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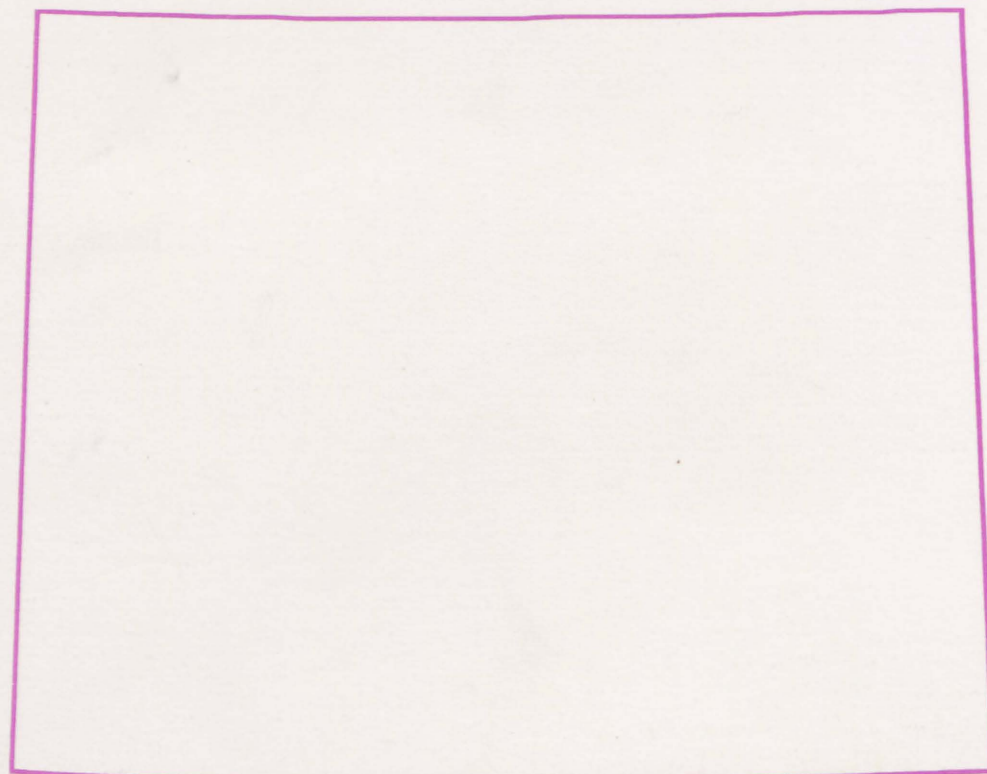


Water Resources Data Wyoming Water Year 1994

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CALENDAR FOR WATER YEAR 1994

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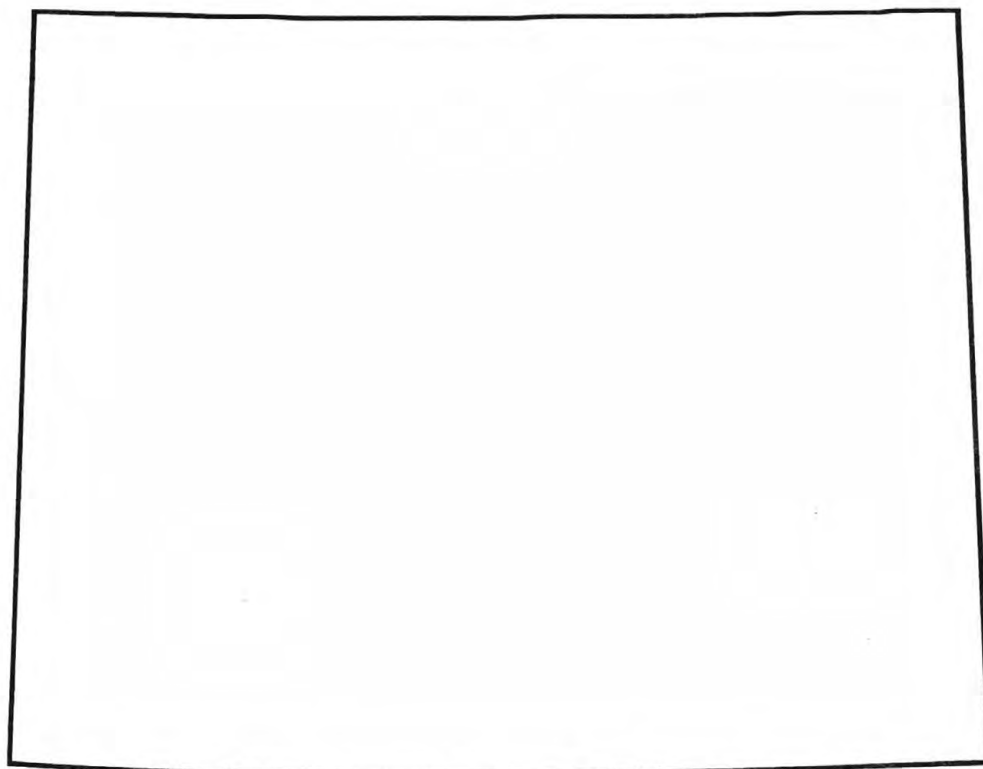
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Water Resources Data Wyoming Water Year 1994

by J.R. Schuetz, G.F. Ritz, M.L. Smalley, and R.E. Woodruff



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

UNITED STATES DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, Secretary

GEOLOGICAL SURVEY

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2617 East Lincolnway, Suite B
Cheyenne, Wyoming 82001

1995

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 State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources.

This report is the culmination of a concerted effort by dedicated 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 Geological Survey policy and established 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:

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S. L. Green	P. O'Daniel	W. J. Sadler	K. R. Watson
K. J. Hedmark	B. C. Pedersen	M. E. Smith	T. F. Werth
G. A. Laidlaw	T. A. Pointon	D. St.Clair	L. D. Young

S. L. Green, P. O'Daniel, I. Rodgers, and L. D. Young typed and assembled the text of the report.

This report was prepared in cooperation with the State of Wyoming and with other agencies; and under the general supervision of Barney Lewis, District Chief, Wyoming.

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Water resources data for the 1994 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. This report contains discharge records for 182 gaging stations; stage and contents for 16 lakes and reservoirs; water quality for 35 gaging stations and 24 ungaged stations; and water levels for 7 observation wells. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements. These data represent that 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, *Ground water, *Water quality, Flow-rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperature, Sampling Sites, Water levels, Water analyses.

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Bear River above reservoir, near Woodruff, UT (d,c,s)	10020100	270
Woodruff Narrows Reservoir near Woodruff, UT (e,v)	10020200	272
Bear River below reservoir, near Woodruff, UT (d)	10020300	273
Twin Creek at Sage, WY (c,s)	10027000	274
Bear River below Pixley Dam, near Cokeville, WY (d)	10028500	275
Smiths Fork near Border, WY (d)	10032000	276
Smiths Fork at Cokeville, WY (c,s)	10035000	277
Bear River below Smiths Fork, near Cokeville, WY (d,c,m)	10038000	278
Bear River at Border, WY (d,c,m,s)	10039500	280
<u>SNAKE RIVER BASIN</u>		
Snake River above Jackson Lake, at Flagg Ranch, WY (d,c,t)	13010065	281
Jackson Lake near Moran, WY (v)	13010500	285
Snake River near Moran, WY (d)	13011000	286
PACIFIC CREEK BASIN		
Pacific Creek at Moran, WY (d)	13011500	287
BUFFALO FORK BASIN		
Buffalo Fork above Lava Creek, near Moran, WY (d)	13011900	288
SPREAD CREEK BASIN		
Spread Creek at diversion dam, near Moran, WY (d)	13012490	289
GROS VENTRE RIVER BASIN		
Gros Ventre River at Zenith, WY (d)	13015000	290
FISH CREEK BASIN		
Fish Creek at Wilson, WY (d)	13016450	291
FLAT CREEK BASIN		
Flat Creek:)		
Cache Creek near Jackson, WY (d,c,m,r,s)	13018300	292
Flat Creek below Cache Creek, near Jackson, WY (d)	13018350	296
Snake River below Flat Creek, near Jackson, WY (d)	13018750	297
Snake River above reservoir, near Alpine, WY (d)	13022500	298
GREYS RIVER BASIN		
Greys River above reservoir, near Alpine, WY (d)	13023000	299
SALT RIVER BASIN		
Salt River above reservoir, near Etna, WY (d,c,t,s)	13027500	300
HENRYS FORK BASIN		
Falls River:		
Boundary Creek near Bechler Ranger Station, WY (d)	13046680	304

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 (1994) active stations. Reservoir stations are also 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	1983-93.	--	1983-93.	1988-93.	--	
Gibbon River near West Yellowstone, Mont.....	06037000	118	1913-16;1983-93.	--	1983-93.	1988-93.	--	
Madison River near West Yellowstone, Mont.....	06037500	420	1913-73;1983-86; 1988-	--	1983-86; 1989-	1989-	--	
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-	1988-	--	
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.	--	

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-	--	--	
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-	--	1988-	--	--	
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-	--	--	
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, 1994

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.	--	--	--	--	
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.	--	--	

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-	1949-51; 1959-65; 1971;1977; 1985-	1973-78; 1986-	
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.	--	--	

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-	--	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-	--	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-	--	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-	--	--	--	--	

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-	--	1980-92.	--	1983; 1989.	
Little Wind (Popo Agie) River below Arapahoe (Agency).....								
Beaver Creek near Lander.....	06234500	1,464	1906-9;1911-18. 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.	

WATER RESOURCES DATA - WYOMING, 1994

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	06238780	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	
MISSOURI RIVER BASIN--continued								
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 l	06252000	--	1948-50.	--	--	--	--	
Lateral P-34.9 wasteway near Shoshoni.....	06252500	--	1949-50.	--	--	--	--	

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								
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.	--	--	--	

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								
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.	

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>								
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-	--	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	66.1	1962-75;1991-	--	--	--	--	
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.	

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								
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	0.94	1954-59d;1960-67c.	--	--	--	--	

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								
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.	--	--	--

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								
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-	--	--	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.	

WATER RESOURCES DATA - WYOMING, 1994

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								
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-	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.	--	--	--	--	

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--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.....								
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	06284380	--	--	--	1976.	--	--	
Shoshone River near Garland.....	06284400	2,036	1958-79.	--	1985-92.	--	--	
					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	
<u>MISSOURI RIVER BASIN--continued</u>								
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-	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 Junctio	06288600	15.9	1982-87.	--	--	--	--	
Dry Fork below Lick Creek, near Burgess Junction	06288700	54.1	1982-87;1992-	--	--	--	--	
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.	--	--	--	--	

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								
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-	--	--	--	--	
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 Armino.....	06309260	8.80	1974-79.	--	--	--	--	

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								
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.	--	--	--	

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-	--	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.	

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.

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	.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.	--	--	--	--	

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								
CHEYENNE RIVER BASIN--continued								
Cheyenne River--continued								
Black Thunder Creek:								
Little Thunder Creek:								
Reservoir No. 10.....	06375000	.66	1951-54g.	--	--	--	--	
Reservoir No. 12.....	06375500	.28	1951-52g.	--	--	--	--	
Little Thunder Creek near Hampshire.....	06375600	234	1977-81;1987-	--	1977-81; 1988; 1990-	1977-81; 1988; 1990-	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:								
Reservoir No. 58.....	06381500	.07	1953-54g.	--	--	--	--	

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							
Lance Creek--continued							
Lightning Creek--continued							
Twentymile Creek--continued							
Reservoir No. 42 (on Twentymile Draw).....	06382000	.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	0.11	1951-54g.	--	--	--	--

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	.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	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	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	
MISSOURI RIVER BASIN--continued								
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.	1976-83; 1986-87; 1990-93	1975-93.	
Keyhole Reservoir near Moorcroft	06427000	1,953	1952-	--	--	--	--	
Belle Fourche River below Keyhole Reservoir	06427500	1,954	1951-	--	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	06429997	--	1987-	--	--	--	--	
Murray ditch 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-	--	--	--	--	
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-	--	--	--	--	

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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								
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-	1970-	1973-	
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.	--	--	

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	0.66	--	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-	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.....							
	06630440	28.7	1972-75.	--	--	--	--
East Fork 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
<u>MISSOURI RIVER BASIN--continued</u>							
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-	--	--	--	--
Carlson Creek ditch above Wagonhound Creek, near Arlington.....	06632055	--	1994-	--	--	--	--
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.	--	--	--

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--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-	--	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.	--	

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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								
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.	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.	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-	--	1957-60. 1985-87; 1989.	1985-87.	1987.	
North Platte River near Goose Egg	06643510	--	--	--	1977-79; 1983-89.	1983;1988.	1977-79; 1982-87.	

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.	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.	--	--	
South Fork Casper Creek:								
Clarks Gulch near Natrona	06644200	2.64	--	1961-72.	--	--	--	
Casper Creek at Casper	06644500	668	1946-56.	--	1965; 1967-88.	1988.	1974; 1982-87.	
North Platte River at Casper	06644550	--	--	--	1971-92.	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-	--	--	--	--	
Smith Creek at Otter Creek, near Casper	06645160	10.9	1974-79.	--	--	--	--	
Otter Creek at mouth, near Casper	06645164	6.50	1987-	--	--	--	--	
Smith Creek below Otter Creek, near Casper	06645166	18.5	1987-	--	--	--	--	
Beaver Creek above Pole Creek, near Casper.....	06645174	4.67	1987-	--	--	--	--	
Pole Creek near Casper	06645178	2.70	1987-	--	--	--	--	
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.	
Little Deer Creek above East Cart Creek, near Glenrock.....								
	06646280	3.89	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							
Deer Creek--continued							
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	13,538	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.	--	--	--

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								
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	-- b	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-	--	1965.	--	--	
Horseshoe Creek near Glendo.....	06653500	211	1916-18;1921-24; 1928-33; 1935-70; 1988-	--	--	--	--	
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) Glendevy, 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-	--	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.	--	--	

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								
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								
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.	--	--	--	

WATER RESOURCES DATA - WYOMING, 1994

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								
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-	--	--	--	--
South Platte River:							
Lonetree Creek at Carr, Colo	06753400	--	1993-		1993-	1993-	--
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-	--	1986-92.	--	--
Diamond Creek below Roundtop Road, at F. E.							
Warren Air Force Base	06755840	10.75	1994-	--	--	--	--
Diamond Creek at F.E. Warren Air Force Base	06755860	10.8	1992-	--	--	--	--
Diamond Creek at mouth, at F.E. Warren Air Force							
Base	06755880	10.9	1992-	--	--	--	--
Crow Creek at F.E. Warren Air Force Base	06755950	253	1994-	--	1983-	--	1987-
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-	--	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.	--	--	--

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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
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.	--	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-	--	1975-78; 1980; 1985-88.	1975-78.	1976.

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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	
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-	--	--	--	--	
Highland Ditch near Pinedale.....	09196960	--	1985-86;1988-	--	--	--	--	
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.	--	--	--	--	

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-	1975-82; 1986-	1973-80; 1986-	
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.	--	--	--	--	

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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								
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.	--	--	--	

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.	1971-81.	1973-80.	

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
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-	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.	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.	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	
COLORADO RIVER BASIN--continued								
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					
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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-	--	--	--	--	
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.	

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-	--	--	--	--	
Sulphur Creek below reservoir, near Evanston.....	10015900	69.2	1958-92.	--	--	--	--	

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								
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-	--	--	--	--	
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-	--	--	--	--	

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.	1989-92.	--	
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-	
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.	--	--	--	--	

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>GREAT SALT LAKE BASIN--continued</u>								
BEAR RIVER BASIN--continued								
Bear River at Border.....	10039500	2,486	1937-	--	1961; 1965-	1978-84; 1986-	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								
	13010000	485	1913-25.	--	--	--	--	
Snake River above Jackson Lake, at Flagg Ranch	13010065	486	1987-	--	1987-	1987-92.	1987-	
Snake River above Jackson Lake, at Flagg Ranch	13010200	486	1983-87.	--	1972; 1975-76; 1983-88.	--	1976.	
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.	--	--	--	--	
Spread Creek near Moran (Elk).....	13012500	101	1917-18;1993-	--	1971-72; 1976; 1990.	1990.	1976.	
Cottonwood Creek near Teton	13013000	72.3	1917-18.	--	--	--	--	
Spring Creek near Teton	13013500	--	1917-18.	--	--	--	--	
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-	--	--	--	--	

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	
SNAKE RIVER BASIN--continued								
Snake River--continued								
Gros Ventre River--continued								
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 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-	--	1966;1973.	--	--	
Cache Creek near Jackson.....	13018300	10.6	1962-	--	1965-	1968-	1969; 1973-	
Flat Creek below Cache Creek, near Jackson.....	13018350	129	1989-	--	1973.	--	--	
Flat Creek near Cheney	13018500	142	1917-18;1989-	--	1981-82.	--	1981-82.	
Snake River below Flat Creek, near Jackson	13018750	2,627	1975-	--	--	--	--	
Horse Creek near Cheney	13019000	37.9	1917-18.	--	--	--	--	
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.	--	--	--	

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 RIVERBASIN--continued								
Snake River--continued								
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.	--	--	
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-	1989-	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-	--	--	--	--	

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							
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.

WATER RESOURCES DATA - WYOMING, 1994

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State, municipal, county, and Federal agencies, obtains a large amount of data pertaining to the water resources of Wyoming each water year. The accumulation of this data constitutes 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 the 1994 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. This report contains discharge records for 182 gaging stations; stage and contents for 16 lakes and reservoirs; water quality for 35 gaging stations and 24 ungaged stations; and water levels for 7 observation wells. Locations of streamflow-gaging stations, water-quality stations, and observation wells 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 in the United States or may be purchased from Books and Open-File Reports, U.S. Geological Survey, Box 25425, Federal Center, Denver, CO 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 the 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 report is identified as "U.S. Geological Survey Water-Data Report WY-94-1." Water-Data reports are for sale in paper copy or in microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161. Beginning with the 1990 water year, all water-data reports will also be available on Compact Disc - Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc.

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 (307) 778-2931. A limited number of CD-ROM discs will be available for sale by the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado 80225.

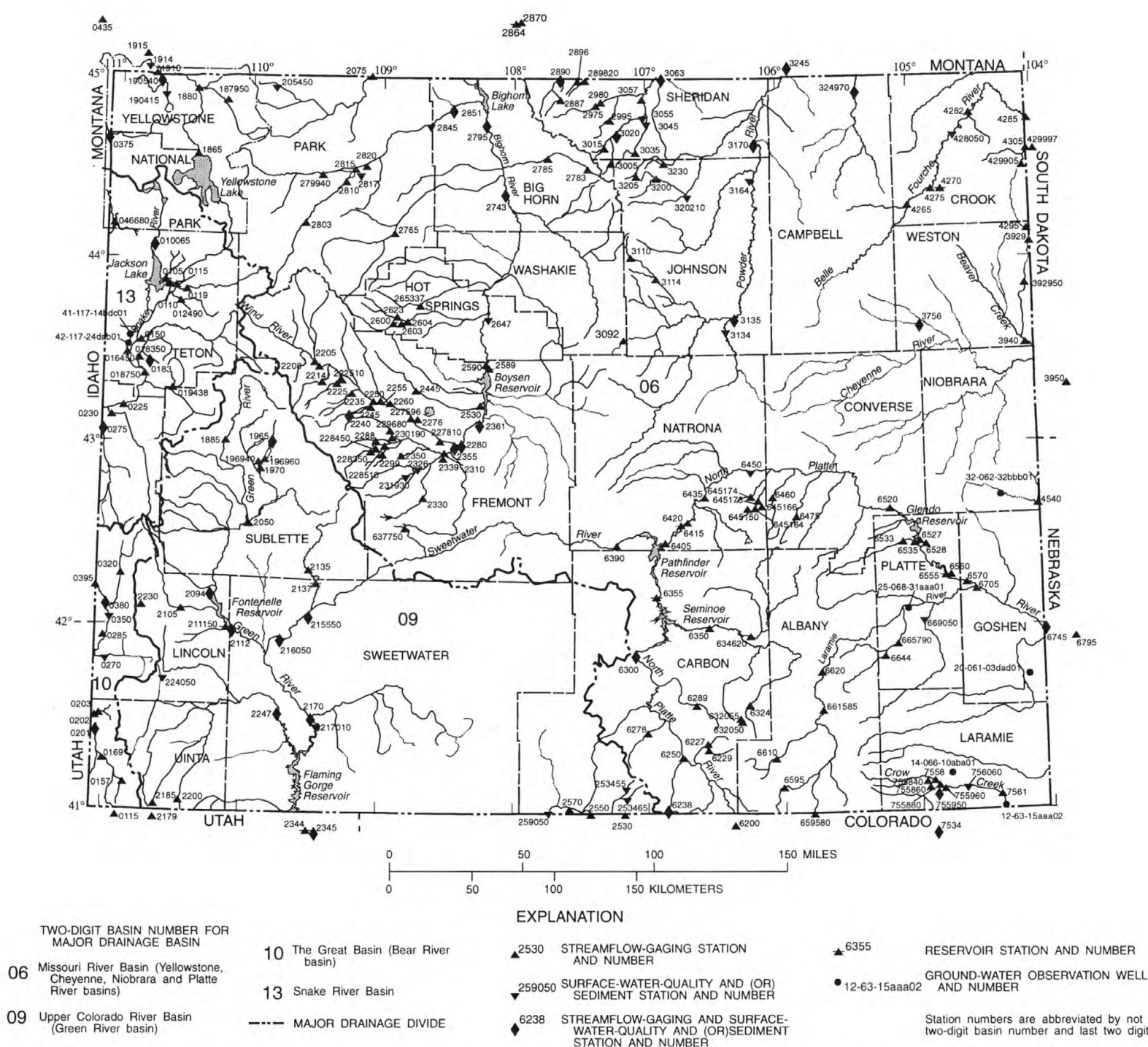


Figure 1. Location of surface-water stations, water-quality stations, stage and/or content stations, and ground-water observation wells, 1994 water year.

COOPERATION

The U.S. Geological Survey and agencies 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 Department of Agriculture, Bill Gentle, Commissioner of Agriculture

Wyoming Water Development Commission, Michael K. Purcell, Administrator

Wyoming Department of Environmental Quality, Dennis Hemmer, Director

Wyoming Department of Transportation, Don Diller, P.E., Director

Wyoming Game and Fish Department, Francis E. Petera, Director

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

Teton County, County Commissioners

Teton County Conservation District, William Glenn, Chairman

City of Evanston, Dennis J. Ottley, Mayor

Midvale Irrigation District, Bill Brown, Manager

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

Colorado State University, Dr. Albert Yates, President

Assistance in the form of funds and 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; by the Corps of Engineers, U.S. Army for 2 streamflow-gaging stations; U.S. Air Force, Department of Defense for 5 streamflow-gaging stations; by the Bureau of Land Management, U.S. Department of the Interior for part of a streamflow-gaging station; and Little Horn Energy of Wyoming, permittee of the Federal Energy Regulatory Commission for 1 streamflow-gaging station, published in this report.

SUMMARY OF HYDROLOGIC CONDITIONS

The water year began with precipitation being above average throughout most of the State. By late summer conditions had changed and most of the State was affected by drought. Streamflow at most streamflow-gaging stations also showed a decrease to a below average condition by the end of the water year.

Precipitation

Precipitation during water year 1994 was less than normal (average for 1961-90) throughout most of the State. Precipitation and departures from normal for the major divisions (drainage basins) are published monthly in "Climatological Data, Wyoming" by the National Oceanic and Atmospheric Administration. The divisional data from water year 1994 was separated into two time periods (October through March, April through June) indicating seasonal precipitation for water year 1994 as related to normal precipitation (fig. 2).

Precipitation from October through March was above to near normal except for the Snake River, Green River and Bear River basins, which were below normal. During the period April through June all major basins showed decreased precipitation to below normal conditions. Drought conditions existed over much of the State by late summer.

WATER RESOURCES DATA - WYOMING, 1994

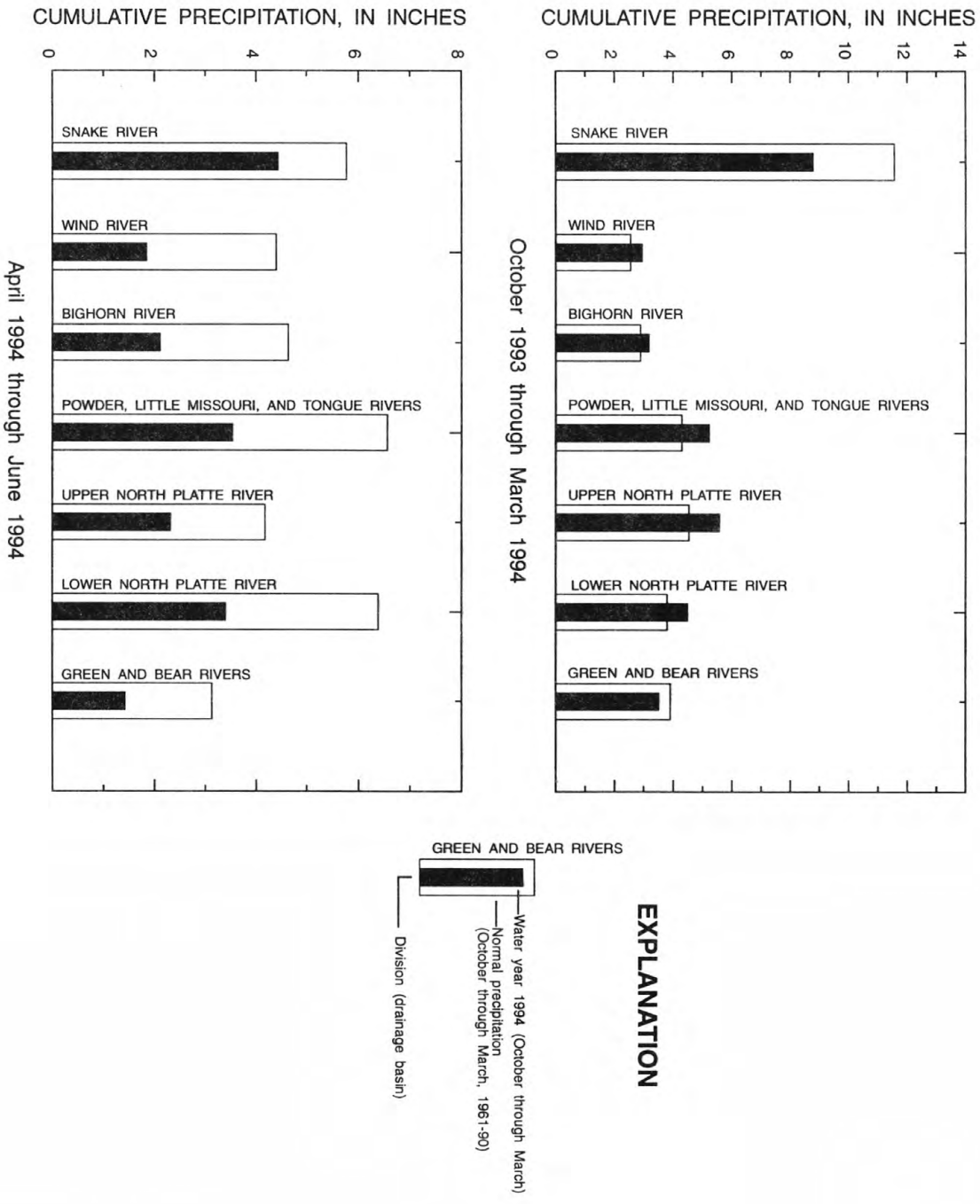


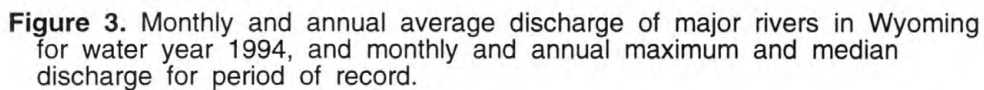
Figure 2. Cumulative seasonal precipitation for major drainage basins for water year 1994 and normal average for 1961-90.

Most of the precipitation stations used to compile the data for figure 2 are in nonmountainous areas of the State and data from these stations might not be indicative of precipitation in the mountains. Precipitation in the mountains, in the form of snow, provides most of Wyoming's annual water supply. Precipitation and snowpack in Wyoming's mountains are reported by the U.S. Soil Conservation Service in "Wyoming Basin Outlook Reports." The May 1, 1994 issue, just prior to the heavy snowmelt period, reported that the high elevation snowpack was less than average throughout the State. The percentage range of average annual snowpack for the data sites in seven drainage basins in Wyoming, as of May 1, 1994, is listed in the following table.

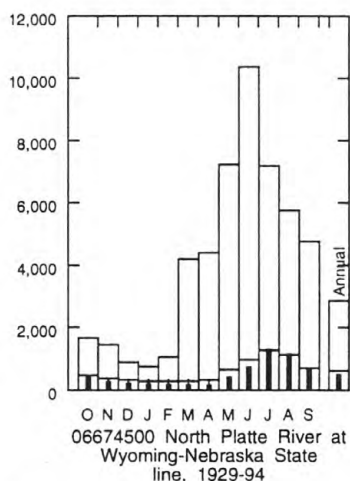
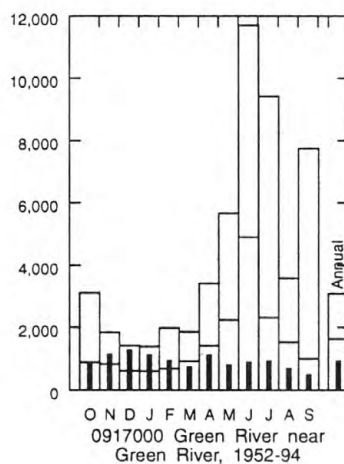
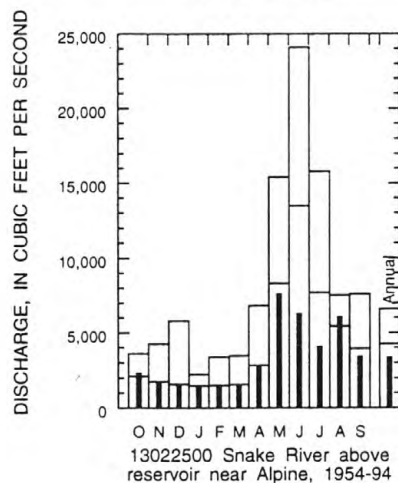
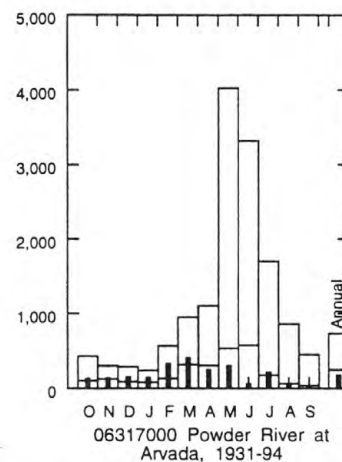
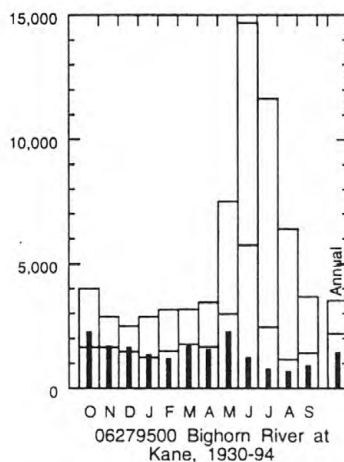
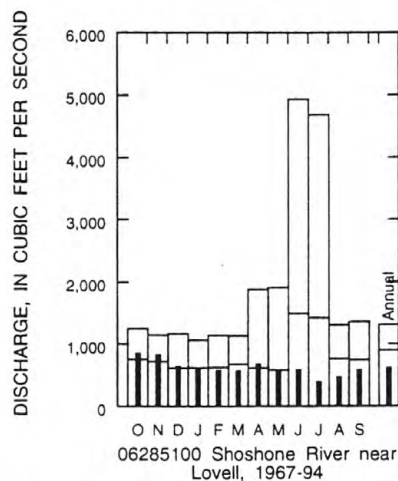
<u>Drainage basin</u>	<u>Average snowpack, in percent</u>
Snake River	42 to 64
Wind River	54 to 70
Bighorn River	62 to 89
Powder and Tongue Rivers	60 to 79
Upper North Platte River	83 to 86
Lower North Platte River	68 to 83
Upper and Lower Green River	41 to 69

Streamflow

Streamflow, in general, decreased during water year 1994 in comparison to water year 1993, and was generally below average for most of the unregulated streams. The May 1, 1994 "Wyoming Basin Outlook Report" published by the U.S. Soil Conservation Service noted that reservoir storage at that time was generally above average. Storage at most reservoirs was above average because operators of the reservoirs anticipated below normal runoff. Boysen Reservoir was 146 percent of average, Keyhole Reservoir was 89 percent, Pathfinder Reservoir was 75 percent, and Jackson lake was 147 percent. Due to the extreme drought conditions this year all stations shown in figure 3 had average discharges below the median discharge for each station. Average discharges at 06279500 Bighorn River at Kane, 06674500 North Platte River at Wyoming-Nebraska State line, 09217000 Green River near Green River, and 13022500 Snake River above Reservoir near Alpine were all in the first quartile of annual average discharges. Stations 06285100 Shoshone River near Lovell, 06317000 Powder River at Arvada, and 06630000 North Platte River above Seminoe Reservoir, near Sinclair were in the second quartile. The first quartile is the first 25 percent of annual average discharges ranked in increasing value for period of record at each station. The second quartile is the annual average discharges in the 26th to 50th percentiles.



WATER RESOURCES DATA - WYOMING 1994



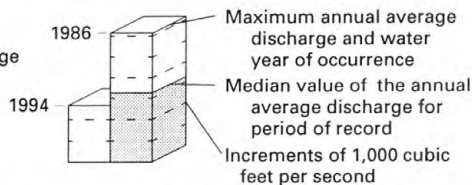
EXPLANATION

COMPARISON OF ANNUAL AVERAGE DISCHARGE

Data for water year 1994

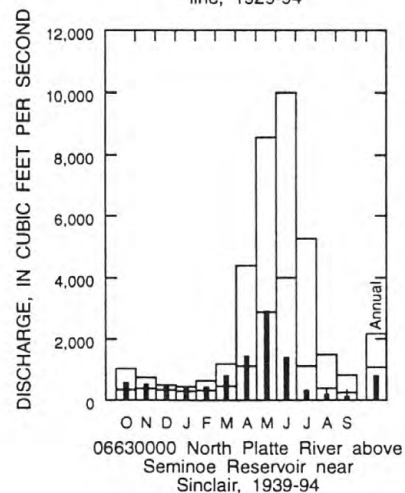
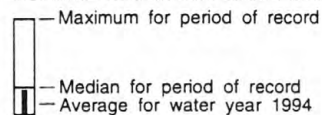
Data for period of record

Annual average discharge and water year



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

MONTHLY OR ANNUAL DISCHARGE



Chemical Quality of Stream Water

The specific conductance of stream-water samples was measured at six stations from selected streams in Wyoming during water year 1994 to describe the general chemical quality of the stream water. Specific conductance typically varies directly with the dissolved-solids concentration; thus, dissolved solids was chosen as an indicator of the concentration and species of ions in water. Onsite field measurement of specific conductance is not an elaborate or complex technique, thus, specific conductance is commonly measured during each field visit.

A statistical description of specific conductance measurements at the six selected stations is shown in table 1. The table lists the means, standard deviations, medians, maximum and minimum values for water year 1994 and for the 10-year period encompassing water years 1984-93. The mean of the specific conductance values measured in water year 1994 at the six stations was within one standard deviation of the statistical mean established for the previous 10-year period of record, indicating no significant change has occurred in the overall quality of the stream water.

Table 1.--Statistical description of specific conductance measurements for selected water samples at selected locations for the 1994 and 1984-1993 water years.
[Specific conductance, in microsiemens per centimeter at 25° Celsius]

Stream name and station number	Specific conductance											
	Water year 1994						Water years 1984-93					
	Number of values	Mean	Standard deviation	Median	Maximum	Minimum	Number of values	Mean	Standard deviation	Median	Maximum	Minimum
Bighorn River 06279500	10	986	148	990	1,160	693	94	945	190	940	1,330	458
Shoshone River 06285100	10	756	86	784	860	593	69	897	254	860	1,390	342
Powder River 06317000	4	1,918	388	1,995	2,290	1,390	80	2,754	1,180	2,465	6,500	820
North Platte River 06630000	6	438	66	441	522	323	66	398	119	418	700	146
North Platte River 06674500	10	920	113	974	1,020	695	80	857	91	868	1,060	640
Green River 09217000	6	567	119	562	753	438	76	580	182	562	1,000	285

Ground-Water levels

Ground-water levels were measured in a statewide network of 83 observation wells; most wells are in areas of extensive ground-water withdrawal in southeastern Wyoming. Water in Niobrara, Goshen, and eastern Laramie counties is withdrawn from the High Plains aquifer, principally for irrigation; and water in Platte County is primarily withdrawn from alluvium, also principally for irrigation. Water in central Laramie County is withdrawn from the High Plains aquifer, principally for domestic use.

Ground-water level measurements were continuously recorded in 65 wells equipped with float-driven, digital water-level recorders and at 2 artesian wells equipped with pressure-sensing transducers and electronic data recorders. Water levels in the remaining wells in the network were measured manually by use of a steel tape.

Hydrographs for representative observation wells in southeastern Wyoming are shown in figure 4. The location of all wells in the observation-well network and hydrographs and selected statistical data of water levels are published in separate reports of the U.S. Geological Survey. The most recent water-level report "Ground-Water Levels in Wyoming, 1984 through September 1993," by Hugh I. Kennedy and Sharon L. Green, is available for inspection at the U.S. Geological Survey in Cheyenne.

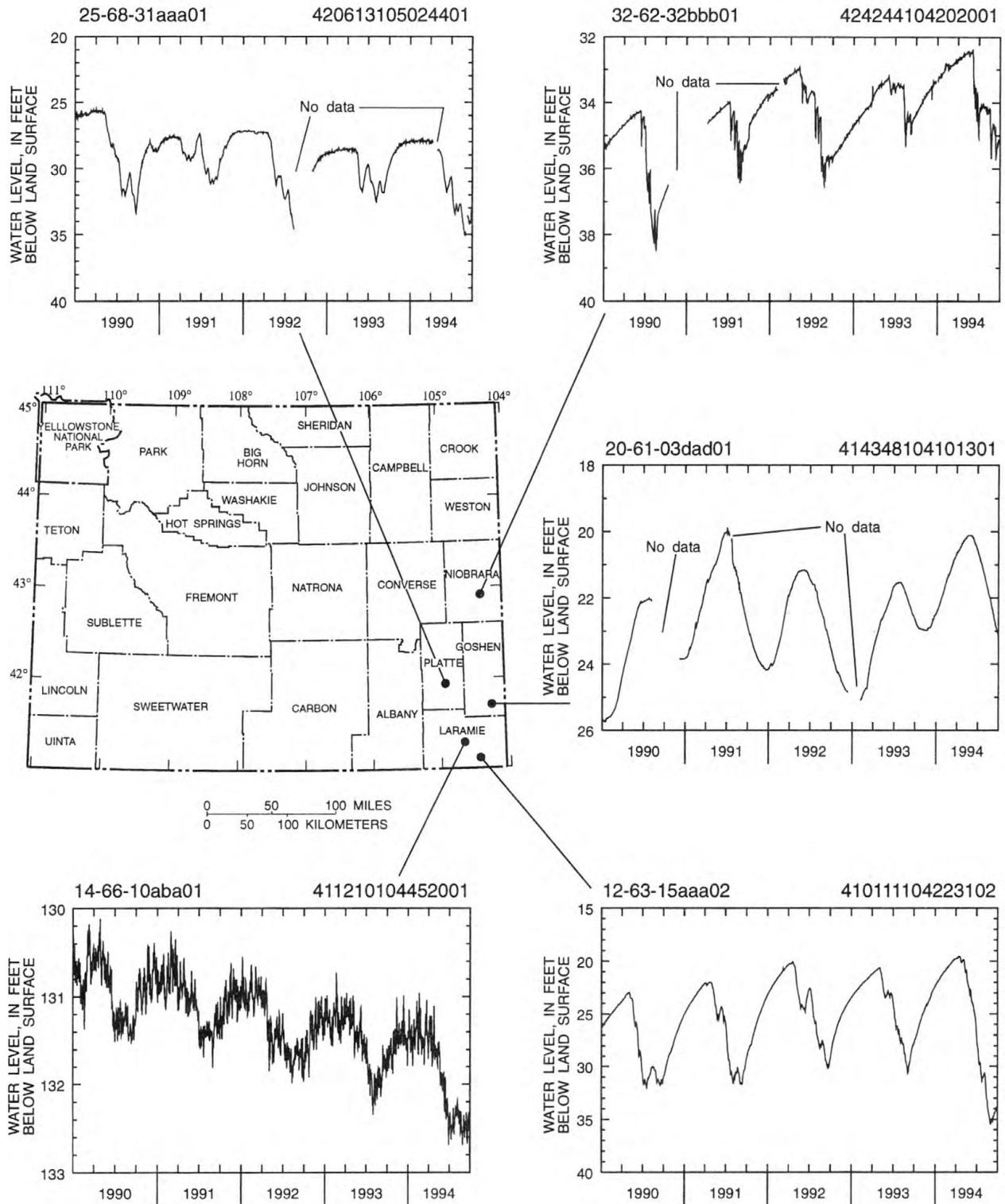


Figure 4. Water-level hydrographs for observation wells in areas of extensive ground-water withdrawals, January 1990 to September 1994.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-Mark Network is a network of 57 small sites in small drainage basins around the country whose purpose 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 and contrast conditions observed in basins more obviously affected by the activities of man.

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 natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information 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 that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing 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 implemented full-scale 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 principle 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.

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1994 water year that began on October 1, 1993, and ended September 30, 1994. 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, water-quality data for surface and ground water, and ground-water-level data. The locations of the stations and wells 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 data station, whether stream site or well, in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. 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 and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells and, in Wyoming, for surface-water stations where only infrequent measurements are made.

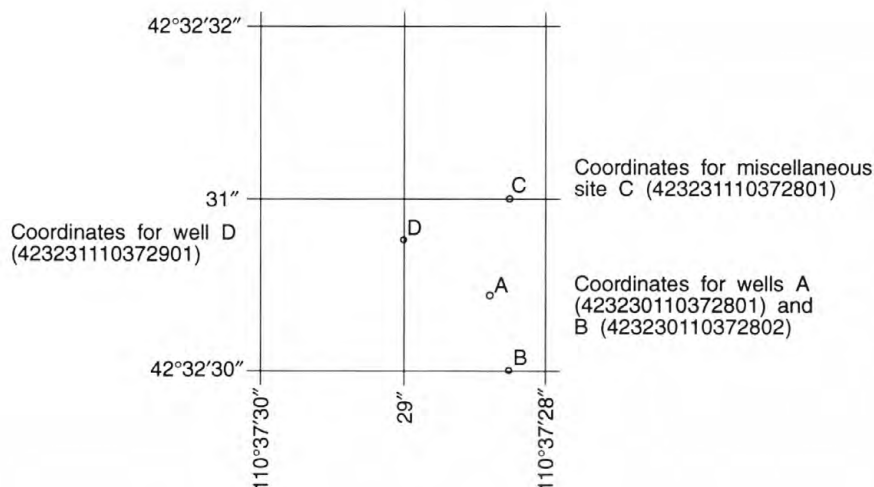
Downstream Order System

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 show 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 according to 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 both 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

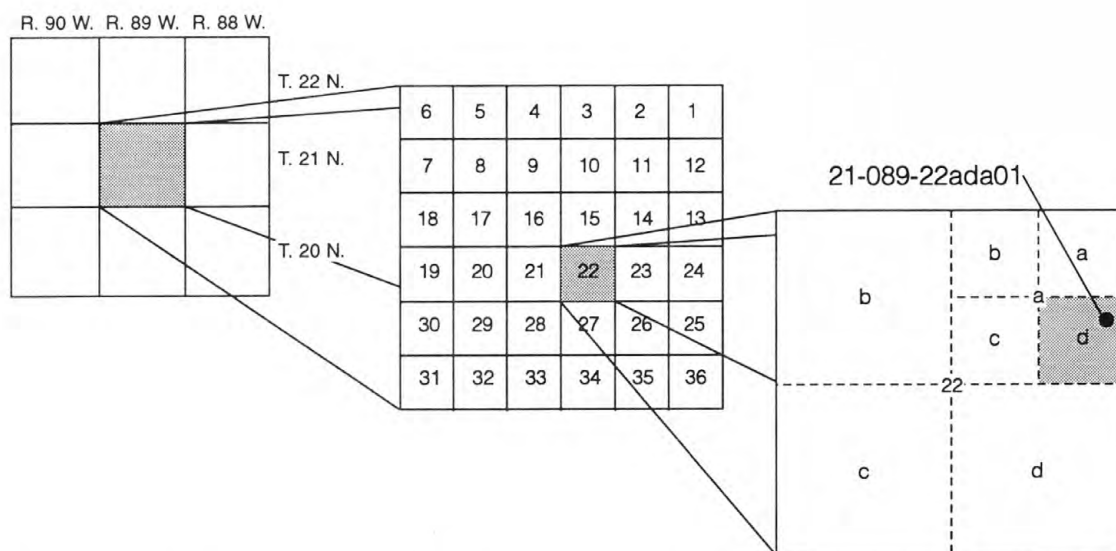
The identification numbers for wells and miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote the degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number, and has no locational significance. In the rare instance where the initial determination of latitude and longitude are 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 figure below.)



System for numbering wells and miscellaneous sites
(latitude and longitude).

In order to compare data for wells in other publications, such as the county ground-water studies, the wells in this report are also numbered according to a system based on the location in the public land classification of the U.S. Bureau of Land Management. The system is illustrated in the following figure. The first numeral denotes the township north of a base line, the second numeral denotes the range west of the fifth principal meridian, and the third numeral denotes the section in which the well is located. The letters A, B, C, and D designate, respectively, the northeast, northwest, southwest, and southeast quarter section, quarter-quarter section, and quarter-quarter-quarter section (10-acre or 4-hectare tract). For example, well 14-66-10aba01 is in the NE1/4 NW1/4 NE1/4 sec.10, T.14 N., R.66 W. Consecutive terminal numbers are added if more than one well is recorded within a 10-acre tract.

For a small irregularly-shaped area in west central Wyoming, the well or miscellaneous site numbers are based on the Wind River Meridian and Base Line system. The uppercase letter that begins the number designates the quadrant of the system. The quadrants are lettered A, B, C, and D in a counter-clockwise direction beginning with A in the northeast quadrant. Otherwise, the well numbers are the same as given in the preceding paragraph.



System for numbering wells and miscellaneous sites (township and range).

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 mean discharges 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. Measurements of discharge are made with current meters using methods adapted 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 then 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 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 stream-gaging 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 then 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 in error as 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 faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated 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 the next two sections. "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

Streamflow data in this report are presented in a new format that is 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 a pilot program to reformat the annual water-data report to meet current user needs and data preferences.

