	--	--	--	1905;1974-	1975;1977.	1974-89.	
Blacks Fork above Blacks Fork ranger station, Utah....	09217500	48.8	1937-39.	--	--	--	--	
Blacks Fork near Robertson.....	09217900	130	1966-86;1992-	--	--	--	--	
Blacks Fork at Blacks Fork ranger station, Utah	09218000	129	1937-39.	--	--	--	--	
Blacks Fork near Millburne	09218500	152	1939-	--	1969-70; 1975-78.	1975-78.	1976-77.	
Blacks Fork near Urie	09219000	261	1913-24;1937-55.	--	--	--	--	
East Fork of Smiths Fork at China Meadows, near Robertson	09219500	36.9	1938-39.	--	--	--	--	
East Fork of Smiths Fork near Robertson	09220000	53.0	1939-	--	1975-78.	1975-78.	1977.	
West Fork of Smiths Fork near Robertson	09220500	37.2	1939-81.	--	1975-78.	1975-78.	1977.	
Smiths Fork near Robertson.....	09221000	144	1938-39.	--	1969-70; 1976.	1976.	1976.	
Smiths Fork at Mountainview	09221500	192	1941-57.	--	--	--	--	
Smiths Fork near Lyman	09221650	--	--	--	1974-89.	1975-78.	1974-82.	
Mud Spring Hollow:								
Mud Spring Hollow tributary near Lyman	09221670	.97	--	1965-72.	--	--	--	
Mud Spring Hollow near Church Butte, near Lyman.....	09221680	8.83	--	1965-84.	1977-78.	1977-78.	--	
Mud Spring (Hank) Hollow near Lyman.....	09221700	10.2	--	1959-71.	--	--	--	
Blacks Fork near Lyman	09222000	821	1937-57;1962-83.	--	1962-89; 1995-	1971-81; 1995-	1973-80; 1995-	

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
COLORADO RIVER BASIN--continued								
GREEN RIVER BASIN--continued								
Green River--continued								
Blacks Fork--continued								
Muddy Creek:								
Little Muddy Creek:								
Ryckman Creek near Glencoe	09222200	53.4	1980-81.	--	1980-81.	1980-81.	--	
Little Muddy Creek above North Fork, near Glencoe	09222250	366	1980-81.	--	1980-81.	1980-81.	--	
Little Muddy Creek near Glencoe	09222300	416	1976-80.	--	1975-80.	1975-80.	1976.	
Muddy Creek near Hampton	09222400	963	1975-81.	--	1975-81.	1975-81.	1976.	
Blacks Fork above Hams Fork, near (at) Granger (near Granger)	09222500	e2,170	1896-97.	--	--	--	--	
Hams Fork below Pole Creek, near Frontier	09223000	128	1952-	--	1975-78.	1975-78.	--	
Hams Fork near Frontier	09223500	298	1945-1972.	--	--	--	--	
Hams Fork at Diamondville (Kemmerer)	09224000	386	1917-33;1945-49.	--	--	--	--	
Hams Fork near Diamondville	09224050	--	--	--	1975-89; 1992-	1980-82.	1975-89; 1992-	
Hams Fork near Granger	09224450	e670	--	--	1967-86.	1971-82.	1975-76.	
Blacks Fork below Hams Fork, at Granger (at Granger)	09224500	e2,840	1896-1900.	--	--	--	--	
Blacks Fork tributary near Granger.....	09224600	5.03	--	1959-81.	--	--	--	
Blacks Fork near Little America	09224700	e3,100	1962-		1964-	1968; 1970-82; 1989.	1973-82.	
Meadow Springs Wash:								
Meadow Springs Wash (Spider Creek) tributary near Green River.....	09224800	5.22	--		1962-65; 1968-81.	1978.	--	
Blacks Fork tributary No. 2 near Green River	09224810	12.0	--		1965-81.	1978.	--	
Blacks Fork tributary No. 3 near Green River	09224820	3.59	--		1965-84.	--	--	
Blacks Fork tributary No. 4 near Green River	09224840	1.26	--		1965-81.	--	--	
Blacks Fork near Marston	09224900	--	--		--	1959-64.	--	
Summers Dry Creek near Green River	09224980	423	--		1965-81.	1976-78.	--	

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DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year				
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology
<u>COLORADO RIVER BASIN--continued</u>							
GREEN RIVER BASIN--continued							
Green River--continued							
Blacks Fork near Green River.....	09225000	e3,670	1947-62.	--	1954-55; 1958-59; 1967.	--	--
Squaw Hollow near Burntfork	09225200	6.57	--	1965-84.	1977-78.	1975; 1977-78.	--
Green River tributary No. 2 near Burntfork.....	09225300	13.0	--	1959; 1961-81.	1976.	1976-77.	--
Green River near Linwood, Utah.....	09225500	e14,300	1928-63.	--	--	--	--
Henrys Fork near Lonetree.....	09226000	e56	1942-72.	--	1969-72; 1976-77.	1977.	1976-77.
Middle Fork Beaver Creek near Lonetree.....	09226500	e28	1948-70.	--	--	--	--
East Fork Beaver Creek near Lonetree.....	09227000	e8.2	1948-62.	--	--	--	--
West Fork Beaver Creek near Lonetree.....	09227500	e23	1948-62.	--	--	--	--
Henrys Fork near Burntfork	09228000	242	1942-54.	--	--	--	--
Burnt Fork near Burntfork.....	09228500	52.8	1943-83.	--	1969-70; 1975-78.	1975-78.	1977.
Burnt Fork at Burntfork.....	09229000	e73	1929-43.	--	--	--	--
Henrys Fork tributary near Manila, Utah.....	09229450	3.15	--	1965-74.	--	--	--
Henrys Fork near Manila, Utah.....	09229500	e520	1928-93.	--	1954-55; 1958-89.	1972; 1975-78; 1989.	1976.
Sheep Creek:							
Sheep Creek upper canal near Manila, Utah	09231000	--	1949-61.	--	--	--	--
Carter Creek canal near Manila, Utah.....	09231200	--	1956-61.	--	--	--	--
Sheep Creek lower canal near Manila, Utah	09231500	--	1949-61.	--	--	--	--
Sheep Creek near Manila, Utah	09232000	42	1942-61.	--	--	--	--
Sheep Creek at mouth, near Manila, Utah	09232500	111	1946-61.	--	--	--	--
Flaming Gorge Reservoir at Flaming Gorge Dam, Utah..	09234400	e19,350	1962-	--	--	--	--
Green River near Greendale, Utah.....	09234500	i19,350	1950-	--	1956-59; 1963-	1956-59.	--
Vermillion Creek near Hiawatha, Colo	09235300	196	1975-81.	--	1975-81.	1975-81.	1976-77.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
COLORADO RIVER BASIN--continued								
GREEN RIVER BASIN--continued								
Green River--continued								
Yampa River:								
Middle Fork Little Snake River:								
North Fork Little Snake River near Encampment..	09251800	9.64	1956-65.	--	--	--	--	
North Fork Little Snake River near Slater, Colo	09251900	29.3	1956-63.	--	1957-58; 1977-78.	1977-78.	1977.	
Little Snake River near Slater, Colo.....	09253000	285	1943-47;1950-	--	1977-86.	1977.	1977.	
Battle Creek near Encampment.....	09253400	13.0	1956-63;1985-88.	--	1978; 1986-88.	1978; 1986-88.	1978.	
West Fork Battle Creek:								
Haggarty Creek above Belvidere ditch, near Encampment	09253455	--	--	--	1993-	--	--	
West Fork Battle Creek at Battle Creek Campground, near Savery	09253465	--	--	--	1993-	--	--	
Slater Fork (Creek) near Slater, Colo	09255000	161	1910-12;1931-	--	--	--	--	
East Fork Savery Creek near Encampment	09255400	5.57	1956-58;1985-88.	--	1986-87.	1986-88.	--	
Savery Creek at upper station, near Savery	09255500	200	1940-44;1952-71.	--	1957-58; 1975-78; 1986.	1976-78.	1975-78.	
Big Sandstone Creek near Savery	09255900	9.85	1956-58;1985-88.	--	1986-87.	1986-88.	--	
Savery Creek near Savery	09256000	330	1941-46;1947-72; 1985-92.	--	1975-78; 1985-91.	1976-78; 1985-91.	1975-78; 1985-91.	
Savery Creek at Savery	09256500	354	1915-16;1918-22.	--	1957;1975; 1977.	1977.	1975; 1977.	
Little Snake River near Dixon.....	09257000	988	1910-23;1938-	--	1957-58; 1975-78; 1981-88.	1971-82; 1988.	1975-77.	
Willow Creek near Baggs.....	09257500	e5	1911-23.	--	--	--	--	
Willow Creek near Dixon.....	09258000	e24	1953-93.	--	--	--	--	
Muddy Creek:								
Cow Creek:								
Dry Cow Creek near Baggs	09258200	49.7	--	1970-81.	1976-78.	1975-79.	--	
Little Robber Reservoir	09258500	b8.5	1954-62d.	--	--	--	--	
Muddy Creek above Baggs	09258900	1,178	--	1958-71.	1976;1978.	1976;1978.	1976.	

Footnotes at end of table.

WATER RESOURCES DATA - WYOMING, 1997

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DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
COLORADO RIVER BASIN--continued								
GREEN RIVER BASIN--continued								
Green River--continued								
Yampa River--continued								
Little Snake River--continued								
Muddy Creek near Baggs	09259000	e1,257	1915-16;1918;1987-91.	--	1957-58; 1985.	1988-91.	1985.	
Little Snake River below Baggs.....	09259050	--	--	--	1980-	1989-	1981-89.	
Fourmile Creek (at Ryan's Ranch) near Baggs.....	09259500	e4	1911-23.	--	--	--	--	
Little Snake River near Baggs.....	09259700	e3,020	1961-68.	--	1965-80.	1977.	1977.	
Little Snake River near Lily, Colo	09260000	e3,730	1904;1921-	--	--	--	--	
GREAT SALT LAKE BASIN								
BEAR RIVER BASIN								
Bear River:								
East Fork Bear River near Evanston	10010400	34.6	1973-86.	--	--	--	--	
Hilliard-East Fork Canal near State line, near Evanston.....	10010500	--	1941-79.	--	--	--	--	
Diversions from Bear River above gaging station, near Utah-Wyoming State line.....	10011000	--	1944-47j;1953-56j; 1958-k.	--	--	--	--	
West Fork Bear River at Whitney Dam, near Oakley, Utah.....	10011200	6.79	1963-86.	--	--	--	--	
West Fork Bear River below Deer Creek, near Evanston.....	10011400	52.2	1973-86.	--	--	--	--	
Bear River near Utah-Wyoming State line	10011500	172	1942-	--	--	--	--	
Mill Creek at Utah-Wyoming State line.....	10012000	59	1949-62.	--	--	--	--	
Mill Creek near Evanston.....	10012500	60.6	1942-48.	--	--	--	--	
Diversions from Mill Creek	10013000	--	1944-45j.	--	--	--	--	
Mill Creek below diversions, near Evanston	10013500	--	1946-47j.	--	--	--	--	
Bear River above Sulphur Creek, near Evanston	10014000	282	1946-56.	--	--	--	--	
Sulphur Creek above diversions, near Evanston.....	10014500	--	1945k.	--	--	--	--	
Willow Creek above diversion, near Evanston	10015000	--	1945k.	--	--	--	--	
Diversions from Sulphur Creek and Willow Creek ...	10015500	--	1944-45j.	--	--	--	--	
Sulphur Creek above reservoir, near Evanston	10015700	64.2	1957-97.	--	--	--	--	
Sulphur Creek below reservoir, near Evanston.....	10015900	69.2	1958-92; 1996-	--	--	--	--	

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year				
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology
GREAT SALT LAKE BASIN--continued							
BEAR RIVER BASIN--continued							
Bear River--continued							
Sulphur Creek near Evanston.....	10016000	80.5	1942-59.	--	--	--	--
Bear River at Millis, near Evanston.....	10016500	420	1942-46.	--	--	--	--
Bear River at Evanston	10016900	433	1984-	--	1986;1989.	1988-89.	--
Yellow Creek near Evanston	10017000	79.2	1944-45;1949-78.	--	--	--	--
Coyote Creek near Evanston	10017500	e28	1942-45.	--	--	--	--
Diversions from Yellow Creek.....	10018000	--	1944-45j.	--	--	--	--
Yellow Creek below diversions, near Evanston.....	10018500	--	1946-47j.	--	--	--	--
Yellow Creek at mouth, near Evanston	10018900	--	--	--	1983-89.	--	1983-89.
Bear River near Evanston	10019000	715	1913-56.	--	--	--	--
Chapman Canal at State line, near Evanston	10019500	--	1942-86.	--	--	--	--
Whitney Canyon Creek near Evanston	10019700	8.93	--	1965-81.	--	--	--
Diversions from Bear River between State line and Woodruff gaging stations	10020000	--	1944-47j;1953-56j; 1958-k.	--	--	--	--
Bear River above reservoir, near Woodruff, Utah	10020100	752	1961-	--	1968-	1989-	1978-89.
Woodruff Narrows Reservoir near Woodruff, Utah.....	10020200	784	1965-96.	--	--	--	--
Bear River below reservoir, near Woodruff, Utah	10020300	784	1961-	--	--	--	--
Bear River near Woodruff, Utah.....	10020500	e870	1941-61.	--	--	--	--
Bear River near Randolph, Utah.....	10026500	1,616	1943-92.	--	--	--	--
Twin Creek:							
Rock Creek near Fossil	10026800	49.0	1961-66.	--	--	--	--
Twin Creek tributary near Sage.....	10026850	2.91	--	1965-70.	--	--	--
Twin Creek at Sage	10027000	246	1943-62;1976-81.	--	1958;1961; 1967-69; 1975-81; 1989-	1976-81; 1989-	1975-80.
Twin Creek Canal near Sage	10027500	--	1944-45j.	--	--	--	--
Diversions from Bear River between Randolph and below Pixley Dam gaging stations.....	10028000	--	1944-48j;1953-56j; 1958-k.	--	--	--	--
Bear River below Pixley Dam, near Cokeville (near Cokeville)	10028500	2,032	1941-43;1952-56;1958-	--	--	--	--

Footnotes at end of table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
GREAT SALT LAKE BASIN--continued								
BEAR RIVER BASIN--continued								
Bear River--continued								
Leeds Creek near Cokeville	10029000	--	1944j.	--	--	--	--	
Bear River above Sublette Creek, near Cokeville	10029500	e2,110	1948-55.	--	--	--	--	
Sublette Creek near Cokeville.....	10030000	--	1944-45j;1955-56j; 1958-k.	--	--	--	--	
Smiths Fork near Afton.....	10030300	1.62	--	1964-70.	--	--	--	
Smiths Fork near Smoot.....	10030500	17.3	1943.	--	--	--	--	
Smiths Fork above Hobbie Creek, near Geneva, Idaho	10031000	--	1944-46j.	--	--	--	--	
Smiths Fork near Border	10032000	165	1942-	--	--	--	--	
Coal (Howland) Creek near Cokeville	10032500	--	1944-48j;1953-56j.	--	--	--	--	
Muddy Creek above Mill Creek, near Cokeville	10032700	20.7	1965-69.	--	--	--	--	
Mill Creek near Cokeville	10032800	8.07	1966-69.	--	--	--	--	
Grade Creek near Cokeville	10033000	--	1944-48j;1953-56j; 1958-k.	--	--	--	--	
Pine Creek above diversions, near Cokeville.....	10033500	--	1944-48j;1953-56j; 1958-65k.	--	--	--	--	
Diversions from Pine Creek	10034000	--	1944-48j;1953-56j; 1958-k.	--	--	--	--	
Bruner Creek above Covey Canal, near Cokeville	10034500	--	1944-48j;1953-56j; 1958-k.	--	--	--	--	
Smiths Fork at Cokeville.....	10035000	275	1942-52.	--	1985-88; 1990-92; 1993-	1989-92; 1993-	--	
Spring Creek above Covey Canal, near Cokeville.....	10035500	--	1944-48j;1953-56j; 1958-k.	--	--	--	--	
Spring Creek to Collette Creek, near Cokeville	10036000	--	1944-48j;1953-56j.	--	--	--	--	
Birch Creek near Cokeville.....	10036500	--	1944-45k.	--	--	--	--	
Garrett Springs:								
Hickman Canal near Cokeville	10037000	--	1944-48j.	--	--	--	--	
George Bourne Canal near Cokeville.....	10037500	--	1944-48j.	--	--	--	--	
Bear River below Smiths Fork, near Cokeville.....	10038000	2,447	1954-	--	1993-	--	1993-	

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
<u>GREAT SALT LAKE BASIN--continued</u>								
BEAR RIVER BASIN--continued								
Bear River--continued								
Chalk Creek:								
Chalk Creek Canal near Cokeville	10038500	--	1944-45j.	--	--	--	--	
Diversions from Bear River between Pixley Dam and Border gaging stations, and from Smiths Fork and its tributaries.....	10039000		1944-48j;1953-56j; 1958-k.	--	--	--	--	
Bear River at Border.....	10039500	2,486	1937-	--	1961; 1965-95.	1978-84; 1986-93.	1973-89.	
Thomas Fork near Geneva, Idaho	10040000	45.3	1939-51.	--	--	--	--	
Thomas Fork near Wyoming-Idaho State line	10041000	113	1949-92.	--	--	--	--	
Sheep Creek:								
Sheep Creek tributary near Border.....	10043300	.12	--	1961-64.	--	--	--	
Sheep Creek tributary No. 2 near Border	10043350	.34	--	1965-71.	--	--	--	
<u>SNAKE RIVER BASIN</u>								
Snake River at south boundary of Yellowstone National Park								
Snake River above Jackson Lake, at Flagg Ranch	13010065	486	1913-25.	--	--	--	--	
Snake River above Jackson Lake, at Flagg Ranch	13010200	486	1987-	--	1987-	1987-92.	1987-93.	
			1983-87.	--	1972; 1975-76; 1983-88.	--	1976.	
Pilgrim Creek near Moran	13010450	--	1997-	--	--	--	--	
Jackson Lake near (at) Moran	13010500	807	1908-79;1984-	--	--	--	--	
(South Fork) Snake River near (at) Moran.....	13011000	807	1903-	--	--	--	--	
Pacific Creek at (near) Moran.....	13011500	169	1906;1917-18;1944-75; 1978-	--	1987-93.	1987-93.	--	
Buffalo Fork:								
Blackrock Creek:								
Blackrock Creek tributary near Moran.....	13011800	.80	--	1964-74.	--	--	--	
Buffalo Fork above Lava Creek, near Moran.....	13011900	323	1965-	--	1971; 1973-78.	--	--	
Buffalo Fork (River) near Moran (Elk)	13012000	378	1906a;1917-18; 1944-60.	--	--	--	--	

Footnotes at end of table.

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
<u>SNAKE RIVER BASIN--continued</u>								
Snake River--continued								
Spread Creek at diversion dam, near Moran	13012490	97.4	1994-96.	--	--	--	--	
Spread Creek near Moran (Elk).....	13012500	101	1917-18;1993-95.	--	1971-72; 1976;1990.	1990.	1976.	
Cottonwood Creek near Teton	13013000	72.3	1917-18.	--	--	--	--	
Spring Creek near Teton.....	13013500	--	1917-18.	--	--	--	--	
Snake River at Moose.....	13013650	1,677	1995-	--	1995-	1995-	--	
Cottonwood Creek:								
Spring Creek near Zenith	13014000	--	1917-18.	--	--	--	--	
Gros Ventre River at Kelly	13014500	622	1918;1944-58.	--	--	--	--	
Gros Ventre River at Zenith	13015000	683	1917-18;1987-	--	--	--	--	
Spring Creek at Zenith	13015500	--	1917-18.	--	--	--	--	
Spring Creek at West Gros Ventre Butte	13016000	--	1918.	--	--	--	--	
Snake River near Wilson	13016100	2,342	1972-75.	--	--	--	--	
Fish Creek:								
Lake Creek below Granite Creek Supplement, near Moose.....	13016240	22.2	1995-	--	--	--	--	
Granite Creek above Granite Creek Supplement, near Moose.....	13016305	14.9	1995-	--	--	--	--	
Granite Creek Supplement above Lake Creek, near Moose	13016310	--	1995-	--	--	--	--	
Granite Creek Supplement below Lake Creek, near Moose	13016315	--	1995-	--	--	--	--	
Fish Creek at Wilson	13016450	71.2	1994-	--	--	--	--	
Fish Creek near Wilson.....	13016500	87.4	1917-18.	--	--	--	--	
Mosquito Creek near Wilson	13017000	24.2	1917-18.	--	--	--	--	
Big Spring Creek near Cheney	13017500	--	1918.	--	--	--	--	
FLAT CREEK BASIN								
Flat Creek near Jackson	13018000	40.1	1933-41;1989-93.	1994-96.	1966;1973.	--	--	
Cache Creek near Jackson.....	13018300	10.6	1962-	--	1965-96.	1968-96.	1969; 1973-96.	
Flat Creek below Cache Creek, near Jackson.....	13018350	129	1989-96.	--	1973.	--	--	
Flat Creek near Cheney	13018500	142	1917-18;1989-93.	1994-96.	1981-82.	--	1981-82.	
Snake River below Flat Creek, near Jackson	13018750	2,627	1975-	--	--	--	--	
Horse Creek near Cheney	13019000	37.9	1917-18.	--	--	--	--	

DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year				
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology
<u>SNAKE RIVER BASIN--continued</u>							
Snake River--continued							
HOBACK RIVER BASIN							
Hoback River:							
Rim Draw (Fish Creek) near Bondurant	13019210	3.41	--	1964-74.	--	--	--
Sour Moose Creek near Bondurant	13019220	2.77	--	1964-81.	--	--	--
North Fork Fish Creek near Bondurant.....	13019280	14.4	--	1964-69.	--	--	--
Cliff Creek near Bondurant	13019400	58.6	--	1964-74.	--	--	--
Granite Creek near Bondurant	13019430	--	--	--	1983-90.	1983-90.	--
Little Granite Creek at mouth, near Bondurant.....	13019438	21.1	1981-92.	--	1981-90.	1981-90.	1981-90.
Hoback River near Jackson (Cheney).....	13019500	564	1917-18;1944-58.	--	--	--	--
Fall (Coburn) Creek near Jackson (Cheney)	13020000	46.8	1917-18.	1964-74.	--	--	--
Snake River at Astoria Mineral Hot Springs.....	13020300	--	--	--	1992.	--	--
Dog Creek near Cheney	13020500	14.1	1917-18.	--	--	--	--
Cabin Creek near Jackson (Cheney).....	13021000	8.71	1917-18.	1964-74.	--	--	--
Bailey Creek near Alpine, Idaho (Wyo.)	13021500	15.9	1917-18.	--	--	--	--
West Table Creek near Alpine	13021700	1.06	--	1964-69.	--	--	--
Wolf Creek near Alpine, Wyo. (Idaho).....	13022000	13.1	1917-18.	1964-67.	--	--	--
Snake River above reservoir, near Alpine	13022500	3,465	1937-39;1953-	--	1965-86; 1988.	1974-77.	1973-80.
RED CREEK BASIN							
Red Creek near Alpine.....	13022550	3.88	--	1964-73.	--	--	--
COTTONWOOD CREEK BASIN							
Cottonwood Creek near Alpine	13022570	2.40	--	1964-72.	--	--	--
GREYS RIVER BASIN							
Greys River above reservoir, near Alpine (near Alpine, Idaho).....	13023000	448	1917-18;1937-39;1953-	--	--	--	--
Snake River below Greys River, at Alpine, Idaho	13023500	3,940	1944-54.	--	--	--	--
SALT RIVER BASIN							
Salt River:							
Fish Creek near Smoot	13023800	e3.60	--	1964-74.	--	--	--
Salt River near Smoot.....	13023900	47.8	1932-57.	--	1981-85.	--	--
Cottonwood Creek near Smoot	13024500	26.3	1932-57.	--	--	--	--
Swift Creek near Afton	13025000	27.4	1942-80.	--	1965; 1981-85.	--	--

WATER RESOURCES DATA - WYOMING, 1997

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DISCONTINUED AND ACTIVE SURFACE-WATER DISCHARGE, WATER-QUALITY, SEDIMENT, AND BIOLOGICAL STATIONS--Continued

Station name	Station number	Drainage area (square miles)	Period of record, by calendar year					
			Daily or monthly discharge or content	Annual peak discharge	Water quality	Sediment	Biology	
SNAKE RIVER BASIN--continued								
Snake River--continued								
SALT RIVER BASIN--continued								
Salt River--continued								
Crow Creek near Fairview	13025500	e115	1946-49;1961-67.	--	1965; 1983-84.	--	--	
Stump Creek near Auburn.....	13026000	103	1946-49.	--	1989-92.	--	--	
Salt River near Thayne	13026500	570	1932-33;1961-67.	--	--	--	--	
Strawberry Creek near Bedford	13027000	21.3	1932-43.	--	--	--	--	
Bear Canyon near Freedom.....	13027200	e3.3	--	1961-71.	--	--	--	
Salt River above reservoir, near Etna	13027500	829	1953-	--	1965-95.	1989-95.	1970; 1973-81; 1989-92.	
Salt River near Alpine, Idaho	13028000	878	1917-18.	--	--	--	--	
Salt River at Wyoming-Idaho State line	13028500	890	1933-55.	--	--	--	--	
SNAKE RIVER near Alpine.....	13029000	4,841	1916-18;1934.	--	--	--	--	
SNAKE RIVER near Irwin, Idaho.....	13032500	5,225	1934-36;1939-41;1949-	--	--	--	--	
HENRYS FORK BASIN								
Falls River:								
Grassy Lake near Moran	13046500	10.4	1939-79.	--	--	--	--	
Boundary Creek near Bechler Ranger Station	13046680	86.9	1984-	--	--	--	--	
Conant Creek:								
Squirrel Creek:								
North Fork Squirrel Creek near Squirrel, Idaho..	13047800	2.40	1961-67.	--	--	--	--	

a Stage record or stage record and instantaneous discharge measurements only.

b Part of drainage area is noncontributing or does not contribute directly to surface runoff.

c Storm runoff for summer season only.

d Published in U.S. Geological Survey Water-Supply Paper 1475-I, Hydrology of Small Watersheds in Western States.

e Approximate.

f Published in reports of Department of Northern Affairs and National Resources, Canada.

g Published in U.S. Geological Survey Water-Supply Paper 1531, Hydrology of the Upper Cheyenne River Basin.

h Includes several sites on the reservoir.

i Approximately, includes area which is probably noncontributing.

j Published in U. S. Geological Survey Open-File Report of Bear River hydrometric data.

k Published in reports of Bear River Commission.

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State, county, municipal, and other Federal agencies, obtains a large amount of data pertaining to the water resources of Wyoming each water year. 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 Geological Survey, the data are published annually in this report series entitled, "Water Resources Data - Wyoming" as part of the National Water Data System.

Water resources data for water year 1997 for Wyoming consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground water. This report contains discharge records for 168 gaging stations; stage and contents for 15 lakes and reservoirs; and water quality at 28 gaging stations and 23 ungaged stations. 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 U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and 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 U.S. Geological Survey, Earth Science Information Center, Federal Center, Building 810, Box 25425, Denver, Colorado 80225.

For water years 1961 through 1970, streamflow data were released by the Geological Survey 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 are published in official Survey reports on a State-boundary basis. These official Survey 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-97-1." 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.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone at (307) 778-2931.

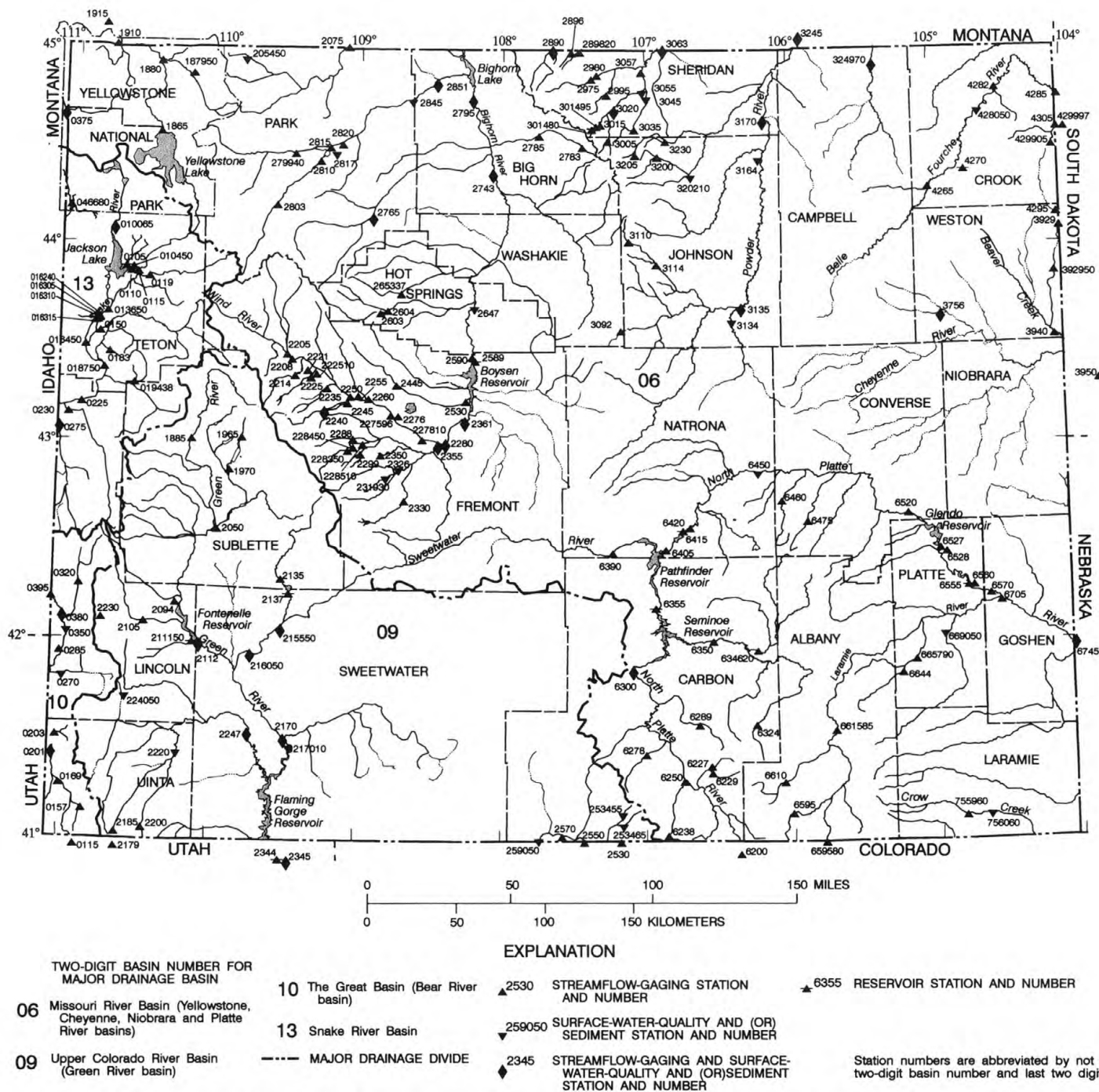


Figure 1. Location of surface-water stations, water-quality stations, and stage and/or content stations, 1997 water year.

COOPERATION

The U.S. Geological Survey and organizations of the State of Wyoming have had cooperative agreements for the systematic collection of streamflow records since 1895, for ground-water levels since 1940, and for water-quality records since 1946. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Wyoming State Engineer, Gordon W. Fassett

Wyoming Water Development Commission, Michael K. Purcell, Administrator

Wyoming Department of Environmental Quality, Dennis Hemmer, Director

Fremont County Weed and Pest Control District, Lars Baker, Supervisor

Teton County Natural Resource District, William Glenn, Chairman

City of Cheyenne, Leo Pando, Mayor

City of Evanston, Dennis J. Ottley, Mayor

Lingle-Ft. Laramie Conservation District, John Rose, Chairman

Saratoga, Encampment, Rawlins Conservation District, James Wiant, Chairman

Midvale Irrigation District, Bill Brown, Manager

Shoshone Heart Mountain Irrigation District, Dean House, Manager

Shoshone and Arapaho Tribes, Joint Business Council, Alfred Ward and Richard Brannon Chairmen

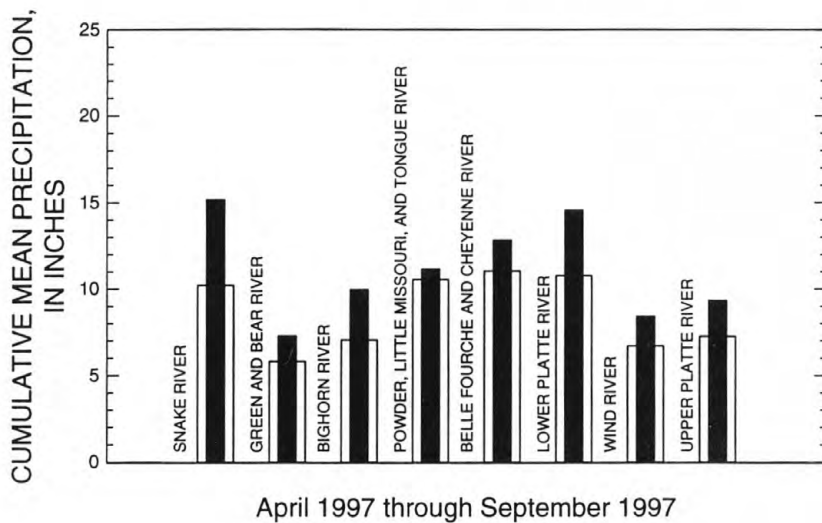
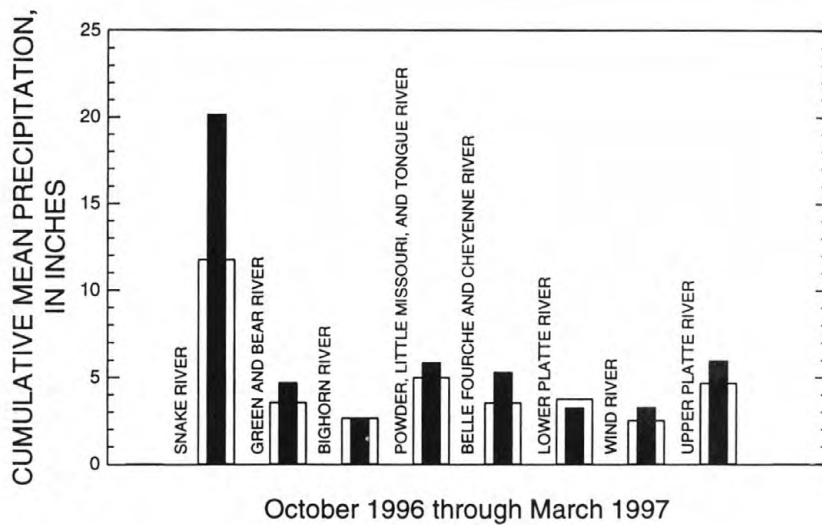
Assistance in the form of funds or services was given by the Bureau of Reclamation, U.S. Department of the Interior for 6 streamflow-gaging stations, 3 water-quality stations, and 2 reservoir stations; and by the Corps of Engineers, U.S. Army for 2 streamflow-gaging stations, published in this report.

SUMMARY OF HYDROLOGIC CONDITIONS

Precipitation was near normal to greater than normal during water year 1997 throughout most of the State. Streamflow at most streamflow-gaging stations in water year 1997 was near normal to greater than normal. Localized flooding as a result of snowmelt and intense rainfall occurred in parts of the State during water year 1997. A statistical summary of specific conductance indicates concentrations of dissolved ions generally were lower at six gaging stations at which measurements were made. Statistically significant decreases in specific conductance occurred at three of the six stations.

Precipitation

Precipitation was near normal to greater than normal (average for 1961-90) during water year 1997 throughout most of the State. Precipitation and departures from normal for the major divisions, as defined by the National Oceanic and Atmospheric Administration, are published monthly in "Climatological Data, Wyoming". The divisional data from water year 1997 were separated into two time periods (October 1996 through March 1997, and April through September 1997) representing seasonal precipitation for water year 1997 and compared to normal precipitation for the same periods (fig. 2). Precipitation from October 1996 through March 1997 was much greater than normal in most of the Snake River division. Precipitation for the same period was near normal for most of the other divisions. Precipitation from April through September 1997 was much less than normal parts of the Belle Fourche and Cheyenne River division. Precipitation for the same period was near normal to greater than normal for most of the other divisions.



EXPLANATION

- Cumulative mean precipitation by major division for portion of year indicated, water year 1997
- Cumulative mean normal precipitation by major division for portion of year indicated (normal based on period from 1961-90)

NOTE: Precipitation data summarized by major divisions as defined by the National Oceanic and Atmospheric Administration.

Figure 2. Mean cumulative precipitation for water year 1997 and mean cumulative normal precipitation for 1961-90 by major divisions, Wyoming.

Most of the precipitation data compiled for figure 2 are from stations in nonmountainous areas of the State. Data from these stations might not be indicative of precipitation in the mountains. Most of the precipitation in the mountains is in the form of snow. Melting of the snowpack throughout the late spring and early summer provides most of Wyoming's annual water supply. Precipitation and snowpack is reported by the U.S. Department of Agriculture, Natural Resources Conservation Service, in "Wyoming Basin Outlook Reports."

Mountain snowpack as of May 1, 1997, prior to the normal intense snowmelt period, was near normal to much greater than normal statewide. Snowpack remained normal to much greater than normal throughout May. The range of snowpack, in percent of normal, for stations in the major drainage basins, as defined by the National Resources Conservation Service, in Wyoming as of May 1, and June 1, 1997 are listed in the following table:

Drainage basin	Range of snowpack, in percent of normal	
	As of May 1, 1997	As of June 1, 1997
Snake River	145 to 199	123 to 176
Green and Bear River	97 to 155	-- to 128
Bighorn River	115 to 153	6 to 122
Powder and Tongue Rivers	102 to 135	10 to 323
Belle Fourche and Cheyenne Rivers	181	--
Lower Platte River	128 to 177	97 to 142
Wind River	136 to 166	103 to 134
Upper Platte River	119 to 139	125 to 162

Streamflow

Streamflow at most streamflow-gaging stations across the State in water year 1997 was near normal to greater than normal. Streamflow statistics at streamflow-gaging stations for representative major rivers in Wyoming are shown in figure 3. Average annual discharge at streamflow-gaging stations on most major rivers in 1997 was greater than the median average annual discharge for the period of record. New maximum average monthly as well as average annual discharges were established for stations 06285100 (Shoshone River near Lovell) and 13022500 (Snake River above reservoir near Alpine). New maximum average monthly discharges were established for stations 09217000 (Green River near Green River) and 06630000 (North Platte River above Seminole Reservoir near Sinclair). The June average monthly discharges also were much greater than the median average monthly discharge for all stations in figure 3 except 06317000.

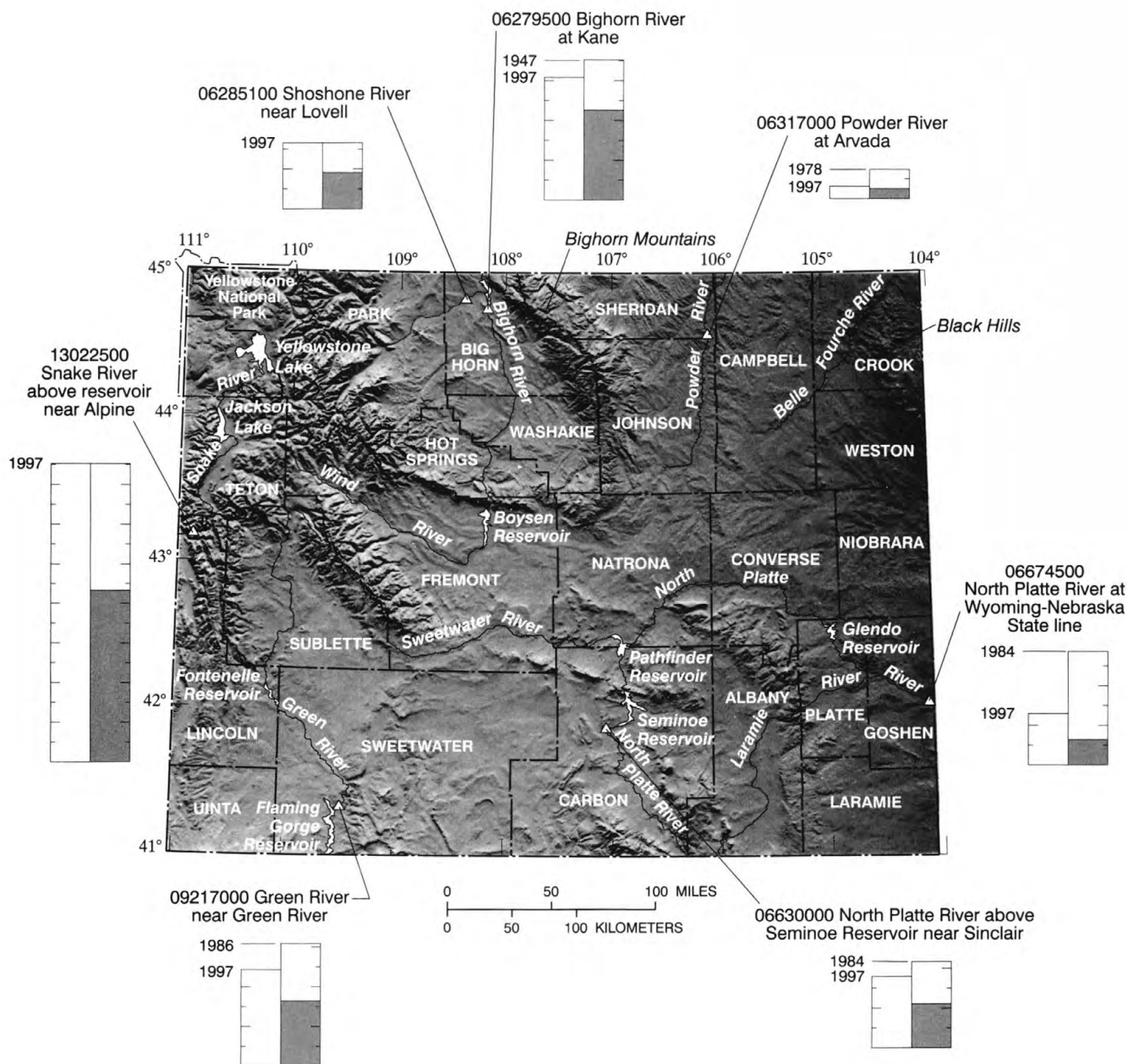
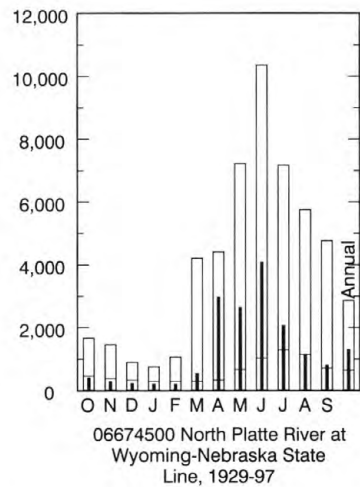
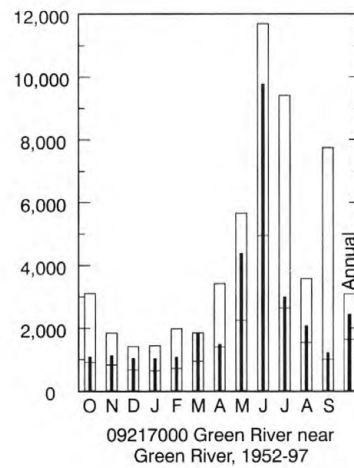
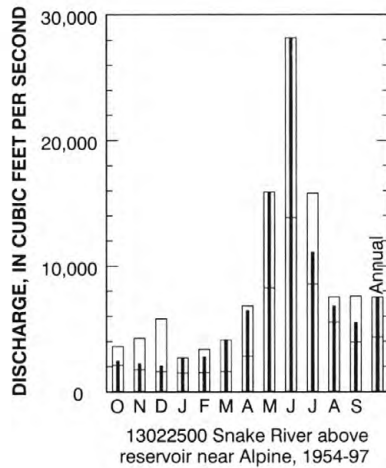
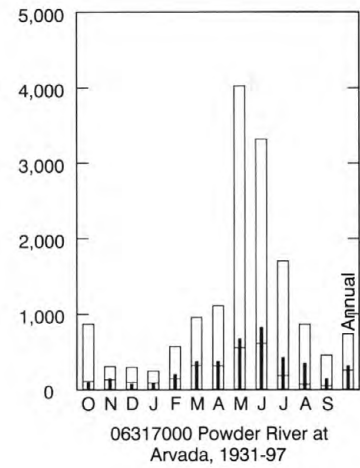
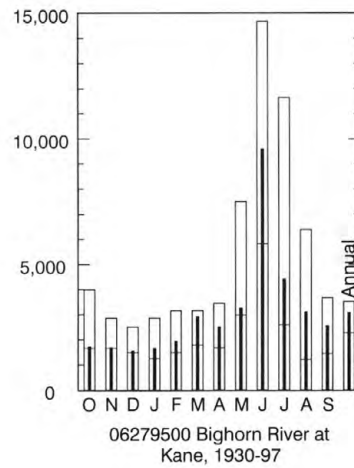
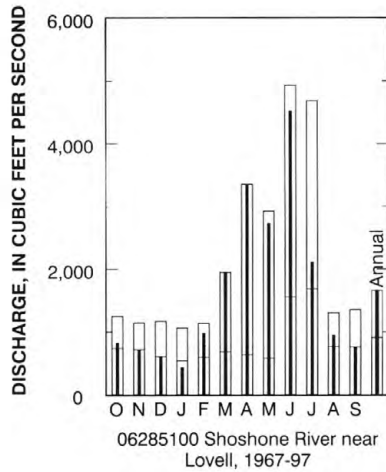
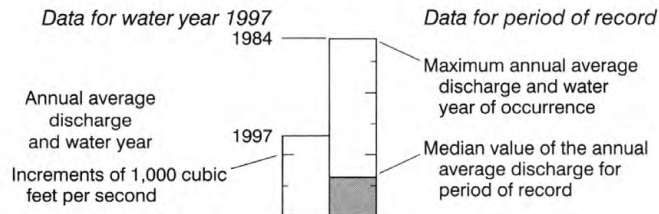


Figure 3. Monthly and annual average discharge of major rivers in Wyoming for water year 1997, and monthly and annual maximum and median discharge for period of record.



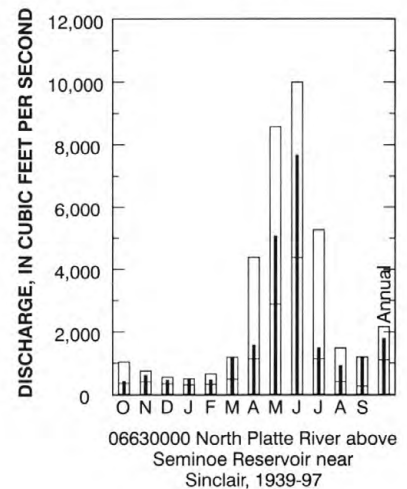
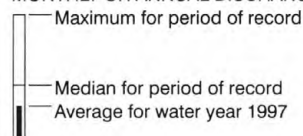
EXPLANATION

COMPARISON OF ANNUAL AVERAGE DISCHARGE



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

MONTHLY OR ANNUAL DISCHARGE



Floods

Regional and localized flooding as a result of snowmelt and intense rainstorms occurred in parts of the State during water year 1997. Instantaneous peak discharges equaled or exceeded previous peaks for the second consecutive year at several stations in the northwestern part of the State. Instantaneous discharge, date of occurrence, and period of operation for peaks of record or other significant peaks at 15 streamflow-gaging stations are listed in the following table. Where sufficient data exist, approximate recurrence intervals also are listed.

[MT, Montana; WY, Wyoming; --, insufficient data]

Station number	Station name	Discharge, in cubic feet per second	Date	Period of operation, water years	Approximate recurrence interval, in years
06037500	Madison River near West Yellowstone, MT	2,630 ¹	05/18/97	1913-17, 1918-21, 1922-73, 1983-86, 1988-97	>100
06186500	Yellowstone River at Yellowstone Lake Outlet, Yellowstone National Park	9,950	06/18/97	1926-82, 1983-86, 1988-97	>100
06188000	Lamar River near Tower Falls Ranger Station, Yellowstone National Park	17,500 ²	06/05/97	1922, 1923-69, 1985-86, 1988-97	>100
06191500	Yellowstone River at Corwin Springs, MT	32,200 ³	06/10/97	1889-93, 1910-97	>100
06220800	Wind River above Red Creek, near Dubois, WY	11,300	06/09/97	1990-97	--
06265337	Cottonwood Creek at High Island Ranch, near Hamilton Dome, WY	3,390	06/10/97	1993-97	--
06755960	Crow Creek at 19th Street, at Cheyenne, WY	769	08/12/97	1993-97	--
09188500	Green River at Warren Bridge, near Daniel, WY	5,930	06/11/97	1931-92, 1993-97	>100
09215550	Big Sandy River below Farson, WY	1,690	03/21/97	1981-97	5-15
13013650	Snake River at Moose, WY	25,300	06/11/97	1995-97	--
13015000	Gros Ventre River at Zenith, WY	6,170 ⁴	06/06/97	1917, 1918, 1987-97	>10
13016305	Granite Creek above Granite Creek Supplemental, near Moose, WY	518	06/09/97	1995-97	--
13016450	Fish Creek at Wilson, WY	1,430	06/08/97	1994-97	--
13018750	Snake River below Flat Creek, near Jackson, WY	30,200 ⁵	06/11/97	1975-97	--
13022500	Snake River above reservoir, near Alpine, WY	38,600	06/11/97	1937-39, 1953-97	--

¹ Peak of record 2,820 ft³/s, May 18, 1996.

² Peak of record 19,500 ft³/s, June 10, 1996.

³ Equal to peak of record.

⁴ Seasonal station.

⁵ Maximum mean daily discharge.

Chemical Quality of Stream Water

The specific conductance of stream-water samples was measured at six stations from five selected streams in Wyoming during water year 1997 to describe the general chemical quality of the stream water. Specific conductance typically varies directly with the dissolved-solids concentration; thus, specific conductance was chosen as an indicator of the concentration of dissolved ions in water. Onsite field measurement of specific conductance is not an elaborate or complex technique; specific conductance commonly is measured during each field visit to the six stations.

A statistical summary of specific conductance measurements at the six selected stations is shown in table 1. The table lists the mean, standard deviation, median, and maximum and minimum specific conductance values for water year 1997 and for the 10-year period of water years 1987-1996. To determine if the specific conductance values for water year 1997 and values for the previous 10-year period of record were statistically different, a statistical test called the Wilcoxon-Mann-Whitney rank-sum was used. The test is a nonparametric counterpart to the common t-test and does not require the data to have a normal distribution. The test is used to determine if there is a difference between two sets of data. The null hypothesis of test assumes the two data sets are identical.¹ If the absolute value of the computed test statistic is greater than the tabular z value (z_{tab}), the hypothesis is rejected. The Wilcoxon-Mann-Whitney rank-sum test results were evaluated at the 95 percent confidence level ($\alpha=0.05$).

Results of the Wilcoxon-Mann-Whitney rank-sum test are listed in table 1. For three of the six stations, Powder River at Arvada (06317000), North Platte River at Wyoming-Nebraska State line (06674500), and Green River near Green River (09217000), the null hypothesis was accepted, indicating no significant change has occurred in the general quality of the stream water. The test indicated that significant differences existed in the specific conductance values of the stream water between the two time periods for three stations, North Platte River above Seminoe Reservoir, near Sinclair (06630000), Bighorn River at Kane (06279500), and Shoshone River near Lovell (06285100). The means of the specific conductance values measured in water year 1997 were less than the means established for the previous 10-year period of record for these sites. Stream discharges measured during each field visit for specific conductance generally were higher during water year 1997 when compared to discharges from field visits for the previous 10-year period of record. Concentrations of dissolved ions generally are decreased by increases in stream discharge; thus, the lower specific conductance values in water year 1997 are probably from higher stream discharge.

¹Anderson, D.R., Sweeney, D. J., and Williams, T.A., 1991, Introduction to statistics: concepts and applications, 2nd ed: West Publishing Company, St. Paul, Minn., 714 p.

Table 1.--Statistical summary of specific conductance measurements for selected water samples at selected locations and results of the Wilcoxon-Mann-Whitney rank-sum test for the 1997 and 1987-1996 water years.

[Specific conductance, in microsiemens per centimeter at 25 degrees Celsius;
 z_R , calculated test statistic; z_{tab} , z value from standard table; A, accepted; R, rejected]

Station name and number	Specific Conductance												Wilcoxon-Mann-Whitney rank-sum test		
	Water Year 1997						Water years 1987-1996						z_R	z_{tab}	Hypothesis
	Number of values	Mean	Standard deviation	Median	Maximum	Minimum	Number of values	Mean	Standard deviation	Median	Maximum	Minimum			
Bighorn River at Kane 06279500	9	667	147	653	930	482	92	977	235	950	1850	458	-3.68	1.96	R
Shoshone River near Lovell 06285100	9	457	213	351	840	223	97	895	319	850	1990	276	-3.89	1.96	R
Powder River at Arvada 06317000	4	2240	454	2300	2630	1730	70	2510	1020	2350	6200	880	-0.47	1.96	A
North Platte River above Seminole Reservoir, near Sinclair 06630000	13	301	80	294	410	155	67	407	111	420	700	158	-3.21	1.96	R
North Platte River at Wyoming-Nebraska State line 06674500	8	822	215	716	1240	645	96	869	100	890	1060	627	-1.44	1.96	A
Green River near Green River 09217000	6	503	66	482	612	431	74	574	172	552	1000	270	-1.02	1.96	A

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 50 sites in small drainage basins around the country. The objectives of the network are to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare with conditions observed in basins more obviously affected by the activities of man.

National Stream Quality Accounting Network (NASQAN) monitors the water quality of large rivers within four of the Nation's largest river basins--the Mississippi, Columbia, Colorado, and Rio Grande. The network consists of 39 stations. 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 Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization 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 to determine global cycles of carbon, nutrients, and other chemicals.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead Federal agency, the USGS works together with over 100 organizations to accomplish the following objectives; (1) To provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites; (2) to provide the mechanism to evaluate the effectiveness of the significant reduction in SO₂ emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred; and (3) to provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO₂ and NO_x scheduled to begin in 2000.

Data from the network, as well as information about individual sites, are available through the world wide web at:

<http://nadp.nrel.colostate.edu/NADP>

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey 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 53 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 will be 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 decision making by water-resources managers 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 within the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies.

Additional information about the NAWQA Program is available through the world wide web at:

http://www.rvares.er.usgs.gov/nawqa/nawqa_home.html

Radiochemical Program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins within the coterminous United States.

Tritium Network is a network of stations that has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data also are obtained at a number of precipitation stations. The purpose of collecting tritium data at precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

EXPLANATION OF THE RECORDS

The surface-water records published in this report are for water year 1997, which began October 1, 1996, and ended September 30, 1997. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, and water-quality data for surface water. The locations of the stations where the data were collected are shown in figure 1. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each surface-water data station in this report is assigned a unique identification number. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations is based on geographic location. Generally, the "downstream-order" system is used for surface-water stations, and the "latitude-longitude" system is used in Wyoming for surface-water stations where only miscellaneous measurements are made.

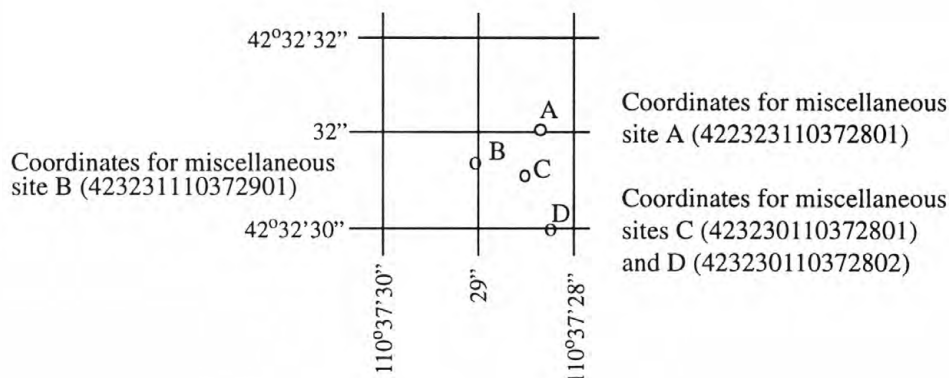
Downstream-Order System

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

The station-identification number is assigned in downstream order. In assigning station numbers, 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 made up of all types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station, such as 06642000, which appears just to the left of the station name, includes the two-digit Part number "06" plus the six-digit downstream-order number "642000." The Part number designates the major river basin; for example, Part "06" is the Missouri River basin.

Latitude-Longitude System

The identification numbers for miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of north latitude, the next seven digits denote degrees, minutes, and seconds of west longitude, and the last two digits (assigned sequentially) identify the order of sites if more than one within a 1-second grid. This site-identification number, once assigned, is arbitrary and has no locational significance. If the initial determination of latitude and longitude is found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See following figure.)



System for numbering miscellaneous sites
(latitude and longitude).

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because daily reservoir storage and end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles. Records of miscellaneous discharge measurements or of measurements from special studies may be considered as partial records, but they are presented separately in this report. Location of all complete-record stations for which data are given in this report are shown in figure 1.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relationships between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relationship between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained with analog recorders that trace continuous graphs of stage or with digital recorders that punch stage values on paper tapes at selected time intervals or with electronic data loggers that transmit stage values by satellite telemetry. Measurements of discharge are made with current meters using methods adopted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow over dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

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

In computing records of lake or reservoir contents, it is necessary to have available (from surveys) curves or tables defining the relationship of stage and content. The application of stage to the stage-content curves or tables gives the contents from which daily, monthly, or yearly changes are determined. If the stage-content relationship changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relationship. Even when this is done, the contents computed may become increasingly incorrect as the lapsed time since the last survey increases. Discharges over lake or reservoir spillways are computed from stage-discharge relationships much as other stream discharges are computed.

For some gaging stations, there are periods when no gage-height record is obtained, or the recorded gage height is so incorrect that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in sections "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

Streamflow data in this report are presented in a format considerably different from the format in data reports prior to the 1991 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or station manuscript above the table. These changes represent the results of reformatting the annual water-data report to meet current user needs and data preferences.

The record published for each continuous-record surface-water discharge station (gaging station) consists of four parts: the manuscript or station description; the data table of daily mean values of discharge for the current water year with summary data; a tabular statistical summary of monthly mean flow data for a designated period, by water year; and 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.

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 to follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations 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 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 indicates the 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 flow at it reasonably can be considered equivalent to flow at the present station.

REVISED RECORDS.--Because of new information, published records occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to National Geodetic Vertical Datum of 1929 (see glossary), 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 will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a REMARKS paragraph is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph also is used to present information 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 to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the U.S. Geological Survey by a cooperating organization are identified here.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning 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 U.S. Geological Survey.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published 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 District Office (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. Of course, if the data for a discontinued station were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is 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 skeleton stage-capacity table when daily contents are given.

Headings for AVERAGE DISCHARGE, EXTREMES FOR PERIOD OF RECORD, AND EXTREMES FOR CURRENT YEAR have been deleted and the information contained in these paragraphs is now presented in the tabular summaries following the discharge table or in the REMARKS paragraph. No changes have been made to the data presentations of lake contents.

Data table of daily mean values

The daily table of discharge records for streamgaging 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 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 usually is expressed in cubic feet per second per square mile (line headed "CFSM"); or in inches (line headed "IN."); or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if there is extensive regulation or diversion 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 contents are given. These figures are identified by a symbol and corresponding footnote.

Statistics of monthly mean data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "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 figures. 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. It will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be 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 record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be 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 this occurs, 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 there is extensive regulation or diversion of flow in the drainage basin.

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments to 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. At some stations the annual total discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

ANNUAL MEAN.--The arithmetic mean of the individual daily mean discharges for the year noted or for the designated period. At some stations the yearly mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

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 seven 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-day period low-flow statistic.)

INSTANTANEOUS PEAK FLOW.--The maximum instantaneous discharge occurring for the water year or for the designated period. Note that secondary instantaneous peak discharges above a selected base discharge are stored in District computer files for stations meeting certain criteria. Those discharge values may be obtained by writing to the District Office. (See address on back of title page of this report.)

INSTANTANEOUS PEAK STAGE.--The maximum instantaneous stage occurring for the water year or for the designated period. If the dates of occurrence for the instantaneous peak flow and instantaneous peak stage differ, 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.--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 equal to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

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

Inches (INCHES) indicates 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.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter symbol "e" and printing a table footnote (e-- Estimated) or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records 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 measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of their true values; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures for more than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. No rounding rules apply to discharges listed for partial-record stations and miscellaneous sites. Discharges listed are those actually computed.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff because of the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation from artificial causes, or to other factors. For such stations, figures for cubic feet per second per square mile and for 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 Records Available

Records of daily diversions of water from streams by canals are collected by and published in Hydrographers Annual Reports of the Wyoming Board of Control. Included are discharge records for streams and storage records for reservoirs not published in reports of the Geological Survey.

The National Water Data Exchange (NAWDEx), U.S. Geological Survey, Reston, VA 22092, maintains an index of records of discharge collected by other agencies but not published by the Geological Survey. Information on records at specific sites can be obtained from that office upon request.

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables is on file in the Wyoming District office. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained at the address given on the back of the title page of this report.

Records of Surface-Water Quality

Records of surface-water quality in this report represent a variety of data types and measurement or sampling and analysis frequencies. Whenever possible, records of surface-water quality are obtained at or near streamgaging stations because interpretation of surface-water quality and seasonal variation is enhanced by knowledge of corresponding discharge data. Locations of stations for which records on the quality of surface water appear in this report are shown in figure 1.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where water-quality data are collected systematically over a period of years, but frequency of sampling usually is less than quarterly. A miscellaneous sampling site is a location where samples are collected one time or intermittently to provide better areal coverage for defining water-quality conditions over a broad area in a river basin.

A distinction needs to be made between "continuing records", as used in reference to data for continuing-record stations, and "continuous record," which refers to a continuous graph over time or a series of discrete values recorded at short time intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, most water-quality data are obtained on a monthly or less frequent basis.

Onsite Measurements and Sample Collection

When obtaining water-quality data, a major concern is assuring that onsite water-quality measurements and the samples collected for laboratory analysis are representative of the actual quality of the water. Measurements such as water temperature, pH, and dissolved oxygen are made onsite when the samples are collected because of the potential for significant change with time. To assure that measurements made in the laboratory also represent the actual environmental concentrations of constituents, prescribed procedures need to be followed in collection and processing of samples. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," (TWRI) Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. All of these references are listed under "PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS" which appears at the end of the introductory text. Also, detailed information on collecting, treating, and shipping samples may be obtained from other references and from the Wyoming District office.

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 through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals, depends on flow conditions and other factors which must be evaluated by the sampler.

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. If an apparent inconsistency exists between a reported pH value and a 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 water-quality stations equipped with electronic monitors and digital recorders, the record consists of a daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records of the individual hourly values (unit values) may be obtained from the Wyoming District office.

Water Temperature

Water temperatures are measured at water-quality stations at the time of sampling. In addition, water temperatures are taken at the time of discharge measurements at streamgaging stations. For stations where water temperatures are measured manually once daily, the water temperatures are taken at about the same time each day for consistency in the record. Deep streams commonly have a small diurnal temperature change, whereas shallow streams may have a daily range of several degrees, which closely follows the changes in air temperature. The water temperature in some streams may be affected by industrial discharges of warm water.

For stations where recording instruments are used, the record consisting of either daily mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements and those taken manually once-daily are on file in the Wyoming District office.

Sediment

Suspended-sediment concentrations are determined from samples collected using depth-integrating samplers. Samples usually are obtained from several verticals in the cross section. At daily sediment stations, daily samples may be obtained from a single vertical and a coefficient applied to determine the mean concentration in the cross section. Daily mean suspended-sediment concentrations are computed using sample concentrations and the continuous streamflow record according to the methods described in TWRI Book 3, Chap. C3. Daily suspended-sediment discharge then is computed as the product of stream discharge times the daily mean concentration times a unit conversion factor of 0.0027.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been 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 were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between suspended-sediment concentration and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

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

Laboratory Analyses

Samples for indicator bacteria are analyzed locally. Samples for suspended-sediment are analysed at the U.S. Geological Survey laboratory in Helena, Montana. Samples for all other constituents are analyzed at the Geological Survey National Water-Quality Laboratory in Arvada, Colorado. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1 and C3. Methods used by the National Water-Quality Laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

In March 1989, the National Water-Quality Laboratory identified a bias in the turbidimetric method for sulfate analysis, indicating that values below 75 mg/L have a median positive bias of 2 mg/L above the true value for the period between 1982 and 1989.

New protocols have been established by the U.S. Geological Survey for the collection and processing of surface-water samples that are analyzed for dissolved inorganic constituents¹. These protocols are designed to produce trace-element data that are free of potential contamination associated with sample collection and filtration procedures. Because of the very low concentrations of some trace constituents in the environment, special precautions are necessary to protect the sample from the introduction of trace constituents during processing that could lead to a positive bias in reported concentrations. The protocols have been tested to assure reliable results at the microgram per liter (parts per billion) level. Dissolved trace-element data published prior to implementation of the protocols in 1994 may have a potential positive bias ranging from negligible to several micrograms per liter, depending on the procedures and sampling equipment used at the site.

Presentation of Water-Quality Records

Water-quality records collected at a streamgaging station are published immediately following the daily discharge record. Station number and name are the same for both records. Where a daily discharge record is not available or where the location of the water quality station differs significantly from that of the nearby streamgaging station, the water-quality record is published with its own station number and name in the standard downstream-order sequence.

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, cooperating agencies, and extremes for parameters measured on a daily basis. Tables of chemical, physical, biological, and radiochemical data obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, water temperature, and suspended sediment then follow in sequence.

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

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge"; same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge"; same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. 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 monitor, 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 Geological Survey by a cooperating organization are identified here.

¹ Horowitz, A.J., Demas, C.R., Fitzgerald, K.K., Miller, T.L., and Rickert, D.A., 1994, U.S. Geological Survey Protocol for the Collection and Processing of Surface-Water Samples for the Subsequent Determination of Inorganic Constituents in Filtered Water: U.S. Geological Survey Open-File Report 94-539, 57 p.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

Remark Codes

The following remark codes may appear with the water-quality data in this report:

<u>PRINTED OUTPUT</u>	<u>REMARK</u>
E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptable range (non-ideal colony count)

Change in National Trends Network Procedures

Sample handling procedures at all National Trends Network stations were changed substantially on January 11, 1994, to reduce contamination from the sample shipping container. The data for samples before and after that date are different and not directly comparable. A tabular summary of the differences based on a special intercomparison study, is available from the NADP/NTN Coordination office, Colorado State University, Fort Collins, CO 80523 (Telephone: 970-491-5643).

ACCESS TO WATER DATA

The U.S. Geological Survey 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 at

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

Some water-quality and ground-water data are also available through the WWW. In addition, data can be provided in various machine-readable formats on magnetic tape or 3-1/2 inch floppy disk. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division District offices (See address on the back of the title page.)

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System (SI) Units on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often formed into colonies. Some bacteria cause disease, while 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.

Fecal coliform bacteria are bacteria that are present in the intestine and feces of warm-blooded animals. They are often 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.

Fecal streptococcal bacteria also are bacteria found in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as Gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which 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.

Non-ideal colony count (K) is a remark code used in reporting bacteria densities when plate counts fall outside of an ideal range. The lower limit of 20 colonies is set as the number below which statistically valid results become increasingly questionable. The upper limit, which differs according to type of bacteria, represents numbers above which interference from colony crowding, deposition of extraneous material, and other factors appear to result in increasingly questionable results.

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Bottom material: See Bed material.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

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

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

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

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.

Cubic feet per second per square mile [(ft³/s)/mi²] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (ft³/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Cubic-foot-per-second day (cfs-day) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,447 cubic meters.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

Annual 7-day minimum is the lowest mean discharge for seven 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.)

Instantaneous discharge is the discharge at a particular instant of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Dissolved refers to that material in a representative water sample which passes through a 0.45 micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determination of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved-solids concentration of water 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 of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.493 to reflect the change.

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

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

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

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

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate (CaCO_3).

Hydrologic Benchmark Network is a network of about 50 sites in small drainage basins around the country. The purpose of the network is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare with conditions observed in basins more obviously affected by the activities of man.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number.

Less than (<) is a remark code indicating that the analyzed value was found to be less than the numeric value listed. The value associated with the "<" remark indicates the detection limit of the applied laboratory or the reporting limit if specified by USEPA or state environmental agency.

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 liter (UG/L, $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of solution. One thousand micrograms per liter is equivalent to one milligram per liter.

Microsiemens per centimeter at 25 degrees Celsius (US/CM, $\mu\text{S/cm}$) is a unit for reporting specific electrical conductance.

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

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in national or regional water-quality planning and management. The 39 sites in NASQAN generally are located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data in coordination with the Water Resources Council. The objective of NASQAN is to obtain data on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting. Such data may be used for: description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs; detection of changes or trends with time in the pattern of occurrence of water-quality characteristics; and a nationally consistent data base useful for water-quality assessment and hydrologic research.

National Water-Quality Assessment Program (NAWQA) is a nationwide program that was started by the U.S. Geological Survey in 1991. The long term goals of the NAWQA program are to describe the status and trends in the quality of a large, representative part of the Nation's surface-water, and ground-water resources and to provide a sound, scientific understanding of the primary natural and human factors affecting the quality of these resources. The principal building blocks of the NAWQA program are the study-unit investigations on which national-level assessments are based. Study-unit investigations are comprehensive and include information on water, sediment, biota, and aquatic and terrestrial habitats within its boundaries.

The National Trends Network (NTN) is a network of stations for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both spatial and temporal, of the composition of atmospheric deposition, which includes snow, rain, dust particles, aerosols, and gases. The network from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program (NADP).

Organism is any living entity.

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, acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent. The codes used in NWIS are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Partial-record station is a site where discrete streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of a particle determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine all 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 used in this report agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

<u>Classification</u>	<u>Size (mm)</u>	<u>Method of analysis</u>
Clay	0.00024 - 0.004	Sedimentation
Silt	.004 - .062	Sedimentation
Sand	.062 - 2.0	Sedimentation or sieve
Gravel	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. 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.

Percent composition 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, mass, or volume.

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

pH indicates the degree of acidity or alkalinity of water and is expressed in logarithmic units. The pH value of a solution is the negative logarithm of the hydrogen-ion concentration, in moles per liter.

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

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins within the conterminous United States.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Recurrence interval is the average time interval between occurrences of a hydrological event of a given or greater magnitude, usually expressed in years. May also be called return period.

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

Sea level in this report refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)--a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it 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 influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists as a colloid.

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 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour period.

Suspended-sediment discharge (tons/day) is the rate at which a quantity of sediment, as measured by dry mass or volume, passes a stream section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) $\times$ discharge (ft^3/s) $\times$ 0.0027.

Suspended-sediment load is a general term that refers to the total mass of material in suspension. It is not synonymous with sediment discharge, which is a rate of transport.

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. Waters range to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 degrees Celsius. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 60 to 65 percent of the specific conductance (in microsiemens per centimeter at 25 degrees Celsius). This relation is not constant from stream to stream, and may vary in the same source with changes in the composition of the water.

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

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.

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured in acres. In localities not covered by topographic maps, the areas are computed from the best maps available. All areas shown are those for the stage when the map was made.

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

Suspended (as pertains to chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with the 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 μ m membrane filter 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 the 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 sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended 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. A 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 analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings 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 concentration 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 that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 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) is the quantity, in tons, of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total is the amount of a given constituent in a representative water-suspended sediment 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" indicates both that the sample consists of a water-suspended sediment mixture and that the analytical method determined all of the constituent in the sample.)

Total discharge is the quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross-section per unit of time. 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. 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, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment 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, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Turbidity of a sample is the reduction of transparency because of the presence of particulate matter. In this report it is expressed in Nephelometric turbidity units (NTU), obtained from the nephelometric method for turbidity determination which measures the intensity of light scattered by suspended particles at 90 degrees from the path of an incident light source.

Tritium Network is a network of stations that has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the tritium data collection at precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period October 1 through the following 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, 1990, is called "water year 1990."

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.

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

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Branch of Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

- 1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

- 2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F. P. Haeni: USGS--TWRI Book 2, Chapter D2. 1988. 86 pages.
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- 3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
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- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
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- 3-A7. *Stage measurement at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
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- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F. A. Kilpatrick and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1989. 27 pages.
- 3-A10. *Discharge ratings at gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. *Measurement of discharge by the moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
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- 3-A13. *Computation of continuous records of streamflow*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. *Use of flumes in measuring discharge*, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.
- 3-A16. *Measurement of discharge using tracers*, by F. A. Kilpatrick and E. D. Cobb: USGS--TWRI Book 3, Chapter A16. 1985. 52 pages.
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- 3-A19. *Levels at streamflow gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A19. 1990. 31 pages.

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- 3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
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- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-B4. *Regression modeling of ground-water flow*, by R. L. Cooley and R. L. Naff: USGS--TWRI Book 3, Chapter B4. 1990. 232 pages.
- 3-B4. *Supplement 1. Regression modeling of ground-water flow - Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems*, by R. L. Cooley: USGS--TWRI Book 3, Chapter B4. 1993. 8 pages.
- 3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems--An introduction*, by O. L. Franke, T. E. Reilly, and G. D. Bennett: USGS--TWRI Book 3, Chapter B5. 1987. 15 pages.
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- 3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
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- 4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
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- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M.J. Fishman and L. C. Friedman, editors: USGS--TWRI Book 5, Chapter A1. 1989. 545 pages.
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- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L. J. Britton and P. E. Greenson, editors: USGS--TWRI Book 5, Chapter A4. 1989. 363 pages.
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- 5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M. G. McDonald and A. W. Harbaugh: USGS--TWRI Book 6, Chapter A1. 1988. 586 pages.
- 6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model*, by S. A. Leake and D. E. Prudic: USGS--TWRI Book 6, Chapter A2. 1991. 68 pages.
- 6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual*, by L. J. Torak: USGS--TWRI Book 6, Chapter A3. 1993. 136 pages.
- 6-A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions*, by R. L. Cooley: USGS--TWRI Book 6, Chapter A4. 1992. 108 pages.
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- 6-A6. *A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction*, by Eric D. Swain and Eliezer J. Wexler. 1995. 125 pages.
- 7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.
- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.
- 8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.
- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.
- 9-A7. *National Field Manual for the Collection of Water-Quality Data: Biological Indicators*, by D. N. Myers and F. D. Wilde: USGS--TWRI Book 9, Chapter A7. 1997. 49 pages.

06037500 MADISON RIVER NEAR WEST YELLOWSTONE, MT

LOCATION.--Lat 44°39'25", long 111°04'03", in NE¹/₄ NW¹/₄ SW¹/₄ 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 sea level, from topographic map. Prior to Oct. 20, 1918, nonrecording gage, and Oct. 20, 1918 to June 29, 1930, nonrecording gage or water-stage recorder at sites 2.5 mi upstream at different datums. U.S. Geological Survey satellite telemeter at station. Supplementary nonrecording gage at site 0.3 mi downstream at different datum used at time during 1927-30.

REMARKS.--Records good. No regulation or diversions upstream from station. Station operated and record provided by Montana District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	545	544	624	e680	e530	473	532	912	2020	962	709	670
2	539	551	623	e660	527	e470	508	882	2060	1020	705	676
3	539	554	617	e640	516	e470	515	827	1860	985	696	676
4	539	558	615	e660	498	e475	522	804	1810	931	697	682
5	537	566	622	e660	495	480	506	839	1880	921	823	676
6	532	539	625	664	486	481	486	940	1830	903	872	691
7	531	558	625	663	477	485	503	1100	1750	885	745	752
8	531	557	640	652	474	488	501	1200	1710	866	720	693
9	535	561	651	638	475	475	503	1260	1940	851	695	668
10	539	558	694	638	476	470	496	1400	1820	872	693	670
11	538	556	691	623	486	495	485	1570	1680	901	730	723
12	537	560	663	558	499	493	481	1740	1670	863	737	872
13	535	561	662	e560	483	484	485	1890	1530	898	725	761
14	542	e560	660	e560	484	480	494	1980	1460	828	760	706
15	547	e580	635	e560	492	474	501	2090	1400	797	728	686
16	576	585	644	563	490	496	511	2250	1500	774	713	673
17	557	589	608	552	500	516	578	2400	1390	760	697	659
18	554	599	e620	552	508	500	630	2550	1500	751	687	662
19	579	e620	641	554	495	508	681	2520	1550	755	684	693
20	567	e640	641	557	495	548	774	2410	1360	771	676	668
21	546	e640	649	566	485	595	883	2380	1250	754	674	686
22	551	e640	647	561	477	593	862	2240	1180	734	675	797
23	558	e640	635	559	469	595	821	2290	1150	720	667	705
24	580	658	609	542	466	577	800	2330	1080	725	707	671
25	600	651	604	531	472	540	800	2160	1040	741	733	659
26	570	621	626	548	483	540	810	1780	1010	770	696	658
27	544	620	e640	544	e480	593	827	1610	995	728	685	691
28	567	626	648	529	485	573	934	1620	995	718	668	682
29	569	629	659	530	---	532	972	1720	980	755	667	662
30	574	599	667	526	---	522	932	1870	956	752	667	649
31	559	---	676	e530	---	531	---	1920	---	724	662	---
TOTAL	17117	17720	19861	18160	13703	15952	19333	53484	44356	25415	21993	20817
MEAN	552	591	641	586	489	515	644	1725	1479	820	709	694
MAX	600	658	694	680	530	595	972	2550	2060	1020	872	872
MIN	531	539	604	526	466	470	481	804	956	718	662	649
AC-FT	33950	35150	39390	36020	27180	31640	38350	106100	87980	50410	43620	41290

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 1997, BY WATER YEAR (WY)*

	430	421	412	400	395	402	493	846	818	499	432	426
MEAN	430	421	412	400	395	402	493	846	818	499	432	426
MAX	710	697	641	586	572	539	671	1725	1479	917	759	704
(WY)	1914	1914	1997	1997	1914	1917	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

MADISON RIVER BASIN

06037500 MADISON RIVER NEAR WEST YELLOWSTONE, MT--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1913 - 1997*	
ANNUAL TOTAL	255141		287911		--	
ANNUAL MEAN	697		789		496	
HIGHEST ANNUAL MEAN	--		--		789	1997
LOWEST ANNUAL MEAN	--		--		337	1934
HIGHEST DAILY MEAN	2750	May 18	2550	May 18	2750	May 18 1996
LOWEST DAILY MEAN	360	Feb 2	466	Feb 24	245	Jan 1 1942
ANNUAL SEVEN-DAY MINIMUM	387	Jan 31	475	Feb 23	267 ^b	Aug 6 1931
INSTANTANEOUS PEAK FLOW	--		2630	May 18	2820 ^b	May 18 1996
INSTANTANEOUS PEAK STAGE	--		3 ^a 58	May 18	10 ^d 00 ^c	Jan 8 1937
INSTANTANEOUS LOW FLOW	--		455 ^a	Feb 8	100 ^d	Feb 7 1933
ANNUAL RUNOFF (AC-FT)	506100		571100		359600	
10 PERCENT EXCEEDS	1290		1500		749	
50 PERCENT EXCEEDS	566		649		430	
90 PERCENT EXCEEDS	436		494		337	

* During periods of operation (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).

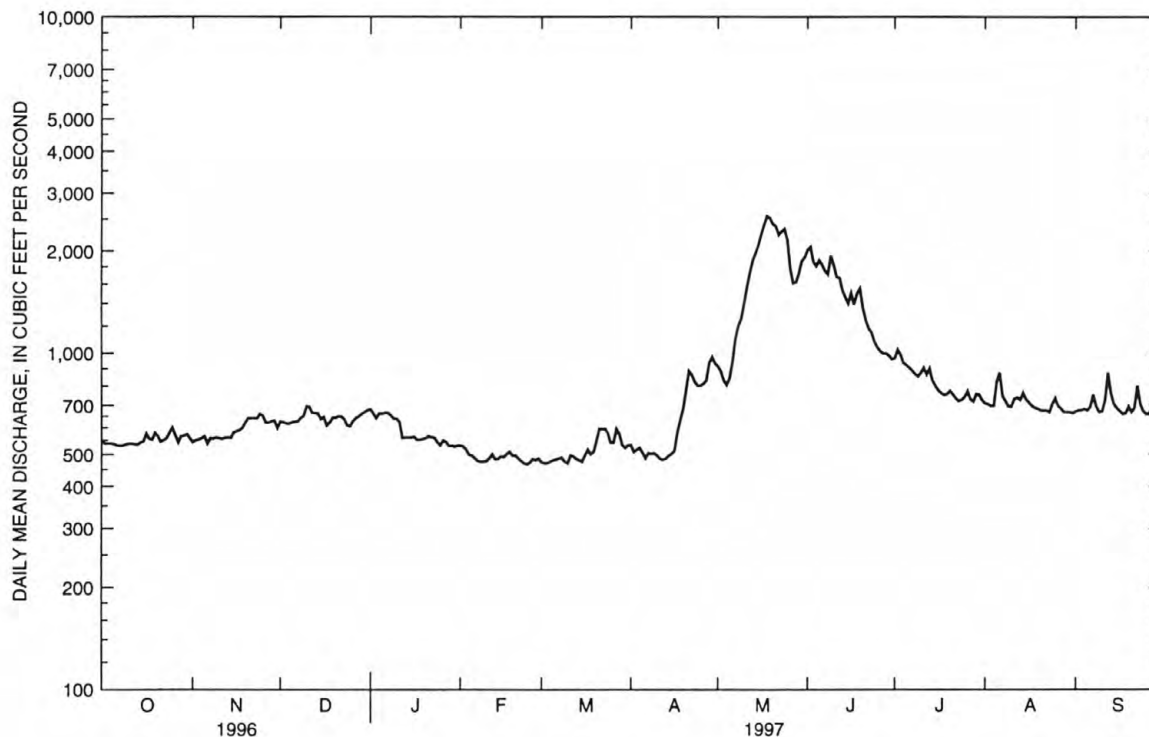
a Gage height, 1.88 ft, may have been less during ice period.

b Gage height, 3.78 ft.

c About; backwater from ice.

d Result of freezeup.

e Estimated.



06037500 MADISON RIVER NEAR WEST YELLOWSTONE, MT

06043500 GALLATIN RIVER NEAR GALLATIN GATEWAY, MT

LOCATION.--Lat 45°29'51", long 111°16'11" in SE¹/₄ SE¹/₄ SE¹/₄ sec.7, T.4 S., R.4 E., Gallatin County, MT, 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).

GAGE.--Water-stage recorder. Datum of gage is 5,167.67 ft above sea level. Prior to Oct. 20, 1932, nonrecording gages at several different sites and datums within 0.8 mi of present site.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversions for irrigation of about 1,400 acres upstream from station. U.S. Geological Survey satellite telemeter at station. Station operated and record provided by Montana District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	464	384	352	465	e360	308	386	807	7700	2410	1030	639
2	456	408	335	516	e350	307	370	748	8400	2180	1080	655
3	451	418	328	e540	e340	320	365	725	7070	2080	988	654
4	446	434	300	e520	305	315	387	841	7020	1930	936	646
5	440	422	323	e500	294	313	353	949	7840	1880	1070	629
6	438	376	310	e450	305	312	324	1130	7920	1910	1150	642
7	434	407	309	e420	309	316	378	1280	7870	1890	984	634
8	432	405	354	e450	304	321	354	1270	7810	1790	958	608
9	427	405	388	e500	307	311	355	1430	6740	1750	907	593
10	426	396	389	e450	320	313	336	1770	6320	1770	882	624
11	422	397	367	e350	339	333	323	2170	6340	1740	857	916
12	418	404	340	e300	333	329	326	2400	5720	1580	851	1230
13	416	406	322	e250	325	318	339	2730	5300	1470	901	883
14	430	431	335	e280	324	299	350	2890	4990	1400	941	770
15	429	402	309	e350	329	304	347	3390	4830	1360	861	713
16	432	343	e280	e330	334	319	364	3990	4800	1360	1090	690
17	406	359	e230	e350	337	368	427	4480	4620	1340	937	672
18	414	401	e220	e370	337	361	482	4480	5220	1360	860	736
19	456	480	e250	e380	334	401	588	3880	4590	1380	887	763
20	439	553	e280	e390	323	428	687	3900	3990	1410	823	698
21	406	446	330	e380	308	447	702	4340	3570	1320	795	678
22	444	439	306	e370	315	433	638	4580	3370	1230	769	709
23	434	426	e210	e370	308	441	609	4610	3230	1240	748	679
24	439	375	e250	e360	307	419	598	5250	3010	1180	741	650
25	457	421	e250	e350	313	372	638	5180	2670	1150	759	633
26	431	389	e240	e350	324	394	628	4280	2530	1170	721	620
27	356	348	e230	e370	335	458	759	3790	2580	1060	698	685
28	417	387	e250	e370	327	409	932	3720	2530	1050	682	643
29	465	393	e330	e370	---	384	872	4080	2400	1150	670	618
30	434	341	355	e370	---	382	802	4410	2320	1090	660	602
31	368	---	382	e370	---	399	---	5240	---	1040	644	---
TOTAL	13327	12196	9454	12191	9046	11134	15019	94740	153300	46670	26880	20912
MEAN	430	407	305	393	323	359	501	3056	5110	1505	867	697
MAX	465	553	389	540	360	458	932	5250	8400	2410	1150	1230
MIN	356	341	210	250	294	299	323	725	2320	1040	644	593
AC-FT	26430	24190	18750	24180	17940	22080	29790	187900	304100	92570	53320	41480

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1889 - 1997, BY WATER YEAR (WY)*

	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900
MEAN	456	383	322	307	304	311	503	1808	2976	1303	615	496
MAX	743	589	549	468	430	465	899	3135	5110	3669	1162	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

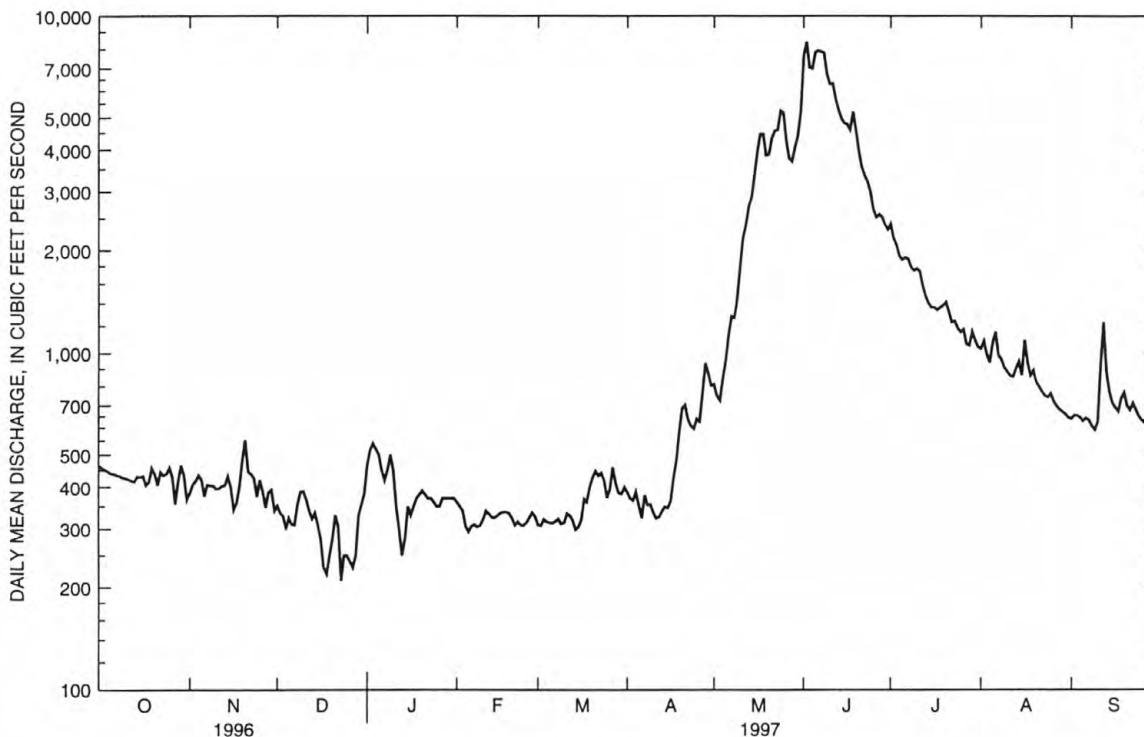
SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1889 - 1997*	
ANNUAL TOTAL	357436		424869		--	
ANNUAL MEAN	977		1164		818	
HIGHEST ANNUAL MEAN	--		--		1184	1976
LOWEST ANNUAL MEAN	--		--		408	1934
HIGHEST DAILY MEAN	6760	Jun 10	8400	Jun 2	8970	Jun 17 1974
LOWEST DAILY MEAN	200	Feb 3	210	Dec 23	174	Nov 21 1931
ANNUAL SEVEN-DAY MINIMUM	230	Jan 1	248	Dec 22	182	Jan 18 1931
INSTANTANEOUS PEAK FLOW	--		9160	Jun 2	9270 ^a	Jun 27 1971
INSTANTANEOUS PEAK STAGE	--		6.71	Jun 2	7 ^b ₃₈	Jun 17 1974
INSTANTANEOUS LOW FLOW	--		--		117	Jan 19 1935
ANNUAL RUNOFF (AC-FT)	709000		842700		592500	
10 PERCENT EXCEEDS	2890		3630		2050	
50 PERCENT EXCEEDS	455		450		430	
90 PERCENT EXCEEDS	270		313		268	

* During periods of operation (August 1889 to 1894, June 30 to September 1969, October 1971 to September 1981, October 1984 to current year).

a Correction, from rating curve extended above 5,500 ft³/s. Gage height, 6.49 ft.

b Gage height, 0.68 ft, result of freezeup.

e Estimated.



06043500 GALLATIN RIVER NEAR GALLATIN GATEWAY, MT

06186500 YELLOWSTONE RIVER AT YELLOWSTONE LAKE OUTLET, YELLOWSTONE NATIONAL PARK

LOCATION.--Lat 44°34'03", long 110°22'48", Yellowstone National Park, Hydrologic Unit 10070001, 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.--1,006 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.

GAGE.--Water-stage recorder. Datum of gage is 7,729.58 ft above sea level. Prior to Oct. 2, 1928, nonrecording gage at site 450 ft upstream at datum 1.07 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair. No artificial regulation. Station operated and record provided by Montana District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1040	744	703	e640	e610	e600	e620	e680	5320	8340	4580	2300
2	1020	740	702	e640	e610	e600	e620	e700	5670	8170	4480	2250
3	1010	732	697	e640	e610	e600	e620	e720	5980	7980	4380	2220
4	1010	723	690	e640	e610	e600	e620	e740	6290	7760	4270	2170
5	998	715	685	e640	e610	e600	e620	e770	6680	7570	4240	2120
6	981	709	688	e630	e610	e600	e620	e800	7130	7400	4180	2090
7	970	696	686	e630	e610	e600	e620	e850	7570	7240	4090	2060
8	961	682	682	e630	e610	e600	e620	e900	7970	7090	4010	2020
9	954	675	671	e630	e610	e600	e620	e950	8340	6940	3840	1980
10	943	670	690	e630	e610	e600	e620	e1000	8710	6820	3800	1930
11	938	659	703	e620	e600	e610	e620	e1100	9030	6730	3730	1940
12	926	651	698	e620	e600	e610	e620	e1200	9220	6650	3650	1910
13	912	646	689	e620	e600	e610	e620	e1300	9340	6620	3590	1860
14	900	635	696	e620	e600	e610	e620	e1400	9440	6470	3540	1840
15	885	653	685	e620	e600	e610	e620	e1500	9550	6320	3450	1820
16	872	656	678	e620	e600	e610	e620	e1600	9680	6190	3340	1790
17	875	661	690	e620	e600	e610	e621	e1800	9770	6060	3280	1730
18	855	664	678	e620	e600	e610	e622	e2000	9860	5960	3200	1690
19	846	713	672	e620	e600	e610	e627	2230	9930	5850	3120	1640
20	837	739	665	e620	e600	e610	e633	2490	9850	5750	3030	1610
21	823	749	669	e620	e600	e610	e640	2720	9790	5640	2970	1590
22	805	742	666	e620	e600	e610	e640	3020	9700	5510	2900	1570
23	795	738	e660	e620	e600	e610	e640	e3300	9600	5410	2840	1550
24	795	732	e660	e620	e600	e610	e640	e3600	9490	5310	2790	1530
25	781	735	e660	e620	e600	e610	e650	e3900	9320	5220	2730	1500
26	765	732	e650	e610	e600	e610	e650	e4100	9130	5120	2680	1490
27	765	724	e650	e610	e600	e610	e650	e4300	8960	4990	2630	1470
28	764	708	e650	e610	e600	e610	e660	e4500	8790	4890	2560	1430
29	762	709	e650	e610	---	e620	e660	4640	8640	4850	2500	1410
30	762	705	e650	e610	---	e620	e670	4810	8470	4770	2420	1390
31	754	---	e650	e610	---	e620	---	5010	---	4700	2360	---
TOTAL	27304	21037	20963	19310	16900	18840	18923	68630	257220	194320	105180	53900
MEAN	881	701	676	623	604	608	631	2214	8574	6268	3393	1797
MAX	1040	749	703	640	610	620	670	5010	9930	8340	4580	2300
MIN	754	635	650	610	600	600	620	680	5320	4700	2360	1390
AC-FT	54160	41730	41580	38300	33520	37370	37530	136100	510200	385400	208600	106900

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 1997, BY WATER YEAR (WY)*

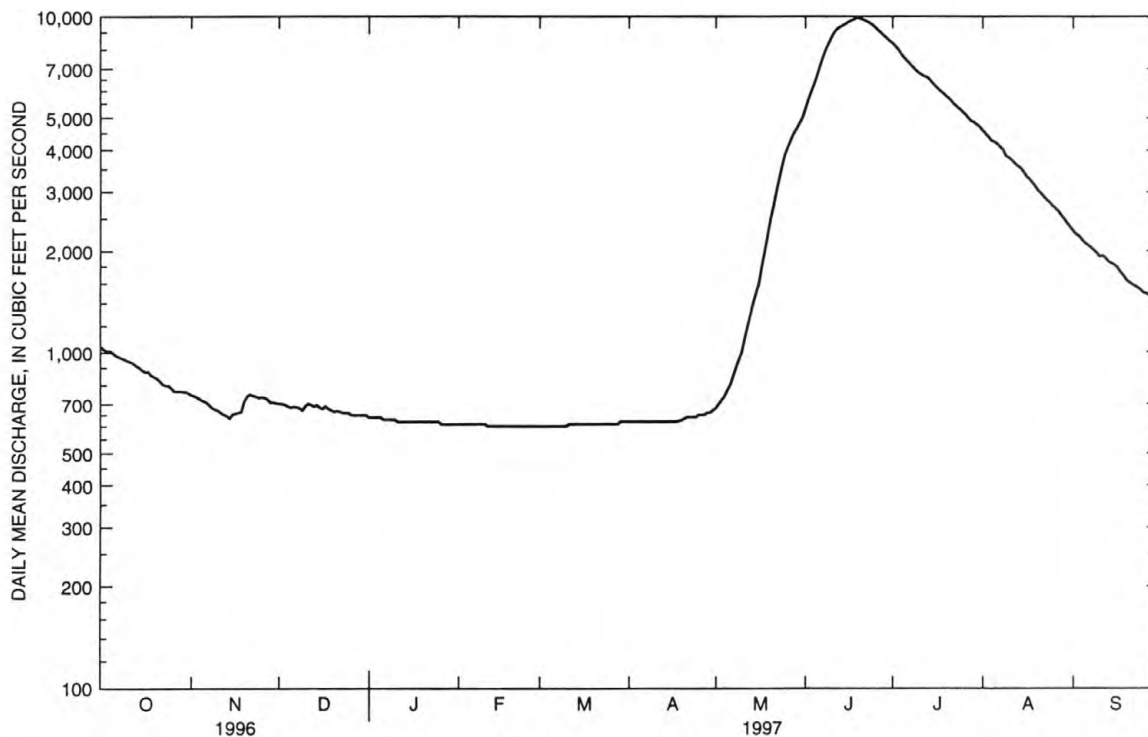
	MEAN	803	607	475	394	383	444	545	1151	3694	4080	2238	1224
MAX	1259	984	775	639	628	717	801	2214	8574	7160	4031	1954	
(WY)	1973	1951	1951	1971	1971	1962	1952	1997	1997	1982	1982	1982	
MIN	327	276	246	168	123	130	175	605	1707	1272	812	538	
(WY)	1989	1989	1932	1989	1989	1935	1937	1953	1934	1934	1934	1934	

YELLOWSTONE RIVER BASIN

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

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1927 - 1997*	
ANNUAL TOTAL	718894		822527		--	
ANNUAL MEAN	1964		2253		1342	
HIGHEST ANNUAL MEAN	--		--		2253	1997
LOWEST ANNUAL MEAN	--		--		682	1934
HIGHEST DAILY MEAN	8730	Jun 28	9930	Jun 19	9930	Jun 19 1997
LOWEST DAILY MEAN	500	Jan 29	600	Feb 11	100	Feb 18 1993
ANNUAL SEVEN-DAY MINIMUM	500	Jan 29	600	Feb 11	113	Feb 11 1989
INSTANTANEOUS PEAK FLOW	--		9950	Jun 18	9950	Jun 18 1997
INSTANTANEOUS PEAK STAGE	--		8.90	Jun 18	8.90	Jun 18 1997
ANNUAL RUNOFF (AC-FT)	1426000		1631000		972100	
ANNUAL RUNOFF (CFSM)	1.95		2.24		1.33	
ANNUAL RUNOFF (INCHES)	26.58		30.42		18.12	
10 PERCENT EXCEEDS	6430		6700		3490	
50 PERCENT EXCEEDS	724		742		679	
90 PERCENT EXCEEDS	530		610		335	

* During periods of operation (October 1926 to September 1982, October 1983 to September 1986, October 1988 to current year).
e Estimated.



06186500 YELLOWSTONE RIVER AT YELLOWSTONE LAKE OUTLET, YELLOWSTONE NATIONAL PARK

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

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

DRAINAGE AREA.--99.0 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 6,630 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges and those for June, which are fair, and those for July 1-16, which are poor. No regulation or diversion upstream of station. U.S. Geological Survey satellite telemeter at station. Station operated and record provided by Monana District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	31	e27	e35	34	e27	37	98	1320	380	257	101
2	51	33	e28	e35	34	29	34	91	1140	331	244	98
3	50	34	e29	e35	32	30	36	90	1160	434	228	100
4	50	38	e29	e34	32	28	36	98	1420	376	213	97
5	49	36	30	e33	e32	e28	34	107	1560	375	206	95
6	48	32	32	e32	e31	29	e34	138	1440	393	194	100
7	47	36	31	31	e31	31	e34	181	1350	409	193	107
8	45	35	33	32	e30	31	35	170	1330	428	185	94
9	45	36	37	34	e30	28	36	202	1200	445	172	92
10	45	36	41	34	e31	e29	34	268	1090	461	159	91
11	44	35	39	e34	32	32	e33	336	1210	499	153	131
12	43	36	36	e32	32	31	e33	387	897	442	152	129
13	43	35	32	e30	32	e31	e35	449	847	413	150	95
14	44	38	29	e32	32	e30	37	496	778	389	169	88
15	45	36	24	e34	32	e29	37	611	722	415	158	86
16	47	32	e22	e35	32	29	40	736	716	438	239	89
17	42	34	e21	e35	32	31	45	797	706	449	166	86
18	40	39	e20	34	32	30	51	817	793	443	152	84
19	43	74	e25	34	e31	32	60	754	726	426	147	89
20	41	82	32	34	e30	35	79	757	624	385	138	80
21	36	70	32	35	30	40	85	786	548	377	135	79
22	38	51	e32	34	e29	40	79	816	546	364	130	89
23	39	46	e32	35	e28	39	78	862	540	353	126	82
24	40	39	32	35	e28	37	79	872	471	353	140	79
25	40	42	e32	32	e28	32	79	881	419	343	130	79
26	38	35	e32	e32	29	e33	79	697	410	333	125	81
27	30	34	e30	e32	30	e34	93	622	375	306	128	101
28	34	38	e32	e31	e28	33	110	594	385	315	115	82
29	38	37	e33	32	---	33	108	668	399	367	112	78
30	37	e28	e33	33	---	34	99	779	361	320	108	78
31	32	---	e34	33	---	38	---	1060	---	280	102	---
TOTAL	1316	1208	951	1033	864	993	1689	16220	25483	12042	5026	2760
MEAN	42.5	40.3	30.7	33.3	30.9	32.0	56.3	523	849	388	162	92.0
MAX	52	82	41	35	34	40	110	1060	1560	499	257	131
MIN	30	28	20	30	28	27	33	90	361	280	102	78
AC-FT	2610	2400	1890	2050	1710	1970	3350	32170	50550	23890	9970	5470

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1997, BY WATER YEAR (WY)

	1989	1995	1989	1989	1995	1989	1993	1995	1994	1994	1994	1994
MEAN	42.5	32.5	25.2	24.8	22.7	24.0	67.3	419	742	301	103	61.2
MAX	50.5	40.3	31.2	33.3	30.9	32.0	127	580	1251	429	162	92.0
(WY)	1993	1997	1996	1997	1997	1997	1990	1993	1996	1996	1997	1997
MIN	27.8	21.4	16.0	16.7	16.9	20.1	32.3	217	368	106	58.1	40.4
(WY)	1989	1995	1989	1989	1995	1989	1993	1995	1994	1994	1994	1994

YELLOWSTONE RIVER BASIN

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

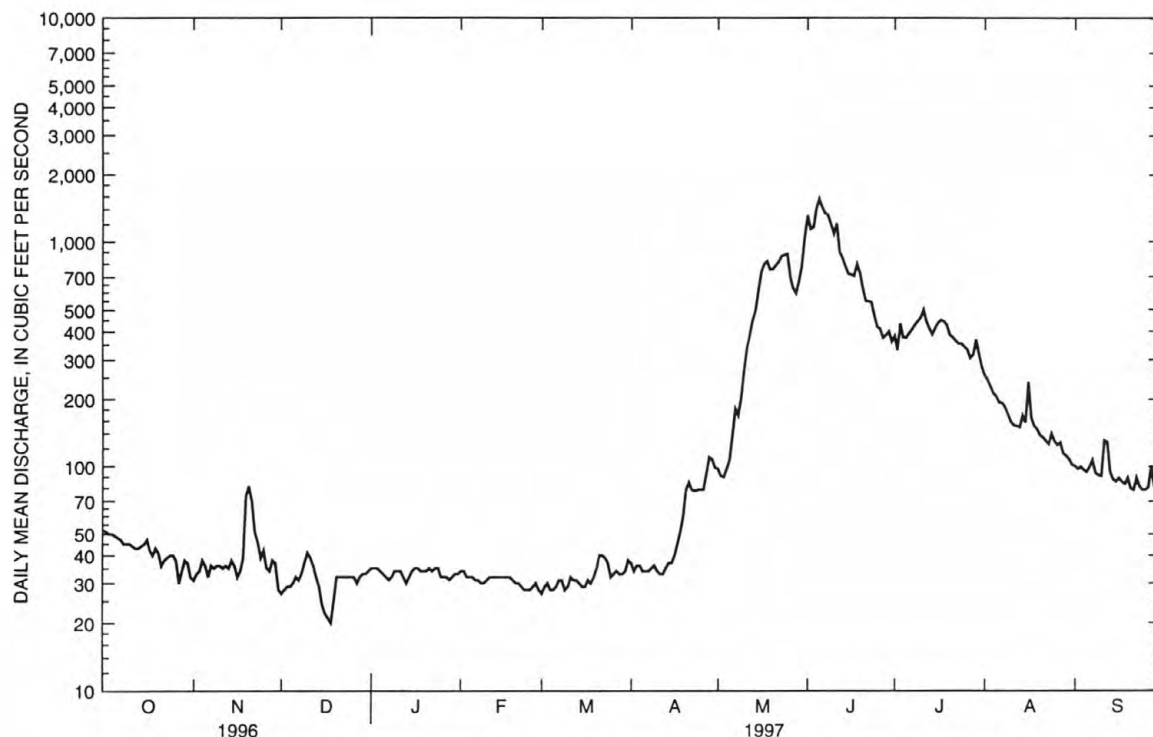
SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1989 - 1997	
ANNUAL TOTAL	74404		69585		--	
ANNUAL MEAN	203		191		156	
HIGHEST ANNUAL MEAN	--		--		204	1996
LOWEST ANNUAL MEAN	--		--		108	1994
HIGHEST DAILY MEAN	2070	Jun 9	1560	Jun 5	2070 ^b	Jun 9 1996
LOWEST DAILY MEAN	20	Feb 2	20	Dec 18	12	Feb 4 1989
ANNUAL SEVEN-DAY MINIMUM	21	Mar 22	25	Dec 13	13	Feb 2 1989
INSTANTANEOUS PEAK FLOW	--		1830	Jun 4	2450 ^c	Jun 8 1996
INSTANTANEOUS PEAK STAGE	--		5 ^a	Jun 4	5.64	Jun 6 1995
INSTANTANEOUS LOW FLOW	--		18	Oct 27	11	Jan 31 1989
ANNUAL RUNOFF (AC-FT)	147600		138000		112800	
10 PERCENT EXCEEDS	736		601		512	
50 PERCENT EXCEEDS	49		45		44	
90 PERCENT EXCEEDS	23		30		21	

a Gage height, 0.49 ft; may have been lower during ice-affected period.

b Also occurred Jan. 3, 1995.

c Gage height, 5.61 ft.

e Estimated.



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

39

LOCATION.--Lat 44°55'40", long 110°23'35", Yellowstone National Park, Hydrologic Unit 10070001, 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.

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

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 Montana District.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	228	e150	e150	e170	e140	e130	e270	1200	13000	3540	871	356
2	214	e150	e160	e170	e140	e130	e250	1020	11900	3060	822	355
3	204	e160	e160	e170	e140	e140	e260	916	10800	3430	803	358
4	198	e160	e160	e160	e130	e140	e270	1110	12400	2820	731	352
5	192	170	e150	e150	e120	e140	e250	1400	15000	2690	740	341
6	186	159	e160	e140	e110	e140	e220	2080	14400	2710	740	353
7	183	166	e160	e130	e110	e140	e200	2830	13100	2670	663	410
8	180	169	e170	e140	e120	e150	216	2650	12400	2630	662	365
9	177	163	e180	e140	e120	e140	225	3090	12200	2530	612	324
10	174	150	e200	e150	e120	e140	202	3970	11200	2490	577	309
11	171	147	e190	e150	e130	e150	193	4650	12200	2520	571	474
12	168	150	e170	e130	e130	e170	207	5090	9020	2140	566	597
13	166	151	e170	e120	e130	e160	216	5810	8840	2120	579	552
14	165	170	e170	e130	e130	e160	234	5690	7710	1780	711	438
15	170	156	e160	e140	e140	e150	235	7180	7140	1710	659	397
16	191	145	e160	e140	e140	e160	252	8580	7220	1690	865	430
17	174	154	e150	e130	e150	e170	353	9110	6910	1640	710	401
18	161	172	e140	e130	e150	e160	437	9110	7930	1540	597	376
19	177	374	e150	e140	e140	e170	608	7910	7640	1480	611	435
20	173	538	e160	e150	e140	e180	852	8020	6030	1370	563	413
21	154	365	e160	e150	e130	e200	1090	8290	5220	1290	527	378
22	163	285	e160	e140	e130	e230	945	8460	5030	1220	504	417
23	165	264	e160	e140	e130	e270	870	8930	5230	1210	473	419
24	167	205	e160	e130	e120	e260	883	8860	4380	1190	488	365
25	173	226	e150	e130	e120	e250	932	8520	3650	1140	532	342
26	161	175	e150	e130	e130	293	916	5980	3650	1190	459	329
27	145	e160	e140	e130	e140	330	1230	4880	3870	1030	469	393
28	193	e170	e150	e120	e140	e300	1780	4800	3850	1070	431	413
29	186	e180	e150	e130	---	e270	1560	6010	3620	1180	405	357
30	180	e160	e150	e140	---	e280	1300	7120	3530	1160	383	335
31	162	---	e160	e140	---	e290	---	8890	---	959	368	---
TOTAL	5501	5944	4960	4360	3670	5993	17456	172156	249070	59199	18692	11784
MEAN	177	198	160	141	131	193	582	5553	8302	1910	603	393
MAX	228	538	200	170	150	330	1780	9110	15000	3540	871	597
MIN	145	145	140	120	110	130	193	916	3530	959	368	309
AC-FT	10910	11790	9840	8650	7280	11890	34620	341500	494000	117400	37080	23370

MEAN	213	157	121	106	101	110	452	2787	4279	1362	356	230
MAX	485	330	202	200	171	204	1684	6885	9044	3256	886	518
(WY)	1942	1928	1951	1969	1969	1992	1990	1928	1996	1943	1968	1968
MIN	109	88.1	75.5	71.8	70.0	67.9	106	969	1408	344	173	115
(WY)	1989	1937	1953	1989	1942	1964	1945	1933	1934	1931	1940	1988

YELLOWSTONE RIVER BASIN

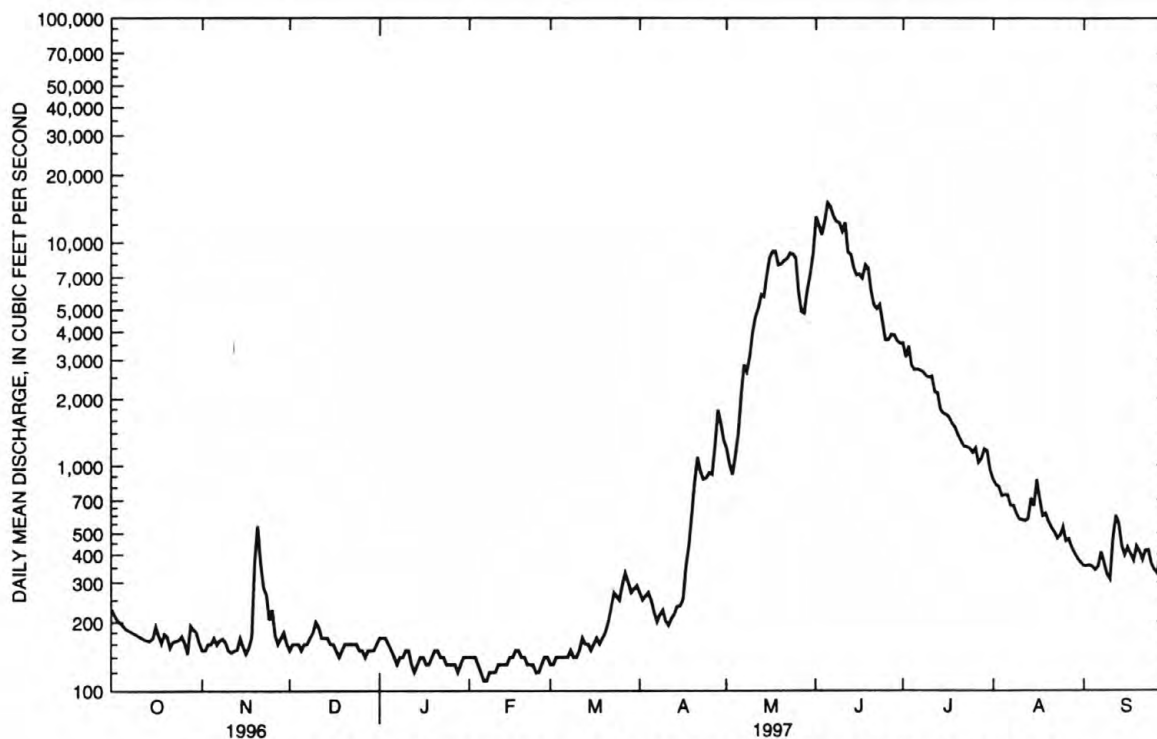
06188000 LAMAR RIVER NEAR TOWER FALLS RANGER STATION, YELLOWSTONE NATIONAL PARK--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1923 - 1997*	
ANNUAL TOTAL	506705		558785		--	
ANNUAL MEAN	1384		1531		863	
HIGHEST ANNUAL MEAN	--		--		1531	1997
LOWEST ANNUAL MEAN	--		--		525	1934
HIGHEST DAILY MEAN	15600	Jun 10	15000	Jun 5	15600	Jun 10 1996
LOWEST DAILY MEAN	100	Feb 2	110	Feb 6	45	Mar 23 1964
ANNUAL SEVEN-DAY MINIMUM	109	Feb 23	119	Feb 4	57	Mar 5 1964
INSTANTANEOUS PEAK FLOW	--		17500	Jun 5	19500	Jun 10 1996
INSTANTANEOUS PEAK STAGE	--		11.46	Jun 5	12 ^a	Jun 10 1996
INSTANTANEOUS LOW FLOW	--		00		40 ^a	Mar 16 1945
ANNUAL RUNOFF (AC-FT)	1005000		1108000		625300	
10 PERCENT EXCEEDS	5100		5740		2960	
50 PERCENT EXCEEDS	197		260		189	
90 PERCENT EXCEEDS	130		140		90	

* During periods of operation [September 1922, April 1923 to September 1969, May 1985 to September 1986, (seasonal records only), October 1988 to current year].

a Observed, but may have been lower during periods of no gage-height record in winter.

e Estimated.



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

YELLOWSTONE RIVER BASIN

41

06191000 GARDNER RIVER NEAR MAMMOTH, YELLOWSTONE NATIONAL PARK

LOCATION.--Lat 44°59'33", long 110°41'26", Yellowstone National Park, Hydrologic Unit 10070001, on left bank at Wyoming-Montana State line, 400 ft upstream from highway bridge, 0.5 mi downstream from Hot River (formerly Boiling 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. Datum of gage is 5,623.97 ft above sea level (levels by National Park Service).

REMARKS.--Records good. No regulation or diversion upstream of station. Station operated and record provided by Montana District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	136	123	169	118	105	122	319	1720	526	279	188
2	148	139	125	192	120	109	118	283	1760	503	273	196
3	150	137	123	178	118	109	118	272	1530	493	268	197
4	150	140	111	162	105	108	120	309	1480	450	272	194
5	150	136	125	138	102	102	113	375	1650	446	321	183
6	150	124	127	126	106	107	114	482	1600	442	297	185
7	150	134	127	141	109	107	114	586	1550	449	273	189
8	150	135	129	141	110	106	112	598	1500	432	262	177
9	150	133	133	141	113	105	112	669	1630	423	252	172
10	150	135	136	138	123	109	110	806	1600	420	250	174
11	147	133	130	126	123	110	109	957	1510	411	266	206
12	147	133	129	100	119	109	109	1040	1310	388	252	237
13	147	133	127	106	115	104	109	1150	1210	372	246	183
14	147	136	126	124	112	104	110	1300	1060	354	240	167
15	148	129	112	124	114	101	113	1390	976	348	231	161
16	153	124	107	121	116	114	119	1430	1030	345	247	156
17	146	131	109	118	117	121	136	1520	939	342	217	155
18	148	131	110	117	114	113	155	1600	999	340	208	163
19	156	215	125	117	109	116	186	1480	941	340	204	179
20	148	222	127	113	111	125	224	1530	785	335	193	168
21	143	172	129	121	111	130	240	1570	684	329	192	169
22	143	162	121	126	110	128	218	1470	650	314	185	192
23	145	153	122	122	108	130	216	1590	635	317	179	171
24	146	139	128	117	109	126	217	1620	609	309	192	162
25	150	142	109	121	110	121	232	1430	569	312	184	159
26	133	128	116	126	111	122	244	1200	548	337	180	159
27	134	125	125	119	111	130	298	1100	562	305	179	189
28	145	126	114	116	110	128	348	1080	560	307	176	173
29	146	131	114	117	---	123	326	1190	537	349	176	164
30	145	117	113	117	---	122	311	1260	526	311	178	159
31	136	---	126	116	---	124	---	1470	---	288	181	---
TOTAL	4548	4231	3778	4010	3154	3568	5173	33076	32660	11637	7053	5327
MEAN	147	141	122	129	113	115	172	1067	1089	375	228	178
MAX	156	222	136	192	123	130	348	1620	1760	526	321	237
MIN	133	117	107	100	102	101	109	272	526	288	176	155
AC-FT	9020	8390	7490	7950	6260	7080	10260	65610	64780	23080	13990	10570

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1997, BY WATER YEAR (WY)*

	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
MEAN	126	111	101	96.0	91.8	92.2	140	509	728	307	163	137
MAX	175	141	126	129	116	116	304	1067	1354	662	236	190
(WY)	1969	1997	1996	1997	1969	1986	1990	1997	1971	1943	1943	1968
MIN	95.9	85.5	79.3	77.6	75.0	75.4	84.1	283	212	133	103	93.4
(WY)	1961	1940	1941	1941	1940	1942	1945	1960	1987	1988	1988	1988

YELLOWSTONE RIVER BASIN

06191000 GARDNER RIVER NEAR MAMMOTH, YELLOWSTONE NATIONAL PARK--Continued

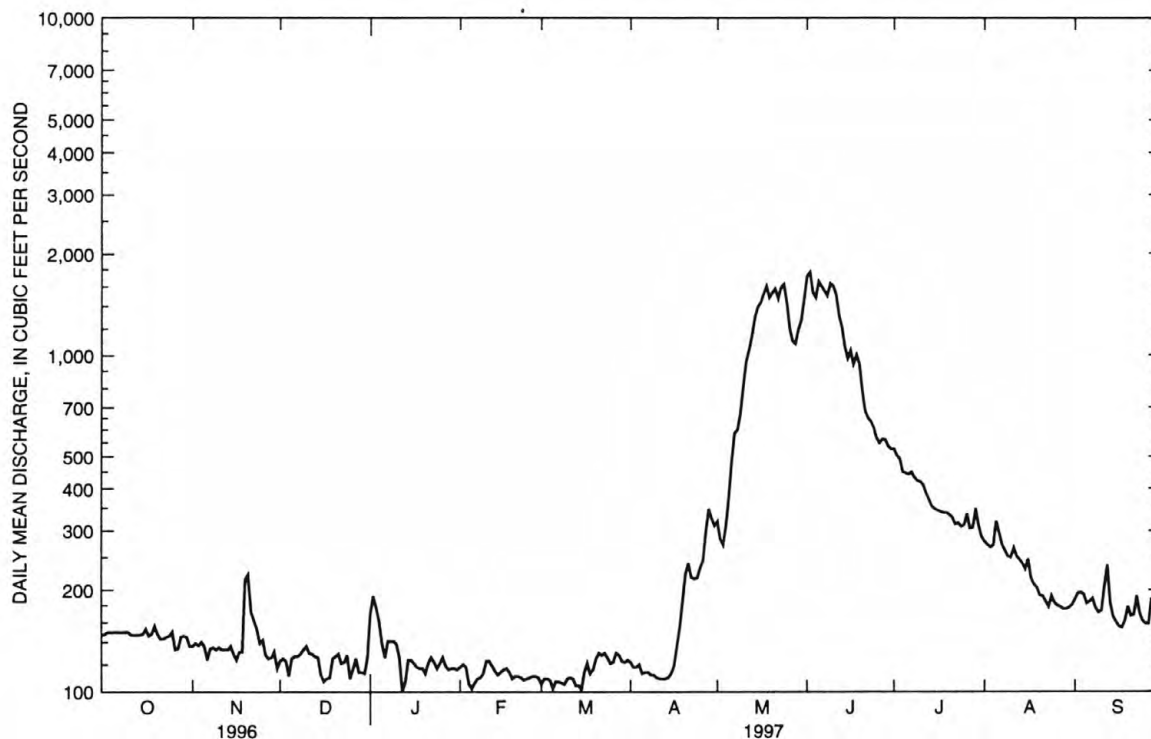
SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1939 - 1997*	
ANNUAL TOTAL	105038		118215		--	
ANNUAL MEAN	287		324		217	
HIGHEST ANNUAL MEAN	--		--		324	1997
LOWEST ANNUAL MEAN	--		--		138	1988
HIGHEST DAILY MEAN	1740	May 18	1760	Jun 2	1830	May 29 1956
LOWEST DAILY MEAN	80	Feb 1	100	Jan 12	53	Dec 15 1988
ANNUAL SEVEN-DAY MINIMUM	89	Jan 31	106	Mar 9	61	Feb 1 1989
INSTANTANEOUS PEAK FLOW	--		2050	Jun 2	2080 ^b	Jun 4 1956
INSTANTANEOUS PEAK STAGE	--		5 ^a ₀₃	Jun 2	5 ^c ₀₃	Jun 2 1997
INSTANTANEOUS LOW FLOW	--		80	Mar 1	35 ^c	Mar 28 1942
ANNUAL RUNOFF (AC-FT)	208300		234500		157400	
10 PERCENT EXCEEDS	796		985		525	
50 PERCENT EXCEEDS	150		150		120	
90 PERCENT EXCEEDS	107		110		87	

* During periods of operation (October 1938 to September 1972, April 1984 to current year).

a Gage height, 1.97 ft.

b Gage height, 4.46 ft.

c Gage height, 1.08 ft.



06191000 GARDNER RIVER NEAR MAMMOTH, YELLOWSTONE NATIONAL PARK

YELLOWSTONE RIVER BASIN

43

06191500 YELLOWSTONE RIVER AT CORWIN SPRINGS, MT

LOCATION.--Lat 45°06'43", long 110°47'37", in NW¹/₄ SE¹/₄ NW¹/₄ 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.--2,623 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.

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

REMARKS.--Records good except those for estimated daily discharges, which are fair. Natural storage in Yellowstone Lake. Diversions for irrigation of about 960 acres of which 40 acres lies downstream from station. U.S. Geological Survey satellite telemeter at station. Station operated and record provided by Montana District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1810	1310	1300	1320	1430	1190	1510	3140	24900	14700	6370	3390
2	1760	1340	1270	1650	1440	1260	1400	2820	24800	14000	6200	3320
3	1730	1340	1280	1660	1440	1270	1420	2640	23200	14200	6040	3300
4	1710	1370	1170	1530	1380	1240	1460	2870	25100	13100	5810	3260
5	1690	1360	1200	1380	1310	1250	1340	3390	28600	12600	5880	3160
6	1680	1240	1180	e1300	1320	1230	1160	4370	29900	12400	5890	3150
7	1650	1310	1230	e1300	1350	1300	1460	5630	29000	12100	5580	3220
8	1630	1290	1290	1440	1360	1320	1380	5530	27900	11800	5470	3100
9	1600	1280	1320	1450	1340	1260	1370	6080	28800	11500	5330	2960
10	1590	1270	1400	1470	1360	1300	1320	7560	26200	11300	5150	2900
11	1570	1250	1360	1460	1340	1360	1250	8970	28800	11200	5110	3180
12	1560	1250	1310	e1100	1360	1350	1270	9840	25200	10600	5000	3530
13	1540	1240	1270	e900	1350	1320	1320	11300	24800	10500	5010	3310
14	1540	1290	1200	e1000	1370	1220	1350	11400	23200	9940	5130	3020
15	1540	1270	1150	e1200	1380	1160	1370	13600	22700	9600	5000	2880
16	1580	1220	1080	e1100	1390	1240	1380	15700	23100	9350	5120	2900
17	1520	1220	e950	e1300	1400	1410	1520	16800	22300	9110	4880	2810
18	1500	1270	e800	1440	1390	1360	1670	17600	23400	8830	4660	2750
19	1550	1660	e850	1450	1360	1400	1940	15700	23300	8610	4600	2840
20	1530	2150	e900	1460	1320	1480	2350	16100	21100	8370	4420	2720
21	1440	1790	e950	1470	1300	1580	2780	16800	19500	8100	4320	2640
22	1450	1610	e850	1460	1290	1570	2540	17100	19100	7830	4190	2820
23	1440	1570	e700	1420	1250	1590	2410	18400	19000	7700	4090	2690
24	1450	1440	e750	1390	1190	1560	2380	18700	17600	7520	4070	2560
25	1490	1480	e800	e1300	1210	1440	2500	18500	16300	7380	4110	2490
26	1430	1340	e750	e1350	1280	1480	2490	14800	16000	7520	3910	2450
27	1300	1330	895	1370	1310	1580	2900	13100	16100	7080	3840	2600
28	1370	1390	988	1350	1290	1520	3790	12800	16000	6960	3740	2560
29	1440	1390	1050	1360	---	1440	3660	14800	15400	7050	3640	2430
30	1430	1200	1140	1390	---	1470	3260	16600	14900	7000	3530	2350
31	1340	---	1190	1420	---	1510	---	19100	---	6590	3450	---
TOTAL	47860	41470	33573	42190	37510	42660	57950	361740	676200	304540	149540	87290
MEAN	1544	1382	1083	1361	1340	1376	1932	11670	22540	9824	4824	2910
MAX	1810	2150	1400	1660	1440	1590	3790	19100	29900	14700	6370	3530
MIN	1300	1200	700	900	1190	1160	1160	2640	14900	6590	3450	2350
AC-FT	94930	82260	66590	83680	74400	84620	114900	717500	1341000	604100	296600	173100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1889 - 1997, BY WATER YEAR (WY)*

	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900
MEAN	1525	1190	964	847	834	916	1538	6020	11530	6865	3214	1966
MAX	2429	2058	1424	1361	1340	1376	3542	13590	22540	13260	5688	3207
(WY)	1973	1928	1984	1997	1997	1997	1990	1928	1997	1982	1982	1968
MIN	781	702	551	448	411	412	576	2575	4245	2025	1319	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

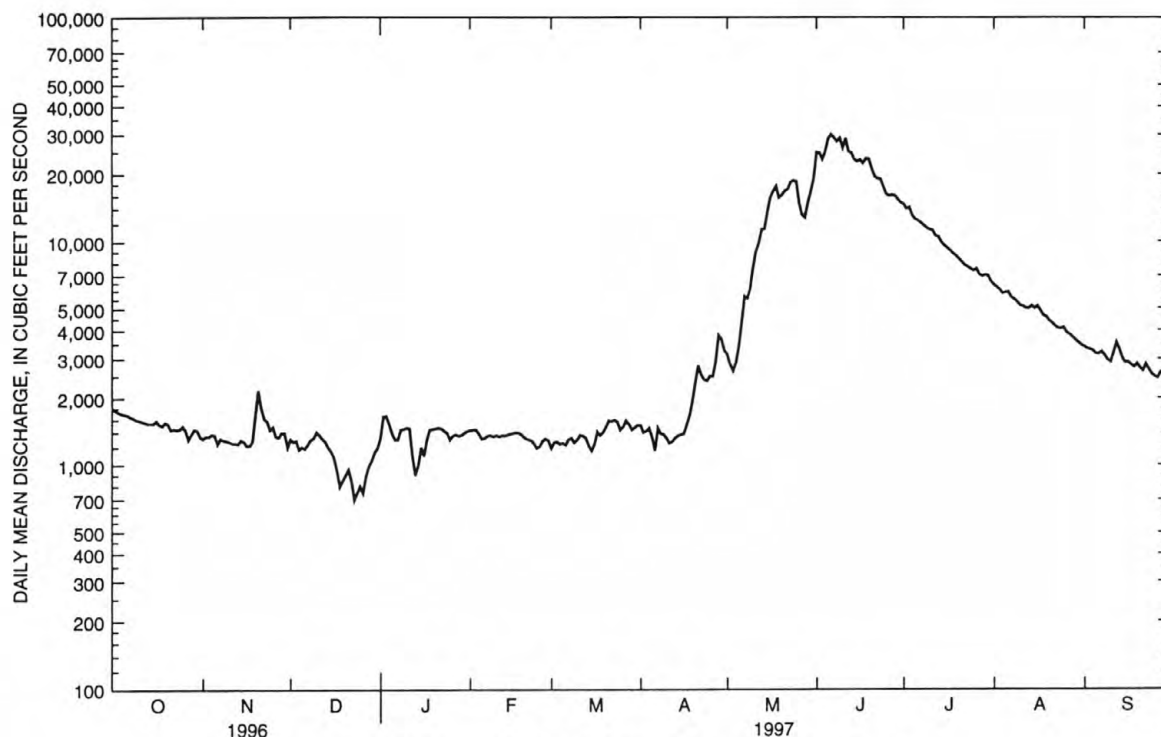
SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1889 - 1997*	
ANNUAL TOTAL	1647308		1882523		--	
ANNUAL MEAN	4501		5158		3126	
HIGHEST ANNUAL MEAN	--		--		5158	1997
LOWEST ANNUAL MEAN	--		--		1903	1934
HIGHEST DAILY MEAN	29300	Jun 10	29900	Jun 6	32000	Jun 14 1918
LOWEST DAILY MEAN	700	Dec 23	700	Dec 23	380	Feb 5 1989
ANNUAL SEVEN-DAY MINIMUM	814	Dec 21	814	Dec 21	393	Feb 4 1937
INSTANTANEOUS PEAK FLOW	--		32200	Jun 6	32200 ^a	Jun 10 1996
INSTANTANEOUS PEAK STAGE	--		10.91	Jun 6	11.50 ^b	Jun 14 1918
INSTANTANEOUS LOW FLOW	--		--		343 ^c	Feb 2 1989
ANNUAL RUNOFF (AC-FT)	3267000		3734000		2265000	
10 PERCENT EXCEEDS	14000		16000		8490	
50 PERCENT EXCEEDS	1670		1590		1400	
90 PERCENT EXCEEDS	1080		1230		760	

* During periods of operation (August 1889 to November 1893, September 1910 to current year).

a Gage height, 10.92 ft.

b Gage height, 0.12 ft, result of freezeup.

c Estimated.



06191500 YELLOWSTONE RIVER AT CORWIN SPRINGS, MT

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

LOCATION.--Lat 44°57'28", long 109°48'21", Park County, WY, Hydrologic Unit 10070006, Shoshone National Forest, at bridge on U.S. Highway 12, 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 1996 TO SEPTEMBER 1997

		DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT 29...	1110	28	102	8.4	2.5	4.0	588	10.2	97	47	15
MAR 26...	1105	28	103	--	1.5	14.0	593	10.8	99	--	--
APR 15...	1045	24	108	7.2	1.0	2.0	595	10.8	97	55	17
JUN 25...	1330	625	52	7.7	8.0	16.0	595	9.1	99	23	7.1
AUG 21...	1240	165	51	7.3	14.0	24.0	600	8.0	99	24	7.3
DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)
OCT 29...	2.3	1.4	0.1	0.4	49	5.0	0.2	<0.1	4.9	59	0.08
MAR 26...	--	--	--	--	--	--	--	--	--	--	--
APR 15...	2.8	1.7	0.1	0.6	53	4.6	0.3	0.1	6.3	66	0.09
JUN 25...	1.4	0.9	0.1	0.3	24	3.1	0.1	<0.1	3.8	31	0.04
AUG 21...	1.3	0.8	0.1	0.3	24	3.3	0.2	<0.1	3.0	31	0.04
DATE	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
OCT 29...	4.43	5.1	<1	16	2	10	<1	<1	<3	<1	<3
MAR 26...	--	--	--	--	--	--	--	--	--	--	--
APR 15...	4.28	8.2	<1	18	<0.5	9.6	<1	<1	<3	1	85
JUN 25...	52.8	28	<1	11	<0.5	6.2	<1	<1	<3	3	12
AUG 21...	13.6	13	<1	11	<0.5	9.9	<1	<1	4	1	3
DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
OCT 29...	<1	<4	<1	<0.1	<10	<10	<1	<1	44	<6	<3
MAR 26...	--	--	--	--	--	--	--	--	--	--	--
APR 15...	<1	<4	10	<0.1	<10	<10	<1	<1	52	<6	<3
JUN 25...	<1	<4	2	<0.1	<10	<10	<1	<1	27	<6	<3
AUG 21...	<1	<4	2	<0.1	<10	<10	<1	<1	27	<6	<3

YELLOWSTONE RIVER BASIN

06207500 CLARKS FORK YELLOWSTONE RIVER NEAR BELFRY, MT

LOCATION.--Lat 45°00'37", long 109°03'53", in NW¹/₄ SW¹/₄ NW¹/₄ 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. Datum of gage is 3,986.24 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Nov. 15, 1934, nonrecording gage, and Nov. 15, 1934, to July 26, 1951, water-stage recorder at bridge 0.4 mi downstream of different datum. July 27, 1951 to Sept. 30, 1953, water-stage recorder at present site at datum 0.98 ft higher.

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 Montana District. U.S. Geological Survey data collection platform at station. Station operated and record provided by Montana District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	299	e300	e270	754	e350	202	417	824	7810	4370	2090	675
2	319	e350	e300	846	e320	223	398	753	8290	3900	1910	651
3	325	422	e280	830	e300	231	372	619	7390	3730	1800	629
4	334	415	e260	746	e250	215	375	651	7990	3360	1640	614
5	328	420	e300	589	e200	206	e300	794	9600	3260	1590	595
6	324	410	e350	481	e190	218	e250	1040	9940	3310	1610	592
7	321	364	e400	460	e190	227	e270	1540	9480	3460	1530	647
8	316	385	450	495	e200	226	e270	1500	9160	3650	1470	635
9	321	393	533	e450	e210	217	e260	1540	9980	3760	1450	559
10	314	397	507	e300	e210	220	e250	1900	10100	3810	1380	530
11	308	390	489	e200	e230	268	e240	2340	10500	3870	1290	594
12	299	390	467	e100	e240	243	e220	2480	8760	3640	1240	707
13	278	391	454	e150	247	246	e240	2810	7850	3220	1150	804
14	270	391	447	e200	253	184	e260	2920	6950	2660	1170	790
15	259	e350	412	e250	261	208	e280	3540	6720	2550	1170	704
16	271	e300	e340	e300	281	243	310	4430	7060	2730	1400	673
17	300	e250	e300	e250	305	364	367	5050	7220	2910	1510	614
18	296	e270	e250	e300	277	302	495	5470	8160	2910	1480	550
19	286	e300	e270	e400	253	318	666	4820	9070	2930	1330	541
20	306	e250	e300	342	250	371	902	4600	7280	2730	1200	544
21	290	e220	e270	321	232	469	1130	4780	5660	2480	1110	520
22	263	e220	e220	303	227	485	915	5080	5150	2410	1060	541
23	277	e210	e190	e300	233	474	809	5330	5880	2380	1030	649
24	279	e200	e190	e250	197	475	775	5270	5090	2350	1030	557
25	276	e230	e180	e200	228	395	748	6120	4190	2350	1030	531
26	309	e220	e150	e170	248	367	731	4690	3930	2360	990	504
27	309	e250	e200	e130	237	443	809	3810	4270	2240	1010	493
28	275	e280	e300	e150	229	464	1180	3400	4490	2180	935	558
29	309	e310	e400	e200	---	382	1110	3670	4430	2360	859	509
30	427	e250	e500	e300	---	348	914	4290	4360	2440	783	497
31	e250	---	692	e350	---	373	---	5200	---	2340	729	---
TOTAL	9338	9528	10671	11117	6848	9607	16263	101261	216760	92650	39976	18007
MEAN	301	318	344	359	245	310	542	3266	7225	2989	1290	600
MAX	427	422	692	846	350	485	1180	6120	10500	4370	2090	804
MIN	250	200	150	100	190	184	220	619	3930	2180	729	493
AC-FT	18520	18900	21170	22050	13580	19060	32260	200900	429900	183800	79290	35720

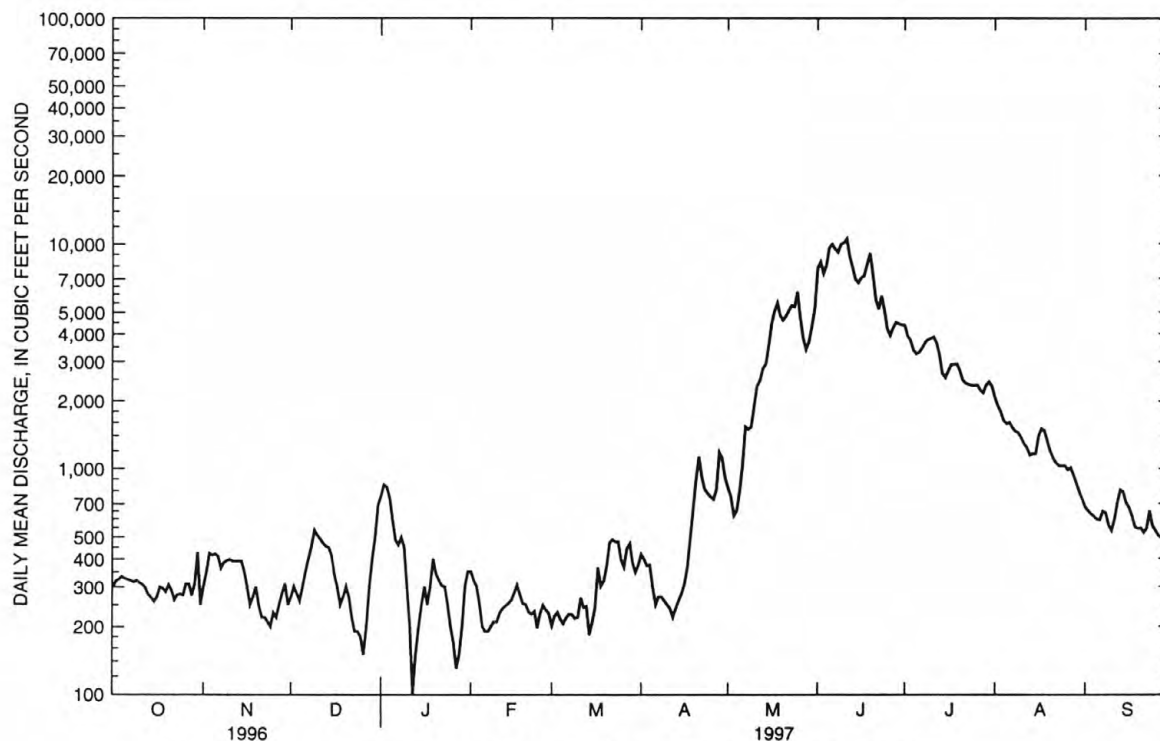
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1997, BY WATER YEAR (WY)

MEAN	283	296	262	230	222	221	432	2036	4134	2218	627	324
MAX	725	648	379	359	329	364	1167	5704	7225	5744	1453	834
(WY)	1931	1928	1951	1997	1963	1972	1943	1928	1997	1975	1951	1941
MIN	45.5	115	110	110	100	96.3	111	839	1607	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 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1921 - 1997	
ANNUAL TOTAL	490750		542026		--	
ANNUAL MEAN	1341		1485		942	
HIGHEST ANNUAL MEAN	--		--		1509	1997
LOWEST ANNUAL MEAN	--		--		547	1977
HIGHEST DAILY MEAN	10400	Jun 10	10500	Jun 11	12300	Jun 9 1981
LOWEST DAILY MEAN	130	Feb 1	100	Jan 12	33	Apr 26 1961
ANNUAL SEVEN-DAY MINIMUM	169	Jan 28	200	Dec 21	37	Oct 8 1988
INSTANTANEOUS PEAK FLOW	--		10900	Jun 11	14800	Jun 9 1981
INSTANTANEOUS PEAK STAGE	--		8.68	Jun 11	9 ^a	Jun 9 1981
INSTANTANEOUS LOW FLOW	--		--		32 ^a	Apr 26 1961
ANNUAL RUNOFF (AC-FT)	973400		1075000		682500	
10 PERCENT EXCEEDS	4600		4450		2890	
50 PERCENT EXCEEDS	350		467		301	
90 PERCENT EXCEEDS	204		222		170	

a Result of discharge measurement.
e Estimated.



06207500 CLARKS FORK YELLOWSTONE RIVER NEAR BELFRY, MT

LOCATION.--Lat 43°27'16", long 109°27'57", in SE¹/₄ SW¹/₄ NW¹/₄ sec.34, T.6 N., R.6 W., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, on left bank 1.0 mi upstream from mouth and 9.9 mi southeast of Dubois.

PERIOD OF RECORD.--April 1950 to September 1957, October 1975 to September 1997 (discontinued). Prior to October 1953, published as North Fork Wind River near Dubois.

REMARKS.--Estimated daily discharges: Nov. 18-20 and Dec. 5 to Feb. 17. Records fair except those for estimated daily discharges, which are poor. Diversions for irrigation of about 2,000 acres upstream from station.

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 1	0430	2,770	6.44
June 9	0300	*5,340	*7.42
June 18	1100	3,140	6.29

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	143	94	84	72	54	61	111	174	2170	1220	395	206
2	143	99	91	76	52	73	82	162	1770	878	364	209
3	137	98	71	80	51	70	81	144	1560	881	366	202
4	137	105	55	72	52	63	115	187	1980	827	341	197
5	137	111	56	70	54	68	84	212	2360	936	471	186
6	133	78	54	66	50	68	80	354	2550	1010	431	172
7	130	108	54	62	49	68	85	358	2070	982	379	164
8	125	112	58	58	47	67	84	383	2100	799	332	161
9	124	115	62	62	45	67	78	428	3320	804	329	156
10	121	105	66	64	44	75	67	574	3620	777	345	154
11	123	101	64	60	45	70	64	632	2630	757	414	248
12	122	102	60	54	47	84	64	513	2100	667	576	307
13	120	102	58	50	50	74	59	612	2190	585	522	193
14	113	106	54	44	52	52	74	723	2040	537	393	186
15	110	86	51	42	54	51	69	850	2270	594	339	177
16	110	95	48	44	58	66	75	1050	2390	604	318	185
17	107	73	47	47	66	80	129	1020	2430	648	293	174
18	88	80	47	52	80	92	163	999	2800	626	282	170
19	120	90	50	56	61	122	202	818	2420	671	265	180
20	100	110	52	58	68	153	211	810	1880	558	238	187
21	84	125	54	60	65	155	211	855	1790	554	219	185
22	100	113	56	58	61	127	168	914	1860	525	230	233
23	118	106	60	57	66	133	160	989	1920	488	247	267
24	111	73	62	56	67	130	147	941	1510	580	240	209
25	108	101	66	54	70	92	130	895	1240	653	241	189
26	106	73	68	56	69	117	146	800	1280	522	238	180
27	95	73	68	54	70	159	198	742	1380	466	343	180
28	101	104	65	52	67	125	297	744	1370	478	250	176
29	118	118	65	52	---	101	237	894	1170	629	230	168
30	112	96	66	50	---	90	184	996	1280	495	221	165
31	108	---	70	53	---	114	---	1530	---	397	212	---
TOTAL	3604	2952	1882	1791	1614	2867	3855	21303	61450	21148	10064	5766
MEAN	116	98.4	60.7	57.8	57.6	92.5	129	687	2048	682	325	192
MAX	143	125	91	80	80	159	297	1530	3620	1220	576	307
MIN	84	73	47	42	44	51	59	144	1170	397	212	154
AC-FT	7150	5860	3730	3550	3200	5690	7650	42250	121900	41950	19960	11440

MEAN	96.4	61.9	49.5	47.0	48.0	59.7	154	538	1084	558	193	119
MAX	200	112	87.8	68.8	66.8	92.5	353	1161	2048	1281	461	224
(WY)	1951	1951	1951	1953	1951	1997	1952	1956	1997	1951	1951	1950
MIN	51.7	35.7	28.5	27.4	26.7	39.6	64.4	215	339	106	51.2	34.0
(WY)	1989	1989	1989	1977	1985	1978	1984	1977	1994	1994	1988	1988

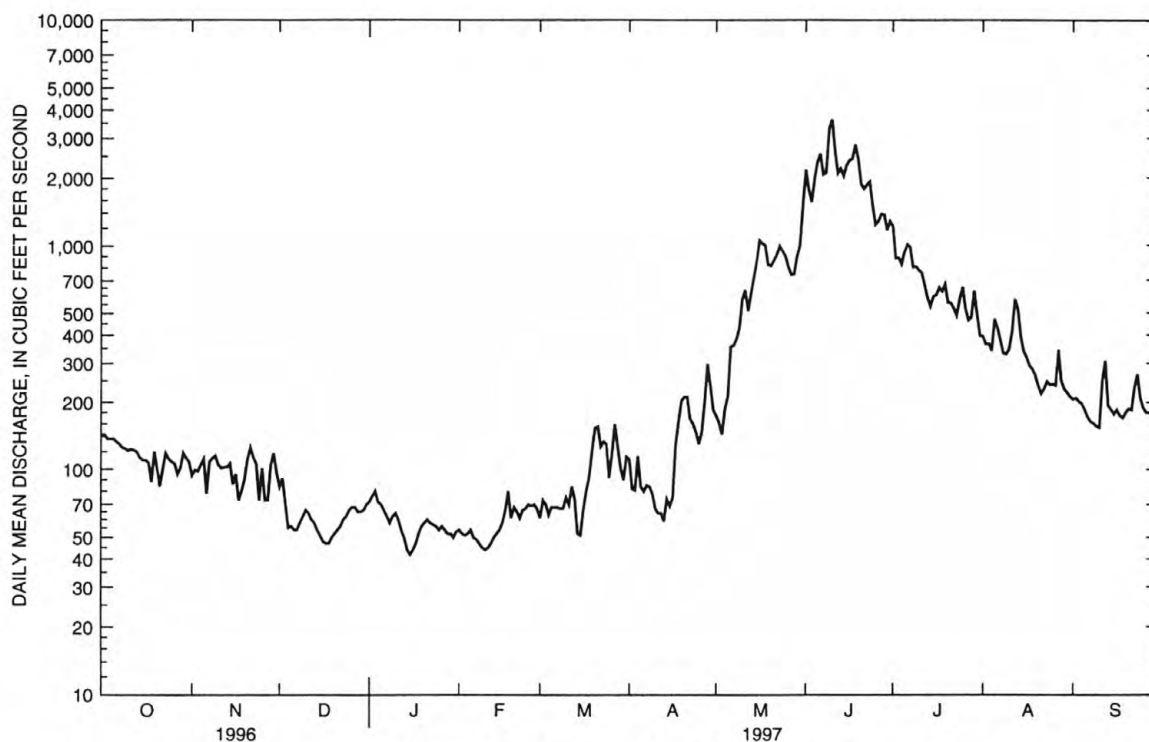
YELLOWSTONE RIVER BASIN

49

06220500 EAST FORK WIND RIVER NEAR DUBOIS, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1950 - 1997	
ANNUAL TOTAL	117876		138296		--	
ANNUAL MEAN	322		379		250	
HIGHEST ANNUAL MEAN	--		--		414	1951
LOWEST ANNUAL MEAN	--		--		126	1977
HIGHEST DAILY MEAN	2860	Jun 9	3620	Jun 10	3740	Jun 1 1956
LOWEST DAILY MEAN	45	Jan 18	42	Jan 15	18	Jan 9 1977
ANNUAL SEVEN-DAY MINIMUM	50	Dec 14	47	Feb 6	21	Feb 1 1985
INSTANTANEOUS PEAK FLOW	--		5340	Jun 9	5980 ^b	Jun 9 1981
INSTANTANEOUS PEAK STAGE	--		7.42 ^a	Jun 9	9.27	Jun 30 1957
ANNUAL RUNOFF (AC-FT)	233800		274300		180800	
10 PERCENT EXCEEDS	1090		997		706	
50 PERCENT EXCEEDS	110		125		84	
90 PERCENT EXCEEDS	58		54		40	

a From Floodmarks.

b Gage height, 7.69 ft, from rating curve extended above 2,600 ft³/s.

06220500 EAST FORK WIND RIVER NEAR DUBOIS, WY

YELLOWSTONE RIVER BASIN

06220800 WIND RIVER ABOVE RED CREEK, NEAR DUBOIS, WY

LOCATION.--Lat 43°26'30", long 109°27'29", in NW¹/₄ SW¹/₄ NW¹/₄ 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 sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 19, 20, Dec. 19-22, Jan. 12-18, and Feb. 6-14. Records good except those for estimated daily discharges, which are poor. Diversions for irrigation of about 1,800 acres upstream from station. Wind River Indian Reservation data collection platform with satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

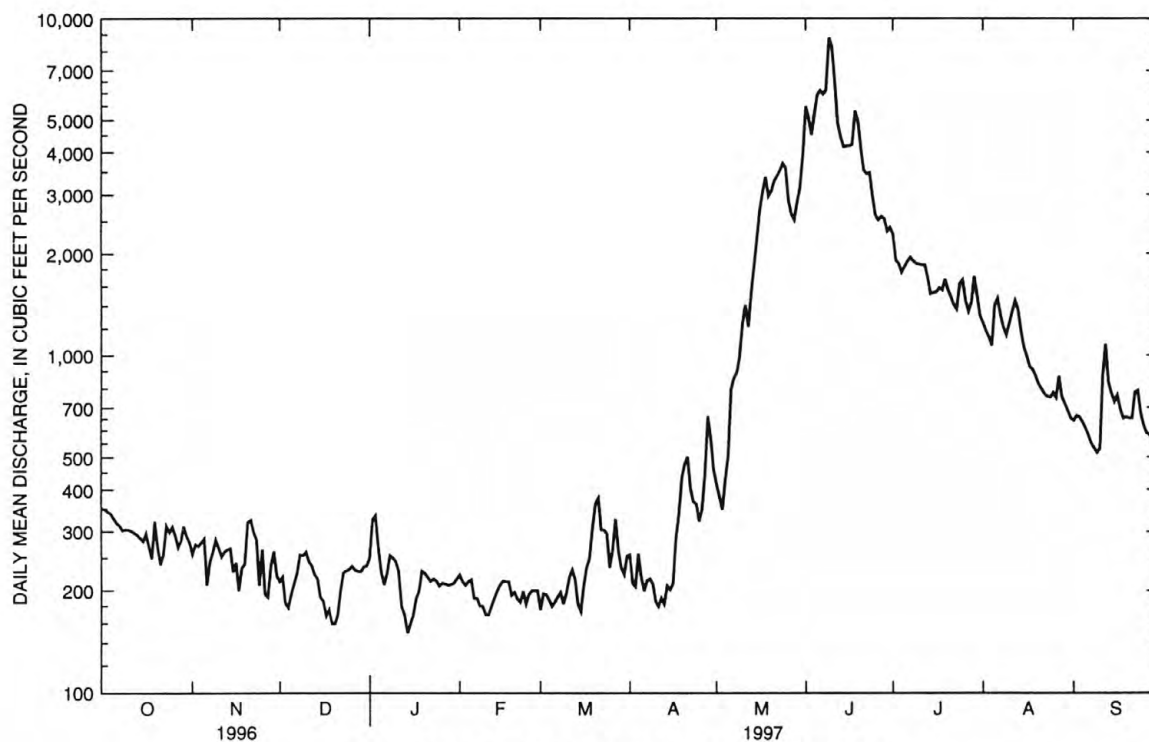
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	351	257	214	250	223	176	256	416	5480	2290	1250	642
2	349	274	220	326	213	196	211	382	5060	1910	1180	662
3	343	271	184	335	208	195	206	349	4520	1870	1130	657
4	339	278	179	271	213	188	258	430	5220	1760	1070	638
5	328	285	196	227	216	180	220	505	5950	1830	1410	611
6	318	208	211	209	190	185	200	792	6110	1900	1470	584
7	312	243	226	226	190	192	215	858	5970	1950	1320	552
8	302	260	256	255	180	198	217	890	6120	1900	1210	532
9	304	283	255	251	180	183	210	992	8770	1870	1150	515
10	303	268	261	245	170	198	186	1240	8260	1860	1240	530
11	301	253	245	229	170	220	180	1410	6470	1850	1350	869
12	297	261	238	180	180	231	190	1220	4890	1850	1450	1080
13	293	265	224	170	190	216	183	1530	4460	1700	1370	830
14	287	267	218	150	200	182	207	1840	4160	1520	1180	772
15	280	228	192	160	208	174	202	2220	4180	1530	1060	728
16	295	242	187	170	214	207	211	2700	4180	1540	994	761
17	270	200	169	190	213	235	287	3050	4230	1580	924	691
18	249	234	176	200	213	249	338	3380	5320	1560	909	650
19	321	240	160	229	194	309	433	2970	4950	1680	871	657
20	269	320	160	226	198	363	478	3070	4090	1560	823	650
21	239	324	170	220	189	377	501	3290	3530	1490	794	651
22	257	298	200	214	185	304	404	3410	3460	1410	770	776
23	311	284	227	217	199	303	369	3530	3480	1370	754	786
24	298	208	230	214	183	296	362	3710	2960	1630	751	675
25	309	265	232	207	195	235	322	3600	2600	1670	774	620
26	291	196	237	211	200	263	350	2870	2520	1450	749	588
27	269	192	231	210	200	327	448	2620	2580	1350	866	583
28	280	237	229	208	200	262	660	2520	2540	1430	754	553
29	310	262	229	209	---	234	570	2840	2330	1710	719	525
30	290	222	236	211	---	224	458	3140	2390	1500	685	509
31	278	---	238	217	---	254	---	3970	---	1310	651	---
TOTAL	9243	7625	6630	6837	5514	7356	9332	65744	136780	51830	31628	19877
MEAN	298	254	214	221	197	237	311	2121	4559	1672	1020	663
MAX	351	324	261	335	223	377	660	3970	8770	2290	1470	1080
MIN	239	192	160	150	170	174	180	349	2330	1310	651	509
AC-FT	18330	15120	13150	13560	10940	14590	18510	130400	271300	102800	62730	39430

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1997, BY WATER YEAR (WY)

MEAN	298	234	190	176	173	197	308	1376	2845	1421	634	406
MAX	353	295	225	221	197	237	429	2121	4559	2473	1020	663
(WY)	1991	1991	1992	1997	1997	1997	1994	1997	1997	1995	1997	1997
MIN	244	171	146	122	144	178	213	621	892	386	349	246
(WY)	1993	1993	1993	1993	1993	1995	1995	1995	1994	1994	1994	1994

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

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1991 - 1997	
ANNUAL TOTAL	310710		358396		--	
ANNUAL MEAN	849		982		689	
HIGHEST ANNUAL MEAN	--		--		982	1997
LOWEST ANNUAL MEAN	--		--		410	1994
HIGHEST DAILY MEAN	6700	Jun 10	8770	Jun 9	8770	Jun 9 1997
LOWEST DAILY MEAN	150	Feb 3	150	Jan 14	90	Jan 13 1993
ANNUAL SEVEN-DAY MINIMUM	167	Feb 26	173	Dec 15	96	Jan 9 1993
INSTANTANEOUS PEAK FLOW	--		11300	Jun 9	11300	Jun 9 1997
INSTANTANEOUS PEAK STAGE	--		9.97	Jun 9	9.97	Jun 9 1997
ANNUAL RUNOFF (AC-FT)	616300		710900		499300	
10 PERCENT EXCEEDS	2500		2850		1850	
50 PERCENT EXCEEDS	298		310		276	
90 PERCENT EXCEEDS	192		191		163	



06220800 WIND RIVER ABOVE RED CREEK, NEAR DUBOIS, WY

LOCATION.--Lat 43°20'44", long 109°24'34", in SE 1/4 SE 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.

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

REMARKS.--Estimated daily discharges: Nov. 17-19, 26-28, 30, Dec. 1-8, 15-22, Jan. 1-17, 24, 25, Feb. 5-11, 22, 24, and June 11-24. Records good except those for estimated daily discharges, which are poor. No diversion upstream from station. U.S. Geological Survey data collection platform with satellite telemetry at station.

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 9	0600	*1,490	*4.35
Aug. 6	1245	717	3.77

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	19	20	17	14	9.3	11	37	561	432	425	258
2	38	21	18	18	13	9.1	10	34	612	368	409	281
3	35	19	17	17	13	8.9	11	31	527	328	407	302
4	35	22	18	15	13	8.8	11	34	500	307	395	307
5	35	19	16	13	12	8.7	12	39	630	321	466	281
6	34	14	15	13	11	8.6	11	51	690	361	660	254
7	33	18	15	14	12	8.8	12	66	724	402	554	242
8	32	21	17	16	10	8.8	11	72	730	429	472	232
9	32	20	15	15	10	8.8	11	76	1210	444	463	221
10	33	19	15	13	10	9.2	10	92	1160	466	413	224
11	34	17	15	11	11	11	11	117	1100	477	417	342
12	34	17	14	10	12	11	11	126	900	433	368	484
13	34	19	16	9.6	12	9.7	10	141	750	378	351	348
14	32	20	16	13	11	11	9.9	179	700	311	320	317
15	27	13	15	17	11	9.4	9.9	215	670	301	289	317
16	29	14	15	16	11	10	9.9	256	670	350	310	328
17	22	14	16	15	12	11	12	313	700	402	291	250
18	22	14	16	15	12	11	17	366	750	425	274	201
19	33	16	17	15	11	13	23	298	700	432	282	184
20	19	18	16	14	11	14	25	258	660	428	286	166
21	20	17	17	14	12	14	24	258	620	425	282	166
22	25	17	18	14	11	13	23	282	580	418	310	180
23	27	17	16	14	10	14	21	287	540	399	332	192
24	23	17	15	14	10	13	21	308	520	425	349	165
25	23	19	15	15	10	13	23	307	491	438	398	147
26	22	20	15	13	9.8	14	31	263	452	443	398	133
27	20	19	16	13	9.4	15	37	240	454	426	373	147
28	24	18	16	13	9.4	13	53	224	451	413	358	122
29	27	18	16	14	---	12	50	227	438	519	329	114
30	23	19	15	13	---	12	42	256	443	585	292	104
31	20	---	17	14	---	12	---	304	---	460	266	---
TOTAL	888	535	498	437.6	313.6	345.1	573.7	5757	19933	12746	11539	7009
MEAN	28.6	17.8	16.1	14.1	11.2	11.1	19.1	186	664	411	372	234
MAX	41	22	20	18	14	15	53	366	1210	585	660	484
MIN	19	13	14	9.6	9.4	8.6	9.9	31	438	301	266	104
AC-FT	1760	1060	988	868	622	685	1140	11420	39540	25280	22890	13904

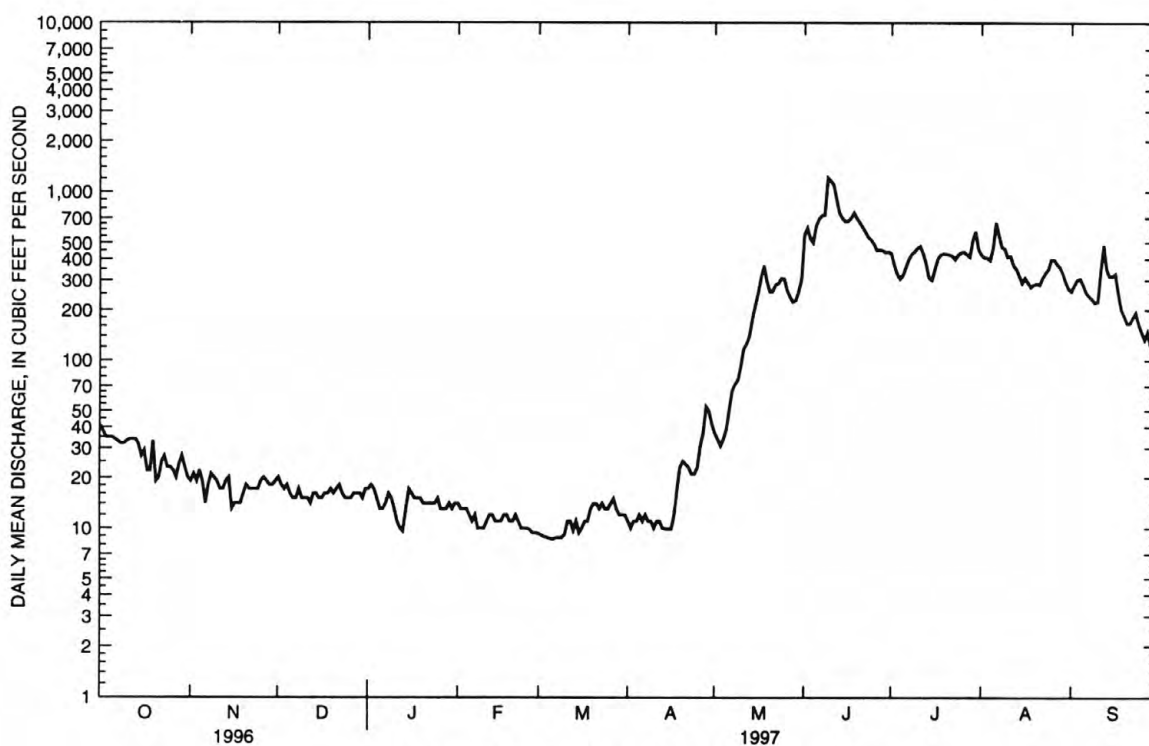
MEAN	41.7	20.1	12.4	8.53	7.47	8.38	19.1	159	462	475	318	136
MAX	72.5	40.6	22.8	19.2	12.5	13.6	60.3	299	739	794	406	250
(WY)	1968	1974	1974	1962	1962	1972	1962	1958	1971	1975	1971	1973
MIN	22.8	9.74	3.79	1.53	2.12	2.31	8.48	71.1	261	280	245	59.2
(WY)	1989	1977	1977	1977	1977	1977	1970	1959	1992	1992	1989	1964

YELLOWSTONE RIVER BASIN

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

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1958 - 1997	
ANNUAL TOTAL	53501.4		60575.0		--	
ANNUAL MEAN	146		166		140	
HIGHEST ANNUAL MEAN	--		--		179	1971
LOWEST ANNUAL MEAN	--		--		95.2	1992
HIGHEST DAILY MEAN	781	Jul 5	1210	Jun 9	1250	Jun 15 1995
LOWEST DAILY MEAN	7.0	Feb 4	8.6	Mar 6	1.0	Jan 9 1977
ANNUAL SEVEN-DAY MINIMUM	8.1	Jan 31	8.8	Mar 3	1.3	Jan 4 1977
INSTANTANEOUS PEAK FLOW	--		1490	Jun 9	1510	Jul 13 1995
INSTANTANEOUS PEAK STAGE	--		4.35	Jun 9	4.50	Jul 13 1995
ANNUAL RUNOFF (AC-FT)	106100		120200		101200	
10 PERCENT EXCEEDS	514		456		439	
50 PERCENT EXCEEDS	29		23		28	
90 PERCENT EXCEEDS	10		11		7.0	



06221400 DINWOODY CREEK ABOVE LAKES, NEAR BURRIS, WY

YELLOWSTONE RIVER BASIN

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

LOCATION.--Lat 43°24'59", long 109°19'40", in NE¹/₄ NW¹/₄ NW¹/₄ 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 to October 1997.

GAGE.--Water-stage recorder. Datum of gage is 6,150 ft above sea level, from topographic map. Miscellaneous measurements (July 1988 to September 1996) published at equivalent site previously identified as 432609109205001 at different datum.

REMARKS.--Estimated daily discharges: May 5-15, May 31 to June 2, and June 15-17. Records good except those for estimated daily discharges, which are poor. Flow completely regulated by headworks. U.S. Geological Survey data collection platform with satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	80	55	68	53
2	---	---	---	---	---	---	---	---	99	54	68	53
3	---	---	---	---	---	---	---	---	102	53	68	53
4	---	---	---	---	---	---	---	---	76	52	68	53
5	---	---	---	---	---	---	---	15	47	51	69	53
6	---	---	---	---	---	---	---	26	55	50	70	52
7	---	---	---	---	---	---	---	28	79	50	69	53
8	---	---	---	---	---	---	---	31	84	52	67	52
9	---	---	---	---	---	---	---	35	32	59	67	52
10	---	---	---	---	---	---	---	45	29	71	67	52
11	---	---	---	---	---	---	---	39	46	74	67	53
12	---	---	---	---	---	---	---	48	45	68	68	54
13	---	---	---	---	---	---	---	58	46	69	68	52
14	---	---	---	---	---	---	---	72	45	70	59	51
15	---	---	---	---	---	---	---	80	50	70	51	50
16	---	---	---	---	---	---	---	55	60	70	52	50
17	---	---	---	---	---	---	---	28	80	72	54	51
18	---	---	---	---	---	---	---	42	67	72	54	51
19	---	---	---	---	---	---	---	45	60	73	55	37
20	---	---	---	---	---	---	---	46	61	72	55	28
21	---	---	---	---	---	---	---	54	59	72	55	28
22	---	---	---	---	---	---	---	73	60	71	55	28
23	---	---	---	---	---	---	---	67	60	70	55	28
24	---	---	---	---	---	---	---	61	58	70	55	28
25	---	---	---	---	---	---	---	61	57	70	55	28
26	---	---	---	---	---	---	---	70	57	70	55	28
27	---	---	---	---	---	---	---	71	56	70	54	28
28	---	---	---	---	---	---	---	66	55	70	55	27
29	---	---	---	---	---	---	---	26	54	70	55	27
30	---	---	---	---	---	---	---	50	55	69	53	26
31	---	---	---	---	---	---	---	68	---	68	53	---
TOTAL	---	---	---	---	---	---	---	1360	1814	2027	1864	1279
MEAN	---	---	---	---	---	---	---	50.4	60.5	65.4	60.1	42.6
MAX	---	---	---	---	---	---	---	80	102	74	70	54
MIN	---	---	---	---	---	---	---	15	29	50	51	26
AC-FT	---	---	---	---	---	---	---	2700	3600	4020	3700	2540
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 1997, BY WATER YEAR (WY)												
MEAN	---	---	---	---	---	---	---	---	60.5	65.4	60.1	42.6
MAX	---	---	---	---	---	---	---	---	60.5	65.4	60.1	42.6
(WY)	---	---	---	---	---	---	---	---	1997	1997	1997	1997
MIN	---	---	---	---	---	---	---	---	60.5	65.4	60.1	42.6
(WY)	---	---	---	---	---	---	---	---	1997	1997	1997	1997

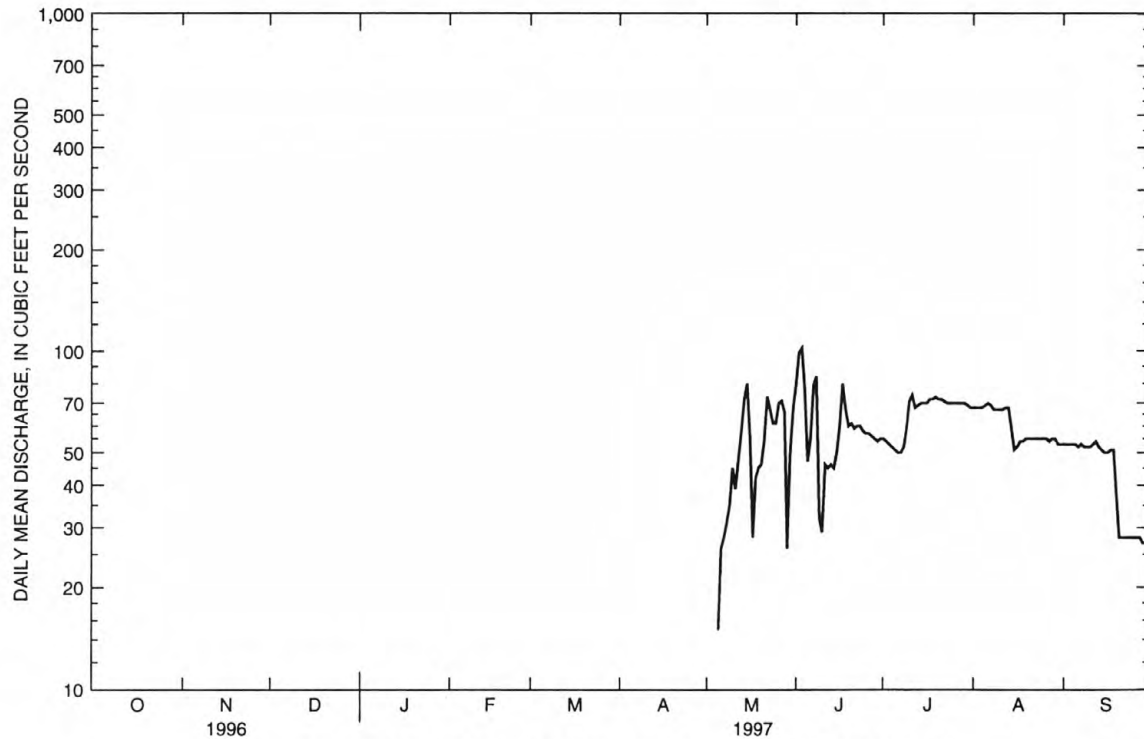
06222100 UPPER WIND RIVER A CANAL AT HEADWORKS, NEAR BURRIS, WY--Continued

SUMMARY STATISTICS

FOR 1997 WATER YEAR*

HIGHEST DAILY MEAN	102	Jun 3
LOWEST DAILY MEAN	15	May 5
ANNUAL SEVEN-DAY MINIMUM	27	Sep 24
10 PERCENT EXCEEDS	72	
50 PERCENT EXCEEDS	55	
90 PERCENT EXCEEDS	28	

* During period of operation.



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

LOCATION.--Lat 43°20'11", long 109°17'55", 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.

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.

REMARKS.--Estimated daily discharges: June 1-4, 9, 13-17. Records good except those for estimated daily discharges, which are poor. Adjudicated diversion upstream for irrigation of 267 acres. U.S. Geological Survey data collection platform with satellite telemetry at station. Results of discharge measurements, in cubic feet per second, made during the period when the station was not in operation, are given below:

Oct.	1	.	.	.	14.3
Mar.	19	.	.	.	3.47

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	3.4	18	250	101	89	57
2	---	---	---	---	---	---	3.4	16	220	92	84	64
3	---	---	---	---	---	---	3.2	14	190	83	78	66
4	---	---	---	---	---	---	3.7	15	200	78	75	62
5	---	---	---	---	---	---	3.6	21	217	78	92	57
6	---	---	---	---	---	---	3.6	30	218	81	150	52
7	---	---	---	---	---	---	3.7	40	230	83	130	48
8	---	---	---	---	---	---	3.7	37	235	86	112	47
9	---	---	---	---	---	---	3.6	41	717	86	99	43
10	---	---	---	---	---	---	3.5	52	508	89	94	41
11	---	---	---	---	---	---	3.6	64	369	93	104	47
12	---	---	---	---	---	---	4.0	66	256	88	98	72
13	---	---	---	---	---	---	3.5	81	200	83	92	69
14	---	---	---	---	---	---	3.6	101	185	73	84	70
15	---	---	---	---	---	---	3.5	134	195	67	77	76
16	---	---	---	---	---	---	3.6	182	210	65	71	91
17	---	---	---	---	---	---	3.8	255	180	68	68	83
18	---	---	---	---	---	---	4.0	265	218	71	62	73
19	---	---	---	---	---	---	4.8	181	256	74	59	69
20	---	---	---	---	---	---	6.5	147	197	78	56	65
21	---	---	---	---	---	---	9.1	158	158	79	54	64
22	---	---	---	---	---	---	8.7	175	146	77	50	70
23	---	---	---	---	---	---	7.8	183	156	73	49	73
24	---	---	---	---	---	---	8.7	220	146	75	50	67
25	---	---	---	---	---	---	9.2	191	125	80	51	62
26	---	---	---	---	---	---	14	147	110	79	52	55
27	---	---	---	---	---	---	16	126	105	77	53	50
28	---	---	---	---	---	---	26	109	108	78	53	49
29	---	---	---	---	---	---	25	112	108	106	52	42
30	---	---	---	---	---	---	19	125	105	115	50	38
31	---	---	---	---	---	---	---	163	---	102	51	---
TOTAL	---	---	---	---	---	---	219.8	3469	6518	2558	2339	1822
MEAN	---	---	---	---	---	---	7.33	112	217	82.5	75.5	60.7
MAX	---	---	---	---	---	---	26	265	717	115	150	91
MIN	---	---	---	---	---	---	3.2	14	105	65	49	38
AC-FT	---	---	---	---	---	---	436	6880	12930	5070	4640	3610

MEAN	17.3	10.3	5.97	4.10	2.71	2.91	8.77	83.4	201	121	58.8	30.7
MAX	50.0	25.4	15.0	10.0	7.00	10.0	25.7	162	525	328	164	64.6
(WY)	1924	1928	1926	1926	1923	1923	1926	1924	1921	1995	1930	1927
MIN	5.16	1.76	.55	.30	.20	.000	.88	29.5	51.4	33.8	18.8	12.2
(WY)	1934	1934	1934	1934	1934	1934	1940	1935	1934	1940	1940	1934

06222500 DRY CREEK NEAR BURRIS, WY--Continued

SUMMARY STATISTICS

FOR 1997 WATER YEAR*

WATER YEARS 1921 - 1995

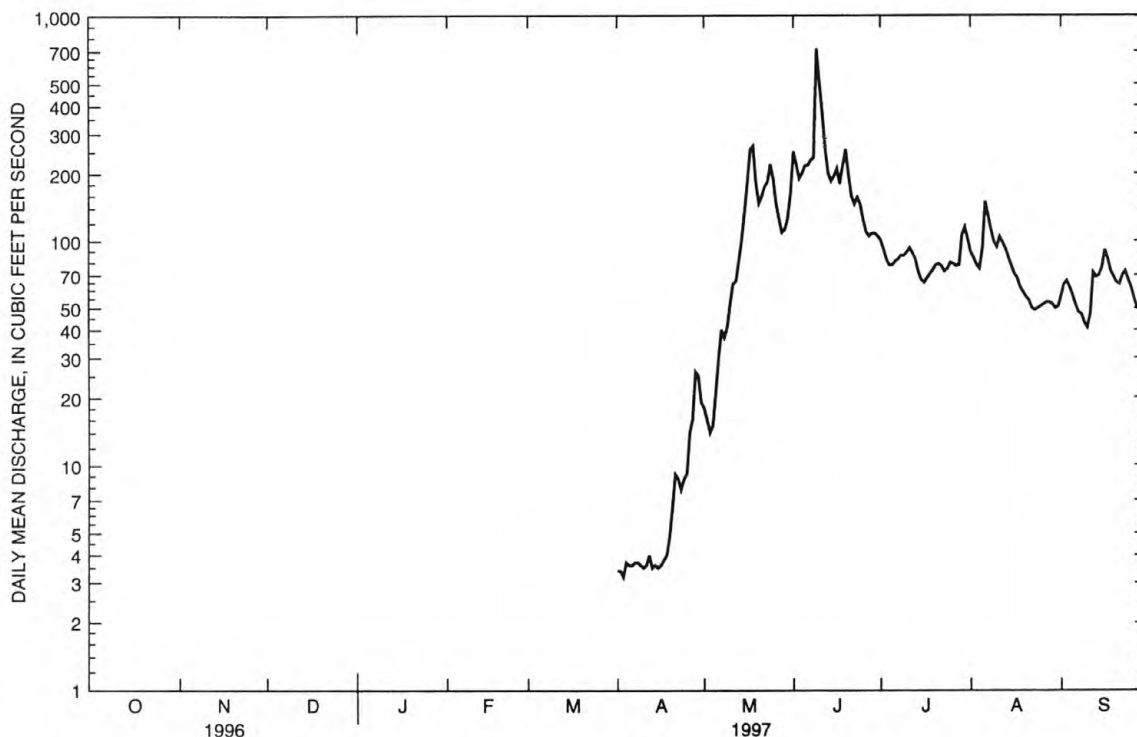
ANNUAL MEAN	--	44.6	
HIGHEST ANNUAL MEAN	--	73.0	1995
LOWEST ANNUAL MEAN	--	20.1	1940
HIGHEST DAILY MEAN	717 Jun 9	1240	Jun 7 1921#
LOWEST DAILY MEAN	3.2 Apr 3	.00	Mar 1 to
			Apr 11 1934#
ANNUAL SEVEN-DAY MINIMUM	--	.00	Mar 1 1934
INSTANTANEOUS PEAK FLOW	1250 Jun 9	1400 ^a	Jun 12 1921#
INSTANTANEOUS PEAK STAGE	6.40 ^b Jun 9	5.84	Jun 14 1995#
ANNUAL RUNOFF (AC-FT)	--	32290	
10 PERCENT EXCEEDS	--	137	
50 PERCENT EXCEEDS	--	14	
90 PERCENT EXCEEDS	--	2.0	

* During period of operation.

For period of record through 1997.

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.



06222500 DRY CREEK NEAR BURRIS, WY

YELLOWSTONE RIVER BASIN

06222510 DRY CREEK CANAL AT HEADGATE, NEAR BURRIS, WY

LOCATION.--Lat 43°20'38", long 109°17'25", in NW¹/₄ NE¹/₄ NE¹/₄ 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 current year (no winter records).

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

REMARKS.--Estimated daily discharges: June 1-5, 9-17, 23, 24. Records fair except for estimated periods, which are poor. Flow is diverted from Dry Creek for irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	.00	100	179	227	177
2	---	---	---	---	---	---	---	.00	256	173	220	185
3	---	---	---	---	---	---	---	.00	244	164	211	187
4	---	---	---	---	---	---	---	.00	244	161	206	184
5	---	---	---	---	---	---	---	.00	228	158	222	177
6	---	---	---	---	---	---	---	2.7	227	165	181	170
7	---	---	---	---	---	---	---	17	231	174	118	165
8	---	---	---	---	---	---	---	34	229	194	95	162
9	---	---	---	---	---	---	---	43	100	207	83	158
10	---	---	---	---	---	---	---	52	244	217	77	155
11	---	---	---	---	---	---	---	64	225	229	76	166
12	---	---	---	---	---	---	---	70	236	209	165	204
13	---	---	---	---	---	---	---	87	185	176	231	208
14	---	---	---	---	---	---	---	93	181	187	215	201
15	---	---	---	---	---	---	---	109	201	203	200	205
16	---	---	---	---	---	---	---	113	201	205	191	218
17	---	---	---	---	---	---	---	121	190	216	186	200
18	---	---	---	---	---	---	---	120	196	224	180	183
19	---	---	---	---	---	---	---	153	189	231	178	165
20	---	---	---	---	---	---	---	150	185	243	178	153
21	---	---	---	---	---	---	---	167	173	239	173	153
22	---	---	---	---	---	---	---	180	165	233	172	154
23	---	---	---	---	---	---	---	183	170	227	173	155
24	---	---	---	---	---	---	---	212	180	231	175	142
25	---	---	---	---	---	---	---	202	186	244	178	115
26	---	---	---	---	---	---	---	186	184	243	185	86
27	---	---	---	---	---	---	---	165	183	239	185	67
28	---	---	---	---	---	---	---	154	187	237	181	56
29	---	---	---	---	---	---	---	130	187	272	177	43
30	---	---	---	---	---	---	---	133	187	247	174	33
31	---	---	---	---	---	---	---	121	---	232	173	---
TOTAL	---	---	---	---	---	---	---	3061.70	5894	6559	5386	4627
MEAN	---	---	---	---	---	---	---	98.8	196	212	174	154
MAX	---	---	---	---	---	---	---	212	256	272	231	218
MIN	---	---	---	---	---	---	---	.00	100	158	76	33
AC-FT	---	---	---	---	---	---	---	6070	11690	13010	10680	9180

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1997, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	1.44	---	---	---	---	3.01	100	188	200	192	130
MAX	2.29	---	---	---	---	6.24	154	247	228	217	188
(WY)	1993	---	---	---	---	1989	1994	1994	1996	1994	1990
MIN	.60	---	---	---	---	.000	53.8	116	155	174	90.2
(WY)	1994	---	---	---	---	1991	1991	1995	1989	1997	1992

YELLOWSTONE RIVER BASIN

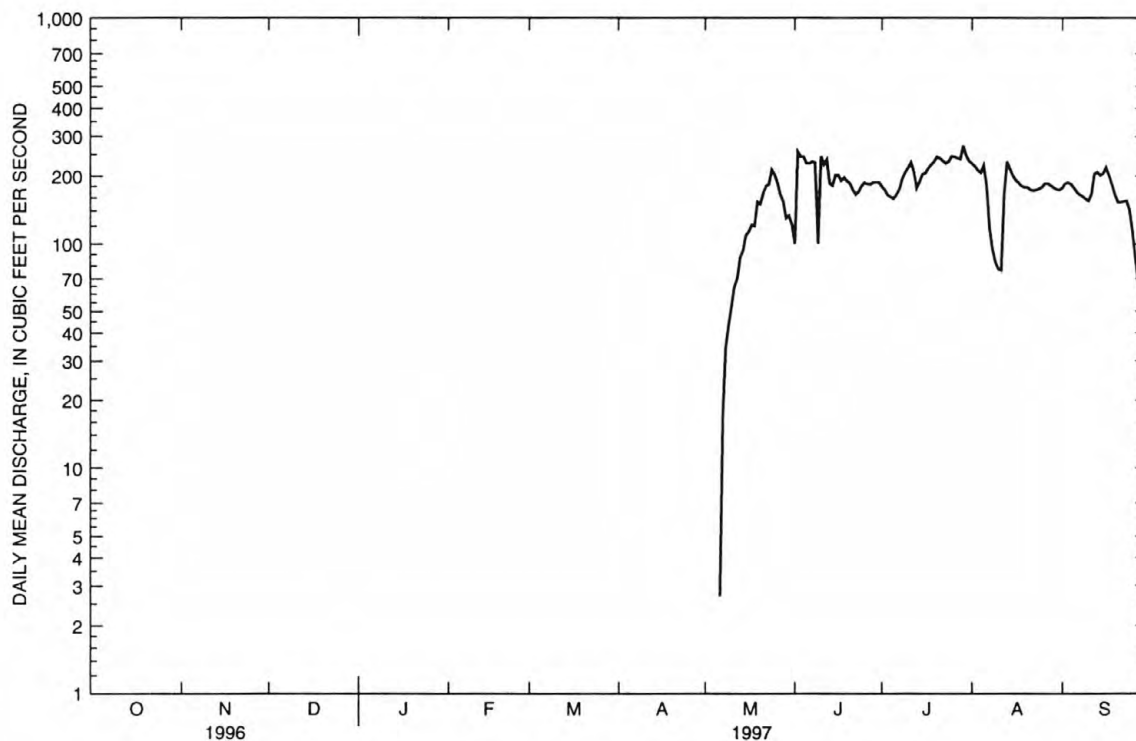
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06222510 DRY CREEK CANAL AT HEADGATE, NEAR BURRIS, WY--Continued

SUMMARY STATISTICS

	FOR 1997 WATER YEAR*		WATER YEARS 1988 - 1997*	
HIGHEST DAILY MEAN	272	Jul 29	285	Jun 23 1994
LOWEST DAILY MEAN	2.70	May 6	.00	Many days, most years
INSTANTANEOUS PEAK FLOW	299	Jul 29	301	Jun 23 1994
INSTANTANEOUS PEAK STAGE	3.23	Jul 29	3.88	Jun 23 1994
10 PERCENT EXCEEDS	--		229	
50 PERCENT EXCEEDS	--		167	
90 PERCENT EXCEEDS	--		.25	

* During period of operation.