The records published for each continuous-record surface-water discharge station (gaging station) now consist 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, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

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

PERIOD OF RECORD.--This 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 can reasonably 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 sea level (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 record 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 statement is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also 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, possibly, 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.

EXTREMES FOR CURRENT YEAR.--Extremes given here are similar to those for the period of record, except the peak discharge listed may include secondary peaks. For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. The peaks greater than the base discharge, excluding the highest one, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330. The minimum for the current water year appears below the table of peak data.

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 to determine if the published records were ever revised after the station was discontinued. Of course, if the data 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 always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a 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, except for the listing of secondary instantaneous peak discharges in the EXTREMES FOR CURRENT YEAR paragraph, is now presented in the tabular summaries following the discharge table or in the REMARKS paragraph, as appropriate. 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 stream-gaging stations gives mean discharge for each day of the water year. In the monthly summary for the daily 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 discharges, respectively, for each month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion 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 diversions 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 are also 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 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

INSTANTANEOUS PEAK FLOW.--The maximum instantaneous discharge occurring for the water year or for the designated period. Note that secondary instantaneous peak discharge 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.--Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

Acre-foot (AC-FT) is the quantity of water required to cover 1 acre to a depth of 1 foot and is 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 of 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 is exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.--The discharge that is exceeded by 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.--The discharge that is exceeded by 90 percent of the time for the designated period.

If applicable, data collected at partial-record stations follow the information for continuous-record sites. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

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 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 value; "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 daily 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. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. 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 are on file in the Wyoming District office. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the District office.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A 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 limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

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

Arrangement of Records

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

Onsite Measurements and Sample Collection

In obtaining water-quality data, a major concern needs to be assuring that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. All of these references are listed on pages 30 and 31 of this report. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey 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 collector.

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

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, 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 (hourly values) may be obtained from the U.S.G.S. District Office whose address is given on the back of the title page of this report.

Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter ($\mu\text{g/L}$) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Present data above the $\mu\text{g/L}$ level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey will begin using new trace-element protocols in the near future.

Water Temperature

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

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

Sediment

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

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 were 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 quality and streamflow and in predicting long-term sediment discharge characteristics of the stream.

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

Laboratory Measurements

Samples for suspended sediment, turbidity, indicator bacteria, and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the Geological Survey National Water Quality Laboratory in Arvada, Colorado or in the Wyoming Department of Agriculture laboratory in Laramie, Wyoming. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used for chemical and biological analyses are given in TWRI, Book 1, Chap. D2; Book 5, Chap. A1, A2, A3, A4, A5, and A6. In March 1989 the National Water-Quality Laboratory discovered 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. Sulfate values in this report have not been corrected for this bias.

Data Presentation

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

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

LOCATION.--See Data Presentation 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 record, sediment pumping sampler, or other sampling device is in operation at a station.

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

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

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, WATSTORE, 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.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

The following remarks 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, which is the analytical detection limit
K	Results based on colony count outside the acceptable range (non-ideal colony count)
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted)
D	Biological organism count equal to or greater than 15 percent (dominant)
&	Biological organism estimated as dominant

Records of Ground-Water levels

Only selected water-level data from Wyoming's network of observation wells are given in this report. These data are intended to provide a sampling and historical record of water-level changes in the more important aquifers. Locations of the observation wells in this network in Wyoming are shown in figure 1.

Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears to the upper left corner of the table. The secondary identification number is the local well number, an alphanumeric number, derived from the township-range location of the well.

Water-level records are obtained from direct measurements with a steel tape or from the graph or punched tape of a water-stage recorder. The water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given to a tenth of a foot or a larger unit.

Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); a landline location designation; the hydrologic-unit number; the distance and direction from a geographic point of reference; and the owner's name.

AQUIFER.--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and/or screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

INSTRUMENTATION.--This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on weekly, monthly, or some other frequency of measurement.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) sea level; it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that also are water-quality observation wells, and may be used to acknowledge the assistance of local (non-Survey) observers.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the Geological Survey, may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of the period of published record, with respect to land-surface datum, and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet below land-surface datum and all taped measurements of water level are listed. For wells equipped with recorders, only abbreviated tables are published; generally, only water-level lows are listed for every fifth day and at the end of the month (eom). The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of water level.

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that for most sampling sites they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes only slowly; therefore, for most general purposes one annual sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration. In the special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some counties but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

Most methods for collecting and analyzing water samples are described in the "U.S. Geological Survey Techniques of Water-Resources Investigations" manuals listed on a following page. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-water-level records. Data for quality of ground water are listed alphabetically by County, and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The REMARK codes listed for surface-water-quality records are also applicable to ground-water-quality records.

ACCESS TO WATSTORE DATA

The U.S. Geological Survey is the principal Federal water-data agency and, as such, collects and disseminates about 70 percent of the water data currently being used by numerous State, local, private, and other Federal agencies to develop and manage our water resources. As part of the Geological Survey's program of releasing water data to the public, a large-scale computerized system has been developed for the storage and retrieval of water data collected through its activities. The National Water Data Storage and Retrieval System (WATSTORE) was established in 1972 to provide an effective and efficient means for the processing and maintenance of water data collected through the activities of the U.S. Geological Survey and to facilitate release of the data to the public. A variety of useful products, ranging from data tables to complex statistical analyses such as Log Pearson Type III, can be produced using WATSTORE. The system resides on the central computer facilities of the U.S. Geological Survey at its National Center in Reston, Virginia, and consists of related files and data bases.

- * Station Header File - Contains descriptive information on more than 440,000 sites throughout the United States and its territories where the U.S. Geological Survey collects or had collected data.
- * Daily Values File - Contains more than 220 million daily values of stream flows, stages, reservoir contents, water temperatures, specific conductances, sediment concentrations, sediment discharges, and ground-water levels.
- * Peak Flow File - Contains approximately 500,000 maximum (peak) streamflow and gage-height values at surface-water sites.
- * Water Quality File - Contains approximately 2 million analyses of water samples that describe the chemical, physical, biological, and radio-chemical characteristics of both surface and ground water.
- * Ground-Water Site Inventory Data Base - Contains inventory data for more than 900,000 wells, springs, and other sources of ground water. The data includes site location, geohydrologic characteristics, well-construction history, and one-time field measurements such as water temperature.

In 1976, the U.S. Geological Survey opened WATSTORE to the public for direct access. The signing of a Memorandum of Agreement with the Survey is required to obtain direct access to WATSTORE. The system can be accessed either synchronously or asynchronously. The requestor will be expected to pay all computer costs he/she incurs. Direct access may be obtained by contacting:

U.S. Geological Survey
National Water Data Exchange
421 USGS National Center
Reston, Virginia 22092

In addition to providing direct access to WATSTORE, data can be provided in various machine-readable formats on magnetic tape or 5-1/4 inch floppy disk; and, as noted in the introduction, on CD-ROM discs. Beginning with the 1990 water year, all water-data reports will also be available on Compact Disc - Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc. 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's District offices. (See address on the back of the title page.) A limited number of CD-ROM discs will be available for sale by the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado 80225.

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 equal to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

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

Algae are mostly aquatic single-celled, colonial, or multicelled plants, containing chlorophyll and lacking roots, stems, and leaves.

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

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped 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.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C $\pm$ 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or 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 $\pm$ 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 are bacteria found also in the intestine of warmblooded 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 organism which produce red or pink colonies with 48 hours at 35°C $\pm$ 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.

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

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

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

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m³), and periphyton and benthic organisms in grams per square meter (g/m²).

Dry mass refers to the mass of residue present after drying in an oven at 105°C for zooplankton and periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and the ash mass and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by 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.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

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 a 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 or to prevent the intrusion of salt water.

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

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.

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 time.

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

Dissolved refers to that material in a representative water sample which passes through a 0.45 μm membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations 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 0.492 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 noted.

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 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 Bench-Mark Network is a network of 57 sites in small drainage basins around the country whose purpose 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 and contrast 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.

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

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

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

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

Micrograms per gram (ug/g) 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, ug/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

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 water. 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 natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information 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 that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing 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 implemented full-scale 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 principle 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.

National Trends Network (NTN) is a 150-station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of atmospheric deposition, which includes snow, rain, dust particles, aerosols, and gases. The core 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 unit area habitat, usually square meter (m²), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

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

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE 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 particular site where limited 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 fall diameter or 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 Unit 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.

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

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

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).

Plankton is a community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

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

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

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

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

Milligrams of carbon per area or volume per unit time [$\text{mg C}/(\text{m}^2 \cdot \text{time})$] for periphyton and macrophytes and [$\text{mg C}/(\text{m}^3 \cdot \text{time})$] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [$\text{mg O}_2/(\text{m}^2 \cdot \text{time})$] for periphyton and macrophytes and [$\text{mg O}_2/(\text{m}^3 \cdot \text{time})$] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

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 in 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.

Return period 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 recurrence interval.

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.

Bed load is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bed load is considered to consist of particles in transit within 0.25 ft of the streambed.

Bed load discharge (tons per day) is the quantity of bed load measured by dry weight that moves past a section as bed load in a given time.

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

Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft³/s) x 0.0027.

Suspended-sediment load is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry mass or volume, that passes a section during a given time.

Total-sediment load or total load is a term which refers to the total sediment (bed load plus suspended-sediment load) that is in transport. It is not synonymous with total-sediment discharge.

7-day 10-year low flow (7 Q₁₀) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

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 in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which 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°C. 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 65 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and the 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.

Substrate is the physical surface upon which an organism lives.

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

Natural substrate refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lives.

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 by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered 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 used in tables of 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 µm 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 constituents.

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 µm 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.

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

Kingdom..... Animal
Phylum..... Arthropoda
Class..... Insecta
Order..... Ephemeroptera
Family..... Ephemeridae
Genus..... Hexagenia
Species..... Hexagenia limbata

Thermograph is an instrument that continuously records variation 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 concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water 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 of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total is the total 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" does double duty here, indicating 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 total 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 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.

Tritium Network is a network of stations which 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 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 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, 1994, is called the "1994 water year."

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 references 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."

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- 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-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
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- 3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A12. *Fluorometric procedures for dye tracing*, Revised, by J. F. Wilson, Jr., E. D. Cobb, and F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 41 pages.
- 3-A13. *Computation of continuous records of streamflow*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 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.
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- 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.
- 3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T. E. Reilly, O. L. Franke, and G. D. Bennett: USGS--TWRI Book 3, Chapter B6. 1987. 28 pages.
- 3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by E. J. Wexler: USGS--TWRI Book 3, Chapter B7. 1992. 190 pages.
- 3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 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. Greeson, 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.
- 6-A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water problems, Part 3: Design philosophy and programming details*, by L. J. Torak. USGS--TWRI Book 6, Chapter A5, 1993. 243 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.
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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 stateline, 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. Supplementary nonrecording gage at site 0.3 mi downstream at different datum used at time during 1927-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	430	405	426	421	400	422	424	605	690	426	380	352
2	431	399	436	425	402	427	447	607	752	421	382	353
3	431	397	423	425	402	437	467	645	622	420	381	355
4	431	405	433	428	405	446	495	691	599	415	379	355
5	431	404	432	448	394	452	448	785	565	417	373	349
6	440	387	415	430	398	430	444	856	545	445	369	349
7	468	393	432	413	426	413	457	965	531	464	362	355
8	519	392	436	431	432	412	438	1010	549	434	363	356
9	475	389	440	438	403	404	429	1010	590	417	385	356
10	456	389	428	427	402	403	426	1040	544	414	370	355
11	439	390	426	424	423	419	418	991	514	421	372	359
12	439	389	435	424	384	402	439	1010	518	409	369	360
13	438	385	412	423	407	402	478	1090	535	404	376	359
14	476	382	418	426	405	411	473	1040	734	398	364	371
15	497	375	428	427	405	422	457	912	674	401	357	369
16	490	375	425	428	405	438	500	949	584	396	353	365
17	464	377	417	422	411	441	581	974	539	392	347	366
18	445	378	413	419	424	423	686	924	514	387	347	367
19	437	374	420	413	421	438	742	810	494	388	347	369
20	431	372	410	406	408	419	822	788	480	387	345	369
21	427	372	421	401	409	419	893	791	470	385	347	368
22	428	385	411	407	410	419	882	732	580	385	346	363
23	423	400	415	408	409	430	954	702	518	388	342	367
24	423	370	413	420	411	408	878	691	496	398	341	366
25	423	339	409	417	419	409	855	705	468	400	339	363
26	419	e350	417	415	439	405	742	710	455	386	339	364
27	410	e400	419	411	440	400	643	707	444	383	340	365
28	416	431	414	396	424	401	606	909	440	382	351	371
29	406	428	408	406	---	393	565	842	436	380	351	380
30	392	426	411	401	---	395	567	694	433	372	354	401
31	401	---	416	359	---	406	---	641	---	377	352	---
TOTAL	13636	11658	13059	12939	11518	12946	17656	25826	16313	12492	11123	10897
MEAN	440	389	421	417	411	418	589	833	544	403	359	363
MAX	519	431	440	448	440	452	954	1090	752	464	385	401
MIN	392	339	408	359	384	393	418	605	433	372	339	349
AC-FT	27050	23120	25900	25660	22850	25680	35020	51230	32360	24780	22060	21610

MEAN	427	418	407	397	393	399	488	822	795	491	426	420
MAX	710	697	568	582	572	539	671	1212	1415	917	759	704
(WY)	1914	1914	1914	1914	1914	1917	1925	1956	1971	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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1913 - 1994	
ANNUAL TOTAL	192818		170063		--	
ANNUAL MEAN	528		466		489	
HIGHEST ANNUAL MEAN	--		--		664	1914
LOWEST ANNUAL MEAN	--		--		337	1934
HIGHEST DAILY MEAN	2140	May 22	1090	May 13	2150	Jun 1 1986
LOWEST DAILY MEAN	327	Feb 16	339	Nov 25	245	Jan 1 1942
ANNUAL SEVEN-DAY MINIMUM	355	Feb 11	342	Aug 21	267	Aug 6 1931
INSTANTANEOUS PEAK FLOW	--		1180	May 13	b2340	May 31 1986
INSTANTANEOUS PEAK STAGE	--		2.65	May 13	c10.00	Jan 8 1937
INSTANTANEOUS LOW FLOW	--		a312	Jan 31	d100	Feb 7 1933
ANNUAL RUNOFF (AC-FT)	382500		337300		354000	
10 PERCENT EXCEEDS	856		691		730	
50 PERCENT EXCEEDS	434		419		426	
90 PERCENT EXCEEDS	367		363		335	

a Gage height, 1.74 ft.
b Gage height, 3.56 ft.
c About; backwater from ice.
d Result of freezeup.
e Estimated.

MADISON RIVER BASIN

06037500 MADISON RIVER NEAR WEST YELLOWSTONE, MT--Continued
WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1983-86, 1989 to current year.

REMARKS.--Unpublished records for many days of instantaneous water temperature and specific conductance are available in files of the District office.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1983 to July 1986.

WATER TEMPERATURE: July 1983 to July 1986.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (water years 1983-86): Maximum, 558 microsiemens, Mar. 24, 25, 1986; minimum, 78 microsiemens, May 30, 1986.

WATER TEMPERATURE (water years 1983-86): Maximum, 25.5°C, Aug. 6, 9, 1983; minimum, 0.0°C, on many days during winter periods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	PH WATER WHOLE FIELD (STAND- ARD UNITS)
OCT									
05...	1230	423	459	20.0	14.5	605	8.4	104	8.2
NOV									
30...	1300	417	470	-4.0	6.0	602	9.8	100	8.4
FEB									
15...	1045	395	501	-12.0	5.0	602	10.4	103	8.1
APR									
05...	0830	437	506	-7.0	5.5	600	10.0	101	7.8
MAY									
09...	1330	1020	220	21.0	15.5	605	8.5	108	7.8
16...	1330	953	259	18.0	13.0	595	8.1	99	7.4
JUN									
02...	1030	765	326	17.0	15.5	608	8.6	109	7.7
JUL									
05...	1930	429	453	26.0	18.0	600	7.2	97	8.1
AUG									
22...	1810	377	497	23.0	19.0	600	7.4	102	8.2

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BORON, DIS- SOLVED (UG/L AS B)	LITHIUM DIS- SOLVED (UG/L AS LI)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT								
05...	--	280	260	710	590	3	3.4	90
NOV								
30...	59	310	300	770	640	8	9.0	91
FEB								
15...	64	310	300	830	690	11	12	88
APR								
05...	63	310	290	810	670	12	14	83
MAY								
09...	25	130	120	330	280	35	96	81
16...	28	150	140	380	320	28	72	48
JUN								
02...	37	200	190	560	420	11	23	89
JUL								
05...	53	300	270	680	600	3	3.5	92
AUG								
22...	60	360	300	760	620	2	2.0	8

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, 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 fair. Diversions for irrigation of about 1,400 acres upstream from station. Several observations of water temperature and specific conductance were made during the year. U.S. Geological Survey satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	560	505	398	378	335	349	344	789	2220	887	533	403
2	557	446	397	375	303	354	356	772	2150	866	559	399
3	552	484	371	371	324	355	377	768	1880	874	532	394
4	544	480	386	375	332	359	389	828	1930	822	517	403
5	552	455	392	382	326	351	342	915	1810	798	510	392
6	552	405	349	364	325	331	349	1180	1680	1030	500	385
7	547	484	341	327	322	310	347	1470	1700	1130	484	380
8	587	454	391	342	322	325	330	1850	1620	1070	480	377
9	566	421	413	360	325	323	327	2190	1490	914	482	370
10	567	470	400	370	327	328	334	2440	1370	856	467	367
11	566	440	404	e370	346	343	341	2590	1310	817	478	374
12	583	420	404	e380	344	328	372	3020	1430	778	498	375
13	579	422	356	e380	334	326	412	3770	1860	755	496	372
14	564	428	345	e360	326	341	406	3080	2680	737	471	388
15	578	418	370	364	332	352	373	2570	2030	722	463	393
16	585	424	393	367	340	371	421	2530	1840	699	457	378
17	557	430	366	366	348	378	537	2350	1690	677	446	371
18	538	438	338	358	351	354	654	2020	1570	662	440	368
19	526	370	381	356	340	355	774	2080	1510	651	433	366
20	511	386	357	344	328	306	957	2080	1460	631	430	365
21	506	398	357	325	329	343	1180	1860	1420	610	428	364
22	523	418	358	334	324	344	1480	1740	1430	596	424	362
23	512	350	359	342	327	336	1660	1840	1390	605	426	361
24	507	313	366	351	318	301	1540	1960	1280	670	417	356
25	494	e310	352	362	315	334	1390	2110	1180	623	411	352
26	486	303	358	359	336	324	1150	2220	1120	584	403	349
27	474	299	375	364	343	321	980	2290	1050	573	398	348
28	512	377	363	357	342	321	890	2470	993	584	400	347
29	423	415	356	343	---	306	797	2210	963	582	417	356
30	408	415	358	341	---	314	804	2040	935	561	405	388
31	478	---	383	317	---	327	---	2060	---	549	403	---
TOTAL	16494	12378	11537	11084	9264	10410	20613	62092	46991	22913	14208	11203
MEAN	532	413	372	358	331	336	687	2003	1566	739	458	373
MAX	587	505	413	382	351	378	1660	3770	2680	1130	559	403
MIN	408	299	338	317	303	301	327	768	935	549	398	347
AC-FT	32720	24550	22880	21990	18380	20650	40890	123200	93210	45450	28180	22220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1889 - 1994, BY WATER YEAR (WY)*

	MEAN	456	383	323	307	304	310	503	1787	2897	1279	608	492
MAX	743	589	549	468	430	465	899	3135	5056	3669	1162	787	
(WY)	1893	1960	1893	1893	1893	1960	1990	1976	1974	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	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1889 - 1994*
ANNUAL TOTAL	392297	249187	--
ANNUAL MEAN	1075	683	806
HIGHEST ANNUAL MEAN	--	--	1184
LOWEST ANNUAL MEAN	--	--	408
HIGHEST DAILY MEAN	5490	May 22	8970
LOWEST DAILY MEAN	210	Feb 17	174
ANNUAL SEVEN-DAY MINIMUM	243	Jan 9	182
INSTANTANEOUS PEAK FLOW	--	--	9100
INSTANTANEOUS PEAK STAGE	--	4.46	7.38
INSTANTANEOUS LOW FLOW	--	a273	b117
ANNUAL RUNOFF (AC-FT)	778100	494300	584200
10 PERCENT EXCEEDS	3350	1670	2020
50 PERCENT EXCEEDS	486	413	430
90 PERCENT EXCEEDS	264	329	268

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

a Gage height, 1.20 ft.

b Gage height, 0.68 ft, result of freezeup.

e Estimated.

YELLOWSTONE RIVER BASIN

06186500 YELLOWSTONE RIVER AT YELLOWSTONE LAKE OUTLET, YELLOWSTONE NATIONAL PARK

LOCATION.--Lat 44°34'03", long 110°22'48", Yellowstone National Park, 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. Several observations of water temperature and specific conductance were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	889	621	445	407	e350	e360	437	642	2810	e2400	1360	695
2	873	615	444	411	e350	e360	435	656	2850	e2300	1340	687
3	865	618	440	411	e350	e370	436	681	2890	e2300	1310	685
4	854	598	443	410	e340	e370	440	700	2910	e2300	1280	664
5	841	591	439	e400	e340	e380	440	737	2930	e2200	1240	646
6	833	583	435	e400	e340	e380	440	770	2950	e2200	1230	633
7	829	575	435	e400	e330	e390	446	817	e3000	e2200	1200	619
8	823	567	440	e390	e330	e390	446	884	e3000	e2100	1180	612
9	816	558	449	e390	e330	e400	443	954	e3000	e2100	1160	603
10	810	547	441	e390	e320	e400	440	1040	e3000	e2100	1120	595
11	798	539	435	e390	e320	e410	439	1130	e2900	e2000	1090	592
12	791	534	438	e390	e320	e410	439	1240	e2900	e2000	1070	585
13	789	525	433	e390	e320	e420	440	1370	e2900	e2000	1050	573
14	799	524	428	e380	e320	e430	435	1490	e2900	1950	1030	565
15	801	520	423	e380	e320	e440	433	1490	e2800	1920	1010	552
16	795	512	419	e380	e330	e450	429	1210	e2800	1870	979	547
17	783	508	418	e380	e330	e450	428	1300	e2800	1840	963	544
18	774	501	417	e380	e330	e454	427	1850	e2800	1800	931	539
19	764	495	411	e380	e330	e457	430	2030	e2700	1750	911	531
20	753	488	412	e370	e330	e456	436	2090	e2700	1710	889	524
21	739	485	410	e370	e340	e454	449	2140	e2700	1680	884	510
22	732	495	412	e370	e340	e448	476	2160	e2700	1650	876	501
23	723	477	413	e370	e340	e459	503	2190	e2600	1610	838	500
24	716	468	410	e370	e340	e456	538	2230	e2600	1600	816	493
25	699	464	407	e370	e340	e454	570	2280	e2600	1560	797	492
26	688	458	406	e360	e350	e452	586	2330	e2500	1530	782	484
27	682	453	404	e360	e350	e452	598	2420	e2500	1500	764	478
28	664	453	404	e360	e350	e447	613	2530	e2500	1470	751	473
29	655	450	403	e360	---	e445	624	2620	e2400	1440	734	467
30	644	447	399	e360	---	e442	632	2660	e2400	1400	718	464
31	635	---	406	e360	---	e440	---	2720	---	1390	707	---
TOTAL	23857	15669	13119	11839	9380	13126	14328	49361	83040	57870	31010	16853
MEAN	770	522	423	382	335	423	478	1592	2768	1867	1000	562
MAX	889	621	449	411	350	459	632	2720	3000	2400	1360	695
MIN	635	447	399	360	320	360	427	642	2400	1390	707	464
AC-FT	47320	31080	26020	23480	18610	26040	28420	97910	164700	114800	61510	33430
CFSM	.76	.52	.42	.38	.33	.42	.47	1.58	2.75	1.86	.99	.56
IN.	.88	.58	.49	.44	.35	.49	.53	1.83	3.07	2.14	1.15	.62

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 1994, BY WATER YEAR (WY)*

	MEAN	MAX	(WY)	MIN	(WY)
1927	806	1259	1927	327	1989
1928	609	984	1928	276	1989
1929	473	775	1929	246	1932
1930	391	639	1930	168	1989
1931	378	628	1931	122	1989
1932	439	717	1932	130	1935
1933	544	801	1933	175	1937
1934	1135	2194	1934	605	1953
1935	3571	6640	1935	1707	1934
1936	3991	7160	1936	1272	1934
1937	2201	4031	1937	812	1934
1938	1208	1954	1938	538	1934

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1927 - 1994*
ANNUAL TOTAL	484655	339452	--
ANNUAL MEAN	1328	930	1317
HIGHEST ANNUAL MEAN	--	--	1939
LOWEST ANNUAL MEAN	--	--	682
HIGHEST DAILY MEAN	4700	3000	9120
LOWEST DAILY MEAN	100	320	b100
ANNUAL SEVEN-DAY MINIMUM	113	321	113
INSTANTANEOUS PEAK FLOW	--	a	9170
INSTANTANEOUS PEAK STAGE	--	a	8.20
ANNUAL RUNOFF (AC-FT)	961300	673300	954400
ANNUAL RUNOFF (CFSM)	1.32	.92	1.31
ANNUAL RUNOFF (INCHES)	17.92	12.55	17.79
10 PERCENT EXCEEDS	3940	2360	3440
50 PERCENT EXCEEDS	664	558	680
90 PERCENT EXCEEDS	150	366	333

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

a Not determined.

b May have been less during periods of ice effect.

c Estimated.

YELLOWSTONE RIVER BASIN

37

06187950 SODA BUTTE CREEK NEAR LAMAR RANGER STATION, YNP

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, which are fair. No regulation or diversion upstream of station. Several observations of water temperature and specific conductance were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	40	26	25	e21	e20	26	106	870	164	71	45
2	49	33	26	25	e22	e21	26	102	823	156	82	46
3	48	38	26	25	e22	e22	27	98	636	149	75	46
4	47	36	27	25	e22	e20	28	103	612	138	77	45
5	46	33	e25	25	e22	e18	25	117	544	131	81	43
6	46	31	e22	25	e22	e17	28	190	481	185	69	43
7	49	36	25	e24	e23	e16	27	286	422	146	64	42
8	50	37	27	25	e22	e16	26	405	358	128	63	42
9	49	32	28	25	e21	e16	27	515	303	123	74	42
10	49	35	28	26	e21	e17	28	546	270	119	71	42
11	48	32	25	27	e20	e18	28	624	284	113	61	42
12	47	31	e23	27	e19	e19	31	758	337	107	61	42
13	47	30	e20	26	e20	e20	35	940	369	103	58	41
14	48	31	e23	26	e20	e21	34	750	566	99	57	43
15	49	28	24	27	e21	e21	33	592	362	94	56	43
16	50	30	e24	26	e23	e22	40	569	316	97	53	42
17	49	32	e24	26	e22	e23	50	556	279	89	52	40
18	47	32	e24	25	e21	23	72	429	286	86	51	39
19	47	e30	e24	25	e19	24	106	449	307	86	51	39
20	45	28	e24	e25	e18	e23	159	471	308	80	50	39
21	44	29	e24	e24	e18	24	207	382	310	78	49	37
22	44	32	e23	e24	e17	24	234	356	283	75	51	37
23	44	31	25	e25	e18	23	244	396	268	73	50	37
24	43	e25	25	25	e18	e24	246	464	249	74	47	37
25	43	e20	e25	25	e18	e24	198	533	236	116	47	37
26	41	e21	24	25	e18	24	154	597	222	89	47	37
27	40	e22	24	e24	e19	e24	128	634	202	82	46	36
28	41	23	25	e23	e18	24	115	651	189	77	46	36
29	33	24	25	e22	---	25	103	575	180	76	48	36
30	32	26	e24	e21	---	25	101	544	171	73	46	36
31	37	---	24	e20	---	25	---	591	---	72	46	---
TOTAL	1402	908	763	768	565	663	2586	14329	11043	3278	1800	1212
MEAN	45.2	30.3	24.6	24.8	20.2	21.4	86.2	462	368	106	58.1	40.4
MAX	50	40	28	27	23	25	246	940	870	185	82	46
MIN	32	20	20	20	17	16	25	98	171	72	46	36
AC-FT	2780	1800	1510	1520	1120	1320	5130	28420	21900	6500	3570	2400
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1994, BY WATER YEAR (WY)												
MEAN	42.2	31.9	24.4	23.9	22.1	23.5	76.4	446	627	245	90.2	55.4
MAX	50.5	38.7	27.9	26.3	25.8	31.0	127	580	802	330	134	62.5
(WY)	1993	1991	1991	1990	1992	1992	1990	1993	1991	1990	1993	1993
MIN	27.8	22.8	16.0	16.7	17.2	20.1	32.3	255	368	106	58.1	40.4
(WY)	1989	1989	1989	1989	1989	1989	1993	1990	1994	1994	1994	1994
SUMMARY STATISTICS												
FOR 1993 CALENDAR YEAR				FOR 1994 WATER YEAR				WATER YEARS 1989 - 1994				
ANNUAL TOTAL	56884			39317			--					
ANNUAL MEAN	156			108			143					
HIGHEST ANNUAL MEAN	--			--			157					
LOWEST ANNUAL MEAN	--			--			108					
HIGHEST DAILY MEAN	1380			May 21			940			May 13		
LOWEST DAILY MEAN	20			Mar 20			16			Mar 7		
ANNUAL SEVEN-DAY MINIMUM	23			Mar 18			17			Mar 5		
INSTANTANEOUS PEAK FLOW	--			--			1070			Jun 1		
INSTANTANEOUS PEAK STAGE	--			--			4.56			Jun 1		
INSTANTANEOUS LOW FLOW	--			--			a14			Mar 8		
ANNUAL RUNOFF (AC-FT)	112800			77990			103300			103300		
10 PERCENT EXCEEDS	527			324			478					
50 PERCENT EXCEEDS	40			40			43					
90 PERCENT EXCEEDS	24			21			21					

a Result of discharge measurement, but may have been less during ice-affected period.

b Gage height, 5.22 ft.

c Gage height, 1.63 ft.

e Estimated.

YELLOWSTONE RIVER BASIN

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

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.

DRAINAGE AREA.--660 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 6,000 ft above National Vertical Datum of 1929, from topographic map. Prior to Sept. 16, 1925, nonrecording gage and Sept. 16, 1925 to July 29, 1927, water-stage recorder at same site at datum 1.00 ft higher. July 29, 1927 to Sept. 30, 1969, water-stage recorder at same site and datum. May 1985 to September 1986, nonrecording gage at same site and datum.

REMARKS.--Records good except those for May, which are fair, and those for estimated daily discharges, which are poor. No regulation or diversion upstream of station. Several observations of water temperature and specific conductance were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180	e150	e140	e100	e85	e120	133	1240	4210	711	264	136
2	180	137	e140	e100	e90	e130	164	1140	4020	668	288	135
3	177	156	e130	e110	e90	e130	207	1220	3280	626	275	135
4	174	154	e120	e110	e90	e120	218	1490	3040	583	279	140
5	171	143	e100	e110	e85	e120	174	1990	2810	545	280	136
6	170	131	e90	e100	e95	e110	179	3250	2470	791	265	129
7	183	e140	e100	e95	e100	e100	165	4180	2260	753	242	125
8	231	e140	e120	e100	e95	e95	144	5310	1910	616	229	125
9	218	e130	e120	e100	e90	e95	133	5860	1670	537	236	126
10	211	e140	e110	e100	e95	e100	141	5790	1480	500	255	125
11	209	e140	e90	e100	e90	e110	139	5970	1450	494	220	124
12	206	e130	e75	e100	e80	e100	171	6630	1700	454	210	125
13	206	e130	e80	e100	e90	e100	253	7490	1990	433	207	124
14	227	e130	e85	e100	e90	e110	265	5920	3040	435	201	129
15	258	e130	e90	e100	e90	e120	236	4600	2220	413	190	142
16	276	e140	e100	e100	e100	e120	358	4640	1970	406	186	143
17	246	e140	e100	e100	e95	e120	647	4330	1660	383	179	133
18	219	e140	e100	e100	e100	e110	1110	3270	1560	357	170	124
19	204	e130	e95	e95	e100	e110	1690	3560	1560	352	163	122
20	194	e120	e95	e90	e100	e100	2260	3650	1500	342	155	122
21	175	e130	e90	e90	e95	e110	3030	2890	1450	320	155	121
22	183	e130	e90	e85	e95	e110	3420	2780	1370	301	157	119
23	181	e100	e90	e85	e100	e100	3430	3240	1280	289	155	116
24	181	e80	e95	e90	e100	e90	3340	3560	1180	291	150	116
25	179	e70	e100	e95	e100	e90	2500	3850	1060	368	144	113
26	167	e80	e100	e90	e110	e95	1810	4010	977	335	137	113
27	152	e100	e100	e90	e120	e95	1390	3950	896	306	134	111
28	e150	e120	e95	e85	e110	e100	1190	4380	819	288	133	111
29	e140	e130	e90	e90	---	e100	1020	3860	777	280	139	110
30	e140	e140	e90	e85	---	107	1060	3490	756	277	144	111
31	e150	---	e95	e80	---	114	---	3570	---	269	140	---
TOTAL	5938	3831	3115	2975	2680	3331	30977	121110	56365	13723	6082	3741
MEAN	192	128	100	96.0	95.7	107	1033	3907	1879	443	196	125
MAX	276	156	140	110	120	130	3430	7490	4210	791	288	143
MIN	140	70	75	80	80	90	133	1140	756	269	133	110
AC-FT	11780	7600	6180	5900	5320	6610	61440	240200	111800	27220	12060	7420

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 1994, BY WATER YEAR (WY)*

	MEAN	215	157	119	105	101	108	447	2726	4098	1330	350	227
MAX	485	330	202	200	171	204	1684	6885	7834	3256	886	518	
(WY)	1942	1928	1951	1969	1969	1992	1990	1928	1927	1943	1968	1968	
MIN	109	88.1	75.5	71.8	70.0	67.9	105	969	1408	344	173	115	
(WY)	1989	1937	1953	1989	1942	1964	1945	1933	1934	1931	1940	1988	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1923 - 1994*
ANNUAL TOTAL	370561	253868	--
ANNUAL MEAN	1015	696	838
HIGHEST ANNUAL MEAN	--	--	1287
LOWEST ANNUAL MEAN	--	--	525
HIGHEST DAILY MEAN	9580	May 21	11900
LOWEST DAILY MEAN	70	Nov 25	45
ANNUAL SEVEN-DAY MINIMUM	89	Dec 11	57
INSTANTANEOUS PEAK FLOW	--	8540	May 13
INSTANTANEOUS PEAK STAGE	--	7.91	May 13
INSTANTANEOUS LOW FLOW	--	--	a40
ANNUAL RUNOFF (AC-FT)	735000	503500	606800
10 PERCENT EXCEEDS	3450	2610	2900
50 PERCENT EXCEEDS	220	140	186
90 PERCENT EXCEEDS	106	90	90

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

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

e Estimated.

06190415 MAMMOTH SPRINGS OUTFLOW AT MAMMOTH, YELLOWSTONE NATIONAL PARK

LOCATION.--Lat 44°58'08", long 110°41'02", Yellowstone National Park, Hydrologic Unit 10070001, 2,000 ft upstream from mouth.

PERIOD OF RECORD.--Water years 1988 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
NOV 04...	1130	2.8	1970	-3.0	14.0	610	170
DEC 16...	0820	2.8	2000	-8.0	10.5	590	170
FEB 02...	0900	2.8	2000	-4.0	8.0	600	160
MAR 09...	0925	3.0	2000	-8.0	11.0	600	170
APR 27...	0930	3.0	1990	-3.0	12.0	600	170
JUN 02...	0940	2.9	1940	12.0	21.0	590	170
JUL 14...	1130	2.5	1920	22.0	25.0	600	170
AUG 24...	1140	2.3	1940	25.5	24.0	610	170

YELLOWSTONE RIVER BASIN

06190540 HOT RIVER AT MAMMOTH, YELLOWSTONE NATIONAL PARK

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

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1988 to September 1994, discontinued. Miscellaneous measurements made at this site 1938-44, 1966-67, and 1986-87 water years.

GAGE.--Water-stage recorder. Datum of gage is 5,666.11 ft above sea level. Levels by U.S. National Park Service.

REMARKS.--Water-discharge records good. No regulation or diversion upstream of station, however, flow is added from sinkholes upstream from spring

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	26	23	24	22	23	24	27	28	27	27	27
2	27	26	23	24	21	23	25	27	28	27	27	27
3	27	27	23	24	21	23	24	27	28	27	27	27
4	27	27	23	24	23	23	24	27	28	26	27	27
5	27	26	22	24	21	24	24	28	28	26	27	27
6	27	25	22	24	24	24	25	28	28	27	27	27
7	27	26	23	23	21	23	25	28	28	27	27	27
8	27	26	23	25	20	24	25	28	28	27	27	27
9	27	27	23	25	21	24	25	28	28	27	27	27
10	27	27	23	25	22	25	25	28	28	27	27	27
11	27	27	23	25	22	25	25	28	28	27	27	27
12	27	27	23	25	20	24	25	28	28	26	27	27
13	27	26	22	25	22	25	25	28	28	26	27	27
14	27	26	22	25	22	25	25	28	28	26	27	27
15	27	27	24	25	22	25	25	28	28	26	27	27
16	27	27	23	25	22	25	26	28	28	27	27	27
17	27	27	23	25	22	25	26	28	28	27	27	27
18	27	26	21	25	23	25	27	28	28	27	27	27
19	27	24	22	25	23	25	28	28	28	27	27	27
20	27	26	22	24	23	23	29	28	27	27	27	27
21	27	26	23	23	23	23	29	28	27	27	27	27
22	27	24	22	24	22	23	29	28	28	26	27	27
23	27	19	24	23	22	23	29	28	28	26	27	27
24	27	19	24	25	22	22	29	28	27	26	27	27
25	27	20	22	25	22	23	29	28	27	27	27	27
26	27	20	24	25	23	23	28	28	27	27	27	27
27	27	21	24	25	23	23	27	28	27	27	27	27
28	27	23	23	22	23	24	27	28	27	27	27	27
29	26	23	24	25	---	24	27	27	27	27	27	27
30	25	23	24	22	---	23	27	27	27	27	27	27
31	26	---	24	22	---	24	---	27	---	27	27	---
TOTAL	833	744	711	752	617	738	788	861	831	828	837	810
MEAN	26.9	24.8	22.9	24.3	22.0	23.8	26.3	27.8	27.7	26.7	27.0	27.0
MAX	27	27	24	25	24	25	29	28	28	27	27	27
MIN	25	19	21	22	20	22	24	27	27	26	27	27
AC-FT	1650	1480	1410	1490	1220	1460	1560	1710	1650	1640	1660	1610

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1994, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993	1994
MEAN	26.9	25.9	25.6	26.0	25.0	25.1
MAX	29.9	28.8	27.6	28.0	27.4	26.2
(WY)	1989	1989	1989	1989	1989	1989
MIN	23.9	22.7	22.9	24.1	22.0	23.8
(WY)	1990	1990	1994	1990	1994	1990

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1989 - 1994
ANNUAL TOTAL	9844	9350	--
ANNUAL MEAN	27.0	25.6	26.6
HIGHEST ANNUAL MEAN	--	--	27.5
LOWEST ANNUAL MEAN	--	--	25.5
HIGHEST DAILY MEAN	35	29	35
LOWEST DAILY MEAN	19	19	19
ANNUAL SEVEN-DAY MINIMUM	21	21	21
INSTANTANEOUS PEAK FLOW	--	30	35
INSTANTANEOUS PEAK STAGE	--	1.34	1.50
INSTANTANEOUS LOW FLOW	--	a17	b17
ANNUAL RUNOFF (AC-FT)	19530	18550	19260
10 PERCENT EXCEEDS	31	28	29
50 PERCENT EXCEEDS	27	27	27
90 PERCENT EXCEEDS	24	22	24

a Gage height, 1.06 ft.

b Many days.

06190540 HOT RIVER AT MAMMOTH, YELLOWSTONE NATIONAL PARK--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1988 to September 1994, discontinued.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1988 to September 1990.

WATER TEMPERATURE: October 1988 to September 1990.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (water years 1989-90): Maximum, 2,410 microsiemens, Jan. 29, 1990; minimum, 1500 microsiemens, July 17, 22-23, 1990.

WATER TEMPERATURE (water years 1989-1990): Maximum, 55.5°C, Feb. 28, 1990; minimum, 38.0°C, June 16, 17, 1989, April 19, 1990.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
NOV							
04...	1350	27	1580	-2.0	41.5	400	110
DEC							
16...	0905	23	1700	-8.0	45.5	440	110
FEB							
02...	1020	22	1740	2.0	43.0	450	120
MAR							
09...	1240	24	1650	12.0	43.5	420	110
APR							
27...	1215	28	1500	-3.0	39.5	380	99
JUN							
02...	1015	27	1480	19.0	40.0	350	97
JUL							
14...	1305	26	1490	25.0	42.0	370	100
AUG							
24...	1245	28	1540	28.0	43.5	380	100

YELLOWSTONE RIVER BASIN

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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	120	108	93	94	94	106	226	494	180	126	110
2	134	113	108	94	91	96	110	229	527	174	128	110
3	134	120	106	95	91	97	116	250	427	171	127	114
4	132	120	105	97	93	95	119	286	413	168	123	112
5	132	114	101	97	86	94	108	333	372	168	122	108
6	133	107	91	96	94	91	110	424	340	192	121	107
7	148	117	109	87	89	89	111	495	324	192	118	106
8	151	115	104	93	81	90	107	576	320	175	118	106
9	140	110	104	97	80	95	106	622	298	165	122	104
10	141	115	105	96	80	100	107	638	268	161	118	104
11	139	111	103	96	80	103	108	637	252	162	118	105
12	137	110	102	95	73	100	114	708	273	154	117	105
13	135	108	89	96	72	101	122	812	328	151	119	105
14	136	107	94	96	72	104	119	706	427	151	115	117
15	138	107	105	96	71	106	118	615	333	149	114	115
16	138	108	100	95	72	107	136	617	300	150	112	109
17	134	106	95	93	70	107	163	595	270	144	112	107
18	131	107	88	95	73	105	203	485	254	141	111	105
19	132	96	96	94	82	107	251	487	243	138	110	105
20	128	101	91	90	93	102	330	483	236	136	110	105
21	129	106	96	90	92	102	379	442	235	135	109	103
22	130	108	90	94	93	103	419	398	273	132	110	103
23	128	85	99	90	89	104	413	408	240	131	112	103
24	127	90	97	97	85	103	367	431	227	135	110	103
25	124	86	93	94	95	103	322	462	214	134	109	102
26	123	94	99	94	96	102	266	487	204	129	108	100
27	122	100	96	94	96	102	233	510	197	129	108	100
28	124	116	93	88	95	102	215	550	190	131	109	100
29	109	120	93	97	---	101	199	483	186	129	112	102
30	114	115	94	88	---	101	206	449	183	127	111	105
31	120	---	93	81	---	103	---	453	---	127	110	---
TOTAL	4077	3232	3047	2898	2378	3109	5783	15297	8848	4661	3569	3180
MEAN	132	108	98.3	93.5	84.9	100	193	493	295	150	115	106
MAX	151	120	109	97	96	107	419	812	527	192	128	117
MIN	109	85	88	81	70	89	106	226	183	127	108	100
AC-FT	8090	6410	6040	5750	4720	6170	11470	30340	17550	9250	7080	6310

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1994, BY WATER YEAR (WY)*

MEAN	126	111	100	94.9	91.1	91.4	138	490	708	301	160	135
MAX	175	136	119	118	116	116	304	811	1354	662	236	190
(WY)	1969	1969	1972	1969	1969	1986	1990	1956	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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1939 - 1994*
ANNUAL TOTAL	91405	60079	--
ANNUAL MEAN	250	165	213
HIGHEST ANNUAL MEAN	--	--	313
LOWEST ANNUAL MEAN	--	--	138
HIGHEST DAILY MEAN	1580	812	1830
LOWEST DAILY MEAN	79	70	53
ANNUAL SEVEN-DAY MINIMUM	88	72	61
INSTANTANEOUS PEAK FLOW	--	859	b2080
INSTANTANEOUS PEAK STAGE	--	3.74	4.83
INSTANTANEOUS LOW FLOW	--	a68	c35
ANNUAL RUNOFF (AC-FT)	181300	119200	154000
10 PERCENT EXCEEDS	759	351	509
50 PERCENT EXCEEDS	122	110	119
90 PERCENT EXCEEDS	92	92	87

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

a Gage height, 1.96 ft.

b Gage height, 4.46 ft.

c Gage height, 1.08 ft.

YELLOWSTONE RIVER BASIN

43

06191400 LaDUKE (CORWIN) HOT SPRINGS NEAR CORWIN SPRINGS, MT

LOCATION.--Lat 45°05'26", long 110°46'28", in NW¹/₄ SE¹/₄ SW¹/₄ sec.32, T.8 S., R.8 E., Park County, Hydrologic Unit 10070001, downstream end of concrete culvert under U.S. Highway 89, about 4.5 mi north of Gardiner, and 3 mi south of Corwin Springs.

PERIOD OF RECORD.--Water years 1988 to current year.