06222510 DRY CREEK CANAL AT HEADGATE, NEAR BURRIS, WY

06223500 WILLOW CREEK NEAR CROWHEART, WY

LOCATION.--Lat 43°17'00", long 109°11'08", 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).

REVISÉD RECORDS.--WSP 1309: 1939 (M).

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

REMARKS.--No estimated daily discharges. Records good. 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. 2	7.28
Mar. 31	5.66

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	5.6	8.2	165	55	25	13
2	---	---	---	---	---	---	5.5	8.8	165	48	23	14
3	---	---	---	---	---	---	5.7	8.3	149	46	22	14
4	---	---	---	---	---	---	5.7	8.1	158	44	21	14
5	---	---	---	---	---	---	5.9	7.9	186	46	37	13
6	---	---	---	---	---	---	5.6	7.9	180	45	68	13
7	---	---	---	---	---	---	5.6	7.7	192	44	36	12
8	---	---	---	---	---	---	5.9	8.0	189	43	29	12
9	---	---	---	---	---	---	6.2	8.2	299	42	28	12
10	---	---	---	---	---	---	6.5	8.3	223	43	29	11
11	---	---	---	---	---	---	6.7	8.4	178	42	37	13
12	---	---	---	---	---	---	7.1	8.6	147	37	36	19
13	---	---	---	---	---	---	7.2	8.7	144	35	30	14
14	---	---	---	---	---	---	7.4	9.0	133	31	26	14
15	---	---	---	---	---	---	7.6	10	139	31	25	14
16	---	---	---	---	---	---	7.7	31	152	33	23	17
17	---	---	---	---	---	---	7.7	50	132	32	22	14
18	---	---	---	---	---	---	7.7	59	187	32	21	13
19	---	---	---	---	---	---	7.6	49	176	32	20	14
20	---	---	---	---	---	---	7.7	51	147	32	19	14
21	---	---	---	---	---	---	7.7	60	113	29	18	16
22	---	---	---	---	---	---	7.7	67	118	27	18	17
23	---	---	---	---	---	---	7.9	73	121	27	18	17
24	---	---	---	---	---	---	9.4	92	93	36	17	16
25	---	---	---	---	---	---	9.1	83	74	38	17	15
26	---	---	---	---	---	---	8.7	79	70	30	17	14
27	---	---	---	---	---	---	8.0	66	71	26	16	13
28	---	---	---	---	---	---	8.0	63	68	25	15	13
29	---	---	---	---	---	---	8.8	72	63	41	14	13
30	---	---	---	---	---	---	8.6	79	60	32	14	13
31	---	---	---	---	---	---	---	98	---	25	13	---
TOTAL	---	---	---	---	---	---	216.5	1198.1	4292	1129	754	421
MEAN	---	---	---	---	---	---	7.22	38.6	143	36.4	24.3	14.0
MAX	---	---	---	---	---	---	9.4	98	299	55	68	19
MIN	---	---	---	---	---	---	5.5	7.7	60	25	13	11
AC-FT	---	---	---	---	---	---	429	2380	8510	2240	1500	835

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1995, BY WATER YEAR (WY)

MEAN	9.03	7.53	6.15	5.25	4.76	4.96	6.34	27.9	75.3	28.7	12.5	9.20
MAX	17.6	13.3	10.0	8.00	7.00	8.00	9.15	63.8	190	112	45.4	21.9
(WY)	1931	1927	1927	1927	1922	1922	1922	1931	1991	1995	1930	1930
MIN	5.15	2.50	2.00	2.00	2.00	2.50	3.97	6.85	9.71	5.68	3.50	4.67
(WY)	1989	1940	1940	1940	1940	1940	1940	1935	1934	1940	1940	1935

06223500 WILLOW CREEK NEAR CROWHEART, WY--Continued

SUMMARY STATISTICS

FOR 1997 WATER YEAR*

WATER YEARS 1922 - 1995

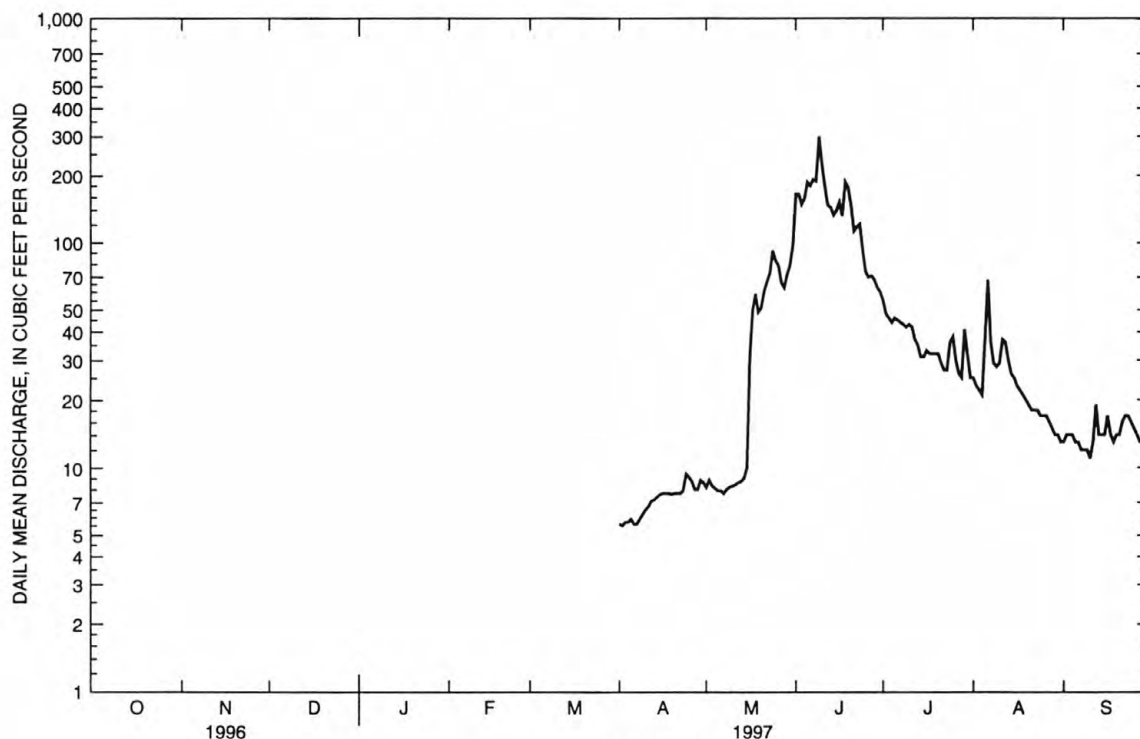
ANNUAL MEAN	--		16.5	
HIGHEST ANNUAL MEAN	--		31.0	1995
LOWEST ANNUAL MEAN	--		4.60	1940
HIGHEST DAILY MEAN	299	Jun 9	468	Jun 12 1991#
LOWEST DAILY MEAN	5.5	Apr 2	2.0	Dec 1 1939#
ANNUAL SEVEN-DAY MINIMUM	--		2.0	Dec 1 1939
INSTANTANEOUS PEAK FLOW	414	Jun 9	1100 ^a	May 31 1939#
INSTANTANEOUS PEAK STAGE	4.23	Jun 9	5.40 ^b	May 31 1939#
ANNUAL RUNOFF (AC-FT)	--		11930	
10 PERCENT EXCEEDS	--		38	
50 PERCENT EXCEEDS	--		7.4	
90 PERCENT EXCEEDS	--		4.0	

* During period of operation.

For period of record through 1997.

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

b Site and datum then in use.



06223500 WILLOW CREEK NEAR CROWHEART, WY

06224000 BULL LAKE CREEK ABOVE BULL LAKE, WY

LOCATION.--Lat 43°10'37", long 109°12'08", in NE¹/₄ SW¹/₄ 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.

WATER-DISCHARGE RECORDS

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 sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 7, 18, 19, 24, 25, Dec. 1, 2, and Feb. 6-14, 21-24. Records good except those for estimated daily discharges, which are poor. No diversions upstream from station. U.S. Geological Survey data collection platform with satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 9	0845	*2,670	*6.34
June 19	1500	2,600	6.28

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	47	45	90	42	25	33	103	1550	971	752	380
2	83	46	40	113	34	26	32	99	1770	915	681	367
3	80	44	32	110	41	25	32	94	1480	805	644	376
4	78	43	34	140	44	25	37	98	1480	729	631	401
5	76	42	47	61	41	25	38	111	1790	712	807	397
6	74	33	48	64	34	28	38	147	1840	747	1270	371
7	72	34	48	74	33	27	38	191	1980	839	1160	345
8	70	42	57	68	32	26	36	185	2170	895	945	328
9	69	42	61	68	30	26	35	197	2560	930	808	308
10	68	41	58	60	29	28	32	250	2420	981	754	296
11	67	39	55	46	28	28	30	310	2210	1020	820	323
12	65	41	58	30	27	28	28	313	1740	973	784	497
13	62	42	58	37	26	26	30	382	1490	861	724	524
14	61	40	73	52	28	24	31	478	1320	722	642	463
15	59	36	49	53	30	25	29	589	1220	654	563	451
16	58	34	55	48	30	28	30	728	1220	671	513	515
17	55	24	27	44	31	29	35	824	1250	737	489	476
18	54	25	30	48	29	28	44	993	1490	786	457	394
19	55	44	51	46	28	29	63	934	2390	858	436	360
20	54	63	50	44	26	33	82	889	2240	873	430	333
21	52	60	50	40	23	37	88	914	1830	843	424	319
22	53	60	50	39	25	37	78	960	1520	815	429	331
23	50	61	51	41	27	37	72	976	1500	768	446	346
24	49	58	57	40	26	39	83	1060	1510	779	457	339
25	50	61	56	38	28	35	88	1030	1310	878	499	318
26	58	42	53	42	29	39	97	903	1080	871	544	292
27	55	39	64	44	27	44	106	761	980	822	530	272
28	55	60	71	49	27	40	133	678	1010	769	492	260
29	56	59	72	48	---	36	121	693	1020	854	462	249
30	53	43	66	47	---	36	111	817	1000	996	436	233
31	49	---	76	47	---	37	---	1080	---	892	405	---
TOTAL	1926	1345	1642	1771	855	956	1730	17787	48370	25966	19434	10864
MEAN	62.1	44.8	53.0	57.1	30.5	30.8	57.7	574	1612	838	627	362
MAX	86	63	76	140	44	44	133	1080	2560	1020	1270	524
MIN	49	24	27	30	23	24	28	94	980	654	405	233
AC-FT	3820	2670	3260	3510	1700	1900	3430	35280	95940	51500	38550	21550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1997, BY WATER YEAR (WY)

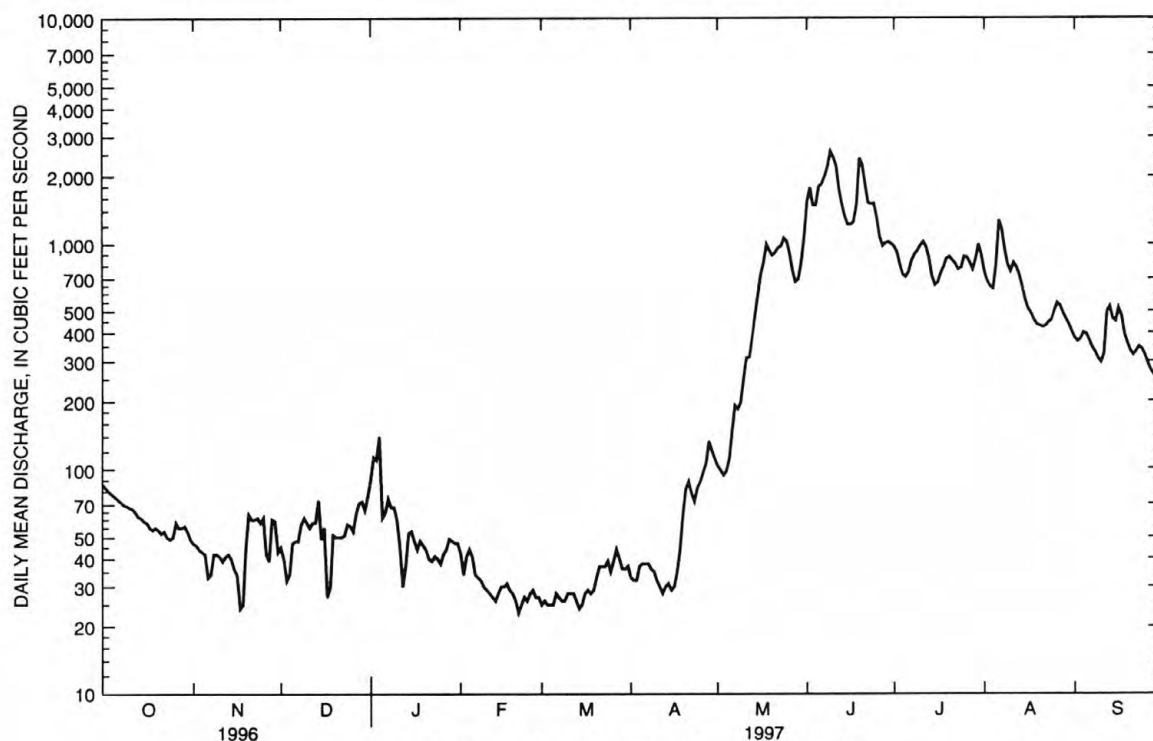
MEAN	99.0	55.7	38.0	28.9	25.0	26.8	66.1	465	1165	913	432	207
MAX	222	109	62.2	57.1	41.4	57.4	199	777	2104	1581	655	533
(WY)	1983	1951	1951	1997	1943	1986	1943	1969	1986	1975	1982	1973
MIN	32.9	29.5	14.6	7.29	6.88	6.69	24.9	170	560	337	145	109
(WY)	1989	1977	1977	1977	1977	1977	1970	1975	1992	1994	1985	1988

YELLOWSTONE RIVER BASIN

63

06224000 BULL LAKE CREEK ABOVE BULL LAKE, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1942 - 1997
ANNUAL TOTAL	115226	132646	--
ANNUAL MEAN	315	363	295
HIGHEST ANNUAL MEAN	--	--	415
LOWEST ANNUAL MEAN	--	--	174
HIGHEST DAILY MEAN	2180	2560	3560
LOWEST DAILY MEAN	22	23	6.2
ANNUAL SEVEN-DAY MINIMUM	24	26	6.5
INSTANTANEOUS PEAK FLOW	--	2670	4470
INSTANTANEOUS PEAK STAGE	--	6.34	7.98
ANNUAL RUNOFF (AC-FT)	228600	263100	213400
10 PERCENT EXCEEDS	1130	994	914
50 PERCENT EXCEEDS	69	68	75
90 PERCENT EXCEEDS	30	29	22



06224000 BULL LAKE CREEK ABOVE BULL LAKE, WY

YELLOWSTONE RIVER BASIN

06224000 BULL LAKE CREEK ABOVE BULL LAKE, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)
DEC					
11...	1030	54	49	6.0	3.0
JAN					
14...	1320	52	146	1.0	-10.0
MAR					
19...	0900	27	92	2.5	4.0
APR					
13...	1430	30	129	3.0	4.0
25...	1030	82	130	6.0	6.0
MAY					
06...	1115	147	48	10.0	15.0
JUN					
12...	1215	1750	23	15.0	25.0
JUL					
07...	1115	842	20	13.5	22.0
AUG					
19...	1200	442	47	15.5	24.0
SEP					
29...	1215	258	27	11.0	20.5

YELLOWSTONE RIVER BASIN

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06224500 BULL LAKE NEAR LENORE, WY

LOCATION.--Lat 43°12'35", long 109°02'30", in E¹/₂ NW¹/₄ sec.30, T.3 N., R.2 W., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, at dam on Bull Lake Creek, 2.8 mi upstream from mouth of Bull Lake Creek, and 9.8 mi south of Lenore.

DRAINAGE AREA.--210 mi², of which 12 mi² probably is noncontributing.

PERIOD OF RECORD.--April 1938 to current year. Monthend contents only for some periods, published in WSP 1309. Published as Bull Lake Reservoir near Lenore 1938-50.

GAGE.--Water-stage recorder. Datum of gage is sea level (Bureau of Reclamation datum).

REMARKS.--Reservoir is formed by rockfill dam completed by Bureau of Reclamation July 22, 1938. Capacity, 152,500 acre-ft below elevation 5,805.00 ft, top of spillway gates. Dead storage, 722 acre-ft. Figures given herein represent total contents. Water is used for irrigation near Riverton. Bureau of Reclamation data collection platform with satellite telemetry at station.

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily contents, 154,200 acre-ft, Aug. 10, 1965, elevation, 5,805.70 ft; minimum daily contents (since appreciable storage was attained), 5,540 acre-ft, Mar. 15, 1950, elevation, 5,742.56 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 149,000 acre-ft, July 11-13, 25-26, Aug. 6-8, 24-28, maximum daily elevation, 5,803.94 ft, Aug. 7; minimum daily contents, 75,900 acre-ft, Oct. 9, 10, elevation, 5,777.82 ft.

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

5,770	69,100	5,800	137,000
5,780	81,400	5,810	152,000
5,790	108,000		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY OBSERVATION AT 2400 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78100	77100	78100	79700	81300	81800	82100	81000	98200	148000	148000	147000
2	77900	77200	78100	79800	81300	81800	82100	80900	101000	148000	148000	147000
3	77600	77200	78100	80000	81400	81800	82100	80900	104000	148000	147000	146000
4	77300	77300	78100	80100	81500	81900	82200	80900	106000	148000	147000	146000
5	77000	77300	78100	80100	81500	82000	82200	80900	109000	147000	148000	145000
6	76600	77300	78200	80200	81500	81900	82300	80800	112000	147000	149000	145000
7	76300	77300	78200	80300	81600	81900	82300	80900	115000	147000	149000	144000
8	76100	77300	78300	80400	81600	81900	82300	80900	119000	148000	149000	143000
9	75900	77400	78300	80400	81600	81900	82300	81100	123000	148000	148000	142000
10	75900	77400	78400	80500	81600	82000	82300	81300	128000	148000	147000	141000
11	76000	77400	78400	80500	81700	82000	82300	81600	131000	149000	147000	140000
12	76100	77400	78400	80500	81700	81900	82300	81900	132000	149000	147000	139000
13	76200	77500	78500	80600	81700	81900	82300	82200	133000	149000	147000	138000
14	76200	77500	78600	80600	81700	82000	82300	82600	134000	148000	147000	137000
15	76200	77500	78600	80700	81700	81900	82300	83200	134000	148000	147000	137000
16	76300	77500	78700	80800	81700	82000	82300	83800	135000	148000	147000	136000
17	76300	77500	78700	80900	81700	82000	82100	84700	136000	148000	147000	135000
18	76400	77700	78700	80900	81700	82000	82100	85700	138000	148000	147000	134000
19	76500	77600	78700	80900	81700	81900	81800	86600	142000	148000	148000	133000
20	76500	77600	78800	80900	81700	82000	81600	87200	146000	148000	148000	132000
21	76500	77700	78900	80900	81700	82000	81300	87900	148000	148000	148000	131000
22	76500	77800	78900	80900	81700	82000	81200	88800	148000	148000	148000	130000
23	76500	77900	79000	81000	81700	82000	80900	89600	148000	148000	148000	129000
24	76600	77900	79000	81000	81700	82100	80900	90700	148000	148000	149000	128000
25	76700	78000	79100	81000	81700	82100	80900	91600	147000	149000	149000	127000
26	76900	78000	79100	81000	81800	82100	80900	92400	147000	149000	149000	126000
27	76900	78000	79200	81100	81800	82100	80800	92800	146000	148000	149000	125000
28	77000	78000	79300	81200	81800	82200	80800	93000	147000	148000	149000	124000
29	77000	78100	79300	81200	---	82100	80900	93400	147000	148000	148000	123000
30	77100	78100	79400	81200	---	82100	81000	94400	148000	148000	148000	121000
31	77100	---	79500	81300	---	82200	---	95900	---	148000	148000	---
MAX	78100	78100	79500	81300	81800	82100	82300	95900	148000	149000	149000	147000
MIN	75900	77100	78100	79700	81300	81800	80800	80800	98200	147000	147000	121000
(#)	5,778.30	5,778.71	5,779.26	5,779.96	5,780.17	5,780.32	5,779.85	5,785.60	5,803.44	5,803.73	5,803.48	5,794.78
(*)	-1,400	+1,000	+1,400	+1,800	+500	+400	-1,200	+14,900	+52,100	0	0	-27,000

WTR YR 1997 MAX 149000 MIN 75900 (*) +42,500

(#) Elevation, in feet, at end of month.

(*) Change in contents, in acre-feet.

YELLOWSTONE RIVER BASIN

06225000 BULL LAKE CREEK NEAR LENORE, WY

LOCATION.--Lat 43°14'33", long 109°01'20", in NE¹/₄ NW¹/₄ 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 sea level, from topographic map. May 18, 1918, to Sept. 30, 1922, at site 10 ft upstream at datum 0.86 ft higher; Oct. 1, 1922, to Oct. 3, 1934, at present site at datum 2.00 ft lower.

REMARKS.--Estimated daily discharges: Nov. 27, Dec. 1-4, 6, 15-27, Jan. 5-8, 10-26, 28, 29, Feb. 4-11, 13, 14, Mar. 1, 4, 5, and June 13-18. Records good except those for estimated daily discharges, which are poor. Flow completely regulated by Bull Lake 2.8 mi upstream since April 1938. (See station 06224500.) Diversions upstream from station for irrigation of about 730 acres downstream. Bureau of Reclamation data collection platform with satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	227	30	29	28	29	29	26	85	309	637	850	591
2	218	30	29	28	29	29	26	138	313	725	839	588
3	214	30	29	28	29	29	27	135	314	756	788	585
4	215	30	29	28	28	29	28	135	317	752	568	585
5	215	30	30	28	28	29	28	135	321	699	469	608
6	213	30	27	28	28	29	28	135	327	663	701	632
7	212	29	28	28	28	29	28	135	333	649	1030	633
8	176	29	27	28	28	29	28	135	339	625	1150	678
9	117	30	27	28	28	29	28	135	341	628	1140	773
10	64	30	26	28	29	29	28	135	350	628	1120	819
11	32	30	26	28	30	29	28	135	624	628	996	816
12	37	30	26	28	30	29	28	160	972	702	732	813
13	28	30	26	28	30	29	28	216	980	800	649	814
14	27	30	26	28	30	29	28	262	986	829	654	809
15	28	30	34	28	30	29	29	313	980	792	574	797
16	30	30	34	28	29	29	41	387	986	759	466	796
17	31	30	34	28	30	29	155	427	676	709	369	796
18	30	30	34	28	29	29	157	465	497	660	279	794
19	29	31	34	28	29	28	159	521	450	662	280	784
20	29	31	34	28	29	29	158	551	464	663	273	780
21	29	31	30	29	29	29	156	552	793	665	274	779
22	29	30	28	29	29	28	156	554	1220	599	274	777
23	29	30	27	29	29	28	188	556	1390	685	274	774
24	30	30	27	29	29	28	192	556	1380	665	278	772
25	30	29	27	29	29	28	101	562	1380	693	315	769
26	31	29	27	29	29	28	99	571	1220	788	402	766
27	30	29	27	29	29	27	132	565	912	840	488	766
28	30	29	27	29	29	27	132	568	829	843	612	763
29	30	29	27	29	---	26	121	498	714	841	643	756
30	30	29	28	29	---	27	69	348	651	845	591	751
31	30	---	28	29	---	27	---	309	---	852	588	---
TOTAL	2500	895	892	879	812	882	2432	10379	21368	22282	18666	22164
MEAN	80.6	29.8	28.8	28.4	29.0	28.5	81.1	335	712	719	602	739
MAX	227	31	34	29	30	29	192	571	1390	852	1150	819
MIN	27	29	26	28	28	26	26	85	309	599	273	585
AC-FT	4960	1780	1770	1740	1610	1750	4820	20590	42380	44200	37020	43960

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 1997, BY WATER YEAR (WY)

	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929
MEAN	132	69.4	72.1	89.7	75.6	61.7	96.4	234	556	811	659	431
MAX	782	467	241	267	219	197	601	831	2265	1645	1027	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	.000	3.59	6.01	10.6	85.6	193	113
(WY)	1941	1965	1978	1931	1931	1937	1941	1940	1941	1941	1977	1961

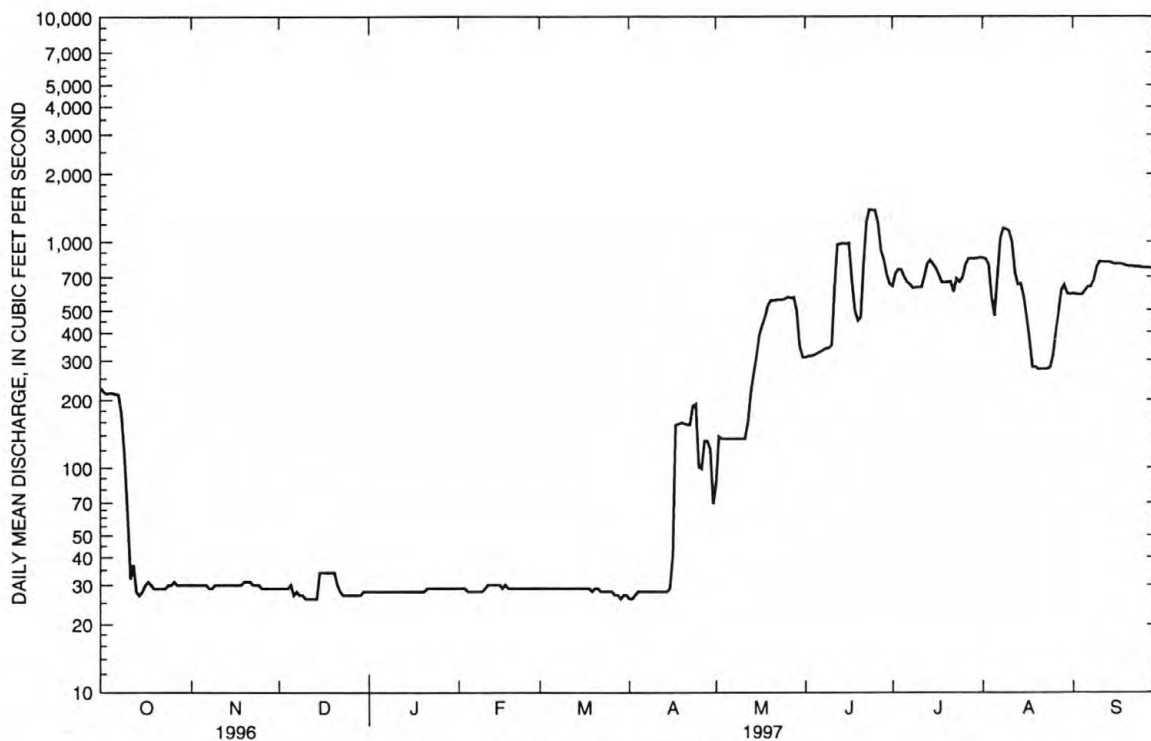
YELLOWSTONE RIVER BASIN

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06225000 BULL LAKE CREEK NEAR LENORE, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1918 - 1997	
ANNUAL TOTAL	114482		104151		--	
ANNUAL MEAN	313		285		274	
HIGHEST ANNUAL MEAN	--		--		427	1969
LOWEST ANNUAL MEAN	--		--		100	1941
HIGHEST DAILY MEAN	1550	Jul 6	1390	Jun 23	3900	Jun 16 1918
LOWEST DAILY MEAN	26	Dec 10	26	Dec 10-14, Mar 29, Apr 1, 2	.00 ^a	Feb 28 to Apr 7 1937
ANNUAL SEVEN-DAY MINIMUM	26	Dec 8	26	Dec 8	.00 ^b	Feb 28 1937
INSTANTANEOUS PEAK FLOW	--		1430	Jun 22	6200	Aug 8 1951
INSTANTANEOUS PEAK STAGE	--		3.94	Jun 22	7.09	Aug 8 1951
ANNUAL RUNOFF (AC-FT)	227100		206600		198600	
10 PERCENT EXCEEDS	954		792		802	
50 PERCENT EXCEEDS	40		34		108	
90 PERCENT EXCEEDS	29		28		20	

a Result of regulation.

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

06225000 BULL LAKE CREEK NEAR LENORE, WY

YELLOWSTONE RIVER BASIN

06225500 WIND RIVER NEAR CROWHEART, WY

LOCATION.--Lat 43°14'33", long 109°00'35", in NW¹/₄ NW¹/₄ 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 sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 17 to Mar. 6, Mar. 11-15, and July 4-6. Records good except those for estimated daily discharges, which are poor. Some regulation by Bull Lake on Bull Lake Creek. (See station 06224500.) Diversions for irrigation of about 25,000 acres upstream from station. Bureau of Reclamation data collection platform with satellite telemetry at 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	759	480	360	420	380	330	359	541	6580	3560	2820	1610
2	749	466	340	450	350	300	347	578	7260	3320	2680	1590
3	746	471	320	450	350	300	326	565	6290	3260	2540	1570
4	736	464	300	450	341	300	330	553	6500	3100	2230	1570
5	722	478	325	400	330	300	361	625	7410	3060	2360	1600
6	714	440	350	350	320	310	329	758	7730	3030	3020	1600
7	693	408	380	390	310	303	319	899	7880	3130	3290	1570
8	655	437	400	420	300	304	332	920	7790	2990	3210	1570
9	600	463	410	420	300	302	332	959	10000	2950	3040	1650
10	598	451	400	400	280	306	326	1120	10500	2970	2960	1670
11	584	441	380	360	280	315	309	1300	10300	2970	3100	1800
12	577	436	370	300	300	330	302	1220	8140	3000	2820	2320
13	569	437	380	280	310	325	308	1390	7530	3160	2650	2190
14	555	435	340	270	330	300	297	1710	6920	2870	2470	2040
15	550	429	300	250	340	280	316	2130	6760	2730	2260	1950
16	547	414	287	270	360	308	323	2690	6610	2660	2040	1940
17	557	400	270	320	360	346	433	3140	6070	2680	1880	1900
18	533	380	270	330	350	348	504	3820	6970	2670	1720	1820
19	538	365	280	350	320	384	564	3560	7670	2780	1680	1800
20	554	400	310	380	330	465	621	3490	6410	2920	1610	1810
21	503	450	380	370	310	521	660	3760	5760	2730	1580	1760
22	460	450	410	350	320	419	625	4150	5820	2570	1550	1850
23	514	410	430	360	340	399	598	4330	6270	2590	1550	1960
24	529	370	430	350	320	422	640	4500	5680	2670	1550	1920
25	526	340	440	350	350	373	519	4790	5090	2950	1570	1830
26	551	330	440	360	350	345	486	3980	4630	2830	1620	1750
27	507	330	430	350	340	389	549	3570	4240	2800	1780	1690
28	490	350	430	340	310	393	698	3410	4120	2810	1820	1670
29	506	370	430	350	---	354	740	3540	3720	3050	1800	1620
30	506	370	400	360	---	338	610	3710	3690	3180	1690	1590
31	499	---	380	370	---	340	---	4620	---	2990	1640	---
TOTAL	18127	12465	11372	11170	9181	10749	13463	76328	200340	90980	68530	53210
MEAN	585	416	367	360	328	347	449	2462	6678	2935	2211	1774
MAX	759	480	440	450	380	521	740	4790	10500	3560	3290	2320
MIN	460	330	270	250	280	280	297	541	3690	2570	1550	1570
AC-FT	35950	24720	22560	22160	18210	21320	26700	151400	397400	180500	135900	105500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1997, BY WATER YEAR (WY)

MEAN	676	479	389	370	357	366	561	1761	3781	2898	1667	1156
MAX	1415	932	625	560	538	616	1284	2938	7259	5694	2483	1774
(WY)	1952	1969	1972	1954	1951	1972	1952	1956	1971	1967	1951	1997
MIN	371	298	215	179	202	226	309	729	1520	1362	853	688
(WY)	1989	1978	1982	1982	1989	1977	1993	1977	1994	1992	1977	1994

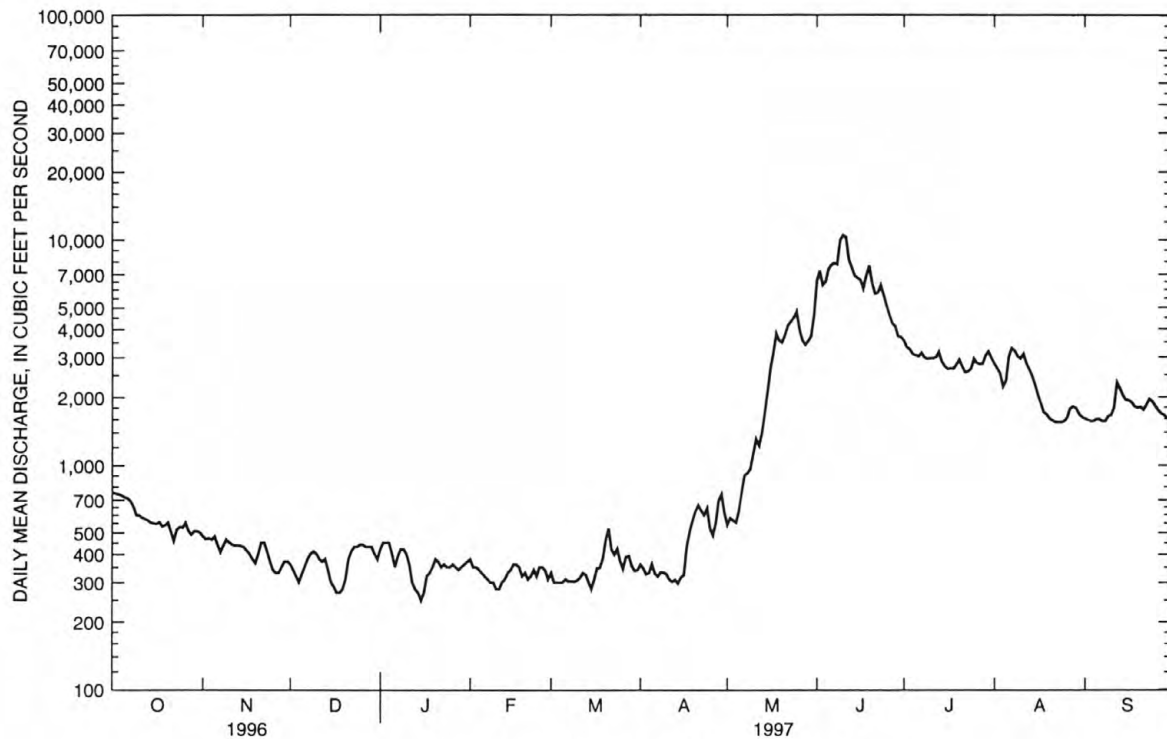
YELLOWSTONE RIVER BASIN

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06225500 WIND RIVER NEAR CROWHEART, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1946 - 1997	
ANNUAL TOTAL	489151		575915		--	
ANNUAL MEAN	1336		1578		1208	
HIGHEST ANNUAL MEAN	--		--		1651	1951
LOWEST ANNUAL MEAN	--		--		670	1977
HIGHEST DAILY MEAN	8020	Jun 11	10500	Jun 10	11300	Jun 23 1971
LOWEST DAILY MEAN	220	Feb 28	250	Jan 15	130	Feb 5 1982
ANNUAL SEVEN-DAY MINIMUM	250	Feb 24	289	Jan 12	143	Dec 30 1981
INSTANTANEOUS PEAK FLOW	--		12200	Jun 9	14300	Jun 13 1991
INSTANTANEOUS PEAK STAGE	--		10.93	Jun 9	11.04 ^a	Jun 13 1991
ANNUAL RUNOFF (AC-FT)	970200		1142000		875400	
10 PERCENT EXCEEDS	3920		3740		2820	
50 PERCENT EXCEEDS	553		538		580	
90 PERCENT EXCEEDS	300		310		300	

a From floodmarks.



06225500 WIND RIVER NEAR CROWHEART, WY

LOCATION.--Lat 43°13'45", long 108°53'40", in SE1/4 SE1/4 sec.17, T.3 N., R.1 W., Fremont County, Hydrologic Unit 10080001, on right bank 3.3 mi downstream from diversion dam on Wind River and 15 mi southeast of Lenore.

PERIOD OF RECORD.--May 1941 to September 1945 (irrigation season only), May 1949 to September 1982, April 1988 to current year. No winter record 1977-1978, and 1988 to current year. Monthly discharge only from some periods, published in WSP 1309.

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

REMARKS.--Estimated daily discharges: Oct. 23, 24, Apr. 16, and June 1, 5-8, 18, 22, 25-27, 29, 30. Records good except those for Oct. 8-23 and the month of June, which are poor. Flow used for irrigation on Riverton project. Midvale Irrigation District data collection platform with satellite telemetry at station.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	653	---	---	---	---	---	---	387	1650	1400	1600	1090
2	650	---	---	---	---	---	---	433	1570	1460	1520	1100
3	648	---	---	---	---	---	---	417	1520	1540	1420	1100
4	648	---	---	---	---	---	---	394	1520	1540	1350	1090
5	637	---	---	---	---	---	---	467	1570	1550	1360	1080
6	624	---	---	---	---	---	---	535	1580	1570	1390	1080
7	617	---	---	---	---	---	---	702	1450	1570	1230	1040
8	528	---	---	---	---	---	---	738	1420	1570	981	1000
9	448	---	---	---	---	---	---	711	1490	1670	919	1020
10	415	---	---	---	---	---	---	763	1470	1680	917	1060
11	405	---	---	---	---	---	---	778	1270	1680	923	1170
12	396	---	---	---	---	---	---	757	1130	1680	854	1540
13	391	---	---	---	---	---	---	885	1110	1700	791	1580
14	393	---	---	---	---	---	---	1020	1080	1620	769	1530
15	397	---	---	---	---	---	---	1130	1070	1670	778	1360
16	412	---	---	---	---	---	100	1260	1080	1670	769	1440
17	438	---	---	---	---	---	311	1340	1060	1670	766	1410
18	426	---	---	---	---	---	403	1350	1140	1660	763	1330
19	418	---	---	---	---	---	478	1320	1080	1670	868	1310
20	444	---	---	---	---	---	554	1310	995	1700	932	1310
21	400	---	---	---	---	---	607	1340	934	1670	932	1270
22	349	---	---	---	---	---	578	1450	937	1660	915	1370
23	402	---	---	---	---	---	494	1550	947	1660	924	1430
24	100	---	---	---	---	---	510	1590	940	1660	932	1300
25	---	---	---	---	---	---	395	1600	920	1700	971	1060
26	---	---	---	---	---	---	298	1550	1000	1690	1050	868
27	---	---	---	---	---	---	345	1500	1100	1680	1240	804
28	---	---	---	---	---	---	489	1510	1130	1680	1320	803
29	---	---	---	---	---	---	588	1560	1190	1700	1310	774
30	---	---	---	---	---	---	447	1570	1220	1660	1210	736
31	---	---	---	---	---	---	---	1630	---	1690	1150	---
TOTAL	11239	---	---	---	---	---	6597	33547	36573	50720	32854	35055
MEAN	468	---	---	---	---	---	440	1082	1219	1636	1060	1169
MAX	653	---	---	---	---	---	607	1630	1650	1700	1600	1580
MIN	100	---	---	---	---	---	100	387	920	1400	763	736
AC-FT	22290	---	---	---	---	---	13090	66540	72540	100600	65170	69530

MEAN	195	184	199	199	201	224	297	700	1117	1252	978	684
MAX	430	436	383	345	357	422	440	1159	1668	1736	1402	1169
(WY)	1994	1972	1958	1958	1954	1972	1980	1976	1990	1976	1995	1997
MIN	.000	.000	.000	.000	.000	.000	91.2	339	321	587	423	277
(WY)	1951	1951	1971	1971	1971	1971	1971	1942	1944	1941	1941	1994

YELLOWSTONE RIVER BASIN

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06226000 WYOMING CANAL NEAR LENORE, WY--Continued

SUMMARY STATISTICS

FOR 1997 WATER YEAR*

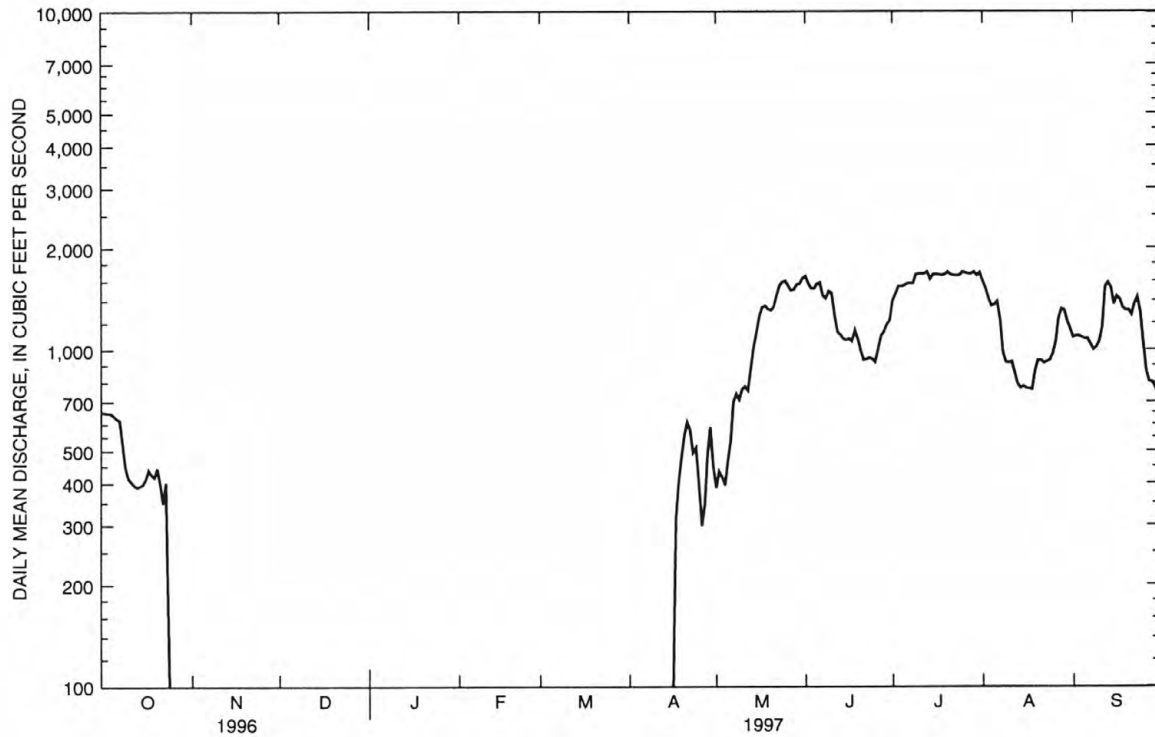
WATER YEARS 1941 - 1982^a

ANNUAL MEAN	--		540	
HIGHEST ANNUAL MEAN	--		669	1972
LOWEST ANNUAL MEAN	--		461	1975
HIGHEST DAILY MEAN	1700	Jul 13, 20, 25, 29	1860	Jun 11, 12 1990#
LOWEST DAILY MEAN	100	Oct 24, Apr 16	.00	Many days, most years
ANNUAL SEVEN-DAY MINIMUM	--		.00	Many days, most years
INSTANTANEOUS PEAK FLOW	--		2060	Jun 5 1990#
INSTANTANEOUS PEAK STAGE	--		13.79	Jun 5 1990#
ANNUAL RUNOFF (AC-FT)	--		391000	
10 PERCENT EXCEEDS	--		1340	
50 PERCENT EXCEEDS	--		429	
90 PERCENT EXCEEDS	--		.00	

* During period of operation.

For period of record through 1997.

a Water years 1977 and 1978 not included.



06226000 WYOMING CANAL NEAR LENORE, WY

YELLOWSTONE RIVER BASIN

06227596 JOHNSTOWN DITCH AT HEADWORKS, NEAR KINNEAR, WY

LOCATION.--Lat 43°09'02", long 108°43'41", 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 current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 5,310 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1, May 16 to June 5, June 16-23, 25-30, July 2-7, 19, 20, Aug. 2-5, 20-31, and Sept. 1-7, 9, 11-30. Records poor. Flow is diverted from the Wind River for irrigation. Wind River Indian Reservation data collection platform with satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	---	---	---	---	---	---	---	8.0	19	25	17
2	---	---	---	---	---	---	---	---	4.9	22	24	17
3	---	---	---	---	---	---	---	---	19	22	24	17
4	---	---	---	---	---	---	---	---	19	22	25	16
5	---	---	---	---	---	---	---	---	22	22	23	17
6	---	---	---	---	---	---	---	---	23	21	24	18
7	---	---	---	---	---	---	---	---	25	22	21	20
8	---	---	---	---	---	---	---	---	23	22	19	20
9	---	---	---	---	---	---	---	---	20	23	19	20
10	---	---	---	---	---	---	---	---	24	22	19	21
11	---	---	---	---	---	---	---	---	26	25	20	19
12	---	---	---	---	---	---	---	---	25	26	19	19
13	---	---	---	---	---	---	---	---	26	26	18	19
14	---	---	---	---	---	---	---	---	27	28	18	19
15	---	---	---	---	---	---	---	---	27	33	17	20
16	---	---	---	---	---	---	---	15	17	36	16	19
17	---	---	---	---	---	---	---	31	12	36	16	19
18	---	---	---	---	---	---	---	31	10	35	15	19
19	---	---	---	---	---	---	---	31	10	37	21	19
20	---	---	---	---	---	---	---	31	8.5	38	19	19
21	---	---	---	---	---	---	---	31	10	39	19	19
22	---	---	---	---	---	---	---	31	10	38	19	18
23	---	---	---	---	---	---	---	31	10	37	19	18
24	---	---	---	---	---	---	---	31	10	38	18	19
25	---	---	---	---	---	---	---	31	10	39	18	18
26	---	---	---	---	---	---	---	17	10	42	18	18
27	---	---	---	---	---	---	---	16	11	42	18	18
28	---	---	---	---	---	---	---	18	11	37	18	18
29	---	---	---	---	---	---	---	18	11	32	18	17
30	---	---	---	---	---	---	---	17	24	28	18	19
31	---	---	---	---	---	---	---	10	---	25	18	---
TOTAL	10	---	---	---	---	---	---	390	493.4	934	603	556
MEAN	10.0	---	---	---	---	---	---	24.4	16.4	30.1	19.5	18.5
MAX	10	---	---	---	---	---	---	31	27	42	25	21
MIN	10	---	---	---	---	---	---	10	4.9	19	15	16
AC-FT	20	---	---	---	---	---	---	774	979	1850	1200	1100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1997, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995	1996	1997
MEAN	1.25	---	---	---	---	---	---
MAX	1.73	---	---	---	---	---	---
(WY)	1993	---	---	---	---	---	---
MIN	.76	---	---	---	---	---	---
(WY)	1994	---	---	---	---	---	---

YELLOWSTONE RIVER BASIN

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

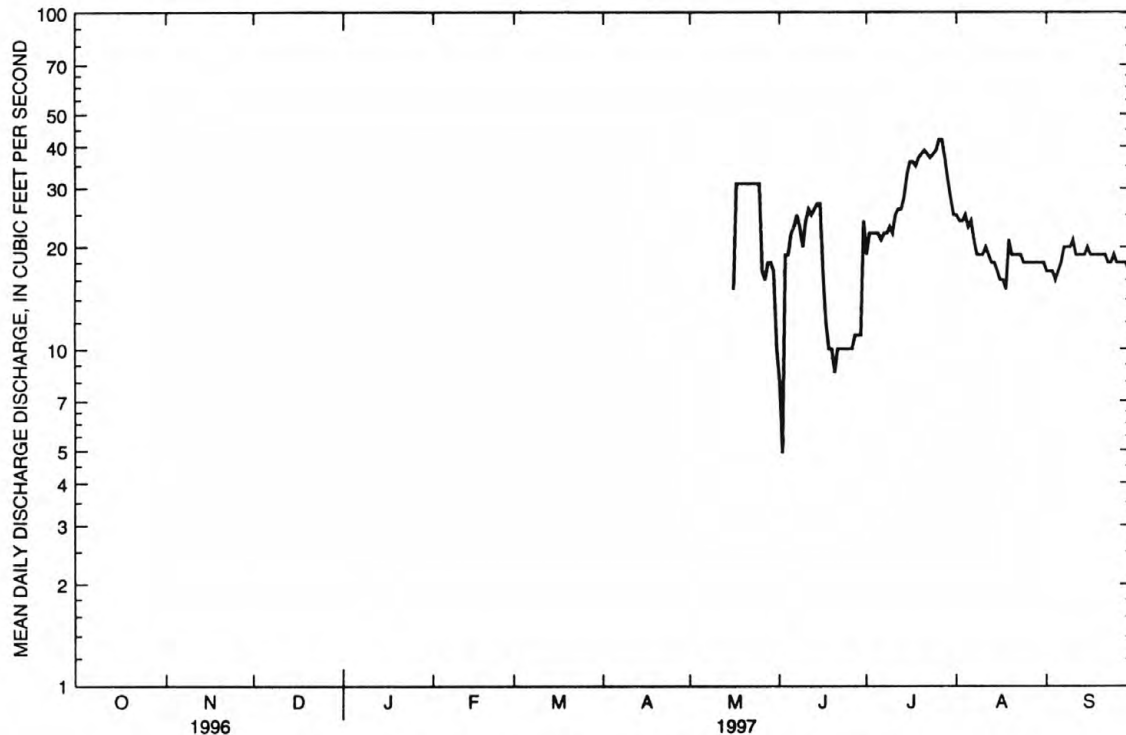
SUMMARY STATISTICS

FOR 1997 WATER YEAR*

WATER YEARS 1991 - 1997*

HIGHEST DAILY MEAN	42	Jul 26	48	Jun 25 1991
LOWEST DAILY MEAN	4.9	Jun 2	.00	Many days,
				most years
INSTANTANEOUS PEAK FLOW	43	Jul 26	56	Jul 23 1996
INSTANTANEOUS PEAK STAGE	1.91	Jul 27	2.25	Jul 23 1996
10 PERCENT EXCEEDS	--		31	
50 PERCENT EXCEEDS	--		20	
90 PERCENT EXCEEDS	--		4.9	

* During period of operation.



06227596 JOHNSTOWN DITCH AT HEADWORKS, NEAR KINNEAR, WY

YELLOWSTONE RIVER BASIN

06227600 WIND RIVER NEAR KINNEAR, WY

LOCATION.--Lat 43°08'34", long 108°42'32", in SW¹/₄ SE¹/₄ SW¹/₄ sec.13, T.2 N., R.1 E., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, on right bank, 200 ft upstream from bridge on Wyoming State Secondary Highway 132, and 1.7 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 sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 27 to Nov. 9, Nov. 17 to Apr. 3, and June 30. Records fair except those for Oct. 1 to Apr. 8, which are poor. Some regulation by Bull Lake beginning in 1938 (see station 06224500) 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 waste water returns to river downstream from station through Fivemile and Muddy Creeks. Midvale Irrigation District data collection platform with satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	174	530	400	430	380	340	370	218	3930	2440	1210	402
2	177	520	380	470	400	340	360	207	5880	2080	1090	384
3	185	520	330	460	390	340	350	199	5300	1850	1040	354
4	180	520	300	450	380	350	322	196	5280	1610	813	367
5	180	520	320	380	370	330	387	193	6240	1490	784	363
6	173	490	360	317	360	310	318	193	6920	1480	1530	377
7	172	460	400	310	340	330	295	227	7180	1580	2060	373
8	170	480	430	310	320	340	335	196	7250	1550	2290	399
9	166	510	440	310	310	350	354	240	8060	1320	2160	468
10	168	539	450	340	290	360	341	311	11000	1290	2090	487
11	166	490	430	320	290	380	318	500	10300	1280	2330	485
12	166	446	420	300	290	370	304	509	8800	1290	2110	692
13	162	451	400	280	310	360	300	497	7450	1630	1920	654
14	165	463	380	260	320	350	286	654	6670	1240	1720	536
15	163	493	350	270	330	330	261	1010	6350	962	1440	553
16	164	458	330	270	340	340	199	1630	6200	839	1070	518
17	157	440	300	280	350	380	185	2250	5680	850	951	512
18	130	420	290	280	360	460	178	3030	5920	820	774	495
19	124	460	310	300	370	420	172	3000	7050	895	677	514
20	126	490	330	310	380	480	163	2810	6450	1280	560	505
21	127	520	360	310	360	540	152	2910	5530	927	527	513
22	114	510	370	320	350	520	150	3040	5200	776	494	531
23	65	480	360	320	350	470	165	3050	5440	781	436	578
24	162	430	340	310	340	460	219	3130	5050	911	422	680
25	438	400	320	300	340	450	211	3380	4420	1270	419	769
26	473	400	300	300	350	400	225	2710	3960	1110	467	851
27	530	400	310	310	360	400	243	2020	3390	1050	406	872
28	520	400	320	300	340	420	241	1680	3190	1030	412	848
29	530	400	350	320	---	410	248	1680	2840	1350	444	839
30	540	410	380	340	---	390	241	1780	2640	1660	384	848
31	530	---	390	350	---	370	---	2350	---	1360	392	---
TOTAL	7297	14050	11150	10127	9670	12090	7893	45800	179570	40001	33422	16767
MEAN	235	468	360	327	345	390	263	1477	5986	1290	1078	559
MAX	540	539	450	470	400	540	387	3380	11000	2440	2330	872
MIN	65	400	290	260	290	310	150	193	2640	776	384	354
AC-FT	14470	27870	22120	20090	19180	23980	15660	90840	356200	79340	66290	33260

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1997, BY WATER YEAR (WY)

MEAN	252	414	316	286	293	313	242	850	3063	1679	553	391
MAX	319	475	380	360	346	418	314	1477	5986	4802	1078	559
(WY)	1996	1996	1996	1996	1996	1996	1994	1997	1997	1995	1997	1997
MIN	188	364	240	193	224	194	170	346	400	379	373	303
(WY)	1993	1995	1993	1993	1993	1992	1992	1995	1994	1994	1994	1992

YELLOWSTONE RIVER BASIN

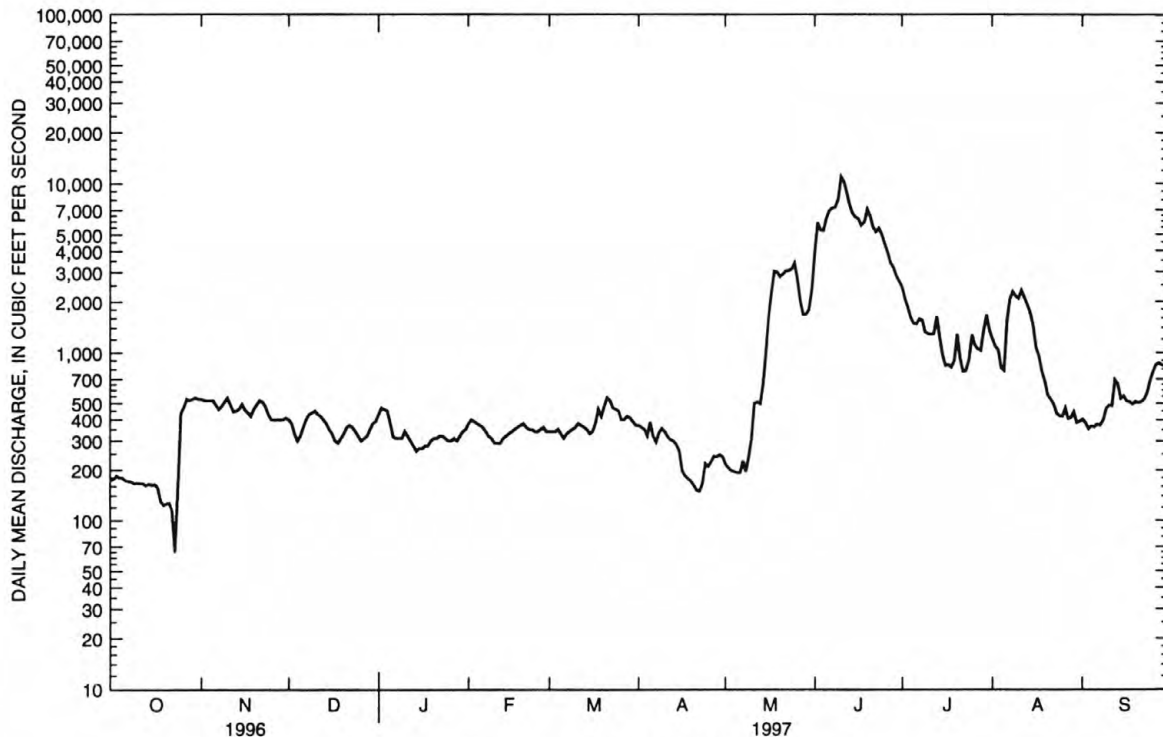
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06227600 WIND RIVER NEAR KINNEAR, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1992 - 1997	
ANNUAL TOTAL	346247		387837		--	
ANNUAL MEAN	946		1063		721	
HIGHEST ANNUAL MEAN	--		--		1063	1997
LOWEST ANNUAL MEAN	--		--		361	1994
HIGHEST DAILY MEAN	7700	Jun 12	11000	Jun 10	11000	Jun 10 1997#
LOWEST DAILY MEAN	65	Oct 23	65	Oct 23	28	Apr 24, 25 1978#
ANNUAL SEVEN-DAY MINIMUM	120	Oct 17	120	Oct 17	79	Oct 18 1992
INSTANTANEOUS PEAK FLOW	--		11600	Jun 10	13900	Jun 13 1991#
INSTANTANEOUS PEAK STAGE	--		8.79a	Jun 10	8.79 ^a	Jun 10 1997
ANNUAL RUNOFF (AC-FT)	686800		769300		522100	
10 PERCENT EXCEEDS	3580		2820		1470	
50 PERCENT EXCEEDS	400		410		362	
90 PERCENT EXCEEDS	193		199		190	

For period of record; 1974-79, 1992-97.

a From floodmark.



06227600 WIND RIVER NEAR KINNEAR, WY

YELLOWSTONE RIVER BASIN

06227810 LEFTHAND DITCH AT HEADWORKS, NEAR RIVERTON, WY

LOCATION.--Lat 43°01'34", long 108°31'12", in NE¹/₄ NE¹/₄ NE¹/₄ 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 current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 5,060 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1, 2, May 11-14, June 3-5, July 26-31, and Sept. 30. Records fair. Flow is diverted from Wind River for irrigation. Wind River Indian Reservation data collection platform with satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	---	---	---	---	---	---	---	59	6.7	21	9.4
2	3.0	---	---	---	---	---	---	---	56	13	20	13
3	---	---	---	---	---	---	---	---	54	20	21	16
4	---	---	---	---	---	---	---	---	53	16	21	14
5	---	---	---	---	---	---	---	---	51	16	20	16
6	---	---	---	---	---	---	---	---	49	21	19	22
7	---	---	---	---	---	---	---	---	43	22	18	22
8	---	---	---	---	---	---	---	---	35	26	17	31
9	---	---	---	---	---	---	---	---	31	28	17	37
10	---	---	---	---	---	---	---	---	34	28	17	37
11	---	---	---	---	---	---	---	10	30	27	17	36
12	---	---	---	---	---	---	---	21	21	27	17	34
13	---	---	---	---	---	---	---	21	18	28	16	33
14	---	---	---	---	---	---	---	21	17	30	16	32
15	---	---	---	---	---	---	---	21	16	32	16	29
16	---	---	---	---	---	---	---	20	16	31	16	26
17	---	---	---	---	---	---	---	15	16	33	15	26
18	---	---	---	---	---	---	---	6.7	15	36	14	25
19	---	---	---	---	---	---	---	8.7	14	35	13	20
20	---	---	---	---	---	---	---	13	13	38	12	16
21	---	---	---	---	---	---	---	13	13	30	11	16
22	---	---	---	---	---	---	---	11	12	26	14	16
23	---	---	---	---	---	---	---	21	12	25	16	15
24	---	---	---	---	---	---	---	45	11	25	15	15
25	---	---	---	---	---	---	---	66	9.9	27	16	15
26	---	---	---	---	---	---	---	64	12	26	16	15
27	---	---	---	---	---	---	---	63	12	25	15	15
28	---	---	---	---	---	---	---	59	9.5	24	15	15
29	---	---	---	---	---	---	---	63	8.3	23	14	15
30	---	---	---	---	---	---	---	66	7.6	22	12	6.5
31	---	---	---	---	---	---	---	58	---	21	11	---
TOTAL	8.6	---	---	---	---	---	---	686.4	748.3	787.7	498	637.9
MEAN	4.30	---	---	---	---	---	---	32.7	24.9	25.4	16.1	21.3
MAX	5.6	---	---	---	---	---	---	66	59	38	21	37
MIN	3.0	---	---	---	---	---	---	6.7	7.6	6.7	11	6.5
AC-FT	17	---	---	---	---	---	---	1360	1480	1560	988	1270

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1997, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995	1996	1997
MEAN	.60	---	---	---	---	.60	24.4
MAX	.87	---	---	---	---	.60	35.3
(WY)	1994	---	---	---	---	1992	1992
MIN	.33	---	---	---	---	.60	20.2
(WY)	1993	---	---	---	---	1992	1993

06227810 LETHAND DITCH AT HEADWORKS, NEAR RIVERTON, WY--Continued

SUMMARY STATISTICS

FOR 1997 WATER YEAR*

WATER YEARS 1991 - 1997*

HIGHEST DAILY MEAN
LOWEST DAILY MEAN

66 May 25, 30
3.0 Oct 2

66 May 25, 30 1997
.00 Many days,

INSTANTANEOUS PEAK FLOW

74 May 24

74^a Jun 13 1991,

INSTANTANEOUS PEAK STAGE

3.19 Sep 8

3.19 Sep 8 1997

10 PERCENT EXCEEDS

--

40

50 PERCENT EXCEEDS

--

25

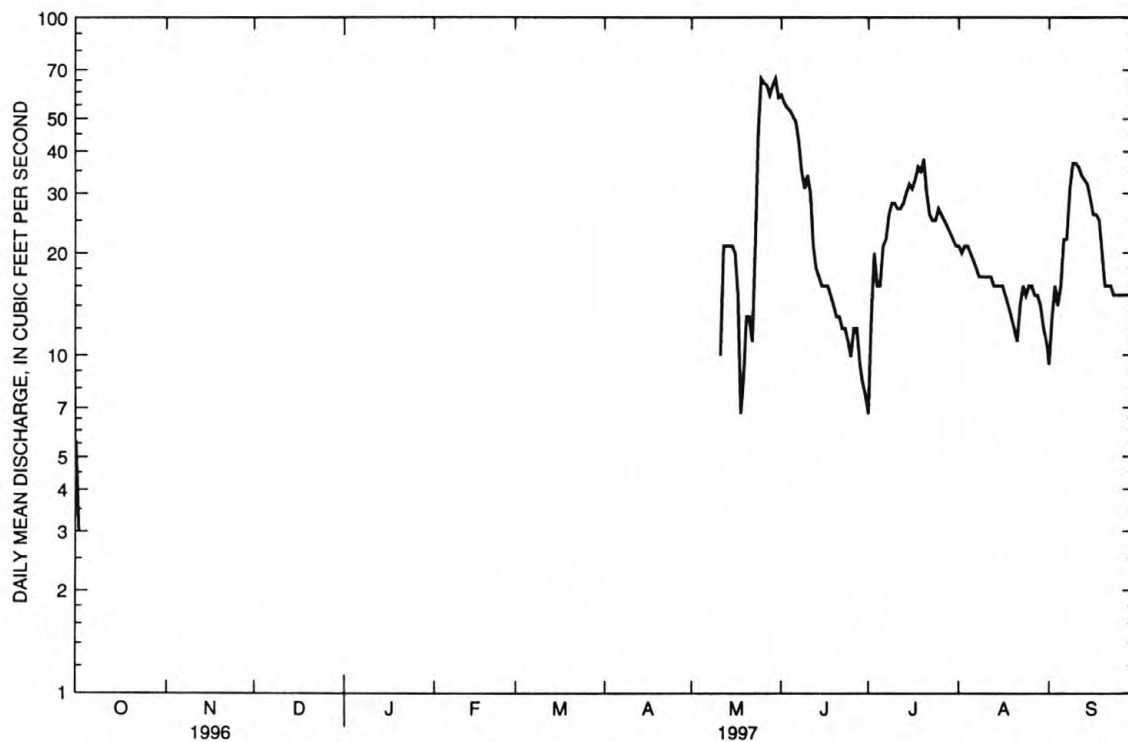
90 PERCENT EXCEEDS

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4.0

* During period of operation.

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



06227810 LETHAND DITCH AT HEADWORKS, NEAR RIVERTON, WY

YELLOWSTONE RIVER BASIN

06228000 WIND RIVER AT RIVERTON, WY

LOCATION.--Lat 43°00'38", long 108°22'32", 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 265 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. Datum of gage is 4,901.56 ft above sea level. See WSP 1729 for history of changes prior to Oct. 13, 1930. Oct. 13, 1930 to Apr. 15, 1968, water-stage recorder at site 280 ft upstream at datum 2.00 ft higher. Apr. 16 to Nov. 17, 1968, water-stage recorder at site 880 ft upstream at datum 2.00 ft higher. Nov. 18, 1968 to July 28, 1970, water-stage recorder at site 225 ft upstream at datum 2.00 ft higher. July 29, 1970 to Sept. 30, 1977, water-stage recorder at present site at datum 2.00 ft higher.

REMARKS.--Estimated daily discharges: Nov. 19 and Nov. 26 to Mar. 18. Records good except those for estimated daily discharges, which are poor. Some regulation by Bull Lake beginning in 1938 (see station 06224500) 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 waste water returns to river downstream from station through Fivemile and Muddy Creeks. Bureau of Reclamation data collection platform with satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123	567	450	460	400	340	378	132	3100	1850	1050	139
2	119	543	420	490	460	360	414	132	4950	1740	930	135
3	111	548	350	470	440	375	395	160	4840	1490	870	116
4	106	548	300	440	420	400	372	158	4310	1310	742	91
5	98	551	320	400	400	340	406	138	4810	1180	578	62
6	96	559	380	375	380	360	417	99	5440	1090	1100	57
7	93	491	440	350	360	380	379	111	5830	1130	1700	62
8	93	508	480	340	340	400	372	99	6100	1150	2000	63
9	93	528	540	340	320	425	389	101	6630	946	1880	86
10	90	547	540	375	300	450	385	120	9060	929	1800	113
11	88	533	500	320	300	480	369	242	9820	907	1910	140
12	86	520	480	290	290	460	353	410	8650	936	1790	225
13	86	517	460	270	310	420	350	258	6660	1150	1720	433
14	83	522	430	260	320	380	329	379	5950	987	1530	357
15	78	523	380	280	320	360	322	658	5560	693	1280	305
16	78	510	350	280	350	470	213	1080	5470	558	992	304
17	78	493	340	270	370	660	175	1520	5130	547	899	279
18	75	458	320	270	390	890	134	2060	4910	532	684	280
19	75	520	320	290	410	440	110	2440	6020	572	580	327
20	106	556	350	280	430	497	96	2110	6000	938	377	347
21	182	619	370	280	400	553	102	2140	5020	770	336	342
22	180	584	350	290	375	579	71	2300	4650	613	311	420
23	130	552	320	290	360	497	81	2370	4890	485	268	437
24	94	534	300	280	355	486	110	2460	4630	550	255	501
25	475	484	290	260	340	496	144	2780	4010	756	235	574
26	607	460	280	270	370	427	126	2470	3540	835	240	696
27	577	450	280	280	380	414	109	1800	2840	799	222	769
28	555	420	300	270	370	479	115	1480	2560	808	181	746
29	568	430	330	270	---	445	134	1400	2280	1060	157	723
30	589	460	360	300	---	404	152	1560	2100	1380	157	749
31	576	---	430	350	---	389	---	1940	---	1230	140	---
TOTAL	6388	15535	11760	9990	10260	14056	7502	35107	155760	29921	26914	9878
MEAN	206	518	379	322	366	453	250	1132	5192	965	868	329
MAX	607	619	540	490	460	890	417	2780	9820	1850	2000	769
MIN	75	420	280	260	290	340	71	99	2100	485	140	57
AC-FT	12670	30810	23330	19820	20350	27880	14880	69630	308900	59350	53380	19590

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1997, BY WATER YEAR (WY)

	MEAN	596	447	349	330	333	348	420	1241	2884	1762	700	494
MAX	1500	895	559	539	531	650	1234	4618	7194	5802	3052	1794	
(WY)	1952	1969	1972	1972	1948	1916	1943	1928	1921	1917	1930	1927	
MIN	152	222	200	151	196	74.9	53.8	72.6	68.6	20.3	42.8	35.7	
(WY)	1993	1941	1932	1938	1981	1981	1989	1989	1994	1994	1994	1988	

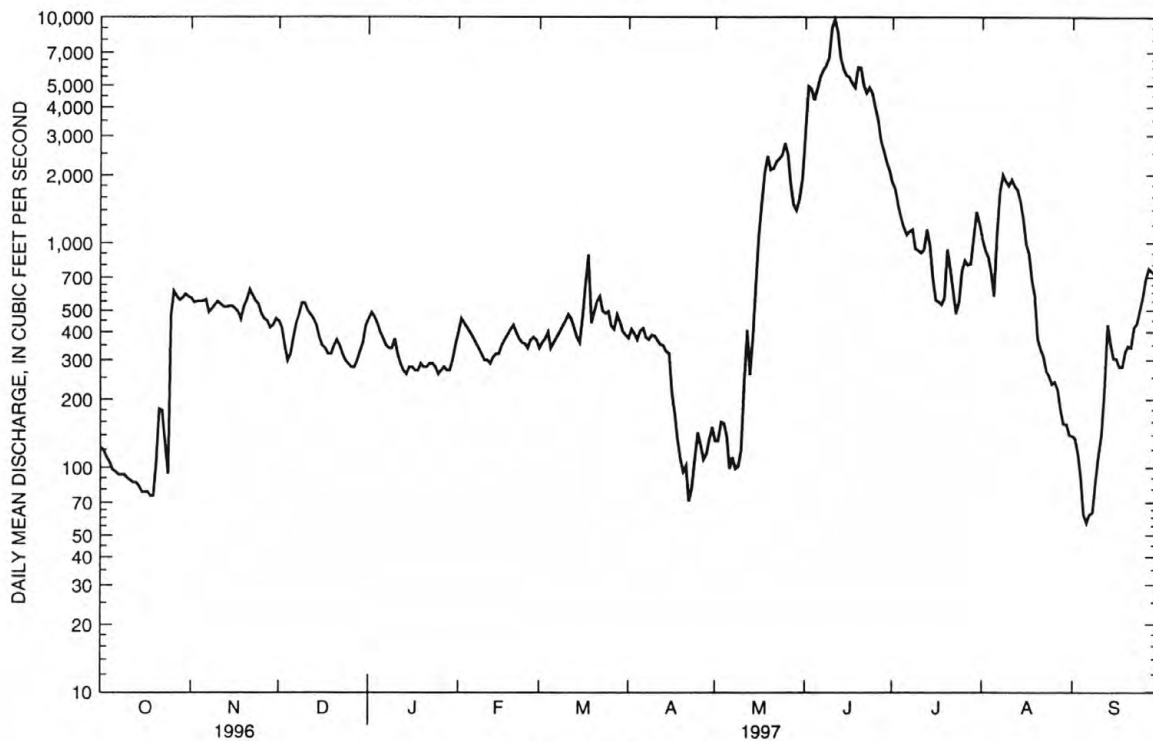
YELLOWSTONE RIVER BASIN

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06228000 WIND RIVER AT RIVERTON, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1912 - 1997	
ANNUAL TOTAL	247616		333071		--	
ANNUAL MEAN	677		913		816	
HIGHEST ANNUAL MEAN	--		--		1626	
LOWEST ANNUAL MEAN	--		--		195	
HIGHEST DAILY MEAN	5870	Jun 12	9820	Jun 11	11400	Jun 14 1935
LOWEST DAILY MEAN	61	Aug 29	57	Sep 6	9.8	May 28 1977
ANNUAL SEVEN-DAY MINIMUM	69	Aug 23	76	Sep 4	12	Jul 13 1977
INSTANTANEOUS PEAK FLOW	--		10100	Jun 10	13300 ^a	Jun 15 1935
INSTANTANEOUS PEAK STAGE	--		10.86	Jun 10	10.86	Jun 10 1997
ANNUAL RUNOFF (AC-FT)	491100		660600		591500	
10 PERCENT EXCEEDS	2100		2120		2090	
50 PERCENT EXCEEDS	355		414		402	
90 PERCENT EXCEEDS	86		112		172	

a Gage height, 10.15 ft, present datum from rating curve extended above 7,200 ft³/s.



06228000 WIND RIVER AT RIVERTON, WY

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 740 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 9	0515	*1,610	*7.01
June 19	0145	1,300	6.38

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	30	27	46	25	16	24	56	981	429	203	95
2	38	31	26	50	25	16	24	51	987	359	192	101
3	37	30	26	54	25	16	24	51	881	321	184	100
4	36	30	26	46	24	17	27	68	981	309	179	99
5	36	31	26	43	22	18	26	89	1150	327	277	96
6	35	21	27	41	20	17	26	125	1150	354	466	92
7	34	28	29	39	20	17	25	135	1130	384	364	87
8	33	30	31	37	19	17	25	114	1240	393	280	82
9	33	31	31	33	18	17	24	122	1490	396	240	77
10	33	29	32	30	19	17	22	163	1300	413	242	74
11	32	27	32	28	20	17	22	178	1150	416	284	77
12	31	27	33	26	20	17	21	160	891	393	293	105
13	30	27	36	25	20	16	21	220	862	335	258	103
14	29	26	37	26	19	15	22	278	730	272	221	97
15	28	20	38	27	19	16	22	361	698	254	194	94
16	28	19	35	26	18	17	23	417	693	272	177	129
17	25	20	34	25	18	18	29	470	748	293	167	112
18	24	27	35	25	18	18	36	567	948	298	155	96
19	32	33	35	25	18	21	56	491	1210	306	148	100
20	23	38	33	24	18	23	64	478	1090	315	142	97
21	28	35	34	23	21	26	59	550	893	301	135	100
22	33	38	32	23	17	25	51	585	835	280	131	115
23	32	37	33	24	17	27	43	568	878	260	128	123
24	28	32	34	25	17	27	37	612	745	260	123	113
25	33	34	33	24	17	24	49	579	568	284	124	101
26	31	32	35	25	17	28	56	508	489	286	126	92
27	30	24	37	26	17	33	66	422	511	265	123	89
28	31	26	38	28	17	28	84	383	512	243	118	84
29	38	27	40	29	---	26	74	428	477	265	111	80
30	33	26	42	28	---	26	59	539	452	264	106	77
31	30	---	43	27	---	26	---	705	---	225	99	---
TOTAL	984	866	1030	958	545	642	1141	10473	26670	9772	5990	2887
MEAN	31.7	28.9	33.2	30.9	19.5	20.7	38.0	338	889	315	193	96.2
MAX	40	38	43	54	25	33	84	705	1490	429	466	129
MIN	23	19	26	23	17	15	21	51	452	225	99	74
AC-FT	1950	1720	2040	1900	1080	1270	2260	20770	52900	19380	11880	5730

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1997, BY WATER YEAR (WY)

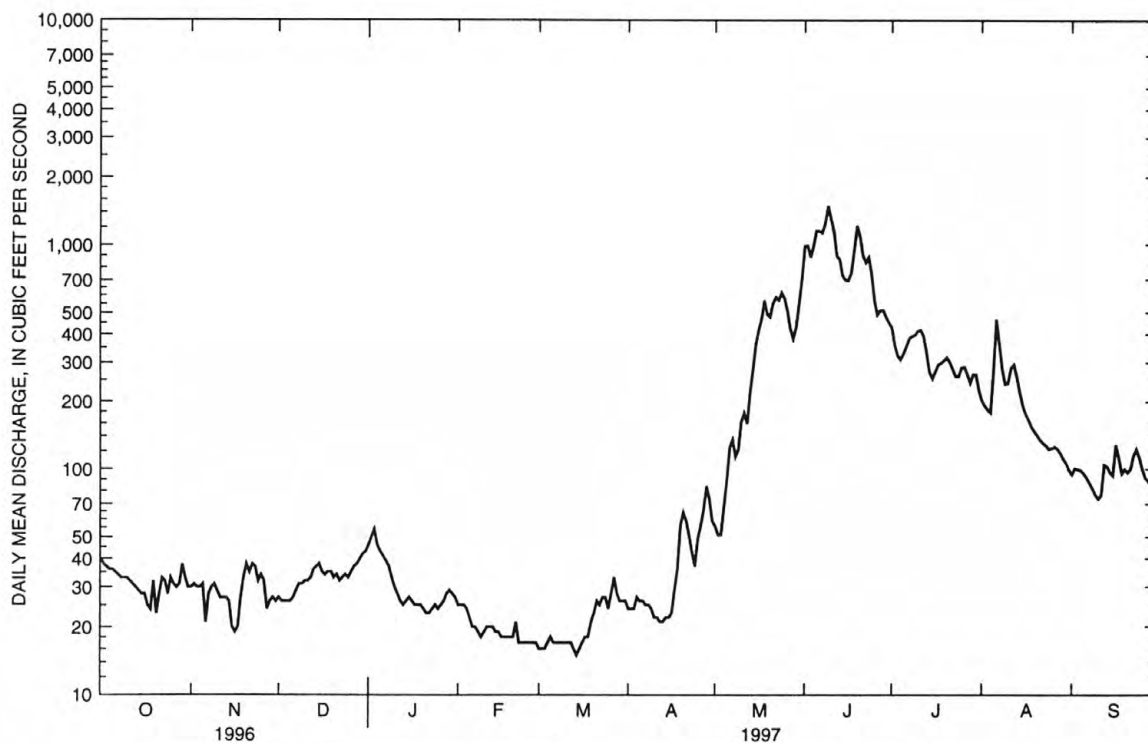
MEAN	42.3	29.2	23.5	17.1	14.2	17.4	50.2	252	592	327	112	57.1
MAX	94.3	48.4	34.6	30.9	26.2	34.1	94.6	403	1067	791	197	96.2
(WY)	1983	1991	1996	1997	1986	1986	1987	1987	1986	1995	1982	1997
MIN	14.5	15.7	11.8	6.05	6.72	9.60	29.2	111	242	81.0	30.7	20.0
(WY)	1989	1989	1977	1977	1977	1977	1982	1995	1994	1988	1988	1988

YELLOWSTONE RIVER BASIN

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

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1977 - 1997	
ANNUAL TOTAL	53651		61958		--	
ANNUAL MEAN	147		170		128	
HIGHEST ANNUAL MEAN	--		--		188	1986
LOWEST ANNUAL MEAN	--		--		71.2	1977
HIGHEST DAILY MEAN	1200	Jun 10	1490	Jun 9	1960	Jun 13 1991
LOWEST DAILY MEAN	16	Feb 27	15	Mar 14	4.5	Feb 1 1977
ANNUAL SEVEN-DAY MINIMUM	17	Feb 24	16	Mar 9	4.5	Feb 1 1977
INSTANTANEOUS PEAK FLOW	--		1610	Jun 9	2230	Jun 13 1991
INSTANTANEOUS PEAK STAGE	--		7.01	Jun 9	8.48	Jun 13 1991
ANNUAL RUNOFF (AC-FT)	106400		122900		92760	
10 PERCENT EXCEEDS	537		498		384	
50 PERCENT EXCEEDS	38		37		38	
90 PERCENT EXCEEDS	20		20		14	



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

YELLOWSTONE RIVER BASIN

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

LOCATION.--Lat 42°59'04", long 108°59'57", 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 sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Washakie Reservoir.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

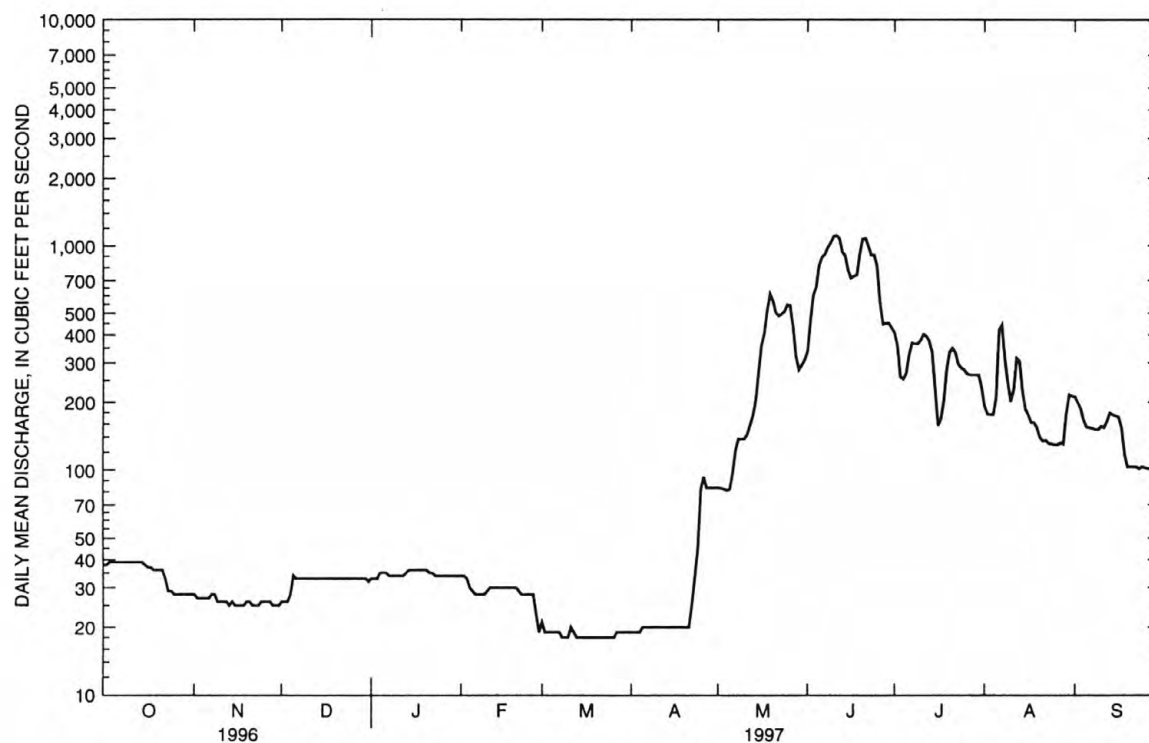
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	28	26	33	34	21	19	83	337	410	192	212
2	38	27	26	33	34	19	19	83	458	359	177	199
3	39	27	26	33	33	19	19	82	600	260	176	188
4	39	27	28	35	30	19	19	81	652	254	176	167
5	39	27	34	35	29	19	20	82	814	268	212	155
6	39	27	33	35	28	19	20	97	887	327	422	154
7	39	28	33	34	28	19	20	122	914	368	443	153
8	39	28	33	34	28	18	20	137	979	366	312	151
9	39	26	33	34	28	18	20	137	1030	365	245	151
10	39	26	33	34	29	18	20	137	1100	379	201	156
11	39	26	33	34	30	20	20	143	1110	402	228	154
12	39	26	33	34	30	19	20	158	1080	395	314	164
13	39	25	33	35	30	18	20	175	937	376	306	179
14	39	26	33	36	30	18	20	205	903	338	225	176
15	38	25	33	36	30	18	20	274	779	230	186	174
16	37	25	33	36	30	18	20	360	718	157	176	172
17	37	25	33	36	30	18	20	407	731	168	162	153
18	36	25	33	36	30	18	20	514	740	203	162	117
19	36	26	33	36	30	18	20	609	916	280	154	103
20	36	26	33	36	30	18	20	569	1070	335	139	103
21	36	25	33	35	29	18	20	504	1080	348	134	103
22	33	25	33	35	28	18	25	487	993	334	135	103
23	29	25	33	34	28	18	33	496	909	296	131	101
24	29	26	33	34	28	18	45	509	909	284	130	103
25	28	26	33	34	28	18	82	545	814	279	129	102
26	28	26	33	34	28	18	93	542	568	268	129	101
27	28	26	33	34	23	19	83	438	447	265	132	101
28	28	25	33	34	19	19	83	322	452	265	130	101
29	28	25	33	34	---	19	83	280	452	265	176	101
30	28	25	33	34	---	19	83	292	431	265	216	101
31	28	---	32	34	---	19	---	310	---	233	213	---
TOTAL	1087	780	997	1071	812	575	1026	9180	23810	9342	6263	4198
MEAN	35.1	26.0	32.2	34.5	29.0	18.5	34.2	296	794	301	202	140
MAX	39	28	34	36	34	21	93	609	1110	410	443	212
MIN	28	25	26	33	19	18	19	81	337	157	129	101
AC-FT	2160	1550	1980	2120	1610	1140	2040	18210	47230	18530	12420	8330

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1997, BY WATER YEAR (WY)

MEAN	33.1	27.4	23.4	19.8	15.3	14.7	33.2	184	548	338	171	95.5
MAX	65.3	40.6	36.7	34.5	29.0	21.8	71.4	296	897	774	264	146
(WY)	1996	1991	1991	1997	1997	1994	1994	1997	1991	1995	1993	1993
MIN	18.8	4.68	5.19	6.18	7.19	6.65	5.07	125	244	169	65.3	33.7
(WY)	1989	1989	1989	1989	1989	1991	1991	1990	1992	1994	1994	1994

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

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1989 - 1997	
ANNUAL TOTAL	51446		59141		--	
ANNUAL MEAN	141		162		126	
HIGHEST ANNUAL MEAN	--		--		177	1995
LOWEST ANNUAL MEAN	--		--		80.1	1994
HIGHEST DAILY MEAN	1050	Jun 12	1110	Jun 11	1930	Jun 13 1991
LOWEST DAILY MEAN	11	Mar 20	18	Mar 8-10, 13-26	3.5	Mar 17 1991
ANNUAL SEVEN-DAY MINIMUM	14	Feb 7	18	Mar 13	3.6	Mar 16 1991
INSTANTANEOUS PEAK FLOW	--		1120	Jun 11	2120	Jun 13 1991
INSTANTANEOUS PEAK STAGE	--		4.72	Jun 11	6.43	Jun 13 1991
ANNUAL RUNOFF (AC-FT)	102000		117300		90920	
10 PERCENT EXCEEDS	427		449		334	
50 PERCENT EXCEEDS	37		36		35	
90 PERCENT EXCEEDS	18		20		11	



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

YELLOWSTONE RIVER BASIN

06228510 RAY CANAL AT HEADWORKS, NEAR FORT WASHAKIE, WY

LOCATION.--Lat 43°00'02", long 108°55'56", 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 current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 5,710 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: May 16-19. 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 station was not in operation, is given below:

Oct. 8 . . . 2.11

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	---	---	---	---	---	---	---	222	284	222	217
2	---	---	---	---	---	---	---	---	210	266	213	212
3	---	---	---	---	---	---	---	---	182	226	212	204
4	---	---	---	---	---	---	---	---	189	222	211	193
5	---	---	---	---	---	---	---	---	215	225	225	181
6	---	---	---	---	---	---	---	---	233	249	288	180
7	---	---	---	---	---	---	---	---	233	286	257	178
8	---	---	---	---	---	---	---	---	223	293	229	176
9	---	---	---	---	---	---	---	---	206	289	212	176
10	---	---	---	---	---	---	---	---	204	296	198	180
11	---	---	---	---	---	---	---	---	224	295	199	180
12	---	---	---	---	---	---	---	---	255	278	228	187
13	---	---	---	---	---	---	---	---	238	269	227	201
14	---	---	---	---	---	---	---	---	240	254	193	201
15	---	---	---	---	---	---	---	---	234	205	179	201
16	---	---	---	---	---	---	---	31	230	154	178	203
17	---	---	---	---	---	---	---	107	231	194	168	191
18	---	---	---	---	---	---	---	107	234	222	164	158
19	---	---	---	---	---	---	---	107	238	268	168	142
20	---	---	---	---	---	---	---	118	238	298	169	139
21	---	---	---	---	---	---	---	132	230	287	174	141
22	---	---	---	---	---	---	---	148	224	269	183	144
23	---	---	---	---	---	---	---	167	230	259	183	136
24	---	---	---	---	---	---	---	169	267	256	182	129
25	---	---	---	---	---	---	---	170	278	254	176	129
26	---	---	---	---	---	---	---	171	253	250	171	126
27	---	---	---	---	---	---	---	162	274	249	170	125
28	---	---	---	---	---	---	---	153	289	249	169	124
29	---	---	---	---	---	---	---	181	291	250	190	122
30	---	---	---	---	---	---	---	211	286	249	220	121
31	---	---	---	---	---	---	---	216	---	241	219	---
TOTAL	17	---	---	---	---	---	---	2350	7101	7886	6177	4997
MEAN	17.0	---	---	---	---	---	---	147	237	254	199	167
MAX	17	---	---	---	---	---	---	216	291	298	288	217
MIN	17	---	---	---	---	---	---	31	182	154	164	121
AC-FT	34	---	---	---	---	---	---	4660	14080	15640	12250	9910

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1997, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	23.4	21.6	---	---	---	---	19.2	110	201
MAX	50.7	28.9	---	---	---	---	47.5	199	320
(WY)	1995	1995	---	---	---	---	1989	1992	1990
MIN	.81	14.2	---	---	---	---	.97	21.3	29.5
(WY)	1994	1993	---	---	---	---	1992	1991	1995

YELLOWSTONE RIVER BASIN

85

06228510 RAY CANAL AT HEADWORKS, NEAR FORT WASHAKIE, WY--Continued

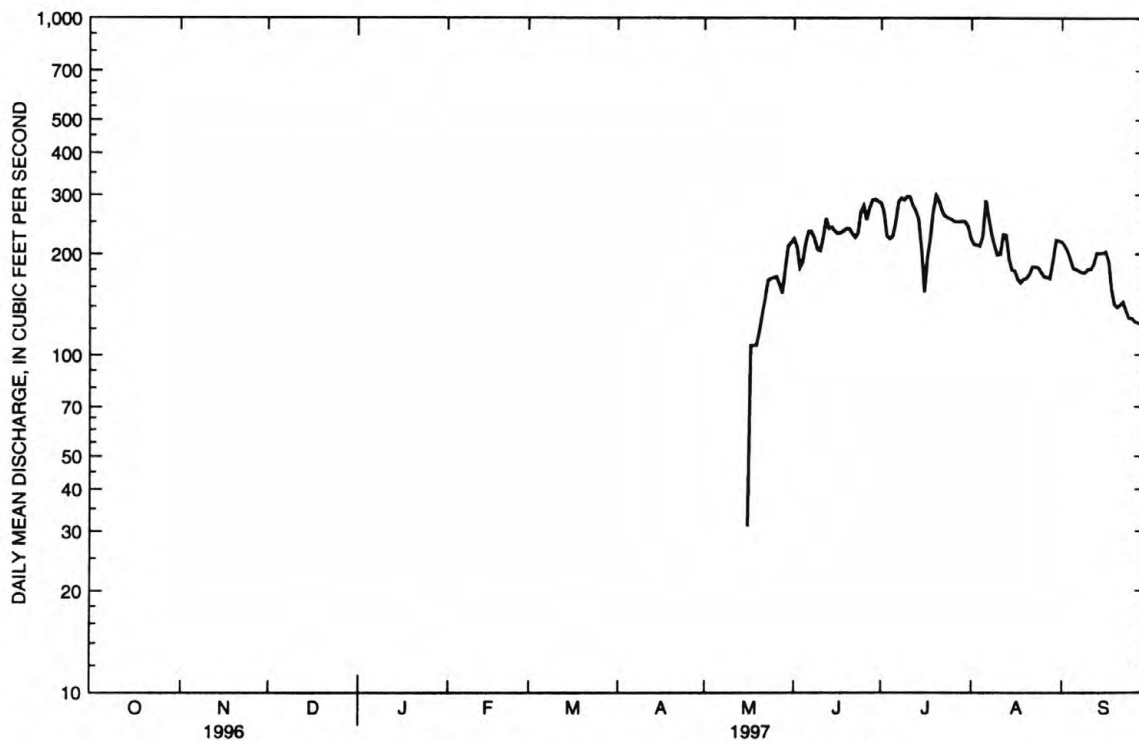
SUMMARY STATISTICS

FOR 1997 WATER YEAR*

WATER YEARS 1989 - 1997*

HIGHEST DAILY MEAN	298	Jul 20	390	Jun 29 1996
LOWEST DAILY MEAN	17	Oct 1	.00	Apr 1, 2 1991
INSTANTANEOUS PEAK FLOW	330	Jun 11	446	Jun 12 1996
INSTANTANEOUS PEAK STAGE	3.94	Jun 11	4.08	Jun 12 1996
10 PERCENT EXCEEDS	--		271	
50 PERCENT EXCEEDS	--		130	
90 PERCENT EXCEEDS	--		1.7	

* During period of operation.



06228510 RAY CANAL AT HEADWORKS, NEAR FORT WASHAKIE, WY

YELLOWSTONE RIVER BASIN

06228800 NORTH FORK LITTLE WIND RIVER NEAR FORT WASHAKIE, WY

LOCATION.--Lat 43°01'43", long 109°00'02", in NW¹/₄ SW¹/₄ SE¹/₄ 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 sea level, from topographic map. Prior to Oct. 21, 1993, at site 2,000 ft upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 1-7, Nov. 16 to Mar. 17, July 31, Aug. 1-3, 11-13, and Sept. 24-30. Records fair except those for estimated daily discharges, which are poor. Diversions for irrigation of 80 acres upstream from station. U.S. Geological Survey data collection platform with satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	40	29	26	22	27	45	89	795	434	240	109
2	47	41	27	26	22	27	43	86	886	407	220	108
3	47	40	26	27	21	26	41	81	771	372	195	111
4	46	40	25	27	20	27	44	97	748	343	180	111
5	46	40	24	26	19	26	44	117	875	329	257	109
6	45	34	22	25	18	25	44	138	955	323	450	109
7	45	37	24	23	17	26	43	157	997	324	427	108
8	43	38	26	22	16	27	42	141	1020	330	414	105
9	40	39	28	23	16	28	41	144	1140	336	343	102
10	40	38	29	21	16	29	37	168	1120	345	296	99
11	39	36	27	20	17	29	38	169	961	349	300	97
12	38	36	26	18	19	30	37	158	847	351	330	106
13	37	36	24	16	20	31	37	186	792	347	320	107
14	36	36	23	15	22	31	38	215	769	324	317	109
15	34	34	21	16	23	29	37	255	712	293	281	113
16	33	32	20	17	25	30	37	316	703	268	245	130
17	32	25	19	18	25	31	45	378	684	260	223	131
18	30	23	19	18	25	32	54	458	729	255	202	129
19	30	25	20	19	26	38	90	449	876	260	180	126
20	31	30	21	20	26	55	105	447	874	267	166	126
21	31	32	22	19	26	57	97	478	786	265	155	133
22	36	30	20	18	27	58	82	514	729	261	147	142
23	36	28	19	18	27	60	69	531	719	254	140	153
24	35	26	18	18	27	58	69	592	691	254	134	149
25	36	25	17	17	26	50	76	593	604	259	132	137
26	38	24	18	16	26	51	85	577	561	261	130	130
27	41	28	19	17	25	57	90	498	531	258	129	120
28	44	32	20	18	25	50	108	438	506	250	125	115
29	45	31	21	19	---	45	105	431	490	255	121	112
30	44	30	22	20	---	44	89	486	463	253	116	110
31	41	---	24	21	---	42	---	596	---	251	112	---
TOTAL	1214	986	700	624	624	1176	1812	9983	23334	9338	7027	3546
MEAN	39.2	32.9	22.6	20.1	22.3	37.9	60.4	322	778	301	227	118
MAX	48	41	29	27	27	60	108	596	1140	434	450	153
MIN	30	23	17	15	16	25	37	81	463	250	112	97
AC-FT	2410	1960	1390	1240	1240	2330	3590	19800	46280	18520	13940	7030

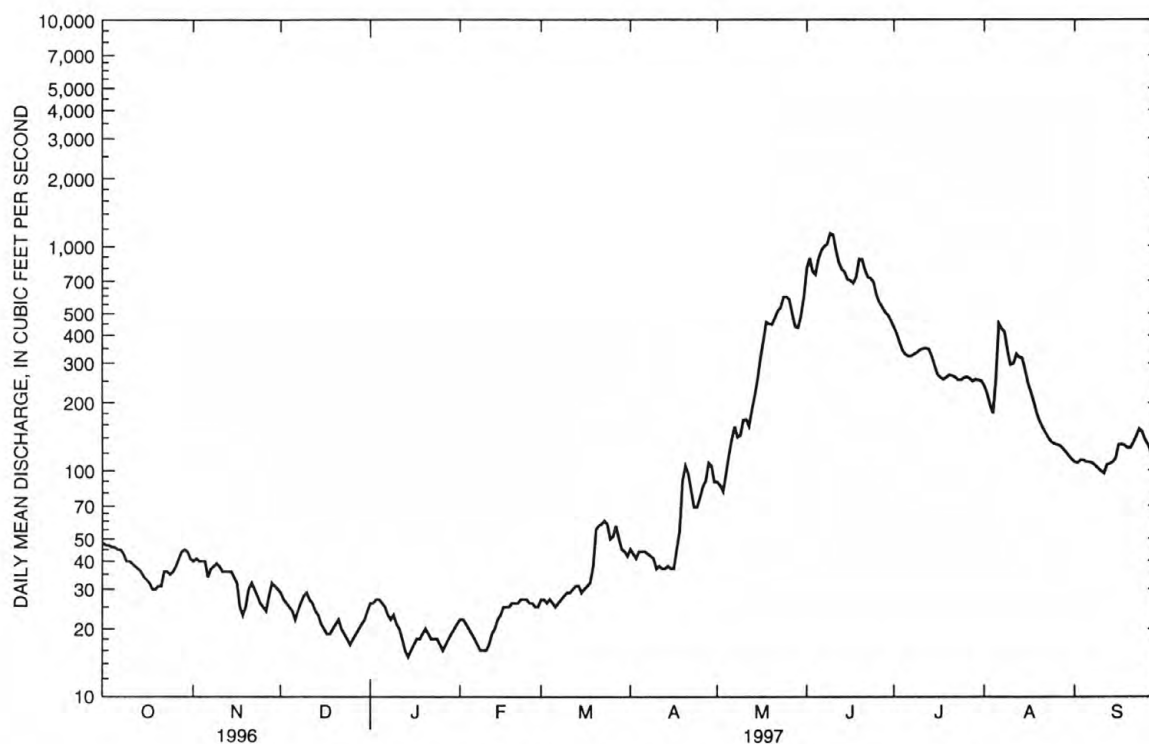
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1997, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	46.6	32.9	24.8	18.5	17.5	25.8	52.2	255	641
MAX	65.0	48.9	50.1	31.9	24.1	38.8	84.5	376	1006
(WY)	1996	1996	1996	1996	1996	1995	1994	1993	1991
MIN	13.5	14.7	13.6	8.95	8.52	16.1	27.5	143	212
(WY)	1989	1989	1989	1989	1989	1990	1993	1990	1992

06228800 NORTH FORK LITTLE WIND RIVER NEAR FORT WASHAKIE, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1989 - 1997	
ANNUAL TOTAL	63697		60364		--	
ANNUAL MEAN	174		165		138	
HIGHEST ANNUAL MEAN	--		--		194	1995
LOWEST ANNUAL MEAN	--		--		76.1	1992
HIGHEST DAILY MEAN	1420	Jun 10	1140	Jun 9	2070	Jun 13 1991
LOWEST DAILY MEAN	17	Feb 3	15	Jan 14	6.5	Feb 3 1989
ANNUAL SEVEN-DAY MINIMUM	19	Dec 22	17	Jan 12	7.4	Feb 2 1989
INSTANTANEOUS PEAK FLOW	--		1270	Jun 9	2360 ^a	Jun 13 1991
INSTANTANEOUS PEAK STAGE	--		6.59	Jun 9	6.94	Jun 15 1995
ANNUAL RUNOFF (AC-FT)	126300		119700		99760	
10 PERCENT EXCEEDS	655		488		387	
50 PERCENT EXCEEDS	44		45		45	
90 PERCENT EXCEEDS	23		20		16	

a Gage height, 6.20 ft, site and datum then in use.



06228800 NORTH FORK LITTLE WIND RIVER NEAR FORT WASHAKIE, WY

YELLOWSTONE RIVER BASIN

06229900 TROUT CREEK NEAR FORT WASHAKIE, WY

LOCATION.--Lat 42°57'04", long 108°56'54", 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 sea level, from topographic map. Oct. 1, 1961 to Sept. 30, 1968, crest-stage gage at site 100 ft downstream at datum 1.05 ft lower. Oct. 1, 1969 to Sept. 30, 1984, crest-stage gage at present site at datum 1.05 ft lower.

REMARKS.--No estimated daily discharges. Records good. Results of discharge measurements, in cubic feet per second, made during the period station was not in operation, are given below:

Oct. 03 . . . 5.01
Nov. 13 . . . 5.17
Jan. 07 . . . 3.64
Mar. 06 . . . 5.07

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	7.3	4.2	64	15	7.7	7.6
2	---	---	---	---	---	---	6.7	4.1	63	15	7.4	7.9
3	---	---	---	---	---	---	6.3	4.0	58	14	7.2	7.9
4	---	---	---	---	---	---	6.2	4.0	58	14	7.1	7.7
5	---	---	---	---	---	---	5.9	4.2	59	13	8.5	7.9
6	---	---	---	---	---	---	5.0	4.6	56	13	11	7.7
7	---	---	---	---	---	---	4.5	6.0	52	13	9.3	7.6
8	---	---	---	---	---	---	4.3	6.0	52	12	8.7	7.8
9	---	---	---	---	---	---	4.3	6.0	50	12	8.3	7.9
10	---	---	---	---	---	---	4.3	6.9	45	11	8.3	7.8
11	---	---	---	---	---	---	4.3	8.6	40	10	8.6	7.9
12	---	---	---	---	---	---	4.0	9.1	37	10	9.1	7.8
13	---	---	---	---	---	---	3.9	12	35	10	8.8	8.0
14	---	---	---	---	---	---	3.8	15	33	9.8	8.7	7.9
15	---	---	---	---	---	---	3.3	20	31	9.3	8.4	8.0
16	---	---	---	---	---	---	3.2	27	29	9.3	8.2	8.4
17	---	---	---	---	---	---	3.2	35	27	9.4	8.2	8.1
18	---	---	---	---	---	---	3.4	40	26	9.5	8.1	8.2
19	---	---	---	---	---	---	3.7	34	26	10	8.1	8.9
20	---	---	---	---	---	---	3.8	28	24	12	8.1	8.6
21	---	---	---	---	---	---	4.0	27	23	10	8.2	9.1
22	---	---	---	---	---	---	3.6	30	22	9.5	8.1	9.4
23	---	---	---	---	---	---	3.5	31	21	9.0	8.1	9.4
24	---	---	---	---	---	---	3.8	33	20	8.8	7.9	9.2
25	---	---	---	---	---	---	3.9	35	19	8.7	7.9	9.1
26	---	---	---	---	---	---	3.9	37	18	8.4	8.0	9.1
27	---	---	---	---	---	---	3.7	37	17	7.9	8.2	9.0
28	---	---	---	---	---	---	3.6	37	16	7.9	8.0	8.8
29	---	---	---	---	---	---	3.9	40	16	8.4	7.9	8.8
30	---	---	---	---	---	---	4.1	48	16	8.2	7.9	8.8
31	---	---	---	---	---	---	---	56	---	8.0	7.7	---
TOTAL	---	---	---	---	---	---	129.4	689.7	1053	326.1	255.7	250.3
MEAN	---	---	---	---	---	---	4.31	22.2	35.1	10.5	8.25	8.34
MAX	---	---	---	---	---	---	7.3	56	64	15	11	9.4
MIN	---	---	---	---	---	---	3.2	4.0	16	7.9	7.1	7.6
AC-FT	---	---	---	---	---	---	257	1370	2090	647	507	496

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1997, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	5.79	5.28	4.79	4.57	4.38	4.54	5.38	19.0
MAX	8.45	7.37	6.26	5.97	5.15	5.52	7.47	32.4
(WY)	1996	1996	1996	1996	1996	1996	1991	1995
MIN	3.77	4.12	3.78	3.71	3.44	3.78	4.05	12.3
(WY)	1991	1991	1995	1991	1991	1991	1991	1992

YELLOWSTONE RIVER BASIN

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06229900 TROUT CREEK NEAR FORT WASHAKIE, WY--Continued

SUMMARY STATISTICS

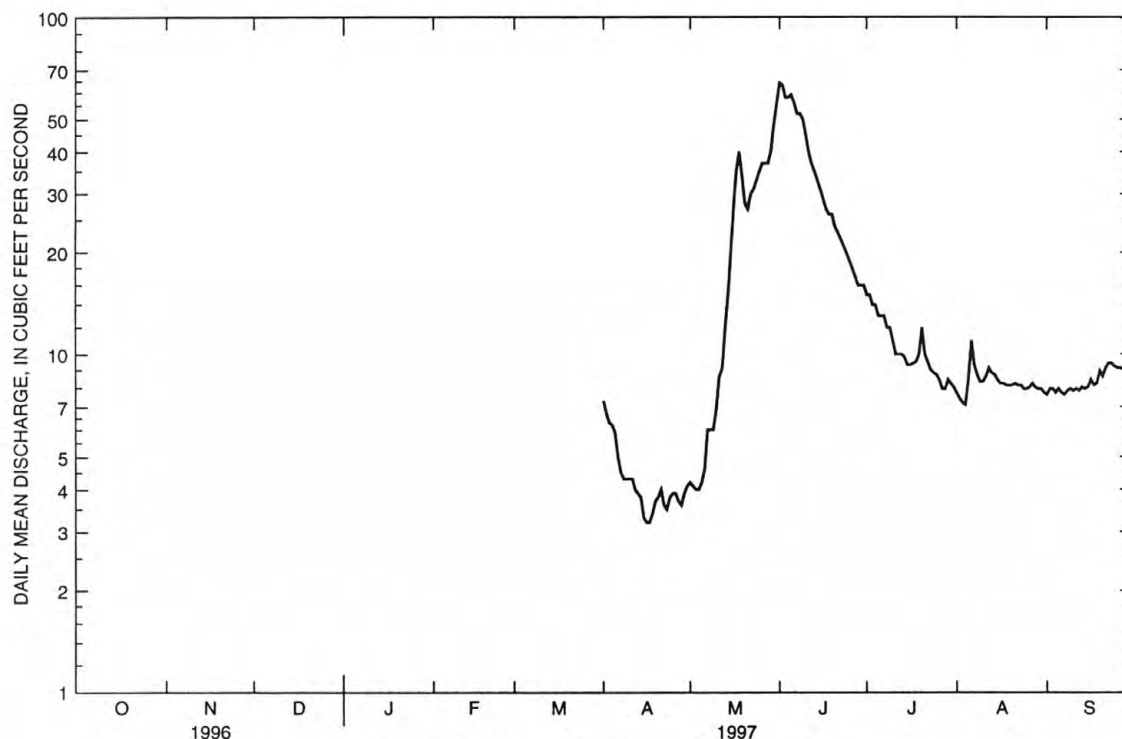
FOR 1997 WATER YEAR*

WATER YEARS 1990 - 1996

ANNUAL MEAN	--	10.4	
HIGHEST ANNUAL MEAN	--	17.3	1995
LOWEST ANNUAL MEAN	--	5.95	1994
HIGHEST DAILY MEAN	64	316	Jun 2 1991
LOWEST DAILY MEAN	3.2	3.0	Dec 22 1990
ANNUAL SEVEN-DAY MINIMUM	--	3.3	Feb 14 1991
INSTANTANEOUS PEAK FLOW	70	500 ^a	Jun 2 1991#
INSTANTANEOUS PEAK STAGE	5.48	7.49	Jun 2 1991#
ANNUAL RUNOFF (AC-FT)	--	7550	
10 PERCENT EXCEEDS	--	17	
50 PERCENT EXCEEDS	--	5.5	
90 PERCENT EXCEEDS	--	3.8	

* During period of operation.

For period of record, 1961-68, 1970-84, 1990 to current year.

a From rating curve extended above 160 ft³/s on basis of slope-conveyance computation of peak flow.

06229900 TROUT CREEK NEAR FORT WASHAKIE, WY

YELLOWSTONE RIVER BASIN

06231930 BALDWIN CREEK BELOW DICKINSON CREEK, AT LANDER, WY

LOCATION.--Lat 42°51'00", long 108°43'25", in NW¹/₄ SW¹/₄ NW¹/₄ sec.8, T.33 N., R.99 W., Fremont County, Hydrologic Unit 10080003, 100 ft downstream from mouth of Dickinson Creek and 0.5 mi north of Lander.

PERIOD OF RECORD.--October 1989 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
NOV 26...	1130	11	1140	8.4	1.0	-1.0	635	12.5	106	56	1.7
MAR 20...	1250	8.9	1060	8.4	7.0	22.0	630	11.0	110	143	3.4
MAY 20...	1125	76	370	8.3	7.5	20.5	630	10.0	101	383	79
JUN 17...	1115	99	443	8.0	11.0	20.5	630	9.2	101	148	40

06232600 POPO AGIE RIVER AT HUDSON SIDING, NEAR LANDER, WY

LOCATION.--Lat 42°51'59", long 108°41'04", in NW¹/₄ NE¹/₄ sec.30, T.2 S., R.2 E., Fremont County, Hydrologic Unit 10080003, Wind River Indian Reservation, on left bank at bridge on private road, 1.2 mi downstream from North Popo Agie River, and 3.2 mi northeast of Lander.

PERIOD OF RECORD.--October 1984 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
NOV 26...	1350	101	565	8.8	1.0	5.0	638
MAR 20...	1030	71	580	8.4	5.5	14.0	633
JUN 18...	0945	1240	115	8.2	11.0	18.5	635
AUG 28...	1150	145	535	8.5	21.0	27.5	630

DATE	TIME	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
NOV 26...	12.4	104	K2	<0.01	0.06	<0.01	0.02
MAR 20...	11.2	107	K18	<0.01	0.12	0.18	0.05
JUN 18...	9.3	101	220	<0.01	0.09	<0.01	<0.01
AUG 28...	9.8	134	130	<0.01	0.06	<0.01	0.03

K-Results based on colony count outside the acceptable range (non-ideal colony count).

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LOCATION.--Lat 42°43'00", long 108°38'34", in NE 1/4 SE 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.

REMARKS.--No estimated daily discharges. 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. 01	.	.	.	50.4
Mar. 31	.	.	.	27.3

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 350 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 25	0200	492	4.07
June 8	0900	*841	*4.89

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	27	60	564	244	86	40
2	---	---	---	---	---	---	26	60	583	217	82	39
3	---	---	---	---	---	---	28	58	486	194	79	40
4	---	---	---	---	---	---	31	70	545	187	75	40
5	---	---	---	---	---	---	28	82	644	177	93	39
6	---	---	---	---	---	---	29	97	659	174	131	39
7	---	---	---	---	---	---	27	116	643	171	120	39
8	---	---	---	---	---	---	26	121	802	165	109	38
9	---	---	---	---	---	---	26	123	762	160	99	51
10	---	---	---	---	---	---	25	148	727	159	89	68
11	---	---	---	---	---	---	25	171	726	162	91	70
12	---	---	---	---	---	---	25	162	632	157	99	73
13	---	---	---	---	---	---	26	196	544	141	91	72
14	---	---	---	---	---	---	25	242	462	128	80	70
15	---	---	---	---	---	---	25	293	479	120	75	68
16	---	---	---	---	---	---	24	358	429	118	70	72
17	---	---	---	---	---	---	28	407	436	116	65	72
18	---	---	---	---	---	---	39	435	444	114	65	68
19	---	---	---	---	---	---	43	387	491	116	63	78
20	---	---	---	---	---	---	53	378	532	114	57	77
21	---	---	---	---	---	---	56	400	489	111	55	77
22	---	---	---	---	---	---	50	427	460	108	51	82
23	---	---	---	---	---	---	43	436	468	103	50	80
24	---	---	---	---	---	---	46	459	410	102	48	77
25	---	---	---	---	---	---	48	456	342	102	48	74
26	---	---	---	---	---	---	50	444	302	99	50	72
27	---	---	---	---	---	---	51	383	290	96	50	70
28	---	---	---	---	---	---	61	334	280	104	45	67
29	---	---	---	---	---	---	65	333	265	104	43	66
30	---	---	---	---	---	---	58	366	254	101	43	65
31	---	---	---	---	---	---	---	423	---	92	42	---
TOTAL	---	---	---	---	---	---	1114	8425	15150	4256	2244	1883
MEAN	---	---	---	---	---	---	37.1	272	505	137	72.4	62.8
MAX	---	---	---	---	---	---	65	459	802	244	131	82
MIN	---	---	---	---	---	---	24	58	254	92	42	38
AC-FT	---	---	---	---	---	---	2210	16710	30050	8440	4450	3730

MEAN	35.0	29.7	25.6	23.4	23.7	24.6	43.9	188	335	132	51.5	41.0
MAX	49.0	41.8	35.8	32.9	42.5	33.9	76.6	334	720	332	98.6	62.6
(WY)	1948	1951	1951	1948	1962	1948	1952	1952	1965	1965	1950	1950
MIN	22.5	21.4	17.5	13.9	17.4	18.8	27.4	85.1	92.9	34.5	21.9	23.0
(WY)	1961	1963	1960	1963	1960	1957	1957	1959	1960	1961	1960	1958

YELLOWSTONE RIVER BASIN

06233000 LITTLE POPO AGIE RIVER NEAR LANDER, WY--Continued

SUMMARY STATISTICS

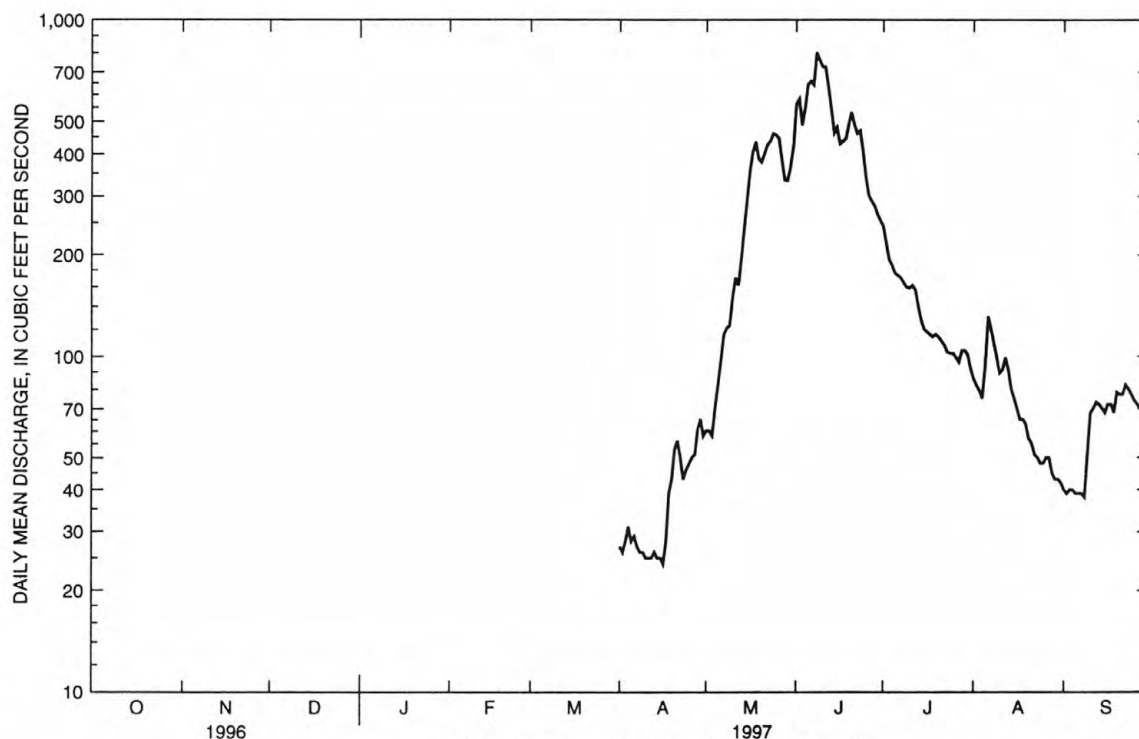
FOR 1997 WATER YEAR*

WATER YEARS 1946 - 1971*

ANNUAL MEAN	--		80.4	
HIGHEST ANNUAL MEAN	--		131	1965
LOWEST ANNUAL MEAN	--		37.0	1960
HIGHEST DAILY MEAN	802	Jun 8	1590	Jun 16 1963
LOWEST DAILY MEAN	24	Apr 16	12	Jan 20, 21, Feb 26 to Mar 2 1960, Jan 10, 11, 18, 19 1963#
ANNUAL SEVEN-DAY MINIMUM	--		12	Feb 25 1960
INSTANTANEOUS PEAK FLOW	841	Jun 8	2010	Jun 16 1963#
INSTANTANEOUS PEAK STAGE	4.89	Jun 8	6.64	Jun 16 1963#
ANNUAL RUNOFF (AC-FT)	--		58230	
10 PERCENT EXCEEDS	--		213	
50 PERCENT EXCEEDS	--		34	
90 PERCENT EXCEEDS	--		21	

* During period of operation.

For period of record through 1997.



06233000 LITTLE POPO AGIE RIVER NEAR LANDER, WY

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LOCATION.--Lat 42°59'51", long 108°22'29", in NE¹/₄ NW¹/₄ 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.

WATER-DISCHARGE RECORDS

REVISED RECORDS.--WSP 1729: Drainage area.

REMARKS.--Estimated daily discharges: Nov. 19, 20 and Nov. 26 to Mar. 16. Records good except those for estimated daily discharges, which are poor. Diversions for irrigation of about 62,900 acres upstream from station. Bureau of Reclamation data collection platform with satellite telemetry at station.

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 10	1900	*5.600	*7.64

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

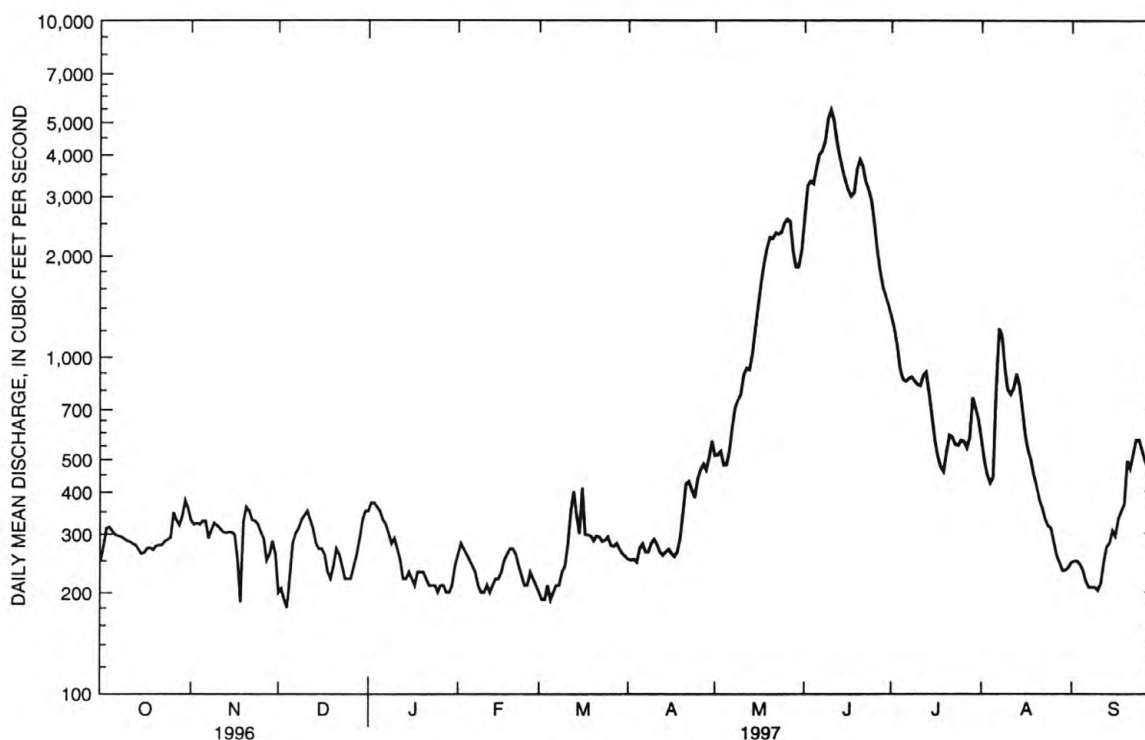
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1997, BY WATER YEAR (WY)

MEAN	323	281	213	187	211	265	366	1111	2422	1000	269	261
MAX	728	501	351	302	728	427	1044	2351	5109	3345	699	1323
(WY)	1983	1974	1974	1974	1962	1974	1973	1958	1983	1995	1965	1973
MIN	115	174	129	95.0	123	181	148	242	288	111	58.4	82.5
(WY)	1989	1989	1959	1961	1959	1989	1989	1960	1977	1994	1960	1994

YELLOWSTONE RIVER BASIN

06235500 LITTLE WIND RIVER NEAR RIVERTON, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1941 - 1997	
ANNUAL TOTAL	204636		255194		--	
ANNUAL MEAN	559		699		577	
HIGHEST ANNUAL MEAN	--		--		1021	
LOWEST ANNUAL MEAN	--		--		236	
HIGHEST DAILY MEAN	4010	Jun 11	5450	Jun 10	12800	Jun 17 1963
LOWEST DAILY MEAN	139	Aug 16	180	Dec 4	41	Aug 7 1960
ANNUAL SEVEN-DAY MINIMUM	151	Aug 24	199	Feb 28	46	Aug 5 1960
INSTANTANEOUS PEAK FLOW	--		5600		14700	
INSTANTANEOUS PEAK STAGE	--		7.64		10.85	
ANNUAL RUNOFF (AC-FT)	405900		506200		417900	
10 PERCENT EXCEEDS	1480		2090		1450	
50 PERCENT EXCEEDS	300		310		265	
90 PERCENT EXCEEDS	172		211		148	



06235500 LITTLE WIND RIVER NEAR RIVERTON, WY

YELLOWSTONE RIVER BASIN

95

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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML) (31625)	
NOV 25...	1345	289	805	8.5	2.0	6.0	640	12.1	105	K1
MAR 20...	1430	285	849	8.3	8.0	19.0	640	10.0	101	K19
JUN 18...	1110	3050	199	8.1	15.0	19.5	640	8.4	100	100
AUG 28...	1315	240	730	8.7	21.5	29.0	640	8.1	110	60

K-Results based on colony count outside the acceptable range (non-ideal colony count).

YELLOWSTONE RIVER BASIN

06236100 WIND RIVER ABOVE BOYSEN RESERVOIR, NEAR SHOSHONI, WY

LOCATION.--Lat 43°07'45", long 108°13'24", in SE¹/₄ SE¹/₄ SE¹/₄ 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 sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 27 to Mar. 17. 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. Wind River Indian Reservation data collection platform with satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

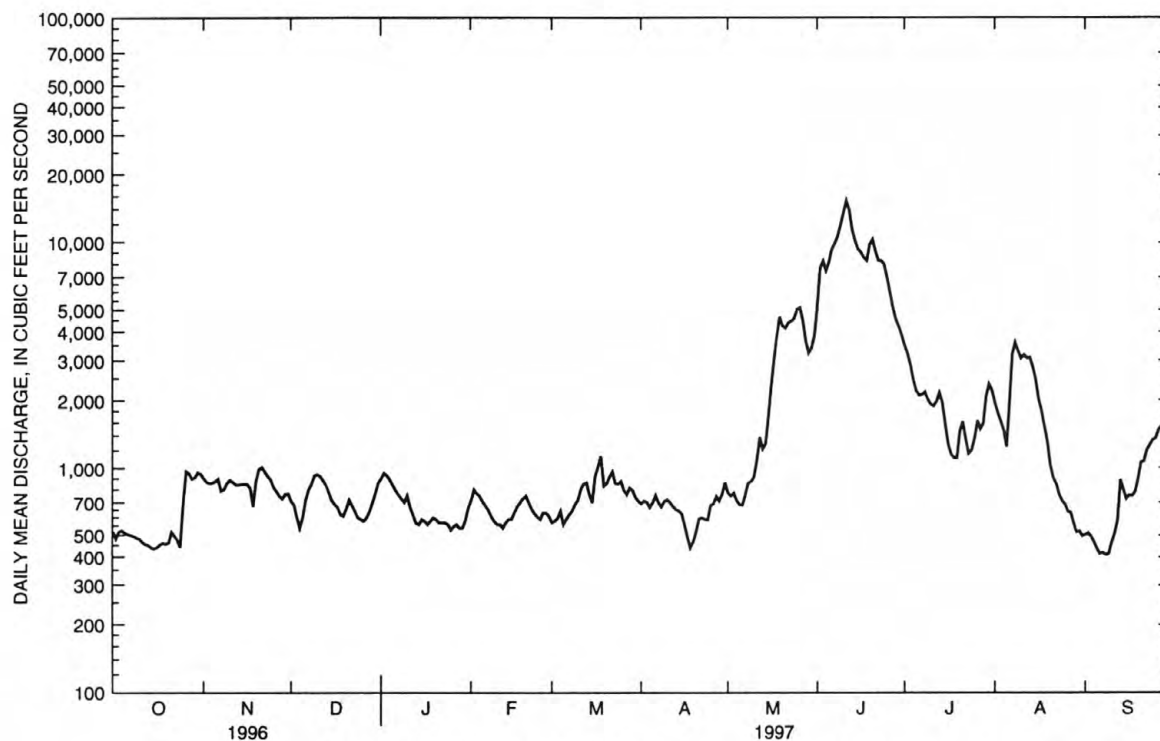
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	518	901	710	900	720	570	693	776	5280	3480	1950	504
2	482	866	685	950	800	580	712	750	7730	3220	1750	512
3	517	855	600	930	770	595	703	771	8250	2870	1610	495
4	524	858	540	890	750	640	666	716	7510	2460	1470	467
5	512	874	600	840	710	560	698	685	8160	2200	1240	437
6	503	895	720	795	680	590	753	683	9330	2100	1930	415
7	499	789	800	760	650	617	700	761	9860	2120	3180	419
8	494	801	850	730	610	640	670	856	10600	2170	3580	411
9	486	855	930	704	580	685	708	870	12000	2010	3290	414
10	480	884	940	755	560	720	721	911	13600	1920	3060	466
11	464	866	920	670	560	800	702	1080	15300	1880	3160	508
12	454	844	880	620	540	850	671	1370	14000	1970	3060	581
13	451	842	840	570	570	860	652	1220	11400	2150	3080	885
14	439	846	780	560	590	760	645	1280	10200	1960	2800	801
15	435	850	720	590	590	700	626	1700	9340	1550	2470	727
16	440	846	690	580	630	920	558	2330	9060	1270	2020	754
17	453	814	670	560	670	1010	492	3050	8590	1150	1790	750
18	461	673	620	580	700	1130	441	3850	8310	1110	1530	781
19	455	877	610	600	730	831	467	4660	9780	1110	1310	894
20	462	989	660	590	750	852	517	4250	10300	1460	1030	1060
21	515	1010	720	570	700	916	591	4160	9170	1600	897	1070
22	496	964	680	570	655	962	599	4400	8320	1350	850	1200
23	476	921	640	570	625	855	590	4470	8280	1160	757	1260
24	441	889	600	560	605	849	586	4600	8000	1200	712	1330
25	695	822	590	530	590	872	680	5060	7000	1350	688	1350
26	968	787	580	550	630	792	692	5130	6030	1620	638	1480
27	948	750	600	560	630	760	745	4500	5100	1490	632	1530
28	894	730	640	540	610	813	714	3670	4540	1570	565	1460
29	906	765	700	540	---	795	763	3230	4220	2070	517	1430
30	956	770	770	580	---	741	861	3390	3870	2350	522	1410
31	944	---	860	660	---	712	---	3860	---	2220	497	---
TOTAL	17768	25433	22145	20404	18205	23977	19616	79039	263130	58140	52585	25801
MEAN	573	848	714	658	650	773	654	2550	8771	1875	1696	860
MAX	968	1010	940	950	800	1130	861	5130	15300	3480	3580	1530
MIN	435	673	540	530	540	560	441	683	3870	1110	497	411
AC-FT	35240	50450	43920	40470	36110	47560	38910	156800	521900	115300	104300	51180

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1997, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	626	748	554	549	564	684	597	1708
MAX	862	904	719	665	755	806	783	3445
(WY)	1996	1996	1996	1996	1996	1994	1996	1991
MIN	393	631	442	356	361	557	398	513
(WY)	1993	1993	1994	1993	1994	1991	1992	1990

06236100 WIND RIVER ABOVE BOYSEN RESERVOIR, NEAR SHOSHONI, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1990 - 1997
ANNUAL TOTAL	485287	626243	--
ANNUAL MEAN	1326	1716	1272
HIGHEST ANNUAL MEAN	--	--	1887
LOWEST ANNUAL MEAN	--	--	551
HIGHEST DAILY MEAN	10400	15300	17900
LOWEST DAILY MEAN	336	411	152
ANNUAL SEVEN-DAY MINIMUM	372	433	156
INSTANTANEOUS PEAK FLOW	--	15700	18700
INSTANTANEOUS PEAK STAGE	--	8.74	9.31
ANNUAL RUNOFF (AC-FT)	962600	1242000	921800
10 PERCENT EXCEEDS	3910	4230	2470
50 PERCENT EXCEEDS	719	789	633
90 PERCENT EXCEEDS	440	516	379



06236100 WIND RIVER ABOVE BOYSEN RESERVOIR, NEAR SHOSHONI, WY

YELLOWSTONE RIVER BASIN

06236100 WIND RIVER ABOVE BOYSEN RESERVOIR, NEAR SHOSHONI, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: April 1991 to current year (irrigation season only).

INSTRUMENTATION: Sediment pumping sampler set for once or twice daily.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean during period of operation, 5,630 mg/L, June 13, 1991; minimum daily mean during period of operation, 19 mg/L, Aug. 6, 17, 1996.

SEDIMENT LOADS: Maximum daily during period of operation, 242,000 tons, June 13, 1991; minimum daily during period of operation, 8.3 tons, July 20, 1994.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean during period of operation, 1,870 mg/L, June 11; minimum daily mean during period of operation, 29 mg/L, July 18.

SEDIMENT LOADS: Maximum daily during period of operation, 77,200 tons, June 11; minimum daily during period of operation, 87 tons, July 18.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)
JUN 11...	1330	15200	15.0	67	82	95	100

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	177	371	739	10500	329	3090	184	969	---	---
2	---	---	108	219	930	19400	256	2230	135	638	---	---
3	---	---	140	291	888	19800	365	2830	107	465	---	---
4	---	---	143	276	577	11700	274	1820	95	377	---	---
5	---	---	142	263	570	12600	194	1150	81	271	---	---
6	---	---	110	203	737	18600	161	913	199	1040	---	---
7	---	---	132	271	667	17800	137	784	454	3900	---	---
8	---	---	199	460	840	24000	123	721	550	5320	---	---
9	---	---	246	578	1380	44700	137	743	436	3870	---	---
10	---	---	277	681	1420	52100	117	607	284	2350	---	---
11	---	---	306	892	1870	77200	86	437	212	1810	---	---
12	---	---	394	1460	892	33700	70	372	---	---	---	---
13	---	---	570	1880	908	27900	75	435	---	---	---	---
14	---	---	680	2350	998	27500	78	413	---	---	---	---
15	---	---	840	3860	774	19500	73	306	---	---	---	---
16	---	---	955	6010	730	17900	52	178	---	---	---	---
17	---	---	1260	10400	720	16700	38	118	---	---	---	---
18	---	---	1310	13600	704	15800	29	87	---	---	---	---
19	---	---	1190	15000	976	25800	30	90	---	---	---	---
20	---	---	1010	11600	1050	29200	62	244	---	---	---	---
21	---	---	950	10700	765	18900	190	821	---	---	---	---
22	---	---	915	10900	690	15500	146	532	---	---	---	---
23	---	---	830	10000	640	14300	52	163	---	---	---	---
24	---	---	738	9170	643	13900	33	107	---	---	---	---
25	---	---	690	9430	633	12000	86	313	---	---	---	---
26	---	---	620	8590	627	10200	233	1020	---	---	---	---
27	---	---	450	5470	614	8450	180	724	---	---	---	---
28	---	---	287	2840	516	6330	190	805	---	---	---	---
29	---	---	208	1810	406	4630	409	2290	---	---	---	---
30	---	---	260	2380	343	3580	326	2070	---	---	---	---
31	---	---	410	4270	---	---	379	2270	---	---	---	---
TOTAL	---	---	---	146225	---	630190	---	28683	---	---	---	---

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LOCATION.--Lat 43°18'05", long 108°42'08", 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.

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 sea level, from topographic map. Aug. 27, 1948, to Mar. 28, 1950, at site 0.2 mi downstream at different datum. Mar. 29, 1950, to Apr. 23, 1974, at site 325 ft downstream at present datum. Apr. 24, 1974, to September 30, 1975, at site 25 ft downstream at present datum.

REMARKS.--Estimated daily discharges: Nov. 5-7, 16-18, 24, 27, Nov. 29 to Dec. 1, Dec. 5-15, 17-26, Jan. 8 to Feb. 27, Mar. 1, 2, 5, 6, and July 26-31. Records good except those from July 31 to Sept. 30, which are fair and those for estimated daily discharges, which are poor. Flow regulated by reservoir system about 10.5 mi upstream. Diversions 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.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	6.8	5.2	9.2	8.0	10	7.6	11	5.8	2.3	8.6	2.0
2	5.2	6.9	5.1	10	8.5	10	7.3	9.6	5.3	2.3	8.3	2.1
3	5.4	7.0	5.4	11	9.0	11	7.1	8.5	4.8	3.0	7.2	2.2
4	5.7	7.1	5.2	11	8.5	10	7.3	7.7	4.6	3.0	6.3	2.3
5	5.8	7.4	5.0	11	8.0	9.5	7.4	6.8	4.3	2.8	8.5	2.0
6	5.7	7.2	5.4	11	8.0	10	6.3	6.2	3.8	2.4	14	1.9
7	5.6	7.0	5.6	8.5	7.5	11	7.0	5.9	3.7	2.1	11	1.7
8	5.6	7.2	6.0	8.0	7.5	11	8.0	5.7	4.4	1.8	7.4	1.5
9	5.7	8.1	6.5	7.5	7.5	12	8.3	5.6	18	1.5	6.0	1.5
10	5.7	8.4	7.0	7.8	7.5	12	8.3	5.7	101	1.3	6.2	1.8
11	5.8	8.1	7.5	7.2	8.0	13	7.9	5.7	69	7.1	7.6	2.4
12	5.6	7.4	7.0	7.0	8.0	13	7.5	5.7	52	4.7	14	2.3
13	5.6	7.4	6.5	6.5	8.5	12	8.3	5.6	23	3.8	49	2.3
14	5.6	7.5	6.0	6.5	9.0	11	7.9	5.6	15	3.5	22	2.1
15	5.7	7.3	5.2	7.0	9.5	9.1	7.7	5.5	15	2.3	8.1	2.0
16	6.0	6.8	4.9	6.6	10	10	7.3	5.6	13	1.6	5.9	1.9
17	6.8	7.2	4.5	6.2	11	11	7.1	5.6	11	1.2	4.9	1.9
18	7.6	7.8	4.0	6.0	11	11	7.0	5.7	9.0	1.0	4.2	2.1
19	7.4	8.9	4.4	6.2	10	10	6.8	6.1	8.0	1.5	3.5	3.2
20	7.8	12	5.0	6.4	10	11	6.5	6.3	6.7	5.6	3.3	3.8
21	8.2	10	6.0	6.6	10	10	6.2	5.6	5.2	32	3.0	4.3
22	7.7	7.5	5.8	7.0	9.6	9.9	6.1	5.6	4.5	40	2.8	5.0
23	7.4	7.0	5.6	7.0	9.6	9.6	6.3	5.9	4.0	9.5	2.6	5.2
24	7.6	7.0	5.6	7.0	9.8	9.4	8.5	5.5	3.7	6.9	2.6	4.9
25	8.1	6.4	6.4	7.0	9.8	9.2	9.3	5.9	3.6	47	2.8	4.3
26	8.1	6.3	8.0	6.6	10	8.3	8.7	7.1	3.3	143	2.6	4.2
27	7.7	6.2	8.9	6.6	10	8.8	7.7	7.3	3.1	94	2.6	4.0
28	7.1	5.2	8.9	6.6	11	8.6	6.8	8.2	2.8	55	2.5	4.1
29	7.0	5.4	8.9	7.0	---	7.9	8.7	7.5	2.6	30	2.1	3.5
30	7.9	5.0	8.8	7.0	---	7.5	11	6.7	2.5	24	2.0	3.7
31	7.3	---	8.9	7.5	---	7.4	---	6.1	---	15	1.9	---
TOTAL	203.8	219.5	193.2	236.5	254.8	314.2	227.9	201.5	412.7	551.2	233.5	86.2
MEAN	6.57	7.32	6.23	7.63	9.10	10.1	7.60	6.50	13.8	17.8	7.53	2.87
MAX	8.2	12	8.9	11	11	13	11	11	101	143	49	5.2
MIN	5.2	5.0	4.0	6.0	7.5	7.4	6.1	5.5	2.5	1.0	1.9	1.5
AC-FT	404	435	383	469	505	623	452	400	819	1090	463	171

MEAN	2.82	3.19	2.12	2.16	3.66	5.49	4.56	5.42	6.12	2.22	1.10	2.71
MAX	6.98	10.2	6.69	7.72	10.6	13.3	8.95	53.4	48.8	17.8	7.53	14.5
(WY)	1994	1992	1993	1994	1991	1993	1994	1991	1991	1997	1997	1973
MIN	.000	.000	.000	.000	.000	.27	.097	.38	.043	.000	.000	.000
(WY)	1955	1955	1953	1951	1956	1954	1954	1955	1952	1956	1954	1952

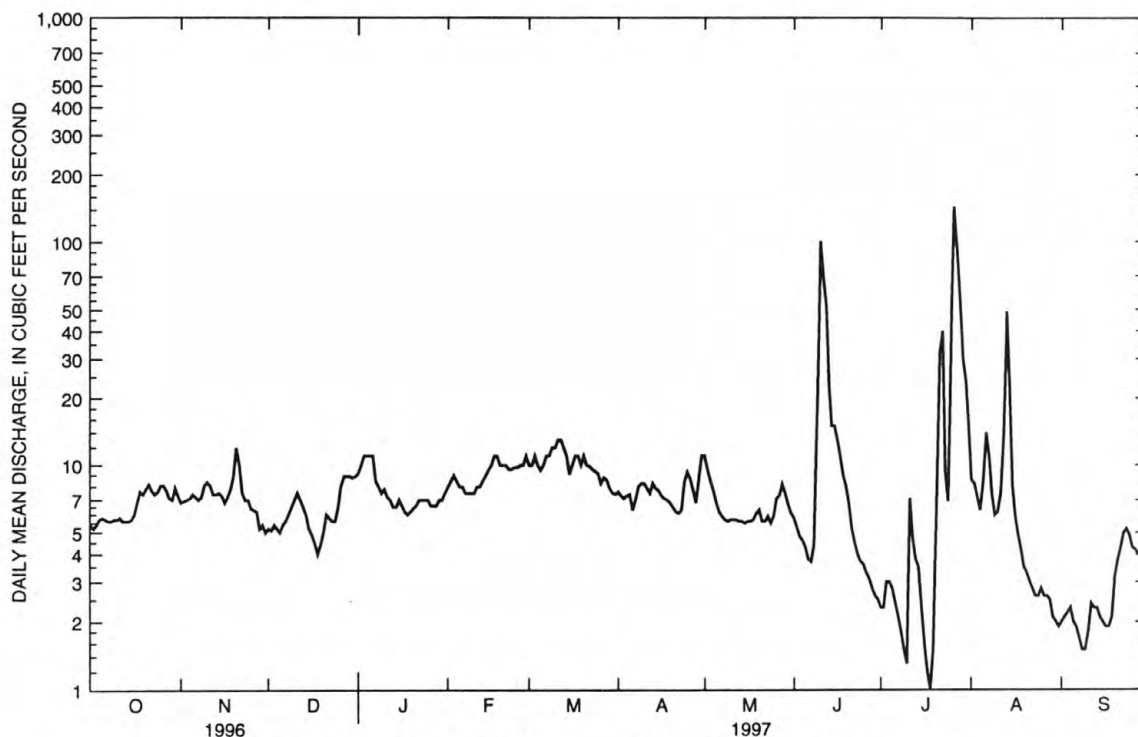
YELLOWSTONE RIVER BASIN

06244500 FIVEMILE CREEK ABOVE WYOMING CANAL, NEAR PAVILLION, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1950 - 1997
ANNUAL TOTAL	1751.56	3135.0	--
ANNUAL MEAN	4.79	8.59	3.45
HIGHEST ANNUAL MEAN	--	--	12.4
LOWEST ANNUAL MEAN	--	--	.25
HIGHEST DAILY MEAN	14 May 25	143 Jul 26	273 Sep 20 1950
LOWEST DAILY MEAN	.02 Aug 11	1.0 Jul 18	.00 Several days, 1991
ANNUAL SEVEN-DAY MINIMUM	.03 Aug 11	1.8 Sep 4	.00 Several days, 1955
INSTANTANEOUS PEAK FLOW	--	163 ^a Jul 26	1750 ^b Sep 6 1951
INSTANTANEOUS PEAK STAGE	--	4.02 ^c Jul 26	5.60 ^c Sep 6 1951
ANNUAL RUNOFF (AC-FT)	3470	6220	2500
10 PERCENT EXCEEDS	7.8	11	7.5
50 PERCENT EXCEEDS	5.4	7.0	2.0
90 PERCENT EXCEEDS	.15	2.6	.00

a From rating curve extended above 19.4 ft³/s.b From rating curve extended above 350 ft³/s.

c From floodmarks.



06244500 FIVEMILE CREEK ABOVE WYOMING CANAL, NEAR PAVILLION, WY

101

LOCATION.--Lat 43°13'20", long 108°13'06", in NW¼ SW¼ 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.

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 sea level, from topographic map. May 10, 1941 to Sept. 30, 1942, nonrecording gage at site 1.0 mi downstream at different datum. Aug. 28, 1948 to Sept. 30, 1983, at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 2 to Mar. 7 and Sept. 6-8. Records poor. Natural flow of stream affected by regulation from reservoir system in the headwaters, diversions for irrigation, and return flow from irrigated areas. U.S. Geological Survey data collection platform with satellite telemetry at station.

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.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	340	145	94	76	72	51	64	238	384	401	486	397
2	327	139	87	79	74	50	63	238	393	386	452	392
3	325	139	72	76	72	48	65	208	344	367	452	385
4	327	138	70	75	68	49	65	208	327	365	454	369
5	322	136	75	72	66	50	63	208	306	377	458	355
6	317	129	80	70	65	49	66	198	310	382	524	360
7	311	128	84	68	64	50	65	182	310	383	547	370
8	308	124	86	68	63	51	65	193	512	381	522	389
9	308	127	88	67	62	51	66	208	406	392	489	430
10	306	125	89	64	61	55	67	213	369	375	488	408
11	288	122	90	60	62	56	67	212	457	393	476	378
12	240	120	93	52	64	57	67	201	434	380	464	378
13	215	118	89	45	66	55	65	192	399	362	440	391
14	210	120	83	44	69	55	66	190	364	382	473	415
15	197	117	78	45	70	53	65	186	365	355	480	409
16	195	114	74	47	68	53	76	213	383	365	446	395
17	193	114	68	44	64	55	133	207	358	370	432	407
18	188	118	64	43	60	55	92	210	351	390	419	409
19	185	110	70	45	58	57	132	213	347	389	404	422
20	178	117	78	48	57	60	150	200	336	378	391	426
21	177	108	83	50	56	59	141	199	311	356	394	441
22	177	106	76	52	55	60	122	273	306	382	383	447
23	178	102	72	54	57	61	139	284	294	368	396	429
24	172	97	68	58	58	63	158	296	291	354	395	426
25	170	97	70	60	57	63	175	297	290	324	394	481
26	166	95	68	58	54	64	166	392	306	329	410	498
27	159	99	70	56	52	65	160	414	293	332	407	463
28	156	96	72	58	53	65	158	403	320	389	408	445
29	154	96	74	62	---	64	175	386	361	463	407	425
30	150	97	74	64	---	63	230	363	401	427	408	408
31	147	---	76	68	---	63	---	349	---	478	401	---
TOTAL	7086	3493	2415	1828	1747	1750	3186	7774	10628	11775	13700	12348
MEAN	229	116	77.9	59.0	62.4	56.5	106	251	354	380	442	412
MAX	340	145	94	79	74	65	230	414	512	478	547	498
MIN	147	95	64	43	52	48	63	182	290	324	383	355
AC-FT	14060	6930	4790	3630	3470	3470	6320	15420	21080	23360	27170	24490

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1997, BY WATER YEAR (WY)

MEAN	140	77.2	57.1	48.8	47.7	52.2	78.5	175	275	329	336	284
MAX	239	120	89.7	88.7	79.5	87.2	178	265	442	524	525	451
(WY)	1996	1970	1956	1996	1959	1963	1990	1983	1976	1983	1983	1982
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

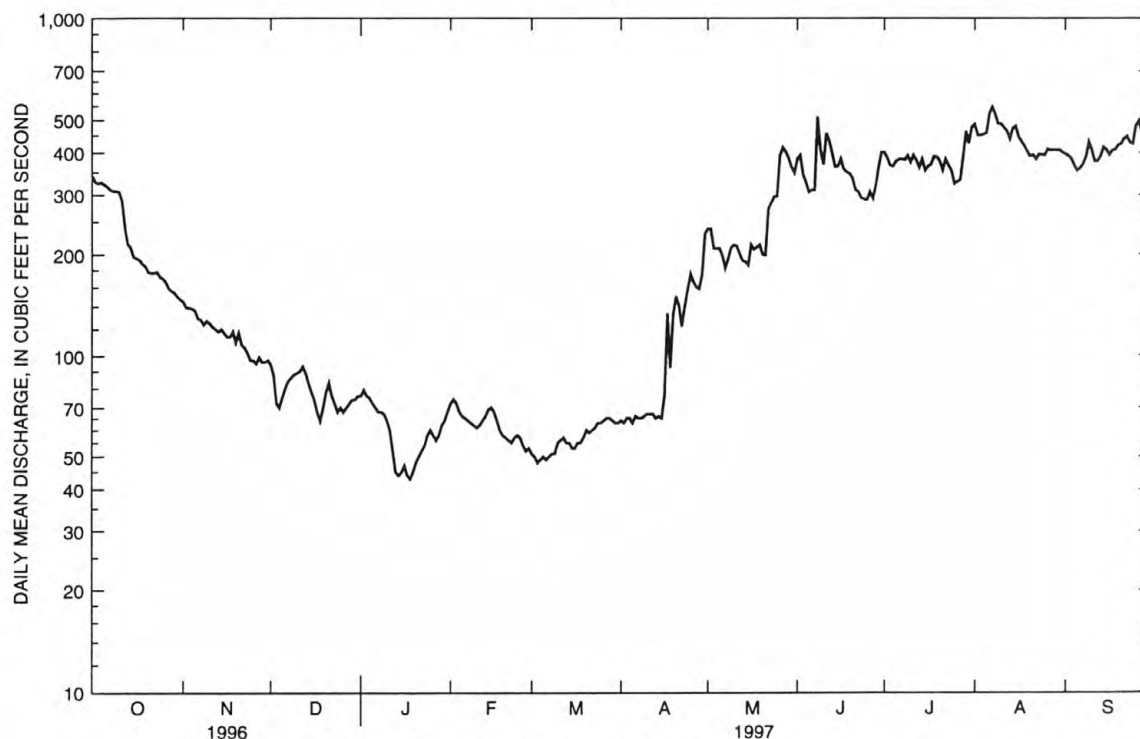
YELLOWSTONE RIVER BASIN

06253000 FIVEMILE CREEK NEAR SHOSHONI, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1941 - 1997
ANNUAL TOTAL	74404	77730	--
ANNUAL MEAN	203	213	160
HIGHEST ANNUAL MEAN	--	--	229
LOWEST ANNUAL MEAN	--	--	54.8
HIGHEST DAILY MEAN	452	547	964
LOWEST DAILY MEAN	44	43	1.0
ANNUAL SEVEN-DAY MINIMUM	49	45	1.4
INSTANTANEOUS PEAK FLOW	--	1400	3390 ^a
INSTANTANEOUS PEAK STAGE	--	5.43	9.61 ^b
ANNUAL RUNOFF (AC-FT)	147600	154200	116100
10 PERCENT EXCEEDS	389	417	358
50 PERCENT EXCEEDS	151	166	100
90 PERCENT EXCEEDS	54	57	39

a Gage height, 7.85 ft.

b Backwater from ice.



06253000 FIVEMILE CREEK NEAR SHOSHONI, WY

YELLOWSTONE RIVER BASIN

103

06258900 BOYSEN RESERVOIR NEAR SHOSHONI, WY

LOCATION.--Lat 43°25'00", long 108°10'37", in NW¹/₄ NW¹/₄ sec.16, T.5 N., R.6 E., Fremont County, Hydrologic Unit 10080005, at dam on Wind River and 13 mi north of Shoshoni.

DRAINAGE AREA.--7,700 mi².

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

GAGE.--Water-stage recorder. Datum of gage is sea level (Bureau of Reclamation datum of 1933).

REMARKS.--Reservoir is formed by rockfill dam completed by Bureau of Reclamation in October 1951. Capacity, 802,000 acre-ft below elevation 4,725.00 ft, top of spillway gate. Includes 59,880 acre-ft dead storage below elevation 4,657.00 ft, invert of penstock pipe. Figures given herein represent total contents. Water used for irrigation, flood control, and power generation.

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily contents, 922,000 acre-ft, July 6, 7, 1967, elevation, 4,730.83 ft; minimum daily contents (since normal use of water started), 252,000 acre-ft, Mar. 18, 19, 1956, elevation, 4,684.18 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 788,000 acre-ft, June 26, 27, 28, maximum daily elevation, 4,727.33 ft, June 27; minimum daily contents, 431,000 acre-ft, May 12, 13, minimum daily elevation, 4,705.28 ft, May 12.

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

4,705	427,000	4,720	648,000
4,710	493,000	4,725	742,000
4,715	566,000	4,730	844,000

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY OBSERVATION AT 2400 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	650000	636000	632000	617000	602000	583000	512000	441000	486000	783000	734000	702000
2	650000	636000	631000	617000	602000	582000	510000	441000	496000	782000	733000	700000
3	649000	636000	630000	618000	601000	582000	507000	440000	508000	780000	731000	698000
4	649000	636000	629000	618000	601000	581000	503000	439000	517000	777000	729000	696000
5	649000	636000	629000	618000	600000	580000	499000	439000	527000	775000	730000	693000
6	649000	636000	628000	618000	600000	579000	497000	438000	541000	772000	730000	690000
7	648000	636000	627000	617000	599000	577000	494000	437000	555000	770000	733000	688000
8	648000	635000	627000	617000	598000	576000	490000	437000	573000	767000	734000	686000
9	648000	635000	626000	617000	597000	573000	487000	436000	591000	764000	737000	683000
10	648000	635000	627000	617000	596000	571000	484000	433000	612000	761000	739000	680000
11	647000	635000	627000	616000	595000	569000	481000	432000	636000	760000	740000	678000
12	647000	635000	627000	615000	594000	567000	478000	431000	659000	759000	740000	676000
13	646000	635000	628000	614000	594000	564000	474000	431000	678000	758000	739000	674000
14	645000	635000	627000	613000	592000	561000	471000	432000	693000	757000	738000	672000
15	644000	634000	626000	612000	592000	558000	468000	433000	707000	755000	736000	670000
16	644000	635000	626000	612000	591000	556000	465000	435000	719000	753000	735000	668000
17	642000	634000	624000	611000	591000	553000	462000	439000	729000	750000	733000	666000
18	641000	633000	624000	611000	590000	550000	459000	445000	738000	748000	731000	664000
19	640000	632000	622000	610000	590000	548000	456000	452000	750000	746000	729000	663000
20	639000	633000	621000	610000	589000	546000	454000	455000	761000	744000	728000	662000
21	638000	633000	621000	609000	588000	544000	451000	459000	767000	744000	726000	662000
22	637000	634000	620000	609000	588000	541000	449000	461000	771000	741000	725000	661000
23	637000	634000	620000	608000	587000	539000	447000	463000	775000	739000	722000	660000
24	636000	634000	619000	608000	586000	536000	446000	466000	781000	737000	720000	660000
25	634000	634000	619000	607000	586000	534000	445000	469000	785000	735000	718000	659000
26	636000	633000	618000	607000	585000	531000	444000	474000	788000	733000	716000	659000
27	636000	633000	618000	606000	585000	528000	443000	477000	788000	732000	714000	658000
28	636000	632000	617000	605000	584000	525000	442000	478000	788000	734000	712000	658000
29	635000	632000	617000	605000	---	522000	441000	478000	786000	735000	710000	657000
30	636000	632000	617000	603000	---	519000	441000	479000	785000	735000	707000	657000
31	636000	---	617000	603000	---	516000	---	481000	---	734000	705000	---
MAX	650000	636000	632000	618000	602000	583000	512000	481000	788000	783000	740000	702000
MIN	634000	632000	617000	603000	584000	516000	441000	431000	486000	732000	705000	657000
(#)	4,719.28	4,719.07	4,718.16	4,717.33	4,716.16	4,711.66	4,706.11	4,709.13	4,727.17	4,724.63	4,723.09	4,720.47
(*)	-75,000	-4,000	-15,000	-14,000	-19,000	-68,000	-75,000	+40,000	+304,000	-51,000	-29,000	-48,000

WTR YR 1997 MAX 788000 MIN 431000 (*) -54,000

(#) Elevation, in feet, at end of month.

(*) Change in contents, in acre-feet.

LOCATION.--Lat 43°25'30", long 108°10'42", in NW¹/₄ SW¹/₄ 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.

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

REVISED RECORDS.--WSP 1709: Drainage area.

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

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Boysen Reservoir (station 06258900) 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. Bureau of Reclamation data collection platform with satellite telemetry at station.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	998	996	982	990	1080	1070	2340	1300	3030	4960	3070	2150
2	1020	996	980	985	1080	1060	2320	1310	3040	4670	3070	2160
3	1020	996	980	986	1070	1060	2340	1310	3000	4300	3060	2150
4	1020	994	980	990	1070	1090	2400	1310	3030	3910	3070	2160
5	1040	991	984	985	1070	1130	2410	1310	3030	3900	2740	2150
6	1040	991	991	982	1070	1260	2390	1300	3020	3880	2720	2140
7	1040	993	991	980	1070	1420	2380	1310	3020	3870	2890	2130
8	1030	996	991	975	1070	1640	2370	1450	3030	3860	2900	2140
9	1040	991	989	977	1070	1790	2370	1840	3000	3830	2930	2170
10	992	991	985	978	1070	2040	2370	2340	3000	3440	2890	2180
11	984	993	985	974	1070	2370	2330	2330	3000	2870	3240	2170
12	991	996	985	974	1070	2360	2270	2200	2980	2810	3780	2160
13	994	996	987	974	1070	2390	2290	1570	2980	2810	3910	2190
14	1010	992	996	970	1070	2370	2300	1320	3000	2820	3900	2200
15	1010	986	993	975	1070	2360	2280	1310	3020	2790	3780	2200
16	1010	985	997	971	1070	2360	2200	1310	3370	2800	3470	2190
17	1020	985	990	969	1070	2360	2080	1260	4040	2790	3380	2200
18	1010	985	985	965	1070	2360	2090	1270	4020	2770	3100	2210
19	1010	985	982	964	1070	2360	2080	1780	4240	2790	2720	2200
20	1010	986	983	964	1050	2360	2090	2710	5250	2780	2190	2190
21	1010	985	1000	968	1030	2370	2020	2940	6320	2780	2190	2170
22	1010	985	1020	984	1030	2350	1810	3560	6550	2770	2140	2190
23	1010	970	1010	1040	1030	2350	1790	3970	6390	2770	2120	2190
24	1010	969	1000	1060	995	2360	1610	3990	5420	2780	2120	2200
25	1010	971	1010	1060	966	2360	1510	4010	4990	2840	2130	2210
26	1010	972	1000	1070	1000	2360	1500	4050	5000	2860	2130	2230
27	1000	995	996	1070	1080	2360	1510	4000	5010	2900	2120	2270
28	1010	984	995	1060	1080	2350	1520	3960	5010	2560	2150	2250
29	1020	985	991	1060	---	2340	1510	3970	5000	3020	2210	2230
30	1010	990	991	1060	---	2340	1400	3490	4990	3060	2200	2220
31	997	---	991	1060	---	2340	---	3030	---	3070	2130	---
TOTAL	31386	29630	30740	31020	29611	63090	61880	72810	120780	100060	86450	65600
MEAN	1012	988	992	1001	1058	2035	2063	2349	4026	3228	2789	2187
MAX	1040	996	1020	1070	1080	2390	2410	4050	6550	4960	3910	2270
MIN	984	969	980	964	966	1060	1400	1260				

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1997, BY WATER YEAR (WY)

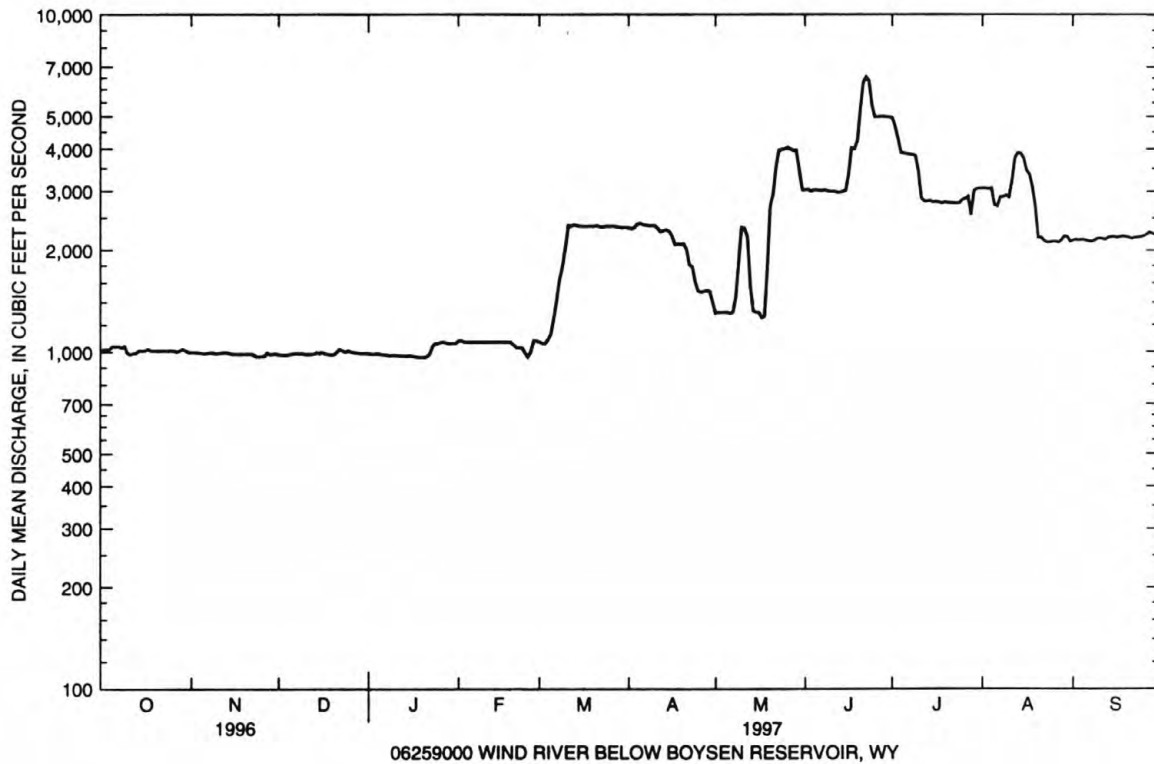
MEAN	1194	1189	1178	1109	1070	1132	1255	1451	2303	2504	1506	1299
MAX	2846	2086	2005	2208	2202	2035	2236	2360	7252	8816	2789	2502
(WY)	1983	1959	1959	1958	1958	1997	1974	1984	1991	1967	1997	1973
MIN	332	306	301	299	210	213	389	777	980	935	909	715
(WY)	1961	1978	1989	1989	1952	1952	1952	1952	1992	1992	1992	1994

YELLOWSTONE RIVER BASIN

105

06259000 WIND RIVER BELOW BOYSEN RESERVOIR, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1951 - 1997	
ANNUAL TOTAL	540887		723057		--	
ANNUAL MEAN	1478		1981		1422	
HIGHEST ANNUAL MEAN	--		--		2349	1983
LOWEST ANNUAL MEAN	--		--		612	1961
HIGHEST DAILY MEAN	4050	Jul 7	6550	Jun 22	13200	Jul 7 1967
LOWEST DAILY MEAN	645	Mar 23	964	Jan 19, 20	4.7	Apr 3 1962
ANNUAL SEVEN-DAY MINIMUM	929	Jan 8	968	Jan 15	106	Oct 12 1951
INSTANTANEOUS PEAK FLOW	--		6650	Jun 22	13500	Jul 7 1967
INSTANTANEOUS PEAK STAGE	--		9.51	Jun 22	13.35	Jul 7 1967
ANNUAL RUNOFF (AC-FT)	1073000		1434000		1030000	
10 PERCENT EXCEEDS	2240		3480		2160	
50 PERCENT EXCEEDS	1130		1790		1170	
90 PERCENT EXCEEDS	941		985		654	



YELLOWSTONE RIVER BASIN

06260300 ANCHOR RESERVOIR NEAR ANCHOR, WY

LOCATION.--Lat 43°39'50", long 108°49'27", in sec.26, T.43 N., R.100 W., Hot Springs County, Hydrologic Unit 10080007, at dam on South Fork Owl Creek, 2.0 mi downstream from Middle Fork, 3.0 mi southeast of Anchor, and 32 mi west of Thermopolis.

DRAINAGE AREA.--131 mi².

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

GAGE.--Water-stage recorder. Datum of gage is sea level (Bureau of Reclamation datum).

REVISED RECORDS.--WRD 1996: 1995(M).

REMARKS.--Reservoir is formed by concrete arch dam completed by Bureau of Reclamation in 1960. Capacity, 17,230 acre-ft below elevation 6,441.00 ft, crest of spillway. Includes 68 acre-ft below elevation 6,343.75 ft, invert of river outlet. Figures given herein represent total contents. Water used for irrigation of lands in Owl Creek basin.

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily contents, 9,250 acre-ft, July 4, 1967, elevation, 6,418.52 ft; maximum elevation, 6,419.10 ft, June 12, 1991; no storage on many days, most years.

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 7,650 acre-ft, June 29, 30, elevation, 6,413.10 ft; minimum daily contents, 212 acre-ft, Oct. 1, 2, elevation, 6,353.00 ft.

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

6,350	148	6,380	1,720	6,410	6,470
6,360	414	6,390	2,880	6,415	8,150
6,370	915	6,400	4,470		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY OBSERVATION AT 2400 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	212	286	233	283	244	263	548	618	509	7620	3840	2010
2	212	283	239	277	246	263	548	618	594	7570	3750	1920
3	214	283	235	271	250	263	548	628	701	7520	3650	1860
4	214	283	233	269	254	263	548	638	839	7470	3570	1800
5	216	283	233	269	257	263	548	648	1030	7420	3490	1730
6	216	269	233	269	257	263	548	659	1200	7300	3400	1670
7	218	269	233	269	257	263	548	638	1480	7240	3330	1630
8	220	254	233	269	257	263	548	628	1840	7110	3240	1560
9	223	254	233	269	257	263	548	618	2280	6980	3130	1500
10	225	254	233	269	257	263	548	604	2880	6780	3000	1480
11	227	254	233	269	257	263	558	590	3590	6670	2880	1400
12	229	254	233	269	257	269	562	580	4150	6580	2830	1350
13	231	254	233	269	257	274	567	604	4500	6490	2760	1300
14	235	254	233	263	257	280	571	623	4870	6380	2710	1250
15	239	254	233	260	257	289	575	638	5280	6250	2650	1190
16	244	254	233	257	257	299	575	609	5690	6140	2610	1140
17	248	254	233	257	257	305	580	580	6070	6010	2580	1100
18	252	254	233	257	257	311	580	580	6490	5880	2540	982
19	254	254	233	257	257	323	580	535	6850	5650	2500	936
20	260	254	237	257	257	339	580	460	7390	5490	2460	890
21	266	254	239	257	257	355	580	476	7420	5360	2430	815
22	271	254	244	257	257	372	580	501	7370	5260	2380	744
23	277	254	248	257	257	389	580	501	7390	5010	2340	695
24	280	254	252	257	257	414	585	452	7420	4760	2300	648
25	283	244	257	257	257	444	590	418	7420	4540	2260	603
26	283	244	263	254	257	472	594	379	7470	4430	2220	566
27	283	233	269	254	260	492	599	352	7570	4360	2170	492
28	286	233	271	250	263	509	604	320	7620	4270	2140	460
29	286	233	277	248	---	526	609	345	7650	4160	2100	429
30	286	233	283	246	---	535	609	386	7650	4060	2070	414
31	286	---	283	244	---	548	---	433	---	3940	2040	---
MAX	286	286	283	283	263	548	609	659	7650	7620	3840	2010
MIN	212	233	233	244	244	263	548	320	509	3940	2040	414
(#)	6,356.10	6,354.00	6,356.00	6,354.50	6,355.30	6,363.30	6,364.60	6,360.50	6,413.10	6,397.00	6,383.10	6,360.00
(*)	+74	-53	+50	-39	+19	+285	+61	-176	+7,220	-3,710	-1,900	-1,630

WTR YR 1997 MAX 7650 MIN 212 (*) +202

(#) Elevation, in feet, at end of month.
(*) Change in contents, in acre-feet.

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LOCATION.--Lat 43°39'57", long 108°47'34", in sec.25, T.43 N., R.100 W., Hot Springs County, Hydrologic Unit 10080007, on left bank 1.6 mi downstream from Anchor Dam and 30 mi west of Thermopolis.

GAGE.--Water-stage recorder. Elevation of gage is 6,120 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Anchor Dam (station 06260300). No diversion upstream from station. Results of discharge measurements, in cubic feet per second, made during the period when station was not in operation, are given below:

Oct. 18 . . .	0.23
Mar. 26 . . .	3.36

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	3.2	3.3	191	87	54	24
2	---	---	---	---	---	---	3.1	3.3	179	87	53	24
3	---	---	---	---	---	---	2.9	3.3	158	57	53	24
4	---	---	---	---	---	---	2.9	3.3	169	48	50	24
5	---	---	---	---	---	---	2.9	15	163	48	47	24
6	---	---	---	---	---	---	5.0	24	140	48	47	24
7	---	---	---	---	---	---	5.9	23	149	48	46	24
8	---	---	---	---	---	---	3.1	23	152	46	57	23
9	---	---	---	---	---	---	2.9	27	88	45	61	23
10	---	---	---	---	---	---	3.9	30	46	44	60	27
11	---	---	---	---	---	---	1.4	29	25	44	59	32
12	---	---	---	---	---	---	.49	38	27	63	59	36
13	---	---	---	---	---	---	.96	43	28	71	59	41
14	---	---	---	---	---	---	2.7	56	28	71	51	39
15	---	---	---	---	---	---	2.7	61	29	71	29	38
16	---	---	---	---	---	---	2.7	117	29	66	29	44
17	---	---	---	---	---	---	2.7	127	41	74	29	48
18	---	---	---	---	---	---	2.7	114	64	94	28	47
19	---	---	---	---	---	---	2.7	104	93	93	28	42
20	---	---	---	---	---	---	2.7	100	131	92	28	41
21	---	---	---	---	---	---	2.7	98	189	91	28	40
22	---	---	---	---	---	---	2.7	126	166	78	28	40
23	---	---	---	---	---	---	3.0	142	137	67	27	39
24	---	---	---	---	---	---	3.2	139	98	66	26	38
25	---	---	---	---	---	---	3.3	137	59	82	25	37
26	---	---	---	---	---	---	3.3	122	48	93	25	36
27	---	---	---	---	---	---	3.3	113	44	91	25	35
28	---	---	---	---	---	---	3.3	111	44	82	24	34
29	---	---	---	---	---	---	3.3	108	87	70	24	26
30	---	---	---	---	---	---	3.3	101	87	54	24	22
31	---	---	---	---	---	---	---	136	---	54	24	---
TOTAL	---	---	---	---	---	---	88.95	2277.2	2889	2125	1207	996
MEAN	---	---	---	---	---	---	2.96	73.5	96.3	68.5	38.9	33.2
MAX	---	---	---	---	---	---	5.9	142	191	94	61	48
MIN	---	---	---	---	---	---	.49	3.3	25	44	24	22
AC-FT	---	---	---	---	---	---	176	4520	5730	4210	2390	1980

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1988, BY WATER YEAR (WY)

MEAN	7.40	2.71	.98	.40	.71	2.06	10.2	49.4	99.1	57.4	22.1	11.6
MAX	20.5	8.90	3.86	2.39	2.82	8.66	30.2	90.1	226	124	60.4	23.7
(WY)	1983	1982	1982	1981	1988	1960	1987	1974	1986	1982	1975	1963
MIN	2.49	.013	.000	.000	.000	.000	1.01	14.3	34.7	11.9	4.18	4.01
(WY)	1965	1962	1961	1960	1960	1961	1975	1981	1985	1988	1966	1964

06260400 SOUTH FORK OWL CREEK BELOW ANCHOR RESERVOIR, WY--Continued

SUMMARY STATISTICS

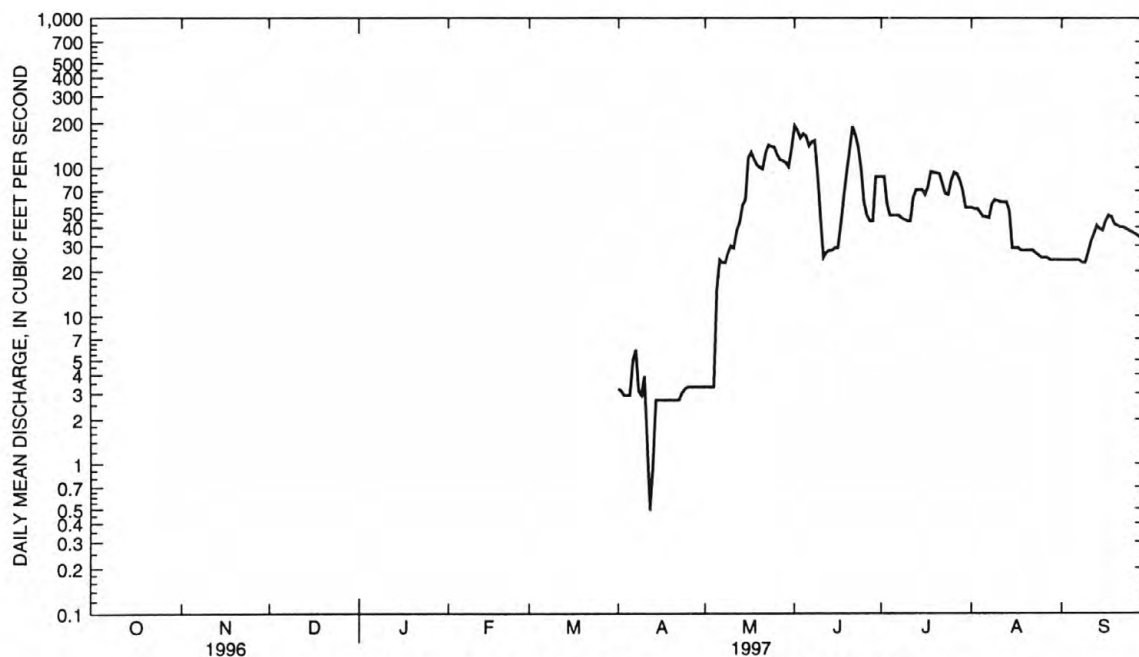
FOR 1997 WATER YEAR*

WATER YEARS 1959 - 1988

ANNUAL MEAN	--	22.1	
HIGHEST ANNUAL MEAN	--	35.9	1986
LOWEST ANNUAL MEAN	--	11.3	1985
HIGHEST DAILY MEAN	191 Jun 1	303	Jun 12 1991#
LOWEST DAILY MEAN	.49 Apr 12	.00	Several days,
			most years#
ANNUAL SEVEN-DAY MINIMUM	2.0 Apr 11	.00	Most years#
INSTANTANEOUS PEAK FLOW	211 Jun 2	373 ^a	May 26 1967#
INSTANTANEOUS PEAK STAGE	3.58 Jun 2	4.02	Jun 11 1991#
ANNUAL RUNOFF (AC-FT)	--	16050	
10 PERCENT EXCEEDS	--	76	
50 PERCENT EXCEEDS	--	5.8	
90 PERCENT EXCEEDS	--	.00	

* During period of operation.

For period of record through 1997.

^a Gage height, 3.64 ft.

06260400 SOUTH FORK OWL CREEK BELOW ANCHOR RESERVOIR, WY

YELLOWSTONE RIVER BASIN

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06264700 BIGHORN RIVER AT LUCERNE, WY

LOCATION.--Lat 43°44'10", long 108°09'38", in SE¹/₄ 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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
OCT 28...	1345	924	582	8.8	9.0	7.0	E660
MAR 24...	1210	2260	668	8.4	5.0	7.0	657
APR 16...	0930	2150	678	8.0	4.0	6.5	660
JUN 24...	1045	5900	444	8.0	16.0	18.0	660
AUG 22...	1135	2100	454	8.3	20.0	27.0	662

E-Estimate.

DATE	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
OCT 28...	E13.2	--	44	0.01	0.07	0.02	<0.01
MAR 24...	11.6	106	20	--	--	--	--
APR 16...	11.7	103	87	<0.01	0.06	<0.01	<0.01
JUN 24...	8.3	97	130	<0.01	0.13	0.03	0.02
AUG 22...	10.4	132	130	<0.01	<0.05	0.02	0.01

E-Estimate.

YELLOWSTONE RIVER BASIN

06265337 COTTONWOOD CREEK AT HIGH ISLAND RANCH, NEAR HAMILTON DOME, WY

LOCATION.--Lat 43°45'46", long 108°40'34", 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 sea level, from topographic map. Prior to Sept. 9, 1996, at site 9 ft downstream at datum 3.00 ft higher.

REMARKS.--Estimated daily discharges: Oct. 21-25, Oct. 28 to Nov. 15, Nov. 17 to Apr 9, June 10-12, 14-19, July 8, 9, 14, 15, 24, and Aug. 2-11. Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.6	1.1	10	6.2	.75	7.0	19	47	53	33	4.1
2	1.2	1.5	1.2	11	7.8	.70	7.0	21	48	52	1.3	4.0
3	1.1	2.0	1.0	10	6.4	.90	7.3	26	34	53	1.3	3.7
4	1.1	2.3	.90	9.0	6.0	1.3	8.0	30	39	51	1.2	5.9
5	1.1	1.0	.90	4.5	5.0	1.1	7.0	34	46	52	17	4.4
6	1.1	.60	.80	1.5	2.5	1.8	6.4	45	34	49	13	4.0
7	1.1	.80	.90	1.2	1.5	2.4	6.2	46	56	43	1.3	3.7
8	1.1	1.8	1.0	1.3	.90	2.8	6.0	44	68	35	1.4	3.6
9	1.1	2.2	1.2	1.8	.60	3.2	5.0	39	113	30	1.5	3.3
10	1.1	1.9	1.5	3.0	.35	3.6	4.5	45	890	15	1.5	3.3
11	.97	2.3	1.4	2.0	.30	3.5	3.9	44	895	15	3.5	3.8
12	.86	2.5	1.1	.80	.33	4.5	5.3	38	96	22	18	4.0
13	.86	2.0	.80	.30	.40	6.0	6.5	46	193	21	6.4	3.1
14	.86	1.9	.75	.25	2.1	5.0	8.8	49	150	19	7.7	3.0
15	.93	1.4	.60	.32	1.9	2.5	8.0	45	280	28	9.8	2.5
16	1.1	1.1	.55	.80	2.5	3.0	9.4	49	160	42	7.5	2.5
17	1.5	1.0	.45	.70	3.6	4.0	21	50	117	39	9.1	2.5
18	.77	1.2	.40	1.1	3.2	5.0	28	46	90	36	6.7	2.5
19	1.3	2.0	.44	2.0	3.0	7.0	30	34	80	55	6.2	3.2
20	1.3	3.5	.50	2.2	3.2	9.0	36	37	89	6.8	6.0	4.0
21	1.0	3.0	.60	2.2	2.7	10	33	39	82	1.7	5.2	4.0
22	1.0	3.2	.50	2.1	2.0	8.0	19	43	85	1.3	4.8	30
23	1.2	2.5	.45	2.0	1.7	9.0	16	48	86	2.3	8.7	25
24	1.0	2.1	.40	1.8	1.5	7.0	16	54	83	5.0	5.9	8.8
25	.70	1.8	.45	1.3	1.2	5.6	14	50	79	14	6.6	6.2
26	.45	1.4	.37	1.2	1.5	6.9	14	38	78	7.4	5.9	4.8
27	.54	1.2	1.8	1.5	1.0	9.0	16	28	70	6.8	15	4.3
28	.90	1.3	2.0	1.0	.90	6.6	26	27	63	25	8.9	3.6
29	1.9	1.5	6.5	1.2	---	6.2	21	30	61	70	5.7	3.6
30	2.2	1.2	9.0	1.8	---	6.0	17	31	56	62	5.5	3.6
31	1.7	---	8.0	8.0	---	6.4	---	39	---	35	4.7	---
TOTAL	34.44	53.80	47.56	87.87	70.28	148.75	413.3	1214	4268	947.3	230.3	165.0
MEAN	1.11	1.79	1.53	2.83	2.51	4.80	13.8	39.2	142	30.6	7.43	5.50
MAX	2.2	3.5	9.0	11	7.8	10	36	54	895	70	33	30
MIN	.45	.60	.37	.25	.30	.70	3.9	19	34	1.3	1.2	2.5
AC-FT	68	107	94	174	139	295	820	2410	8470	1880	457	327

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1997, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997
MEAN	4.30	3.12	1.15	1.05	1.90
MAX	7.07	6.91	2.60	2.83	3.30
(WY)	1995	1994	1994	1997	1996
MIN	1.11	.39	.057	.015	.28
(WY)	1997	1995	1995	1995	1997

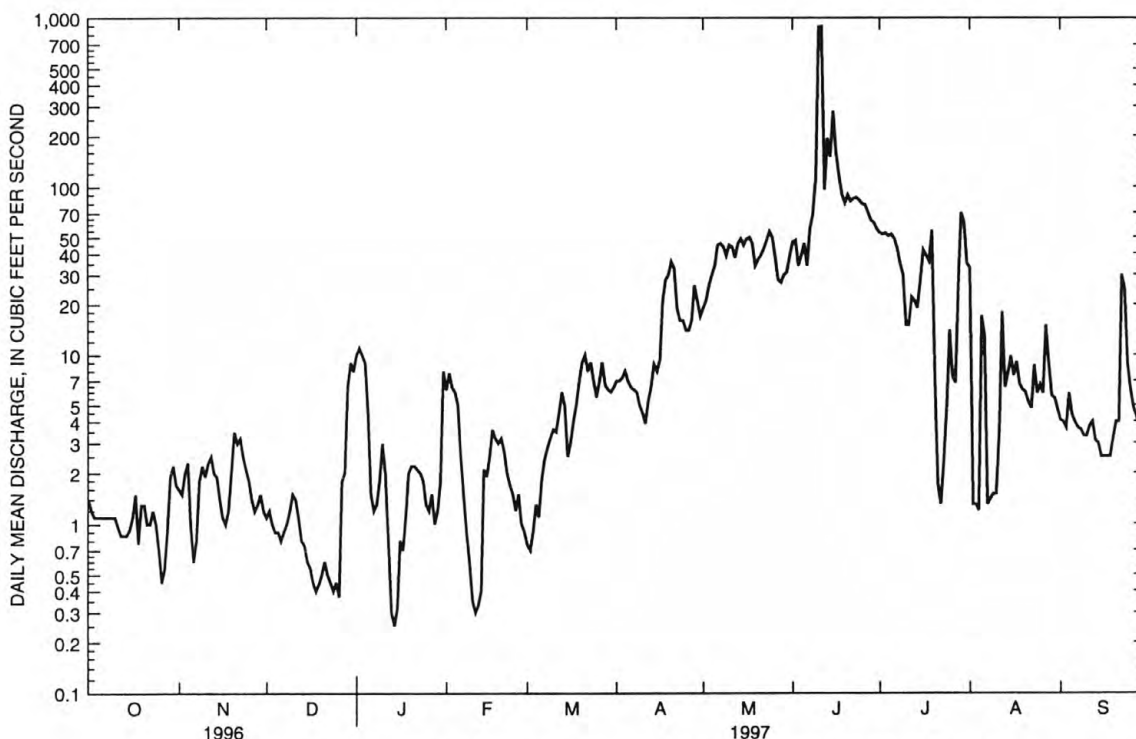
06265337 COTTONWOOD CREEK AT HIGH ISLAND RANCH, NEAR HAMILTON DOME, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1993 - 1997	
ANNUAL TOTAL	2042.25		7680.60		--	
ANNUAL MEAN	5.58		21.0		12.2	
HIGHEST ANNUAL MEAN	--		--		21.0	1997
LOWEST ANNUAL MEAN	--		--		5.12	1994
HIGHEST DAILY MEAN	45	Aug 15	895	Jun 11	895	Jun 11 1997
LOWEST DAILY MEAN	.00	Several days	.25	Jan 14	.00	Several days, most years
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 25		Dec 20	.00	Most years
INSTANTANEOUS PEAK FLOW	605	Aug 15	3390 ^b	Jun 10	3390 ^b	Jun 10 1997
INSTANTANEOUS PEAK STAGE	4.56 ^a	Aug 15	10.75 ^c	Jun 10	10.75 ^c	Jun 10 1997
ANNUAL RUNOFF (AC-FT)	4050		15230		8850	
10 PERCENT EXCEEDS	17		49		39	
50 PERCENT EXCEEDS	2.0		4.0		4.6	
90 PERCENT EXCEEDS	.00		.86		.10	

a Site and datum then in use.

b From indirect measurement of peak flow.

c From floodmark.