REMARKS.--Water years 1972 and 1975-76, Open-File Report 78-438.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
NOV 04...	1655	0.18	2530	-10.0	61.5	1200	42
DEC 16...	1130	0.19	2560	-5.0	61.5	1200	44
FEB 02...	1400	0.18	2560	2.0	61.0	1200	44
MAR 09...	1530	0.18	2510	10.0	62.0	1200	45
APR 27...	1650	0.22	2550	-2.0	62.5	1300	43
JUN 02...	1525	0.23	2580	22.0	62.0	1200	46
JUL 14...	2105	0.23	2590	19.0	62.0	1200	44
AUG 24...	1405	0.23	2560	28.0	62.5	1200	44

YELLOWSTONE RIVER BASIN

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.--Water-discharge 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1610	1300	1010	833	748	814	936	2730	10100	3940	2100	1240
2	1580	1180	991	834	792	847	968	2690	10400	3850	2090	1230
3	1560	1240	972	837	787	886	1030	2810	8900	3760	2030	1240
4	1550	1250	997	839	745	911	1090	3300	8660	3640	2010	1240
5	1530	1170	954	863	743	920	968	3870	8270	3520	1980	1190
6	1510	1070	840	832	731	893	1010	5860	7580	3810	1920	1160
7	1570	1160	900	793	e720	859	995	7630	7220	3820	1860	1140
8	1630	1170	967	761	e680	859	964	9700	6550	3560	1820	1120
9	1590	1100	970	795	e700	862	929	11000	6200	3380	1850	1110
10	1560	1150	984	811	e720	866	942	11300	5730	3270	1840	1100
11	1560	1090	990	820	e720	914	935	11000	5590	3220	1770	1100
12	1540	1070	974	827	703	881	971	12900	5950	3120	1730	1100
13	1530	1050	904	834	724	873	1070	14400	6380	3030	1720	1090
14	1570	1030	829	844	714	911	1120	12200	8420	3000	1690	1120
15	1630	990	924	859	713	927	1060	9660	7130	2930	1650	1150
16	1650	1040	935	864	717	946	1150	9480	6570	2900	1620	1100
17	1600	1040	903	852	723	986	1490	9290	6010	2830	1570	1080
18	1530	1070	885	832	736	948	2040	7700	5730	2770	1540	1060
19	1500	913	913	836	746	983	2950	8130	5660	2710	1500	1050
20	1480	962	853	816	736	882	3910	9020	5520	2630	1470	1030
21	1430	987	874	778	737	948	5270	7660	5420	2570	1460	1020
22	1430	1080	849	793	741	956	6260	7160	5420	2530	1470	987
23	1420	987	826	791	736	912	6430	7840	5230	2470	1450	983
24	1410	e800	814	807	725	855	6180	8490	5020	2480	1400	979
25	1390	e750	840	807	730	883	4980	9170	4830	2540	1380	976
26	1340	e850	822	811	747	904	3800	9560	4630	2420	1340	960
27	1310	e950	836	801	759	869	3040	9680	4500	2330	1320	954
28	1340	1040	858	773	784	887	2760	10600	4290	2270	1300	942
29	1200	1090	838	782	---	860	2450	9720	4160	2230	1300	943
30	1140	1060	820	766	---	879	2490	9000	4060	2170	1290	964
31	1230	---	828	720	---	897	---	9250	---	2140	1250	---
TOTAL	45920	31639	27900	25211	20557	27818	70188	262800	190130	91840	50720	32358
MEAN	1481	1055	900	813	734	897	2340	8477	6338	2963	1636	1079
MAX	1650	1300	1010	864	792	986	6430	14400	10400	3940	2100	1240
MIN	1140	750	814	720	680	814	929	2690	4060	2140	1250	942
AC-FT	91080	62760	55340	50010	40770	55180	139200	521300	377100	182200	100600	64180

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1889 - 1994, BY WATER YEAR (WY)*

MEAN	1530	1191	963	840	827	908	1531	5940	11280	6780	3178	1950
MAX	2429	2058	1424	1231	1176	1352	3542	13590	21230	13260	5688	3207
(WY)	1973	1928	1984	1984	1969	1986	1990	1928	1918	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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1889 - 1994*
ANNUAL TOTAL	1276556	877081	--
ANNUAL MEAN	3497	2403	3085
HIGHEST ANNUAL MEAN	--	--	4346
LOWEST ANNUAL MEAN	--	--	1903
HIGHEST DAILY MEAN	19500	May 21 14400	32000
LOWEST DAILY MEAN	532	Feb 27 680	380
ANNUAL SEVEN-DAY MINIMUM	549	Feb 23 709	393
INSTANTANEOUS PEAK FLOW	--	15600	May 13 b32000
INSTANTANEOUS PEAK STAGE	--	7.45	May 13 11.5
INSTANTANEOUS LOW FLOW	--	a678	Feb 12 c343
ANNUAL RUNOFF (AC-FT)	2532000	1740000	2235000
10 PERCENT EXCEEDS	11400	6480	8380
50 PERCENT EXCEEDS	1430	1150	1400
90 PERCENT EXCEEDS	620	793	760

* During period of operation (1890-93, September 1910 to current year).

a Gage height, 0.70 ft.

b Observed, from rating curve extended above 18,000 ft³/s.

c Gage height, 0.12 ft, result of freezeup.

e Estimated.

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
NOV 02...	0900	8.7	126	8.0	0.5	-3.0	597	8.6	76	65	21	3.0
MAR 23...	1015	9.2	128	8.4	0.5	-2.0	585	11.1	101	62	20	3.0
JUN 14...	1315	E1300	39	8.4	6.5	6.0	588	9.2	97	18	5.7	0.99
AUG 24...	1050	22	85	8.4	13.0	23.0	596	8.6	105	42	13	2.4

E-Estimate.

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
NOV 02...	1.7	0.1	0.50	65	6.4	0.3	<0.1	5.4	77	0.11	1.82
MAR 23...	1.6	0.1	0.60	66	6.4	0.4	<0.1	5.6	77	0.11	1.92
JUN 14...	0.80	0.1	0.30	23	2.9	0.1	<0.1	3.0	28	0.04	--
AUG 24...	1.5	0.1	0.40	42	4.8	0.2	<0.1	3.6	51	0.07	3.04

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)
NOV 02...	0900	8.7	<10	<1	19	<0.5	<10	<1.0	<1	<3	1
MAR 23...	1015	9.2	<10	<1	18	<0.5	10	<1.0	<1	<3	2
JUN 14...	1315	E1300	50	<1	9	<0.5	<10	1.0	1	<3	3
JUN 14...	1430	E1300	40	<1	8	<0.5	10	<1.0	3	<3	3
AUG 24...	1050	22	<10	<1	16	<0.5	10	2.0	<1	<3	<1

E-Estimate.

DATE	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 02...	7	1	<4	3	<0.1	<1	<1.0	56	4
MAR 23...	25	1	<4	3	0.3	<1	<1.0	57	6
JUN 14...	73	<1	<4	3	<0.1	<1	2.0	22	<3
JUN 14...	78	<1	<4	4	<0.1	<1	<1.0	19	<3
AUG 24...	8	<1	<4	2	<0.1	<1	<1.0	45	7

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. Several observations of water temperature and specific conductance were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	121	302	295	226	e180	243	193	738	3830	913	243	77
2	125	296	286	228	e180	290	230	697	4180	879	286	76
3	126	283	276	226	e180	311	262	646	3580	815	290	75
4	121	306	275	255	e180	266	298	656	3130	754	340	68
5	112	311	e270	236	e190	249	260	749	3090	668	330	65
6	104	273	259	e170	e160	235	222	1160	2800	727	309	70
7	109	277	256	e170	e140	217	228	1640	2620	825	279	73
8	133	321	280	e200	e120	198	213	2330	2200	736	256	72
9	191	308	299	e230	e140	208	200	3090	1780	695	251	66
10	233	300	284	e240	e170	208	193	3470	1410	636	256	57
11	371	294	287	251	e180	204	184	3730	1270	584	237	57
12	390	273	270	247	e180	207	164	4520	1430	542	219	59
13	362	284	251	247	e190	196	205	5210	1820	503	218	59
14	352	288	228	251	e210	200	253	4980	3130	494	196	64
15	356	265	e230	e240	222	213	243	3820	3090	454	178	73
16	379	285	e220	e210	227	214	223	3340	2480	429	178	65
17	389	287	e210	e160	228	231	364	3320	1860	408	163	63
18	384	285	e190	e160	222	240	576	2840	1600	370	146	63
19	371	256	e190	e180	e200	226	909	2520	1620	352	132	61
20	364	236	e190	e180	e180	219	1210	3160	1680	345	131	61
21	344	255	e190	e220	e160	191	1540	2780	1860	322	132	58
22	340	e250	e190	e240	e160	202	1850	2280	1950	297	129	57
23	343	e150	e200	249	e170	196	1780	2280	1980	273	118	56
24	338	e150	e210	249	e160	182	1810	2470	1790	279	102	53
25	334	e180	e220	248	e150	181	1740	2930	1610	357	92	49
26	333	e210	240	234	e170	182	1380	3280	1500	403	83	49
27	325	e230	233	239	e210	183	1080	3720	1360	371	74	49
28	315	e250	218	223	245	183	932	4130	1190	336	75	50
29	321	e280	227	e220	---	183	787	3700	1050	311	79	51
30	259	313	219	e210	---	173	752	3270	958	278	77	51
31	278	---	232	e180	---	176	---	3460	---	264	79	---
TOTAL	8623	7998	7425	6819	5104	6607	20281	86916	63848	15620	5678	1847
MEAN	278	267	240	220	182	213	676	2804	2128	504	183	61.6
MAX	390	321	299	255	245	311	1850	5210	4180	913	340	77
MIN	104	150	190	160	120	173	164	646	958	264	74	49
AC-FT	17100	15860	14730	13530	10120	13100	40230	172400	126600	30980	11260	3660

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1994, BY WATER YEAR (WY)

	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944
MEAN	285	295	260	229	221	219	425	2028	4041	2179	616	322												
MAX	725	648	379	345	329	364	1167	5704	6631	5744	1453	834												
(WY)	1931	1928	1951	1952	1963	1972	1943	1928	1974	1975	1951	1941												
MIN	45.5	115	110	110	100	96.3	110	839	1607	349	66.5	50.1												
(WY)	1989	1989	1922	1922	1922	1922	1961	1968	1987	1988	1988	1988												

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1921 - 1994
ANNUAL TOTAL	303878	236766	--
ANNUAL MEAN	833	649	928
HIGHEST ANNUAL MEAN	--	--	1458
LOWEST ANNUAL MEAN	--	--	547
HIGHEST DAILY MEAN	6010	May 21	5210
LOWEST DAILY MEAN	104	Oct 6	49
ANNUAL SEVEN-DAY MINIMUM	117	Oct 1	50
INSTANTANEOUS PEAK FLOW	--	--	5570
INSTANTANEOUS PEAK STAGE	--	--	6.07
INSTANTANEOUS LOW FLOW	--	--	49
ANNUAL RUNOFF (AC-FT)	602700	469600	672400
10 PERCENT EXCEEDS	2520	1960	2860
50 PERCENT EXCEEDS	270	250	300
90 PERCENT EXCEEDS	160	88	170

a Result of discharge measurement.

e Estimated.

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 current year. Prior to October 1953, published as North Fork Wind River near Dubois.

GAGE.--Water-stage recorder. Elevation of gage is 6,440 ft above sea level, from topographic map. Prior to Sept. 30, 1957, at site 50 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Nov. 26 to Mar. 11. Records fair except those for estimated daily discharges, which are poor. Diversions for irrigation of about 2,000 acres upstream from station.

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)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 14	0230	*2470	*5.91	No other peak greater than base discharge.			

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	68	60	41	34	60	66	155	643	153	151	56
2	85	61	58	40	37	60	68	114	535	152	237	62
3	83	69	54	40	38	63	71	110	498	142	350	66
4	81	67	52	42	40	62	66	126	487	131	181	63
5	80	64	50	42	41	60	48	174	506	119	62	58
6	80	61	47	41	43	62	44	306	486	123	61	58
7	79	68	50	40	43	60	43	544	469	137	59	58
8	127	73	52	39	42	56	38	751	311	150	60	58
9	89	70	54	41	41	55	37	690	221	144	57	59
10	87	67	52	40	43	58	43	1010	190	139	58	60
11	92	68	50	38	46	60	38	1170	271	132	64	58
12	90	68	48	40	52	58	41	1180	402	124	60	58
13	91	55	45	43	48	72	73	1220	377	121	73	60
14	89	59	42	48	52	78	74	1090	422	117	61	63
15	87	61	39	44	56	86	44	705	248	118	62	68
16	86	70	38	40	60	104	102	608	212	101	57	74
17	85	60	37	36	59	118	219	582	197	100	54	68
18	86	68	36	35	56	92	340	401	232	101	52	67
19	84	48	37	36	58	78	383	478	335	96	51	67
20	79	81	35	37	55	63	427	611	315	88	50	68
21	73	87	36	37	52	59	482	395	307	81	52	69
22	80	80	36	40	52	60	450	344	511	78	53	71
23	78	89	35	41	54	47	392	478	446	79	58	72
24	77	58	35	40	53	40	240	451	315	81	53	72
25	77	52	36	39	54	41	157	617	265	74	54	71
26	75	50	37	38	56	38	121	639	242	72	54	70
27	69	54	38	36	58	39	95	686	218	68	55	70
28	76	62	39	35	58	39	91	634	177	66	54	69
29	73	67	41	35	---	36	92	554	164	67	56	69
30	58	64	43	34	---	37	106	513	156	69	60	73
31	69	---	42	33	---	47	---	661	---	70	57	---
TOTAL	2552	1969	1354	1211	1381	1888	4491	17997	10158	3293	2466	1955
MEAN	82.3	65.6	43.7	39.1	49.3	60.9	150	581	339	106	79.5	65.2
MAX	127	89	60	48	60	118	482	1220	643	153	350	74
MIN	58	48	35	33	34	36	37	110	156	66	50	56
AC-FT	5060	3910	2690	2400	2740	3740	8910	35700	20150	6530	4890	3880

MEAN	96.0	60.7	49.1	46.4	47.1	58.1	157	544	1009	529	187	114
MAX	200	112	87.8	68.8	66.8	92.5	353	1161	1756	1281	461	224
(WY)	1951	1951	1951	1953	1951	1986	1952	1956	1957	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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1950 - 1994	
ANNUAL TOTAL	80626		50715		--	
ANNUAL MEAN	221		139		240	
HIGHEST ANNUAL MEAN	--		--		414	
LOWEST ANNUAL MEAN	--		--		126	
HIGHEST DAILY MEAN	1940	May 21	1220	May 13	3740	Jun 1 1956
LOWEST DAILY MEAN	28	Jan 10	33	Jan 31	18	Jan 9 1977
ANNUAL SEVEN-DAY MINIMUM	30	Jan 9	35	Jan 27	21	Feb 1 1985
INSTANTANEOUS PEAK FLOW	--		2470		5980a	Jun 9 1981
INSTANTANEOUS PEAK STAGE	--		5.91		9.27	Jun 30 1957
ANNUAL RUNOFF (AC-FT)	159900		100600		173900	
10 PERCENT EXCEEDS	688		401		682	
50 PERCENT EXCEEDS	84		67		82	
90 PERCENT EXCEEDS	38		39		40	

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

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. 24-26, Dec. 15-25, Feb. 1-14, and Mar. 7-10. Records good except those for estimated daily discharges, which are poor. Diversions for irrigation of about 1,800 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	273	264	227	171	140	176	235	392	1610	500	499	235
2	272	220	226	170	140	182	236	338	1310	492	664	254
3	274	237	222	175	150	182	241	341	1220	461	670	269
4	269	257	219	180	150	190	238	364	1190	440	540	259
5	265	245	218	185	140	187	206	562	1300	413	437	250
6	268	204	206	184	140	183	200	965	1220	425	392	240
7	311	223	196	177	134	190	205	1410	1130	452	362	235
8	381	230	213	177	132	190	188	1640	847	477	354	235
9	325	221	221	182	130	180	194	1610	679	431	392	235
10	310	227	219	182	134	170	211	1920	588	404	398	230
11	319	231	214	174	140	177	195	2110	689	392	364	233
12	305	238	210	178	150	172	209	2420	895	372	340	242
13	297	257	203	188	160	178	259	3060	900	371	380	258
14	295	231	190	188	160	194	263	2550	1030	380	338	268
15	296	204	180	185	164	207	221	1870	744	378	335	289
16	294	227	174	182	173	225	282	1670	622	362	319	288
17	282	222	170	188	169	240	454	1500	569	363	309	264
18	288	227	168	185	171	213	627	1090	608	357	303	253
19	283	180	170	180	160	209	748	1230	764	359	289	247
20	274	197	166	178	165	185	900	1490	768	352	271	244
21	265	220	160	174	162	185	1060	984	782	348	273	243
22	287	239	160	178	159	198	1100	862	1270	341	282	245
23	283	228	160	174	158	178	989	1070	1240	342	295	237
24	275	190	162	183	163	163	827	1020	922	354	274	234
25	271	160	167	176	161	171	637	1410	803	341	265	232
26	268	170	173	177	166	179	500	1520	743	344	258	229
27	255	227	172	186	171	172	389	1660	681	348	252	226
28	270	232	167	179	174	177	363	1620	575	344	250	226
29	263	235	167	175	---	172	348	1410	548	352	242	227
30	216	233	166	166	---	173	351	1230	525	334	243	253
31	237	---	174	152	---	197	---	1600	---	344	235	---
TOTAL	8771	6676	5840	5529	4316	5795	12876	42918	26772	11973	10825	7380
MEAN	283	223	188	178	154	187	429	1384	892	386	349	246
MAX	381	264	227	188	174	240	1100	3060	1610	500	670	289
MIN	216	160	160	152	130	163	188	338	525	334	235	226
AC-FT	17400	13240	11580	10970	8560	11490	25540	85130	53100	23750	21470	14640

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1994, BY WATER YEAR (WY)

	1991	1992	1993	1994
MEAN	294	230	185	167
MAX	353	295	225	188
(WY)	1991	1991	1992	1991
MIN	244	171	146	122
(WY)	1993	1993	1993	1993

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1991 - 1994
ANNUAL TOTAL	225742	149671	--
ANNUAL MEAN	618	410	558
HIGHEST ANNUAL MEAN	--	--	735
LOWEST ANNUAL MEAN	--	--	410
HIGHEST DAILY MEAN	3900	May 21	4700
LOWEST DAILY MEAN	90	Jan 13	90
ANNUAL SEVEN-DAY MINIMUM	96	Jan 9	96
INSTANTANEOUS PEAK FLOW	--	3650	4900
INSTANTANEOUS PEAK STAGE	--	6.40	6.60a
ANNUAL RUNOFF (AC-FT)	447800	296900	404600
10 PERCENT EXCEEDS	1800	986	1490
50 PERCENT EXCEEDS	272	245	266
90 PERCENT EXCEEDS	150	168	160

a From floodmark.

06221400 DINWOODY CREEK ABOVE LAKES, NEAR BURRIS, WY

LOCATION.--Lat 43°20'44", long 109°24'34", in SE¹/₄ SE¹/₄ sec.1, T.4 N., R.6 W., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, on left bank 0.5 mi upstream from Upper Dinwoody Lake, 7.0 mi west of Burris, and 17 mi southeast of Dubois.

DRAINAGE AREA.--88.2 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 6,500 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 31, Nov. 1, 6, Nov. 14 to Feb. 28, Mar. 23-25, 27, and Aug. 13-17.

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 700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 23	0215	*485	*3.59	No peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	20	9.9	5.0	3.2	4.7	5.0	53	305	315	359	159
2	37	18	9.8	4.8	3.4	4.8	5.1	48	278	315	376	142
3	37	22	9.7	4.8	3.5	4.9	5.4	53	251	307	378	205
4	37	18	9.6	4.8	3.3	4.9	5.3	58	267	279	357	204
5	37	18	9.2	4.8	3.6	4.7	5.8	91	295	243	365	143
6	38	17	8.4	4.6	3.4	4.8	5.8	143	300	267	347	128
7	44	17	8.8	4.4	3.3	4.8	5.6	193	292	253	322	123
8	62	17	8.8	4.4	3.3	4.7	5.5	225	241	216	302	132
9	50	18	8.6	4.7	3.2	4.7	5.6	195	182	225	358	137
10	46	16	8.3	4.6	3.3	4.6	6.5	212	144	260	375	151
11	47	15	8.4	4.4	3.3	4.7	7.1	248	144	289	341	142
12	47	15	8.4	4.2	3.5	4.7	9.2	305	191	289	331	123
13	43	15	8.0	4.3	4.0	4.7	9.5	374	245	281	320	141
14	48	14	6.8	4.4	4.0	4.8	8.6	336	284	270	320	130
15	42	13	6.6	4.5	3.9	4.9	7.7	251	286	268	310	123
16	38	14	6.0	4.4	3.6	4.9	8.9	236	227	275	290	113
17	35	14	4.9	4.5	3.9	4.6	12	239	172	292	270	106
18	37	13	5.2	4.3	3.8	4.2	17	200	159	296	247	100
19	32	12	5.2	4.0	4.0	3.9	24	187	198	306	246	94
20	28	13	5.4	4.0	3.8	4.1	35	191	264	298	256	91
21	29	14	5.6	4.0	3.7	4.3	68	161	299	295	237	87
22	34	13	5.8	4.2	3.7	3.3	122	140	403	296	297	80
23	30	11	5.6	4.0	3.7	3.3	158	159	445	300	265	78
24	29	10	6.0	3.7	3.6	3.1	131	165	397	294	206	78
25	26	9.0	6.2	3.7	3.7	3.5	99	194	383	317	201	77
26	26	10	5.8	3.7	3.9	3.7	74	243	365	336	205	78
27	23	10	5.6	3.7	4.2	3.9	62	279	345	324	200	75
28	25	11	5.4	3.7	4.5	3.9	57	314	315	312	161	78
29	21	10	5.4	3.7	---	4.4	50	275	308	309	200	84
30	19	10	5.2	3.5	---	4.5	48	242	322	318	166	107
31	20	---	5.2	3.0	---	4.9	---	279	---	345	169	---
TOTAL	1105	427.0	217.8	130.8	102.3	135.9	1063.6	6289	8307	8990	8777	3509
MEAN	35.6	14.2	7.03	4.22	3.65	4.38	35.5	203	277	290	283	117
MAX	62	22	9.9	5.0	4.5	4.9	158	374	445	345	378	205
MIN	19	9.0	4.9	3.0	3.2	3.1	5.0	48	144	216	161	75
AC-FT	2190	847	432	259	203	270	2110	12470	16480	17830	17410	6960

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1994, BY WATER YEAR (WY)

	MEAN	42.1	20.2	12.0	8.25	7.28	8.16	18.9	159	442	470	318	132
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	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1958 - 1994
ANNUAL TOTAL	44056.1	39054.4	--
ANNUAL MEAN	121	107	137
HIGHEST ANNUAL MEAN	--	--	179
LOWEST ANNUAL MEAN	--	--	95.2
HIGHEST DAILY MEAN	543	Jun 22	1210
LOWEST DAILY MEAN	4.3	Feb 18	1.0
ANNUAL SEVEN-DAY MINIMUM	5.0	Mar 11	1.3
INSTANTANEOUS PEAK FLOW	--	485	1450
INSTANTANEOUS PEAK STAGE	--	3.59	4.44
ANNUAL RUNOFF (AC-FT)	87390	77460	99440
10 PERCENT EXCEEDS	419	306	435
50 PERCENT EXCEEDS	19	34	28
90 PERCENT EXCEEDS	6.2	3.9	6.8

YELLOWSTONE RIVER BASIN

06222500 DRY CREEK NEAR BURRIS, WY

LOCATION.--Lat 43°20'11", long 109°17'55", in NW¹/₄ NE¹/₄ SW¹/₄ sec. 12, T.4 N., R.5 W., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, on left bank 0.9 mi upstream from Dry Creek Canal headgate and 2.4 mi southwest of Burris.

DRAINAGE AREA.--57 mi², approximately.

PERIOD OF RECORD.--June 1921 to September 1940, October 1988 to current year. Published as "near Lenore" 1921 to 1924.

GAGE.--Water-stage recorder. Elevation of gage is 6,430 ft (revised) above sea level, from topographic map. Prior to Nov. 5, 1934, at site 50 ft downstream at datum 4.07 ft higher. Nov. 5, 1934 to September 1940, at site 5 ft downstream at datum 3.00 ft higher.

REMARKS.--Estimated daily discharges: Oct. 30, 31, Nov. 1, 6-11, 15-26, Dec. 5, 6, 13, 17-25, 31, Jan. 1-14, 30, 31, and Feb. 1 to Mar. 10. Records fair except those for estimated daily discharges, which are poor. Adjudicated diversion upstream for irrigation of 267 acres.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	5.8	3.6	2.2	1.2	1.2	1.8	22	104	57	43	23
2	13	5.3	3.5	2.0	1.2	1.2	1.8	21	97	54	46	27
3	12	7.7	3.3	1.8	1.2	1.4	1.8	22	88	53	53	29
4	12	6.9	3.3	1.7	1.2	1.7	1.9	24	91	51	58	34
5	11	5.3	3.1	1.6	1.2	1.9	1.8	34	96	49	56	32
6	11	4.3	3.0	1.4	1.2	1.6	1.7	50	94	48	51	28
7	13	4.5	3.2	1.4	1.1	1.4	1.6	74	88	52	45	25
8	17	4.6	3.2	1.3	1.1	1.3	1.5	104	73	48	43	21
9	16	4.3	2.9	1.2	1.0	1.2	1.4	73	61	44	43	20
10	16	4.5	2.9	1.2	1.1	1.4	1.9	89	56	43	45	20
11	15	4.8	2.9	1.1	1.1	1.5	1.6	117	51	41	45	20
12	15	4.9	2.8	1.4	1.1	1.5	1.8	132	55	40	43	20
13	14	5.0	2.8	1.8	1.1	1.6	2.1	202	64	39	44	22
14	13	5.1	2.9	2.1	1.1	1.7	2.1	181	81	39	39	22
15	13	4.8	2.9	2.5	1.2	1.8	1.9	132	73	40	35	25
16	13	5.0	2.9	1.9	1.2	2.0	2.1	124	63	40	33	23
17	12	4.8	2.3	1.4	1.3	2.5	2.3	112	58	39	30	24
18	12	4.9	2.2	1.2	1.3	2.2	2.9	85	50	36	28	23
19	12	4.8	2.2	1.2	1.3	2.3	10	73	48	35	26	21
20	11	4.9	2.1	1.2	1.2	2.1	24	74	58	36	25	21
21	11	5.0	2.2	1.2	1.2	1.9	31	61	67	36	24	20
22	11	4.8	2.1	1.1	1.2	1.8	51	57	102	34	27	19
23	10	4.6	2.2	1.1	1.2	1.9	66	58	143	35	29	19
24	9.7	4.0	2.3	1.1	1.2	2.3	51	59	114	35	28	18
25	9.5	3.7	2.5	1.1	1.2	2.8	38	65	95	34	27	17
26	9.1	3.9	3.1	1.1	1.1	2.0	28	77	86	34	27	16
27	8.8	4.0	2.6	1.1	1.1	2.7	24	85	77	35	27	16
28	9.0	3.7	2.5	1.1	1.1	1.7	21	103	66	34	25	16
29	7.5	3.7	2.4	1.1	---	2.3	22	89	60	35	23	16
30	6.2	3.8	2.6	1.1	---	1.7	22	85	59	34	23	17
31	6.0	---	2.4	1.1	---	1.7	---	89	---	36	23	---
TOTAL	362.8	143.4	84.9	43.8	32.7	56.3	422.0	2573	2318	1266	1114	654
MEAN	11.7	4.78	2.74	1.41	1.17	1.82	14.1	83.0	77.3	40.8	35.9	21.8
MAX	17	7.7	3.6	2.5	1.3	2.8	66	202	143	57	58	34
MIN	6.0	3.7	2.1	1.1	1.0	1.2	1.4	21	48	34	23	16
AC-FT	720	284	168	87	65	112	837	5100	4600	2510	2210	1300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1994, BY WATER YEAR (WY)

	MEAN	17.3	10.4	6.04	4.18	2.74	2.94	8.98	85.1	195	113	57.5	30.6
MAX	50.0	25.4	15.0	10.0	7.00	10.0	25.7	162	525	212	164	64.6	
(WY)	1924	1928	1926	1926	1923	1923	1926	1924	1921	1923	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	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1921 - 1994
ANNUAL TOTAL	15383.8	9070.9	--
ANNUAL MEAN	42.1	24.9	43.4
HIGHEST ANNUAL MEAN	--	--	68.0
LOWEST ANNUAL MEAN	--	--	20.1
HIGHEST DAILY MEAN	291	May 21	202
LOWEST DAILY MEAN	1.8	Feb 17	1.0
ANNUAL SEVEN-DAY MINIMUM	2.0	Mar 16	1.1
INSTANTANEOUS PEAK FLOW	--	--	227
INSTANTANEOUS PEAK STAGE	--	--	3.91
ANNUAL RUNOFF (AC-FT)	30510	17990	31430
10 PERCENT EXCEEDS	149	69	135
50 PERCENT EXCEEDS	6.0	11	14
90 PERCENT EXCEEDS	2.3	1.2	2.0

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

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: Oct. 26-30 and May 1-6. Records good except those for estimated daily discharges, which are poor. Flow is diverted from Dry Creek for irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	---	---	---	---	---	---	.00	273	238	234	189
2	3.3	---	---	---	---	---	---	40	271	236	233	188
3	1.7	---	---	---	---	---	---	60	262	234	245	182
4	.93	---	---	---	---	---	---	70	260	230	248	185
5	.60	---	---	---	---	---	---	80	265	226	244	184
6	.36	---	---	---	---	---	---	88	266	236	239	177
7	.23	---	---	---	---	---	---	107	266	244	232	168
8	.13	---	---	---	---	---	---	86	257	236	229	161
9	.09	---	---	---	---	---	---	85	242	228	226	156
10	.07	---	---	---	---	---	---	100	229	227	230	152
11	.06	---	---	---	---	---	---	118	212	227	223	153
12	.05	---	---	---	---	---	---	148	206	229	223	153
13	.04	---	---	---	---	---	---	134	216	229	223	151
14	.03	---	---	---	---	---	---	104	245	229	220	151
15	.01	---	---	---	---	---	---	94	256	214	219	149
16	.00	---	---	---	---	---	---	136	251	193	217	145
17	.00	---	---	---	---	---	---	186	234	191	214	140
18	.00	---	---	---	---	---	---	202	215	197	210	134
19	.00	---	---	---	---	---	---	218	206	211	207	128
20	.00	---	---	---	---	---	---	229	223	218	210	122
21	.00	---	---	---	---	---	---	217	256	217	210	117
22	.00	---	---	---	---	---	---	202	276	217	211	112
23	.00	---	---	---	---	---	---	196	285	219	213	106
24	.00	---	---	---	---	---	---	190	271	216	208	100
25	.00	---	---	---	---	---	---	196	257	218	202	96
26	.00	---	---	---	---	---	---	213	244	220	199	92
27	.00	---	---	---	---	---	---	234	248	223	197	90
28	.00	---	---	---	---	---	---	263	250	223	194	89
29	.00	---	---	---	---	---	---	255	242	222	192	88
30	.00	---	---	---	---	---	---	254	240	219	195	69
31	.00	---	---	---	---	---	---	260	---	226	192	---
TOTAL	18.60	---	---	---	---	---	---	4765.00	7424	6893	6739	4127
MEAN	.60	---	---	---	---	---	---	154	247	222	217	138
MAX	11	---	---	---	---	---	---	263	285	244	248	189
MIN	.00	---	---	---	---	---	---	.00	206	191	192	69
AC-FT	37	---	---	---	---	---	---	9450	14730	13670	13370	8190

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1994, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994
MEAN	1.44	---	---	---	---	3.01	114
MAX	2.29	---	---	---	---	6.24	154
(WY)	1993	---	---	---	---	1989	1994
MIN	.60	---	---	---	---	.000	53.8
(WY)	1994	---	---	---	---	1991	1991

SUMMARY STATISTICS

HIGHEST DAILY MEAN
LOWEST DAILY MEAN

FOR 1994 WATER YEAR*

285 Jun 23
.00 Oct 16-31

WATER YEARS 1988 - 1994*

285 Jun 23 1994
.00 Many days,
most years
.00 Many days,
most years
301 Jun 23 1994
3.88 Jun 23 1994

ANNUAL SEVEN-DAY MINIMUM

INSTANTANEOUS PEAK FLOW
INSTANTANEOUS PEAK STAGE

301 Jun 23
3.88 Jun 23

* During period of operation.

YELLOWSTONE RIVER BASIN

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.

REVISED 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.--Estimated daily discharges: Oct. 30 and Nov. 6 to Mar. 4. Records fair except those for estimated daily discharges, which are poor. Diversions for irrigation of 60.1 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	6.8	8.2	5.8	4.8	6.0	4.2	8.0	35	7.3	5.5	4.9
2	7.7	7.9	8.0	5.6	4.6	6.0	4.3	8.0	40	7.1	6.1	5.3
3	7.7	6.8	7.8	5.4	4.8	5.8	4.3	8.1	45	7.0	5.8	4.9
4	7.7	6.9	8.0	5.4	4.7	5.6	4.6	8.4	46	6.8	5.8	4.6
5	7.6	7.4	7.8	5.4	5.0	5.3	4.5	10	43	6.7	5.7	4.6
6	7.8	7.2	7.8	5.2	5.2	5.2	4.6	8.9	38	7.1	5.3	4.5
7	8.7	7.0	7.6	5.2	5.2	5.4	4.6	15	18	7.6	5.1	4.5
8	8.6	7.0	7.4	5.0	5.0	5.3	4.5	28	13	7.2	5.4	4.5
9	8.1	6.6	7.4	5.2	4.8	5.3	4.5	21	11	7.0	5.9	4.3
10	7.8	6.4	7.2	5.2	4.7	4.9	5.5	33	10	6.8	5.7	4.3
11	7.8	6.2	7.0	5.2	4.8	4.9	5.4	50	11	6.8	5.2	4.3
12	7.7	6.4	6.8	5.2	4.9	5.0	5.6	62	13	6.6	5.3	4.5
13	7.2	6.6	6.6	5.4	5.0	4.9	5.4	80	13	7.1	5.3	4.8
14	7.2	6.8	6.6	5.8	5.2	4.7	5.2	57	15	7.0	5.2	4.7
15	7.3	6.8	6.4	6.0	5.3	4.6	5.0	46	12	6.5	5.1	4.8
16	7.4	6.6	6.4	6.2	5.2	4.4	5.0	48	12	6.3	4.9	4.9
17	7.3	6.4	6.2	5.8	5.4	4.3	5.0	41	12	6.1	4.8	4.9
18	7.1	6.2	6.2	5.6	5.6	4.3	5.4	28	11	5.8	4.7	4.8
19	7.0	6.2	6.2	5.4	5.8	4.5	5.8	26	11	5.7	4.8	4.7
20	6.9	6.0	6.0	5.6	5.8	4.2	6.0	28	12	6.0	4.8	4.8
21	6.9	6.2	5.8	5.8	6.0	4.1	6.7	23	11	5.6	4.7	4.7
22	7.0	6.4	5.8	5.8	6.2	4.5	7.5	24	17	5.6	4.9	5.0
23	6.9	6.4	5.8	6.0	6.2	4.4	13	30	19	5.6	4.7	4.8
24	6.9	6.8	5.6	5.8	6.2	3.9	13	28	13	5.9	4.5	4.7
25	6.8	6.6	5.6	5.8	6.2	4.1	11	36	10	5.5	4.3	4.9
26	7.1	7.0	5.4	5.8	6.0	4.0	11	38	9.4	5.5	4.3	4.8
27	7.0	7.4	5.4	5.6	6.0	4.3	9.7	34	8.7	5.3	4.2	4.9
28	7.3	7.8	5.6	5.4	6.0	4.3	8.7	40	8.1	5.2	4.4	4.9
29	7.3	8.2	5.8	5.2	---	4.3	8.4	29	7.8	5.1	4.4	4.8
30	7.4	8.0	5.8	5.0	---	4.3	8.3	33	7.3	5.0	4.5	5.0
31	7.5	---	5.8	4.9	---	4.3	---	34	---	5.5	4.5	---
TOTAL	230.3	205.0	204.0	170.7	150.6	147.1	196.7	963.4	532.3	194.3	155.8	142.1
MEAN	7.43	6.83	6.58	5.51	5.38	4.75	6.56	31.1	17.7	6.27	5.03	4.74
MAX	8.7	8.2	8.2	6.2	6.2	6.0	13	80	46	7.6	6.1	5.3
MIN	6.8	6.0	5.4	4.9	4.6	3.9	4.2	8.0	7.3	5.0	4.2	4.3
AC-FT	457	407	405	339	299	292	390	1910	1060	385	309	282

YELLOWSTONE RIVER BASIN

06223500 WILLOW CREEK NEAR CROWHEART, WY--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1994, BY WATER YEAR (WY)

	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
MEAN	9.14	7.58	6.14	5.24	4.76	4.95	6.39	28.8	70.8	25.1	12.1	9.11							
MAX	17.6	13.3	10.0	8.00	7.00	8.00	9.15	63.8	190	55.3	45.4	21.9							
(WY)	1931	1927	1927	1927	1922	1922	1922	1931	1991	1928	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							

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1922 - 1994
ANNUAL TOTAL	6903.6	3292.3	--
ANNUAL MEAN	18.9	9.02	15.8
HIGHEST ANNUAL MEAN	--	--	28.9
LOWEST ANNUAL MEAN	--	--	4.60
HIGHEST DAILY MEAN	119	80	468
LOWEST DAILY MEAN	4.5	3.9	2.0
ANNUAL SEVEN-DAY MINIMUM	5.0	4.2	2.0
INSTANTANEOUS PEAK FLOW	--	107a	1100b
INSTANTANEOUS PEAK STAGE	--	4.77c	5.40d
ANNUAL RUNOFF (AC-FT)	13690	6530	11450
10 PERCENT EXCEEDS	67	13	36
50 PERCENT EXCEEDS	7.3	6.0	7.4
90 PERCENT EXCEEDS	5.6	4.5	4.0

a Gage-height 3.12 ft.

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

c Backwater from ice.

d Site and datum then in use.

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.

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. 18 and Mar. 25-29. Records good except for estimated discharges which are poor. No diversions upstream from station. Satellite telemeter 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)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 14	0730	*1,170	*4.67	No peak greater than base discharge.			

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	52	29	14	10	16	16	126	927	440	349	155
2	83	49	27	14	11	17	15	121	854	441	408	162
3	81	49	26	14	10	18	15	118	751	433	494	165
4	78	45	26	14	10	19	16	125	747	404	521	186
5	76	42	24	14	10	20	15	206	753	359	483	181
6	73	34	25	13	10	20	15	309	761	339	423	166
7	77	41	25	13	10	18	14	416	751	347	375	152
8	87	37	24	14	10	17	14	507	642	327	334	143
9	87	35	24	14	9.8	17	15	499	510	299	317	138
10	94	38	24	13	10	18	19	570	402	294	345	136
11	99	38	24	14	10	17	18	688	352	305	335	139
12	99	38	23	11	11	17	20	901	379	322	320	136
13	98	38	22	11	13	17	21	1120	463	324	308	139
14	93	38	20	11	13	17	20	1130	574	321	310	148
15	89	33	22	13	13	18	18	997	553	312	303	154
16	88	36	21	14	13	19	18	890	475	309	290	151
17	85	34	17	13	13	19	22	783	398	311	272	147
18	82	30	18	12	13	18	31	617	350	313	251	138
19	79	25	19	12	12	17	46	518	361	314	233	128
20	77	31	16	12	12	16	66	498	428	316	228	117
21	72	35	17	12	12	17	114	432	522	319	228	110
22	71	34	16	12	12	16	196	380	688	319	240	104
23	67	31	17	11	12	16	258	410	940	320	255	98
24	66	23	18	11	13	14	254	445	848	313	231	93
25	61	20	17	11	12	15	227	522	705	312	204	89
26	60	25	16	11	12	14	201	637	610	343	193	89
27	60	29	16	11	13	14	170	745	563	349	188	85
28	60	30	16	11	15	14	163	905	508	347	178	83
29	57	30	15	11	---	14	143	862	455	341	165	84
30	51	30	15	11	---	15	131	797	440	334	166	90
31	54	---	15	9.0	---	16	---	846	---	334	156	---
TOTAL	2389	1050	634	381.0	324.8	520	2291	18120	17710	10461	9103	3906
MEAN	77.1	35.0	20.5	12.3	11.6	16.8	76.4	585	590	337	294	130
MAX	99	52	29	14	15	20	258	1130	940	441	521	186
MIN	51	20	15	9.0	9.8	14	14	118	350	294	156	83
AC-FT	4740	2080	1260	756	644	1030	4540	35940	35130	20750	18060	7750

MEAN	100	56.0	37.3	28.0	24.8	26.4	66.8	470	1137	897	426	203
MAX	222	109	62.2	42.7	41.4	57.4	199	777	2104	1581	655	533
(WY)	1983	1951	1951	1943	1943	1986	1943	1969	1986	1975	1982	1973
MIN	32.9	29.5	14.6	7.29	6.87	6.69	24.9	170	560	337	145	109
(WY)	1989	1977	1977	1977	1977	1977	1970	1975	1992	1994	1985	1988

	ANNUAL MEAN		HIGHEST DAILY MEAN		LOWEST DAILY MEAN		ANNUAL SEVEN-DAY MINIMUM		INSTANTANEOUS PEAK FLOW		INSTANTANEOUS PEAK STAGE		ANNUAL RUNOFF (AC-FT)		10 PERCENT EXCEEDS		50 PERCENT EXCEEDS		90 PERCENT EXCEEDS	
ANNUAL TOTAL	99469		66889.8		--		--		--		--		--		--		--		--	
ANNUAL MEAN	273		183		290		415		174		3560		6.2		6.5		4470		7.98	
HIGHEST ANNUAL MEAN	--		--		--		--		--		--		--		--		--		--	
LOWEST ANNUAL MEAN	--		--		--		--		--		--		--		--		--		--	
HIGHEST DAILY MEAN	1530	May 22	1130	May 14	3560	Jun 9	1981		4470	Jun 9	1981		7.98	Jun 9	1981		4470	Jun 9	1981	
LOWEST DAILY MEAN	14	Feb 17	9.0	Jan 31	6.2	Jan 9	1977		6.5	Mar 10	1977		7.98	Jun 9	1981		4470	Jun 9	1981	
ANNUAL SEVEN-DAY MINIMUM	16	Dec 25	10	Feb 3	6.5	Mar 10	1977		6.5	Mar 10	1977		7.98	Jun 9	1981		4470	Jun 9	1981	
INSTANTANEOUS PEAK FLOW	--		1170	May 14	4470	Jun 9	1981		6.5	Mar 10	1977		7.98	Jun 9	1981		4470	Jun 9	1981	
INSTANTANEOUS PEAK STAGE	--		4.67	May 14	7.98	Jun 9	1981		6.5	Mar 10	1977		7.98	Jun 9	1981		4470	Jun 9	1981	
ANNUAL RUNOFF (AC-FT)	197300		132700		210400				6.5	Mar 10	1977		7.98	Jun 9	1981		4470	Jun 9	1981	
10 PERCENT EXCEEDS	897		509		901				6.5	Mar 10	1977		7.98	Jun 9	1981		4470	Jun 9	1981	
50 PERCENT EXCEEDS	50		73		76				6.5	Mar 10	1977		7.98	Jun 9	1981		4470	Jun 9	1981	
90 PERCENT EXCEEDS	20		13		22				6.5	Mar 10	1977		7.98	Jun 9	1981		4470	Jun 9	1981	

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)
OCT					
15...	1055	88	153	10.0	13.0
NOV					
22...	1315	34	89	2.0	10.0
JAN					
10...	1515	14	120	2.0	6.5
MAR					
15...	0850	18	122	5.0	2.0
APR					
01...	1200	19	105	6.0	8.0
29...	1005	147	100	5.0	2.0
MAY					
29...	1640	841	23	12.5	23.0
JUL					
08...	1540	323	23	17.5	24.0
AUG					
15...	1330	310	22	14.5	28.0
SEP					
16...	1345	158	31	11.0	18.5

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.

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. 19, 23-27, Dec. 5-7, 12-14, 17-25, 30, Jan. 2, 6-8, 11, 12, 17, 18, 30, 31, and Feb. 1-5, 8, 9, 12, 13, 25. 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. U.S. Bureau of Reclamation satellite telemeter at station.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	554	40	47	41	37	37	30	268	122	546	851	812
2	558	43	47	40	37	38	30	266	81	643	655	802
3	555	46	47	40	38	38	29	383	383	643	453	795
4	535	45	47	40	39	38	28	492	464	646	444	783
5	517	45	46	40	39	38	29	490	383	663	466	915
6	519	45	45	40	38	37	28	216	368	677	544	792
7	520	45	46	39	38	36	28	56	554	677	606	631
8	298	45	40	41	37	36	28	52	604	674	659	589
9	60	45	38	40	38	36	28	53	785	672	647	504
10	35	45	38	40	38	36	31	54	913	692	597	499
11	33	45	40	39	38	37	29	55	969	847	534	496
12	33	45	40	40	37	38	28	56	867	958	497	306
13	39	45	38	40	38	38	28	57	867	939	497	47
14	49	45	39	39	37	37	28	58	830	883	497	43
15	40	45	39	40	38	36	28	59	873	807	491	43
16	40	45	40	40	38	32	27	59	875	808	479	43
17	40	45	39	40	38	25	28	56	658	803	495	43
18	40	45	39	39	38	25	76	310	610	799	578	43
19	40	45	40	39	38	26	149	398	600	796	656	43
20	40	46	40	39	38	25	150	231	424	793	651	43
21	40	45	40	40	38	25	131	366	416	793	648	43
22	40	45	38	40	38	26	36	570	342	816	650	43
23	40	45	40	40	38	28	33	592	177	951	647	43
24	40	44	40	40	38	31	33	587	88	945	643	43
25	40	43	40	39	37	31	33	558	88	934	652	43
26	40	46	39	39	38	30	33	317	88	926	810	42
27	40	46	39	39	38	30	33	158	88	915	846	37
28	40	47	39	39	38	30	113	144	215	903	844	36
29	40	46	39	39	---	30	271	80	351	896	840	36
30	40	47	40	38	---	30	269	107	463	892	829	36
31	40	---	41	38	---	30	---	214	---	884	818	---
TOTAL	4985	1349	1270	1227	1060	1010	1845	7362	14546	24821	19524	8674
MEAN	161	45.0	41.0	39.6	37.9	32.6	61.5	237	485	801	630	289
MAX	558	47	47	41	39	38	271	592	969	958	851	915
MIN	33	40	38	38	37	25	27	52	81	546	444	36
AC-FT	9890	2680	2520	2430	2100	2000	3660	14600	28850	49230	38730	17200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 1994, BY WATER YEAR (WY)

STATISTICS OF MONTHLY MEAN RAIN FOR WATER YEARS 1918 - 1994, BY WATER YEAR (WY)												
MEAN	134	70.2	73.7	91.9	77.4	62.9	97.9	231	560	805	654	420
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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1918 - 1994
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ANNUAL TOTAL	77697		87673		--	
ANNUAL MEAN	213		240		273	
HIGHEST ANNUAL MEAN	--		--		427	1969
LOWEST ANNUAL MEAN	--		--		100	1941
HIGHEST DAILY MEAN	938	Aug 14	969	Jun 11	3900	Jun 16 1918
LOWEST DAILY MEAN	20	Feb 17	25	Mar 17, 18, 20, 21	.00a	Feb 28 to Apr 7 1937
ANNUAL SEVEN-DAY MINIMUM	22	Feb 13	26	Mar 17	.00	Feb 28 1937
INSTANTANEOUS PEAK FLOW	--		1030	Jun 11	6200b	Aug 8 1951
INSTANTANEOUS PEAK STAGE	--		3.48	Jun 11	7.09	Aug 8 1951
ANNUAL RUNOFF (AC-FT)	154100		173900		197900	
10 PERCENT EXCEEDS	744		795		800	
50 PERCENT EXCEEDS	40		45		110	
90 PERCENT EXCEEDS	23		33		19	

a Result of regulation.