06265337 COTTONWOOD CREEK AT HIGH ISLAND RANCH, NEAR HAMILTON DOME, WY

YELLOWSTONE RIVER BASIN

06274300 BIGHORN RIVER AT BASIN, WY

LOCATION.--Lat 44°23'00", long 108°02'08", in SE¹/₄ NW¹/₄ NE¹/₄ 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. Datum of gage is 3,821.29 ft above sea level.

REMARKS.--Estimated daily discharges: Dec. 8 to Feb. 26 and July 1-10, 22, 23. Records fair except 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1330	1440	1370	1450	1700	1480	2750	1680	5940	5800	3150	1730
2	1340	1430	1380	1500	1650	1460	2740	1520	7540	5550	3360	1690
3	1350	1420	1410	1600	1600	1510	2730	1470	6590	5400	2970	1650
4	1370	1420	1330	1600	1600	1560	2740	1420	5880	5400	2810	1650
5	1370	1430	1390	1600	1600	1560	2790	1410	6080	4850	2760	1680
6	1350	1430	1420	1500	1600	1590	2780	1390	6790	4750	2710	1720
7	1350	1410	1470	1400	1700	1730	2740	1410	6430	4500	2500	1750
8	1350	1400	1460	1350	1700	2020	2700	1510	6710	4250	2640	1790
9	1430	1400	1420	1400	1700	2310	2610	1620	9070	4000	2560	1770
10	1520	1410	1390	1400	1750	2480	2670	1930	10700	3750	2560	1810
11	1510	1410	1400	1300	1750	3370	2680	2450	13200	3460	2780	1810
12	1380	1410	1400	1200	1750	4180	2640	2670	8630	2800	3100	1850
13	1360	1410	1400	1110	1800	3880	2540	2550	9400	3850	3830	1870
14	1360	1420	1400	1050	1800	3420	2550	2030	9100	3560	4060	1960
15	1360	1430	1400	1100	1950	3010	2450	1710	13500	3170	3950	1990
16	1370	1420	1400	1250	2050	2950	2500	1700	11700	2840	3640	1970
17	1370	1370	1350	1300	2050	3040	2390	1990	8540	2700	3280	2020
18	1400	1340	1320	1450	2050	3290	2200	2640	7540	2650	3290	2080
19	1410	1450	1300	1580	2050	3250	2170	2580	8000	2800	2960	2150
20	1410	1450	1300	1690	2040	3120	2160	2270	7260	6010	2520	2280
21	1410	1430	1250	1750	1950	3030	2180	3280	7910	5680	1980	2350
22	1410	1420	1300	1800	1900	2970	2090	3700	8950	4300	1910	2580
23	1410	1360	1270	1800	1800	2900	1840	4470	9030	3400	1860	3730
24	1420	1350	1250	1750	1680	2850	1750	5430	8690	2930	1820	2870
25	1410	1410	1260	1700	1600	2820	1630	6740	7020	3290	1810	2660
26	1460	1480	1250	1640	1600	2810	1440	7010	5780	3220	1760	2550
27	1460	1440	1300	1520	1700	2780	1360	6020	5450	2980	1750	2470
28	1400	1380	1330	1500	1510	2770	1360	5190	5370	2960	1760	2440
29	1440	1410	1380	1500	---	2760	1430	4890	5320	4470	1760	2450
30	1460	1380	1400	1600	---	2760	1830	4980	5230	3430	1780	2440
31	1480	---	1400	1700	---	2740	---	5010	---	3200	1810	---
TOTAL	43450	42360	42100	46090	49630	82400	68440	94670	237350	121950	81430	63760
MEAN	1402	1412	1358	1487	1773	2658	2281	3054	7912	3934	2627	2125
MAX	1520	1480	1470	1800	2050	4180	2790	7010	13500	6010	4060	3730
MIN	1330	1340	1250	1050	1510	1460	1360	1390	5230	2650	1750	1650
AC-FT	86180	84020	83510	91420	98440	163400	135800	187800	470800	241900	161500	126500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1997, BY WATER YEAR (WY)

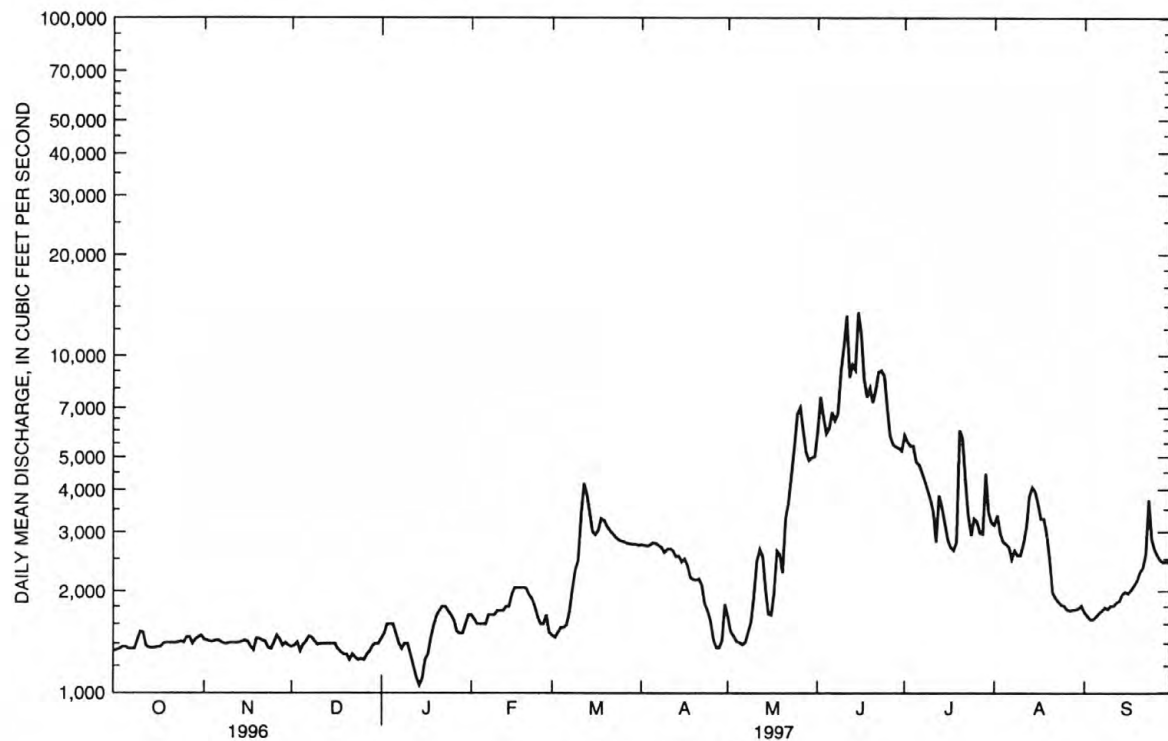
	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	1518	1441	1287	1180	1246	1468	1430	2374	4280	2374	1141	1308		
MAX	2346	2439	1933	1975	1773	2658	2864	4030	11210	8574	2627	2125		
(WY)	1984	1984	1985	1992	1997	1997	1996	1984	1991	1995	1997	1997		
MIN	694	659	642	566	504	634	723	1052	1075	357	455	749		
(WY)	1989	1989	1989	1989	1989	1989	1992	1989	1994	1988	1988	1988		

YELLOWSTONE RIVER BASIN

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06274300 BIGHORN RIVER AT BASIN, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1984 - 1997	
ANNUAL TOTAL	708314		973630		--	
ANNUAL MEAN	1935		2667		1754	
HIGHEST ANNUAL MEAN	--		--		2667	1997
LOWEST ANNUAL MEAN	--		--		800	1989
HIGHEST DAILY MEAN	6600	Jun 15	13500	Jun 15	16600	Jun 8 1991
LOWEST DAILY MEAN	418	Aug 22	1050	Jan 14	276	Jul 27 1988
ANNUAL SEVEN-DAY MINIMUM	448	Aug 22	1190	Jan 11	292	Jul 24 1988
INSTANTANEOUS PEAK FLOW	--		16600	Jun 15	19500	Jun 7 1991
INSTANTANEOUS PEAK STAGE	--		10.00	Jun 15	10.49	Jun 7 1991
ANNUAL RUNOFF (AC-FT)	1405000		1931000		1270000	
10 PERCENT EXCEEDS	3420		5400		2960	
50 PERCENT EXCEEDS	1460		1810		1370	
90 PERCENT EXCEEDS	946		1370		699	



06274300 BIGHORN RIVER AT BASIN, WY

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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)
		OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)
OCT 28...	1610	1410	747	8.7	6.0	7.0	--	11.9
MAR 24...	1605	2880	777	8.3	7.0	11.0	670	11.5
APR 15...	1620	2500	796	8.2	8.0	10.0	675	10.8
JUN 24...	1415	9080	520	8.3	19.0	24.0	670	7.9
AUG 20...	1225	2650	627	8.2	21.0	30.0	--	7.6

DATE		OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)
OCT 28...	--		K4	<0.01	0.16	<0.01	<0.01	33	126
MAR 24...	108		K10	--	--	--	--	352	2740
APR 15...	103		K15	<0.01	0.10	<0.01	<0.01	246	1660
JUN 24...	97		820	<0.01	0.21	0.02	0.02	1980	48500
AUG 20...	--		460	0.01	0.34	<0.01	0.02	450	3220

K-Results based on colony count outside the acceptable range (non-ideal colony count).

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LOCATION.--Lat 44°09'20", 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.

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). Monthly discharge only for some periods, published in WSP 1309.

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

REMARKS.--Estimated daily discharge: June 23. Records fair. 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. Results of discharge measurements, in cubic feet per second, made during the period when station was not in operation, are given below:

Oct. 01	.	.	.	237
Mar. 25	.	.	.	33.5
Mar. 26	.	.	.	49.9

COOPERATION.--Station operated and record provided by Office of the Wyoming State Engineer; record reviewed by U.S. Geological Survey.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	48	394	1090	1210	839	505
2	---	---	---	---	---	---	45	387	1100	917	792	523
3	---	---	---	---	---	---	45	362	972	926	765	519
4	---	---	---	---	---	---	49	387	983	868	752	533
5	---	---	---	---	---	---	256	426	1180	1010	893	534
6	---	---	---	---	---	---	170	513	1500	1090	889	524
7	---	---	---	---	---	---	53	529	1980	1050	820	514
8	---	---	---	---	---	---	45	502	3810	974	772	482
9	---	---	---	---	---	---	42	515	3260	965	765	477
10	---	---	---	---	---	---	42	613	2960	927	758	495
11	---	---	---	---	---	---	42	708	2490	868	864	533
12	---	---	---	---	---	---	55	652	1790	735	857	544
13	---	---	---	---	---	---	43	694	1740	576	792	534
14	---	---	---	---	---	---	46	732	1750	466	759	524
15	---	---	---	---	---	---	51	836	1690	459	695	514
16	---	---	---	---	---	---	48	838	1700	473	700	509
17	---	---	---	---	---	---	48	880	1800	605	669	482
18	---	---	---	---	---	---	48	898	1920	890	650	473
19	---	---	---	---	---	---	48	783	1900	1080	626	464
20	---	---	---	---	---	---	48	789	1810	967	614	442
21	---	---	---	---	---	---	46	887	1780	965	602	433
22	---	---	---	---	---	---	66	924	1800	973	591	425
23	---	---	---	---	---	---	160	933	1800	862	568	340
24	---	---	---	---	---	---	159	942	1570	917	556	286
25	---	---	---	---	---	---	193	942	1450	1030	567	250
26	---	---	---	---	---	---	231	865	1460	884	567	252
27	---	---	---	---	---	---	246	790	1530	840	607	263
28	---	---	---	---	---	---	347	727	1740	873	551	260
29	---	---	---	---	---	---	399	820	1560	955	528	253
30	---	---	---	---	---	---	394	854	1320	897	519	242
31	---	---	---	---	---	---	---	976	---	854	514	---
TOTAL	---	---	---	---	---	---	3513	22098	53435	27106	21441	13129
MEAN	---	---	---	---	---	---	117	713	1781	874	692	438
MAX	---	---	---	---	---	---	399	976	3810	1210	893	544
MIN	---	---	---	---	---	---	42	362	972	459	514	242
AC-FT	---	---	---	---	---	---	6970	43830	106000	53760	42530	26040

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1971, BY WATER YEAR (WY)

MEAN	152	104	78.3	64.5	63.7	77.3	145	558	1241	798	473	229
MAX	457	248	134	105	104	117	441	1319	3185	2219	1704	662
(WY)	1942	1942	1931	1943	1962	1942	1952	1931	1957	1965	1941	1941
MIN	72.5	52.8	45.0	27.0	33.9	35.1	43.6	214	284	188	137	84.2
(WY)	1956	1956	1970	1963	1960	1963	1967	1955	1934	1934	1940	1939

YELLOWSTONE RIVER BASIN

06276500 GREYBULL RIVER AT MEETEETSE, WY--Continued

SUMMARY STATISTICS

FOR 1997 WATER YEAR*

WATER YEARS 1931 - 1971**

ANNUAL MEAN	--		333	
HIGHEST ANNUAL MEAN	--		566	1957
LOWEST ANNUAL MEAN	--		130	1940
HIGHEST DAILY MEAN	3810	Jun 8	6770	Jun 6 1957
LOWEST DAILY MEAN	42	Apr 9-11	13	Apr 18 1989#
ANNUAL SEVEN-DAY MINIMUM	--		20	Feb 25 1960
INSTANTANEOUS PEAK FLOW	6580	Jun 8	13600 ^a	Jun 15 1963#
INSTANTANEOUS PEAK STAGE	6.27 ^b	Jun 8	9.20 ^b	Jun 15 1963
ANNUAL RUNOFF (AC-FT)	--		241200	
10 PERCENT EXCEEDS	--		800	
50 PERCENT EXCEEDS	--		130	
90 PERCENT EXCEEDS	--		55	

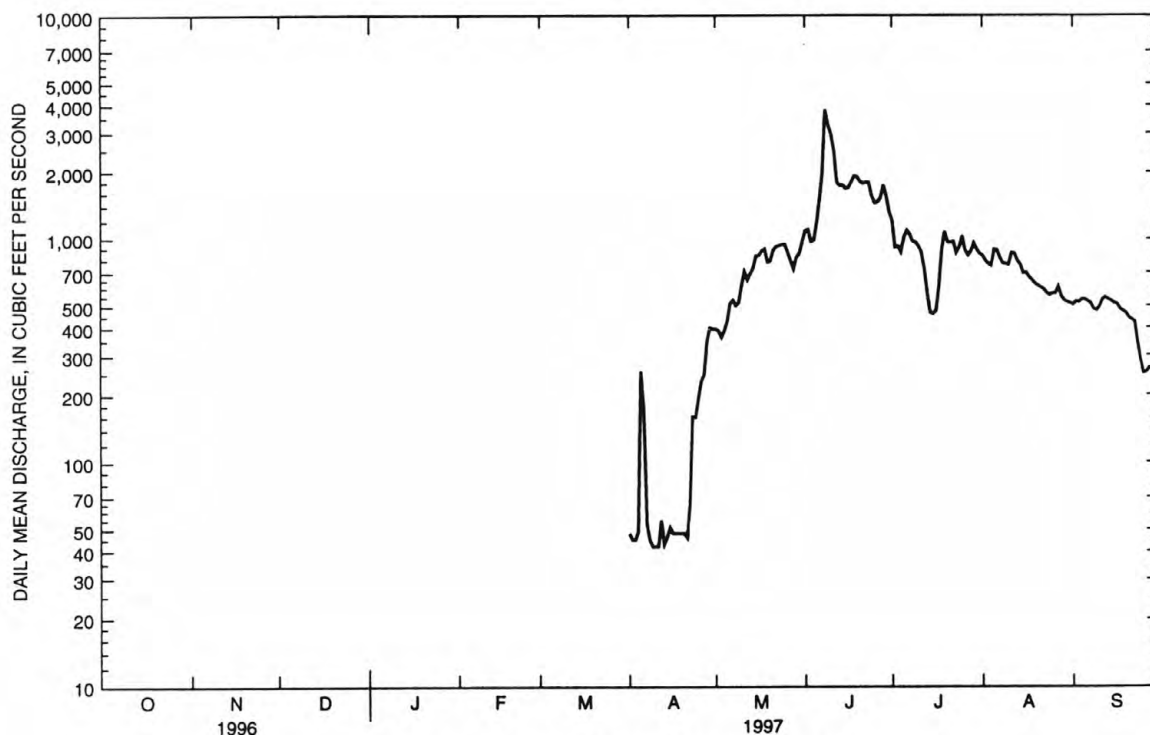
* During period of operation.

** Record prior to October 1930 not used in computations, monthly discharge only for selected months.

For period of record through 1997.

a From rating curve extended above 4,600 ft³/s on basis of velocity-area study.

b From floodmark.



06276500 GREYBULL RIVER AT MEETEETSE, WY

YELLOWSTONE RIVER BASIN

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06276500 GREYBULL RIVER AT MEETEETSE, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT 30...	0940	75	658	8.5	0.0	-1.0	620	11.7	99	14	52	11
MAR 25...	0945	34	718	8.4	1.0	3.0	622	12.0	104	21	67	6.2
JUN 26...	1000	1460	161	8.1	8.5	17.5	620	9.7	102	83	558	2200
AUG 21...	0835	602	238	8.4	12.0	19.0	628	9.0	102	K74	30	49

K-Results based on colony count outside the acceptable range (non-ideal colony count).

YELLOWSTONE RIVER BASIN

06278300 SHELL CREEK ABOVE SHELL RESERVOIR, WY

LOCATION.--Lat 44°30'29", long 107°24'11", 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 sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 26 to Jan. 14, Jan. 17 to Feb. 17, Mar. 14-19, Apr. 20, 21, and May 5-8, 11, 14, 15. Records good except those for estimated discharges, which are poor. No diversions upstream from station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 1	2145	625	5.43
June 5	2030	*738	*5.79
June 15	0415	525	5.08

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	5.6	3.8	3.7	3.8	2.7	2.4	3.4	545	50	27	6.4
2	7.7	6.4	3.7	3.8	3.8	2.7	2.6	3.5	422	61	25	6.5
3	7.5	6.8	3.7	3.8	3.7	2.6	2.8	3.4	345	73	23	6.5
4	7.3	7.0	3.6	3.7	3.6	2.7	2.6	4.2	438	66	21	6.9
5	7.1	7.0	3.6	3.6	3.5	2.6	2.5	4.4	493	54	21	6.8
6	7.0	6.4	3.6	3.6	3.4	2.7	2.8	6.6	437	50	19	6.4
7	7.0	5.6	3.6	3.6	3.3	2.5	3.0	11	365	47	17	6.3
8	6.6	5.6	3.5	3.6	3.3	2.5	3.0	12	415	43	16	6.0
9	6.3	5.6	3.6	3.5	3.4	2.5	2.9	12	331	39	15	5.7
10	6.2	5.4	3.7	3.3	3.4	2.5	2.6	12	322	37	15	5.6
11	6.1	5.4	3.7	3.2	3.3	2.4	2.5	12	382	37	17	5.4
12	5.9	5.4	3.8	3.0	3.2	2.3	2.5	12	223	43	15	5.6
13	5.8	5.4	3.8	3.1	3.2	2.2	2.5	13	187	55	14	5.3
14	5.6	5.4	3.7	3.2	3.2	2.2	2.6	14	220	47	15	4.9
15	5.4	5.0	3.6	3.0	3.3	2.1	2.5	16	409	37	14	4.7
16	5.4	4.7	3.5	3.1	3.4	2.1	2.8	30	221	32	16	5.4
17	6.0	4.5	3.6	3.1	3.5	2.0	3.0	57	203	29	16	6.0
18	6.8	4.5	3.5	3.2	3.4	1.9	3.6	126	197	28	14	5.6
19	7.2	4.5	3.5	3.3	3.4	2.1	3.8	118	165	37	13	6.7
20	7.0	4.5	3.8	3.5	3.2	2.2	3.8	105	128	41	12	6.7
21	6.5	4.5	3.5	3.6	3.1	2.0	4.0	116	102	34	11	6.3
22	7.2	4.5	3.3	3.6	3.0	2.0	3.8	154	92	30	11	7.3
23	7.0	4.4	3.3	3.5	2.9	2.2	3.5	200	91	29	9.9	8.3
24	7.2	4.3	3.5	3.5	2.8	2.0	3.4	223	94	51	9.7	7.5
25	7.1	4.2	3.4	3.7	2.8	2.3	3.3	220	73	67	9.1	6.9
26	6.2	4.1	3.2	3.7	2.8	2.5	3.2	162	61	44	9.3	6.7
27	6.6	4.2	3.3	3.5	2.9	2.7	3.5	108	56	37	8.9	6.6
28	7.3	4.2	3.5	3.4	2.8	2.6	3.8	85	54	34	8.3	6.5
29	6.8	3.9	3.5	3.4	---	2.5	3.6	87	51	35	7.6	6.1
30	6.4	3.8	3.6	3.5	---	2.6	3.5	131	47	32	7.2	6.0
31	6.1	---	3.6	3.7	---	2.7	---	323	---	28	6.9	---
TOTAL	206.3	152.8	110.6	107.0	91.4	73.6	92.4	2384.5	7169	1327	443.9	187.6
MEAN	6.65	5.09	3.57	3.45	3.26	2.37	3.08	76.9	239	42.8	14.3	6.25
MAX	8.0	7.0	3.8	3.8	3.8	2.7	4.0	323	545	73	27	8.3
MIN	5.4	3.8	3.2	3.0	2.8	1.9	2.4	3.4	47	28	6.9	4.7
AC=FT	409	303	219	212	181	146	183	4730	14220	2630	880	372

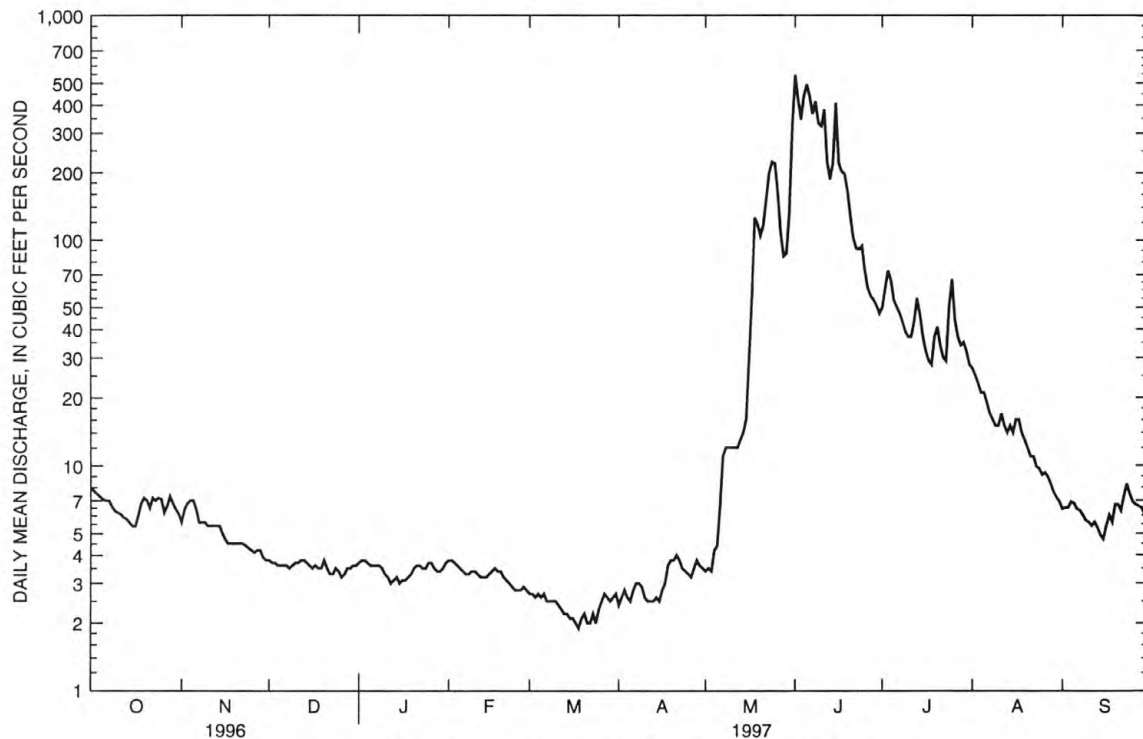
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1997, BY WATER YEAR (WY)

MEAN	8.57	5.84	3.83	2.69	2.19	2.09	5.69	104	211	49.8	13.3	9.93
MAX	17.6	11.2	7.18	4.50	3.50	3.69	28.4	289	353	188	45.6	44.9
(WY)	1962	1962	1995	1995	1958	1960	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	11.7	4.08	2.77
(WY)	1989	1976	1970	1980	1980	1961	1970	1975	1994	1961	1961	1988

06278300 SHELL CREEK ABOVE SHELL RESERVOIR, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1957 - 1997
ANNUAL TOTAL	12757.3	12346.1	--
ANNUAL MEAN	34.9	33.8	34.9
HIGHEST ANNUAL MEAN	--	--	50.2
LOWEST ANNUAL MEAN	--	--	18.6
HIGHEST DAILY MEAN	592 Jun 9	545 Jun 1	1010 Jun 15 1963
LOWEST DAILY MEAN	1.5 Feb 28, Mar 10	1.9 Mar 18	.60 Mar 7 1967
ANNUAL SEVEN-DAY MINIMUM	1.7 Feb 25	2.0 Mar 16	.90 Jan 27 1980
INSTANTANEOUS PEAK FLOW	--	738 Jun 5	1870 ^a Jun 15 1963
INSTANTANEOUS PEAK STAGE	--	5.79 Jun 5	7.84 ^b Jun 15 1963
ANNUAL RUNOFF (AC-FT)	25300	24490	25260
10 PERCENT EXCEEDS	79	89	100
50 PERCENT EXCEEDS	5.0	5.4	5.8
90 PERCENT EXCEEDS	2.2	2.7	1.9

a From rating curve extended above 725 ft³/s on basis of velocity-area study.
b From floodmarks.



06278300 SHELL CREEK ABOVE SHELL RESERVOIR, WY

YELLOWSTONE RIVER BASIN

06278500 SHELL CREEK NEAR SHELL, WY

LOCATION.--Lat 44°33'54", long 107°42'44", 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. Datum of gage is 4,370.05 ft above sea level.

REMARKS.--Estimated daily discharges: Aug. 21-24. 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 period when station was not in operation, are given below:

Oct. 09 . . . 57.5
Mar. 25 . . . 22.5

COOPERATION.--Station operated and record provided by Office of the Wyoming State Engineer; record reviewed by U.S. Geological Survey.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 750 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 11	0200	*1,210	*5.16
June 15	1000	989	4.77

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	37	38	975	233	132	133
2	---	---	---	---	---	---	34	37	978	256	130	132
3	---	---	---	---	---	---	34	37	798	277	133	130
4	---	---	---	---	---	---	37	37	858	252	123	128
5	---	---	---	---	---	---	30	40	948	225	122	127
6	---	---	---	---	---	---	31	49	956	208	120	125
7	---	---	---	---	---	---	37	58	918	198	114	123
8	---	---	---	---	---	---	34	56	871	188	109	123
9	---	---	---	---	---	---	33	60	829	180	106	122
10	---	---	---	---	---	---	31	72	782	175	106	122
11	---	---	---	---	---	---	28	80	1000	151	112	122
12	---	---	---	---	---	---	31	75	784	174	107	120
13	---	---	---	---	---	---	32	85	625	215	106	117
14	---	---	---	---	---	---	33	87	584	194	107	115
15	---	---	---	---	---	---	32	107	822	170	104	115
16	---	---	---	---	---	---	32	194	679	157	110	115
17	---	---	---	---	---	---	34	237	562	149	115	113
18	---	---	---	---	---	---	37	247	537	144	104	113
19	---	---	---	---	---	---	41	320	519	158	100	120
20	---	---	---	---	---	---	41	306	460	158	96	115
21	---	---	---	---	---	---	44	330	398	147	93	88
22	---	---	---	---	---	---	36	372	353	139	91	87
23	---	---	---	---	---	---	36	484	336	133	105	90
24	---	---	---	---	---	---	37	547	338	170	114	82
25	---	---	---	---	---	---	36	590	304	258	121	80
26	---	---	---	---	---	---	36	502	276	184	114	78
27	---	---	---	---	---	---	37	399	259	159	118	78
28	---	---	---	---	---	---	43	356	243	149	112	77
29	---	---	---	---	---	---	41	355	234	154	109	77
30	---	---	---	---	---	---	38	399	216	151	107	76
31	---	---	---	---	---	---	---	612	---	139	126	---
TOTAL	---	---	---	---	---	---	1063	7168	18442	5645	3466	3243
MEAN	---	---	---	---	---	---	35.4	231	615	182	112	108
MAX	---	---	---	---	---	---	44	612	1000	277	133	133
MIN	---	---	---	---	---	---	28	37	216	133	91	76
AC-FT	---	---	---	---	---	---	2110	14220	36580	11200	6870	6430

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1971, BY WATER YEAR (WY)

	MEAN	56.9	47.2	41.5	36.9	35.2	34.7	50.9	272	519	166	91.1	70.9
MAX	95.2	76.4	60.4	48.7	44.6	48.0	138	438	990	308	135	134	
(WY)	1942	1969	1969	1948	1947	1946	1946	1968	1968	1945	1968	1968	
MIN	35.3	31.5	30.0	28.3	26.9	25.9	29.0	92.7	163	69.2	57.7	36.0	
(WY)	1955	1955	1941	1967	1961	1961	1961	1953	1966	1961	1966	1954	

YELLOWSTONE RIVER BASIN

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06278500 SHELL CREEK NEAR SHELL, WY--Continued

SUMMARY STATISTICS

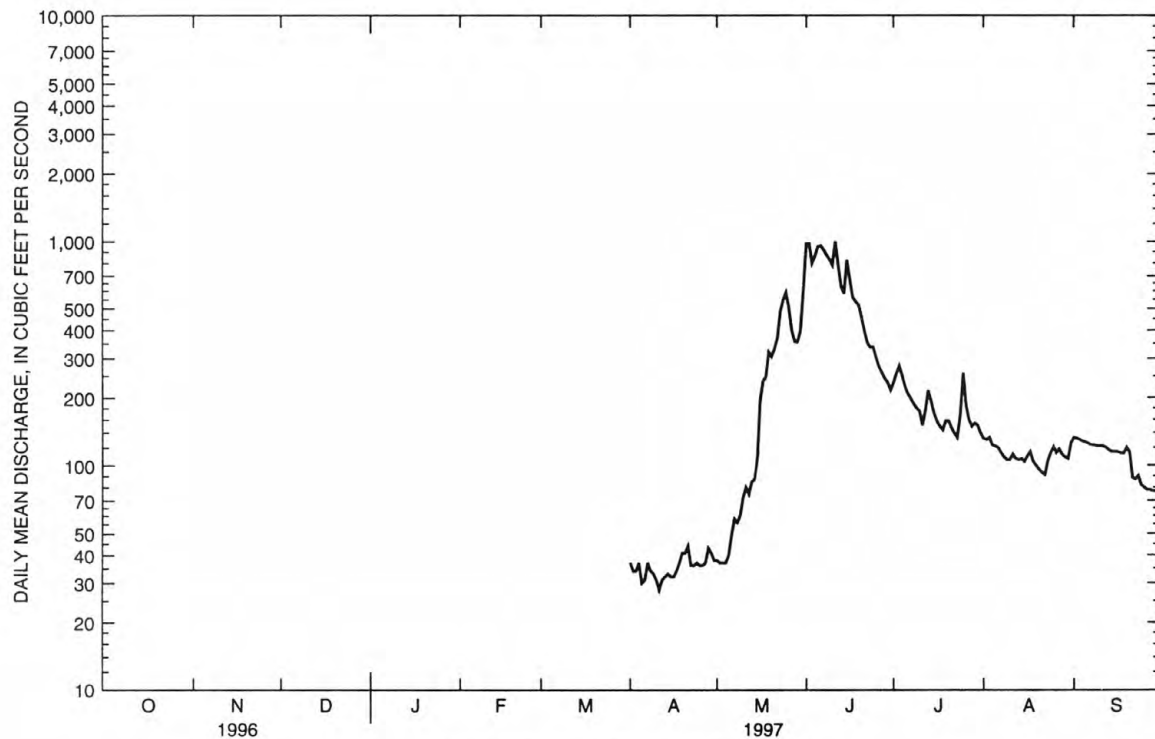
FOR 1997 WATER YEAR*

WATER YEARS 1941 - 1971

ANNUAL MEAN	--		119	
HIGHEST ANNUAL MEAN	--		160	1968
LOWEST ANNUAL MEAN	--		77.3	1966
HIGHEST DAILY MEAN	1000	Jun 11	1980	Jun 4 1968
LOWEST DAILY MEAN	28	Apr 11	13	Apr 10 1989#
ANNUAL SEVEN-DAY MINIMUM	--		20	Jan 28 1951
INSTANTANEOUS PEAK FLOW	1210	Jun 11	3020 ^a	Jun 24 1945#
INSTANTANEOUS PEAK STAGE	5.16	Jun 11	7.49	Jun 24 1945#
ANNUAL RUNOFF (AC-FT)	--		85900	
10 PERCENT EXCEEDS	--		288	
50 PERCENT EXCEEDS	--		50	
90 PERCENT EXCEEDS	--		33	

* During period of operation.

For period of record through 1997.

a From rating curve extended above 1,600 ft³/s.

06278500 SHELL CREEK NEAR SHELL, WY

LOCATION.--Lat 44°45'31", long 108°10'51", in NW¹/₄ NE¹/₄ SW¹/₄ 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.

WATER-DISCHARGE RECORDS

GAGE.--Water-stage recorder. Elevation of gage is 3,660 ft above sea level, from topographic map. Aug. 29, 1928, to Apr. 25, 1932, nonrecording gage, and Apr. 25, 1932, to May 16, 1956, water-stage recorder at site 12.5 mi downstream at different datum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1923, 14.8 ft, Sept. 30, 1923, site and datum in use April 1932 to May 1956.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1830	1770	1600	1800	1800	1820	2950	2080	6480	6340	3710	2210
2	1810	1750	1600	1850	1700	1680	2960	1810	8700	6010	3870	2130
3	1800	1750	1650	1800	1600	1740	2960	1760	7300	5980	3550	2040
4	1850	1750	1600	1800	1600	1980	2930	1670	6800	5840	3370	2000
5	1840	1750	1600	1700	1600	1830	2930	1640	7100	5360	3250	2030
6	1770	1750	1600	1600	1600	1820	2930	1580	7900	5250	3470	2080
7	1740	1720	1650	1500	1700	2140	3000	1570	7500	4910	3020	2110
8	1730	1690	1650	1600	1700	2280	2950	1670	7800	4620	3230	2160
9	1750	1690	1700	1650	1700	2410	2830	1810	12000	4340	3090	2120
10	1860	1740	1850	1550	1800	2590	2810	1950	15300	4130	3070	2150
11	1800	1760	1850	1500	1800	3170	2870	2450	17800	3910	3350	2190
12	1660	1760	1900	1350	1900	4420	2860	2910	13400	3220	3500	2240
13	1610	1730	1850	1200	2000	4450	2820	2860	11600	5320	4220	2290
14	1610	1710	1800	1200	2200	3760	2830	2430	12800	4330	4440	2360
15	1600	1700	1700	1400	2300	3170	2760	1990	13400	3740	4370	2350
16	1580	1690	1600	1600	2500	3110	2780	1880	15000	3350	4180	2330
17	1630	1650	1550	1550	2500	3320	2740	2080	11200	3130	3830	2390
18	1700	1620	1400	1600	2400	3590	2500	2730	9650	3070	3850	2470
19	1700	1660	1350	1800	2400	3680	2460	3070	9980	3160	3610	2540
20	1700	1710	1350	2000	2280	3500	2490	2680	9280	5360	3080	2700
21	1700	1710	1400	2100	2200	3370	2490	3250	9050	5940	2580	2790
22	1700	1680	1350	2100	2200	3300	2380	4000	9740	4250	2330	2930
23	1670	1650	1300	2000	2100	3230	2140	4450	9720	3630	2250	4110
24	1670	1500	1300	1950	1840	3170	2000	5450	9400	3370	2200	3780
25	1670	1550	1250	1700	1790	3110	1950	6170	8160	3960	2200	3300
26	1700	1600	1300	1700	1700	3080	1650	6980	6760	4160	2180	3100
27	1740	1650	1400	1600	1690	3030	1550	6370	6290	3690	2150	3030
28	1710	1650	1400	1500	1860	3040	1510	5720	6150	3550	2250	2980
29	1740	1600	1400	1500	---	3020	1540	5330	6030	4760	2210	2980
30	1790	1650	1550	1600	---	2980	2070	5400	5830	4400	2160	2960
31	1810	---	1700	1800	---	2960	---	5660	---	3970	2180	---
TOTAL	53470	50590	48200	51600	54460	90750	75640	101400	288120	137050	96750	76850
MEAN	1725	1686	1555	1665	1945	2927	2521	3271	9604	4421	3121	2562
MAX	1860	1770	1900	2100	2500	4450	3000	6980	17800	6340</		

MEAN	1803	1683	1459	1366	1545	1825	1828	3191	5953	3192	1451	1528
MAX	3994	2871	2506	2871	3164	3171	3454	7505	14680	11650	6388	3673
(WY)	1983	1984	1983	1972	1983	1972	1943	1947	1944	1967	1930	1973
MIN	524	737	627	580	550	740	696	1005	1032	501	305	386
(WY)	1936	1961	1961	1937	1933	1989	1961	1960	1934	1961	1940	1935

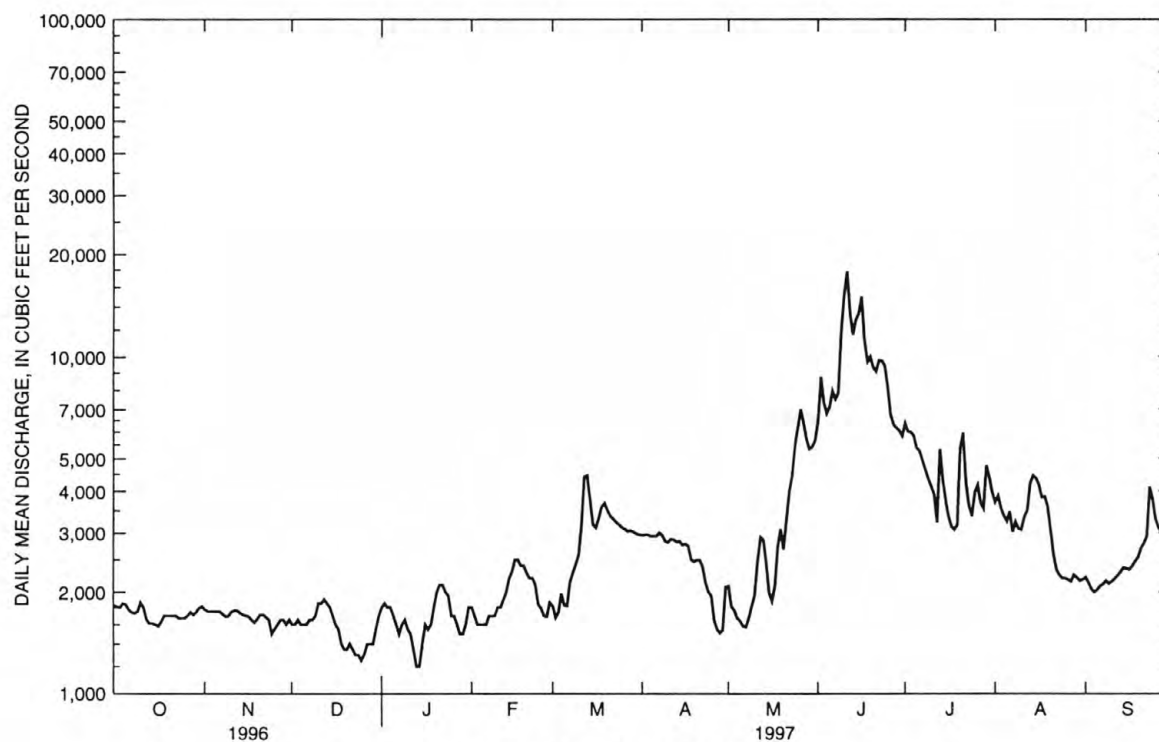
YELLOWSTONE RIVER BASIN

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06279500 BIGHORN RIVER AT KANE, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1930 - 1997*	
ANNUAL TOTAL	825828		1124880		--	
ANNUAL MEAN	2256		3082		2235	
HIGHEST ANNUAL MEAN	--		--		3524	1947
LOWEST ANNUAL MEAN	--		--		915	1989
HIGHEST DAILY MEAN	7550	Jun 16	17800	Jun 11	24800	Jun 15 1935
LOWEST DAILY MEAN	900	Feb 2	1200	Jan 13, 14	179	Jul 22 1934
ANNUAL SEVEN-DAY MINIMUM	957	Aug 26	1320	Dec 20	184	Jul 18 1934
INSTANTANEOUS PEAK FLOW	--		18600	Jun 11	25200 ^a	Jun 16 1935
INSTANTANEOUS PEAK STAGE	--		9.11	Jun 11	11.10 ^a	Jun 16 1935
ANNUAL RUNOFF (AC-FT)	1638000		2231000		1619000	
10 PERCENT EXCEEDS	3730		5880		4050	
50 PERCENT EXCEEDS	1810		2180		1650	
90 PERCENT EXCEEDS	1110		1600		792	

* August 1928 to September 1929 not used in computations, monthly discharge only for selected months.
 a Site and datum then in use.



06279500 BIGHORN RIVER AT KANE, WY

YELLOWSTONE RIVER BASIN

06279500 BIGHORN RIVER AT KANE, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1947 to September 1997 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

						DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)			

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WATER-QUALITY DATA. WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	DICHLOR PROP, WATER, FLTRD, GF 0.7U REC (UG/L) (49302)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L) (49301)	DISUL- FOTON WATER, FLTRD 0.7 U GF, REC (UG/L) (82677)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	DNOC WAT,FLT REC (UG/L) (49299)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ESFEN- VAL- ERATE, WAT,FLT REC (UG/L) (49298)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)
	APR 14...	<0.032	<0.001	<0.003	<0.035	<0.017	E0.009	<0.035	<0.002	<0.019	<0.004
JUN 24...	<0.032	<0.001	<0.003	<0.035	<0.017	E0.03	<0.035	E0.003	<0.019	<0.004	<0.003
E-Estimate.											
DATE	FEN- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	FLUO- METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	FONOFOS WATER DISS REC (UG/L) (04095)	3HYDRXY CARBO- FURAN WAT,FLT GF 0.7U REC (UG/L) (49308)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L) (38487)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHIO- CABB, WATER, FLTRD, GF 0.7U REC (UG/L) (38501)
	APR 14...	<0.013	<0.035	<0.003	<0.014	<0.002	<0.004	<0.002	<0.05	<0.035	<0.005
JUN 24...	<0.013	<0.035	<0.003	<0.014	<0.002	<0.004	<0.002	<0.05	<0.035	E0.004	<0.026
E-Estimate.											
DATE	METH- OMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	1-NAPH THOL, WATER, FLTRD, GF 0.7U REC (UG/L) (49295)	NAPPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	NEB- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49294)	NORFLUR AZON, WATER, FLTRD, GF 0.7U REC (UG/L) (49293)	ORY- ZALIN, WATER, FLTRD, GF 0.7U REC (UG/L) (49292)	OXAMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (38866)
	APR 14...	<0.017	<0.006	<0.002	<0.004	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019
JUN 24...	<0.017	<0.006	E0.002	<0.004	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018
E-Estimate.											
DATE	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PIC- LORAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49291)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)
	APR 14...	<0.004	<0.004	<0.004	<0.005	<0.002	<0.05	<0.018	<0.003	<0.007	<0.004
JUN 24...	<0.004	<0.004	<0.004	<0.005	<0.002	<0.05	E0.004	<0.003	<0.007	<0.004	<0.013
E-Estimate.											
DATE	PRO- PHAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49236)	PRO- POXUR, WATER, FLTRD, GF 0.7U REC (UG/L) (38538)	SILVEX, DIS- SOLVED (UG/L) (39762)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- CLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L) (49235)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
	APR 14...	<0.035	<0.035	<0.021	<0.005	<0.01	<0.007	<0.013	<0.002	<0.001	<0.05
JUN 24...	<0.035	<0.035	<0.021	<0.005	E0.001	<0.007	<0.013	<0.002	E0.004	<0.05	E0.002
E-Estimate.											

YELLOWSTONE RIVER BASIN

06279940 NORTH FORK SHOSHONE RIVER AT WAPITI, WY

LOCATION.--Lat 44°28'10", long 109°25'49", in SE¹/₄ NW¹/₄ NW¹/₄ 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 sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 27, Nov. 16, 17, 23, Nov. 25 to Dec. 1, Dec. 16, Dec. 19 to Jan. 5, Jan. 7-23, Jan. 26 to Feb. 10, Feb. 13, Feb. 21 to Mar. 6, Mar. 15 to Apr. 2, and June 2-5. Records good except those for June 6 to July 8, which are fair, and those for estimated daily discharges, which are poor. Diversion for irrigation of about 1,500 acres upstream from station. Bureau of Reclamation data collection platform with satellite telemetry at 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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 24	2100	6,620	7.51
June 9	2345	*9,850	8.21

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	405	259	240	230	210	170	450	919	7420	3780	1420	563
2	388	272	204	230	220	170	430	853	6800	3190	1360	556
3	378	279	164	220	190	190	455	804	6300	2930	1310	543
4	366	291	168	200	180	190	466	898	7450	2770	1250	538
5	355	272	190	190	170	180	417	1100	8300	2940	1730	516
6	345	231	198	190	170	190	371	1610	8610	3030	1360	492
7	337	246	183	190	170	187	381	1850	8260	3200	1240	568
8	330	250	175	190	180	181	350	1840	8060	3190	1200	482
9	323	245	173	180	210	174	337	2170	8690	3210	1120	464
10	317	242	171	170	190	193	310	2710	8940	3230	1330	452
11	312	246	159	140	195	219	288	3060	8170	3070	1200	645
12	305	248	143	120	195	236	282	3090	6790	2910	1090	635
13	301	249	135	150	190	228	294	3380	6400	2670	1040	516
14	304	250	132	180	195	178	302	3570	5820	2360	1290	458
15	299	233	91	220	179	190	294	4280	5740	2480	1070	512
16	308	220	90	210	194	210	334	4920	5940	2690	1070	583
17	289	210	88	220	194	250	539	5260	6080	2700	949	480
18	282	233	91	230	190	270	785	5280	7500	2590	896	441
19	323	771	87	250	190	250	1030	4410	6890	2520	843	454
20	294	747	85	260	178	330	1290	4340	5680	2210	804	416
21	251	468	88	250	170	470	1310	4740	4910	2230	791	410
22	278	371	80	230	160	410	997	5150	5130	2180	770	523
23	275	340	74	210	160	440	910	5130	5140	2120	745	461
24	272	278	77	221	160	330	868	5340	4280	2060	796	409
25	275	321	79	201	160	420	822	5190	3900	1930	787	392
26	273	290	110	180	190	500	827	4120	3960	1880	737	381
27	245	270	150	160	190	560	1100	3490	4150	1750	734	391
28	280	260	190	170	180	500	1530	3330	4200	1800	687	383
29	338	280	230	180	---	440	1250	3690	4070	2000	652	370
30	280	250	240	190	---	410	1030	4620	3960	1740	610	356
31	259	---	230	200	---	440	---	6080	---	1530	579	---
TOTAL	9587	9122	4515	6162	5160	9106	20049	107224	187540	78890	31460	14390
MEAN	309	304	146	199	184	294	668	3459	6251	2545	1015	480
MAX	405	771	240	260	220	560	1530	6080	8940	3780	1730	645
MIN	245	210	74	120	160	170	282	804	3900	1530	579	356
AC-FT	19020	18090	8960	12220	10230	18060	39770	212700	372000	156500	62400	28540

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1997, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	260	219	164	147	152	210	553	2157
MAX	309	304	283	199	184	294	792	3459
(WY)	1997	1997	1996	1997	1997	1997	1997	1997
MIN	221	157	139	121	123	144	282	1221
(WY)	1995	1995	1993	1992	1994	1991	1993	1990

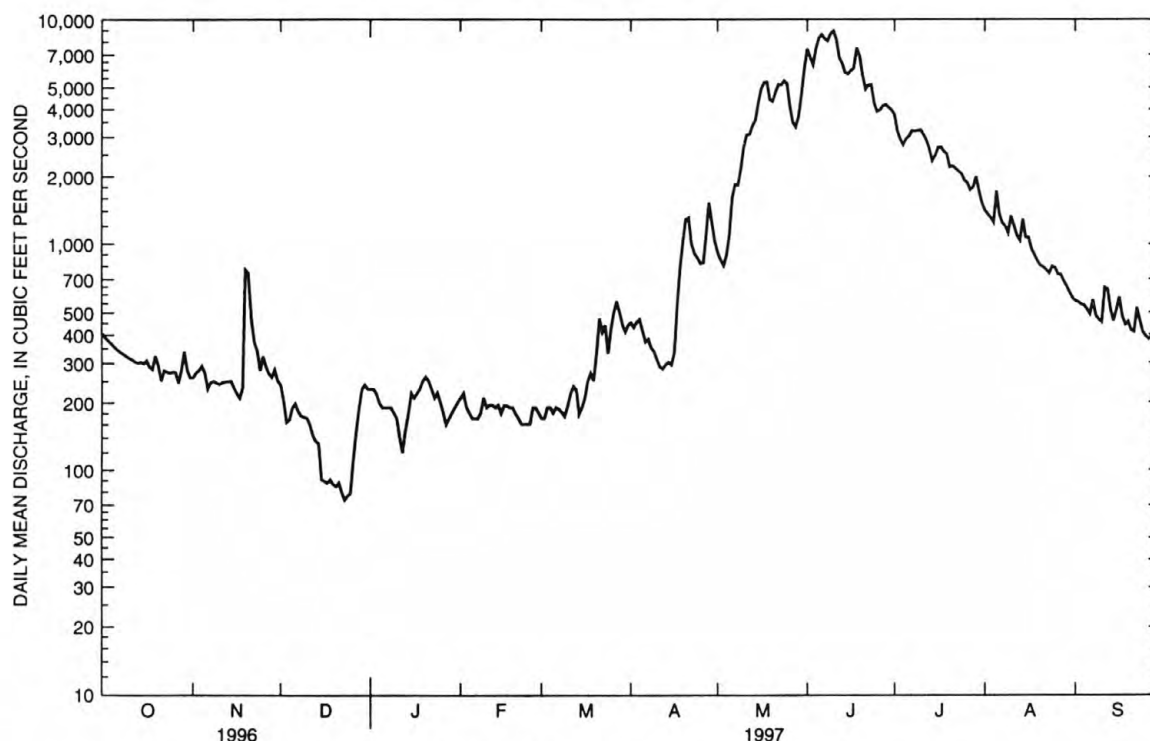
YELLOWSTONE RIVER BASIN

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06279940 NORTH FORK SHOSHONE RIVER AT WAPITI, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1990 - 1997	
ANNUAL TOTAL	448944		483205		--	
ANNUAL MEAN	1227		1324		895	
HIGHEST ANNUAL MEAN	--		--		1324	1997
LOWEST ANNUAL MEAN	--		--		551	1994
HIGHEST DAILY MEAN	8560	Jun 9	8940	Jun 10	8940	Jun 10 1997
LOWEST DAILY MEAN	74	Dec 23	74	Dec 23	74	Dec 23 1996
ANNUAL SEVEN-DAY MINIMUM	81	Dec 19	81	Dec 19	81	Dec 19 1996
INSTANTANEOUS PEAK FLOW	--		9850	Jun 9	11100 ^a	Jun 9 1996
INSTANTANEOUS PEAK STAGE	--		8.21	Jun 9	9.54 ^b	Jun 13 1991
ANNUAL RUNOFF (AC-FT)	890500		958400		648600	
10 PERCENT EXCEEDS	4010		4280		2760	
50 PERCENT EXCEEDS	352		388		275	
90 PERCENT EXCEEDS	160		172		136	

a Gage height, 8.63 ft, from floodmarks.

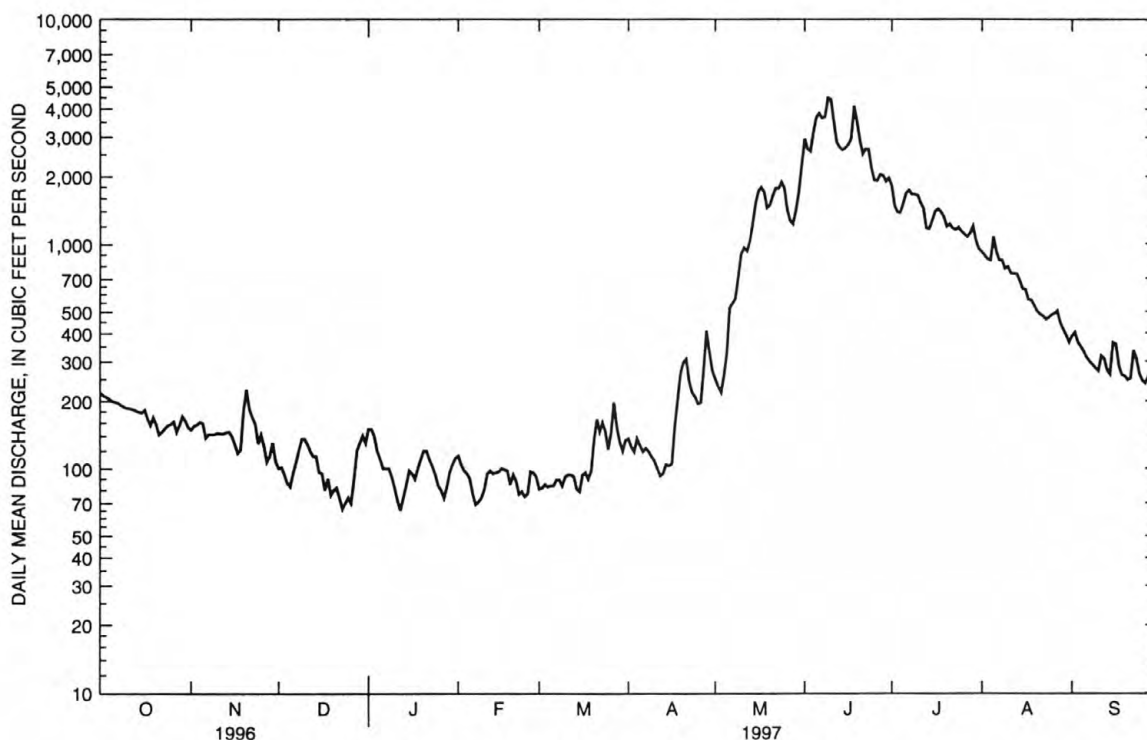
b Discharge 9,460 ft³/s.

06279940 NORTH FORK SHOSHONE RIVER AT WAPITI, WY

06280300 SOUTH FORK SHOSHONE RIVER NEAR VALLEY, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1957 - 1997	
ANNUAL TOTAL	191307		222159		--	
ANNUAL MEAN	523		609		416	
HIGHEST ANNUAL MEAN	--		--		609	1997
LOWEST ANNUAL MEAN	--		--		221	1977
HIGHEST DAILY MEAN	3760	Jun 9	4500	Jun 9	6100	Jun 9 1981
LOWEST DAILY MEAN	62	Feb 2	65	Jan 12	35	Dec 20 1990
ANNUAL SEVEN-DAY MINIMUM	74	Jan 29	74	Dec 20	40	Dec 18 1990
INSTANTANEOUS PEAK FLOW	--		5190	Jun 9	10000	Jun 9 1981
INSTANTANEOUS PEAK STAGE	--		8.53	Jun 9	9.24 ^a	Jun 9 1981
ANNUAL RUNOFF (AC-FT)	379500		440700		301400	
10 PERCENT EXCEEDS	1820		1770		1260	
50 PERCENT EXCEEDS	162		182		139	
90 PERCENT EXCEEDS	84		85		68	

a From floodmarks.

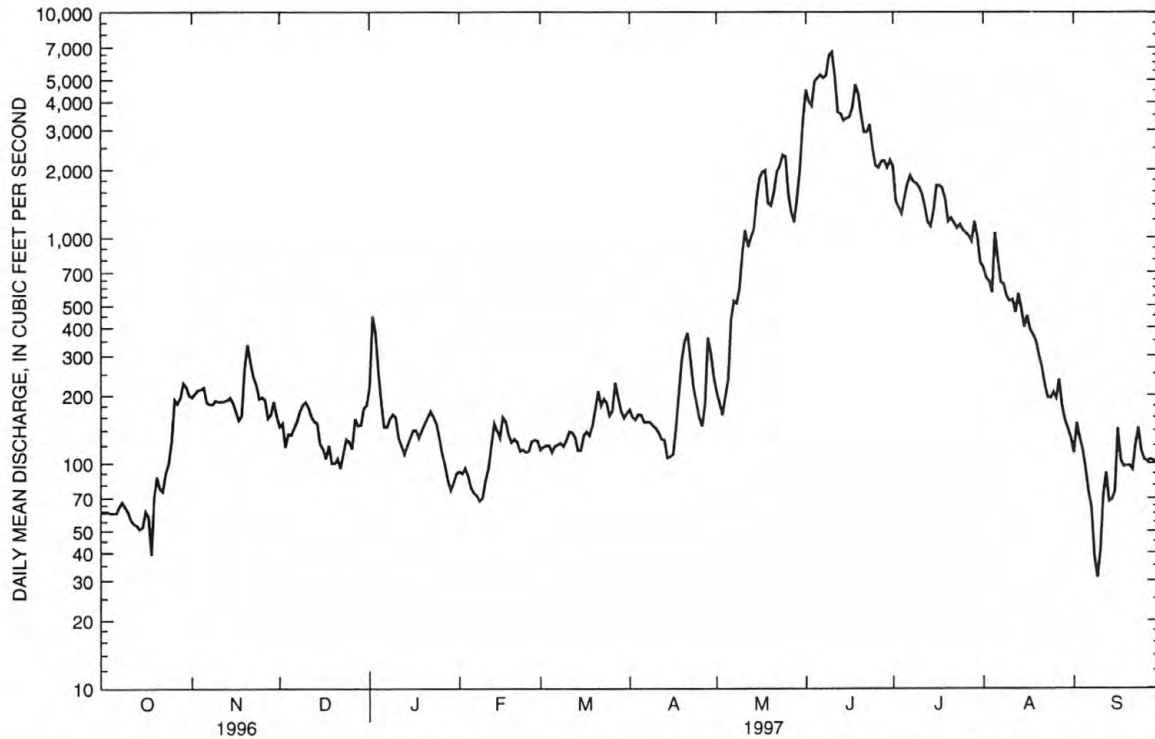


06280300 SOUTH FORK SHOSHONE RIVER NEAR VALLEY, WY

06281000 SOUTH FORK SHOSHONE RIVER ABOVE BUFFALO BILL RESERVOIR, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1903 - 1997	
ANNUAL TOTAL	189123.7		243594		--	
ANNUAL MEAN	517		667		388	
HIGHEST ANNUAL MEAN	--		--		705	1907
LOWEST ANNUAL MEAN	--		--		181	1988
HIGHEST DAILY MEAN	4320	Jun 15	6670	Jun 10	7370	Jun 9 1981
LOWEST DAILY MEAN	4.8	Sep 8	31	Sep 9	.00	Several days, 1992-93
ANNUAL SEVEN-DAY MINIMUM	5.2	Sep 4	53	Oct 12	.00	Sep 15 1992
INSTANTANEOUS PEAK FLOW	--		7870	Jun 10	9960	Jun 9 1981
INSTANTANEOUS PEAK STAGE	--		8.36	Jun 10	9.41 ^a	Jun 9 1981
ANNUAL RUNOFF (AC-FT)	375100		483200		281400	
10 PERCENT EXCEEDS	2040		2000		1300	
50 PERCENT EXCEEDS	140		170		125	
90 PERCENT EXCEEDS	52		80		31	

a Site and datum then in use.



06281000 SOUTH FORK SHOSHONE RIVER ABOVE BUFFALO BILL RESERVOIR, WY

YELLOWSTONE RIVER BASIN

06281500 BUFFALO BILL RESERVOIR NEAR CODY, WY

LOCATION.--Lat 44°30'05", long 109°11'00", in NE¹/4 sec.12, T.52 N., R.103 W., Park County, Hydrologic Unit 10080013, at dam on Shoshone River, 5.0 mi upstream from Trail Creek, and 6.0 mi southwest of Cody.

DRAINAGE AREA.--1,498 mi².

PERIOD OF RECORD.--May to July 1909, January 1910 to current year. Monthend contents only prior to October 1938, published in WSP 1309. Prior to October 1944, published as Shoshone Reservoir near Cody.

GAGE.--Water-stage recorder. Datum of gage is sea level (Bureau of Reclamation datum). Prior to July 8, 1959, nonrecording gage at same datum.

REMARKS.--Reservoir is formed by masonry dam completed by Bureau of Reclamation in 1909. Height of dam was increased 25 ft, effective 1992, increasing capacity to 604,800 acre-ft, elevation 5,393.50 ft, from 424,000 acre-ft, elevation 5,360.00 ft. Crest of dam is at elevation 5,395.00 ft. Dead storage negligible. Figures given herein represent total contents. Water used for power generation and irrigation of lands east of Cody.

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily contents, 647,000 acre-ft, July 30, 1996, elevation, 5,393.51 ft; minimum daily contents, 19,000 acre-ft, Jan 23-25, 1941, elevation, 5,225.3 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 646,000 acre-ft, July 26, 27, maximum elevation, 5,393.42 ft, July 26; minimum daily contents, 262,000 acre-ft, May 9-12, minimum elevation, 5,336.51 ft, May 10.

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

5,335	251,000	5,365	430,000	5,385	577,000
5,345	304,000	5,375	502,000	5,395	659,000
5,355	364,000				

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY OBSERVATION AT 2400 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	526000	512000	516000	512000	514000	484000	420000	291000	349000	620000	641000	621000
2	525000	512000	516000	515000	514000	483000	416000	286000	362000	620000	640000	620000
3	525000	512000	515000	516000	514000	482000	412000	281000	373000	621000	640000	618000
4	524000	512000	515000	517000	514000	480000	408000	276000	386000	622000	639000	616000
5	523000	513000	515000	517000	513000	478000	404000	272000	404000	625000	641000	614000
6	522000	512000	515000	517000	512000	477000	399000	269000	422000	627000	641000	612000
7	521000	512000	515000	517000	511000	475000	394000	267000	439000	631000	640000	610000
8	520000	512000	515000	517000	510000	474000	390000	265000	455000	634000	639000	608000
9	519000	512000	515000	517000	509000	473000	385000	262000	475000	637000	639000	605000
10	518000	512000	515000	517000	508000	472000	380000	262000	494000	640000	639000	603000
11	517000	512000	515000	517000	508000	470000	375000	262000	510000	641000	639000	601000
12	516000	512000	515000	517000	507000	468000	370000	262000	520000	642000	639000	599000
13	515000	512000	515000	516000	506000	465000	365000	263000	529000	641000	639000	597000
14	514000	513000	515000	516000	505000	462000	359000	264000	537000	641000	639000	595000
15	513000	512000	514000	516000	503000	459000	354000	268000	547000	643000	639000	592000
16	512000	512000	514000	516000	502000	457000	349000	273000	556000	644000	639000	591000
17	511000	512000	513000	515000	501000	454000	345000	280000	567000	644000	639000	588000
18	510000	513000	513000	516000	500000	452000	341000	287000	582000	644000	638000	586000
19	510000	514000	512000	516000	499000	450000	338000	291000	597000	645000	637000	584000
20	510000	515000	512000	516000	497000	448000	336000	295000	600000	644000	637000	582000
21	510000	516000	512000	515000	496000	447000	333000	299000	603000	644000	636000	580000
22	510000	516000	512000	516000	494000	445000	329000	305000	606000	643000	635000	578000
23	510000	516000	511000	515000	493000	444000	325000	310000	610000	643000	634000	577000
24	510000	516000	511000	515000	491000	442000	320000	316000	612000	645000	633000	576000
25	510000	516000	512000	515000	490000	440000	316000	322000	612000	645000	632000	574000
26	511000	517000	511000	515000	488000	438000	311000	325000	613000	646000	631000	572000
27	511000	517000	511000	514000	487000	437000	306000	325000	614000	646000	630000	571000
28	510000	516000	511000	514000	486000	435000	303000	325000	615000	645000	628000	569000
29	511000	517000	511000	514000	---	431000	299000	326000	616000	645000	627000	568000
30	512000	516000	511000	514000	---	428000	295000	329000	618000	644000	625000	567000
31	512000	---	512000	514000	---	424000	---	336000	---	642000	623000	---
MAX	526000	517000	516000	517000	514000	484000	420000	336000	618000	646000	641000	621000
MIN	510000	512000	511000	512000	486000	424000	295000	262000	349000	620000	623000	567000
(#)	5,376.12	5,376.73	5,376.14	5,376.34	5,372.53	5,363.76	5,342.78	5,349.87	5,390.00	5,392.88	5,390.59	5,383.37
(*)	-15,000	+4,000	-4,000	+2,000	-28,000	-62,000	-129,000	+41,000	+282,000	+24,000	-19,000	-56,000

WTR YR 1997 MAX 646000 MIN 262000 (*) +40,000

(#) Elevation, in feet, at end of month.

(*) Change in contents, in acre-feet.

YELLOWSTONE RIVER BASIN

133

06281700 SHOSHONE RIVER ABOVE DEMARIS SPRINGS, NEAR CODY, WY

LOCATION.--Lat 44°30'39", long 109°08'47", in NW¹/4 SE¹/4 sec.5, T.52 N., R.102 W, Park County, Hydrologic Unit 10080014, at bridge on State Highway 16, 1.9 mi downstream from Buffalo Bill Reservoir, and 3.8 mi west of Cody city limits.

PERIOD OF RECORD.--October 1987 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TEMPER-ATURE AIR (DEG C) (00020)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 14...	1240	450	156	7.3	6.0	5.0	630	1.8	10.1	98	51
JAN 29...	1125	426	196	7.8	1.0	0.0	640	9.5	12.0	101	76
MAR 25...	1600	1800	177	7.9	3.0	14.0	637	1.2	11.7	104	--
MAY 06...	1230	3150	200	7.6	6.0	18.5	630	5.0	10.2	99	69
JUN 26...	0745	4820	96	7.8	10.0	15.5	638	36	9.6	102	31
JUL 31...	1110	2530	89	7.4	12.0	27.0	642	30	8.8	97	33
AUG 20...	1605	990	103	7.4	13.0	32.0	-	20	8.8	--	34
SEP 10...	1110	1020	104	8.0	14.0	27.0	637	18	9.1	106	36

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
NOV 14...	15	3.4	11	0.7	1.0	60	19	0.6	0.1	13
JAN 29...	22	5.0	13	0.7	1.0	73	27	0.9	0.2	15
MAR 25...	--	--	--	--	--	--	--	--	--	--
MAY 06...	20	4.5	14	0.7	1.0	72	27	1.0	0.2	14
JUN 26...	8.7	2.2	6.7	0.5	0.7	40	7.2	0.4	0.1	15
JUL 31...	9.5	2.2	7.1	0.5	0.7	41	8.0	0.3	<0.1	15
AUG 20...	9.9	2.3	7.0	0.5	0.7	43	8.8	0.4	<0.1	15
SEP 10...	10	2.5	7.1	0.5	0.8	44	9.3	0.4	<0.1	14

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV 14...	99	0.13	121	<0.01	<0.05	<0.01	<0.2	0.03	0.04	0.04
JAN 29...	128	0.17	148	0.01	0.08	0.02	<0.2	0.06	0.03	0.03
MAR 25...	--	--	--	<0.01	<0.05	<0.01	0.3	0.08	0.02	0.02
MAY 06...	124	0.17	1060	<0.01	<0.05	<0.01	<0.2	0.12	0.04	0.03
JUN 26...	66	0.09	856	<0.01	0.09	<0.01	<0.2	0.16	0.03	0.04
JUL 31...	68	0.09	462	<0.01	0.07	<0.01	<0.2	0.06	0.03	0.04
AUG 20...	71	0.10	189	<0.01	0.08	<0.01	<0.2	0.06	0.03	0.04
SEP 10...	71	0.10	196	<0.01	0.07	<0.01	<0.2	0.07	0.03	0.02

YELLOWSTONE RIVER BASIN

06282000 SHOSHONE RIVER BELOW BUFFALO BILL RESERVOIR, WY

LOCATION.--Lat 44°31'00", long 109°05'50", 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 Oct. 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 sea level, from topographic map. Prior to Oct. 1, 1949, at site 2.5 mi upstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated by Buffalo Bill Reservoir (station 06281500). 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. Bureau of Reclamation data collection platform with satellite telemetry at station.

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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	689	502	508	520	511	1130	2700	3140	3160	3970	1960	1060
2	685	528	506	520	511	1130	2690	3160	3160	3540	1590	1050
3	599	527	506	520	511	1130	2720	3140	3140	2840	1590	1060
4	635	521	506	519	552	1130	2720	3140	3140	2250	1440	1050
5	700	520	511	518	649	1130	2840	3140	3160	2240	1400	1050
6	695	508	516	517	743	1130	2980	3200	3600	2230	1790	1050
7	702	511	514	517	786	1130	3000	3190	4020	2230	1790	1050
8	695	517	516	513	788	1130	3020	3150	4070	2240	1640	1050
9	690	518	517	510	781	1130	3030	3160	4040	2430	1280	1040
10	690	517	516	511	791	1130	3030	3180	4090	2710	1300	1050
11	694	517	510	510	786	1220	3030	3170	4490	3090	1240	1070
12	695	516	511	510	807	1430	3030	3180	4960	3230	1190	1070
13	698	517	512	511	877	1620	3060	3170	4760	3000	1190	1070
14	698	518	511	508	912	1800	3050	3170	4640	2580	1190	1080
15	694	517	511	507	956	1830	3020	3170	4030	1760	1180	1090
16	691	514	511	507	1030	1850	3030	3180	4030	2310	1180	1100
17	690	516	513	502	1080	1820	3010	3130	4010	3000	1190	1080
18	692	517	516	507	1070	1840	2990	3110	4030	2720	1190	1090
19	465	513	516	509	1110	1830	2980	3110	4960	2580	1180	1100
20	427	515	516	506	1120	1840	2980	3140	5790	2580	1110	1090
21	420	514	518	506	1120	1840	3020	3150	6040	2570	1070	1090
22	418	513	517	506	1110	1840	3190	3180	6040	2570	1060	965
23	424	513	517	507	1110	1870	3180	3190	6080	2060	1060	968
24	423	513	519	506	1120	1860	3170	3200	5620	1560	1060	803
25	426	514	519	511	1120	1870	3160	3200	4950	1590	1050	795
26	427	511	518	512	1130	1880	3150	3200	4780	1610	1050	804
27	428	507	520	507	1120	1870	3150	3180	4710	1970	1050	819
28	420	510	518	508	1120	1930	3130	3140	4580	2120	1030	791
29	303	511	519	508	---	2270	3160	3150	4600	2330	1040	695
30	419	508	520	509	---	2460	3160	3150	4450	2620	1050	710
31	407	---	519	509	---	2710	---	3160	---	2580	1050	---
TOTAL	17739	15443	15947	15831	25321	50780	90380	98030	133130	77110	39190	29790
MEAN	572	515	514	511	904	1638	3013	3162	4438	2487	1264	993
MAX	702	528	520	520	1130	2710	3190	3200	6080	3970	1960	1100
MIN	303	502	506	502	511	1130	2690	3110	3140	1560	1030	695
AC-FT	35190	30630	31630	31400	50220	100700	179300	194400	264100	152900	77730	59090

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1997, BY WATER YEAR (WY)

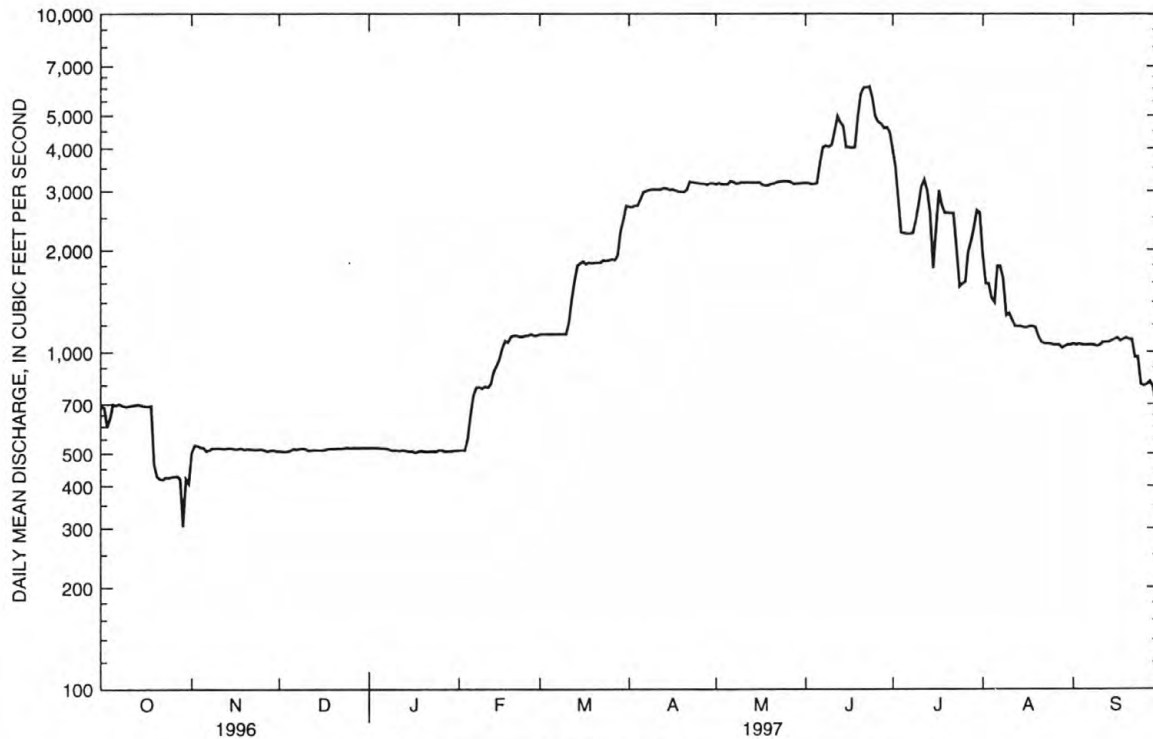
	MEAN	685	526	526	499	496	519	849	1465	2516	2619	1316	938
MAX	1198	966	944	894	904	1638	3013	3162	6440	6556	3397	2113	
(WY)	1953	1952	1951	1952	1997	1997	1997	1997	1943	1943	1958	1958	
MIN	187	128	111	115	65.4	72.5	113	827	807	1017	685	582	
(WY)	1989	1989	1989	1989	1959	1959	1959	1995	1992	1993	1977	1988	

06282000 SHOSHONE RIVER BELOW BUFFALO BILL RESERVOIR, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1943 - 1997*	
ANNUAL TOTAL	597072		608691		--	
ANNUAL MEAN	1631		1668		1082 ^a	
HIGHEST ANNUAL MEAN	--		--		1764	1943
LOWEST ANNUAL MEAN	--		--		556	1988
HIGHEST DAILY MEAN	7290	Jun 28	6080	Jun 23	15100	Jun 9 1981
LOWEST DAILY MEAN	303	Oct 29	303	Oct 29	14	Nov 19 1933#
ANNUAL SEVEN-DAY MINIMUM	404	Oct 25	404	Oct 25	64	Jan 21 1959
INSTANTANEOUS PEAK FLOW	--		6150	Jun 23	17300	Jun 9 1981#
INSTANTANEOUS PEAK STAGE	--		8.07	Jun 23	11.57	Jun 9 1981
ANNUAL RUNOFF (AC-FT)	1184000		1207000		784200	
10 PERCENT EXCEEDS	3040		3180		1950	
50 PERCENT EXCEEDS	1060		1110		841	
90 PERCENT EXCEEDS	504		509		295	

* Period following Heart Mountain Diversion. See REMARKS.

For period of record through 1997.

a Average discharge (water years 1922-1942) prior to Heart Mountain Diversion, 1,256 ft³/s.

06282000 SHOSHONE RIVER BELOW BUFFALO BILL RESERVOIR, WY

YELLOWSTONE RIVER BASIN

06284500 BITTER CREEK NEAR GARLAND, WY

LOCATION.--Lat 44°45'13", long 108°35'29", 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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
OCT							
29...	1515	48	1280	8.9	5.0	0.0	E660
MAR							
25...	1350	22	1450	9.0	9.5	14.0	660
APR							
14...	1740	17	1550	8.6	13.0	16.5	655
JUN							
25...	0730	289	470	8.1	12.0	15.0	665
AUG							
21...	0755	278	625	8.1	14.0	18.0	663

E-Estimate.

DATE	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
OCT							
29...	E14.0	--	130	0.02	4.6	<0.01	<0.01
MAR							
25...	14.6	149	K2	--	--	--	--
APR							
14...	10.8	120	K13	0.04	3.6	0.04	0.03
JUN							
25...	9.8	105	1100	0.01	1.8	0.03	0.07
AUG							
21...	8.7	97	520	0.01	2.4	<0.01	0.07

E-Estimate.

K-Results based on colony count outside the acceptable range (non-ideal colony count).

06285100 SHOSHONE RIVER NEAR LOVELL, WY

LOCATION.--Lat 44°50'19", long 108°26'04", in NW¹/₄ NE¹/₄ 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 sea level, from topographic map. Prior to Oct. 1, 1976, at site 500 ft downstream, at datum 2.00 ft higher. Oct. 1, 1976 to Sept. 30, 1980, at site 500 ft downstream, at datum 1.00 ft higher. Oct. 1, 1981 to Nov. 13, 1986, at site 500 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Nov. 22-25, Dec. 4-7, Dec. 19 to Feb. 19, Apr. 17, July 30 to Aug. 1, and Aug. 27 to Sept. 15. Records fair except those for Oct. 1 to Feb. 19, Apr. 17, July 30 to Aug. 1, and Aug. 27 to Sept. 15, which are poor. Flow regulated by Buffalo Bill Reservoir (station 06281500). 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. U.S. Geological Survey data collection platform with satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1120	598	727	540	500	1270	3370	2640	3010	3920	1700	560
2	931	748	725	560	520	1290	3370	2660	2900	3300	1530	560
3	906	781	692	540	500	1300	3450	2650	2710	2970	1510	600
4	767	770	680	540	500	1290	3420	2710	2510	1680	1390	620
5	725	725	680	500	500	1270	3570	2700	2390	1680	917	660
6	719	693	670	470	620	1270	3780	2730	2440	1680	1370	700
7	783	646	660	460	700	1300	3800	2640	3310	1670	1540	800
8	931	663	691	460	730	1300	3790	2530	3520	1560	1570	740
9	873	691	709	430	740	1270	3770	2520	3890	1480	1090	670
10	812	681	710	400	740	1290	3740	2480	4860	2060	1030	760
11	764	666	709	370	750	1400	3700	2490	4650	2240	1040	820
12	810	649	691	360	790	1760	3670	2540	5060	3060	854	800
13	804	636	684	370	850	1880	3720	2500	5480	3370	949	840
14	855	652	687	400	940	2180	3720	2530	5700	2820	893	860
15	844	761	663	400	1100	2170	3560	2510	6280	1520	922	820
16	817	792	605	380	1200	2240	3460	2560	4940	1030	1120	734
17	915	794	580	370	1300	2400	3490	2610	4470	2690	1130	776
18	974	772	580	400	1400	2310	3370	2560	4440	2670	1100	753
19	1110	722	580	420	1350	2300	3330	2640	4800	2320	951	824
20	1010	789	560	450	1340	2270	3260	2640	6250	2360	790	938
21	801	756	520	450	1320	2270	3020	2630	6610	2390	516	998
22	769	750	500	450	1290	2260	3190	2660	6390	2270	473	1070
23	771	740	500	450	1280	2250	3040	2810	6350	2110	415	1010
24	753	730	490	420	1290	2250	2990	2880	6010	1040	445	844
25	749	740	480	400	1290	2230	2980	3320	4650	1020	450	671
26	913	749	450	400	1310	2240	2860	3180	4350	1190	737	665
27	709	739	420	380	1300	2240	2840	3130	4370	1320	660	705
28	727	739	430	380	1270	2240	2800	3090	4270	1800	600	717
29	729	745	480	420	---	2570	2790	3100	4420	2030	580	704
30	510	726	510	450	---	2920	2730	3060	4540	2200	560	575
31	596	---	520	480	---	3250	---	3040	---	2050	560	---
TOTAL	25497	21643	18583	13500	27420	60480	100580	84740	135570	65500	29392	22794
MEAN	822	721	599	435	979	1951	3353	2734	4519	2113	948	760
MAX	1120	794	727	560	1400	3250	3800	3320	6610	3920	1700	1070
MIN	510	598	420	360	500	1270	2730	2480	2390	1020	415	560
AC-FT	50570	42930	36860	26780	54390	120000	199500	168100	268900	129900	58300	45210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1997, BY WATER YEAR (WY)

	MEAN	768	711	647	586	611	673	842	916	1969	1862	748	781
MAX	1251	1146	1168	1065	1139	1951	3353	2925	4935	4686	1305	1354	
(WY)	1972	1969	1969	1973	1973	1997	1997	1996	1981	1982	1982	1991	
MIN	369	297	306	226	228	243	248	193	203	149	207	245	
(WY)	1989	1986	1995	1991	1989	1995	1981	1977	1977	1977	1977	1977	

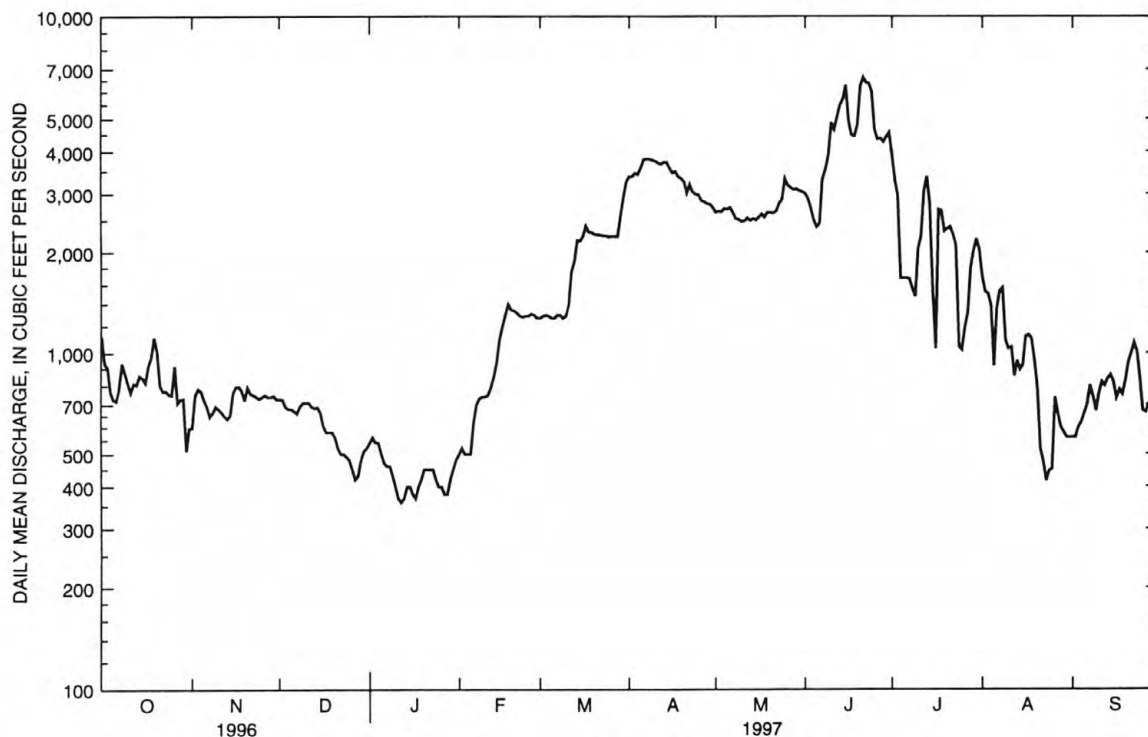
YELLOWSTONE RIVER BASIN

06285100 SHOSHONE RIVER NEAR LOVELL, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1967 - 1997	
ANNUAL TOTAL	600121		605699		--	
ANNUAL MEAN	1640		1659		927	
HIGHEST ANNUAL MEAN	--		--		1659	
LOWEST ANNUAL MEAN	--		--		359	
HIGHEST DAILY MEAN	8270	Jul 1	6610	Jun 21	15200	Jun 10 1981
LOWEST DAILY MEAN	320	Feb 4	360	Jan 12	27	May 31 1977
ANNUAL SEVEN-DAY MINIMUM	352	Jan 31	379	Jan 11	48	May 30 1977
INSTANTANEOUS PEAK FLOW	--		7020	Jun 15	16400 ^a	Jun 10 1981
INSTANTANEOUS PEAK STAGE	--		9.77	Jun 15	10.86 ^b	Feb 5 1996
ANNUAL RUNOFF (AC-FT)	1190000		1201000		671500	
10 PERCENT EXCEEDS	3550		3470		1610	
50 PERCENT EXCEEDS	803		1020		672	
90 PERCENT EXCEEDS	540		496		330	

a Gage height, 9.16 ft, site then in use, at present datum.

b Backwater from ice.



06285100 SHOSHONE RIVER NEAR LOVELL, WY

06285100 SHOSHONE RIVER NEAR LOVELL, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967 to September 1997 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1966 to September 1983.

WATER TEMPERATURES: October 1966 to September 1983

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

						DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)				
				DATE	TIME								
				NOV									
				21...	1140	734	840	0.5	8.0				
				APR									
				14...	1545	3800	315	6.0	15.0				
				MAY									
				22...	1545	2690	351	15.5	25.5				
				JUN									
				12...	1635	4960	325	15.5	18.5				
				24...	1630	5980	223	19.5	24.5				
				26...	1400	4570	247	15.0	26.0				
				JUL									
				24...	1645	1110	566	19.5	27.5				
				AUG									
				19...	1515	1040	608	19.5	18.5				
				SEP									
				15...	1600	825	641	16.5	15.5				
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	2,4,5-T DIS- SOLVED (UG/L) (39742)	2,4-D, DIS- SOLVED (UG/L) (39732)	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38746)	ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260)	ACIFL- UORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	
APR													
14...	1545	3800	8.0	662	10.8	100	<0.035	<0.035	<0.035	<0.002	<0.035	<0.002	
JUN													
24...	1630	5980	8.3	665	8.0	100	<0.035	<0.035	<0.035	<0.002	<0.035	<0.002	
DATE	TIME	ALDI- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	ALDI- CARB SULFONE WAT,FLT GF 0.7U REC (UG/L) (49313)	ALDICA- RB SUL- FOXIDE, WAT,FLT GF 0.7U REC (UG/L) (49314)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BENTA- ZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)	BRO- MACIL, WATER, FLTRD, DISS, REC (UG/L) (04029)	BRO- MOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L) (49311)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
APR													
14...	<0.016	<0.016	<0.021	<0.001	<0.002	<0.001	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003	
JUN													
24...	<0.016	<0.016	<0.021	E0.002	E0.001	<0.001	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003	
E-Estimate.													
DATE	TIME	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- AMBEN, WATER, FLTRD, GF 0.7U GF 0.7U REC (UG/L) (49307)	CHLORO- THALO- NIL, WAT,FLT GF 0.7U REC (UG/L) (49306)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CLOPYR- ALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	P,P' DDE DISSOLV REC (UG/L) (34653)	DACTHAL MONO- ACID, WAT,FLT GF 0.7U REC (UG/L) (49304)	DI- AZINON, DIS- SOLVED REC (UG/L) (39572)	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)	DICHLO- BENIL, WATER, FLTRD, GF 0.7U REC (UG/L) (49303)
APR													
14..	<0.003	<0.011	<0.035	<0.004	<0.05	<0.004	<0.002	<0.006	<0.017	<0.002	<0.035	<0.02	
JUN													
24...	<0.003	<0.011	<0.035	<0.004	<0.05	E0.003	<0.002	<0.006	<0.017	<0.002	<0.035	<0.02	
E-Estimate.													

YELLOWSTONE RIVER BASIN

06285100 SHOSHONE RIVER NEAR LOVELL, WY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	DICHLOR PROP, WATER, FLTRD, GF 0.7U REC (UG/L) (49302)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L) (49301)	DISUL- FOTON WATER FLTRD, 0.7 U GF, REC (UG/L) (82677)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	DNOC WAT,FLT GF 0.7U REC (UG/L) (49299)	EPTC WATER FLTRD, 0.7 U GF, REC (UG/L) (82668)	ESFEN- VAL- ERATE, WAT,FLT GF 0.7U REC (UG/L) (49298)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD, 0.7 U GF, REC (UG/L) (82672)
APR 14...	<0.032	<0.001	<0.003	<0.035	<0.017	<0.02	<0.035	<0.002	<0.019	<0.004	<0.003
JUN 24...	<0.032	<0.001	<0.003	<0.035	<0.017	<0.02	<0.035	<0.002	<0.019	<0.004	<0.003
DATE	FEN- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	FLUO- METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	FONOFOS WATER DISS REC (UG/L) (04095)	3HYDRXY CARBO- FURAN WAT,FLT GF 0.7U REC (UG/L) (49308)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD, 0.7 U GF, REC (UG/L) (82666)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L) (38487)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHIO- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (38501)
APR 14...	<0.013	<0.035	<0.003	<0.014	<0.002	<0.004	<0.002	<0.05	<0.035	<0.005	<0.026
JUN 24...	<0.013	<0.035	<0.003	<0.014	<0.002	<0.004	<0.002	<0.05	<0.035	<0.005	<0.026
DATE	METH- OMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD, 0.7 U GF, REC (UG/L) (82671)	1-NAPH THOL, WATER, FLTRD, GF 0.7U REC (UG/L) (49295)	NAPROP- AMIDE WATER, FLTRD, 0.7 U GF, REC (UG/L) (82684)	NEB- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49294)	NORFLUR AZON, WATER, FLTRD, GF 0.7U REC (UG/L) (49293)	ORY- ZALIN, WATER, FLTRD, GF 0.7U REC (UG/L) (49292)	OXAMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (38866)
APR 14...	<0.017	<0.006	<0.002	<0.004	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018
JUN 24...	<0.017	<0.006	E0.001	<0.004	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018
E-Estimate.											
DATE	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FLTRD, 0.7 U GF, REC (UG/L) (82669)	PENDI- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD, 0.7 U GF, REC (UG/L) (82664)	PIC- LORAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49291)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD, 0.7 U GF, REC (UG/L) (82676)	PROP- CHLOR, WATER, FLTRD, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD, 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD, 0.7 U GF, REC (UG/L) (82685)
APR 14...	<0.004	<0.004	<0.004	<0.005	<0.002	<0.05	<0.018	<0.003	<0.007	<0.004	<0.013
JUN 24...	<0.004	<0.004	<0.004	<0.005	<0.002	<0.05	<0.018	<0.003	<0.007	<0.004	<0.013
DATE	PRO- PHAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49236)	PRO- POXUR, WATER, FLTRD, GF 0.7U REC (UG/L) (38538)	SILVEX, DIS- SOLVED (UG/L) (39762)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD, 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD, 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD, 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD, 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD, 0.7 U GF, REC (UG/L) (82678)	TRI- CLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L) (49235)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
APR 14...	<0.035	<0.035	<0.021	<0.005	<0.01	<0.007	<0.013	<0.002	<0.001	<0.05	<0.002
JUN 24...	<0.035	<0.035	<0.021	<0.005	<0.01	<0.007	<0.013	<0.002	0.007	<0.05	<0.002

YELLOWSTONE RIVER BASIN

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06286400 BIGHORN LAKE NEAR ST. XAVIER, MT

LOCATION.--Lat 45°18'27", long 107°57'26", in SW¹/₄ SE¹/₄ sec.18, T.6 S., R.30 E., Big Horn County, Hydrologic Unit 10080010, in block 13 of Yellowtail Dam on Bighorn River, 1.3 mi upstream from Grapevine Creek, 15.5 mi southwest of St. Xavier, and at river mile 86.6.

DRAINAGE AREA.--19,626 mi².

PERIOD OF RECORD.--November 1965 to current year (monthend contents only). Prior to October 1969, published as "Yellowtail Reservoir." Records of daily elevations and contents on file in Helena, MT district office.

GAGE.--Water-stage recorder in powerhouse control room. Datum of gage is referenced to sea level (Bureau of Reclamation datum).

REMARKS.--Reservoir is formed by thin concrete-arch dam; construction began in 1961; completed in 1967. Storage began Nov. 3, 1965. Usable capacity, 1,312,000 acre-ft, between elevation 3,296.50 ft, river outlet invert, and 3,657.00 ft, top of flood control. Elevation of spillway crest, 3,593.00 ft. Normal maximum operating level, 1,097,000 acre-ft, elevation, 3,640.00 ft. Minimum operating level, 483,400 acre-ft, elevation, 3,547.00 ft. Dead storage, 16,010 acre-ft, below elevation 3,296.50 ft. Figures given herein represent usable contents. Water is used for power production, flood control, irrigation, and recreation.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,346,000 acre-ft, July 6, 1967, elevation, 3,656.43 ft; minimum since first filling, 641,900 acre-ft, Apr. 14, 1989, elevation 3,583.30 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,224,000 acre-ft, July 14, elevation, 3,651.71 ft; minimum, 691,800 acre-ft, May 8, elevation, 3,593.15 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)	Contents (acre-feet)	Change in Contents (acre-feet)
Sept. 30	3,633.43	978,100	---
Oct. 31	3,634.29	987,300	+9,200
Nov. 30	3,631.60	959,200	-28,100
Dec. 31	3,624.55	894,300	-64,900
CAL YR 1996			+45,400
Jan. 31	3,615.81	826,400	-67,900
Feb. 28	3,605.94	762,400	-64,000
Mar. 31	3,605.70	761,000	-1,400
Apr. 30	3,594.86	700,800	-60,200
May 31	3,618.52	846,300	+145,500
June 30	3,646.90	1,149,000	+302,700
July 31	3,649.37	1,187,000	+38,000
Aug. 31	3,640.53	1,061,000	-126,000
Sept. 30	3,638.21	1,032,000	-29,000
WTR YR 1997			+53,900

LOCATION.--Lat 45°19'00", long 107°55'05", in NW¹/₄ NW¹/₄ NE¹/₄ sec.16, T.6 S., R.31 E., Big Horn County, Hydrologic Unit 10080015, on right bank 800 ft downstream from Yellowtail afterbay dam, 1,500 ft downstream from Lime Kiln Creek, 14 mi southwest of St. Xavier, and at river mile 83.9.

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

GAGE.--Water-stage recorder. Datum of gage is 3,158.38 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Apr. 16, 1963, and June 13, 1964, to Mar. 31, 1965, water-stage recorder at site 1.2 mi upstream at different datum. Apr. 1, 1965, to July 31, 1966, water-stage recorder at site 1,300 ft downstream at present datum.

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 (see 06286400) since Nov. 3, 1965. Diversions for irrigation of about 375,000 acres upstream from station. Bureau of Reclamation data collection platform with satellite telemeter at station. Station operated and record provided by Montana District.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2640	2770	2950	3350	3530	4500	5840	5400	5940	6000	6970	7260
2	2600	2740	3020	3350	3540	4520	5970	5410	6290	5590	6760	7100
3	2590	2760	3080	3340	3630	4530	6040	5350	6270	4330	6910	6560
4	2580	2760	3120	3360	3860	4530	6200	5330	6270	3990	6890	6080
5	2550	2800	3140	3410	3870	4520	6190	5270	6180	4020	6850	5540
6	2540	2700	3090	3410	3870	4520	6180	4930	6230	4000	6820	5140
7	2540	2380	2940	3420	3980	4500	6320	4900	6290	4020	6780	5150
8	2530	2420	2940	3420	4220	4490	6440	4840	6360	4010	6730	4950
9	2490	2470	2940	3400	4240	4490	6480	4430	6480	4040	6680	4290
10	2500	2480	2980	3400	4220	4460	6660	4150	6870	4020	6640	3820
11	2520	2520	2980	3400	4250	4440	6640	4140	7310	4270	6670	3810
12	2520	2570	2980	3390	4240	4430	6610	4120	9050	5300	6790	3810
13	2500	2600	3010	3410	4220	4420	6600	4100	10900	6200	6770	3780
14	2500	2640	3010	3390	4230	4490	6620	4100	11200	6760	6740	3750
15	2300	2670	3020	3400	4230	4760	6650	3980	11300	6940	6710	3740
16	1440	2710	3040	3420	4230	4900	6800	3660	11400	6870	6680	3700
17	2970	2730	3060	3410	4210	4880	6790	3650	11500	6900	6640	3700
18	2950	2780	3070	3430	4310	4870	6780	3630	11500	6900	6610	3700
19	2950	2820	3170	3410	4530	4880	6780	3500	11500	6990	6570	3670
20	2950	2840	3170	3450	4540	4870	6750	3340	11500	7010	6760	3640
21	2950	2880	3180	3440	4530	4860	6740	3330	11500	6960	6770	3670
22	2840	2940	3200	3470	4520	4860	6680	3310	11500	6990	6750	3640
23	2750	2980	3210	3470	4530	4870	6470	3310	11500	7050	6710	3810
24	2760	3020	3220	3490	4540	4860	6440	3270	11000	7050	6680	4170
25	2760	2990	3250	3490	4540	4890	6460	3270	9970	6910	6630	4150
26	2760	2790	3260	3490	4510	5150	6440	3250	8950	6870	6620	4120
27	2750	2840	3300	3530	4510	5370	6450	3420	8010	6820	6560	4140
28	2760	2860	3300	3500	4500	5540	6320	4060	7000	6750	6820	4120
29	2760	2890	3300	3530	---	5510	5930	4530	6180	6690	7310	4250
30	2760	2920	3330	3510	---	5510	5810	4990	5960	6970	7270	4290
31	2750	---	3330	3510	---	5580	---	5470	---	7090	7220	---
TOTAL	81760	82270	96590	106400	118130	149000	193080	130440	261910	184310	210310	133550
MEAN	2637	2742	3116	3432	4219	4806	6436	4208	8730	5945	6784	4452
MAX	2970	3020	3330	3530	4540	5580	6800	5470	11500</			

YELLOWSTONE RIVER BASIN

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06287000 BIGHORN RIVER NEAR ST. XAVIER, MT--Continued

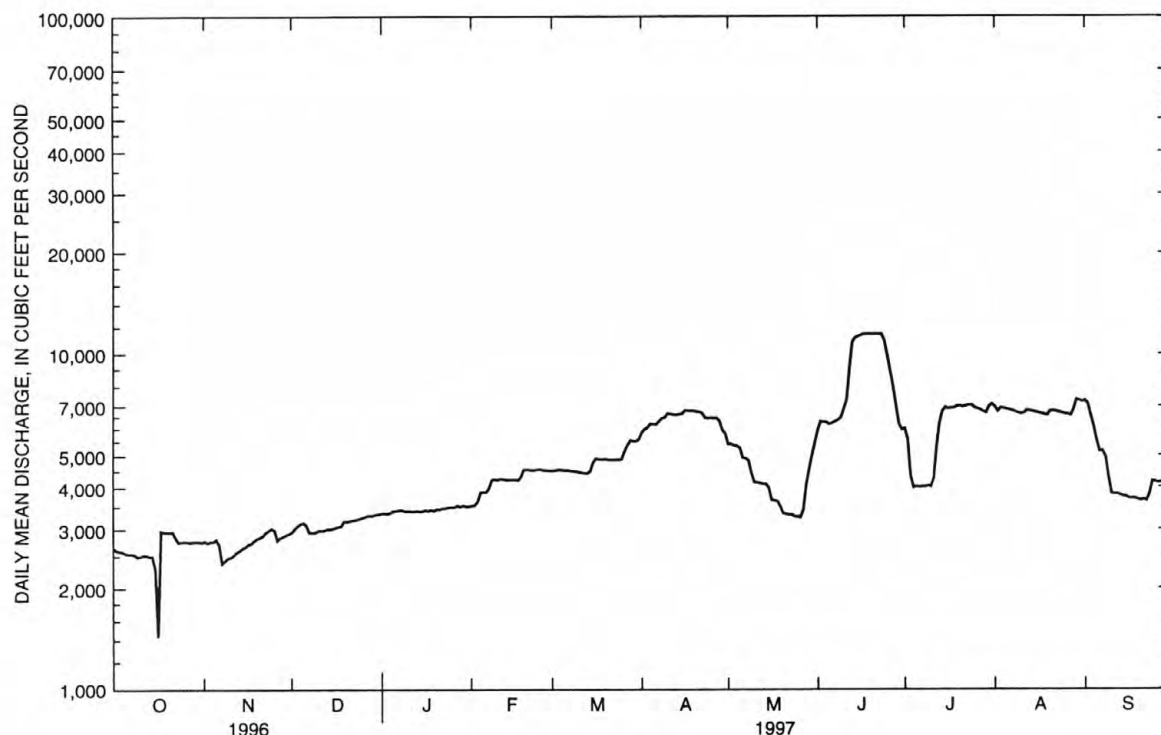
SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1935 - 1997	
ANNUAL TOTAL	1430640		1747750		--	
ANNUAL MEAN	3909		4788		3511	
HIGHEST ANNUAL MEAN	--		--		5059	1947
LOWEST ANNUAL MEAN	--		--		1565	1966
HIGHEST DAILY MEAN	7540	Jul 4	11500	Jun 17	37400	Jun 16 1935
LOWEST DAILY MEAN	1440	Oct 16	1440	Oct 16	112	Apr 2 1967
ANNUAL SEVEN-DAY MINIMUM	2330	Oct 10	2330	Oct 10	195	Mar 25 1966
INSTANTANEOUS PEAK FLOW	--		11600	Jun 17	37400	Jun 16 1935
INSTANTANEOUS LOW FLOW	--		--		49	Mar 29 1966
ANNUAL RUNOFF (AC-FT)	2838000		3467000		2543000	
10 PERCENT EXCEEDS	6470		6900		5870	
50 PERCENT EXCEEDS	3020		4240		2870	
90 PERCENT EXCEEDS	2610		2760		1570	

SUMMARY STATISTICS	WATER YEARS 1935 - 1961*		WATER YEARS 1967 - 1997**	
ANNUAL MEAN	3426		3570	
HIGHEST ANNUAL MEAN	5059	1947	4788	1997
LOWEST ANNUAL MEAN	1706	1961	1868	1989
HIGHEST DAILY MEAN	37400	Jun 16 1935	24800	Jul 6 1967
LOWEST DAILY MEAN	300	Dec 20 1951	112	Apr 2 1967
ANNUAL SEVEN-DAY MINIMUM	656	Dec 25 1934	518	Mar 25 1970
INSTANTANEOUS PEAK FLOW	37400	Jun 16 1935	25300	Jul 5 1967
INSTANTANEOUS LOW FLOW	228	Dec 9 1937	112 ^a	Apr 2 1967
ANNUAL RUNOFF (AC-FT)	2482000		2586000	
10 PERCENT EXCEEDS	6440		5620	
50 PERCENT EXCEEDS	2450		3200	
90 PERCENT EXCEEDS	1370		1880	

* Prior to construction of Yellowtail Dam.

** After completion of Yellowtail Dam.

a Result of discharge measurement (dam closure).



06287000 BIGHORN RIVER NEAR ST. XAVIER, MT

YELLOWSTONE RIVER BASIN

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

LOCATION.--Lat 45°00'25", long 107°36'52", 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.--193 mi².

WATER-DISCHARGE RECORDS

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.

GAGE.--Water-stage recorder. Elevation of gage is 4,350 ft above sea level, from topographic map.

REMARKS.--Water-discharge records good. Diversions for irrigation of 163 acres upstream from station. Station operated and record provided by the Montana District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	87	77	75	66	54	69	96	919	329	181	131
2	92	86	78	73	62	59	65	91	924	328	180	129
3	92	87	70	72	61	58	66	91	888	325	177	128
4	91	85	70	69	59	54	69	97	924	297	175	126
5	91	84	81	59	52	56	53	107	942	285	174	123
6	92	78	78	59	49	56	62	125	1000	278	171	123
7	91	81	77	71	54	56	69	149	1090	268	169	122
8	92	80	78	68	58	55	69	142	1020	258	168	118
9	91	82	80	66	59	56	68	150	904	248	167	117
10	91	82	78	54	63	56	66	173	896	243	166	116
11	91	81	78	34	64	56	62	190	1020	253	166	115
12	90	80	77	28	60	56	61	190	799	247	160	114
13	90	79	75	35	58	54	66	208	767	296	159	112
14	90	81	77	52	58	41	67	226	685	242	161	108
15	90	80	73	64	58	52	66	268	943	226	162	108
16	92	70	72	54	57	63	66	339	796	220	201	108
17	90	67	55	61	58	60	70	426	718	216	171	106
18	88	81	45	78	57	60	76	457	659	213	159	107
19	95	82	64	78	56	62	83	374	587	221	154	112
20	91	84	80	74	56	63	89	370	528	215	149	105
21	84	77	77	69	55	63	93	399	492	208	146	102
22	89	77	e60	67	54	62	88	434	450	201	144	103
23	87	68	e40	66	47	62	85	480	420	198	142	100
24	86	64	e45	53	54	62	84	508	389	213	141	96
25	88	80	e45	e35	56	63	83	575	366	231	141	94
26	76	79	e40	e40	56	67	81	522	353	199	139	93
27	77	76	e60	e45	56	71	85	487	340	195	138	94
28	89	81	70	69	58	67	96	489	332	191	136	92
29	91	82	69	72	---	66	96	500	320	212	135	91
30	85	77	77	68	---	64	92	528	311	195	134	89
31	73	---	73	65	---	67	---	663	---	185	132	---
TOTAL	2749	2378	2119	1873	1601	1841	2245	9854	20782	7436	4898	3282
MEAN	88.7	79.3	68.4	60.4	57.2	59.4	74.8	318	693	240	158	109
MAX	95	87	81	78	66	71	96	663	1090	329	201	131
MIN	73	64	40	28	47	41	53	91	311	185	132	89
AC-FT	5450	4720	4200	3720	3180	3650	4450	19550	41220	14750	9720	6510

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1997, BY WATER YEAR (WY)

	MEAN	87.2	76.0	68.1	62.8	61.6	61.8	85.6	324	531	225	125	99.2
MAX	120	104	91.2	84.9	88.0	86.4	172	533	1125	689	228	151	
(WY)	1976	1942	1976	1946	1946	1946	1946	1977	1975	1975	1975	1975	1975
MIN	64.0	55.3	48.3	43.6	47.8	48.6	50.7	127	169	101	69.8	67.9	
(WY)	1961	1986	1990	1963	1990	1961	1961	1953	1985	1961	1961	1961	1961

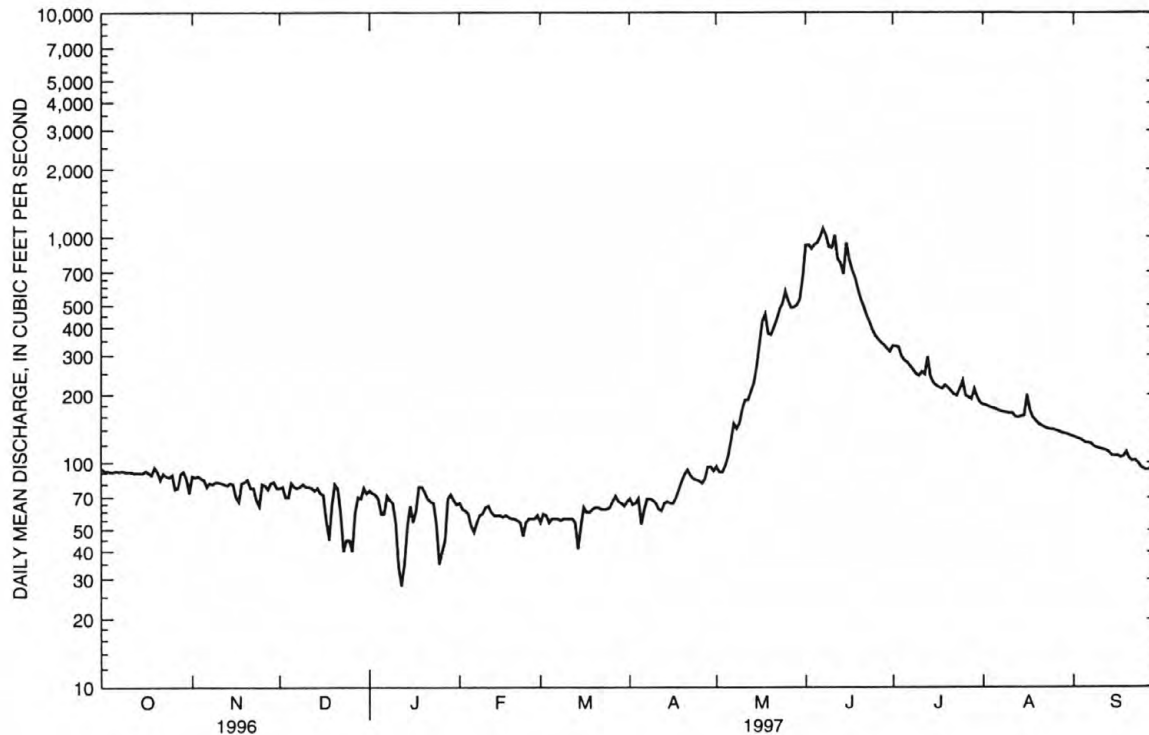
06289000 LITTLE BIGHORN RIVER AT STATE LINE, NEAR WYOLA, MT--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1940 - 1997
ANNUAL TOTAL	55986	61058	--
ANNUAL MEAN	153	167	150
HIGHEST ANNUAL MEAN	--	--	253
LOWEST ANNUAL MEAN	--	--	90.3
HIGHEST DAILY MEAN	939	1090	2340
LOWEST DAILY MEAN	35	28	18
ANNUAL SEVEN-DAY MINIMUM	45	46	27
INSTANTANEOUS PEAK FLOW	--	2100	2730 ^a
INSTANTANEOUS PEAK STAGE	--	4.35	5.93 ^b
INSTANTANEOUS LOW FLOW	--	26	18
ANNUAL RUNOFF (AC-FT)	111000	121100	108900
10 PERCENT EXCEEDS	368	393	342
50 PERCENT EXCEEDS	91	88	84
90 PERCENT EXCEEDS	65	56	56

a Gage height, 4.97 ft, from rating curve extended above 1,400 ft³/s.

b Log jam.

e Estimated.



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

YELLOWSTONE RIVER BASIN

06289000 LITTLE BIGHORN RIVER AT STATE LINE, NEAR WYOLA, MT--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1993 to current year.

REMARKS.--Unpublished records for many days of instantaneous water temperature and specific conductance are available in files of the Montana District office.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	TEMPER-ATURE AIR (DEG C) (00020)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI, KF AGAR (COLS. PER 100 ML) (31673)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)
DEC 10...	0940	78	341	3.0	-3.0	K14	K10	8.5	--
FEB 19...	0945	57	365	2.0	-3.0	K19	K14	8.6	0.17
MAR 25...	0930	58	362	2.0	5.0	--	K11	8.6	--
MAY 20...	0945	466	313	5.0	10.0	K7	K5	8.9	--
JUN 25...	0910	369	319	7.0	19.0	57	25	8.7	--
JUL 29...	0930	191	328	11.0	21.0	22	90	8.6	0.14
SEP 08...	0915	110	342	9.0	17.5	K6	K3	8.6	--

K-Results based on colony count outside the acceptable range (non-ideal colony count).

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
DEC 10...	<0.01	0.18	<0.05	<0.01	<0.01	48	10	32
FEB 19...	0.02	0.19	0.02	<0.01	<0.01	38	5.8	66
MAR 25...	<0.01	0.16	<0.02	0.03	<0.01	43	6.7	84
MAY 20...	<0.01	0.19	0.02	<0.01	<0.01	30	38	80
JUN 25...	<0.01	0.18	0.03	0.03	<0.01	37	37	94
JUL 29...	0.04	0.18	0.02	<0.01	0.01	37	19	75
SEP 08...	<0.01	0.12	<0.02	<0.01	<0.01	25	7.4	69

DATE	TIME	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CaCO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940)
DEC 10...	0940	180	46	17	1.4	0.0	0.70	183	9.2	0.60
MAY 20...	0945	160	43	13	0.95	0.0	0.67	--	5.1	0.44
SEP 08...	0915	190	46	17	1.4	0.0	0.65	166	8.2	0.38

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06289000 LITTLE BIGHORN RIVER AT STATE LINE, NEAR WYOLA, MT--Continued

	MANGA- NESE, TOTAL RECOV- ERABLE	NICKEL, TOTAL RECOV- ERABLE	NICKEL, DIS- SOLVED	SELE- NIUM, DIS- SOLVED	ZINC, TOTAL RECOV- ERABLE	ZINC, DIS- SOLVED
DATE	(UG/L AS PB) (01049)	(UG/L AS MN) (01055)	(UG/L AS NI) (01067)	(UG/L AS SE) (01147)	(UG/L AS ZN) (01092)	(UG/L AS ZN) (01090)
DEC 10...	<1	<10	<1	<1	<10	<3
MAY 20...	<1	17	<1	<1	<10	<3
SEP 08...	<1	<10	<1	<1	<10	<3

YELLOWSTONE RIVER BASIN

06289600 WEST PASS CREEK NEAR PARKMAN, WY

LOCATION.--Lat 44°59'16", long 107°28'56", in NE¹/₄ NE¹/₄ SE¹/₄ 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 4,550 ft above sea level, from topographic map. Prior to Apr. 2, 1985, at site 100 ft north (on abandoned channel) at datum 3.28 ft lower. Apr. 2, 1985 to Mar. 27, 1986, at site 300 ft upstream at datum 1.95 ft higher.

REMARKS.--Estimated daily discharges: Oct. 28-31 and Nov. 16 to Apr. 15. Records good except those for estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation upstream from station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 19	Unknown	38	1.33
May 18	0830	*75	*1.86
June 15	0500	75	1.85

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	7.6	7.2	9.6	8.2	6.0	15	35	57	23	14	10
2	7.8	7.5	7.3	9.2	8.0	6.3	14	35	55	22	13	10
3	7.7	7.6	7.1	8.6	7.3	6.4	14	28	53	22	13	9.7
4	7.7	7.7	7.2	8.0	6.6	6.2	13	27	51	20	13	9.3
5	7.6	7.8	7.4	7.3	6.3	6.3	13	27	51	20	13	9.3
6	7.6	7.8	6.9	7.0	6.0	6.3	12	29	49	20	13	9.4
7	7.6	7.7	7.0	6.5	5.7	6.3	11	33	47	19	13	9.4
8	7.5	7.5	7.4	6.8	5.6	6.5	9.4	33	44	19	13	9.4
9	7.5	8.2	7.2	6.9	5.6	6.6	13	34	41	19	13	9.4
10	7.5	7.9	7.2	6.6	5.5	6.7	13	36	39	19	13	9.5
11	7.5	7.7	7.5	5.8	5.5	7.2	12	40	38	19	13	9.5
12	7.5	7.5	7.4	5.0	5.4	6.9	14	41	36	19	13	9.5
13	7.5	7.5	7.4	6.1	5.4	6.5	15	41	34	22	13	9.4
14	7.4	7.6	7.3	7.2	5.5	6.0	17	43	32	18	12	9.5
15	7.5	7.5	7.1	6.6	5.8	7.0	21	45	56	17	13	9.6
16	7.4	6.3	6.6	6.1	6.3	10	22	51	46	17	15	9.5
17	7.6	6.5	4.7	8.5	6.6	16	25	58	39	17	13	9.4
18	7.5	7.3	5.8	10	6.8	14	24	68	35	16	13	9.7
19	7.6	7.3	7.2	9.5	6.8	20	24	58	34	17	12	10
20	7.7	7.3	7.8	9.0	6.7	18	25	52	32	16	12	9.7
21	7.6	7.0	7.0	8.0	6.6	14	24	54	30	16	12	9.5
22	7.6	6.6	6.6	7.4	6.5	12	24	55	28	16	11	10
23	7.6	6.2	6.1	7.1	6.3	11	24	51	27	15	11	9.5
24	7.5	6.0	5.6	6.7	6.4	14	24	53	26	15	11	9.2
25	7.4	7.3	5.3	6.0	6.5	12	25	56	25	15	11	9.1
26	7.3	7.6	5.0	5.4	6.5	14	25	56	24	15	10	9.0
27	5.8	7.5	6.0	5.2	6.3	15	24	61	23	15	10	9.4
28	5.4	7.3	7.9	6.0	6.2	15	26	54	23	14	10	9.2
29	5.2	7.2	7.1	6.9	---	15	31	52	22	15	10	9.1
30	5.5	7.0	7.8	8.0	---	14	28	50	22	14	10	9.1
31	6.0	---	8.8	8.4	---	14	---	51	---	14	10	---
TOTAL	224.5	219.5	213.9	225.4	176.9	325.2	581.4	1407	1119	545	376	284.3
MEAN	7.24	7.32	6.90	7.27	6.32	10.5	19.4	45.4	37.3	17.6	12.1	9.48
MAX	7.9	8.2	8.8	10	8.2	20	31	68	57	23	15	10
MIN	5.2	6.0	4.7	5.0	5.4	6.0	9.4	27	22	14	10	9.0
AC-FT	445	435	424	447	351	645	1150	2790	2220	1080	746	564

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1997, BY WATER YEAR (WY)

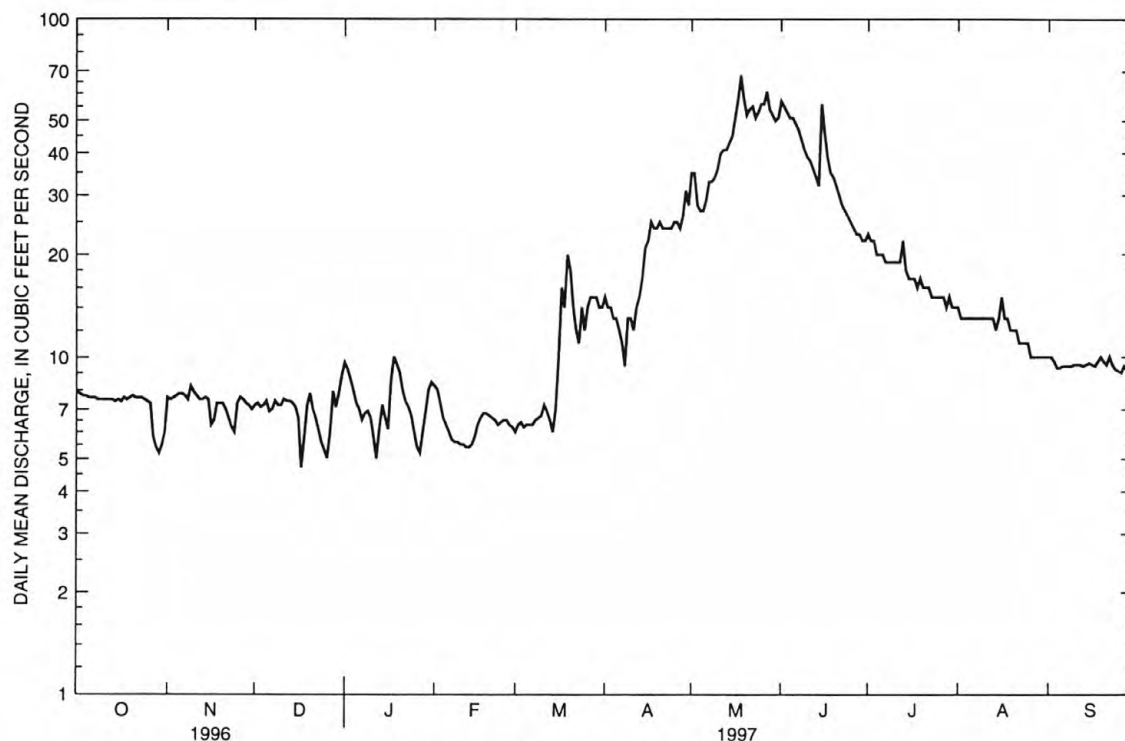
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	7.63	7.43	6.64	6.41	6.16	7.68	13.8	34.6	26.4	13.7	9.13	7.93			
MAX	9.95	9.30	9.02	8.10	7.98	10.5	25.2	79.9	60.6	26.9	14.9	11.6			
(WY)	1986	1996	1996	1996	1996	1997	1994	1995	1995	1995	1995	1995			
MIN	5.76	6.34	4.92	4.25	4.02	5.64	9.14	13.1	7.82	5.21	5.07	5.09			
(WY)	1990	1990	1991	1988	1989	1991	1992	1985	1985	1985	1985	1989			

06289600 WEST PASS CREEK NEAR PARKMAN, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1983 - 1997
ANNUAL TOTAL	4721.6	5698.1	--
ANNUAL MEAN	12.9	15.6	13.2
HIGHEST ANNUAL MEAN	--	--	21.2
LOWEST ANNUAL MEAN	--	--	7.76
HIGHEST DAILY MEAN	49 May 26	68 May 18	291 May 9 1995
LOWEST DAILY MEAN	4.7 Dec 17	4.7 Dec 17	.02 ^a Jan 7 1988
ANNUAL SEVEN-DAY MINIMUM	5.9 Dec 21	5.5 Feb 8	.81 Feb 3 1989
INSTANTANEOUS PEAK FLOW	--	75 May 18, June 15	340 May 9 1995
INSTANTANEOUS PEAK STAGE	--	1.86 May 18	4.76 ^b Apr 28 1984
ANNUAL RUNOFF (AC-FT)	9370	11300	9550
10 PERCENT EXCEEDS	25	36	25
50 PERCENT EXCEEDS	9.0	9.5	8.2
90 PERCENT EXCEEDS	7.0	6.3	5.8

a Result of channel blockage or diversion upstream.

b Backwater from ice, site and datum then in use.



06289600 WEST PASS CREEK NEAR PARKMAN, WY

06289820 EAST PASS CREEK NEAR DAYTON, WY

LOCATION.--Lat 44°59'26", long 107°25'20", in NE¹/₄ SE¹/₄ NE¹/₄ 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 sea level, from topographic map. October 1982 to August 1995, at site 270 ft upstream at different datum. August 1995 to April 1996, at site 0.3 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 28, 29, Nov. 21-26, Dec. 15, 16, 19-21, 24-28, Dec. 30 to Jan. 6, Jan. 12-21, Jan. 26 to Feb. 1, Feb. 5-10, 12, 13, 23, 24, Mar. 1, 13-16, and Apr. 5-8. 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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 25 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 19	1600	28	5.85
May 18	1300	100	6.37
May 27	0900	104	6.39
June 15	0430	*117	*6.45

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	9.0	9.3	15	13	8.7	19	38	89	29	14	6.7
2	7.6	9.0	9.1	13	13	9.1	18	39	85	28	13	4.8
3	7.3	9.0	8.6	12	11	9.2	18	35	79	28	13	3.2
4	7.4	9.0	9.0	11	10	8.8	18	34	76	26	11	3.5
5	7.1	9.0	9.7	9.8	9.0	9.0	17	36	78	24	9.0	3.8
6	7.1	9.0	8.9	9.0	8.3	9.0	15	41	79	25	8.1	3.9
7	7.3	9.3	8.9	9.8	8.1	9.0	14	48	73	24	7.9	4.0
8	7.4	9.1	9.1	9.7	8.0	9.1	12	49	69	23	7.4	4.2
9	7.4	9.5	9.6	9.7	8.2	9.3	17	47	64	22	7.0	7.1
10	7.7	9.7	9.5	7.7	8.3	9.2	17	49	61	21	8.4	7.0
11	7.7	9.6	9.4	6.2	8.6	9.5	16	53	58	23	8.5	6.9
12	7.9	9.2	9.4	5.4	8.0	9.7	15	53	57	23	10	6.9
13	8.4	9.0	9.3	7.0	8.2	9.1	17	53	53	25	10	6.8
14	8.7	9.3	9.1	9.6	8.7	8.3	20	54	48	21	10	6.7
15	8.7	9.5	8.8	8.8	9.0	12	21	55	94	20	10	6.7
16	9.0	9.1	6.3	6.8	9.4	17	24	67	81	20	13	6.8
17	9.6	8.1	3.7	8.8	9.9	18	28	78	73	20	11	6.7
18	9.4	9.9	5.9	14	9.8	16	32	90	60	19	10	7.8
19	9.5	9.5	8.6	13	9.8	21	36	81	56	21	10	9.3
20	9.2	9.3	11	12	9.7	22	41	66	53	21	9.6	8.6
21	9.2	9.0	9.0	10	9.4	21	43	69	48	19	9.3	8.4
22	9.0	8.5	7.7	9.6	9.3	19	39	79	44	19	8.9	8.6
23	9.0	8.0	5.5	9.3	8.8	18	36	73	40	19	8.1	8.2
24	9.0	7.6	6.4	9.0	9.0	19	34	78	39	18	6.9	7.7
25	8.9	8.2	5.3	7.8	9.3	18	34	88	36	18	7.0	7.4
26	8.6	8.7	4.5	7.0	9.3	18	33	84	34	14	7.2	7.4
27	8.6	9.1	6.8	6.0	9.0	20	32	96	32	14	7.2	7.8
28	7.5	9.4	10	9.0	8.8	20	34	87	30	15	7.3	7.6
29	9.8	9.6	9.1	13	---	19	38	80	30	16	7.1	8.9
30	9.7	9.3	10	16	---	18	36	74	29	15	6.9	11
31	8.5	---	12	12	---	18	---	75	---	14	6.8	---
TOTAL	260.4	271.5	259.5	307.0	260.9	441.0	774	1949	1748	644	283.6	204.4
MEAN	8.40	9.05	8.37	9.90	9.32	14.2	25.8	62.9	58.3	20.8	9.15	6.81
MAX	9.8	9.9	12	16	13	22	43	96	94	29	14	11
MIN	7.1	7.6	3.7	5.4	8.0	8.3	12	34	29	14	6.8	3.2
AC-FT	517	539	515	609	517	875	1540	3870	3470	1280	563	405

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1997, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	8.92	9.00	8.41	8.63	8.60	9.98	16.9	44.5	38.4	13.6	7.64	7.69			
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)	1986	1996	1996	1996	1996	1997	1994	1995	1995	1992	1993	1995			
MIN	5.73	6.90	6.69	6.96	6.78	7.29	9.30	15.3	6.65	5.06	2.73	4.02			
(WY)	1991	1986	1988	1988	1989	1990	1992	1985	1985	1985	1988	1989			

YELLOWSTONE RIVER BASIN

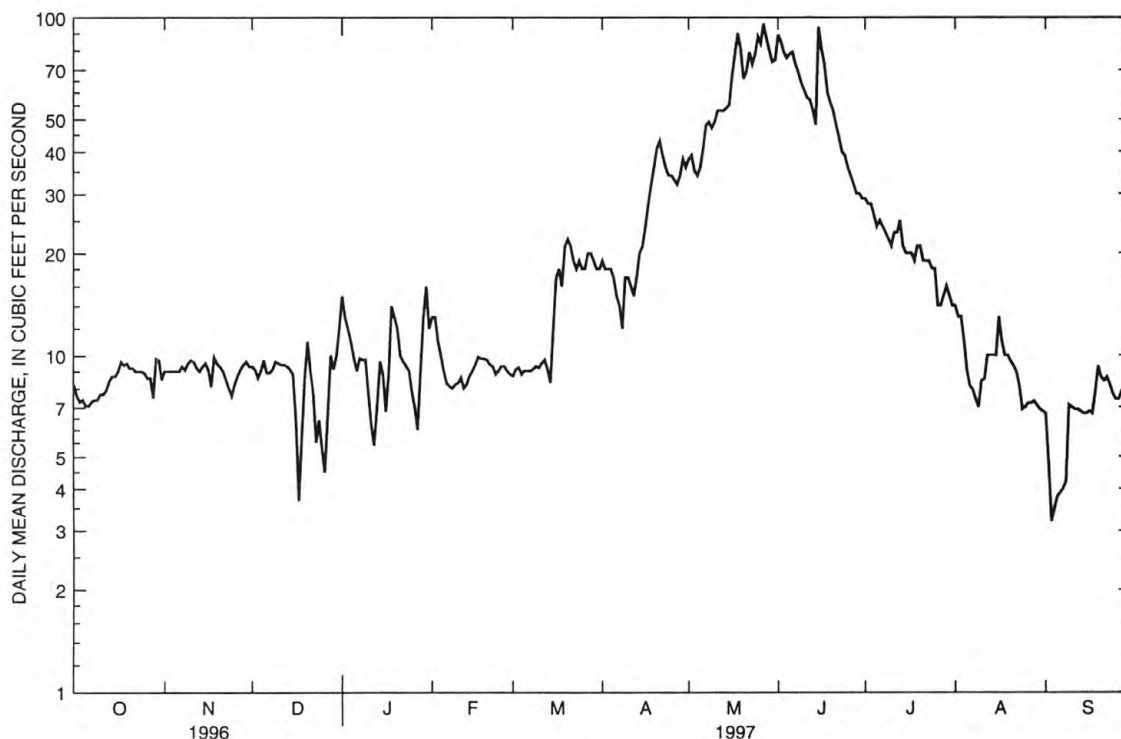
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06289820 EAST PASS CREEK NEAR DAYTON, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1983 - 1997
ANNUAL TOTAL	5787.3	7403.3	--
ANNUAL MEAN	15.8	20.3	15.2
HIGHEST ANNUAL MEAN	--	--	23.6
LOWEST ANNUAL MEAN	--	--	8.57
HIGHEST DAILY MEAN	63 Jun 5	96 May 27	304 May 9 1995
LOWEST DAILY MEAN	3.7 Dec 17	3.2 Sep 3	1.7 Aug 6 1988
ANNUAL SEVEN-DAY MINIMUM	6.2 Aug 31	3.9 Sep 2	2.1 Aug 20 1988
INSTANTANEOUS PEAK FLOW	--	117 Jun 15	511 ^a May 9 1995
INSTANTANEOUS PEAK STAGE	--	6.45 Jun 15	9.00 ^b Feb 6 1996
ANNUAL RUNOFF (AC-FT)	11480	14680	11020
10 PERCENT EXCEEDS	36	53	31
50 PERCENT EXCEEDS	10	9.7	9.3
90 PERCENT EXCEEDS	6.8	7.1	6.2

a From rating curve extended above 221 ft³/s.

b Ice jam, site and datum then in use.



06289820 EAST PASS CREEK NEAR DAYTON, WY

YELLOWSTONE RIVER BASIN

06298000 TONGUE RIVER NEAR DAYTON, WY

LOCATION.--Lat 44°50'58", long 107°18'14", in NE¹/₄ NE¹/₄ NE¹/₄ 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.--204 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 sea level, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 5, 24-29, Jan. 5, 12-19, 26-30, and Feb. 8-18, 23-28. Records fair except those for estimated daily discharges, which are poor. Small diversion upstream from station for Dayton municipal supply. Figures of daily discharge do not include water diverted 0.6 mi upstream from station by Highline ditch for irrigation downstream from station. National Weather Service data collection platform with satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 980 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 25	0100	1,220	4.31
June 1	0300	1,390	4.51
June 15	1000	*2,000	*5.12

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	70	56	59	53	41	57	104	1260	382	173	104
2	94	73	58	62	50	46	53	91	1220	379	167	104
3	89	70	48	62	48	48	51	94	1100	405	166	102
4	85	69	46	53	46	44	58	104	1110	389	160	100
5	83	71	54	37	38	44	44	118	1160	355	161	98
6	82	56	56	40	38	46	27	151	1120	425	157	98
7	80	59	56	57	45	46	45	191	1100	332	151	97
8	81	61	59	57	47	45	53	188	1040	303	149	96
9	83	71	62	56	47	43	57	205	1000	283	149	96
10	83	72	61	45	48	44	55	269	949	271	151	94
11	82	69	61	39	46	45	51	315	1190	276	160	96
12	80	70	56	45	43	47	48	309	989	289	150	94
13	80	68	53	56	47	43	51	361	935	342	150	91
14	79	69	54	63	53	31	53	390	785	280	152	89
15	76	63	52	67	59	44	56	457	1550	243	147	89
16	81	54	48	63	66	51	55	606	1020	228	233	91
17	75	44	42	66	62	52	62	772	940	220	200	87
18	64	60	44	63	54	49	73	817	819	212	155	83
19	95	71	67	60	44	54	84	617	738	242	146	98
20	80	77	67	56	46	58	93	656	691	246	137	95
21	70	64	61	54	45	56	105	738	635	213	131	89
22	73	67	57	51	44	52	96	774	594	197	128	94
23	79	66	52	50	36	53	91	901	575	191	124	106
24	74	46	61	38	44	50	88	948	594	218	122	95
25	77	70	60	37	52	44	85	1060	511	314	122	102
26	64	65	50	54	44	54	82	890	471	215	119	100
27	31	51	54	58	45	59	91	798	443	202	117	101
28	73	62	57	60	45	52	117	737	417	193	112	100
29	86	66	54	58	---	53	112	729	400	201	110	96
30	73	57	58	54	---	49	101	738	378	200	107	94
31	54	---	55	52	---	56	---	928	---	183	105	---
TOTAL	2406	1931	1719	1672	1335	1499	2094	16056	25734	8429	4511	2879
MEAN	77.6	64.4	55.5	53.9	47.7	48.4	69.8	518	858	272	146	96.0
MAX	100	77	67	67	66	59	117	1060	1550	425	233	106
MIN	31	44	42	37	36	31	27	91	378	183	105	83
AC-FT	4770	3830	3410	3320	2650	2970	4150	31850	51040	16720	8950	5710
+	84	.00	.00	.00	.00	.00	.00	702	1040	1200	950	722

ADJUSTED FOR DIVERSION BY HIGHLINE DITCH

MEAN	79.0	64.4	55.5	53.9	47.7	48.4	69.8	529	876	292	162	108
AC-FT	4854	3830	3410	3320	2650	2970	4150	32550	52080	17920	9900	6432

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 1997, BY WATER YEAR (WY)

MEAN	82.1	68.2	61.2	56.0	52.6	51.8	109	525	713	247	112	85.3
MAX	284	155	108	88.9	80.8	72.0	354	1048	1482	767	244	163
(WY)	1924	1924	1924	1924	1924	1924	1926	1926	1978	1975	1927	1968
MIN	49.6	41.1	39.6	36.1	34.1	38.1	44.2	266	214	81.1	52.8	42.8
(WY)	1955	1941	1941	1941	1941	1941	1975	1953	1919	1919	1966	1966

YELLOWSTONE RIVER BASIN

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06298000 TONGUE RIVER NEAR DAYTON, WY--Continued

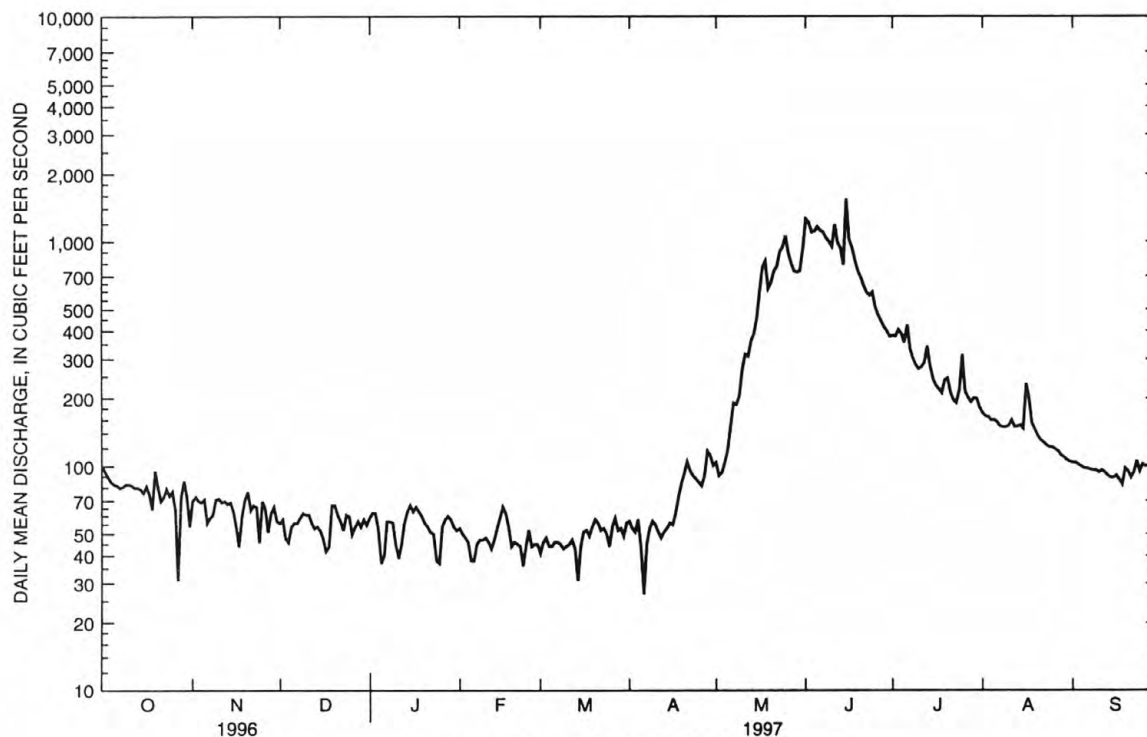
SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR*		FOR 1997 WATER YEAR*		WATER YEARS 1919 - 1997*	
ANNUAL TOTAL	64365		70265		--	
ANNUAL MEAN	176		193		182	
HIGHEST ANNUAL MEAN	--		--		316	1924
LOWEST ANNUAL MEAN	--		--		98.4	1989
HIGHEST DAILY MEAN	1200	May 17	1550	Jun 15	2590	Jun 5 1968
LOWEST DAILY MEAN	31	Oct 27	27	Apr 6	18	Nov 29 1919
ANNUAL SEVEN-DAY MINIMUM	47	Feb 22	42	Mar 9	31	Nov 9 1940
INSTANTANEOUS PEAK FLOW	--		2000	Jun 15	3400	Jun 3 1944
INSTANTANEOUS PEAK STAGE	--		5.12	Jun 15	6.45	Jun 3 1944
ANNUAL RUNOFF (AC-FT)	127700		139400		131600	
10 PERCENT EXCEEDS	576		610		490	
50 PERCENT EXCEEDS	73		79		73	
90 PERCENT EXCEEDS	53		45		48	

+ Diversion, in acre-ft, upstream from station by Highline Ditch.

* Unadjusted for diversion by Highline Ditch.

ADJUSTED FOR DIVERSION BY HIGHLINE DITCH

	Annual Total	Annual Mean	Annual Runoff (ac-ft)
1996 Calendar Year	64,407	176	127,800
1997 Water Year	72,637	199	144,100



06298000 TONGUE RIVER NEAR DAYTON, WY

YELLOWSTONE RIVER BASIN

06299500 WOLF CREEK AT WOLF, WY

LOCATION.--Lat 44°46'21", long 107°14'01", in NE¹/₄ SW¹/₄ NW¹/₄ sec.4, T.55 N., R.86 W., Sheridan County, Hydrologic Unit 10090101, on left bank at Wolf and 0.5 mi downstream from Red Canyon Creek.

DRAINAGE AREA.--37.8 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 4,525 ft above sea level, from topographic map. Prior to May 26, 1945, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Apr. 5-13, and June 7-9, 17-20. Records good except those for estimated daily discharges, which are poor. No diversion upstream from station. Result of discharge measurement, in cubic feet per second, made during the period when station was not in operation is given below:

Oct. 6 . . . 6.80

COOPERATION.--Station operated and record provided by Office of the Wyoming State Engineer; record reviewed by U.S. Geological Survey.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, about 5.0 ft, May 18, 1944.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 180 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 10	2100	*309	*2.90
June 15	1000	306	2.89

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	8.9	19	261	59	27	15
2	---	---	---	---	---	---	8.1	19	258	54	26	15
3	---	---	---	---	---	---	8.1	20	231	64	26	14
4	---	---	---	---	---	---	8.6	21	234	56	25	14
5	---	---	---	---	---	---	5.8	25	236	52	25	13
6	---	---	---	---	---	---	8.0	32	218	55	24	13
7	---	---	---	---	---	---	7.6	38	230	47	23	13
8	---	---	---	---	---	---	6.9	36	280	43	23	13
9	---	---	---	---	---	---	6.3	39	230	40	21	13
10	---	---	---	---	---	---	6.0	46	220	39	23	12
11	---	---	---	---	---	---	6.2	53	258	40	25	13
12	---	---	---	---	---	---	8.2	54	200	47	22	12
13	---	---	---	---	---	---	7.3	61	184	52	23	12
14	---	---	---	---	---	---	7.8	70	164	41	21	12
15	---	---	---	---	---	---	7.8	85	250	36	21	11
16	---	---	---	---	---	---	8.1	115	188	35	33	11
17	---	---	---	---	---	---	10	164	175	33	28	11
18	---	---	---	---	---	---	13	184	162	32	23	11
19	---	---	---	---	---	---	16	166	151	39	21	14
20	---	---	---	---	---	---	18	170	138	39	20	13
21	---	---	---	---	---	---	19	191	129	33	19	13
22	---	---	---	---	---	---	18	203	114	31	19	15
23	---	---	---	---	---	---	17	210	103	30	18	16
24	---	---	---	---	---	---	17	218	105	36	17	13
25	---	---	---	---	---	---	16	222	88	47	17	12
26	---	---	---	---	---	---	16	186	79	33	17	12
27	---	---	---	---	---	---	16	169	73	32	16	12
28	---	---	---	---	---	---	20	170	69	31	16	12
29	---	---	---	---	---	---	20	186	65	31	15	11
30	---	---	---	---	---	---	18	188	59	30	15	11
31	---	---	---	---	---	---	---	208	---	28	15	---
TOTAL	---	---	---	---	---	---	353.7	3568	5152	1265	664	382
MEAN	---	---	---	---	---	---	11.8	115	172	40.8	21.4	12.7
MAX	---	---	---	---	---	---	20	222	280	64	33	16
MIN	---	---	---	---	---	---	5.8	19	59	28	15	11
AC-FT	---	---	---	---	---	---	702	7080	10220	2510	1320	758

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1971, BY WATER YEAR (WY)

MEAN	8.73	6.98	5.69	4.73	4.48	4.79	13.6	99.7	138	39.1	15.0	10.1
MAX	14.2	9.97	7.46	6.07	5.64	6.24	33.3	161	263	72.0	30.8	23.0
(WY)	1969	1952	1969	1962	1962	1947	1962	1963	1964	1951	1951	1968
MIN	6.46	5.73	3.83	2.80	3.15	3.65	6.39	35.6	50.3	17.9	6.23	6.82
(WY)	1957	1961	1950	1950	1957	1957	1958	1960	1960	1960	1961	1954

06299500 WOLF CREEK AT WOLF, WY--Continued

SUMMARY STATISTICS

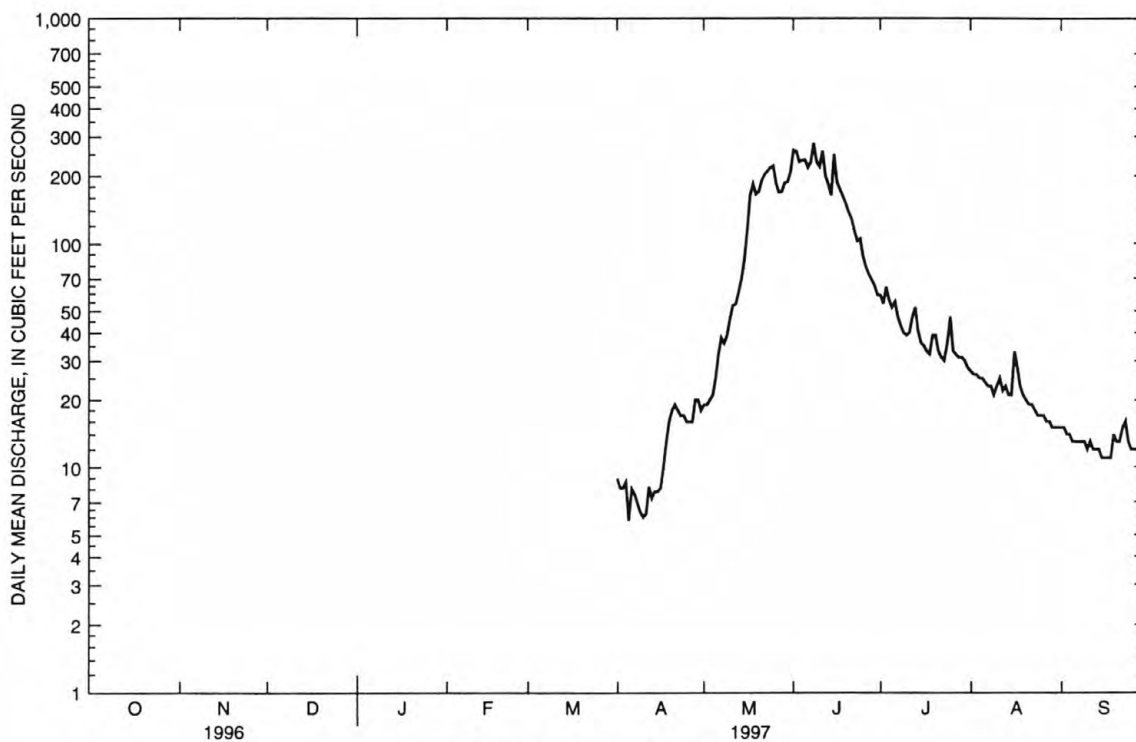
FOR 1997 WATER YEAR*

WATER YEARS 1946 - 1971

ANNUAL MEAN	--		29.3	
HIGHEST ANNUAL MEAN	--		45.0	1964
LOWEST ANNUAL MEAN	--		13.8	1960
HIGHEST DAILY MEAN	280	Jun 8	601	Jun 9 1964#
LOWEST DAILY MEAN	5.8	Apr 5	1.8	Feb 26 1947#
ANNUAL SEVEN-DAY MINIMUM	--		2.5	Jan 24 1957
INSTANTANEOUS PEAK FLOW	309	Jun 10	1130 ^a	Jun 15 1963#
INSTANTANEOUS PEAK STAGE	2.90	Jun 10	4.60	Jun 15 1963#
ANNUAL RUNOFF (AC-FT)	--		21220	
10 PERCENT EXCEEDS	--		90	
50 PERCENT EXCEEDS	--		7.9	
90 PERCENT EXCEEDS	--		4.4	

* During period of operation.

For period of record through 1997.

^a From rating curve extended above 500 ft³/s.

06299500 WOLF CREEK AT WOLF, WY

06300500 EAST FORK BIG GOOSE CREEK NEAR BIG HORN, WY

LOCATION.--Lat 44°32'18", long 107°13'33", in SE¹/₄ SE¹/₄ NW¹/₄ sec.28, T.53 N., R.86 W., Johnson County, Hydrologic Unit 10090101, Bighorn National Forest, on right bank 0.7 mi upstream from Park Reservoir and 16 mi southwest of Big Horn.

DRAINAGE AREA.--20.1 mi².

PERIOD OF RECORD.--October 1953 to current year (no winter records since 1973). Prior to October 1960, published as East Goose Creek near Big Horn.

GAGE.--Water-stage recorder. Elevation of gage is 8,320 ft above sea level, from topographic map. Prior to June 28, 1960, water-stage recorder at site 1.1 mi downstream at different datum. June 28, 1960, to July 14, 1970, water-stage recorder at site 0.9 mi downstream at different datums and July 15 to Oct. 7, 1970, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: May 1-22 and June 1-10. Records good except those for estimated daily discharges, which are poor. No diversion upstream from station. Result of discharge measurement, in cubic feet per second, made when station was not in operation, is given below:

Oct. 1 . . . 13.9

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	6.0	250	80	34	12
2	---	---	---	---	---	---	---	8.0	280	72	32	12
3	---	---	---	---	---	---	---	6.0	260	88	31	11
4	---	---	---	---	---	---	---	5.0	280	79	28	11
5	---	---	---	---	---	---	---	6.0	310	72	27	11
6	---	---	---	---	---	---	---	8.0	340	72	25	11
7	---	---	---	---	---	---	---	10	300	71	24	10
8	---	---	---	---	---	---	---	15	320	65	23	9.6
9	---	---	---	---	---	---	---	17	350	61	22	9.2
10	---	---	---	---	---	---	---	20	260	60	21	8.6
11	---	---	---	---	---	---	---	23	302	58	25	8.3
12	---	---	---	---	---	---	---	25	235	63	24	9.2
13	---	---	---	---	---	---	---	31	199	70	21	8.7
14	---	---	---	---	---	---	---	43	202	57	20	8.0
15	---	---	---	---	---	---	---	60	358	49	20	7.6
16	---	---	---	---	---	---	---	87	248	46	23	8.1
17	---	---	---	---	---	---	---	113	228	45	26	7.4
18	---	---	---	---	---	---	---	150	226	45	22	6.7
19	---	---	---	---	---	---	---	115	200	60	20	8.3
20	---	---	---	---	---	---	---	80	161	65	19	9.5
21	---	---	---	---	---	---	---	93	131	53	17	9.3
22	---	---	---	---	---	---	---	140	128	45	17	12
23	---	---	---	---	---	---	---	158	137	41	16	17
24	---	---	---	---	---	---	---	181	142	46	15	17
25	---	---	---	---	---	---	---	173	99	78	15	14
26	---	---	---	---	---	---	---	128	85	53	15	12
27	---	---	---	---	---	---	---	93	84	45	15	12
28	---	---	---	---	---	---	---	78	87	42	14	11
29	---	---	---	---	---	---	---	84	80	42	13	11
30	---	---	---	---	---	---	---	115	80	41	13	9.9
31	---	---	---	---	---	---	---	228	---	37	12	---
TOTAL	---	---	---	---	---	---	---	2299.0	6362	1801	649	312.4
MEAN	---	---	---	---	---	---	---	74.2	212	58.1	20.9	10.4
MAX	---	---	---	---	---	---	---	228	358	88	34	17
MIN	---	---	---	---	---	---	---	5.0	80	37	12	6.7
AC-FT	---	---	---	---	---	---	---	4560	12620	3570	1290	620

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1973, BY WATER YEAR (WY)

	MEAN	8.61	5.47	3.65	3.04	2.60	2.52	4.97	84.4	188	56.9	18.2	12.4
MAX	16.9	8.43	5.32	4.16	3.30	3.52	18.6	152	260	111	46.5	37.0	
(WY)	1968	1969	1958	1962	1959	1962	1962	1958	1963	1964	1968	1968	
MIN	4.48	2.85	2.23	1.87	1.63	1.15	1.76	28.9	84.6	20.5	7.39	5.22	
(WY)	1971	1963	1963	1971	1971	1971	1971	1968	1966	1961	1961	1954	

06300500 EAST FORK BIG GOOSE CREEK NEAR BIG HORN, WY--Continued

SUMMARY STATISTICS

FOR 1997 WATER YEAR*

WATER YEARS 1954 - 1973

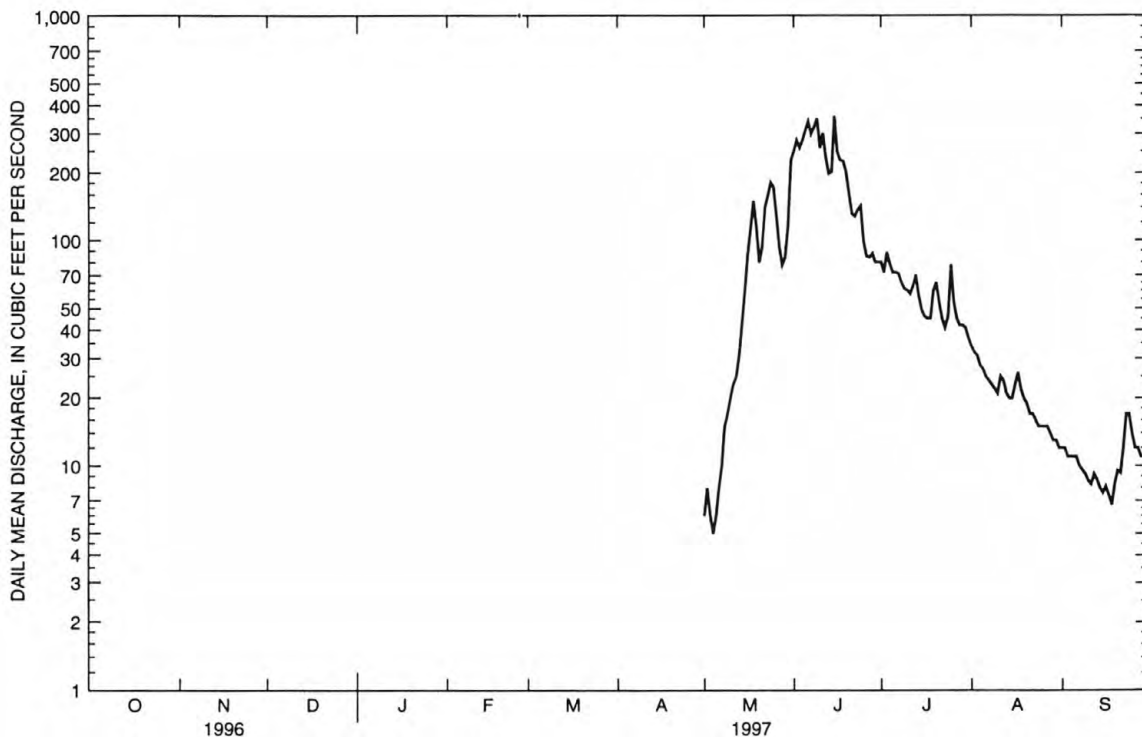
ANNUAL MEAN	--		32.6	
HIGHEST ANNUAL MEAN	--		41.8	1963
LOWEST ANNUAL MEAN	--		21.4	1966
HIGHEST DAILY MEAN	558	Jun 15	775	Jun 15 1963#
LOWEST DAILY MEAN	5.0	May 4	1.0	Dec 11-14 1963, Mar 24, 25, Nov 14, 15 1964 Mar 18 1971#
ANNUAL SEVEN-DAY MINIMUM	--		1.1 ^a	Mar 12 1971
INSTANTANEOUS PEAK FLOW	476	Jun 15	1230 ^a	Jun 15 1963#
INSTANTANEOUS PEAK STAGE	5.44	Jun 15	4.59 ^b	Jun 15 1963#
ANNUAL RUNOFF (AC-FT)	--		23600	
10 PERCENT EXCEEDS	--		102	
50 PERCENT EXCEEDS	--		6.0	
90 PERCENT EXCEEDS	--		2.4	

* During period of operation.

For period of record through 1997.

a From rating curve extended above 250 ft³/s on basis of slope-area measurement of peak flow.

b State and datum then in use.



06300500 EAST FORK BIG GOOSE CREEK NEAR BIG HORN, WY

YELLOWSTONE RIVER BASIN

06301480 CONEY CREEK ABOVE TWIN LAKES, NEAR BIG HORN, WY

LOCATION.--Lat 44°36'05", long 107°19'01", 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 record 1993 to 1996).

GAGE.--water-stage recorder. Elevation of gage is 8,690 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 26, 27. Records fair. No diversion upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.68	.61	.30	.10	.09	.08	.07	.46	89	8.6	5.6	.86
2	.73	.57	.30	.11	.11	.07	.07	.65	73	9.2	4.9	.82
3	.75	.55	.29	.12	.12	.07	.06	.49	56	10	5.7	.74
4	.72	.52	.27	.16	.11	.07	.06	.41	60	11	4.8	.68
5	.68	.58	.26	.14	.11	.07	.13	.43	70	9.4	4.3	.64
6	.64	.57	.25	.14	.10	.06	.13	.57	67	9.6	3.8	.61
7	.60	.58	.24	.13	.10	.06	.11	.82	57	8.5	3.4	.57
8	.54	.55	.23	.15	.09	.06	.11	.96	69	7.9	2.9	.52
9	.49	.54	.21	.17	.09	.06	.10	1.1	63	7.5	2.5	.48
10	.48	.51	.19	.19	.09	.05	.09	1.5	48	7.0	2.4	.46
11	.44	.46	.20	.18	.09	.05	.09	2.0	77	6.6	2.9	.44
12	.40	.45	.18	.16	.08	.04	.09	2.5	58	7.5	2.9	.38
13	.37	.43	.18	.15	.08	.06	.08	3.4	43	9.9	2.6	.35
14	.33	.42	.22	.13	.09	.06	.07	5.3	31	9.8	2.5	.34
15	.28	.43	.21	.12	.11	.06	.08	11	51	7.7	2.3	.33
16	.29	.43	.23	.11	.11	.05	.08	14	40	6.5	2.9	.32
17	.34	.41	.22	.10	.08	.04	.09	21	33	5.8	3.5	.30
18	.34	.40	.20	.09	.08	.04	.11	32	31	5.6	2.9	.28
19	.33	.37	.19	.08	.07	.04	.15	22	27	7.5	2.4	.37
20	.37	.36	.17	.08	.07	.04	.21	18	21	13	2.0	.41
21	.39	.35	.17	.08	.08	.04	.25	23	17	11	1.7	.44
22	.38	.33	.18	.08	.08	.04	.24	28	14	8.4	1.7	.68
23	.38	.34	.18	.09	.08	.04	.22	34	15	7.2	1.6	1.0
24	.37	.32	.18	.08	.07	.05	.20	40	15	7.2	1.5	1.1
25	.38	.31	.26	.08	.07	.06	.20	40	12	13	1.6	1.0
26	1.1	.30	.26	.09	.07	.06	.20	30	10	11	1.6	.94
27	.95	.35	.23	.12	.07	.06	.19	22	9.1	8.4	1.4	.80
28	.90	.34	.19	.12	.09	.06	.23	19	8.7	7.0	1.3	.72
29	.80	.32	.17	.11	---	.07	.30	21	8.7	7.4	1.2	.63
30	.71	.31	.13	.09	---	.06	.35	28	8.1	7.2	1.1	.59
31	.65	---	.11	.08	---	.05	---	56	---	6.2	.98	---
TOTAL	16.81	13.01	6.60	3.63	2.48	1.72	4.36	479.59	1181.6	262.6	82.88	17.80
MEAN	.54	.43	.21	.12	.089	.055	.15	15.5	39.4	8.47	2.67	.59
MAX	1.1	.61	.30	.19	.12	.08	.35	56	89	13	5.7	1.1
MIN	.28	.30	.11	.08	.07	.04	.06	.41	8.1	5.6	.98	.28
AC-FT	33	26	13	7.2	4.9	3.4	8.6	951	2340	521	164	35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1993, BY WATER YEAR (WY)*

	1991	1992	1993	1991	1992	1993	1991	1992	1993	1991	1992	1993
MEAN	.57	.50	.27	.16	.13	.14	.58	18.8	30.8	7.93	1.68	.63
MAX	.71	.61	.36	.22	.20	.21	1.59	27.4	50.9	14.1	3.50	1.00
(WY)	1993	1993	1993	1992	1992	1992	1992	1992	1995	1995	1993	1993
MIN	.52	.43	.17	.12	.089	.055	.15	8.58	8.89	2.03	.67	.18
(WY)	1992	1997	1991	1997	1997	1997	1997	1995	1994	1994	1996	1996

YELLOWSTONE RIVER BASIN

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06301480 CONEY CREEK ABOVE TWIN LAKES, NEAR BIG HORN, WY--Continued

SUMMARY STATISTICS

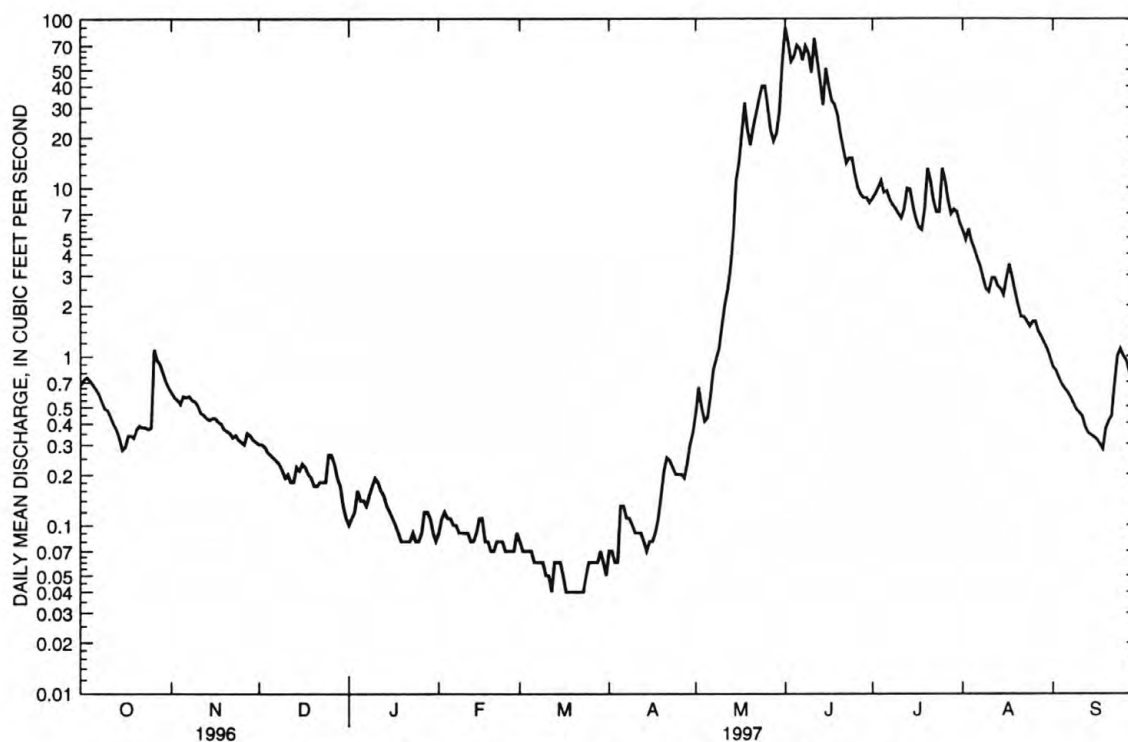
FOR 1997 WATER YEAR

WATER YEARS 1991 - 1997*

ANNUAL TOTAL	2073.08	--	
ANNUAL MEAN	5.68	--	
HIGHEST ANNUAL MEAN	--	5.84	1992
LOWEST ANNUAL MEAN	--	4.83	1991
HIGHEST DAILY MEAN	89	105	Jun 16 1995#
LOWEST DAILY MEAN	.04	.03	Sep 10 1996#
ANNUAL SEVEN-DAY MINIMUM	.04	.04	Sep 7 1996
INSTANTANEOUS PEAK FLOW	105	135	Jun 15 1995#
INSTANTANEOUS PEAK STAGE	4.04	5.05 ^a	May 14 1991#
ANNUAL RUNOFF (AC-FT)	4110	--	
10 PERCENT EXCEEDS	16	22	
50 PERCENT EXCEEDS	.38	.64	
90 PERCENT EXCEEDS	.07	.12	

* During period of operation (October 1990 to current year, no winter record 1993-1996).

For period of record through 1997.

^a Backwater from ice/snow.

06301480 CONEY CREEK ABOVE TWIN LAKES, NEAR BIG HORN, WY

YELLOWSTONE RIVER BASIN

06301495 CONEY CREEK BELOW TWIN LAKES, NEAR BIG HORN, WY

LOCATION.--Lat 44°36'34", long 107°18'12", unsurveyed, Sheridan County, Hydrologic Unit 10090101, Bighorn National Forest, 0.2 mi downstream from Twin Lakes, 0.2 mi upstream from mouth, and 16.0 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, and 1996).

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 8,440 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 2 to Apr. 15, Apr. 18-23, and Apr. 28 to May 9. Records fair except those for estimated daily discharges, which are poor. Flow regulated by Twin Lakes, capacity, 1,520 acre-ft. Seasonal records collected by State of Wyoming at present site, but different datum, 1971-90.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.1	.22	.05	.04	.05	.05	2.0	141	64	13	3.0
2	1.7	.97	.20	.05	.04	.04	.05	3.0	134	26	11	2.9
3	1.6	.90	.18	.05	.04	.04	.05	2.0	106	27	14	2.8
4	1.5	.83	.17	.06	.04	.04	.06	1.5	133	28	13	2.6
5	1.4	.74	.16	.06	.04	.04	.08	2.0	132	24	11	2.4
6	1.2	.80	.15	.06	.04	.04	.11	2.6	123	27	10	2.2
7	1.2	.77	.15	.05	.04	.04	.09	3.5	105	22	8.9	2.1
8	1.1	.75	.14	.05	.03	.04	.08	4.5	120	14	8.3	2.0
9	1.0	.72	.13	.06	.03	.04	.07	5.8	131	16	7.5	2.0
10	.90	.68	.12	.06	.03	.04	.07	7.1	94	17	7.6	1.9
11	.80	.63	.12	.06	.03	.03	.07	7.8	142	16	9.2	1.9
12	.73	.60	.11	.06	.03	.03	.07	9.0	121	19	9.0	1.9
13	.65	.58	.12	.06	.04	.04	.07	11	99	24	8.1	1.9
14	.62	.56	.13	.06	.04	.04	.07	13	73	22	7.9	1.8
15	.59	.54	.13	.05	.04	.04	.08	18	109	18	7.4	1.7
16	.62	.54	.14	.05	.05	.03	.10	26	89	15	9.4	1.8
17	.68	.50	.13	.04	.05	.04	.11	44	77	14	12	1.7
18	.72	.46	.12	.04	.04	.04	.17	60	71	14	9.0	1.6
19	.73	.44	.11	.04	.04	.04	.23	43	64	19	7.4	2.1
20	.78	.40	.10	.03	.04	.04	.45	35	51	32	6.5	2.5
21	.81	.40	.10	.03	.04	.04	.35	43	42	22	5.8	2.5
22	.84	.40	.10	.03	.04	.04	.27	50	37	18	5.7	3.2
23	.86	.37	.11	.03	.05	.04	.23	60	51	16	5.1	4.3
24	.86	.34	.11	.03	.05	.04	.23	69	50	16	4.9	4.1
25	.90	.32	.11	.03	.04	.04	.22	71	32	25	5.3	3.8
26	3.0	.30	.11	.03	.04	.05	.23	57	25	21	4.1	3.0
27	2.4	.32	.11	.04	.04	.05	.37	46	23	17	2.8	2.8
28	2.0	.30	.10	.04	.05	.05	.50	49	22	16	4.1	2.6
29	1.6	.27	.09	.04	---	.06	.75	80	21	16	4.5	2.1
30	1.3	.25	.07	.03	---	.05	1.4	89	20	16	4.2	2.0
31	1.2	---	.06	.03	---	.04	---	94	---	14	3.9	---
TOTAL	35.79	16.78	3.90	1.40	1.12	1.28	6.68	1008.8	2438	655	240.6	73.2
MEAN	1.15	.56	.13	.045	.040	.041	.22	32.5	81.3	21.1	7.76	2.44
MAX	3.0	1.1	.22	.06	.05	.06	1.4	94	142	64	14	4.3
MIN	.59	.25	.06	.03	.03	.03	.05	1.5	20	14	2.8	1.6
AC-FT	71	33	7.7	2.8	2.2	2.5	13	2000	4840	1300	477	145

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1997, BY WATER YEAR (WY)*

	1991	1992	1993	1994	1995	1996	1997
MEAN	1.68	.38	.20	.14	.17	.23	.52
MAX	4.50	.56	.32	.26	.32	.51	1.32
(WY)	1991	1997	1992	1992	1992	1992	1993
MIN	.50	.14	.13	.045	.040	.041	.20
(WY)	1992	1993	1997	1997	1997	1997	1993

06301495 CONEY CREEK BELOW TWIN LAKES, NEAR BIG HORN, WY--Continued

SUMMARY STATISTICS

FOR 1997 WATER YEAR

WATER YEARS 1991 - 1997*

ANNUAL TOTAL	4482.55	--	
ANNUAL MEAN	12.3	12.0	
HIGHEST ANNUAL MEAN	--	12.6	1992
LOWEST ANNUAL MEAN	--	11.2	1991
HIGHEST DAILY MEAN	142	172	May 29 1993#
LOWEST DAILY MEAN	.03	.03	Several days, 1997#
ANNUAL SEVEN-DAY MINIMUM	.03	.03	Jan 20 1997
INSTANTANEOUS PEAK FLOW	202 ^a	223 ^b	May 29 1993#
INSTANTANEOUS PEAK STAGE	4.32 ^c	4.32 ^c	May 1, 2 1997#
ANNUAL RUNOFF (AC-FT)	8890	8710	
10 PERCENT EXCEEDS	43	46	
50 PERCENT EXCEEDS	.77	1.2	
90 PERCENT EXCEEDS	.04	.11	

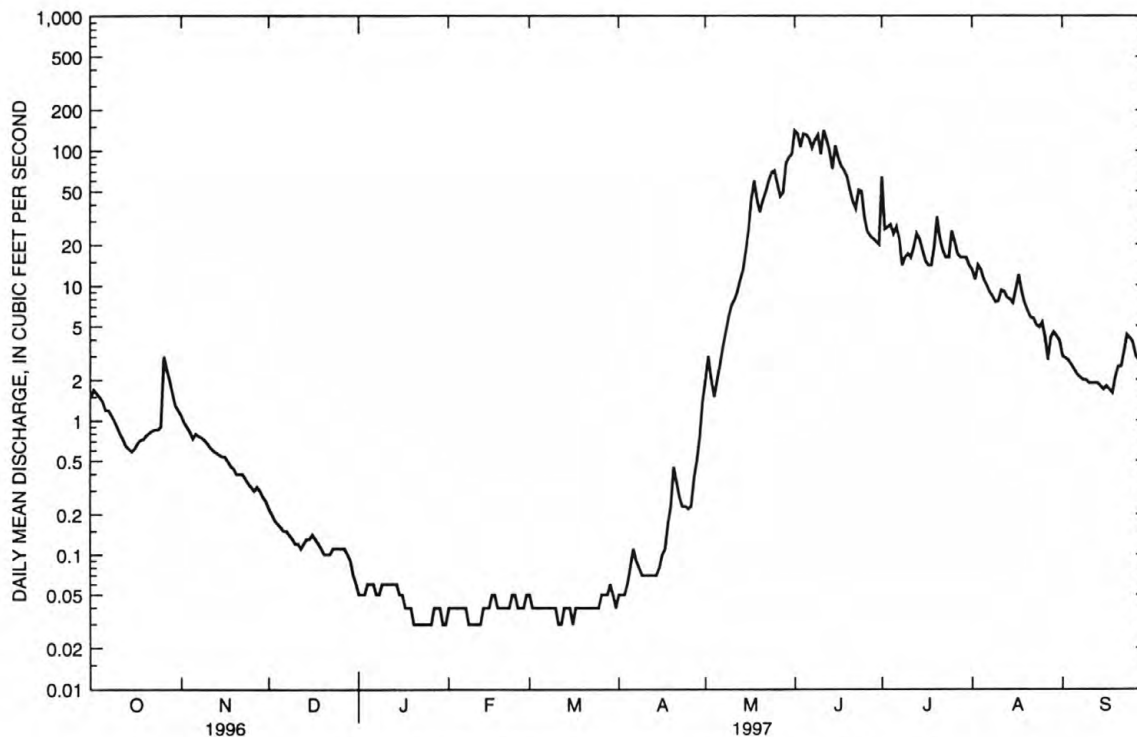
* During periods of operation (October 1990 to current year, no winter records 1993, 1994, and 1996).

For period of record through 1997.

a Gage height, 3.21 ft.

b Gage height, 3.16 ft.

c Backwater from snow and ice.



06301495 CONEY CREEK BELOW TWIN LAKES, NEAR BIG HORN, WY

YELLOWSTONE RIVER BASIN

06301500 WEST FORK BIG GOOSE CREEK NEAR BIG HORN, WY

LOCATION.--Lat 44°36'47", long 107°17'49", in NE¹/₄ SE¹/₄ NE¹/₄ sec.35, T.54 N., R.87 W., Sheridan County, Hydrologic Unit 10090101, Bighorn National Forest, on left bank 0.3 mi downstream from Twin Lakes Branch and 16 mi west of Big Horn.

DRAINAGE AREA.--24.4 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 8,420 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: May 1-14. Records good except those for estimated daily discharges, which are poor. Some regulation by Twin Lakes, capacity, 1,520 acre-ft, and Dome Lake, capacity, 1,800 acre-ft. No diversion 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. 10 . . . 7.49

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	2.5	425	111	45	25
2	---	---	---	---	---	---	---	3.5	431	89	43	25
3	---	---	---	---	---	---	---	2.5	332	94	45	25
4	---	---	---	---	---	---	---	2.0	370	95	43	25
5	---	---	---	---	---	---	---	2.5	437	91	41	24
6	---	---	---	---	---	---	---	3.5	443	91	39	24
7	---	---	---	---	---	---	---	4.5	404	84	36	24
8	---	---	---	---	---	---	---	5.4	425	69	34	24
9	---	---	---	---	---	---	---	6.5	428	56	31	24
10	---	---	---	---	---	---	---	8.0	341	43	32	24
11	---	---	---	---	---	---	---	9.0	443	43	36	24
12	---	---	---	---	---	---	---	10	382	56	36	24
13	---	---	---	---	---	---	---	14	296	81	34	24
14	---	---	---	---	---	---	---	16	229	78	34	23
15	---	---	---	---	---	---	---	23	368	66	32	22
16	---	---	---	---	---	---	---	34	327	58	36	22
17	---	---	---	---	---	---	---	59	263	52	40	22
18	---	---	---	---	---	---	---	75	250	50	36	22
19	---	---	---	---	---	---	---	57	221	69	32	22
20	---	---	---	---	---	---	---	47	186	107	29	22
21	---	---	---	---	---	---	---	58	154	86	26	22
22	---	---	---	---	---	---	---	63	130	69	25	22
23	---	---	---	---	---	---	---	97	141	61	24	23
24	---	---	---	---	---	---	---	181	138	61	25	24
25	---	---	---	---	---	---	---	205	113	87	28	23
26	---	---	---	---	---	---	---	166	99	74	26	22
27	---	---	---	---	---	---	---	122	91	63	26	22
28	---	---	---	---	---	---	---	112	86	59	27	22
29	---	---	---	---	---	---	---	138	85	58	27	19
30	---	---	---	---	---	---	---	160	82	56	27	9.2
31	---	---	---	---	---	---	---	213	---	50	27	---
TOTAL	---	---	---	---	---	---	---	1899.9	8120	2207	1022	679.2
MEAN	---	---	---	---	---	---	---	61.3	271	71.2	33.0	22.6
MAX	---	---	---	---	---	---	---	213	443	111	45	25
MIN	---	---	---	---	---	---	---	2.0	82	43	24	9.2
AC-FT	---	---	---	---	---	---	---	3770	16110	4380	2030	1350

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1971, BY WATER YEAR (WY)

	MEAN	8.56	6.16	4.82	3.79	3.09	2.98	5.05	65.3	198	60.9	29.7	24.1
MAX	18.0	10.3	9.61	6.55	5.96	5.40	15.5	139	305	111	57.3	48.9	
(WY)	1963	1969	1969	1965	1963	1963	1962	1956	1965	1965	1968	1968	
MIN	2.67	1.22	1.03	1.05	1.06	1.46	1.71	13.9	102	35.1	19.4	6.32	
(WY)	1964	1964	1964	1964	1964	1964	1957	1957	1966	1966	1969	1956	

06301500 WEST FORK BIG GOOSE CREEK NEAR BIG HORN, WY--Continued

SUMMARY STATISTICS

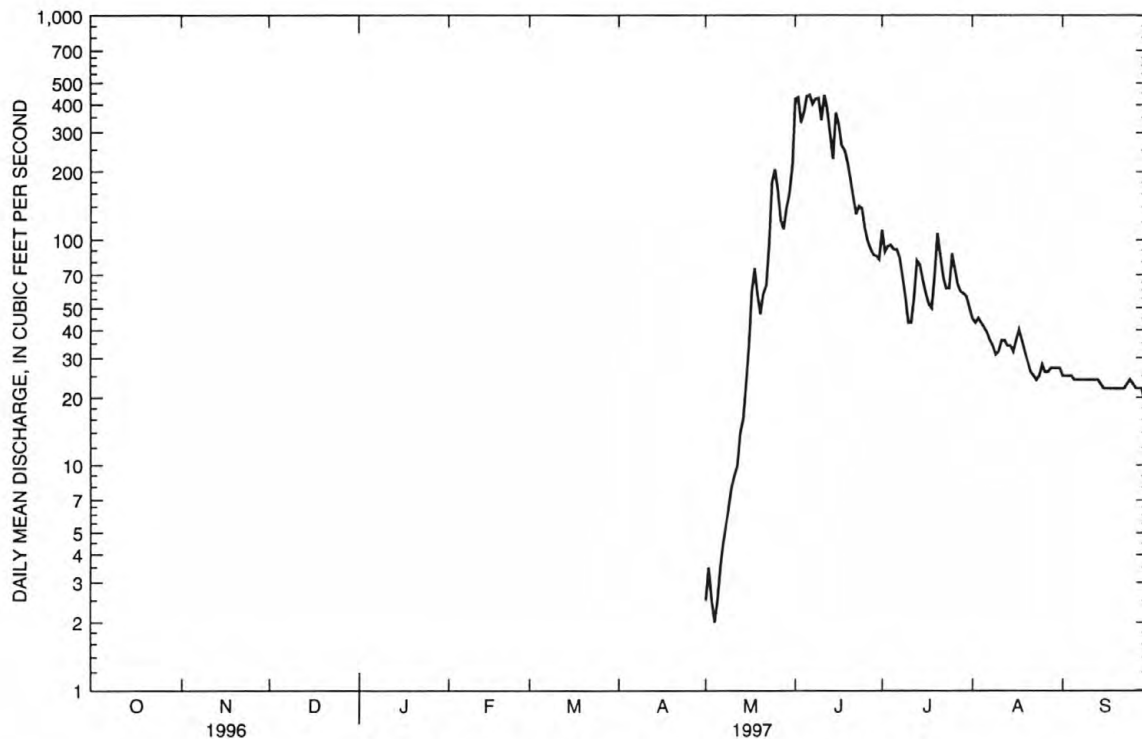
FOR 1997 WATER YEAR*

WATER YEARS 1954 - 1971

ANNUAL MEAN	--		34.3	
HIGHEST ANNUAL MEAN	--		45.7	1965
LOWEST ANNUAL MEAN	--		21.7	1960
HIGHEST DAILY MEAN	443	Jun 6	612	Jun 16 1963#
LOWEST DAILY MEAN	2.0	May 4	.80	Dec 14,15 1963
				Jan 15,16
				Feb 26 1964#
ANNUAL SEVEN-DAY MINIMUM	--		1030 ^a	Dec 20 1963
INSTANTANEOUS PEAK FLOW	506	Jun 8	5.37	Jun 15 1963#
INSTANTANEOUS PEAK STAGE	4.22	Jun 8		Jun 15 1963#
ANNUAL RUNOFF (AC-FT)	--		24880	
10 PERCENT EXCEEDS	--		90	
50 PERCENT EXCEEDS	--		6.9	
90 PERCENT EXCEEDS	--		2.3	

* During period of operation.

For period of record through 1997.

a From rating curve extended above 410 ft³/s on basis of velocity area study.

06301500 WEST FORK BIG GOOSE CREEK NEAR BIG HORN, WY

YELLOWSTONE RIVER BASIN

06302000 BIG GOOSE CREEK NEAR SHERIDAN, WY

LOCATION.--Lat 44°42'08", long 107°10'51", in NW¹/₄ NE¹/₄ sec.35, T.55 N., R.86 W., Sheridan County, Hydrologic Unit 10090101, on right bank 0.4 mi upstream from Cave Creek and 14 mi southwest of Sheridan.

DRAINAGE AREA.--120 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1006: Drainage area. WSP 1509: 1930(M), 1931.

GAGE.--Water-stage recorder. Elevation of gage is 4,505 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Apr. 5-12. Records good except those for estimated daily discharges, which are poor. Natural flow of stream affected by transbasin diversions, storage reservoirs, diversions for irrigation of about 20 acres and to Sheridan Filtration plant, and return flow from irrigated areas. PK ditch diverts water 0.6 mi upstream from station for irrigation of lands downstream from station. Result of discharge measurement, in cubic feet per second, made when station was not in operation, is given below:

Oct. 2 . . . 4.84

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	19	42	688	180	43	22
2	---	---	---	---	---	---	16	42	808	159	38	27
3	---	---	---	---	---	---	17	41	682	180	38	26
4	---	---	---	---	---	---	18	45	688	178	36	32
5	---	---	---	---	---	---	8.0	54	765	160	50	46
6	---	---	---	---	---	---	7.5	67	778	159	45	30
7	---	---	---	---	---	---	7.0	85	748	137	36	25
8	---	---	---	---	---	---	6.0	82	760	110	33	24
9	---	---	---	---	---	---	7.0	89	841	85	31	24
10	---	---	---	---	---	---	8.0	104	748	60	31	24
11	---	---	---	---	---	---	9.0	113	796	59	41	28
12	---	---	---	---	---	---	13	112	712	86	41	28
13	---	---	---	---	---	---	15	123	640	123	42	26
14	---	---	---	---	---	---	15	134	590	105	42	26
15	---	---	---	---	---	---	15	159	834	79	39	26
16	---	---	---	---	---	---	16	197	890	63	55	27
17	---	---	---	---	---	---	21	251	778	57	60	27
18	---	---	---	---	---	---	28	280	682	52	47	28
19	---	---	---	---	---	---	33	243	635	74	45	35
20	---	---	---	---	---	---	36	232	525	157	38	36
21	---	---	---	---	---	---	36	248	400	117	28	35
22	---	---	---	---	---	---	33	255	341	86	27	44
23	---	---	---	---	---	---	31	399	327	69	24	51
24	---	---	---	---	---	---	31	670	344	71	24	44
25	---	---	---	---	---	---	30	733	283	118	27	40
26	---	---	---	---	---	---	31	670	237	95	24	38
27	---	---	---	---	---	---	34	624	201	75	22	40
28	---	---	---	---	---	---	41	570	167	64	22	43
29	---	---	---	---	---	---	41	565	165	62	21	42
30	---	---	---	---	---	---	38	393	157	59	22	35
31	---	---	---	---	---	---	---	407	---	50	21	---
TOTAL	---	---	---	---	---	---	660.5	8029	17210	3129	1093	979
MEAN	---	---	---	---	---	---	22.0	259	574	101	35.3	32.6
MAX	---	---	---	---	---	---	41	733	890	180	60	51
MIN	---	---	---	---	---	---	6.0	41	157	50	21	22
AC-FT	---	---	---	---	---	---	1310	15930	34140	6210	2170	1940

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1971, BY WATER YEAR (WY)

	MEAN	27.5	18.6	14.0	11.9	10.2	10.4	33.4	233	439	92.4	32.6	30.7
MAX	93.3	48.0	30.3	22.0	18.2	20.2	102	576	764	266	71.7	116	
(WY)	1947	1942	1951	1951	1951	1946	1943	1944	1963	1945	1968	1941	
MIN	9.68	7.08	5.19	2.66	2.90	2.75	11.5	37.2	49.6	22.3	10.3	11.3	
(WY)	1953	1940	1955	1955	1955	1937	1970	1960	1934	1961	1934	1931	

06302000 BIG GOOSE CREEK NEAR SHERIDAN, WY--Continued

SUMMARY STATISTICS

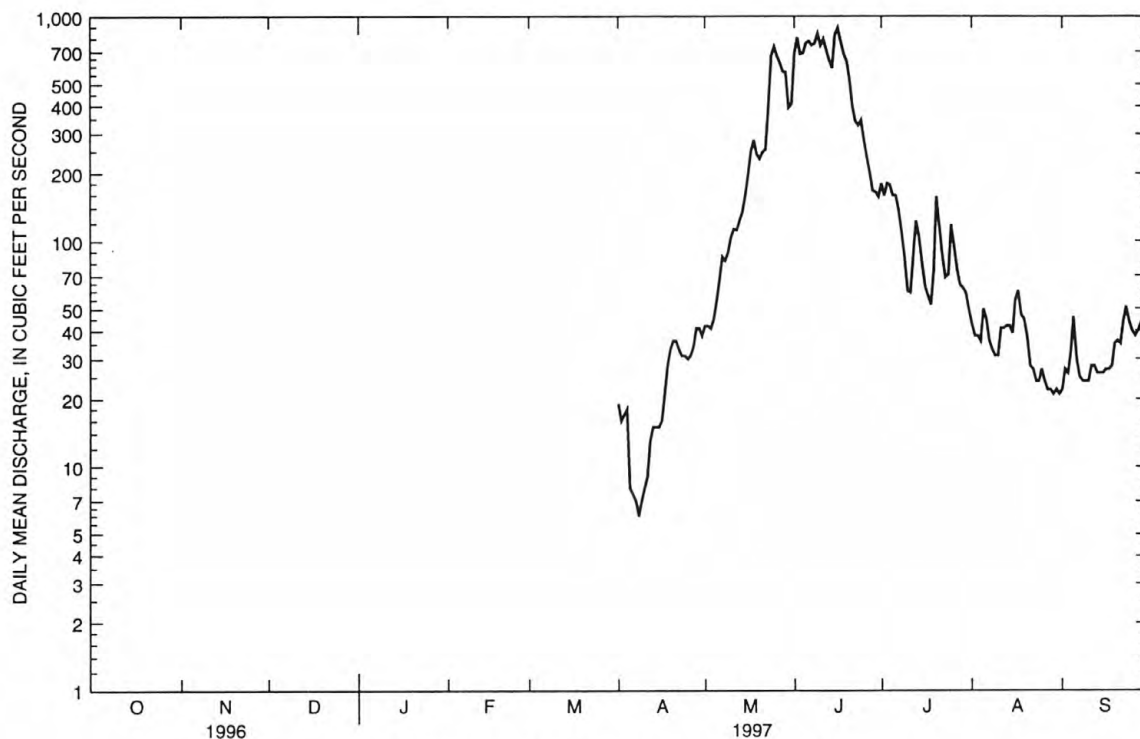
FOR 1997 WATER YEAR*

WATER YEARS 1930 - 1971

ANNUAL MEAN	--		80.2	
HIGHEST ANNUAL MEAN	--		137	1944
LOWEST ANNUAL MEAN	--		26.6	1960
HIGHEST DAILY MEAN	890	Jun 16	2050	Jun 16 1963#
LOWEST DAILY MEAN	6.0	Apr 8	1.6	Nov 29 1954#
ANNUAL SEVEN-DAY MINIMUM	--		2.2	Jan 18 1955
INSTANTANEOUS PEAK FLOW	925	Jun 15	3160a	Jun 15 1963#
INSTANTANEOUS PEAK STAGE	3.78	Jun 15	5.83	Jun 15 1963#
ANNUAL RUNOFF (AC-FT)	--		58100	
10 PERCENT EXCEEDS	--		214	
50 PERCENT EXCEEDS	--		20	
90 PERCENT EXCEEDS	--		8.0	

* During period of operation.

For period of record through 1997.

a From rating curve extended above 1,600 ft³/s.

06302000 BIG GOOSE CREEK NEAR SHERIDAN, WY

YELLOWSTONE RIVER BASIN

06302000 BIG GOOSE CREEK NEAR SHERIDAN, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1986 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
NOV 05...	1300	18	114	7.2	2.5	1.5	644	10.5	91	K4
MAR 10...	1310	16	143	7.8	2.0	11.0	648	10.0	85	16
MAY 05...	1550	55	129	7.7	6.5	17.0	650	9.0	86	K2
JUL 22...	1230	87	67	7.4	15.5	24.5	649	6.6	78	28

K-Results based on colony count outside the acceptable range (non-ideal colony count).

YELLOWSTONE RIVER BASIN

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06303500 LITTLE GOOSE CREEK IN CANYON, NEAR BIG HORN, WY

LOCATION.--Lat 44°35'46", long 107°02'22", in SE¹/₄ SW¹/₄ NE¹/₄ 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 sea level, from topographic map.

REMARKS.--Estimated daily discharges: Apr. 8, 11-13. Records good except those above 100 ft³/s, which are fair and those for estimated daily discharges, which are poor. 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. 7 . . . 13.4

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	17	48	420	146	76	76
2	---	---	---	---	---	---	15	44	422	136	75	77
3	---	---	---	---	---	---	15	44	385	147	76	76
4	---	---	---	---	---	---	16	50	392	137	75	76
5	---	---	---	---	---	---	11	60	415	131	76	76
6	---	---	---	---	---	---	13	76	403	128	71	75
7	---	---	---	---	---	---	18	96	437	118	69	74
8	---	---	---	---	---	---	16	95	601	108	69	76
9	---	---	---	---	---	---	15	102	468	99	71	78
10	---	---	---	---	---	---	14	122	436	94	73	78
11	---	---	---	---	---	---	13	134	451	98	75	80
12	---	---	---	---	---	---	10	138	413	107	76	81
13	---	---	---	---	---	---	12	150	378	101	75	81
14	---	---	---	---	---	---	13	162	361	90	72	81
15	---	---	---	---	---	---	13	191	531	83	72	81
16	---	---	---	---	---	---	14	233	443	79	77	81
17	---	---	---	---	---	---	19	297	437	73	75	81
18	---	---	---	---	---	---	24	317	409	71	72	80
19	---	---	---	---	---	---	33	269	380	88	75	78
20	---	---	---	---	---	---	43	263	352	115	73	74
21	---	---	---	---	---	---	47	280	311	93	72	73
22	---	---	---	---	---	---	41	293	286	89	71	80
23	---	---	---	---	---	---	38	300	261	82	70	79
24	---	---	---	---	---	---	38	311	246	86	69	73
25	---	---	---	---	---	---	37	350	205	104	70	66
26	---	---	---	---	---	---	36	322	198	101	71	65
27	---	---	---	---	---	---	40	322	183	96	73	64
28	---	---	---	---	---	---	50	297	165	89	76	64
29	---	---	---	---	---	---	50	293	155	80	76	64
30	---	---	---	---	---	---	48	286	147	76	75	56
31	---	---	---	---	---	---	---	326	---	73	74	---
TOTAL	---	---	---	---	---	---	769	6271	10691	3118	2270	2244
MEAN	---	---	---	---	---	---	25.6	202	356	101	73.2	74.8
MAX	---	---	---	---	---	---	50	350	601	147	77	81
MIN	---	---	---	---	---	---	10	44	147	71	69	56
AC-FT	---	---	---	---	---	---	1530	12440	21210	6180	4500	4450

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1971, BY WATER YEAR (WY)

	MEAN	23.5	13.1	10.4	8.58	8.11	8.48	32.9	183	241	102	79.2	47.4
MAX	46.0	26.5	17.5	12.3	13.9	14.1	106	339	426	140	124	84.4	
(WY)	1959	1962	1942	1942	1962	1962	1943	1944	1970	1967	1968	1958	
MIN	12.7	8.51	6.49	4.99	5.38	5.76	9.46	80.4	106	79.0	44.2	20.4	
(WY)	1954	1955	1950	1950	1950	1950	1970	1950	1966	1958	1960	1960	

06303500 LITTLE GOOSE CREEK IN CANYON, NEAR BIG HORN, WY--Continued

SUMMARY STATISTICS

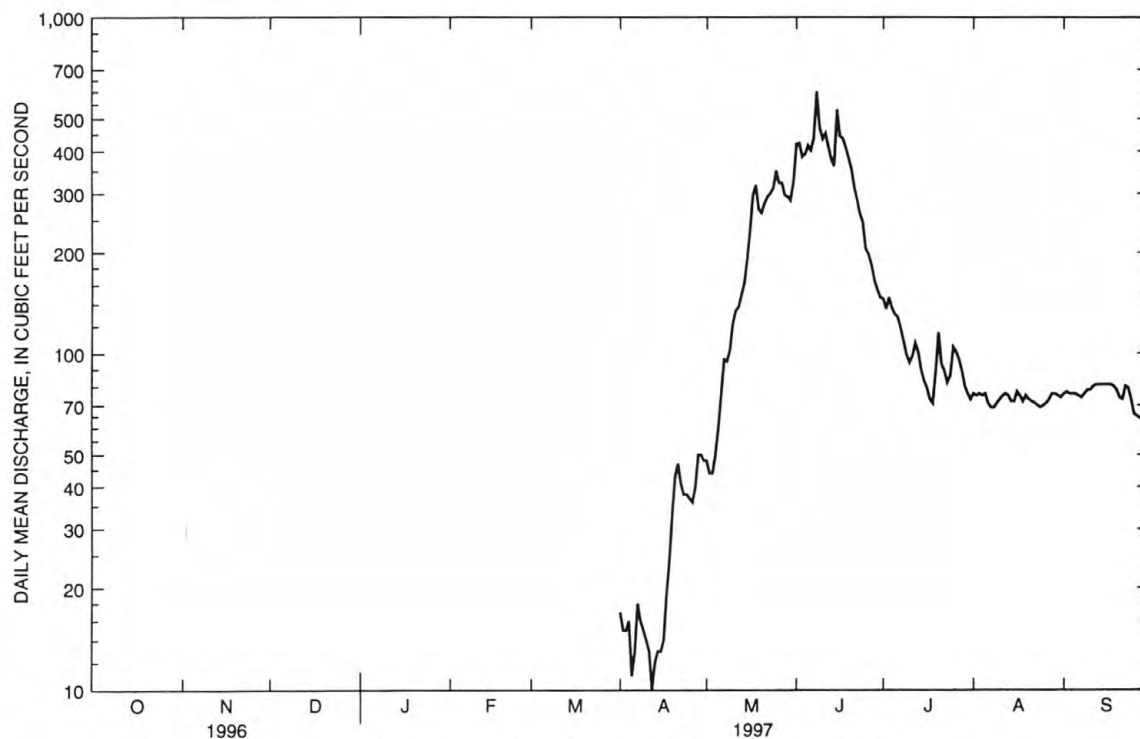
FOR 1997 WATER YEAR*

WATER YEARS 1941 - 1971

ANNUAL MEAN	--		63.4	
HIGHEST ANNUAL MEAN	--		83.9	1970
LOWEST ANNUAL MEAN	--		40.6	1960
HIGHEST DAILY MEAN	601	Jun 8	837	Jun 15 1963#
LOWEST DAILY MEAN	10	Apr 12	3.0	Jan 3 1950#
ANNUAL SEVEN-DAY MINIMUM	--		4.5	Dec 31 1949
INSTANTANEOUS PEAK FLOW	850	Jun 8	1350 ^a	Jun 15 1963#
INSTANTANEOUS PEAK STAGE	5.50	Jun 8	6.78	Jun 15 1963#
ANNUAL RUNOFF (AC-FT)	--		45900	
10 PERCENT EXCEEDS	--		172	
50 PERCENT EXCEEDS	--		21	
90 PERCENT EXCEEDS	--		7.5	

* During period of operation.

For period of record through 1997.

a From rating curve extended above 900 ft³/s.

06303500 LITTLE GOOSE CREEK IN CANYON, NEAR BIG HORN, WY

YELLOWSTONE RIVER BASIN

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06304500 LITTLE GOOSE CREEK AT SHERIDAN, WY

LOCATION.--Lat 44°48'10", long 106°57'10", 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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
NOV 05...	1415	44	688	8.0	4.0	2.5	665	11.1	97	30
MAR 10...	1450	46	787	8.4	4.5	9.0	668	11.2	99	23
MAY 05...	1710	115	456	8.6	13.5	19.0	669	11.7	128	35
JUL 22...	1355	86	493	8.4	23.0	26.5	661	9.4	127	330

06305500 GOOSE CREEK BELOW SHERIDAN, WY

LOCATION.--Lat 44°49'25", long 106°57'40", in SE¹/₄ SW¹/₄ 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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
NOV 05...	1520	114	690	8.6	4.0	2.5	666
MAR 10...	1615	95	799	8.3	2.5	6.0	668
MAY 05...	1805	224	513	8.6	13.5	21.0	670
JUL 22...	1435	249	431	8.6	22.0	31.0	669

DATE	TIME	OXYGEN, DIS- SOLVED (MG/L) (00300)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
NOV 05...	11.7	102	K320	0.02	0.75	0.04	0.09
MAR 10...	11.8	99	330	<0.01	0.64	0.03	0.10
MAY 05...	10.5	115	34	<0.01	0.25	<0.01	0.03
JUL 22...	9.1	119	310	<0.01	0.22	<0.01	0.05

K-Results based on colony count 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", in SE¹/₄ SE¹/₄ NE¹/₄ 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.--411 mi².

PERIOD OF RECORD.--May 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,620 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 16 to Dec. 7, Dec. 12, 13, 15, 16, and Dec. 18 to Mar. 11. 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	121	86	82	90	95	120	207	889	359	168	124
2	83	107	83	86	83	98	120	297	1240	406	151	121
3	79	108	80	86	80	100	110	243	1170	374	136	117
4	76	107	90	77	78	98	108	217	1090	409	122	110
5	72	108	105	65	74	100	98	223	1190	360	135	108
6	71	104	100	66	74	110	80	238	1230	362	158	111
7	73	97	99	71	75	112	100	287	1180	326	124	95
8	71	90	102	74	80	102	111	302	1420	295	108	94
9	72	100	103	72	80	110	109	301	1490	243	96	93
10	73	103	107	63	83	115	103	325	1340	199	100	92
11	70	107	102	59	85	120	101	359	1290	186	119	95
12	68	104	99	73	90	130	95	356	1320	250	141	101
13	66	102	94	90	95	127	105	372	1130	323	134	91
14	65	105	89	100	100	120	133	380	1100	307	158	89
15	69	107	82	110	100	121	167	413	1380	248	154	90
16	74	97	76	100	100	122	184	464	1730	211	196	88
17	85	85	56	100	100	126	206	540	1490	184	252	96
18	84	96	58	97	97	131	225	674	1270	168	214	96
19	86	87	72	92	92	137	244	625	1210	246	195	117
20	94	79	100	92	93	146	240	530	1100	414	184	135
21	97	70	90	83	95	154	237	524	914	354	169	138
22	91	66	85	78	95	159	210	522	769	280	158	158
23	89	62	80	69	89	156	190	541	690	230	148	197
24	95	72	87	60	92	153	177	804	735	214	142	178
25	93	89	92	53	97	145	176	992	644	257	142	162
26	107	100	91	56	100	136	180	1040	557	275	147	152
27	90	92	93	65	100	138	170	1080	485	248	143	157
28	97	100	94	79	99	138	178	991	419	231	133	168
29	116	95	83	95	---	127	191	907	395	210	129	171
30	115	92	85	96	---	117	209	787	369	215	125	170
31	96	---	80	95	---	111	---	691	---	193	124	---
TOTAL	2621	2852	2743	2484	2516	3854	4677	16232	31236	8577	4605	3714
MEAN	84.5	95.1	88.5	80.1	89.9	124	156	524	1041	277	149	124
MAX	116	121	107	110	100	159	244	1080	1730	414	252	197
MIN	65	62	56	53	74	95	80	207	369	168	96	88
AC-FT	5200	5660	5440	4930	4990	7640	9280	32200	61960	17010	9130	7370

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1997, BY WATER YEAR (WY)

MEAN	103	97.0	81.5	69.8	86.8	106	137	412	634	170	61.8	86.9
MAX	156	126	107	109	137	185	195	891	1592	547	149	132
(WY)	1985	1996	1996	1990	1996	1994	1994	1984	1995	1995	1997	1987
MIN	49.9	59.4	54.2	48.4	36.7	70.3	72.0	98.4	90.6	20.1	15.6	33.3
(WY)	1989	1989	1986	1989	1989	1992	1989	1989	1994	1988	1988	1988

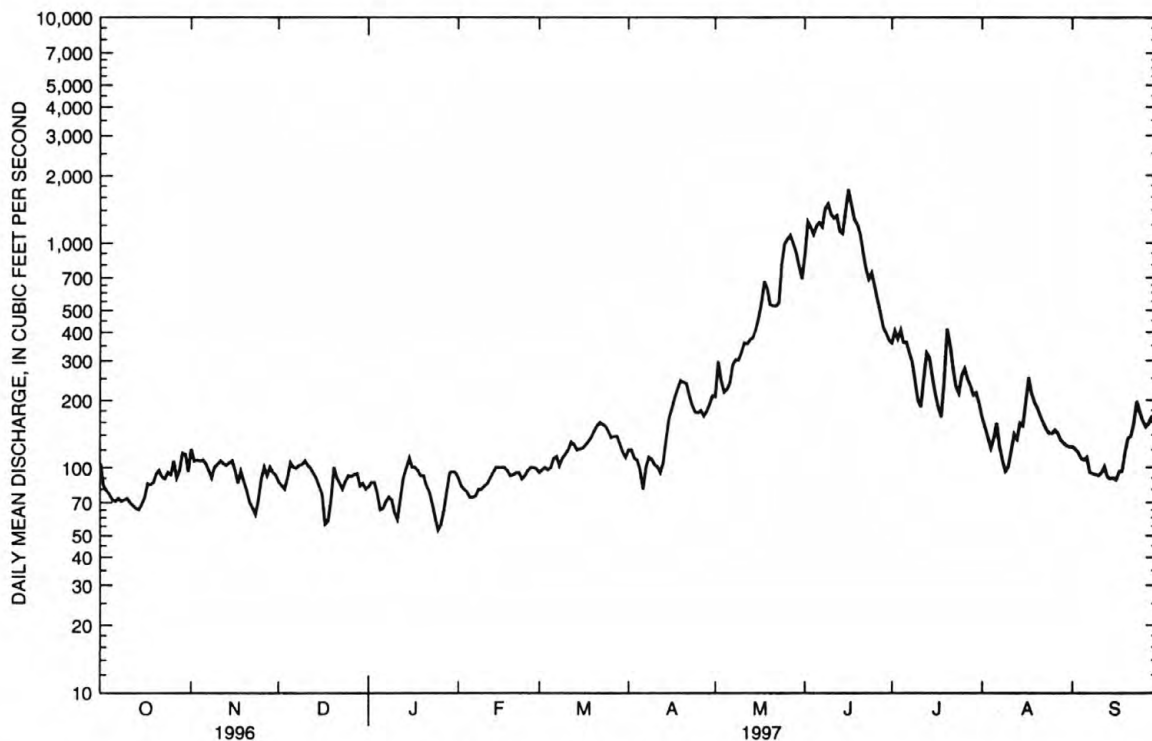
YELLOWSTONE RIVER BASIN

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06305700 GOOSE CREEK NEAR ACME, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1984 - 1997	
ANNUAL TOTAL	66255		86111		--	
ANNUAL MEAN	181		236		163	
HIGHEST ANNUAL MEAN	--		--		303	1995
LOWEST ANNUAL MEAN	--		--		71.8	1989
HIGHEST DAILY MEAN	1210	Jun 16	1730	Jun 16	3040	Jun 17 1995
LOWEST DAILY MEAN	28	Aug 5	53	Jan 25	8.4	Aug 26 1988
ANNUAL SEVEN-DAY MINIMUM	29	Aug 22	66	Jan 22	10	Aug 21 1988
INSTANTANEOUS PEAK FLOW	--		1920	Jun 16	3330	Jun 17 1995
INSTANTANEOUS PEAK STAGE	--		5.98	Jun 16	7.65 ^a	Feb 25 1986
ANNUAL RUNOFF (AC-FT)	131400		170800		118000	
10 PERCENT EXCEEDS	490		547		369	
50 PERCENT EXCEEDS	95		110		95	
90 PERCENT EXCEEDS	35		76		44	

a From floodmarks, backwater from ice.



06305700 GOOSE CREEK NEAR ACME, WY

LOCATION.--Lat 45°00'32", long 106°50'08", in NW¼/4 NW¼/4 NE¼/4 sec.33, T.9 S., R.40 E., Big Horn County, MT, 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.

WATER-DISCHARGE RECORDS

REMARKS.--Discharge 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 Montana District.

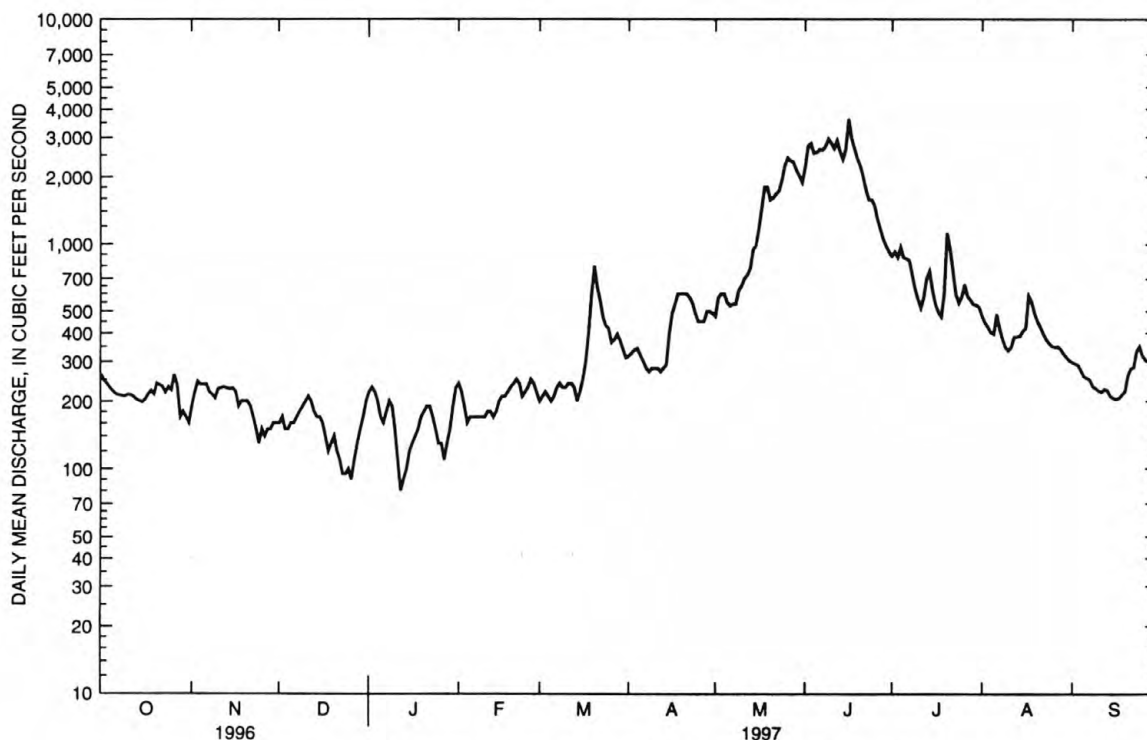
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	263	e190	e160	e220	e240	e200	317	476	2200	886	477	297
2	248	e220	e170	e230	e220	e210	327	577	2740	926	444	292
3	240	244	e150	e220	e190	e220	338	e600	2810	873	425	289
4	230	237	e150	e200	e160	e210	342	e600	2540	969	402	272
5	222	237	e160	e170	e170	e200	e320	e550	2560	872	396	257
6	215	238	e160	e160	e170	e210	e300	e530	2650	863	485	253
7	214	220	e170	e180	e170	e230	e280	e540	2630	847	421	249
8	212	214	e180	e200	e170	e240	e270	e540	2720	732	377	232
9	211	206	e190	e190	e170	e230	e280	e620	2940	633	347	228
10	214	226	e200	e150	e170	e230	e280	e650	2820	568	334	222
11	214	229	e210	e110	e180	e240	e280	e700	2670	519	347	219
12	210	231	e200	e80	e180	e240	e270	e730	2890	578	385	226
13	204	228	e180	e90	e170	e230	e280	e780	2600	705	385	223
14	201	226	e170	e100	e180	e200	e290	e950	2390	757	388	210
15	198	228	e170	e120	e200	e220	e400	982	2650	619	408	206
16	204	e220	e160	e130	e210	e250	e490	1160	3620	538	422	204
17	215	e190	e140	e140	e210	e300	e540	1430	2970	495	589	206
18	223	e200	e120	e150	e220	e400	e600	1800	2660	473	556	214
19	215	e200	e130	e170	e230	e600	e600	1800	2400	599	490	220
20	240	e200	e140	e180	e240	e800	e600	1580	2240	1120	453	259
21	236	e190	e120	e190	e250	641	e600	1610	2000	959	425	278
22	232	e170	e110	e190	e240	559	e580	1680	1750	764	397	282
23	219	e150	e95	e170	e210	468	e550	1730	1580	601	375	333
24	231	e130	e95	e150	e220	432	e490	1940	1580	545	360	349
25	224	e150	e100	e130	e230	420	e450	2260	1490	583	350	318
26	262	e140	e90	e130	e250	363	e450	2430	1300	661	347	304
27	236	e150	e110	e110	e240	375	e450	2360	1160	584	349	300
28	e170	e150	e130	e130	e220	395	e500	2330	1050	564	340	302
29	e180	e160	e150	e150	---	371	e500	2150	979	539	325	306
30	e170	e160	e170	e190	---	338	e490	2030	923	535	312	302
31	e160	---	e200	e230	---	311	---	1890	---	522	302	---
TOTAL	6713	5934	4680	4960	5710	10333	12464	40005	67512	21429	12413	7852
MEAN	217	198	151	160	204	333	415	1290	2250	691	400	262
MAX	263	244	210	230	250	800	600	2430	3620	1120	589	349
MIN	160	130	90	80	160	200	270	476	923	473	302	204
AC-FT	13320	11770	9280	9840	11330	20500	24720	79350	133900	42500	24620	15570

MEAN	256	226	182	181	238	317	368	1178	1734	491	182	222
MAX	403	324	271	330	672	855	676	3283	3570	1674	475	615
(WY)	1969	1974	1976	1974	1971	1972	1977	1978	1978	1975	1968	1968
MIN	116	133	102	95.9	84.5	129	124	439	342	87.5	16.5	74.2
(WY)	1961	1989	1985	1985	1989	1961	1961	1989	1966	1961	1961	1966

06306300 TONGUE RIVER AT STATE LINE, NEAR DECKER, MT--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1961 - 1997	
ANNUAL TOTAL	161461		200005		464	
ANNUAL MEAN	441		548		862	1978
HIGHEST ANNUAL MEAN					187	1961
LOWEST ANNUAL MEAN					15400	May 19 1978
HIGHEST DAILY MEAN	2590	Jun 11	3620	Jun 16	5.4	Aug 24 1961
LOWEST DAILY MEAN	90	Dec 26	80	Jan 12	7.2	Aug 22 1961
ANNUAL SEVEN-DAY MINIMUM	97	Aug 23	103	Dec 21	17500	May 12 1978
INSTANTANEOUS PEAK FLOW			3910	Jun 16	14.25	May 12 1978
INSTANTANEOUS PEAK STAGE			7.98	Jun 16	3.0	Aug 23 1961
INSTANTANEOUS LOW FLOW					336500	
ANNUAL RUNOFF (AC-FT)	320300		396700		1130	
10 PERCENT EXCEEDS	1370		1580		240	
50 PERCENT EXCEEDS	214		263		120	
90 PERCENT EXCEEDS	111		156			

e Estimated.



06306300 TONGUE RIVER AT STATE LINE, NEAR DECKER, MT

YELLOWSTONE RIVER BASIN

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.

WATER TEMPERATURE: October 1965 to September 1976.

REMARKS.--Unpublished records for many days of instantaneous water temperature and specific conductance are available in files of the Montana District office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (water years 1966-76, 1981-87): Maximum daily, 1,490 microsiemens per centimeter ($\mu\text{S}/\text{cm}$) at 25.0°C, Aug. 12, 1966, Jan. 11, 1972; minimum daily, 192 microsiemens per centimeter ($\mu\text{S}/\text{cm}$) at 25.0°C, June 7, 1976.

WATER TEMPERATURE (water years 1966-76): Maximum, 30.5°C, July 16, 1966; minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED SATUR- ATION (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
NOV 07...	1010	208	710	8.5	1.0	3.5	675	12.6	100	340	69	41
MAR 11...	0925	230	823	8.2	0.0	5.0	681	11.7	90	360	69	46
MAY 06...	0800	532	701	8.5	12.5	13.0	673	9.5	101	300	61	36
JUL 22...	1630	701	580	8.1	24.5	29.0	673	7.0	96	240	51	28

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)
NOV 07...	26	0.6	2.7	242	140	3.7	0.4	5.6	434	0.59	243
MAR 11...	37	0.8	3.8	246	210	4.7	0.3	7.0	525	0.71	326
MAY 06...	28	0.7	3.0	215	160	3.3	0.2	4.6	430	0.59	618
JUL 22...	22	0.6	3.9	172	130	2.1	0.2	9.7	346	0.47	655

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LOCATION.--Lat 43°34'40", long 107°08'16", in SE 1/4 SW 1/4 NE 1/4 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.

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

GAGE.--Water-stage recorder. Elevation of gage is 7,220 ft above sea level, from topographic map. Prior to Oct. 1, 1970, at site 1,000 ft upstream at different datum. Oct. 1, 1970 to Aug. 17, 1987, at site 100 ft upstream at datum 6.78 ft higher (gage operated concurrently with present site Sept. 15, 1983 to Aug. 17, 1987).

REMARKS.--Estimated daily discharges: Oct. 26 to Nov. 4, Nov. 6-12, Nov. 16 to Dec. 6, Dec. 12, 13, Jan. 4-7, 9-13, 23-28, Feb. 6-13, Mar. 1, 13-15, 25, 28, and Apr. 6-15. Records good except those for estimated daily discharges, which are poor. No diversion upstream from station.

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 17	1630	591	8.35
June 8	1715	*601	*8.38
June 12	2230	454	7.95
July 28	2000	336	7.55

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	5.6	5.5	5.9	5.9	6.3	11	36	146	30	18	9.1
2	6.9	6.8	5.3	6.0	5.8	6.9	10	32	154	28	16	9.1
3	6.6	7.6	5.1	6.5	5.8	7.0	11	30	119	35	14	9.0
4	6.6	7.7	5.2	6.0	5.8	7.0	10	33	111	28	14	8.7
5	6.6	7.0	5.6	5.4	5.8	7.0	9.7	45	106	26	20	8.7
6	6.6	6.4	6.0	5.8	5.7	7.0	9.0	70	103	25	18	8.7
7	6.5	6.0	6.3	6.1	5.6	7.0	8.6	92	92	23	15	8.4
8	6.3	6.3	6.3	6.1	5.5	6.7	8.5	96	172	22	13	7.8
9	6.3	6.6	6.3	6.0	5.5	6.6	8.0	110	119	22	13	7.8
10	6.3	7.0	6.3	5.8	5.5	6.6	7.5	141	129	20	13	8.0
11	6.3	6.6	6.2	5.6	5.6	6.6	7.5	153	106	20	15	8.4
12	6.3	6.4	6.0	5.4	5.7	6.8	8.0	163	133	20	14	8.7
13	6.2	6.3	5.8	5.6	5.9	6.5	8.6	201	154	19	28	8.1
14	6.0	6.3	4.1	6.0	6.1	5.9	9.4	247	119	18	16	7.8
15	6.0	6.0	6.8	6.0	6.1	6.4	10	315	117	16	14	8.9
16	6.1	5.9	7.0	6.0	6.0	6.8	12	412	102	16	13	10
17	6.4	5.5	7.0	6.0	5.9	7.3	14	473	92	15	12	8.2
18	7.4	5.7	6.7	6.0	5.9	7.4	17	387	86	15	12	7.8
19	7.7	5.5	6.6	6.0	6.2	8.1	21	276	78	19	12	9.3
20	6.4	5.3	6.5	5.9	6.4	9.3	31	263	71	27	11	8.5
21	7.1	5.2	6.3	5.8	6.6	9.9	33	329	65	18	10	8.2
22	7.8	5.0	6.3	6.0	7.1	9.2	27	302	59	15	10	13
23	7.6	4.8	6.3	5.9	7.1	10	26	271	55	14	9.9	14
24	7.2	5.1	6.1	5.7	6.3	9.5	26	250	51	23	9.9	9.4
25	7.8	5.4	6.0	5.6	6.3	9.2	24	222	47	19	9.9	8.3
26	6.4	5.8	5.9	5.6	6.3	9.9	25	185	42	15	9.9	7.8
27	5.2	5.9	5.6	5.7	6.3	9.8	33	159	39	18	9.7	7.8
28	5.6	6.2	5.9	5.8	6.5	9.3	47	151	36	50	9.1	7.5
29	6.3	5.9	6.0	6.0	---	9.8	44	141	34	43	9.5	7.6
30	5.5	5.6	6.0	6.0	---	12	37	134	32	22	9.4	7.8
31	4.9	---	6.0	6.0	---	10	---	132	---	18	9.1	---
TOTAL	202.2	181.4	187.0	182.2	169.2	247.8	553.8	5851	2769	699	407.4	262.4
MEAN	6.52	6.05	6.03	5.88	6.04	7.99	18.5	189	92.3	22.5	13.1	8.75
MAX	7.8	7.7	7.0	6.5	7.1	12	47	473	172	50	28	14
MIN	4.9	4.8	4.1	5.4	5.5	5.9	7.5	30	32	14	9.1	7.5
AC-FT	401	360	371	361	336	492	1100	11610	5490	1390	808	520

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1997, BY WATER YEAR (WY)

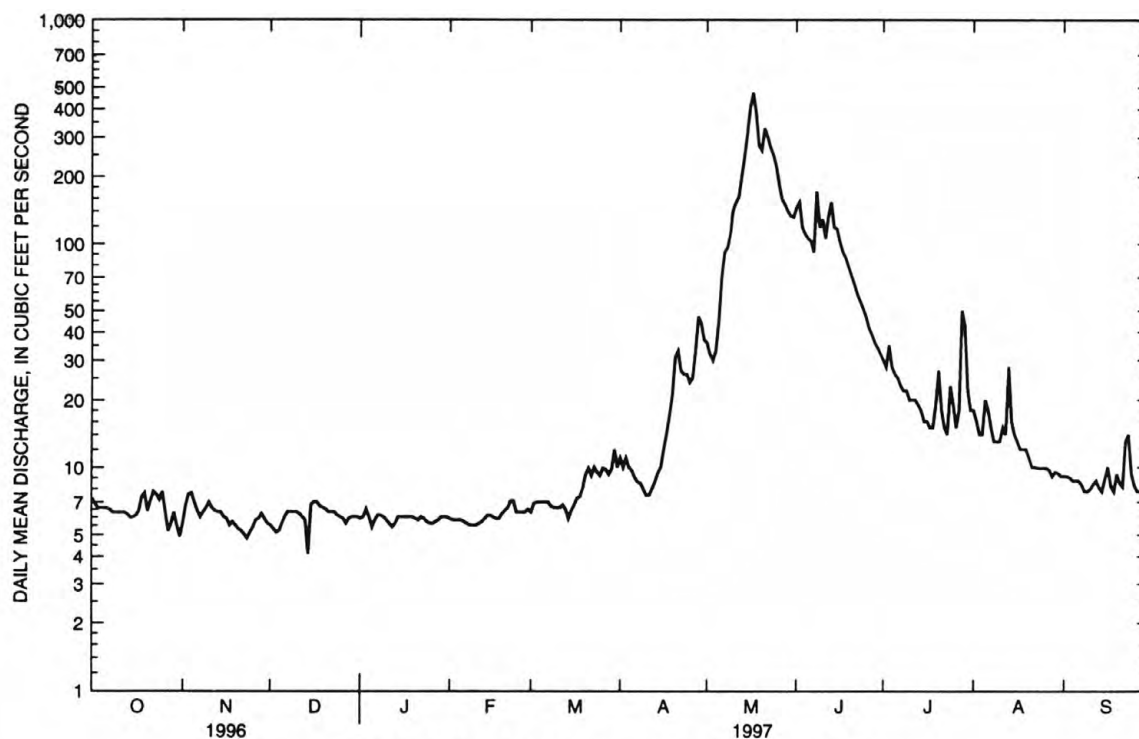
MEAN	6.93	6.23	5.65	5.13	5.30	6.61	32.8	158	97.4	18.8	8.70	7.32
MAX	15.0	13.2	9.92	7.78	10.1	14.2	106	268	299	39.9	18.3	17.0
(WY)	1983	1983	1983	1983	1969	1972	1987	1984	1975	1975	1968	1968
MIN	2.45	2.00	2.75	2.48	3.74	4.05	8.00	56.2	18.1	7.26	4.34	4.16
(WY)	1963	1963	1962	1962	1989	1965	1970	1992	1985	1974	1966	1969

06309200 MIDDLE FORK POWDER RIVER NEAR BARNUM, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1962 - 1997
ANNUAL TOTAL	10364.9	11712.4	--
ANNUAL MEAN	28.3	32.1	30.0
HIGHEST ANNUAL MEAN	--	--	50.9
LOWEST ANNUAL MEAN	--	--	13.1
HIGHEST DAILY MEAN	495	473	778
LOWEST DAILY MEAN	4.1	4.1	1.0
ANNUAL SEVEN-DAY MINIMUM	5.0	5.2	1.2
INSTANTANEOUS PEAK FLOW	--	602	7110 ^a
INSTANTANEOUS PEAK STAGE	--	8.38	12.60 ^b
INSTANTANEOUS LOW FLOW	--	4.1	1.0
ANNUAL RUNOFF (AC-FT)	20560	23230	21760
10 PERCENT EXCEEDS	72	104	78
50 PERCENT EXCEEDS	6.9	8.0	7.0
90 PERCENT EXCEEDS	5.5	5.7	4.6

a On basis of slope-area measurement of peak flow.

b From floodmarks, site and datum then in use.



06309200 MIDDLE FORK POWDER RIVER NEAR BARNUM, WY

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LOCATION.--Lat 44°01'40", long 107°04'49", in SW¹/₄ SE¹/₄ NW¹/₄ 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.

REVISED RECORDS.--WSP 1279: 1947-48(M), 1949, 1950-51(M), 1952.

GAGE.--Water-stage recorder. Elevation of gage is 8,180 ft above sea level, from topographic map. Prior to Oct. 1, 1966, at site 0.7 mi downstream at different datum. Oct. 1, 1966 to Aug. 26, 1986, at site 0.1 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 27 to Dec. 6, Mar. 21 to Apr. 2, Apr. 20-26, June 25 to July 2, and July 4-24. Records good except those for estimated daily discharges and those for May 4-22, which are poor. No diversion upstream from station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 190 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 17	1630	194	3.80
June 8	1730	*315	*4.13

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	2.2	2.6	2.5	2.2	2.1	4.1	9.0	155	48	25	15
2	4.9	2.7	2.5	2.5	2.2	2.1	3.2	4.7	145	47	19	17
3	4.5	3.2	2.4	2.6	2.1	2.1	2.5	4.1	124	68	17	15
4	4.5	3.7	2.5	2.6	2.1	2.1	2.6	4.3	120	49	16	14
5	4.3	3.3	2.6	2.5	2.1	2.1	2.6	6.0	119	40	16	14
6	4.2	2.8	2.6	2.5	2.1	2.1	2.5	9.3	116	35	17	13
7	4.1	2.4	2.7	2.5	2.1	2.1	2.5	13	107	32	17	13
8	4.0	2.5	2.7	2.5	2.1	2.1	2.5	16	167	29	15	13
9	3.9	2.7	2.7	2.5	2.1	2.1	2.5	22	167	27	14	13
10	3.7	2.9	2.7	2.5	2.2	2.1	2.4	31	159	24	15	12
11	3.6	2.8	2.7	2.5	2.2	2.1	2.4	37	161	22	20	13
12	3.6	2.8	2.7	2.5	2.2	2.1	2.3	42	135	23	17	19
13	3.6	2.7	2.7	2.5	2.2	2.1	2.3	52	139	26	15	14
14	3.5	2.6	2.7	2.5	2.2	2.4	2.3	59	112	24	14	12
15	3.4	2.6	2.7	2.5	2.2	2.4	2.3	70	128	21	14	12
16	3.4	2.5	2.7	2.4	2.2	2.4	2.2	114	117	18	13	14
17	3.8	2.5	2.5	2.4	2.1	2.4	2.3	166	96	17	13	13
18	4.0	2.5	2.4	2.4	2.1	2.4	2.4	133	93	16	12	12
19	4.4	2.5	2.4	2.4	2.1	2.2	2.7	99	92	47	11	16
20	3.5	2.5	2.4	2.4	2.1	2.4	3.3	118	75	53	11	16
21	3.2	2.4	2.4	2.4	2.1	2.8	4.4	137	65	44	10	14
22	3.7	2.4	2.4	2.4	2.1	3.6	6.2	134	58	33	9.7	17
23	3.7	2.3	2.5	2.4	2.1	4.7	8.0	142	52	27	9.6	22
24	3.5	2.4	2.5	2.4	2.1	4.5	11	152	51	22	9.2	15
25	3.5	2.6	2.5	2.3	2.1	4.1	14	150	45	20	9.2	13
26	2.1	2.6	2.5	2.3	2.1	5.0	17	127	42	17	9.7	12
27	1.6	2.7	2.5	2.2	2.1	6.4	23	115	39	21	11	13
28	2.0	2.7	2.3	2.3	2.1	5.7	23	111	37	23	8.8	13
29	2.3	2.7	2.3	2.3	---	4.9	19	132	36	37	8.1	12
30	2.1	2.7	2.3	2.2	---	4.3	12	135	35	24	7.8	12
31	1.9	---	2.4	2.2	---	5.1	---	137	---	20	9.8	---
TOTAL	109.9	79.9	78.5	75.1	59.7	95.0	189.5	2481.4	2987	954	413.9	423
MEAN	3.55	2.66	2.53	2.42	2.13	3.06	6.32	80.0	99.6	30.8	13.4	14.1
MAX	5.4	3.7	2.7	2.6	2.2	6.4	23	166	167	68	25	22
MIN	1.6	2.2	2.3	2.2	2.1	2.1	2.2	4.1	35	16	7.8	12
AC-FT	218	158	156	149	118	188	376	4920	5920	1890	821	832

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1997, BY WATER YEAR (WY)

MEAN	4.34	3.47	2.80	2.29	2.13	2.25	9.00	59.3	65.1	17.5	7.13	5.17
MAX	10.4	10.1	6.96	4.50	4.00	4.99	35.7	119	178	46.8	13.4	14.1
(WY)	1983	1983	1983	1958	1958	1960	1987	1947	1967	1975	1997	1997
MIN	2.03	1.70	1.41	.80	1.00	1.19	1.09	23.4	13.2	4.88	2.85	2.47
(WY)	1961	1981	1967	1949	1959	1967	1961	1972	1960	1960	1960	1960

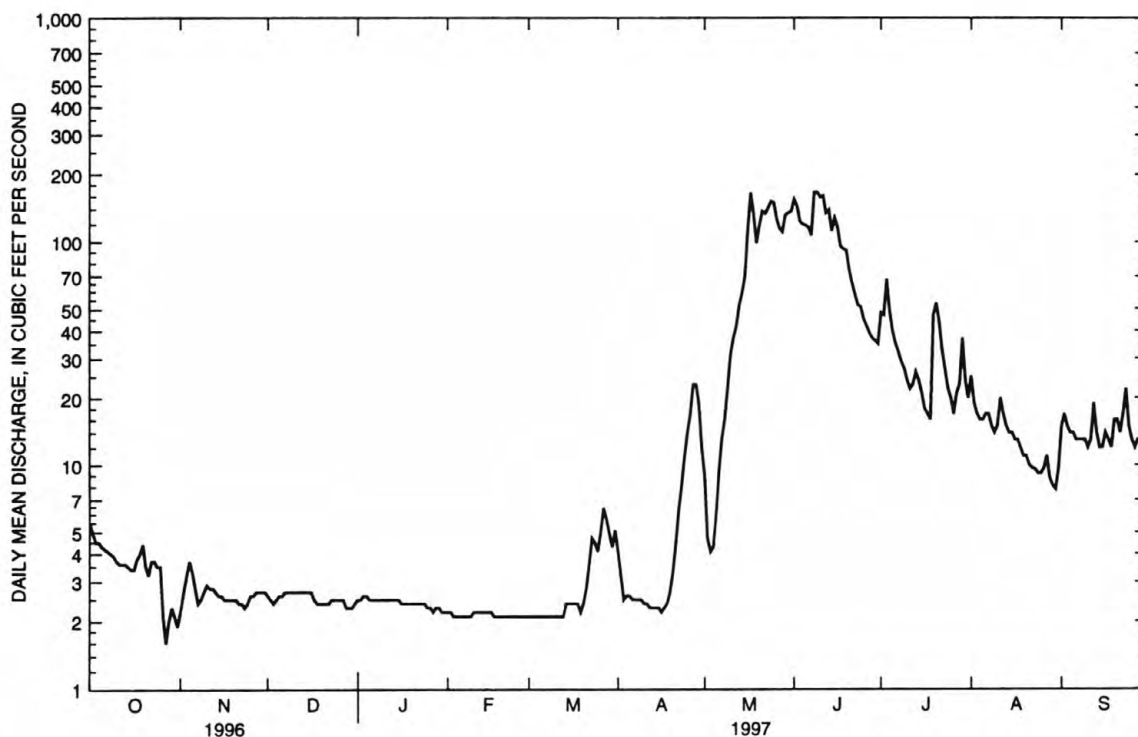
06311000 NORTH FORK POWDER RIVER NEAR HAZELTON, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1946 - 1997
ANNUAL TOTAL	6732.9	7946.9	--
ANNUAL MEAN	18.4	21.8	15.1
HIGHEST ANNUAL MEAN	--	--	26.7
LOWEST ANNUAL MEAN	--	--	6.91
HIGHEST DAILY MEAN	256	167	354
LOWEST DAILY MEAN	1.6	1.6	.60 ^a
ANNUAL SEVEN-DAY MINIMUM	2.0	2.0	.64 ^b
INSTANTANEOUS PEAK FLOW	--	315	886 ^b
INSTANTANEOUS PEAK STAGE	--	4.13	6.21 ^c
ANNUAL RUNOFF (AC-FT)	13350	15760	10920
10 PERCENT EXCEEDS	77	72	43
50 PERCENT EXCEEDS	3.9	4.0	3.9
90 PERCENT EXCEEDS	2.4	2.1	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 curve extended above 110 ft³/s, on basis of slope-area measurement of peak flow.

c Backwater from ice, site and datum then in use.



06311000 NORTH FORK POWDER RIVER NEAR HAZELTON, WY

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REMARKS.--Estimated daily discharges: Dec. 15 to Jan. 8 and Jan. 10 to Mar. 19. Records good except those for estimated daily discharges, which are poor. Some regulation for irrigation by Dullknife Reservoir 13 mi upstream, capacity, 4,350 acre-ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	20	20	21	20	20	20	24	194	59	51	60
2	22	20	20	21	20	20	20	23	188	64	51	60
3	22	20	19	21	20	20	20	22	156	80	47	61
4	21	20	18	21	20	19	20	21	137	85	44	60
5	21	20	20	20	19	20	19	22	134	64	43	60
6	21	20	21	19	19	20	23	36	131	59	42	60
7	21	20	20	20	19	20	20	51	122	56	42	60
8	21	20	20	21	19	20	20	49	204	53	41	60
9	21	20	20	21	19	20	20	41	313	52	38	60
10	20	20	20	20	19	20	20	47	248	50	38	59
11	20	20	20	19	19	20	21	48	276	48	41	59
12	20	20	20	19	19	20	25	37	193	50	41	60
13	20	20	20	19	20	19	20	43	229	54	40	60
14	20	20	20	19	20	19	20	47	175	52	38	59
15	20	20	21	19	20	20	20	46	176	47	37	59
16	21	20	21	19	20	20	19	57	216	44	37	59
17	21	21	20	19	21	20	20	64	150	42	36	59
18	20	20	19	20	20	20	26	58	134	41	36	59
19	20	20	19	20	20	20	26	52	131	55	35	60
20	20	20	20	20	20	20	28	52	108	78	34	59
21	20	20	19	20	20	20	36	52	95	72	34	59
22	20	20	19	20	19	20	29	51	86	59	32	52
23	20	20	19	20	19	20	26	54	80	52	32	47
24	20	20	19	20	19	20	25	74	76	58	50	43
25	20	20	19	19	19	20	23	175	68	52	55	40
26	21	20	19	19	20	20	22	163	67	49	57	40
27	20	20	20	19	20	21	23	140	64	46	59	40
28	20	20	20	19	20	20	28	127	62	52	59	39
29	20	20	20	20	---	20	28	149	60	65	59	32
30	20	20	20	20	---	19	25	171	58	61	60	29
31	20	---	21	20	---	19	---	161	---	54	60	---
TOTAL	635	601	613	614	549	616	692	2157	4331	1753	1369	1614
MEAN	20.5	20.0	19.8	19.8	19.6	19.9	23.1	69.6	144	56.5	44.2	53.8
MAX	22	21	21	21	21	21	36	175	313	85	60	61
MIN	20	20	18	19	19	19	19	21	58	41	32	29
AC-FT	1260	1190	1220	1220	1090	1220	1370	4280	8590	3480	2720	3200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1997, BY WATER YEAR (WY)

MEAN	21.5	19.0	18.6	18.2	17.9	17.7	26.8	76.0	92.5	46.8	38.8	31.6
MAX	31.5	21.9	23.1	20.2	20.8	21.0	47.9	176	193	80.5	51.1	53.8
(WY)	1983	1983	1977	1977	1980	1980	1977	1978	1995	1975	1996	1997
MIN	16.1	15.8	14.9	15.1	14.2	14.6	16.9	25.5	39.7	30.8	26.1	20.0
(WY)	1990	1990	1991	1991	1991	1991	1993	1980	1994	1977	1985	1974

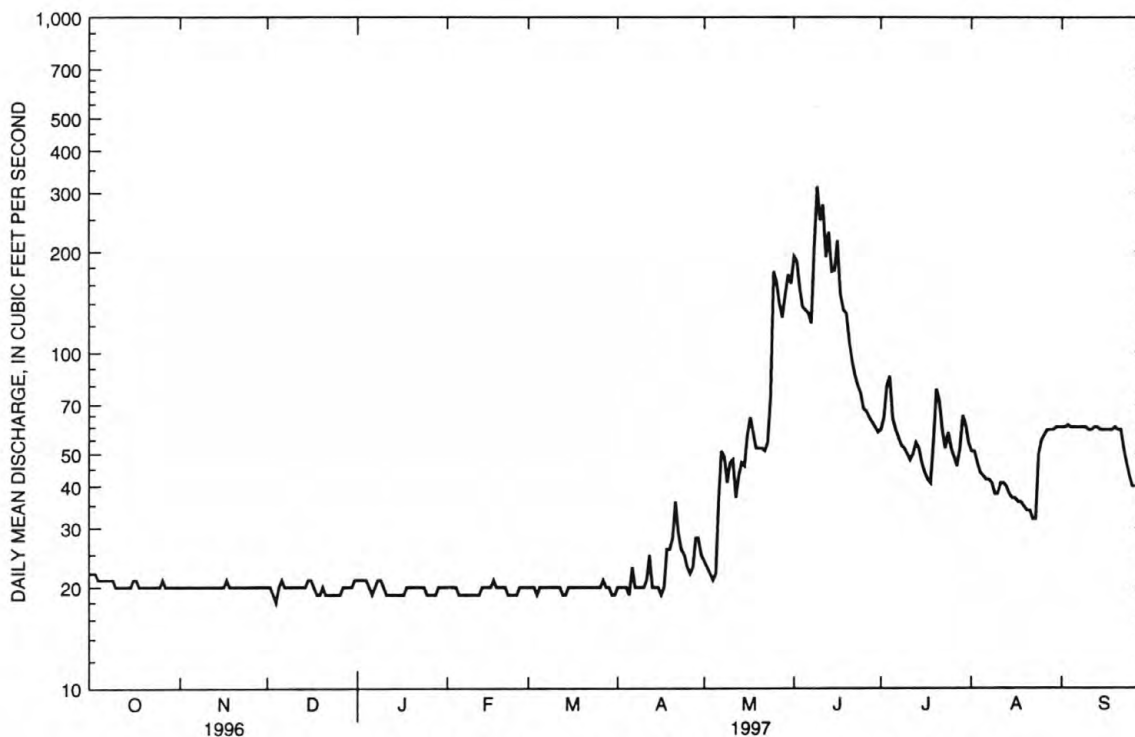
YELLOWSTONE RIVER BASIN

06311400 NORTH FORK POWDER RIVER BELOW PASS CREEK, NEAR MAYOWORTH, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1974 - 1997	
ANNUAL TOTAL	14906		15544		--	
ANNUAL MEAN	40.7		42.6		35.5	
HIGHEST ANNUAL MEAN	--		--		51.6	
LOWEST ANNUAL MEAN	--		--		25.4	
HIGHEST DAILY MEAN	220	May 31	313	Jun 9	379	Jun 5 1995
LOWEST DAILY MEAN	17	Feb 2	18	Dec 4	9.5	Feb 6 1991
ANNUAL SEVEN-DAY MINIMUM	18	Jan 29	19	Jan 11	11	Feb 5 1991
INSTANTANEOUS PEAK FLOW	--		368		1590 ^a	
INSTANTANEOUS PEAK STAGE	--		5.53		8.89 ^b	
ANNUAL RUNOFF (AC-FT)	29570		30830		25710	
10 PERCENT EXCEEDS	81		70		63	
50 PERCENT EXCEEDS	21		21		21	
90 PERCENT EXCEEDS	19		19		17	

a From rating curve extended above 400 ft³/s, on basis of slope-area measurement of peak flow.

b From floodmarks.



06311400 NORTH FORK POWDER RIVER BELOW PASS CREEK, NEAR MAYOWORTH, WY

YELLOWSTONE RIVER BASIN

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06313400 SALT CREEK NEAR SUSSEX, WY

LOCATION.--Lat 43°37'19", long 106°22'04", 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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TEMPER-ATURE AIR (DEG C) (00020)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT 24...	0945	8.8	6710	8.2	1.5	4.0	638	10.1	88	850	190	90
MAR 21...	1000	24	5350	8.2	4.5	2.0	654	10.5	97	980	210	110
JUN 03...	1225	90	3930	8.0	17.0	19.0	651	7.5	92	620	130	72
SEP 02...	0925	7.3	5840	8.0	15.0	19.0	659	8.7	102	680	150	70

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
OCT 24...	1100	16	39	299	1700	990	2.6	26	4320	5.87	103
MAR 21...	870	12	25	306	1900	590	1.8	17	3910	5.31	253
JUN 03...	639	11	14	215	1400	330	1.1	7.2	2680	3.64	650
SEP 02...	1070	18	26	234	1300	1000	2.1	18	3810	5.18	75.0

LOCATION.--Lat 43°41'44", long 106°18'24", 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.

WATER-DISCHARGE RECORDS

REVISED RECORDS.--WDR WY-80-1: 1979(M), 1979.

GAGE.--Water-stage recorder. Datum of gage is 4,365.28 ft above sea level. Prior to June 30, 1940, nonrecording gage about 500 ft downstream from State Highway 192 at datum 4,363.23 ft. Feb. 8, 1950, to Sept. 30, 1957, water-stage recorder about 600 ft downstream from State Highway 192 at datum 4,362.16 ft. October 1977, to Apr. 8, 1983, water-stage recorder 10 ft downstream from State Highway 192 at datum 4,362.95 ft. Apr. 9, 1983 to Oct. 21, 1987, at site 300 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Nov. 17-19, 21, Nov. 23 to Mar. 5, Mar. 8-14, and Apr. 6-12. 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. U.S. Geological Survey data collection platform with satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 13	1300	*2,120	*5.01
July 30	1100	2,100	4.98

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	134	170	235	220	120	176	389	420	141	278	60
2	64	130	160	215	205	130	174	578	536	131	222	58
3	58	142	150	190	195	145	172	423	622	147	172	55
4	61	158	150	170	180	150	168	323	451	195	208	53
5	61	161	155	150	175	145	178	279	373	222	177	51
6	65	148	160	130	170	165	150	276	333	199	137	52
7	65	132	170	140	170	218	135	322	314	169	179	49
8	72	117	180	150	170	255	120	422	284	139	177	42
9	78	136	190	140	175	290	110	433	550	132	130	38
10	75	143	194	130	180	235	120	390	623	122	130	37
11	77	155	190	115	180	210	140	433	497	115	134	38
12	76	148	185	105	200	170	160	490	546	191	135	36
13	79	142	180	110	190	145	184	480	1490	152	125	33
14	69	145	170	120	220	170	231	525	938	122	146	36
15	67	141	150	130	280	206	404	599	661	107	126	36
16	72	128	135	125	315	207	432	671	553	92	111	38
17	84	110	120	140	360	249	629	807	546	73	109	50
18	106	140	115	155	385	275	579	871	426	59	107	63
19	104	190	125	170	340	248	436	785	382	170	96	80
20	102	208	140	180	275	217	348	593	367	444	92	103
21	101	195	130	175	215	210	325	526	324	511	112	109
22	98	216	121	161	165	200	327	570	287	334	77	146
23	93	195	123	155	135	186	287	558	251	176	67	494
24	99	190	130	145	130	183	256	537	226	125	51	289
25	101	200	95	135	140	188	247	526	215	107	43	218
26	118	185	120	150	145	183	232	568	204	126	37	169
27	101	190	165	175	140	185	227	550	190	105	52	152
28	130	200	180	190	130	199	235	465	179	566	48	146
29	172	185	160	220	---	195	279	427	169	334	44	148
30	153	175	195	260	---	190	452	428	156	1130	44	145
31	143	---	220	235	---	180	---	443	---	493	54	---
TOTAL	2818	4839	4828	5001	5785	6049	7913	15687	13113	7129	3620	3024
MEAN	90.9	161	156	161	207	195	264	506	437	230	117	101
MAX	172	216	220	260	385	290	629	871	1490	1130	278	494
MIN	58	110	95	105	130	120	110	276	156	59	37	33
AC-FT	5590	9600	9580	9920	11470	12000	15700	31120	26010	14140	7180	6000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1997, BY WATER YEAR (WY)

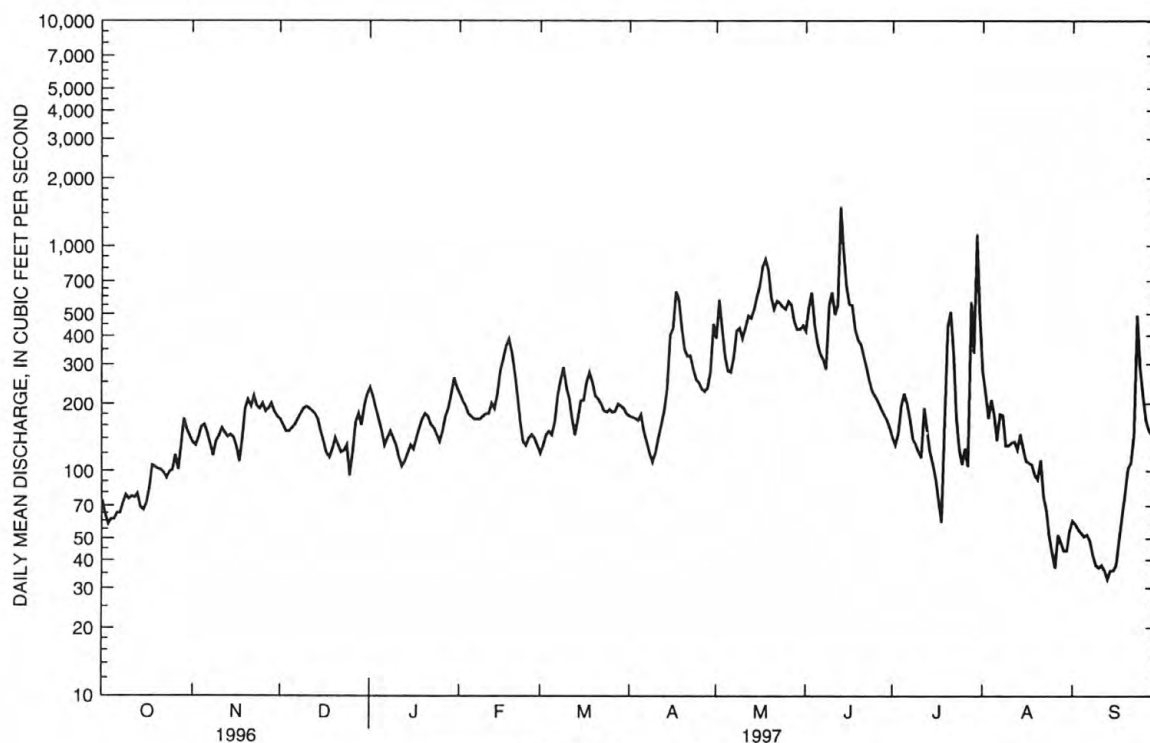
MEAN	137	128	116	115	171	270	269	580	370	134	56.9	70.2
MAX	838	202	176	177	335	701	553	2553	1477	374	125	448
(WY)	1995	1987	1995	1983	1980	1987	1987	1978	1995	1978	1983	1982
MIN	24.2	77.7	79.5	58.6	69.4	110	136	72.0	22.2	20.4	3.54	4.90
(WY)	1957	1953	1991	1940	1939	1940	1953	1992	1954	1996	1939	1939

06313500 POWDER RIVER AT SUSSEX, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1938 - 1997	
ANNUAL TOTAL	73093.8		79806		--	
ANNUAL MEAN	200		219		204	
HIGHEST ANNUAL MEAN	--		--		486	
LOWEST ANNUAL MEAN	--		--		115	
HIGHEST DAILY MEAN	1770	May 25	1490	Jun 13	14100	May 23 1952
LOWEST DAILY MEAN	4.7	Sep 5	33	Sep 13	1.5	Aug 25 1939
ANNUAL SEVEN-DAY MINIMUM	6.3	Aug 22	36	Sep 9	2.6	Aug 23 1939
INSTANTANEOUS PEAK FLOW	--		2120	Jun 13	32500 ^a	May 23 1952
INSTANTANEOUS PEAK STAGE	--		5.01	Jun 13	4374.76 ^b	May 23 1952
ANNUAL RUNOFF (AC-FT)	145000		158300		147900	
10 PERCENT EXCEEDS	403		457		415	
50 PERCENT EXCEEDS	151		170		125	
90 PERCENT EXCEEDS	9.6		71		25	

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.



06313500 POWDER RIVER AT SUSSEX, WY

YELLOWSTONE RIVER BASIN

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.

WATER TEMPERATURE: October 1982 to September 1984.

SUSPENDED-SEDIMENT DISCHARGE: May 1983 to September 1984.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED SATUR- ATION (MG/L) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
OCT												
24...	1150	105	1960	8.3	2.0	7.0	639	10.9	95	540	130	51
DEC												
10...	0930	192	1680	8.0	0.0	5.0	640	9.5	78	390	98	36
JAN												
22...	1200	161	1790	7.7	0.0	3.5	643	9.8	80	510	130	44
MAR												
21...	1200	216	1980	8.2	7.5	8.0	655	11.7	114	520	130	48
MAY												
12...	1045	495	971	8.0	10.5	22.5	652	9.8	103	250	62	24
JUN												
03...	1005	660	1540	7.9	16.0	17.5	654	8.1	96	300	69	30
13...	1330	1900	1450	7.9	9.0	17.0	649	8.0	82	260	62	27
JUL												
31...	1100	484	1820	7.7	22.0	28.5	656	6.4	86	530	150	41
SEP												
02...	1210	59	1940	8.1	18.0	22.0	662	8.0	98	540	130	52
24...	0910	281	1730	7.9	9.5	11.5	657	9.1	93	360	90	32

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)
OCT											
24...	190	4	6.0	207	620	140	0.6	7.8	1270	1.73	360
DEC											
10...	130	3	4.3	196	520	110	0.6	10	1030	1.40	532
JAN											
22...	190	4	1.4	205	420	85	0.4	8.2	1000	1.36	436
MAR											
21...	220	4	6.2	205	730	100	0.7	9.1	1370	1.86	798
MAY											
12...	93	3	2.9	127	280	45	0.4	8.4	589	0.80	787
JUN											
03...	188	5	6.3	154	480	80	0.5	8.5	953	1.30	1700
13...	213	6	7.9	175	520	76	0.6	5.0	1010	1.38	5200
JUL											
31...	203	4	8.3	165	770	45	0.8	8.4	1320	1.80	1730
SEP											
02...	222	4	7.2	201	630	140	0.6	9.1	1320	1.79	210
24...	223	5	6.3	135	670	66	0.8	6.9	1180	1.60	894

YELLOWSTONE RIVER BASIN

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06313500 POWDER RIVER AT SUSSEX, WY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
OCT 24...	1150	105	13	<1	29	1.5	218	<1	1	<3	<1	<3
MAR 21...	1200	216	8.4	<1	27	<0.5	190	<1	<1	<3	<1	<3
JUN 03...	1005	660	<5.0	<1	36	<0.5	172	<1	<1	<3	<1	<3
SEP 02...	1210	59	<15	<1	34	<1.5	269	<3	<1	<9	1	<9

DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
OCT 24...	<1	79	8	<0.1	<10	<10	2	<1	1700	6	<3
MAR 21...	<1	82	4	1.9	<10	10	3	<1	1700	<6	<3
JUN 03...	<1	62	1	<0.1	<10	<10	2	<1	1010	<6	4
SEP 02...	<1	97	10	<0.1	36	<30	2	<3	1870	<18	<9

06316400 CRAZY WOMAN CREEK AT UPPER STATION, NEAR ARVADA, WY

LOCATION.--Lat 44°29'28", long 106°10'38", in NE¹/₄ SW¹/₄ sec.7, T.52 N., R.77 W., Johnson County, Hydrologic Unit 10090205, 1.1 mi upstream from Jewell Draw, 5.0 mi upstream from mouth, and 11 mi south of Arvada.

DRAINAGE AREA.--945 mi², approximately.

PERIOD OF RECORD.--Water years 1967 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)
MAY 06...	1315	36	1720	8.2	16.0	24.0	664	9.0
30...	1045	146	652	7.8	14.5	21.5	668	8.5
JUL 24...	1115	183	843	7.8	22.5	26.0	681	7.0

DATE	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, DIS- CHARGE, SUS- PENDE PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE PENDED (T/DAY) (80155)
MAY 06...	106	<0.01	<0.05	<0.01	<0.01	128	12
30...	96	<0.01	0.10	<0.01	0.01	1290	509
JUL 24...	91	<0.01	0.05	0.02	0.02	1010	499

LOCATION.--Lat 44°39'00", long 106°07'37", 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.

WATER-DISCHARGE RECORDS

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.

REMARKS.--Estimated daily discharges: Oct. 4 to Nov. 4, Nov. 16 to Apr. 27, and June 20-24. 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. U.S. Geological Survey data collection platform with satellite telemetry at station.

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 24	2200	*4,150	*5.79
June 15	0930	3,160	5.21

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	125	84	78	155	180	230	387	628	288	1330	111
2	68	120	80	73	150	190	230	613	667	251	904	109
3	74	135	70	64	140	200	220	507	620	240	836	103
4	77	165	75	61	135	210	210	638	798	235	649	100
5	81	190	80	57	130	220	190	495	821	236	620	113
6	87	200	88	66	130	240	170	390	644	281	432	109
7	92	210	96	72	135	280	160	356	566	283	442	101
8	90	223	100	62	135	350	150	377	604	314	397	96
9	88	214	105	50	135	500	150	442	701	294	296	95
10	84	199	98	42	135	600	180	535	669	265	273	93
11	83	189	89	39	130	530	240	544	1290	232	318	92
12	84	201	85	42	135	400	300	503	1100	217	320	92
13	88	204	80	54	160	350	360	553	1060	197	316	86
14	90	207	84	66	200	320	400	633	1610	182	321	81
15	90	208	75	65	230	460	460	593	2120	188	308	82
16	80	160	70	63	330	550	580	667	1470	227	287	77
17	76	100	67	80	320	700	680	679	1260	185	289	68
18	74	110	68	100	300	630	730	800	1120	147	285	64
19	74	105	69	99	290	550	800	889	1080	209	213	68
20	74	100	62	98	270	480	690	975	950	570	194	77
21	79	95	57	95	260	450	610	923	800	554	164	93
22	85	86	55	83	240	420	530	831	700	693	166	114
23	87	77	50	77	220	390	480	812	630	692	167	145
24	91	69	55	68	230	360	430	1270	550	524	164	155
25	100	77	50	58	240	320	380	959	470	369	159	488
26	100	84	47	77	230	300	340	743	431	277	168	381
27	110	90	53	115	210	300	320	775	381	275	173	339
28	120	94	56	135	200	280	307	786	345	1040	176	276
29	130	90	53	150	---	270	304	754	314	520	142	222
30	150	87	60	170	---	250	335	696	284	1190	139	201
31	140	---	68	160	---	230	---	617	---	1880	120	---
TOTAL	2805	4214	2229	2519	5575	11510	11166	20742	24683	13055	10768	4231
MEAN	90.5	140	71.9	81.3	199	371	372	669	823	421	347	141
MAX	150	223	105	170	330	700	800	1270	2120	1880	1330	488
MIN	59	69	47	39	130	180	150	356	284	147	120	64
AC-FT	5560	8360	4420	5000	11060	22830	22150	41140	48960	25890	21360	8390

MEAN	132	124	97.5	87.8	170	398	356	733	773	266	99.2	74.4
MAX	865	303	290	242	567	953	1107	4025	3319	1703	861	451
(WY)	1995	1974	1974	1974	1972	1978	1941	1978	1962	1937	1941	1982
MIN	.000	11.4	23.0	15.0	10.0	144	99.0	51.3	30.6	15.8	.000	.000
(WY)	1961	1936	1950	1933	1933	1961	1961	1936	1954	1974	1932	1932

YELLOWSTONE RIVER BASIN

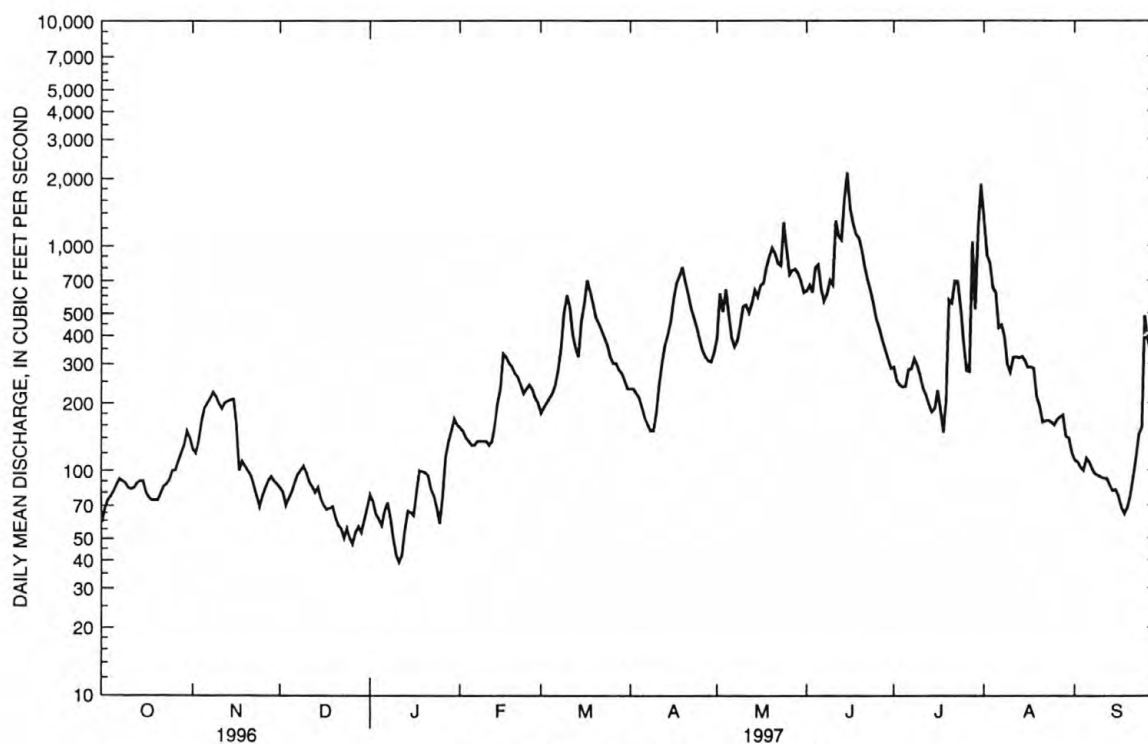
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06317000 POWDER RIVER AT ARVADA, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1931 - 1997
ANNUAL TOTAL	89595.32	113497	--
ANNUAL MEAN	245	311	278
HIGHEST ANNUAL MEAN	--	--	735
LOWEST ANNUAL MEAN	--	--	70.3
HIGHEST DAILY MEAN	2300	2120	22600
LOWEST DAILY MEAN	.00	39	.00
ANNUAL SEVEN-DAY MINIMUM	2.2	51	100000 ^a
INSTANTANEOUS PEAK FLOW	--	4150	100000 ^a
INSTANTANEOUS PEAK STAGE	--	5.79	23.70 ^b
ANNUAL RUNOFF (AC-FT)	177700	225100	201100
10 PERCENT EXCEEDS	586	698	594
50 PERCENT EXCEEDS	103	201	129
90 PERCENT EXCEEDS	13	70	15

a About, from rating curve extended above 20,000 ft³/s.

b From floodmarks, site and datum then in use.



06317000 POWDER RIVER AT ARVADA, WY

YELLOWSTONE RIVER BASIN

06317000 POWDER RIVER AT ARVADA, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1946-57, 1968 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: March 1949 to September 1957, October 1967 to September 1978.

SUSPENDED-SEDIMENT DISCHARGE: April 1946 to September 1957, October 1967 to September 1971, January 1975 to September 1978, April 1983 to September 1984.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
NOV 21...	1715	95	2630	7.4	0.0	-5.0	668	12.5	99	780	180	80
JAN 27...	1515	130	1990	7.8	0.0	-10.0	676	8.6	67	560	140	50
MAY 06...	1545	384	2620	8.1	19.5	21.0	666	8.1	102	660	150	67
JUL 24...	0945	539	1730	7.8	22.5	24.5	670	8.2	109	460	120	39

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)
NOV 21...	280	4	6.8	242	960	130	0.5	9.7	1790	2.44	460
JAN 27...	190	4	5.5	235	670	110	0.5	11	1320	1.79	463
MAY 06...	360	6	7.5	169	1200	78	0.7	8.3	1950	2.66	2020
JUL 24...	200	4	7.4	141	690	60	0.5	9.6	1220	1.65	1770

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LOCATION.--Lat 44°27'22", long 106°52'42", 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.

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 sea level, from topographic map. Prior to Jan. 8, 1944, nonrecording gages 600 ft upstream on North and South Forks at different datums. Jan. 8, 1944, to Sept. 30, 1952, water-stage recorder at present site at datum 0.72 ft lower.

REMARKS.--Estimated daily discharges: Apr. 5-7. Records good except those above 800 ft³/s and those for estimated daily discharges, which are poor. 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:

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	8.7	16	289	89	65	43
2	---	---	---	---	---	---	7.2	15	261	81	61	43
3	---	---	---	---	---	---	6.8	14	227	96	58	41
4	---	---	---	---	---	---	7.9	19	235	91	55	41
5	---	---	---	---	---	---	7.6	31	250	84	73	41
6	---	---	---	---	---	---	7.0	41	253	84	64	39
7	---	---	---	---	---	---	7.0	57	235	74	58	38
8	---	---	---	---	---	---	7.0	46	1110	72	55	37
9	---	---	---	---	---	---	6.2	45	714	66	53	36
10	---	---	---	---	---	---	6.2	62	496	65	56	36
11	---	---	---	---	---	---	5.5	71	441	64	68	36
12	---	---	---	---	---	---	4.4	65	392	85	63	37
13	---	---	---	---	---	---	3.9	80	357	88	59	36
14	---	---	---	---	---	---	4.9	87	285	63	57	33
15	---	---	---	---	---	---	5.8	93	376	56	55	28
16	---	---	---	---	---	---	6.6	133	301	51	63	28
17	---	---	---	---	---	---	10	189	274	49	64	27
18	---	---	---	---	---	---	16	196	252	46	55	25
19	---	---	---	---	---	---	19	140	231	65	51	30
20	---	---	---	---	---	---	21	138	202	156	49	30
21	---	---	---	---	---	---	22	176	181	82	46	28
22	---	---	---	---	---	---	17	174	164	63	46	35
23	---	---	---	---	---	---	15	176	158	57	45	46
24	---	---	---	---	---	---	15	197	164	57	46	33
25	---	---	---	---	---	---	13	243	131	70	46	30
26	---	---	---	---	---	---	13	198	112	61	46	28
27	---	---	---	---	---	---	14	191	103	58	47	32
28	---	---	---	---	---	---	21	187	97	64	43	36
29	---	---	---	---	---	---	19	185	92	109	41	30
30	---	---	---	---	---	---	16	185	86	86	41	28
31	---	---	---	---	---	---	---	205	---	72	41	---
TOTAL	---	---	---	---	---	---	333.7	3655	8469	2304	1670	1031
MEAN	---	---	---	---	---	---	11.1	118	282	74.3	53.9	34.4
MAX	---	---	---	---	---	---	22	243	1110	156	73	46
MIN	---	---	---	---	---	---	3.9	14	86	46	41	25
AC-FT	---	---	---	---	---	---	662	7250	16800	4570	3310	2040

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1997, BY WATER YEAR (WY)

MEAN	9.23	7.11	5.57	4.58	4.43	4.81	15.1	98.4	149	62.3	40.8	20.1
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	27.1	37.8	28.3	4.22	1.57
(WY)	1955	1955	1967	1950	1957	1966	1966	1960	1954	1958	1954	1954

YELLOWSTONE RIVER BASIN

06320000 ROCK CREEK NEAR BUFFALO, WY--Continued

SUMMARY STATISTICS

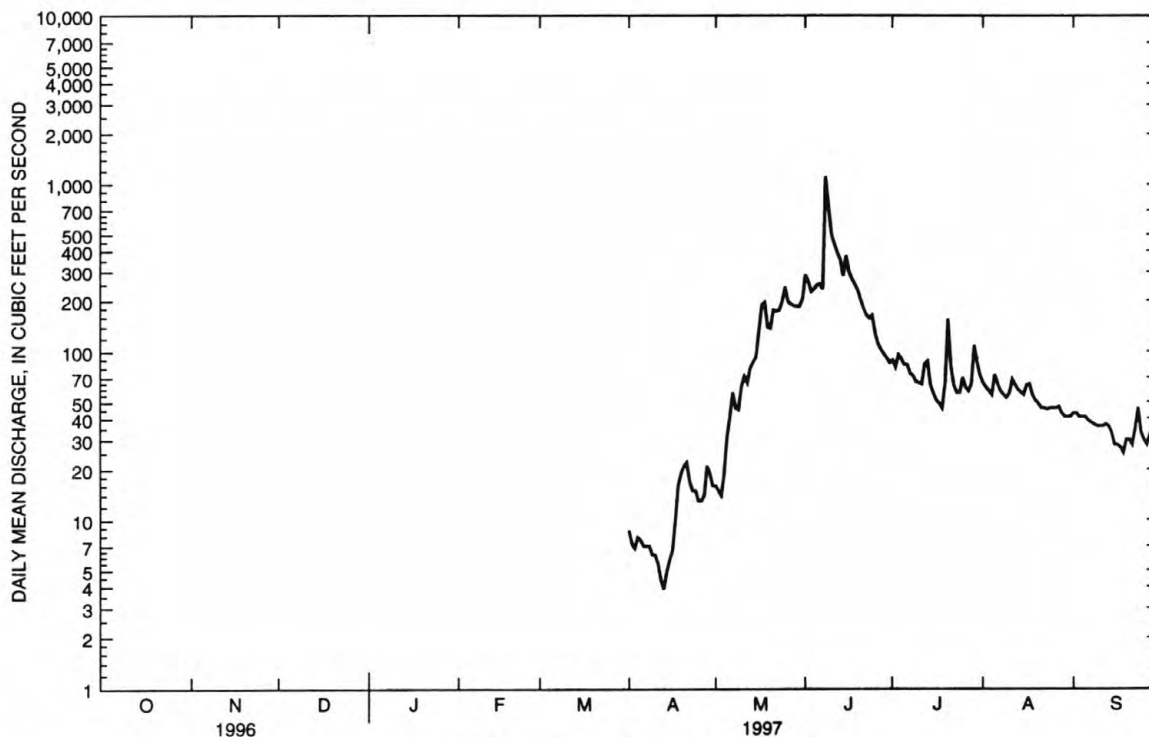
FOR 1997 WATER YEAR*

WATER YEARS 1945 - 1971

ANNUAL MEAN	--		34.7	
HIGHEST ANNUAL MEAN	--		54.7	1963
LOWEST ANNUAL MEAN	--		16.1	1954
HIGHEST DAILY MEAN	1110	Jun 8	945	Jun 8 1997#
LOWEST DAILY MEAN	3.9	Apr 13	.50	Sep 19 1954#
ANNUAL SEVEN-DAY MINIMUM	--		.59	Sep 17 1954
INSTANTANEOUS PEAK FLOW	2080 ^a	Jun 8	2080 ^a	Jun 8 1997#
INSTANTANEOUS PEAK STAGE	8.80	Jun 8	8.80	Jun 8 1997#
ANNUAL RUNOFF (AC-FT)	--		25120	
10 PERCENT EXCEEDS	233		102	
50 PERCENT EXCEEDS	57		8.2	
90 PERCENT EXCEEDS	13		3.7	

* During period of operation.

For period of record through 1997.

a From rating curve extended above 610 ft³/s.

06320000 ROCK CREEK NEAR BUFFALO, WY

YELLOWSTONE RIVER BASIN

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06320210 CLEAR CREEK ABOVE KUMOR DRAW, NEAR BUFFALO, WY

LOCATION.--Lat 44°23'21", long 106°37'23", in NW¹/₄ NE¹/₄ SE¹/₄ 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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
NOV							
05...	1045	71	686	8.0	2.0	1.0	647
MAR							
10...	1015	48	926	7.8	0.0	12.0	649
MAY							
05...	1355	135	441	8.4	10.5	17.0	653
JUL							
22...	1000	298	340	8.0	15.5	25.0	651

DATE	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
NOV							
05...	11.5	98	32	0.02	0.06	0.09	0.01
MAR							
10...	8.0	65	K20	<0.01	0.14	0.23	0.04
MAY							
05...	11.1	116	29	<0.01	<0.05	<0.01	<0.01
JUL							
22...	8.4	99	500	<0.01	<0.05	<0.01	0.02

K-Results based on colony count outside the acceptable range (non-ideal colony count).

06320500 SOUTH PINEY CREEK AT WILLOW PARK, WY--Continued

SUMMARY STATISTICS

FOR 1997 WATER YEAR*

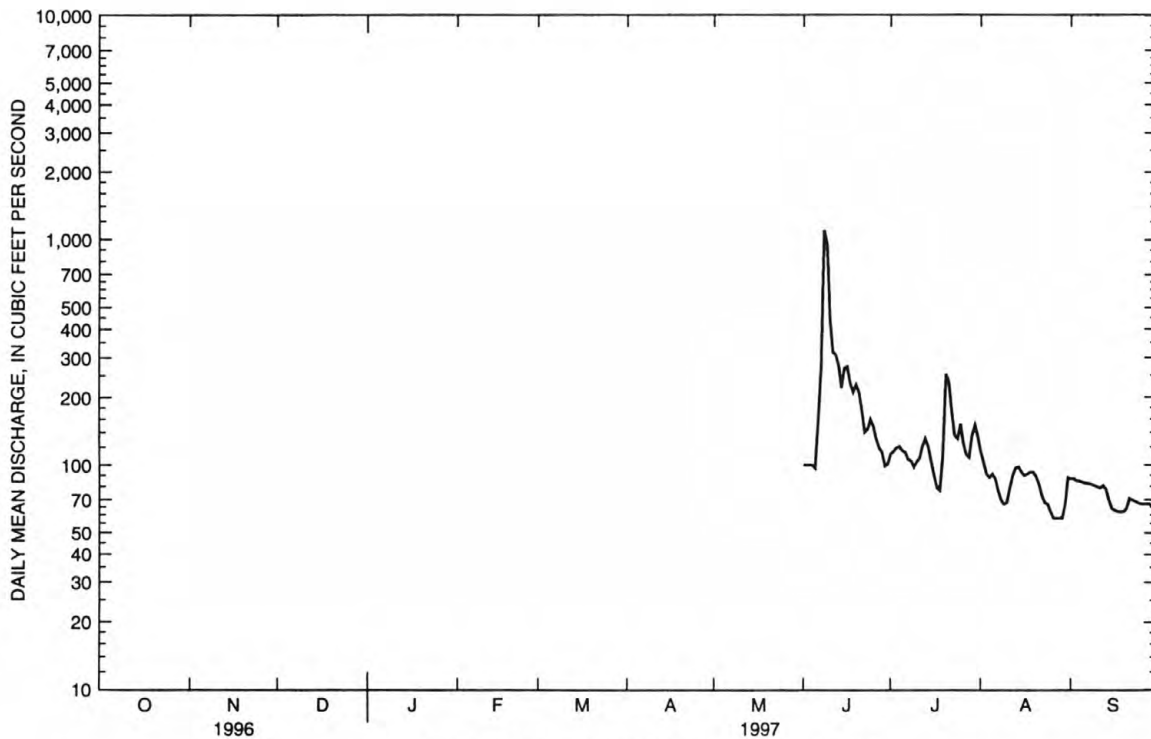
WATER YEARS 1947 - 1971

ANNUAL MEAN	--		42.4 ^a	
HIGHEST ANNUAL MEAN	--		55.9	1963
LOWEST ANNUAL MEAN	--		27.5	1960
HIGHEST DAILY MEAN	1100	Jun 8	1100	Jun 8 1997#
LOWEST DAILY MEAN	58	Aug 26-29	.13 ^b	May 1-6 1989#
ANNUAL SEVEN-DAY MINIMUM	--			
INSTANTANEOUS PEAK FLOW	1220	Jun 8	1620 ^c	Nov 19 1966
INSTANTANEOUS PEAK STAGE	5.27	Jun 8	5.68	Jun 15 1963#
ANNUAL RUNOFF (AC-FT)	--		30700	
10 PERCENT EXCEEDS	--		116	
50 PERCENT EXCEEDS	--		12	
90 PERCENT EXCEEDS	--		4.0	

* During period of operation.

For period of record through 1997.

a Unadjusted.

b Minimum daily, prior to construction of Willow Park Reservoir, 4.5 ft³/s, Mar. 1 to Apr. 5, 1955.c From rating curve extended above 360 ft³/s on basis of slope-area measurement of peak flow.

06320500 SOUTH PINEY CREEK AT WILLOW PARK, WY

YELLOWSTONE RIVER BASIN

06323000 PINEY CREEK AT KEARNY, WY

LOCATION.--Lat 44°32'08", long 106°49'18", in NE¹/₄ NE¹/₄ SW¹/₄ 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 current year. 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. Datum of gage is 4,655.11 ft above sea level. Sept. 6, 1902, to June 30, 1906, nonrecording gage at site 50 ft upstream at different datum. May 14, 1911, to July 31, 1917, and May 1, 1919, to Sept. 30, 1923, nonrecording gage at site 50 ft upstream at present datum.

REMARKS.--Estimated daily discharges: Nov. 17 to Mar. 7, Mar. 9, 14-17, and Apr. 5-9, 12, 13. 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, 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.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	65	41	46	38	25	53	106	515	169	165	144
2	22	56	42	48	37	26	47	100	517	169	140	75
3	19	50	43	49	36	27	46	98	491	193	123	54
4	15	50	44	49	36	26	52	106	462	182	107	52
5	12	47	45	48	35	25	50	123	454	165	113	50
6	11	43	45	48	34	24	49	144	479	167	104	48
7	9.9	42	44	49	33	23	48	184	620	148	91	47
8	10	50	45	49	32	23	47	177	1720	120	88	45
9	23	45	47	48	31	23	46	189	1500	102	102	44
10	23	47	48	46	30	24	45	233	1060	98	97	43
11	22	48	50	44	29	24	42	269	905	106	113	40
12	20	45	49	43	28	25	42	272	865	133	129	39
13	19	43	48	43	28	23	41	311	783	145	144	39
14	19	43	47	43	28	23	42	342	648	123	148	35
15	19	42	46	43	29	24	42	378	907	100	152	30
16	20	39	45	43	29	25	45	446	772	83	167	30
17	23	38	44	44	30	28	56	552	665	72	169	29
18	19	39	43	45	30	30	72	563	588	72	169	30
19	25	40	44	46	30	37	88	466	575	109	177	34
20	24	41	45	47	29	50	107	450	539	353	174	35
21	19	40	44	47	28	51	107	500	471	342	169	43
22	45	39	43	47	27	48	98	487	363	266	180	51
23	57	38	42	46	26	46	93	483	335	215	169	62
24	54	39	42	44	26	45	91	500	346	197	167	54
25	56	40	42	41	27	43	88	565	313	213	155	50
26	53	40	42	40	27	50	90	543	266	180	144	45
27	58	39	43	39	28	56	94	556	213	171	153	31
28	74	40	44	38	26	47	113	495	194	172	153	31
29	66	41	44	36	---	47	109	471	178	184	167	30
30	66	40	44	37	---	45	102	450	163	192	171	29
31	62	---	45	38	---	51	---	450	---	179	177	---
TOTAL	986.9	1309	1380	1374	847	1064	2045	11009	17907	5120	4477	1369
MEAN	31.8	43.6	44.5	44.3	30.3	34.3	68.2	355	597	165	144	45.6
MAX	74	65	50	49	38	56	113	565	1720	353	180	144
MIN	9.9	38	41	36	26	23	41	98	163	72	88	29
AC-FT	1960	2600	2740	2730	1680	2110	4060	21840	35520	10160	8880	2720

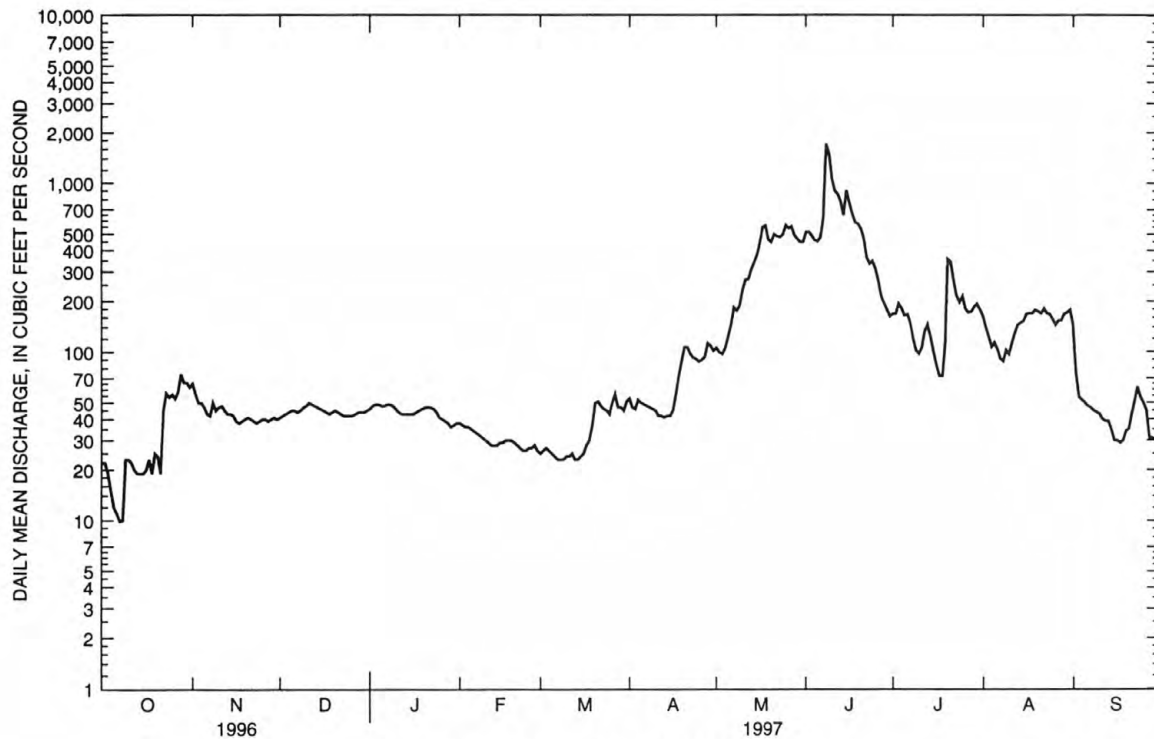
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1997, BY WATER YEAR (WY)

	MEAN	29.9	35.4	31.1	27.3	26.3	30.8	69.8	274	381	95.0	29.5	25.8
MAX	85.4	67.7	53.6	44.3	54.4	72.8	204	683	911	413	144	185	
(WY)	1913	1962	1977	1997	1962	1972	1943	1944	1995	1975	1997	1923	
MIN	8.84	13.0	13.4	12.3	10.7	16.7	15.8	43.3	33.8	13.0	7.98	3.47	
(WY)	1965	1955	1966	1967	1960	1957	1981	1985	1985	1985	1980	1981	

06323000 PINEY CREEK AT KEARNY, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1903 - 1997	
ANNUAL TOTAL	33704.1		48887.9		--	
ANNUAL MEAN	92.1		134		86.4	
HIGHEST ANNUAL MEAN	--		--		168	1944
LOWEST ANNUAL MEAN	--		--		27.8	1985
HIGHEST DAILY MEAN	770	Jun 9	1720	Jun 8	1780	Jun 15 1963
LOWEST DAILY MEAN	7.2	Sep 6, 7, 11	9.9	Oct 7	1.9	Oct 3 1981
						Sep 14-18 1985
ANNUAL SEVEN-DAY MINIMUM	7.4	Sep 5	14	Oct 2	2.1	Sep 13 1985
INSTANTANEOUS PEAK FLOW	--		1870	Jun 8	3410 ^a	Jun 15 1963
INSTANTANEOUS PEAK STAGE	--		5.45	Jun 8	6.05	Jun 15 1963
ANNUAL RUNOFF (AC-FT)	66850		96970		62560	
10 PERCENT EXCEEDS	301		448		255	
50 PERCENT EXCEEDS	39		48		34	
90 PERCENT EXCEEDS	10		26		14	

a From rating curve extended above 1,800 ft³/s.



06323000 PINEY CREEK AT KEARNY, WY

YELLOWSTONE RIVER BASIN

06324500 POWDER RIVER AT MOORHEAD, MT

LOCATION.--Lat 45°04'04", long 105°52'10", in NW¹/₄ SE¹/₄ NW¹/₄ sec.8, T.9 S., R.48 E., Powder River County, Hydrologic Unit 10090207, on left bank 500 ft downstream from discontinued post office at Moorhead, 6.2 mi upstream from Buffalo Creek, and at river mile 184.8.

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. Datum of gage is 3,334.6 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Aug. 28, 1931, nonrecording gage at site 0.3 mi upstream at different datum. Aug. 28, 1931, to Mar. 21, 1956, water-stage recorder at site 1.2 mi upstream at different datum. Mar. 22 to July 24, 1956, nonrecording gage at site 0.3 mi downstream at different datum. July 25 to Sept. 12, 1956, nonrecording gage at present site and datum.

REMARKS.--Discharge records fair except those for period of 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. U.S. Geological Survey data collection platform with satellite telemetry at station. Station operated and record provided by Montana District.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 30, 1923, reached a stage of 19 ft, site and datum used 1931-56, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	e220	e110	e200	e270	e350	493	592	1200	803	2270	309
2	135	345	e120	e350	e260	e300	504	759	1310	771	1400	312
3	139	383	e110	e500	e250	e250	494	829	1570	726	1200	283
4	153	400	e100	e450	e240	e200	449	846	1590	711	991	223
5	167	389	e120	e400	e230	e220	487	809	1590	781	893	202
6	171	375	e130	e400	e230	e300	319	712	1560	746	808	189
7	164	350	e140	e450	e220	e400	e160	626	1470	767	794	190
8	164	331	e150	e450	e230	e500	e160	621	1550	699	789	182
9	153	336	e170	e350	e210	e700	e190	695	2810	657	745	171
10	153	334	e180	e250	e230	e900	e180	686	3870	588	670	159
11	154	357	e170	e150	e230	e1100	e150	756	3360	500	654	156
12	165	339	e150	e140	e220	e1000	e250	834	3070	441	689	149
13	168	344	e130	e150	e300	e900	e400	848	2660	419	701	136
14	166	327	e120	e160	e450	e700	484	875	2660	457	670	129
15	145	341	e130	e180	e550	e800	539	943	3320	452	667	123
16	137	324	e120	e160	e600	e1100	591	954	3030	371	676	121
17	136	e200	e110	e170	e650	e1400	668	1020	2710	336	653	116
18	134	e100	e100	e180	e600	e1700	849	1360	2320	262	681	113
19	147	e120	e90	e200	e600	e1500	910	1660	2110	216	676	112
20	156	e130	e110	e220	e600	1430	1000	1580	1960	508	623	118
21	155	e130	e100	e250	e550	997	994	1460	1780	1980	580	116
22	167	e120	e90	e200	e550	936	947	1320	1630	1320	548	130
23	182	e120	e80	e160	e450	887	857	1280	1420	1230	512	168
24	180	e100	e90	e140	e470	830	781	1440	1320	1070	498	205
25	199	e110	e80	e120	e500	755	718	2050	1270	871	478	356
26	302	e100	e75	e140	e470	667	669	1630	1190	731	493	626
27	309	e110	e85	e160	e400	612	594	1650	1090	773	450	527
28	249	e120	e90	e180	e350	635	542	1650	970	1170	424	461
29	e240	e130	e85	e210	---	603	521	1560	890	1290	422	427
30	e220	e120	e100	e250	---	534	543	1400	829	1080	406	436
31	e200	---	e150	e280	---	505	---	1290	---	2210	383	---
TOTAL	5436	7205	3585	7600	10910	23711	16443	34735	58109	24936	22444	6945
MEAN	175	240	116	245	390	765	548	1120	1937	804	724	232
MAX	309	400	180	500	650	1700	1000	2050	3870	2210	2270	626
MIN	126	100	75	120	210	200	150	592	829	216	383	112
AC-FT	10780	14290	7110	15070	21640	47030	32610	68900	115300	49460	44520	13780

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1997, BY WATER YEAR (WY)*

MEAN	221	219	157	150	290	633	510	1060	1413	483	176	143
MAX	897	491	326	445	1200	2290	1314	5553	4131	2500	1219	686
(WY)	1995	1930	1981	1981	1930	1947	1965	1978	1967	1937	1941	1982
MIN	16.1	80.0	56.2	27.2	20.9	210	117	82.6	39.5	33.9	.60	1.28
(WY)	1955	1936	1933	1950	1933	1935	1961	1934	1954	1961	1966	1960

06324500 POWDER RIVER AT MOORHEAD, MT--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1930 - 1997*	
ANNUAL TOTAL	161282		222059		--	
ANNUAL MEAN	441		608		454	
HIGHEST ANNUAL MEAN	--		--		1091	1978
LOWEST ANNUAL MEAN	--		--		109	1961
HIGHEST DAILY MEAN	3500	Mar 13	3870	Jun 10	27500	May 20 1978
LOWEST DAILY MEAN	17	Aug 17	75	Dec 26	.00	Jul 15 1931
ANNUAL SEVEN-DAY MINIMUM	21	Aug 14	84	Dec 23	.00	Sep 4 1960
INSTANTANEOUS PEAK FLOW	--		4290 ^a	Jun 10	33000 ^c	May 20 1978
INSTANTANEOUS PEAK STAGE	--		9.09 ^b	Mar 12	17.70 ^d	Mar 21 1956
ANNUAL RUNOFF (AC-FT)	319900		440500		329300	
10 PERCENT EXCEEDS	1190		1410		1070	
50 PERCENT EXCEEDS	170		424		217	
90 PERCENT EXCEEDS	34		120		46	

* During period of operation (1930-72, 1975 to current year).

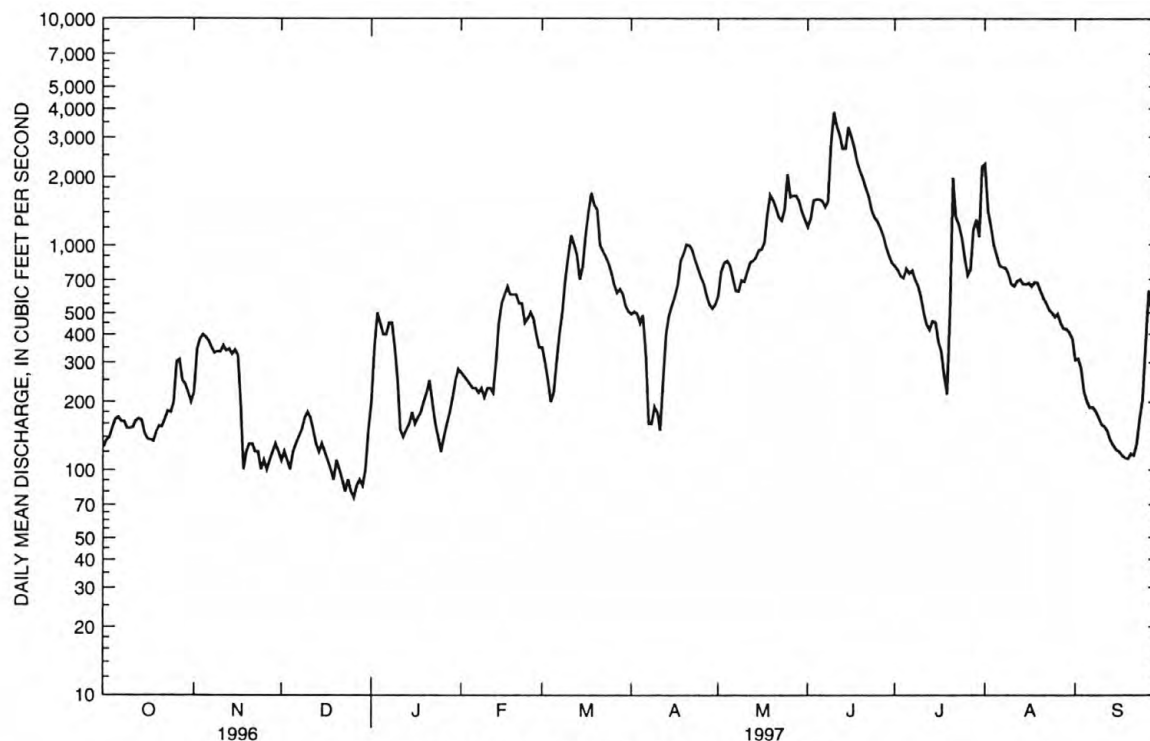
a Gage height, 6.00 ft.

b Backwater from ice.

c Gage height, 15.24 ft.

d Ice jam, site and datum then in use.

e Estimated.



06324500 POWDER RIVER AT MOORHEAD, MT

YELLOWSTONE RIVER BASIN

06324500 POWDER RIVER AT MOORHEAD, MT--Continued

WATER-QUALITY RECORDS

LOCATION.--Samples collected at bridge on county road, 1.2 mi upstream from gaging station.

PERIOD OF RECORD.--Water years 1951-53, 1956-57, 1969-72, 1975 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1986 to November 1989.

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).

REMARKS.--Unpublished records for many days of instantaneous water temperature and specific conductance are available in files of the Montana District office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (water years 1986-90): Maximum daily, 4,150 microsiemens per centimeter ($\mu\text{S}/\text{cm}$) at 25.0°C, July 17, 1988; minimum daily 642 microsiemens per centimeter ($\mu\text{S}/\text{cm}$) at 25.0°C, May 20, 1988.

WATER TEMPERATURE (water years 1951-53, 1955-57, 1975-81): 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.

WATER QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 02...	1445	142	1750	14.5	15.0	23	8.8	69
MAR 21...	0905	1000	--	1.5	6.0	4080	11000	79

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LOCATION.--Lat 44°55'37", long 105°21'10", in NW¼ SW¼ 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.

WATER-DISCHARGE RECORDS

REMARKS.--Estimated daily discharges: Dec. 16-20, 27-30, Jan. 2, 3, Jan. 30 to Feb. 1, Mar. 1, 3-6, and Apr. 5-14, 19-27. 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. U.S. Geological Survey data collection platform with satellite telemetry at station.

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 4	1400	564	6.64
Feb. 3	0330	579	6.70
Feb. 18	1730	*1,500	*9.10
Mar. 13	0430	323	4.99
Mar. 20	1700	200	4.36
Apr. 18	1130	413	5.59

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	11	4.5	3.9	170	115	38	37	11	53	10	2.8
2	2.6	8.1	4.5	100	475	111	34	37	9.3	33	7.8	2.6
3	2.6	7.1	3.9	350	549	105	29	36	8.3	28	6.5	2.3
4	2.6	6.9	3.9	495	424	100	27	35	7.5	28	5.8	2.3
5	2.6	6.6	3.9	221	227	95	25	34	6.7	28	5.7	2.2
6	2.6	7.0	3.8	93	109	105	24	32	7.5	25	5.3	2.1
7	2.6	7.8	3.8	72	64	107	23	29	8.1	24	4.7	2.1
8	2.6	7.6	3.6	60	57	122	24	24	8.2	20	4.3	2.0
9	2.5	7.0	3.6	33	42	148	25	18	8.8	12	4.0	2.0
10	2.2	7.4	3.5	17	43	166	27	13	9.4	6.9	3.8	2.0
11	2.2	7.2	3.4	12	36	192	37	11	12	4.3	3.8	2.0
12	2.2	7.1	3.4	23	34	216	35	9.8	21	4.5	3.9	2.0
13	2.2	6.8	3.3	33	33	282	29	8.4	14	7.4	3.8	2.0
14	2.2	6.8	3.4	21	32	189	38	7.6	10	5.7	3.8	2.0
15	2.9	6.8	3.4	12	118	153	62	6.4	12	4.8	3.6	2.0
16	2.9	6.3	3.3	10	507	140	135	5.0	22	4.8	4.1	2.0
17	2.9	5.7	3.1	15	733	133	281	3.9	12	4.6	5.0	1.9
18	2.9	6.7	3.0	9.2	1230	147	362	3.7	7.4	4.6	4.9	1.9
19	2.9	6.0	3.2	8.0	1310	179	270	3.7	7.8	5.5	4.7	1.9
20	2.9	5.7	3.5	9.0	1000	191	190	3.1	9.1	6.3	4.6	2.0
21	2.9	5.4	3.6	13	743	171	150	2.8	8.9	21	4.5	2.0
22	2.9	5.4	3.5	32	402	131	140	3.0	9.5	65	4.3	2.3
23	2.9	5.2	3.3	22	241	106	120	3.3	13	47	3.8	2.8
24	2.8	5.1	3.8	21	202	90	100	3.3	18	65	3.1	2.7
25	2.8	5.0	3.6	32	184	77	71	7.3	27	52	2.8	2.5
26	4.2	4.8	4.1	27	169	70	58	9.6	27	29	2.9	2.5
27	4.3	4.8	4.5	16	153	64	47	14	26	16	2.6	2.5
28	4.6	4.7	4.0	13	131	56	45	20	19	11	2.4	2.6
29	8.3	4.6	4.2	13	---	52	42	19	16	9.7	2.3	2.6
30	7.1	4.6	3.8	15	---	45	39	17	21	8.4	2.2	2.7
31	15	---	4.0	45	---	40	---	14	---	7.5	2.1	---
TOTAL	109.3	191.2	114.4	1846.1	9418	3898	2527	470.9	397.5	642.0	133.1	67.3
MEAN	3.53	6.37	3.69	59.6	336	126	84.2	15.2	13.3	20.7	4.29	2.24
MAX	15	11	4.5	495	1310	282	362	37	27	65	10	2.8
MIN	2.2	4.6	3.0	3.9	32	40	23	2.8	6.7	4.3	2.1	1.9
AC-FT	217	379	227	3660	18680	7730	5010	934	788	1270	264	133

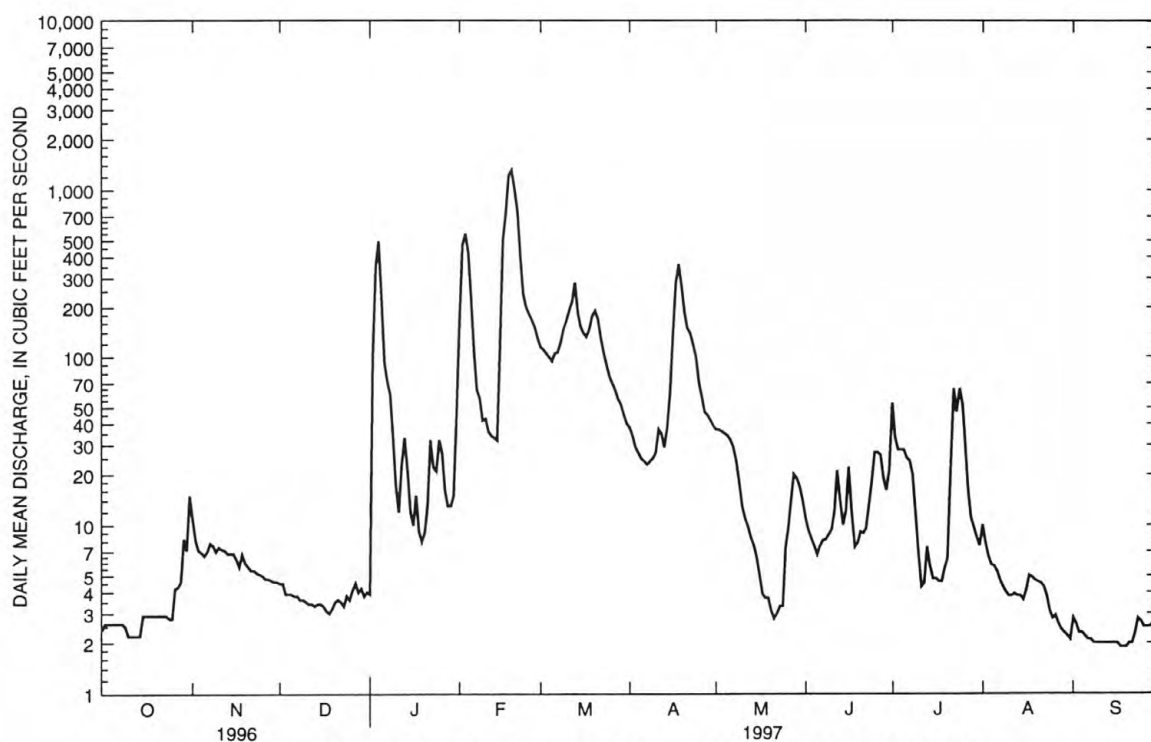
MEAN	12.0	3.18	2.44	9.11	43.6	67.4	21.6	67.1	30.9	11.7	6.31	4.54
MAX	172	20.4	9.97	89.0	336	613	84.2	703	188	68.8	44.8	60.8
(WY)	1995	1987	1995	1974	1997	1978	1997	1978	1984	1982	1993	1986
MIN	.009	.015	.21	.10	.46	1.34	.75	1.04	2.11	.044	.000	.002
(WY)	1992	1982	1982	1991	1989	1981	1981	1992	1988	1980	1991	1991

YELLOWSTONE RIVER BASIN

06324970 LITTLE POWDER RIVER ABOVE DRY CREEK, NEAR WESTON, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1973 - 1997
ANNUAL TOTAL	20174.1	19814.8	--
ANNUAL MEAN	55.1	54.3	23.3
HIGHEST ANNUAL MEAN	--	--	127
LOWEST ANNUAL MEAN	--	--	1.49
HIGHEST DAILY MEAN	2150	1310	5000
LOWEST DAILY MEAN	1.6	1.9	.00
ANNUAL SEVEN-DAY MINIMUM	1.7	2.0	.00
INSTANTANEOUS PEAK FLOW	--	1500	5300
INSTANTANEOUS PEAK STAGE	--	9.10	11.63
ANNUAL RUNOFF (AC-FT)	40020	39300	16860
10 PERCENT EXCEEDS	84	143	36
50 PERCENT EXCEEDS	7.4	8.3	2.8
90 PERCENT EXCEEDS	2.3	2.6	.02

a Gage height, 11.62 ft.



06324970 LITTLE POWDER RIVER ABOVE DRY CREEK, NEAR WESTON, WY

YELLOWSTONE RIVER BASIN

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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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
NOV												
14...	0815	7.0	3140	8.2	0.5	5.0	671	8.4	67	810	160	100
JAN												
28...	1010	13	1990	7.5	0.0	5.0	676	6.3	49	630	130	73
MAY												
06...	1805	35	3480	8.2	17.5	22.5	671	8.3	100	1200	220	165
JUL												
24...	1510	63	1780	7.8	25.5	32.0	675	6.7	93	570	120	67

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)
NOV											
14...	400	6	3.4	300	1400	34	0.6	9.7	2290	3.11	43.2
JAN											
28...	260	5	18	246	950	15	0.5	12	1610	2.18	56.4
MAY											
06...	400	5	20	383	1700	26	0.5	7.4	2820	3.83	266
JUL											
24...	180	3	18	168	780	13	0.5	11	1280	1.74	218

CHEYENNE RIVER BASIN

06375600 LITTLE THUNDER CREEK NEAR HAMPSHIRE, WY

LOCATION.--Lat 43°39'20", long 104°54'20", in SW¹/₄ SE¹/₄ sec.33, T.43 N., R.67 W., Weston County, Hydrologic Unit 10120103, 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.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to September 1981, October 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,400 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 24-27, Nov. 29 to Dec. 8, Dec. 12 to Jan. 20, Jan. 24 to Feb. 23, and Apr. 5-12, 18. Records good except those for daily discharges less than 1 ft³/s and those for estimated daily discharges, which are poor. Numerous small stock water reservoirs upstream from station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 40 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 2	0300	88	3.98
May 25	1230	263	4.91
July 28	2330	*321	*5.17
July 31	1500	76	3.89
Aug. 10	1500	48	3.62

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	12	1.0	1.1	.01	3.9	3.7	.00	23	.48
2	.00	.00	.00	7.5	4.0	1.2	.01	38	3.5	.00	8.0	.47
3	.00	.00	.00	5.0	20	1.4	.01	7.7	3.2	.00	6.0	.44
4	.00	.00	.00	2.5	7.0	1.4	.01	2.9	2.3	.00	3.8	.36
5	.00	.00	.00	1.0	2.0	.80	.01	1.6	1.8	.00	2.4	.32
6	.00	.00	.00	.50	.50	.79	.00	.83	9.3	.00	1.7	.21
7	.00	.00	.00	.35	.08	.98	.00	.36	9.6	.00	1.3	.14
8	.00	.00	.00	.20	.00	1.1	.00	.27	4.4	.00	1.0	.09
9	.00	.00	.01	.08	.00	1.1	.00	.22	2.8	.00	.76	.04
10	.00	.00	.01	.02	.00	1.1	.00	.18	2.3	.00	17	.02
11	.00	.00	.01	.00	.00	.61	.00	.13	1.9	.00	24	.02
12	.00	.00	.00	.00	.00	.57	.02	.10	1.5	.00	13	.01
13	.00	.00	.00	.00	.02	.40	.06	.06	1.0	.00	11	.00
14	.00	.00	.00	.00	.25	.34	.17	.03	.79	.00	9.2	.00
15	.00	.00	.00	.00	.70	.21	.29	.02	.84	.00	8.4	.00
16	.00	.00	.00	.00	2.0	.20	.32	.02	.94	.00	8.1	.00
17	.00	.00	.00	.00	35	.18	.40	.01	.83	.00	8.1	.24
18	.00	.00	.00	.00	42	.15	4.7	.01	.71	.00	8.1	.33
19	.00	.00	.00	.14	17	.12	11	.01	.68	.00	8.6	.33
20	.00	.00	.00	.28	12	.09	5.9	.01	.58	.00	8.4	.31
21	.00	.00	.00	.41	7.0	.06	4.2	.01	.51	.00	7.9	.19
22	.00	.00	.00	.42	5.5	.04	2.5	.01	.41	.00	6.0	.18
23	.00	.00	.00	.37	4.0	.02	1.8	.01	.33	9.1	3.5	.41
24	.00	.00	.00	.25	4.5	.02	1.8	.01	.34	7.5	2.3	.91
25	.00	.00	.00	.14	3.5	.01	1.4	93	.32	3.3	1.4	.74
26	.00	.00	.00	.02	3.3	.01	.86	124	.20	1.8	.99	1.0
27	.00	.00	.02	.00	2.6	.01	.52	57	.08	.85	.73	.87
28	.00	.00	.02	.00	2.1	.01	.24	20	.02	55	1.7	.64
29	.00	.00	.04	.00	---	.01	.30	12	.01	172	1.3	.49
30	.00	.00	.20	.00	---	.01	1.1	7.6	.00	69	.70	.38
31	.00	---	15	.35	---	.01	---	5.2	---	52	.55	---
TOTAL	0.00	0.00	15.31	31.53	176.05	14.05	37.63	375.20	54.89	370.55	198.93	9.62
MEAN	.000	.000	.49	1.02	6.29	.45	1.25	12.1	1.83	12.0	6.42	.32
MAX	.00	.00	15	12	42	1.4	11	124	9.6	172	24	1.0
MIN	.00	.00	.00	.00	.00	.01	.00	.01	.00	.00	.55	.00
AC-FT	.00	.00	30	63	349	28	75	744	109	735	395	19

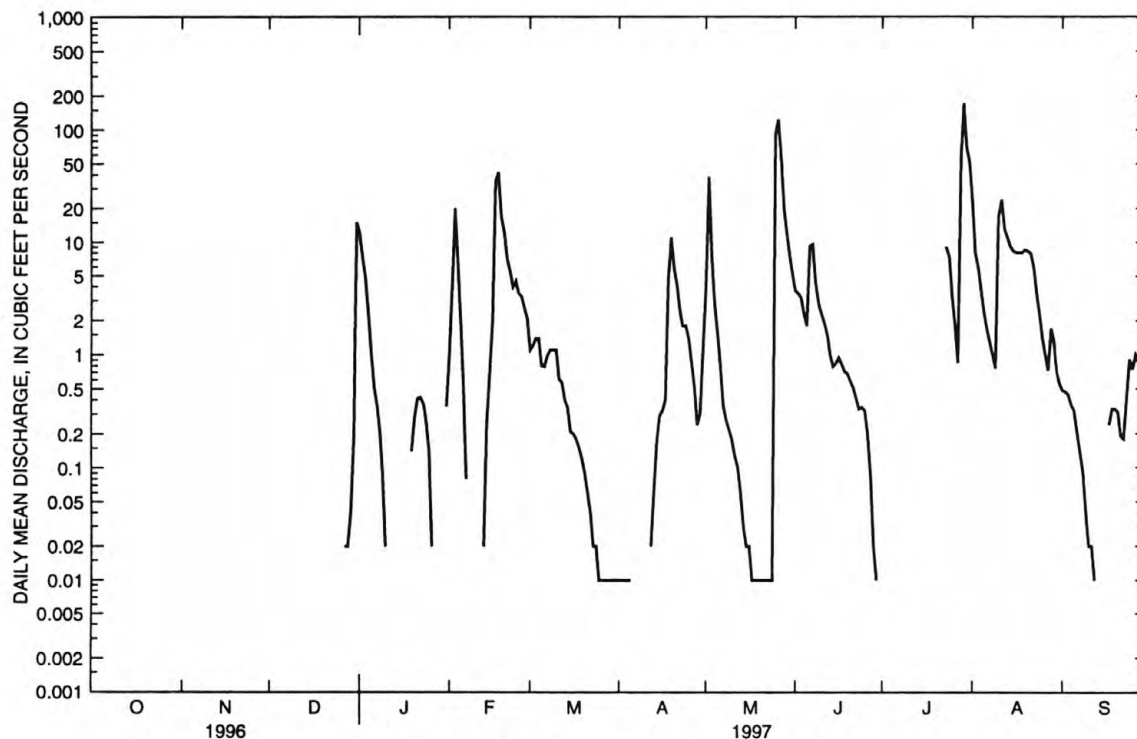
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1997, BY WATER YEAR (WY)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	.038	.013	.055	.081	.92	1.51	.20	14.4	2.37	2.36	1.75	.030									
MAX	.24	.090	.49	1.02	6.29	10.8	1.25	114	8.97	12.0	6.82	.32									
(WY)	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
MIN	.000	.000	.000	.000	.000	.000	.000	.007	.000	.000	.000	.000									
(WY)	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008

06375600 LITTLE THUNDER CREEK NEAR HAMPSHIRE, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1977 - 1997
ANNUAL TOTAL	393.15	1283.76	--
ANNUAL MEAN	1.07	3.52	2.00
HIGHEST ANNUAL MEAN	--	--	11.8
LOWEST ANNUAL MEAN	--	--	.003
HIGHEST DAILY MEAN	99 May 27	172 Jul 29	1570 May 18 1978
LOWEST DAILY MEAN	.00 Many days	.00 Many days	.00 Many days, 1989
ANNUAL SEVEN-DAY MINIMUM	.00 Many days	.00 Many days	.00 Many days, each year
INSTANTANEOUS PEAK FLOW	--	321 Jul 28	3030 ^a May 18 1978
INSTANTANEOUS PEAK STAGE	--	5.17 Jul 28	9.02 May 18 1978
ANNUAL RUNOFF (AC-FT)	780	2550	1450
10 PERCENT EXCEEDS	1.1	7.6	.89
50 PERCENT EXCEEDS	.00	.09	.00
90 PERCENT EXCEEDS	.00	.00	.00

a From rating curve extended above 180 ft³/s on basis of slope-area measurement of peak flow at gage height 7.6 ft and 9.02 ft.



06375600 LITTLE THUNDER CREEK NEAR HAMPSHIRE, WY

CHEYENNE RIVER BASIN

06375600 LITTLE THUNDER CREEK NEAR HAMPSHIRE, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1977 to September 1981, October 1987 to September 1997 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

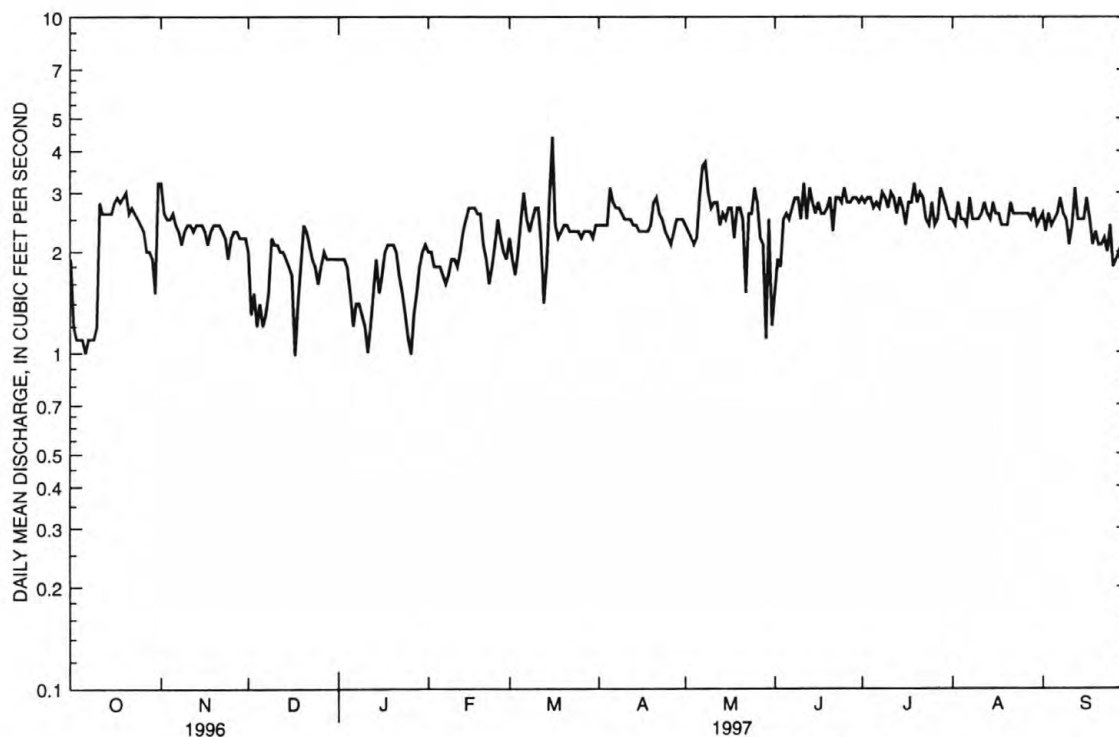
		DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TEMPER-ATURE AIR (DEG C) (00020)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)	
APR 21...	1340	4.2	1240	8.0	9.0	10.5	650	9.7	99	420	
MAY 07...	1600	0.33	1520	7.9	17.5	17.0	654	8.0	98	540	
28...	1140	19	562	7.6	11.0	11.5	658	8.7	92	180	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CaCO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO2) (00955)
APR 21...	91	47	110	2	11	146	510	14	0.3	6.0	
MAY 07...	110	62	140	3	18	175	630	29	0.4	7.8	
28...	39	19	39	1	8.1	76	180	6.1	0.2	4.9	
DATE		SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
APR 21...	880	1.20	9.98	5.9	<1	34	<0.5	171	<1	<1.0	
MAY 07...	1100	1.50	0.98	12	<1	80	<0.5	302	<1	<1.0	
28...	345	0.47	17.7	8.1	<1	42	<0.5	88	<1	<1.0	
DATE		COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)
APR 21...	<3	2	6	<1	25	31	0.3	<10	<10	<1	
MAY 07...	<3	2	19	<1	41	91	<0.1	10	10	<1	
28...	<3	<1	19	<1	14	11	<0.1	<10	<10	<1	
DATE		SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
APR 21...	<1	780	<6	<3	7.6	1.5	73	0.83	95		
MAY 07...	<1	1100	<6	<3	13	1.8	78	0.07	40		
28...	<1	390	<6	<3	9.4	3.7	274	14	99		

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MEAN	1.72	1.64	1.56	1.48	1.67	1.79	2.21	2.17	2.30	2.05	1.87	1.77
MAX	2.32	2.35	2.23	2.17	2.51	2.70	4.07	3.44	4.05	3.09	2.89	2.78
(WY)	1979	1981	1980	1979	1979	1979	1994	1978	1980	1979	1978	1978
MIN	.31	.47	.44	.42	.46	.71	.88	.81	1.34	1.34	.75	.62
(WY)	1977	1977	1977	1993	1977	1977	1993	1993	1994	1993	1976	1976

06392900 BEAVER CREEK AT MALLO CAMP, NEAR FOUR CORNERS, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1975 - 1997	
ANNUAL TOTAL	741.19		840.77		--	
ANNUAL MEAN	2.03		2.30		1.86	
HIGHEST ANNUAL MEAN	--		--		2.59	1979
LOWEST ANNUAL MEAN	--		--		.94	1977
HIGHEST DAILY MEAN	7.6	Apr 11	4.4	Mar 16	28	Apr 22 1994
LOWEST DAILY MEAN	.66	Aug 23	.98	Dec 17	.10	Jan 20 1993
ANNUAL SEVEN-DAY MINIMUM	.90	Aug 23	1.1	Oct 3	.12	Jan 17 1993
INSTANTANEOUS PEAK FLOW	--		31	Oct 31	103 ^a	Apr 22 1994
INSTANTANEOUS PEAK STAGE	--		1.68	Oct 31	2.14	Apr 22 1994
ANNUAL RUNOFF (AC-FT)	1470		1670		1350	
10 PERCENT EXCEEDS	2.6		2.9		2.6	
50 PERCENT EXCEEDS	2.1		2.4		1.8	
90 PERCENT EXCEEDS	1.1		1.6		1.1	

a From rating curve extended above 85 ft³/s.

06392900 BEAVER CREEK AT MALLO CAMP, NEAR FOUR CORNERS, WY

LOCATION.--Lat 43°51'32", long 104°06'24", in SW 1/4 SE 1/4 sec.19, T.45 N., R.60 W., Weston County, Hydrologic Unit 10120107, on right bank 20 ft upstream of culvert on county road, 0.6 mi upstream from South Draw, 2.5 mi upstream from LAK Reservoir Dam, and 4.7 mi east of Newcastle.

PERIOD OF RECORD.--October 1974 to September 1982, April 1991 to current year.

REMARKS.--Estimated daily discharges: Dec. 1 to Apr. 17. Records good except those for estimated daily discharges, which are poor. A few small diversions upstream from station for irrigation.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 50 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 5	unknown	*53	*7.27

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	14	13	15	14	13	17	16	11	14	15	17
2	13	14	13	15	13	14	17	16	13	15	15	18
3	13	14	13	15	13	14	16	16	12	15	15	17
4	13	14	13	14	13	13	17	15	11	15	15	17
5	13	15	12	13	13	12	25	15	11	14	15	18
6	13	14	13	12	12	12	20	15	11	14	15	17
7	13	14	13	12	12	13	18	15	10	17	15	17
8	13	14	13	13	12	14	17	15	10	15	15	17
9	13	14	14	13	13	15	16	14	10	15	15	16
10	13	14	14	12	12	16	16	13	10	15	16	15
11	13	14	14	12	12	16	15	11	13	16	18	15
12	13	14	13	11	13	16	16	12	12	19	17	16
13	13	14	13	11	13	16	16	11	11	18	16	17
14	13	14	12	11	13	15	17	9.9	11	15	16	16
15	13	14	12	12	13	14	16	10	11	15	16	17
16	15	14	12	13	13	15	16	10	10	15	16	18
17	16	14	11	13	14	16	16	9.9	10	13	17	17
18	14	14	11	13	15	16	16	10	10	17	17	17
19	15	14	13	14	14	17	16	10	10	20	16	18
20	16	14	13	15	14	17	16	10	10	17	16	19
21	14	14	14	15	14	17	17	10	10	19	16	19
22	14	14	13	14	13	17	16	16	10	15	16	22
23	14	14	12	13	13	17	16	12	9.9	14	15	23
24	14	14	12	13	12	17	16	11	11	14	15	19
25	14	13	13	12	13	16	15	13	15	14	17	19
26	14	13	13	11	14	17	15	12	14	13	16	19
27	14	13	13	11	14	17	15	13	14	13	16	19
28	14	13	14	13	14	17	15	12	14	13	16	19
29	16	13	13	13	---	16	16	12	14	16	16	19
30	15	13	13	13	---	16	16	12	14	17	16	19
31	14	---	14	14	---	17	---	11	---	16	16	---
TOTAL	428	415	399	401	368	478	496	387.8	342.9	478	491	536
MEAN	13.8	13.8	12.9	12.9	13.1	15.4	16.5	12.5	11.4	15.4	15.8	17.9
MAX	16	15	14	15	15	17	25	16	15	20	18	23
MIN	13	13	11	11	12	12	15	9.9	9.9	13	15	15
AC-FT	849	823	791	795	730	948	984	769	680	948	974	1061

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1997, BY WATER YEAR (WY)

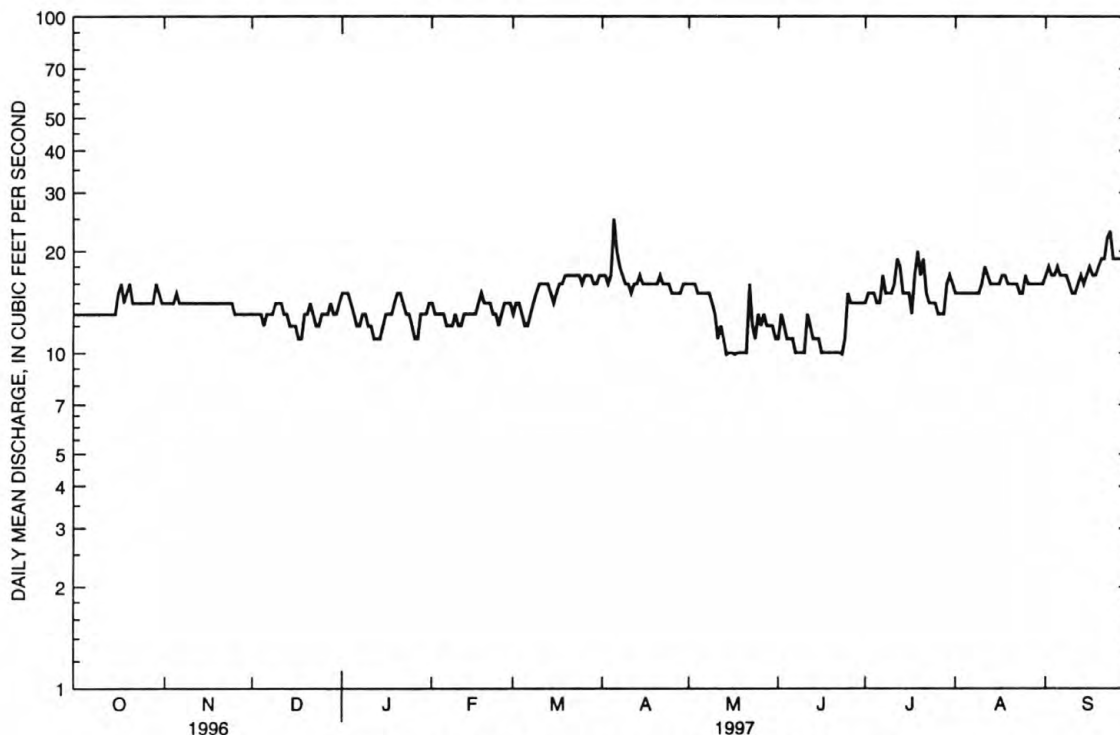
MEAN	12.0	12.3	12.4	12.1	12.5	14.1	12.8	9.82	10.6	10.7	10.9	11.9
MAX	14.1	14.8	14.4	14.8	14.4	21.3	17.8	15.3	12.7	15.4	15.8	17.9
(WY)	1975	1977	1976	1977	1977	1996	1996	1996	1995	1997	1997	1997
MIN	9.40	9.74	10.2	9.52	10.6	10.8	9.53	6.45	5.92	8.24	6.33	8.89
(WY)	1982	1994	1993	1980	1993	1993	1981	1992	1992	1981	1992	1991

CHEYENNE RIVER BASIN

06392950 STOCKADE BEAVER CREEK NEAR NEWCASTLE, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1975 - 1997	
ANNUAL TOTAL	5081.4		5220.7		--	
ANNUAL MEAN	13.9		14.3		11.9	
HIGHEST ANNUAL MEAN	--		--		14.3	1997
LOWEST ANNUAL MEAN	--		--		9.80	1992
HIGHEST DAILY MEAN	100	Mar 13	25	Apr 5	143	Jul 16 1993
LOWEST DAILY MEAN	6.3	Jul 15	9.9	May 14, 17, Jun 23	3.9	May 21 1992
ANNUAL SEVEN-DAY MINIMUM	7.2	Jul 24	10	May 14	4.6	Aug 2 1992
INSTANTANEOUS PEAK FLOW	--		53	Apr 5	776 ^a	Jul 16 1993
INSTANTANEOUS PEAK STAGE	--		7.27	Apr 5	12.44	Jul 16 1993
ANNUAL RUNOFF (AC-FT)	10080		10360		8590	
10 PERCENT EXCEEDS	16		17		14	
50 PERCENT EXCEEDS	13		14		12	
90 PERCENT EXCEEDS	9.7		11		8.4	

a From rating curve extended above 18 ft³/s on basis of culvert-backwater computation.



06392950 STOCKADE BEAVER CREEK NEAR NEWCASTLE, WY

06394000 BEAVER CREEK NEAR NEWCASTLE, WY

LOCATION.--Lat 43°32'07", long 104°07'02", in NW¹/₄ sec.18, T.41 N., R.60 W., Weston County, Hydrologic Unit 10120107, at highway bridge, 2.2 mi downstream from Sheep Creek, and 23 mi south of Newcastle.

DRAINAGE AREA.--1,320 mi².

PERIOD OF RECORD.--February to September 1943, October 1944 to current year.

REVISED RECORDS.--WSP 1209: 1943, 1946, 1948-49.

GAGE.--Water-stage recorder. Elevation of gage is 3,660 ft above sea level, from topographic map. Prior to Nov. 1, 1945, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Oct. 30, 31, Nov. 16 to Mar. 13, and Apr. 5-12. Records fair except those for estimated daily discharges, which are poor. There are many small reservoirs upstream from station used for storage of stock and irrigation water, total capacity, about 11,000 acre-ft. Diversions for irrigation of about 4,900 acres upstream from station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 19	unknown	unknown	*10.33 ^a
Mar. 13	unknown	*1,030	9.17 ^b
Mar. 20	0800	790	7.85
July 24	0030	547	6.65

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	29	16	21	400	29	62	44	31	6.3	72	8.5
2	15	27	18	35	350	31	57	116	29	5.9	66	6.9
3	15	24	20	60	300	36	51	110	41	5.9	35	6.2
4	15	22	16	100	200	33	47	128	47	5.8	26	9.0
5	15	17	10	75	100	30	43	94	138	5.9	22	12
6	15	20	12	35	60	35	35	62	77	6.8	22	14
7	15	21	15	15	40	45	29	47	43	7.7	21	14
8	15	20	17	16	30	50	31	36	28	8.7	19	13
9	15	20	19	15	24	45	32	31	20	10	17	8.0
10	15	19	21	10	20	55	31	27	17	8.1	19	6.3
11	15	19	23	7.0	19	120	29	24	14	7.9	21	5.9
12	15	19	26	4.5	18	400	35	22	13	6.8	21	7.9
13	15	19	27	6.0	17	950	38	21	13	32	18	9.2
14	15	19	25	9.0	18	515	42	21	14	56	14	11
15	15	19	21	12	20	239	48	21	14	13	14	11
16	15	18	16	10	23	139	51	20	14	9.6	14	12
17	16	14	11	11	600	142	72	19	15	13	14	11
18	17	17	7.0	14	500	111	169	19	15	10	14	11
19	18	19	5.0	17	610	237	281	19	17	53	16	11
20	19	17	7.0	25	500	715	238	21	17	27	16	11
21	18	20	13	40	400	574	199	20	15	164	15	11
22	18	17	11	30	150	519	142	19	14	120	15	13
23	18	13	9.0	20	90	352	101	35	12	384	13	19
24	18	10	9.4	16	60	205	81	29	11	309	12	18
25	18	12	10	13	40	138	61	61	10	117	12	20
26	20	13	9.4	10	35	110	51	58	9.5	62	12	18
27	18	11	12	7.4	32	93	41	103	8.4	41	12	16
28	17	14	16	12	32	81	36	110	8.0	34	11	17
29	32	19	14	17	---	75	34	64	7.4	44	10	18
30	40	16	16	22	---	70	36	39	7.2	28	9.5	17
31	35	---	19	80	---	65	---	33	---	31	8.8	---
TOTAL	562	544	470.8	764.9	4688	6239	2203	1473	719.5	1633.4	611.3	365.9
MEAN	18.1	18.1	15.2	24.7	167	201	73.4	47.5	24.0	52.7	19.7	12.2
MAX	40	29	27	100	610	950	281	128	138	384	72	20
MIN	15	10	5.0	4.5	17	29	29	19	7.2	5.8	8.8	5.9
AC-FT	1110	1080	934	1520	9300	12380	4370	2920	1430	3240	1210	726

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1997, BY WATER YEAR (WY)

	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
MEAN	11.5	10.4	10.1	10.8	33.5	84.0	32.8	52.0	67.8	32.5	16.1	8.92
MAX	89.1	29.1	21.3	45.1	195	300	249	399	561	320	107	64.2
(WY)	1987	1975	1970	1974	1974	1994	1971	1962	1962	1962	1953	1986
MIN	.000	.19	.38	.34	.88	3.69	.39	.068	.17	.17	.010	.000
(WY)	1953	1961	1962	1962	1946	1961	1961	1961	1974	1950	1960	1956

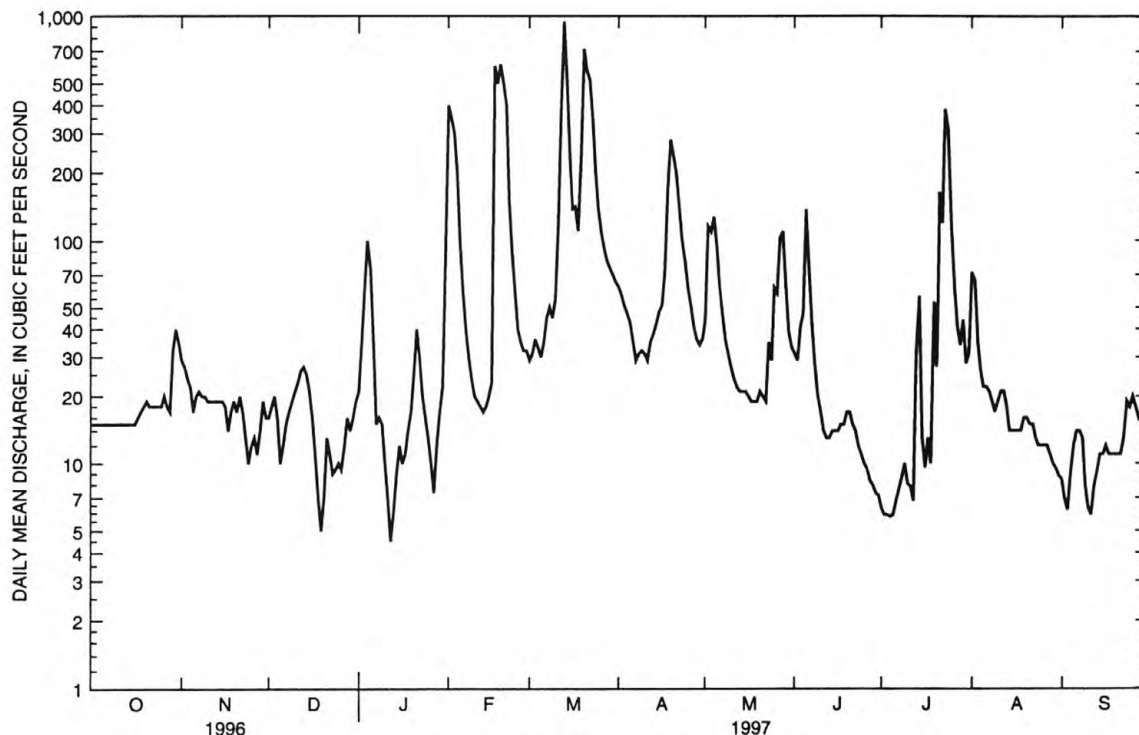
06394000 BEAVER CREEK NEAR NEWCASTLE, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1945 - 1997
ANNUAL TOTAL	19454.04	20274.8	--
ANNUAL MEAN	53.2	55.5	30.9
HIGHEST ANNUAL MEAN	--	--	130 1962
LOWEST ANNUAL MEAN	--	--	5.13 1961
HIGHEST DAILY MEAN	1040 May 28	950 Mar 13	6550 Jun 16 1962
LOWEST DAILY MEAN	.94 Aug 28	4.5 Jan 12	.00 Several years
ANNUAL SEVEN-DAY MINIMUM	1.5 Aug 22	6.3 Jun 30	.00 Several years
INSTANTANEOUS PEAK FLOW	--	1030 ^b Mar 13	11900 ^c Jun 16 1962
INSTANTANEOUS PEAK STAGE	--	10.33 ^a Feb 19	19.98 Jun 16 1962
ANNUAL RUNOFF (AC-FT)	38590	40220	22360
10 PERCENT EXCEEDS	110	116	51
50 PERCENT EXCEEDS	17	19	9.2
90 PERCENT EXCEEDS	6.0	9.5	.58

a At least, backwater from ice.

b From floodmarks, gage height 9.17 ft.

c From rating curve extended above 4,000 ft³/s on basis of contracted-opening measurement of peak flow.



06394000 BEAVER CREEK NEAR NEWCASTLE, WY

06395000 CHEYENNE RIVER AT EDMONT, SD

LOCATION.--Lat 43°18'20", long 103°49'14", in SW¹/₄ SE¹/₄ 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. Datum of gage is 3,414.56 ft above sea level. Prior to Dec. 1, 1906, nonrecording gage 20 ft upstream at datum 0.7 ft lower. Apr. 11, 1928, to Feb. 28, 1933, Oct. 4, 1946, to Oct. 23, 1947, and Jan. 11, 1961, to Apr. 24, 1963, nonrecording gage, and Oct. 24, 1947, to Jan. 10, 1961, and Apr. 25, 1963, to Sept. 30, 1972, water-stage recorder all at present site at datum 2.00 ft higher.

REMARKS.--Records good 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. Bureau of Reclamation satellite data-collection platform at station. Station operated and record provided by South Dakota District.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 12, 1920, reached a stage of 13.0 ft and May 1, 1922, 14.0 ft, present datum, from floodmarks at railroad bridge.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	45	e11	e9.0	e25	230	97	93	109	21	169	15
2	16	42	e11	e12	e350	260	94	119	101	19	272	14
3	18	31	e11	e30	e300	241	96	196	233	21	320	13
4	21	25	e11	e40	e280	200	83	201	200	19	222	12
5	20	27	e15	e40	e280	181	93	292	160	19	177	12
6	21	29	e15	e40	e270	170	119	205	223	18	111	15
7	22	28	e15	e50	e270	171	71	140	142	16	98	16
8	22	31	e15	e60	e260	176	78	104	100	14	90	17
9	23	30	e16	e65	e260	163	80	94	80	14	71	17
10	e22	28	e17	e60	e170	233	77	87	74	12	61	15
11	21	28	e18	e8.0	e90	e290	85	72	66	9.2	56	12
12	20	26	e19	e7.0	e78	e350	77	77	69	8.3	53	12
13	20	29	e19.5	e6.0	e69	e420	76	66	56	6.6	48	12
14	24	27	e19.5	e6.0	e60	e480	77	60	52	7.3	43	12
15	23	30	e19.5	e6.0	e50	455	76	58	61	41	36	14
16	23	32	e17	e5.5	e100	281	76	55	60	18	33	14
17	26	e28	e14	e4.7	e190	216	82	55	55	8.5	32	15
18	24	e25	e11	e4.0	e300	220	104	56	50	8.3	31	16
19	26	e21	e9.5	e3.4	e700	186	276	52	46	15	32	15
20	31	e20	e9.5	e3.2	e680	e300	402	51	46	407	29	16
21	29	e20	e9.5	e10	e600	e460	391	50	45	207	27	16
22	28	e19	e9.0	e30	e580	648	352	53	41	225	25	18
23	29	e17	e8.0	e35	e540	557	271	59	36	154	23	22
24	28	e15	e7.0	e35	e520	388	214	67	33	507	22	24
25	27	e15	e7.0	e35	446	252	180	93	36	351	19	25
26	30	e13	e7.0	e6.0	367	185	133	148	31	140	18	27
27	31	e11	e7.0	e5.4	342	167	109	161	29	73	19	26
28	30	e11	e7.0	e5.3	286	145	96	204	27	57	19	23
29	34	e11	e7.0	e5.3	---	119	84	290	25	59	20	23
30	69	e15	e8.0	e6.5	---	108	87	214	23	98	18	24
31	57	---	e8.0	e17	---	97	---	139	---	121	17	---
TOTAL	831	729	378.0	650.3	8463	8349	4136	3611	2309	2694.2	2211	512
MEAN	26.8	24.3	12.2	21.0	302	269	138	116	77.0	86.9	71.3	17.1
MAX	69	45	20	65	700	648	402	292	233	507	320	27
MIN	16	11	7.0	3.2	25	97	71	50	23	6.6	17	12
AC-FT	1650	1450	750	1290	16790	16560	8200	7160	4580	5340	4390	1020

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1997, BY WATER YEAR (WY)

	MEAN	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
MEAN	16.6	11.5	7.40	7.36	40.3	124	63.8	225	254	128	68.8	27.3
MAX	202	51.0	32.3	34.6	302	506	559	2192	2084	806	388	275
(WY)	1987	1983	1983	1995	1997	1994	1955	1978	1962	1958	1955	1973
MIN	.000	.023	.000	.000	.000	3.39	.22	.27	1.76	.15	.000	.000
(WY)	1961	1962	1960	1950	1960	1961	1961	1960	1966	1985	1960	1956

CHEYENNE RIVER BASIN

06395000 CHEYENNE RIVER AT EDMONT, SD--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1929-1932, 1947-1997
ANNUAL TOTAL	27526.93	34873.5	--
ANNUAL MEAN	75.2	95.5	81.4 ^a
HIGHEST ANNUAL MEAN	--	--	434
LOWEST ANNUAL MEAN	--	--	12.0
HIGHEST DAILY MEAN	1400 Mar 15	700 Feb 19	24000 May 20 1978 ^b
LOWEST DAILY MEAN	.10 Aug 28	3.2 Jan 20	.00 Jan 5 1947 ^b
ANNUAL SEVEN-DAY MINIMUM	.24 Jan 30	4.7 Jan 14 ^d	.00 Aug 31 1947 ^c
INSTANTANEOUS PEAK FLOW	--	800 Feb 19 ^f	28000 May 20 1978
INSTANTANEOUS PEAK STAGE	--	6.24 Feb 2 ^f	13.65 May 20 1978
ANNUAL RUNOFF (AC-FT)	54600	69170	58990
10 PERCENT EXCEEDS	157	274	154 ^c
50 PERCENT EXCEEDS	23	35	10 ^c
90 PERCENT EXCEEDS	2.1	11	.10 ^c

a Median of annual mean discharges, 72 ft³/s.

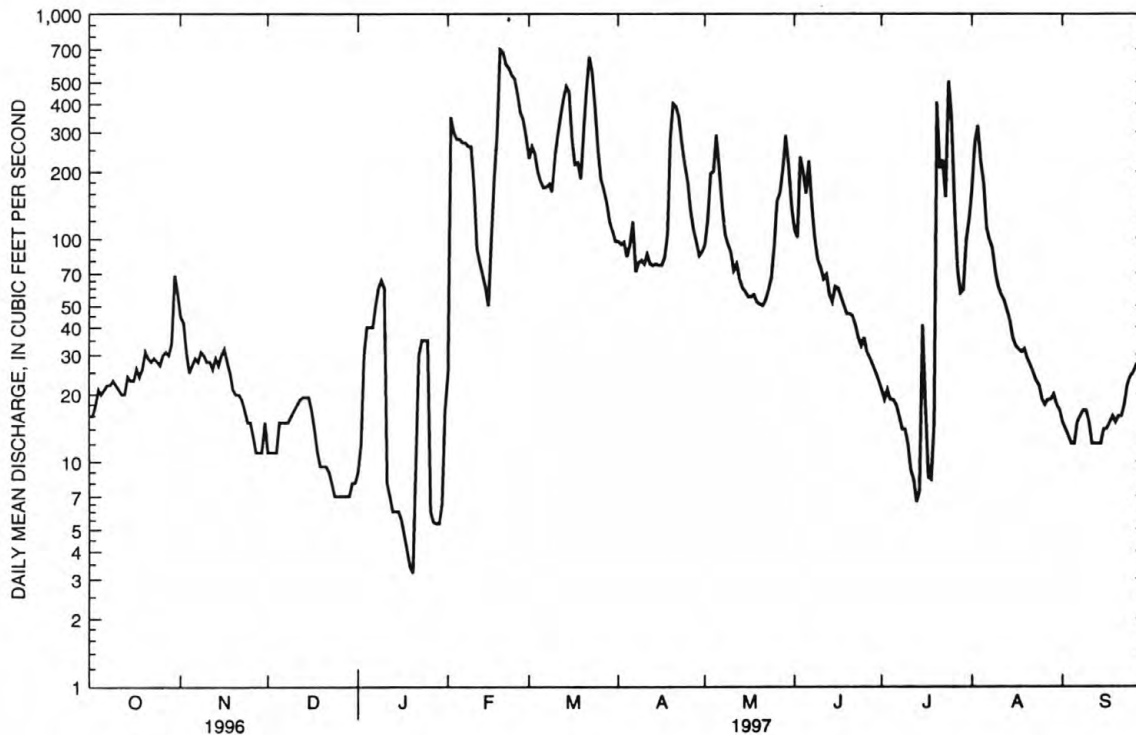
b No flow at times in most years.

c Reflects water years 1947-97 only.

d Gage height, 4.87 ft.

e Estimated.

f Backwater from ice.



06395000 CHEYENNE RIVER AT EDMONT, SD

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LOCATION.--Lat 44°19'19", long 104°56'24", in NW¹/₄ NW¹/₄ 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.

WATER-DISCHARGE RECORDS

GAGE.--Water-stage recorder. Elevation of gage is 4,110 ft above sea level, from topographic map. Prior to Mar. 28, 1947, nonrecording gage, and Mar. 28, 1947, to Jan. 16, 1951, water-stage recorder at site 4 mi downstream at different datum. Jan. 17, 1951, to September 1970, water-stage recorder at site 7.9 mi upstream at different datum. September 1970 to Oct. 22, 1993, water-stage recorder at site 8.0 mi upstream at different datum.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 360 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 3	unknown	unknown	*9.10
Apr. 19	0200	*422 ^a	7.94

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	7.1	5.6	35	50	45	37	147	20	17	83	3.5
2	5.0	7.1	5.4	310	82	42	36	107	19	14	59	4.2
3	5.0	7.3	5.3	350	170	39	37	177	19	12	57	4.5
4	5.0	7.6	5.0	320	120	39	36	99	18	11	36	4.4
5	5.0	8.0	4.5	120	92	40	36	63	22	11	27	4.7
6	5.0	8.2	4.2	72	68	45	33	47	19	10	40	5.7
7	5.0	7.6	3.8	60	36	50	31	40	17	10	27	5.0
8	5.0	7.5	4.3	48	43	80	33	36	16	10	19	3.6
9	4.9	8.0	4.8	28	35	170	36	31	16	9.5	16	2.9
10	4.5	8.6	5.5	15	17	250	37	28	15	9.5	14	2.5
11	4.7	8.3	5.2	9.0	14	300	35	28	15	9.1	13	2.3
12	4.7	7.8	4.7	5.0	11	270	36	28	16	7.8	9.6	2.0
13	4.7	7.3	4.5	5.8	10	170	35	27	13	7.2	7.8	1.9
14	5.0	7.0	4.2	6.0	12	120	33	25	12	6.7	7.3	1.8
15	5.0	6.6	3.6	7.0	15	70	31	25	13	6.5	7.2	1.6
16	5.2	6.3	3.6	6.2	26	88	40	24	15	6.0	7.7	1.9
17	4.8	6.2	2.8	6.5	72	100	130	24	15	5.4	8.8	1.8
18	4.8	6.2	2.3	6.9	200	100	326	23	15	4.9	8.7	1.6
19	5.8	6.6	1.7	10	330	132	358	23	17	5.5	9.1	1.8
20	7.0	6.0	1.9	15	370	79	294	23	19	6.3	9.2	2.2
21	9.3	5.6	3.0	14	350	65	244	23	17	10	9.1	2.1
22	10	5.2	4.5	14	180	57	214	22	14	45	9.1	2.1
23	9.7	4.7	3.5	20	130	48	166	21	12	100	8.3	3.9
24	7.8	4.5	4.0	25	94	42	117	19	12	75	6.5	5.3
25	8.4	5.3	4.3	35	78	41	87	18	12	45	6.7	4.9
26	7.4	6.0	3.5	15	65	40	72	18	10	24	6.5	8.3
27	6.8	6.8	3.9	5.0	56	39	60	20	12	15	6.5	6.6
28	7.8	6.8	5.0	11	50	39	56	21	12	19	6.5	5.7
29	7.3	6.4	5.0	16	---	39	51	28	11	14	6.0	5.1
30	7.5	6.0	5.6	27	---	38	52	27	13	17	5.1	4.6
31	7.0	---	8.0	40	---	38	---	24	---	107	3.9	---
TOTAL	190.3	202.6	133.2	1657.4	2776	2715	2789	1266	456	650.4	540.6	108.5
MEAN	6.14	6.75	4.30	53.5	99.1	87.6	93.0	40.8	15.2	21.0	17.4	3.62
MAX	10	8.6	8.0	350	370	300	358	177	22	107	83	8.3
MIN	4.5	4.5	1.7	5.0	10	38	31	18	10	4.9	3.9	1.6
AC-FT	377	402	264	3290	5510	5390	5530	2510	904	1290	1070	216

MEAN	4.45	1.74	1.99	3.34	19.2	62.2	24.8	72.7	64.5	20.0	10.9	5.49
MAX	68.0	14.4	22.3	53.5	260	374	190	1057	509	72.5	57.3	63.5
(WY)	1995	1996	1956	1997	1962	1978	1944	1978	1964	1948	1993	1951
MIN	.000	.000	.000	.000	.000	.10	.000	.045	.097	.000	.000	.000
(WY)	1944	1944	1944	1944	1944	1951	1961	1958	1966	1954	1944	1944

06426500 BELLE FOURCHE RIVER BELOW MOORCROFT, WY--Continued

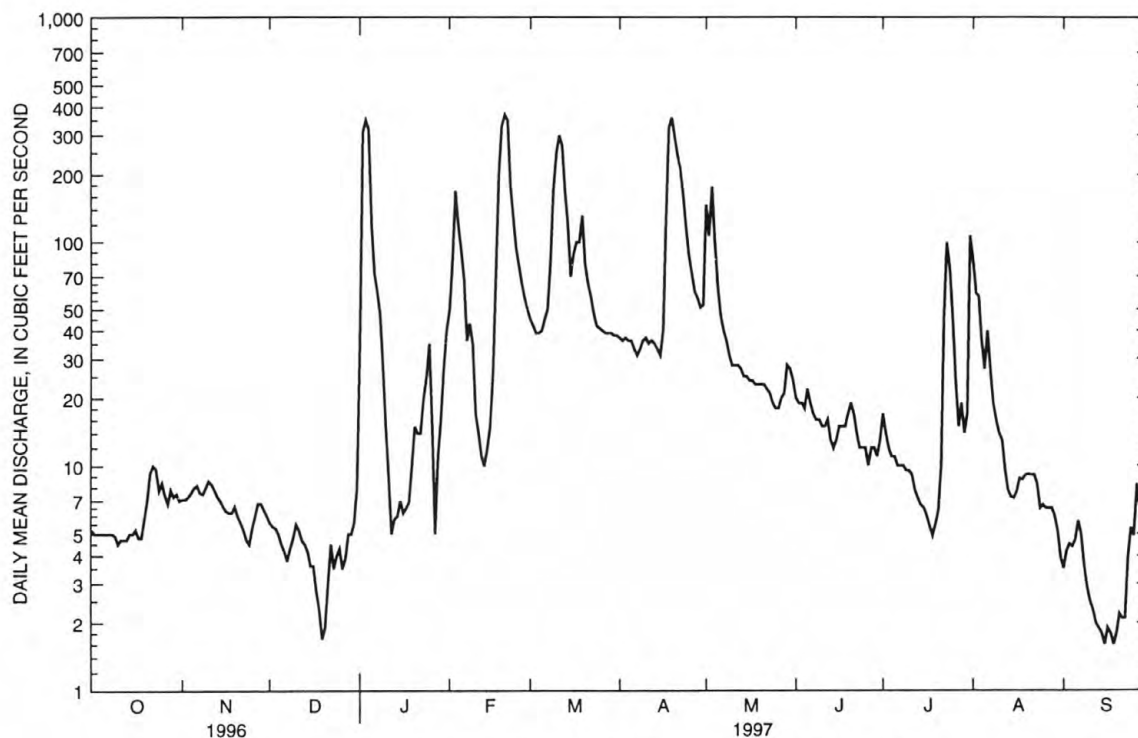
SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1944 - 1997	
ANNUAL TOTAL	9329.6		13485.0		--	
ANNUAL MEAN	25.5		36.9		24.3	
HIGHEST ANNUAL MEAN	--		--		136	
LOWEST ANNUAL MEAN	--		--		1.14	
HIGHEST DAILY MEAN	840	Mar 13	370	Feb 20	10300	May 19 1978
LOWEST DAILY MEAN	1.7	Dec 19	1.6	Sep 15, 18	.00	Several days, most years
ANNUAL SEVEN-DAY MINIMUM	2.7	Dec 15	1.8	Sep 13	.00	Several days, most years
INSTANTANEOUS PEAK FLOW	--		422 ^a		15300 ^b	
INSTANTANEOUS PEAK STAGE	--		9.10 ^c		14.60 ^d	
ANNUAL RUNOFF (AC-FT)	18510		26750		17620	
10 PERCENT EXCEEDS	40		93		35	
50 PERCENT EXCEEDS	8.6		12		1.1	
90 PERCENT EXCEEDS	4.6		4.5		.00	

a Gage height 7.94 ft. Maximum recorded, may have been higher during period of estimated discharge.

b From rating curve extended above 11,000 ft³/s, site and datum then in use.

c From floodmarks, backwater from ice.

d From floodmarks in gage shelter, site and datum then in use.



06426500 BELLE FOURCHE RIVER BELOW MOORCROFT, WY

CHEYENNE RIVER BASIN

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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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)
NOV 13...	1540	7.3	2690	8.4	0.5	-4.0	663	9.9
JAN 28...	1500	2.0	1520	7.6	0.0	0.5	658	4.9
MAY 07...	0800	42	1840	8.1	13.5	10.0	658	10.0
AUG 26...	1040	6.5	2570	8.3	21.5	26.0	661	8.8

DATE	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
NOV 13...	80	54	0.07	3.70	0.02	0.13	140
JAN 28...	39	K15	0.03	1.30	1.10	0.10	120
MAY 07...	112	320	0.02	0.57	<0.01	<0.01	98
AUG 26...	116	280	0.01	0.05	<0.01	<0.01	84

K-Results based on colony count outside the acceptable range (non-ideal colony count).

CHEYENNE RIVER BASIN

06427000 KEYHOLE RESERVOIR NEAR MOORCROFT, WY

LOCATION.--Lat 44°22'55", long 104°46'45", in NW¹/₄ NW¹/₄ sec.27, T.51 N., R.66 W., Crook County, Hydrologic Unit 10120201, at reservoir dam on Belle Fourche River 12 mi northeast of Moorcroft.

DRAINAGE AREA.--1,953 mi².

PERIOD OF RECORD.--March 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level (Bureau of Reclamation datum). Prior to May 15, 1958, and Oct. 1, 1968 to Mar. 13, 1970, nonrecording gages; May 15 1958, to Sept. 30, 1968, water-stage recorder; all at present site and datum.

REMARKS.--Reservoir is formed by a zoned earthfill dam completed by the Bureau of Reclamation Oct. 25, 1952. Storage began Feb. 12, 1952. Dead storage, below elevation 4,036.0 ft, 730 acre-ft. Inactive storage, between elevations 4,036.0 ft and 4,051.0 ft, 7,230 acre-ft. Total capacity below elevation 4,099.3 ft, crest of spillway, 193,800 acre-ft. Figures given herein represent total contents. The reservoir provides flood control and water for irrigation in Wyoming and near Belle Fourche, SD.

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily contents, 210,000 acre-ft, May 21, 1978, elevation, 4,100.38 ft; minimum daily contents (since appreciable storage was attained), 6,000 acre-ft, May 8, 9, 1955, elevation, 4,046.35 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 187,00 acre-ft, Apr. 22-30, May 4, maximum elevation, 4,098.55 ft, Apr. 23; minimum daily contents, 141,000 acre-ft, Oct. 3 to Dec 17, minimum elevation, 4,092.95 ft, Oct.15.

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

4,090	120,000
4,095	156,000
4,100	200,000

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY OBSERVATION AT 2400 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142000	141000	141000	143000	149000	163000	182000	186000	184000	182000	181000	178000
2	142000	141000	141000	144000	149000	163000	182000	186000	184000	182000	181000	178000
3	141000	141000	141000	146000	150000	163000	182000	186000	184000	182000	181000	178000
4	141000	141000	141000	146000	151000	163000	182000	187000	184000	182000	181000	178000
5	141000	141000	141000	146000	151000	163000	182000	186000	184000	181000	181000	178000
6	141000	141000	141000	147000	151000	164000	182000	186000	184000	181000	181000	178000
7	141000	141000	141000	147000	152000	164000	182000	186000	184000	181000	181000	177000
8	141000	141000	141000	147000	152000	164000	182000	186000	184000	181000	181000	177000
9	141000	141000	141000	147000	152000	165000	182000	186000	184000	181000	181000	177000
10	141000	141000	141000	147000	152000	167000	182000	186000	183000	181000	181000	177000
11	141000	141000	141000	147000	152000	169000	182000	185000	183000	181000	180000	177000
12	141000	141000	141000	147000	152000	170000	182000	185000	183000	181000	180000	177000
13	141000	141000	141000	147000	152000	171000	182000	185000	183000	181000	180000	177000
14	141000	141000	141000	147000	152000	171000	182000	185000	184000	181000	180000	176000
15	141000	141000	141000	147000	152000	172000	181000	185000	184000	181000	180000	177000
16	141000	141000	141000	147000	152000	172000	182000	185000	184000	181000	180000	176000
17	141000	141000	141000	147000	153000	173000	183000	185000	184000	181000	180000	176000
18	141000	141000	142000	147000	154000	176000	184000	184000	184000	181000	180000	176000
19	141000	141000	142000	147000	156000	178000	185000	184000	183000	181000	180000	176000
20	141000	141000	142000	148000	159000	179000	186000	184000	183000	181000	180000	176000
21	141000	141000	142000	148000	160000	180000	186000	184000	183000	180000	179000	176000
22	141000	141000	142000	148000	161000	180000	187000	184000	183000	180000	179000	176000
23	141000	141000	142000	148000	161000	181000	187000	184000	183000	180000	179000	176000
24	141000	141000	142000	148000	162000	181000	187000	184000	183000	180000	180000	176000
25	141000	141000	142000	148000	162000	181000	187000	184000	183000	180000	179000	176000
26	141000	141000	142000	148000	162000	181000	187000	184000	183000	180000	179000	176000
27	141000	141000	142000	148000	163000	181000	187000	184000	183000	181000	179000	175000
28	141000	141000	142000	148000	163000	181000	187000	184000	182000	181000	179000	175000
29	141000	141000	142000	148000	---	181000	187000	184000	183000	181000	179000	175000
30	141000	141000	142000	148000	---	182000	187000	184000	182000	181000	179000	175000
31	141000	---	142000	148000	---	182000	---	184000	---	181000	178000	---
MAX	142000	141000	142000	148000	163000	182000	187000	187000	184000	182000	181000	178000
MIN	141000	141000	141000	143000	149000	163000	181000	184000	182000	180000	178000	175000
(#)	4,092.99	4,092.96	4,093.17	4,093.98	4,095.80	4,098.01	4,098.53	4,098.24	4,098.03	4,097.91	4,097.62	4,097.27
(*)	-1,000	0	+1,000	+6,000	+15,000	+19,000	+5,000	-3,000	-2,000	-1,000	-3,000	-3,000

WTR YR 1997 MAX 187,000 MIN 141,000 (*) +33,000

(#) Elevation, in feet, at end of month.

(*) Change in contents, in acre-feet.

CHEYENNE RIVER BASIN

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06428050 BELLE FOURCHE RIVER BELOW HULETT, WY

LOCATION.--Lat 44°42'04", long 104°35'07", 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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
NOV 13...	1305	24	1880	8.0	2.0	-2.0	674
JAN 29...	0835	16	2040	7.6	0.0	-6.0	675
MAY 07...	1015	243	1250	8.1	13.5	13.0	667
JUL 25...	0655	36	1710	7.7	22.5	22.0	656

DATE	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
NOV 13...	12.1	100	K7	<0.01	0.15	0.06	<0.01
JAN 29...	8.6	67	K1200	0.02	0.32	0.08	<0.01
MAY 07...	9.2	101	35	<0.01	<0.05	<0.01	<0.01
JUL 25...	7.4	100	95	<0.01	0.07	0.03	0.01

K-Results based on colony count 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" 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 current year (no winter record).

GAGE.--Water-stage recorder. Elevation of gage is 3,600 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Apr. 6-13, May 12 to June 3, and June 6 to Aug. 11. Records fair except those for estimated daily discharges, which are poor. Major regulation by Keyhole Reservoir (station 06427000). Streamflow also affected by diversions for irrigation and return flow from irrigated areas. Results of discharge measurements, in cubic feet per second, made during the period when station was not in operation, are given below:

Oct. 1 . . . 24.2
Mar. 20 . . . 1740

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	240	404	177	78	92	28
2	---	---	---	---	---	---	209	412	171	77	81	33
3	---	---	---	---	---	---	190	393	162	76	70	31
4	---	---	---	---	---	---	200	368	158	74	60	29
5	---	---	---	---	---	---	213	358	153	86	59	28
6	---	---	---	---	---	---	132	344	140	75	58	26
7	---	---	---	---	---	---	103	325	130	72	57	27
8	---	---	---	---	---	---	96	302	122	71	53	28
9	---	---	---	---	---	---	89	281	112	68	47	28
10	---	---	---	---	---	---	100	261	105	63	44	27
11	---	---	---	---	---	---	115	257	100	58	42	26
12	---	---	---	---	---	---	150	250	97	58	41	25
13	---	---	---	---	---	---	187	240	100	57	41	25
14	---	---	---	---	---	---	226	232	105	54	43	25
15	---	---	---	---	---	---	252	224	108	50	42	25
16	---	---	---	---	---	---	287	218	140	48	41	25
17	---	---	---	---	---	---	477	212	139	46	40	24
18	---	---	---	---	---	---	878	210	130	46	38	25
19	---	---	---	---	---	---	810	220	120	48	37	24
20	---	---	---	---	---	---	743	215	110	58	36	24
21	---	---	---	---	---	---	718	207	115	63	32	25
22	---	---	---	---	---	---	689	200	105	67	29	28
23	---	---	---	---	---	---	605	190	174	64	28	32
24	---	---	---	---	---	---	509	200	140	63	28	33
25	---	---	---	---	---	---	444	210	118	66	29	33
26	---	---	---	---	---	---	419	268	99	79	31	32
27	---	---	---	---	---	---	415	245	90	68	32	32
28	---	---	---	---	---	---	415	228	83	62	31	31
29	---	---	---	---	---	---	461	214	80	170	30	30
30	---	---	---	---	---	---	434	200	84	270	29	29
31	---	---	---	---	---	---	---	183	---	168	28	---
TOTAL	---	---	---	---	---	---	10806	8071	3667	2403	1349	838
MEAN	---	---	---	---	---	---	360	260	122	77.5	43.5	27.9
MAX	---	---	---	---	---	---	878	412	177	270	92	33
MIN	---	---	---	---	---	---	89	183	80	46	28	24
AC-FT	---	---	---	---	---	---	21430	16010	7270	4770	2680	1660

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1997, BY WATER YEAR (WY)

MEAN	12.4	---	---	---	---	---	97.4	147	99.0	78.1	61.7	29.6
MAX	14.4	---	---	---	---	---	360	404	204	109	106	49.7
(WY)	1989	---	---	---	---	---	1997	1995	1993	1989	1989	1993
MIN	10.3	---	---	---	---	---	8.82	37.3	32.8	44.8	22.2	15.0
(WY)	1990	---	---	---	---	---	1992	1992	1992	1992	1996	1992

06428200 BELLE FOURCHE RIVER NEAR ALVA, WY--Continued

SUMMARY STATISTICS

FOR 1997 WATER YEAR*

WATER YEARS 1989 - 1997

HIGHEST DAILY MEAN	878	Apr 18	2000	May 9 1995
LOWEST DAILY MEAN	24	Sep 19, 20	3 ^b	Jun 11 1992
INSTANTANEOUS PEAK FLOW	1040 ^a	Apr 18	2690 ^b	May 8 1995
INSTANTANEOUS PEAK STAGE	5.63 ^c		8.15 ^d	Mar 20 1996

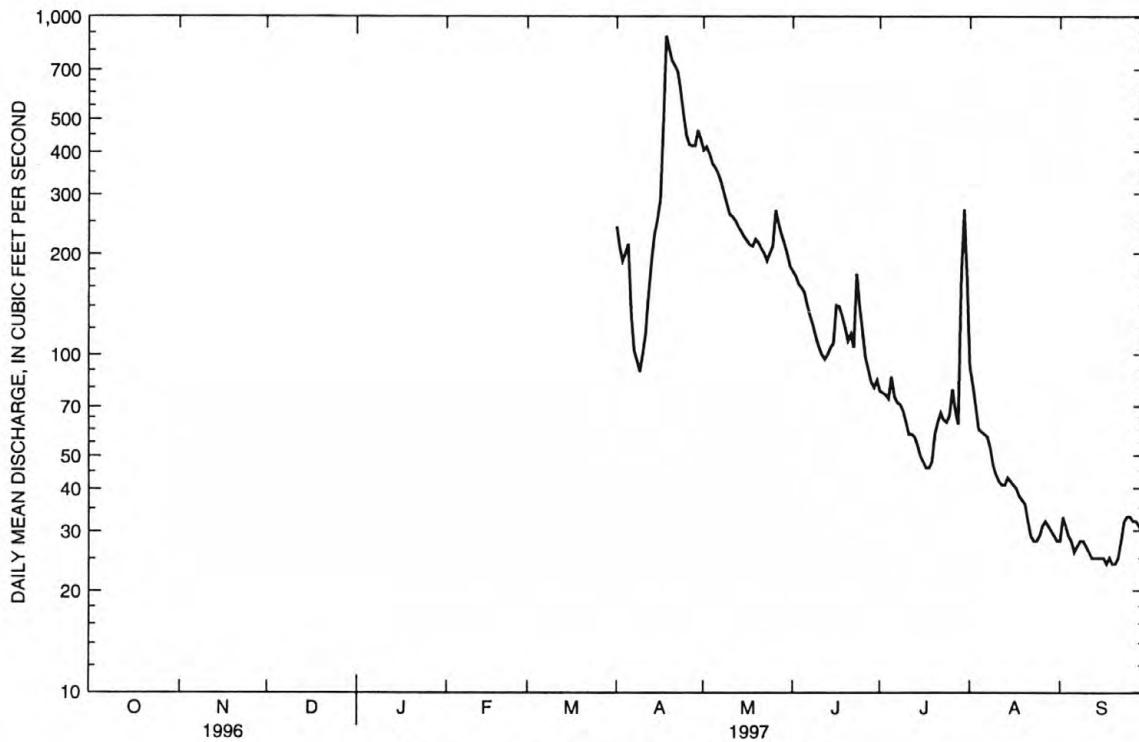
* During period of operation.

a Gage height, 4.61 ft.

b From floodmarks, gage height, 6.76 ft.

c At least, from measurement note, station not in operation.

d From floodmarks, backwater from ice. Probably occurred in March, when station was not in operation.



06428200 BELLE FOURCHE RIVER NEAR ALVA, WY

CHEYENNE RIVER BASIN

06428500 BELLE FOURCHE RIVER AT WYOMING-SOUTH DAKOTA STATE LINE

LOCATION.--Lat 44°44'59", long 104°02'49", in NE¹/4 NW¹/4 NW¹/4 sec.18, T.9 N., R.1 E., Butte County, South Dakota, 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, SD.

DRAINAGE AREA.--3,280 mi², approximately.

PERIOD OF RECORD.--December 1946 to current year. Records for water year 1947 incomplete, yearly estimate published in WSP 1729.

GAGE.--Water-stage recorder. Datum of gage is 3,095.7 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 5,400 acres. Flow regulated by Keyhole Reservoir (station 06427000), usable capacity, 191,600 acre-ft, 143 mi upstream since Oct. 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, Mar. 22, 1949, backwater from ice; no flow at times some years. Bureau of Reclamation satellite data-collection platform at station. Station operated and record provided by South Dakota District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	49	e45	e40	e800	e105	334	531	223	85	126	28
2	25	52	e40	e775	e900	e100	291	508	204	91	104	29
3	24	52	e40	e725	e800	e100	266	495	192	89	92	30
4	24	44	e40	e590	e630	e105	247	479	182	88	79	28
5	24	41	e37	e450	e530	e120	272	452	173	82	68	29
6	24	42	e35	e400	e470	e135	165	431	162	78	64	28
7	24	40	e37	e405	e390	e150	130	409	157	89	64	30
8	24	40	e40	e400	e300	e160	e115	395	150	76	62	28
9	24	39	e40	e300	e200	e170	e105	365	142	75	55	28
10	24	40	e40	e175	e160	e180	e120	353	136	70	52	28
11	24	39	e37	e85	e140	e185	e140	334	127	65	51	28
12	24	31	e31	e70	e125	e175	194	317	121	64	51	27
13	24	e27	e32	e63	e120	e115	284	309	117	63	49	27
14	25	e29	e34	e60	e120	e90	310	294	122	61	50	27
15	25	e37	e34	e64	e125	e100	432	278	122	60	44	26
16	26	e36	e30	e66	e135	e110	497	268	124	58	44	27
17	28	e34	e26	e68	e180	e200	668	257	159	56	50	26
18	31	e33	e24	e70	e410	289	915	249	157	53	52	25
19	33	e33	e24	e90	e350	428	1170	247	144	53	57	24
20	35	e35	e25	e170	e300	1090	1030	252	130	53	42	25
21	44	e35	e26	e350	e260	1670	996	245	120	69	42	26
22	42	e33	e25	e390	e225	1670	903	235	121	73	42	27
23	39	e29	e24	e350	e200	1260	828	226	110	76	38	29
24	35	e30	e23	e290	e180	906	730	219	198	72	35	31
25	35	e30	e23	e200	e150	700	648	237	154	72	33	32
26	165	e28	e21	e70	e140	584	582	318	116	74	33	34
27	137	e25	e23	e60	e130	508	548	409	103	91	34	33
28	79	e41	e25	e60	e115	445	535	365	93	72	33	33
29	59	e48	e27	e65	---	409	525	319	89	66	33	34
30	42	e48	e28	e150	---	404	547	270	91	128	29	34
31	38	---	e27	e600	---	391	---	244	---	206	30	---
TOTAL	1232	1120	963	7651	8585	13054	14527	10310	4239	2408	1638	861
MEAN	39.7	37.3	31.1	247	307	421	484	333	141	77.7	52.8	28.7
MAX	165	52	45	775	900	1670	1170	531	223	206	126	34
MIN	24	25	21	40	115	90	105	219	89	53	29	24
AC-FT	2440	2220	1910	15180	17030	25890	28810	20450	8410	4780	3250	1710

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1997, BY WATER YEAR (WY)*

MEAN	26.3	21.3	16.3	19.8	43.7	160	160	229	184	95.4	73.0	33.9
MAX	118	65.9	41.0	247	459	931	823	1104	812	303	271	109
(WY)	1972	1972	1974	1997	1996	1972	1971	1978	1984	1981	1980	1955
MIN	.000	.000	.000	.000	.20	15.7	15.1	3.10	11.9	2.94	.10	.000
(WY)	1955	1961	1961	1961	1959	1981	1992	1961	1961	1960	1961	1954

06428500 BELLE FOURCHE RIVER AT WYOMING-SOUTH DAKOTA STATE LINE--Continued

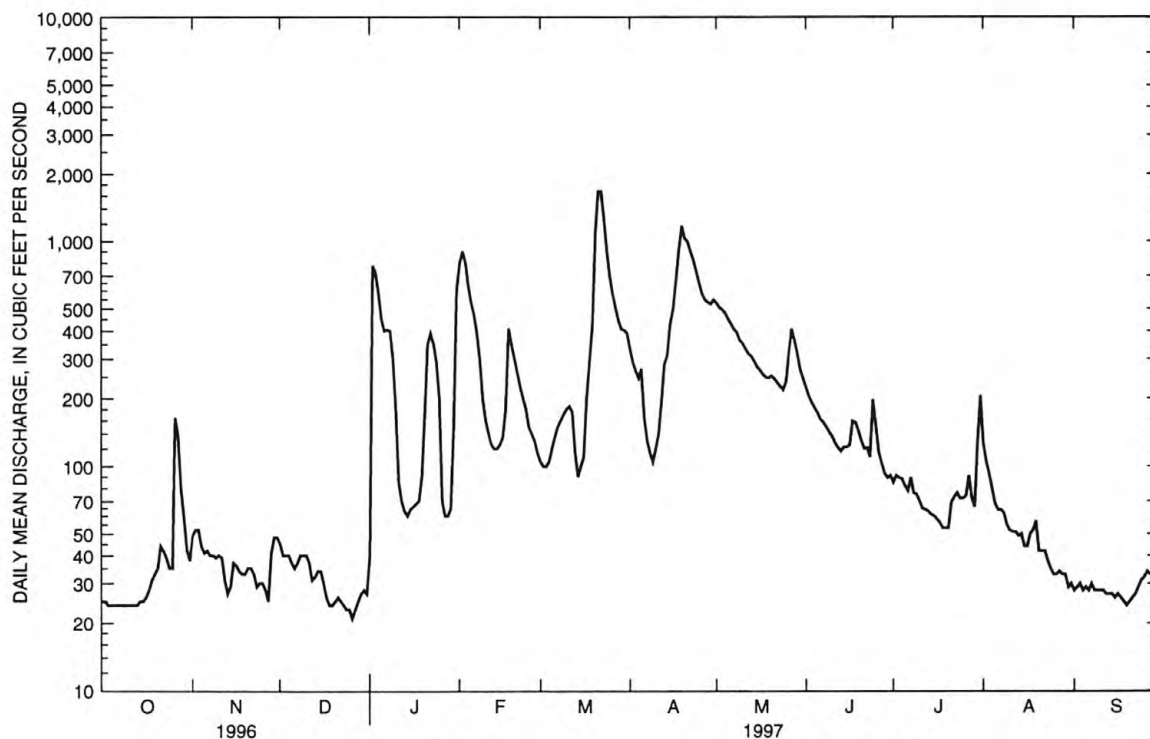
SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1954 - 1997*	
ANNUAL TOTAL	69845		66588		--	
ANNUAL MEAN	191		182		88.8	
HIGHEST ANNUAL MEAN	--		--		229	1978
LOWEST ANNUAL MEAN	--		--		7.69	1961
HIGHEST DAILY MEAN	4560	Mar 15	1670	Mar 21, 22	4760	May 9 1995 ^a
LOWEST DAILY MEAN	12	Mar 8	21	Dec 26	.00	Jul 30 1954 ^a
ANNUAL SEVEN-DAY MINIMUM	16	Jan 26	23	Dec 22	.00	Jul 30 1954 ^b
INSTANTANEOUS PEAK FLOW	--		1840	Mar 22	6320	May 10 1995 ^b
INSTANTANEOUS PEAK STAGE	--		11.58	Mar 22	16.33	May 10 1995
ANNUAL RUNOFF (AC-FT)	138500		132100		64330	
10 PERCENT EXCEEDS	488		474		194	
50 PERCENT EXCEEDS	44		82		35	
90 PERCENT EXCEEDS	23		27		4.7	

* Regulated period only (1954-97). See REMARKS.

a No flow at times in some years.

b Based on slope-area measurement of peak flow.

e Estimated.