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

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: Oct. 9-13, Nov 16 to Jan. 21, and Feb. 1-27. 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. U.S. Bureau of Reclamation satellite telemeter 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	945	480	378	290	240	317	316	713	1720	1260	1560	1250
2	1000	466	380	290	240	337	341	693	1520	1360	1590	1250
3	1010	438	380	300	250	343	343	737	1660	1340	1460	1250
4	994	487	370	300	250	338	356	870	1680	1300	1390	1250
5	970	479	370	315	240	333	347	971	1710	1270	1310	1370
6	970	441	350	310	230	330	319	1080	1640	1240	1330	1280
7	997	429	340	300	230	312	314	1280	1780	1250	1330	1050
8	952	453	360	300	220	302	306	1740	1600	1300	1370	995
9	800	441	380	310	230	304	296	1770	1620	1260	1350	903
10	700	439	370	310	240	305	320	2080	1650	1220	1290	890
11	600	440	360	300	250	313	327	2220	1740	1380	1240	879
12	560	445	360	300	250	317	313	2600	1770	1510	1160	704
13	542	459	350	310	260	313	328	3200	1860	1510	1140	460
14	586	462	330	310	260	320	358	3320	1850	1480	1220	448
15	593	421	310	300	270	329	351	2350	1820	1390	1160	447
16	583	400	300	300	270	335	338	2040	1710	1400	1110	454
17	517	390	290	300	270	348	452	1800	1400	1390	1070	458
18	525	370	280	303	260	345	686	1640	1280	1400	1110	439
19	543	370	290	300	260	332	889	1540	1390	1380	1160	425
20	535	360	280	300	250	318	1050	1740	1220	1380	1140	414
21	528	380	270	290	250	297	1190	1440	1250	1370	1120	416
22	527	390	270	293	250	312	1300	1450	1420	1370	1140	419
23	538	380	270	309	240	323	1210	1570	1910	1520	1150	418
24	534	360	280	289	250	292	1040	1580	1520	1560	1160	410
25	523	300	290	289	230	288	884	1780	1300	1550	1140	402
26	521	330	290	287	250	299	810	1670	1180	1520	1270	397
27	508	360	290	284	280	288	681	1680	1060	1550	1330	391
28	496	390	280	287	305	291	623	1690	1050	1540	1320	386
29	523	400	280	291	---	291	756	1570	1110	1510	1300	386
30	468	390	280	277	---	288	722	1360	1190	1490	1280	400
31	458	---	290	249	---	294	---	1770	---	1520	1270	---
TOTAL	20546	12350	9918	9193	7025	9754	17566	51944	45610	43520	38970	20641
MEAN	663	412	320	297	251	315	586	1676	1520	1404	1257	688
MAX	1010	487	380	315	305	348	1300	3320	1910	1560	1590	1370
MIN	458	300	270	249	220	288	296	693	1050	1220	1070	386
AC-FT	40750	24500	19670	18230	13930	19350	34840	103000	90470	86320	77300	40940

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1994, BY WATER YEAR (WY)

	MEAN	482	392	374	361	368	569	1771	3680	2854	1655	1137
MAX	1415	932	625	560	538	616	1284	2938	7259	5694	2483	1719
(WY)	1952	1969	1972	1954	1951	1972	1952	1956	1971	1967	1951	1983
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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1946 - 1994
ANNUAL TOTAL	378369	287037	--
ANNUAL MEAN	1037	786	1197
HIGHEST ANNUAL MEAN	--	--	1651
LOWEST ANNUAL MEAN	--	--	670
HIGHEST DAILY MEAN	4610	3320	11300
LOWEST DAILY MEAN	130	220	130
ANNUAL SEVEN-DAY MINIMUM	143	234	143
INSTANTANEOUS PEAK FLOW	--	4200	14300
INSTANTANEOUS PEAK STAGE	--	8.77	11.04a
ANNUAL RUNOFF (AC-FT)	750500	569300	867100
10 PERCENT EXCEEDS	2510	1570	2740
50 PERCENT EXCEEDS	468	462	584
90 PERCENT EXCEEDS	200	280	300

a From floodmarks.

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LOCATION.--Lat 43°13'45", long 108°53'40", in SE 1/4 SE 1/4 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 for 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: Nov. 2, 3, Mar. 30, May 5-10, May 20 to June 3, and Sept. 13, 14. Records good except those for estimated discharges, which are poor. Flow used for irrigation on Riverton project. U.S. Bureau of Reclamation satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	574	246	---	---	---	.00	140	496	920	849	1110	823
2	636	5.0	---	---	---	.00	176	502	861	973	1190	821
3	656	.1	---	---	---	.00	216	489	1130	949	1050	815
4	656	.00	---	---	---	.00	218	614	1210	918	978	821
5	632	.00	---	---	---	.00	207	639	1240	889	902	938
6	632	.00	---	---	---	.00	130	701	1160	857	926	887
7	654	.00	---	---	---	.00	123	621	1300	864	898	638
8	650	.00	---	---	---	.00	124	1080	1160	909	941	624
9	333	.00	---	---	---	.00	119	1310	1150	865	932	539
10	247	.00	---	---	---	.00	124	1340	1170	816	895	523
11	181	.00	---	---	---	.00	131	1460	1230	946	847	510
12	238	.00	---	---	---	.00	128	1520	1280	1090	749	334
13	224	.00	---	---	---	.00	128	1460	1350	1110	717	30
14	302	.00	---	---	---	.00	131	1390	1420	1100	886	.1
15	373	.00	---	---	---	.00	130	1360	1450	1000	740	.00
16	380	.00	---	---	---	.00	130	1280	1370	992	690	.00
17	368	.00	---	---	---	.00	131	1400	1070	984	666	.00
18	417	.00	---	---	---	.00	276	1300	964	995	718	.00
19	460	.00	---	---	---	.00	517	1150	1050	973	789	.00
20	437	.00	---	---	---	.00	620	1310	936	972	749	.00
21	417	.00	---	---	---	.00	716	1030	916	960	718	.00
22	417	.00	---	---	---	.00	547	1030	1000	952	735	.00
23	426	.00	---	---	---	.00	498	1100	1520	1100	738	.00
24	423	.00	---	---	---	.00	521	1110	1170	1140	750	.00
25	410	.00	---	---	---	.00	515	1240	1010	1110	712	.00
26	413	.00	---	---	---	.00	519	1120	880	1080	838	.00
27	389	.00	---	---	---	.00	445	1110	737	1090	892	.00
28	350	.00	---	---	---	.00	360	1100	715	1090	905	.00
29	349	.00	---	---	---	.00	522	1030	753	1080	875	.00
30	348	.00	---	---	---	15	491	848	818	1070	844	.00
31	340	---	---	---	---	113	---	1070	---	1080	827	---
TOTAL	13332	251.10	---	---	---	128.00	9033	33210	32940	30803	26207	8303.10
MEAN	430	8.37	---	---	---	4.13	301	1071	1098	994	845	277
MAX	656	246	---	---	---	113	716	1520	1520	1140	1190	938
MIN	181	.00	---	---	---	.00	119	489	715	816	666	.00
AC-FT	26440	498	---	---	---	254	17920	65870	65340	61100	51980	16470

	1961-1969					1970-1979					1980-1989		
MEAN	187	188	199	199	201	224	301	686	1107	1233	961	659	
MAX	430	436	383	345	357	422	440	1159	1668	1736	1301	1047	
(WY)	1994	1972	1958	1958	1954	1972	1980	1976	1990	1976	1975	1976	
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	

WATER YEARS 1941 - 1994*

FOR 1994 WATER YEAR		WATER YEARS 1941 - 1994	
ANNUAL MEAN	--	540	
HIGHEST ANNUAL MEAN	--	669	1972
LOWEST ANNUAL MEAN	--	461	1975
HIGHEST DAILY MEAN	1520	1860	Jun 11-12 1990
LOWEST DAILY MEAN	.00		Many days, most years
ANNUAL SEVEN-DAY MINIMUM	--	.00	Many days, most years
ANNUAL RUNOFF (AC-FT)	--	391000	
10 PERCENT EXCEEDS	--	1320	
50 PERCENT EXCEEDS	--	411	
90 PERCENT EXCEEDS	--	.00	

* During period of operation.

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 the gage is 5,310 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow is diverted from the Wind River for irrigation.

Satellite telemeter at station. Results of discharge measurement, in cubic feet per second, made during the period when station was not in operation is given below:

Apr. 8 . . . 0.45

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	---	---	---	---	---	---	.27	37	26	28	31
2	1.7	---	---	---	---	---	---	.28	36	26	25	31
3	1.1	---	---	---	---	---	---	.27	36	26	23	31
4	.95	---	---	---	---	---	---	.30	35	26	22	31
5	.85	---	---	---	---	---	---	.30	35	27	21	31
6	.79	---	---	---	---	---	---	15	34	28	20	31
7	.79	---	---	---	---	---	---	22	34	28	20	31
8	.77	---	---	---	---	---	---	23	34	28	20	30
9	.73	---	---	---	---	---	---	23	34	29	21	30
10	.70	---	---	---	---	---	---	24	34	29	19	30
11	.67	---	---	---	---	---	---	22	34	28	17	30
12	.67	---	---	---	---	---	---	22	34	28	17	32
13	.67	---	---	---	---	---	---	22	34	29	17	34
14	.67	---	---	---	---	---	---	35	33	29	17	31
15	.60	---	---	---	---	---	---	29	32	29	16	30
16	.57	---	---	---	---	---	---	25	29	28	16	26
17	.57	---	---	---	---	---	---	26	26	29	17	24
18	.56	---	---	---	---	---	---	30	25	28	17	23
19	.52	---	---	---	---	---	---	33	25	28	17	23
20	.52	---	---	---	---	---	---	38	25	29	17	18
21	.52	---	---	---	---	---	---	38	24	28	18	15
22	.52	---	---	---	---	---	---	38	24	29	18	15
23	.52	---	---	---	---	---	---	37	28	29	19	15
24	.52	---	---	---	---	---	---	38	24	29	21	15
25	.52	---	---	---	---	---	---	39	24	29	22	14
26	.52	---	---	---	---	---	---	38	24	30	26	14
27	.52	---	---	---	---	---	---	38	25	31	26	14
28	.51	---	---	---	---	---	---	38	24	31	26	14
29	.48	---	---	---	---	---	---	38	25	30	29	14
30	.44	---	---	---	---	---	---	38	26	30	31	9.3
31	.44	---	---	---	---	---	---	39	---	30	31	---
TOTAL	23.71	---	---	---	---	---	---	809.42	894	884	654	717.3
MEAN	.76	---	---	---	---	---	---	26.1	29.8	28.5	21.1	23.9
MAX	3.8	---	---	---	---	---	---	39	37	31	31	34
MIN	.44	---	---	---	---	---	---	.27	24	26	16	9.3
AC-FT	47	---	---	---	---	---	---	1610	1770	1750	1300	1420

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1994, BY WATER YEAR (WY)

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

SUMMARY STATISTICS

HIGHEST DAILY MEAN 39 May 25, 31
LOWEST DAILY MEAN .27 May 1, 3

ANNUAL SEVEN-DAY MINIMUM

INSTANTANEOUS PEAK FLOW 52 May 31
INSTANTANEOUS PEAK STAGE 2.18 May 31

10 PERCENT EXCEEDS --

50 PERCENT EXCEEDS --

90 PERCENT EXCEEDS --

WATER YEARS 1991 - 1994*

48 Jun 25 1991
.00 Many days,
most years
.00 Many days,
most years
54 Jun 24 1991
2.15 Jun 24 1991
32
19
.93

* During period of operation.

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: Nov. 16 to Mar. 16, Mar 24-27, and June 24. 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 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	366	199	410	300	240	340	150	313	543	375	400	378
2	370	433	400	300	250	350	195	312	513	377	418	381
3	360	397	390	310	260	350	148	316	498	379	402	380
4	320	439	380	320	250	340	136	339	475	377	389	376
5	319	450	380	330	240	330	142	398	475	377	381	379
6	319	445	370	310	230	330	223	438	469	375	377	382
7	329	415	380	310	230	320	193	392	452	382	377	380
8	329	418	380	310	230	310	191	498	449	381	384	372
9	322	412	390	320	240	310	188	523	453	377	382	350
10	311	415	380	320	250	310	195	744	452	374	374	344
11	317	430	370	310	260	320	212	834	447	370	363	349
12	319	424	360	310	260	320	205	1060	438	372	366	386
13	319	440	350	320	260	310	192	1670	423	373	376	472
14	307	459	340	310	270	300	241	2310	390	374	368	435
15	232	421	330	310	280	320	260	1150	357	375	358	440
16	225	420	310	300	280	330	211	846	357	373	362	443
17	217	400	300	290	270	349	301	526	355	379	359	446
18	204	390	300	280	260	359	468	409	332	374	350	423
19	122	380	300	280	260	340	460	404	332	378	350	415
20	115	370	290	290	250	332	467	486	333	378	354	408
21	111	390	280	290	250	311	476	457	332	371	366	404
22	110	420	280	300	250	309	633	454	336	375	369	406
23	107	390	280	310	250	340	724	449	442	377	367	411
24	106	370	290	300	260	320	619	462	338	375	370	409
25	106	330	300	290	250	310	481	513	314	372	371	394
26	106	390	300	290	270	310	403	487	318	381	370	386
27	104	410	300	290	300	290	338	498	339	395	364	371
28	121	430	290	300	330	290	328	478	338	398	372	363
29	169	430	290	300	---	312	323	464	342	390	370	356
30	162	430	300	280	---	293	317	461	359	390	375	367
31	126	---	300	260	---	144	---	546	---	390	377	---
TOTAL	7050	12147	10320	9340	7230	9799	9420	19237	12001	11734	11561	11806
MEAN	227	405	333	301	258	316	314	621	400	379	373	394
MAX	370	459	410	330	330	359	724	2310	543	398	418	472
MIN	104	199	280	260	230	144	136	312	314	370	350	344
AC-FT	13980	24090	20470	18530	14340	19440	18680	38160	23800	23270	22930	23420

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1994, BY WATER YEAR (WY)

	1992	1993	1994	1992	1993	1994	1992	1993	1994	1992	1993	1994
MEAN	244	392	291	264	266	258	241	785	988	515	416	361
MAX	317	405	333	301	313	316	314	1267	1723	657	469	394
(WY)	1992	1994	1994	1994	1992	1994	1994	1993	1993	1993	1993	1994
MIN	188	384	240	193	224	194	170	467	400	379	373	303
(WY)	1993	1992	1993	1993	1993	1992	1992	1992	1994	1994	1994	1992

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1992 - 1994
ANNUAL TOTAL	194580	131645	--
ANNUAL MEAN	533	361	419
HIGHEST ANNUAL MEAN	--	--	520
LOWEST ANNUAL MEAN	--	--	361
HIGHEST DAILY MEAN	4050	2310	8600
LOWEST DAILY MEAN	89	104	28
ANNUAL SEVEN-DAY MINIMUM	103	107	79
INSTANTANEOUS PEAK FLOW	--	2980	13900
INSTANTANEOUS PEAK STAGE	--	5.92	8.03a
ANNUAL RUNOFF (AC-FT)	385900	261100	303200
10 PERCENT EXCEEDS	1400	455	518
50 PERCENT EXCEEDS	357	357	340
90 PERCENT EXCEEDS	160	237	175

For period of record, 1974-79, 1992-94.

a From floodmark.

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. 1-31, May 1-3, and Sept. 30. Records good, except those for Oct. 1-31, which are poor. Flow is diverted from Wind River for irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	---	---	---	---	---	---	.00	36	38	49	47
2	2.0	---	---	---	---	---	---	.00	35	39	50	47
3	2.0	---	---	---	---	---	---	4.7	34	40	49	46
4	1.5	---	---	---	---	---	---	9.5	33	40	49	46
5	1.5	---	---	---	---	---	---	11	32	41	48	46
6	1.0	---	---	---	---	---	---	11	33	41	47	46
7	1.0	---	---	---	---	---	---	14	32	41	46	46
8	1.0	---	---	---	---	---	---	15	32	41	46	45
9	.50	---	---	---	---	---	---	16	33	40	47	45
10	.50	---	---	---	---	---	---	17	33	38	46	45
11	.50	---	---	---	---	---	---	23	33	39	45	45
12	.50	---	---	---	---	---	---	24	33	40	46	46
13	.00	---	---	---	---	---	---	26	33	40	48	48
14	.00	---	---	---	---	---	---	26	33	42	49	47
15	.00	---	---	---	---	---	---	24	34	42	49	46
16	.00	---	---	---	---	---	---	23	36	43	49	48
17	.00	---	---	---	---	---	---	20	37	44	49	49
18	.00	---	---	---	---	---	---	18	37	45	48	49
19	.00	---	---	---	---	---	---	21	37	46	48	49
20	.00	---	---	---	---	---	---	24	38	47	48	48
21	.00	---	---	---	---	---	---	24	41	49	48	49
22	.00	---	---	---	---	---	---	24	38	51	48	41
23	.00	---	---	---	---	---	---	25	37	53	48	36
24	.00	---	---	---	---	---	---	29	37	53	48	36
25	.00	---	---	---	---	---	---	29	36	53	48	36
26	.00	---	---	---	---	---	---	32	37	53	48	36
27	.00	---	---	---	---	---	---	32	37	51	47	35
28	.00	---	---	---	---	---	---	33	37	48	47	34
29	.00	---	---	---	---	---	---	32	38	48	46	34
30	.00	---	---	---	---	---	---	32	37	49	47	17
31	.00	---	---	---	---	---	---	34	---	48	47	---
TOTAL	27.00	---	---	---	---	---	---	653.20	1059	1383	1478	1288
MEAN	.87	---	---	---	---	---	---	21.1	35.3	44.6	47.7	42.9
MAX	15	---	---	---	---	---	---	34	41	53	50	49
MIN	.00	---	---	---	---	---	---	.00	32	38	45	17
AC-FT	54	---	---	---	---	---	---	1300	2100	2740	2930	2550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1994, BY WATER YEAR (WY)

	1991	1992	1993	1994
MEAN	.60	.60	.60	.60
MAX	.87	.87	.87	.87
(WY)	1994	1992	1993	1994
MIN	.33	.60	20.2	24.3
(WY)	1993	1992	1993	1991

SUMMARY STATISTICS

	FOR 1994 WATER YEAR*	WATER YEARS 1991 - 1994*
HIGHEST DAILY MEAN	53 Jul 23	59 Jun 13 1991
LOWEST DAILY MEAN	.00 Many days	.00 Many days, each year
INSTANTANEOUS PEAK FLOW	54 Jul 23	74a Jun 13 1991
INSTANTANEOUS PEAK STAGE	2.74 Jul 23	2.74 Jul 23 1994
10 PERCENT EXCEEDS	--	45
50 PERCENT EXCEEDS	--	27
90 PERCENT EXCEEDS	--	.00

* During period of operation.

a Gage height, 2.73 ft.

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.

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. 22 to Mar. 17, May 19, 20, 24-26, June 24, and July 5, 7, 8. Records fair 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. U.S. Bureau of Reclamation satellite telemeter at station.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	221	145	250	300	160	360	175	110	139	28	26	44
2	226	462	270	310	160	400	192	103	100	27	50	51
3	237	458	260	330	170	500	198	70	95	29	41	52
4	259	472	210	310	160	560	173	67	71	31	53	50
5	272	519	230	320	170	600	175	70	63	26	56	49
6	278	474	210	330	160	620	208	64	61	25	50	48
7	307	446	170	320	180	560	188	96	51	25	42	45
8	315	464	150	330	160	470	176	77	46	24	37	39
9	309	476	160	320	160	490	177	203	52	22	36	38
10	298	462	160	300	150	520	187	348	57	18	41	36
11	283	468	240	320	150	780	194	502	52	16	42	36
12	293	468	190	310	150	700	197	741	39	16	37	38
13	287	479	250	320	160	540	139	1150	42	14	39	148
14	285	507	230	330	170	470	142	1990	49	15	52	170
15	209	469	220	330	190	450	177	1010	38	16	51	184
16	176	457	210	330	200	420	132	526	96	16	52	212
17	176	462	200	330	220	410	121	241	105	16	56	222
18	249	467	190	300	270	382	275	84	87	17	48	204
19	173	457	190	300	240	370	367	28	53	17	43	200
20	144	408	200	280	220	362	267	32	45	18	45	191
21	142	397	230	280	220	326	303	65	57	19	48	195
22	140	397	240	300	210	320	530	39	48	20	50	215
23	137	398	220	300	220	377	748	31	104	20	40	217
24	135	350	260	280	230	338	546	29	210	21	38	219
25	133	300	290	310	210	305	306	25	59	22	40	215
26	131	240	320	290	240	300	180	39	58	19	41	207
27	132	260	270	270	280	316	125	32	50	18	32	200
28	133	257	290	260	300	301	107	36	53	18	36	198
29	170	250	290	240	---	317	138	41	44	18	33	188
30	187	250	280	200	---	310	118	42	34	18	34	185
31	151	---	290	177	---	212	---	73	---	21	37	---
TOTAL	6588	12119	7170	9227	5510	13386	6961	7964	2058	630	1326	4096
MEAN	213	404	231	298	197	432	232	257	68.6	20.3	42.8	137
MAX	315	519	320	330	300	780	748	1990	210	31	56	222
MIN	131	145	150	177	150	212	107	25	34	14	26	36
AC-FT	13070	24040	14220	18300	10930	26550	13810	15800	4080	1250	2630	8120

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1994, BY WATER YEAR (WY)												
MEAN	610	447	350	331	333	347	426	1264	2836	1758	712	505
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

	FOR CALENDAR YEAR		FOR WATER YEAR		WATER YEARS 1912 - 1991	
ANNUAL TOTAL	165761		77035		-	-
ANNUAL MEAN	454		211		817	
HIGHEST ANNUAL MEAN	--		--		1626	1913
LOWEST ANNUAL MEAN	--		--		195	1988
HIGHEST DAILY MEAN	3020	May 22	1990	May 14	11400	Jun 14 1935
LOWEST DAILY MEAN	73	Jul 10	14	Jul 13	9.8	May 28 1977
ANNUAL SEVEN-DAY MINIMUM	112	May 6	16	Jul 11	12	Jul 13 1977
INSTANTANEOUS PEAK FLOW	--		2390a	May 14	13300b	Jun 15 1935
INSTANTANEOUS PEAK STAGE	--		8.25c	Dec 10	10.80c	Dec 30 1983
ANNUAL RUNOFF (AC-FT)	328800		152800		592200	
10 PERCENT EXCEEDS	1210		457		2090	
50 PERCENT EXCEEDS	257		190		407	
90 PERCENT EXCEEDS	141		32		178	

c Backwater from ice.

YELLOWSTONE RIVER BASIN

06228000 WIND RIVER AT RIVERTON, WY--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1947-58, 1960 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
OCT 27...	1345	131	556	8.6	6.0	13.5	640	1.3	12.2	117
JAN 31...	1100	177	492	8.0	0.0	-20.5	645	0.80	12.3	100
MAR 30...	1100	316	460	8.6	4.0	4.0	646	0.40	11.8	106
MAY 10...	1015	174	276	8.2	14.0	18.0	640	42	9.4	109
JUL 22...	1415	22	545	9.0	27.0	30.0	641	1.0	12.1	182
SEP 15...	1000	188	460	8.5	13.0	14.0	644	36	9.0	101

DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3
OCT 27...	K3	26	210	59	16	42	1	2.6	6	218
JAN 31...	K4	120	200	54	15	24	0.7	2.6	0	240
MAR 30...	<1	K6	190	52	14	22	0.7	2.8	0	213
MAY 10...	370	K2100	99	28	7.0	17	0.7	2.0	0	115
JUL 22...	23	230	160	46	12	53	2	3.5	18	177
SEP 15...	K1200	K1700	180	50	14	28	0.9	3.0	3	216

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

DATE	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
OCT 27...	188	183	99	4.9	0.4	15	320	353	0.44	113
JAN 31...	197	183	65	5.6	0.4	17	271	302	0.37	130
MAR 30...	175	179	64	5.2	0.3	14	281	279	0.38	240
MAY 10...	94	102	41	2.8	0.2	14	174	169	0.24	81.7
JUL 22...	175	171	110	5.4	0.4	13	345	348	0.47	20.5
SEP 15...	182	189	63	3.5	0.4	15	306	287	0.42	155

06228000 WIND RIVER AT RIVERTON, WY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 27...	<0.01	<0.05	0.01	0.2	0.01	<0.01	<0.01	9	3.2	69
JAN 31...	0.04	0.17	0.05	<0.2	0.04	0.02	0.01	85	41	11
MAR 30...	<0.01	<0.05	0.01	<0.2	<0.01	<0.01	<0.01	35	30	54
MAY 10...	<0.01	<0.05	0.01	0.5	0.13	0.03	0.05	126	59	94
JUL 22...	<0.01	<0.05	0.02	0.5	0.02	<0.01	<0.01	11	0.65	47
SEP 15...	<0.01	0.11	0.02	0.3	0.06	<0.01	<0.01	116	59	96

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BARIUM, DIS- SOLVED (UG/L AS BA)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 27...	1345	131	6.0	13.5	10	67	<3	<3
MAR 30...	1100	316	4.0	4.0	<10	60	<3	<3
MAY 10...	1015	174	14.0	18.0	80	38	<3	56
SEP 15...	1000	188	13.0	14.0	10	72	<3	12

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
OCT 27...	15	9	<10	<1	<2	<1.0	350	<6
MAR 30...	13	7	<10	<1	<1	<1.0	280	<6
MAY 10...	<4	6	<10	<1	<1	<1.0	170	<6
SEP 15...	11	6	<10	<1	<1	<1.0	310	<6

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

LOCATION.--Lat 42°58'06", long 109°02'13", in SE¹/₄ SW¹/₄ SE¹/₄ sec.18, T.1 S., R.2 W., Fremont County, Hydrologic Unit 10080002, Wind River Indian Reservation, on right bank 1.9 mi upstream from Washakie Dam and 8.0 mi southwest of Fort Washakie.

DRAINAGE AREA.--90.3 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 6,440 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 9, Oct. 29 to Nov. 3, Nov. 6, 7, Jan. 16, May 9, and June 24. Records good except those for estimated daily discharges, which are poor.

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)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 13	0145	*628	*4.96	No peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	18	18	14	13	13	21	77	519	131	68	41
2	35	18	18	14	13	13	20	73	412	128	89	44
3	34	19	18	13	13	14	21	77	339	124	98	45
4	33	22	18	14	12	17	22	88	349	116	92	43
5	32	18	18	14	12	22	21	152	341	107	87	40
6	32	17	18	14	11	20	22	227	327	105	79	38
7	35	19	18	14	11	17	23	249	312	106	72	36
8	41	21	18	14	11	16	21	275	255	100	67	35
9	41	20	18	14	12	15	22	290	201	91	67	34
10	40	22	19	14	12	15	25	300	167	87	68	32
11	41	21	21	14	12	15	26	367	161	84	67	32
12	40	21	21	14	12	15	29	477	177	83	66	33
13	40	21	19	14	12	16	33	577	205	83	66	38
14	39	22	18	14	12	18	31	531	250	84	66	38
15	37	22	18	14	12	18	30	466	232	80	65	40
16	35	23	18	14	12	19	39	452	199	78	61	39
17	34	21	17	13	12	20	54	374	176	76	57	38
18	35	21	16	13	12	18	80	265	161	73	54	35
19	32	20	16	13	12	19	110	246	173	70	52	34
20	31	21	16	13	12	18	130	255	187	70	51	34
21	30	20	16	13	12	20	174	212	201	69	49	33
22	30	20	16	13	12	21	234	210	280	67	50	32
23	28	19	15	12	12	20	231	250	339	66	50	31
24	27	19	15	12	12	20	185	282	270	66	47	30
25	26	20	15	12	12	22	146	323	225	65	45	29
26	26	19	16	12	12	21	118	373	197	63	43	28
27	23	18	16	12	12	22	100	394	180	63	41	27
28	26	18	16	12	12	21	86	490	159	68	43	26
29	19	19	15	12	---	20	81	401	144	69	42	25
30	17	18	14	12	---	19	76	407	136	67	41	27
31	17	---	14	12	---	20	---	446	---	67	41	---
TOTAL	992	597	529	409	336	564	2211	9606	7274	2606	1884	1037
MEAN	32.0	19.9	17.1	13.2	12.0	18.2	73.7	310	242	84.1	60.8	34.6
MAX	41	23	21	14	13	22	234	577	519	131	98	45
MIN	17	17	14	12	11	13	20	73	136	63	41	25
AC-FT	1970	1180	1050	811	666	1120	4390	19050	14430	5170	3740	2060

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1994, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1977	42.2	94.3	1983	14.5	1989
1978	28.2	48.4	1991	15.7	1989
1979	22.2	30.6	1978	11.8	1977
1980	16.0	25.1	1978	6.05	1977
1981	13.7	26.1	1986	6.72	1977
1982	16.8	34.1	1986	9.60	1977
1983	52.2	94.6	1987	29.2	1982
1984	256	403	1987	132	1994
1985	547	1066	1986	242	1994
1986	299	549	1987	81.0	1988
1987	105	197	1982	30.7	1988
1988	54.7	82.9	1984	20.0	1988

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1977 - 1994
ANNUAL TOTAL	47840	28045	---
ANNUAL MEAN	131	76.8	121
HIGHEST ANNUAL MEAN	---	---	188
LOWEST ANNUAL MEAN	---	---	71.2
HIGHEST DAILY MEAN	818	577	1960
LOWEST DAILY MEAN	11	11	4.5
ANNUAL SEVEN-DAY MINIMUM	12	12	4.5
INSTANTANEOUS PEAK FLOW	---	628	2230
INSTANTANEOUS PEAK STAGE	---	4.96	8.48
ANNUAL RUNOFF (AC-FT)	94890	55630	87850
10 PERCENT EXCEEDS	433	233	359
50 PERCENT EXCEEDS	31	31	37
90 PERCENT EXCEEDS	15	13	14

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.--Estimated daily discharges: Feb. 10 to Mar. 11 and Apr. 18-26. Records good except for estimated discharges, which are poor. Flow regulated by Washakie Reservoir.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	29	18	18	11	11	24	156	431	251	99	39
2	21	34	18	18	11	11	21	125	461	248	96	42
3	22	43	18	15	11	11	21	95	396	247	96	43
4	22	52	18	11	11	11	21	69	345	245	96	42
5	22	52	18	11	11	11	21	43	365	242	96	39
6	22	49	18	11	11	11	21	46	346	239	96	37
7	22	49	18	11	11	11	21	50	315	236	95	35
8	22	49	18	11	11	11	21	53	299	230	93	34
9	22	48	18	11	11	11	21	82	288	226	83	33
10	22	46	18	11	11	19	21	113	222	223	78	31
11	22	42	18	11	11	27	21	116	224	218	75	31
12	22	42	18	11	11	27	21	180	263	213	67	32
13	22	42	18	11	11	27	20	288	262	207	66	36
14	22	42	18	11	11	27	20	374	262	162	66	37
15	23	36	18	11	11	27	20	363	227	133	66	39
16	24	33	18	11	11	27	20	363	264	132	62	38
17	24	29	18	11	11	27	21	363	262	130	58	36
18	24	24	18	11	11	27	40	308	261	127	54	35
19	24	21	18	11	11	27	50	212	259	125	51	33
20	24	18	18	11	11	27	60	150	258	122	50	33
21	24	18	18	11	11	27	110	150	258	121	49	32
22	24	18	18	11	11	26	172	152	258	124	50	32
23	24	18	18	11	11	26	172	153	258	126	50	30
24	24	18	18	11	11	26	172	181	261	125	46	29
25	24	18	18	11	11	26	172	270	260	122	44	29
26	24	18	18	11	10	26	172	312	259	118	42	28
27	24	18	18	11	11	26	172	329	258	114	40	27
28	24	18	18	11	11	26	169	416	258	111	41	26
29	24	18	18	11	---	26	164	408	255	109	41	25
30	24	18	18	11	---	26	160	374	255	104	40	27
31	24	---	18	11	---	26	---	384	---	102	39	---
TOTAL	713	960	558	359	307	675	2141	6678	8590	5232	2025	1010
MEAN	23.0	32.0	18.0	11.6	11.0	21.8	71.4	215	286	169	65.3	33.7
MAX	24	52	18	18	11	27	172	416	461	251	99	43
MIN	21	18	18	11	10	11	20	43	222	102	39	25
AC-FT	1410	1900	1110	712	609	1340	4250	13250	17040	10380	4020	2000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1994, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993	1994	1989	1990	1991	1992	1993	1994
MEAN	26.6	26.8	22.2	15.9	12.4	13.2	30.2	174	454	266	152	96.8
MAX	38.7	40.6	36.7	23.8	14.9	21.8	71.4	215	897	317	264	146
(WY)	1991	1991	1991	1991	1992	1994	1994	1994	1991	1989	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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1989 - 1994
ANNUAL TOTAL	47865	29248	--
ANNUAL MEAN	131	80.1	108
HIGHEST ANNUAL MEAN	--	--	150
LOWEST ANNUAL MEAN	--	--	80.1
HIGHEST DAILY MEAN	789	461	1930
LOWEST DAILY MEAN	12	10	3.5
ANNUAL SEVEN-DAY MINIMUM	12	11	3.6
INSTANTANEOUS PEAK FLOW	--	464	2120
INSTANTANEOUS PEAK STAGE	--	3.58	6.43
ANNUAL RUNOFF (AC-FT)	94940	58010	78090
10 PERCENT EXCEEDS	377	258	293
50 PERCENT EXCEEDS	30	27	32
90 PERCENT EXCEEDS	14	11	9.0

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 1 to June 1. Records good except those for estimated daily discharge, which are poor. Flow is diverted from the South Fork Little Wind River for irrigation. Result of discharge measurements in cubic feet per second, made during the period when the station was not in operation, are given below:

Apr 26 . . . 9.08

Apr 29 . . . 8.74

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	---	---	---	---	---	---	18	337	262	111	34
2	.47	---	---	---	---	---	---	28	328	258	119	36
3	.53	---	---	---	---	---	---	32	314	256	118	36
4	.56	---	---	---	---	---	---	34	291	252	118	37
5	.54	---	---	---	---	---	---	41	299	250	118	34
6	.53	---	---	---	---	---	---	47	293	247	116	31
7	.55	---	---	---	---	---	---	47	284	245	113	30
8	.53	---	---	---	---	---	---	41	291	241	110	34
9	.50	---	---	---	---	---	---	56	290	235	103	44
10	.50	---	---	---	---	---	---	64	249	229	96	42
11	.50	---	---	---	---	---	---	94	226	224	93	41
12	.50	---	---	---	---	---	---	94	269	218	85	43
13	.50	---	---	---	---	---	---	131	272	213	83	42
14	.50	---	---	---	---	---	---	134	271	180	83	41
15	.50	---	---	---	---	---	---	134	245	144	83	43
16	.49	---	---	---	---	---	---	134	280	140	79	43
17	.48	---	---	---	---	---	---	134	279	138	75	43
18	.48	---	---	---	---	---	---	148	275	135	72	44
19	.46	---	---	---	---	---	---	167	272	132	68	45
20	.44	---	---	---	---	---	---	198	270	129	66	45
21	.44	---	---	---	---	---	---	198	268	128	64	45
22	.44	---	---	---	---	---	---	194	274	133	57	45
23	.44	---	---	---	---	---	---	194	280	135	43	43
24	.43	---	---	---	---	---	---	212	284	132	40	38
25	.44	---	---	---	---	---	---	250	285	128	38	32
26	.44	---	---	---	---	---	---	299	280	126	36	32
27	.44	---	---	---	---	---	---	303	279	123	34	31
28	.44	---	---	---	---	---	---	303	275	120	35	30
29	.44	---	---	---	---	---	---	303	271	117	34	30
30	.37	---	---	---	---	---	---	303	268	115	34	32
31	.36	---	---	---	---	---	---	318	---	114	33	---
TOTAL	25.24	---	---	---	---	---	---	4653	8399	5499	2357	1146
MEAN	.81	---	---	---	---	---	---	150	280	177	76.0	38.2
MAX	11	---	---	---	---	---	---	318	337	262	119	45
MIN	.36	---	---	---	---	---	---	18	226	114	33	30
AC-FT	50	---	---	---	---	---	---	9230	16660	10910	4680	2270

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1994, BY WATER YEAR (WY)*

	1989	1990	1991	1992	1993	1994
MEAN	20.6	14.2	---	---	---	---
MAX	40.4	14.2	---	---	---	---
(WY)	1993	1993	---	---	---	---
MIN	.81	14.2	---	---	---	---
(WY)	1994	1993	---	---	---	---

SUMMARY STATISTICS
HIGHEST DAILY MEAN
LOWEST DAILY MEAN
ANNUAL SEVEN-DAY MINIMUM
INSTANTANEOUS PEAK FLOW
INSTANTANEOUS PEAK STAGE
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

FOR 1994 WATER YEAR*

337 Jun 1
.36 Oct 31
337a Jun 1
3.68 Jun 1
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WATER YEARS 1989 - 1994*

377 May 26 1992
.00 Apr 1 1991
.36 Nov 24 1992
444 Jun 23 1990
4.07 Jun 23 1990
270
127
1.2

* During period of operation.
a Observed.

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. 21, 22, 30, 31, Nov. 2, 3, 5-11, and Nov. 14 to Mar. 28. Records fair except those for estimated daily discharges, which are poor. Diversions for irrigation of 80 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	30	23	19	15	17	35	125	389	136	49	35
2	49	25	23	19	16	17	32	123	387	126	70	37
3	48	29	23	19	16	18	32	125	358	117	66	39
4	47	29	22	19	15	22	36	128	334	111	67	40
5	46	25	22	18	14	27	34	153	321	104	69	39
6	45	24	21	18	14	25	34	190	311	101	70	38
7	45	25	22	18	14	22	34	213	297	98	71	37
8	50	25	23	17	13	21	31	274	287	95	69	37
9	50	24	24	18	12	20	32	277	264	93	67	37
10	49	23	24	18	13	20	36	300	234	88	65	35
11	49	24	24	18	14	20	37	337	208	84	64	34
12	50	24	23	18	14	20	40	388	190	80	63	34
13	50	24	23	18	14	21	47	454	179	77	64	35
14	49	24	22	18	14	23	45	450	178	73	62	37
15	48	23	22	18	15	23	41	423	190	71	62	40
16	47	26	22	17	16	24	49	420	208	68	60	42
17	46	29	21	17	17	25	65	403	206	67	58	43
18	46	29	21	17	17	24	98	357	194	64	57	43
19	46	28	21	16	17	25	109	317	178	62	55	43
20	44	28	20	16	17	27	123	309	171	59	53	44
21	42	29	20	16	16	28	137	288	169	57	52	43
22	39	30	20	16	16	28	172	266	188	55	51	42
23	36	28	19	16	16	27	193	265	229	53	49	42
24	35	26	19	16	17	26	182	275	252	52	47	40
25	34	24	19	16	16	27	170	292	247	51	46	39
26	34	21	20	16	15	28	160	317	229	49	43	38
27	32	20	20	16	16	29	146	324	204	47	41	37
28	32	21	19	16	16	30	134	371	182	46	39	36
29	29	22	18	16	---	30	126	386	166	46	37	35
30	27	22	18	15	---	31	124	377	151	46	36	35
31	28	---	18	14	---	32	---	373	---	46	35	---
TOTAL	1323	761	656	529	425	757	2534	9300	7101	2322	1737	1156
MEAN	42.7	25.4	21.2	17.1	15.2	24.4	84.5	300	237	74.9	56.0	38.5
MAX	51	30	24	19	17	32	193	454	389	136	71	44
MIN	27	20	18	14	12	17	31	123	151	46	35	34
AC-FT	2620	1510	1300	1050	843	1500	5030	18450	14080	4610	3450	2290

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1994, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993	1994
MEAN	43.1	30.0	20.5	16.2	15.1	20.9
MAX	64.6	42.5	26.5	22.3	19.2	24.9
(WY)	1990	1990	1990	1991	1993	1994
MIN	13.5	14.7	13.6	8.95	8.52	16.1
(WY)	1989	1989	1989	1989	1989	1990

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1989 - 1994
ANNUAL TOTAL	62767	28601	--
ANNUAL MEAN	172	78.4	117
HIGHEST ANNUAL MEAN	--	--	171
LOWEST ANNUAL MEAN	--	--	76.1
HIGHEST DAILY MEAN	1430	454	2070
LOWEST DAILY MEAN	13	12	6.5
ANNUAL SEVEN-DAY MINIMUM	15	13	7.4
INSTANTANEOUS PEAK FLOW	--	467	2360
INSTANTANEOUS PEAK STAGE	--	5.15	6.20a
ANNUAL RUNOFF (AC-FT)	124500	56730	84560
10 PERCENT EXCEEDS	632	231	316
50 PERCENT EXCEEDS	32	37	39
90 PERCENT EXCEEDS	18	17	15

a At site and datum then in use.

YELLOWSTONE RIVER BASIN

06229680 SAGE CREEK ABOVE NORKOK MEADOWS CREEK, NEAR FORT WASHAKIE, WY

LOCATION.--Lat 43°05'47", long 108°54'29", in NE¹/₄ NW¹/₄ NW¹/₄ sec.5, T.1 N., R.1 W., Fremont County, Hydrologic Unit 10080002, Wind River Indian Reservation, on left bank 60 ft upstream from U.S. Highway 287, 1.5 mi upstream from Norkok Meadows Creek, and 6.9 mi north of Fort Washakie.

DRAINAGE AREA.--118 mi² (at site prior to Oct. 25, 1991).

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

GAGE.--Water-stage recorder. Datum of the gage is 5,660 ft above sea level, from topographic map. Prior to Oct. 25, 1991, at site 1.5 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 30 to Nov. 3, Nov. 6 to Mar. 21, and June 26 to July 13. Records fair, except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	5.4	7.8	2.7	2.4	5.5	5.7	4.4	4.2	1.7	1.3	2.1
2	3.8	5.4	8.0	2.9	2.6	7.0	5.9	4.2	4.3	1.6	1.7	2.3
3	4.1	5.0	8.2	3.2	2.8	8.5	5.9	4.1	5.1	1.6	2.3	2.5
4	4.0	4.9	8.4	3.3	2.7	9.5	6.0	4.0	5.1	1.6	2.2	1.9
5	3.9	5.2	7.2	3.4	2.6	9.5	6.1	4.2	4.9	1.6	2.0	1.5
6	3.8	4.5	6.8	3.3	3.0	9.2	6.7	4.4	4.5	1.7	2.1	1.3
7	4.7	4.5	6.6	3.1	2.8	8.8	6.7	4.2	3.9	1.7	2.0	1.3
8	6.4	4.8	7.4	3.2	2.5	8.0	7.0	4.1	3.5	1.9	1.8	1.3
9	5.4	5.0	8.0	3.5	2.3	7.1	6.8	3.9	3.4	1.8	1.6	1.2
10	5.1	5.0	7.8	3.8	2.7	6.6	7.5	3.7	3.3	1.7	1.8	1.1
11	4.8	4.9	8.2	4.0	2.5	7.5	7.6	3.6	3.2	1.7	1.9	1.2
12	4.8	5.0	7.6	4.0	2.7	6.6	7.3	3.7	2.9	1.8	1.7	1.2
13	4.7	4.7	7.4	3.9	2.9	6.8	7.3	4.0	2.8	1.9	1.8	1.4
14	4.5	4.3	7.0	4.2	3.2	7.0	7.4	4.8	2.8	1.9	1.7	1.4
15	4.5	4.0	6.0	4.4	3.5	6.4	7.0	4.6	2.6	1.9	1.6	1.6
16	4.5	4.0	6.0	4.5	3.4	5.6	7.0	5.3	3.1	1.9	1.4	1.7
17	4.5	4.2	5.2	4.2	3.6	5.0	7.0	7.3	3.8	1.7	1.3	1.7
18	4.6	4.2	4.5	3.8	3.5	4.2	6.8	8.4	4.1	1.5	1.3	1.5
19	4.5	4.2	4.0	3.4	3.4	4.7	4.6	6.4	3.1	1.4	1.2	1.4
20	4.5	4.3	4.0	3.2	3.4	4.7	4.2	5.7	2.6	1.3	1.4	1.4
21	4.6	4.5	3.5	3.0	3.3	4.5	4.2	6.3	2.6	1.4	1.4	1.8
22	4.7	4.4	3.1	2.8	3.2	5.0	4.2	6.0	2.9	1.4	1.4	1.8
23	4.7	4.3	3.3	2.9	3.1	5.6	4.1	5.2	2.8	1.4	1.4	1.9
24	4.7	4.0	3.5	2.7	3.0	5.5	3.9	5.1	3.5	1.6	1.3	1.8
25	4.7	3.5	3.8	2.8	2.5	5.1	4.0	5.3	2.5	1.6	1.3	1.6
26	4.7	4.0	4.0	2.7	2.6	5.2	4.9	5.3	2.1	1.6	1.3	1.6
27	4.7	4.7	3.5	2.6	3.0	5.3	4.9	5.4	2.0	1.6	1.4	1.5
28	4.9	5.4	3.2	2.5	4.0	5.3	4.5	5.4	1.9	1.9	1.6	1.6
29	5.3	6.0	2.7	2.7	---	5.4	4.4	5.2	1.8	1.8	1.6	1.9
30	5.6	7.8	2.5	2.8	---	5.4	4.4	5.1	1.8	1.7	1.8	2.0
31	5.6	---	2.5	2.7	---	5.6	---	4.6	---	1.8	1.9	---
TOTAL	145.1	142.1	171.7	102.2	83.2	196.1	174.0	153.9	97.1	51.7	50.5	48.5
MEAN	4.68	4.74	5.54	3.30	2.97	6.33	5.80	4.96	3.24	1.67	1.63	1.62
MAX	6.4	7.8	8.4	4.5	4.0	9.5	7.6	8.4	5.1	1.9	2.3	2.5
MIN	3.8	3.5	2.5	2.5	2.3	4.2	3.9	3.6	1.8	1.3	1.2	1.1
AC-FT	288	282	341	203	165	389	345	305	193	103	100	96

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1994, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994
MEAN	4.43	5.07	4.69	3.80	4.18
MAX	5.19	7.18	6.04	5.04	5.08
(WY)	1993	1992	1992	1992	1991
MIN	2.82	3.81	2.53	2.12	2.97
(WY)	1991	1991	1991	1991	1994

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1990 - 1994
ANNUAL TOTAL	3594.3	1416.1	---
ANNUAL MEAN	9.85	3.88	9.10
HIGHEST ANNUAL MEAN	---	---	16.7
LOWEST ANNUAL MEAN	---	---	3.88
HIGHEST DAILY MEAN	70	9.5	550
LOWEST DAILY MEAN	2.5	1.1	.50
ANNUAL SEVEN-DAY MINIMUM	3.2	1.2	.60
INSTANTANEOUS PEAK FLOW	---	9.7a	624b
INSTANTANEOUS PEAK STAGE	---	3.67c	7.02d
ANNUAL RUNOFF (AC-FT)	7130	2810	6590
10 PERCENT EXCEEDS	28	6.8	13
50 PERCENT EXCEEDS	4.8	3.9	4.8
90 PERCENT EXCEEDS	3.8	1.6	2.1

a Gage height, 1.96 ft.

b From rating curve extended above 150 ft³/s on basis of culvert indirect measurement of peak flow.

c Backwater from ice.

d At present site and datum; 7.02 ft, from floodmarks, site and datum then in use.