06428500 BELLE FOURCHE RIVER AT WYOMING-SOUTH DAKOTA STATE LINE

CHEYENNE RIVER BASIN

06429500 COLD SPRINGS CREEK AT BUCKHORN, WY

LOCATION.--Lat 44°09'15", long 104°04'37", 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.--19.0 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 sea level, from topographic map. October 1974 to September 1982, 200 ft upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 18, 21, 22, 27, 28, Oct. 30 to Nov. 4, Nov. 6-9, 16-18, 23-25, 27, 28, Nov. 30 to Dec. 9, Dec. 12-20, Dec. 22 to Mar. 20, and Apr. 10-17. Records good except those for estimated daily discharges, which are poor. No diversion upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	4.1	4.0	4.8	5.4	4.6	5.5	5.5	6.0	6.1	5.9	6.1
2	4.2	4.3	4.4	5.0	5.2	4.8	5.5	5.4	6.2	6.1	5.7	6.1
3	4.2	4.5	3.0	5.0	5.2	5.0	5.5	5.5	6.1	6.1	5.7	6.1
4	4.2	4.5	2.9	4.8	5.0	4.8	5.5	5.7	6.1	6.1	5.7	6.1
5	4.2	4.5	2.9	4.5	4.9	4.8	5.5	5.7	6.1	6.1	5.8	6.1
6	4.2	4.5	2.9	4.2	4.8	4.8	5.5	5.7	6.1	6.1	5.9	6.1
7	4.1	3.8	2.8	3.5	4.7	5.0	5.5	5.7	6.1	5.9	5.7	6.1
8	4.0	4.1	2.8	3.9	4.6	5.2	5.5	5.9	6.1	5.9	5.7	6.1
9	4.0	4.2	3.5	4.5	4.6	5.0	5.5	6.1	6.1	5.9	5.7	6.1
10	4.0	4.5	4.5	4.0	4.7	5.0	5.2	6.1	6.1	5.9	5.9	6.1
11	4.0	4.5	4.5	3.3	4.7	5.2	4.6	6.1	5.9	5.9	5.9	6.1
12	4.0	4.5	4.3	2.3	4.6	5.2	5.4	5.9	5.9	6.2	5.9	6.1
13	4.0	4.4	4.0	1.8	4.8	4.6	5.6	5.9	5.9	6.2	5.9	6.1
14	4.0	4.2	4.0	2.3	4.9	4.0	5.4	5.9	5.8	6.1	5.9	6.1
15	4.0	4.2	3.6	3.0	5.0	4.4	5.4	5.9	5.7	6.1	5.9	6.1
16	4.0	4.0	2.7	3.9	5.2	4.8	5.3	5.9	5.7	5.9	5.9	6.1
17	4.0	3.2	1.5	3.5	5.2	5.5	5.3	5.9	5.7	5.9	5.9	6.1
18	3.5	3.8	.70	4.1	5.2	5.0	5.1	5.9	5.8	6.0	6.0	6.1
19	4.2	4.5	.45	4.6	5.2	5.2	5.1	5.9	6.0	6.1	6.1	6.1
20	4.2	4.4	.30	4.8	5.2	5.4	5.2	5.9	6.2	5.9	6.1	6.1
21	3.4	4.4	.70	4.8	5.0	5.5	5.4	5.9	6.1	6.0	6.1	6.1
22	3.9	4.4	1.5	4.6	4.8	5.5	5.3	5.9	6.1	5.9	6.1	6.1
23	4.4	4.0	.70	4.5	4.5	5.3	5.3	5.9	6.1	5.9	6.1	6.1
24	4.4	3.4	.90	4.3	4.3	5.3	5.3	5.9	6.1	5.9	6.2	6.1
25	4.4	3.7	1.2	4.2	4.6	5.3	5.2	5.9	6.1	5.8	6.3	6.1
26	2.6	4.5	1.0	3.9	4.9	5.3	5.3	5.9	6.0	5.7	6.3	6.1
27	3.5	4.5	1.6	3.2	4.9	5.3	5.4	5.9	5.9	5.8	6.4	6.1
28	4.9	4.4	3.0	2.8	4.9	5.3	5.5	5.9	5.9	5.9	6.3	6.1
29	4.8	4.4	2.5	4.8	---	5.3	5.5	5.9	5.9	5.9	6.3	6.1
30	4.0	3.6	3.5	5.2	---	5.3	5.5	5.9	6.0	5.9	6.3	6.1
31	3.2	---	4.6	5.4	---	5.5	---	5.9	---	5.9	6.1	---
TOTAL	124.7	126.0	80.95	125.5	137.0	157.2	160.8	181.4	179.8	185.1	185.7	183.0
MEAN	4.02	4.20	2.61	4.05	4.89	5.07	5.36	5.85	5.99	5.97	5.99	6.10
MAX	4.9	4.5	4.6	5.4	5.4	5.5	5.6	6.1	6.2	6.2	6.4	6.1
MIN	2.6	3.2	.30	1.8	4.3	4.0	4.6	5.4	5.7	5.7	5.7	6.1
AC-FT	247	250	161	249	272	312	319	360	357	367	368	363

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1997, BY WATER YEAR (WY)

MEAN	4.03	3.85	3.76	3.77	3.96	4.24	4.57	4.39	4.47	4.31	4.44	4.37
MAX	5.58	5.48	5.59	5.09	5.43	5.54	6.17	5.85	5.99	5.97	5.99	6.10
(WY)	1978	1977	1977	1981	1976	1976	1976	1997	1997	1997	1997	1997
MIN	2.53	2.09	2.06	2.50	2.61	2.91	3.07	3.10	3.19	2.62	2.71	2.92
(WY)	1975	1993	1993	1994	1993	1993	1993	1993	1994	1995	1995	1994

06429500 COLD SPRINGS CREEK AT BUCKHORN, WY--Continued

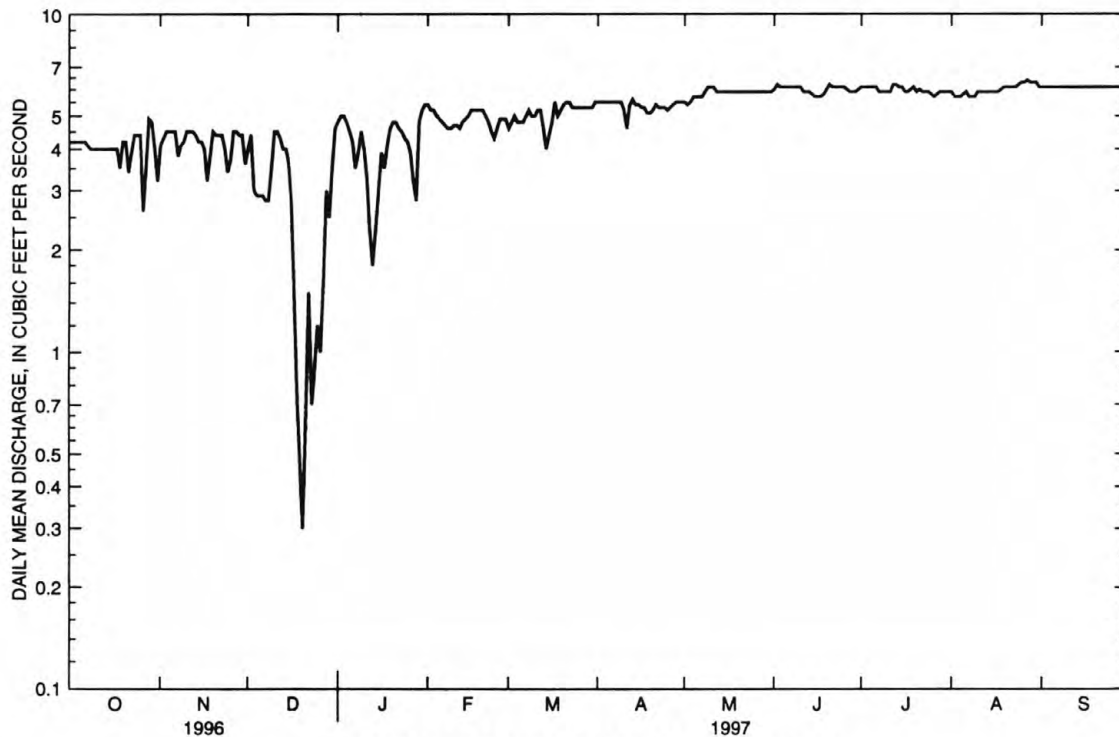
SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1975 - 1997
ANNUAL TOTAL	1442.05	1827.15	--
ANNUAL MEAN	3.94	5.01	4.20
HIGHEST ANNUAL MEAN	--	--	5.37 1976
LOWEST ANNUAL MEAN	--	--	2.92 1993
HIGHEST DAILY MEAN	6.0 Apr 11	6.4 Aug 27	9.5 Apr 22 1980
LOWEST DAILY MEAN	.30 Dec 20	.30 Dec 20	.30 Dec 20 1996
ANNUAL SEVEN-DAY MINIMUM	.75 Dec 18	.75 Dec 18	.75 Dec 18 1996
INSTANTANEOUS PEAK FLOW	--	7.0 ^a Aug 26	13 ^b Apr 1 1981
INSTANTANEOUS PEAK STAGE	--	2.96 ^c Dec 13	8.61 ^d Jan 12 1978
ANNUAL RUNOFF (AC-FT)	2860	3620	3040
10 PERCENT EXCEEDS	4.7	6.1	5.6
50 PERCENT EXCEEDS	4.2	5.3	4.3
90 PERCENT EXCEEDS	2.6	3.5	2.8

a Gage height, 2.31 ft.

b Gage height, 4.98 ft, site and datum then in use.

c Backwater from ice.

d Backwater from ice, site and datum then in use.



06429500 COLD SPRINGS CREEK AT BUCKHORN, WY

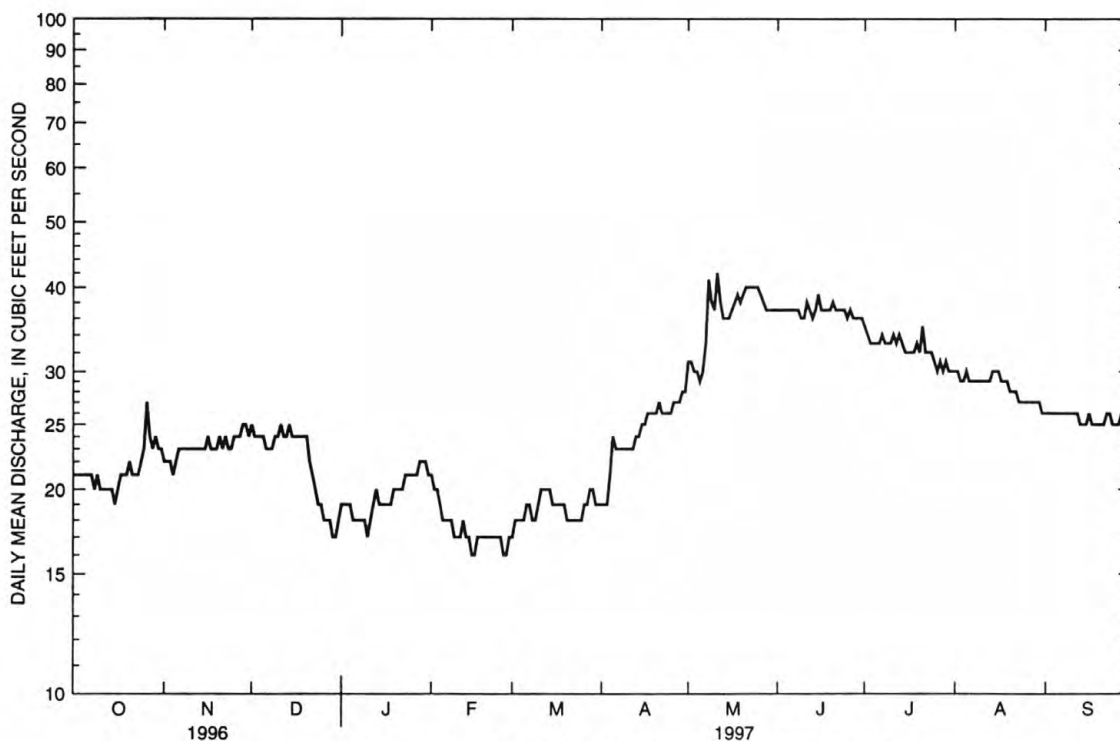
06429905 SAND CREEK NEAR RANCH A, NEAR BEULAH, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1977 - 1997	
ANNUAL TOTAL	9144		9350		--	
ANNUAL MEAN	25.0		25.6		22.4	
HIGHEST ANNUAL MEAN	--		--		29.5	
LOWEST ANNUAL MEAN	--		--		15.7	
HIGHEST DAILY MEAN	202	Mar 13	42	May 11	455	May 9 1995
LOWEST DAILY MEAN	17	Feb 2	16	Feb 15, 16, 26, 27	12	Mar 10 1992
ANNUAL SEVEN-DAY MINIMUM	18	Dec 25	17	Feb 13	13	Mar 8 1992
INSTANTANEOUS PEAK FLOW	--		47	May 11 ^a	1230	May 8 1995
INSTANTANEOUS PEAK STAGE	--		1.82 ^b	Jun 11	3.80 ^c	May 8 1995
ANNUAL RUNOFF (AC-FT)	18140		18550		16250	
10 PERCENT EXCEEDS	31		37		29	
50 PERCENT EXCEEDS	24		24		21	
90 PERCENT EXCEEDS	20		18		16	

a Gage height, 1.66 ft.

b Backwater from ice.

c From floodmarks, present site and datum.



06429905 SAND CREEK NEAR RANCH A, NEAR BEULAH, WY

CHEYENNE RIVER BASIN

06429997 MURRAY DITCH ABOVE HEADGATE, AT WYOMING-SOUTH DAKOTA STATE LINE

LOCATION.--Lat 44°34'35", long 104°03'20", in SW¹/₄ SW¹/₄ sec.7, T.7 N., R.1 E., Butte County, South Dakota, 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 sea level, from topographic map. Prior to Apr. 23, 1987, published as 06430000 (below diversion at site 15 ft downstream).

REMARKS.--Records fair. Ditch diverts water from left bank of Redwater Creek, 2.0 mi upstream, for irrigation of about 700 acres. Flow maintained during irrigation season only. Station operated and record provided by South Dakota District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e10	23
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e10	25
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	5.0	e10	21
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	10	e1.0	18
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	10	e.00	20
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	10	e.00	15
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	10	e.00	20
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.6	e.00	14
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.4	e.00	14
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.2	e.00	14
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.3	e.00	9.5
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.2	e.00	8.3
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	8.5	e.00	8.0
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	8.3	e.00	8.6
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	8.7	e.00	9.3
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	8.7	e.00	6.4
17	.00	.00	.00	.00	.00	.00	.23	.00	.00	8.7	e.00	7.0
18	.00	.00	.00	.00	.00	.00	.95	.00	.00	9.0	e.00	4.5
19	.00	.00	.00	.00	.00	.00	.76	.00	.00	18	.00	5.3
20	.00	.00	.00	.00	.00	.00	.40	.00	.00	e18	.00	6.5
21	.00	.00	.00	.00	.00	.00	.20	.00	.00	e20	5.1	6.6
22	.00	.00	.00	.00	.00	.00	.01	.00	.00	e19	7.9	7.7
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	e20	14	5.5
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	e20	16	2.1
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	e20	e16	1.7
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	e20	e16	1.7
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	e20	e16	1.7
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	e15	e16	1.7
29	.00	.00	.00	.00	---	.00	.00	.00	.00	e10	e18	3.2
30	.00	.00	.00	.00	---	.00	.00	.00	.00	e10	e22	7.1
31	.00	---	.00	.00	---	.00	---	.00	---	e10	21	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	2.55	0.00	0.00	363.60	199.00	296.4
MEAN	.000	.000	.000	.000	.000	.000	.085	.000	.000	11.7	6.42	9.88
MAX	.00	.00	.00	.00	.00	.00	.95	.00	.00	20	22	25
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.7
AC-FT	.00	.00	.00	.00	.00	.00	5.1	.00	.00	721	395	588

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1997, BY WATER YEAR (WY)

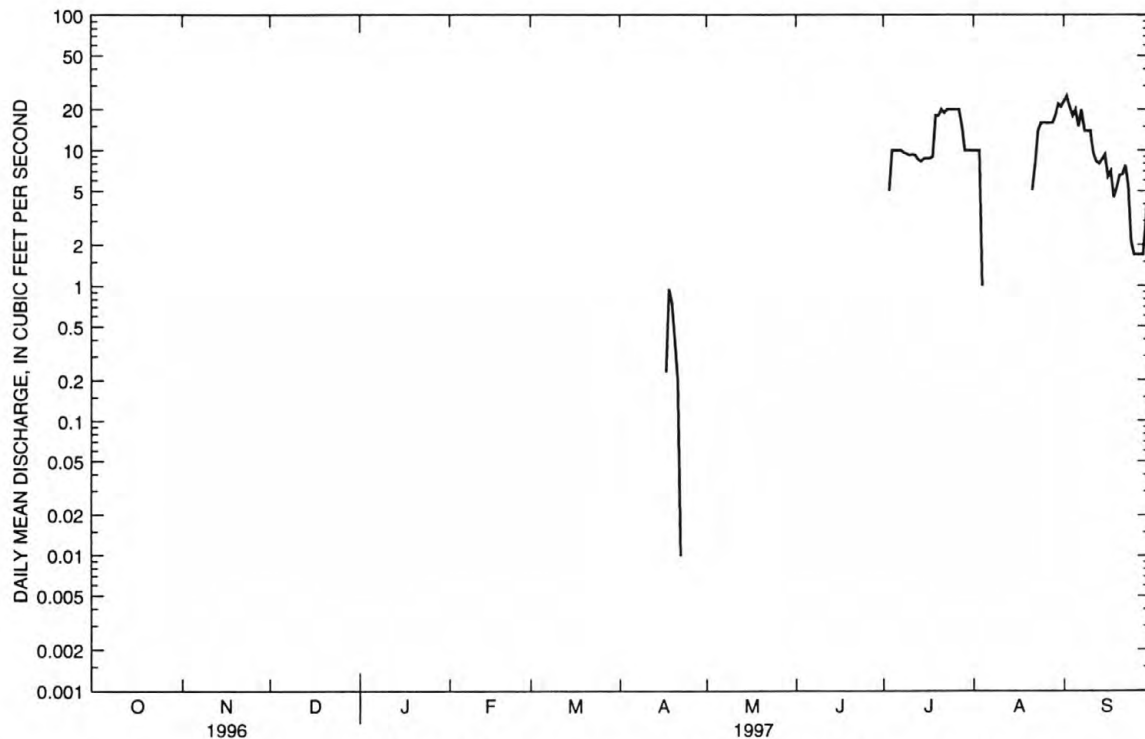
MEAN	6.23	.17	.000	.000	.000	.000	.014	1.12	5.69	10.5	9.16	8.79
MAX	20.6	.94	.000	.000	.000	.000	.085	6.30	13.9	16.4	18.2	18.8
(WY)	1991	1994	1988	1988	1988	1988	1997	1992	1988	1991	1991	1994
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.84	3.71	.80
(WY)	1988	1988	1988	1988	1988	1988	1988	1990	1991	1993	1993	1993

06429997 MURRAY DITCH ABOVE HEADGATE, AT WYOMING-SOUTH DAKOTA STATE LINE--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1988 - 1997	
ANNUAL TOTAL	976.15		861.55		--	
ANNUAL MEAN	2.67		2.36		3.50	
HIGHEST ANNUAL MEAN	--		--		5.32	
LOWEST ANNUAL MEAN	--		--		.92	
HIGHEST DAILY MEAN	25	Jul 19	25	Sep 2 ^a	46	Oct 8 1990
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1 ^a	.00	Oct 1 1987 ^a
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1987
ANNUAL RUNOFF (AC-FT)	1940		1710		2530	
10 PERCENT EXCEEDS	10		10		13	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

a No flow for many days in each year.

e Estimated.



06429997 MURRAY DITCH ABOVE HEADGATE AT WYOMING-SOUTH DAKOTA STATE LINE

LOCATION.--Lat 44°34'26", long 104°02'54", in NW¼ NW¼ 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.

PERIOD OF RECORD.--April 1929 to September 1931 and February 1936 to July 1937 (published as "near Beulah, WY"),
June 1954 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,410 ft above sea level, from topographic map. Apr. 25, 1929, to Sept. 30, 1931, and Feb. 28, 1936, to July 31, 1937, nonrecording gage at site 2 mi upstream at different datum.

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 06429997). Station operated and record provided by South Dakota District.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	38	32	e35	44	38	46	89	62	56	41	23
2	38	37	33	58	42	39	45	93	60	e56	38	24
3	38	37	32	49	42	38	46	91	59	46	38	25
4	38	37	32	46	40	37	48	86	56	40	45	25
5	39	37	33	43	39	37	53	93	56	40	50	25
6	39	38	33	43	40	37	73	102	56	40	49	26
7	39	38	32	38	40	38	35	112	56	41	48	26
8	39	37	32	36	39	38	35	114	55	41	48	27
9	39	37	36	34	40	37	37	103	55	41	48	29
10	39	37	34	e30	40	37	37	96	55	40	47	29
11	39	37	34	e28	40	37	36	95	59	40	47	29
12	38	36	33	e26	39	38	36	89	59	40	47	29
13	38	36	33	e24	40	37	37	80	57	38	47	30
14	38	36	34	e30	40	35	40	76	57	36	48	30
15	38	37	32	e35	42	36	42	74	63	36	48	30
16	39	37	e30	e37	50	37	43	70	77	36	48	31
17	40	36	e30	40	53	39	44	66	67	37	47	35
18	40	36	e30	40	49	38	46	68	62	37	47	41
19	40	36	e28	42	45	38	77	66	59	31	46	41
20	41	36	e30	44	42	38	79	62	58	25	45	41
21	40	35	33	47	41	42	103	61	59	30	39	41
22	39	33	31	42	40	44	107	61	58	29	33	42
23	38	33	32	41	38	44	93	59	58	28	34	46
24	38	32	e28	41	38	44	84	58	57	28	34	49
25	38	32	e25	37	39	44	73	61	56	29	34	48
26	45	32	e22	39	40	44	62	64	56	31	34	47
27	42	32	e24	e37	40	44	67	92	56	33	34	47
28	40	33	e24	e38	39	44	84	87	56	34	34	46
29	40	33	e25	39	---	44	100	77	57	39	31	44
30	39	32	e28	40	---	45	88	70	56	40	22	37
31	38	---	e28	43	---	46	---	65	---	40	23	---
TOTAL	1216	1063	943	1202	1161	1234	1796	2480	1757	1158	1274	1043
MEAN	39.2	35.4	30.4	38.8	41.5	39.8	59.9	80.0	58.6	37.4	41.1	34.8
MAX	45	38	36	58	53	46	107	114	77	56	50	49
MIN	38	32	22	24	38	35	35	58	55	25	22	23
AC-FT	2410	2110	1870	2380	2300	2450	3560	4920	3490	2300	2530	2070

MEAN	27.9	31.9	31.6	31.0	32.2	34.0	36.8	54.4	46.3	22.8	22.0	24.9
MAX	45.0	47.9	47.1	46.1	57.8	66.0	60.9	168	128	54.9	58.9	50.4
(WY)	1973	1974	1974	1974	1971	1996	1971	1995	1976	1976	1973	1973
MIN	14.2	20.8	21.5	20.7	21.2	22.1	18.8	7.44	6.29	7.62	6.78	11.8
(WY)	1991	1961	1993	1993	1993	1962	1981	1985	1961	1990	1985	1985

06430500 REDWATER CREEK AT WYOMING-SOUTH DAKOTA STATE LINE--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1955 - 1997*	
ANNUAL TOTAL	15655		16327		--	
ANNUAL MEAN	42.8		44.7		33.0	
HIGHEST ANNUAL MEAN	--		--		56.0	1973
LOWEST ANNUAL MEAN	--		--		17.9	1961
HIGHEST DAILY MEAN	459	Mar 13	114	May 8	1330	May 9 1995 ^a
LOWEST DAILY MEAN	17	Jul 23	22	Dec 26	1.3	May 22 1985 ^a
ANNUAL SEVEN-DAY MINIMUM	18	Jul 19	24	Aug 30 ^b	1.9	May 21 1985 ^c
INSTANTANEOUS PEAK FLOW	--		119	Apr 6 ^d	2440	Aug 22 1973 ^c
INSTANTANEOUS PEAK STAGE	--		3.97	May 27 ^d	12.19	Aug 22 1973
ANNUAL RUNOFF (AC-FT)	31050		32380		23890	
10 PERCENT EXCEEDS	61		66		46	
50 PERCENT EXCEEDS	37		40		30	
90 PERCENT EXCEEDS	26		30		15	

* Period using present site and datum only. See GAGE.

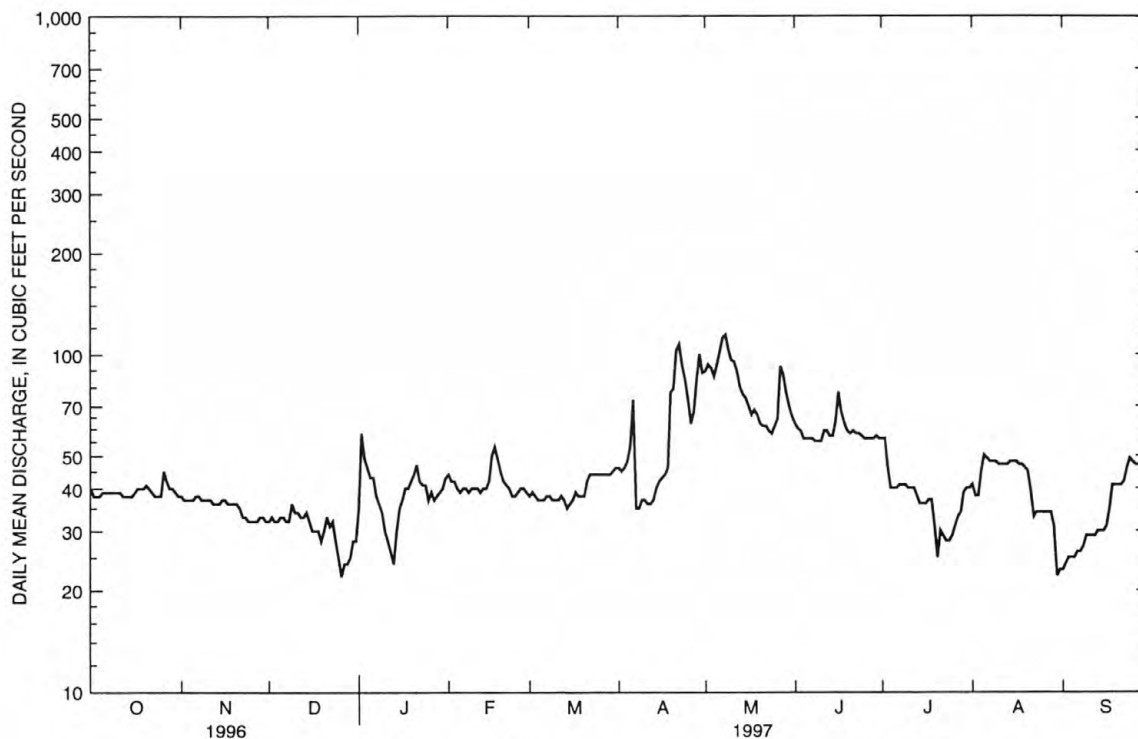
a No flow Aug. 13-15, 1929, during partial year.

b Gage height, 3.88 ft.

c From rating curve, extended above 1,000 ft³/s on basis of slope-area measurement.

d Discharge, 118 ft³/s.

e Estimated.



06430500 REDWATER CREEK AT WYOMING-SOUTH DAKOTA STATE LINE

PLATTE RIVER BASIN

06620000 NORTH PLATTE RIVER NEAR NORTHGATE, CO

LOCATION.--Lat 40°56'15", long 106°20'16", in NE¹/₄ SW¹/₄ SE¹/₄ 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. Datum of gage is 7,810.39 ft above sea level. See WSP 1730 for history of changes prior to Apr. 8, 1918. Apr. 8, 1918, to Aug. 21, 1961, water-stage recorder at site 0.7 mi downstream at datum 3.36 ft lower. Aug. 22, 1961, to Sept. 18, 1984, at site 650 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Oct. 18, 26-28, Nov. 8, 19, 25, 26, and Dec. 4 to Mar. 29. Records good except those for June 5 to July 17, which are fair and 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. National Weather Service data collection platform with satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	209	223	210	170	140	781	1940	3010	1070	787	236
2	151	201	209	220	160	145	656	1580	3060	1020	674	251
3	147	192	174	210	150	140	660	1250	3500	908	539	240
4	140	211	185	200	140	125	732	1090	3940	921	451	222
5	143	215	205	170	145	125	709	1120	4260	925	422	236
6	137	178	200	150	140	130	547	1360	4070	893	483	239
7	127	141	210	130	140	130	510	1600	3920	834	586	228
8	124	250	220	135	140	130	532	1810	3710	785	530	240
9	118	235	230	140	140	140	529	2050	3650	785	441	242
10	114	249	250	150	145	150	507	2210	3630	835	454	220
11	111	239	230	140	150	160	423	2210	3500	878	602	199
12	106	251	220	125	160	175	402	2270	3270	831	650	195
13	99	253	200	135	160	170	455	2280	3180	794	604	246
14	97	231	170	140	150	160	382	2210	2850	840	554	234
15	100	218	155	145	155	180	408	2260	2460	753	633	205
16	102	188	150	150	160	210	500	2320	2230	710	515	191
17	97	148	140	160	165	260	697	2360	2070	642	419	193
18	105	240	130	165	170	300	990	2540	1970	632	371	191
19	124	300	140	165	165	360	1260	2830	1990	699	387	441
20	129	358	150	170	160	470	1490	2830	2090	759	411	1540
21	120	368	170	160	150	670	1680	2800	2410	695	372	2700
22	102	405	170	160	145	1000	1710	2750	2750	636	339	3370
23	102	468	160	150	145	1700	1510	2840	2740	608	311	2750
24	113	404	160	140	140	1500	1330	3130	2440	541	289	1490
25	116	290	170	150	140	1400	1180	3830	2140	547	276	1110
26	120	270	180	160	140	1200	1070	3530	1810	523	266	889
27	120	253	190	150	145	1100	1150	3200	1450	480	275	826
28	130	235	200	150	150	1000	1220	2780	1300	474	274	885
29	173	276	200	145	---	950	1550	2310	1240	526	270	727
30	149	258	205	150	---	885	1960	2240	1190	585	256	622
31	184	---	205	160	---	808	---	2520	---	764	248	---
TOTAL	3853	7734	5801	4885	4220	16013	27530	72050	81830	22893	13689	21358
MEAN	124	258	187	158	151	517	918	2324	2728	738	442	712
MAX	184	468	250	220	170	1700	1960	3830	4260	1070	787	3370
MIN	97	141	130	125	140	125	382	1090	1190	474	248	191
AC-FT	7640	15340	11510	9690	8370	31760	54610	142900	162300	45410	27150	42360

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 1997, BY WATER YEAR (WY)

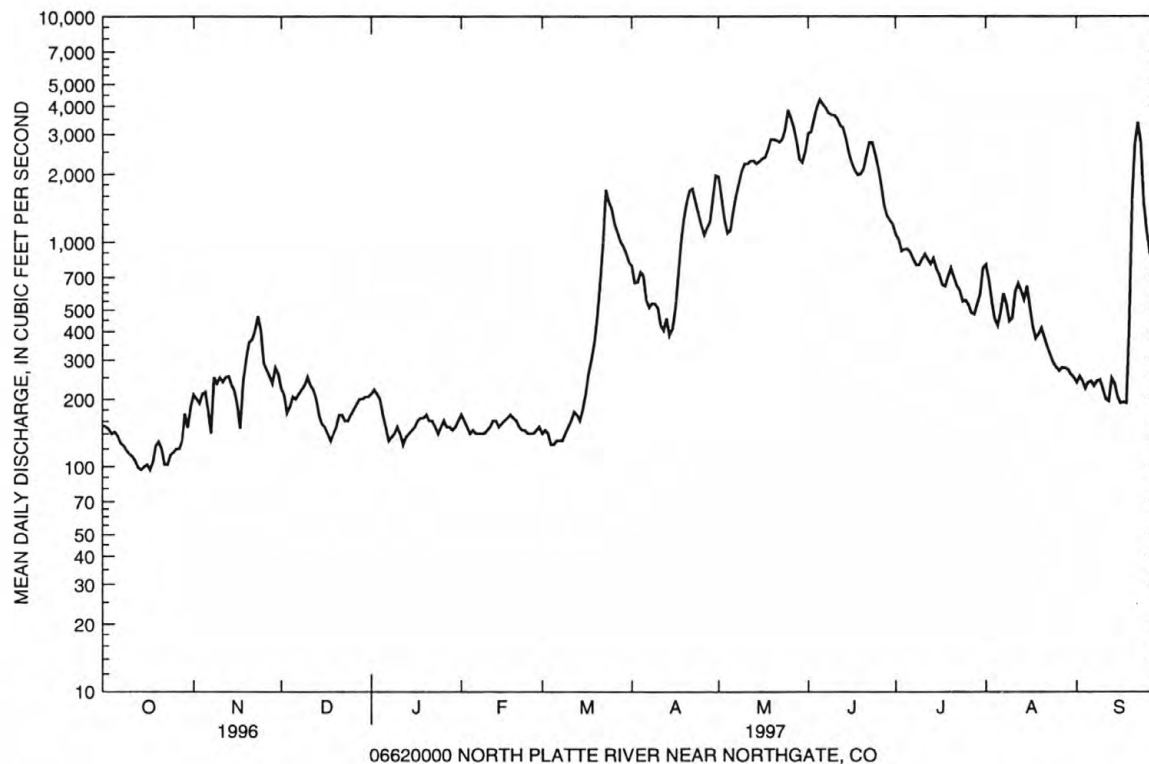
	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915
MEAN	160	151	102	82.6	87.9	172	762	1154	1497	645	268	152
MAX	538	366	200	177	199	722	2444	3649	3296	2367	763	712
(WY)	1962	1962	1928	1984	1986	1986	1962	1984	1983	1957	1983	1997
MIN	31.7	54.2	33.9	27.5	35.7	47.8	131	212	89.4	26.7	38.5	23.8
(WY)	1935	1935	1977	1977	1933	1964	1981	1981	1934	1934	1934	1934

06620000 NORTH PLATTE RIVER NEAR NORTHGATE, CO--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1904 - 1997	
ANNUAL TOTAL	232420		281856		--	
ANNUAL MEAN	635		772		438	
HIGHEST ANNUAL MEAN	--		--		878	1917
LOWEST ANNUAL MEAN	--		--		117	1977
HIGHEST DAILY MEAN	3760	Apr 11	4260	Jun 5	6450	Jun 10 1923
LOWEST DAILY MEAN	81	Sep 18	97	Oct 14, 17	19	Jul 17-19 1934
ANNUAL SEVEN-DAY MINIMUM	85	Sep 13	101	Oct 12	20	Jul 15 1934
INSTANTANEOUS PEAK FLOW	--		4390	Jun 5	6720 ^a	Jun 11 1923
INSTANTANEOUS PEAK STAGE	--		6.52	Jun 5	9.65 ^b	Apr 25 1980
ANNUAL RUNOFF (AC-FT)	461000		559100		317200	
10 PERCENT EXCEEDS	1990		2310		1240	
50 PERCENT EXCEEDS	193		274		161	
90 PERCENT EXCEEDS	109		140		68	

a Gage height 6.24 ft, site and datum then in use.

b Backwater from ice jam.



PLATTE RIVER BASIN

06622700 NORTH BRUSH CREEK NEAR SARATOGA, WY

LOCATION.--Lat 41°22'13", long 106°31'12", 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 sea level, from topographic map. Prior to June 17, 1971, at site 0.02 mi downstream at different datum. June 17, 1971, to Aug. 2, 1984, at site 0.2 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 16-18, 21-24, Oct. 27 to Nov. 8, Nov. 10-12, Nov. 22 to Dec. 5, Dec. 15-26, Jan. 3-7, 11, 12, 24, 25, 28-30, Feb. 4-9, Feb. 19 to Apr. 23. Records good except those for estimated daily discharges, which are poor. No diversion upstream from station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 350 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 21	2130	507	3.74
June 1	1830	*946	4.59

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	9.6	10	10	8.6	8.0	13	22	765	76	18	9.3
2	8.7	9.5	9.2	10	8.6	8.2	14	21	664	63	15	9.3
3	8.7	9.5	9.2	10	8.6	8.2	16	21	597	58	13	9.0
4	9.1	9.5	9.2	10	8.6	8.3	14	22	624	54	12	9.0
5	9.6	9.6	9.2	10	8.6	8.4	15	29	596	50	17	9.5
6	8.5	9.2	11	8.9	8.4	8.6	18	44	552	49	20	9.6
7	8.0	9.0	11	9.6	8.2	8.6	15	63	494	47	15	9.9
8	8.0	10	11	10	8.0	8.6	13	69	517	43	13	9.5
9	7.8	10	10	10	8.1	8.5	11	75	533	41	12	8.9
10	7.4	10	10	10	8.4	8.5	13	92	481	38	19	8.6
11	7.4	11	10	9.4	8.4	8.5	13	114	456	35	26	9.6
12	7.1	11	10	8.0	8.6	8.5	16	122	409	36	22	12
13	6.8	11	9.8	8.5	8.6	8.4	21	136	353	39	21	10
14	6.8	11	9.6	8.6	8.6	8.0	15	156	325	30	21	9.6
15	6.8	11	9.1	8.1	8.6	8.4	10	178	324	26	15	9.4
16	6.6	11	8.6	8.6	8.6	8.9	11	221	299	24	13	15
17	6.2	11	8.5	8.6	8.6	9.2	13	278	322	22	12	11
18	7.9	11	8.7	8.6	8.6	9.4	15	346	346	21	13	10
19	10	11	9.5	8.6	8.4	9.7	17	367	372	28	18	73
20	10	12	9.9	8.6	8.4	10	19	363	349	26	14	43
21	8.0	11	9.9	8.6	8.2	11	21	382	348	20	12	47
22	10	10	9.2	8.6	8.2	12	18	414	299	17	11	30
23	9.0	9.4	8.5	8.6	8.2	13	16	401	244	17	11	37
24	8.3	9.4	8.5	8.1	8.0	12	17	395	193	17	10	26
25	8.9	9.7	9.0	9.5	8.0	14	19	382	153	16	10	18
26	9.1	9.2	9.5	9.4	8.2	14	20	297	129	14	11	18
27	7.7	9.9	10	9.0	8.4	13	23	222	120	14	11	23
28	8.5	10	10	8.9	8.4	13	32	204	109	15	11	16
29	10	10	10	8.7	---	12	30	401	98	22	12	14
30	9.5	10	10	8.5	---	14	25	522	85	16	10	13
31	10	---	10	8.6	---	12	---	617	---	24	9.3	---
TOTAL	259.5	305.5	298.1	280.6	235.1	312.9	513	6976	11156	998	447.3	537.2
MEAN	8.37	10.2	9.62	9.05	8.40	10.1	17.1	225	372	32.2	14.4	17.9
MAX	10	12	11	10	8.6	14	32	617	765	76	26	73
MIN	6.2	9.0	8.5	8.0	8.0	8.0	10	21	85	14	9.3	8.6
AC-FT	515	606	591	557	466	621	1020	13840	22130	1980	887	1070

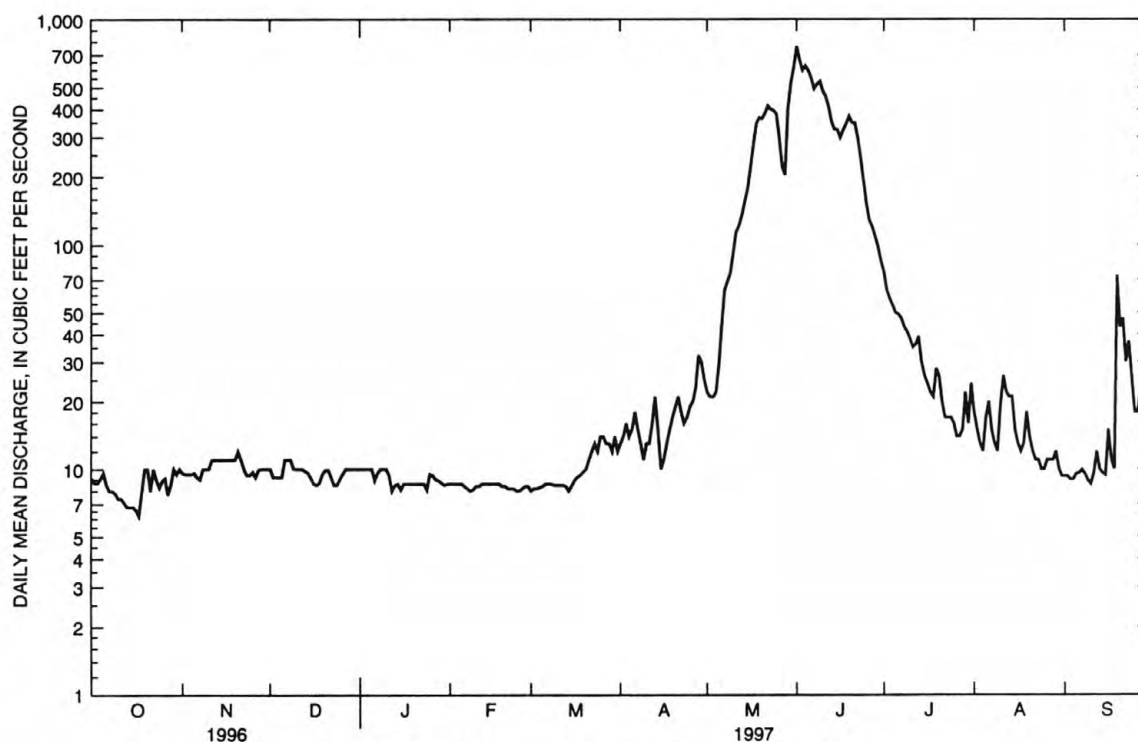
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1997, BY WATER YEAR (WY)

MEAN	14.0	11.5	9.96	9.17	9.21	10.5	23.8	164	261	57.1	13.8	12.7
MAX	38.7	21.3	15.1	13.1	11.7	20.1	73.4	262	534	224	29.5	27.2
(WY)	1966	1962	1984	1966	1973	1966	1962	1962	1983	1983	1983	1965
MIN	7.77	8.40	6.67	6.15	6.55	6.80	12.3	53.5	57.4	11.9	7.75	7.22
(WY)	1990	1977	1991	1970	1970	1970	1993	1995	1987	1994	1989	1989

06622700 NORTH BRUSH CREEK NEAR SARATOGA, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1961 - 1997
ANNUAL TOTAL	19134.1	22319.2	--
ANNUAL MEAN	52.3	61.1	49.8
HIGHEST ANNUAL MEAN	--	--	82.0
LOWEST ANNUAL MEAN	--	--	27.3
HIGHEST DAILY MEAN	501	765	955
LOWEST DAILY MEAN	6.2	6.2	4.3
ANNUAL SEVEN-DAY MINIMUM	6.8	6.8	5.1
INSTANTANEOUS PEAK FLOW	--	946	1360 ^a
INSTANTANEOUS PEAK STAGE	--	4.59	4.59
ANNUAL RUNOFF (AC-FT)	37950	44270	36050
10 PERCENT EXCEEDS	246	231	161
50 PERCENT EXCEEDS	10	11	12
90 PERCENT EXCEEDS	8.6	8.4	8.2

a Gage height, 4.23 ft, site and datum then in use.



06622700 NORTH BRUSH CREEK NEAR SARATOGA, WY

PLATTE RIVER BASIN

06622900 SOUTH BRUSH CREEK NEAR SARATOGA, WY

LOCATION.--Lat 41°20'38", long 106°31'33", in NE¹/₄ NW¹/₄ 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).

GAGE.--Water-stage recorder. Elevation of gage is 8,100 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: May 1-15, July 22-30, Aug. 13-18, and Sept. 12-30. Records poor. Transbasin diversion 0.3 mi upstream from station for irrigation in North Brush Creek basin. Result of discharge measurement, in cubic feet per second, made during period when station was not in operation, is given below:

Oct. 2 . . . 7.13

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	8.4	260	38	11	4.4
2	---	---	---	---	---	---	---	8.2	276	24	8.7	4.2
3	---	---	---	---	---	---	---	8.0	272	20	7.3	4.2
4	---	---	---	---	---	---	---	9.0	277	15	7.4	4.1
5	---	---	---	---	---	---	---	10	281	13	11	4.1
6	---	---	---	---	---	---	---	11	264	12	11	4.3
7	---	---	---	---	---	---	---	13	229	10	7.4	4.2
8	---	---	---	---	---	---	---	15	228	15	6.0	4.1
9	---	---	---	---	---	---	---	20	264	19	5.6	4.0
10	---	---	---	---	---	---	---	25	253	16	10	4.0
11	---	---	---	---	---	---	---	34	253	14	16	4.3
12	---	---	---	---	---	---	---	45	247	14	14	4.5
13	---	---	---	---	---	---	---	58	193	12	12	4.2
14	---	---	---	---	---	---	---	72	158	21	10	4.1
15	---	---	---	---	---	---	---	90	164	26	8.2	4.0
16	---	---	---	---	---	---	---	103	153	24	7.0	5.0
17	---	---	---	---	---	---	---	117	176	21	5.4	4.3
18	---	---	---	---	---	---	---	133	196	25	6.5	4.1
19	---	---	---	---	---	---	---	136	209	29	10	45
20	---	---	---	---	---	---	---	137	213	27	6.0	30
21	---	---	---	---	---	---	---	138	208	19	5.4	32
22	---	---	---	---	---	---	---	144	196	16	5.3	25
23	---	---	---	---	---	---	---	144	152	15	5.0	27
24	---	---	---	---	---	---	---	147	116	15	4.9	15
25	---	---	---	---	---	---	---	138	90	13	4.9	10
26	---	---	---	---	---	---	---	104	75	12	5.0	9.0
27	---	---	---	---	---	---	---	82	69	12	4.9	10
28	---	---	---	---	---	---	---	73	64	12	5.1	9.0
29	---	---	---	---	---	---	---	150	55	14	6.5	8.0
30	---	---	---	---	---	---	---	202	45	10	4.6	7.5
31	---	---	---	---	---	---	---	225	---	15	4.5	---
TOTAL	---	---	---	---	---	---	---	2599.6	5636	548	236.6	303.6
MEAN	---	---	---	---	---	---	---	83.9	188	17.7	7.63	10.1
MAX	---	---	---	---	---	---	---	225	281	38	16	45
MIN	---	---	---	---	---	---	---	8.0	45	10	4.5	4.0
AC-FT	---	---	---	---	---	---	---	5160	11180	1090	469	602

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1972, BY WATER YEAR (WY)

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
MEAN	11.7	9.02	7.14	5.83	6.01	6.63	15.0	85.9	172	43.6	10.6	9.16
MAX	33.8	25.9	17.2	9.61	9.46	11.3	54.2	119	295	81.2	20.0	24.8
(WY)	1962	1962	1962	1962	1962	1966	1962	1962	1968	1964	1968	1961
MIN	3.59	5.41	4.04	2.40	3.71	4.61	7.53	53.0	64.6	15.5	2.70	2.74
(WY)	1965	1964	1965	1965	1965	1963	1968	1972	1966	1963	1963	1969

06622900 SOUTH BRUSH CREEK NEAR SARATOGA, WY--Continued

SUMMARY STATISTICS

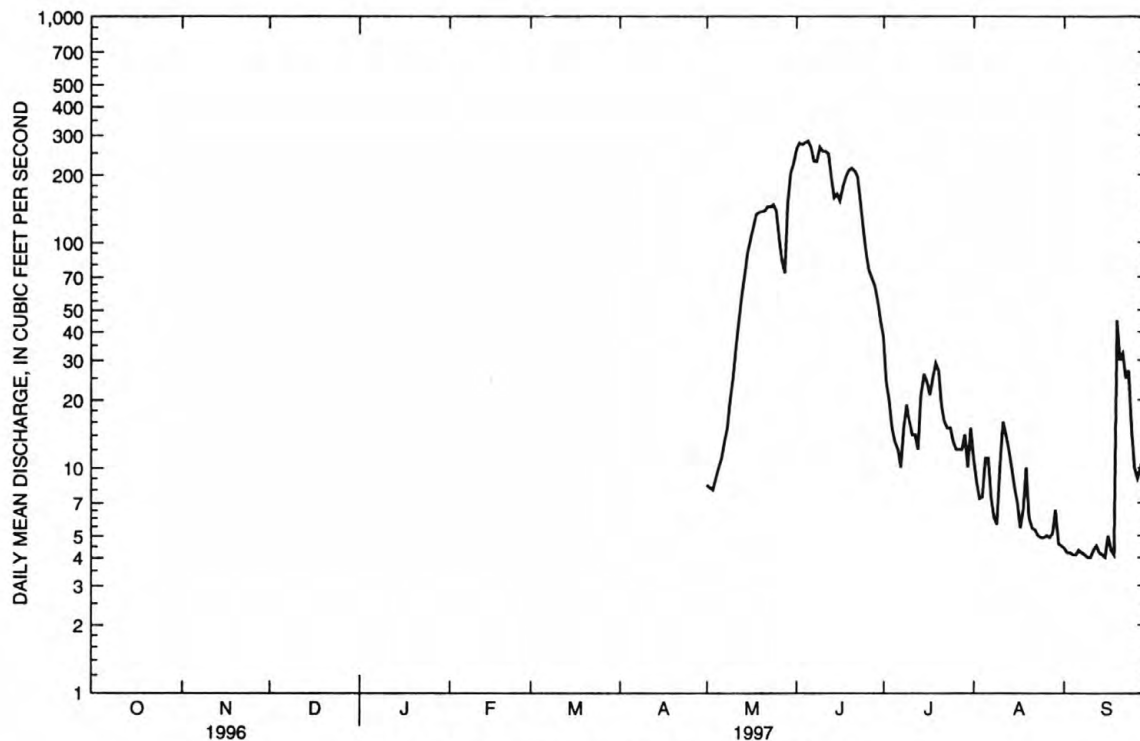
FOR 1997 WATER YEAR*

WATER YEARS 1961 - 1972

ANNUAL MEAN	--		31.8	
HIGHEST ANNUAL MEAN	--		45.9	1962
LOWEST ANNUAL MEAN	--		18.6	1963
HIGHEST DAILY MEAN	281	Jun 5	501	Jun 10 1965#
LOWEST DAILY MEAN	4.0	Sept 9,10,15	.80	Aug 15-20, 28,29 1963
ANNUAL SEVEN-DAY MINIMUM	--		.84	Aug 14 1963
INSTANTANEOUS PEAK FLOW	308	Jun 4	559	Jun 10 1965#
INSTANTANEOUS PEAK STAGE	3.46	Jun 4	4.09	Jun 10 1965#
ANNUAL RUNOFF (AC-FT)	--		23070	
10 PERCENT EXCEEDS	--		91	
50 PERCENT EXCEEDS	--		8.2	
90 PERCENT EXCEEDS	--		4.6	

* During period of operation.

For period of record through 1997.



06622900 SOUTH BRUSH CREEK NEAR SARATOGA, WY

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 750 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 2	2230	*1,490	*4.94
June 19	2230	1,310	4.74

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	37	33	32	25	18	32	56	1000	430	105	42
2	29	41	32	32	24	19	31	51	1100	382	87	40
3	28	43	31	32	23	19	31	50	1230	362	77	36
4	28	34	30	30	22	18	34	56	1100	334	74	36
5	28	28	31	28	22	18	34	75	1130	320	80	37
6	26	27	31	27	21	18	33	98	1020	303	79	37
7	25	28	32	26	21	19	32	133	1000	285	68	37
8	24	32	34	24	22	19	29	151	1280	272	62	42
9	24	37	36	24	22	20	29	163	1140	254	68	35
10	24	36	36	24	22	20	28	196	1090	239	98	32
11	23	36	36	23	22	21	29	222	1010	220	107	35
12	23	36	35	22	22	23	36	233	931	205	116	66
13	22	36	34	22	21	23	46	251	895	229	89	41
14	22	36	31	23	21	22	41	267	870	177	73	36
15	23	36	30	23	21	24	28	310	822	160	64	33
16	23	36	30	24	21	25	27	382	764	150	54	38
17	22	32	31	25	20	27	31	439	811	144	55	34
18	26	33	32	26	20	30	37	488	913	134	55	74
19	29	36	33	27	20	33	46	518	1070	150	54	328
20	28	35	33	27	21	42	55	490	1090	150	48	276
21	26	33	32	27	20	50	62	479	1090	119	46	253
22	28	34	31	26	20	65	57	483	1020	109	45	140
23	29	35	31	25	19	54	49	490	943	104	43	136
24	27	31	31	24	18	47	48	532	835	102	41	106
25	28	34	31	24	17	76	46	556	711	96	41	88
26	28	33	31	25	18	60	51	463	622	89	42	92
27	35	32	30	25	19	36	56	421	571	85	49	97
28	48	33	31	24	19	33	69	413	534	93	55	79
29	40	35	31	23	---	32	70	461	499	98	42	72
30	54	34	31	24	---	32	62	572	465	121	40	67
31	43	---	32	25	---	31	---	720	---	136	38	---
TOTAL	894	1029	993	793	583	974	1259	10219	27556	6052	1995	2465
MEAN	28.8	34.3	32.0	25.6	20.8	31.4	42.0	330	919	195	64.4	82.2
MAX	54	43	36	32	25	76	70	720	1280	430	116	328
MIN	22	27	30	22	17	18	27	50	465	85	38	32
AC-FT	1770	2040	1970	1570	1160	1930	2500	20270	54660	12000	3960	4890

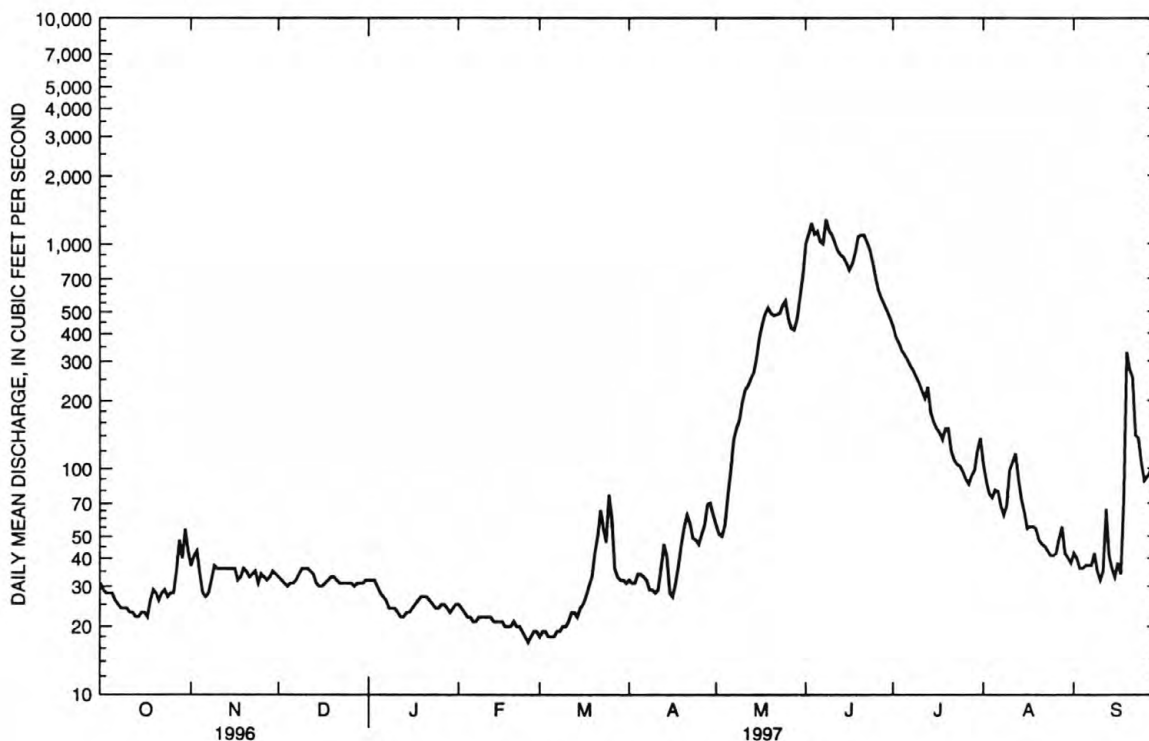
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1997, BY WATER YEAR (WY)

MEAN	30.1	24.7	22.1	19.6	18.5	19.7	40.5	272	609	213	47.8	33.4
MAX	60.5	38.7	32.1	28.9	28.1	31.4	76.5	468	919	581	83.3	82.2
(WY)	1966	1985	1984	1971	1971	1997	1989	1974	1997	1995	1995	1997
MIN	17.5	15.6	11.7	10.9	10.8	10.9	19.3	120	171	46.2	25.2	18.1
(WY)	1992	1978	1969	1969	1969	1969	1975	1995	1992	1994	1977	1994

06623800 ENCAMPMENT RIVER ABOVE HOG PARK CREEK, NEAR ENCAMPMENT, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1965 - 1997	
ANNUAL TOTAL	48295		54812		--	
ANNUAL MEAN	132		150		112	
HIGHEST ANNUAL MEAN	--		--		159	1982
LOWEST ANNUAL MEAN	--		--		51.2	1977
HIGHEST DAILY MEAN	1010	Jun 10,11	1280	Jun 8	1360	Jun 25 1983
LOWEST DAILY MEAN	22	Several days	17	Feb 25	9.5	Dec 31 1968
ANNUAL SEVEN-DAY MINIMUM	22	Mar 3	18	Feb 23	10	Mar 8 1969
INSTANTANEOUS PEAK FLOW	--		1490	Jun 2	1680 ^a	Jun 13 1965
INSTANTANEOUS PEAK STAGE	--		4.94	Jun 2	4.94	Jun 2 1997
ANNUAL RUNOFF (AC-FT)	95790		108700		81500	
10 PERCENT EXCEEDS	524		489		382	
50 PERCENT EXCEEDS	34		36		28	
90 PERCENT EXCEEDS	24		22		17	

a About June 13, 1965, from slope-area measurement of peak flow, gage height not determined.



06623800 ENCAMPMENT RIVER ABOVE HOG PARK CREEK, NEAR ENCAMPMENT, WY

PLATTE RIVER BASIN

06625000 ENCAMPMENT RIVER AT MOUTH, NEAR ENCAMPMENT, WY

LOCATION.--Lat 41°18'12", long 106°42'53", in NE¹/₄ NW¹/₄ 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 sea level, from topographic map. Prior to June 28, 1961, water-stage recorder at site 660 ft upstream at datum 2.00 ft higher.

REMARKS.--Estimated daily discharges: Nov. 27 to Mar. 2, Mar. 4-9, 11, 12, 16, May 17, 18, 24-26, 29-31, and June 16-19, 25, 26. 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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 25	Unknown	Unknown	Unknown
June 3	0600	*3,380	*6.57
June 21	0430	2,530	5.85

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	106	100	110	120	107	125	278	2320	774	175	100
2	83	92	100	120	115	106	124	257	2880	635	148	100
3	83	95	97	120	105	95	122	244	3000	579	136	96
4	89	103	100	110	100	82	136	253	2750	538	130	94
5	90	114	100	100	110	92	132	304	2840	515	151	96
6	87	107	97	80	100	100	124	381	2750	497	163	91
7	85	119	98	84	95	86	119	520	2490	464	143	93
8	84	115	110	89	93	80	120	603	2730	442	125	93
9	84	114	115	97	90	87	126	656	2710	407	118	85
10	83	108	120	100	92	85	119	749	2500	385	152	81
11	81	103	115	85	100	111	112	863	2470	368	172	82
12	80	106	110	74	110	138	110	880	2270	355	178	100
13	80	109	115	80	100	122	111	882	2010	385	197	105
14	80	106	110	88	110	93	113	1000	1860	306	152	91
15	83	114	100	94	120	90	114	1050	1740	260	128	85
16	84	111	95	92	130	104	111	1200	1550	218	112	87
17	84	111	87	96	140	125	121	1450	1600	211	108	88
18	73	115	83	100	140	120	142	1600	1700	201	111	83
19	96	123	88	105	130	117	163	1820	1900	215	109	513
20	98	122	96	110	120	118	202	1730	2160	249	104	466
21	90	117	99	105	110	122	230	1610	2340	202	102	524
22	82	141	100	100	95	124	220	1600	2120	175	104	321
23	93	155	94	95	100	127	209	1490	1860	162	105	303
24	91	125	95	90	94	133	203	1650	1610	160	100	236
25	96	126	100	100	110	120	188	1900	1350	152	101	201
26	97	122	110	105	131	120	213	1600	1200	142	101	185
27	93	100	110	100	118	124	206	1200	1120	136	107	251
28	103	130	105	94	102	120	266	1120	1060	139	123	202
29	114	120	110	98	---	122	322	1300	1020	174	114	184
30	101	110	110	100	---	114	300	1500	895	153	104	175
31	105	---	100	115	---	119	---	1800	---	190	98	---
TOTAL	2761	3439	3169	3036	3080	3403	4903	33490	60805	9789	3971	5211
MEAN	89.1	115	102	97.9	110	110	163	1080	2027	316	128	174
MAX	114	155	120	120	140	138	322	1900	3000	774	197	524
MIN	73	92	83	74	90	80	110	244	895	136	98	81
AC-FT	5480	6820	6290	6020	6110	6750	9730	66430	120600	19420	7880	10340

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1997, BY WATER YEAR (WY)

MEAN	76.2	76.6	67.8	60.4	61.6	68.7	148	762	1203	289	66.9	55.0
MAX	165	147	102	97.9	115	117	352	1258	2029	942	178	174
(WY)	1966	1966	1997	1997	1962	1989	1962	1952	1971	1995	1982	1997
MIN	29.4	42.6	49.2	34.2	35.8	44.5	71.3	340	193	29.2	21.5	14.2
(WY)	1980	1977	1964	1963	1955	1964	1944	1977	1987	1994	1948	1954

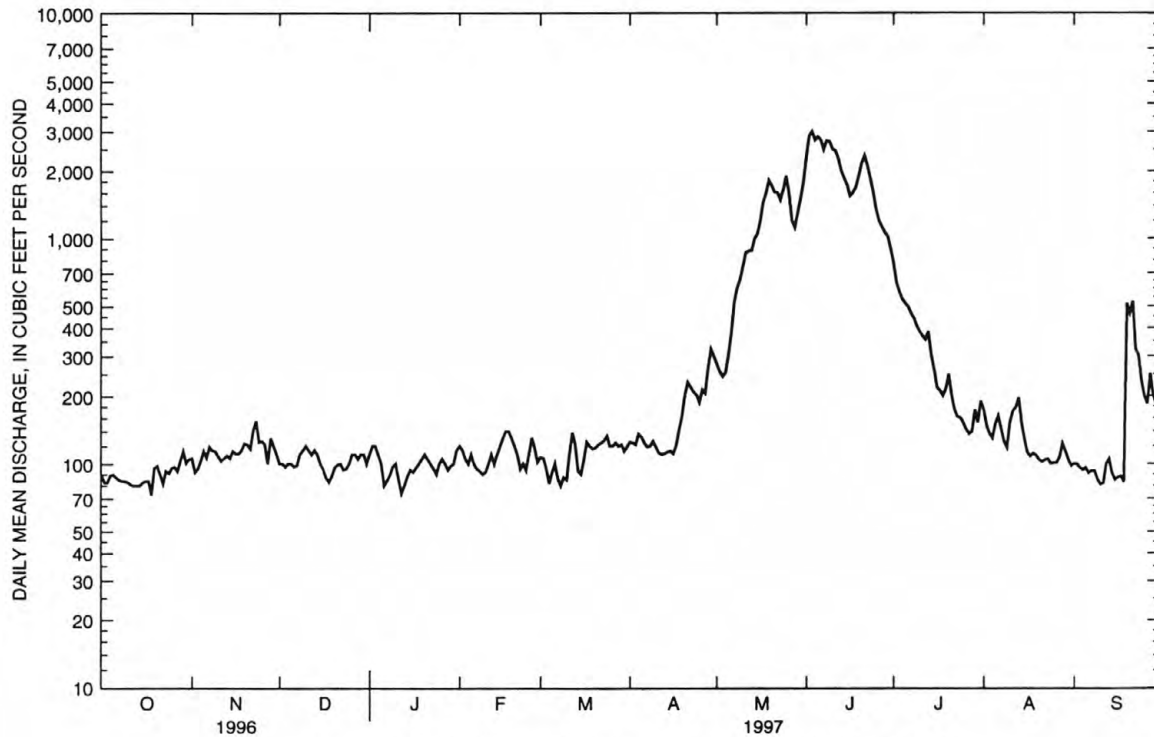
06625000 ENCAMPMENT RIVER AT MOUTH, NEAR ENCAMPMENT, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1941 - 1997	
ANNUAL TOTAL	115908		137057		--	
ANNUAL MEAN	317		375		245	
HIGHEST ANNUAL MEAN	--		--		375	1997
LOWEST ANNUAL MEAN	--		--		102	1977
HIGHEST DAILY MEAN	2310	May 17	3000	Jun 3	3640	Jun 4 1952
LOWEST DAILY MEAN	37	Sep 18	73	Oct 18	8.0 ^a	Sep 1 1954
ANNUAL SEVEN-DAY MINIMUM	38	Sep 18	81	Oct 12	8 ^b	Aug 28 1954
INSTANTANEOUS PEAK FLOW	--		3380	Jun 3	4510 ^b	Jun 1 1943
INSTANTANEOUS PEAK STAGE	--		6.57	Jun 3	10.33 ^c	Jun 4 1952
ANNUAL RUNOFF (AC-FT)	229900		271900		177200	
10 PERCENT EXCEEDS	1350		1390		792	
50 PERCENT EXCEEDS	108		117		73	
90 PERCENT EXCEEDS	63		88		42	

a Minimum daily discharges for period of record, 5.2 ft³/s, Aug. 15, 16, 1940.

b Gage height, 10.25 ft, present datum.

c Present datum.



06625000 ENCAMPMENT RIVER AT MOUTH, NEAR ENCAMPMENT, WY

PLATTE RIVER BASIN

06627800 JACK CREEK ABOVE COYOTE DRAW, NEAR SARATOGA, WY

LOCATION.--Lat 41°26'21", long 106°58'16", in NW¹/₄ NE¹/₄ NW¹/₄ 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 sea level, from topographic map.

REMARKS.--Estimated daily discharges: Apr. 1-17, June 12-16, and Sept. 13-30. Records 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	21	72	260	65	18	14
2	---	---	---	---	---	---	24	67	316	61	16	12
3	---	---	---	---	---	---	26	63	337	56	15	10
4	---	---	---	---	---	---	24	61	293	55	14	8.8
5	---	---	---	---	---	---	27	76	276	50	17	9.2
6	---	---	---	---	---	---	31	97	275	48	33	8.7
7	---	---	---	---	---	---	30	126	272	44	21	8.7
8	---	---	---	---	---	---	25	132	257	42	17	8.3
9	---	---	---	---	---	---	20	120	270	38	14	8.1
10	---	---	---	---	---	---	27	126	292	35	16	7.4
11	---	---	---	---	---	---	28	139	232	34	19	7.4
12	---	---	---	---	---	---	34	142	200	34	18	8.1
13	---	---	---	---	---	---	37	142	170	34	15	9.0
14	---	---	---	---	---	---	30	156	150	31	15	8.0
15	---	---	---	---	---	---	24	162	150	29	14	8.0
16	---	---	---	---	---	---	32	185	130	27	12	11
17	---	---	---	---	---	---	40	227	133	26	13	9.5
18	---	---	---	---	---	---	50	264	133	25	13	9.0
19	---	---	---	---	---	---	55	262	147	28	12	34
20	---	---	---	---	---	---	65	236	159	28	11	14
21	---	---	---	---	---	---	73	254	160	24	10	17
22	---	---	---	---	---	---	59	271	151	22	10	10
23	---	---	---	---	---	---	57	232	137	21	10	14
24	---	---	---	---	---	---	54	215	124	26	9.6	13
25	---	---	---	---	---	---	52	248	99	22	8.9	9.2
26	---	---	---	---	---	---	63	265	88	18	8.8	9.0
27	---	---	---	---	---	---	52	214	82	17	11	14
28	---	---	---	---	---	---	72	185	78	18	11	10
29	---	---	---	---	---	---	99	162	76	24	10	9.0
30	---	---	---	---	---	---	88	250	73	21	9.0	8.0
31	---	---	---	---	---	---	---	274	---	18	8.8	---
TOTAL	---	---	---	---	---	---	1319	5425	5520	1021	430.1	326.4
MEAN	---	---	---	---	---	---	44.0	175	184	32.9	13.9	10.9
MAX	---	---	---	---	---	---	99	274	337	65	33	34
MIN	---	---	---	---	---	---	20	61	73	17	8.8	7.4
AC-FT	---	---	---	---	---	---	2620	10760	10950	2030	853	647

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1997, BY WATER YEAR (WY)*

MEAN	---	---	---	---	---	29.9	105	107	27.3	7.21	5.59
MAX	---	---	---	---	---	44.0	175	231	84.0	14.0	10.9
(WY)	---	---	---	---	---	1997	1997	1995	1995	1995	1997
MIN	---	---	---	---	---	15.6	39.7	32.9	8.07	2.53	2.76
(WY)	---	---	---	---	---	1991	1990	1992	1994	1994	1990

06627800 JACK CREEK ABOVE COYOTE DRAW, NEAR SARATOGA, WY--Continued

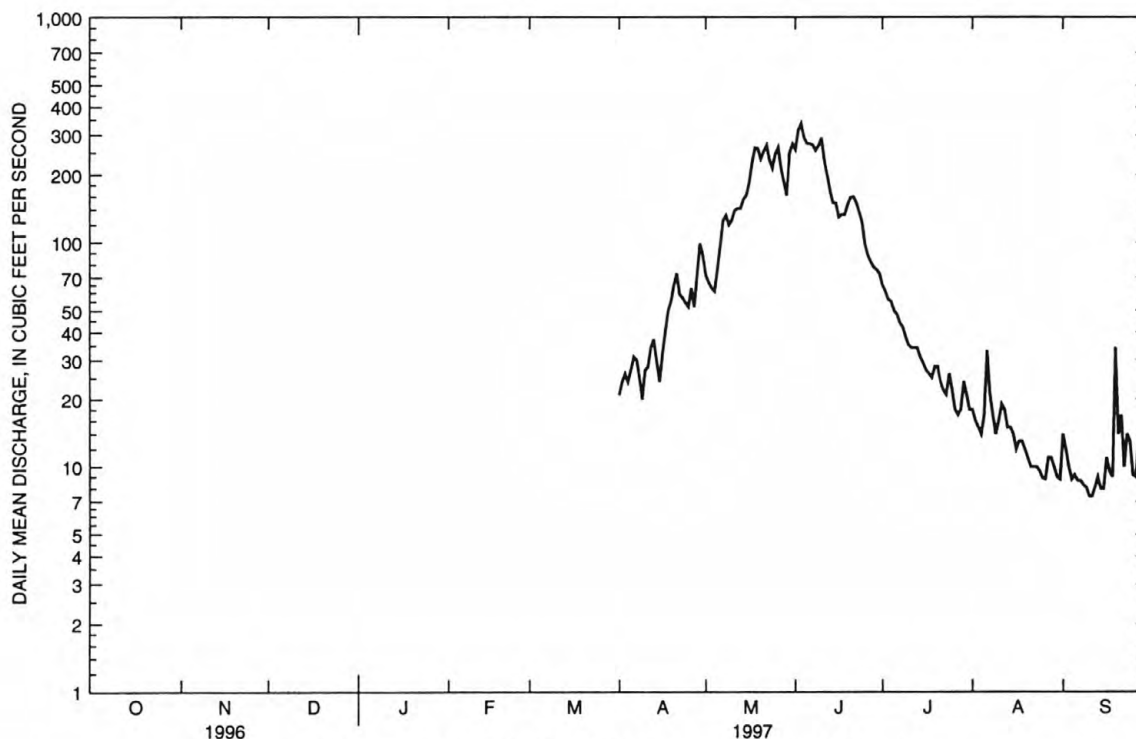
SUMMARY STATISTICS

FOR 1997 WATER YEAR*

WATER YEARS 1990 - 1997*

HIGHEST DAILY MEAN	337	Jun 3	379	Jun 9 1995
LOWEST DAILY MEAN	7.4	Sep 10,11	40	Aug 27 1994
INSTANTANEOUS PEAK FLOW	367	May 30	461 ^a	Jun 9 1993
INSTANTANEOUS PEAK STAGE	6.62	May 30	7.22	Jun 9 1995
10 PERCENT EXCEEDS	--		131	
50 PERCENT EXCEEDS	--		21	
90 PERCENT EXCEEDS	--		3.2	

* During period of operation.

^a Gage height, 7.08 ft.

06627800 JACK CREEK ABOVE COYOTE DRAW, NEAR SARATOGA, WY

PLATTE RIVER BASIN

06628900 PASS CREEK NEAR ELK MOUNTAIN, WY

LOCATION.--Lat 41°35'12", long 106°36'40", in NE¹/₄ SE¹/₄ SE¹/₄ 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 sea level, from topographic map. Apr. 18, 1957 to Oct. 6, 1966, 274 ft upstream at datum 6.00 ft higher. Oct. 7, 1966 to Sept 23, 1987, at site 289 ft upstream at datum 6.00 ft higher.

REMARKS.--Estimated daily discharges: Apr. 1-17. Records poor. Diversions for irrigation of about 6,300 acres upstream from station. Diversion to Kerr ditch 7.5 mi upstream. Result of discharge measurement, in cubic feet per second, made when station was not in operation, is given below:

Oct. 11 . . . 8.25

COOPERATION.--Station operated and record provided by Office of the Wyoming State Engineer; record reviewed by U.S. Geological Survey.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 19	0100	323	6.53
May 29	2100	*455	*7.01

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	17	78	318	24	31	2.6
2	---	---	---	---	---	---	20	69	291	18	29	3.9
3	---	---	---	---	---	---	23	76	251	17	26	6.1
4	---	---	---	---	---	---	19	91	216	20	26	6.7
5	---	---	---	---	---	---	24	111	200	20	31	9.4
6	---	---	---	---	---	---	30	147	182	19	39	8.5
7	---	---	---	---	---	---	27	177	182	18	21	7.7
8	---	---	---	---	---	---	23	162	165	18	12	7.0
9	---	---	---	---	---	---	20	136	153	17	9.4	6.0
10	---	---	---	---	---	---	31	154	147	16	16	6.2
11	---	---	---	---	---	---	30	168	147	17	24	5.9
12	---	---	---	---	---	---	40	151	142	18	15	7.6
13	---	---	---	---	---	---	50	149	138	22	16	9.9
14	---	---	---	---	---	---	42	154	128	18	16	9.4
15	---	---	---	---	---	---	35	160	134	16	9.9	8.6
16	---	---	---	---	---	---	50	179	114	15	7.1	27
17	---	---	---	---	---	---	65	232	113	15	7.3	12
18	---	---	---	---	---	---	100	270	99	15	8.2	12
19	---	---	---	---	---	---	115	255	97	18	9.5	65
20	---	---	---	---	---	---	146	227	83	19	8.0	43
21	---	---	---	---	---	---	122	209	112	15	6.1	57
22	---	---	---	---	---	---	75	224	79	13	5.2	51
23	---	---	---	---	---	---	67	218	64	13	4.4	31
24	---	---	---	---	---	---	68	211	53	22	3.7	18
25	---	---	---	---	---	---	56	209	47	28	3.3	12
26	---	---	---	---	---	---	66	214	42	29	3.6	14
27	---	---	---	---	---	---	70	225	40	28	5.3	16
28	---	---	---	---	---	---	121	188	39	32	5.4	10
29	---	---	---	---	---	---	143	343	35	39	5.4	7.8
30	---	---	---	---	---	---	96	358	30	34	3.1	6.5
31	---	---	---	---	---	---	---	293	---	34	2.5	---
TOTAL	---	---	---	---	---	---	1791	5838	3841	647	409.4	487.8
MEAN	---	---	---	---	---	---	59.7	188	128	20.9	13.2	16.3
MAX	---	---	---	---	---	---	146	358	318	39	39	65
MIN	---	---	---	---	---	---	17	69	30	13	2.5	2.6
AC-FT	---	---	---	---	---	---	3550	11580	7620	1280	812	968

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1992, BY WATER YEAR (WY)

	12.1	11.8	10.2	9.56	10.2	18.1	63.5	178	131	31.5	12.9	9.89
MEAN	12.1	11.8	10.2	9.56	10.2	18.1	63.5	178	131	31.5	12.9	9.89
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	62.0	36.1	9.45	3.14	3.37
(WY)	1964	1978	1978	1981	1982	1965	1966	1989	1989	1977	1989	1977

06628900 PASS CREEK NEAR ELK MOUNTAIN, WY--Continued

SUMMARY STATISTICS

FOR 1997 WATER YEAR*

WATER YEARS 1957 - 1992

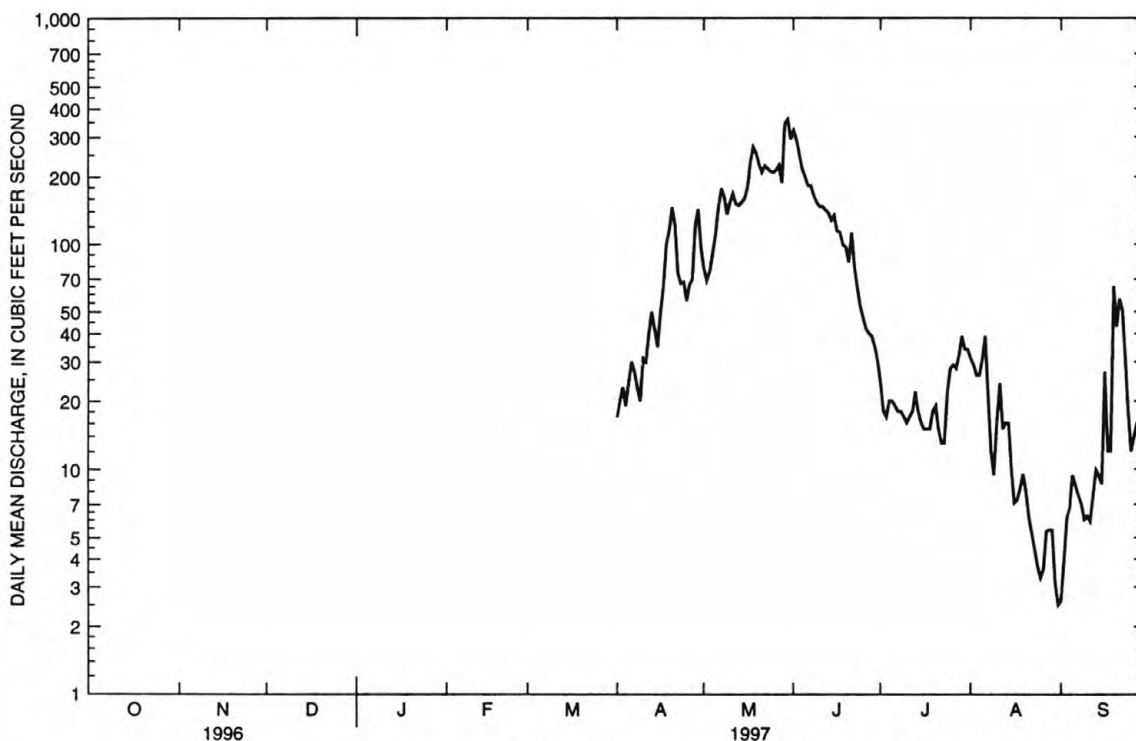
ANNUAL MEAN	--		41.1	
HIGHEST ANNUAL MEAN	--		86.4	1984
LOWEST ANNUAL MEAN	358	May 30	20.2	1959
HIGHEST DAILY MEAN	2.5	Aug 31	1780	May 12 1984#
LOWEST DAILY MEAN	--		.93	Sep 7 1989#
ANNUAL SEVEN-DAY MINIMUM	455	May 29	1.0	Sep 1 1989
INSTANTANEOUS PEAK FLOW	7.01	May 29	4660 ^a	May 12 1984#
INSTANTANEOUS PEAK STAGE	--		9.12 ^b	May 12 1984#
ANNUAL RUNOFF (AC-FT)	--		29790	
10 PERCENT EXCEEDS	--		117	
50 PERCENT EXCEEDS	--		13	
90 PERCENT EXCEEDS	--		6.4	

* During period of operation.

For period of record through 1997.

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. Maximum stage since at least 1938, from information by local resident.



06628900 PASS CREEK NEAR ELK MOUNTAIN, WY

PLATTE RIVER BASIN

06630000 NORTH PLATTE RIVER ABOVE SEMINOLE RESERVOIR, NEAR SINCLAIR, WY

LOCATION.--Lat 41°52'20", long 107°03'25", 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 Seminole 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 Mar. 25, 1993. Datum of gage is 6,400.75 ft above sea level.

REMARKS.--Estimated daily discharges: Nov. 7-10, 17, 18, and Nov. 27 to Mar. 19. 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. Bureau of Reclamation data collection platform with satellite telemetry at station.

COOPERATION.--Ten discharge measurements provided by the Bureau of Reclamation and seven discharge measurements provided by Office of the Wyoming State Engineer.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

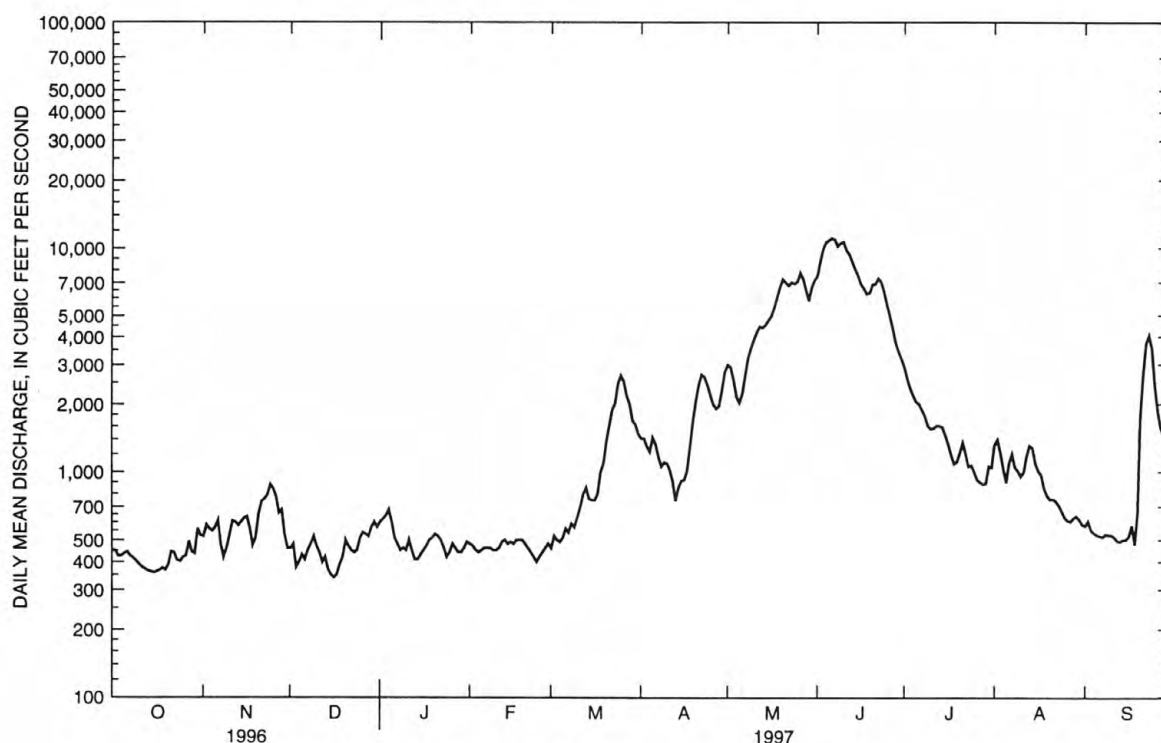
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	452	520	460	600	480	460	1410	2990	7490	2920	1320	577
2	449	584	480	620	470	520	1410	2930	8720	2590	1390	604
3	425	561	380	640	450	500	1300	2560	9910	2350	1220	552
4	426	549	400	680	440	490	1230	2160	10600	2190	1030	536
5	436	571	430	600	450	510	1420	2040	10800	2060	899	526
6	443	612	410	510	460	560	1330	2230	11000	2010	1100	520
7	426	480	450	480	460	540	1160	2690	10900	1890	1200	515
8	417	420	480	450	460	590	1060	3220	10200	1770	1050	529
9	405	460	520	460	450	570	1100	3550	10500	1610	1010	525
10	391	525	470	450	450	630	1090	3880	10600	1560	959	525
11	380	608	440	500	460	700	1020	4190	9780	1570	1000	513
12	372	601	400	450	490	800	910	4460	9360	1610	1180	495
13	365	582	420	410	500	850	746	4410	8680	1610	1310	492
14	362	602	370	410	480	760	849	4550	8040	1590	1280	500
15	358	626	350	430	490	750	913	4760	7530	1460	1090	501
16	362	636	340	450	480	750	923	4980	6900	1330	1010	517
17	367	565	350	470	500	800	1020	5400	6600	1190	971	578
18	375	475	390	500	500	1000	1300	6000	6240	1090	844	477
19	368	512	420	510	500	1100	1680	6680	6300	1110	787	661
20	388	651	500	530	480	1380	2060	7230	6860	1220	756	1730
21	444	743	470	520	460	1620	2440	7010	6900	1350	759	2680
22	440	761	450	500	440	1900	2710	6790	7300	1210	742	3740
23	408	793	440	460	420	2030	2650	7010	7050	1060	710	4050
24	402	880	450	420	400	2480	2430	6920	6370	1070	670	3540
25	420	845	510	440	420	2690	2190	7060	5590	1000	628	2420
26	426	780	540	480	440	2540	2000	7720	4980	924	610	1850
27	495	660	530	460	460	2190	1920	7290	4340	903	602	1570
28	444	680	520	440	480	2010	1970	6470	3750	884	624	1460
29	436	530	570	440	---	1690	2310	5820	3420	890	637	1450
30	562	460	600	460	---	1630	2790	6690	3190	1060	616	1320
31	525	---	570	490	---	1480	---	7190	---	1050	584	---
TOTAL	12969	18272	14110	15260	12970	36520	47341	156880	229900	46131	28588	35953
MEAN	418	609	455	492	463	1178	1578	5061	7663	1488	922	1198
MAX	562	880	600	680	500	2690	2790	7720	11000	2920	1390	4050
MIN	358	420	340	410	400	460	746	2040	3190	884	584	477
AC-FT	25720	36240	27990	30270	25730	72440	93900	311200	456000	91500	56700	71310

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1997, BY WATER YEAR (WY)

	MEAN	405	422	346	313	343	539	1430	3180	4459	1435	503	314
MAX	1036	745	546	496	654	1190	4390	8568	9999	5256	1484	1198	
(WY)	1966	1966	1996	1996	1996	1986	1962	1984	1983	1983	1983	1997	
MIN	157	240	226	181	193	205	492	1149	830	204	135	93.3	
(WY)	1957	1953	1953	1963	1964	1964	1995	1990	1954	1939	1940	1944	

06630000 NORTH PLATTE RIVER ABOVE SEMINOE RESERVOIR, NEAR SINCLAIR, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1939 - 1997	
ANNUAL TOTAL	551266		654894		--	
ANNUAL MEAN	1506		1794		1144	
HIGHEST ANNUAL MEAN	--		--		2169	1984
LOWEST ANNUAL MEAN	--		--		467	1954
HIGHEST DAILY MEAN	8640	May 20	11000	Jun 6	14800	Jun 11 1986
LOWEST DAILY MEAN	241	Sep 5	340	Dec 16	70	Sep 17 1944
ANNUAL SEVEN-DAY MINIMUM	252	Sep 4	365	Oct 13	77	Sep 12 1944
INSTANTANEOUS PEAK FLOW	--		11300	Jun 7	16200	Jun 11 1986
INSTANTANEOUS PEAK STAGE	--		9.42	Jun 7	11.30	Jun 11 1986
INSTANTANEOUS LOW FLOW	--		--		70	Sep 17 1944
ANNUAL RUNOFF (AC-FT)	1093000		1299000		828600	
10 PERCENT EXCEEDS	4990		6100		3210	
50 PERCENT EXCEEDS	640		700		440	
90 PERCENT EXCEEDS	361		426		230	



06630000 NORTH PLATTE RIVER ABOVE SEMINOE RESERVOIR, NEAR SINCLAIR, WY

PLATTE RIVER BASIN

06630000 NORTH PLATTE RIVER ABOVE SEMINOE RESERVOIR, NEAR SINCLAIR, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1961 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: March 1978 to October 1978.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	
OCT										
10...	1120	387	410	8.3	10.5	25.0	609	8.5	96	
NOV										
19...	1050	513	410	8.2	1.5	14.5	602	10.1	91	
DEC										
31...	1130	572	374	8.0	0.0	5.0	605	9.4	81	
MAR										
04...	1155	493	394	8.3	0.0	-5.0	603	12.2	106	
28...	1020	1910	305	8.0	3.5	14.0	601	10.2	98	
APR										
25...	0945	2230	291	7.9	5.5	6.5	605	8.9	89	
MAY										
15...	0910	4660	155	7.6	13.0	15.0	608	9.9	118	
JUN										
05...	0930	10600	207	7.6	15.0	23.5	602	8.0	101	
17...	1120	6500	238	7.8	12.5	20.5	614	9.2	108	
JUL										
02...	1545	2590	250	8.2	17.0	19.0	604	8.7	114	
16...	0950	1380	294	8.3	19.5	23.5	609	7.9	108	
AUG										
19...	1000	793	332	8.4	16.0	21.0	610	7.4	94	
SEP										
23...	0930	4160	256	7.9	11.0	8.5	612	8.7	99	
DATE		COLI- FORM, FECAL, 0.7 UM-MF (COLS. / 100 ML) (31625)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	RESIDUE AT 105 DEG. C, DIS- SOLVED (MG/L) (00515)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)
OCT										
10...	--	<0.01	<0.05	0.02	<0.01	246	274	--	--	--
NOV										
19...	--	0.02	<0.05	0.02	<0.01	--	--	252	2	2
DEC										
31...	--	<0.01	0.05	<0.01	<0.01	--	--	238	8	8
MAR										
04...	--	<0.01	<0.05	<0.01	<0.01	--	260	256	--	--
28...	--	<0.01	0.10	0.03	0.04	--	--	192	74	74
APR										
25...	--	<0.01	0.08	<0.01	0.01	--	--	328	61	61
MAY										
15...	--	<0.01	<0.05	<0.01	0.01	--	--	107	55	55
JUN										
05...	--	<0.01	<0.05	<0.01	0.04	--	--	128	<1	<1
17...	--	<0.01	0.06	<0.01	0.02	--	--	183	64	64
JUL										
02...	--	<0.01	0.05	<0.01	0.01	--	--	185	5	5
16...	18	<0.01	<0.05	0.02	0.01	--	--	191	6	6
AUG										
19...	--	<0.01	0.07	<0.01	<0.01	--	--	222	12	12
SEP										
23...	--	<0.01	0.08	0.07	0.03	--	--	190	79	79

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LOCATION.--Lat 41°35'07", long 106°13'20", in SE 1/4 SW 1/4 sec. 25, T.19 N., R.79 W., Carbon County, Hydrologic Unit 101800004, 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.

GAGE.--Water-stage recorder. Elevation of gage is 7,790 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 22, Nov. 6, 7, 15-17, Nov. 23 to Dec. 9, Dec. 14-29, Jan. 2-20, 22-30, Feb. 7-17, 19, Feb. 21 to Mar. 9, Mar. 12-21, Mar. 24 to Apr. 2, Apr. 5-7, 9-14, and June 12-16. Records good 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. No diversion upstream from station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 1	2000	*1,540	*4.94
June 19	2100	836	3.93

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	13	11	12	11	9.0	16	30	1060	184	51	21
2	16	13	10	12	11	9.0	18	28	1010	158	44	27
3	14	13	10	13	11	9.0	21	28	883	150	39	22
4	18	13	10	13	11	8.5	16	29	891	138	41	21
5	20	13	11	12	11	8.7	19	38	850	131	39	21
6	16	12	11	11	11	9.0	25	51	777	123	64	19
7	14	12	11	12	10	9.0	20	70	695	118	51	19
8	13	13	12	12	9.5	9.0	15	76	710	125	36	18
9	12	13	12	12	9.5	9.2	13	81	708	128	34	18
10	12	13	12	12	10	8.9	16	94	654	119	66	17
11	12	12	12	11	11	9.0	15	104	661	115	54	17
12	11	12	12	10	11	9.5	19	101	560	112	44	19
13	11	12	12	10	10	9.0	25	117	520	115	51	18
14	10	12	11	10	10	8.2	20	147	480	102	50	17
15	9.9	12	10	11	11	9.0	12	184	440	95	38	15
16	9.5	12	10	10	11	9.4	13	264	420	92	32	18
17	8.7	13	9.6	10	11	9.6	15	338	522	89	30	17
18	10	14	9.2	10	11	10	19	421	582	88	31	16
19	13	14	9.4	11	10	9.8	24	438	632	109	37	81
20	10	14	10	11	11	11	29	420	594	109	32	63
21	8.6	13	11	11	10	13	32	441	568	86	33	68
22	14	13	11	10	10	15	28	481	520	73	30	44
23	12	12	10	9.5	10	16	26	474	473	64	28	56
24	11	12	10	9.0	9.0	14	25	466	401	58	26	43
25	12	13	11	10	9.0	17	25	466	318	55	25	33
26	12	12	11	11	9.4	17	26	399	289	50	25	28
27	9.9	11	12	11	9.4	15	25	303	274	44	25	30
28	13	11	12	9.8	9.4	16	31	291	263	53	24	25
29	14	11	12	10	---	14	36	398	252	84	29	23
30	13	11	12	11	---	18	32	502	215	55	24	21
31	14	---	12	11	---	14	---	694	---	69	22	---
TOTAL	388.6	374	339.2	338.3	288.2	352.8	656	7974	17222	3091	1155	855
MEAN	12.5	12.5	10.9	10.9	10.3	11.4	21.9	257	574	99.7	37.3	28.5
MAX	20	14	12	13	11	18	36	694	1060	184	66	81
MIN	8.6	11	9.2	9.0	9.0	8.2	12	28	215	44	22	15
AC-FT	771	742	673	671	572	700	1300	15820	34160	6130	2290	1700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1997, BY WATER YEAR (WY)

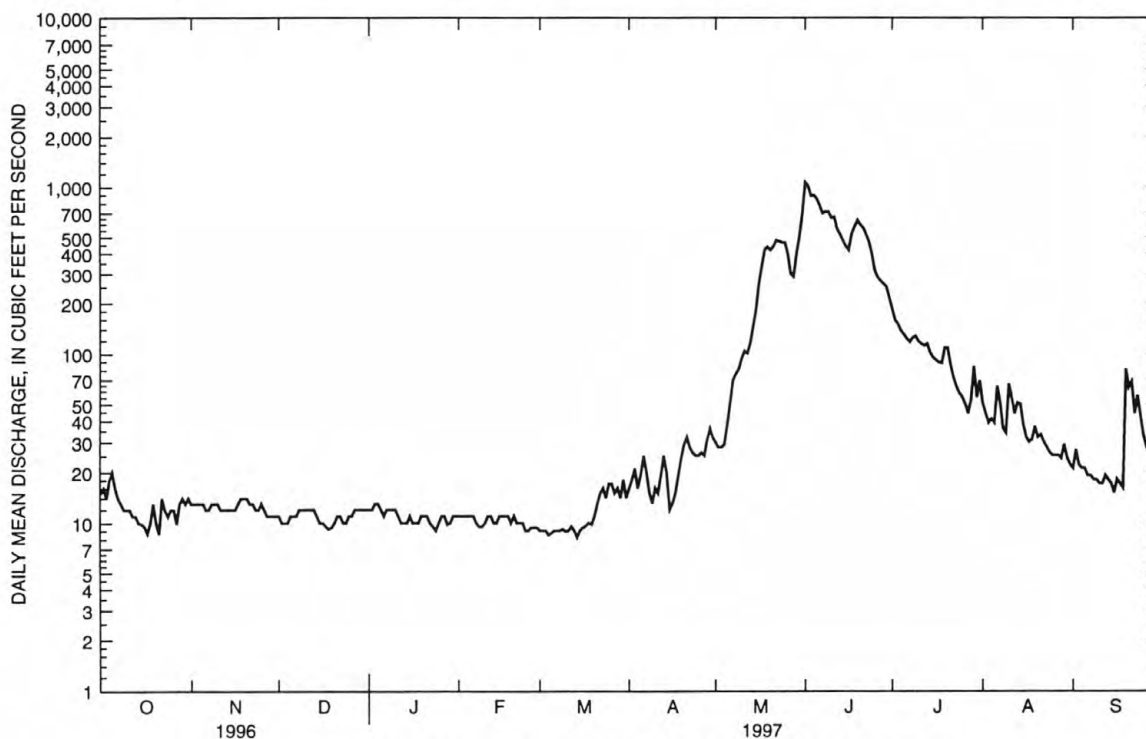
MEAN	16.6	13.5	11.6	10.7	10.5	10.5	22.8	224	514	134	31.7	21.9
MAX	40.0	22.8	18.8	15.3	17.0	15.6	45.8	409	1024	420	66.9	40.1
(WY)	1983	1973	1973	1966	1974	1979	1989	1974	1971	1982	1982	1971
MIN	9.57	8.85	6.81	7.74	7.03	7.08	10.9	59.3	158	30.9	14.2	10.3
(WY)	1990	1977	1968	1969	1969	1969	1995	1968	1987	1977	1994	1994

06632400 ROCK CREEK ABOVE KING CANYON CANAL, NEAR ARLINGTON, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1966 - 1997
ANNUAL TOTAL	34093.8	33034.1	--
ANNUAL MEAN	93.2	90.5	85.0 ^a
HIGHEST ANNUAL MEAN	--	--	142
LOWEST ANNUAL MEAN	--	--	48.9
HIGHEST DAILY MEAN	939	1060	1690
LOWEST DAILY MEAN	8.6	8.2	4.8
ANNUAL SEVEN-DAY MINIMUM	9.6	8.9	6.0
INSTANTANEOUS PEAK FLOW	--	1540	2590
INSTANTANEOUS PEAK STAGE	--	4.94	5.92
ANNUAL RUNOFF (AC-FT)	67630	65520	61600
10 PERCENT EXCEEDS	423	362	277
50 PERCENT EXCEEDS	13	16	15
90 PERCENT EXCEEDS	10	10	8.9

a Annual mean, water years 1955-1997, 81.8 ft³/s, includes records for station 06632500, Rock Creek at Arlington for water years 1955-1965, adjusted for diversion by King Canyon Canal.

b Gage height, 5.83 ft.



06632400 ROCK CREEK ABOVE KING CANYON CANAL, NEAR ARLINGTON, WY

06634620 LITTLE MEDICINE BOW RIVER AT BOLES SPRING, NEAR MEDICINE BOW, WY

LOCATION.--Lat 41°57'40", long 106°12'31", in NW¹/₄ SW¹/₄ SW¹/₄ 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 published as "near Medicine Bow" (station 06634600) do 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 sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 26-28, Nov. 3, 26-29, Dec. 1-8, 12-24, Jan. 3-20, 23, 28, Feb. 4-9, 14, 16, and Feb. 19 to Mar. 12. Records fair except those for estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 20	1030	*1,900	7.66
June 3	0500	410	3.85

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	5.4	11	12	11	10	128	215	241	20	91	5.0
2	2.5	5.8	9.0	12	11	15	127	212	223	17	37	4.9
3	2.5	10	6.5	11	9.6	14	108	201	300	16	22	4.7
4	2.5	16	8.0	9.0	8.2	13	89	181	212	16	16	4.3
5	2.8	19	9.0	5.6	9.0	15	100	186	188	16	16	4.3
6	3.2	10	8.0	4.5	8.6	20	46	203	169	18	27	4.4
7	3.2	6.3	10	3.8	8.4	20	44	227	161	15	22	4.4
8	3.4	8.4	13	5.7	8.8	20	75	277	145	13	17	4.1
9	3.4	9.8	15	7.2	9.8	20	83	320	133	12	14	4.1
10	3.7	10	16	7.0	11	21	70	306	121	12	15	4.0
11	3.3	12	16	6.0	11	30	64	311	116	11	21	3.6
12	3.0	17	14	5.0	10	70	44	332	105	11	19	3.2
13	2.9	15	11	3.5	10	115	50	286	117	11	19	3.2
14	2.7	15	9.0	5.0	10	145	60	271	107	9.6	21	3.1
15	2.8	17	7.3	7.0	11	118	80	272	109	9.4	19	3.0
16	2.8	5.7	9.2	6.2	11	130	85	258	107	8.8	15	3.4
17	2.5	7.5	8.5	8.0	13	177	129	266	112	8.1	14	3.4
18	2.6	8.6	5.2	11	14	690	210	279	97	7.2	13	3.3
19	4.0	15	8.0	10	14	1040	228	298	94	7.8	12	9.7
20	6.2	24	9.0	11	13	1450	221	269	81	9.2	11	12
21	6.0	26	8.0	9.3	11	1250	238	232	71	10	11	12
22	3.4	24	8.0	6.9	9.0	732	254	222	61	12	10	11
23	3.5	24	7.0	6.0	10	464	219	228	52	10	10	11
24	5.5	20	9.0	5.1	8.5	548	189	268	46	11	9.0	9.7
25	7.3	12	10	5.4	10	419	174	249	39	8.7	7.9	8.7
26	6.0	10	9.3	5.0	13	215	159	233	34	8.6	7.8	7.9
27	4.2	6.6	9.0	6.2	13	190	145	245	31	7.2	7.7	8.3
28	3.0	8.0	9.4	8.0	12	304	152	268	28	7.3	6.7	8.0
29	1.6	11	10	9.2	---	262	162	317	26	7.6	6.3	7.2
30	2.4	13	11	11	---	199	203	275	23	7.4	5.8	6.7
31	3.4	---	11	10	---	141	---	262	---	7.5	5.2	---
TOTAL	108.8	392.1	304.4	232.6	298.9	8857	3936	7969	3349	345.4	528.4	182.6
MEAN	3.51	13.1	9.82	7.50	10.7	286	131	257	112	11.1	17.0	6.09
MAX	7.3	26	16	12	14	1450	254	332	300	20	91	12
MIN	1.6	5.4	5.2	3.5	8.2	10	44	181	23	7.2	5.2	3.0
AC-FT	216	778	604	461	593	17570	7810	15810	6640	685	1050	362

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1997, BY WATER YEAR (WY)

	8.89	9.54	4.81	2.37	14.0	69.8	115	161	86.3	17.5	8.09	7.33
MEAN	8.89	9.54	4.81	2.37	14.0	69.8	115	161	86.3	17.5	8.09	7.33
MAX	18.0	18.7	11.5	7.50	110	286	246	388	419	46.0	22.1	19.5
(WY)	1985	1996	1987	1997	1986	1997	1988	1995	1995	1995	1990	1985
MIN	3.51	4.25	1.41	1.06	1.05	15.0	28.5	21.2	5.96	3.76	1.40	.89
(WY)	1997	1995	1995	1992	1990	1993	1992	1992	1994	1996	1994	1994

06634620 LITTLE MEDICINE BOW RIVER AT BOLE SPRINGS, NEAR MEDICINE BOW, WY--Continued

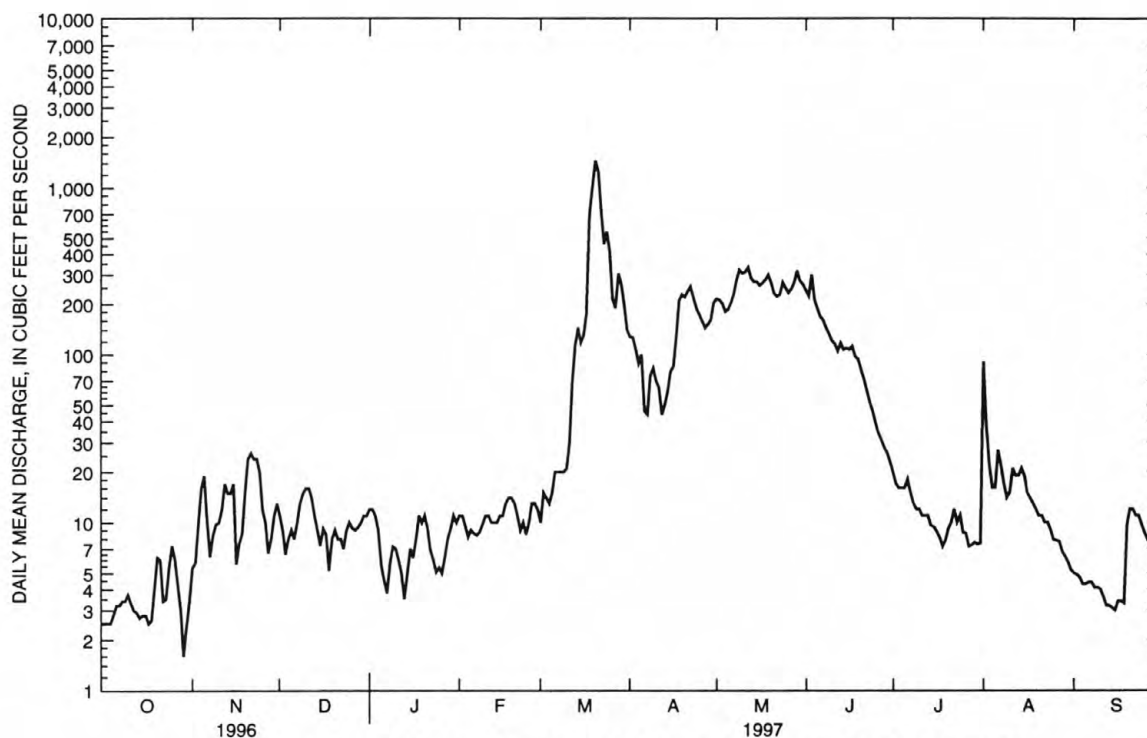
SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1985 - 1997
ANNUAL TOTAL	13204.94	26504.2	--
ANNUAL MEAN	36.1	72.6	42.1 ^a
HIGHEST ANNUAL MEAN	--	--	84.8
LOWEST ANNUAL MEAN	--	--	12.7
HIGHEST DAILY MEAN	273 May 16	1450 Mar 20	1450 Mar 20 1997
LOWEST DAILY MEAN	.36 Feb 4	1.6 Oct 29	.36 ^b Feb 4 1996
ANNUAL SEVEN-DAY MINIMUM	.52 Jan 31	2.7 Oct 1	.52 ^c Jan 31 1996
INSTANTANEOUS PEAK FLOW	--	1900 Mar 20	9500 ^c May 17 1978
INSTANTANEOUS PEAK STAGE	--	7.66 Mar 20	14.10 ^d May 17 1978
ANNUAL RUNOFF (AC-FT)	26190	52570	30460
10 PERCENT EXCEEDS	124	230	128
50 PERCENT EXCEEDS	8.0	11	8.7
90 PERCENT EXCEEDS	1.1	4.1	1.4

a Average discharge, water years 1974-97, 52.6 ft³/s, unadjusted for flow from Boles Spring.

b No flow at times, water years 1974-84, site and datum then in use.

c From slope-area measurement of peak flow.

d From floodmarks in gage well, site and datum then in use.



06634620 LITTLE MEDICINE BOW RIVER AT BOLES SPRING, NEAR MEDICINE BOW, WY

06635000 MEDICINE BOW RIVER ABOVE SEMINOLE RESERVOIR, NEAR HANNA, WY

LOCATION.--Lat 42°00'35", long 106°30'45", 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 Seminole 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 Nov. 20, 1990. Datum of gage is 6,415.40 ft above sea level.

REMARKS.--Estimated daily discharges: Oct. 18-24, Oct. 27 to Nov. 4, Nov. 6-12, 25-30, Dec. 2-5, 15-17, 20, 21, 25, 26, Jan. 4-9, 12-18, 21-26, Feb. 7-11, 13-16, 18-25, Feb. 28 to Mar. 19, and Apr. 6-8, 11-14. Records good 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. Bureau of Reclamation data collection platform with satellite telemetry at station.

COOPERATION.--Seven discharge measurements provided by the Bureau of Reclamation and seven discharge measurements provided by Office of the Wyoming State Engineer.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	47	31	67	90	77	236	409	895	236	35	31
2	13	52	29	74	84	69	237	382	897	211	108	30
3	15	59	26	80	81	62	234	358	1070	191	60	28
4	19	66	31	72	91	63	207	312	1210	171	47	28
5	19	77	36	62	112	71	194	288	1250	152	47	28
6	19	46	43	50	91	71	180	280	1340	145	47	27
7	19	25	39	60	77	69	140	301	1400	137	89	26
8	21	36	40	76	85	66	150	348	1390	135	86	25
9	22	49	54	70	92	71	192	445	1310	132	68	25
10	22	60	54	66	100	94	187	488	1300	121	81	24
11	24	63	58	58	110	140	120	482	1360	115	108	24
12	24	82	64	52	120	190	110	532	1300	105	100	22
13	25	79	70	45	110	180	130	552	1220	89	108	22
14	24	73	58	56	100	170	150	500	1250	82	124	21
15	24	78	56	50	110	160	157	517	1210	77	125	20
16	26	39	50	62	115	205	166	532	1100	74	123	21
17	28	29	42	58	121	265	180	571	1030	73	109	19
18	25	52	38	62	130	325	239	656	972	78	91	20
19	27	98	34	66	110	900	335	772	927	73	76	36
20	32	96	53	69	89	1440	354	838	955	73	65	35
21	28	94	63	70	77	1500	373	803	998	63	57	52
22	18	106	59	73	71	1370	442	788	992	69	49	101
23	22	101	52	70	63	759	432	790	973	79	44	125
24	30	93	47	81	60	640	351	850	887	71	42	129
25	50	80	45	92	66	685	322	850	781	64	39	132
26	38	82	53	82	79	481	310	782	647	57	37	120
27	23	39	45	76	81	336	274	758	519	54	36	118
28	28	33	43	81	82	347	268	723	416	44	34	108
29	31	33	53	82	---	428	267	727	329	42	33	91
30	35	36	58	83	---	344	321	724	268	39	31	88
31	40	---	65	93	---	284	---	894	---	38	30	---
TOTAL	784	1903	1489	2138	2597	11862	7258	18252	30196	3090	2129	1576
MEAN	25.3	63.4	48.0	69.0	92.8	383	242	589	1007	99.7	68.7	52.5
MAX	50	106	70	93	130	1500	442	894	1400	236	125	132
MIN	13	25	26	45	60	62	110	280	268	38	30	19
AC-FT	1560	3770	2950	4240	5150	23530	14400	36200	59890	6130	4220	3130

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1997, BY WATER YEAR (WY)

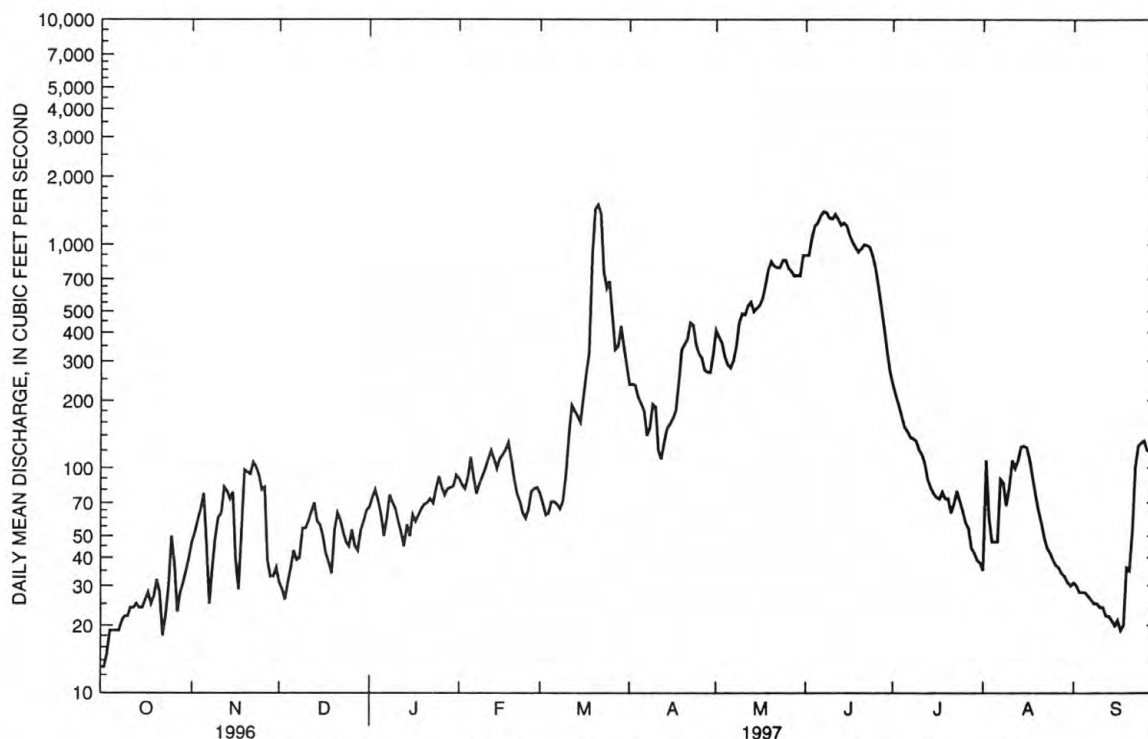
	MEAN	MAX	(WY)	MIN	(WY)
1939	42.6	132	1963	9.65	1957
1940	50.7	114	1974	16.3	1940
1941	38.5	72.9	1974	8.70	1979
1942	31.8	69.0	1997	7.76	1979
1943	49.0	397	1962	10.0	1949
1944	141	516	1943	20.4	1944
1945	330	950	1983	66.4	1995
1946	573	3059	1973	81.5	1954
1947	680	2076	1983	58.6	1954
1948	182	1030	1983	5.71	1939
1949	55.6	246	1983	4.24	1994
1950	29.9	236	1973	3.78	1956

06635000 MEDICINE BOW RIVER ABOVE SEMINOE RESERVOIR, NEAR HANNA, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1939 - 1997	
ANNUAL TOTAL	69428.83		83274		--	
ANNUAL MEAN	190		228		184	
HIGHEST ANNUAL MEAN	--		--		531	
LOWEST ANNUAL MEAN	--		--		43.7	
HIGHEST DAILY MEAN	1450	May 20	1500	Mar 21	5330	May 11 1973
LOWEST DAILY MEAN	.71	Sep 5	13	Oct 1, 2	.71	Sep 5 1996
ANNUAL SEVEN-DAY MINIMUM	.89	Aug 31	17	Oct 1	.89	Aug 31 1996
INSTANTANEOUS PEAK FLOW	--		2080	Mar 20	6010 ^a	May 12 1973
INSTANTANEOUS PEAK STAGE	--		4.85	Mar 20	8.20 ^b	Feb 26 1986
ANNUAL RUNOFF (AC-FT)	137700		165200		133400	
10 PERCENT EXCEEDS	635		781		541	
50 PERCENT EXCEEDS	64		81		52	
90 PERCENT EXCEEDS	11		28		15	

a Gage height, 6.74 ft.

b From floodmarks, backwater from ice.



06635000 MEDICINE BOW RIVER ABOVE SEMINOE RESERVOIR, NEAR HANNA, WY

06635500 SEMINOE RESERVOIR NEAR LEO, WY

LOCATION.--Lat 42°09'21", long 106°54'29", in NW¹/₄ NE¹/₄ sec.8, T.25 N., R.84 W., Carbon County, Hydrologic Unit 10180003, on upstream side near center of dam on North Platte River, 6.0 mi upstream from high-water line of Pathfinder Reservoir at elevation 5,850.1 ft, and 9.0 mi southwest of Leo.

DRAINAGE AREA.--7,230 mi², of which 589 mi² is probably noncontributing.

PERIOD OF RECORD.--February 1939 to current year. Monthend figures only for February, March 1939, October 1940 to September 1950, published in WSP 1310.

REVISED RECORDS.--WDR WY-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,190.00 ft above sea level (levels by Bureau of Reclamation). Prior to Apr. 20, 1939, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by concrete-arch dam. Storage began Apr. 1, 1939, but some regulation for power development during period Jan. 1 to Mar. 31, 1939. Capacity, 1,017,000 acre-ft below elevation 6,357 ft, top of spillway gates. Figures given herein represent total contents, of which 31,700 acre-ft, capacity below elevation 6,239 ft, minimum operating level for power development, are not available for power development and 533 acre-ft, below elevation 6,185.09 ft, penstock invert, is dead storage. Water is used for irrigation and power development.

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily contents, 1,073,000 acre-ft, June 20, 1949, elevation, 6,359.29 ft; minimum daily contents (since appreciable storage was attained), 19,040 acre-ft, Sept. 1, 1939, elevation, 6,228.00 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 978,000 acre-ft, June 25, elevation, 6,355.03 ft; minimum daily contents, 601,000 acre-ft, Apr. 18, 19, 20, minimum daily elevation, 6,331.96 ft, Apr. 19.

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

6,330	575,000	6,350	883,000
6,340	716,000	6,360	1,080,000

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY OBSERVATION AT 2400 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	816000	794000	781000	744000	708000	671000	639000	613000	797000	964000	900000	881000
2	815000	794000	780000	743000	707000	669000	638000	615000	809000	960000	898000	880000
3	814000	794000	779000	743000	706000	667000	638000	616000	824000	957000	896000	878000
4	813000	793000	778000	741000	705000	664000	635000	616000	839000	955000	895000	877000
5	812000	793000	776000	739000	703000	661000	635000	616000	852000	952000	894000	875000
6	811000	793000	774000	739000	701000	658000	634000	615000	865000	950000	893000	874000
7	811000	792000	773000	737000	700000	655000	631000	616000	875000	947000	892000	872000
8	809000	791000	771000	736000	700000	651000	629000	614000	884000	945000	892000	870000
9	809000	791000	771000	734000	699000	650000	628000	618000	893000	944000	892000	870000
10	808000	789000	771000	732000	699000	647000	624000	622000	903000	943000	892000	870000
11	808000	789000	769000	729000	698000	644000	621000	626000	911000	942000	892000	868000
12	807000	788000	767000	728000	696000	642000	619000	633000	918000	941000	891000	868000
13	806000	788000	766000	726000	695000	638000	616000	634000	924000	940000	891000	868000
14	806000	787000	766000	725000	693000	636000	611000	639000	929000	939000	891000	867000
15	805000	787000	766000	722000	692000	633000	609000	644000	933000	937000	890000	866000
16	804000	787000	765000	721000	690000	630000	605000	649000	937000	936000	890000	865000
17	802000	786000	762000	721000	689000	628000	604000	655000	941000	935000	889000	864000
18	801000	786000	760000	719000	688000	626000	601000	662000	946000	933000	889000	863000
19	800000	786000	758000	719000	687000	626000	601000	671000	949000	931000	888000	863000
20	798000	785000	756000	719000	685000	627000	601000	681000	955000	930000	887000	864000
21	798000	785000	754000	718000	684000	629000	602000	691000	960000	927000	887000	867000
22	796000	784000	752000	717000	682000	632000	604000	700000	967000	925000	887000	873000
23	795000	784000	753000	717000	681000	633000	606000	710000	972000	923000	887000	880000
24	794000	784000	752000	717000	679000	634000	606000	719000	976000	919000	887000	886000
25	794000	783000	751000	716000	678000	638000	607000	729000	978000	916000	887000	889000
26	794000	783000	749000	715000	677000	640000	609000	740000	977000	913000	888000	892000
27	794000	783000	749000	714000	674000	642000	610000	751000	976000	910000	887000	893000
28	794000	782000	749000	713000	672000	642000	610000	760000	974000	907000	886000	894000
29	793000	782000	748000	712000	---	642000	610000	767000	971000	905000	884000	894000
30	793000	782000	746000	710000	---	642000	612000	776000	967000	903000	883000	896000
31	794000	---	745000	708000	---	641000	---	786000	---	901000	882000	---
MAX	816000	794000	781000	744000	708000	671000	639000	786000	978000	964000	900000	896000
MIN	793000	782000	745000	708000	672000	626000	601000	613000	797000	901000	882000	863000
(#)	6,344.88	6,344.17	6,341.91	6,339.49	6,337.09	6,334.89	6,332.76	6,344.42	6,354.49	6,351.01	6,349.95	6,350.70
(*)	-23,000	-12,000	-37,000	-37,000	-36,000	-31,000	-29,000	+174,000	+181,000	-66,000	-19,000	+14,000
CAL YR 1996	MAX	909,000	MIN	617,000	(*)	-60,000						
WTR YR 1997	MAX	978,000	MIN	601,000	(*)	+79,000						

(#) Elevation, in feet, at end of month.

(*) Change in contents, in acre-feet.

PLATTE RIVER BASIN

06639000 SWEETWATER RIVER NEAR ALCOVA, WY

LOCATION.--Lat 42°29'24", long 107°08'00", 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 Alcovia.

DRAINAGE AREA.--2,338 mi². Area at site prior to Apr. 1, 1992, 2327 mi²

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 sea level, from topographic map. Aug. 28, 1913, to Sept. 30, 1924, nonrecording gages at site 7.0 mi upstream at different datums. Oct. 1, 1938, to Mar. 31, 1992, at site 6.6 mi upstream at different datum.

REMARKS.--No estimated daily discharges. 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. Bureau of Reclamation satellite telemeter at 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	178	467	998	252	95	47
2	---	---	---	---	---	---	175	539	941	228	94	48
3	---	---	---	---	---	---	171	595	877	214	89	47
4	---	---	---	---	---	---	171	552	806	207	87	44
5	---	---	---	---	---	---	170	501	769	200	87	44
6	---	---	---	---	---	---	184	450	777	194	90	43
7	---	---	---	---	---	---	170	429	821	194	88	41
8	---	---	---	---	---	---	143	457	881	192	88	39
9	---	---	---	---	---	---	151	510	863	190	94	38
10	---	---	---	---	---	---	177	559	895	185	104	38
11	---	---	---	---	---	---	184	608	931	179	114	36
12	---	---	---	---	---	---	181	651	926	171	130	35
13	---	---	---	---	---	---	164	682	893	165	123	34
14	---	---	---	---	---	---	128	694	905	152	101	34
15	---	---	---	---	---	---	161	717	963	142	87	35
16	---	---	---	---	---	---	160	738	983	136	81	35
17	---	---	---	---	---	---	151	770	901	133	82	34
18	---	---	---	---	---	---	146	794	742	129	79	33
19	---	---	---	---	---	---	164	842	634	122	76	36
20	---	---	---	---	---	---	232	879	589	121	73	35
21	---	---	---	---	---	---	289	892	542	120	70	35
22	---	---	---	---	---	---	314	914	505	116	68	42
23	---	---	---	---	---	---	355	943	484	108	64	49
24	---	---	---	---	---	---	413	967	461	107	61	55
25	---	---	---	---	---	---	455	948	431	108	60	56
26	---	---	---	---	---	---	466	946	397	103	57	57
27	---	---	---	---	---	---	440	1010	374	94	55	55
28	---	---	---	---	---	---	404	1010	344	95	54	53
29	---	---	---	---	---	---	405	994	315	94	52	53
30	---	---	---	---	---	---	418	1000	291	95	52	53
31	---	---	---	---	---	---	---	1010	---	98	50	---
TOTAL	---	---	---	---	---	---	7320	23068	21239	4644	2505	1284
MEAN	---	---	---	---	---	---	244	744	708	150	80.8	42.8
MAX	---	---	---	---	---	---	466	1010	998	252	130	57
MIN	---	---	---	---	---	---	128	429	291	94	50	33
AC-FT	---	---	---	---	---	---	14520	45760	42130	9210	4970	2550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1983, BY WATER YEAR (WY)

	45.8	50.2	38.7	31.6	36.9	78.6	257	432	407	111	40.4	28.1
MEAN	45.8	50.2	38.7	31.6	36.9	78.6	257	432	407	111	40.4	28.1
MAX	86.6	83.3	59.4	54.5	69.1	210	1869	1296	1130	362	96.8	115
(WY)	1916	1972	1972	1953	1968	1916	1924	1980	1983	1917	1983	1973
MIN	16.0	20.0	20.0	10.8	12.3	33.0	74.4	20.7	12.6	5.01	.92	1.90
(WY)	1941	1961	1941	1962	1949	1924	1963	1940	1977	1940	1940	1940

06639000 SWEETWATER RIVER NEAR ALCOVA, WY--Continued

SUMMARY STATISTICS

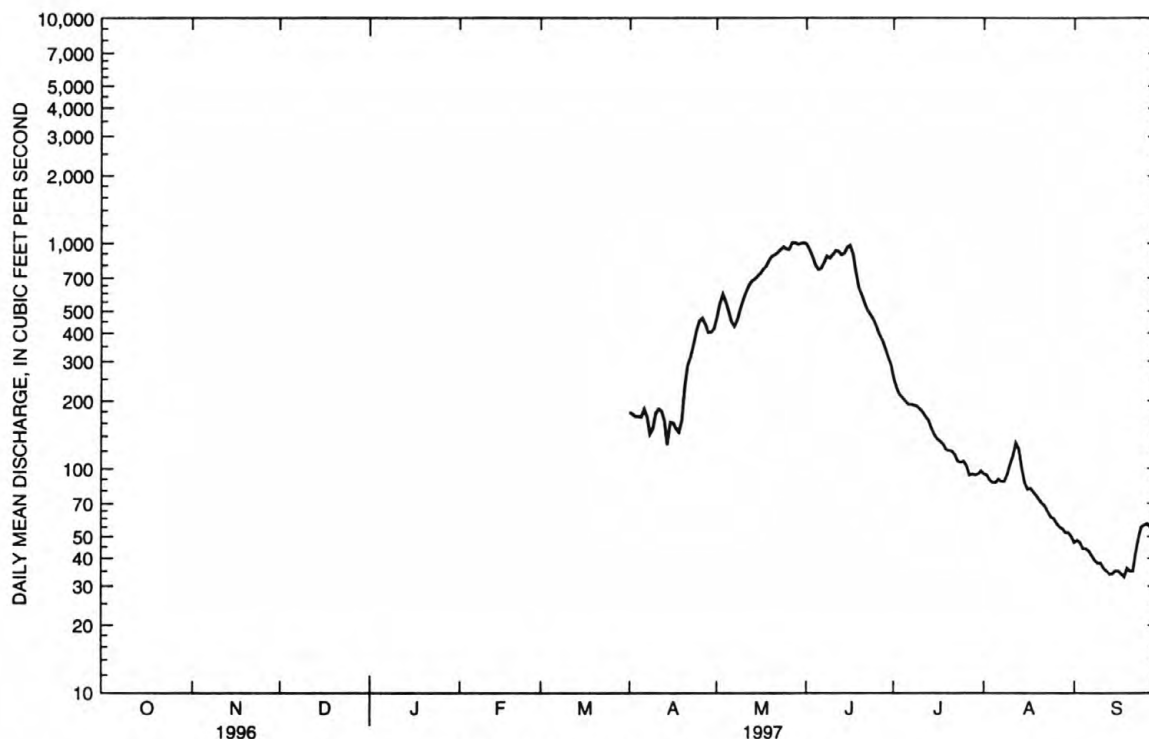
FOR 1997 WATER YEAR*

WATER YEARS 1914 - 1983

ANNUAL MEAN	--		126	
HIGHEST ANNUAL MEAN	--		312	1924
LOWEST ANNUAL MEAN	--		25.8	1940
HIGHEST DAILY MEAN	--		4290	Apr 13 1924
LOWEST DAILY MEAN	1010	May 27,28,31	.50	Jul 30 to
ANNUAL SEVEN-DAY MINIMUM	33	Sep 18	.50	Aug 12 1940#
INSTANTANEOUS PEAK FLOW	--		4290 ^a	Jul 30 1940
INSTANTANEOUS PEAK STAGE	1040	May 27	9.90	Apr 13 1924#
ANNUAL RUNOFF (AC-FT)	5.16	May 27	91260	Apr 27 1983#
10 PERCENT EXCEEDS	--		376	
50 PERCENT EXCEEDS	--		50	
90 PERCENT EXCEEDS	--		18	

* During period of operation.

For period of record through 1997.

^a Maximum observed.

06639000 SWEETWATER RIVER NEAR ALCOVA, WY

PLATTE RIVER BASIN

06640500 PATHFINDER RESERVOIR NEAR ALCOVA, WY

LOCATION.--Lat 42°28'06", long 106°51'12", in NW¹/₄ SW¹/₄ sec.24, T.29 N., R.84 W., Natrona County, Hydrologic Unit 10180003, in gatehouse near left end of dam on North Platte River and 9.0 mi southwest of Alcova.

DRAINAGE AREA.--10,711 mi², of which 700 mi² probably is non-contributing.

PERIOD OF RECORD.--January 1909 to current year. Month end figures only for some periods, published in WSP 1310.

REVISED RECORDS.--WDR WY-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,678.1 ft above sea level. Prior to Apr. 12, 1950, nonrecording gages near present site, and Apr. 12 to Sept. 30, 1950, water-stage recorder at present site, all at Bureau of Reclamation datum which was 1.9 ft lower.

REMARKS.--Reservoir is formed by masonry dam. Storage began in April 1909. Capacity, 1,016,000 acre-ft between elevations 5,668.1 ft, north outlet trashrack sill, and 5,850.1 ft, crest of spillway. No dead storage. Figures given herein represent total contents. Water is used to irrigate lands in Wyoming and Nebraska under the North Platte project. Since December 1960, water has been diverted directly through a tunnel to Fremont Canyon Powerplant, bypassing a section of river channel immediately below Pathfinder Dam.

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily contents, 1,182,000 acre-ft, June 25-27, 1917, elevation, 5,858.86 ft, present datum; no storage at times during 1909-12, 1931, 1958-59.

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 1,010,000 acre-ft, June 16 to July 1, maximum daily elevation, 5,849.81 ft, June 26; minimum daily contents, 772,000 acre-ft, Oct. 1, elevation, 5,837.95 ft.

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

5,835	720,000	5,845	908,000
5,840	810,000	5,850	1,010,000

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY OBSERVATION AT 2400 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	772000	785000	808000	832000	863000	889000	903000	925000	959000	1010000	894000	860000
2	773000	786000	809000	834000	863000	889000	904000	926000	961000	1000000	891000	861000
3	774000	787000	809000	835000	865000	890000	903000	927000	961000	1000000	889000	861000
4	776000	788000	810000	836000	866000	890000	904000	927000	962000	997000	886000	862000
5	776000	790000	809000	837000	867000	890000	904000	928000	963000	993000	883000	862000
6	776000	792000	809000	838000	868000	890000	904000	929000	965000	989000	880000	862000
7	777000	791000	812000	839000	870000	892000	904000	930000	969000	985000	877000	862000
8	777000	792000	812000	840000	871000	893000	904000	930000	974000	981000	874000	862000
9	777000	793000	813000	841000	870000	893000	904000	932000	978000	974000	872000	862000
10	778000	795000	813000	843000	871000	894000	905000	934000	983000	969000	871000	863000
11	778000	797000	814000	844000	872000	894000	905000	935000	986000	964000	870000	862000
12	779000	798000	816000	847000	874000	895000	905000	937000	990000	959000	869000	861000
13	780000	798000	817000	848000	875000	896000	906000	938000	994000	954000	867000	860000
14	780000	798000	817000	850000	876000	897000	906000	939000	1000000	950000	866000	861000
15	780000	799000	818000	852000	877000	898000	906000	940000	1000000	945000	866000	860000
16	780000	801000	817000	853000	878000	899000	906000	941000	1010000	940000	867000	860000
17	779000	803000	818000	854000	880000	900000	907000	941000	1010000	935000	866000	859000
18	781000	804000	819000	854000	881000	901000	907000	942000	1010000	932000	866000	859000
19	782000	804000	820000	855000	882000	901000	907000	943000	1010000	926000	865000	859000
20	781000	804000	821000	854000	882000	902000	908000	944000	1010000	921000	866000	858000
21	781000	804000	822000	854000	884000	902000	909000	945000	1010000	918000	866000	858000
22	780000	805000	824000	854000	886000	902000	911000	947000	1010000	916000	865000	858000
23	781000	807000	824000	855000	887000	902000	912000	948000	1010000	914000	863000	860000
24	782000	808000	824000	856000	887000	904000	914000	949000	1010000	912000	862000	860000
25	781000	809000	825000	856000	888000	904000	916000	950000	1010000	911000	861000	861000
26	781000	809000	827000	856000	888000	904000	917000	953000	1010000	910000	860000	860000
27	783000	810000	826000	857000	888000	903000	917000	954000	1010000	907000	859000	859000
28	782000	809000	827000	858000	889000	904000	919000	956000	1010000	905000	859000	859000
29	784000	809000	829000	859000	---	904000	920000	958000	1010000	902000	859000	858000
30	784000	809000	830000	861000	---	903000	922000	958000	1010000	899000	860000	858000
31	785000	---	832000	862000	---	905000	---	956000	---	896000	860000	---
MAX	785000	810000	832000	862000	889000	905000	922000	958000	1010000	1010000	894000	863000
MIN	772000	785000	808000	832000	863000	889000	903000	925000	959000	986000	859000	858000
(#)	5,838.65	5,839.93	5,841.14	5,842.69	5,844.05	5,844.84	5,845.68	5,847.31	5,849.71	5,844.41	5,842.58	5,842.48
(*)	+13,000	+24,000	+23,000	+30,000	+27,000	+16,000	+17,000	+34,000	+54,000	-114,000	-36,000	-2,000
CAL YR 1996	MAX	983,000	MIN	705,000	(*)	+127,000						
WTR YR 1997	MAX	1,010,000	MIN	772,000	(*)	+86,000						

(#) Elevation, in feet, at end of month.

(*) Change in contents, in acre-feet.

06641500 ALCOVA RESERVOIR AT ALCOVA, WY

LOCATION.--Lat 42°32'52", long 106°43'08", in SE¹/₄ SE¹/₄ sec.24, T.30 N., R.83 W., Natrona County, Hydrologic Unit 10180007, in elevator shaft at right end of dam on North Platte River and 0.2 mi southwest of Alcovia.

DRAINAGE AREA.--10,766 mi², of which 700 mi² probably is non-contributing.

PERIOD OF RECORD.--February 1938 to current year. Prior to October 1950 monthend figures only, published in WSP 1310.

REVISED RECORDS.--WDR WY-76-1: Drainage area.

GAGE.--Water-stage recorder for elevations above 5,447.00 ft. Datum of gage is 5,320 ft above sea level (levels by Bureau of Reclamation). Prior to June 27, 1955, nonrecording gages near present site at same datum.

REMARKS.--Reservoir is formed by rock-fill dam completed in January 1938; storage began Feb. 8, 1938. Capacity, 184,300 acre-ft at elevation 5,500.00 ft, top of spillway gates. Dead storage, 100 acre-ft. Figures given herein represent total contents. Usable contents published prior to October 1956. Water is used for irrigation in North Platte River basin.

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily contents, 190,000 acre-ft, Aug. 14, 15, 1952, elevation, 5,499.92 ft; minimum daily contents (since appreciable storage was attained), 2,000 acre-ft, Sept. 30, 1940, elevation, 5,353.56 ft. No usable storage prior to February 1938.

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 182,000 acre-ft, Apr. 24, May 27, June 13-18, and Aug. 1, 7, 8, maximum daily elevation, 5,498.93 ft, Apr. 24; minimum daily contents, 154,000 acre-ft, Nov. 26, 29, and Dec. 3, 7, 12, 30; minimum elevation, 5,487.21 ft, Nov. 26.

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

5,485	199,000	5,495	172,000
5,490	160,000	5,500	184,000

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY OBSERVATION AT 2400 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180000	167000	155000	155000	155000	158000	157000	180000	180000	181000	182000	180000
2	179000	166000	155000	156000	155000	157000	158000	180000	180000	181000	181000	180000
3	177000	164000	154000	156000	155000	157000	158000	180000	179000	181000	181000	180000
4	177000	164000	155000	156000	156000	157000	159000	180000	179000	181000	181000	180000
5	177000	163000	155000	156000	156000	158000	160000	180000	180000	181000	181000	181000
6	176000	161000	155000	156000	157000	158000	160000	180000	180000	181000	181000	181000
7	176000	162000	154000	156000	156000	158000	162000	180000	180000	181000	182000	181000
8	175000	161000	155000	156000	156000	158000	163000	180000	181000	181000	182000	181000
9	175000	160000	155000	156000	156000	158000	165000	180000	181000	181000	181000	181000
10	175000	159000	155000	156000	155000	157000	166000	179000	181000	181000	181000	181000
11	174000	158000	155000	157000	156000	157000	168000	179000	181000	181000	181000	181000
12	173000	158000	154000	156000	156000	157000	169000	179000	181000	181000	181000	181000
13	172000	158000	155000	157000	156000	156000	171000	179000	182000	181000	181000	181000
14	170000	158000	155000	156000	156000	156000	173000	179000	182000	181000	181000	180000
15	171000	158000	155000	156000	156000	156000	174000	179000	182000	181000	179000	180000
16	172000	157000	156000	156000	157000	156000	176000	179000	182000	181000	179000	180000
17	173000	156000	156000	155000	156000	156000	178000	180000	182000	181000	179000	179000
18	171000	156000	157000	155000	156000	157000	179000	180000	182000	181000	179000	179000
19	170000	155000	157000	155000	156000	157000	181000	180000	181000	181000	179000	179000
20	171000	155000	156000	156000	157000	157000	181000	180000	181000	181000	180000	180000
21	171000	155000	156000	156000	156000	157000	181000	180000	181000	181000	180000	180000
22	172000	155000	156000	156000	156000	157000	181000	181000	181000	181000	180000	180000
23	171000	155000	156000	156000	156000	157000	181000	181000	181000	180000	180000	179000
24	171000	155000	156000	156000	157000	157000	182000	181000	181000	180000	180000	179000
25	171000	155000	156000	156000	156000	157000	180000	181000	181000	180000	180000	179000
26	171000	154000	156000	156000	157000	157000	181000	181000	181000	180000	180000	179000
27	169000	155000	156000	155000	158000	157000	181000	182000	181000	180000	180000	179000
28	169000	155000	155000	156000	158000	157000	181000	181000	181000	181000	181000	180000
29	169000	154000	155000	155000	---	157000	181000	181000	181000	181000	181000	180000
30	168000	155000	154000	156000	---	157000	181000	181000	181000	181000	181000	180000
31	167000	---	155000	156000	---	157000	---	180000	---	181000	181000	---
MAX	180000	167000	157000	157000	158000	158000	182000	182000	182000	181000	182000	181000
MIN	167000	154000	154000	155000	155000	156000	157000	179000	179000	180000	179000	179000
(#)	5,492.85	5,487.49	5,487.33	5,487.92	5,488.91	5,488.45	5,498.51	5,498.36	5,498.77	5,497.79	5,498.53	5,498.34
(*)	-14,000	-12,000	0	+1,000	+2,000	-1,000	+24,000	-1,000	+1,000	0	0	-1,000
CAL YR 1996	MAX	182,000	MIN	154,000	(*)	0						
WTR YR 1997	MAX	182,000	MIN	154,000	(*)	-1,000						

(#) Elevation, in feet, at end of month.

(*) Change in contents, in acre-feet.

PLATTE RIVER BASIN

06642000 NORTH PLATTE RIVER AT ALCOVA, WY

LOCATION.--Lat 42°34'27", long 106°41'31", in NW¹/₄ NE¹/₄ NW¹/₄ sec.17, T.30 N., R.82 W., Natrona County, Hydrologic Unit 10180007, on left bank 0.5 mi downstream from Hogback Draw, 0.8 mi downstream from Gray Reef Dam, 1.9 mi northeast of Alcova, and 3.8 mi downstream from Alcova Dam.

DRAINAGE AREA.--10,812 mi², of which 700 mi² probably is non-contributing.

PERIOD OF RECORD.--February 1904 to December 1905, October 1934 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1310: 1937-38, 1945. WDR WY-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,299.40 ft above sea level. Feb. 19, 1904, to Dec. 31, 1905, non-recording gage at site 3.7 mi upstream at different datum. June 1, 1935, to Apr. 27, 1961, water-stage recorder at site 3.5 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Jan. 12-14. Records fair except those for estimated daily discharges, which are poor. Flow completely regulated by Seminole, Pathfinder, and Alcova Reservoirs (stations 06635500, 06640500, and 06641500). Natural flow of stream affected by transbasin diversions, storage reservoirs, power development, diversions for irrigation, and return flow from irrigated areas.

COOPERATION.--Fourteen discharge measurements provided by the Bureau of Reclamation and five discharge measurements provided by the Office of the Wyoming State Engineer.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	681	726	730	729	721	1450	2260	2590	3740	5230	3050	818
2	688	720	732	728	721	1560	2160	2710	3760	5240	3060	818
3	679	710	722	735	724	1710	2150	2720	3840	5200	3040	752
4	678	690	726	739	728	1770	2110	2720	4270	5150	3030	696
5	712	699	719	743	734	1780	1930	2720	4570	5140	3040	697
6	766	710	722	748	730	1790	1920	2720	4910	5130	3040	701
7	768	681	723	747	736	1800	1920	2730	5050	5100	2760	712
8	753	670	717	748	736	1810	1910	2750	5070	5060	1900	652
9	754	661	718	746	734	1820	1910	2740	5110	4950	1830	607
10	752	662	723	749	736	1890	1920	2750	5130	4500	1860	613
11	732	667	726	754	738	2240	1910	2780	5140	4120	1870	611
12	730	678	726	750	738	2440	1890	2810	5140	4120	1870	624
13	729	691	729	750	741	2450	1890	3080	5180	4100	1870	635
14	726	704	736	750	740	2430	1900	3080	5330	4080	1870	646
15	727	712	730	743	745	2350	1910	3090	5320	4060	1600	652
16	734	727	738	734	750	2320	1910	3100	5290	4050	1040	648
17	733	720	735	728	755	2320	1900	3100	5280	4050	1040	660
18	728	706	729	721	756	2390	1930	3110	5350	4040	1050	670
19	729	702	719	717	768	2440	1940	3140	5450	4040	1050	671
20	729	700	708	715	773	2430	1940	3130	5440	4020	840	669
21	733	706	712	716	797	2420	1930	3130	5360	3810	848	667
22	729	695	717	716	838	2420	1950	3130	5240	3190	848	664
23	731	715	720	720	883	2400	1950	3140	5250	3030	852	664
24	726	714	714	720	927	2410	1950	3140	5240	3020	856	664
25	725	716	712	721	991	2400	1950	3140	5240	3030	887	671
26	732	741	711	720	1150	2380	1950	3150	5240	3030	859	670
27	726	746	700	721	1280	2370	1940	3170	5250	3040	817	675
28	728	737	711	723	1380	2360	2030	3170	5250	3030	817	679
29	730	743	715	719	---	2370	2260	3320	5250	3080	819	686
30	728	736	721	721	---	2360	2410	3710	5240	3030	818	701
31	743	---	727	723	---	2350	---	3740	---	3040	814	---
TOTAL	22559	21185	22368	22694	23050	67430	59630	93510	150930	125710	49945	20293
MEAN	728	706	722	732	823	2175	1988	3016	5031	4055	1611	676
MAX	768	746	738	754	1380	2450	2410	3740	5450	5240	3060	818
MIN	678	661	700	715	721	1450	1890	2590	3740	3020	814	607
AC-FT	44750	42020	44370	45010	45720	133700	118300	185500	299400	249300	99070	40250

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 1997, BY WATER YEAR (WY)

	MEAN	638	560	494	477	474	571	876	1652	2366	3010	2858	1450
MAX	1544	1754	1163	955	1039	2571	3476	5900	8857	7746	5061	3387	
(WY)	1986	1987	1967	1973	1972	1984	1984	1904	1905	1983	1952	1952	
MIN	3.00	3.00	3.00	3.00	3.00	3.00	3.00	4.39	18.7	564	553	180	
(WY)	1943	1942	1939	1939	1942	1938	1939	1955	1955	1967	1967	1940	

PLATTE RIVER BASIN

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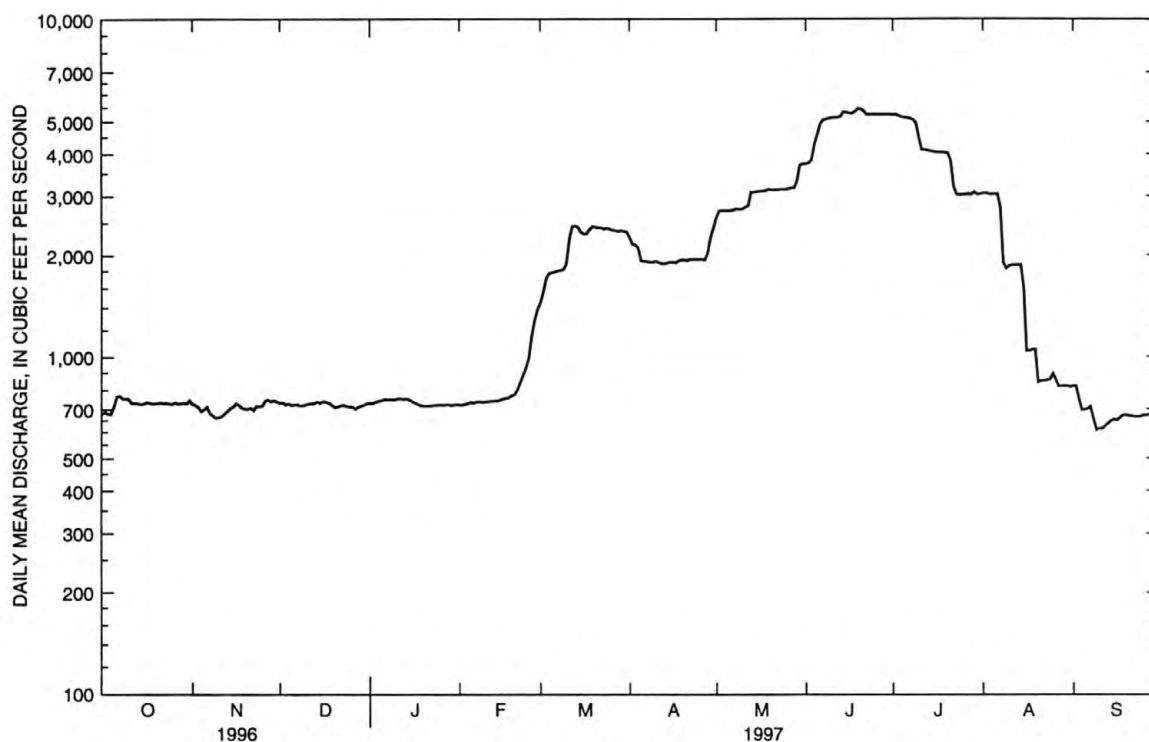
06642000 NORTH PLATTE RIVER AT ALCOVA, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1904 - 1997	
ANNUAL TOTAL	536432		679304		--	
ANNUAL MEAN	1466		1861		1286	
HIGHEST ANNUAL MEAN	--		--		2575	1984
LOWEST ANNUAL MEAN	--		--		660	1995
HIGHEST DAILY MEAN	4560	Jun 14	5450	Jun 19	13400	Jun 11 1905
LOWEST DAILY MEAN	488	Jan 27	607	Sep 9	3.0	Oct 1 1937
ANNUAL SEVEN-DAY MINIMUM	499	Jan 25	627	Sep 8	3.0	Oct 1 1937
INSTANTANEOUS PEAK FLOW	--		5450 ^a	Jun 18	13400	Jun 6 1905
INSTANTANEOUS PEAK STAGE	--		5.56 ^b	Jul 2	11.50 ^c	Jun 6 1905
ANNUAL RUNOFF (AC-FT)	1064000		1347000		931300	
10 PERCENT EXCEEDS	3100		4360		3510	
50 PERCENT EXCEEDS	1010		848		881	
90 PERCENT EXCEEDS	514		697		5.2	

a Gage height, 5.54 ft.

b Backwater from aquatic plant growth.

c Site and datum then in use.



06642000 NORTH PLATTE RIVER AT ALCOVA, WY

LOCATION.--Lat 42°51'40", long 106°12'53", in SE¹/₄ NW¹/₄ 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.

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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT 18...	0940	763	748	8.2	5.5	4.5	632	10.2	98
FEB 27...	1215	1340	637	8.2	5.0	7.0	618	--	--
MAY 09...	0940	3250	469	8.0	8.5	12.5	681	10.1	97
AUG 14...	1025	2110	570	8.2	16.0	18.0	634	8.4	103

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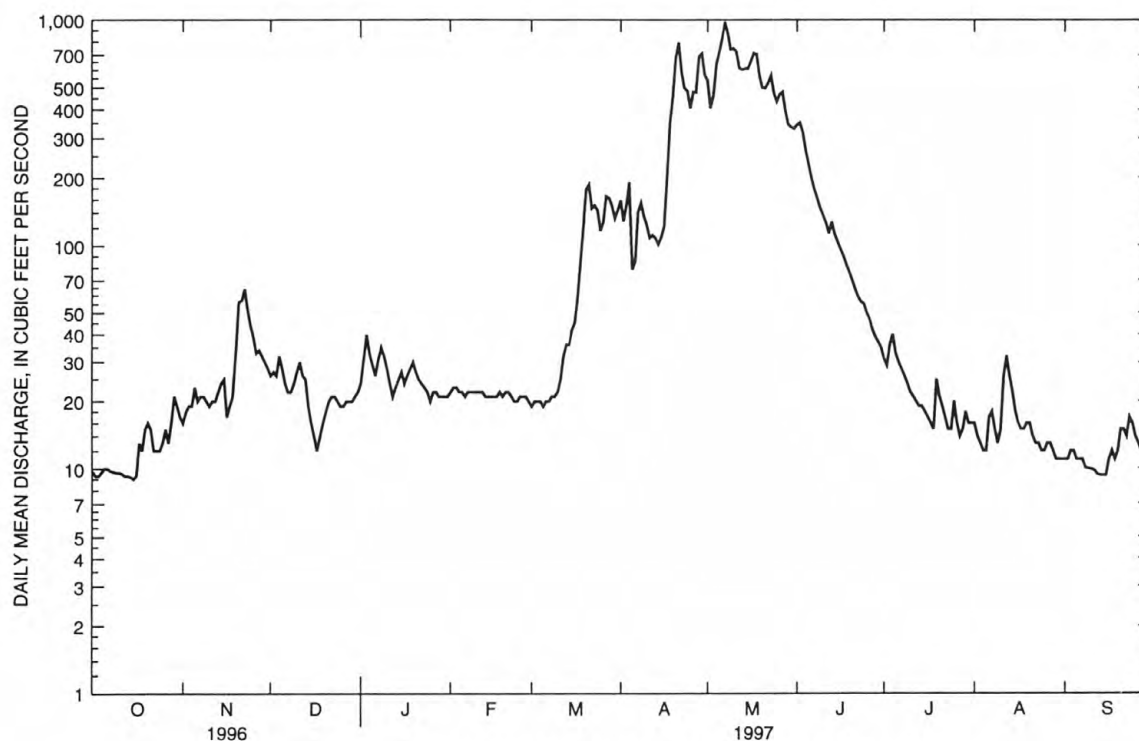
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MEAN	8.26	11.6	9.63	8.43	9.46	31.2	188	277	94.9	15.2	5.51	5.61
MAX	18.4	40.5	34.2	26.0	21.5	79.8	352	805	435	57.4	15.5	11.8
(WY)	1996	1996	1996	1997	1997	1997	1987	1995	1995	1947	1997	1997
MIN	3.85	6.04	3.38	3.85	3.44	9.77	44.8	46.5	14.2	3.04	2.47	2.10
(WY)	1990	1993	1991	1991	1947	1950	1989	1989	1989	1989	1989	1990

PLATTE RIVER BASIN

06646000 DEER CREEK IN CANYON, NEAR GLENROCK, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1946 - 1997
ANNUAL TOTAL	29131.6	38608.2	--
ANNUAL MEAN	79.6	106	57.0
HIGHEST ANNUAL MEAN	--	--	124 1995
LOWEST ANNUAL MEAN	--	--	13.9 1989
HIGHEST DAILY MEAN	760 Apr 24	983 May 7	1920 Jun 10 1986
LOWEST DAILY MEAN	6.6 Sep 7	9.0 Oct 15	1.1 Sep 17 1990
ANNUAL SEVEN-DAY MINIMUM	6.8 Sep 6	9.3 Oct 10	1.4 Sep 12 1990
INSTANTANEOUS PEAK FLOW	--	1180 May 7	3200 Jun 10 1986
INSTANTANEOUS PEAK STAGE	--	7.07 May 7	9.42 Jun 10 1986
ANNUAL RUNOFF (AC-FT)	57780	76580	41320
10 PERCENT EXCEEDS	303	445	165
50 PERCENT EXCEEDS	20	22	9.5
90 PERCENT EXCEEDS	8.8	12	3.6



06646000 DEER CREEK IN CANYON, NEAR GLENROCK, WY

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LOCATION.--Lat 42°36'44", long 105°51'29", in NE¹/₄ NE¹/₄ SW¹/₄ sec.32, T.31 N., R.75 W., Converse County, Hydrologic Unit 10180007, on left bank at Echo Mountain Ranch (old Boxelder Post Office), 0.8 mi downstream from Snowshoe Creek, and 17 mi south of Glenrock.

PERIOD OF RECORD.--April 1946 to September 1951, October 1961 to September 1967, October 1971 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,710 ft above sea level, from topographic map. Prior to June 7, 1946, non-recording gage, and June 8, 1946, to July 21, 1976, water-stage recorder at site 400 ft downstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 17, 21-28, Nov. 30 to Dec. 1, Dec. 15-19, Jan. 3-17, 24-27, Feb. 4-7, 25, 26, Mar. 11-15, and Mar. 28 to Apr. 14. Records good except those for Jan. 28 to Mar. 10, July 30 to Sept. 30, daily discharges less than 1.0 ft³/s, and estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 60 acres, of which about 40 acres are downstream from station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 20	1930	341	3.88
May 17	2300	*648	*4.58

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.78	3.6	8.2	8.1	7.1	7.4	59	224	327	18	3.6	1.3
2	.64	3.4	8.7	12	7.3	7.4	52	199	334	17	2.8	1.5
3	.58	3.7	7.8	11	7.3	7.4	57	200	278	22	2.2	1.5
4	.65	3.7	7.6	9.5	7.1	7.4	49	246	235	22	2.0	1.3
5	.67	4.1	7.3	8.8	6.8	7.4	36	293	204	17	2.3	1.2
6	.64	3.6	7.8	9.1	6.6	7.4	44	357	175	15	4.7	1.0
7	.65	3.5	7.3	9.3	6.8	7.4	48	441	151	13	4.6	.91
8	.64	3.3	7.3	9.0	7.0	7.5	45	446	138	12	3.3	.78
9	.63	3.7	8.4	8.4	7.0	7.9	40	407	119	11	2.6	.76
10	.62	3.8	9.0	7.4	7.0	7.9	34	419	113	9.3	3.6	.82
11	.61	3.9	7.9	6.9	6.9	8.1	33	427	104	9.0	6.5	.78
12	.58	4.1	7.1	7.2	7.0	9.2	38	376	84	8.1	6.1	.76
13	.58	4.7	6.9	7.4	7.0	11	42	371	100	7.4	5.2	.73
14	.62	5.2	6.1	8.1	7.0	13	46	388	80	6.8	3.9	.70
15	.57	4.9	5.8	8.2	6.9	14	47	406	84	6.1	2.8	.66
16	.65	3.5	5.5	8.0	7.0	17	53	464	79	5.4	2.3	.70
17	1.5	4.2	5.2	8.4	7.0	23	79	551	74	4.8	2.2	.67
18	1.6	4.7	5.0	8.7	7.2	28	137	577	63	6.6	2.4	.65
19	2.1	8.5	5.8	8.7	7.2	33	183	474	59	12	2.2	.79
20	2.2	10	6.6	8.5	7.2	45	265	407	52	8.2	1.7	.80
21	2.1	7.8	7.0	8.6	7.2	55	275	413	47	6.2	1.4	.80
22	1.6	9.0	6.6	8.0	7.2	59	225	456	43	5.3	1.4	.84
23	1.5	11	6.4	7.8	7.2	62	204	441	40	4.8	1.3	.87
24	1.6	7.2	5.9	7.3	7.2	57	185	385	41	6.1	1.2	.88
25	1.7	9.0	5.8	6.7	7.3	67	166	340	35	6.0	1.2	.92
26	1.8	7.8	6.1	6.3	7.3	66	180	404	32	4.5	2.3	.84
27	2.4	8.3	6.1	6.6	7.4	75	179	336	28	3.9	2.4	.79
28	3.1	10	6.1	6.8	7.4	70	230	310	25	3.9	2.0	.73
29	4.2	8.6	6.0	7.0	---	66	255	323	23	3.9	2.0	.81
30	4.4	7.6	6.2	7.0	---	64	233	324	21	4.0	1.8	.95
31	4.0	---	6.4	7.0	---	67	---	303	---	3.8	1.5	---
TOTAL	45.91	176.4	209.9	251.8	198.6	984.4	3519	11708	3188	283.1	85.5	26.74
MEAN	1.48	5.88	6.77	8.12	7.09	31.8	117	378	106	9.13	2.76	.89
MAX	4.4	11	9.0	12	7.4	75	275	577	334	22	6.5	1.5
MIN	.57	3.3	5.0	6.3	6.6	7.4	33	199	21	3.8	1.2	.65
AC-FT	91	350	416	499	394	1950	6980	23220	6320	562	170	53

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1997, BY WATER YEAR (WY)

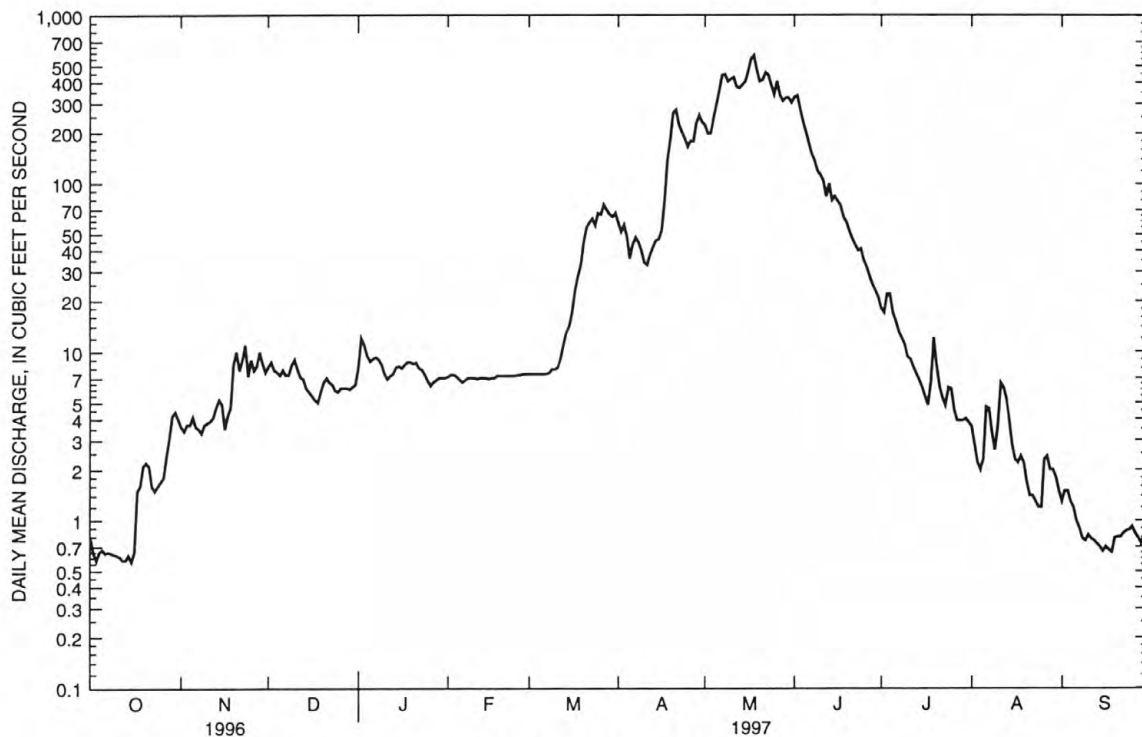
MEAN	2.23	3.23	2.76	2.43	2.76	8.48	76.7	243	81.4	9.16	1.49	.81
MAX	12.5	17.6	15.0	8.12	9.25	31.8	220	562	332	48.8	4.95	4.11
(WY)	1983	1983	1996	1997	1962	1997	1962	1973	1995	1947	1984	1973
MIN	.24	.60	.46	.66	.093	1.47	9.33	39.5	8.28	.21	.021	.058
(WY)	1965	1964	1964	1981	1966	1981	1981	1989	1985	1989	1989	1981

PLATTE RIVER BASIN

06647500 BOX ELDER CREEK AT BOXELDER, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1946 - 1997
ANNUAL TOTAL	14928.62	20677.35	--
ANNUAL MEAN	40.8	56.7	36.4
HIGHEST ANNUAL MEAN	--	--	85.8
LOWEST ANNUAL MEAN	--	--	6.95
HIGHEST DAILY MEAN	521 May 16	577 May 18	2460 May 14 1965
LOWEST DAILY MEAN	.12 Aug 20	.57 Oct 15	.00 Some years
ANNUAL SEVEN-DAY MINIMUM	.13 Aug 16	.60 Oct 9	.00 Some years
INSTANTANEOUS PEAK FLOW	--	648 May 17	4530 May 14 1965
INSTANTANEOUS PEAK STAGE	--	4.58 May 17	8.58 ^a May 14 1965
ANNUAL RUNOFF (AC-FT)	29610	41010	26370
10 PERCENT EXCEEDS	165	231	109
50 PERCENT EXCEEDS	6.0	7.3	2.9
90 PERCENT EXCEEDS	.26	.88	.40

a Site and datum then in use.



06647500 BOX ELDER CREEK AT BOXELDER, WY

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LOCATION.--Lat 42°39'10", long 105°09'32", in NE 1/4 SE 1/4 SW 1/4 sec.17, T.31 N., R.69 W., Converse County, Hydrologic Unit 10180008, on right bank 0.5 mi downstream from bridge on U.S. Highway 87, 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.

PERIOD OF RECORD.--January, April to November 1895, April to October 1896, January 1897 to December 1898, April to November 1899, April to September 1917, April to September 1918, May to September 1924, April 1958 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as "at Orin Junction" 1895, 1897-99 and as "at McKinley" 1917-18.

GAGE.--Water-stage recorder, and concrete weir since Mar. 6, 1994. Elevation of gage is 4,660 ft above sea level, from topographic map. Jan. 1, 1895, to Nov. 30, 1899, and May 1 to Sept. 30, 1924, nonrecording gage at railroad bridge just upstream from U.S. Highway 87 at different datum. Apr. 1, 1917, to Sept. 30, 1918, nonrecording gage at site 1.9 mi downstream at different datum. Apr. 1958 to Mar. 5, 1994, at site 0.3 mi upstream at different datum.

COOPERATION.--Seven discharge measurements provided by the Bureau of Reclamation and nine provided by the Office of the Wyoming State Engineer.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	810	976	944	1310	1310	1450	3030	4140	4850	5200	3140	830
2	792	954	957	1430	1340	1530	3030	4480	4900	5160	3130	820
3	781	953	903	1520	1380	1730	2880	4380	5050	5240	3220	841
4	906	946	834	1210	1170	1840	2900	4480	4850	5340	3310	867
5	917	949	852	1130	1190	1900	3060	4740	4910	5200	3120	875
6	903	1010	875	982	1180	1950	2730	4870	5010	5190	3090	796
7	890	996	870	949	1040	1920	2610	5000	5260	5150	3120	806
8	934	934	885	934	1030	1900	2730	5170	5460	5080	3080	791
9	939	903	977	960	917	1900	2770	5100	5490	4960	2570	782
10	921	896	1110	1020	975	1930	2740	4870	5570	4970	2140	782
11	906	886	1040	860	1060	1940	2690	4810	5590	4720	2150	738
12	898	876	982	500	1160	2160	2620	4740	5640	4260	2200	742
13	879	855	953	360	1150	2490	2580	4500	5610	4110	2360	714
14	868	842	940	380	1190	2630	2620	4510	5830	4050	2170	666
15	849	848	880	520	1150	2600	2630	4630	6060	4050	2080	665
16	848	915	840	900	1210	2610	2700	4570	5840	4050	2050	645
17	899	864	800	1050	1280	2580	2780	4620	5850	4030	1750	655
18	944	873	520	1000	1390	2650	3020	4690	5720	4010	1360	679
19	911	993	510	1100	1310	2750	3380	4760	5640	4080	1290	708
20	880	983	480	1200	1310	2900	3700	4470	5720	4140	1240	731
21	914	964	590	1150	1210	3040	4160	4280	5700	4170	1210	756
22	912	993	750	1150	1130	3120	4290	4280	5650	4100	1090	691
23	900	976	830	1100	1070	3030	3950	4490	5460	3660	995	680
24	896	970	770	1050	1030	3050	3710	4520	5390	3190	981	693
25	903	965	700	1000	1110	3100	3560	4400	5380	3170	943	692
26	1070	964	790	950	1180	3020	3410	4320	5320	3120	907	663
27	1020	943	830	940	1300	3030	3450	4820	5260	3120	854	645
28	981	916	900	1050	1390	3080	3390	4690	5250	3110	847	646
29	1050	947	1100	1100	---	3120	3650	4580	5240	3350	821	663
30	1040	958	1150	1100	---	3090	4140	4650	5220	3330	824	744
31	1010	---	1250	1200	---	3030	---	4840	---	3350	817	---
TOTAL	28371	28048	26812	31105	33162	77070	94910	143400	162720	130660	58859	22006
MEAN	915	935	865	1003	1184	2486	3164	4626	5424	4215	1899	734
MAX	1070	1010	1250	1520	1390	3120	4290	5170	6060	5340	3310	875
MIN	781	842	480	360	917	1450	2580	4140	4850	3110	817	645
AC-FT	5627											

MEAN	1190	1086	906	912	1009	1195	1882	3365	3267	2660	2298	1618
MAX	1708	2191	1223	1172	1472	2911	4578	9274	14430	9973	5258	4150
(WY)	1986	1987	1974	1986	1980	1984	1974	1973	1917	1917	1924	1917
MIN	571	639	544	600	594	618	670	839	958	982	583	399
(WY)	1961	1959	1991	1992	1993	1981	1981	1992	1990	1967	1898	1898

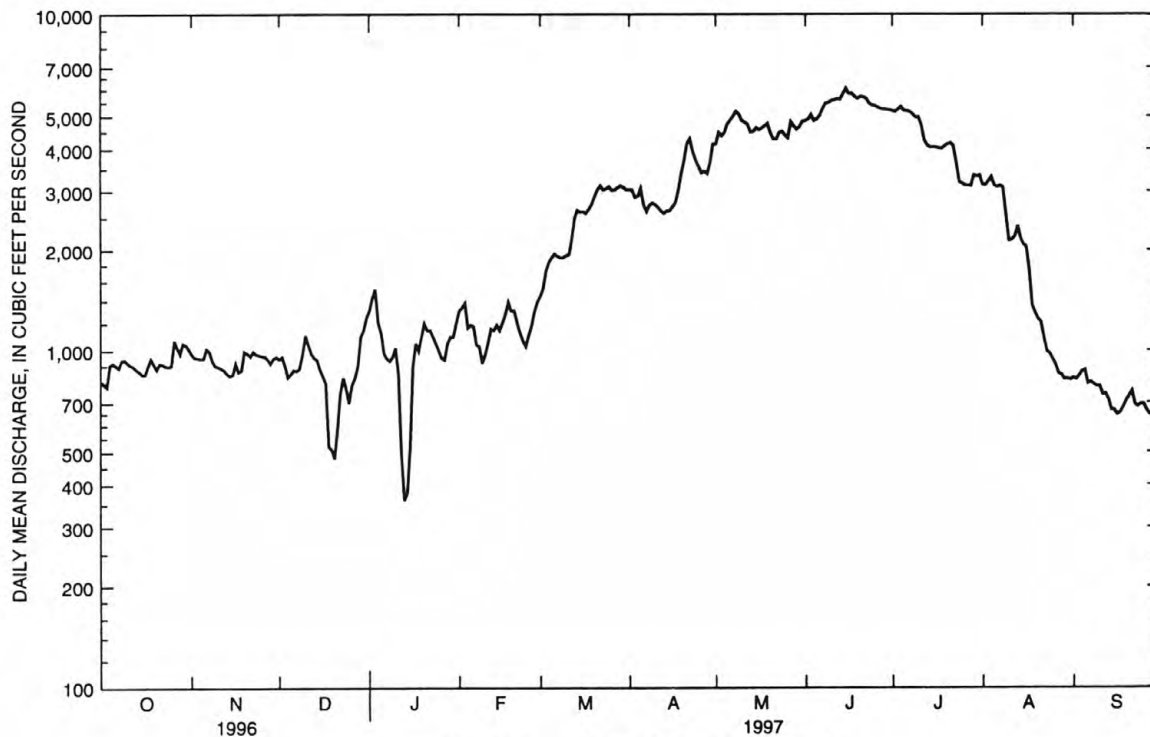
PLATTE RIVER BASIN

06652000 NORTH PLATTE RIVER AT ORIN, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1895 - 1997	
ANNUAL TOTAL	649980		837123		--	
ANNUAL MEAN	1776		2293		1642	
HIGHEST ANNUAL MEAN	--		--		3110	1984
LOWEST ANNUAL MEAN	--		--		935	1961
HIGHEST DAILY MEAN	4640	Jun 17	6060	Jun 15	20300	Jun 27 1917
LOWEST DAILY MEAN	445	Jan 7	360	Jan 13	140	Dec 21 1990
ANNUAL SEVEN-DAY MINIMUM	499	Jan 3	636	Dec 18	324	Sep 25 1966
INSTANTANEOUS PEAK FLOW	--		6810	Jun 14	23800 ^a	May 15 1965
INSTANTANEOUS PEAK STAGE	--		6.38	Jun 14	10.45 ^b	Jun 12 1970
ANNUAL RUNOFF (AC-FT)	1289000		1660000		1190000	
10 PERCENT EXCEEDS	3920		5000		3830	
50 PERCENT EXCEEDS	1100		1290		1290	
90 PERCENT EXCEEDS	692		792		700	

a Gage height, 10.00 ft, site and datum then in use.

b Site and datum then in use.



06652000 NORTH PLATTE RIVER AT ORIN, WY

06652700 GLENDO RESERVOIR NEAR GLENDO, WY

LOCATION.--Lat 42°28'21", long 104°57'28", in SW¹/₄ NE¹/₄ sec.24, T.29 N., R.68 W., Platte County, Hydrologic Unit 10180008, on right bank in gate shaft house on North Platte River, 0.5 mi southwest of Glendo Dam, and 5.0 mi southeast of Glendo.

DRAINAGE AREA.--15,545 mi², of which 1,215 mi² probably is noncontributing.

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

REVISED RECORDS.--WDR WY-76-1: Drainage area.

GAGE.--Water-stage recorder for elevations above 4,543.50 ft. Datum of gage is 4,543.50 ft above sea level (levels by Bureau of Reclamation).

REMARKS.--Reservoir is formed by rock-fill dam completed in October 1957. Storage began Oct. 17, 1957. Capacity, 789,400 acre-ft at elevation 4,653.00 ft, spillway crest. Dead storage, 11,030 acre-ft. Figures given herein represent total contents. Water is used for irrigation in North Platte River basin, and for power generation.

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily contents, 758,800 acre-ft, May 28, 1973, elevation, 4,650.94 ft; minimum daily contents(since appreciable storage was attained), 15,140 acre-ft, Sept. 28, 1966, elevation, 4,548.10 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 572,000 acre-ft, July 9, 10, maximum daily elevation, 4,639.24 ft, July 9; minimum daily contents, 103,000 acre-ft, Oct. 1, elevation, 4,581.01 ft.

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

4,580	98,800	4,610	274,000	4,630	459,000
4,590	144,000	4,620	385,000	4,640	583,000
4,600	202,000				

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY OBSERVATION AT 2400 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103000	160000	217000	271000	330000	387000	494000	499000	523000	552000	456000	314000
2	104000	162000	219000	274000	332000	389000	496000	500000	527000	551000	453000	307000
3	105000	164000	220000	277000	335000	393000	496000	500000	530000	550000	451000	300000
4	107000	165000	223000	279000	336000	396000	499000	502000	534000	550000	449000	294000
5	109000	167000	225000	282000	338000	401000	500000	503000	535000	549000	447000	287000
6	110000	169000	226000	284000	340000	405000	499000	505000	537000	551000	445000	282000
7	112000	171000	228000	285000	342000	408000	499000	508000	540000	558000	443000	276000
8	114000	173000	230000	288000	343000	411000	499000	511000	542000	565000	441000	270000
9	116000	175000	231000	289000	345000	415000	500000	513000	544000	572000	438000	265000
10	118000	177000	234000	291000	346000	419000	500000	513000	545000	572000	433000	260000
11	119000	178000	236000	292000	348000	421000	501000	513000	546000	571000	430000	255000
12	121000	180000	238000	293000	349000	425000	501000	514000	547000	568000	427000	250000
13	123000	182000	240000	293000	351000	429000	501000	513000	548000	564000	425000	247000
14	124000	184000	243000	293000	353000	433000	501000	511000	550000	561000	421000	244000
15	126000	185000	244000	294000	355000	438000	502000	511000	552000	558000	419000	242000
16	128000	188000	246000	295000	358000	442000	501000	511000	553000	554000	416000	240000
17	130000	189000	246000	297000	361000	446000	501000	509000	555000	551000	413000	239000
18	132000	191000	246000	299000	363000	449000	501000	508000	556000	548000	409000	238000
19	134000	193000	247000	302000	365000	454000	503000	507000	556000	545000	403000	237000
20	135000	195000	248000	304000	367000	459000	503000	505000	557000	542000	397000	236000
21	137000	197000	250000	306000	369000	464000	506000	504000	558000	539000	391000	236000
22	139000	199000	251000	310000	371000	468000	507000	502000	558000	535000	385000	234000
23	141000	201000	253000	311000	373000	473000	508000	500000	558000	531000	378000	233000
24	143000	203000	254000	314000	375000	478000	508000	500000	558000	524000	371000	231000
25	145000	205000	256000	315000	377000	483000	507000	501000	558000	514000	364000	230000
26	147000	207000	258000	317000	380000	487000	506000	502000	557000	504000	357000	230000
27	149000	209000	260000	319000	382000	490000	504000	505000	556000	495000	350000	231000
28	152000	211000	261000	320000	384000	491000	503000	509000	555000	486000	343000	233000
29	154000	213000	264000	323000	---	493000	501000	512000	554000	477000	336000	234000
30	156000	215000	266000	325000	---	493000	499000	515000	553000	468000	329000	236000
31	158000	---	268000	327000	---	493000	---	519000	---	460000	322000	---
MAX	158000	215000	268000	327000	384000	493000	508000	519000	558000	572000	456000	314000
MIN	103000	160000	217000	271000	330000	387000	494000	499000	523000	460000	322000	230000
(#)	4,592.56	4,601.88	4,609.29	4,616.47	4,622.75	4,632.99	4,633.49	4,635.10	4,637.78	4,630.08	4,615.85	4,604.90
(*)	+57,000	+57,000	+53,000	+59,000	+57,000	+109,000	+6,000	+20,000	+34,000	-93,000	-138,000	-86,000
CAL YR 1996	MAX	545,000	MIN	91,700	(*)	+27,000						
WTR YR 1997	MAX	572,000	MIN	103,000	(*)	+135,000						

(#) Elevation, in feet, at end of month.

(*) Change in contents, in acre-feet.

PLATTE RIVER BASIN

06652800 NORTH PLATTE RIVER BELOW GLENDO RESERVOIR, WY

LOCATION.--Lat 42°27'25", long 104°56'50", 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. Datum of gage is 4,488.94 ft above sea level, (levels by Bureau of Reclamation).

REMARKS.--Estimated daily discharges: Dec. 14-28, and Jan. 4-7, 9-17. Records good except those less than 500 ft³/s, which are fair, and those for estimated daily discharges, which are poor. Flow completely regulated by Glendo Reservoir since Oct. 17, 1957 (station 06652700). 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. Bureau of Reclamation data collection platform with satellite telemetry at station.