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.

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.--Estimated daily discharges: Nov. 24-26, Jan. 31, and Feb. 9, 12. Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	6.0	4.7	5.0	4.9	4.7	4.8	9.3	12	5.3	4.1	3.8
2	6.9	6.0	4.7	5.0	5.0	4.7	4.7	8.8	11	5.0	4.8	3.8
3	6.9	6.0	4.7	5.0	4.9	4.8	4.9	8.3	10	5.0	4.5	3.7
4	6.9	6.0	4.7	5.0	4.8	4.8	5.0	8.5	10	5.0	4.2	3.7
5	6.9	5.9	4.7	5.0	4.8	4.8	5.0	10	9.8	5.0	3.9	3.6
6	6.9	5.7	4.8	5.0	4.7	4.7	5.0	11	9.2	5.0	3.7	3.6
7	7.3	5.7	5.0	4.8	4.8	4.7	4.9	11	8.9	5.0	3.6	3.6
8	7.5	5.7	5.0	4.7	4.6	4.7	4.8	12	8.6	5.0	3.7	3.6
9	7.2	5.5	5.0	4.7	4.7	4.7	4.8	12	8.6	4.9	3.7	3.5
10	7.2	5.3	5.0	4.6	4.7	4.7	5.2	13	8.5	4.7	3.7	3.5
11	7.2	5.2	5.0	4.5	4.7	4.8	5.0	14	8.2	4.5	3.6	3.5
12	7.2	5.2	5.0	4.5	4.5	4.9	4.9	16	7.9	4.5	3.6	3.5
13	7.0	5.3	4.9	4.5	4.5	4.8	5.0	18	7.7	4.5	3.6	3.6
14	6.6	5.2	4.7	4.5	4.5	5.0	5.0	18	7.5	4.6	3.6	3.6
15	6.6	5.2	4.8	4.7	4.5	4.9	4.9	18	7.8	4.5	3.5	3.6
16	6.6	5.2	4.7	4.7	4.6	4.9	5.0	19	8.4	4.2	3.4	3.6
17	6.6	5.5	4.7	4.7	4.7	5.0	5.3	19	7.7	4.2	3.4	3.6
18	6.6	5.4	4.7	4.6	4.7	4.9	6.3	17	7.1	4.1	3.3	3.6
19	6.5	5.2	4.9	4.7	4.7	5.0	6.8	17	6.7	4.1	3.3	3.7
20	6.4	5.2	5.0	4.7	4.7	4.8	6.9	17	6.4	4.1	3.3	3.7
21	6.4	5.2	5.0	4.5	4.7	4.7	7.4	15	6.3	4.0	3.4	3.8
22	6.5	5.2	4.8	4.5	4.7	5.1	8.7	15	6.7	4.0	3.5	3.8
23	6.4	5.2	4.7	4.5	4.5	4.9	11	14	6.8	4.0	3.4	3.8
24	6.3	4.6	4.7	4.5	4.6	4.8	14	14	6.1	4.0	3.4	3.7
25	6.3	4.2	4.7	4.5	4.5	4.7	14	14	5.9	4.0	3.4	3.7
26	6.3	4.6	4.7	4.6	4.5	4.8	13	14	5.8	4.0	3.4	3.6
27	6.1	4.7	4.7	4.7	4.6	4.8	11	14	5.6	4.0	3.5	3.7
28	6.3	4.7	4.7	4.7	4.6	4.8	10	14	5.5	4.0	3.7	3.6
29	6.1	4.7	4.7	4.8	---	4.7	9.9	13	5.4	4.0	3.7	3.7
30	6.0	4.7	4.7	4.7	---	4.7	9.4	12	5.3	4.0	3.7	3.8
31	6.0	---	4.9	4.8	---	4.7	---	12	---	4.1	3.7	---
TOTAL	206.6	158.2	149.0	145.7	130.7	149.0	212.6	427.9	231.4	137.3	113.3	109.6
MEAN	6.66	5.27	4.81	4.70	4.67	4.81	7.09	13.8	7.71	4.43	3.65	3.65
MAX	7.5	6.0	5.0	5.0	5.0	5.1	14	19	12	5.3	4.8	3.8
MIN	6.0	4.2	4.7	4.5	4.5	4.7	4.7	8.3	5.3	4.0	3.3	3.5
AC-FT	410	314	296	289	259	296	422	849	459	272	225	217

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1994, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994
MEAN	5.49	5.05	4.67	4.40	4.31
MAX	6.66	5.43	5.02	4.70	4.82
(WY)	1994	1993	1992	1991	1990
MIN	3.77	4.12	3.87	3.71	3.44
(WY)	1991	1991	1991	1991	1991

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1990 - 1994
ANNUAL TOTAL	3410.2	2171.3	--
ANNUAL MEAN	9.34	5.95	9.20
HIGHEST ANNUAL MEAN	--	--	14.0
LOWEST ANNUAL MEAN	--	--	5.95
HIGHEST DAILY MEAN	46 May 22	19 May 16, 17	316 Jun 2 1991
LOWEST DAILY MEAN	3.6 Mar 4	3.3 Aug 18-20	3.0 Dec 22 1990
ANNUAL SEVEN-DAY MINIMUM	3.7 Feb 28	3.4 Aug 15	3.3 Feb 14 1991
INSTANTANEOUS PEAK FLOW	--	19 May 15	500a Jun 2 1991#
INSTANTANEOUS PEAK STAGE	--	4.46 May 15	7.49 Jun 2 1991
ANNUAL RUNOFF (AC-FT)	6760	4310	6660
10 PERCENT EXCEEDS	26	10	15
50 PERCENT EXCEEDS	6.0	4.8	5.2
90 PERCENT EXCEEDS	4.3	3.7	3.8

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.

YELLOWSTONE RIVER BASIN

06230190 MILL CREEK ABOVE RAY LAKE OUTLET CANAL, NEAR FORT WASHAKIE, WY

LOCATION.--Lat 42°56'50", long 108°48'29", in SW¹/₄ SE¹/₄ NW¹/₄ sec.30, T.1 S., R.1 E., Fremont County, Hydrologic Unit 10080002, Wind River Indian Reservation, on right bank 70 ft upstream from bridge on secondary road south of U.S. Highway 287, 900 ft upstream from Ray Lake Outlet Canal, and 5.4 mi southeast of Fort Washakie.

DRAINAGE AREA.--15.8 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 5,505 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 3 to Mar. 15. Records good except those for estimated daily discharges, which are poor. Some diversion for irrigation upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	1.5	1.1	1.0	.84	1.3	1.2	1.8	14	12	1.4	1.1
2	2.4	1.5	1.0	1.1	.98	1.5	1.2	2.2	14	11	2.4	1.1
3	1.8	1.5	1.0	1.0	.94	1.6	1.2	5.1	15	12	2.1	1.0
4	1.6	1.3	1.1	1.1	.90	1.7	1.2	2.0	14	12	2.3	.87
5	1.5	.85	1.0	1.1	.99	1.5	1.4	1.9	14	12	1.7	.86
6	1.5	.82	.92	.98	1.1	1.3	1.3	1.7	14	12	1.4	.88
7	2.8	.93	1.0	.90	.93	1.2	1.2	1.7	14	12	2.0	.81
8	2.8	.85	1.1	1.1	.78	1.1	1.1	1.6	15	12	2.1	.81
9	2.2	.98	1.2	.98	.86	1.3	1.1	1.6	18	12	3.3	.83
10	2.0	.91	1.2	.88	1.1	1.4	3.0	1.8	18	10	4.2	.82
11	1.7	.97	1.1	1.1	.99	1.4	2.5	1.9	15	9.5	4.2	.82
12	1.6	1.0	1.3	1.0	.89	1.3	1.8	2.0	15	9.4	2.9	.98
13	1.5	.95	1.1	1.1	1.0	1.6	1.4	2.2	15	8.7	6.9	1.2
14	1.5	.86	.95	1.2	1.1	2.0	1.4	2.1	16	8.7	8.3	1.2
15	1.5	.81	1.0	1.3	1.3	1.2	1.3	2.9	17	7.4	9.2	1.2
16	1.5	.92	.91	1.1	1.2	1.5	1.2	3.1	16	5.1	7.4	1.1
17	1.5	.97	.86	1.2	1.2	1.7	1.3	3.1	16	4.5	5.5	1.0
18	1.4	.88	.79	.96	1.3	1.4	1.3	3.9	15	3.9	5.1	1.0
19	1.4	.92	.74	1.0	1.2	1.5	1.3	6.7	15	3.1	5.2	1.0
20	1.4	.96	.80	1.1	1.1	1.2	1.3	7.4	14	3.6	4.3	1.0
21	1.3	1.0	.88	1.1	1.0	1.3	1.3	6.0	17	2.1	4.3	1.1
22	1.4	.90	.82	1.0	1.1	1.8	1.3	6.1	18	1.5	4.1	1.2
23	1.4	.82	.78	.97	1.3	2.1	1.2	6.2	16	1.3	3.4	1.1
24	1.4	.68	.88	1.1	.98	1.4	1.1	6.9	15	1.3	2.6	.94
25	1.3	.60	.82	1.2	.85	1.4	1.6	9.0	14	1.1	1.3	.80
26	1.3	.69	1.1	1.2	1.0	1.2	2.8	9.5	13	1.0	.88	.77
27	1.3	.80	1.0	1.1	1.1	1.4	2.7	8.7	13	1.0	.78	.76
28	1.4	.90	.94	1.0	1.2	1.4	2.5	11	13	1.1	.83	.76
29	1.5	1.0	.80	1.1	---	1.7	2.5	14	13	1.1	.77	.75
30	1.4	1.3	.86	1.0	---	1.6	2.2	15	13	1.0	.87	.85
31	1.6	---	.94	.96	---	1.3	---	15	---	1.4	.94	---
TOTAL	52.4	29.07	29.99	32.93	29.23	45.3	47.9	164.1	449	194.8	102.67	28.61
MEAN	1.69	.97	.97	1.06	1.04	1.46	1.60	5.29	15.0	6.28	3.31	.95
MAX	3.5	1.5	1.3	1.3	1.3	2.1	3.0	15	18	12	9.2	1.2
MIN	1.3	.60	.74	.88	.78	1.1	1.1	1.6	13	1.0	.77	.75
AC-FT	104	58	59	65	58	90	95	325	891	386	204	57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1994, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994
MEAN	1.53	1.25	.89	.84	.99
MAX	1.94	1.50	1.07	1.06	1.39
(WY)	1991	1991	1992	1994	1992
MIN	1.22	.97	.46	.34	.73
(WY)	1992	1994	1991	1993	1994

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1990 - 1994
ANNUAL TOTAL	1417.39	1206.00	--
ANNUAL MEAN	3.88	3.30	4.35
HIGHEST ANNUAL MEAN	--	--	7.10
LOWEST ANNUAL MEAN	--	--	3.14
HIGHEST DAILY MEAN	50	18	328
LOWEST DAILY MEAN	.40	.60	.21
ANNUAL SEVEN-DAY MINIMUM	.50	.77	.24
INSTANTANEOUS PEAK FLOW	--	21	426
INSTANTANEOUS PEAK STAGE	--	1.79	4.20
ANNUAL RUNOFF (AC-FT)	2810	2390	3150
10 PERCENT EXCEEDS	9.4	12	10
50 PERCENT EXCEEDS	1.5	1.3	1.6
90 PERCENT EXCEEDS	.79	.86	.86

06231000 LITTLE WIND RIVER ABOVE ARAPAHOE, WY

LOCATION.--Lat 42°57'35", long 108°29'51", in NW¹/₄ NW¹/₄ SW¹/₄ sec.23, T.1 S., R.3 E., Fremont County, Hydrologic Unit 10080002, Wind River Indian Reservation, on left bank 0.4 mi southwest of Arapahoe School, 1.2 mi upstream from Popo Agie River, and 5.4 mi downstream from Seventeen Mile Bridge.

DRAINAGE AREA.--660 mi²

PERIOD OF RECORD.--May 1906 to December 1909, May 1911 to November 1918, October 1979 to current year. Prior to October 1979, intermittent record. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Elevation of gage is 4,990 ft above sea level, from topographic map. May 1906 to December 1909, nonrecording gage 300 ft upstream at different datum, and May 1911 to November 1918, nonrecording gage 0.3 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 14 to Mar. 10 and May 1-6. Records good except those for estimated daily discharges, which are poor. Some regulation by Washakie Reservoir, 34 mi upstream, capacity 7,940 acre-ft, and return flow from irrigation. Diversions for irrigation of about 26,000 acres upstream from station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 20	1000	ice jam	*8.90	No peak greater than base discharge.			
May 14	1800	*525	8.81				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	133	70	78	32	81	53	117	159	19	14	8.9
2	123	138	74	81	33	88	52	118	220	20	17	9.6
3	131	139	78	84	34	104	48	111	235	21	16	9.6
4	125	145	76	80	33	125	47	106	164	23	15	9.3
5	119	155	70	82	35	137	50	110	131	24	13	8.9
6	115	149	71	85	32	145	47	115	132	22	13	9.5
7	120	156	72	74	36	132	46	132	106	26	12	9.6
8	159	167	74	76	33	124	44	155	76	27	12	9.2
9	165	159	80	73	31	123	42	192	70	26	13	9.9
10	157	153	83	70	30	124	45	184	54	24	14	10
11	152	149	78	64	29	112	60	205	46	22	16	9.0
12	146	136	83	61	30	95	53	213	40	19	14	9.5
13	141	135	78	63	37	99	48	302	41	18	13	10
14	142	130	74	65	39	84	45	464	35	20	13	11
15	137	120	72	64	41	81	45	456	31	20	13	12
16	137	106	72	66	51	79	41	431	33	19	14	12
17	134	106	72	64	58	76	41	407	35	17	12	12
18	133	98	68	61	63	74	45	359	31	17	11	12
19	134	92	67	62	58	70	59	232	27	14	11	11
20	134	84	77	56	54	67	68	109	31	14	12	11
21	138	76	72	58	53	62	78	56	28	14	12	10
22	143	80	67	57	52	63	92	45	24	16	11	11
23	143	72	66	62	54	70	154	39	30	16	9.9	12
24	143	64	70	58	57	65	204	30	28	15	9.7	12
25	139	55	76	60	54	58	202	25	22	14	9.1	11
26	135	51	84	57	60	58	216	27	23	14	8.9	11
27	135	56	74	53	68	57	207	41	21	15	8.9	13
28	134	62	77	51	75	54	161	71	22	14	9.0	14
29	138	60	78	46	---	58	132	171	21	13	9.2	14
30	134	64	76	39	---	55	129	163	22	13	8.9	15
31	128	---	77	33	---	54	---	145	---	13	8.9	---
TOTAL	4166	3290	2306	1983	1262	2674	2554	5331	1938	569	373.5	327.0
MEAN	134	110	74.4	64.0	45.1	86.3	85.1	172	64.6	18.4	12.0	10.9
MAX	165	167	84	85	75	145	216	464	235	27	17	15
MIN	52	51	66	33	29	54	41	25	21	13	8.9	8.9
AC-FT	8260	6530	4570	3930	2500	5300	5070	10570	3840	1130	741	649

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1994, BY WATER YEAR (WY)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	124	113	83.0	71.5	74.1	93.3	99.5	271	785	316	71.7	57.3			
MAX	264	182	130	101	102	142	159	568	1985	856	234	125			
(WY)	1983	1985	1983	1983	1984	1987	1984	1987	1991	1983	1982	1982			
MIN	34.9	46.9	49.6	42.9	42.0	56.1	31.7	30.4	64.6	18.4	12.0	9.56			
(WY)	1989	1989	1991	1989	1989	1989	1989	1982	1994	1994	1994	1988			

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1980 - 1994
ANNUAL TOTAL	79278	26773.5	--
ANNUAL MEAN	217	73.4	180
HIGHEST ANNUAL MEAN	--	--	344
LOWEST ANNUAL MEAN	--	--	73.4
HIGHEST DAILY MEAN	1880	464	3930
LOWEST DAILY MEAN	47	8.9	6.7
ANNUAL SEVEN-DAY MINIMUM	55	9.0	7.2
INSTANTANEOUS PEAK FLOW	--	525a	4190
INSTANTANEOUS PEAK STAGE	--	8.90b	13.39
ANNUAL RUNOFF (AC-FT)	157200	53110	130300
10 PERCENT EXCEEDS	638	145	354
50 PERCENT EXCEEDS	101	59	86
90 PERCENT EXCEEDS	62	12	33

a Gage height, 8.81 ft.

b Backwater from ice.

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN, DIS- SOLVED (MG/L)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
OCT 26...	1320	16	820	8.4	8.0	11.0	642	12.6	127	26	1.1
MAY 11...	1120	56	334	8.1	11.0	22.0	633	9.4	103	345	52
JUN 08...	1450	20	778	8.4	16.0	18.0	630	9.3	115	34	1.8
AUG 10...	1335	13	1060	8.2	19.0	29.0	638	11.9	154	26	0.91

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)
OCT 26...	1110	108	557	645	12.3	120	8.7	7.0
MAR 23...	1335	71	684	628	10.6	109	9.0	8.0
MAY 25...	1310	394	252	631	9.4	113	8.6	15.0
AUG 09...	1420	70	773	634	12.2	169	8.6	22.0

DATE	TEMPER- ATURE AIR (DEG C)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS P)
OCT 26...	8.5	36	<0.01	<0.05	0.01	<0.2	0.04	0.02
MAR 23...	4.5	<1	0.03	0.17	0.08	0.6	0.09	0.05
MAY 25...	20.0	200	<0.01	<0.05	0.03	0.5	0.08	0.03
AUG 09...	29.0	240	<0.01	<0.05	0.02	0.3	0.06	0.05

06233000 LITTLE POPO AGIE RIVER NEAR LANDER, WY

LOCATION.--Lat 42°43'00", long 108°38'34", in NE¹/₄ SE¹/₄ sec.27, T.32 N., R.99 W., Fremont County, Hydrologic Unit 10080003, on left bank 700 ft downstream from bridge on State Highway 28, 2.5 mi downstream from Red Canyon Creek, and 9.5 mi southeast of post office in Lander.

DRAINAGE AREA.--125 mi².

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

REVISED RECORDS.--WSP 1709: Drainage area.

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

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.

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

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)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 17	0530	393	3.72	May 28	1030	*405	*3.75

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	29	104	348	71	71	27
2	---	---	---	---	---	---	29	98	306	68	80	26
3	---	---	---	---	---	---	28	100	262	66	90	24
4	---	---	---	---	---	---	32	104	252	60	92	24
5	---	---	---	---	---	---	29	120	246	58	78	23
6	---	---	---	---	---	---	29	155	233	57	70	22
7	---	---	---	---	---	---	29	165	220	60	66	21
8	---	---	---	---	---	---	28	198	191	58	66	21
9	---	---	---	---	---	---	29	214	168	53	68	20
10	---	---	---	---	---	---	35	246	150	50	68	20
11	---	---	---	---	---	---	32	272	139	49	64	19
12	---	---	---	---	---	---	33	325	139	47	62	19
13	---	---	---	---	---	---	35	359	142	44	64	22
14	---	---	---	---	---	---	34	355	147	42	62	22
15	---	---	---	---	---	---	33	359	139	41	60	23
16	---	---	---	---	---	---	39	370	136	41	58	23
17	---	---	---	---	---	---	52	367	131	39	58	23
18	---	---	---	---	---	---	62	310	118	37	52	22
19	---	---	---	---	---	---	80	279	116	35	47	22
20	---	---	---	---	---	---	88	276	112	34	50	22
21	---	---	---	---	---	---	98	276	108	33	42	23
22	---	---	---	---	---	---	126	240	124	30	41	23
23	---	---	---	---	---	---	144	252	139	30	42	23
24	---	---	---	---	---	---	179	262	124	30	35	23
25	---	---	---	---	---	---	160	279	110	30	32	23
26	---	---	---	---	---	---	139	294	104	28	29	22
27	---	---	---	---	---	---	122	283	96	44	28	22
28	---	---	---	---	---	---	112	363	86	70	27	22
29	---	---	---	---	---	---	106	325	80	70	25	22
30	---	---	---	---	---	---	100	314	75	68	25	22
31	---	---	---	---	---	---	---	344	---	68	25	---
TOTAL	---	---	---	---	---	---	2071	8008	4741	1511	1677	670
MEAN	---	---	---	---	---	---	69.0	258	158	48.7	54.1	22.3
MAX	---	---	---	---	---	---	179	370	348	71	92	27
MIN	---	---	---	---	---	---	28	98	75	28	25	19
AC-FT	---	---	---	---	---	---	4110	15880	9400	3000	3330	1330

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1971, BY WATER YEAR (WY)

	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	

SUMMARY STATISTICS

ANNUAL MEAN
HIGHEST ANNUAL MEAN
LOWEST ANNUAL MEAN
HIGHEST DAILY MEAN
LOWEST DAILY MEAN

FOR 1994 WATER YEAR*

--
--
--
370 May 16
19 Sep 11, 12

WATER YEARS 1946 - 1971

80.4
131 1965
37.0 1960
1590 Jun 16 1963
12 Jan 20,21, Feb 26
to Mar 2 1960,
Jan 10,11,18,19 1963#
12 Feb 25 1960
2010 Jun 16 1963#
6.64 Jun 16 1963#
58230
213
34
21

ANNUAL SEVEN-DAY MINIMUM

INSTANTANEOUS PEAK FLOW
INSTANTANEOUS PEAK STAGE
ANNUAL RUNOFF (AC-FT)
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

--
405 May 28
3.75 May 28
--
--
--

* During period of operation.

For period of record through 1994.

YELLOWSTONE RIVER BASIN

06233900 POPO AGIE RIVER NEAR ARAPAHOE, WY

LOCATION.--Lat 42°56'47", long 108°30'34", in NE¹/₄ NE¹/₄ SW¹/₄ sec.27, T.1 S., R.3 E., Fremont County, Hydrologic Unit 10080003, Wind River Indian Reservation, on left bank 1.4 mi southwest of Arapahoe School and 3.0 mi upstream from Little Wind River.

DRAINAGE AREA.--796 mi².

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,995.72 ft above sea level.

REMARKS.--Estimated daily discharges: Nov. 16 to Mar. 10. Records good except those for estimated daily discharges, which are poor. Diversions for irrigation of about 36,900 acres upstream from station.

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)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 14	1100	*1,210	*5.98	No peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	160	110	130	48	130	136	320	834	136	67	48
2	126	158	115	130	49	150	136	302	727	139	83	55
3	130	164	120	135	52	180	136	294	573	142	121	57
4	124	176	110	135	49	200	139	299	544	135	142	56
5	122	178	120	130	52	220	145	335	555	117	125	51
6	120	149	110	125	49	230	140	430	517	104	113	47
7	129	155	100	120	55	210	135	484	474	100	98	43
8	201	183	110	110	50	200	133	579	395	101	94	36
9	195	175	120	105	48	180	132	593	325	95	102	32
10	190	183	130	100	46	170	158	667	255	78	100	29
11	177	155	130	98	44	158	186	757	218	71	97	31
12	187	143	125	94	46	160	160	901	202	65	95	33
13	178	140	120	98	54	177	159	1040	257	64	85	36
14	183	151	120	100	60	165	160	1130	271	58	83	41
15	184	135	115	99	72	166	155	1010	293	76	88	47
16	181	145	110	100	88	156	154	989	292	67	82	42
17	173	150	110	99	100	160	175	884	288	50	72	42
18	173	155	104	92	110	153	206	675	247	51	69	43
19	173	150	100	92	120	147	241	489	230	41	75	42
20	169	150	95	86	120	152	279	439	261	41	71	45
21	167	159	92	90	115	146	322	383	247	45	76	47
22	164	158	90	87	110	146	422	310	282	45	65	50
23	166	118	88	94	100	155	529	319	423	47	57	53
24	160	104	88	86	100	141	569	368	372	46	56	55
25	161	90	94	93	95	137	539	433	309	44	52	52
26	158	86	100	88	90	133	496	533	269	44	47	50
27	154	90	110	82	100	134	419	540	224	46	42	61
28	150	95	115	78	115	133	374	735	205	45	42	60
29	162	100	110	74	---	140	359	751	180	59	42	59
30	142	105	110	59	---	140	323	663	147	63	45	58
31	143	---	120	50	---	135	---	711	---	63	47	---
TOTAL	4971	4260	3391	3059	2137	5004	7617	18363	10416	2278	2433	1401
MEAN	160	142	109	98.7	76.3	161	254	592	347	73.5	78.5	46.7
MAX	201	183	130	135	120	230	569	1130	834	142	142	61
MIN	120	86	88	50	44	130	132	294	147	41	42	29
AC-FT	9860	8450	6730	6070	4240	9930	15110	36420	20660	4520	4830	2780

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1994, BY WATER YEAR (WY)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	180	151	122	108	110	149	229	693	1242	515	169	169			
MAX	383	197	165	155	152	209	470	1292	2920	1176	298	331			
(WY)	1983	1984	1984	1984	1992	1987	1987	1980	1986	1983	1983	1982			
MIN	80.0	116	96.6	88.0	76.3	96.9	101	227	347	73.5	40.3	46.7			
(WY)	1989	1993	1991	1981	1994	1982	1989	1990	1994	1994	1988	1994			

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1980 - 1994
ANNUAL TOTAL	124979	65330	--
ANNUAL MEAN	342	179	320
HIGHEST ANNUAL MEAN	--	--	566
LOWEST ANNUAL MEAN	--	--	179
HIGHEST DAILY MEAN	2900	1130	4370
LOWEST DAILY MEAN	72	29	17
ANNUAL SEVEN-DAY MINIMUM	85	34	25
INSTANTANEOUS PEAK FLOW	--	1210	4600a
INSTANTANEOUS PEAK STAGE	--	5.98	9.93
ANNUAL RUNOFF (AC-FT)	247900	129600	231800
10 PERCENT EXCEEDS	1040	405	714
50 PERCENT EXCEEDS	157	129	153
90 PERCENT EXCEEDS	95	48	90

a Gage height, 9.91 ft.

75

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

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

REMARKS.--Estimated daily discharges: Nov. 24 to Mar. 13, June 24, and July 16-18. Records good except those for estimated daily discharges, which are poor. Diversions for irrigation of about 62,900 acres upstream from station. U.S. Bureau of Reclamation satellite telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,200 ft³/s and maximum (*):

EXTREMES FOR CURRENT YEAR:--Peak discharges greater than base discharge of 5,200 ft ³ /s and maximum (%)			
Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 14	1715	*2,130	*5.36
No peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	215	284	240	220	118	330	247	654	1050	182	107	73
2	253	285	210	230	110	360	245	649	1060	175	118	79
3	266	292	200	230	110	380	240	580	920	177	138	78
4	256	304	220	250	110	400	239	541	784	178	161	80
5	252	315	210	240	120	400	252	558	735	166	165	72
6	250	287	200	230	130	375	249	630	689	154	150	65
7	260	275	198	220	130	350	241	792	631	149	134	63
8	322	305	200	210	110	381	246	964	536	151	124	63
9	350	308	210	200	100	420	244	1110	450	147	131	57
10	333	317	240	200	96	530	257	1110	346	130	135	57
11	319	318	220	200	110	440	310	1250	287	116	128	55
12	316	317	240	210	100	370	293	1410	258	105	125	58
13	308	309	230	220	110	300	275	1710	286	100	118	70
14	312	316	220	230	130	291	268	1980	297	85	111	70
15	315	277	210	230	150	293	264	1860	317	93	111	80
16	309	281	200	210	140	282	257	1760	325	100	106	83
17	297	309	200	190	150	276	265	1630	328	94	99	79
18	292	300	200	180	170	278	291	1380	302	84	95	80
19	290	293	190	180	160	265	348	1030	270	75	96	81
20	287	299	180	210	150	268	409	742	286	67	93	81
21	287	314	210	200	170	256	499	581	282	74	95	84
22	287	305	190	180	190	257	631	443	278	74	93	91
23	285	300	180	190	200	276	863	409	414	79	81	98
24	280	270	180	210	220	265	1060	455	470	82	79	102
25	278	240	200	240	180	244	1070	494	340	80	75	101
26	277	220	240	200	230	249	1060	618	296	76	68	102
27	278	210	250	190	270	242	975	669	255	77	64	112
28	275	220	230	180	310	244	860	799	234	79	62	121
29	281	230	230	160	---	250	739	1050	216	87	64	119
30	269	240	220	150	---	254	701	912	196	98	65	120
31	265	---	210	130	---	242	---	911	---	96	68	---
TOTAL	8864	8540	6558	6320	4274	9768	13898	29681	13138	3430	3259	2474
MEAN	286	285	212	204	153	315	463	957	438	111	105	82.5
MAX	350	318	250	250	310	530	1070	1980	1060	182	165	121
MIN	215	210	180	130	96	242	239	409	196	67	62	55
AC-FT	17580	16940	13010	12540	8480	19370	27570	58870	20600	6800	6460	4910

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1994, BY WATER YEAR (WY)

MEAN	321	279	211	185	209	264	368	1110	2359	964	262	260
MAX	728	501	351	302	728	427	1044	2351	5109	2832	699	1323
(WY)	1983	1974	1974	1974	1962	1974	1973	1958	1983	1967	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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1941 - 1994
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ANNUAL TOTAL	208725		110204		--	
ANNUAL MEAN	572		302		567	
HIGHEST ANNUAL MEAN	--		--		1021	1983
LOWEST ANNUAL MEAN	--		--		236	1960
HIGHEST DAILY MEAN	4720	Jun 18	1980	May 14	12800	Jun 17 1963
LOWEST DAILY MEAN	120	Feb 17	55	Sep 11	41	Aug 7 1960
ANNUAL SEVEN-DAY MINIMUM	140	Feb 13	60	Sep 6	46	Aug 5 1960
INSTANTANEOUS PEAK FLOW	--		2130	May 14	14700	Jun 17 1963
INSTANTANEOUS PEAK STAGE	--		5.36	May 14	10.85	Jun 17 1963
ANNUAL RUNOFF (AC-FT)	414000		218600		410800	
10 PERCENT EXCEEDS	1660		631		1420	
50 PERCENT EXCEEDS	286		240		260	
90 PERCENT EXCEEDS	160		81		145	

YELLOWSTONE RIVER BASIN

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	
OCT 27...	1120	293	795	8.3	6.0	4.0	642	11.3	108	22
MAY 10...	1500	1130	295	8.1	17.0	29.0	638	10.2	127	210
JUN 09...	1445	449	526	8.6	18.0	18.0	640	10.4	132	26
AUG 11...	1100	129	1030	8.3	22.0	26.0	640	9.3	128	41

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. 24 to Mar. 14. 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. Satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	564	430	490	520	280	850	391	836	1210	266	213	202
2	602	632	480	540	270	900	398	800	1280	254	266	229
3	643	740	460	560	280	1000	423	704	1110	256	295	236
4	636	752	430	560	270	1100	389	661	970	261	337	239
5	595	817	440	560	290	1200	395	652	882	247	373	234
6	589	756	410	560	290	1200	414	705	843	225	346	231
7	651	737	360	540	310	1100	452	853	777	227	325	228
8	745	737	340	540	270	950	449	939	699	230	303	216
9	800	737	360	520	260	1000	431	1200	621	225	328	216
10	777	743	390	500	250	1200	441	1160	532	217	328	203
11	727	747	460	520	260	1400	480	1540	469	192	312	210
12	733	758	430	520	250	1200	510	1790	426	178	307	221
13	718	736	480	540	270	1000	451	2370	453	181	285	269
14	708	765	450	560	300	850	454	3500	468	183	289	329
15	664	717	430	560	340	743	488	2950	493	186	289	362
16	596	684	410	540	340	695	460	2330	537	197	296	367
17	577	767	400	520	370	682	434	1910	542	197	282	395
18	613	756	390	480	440	661	598	1440	501	178	264	374
19	553	741	380	480	400	633	745	1020	406	167	239	366
20	482	653	380	490	370	611	764	752	399	153	247	358
21	473	671	440	480	390	583	863	665	415	152	242	366
22	464	726	430	480	400	560	1020	523	399	156	243	404
23	459	686	400	490	440	611	1510	469	528	156	219	414
24	450	620	440	494	480	603	1590	504	664	162	213	416
25	438	540	490	550	410	533	1430	525	496	160	209	401
26	430	460	560	480	520	527	1310	647	435	154	204	383
27	422	470	522	460	600	530	1190	721	394	158	189	368
28	413	475	520	440	750	517	1050	769	363	172	184	379
29	439	480	520	400	---	530	964	1110	329	182	186	372
30	467	490	500	350	---	543	900	989	297	189	182	374
31	420	---	500	300	---	468	---	973	---	193	185	---
TOTAL	17848	20023	13692	15534	10100	24980	21394	36007	17938	6054	8180	9362
MEAN	576	667	442	501	361	806	713	1162	598	195	264	312
MAX	800	817	560	560	750	1400	1590	3500	1280	266	373	416
MIN	413	430	340	300	250	468	389	469	297	152	182	202
AC-FT	35400	39720	27160	30810	20030	49550	42430	71420	35580	12010	16230	18570

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1994, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	582	698	479	495	505	658	558	1677	3503	1014	533	515
MAX	783	840	562	565	699	806	713	3445	9354	1344	832	681
(WY)	1991	1991	1992	1991	1992	1994	1994	1991	1991	1991	1993	1991
MIN	393	631	442	356	361	557	398	513	598	195	264	312
(WY)	1993	1993	1994	1993	1994	1991	1992	1990	1994	1994	1994	1994

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1990 - 1994
ANNUAL TOTAL	406320	201112	--
ANNUAL MEAN	1113	551	987
HIGHEST ANNUAL MEAN	--	--	1643
LOWEST ANNUAL MEAN	--	--	551
HIGHEST DAILY MEAN	7540	Jun 18	3500 May 14
LOWEST DAILY MEAN	290	Feb 17	152 Jul 21
ANNUAL SEVEN-DAY MINIMUM	306	Jan 9	156 Jul 20
INSTANTANEOUS PEAK FLOW	--	--	3940 May 14
INSTANTANEOUS PEAK STAGE	--	5.17 May 14	18700 Jun 14 1991
ANNUAL RUNOFF (AC-FT)	805900	398900	715200 9.31 Jun 14 1991
10 PERCENT EXCEEDS	3240	956	1540
50 PERCENT EXCEEDS	591	469	581
90 PERCENT EXCEEDS	353	218	337

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 to July 1991, April to July 1993, May to July 1994.

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

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, 20 mg/L, July 20, 1994.

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, 616 mg/L, May 14; minimum daily mean during period of operation, 20 mg/L, July 20.

SEDIMENT LOADS: Maximum daily during period of operation, 5,820 tons, May 14; minimum daily during period of operation, 8.3 tons, July 20.

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
MAY						
05...	1730	693	19.0	16.5	117	219
12...	1845	1560	16.5	17.5	412	1740
23...	1520	490	16.0	21.5	67	89
JUN						
07...	1520	755	17.0	26.5	41	84
19...	1440	394	20.0	25.0	16	17
JUL						
20...	1615	157	24.5	24.5	19	8.1

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	APRIL			MAY			JUNE		
1	391	---	---	836	164	370	1210	96	314
2	398	---	---	800	159	343	1280	79	273
3	423	---	---	704	133	253	1110	76	228
4	389	---	---	661	112	200	970	70	183
5	395	---	---	652	111	195	882	61	145
6	414	---	---	705	81	154	843	50	114
7	452	---	---	853	109	251	777	42	88
8	449	---	---	939	89	226	699	40	75
9	431	---	---	1200	200	648	621	100	168
10	441	---	---	1160	219	686	532	85	122
11	480	---	---	1540	455	1890	469	61	77
12	510	---	---	1790	466	2250	426	60	69
13	451	---	---	2370	473	3030	453	118	144
14	454	---	---	3500	616	5820	468	249	315
15	488	---	---	2950	563	4480	493	287	382
16	460	---	---	2330	509	3200	537	278	403
17	434	---	---	1910	479	2470	542	219	320
18	598	---	---	1440	379	1470	501	195	264
19	745	---	---	1020	265	730	406	50	55
20	764	---	---	752	168	341	399	21	23
21	863	---	---	665	142	255	415	40	45
22	1020	---	---	523	90	127	399	64	69
23	1510	---	---	469	79	100	528	145	219
24	1590	---	---	504	93	127	664	362	649
25	1430	---	---	525	108	153	496	332	445
26	1310	---	---	647	150	262	435	278	327
27	1190	---	---	721	160	311	394	257	273
28	1050	---	---	769	167	347	363	248	243
29	964	---	---	1110	280	839	329	234	208
30	900	---	---	989	262	700	297	225	180
31	---	---	---	973	229	602	---	---	---
TOTAL	21394	---	---	36007	---	32830	17938	---	6420

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

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JULY			AUGUST			SEPTEMBER		
1	266	216	155	213	---	---	202	---	---
2	254	204	140	266	---	---	229	---	---
3	256	194	134	295	---	---	236	---	---
4	261	183	129	337	---	---	239	---	---
5	247	171	114	373	---	---	234	---	---
6	225	162	98	346	---	---	231	---	---
7	227	153	94	325	---	---	228	---	---
8	230	142	88	303	---	---	216	---	---
9	225	132	80	328	---	---	216	---	---
10	217	122	71	328	---	---	203	---	---
11	192	112	58	312	---	---	210	---	---
12	178	103	50	307	---	---	221	---	---
13	181	93	45	285	---	---	269	---	---
14	183	83	41	289	---	---	329	---	---
15	186	72	36	289	---	---	362	---	---
16	197	62	33	296	---	---	367	---	---
17	197	52	28	282	---	---	395	---	---
18	178	42	20	264	---	---	374	---	---
19	167	31	14	239	---	---	366	---	---
20	153	20	8.3	247	---	---	358	---	---
21	152	---	---	242	---	---	366	---	---
22	156	---	---	243	---	---	404	---	---
23	156	---	---	219	---	---	414	---	---
24	162	---	---	213	---	---	416	---	---
25	160	---	---	209	---	---	401	---	---
26	154	---	---	204	---	---	383	---	---
27	158	---	---	189	---	---	368	---	---
28	172	---	---	184	---	---	379	---	---
29	182	---	---	186	---	---	372	---	---
30	189	---	---	182	---	---	374	---	---
31	193	---	---	185	---	---	---	---	---
TOTAL	6054	---	---	8180	---	---	9362	---	---

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 100800005, 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.

PERIOD OF RECORD.--October 1945 to September 1975, October 1980 to current year.
GAGE.--Water-stage recorder. Elevation of gage is 5,500 feet 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. 24 to Dec. 8, Dec. 14 to Jan. 1, Jan. 7-14, 18, Jan. 22 to Feb. 26, and Aug. 23 to Sept. 30. Records good except those for Oct. 27 to Nov. 23 and Dec. 9-13, which are fair, and those for estimated daily discharges, which are poor. Flow regulated by reservoir system approximately 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	6.4	8.4	4.5	8.0	5.0	11	9.9	7.8	3.5	.12	1.5	.80
2	6.4	6.8	4.7	7.4	5.2	13	9.9	7.4	3.3	.11	4.4	.80
3	6.2	8.0	4.5	7.2	5.4	16	9.8	7.4	3.3	.13	5.4	1.0
4	6.2	8.9	4.5	7.3	5.4	16	9.9	7.3	3.3	.13	12	1.0
5	6.5	7.8	4.9	7.1	5.4	18	9.5	8.7	3.1	.11	6.7	.80
6	6.8	4.5	4.8	7.0	5.2	17	9.5	9.1	2.6	.13	4.2	1.0
7	7.1	5.4	4.7	6.9	5.2	15	9.5	8.2	2.2	.46	2.6	1.0
8	7.2	5.6	4.5	7.6	5.0	14	9.2	7.4	2.0	1.7	2.1	.80
9	7.4	4.8	6.2	7.8	4.7	14	8.9	7.1	2.0	1.7	2.7	.80
10	7.8	5.2	6.7	8.0	5.4	13	9.9	6.7	2.0	1.1	3.2	.60
11	8.0	5.8	6.7	8.0	5.6	13	11	6.5	2.0	.48	3.7	.60
12	7.8	8.3	7.2	7.8	6.0	12	10	6.4	1.9	.21	2.9	.60
13	7.6	7.7	6.2	7.8	6.2	12	9.3	6.6	1.7	.16	2.3	.40
14	7.5	6.9	5.6	8.0	6.6	13	9.1	6.2	1.5	.31	2.3	.60
15	7.5	3.7	5.8	8.3	7.0	13	8.6	5.8	1.5	.62	2.0	.80
16	7.2	5.8	5.6	8.3	7.4	12	8.4	5.5	2.8	.64	1.7	1.0
17	7.4	6.6	5.4	7.7	7.8	12	8.4	5.3	4.3	.56	1.3	1.0
18	7.5	9.0	5.2	7.4	8.2	12	8.5	5.0	4.1	.23	1.0	1.0
19	8.3	8.6	5.0	9.4	8.2	11	8.5	4.9	3.1	.16	.80	1.0
20	7.8	8.3	4.5	8.6	8.2	11	8.6	5.1	2.4	.16	.73	.80
21	6.9	6.9	4.8	8.6	8.2	9.8	8.7	4.8	1.9	.16	.71	.80
22	6.7	7.7	4.3	8.4	8.0	10	8.4	4.7	2.4	.16	.83	.60
23	6.7	3.1	4.4	8.0	8.0	10	8.2	4.5	2.7	.16	.80	.80
24	6.7	3.0	4.6	8.0	7.2	9.3	8.0	4.5	2.4	.16	.80	.80
25	6.9	2.9	5.4	8.2	6.0	9.8	7.9	4.4	1.6	.87	.80	.80
26	7.0	3.0	7.0	8.2	8.0	10	8.2	4.4	1.1	1.2	.80	.60
27	7.3	3.2	7.8	8.2	10	9.3	8.0	4.3	.61	.84	.60	.60
28	7.3	3.7	7.6	7.8	11	9.6	8.2	4.3	.41	.76	.60	.40
29	7.4	4.1	7.4	7.6	---	9.6	8.3	3.9	.29	.91	.60	.40
30	4.1	4.4	7.5	6.0	---	9.5	8.2	3.5	.18	1.2	.80	.40
31	4.9	---	7.8	4.8	---	9.7	---	3.2	---	1.2	.80	---
TOTAL	216.5	178.1	175.8	239.4	189.5	374.6	268.5	180.9	66.19	16.84	71.67	22.60
MEAN	6.98	5.94	5.67	7.72	6.77	12.1	8.95	5.84	2.21	.54	2.31	.75
MAX	8.3	9.0	7.8	9.4	11	18	11	9.1	4.3	1.7	12	1.0
MIN	4.1	2.9	4.3	4.8	4.7	9.3	7.9	3.2	.18	.11	.60	.40
AC-FT	429	353	349	475	376	743	533	359	131	33	142	40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950-1951, 1954, 51 WATER YEAR (WY)												
MEAN	2.47	2.85	1.77	1.78	3.27	5.21	4.33	5.14	5.92	1.75	.95	2.59
MAX	6.98	10.2	6.69	7.72	10.6	13.3	8.95	53.4	48.8	11.5	5.95	14.5
(WY)	1994	1992	1993	1994	1991	1993	1994	1991	1991	1973	1992	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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR			FOR 1994 WATER YEAR			WATER YEARS 1950 - 1994		
ANNUAL TOTAL	2696.87			2000.60			--		
ANNUAL MEAN	7.39			5.48			3.16		
HIGHEST ANNUAL MEAN	--			--			12.4 1991		
LOWEST ANNUAL MEAN	--			--			.25 1955		
HIGHEST DAILY MEAN	80	Jun	5	18	Mar	5	273	Sep	20 1950
LOWEST DAILY MEAN	.20	Aug	25	.11	Jul	2, 5	.00	Several days,	most years
ANNUAL SEVEN-DAY MINIMUM	.37	Aug	23	.13	Jun	30	.00	Several days,	most years
INSTANTANEOUS PEAK FLOW	--			44	Mar	3	1750a	Sep	6 1951
INSTANTANEOUS PEAK STAGE	--			2.58	Mar	3	5.60b	Sep	6 1951
ANNUAL RUNOFF (AC-FT)	5350			3970			2290		
10 PERCENT EXCEEDS	12			9.6			7.0		
50 PERCENT EXCEEDS	6.4			5.6			1.6		
90 PERCENT EXCEEDS	3.0			.61			.00		

a From rating curve extended above 350 ft³/s.

b From floodmarks.

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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.

a Gage height, 7.85 ft.
b Backwater from ice.

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.

DRAINAGE AREA.--7.701 mi².

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

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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1994. BY WATER YEAR (WY)

	1214	1212	1200	1129	1084	1124	1230	1409	2194	2374	1456	1275
MEAN	1214	1212	1200	1129	1084	1124	1230	1409	2194	2374	1456	1275
MAX	2846	2086	2005	2208	2202	2027	2236	2359	7252	8816	2317	2502
(WY)	1983	1959	1959	1958	1958	1974	1974	1984	1991	1967	1965	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

SUMMARY STATISTICS		FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1951 - 1994	
ANNUAL TOTAL	477341			387856		--	
ANNUAL MEAN	1308			1063		1396	
HIGHEST ANNUAL MEAN	--			--		2349	1983
LOWEST ANNUAL MEAN	--			--		612	1961
HIGHEST DAILY MEAN	4900	Jun 24		5490	Mar 29	13200	Jul 7 1967
LOWEST DAILY MEAN	551	Feb 24		494	Sep 25	4.7	Apr 3 1962
ANNUAL SEVEN-DAY MINIMUM	552	Feb 22		509	Sep 24	106	Oct 12 1951
INSTANTANEOUS PEAK FLOW	--			6690	Mar 29	13500	Jul 7 1967
INSTANTANEOUS PEAK STAGE	--			9.48	Mar 29	13.35	Jul 7 1967
ANNUAL RUNOFF (AC-FT)	946800			769300		1011000	
10 PERCENT EXCEEDS	2090			1390		2100	
50 PERCENT EXCEEDS	1100			1070		1180	
90 PERCENT EXCEEDS	583			672		670	

06260000 SOUTH FORK OWL CREEK NEAR ANCHOR, WY

LOCATION.--Lat 43°40'01", long 108°51'18", in sec.28, T.43 N., R.100 W., Hot Springs County, Hydrologic Unit 10080007, on left bank 0.2 mi upstream from normal high-water line of Anchor reservoir, 1.6 mi upstream from Anchor Dam, 2.6 mi southwest of Anchor, and 33 mi west of Thermopolis.

DRAINAGE AREA.--85.5 mi².

PERIOD OF RECORD.--April to May 1932, August 1939 to September 1943 (no winter records except 1941 water year), April 1959 to September 1985, May 1991 to current year.

REVISED RECORDS.--WDR WY-76-1: Drainage area.

GAGE.--Water-stage recorder and concrete flume. Datum of gage is 6,452.11 ft above sea level. See WSP 1916 for history of changes prior to Aug. 11, 1965. Aug. 11, 1965, to Nov. 3, 1968, at present site and datum 1.00 ft higher. Nov. 4, 1968, to June 5, 1970, at site 0.7 mi upstream on left bank at datum 52.36 ft higher. June 6, 1970, to Sept. 30, 1972, at site 0.7 mi upstream on right bank at datum 52.22 ft higher. Oct. 1, 1972, to June 5, 1978, at site 0.7 mi upstream on left bank at datum 52.36 ft higher. June 6, 1978 to Sept. 30, 1985, and May 13, 1991 to Sept. 30, 1994 at present site and datum 1.00 ft higher.

REMARKS.--Estimated daily discharges: Nov. 8 to Apr. 5. Records fair except for estimated discharges, which are poor. No diversion upstream from station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 25	1545	ice jam	*2.80	No peak greater than base discharge.			
May 13	2215	*193	2.56				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	8.8	7.5	3.3	1.7	3.0	7.0	24	53	9.7	10	7.3
2	12	10	6.5	3.5	1.8	4.0	5.8	21	42	9.1	20	7.4
3	12	7.5	8.0	4.0	1.9	5.0	7.0	23	37	8.1	27	9.0
4	12	11	8.5	3.5	1.9	7.0	7.8	23	38	7.2	21	7.7
5	12	8.7	9.0	3.8	1.7	6.5	7.0	26	36	6.6	15	7.3
6	12	12	7.5	3.5	1.8	6.0	6.3	37	34	7.1	16	7.3
7	12	7.2	6.0	3.0	1.9	5.5	5.9	66	28	11	13	7.3
8	13	9.0	6.2	2.5	1.8	5.0	6.7	78	19	13	12	7.3
9	13	17	6.4	2.7	1.5	5.0	7.7	54	15	12	14	7.3
10	13	19	6.0	3.0	1.9	5.5	7.3	73	14	11	14	7.3
11	13	16	6.5	3.2	2.0	6.5	7.4	99	15	9.3	12	7.5
12	12	18	5.5	3.2	1.8	8.5	7.5	115	19	7.9	12	7.3
13	12	22	4.5	2.8	2.0	8.0	11	117	15	8.0	11	7.3
14	12	23	4.0	2.5	2.2	10	12	93	16	8.8	13	7.3
15	12	16	3.5	2.8	2.4	13	10	61	12	12	12	7.3
16	12	10	4.0	3.0	2.6	10	16	61	12	10	9.7	7.3
17	11	9.0	3.5	2.3	2.8	9.0	18	49	13	8.5	8.5	7.3
18	12	15	3.3	2.0	2.7	7.0	33	29	13	7.5	8.0	7.3
19	11	20	3.8	2.2	2.6	8.0	40	46	16	7.3	7.7	7.3
20	11	16	3.5	2.4	2.5	7.0	45	58	15	7.3	7.3	7.3
21	9.5	14	4.0	2.5	2.4	6.0	74	29	15	7.3	7.3	7.3
22	11	17	3.8	2.7	2.3	5.3	89	32	29	7.3	8.0	7.3
23	11	5.0	3.5	2.9	2.5	5.0	58	47	25	7.3	7.4	7.3
24	11	4.5	3.7	2.6	2.7	4.5	33	39	14	7.3	7.3	7.3
25	9.9	4.5	4.0	2.4	3.0	4.0	22	55	13	7.3	7.3	7.2
26	11	5.5	4.5	2.2	2.2	3.7	19	46	12	7.3	7.3	7.3
27	10	7.0	3.5	2.0	2.7	4.0	19	53	12	7.3	7.3	7.3
28	11	8.0	3.0	1.9	3.3	4.5	17	62	12	7.3	7.3	7.3
29	7.1	7.5	2.5	1.8	---	5.0	18	47	11	7.3	7.3	7.2
30	14	8.5	2.8	1.7	---	5.5	22	51	11	7.3	7.3	7.3
31	28	---	3.0	1.6	---	6.0	---	55	---	7.3	7.3	---
TOTAL	375.5	356.7	152.0	83.5	62.6	193.0	639.4	1669	616	261.7	344.3	221.2
MEAN	12.1	11.9	4.90	2.69	2.24	6.23	21.3	53.8	20.5	8.44	11.1	7.37
MAX	28	23	9.0	4.0	3.3	13	89	117	53	13	27	9.0
MIN	7.1	4.5	2.5	1.6	1.5	3.0	5.8	21	11	6.6	7.3	7.2
AC-FT	745	708	301	166	124	383	1270	3310	1220	519	683	439

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1994, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1941	12.0	27.1	1941	6.69	1970
1942	7.52	13.7	1942	3.46	1965
1943	4.93	9.75	1943	1.17	1980
1944	3.56	8.06	1944	.077	1979
1945	3.36	6.99	1945	.19	1980
1946	5.33	15.4	1946	.32	1980
1947	15.4	51.0	1947	1.63	1973
1948	77.7	184	1948	24.7	1968
1949	161	368	1949	20.5	1994
1950	72.7	203	1950	8.44	1994
1951	26.5	122	1951	8.33	1985
1952	17.0	61.8	1952	6.69	1960

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1941 - 1994
ANNUAL TOTAL	12870.4	4974.9	---
ANNUAL MEAN	35.3	13.6	33.7
HIGHEST ANNUAL MEAN	---	---	62.0
LOWEST ANNUAL MEAN	---	---	13.6
HIGHEST DAILY MEAN	310	May 21	729
LOWEST DAILY MEAN	2.5	Dec 29	.00
ANNUAL SEVEN-DAY MINIMUM	3.3	Dec 25	.00
INSTANTANEOUS PEAK FLOW	---	193a	1940b
INSTANTANEOUS PEAK STAGE	---	2.80c	8.73d
ANNUAL RUNOFF (AC-FT)	25530	9870	24410
10 PERCENT EXCEEDS	118	32	101
50 PERCENT EXCEEDS	12	7.5	10
90 PERCENT EXCEEDS	6.2	2.6	2.5

a Gage height, 2.56 ft.

b From rating curve extended above 640 ft³/s on basis of slope-area measurement of peak flow.

c Backwater from ice.

d site and datum then in use.

YELLOWSTONE RIVER BASIN

06260400 SOUTH FORK OWL CREEK BELOW ANCHOR RESERVOIR, WY

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.

DRAINAGE AREA.--131 mi².

PERIOD OF RECORD.--April 1959 to current year (no winter records since 1988).

REVISED RECORDS.--WDR WY-76-1: Drainage area.

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

REMARKS.--Estimated daily discharges: Apr. 1-14. Records good except for estimated discharges, which are poor.

Flow regulated by Anchor Dam. No diversion upstream from station. Result of discharge measurements, in cubic feet per second, made during the period when station was not in operation is given below:

Oct. 5 . . . 7.38
Mar. 22 . . . 1.91

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	1.6	10	43	6.6	5.3	4.6
2	---	---	---	---	---	---	1.8	8.5	45	6.1	17	5.5
3	---	---	---	---	---	---	2.0	21	46	5.3	22	5.6
4	---	---	---	---	---	---	1.6	33	35	4.8	24	7.5
5	---	---	---	---	---	---	1.1	30	34	4.0	23	5.9
6	---	---	---	---	---	---	1.0	29	31	4.4	20	5.5
7	---	---	---	---	---	---	.90	27	29	6.3	12	5.0
8	---	---	---	---	---	---	1.0	27	19	8.9	9.9	4.6
9	---	---	---	---	---	---	1.1	31	12	8.9	11	4.3
10	---	---	---	---	---	---	1.0	51	11	7.6	12	4.2
11	---	---	---	---	---	---	1.1	68	15	5.8	10	3.7
12	---	---	---	---	---	---	1.2	87	20	4.6	9.4	4.5
13	---	---	---	---	---	---	1.3	112	19	4.6	9.5	5.0
14	---	---	---	---	---	---	4.0	145	18	4.9	9.7	5.1
15	---	---	---	---	---	---	7.9	120	13	8.2	10	5.6
16	---	---	---	---	---	---	6.7	99	12	7.3	8.7	6.9
17	---	---	---	---	---	---	6.2	77	13	4.5	6.9	4.9
18	---	---	---	---	---	---	6.7	39	12	3.5	6.7	4.6
19	---	---	---	---	---	---	6.9	24	18	3.3	6.4	4.4
20	---	---	---	---	---	---	6.5	49	18	3.9	6.1	4.9
21	---	---	---	---	---	---	9.3	50	19	3.1	5.7	5.0
22	---	---	---	---	---	---	14	29	25	2.5	6.5	4.8
23	---	---	---	---	---	---	20	35	34	2.2	6.5	3.7
24	---	---	---	---	---	---	21	35	23	2.7	5.2	3.6
25	---	---	---	---	---	---	21	36	18	3.7	4.8	3.5
26	---	---	---	---	---	---	18	39	13	3.2	4.3	3.5
27	---	---	---	---	---	---	17	54	12	3.1	4.0	3.6
28	---	---	---	---	---	---	15	59	9.1	2.8	4.5	3.6
29	---	---	---	---	---	---	14	50	8.0	2.9	4.6	3.5
30	---	---	---	---	---	---	11	37	7.3	2.6	4.8	4.2
31	---	---	---	---	---	---	---	37	---	2.5	4.7	---
TOTAL	---	---	---	---	---	---	221.90	1548.5	631.4	144.8	295.2	141.3
MEAN	---	---	---	---	---	---	7.40	50.0	21.0	4.67	9.52	4.71
MAX	---	---	---	---	---	---	21	145	46	8.9	24	7.5
MIN	---	---	---	---	---	---	.90	8.5	7.3	2.2	4.0	3.5
AC-FT	---	---	---	---	---	---	440	3070	1250	287	586	280

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

	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
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																		

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR*	WATER YEARS 1959 - 1988
ANNUAL MEAN	---	---	22.1
HIGHEST ANNUAL MEAN	---	---	35.9
LOWEST ANNUAL MEAN	---	---	11.3
HIGHEST DAILY MEAN	63 Jul 31	145 May 14	303 Jun 12 1991#
LOWEST DAILY MEAN	.29 Apr 21	.90 Apr 7	.00 Several days, most years#
ANNUAL SEVEN-DAY MINIMUM	.33 Apr 11	1.0 Apr 5	.00 most years#
INSTANTANEOUS PEAK FLOW	---	157 May 13	373a May 26 1967#
INSTANTANEOUS PEAK STAGE	---	3.28 May 13	4.02 Jun 11 1991#
ANNUAL RUNOFF (AC-FT)	---	---	16040
10 PERCENT EXCEEDS	56	38	76
50 PERCENT EXCEEDS	44	7.3	5.8
90 PERCENT EXCEEDS	.58	2.7	.00

* During period of operation.

For period of record through 1994.

a Gage height, 3.64 ft.

06262300 NORTH FORK OWL CREEK ABOVE BASIN RANCH, NEAR ANCHOR, WY

LOCATION.--Lat 43°41'21", long 108°50'24", in NW¹/₄ SW¹/₄ SE¹/₄ sec.15, T.43 N., R.100 W., Hot Springs County, Hydrologic Unit 10080007, on right bank 0.1 mi downstream from Anchor Dam road, 1.1 mi southwest of Anchor, and 32 mi west of Thermopolis.

DRAINAGE AREA.--61 mi², approximately.

PERIOD OF RECORD.--April 1962 to September 1975 (discharge measurements only in 1973 and no winter records 1974), April 1991 to current year. Published as "below Cup Creek, near Anchor" 1962-67.

GAGE.--Water-stage recorder. Elevation of gage is 6,340 ft above sea level, from topographic map. Prior to Oct. 1, 1967 at site 0.1 mi upstream at different datum. Oct. 1, 1967 to Sept. 5, 1972 at site 0.5 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 6-15, Nov. 27 to Apr. 5, and Aug. 15 to Sept. 13. Records poor. Several small reservoirs upstream from station used for storage of stock and irrigation water. Diversion upstream from station into H.D. Ranch ditch for irrigation of about 820 acres downstream from station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 160 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr 21	2030	*50	*3.45	No peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	5.8	2.8	.95	.80	2.8	9.0	6.6	2.2	.00	.03	1.0
2	4.3	6.9	2.5	1.0	.85	4.0	10	6.0	1.8	.00	1.9	3.0
3	4.3	10	2.3	.97	.90	5.0	13	7.1	1.5	.00	11	3.5
4	3.3	5.8	2.6	.95	.90	6.9	11	6.6	1.4	.00	7.9	4.0
5	2.3	7.8	2.8	.97	.85	6.0	7.0	13	1.2	.00	5.3	2.0
6	2.8	8.8	2.1	1.0	.90	5.5	5.2	19	1.2	.00	1.4	1.1
7	5.0	11	2.3	.95	1.0	5.0	5.2	19	1.1	.00	.78	.90
8	6.6	10	2.5	.90	.80	4.7	4.8	23	.31	.00	1.1	.80
9	4.7	11	2.8	.95	.70	4.5	5.0	19	.04	.00	1.8	.75
10	4.6	11	2.7	1.0	.90	5.1	6.1	22	.03	.00	1.9	.75
11	6.0	9.6	3.0	1.0	1.0	6.0	5.2	23	.03	.00	1.5	.90
12	5.8	10	2.4	1.0	.90	5.5	8.8	24	.04	.00	3.6	1.1
13	5.5	12	2.2	1.1	1.2	6.5	18	20	.04	.00	1.6	1.0
14	6.9	12	1.9	1.1	1.5	7.5	14	15	.03	.00	.45	.97
15	7.8	11	1.4	1.2	1.7	7.0	11	12	.03	.00	.30	1.3
16	7.4	6.9	1.6	1.3	1.8	8.0	23	10	.06	.00	.20	1.2
17	7.0	6.6	1.3	1.1	2.0	7.0	33	6.4	.06	.00	.10	1.1
18	6.9	10	1.2	1.0	1.9	6.5	33	5.8	.05	.00	.04	1.1
19	7.4	12	1.4	1.1	1.8	6.8	29	6.2	.03	.00	.00	1.1
20	7.1	8.7	1.1	1.2	1.7	5.7	27	8.5	.02	.00	.00	1.2
21	5.5	7.9	1.3	1.1	1.6	5.0	31	5.0	.03	.00	.00	1.4
22	7.2	12	1.2	1.3	1.5	6.0	27	4.5	.07	.00	.00	1.6
23	6.3	11	1.0	1.4	1.8	5.8	17	4.3	.05	.00	.00	1.3
24	6.5	8.2	1.1	1.3	2.0	5.0	11	3.2	.02	.00	.00	1.3
25	6.1	4.1	1.2	1.1	2.2	4.4	8.7	3.5	.00	.00	.00	1.3
26	6.5	1.1	1.3	1.0	1.5	4.0	4.9	2.2	.00	.00	.00	1.3
27	4.9	2.0	1.1	.90	1.9	4.3	4.1	2.8	.00	.00	.00	1.3
28	7.5	3.0	1.0	.85	3.0	4.6	3.9	3.2	.00	.00	.00	1.3
29	4.1	2.8	.90	.80	---	4.9	4.6	2.3	.00	.00	.00	1.2
30	7.2	3.2	.95	.80	---	5.0	4.4	2.3	.00	.00	.00	1.6
31	7.8	---	1.0	.75	---	7.5	---	2.4	---	.00	.00	---
TOTAL	179.6	242.2	54.95	32.04	39.60	172.5	394.9	307.9	11.34	0.00	40.90	42.37
MEAN	5.79	8.07	1.77	1.03	1.41	5.56	13.2	9.93	.38	.0000	1.32	1.41
MAX	7.8	12	3.0	1.4	3.0	8.0	33	24	2.2	.00	11	4.0
MIN	2.3	1.1	.90	.75	.70	2.8	3.9	2.2	.00	.00	.00	.75
AC-FT	356	480	109	64	79	342	783	611	22	.00	81	84

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1994, BY WATER YEAR (WY)

	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	3.37	2.88	1.98	1.34	2.22	5.31	14.3	41.6	65.0	17.4	5.84	4.32																					
MAX	7.67	8.07	4.21	3.97	4.39	18.8	54.0	100	139	56.5	19.2	15.8																					
(WY)	1972	1994	1993	1993	1993	1972	1962	1963	1963	1975	1968	1991																					
MIN	.000	.043	.24	.031	.000	1.76	3.51	9.93	.38	.000	.30	.000																					
(WY)	1965	1967	1967	1967	1966	1967	1966	1994	1994	1994	1966	1964																					

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1962 - 1994
ANNUAL TOTAL	5583.05	1518.30	--
ANNUAL MEAN	15.3	4.16	13.0
HIGHEST ANNUAL MEAN	--	--	24.4
LOWEST ANNUAL MEAN	--	--	4.16
HIGHEST DAILY MEAN	100 May 28	33 Apr 17,18	430 Jun 5 1968
LOWEST DAILY MEAN	.06 May 1	.00 Jun 25 to Jul 31, Aug 19-31	.00 Many days, several years
ANNUAL SEVEN-DAY MINIMUM	.83 Apr 27	.00 Jun 25	.00 Aug 6 1964
INSTANTANEOUS PEAK FLOW	--	50 Apr 21	1370a Jun 15 1963
INSTANTANEOUS PEAK STAGE	--	3.45 Apr 21	--
ANNUAL RUNOFF (AC-FT)	11070	3010	9450
10 PERCENT EXCEEDS	57	10	44
50 PERCENT EXCEEDS	6.6	1.9	4.2
90 PERCENT EXCEEDS	2.7	.00	.20

YELLOWSTONE RIVER BASIN

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)
NOV 25...	1330	1100	717	662	12.2	102	8.5	2.0
MAR 22...	1100	772	804	647	10.8	105	8.4	7.0
JUN 13...	1120	1080	752	643	9.7	122	8.5	18.0
AUG 23...	1040	1030	805	656	11.7	147	8.4	19.0

DATE	TEMPER- ATURE AIR (DEG C)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
NOV 25...	-16.5	100	<0.01	0.13	0.02	<0.2	<0.01	<0.01
MAR 22...	9.0	200	0.02	<0.05	0.02	0.3	0.03	<0.01
JUN 13...	25.0	34	<0.01	<0.05	0.01	0.3	<0.01	<0.01
AUG 23...	18.0	170	<0.01	<0.05	0.02	0.2	<0.01	0.02

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 6 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 5,680 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 4 to Mar 15, July 22 to Aug. 3 and Aug. 20-23. Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	8.0	3.5	1.8	.85	2.5	8.9	14	9.4	7.4	1.2	.19
2	4.8	10	3.0	1.5	.90	3.5	9.4	12	8.7	7.1	1.1	.25
3	4.6	7.7	3.8	1.8	.95	4.5	11	12	8.5	6.8	1.2	.47
4	4.4	7.0	4.0	1.4	.95	6.0	11	12	8.4	6.9	1.8	.44
5	4.4	8.5	4.4	1.7	.90	5.5	5.5	16	7.4	4.0	1.8	.41
6	4.4	9.5	3.5	1.4	.95	5.0	5.3	20	7.0	5.2	1.9	.25
7	6.5	9.5	3.1	1.2	1.1	4.7	5.8	18	6.9	12	1.9	.24
8	7.3	9.0	3.3	1.1	.90	4.4	5.2	22	7.1	3.7	1.8	.18
9	5.7	8.5	3.5	1.2	1.2	4.0	5.5	20	7.5	1.6	1.8	.17
10	5.3	9.0	3.1	1.3	1.3	5.0	6.7	20	7.2	1.0	1.7	.10
11	5.1	9.0	3.6	1.3	1.3	7.0	5.5	20	5.0	.84	1.6	.03
12	4.9	8.0	2.8	1.3	1.1	6.5	7.2	23	4.3	.72	1.6	.00
13	4.9	10	2.4	1.2	1.3	8.0	11	23	4.5	1.3	1.5	.00
14	7.1	11	2.1	1.3	1.5	11	11	20	4.1	3.2	1.5	.00
15	7.0	7.0	1.8	1.5	1.8	10	7.4	18	3.7	2.4	1.4	.00
16	7.1	4.7	2.6	1.6	1.9	12	13	19	4.6	1.4	1.4	.00
17	8.7	4.0	2.4	1.3	2.0	12	18	18	4.2	1.1	1.3	.00
18	5.8	7.0	2.2	1.0	1.9	8.6	22	16	3.3	1.2	1.2	.00
19	5.3	9.0	2.5	1.2	1.8	9.2	22	15	2.7	1.2	1.2	.00
20	5.2	6.5	1.9	1.3	1.7	6.9	23	16	2.3	1.2	1.0	.00
21	4.3	6.0	2.3	1.3	1.6	6.1	23	13	2.5	1.2	.80	.00
22	5.1	8.5	2.2	1.4	1.5	7.5	27	12	3.6	1.0	.90	.11
23	4.9	8.0	1.7	1.5	1.7	7.2	24	12	4.8	.90	.28	.21
24	4.5	4.2	1.9	1.6	1.9	5.5	21	11	3.1	1.0	.24	.17
25	4.3	1.7	2.2	1.4	2.1	4.6	20	11	2.4	1.1	.20	.00
26	4.6	2.0	2.4	1.2	1.4	4.3	14	10	2.5	.80	.15	.00
27	3.9	2.8	1.9	1.1	1.8	4.5	14	9.9	2.8	.70	.08	.00
28	5.0	3.8	1.7	1.0	2.8	4.8	13	9.3	3.0	.60	.02	.00
29	6.9	3.5	1.4	.90	---	5.3	12	8.9	3.5	.55	.00	.00
30	7.9	4.0	1.6	.85	---	5.3	12	8.8	4.9	.52	.00	.02
31	8.7	---	1.9	.80	---	7.2	---	9.1	---	.50	.00	---
TOTAL	173.5	207.4	80.7	40.45	41.10	198.6	394.4	469.0	149.9	79.13	32.57	3.24
MEAN	5.60	6.91	2.60	1.30	1.47	6.41	13.1	15.1	5.00	2.55	1.05	.11
MAX	8.7	11	4.4	1.8	2.8	12	27	23	9.4	12	1.9	.47
MIN	3.9	1.7	1.4	.80	.85	2.5	5.2	8.8	2.3	.50	.00	.00
AC-FT	344	411	160	80	82	394	782	930	297	157	65	6.4

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1994, BY WATER YEAR (WY)

	1993	1994	1993	1994	1993	1994	1993	1994	1993	1994	1993	1994
MEAN	5.60	6.91	2.60	1.30	1.47	6.41	9.29	43.9	30.5	10.2	4.55	2.85
MAX	5.60	6.91	2.60	1.30	1.47	6.41	13.1	72.8	55.9	17.8	8.05	5.59
(WY)	1994	1994	1994	1994	1994	1994	1994	1993	1993	1993	1993	1993
MIN	5.60	6.91	2.60	1.30	1.47	6.41	5.43	15.1	5.00	2.55	1.05	.11
(WY)	1994	1994	1994	1994	1994	1994	1993	1994	1994	1994	1994	1994

SUMMARY STATISTICS

	FOR 1994 WATER YEAR	WATER YEARS 1993 - 1994
ANNUAL TOTAL	1869.99	---
ANNUAL MEAN	5.12	5.12
HIGHEST ANNUAL MEAN	---	5.12 1994
LOWEST ANNUAL MEAN	---	5.12 1994
HIGHEST DAILY MEAN	27	160 May 5 1993
LOWEST DAILY MEAN	.00	.00 Aug 29-31, Sep 12-21, Sep 25-29 1994
ANNUAL SEVEN-DAY MINIMUM	.00	.00 Sep 12 1994
INSTANTANEOUS PEAK FLOW	34a	510 May 5 1993
INSTANTANEOUS PEAK STAGE	2.30	4.13 May 5 1993
ANNUAL RUNOFF (AC-FT)	3710	3710
10 PERCENT EXCEEDS	12	30
50 PERCENT EXCEEDS	3.5	5.4
90 PERCENT EXCEEDS	.36	.90

a Gage height, 1.06 ft.

b Backwater from ice, high-water mark found on Jan. 21 but occurred sometime in December or January.

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: Oct. 8-19, Nov. 27 to Dec. 14, and Dec. 18 to Mar. 4. Records good 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1560	1380	1500	1200	950	1100	1870	1320	1340	626	578	570
2	1620	1400	1400	1200	950	1150	1130	1180	1330	620	514	590
3	1660	1490	1400	1300	860	1200	1070	1030	1230	622	489	637
4	1700	1700	1400	1300	800	1200	1090	976	1260	629	585	632
5	1740	1890	1400	1200	750	1230	1110	997	1330	681	825	632
6	1750	1870	1400	1100	740	1190	1140	1110	1320	647	936	605
7	2160	1850	1300	1100	700	1120	1120	1380	1210	1560	770	521
8	3410	1870	1300	1200	590	1070	1090	1620	1170	1380	691	522
9	3040	1870	1300	1200	560	1020	1090	1860	1270	1150	632	529
10	3500	1810	1300	1200	600	1020	1130	2020	1150	1070	577	545
11	3190	1580	1300	1200	700	1030	991	2240	1080	951	545	533
12	2800	1350	1400	1200	800	1020	943	2630	1030	806	521	525
13	2730	1350	1400	1200	840	1010	939	2910	1050	683	506	548
14	2700	1340	1400	1200	880	999	939	3080	995	579	547	644
15	2580	1320	1390	1200	900	990	939	2400	1150	590	590	2050
16	2580	1320	1390	1300	940	979	921	2180	1160	735	525	1690
17	2490	1460	1400	1100	960	966	911	2360	1160	872	493	1060
18	2410	1490	1350	1100	980	958	875	2020	1100	875	458	997
19	2250	1460	1300	1100	940	1030	775	1980	1100	704	480	940
20	1960	1410	1300	1100	900	998	907	2470	1100	623	517	976
21	1940	1440	1300	1100	860	993	933	2130	1010	587	566	845
22	1940	1450	1300	1100	820	980	1040	1640	973	580	616	839
23	1950	1350	1200	1100	780	1020	1480	1550	1090	549	571	858
24	1960	1250	1200	1100	740	1030	1980	1520	1100	554	537	852
25	1950	1220	1200	1200	700	1030	2060	1490	939	596	523	796
26	1890	1230	1200	1100	680	1010	2070	1540	858	527	535	727
27	1780	1300	1200	1000	800	1010	2110	1400	822	547	518	686
28	1480	1400	1200	1000	900	999	1960	1380	695	584	513	681
29	1390	1500	1200	950	---	4460	1750	1360	622	534	578	697
30	1330	1500	1200	950	---	6280	1570	1260	609	486	580	768
31	1350	---	1200	950	---	2940	---	1230	---	564	555	---
TOTAL	66790	44850	40730	35250	22620	43032	37933	54263	32253	22511	17871	23495
MEAN	2155	1495	1314	1137	808	1388	1264	1750	1075	726	576	783
MAX	3500	1890	1500	1300	980	6280	2110	3080	1340	1560	936	2050
MIN	1330	1220	1200	950	560	958	775	976	609	486	458	521
AC-FT	132500	88960	80790	69920	44870	85350	75240	107600	63970	44650	35450	46600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1994, BY WATER YEAR (WY)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984-1994, BY WATER YEAR (WY)												
MEAN	1547	1480	1312	1194	1210	1358	1279	2242	3536	1619	945	1218
MAX	2346	2439	1933	1975	1644	2118	2302	4030	11210	3964	2105	2082
(WY)	1984	1984	1985	1992	1992	1986	1986	1984	1991	1986	1984	1991
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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1984 - 1994
ANNUAL TOTAL	682036	441598	--
ANNUAL MEAN	1869	1210	1578
HIGHEST ANNUAL MEAN	--	--	2291
LOWEST ANNUAL MEAN	--	--	800
HIGHEST DAILY MEAN	11000	6280	16600
LOWEST DAILY MEAN	500	458	276
ANNUAL SEVEN-DAY MINIMUM	595	514	292
INSTANTANEOUS PEAK FLOW	--	7720a	19500
INSTANTANEOUS PEAK STAGE	--	10.00b	10.49
ANNUAL RUNOFF (AC-FT)	1353000	875900	1143000
10 PERCENT EXCEEDS	4250	1950	2460
50 PERCENT EXCEEDS	1300	1100	1250
90 PERCENT EXCEEDS	805	578	677

a Gage height, 7.12 ft.

b Backwater from ice.

YELLOWSTONE RIVER BASIN

89

06274300 BIGHORN RIVER AT BASIN, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)
NOV 25...	1105	1200	980	665	12.4	99	8.5	0.5
MAR 22...	1400	949	1070	638	10.3	104	8.5	8.0
JUN 13...	1520	1010	934	652	9.4	122	8.4	20.0
AUG 23...	1355	600	1160	668	11.5	148	8.5	21.0

DATE	TEMPER- ATURE AIR (DEG C)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
NOV 25...	-21.0	K20	0.01	0.28	0.03	0.3	0.02	<0.01
MAR 22...	10.5	K5	0.02	0.20	0.02	0.5	0.08	<0.01
JUN 13...	21.0	440	0.01	0.73	0.03	0.8	0.20	0.02
AUG 23...	29.0	120	0.02	1.00	0.01	0.5	0.09	0.02

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

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.

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.--No estimated daily discharges. Records good. 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 measurement, in cubic feet per second, made during the period when station was not in operation, are given below:

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	73	193	692	474	455	362
2	---	---	---	---	---	---	64	221	658	509	484	349
3	---	---	---	---	---	---	67	277	620	540	571	332
4	---	---	---	---	---	---	63	316	609	561	614	322
5	---	---	---	---	---	---	50	370	631	571	550	308
6	---	---	---	---	---	---	53	423	582	593	509	316
7	---	---	---	---	---	---	48	535	582	556	484	308
8	---	---	---	---	---	---	48	603	504	653	479	300
9	---	---	---	---	---	---	51	525	450	614	499	308
10	---	---	---	---	---	---	53	540	423	593	497	320
11	---	---	---	---	---	---	51	609	450	582	450	324
12	---	---	---	---	---	---	50	625	504	577	469	328
13	---	---	---	---	---	---	50	636	499	571	465	336
14	---	---	---	---	---	---	50	609	620	598	465	315
15	---	---	---	---	---	---	46	587	479	603	462	149
16	---	---	---	---	---	---	46	577	432	535	460	223
17	---	---	---	---	---	---	47	603	432	499	460	240
18	---	---	---	---	---	---	120	499	427	504	445	226
19	---	---	---	---	---	---	135	577	479	530	441	216
20	---	---	---	---	---	---	168	686	479	540	430	209
21	---	---	---	---	---	---	247	577	499	525	427	206
22	---	---	---	---	---	---	254	535	556	504	432	199
23	---	---	---	---	---	---	250	620	418	484	418	183
24	---	---	---	---	---	---	233	631	392	504	401	177
25	---	---	---	---	---	---	226	698	401	489	412	174
26	---	---	---	---	---	---	110	675	362	479	414	163
27	---	---	---	---	---	---	95	692	370	484	414	154
28	---	---	---	---	---	---	91	692	383	494	409	149
29	---	---	---	---	---	---	97	614	418	499	409	152
30	---	---	---	---	---	---	160	603	441	469	403	154
31	---	---	---	---	---	---	---	681	---	455	387	---
TOTAL	---	---	---	---	---	---	3096	17029	14792	16589	14215	7502
MEAN	---	---	---	---	---	---	103	549	493	535	459	250
MAX	---	---	---	---	---	---	254	698	692	653	614	362
MIN	---	---	---	---	---	---	46	193	362	455	387	149
AC-FT	---	---	---	---	---	---	6140	33780	29340	32900	28200	14880

	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	

WATER YEARS 1931 - 1971**

ANNUAL MEAN		333	1957	
HIGHEST ANNUAL MEAN		566	1940	
LOWEST ANNUAL MEAN		130		
HIGHEST DAILY MEAN		6770	Jun 6	1957
LOWEST DAILY MEAN		13	Apr 18	1989#
ANNUAL SEVEN-DAY MINIMUM		20	Feb 25	1960
INSTANTANEOUS PEAK FLOW		13600a	Jun 15	1963#
INSTANTANEOUS PEAK STAGE		3.64	May 28	9.20b Jun 15 1963#
ANNUAL RUNOFF (AC-FT)		241200		
10 PERCENT EXCEEDS		800		
50 PERCENT EXCEEDS		130		
90 PERCENT EXCEEDS		55		

b From floodmark.

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.

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

REVISÉD 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. 30 to Apr. 4, Apr. 17-23, and Aug. 25 to Sept. 20. Records fair except those for estimated daily 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 (*):

EXTREMES FOR CURRENT YEAR: Peak discharges greater than base discharge of 400 ft ³ /s and maximum ():				Discharge			
Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 13	0300	*438	*4.74	No other peak greater than base discharge.			

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	5.6	3.6	3.3	2.7	2.1	2.6	8.2	92	20	11	6.2
2	9.2	5.6	3.6	3.4	2.6	2.2	2.7	6.8	74	18	10	6.1
3	8.0	5.4	3.6	3.5	2.5	2.2	2.8	6.7	63	19	10	6.1
4	7.6	5.2	3.5	3.5	2.4	2.2	3.0	9.0	61	19	10	6.0
5	8.1	5.2	3.4	3.3	2.4	2.2	3.0	9.7	61	18	10	5.9
6	8.5	5.2	3.4	3.0	2.3	2.2	3.0	32	49	18	10	5.9
7	9.4	5.1	3.4	2.6	2.1	2.2	3.1	64	45	19	10	5.8
8	11	4.7	3.5	2.6	2.0	2.2	3.0	101	48	25	9.6	5.8
9	9.4	4.5	3.7	2.6	1.9	2.1	2.9	150	46	28	9.4	5.7
10	9.3	4.5	3.7	2.7	2.0	2.0	2.9	184	48	23	9.4	5.5
11	9.0	4.4	3.7	2.9	2.0	2.0	2.8	227	45	20	9.1	5.4
12	9.1	4.2	3.7	3.0	2.1	2.0	2.8	285	43	20	9.9	5.3
13	8.9	4.1	3.5	3.1	2.1	2.0	2.3	369	43	19	11	5.2
14	8.6	4.3	3.5	3.2	2.2	2.1	2.5	194	77	18	11	5.4
15	9.0	4.4	3.6	3.2	2.3	2.2	2.8	139	70	17	11	5.6
16	9.3	4.4	3.5	3.1	2.3	2.3	3.1	229	58	16	11	6.0
17	11	4.3	3.4	3.0	2.2	2.4	3.5	207	56	16	11	6.2
18	8.9	4.4	3.2	2.9	2.1	2.5	4.0	140	50	13	10	6.4
19	9.8	4.4	3.2	2.7	2.1	2.5	6.0	260	41	12	9.8	6.8
20	9.9	4.3	3.2	2.8	2.1	2.6	8.0	225	47	12	9.6	7.0
21	7.9	4.3	3.1	2.9	2.1	2.6	25	135	49	13	9.0	7.6
22	7.4	4.2	3.1	3.0	2.0	2.7	60	105	49	13	8.6	7.1
23	7.9	3.8	3.2	3.0	2.0	2.8	110	116	45	12	8.3	7.1
24	9.0	3.6	3.2	3.0	2.0	2.8	95	110	36	12	8.1	6.7
25	8.2	3.3	3.2	3.0	2.1	2.7	61	119	35	12	7.5	6.5
26	6.8	3.2	3.2	3.0	2.1	2.5	33	113	30	12	6.9	6.3
27	7.0	3.1	3.3	3.0	2.0	2.4	25	127	31	12	6.7	6.1
28	6.4	3.0	3.3	3.0	2.0	2.4	18	118	29	11	6.7	5.8
29	6.5	3.4	3.1	2.8	---	2.4	13	100	25	11	6.4	5.8
30	6.4	3.7	3.1	2.7	---	2.4	11	91	20	11	6.3	5.8
31	6.2	---	3.2	2.7	---	2.4	---	95	---	11	6.3	---
TOTAL	262.7	129.8	104.9	92.5	60.7	72.3	517.8	4075.4	1466	500	283.6	183.1
MEAN	8.47	4.33	3.38	2.98	2.17	2.33	17.3	131	48.9	16.1	9.15	6.10
MAX	11	5.6	3.7	3.5	2.7	2.8	110	369	92	28	11	7.6
MIN	6.2	3.0	3.1	2.6	1.9	2.0	2.3	6.7	20	11	6.3	5.2
AC-FT	521	257	208	183	120	143	1030	8080	2910	992	563	363

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1994. BY WATER YEAR (WY)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1994, BY WATER YEAR (WY)												
MEAN	8.57	5.73	3.71	2.58	2.14	2.08	5.90	108	205	48.5	13.4	10.2
MAX	17.6	11.2	6.45	4.27	3.50	3.69	28.4	289	353	188	45.6	44.9
(WY)	1962	1962	1969	1958	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

SUMMARY STATISTICS

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1957 - 1994	
ANNUAL TOTAL	11438.2		7748.8		--	
ANNUAL MEAN	31.3		21.2		34.6	
HIGHEST ANNUAL MEAN	--		--		50.2	
LOWEST ANNUAL MEAN	--		--		18.6	
HIGHEST DAILY MEAN	442	May 28	369	May 13	1010	Jun 15 1963
LOWEST DAILY MEAN	2.0	Feb 17	1.9	Feb 9	.60	Mar 7 1967
ANNUAL SEVEN-DAY MINIMUM	2.2	Feb 13	2.0	Feb 7	.90	Jan 27 1980
INSTANTANEOUS PEAK FLOW	--		438		1870a	Jun 15 1963
INSTANTANEOUS PEAK STAGE	--		4.74		7.84b	Jun 15 1963
ANNUAL RUNOFF (AC-FT')	22690		15370		25070	
10 PERCENT EXCEEDS	98		59		100	
50 PERCENT EXCEEDS	4.5		5.9		5.8	
90 PERCENT EXCEEDS	2.3		2.3		1.8	

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

a From facing curve
b From floodmarks.

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: Sept. 26-30. Records good except those for estimated daily discharges, which are fair. 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. 5. . . 75.7

Mar. 24. . . 30.7

COOPERATION.--Records provided by Office of the Wyoming State Engineer and reviewed by 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)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 13	2130	*1,050	*4.73	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	34	110	227	96	110	81
2	---	---	---	---	---	---	34	102	209	95	113	78
3	---	---	---	---	---	---	34	100	187	116	114	80
4	---	---	---	---	---	---	35	99	178	114	113	80
5	---	---	---	---	---	---	34	116	168	111	108	76
6	---	---	---	---	---	---	34	176	158	119	105	74
7	---	---	---	---	---	---	34	261	155	138	102	73
8	---	---	---	---	---	---	34	377	160	147	102	72
9	---	---	---	---	---	---	33	471	160	128	102	71
10	---	---	---	---	---	---	34	533	160	119	103	69
11	---	---	---	---	---	---	34	626	140	114	108	72
12	---	---	---	---	---	---	35	758	137	111	111	58
13	---	---	---	---	---	---	36	962	133	111	103	56
14	---	---	---	---	---	---	36	661	174	110	102	58
15	---	---	---	---	---	---	34	458	197	108	100	74
16	---	---	---	---	---	---	37	585	178	113	97	62
17	---	---	---	---	---	---	45	588	172	108	96	59
18	---	---	---	---	---	---	59	413	147	103	96	53
19	---	---	---	---	---	---	71	532	137	102	96	51
20	---	---	---	---	---	---	95	565	135	102	95	51
21	---	---	---	---	---	---	124	381	130	99	95	52
22	---	---	---	---	---	---	179	302	135	97	95	52
23	---	---	---	---	---	---	307	305	137	116	88	51
24	---	---	---	---	---	---	287	299	124	118	82	50
25	---	---	---	---	---	---	204	290	116	118	81	49
26	---	---	---	---	---	---	124	271	113	118	81	48
27	---	---	---	---	---	---	105	276	108	113	81	48
28	---	---	---	---	---	---	95	282	103	116	80	47
29	---	---	---	---	---	---	150	258	102	118	80	48
30	---	---	---	---	---	---	131	232	99	111	81	48
31	---	---	---	---	---	---	---	237	---	110	81	---
TOTAL	---	---	---	---	---	---	2528	11626	4479	3499	3001	1841
MEAN	---	---	---	---	---	---	84.3	375	149	113	96.8	61.4
MAX	---	---	---	---	---	---	307	962	227	147	114	81
MIN	---	---	---	---	---	---	33	99	99	95	80	47
AC-FT	---	---	---	---	---	---	5010	23060	8880	6940	5950	3650

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

	MEAN	MAX	(WY)	MIN	(WY)
1941	56.9	95.2	1942	35.3	1955
1942	47.2	76.4	1943	31.5	1955
1943	41.5	60.4	1944	30.0	1941
1944	36.9	48.7	1945	28.3	1967
1945	35.2	44.6	1946	26.9	1961
1946	34.7	48.0	1947	25.9	1961
1947	50.9	138	1948	29.0	1961
1948	272	438	1949	92.7	1953
1949	519	990	1950	163	1966
1950	166	308	1951	69.2	1961
1951	91.1	135	1952	57.7	1966
1952	70.9	134	1953	36.0	1954

SUMMARY STATISTICS

	FOR 1994 WATER YEAR*	WATER YEARS 1941 - 1971
ANNUAL MEAN	---	119
HIGHEST ANNUAL MEAN	---	160
LOWEST ANNUAL MEAN	---	77.3
HIGHEST DAILY MEAN	962 May 13	1980 Jun 4 1968
LOWEST DAILY MEAN	33 Apr 9	13 Apr 10 1989#
ANNUAL SEVEN-DAY MINIMUM	---	20 Jan 28 1951
INSTANTANEOUS PEAK FLOW	1050 May 13	3020a Jun 24 1945#
INSTANTANEOUS PEAK STAGE	4.73 May 13	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 1994.

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

93

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.

DRAINAGE AREA.--15,765 mi². Area at sites used prior to May 17, 1956, 15,846 mi².

PERIOD OF RECORD.--August 1928 to current year.
REVISED RECORDS.--WSP 1309: 1929(M). WSP 1509: 1929. WSP 1709: Drainage area.
GAGE.--Water-stage recorder. Elevation of gage is 3,660 ft above 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.
REMARKS.--Estimated daily discharges: Nov. 22 to Dec. 10, Dec. 16 to Mar. 1, and Aug. 25-30. Records good except those for estimated daily discharges, which are poor. Some regulation by Boysen Reservoir (station 06258900) since October 1951. Diversions for irrigation of about 376,000 acres upstream from station. U.S. Corps of Engineers satellite telemeter at station.
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	1710	1570	1800	1600	1200	1300	2460	1650	1540	716	629	674
2	1710	1580	1700	1600	1200	1670	1560	1440	1570	695	627	690
3	1750	1620	1700	1600	1100	1810	1310	1260	1470	701	607	724
4	1750	1770	1700	1600	1100	1940	1300	1140	1380	709	621	731
5	1760	2020	1700	1600	1100	2010	1340	1120	1460	728	726	735
6	1760	2040	1700	1600	1100	1890	1360	1180	1520	740	855	731
7	2040	2000	1500	1600	1000	1840	1320	1490	1380	999	806	699
8	4340	2030	1400	1500	910	1610	1290	1910	1290	1490	727	665
9	3410	2000	1500	1400	960	1520	1260	2400	1430	1160	689	662
10	3440	2030	1600	1300	1100	1450	1290	2620	1370	1060	671	684
11	3510	1870	1830	1300	1100	1320	1230	2830	1250	965	634	681
12	2850	1600	1820	1300	1300	1310	1150	3350	1170	845	633	665
13	2510	1510	1850	1400	1400	1290	1140	3880	1140	759	633	687
14	2400	1550	1820	1400	1400	1280	1160	4230	1110	683	644	731
15	2380	1510	1740	1400	1400	1270	1180	3420	1160	658	673	1840
16	2300	1460	1700	1300	1400	1250	1150	3050	1290	707	663	2400
17	2260	1580	1600	1200	1400	1230	1120	3230	1280	785	635	1350
18	2270	1680	1500	1100	1400	1210	1090	2960	1230	894	611	1110
19	2240	1650	1500	1100	1400	1220	1050	2570	1160	774	616	1080
20	2230	1630	1500	1100	1300	1250	1100	3100	1160	681	648	1060
21	2180	1650	1500	1200	1300	1190	1240	3100	1090	651	653	973
22	2140	1600	1500	1300	1300	1160	1310	2300	1050	630	678	872
23	2150	1500	1500	1400	1200	1220	1730	1950	1170	633	687	908
24	2160	1300	1500	1400	1100	1210	2370	1920	1270	626	673	900
25	2180	1400	1500	1300	1000	1180	2600	1860	1100	636	680	884
26	2150	1400	1600	1300	900	1190	2500	1850	995	647	680	836
27	2050	1500	1600	1300	940	1190	2590	1780	938	624	660	798
28	1810	1600	1700	1300	1100	1170	2370	1680	864	636	660	782
29	1620	1700	1800	1200	---	2950	2120	1620	774	630	660	796
30	1490	1800	1700	1200	---	5760	1920	1580	724	614	690	812
31	1500	---	1600	1200	---	3860	---	1460	---	608	681	---
TOTAL	70050	50150	50660	42100	33110	51750	46610	69930	36335	23684	20750	27160
MEAN	2260	1672	1634	1358	1182	1669	1554	2256	1211	764	669	905
MAX	4340	2040	1850	1600	1400	5760	2600	4230	1570	1490	855	2400
MIN	1490	1300	1400	1100	900	1160	1050	1120	724			

	1809	1691	1463	1368	1537	1809	1811	3201	5849	3097	1415	1504
MEAN	1809	1691	1463	1368	1537	1809	1811	3201	5849	3097	1415	1504
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

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

YELLOWSTONE RIVER BASIN

06279500 BIGHORN RIVER AT KANE, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1947 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)
OCT					
06...	1400	1730	900	14.0	25.0
NOV					
18...	1400	1720	920	1.5	1.0
DEC					
14...	1700	1900	920	0.0	1.0
FEB					
08...	1700	906	1060	0.0	-18.0
MAR					
17...	1000	1250	1160	6.0	11.0
MAY					
02...	1700	1390	880	14.0	20.0
31...	1435	1420	693	21.0	34.0
JUL					
28...	1242	644	1080	25.5	25.0
AUG					
25...	1635	665	1130	22.5	41.0
SEP					
27...	1445	798	1120	17.5	24.0

06279940 NORTH FORK SHOSHONE RIVER AT WAPITI, WY

LOCATION.--Lat 44°28'10", long 109°25'49", in SE¹/₄ 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: Nov. 22, 23, 27-29, Dec. 3, 5-7, 12-14, 18-25, 28, 30, Jan. 2, 6-8, 17, 18, 20, 25, Jan. 30 to Feb. 5, Feb. 7-13, 20, 22-25, Mar. 10, 23, and June 10, 11, 13, 14, 16. Records fair except those for estimated daily discharges, which are poor. Diversion for irrigation of about 1,500 acres upstream from station. U.S. Bureau of Reclamation satellite telemeter 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	242	204	161	140	130	133	236	551	3150	1060	290	203
2	240	186	160	140	125	144	229	470	2790	1040	290	204
3	233	200	160	141	120	159	241	599	2550	969	322	198
4	233	199	162	141	120	170	228	648	2590	906	300	193
5	230	185	155	142	120	169	211	1060	2600	848	305	190
6	228	172	160	145	126	156	208	1340	2300	1020	284	182
7	238	189	160	140	120	153	206	1620	2070	854	279	176
8	270	179	164	140	115	146	201	2110	1570	753	263	173
9	248	172	159	136	109	149	203	2390	1310	765	249	172
10	247	181	157	138	110	150	211	2600	1200	733	234	172
11	250	172	154	136	120	161	208	2810	1260	669	248	169
12	246	166	150	137	120	160	234	3420	1600	601	247	168
13	251	178	150	134	120	167	255	4060	2100	566	245	165
14	272	176	150	137	122	177	253	3220	3240	533	252	163
15	274	163	148	137	122	196	247	2520	1850	495	248	167
16	269	171	156	137	122	218	347	2500	1620	477	251	164
17	258	171	148	135	124	214	645	2300	1400	484	243	162
18	256	172	155	135	125	190	970	1770	1520	511	244	158
19	243	156	145	134	125	190	1160	1930	1770	507	244	157
20	235	159	160	130	130	173	1370	2000	1870	483	242	156
21	229	160	160	122	137	179	1570	1580	1840	452	242	156
22	230	170	155	125	130	177	1600	1570	2000	427	241	160
23	228	150	140	129	125	180	1340	2050	1880	414	233	159
24	232	132	150	133	130	162	1190	2110	1660	415	224	158
25	229	113	150	135	125	166	1000	2350	1490	416	223	159
26	222	129	152	132	120	169	798	2710	1400	422	218	160
27	213	140	151	132	127	166	607	3060	1260	405	211	163
28	215	150	150	132	130	173	516	3320	1140	333	213	163
29	197	160	139	127	---	164	471	2880	1110	301	211	167
30	173	164	140	135	---	172	497	2700	1070	292	211	174
31	198	---	137	135	---	202	---	3000	---	293	207	---
TOTAL	7329	5019	4738	4192	3449	5285	17452	67248	55210	18444	7714	5111
MEAN	236	167	153	135	123	170	582	2169	1840	595	249	170
MAX	274	204	164	145	137	218	1600	4060	3240	1060	322	204
MIN	173	113	137	122	109	133	201	470	1070	292	207	156
AC-FT	14540	9960	9400	8310	6840	10480	34620	133400	109500	36580	15300	10140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1994, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994
MEAN	252	199	148	134	135
MAX	297	236	159	149	145
(WY)	1991	1991	1990	1990	1991
MIN	232	167	139	121	123
(WY)	1993	1994	1993	1992	1994

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1990 - 1994
ANNUAL TOTAL	286152	201191	--
ANNUAL MEAN	784	551	741
HIGHEST ANNUAL MEAN	--	--	934
LOWEST ANNUAL MEAN	--	--	551
HIGHEST DAILY MEAN	3800	4060	7550
LOWEST DAILY MEAN	108	109	90
ANNUAL SEVEN-DAY MINIMUM	113	116	107
INSTANTANEOUS PEAK FLOW	--	4510	9460
INSTANTANEOUS PEAK STAGE	--	7.07	9.54
ANNUAL RUNOFF (AC-FT)	567600	399100	537000
10 PERCENT EXCEEDS	2670	1770	2320
50 PERCENT EXCEEDS	253	204	248
90 PERCENT EXCEEDS	130	132	131

LOCATION.--Lat 44°12'30", long 109°33'15", in NE1/4 sec.24, T.49 N., R.106 W., Park County, Hydrologic Unit 10080013, Shoshone National Forest, on left bank 75 ft downstream from U.S. Forest Service bridge, 0.4 mi downstream from Boulder Creek, 3.2 mi northeast of Valley, and 34 mi southwest of Cody.