COOPERATION.--Nineteen discharge measurements provided by the Bureau of Reclamation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	315	28	29	29	28	27	2400	4450	3060	5650	5610	4530
2	246	29	29	29	28	27	2450	4120	3080	5560	4410	4520
3	214	29	29	29	28	27	2400	3760	3290	5580	4440	4410
4	39	29	28	27	27	27	2410	3750	3100	5530	4440	4280
5	41	28	29	20	28	27	2390	3740	3780	5490	4250	4070
6	42	28	29	24	28	27	2400	3810	4080	3800	4120	3860
7	43	28	29	23	27	27	2390	3380	4080	1180	4160	3820
8	37	28	29	24	27	27	2400	3530	4090	1130	4180	3690
9	32	29	29	23	27	26	2400	4260	4660	1130	4330	3570
10	32	29	29	21	27	94	2360	4580	5030	4700	4340	3390
11	32	29	29	17	27	449	2360	4570	5050	5510	4110	3270
12	32	29	29	20	27	470	2380	4710	5050	5500	3760	3010
13	31	29	29	22	27	402	2350	4950	5060	5520	3590	2540
14	29	29	27	24	27	413	2360	4980	5020	5490	3500	2260
15	28	29	24	27	27	426	2360	4960	5020	5520	3410	1500
16	28	30	23	28	27	418	2630	5040	5020	5520	3380	1320
17	29	29	21	29	27	423	2860	5210	4970	5590	3540	1200
18	28	29	19	31	27	433	2860	5210	5030	5570	3770	1220
19	28	28	23	30	27	410	2850	5250	5180	5530	4040	1260
20	28	28	27	30	27	403	2850	5300	5260	5570	4160	1260
21	27	27	26	29	27	408	3040	5290	5260	5570	4360	1200
22	27	28	24	29	27	409	3250	5300	5280	5470	4480	1450
23	27	28	23	29	27	408	3350	5270	5290	5470	4600	1750
24	27	28	24	29	27	409	3940	5130	5270	7100	4570	1740
25	28	29	25	29	27	570	3950	4390	5280	8030	4550	1540
26	31	28	23	28	27	1120	3940	3740	5470	7970	4570	423
27	28	28	27	28	27	1640	3960	3450	5660	7910	4580	288
28	28	28	29	28	27	1940	4440	3080	5650	7870	4580	186
29	28	28	30	28	---	2310	4670	3070	5650	7850	4560	41
30	27	28	29	28	---	2400	4670	3060	5630	7890	4530	42
31	27	---	29	28	---	2390	---	3080	---	7740	4540	---
TOTAL	1639	854	829	820	761	18587	89070	134420	143350	173940	131460	67640
MEAN	52.9	28.5	26.7	26.5	27.2	600	2969	4336	4778	5611	4241	2255
MAX	315	30	30	31	28	2400	4670	5300	5660	8030	5610	4530
MIN	27	27	19	17	27	26	2350	3060	3060	1130	3380	41
AC-FT	3250	1690	1640	1630	1510	36870	176700	266600	284300	345000	260800	134200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1997, BY WATER YEAR (WY)

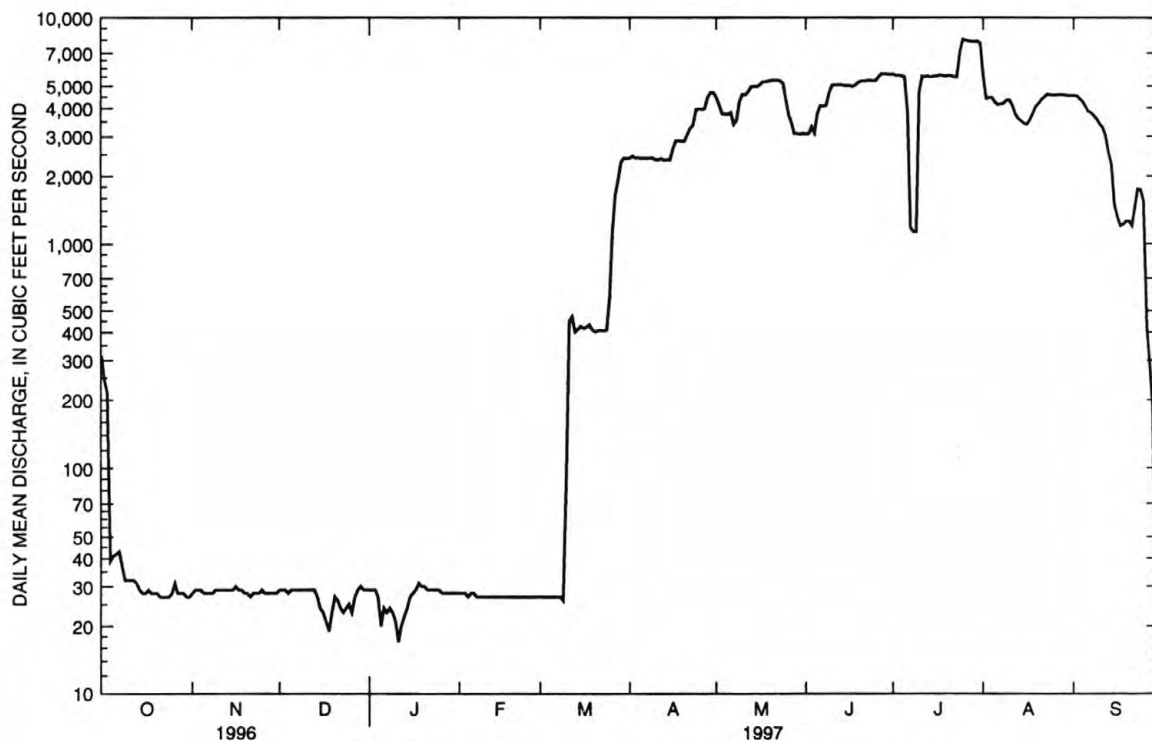
	MEAN	70.8	30.6	15.9	13.8	106	472	1153	2206	2764	4874	4935	2537
MAX	951	857	324	173	1054	3837	3868	4688	8916	8681	8923	6027	
(WY)	1987	1987	1959	1963	1984	1974	1974	1984	1973	1983	1983	1983	
MIN	1.51	1.09	1.00	1.30	1.33	1.58	203	15.4	66.1	3104	3871	906	
(WY)	1992	1991	1991	1992	1990	1990	1960	1990	1962	1962	1977	1961	

PLATTE RIVER BASIN

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06652800 NORTH PLATTE RIVER BELOW GLENDON RESERVOIR, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1958 - 1997	
ANNUAL TOTAL	621586		763370		--	
ANNUAL MEAN	1698		2091		1609	
HIGHEST ANNUAL MEAN	--		--		3126	1984
LOWEST ANNUAL MEAN	--		--		920	1961
HIGHEST DAILY MEAN	7460	Jul 27	8030	Jul 25	10300	Jun 30 1984
LOWEST DAILY MEAN	19	Dec 18	17	Jan 11	.41	Oct 17 1977
ANNUAL SEVEN-DAY MINIMUM	23	Dec 15	21	Jan 7	.64	Dec 20 1990
INSTANTANEOUS PEAK FLOW	--		8140	Jul 24	10300	Jun 29 1984
INSTANTANEOUS PEAK STAGE	--		10.24	Jul 24	11.16	Jun 29 1984
ANNUAL RUNOFF (AC-FT)	1233000		1514000		1166000	
10 PERCENT EXCEEDS	4890		5280		4920	
50 PERCENT EXCEEDS	36		1130		215	
90 PERCENT EXCEEDS	27		27		2.0	



06652800 NORTH PLATTE RIVER BELOW GLENDON RESERVOIR, WY

PLATTE RIVER BASIN

06655500 GUERNSEY RESERVOIR NEAR GUERNSEY, WY

LOCATION.--Lat 42°17'23", long 104°45'48", in NE¹/₄ NW¹/₄ sec.27, T.27 N., R.66 W., Platte County, Hydrologic Unit 10180008, on gate structure at right end of dam on North Platte River and 1.2 mi northwest of Guernsey.

DRAINAGE AREA.--16,224 mi², of which 1,216 mi² probably is non-contributing.

PERIOD OF RECORD.--January 1928 to current year. Prior to October 1950 monthend figures only, published in WSP 1310.

REVISED RECORDS.--WDR WY-76-1: Drainage area. WDR WY-82-1: 1981 (capacity).

GAGE.--Water-stage recorder. Datum of gage is 4,370.00 ft above sea level (levels by Bureau of Reclamation). Prior to Sept. 20, 1966, nonrecording gages at same datum.

REMARKS.--Reservoir is formed by rock-fill dam completed in July 1927. Capacity, 45,600 acre-ft, at elevation 4,420 ft, top of spillway gate. Dead storage is negligible. Figures given herein represent total contents. Usable contents published prior to October 1956. Water is used for irrigation in eastern Wyoming and western Nebraska and for power generation.

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily contents, 73,240 acre-ft, Oct. 17, 1929, elevation, 4,420.95 ft, no storage Oct. 11, 1982, Oct. 6, 7, Oct. 10 to Dec. 4, 1983, Oct. 19, Oct. 25, 1984 to Jan. 14, 1985, Dec. 6-7, 1986; minimum daily elevation, 4,361.50 ft, Oct. 5, 6, 1958.

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 37,100 acre-ft, Aug. 13, elevation, 4,416.27 ft; minimum daily contents, 9.0 acre-ft, Sept. 30, elevation, 4,372.12 ft.

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

4,372	8	4,385	1,200	4,400	9,690	4,415	34,300
4,375	50	4,390	2,710	4,405	16,000	4,420	45,600
4,380	375	4,395	5,360	4,410	24,300		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY OBSERVATION AT 2400 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2570	4570	8340	11900	15200	18000	28700	31200	35800	36000	35000	35600
2	1220	4680	8480	12000	15300	18100	28700	31400	36500	35600	35000	35400
3	233	4800	8580	12100	15500	18200	28800	31400	36800	35500	35100	35500
4	616	4900	8720	12200	15500	18300	29200	31400	36800	35500	35200	35600
5	935	5050	8840	12300	15700	18400	29400	31300	36400	35400	35400	35700
6	1140	5140	8970	12500	15800	18500	29100	31200	36400	34100	35500	35700
7	1330	5260	9090	12600	15900	18600	29100	31600	36400	25800	35600	35700
8	1510	5370	9230	12700	16000	18700	29200	31100	36400	17000	35700	35700
9	1680	5460	9330	12800	16100	18800	29500	30600	35800	7900	35500	35700
10	1820	5590	9490	12900	16200	18900	29600	30500	35700	2230	35700	35900
11	1960	5700	9570	12900	16300	19300	29600	30200	35700	2110	36200	35900
12	2090	5830	9690	13000	16400	20300	29700	29900	35600	1810	36800	35700
13	2210	5930	9790	13100	16500	21100	29700	29700	35800	1650	37100	34600
14	2330	6060	9950	13200	16600	21900	29800	29500	36000	1500	36900	33400
15	2450	6200	10000	13300	16700	22800	29800	29400	36100	1320	36800	30500
16	2580	6340	10200	13400	16800	23600	29600	29200	36100	1000	36600	27400
17	2700	6460	10200	13500	16900	24500	29700	29600	35800	921	36300	24200
18	2820	6600	10200	13600	17000	25400	30000	30000	35400	946	36100	21000
19	2950	6750	10300	13700	17100	26200	30400	30500	35300	956	36200	18100
20	3070	6870	10400	13900	17200	27000	30700	31100	35400	904	36000	15200
21	3180	7000	10500	14000	17300	27800	30700	31700	35400	973	36000	12000
22	3290	7160	10700	14100	17400	28700	30700	32400	35600	634	35900	8800
23	3410	7260	10800	14200	17500	29600	30500	32700	35700	642	35900	7700
24	3530	7390	10900	14300	17600	30100	30500	32800	35700	2640	35900	7580
25	3660	7550	11000	14400	17700	29900	30800	33100	35900	7680	35900	7660
26	3840	7690	11100	14500	17700	29500	31300	33000	35900	11400	35900	6000
27	3970	7830	11200	14600	17800	29100	31600	32700	35900	14900	35900	3240
28	4090	7970	11300	14700	17900	28900	31200	33100	36000	18300	35800	1200
29	4220	8130	11500	14800	---	28600	31100	33800	36000	22500	35700	18
30	4340	8210	11600	14900	---	28600	31000	34500	36000	26700	35700	9.0
31	4450	---	11700	15000	---	28700	---	35100	---	31800	35600	---
MAX	4450	8210	11700	15000	17900	30100	31600	35100	36800	36000	37100	35900
MIN	233	4570	8340	11900	15200	18000	28700	29200	35300	634	35000	9.0
(#)	4,393.55	4,398.52	4,401.80	4,404.33	4,406.27	4,412.27	4,413.42	4,415.36	4,415.79	4,413.82	4,415.60	4,372.12
(*)	+550	+3,760	+3,490	+3,300	+2,900	+10,800	+2,300	+4,100	+900	-4,200	+3,800	-35,600

CAL YR 1996 MAX 37,800 MIN 233 (*) -3,100
WTR YR 1997 MAX 36,800 MIN 9.0 (*) -3,900

(#) Elevation, in feet, at end of month.
(*) Change in contents, in acre-feet.

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LOCATION.--Lat 42°16'50", long 104°45'15", in SE¹/₄ SE¹/₄ sec.27, T.27 N., R.66 W., Platte County, Hydrologic Unit 10180008, on right bank 1.0 mi northwest of Guernsey and 1.1 mi downstream from Guernsey Dam.

PERIOD OF RECORD.--June 1900 to current year (no winter records prior to 1903). Monthly discharge only for some periods, published in WSP 1310. Published as "near Guernsey" 1900-1901, 1904; as "at Guernsey" 1902-3, 1905-8, March to October 1912; as "at Whalen" 1909; as North Platte River and Interstate Canal at Whalen 1910-11, 1913-16; and as "above Whalen" 1917-27.

GAGE.--Water-stage recorder. Elevation of gage is 4,340 ft above sea level, from topographic map. Prior to Nov. 17, 1908, and Mar. 30 to Oct. 31, 1912, nonrecording gages downstream at several sites within 0.8 mi at different datums. May 1, 1909, to Dec. 31, 1927, nonrecording gages at different datums on river and diversion canals at Whalen Dam about 9.0 mi downstream. Jan. 1, 1928, to Sept. 30, 1964, water-stage recorder at site 130 ft downstream and datum 1.50 ft higher. Oct. 1, 1964 to Sept. 29, 1989, water-stage recorder at site 130 ft downstream at same datum.

COOPERATION.--Seventeen discharge measurements provided by the Bureau of Reclamation.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	906	5.5	4.3	8.1	11	13	2480	4620	2980	5750	4530	4470
2	856	5.6	4.2	7.7	11	14	2480	4270	2990	5840	4260	4490
3	541	5.3	4.2	8.1	12	12	2480	3930	3360	5690	4300	4330
4	149	5.1	4.2	7.5	11	7.2	2480	3960	3290	5640	4320	4200
5	9.4	4.8	4.6	8.1	11	7.3	2500	3940	3980	5620	4120	3970
6	9.0	4.9	4.2	8.3	12	8.3	2510	3990	4280	5640	3990	3790
7	8.6	4.8	4.2	8.3	12	8.3	2510	3550	4280	5590	4040	3740
8	8.2	4.7	4.8	8.6	12	8.5	2510	3720	4290	5640	4050	3660
9	8.3	4.7	5.2	8.8	12	9.5	2500	4430	4910	5680	4210	3490
10	8.8	4.7	5.4	8.8	12	12	2500	4770	5250	5650	4210	3340
11	8.1	4.7	5.5	8.5	12	12	2500	4780	5250	5660	3970	3250
12	7.9	4.7	5.3	8.3	12	12	2500	4910	5230	5710	3660	3180
13	8.3	4.6	5.3	8.3	12	8.3	2500	5100	5200	5650	3590	3110
14	8.3	4.6	5.1	8.9	13	7.4	2490	5100	5170	5620	3580	3090
15	8.4	4.7	4.8	10	12	6.9	2490	5100	5140	5590	3500	3090
16	8.2	4.9	4.6	10	12	6.5	2780	5110	5110	5640	3470	3000
17	8.1	4.7	4.4	10	12	6.4	2990	5080	5210	5480	3620	2890
18	8.1	4.6	4.7	11	12	6.3	2990	5100	5280	5530	3720	2850
19	7.5	4.8	5.1	11	13	6.1	3000	5060	5300	5520	3880	2800
20	6.8	4.3	5.4	11	15	6.2	3000	5070	5340	5450	4130	2740
21	6.6	4.2	4.9	11	15	5.4	3260	5030	5310	5440	4260	2880
22	6.7	4.4	4.7	11	15	5.7	3510	5020	5320	5420	4370	2870
23	6.5	4.3	4.7	11	16	5.7	3570	5170	5340	5290	4520	2300
24	6.6	4.6	4.8	11	16	126	3990	5180	5340	5340	4490	1850
25	6.5	4.6	5.4	11	16	560	4000	4850	5310	5780	4460	1740
26	6.3	4.4	5.7	11	14	1220	3920	4140	5510	6030	4490	1680
27	6.1	4.3	6.4	11	14	1750	3980	4030	5700	6030	4510	1680
28	6.3	4.3	6.2	12	13	2030	4620	3080	5720	6040	4530	1280
29	5.7	4.1	7.2	12	---	2400	4870	2980	5730	5680	4520	532
30	5.7	4.2	7.3	11	---	2470	4870	2960	5740	5700	4470	189
31	5.7	---	7.7	11	---	2440	---	2970	---	5270	4470	---
TOTAL	2652.7	140.1	160.5	302.3	360	13191.0	92780	137000	146860	174610	128240	86481
MEAN	85.6	4.67	5.18	9.75	12.9	426	3093	4419	4895	5633	4137	2883
MAX	906	5.6	7.7	12	16	2470	4870	5180	5740	6040	4530	4490
MIN	5.7	4.1	4.2	7.5	11	5.4	2480	2960	2980	5270	3470	189
AC-FT	5260	278	318	600	714	26160	184000	271700	291300	346300	254400	

MEAN	539	244	176	163	202	450	1161	2960	4222	4758	4208	2659
MAX	5690	2610	1000	800	900	3837	5680	8588	15380	9896	9035	6518
(WY)	1913	1913	1907	1907	1907	1974	1924	1901	1917	1917	1983	1983
MIN	2.42	1.40	1.35	1.38	1.27	1.24	11.5	7.15	413	1305	400	196
(WY)	1990	1976	1963	1990	1991	1991	1957	1990	1982	1902	1902	1902

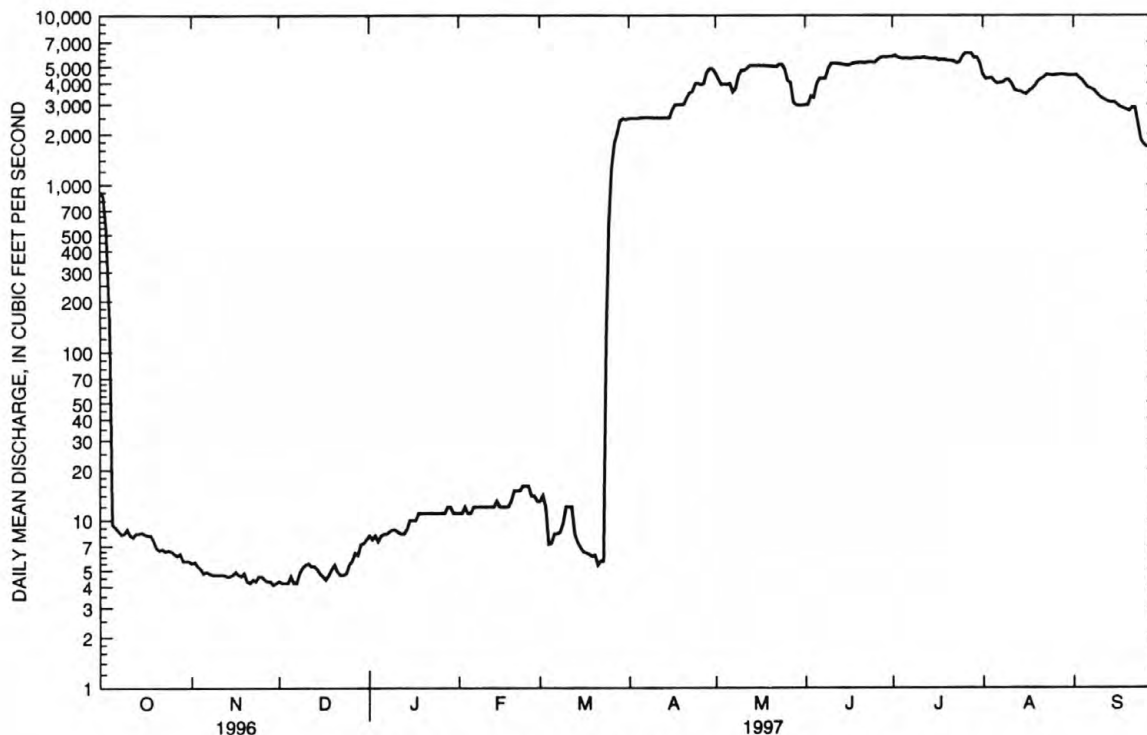
PLATTE RIVER BASIN

06656000 NORTH PLATTE RIVER BELOW GUERNSEY RESERVOIR, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1901 - 1997	
ANNUAL TOTAL	642848.0		782777.6		--	
ANNUAL MEAN	1756		2145		1823	
HIGHEST ANNUAL MEAN	--		--		3556	
LOWEST ANNUAL MEAN	--		--		832	
HIGHEST DAILY MEAN	5420	Jul 3	6040	Jul 28	30000	Jun 3 1908
LOWEST DAILY MEAN	3.7	Mar 25,26	4.1	Nov 29	.00	Feb 28 1927, several days 1951
ANNUAL SEVEN-DAY MINIMUM	4.0	Mar 23	4.2	Nov 28	.00	Nov 19 1951
INSTANTANEOUS PEAK FLOW	--		6170	Jul 25	30000 ^a	Jun 2 1908
INSTANTANEOUS PEAK STAGE	--		6.64	Jul 25	11.50 ^b	Jun 2 1908
ANNUAL RUNOFF (AC-FT)	1275000		1553000		1320000	
10 PERCENT EXCEEDS	4980		5340		4960	
50 PERCENT EXCEEDS	11		1740		735	
90 PERCENT EXCEEDS	4.6		4.8		4.5	

a From rating curve extended above 13,000 ft³/s.

b From floodmark, site and datum then in use.



06656000 NORTH PLATTE RIVER BELOW GUERNSEY RESERVOIR, WY

LOCATION.--Lat 42°14'17", long 104°37'41", in SW¹/₄ SW¹/₄ 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.

PERIOD OF RECORD.--May 1909 to current year. Monthly discharge only, prior to January 1915, published in WSP 1910. Prior to Apr. 16, 1938, published as "below Whalen", and Apr. 16, 1938, to Sept. 30, 1974, as "at recorder station, below Whalen".

GAGE.--Water-stage recorder and sheet piling weir since Apr. 25, 1994. Elevation of gage is 4,280 ft above sea level, from topographic map. Prior to Apr. 16, 1938, nonrecording gages at Whalen diversion dam and canals 0.7 mi upstream at different datums. Apr. 16, 1938, to Nov. 17, 1955, water-stage recorder at site 1.9 mi downstream, and Nov. 18, 1955, to Apr. 25, 1994, at site 1.8 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Dec. 14-30, Jan. 5-19, 24-31, and Feb. 5, 6, 24, 25. Records good except those for estimated daily discharges, which are poor. Flow regulated by Whalen diversion dam 0.7 mi upstream. Natural flow of stream affected by storage reservoirs, transbasin diversions, power development, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Bureau of Reclamation data collection platform with satellite telemetry at station.

COOPERATION.--Eleven discharge measurements provided by the Bureau of Reclamation and nine discharge measurements provided by Office of the Wyoming State Engineer.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	13	8.0	8.8	13	14	2370	3680	2850	2250	1420	1040
2	44	13	7.9	8.1	13	16	2410	3350	2870	2260	1090	1050
3	74	12	7.0	8.7	14	15	2420	2930	3190	2150	1070	965
4	276	12	6.9	9.7	13	15	2440	2360	3130	2040	1040	907
5	101	12	7.4	7.6	13	13	2460	2300	3660	2030	974	838
6	70	12	7.0	7.1	13	11	2460	2300	4070	2050	899	767
7	59	11	6.9	6.9	14	11	2460	1910	4090	2000	910	697
8	50	11	7.0	7.2	14	11	2460	1750	4100	2000	910	687
9	44	11	6.6	7.4	14	11	2460	2290	4560	2040	986	601
10	39	11	6.3	6.3	15	11	2450	2650	5030	1980	1030	580
11	35	10	6.2	5.1	15	11	2450	2550	5030	2010	972	474
12	32	10	6.0	3.9	14	13	2450	2560	4990	2070	889	414
13	29	9.9	6.3	4.5	15	13	2460	2680	5030	2040	754	350
14	28	9.9	5.9	5.3	14	12	2440	2530	5040	2000	731	349
15	26	10	5.6	6.5	15	12	2450	2390	5030	1990	650	352
16	24	11	5.4	6.8	15	11	2630	2270	4430	2050	588	328
17	26	9.5	5.0	8.9	14	11	2920	2190	4340	2000	688	301
18	24	9.9	4.6	11	14	10	2920	2190	4400	2060	711	327
19	22	10	4.2	13	14	9.7	2930	2150	4420	2170	751	340
20	22	8.8	4.8	15	14	9.2	2940	2120	4440	2100	951	326
21	21	8.2	5.8	15	15	8.7	3130	2090	4210	2080	1020	425
22	19	8.3	5.6	13	15	8.7	3460	2140	3600	2100	1080	685
23	17	8.7	5.2	12	16	8.3	3470	2370	3440	1980	1140	547
24	17	8.2	4.7	10	15	17	3940	2430	3180	2030	1090	525
25	17	8.5	4.7	9.3	15	422	3950	2550	2910	2340	1030	476
26	20	8.4	4.3	8.6	17	1050	3860	2240	2930	2620	1040	399
27	18	7.8	5.0	8.5	15	1530	3860	2950	3000	2610	1040	401
28	15	7.8	6.0	8.5	16	1800	3890	2190	2740	2610	1030	411
29	15	7.7	7.0	11	---	2150	3890	2040	2600	2280	1060	175
30	15	7.0	8.2	12	---	2310	3870	2340	2480	2320	1040	453
31	14	---	9.4	13	---	2330	---	2800	---	2180	1030	---
TOTAL	1299	297.6	190.9	278.7	404	11874.6	88300	75290	115790	66440	29614	16190
MEAN	41.9	9.92	6.16	8.99	14.4	383	2943	2429	3860	2143	955	540
MAX	276	13	9.4	15	17	2330	3950	3680	5040	2620	1420	1050
MIN	14	7.0	4.2	3.9	13	8.3	2370	1750	2480	1980	588	175
AC-FT	2580	590	379	553	801	23550	175100	149300	229700	131800	58740	32111

MEAN	192	98.2	63.5	56.3	82.6	252	481	1258	2002	1854	1401	694
MAX	1389	1130	405	494	604	3885	5411	6175	14360	8330	5465	3976
(WY)	1918	1987	1930	1927	1930	1974	1924	1924	1917	1917	1983	1983
MIN	4.24	.71	.30	.24	.013	.000	2.83	13.6	126	559	86.6	43.8
(WY)	1967	1967	1967	1962	1967	1976	1954	1990	1982	1934	1934	1934

PLATTE RIVER BASIN

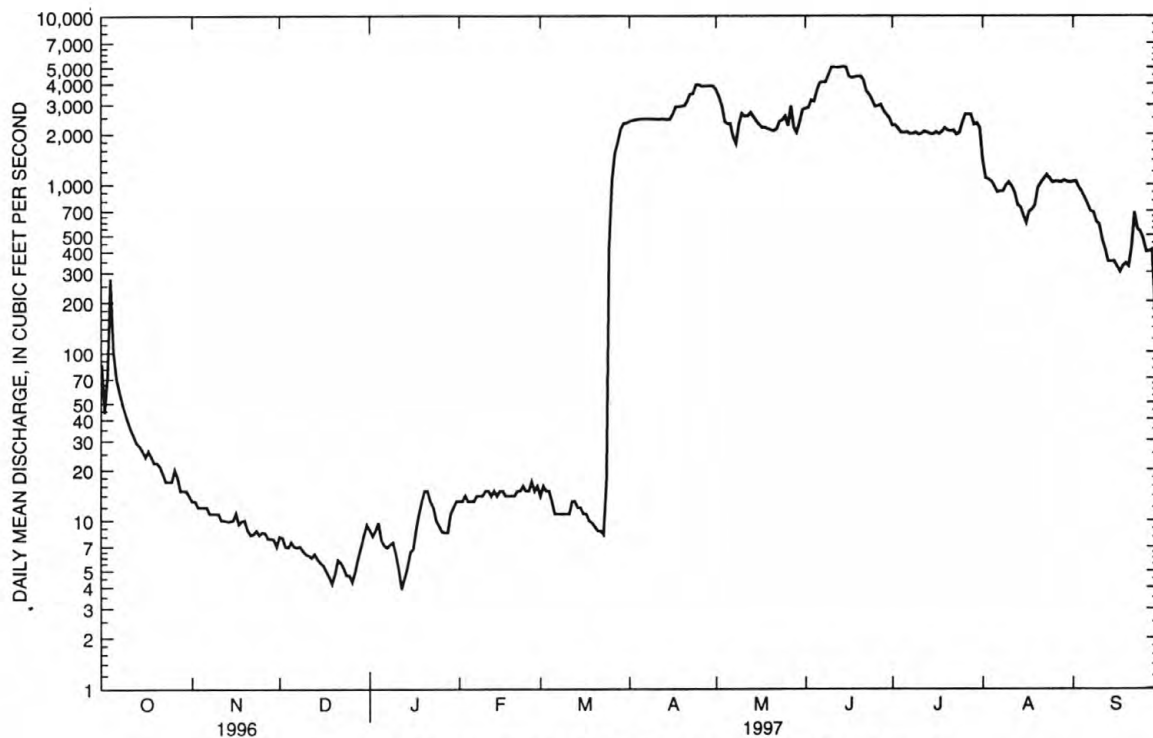
06657000 NORTH PLATTE RIVER BELOW WHALEN DIVERSION DAM, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1917 - 1997	
ANNUAL TOTAL	220969.2		405968.8		--	
ANNUAL MEAN	604		1112		706	
HIGHEST ANNUAL MEAN	--		--		2992	
LOWEST ANNUAL MEAN	--		--		178	
HIGHEST DAILY MEAN	3630	Jun 17	5040	Jun 14	19500	Jun 28 1917
LOWEST DAILY MEAN	4.2	Dec 19	3.9	Jan 12	.00	many days,
						several years
ANNUAL SEVEN-DAY MINIMUM	5.0	Dec 18	5.0	Dec 18		
INSTANTANEOUS PEAK FLOW	--		5090	Jun 10	22000 ^a	Jan 8 1962
INSTANTANEOUS PEAK STAGE	--		8.98	Jun 10	9.85 ^b	Jun 26 1955#
ANNUAL RUNOFF (AC-FT)	438300		805200		511700	
10 PERCENT EXCEEDS	1690		2940		1880	
50 PERCENT EXCEEDS	31		350		143	
90 PERCENT EXCEEDS	6.2		7.2		3.7	

For period of record through 1997.

a From rating curve extended above 4,500 ft³/s on basis of studies of peak-flow measurements of upstream floods.

b Site and datum then in use.



06657000 NORTH PLATTE RIVER BELOW WHALEN DIVERSION DAM, WY

06659500 LARAMIE RIVER AND PIONEER CANAL NEAR WOODS, WY

LOCATION.--River: Lat 41°08'17", long 105°58'49", in NW¹/₄ SE¹/₄ 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", in SE¹/₄ NE¹/₄ 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. Datum of gage is 7,388.99 ft above sea level. Apr. 16 to Nov. 15, 1912, nonrecording gage and Nov. 16, 1912, to Sept. 22, 1915, water-stage recorder 90 ft downstream between dam crest and canal headgates at datum 1.00 ft higher. Sept. 23, 1915, to Sept. 30, 1924, Apr. 19 to Sept. 30, 1927, and Apr. 11, 1932, to Sept. 30, 1935, water-stage recorder at site 50 ft downstream at datum 1.00 ft higher. Oct. 1, 1935, to July 13, 1950, water-stage recorder at site 50 ft downstream at present datum.

Canal: Water-stage recorder and Parshall flume. Elevation of gage is 7,390 ft above sea level, from topographic map. Apr. 16, 1912, to Apr. 10, 1923, nonrecording gage; Apr. 11, 1923, to Sept. 30, 1924, and Apr. 19 to June 9, 1927, water-stage recorder; June 10 to Sept. 30, 1927, and Apr. 11, 1932, to May 8, 1938, nonrecording gage; May 9, 1938, to Apr. 26, 1966, water-stage recorder at site 1.5 mi downstream at different datums. Apr. 27, 1966, to May 8, 1967, at present site, at datum 0.06 ft lower.

REMARKS.--Estimated daily discharges: Apr. 6, 10-14. Records good. Pioneer Canal diverts from left bank of river at diversion dam 100 ft downstream for irrigation in vicinity of Laramie. Records show combined flow of river and canal. Three small reservoirs 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 State of Wyoming, has data collection platform with satellite telemetry at 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	79	190	1340	343	152	97
2	---	---	---	---	---	---	75	167	1570	288	113	107
3	---	---	---	---	---	---	72	155	1910	246	94	94
4	---	---	---	---	---	---	89	158	1810	208	89	88
5	---	---	---	---	---	---	88	196	1700	194	87	104
6	---	---	---	---	---	---	77	254	1700	185	164	95
7	---	---	---	---	---	---	68	322	1730	170	190	96
8	---	---	---	---	---	---	86	397	1600	158	116	106
9	---	---	---	---	---	---	73	404	1570	146	90	101
10	---	---	---	---	---	---	67	429	1470	136	162	88
11	---	---	---	---	---	---	68	463	1380	129	282	84
12	---	---	---	---	---	---	65	489	1360	133	282	83
13	---	---	---	---	---	---	58	499	1280	127	235	95
14	---	---	---	---	---	---	55	546	1230	120	211	83
15	---	---	---	---	---	---	64	638	1250	108	219	77
16	---	---	---	---	---	---	63	734	1120	101	176	73
17	---	---	---	---	---	---	76	871	1110	98	157	74
18	---	---	---	---	---	---	107	1030	1090	97	153	72
19	---	---	---	---	---	---	130	1110	1110	99	171	180
20	---	---	---	---	---	---	151	1100	1200	105	166	762
21	---	---	---	---	---	---	179	1040	1210	99	142	785
22	---	---	---	---	---	---	164	1110	1130	89	135	454
23	---	---	---	---	---	---	146	1310	1030	88	128	359
24	---	---	---	---	---	---	148	1300	920	93	119	297
25	---	---	---	---	---	---	132	1310	804	105	117	243
26	---	---	---	---	---	---	136	1190	713	95	112	210
27	---	---	---	---	---	---	141	1030	642	91	108	221
28	---	---	---	---	---	---	164	956	598	91	106	206
29	---	---	---	---	---	---	218	959	506	106	102	183
30	---	---	---	---	---	---	234	1250	411	117	108	168
31	---	---	---	---	---	---	---	1220	---	152	99	---
TOTAL	---	---	---	---	---	---	3273	22827	36494	4317	4585	5685
MEAN	---	---	---	---	---	---	109	736	1216	139	148	190
MAX	---	---	---	---	---	---	234	1310	1910	343	282	785
MIN	---	---	---	---	---	---	55	155	411	88	87	72
AC-FT	---	---	---	---	---	---	6490	45280	72390	8560	9090	11280

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1971, BY WATER YEAR (WY)

	MEAN	63.2	52.1	42.1	38.5	40.1	49.9	129	557	769	182	79.8	53.6
MAX	160	94.9	77.4	57.1	74.5	84.9	355	1057	2052	726	127	128	
(WY)	1962	1962	1966	1966	1962	1966	1962	1962	1957	1957	1955	1961	
MIN	33.7	32.0	28.3	24.3	24.6	27.7	67.0	233	62.9	20.2	24.8	15.1	
(WY)	1953	1934	1961	1961	1955	1964	1955	1953	1934	1934	1954	1934	

PLATTE RIVER BASIN

06659500 LARAMIE RIVER AND PIONEER CANAL NEAR WOODS, WY--Continued

SUMMARY STATISTICS

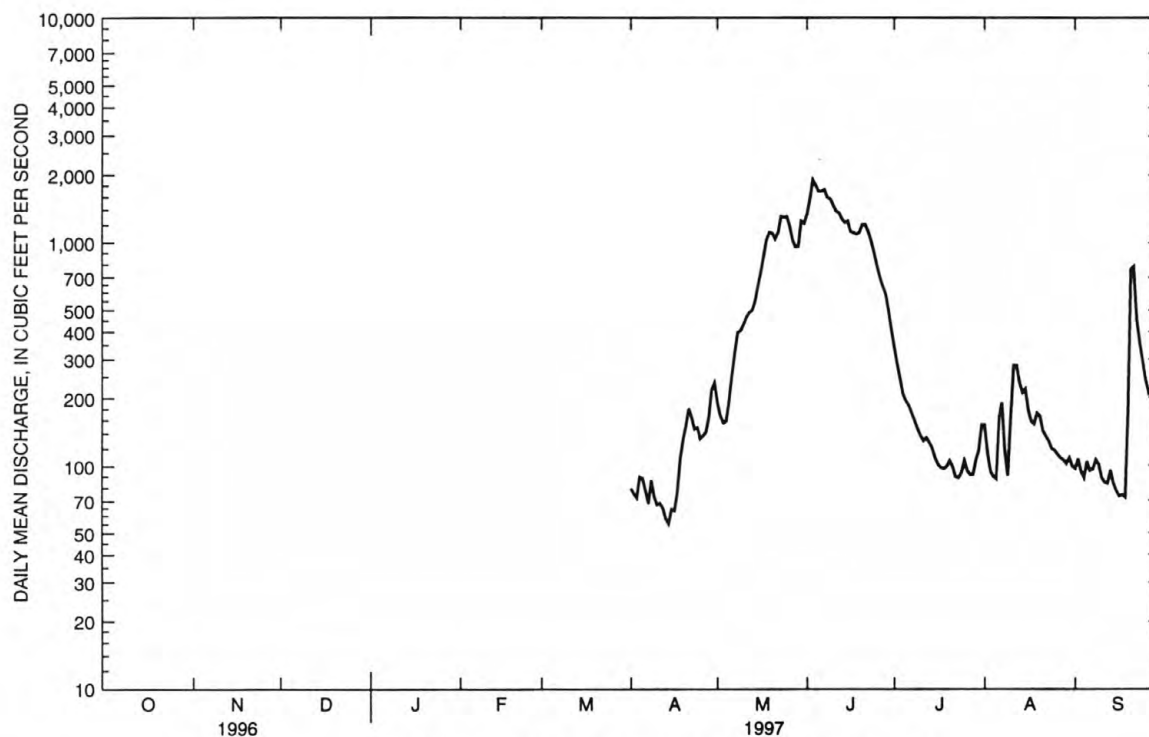
FOR 1997 WATER YEAR*

WATER YEARS 1912 - 1971

ANNUAL MEAN	--		171	
HIGHEST ANNUAL MEAN	--		319	1957
LOWEST ANNUAL MEAN	--		64.9	1934
HIGHEST DAILY MEAN	1910	Jun 3	3320	Jun 14 1957
LOWEST DAILY MEAN	55	Apr 14	.00	May 1 1912
ANNUAL SEVEN-DAY MINIMUM	--		6.0	Oct 15 1913
INSTANTANEOUS PEAK FLOW	2200	Jun 3	5060	Jun 10 1923#
ANNUAL RUNOFF (AC-FT)	--		123600	
10 PERCENT EXCEEDS	--		470	
50 PERCENT EXCEEDS	--		57	
90 PERCENT EXCEEDS	--		31	

* During period of operation.

For period of record through 1997.



06659500 LARAMIE RIVER AND PIONEER CANAL NEAR WOODS, WY

PLATTE RIVER BASIN

277

06659580 SAND CREEK AT COLORADO-WYOMING STATE LINE

LOCATION.--Lat 40°59'37", long 105°45'35", 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 sea level, from topographic map. Prior to July 19, 1977, gage at site 700 ft upstream at different datum.

REMARKS.--Estimated daily discharges: Apr. 11-14. 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 diverted 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 Office of the Wyoming State Engineer; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	4.5	15	125	9.4	4.5	1.3
2	---	---	---	---	---	---	4.4	15	168	8.2	3.4	1.4
3	---	---	---	---	---	---	4.5	13	197	7.8	2.7	1.4
4	---	---	---	---	---	---	5.7	15	164	7.7	2.5	1.5
5	---	---	---	---	---	---	5.2	18	154	7.5	2.9	1.7
6	---	---	---	---	---	---	5.4	24	132	8.0	7.2	1.7
7	---	---	---	---	---	---	5.1	31	162	7.3	8.1	1.5
8	---	---	---	---	---	---	4.2	34	117	6.5	5.2	1.4
9	---	---	---	---	---	---	4.0	35	122	6.0	3.4	1.2
10	---	---	---	---	---	---	4.2	37	93	5.6	3.7	1.2
11	---	---	---	---	---	---	3.9	40	80	5.1	7.7	1.1
12	---	---	---	---	---	---	3.6	42	68	4.8	6.3	1.2
13	---	---	---	---	---	---	3.3	40	67	4.7	5.2	1.2
14	---	---	---	---	---	---	3.4	37	61	4.4	3.5	1.1
15	---	---	---	---	---	---	3.4	41	54	3.9	2.8	1.2
16	---	---	---	---	---	---	3.7	40	44	3.3	2.1	1.0
17	---	---	---	---	---	---	5.5	40	46	3.1	1.8	.90
18	---	---	---	---	---	---	8.1	41	37	3.0	1.8	1.0
19	---	---	---	---	---	---	9.6	41	32	3.4	1.7	4.8
20	---	---	---	---	---	---	12	37	28	3.7	1.8	40
21	---	---	---	---	---	---	13	35	24	3.9	1.7	40
22	---	---	---	---	---	---	11	44	23	3.2	1.5	19
23	---	---	---	---	---	---	9.8	52	19	2.8	1.4	17
24	---	---	---	---	---	---	11	44	18	3.0	1.2	15
25	---	---	---	---	---	---	9.3	41	16	3.0	1.2	12
26	---	---	---	---	---	---	12	53	15	2.5	1.2	9.0
27	---	---	---	---	---	---	11	62	14	2.2	1.3	7.3
28	---	---	---	---	---	---	12	60	13	2.2	1.2	6.7
29	---	---	---	---	---	---	18	66	12	2.6	1.2	6.0
30	---	---	---	---	---	---	17	87	11	3.8	1.3	5.7
31	---	---	---	---	---	---	---	90	---	3.7	1.2	---
TOTAL	---	---	---	---	---	---	227.8	1270	2116	146.3	92.7	205.50
MEAN	---	---	---	---	---	---	7.59	41.0	70.5	4.72	2.99	6.85
MAX	---	---	---	---	---	---	18	90	197	9.4	8.1	40
MIN	---	---	---	---	---	---	3.3	13	11	2.2	1.2	.90
AC-FT	---	---	---	---	---	---	452	2520	4200	290	184	408

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1971, BY WATER YEAR (WY)

	1969	1970	1971	1970	1969	1970	1971	1970	1969	1970	1971	1970
MEAN	3.14	3.34	2.66	2.27	2.46	2.73	9.09	41.6	74.4	7.16	2.30	2.12
MAX	3.68	4.41	2.97	2.53	3.19	2.85	11.6	54.2	116	9.65	3.02	3.22
(WY)	1971	1971	1971	1971	1971	1971	1971	1971	1971	1970	1970	1971
MIN	2.75	2.47	2.39	1.83	1.84	2.65	4.90	29.3	17.8	2.28	1.02	.57
(WY)	1970	1969	1970	1970	1969	1969	1970	1969	1969	1969	1969	1969

06659580 SAND CREEK AT COLORADO-WYOMING STATE LINE--Continued

SUMMARY STATISTICS

FOR 1997 WATER YEAR*

WATER YEARS 1969 - 1971

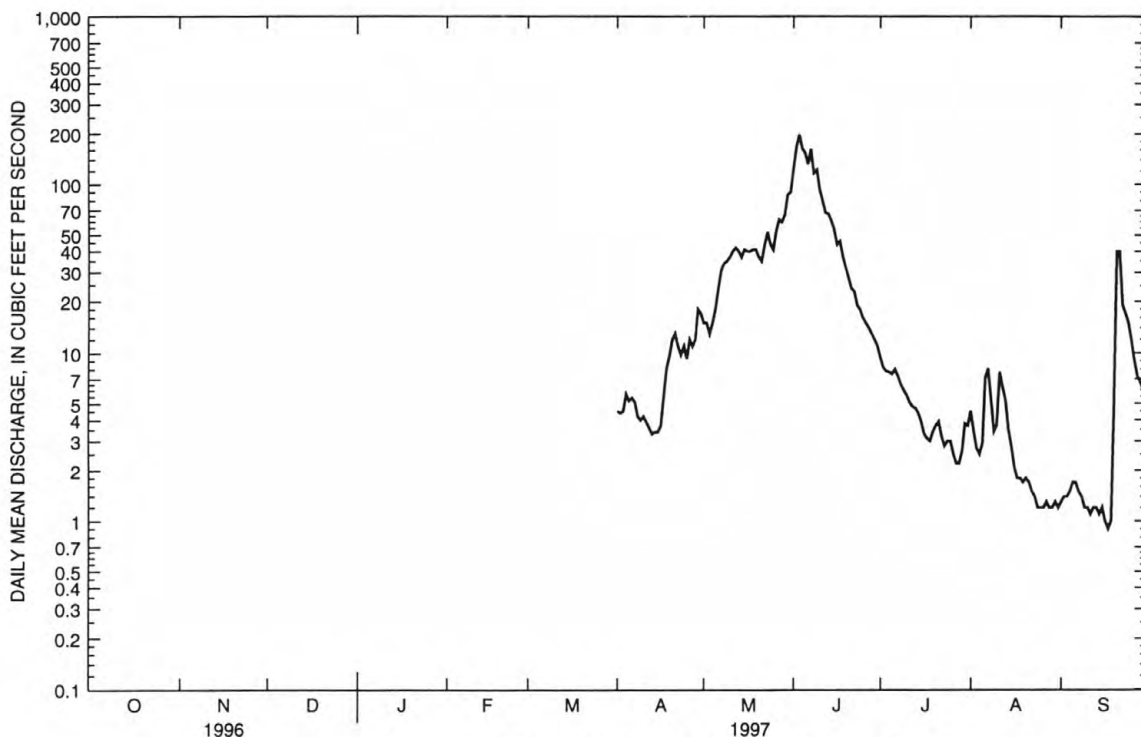
ANNUAL MEAN	--	12.7	
HIGHEST ANNUAL MEAN	--	18.0	1971
LOWEST ANNUAL MEAN	--	6.41	1969
HIGHEST DAILY MEAN	197 Jun 3	193	Jun 15 1970
LOWEST DAILY MEAN	.90 Sep 17	.13	Jul 26-28 1972#
ANNUAL SEVEN-DAY MINIMUM	--	³⁰	Sep 4 1969
INSTANTANEOUS PEAK FLOW	240 Jun 3	6710 ^a	Jul 19 1977#
INSTANTANEOUS PEAK STAGE	2.32 Jun 3	6.65 ^b	Jul 19 1977#
ANNUAL RUNOFF (AC-FT)	--	9240	
10 PERCENT EXCEEDS	--	33	
50 PERCENT EXCEEDS	--	3.0	
90 PERCENT EXCEEDS	--	1.5	

* During period of operation.

For period of record through 1997.

a From slope-area measurement of peak flow.

b From floodmarks.



06659580 SAND CREEK AT COLORADO-WYOMING STATE LINE

06661000 LITTLE LARAMIE RIVER NEAR FILMORE, WY

LOCATION.--Lat 41°17'42", long 106°02'03", 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 Sept. 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 sea level, from topographic map. Prior to Sept. 16, 1938, nonrecording gages, and Sept. 16, 1938 to Sept. 7, 1976, water-stage recorder, at sites 0.7 mi upstream at different datums.

REMARKS.--Estimated daily discharges: Apr. 5-11. Records good. Ten small reservoirs upstream from station, combined capacity, about 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 Office of the Wyoming State Engineer; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	40	71	685	222	107	40
2	---	---	---	---	---	---	37	65	938	197	89	42
3	---	---	---	---	---	---	45	59	1110	184	76	38
4	---	---	---	---	---	---	61	58	987	178	74	39
5	---	---	---	---	---	---	48	60	1010	173	76	41
6	---	---	---	---	---	---	40	68	926	166	115	37
7	---	---	---	---	---	---	42	81	873	156	106	38
8	---	---	---	---	---	---	48	89	787	150	76	38
9	---	---	---	---	---	---	54	91	860	146	63	37
10	---	---	---	---	---	---	50	102	742	143	98	31
11	---	---	---	---	---	---	48	117	794	139	102	34
12	---	---	---	---	---	---	45	119	792	140	85	38
13	---	---	---	---	---	---	39	118	688	140	85	40
14	---	---	---	---	---	---	38	144	615	130	74	34
15	---	---	---	---	---	---	54	171	672	118	65	32
16	---	---	---	---	---	---	80	210	598	113	56	32
17	---	---	---	---	---	---	64	275	574	110	55	32
18	---	---	---	---	---	---	58	340	641	119	59	30
19	---	---	---	---	---	---	58	409	766	129	61	115
20	---	---	---	---	---	---	64	406	813	131	57	149
21	---	---	---	---	---	---	81	403	749	114	55	134
22	---	---	---	---	---	---	65	479	657	107	58	104
23	---	---	---	---	---	---	62	501	557	101	52	116
24	---	---	---	---	---	---	64	505	468	100	46	86
25	---	---	---	---	---	---	61	496	386	96	46	70
26	---	---	---	---	---	---	59	454	336	92	54	63
27	---	---	---	---	---	---	58	382	316	90	56	67
28	---	---	---	---	---	---	64	336	290	95	48	57
29	---	---	---	---	---	---	95	341	270	143	49	52
30	---	---	---	---	---	---	87	409	249	111	42	49
31	---	---	---	---	---	---	---	498	---	142	40	---
TOTAL	---	---	---	---	---	---	1709	7857	20149	4175	2125	1715
MEAN	---	---	---	---	---	---	57.0	253	672	135	68.5	57.2
MAX	---	---	---	---	---	---	95	505	1110	222	115	149
MIN	---	---	---	---	---	---	37	58	249	90	40	30
AC-FT	---	---	---	---	---	---	3390	15580	39970	8280	4210	3400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1971, BY WATER YEAR (WY)

MEAN	31.0	28.2	23.9	19.6	20.5	26.4	55.6	242	550	155	50.3	28.9
MAX	77.2	50.0	40.0	35.0	53.8	47.9	136	502	1217	572	126	74.7
(WY)	1913	1913	1913	1913	1962	1971	1924	1926	1903	1917	1912	1912
MIN	13.2	10.0	10.0	8.76	8.00	9.97	17.6	69.5	48.3	17.9	12.6	8.80
(WY)	1936	1920	1934	1955	1955	1955	1955	1968	1934	1934	1934	1913

PLATTE RIVER BASIN

06661000 LITTLE LARAMIE RIVER NEAR FILMORE, WY--Continued

SUMMARY STATISTICS

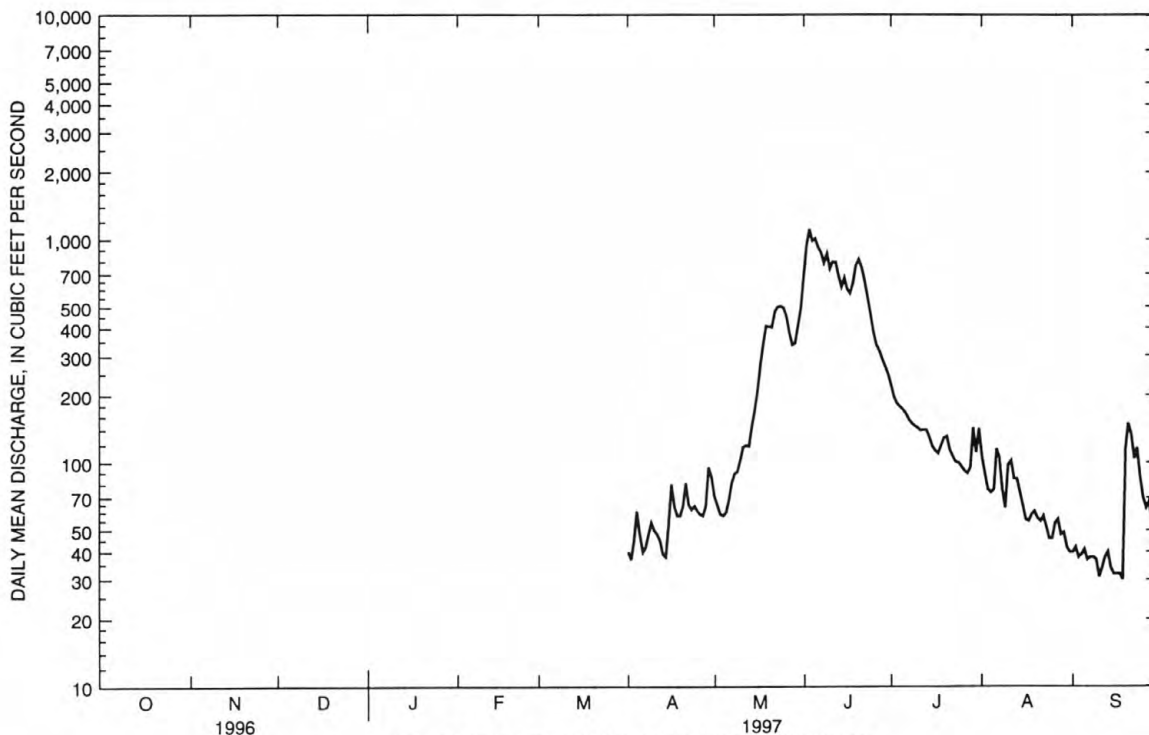
FOR 1997 WATER YEAR*

WATER YEARS 1903 - 1971

ANNUAL MEAN	--		103	
HIGHEST ANNUAL MEAN	--		184	1917
LOWEST ANNUAL MEAN	--		32.7	1934
HIGHEST DAILY MEAN	1110	Jun 3	2400	Jun 1 1914
LOWEST DAILY MEAN	30	Sep 18	1.0	Sep 17-20 1913#
ANNUAL SEVEN-DAY MINIMUM	--		1.7	Sep 15 1913
INSTANTANEOUS PEAK FLOW	1310	Jun 3	3450	Jun 10 1965#
INSTANTANEOUS PEAK STAGE	4.42	Jun 3	5.33	Jun 10 1965
ANNUAL RUNOFF (AC-FT)	--		74380	
10 PERCENT EXCEEDS	--		275	
50 PERCENT EXCEEDS	--		31	
90 PERCENT EXCEEDS	--		16	

* During period of operation

For period of record through 1997.



06661000 LITTLE LARAMIE RIVER NEAR FILMORE, WY

PLATTE RIVER BASIN

281

06661585 LARAMIE RIVER NEAR BOSLER, WY

LOCATION.--Lat 41°33'17", long 105°40'58", in NW¹/₄ NW¹/₄ NE¹/₄ 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 sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 16, Nov. 29 to Mar. 18, Apr. 5-9, and July 10. Records good except those for periods of estimated daily discharge, 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. National Weather Service data collection platform with satellite telemetry at 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	109	55	100	100	60	109	197	610	378	77	68
2	58	107	60	110	100	65	107	206	641	300	86	71
3	62	90	65	110	95	65	117	190	698	234	82	67
4	75	89	70	100	90	65	129	170	820	198	81	66
5	79	84	80	90	90	70	95	154	1010	174	77	66
6	71	55	80	85	85	75	75	140	1110	150	79	65
7	64	36	75	83	80	85	80	139	1090	144	103	63
8	70	44	80	80	75	95	120	126	1110	124	114	59
9	66	83	85	80	70	100	160	152	1140	110	110	57
10	59	101	90	75	65	110	149	183	1150	95	123	59
11	55	235	90	70	65	120	157	195	1160	78	137	63
12	52	106	95	65	70	120	143	190	1150	74	140	68
13	50	96	95	60	70	110	135	185	1150	73	178	60
14	45	92	90	60	65	100	127	194	1170	66	208	52
15	42	91	85	60	70	100	140	187	1220	62	199	47
16	41	85	75	55	75	110	145	186	1270	52	171	44
17	43	70	70	60	80	120	157	203	1270	46	165	45
18	38	92	65	65	80	130	149	219	1310	46	145	43
19	48	125	65	75	79	148	141	260	1300	43	123	53
20	47	139	70	85	75	160	138	323	1260	63	112	82
21	31	136	75	85	70	145	144	394	1210	78	105	117
22	34	122	80	80	65	141	154	457	1180	70	120	216
23	56	116	75	80	60	145	165	537	1180	74	122	348
24	54	101	70	75	55	145	173	566	1140	76	110	305
25	48	101	70	80	55	145	171	580	1010	70	103	271
26	25	106	75	85	60	149	167	611	865	59	94	226
27	27	78	80	80	65	139	165	613	737	52	85	188
28	43	56	85	75	65	138	158	633	646	54	81	155
29	45	55	90	75	---	133	167	614	563	60	80	136
30	77	55	90	80	---	123	184	628	461	67	77	130
31	95	---	95	90	---	116	---	613	---	78	75	---
TOTAL	1659	2855	2425	2453	2074	3527	4221	10045	30631	3248	3562	3290
MEAN	53.5	95.2	78.2	79.1	74.1	114	141	324	1021	105	115	110
MAX	95	235	95	110	100	160	184	633	1310	378	208	348
MIN	25	36	55	55	55	60	75	126	461	43	75	43
AC-FT	3290	5660	4810	4870	4110	7000	8370	19920	60760	6440	7070	6530

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1997, BY WATER YEAR (WY)

	MEAN	55.0	72.6	56.3	46.2	55.2	107	159	288	759	272	84.9	33.0
MAX	196	155	101	92.7	120	209	531	1198	2512	1529	428	140	
(WY)	1985	1987	1984	1986	1986	1986	1984	1984	1983	1983	1984	1984	
MIN	3.26	7.37	8.09	18.8	29.8	44.0	10.3	17.0	86.4	9.45	4.43	.96	
(WY)	1993	1995	1995	1991	1989	1995	1995	1990	1994	1994	1994	1994	

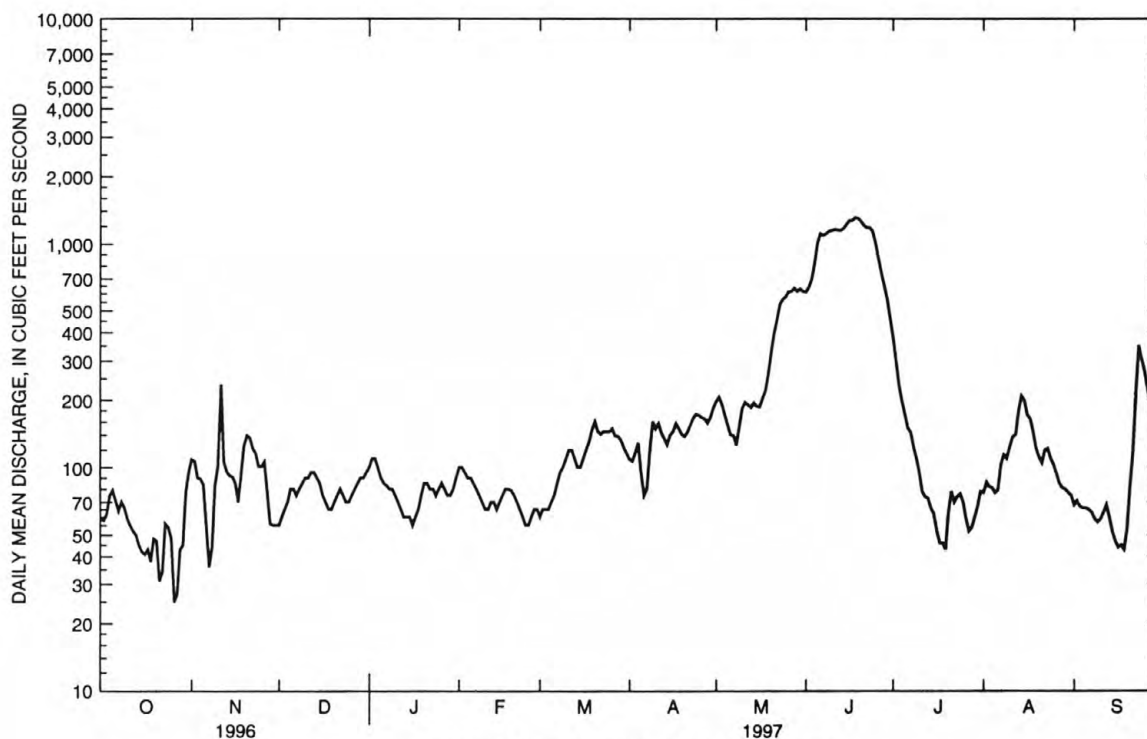
PLATTE RIVER BASIN

06661585 LARAMIE RIVER NEAR BOSLER, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1973 - 1997
ANNUAL TOTAL	58584.8	69990	--
ANNUAL MEAN	160	192	165
HIGHEST ANNUAL MEAN	--	--	475
LOWEST ANNUAL MEAN	--	--	39.4
HIGHEST DAILY MEAN	1060 May 29	1310 Jun 18	4390 Jun 28 1983
LOWEST DAILY MEAN	5.9 Sep 11	25 Oct 26	.00 Oct 10 1987
ANNUAL SEVEN-DAY MINIMUM	7.6 Sep 7	39 Oct 21	.03 Oct 9 1987
INSTANTANEOUS PEAK FLOW	--	1330 Jun 18	4480 ^a Jun 11 1986
INSTANTANEOUS PEAK STAGE	--	5.23 Jun 18	8.40 ^b Apr 22 1973
ANNUAL RUNOFF (AC-FT)	116200	138800	119800
10 PERCENT EXCEEDS	437	564	383
50 PERCENT EXCEEDS	90	90	63
90 PERCENT EXCEEDS	26	55	14

a Gage height, 7.39 ft.

b Ice jam.



06661585 LARAMIE RIVER NEAR BOSLER, WY

283

LOCATION.--Lat 41°50'39", long 105°13'15", 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 U.S. Highway 34, 900 ft upstream from Mule Creek, 2.9 mi upstream from Bluegrass Creek, and 20 mi southwest of Wheatland.

GAGE.--Water-stage recorder. Elevation of gage is 5,340 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. 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 Office of the Wyoming State Engineer; record reviewed by U.S. Geological Survey.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	15	22	12	4.2	15	4.7
2	---	---	---	---	---	---	16	22	13	5.1	8.9	4.4
3	---	---	---	---	---	---	15	22	14	5.5	6.8	4.3
4	---	---	---	---	---	---	14	21	13	5.4	6.6	5.3
5	---	---	---	---	---	---	15	21	13	5.4	7.2	4.8
6	---	---	---	---	---	---	11	20	13	5.1	11	4.5
7	---	---	---	---	---	---	11	19	13	4.8	11	4.4
8	---	---	---	---	---	---	14	18	12	4.9	9.7	4.2
9	---	---	---	---	---	---	15	17	9.8	3.9	8.8	3.8
10	---	---	---	---	---	---	14	16	7.7	2.4	11	4.5
11	---	---	---	---	---	---	15	12	9.5	2.2	11	2.8
12	---	---	---	---	---	---	14	8.9	10	2.8	11	2.5
13	---	---	---	---	---	---	15	8.3	9.6	3.0	11	2.7
14	---	---	---	---	---	---	17	9.0	11	3.4	11	3.1
15	---	---	---	---	---	---	18	8.4	10	3.9	9.4	2.9
16	---	---	---	---	---	---	18	8.3	9.2	3.6	9.0	2.8
17	---	---	---	---	---	---	18	8.8	7.7	3.1	8.6	2.3
18	---	---	---	---	---	---	20	8.4	7.0	2.4	8.6	2.5
19	---	---	---	---	---	---	22	8.7	6.5	2.2	8.6	5.7
20	---	---	---	---	---	---	25	8.4	5.7	3.5	8.1	6.3
21	---	---	---	---	---	---	28	8.3	4.8	3.1	7.3	6.3
22	---	---	---	---	---	---	26	8.9	3.9	2.9	7.4	7.0
23	---	---	---	---	---	---	22	9.3	4.0	3.2	7.1	7.9
24	---	---	---	---	---	---	23	10	4.7	3.7	7.1	7.4
25	---	---	---	---	---	---	23	10	4.6	4.3	6.9	6.9
26	---	---	---	---	---	---	25	9.9	4.8	4.7	6.9	6.3
27	---	---	---	---	---	---	23	11	5.8	5.0	6.4	6.7
28	---	---	---	---	---	---	21	14	5.0	6.6	5.4	6.7
29	---	---	---	---	---	---	22	14	4.9	13	5.6	6.5
30	---	---	---	---	---	---	23	14	4.5	16	5.5	5.0
31	---	---	---	---	---	---	---	14	---	16	4.6	---
TOTAL	---	---	---	---	---	---	558	410.6	253.7	155.3	262.5	145.2
MEAN	---	---	---	---	---	---	18.6	13.2	8.46	5.01	8.47	4.84
MAX	---	---	---	---	---	---	28	22	14	16	15	7.9
MIN	---	---	---	---	---	---	11	8.3	3.9	2.2	4.6	2.3
AC-FT	---	---	---	---	---	---	1110	814	503	308	521	283

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1997, BY WATER YEAR (WY)

MEAN	4.24	---	---	---	---	7.75	32.6	69.2	47.3	25.0	14.5	6.48
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	4.14	2.67	.89	.65	.92
(WY)	1989	---	---	---	---	1987	1977	1977	1989	1989	1989	1977

06664400 SYBILLE CREEK ABOVE MULE CREEK, NEAR WYEATLAND, WY--Continued

SUMMARY STATISTICS

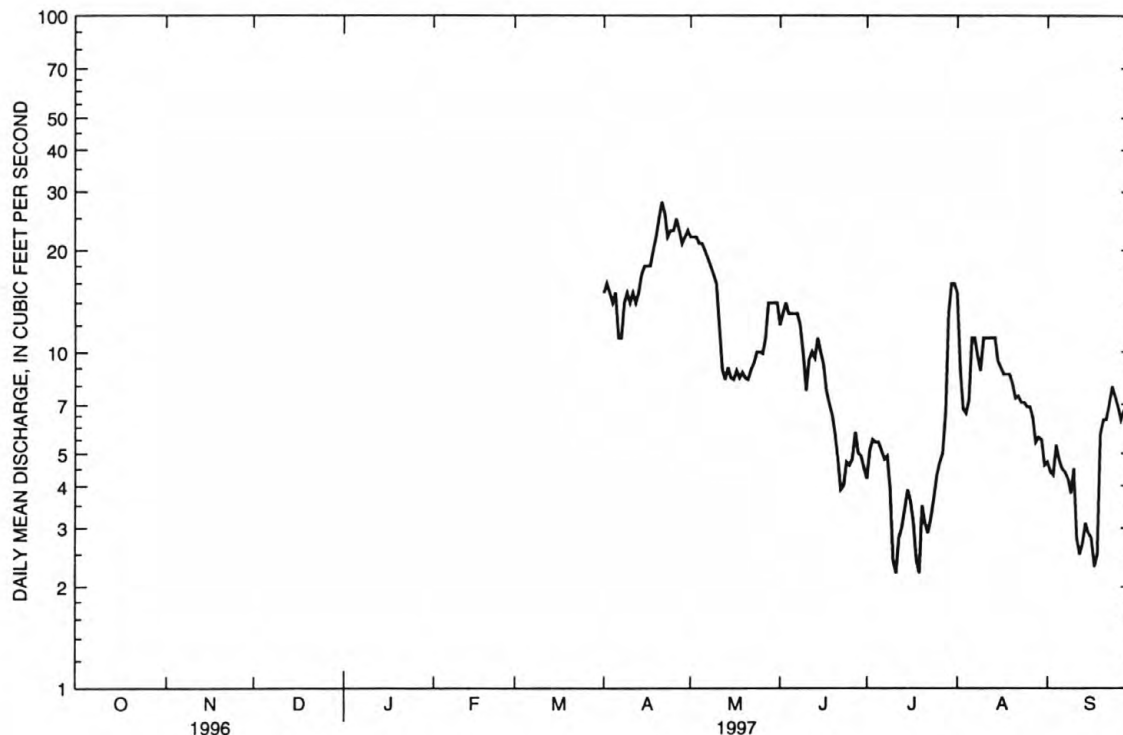
FOR 1997 WATER YEAR*

WATER YEARS 1974 - 1997*

HIGHEST DAILY MEAN	28	Apr 21	1280	Aug 20 1990
LOWEST DAILY MEAN	2.2	Jul 11, 19	19900 ^a 49	Sep 8 1977
INSTANTANEOUS PEAK FLOW	97	Jul 30	15.60	Aug 20 1990
INSTANTANEOUS PEAK STAGE	2.61	Jul 30	9.4	Aug 20 1990
10 PERCENT EXCEEDS	--		59	
50 PERCENT EXCEEDS	--		9.4	
90 PERCENT EXCEEDS	--		2.4	

* During period of operation.

a On basis of slope-area measurement of peak flow at site 1.2 mi upstream.



06664400 SYBILLE CREEK ABOVE MULE CREEK, NEAR WHEATLAND, WY

06665790 SYBILLE CREEK ABOVE CANAL NO. 3, NEAR WHEATLAND, WY

LOCATION.--Lat 41°54'40", long 105°07'36", in NW¹/₄ SW¹/₄ NE¹/₄ 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 sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. 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 record provided by Office of the Wyoming State Engineer; record reviewed by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	25	37	28	53	90	28
2	---	---	---	---	---	---	27	34	35	67	69	28
3	---	---	---	---	---	---	27	34	35	60	61	29
4	---	---	---	---	---	---	25	35	30	57	61	30
5	---	---	---	---	---	---	30	41	31	54	75	28
6	---	---	---	---	---	---	23	27	32	56	50	28
7	---	---	---	---	---	---	24	40	33	56	39	28
8	---	---	---	---	---	---	27	37	34	48	33	28
9	---	---	---	---	---	---	27	50	35	73	26	29
10	---	---	---	---	---	---	24	71	37	114	29	28
11	---	---	---	---	---	---	25	64	37	108	32	27
12	---	---	---	---	---	---	25	44	38	100	29	26
13	---	---	---	---	---	---	25	36	40	97	33	26
14	---	---	---	---	---	---	28	28	40	94	29	26
15	---	---	---	---	---	---	29	28	39	97	25	25
16	---	---	---	---	---	---	29	43	40	95	27	24
17	---	---	---	---	---	---	28	104	41	99	32	23
18	---	---	---	---	---	---	29	131	40	88	30	24
19	---	---	---	---	---	---	33	129	39	111	37	31
20	---	---	---	---	---	---	36	93	36	110	42	34
21	---	---	---	---	---	---	39	70	36	97	32	52
22	---	---	---	---	---	---	37	70	35	80	27	42
23	---	---	---	---	---	---	33	95	61	41	26	39
24	---	---	---	---	---	---	33	102	91	41	26	36
25	---	---	---	---	---	---	31	111	88	59	47	32
26	---	---	---	---	---	---	29	115	92	87	45	26
27	---	---	---	---	---	---	28	51	95	95	40	23
28	---	---	---	---	---	---	28	29	79	105	36	22
29	---	---	---	---	---	---	28	30	76	122	29	20
30	---	---	---	---	---	---	29	31	64	114	30	18
31	---	---	---	---	---	---	---	30	---	100	28	---
TOTAL	---	---	---	---	---	---	861	1840	1437	2578	1215	860
MEAN	---	---	---	---	---	---	28.7	59.4	47.9	83.2	39.2	28.7
MAX	---	---	---	---	---	---	39	131	95	122	90	52
MIN	---	---	---	---	---	---	23	27	28	41	25	18
AC-FT	---	---	---	---	---	---	1710	3650	2850	5110	2410	1710

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1997, BY WATER YEAR (WY)

	MEAN	29.0	---	---	---	---	25.5	60.8	118	91.9	90.2	75.3	36.5
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	7.85	16.5	20.2	34.5	31.8	3.09
(WY)	1989	---	---	---	---	---	1987	1982	1989	1992	1992	1981	1989

PLATTE RIVER BASIN

06665790 SYBILLE CREEK ABOVE CANAL NO. 3, NEAR WHEATLAND, WY--Continued

SUMMARY STATISTICS

FOR 1997 WATER YEAR*

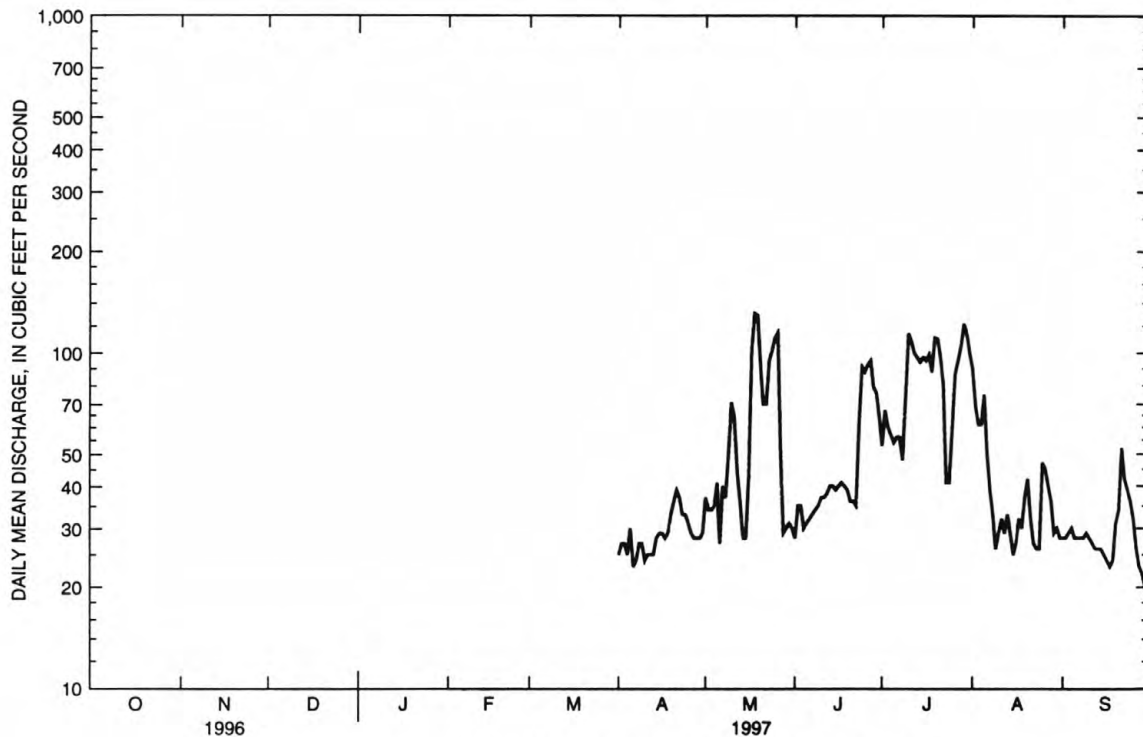
WATER YEARS 1980 - 1997*

HIGHEST DAILY MEAN	131	May 18	1280	May 22 1983
LOWEST DAILY MEAN	18	Sep 30		
INSTANTANEOUS PEAK FLOW	201	Jul 30	6900 ^a	Sep 1.4-11 1981
INSTANTANEOUS PEAK STAGE	1.67	Jul 30	8.35 ^b	Aug 20 1990
10 PERCENT EXCEEDS	--		138	Aug 20 1990
50 PERCENT EXCEEDS	--		49	
90 PERCENT EXCEEDS	--		13	

* During period of operation.

a From rating curve extended above 1,300 ft³/s.

b From floodmarks.



06665790 SYBILLE CREEK ABOVE CANAL NO. 3, NEAR WHEATLAND, WY

PLATTE RIVER BASIN

287

06669050 WHEATLAND CREEK BELOW WHEATLAND, WY

LOCATION.--Lat 42°05'05", long 104°57'02", 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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
OCT 21...	1620	3.9	1170	8.2	5.5	4.0	647
FEB 08...	1745	1.7	1270	8.2	2.0	-5.0	646
MAY 03...	1230	2.0	933	8.6	12.5	14.0	650
AUG 26...	1220	2.2	1170	8.0	20.5	27.0	647

DATE	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
OCT 21...	11.5	108	69	0.03	4.1	0.07	0.08
FEB 08...	11.1	95	760	0.04	4.0	3.60	0.83
MAY 03...	11.5	127	K17	0.05	1.9	0.53	0.31
AUG 26...	10.2	135	460	0.03	2.8	0.04	0.33

K-Results based on colony count outside the acceptable range (non-ideal colony count).

LOCATION.--Lat 42°12'02", long 104°32'16", 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.

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-Port 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-Port Laramie Canal since 1956.

GAGE.--Water-stage recorder. Elevation of gage is 4,220 ft above sea level, from topographic map. Apr. 4, 1915, to Mar. 31, 1925, nonrecording gage at site 0.1 mi downstream at different datum. Apr. 1, 1925, to Sept. 30, 1932, nonrecording gage and Oct. 1, 1932, to Aug. 20, 1935, water-stage recorder at site 4.3 mi upstream at different datum. Aug. 21, 1935, to Nov. 2, 1970, water-stage recorder at site 0.3 mi upstream at different datum. Nov. 3, 1970, to May 9, 1973, water-stage recorder 0.1 mi downstream at different datum. May 10, 1973, to Apr. 5, 1977, water-stage recorder 4.3 mi upstream at different datum.

COOPERATION.--Six discharge measurements provided by the office of Wyoming State Engineer.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	63	49	48	52	43	149	91	144	53	54	57
2	47	61	49	50	51	41	107	91	143	53	56	57
3	46	47	50	52	52	41	89	82	138	49	55	57
4	46	41	47	48	52	41	77	75	157	46	61	57
5	45	44	50	45	48	40	74	91	152	46	59	57
6	44	47	47	40	47	40	75	94	129	46	61	55
7	43	47	47	43	48	38	71	94	115	46	71	55
8	42	47	47	46	50	38	77	65	102	44	83	54
9	41	49	47	46	54	38	86	84	89	45	80	54
10	41	53	46	35	50	37	68	78	87	48	72	54
11	41	50	46	28	48	47	65	70	93	48	74	54
12	41	50	46	26	47	152	64	70	106	46	86	54
13	40	48	45	27	46	256	60	61	105	44	99	53
14	40	49	45	28	45	262	59	60	133	45	100	54
15	40	51	47	30	44	268	58	58	214	46	92	53
16	44	51	44	33	44	271	58	50	222	46	83	52
17	44	52	34	39	43	276	57	47	210	48	89	51
18	47	50	27	46	42	279	57	48	184	48	93	52
19	47	50	30	47	42	282	56	46	172	60	86	56
20	42	49	33	45	41	283	56	41	158	59	80	56
21	37	48	35	45	41	303	56	42	135	62	73	56
22	32	48	37	44	41	443	55	49	117	54	68	57
23	32	48	32	42	41	467	55	58	97	49	67	60
24	30	50	29	38	42	469	55	57	81	48	67	63
25	30	50	31	35	43	469	56	62	78	48	67	64
26	33	49	34	35	42	471	56	60	76	48	67	63
27	53	49	41	39	42	472	59	81	73	47	67	62
28	71	50	38	47	42	475	59	140	61	48	64	60
29	72	51	43	52	---	473	60	179	52	51	58	59
30	62	50	46	50	---	476	68	181	55	50	59	60
31	63	---	45	51	---	384	---	156	---	54	59	---
TOTAL	1384	1492	1287	1280	1280	7675	2042	2461	3678	1525	2250	1696
MEAN	44.6	49.7	41.5	41.3	45.7	248	68.1	79.4	123	49.2	72.6	56.5
MAX	72	63	50	52	54	476	149	181	222	62	100	64
MIN	30	41	27	26	41	37	55	41	52	44	54	51
AC-FT	2750	2960	2550	2540	2540	15220	4050	4880	7300	3020	4460	3360

MEAN	71.8	84.9	91.8	89.4	94.3	111	160	403	329	139	66.5	62.5
MAX	350	388	464	360	418	425	1056	3145	2967	1925	390	245
(WY)	1985	1985	1985	1985	1984	1984	1984	1973	1983	1983	1984	1973
MIN	13.9	10.4	6.35	6.32	17.3	21.7	37.5	25.3	17.3	23.1	8.73	15.0
(WY)	1965	1981	1981	1981	1981	1983	1981	1963	1966	1966	1975	1964

06670500 LARAMIE RIVER NEAR FORT LARAMIE, WY--Continued

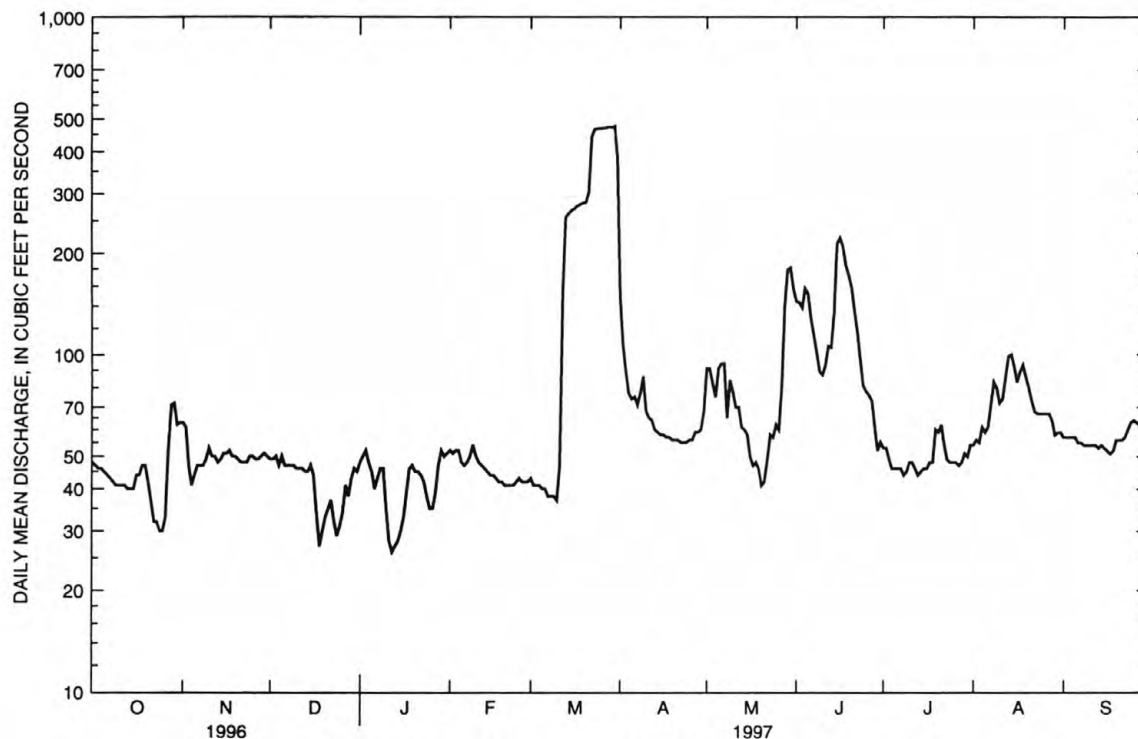
SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1957 - 1997*	
ANNUAL TOTAL	32210		28050		--	
ANNUAL MEAN	88.0		76.8		142	
HIGHEST ANNUAL MEAN	--		--		672	
LOWEST ANNUAL MEAN	--		--		26.1	
HIGHEST DAILY MEAN	282	Apr 24	476	Mar 30	5810	May 10 1973
LOWEST DAILY MEAN	27	Dec 18	26	Jan 12	2.0 ^a	Jan 23 1981
ANNUAL SEVEN-DAY MINIMUM	32	Dec 18	30	Jan 10	3.1	Jan 21 1981
INSTANTANEOUS PEAK FLOW	--	--	483	Mar 30	6260	May 10 1973 [#]
INSTANTANEOUS PEAK STAGE	--	--	3.89	Mar 30	9.40 ^b	May 10 1973
ANNUAL RUNOFF (AC-FT)	63890		55640		103000	
10 PERCENT EXCEEDS	154		136		225	
50 PERCENT EXCEEDS	58		52		67	
90 PERCENT EXCEEDS	42		40		29	

* For period of record following discontinuance of diversion to Gering-Fort Laramie Canal. See PERIOD OF RECORD.

For period of record, 1915-1997.

a No flow Jan. 31 to Mar. 20, Oct. 24 to Dec. 17, 1926, Mar. 1-26, 1927, Apr. 14, 1938, all flow diverted by Bering-Fort Laramie Canal.

b Site and datum then in use.



06670500 LARAMIE RIVER NEAR FORT LARAMIE, WY

PLATTE RIVER BASIN

06674500 NORTH PLATTE RIVER AT WYOMING-NEBRASKA STATE LINE

LOCATION.--Lat 41°59'19", long 104°03'10", 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 Mar. 9, 1994. Datum of gage is 4,025 ft above sea level, from topographic map. Prior to Nov. 6, 1929, non-recording gage and Nov. 6, 1929, to Sept. 30, 1959, water-stage recorder at site 0.2 mi upstream at different datum. Oct. 7, 1959 to Feb. 22, 1972 water-stage recorder at site 0.2 mi upstream at different datum. Feb. 22, 1972 to Mar. 9, 1994, water-stage recorder at site 0.3 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Dec. 15-29, and Jan. 7, 10-19, 24-29. 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. U.S. Army Corps of Engineers data collection platform with satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	737	322	263	227	210	196	2370	4060	2920	2500	2360	1040
2	593	317	262	227	208	196	2340	3890	3190	2320	1900	1040
3	521	317	259	230	207	196	2370	3580	3700	2260	1640	1090
4	496	311	258	231	203	194	2420	3170	3400	2070	1500	1100
5	552	304	255	223	201	194	2520	2660	3310	2000	1380	1070
6	541	299	253	220	201	193	2480	2490	3760	1970	1320	1030
7	485	299	252	218	199	194	2540	2460	4000	1930	1190	966
8	459	295	250	219	197	194	2550	1950	4060	1830	1120	903
9	437	295	250	219	199	197	2600	2050	4060	1830	1040	894
10	425	289	250	205	200	198	2640	2400	4480	1830	1130	860
11	413	286	250	190	201	201	2610	2620	4870	1820	1200	821
12	397	283	248	170	198	202	2620	2600	4970	1870	1230	755
13	383	283	246	170	199	221	2610	2620	5050	1900	1150	707
14	372	283	247	180	198	255	2630	2610	5100	1870	1050	655
15	362	284	245	200	199	280	2640	2470	5180	1830	1030	619
16	356	288	220	210	197	294	2660	2360	5240	1800	913	627
17	360	283	180	200	197	308	2870	2240	4840	1850	855	620
18	354	282	170	205	197	317	3040	2170	4720	1800	869	592
19	352	286	170	215	197	326	3080	2150	4730	1880	851	619
20	350	282	200	225	197	334	3070	2090	4760	2130	868	645
21	341	279	240	219	197	342	3070	2060	4830	2010	927	631
22	336	277	210	213	197	355	3270	2070	4560	1980	965	697
23	328	273	200	208	197	453	3420	2240	4090	1960	1020	903
24	323	271	180	205	197	513	3500	2430	3790	2000	1070	873
25	319	270	180	195	197	545	3790	3780	3500	1940	1030	821
26	322	269	200	175	197	714	3850	3030	3220	2230	1010	759
27	317	267	200	180	197	1200	3850	2800	3170	2360	1000	704
28	317	267	220	200	197	1650	3880	3070	3080	2390	1010	677
29	333	267	230	210	---	1890	4010	2570	2900	2480	1020	661
30	330	265	231	211	---	2190	4050	2470	2750	2370	1030	581
31	326	---	230	210	---	2380	---	2650	---	3080	1040	---
TOTAL	12537	8593	7049	6410	5581	16922	89350	81810	122230	64090	35718	23960
MEAN	404	286	227	207	199	546	2978	2639	4074	2067	1152	799
MAX	737	322	263	231	210	2380	4050	4060	5240	3080	2360	1100
MIN	317	265	170	170	197	193	2340	1950	2750	1800	851	581
AC-FT	24870	17040	13980	12710	11070	33560	177200	162300	242400	127100	70850	47520

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1997, BY WATER YEAR (WY)

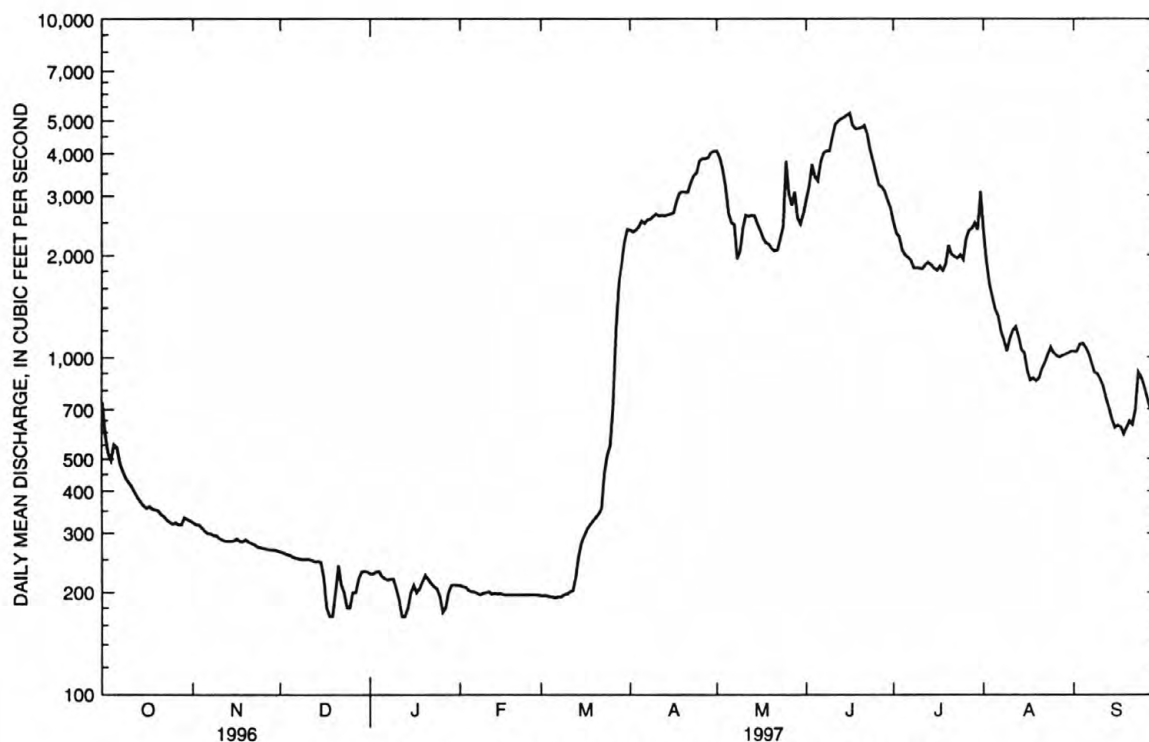
	MEAN	511	427	379	336	342	494	631	1185	1686	1533	1271	870
MAX	1666	1454	895	751	1063	4202	4407	7226	10360	7170	5751	4766	
(WY)	1987	1987	1930	1930	1984	1974	1974	1971	1929	1983	1983	1983	
MIN	150	174	191	166	148	141	141	43.9	49.1	611	154	230	
(WY)	1957	1935	1991	1993	1993	1991	1991	1990	1992	1934	1934	1934	

06674500 NORTH PLATTE RIVER AT WYOMING-NEBRASKA STATE LINE--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1929 - 1997	
ANNUAL TOTAL	278250		474250		--	
ANNUAL MEAN	760		1299		788	
HIGHEST ANNUAL MEAN	--		--		2863	1984
LOWEST ANNUAL MEAN	--		--		388	1992
HIGHEST DAILY MEAN	3690	Jun 17	5240	Jun 16	17600	Jun 2 1929
LOWEST DAILY MEAN	170	Dec 18	170	Dec 18,19	3.9	May 13 1992
				Jan 12,13		
ANNUAL SEVEN-DAY MINIMUM	196	Dec 17	189	Jan 11	4.4	Jun 20 1992
INSTANTANEOUS PEAK FLOW	--		5340	Jun 16	17900 ^a	Jun 2 1929
INSTANTANEOUS PEAK STAGE	--		5.78	Jun 16	7.04 ^b	Jun 2 1929
ANNUAL RUNOFF (AC-FT)	551900		940700		571000	
10 PERCENT EXCEEDS	1430		3240		1460	
50 PERCENT EXCEEDS	335		645		488	
90 PERCENT EXCEEDS	251		198		210	

a Maximum observed.

b Site and datum then in use.



06674500 NORTH PLATTE RIVER AT WYOMING-NEBRASKA STATE LINE

PLATTE RIVER BASIN

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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)
OCT 22...	1535	336	959	9.5	10.0
DEC 11...	0900	250	977	6.0	11.0
FEB 09...	1530	200	1240	4.5	4.0
MAR 27...	0920	1130	738	9.0	19.0
MAY 05...	1345	2530	693	12.0	21.0
21...	1830	2050	671	13.5	18.0
AUG 13...	1130	1150	645	19.5	21.0
SEP 16...	0920	630	656	16.0	12.0

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	2, 4, 5-T DIS- SOLVED (UG/L) (39742)	2, 4-D, DIS- SOLVED (UG/L) (39732)	2, 4-DB WATER, FLTRD, GF 0.7U REC (38746)	ACETO- CHLOR, WATER, FLTRD, GF 0.7U REC (49260)	ACIFL- UORFEN WATER, FLTRD, GF 0.7U REC (49315)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)
MAY 05...	1345	2530	7.8	665	8.1	86	<0.035	<0.035	<0.035	<0.002	<0.035	<0.002
AUG 13...	1130	1150	8.2	664	7.4	93	<0.035	<0.035	<0.035	<0.002	<0.035	E0.003

E-Estimate.

DATE	ALDI- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	ALDI- CARB SULFONE WAT, FLT GF 0.7U REC (UG/L) (49313)	ALDICA- RB SUL- FOXIDE, WAT, FLT GF 0.7U REC (UG/L) (49314)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BENTA- ZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)	BRO- MACIL, WATER, DISS, REC (UG/L) (04029)	BRO- MOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L) (49311)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER, FLTRD, 0.7 U GF, REC (UG/L) (82680)
MAY 05...	<0.016	<0.016	<0.021	0.004	E0.004	<0.001	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003
AUG 13...	<0.016	<0.016	<0.021	0.008	E0.006	<0.001	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003

E-Estimate.

DATE	CARBO- FURAN WATER, FLTRD, GF, REC (UG/L) (82674)	CHLOR- AMBEN, WATER, FLTRD, GF 0.7U REC (UG/L) (49307)	CHLORO- THALO- NIL, WAT, FLT GF 0.7U REC (UG/L) (49306)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CLOPYR- ALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	P, P' DDE DISSOLV (UG/L) (34653)	DACTHAL MONO- ACID, WAT, FLT GF 0.7U REC (UG/L) (49304)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)	DICHLO- BENIL, WATER, FLTRD, GF 0.7U REC (UG/L) (49303)
MAY 05...	<0.003	<0.011	<0.035	<0.004	<0.050	<0.004	<0.002	<0.006	<0.017	<0.002	<0.035	<0.02
AUG 13...	<0.003	<0.011	<0.035	E0.003	<0.050	<0.004	<0.002	<0.006	<0.017	<0.002	<0.035	<0.02

E-Estimate.

WATER-QUALITY RECORDS

DATE	DICHLOR PROP, WATER, FLTRD, GF 0.7U	2,6-DI- ETHYL ANILINE WAT FLT DIS- 0.7 U	DINOSEB WATER, FLTRD, GF 0.7U	DISUL- FOTON WATER FLTRD 0.7 U	DIURON, WATER, FLTRD, GF 0.7U	DNOC WAT,FLT GF 0.7U	EPTC WATER FLTRD 0.7 U	ESFEN- VAL- ERATE, WAT,FLT GF 0.7U	ETHAL- FLUR- ALIN WAT FLT 0.7 U	ETHO- PROP WATER FLTRD 0.7 U
	REC (UG/L) (49302)	SOLVED (UG/L) (39381)	GF, REC (UG/L) (82660)	GF, REC (UG/L) (49301)	REC (UG/L) (82677)	REC (UG/L) (49299)	GF, REC (UG/L) (82668)	REC (UG/L) (49298)	GF, REC (UG/L) (82663)	GF, REC (UG/L) (82672)

	FEN- URON, WATER, FLTRD, GF 0.7U	FLUO- METURON, FLTRD, GF 0.7U	FONOFOS WATER DISS	3HYDRXY CARBO- PURAN WAT, FLT GF 0.7U	ALPHA BHC DIS- SOLVED	LINDANE DIS- SOLVED	LIN- URON WATER FLTRD 0.7 U	MCPA, WATER, FLTRD, GF 0.7U	MCPB, WATER, FLTRD, GF 0.7U	METHIO- CARB, WATER, FLTRD, GF 0.7U
DATE	REC (UG/L) (49297)	REC (UG/L) (38811)	REC (UG/L) (04095)	REC (UG/L) (49308)	SOLVED (UG/L) (34253)	SOLVED (UG/L) (39341)	GF, REC (UG/L) (82666)	REC (UG/L) (38482)	REC (UG/L) (38487)	SOLVED (UG/L) (39532)

	METH- OMYL, WATER, FLTRD,	METHYL PARA- THION	METO- LACHLOR	METRI- BUZIN	MOL- INATE	1-NAPH THOL,	NAPROP- AMIDE	NEB- URON,	NORFLUR AZON,	ORY- ZALIN,	OXAMY/ WATER,
		GF 0.7 U	GF 0.7 U	GF 0.7 U	GF 0.7 U	GF 0.7 U	GF 0.7 U	GF 0.7 U	GF 0.7 U	GF 0.7 U	GF 0.7 U
DATE	REC	GF, REC	DISSOLV	DISSOLV	GF, REC	REC	GF, REC	REC	REC	REC	REC
	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
	(49296)	(82667)	(39415)	(82630)	(82671)	(49295)	(82684)	(49294)	(49293)	(49292)	(38866)

[illegible]

E-Estimate.

	PRO- PHAM, WATER, FLTRD, GF 0.7U	PRO- POXUR, WATER, FLTRD, GF 0.7U	SILVEX, DIS-	SI- MAZINE, WATER, FLTRD, DISS,	TEBU- THIURON WATER, FLTRD 0.7 U	TER- BACIL WATER FLTRD 0.7 U	TER- BUFOS WATER FLTRD 0.7 U	THIO- BENCARB WATER FLTRD 0.7 U	TRIAL- LATE WATER FLTRD 0.7 U	TRI- CLOPYR, WATER, FLTRD GF 0.7U	TRI- FLUR- ALIN WAT FLT 0.7 U
DATE	REC (UG/L) (49236)	REC (UG/L) (38538)	SOLVED (UG/L) (39762)	REC (UG/L) (04035)	GF, REC (UG/L) (82670)	GF, REC (UG/L) (82665)	GF, REC (UG/L) (82675)	GF, REC (UG/L) (82681)	GF, REC (UG/L) (82678)	REC (UG/L) (49235)	GF, REC (UG/L) (82661)

E-Estimate.

06755960 CROW CREEK AT 19TH STREET, AT CHEYENNE, WY

LOCATION.--Lat 41°07'52", long 104°49'41", 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.

GAGE.--Water-stage recorder. Elevation of gage is 6,050 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 6-8, 15-19, 26, Nov. 29 to Dec. 7, Dec. 12, 15-27, Jan. 4-30, Feb. 2-8, 13,14, 22, Mar. 4, 5, 13-16, and Apr. 4, 5, 9-13. Records fair except those greater than 100 ft³/s and 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

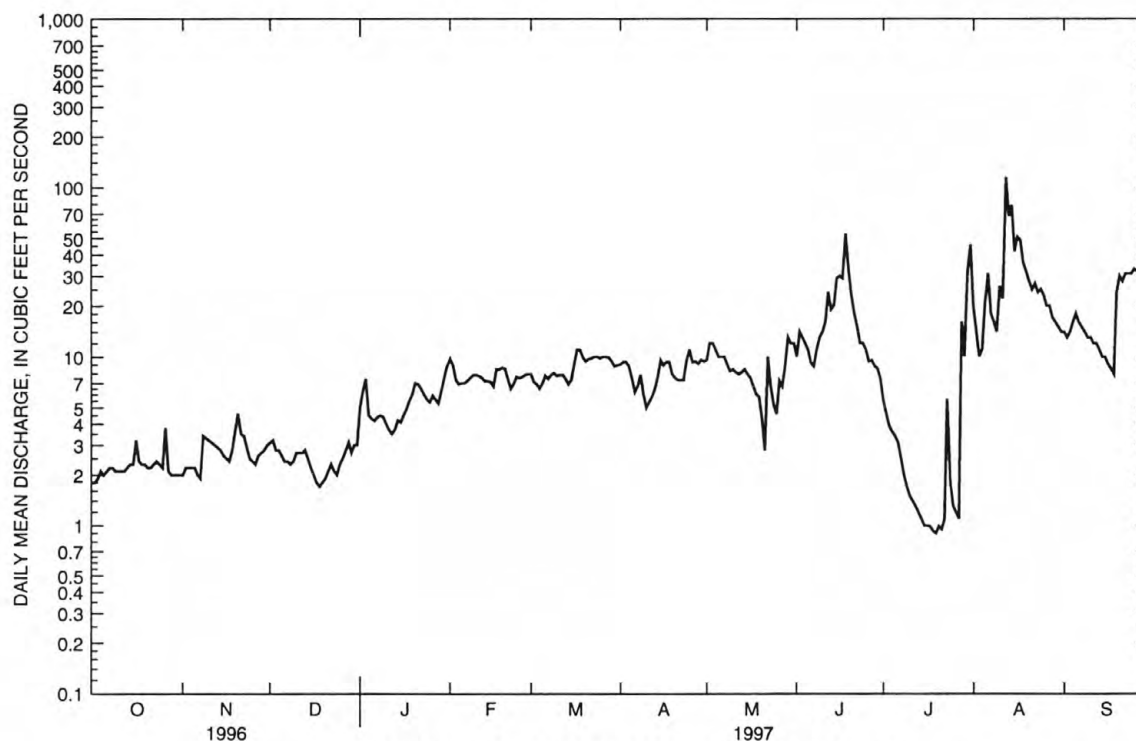
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	2.0	3.1	5.0	9.7	7.9	9.0	9.6	10	5.5	20	14
2	1.8	2.2	3.2	6.3	8.9	7.1	9.3	12	14	4.6	14	13
3	1.9	2.2	2.8	7.4	7.3	6.9	9.3	12	13	3.9	10	14
4	2.1	2.2	2.8	4.5	6.9	6.5	8.8	11	12	3.6	11	16
5	2.0	2.2	2.6	4.3	7.0	7.0	7.5	10	11	3.4	21	18
6	2.1	2.0	2.4	4.2	7.0	7.7	6.2	10	9.2	3.1	31	16
7	2.2	1.9	2.4	4.4	7.2	7.4	6.7	10	8.8	2.5	18	15
8	2.2	3.4	2.3	4.5	7.5	7.8	7.8	9.0	11	2.0	16	14
9	2.1	3.3	2.4	4.4	7.8	8.0	6.0	8.2	13	1.7	14	13
10	2.1	3.2	2.7	4.0	7.8	7.7	5.0	8.4	14	1.5	26	13
11	2.1	3.1	2.7	3.7	7.7	7.8	5.4	8.1	16	1.4	22	12
12	2.1	3.0	2.7	3.5	7.5	7.8	5.8	7.9	24	1.3	115	12
13	2.2	2.9	2.8	3.7	7.2	7.4	6.4	8.1	19	1.2	68	11
14	2.3	2.8	2.5	4.2	7.2	6.9	7.5	8.4	20	1.1	79	10
15	2.3	2.6	2.2	4.1	7.1	7.3	9.5	7.9	29	1.0	42	10
16	3.2	2.5	2.0	4.5	6.7	9.0	8.9	7.5	30	1.0	51	9.1
17	2.4	2.4	1.8	4.9	8.4	11	9.3	6.7	29	.99	49	8.5
18	2.3	2.8	1.7	5.5	8.4	11	9.3	6.0	53	.93	36	7.9
19	2.3	3.6	1.8	6.0	8.6	9.9	7.9	5.8	33	.90	32	24
20	2.2	4.6	1.9	7.0	8.5	9.4	7.5	4.3	23	.99	28	30
21	2.2	3.5	2.1	6.9	7.4	9.7	7.3	2.8	18	.95	25	28
22	2.3	3.4	2.3	6.5	6.5	9.8	7.3	10	15	1.1	27	31
23	2.4	2.9	2.1	6.0	6.9	10	7.3	6.7	12	5.6	24	31
24	2.3	2.5	2.0	5.6	7.6	10	9.6	5.2	12	1.8	25	31
25	2.2	2.4	2.3	5.4	7.5	9.8	11	4.6	11	1.3	23	33
26	3.8	2.3	2.5	5.9	7.6	10	9.3	7.2	9.4	1.2	20	32
27	2.1	2.6	2.8	5.6	7.8	10	9.4	6.7	9.5	1.1	20	31
28	2.0	2.7	3.1	5.3	7.9	9.9	9.1	8.9	8.8	16	17	29
29	2.0	2.8	2.7	6.3	---	9.4	9.6	13	8.5	10	16	28
30	2.0	3.0	3.0	7.5	---	8.8	9.4	12	7.4	32	15	28
31	2.0	---	3.0	8.8	---	8.9	---	12	---	46	14	---
TOTAL	69.0	83.0	76.7	165.9	213.6	267.8	242.4	260.0	503.6	159.66	929	582.5
MEAN	2.23	2.77	2.47	5.35	7.63	8.64	8.08	8.39	16.8	5.15	30.0	19.4
MAX	3.8	4.6	3.2	8.8	9.7	11	11	13	53	46	115	33
MIN	1.8	1.9	1.7	3.5	6.5	6.5	5.0	2.8	7.4	.90	10	7.9
AC-FT	137	165	152	329	424	531	481	516	999	317	1840	1160

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1997, BY WATER YEAR (WY)

MEAN	3.31	4.34	3.78	4.39	5.69	6.56	7.96	7.73	24.4	8.96	9.54	6.78
MAX	5.80	10.9	9.07	8.84	11.2	10.8	17.8	9.65	73.3	26.7	30.0	19.4
(WY)	1996	1996	1996	1996	1996	1996	1996	1995	1995	1995	1997	1997
MIN	2.23	1.46	1.39	1.48	1.61	1.60	1.95	3.82	1.74	1.60	1.65	2.18
(WY)	1997	1995	1995	1995	1995	1995	1995	1994	1994	1994	1994	1996

06755960 CROW CREEK AT 19TH STREET, AT CHEYENNE, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1994 - 1997
ANNUAL TOTAL	2376.7	3553.16	
ANNUAL MEAN	6.49	9.73	7.77
HIGHEST ANNUAL MEAN			10.7
LOWEST ANNUAL MEAN			2.64
HIGHEST DAILY MEAN	32 Apr 14	115 Aug 12	118 Jun 9 1995
LOWEST DAILY MEAN	1.0 Aug 26,27	.90 Jul 19	.90 Jul 19 1997
ANNUAL SEVEN-DAY MINIMUM	1.2 Aug 21	.97 Jul 15	.97 Jul 15 1997
INSTANTANEOUS PEAK FLOW		769 ^a Aug 12	769 Aug 12 1997
INSTANTANEOUS PEAK STAGE		4.80 Aug 12	4.80 Aug 12 1997
ANNUAL RUNOFF (AC-FT)	4710	7050	5630
10 PERCENT EXCEEDS	14	23	15
50 PERCENT EXCEEDS	3.8	7.3	3.3
90 PERCENT EXCEEDS	1.8	2.1	1.4

a From rating curve extended above 250 ft³/s.

06755960 CROW CREEK AT 19TH STREET, AT CHEYENNE, WY

PLATTE RIVER BASIN

06756060 CROW CREEK NEAR ARCHER, WY

LOCATION.--Lat 41°07'35", long 104°39'04", 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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
NOV							
12...	1230	6.6	780	8.1	9.0	18.0	622
FEB							
18...	1000	21	780	8.0	3.0	6.0	616
MAY							
30...	1030	20	588	8.1	14.0	16.5	E622
SEP							
04...	1130	33	679	8.2	19.0	26.0	E624

E-Estimate.

DATE	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
NOV							
12...	9.6	102	150	0.49	18.0	1.60	1.10
FEB							
18...	10.6	98	120	0.25	3.4	4.50	1.50
MAY							
30...	E9.4	--	K6800	0.33	2.4	0.86	0.98
SEP							
04...	E6.6	--	K490	0.34	2.6	0.25	0.83

E-Estimate.
K-Results based on colony count outside the acceptable range (non-ideal colony count).

09188500 GREEN RIVER AT WARREN BRIDGE, NEAR DANIEL, WY

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.

REVISÉD RECORDS.--WSP 979: 1932(M).

GAGE.--Water-stage recorder. Datum of gage is 7,468.09 ft above sea level. Prior to Oct. 6, 1977, on left bank at same datum.

REMARKS.--Estimated daily discharges: Oct. 20-27, Nov. 5 to Apr. 17, and May 5-28. Records fair 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. National Weather Service data collection platform with satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	212	170	200	220	150	120	180	403	2880	1950	1020	418
2	205	167	190	220	150	120	170	364	3280	1800	873	408
3	199	168	180	220	150	120	170	356	3420	1580	780	404
4	200	164	180	180	140	120	180	338	3380	1320	744	401
5	198	160	230	150	130	120	190	360	3560	1210	829	413
6	195	110	250	160	120	110	180	400	3770	1290	962	405
7	190	100	250	170	110	120	170	500	3910	1390	1050	393
8	184	170	270	170	110	120	170	580	3900	1460	1010	371
9	181	160	300	160	110	130	180	660	4220	1490	857	359
10	177	160	290	160	110	130	190	750	4920	1510	801	342
11	174	150	280	150	110	130	180	890	5620	1440	839	399
12	172	150	270	150	110	130	170	800	4800	1530	809	718
13	170	160	250	150	110	130	180	890	3750	1480	766	897
14	165	160	250	150	120	120	160	1000	3230	1130	788	773
15	165	160	200	140	130	110	165	1300	3020	958	776	629
16	167	100	220	140	130	120	180	1700	2800	945	656	603
17	169	95	130	140	120	120	190	2000	2740	1040	605	579
18	156	93	140	150	120	130	261	2200	2980	1190	572	541
19	169	150	150	160	120	130	316	2400	3580	1300	535	502
20	160	180	160	160	120	130	369	2000	3840	1370	509	481
21	140	200	170	160	120	140	415	1600	3550	1290	496	473
22	150	190	180	150	120	140	385	2000	3070	1210	496	548
23	160	150	180	140	110	150	287	2400	2870	1160	500	527
24	170	120	180	140	100	160	270	2600	2740	1160	503	503
25	160	140	190	140	110	140	270	3000	2650	1250	516	477
26	150	110	200	160	120	160	292	3000	2320	1300	526	463
27	170	180	220	160	130	180	341	2600	2110	1250	543	447
28	175	200	240	160	120	180	443	2300	2080	1140	531	421
29	185	210	240	150	---	170	468	2110	2090	1000	525	405
30	182	200	240	150	---	170	429	2320	2020	1040	471	401
31	179	---	230	150	---	190	---	2500	---	1160	435	---
TOTAL	5429	4627	6660	4960	3400	4240	7551	46321	99100	40343	21323	14701
MEAN	175	154	215	160	121	137	252	1494	3303	1301	688	490
MAX	212	210	300	220	150	190	468	3000	5620	1950	1050	897
MIN	140	93	130	140	100	110	160	338	2020	945	435	342
AC-FT	10770	9180	13210	9840	6740	8410	14980	91880	196600	80020	42290	29160

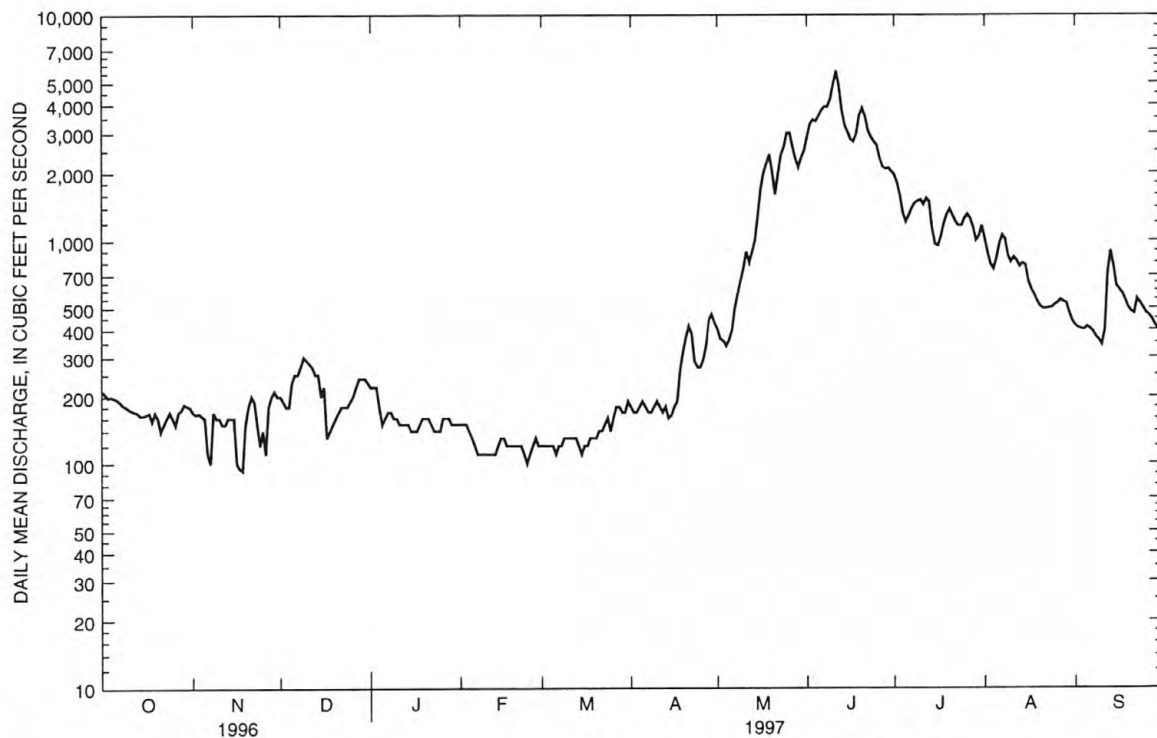
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1997, BY WATER YEAR (WY)

MEAN	199	144	124	109	110	123	288	1028	1813	1267	546	303
MAX	433	223	215	176	166	240	600	1811	3813	2424	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 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1932 - 1997*	
ANNUAL TOTAL	241999		258655		--	
ANNUAL MEAN	661		709		506	
HIGHEST ANNUAL MEAN	--		--		768	1986
LOWEST ANNUAL MEAN	--		--		281	1977
HIGHEST DAILY MEAN	3780	Jun 12	5620	Jun 11	5620	Jun 11 1997
LOWEST DAILY MEAN	80	Feb 2	93	Nov 18	36	Nov 26 1933
ANNUAL SEVEN-DAY MINIMUM	93	Jan 30	110	Feb 7	43	Nov 24 1933
INSTANTANEOUS PEAK FLOW	--		5930	Jun 11	5930	Jun 11 1997
INSTANTANEOUS PEAK STAGE	--		6.04	Jun 11	6.04	Jun 11 1997
ANNUAL RUNOFF (AC-FT)	480000		513000		366600	
10 PERCENT EXCEEDS	2200		2150		1430	
50 PERCENT EXCEEDS	230		220		200	
90 PERCENT EXCEEDS	110		120		100	

* No record for 1993 water year.



09188500 GREEN RIVER AT WARREN BRIDGE, NEAR DANIEL, WY

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EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 24	2000	804	4.75
June 11	0100	2,430	6.65
June 19	0100	*2,470	6.69

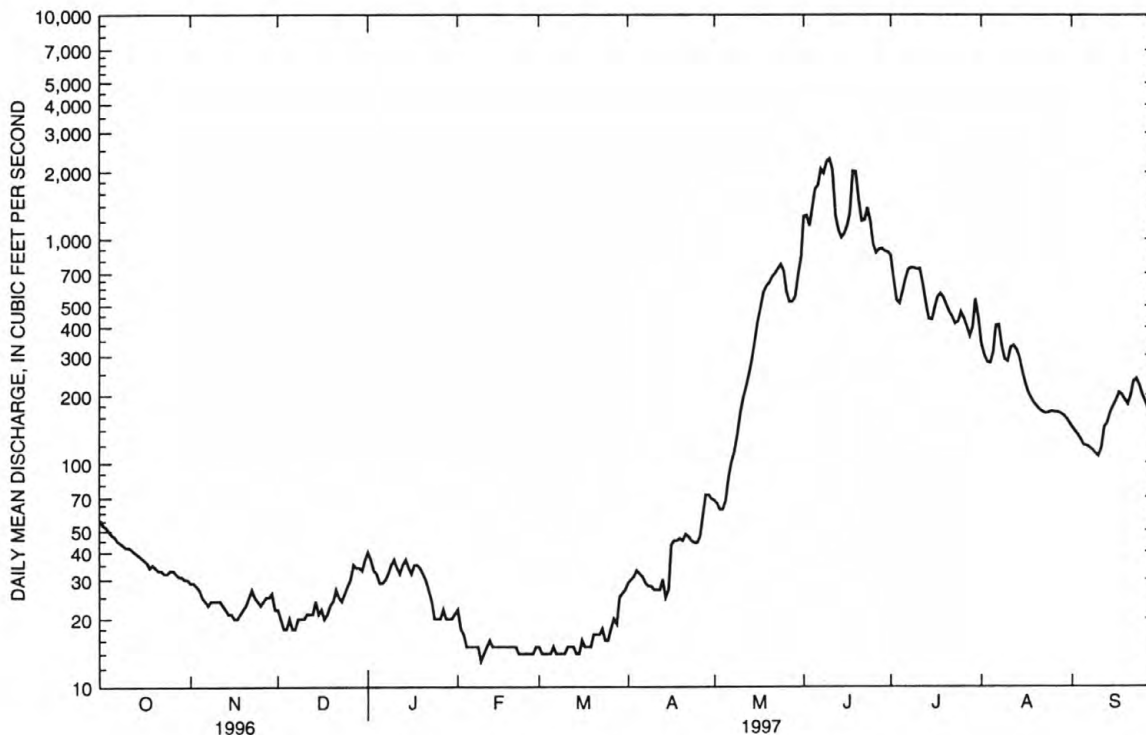
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	29	22	40	22	15	29	68	1270	849	336	144
2	53	29	20	37	18	14	30	66	1280	660	300	138
3	52	28	18	33	17	14	31	62	1150	531	281	133
4	50	27	18	32	15	14	33	62	1380	516	278	127
5	48	25	20	29	15	14	32	68	1680	582	310	120
6	47	24	18	29	15	15	31	86	1740	665	410	119
7	45	23	18	30	15	14	29	101	2060	731	413	117
8	44	24	20	32	15	14	28	112	1980	744	328	114
9	43	24	20	35	13	14	28	133	2230	743	288	110
10	42	24	20	37	14	14	27	165	2290	733	283	107
11	42	24	21	34	15	15	27	194	2040	738	326	116
12	41	23	21	32	16	15	27	219	1280	630	331	144
13	40	22	21	35	15	15	30	250	1100	520	318	150
14	39	21	24	37	15	14	25	290	1020	438	295	167
15	38	21	21	34	15	14	27	349	1060	435	258	178
16	37	20	22	32	15	16	43	426	1150	494	228	189
17	36	20	20	35	15	15	45	494	1310	551	207	205
18	34	21	21	35	15	15	45	577	2020	571	195	201
19	35	22	23	34	15	15	46	616	2010	550	185	190
20	34	23	24	32	15	17	45	637	1500	509	178	182
21	33	25	27	30	15	17	48	678	1210	473	172	199
22	33	27	25	27	14	17	47	704	1220	449	168	230
23	32	25	24	24	14	18	45	737	1380	417	166	236
24	32	24	26	20	14	16	44	770	1210	427	167	221
25	33	23	28	20	14	16	44	724	951	470	169	201
26	33	24	30	20	14	18	47	581	870	442	168	186
27	32	25	35	22	14	20	58	524	902	404	168	172
28	31	25	34	20	15	19	72	526	909	367	166	160
29	31	26	34	20	---	25	72	553	885	401	163	147
30	30	22	33	20	---	26	69	686	877	539	158	135
31	30	---	37	21	---	27	---	824	---	445	151	---
TOTAL	1206	720	745	918	424	512	1204	12282	41964	17024	7564	4838
MEAN	38.9	24.0	24.0	29.6	15.1	16.5	40.1	396	1399	549	244	161
MAX	56	29	37	40	22	27	72	824	2290	849	413	236
MIN	30	20	18	20	13	14	25	62	870	367	151	107
AC-FT	2390	1430	1480	1820	841	1020	2390	24360	83240	33770	15000	9600

MEAN	54.7	32.5	24.1	19.5	16.8	16.8	37.7	290	850	526	163	90.0
MAX	165	71.8	53.0	37.6	36.7	35.1	98.4	579	1476	1142	350	209
(WY)	1984	1984	1978	1969	1969	1986	1962	1969	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 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1955 - 1997	
ANNUAL TOTAL	72781		89401		--	
ANNUAL MEAN	199		245		177	
HIGHEST ANNUAL MEAN	--		--		253	1986
LOWEST ANNUAL MEAN	--		--		96.7	1977
HIGHEST DAILY MEAN	1620	Jul 5	2290	Jun 10	2290	Jun 10 1997
LOWEST DAILY MEAN	14	Feb 2	13	Feb 9	3.3	Apr 4 1977
ANNUAL SEVEN-DAY MINIMUM	18	Feb 25	14	Feb 21	3.4	Mar 31 1977
INSTANTANEOUS PEAK FLOW	--		2470	Jun 19	2550	Jun 16 1959
INSTANTANEOUS PEAK STAGE	--		6.69	Jun 19	7.65	Jun 6 1986
ANNUAL RUNOFF (AC-FT)	144400		177300		128300	
10 PERCENT EXCEEDS	811		737		571	
50 PERCENT EXCEEDS	46		39		42	
90 PERCENT EXCEEDS	20		15		13	

a Gage height, 7.15 ft.



09196500 PINE CREEK ABOVE FREMONT LAKE, WY

GREEN RIVER BASIN

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09197000 PINE CREEK BELOW FREMONT LAKE, WY

LOCATION.--Lat 42°53'42", long 109°50'35", in NE¹/₄ NE¹/₄ NE¹/₄ 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 since 1918). 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 sea level, from topographic map. Prior to September 30, 1918, nonrecording gage at site 0.2 mi upstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Some regulation by Fremont Lake. Fremont Ditch and Highland Ditch divert water upstream from station for irrigation downstream from station. Result of discharge measurement, in cubic feet per second, made when station was not in operation, is given below:

Mar. 25 . . . 31.0

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	30	29	599	979	293	121
2	---	---	---	---	---	---	30	29	650	945	287	121
3	---	---	---	---	---	---	30	29	710	774	281	121
4	---	---	---	---	---	---	30	34	757	680	273	119
5	---	---	---	---	---	---	29	45	824	487	271	119
6	---	---	---	---	---	---	29	46	881	225	272	119
7	---	---	---	---	---	---	29	65	926	153	272	111
8	---	---	---	---	---	---	29	100	1030	232	267	103
9	---	---	---	---	---	---	30	117	1150	424	263	103
10	---	---	---	---	---	---	31	125	1290	390	262	103
11	---	---	---	---	---	---	31	125	1430	355	261	103
12	---	---	---	---	---	---	31	146	1450	358	261	102
13	---	---	---	---	---	---	31	241	1390	358	262	101
14	---	---	---	---	---	---	31	290	1360	353	258	101
15	---	---	---	---	---	---	31	299	1300	350	254	102
16	---	---	---	---	---	---	31	304	1250	306	247	103
17	---	---	---	---	---	---	31	322	1230	269	241	101
18	---	---	---	---	---	---	31	336	1280	248	219	101
19	---	---	---	---	---	---	30	367	1390	250	209	101
20	---	---	---	---	---	---	30	414	1420	255	194	101
21	---	---	---	---	---	---	30	424	1410	257	158	101
22	---	---	---	---	---	---	30	459	1360	258	158	101
23	---	---	---	---	---	---	30	509	1340	258	156	101
24	---	---	---	---	---	---	29	538	1310	259	156	101
25	---	---	---	---	---	---	29	564	1280	264	134	101
26	---	---	---	---	---	---	29	578	1200	267	121	99
27	---	---	---	---	---	---	29	567	1130	274	121	99
28	---	---	---	---	---	---	29	543	1080	275	121	99
29	---	---	---	---	---	---	29	537	1040	274	121	99
30	---	---	---	---	---	---	29	537	999	283	121	98
31	---	---	---	---	---	---	---	554	---	292	121	---
TOTAL	---	---	---	---	---	---	898	9273	34466	11352	6635	3155
MEAN	---	---	---	---	---	---	29.9	299	1149	366	214	105
MAX	---	---	---	---	---	---	31	578	1450	979	293	121
MIN	---	---	---	---	---	---	29	29	599	153	121	98
AC-FT	---	---	---	---	---	---	1780	18390	68360	22520	13160	6260

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1918, BY WATER YEAR (WY)

	63.2	36.8	27.5	23.3	24.3	26.2	35.1	97.1	857	939	246	91.4
MEAN	63.2	36.8	27.5	23.3	24.3	26.2	35.1	97.1	857	939	246	91.4
MAX	86.2	40.0	34.2	26.3	33.0	36.0	45.0	130	1273	1258	300	131
(WY)	1916	1911	1918	1918	1916	1916	1918	1916	1918	1917	1917	1917
MIN	49.9	30.0	20.0	20.0	18.0	20.0	27.0	81.4	552	665	203	54.6
(WY)	1917	1917	1917	1916	1917	1917	1917	1912	1917	1912	1911	1911

GREEN RIVER BASIN

09197000 PINE CREEK BELOW FREMONT LAKE, WY--Continued

SUMMARY STATISTICS

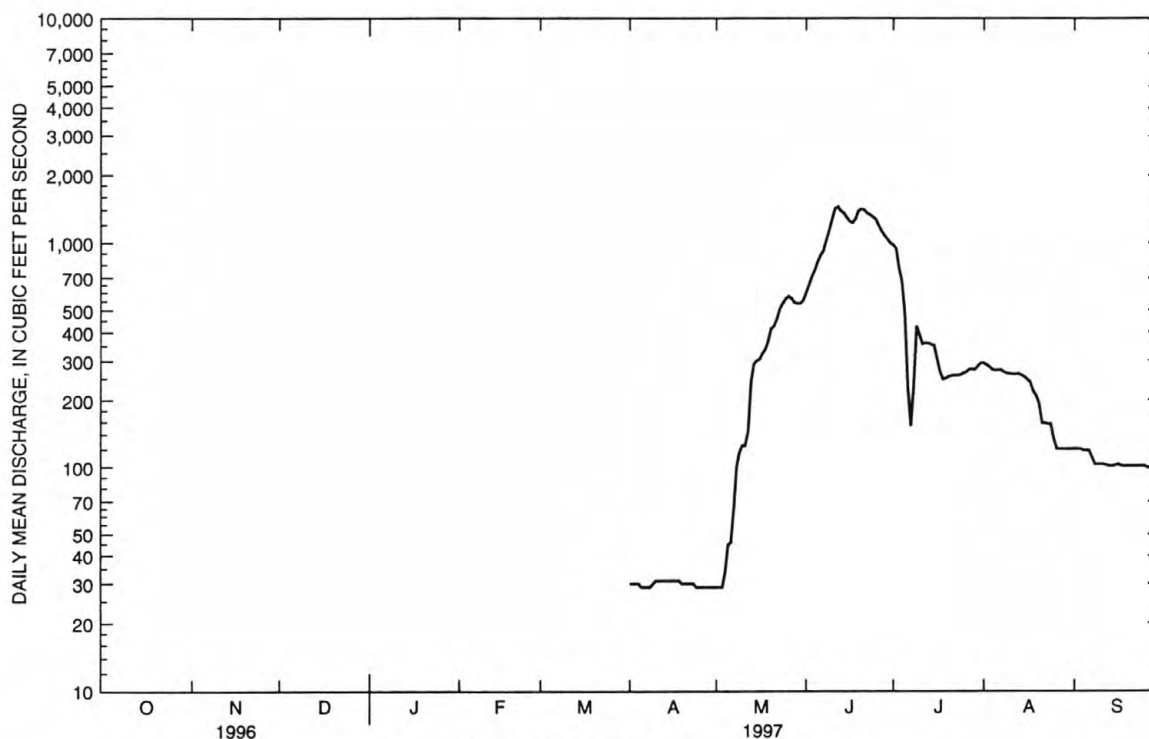
FOR 1997 WATER YEAR*

WATER YEARS 1911 - 1918*

ANNUAL MEAN	--		197	
HIGHEST ANNUAL MEAN	--		211	1917
LOWEST ANNUAL MEAN	--		183	1912
HIGHEST DAILY MEAN	1450	Jun 12	2330	Jun 17 1918
LOWEST DAILY MEAN	29	Apr 5-8, Apr 24 to May 3	8.6	Apr 23 1990#
ANNUAL SEVEN-DAY MINIMUM	--		18	Feb 1 1917
INSTANTANEOUS PEAK FLOW	1470	Jun 11	2330	Jun 17 1918#
INSTANTANEOUS PEAK STAGE	3.98	Jun 11	--	
ANNUAL RUNOFF (AC-FT)	--		143000	
10 PERCENT EXCEEDS	--		675	
50 PERCENT EXCEEDS	--		40	
90 PERCENT EXCEEDS	--		20	

* During period of operation.

For period of record through 1997.



09197000 PINE CREEK BELOW FREMONT LAKE, WY

GREEN RIVER BASIN

303

09205000 NEW FORK RIVER NEAR BIG PINEY, WY

LOCATION.--Lat 42°34'02", long 109°55'46", in SE¹/₄ NE¹/₄ NE¹/₄ 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 sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 15-18 and Nov. 25 to Apr. 16. 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. National Weather Service data collection platform with satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	312	386	240	300	260	280	470	525	3430	2470	986	455
2	317	386	240	300	250	280	410	527	4210	2370	957	455
3	317	373	240	300	240	280	410	539	4650	2220	924	455
4	317	371	230	300	220	270	470	531	4700	1950	874	455
5	317	368	240	290	240	260	410	537	5050	1750	987	455
6	317	346	230	290	230	270	400	566	5460	1460	1110	455
7	317	321	240	290	220	280	415	596	5660	1200	1040	455
8	317	355	260	290	210	290	420	636	5820	1120	1010	455
9	313	351	280	280	200	290	400	687	6590	1150	967	455
10	297	351	300	270	210	280	380	734	7300	1250	971	455
11	296	351	290	250	240	290	370	810	7900	1320	1100	464
12	301	355	280	250	240	310	370	896	7970	1320	1070	560
13	301	362	270	250	240	340	380	1040	7070	1420	1020	538
14	300	362	270	250	250	340	400	1250	6340	1380	993	501
15	291	330	250	240	250	340	390	1460	5580	1290	937	478
16	295	300	270	240	260	310	420	1970	5080	1220	898	499
17	301	290	240	240	270	360	461	2500	4920	1120	843	512
18	301	310	220	240	270	430	497	2920	4690	1040	796	504
19	307	357	220	250	270	520	548	3270	4640	1050	753	501
20	311	375	220	250	270	630	539	3490	5230	1120	705	515
21	315	393	230	250	260	720	506	3640	5410	1110	664	547
22	317	404	250	250	250	690	501	3830	5080	1010	622	640
23	331	404	250	250	250	620	476	3940	4600	986	607	633
24	339	388	250	240	250	560	472	4060	4370	1100	555	604
25	362	340	250	240	260	580	444	4200	4100	1160	548	592
26	380	320	260	240	270	660	436	4060	3720	1070	525	587
27	380	320	280	240	270	750	432	3330	3300	1040	508	587
28	380	310	300	240	270	660	427	2760	2980	1030	496	563
29	380	320	300	240	---	500	446	2480	2820	1030	477	552
30	383	250	300	250	---	470	516	2530	2660	1010	459	549
31	386	---	300	260	---	520	---	2850	---	1010	455	---
TOTAL	10098	10449	8000	8070	6920	13380	13216	63164	151330	40776	24857	15476
MEAN	326	348	258	260	247	432	441	2038	5044	1315	802	516
MAX	386	404	300	300	270	750	548	4200	7970	2470	1110	640
MIN	291	250	220	240	200	260	370	525	2660	986	455	455
AC-FT	20030	20730	15870	16010	13730	26540	26210	125300	300200	80880	49300	30700

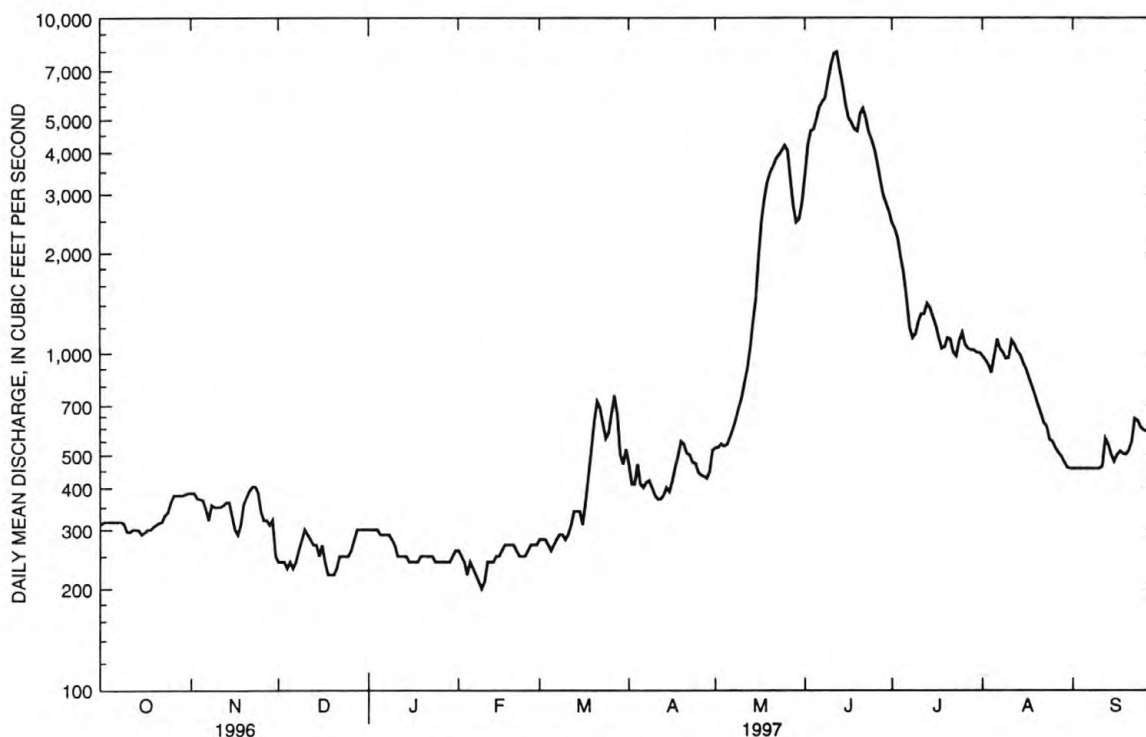
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1997, BY WATER YEAR (WY)

MEAN	375	322	241	200	210	266	439	1145	3063	1654	594	376
MAX	989	608	397	277	337	597	1114	2539	7065	4155	1279	766
(WY)	1983	1984	1983	1969	1969	1972	1969	1969	1986	1982	1982	1983
MIN	171	188	139	129	135	161	181	254	699	405	225	164
(WY)	1989	1989	1989	1963	1989	1977	1981	1977	1992	1961	1988	1988

GREEN RIVER BASIN

09205000 NEW FORK RIVER NEAR BIG PINEY, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1954 - 1997	
ANNUAL TOTAL	322005		365736		--	
ANNUAL MEAN	880		1002		741	
HIGHEST ANNUAL MEAN	--		--		1288	1986
LOWEST ANNUAL MEAN	--		--		313	1977
HIGHEST DAILY MEAN	6430	Jun 12	7970	Jun 12	9110	Jun 7 1986
LOWEST DAILY MEAN	200	Feb 2	200	Feb 9	90	Jan 13 1963
ANNUAL SEVEN-DAY MINIMUM	217	Jan 30	219	Feb 4	104	Jan 9 1963
INSTANTANEOUS PEAK FLOW	--		8030	Jun 11	9190	Jun 7 1986
INSTANTANEOUS PEAK STAGE	--		7.60	Jun 11	8.28	Jun 7 1986
ANNUAL RUNOFF (AC-FT)	638700		725400		536900	
10 PERCENT EXCEEDS	2710		3100		1860	
50 PERCENT EXCEEDS	353		427		330	
90 PERCENT EXCEEDS	250		250		190	



09205000 NEW FORK RIVER NEAR BIG PINEY, WY

GREEN RIVER BASIN

305

09209400 GREEN RIVER NEAR LA BARGE, WY

LOCATION.--Lat 42°11'34", long 110°09'45", 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).

GAGE.--Water-stage recorder. Elevation of gage is 6,520 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 5, 6, 15-19, Nov. 25 to Apr. 17, and Apr 29 to May 21. 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. National Weather Service data collection platform with satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	643	869	520	600	420	660	1120	1800	7320	4580	2920	1190
2	645	838	500	600	400	660	1000	1900	8430	4310	2780	1200
3	646	810	500	600	370	660	950	1900	9840	4130	2560	1170
4	646	797	450	600	360	660	1000	1800	10400	3830	2370	1160
5	639	740	470	560	400	660	1100	1900	10500	3390	2920	1150
6	636	700	450	560	380	600	970	2100	10800	3040	4240	1150
7	624	743	500	560	370	600	920	2300	11600	2680	3570	1120
8	610	767	520	560	360	700	940	2500	12200	2480	3130	1090
9	606	751	560	560	350	800	1000	2700	13200	2430	2870	1090
10	604	803	600	513	360	860	960	3000	14400	2580	2680	1150
11	604	777	560	500	400	900	910	3500	15800	2700	2910	1080
12	604	781	540	500	450	900	870	3800	16800	2790	3050	1330
13	605	797	500	500	500	900	910	4200	16800	3190	2890	1750
14	604	794	480	500	600	900	930	4700	15700	3290	2730	1840
15	599	700	450	450	700	800	990	5000	14100	3000	2590	1750
16	599	660	450	450	700	840	1100	5800	12700	2690	2480	1650
17	620	640	450	450	700	900	1080	6400	11400	2500	2270	1610
18	643	600	450	450	700	940	1240	7000	10500	2390	2100	1540
19	655	700	400	470	700	1000	1440	7400	10200	2540	1990	1500
20	674	873	450	500	700	1010	1530	7800	11000	2780	1860	1510
21	635	1000	480	500	700	1100	1560	8000	12000	2810	1750	1590
22	627	1130	500	500	700	1300	1560	8480	11700	2690	1650	1840
23	656	1130	500	500	660	1400	1560	8620	10400	2610	1590	1970
24	735	961	500	450	640	1500	1560	8910	9150	2750	1540	1850
25	825	800	500	400	600	1400	1580	9210	8400	3080	1460	1700
26	852	700	520	400	640	1500	1600	9640	7680	2960	1440	1610
27	832	600	560	400	700	1500	1610	9000	6640	2860	1430	1560
28	823	600	600	400	800	1500	1630	7360	5780	2780	1420	1480
29	825	640	600	400	---	1400	1700	6350	5290	2770	1340	1420
30	843	600	600	403	---	1200	1800	6250	4950	2870	1250	1360
31	876	---	600	450	---	1100	---	6740	---	2920	1190	---
TOTAL	21035	23301	15760	15286	15360	30850	37120	166060	325680	92420	70970	43410
MEAN	679	777	508	493	549	995	1237	5357	10860	2981	2289	1447
MAX	876	1130	600	600	800	1500	1800	9640	16800	4580	4240	1970
MIN	599	600	400	400	350	600	870	1800	4950	2390	1190	1080
AC-FT	41720	46220	31260	30320	30470	61190	73630	329400	646000	183300	140800	86100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1997, BY WATER YEAR (WY)

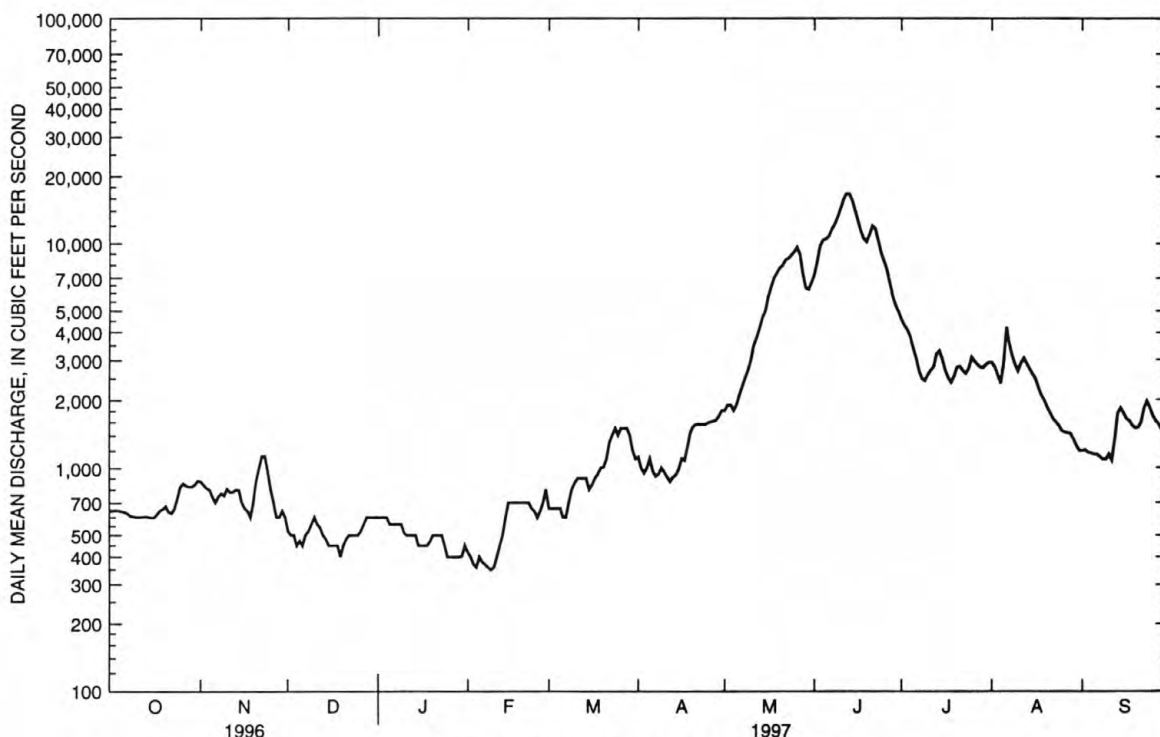
	831	739	536	465	493	708	1416	2890	5873	3527	1502	906
MEAN	831	739	536	465	493	708	1416	2890	5873	3527	1502	906
MAX	2049	1306	866	608	678	1565	2692	5357	14230	7993	3185	1768
(WY)	1983	1984	1984	1966	1969	1972	1986	1997	1986	1982	1982	1983
MIN	368	469	367	314	270	426	469	305	1080	710	466	365
(WY)	1989	1989	1989	1989	1989	1970	1977	1977	1992	1994	1988	1988

GREEN RIVER BASIN

09209400 GREEN RIVER NEAR LA BARGE, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1964 - 1997	
ANNUAL TOTAL	699654		857252		--	
ANNUAL MEAN	1912		2349		1660 ^a	
HIGHEST ANNUAL MEAN	--		--		2908	1986
LOWEST ANNUAL MEAN	--		--		668	1977
HIGHEST DAILY MEAN	12200	Jun 14	16800	Jun 12	18800	Jun 9 1986
LOWEST DAILY MEAN	350	Feb 3	350	Feb 9	188	May 17 1977
ANNUAL SEVEN-DAY MINIMUM	409	Jan 1	369	Feb 4	215	May 13 1977
INSTANTANEOUS PEAK FLOW	--		17300	Jun 13	18800	Jun 9 1986
INSTANTANEOUS PEAK STAGE	--		10.11	Jun 13	10.50	Jun 9 1986
ANNUAL RUNOFF (AC-FT)	1388000		1700000		1202000	
10 PERCENT EXCEEDS	5450		7130		4070	
50 PERCENT EXCEEDS	755		1080		804	
90 PERCENT EXCEEDS	497		492		430	

a Average discharge, water years 1947-97, 1614 ft³/s.



09209400 GREEN RIVER NEAR LA BARGE, WY

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EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 21	0130	495	8.27
Apr. 28	0100	428	7.96
May 18	0915	550	8.50
June 9	0345	*565	*8.56
Aug. 5	2115	158	6.53

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	34	25	37	28	28	48	186	487	146	76	55
2	34	34	23	40	25	26	50	153	509	143	73	55
3	34	34	21	45	22	26	52	159	474	137	71	55
4	34	35	20	43	20	25	54	222	451	131	71	57
5	34	37	21	41	20	22	50	289	478	126	117	55
6	33	32	20	38	20	24	47	317	494	121	104	58
7	34	30	20	35	20	25	45	317	491	116	82	56
8	41	32	22	33	20	25	44	303	506	110	75	55
9	40	35	22	33	18	25	47	299	538	108	68	54
10	41	39	22	33	19	25	45	318	479	106	78	56
11	34	40	25	31	21	27	44	339	439	104	80	58
12	34	36	25	30	23	27	42	350	414	112	76	64
13	33	34	25	31	22	27	42	360	422	114	74	66
14	32	34	27	32	22	25	44	379	422	103	69	70
15	32	31	30	34	22	25	47	430	362	98	66	74
16	34	31	27	30	23	27	65	466	335	95	63	78
17	34	30	26	32	24	28	107	494	326	92	63	76
18	33	30	24	35	23	30	149	518	320	91	62	70
19	35	32	26	35	22	35	207	489	315	97	61	66
20	34	35	30	35	22	37	282	440	300	95	59	64
21	32	38	31	34	22	39	329	418	283	87	57	66
22	33	40	32	32	21	43	234	441	264	86	56	76
23	35	37	33	30	21	40	212	443	247	88	56	80
24	34	35	35	25	21	38	166	485	230	91	56	76
25	35	32	35	25	21	37	151	484	215	87	57	70
26	35	32	35	25	21	35	182	399	200	83	56	66
27	33	32	36	28	23	40	232	347	186	80	55	60
28	34	33	37	25	28	38	336	334	177	80	52	56
29	34	31	36	25	---	40	296	334	168	87	52	52
30	35	28	35	25	---	43	208	372	156	81	52	50
31	35	---	36	25	---	45	---	411	---	81	53	---
TOTAL	1069	1013	862	1002	614	977	3857	11296	10688	3176	2090	1894
MEAN	34.5	33.8	27.8	32.3	21.9	31.5	129	364	356	102	67.4	63.1
MAX	41	40	37	45	28	45	336	518	538	146	117	80
MIN	32	28	20	25	18	22	42	153	156	80	52	50
AC-FT	2120	2010	1710	1990	1220	1940	7650	22410	21200	6300	4150	3760

MEAN	31.8	29.7	26.3	25.5	26.6	32.3	100	216	230	77.1	37.7	30.7
MAX	55.3	44.9	42.1	41.3	51.3	76.3	280	437	628	185	76.0	63.5
(WY)	1987	1952	1985	1985	1985	1986	1986	1980	1986	1975	1983	1997
MIN	19.1	18.6	13.5	14.3	15.0	18.7	35.1	32.1	20.3	17.2	10.2	12.7
(WY)	1978	1994	1990	1991	1958	1962	1977	1977	1977	1977	1992	1977

09210500 FONTENELLE CREEK NEAR HERSCHLER RANCH, NEAR FONTENELLE, WY--Continued

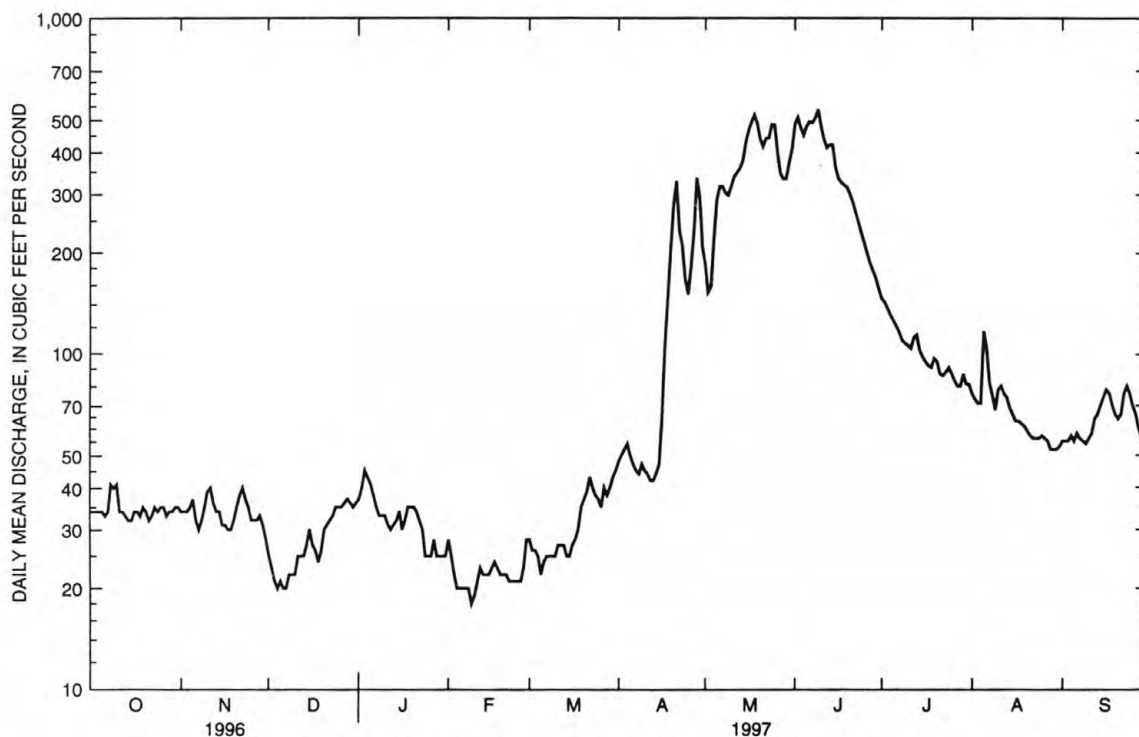
SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1952 - 1997

ANNUAL TOTAL	26893		38538		--	
ANNUAL MEAN	73.5		106		72.0	
HIGHEST ANNUAL MEAN	--		--		155	1986
LOWEST ANNUAL MEAN	--		--		24.8	1977
HIGHEST DAILY MEAN	451	Jun 11	538	Jun 9	865	Jun 6 1986
LOWEST DAILY MEAN	17	Feb 2	18	Feb 9	5.6	Aug 14 1992
ANNUAL SEVEN-DAY MINIMUM	19	Feb 28	20	Feb 4	6.2	Aug 10 1992
INSTANTANEOUS PEAK FLOW	--		565	Jun 9	907	Apr 23 1986
INSTANTANEOUS PEAK STAGE	--		8.56	Jun 9	9.51	Apr 23 1986
ANNUAL RUNOFF (AC-FT)	53340		76440		52190	
10 PERCENT EXCEEDS	190		334		185	
50 PERCENT EXCEEDS	34		44		33	
90 PERCENT EXCEEDS	21		24		20	



09210500 FONTENELLE CREEK NEAR HERSCHLER RANCH, NEAR FONTENELLE, WY

09211150 FONTENELLE RESERVOIR NEAR FONTENELLE, WY

LOCATION.--Lat 42°02'00", long 110°04'00", in S¹/₂ sec.25 T.24 N., R.112 W., Lincoln County, Hydrologic Unit 14040101, at dam on Green River, 3.0 mi north of Fontenelle, and 3.5 mi upstream from Slate Creek.

DRAINAGE AREA.--4,280 mi².

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WSP 2125: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is sea level (Bureau of Reclamation datum).

REMARKS.--Reservoir is formed by earthfill dam completed by Bureau of Reclamation in April 1964. Capacity, 344,800 acre-ft between elevations 6,506.0 ft, crest of spillway, and 6,408.0 ft, invert of outlet pipe. Dead storage, below elevation 6,408.0 ft, 560 acre-ft. Figures given herein represent total contents. Water used for irrigation and power generation. Capacity table is available from the Bureau of Reclamation.

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily contents, 387,000 acre-ft, June 29, 1965, elevation, 6,511.01 ft; minimum daily, 5,680 acre-ft, July 28, 1967, elevation, 6,423.98 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 342,000 acre-ft, Aug. 7, 8, maximum elevation, 6,505.43 ft, Aug. 8; minimum daily, 100,000 acre-ft, Mar. 18, elevation, 6,465.21.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY OBSERVATION AT 2400 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	262000	241000	221000	187000	158000	119000	122000	137000	214000	297000	327000	326000
2	261000	240000	219000	186000	157000	117000	122000	137000	216000	294000	329000	326000
3	260000	240000	218000	186000	156000	116000	122000	137000	221000	292000	331000	326000
4	259000	239000	216000	185000	155000	114000	122000	138000	227000	290000	333000	326000
5	258000	238000	214000	185000	154000	113000	122000	138000	233000	286000	335000	326000
6	258000	237000	213000	184000	152000	111000	122000	138000	239000	281000	340000	326000
7	257000	237000	211000	183000	151000	110000	122000	139000	247000	277000	342000	326000
8	257000	236000	210000	182000	150000	108000	122000	140000	256000	274000	342000	326000
9	256000	235000	209000	181000	148000	107000	121000	142000	266000	273000	341000	326000
10	256000	235000	208000	181000	147000	106000	121000	143000	278000	274000	341000	326000
11	255000	234000	208000	180000	145000	105000	120000	145000	290000	276000	341000	327000
12	255000	234000	207000	179000	143000	104000	120000	148000	302000	277000	341000	327000
13	254000	233000	206000	178000	142000	104000	119000	150000	314000	280000	340000	327000
14	254000	232000	205000	177000	141000	103000	118000	153000	322000	283000	339000	328000
15	253000	232000	204000	176000	139000	102000	118000	156000	328000	286000	338000	328000
16	252000	231000	203000	175000	138000	101000	117000	159000	330000	289000	337000	329000
17	251000	230000	202000	173000	136000	101000	117000	164000	331000	290000	335000	329000
18	250000	229000	200000	172000	135000	100000	118000	169000	330000	292000	334000	329000
19	249000	229000	199000	171000	133000	101000	119000	176000	327000	294000	333000	329000
20	248000	228000	197000	170000	132000	102000	121000	183000	326000	296000	332000	330000
21	247000	228000	196000	169000	131000	105000	122000	190000	328000	299000	332000	330000
22	246000	228000	195000	168000	129000	108000	124000	195000	329000	301000	332000	331000
23	245000	228000	194000	167000	128000	113000	126000	199000	327000	303000	331000	331000
24	244000	228000	193000	166000	126000	115000	128000	204000	324000	306000	331000	332000
25	244000	227000	192000	165000	125000	117000	129000	209000	322000	309000	330000	332000
26	243000	226000	191000	164000	123000	119000	129000	215000	319000	312000	330000	332000
27	243000	225000	191000	163000	122000	120000	130000	219000	315000	314000	329000	332000
28	242000	225000	190000	162000	120000	121000	131000	220000	310000	316000	329000	332000
29	241000	223000	189000	161000	---	122000	133000	218000	305000	319000	328000	331000
30	241000	222000	188000	160000	---	122000	135000	215000	301000	322000	328000	301000
31	240000	---	187000	159000	---	122000	---	214000	---	324000	327000	---
MAX	262000	241000	221000	187000	158000	122000	135000	220000	331000	324000	342000	332000
MIN	240000	222000	187000	159000	120000	100000	117000	137000	214000	273000	327000	301000
(#)	6,491.89	6,489.06	6,483.51	6,478.35	6,470.12	6,470.53	6,473.52	6,487.81	6,500.20	6,503.24	6,503.57	6,504.06
(*)	-23,000	-18,000	-35,000	-28,000	-39,000	+2,000	+13,000	-21,000	+87,000	+23,000	+3,000	-26,000

CAL YR 1996 MAX 325,000 MIN 99,000 (*) -30,000

WTR YR 1997 MAX 342,000 MIN 100,000 (*) +38,000

(#) Elevation, in feet, at end of month.

(*) Change in contents, in acre-feet.

09211200 GREEN RIVER BELOW FONTENELLE RESERVOIR, WY

LOCATION.--Lat 42°01'16", long 110°02'57", in NW¹/₄ NW¹/₄ NE¹/₄ 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. Datum of gage is 6,378.13 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated by Fontenelle Reservoir (station 09211150) 1.0 mi upstream. Natural flow of stream affected by storage reservoirs and diversions for irrigation of about 202,000 acres upstream from station. National Weather Service data collection platform with satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1170	1070	1110	1100	1090	1240	1220	1880	7480	6800	1510	1440
2	1160	1120	1110	1090	1090	1240	1220	2000	7480	6070	1510	1210
3	1160	1090	1110	1090	1090	1240	1220	2000	7480	5570	1510	1080
4	1160	1100	1120	1070	1100	1240	1220	2000	7540	5590	1580	1080
5	1160	1060	1130	1030	1110	1240	1220	2120	7590	5580	1850	1050
6	1040	1070	1130	1030	1110	1240	1220	2310	7620	5580	2270	1040
7	884	1060	1140	1020	1150	1240	1220	2490	7650	5020	2760	1040
8	880	1060	1120	1040	1200	1240	1220	2790	7690	3990	3030	1050
9	872	1050	1110	1040	1200	1240	1220	2910	7760	3080	3060	1050
10	872	1050	1080	1040	1200	1240	1220	2910	8130	2310	3030	1050
11	878	1040	1060	1060	1200	1240	1190	2900	9360	1950	3030	1060
12	878	1080	1060	1080	1210	1220	1190	3080	10400	1950	3040	1150
13	873	1080	1060	1090	1210	1210	1190	3400	10800	1910	3020	1260
14	893	1090	1060	1090	1210	1210	1190	3590	11000	1770	3000	1250
15	1000	1100	1070	1090	1220	1210	1190	3760	11000	1630	3020	1240
16	1100	1100	1070	1090	1220	1210	1200	4150	11100	1640	3000	1230
17	1110	1080	1060	1090	1230	1210	1180	4540	11100	1640	3010	1220
18	1120	1090	1080	1090	1230	1210	1160	4520	11100	1640	2730	1210
19	1120	1110	1080	1090	1230	1210	1200	4820	11100	1640	2190	1200
20	1130	1110	1080	1090	1230	1210	1240	5300	11100	1610	2000	1190
21	1130	1110	1080	1100	1230	1210	1310	5800	11100	1590	1840	1190
22	1130	1100	1070	1100	1230	1210	1410	6170	11100	1580	1650	1260
23	1110	1100	1090	1100	1230	1210	1430	6650	11100	1570	1680	1300
24	1110	1090	1090	1110	1230	1210	1530	6790	10800	1550	1680	1280
25	1120	1100	1090	1110	1230	1210	1600	6750	10000	1540	1670	1270
26	1150	1120	1090	1110	1240	1220	1620	6740	9210	1550	1640	1270
27	1140	1120	1090	1110	1240	1210	1620	6960	8990	1550	1570	1280
28	1100	1110	1050	1100	1240	1210	1690	7390	8630	1540	1490	1250
29	1080	1110	1050	1090	---	1220	1790	7540	7990	1520	1470	1250
30	1120	1110	1060	1090	---	1220	1790	7510	7470	1530	1460	1280
31	1140	---	1070	1090	---	1220	---	7490	---	1510	1430	---
TOTAL	32790	32680	33670	33520	33400	37890	39920	139260	280870	84000	67730	35730
MEAN	1058	1089	1086	1081	1193	1222	1331	4492	9362	2710	2185	1191
MAX	1170	1120	1140	1110	1240	1240	1790	7540	11100	6800	3060	1440
MIN	872	1040	1050	1020	1090	1210	1160	1880	7470	1510	1430	1040
AC-FT	65040	64820	66780	66490	66250	75150	79180	276200	557100	166600	134300	70870

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1997, BY WATER YEAR (WY)

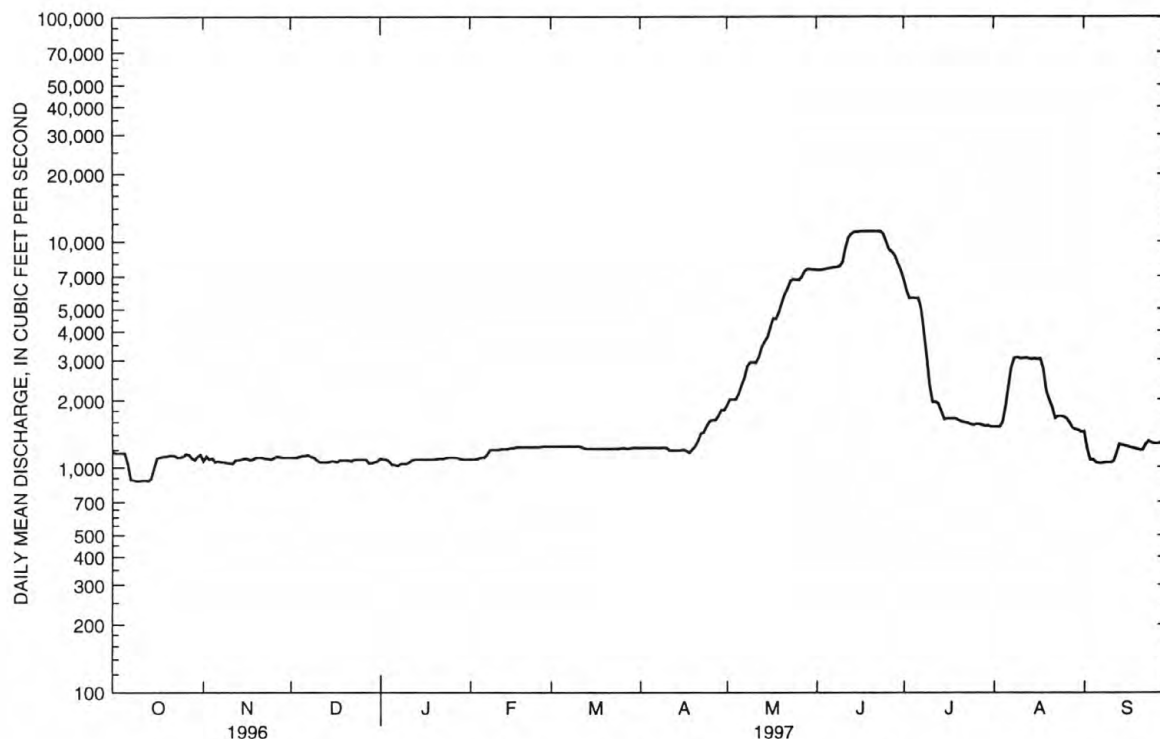
	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
MEAN	1007	869	794	807	861	941	1515	2463	4636	3283	1652	1249
MAX	3138	1522	1300	1309	1818	1576	3134	5588	11240	8868	3466	7893
(WY)	1983	1984	1994	1992	1974	1986	1986	1985	1986	1986	1982	1965
MIN	291	308	272	273	262	365	370	463	465	364	367	285
(WY)	1989	1989	1968	1968	1968	1989	1968	1992	1977	1977	1977	1988

09211200 GREEN RIVER BELOW FONTENELLE RESERVOIR, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1964 - 1997	
ANNUAL TOTAL	714670		851460		--	
ANNUAL MEAN	1953		2333		1676	
HIGHEST ANNUAL MEAN	--		--		3060	1986
LOWEST ANNUAL MEAN	--		--		690	1977
HIGHEST DAILY MEAN	7820	Jun 21	11100	Jun 16-23	18600	Sep 6 1965
LOWEST DAILY MEAN	872	Oct 9, 10	872	Oct 9, 10	209	Nov 22 1968
ANNUAL SEVEN-DAY MINIMUM	877	Oct 7	877	Oct 7	251	Dec 25 1967
INSTANTANEOUS PEAK FLOW	--		11400	Jun 16	19400 ^a	Sep 5 1965
INSTANTANEOUS PEAK STAGE	--		16.92	Jun 16	18.74 ^b	Sep 5 1965
ANNUAL RUNOFF (AC-FT)	1418000		1689000		1215000	
10 PERCENT EXCEEDS	4170		6790		3690	
50 PERCENT EXCEEDS	1220		1220		1100	
90 PERCENT EXCEEDS	1080		1060		492	

a Caused by emergency release from Fontenelle Reservoir.

b From floodmarks.



09211200 GREEN RIVER BELOW FONTENELLE RESERVOIR, WY

09211200 GREEN RIVER BELOW FONTENELLE RESERVOIR, WY--Continued

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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED SATUR- ATION (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
OCT										
24...	1040	1110	324	8.6	9.0	3.0	598	9.1	101	140
NOV										
12...	1345	1070	349	8.7	6.0	14.5	610	13.2	133	150
JAN										
06...	1320	1050	424	8.5	2.0	-5.0	608	12.2	111	190
MAR										
03...	1425	1240	446	8.5	2.0	0.0	599	11.5	106	200
APR										
22...	1530	1400	420	8.4	6.0	14.0	605	10.2	104	170
MAY										
13...	1330	3470	415	8.2	10.5	21.5	605	8.9	101	180
JUN										
09...	1630	7780	266	8.1	14.0	16.0	606	8.5	104	120
JUL										
23...	1525	1570	311	8.1	16.0	21.0	610	6.8	87	130
AUG										
04...	1510	1670	315	7.9	17.0	15.0	615	6.0	77	140
SEP										
03...	0815	1090	331	7.9	17.0	13.0	614	7.8	101	140

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)
OCT										
24...	37	11	14	0.5	1.3	131	48	2.2	0.2	7.9
NOV										
12...	39	12	15	0.5	1.4	134	52	2.5	0.2	7.5
JAN										
06...	51	16	20	0.6	1.7	157	72	3.2	0.2	8.4
MAR										
03...	53	16	18	0.6	1.5	160	76	3.4	0.2	8.4
APR										
22...	44	14	20	0.7	2.5	141	76	4.2	0.2	7.1
MAY										
13...	49	15	14	0.5	2.2	158	58	3.5	0.2	7.7
JUN										
09...	33	8.9	6.8	0.3	1.4	109	25	1.5	0.1	6.5
JUL										
23...	34	11	11	0.4	1.4	122	33	1.7	0.2	8.0
AUG										
04...	37	11	12	0.4	1.4	125	36	1.8	0.1	7.6
SEP										
03...	37	13	14	0.5	1.4	132	43	2.1	0.2	6.6

09211200 GREEN RIVER BELOW FONTENELLE RESERVOIR, WY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
OCT 24...	200	0.27	600	0.02	<0.05	0.05	0.3	<0.01	<0.01	<0.01
NOV 12...	210	0.29	607	0.03	0.06	0.04	0.2	0.01	<0.01	<0.01
JAN 06...	267	0.36	756	0.01	<0.05	0.03	<0.2	<0.01	<0.01	<0.01
MAR 03...	273	0.37	914	<0.01	0.09	0.02	0.4	<0.01	<0.01	<0.01
APR 22...	253	0.34	958	<0.01	<0.05	0.01	0.4	0.02	0.02	<0.01
MAY 13...	244	0.33	2290	<0.01	0.05	<0.01	0.3	0.01	<0.01	0.01
JUN 09...	148	0.20	3110	<0.01	<0.05	0.02	<0.2	0.03	<0.01	<0.01
JUL 23...	174	0.24	739	<0.01	0.07	<0.01	0.3	0.03	<0.01	0.02
AUG 04...	183	0.25	823	<0.01	0.11	<0.01	0.3	0.04	0.02	0.03
SEP 03...	197	0.27	578	<0.01	0.13	<0.01	0.2	0.01	0.03	0.02

09213500 BIG SANDY RIVER NEAR FARSON, WY--Continued

SUMMARY STATISTICS

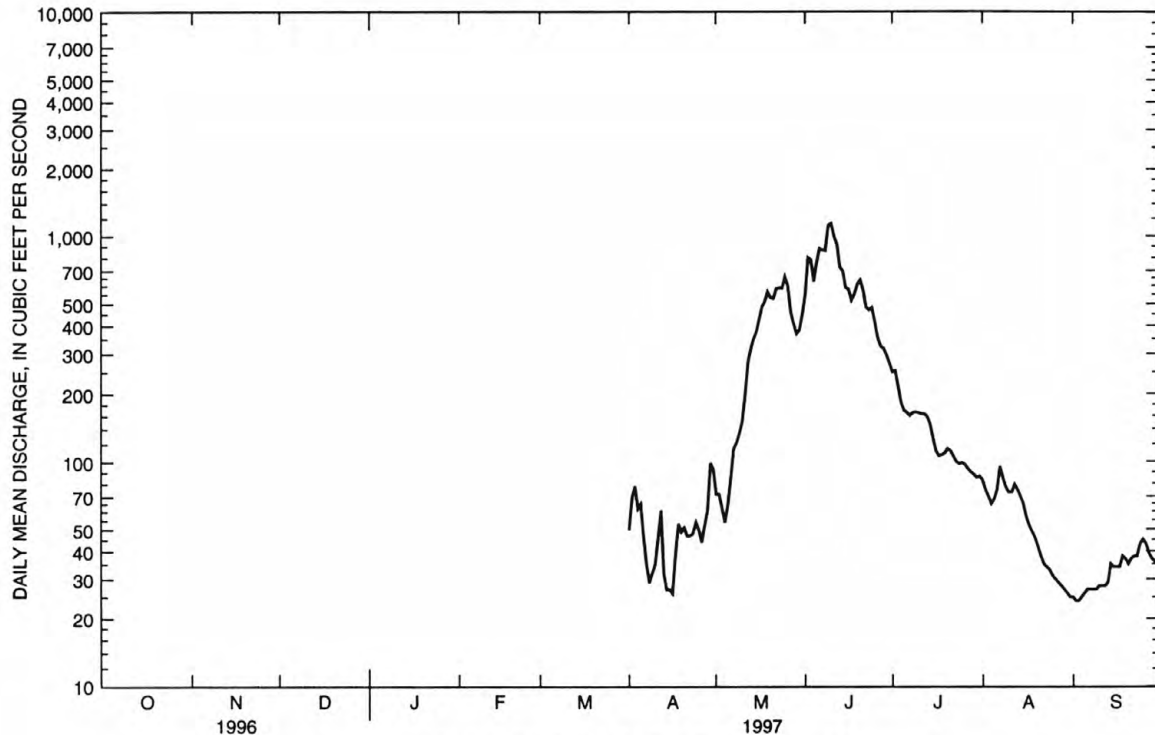
FOR 1997 WATER YEAR*

WATER YEARS 1915 - 1971

ANNUAL MEAN	--	86.7	
HIGHEST ANNUAL MEAN	--	148	1917
LOWEST ANNUAL MEAN	--	33.0	1934
HIGHEST DAILY MEAN	1140	Jun 10	1320 Jun 12 1965#
LOWEST DAILY MEAN	24	Sep 2, 3	.00 Jan 27-31 1963#
ANNUAL SEVEN-DAY MINIMUM	--	.10	Feb 1 1960
INSTANTANEOUS PEAK FLOW	1280	Jun 10	1890 Jun 3 1986#
INSTANTANEOUS PEAK STAGE	7.74	Jun 10	8.46 Jun 3 1986, Jun 17 1995#
ANNUAL RUNOFF (AC-FT)	--	62800	
10 PERCENT EXCEEDS	--	272	
50 PERCENT EXCEEDS	--	25	
90 PERCENT EXCEEDS	--	9.0	

* During period of operation.

For period of record through 1997.



09213500 BIG SANDY RIVER NEAR FARSON, WY

09213700 BIG SANDY RESERVOIR NEAR FARSON, WY

LOCATION.--Lat 42°14'57", long 109°25'43", in NE¹/₄ NW¹/₄ 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.

GAGE.--Water-stage recorder. Datum of gage is 6,770.00 ft above sea level (levels by U.S. Bureau of Reclamation).

REMARKS.--No estimated daily contents. Records good. 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, trash-rack sill. Reservoir is used for storage of irrigation water and for recreation. Figures given herein represent active storage. U.S. Geological Survey data collection platform with satellite telemetry at station.

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, 920 acre-ft, Sept. 15, 1988, elevation, 6,724.66 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents recorded, 41,400 acre-ft, June 12, elevation, 6,758.71 ft; minimum contents recorded, 11,100 acre-ft, Oct. 1, elevation, 6,742.51 ft.

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

6,720	0	6,740	8,655	6,760	44,905
6,730	2,545	6,750	22,155		

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY OBSERVATION AT 2400 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11100	12200	13500	14700	16000	17100	27600	30800	39000	38200	32600	24900
2	11100	12200	13600	14800	16000	17100	27700	30900	39500	38100	32300	24500
3	11200	12300	13600	14900	16100	17200	27800	31000	39900	37900	32100	24100
4	11200	12400	13700	14900	16100	17200	28000	31100	40000	37800	31700	23700
5	11300	12400	13700	15000	16100	17200	28200	31300	40100	37600	31500	23300
6	11300	12400	13700	15000	16200	17300	28300	31400	40400	37500	31400	22900
7	11300	12400	13700	15100	16200	17300	28400	31600	40500	37400	31400	22500
8	11400	12400	13800	15100	16200	17400	28400	31800	40600	37300	31200	22000
9	11400	12500	13800	15100	16300	17400	28500	32100	41000	37100	31000	21600
10	11400	12500	13800	15100	16300	17400	28500	32400	41300	36900	31000	21100
11	11400	12600	13900	15100	16300	17500	28500	32600	41300	36600	30900	20600
12	11500	12600	13900	15100	16400	17600	28600	33200	41200	36400	30900	20200
13	11500	12700	14000	15200	16400	17700	28700	33700	40900	36200	30900	19800
14	11500	12800	14000	15200	16500	17800	28700	34200	40700	36000	30800	19400
15	11500	12800	14000	15200	16500	17900	28800	34900	40500	35600	30900	19000
16	11500	12800	14100	15200	16600	17900	28800	35500	40400	35300	30800	18700
17	11500	12800	14100	15200	16600	18000	28900	36300	40300	35200	30700	18400
18	11600	12900	14100	15300	16600	18300	29100	36900	40200	35000	30500	18200
19	11600	13000	14200	15300	16700	19100	29100	37800	40300	34700	30200	18100
20	11600	13100	14200	15300	16700	20500	29300	38300	40300	34600	29800	18300
21	11600	13100	14200	15300	16800	21800	29400	38600	40200	34500	29400	18400
22	11600	13300	14300	15300	16800	23900	29500	38800	40100	34400	29000	18500
23	11600	13300	14300	15300	16800	25100	29500	39000	39900	34200	28600	18600
24	11600	13300	14400	15400	16900	25900	29700	39200	39700	34000	28200	18700
25	11800	13400	14400	15700	16900	26200	29800	39400	39500	33900	27700	18800
26	11800	13400	14500	15700	16900	26500	29900	39500	39300	33800	27300	18900
27	11900	13400	14500	15800	17000	26900	30000	39300	39000	33600	26900	19000
28	11900	13400	14600	15800	17000	27100	30100	39100	38800	33300	26400	19000
29	12000	13500	14600	15800	---	27200	30400	38900	38700	33200	26000	19100
30	12100	13500	14600	15900	---	27300	30600	38800	38500	33000	25700	19200
31	12100	---	14700	15900	---	27500	---	38800	---	32800	25300	---
MAX	12100	13500	14700	15900	17000	27500	30600	39500	41300	38200	32600	24900
MIN	11100	12200	13500	14700	16000	17100	27600	30800	38500	32800	25300	18100
(#)	12100	13500	14700	15900	17000	27500	30600	38800	38500	32800	25300	19200
(*)	+1000	+1400	+1200	+1200	+1100	+10500	+3100	+8200	-300	-5700	-7500	-6100

CAL YR 1996 MAX 38800 MIN 10400 (*) -13,000
WTR YR 1997 MAX 41300 MIN 11100 (*) +8,100

(#) Elevation, in feet, at end of month.

(*) Change of contents, in acre-feet.

09215550 BIG SANDY RIVER BELOW FARSON, WY

LOCATION.--Lat 42°04'24", long 109°28'43", in SW¹/₄ SE¹/₄ NE¹/₄ sec.12, T.24 N., R.107 W., Sweetwater County, Hydrologic Unit 14040104, on left bank 2.7 mi northwest of Eden, 3.0 mi southwest of Farson, and 3.8 mi downstream from Little Sandy Creek

DRAINAGE AREA.--1,097 mi², of which 12.9 mi² probably is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1981 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,520 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 22, 26, 28, 29, Nov. 6-8, 15-18, Nov. 26 to Mar. 16, and Sept. 26-30. Records fair 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	24	22	16	10	9.0	114	67	92	101	52	52
2	22	24	20	16	9.5	9.0	137	51	106	102	49	48
3	22	24	17	14	9.0	9.0	86	39	175	83	51	45
4	22	24	15	13	9.0	9.0	81	36	292	69	45	47
5	23	27	16	12	8.5	9.0	121	34	309	69	59	48
6	23	26	16	11	8.0	9.0	114	31	350	66	64	44
7	22	22	16	12	7.2	11	60	28	415	62	52	44
8	23	23	17	13	7.0	13	50	28	472	57	48	45
9	23	22	18	14	7.4	17	48	27	550	56	46	45
10	23	15	19	14	7.8	25	54	26	655	55	48	44
11	23	20	20	12	8.4	40	38	24	782	55	51	44
12	23	15	19	11	8.0	80	38	24	829	59	51	41
13	23	17	20	11	8.0	130	47	23	822	61	53	43
14	23	20	18	12	8.5	70	40	23	731	65	51	46
15	22	22	16	11	9.0	100	37	26	713	67	48	45
16	24	23	13	10	10	300	37	24	615	63	43	45
17	24	27	12	9.2	11	504	110	23	502	58	39	45
18	25	29	11	9.4	11	801	181	24	455	53	41	47
19	26	30	11	9.8	10	1230	177	27	423	53	44	52
20	25	31	11	9.8	10	1300	172	28	443	52	45	48
21	24	28	12	10	9.5	1410	149	35	451	52	48	46
22	24	27	13	10	9.5	1330	125	34	437	51	43	49
23	21	29	12	9.5	9.0	1250	94	51	400	47	45	45
24	21	27	12	9.0	9.0	1040	73	78	345	48	47	45
25	24	27	13	9.8	8.0	538	57	116	305	49	47	44
26	25	27	13	10	8.5	279	51	162	254	45	44	47
27	24	25	13	8.4	9.0	343	52	208	204	51	46	42
28	26	22	14	9.0	8.5	307	56	187	156	54	52	36
29	27	24	15	10	---	164	63	147	126	63	52	32
30	27	21	16	11	---	113	66	121	111	62	50	28
31	25	---	15	11	---	90	---	93	---	55	52	---
TOTAL	732	722	475	347.9	248.3	11539.0	2528	1845	12520	1883	1506	1332
MEAN	23.6	24.1	15.3	11.2	8.87	372	84.3	59.5	417	60.7	48.6	44.4
MAX	27	31	22	16	11	1410	181	208	829	102	64	52
MIN	21	15	11	8.4	7.0	9.0	37	23	92	45	39	28
AC-FT	1450	1430	942	690	493	22890	5010	3660	24830	3730	2990	2640

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1997, BY WATER YEAR (WY)

	MEAN	25.5	25.6	13.7	8.52	10.6	69.8	68.4	53.3	123	76.0	41.8	33.4
MAX	51.4	105	39.2	30.5	37.8	372	224	138	515	309	78.9	53.9	
(WY)	1984	1984	1984	1984	1982	1997	1985	1983	1986	1995	1984	1984	
MIN	11.4	7.24	3.82	.34	2.17	6.77	15.7	7.62	14.7	17.9	18.8	17.5	
(WY)	1991	1990	1990	1991	1990	1988	1989	1990	1989	1989	1989	1994	

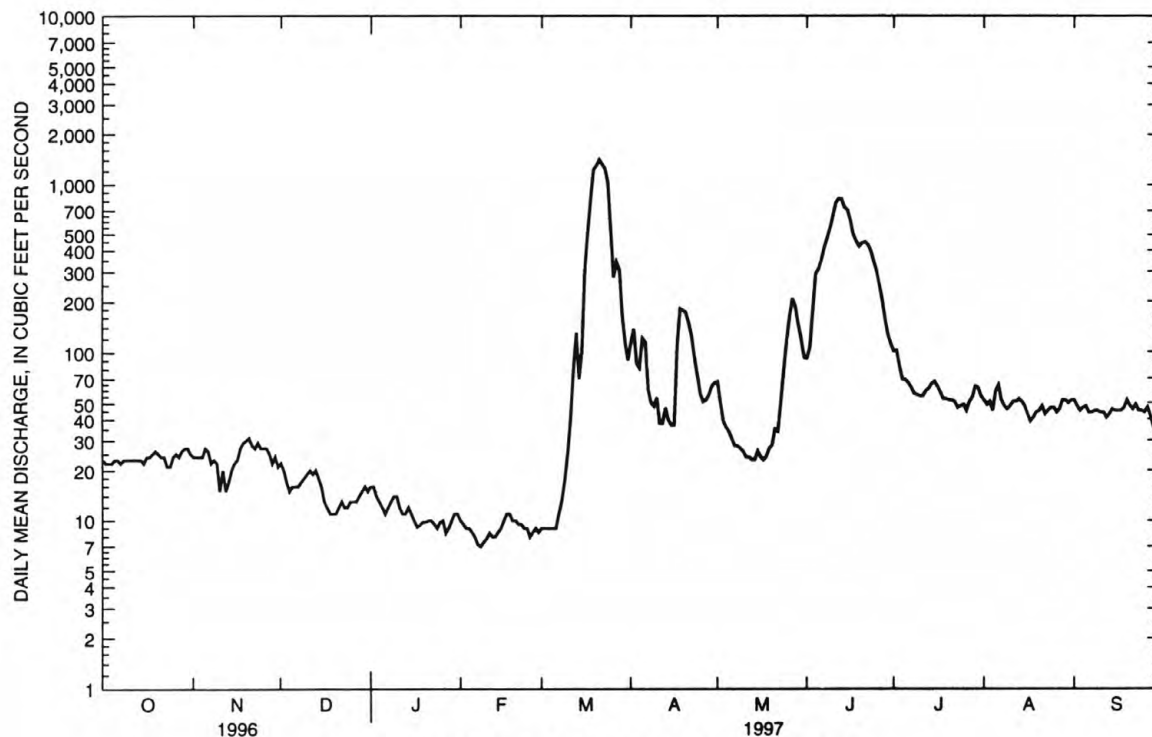
GREEN RIVER BASIN

09215550 BIG SANDY RIVER BELOW FARSON, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1981 - 1997
ANNUAL TOTAL	11267.8	35678.2	--
ANNUAL MEAN	30.8	97.7	46.6
HIGHEST ANNUAL MEAN	--	--	97.7
LOWEST ANNUAL MEAN	--	--	12.0
HIGHEST DAILY MEAN	260 Mar 12	1410 Mar 21	1410 Mar 21 1997
LOWEST DAILY MEAN	5.4 Feb 1	7.0 Feb 8	.00 Dec 23-27 1990,
			Jan 22 to
			Feb 4 1991
ANNUAL SEVEN-DAY MINIMUM	6.0 Jan 30	7.7 Feb 6	.00 Jan 22 1991
INSTANTANEOUS PEAK FLOW	--	1690 Mar 21	1690 ^a Mar 21 1997
INSTANTANEOUS PEAK STAGE	--	7.40 Mar 21	8.30 ^b Mar 12 1995
ANNUAL RUNOFF (AC-FT)	22350	70770	33730
10 PERCENT EXCEEDS	61	226	70
50 PERCENT EXCEEDS	24	36	24
90 PERCENT EXCEEDS	8.5	9.8	6.8

a Gage height 7.40 ft.

b Backwater from ice.