GAGE.--Water-stage recorder. Elevation of gage is 6,200 ft above sea level, from topographic map. Prior to Nov. 22, 1961, at site 75 ft upstream at same datum.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s and maximum (*):

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1994, BY WATER YEAR (WY)												
MEAN	155	107	83.1	75.9	71.9	77.5	164	745	1719	1093	371	210
MAX	244	147	109	94.9	93.7	128	341	1387	2910	2287	834	341
(WY)	1983	1985	1966	1983	1962	1986	1962	1958	1974	1975	1982	1982
MIN	92.5	70.6	56.2	55.2	54.8	59.8	69.6	252	856	308	156	110
(WY)	1989	1980	1989	1989	1989	1975	1970	1977	1994	1988	1988	1988

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1957 - 1994	
ANNUAL TOTAL	123924		93454		--	
ANNUAL MEAN	340		256		407	
HIGHEST ANNUAL MEAN	--		--		583	1965
LOWEST ANNUAL MEAN	--		--		221	1977
HIGHEST DAILY MEAN	1860	Jun 21	1690	May 13	6100	Jun 9 1981
LOWEST DAILY MEAN	56	Nov 26	55	Feb 3	35	Dec 20 1990
ANNUAL SEVEN-DAY MINIMUM	65	Nov 21	60	Feb 2	40	Dec 18 1990
INSTANTANEOUS PEAK FLOW	--		2000	Jun 14	10000	Jun 9 1981
INSTANTANEOUS PEAK STAGE	--		6.30	Jun 14	9.24a	Jun 9 1981
ANNUAL RUNOFF (AC-FT)	245800		185400		294800	
10 PERCENT EXCEEDS	996		746		1230	
50 PERCENT EXCEEDS	110		111		137	
90 PERCENT EXCEEDS	70		68		67	

a From floodmarks.

97

LOCATION.--Lat 44°25'09", long 109°15'26", in lot 5, SE¹/₄ NE¹/₄ SE¹/₄ sec. 5, T.51 N., R.103 W., Park County, Hydrologic Unit 10080013, on right bank at old diversion structure 0.2 miles downstream from Cody Canal diversion, 1 mile upstream from normal pool of Buffalo Bill Reservoir at elevation 5,364 ft, and 12.5 miles southwest of Cody.

DRAINAGE AREA.--585 mi².

PERIOD OF RECORD.--May to November 1903, May 1905 to September 1908, January 1921 to September 1926, October 1973 to current year (gage heights only June to September 1908). No winter records 1906, 1908, 1922. Published as "at Marquette" 1903, 1905-8, and as Shoshone River above Shoshone Reservoir 1921-26.

REVISED RECORDS.--WSP 1309: 1907.

GAGE.--Water-stage recorder. Elevation of gage is 5,440 ft above sea level, from topographic map. Apr. 26 to Nov. 30, 1903, and May 1905 to May 30, 1908, nonrecording gages at sites within about 6.0 mi downstream at different datums. Prior to Oct. 3, 1989, recording gage at site 1.1 mile downstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 23-25, Dec. 18 to Jan. 2, Jan. 6-13, 17-21, 23-25, and Jan. 29 to Mar. 3. Records good except those less than 100 ft³/s, and those for estimated daily discharges, which are poor. Diversions for irrigation of about 11,000 acres upstream from station. U.S. Bureau of Reclamation satellite telemeter at station.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.71	161	147	135	85	110	127	169	1080	108	.12	.03
2	.70	157	144	140	83	115	135	154	810	84	.12	.03
3	.67	159	150	143	74	120	135	160	723	53	.19	.03
4	.67	165	145	146	76	132	138	150	764	4.4	.35	.02
5	.66	160	139	142	80	135	128	191	875	.48	.19	.02
6	.62	151	137	130	79	129	125	414	750	41	.16	.02
7	26	148	150	125	71	118	123	628	674	106	.06	.02
8	101	152	152	127	65	115	118	830	352	88	.06	.15
9	94	151	149	130	65	116	115	777	149	51	.06	.16
10	89	144	143	130	62	118	114	1000	76	14	19	.11
11	108	149	139	130	62	118	115	1240	139	27	1.5	.11
12	124	147	140	132	64	114	115	1590	469	3.7	1.0	.11
13	124	151	123	138	62	112	126	2060	573	.30	.94	.14
14	123	153	117	146	66	115	135	1510	1260	.16	.56	.09
15	120	153	118	143	74	121	90	968	424	.15	.29	.09
16	118	142	125	141	78	128	79	934	229	.13	.29	.09
17	116	141	127	129	85	132	135	816	130	.12	.26	.04
18	115	137	110	128	90	124	290	466	186	.19	.19	.04
19	113	129	107	130	87	121	446	527	437	.68	.19	.04
20	112	127	105	130	83	116	544	716	456	.90	.19	.04
21	109	122	110	135	89	114	673	416	462	.62	.18	.04
22	109	124	107	133	85	117	705	338	998	.60	.12	.04
23	108	130	110	135	90	115	574	495	831	.41	.10	.04
24	107	120	118	130	95	108	414	545	535	.41	.05	.03
25	106	115	128	129	90	104	316	728	424	.41	.04	.03
26	106	125	129	128	94	106	226	906	377	.29	.04	.03
27	122	131	130	120	99	105	186	1080	286	.19	.03	.03
28	170	138	125	121	106	109	161	979	129	.17	.03	.03
29	167	151	120	111	---	109	142	783	123	.12	.03	.02
30	157	150	125	105	---	105	161	731	115	.12	.03	.02
31	158	---	130	95	---	114	---	1080	---	.12	.03	---
TOTAL	2906.03	4283	3999	4037	2239	3615	6891	23381	14836	586.67	26.40	1.69
MEAN	93.7	143	129	130	80.0	117	230	754	495	18.9	.85	.056
MAX	170	165	152	146	106	135	705	2060	1260	108	19	.16
MIN	.62	115	105	95	62	104	79	150	76	.12	.03	.02
AC-FT	5760	8500	7930	8010	4440	7170	13670	46380	29430	1160	52	3.1

	MEAN	113	152	116	100	99.1	110	199	692	1676	1030	198	94.1
MAX	407	268	166	130	128	174	387	1281	3140	3033	1083	381	
(WY)	1924	1924	1926	1994	1986	1986	1925	1991	1974	1907	1907	1907	
MIN	18.0	71.2	54.5	62.9	72.9	76.8	87.1	168	495	18.9	.85	.039	
(WY)	1979	1980	1925	1925	1985	1924	1993	1977	1994	1994	1994	1992	

WATER YEARS 1903 - 1994

SUMMARY STATISTICS FOR 1993 CALENDAR YEAR			FOR 1994 WATER YEAR			WATER YEARS 1903 - 1994		
ANNUAL TOTAL	107306.66		66801.79		--			
ANNUAL MEAN	294		183		371			
HIGHEST ANNUAL MEAN	--		--		705			1907
LOWEST ANNUAL MEAN	--		--		181			1988
HIGHEST DAILY MEAN	2120	Jun 21	2060	May 13	7370		Jun 9	1981
LOWEST DAILY MEAN	.25	Apr 30	.02	Sep 4-7, 29, 30	.00		Several days,	1992-93
ANNUAL SEVEN-DAY MINIMUM	.68	Sep 30	.02	Sep 1	.00		Sep 15	1992
INSTANTANEOUS PEAK FLOW	--		2250	May 13	9960		Jun 9	1981
INSTANTANEOUS PEAK STAGE	--		6.75	May 13	9.41a		Jun 9	1981
ANNUAL RUNOFF (AC-FT')	212800		132500		268600			
10 PERCENT EXCEEDS	892		530		1250			
50 PERCENT EXCEEDS	117		118		124			
90 PERCENT EXCEEDS	2.1		.11		30			

a Site and datum then in use.

YELLOWSTONE RIVER BASIN

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TEMPER-ATURE AIR (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED CENT SATUR-ATION	HARD-NESS TOTAL (MG/L AS CACO3)
OCT 07...	1600	480	170	7.5	13.0	3.0	2.2	631	8.9	102	59
NOV 16...	1650	580	180	7.4	7.0	4.5	3.5	638	11.0	108	62
DEC 15...	1600	360	205	7.5	1.5	4.0	1.9	630	11.6	100	76
FEB 11...	0830	380	210	7.8	2.0	-4.0	2.8	631	8.9	78	70
MAR 22...	1600	350	205	7.8	3.0	0.0	2.7	627	11.1	100	73
MAY 03...	1330	1190	225	--	7.0	11.0	0.40	640	9.6	94	70
JUN 14...	0745	1370	144	7.9	10.0	7.0	1.2	627	9.7	105	49
JUL 11...	1135	1240	142	7.6	13.0	--	4.7	637	9.0	102	49
AUG 23...	1720	960	166	7.8	16.0	30.0	4.7	636	8.4	102	56
SEP 27...	1000	575	204	7.5	15.0	22.0	10	639	8.7	103	67

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT 07...	17	3.9	12	0.7	1.0	62	23	0.4	0.2	12
NOV 16...	18	4.2	13	0.7	0.60	69	25	0.9	0.2	12
DEC 15...	22	5.0	15	0.8	1.5	80	28	1.1	<0.1	13
FEB 11...	20	4.8	15	0.8	1.1	78	29	0.9	0.1	12
MAR 22...	21	5.1	16	0.8	1.1	80	30	0.9	0.1	13
MAY 03...	20	4.9	15	0.8	1.1	78	31	1.1	0.2	13
JUN 14...	14	3.5	12	0.7	0.80	58	19	0.6	<0.1	14
JUL 11...	14	3.4	10	0.6	0.90	55	18	0.7	0.1	13
AUG 23...	16	4.0	12	0.7	0.90	60	20	0.8	0.1	13
SEP 27...	19	4.7	14	0.7	1.0	73	27	1.1	0.1	13

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)
OCT 07...	107	0.15	138	<0.01	<0.05	0.03	<0.2	0.05	0.03	0.03
NOV 16...	115	0.16	181	<0.01	<0.05	<0.01	<0.2	0.04	0.01	0.02
DEC 15...	134	0.18	130	<0.01	<0.05	<0.01	<0.2	0.02	0.02	0.02
FEB 11...	130	0.18	133	<0.01	<0.05	0.02	<0.2	0.07	0.02	0.02
MAR 22...	136	0.18	128	0.02	0.15	<0.01	<0.2	0.03	0.03	0.01
MAY 03...	133	0.18	428	<0.01	<0.05	0.02	<0.2	0.03	0.02	0.02
JUN 14...	99	0.13	366	<0.01	0.05	0.02	<0.2	0.04	0.03	0.03
JUL 11...	93	0.13	312	<0.01	<0.05	0.02	<0.2	0.04	0.03	0.03
AUG 23...	103	0.14	268	<0.01	0.08	0.01	<0.2	0.04	0.03	0.04
SEP 27...	124	0.17	192	<0.01	<0.05	0.02	<0.2	0.05	0.04	0.02

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. (See 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. U.S. Bureau of Reclamation satellite telemeter 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 dam.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	635	411	405	425	435	402	402	1450	1420	1200	1170	1050
2	636	416	403	424	435	402	392	1450	1410	1210	1150	1050
3	632	406	402	426	437	402	396	1450	1410	1190	1150	1030
4	632	408	404	425	440	402	393	1450	1400	1180	1140	974
5	584	412	405	424	443	403	399	1460	1390	1170	1150	975
6	552	411	408	424	447	403	417	1510	1380	1230	1150	946
7	547	409	410	423	447	404	433	1530	1380	1100	1130	932
8	433	432	414	438	446	407	420	1530	1380	1030	1150	927
9	419	549	419	442	446	409	414	1540	1360	1060	1140	930
10	428	638	419	442	447	407	415	1530	1360	1130	1070	928
11	430	622	422	438	447	408	429	1540	1360	1230	1080	885
12	427	672	424	435	446	407	421	1590	1360	1240	1070	867
13	413	664	424	436	446	407	627	1580	1360	1200	1080	878
14	409	662	425	435	459	411	907	1530	1320	1200	1080	884
15	411	660	429	435	440	413	971	1530	1300	1200	1070	834
16	411	656	429	437	444	422	1010	1510	1310	1200	1070	806
17	412	655	427	423	453	418	1290	1460	1290	1200	1070	775
18	414	666	427	431	452	418	1270	1420	1270	1210	1070	756
19	413	667	428	435	451	408	1270	1420	1250	1190	1060	732
20	415	667	426	434	451	400	1330	1430	1200	1170	1070	697
21	416	663	429	443	451	403	1420	1440	1150	1180	1080	686
22	416	518	430	437	451	408	1440	1440	1160	1180	1050	664
23	416	435	429	438	436	402	1440	1370	1140	1180	1030	628
24	422	436	429	438	395	401	1440	1380	1150	1180	1020	575
25	413	438	428	437	395	403	1450	1370	1120	1180	1030	589
26	413	437	429	436	399	403	1010	1370	1140	1170	1040	628
27	412	437	427	435	403	404	906	1400	1130	1190	1060	627
28	415	441	425	434	402	402	1040	1400	1140	1190	1060	629
29	412	440	425	434	---	402	1240	1400	1140	1170	1050	582
30	411	433	426	433	---	403	1460	1390	1140	1160	1040	567
31	411	---	424	434	---	406	---	1420	---	1150	1050	---
TOTAL	14210	15761	13051	13431	12244	12590	26452	45290	38320	36470	33630	24031
MEAN	458	525	421	433	437	406	882	1461	1277	1176	1085	801
MAX	636	672	430	443	459	422	1460	1590	1420	1240	1170	1050
MIN	409	406	402	423	395	400	392	1370	1120	1030	1020	567
AC-FT	28190	31260	25890	26640	24290	24970	52470	89830	76010	72340	66710	47670
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1994, BY WATER YEAR (WY)												
MEAN	700	535	535	504	490	495	778	1416	2468	2607	1322	937
MAX	1198	966	944	894	893	866	1743	2958	6440	6556	3397	2113
(WY)	1953	1952	1951	1952	1973	1973	1976	1951	1943	1943	1958	1958
MIN	187	128	111	115	65.4	72.5	113	833	807	1017	685	582
(WY)	1989	1989	1989	1989	1959	1959	1959	1981	1992	1993	1977	1988
SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1943 - 1994*												
ANNUAL TOTAL	239908			285480			1069a					
ANNUAL MEAN	657			782			1764			1943		
HIGHEST ANNUAL MEAN	---			---			556			1988		
LOWEST ANNUAL MEAN	---			---			15100			Jun 9 1981		
HIGHEST DAILY MEAN	1300			May 4			1590			May 12		
LOWEST DAILY MEAN	183			Mar 26			392			Apr 2		
ANNUAL SEVEN-DAY MINIMUM	207			Jan 4			399			Mar 30		
INSTANTANEOUS PEAK FLOW	---			---			1660			May 12		
INSTANTANEOUS PEAK STAGE	---			---			5.29			May 12		
ANNUAL RUNOFF (AC-FT)	475900			566200			774200			11.57		
10 PERCENT EXCEEDS	1140			1390			1830					
50 PERCENT EXCEEDS	629			622			841					
90 PERCENT EXCEEDS	210			407			306					

* Period following Heart Mountain Diversion. See REMARKS.

For period of record through 1994.

a Average discharge (water years 1922-1942) prior to Heart Mountain Diversion, 1,256 ft³/s.

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)
NOV 01...	1630	50	1470	665	10.8	103	9.0	7.0
MAR 22...	1315	18	1650	650	13.8	128	9.0	5.0
JUN 15...	0830	362	607	652	9.4	98	8.4	10.0
AUG 25...	0910	337	709	661	9.1	102	8.3	14.0

DATE	TEMPER- ATURE AIR (DEG C)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
NOV 01...	9.0	45	0.02	4.6	0.03	0.6	0.02	<0.01
MAR 22...	6.0	K9	0.06	3.6	0.02	0.5	0.04	<0.01
JUN 15...	12.0	610	0.02	2.6	0.07	1.1	0.46	0.10
AUG 25...	21.0	430	0.02	3.2	0.02	0.6	0.23	0.08

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 upstream from bridge on County Road 9 and 1.5 mi west of Lovell.

DRAINAGE AREA.--2,350 mi², approximately.

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. 24-30, Dec. 21 to Jan. 4, Jan. 8 to Feb. 14, and May 20-30. Records good except those for estimated daily discharges, which are poor. Flow regulated by Buffalo Bill Reservoir. (See 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	754	711	671	620	600	560	594	746	508	200	535	511
2	786	751	654	620	600	641	565	788	499	240	493	532
3	803	761	653	620	600	638	556	677	483	228	467	577
4	827	747	651	620	600	765	560	583	439	283	466	560
5	712	741	640	604	580	664	548	574	450	288	515	567
6	601	741	628	594	580	570	588	565	544	219	527	569
7	725	739	667	619	580	542	572	524	525	1220	512	527
8	1510	733	636	620	580	538	564	459	572	461	532	504
9	1150	754	641	620	570	535	533	483	645	350	507	503
10	1130	976	629	620	580	542	528	502	707	233	487	500
11	1290	983	634	620	580	549	534	460	740	398	476	501
12	1360	986	635	620	580	553	519	499	943	424	494	494
13	950	1010	633	630	580	556	516	547	969	390	466	446
14	846	991	638	640	580	570	581	571	812	300	480	510
15	924	989	644	640	579	573	745	544	759	281	476	799
16	840	1040	638	620	575	574	823	676	786	293	415	675
17	790	1010	642	600	583	576	1030	608	794	341	402	677
18	834	979	651	600	607	570	1050	516	745	373	414	714
19	823	964	640	600	588	555	983	616	751	326	419	718
20	790	968	639	600	576	535	844	620	706	301	425	706
21	768	962	640	620	572	535	758	620	501	304	458	675
22	772	948	640	620	585	537	698	600	440	338	477	646
23	762	660	640	640	578	565	652	600	496	357	427	629
24	742	620	640	640	517	540	609	600	517	405	388	612
25	739	640	620	640	456	565	837	600	458	457	382	565
26	734	660	620	620	608	576	990	580	465	471	389	557
27	728	680	620	620	516	554	733	580	425	480	416	548
28	729	680	620	620	549	562	606	580	346	486	466	550
29	695	680	620	620	---	570	585	570	281	493	485	556
30	671	700	620	620	---	547	660	560	248	502	493	539
31	664	---	620	600	---	585	---	528	---	517	488	---
TOTAL	26449	24804	19764	19187	16079	17742	20361	17976	17554	11959	14377	17467
MEAN	853	827	638	619	574	572	679	580	585	386	464	582
MAX	1510	1040	671	640	608	765	1050	788	969	1220	535	799
MIN	601	620	620	594	456	535	516	459	248	200	382	446
AC-FT	52460	49200	39200	38060	31890	35190	40390	35660	34820	23720	28520	34650
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1994, BY WATER YEAR (WY)												
MEAN	778	722	662	601	608	630	688	796	1865	1785	749	769
MAX	1251	1146	1168	1065	1139	1133	1877	1909	4935	4686	1305	1354
(WY)	1972	1969	1969	1973	1973	1973	1976	1975	1981	1982	1982	1991
MIN	369	297	330	226	228	249	248	193	203	149	207	245
(WY)	1989	1986	1989	1991	1989	1989	1981	1977	1977	1977	1977	1977
SUMMARY STATISTICS												
				FOR 1993 CALENDAR YEAR			FOR 1994 WATER YEAR			WATER YEARS 1967 - 1994		
ANNUAL TOTAL				228554			223719			--		
ANNUAL MEAN				626			613			888		
HIGHEST ANNUAL MEAN				--			--			1313		
LOWEST ANNUAL MEAN				--			--			359		
HIGHEST DAILY MEAN				2070			1510			15200		
LOWEST DAILY MEAN				269			200			27		
ANNUAL SEVEN-DAY MINIMUM				304			244			48		
INSTANTANEOUS PEAK FLOW				--			3230			16400a		
INSTANTANEOUS PEAK STAGE				--			6.87			10.09b		
ANNUAL RUNOFF (AC-FT)				453300			443700			643600		
10 PERCENT EXCEEDS				949			807			1400		
50 PERCENT EXCEEDS				620			594			668		
90 PERCENT EXCEEDS				330			434			330		

a Gage height, 9.16 ft, site then in use, at present datum.

b Backwater from ice, site then in use, at present datum.

YELLOWSTONE RIVER BASIN

06285100 SHOSHONE RIVER NEAR LOVELL, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1966 to September 1983.

WATER TEMPERATURES: October 1966 to September 1983.

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)
NOV					
18...	1100	977	705	3.5	3.0
DEC					
15...	1100	640	835	1.5	6.0
JAN					
04...	1145	610	820	1.5	2.0
FEB					
09...	1115	570	810	0.0	-10.0
MAR					
11...	1145	551	860	4.5	8.5
MAY					
03...	0905	735	663	10.5	15.0
31...	1650	552	593	19.0	20.0
JUL					
28...	1030	514	702	19.0	28.0
AUG					
25...	0855	394	785	15.5	18.5
SEP					
27...	1148	564	783	13.5	15.0

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 district office.

GAGE.--Water-stage recorder in powerhouse control room. Datum of gage is referenced to sea level (levels by U.S. Bureau of Reclamation).

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, revised, 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 U.S. 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, 1,066,000 acre-ft, Oct. 14, elevation, 3,640.93 ft; minimum, 747,400 acre-ft, Sept. 13, elevation, 3,603.35 ft.

MONTHEND GAGE HEIGHT AND CONTENTS AT 2400, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Gage height (feet)	Contents (acre-feet)	Change in Contents (acre-feet)
Sept. 30	3,638.82	1,039,000	---
Oct. 31	3,635.65	1,002,000	-37,000
Nov. 30	3,627.60	921,100	-80,900
Dec. 31	3,623.22	883,200	-37,900
CAL YR 1993			-37,200
Jan. 31	3,614.52	817,300	-65,900
Feb. 28	3,608.19	775,900	-41,400
Mar. 31	3,609.38	783,300	+7,400
Apr. 30	3,613.37	809,400	+26,100
May 31	3,620.26	859,600	+50,200
June 30	3,615.00	820,700	-38,900
July 31	3,608.77	779,500	-41,200
Aug. 31	3,604.14	751,900	-27,600
Sept. 30	3,608.06	775,200	+23,300
WTR YR 1994			-263,800

YELLOWSTONE RIVER BASIN

06287000 BIGHORN RIVER NEAR ST. XAVIER, MT

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.

DRAINAGE AREA.--19,667 mi². Area at site used prior to Apr. 16, 1963, 19,626 mi².

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 preceding page) since Nov. 3, 1965. Diversions for irrigation of about 375,000 acres upstream from station. Bureau of Reclamation satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3300	5330	2990	3140	2900	2420	2150	2380	4720	2310	2000	1890
2	3310	5600	3010	3140	2730	2440	2110	2370	6180	2330	1900	1880
3	3320	5290	3030	3140	2700	2490	2110	2350	5460	2320	1900	1860
4	3320	4960	3050	3160	2710	2480	2100	2340	4570	2330	1890	1850
5	3290	4600	3040	3150	2710	2470	2120	2340	3780	2340	1880	1840
6	3300	4290	3070	3180	2700	2470	2110	2330	3110	2340	1880	1820
7	3330	3980	3080	3190	2690	2460	2090	2320	3030	2350	1870	1810
8	3530	3690	3100	3180	2690	2440	2090	2310	3020	2350	1880	1800
9	4070	3450	3100	3200	2700	2440	2080	2300	3020	2370	1870	1790
10	4060	3280	3100	3220	2620	2430	2070	2350	3020	2380	1980	1780
11	4080	3300	3110	3220	2440	2440	2060	2330	3020	2380	1970	1760
12	4230	3320	3100	3180	2440	2410	2060	2360	3020	2380	1970	1690
13	4600	3350	3110	2990	2440	2400	2060	2440	3020	2350	1980	1630
14	4600	3350	3140	2990	2440	2400	2020	2420	3020	2260	1960	1630
15	4600	3380	3150	3000	2440	2390	2020	2420	2980	2270	1960	1600
16	4630	3400	3150	3000	2430	2390	2010	2460	2750	2280	1950	1560
17	4640	3420	3170	2980	2430	2380	2010	2490	2750	2280	1920	1550
18	4620	3440	3170	2970	2440	2370	2000	2480	2740	2290	1920	1540
19	4630	3460	3170	2980	2440	2360	1980	2590	2730	2310	1910	1530
20	4640	3490	3200	2970	2440	2350	1980	2830	2730	2300	1910	1510
21	4630	3510	3220	2980	2440	2340	1980	2850	2740	2310	1900	1500
22	4650	3530	3200	2980	2430	2330	2080	2860	2750	2310	1920	1490
23	4650	3560	3180	2980	2430	2320	2500	2850	2750	2310	1890	1480
24	4640	3560	3040	2980	2440	2260	2480	2890	2740	2320	1920	1470
25	4640	3590	3050	2980	2430	2170	2470	2940	2520	2260	1990	1460
26	4660	3610	3060	2980	2420	2150	2460	2970	2390	2050	1970	1450
27	4660	3630	3080	2970	2420	2160	2450	2990	2390	2040	1960	1430
28	4690	3640	3070	2960	2410	2160	2430	2990	2410	2050	1950	1490
29	4720	3570	3090	2950	---	2160	2400	3030	2370	2040	1930	1700
30	4750	3260	3100	2950	---	2150	2390	3020	2320	2050	1920	1700
31	4790	---	3120	2960	---	2150	---	3080	---	2040	1900	---
TOTAL	131580	113840	96250	94650	70950	72780	64870	80680	94050	70300	59750	49490
MEAN	4245	3795	3105	3053	2534	2348	2162	2603	3135	2268	1927	1650
MAX	4790	5600	3220	3220	2900	2490	2500	3080	6180	2380	2000	1890
MIN	3290	3260	2990	2950	2410	2150	1980	2300	2320	2040	1870	1430
AC-FT	261000	225800	190900	187700	140700	144400	128700	160000	186500	139400	118500	98160

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1994, BY WATER YEAR (WY)

	MEAN	2959	2964	2751	2587	2629	2879	2810	3852	7310	5566	2785	2676
MAX	5142	5151	4999	5267	4384	4809	6675	8744	17900	18890	6490	4544	
(WY)	1972	1983	1968	1968	1976	1976	1972	1947	1935	1967	1978	1973	
MIN	1224	856	1095	1090	888	327	678	900	1078	1144	1260	1074	
(WY)	1978	1966	1935	1935	1936	1966	1966	1966	1966	1960	1966	1966	

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1935 - 1994
ANNUAL TOTAL	1184290	999190	--
ANNUAL MEAN	3245	2738	3482
HIGHEST ANNUAL MEAN	--	--	5059
LOWEST ANNUAL MEAN	--	--	1565
HIGHEST DAILY MEAN	7910	6180	37400
LOWEST DAILY MEAN	1990	1430	112
ANNUAL SEVEN-DAY MINIMUM	1990	1470	195
INSTANTANEOUS PEAK FLOW	--	6510	37400
INSTANTANEOUS LOW FLOW	--	--	49
ANNUAL RUNOFF (AC-FT)	2349000	1982000	2523000
10 PERCENT EXCEEDS	4770	3660	5720
50 PERCENT EXCEEDS	3000	2460	2850
90 PERCENT EXCEEDS	2010	1890	1550

06287000 BIGHORN RIVER NEAR ST. XAVIER, MT--Continued

SUMMARY STATISTICS

	WATER YEARS 1935 - 1961*		WATER YEARS 1967 - 1994**	
ANNUAL MEAN	3426		3514	
HIGHEST ANNUAL MEAN	5059	1947	4697	1983
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	a112	Apr 2 1967
ANNUAL RUNOFF (AC-FT)	2482000		2546000	
10 PERCENT EXCEEDS	6440		5300	
50 PERCENT EXCEEDS	2450		3190	
90 PERCENT EXCEEDS	1370		1920	

* Prior to construction of Yellowtail Dam.

** After completion of Yellowtail Dam.

a Result of discharge measurement (dam closure).

YELLOWSTONE RIVER BASIN

06288700 DRY FORK LITTLE BIGHORN RIVER BELOW LICK CREEK, NEAR BURGESS JUNCTION, WY

LOCATION.--Lat 44°53'19", long 107°36'54", in SE¹/₄ SE¹/₄ NW¹/₄ sec.28, T.57 N., R.89 W., Sheridan County, Hydrologic Unit 10080016, Bighorn National Forest, on left bank 0.3 mi downstream from Lick Creek, 4.9 mi upstream from mouth, and 9.2 mi northwest of Burgess Junction.

DRAINAGE AREA.--54.3 mi².

PERIOD OF RECORD.--October 1982 to September 1987, October 1992 to September 1993.

GAGE.--Water-stage recorder. Elevation of gage is 6,070 ft above sea level, from topographic map. September 1987 to October 1987, at site 0.3 mi upstream at different datum, drainage area, 54.1 mi².

REMARKS.--Estimated daily discharges: Oct. 30 to Nov. 1, Nov. 6, 21-26, Jan. 6-8, Feb. 3-27, and Mar. 7-9, 24.

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 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 25	1930	ice jam	*4.98	May 12	2000	*280	4.26
Apr. 24	1900	123	3.50				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	27	27	24	23	19	20	70	107	58	40	31
2	33	29	27	23	23	19	20	67	102	58	40	29
3	33	31	26	23	23	19	21	66	99	58	39	30
4	33	29	26	23	22	19	21	67	98	57	38	29
5	33	26	26	23	23	19	21	77	94	56	38	29
6	33	26	26	21	22	19	21	92	92	56	38	29
7	36	28	26	21	20	17	21	106	92	73	37	28
8	32	28	25	22	17	18	20	124	91	59	37	28
9	34	26	25	23	18	20	20	137	88	57	37	29
10	35	28	25	23	20	20	20	155	85	55	37	29
11	34	28	25	23	20	20	20	166	82	54	37	30
12	34	29	25	23	19	19	21	200	82	52	36	29
13	33	29	25	23	19	18	23	212	80	52	35	29
14	33	28	25	23	19	18	23	173	80	52	35	31
15	33	26	25	23	19	19	23	169	76	51	35	40
16	33	28	25	23	19	20	25	184	74	51	35	32
17	32	27	25	23	19	20	30	180	72	50	33	30
18	32	27	25	23	19	20	36	169	71	49	33	29
19	32	26	25	23	19	20	43	178	70	49	33	29
20	29	26	25	23	19	19	54	179	69	48	32	29
21	30	25	25	23	18	20	70	154	68	47	32	29
22	31	24	25	23	18	20	88	144	67	46	32	29
23	31	23	25	23	19	19	103	138	66	45	32	29
24	31	24	25	23	20	18	115	133	64	45	31	28
25	30	25	24	23	18	19	118	128	62	45	31	29
26	29	27	24	23	16	20	98	124	62	45	31	28
27	29	30	24	23	18	18	91	123	61	43	31	28
28	29	31	24	23	19	20	83	121	60	43	31	28
29	23	30	24	23	---	18	78	117	59	42	31	27
30	22	28	24	23	---	19	73	113	58	42	31	27
31	25	---	24	23	---	20	---	109	---	42	31	---
TOTAL	970	819	777	709	548	593	1420	4175	2331	1580	1069	881
MBAN	31.3	27.3	25.1	22.9	19.6	19.1	47.3	135	77.7	51.0	34.5	29.4
MAX	36	31	27	24	23	20	118	212	107	73	40	40
MIN	22	23	24	21	16	17	20	66	58	42	31	27
AC-FT	1920	1620	1540	1410	1090	1180	2820	8280	4620	3130	2120	1750

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1994, BY WATER YEAR (WY)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	29.6	26.1	24.0	22.4	20.3	19.3	28.7	88.9	126	63.1	40.4	32.0	
MAX	33.6	29.9	26.6	24.4	21.8	20.6	47.3	135	239	97.7	52.7	40.1	
(WY)	1985	1985	1985	1985	1985	1985	1994	1984	1984	1984	1984	1984	
MIN	23.3	21.9	21.8	19.8	18.4	17.5	21.8	54.5	48.6	35.9	29.2	24.8	
(WY)	1986	1986	1987	1987	1987	1987	1983	1985	1985	1985	1985	1985	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1982 - 1994
ANNUAL TOTAL	15880	15872	--
ANNUAL MEAN	43.5	43.5	43.4
HIGHEST ANNUAL MEAN	--	--	60.6
LOWEST ANNUAL MEAN	--	--	31.3
HIGHEST DAILY MEAN	157	212	338
LOWEST DAILY MEAN	19	16	11
ANNUAL SEVEN-DAY MINIMUM	20	18	16
INSTANTANEOUS PEAK FLOW	--	280a	429
INSTANTANEOUS PEAK STAGE	--	4.98b	3.23c
ANNUAL RUNOFF (AC-FT)	31500	31480	31470
10 PERCENT EXCEEDS	97	92	82
50 PERCENT EXCEEDS	29	29	28
90 PERCENT EXCEEDS	21	19	20

a Gage height, 4.26 ft.

b Backwater from ice.

c Site and datum then in use.

YELLOWSTONE RIVER BASIN

107

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 National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Water-discharge records good. Diversions for irrigation of 163 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	85	89	e74	72	70	70	184	366	167	112	90
2	98	80	86	e74	63	69	71	181	349	163	112	89
3	97	84	84	e74	e60	69	74	179	332	161	111	88
4	95	83	84	75	e60	68	77	182	335	159	110	86
5	94	76	83	75	e60	68	73	208	315	156	111	85
6	94	74	83	76	e60	66	74	253	304	166	107	84
7	104	82	82	77	e55	64	73	279	301	225	106	83
8	99	81	81	75	e50	63	73	319	300	172	105	83
9	101	79	81	75	e45	65	73	350	294	159	104	83
10	100	81	81	74	e50	66	73	388	279	155	104	86
11	99	81	80	74	e55	66	73	426	261	153	105	87
12	99	81	78	74	e60	64	75	674	257	151	103	84
13	98	82	78	73	e70	64	80	761	248	153	99	83
14	100	83	78	74	e70	66	83	628	255	149	98	87
15	100	80	78	73	e70	66	80	597	235	145	97	109
16	98	81	75	74	e65	67	85	691	233	142	97	91
17	95	82	75	76	e60	69	102	693	224	139	96	85
18	96	85	79	75	e60	68	128	642	215	136	96	84
19	94	83	81	74	e60	69	148	685	211	137	95	83
20	85	83	77	73	e60	66	181	721	206	132	94	83
21	81	85	76	72	e55	67	220	573	202	129	94	85
22	80	81	76	72	e45	68	258	526	206	127	93	83
23	80	54	76	71	56	67	283	505	198	124	94	83
24	81	35	75	69	51	65	299	490	191	124	92	81
25	79	44	76	69	51	68	317	464	184	125	91	79
26	80	70	75	75	71	69	266	446	181	123	90	79
27	81	89	75	78	73	67	236	430	179	119	89	79
28	83	109	75	76	72	69	212	421	174	118	89	79
29	71	95	74	73	---	66	196	405	172	118	89	79
30	72	91	74	71	---	66	188	388	170	114	90	79
31	83	---	73	71	---	68	---	372	---	113	91	---
TOTAL	2816	2379	2438	2286	1679	2073	4241	14061	7377	4454	3064	2539
MEAN	90.8	79.3	78.6	73.7	60.0	66.9	141	454	246	144	98.8	84.6
MAX	104	109	89	78	73	70	317	761	366	225	112	109
MIN	71	35	73	69	45	63	70	179	170	113	89	79
AC-FT	5590	4720	4840	4530	3330	4110	8410	27890	14630	8830	6080	5040

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1994, BY WATER YEAR (WY)

	MEAN	86.9	75.7	68.0	62.9	61.7	61.7	85.9	326	523	223	124	98.6
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	
MIN	64.0	55.2	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	1985	1961	1961	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1940 - 1994

ANNUAL TOTAL	49929	49407	--	
ANNUAL MEAN	137	135	150	
HIGHEST ANNUAL MEAN	--	--	253	1975
LOWEST ANNUAL MEAN	--	--	90.3	1961
HIGHEST DAILY MEAN	617	May 21	761	May 13
LOWEST DAILY MEAN	33	Feb 16	35	Nov 24
ANNUAL SEVEN-DAY MINIMUM	47	Feb 13	54	Feb 5
INSTANTANEOUS PEAK FLOW	--	--	1180	May 12
INSTANTANEOUS PEAK STAGE	--	--	3.45	May 12
INSTANTANEOUS LOW FLOW	--	--	33	Nov 24
ANNUAL RUNOFF (AC-FT)	99030	98000	108600	
10 PERCENT EXCEEDS	328	281	337	
50 PERCENT EXCEEDS	84	84	83	
90 PERCENT EXCEEDS	56	66	56	

a Gage height, 4.87 ft from rating curve extended above 1,400 ft³/s.

b Log jam.

e Estimated.

YELLOWSTONE RIVER BASIN

06289000 LITTLE BIGHORN RIVER AT STATE LINE, NEAR WYOLA, MT--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1992 to current year.

REMARKS.--Unpublished records for many days of instantaneous water temperature and specific conductance are available in files of the District office.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
NOV 16...	1000	82	198	5.5	2.5	K4	K10	8.5	--	--
MAR 15...	1000	66	346	5.0	3.5	K1	K8	7.7	--	--
MAY 03...	1015	179	337	19.5	5.5	K1	K10	8.4	--	--
JUN 21...	0940	204	320	21.0	11.0	K14	K6	8.6	170	47
JUL 19...	0850	140	322	24.0	11.0	K14	40	8.6	--	--
AUG 16...	1020	98	327	22.0	11.0	K14	K9	8.2	180	44

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

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 16...	--	<0.22	<0.01	0.22	0.02	<0.01	22	4.9	73
MAR 15...	--	<0.17	<0.01	0.17	0.03	<0.01	11	2.0	69
MAY 03...	--	<0.13	<0.01	0.13	0.01	<0.01	62	30	51
JUN 21...	97.7	<0.08	<0.01	0.08	0.02	<0.01	42	23	65
JUL 19...	--	<0.10	<0.01	0.10	<0.01	<0.01	40	15	26
AUG 16...	47.7	<0.12	<0.01	0.12	0.02	<0.01	26	6.9	61

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
JUN 21...	13	1.2	0.0	0.7	6.8	0.5	0.1	5.0	177	0.24
AUG 16...	16	1.3	0.0	0.7	8.1	0.3	0.2	5.4	180	0.25

DATE	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
JUN 21...	29	<0.5	<1.0	<5	<3	<10	4	<10
AUG 16...	34	<0.5	<1.0	<5	<3	<10	<3	<10

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
JUN 21...	6	<1	<10	<10	1.0	70	<6	7
AUG 16...	<4	<1	<10	<10	<1.0	81	<6	6

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: Nov. 15, 26-28, Dec. 6, 7, 14, 18-23, 28, Jan 8, 9, 19-21, and Feb 4-16, 25-28. 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)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 12	1430	ice jam	2.02*	May 13	0830	47	1.47
Apr. 1	1630	31	1.20	July 7	0800	33	1.24
Apr. 24	2030	*53	1.56				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	8.4	8.6	7.0	7.2	8.3	19	34	17	11	8.1	6.9
2	9.2	7.9	8.4	6.9	9.0	11	17	31	17	10	8.1	6.7
3	9.1	8.0	8.3	7.0	8.3	12	15	30	16	10	8.1	6.6
4	9.1	8.2	8.3	7.0	7.9	12	15	29	16	10	8.0	6.5
5	8.8	7.4	8.0	7.0	7.4	11	13	31	16	10	8.1	6.4
6	8.9	7.5	7.7	4.5	7.0	8.9	14	35	15	11	7.9	6.3
7	10	7.9	7.4	5.9	6.5	7.6	13	35	15	20	7.6	6.3
8	10	7.7	7.5	9.5	6.0	6.9	14	37	17	13	7.8	6.3
9	9.3	7.4	7.4	8.5	6.4	7.6	14	37	16	12	7.7	6.3
10	9.6	7.7	7.3	7.6	7.0	7.7	14	38	15	11	7.5	6.4
11	9.5	7.9	7.4	7.4	6.6	8.6	14	39	14	11	7.5	6.4
12	9.4	8.0	7.4	7.2	7.0	8.4	14	41	14	11	7.4	6.4
13	8.8	8.1	7.2	7.2	7.3	11	14	44	14	11	7.2	6.3
14	8.8	7.8	7.0	7.2	7.7	13	16	41	14	11	7.2	6.8
15	8.6	7.7	7.1	7.1	7.2	11	15	38	14	10	7.1	7.6
16	8.5	8.0	7.0	6.4	7.4	12	16	38	14	10	7.1	6.4
17	8.4	8.0	7.1	4.4	7.6	11	19	37	13	9.7	7.1	6.4
18	8.4	8.0	6.7	6.1	8.1	10	24	35	13	9.6	7.0	6.6
19	8.6	7.7	6.9	12	7.5	10	27	33	13	9.7	7.1	6.6
20	8.3	8.1	6.6	9.0	7.0	9.4	31	34	12	9.5	7.0	6.6
21	8.3	7.9	7.3	8.0	6.2	9.4	36	30	12	9.5	7.0	7.2
22	8.3	6.7	6.7	7.9	6.4	9.4	43	28	12	9.3	6.9	6.8
23	8.2	3.8	6.8	7.5	8.0	8.0	48	26	12	9.3	6.9	6.6
24	8.1	5.6	7.6	7.4	7.2	8.3	50	25	12	9.1	6.8	6.5
25	8.1	8.9	7.3	7.1	6.8	9.3	49	24	11	9.2	6.7	6.5
26	8.1	9.5	7.2	7.1	6.6	9.5	44	23	11	9.0	6.6	6.5
27	8.1	11	7.1	6.9	7.4	9.0	39	22	11	8.7	6.6	6.6
28	8.9	14	6.8	6.9	8.2	9.8	36	20	11	8.6	6.6	6.8
29	7.9	8.9	7.2	6.1	---	9.6	35	19	11	8.5	6.5	6.8
30	7.2	8.8	7.3	5.4	---	11	38	18	11	8.5	6.7	6.9
31	8.4	---	7.0	5.9	---	17	---	17	---	8.2	6.9	---
TOTAL	270.2	242.5	227.6	221.1	202.9	307.7	756	969	409	318.4	224.8	198.0
MEAN	8.72	8.08	7.34	7.13	7.25	9.93	25.2	31.3	13.6	10.3	7.25	6.60
MAX	10	14	8.6	12	9.0	17	50	44	17	20	8.1	7.6
MIN	7.2	3.8	6.6	4.4	6.0	6.9	13	17	11	8.2	6.5	6.3
AC-FT	536	481	451	439	402	610	1500	1920	811	632	446	393

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1994, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	7.27	7.08	6.23	6.10	5.81	7.19	13.3	30.2	22.5	12.4	8.31	7.45
MAX	8.72	8.08	7.34	7.13	7.25	9.97	25.2	71.9	49.3	22.6	13.1	10.2
(WY)	1994	1994	1994	1994	1994	1984	1984	1984	1984	1984	1984	1984
MIN	5.76	6.34	4.92	4.25	4.02	5.64	9.14	13.0	7.82	5.21	5.07	5.09
(WY)	1990	1990	1991	1988	1989	1991	1992	1985	1985	1985	1985	1989

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1983 - 1994
ANNUAL TOTAL	5043.2	4347.2	--
ANNUAL MEAN	13.8	11.9	12.0
HIGHEST ANNUAL MEAN	--	--	18.7
LOWEST ANNUAL MEAN	--	--	7.76
HIGHEST DAILY MEAN	73	50	176
LOWEST DAILY MEAN	3.8	3.8	.02a
ANNUAL SEVEN-DAY MINIMUM	5.5	6.3	.81
INSTANTANEOUS PEAK FLOW	--	53b	195c
INSTANTANEOUS PEAK STAGE	--	2.02d	4.76e
ANNUAL RUNOFF (AC-FT)	10000	8620	8680
10 PERCENT EXCEEDS	31	24	22
50 PERCENT EXCEEDS	8.9	8.3	7.7
90 PERCENT EXCEEDS	5.9	6.6	5.6

a Result of channel blockage or diversion upstream.

b Gage height, 1.56 ft.

c Gage height, 4.62 ft, site and datum then in use.

d Backwater from ice.

e Backwater from ice, site and datum then in use.