09215550 BIG SANDY RIVER BELOW FARSON, WY

GREEN RIVER BASIN

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09215550 BIG SANDY RIVER BELOW FARSON, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1982 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1981 to September 1986.

WATER TEMPERATURES: December 1981 to September 1986.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
OCT												
25...	0825	22	2320	8.4	1.0	0.0	587	10.3	95	690	180	59
NOV												
14...	1315	21	2310	8.4	2.5	5.0	595	11.9	113	660	170	56
JAN												
07...	1125	12	2530	7.7	0.0	-7.0	602	7.4	65	750	190	68
MAR												
05...	1200	9.0	2560	7.6	0.0	-2.0	604	8.8	77	740	190	65
APR												
22...	1130	113	734	8.2	6.0	5.0	602	9.6	98	170	44	14
MAY												
16...	1245	26	2190	8.6	18.0	24.5	607	9.1	122	500	120	48
JUN												
09...	1310	582	390	8.0	9.0	21.0	605	8.6	94	100	29	6.7
JUL												
24...	0825	48	1420	8.3	15.0	19.0	609	7.8	98	390	100	32
AUG												
06...	1450	57	1240	8.4	19.0	21.0	612	8.9	121	320	86	26
SEP												
02...	1650	50	1400	8.7	19.0	22.0	610	11.9	162	390	100	33

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)
OCT											
25...	300	5	2.5	237	1000	47	0.8	12	1740	2.37	104
NOV											
14...	310	5	2.8	229	1000	47	0.9	12	1740	2.36	98.4
JAN											
07...	350	6	3.7	264	1100	52	0.9	13	1940	2.63	62.7
MAR											
05...	330	5	2.6	240	1200	48	0.9	12	1990	2.71	48.4
APR											
22...	88	3	2.7	117	230	14	0.4	8.6	473	0.64	144
MAY											
16...	310	6	3.9	207	900	51	0.7	8.2	1560	2.12	110
JUN											
09...	38	2	1.9	70	110	5.6	0.2	8.3	238	0.32	374
JUL											
24...	170	4	2.7	187	500	25	0.8	10	955	1.30	124
AUG											
06...	150	4	2.9	165	430	22	0.5	11	825	1.12	127
SEP											
02...	160	4	2.7	153	520	23	0.6	9.0	944	1.28	127

GREEN RIVER BASIN

09216050 BIG SANDY RIVER AT GASSON BRIDGE, NEAR EDEN, WY

LOCATION.--Lat 41°56'43", long 109°41'04", in NE¹/₄ SW¹/₄ NW¹/₄ sec.29, T.23 N., R.108 W., Sweetwater County, Hydrologic Unit 14040104, on left bank 0.2 mi upstream from Gasson Bridge and 14.5 mi southwest of Eden.

DRAINAGE AREA.--1,720 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Elevation of gage is 6,350 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 2 to Mar. 16. Records fair 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. U.S. Geological Survey data collection platform with satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	61	47	40	30	27	147	106	119	151	84	92
2	64	60	50	39	28	27	192	99	131	141	85	89
3	64	60	45	36	25	27	188	83	161	128	85	83
4	66	60	40	34	25	27	143	76	294	108	83	95
5	66	63	43	32	23	27	159	73	353	97	94	95
6	64	59	42	30	19	27	180	69	357	92	104	88
7	63	53	41	31	19	31	129	65	423	93	95	82
8	62	55	40	33	18	39	105	64	496	89	86	84
9	63	59	42	34	21	55	94	63	599	88	83	84
10	62	59	44	34	23	89	81	63	675	85	88	85
11	62	59	48	30	23	140	75	59	785	84	93	82
12	62	57	46	27	21	200	73	57	817	95	98	81
13	61	57	49	32	21	280	75	57	819	98	95	85
14	61	56	45	30	22	140	74	55	739	100	96	90
15	60	55	41	29	25	120	71	59	687	101	90	87
16	63	54	34	25	28	150	72	61	613	93	81	86
17	62	49	30	23	32	175	78	60	564	89	71	82
18	60	51	29	24	32	381	205	59	529	86	71	84
19	62	59	28	25	30	708	243	56	491	83	75	91
20	60	63	28	23	30	1010	246	58	485	82	78	88
21	59	61	30	23	28	1670	233	59	512	82	81	78
22	59	59	33	24	27	1590	199	65	493	84	84	75
23	60	61	32	23	26	1460	151	71	471	79	79	72
24	59	57	30	23	24	1160	122	91	417	81	83	69
25	63	56	31	24	23	829	103	124	382	89	89	68
26	64	56	34	26	25	408	93	166	338	82	88	69
27	64	49	36	24	27	346	86	233	280	78	87	69
28	62	48	37	22	26	416	93	242	222	81	89	66
29	63	55	38	24	---	267	94	202	182	89	93	65
30	65	53	40	30	---	201	105	182	164	85	86	65
31	63	---	40	32	---	160	---	137	---	81	88	---
TOTAL	1933	1704	1193	886	701	12187	3909	2914	13598	2894	2682	2429
MEAN	62.4	56.8	38.5	28.6	25.0	393	130	94.0	453	93.4	86.5	81.0
MAX	66	63	50	40	32	1670	246	242	819	151	104	95
MIN	59	48	28	22	18	27	71	55	119	78	71	65
AC-FT	3830	3380	2370	1760	1390	24170	7750	5780	26970	5740	5320	4820

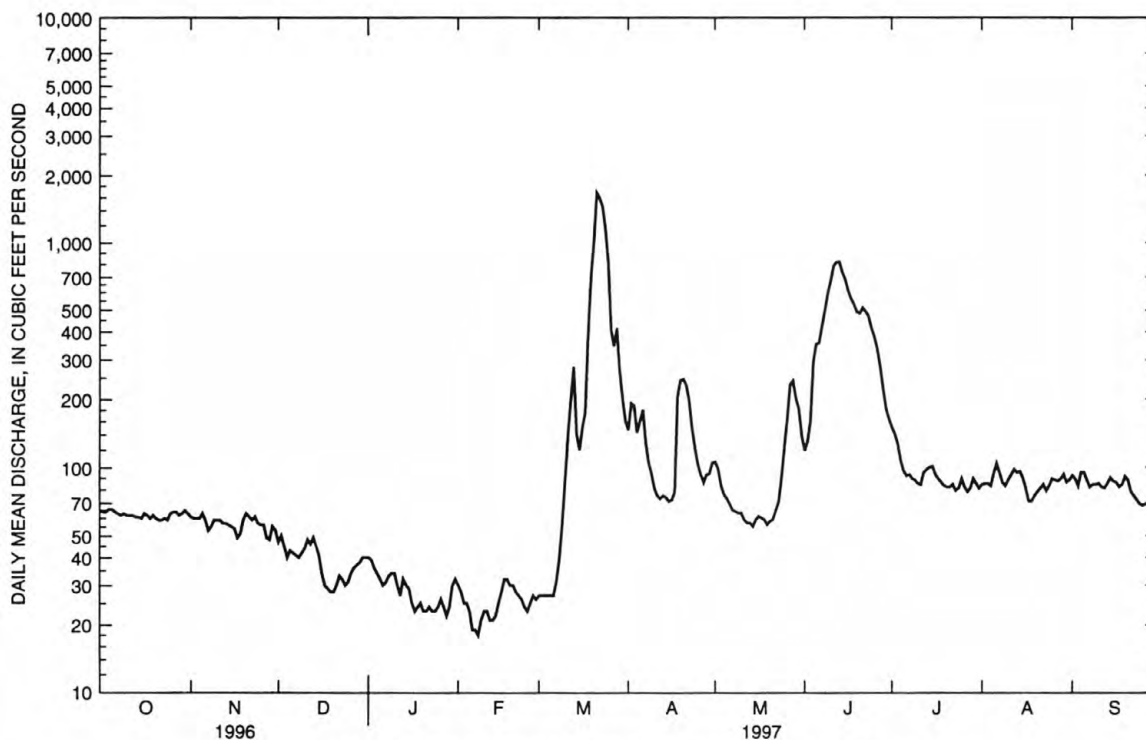
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1997, BY WATER YEAR (WY)

	MEAN	62.7	55.1	39.1	31.5	34.3	87.7	118	78.4	148	110	80.7	73.7
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	36.0	31.5	22.1	17.4	16.4	36.4	28.3	19.7	29.4	30.5	32.4	40.3	
(WY)	1990	1991	1991	1990	1993	1976	1990	1990	1990	1989	1989	1989	

09216050 BIG SANDY RIVER AT GASSON BRIDGE, NEAR EDEN, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1972 - 1997	
ANNUAL TOTAL	23569		47030		--	
ANNUAL MEAN	64.4		129		75.5	
HIGHEST ANNUAL MEAN	--		--		139	1983
LOWEST ANNUAL MEAN	--		--		30.6	1990
HIGHEST DAILY MEAN	319	Mar 13	1670	Mar 21	5530	Apr 24 1980
LOWEST DAILY MEAN	28	Dec 19	18	Feb 8	7.0	Dec 24 1990
ANNUAL SEVEN-DAY MINIMUM	30	Dec 17	21	Feb 6	11	Dec 22 1990
INSTANTANEOUS PEAK FLOW	--		2010 ^a	Mar 21	7430 ^a	Apr 24 1980
INSTANTANEOUS PEAK STAGE	--		8.60	Mar 21	10.58	Apr 24 1980
ANNUAL RUNOFF (AC-FT)	46750		93280		54660	
10 PERCENT EXCEEDS	93		272		113	
50 PERCENT EXCEEDS	60		69		55	
90 PERCENT EXCEEDS	40		27		29	

a From rating curve extended above 2,000 ft³/s on basis of slope-area measurement of peak flow.



09216050 BIG SANDY RIVER AT GASSON BRIDGE, NEAR EDEN, WY

GREEN RIVER BASIN

09216050 BIG SANDY RIVER AT GASSON BRIDGE, NEAR EDEN, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1975 to January 1980, June 1981 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1981 to September 1986.

WATER TEMPERATURES: October 1981 to September 1986.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TEMPER-ATURE AIR (DEG C) (00020)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED SATUR-ATION (MG/L) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT 24...	0900	59	3340	8.3	2.0	-1.0	600	10.3	96	1000	220	120
NOV 12...	1145	58	3350	8.3	5.0	12.0	610	12.0	119	1000	210	120
JAN 06...	1135	30	3440	8.1	0.0	-7.0	610	10.2	88	1100	220	130
MAR 03...	1245	27	3950	8.2	3.0	2.0	600	10.6	102	1200	240	150
APR 22...	1330	230	1190	8.2	8.0	12.0	605	9.2	98	290	62	33
MAY 27...	1055	237	1200	8.2	10.0	14.0	611	8.9	99	310	70	34
JUN 09...	1450	668	667	8.0	17.0	22.0	608	7.0	91	170	42	16
JUL 25...	1030	88	2630	8.2	17.0	22.0	612	7.9	103	680	140	78
AUG 06...	1215	110	2020	8.3	17.0	20.5	617	7.8	101	570	120	62
SEP 04...	0820	98	2230	8.3	14.0	13.0	604	7.4	92	660	140	76

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
OCT 24...	450	6	3.2	257	1700	40	0.9	13	2700	3.67	430
NOV 12...	450	6	3.4	252	1700	38	1.0	11	2680	3.65	420
JAN 06...	490	6	3.8	281	1800	39	0.9	13	2870	3.90	232
MAR 03...	550	7	3.5	274	2100	39	1.0	12	3260	4.43	238
APR 22...	140	4	2.6	135	470	14	0.4	9.1	812	1.10	504
MAY 27...	140	3	2.2	121	470	14	0.2	9.2	812	1.10	519
JUN 09...	68	2	2.0	88	220	7.1	0.2	8.6	417	0.57	752
JUL 25...	300	5	3.2	210	1000	28	0.7	10	1730	2.35	411
AUG 06...	250	5	3.2	191	860	23	0.6	10	1450	1.97	431
SEP 04...	280	5	3.0	198	1000	26	0.7	7.7	1700	2.31	450

09217000 GREEN RIVER NEAR GREEN RIVER, WY

LOCATION.--Lat 41°30'59", long 109°26'54", in NW¹/₄ NE¹/₄ NE¹/₄ 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 sea level, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 3 to Mar. 17. Records good except those for estimated daily discharges, which are poor. Some regulation by Fontenelle Reservoir (station 09211150) 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. National Weather Service data collection platform with satellite telemetry at 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1140	1160	1130	1050	1050	1050	1370	2060	7620	7260	1460	1430
2	1140	1160	1080	1050	1050	1050	1330	2140	7710	6810	1450	1440
3	1170	1160	1000	1050	1050	1050	1360	2230	7770	5990	1430	1230
4	1170	1140	900	1000	1050	1030	1360	2210	7720	5870	1430	1090
5	1150	1180	1000	1000	1050	1050	1350	2200	7660	5870	1560	1080
6	1140	1170	1100	992	1050	1050	1360	2380	7680	5950	1910	1070
7	1060	1110	1100	1000	1100	1050	1390	2520	7720	5970	2220	1060
8	905	1070	1100	1000	1100	1050	1370	2720	7930	5170	2700	1070
9	904	1060	1100	1000	1100	1050	1330	3040	8120	4140	2810	1060
10	916	1060	1050	1000	1100	1100	1290	3090	8250	3300	2820	1050
11	913	1060	1050	1050	1100	1500	1330	3040	8890	2550	2850	1060
12	908	1060	1050	1050	1100	2200	1290	3050	10400	2130	2850	1070
13	901	1080	1050	1050	1100	3000	1290	3310	10900	2110	2840	1130
14	932	1140	1050	1050	1100	2800	1290	3380	11500	2120	2820	1230
15	932	1140	1050	1050	1100	2600	1290	3560	11600	1940	2800	1240
16	997	1110	1050	1050	1100	2300	1310	3720	11800	1800	2820	1240
17	1100	1100	1050	1050	1100	2100	1310	4160	11700	1770	2800	1230
18	1150	1110	1050	1050	1100	2040	1290	4280	11800	1780	2820	1220
19	1160	1130	1050	1050	1100	2310	1430	4330	11800	1760	2480	1240
20	1150	1140	1050	1050	1100	2500	1500	4810	11700	1740	2000	1230
21	1150	1140	1050	1050	1100	2770	1530	5270	11800	1730	1870	1210
22	1150	1140	1050	1050	1100	2890	1590	5720	11700	1650	1670	1310
23	1160	1140	1050	1050	1100	2750	1650	6080	11600	1630	1570	1290
24	1170	1130	1050	1050	1100	2580	1700	6510	11600	1560	1590	1450
25	1180	1130	1050	1050	1050	2320	1770	6600	11200	1540	1590	1400
26	1200	1120	1050	1050	1050	1930	1810	6690	10100	1510	1660	1330
27	1160	1130	1050	1050	1050	1630	1800	6800	9380	1500	1680	1290
28	1160	1160	1000	1050	1050	1600	1820	7170	9250	1510	1490	1260
29	1160	1110	1000	1050	---	1660	1930	7630	8490	1480	1430	1240
30	1160	1110	1000	1050	---	1530	2010	7760	8110	1460	1420	1220
31	1160	---	1000	1050	---	1450	---	7550	---	1460	1420	---
TOTAL	33648	33650	32410	32192	30300	56990	44450	136010	293500	93060	64260	36470
MEAN	1085	1122	1045	1038	1082	1838	1482	4387	9783	3002	2073	1216
MAX	1200	1180	1130	1050	1100	3000	2010	7760	11800	7260	2850	1450
MIN	901	1060	900	992	1050	1030	1290	2060	7620	1460	1420	1050
AC-FT	66740	66740	64290	63850	60100	113000	88170	269800	582200	184600	127500	72340

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1997, BY WATER YEAR (WY)

	956	833	708	727	805	1031	1665	2624	4935	3272	1590	1144
MEAN	956	833	708	727	805	1031	1665	2624	4935	3272	1590	1144
MAX	3109	1844	1419	1442	1980	1852	3416	5665	11700	9415	3577	7746
(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

GREEN RIVER BASIN

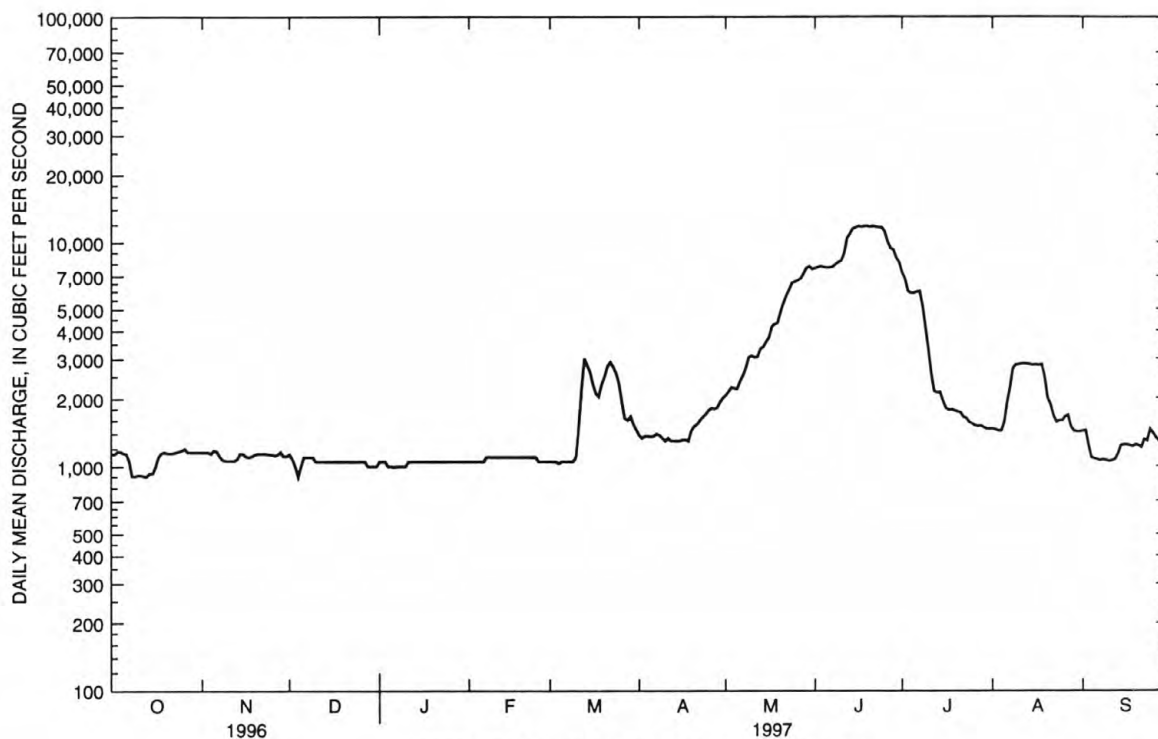
09217000 GREEN RIVER NEAR GREEN RIVER, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1952 - 1997	
ANNUAL TOTAL	732848		886940		--	
ANNUAL MEAN	2002		2430		1693	
HIGHEST ANNUAL MEAN	--		--		3089	1986
LOWEST ANNUAL MEAN	--		--		689	1977
HIGHEST DAILY MEAN	7660	Jun 22	11800	Jun 16,18,19,21	16700	Sep 7 1965
LOWEST DAILY MEAN	900	Dec 4	900	Dec 4	170	Nov 16 1955
ANNUAL SEVEN-DAY MINIMUM	911	Oct 8	911	Oct 8	214	Dec 24 1962
INSTANTANEOUS PEAK FLOW	--		12200 ^b	Jun 16	16800 ^a	Sep 7 1965
INSTANTANEOUS PEAK STAGE	--		7.21 ^c	Mar 12	8.53	Sep 7 1965
ANNUAL RUNOFF (AC-FT)	1454000		1759000		1226000	
10 PERCENT EXCEEDS	4250		6800		3780	
50 PERCENT EXCEEDS	1350		1260		1070	
90 PERCENT EXCEEDS	1060		1050		450	

a Caused by emergency release from Fontenelle Reservoir.

b Gage height 7.04 ft.

c Backwater from ice.



09217000 GREEN RIVER NEAR GREEN RIVER, WY

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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TEMPER-ATURE AIR (DEG C) (00020)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SATUR-ATION (MG/L) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT 24...	1435	1200	495	8.9	5.0	6.0	605	11.0	109	170	42	16
JAN 06...	1605	992	612	8.7	0.0	-5.0	615	11.3	96	230	58	21
MAR 04...	1710	1030	545	8.5	0.0	-3.0	613	10.6	90	230	59	20
MAY 16...	0825	3880	465	8.6	13.0	18.0	620	7.7	90	190	49	16
JUL 24...	1300	1350	431	8.5	20.0	27.0	618	8.2	112	160	40	15
SEP 03...	1330	1040	468	8.7	18.0	23.0	622	8.1	105	170	42	16

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CAC03) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
OCT 24...	34	1	1.3	139	120	4.5	0.2	6.3	308	0.42	997
JAN 06...	44	1	1.8	177	150	5.9	0.2	7.2	394	0.54	1060
MAR 04...	36	1	1.6	168	130	4.8	0.3	7.5	360	0.49	1000
MAY 16...	23	0.7	2.2	160	83	4.4	0.2	7.4	281	0.38	2950
JUL 24...	28	1	1.4	130	83	3.4	0.2	6.4	254	0.35	927
SEP 03...	32	1	1.5	140	97	4.0	0.2	5.2	282	0.38	792

GREEN RIVER BASIN

09217010 GREEN RIVER BELOW GREEN RIVER, WY

LOCATION.--Lat 41°29'46", long 109°26'17", 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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
OCT 24...	1325	1200	530	5.0	6.0	0.02	0.06	0.03	0.3	0.02	0.02	0.01
JAN 06...	1710	1000	688	0.0	-5.0	0.01	0.14	0.13	0.3	0.05	0.05	0.04
MAR 04...	1745	1030	580	0.0	-3.0	<0.01	0.11	<0.01	<0.2	<0.01	<0.01	<0.01
MAY 15...	1525	3700	501	17.5	24.5	0.01	0.05	0.02	0.5	0.07	<0.01	<0.01
JUL 24...	1425	1550	560	20.5	29.0	0.02	0.08	<0.01	0.3	0.07	<0.01	0.03
SEP 03...	1430	1040	491	18.0	23.5	<0.01	0.10	0.02	0.3	0.02	0.03	0.02

09217900 BLACKS FORK NEAR ROBERTSON, WY

LOCATION.--Lat 40°57'33", long 110°34'46", in SW¹/₄ 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. Datum of gage is 8,811.3 ft above sea level (Bureau of Reclamation benchmark). Datums published from October 1968 to September 1978 are incorrect. October 1937 to July 1939, at site 970 ft downstream at different datum, July 1966 to September 1986 and October 1992 to September 1993 at site 0.2 mi downstream at datum 6.5 ft lower.

REMARKS.--Estimated daily discharges: Oct. 22-24, 27, 28, Nov. 2-4, 6, 7, 9-14, 21, 24, Nov. 26 to Dec. 28, Jan. 3-25, 28, Feb. 2-11, Feb. 19 to Mar. 14, Mar. 16-23, 25-29, Mar. 31 to Apr. 3, and Apr. 7, 11-13. Records good except those for estimated daily discharges, which are poor. U.S. Geological Survey data collection platform with satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 18	0015	1,060	4.07
June 9	0630	*1,610	*4.53
June 19	2400	1,220	4.15

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	45	46	46	39	36	31	76	1220	299	150	68
2	45	54	44	68	39	38	33	72	1240	276	129	68
3	47	56	41	70	39	37	35	76	1090	259	125	73
4	49	49	44	72	38	36	36	102	1230	250	141	70
5	45	42	50	66	37	37	31	144	1250	243	172	61
6	43	60	50	58	33	38	40	187	1100	232	157	63
7	42	78	51	60	33	38	45	217	1050	230	139	57
8	41	68	48	60	33	37	40	238	1190	228	128	54
9	42	62	56	62	34	35	29	284	1460	226	127	56
10	41	60	60	62	37	35	31	331	1320	216	129	68
11	40	56	58	60	39	36	44	373	1060	209	134	75
12	39	50	50	54	38	33	48	422	855	212	130	78
13	39	50	50	52	37	32	49	474	700	192	131	60
14	46	50	49	54	34	30	40	537	629	178	114	67
15	42	90	43	59	32	27	28	637	520	173	104	76
16	42	127	44	56	32	26	30	740	537	170	99	99
17	39	139	42	60	31	29	36	811	615	170	99	66
18	49	117	41	66	30	31	43	954	779	176	98	86
19	43	44	42	62	35	35	50	885	1010	181	91	190
20	46	44	43	58	35	36	63	818	975	169	87	144
21	45	44	44	56	34	36	67	753	854	160	105	134
22	46	41	43	56	35	37	62	738	745	157	93	134
23	45	41	42	52	34	38	55	728	606	167	94	132
24	44	42	41	50	32	33	53	742	494	176	88	114
25	43	42	43	48	30	40	51	543	422	152	76	98
26	43	44	45	47	33	41	57	416	392	149	72	158
27	47	47	44	44	34	39	76	367	378	157	75	124
28	47	49	44	41	34	44	100	339	364	186	69	108
29	44	48	45	44	---	44	101	481	346	169	70	103
30	43	44	40	42	---	47	83	556	323	146	64	97
31	43	---	39	41	---	35	---	838	---	146	62	---
TOTAL	1357	1783	1422	1726	971	1116	1487	14879	24754	6054	3352	2781
MEAN	43.8	59.4	45.9	55.7	34.7	36.0	49.6	480	825	195	108	92.7
MAX	49	139	60	72	39	47	101	954	1460	299	172	190
MIN	39	41	39	41	30	26	28	72	323	146	62	54
AC-FT	2690	3540	2820	3420	1930	2210	2950	29510	49100	12010	6650	5520

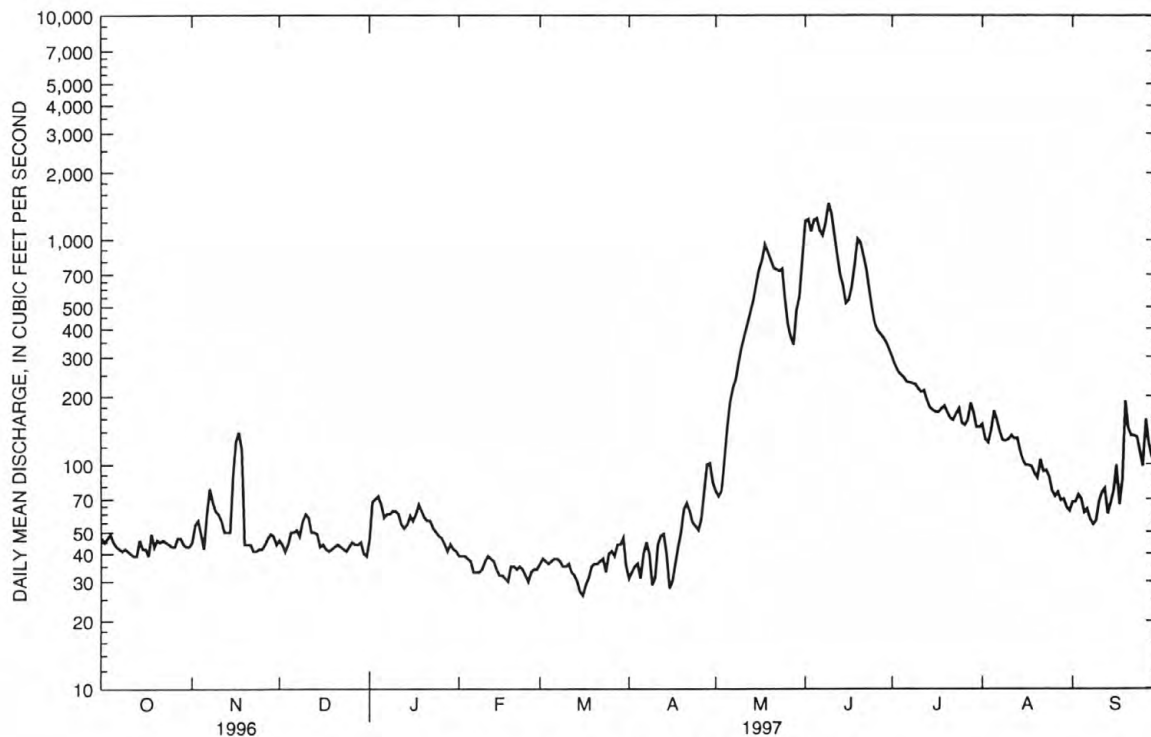
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1997, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)	(WY)	(WY)	(WY)	(WY)	(WY)	(WY)	(WY)	(WY)
MEAN	53.8	41.3	33.7	27.4	24.1	25.6	50.7	400	789	337	112	69.3
MAX	136	62.0	50.0	55.7	36.9	38.6	112	789	1273	1003	232	157
(WY)	1983	1974	1974	1997	1974	1969	1985	1984	1983	1975	1983	1982
MIN	23.9	22.1	11.1	6.73	9.32	9.78	19.4	134	298	64.5	46.3	37.3
(WY)	1993	1994	1977	1977	1977	1994	1975	1975	1994	1994	1994	1976

09217900 BLACKS FORK NEAR ROBERTSON, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1966 - 1997	
ANNUAL TOTAL	59165		61682		--	
ANNUAL MEAN	162		169		164	
HIGHEST ANNUAL MEAN	--		--		228	1983
LOWEST ANNUAL MEAN	--		--		79.3	1977
HIGHEST DAILY MEAN	1370	Jun 9	1460	Jun 9	1880	Jun 19 1983
LOWEST DAILY MEAN	15	Feb 2	26	Mar 16	3.2	Apr 2 1994
ANNUAL SEVEN-DAY MINIMUM	19	Jan 28	30	Mar 12	3 ^a	Apr 2 1994
INSTANTANEOUS PEAK FLOW	--		1610	Jun 9	2480 ^a	Jun 19 1983
INSTANTANEOUS PEAK STAGE	--		4.53	Jun 9	5.17	Jun 15 1995
ANNUAL RUNOFF (AC-FT)	117400		122300		118900	
10 PERCENT EXCEEDS	470		527		504	
50 PERCENT EXCEEDS	49		58		46	
90 PERCENT EXCEEDS	24		35		22	

a Gage height, 4.91 ft, site and datum then in use.



09217900 BLACKS FORK NEAR ROBERTSON, WY

GREEN RIVER BASIN

329

09218500 BLACKS FORK NEAR MILLBURNE, WY

LOCATION.--Lat 41°01'54", long 110°34'43", in NW¹/₄ NE¹/₄ SW¹/₄ sec.11, T.12 N., R.117 W., Uinta County, Hydrologic Unit 14040107, on left bank 0.4 mi downstream from Meeks Cabin Dam, 2.7 mi north of Utah-Wyoming State line, and 17 mi southwest of Millburne.

DRAINAGE AREA.--152 mi².

PERIOD OF RECORD.--July 1939 to current year (no winter records since 1992). Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 929: 1940.

GAGE.--Water-stage recorder. Datum of gage is 8,512.27 ft above sea level (Bureau of Reclamation bench mark). Prior to Oct. 1, 1971, at several sites about 2.0 mi downstream at various datums.

REMARKS.--Estimated daily discharges: May 1-5. Records fair except those for estimated daily discharges, which are poor. Flow completely regulated by Meeks Cabin Reservoir, capacity, 32,470 acre-ft, since June 1971. Results of discharge measurements, in cubic feet per second, made during period when station was not in operation, are given below:

Oct. 2 . . . 60.6
Apr. 28 . . . 16.5

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	18	703	419	244	207
2	---	---	---	---	---	---	---	19	698	438	244	212
3	---	---	---	---	---	---	---	20	704	438	244	217
4	---	---	---	---	---	---	---	21	708	432	244	217
5	---	---	---	---	---	---	---	22	708	428	218	217
6	---	---	---	---	---	---	---	22	711	426	207	217
7	---	---	---	---	---	---	---	23	713	426	207	212
8	---	---	---	---	---	---	---	24	723	417	207	210
9	---	---	---	---	---	---	---	24	1040	408	207	238
10	---	---	---	---	---	---	---	24	1350	404	207	251
11	---	---	---	---	---	---	---	26	1300	402	205	251
12	---	---	---	---	---	---	---	31	1090	401	192	251
13	---	---	---	---	---	---	---	52	936	393	186	249
14	---	---	---	---	---	---	---	150	821	395	182	244
15	---	---	---	---	---	---	---	427	747	381	182	244
16	---	---	---	---	---	---	---	589	716	361	182	223
17	---	---	---	---	---	---	---	633	656	359	182	207
18	---	---	---	---	---	---	---	662	635	349	188	207
19	---	---	---	---	---	---	---	669	729	347	193	207
20	---	---	---	---	---	---	---	670	890	345	197	207
21	---	---	---	---	---	---	---	693	913	342	197	207
22	---	---	---	---	---	---	---	714	881	303	197	207
23	---	---	---	---	---	---	---	741	788	255	197	152
24	---	---	---	---	---	---	---	771	698	253	197	106
25	---	---	---	---	---	---	---	775	634	254	197	103
26	---	---	---	---	---	---	---	775	599	255	202	102
27	---	---	---	---	---	---	---	761	540	255	207	102
28	---	---	---	---	---	---	---	716	482	251	207	102
29	---	---	---	---	---	---	---	705	404	246	207	102
30	---	---	---	---	---	---	---	691	409	244	207	77
31	---	---	---	---	---	---	---	699	---	244	207	---
TOTAL	---	---	---	---	---	---	---	12167	22926	10871	6340	5748
MEAN	---	---	---	---	---	---	---	392	764	351	205	192
MAX	---	---	---	---	---	---	---	775	1350	438	244	251
MIN	---	---	---	---	---	---	---	18	404	244	182	77
AC-FT	---	---	---	---	---	---	---	24130	45470	21560	12580	11400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1992, BY WATER YEAR (WY)

	MEAN	58.9	39.5	29.1	26.4	25.3	28.4	58.3	406	703	339	127	85.2
MAX	199	137	52.7	47.8	57.2	71.7	297	743	1484	1081	317	196	
(WY)	1985	1983	1984	1962	1971	1960	1946	1969	1983	1975	1983	1983	
MIN	28.9	11.6	8.47	7.92	6.10	6.54	7.37	91.6	237	65.9	34.1	31.5	
(WY)	1978	1971	1982	1978	1977	1977	1977	1977	1954	1940	1940	1946	

GREEN RIVER BASIN

09218500 BLACKS FORK NEAR MILLBURNE, WY--Continued

SUMMARY STATISTICS

FOR 1997 WATER YEAR*

WATER YEARS 1940 - 1992

ANNUAL MEAN	--		161 ^a	
HIGHEST ANNUAL MEAN	--		281	1983
LOWEST ANNUAL MEAN	--		82.9	1977
HIGHEST DAILY MEAN	1350	Jun 10	2180	Jun 7 1957
LOWEST DAILY MEAN	18	May 1	1.0	Sep 15, 16 1983
ANNUAL SEVEN-DAY MINIMUM	--		5.7	Nov 7 1970
INSTANTANEOUS PEAK FLOW	1370	Jun 10	2530 ^b	Jun 7 1957#
INSTANTANEOUS PEAK STAGE	4.62	Jun 10	6.76 ^c	Jun 12 1965#
ANNUAL RUNOFF (AC-FT)	--		116600	
10 PERCENT EXCEEDS	--		507	
50 PERCENT EXCEEDS	--		44	
90 PERCENT EXCEEDS	--		14	

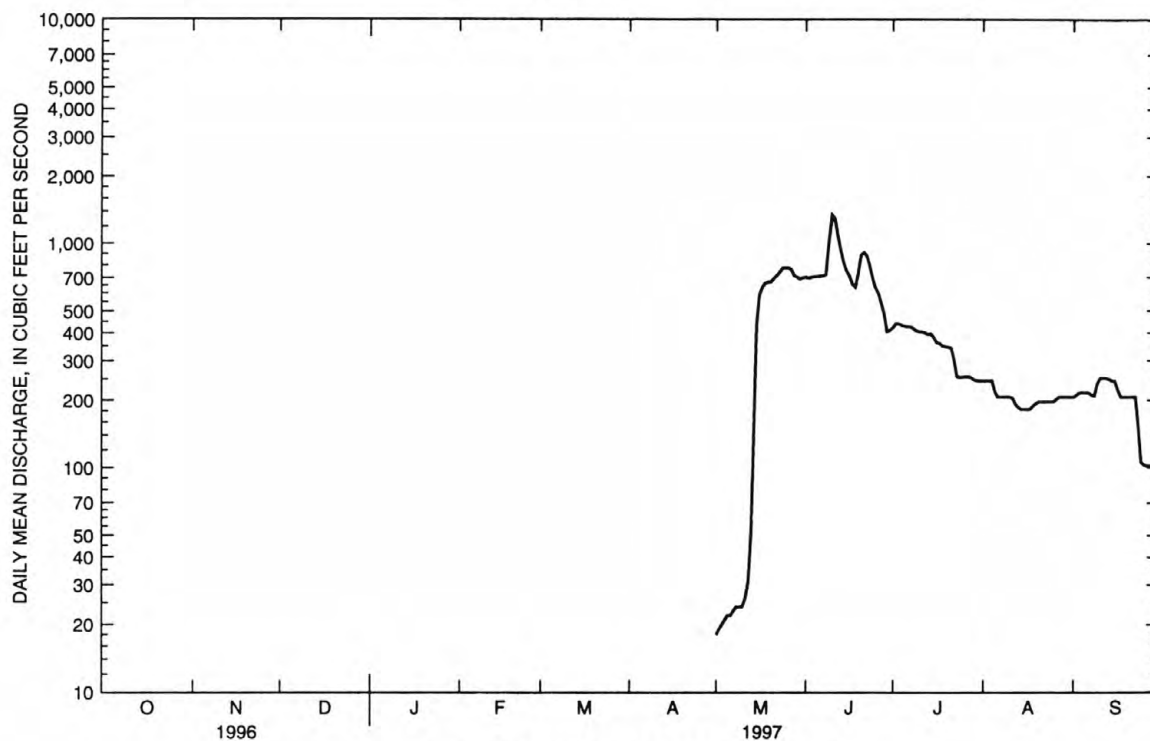
* During period of operation.

For period of record through 1997.

a Unadjusted.

b From rating curve extended above 1,500 ft³/s.

c From floodmarks, site and datum then in use.



09218500 BLACKS FORK NEAR MILLBURNE, WY

09220000 EAST FORK OF SMITH FORK NEAR ROBERTSON, WY

LOCATION.--Lat 41°03'15", long 110°23'52", in NE¹/₄ NW¹/₄ NE¹/₄ 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 south of Robertson.

DRAINAGE AREA.--53.0 mi².

PERIOD OF RECORD.--July 1939 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1313. Prior to Oct. 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 sea level, from topographic map. Prior to July 12, 1957, at datum 3.96 ft higher.

REMARKS.--Estimated daily discharges: May 2, 4-7. Records fair except 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. Results of discharge measurements, in cubic feet per second, made during the period when the station was not in operation are given below:

Oct. 1 . . . 34.1
Apr. 28 . . . 10.4

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	14	97	108	77	62
2	---	---	---	---	---	---	---	13	99	125	76	62
3	---	---	---	---	---	---	---	13	105	125	76	61
4	---	---	---	---	---	---	---	15	119	125	77	62
5	---	---	---	---	---	---	---	15	117	124	68	61
6	---	---	---	---	---	---	---	15	119	123	64	61
7	---	---	---	---	---	---	---	16	123	123	63	61
8	---	---	---	---	---	---	---	16	128	141	63	61
9	---	---	---	---	---	---	---	16	134	149	62	64
10	---	---	---	---	---	---	---	22	129	149	63	67
11	---	---	---	---	---	---	---	23	155	148	63	67
12	---	---	---	---	---	---	---	24	269	146	56	66
13	---	---	---	---	---	---	---	26	262	144	50	66
14	---	---	---	---	---	---	---	59	232	144	50	66
15	---	---	---	---	---	---	---	60	198	131	49	66
16	---	---	---	---	---	---	---	63	173	124	49	60
17	---	---	---	---	---	---	---	71	167	123	50	55
18	---	---	---	---	---	---	---	82	186	123	50	56
19	---	---	---	---	---	---	---	83	245	123	60	57
20	---	---	---	---	---	---	---	83	277	123	71	56
21	---	---	---	---	---	---	---	84	253	121	72	56
22	---	---	---	---	---	---	---	85	224	96	70	56
23	---	---	---	---	---	---	---	92	194	87	70	50
24	---	---	---	---	---	---	---	99	160	87	70	44
25	---	---	---	---	---	---	---	98	139	87	70	44
26	---	---	---	---	---	---	---	97	131	87	67	44
27	---	---	---	---	---	---	---	97	129	87	62	44
28	---	---	---	---	---	---	---	97	104	87	61	44
29	---	---	---	---	---	---	---	98	83	80	62	44
30	---	---	---	---	---	---	---	98	83	77	62	44
31	---	---	---	---	---	---	---	97	---	77	62	---
TOTAL	---	---	---	---	---	---	---	1771	4834	3594	1965	1707
MEAN	---	---	---	---	---	---	---	57.1	161	116	63.4	56.9
MAX	---	---	---	---	---	---	---	99	277	149	77	67
MIN	---	---	---	---	---	---	---	13	83	77	49	44
AC-FT	---	---	---	---	---	---	---	3510	9590	7130	3900	3390

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1971, BY WATER YEAR (WY)

	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
MEAN	15.9	10.9	8.10	7.15	7.19	8.00	20.5	126	216	88.9	33.7	19.6
MAX	34.8	19.0	16.9	16.4	13.4	15.0	90.0	201	430	269	120	59.8
(WY)	1962	1952	1966	1966	1966	1943	1946	1952	1965	1965	1965	1965
MIN	5.21	5.50	2.11	1.34	1.55	2.14	5.01	31.6	59.3	15.9	6.64	6.68
(WY)	1957	1957	1963	1963	1963	1963	1970	1953	1954	1940	1940	1956

09220000 EAST FORK OF SMITH FORK NEAR ROBERTSON, WY--Continued

SUMMARY STATISTICS

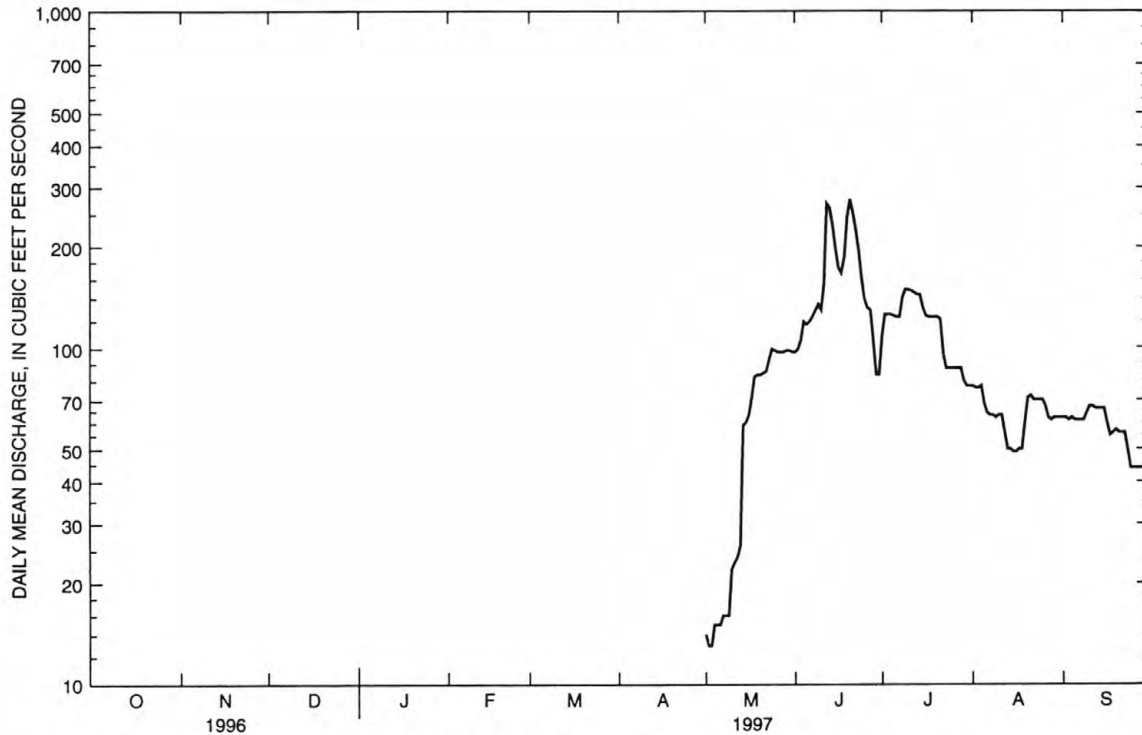
FOR 1997 WATER YEAR*

WATER YEARS 1939 - 1971

ANNUAL MEAN	--		47.1	
HIGHEST ANNUAL MEAN	--		88.9	1965
LOWEST ANNUAL MEAN	--		25.4	1954
HIGHEST DAILY MEAN	277	Jun 20	1030	Jun 10 1965
LOWEST DAILY MEAN	13	May 2, 3	1.0	Dec 17 1962
ANNUAL SEVEN-DAY MINIMUM	--		1.0	Dec 17 1962
INSTANTANEOUS PEAK FLOW	297	Jun 12	1450	Jun 10 1965#
INSTANTANEOUS PEAK STAGE	5.13	Jun 12	6.75	Jun 10 1965#
ANNUAL RUNOFF (AC-FT)	--		34160	
10 PERCENT EXCEEDS	--		140	
50 PERCENT EXCEEDS	--		13	
90 PERCENT EXCEEDS	--		5.6	

* During period of operation.

For period of record through 1997.



09220000 EAST FORK OF SMITH FORK NEAR ROBERTSON, WY

GREEN RIVER BASIN

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09222000 BLACKS FORK NEAR LYMAN, WY

LOCATION.--Lat 41°27'08", long 110°10'20", in SW¹/₄ NW¹/₄ SW¹/₄ sec.15, T.17 N., R.113 N., 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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
NOV 14...	0815	73	1410	8.6	2.0	-1.5	600	10.7	99	K65	700	138
MAR 05...	0900	64	1480	8.4	0.0	-3.0	610	12.0	103	K21	158	27
JUN 11...	1435	1280	712	8.0	15.0	22.0	607	7.9	99	K1300	1010	3500
AUG 05...	1655	272	1370	8.6	19.0	21.0	610	6.5	88	K9000	11600	8520

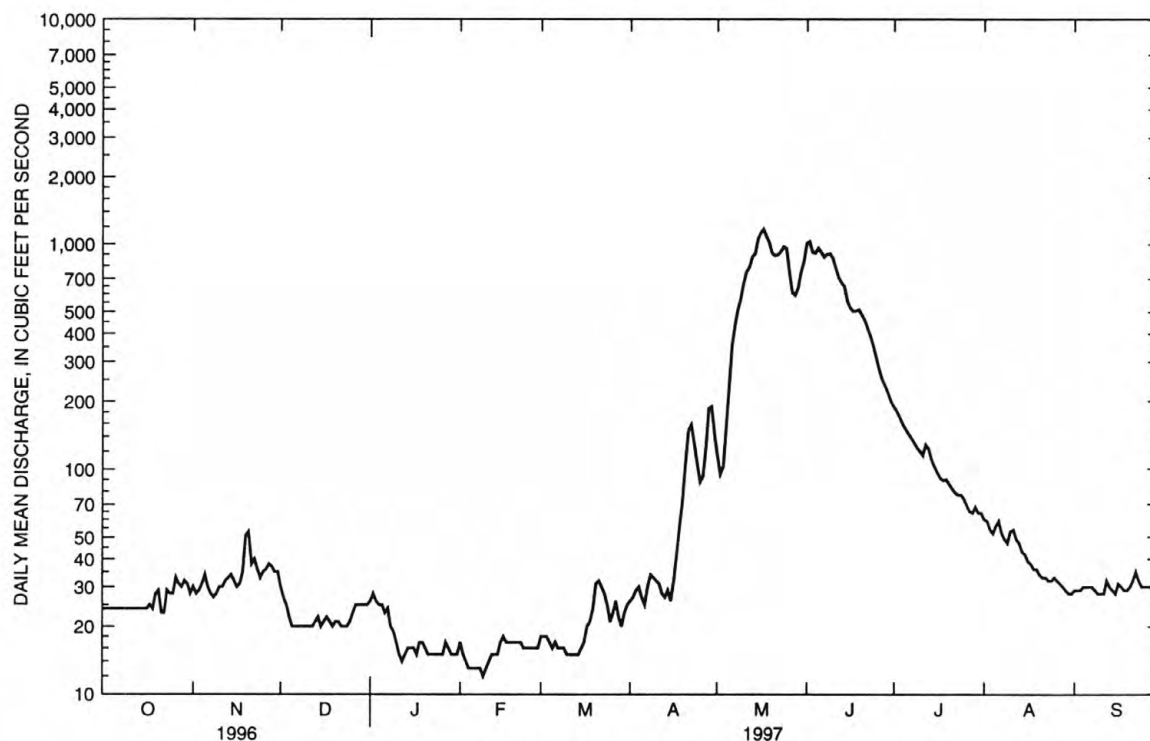
K-Results based on colony count outside the acceptable range (non-ideal colony count).

09223000 HAMS FORK BELOW POLE CREEK, NEAR FRONTIER, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1953 - 1997	
ANNUAL TOTAL	41836		51842		--	
ANNUAL MEAN	114		142		99.5	
HIGHEST ANNUAL MEAN	--		--		214	
LOWEST ANNUAL MEAN	--		--		17.7	
HIGHEST DAILY MEAN	1100	May 17	1170	May 17	2000	Jun 5 1986
LOWEST DAILY MEAN	12	Feb 2	12	Feb 9	.10	Aug 17 1977
ANNUAL SEVEN-DAY MINIMUM	13	Jan 31	13	Feb 4	.62	Aug 11 1977
INSTANTANEOUS PEAK FLOW	--		1290	May 17	2230 ^a	Jun 5 1986
INSTANTANEOUS PEAK STAGE	--		5.83	May 17	8.10 ^b	May 28 1971
ANNUAL RUNOFF (AC-FT)	82980		102800		72100	
10 PERCENT EXCEEDS	355		581		310	
50 PERCENT EXCEEDS	30		30		22	
90 PERCENT EXCEEDS	17		16		12	

a Gage height, 6.72 ft.

b Site then in use.



09223000 HAMS FORK BELOW POLE CREEK, NEAR FRONTIER, WY

GREEN RIVER BASIN

09224050 HAMS FORK NEAR DIAMONDVILLE, WY

LOCATION.--Lat 41°45'06", long 110°31'57", in NW¹/₄ SE¹/₄ SW¹/₄ 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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
NOV							
12...	1630	15	510	8.8	3.0	10.0	600
MAR							
04...	1145	41	464	8.0	0.0	-2.0	594
JUN							
10...	0905	1360	356	8.1	15.0	13.0	596
AUG							
05...	1215	68	408	8.7	18.0	18.0	605

DATE	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
NOV							
12...	12.3	116	<1	0.03	0.20	0.02	0.02
MAR							
04...	10.0	88	29	<0.01	0.30	0.02	0.03
JUN							
10...	6.9	88	68	<0.01	<0.05	<0.01	0.03
AUG							
05...	8.7	117	150	<0.01	0.15	0.02	0.01

09224700 BLACKS FORK NEAR LITTLE AMERICA, WY

LOCATION.--Lat 41°32'46", long 109°41'34", in NE¹/₄ NE¹/₄ NE¹/₄ 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.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 6,127 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 3, 4, 6-10, and Dec. 15 to Mar. 16. 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. National Weather Service data collection platform with satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	132	54	180	190	120	764	1320	1540	288	165	49
2	74	117	56	220	190	130	771	1130	1350	241	170	47
3	74	104	60	250	180	136	768	1040	1230	208	156	57
4	75	92	64	270	160	140	742	974	1230	189	144	57
5	68	97	67	260	150	140	791	933	1190	200	167	60
6	63	70	70	250	140	140	805	922	1200	214	850	64
7	57	75	72	236	120	140	709	985	1290	219	500	64
8	52	88	74	230	110	150	667	1060	1350	215	405	69
9	50	75	82	200	110	180	551	1150	1460	198	259	60
10	49	124	88	190	110	220	437	1160	1970	172	199	51
11	49	129	98	160	120	400	417	1170	3140	157	173	53
12	49	112	103	140	130	800	380	1240	3000	157	193	68
13	47	97	114	150	130	1200	357	1130	2610	151	240	84
14	47	93	129	160	120	1100	354	1030	2690	159	220	134
15	45	89	120	170	120	1000	331	1210	2640	185	192	124
16	48	83	110	150	140	1300	347	1280	2390	177	164	123
17	51	137	96	130	150	1570	342	1410	2010	160	136	124
18	49	130	82	140	160	2070	369	1510	1750	150	116	135
19	60	101	78	150	170	2330	456	1520	1440	154	102	153
20	63	118	82	160	160	2110	551	1570	1160	159	91	193
21	56	116	90	160	160	2030	679	1560	981	176	87	357
22	61	109	88	170	150	1900	896	1580	925	192	82	461
23	84	100	84	160	140	1500	988	1600	880	188	80	355
24	77	97	82	160	130	1260	954	1640	749	180	74	404
25	78	110	90	170	120	1200	997	1400	645	182	64	318
26	79	89	100	180	120	936	1020	1320	557	193	61	274
27	105	67	110	150	130	821	932	1310	515	178	64	246
28	271	51	110	160	110	793	959	1210	481	159	62	230
29	229	64	110	170	---	853	1030	1200	444	157	55	226
30	128	59	120	180	---	809	1230	1300	372	162	54	212
31	126	---	150	180	---	783	---	1490	---	168	52	---
TOTAL	2443	2925	2833	5636	3920	28261	20594	39354	43189	5688	5377	4852
MEAN	78.8	97.5	91.4	182	140	912	686	1269	1440	183	173	162
MAX	271	137	150	270	190	2330	1230	1640	3140	288	850	461
MIN	45	51	54	130	110	120	331	922	372	150	52	47
AC-FT	4850	5800	5620	11180	7780	56060	40850	78060	85670	11280	10670	9620

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1997, BY WATER YEAR (WY)

MEAN	95.3	103	77.3	79.3	111	332	513	974	1100	322	112	85.6
MAX	376	336	230	371	318	912	1310	2918	4573	1349	542	576
(WY)	1983	1983	1984	1971	1984	1997	1973	1984	1983	1975	1983	1983
MIN	7.05	13.6	5.44	3.94	26.4	33.9	51.2	21.1	14.0	4.36	.55	.000
(WY)	1980	1995	1995	1991	1989	1964	1990	1977	1977	1977	1994	1994

GREEN RIVER BASIN

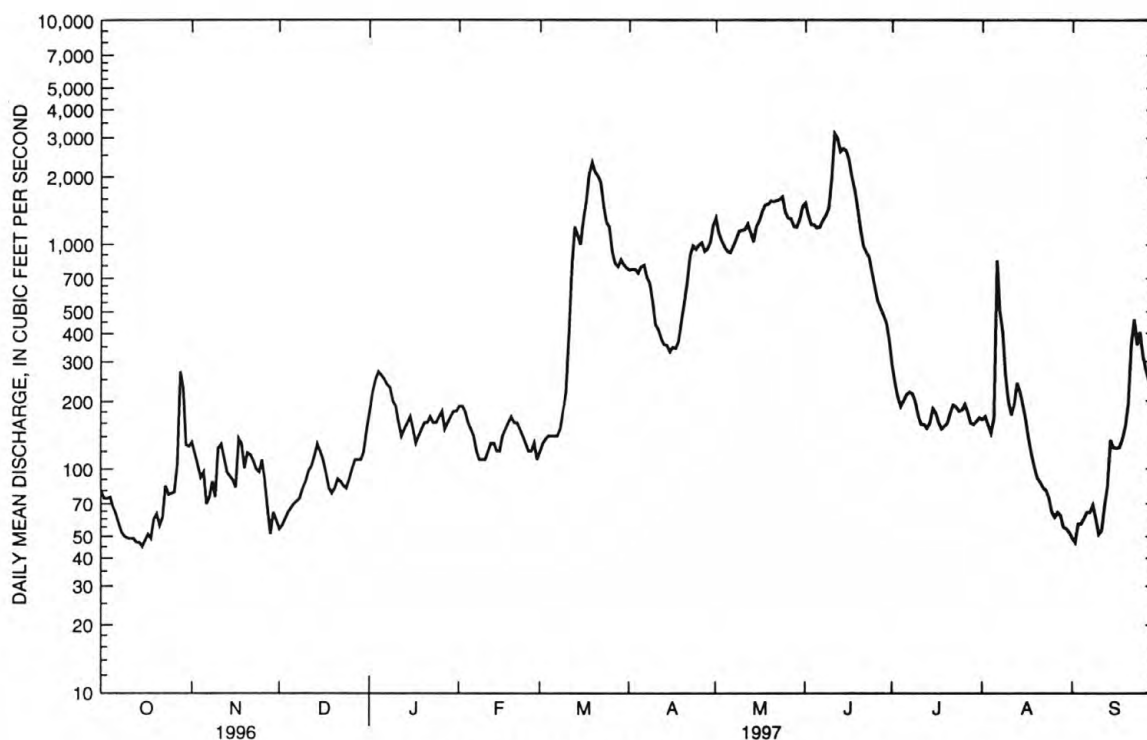
09224700 BLACKS FORK NEAR LITTLE AMERICA, WY--Continued

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1962 - 1997	
ANNUAL TOTAL	108123		165072		--	
ANNUAL MEAN	295		452		327	
HIGHEST ANNUAL MEAN	--		--		888	1983
LOWEST ANNUAL MEAN	--		--		29.0	1977
HIGHEST DAILY MEAN	1760	Jun 12	3140	Jun 11	9340	Jun 13 1965
LOWEST DAILY MEAN	20	Aug 26	45	Oct 15	.00	Many days, several years
ANNUAL SEVEN-DAY MINIMUM	23	Aug 24	48	Oct 10	.00	Sep 20 1962
INSTANTANEOUS PEAK FLOW	--		3360 ^a	Jun 11	9980	Jun 13 1965
INSTANTANEOUS PEAK STAGE	--		11.18 ^b	Mar 13	11.18 ^b	Mar 13 1997
ANNUAL RUNOFF (AC-FT)	214500		327400		236600	
10 PERCENT EXCEEDS	799		1290		951	
50 PERCENT EXCEEDS	110		162		112	
90 PERCENT EXCEEDS	44		64		20	

a Gage height, 8.53 ft.

b Backwater from ice.



09224700 BLACKS FORK NEAR LITTLE AMERICA, WY

09224700 BLACKS FORK NEAR LITTLE AMERICA, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1951 to current year.

WATER TEMPERATURES: March 1951 to September 1963, December 1964 to current year.

INSTRUMENTATION.--Water-quality monitor for specific conductance and water temperature..

REMARKS.--Published as "near Green River" prior to October 1953 and as "near Marston" October 1953 to September 1964. Partial record of specific conductance and temperature for water years 1979 and 1980 are available at District Office. Water-temperature records represent water temperature at sensor within 0.2°C.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 6,010 microsiemens/cm, Oct. 1, 1953; minimum daily, 194 microsiemens/cm, May 17, 1984.

WATER TEMPERATURES: Maximum, 40.0°C, July 31, Aug. 1, 2, 3, 4, 1984; minimum, 0.0°C on many days during winter period most years.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum mean daily, 1,890 microsiemens/cm, Sept. 10; minimum mean daily, 460 microsiemens/cm, May 16.

WATER TEMPERATURES: Maximum, 25.8°C, Aug. 25; minimum, 0.0°C on many days December through March.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	HARD- NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
NOV											
14...	1015	94	1380	1.5	3.0	380	95	34	140	3	3.5
DEC											
12...	1550	104	1330	0.0	4.5	380	100	32	100	2	3.2
JAN											
07...	0845	236	1310	0.0	-8.0	320	81	29	160	4	3.2
MAR											
04...	1425	301	1170	0.0	0.0	390	100	35	98	2	3.4
APR											
24...	0945	956	560	5.0	3.0	220	55	19	34	1	2.9
MAY											
15...	1320	1250	475	16.5	25.0	180	48	15	25	0.8	2.5
JUN											
11...	1740	3270	795	17.5	22.0	--	--	--	--	--	--
JUL											
25...	0815	180	1080	19.0	17.0	360	92	33	96	2	2.8
AUG											
06...	0950	1980	724	17.5	16.5	170	44	15	85	3	2.2
SEP											
03...	1045	69	1570	17.0	19.0	450	100	48	170	3	4.0

DATE	ALKA- LINITY LAB (MG/L AS CAC03) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
NOV										
14...	215	420	69	0.5	9.3	900	1.22	229	201	<3
DEC										
12...	217	430	51	0.4	7.2	854	1.16	240	171	<3
JAN										
07...	218	400	61	0.5	10	876	1.19	558	217	<3
MAR										
04...	236	330	50	0.4	8.4	767	1.04	623	257	<3
APR										
24...	171	100	19	0.2	7.6	343	0.47	887	89	<3
MAY										
15...	167	63	15	0.2	8.7	277	0.38	935	65	<3
JUN										
11...	--	--	--	--	--	--	--	--	157	9
JUL										
25...	215	300	31	0.5	8.5	694	0.94	337	185	<3
AUG										
06...	165	180	22	0.5	7.9	458	0.62	2450	141	33
SEP										
03...	170	570	60	0.6	5.4	1060	1.45	198	286	4

GREEN RIVER BASIN

09224700 BLACKS FORK NEAR LITTLE AMERICA, WY--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1290	1630	1540	1310	1160	1230	965	660	609	990	1040	1410
2	1340	1600	1590	1380	1170	1260	959	652	594	1050	1020	1580
3	1410	1570	1700	1380	1160	1230	957	705	593	1100	973	1570
4	1420	1580	1600	1310	1150	1180	946	693	592	1160	933	1510
5	1410	1580	1540	1260	1180	1160	946	733	597	1170	970	1460
6	1470	1560	1590	1380	1150	1170	981	699	599	1160	673	1430
7	1490	1590	1610	1320	1160	1160	942	673	586	1160	771	1450
8	1480	1540	1590	1400	1180	1170	933	625	567	1190	1170	1520
9	1560	1600	1570	1460	1210	1120	961	606	561	1190	1200	1610
10	1670	1530	1450	1490	1210	1080	1030	556	---	1200	---	1890
11	1710	1680	1350	1460	1220	753	---	582	---	1190	---	1830
12	1710	1760	1320	1450	1240	562	---	592	---	1210	---	1840
13	1760	1540	1260	1430	1260	551	---	572	---	1280	---	1860
14	1740	1370	1220	1380	1260	---	---	574	---	1280	1220	1780
15	1810	1420	1270	1330	1240	---	1180	514	---	1260	1260	1560
16	1760	1480	1320	1280	1180	---	1170	460	---	1250	1290	1540
17	1730	1530	1380	1330	1130	691	1100	481	---	1220	1350	1580
18	1720	1490	1440	1400	1040	621	1030	489	1290	1190	1310	1540
19	1710	1410	1520	1400	972	641	965	463	1280	1160	1320	1510
20	1670	1300	1660	1370	992	647	905	466	1350	1170	1340	1510
21	1720	1460	1650	1340	1010	694	785	485	1390	1150	1400	1280
22	1760	1430	1620	1310	1080	726	655	496	1430	1210	1430	1010
23	1750	1440	1590	1280	1100	792	609	530	1400	1230	1440	1060
24	1740	1420	1530	1240	1160	858	572	596	---	1130	1430	1220
25	1790	1370	1460	1170	1160	918	600	623	780	1060	1450	1080
26	1760	1350	1390	1180	1200	978	658	649	820	1070	1490	1150
27	1770	1610	1330	1170	1220	1050	718	646	879	1110	1450	1130
28	1710	1690	1310	1160	1220	1060	730	633	904	1070	1430	1150
29	1660	1640	1330	1160	---	1020	743	607	906	991	1460	1230
30	1690	1550	1280	1160	---	980	698	564	912	962	1510	1220
31	1690	---	1260	1170	---	967	---	648	---	994	1480	---
MEAN	1640	1520	1460	1320	1160	---	---	589	---	1150	---	1450
MAX	1810	1760	1700	1490	1260	---	---	733	---	1280	---	1890
MIN	1290	1300	1220	1160	972	---	---	460	---	962	---	1010

GREEN RIVER BASIN

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09224700 BLACKS FORK NEAR LITTLE AMERICA, WY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.5	9.0	5.0	3.1	.6	.6	.0	.0	.0	.0	.0	.0
2	15.1	8.8	4.9	3.1	.6	.5	.0	.0	.0	.0	.0	.0
3	17.2	9.7	4.4	3.1	.5	.5	.0	.0	.0	.0	.0	.0
4	17.5	9.1	5.0	3.1	.5	.4	.0	.0	.0	.0	.0	.0
5	16.9	10.2	4.9	3.1	.4	.4	.0	.0	.0	.0	.4	.0
6	15.9	8.7	3.1	3.1	.4	.3	.0	.0	.0	.0	.5	.0
7	16.2	8.9	3.2	3.1	.3	.2	.0	.0	.0	.0	.6	.0
8	16.6	9.3	3.2	3.2	.2	.2	.0	.0	.0	.0	.3	.0
9	17.3	9.5	4.8	3.2	.2	.1	.0	.0	.0	.0	.6	.0
10	17.1	10.4	3.2	3.2	.1	.1	.0	.0	.0	.0	.0	.0
11	17.1	10.3	3.3	3.2	.1	.0	.0	.0	.0	.0	.0	.0
12	16.3	10.3	3.6	2.9	.0	.0	.0	.0	.0	.0	.0	.0
13	15.7	9.0	3.4	1.9	.0	.0	.0	.0	.0	.0	.0	.0
14	15.3	9.2	1.9	1.5	.0	.0	.0	.0	.0	.0	---	---
15	12.0	6.1	1.5	1.4	.0	.0	.0	.0	.0	.0	---	---
16	11.6	6.2	1.4	1.4	.0	.0	.0	.0	.0	.0	---	---
17	6.9	2.9	1.4	1.3	.0	.0	.0	.0	.0	.0	1.4	.0
18	6.9	3.0	1.3	1.3	.0	.0	.0	.0	.0	.0	2.9	.4
19	5.0	3.0	2.6	1.2	.0	.0	.0	.0	.0	.0	3.3	1.6
20	4.1	3.0	3.4	1.2	.0	.0	.0	.0	.0	.0	4.5	2.2
21	5.4	3.0	2.7	1.1	.0	.0	.0	.0	.0	.0	5.7	3.0
22	5.0	3.0	3.3	1.6	.0	.0	.0	.0	.0	.0	5.8	3.2
23	6.0	3.0	1.7	1.0	.0	.0	.0	.0	.0	.0	6.9	4.1
24	5.4	3.0	1.0	.9	.0	.0	.0	.0	.0	.0	6.2	3.7
25	4.1	3.0	.9	.9	.0	.0	.0	.0	.0	.0	4.6	2.0
26	3.1	3.0	.9	.8	.0	.0	.0	.0	.0	.0	6.4	2.3
27	3.0	3.0	.8	.8	.0	.0	.0	.0	.0	.0	5.8	3.9
28	3.1	3.0	.8	.7	.0	.0	.0	.0	.0	.0	5.2	2.7
29	4.3	3.1	.7	.7	.0	.0	.0	.0	---	---	5.8	2.7
30	4.1	3.1	.7	.6	.0	.0	.0	.0	---	---	7.0	3.0
31	4.8	3.1	---	---	.0	.0	.0	.0	---	---	6.9	4.5
MONTH	17.5	2.9	5.0	.6	.6	.0	.0	.0	.0	.0	7.0	.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.5	2.6	9.9	6.9	20.6	17.8	18.8	13.8	24.0	17.7	23.0	15.2
2	4.6	1.4	8.6	4.4	20.6	17.3	19.8	13.9	23.6	18.8	20.2	16.5
3	5.3	1.0	10.7	5.6	20.4	16.3	21.1	13.7	24.1	18.6	19.5	15.8
4	5.5	3.3	12.5	8.2	20.4	17.1	23.2	15.6	21.1	17.8	21.5	15.7
5	4.5	2.4	14.3	9.2	20.8	17.3	24.2	17.3	21.2	16.5	22.0	15.7
6	4.0	.9	14.4	10.7	21.7	17.6	23.3	18.5	19.5	16.2	22.2	16.5
7	3.9	1.3	14.8	10.5	22.3	18.3	23.3	17.1	20.5	16.0	21.3	15.1
8	5.8	2.2	14.8	10.1	21.4	18.6	22.7	17.2	20.5	18.0	21.5	14.8
9	5.5	2.2	15.4	10.7	19.9	18.2	23.0	17.4	19.4	17.4	22.5	15.2
10	---	---	16.7	11.4	18.6	16.3	21.1	17.2	19.5	16.0	20.4	16.7
11	---	---	16.1	12.6	17.8	15.7	20.1	16.3	21.2	14.5	19.1	15.4
12	---	---	16.3	12.2	18.0	14.9	18.6	15.6	20.5	14.7	19.0	12.5
13	---	---	15.5	12.8	17.1	13.8	20.6	12.8	19.2	16.7	18.0	13.3
14	---	---	16.7	12.6	16.0	13.0	22.5	14.8	18.2	15.6	17.9	13.4
15	8.8	5.6	17.7	13.8	17.8	13.1	22.9	17.2	19.2	14.7	16.7	13.9
16	10.8	5.2	17.9	14.8	19.1	14.7	24.2	17.9	19.9	15.2	16.0	11.3
17	11.6	7.6	17.7	15.2	19.9	15.3	22.2	19.2	20.2	15.2	16.1	10.3
18	12.3	8.1	17.2	14.7	18.8	17.2	20.4	17.5	21.4	15.2	13.8	11.7
19	11.4	8.5	17.2	13.5	19.8	16.5	21.3	16.5	22.4	15.9	13.7	10.1
20	11.3	9.3	16.6	14.1	19.8	16.8	22.5	16.0	23.3	15.7	12.2	8.6
21	10.8	7.7	16.6	14.7	20.7	17.2	24.0	17.3	22.2	16.7	11.1	9.4
22	9.6	7.5	17.2	14.6	21.1	18.0	23.3	18.7	23.7	16.2	11.8	9.5
23	9.4	6.5	16.2	13.9	---	17.6	22.6	20.3	24.2	16.7	11.5	10.4
24	7.3	5.0	15.4	13.3	---	---	22.9	18.9	22.8	17.9	12.9	9.1
25	8.3	3.5	13.7	11.7	21.3	---	23.4	18.8	25.8	18.3	12.9	9.9
26	9.2	5.8	12.1	9.0	21.8	17.2	23.6	17.9	22.8	19.5	14.5	12.1
27	11.4	7.0	14.1	9.2	21.1	18.1	24.3	18.9	22.3	16.8	14.6	11.5
28	12.1	9.2	15.4	12.1	21.7	16.2	21.2	18.5	21.3	16.0	13.5	8.3
29	12.0	9.0	16.6	13.7	22.8	17.2	23.3	18.0	21.8	15.5	12.9	8.4
30	10.1	7.4	18.4	14.2	22.2	17.4	21.8	19.0	21.5	14.1	14.1	9.4
31	---	---	20.2	15.7	---	---	22.7	16.7	20.3	16.0	---	---
MONTH	12.3	.9	20.2	4.4	22.8	13.0	24.3	12.8	25.8	14.1	23.0	8.3

09234400 FLAMING GORGE RESERVOIR AT FLAMING GORGE DAM, UT

LOCATION.--Lat 40°54'23", long 109°25'15", in NW¹/₄ NE¹/₄ sec.15, T.2 N., R.22 E., Daggett County, Hydrologic Unit 14040106, at Flaming Gorge Dam on Green River, 1.8 mi southwest of Dutch John, and 4.9 mi northeast of Greendale.

DRAINAGE AREA.--19,350 mi², of which about 4,260 mi², including 3,959 mi² in Great Divide Basin in southern Wyoming, probably is noncontributing.

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

REVISED RECORDS.--WDR UT-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,871 ft above sea level, (levels by Bureau of Reclamation). Prior to Jan. 1, 1964, on left bank 600 ft upstream from face of dam.

REMARKS.--Records good. Reservoir is formed by concrete arch-type dam; storage began Nov. 1, 1962; mass concrete of dam completed Nov. 15, 1962. Total capacity, 3,789,000 acre-ft, consisting of the following: Dead storage, 39,700 acre-ft below elevation 5,740 ft; inactive usable storage, 233,500 acre-ft between elevations 5,740 ft and 5,871 ft; active usable storage, 3,516,000 acre-ft between elevations 5,871 ft and 6,040 ft (top of conservation pool). Reservoir is used for flood control, storage replacement to meet downstream requirements under the Colorado River Compact of 1922, and power generation. Figures given herein represent usable contents. Transbasin diversions and diversions for irrigation above station.

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 3,911,000 acre-ft, July 13, 1983, elevation, 6,043.80 ft; minimum, 582,900 acre-ft Apr. 26, 1965, elevation, 5908.90 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 3,622,000 acre-ft, Aug. 19 through Sept. 5, maximum elevation, 6,036.86 ft Aug. 22, 23, 24; minimum observed, 3,074,000 acre-ft, May 8, 9, elevation, 6,022.63 ft.

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

6,020	2,980,000	6,035	3,546,000
6,025	3,160,000	6,040	3,752,000
6,030	3,349,000		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY OBSERVATION AT 2400 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3360000	3330000	3290000	3250000	3210000	3150000	3180000	3090000	3190000	3560000	3570000	3620000
2	3360000	3330000	3290000	3250000	3210000	3140000	3170000	3080000	3200000	3570000	3570000	3620000
3	3360000	3330000	3290000	3250000	3210000	3140000	3170000	3080000	3220000	3570000	3570000	3620000
4	3360000	3330000	3280000	3250000	3210000	3140000	3160000	3080000	3220000	3570000	3570000	3620000
5	3360000	3330000	3280000	3250000	3200000	3140000	3160000	3080000	3240000	3570000	3570000	3620000
6	3360000	3330000	3280000	3250000	3200000	3140000	3160000	3080000	3240000	3570000	3580000	3610000
7	3360000	3320000	3280000	3250000	3200000	3130000	3150000	3070000	3250000	3580000	3580000	3610000
8	3360000	3320000	3280000	3240000	3200000	3130000	3150000	3070000	3260000	3580000	3580000	3610000
9	3360000	3320000	3280000	3240000	3190000	3130000	3150000	3070000	3280000	3580000	3590000	3610000
10	3350000	3320000	3280000	3240000	3190000	3130000	3150000	3070000	3290000	3570000	3590000	3610000
11	3350000	3320000	3280000	3240000	3190000	3130000	3140000	3070000	3300000	3570000	3590000	3610000
12	3350000	3320000	3280000	3240000	3180000	3140000	3140000	3070000	3320000	3570000	3600000	3600000
13	3350000	3320000	3280000	3240000	3180000	3140000	3130000	3070000	3340000	3560000	3600000	3600000
14	3350000	3310000	3280000	3240000	3180000	3160000	3120000	3080000	3360000	3560000	3600000	3600000
15	3350000	3310000	3270000	3230000	3180000	3170000	3120000	3080000	3380000	3560000	3610000	3600000
16	3340000	3310000	3270000	3230000	3170000	3170000	3120000	3080000	3390000	3560000	3610000	3600000
17	3340000	3310000	3270000	3230000	3170000	3180000	3110000	3080000	3400000	3560000	3610000	3590000
18	3340000	3310000	3270000	3230000	3170000	3180000	3110000	3090000	3410000	3560000	3610000	3590000
19	3340000	3310000	3260000	3230000	3170000	3190000	3110000	3090000	3430000	3560000	3620000	3600000
20	3340000	3310000	3260000	3230000	3170000	3190000	3110000	3100000	3430000	3560000	3620000	3600000
21	3340000	3300000	3260000	3230000	3170000	3200000	3110000	3100000	3440000	3560000	3620000	3590000
22	3340000	3300000	3260000	3230000	3160000	3200000	3110000	3110000	3460000	3560000	3620000	3600000
23	3340000	3300000	3260000	3230000	3160000	3210000	3110000	3120000	3480000	3560000	3620000	3600000
24	3340000	3300000	3250000	3220000	3160000	3210000	3100000	3130000	3500000	3560000	3620000	3600000
25	3340000	3300000	3250000	3220000	3160000	3210000	3100000	3140000	3510000	3560000	3620000	3600000
26	3340000	3300000	3250000	3220000	3150000	3200000	3100000	3140000	3520000	3570000	3620000	3600000
27	3340000	3300000	3250000	3220000	3150000	3200000	3090000	3150000	3530000	3570000	3620000	3600000
28	3330000	3300000	3250000	3220000	3150000	3200000	3090000	3160000	3540000	3570000	3620000	3600000
29	3330000	3290000	3250000	3220000	---	3190000	3090000	3170000	3550000	3570000	3620000	3600000
30	3330000	3290000	3250000	3220000	---	3190000	3090000	3170000	3560000	3570000	3620000	3600000
31	3330000	---	3250000	3220000	---	3180000	---	3180000	---	3570000	3620000	---
MAX	3360000	3330000	3290000	3250000	3210000	3210000	3180000	3180000	3560000	3580000	3620000	3620000
MIN	3330000	3290000	3250000	3220000	3150000	3130000	3090000	3070000	3190000	3560000	3570000	3590000
(#)	6,029.64	6,028.52	6,027.36	6,026.49	6,024.74	6,025.62	6,023.00	6,025.60	6,035.24	6,035.48	6,036.80	6,036.30
(*)	-30,000	-40,000	-40,000	-30,000	-70,000	+30,000	-90,000	+90,000	+380,000	+10,000	+50,000	-20,000
CAL YR 1996	MAX	3410000	MIN	3060000	(*)	-30,000						
WTR YR 1997	MAX	2630000	MIN	3070000	(*)	+240,000						

(#) Elevation, in feet, at end of month.

(*) Change in contents, in acre-feet.

LOCATION.--Lat 40°54'30", long 109°25'20", in NW¼ NW¼ SE¼ 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.

WATER-DISCHARGE RECORDS

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,560 ft³/s, June 16, gage height, 14.76 ft; minimum daily discharge, 1,380 ft³/s, Aug. 15, 16, 18.

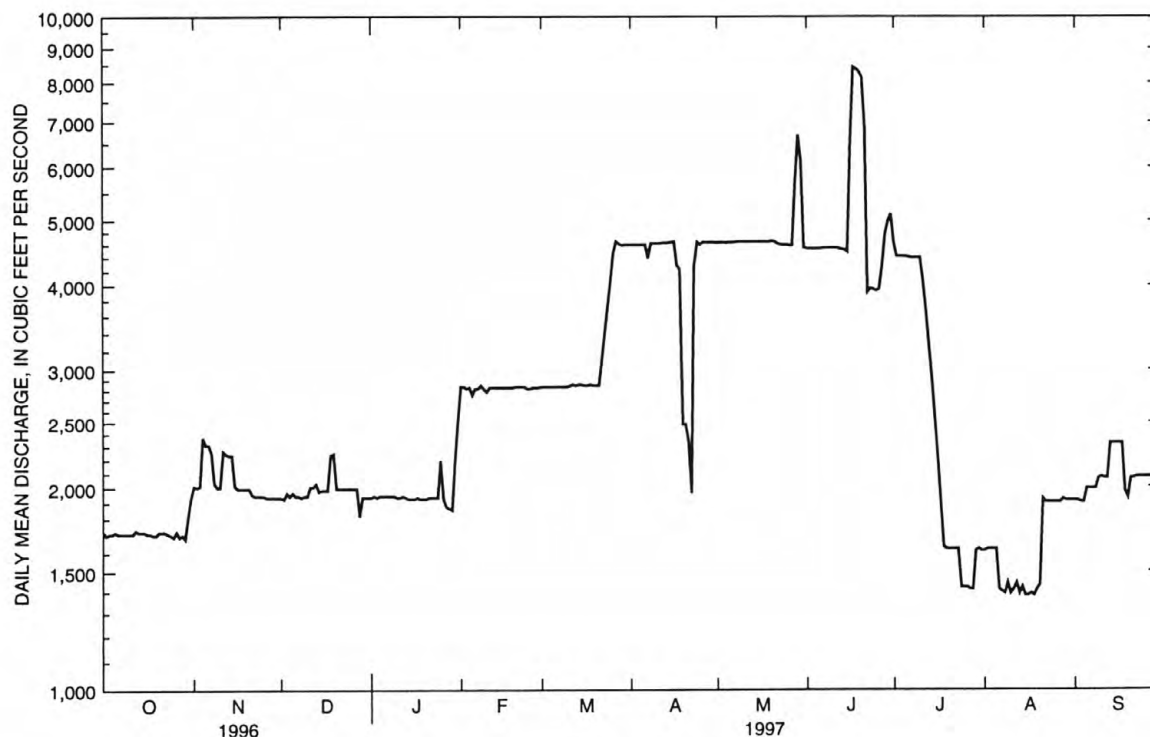
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1997, BY WATER YEAR (WY)

MEAN	1881	2042	2254	2191	2167	1786	1930	2424	2453	2382	2046	1906
MAX	3911	3655	3626	4145	4090	3818	4271	7146	7961	10130	5056	3729
(WY)	1983	1983	1973	1985	1984	1977	1997	1986	1983	1983	1983	1983
MIN	128	312	743	903	773	599	587	984	916	474	497	734
(WY)	1964	1964	1964	1971	1971	1964	1964	1990	1992	1965	1965	1965

GREEN RIVER BASIN

09234500 GREEN RIVER NEAR GREENDALE, UT--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1964 - 1997	
ANNUAL TOTAL	912570		1045690		--	
ANNUAL MEAN	2493		2865		2122	
HIGHEST ANNUAL MEAN	--		--		4270	1983
LOWEST ANNUAL MEAN	--		--		1044	1989
HIGHEST DAILY MEAN	4770	May 22	8420	Jun 17	12300	Jul 16 1983
LOWEST DAILY MEAN	1330	Jul 27	1380	Aug 15	90	Oct 8 1963
ANNUAL SEVEN-DAY MINIMUM	1350	Jul 22	1390	Aug 13	112	Oct 2 1963
ANNUAL RUNOFF (AC-FT)	1810000		2074000		1537000	
10 PERCENT EXCEEDS	4660		4640		3780	
50 PERCENT EXCEEDS	2280		2180		1820	
90 PERCENT EXCEEDS	1510		1690		891	



09234500 GREEN RIVER NEAR GREENDALE, UT

09234500 GREEN RIVER NEAR GREENDALE, UT--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1956 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1956 to September 1959, October 1963 to current year.

WATER TEMPERATURES: October 1956 to September 1959, October 1963 to current year.

SEDIMENT DATA: October 1956 to September 1959.

INSTRUMENTATION.--Water-quality monitor for specific conductance and water temperature since December 1986.

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 district office. Daily records provided by Bureau of Reclamation. 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 to current year).

SPECIFIC CONDUCTANCE (water years 1957-58, 1960-62): Maximum daily, 1,340 microsiemens/cm, Aug. 30, 1961; minimum daily, 325 microsiemens/cm, June 2, 1961.

WATER TEMPERATURES (water years 1957-59): Maximum, 24.0°C, July 24, 25, 1959; minimum, 0.0°C on many days during winter period each year.

SPECIFIC CONDUCTANCE (water years 1964 to current year): Maximum daily, 1,060 microsiemens/cm, Nov. 9, 1971; minimum recorded, 523 microsiemens/cm, Oct. 25, 1994.

WATER TEMPERATURES: Maximum recorded, 17.2°C, July 9, 1989; minimum recorded 1.6°C, Mar. 1, 2, 1987.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 723 microsiemens/cm, Dec. 3, 9, 10, 12, 13; minimum recorded, 584 microsiemens/cm, June 12.

WATER TEMPERATURES: Maximum recorded, 15.1 °C, Sept. 11, 12; minimum recorded, 3.0°C, Mar. 4.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	HARD- NESS TOTAL (MG/L AS CaCO3) (00900)
OCT										
15...	1130	1710	690	8.4	20.0	12.0	8.2	94	618	230
DEC										
04...	1200	2040	740	8.2	-1.0	7.0	9.2	94	619	240
JAN										
29...	0930	2720	720	8.3	0.0	4.0	9.6	88	636	250
MAR										
06...	1200	3120	680	8.4	8.0	4.0	10.2	96	620	230
APR										
17...	0930	4500	680	8.4	5.5	4.5	--	--	--	230
MAY										
21...	0830	4720	640	8.2	18.5	8.0	11.2	104	698	230
JUN										
26...	1115	4010	640	8.2	18.0	13.0	9.5	110	624	230
AUG										
06...	1030	1510	650	8.3	20.0	12.0	--	--	--	240

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)
OCT										
15...	57	22	53	33	2	2.6	180	16	0.29	2.4
DEC										
04...	58	22	52	32	1	2.4	180	16	0.30	2.6
JAN										
29...	63	23	53	31	1	2.4	180	15	0.30	3.7
MAR										
06...	56	21	48	31	1	2.3	170	14	0.30	3.8
APR										
17...	56	21	45	30	1	2.3	170	14	0.25	3.4
MAY										
21...	57	21	47	31	1	2.2	160	13	0.25	3.9
JUN										
26...	57	21	47	31	1	2.2	160	14	0.26	5.4
AUG										
06...	61	20	45	29	1	2.2	150	14	0.25	4.3

GREEN RIVER BASIN

09234500 GREEN RIVER NEAR GREENDALE, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)
OCT 15...	442	429	0.60	2040	<0.005	0.24	0.24	0.24	<1
DEC 04...	444	426	0.60	2450	0.023	0.20	0.20	0.22	<1
JAN 29...	446	434	0.61	3280	0.057	0.20	0.20	0.26	<1
MAR 06...	432	409	0.59	3640	0.039	0.20	0.20	0.24	<1
APR 17...	421	403	0.57	5120	0.010	0.32	0.32	0.33	<1
MAY 21...	402	388	0.55	5120	0.024	--	<0.20	--	<1
JUN 26...	420	397	0.57	4550	0.099	0.22	0.22	0.32	<1
AUG 06...	410	389	0.56	1670	0.045	--	<0.20	--	<1

GREEN RIVER BASIN

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09234500 GREEN RIVER NEAR GREENDALE, UT--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	698	696	697	689	688	689	721	717	719	722	720	721
2	699	697	698	691	689	690	719	719	719	721	721	721
3	698	695	697	692	690	691	723	719	721	721	719	720
4	698	695	696	694	692	693	722	721	721	720	719	720
5	697	694	696	694	693	693	721	721	721	720	720	720
6	699	696	697	693	693	693	721	720	721	720	719	720
7	697	696	697	695	692	694	722	721	721	720	720	720
8	697	692	696	695	691	693	722	721	722	721	719	720
9	697	692	694	699	693	697	723	722	722	721	719	720
10	693	691	692	701	699	700	723	721	723	720	719	720
11	694	691	693	702	700	701	721	720	721	720	719	720
12	694	691	693	701	699	700	723	721	722	720	720	720
13	695	690	692	704	700	701	723	720	722	720	720	720
14	694	690	692	705	701	703	720	719	719	720	720	720
15	694	691	693	708	704	706	721	719	719	720	719	719
16	693	685	690	708	704	706	721	719	720	719	718	719
17	691	685	687	708	705	706	721	719	720	719	718	718
18	691	689	690	710	705	708	720	719	720	719	719	719
19	691	686	688	711	709	710	720	720	720	719	719	719
20	688	682	684	711	708	709	722	720	720	719	718	719
21	686	682	684	712	710	711	722	721	722	720	719	719
22	690	686	688	711	710	711	721	720	721	720	718	719
23	690	689	690	711	710	711	721	720	720	720	718	719
24	690	687	688	713	710	712	720	720	720	719	718	719
25	691	685	688	714	712	713	720	719	720	718	717	718
26	690	684	685	716	713	714	721	719	720	718	715	717
27	690	686	688	717	713	715	720	719	719	715	711	713
28	688	685	686	719	715	717	720	719	719	713	711	712
29	685	681	683	718	716	717	719	719	719	713	711	711
30	687	684	685	719	716	718	720	719	720	712	711	711
31	688	687	687	---	---	---	721	720	721	712	710	712
MONTH	699	681	691	719	688	704	723	717	720	722	710	718
	FEBRUARY			MARCH			APRIL			MAY		
1	711	710	710	699	693	695	675	673	674	676	660	664
2	710	707	709	700	696	699	676	675	675	676	665	669
3	710	707	709	696	692	694	675	673	674	679	667	673
4	714	709	712	694	689	693	674	670	672	677	669	673
5	713	709	713	698	691	694	673	669	671	676	667	672
6	709	704	707	696	694	695	673	671	672	675	665	671
7	710	706	709	694	692	694	673	672	672	665	651	659
8	709	707	708	694	685	692	673	672	673	667	653	661
9	709	705	707	692	684	689	675	672	673	673	664	668
10	709	706	708	695	691	692	676	674	675	670	653	660
11	708	705	707	692	689	691	675	674	675	668	644	660
12	707	703	706	691	689	690	675	673	674	668	658	663
13	705	702	704	690	681	686	674	672	673	665	649	660
14	706	702	704	691	683	688	674	672	673	665	650	661
15	702	699	700	689	686	688	672	671	672	664	659	661
16	706	700	703	689	686	688	672	671	672	667	652	661
17	705	701	703	687	679	684	674	672	673	667	658	661
18	702	696	699	685	681	684	705	674	678	666	654	659
19	703	696	699	685	683	684	714	705	712	662	660	661
20	701	692	696	689	683	686	714	705	711	662	650	655
21	698	692	696	687	682	685	712	669	691	658	616	632
22	699	696	698	684	682	683	672	659	668	619	614	617
23	698	694	697	685	679	683	681	668	674	617	612	615
24	698	693	695	683	675	678	681	674	679	620	609	613
25	697	693	695	684	680	682	676	670	673	620	614	616
26	696	694	695	683	679	681	677	673	675	618	612	613
27	698	693	696	683	668	676	679	673	675	614	608	611
28	697	692	694	675	671	674	676	672	675	653	608	631
29	---	---	---	676	672	675	675	661	668	653	652	653
30	---	---	---	678	675	676	676	663	667	653	612	642
31	---	---	---	677	674	676	---	---	---	612	610	611
MONTH	714	692	703	700	668	686	714	659	676	679	608	649

09234500 GREEN RIVER NEAR GREENDALE, UT--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	611	607	609	625	593	606	627	625	626	630	628	629
2	608	601	605	597	592	595	628	624	627	630	628	630
3	609	601	606	599	592	594	628	624	627	631	629	630
4	607	602	605	600	597	599	628	626	627	631	629	630
5	608	599	603	600	595	597	629	625	627	631	629	631
6	608	596	601	603	599	601	630	626	628	631	629	630
7	600	595	596	605	601	604	630	626	628	629	628	629
8	603	591	597	609	603	605	628	623	626	629	627	628
9	603	596	599	609	606	607	628	624	626	628	627	628
10	601	594	596	608	606	607	629	624	626	629	627	628
11	594	593	594	611	608	609	629	624	625	628	626	627
12	596	584	592	612	610	611	629	622	626	629	626	627
13	598	591	594	614	611	613	626	621	624	629	627	628
14	598	591	594	615	613	613	625	621	623	629	627	628
15	594	589	592	616	614	615	627	621	624	629	628	629
16	661	592	629	622	616	618	626	622	624	631	629	630
17	660	657	659	623	622	622	624	621	623	631	630	631
18	658	652	656	624	621	623	626	622	623	633	630	632
19	657	645	651	627	624	626	625	624	624	633	631	632
20	652	646	650	625	623	624	627	625	626	636	633	634
21	652	646	651	624	623	624	627	623	625	636	629	632
22	654	648	652	624	621	623	626	623	624	629	629	629
23	653	645	650	625	623	624	627	623	625	631	629	630
24	651	645	650	626	624	625	628	626	627	630	628	628
25	652	647	650	625	623	624	629	628	629	631	628	629
26	652	646	649	625	624	625	629	628	629	631	629	630
27	653	639	647	626	623	625	629	628	628	630	626	628
28	644	639	641	626	623	624	630	628	629	629	626	627
29	643	624	634	627	623	625	631	629	630	630	627	628
30	626	621	624	627	625	626	630	629	630	630	626	628
31	---	---	---	628	623	626	630	629	630	---	---	---
MONTH	661	584	623	628	592	615	631	621	626	636	626	629
YEAR	723	584	670									

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	12.4	11.4	11.8	10.5	10.2	10.4	8.1	7.8	7.9	5.7	5.7	5.7
2	11.4	11.1	11.3	10.4	10.2	10.3	7.9	7.7	7.8	5.8	5.7	5.7
3	11.8	11.1	11.2	10.2	10.2	10.2	7.7	7.5	7.6	5.8	5.6	5.7
4	11.8	11.2	11.5	10.2	9.9	10.0	7.6	7.5	7.5	5.6	5.6	5.6
5	11.9	11.0	11.5	10.0	9.8	9.9	7.5	7.4	7.5	5.6	5.4	5.5
6	11.4	11.0	11.2	10.1	9.9	10.0	7.4	7.3	7.4	5.4	5.4	5.4
7	11.6	11.0	11.3	9.9	9.6	9.8	7.3	7.2	7.3	5.4	5.3	5.3
8	12.3	11.1	11.5	10.0	9.8	9.9	7.3	7.2	7.2	5.3	5.2	5.3
9	12.3	11.6	11.9	9.9	9.2	9.5	7.3	7.1	7.2	5.2	5.2	5.2
10	12.3	11.6	11.9	9.5	9.1	9.3	7.2	7.1	7.2	5.2	5.1	5.2
11	12.3	11.7	12.0	9.4	9.0	9.3	7.2	7.1	7.2	5.1	5.0	5.1
12	12.2	11.7	11.9	9.6	9.4	9.5	7.1	7.1	7.1	5.0	4.9	5.0
13	12.2	11.5	11.9	9.6	9.2	9.5	7.2	7.0	7.1	4.9	4.8	4.9
14	12.2	11.6	11.9	9.6	9.1	9.3	7.1	6.9	7.0	4.9	4.8	4.8
15	12.0	11.4	11.7	9.2	8.8	9.0	6.9	6.8	6.9	4.8	4.6	4.7
16	12.5	11.7	12.0	9.1	8.8	9.0	6.8	6.6	6.8	4.7	4.6	4.6
17	12.5	11.5	12.2	8.9	8.7	8.8	6.6	6.4	6.6	4.6	4.5	4.6
18	11.6	11.2	11.5	9.0	8.7	8.8	6.4	6.3	6.3	4.7	4.6	4.6
19	12.1	11.2	11.8	8.8	8.5	8.7	6.3	6.2	6.3	4.7	4.6	4.6
20	12.2	11.6	12.0	8.9	8.6	8.8	6.2	6.1	6.2	4.7	4.6	4.6
21	12.2	11.3	11.9	8.8	8.5	8.7	6.2	6.1	6.2	4.6	4.5	4.5
22	11.3	10.6	11.0	8.8	8.7	8.7	6.1	6.0	6.1	4.5	4.5	4.5
23	10.6	10.4	10.5	8.9	8.7	8.8	6.0	5.9	6.0	4.5	4.4	4.5
24	10.8	10.4	10.6	8.8	8.5	8.6	5.9	5.9	5.9	4.4	4.3	4.3
25	10.9	10.1	10.5	8.7	8.5	8.6	5.9	5.8	5.8	4.3	4.3	4.3
26	10.9	10.0	10.7	8.6	8.4	8.5	5.9	5.8	5.8	4.3	4.0	4.2
27	10.4	10.0	10.2	8.5	8.3	8.4	5.8	5.8	5.8	4.1	3.9	4.0
28	10.5	10.2	10.3	8.4	8.2	8.3	5.8	5.7	5.7	4.0	3.8	3.9
29	11.0	10.5	10.8	8.2	8.1	8.2	5.8	5.7	5.7	4.0	3.9	4.0
30	10.7	10.5	10.6	8.2	8.0	8.1	5.8	5.7	5.7	4.0	3.9	4.0
31	10.5	10.4	10.5	---	---	---	5.8	5.7	5.7	4.0	3.9	4.0
MONTH	12.5	10.0	11.3	10.5	8.0	9.2	8.1	5.7	6.7	5.8	3.8	4.8

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	4.0	3.9	3.9	3.5	3.2	3.3	4.3	4.3	4.3	6.5	5.9	6.3
2	3.9	3.7	3.9	3.7	3.3	3.5	4.3	4.2	4.3	6.4	5.9	6.2
3	3.8	3.7	3.8	3.4	3.2	3.3	4.4	4.2	4.3	6.1	5.9	6.0
4	4.1	3.8	4.0	3.4	3.0	3.2	4.5	4.3	4.4	6.8	5.9	6.3
5	4.1	3.8	4.0	3.5	3.1	3.3	4.3	4.2	4.3	6.6	6.2	6.4
6	3.8	3.4	3.6	3.5	3.3	3.4	4.3	4.2	4.3	7.0	6.2	6.4
7	3.9	3.6	3.8	3.5	3.3	3.4	4.5	4.3	4.4	7.2	6.8	7.0
8	3.8	3.6	3.7	3.4	3.1	3.3	4.4	4.4	4.4	7.1	6.8	6.9
9	3.7	3.5	3.6	3.5	3.1	3.3	4.4	4.4	4.4	6.8	6.7	6.8
10	3.7	3.5	3.6	3.5	3.3	3.4	4.4	4.4	4.4	7.2	6.7	6.9
11	3.7	3.5	3.6	3.5	3.4	3.4	4.5	4.3	4.4	8.1	7.0	7.3
12	3.6	3.3	3.5	3.7	3.4	3.5	4.4	4.3	4.3	7.8	6.9	7.3
13	3.5	3.2	3.4	3.5	3.3	3.4	4.4	4.2	4.3	8.5	7.3	7.7
14	3.6	3.4	3.5	3.6	3.4	3.5	4.5	4.4	4.4	8.9	7.4	8.0
15	3.4	3.3	3.3	3.7	3.5	3.6	4.7	4.4	4.6	8.1	7.9	8.0
16	3.7	3.3	3.6	3.7	3.5	3.6	4.9	4.6	4.7	8.7	7.8	8.1
17	3.7	3.5	3.6	3.7	3.6	3.7	4.9	4.7	4.8	8.7	7.8	8.2
18	3.5	3.3	3.4	3.8	3.6	3.7	5.2	4.9	5.0	9.8	8.2	8.9
19	3.7	3.3	3.5	3.9	3.7	3.8	5.6	5.1	5.3	8.9	8.1	8.4
20	3.5	3.1	3.3	4.0	3.8	3.9	5.8	5.3	5.5	8.4	8.1	8.3
21	3.5	3.1	3.3	4.0	3.8	3.9	6.0	5.5	5.8	8.4	8.0	8.2
22	3.5	3.3	3.4	4.0	3.9	4.0	6.1	5.6	5.8	8.8	8.1	8.5
23	3.5	3.2	3.4	4.1	4.0	4.0	5.8	5.2	5.4	8.7	8.2	8.6
24	3.3	3.1	3.2	4.0	4.0	4.0	5.4	5.2	5.3	8.7	7.9	8.3
25	3.4	3.1	3.3	4.1	4.0	4.1	5.7	5.3	5.5	8.5	8.0	8.3
26	3.4	3.3	3.3	4.2	4.1	4.1	5.8	5.7	5.8	9.0	8.3	8.7
27	3.6	3.3	3.4	4.2	4.1	4.1	5.8	5.5	5.7	9.3	8.5	8.8
28	3.5	3.1	3.3	4.2	4.1	4.1	5.9	5.6	5.7	9.0	7.6	8.3
29	---	---	---	4.2	4.1	4.2	6.5	5.6	6.0	7.7	7.5	7.6
30	---	---	---	4.3	4.1	4.2	6.4	5.9	6.2	9.0	7.6	8.0
31	---	---	---	4.4	4.2	4.3	---	---	---	9.0	8.5	8.8
MONTH	4.1	3.1	3.5	4.4	3.0	3.7	6.5	4.2	4.9	9.8	5.9	7.7
	JUNE			JULY			AUGUST			SEPTEMBER		
1	9.3	8.7	9.1	12.4	10.9	11.7	12.5	11.9	12.2	13.4	13.1	13.3
2	9.5	9.2	9.4	12.8	11.5	12.0	12.5	11.9	12.2	13.3	13.0	13.1
3	9.5	8.5	8.9	12.8	11.9	12.3	12.6	11.8	12.3	13.2	12.9	13.1
4	9.3	8.8	9.2	12.4	11.9	12.1	12.3	11.8	12.1	13.1	12.7	13.0
5	9.7	9.1	9.5	13.2	12.4	12.8	12.7	11.7	12.2	13.1	12.7	12.9
6	10.0	9.3	9.7	12.7	12.6	12.7	12.7	11.5	12.2	13.3	12.7	13.1
7	10.2	9.7	9.9	13.0	12.6	12.7	12.7	11.3	12.2	13.9	13.2	13.6
8	10.0	9.5	9.8	12.9	12.6	12.8	13.8	11.8	12.8	15.0	13.6	14.2
9	10.0	9.5	9.8	13.2	12.6	12.9	13.6	12.0	13.0	15.0	14.6	14.8
10	10.2	9.6	10.0	13.0	12.8	12.9	13.2	11.8	12.6	14.9	14.6	14.8
11	10.4	10.2	10.3	13.1	12.5	12.8	13.0	12.0	12.6	15.1	14.7	14.8
12	11.6	10.2	10.6	12.7	12.0	12.4	14.1	11.6	12.9	15.1	14.7	14.9
13	10.6	9.9	10.2	12.3	12.0	12.2	14.5	12.8	13.7	14.8	14.6	14.7
14	10.5	9.9	10.4	12.8	12.3	12.6	14.6	13.3	13.8	14.9	14.5	14.7
15	10.9	10.4	10.7	13.0	12.7	12.9	14.8	13.2	13.9	14.9	14.2	14.6
16	10.9	8.3	9.5	12.9	11.9	12.5	14.9	12.9	14.0	14.5	13.5	13.9
17	8.4	8.3	8.4	12.4	11.9	12.1	14.9	13.4	14.2	13.7	13.5	13.5
18	8.4	8.1	8.2	12.3	11.6	12.0	14.9	13.3	14.3	14.1	13.7	14.1
19	8.5	8.2	8.4	11.8	10.7	11.3	14.5	13.3	13.9	14.3	14.0	14.2
20	8.9	8.5	8.7	11.8	11.3	11.6	13.6	11.9	13.2	14.1	13.4	13.8
21	10.3	8.6	8.9	12.0	11.5	11.8	13.2	11.9	12.9	15.0	13.6	14.3
22	10.5	9.8	10.1	12.4	11.6	12.0	13.4	12.9	13.2	15.0	14.9	15.0
23	10.6	10.1	10.4	12.1	11.6	11.9	13.1	12.4	12.9	14.9	14.6	14.8
24	10.7	10.4	10.6	12.1	11.8	12.0	12.8	12.4	12.6	14.9	14.5	14.7
25	10.7	10.2	10.4	12.2	11.9	12.0	12.9	12.7	12.8	14.6	14.2	14.5
26	10.5	10.3	10.4	12.2	11.8	12.0	13.1	12.9	13.0	14.3	14.1	14.2
27	10.6	10.3	10.4	12.2	11.8	12.1	13.1	12.9	13.0	14.8	14.2	14.4
28	10.3	10.1	10.2	12.4	12.0	12.3	13.5	12.7	13.1	14.8	14.3	14.5
29	10.9	10.1	10.4	12.6	12.0	12.3	13.1	12.6	12.8	14.6	14.2	14.4
30	11.1	10.7	10.9	12.3	11.8	12.1	13.0	12.6	12.8	14.9	14.3	14.6
31	---	---	---	12.6	11.6	12.2	13.4	12.8	13.1	---	---	---
MONTH	11.6	8.1	9.8	13.2	10.7	12.3	14.9	11.3	13.0	15.1	12.7	14.1
YEAR	15.1	3.0	8.4									

GREEN RIVER BASIN

09253000 LITTLE SNAKE RIVER NEAR SLATER, CO

LOCATION.--Lat 40°59'58", long 107°08'34", in SW¹/₄ NW¹/₄ 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 current year.

REVISED RECORDS.--WSP 1733: 1960.

GAGE.--Water-stage recorder. Datum of gage is 6,831.00 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 2,000 acres upstream from station. Station operated and record provided by Colorado District. U.S. Geological Survey data collection platform with satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	45	e37	e40	e39	e36	147	507	2450	446	81	42
2	33	39	e39	e39	e39	e36	136	440	2640	390	72	43
3	33	43	e41	e41	e39	e36	142	396	2530	357	65	39
4	37	44	e41	e41	e39	e36	167	498	2270	326	66	36
5	35	42	e40	e41	e39	e36	145	724	2260	303	96	38
6	33	42	e40	e42	e39	e38	131	1030	2180	284	93	37
7	32	e42	e40	e42	e39	e42	124	1250	1980	261	72	38
8	31	e41	e39	e42	e38	e48	123	1290	2030	235	63	39
9	31	e41	e38	e41	e38	e47	123	1300	1970	222	60	34
10	31	e41	e38	e41	e38	e50	120	1400	1920	211	78	32
11	30	e41	e38	e41	e38	e55	110	1500	1810	191	99	39
12	30	e41	e39	e42	e38	e60	104	1520	1650	167	95	57
13	30	42	e39	e41	e38	e65	101	1540	1430	177	90	49
14	30	42	e39	e40	e38	e70	102	1610	1320	148	73	43
15	30	e42	e40	e40	e38	e75	109	1670	1210	130	65	39
16	32	e41	e41	e41	e38	83	123	1890	1100	121	55	46
17	33	e41	e42	e41	e37	80	172	2080	1060	118	50	43
18	27	e42	e42	e40	e37	83	253	2130	1120	117	49	41
19	43	e41	e41	e40	e37	91	334	2040	1380	121	50	303
20	41	e42	e40	e40	e37	108	432	1950	1300	125	47	209
21	37	e40	e39	e40	e37	123	501	1890	1350	112	47	257
22	33	e41	e38	e40	e37	124	390	1940	1260	98	45	152
23	35	e41	e38	e40	e37	130	372	1810	1110	96	43	127
24	36	e40	e38	e40	e37	134	360	1870	939	100	41	101
25	40	e39	e40	e40	e37	119	360	1900	781	93	41	85
26	39	e37	e40	e40	e37	119	463	1640	691	86	43	88
27	37	e36	e40	e40	e37	124	532	1360	629	83	51	124
28	53	34	e40	e40	e36	121	819	1260	588	85	60	87
29	39	e36	e40	e40	---	123	834	1750	542	94	47	77
30	52	e36	e40	e39	---	122	598	1960	491	78	43	71
31	56	---	e40	e39	---	138	---	2040	---	79	41	---
TOTAL	1113	1215	1227	1254	1058	2552	8427	46185	43991	5454	1921	2416
MEAN	35.9	40.5	39.6	40.5	37.8	82.3	281	1490	1466	176	62.0	80.5
MAX	56	45	42	42	39	138	834	2130	2640	446	99	303
MIN	27	34	37	39	36	36	101	396	491	78	41	32
AC-FT	2210	2410	2430	2490	2100	5060	16710	91610	87260	10820	3810	4790

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1997, BY WATER YEAR (WY)

	MEAN	38.1	35.4	31.6	31.3	32.3	49.4	261	1089	955	162	39.1	29.4
MAX	91.8	77.8	59.4	74.5	59.5	139	842	2122	2231	519	97.3	80.5	
(WY)	1962	1962	1983	1983	1962	1989	1974	1984	1983	1983	1945	1997	
MIN	17.6	18.4	14.8	16.3	20.4	23.8	77.6	405	178	33.4	17.0	11.0	
(WY)	1953	1959	1977	1945	1945	1977	1973	1977	1987	1977	1954	1944	

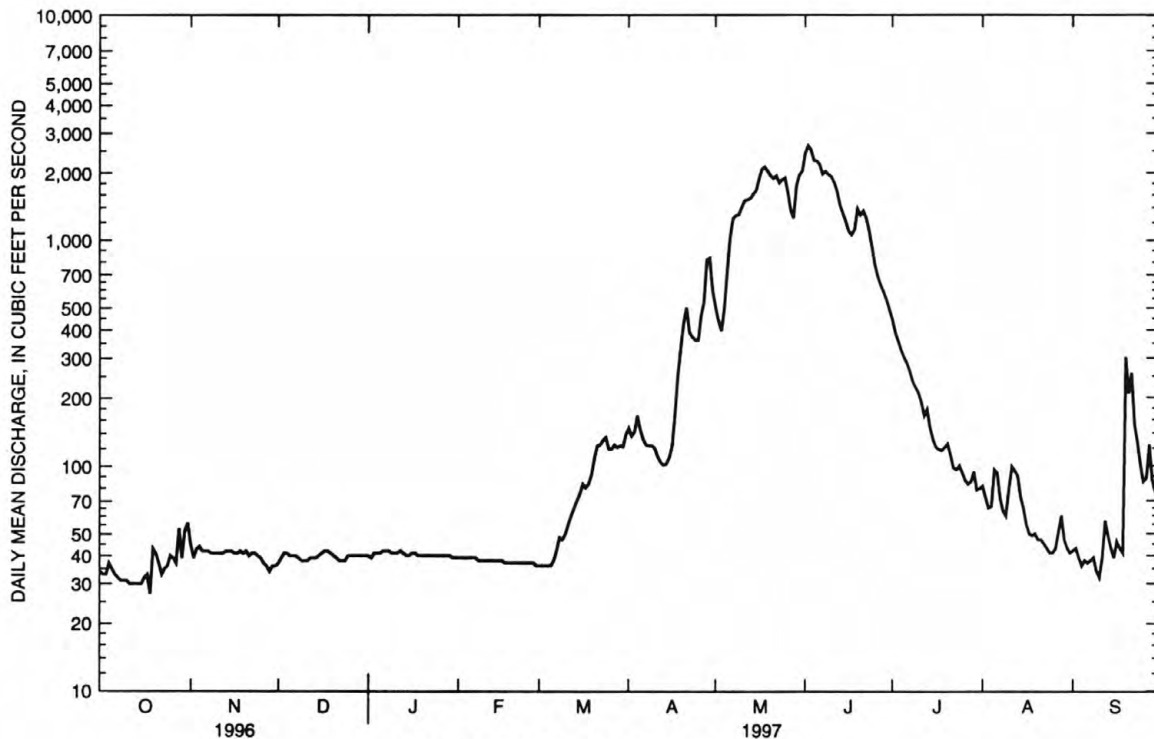
09253000 LITTLE SNAKE RIVER NEAR SLATER, CO--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1944 - 1997
ANNUAL TOTAL	101400	116813	--
ANNUAL MEAN	277	320	230
HIGHEST ANNUAL MEAN	--	--	423
LOWEST ANNUAL MEAN	--	--	86.6
HIGHEST DAILY MEAN	3030	2640	3960
LOWEST DAILY MEAN	23 ^a	27	4.2
ANNUAL SEVEN-DAY MINIMUM	25	30	6.2
INSTANTANEOUS PEAK FLOW	--	3140	4780
INSTANTANEOUS PEAK STAGE	--	7.75	8.78 ^b
ANNUAL RUNOFF (AC-FT)	201100	231700	166600
10 PERCENT EXCEEDS	1260	1330	822
50 PERCENT EXCEEDS	40	48	40
90 PERCENT EXCEEDS	29	37	21

a Also occurred Sep 4-5.

b Maximum gage height, 8.95 ft, Apr 25, 1974.

e Estimated.



09253000 LITTLE SNAKE RIVER NEAR SLATER, CO

GREEN RIVER BASIN

09253455 HAGGARTY CREEK ABOVE BELVIDERE DITCH, NEAR ENCAMPMENT, WY

LOCATION.--Lat 41°09'02", long 107°07'06", in SE¹/₄ 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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TEMPER-ATURE AIR (DEG C) (00020)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED SATUR-ATION (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
MAY 15...	1635	96	27	6.6	1.5	12.0	566	10.9	105	10	3.0
AUG 19...	1740	3.6	41	7.8	12.5	16.5	568	6.8	86	16	4.6

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
MAY 15...	0.7	0.9	0.1	0.3	11	1.4	0.2	<0.1	6.5	20	0.03
AUG 19...	1.0	1.2	0.1	0.4	18	2.0	0.2	<0.1	8.1	28	0.04

DATE	SOLIDS, DIS-SOLVED PER DAY (70302)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC, DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
MAY 15...	5.23	130	<1	11	<0.5	7.1	<1	<1.0	<3	15	76
AUG 19...	0.27	18	<1	14	<0.5	9.4	<1	<1.0	4	16	25

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM, DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY, DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
MAY 15...	<1	<4	3	<0.1	<10	<10	<1	<1	16	<6	<3
AUG 19...	<1	<4	11	0.6	<10	<10	<1	1	20	<6	10

09253465 WEST FORK BATTLE CREEK AT BATTLE CREEK CAMPGROUND, NEAR SAVERY, WY

LOCATION.--Lat 41°05'37", long 107°09'31", 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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TEMPER-ATURE AIR (DEG C) (00020)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED SATUR-ATION (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
		MAY 15... AUG 19...	1840 1635	316 2.4	43 147	6.8 8.1	5.0 17.5	14.5 28.0	587 591	10.5 7.2	107 98	18 56
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
		MAY 15... AUG 19...	0.94 2.8	1.0 4.4	0.1 0.3	0.4 0.7	19 46	1.4 17	0.2 2.1	<0.1 0.4	7.0 9.6	29 83
DATE		SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
		MAY 15... AUG 19...	24.4 0.54	105 14	<1 <1	15 32	<0.5 <0.5	11.3 22.8	<1 <1	<1.0 <1.0	<3 <3	8 8
DATE		LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
		MAY 15... AUG 19...	<1 <1	<4 <4	2 2	0.2 <0.1	<10 <10	<10 <10	<1 <1	<1 <1	30 120	<6 <6

09255000 SLATER FORK NEAR SLATER, CO--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1932 - 1997	
ANNUAL TOTAL	34592.2		44312		--	
ANNUAL MEAN	94.5		121		77.8	
HIGHEST ANNUAL MEAN	--		--		157	
LOWEST ANNUAL MEAN	--		--		20.5	
HIGHEST DAILY MEAN	1320	May 17	937	Jun 2	1500	May 16 1984
LOWEST DAILY MEAN	3.3	Sep 23	11 ^a	Sep 4	.00 ^b	Aug 2 1934
ANNUAL SEVEN-DAY MINIMUM	4.2	Aug 30	11	Sep 2	.00 ^c	Aug 2 1934
INSTANTANEOUS PEAK FLOW	--		1150	Jun 2	2250 ^c	May 16 1984
INSTANTANEOUS PEAK STAGE	--		9.69	Jun 2	11.78 ^d	May 16 1984
ANNUAL RUNOFF (AC-FT)	68610		87890		56340	
10 PERCENT EXCEEDS	299		506		252	
50 PERCENT EXCEEDS	21		23		19	
90 PERCENT EXCEEDS	8.5		15		7.0	

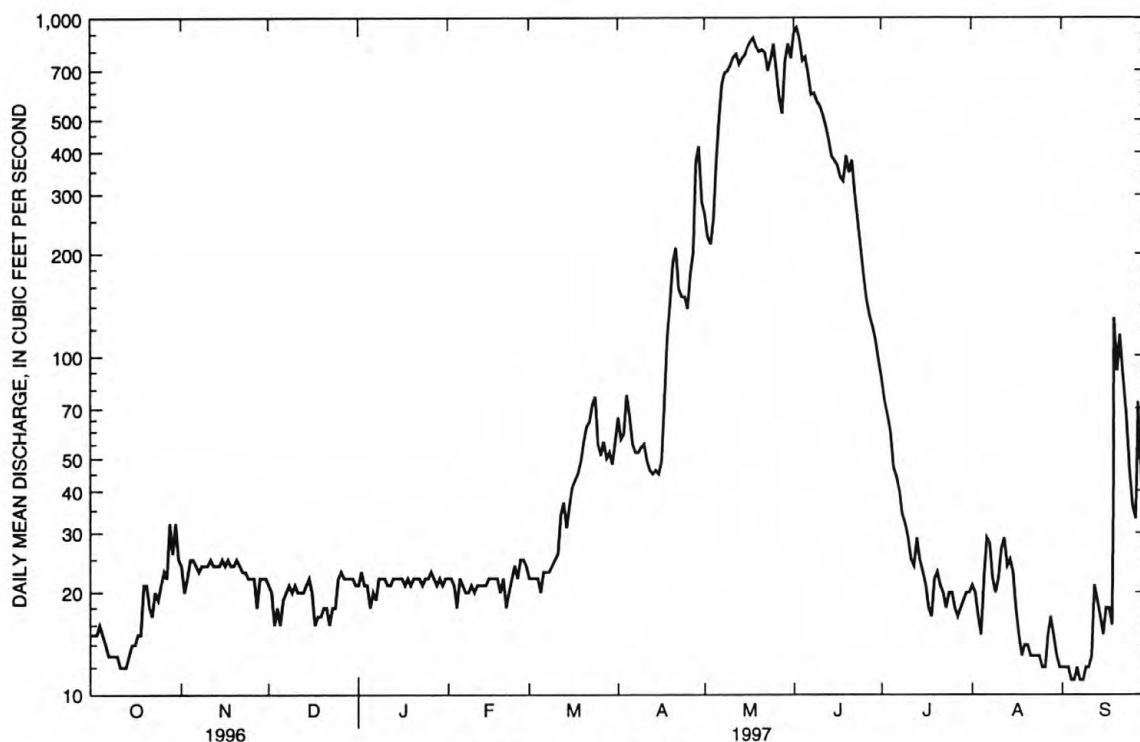
a Also occurred Sep 5, and 7-8.

b Also occurred several days during years 1936, 1954, and 1977.

c From rating curve extended above 1000 ft³/s.

d From floodmark.

e Estimated.



009255000 SLATER FORK NEAR SLATER, CO

GREEN RIVER BASIN

09257000 LITTLE SNAKE RIVER NEAR DIXON, WY

LOCATION.--Lat 41°01'42", long 107°32'55", in SE¹/₄ NW¹/₄ sec.8, T.12 N., R.90 W., Carbon County, Hydrologic Unit 14050003, on left bank 200 ft upstream from highway bridge, 1,000 ft upstream from Willow Creek, and 0.8 mi west of Dixon.

DRAINAGE AREA.--988 mi².

PERIOD OF RECORD.--May 1910 to September 1923, March 1938 to current year. No winter records since 1971. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1243: 1920(M). WDR WY-85-1: 1984(M).

GAGE.--Water-stage recorder. Datum of gage is 6,331.22 ft above sea level. May 27, 1910, to Sept. 30, 1923, nonrecording gage on highway bridge 200 ft downstream at datum 2.98 ft higher; Mar. 15, 1938, to Sept. 30, 1957, water-stage recorder at site 225 ft downstream at datum 2.98 ft higher; Oct. 1, 1957, to June 6, 1968, at site 850 ft downstream at present datum; and June 7 to Sept. 30, 1968, at site 225 ft downstream at present datum.

REMARKS.--Estimated daily discharges: May 1-5. Records fair except those daily discharges below 10 ft³/s, which are poor. Diversions for irrigation of about 9,500 acres upstream from station. One diversion upstream from station for irrigation of about 3,000 acres downstream. Transbasin diversions upstream from station. National Weather Service data collection platform with satellite telemetry at station. Results of discharge measurements, in cubic feet per second, made during the period when the station was not in operation, are given below:

Oct. 3 . . . 0.31
Nov. 20 . . . 175

COOPERATION.--Station operated and record provided by Office of the Wyoming State Engineer; record reviewed by U.S. Geological Survey.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 3,200 ft³/s and maximum (*) during period of operation:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 2	1400	*5,870	*10.37

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	2500	4860	918	22	1.3
2	---	---	---	---	---	---	---	2300	5540	780	18	1.9
3	---	---	---	---	---	---	---	2100	5610	658	9.0	1.8
4	---	---	---	---	---	---	---	2400	5380	576	4.1	.98
5	---	---	---	---	---	---	---	2600	5080	503	14	.66
6	---	---	---	---	---	---	---	2960	4660	443	69	.54
7	---	---	---	---	---	---	---	4100	4250	355	48	.53
8	---	---	---	---	---	---	---	3880	4150	298	20	.47
9	---	---	---	---	---	---	---	3700	4330	267	9.4	.38
10	---	---	---	---	---	---	---	3990	3950	244	9.2	.33
11	---	---	---	---	---	---	---	3920	3910	221	42	.32
12	---	---	---	---	---	---	---	4070	3650	201	64	.65
13	---	---	---	---	---	---	---	3910	3330	209	60	5.1
14	---	---	---	---	---	---	---	4100	2970	193	40	2.5
15	---	---	---	---	---	---	---	4100	2940	157	29	1.2
16	---	---	---	---	---	---	---	4330	2640	118	15	1.5
17	---	---	---	---	---	---	---	4640	2490	78	8.3	6.8
18	---	---	---	---	---	---	---	4750	2470	62	8.5	4.8
19	---	---	---	---	---	---	---	4570	2870	59	9.5	246
20	---	---	---	---	---	---	---	4360	2840	76	9.0	553
21	---	---	---	---	---	---	---	4190	2870	69	7.1	513
22	---	---	---	---	---	---	---	4220	2750	46	5.2	504
23	---	---	---	---	---	---	---	3840	2500	36	4.3	346
24	---	---	---	---	---	---	---	3880	2150	40	2.9	267
25	---	---	---	---	---	---	---	4170	1840	42	1.7	207
26	---	---	---	---	---	---	---	3790	1600	35	1.4	175
27	---	---	---	---	---	---	---	3310	1450	23	1.8	271
28	---	---	---	---	---	---	---	3020	1310	18	3.3	236
29	---	---	---	---	---	---	---	3440	1180	20	5.9	177
30	---	---	---	---	---	---	---	4790	1030	34	2.2	152
31	---	---	---	---	---	---	---	4360	---	22	1.0	---
TOTAL	---	---	---	---	---	---	---	116290	96600	6801	544.8	3678.76
MEAN	---	---	---	---	---	---	---	3751	3220	219	17.6	123
MAX	---	---	---	---	---	---	---	4790	5610	918	69	553
MIN	---	---	---	---	---	---	---	2100	1030	18	1.0	.32
AC-FT	---	---	---	---	---	---	---	230700	191600	13490	1080	7300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1997, BY WATER YEAR (WY)

	73.8	94.3	88.8	85.4	101	215	851	2534	1845	216	26.8	26.1
MEAN	73.8	94.3	88.8	85.4	101	215	851	2534	1845	216	26.8	26.1
MAX	282	245	160	130	433	744	2155	6085	4362	1160	229	180
(WY)	1917	1921	1921	1917	1962	1919	1985	1984	1984	1917	1984	1984
MIN	1.18	36.3	45.0	37.1	47.8	82.8	236	388	181	1.62	.33	.21
(WY)	1990	1956	1923	1963	1967	1965	1973	1977	1987	1994	1992	1980

09257000 LITTLE SNAKE RIVER NEAR DIXON, WY--Continued

SUMMARY STATISTICS

FOR 1997 WATER YEAR*

WATER YEARS 1911 - 1971

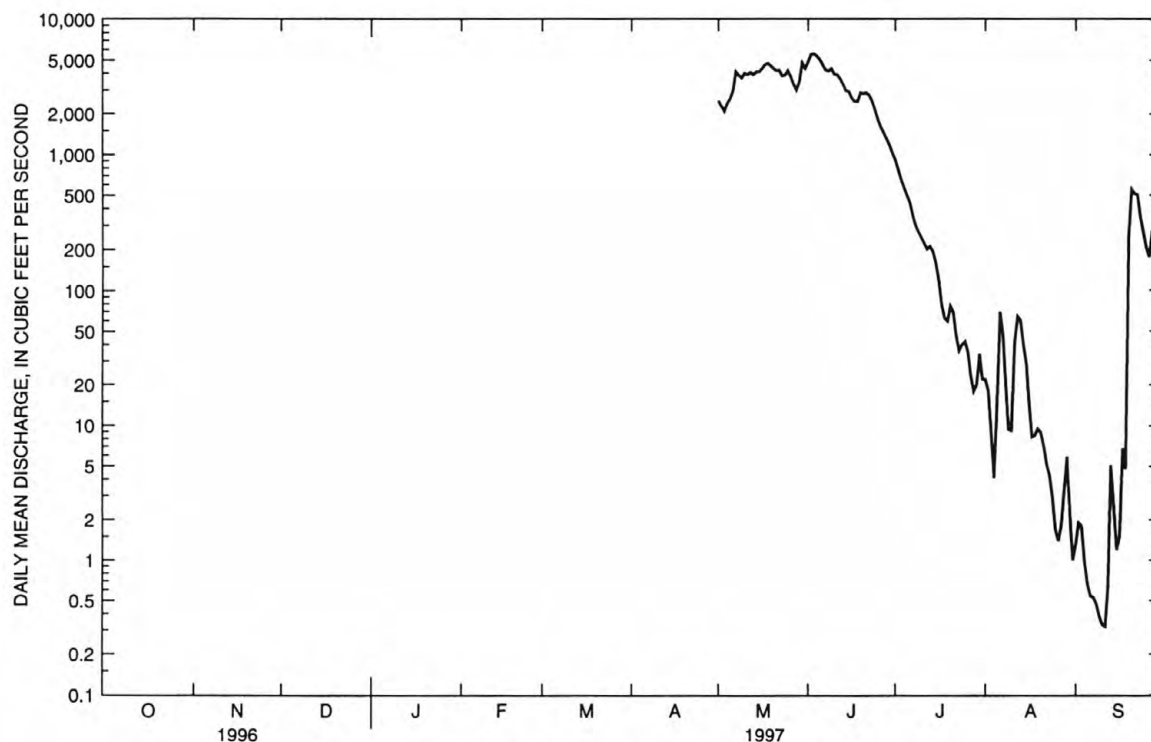
ANNUAL MEAN	--		514	
HIGHEST ANNUAL MEAN	--		930	1920
LOWEST ANNUAL MEAN	--		212	1961
HIGHEST DAILY MEAN	5610	Jun 3	10400	May 16 1984#
LOWEST DAILY MEAN	--	.32 Sep 11	.20	Sep 26 1956#
ANNUAL SEVEN-DAY MINIMUM	--		.35	Sep 3 1969
INSTANTANEOUS PEAK FLOW	5870	Jun 2	13000 ^a	May 16 1984#
INSTANTANEOUS PEAK STAGE	10.37	Jun 2	13.56 ^b	May 16 1984#
ANNUAL RUNOFF (AC-FT)	--		372600	
10 PERCENT EXCEEDS	--		1850	
50 PERCENT EXCEEDS	--		100	
90 PERCENT EXCEEDS	--		8.0	

* During period of operation.

For period of record through 1997.

a From rating curve extended above 10,000 ft³/s, some increase in peak caused by dam failure.

b From floodmarks.



09257000 LITTLE SNAKE RIVER NEAR DIXON, WY

GREEN RIVER BASIN

09259050 LITTLE SNAKE RIVER BELOW BAGGS, WY

LOCATION.--Lat 41°01'43", long 107°41'14", 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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE OF (MM HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (MG/L) (00301)
MAY									
12...	1115	4450	136	8.2	6.5	21.0	612	8.7	88
JUN									
05...	1210	5200	109	7.8	10.5	25.0	605	8.5	96
JUL									
16...	1430	147	235	8.3	22.5	27.5	611	8.1	118
AUG									
19...	1435	33	383	8.6	22.5	26.5	615	8.9	128

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
MAY								
12...	56	16	3.7	4.3	0.3	1.2	60	12
JUN								
05...	38	11	2.6	3.8	0.3	0.9	44	7.6
JUL								
16...	87	25	6.1	10	0.5	1.4	95	17
AUG								
19...	140	38	11	22	0.8	2.2	158	36

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
MAY								
12...	1.1	0.1	12	87	0.12	1050	951	11400
JUN								
05...	0.8	<0.1	10	63	0.09	888	932	13100
JUL								
16...	2.2	0.2	17	136	0.18	53.8	10	4.0
AUG								
19...	5.5	0.3	5.5	215	0.29	19.2	24	2.1

LOCATION.--Lat 40°57'55", long 110°51'10", 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.

GAGE.--Water-stage recorder. Elevation of gage is 7,965 ft above sea level, from river-profile map. Prior to Oct. 1, 1986, at datum 3.0 ft lower.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,230 ft³/s, June 6, 1986, gage height, 4.05 ft; maximum gage height, 4.28 ft, June 19, 1983, datum then in use; minimum, 6.8 ft³/s, Apr. 12, 1984, result of upstream ice jam.

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 18	2000	1,840	6.57
June 5	0200	*2,090	*6.75

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1997, BY WATER YEAR (WY)

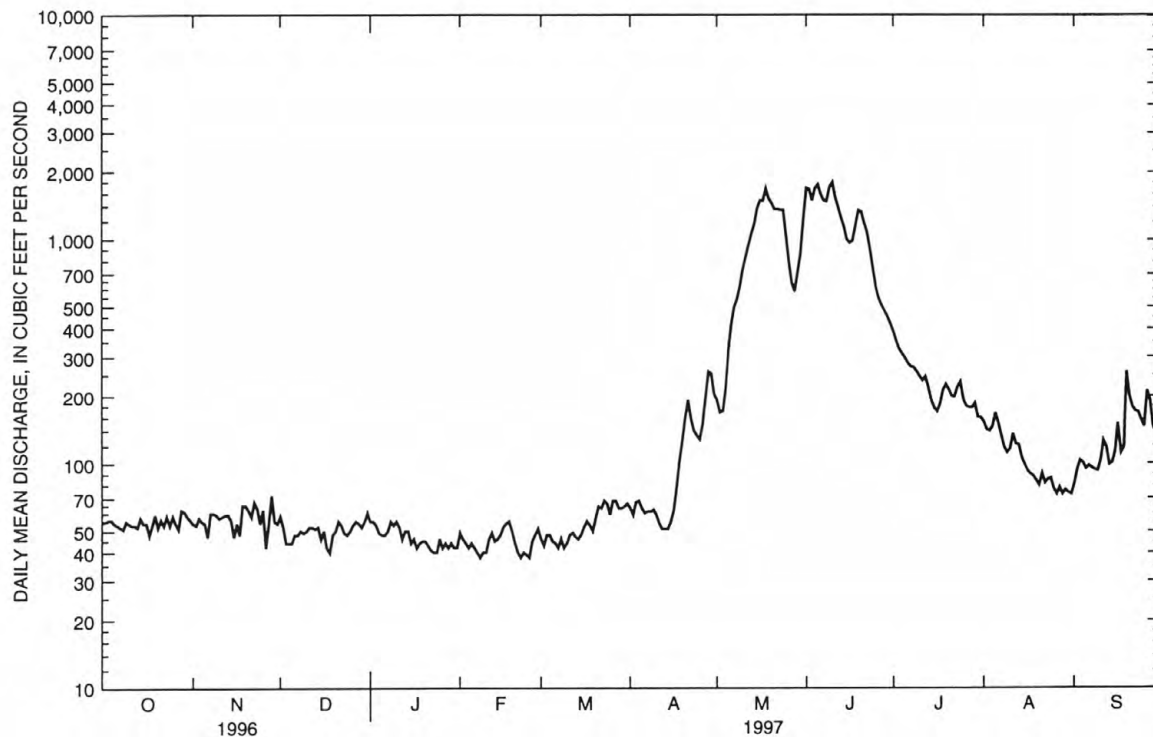
MEAN	62.4	54.2	46.7	42.0	40.2	43.6	111	600	873	303	94.9	73.7
MAX	208	106	94.9	72.4	64.3	69.0	316	1044	1990	1105	244	229
(WY)	1983	1984	1984	1984	1984	1986	1946	1984	1986	1995	1965	1983
MIN	30.8	32.5	27.7	29.6	25.3	26.0	37.2	162	204	67.4	37.5	23.9
(WY)	1959	1955	1960	1991	1964	1964	1944	1977	1992	1961	1954	1956

BEAR RIVER BASIN

10011500 BEAR RIVER NEAR UTAH-WYOMING STATE LINE--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1943 - 1997	
ANNUAL TOTAL	78924		90439		--	
ANNUAL MEAN	216		248		196	
HIGHEST ANNUAL MEAN	--		--		335	
LOWEST ANNUAL MEAN	--		--		81.5	
HIGHEST DAILY MEAN	1970	May 16	1790	Jun 10	2680	Jun 4 1986
LOWEST DAILY MEAN	29	Jan 19	38	Feb 8	--	--
ANNUAL SEVEN-DAY MINIMUM	33	Feb 12	41	Feb 20	21	Dec 28 1959
ANNUAL RUNOFF (AC-FT)	156500		179400		141800	
10 PERCENT EXCEEDS	648		955		614	
50 PERCENT EXCEEDS	64		63		58	
90 PERCENT EXCEEDS	42		44		34	

e Estimated.



10015700 SULPHUR CREEK ABOVE RESERVOIR, BELOW LA CHAPELLE CREEK, NEAR EVANSTON, WY

LOCATION.--Lat 41°07'45", long 110°48'21", in NE¹/₄ SE¹/₄ SW¹/₄ sec. 2, T. 13 N., R. 119 W., Uinta County, Hydrologic Unit 16010101, on right bank 0.2 mi downstream from La Chapelle Creek, 3.3 mi upstream from Sulphur Creek Dam, and 12.8 mi southeast of Evanston.

DRAINAGE AREA.--64.2 mi².

PERIOD OF RECORD.--October 1957 to September 30, 1997 (discontinued). Monthly discharge only for October and November 1957, published in WSP 1734. October 1957 to October 1987 not equivalent because of inflow between sites. October 1987 to October 1989 at present site at different datum.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,240 ft above sea level, from topographic map. Prior to October 7, 1987, at site 1.3 mi downstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several diversions for irrigation upstream from station. Station operated and record provided by Utah District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,400 ft³/s, June 1, 1983, gage height, 9.10 ft, from rating curve extended above 1,200 ft³/s, on basis of slope-area measurement of peak flow. Flood was result of released water from temporary blockage of upstream road culverts; no flow at times some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 246 ft³/s, Apr. 16 and June 12, gage height, 7.19 ft; minimum daily discharge, 0.65 ft³/s, Oct. 1, 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.65	9.9	9.2	e17	e14	e15	e28	63	22	4.2	13	3.2
2	.65	9.6	8.1	e16	e15	e17	e28	65	26	5.7	9.3	1.2
3	.66	9.8	11	e16	e13	e17	e29	47	25	6.5	7.2	1.2
4	.88	11	9.9	e17	e13	e16	e32	39	19	8.5	13	1.3
5	.90	13	9.4	e17	e15	e15	e36	57	17	11	49	1.3
6	.84	17	8.4	e17	e13	e16	e39	82	22	10	29	1.4
7	.83	12	9.4	e16	e12	e17	e36	93	23	13	16	1.8
8	.71	14	11	e14	e11	e19	e34	93	51	11	10	2.2
9	.85	19	12	e12	e11	e18	e34	89	135	11	7.3	2.4
10	1.0	20	12	e11	e11	e19	e38	92	111	5.2	9.5	2.4
11	1.0	19	14	e10	e13	e20	e42	96	67	4.2	26	2.4
12	1.1	18	12	e9.9	e13	e20	e44	91	95	14	24	2.2
13	1.0	20	13	e9.2	e15	e20	e45	92	152	20	15	1.4
14	1.1	21	14	e8.5	e14	e20	e47	95	65	9.0	9.8	1.4
15	1.2	23	19	e8.0	e15	e20	e51	94	59	7.1	7.7	1.5
16	1.7	12	e17	e7.5	e15	e21	132	84	50	6.9	5.9	4.2
17	2.1	8.8	e16	e7.5	e15	e23	133	79	41	3.8	5.2	5.0
18	2.3	21	e14	e7.5	e14	e22	103	66	29	4.0	4.9	5.2
19	3.4	50	e14	e8.0	e14	e21	91	48	24	12	4.6	13
20	3.6	26	e15	e9.2	e14	e21	96	36	17	17	5.0	16
21	5.0	15	e15	e9.2	e14	e21	87	29	14	10	5.0	15
22	4.4	27	e14	e8.0	e15	e22	60	30	11	8.5	5.0	28
23	9.4	26	e14	e7.5	e15	e22	56	26	7.7	19	4.7	26
24	7.4	19	e14	e8.5	e14	e24	77	35	6.9	78	5.0	14
25	7.5	15	e14	e11	e14	e23	61	45	6.6	29	4.8	13
26	6.5	14	e16	e10	e16	e26	37	34	5.8	16	4.5	15
27	8.0	8.4	e16	e12	e17	e30	48	25	4.5	16	4.1	15
28	6.6	8.9	e17	e11	e15	e29	89	18	5.6	17	3.9	10
29	8.0	8.8	e18	e12	---	e28	133	19	4.4	18	3.2	9.5
30	9.2	8.7	e17	e12	---	e28	79	25	4.3	17	2.6	8.4
31	9.7	---	e17	e13	---	e28	---	21	---	17	1.7	---
TOTAL	108.17	504.9	420.4	352.5	390	658	1845	1808	1120.8	429.6	315.9	224.6
MEAN	3.49	16.8	13.6	11.4	13.9	21.2	61.5	58.3	37.4	13.9	10.2	7.49
MAX	9.7	50	19	17	17	30	133	96	152	78	49	28
MIN	.65	8.4	8.1	7.5	11	15	28	18	4.3	3.8	1.7	1.2
AC-FT	215	1000	834	699	774	1310	3660	3590	2220	852	627	445

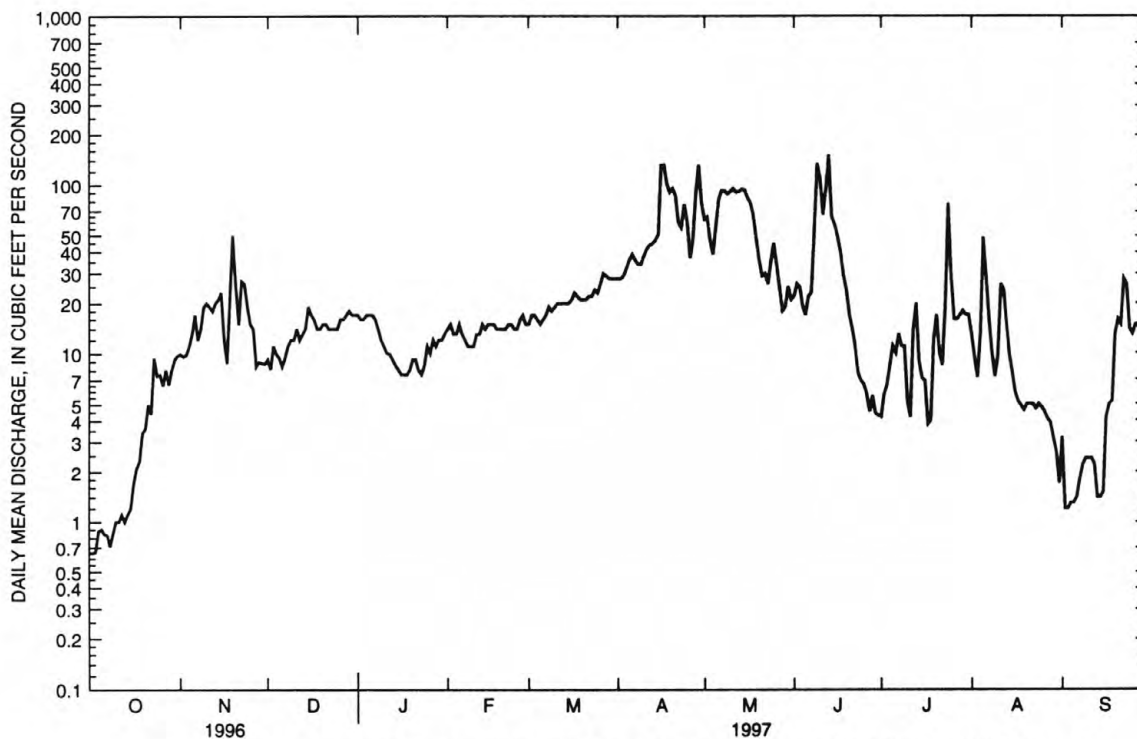
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1997, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	2.16	5.18	5.09	5.08	7.46	24.0	40.5	49.1	23.8	7.19
MAX	6.77	16.8	13.6	11.4	22.2	52.7	69.5	154	55.3	20.7
(WY)	1992	1997	1997	1997	1995	1989	1996	1993	1995	1997
MIN	.18	.59	1.17	1.11	1.18	2.80	15.6	11.4	3.18	.18
(WY)	1991	1991	1991	1991	1991	1991	1995	1992	1994	1988

10015700 SULPHUR CREEK ABOVE RESERVOIR, BELOW LA CHAPELLE CREEK, NEAR EVANSTON, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1988 - 1997
ANNUAL TOTAL	6608.20	8177.87	--
ANNUAL MEAN	18.1	22.4	14.5
HIGHEST ANNUAL MEAN	--	--	25.1
LOWEST ANNUAL MEAN	--	--	7.09
HIGHEST DAILY MEAN	250	152	394
LOWEST DAILY MEAN	.21	.65	.00
ANNUAL SEVEN-DAY MINIMUM	.27	.77	.00
ANNUAL RUNOFF (AC-FT)	13110	16220	10480
10 PERCENT EXCEEDS	45	56	41
50 PERCENT EXCEEDS	9.4	14	4.5
90 PERCENT EXCEEDS	.83	3.3	.22

e Estimated.



10015700 SULPHUR CREEK ABOVE RESERVOIR, BELOW LA CHAPELLE CREEK, NEAR EVANSTON, WY

363

MEAN	9.72	5.04	4.88	4.44	6.07	17.1	38.2	66.1	41.7	30.7	28.1	19.7
MAX	65.8	47.5	40.6	37.3	43.4	105	109	311	217	88.2	58.0	54.7
(WY)	1983	1974	1985	1985	1984	1986	1985	1984	1983	1989	1987	1984
MIN	.000	.000	.000	.000	.000	.000	.000	.000	6.12	2.14	3.92	.000
(WY)	1962	1961	1961	1961	1961	1962	1961	1977	1958	1983	1967	1961

10015900 SULPHUR CREEK BELOW RESERVOIR, NEAR EVANSTON, WY--Continued

SUMMARY STATISTICS

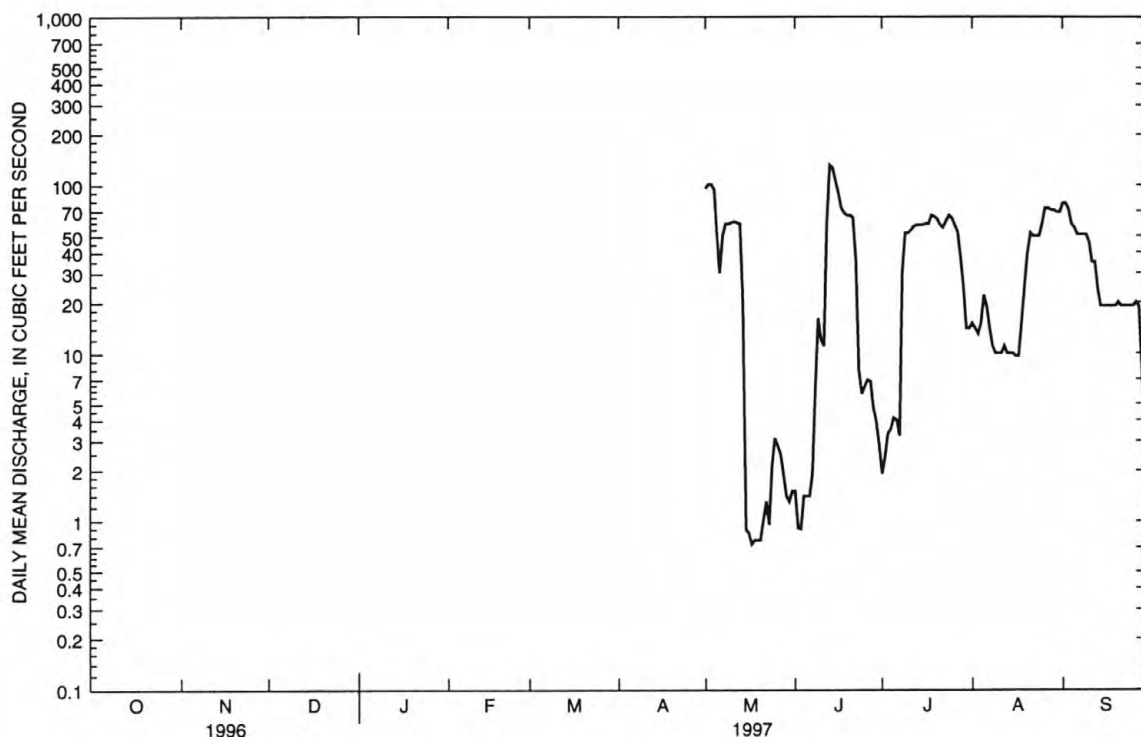
FOR 1997 WATER YEAR*#

WATER YEARS 1958 - 1997*

ANNUAL MEAN	--		23.2	
HIGHEST ANNUAL MEAN	--		58.3	1984
LOWEST ANNUAL MEAN	--		3.89	1977
HIGHEST DAILY MEAN	131	Jun 13	740	May 15 1984
LOWEST DAILY MEAN	.73	May 17	.00	Several days, many years
ANNUAL SEVEN-DAY MINIMUM	--		.00	Several days, many years
INSTANTANEOUS PEAK FLOW	141	Jun 13	154	May 16 1996#
INSTANTANEOUS PEAK STAGE	4.87	Jun 13	4.87	Jun 13 1997#
ANNUAL RUNOFF (AC-FT)	--		16790	
10 PERCENT EXCEEDS	--		62	
50 PERCENT EXCEEDS	--		7.1	
90 PERCENT EXCEEDS	--		.00	

* During period of operation.

Statistics 1958-92, annual instantaneous peaks not available until 1996.



10015900 SULPHUR CREEK BELOW RESERVOIR, NEAR EVANSTON, WY

BEAR RIVER BASIN

365

10016900 BEAR RIVER AT EVANSTON, WY

LOCATION.--Lat 41°16'13", long 110°57'47", 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).

GAGE.--Water-stage recorder. Elevation of gage is 6,730 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Natural flow of stream affected by storage reservoirs, diversions for irrigation, and return flow from irrigated areas. U.S. Geological Survey data collection platform with satellite telemetry at station. Results of discharge measurements, in cubic feet per second, made during the period when the station was not in operation, are given below:

Oct. 2 . . . 32.2
Mar. 27 . . . 437

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	352	539	1570	203	56	78
2	---	---	---	---	---	---	300	481	1700	182	55	79
3	---	---	---	---	---	---	275	474	1560	147	47	82
4	---	---	---	---	---	---	390	429	1610	100	71	68
5	---	---	---	---	---	---	350	504	1670	86	292	65
6	---	---	---	---	---	---	272	603	1520	66	198	62
7	---	---	---	---	---	---	261	730	1400	55	117	58
8	---	---	---	---	---	---	295	776	1370	68	72	58
9	---	---	---	---	---	---	339	834	1770	103	51	57
10	---	---	---	---	---	---	264	962	1960	76	59	57
11	---	---	---	---	---	---	263	1050	1740	73	129	59
12	---	---	---	---	---	---	277	1090	1530	88	114	69
13	---	---	---	---	---	---	280	1220	1710	107	87	61
14	---	---	---	---	---	---	298	1260	1420	85	71	40
15	---	---	---	---	---	---	327	1480	1260	65	50	35
16	---	---	---	---	---	---	446	1650	1110	55	37	37
17	---	---	---	---	---	---	577	1610	1170	48	32	70
18	---	---	---	---	---	---	593	1770	1150	40	31	57
19	---	---	---	---	---	---	565	1710	1290	50	37	87
20	---	---	---	---	---	---	599	1670	1290	61	33	215
21	---	---	---	---	---	---	649	1520	1100	54	50	164
22	---	---	---	---	---	---	575	1490	979	47	52	139
23	---	---	---	---	---	---	536	1450	817	63	57	148
24	---	---	---	---	---	---	583	1480	607	116	65	132
25	---	---	---	---	---	---	575	1360	487	98	61	113
26	---	---	---	---	---	---	487	1050	399	66	77	105
27	---	---	---	---	---	---	501	874	346	56	71	196
28	---	---	---	---	---	---	612	767	304	48	68	150
29	---	---	---	---	---	---	694	784	275	69	69	115
30	---	---	---	---	---	---	614	938	228	59	71	107
31	---	---	---	---	---	---	---	1190	---	62	77	---
TOTAL	---	---	---	---	---	---	13149	33745	35342	2496	2357	2763
MEAN	---	---	---	---	---	---	438	1089	1178	80.5	76.0	92.1
MAX	---	---	---	---	---	---	694	1770	1960	203	292	215
MIN	---	---	---	---	---	---	261	429	228	40	31	35
AC-FT	---	---	---	---	---	---	26080	66930	70100	4950	4680	5480

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1997, BY WATER YEAR (WY)

MEAN	---	---	---	---	---	---	331	768	830	204	68.2	60.4
MAX	---	---	---	---	---	---	602	1291	1890	980	181	225
(WY)	---	---	---	---	---	---	1985	1986	1986	1995	1984	1984
MIN	---	---	---	---	---	---	133	330	121	40.0	16.4	11.8
(WY)	---	---	---	---	---	---	1995	1990	1992	1994	1988	1988

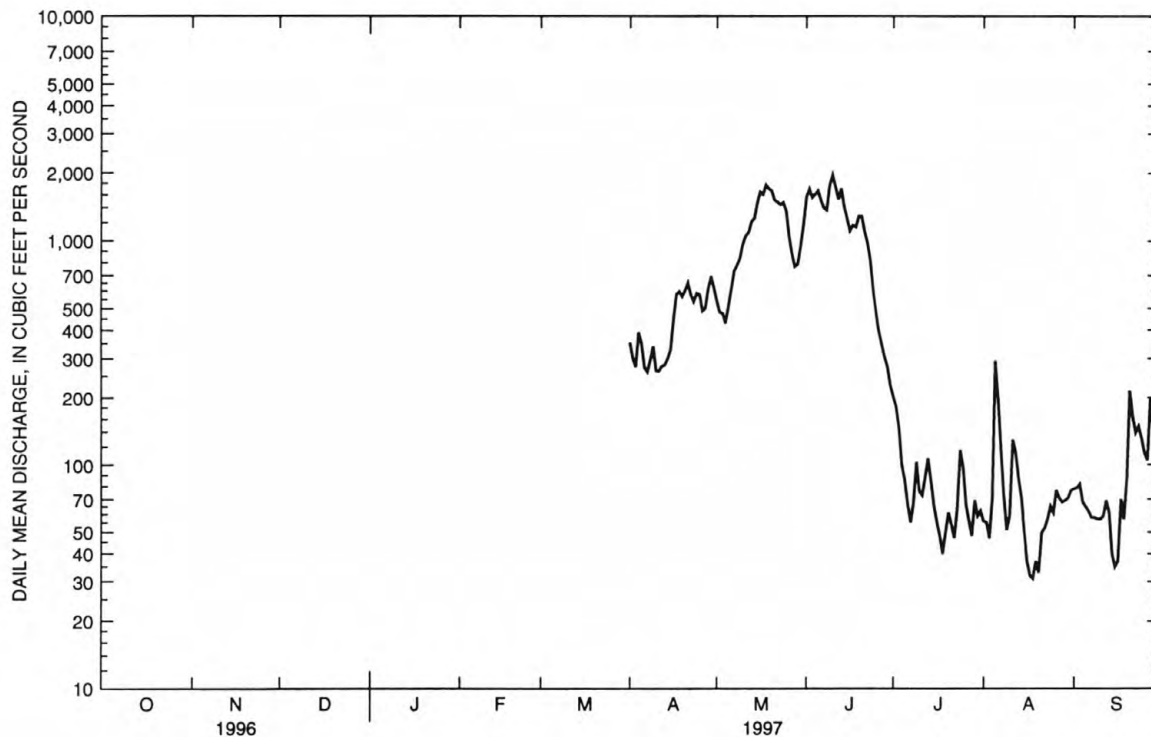
BEAR RIVER BASIN

10016900 BEAR RIVER AT EVANSTON, WY--Continued

SUMMARY STATISTICS

	FOR 1997 WATER YEAR*		WATER YEARS 1984 - 1997*	
HIGHEST DAILY MEAN	1960	Jun 10	3160	May 16 1984
LOWEST DAILY MEAN	31	Aug 18	3.8	Sep 30 1992
INSTANTANEOUS PEAK FLOW	2080	Jun 10	3680	May 16 1984
INSTANTANEOUS PEAK STAGE	5.48	Jun 10	7.35	May 16 1984
10 PERCENT EXCEEDS	--		1050	
50 PERCENT EXCEEDS	--		162	
90 PERCENT EXCEEDS	--		25	

* During period of operation.



10016900 BEAR RIVER AT EVANSTON, WY

10020100 BEAR RIVER ABOVE RESERVOIR, NEAR WOODRUFF, UT

LOCATION.--Lat 41°26'04", long 111°01'01", in NW¹/₄ NW¹/₄ NW¹/₄ 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.

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 sea level, from river-profile map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversion for irrigation of about 43,500 acres upstream from station. Station operated and record provided by Utah District. U.S. Geological Survey data collection platform with satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,150 ft³/s, June 2, 1983, gage height, 6.17 ft; no flow several days during August and September 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,960 ft³/s, June 11, gage height, 5.12 ft; minimum daily discharge, 9.30 ft³/s, Sept. 15, 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	49	100	e100	e129	e160	e280	739	1060	166	22	45
2	16	44	103	e102	e120	e180	e325	706	1410	153	20	53
3	16	40	99	e103	e112	e180	e310	635	1510	120	19	55
4	15	43	108	e100	e110	e150	e300	576	1380	97	16	56
5	16	57	94	e100	e120	e160	e318	589	1440	73	93	47
6	15	60	91	e98	e107	e155	e325	631	1440	64	143	48
7	13	47	103	e97	e95	e150	e340	722	1280	46	82	53
8	13	57	e104	e100	e85	e190	e340	816	1230	32	42	47
9	13	57	e110	e105	e87	e170	e400	852	1370	37	28	46
10	12	59	e100	e118	e89	e188	e450	890	1670	43	35	43
11	12	54	e103	e108	e100	e205	e440	946	1910	36	70	38
12	12	51	e108	e90	e118	e220	e420	986	1590	41	166	38
13	11	53	e110	e93	e118	e230	e455	1050	1600	65	110	51
14	10	41	e97	e95	e110	e220	e480	1170	1550	65	91	43
15	9.3	43	e78	e100	e120	e215	e518	1290	1360	44	68	29
16	9.3	30	e90	e90	e129	e232	e551	1460	1170	36	50	26
17	11	19	e75	e95	e140	e250	626	1570	1140	30	41	43
18	16	27	e69	e90	e150	e270	739	1550	1090	22	37	48
19	19	74	e80	e95	e130	e250	733	1710	1120	20	35	64
20	19	110	e80	e100	e123	e240	743	1590	1190	23	37	196
21	24	84	e100	e90	e115	e232	780	1480	1080	26	30	173
22	24	72	e90	e100	e110	e230	754	1380	915	26	35	141
23	25	123	e90	e100	e129	e245	674	1310	747	26	38	140
24	34	86	e90	e90	e118	e260	701	1270	550	39	53	137
25	50	51	e90	e100	e110	e240	792	1330	415	64	54	131
26	52	58	e90	e128	e140	e260	685	1020	331	44	42	122
27	44	37	e100	e100	e190	e275	606	786	269	35	46	164
28	38	33	e110	e110	e170	e250	643	653	237	29	38	160
29	42	65	e106	e118	---	e270	750	589	211	26	39	124
30	56	94	e102	e100	---	e290	866	689	194	35	30	113
31	52	---	e100	e139	---	e268	---	804	---	31	29	---
TOTAL	715.6	1718	2970	3154	3374	6835	16344	31789	32459	1594	1639	2474
MEAN	23.1	57.3	95.8	102	121	220	545	1025	1082	51.4	52.9	82.5
MAX	56	123	110	139	190	290	866	1710	1910	166	166	196
MIN	9.3	19	69	90	85	150	280	576	194	20	16	26
AC-FT	1420	3410	5890	6260	6690	13560	32420	63050	64380	3160	3250	4910

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1997, BY WATER YEAR (WY)

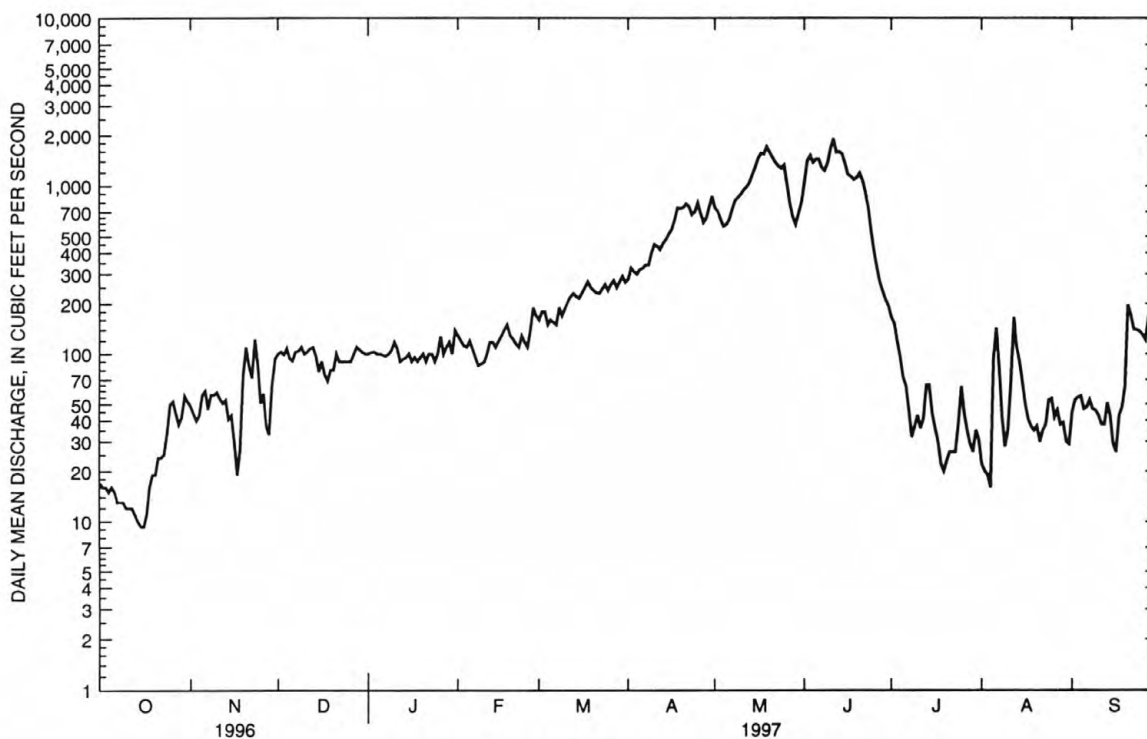
	MEAN	74.3	70.6	71.2	67.9	84.8	164	349	821	881	201	50.8	51.4
MAX	437	198	181	147	312	627	671	1957	2564	1191	340	288	288
(WY)	1983	1974	1984	1984	1986	1986	1969	1984	1986	1995	1983	1983	1983
MIN	3.03	6.06	7.21	6.76	13.8	26.8	77.7	104	54.6	4.84	2.26	.49	.49
(WY)	1965	1989	1989	1989	1993	1977	1977	1977	1992	1988	1988	1988	1988

BEAR RIVER BASIN

10020100 BEAR RIVER ABOVE RESERVOIR, NEAR WOODRUFF, UT--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1962 - 1997
ANNUAL TOTAL	83348.07	105065.6	--
ANNUAL MEAN	228	288	241
HIGHEST ANNUAL MEAN	--	--	583
LOWEST ANNUAL MEAN	--	--	45.1
HIGHEST DAILY MEAN	2130	1910	3900
LOWEST DAILY MEAN	.64	9.3	.00
ANNUAL SEVEN-DAY MINIMUM	.77	11	.00
ANNUAL RUNOFF (AC-FT)	165300	208400	174300
10 PERCENT EXCEEDS	696	962	712
50 PERCENT EXCEEDS	75	102	84
90 PERCENT EXCEEDS	10	27	9.8

e Estimated



10020100 BEAR RIVER ABOVE RESERVOIR, NEAR WOODRUFF, UT

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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
NOV 13...	1445	60	435	8.6	5.0	13.0	605	11.0	200
APR 23...	1730	678	508	8.4	4.0	2.5	595	10.2	220
MAY 15...	0905	1190	213	8.3	11.0	19.5	610	8.2	99
JUN 11...	1025	1960	224	8.1	13.0	16.0	606	7.7	100

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)
NOV 13...	49	18	13	0.4	1.7	198	16	17	0.2	5.1
APR 23...	51	23	15	0.4	2.3	206	28	27	0.2	8.4
MAY 15...	26	8.4	4.2	0.2	1.0	99	7.2	7.6	0.1	5.9
JUN 11...	27	8.6	5.3	0.2	1.3	102	5.5	7.2	<0.1	6.1

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
NOV 13...	239	0.32	38.8	0.02	<0.05	0.02	<0.01	16	2.6
APR 23...	278	0.38	509	<0.01	<0.05	0.05	0.01	190	348
MAY 15...	120	0.16	386	<0.01	0.08	0.02	<0.01	385	1240
JUN 11...	122	0.17	647	<0.01	0.05	<0.01	<0.01	169	894

BEAR RIVER BASIN

10020300 BEAR RIVER BELOW RESERVOIR, NEAR WOODRUFF, UT

LOCATION.--Lat 41°30'20", long 111°00'50", in NE¹/₄ NE¹/₄ NW¹/₄ 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 Wyoming-Utah 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. Datum of gage is 6,398.96 ft above sea level (levels by Utah Water Resources Division from Bureau of Reclamation bench mark). Prior to Sept. 26, 1962, at site 175 ft upstream 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 Utah District. U.S. Geological Survey data collection platform with satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,820 ft³/s, June 2, 1983, gage height, 8.26 ft; no flow July 4, 5, 1962, Aug. 30, 31, Sept. 1, 2, 6, 7, 1979, and Oct. 30, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,380 ft³/s, May 20, gage height, 7.08 ft; minimum daily discharge, 22 ft³/s, several days in November and December.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	24	23	23	23	23	590	896	918	848	121	40
2	33	24	23	23	23	23	571	864	1130	842	121	41
3	33	24	23	23	23	23	538	808	1410	834	121	41
4	33	24	23	23	23	23	498	749	1490	825	71	41
5	33	23	23	23	23	23	509	707	1570	823	39	41
6	33	23	23	23	23	23	526	714	1640	816	39	41
7	35	23	23	23	23	23	510	751	1580	810	38	41
8	38	23	23	23	23	23	480	835	1510	804	39	42
9	38	23	23	23	23	23	464	904	1560	792	39	41
10	38	23	23	24	23	23	462	961	1760	784	39	42
11	37	23	23	23	23	23	450	1030	1940	450	40	42
12	38	23	23	24	23	23	436	1080	1910	123	41	42
13	37	23	23	23	23	23	429	1150	1820	122	40	42
14	37	23	23	23	23	23	424	1240	1840	122	40	42
15	36	23	23	24	23	23	410	1370	1700	122	40	41
16	36	23	23	23	23	23	404	1530	1530	122	39	41
17	36	23	23	23	23	23	405	1670	1400	122	39	41
18	36	23	23	23	23	23	462	1720	1330	122	39	41
19	35	22	23	23	23	23	589	1810	1290	122	39	41
20	35	23	23	23	23	23	693	2080	1300	122	38	41
21	34	22	23	23	23	23	764	1960	1300	122	39	41
22	35	23	23	23	23	23	826	1730	1200	121	39	41
23	34	23	23	23	23	23	815	1610	1080	121	39	41
24	33	23	22	23	23	23	851	1530	948	121	39	41
25	34	23	23	23	23	23	869	1540	888	121	39	41
26	33	23	23	23	23	23	866	1430	884	121	39	41
27	29	23	23	23	23	86	794	1230	879	121	39	42
28	26	23	23	23	23	268	757	1090	870	120	39	41
29	25	23	23	23	---	380	811	952	859	121	40	42
30	25	23	23	23	---	727	891	892	854	121	40	42
31	25	---	23	23	---	624	---	898	---	120	40	---
TOTAL	1043	692	712	716	644	2683	18094	37731	40390	11057	1494	1238
MEAN	33.6	23.1	23.0	23.1	23.0	86.5	603	1217	1346	357	48.2	41.3
MAX	38	24	23	24	23	727	891	2080	1940	848	121	42
MIN	25	22	22	23	23	23	404	707	854	120	38	40
AC-FT	2070	1370	1410	1420	1280	5320	35890	74840	80110	21930	2960	2460

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1997, BY WATER YEAR (WY)

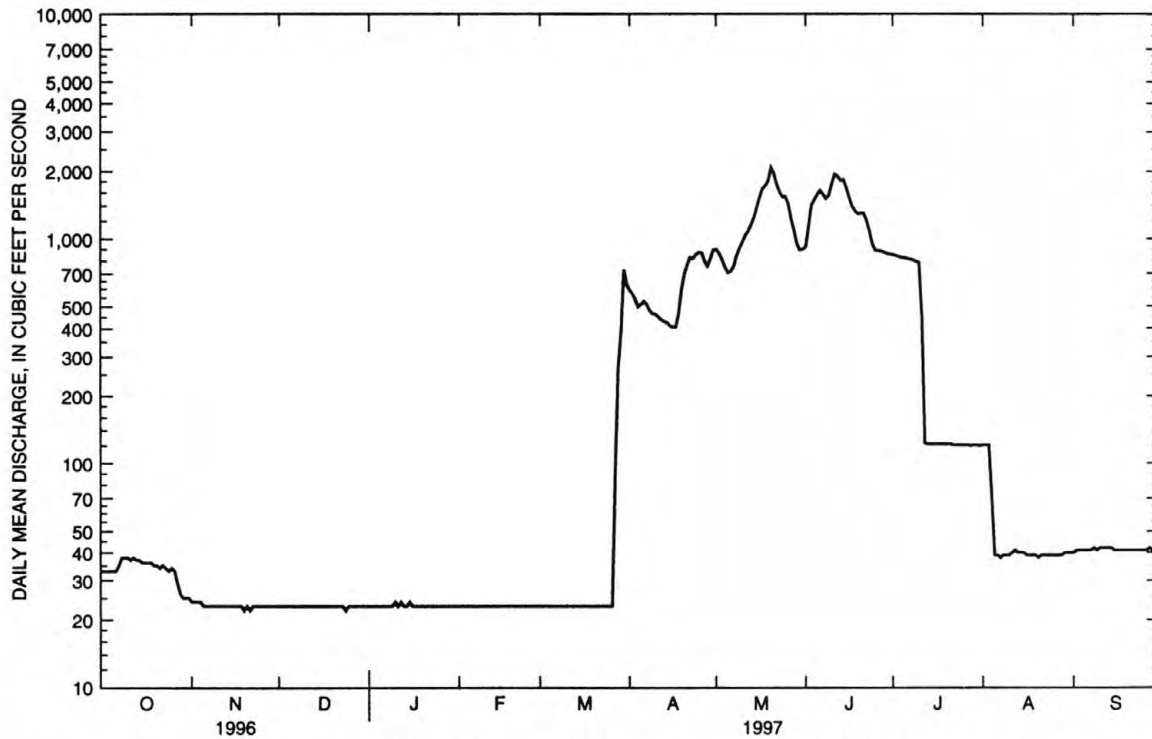
	MEAN	55.2	55.0	46.7	44.4	47.5	99.6	295	795	1000	294	78.5	58.0
MAX	425	421	184	153	171	473	891	1828	2437	913	331	278	
(WY)	1983	1983	1983	1985	1971	1972	1985	1984	1983	1975	1983	1983	
MIN	3.89	.12	4.28	4.37	4.71	4.70	.34	27.8	396	20.0	3.91	3.65	
(WY)	1990	1981	1978	1978	1978	1978	1977	1977	1977	1966	1979	1979	

BEAR RIVER BASIN

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10020300 BEAR RIVER BELOW RESERVOIR, NEAR WOODRUFF, UT--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1962 - 1997	
ANNUAL TOTAL	91704		116494		--	
ANNUAL MEAN	251		319		239	
HIGHEST ANNUAL MEAN	--		--		509	
LOWEST ANNUAL MEAN	--		--		44.3	
HIGHEST DAILY MEAN	2120		2080		3630	
LOWEST DAILY MEAN	22		22		.00	
ANNUAL SEVEN-DAY MINIMUM	23		23		.07	
ANNUAL RUNOFF (AC-FT)	181900		231100		173300	
10 PERCENT EXCEEDS	897		1110		810	
50 PERCENT EXCEEDS	41		39		41	
90 PERCENT EXCEEDS	23		23		9.1	



10020300 BEAR RIVER BELOW RESERVOIR, NEAR WOODRUFF, UT

BEAR RIVER BASIN

10027000 TWIN CREEK AT SAGE, WY

LOCATION.--Lat 41°48'36", long 110°58'12", in NE¹/₄ SW¹/₄ SE¹/₄ sec.7, T.21 N., R.119 W., Lincoln County, Hydrologic Unit 16010101, 0.5 mi downstream from Bulldog Hollow, 0.5 mi southwest of Sage, 0.8 mi southeast of junction of U.S. Highway 30 and State Highway 89, and 5.0 mi upstream from mouth.

DRAINAGE AREA.--246 mi².

PERIOD OF RECORD.--Water years 1975 to 1981, October 1989 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TEMPER-ATURE AIR (DEG C) (00020)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 13...	0830	8.0	940	8.4	1.0	-1.0	610	11.4	101	390
MAR 04...	0905	2.2	944	8.2	0.0	-3.0	608	11.7	101	420
APR 23...	1430	77	815	8.5	5.0	5.0	600	9.9	99	330
MAY 14...	1420	137	715	8.4	15.0	23.0	610	7.9	98	320
JUN 10...	1755	62	913	8.4	18.5	17.0	608	8.1	109	390

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
NOV 13...	86	42	49	1	3.1	218	250	33	0.4	8.6
MAR 04...	93	45	56	1	3.0	254	240	37	0.5	12
APR 23...	72	37	48	1	3.8	226	180	27	0.3	10
MAY 14...	74	33	28	0.7	3.4	244	130	16	0.4	11
JUN 10...	84	45	45	1	3.3	263	190	26	0.4	13

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV 13...	603	0.82	13.0	0.02	<0.05	0.02	<0.01	65	1.4
MAR 04...	640	0.87	3.80	<0.01	0.18	0.02	<0.01	138	0.82
APR 23...	517	0.70	107	<0.01	0.10	0.06	0.06	444	92
MAY 14...	439	0.60	162	<0.01	0.05	<0.01	0.03	532	197
JUN 10...	564	0.77	94.5	<0.01	<0.05	<0.01	<0.01	194	32

BEAR RIVER BASIN

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10028500 BEAR RIVER BELOW PIXLEY DAM, NEAR COKEVILLE, WY

LOCATION.--Lat 41°56'20", long 110°59'05", in SE¹/₄ SE¹/₄ 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 sea level, from river-profile map. Oct. 31, 1941 to Nov. 30, 1943, at site 200 ft downstream at different datum.

REMARKS.--Records good. 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 Utah District.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,300 ft³/s, Mar. 25, 1956; minimum recorded, 0.24 ft³/s, Apr. 26, 1981.

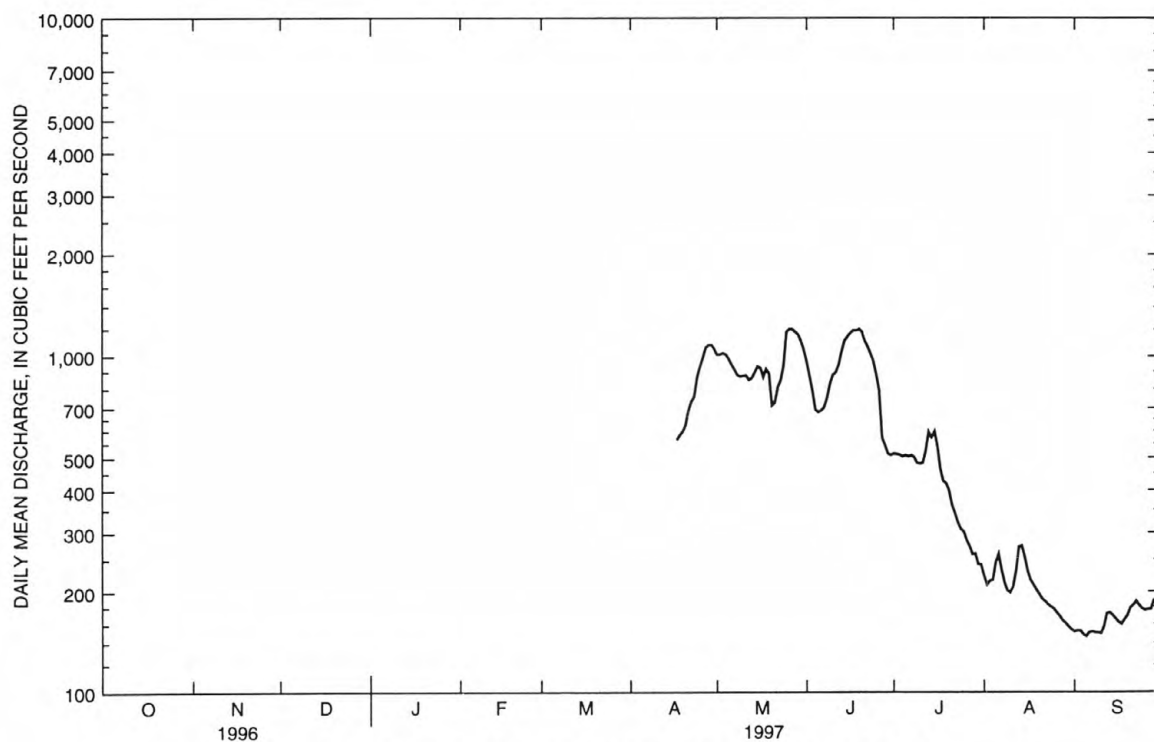
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,250 ft³/s, June 19, gage height 8.65 ft; minimum recorded daily discharge, 147 ft³/s, Sept. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	1010	961	514	224	152
2	---	---	---	---	---	---	---	1010	869	512	210	153
3	---	---	---	---	---	---	---	1020	788	509	216	153
4	---	---	---	---	---	---	---	1010	693	503	217	149
5	---	---	---	---	---	---	---	982	681	507	245	147
6	---	---	---	---	---	---	---	942	688	503	259	151
7	---	---	---	---	---	---	---	912	704	507	233	152
8	---	---	---	---	---	---	---	878	748	501	214	151
9	---	---	---	---	---	---	---	869	826	482	202	151
10	---	---	---	---	---	---	---	873	879	480	199	150
11	---	---	---	---	---	---	---	876	893	482	207	157
12	---	---	---	---	---	---	---	849	940	524	230	172
13	---	---	---	---	---	---	---	861	1030	595	272	173
14	---	---	---	---	---	---	---	893	1110	573	274	170
15	---	---	---	---	---	---	---	931	1140	596	254	166
16	---	---	---	---	---	---	---	922	1170	538	231	162
17	---	---	---	---	---	---	---	564	868	1190	462	160
18	---	---	---	---	---	---	---	583	913	1190	426	165
19	---	---	---	---	---	---	---	597	886	1200	419	170
20	---	---	---	---	---	---	---	624	714	1180	399	179
21	---	---	---	---	---	---	---	688	726	1110	362	182
22	---	---	---	---	---	---	---	732	809	1070	343	187
23	---	---	---	---	---	---	---	756	847	1020	322	182
24	---	---	---	---	---	---	---	867	938	967	307	178
25	---	---	---	---	---	---	---	930	1180	883	302	176
26	---	---	---	---	---	---	---	989	1200	794	285	177
27	---	---	---	---	---	---	---	1060	1200	570	274	177
28	---	---	---	---	---	---	---	1080	1180	544	259	188
29	---	---	---	---	---	---	---	1080	1160	513	260	187
30	---	---	---	---	---	---	---	1050	1110	508	242	184
31	---	---	---	---	---	---	---	1040	---	241	154	---
TOTAL	---	---	---	---	---	---	---	29609	26859	13229	6410	5001
MEAN	---	---	---	---	---	---	---	955	895	427	207	167
MAX	---	---	---	---	---	---	---	1200	1200	596	274	188
MIN	---	---	---	---	---	---	---	714	508	241	154	147
AC-FT	---	---	---	---	---	---	---	58730	53270	26240	12710	9920

BEAR RIVER BASIN

10028500 BEAR RIVER BELOW PIXLEY DAM, NEAR COKEVILLE, WY--Continued



10028500 BEAR RIVER BELOW PIXLEY DAM, NEAR COKEVILLE, WY

LOCATION.--Lat 42°17'36", long 110°52'18", in NE1/4 SW1/4 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 Hobble Creek, and 12.4 mi northeast of Border.

REVISED RECORDS.--WSP 1734: 1952(M).

GAGE.--Water-stage recorder. Elevation of gage is 6,720 ft above sea level, from topographic map. Prior to Oct. 16, 1945, at site 1.2 mi downstream at different datum. Oct. 16, 1945 to November 1986 at site 0.4 mi downstream at different datum.

REMARKS.--Records fair, except those for estimated daily discharges, which are poor. One diversion for irrigation of about 200 acres upstream from station. Station operated and record provided by Utah District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,100 ft³/s, June 4, 1986, gage height, 5.66 ft; minimum, 21 ft³/s, Mar. 29, 1975, Jan. 24, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,650 ft³/s, May 16, gage height, 4.19 ft; minimum daily discharge, 59 ft³/s, Feb. 22.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	88	74	e96	e75	65	e80	368	1330	600	240	139
2	99	85	75	e98	e78	68	e83	336	1360	577	235	136
3	98	88	e75	e94	e72	67	e83	329	1290	552	229	136
4	98	88	e93	e95	e71	67	e85	384	1330	535	229	133
5	97	89	e91	e85	e74	65	e80	497	1370	507	234	130
6	96	82	e90	e81	e74	65	e85	639	1340	499	234	129
7	94	86	e95	e81	e66	65	e90	726	1310	483	219	125
8	95	85	e91	e84	e63	65	e85	804	1300	466	212	123
9	94	83	e95	e87	e64	64	e81	871	1290	455	209	122
10	95	81	e100	e89	e66	65	e81	994	1220	441	224	121
11	98	82	e95	e83	e77	66	e85	1140	1150	424	222	130
12	96	83	e95	e76	e83	69	e90	1230	1140	459	215	132
13	96	83	e95	e79	e70	68	e95	1320	1110	420	202	122
14	93	81	e87	e79	e72	67	e95	1390	1070	387	194	118
15	94	79	e80	e75	e76	68	e100	1510	1000	365	188	123
16	99	74	e83	e80	e79	71	e105	1500	968	345	184	123
17	93	79	e75	e76	e80	76	e108	1460	995	333	181	116
18	93	90	e72	e75	e73	77	152	1450	1010	330	177	114
19	102	105	e75	e80	e68	78	193	1410	1020	326	173	115
20	95	102	e78	e80	63	80	212	1370	959	323	168	e118
21	90	90	e83	e80	61	80	273	1390	910	308	165	e123
22	93	92	e90	e83	59	79	272	1390	862	302	161	e123
23	94	91	e85	e81	67	79	255	1370	844	286	158	e121
24	93	77	e85	e76	67	81	247	1390	807	287	157	e117
25	101	83	e85	e78	65	e75	224	1340	752	277	153	e114
26	95	68	e95	e80	82	e80	244	1220	720	267	150	e114
27	89	74	e95	e74	77	e80	313	1060	693	260	148	e114
28	89	75	e95	e77	74	e75	418	997	681	257	144	e113
29	91	81	e98	e78	---	e82	450	1020	654	264	142	e115
30	89	73	e90	e73	---	e90	393	1120	629	254	139	e114
31	89	---	e88	e72	---	e84	---	1210	---	246	139	---
TOTAL	2938	2517	2703	2525	1996	2261	5157	33235	31114	11835	5825	3673
MEAN	94.8	83.9	87.2	81.5	71.3	72.9	172	1072	1037	382	188	122
MAX	102	105	100	98	83	90	450	1510	1370	600	240	139
MIN	89	68	72	72	59	64	80	329	629	246	139	113
AC-FT	5830	4990	5360	5010	3960	4480	10230	65920	61710	23470	11550	7290

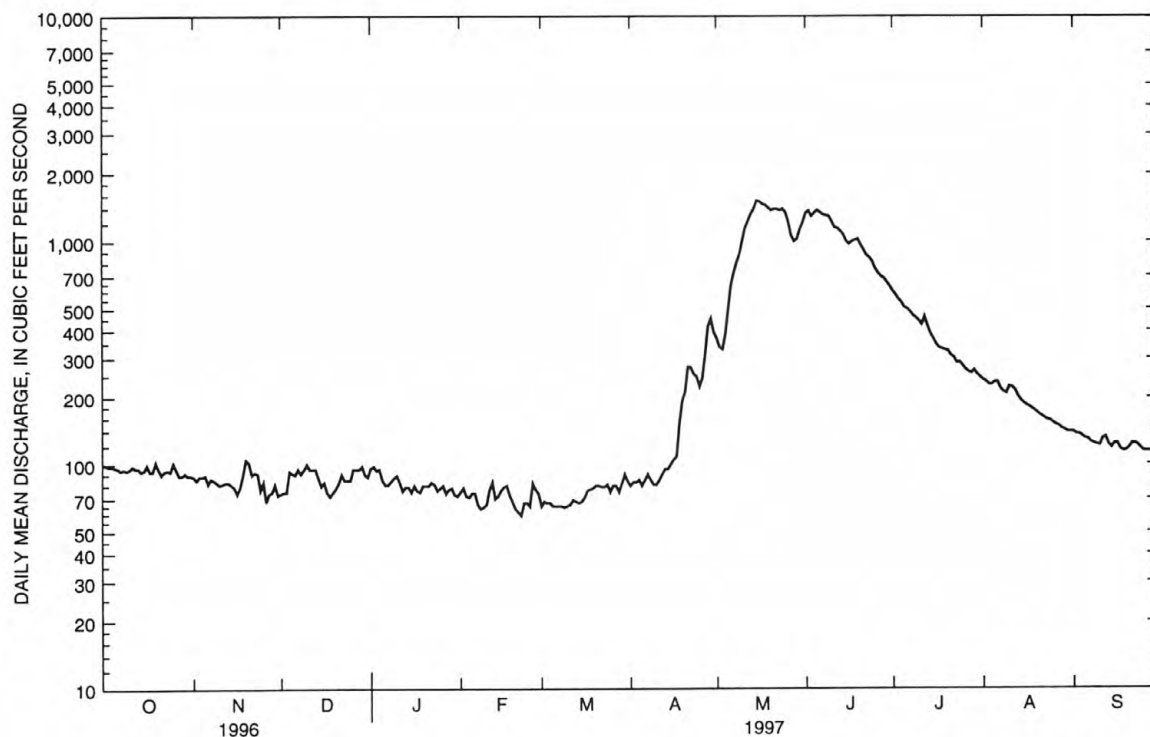
MEAN	91.2	78.5	69.6	63.9	61.5	63.0	162	552	639	298	154	109
MAX	156	113	88.4	85.0	82.8	99.4	385	1072	1377	602	242	166
(WY)	1987	1986	1983	1983	1984	1986	1946	1997	1986	1975	1983	1986
MIN	51.0	50.7	45.3	40.1	38.1	39.5	58.6	99.1	96.2	61.4	55.1	52.1
(WY)	1978	1978	1995	1988	1988	1988	1975	1977	1977	1977	1977	1977

BEAR RIVER BASIN

10032000 SMITHS FORK NEAR BORDER, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1943 - 1997
ANNUAL TOTAL	86054	105779	--
ANNUAL MEAN	235	290	196
HIGHEST ANNUAL MEAN	--	--	324
LOWEST ANNUAL MEAN	--	--	71.1
HIGHEST DAILY MEAN	1360	1510	2000
LOWEST DAILY MEAN	45	59	32
ANNUAL SEVEN-DAY MINIMUM	53	64	35
ANNUAL RUNOFF (AC-FT)	170700	209800	141700
10 PERCENT EXCEEDS	721	1000	526
50 PERCENT EXCEEDS	102	97	91
90 PERCENT EXCEEDS	61	73	59

e Estimated



BEAR RIVER BASIN

377

10035000 SMITHS FORK AT COKEVILLE, WY

LOCATION.--Lat 42°05'47", long 110°56'24", 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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)
NOV 13...	1100	92	391	8.4	3.0	8.0	610	11.8
APR 23...	1200	347	418	8.4	3.0	4.0	605	10.3
MAY 14...	1055	1670	340	8.2	6.0	22.5	609	9.5
JUN 10...	1425	1500	292	8.2	12.0	21.0	610	8.3

DATE	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
NOV 13...	110	0.03	<0.05	0.02	<0.01	15	3.7
APR 23...	97	<0.01	0.27	0.06	0.03	271	254
MAY 14...	96	0.01	0.11	0.03	0.03	524	2360
JUN 10...	97	<0.01	0.08	<0.01	0.02	369	1490

BEAR RIVER BASIN

10038000 BEAR RIVER BELOW SMITHS FORK, NEAR COKEVILLE, WY

LOCATION.--Lat 42°07'36", long 110°58'21", in NW¹/₄ SE¹/₄ NE¹/₄ sec.28, T.25 N., R.119 W., Lincoln County, Hydrologic Unit 16010102, on left bank 1.1 mi upstream from Wyman Dam, 2.8 mi northwest of Cokeville, and 3.8 mi downstream from Smiths Fork.

DRAINAGE AREA.--2,447 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1954 to September 1996, October 1996 to September 1997 (seasonal).

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,140 ft above sea level, from river-profile map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow of stream affected by diversion for irrigation, return flow from irrigated areas, and regulation by upstream reservoirs. Station operated and surface-water record provided by Utah District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,620 ft³/s, June 7, 1983, gage height, 8.75 ft; minimum, 31 ft³/s, Oct. 4, 5, 6, 1977.

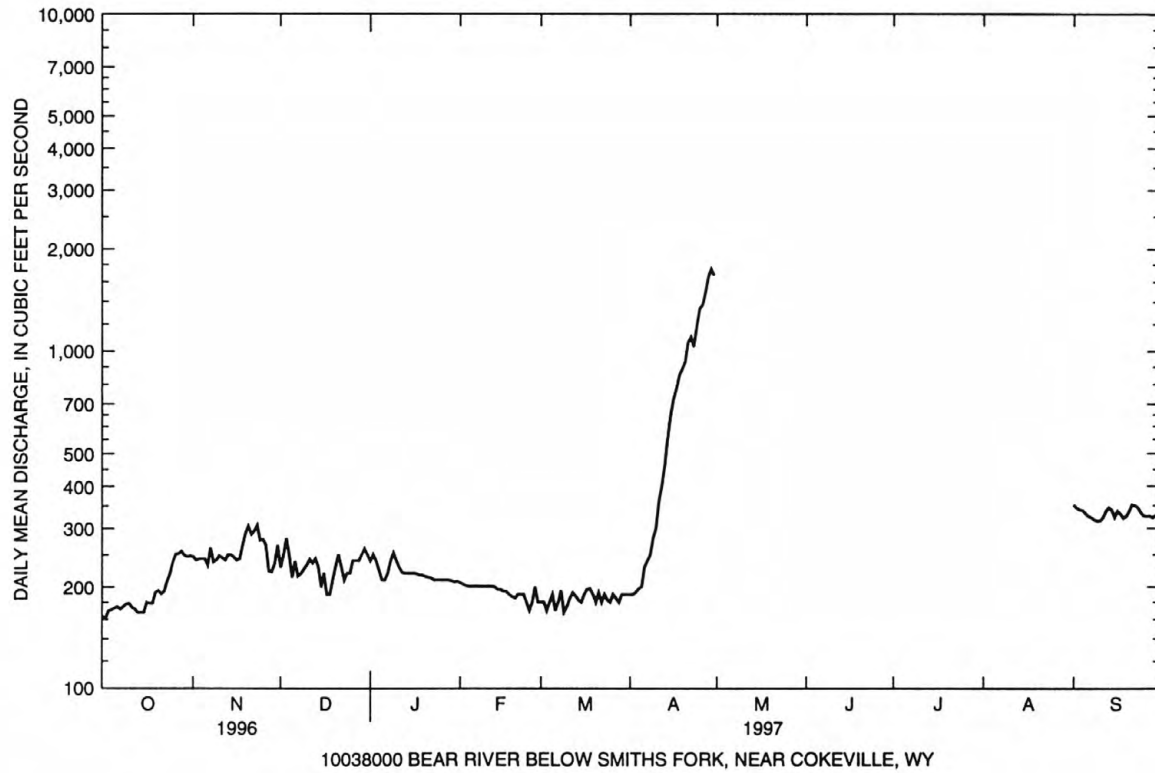
EXTREMES FOR CURRENT YEAR.--Maximum recorded daily discharge, 1,750 ft³/s, Apr. 29, minimum recorded daily discharge, 161 ft³/s, Oct. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	163	247	229	e240	206	e180	e190	---	---	---	---	351
2	161	241	249	e250	204	e180	e190	---	---	---	---	344
3	170	243	280	e240	202	e170	e193	---	---	---	---	340
4	171	243	249	e225	201	e180	e198	---	---	---	---	339
5	173	243	214	e210	201	e190	e200	---	---	---	---	332
6	175	233	239	e210	201	e170	e230	---	---	---	---	325
7	172	262	216	e220	201	e180	e240	---	---	---	---	322
8	175	238	219	e240	201	e195	e250	---	---	---	---	317
9	178	241	226	e253	201	e168	e280	---	---	---	---	314
10	179	248	233	e240	201	e175	e300	---	---	---	---	315
11	174	245	242	229	201	e185	e360	---	---	---	---	322
12	172	241	236	221	201	e192	e400	---	---	---	---	337
13	168	250	243	220	200	e188	e460	---	---	---	---	345
14	168	250	e230	220	197	e183	e550	---	---	---	---	340
15	168	246	e200	220	197	e180	e650	---	---	---	---	323
16	180	241	e220	220	194	e190	e725	---	---	---	---	337
17	179	243	e190	219	194	e197	e775	---	---	---	---	331
18	179	266	e190	217	190	e198	e850	---	---	---	---	321
19	193	290	e210	217	187	e190	887	---	---	---	---	325
20	195	304	e230	215	185	e180	928	---	---	---	---	337
21	191	288	e250	214	e190	e192	1060	---	---	---	---	352
22	194	295	e230	213	e190	e180	1100	---	---	---	---	350
23	208	306	e210	210	e190	e190	1030	---	---	---	---	346
24	220	276	e220	210	e180	e183	1190	---	---	---	---	334
25	238	278	e220	210	e170	e180	1340	---	---	---	---	327
26	251	267	e240	210	e180	e190	1370	---	---	---	---	326
27	252	223	e240	210	e200	e185	1490	---	---	---	---	327
28	256	222	e240	210	e180	e180	1660	---	---	---	---	322
29	249	235	e250	209	---	e190	1750	---	---	---	---	328
30	247	267	e260	207	---	e190	1680	---	---	---	---	328
31	248	---	e250	208	---	e190	---	---	---	---	---	---
TOTAL	6047	7672	7155	6837	5445	5721	22526	---	---	---	---	9957
MEAN	195	256	231	221	194	185	751	---	---	---	---	332
MAX	256	306	280	253	206	198	1750	---	---	---	---	352
MIN	161	222	190	207	170	168	190	---	---	---	---	314
AC-FT	11990	15220	14190	13560	10800	11350	44680	---	---	---	---	19750

e Estimate.

10038000 BEAR RIVER BELOW SMITHS FORK, NEAR COKEVILLE, WY--Continued



BEAR RIVER BASIN

10038000 BEAR RIVER BELOW SMITHS FORK, NEAR COKEVILLE, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1992 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)
NOV 13...	1230	252	570	8.5	3.0	11.0	610	12.4
APR 23...	0850	1110	506	8.4	6.5	3.0	605	9.5
JUN 10...	1240	2520	479	8.0	14.0	17.0	612	7.6
AUG 05...	0855	490	550	8.2	16.0	17.0	620	8.0

DATE	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)
NOV 13...	115	K5	0.02	0.07	0.02	<0.01	32	22
APR 23...	98	K21	<0.01	0.10	0.04	0.01	360	1080
JUN 10...	92	340	<0.01	0.05	<0.01	0.01	154	1050
AUG 05...	100	110	<0.01	0.09	<0.01	<0.01	120	159

K-Results based on colony count outside the acceptable range (non-ideal colony count).

10039500 BEAR RIVER AT BORDER, WY

LOCATION.--Lat 42°12'40", long 111°03'11", in NE¹/₄ NE¹/₄ NE¹/₄ sec.15, T.14 S., R.46 E., Bear Lake County, Idaho, Hydrologic Unit 16010102, on left bank 0.2 mi west of Wyoming-Idaho 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 September 1997 (seasonal).

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,051.63 ft above sea level, 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 Utah District. U.S. Geological Survey data collection platform with satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,880 ft³/s, June 7, 1983, gage height, 9.69 ft; minimum, 24 ft³/s, Apr. 29, 30, 1977.

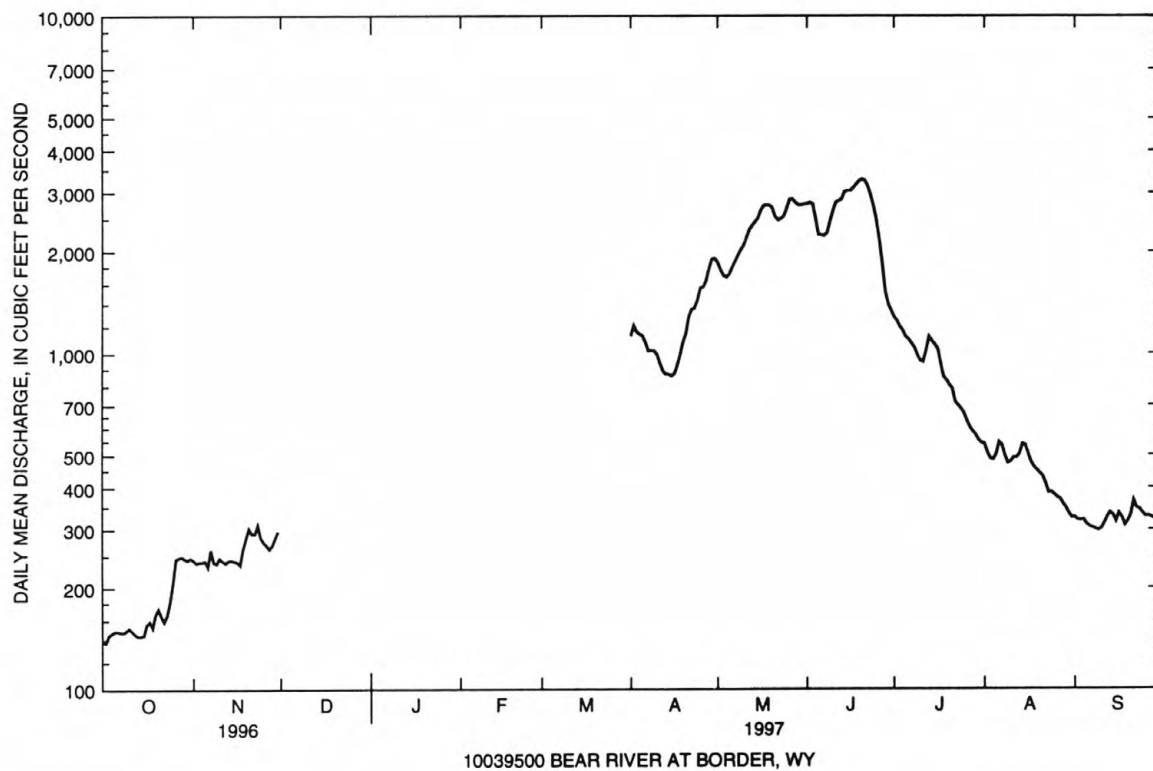
EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3,290 ft³/s, June 20; maximum gage height, 8.52 ft, May 26, 27 (backwater from Thomas Fork); minimum daily discharge, 138 ft³/s, Oct. 1, 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	139	243	---	---	---	---	1130	1860	2770	1280	540	326
2	138	238	---	---	---	---	1210	1770	2800	1250	507	320
3	145	240	---	---	---	---	1160	1700	2770	1200	487	320
4	147	240	---	---	---	---	1140	1680	2500	1170	484	321
5	149	241	---	---	---	---	1130	1710	2250	1120	502	311
6	149	232	---	---	---	---	1080	1790	2240	1100	546	306
7	148	261	---	---	---	---	1020	1860	2230	1070	535	304
8	148	239	---	---	---	---	1020	1940	2280	1040	498	301
9	150	237	---	---	---	---	1020	2020	2470	987	473	298
10	152	246	---	---	---	---	993	2080	2650	950	477	302
11	149	241	---	---	---	---	938	2190	2810	943	491	313
12	146	238	---	---	---	---	891	2320	2830	1020	491	327
13	144	242	---	---	---	---	868	2390	2870	1120	503	337
14	144	243	---	---	---	---	867	2450	3020	1090	539	331
15	145	241	---	---	---	---	857	2510	3040	1060	535	317
16	156	240	---	---	---	---	870	2650	3040	1030	505	335
17	159	235	---	---	---	---	921	2740	3100	930	477	325
18	153	262	---	---	---	---	991	2750	3180	849	461	309
19	167	282	---	---	---	---	1080	2750	3250	832	451	317
20	173	302	---	---	---	---	1140	2700	3290	805	441	331
21	165	291	---	---	---	---	1280	2540	3250	786	432	366
22	159	291	---	---	---	---	1350	2480	3130	717	412	348
23	166	309	---	---	---	---	1360	2510	2930	699	387	345
24	183	284	---	---	---	---	1440	2550	2710	683	388	336
25	209	275	---	---	---	---	1560	2690	2460	662	381	328
26	245	269	---	---	---	---	1570	2860	2170	630	374	329
27	247	263	---	---	---	---	1640	2870	1830	603	370	326
28	249	269	---	---	---	---	1780	2800	1520	586	358	322
29	245	283	---	---	---	---	1900	2750	1400	575	348	330
30	243	296	---	---	---	---	1910	2750	1340	553	334	331
31	246	---	---	---	---	---	---	2770	---	542	325	---
TOTAL	5358	7773	---	---	---	---	36116	73430	78130	27882	14052	9712
MEAN	173	259	---	---	---	---	1204	2369	2604	899	453	324
MAX	249	309	---	---	---	---	1910	2870	3290	1280	546	366
MIN	138	232	---	---	---	---	857	1680	1340	542	325	298
AC-FT	10630	15420	---	---	---	---	71640	145600	155000	55300	27870	19260

BEAR RIVER BASIN

10039500 BEAR RIVER AT BORDER, WY--Continued



SNAKE RIVER MAIN STEM

383

13010065 SNAKE RIVER ABOVE JACKSON LAKE, AT FLAGG RANCH, WY

LOCATION.--Lat 44°05'21", long 110°41'38", Grand Teton National Park, Hydrologic Unit 17040101, on left bank 50 ft upstream from State Highway 89 bridge, 600 ft downstream from the confluence with Sheffield Creek and 2 mi downstream from the south boundary of Yellowstone National Park.

DRAINAGE AREA.--486 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1983 to current year. Prior to 1988 water year, published as station 13010200.

GAGE.--Water-stage recorder. Datum of the gage is 6,801.61 ft above sea level, (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 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.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Station operated and record provided by Idaho District. U.S. Geological Survey data collection platform with satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft³/s, June 5, 1996, gage height, 10.75 ft; minimum, 160 ft³/s, Sept. 5-8, 10, 26-29, 1994, gage height, 3.25 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,500 ft³/s, June 5, gage height, 10.16 ft; minimum daily, 359 ft³/s, Nov. 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	435	391	532	821	556	393	450	1100	11100	2590	992	650
2	430	393	518	1180	518	407	427	1020	9660	2350	979	644
3	429	394	e510	1200	526	421	431	1040	8970	2190	956	658
4	424	399	e490	1130	529	417	444	1220	10400	2060	917	662
5	419	400	e495	e1060	489	419	419	1600	10800	2030	1060	642
6	418	359	509	e960	493	408	394	2130	8730	2000	1090	640
7	417	391	498	928	473	416	404	2550	9090	1940	967	652
8	418	391	509	883	474	420	408	2950	7710	1860	e940	621
9	414	385	515	829	460	402	403	3520	7810	1800	e930	616
10	417	369	564	797	433	395	383	4200	7300	1760	e940	613
11	413	362	569	e760	434	391	374	4710	6850	1760	e1020	671
12	407	365	563	e730	442	388	366	5060	5950	1810	982	765
13	404	366	549	e700	433	383	372	5190	5650	1890	961	694
14	407	381	542	e660	438	370	378	6240	5400	1700	933	654
15	405	389	527	640	430	366	374	e6600	5290	1570	905	652
16	418	377	e520	e620	428	380	405	e7000	5300	1500	868	707
17	420	390	e480	e590	431	407	474	e7300	5300	1440	845	647
18	409	431	e460	574	425	401	585	e7600	6470	1390	821	632
19	445	946	e470	558	421	402	788	7650	5370	1370	800	667
20	440	1070	482	543	420	425	1050	7790	4670	1340	780	633
21	414	818	491	558	410	508	1100	8240	4270	1270	773	636
22	438	738	491	563	406	526	1080	8250	4250	e1240	756	722
23	427	699	485	567	400	516	1030	8480	3990	1200	744	652
24	440	645	e490	545	390	504	1090	8950	3410	1200	762	622
25	452	644	e500	562	383	461	1120	7010	3200	1200	765	606
26	457	567	507	583	384	462	1260	5260	3110	1240	749	605
27	403	584	e570	562	402	512	1660	4790	3070	1130	730	609
28	417	565	e595	561	399	484	1660	5600	2930	1070	710	593
29	433	553	624	555	---	463	1380	8590	2750	1100	690	578
30	425	e505	680	538	---	456	1240	8940	2670	1100	673	569
31	416	---	719	552	---	459	---	9430	---	1030	660	---
TOTAL	13111	15267	16454	22309	12427	13362	21949	170010	181470	49130	26698	19312
MEAN	423	509	531	720	444	431	732	5484	6049	1585	861	644
MAX	457	1070	719	1200	556	526	1660	9430	11100	2590	1090	765
MIN	403	359	460	538	383	366	366	1020	2670	1030	660	569
AC-FT	26010	30280	32640	44250	24650	26500	43540	337200	359900	97450	52960	38310

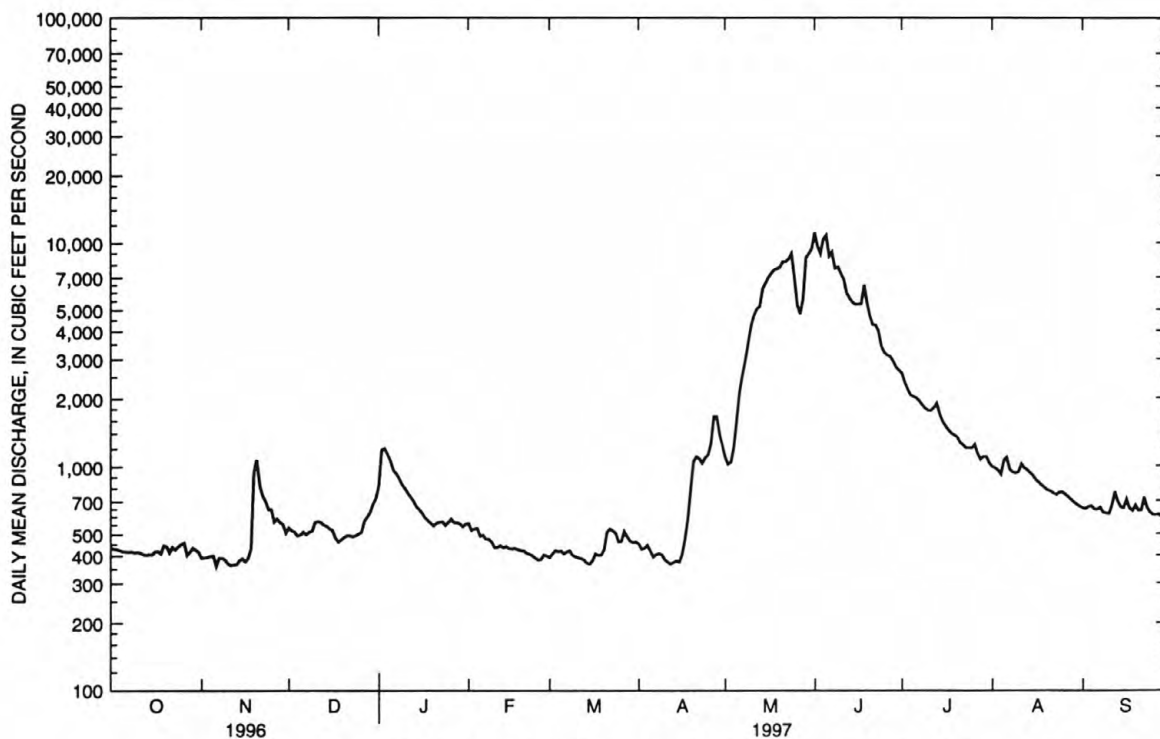
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1997, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	350	357	360	349	340	352	731	2981	3259	900	440	354		
MAX	679	607	531	720	444	506	1509	5484	6701	1633	861	644		
(WY)	1984	1984	1997	1997	1997	1986	1990	1997	1996	1995	1997	1997		
MIN	185	213	247	275	267	279	424	1818	827	331	202	168		
(WY)	1989	1988	1988	1992	1989	1988	1993	1987	1992	1988	1988	1994		

13010065 SNAKE RIVER ABOVE JACKSON LAKE, AT FLAGG RANCH, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1984 - 1997
ANNUAL TOTAL	488906	561499	--
ANNUAL MEAN	1336	1538	899
HIGHEST ANNUAL MEAN	--	--	1538
LOWEST ANNUAL MEAN	--	--	526
HIGHEST DAILY MEAN	11300	11100	11300
LOWEST DAILY MEAN	310	359	161
ANNUAL SEVEN-DAY MINIMUM	336	373	163
ANNUAL RUNOFF (AC-FT)	969700	1114000	651200
10 PERCENT EXCEEDS	4370	5220	2380
50 PERCENT EXCEEDS	496	620	390
90 PERCENT EXCEEDS	365	400	260

e Estimate.



13010065 SNAKE RIVER ABOVE JACKSON LAKE, AT FLAGG RANCH, WY

13010065 SNAKE RIVER ABOVE JACKSON LAKE AT FLAGG RANCH, WY--Continued
(National water-quality assessment station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water years 1986 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June to September 1994, June to September 1995, May to September 1996.

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 22.5 °C July 22, 24, Aug. 11, 1994.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, (PER- CENT SATUR- ATION) (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
OCT											
31...	1210	421	233	7.3	6.0	5.0	11.1	112	594	<0.05	0.02
NOV											
27...	1230	583	210	7.7	-1.0	2.5	12.1	113	601	<0.05	<0.02
DEC											
17...	1445	536	213	8.0	-14.0	0.0	13.4	115	600	0.07	0.04
JAN											
30...	1300	536	210	8.1	1.0	3.5	13.1	125	598	0.08	0.02
FEB											
19...	1245	415	230	7.9	1.5	2.5	12.8	122	595	0.05	<0.01
MAR											
18...	1445	404	240	8.2	8.5	6.0	12.1	123	605	<0.05	<0.02
APR											
21...	1720	1140	177	7.8	3.5	5.5	10.7	110	598	0.07	0.10

DATE	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT DIS- CHARGE SUS- PENDE (MG/L) (80154)	SEDI- MENT DIS- CHARGE SUS- PENDE (T/DAY) (80155)
OCT					
31...	<0.2	0.01	0.01	1	1.1
NOV					
27...	<0.2	<0.01	<0.01	2	3.1
DEC					
17...	<0.2	0.02	0.02	4	5.8
JAN					
30...	<0.2	<0.01	<0.01	2	2.9
FEB					
19...	<0.1	0.01	<0.01	2	2.2
MAR					
18...	<0.2	0.02	<0.01	5	5.5
APR					
21...	0.3	0.05	0.01	94	289

DATE	TIME	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	DEETHYL ATRA- ZINE, WATER, DISS, REC, (UG/L) (04040)	ATRA- ZINE, WATER, DISS, REC, (UG/L) (39632)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS- DIS- SOLVED (UG/L) (33933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)
OCT												
31...	1210	<0.002	<0.002	<0.001	<0.001	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002
JAN												
30...	1300	<0.002	<0.002	<0.001	<0.001	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002

SNAKE RIVER MAIN STEM

13010065 SNAKE RIVER ABOVE JACKSON LAKE, AT FLAGG RANCH, WY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	P, P' DDE	DI- AZINON, DIS-	DI- ELDRIN DIS-	2, 6-DI- ETHYL ANILINE WAT FLT 0.7 U	DISUL- FOTON WATER FLTRD 0.7 U	EPTC WATER FLTRD 0.7 U	ETHAL- FLUR- ALIN WAT FLT 0.7 U	ETHRO- PROP WATER FLTRD 0.7 U	FONOFOS WATER DISS	ALPHA BHC DIS-	LINDANE DIS-	LIN- URON WATER FLTRD 0.7 U
	DISSOLV (UG/L) (34653)	SOLVED (UG/L) (39572)	SOLVED (UG/L) (39381)	GF, REC (UG/L) (82660)	GF, REC (UG/L) (82677)	GF, REC (UG/L) (82668)	GF, REC (UG/L) (82663)	GF, REC (UG/L) (82672)	REC (UG/L) (04095)	SOLVED (UG/L) (34253)	SOLVED (UG/L) (39341)	GF, REC (UG/L) (82666)
OCT 31...	<0.006	<0.002	<0.001	<0.003	<0.017	<0.002	<0.004	<0.003	<0.003	<0.002	<0.004	<0.002
JAN 30...	<0.006	<0.002	<0.001	<0.003	<0.017	<0.002	<0.004	<0.003	<0.003	<0.002	<0.004	<0.002
DATE	MALA- THION, DIS- SOLVED (UG/L) (39532)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA- THION DIS- SOLVED (UG/L) (39542)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)
OCT 31...	<0.005	<0.002	<0.004	<0.004	<0.003	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	<0.018
JAN 30...	<0.005	<0.002	<0.004	<0.004	<0.003	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	<0.018
DATE	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROP- CHLOR, WATER, DISS- REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	
OCT 31...	<0.003	<0.007	<0.004	<0.013	<0.005	<0.010	<0.007	<0.013	<0.002	<0.001	<0.002	
JAN 30...	<0.003	<0.007	<0.004	<0.013	<0.005	<0.010	<0.007	<0.013	<0.002	<0.001	<0.002	

SNAKE RIVER MAIN STEM

387

13010450 PILGRIM CREEK NEAR MORAN, WY

LOCATION.--Lat 43°54'14", long 110°35'12", in SE¹/₄ SW¹/₄ SE¹/₄ sec.31, T.46 N., R.114 W., Teton County, Grand Teton National Park, Hydrologic Unit 17040101, on right bank 70 ft upstream from State Highway 287 bridge and 6.5 mi north of Moran.

PERIOD OF RECORD.--May to September 1997.

GAGE.--Water-stage recorder. Elevation of gage is 6,910 ft above sea level, from topographic map. Miscellaneous measurements at sites upstream and downstream June 1960.

REMARKS.--Records poor. No diversion or regulation. Station operated and record provided by Idaho District. U.S. Geological Survey data collection platform with satellite telemetry at station.

EXTREMES FOR CURRENT PERIOD.--Maximum daily discharge during period May to September, 2,000 ft³/s, June 6, 1997; minimum daily, 18 ft³/s, Sept. 10, 28-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	e450	260	57	22
2	---	---	---	---	---	---	---	---	937	191	56	22
3	---	---	---	---	---	---	---	---	e1100	175	50	25
4	---	---	---	---	---	---	---	---	1440	155	50	24
5	---	---	---	---	---	---	---	---	1860	149	70	22
6	---	---	---	---	---	---	---	---	e2000	139	56	23
7	---	---	---	---	---	---	---	---	1920	130	50	21
8	---	---	---	---	---	---	---	---	1540	130	46	20
9	---	---	---	---	---	---	---	e160	1850	128	41	19
10	---	---	---	---	---	---	---	203	e1410	126	69	18
11	---	---	---	---	---	---	---	e330	1340	123	57	32
12	---	---	---	---	---	---	---	e400	1150	135	52	35
13	---	---	---	---	---	---	---	e550	1040	126	58	24
14	---	---	---	---	---	---	---	709	1100	119	51	22
15	---	---	---	---	---	---	---	839	867	112	44	26
16	---	---	---	---	---	---	---	1510	963	99	39	25
17	---	---	---	---	---	---	---	1430	e750	87	37	22
18	---	---	---	---	---	---	---	1030	e1200	78	35	21
19	---	---	---	---	---	---	---	e700	e650	73	32	22
20	---	---	---	---	---	---	---	786	574	68	31	21
21	---	---	---	---	---	---	---	e750	e500	e65	29	33
22	---	---	---	---	---	---	---	781	e550	e60	29	29
23	---	---	---	---	---	---	---	836	e540	58	28	24
24	---	---	---	---	---	---	---	e1260	e410	73	29	21
25	---	---	---	---	---	---	---	e1200	e370	85	27	20
26	---	---	---	---	---	---	---	e1100	e330	81	27	20
27	---	---	---	---	---	---	---	1030	344	69	27	20
28	---	---	---	---	---	---	---	725	353	63	24	18
29	---	---	---	---	---	---	---	948	e360	81	24	18
30	---	---	---	---	---	---	---	716	355	67	22	18
31	---	---	---	---	---	---	---	493	---	63	22	---
TOTAL	---	---	---	---	---	---	---	---	28253	3368	1269	687
MEAN	---	---	---	---	---	---	---	---	942	109	40.9	22.9
MAX	---	---	---	---	---	---	---	---	2000	260	70	35
MIN	---	---	---	---	---	---	---	---	330	58	22	18
AC-FT	---	---	---	---	---	---	---	---	56040	6680	2520	1360

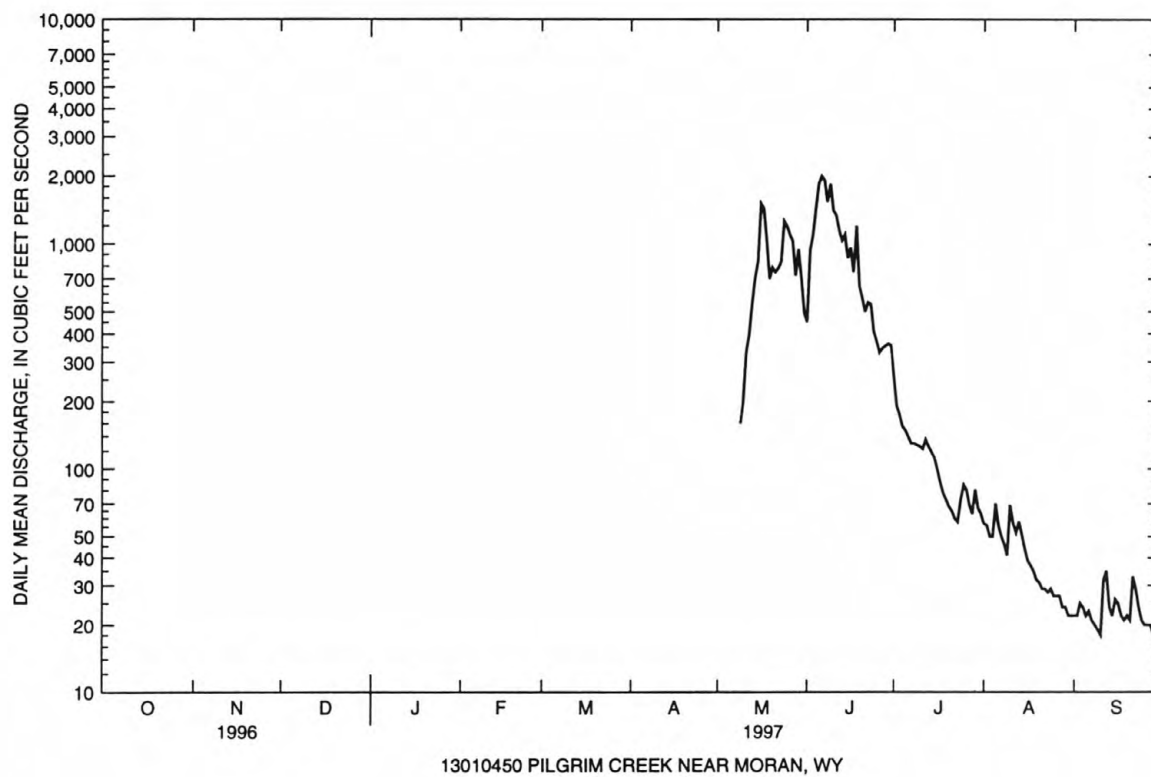
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 1997, BY WATER YEAR (WY)

	1997	1997	1997	1997
MEAN	---	---	---	---
MAX	---	---	---	---
(WY)	---	---	---	---
MIN	---	---	---	---
(WY)	---	---	---	---

e Estimate.

SNAKE RIVER MAIN STEM

13010450 PILGRIM CREEK NEAR MORAN, WY--Continued



13010500 JACKSON LAKE NEAR MORAN, WY

LOCATION.--Lat 43°51'33", long 110°35'23", in SE¹/₄ SW¹/₄ sec.18, T.45 N., R.114 W., Teton County, Grand Teton National Park, Hydrologic Unit 17040101, at Jackson Lake Dam on Snake River, 4.3 mi west of Moran, and at mile 988.9.

DRAINAGE AREA.--807 mi².

PERIOD OF RECORD.--July 1908 to September 1979, (1908-10 fragmentary), October 1984 to current year. Prior to October 1968, published as "at Moran".

REVISED RECORDS.--WDR Idaho 1974: Drainage area.

GAGE.--Shaft encoder connected to a stilling well float. Datum of gage is 6,700.00 ft, Bureau of Reclamation datum, sea level is 2.08 ft lower. July 1908 to June 1, 1941, nonrecording gage at site 300 ft upstream at same datum. June 1, 1941, to Feb. 17, 1978, nonrecording gage at same site and datum.

REMARKS.--Reservoir was formed by log crib dam built in the outlet of the natural lake in 1906. Usable capacity was 300,000 acre-ft. This dam washed out in July 1910 and was replaced by an earth dam, forming a reservoir with a usable capacity of 380,000 acre-ft. The earth dam was raised in 1916, increasing the usable capacity to 790,000 acre-ft. In 1917, by dredging the outlet, the capacity was further increased to 847,000 acre-ft between elevations 6,730 ft (top of baffles to sluices) and 6,769 ft (top of spillway gates). The dam was rebuilt during 1987-89, with the capacity remaining the same. Reservoir is used to store water for irrigation in Snake River valley, Idaho. Figures given herein represent usable contents. Bureau of Reclamation data collection platform with satellite telemetry at station.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 874,100 acre-ft, June 11, 1997, elevation, 6,770.06 ft; no usable contents for several days during period August to October 1919.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 874,100 acre-ft, June 11, elevation, 6,770.06 ft; minimum, 419,800 acre-ft, May 5-6, elevation, 6,751.20 ft.

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

6,750	392,900
6,760	624,400
6,770	872,600

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY OBSERVATION AT 2400 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	642600	638500	657600	683100	691600	650800	547300	429700	739900	841400	836500	764700
2	642400	638500	657800	687000	691600	650300	541700	427000	761000	839600	835000	761500
3	641900	638500	657800	689200	691600	649900	536600	424100	778700	838800	833200	758200
4	641700	638500	657800	689900	690700	648400	531400	421600	798300	838300	832000	755200
5	641200	638100	661000	690200	689700	646700	526100	419800	820500	838800	831400	751800
6	641000	638100	661000	690200	688000	645000	521000	419800	837600	840900	831200	749000
7	640500	637600	661000	690400	687200	642600	515800	420400	851300	843200	829700	745500
8	640200	637800	662700	692600	685300	642200	510500	420400	860000	845200	827600	742300
9	640000	637800	662700	692600	683800	640700	505600	425000	867700	847500	824800	738600
10	639800	637800	663900	692600	681900	639000	500300	429200	872600	849300	824300	735200
11	639500	637800	664600	693100	680200	636900	494600	436500	874100	850000	824100	732400
12	639500	637600	665100	692600	678700	634500	489000	444400	871800	851800	822800	730000
13	639500	637800	666100	692400	677000	632000	483500	452800	870300	851600	821300	726500
14	638800	637800	666300	692100	675600	629200	479100	463800	867500	850300	818500	723500
15	638500	638100	666600	691900	674300	626800	473600	477000	865700	849300	816500	720600
16	638500	638100	666600	691900	672100	623400	468600	492000	864900	848500	813400	716600
17	638500	638800	666600	691600	670900	620300	464000	508600	865400	848200	811400	713700
18	638500	642900	666600	690900	669200	615800	460800	524700	871600	847500	807900	709800
19	638500	647900	666600	690900	668500	611200	457600	539600	873600	847200	804800	706300
20	638500	649900	667800	690900	667000	606900	454000	555600	872600	847200	802100	702900
21	638100	650600	668300	690900	664900	602400	450800	571100	870300	846500	799300	700400
22	638100	652300	669500	690900	662900	597400	448000	587200	868000	845400	796000	697000
23	638100	652800	670200	691600	660800	592600	445300	605000	865200	844400	793300	693800
24	638300	653500	670400	692100	658100	587200	442400	624600	860600	843200	790500	690400
25	639500	654500	672400	692600	655700	582200	439400	638100	856700	842900	787700	686500
26	639500	654900	673600	693400	654000	576800	436700	646700	853100	842600	784700	683600
27	638800	654900	675600	694300	653200	572300	434900	652800	850600	841100	781500	679900
28	639000	655400	676000	693600	652300	568000	434200	662200	848000	840400	777700	676000
29	638800	655400	678000	693100	---	562600	433300	680700	844900	840400	775000	672100
30	638800	655900	678500	692400	---	557200	432000	699000	842400	839300	771700	668300
31	639000	---	679900	691600	---	552200	---	717100	---	838100	767700	---
MAX	642600	655900	679900	694300	691600	650800	547300	717100	874100	851800	836500	764700
MIN	638100	637600	657600	683100	652300	552200	432000	419800	739900	838100	767700	668300
(#)	6,760.61	6,761.31	6,762.30	6,762.78	6,761.16	6,756.96	6,751.75	6,763.82	6,768.82	6,768.65	6,765.86	6,761.82
(*)	-4,400	+16,900	+24,000	+11,700	-39,300	-100,100	-120,200	+285,100	+125,300	-4,300	-70,400	-99,400

CAL YR 1996 MAX 848,500 MIN 504,900 (*) +12,100
WTR YR 1997 MAX 874,100 MIN 419,800 (*) +24,900

(#) Elevation, in feet, at end of month.

(*) Change in contents, in acre-feet.

SNAKE RIVER MAIN STEM

13011000 SNAKE RIVER NEAR MORAN, WY

LOCATION.--Lat 43°51'31", long 110°35'09", 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 river 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. Datum of gage is 6,727.84 ft above sea level (by Bureau of Reclamation datum). Prior to June 13, 1917, nonrecording gage, and June 14, 1917 to May 20, 1940, water-stage recorder at site 1.5 mi downstream at different datums.

REMARKS.--No estimated daily discharges. Records good. Station operated and record provided by Idaho District. Bureau of Reclamation data collection platform with satellite telemetry at station.

COOPERATION.--Gage readings for current reporting purposes provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,100 ft³/s, June 12, 1918, gage height, 10.41 ft, site and datum then in use; maximum gage height, 10.96 ft, June 11, 1997; minimum daily, 0.30 ft³/s, Oct. 28, 1969.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood during early June 1894 was considerably higher than that of June 12, 1918.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,100 ft³/s, June 11, gage height, 10.96 ft; minimum, 447 ft³/s, Nov. 9, gage height, 2.75 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1070	497	497	683	1230	1520	3450	3520	4020	5480	2600	2700
2	701	497	501	745	1240	1520	3470	3520	4020	4830	2610	2700
3	701	497	502	786	1250	1520	3490	3520	4270	4290	2620	2710
4	698	497	502	809	1300	1520	3480	3530	4780	3770	2610	2710
5	700	497	509	824	1350	1520	3490	3530	5280	3300	2610	2710
6	697	500	530	849	1400	1510	3480	3620	6200	2790	2620	2700
7	680	496	533	926	1460	1510	3490	3800	8040	2520	2610	2690
8	647	476	533	976	1490	1510	3500	3960	9030	2510	2600	2690
9	623	452	533	983	1490	1510	3500	4030	9570	2510	2600	2690
10	592	454	531	988	1480	1550	3490	4030	10500	2510	2610	2690
11	561	462	542	990	1480	1660	3490	4040	11500	2760	2610	2700
12	549	464	558	990	1480	1790	3480	4040	11700	3140	2610	2700
13	549	462	560	990	1480	1990	3480	4020	10800	3510	2610	2690
14	549	462	560	990	1500	2210	3480	4030	10800	3500	2610	2690
15	546	462	560	988	1520	2390	3470	4030	10400	3490	2660	2690
16	533	462	571	983	1520	2490	3480	4020	9740	3330	2690	2690
17	509	462	576	983	1520	2600	3490	4010	9350	3090	2700	2690
18	499	462	576	983	1520	2820	3500	4010	9390	2890	2710	2690
19	497	472	580	974	1510	3030	3500	4010	9320	2820	2710	2690
20	497	474	582	967	1520	3200	3510	4020	9150	2820	2710	2690
21	497	465	582	977	1520	3410	3510	4010	9120	2820	2710	2690
22	497	462	582	1000	1530	3490	3500	4000	9090	2810	2700	2690
23	497	462	589	1040	1530	3480	3500	4010	9050	2810	2710	2690
24	501	462	610	1070	1530	3480	3510	4020	8430	2810	2720	2680
25	499	478	615	1070	1530	3490	3520	4030	7700	2820	2710	2690
26	497	495	615	1080	1520	3480	3520	4000	7470	2810	2710	2690
27	497	497	615	1110	1520	3490	3540	4010	7170	2810	2710	2700
28	497	497	615	1160	1520	3500	3530	4030	6950	2740	2710	2700
29	497	497	621	1190	---	3500	3530	4000	6610	2650	2700	2700
30	497	497	627	1190	---	3490	3540	4020	6100	2590	2700	2690
31	497	---	629	1200	---	3470	---	4020	---	2600	2710	---
TOTAL	17871	14319	17536	30494	40940	77650	104920	121440	245550	96130	82500	80830
MEAN	576	477	566	984	1462	2505	3497	3917	8185	3101	2661	2694
MAX	1070	500	629	1200	1530	3500	3540	4040	11700	5480	2720	2710
MIN	497	452	497	683	1230	1510	3450	3520	4020	2510	2600	2680
AC-FT	35450	28400	34780	60480	81200	154000	208100	240900	487000	190700	163600	160300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 1997, BY WATER YEAR (WY)

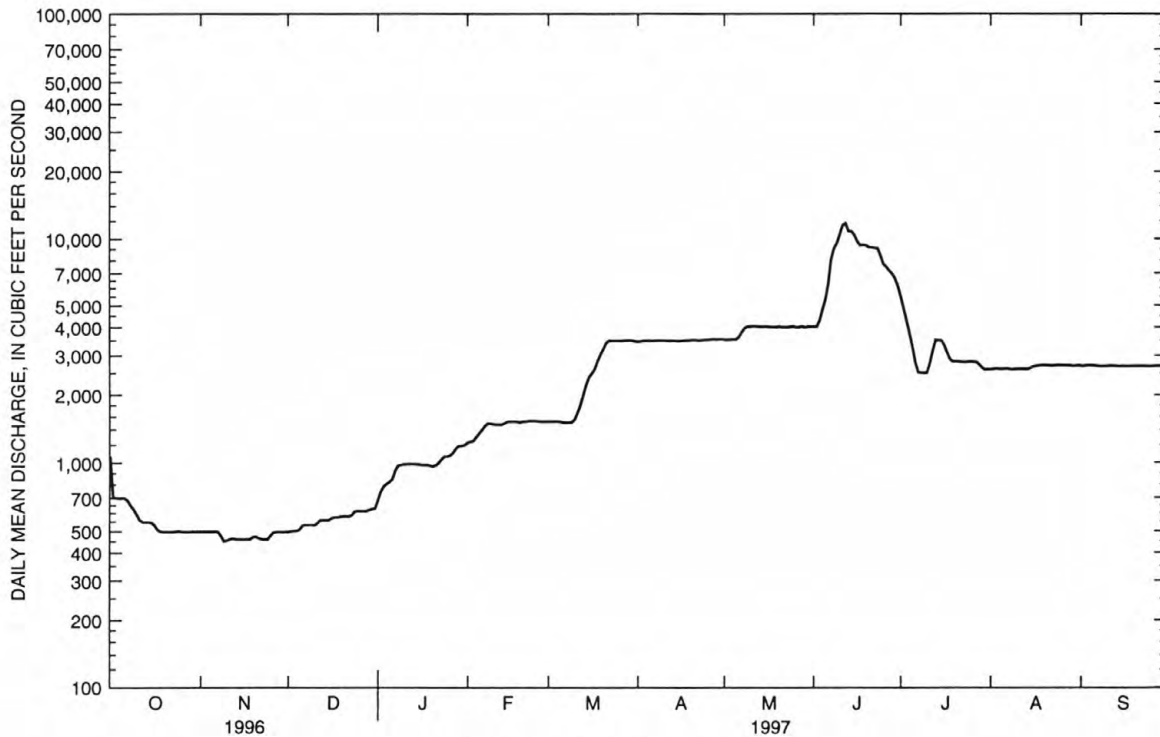
MEAN	340	288	328	304	369	473	746	1442	3478	3990	3530	1964
MAX	1605	3009	4280	1362	2489	3053	3828	5658	8594	8182	7370	5265
(WY)	1913	1957	1957	1912	1961	1951	1974	1971	1918	1921	1918	1984
MIN	5.06	3.00	2.00	2.00	2.00	2.00	2.53	6.48	51.7	983	987	146
(WY)	1948	1949	1945	1945	1945	1945	1945	1945	1932	1989	1919	1910

Snake River Main Stem

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13011000 SNAKE RIVER NEAR MORAN, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1904 - 1997	
ANNUAL TOTAL	779414		930180		--	
ANNUAL MEAN	2130		2548		1444	
HIGHEST ANNUAL MEAN	--		--		2548	1997
LOWEST ANNUAL MEAN	--		--		687	1989
HIGHEST DAILY MEAN	9140	Jun 19	11700	Jun 12	14700	Jun 13 1918
LOWEST DAILY MEAN	452	Nov 9	452	Nov 9	.30	Oct 28 1969
ANNUAL SEVEN-DAY MINIMUM	460	Nov 9	460	Nov 9	1.4	Oct 24 1969
ANNUAL RUNOFF (AC-FT)	1546000		1845000		1046000	
10 PERCENT EXCEEDS	4570		4030		4320	
50 PERCENT EXCEEDS	2000		2610		490	
90 PERCENT EXCEEDS	497		497		17	



13011000 SNAKE RIVER NEAR MORAN, WY

PACIFIC CREEK BASIN

13011500 PACIFIC CREEK AT MORAN, WY

LOCATION.--Lat 43°51'04", long 110°30'59", in SW¹/₄ NW¹/₄ sec.23, T.45 N., R.114 W., Teton County, Grand Teton National Park, Hydrologic Unit 17040101, 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 sea level, from topographic map. July 31 to Nov. 11, 1906, nonrecording gage at site 0.4 mi downstream at different datum. July 20, 1917, to Sept.30, 1918, nonrecording gage at site 0.1 mi downstream at different datum. Sept. 23, 1944, to Nov. 13, 1959, at site 100 ft upstream at same datum. Nov. 14, 1959, to Sept. 24, 1975, at site 35 ft downstream at same datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. No diversion or regulation. Station operated and record provided by Idaho District. U.S. Geological Survey data collection platform with satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,350 ft³/s, May 29, 1983, gage height, 6.33 ft; maximum gage height, 7.20 ft, June 12, 1996, extrapolated from gage height record; minimum daily, 19 ft³/s, Dec. 31, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 21	2330	4,250	7.30
June 5	0130	*4,890	*7.56
June 19	1145	4,290	7.31

Minimum daily, 36 ft³/s, Dec. 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	53	e46	e65	e65	e65	93	519	4170	1410	229	96
2	60	51	e46	e65	e65	e70	85	483	3590	1190	218	96
3	58	52	e44	e60	e65	e70	e80	474	3430	1200	199	103
4	58	52	e42	e60	e65	e65	e80	544	3780	1150	192	102
5	57	e50	e48	e55	e70	e65	e85	645	3930	1050	252	97
6	55	e48	e55	e50	e65	e65	85	863	3930	937	220	97
7	55	e50	e55	e55	e65	e70	90	1050	3760	950	187	95
8	55	e52	e60	e55	e60	e70	89	1230	3550	967	175	91
9	55	52	e60	e55	e60	e75	87	1480	3770	812	165	90
10	54	52	e65	e60	e60	e75	e90	1860	3860	770	231	89
11	54	e50	e60	e55	e65	e80	e100	2240	3530	776	239	111
12	54	e52	e60	e48	e70	e75	105	2420	2940	908	203	138
13	55	52	e55	e50	e70	e70	104	2500	2550	897	192	113
14	54	52	e50	e48	e75	e70	108	2430	2490	768	185	102
15	54	54	e48	e48	e80	e65	108	3250	2560	714	174	107
16	54	54	e44	e46	e80	e65	117	3400	2590	497	158	127
17	55	e58	e36	e48	e75	e65	145	3240	2890	438	150	108
18	53	e65	e38	e50	e75	e65	191	3230	3660	409	149	100
19	56	64	e42	e52	e70	e65	247	2990	3200	403	139	105
20	56	e70	e48	e50	e70	e70	333	3020	2990	373	132	98
21	53	e60	e50	e50	e65	e70	424	3420	2650	333	127	111
22	54	58	e50	e50	e65	e75	427	3420	2450	304	122	122
23	55	e55	e50	e50	e60	e75	407	3410	2380	285	120	107
24	55	50	e55	e50	e60	e75	396	3660	1940	318	120	97
25	55	e50	e55	e50	e65	e80	421	2970	1770	338	118	94
26	55	e48	e55	e55	e65	e75	440	2310	1740	314	113	93
27	53	e46	e55	e50	e70	e80	539	2070	1800	297	110	93
28	52	e50	e60	e50	e65	e80	648	2350	1660	259	105	90
29	54	e46	e60	e55	---	e85	615	3280	1510	301	102	88
30	54	e44	e65	e60	---	e90	553	3350	1440	286	98	87
31	54	---	e70	e65	---	92	---	3640	---	263	96	---
TOTAL	1707	1590	1627	1660	1885	2257	7292	71748	86510	19917	5020	3047
MEAN	55.1	53.0	52.5	53.5	67.3	72.8	243	2314	2884	642	162	102
MAX	61	70	70	65	80	92	648	3660	4170	1410	252	138
MIN	52	44	36	46	60	65	80	474	1440	259	96	87
AC-FT	3390	3150	3230	3290	3740	4480	14460	142300	171600	39510	9960	6040

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 1997, BY WATER YEAR (WY)

MEAN	65.2	54.7	48.7	44.3	45.7	52.3	153	952	1280	351	99.4	71.8
MAX	142	105	93.5	70.7	72.2	94.5	418	2314	2884	1527	191	127
(WY)	1973	1973	1984	1951	1995	1972	1946	1997	1997	1982	1982	1972
MIN	34.6	32.6	29.7	25.3	26.6	34.6	53.3	345	238	70.0	43.0	37.2
(WY)	1988	1953	1955	1979	1955	1963	1970	1975	1994	1994	1988	1994

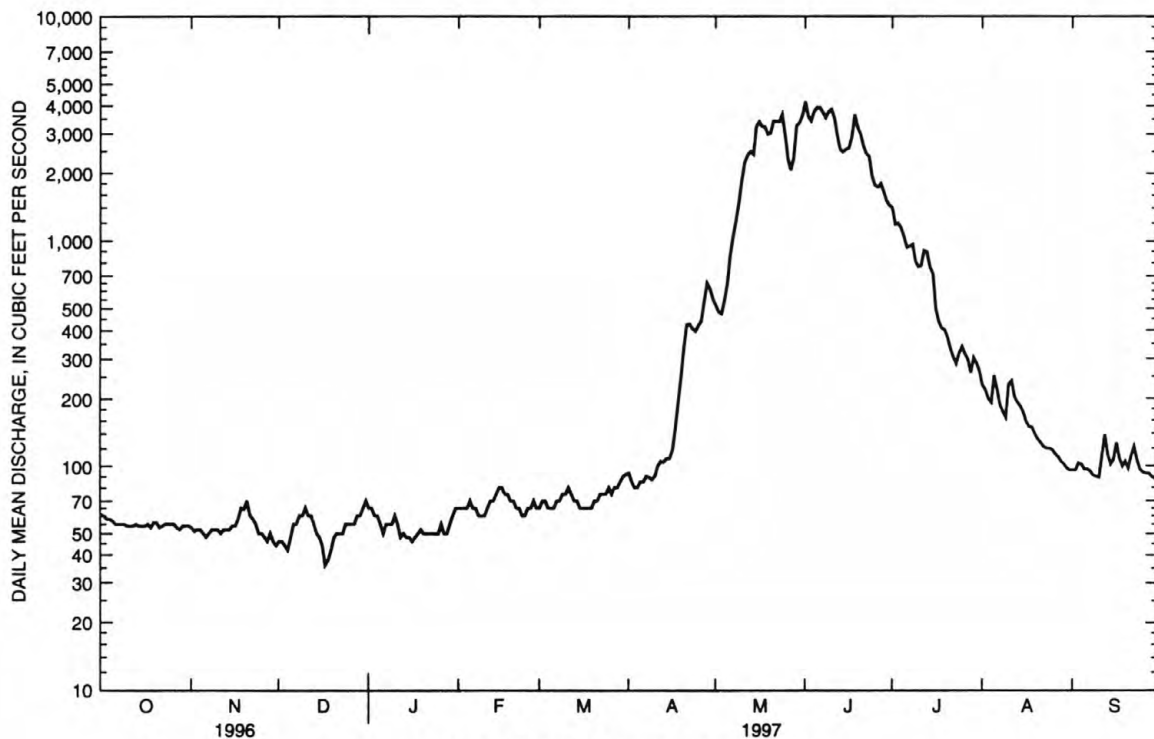
PACIFIC CREEK STATION

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13011500 PACIFIC CREEK AT MORAN, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1917 - 1997	
ANNUAL TOTAL	138893		204260		--	
ANNUAL MEAN	379		560		268	
HIGHEST ANNUAL MEAN	--		--		560	1997
LOWEST ANNUAL MEAN	--		--		132	1994
HIGHEST DAILY MEAN	3520	Jun 11	4170	Jun 1	4170	Jun 1 1997
LOWEST DAILY MEAN	30	Feb 3	36	Dec 17	19	Dec 31 1978
ANNUAL SEVEN-DAY MINIMUM	36	Jan 28	44	Dec 14	23	Jan 6 1993
ANNUAL RUNOFF (AC-FT)	275500		405100		194300	
ANNUAL RUNOFF (CFSM)	2.25		3.31		1.59	
ANNUAL RUNOFF (INCHES)	30.57		44.96		21.56	
10 PERCENT EXCEEDS	1460		2470		920	
50 PERCENT EXCEEDS	60		85		66	
90 PERCENT EXCEEDS	45		50		39	

e Estimate.



13011500 PACIFIC CREEK AT MORAN, WY

BUFFALO FORK BASIN

13011900 BUFFALO FORK ABOVE LAVA CREEK, NEAR MORAN, WY

LOCATION.--Lat 43°50'14", long 110°26'21", 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.

REVISED RECORDS.--WDR Idaho 1974: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,772.78 ft above sea level (Federal Highway Administration bench mark).

REMARKS.--Records good except those for estimated daily discharges, which are fair. Station operated and record provided by Idaho District. U.S. Geological Survey data collection platform with satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,540 ft³/s, June 9, 1981, gage height, 8.61 ft; minimum daily, 73 ft³/s, Jan. 25, 1989.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 25	0100	3,770	6.13
June 11	0445	*5,970	*7.82
June 19	0915	5,800	7.70

Minimum daily, 100 ft³/s, Feb. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	269	208	e180	e180	e140	e120	161	346	4320	3110	1170	450
2	268	e210	e190	e170	e140	e120	147	325	4490	2400	1100	446
3	261	e200	e180	e160	e135	e130	e145	312	4240	2170	1080	443
4	257	e200	e170	e150	e135	e120	e150	348	4930	2020	1000	442
5	255	e210	e180	e140	e140	e120	149	379	5650	2150	1170	429
6	252	211	e190	e135	e145	e130	147	478	5650	2410	1070	422
7	249	e210	e180	e140	e130	e130	e145	549	5720	2720	984	415
8	245	e200	e190	e145	e110	e140	148	599	5630	2630	916	400
9	242	e200	e200	e150	e100	e140	147	683	5680	2610	879	389
10	242	210	e210	e155	e105	e150	138	844	5720	2660	939	385
11	240	208	e190	e150	e110	e150	e135	1050	5750	2570	921	465
12	238	e200	e180	e145	e115	e150	137	1190	5090	2430	822	457
13	236	e190	e170	e140	e120	e140	148	1320	4470	2050	802	407
14	234	e195	e150	e140	e125	e140	161	1520	4180	1790	784	388
15	231	198	e140	e135	e135	e130	159	1920	3980	1870	737	403
16	232	e190	e130	e130	e130	e140	169	2230	4190	2110	707	485
17	225	197	e120	e135	e125	e145	196	2460	4410	2160	669	410
18	218	325	e130	e140	e125	e140	219	2640	5220	2020	658	390
19	250	325	e140	e145	e120	e140	251	2440	5550	2060	632	390
20	233	302	e150	e140	e120	e145	287	2490	5170	1820	604	372
21	e230	254	e160	e145	e115	e150	328	2630	4500	1780	585	381
22	232	241	e150	e140	e115	e160	314	2930	4090	1660	568	400
23	232	231	e160	e135	e110	e155	306	3030	4590	1600	554	378
24	231	207	e160	e140	e110	e150	299	3410	3840	1670	562	358
25	235	e190	e170	e145	e110	e155	306	3200	3200	1550	559	346
26	227	e185	e170	e140	e115	e160	306	2280	3030	1520	530	343
27	211	e180	e175	e130	e120	e170	349	1810	3160	1490	532	351
28	e210	e190	e180	e130	e125	e160	413	1680	3210	1450	502	343
29	e200	e180	e180	e135	---	e160	398	2120	3150	1520	485	332
30	e210	e170	e185	e140	---	166	363	2490	3190	1370	472	324
31	e210	---	e190	e145	---	168	---	3030	---	1290	458	---
TOTAL	7305	6417	5250	4450	3425	4474	6721	52733	136000	62660	23451	11944
MEAN	236	214	169	144	122	144	224	1701	4533	2021	756	398
MAX	269	325	210	180	145	170	413	3410	5750	3110	1170	485
MIN	200	170	120	130	100	120	135	312	3030	1290	458	324
AC-FT	14490	12730	10410	8830	6790	8870	13330	104600	269800	124300	46520	23690

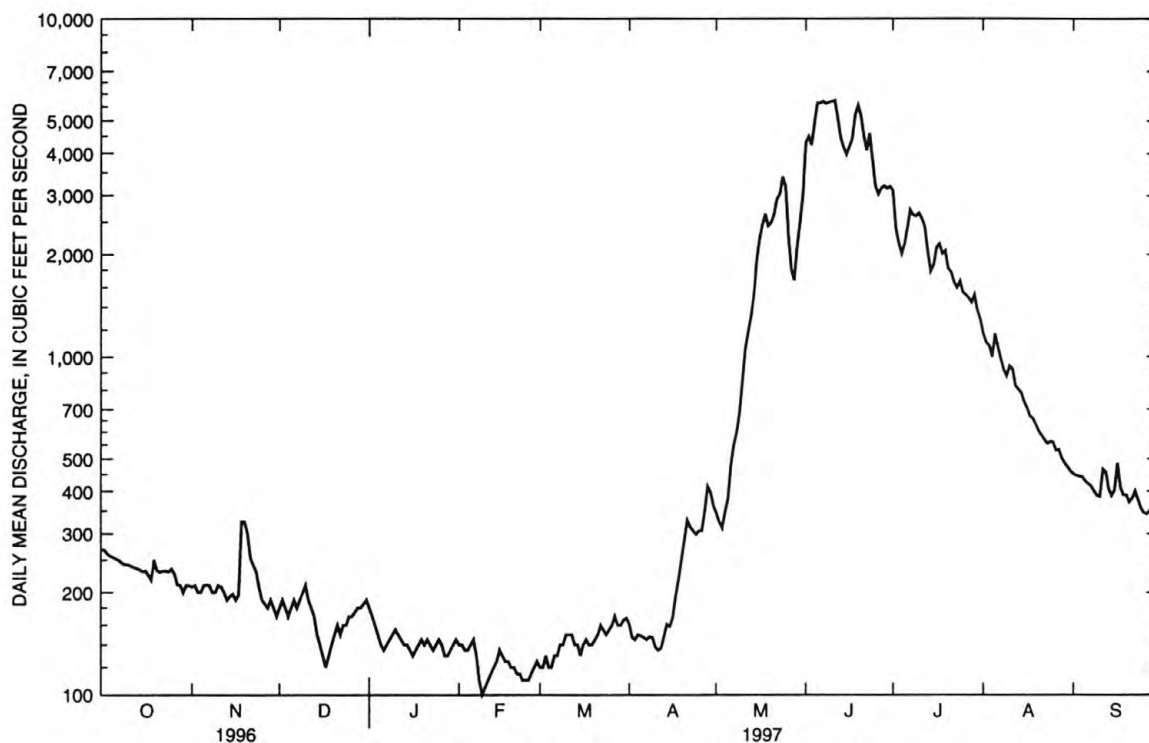
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1997, BY WATER YEAR (WY)

MEAN	214	172	140	121	117	126	218	1012	2347	1372	429	263
MAX	304	229	180	145	191	175	367	1768	4533	3056	946	428
(WY)	1973	1984	1985	1994	1984	1984	1987	1969	1997	1975	1982	1982
MIN	128	122	99.5	87.3	93.1	98.5	124	397	1049	230	163	135
(WY)	1988	1988	1980	1989	1969	1995	1967	1975	1992	1977	1977	1994

13011900 BUFFALO FORK ABOVE LAVA CREEK, NEAR MORAN, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1966 - 1997	
ANNUAL TOTAL	251392		324830		--	
ANNUAL MEAN	687		890		545	
HIGHEST ANNUAL MEAN	--		--		890	1997
LOWEST ANNUAL MEAN	--		--		286	1977
HIGHEST DAILY MEAN	4680	Jun 16	5750	Jun 11	5880	Jun 9 1981
LOWEST DAILY MEAN	80	Feb 3	100	Feb 9	73	Jan 25 1989
ANNUAL SEVEN-DAY MINIMUM	89	Jan 29	112	Feb 8	81	Jan 23 1989
ANNUAL RUNOFF (AC-FT)	498600		644300		395000	
ANNUAL RUNOFF (CFSM)	2.13		2.76		1.69	
ANNUAL RUNOFF (INCHES)	28.95		37.41		22.94	
10 PERCENT EXCEEDS	2510		2800		1660	
50 PERCENT EXCEEDS	231		238		194	
90 PERCENT EXCEEDS	115		135		112	

e Estimate.



13011900 BUFFALO FORK ABOVE LAVA CREEK, NEAR MORAN, WY

SNAKE RIVER MAIN STEM

13013650 SNAKE RIVER AT MOOSE, WY

LOCATION.--Lat 43°39'14", long 110°42'52", 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 6,431.12 ft above sea level, by survey.

REMARKS.--Estimated daily discharges: May 14 to June 3 and Sept. 1-4. Records fair. U.S. Geological Survey data collection platform with satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2400	1200	1130	1340	1820	2120	4320	5080	14900	11700	5780	4250
2	1580	1180	1130	1680	1780	2100	4260	4980	14400	10700	5620	4240
3	1520	1180	1100	1680	1790	2100	4320	4920	14300	9710	5460	4240
4	1500	1190	1110	1630	1890	2080	4320	5020	16100	8900	5220	4230
5	1490	1210	1110	1580	1930	2090	4300	5160	18900	8390	5560	4230
6	1480	1150	1090	1570	2050	2060	4270	5570	20000	8100	5430	4210
7	1470	1190	1110	1620	2130	2060	4330	6050	21800	7950	5220	4200
8	1440	1180	1140	1620	2180	2070	4320	6480	22600	7810	5090	4230
9	1410	1160	1140	1640	2160	2040	4330	6760	23000	7700	5050	4300
10	1380	1150	1210	1640	2140	2040	4290	7260	24200	7640	5260	4290
11	1340	1130	1220	1610	2110	2180	4270	7940	24500	7710	5450	4100
12	1310	1130	1220	1770	2140	2300	4270	7000	23000	8170	5190	4020
13	1290	1150	1170	1580	2120	2530	4280	6590	20800	8360	5120	4040
14	1290	1150	1180	1520	2150	2760	4330	6650	19600	7680	4890	4010
15	1290	1150	1160	1530	2180	2960	4320	8020	19100	7600	4810	4020
16	1300	1110	1160	1620	2160	3190	4370	8870	18400	7650	4770	4150
17	1280	1100	1200	1630	2150	3310	4440	9400	18400	7630	4690	4090
18	1240	1140	1170	1480	2160	3500	4580	9950	19900	7210	4680	4050
19	1270	1410	1120	1510	2130	3770	4710	10000	20300	7050	4600	4050
20	1270	1640	1150	1500	2140	3970	4920	10600	19200	6930	4530	4040
21	1230	1430	1170	1510	2140	4300	5010	11600	18100	6730	4500	4130
22	1230	1310	1170	1570	2150	4460	4980	12000	17400	6620	4450	3970
23	1240	1270	1170	1570	2160	4420	4920	12100	17700	6630	4470	3930
24	1260	1180	1180	1720	2160	4430	4860	12800	16400	6730	4440	3890
25	1270	1200	1180	1730	2120	4360	4920	12000	14500	6630	4410	3900
26	1260	1130	1170	1660	2070	4350	4910	10200	13700	6460	4430	3870
27	1220	1130	1170	1620	2110	4430	5080	9340	13600	6240	4360	3890
28	1200	1160	1160	1800	2100	4390	5330	9570	13400	6100	4340	3880
29	1240	1200	1150	1700	---	4350	5290	11100	13500	6100	4290	3890
30	1240	1120	1200	1700	---	4320	5150	11600	12700	5990	4280	3920
31	1220	---	1210	1740	---	4330	---	12600	---	5960	4250	---
TOTAL	42160	36030	35950	50070	58320	99370	138000	267210	544400	234780	150640	122260
MEAN	1360	1201	1160	1615	2083	3205	4600	8620	18150	7574	4859	4075
MAX	2400	1640	1220	1800	2180	4460	5330	12800	24500	11700	5780	4300
MIN	1200	1100	1090	1340	1780	2040	4260	4920	12700	5960	4250	3870
AC-FT	83620	71470	71310	99310	115700	197100	273700	530000	1080000	465700	298800	242500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

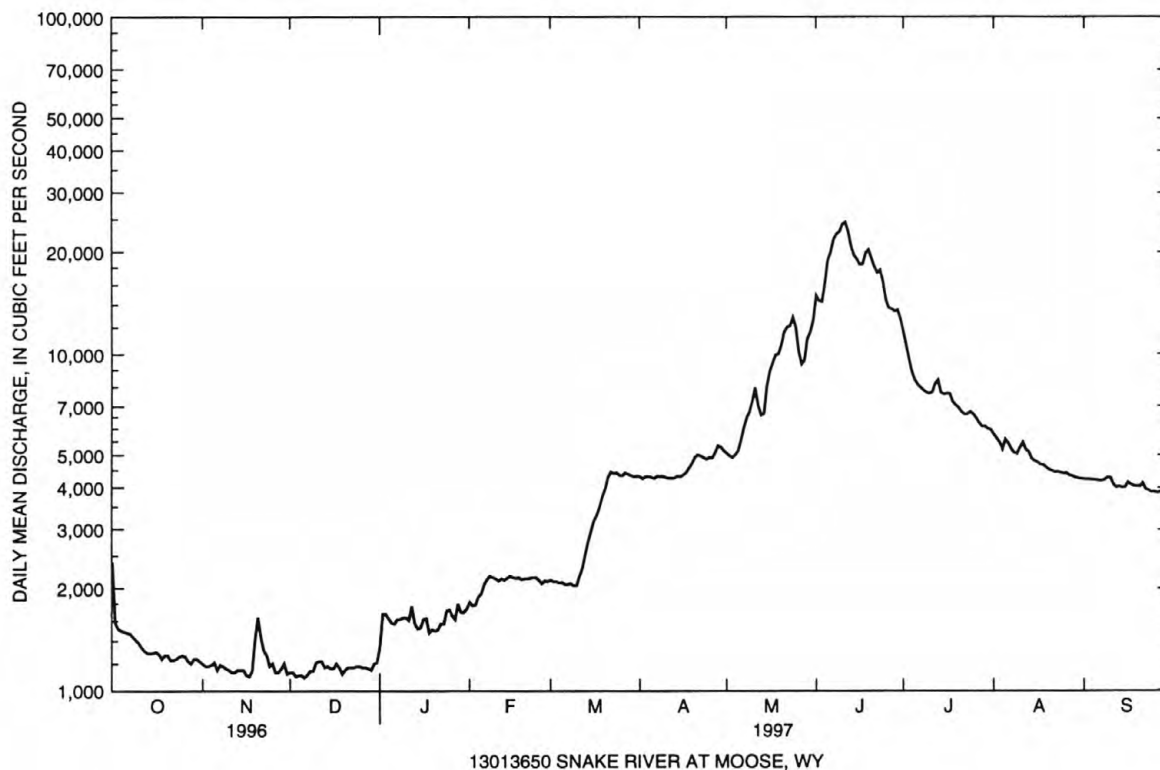
MEAN	1351	1134	1112	1343	1639	2484	4166	6111	14480	7345	4367	3561
MAX	1360	1201	1160	1615	2083	3205	4600	8620	18150	7574	4859	4075
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997
MIN	1342	1067	1064	1071	1210	1763	3731	2531	9336	7160	4000	3142
(WY)	1996	1996	1996	1996	1996	1996	1996	1995	1995	1995	1995	1995

13013650 SNAKE RIVER AT MOOSE, WY--Continued

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SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1995 - 1997	
ANNUAL TOTAL	1512110		1779190		--	
ANNUAL MEAN	4131		4874		4492	
HIGHEST ANNUAL MEAN	--		--		4874	1997
LOWEST ANNUAL MEAN	--		--		4111	1996
HIGHEST DAILY MEAN	20900	Jun 16	24500	Jun 11	24500	Jun 11 1997
LOWEST DAILY MEAN	1030	Jan 5	1090	Dec 6	963	Apr 13 1995*
ANNUAL SEVEN-DAY MINIMUM	1040	Jan 1	1110	Dec 1	978	Apr 9 1995*
INSTANTANEOUS PEAK FLOW	--		25300	Jun 11	25300	Jun 11 1997
INSTANTANEOUS PEAK STAGE	--		15.25	Jun 11	15.25	Jun 11 1997
ANNUAL RUNOFF (AC-FT)	2999000		3529000		3254000	
10 PERCENT EXCEEDS	10600		11600		9940	
50 PERCENT EXCEEDS	2460		4020		3430	
90 PERCENT EXCEEDS	1120		1170		1100	

* During period of operation.



SNAKE RIVER MAIN STEM

13013650 SNAKE RIVER AT MOOSE, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT											
22...	1000	1230	190	8.2	3.5	2.0	605	10.5	100	78	23
NOV											
20...	1145	1650	195	8.3	2.0	5.5	600	10.9	100	77	23
DEC											
10...	1150	1180	191	8.4	3.0	3.0	596	10.6	101	81	24
JAN											
15...	1145	1510	193	8.4	-0.5	-9.5	605	11.9	101	71	21
FEB											
11...	1500	2130	180	8.3	0.0	0.0	600	11.8	103	64	19
MAR											
27...	1200	4130	175	8.2	2.0	2.0	600	10.8	99	60	18
APR											
30...	1200	5180	180	8.2	3.0	4.0	600	10.7	101	71	21
MAY											
21...	1205	11600	146	8.2	5.0	10.0	605	10.0	99	57	17
JUN											
10...	1345	23800	124	7.8	8.5	16.5	595	9.9	109	48	15
20...	1030	19600	116	7.9	10.0	15.0	603	8.8	99	46	14
JUL											
11...	1430	7760	113	7.8	13.0	18.5	605	8.2	98	48	15
AUG											
05...	1145	5570	128	7.8	12.0	16.5	610	8.5	99	52	16
26...	1230	4460	145	7.9	16.0	20.5	610	8.4	107	54	16
SEP											
16...	1210	4210	155	8.2	12.0	11.5	606	8.8	103	62	19

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
OCT											
22...	4.9	7.4	0.4	1.8	85	10	3.7	0.5	15	120	117
NOV											
20...	4.8	7.2	0.4	1.8	87	10	3.3	0.5	14	122	117
DEC											
10...	5.2	8.3	0.4	1.9	85	11	4.3	0.5	16	110	122
JAN											
15...	4.6	9.2	0.5	1.9	82	11	4.8	0.7	15	123	118
FEB											
11...	4.0	11	0.6	1.9	75	12	5.0	0.8	15	115	114
MAR											
27...	3.6	10	0.6	1.9	67	12	5.7	0.9	15	111	107
APR											
30...	4.4	9.5	0.5	1.7	74	10	4.8	0.8	15	112	113
MAY											
21...	3.6	5.4	0.3	1.3	68	5.8	2.2	0.3	11	81	88
JUN											
10...	2.8	5.5	0.3	1.4	60	5.5	2.3	0.4	11	82	80
20...	2.6	4.2	0.3	1.2	53	5.1	2.0	0.3	11	75	73
JUL											
11...	2.7	4.3	0.3	1.3	50	4.7	1.8	0.3	14	72	73
AUG											
05...	3.1	5.9	0.4	1.5	57	6.7	2.8	0.4	14	82	84
26...	3.3	6.8	0.4	1.5	61	7.8	3.4	0.6	14	96	90
SEP											
16...	3.8	7.4	0.4	1.6	66	8.4	3.6	0.6	14	92	98

13013650 SNAKE RIVER AT MOOSE, WY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
OCT										
22...	0.16	399	0.01	<0.05	0.02	<0.2	<0.2	<0.01	<0.01	<0.01
NOV										
20...	0.17	544	--	0.05	0.06	<0.2	--	0.04	--	0.02
DEC										
10...	0.15	350	--	<0.05	0.02	<0.2	--	<0.01	--	0.01
JAN										
15...	0.17	501	--	0.09	<0.01	<0.2	--	<0.01	--	<0.01
FEB										
11...	0.16	661	--	<0.05	<0.01	<0.2	--	<0.01	--	<0.01
MAR										
27...	0.15	1240	--	<0.05	<0.01	0.3	--	0.05	--	<0.01
APR										
30...	0.15	1570	--	0.05	<0.01	<0.2	--	0.01	--	<0.01
MAY										
21...	0.11	2540	--	<0.05	<0.01	0.3	--	0.21	--	0.01
JUN										
10...	0.11	5270	--	0.05	<0.01	0.6	--	0.48	--	0.03
20...	0.10	3970	--	<0.05	<0.01	<0.2	--	0.13	--	<0.01
JUL										
11...	0.10	1510	--	<0.05	<0.01	<0.2	--	0.02	--	0.02
AUG										
05...	0.11	1230	--	<0.05	0.01	<0.2	--	<0.01	--	<0.01
26...	0.13	1160	--	0.06	<0.01	<0.2	--	<0.01	--	<0.01
SEP										
16...	0.13	1050	--	<0.05	<0.01	<0.2	--	0.01	--	<0.01

DATE	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2) (70957)	CHLOR-B PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2) (70958)	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M (00572)	PERI- PHYTON BIOMASS DRY WEIGHT G/SQ M (00573)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT										
22...	4	2	1.2	0.2	--	--	--	--	2	6.6
NOV										
20...	10	5	1.8	0.4	--	--	--	--	14	62
DEC										
10...	6	3	1.3	0.2	--	--	--	--	6	19
JAN										
15...	13	2	1.2	0.2	--	--	--	--	9	37
FEB										
11...	9	3	1.3	0.3	--	--	--	--	12	69
MAR										
27...	5	3	1.6	0.4	--	--	--	--	22	245
APR										
30...	8	7	1.9	0.2	--	--	--	--	25	350
MAY										
21...	12	4	2.9	>2.5	--	--	--	--	417	13100
JUN										
10...	13	7	2.5	>2.5	--	--	--	--	656	42200
20...	9	6	2.1	>2.5	--	--	--	--	394	20900
JUL										
11...	7	4	1.5	0.5	--	--	--	--	75	1570
AUG										
05...	6	2	1.5	0.4	--	--	--	--	19	286
26...	3	2	1.9	0.3	--	--	--	--	11	132
SEP										
16...	4	2	1.6	0.2	2.00	<0.1	74.1	76.2	16	182

SNAKE RIVER MAIN STEM

13013650 SNAKE RIVER AT MOOSE, WY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (82686)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)
OCT 22...	1000	1230	3.5	2.0	<0.002	<0.002	E0.003	<0.002	<0.001	<0.002	<0.002
FEB 11...	1500	2130	0.0	0.0	<0.002	<0.002	E0.002	<0.002	<0.001	<0.002	<0.002
APR 30...	1200	5180	3.0	4.0	<0.002	<0.002	<0.001	<0.002	<0.001	<0.002	<0.002
MAY 21...	1205	11600	5.0	10.0	<0.002	<0.002	0.005	<0.002	<0.001	<0.002	<0.002
JUN 10...	1345	23800	8.5	16.5	<0.002	<0.002	E0.001	<0.002	<0.001	<0.002	<0.002
JUN 20...	1030	19600	10.0	15.0	<0.002	<0.002	<0.001	<0.002	<0.001	<0.002	<0.002
JUL 11...	1430	7760	13.0	18.5	<0.002	<0.002	<0.001	<0.002	<0.001	<0.002	<0.002

E-Estimate.

DATE	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	P, P' DDE DISSOLV (UG/L) (34653)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (82660)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (82677)
OCT 22...	<0.003	<0.003	<0.004	<0.004	<0.002	<0.006	<0.002	<0.001	<0.003	<0.017
FEB 11...	<0.003	<0.003	<0.004	<0.004	<0.002	<0.006	<0.002	<0.001	<0.003	<0.017
APR 30...	<0.003	<0.003	<0.004	<0.004	<0.002	<0.006	<0.002	<0.001	<0.003	<0.017
MAY 21...	<0.003	<0.008	<0.004	<0.004	<0.002	<0.006	<0.002	<0.001	<0.003	<0.017
JUN 10...	<0.003	<0.003	<0.004	<0.004	E0.001	E0.002	<0.002	<0.001	<0.003	<0.017
JUN 20...	<0.003	<0.003	<0.004	<0.004	<0.002	<0.006	<0.002	<0.001	<0.003	<0.017
JUL 11...	<0.003	<0.003	<0.004	<0.004	<0.002	<0.006	<0.002	<0.001	<0.003	<0.017

E-Estimate.

DATE	EPTC WATER FLTRD 0.7 U GF, REC (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (82667)
OCT 22...	<0.002	<0.004	<0.003	<0.003	<0.002	<0.004	<0.002	<0.005	<0.002	<0.006
FEB 11...	<0.002	<0.004	<0.003	<0.003	<0.002	<0.004	<0.002	<0.005	<0.002	<0.006
APR 30...	<0.002	<0.004	<0.003	<0.003	<0.002	<0.004	<0.002	<0.005	<0.002	<0.006
MAY 21...	<0.002	<0.004	<0.003	<0.003	<0.002	<0.004	<0.002	<0.005	<0.002	<0.006
JUN 10...	<0.002	<0.004	<0.003	<0.003	<0.002	<0.004	<0.002	<0.005	<0.002	<0.006
JUN 20...	<0.002	<0.004	<0.003	<0.003	<0.002	<0.004	<0.002	<0.005	<0.002	<0.006
JUL 11...	<0.002	<0.004	<0.003	<0.003	<0.002	<0.004	<0.002	<0.005	<0.002	<0.006

13013650 SNAKE RIVER AT MOOSE, WY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)
OCT 22...	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002	<0.018	<0.003
FEB 11...	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002	<0.018	<0.003
APR 30...	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002	<0.018	<0.003
MAY 21...	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002	<0.018	<0.003
JUN 10...	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002	<0.018	<0.003
JUN 20...	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002	<0.018	<0.003
JUL 11...	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002	<0.018	<0.003
DATE	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
OCT 22...	<0.007	<0.004	<0.013	<0.005	<0.01	<0.007	<0.013	<0.002	<0.001	<0.002
FEB 11...	<0.007	<0.004	<0.013	<0.005	<0.01	<0.007	<0.013	<0.002	<0.001	<0.002
APR 30...	<0.007	<0.004	<0.013	<0.005	<0.01	<0.007	<0.013	<0.002	<0.001	<0.002
MAY 21...	<0.007	<0.004	<0.013	<0.005	<0.01	<0.007	<0.013	<0.002	<0.001	<0.002
JUN 10...	<0.007	<0.004	<0.013	<0.005	<0.01	<0.007	<0.013	<0.002	<0.001	<0.002
JUN 20...	<0.007	<0.004	<0.013	<0.005	<0.01	<0.007	<0.013	<0.002	<0.001	<0.002
JUL 11...	<0.007	<0.004	<0.013	<0.005	<0.01	<0.007	<0.013	<0.002	<0.001	<0.002

GROS VENTRE RIVER BASIN

13015000 GROS VENTRE RIVER AT ZENITH, WY

LOCATION.--Lat 43°33'00", long 110°47'00", in SW¹/₄ NW¹/₄ SW¹/₄ sec.34., T.42 N., R.116 W., Teton County, Hydrologic Unit 17040102, on left bank 20 ft upstream from county bridge, 0.5 mi southwest of Jackson Hole Country Club, and 5.5 mi north of Jackson.

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 sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges and those for May 10 to June 20, which are poor. Station equipment includes satellite telemetry. Diversions of about 300 ft³/s for irrigation upstream from station. No regulation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 6,170 ft³/s, June 6, 1997; maximum gage height, 22.77 ft, June 10, 1996; no flow on many days.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 18, 1927, when landslide about 12 mi upstream washed out, released about 60,000 acre-ft of impounded water (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 6,170 ft³/s, June 6; minimum daily, 68 ft³/s, Apr. 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

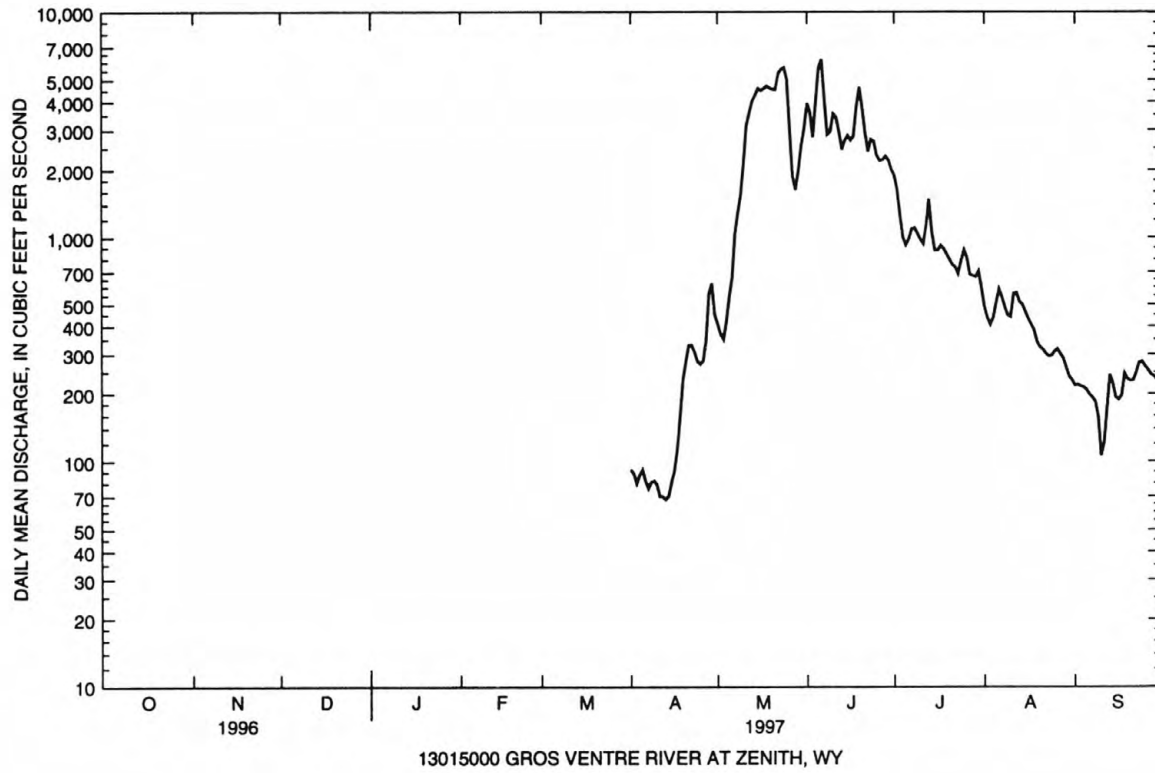
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e92	e410	3930	1890	490	218
2	---	---	---	---	---	---	88	e370	3600	1640	435	220
3	---	---	---	---	---	---	80	e350	2790	1260	406	216
4	---	---	---	---	---	---	87	e420	4000	1000	435	214
5	---	---	---	---	---	---	92	e540	5680	923	509	209
6	---	---	---	---	---	---	82	662	6170	985	585	199
7	---	---	---	---	---	---	76	1040	4120	1090	540	193
8	---	---	---	---	---	---	81	1290	2860	1100	487	184
9	---	---	---	---	---	---	82	1550	2950	1040	448	158
10	---	---	---	---	---	---	79	2140	3530	977	440	106
11	---	---	---	---	---	---	70	e3140	3410	936	559	121
12	---	---	---	---	---	---	70	e3590	2950	1130	563	173
13	---	---	---	---	---	---	68	e4040	2470	1480	515	243
14	---	---	---	---	---	---	70	e4290	2690	1060	500	223
15	---	---	---	---	---	---	81	e4590	2830	874	466	193
16	---	---	---	---	---	---	91	4490	2700	873	433	188
17	---	---	---	---	---	---	114	4590	2800	917	408	197
18	---	---	---	---	---	---	159	e4700	3820	890	386	246
19	---	---	---	---	---	---	231	e4600	4640	844	342	233
20	---	---	---	---	---	---	278	4540	3750	798	323	229
21	---	---	---	---	---	---	328	4520	2910	755	315	230
22	---	---	---	---	---	---	329	5340	2410	736	302	249
23	---	---	---	---	---	---	308	5580	2720	688	294	275
24	---	---	---	---	---	---	278	5680	2670	787	295	278
25	---	---	---	---	---	---	271	5040	2320	876	308	266
26	---	---	---	---	---	---	281	3010	2200	811	316	256
27	---	---	---	---	---	---	347	1870	2220	682	301	244
28	---	---	---	---	---	---	562	1630	2300	673	288	240
29	---	---	---	---	---	---	621	1970	2210	665	262	232
30	---	---	---	---	---	---	e450	2540	2010	704	239	224
31	---	---	---	---	---	---	---	3050	---	595	230	---
TOTAL	---	---	---	---	---	---	5846	91572	95660	29679	12420	6457
MEAN	---	---	---	---	---	---	195	2954	3189	957	401	215
MAX	---	---	---	---	---	---	621	5680	6170	1890	585	278
MIN	---	---	---	---	---	---	68	350	2010	595	230	106
AC-FT	---	---	---	---	---	---	11600	181600	189700	58870	24640	12810

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 1997, BY WATER YEAR (WY)

	MEAN	64.9	64.4	29.5	---	---	---	138	900	1303	496	174	76.0
MAX	89.4	81.3	29.5	---	---	---	---	219	2954	3189	1410	406	215
(WY)	1990	1990	1988	---	---	---	---	1990	1997	1997	1995	1917	1997
MIN	50.3	49.2	29.5	---	---	---	---	41.1	293	88.3	10.5	.86	.000
(WY)	1988	1988	1988	---	---	---	---	1993	1995	1992	1994	1994	1994

e Estimate.

13015000 GROS VENTRE RIVER AT ZENITH, WY--Continued



FISH CREEK BASIN

13016240 LAKE CREEK BELOW GRANITE CREEK SUPPLEMENTAL, NEAR MOOSE, WY

LOCATION.--Lat 43°36'49", long 110°46'44", in NE¹/₄ SW¹/₄ SW¹/₄ sec.9, T.42 N., R.116 W., Teton County, Hydrologic Unit 17040103, Grand Teton National Park, on left bank 60 ft downstream from Granite Creek Supplemental, and 4.3 mi southwest of Moose.

DRAINAGE AREA.--22.2 mi².

PERIOD OF RECORD.--June 1995 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 6,350 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Apr. 1-14. Records good except those for Apr. 1-14, which are poor. Natural flow of stream affected by transbasin diversion 60 ft upstream, into and out of Lake Creek through Granite Creek Supplemental, which diverts water from Snake River main stem for irrigation in Fish Creek Basin. See stations 13016305, 13016310, 13016315 and 13016450. Results of discharge measurements, in cubic feet per second, made during the period when station was not in operation, are given below:

Oct. 08 . . .64.4
Mar. 26 . . .10.2

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	7.6	37	274	180	24	16
2	---	---	---	---	---	---	7.6	34	345	134	21	15
3	---	---	---	---	---	---	6.9	31	321	81	18	15
4	---	---	---	---	---	---	6.6	29	337	66	16	15
5	---	---	---	---	---	---	6.7	26	386	81	27	14
6	---	---	---	---	---	---	6.8	28	410	93	28	22
7	---	---	---	---	---	---	6.0	32	424	102	21	28
8	---	---	---	---	---	---	5.6	38	426	92	17	27
9	---	---	---	---	---	---	5.4	45	458	83	14	26
10	---	---	---	---	---	---	6.4	63	446	86	13	26
11	---	---	---	---	---	---	7.2	83	408	84	15	28
12	---	---	---	---	---	---	7.0	106	349	80	16	29
13	---	---	---	---	---	---	7.1	124	303	64	14	28
14	---	---	---	---	---	---	4.8	139	286	51	12	26
15	---	---	---	---	---	---	4.9	163	286	43	10	25
16	---	---	---	---	---	---	15	175	309	38	19	26
17	---	---	---	---	---	---	43	178	340	44	22	25
18	---	---	---	---	---	---	43	184	421	49	28	24
19	---	---	---	---	---	---	45	173	483	51	31	24
20	---	---	---	---	---	---	53	204	409	48	29	24
21	---	---	---	---	---	---	61	233	350	44	29	25
22	---	---	---	---	---	---	45	245	313	40	27	24
23	---	---	---	---	---	---	35	248	325	41	27	25
24	---	---	---	---	---	---	32	251	272	46	26	24
25	---	---	---	---	---	---	31	207	192	42	25	23
26	---	---	---	---	---	---	29	158	157	39	24	22
27	---	---	---	---	---	---	30	118	177	40	22	22
28	---	---	---	---	---	---	32	96	191	37	19	22
29	---	---	---	---	---	---	37	116	184	39	18	21
30	---	---	---	---	---	---	38	173	189	37	18	20
31	---	---	---	---	---	---	---	191	---	30	19	---
TOTAL	---	---	---	---	---	---	665.6	3928	9771	1985	649	691
MEAN	---	---	---	---	---	---	22.2	127	326	64.0	20.9	23.0
MAX	---	---	---	---	---	---	61	251	483	180	31	29
MIN	---	---	---	---	---	---	4.8	26	157	30	10	14
AC-FT	---	---	---	---	---	---	1320	7790	19380	3940	1290	1370

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
MEAN	---	---	---	---	---	---	17.3	93.3	260	102	32.8	29.1	29.1
MAX	---	---	---	---	---	---	22.2	127	326	131	51.8	41.1	41.1
(WY)	---	---	---	---	---	---	1997	1997	1997	1995	1995	1995	1995
MIN	---	---	---	---	---	---	12.4	59.8	195	64.0	20.9	23.0	23.0
(WY)	---	---	---	---	---	---	1996	1996	1996	1997	1997	1997	1997

13016240 LAKE CREEK BELOW GRANITE CREEK SUPPLEMENTAL, NEAR MOOSE, WY--Continued

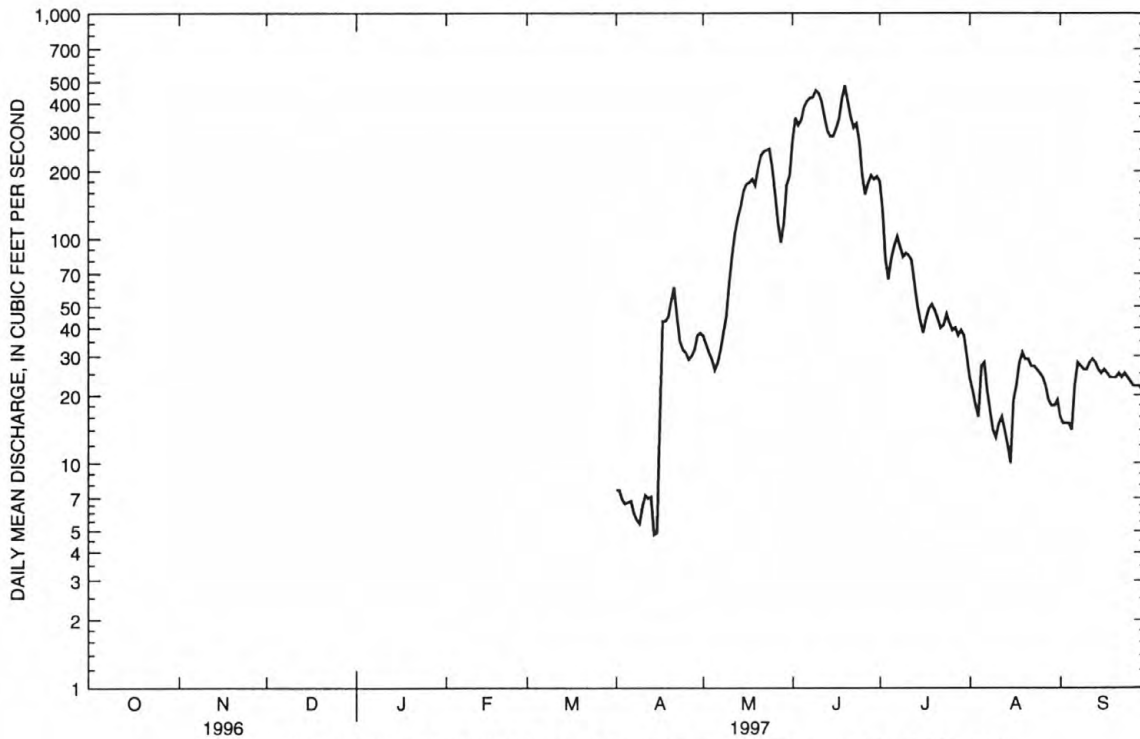
SUMMARY STATISTICS

FOR 1997 WATER YEAR*

WATER YEARS 1995 - 1997*

HIGHEST DAILY MEAN	483	Jun 19	483	Jun 19 1997
LOWEST DAILY MEAN	4.8	Apr 14	4.8	Apr 14 1997
INSTANTANEOUS PEAK FLOW	499	Jun 19	499	Jun 19 1997
INSTANTANEOUS PEAK STAGE	3.64	Jun 19	3.64	Jun 19 1997
10 PERCENT EXCEEDS	--		229	
50 PERCENT EXCEEDS	--		41	
90 PERCENT EXCEEDS	--		13	

* During period of operation.



13016240 LAKE CREEK BELOW GRANITE CREEK SUPPLEMENTAL, NEAR MOOSE, WY

13016305 GRANITE CREEK ABOVE GRANITE CREEK SUPPLEMENTAL, NEAR MOOSE, WY

LOCATION.--Lat 43°36'14", long 110°48'17", 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 sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 24-28, Nov. 30 to Dec. 8, Dec. 13-24, Dec. 26 to Jan. 19, Jan. 25, 26, 28, 29, Feb. 4-12, 22-26, Mar. 1, 14-16, and June 1-9. Records fair except those for estimated daily discharges and Mar. 10 to May 31, which are poor. No diversions upstream from station. See stations 13016240, 13016310, 13016315, and 13016450.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

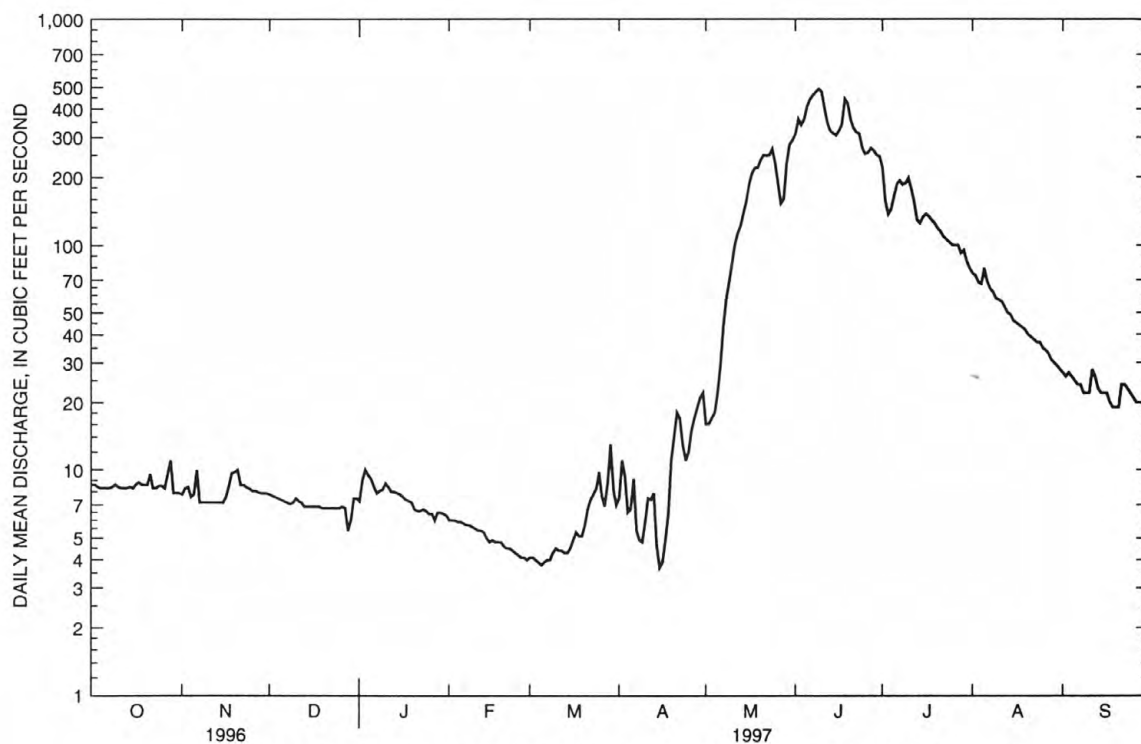
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	7.8	7.8	7.3	6.0	4.1	7.5	16	310	220	75	27
2	8.6	8.3	7.7	9.0	6.0	4.1	11	16	360	157	73	26
3	8.4	8.4	7.6	10	6.0	4.0	9.4	17	340	137	68	27
4	8.3	7.6	7.5	9.5	5.9	3.9	6.5	18	360	144	67	26
5	8.3	7.8	7.4	9.1	5.9	3.8	6.7	22	410	165	79	25
6	8.3	10	7.3	8.4	5.8	3.9	9.1	29	440	187	69	24
7	8.3	7.2	7.2	7.9	5.7	4.0	5.4	43	460	193	64	24
8	8.4	7.2	7.1	8.1	5.7	4.0	4.9	57	475	185	62	22
9	8.6	7.2	7.2	8.2	5.6	4.3	4.8	68	490	188	58	22
10	8.4	7.2	7.5	8.7	5.5	4.5	5.9	82	478	198	57	22
11	8.3	7.2	7.3	8.4	5.4	4.4	7.5	100	403	177	56	28
12	8.3	7.2	7.2	8.0	5.4	4.4	7.4	113	347	155	53	26
13	8.3	7.2	6.9	8.0	5.3	4.3	7.9	122	320	129	50	23
14	8.4	7.2	6.9	7.9	5.0	4.3	4.7	139	312	125	49	22
15	8.3	7.2	6.9	7.8	4.8	4.5	3.7	157	306	133	46	22
16	8.6	7.6	6.9	7.6	4.9	4.9	3.9	186	320	137	45	22
17	8.8	8.5	6.9	7.4	4.8	5.3	4.9	208	341	134	44	20
18	8.6	9.7	6.9	7.3	4.8	5.1	6.4	219	442	129	43	19
19	8.6	9.8	6.8	7.2	4.8	5.1	11	220	423	125	42	19
20	8.6	10	6.8	6.7	4.6	5.7	14	237	358	119	40	19
21	9.6	8.6	6.8	6.6	4.5	6.7	18	250	329	115	39	24
22	8.3	8.6	6.8	6.6	4.5	7.4	17	249	315	109	38	24
23	8.3	8.4	6.8	6.7	4.4	7.8	13	250	311	106	37	23
24	8.5	8.3	6.8	6.6	4.3	8.3	11	266	270	103	37	22
25	8.5	8.1	6.8	6.4	4.2	9.8	12	231	253	100	35	21
26	8.3	8.1	6.9	6.4	4.1	7.7	15	188	256	100	34	20
27	9.6	8.0	6.8	6.0	4.1	6.9	17	153	268	100	33	20
28	11	7.9	5.4	6.5	4.0	8.8	19	160	262	92	31	20
29	7.9	7.9	6.0	6.5	---	13	21	229	250	95	30	19
30	7.9	7.9	7.5	6.4	---	8.2	22	278	247	85	29	18
31	7.9	---	7.5	6.3	---	7.0	---	291	---	79	28	---
TOTAL	264.8	242.1	217.9	233.5	142.0	180.2	307.6	4614	10456	4221	1511	676
MEAN	8.54	8.07	7.03	7.53	5.07	5.81	10.3	149	349	136	48.7	22.5
MAX	11	10	7.8	10	6.0	13	22	291	490	220	79	28
MIN	7.9	7.2	5.4	6.0	4.0	3.8	3.7	16	247	79	28	18
AC-FT	525	480	432	463	282	357	610	9150	20740	8370	3000	1340

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

	1995	1996	1997	1995	1996	1997	1995	1996	1997	1995	1996	1997
MEAN	9.31	8.25	6.00	4.94	4.24	4.64	10.3	109	306	152	40.8	16.1
MAX	10.1	8.43	7.03	7.53	5.07	5.81	10.4	149	349	176	48.7	22.5
(WY)	1996	1996	1997	1997	1997	1997	1996	1997	1997	1995	1997	1997
MIN	8.54	8.07	4.97	2.34	3.44	3.46	10.3	69.4	264	136	33.3	11.9
(WY)	1997	1997	1996	1996	1996	1996	1997	1996	1996	1997	1996	1996

13016305 GRANITE CREEK ABOVE GRANITE CREEK SUPPLEMENTAL, NEAR MOOSE, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1995 - 1997	
ANNUAL TOTAL	17256.3		23066.1		--	
ANNUAL MEAN	47.1		63.2		55.2	
HIGHEST ANNUAL MEAN	--		--		63.2	1997
LOWEST ANNUAL MEAN	--		--		47.1	1996
HIGHEST DAILY MEAN	371	Jun 11	490	Jun 9	490	Jun 9 1997
LOWEST DAILY MEAN	1.2	Jan 9	3.7	Apr 15	1.2	Jan 9 1996
ANNUAL SEVEN-DAY MINIMUM	1.3	Jan 5	4.0	Mar 2	1.3	Jan 5 1996
INSTANTANEOUS PEAK FLOW	404	Jun 11	518	Jun 9	518	Jun 9 1997
INSTANTANEOUS PEAK STAGE	6.38	Jun 11	6.58	Jun 9	6.58	Jun 9 1997
ANNUAL RUNOFF (AC-FT)	34230		45750		39960	
10 PERCENT EXCEEDS	176		241		226	
50 PERCENT EXCEEDS	8.6		8.8		12	
90 PERCENT EXCEEDS	3.4		5.0		3.6	



13016305 GRANITE CREEK ABOVE GRANITE CREEK SUPPLEMENTAL, NEAR MOOSE, WY

FISH CREEK BASIN

13016310 GRANITE CREEK SUPPLEMENTAL ABOVE LAKE CREEK, NEAR MOOSE, WY

LOCATION.--Lat 43°37'09", long 110°46'27", in SE¹/₄ SE¹/₄ NW¹/₄ sec.9, T.42 N., R.116 W., Teton County, Hydrologic Unit 17040103, Grand Teton National Park, on left bank 0.3 mi downstream from headgate, 0.4 mi upstream from Lake Creek, and 4.0 mi southwest of Moose.

DRAINAGE AREA.--Undetermined.

PERIOD OF RECORD.--June 1995 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 6,370 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. This is a transbasin diversion from Snake River for irrigation in Fish Creek Basin. Diversion point is 0.3 mi northeast of this site, at the right bank of Snake River in SW¹/₄ NE¹/₄ sec.9, T.42 N., R.116 W. See stations 13016240, 13016305, 13016315, and 13016450. Results of discharge measurements, in cubic feet per second, made during the period when station was not in operation, are given below:

Oct. 08 . . .66.4
Mat. 36 . . . 2.51

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	2.5	18	3.2	2.5	72	81
2	---	---	---	---	---	---	2.5	18	3.4	2.3	70	80
3	---	---	---	---	---	---	2.5	18	3.5	2.0	68	82
4	---	---	---	---	---	---	2.5	15	3.6	33	65	81
5	---	---	---	---	---	---	2.5	9.0	3.8	54	69	79
6	---	---	---	---	---	---	2.5	9.0	4.0	52	70	98
7	---	---	---	---	---	---	2.5	8.6	4.1	50	65	113
8	---	---	---	---	---	---	2.5	8.5	4.4	50	62	111
9	---	---	---	---	---	---	2.5	8.5	4.8	52	60	109
10	---	---	---	---	---	---	2.5	24	5.4	52	60	110
11	---	---	---	---	---	---	2.5	35	5.7	53	62	114
12	---	---	---	---	---	---	2.5	35	5.7	57	59	117
13	---	---	---	---	---	---	2.5	35	5.5	60	57	112
14	---	---	---	---	---	---	2.5	34	5.3	53	56	110
15	---	---	---	---	---	---	2.5	34	5.1	51	54	110
16	---	---	---	---	---	---	39	14	4.9	52	54	113
17	---	---	---	---	---	---	59	2.7	4.8	50	52	111
18	---	---	---	---	---	---	58	2.5	4.8	79	74	109
19	---	---	---	---	---	---	58	2.6	4.6	96	96	108
20	---	---	---	---	---	---	58	2.8	4.6	93	93	106
21	---	---	---	---	---	---	58	2.8	4.4	89	91	109
22	---	---	---	---	---	---	34	3.0	4.2	86	89	110
23	---	---	---	---	---	---	21	3.1	3.9	85	89	109
24	---	---	---	---	---	---	20	3.2	3.5	90	88	106
25	---	---	---	---	---	---	20	3.3	3.1	93	88	105
26	---	---	---	---	---	---	20	3.3	2.9	88	83	105
27	---	---	---	---	---	---	19	3.1	2.8	87	78	104
28	---	---	---	---	---	---	19	3.0	2.7	83	75	104
29	---	---	---	---	---	---	19	3.0	2.7	83	74	103
30	---	---	---	---	---	---	19	3.0	2.6	82	75	103
31	---	---	---	---	---	---	---	3.1	---	76	80	---
TOTAL	---	---	---	---	---	---	558.5	368.1	124.0	1935.8	2228	3112
MEAN	---	---	---	---	---	---	18.6	11.9	4.13	62.4	71.9	104
MAX	---	---	---	---	---	---	59	35	5.7	96	96	117
MIN	---	---	---	---	---	---	2.5	2.5	2.6	2.0	52	79
AC-FT	---	---	---	---	---	---	1110	730	246	3840	4420	6170

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

	1995	1996	1997	1995	1996	1997	1995	1996	1997	1995	1996	1997
MEAN	---	---	---	---	---	---	10.1	37.1	7.13	54.8	132	112
MAX	---	---	---	---	---	---	18.6	62.2	10.1	62.4	169	139
(WY)	---	---	---	---	---	---	1997	1996	1996	1997	1995	1996
MIN	---	---	---	---	---	---	1.57	11.9	4.13	41.6	71.9	93.5
(WY)	---	---	---	---	---	---	1996	1997	1997	1995	1997	1995

13016310 GRANITE CREEK SUPPLEMENTAL ABOVE LAKE CREEK, NEAR MOOSE, WY--Continued

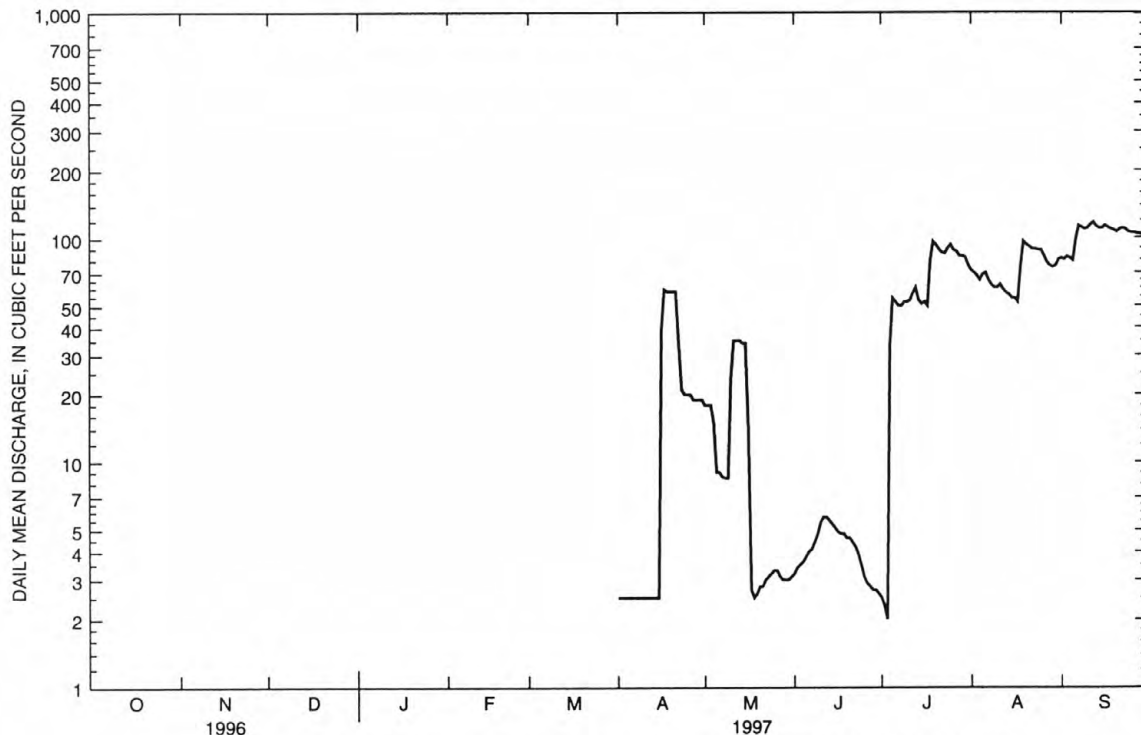
SUMMARY STATISTICS

FOR 1997 WATER YEAR*

WATER YEARS 1995 - 1997*

HIGHEST DAILY MEAN	117	Sep 12	199	Aug 16 1996
LOWEST DAILY MEAN	2.0	Jul 3	1.4	Apr 13 1996
INSTANTANEOUS PEAK FLOW	126	Sep 6	205	Aug 15 1996
INSTANTANEOUS PEAK STAGE	3.36	Sep 6	3.95	Aug 15 1996
10 PERCENT EXCEEDS	--		168	
50 PERCENT EXCEEDS	--		60	
90 PERCENT EXCEEDS	--		2.5	

* During period of operation.



13016310 GRANITE CREEK SUPPLEMENTAL ABOVE LAKE CREEK, NEAR MOOSE, WY

FISH CREEK BASIN

13016315 GRANITE CREEK SUPPLEMENTAL BELOW LAKE CREEK. NEAR MOOSE, WY

LOCATION.--Lat 43°36'22", long 110°47'24", in NW¼ SW¼ NE¼ sec.17, T.42 N., R.116 W., Teton County, Hydrologic Unit 17040103, Grand Teton National Park, on left bank 800 ft upstream from bridge on Moose-Wilson road, 0.9 mi upstream from mouth, and 5.4 mi southwest of Moose.

DRAINAGE AREA.--Undetermined.

PERIOD OF RECORD.--June 1995 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 6,350 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: July 12, 13, 19-23, and July 26 to Aug. 10. Records good except those for July 11 to Aug. 12, which are fair. Canal diverts water from Snake River in SW¹/₄ NE¹/₄ sec. 9, T. 42 N., R. 16 W., for irrigation in Fish Creek Basin. Figures given herein represent water diverted from main stem of Snake River, less that which may divert into Lake Creek, 0.8 mi upstream. Figures given herein also represent water diverted into this canal from Lake Creek, 0.8 mi upstream. See stations 13016240, 13016305, 13016310, and 13016450. Results of discharge measurements, in cubic feet per second, made during the period when station was not in operation, are given below:

Oct. 08 . . . 1.37

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.00	114	76	165	81
2	---	---	---	---	---	---	.00	.00	92	60	160	80
3	---	---	---	---	---	---	.00	.00	81	72	155	81
4	---	---	---	---	---	---	.00	.00	89	111	150	80
5	---	---	---	---	---	---	.00	.00	111	136	160	77
6	---	---	---	---	---	---	.00	.00	106	147	160	86
7	---	---	---	---	---	---	.00	.00	100	154	155	95
8	---	---	---	---	---	---	.00	.00	102	167	150	92
9	---	---	---	---	---	---	.00	.00	109	181	145	91
10	---	---	---	---	---	---	.00	7.9	89	185	140	92
11	---	---	---	---	---	---	.00	22	75	183	133	98
12	---	---	---	---	---	---	.00	29	59	180	122	100
13	---	---	---	---	---	---	.00	33	51	160	117	95
14	---	---	---	---	---	---	.00	40	47	138	113	94
15	---	---	---	---	---	---	.00	52	47	147	107	94
16	---	---	---	---	---	---	.00	58	52	175	94	96
17	---	---	---	---	---	---	.00	77	57	183	84	94
18	---	---	---	---	---	---	.00	98	85	195	96	92
19	---	---	---	---	---	---	.00	90	106	192	111	91
20	---	---	---	---	---	---	.00	51	78	189	107	89
21	---	---	---	---	---	---	.00	35	60	186	102	93
22	---	---	---	---	---	---	.00	34	55	183	101	94
23	---	---	---	---	---	---	.00	34	52	180	101	93
24	---	---	---	---	---	---	.00	45	40	194	98	91
25	---	---	---	---	---	---	.00	48	55	203	96	90
26	---	---	---	---	---	---	.00	35	74	195	92	89
27	---	---	---	---	---	---	.00	24	79	195	85	88
28	---	---	---	---	---	---	.00	30	81	190	78	87
29	---	---	---	---	---	---	.00	62	81	190	76	87
30	---	---	---	---	---	---	.00	82	81	185	76	86
31	---	---	---	---	---	---	---	90	---	175	79	---
TOTAL	---	---	---	---	---	---	0.00	1076.90	2308	5107	3608	2696
MEAN	---	---	---	---	---	---	.0000	34.7	76.9	165	116	89.9
MAX	---	---	---	---	---	---	.00	98	114	203	165	100
MIN	---	---	---	---	---	---	.00	.00	40	60	76	77
AC-FT	---	---	---	---	---	---	.00	2140	4580	10130	7160	5350

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

MEAN	---	---	---	---	---	---	.000	56.1	100	144	145	89.4
MAX	---	---	---	---	---	---	.000	77.5	123	165	160	123
(WY)	---	---	---	---	---	---	1997	1996	1996	1997	1996	1996
MIN	---	---	---	---	---	---	.000	34.7	76.9	128	116	55.5
(WY)	---	---	---	---	---	---	1997	1997	1997	1995	1997	1995

13016315 GRANITE CREEK SUPPLEMENTAL BELOW LAKE CREEK, NEAR MOOSE, WY--Continued

SUMMARY STATISTICS

FOR 1997 WATER YEAR*

WATER YEARS 1995 - 1997*

HIGHEST DAILY MEAN
LOWEST DAILY MEAN

203 Jul 25
.00 Apr 1 to May 9

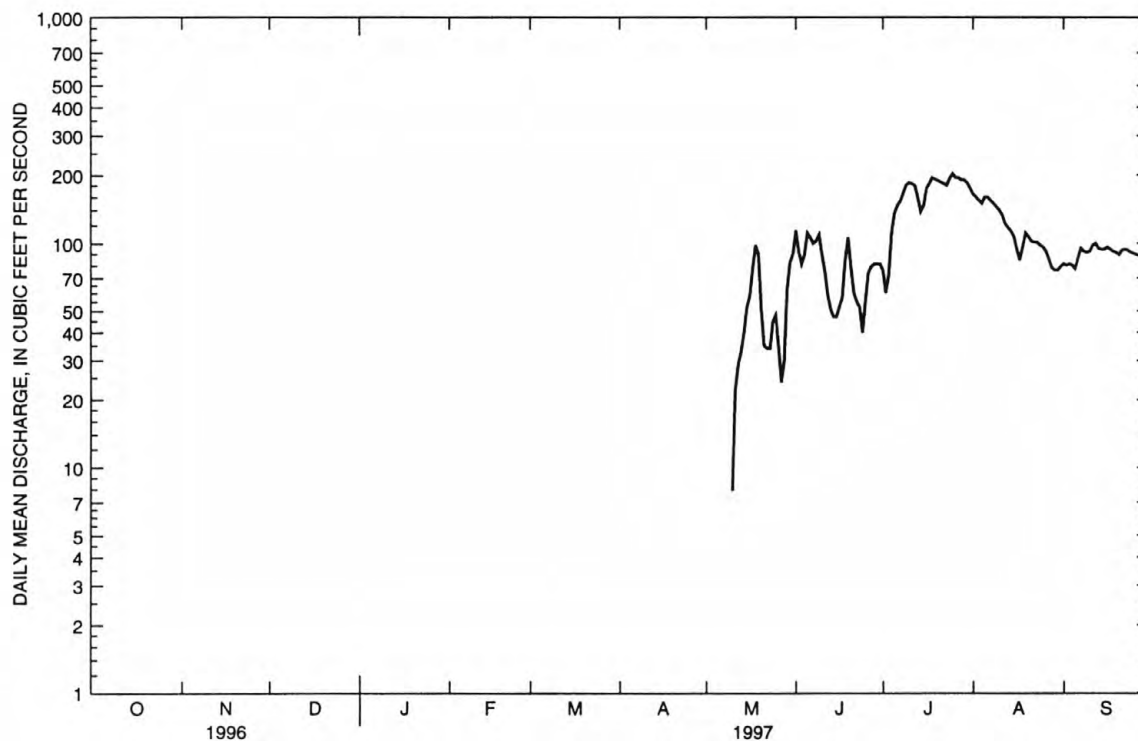
203 Jul 25 1997
.00 Many days,

INSTANTANEOUS PEAK FLOW
INSTANTANEOUS PEAK STAGE
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

208 Jul 18
3.38 Jul 18
--
--
--

208^a Jul 18 1997
3.40 Aug 17 1996
171
111
.00

* During period of operation.
a Stage 3.38 ft.



13016315 GRANITE CREEK SUPPLEMENTAL BELOW LAKE CREEK, NEAR MOOSE, WY

FISH CREEK BASIN

13016450 FISH CREEK AT WILSON, WY

LOCATION.--Lat 43°30'03", long 110°52'15", in NW¹/₄ NW¹/₄ SE¹/₄ 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 sea level, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 17, 18, Jan. 12, 13, 17, and Feb. 4, 6-10, 22, 24, 25. Records good. 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 stations 13016240, 13016305, 13016310, and 13016315.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	65	50	54	47	44	64	134	834	615	349	158
2	126	64	51	82	47	44	63	125	967	574	326	154
3	118	63	51	82	47	44	63	118	950	506	308	152
4	114	63	50	77	45	43	63	112	942	435	290	150
5	110	61	50	71	45	43	63	111	1030	462	311	148
6	105	59	49	68	45	42	63	115	1090	495	311	148
7	103	59	49	66	47	42	62	120	1140	532	295	149
8	99	58	48	64	47	42	61	126	1270	532	279	152
9	88	58	47	63	48	42	62	137	1350	526	267	152
10	85	57	50	63	47	42	63	166	1350	544	266	156
11	83	56	53	60	47	43	64	198	1260	558	268	173
12	83	55	51	58	46	43	64	234	1170	601	262	173
13	81	55	50	57	46	43	65	254	1050	558	246	169
14	81	54	49	58	45	43	66	296	934	483	236	164
15	82	53	49	56	45	43	66	368	873	440	224	162
16	82	53	49	54	44	43	72	429	853	429	213	163
17	82	52	49	53	44	47	83	446	886	442	207	162
18	80	52	48	53	44	50	112	504	1080	451	201	160
19	79	61	48	52	44	51	136	533	1180	463	202	159
20	79	68	46	51	43	53	180	536	1160	477	208	157
21	76	62	46	51	43	57	196	567	1050	444	207	172
22	75	60	46	50	43	61	181	597	927	418	202	172
23	74	59	46	51	43	63	160	622	885	405	207	171
24	74	57	46	50	43	66	152	722	780	424	204	169
25	75	58	46	49	43	65	147	686	644	432	197	165
26	75	55	47	50	43	65	138	590	609	420	188	162
27	73	54	46	48	44	65	136	519	630	406	182	157
28	73	53	46	47	44	66	135	457	665	392	175	153
29	67	53	45	47	---	63	139	536	653	400	168	150
30	65	51	46	46	---	63	137	638	642	388	163	146
31	65	---	48	46	---	63	---	704	---	375	159	---
TOTAL	2685	1728	1495	1777	1259	1584	3056	11700	28854	14627	7321	4778
MEAN	86.6	57.6	48.2	57.3	45.0	51.1	102	377	962	472	236	159
MAX	133	68	53	82	48	66	196	722	1350	615	349	173
MIN	65	51	45	46	43	42	61	111	609	375	159	146
AC-FT	5330	3430	2970	3520	2500	3140	6060	23210	57230	29010	14520	9480

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1997, BY WATER YEAR (WY)

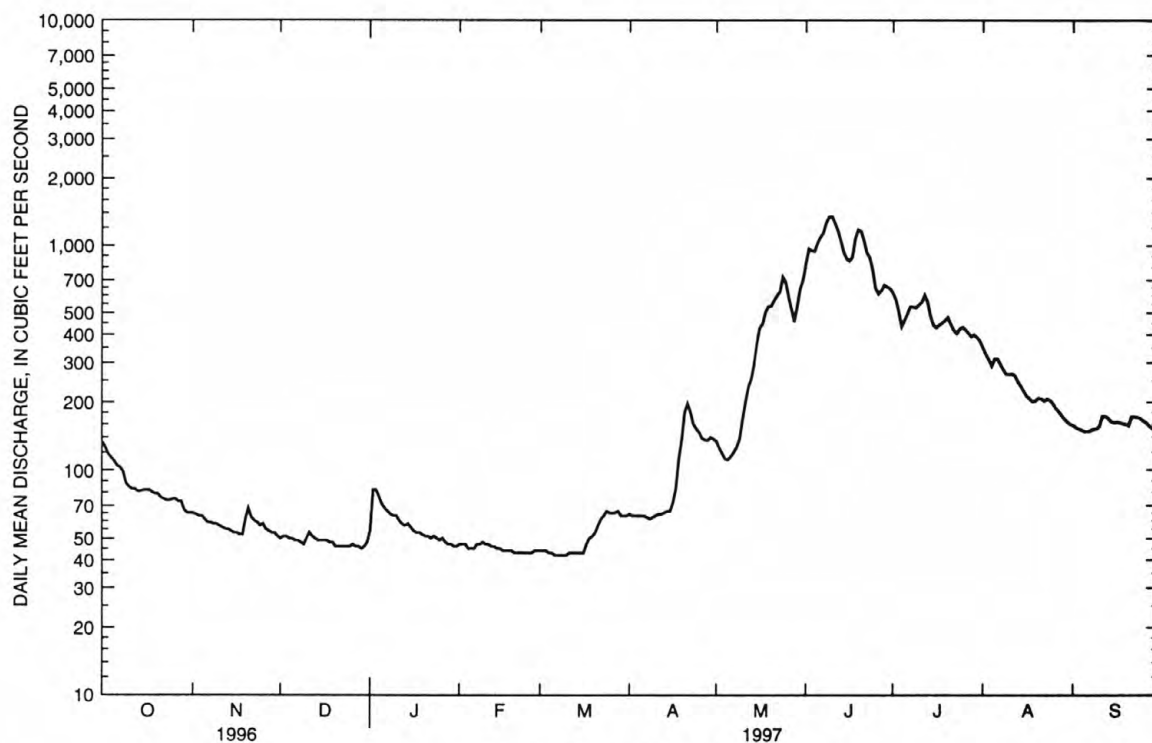
MEAN	82.1	55.2	49.2	46.8	43.5	48.1	84.3	253	641	434	240	161
MAX	89.9	59.8	57.3	57.3	45.0	51.1	102	377	962	527	255	196
(WY)	1996	1996	1996	1997	1997	1997	1997	1997	1997	1995	1994	1996
MIN	69.7	48.3	42.1	38.8	41.6	42.3	69.7	139	351	280	224	137
(WY)	1995	1995	1995	1995	1995	1996	1994	1995	1994	1994	1996	1994

FISH CREEK BASIN

413

13016450 FISH CREEK AT WILSON, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1994 - 1997
ANNUAL TOTAL	69644	80864	--
ANNUAL MEAN	190	222	191
HIGHEST ANNUAL MEAN	--	--	222
LOWEST ANNUAL MEAN	--	--	161
HIGHEST DAILY MEAN	1040	Jun 16, 17	1350
LOWEST DAILY MEAN	41	Jan 27, Mar 7-11	36
ANNUAL SEVEN-DAY MINIMUM	41	Mar 5	37
INSTANTANEOUS PEAK FLOW	--	1430	1430
INSTANTANEOUS PEAK STAGE	--	5.41	5.41
ANNUAL RUNOFF (AC-FT)	138100	160400	138700
10 PERCENT EXCEEDS	511	604	483
50 PERCENT EXCEEDS	81	82	94
90 PERCENT EXCEEDS	43	46	43



13016450 FISH CREEK AT WILSON, WY

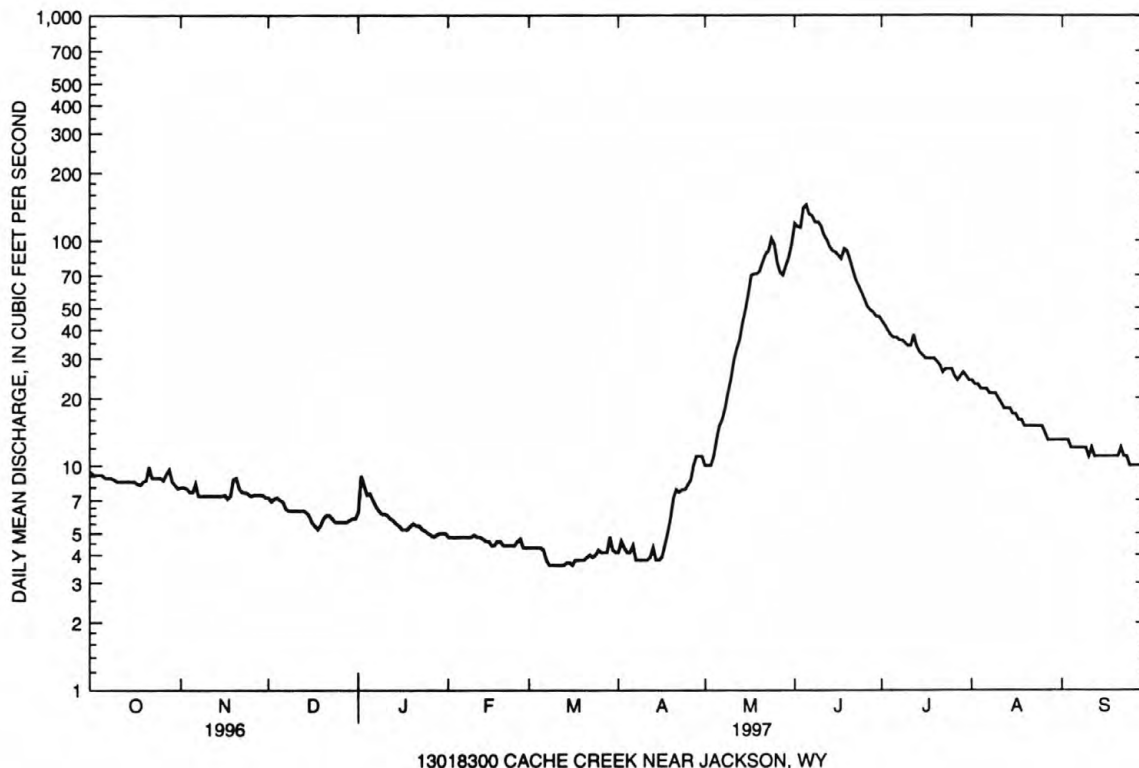
FLAT CREEK BASIN

415

13018300 CACHE CREEK NEAR JACKSON, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1962 - 1997
ANNUAL TOTAL	6719.7	7494.6	--
ANNUAL MEAN	18.4	20.5	13.2
HIGHEST ANNUAL MEAN	--	--	20.5
LOWEST ANNUAL MEAN	--	--	5.64
HIGHEST DAILY MEAN	151 Jun 10	144 Jun 5	161 Jun 24 1971
LOWEST DAILY MEAN	3.7 Jan 18	3.6 Mar 8-13, 16	1.1 Dec 23 1990
ANNUAL SEVEN-DAY MINIMUM	4.3 Feb 27	3.6 Mar 8	1.3 Dec 20 1990
INSTANTANEOUS PEAK FLOW	--	170 Jun 4	225 ^a Jun 24 1971
INSTANTANEOUS PEAK STAGE	--	4.12 Jun 4	4.30 Jun 10 1996
ANNUAL RUNOFF (AC-FT)	13330	14870	9530
10 PERCENT EXCEEDS	49	68	33
50 PERCENT EXCEEDS	8.5	8.5	6.5
90 PERCENT EXCEEDS	4.4	4.2	3.6

a Gage height, 3.90 ft.



LOCATION.--Lat 43°22'20", long 110°44'17", in NE¹/₄ SE¹/₄ sec.3, T.39 N., R.116 W., Teton County, 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.

PERIOD OF RECORD.--November 1975 to current year.

REMARKS.--Records good except those for estimated daily discharges and daily discharges above 25,000 ft³/s, which are fair. Station operated and record provided by Idaho District. U.S. Geological Survey data collection platform with satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 30,200 ft³/s, June 11, 1997; minimum daily, 690 ft³/s, Jan. 19, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 30,200 ft³/s, June 11; minimum daily, 1,550 ft³/s, Dec. 17.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3310	1810	1690	2240	2490	2550	4810	6100	18900	e13000	7210	4750
2	2570	1770	1690	3140	2440	2610	4720	5930	21000	12200	6940	4700
3	2310	1750	1650	3150	2400	2590	4730	5800	19900	e11000	6740	4720
4	2230	1760	1680	2840	e2300	2560	4790	5820	20100	e10200	6600	4710
5	2190	1790	1680	2590	e2350	2550	4790	6040	23400	e9800	6880	4630
6	2160	1770	1650	e2350	e2200	2540	4700	6500	25800	e9600	7140	4570
7	2130	1750	1660	e2400	e2150	2550	4710	7140	26500	e9400	6830	4550
8	2100	1760	1720	2410	e2200	2580	4760	7710	28000	9210	6510	4500
9	2110	1750	1730	2440	e2300	2560	4770	8150	28300	9090	6310	4450
10	2060	1710	1890	2470	e2500	2560	4770	8770	29500	9060	6340	4410
11	1960	1680	1990	2420	2630	2690	4730	9630	30200	9150	6650	4670
12	1920	1670	1910	2220	2630	2830	4680	10400	29100	9900	6530	4790
13	1890	1690	1820	e2100	2600	2990	4690	11000	26100	10500	e6350	4760
14	1870	1700	1780	e2150	2590	3140	4740	11500	24400	9660	e6200	4630
15	1870	1710	e1700	e2080	2640	3320	4760	12800	23700	9290	e6000	4630
16	1880	1680	e1600	e2000	2630	3520	4840	14000	22400	9280	e5800	4730
17	1880	1640	e1550	e2050	2630	3750	4980	14900	22100	9160	e5700	4700
18	1850	1710	e1600	e2100	2630	3970	5290	15700	23100	8820	e5550	4680
19	1890	2190	e1700	e2120	2590	4170	5540	15700	e25000	8610	5420	4680
20	1880	2580	e1700	2150	2580	4390	5930	15500	e24000	8550	5340	4630
21	1840	2390	e1700	2200	e2550	4710	6190	15800	e23000	8240	5280	4760
22	1810	2130	e1720	2240	e2520	5010	6060	16600	21100	8040	5230	4780
23	1820	2060	e1660	2260	e2500	4970	5960	17000	20700	7870	5220	4720
24	1850	1920	e1700	2250	e2450	5030	5840	e17500	20100	7990	5200	4650
25	1900	1850	1760	2450	e2500	4900	5840	e18000	e17000	8210	5190	4600
26	1880	1800	1760	2470	2580	4840	5830	e15500	e15000	7970	5130	4570
27	1820	1700	1850	2300	2600	4980	6000	e14000	14700	7820	5090	4530
28	1790	1740	1810	e2200	2580	4950	6310	13400	14200	7660	4990	4510
29	1820	1780	1810	e2250	---	4850	6440	14400	14200	7790	4920	4480
30	1820	1710	1970	e2300	---	4800	6260	16000	e13800	7920	4800	4460
31	1840	---	2020	e2350	---	4820	---	16700	---	7580	4760	---
TOTAL	62250	54950	54150	72690	69760	114280	158460	373990	665300	282570	182850	138950
MEAN	2008	1832	1747	2345	2491	3686	5282	12060	22180	9115	5898	4632
MAX	3310	2580	2020	3150								

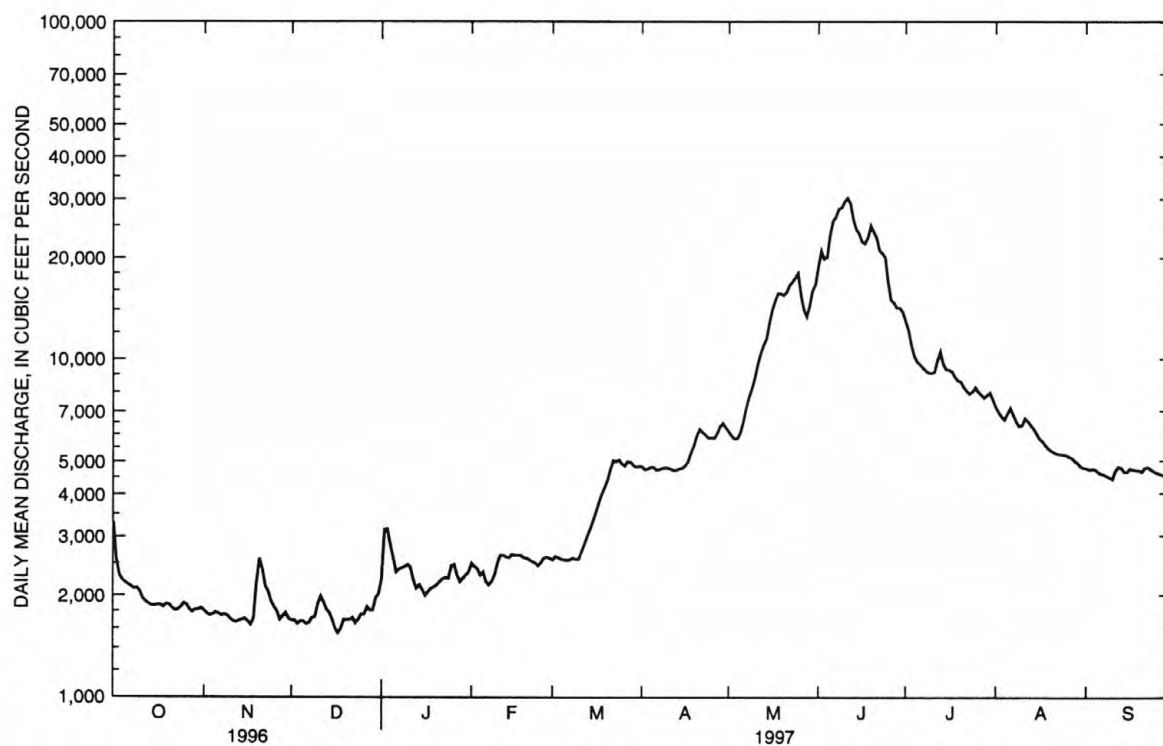
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1997, BY WATER YEAR (WY)

MEAN	1806	1534	1394	1306	1339	1612	2730	6766	11340	6856	4352	3393
MAX	3093	2747	1998	2345	2491	3686	5435	12060	22180	14090	7253	6464
(WY)	1983	1984	1984	1997	1997	1997	1985	1997	1997	1982	1976	1984
MIN	977	967	846	879	825	910	1292	2570	5356	3245	2305	1801
(WY)	1989	1988	1988	1988	1989	1977	1977	1977	1994	1988	1981	1979

13018750 SNAKE RIVER BELOW FLAT CREEK, NEAR JACKSON, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1976 - 1997	
ANNUAL TOTAL	1890160		2230200		--	
ANNUAL MEAN	5164		6110		3663	
HIGHEST ANNUAL MEAN	--		--		6110	1997
LOWEST ANNUAL MEAN	--		--		2469	1977
HIGHEST DAILY MEAN	24200	Jun 17	30200	Jun 11	30200	Jun 11 1997
LOWEST DAILY MEAN	1300	Feb 3	1550	Dec 17	690	Jan 19 1988
ANNUAL SEVEN-DAY MINIMUM	1360	Jan 28	1650	Dec 15	785	Feb 4 1989
ANNUAL RUNOFF (AC-FT)	3749000		4424000		2654000	
10 PERCENT EXCEEDS	13700		15200		8650	
50 PERCENT EXCEEDS	3300		4630		2080	
90 PERCENT EXCEEDS	1630		1760		1120	

e Estimate.



13018750 SNAKE RIVER BELOW FLAT CREEK, NEAR JACKSON, WY

LOCATION.--Lat 43°11'47", long 110°53'18", 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.

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

REMARKS.--Records good except those for estimated daily discharges, which are fair. Station operated and record provided by Idaho District. U.S. Geological Survey data collection platform with satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 38,600 ft³/s, June 11, gage height, 14.04 ft; minimum, 1,870 ft³/s, Dec. 4, gage height, 3.25 ft.

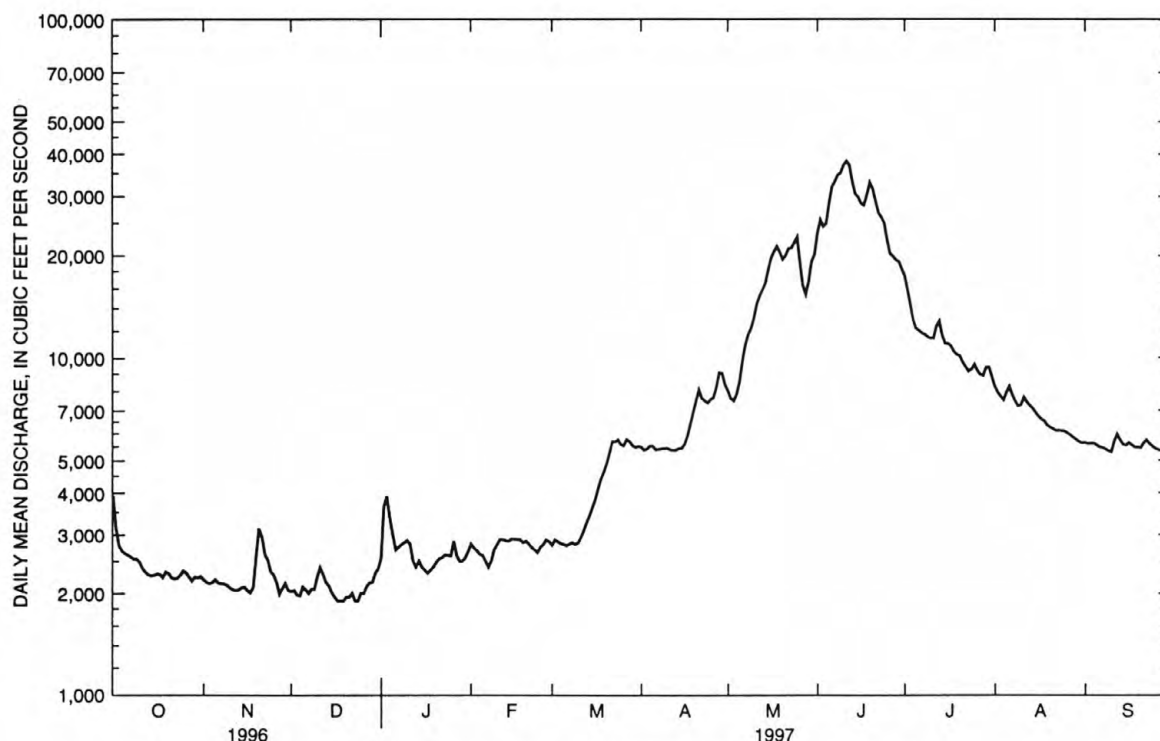
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3930	2200	2030	2550	2810	2790	5470	8000	23400	17500	8240	5630
2	3150	2160	2040	3640	2740	2890	5350	7590	25500	15900	7900	5580
3	2790	2140	1980	3900	2690	2860	5390	7470	24400	14300	7690	5600
4	2690	2160	1970	3390	2620	2820	5500	7820	24900	12900	7510	5600
5	2640	2200	2090	e3000	e2600	2810	5500	8490	e28500	12200	7900	5530
6	2610	2150	2050	e2700	e2500	2780	5370	9770	e32000	12000	8220	5460
7	2580	2140	2000	e2750	e2400	2810	5380	10900	33100	11800	7780	5440
8	2540	2140	2060	e2800	e2500	2840	5400	11700	34600	11700	7450	5390
9	2540	2120	2060	e2840	e2700	2810	5410	12200	35200	11500	7210	5320
10	2490	2080	2240	2880	e2800	2830	5420	13100	37200	11400	7240	5290
11	2380	2050	2390	2810	e2900	2940	5370	14400	38100	11400	7630	5680
12	2320	2040	2280	2500	2900	3080	5350	15300	37200	12400	7400	5950
13	2280	2050	2160	e2400	2880	3260	5350	15900	33200	12800	7230	5730
14	2260	2080	2110	e2500	2870	3410	5410	16600	30500	11600	7080	5560
15	2270	2090	2010	e2400	2910	3600	5420	18200	29900	11000	6890	5520
16	2290	2040	e1950	e2350	2910	3810	5560	19700	28600	11000	6720	5620
17	2280	2010	e1900	e2300	2900	4100	5870	20600	28200	10800	6590	5530
18	2230	2080	e1900	e2350	2900	4380	6350	21300	30300	10400	6510	5450
19	2320	2570	e1900	e2400	2840	4620	6890	20500	32900	10200	6330	5460
20	2300	3130	e1950	2480	2870	4890	7460	19500	31600	10100	6240	5430
21	2230	2950	e1950	2540	2810	5270	8040	20000	29000	9670	6170	5610
22	2210	2610	e2000	2560	e2750	5670	7610	21000	26800	9400	6100	5720
23	2220	2520	e1900	2610	e2700	5660	7470	21100	26000	9110	6110	5590
24	2270	2320	e1900	2600	e2650	5730	7360	21900	25000	9240	6090	5490
25	2340	2270	e2000	2590	e2750	5560	7540	22700	22300	9540	6070	5410
26	2310	2160	e2000	2870	e2800	5510	7630	19000	20300	9160	6000	5360
27	2240	1990	e2100	e2600	2890	5750	8180	16300	19900	8910	5920	5330
28	2180	2070	e2150	e2500	2860	5670	9030	15400	19400	8840	5820	5290
29	2240	2140	2160	e2500	---	5520	8990	16800	19200	9350	5750	5250
30	2230	2040	2300	e2550	---	5450	8340	19200	18300	9370	5660	5230
31	2250	---	2370	2660	---	5490	---	20200	---	8800	5610	---
TOTAL	75610	66700	63900	83520	77450	127610	193410	492640	845500	344290	211060	165050
MEAN	2439	2223	2061	2694	2766	4116	6447	15890	28180	11110	6808	5502
MAX	3930	3130</										

MEAN	2151	1846	1695	1508	1599	1842	3385	8912	13600	8641	5406	4040
MAX	3605	4244	5795	2694	3381	4116	6820	15890	28180	15790	7541	7595
(WY)	1983	1957	1957	1997	1961	1997	1985	1997	1997	1982	1956	1984
MIN	1325	1225	1101	1069	1071	1099	1506	2995	6257	3802	2494	2241
(WY)	1978	1978	1988	1964	1938	1955	1955	1977	1994	1988	1981	1977

13022500 SNAKE RIVER ABOVE RESERVOIR, NEAR ALPINE, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1937 - 1997	
ANNUAL TOTAL	2276890		2746740		--	
ANNUAL MEAN	6221		7525		4579	
HIGHEST ANNUAL MEAN	--		--		7525	
LOWEST ANNUAL MEAN	--		--		2726	
HIGHEST DAILY MEAN	31600	Jun 11	38100	Jun 11	38100	Jun 11 1997
LOWEST DAILY MEAN	1420	Feb 3	1900	Dec 17	900	Dec 31 1978
ANNUAL SEVEN-DAY MINIMUM	1500	Jan 29	1930	Dec 17	957	Jan 9 1964
ANNUAL RUNOFF (AC-FT)	4516000		5448000		3317000	
10 PERCENT EXCEEDS	16400		19800		10800	
50 PERCENT EXCEEDS	3540		5370		2420	
90 PERCENT EXCEEDS	1760		2130		1310	

e Estimate.

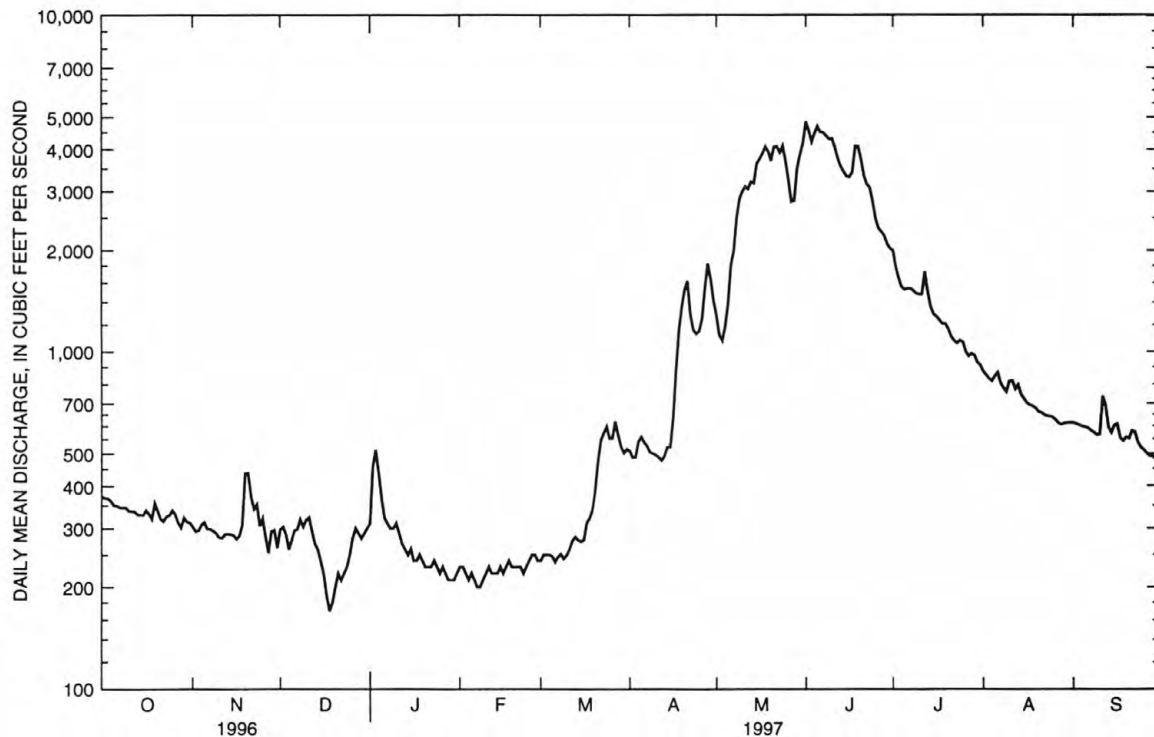


13022500 SNAKE RIVER ABOVE RESERVOIR, NEAR ALPINE, WY

13023000 GREYS RIVER ABOVE RESERVOIR, NEAR ALPINE, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1937 - 1997	
ANNUAL TOTAL	302066		363097		--	
ANNUAL MEAN	825		995		651	
HIGHEST ANNUAL MEAN	--		--		1022	1971
LOWEST ANNUAL MEAN	--		--		259	1977
HIGHEST DAILY MEAN	4480	May 18	4850	Jun 1	6170	Jun 19 1971
LOWEST DAILY MEAN	170	Feb 3	170	Dec 18	92	Jan 2 1978
ANNUAL SEVEN-DAY MINIMUM	199	Dec 16	199	Dec 16	124	Feb 26 1993
ANNUAL RUNOFF (AC-FT)	599100		720200		471300	
10 PERCENT EXCEEDS	2430		3220		1740	
50 PERCENT EXCEEDS	380		500		318	
90 PERCENT EXCEEDS	239		230		190	

e Estimate.



13023000 GREYS RIVER ABOVE RESERVOIR, NEAR ALPINE, WY

SALT RIVER BASIN

13027500 SALT RIVER ABOVE RESERVOIR, NEAR ETNA, WY

LOCATION.--Lat 43°04'47", long 111°02'12", in SW¹/₄ NE¹/₄ sec.28, T.36 N., R.119 W., Lincoln County, Hydrologic Unit 17040105, on right bank 3.4 mi northwest of Etna, and 8.0 mi upstream from maximum flowline of Palisades Reservoir.

DRAINAGE AREA.--829 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 5,675.78 ft above sea level (levels by Bureau of Reclamation).

REMARKS.--No estimated daily discharges. Records good. Diversions upstream from station for power developments, industry, municipal supply, and irrigation of about 60,500 acres of which about 1,000 acres are downstream from station (1966 determination). For details on adjudication of diversions, see Remarks for this station in WSP 1347. Station operated and record provided by Idaho District. Bureau of Reclamation data collection platform with satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,090 ft³/s, June 2, 1986, gage height, 5.71 ft; minimum, 160 ft³/s, Jan. 7, 8, 1971, gage height, 1.53 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,550 ft³/s, May 18, gage height, 5.67 ft; minimum, 391 ft³/s, Dec. 18, gage height, 1.81 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

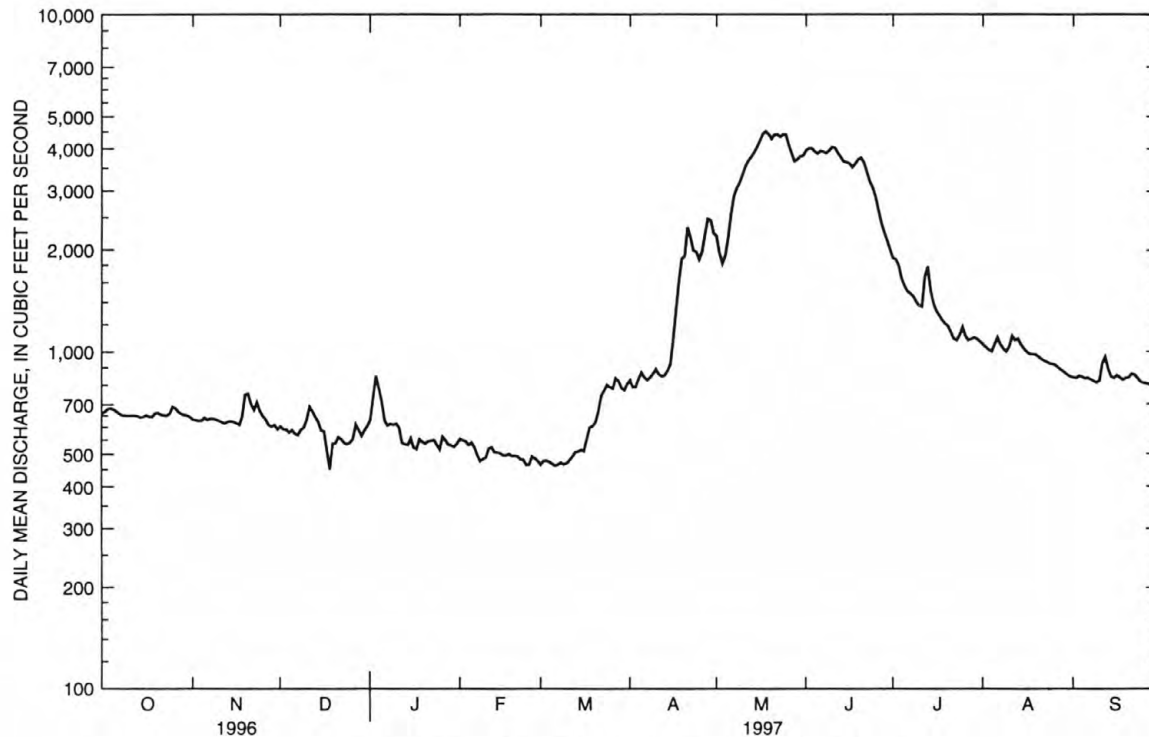
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	661	633	602	628	553	464	823	2210	3960	1900	1050	839
2	669	630	591	731	548	476	786	1970	4020	1880	1030	836
3	681	627	590	850	544	477	787	1830	4020	1800	1010	848
4	683	628	578	783	531	473	831	1930	3930	1650	1000	844
5	678	640	587	708	539	467	867	2180	3880	1570	1050	834
6	667	631	573	625	523	461	840	2570	3940	1510	1100	837
7	658	636	567	606	496	464	825	2900	3930	1490	1050	828
8	651	636	588	613	475	470	839	3070	3890	1460	1020	819
9	650	632	597	609	482	465	861	3180	3960	1410	999	810
10	650	627	630	614	487	468	887	3360	4050	1370	1030	820
11	650	620	688	597	518	478	859	3560	4030	1360	1110	927
12	650	616	669	538	522	490	846	3700	3890	1670	1080	963
13	649	623	643	534	505	505	851	3790	3780	1790	1090	890
14	643	624	621	531	504	507	877	3910	3670	1520	1050	844
15	644	622	586	555	502	513	917	4060	3660	1390	1020	836
16	651	616	582	521	494	509	1090	4240	3620	1320	997	852
17	645	610	511	516	494	552	1330	4440	3530	1280	983	838
18	644	647	449	552	499	598	1620	4510	3620	1240	981	825
19	660	749	535	542	492	603	1890	4430	3730	1210	980	836
20	662	754	537	535	493	620	1920	4290	3760	1190	966	839
21	655	700	559	544	491	669	2340	4410	3640	1140	950	860
22	651	676	552	547	481	742	2190	4420	3420	1090	939	855
23	650	709	538	549	480	769	2000	4350	3210	1080	931	836
24	658	670	534	531	463	797	1980	4420	3080	1120	921	816
25	689	647	539	515	464	786	1880	4410	2890	1180	919	808
26	684	632	552	561	490	779	1980	4120	2640	1110	911	806
27	666	609	610	548	485	835	2230	3880	2410	1080	895	802
28	658	601	588	532	476	819	2480	3680	2260	1090	881	792
29	653	608	565	530	---	782	2460	3720	2140	1100	869	787
30	650	591	586	524	---	771	2250	3800	2010	1090	854	780
31	644	---	604	535	---	804	---	3820	---	1070	844	---
TOTAL	20404	19244	17951	18104	14031	18613	42336	111160	104570	42160	30510	25107
MEAN	658	641	579	584	501	600	1411	3586	3486	1360	984	837
MAX	689	754	688	850	553	835	2480	4510	4050	1900	1110	963
MIN	643	591	449	515	463	461	786	1830	2010	1070	844	780
AC-FT	40470	38170	35610	35910	27830	36920	83970	220500	207400	83620	60520	49800

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1997, BY WATER YEAR (WY)

MEAN	619	588	516	449	439	479	965	1749	1487	866	634	646
MAX	912	838	712	584	702	1121	2204	3586	3486	1809	997	961
(WY)	1983	1984	1984	1997	1963	1986	1986	1997	1997	1975	1983	1971
MIN	336	347	342	318	309	362	503	306	275	271	266	342
(WY)	1978	1978	1993	1993	1993	1988	1977	1977	1977	1977	1977	1977

13027500 SALT RIVER ABOVE RESERVOIR, NEAR ETNA, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1954 - 1997
ANNUAL TOTAL	354269	464190	--
ANNUAL MEAN	968	1272	788
HIGHEST ANNUAL MEAN	--	--	1272
LOWEST ANNUAL MEAN	--	--	430
HIGHEST DAILY MEAN	3810	4510	5030
LOWEST DAILY MEAN	326	449	180
ANNUAL SEVEN-DAY MINIMUM	377	467	226
ANNUAL RUNOFF (AC-FT)	702700	920700	570600
10 PERCENT EXCEEDS	2410	3660	1540
50 PERCENT EXCEEDS	650	797	582
90 PERCENT EXCEEDS	472	510	383



13027500 SALT RIVER ABOVE RESERVOIR, NEAR ETNA, WY

13046680 BOUNDARY CREEK NEAR BECHLER RANGER STATION, WY

LOCATION.--Lat 44°11'09", long 111°00'19", T.49 N., R.118 W., Teton County, Yellowstone National Park, Hydrologic Unit 17040203, on right bank 0.4 mi upstream from confluence with the Bechler River, 3.8 mi north of the Bechler Ranger Station, and 28.0 mi northeast of Ashton, Idaho.

DRAINAGE AREA.--86.9 mi².

PERIOD OF RECORD.--August 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,360 ft above sea level, from topographic map.

REMARKS.--Records fair. Station operated and record provided by Idaho District.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 810 ft³/s, June 2, 1986; maximum gage height, 5.68 ft, May 11, 12, 1997, backwater from Bechler River; minimum daily, 53 ft³/s, Feb. 4-6, 13-18, 21-24, Mar. 5, Apr. 5, 1989; minimum discharge, 52 ft³/s, Mar. 12, 1993, result of discharge measurement.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 680 ft³/s, May 30; minimum daily, 84 ft³/s, Oct. 9-11, 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e88	89	100	116	93	86	100	238	e580	295	144	131
2	e87	88	99	206	89	91	96	212	e600	296	143	130
3	e87	88	98	140	88	89	95	199	e540	247	141	132
4	e86	89	96	114	87	86	96	218	e570	218	141	136
5	e86	89	96	105	87	86	95	262	e600	206	148	131
6	e86	88	95	100	86	85	94	324	e550	201	151	138
7	e85	88	95	99	85	86	93	358	e500	197	144	132
8	e85	89	95	98	85	87	93	448	e470	187	142	129
9	e84	89	95	96	86	86	95	507	e430	180	140	128
10	84	89	103	96	85	85	96	529	396	180	143	129
11	84	90	98	95	85	85	96	541	457	181	142	138
12	85	89	94	100	89	85	95	538	395	177	141	143
13	84	90	93	93	87	85	95	e520	356	185	140	132
14	87	97	92	93	88	85	98	e510	337	173	141	129
15	87	95	90	93	89	85	97	e570	333	167	139	128
16	87	91	91	93	88	87	100	e600	326	162	137	127
17	87	91	88	93	88	89	109	e620	327	159	137	126
18	87	100	87	92	87	87	121	e600	359	158	137	131
19	89	150	88	93	86	89	144	e590	401	158	135	131
20	88	164	88	93	85	93	193	e580	381	159	135	126
21	86	124	89	97	85	100	215	e540	351	155	135	128
22	86	127	89	96	86	101	216	e490	333	153	134	129
23	87	122	89	93	86	98	229	e510	340	151	135	125
24	92	114	89	91	86	97	225	e540	321	153	142	123
25	94	112	92	89	85	96	248	e490	295	153	139	122
26	91	106	91	94	85	97	249	e380	278	152	137	124
27	89	104	96	90	89	106	301	e320	284	149	135	124
28	89	104	88	88	86	102	319	e350	298	147	134	122
29	89	103	89	88	---	99	286	e450	283	149	132	121
30	90	100	92	88	---	98	264	e680	273	148	132	120
31	90	---	92	90	---	98	---	e560	---	146	132	---
TOTAL	2706	3059	2877	3112	2431	2829	4653	14274	11964	5542	4308	3865
MEAN	87.3	102	92.8	100	86.8	91.3	155	460	399	179	139	129
MAX	94	164	103	206	93	106	319	680	600	296	151	143
MIN	84	88	87	88	85	85	93	199	273	146	132	120
AC-FT	5370	6070	5710	6170	4820	5610	9230	28310	23730	10990	8540	7670

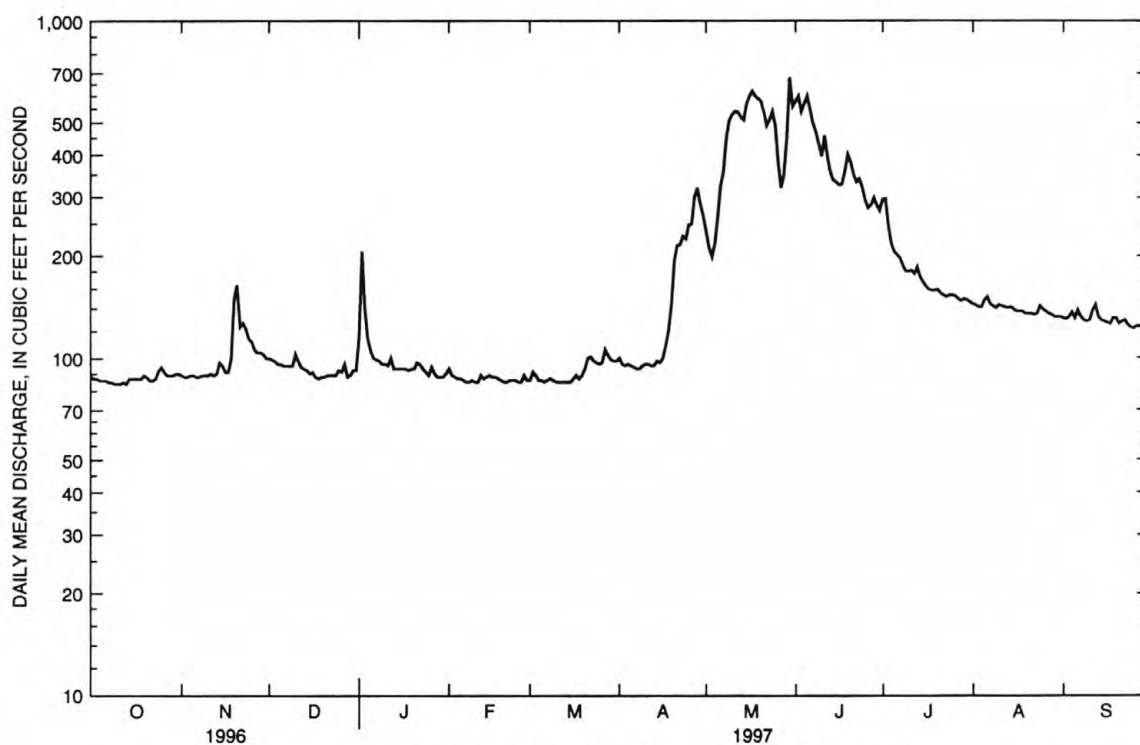
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1997, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	78.0	78.8	75.7	71.7	68.0	69.7	126	283	237	101	83.9	80.5		
MAX	101	102	101	100	86.8	91.3	215	460	566	179	139	129		
(WY)	1985	1997	1996	1997	1997	1997	1990	1997	1986	1997	1997	1997		
MIN	61.6	61.9	58.8	58.1	53.8	58.0	68.8	150	83.3	68.1	62.2	59.4		
(WY)	1993	1993	1993	1993	1989	1993	1991	1990	1987	1988	1988	1988		

13046680 BOUNDARY CREEK NEAR BECHLER RANGER STATION, WY--Continued

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1984 - 1997	
ANNUAL TOTAL	47338		61620		--	
ANNUAL MEAN	129		169		113	
HIGHEST ANNUAL MEAN	--		--		169	1997
LOWEST ANNUAL MEAN	--		--		84.4	1992
HIGHEST DAILY MEAN	580	May 16	680	May 30	810	Jun 2 1986
LOWEST DAILY MEAN	60	Feb 2	84	Oct 9	53	Feb 4 1989
ANNUAL SEVEN-DAY MINIMUM	66	Feb 26	84	Oct 7	53	Feb 12 1989
ANNUAL RUNOFF (AC-FT)	93890		122200		81800	
10 PERCENT EXCEEDS	304		367		220	
50 PERCENT EXCEEDS	91		104		80	
90 PERCENT EXCEEDS	70		86		61	

e Estimate.



13046680 BOUNDARY CREEK NEAR BECHLER RANGER STATION, WY

DISCHARGE AT MISCELLANEOUS SITES

Discharge measurements in the following table were made at special study and miscellaneous sites throughout the State.

Annual maximum discharge at miscellaneous sites during water year 1997

Stream	Tributary to	Location	Drain- age area (sq mi)	Period of Record	Annual Maximum		
					Date	Gage height (feet)	Discharge (cfs)
Platte River basin							
Crow Creek at 5th Street, in Cheyenne	South Platte River	Lat 41°07'20", long 104°48'38", in SE ¹ / ₄ NE ¹ / ₄ SE ¹ / ₄ sec.6, T.13 N., R.66W., Laramie County, Hydrologic Unit 10190009, 15 ft upstream from bridge on 5th Street, in Cheyenne.		1995-97	08-12-97	9.07	946a
Crow Creek on C.P. Orgon property, in Cheyenne	South Platte River	Lat 41°07'26", long 104°47'20", in NW ¹ / ₄ NW ¹ / ₄ SW ¹ / ₄ sec.4, T.13 N., R.66 W., Laramie County, Hydrologic Unit 10190009, 100 ft downstream from bridge over Crow Creek on private land, and approximately 1,700 ft east of Morrie Avenue, in Cheyenne.		1996-97	09-13-96 08-12-97	3.86b 5.30	214 750
Clear Creek at Parsley Boulevard, in Cheyenne	Crow Creek	Lat 41°07'30", long 104°49'22", in SW ¹ / ₄ SE ¹ / ₄ NW ¹ / ₄ sec.6, T.13 N., R.66 W., Laramie County, Hydrologic Unit 10190009, 15 ft upstream from culvert under Parsley Boulevard, in Cheyenne.		1996-97	08-12-97	8.32	(c)
Henderson Drain at Nationway, in Cheyenne	Crow Creek	Lat 41°08'08", long 104°46'19", in SE ¹ / ₄ NE ¹ / ₄ SE ¹ / ₄ sec.33, T.14 N., R.66 W., Laramie County, Hydrologic Unit 10190009, 40 ft upstream from culvert on Nationway, in Cheyenne.		1994, 1996-97	08-12-97	9.86	459
Dry Creek at Vista Lane, in Cheyenne 06756030	Crow Creek	Lat 41°10'27", long 104°50'31", in NW ¹ / ₄ NE ¹ / ₄ NW ¹ / ₄ sec.24, T.14 N., R.67 W.,Laramie County, Hydrologic Unit 10190009, 30 ft upstream from culvert on Vista Lane, in Cheyenne.		1987-97	08-16-97	3.35	(c)
Dry Creek at Smalley Park, in Cheyenne	Crow Creek	Lat 41°10'02", long 104°49'07", in NE ¹ / ₄ NE ¹ / ₄ SW ¹ / ₄ sec.19, T.14 N., R.66 W., Laramie County, Hydrologic Unit 10190009, 30 ft upstream from culvert on Seminole Road in Cheyenne.		1994-97	07-30-97	14.75	384a
Dry Creek tributary at Briarwood Road, in Cheyenne	Dry Creek	Lat 41°09'53", long 104°47'15", in SE ¹ / ₄ NW ¹ / ₄ SW ¹ / ₄ sec.21, T.14 N., R.66 W., Laramie County, Hydrologic Unit 10190009, 15 ft upstream from culvert on Briarwood Road, in Cheyenne.		1994, 1996-97	06-18-97	2.44	(c)
Dry Creek at Windmill Road, in Cheyenne	Crow Creek	Lat 41°09'39", long 104°46'45", in SW ¹ / ₄ SW ¹ / ₄ SE ¹ / ₄ sec.21, T.14 N., R.66 W., Laramie County, Hydrologic Unit 10190009, 50 ft upstream from culvert on Windmill Road in Cheyenne.		1994-97	07-30-97	9.86	268
Dry Creek at College Drive, in Cheyenne	Crow Creek	Lat 41°09'26", long 104°45'38", in SE ¹ / ₄ NE ¹ / ₄ NW ¹ / ₄ sec.27, T.14 N., R.66 W., Laramie County, Hydrologic Unit 10190009, 40 ft upstream from culvert on College Drive, in Cheyenne.		1994-97	06-18-97	12.42	229
Dry Creek at Rawlins Street, in Cheyenne	Crow Creek	Lat 41°09'11", long 104°45'03", in SW ¹ / ₄ SW ¹ / ₄ NW ¹ / ₄ sec.26, T.14 N., R.66 W., Laramie County, Hydrologic Unit 10190009, 30 ft upstream from culvert on Rawlins Street, in Cheyenne.		1994-97	06-18-97	6.24	(c)

a Indirect computation.

b Revised.

c Discharge not determined.

Discharge measurements made at miscellaneous sites during water year 1997

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Yellowstone River basin						
Lower Wind River "A" Canal 432208109151401	Wind River	Lat 43°22'08", long 109°15'14", in NW ¹ / ₄ SE ¹ / ₄ NE ¹ / ₄ sec.32, T.5 N., R.4 W., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, on right bank 100 ft downstream from headgates and 1.1 mi northeast of Burris.		1989-96	5-05-97 18.4 6-26-97 15.1 7-29-97 33.7 9-09-97 29.6	
Meadow Creek Canal 431744109123001	Wind River	Lat 43°17'44", long 109°12'30", in SW ¹ / ₄ SW ¹ / ₄ NW ¹ / ₄ sec.26, T.4 N., R.4 W., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, on right bank 200 ft below headgates, 1.7 mi upstream from aqueduct, and 1.9 mi southwest of Crowheart.		1989-96	5-28-97 33.3 8-08-97 92.2 9-17-97 95.1	
Willow Creek Canal 431707109105201	Wind River	Lat 43°17'07", long 109°10'52", in NE ¹ / ₄ NE ¹ / ₄ NW ¹ / ₄ sec.36, T.4 N., R.4 W., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, on right bank 250 ft downstream from headgates, 0.9 mi upstream from left bank ditch, and 1.8 mi southeast of Crowheart.		1988-96	5-28-97 70.6 8-15-97 71.4 9-17-97 79.3	
Trout Creek below Ray Canal 425850108550701	Little Wind River	Lat 42°58'50", long 108°55'07", in SE ¹ / ₄ NW ¹ / ₄ NE ¹ / ₄ sec.18, T.1 S., R.1 W., Fremont County, Hydrologic Unit 10080002, Wind River Indian Reservation, on left bank 70 ft downstream from Ray Canal, 0.8 mi upstream from Dead Horse Slough, and 1.8 mi southwest of Wind River.		1988-96	6-18-97 26.7 6-18-97 49.7 6-18-97 4.76 7-30-97 26.3 9-25-97 17.4	
Ray Canal below Trout Creek 425849108550701	Trout Creek	Lat 42°58'49", long 108°55'07", in SE ¹ / ₄ NW ¹ / ₄ NE ¹ / ₄ sec.18, T.1 S., R.1 W., Fremont County, Hydrologic Unit 10080002, Wind River Indian Reservation, 180 ft downstream from Trout Creek, and 2.5 mi southwest of Ft. Washakie.		1991-96	6-18-97 230 7-30-97 228 8-29-97 170 9-25-97 113	
Coolidge Canal below Trout Creek 430045108480001	Little Wind River	Lat 43°00'45", long 108°48'00", in SE ¹ / ₄ SW ¹ / ₄ SE ¹ / ₄ sec.31, T.1 N., R.1 E., Fremont County, Hydrologic Unit 10080002, Wind River Indian Reservation, on left bank 0.4 mi upstream from bridge on light-duty road, 0.9 mi downstream from Trout Creek, and 1.6 mi southwest of Ethete.		1989-96	7-31-97 102 8-27-97 66.5 9-30-97 66.1	
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.		1988-96	6-04-97 79.0 7-31-97 40.9 7-31-97 105 9-29-97 33.5	
Ray Reservoir Outlet 425713108485601	Little Wind River	Lat 42°57'13", long 108°48'56", in SE ¹ / ₄ SE ¹ / ₄ SE ¹ / ₄ sec 24, T.1 S., R.1 W., Fremont County, Hydrologic Unit 10080002, Wind River Indian Reservation, on left bank 400 ft downstream from Ray Reservoir, 0.9 mi upstream from Mill Creek, and 4.1 mi southeast of Wind River.		1989-96	9-05-97 32.0 9-25-97 27.8	
Ray Canal at siphon 425709108521201	Little Wind River	Lat 42°57'09", long 108°52'12", in NE ¹ / ₄ NW ¹ / ₄ NW ¹ / ₄ sec.27, T.1 S., R.1 W., Fremont County, Hydrologic Unit 10080002, Wind River Indian Reservation, on right bank at Siphon, 0.2 mi downstream from 37-C Lateral, and 2.5 mi southeast of Wind River		1988-96	5-28-97 88.8 7-31-97 152 8-29-97 78.3 9-25-97 61.6	

DISCHARGE AT MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1997

Stream	Tributary to	Location	Drainage area (sq mi)	Measured pre- viously (water years)	Measurements	
					Date	Discharge (cfs)
Yellowstone River basin--Continued						
Mill Creek below Coolidge Canal 425710108460701	Little Wind River	Lat 42°57'10", long 108°46'07", in NW ¹ / ₄ NE ¹ / ₄ NW ¹ / ₄ sec.28, T.1 S., R.1 E., Fremont County, Hydrologic Unit 10080002, Wind River Indian Reservation, on right bank 100 ft downstream from Coolidge Canal, and 6.2 mi southeast of Wind River.		1988-96	7-30-97 9-05-97 9-30-97	97.0 70.0 84.2
14-B Lateral below Mill Creek 425955108405301	Little Wind River	Lat 42°59'55", long 108°40'53", in SE ¹ / ₄ SW ¹ / ₄ SE ¹ / ₄ sec.6, T.1 S., R.2 E., Fremont County, Hydrologic Unit 10080002, Wind River Indian Reservation, 150 ft downstream from headworks, 500 ft upstream from culvert on 17-Mile Road, and 5 mi southeast of Ethete.		1991-96	7-30-97 8-29-97 9-30-97	8.34 27.3 25.2
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.		1991-96	5-23-97 6-26-97 8-11-97 9-04-97	29.9 49.2 53.9 45.3
65-C-19 Lateral at Headworks 425524108465701	Coolidge Canal	Lat 42°55'24", long 108°46'57", in NW ¹ / ₄ NW ¹ / ₄ NE ¹ / ₄ sec.5, T.2 S., R.1 E., Fremont County, Hydrologic Unit 10080002, Wind River Indian Reservation, 2.35 ft downstream from headworks, 0.6 mi east of U.S. Highway 287, and 33 mi north of Milford.		1991-96	7-30-97 8-18-97 9-25-97	46.8 31.3 17.7
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.		1988-96	5-23-97 6-26-97 8-11-97 9-04-97	17.5 14.1 20.2 16.6
Sub Agency Canal at Auxillary Gage 425857108352101	Little Wind River	Lat 42°58'57", long 108°35'21", in NE ¹ / ₄ NE ¹ / ₄ NW ¹ / ₄ sec.13, T.1 S., R.2 E., Fremont County, Hydrologic Unit 10080002, Wind Rivr Indian Reservation, on right bank 0.1 mi downstream from State Highway 137, 1.7 mi downstream from headgates, and 5.3 mi northest of Arapahoe.		1988-96	5-12-97 7-01-97 8-18-97 9-24-97	68.4 102 59.9 54.9
Snake River basin						
Lake Creek near Wilson 433247110491701	Fish Creek	Lat 43°32'47", long 110°49'17", in SW ¹ / ₄ SW ¹ / ₄ NW ¹ / ₄ sec.6, T.41 N., R.116 W., Teton County, Hydrologic Unit 17040103, at bridge on State Highway 390, 2.8 miles south of Teton Village, and 4.1 mi northeast of Wilson.		1994-96	6-10-97	606

FREMONT COUNTY WEED AND PEST DISTRICT STUDY

YELLOWSTONE RIVER BASIN

425008108445401 SQUAW CREEK AT SMITH STREET, AT LANDER, WY (LAT 42 50 08 LONG 108 44 54)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	TUR- BID- ITY (NTU) (00076)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	DICAMBA TOTAL (UG/L) (82052)
NOV 26...	0950	5.4	1010	0.0	-3.5	2.0	728	<0.01
FEB 18...	1215	4.0	1000	2.0	5.0	540	754	<0.01
MAY 20...	1300	33	401	8.0	22.0	65	237	<0.01
JUN 17...	1245	26	640	10.5	21.5	15	441	0.05
JUL 30...	1150	18	905	16.0	24.0	7.0	645	0.58
AUG 28...	1040	12	915	15.0	26.0	2.1	656	<0.01

DATE	PIC- LORAM UNFILT RECOVER (UG/L) (39720)	2,4-D, TOTAL (UG/L) (39730)	2, 4-DP TOTAL (UG/L) (82183)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
NOV 26...	0.15	<0.01	<0.01	<0.01	<0.01	36	0.52
FEB 18...	<0.01	0.06	<0.01	<0.01	<0.01	200	2.2
MAY 20...	0.06	0.03	<0.01	<0.01	<0.01	432	38
JUN 17...	0.13	0.09	<0.01	<0.01	<0.01	233	16
JUL 30...	0.24	0.06	<0.01	<0.01	<0.01	151	7.3
AUG 28...	0.13	<0.01	<0.01	<0.01	<0.01	110	3.6

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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
inch (in.)	2.54×10^1	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^0	kilometer
<i>Area</i>		
acre	4.047×10^3	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi ²)	2.590×10^0	square kilometer
<i>Volume</i>		
gallon (gal)	3.785×10^0	liter
	3.785×10^0	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^3	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft ³)	2.832×10^1	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft ³ /s) d]	2.447×10^3	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^3	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
<i>Flow</i>		
cubic foot per second (ft ³ /s)	2.832×10^1	liter per second
	2.832×10^1	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^1	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
<i>Mass</i>		
ton (short)	9.072×10^{-1}	megagram or metric ton

Sea level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

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