YELLOWSTONE RIVER BASIN

06289820 EAST PASS CREEK NEAR DAYTON, WY

LOCATION.--Lat 44°59'23", long 107°25'20", in SE¹/₄ SE¹/₄ NE¹/₄ sec.24, T.58 N., R.88 W., Sheridan County, Hydrologic Unit 10080016, on left bank 0.3 mi downstream from bridge on county road, 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 4,410 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 27-30, Nov. 14-16, 19, Nov. 21 to Dec.25, Dec. 28-30, Jan. 4, 6-10, Jan. 17 to Feb. 16, Feb. 18, 20-28, Mar. 8, 9, 23, 24, 27, and Aug. 30 to Sept. 12. 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)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 26	0030	ice jam	*3.63	June 8	1330	29	1.77
Apr. 23	0700	*79	2.29	July 7	1000	30	1.76
May 13	0430	77	2.33				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	8.9	9.1	9.6	9.3	10	18	37	27	12	7.8	3.8
2	9.0	8.8	9.2	9.6	9.0	11	18	36	25	11	7.9	3.8
3	9.0	8.8	9.2	9.4	8.7	12	17	35	24	9.7	7.7	3.9
4	8.7	9.0	9.3	9.5	9.1	13	18	33	24	9.5	7.4	4.1
5	8.7	8.5	9.5	9.6	10	14	17	34	23	9.5	7.4	4.1
6	8.7	9.1	8.0	8.2	9.2	13	18	38	22	10	7.3	4.2
7	10	9.0	8.5	6.8	8.0	11	17	43	21	23	7.2	4.3
8	11	8.8	9.1	7.2	7.2	10	16	49	24	19	7.3	4.4
9	10	8.7	9.5	7.4	8.2	10	17	54	22	16	7.2	4.5
10	10	9.6	9.9	7.6	9.7	10	16	58	21	15	6.3	4.5
11	10	10	10	7.7	9.2	11	16	61	20	14	7.8	4.6
12	10	10	10	8.4	9.0	11	16	67	19	14	5.3	4.7
13	9.9	10	9.2	9.2	9.7	12	17	75	19	14	4.1	4.8
14	9.4	9.8	8.6	9.7	10	14	20	71	20	13	4.1	5.1
15	9.3	9.0	9.2	9.7	11	12	20	60	19	13	3.8	8.4
16	9.4	9.6	8.6	9.7	10	12	20	58	18	12	4.0	8.8
17	8.4	10	8.2	8.2	9.6	13	23	57	17	12	4.0	8.4
18	7.2	10	7.9	8.9	10	12	31	54	17	11	4.0	8.3
19	7.5	9.6	8.0	10	9.9	12	38	51	16	9.7	3.9	7.5
20	8.1	10	7.4	9.7	9.6	12	44	54	16	9.3	2.9	7.0
21	8.5	9.7	7.8	10	8.8	11	59	50	15	8.9	2.4	8.6
22	8.3	11	7.3	11	8.0	11	67	44	15	8.4	2.3	7.9
23	8.2	9.0	6.9	11	7.7	10	75	40	15	7.8	2.2	8.1
24	8.2	6.3	7.9	10	8.0	9.8	67	37	14	8.1	2.2	8.6
25	8.2	7.0	9.1	10	7.9	11	65	35	13	8.4	3.7	8.1
26	8.2	7.6	10	9.5	8.7	11	59	34	13	8.2	3.8	7.2
27	8.0	8.2	10	9.0	9.3	10	48	33	13	8.0	3.7	7.4
28	7.2	8.9	9.4	9.5	9.7	11	40	33	13	8.0	3.7	7.5
29	7.8	9.7	9.2	10	---	11	38	31	13	7.8	3.7	7.5
30	8.3	9.5	9.4	9.7	---	12	37	29	13	7.9	3.7	7.4
31	8.7	---	99.6	8.9	---	15	---	27	---	7.8	3.7	---
TOTAL	272.9	274.1	275.0	284.7	254.5	357.8	972	1418	551	346.0	152.5	187.5
MEAN	8.80	9.14	8.87	9.18	9.09	11.5	32.4	45.7	18.4	11.2	4.92	6.25
MAX	11	11	10	11	11	15	75	75	27	23	7.9	8.8
MIN	7.2	6.3	6.9	6.8	7.2	9.8	16	27	13	7.8	2.2	3.8
AC-FT	541	544	545	565	505	710	1930	2810	1090	686	302	372

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1994, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	8.50	8.82	8.26	8.40	8.35	9.36	15.9	39.7	32.8	13.2	7.05	7.23
MAX	10.9	10.8	9.85	10.2	9.94	12.3	32.4	90.3	72.1	32.9	14.8	10.1
(WY)	1985	1985	1983	1983	1983	1984	1994	1984	1984	1992	1993	1993
MIN	5.73	6.90	6.69	6.96	6.78	7.29	9.30	15.2	6.65	5.06	2.73	4.02
(WY)	1991	1986	1988	1988	1989	1990	1992	1985	1985	1985	1988	1989

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1983 - 1994
ANNUAL TOTAL	6409.8	5346.0	--
ANNUAL MEAN	17.6	14.6	14.0
HIGHEST ANNUAL MEAN	--	--	23.6
LOWEST ANNUAL MEAN	--	--	8.57
HIGHEST DAILY MEAN	136	75	188
LOWEST DAILY MEAN	5.6	2.2	1.7
ANNUAL SEVEN-DAY MINIMUM	6.4	2.8	2.1
INSTANTANEOUS PEAK FLOW	--	79a	197b
INSTANTANEOUS PEAK STAGE	--	3.63c	3.63c
ANNUAL RUNOFF (AC-FT)	12710	10600	10130
10 PERCENT EXCEEDS	38	34	27
50 PERCENT EXCEEDS	9.6	9.6	9.0
90 PERCENT EXCEEDS	7.9	6.6	5.9

a Gage height, 2.29 ft.

b Gage height, 3.14 ft.

c Backwater from ice.

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: Jan. 23. Records good 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 satellite telemeter 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)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 13	0200	*1,460	*4.55	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	86	72	60	57	60	62	328	397	126	76	59
2	88	66	70	61	59	60	69	320	378	121	79	55
3	87	85	67	60	59	61	69	332	345	119	76	53
4	85	78	67	59	59	60	72	338	327	116	75	54
5	85	66	65	62	59	59	58	443	311	113	74	50
6	84	56	58	55	55	57	65	626	291	124	72	49
7	96	71	61	54	48	47	65	713	271	247	68	49
8	116	69	62	62	59	44	60	811	297	175	67	48
9	101	66	63	62	73	51	57	858	301	135	67	47
10	97	72	63	61	81	55	63	939	283	127	70	47
11	102	71	64	60	74	60	59	985	253	123	76	49
12	108	72	65	58	67	57	66	1090	247	118	82	49
13	103	75	62	60	66	55	77	1220	237	125	71	49
14	102	74	61	60	56	62	77	946	279	130	71	53
15	101	69	63	60	58	58	69	831	248	121	66	119
16	99	73	62	59	60	64	86	939	226	122	66	87
17	90	71	58	53	60	64	110	921	228	118	63	73
18	94	72	56	58	60	58	148	768	201	107	60	65
19	89	67	60	71	60	64	195	818	190	104	59	60
20	77	69	60	66	57	54	263	893	184	105	59	56
21	79	70	61	63	55	54	385	682	180	100	58	59
22	100	66	61	62	51	60	548	602	189	94	56	66
23	89	53	57	60	62	56	761	577	197	89	59	76
24	94	40	59	58	61	47	838	554	176	90	55	68
25	86	64	62	59	52	56	730	521	160	96	53	65
26	74	81	62	56	71	56	494	498	153	92	52	63
27	75	85	61	59	67	52	417	479	146	85	51	61
28	90	86	59	58	61	52	372	469	140	82	52	60
29	55	77	58	54	---	56	337	440	136	86	51	60
30	47	74	60	51	---	58	323	415	130	81	55	63
31	78	---	60	54	---	58	---	402	---	80	59	---
TOTAL	2758	2124	1919	1835	1707	1755	6995	20758	7101	3551	1998	1812
MEAN	89.0	70.8	61.9	59.2	61.0	56.6	233	670	237	115	64.5	60.4
MAX	116	86	72	71	81	64	838	1220	397	247	82	119
MIN	47	40	56	51	48	44	57	320	130	80	51	47
AC-FT	5470	4210	3810	3640	3390	3480	13870	41170	14080	7040	3960	3590
+	59	.00	.00	.00	.00	.00	.00	772	1460	1060	1220	959
ADJUSTED FOR DIVERSION BY HIGHLINE DITCH												
MEAN	89.9	70.8	70.8	59.2	61.0	56.6	233	682	261	132	84.3	76.5
AC-FT	5530	4210	3810	3640	3390	3490	13870	41950	15540	8100	5180	4550

YELLOWSTONE RIVER BASIN

06298000 TONGUE RIVER NEAR DAYTON, WY--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 1994, BY WATER YEAR (WY)	
MEAN	81.8 68.0 61.3 55.9 52.6 51.6 111 528 703 246 112 85.1
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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR*	FOR 1994 WATER YEAR*	WATER YEARS 1919 - 1994*
ANNUAL TOTAL	61217	54313	--
ANNUAL MEAN	168	149	181
HIGHEST ANNUAL MEAN	--	--	316
LOWEST ANNUAL MEAN	--	--	98.4
HIGHEST DAILY MEAN	1030 May 21	1220 May 13	2590 Jun 5 1968
LOWEST DAILY MEAN	37 Feb 16	40 Nov 24	18 Nov 29 1919
ANNUAL SEVEN-DAY MINIMUM	46 Mar 10	48 Sep 6	31 Nov 9 1940
INSTANTANEOUS PEAK FLOW	--	1460 May 13	3400 Jun 3 1944
INSTANTANEOUS PEAK STAGE	--	4.55 May 13	6.45 Jun 3 1944
ANNUAL RUNOFF (AC-FT)	121400	107700	131200
10 PERCENT EXCEEDS	494	374	485
50 PERCENT EXCEEDS	82	69	73
90 PERCENT EXCEEDS	51	55	48

+ Diversion, in acre-feet, 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)
1993 Calendar Year	63,640	174	126,200
1994 Water Year	57,100	156	113,300

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.--No estimated daily discharges. Records good. No diversion upstream from station.

COOPERATION.--Records provided by Office of the Wyoming State Engineer and reviewed by the 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)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 12	2045	*223	*2.62	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	8.3	62	68	22	14	9.9
2	---	---	---	---	---	---	8.3	60	65	21	14	9.2
3	---	---	---	---	---	---	8.9	59	60	21	14	8.3
4	---	---	---	---	---	---	9.6	57	56	20	14	8.3
5	---	---	---	---	---	---	8.9	68	53	20	14	8.1
6	---	---	---	---	---	---	8.9	83	50	22	13	7.8
7	---	---	---	---	---	---	8.6	94	48	59	12	7.5
8	---	---	---	---	---	---	8.3	114	52	33	12	7.2
9	---	---	---	---	---	---	8.3	125	51	27	12	7.0
10	---	---	---	---	---	---	8.9	143	47	25	12	7.0
11	---	---	---	---	---	---	9.2	157	43	24	12	7.0
12	---	---	---	---	---	---	10	177	41	23	14	7.0
13	---	---	---	---	---	---	13	193	39	24	12	7.0
14	---	---	---	---	---	---	13	172	59	24	11	7.2
15	---	---	---	---	---	---	12	168	46	23	11	15
16	---	---	---	---	---	---	16	177	44	24	11	12
17	---	---	---	---	---	---	22	179	42	23	10	9.2
18	---	---	---	---	---	---	30	162	38	20	10	8.6
19	---	---	---	---	---	---	36	159	36	20	9.9	8.3
20	---	---	---	---	---	---	44	168	34	19	9.9	7.8
21	---	---	---	---	---	---	57	139	32	18	9.6	8.6
22	---	---	---	---	---	---	77	125	36	18	9.2	8.6
23	---	---	---	---	---	---	98	119	33	17	9.2	8.9
24	---	---	---	---	---	---	112	117	35	17	8.9	8.3
25	---	---	---	---	---	---	112	103	29	17	8.6	8.1
26	---	---	---	---	---	---	90	96	27	17	8.3	7.8
27	---	---	---	---	---	---	80	91	26	16	8.1	7.5
28	---	---	---	---	---	---	72	86	25	16	8.3	7.2
29	---	---	---	---	---	---	68	77	24	17	8.1	7.2
30	---	---	---	---	---	---	65	75	23	15	8.3	7.2
31	---	---	---	---	---	---	---	70	---	15	9.9	---
TOTAL	---	---	---	---	---	---	1123.2	3675	1262	677	338.3	248.8
MEAN	---	---	---	---	---	---	37.4	119	42.1	21.8	10.9	8.29
MAX	---	---	---	---	---	---	112	193	68	59	14	15
MIN	---	---	---	---	---	---	8.3	57	23	15	8.1	7.0
AC-FT	---	---	---	---	---	---	2230	7290	2500	1340	671	493

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	

SUMMARY STATISTICS

	FOR 1994 WATER YEAR*	WATER YEARS 1946 - 1971
ANNUAL MEAN	--	29.3
HIGHEST ANNUAL MEAN	--	45.0
LOWEST ANNUAL MEAN	--	13.8
HIGHEST DAILY MEAN	193	601
LOWEST DAILY MEAN	7.0	1.8
ANNUAL SEVEN-DAY MINIMUM	--	2.5
INSTANTANEOUS PEAK FLOW	223	1130a
INSTANTANEOUS PEAK STAGE	2.62	4.60
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 1994.

a From rating curve extended above 500 ft³/s.

YELLOWSTONE RIVER BASIN

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 1-10. Records good except those for estimated daily discharges, which are poor. No diversion upstream from station.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	70	110	24	18	9.0
2	---	---	---	---	---	---	---	70	88	23	17	8.1
3	---	---	---	---	---	---	---	72	76	22	19	9.0
4	---	---	---	---	---	---	---	72	78	21	21	9.7
5	---	---	---	---	---	---	---	78	71	20	18	8.5
6	---	---	---	---	---	---	---	90	66	23	17	7.6
7	---	---	---	---	---	---	---	95	66	43	15	7.0
8	---	---	---	---	---	---	---	100	58	52	15	6.6
9	---	---	---	---	---	---	---	110	48	34	14	6.4
10	---	---	---	---	---	---	---	120	42	28	16	5.8
11	---	---	---	---	---	---	---	155	38	25	24	6.0
12	---	---	---	---	---	---	---	204	47	23	29	6.0
13	---	---	---	---	---	---	---	257	49	23	25	6.0
14	---	---	---	---	---	---	---	157	97	23	23	6.6
15	---	---	---	---	---	---	---	128	70	20	20	10
16	---	---	---	---	---	---	---	175	53	24	18	11
17	---	---	---	---	---	---	---	169	50	23	16	11
18	---	---	---	---	---	---	---	136	52	20	15	9.9
19	---	---	---	---	---	---	---	192	52	21	14	9.1
20	---	---	---	---	---	---	---	187	54	20	13	8.7
21	---	---	---	---	---	---	---	123	56	18	12	9.9
22	---	---	---	---	---	---	---	103	53	17	11	11
23	---	---	---	---	---	---	---	112	48	16	11	11
24	---	---	---	---	---	---	---	113	43	23	10	11
25	---	---	---	---	---	---	---	115	39	34	9.7	9.9
26	---	---	---	---	---	---	---	119	34	30	9.2	9.2
27	---	---	---	---	---	---	---	131	33	25	8.5	8.5
28	---	---	---	---	---	---	---	134	29	23	8.3	8.3
29	---	---	---	---	---	---	---	112	27	21	8.1	7.8
30	---	---	---	---	---	---	---	109	25	20	8.5	7.9
31	---	---	---	---	---	---	---	115	---	18	9.0	---
TOTAL	---	---	---	---	---	---	---	3923	1652	757	472.3	256.5
MEAN	---	---	---	---	---	---	---	127	55.1	24.4	15.2	8.55
MAX	---	---	---	---	---	---	---	257	110	52	29	11
MIN	---	---	---	---	---	---	---	70	25	16	8.1	5.8
AC-FT	---	---	---	---	---	---	---	7780	3280	1500	937	509

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1973, BY WATER YEAR (WY)

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
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								

SUMMARY STATISTICS

	FOR 1994 WATER YEAR*	WATER YEARS 1954 - 1973
ANNUAL MEAN	--	32.6
HIGHEST ANNUAL MEAN	--	41.8
LOWEST ANNUAL MEAN	--	21.4
HIGHEST DAILY MEAN	257 May 13	775 Jun 15 1963
LOWEST DAILY MEAN	5.8 Sep 10	1.0 Dec 11-14 1963, Mar 24, 25 Nov 14, 15 1964, Mar 18 1971#

ANNUAL SEVEN-DAY MINIMUM

	FOR 1994 WATER YEAR*	WATER YEARS 1954 - 1973
INSTANTANEOUS PEAK FLOW	282 May 12	1.1 Mar 12 1971
INSTANTANEOUS PEAK STAGE	4.79 May 12	1230a Jun 15 1963#
ANNUAL RUNOFF (AC-FT)	--	4.59b Jun 15 1963
10 PERCENT EXCEEDS	117	23600
50 PERCENT EXCEEDS	23	102
90 PERCENT EXCEEDS	8.4	6.0
		2.4

* During period of operation.

For period of record through 1994.

a From rating curve extended above 250 ft³/s on basis of slope-area measurement of peak flow.

b Site and datum then in use.

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 1-17. Records good except those for estimated daily discharges, which are poor. Some regulation by Twin Lakes, capacity, 1,200 acre-ft, and Dome Lake, capacity, 1,800 acre-ft. No diversion upstream from station.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	84	106	31	20	14
2	---	---	---	---	---	---	---	82	97	31	21	13
3	---	---	---	---	---	---	---	80	84	33	22	13
4	---	---	---	---	---	---	---	82	80	33	19	10
5	---	---	---	---	---	---	---	86	77	35	15	11
6	---	---	---	---	---	---	---	94	56	35	14	15
7	---	---	---	---	---	---	---	110	34	36	14	24
8	---	---	---	---	---	---	---	120	46	33	14	24
9	---	---	---	---	---	---	---	130	60	31	14	23
10	---	---	---	---	---	---	---	138	59	29	14	21
11	---	---	---	---	---	---	---	160	50	27	15	17
12	---	---	---	---	---	---	---	190	38	26	16	15
13	---	---	---	---	---	---	---	230	45	26	15	14
14	---	---	---	---	---	---	---	200	90	30	15	14
15	---	---	---	---	---	---	---	190	98	32	18	15
16	---	---	---	---	---	---	---	200	78	33	27	17
17	---	---	---	---	---	---	---	190	68	30	27	17
18	---	---	---	---	---	---	---	176	60	27	24	17
19	---	---	---	---	---	---	---	186	57	27	24	17
20	---	---	---	---	---	---	---	232	55	26	24	17
21	---	---	---	---	---	---	---	174	55	26	23	18
22	---	---	---	---	---	---	---	133	58	25	29	18
23	---	---	---	---	---	---	---	129	58	25	29	18
24	---	---	---	---	---	---	---	128	50	25	29	18
25	---	---	---	---	---	---	---	125	43	26	29	17
26	---	---	---	---	---	---	---	121	38	25	27	15
27	---	---	---	---	---	---	---	123	34	25	28	19
28	---	---	---	---	---	---	---	134	33	24	24	24
29	---	---	---	---	---	---	---	127	34	24	17	24
30	---	---	---	---	---	---	---	112	31	24	15	24
31	---	---	---	---	---	---	---	108	---	23	14	---
TOTAL	---	---	---	---	---	---	---	4374	1772	883	636	523
MEAN	---	---	---	---	---	---	---	141	59.1	28.5	20.5	17.4
MAX	---	---	---	---	---	---	---	232	106	36	29	24
MIN	---	---	---	---	---	---	---	80	31	23	14	10
AC-FT	---	---	---	---	---	---	---	8680	3510	1750	1260	1040
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	101	35.1	19.4	6.32
(WY)	1964	1964	1964	1964	1964	1964	1957	1957	1966	1966	1969	1956

SUMMARY STATISTICS

ANNUAL MEAN
HIGHEST ANNUAL MEAN
LOWEST ANNUAL MEAN
HIGHEST DAILY MEAN
LOWEST DAILY MEAN

FOR 1994 WATER YEAR*

--
--
--
232 May 20
10 Sep 4

WATER YEARS 1954 - 1971

34.3
45.7 1965
21.7 1960
612 Jun 16 1963
.80 Dec 14, 26 1963,
Jan 15, 16
Feb 26 1964#
.89 Dec 20 1963
1030b Jun 15 1963#
5.37 Jun 15 1963#
24880
90
6.9
2.3

ANNUAL SEVEN-DAY MINIMUM

INSTANTANEOUS PEAK FLOW
INSTANTANEOUS PEAK STAGE
ANNUAL RUNOFF (AC-FT)
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

--
258a May 20
3.29 May 20
--
130
29
15

* During period of operation.

For period of record through 1994.

a May have been higher on May 13, during period of estimated daily discharge.

b From rating curve extended above 410 ft³/s on basis of velocity-area study.

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. 1 to June 15. 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.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	17	102	126	26	23	21
2	---	---	---	---	---	---	18	100	107	24	24	20
3	---	---	---	---	---	---	18	100	88	25	24	18
4	---	---	---	---	---	---	18	110	72	25	26	17
5	---	---	---	---	---	---	17	112	56	28	22	16
6	---	---	---	---	---	---	17	115	45	33	22	15
7	---	---	---	---	---	---	17	138	35	66	22	22
8	---	---	---	---	---	---	15	166	39	41	25	23
9	---	---	---	---	---	---	14	200	35	32	24	22
10	---	---	---	---	---	---	16	229	36	27	24	23
11	---	---	---	---	---	---	16	267	27	25	25	20
12	---	---	---	---	---	---	19	320	32	23	27	18
13	---	---	---	---	---	---	22	376	40	25	25	19
14	---	---	---	---	---	---	24	350	70	31	24	23
15	---	---	---	---	---	---	23	236	108	31	24	37
16	---	---	---	---	---	---	30	255	82	34	29	29
17	---	---	---	---	---	---	37	265	70	32	28	27
18	---	---	---	---	---	---	47	252	55	26	24	26
19	---	---	---	---	---	---	58	264	48	25	22	25
20	---	---	---	---	---	---	73	247	44	25	21	18
21	---	---	---	---	---	---	90	317	42	24	21	20
22	---	---	---	---	---	---	122	317	45	23	20	19
23	---	---	---	---	---	---	140	274	49	24	21	18
24	---	---	---	---	---	---	145	236	42	25	20	17
25	---	---	---	---	---	---	143	195	33	27	20	16
26	---	---	---	---	---	---	137	183	28	25	18	22
27	---	---	---	---	---	---	128	172	24	24	14	31
28	---	---	---	---	---	---	118	163	22	23	16	11
29	---	---	---	---	---	---	110	155	25	23	17	12
30	---	---	---	---	---	---	103	148	28	22	20	10
31	---	---	---	---	---	---	---	138	---	22	21	---
TOTAL	---	---	---	---	---	---	1752	6502	1553	866	693	615
MEAN	---	---	---	---	---	---	58.4	210	51.8	27.9	22.4	20.5
MAX	---	---	---	---	---	---	145	376	126	66	29	37
MIN	---	---	---	---	---	---	14	100	22	22	14	10
AC-FT	---	---	---	---	---	---	3480	12900	3080	1720	1370	1220

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	

SUMMARY STATISTICS

	FOR 1994 WATER YEAR*	WATER YEARS 1930 - 1971
ANNUAL MEAN	--	80.2
HIGHEST ANNUAL MEAN	--	137
LOWEST ANNUAL MEAN	--	26.6
HIGHEST DAILY MEAN	376 May 13	2050 Jun 16 1963
LOWEST DAILY MEAN	10 Sep 30	1.6 Nov 29 1954#
ANNUAL SEVEN-DAY MINIMUM	--	2.2 Jan 18 1955
INSTANTANEOUS PEAK FLOW	376a May 13	3160b Jun 15 1963#
INSTANTANEOUS PEAK STAGE	Unknown	5.83 Jun 15 1963
ANNUAL RUNOFF (AC-FT)	--	58100
10 PERCENT EXCEEDS	179	214
50 PERCENT EXCEEDS	26	20
90 PERCENT EXCEEDS	17	8.0

* During period of operation.

For period of record through 1994.

a Estimated mean daily, peak was probably higher.

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

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	
OCT 13...	1045	18	99	8.1	5.5	16.0	649	10.9	102	K4
JAN 11...	0745	16	103	8.1	1.0	6.5	644	12.5	104	K2
MAY 03...	1200	100	70	7.8	6.0	11.5	650	10.2	96	K3
SEP 14...	1000	28	83	7.5	12.5	14.5	642	9.6	107	20

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

YELLOWSTONE RIVER BASIN

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.--No estimated daily discharges. Records good. Three small reservoirs upstream from station, combined capacity, 860 acre-ft, two of which store some imported water. Water imported into drainage basin upstream from station from East Goose Creek basin is diverted downstream from station for irrigation.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	15	90	120	76	80	61
2	---	---	---	---	---	---	16	90	118	83	81	59
3	---	---	---	---	---	---	16	90	122	78	80	55
4	---	---	---	---	---	---	16	90	114	80	77	55
5	---	---	---	---	---	---	16	98	97	84	75	53
6	---	---	---	---	---	---	16	119	96	90	75	51
7	---	---	---	---	---	---	15	120	109	126	75	53
8	---	---	---	---	---	---	13	132	112	97	74	52
9	---	---	---	---	---	---	13	139	113	79	76	50
10	---	---	---	---	---	---	15	155	103	75	75	48
11	---	---	---	---	---	---	15	171	91	72	77	47
12	---	---	---	---	---	---	17	208	90	67	74	45
13	---	---	---	---	---	---	21	280	85	68	64	45
14	---	---	---	---	---	---	23	210	88	71	63	48
15	---	---	---	---	---	---	22	194	75	67	63	55
16	---	---	---	---	---	---	27	216	72	71	63	49
17	---	---	---	---	---	---	39	233	69	69	63	48
18	---	---	---	---	---	---	52	211	68	68	64	45
19	---	---	---	---	---	---	67	243	66	76	63	43
20	---	---	---	---	---	---	84	218	65	72	60	29
21	---	---	---	---	---	---	113	174	64	69	60	29
22	---	---	---	---	---	---	137	162	64	69	59	25
23	---	---	---	---	---	---	155	154	63	74	57	28
24	---	---	---	---	---	---	158	147	60	75	59	35
25	---	---	---	---	---	---	154	137	53	80	62	33
26	---	---	---	---	---	---	129	128	52	84	62	37
27	---	---	---	---	---	---	118	126	55	82	59	31
28	---	---	---	---	---	---	108	121	67	78	59	18
29	---	---	---	---	---	---	96	124	70	79	59	18
30	---	---	---	---	---	---	92	121	75	79	59	17
31	---	---	---	---	---	---	---	119	---	78	60	---
TOTAL	---	---	---	---	---	---	1778	4820	2496	2416	2077	1262
MEAN	---	---	---	---	---	---	59.3	155	83.2	77.9	67.0	42.1
MAX	---	---	---	---	---	---	158	280	122	126	81	61
MIN	---	---	---	---	---	---	13	90	52	67	57	17
AC-FT	---	---	---	---	---	---	3530	9560	4950	4790	4120	2500

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	5.37	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	

SUMMARY STATISTICS

	FOR 1994 WATER YEAR*	WATER YEARS 1941 - 1971
ANNUAL MEAN	--	63.4
HIGHEST ANNUAL MEAN	--	83.9
LOWEST ANNUAL MEAN	--	40.6
HIGHEST DAILY MEAN	280 May 13	837 Jun 15 1963
LOWEST DAILY MEAN	13 Apr 8, 9	3.0 Jan 3 1950
ANNUAL SEVEN-DAY MINIMUM	--	4.5 Dec 31 1949
INSTANTANEOUS PEAK FLOW	328 May 12	1350a Jun 15 1963#
INSTANTANEOUS PEAK STAGE	3.67 May 12	6.78 Jun 15 1963#
ANNUAL RUNOFF (AC-FT)	--	45900
10 PERCENT EXCEEDS	144	172
50 PERCENT EXCEEDS	72	21
90 PERCENT EXCEEDS	24	7.5

* During period of operation.

For period of record through 1994.

a From rating curve extended above 900 ft³/s.

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT 13...	1230	68	635	8.5	9.0	21.0	667	13.4	133	67
JAN 10...	1600	35	520	8.2	0.0	3.0	670	13.0	101	K4
MAY 03...	0950	149	284	8.2	8.5	14.5	670	10.6	103	130
SEP 14...	1150	12	831	8.1	18.0	20.0	660	9.3	114	440

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

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)
OCT 13...	1325	138	640	668	15.4	152	8.4	9.0
JAN 10...	1430	76	592	667	12.5	99	8.4	0.5
MAY 03...	0745	308	309	670	10.2	101	8.1	9.0
SEP 14...	1330	28	761	663	8.8	104	8.1	16.5

DATE	TEMPER- ATURE AIR (DEG C)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHOPHOS- PHATE DIS- SOLVED (MG/L AS P)
OCT 13...	15.0	K8500	<0.01	0.28	<0.01	0.2	0.08	0.06
JAN 10...	2.5	1100	<0.01	1.10	0.02	0.3	0.17	0.14
MAY 03...	11.0	300	<0.01	<0.05	0.02	0.4	0.06	0.02
SEP 14...	13.0	360	0.01	0.37	0.04	0.4	0.29	0.24

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. 24 to Mar. 6 and Apr. 19 to May 26. 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	106	108	91	71	85	128	290	138	33	23	31
2	105	101	106	97	69	135	132	290	130	31	21	32
3	95	97	105	89	68	175	121	300	111	26	23	33
4	86	101	99	79	69	360	149	310	93	24	23	29
5	79	95	90	71	72	1080	137	350	87	23	27	29
6	79	80	77	59	64	710	137	390	79	39	30	28
7	88	97	82	60	56	490	133	425	69	72	26	30
8	132	96	88	70	53	108	123	455	96	123	23	26
9	134	91	90	74	60	101	109	485	122	76	25	25
10	124	91	95	80	70	112	98	540	96	60	26	23
11	145	95	91	86	75	156	91	580	82	52	25	23
12	147	94	88	90	80	166	86	630	63	44	26	23
13	138	91	84	97	90	134	84	720	57	44	28	26
14	127	94	77	85	84	147	85	680	79	55	26	29
15	128	83	85	73	95	149	89	660	143	55	28	55
16	120	104	80	65	100	128	91	600	128	53	23	60
17	114	99	74	56	102	127	95	560	120	52	23	54
18	112	116	69	67	98	117	103	530	113	44	21	52
19	110	98	67	85	89	107	145	500	96	40	22	49
20	114	107	63	82	81	103	200	560	93	38	21	49
21	109	101	68	82	73	94	255	470	90	31	23	54
22	109	102	73	83	67	93	325	410	85	23	24	61
23	105	87	80	90	60	102	405	330	99	19	26	62
24	106	69	85	88	54	83	450	290	93	22	23	59
25	106	78	95	83	51	91	410	275	83	29	18	55
26	103	90	85	78	60	93	380	250	69	33	15	54
27	102	100	77	77	64	87	350	230	61	29	16	55
28	105	110	70	77	71	88	325	211	50	26	17	68
29	104	112	73	75	---	95	310	193	49	24	21	55
30	84	110	77	71	---	91	300	165	43	22	25	55
31	99	---	85	71	---	114	---	151	---	23	24	---
TOTAL	3406	2895	2586	2431	2046	5721	5846	12830	2717	1265	722	1284
MEAN	110	96.5	83.4	78.4	73.1	185	195	414	90.6	40.8	23.3	42.8
MAX	147	116	108	97	102	1080	450	720	143	123	30	68
MIN	79	69	63	56	51	83	84	151	43	19	15	23
AC-FT	6760	5740	5130	4820	4060	11350	11600	25450	5390	2510	1430	2550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1994, BY WATER YEAR (WY)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984-1994, BY WATER YEAR (WY)												
MEAN	99.0	93.6	76.8	67.3	79.1	101	136	380	498	134	57.4	83.3
MAX	156	111	92.6	109	131	185	195	891	1245	437	117	132
(WY)	1985	1985	1990	1990	1986	1994	1994	1984	1984	1992	1993	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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1984 - 1994
ANNUAL TOTAL	69212	43749	--
ANNUAL MEAN	190	120	139
HIGHEST ANNUAL MEAN	--	--	187
LOWEST ANNUAL MEAN	--	--	71.8
HIGHEST DAILY MEAN	1170	1080	2090
LOWEST DAILY MEAN	52	15	8.4
ANNUAL SEVEN-DAY MINIMUM	54	19	10
INSTANTANEOUS PEAK FLOW	--	1490a	2150b
INSTANTANEOUS PEAK STAGE	--	7.51c	7.65d
ANNUAL RUNOFF (AC-FT)	137300	86780	100600
10 PERCENT EXCEEDS	538	290	321
50 PERCENT EXCEEDS	103	86	89
90 PERCENT EXCEEDS	64	26	42

a About.

b Gage height, 6.13 ft.

c Backwater from ice.

d From floodmarks, backwater from ice.

06306300 TONGUE RIVER AT STATE LINE, NEAR DECKER, MT

LOCATION.--Lat 45°00'32", long 106°50'08", in NW¹/₄ NW¹/₄ NE¹/₄ sec.33, T.9 S., R.40 E., Big Horn County, Hydrologic Unit 10090101, on left bank 1 mi north of Wyoming-Montana State line, 1.4 mi southeast of Decker, 1.6 mi upstream from Badger Creek, and at river mile 200.9.

DRAINAGE AREA.--1,477 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 3,429.14 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Water-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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	225	254	e230	e240	e210	e250	301	873	549	201	97	94
2	227	266	e230	e250	e200	e300	317	847	521	179	96	97
3	232	241	e240	e220	e190	e500	322	815	482	147	95	109
4	226	253	e250	e200	e200	e1000	340	786	421	138	100	111
5	215	250	e220	e190	e220	e1800	384	804	385	146	96	102
6	209	e210	e200	e170	e200	e1500	373	974	360	142	103	99
7	216	e210	e220	e160	e150	808	369	1170	340	182	101	94
8	276	244	e230	e180	e120	485	345	1300	362	384	98	90
9	323	243	e240	e190	e140	381	303	1420	491	313	99	86
10	306	234	e250	e200	e180	373	278	1550	435	224	98	85
11	304	234	e260	e210	e170	467	271	1690	385	193	97	80
12	329	260	e270	e220	e180	607	261	1800	340	172	101	75
13	330	270	e250	e230	e200	463	261	2030	325	168	109	78
14	316	e240	e220	e210	e220	446	282	2200	339	178	110	81
15	305	e230	e230	e190	e230	479	295	1840	412	180	102	108
16	300	232	e220	e170	e250	418	274	1740	421	174	107	175
17	288	e240	e230	e150	e260	380	282	1830	408	174	101	181
18	273	e250	e240	e170	e270	359	324	1720	402	175	104	149
19	270	e260	e230	e190	e270	325	403	1520	384	160	101	141
20	270	e270	e230	e170	e260	306	490	1580	366	151	90	125
21	264	e250	e220	e190	e250	275	634	1600	368	136	85	127
22	258	e280	e220	e220	e220	254	856	1340	360	122	90	136
23	267	e230	e210	e230	e180	272	1140	1190	376	111	91	151
24	262	226	e210	e220	e150	257	1430	1080	387	99	89	157
25	263	e200	e230	e210	e140	223	1510	986	355	104	87	153
26	258	e220	e250	e200	e150	242	1410	880	316	115	79	147
27	253	e230	e220	e210	e170	243	1110	810	291	122	71	141
28	251	e240	e200	e220	e200	227	1010	753	260	116	71	146
29	e240	e250	e210	e210	---	242	922	705	235	112	71	154
30	e210	e230	e220	e200	---	247	890	648	220	104	77	145
31	213	---	e230	e200	---	263	---	607	---	100	87	---
TOTAL	8179	7247	7110	6220	5580	14392	17387	39088	11296	5022	2903	3617
MEAN	264	242	229	201	199	464	580	1261	377	162	93.6	121
MAX	330	280	270	250	270	1800	1510	2200	549	384	110	181
MIN	209	200	200	150	120	223	261	607	220	99	71	75
AC-FT	16220	14370	14100	12340	11070	28550	34490	77530	22410	9960	5760	7170

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1994, BY WATER YEAR (WY)

	MEAN	255	226	182	183	239	316	370	1176	1678	476	177	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	

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1961 - 1994
ANNUAL TOTAL	164113	128041	
ANNUAL MEAN	450	351	458
HIGHEST ANNUAL MEAN			862
LOWEST ANNUAL MEAN			187
HIGHEST DAILY MEAN	2570	2200	15400
LOWEST DAILY MEAN	95	71	5.4
ANNUAL SEVEN-DAY MINIMUM	106	78	7.2
INSTANTANEOUS PEAK FLOW		a2340	17500
INSTANTANEOUS PEAK STAGE		b8.53	14.25
INSTANTANEOUS LOW FLOW		c68	3.0
ANNUAL RUNOFF (AC-FT)	325500	254000	331900
10 PERCENT EXCEEDS	1250	812	1100
50 PERCENT EXCEEDS	240	230	240
90 PERCENT EXCEEDS	150	101	120

a Gage height 6.29 ft.

b Ice jam.

c Gage height, 2.36 ft.

e Estimated.

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 District office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (water years 1966-76, 1981-87): Maximum daily, 1,490 microsiemens, Aug. 12, 1966, Jan. 11, 1972; minimum daily, 192 microsiemens, 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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
MAY											
10...	1405	1630	192	23.0	13.0	671	8.8	95	7.7	110	25
JUN											
14...	0820	338	506	10.5	15.0	670	7.8	88	8.2	230	50
23...	1500	381	534	30.0	24.0	672	9.7	131	8.8	250	52
AUG											
30...	0900	77	836	19.0	16.5	--	--	--	--	370	69

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)
MAY										
10...	11	6.9	0.3	1.3	96	28	1.1	<0.1	7.2	138
JUN										
14...	25	19	0.5	2.4	181	87	2.2	0.2	6.2	301
23...	29	21	0.6	2.5	198	97	2.6	0.2	6.1	329
AUG										
30...	47	38	0.9	5.3	243	210	3.8	0.2	7.2	527

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM, DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)
MAY										
10...	0.19	608	--	--	--	--	--	--	--	--
JUN										
14...	0.41	275	<10	<1	45	<0.5	50	1.0	<1	<3
23...	0.45	339	--	--	--	--	--	--	--	--
AUG										
30...	0.72	110	<10	<1	45	<0.5	120	<1.0	<1	<3

DATE	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
MAY										
10...	--	--	--	--	--	--	--	--	--	--
JUN										
14...	2	15	<1.0	13	6	<0.1	<1	<1.0	280	4
23...	--	--	--	--	--	--	--	--	--	--
AUG										
30...	2	10	<1.0	24	11	<0.1	<1	<1.0	660	<3

06309200 MIDDLE FORK POWDER RIVER NEAR BARNUM, WY

LOCATION.--Lat 43°34'40", long 107°08'16", in SE¹/₄ SW¹/₄ NE¹/₄ sec.26, T.42 N., R.86 W., Washakie County, Hydrologic Unit 10090201, on left bank 1,100 ft downstream from Rock Creek and 13 mi southwest of Barnum.

DRAINAGE AREA.--45.2 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 7,220 ft above National Geodetic Vertical Datum of 1929, 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. 29 to Nov. 2, Nov. 4-9, 11, 15, Dec. 13-17, Jan. 7-15, 17-22, Jan 29 to Feb. 17, Mar. 7-10, 13, 15, 18, 20, 21, 24-30, Apr. 1, and May 14 to June 15. 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 200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 24	1630	250	7.23	May 12	2130	*364	*7.67

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	6.6	6.4	6.3	5.4	5.3	7.3	55	47	9.9	6.3	5.2
2	7.4	6.3	6.3	6.3	5.5	5.4	7.1	63	37	9.6	6.5	5.2
3	7.3	6.9	6.2	6.3	5.5	5.6	7.3	68	31	9.5	6.4	5.0
4	7.0	7.6	6.3	6.3	5.5	5.8	7.3	84	28	9.2	6.2	5.0
5	7.0	7.0	6.4	6.3	5.6	5.8	7.5	137	26	9.0	5.8	5.0
6	7.0	6.3	6.6	6.2	5.6	5.7	7.4	168	25	9.5	5.5	5.0
7	7.4	6.0	6.6	6.0	5.5	5.5	6.6	170	30	21	5.3	5.0
8	7.8	6.2	6.6	6.0	5.4	5.2	7.4	160	40	11	5.3	4.8
9	7.4	6.4	6.6	6.2	5.4	5.1	7.6	148	35	9.2	5.5	4.7
10	7.5	6.6	6.3	6.1	5.4	5.3	6.8	143	26	8.6	5.6	4.5
11	7.6	6.8	6.3	6.2	5.5	5.4	7.5	138	22	8.3	5.5	4.5
12	7.5	7.0	6.3	6.3	5.4	5.3	8.4	168	20	8.1	5.5	4.5
13	7.4	7.0	6.2	6.2	5.4	5.6	11	195	18	9.1	5.3	4.8
14	7.6	6.8	6.2	6.2	5.4	6.0	12	153	17	8.8	5.2	6.8
15	8.0	6.5	6.2	6.2	5.4	6.3	11	122	18	8.3	5.2	13
16	7.8	7.0	6.1	5.9	5.4	6.6	14	106	18	8.0	5.0	7.9
17	7.7	6.7	6.0	5.9	5.4	6.7	21	94	16	8.6	5.0	6.3
18	7.4	6.6	6.0	5.8	5.4	7.3	29	81	15	7.7	5.0	5.7
19	7.4	7.0	6.0	5.9	5.4	7.9	40	71	14	7.5	5.0	5.3
20	6.9	7.0	6.0	5.9	5.4	7.4	56	64	14	7.2	5.0	5.3
21	6.7	7.0	6.0	5.9	5.4	6.5	75	67	14	6.7	4.9	5.7
22	7.1	7.0	6.0	5.9	5.4	6.9	122	59	15	6.6	5.0	5.8
23	7.0	6.7	6.0	5.9	5.4	7.5	164	53	14	6.7	5.0	6.0
24	7.0	6.4	6.0	5.9	5.4	7.0	206	47	12	6.9	5.0	5.8
25	6.8	6.3	6.3	5.8	5.4	6.7	176	44	12	6.8	5.0	5.5
26	6.4	6.3	6.3	5.6	5.4	6.9	110	41	11	6.5	4.9	5.3
27	6.3	6.3	6.3	5.6	5.4	6.6	107	37	11	6.4	5.0	5.2
28	6.0	6.4	6.3	5.6	5.3	6.4	93	35	11	6.3	5.0	5.0
29	5.5	6.6	6.3	5.5	---	6.6	70	32	10	6.2	5.0	5.0
30	5.2	6.6	6.3	5.4	---	7.9	55	30	10	6.1	5.0	5.0
31	5.9	---	6.2	5.4	---	6.4	---	31	---	6.2	5.0	---
TOTAL	218.5	199.9	193.6	185.0	152.0	194.6	1460.2	2864	617	259.5	164.9	167.8
MEAN	7.05	6.66	6.25	5.97	5.43	6.28	48.7	92.4	20.6	8.37	5.32	5.59
MAX	8.0	7.6	6.6	6.3	5.6	7.9	206	195	47	21	6.5	13
MIN	5.2	6.0	6.0	5.4	5.3	5.1	6.6	30	10	6.1	4.9	4.5
AC-FT	433	397	384	367	301	386	2900	5680	1220	515	327	333

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1994, BY WATER YEAR (WY)

	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	
MEAN	6.78	6.04	5.49	5.02	5.25	6.35	33.3	156	93.1	18.5	8.51	7.23																						
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																						

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1962 - 1994
ANNUAL TOTAL	11399.7	6677.0	--
ANNUAL MEAN	31.2	18.3	29.4
HIGHEST ANNUAL MEAN	--	--	48.9
LOWEST ANNUAL MEAN	--	--	13.1
HIGHEST DAILY MEAN	419	206	778
LOWEST DAILY MEAN	3.9	4.5	1.0
ANNUAL SEVEN-DAY MINIMUM	4.3	4.7	1.2
INSTANTANEOUS PEAK FLOW	--	364	7110a
INSTANTANEOUS PEAK STAGE	--	7.67	12.60b
ANNUAL RUNOFF (AC-FT)	22610	13240	21290
10 PERCENT EXCEEDS	96	45	75
50 PERCENT EXCEEDS	8.0	6.5	6.9
90 PERCENT EXCEEDS	5.0	5.2	4.5

a On basis of slope-area measurement of peak flow.

b From floodmark, site and datum then in use.

YELLOWSTONE RIVER BASIN

06311000 NORTH FORK POWDER RIVER NEAR HAZELTON, WY

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.

DRAINAGE AREA.--24.5 mi².

PERIOD OF RECORD.--September 1946 to current year. Monthly discharge only for some periods, published in WSP 1309. REVISED RECORDS.--WSP 1279: 1947-48(M), 1949, 1950-51(M), 1952.

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. 11, 12, Oct. 25 to Nov. 8, Apr. 17-21, May 3, 4, 6-12, 14, 15, and May 18 to June 3. 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 190 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 20	1000	ice jam	*4.84	Apr. 21	1900	*332a	4.13

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	4.0	3.4	2.7	2.6	2.5	2.3	13	34	9.0	5.7	3.3
2	5.1	3.7	3.3	2.8	2.6	2.5	2.2	15	33	8.6	6.8	3.3
3	5.0	3.9	3.3	2.8	2.5	2.5	2.2	17	29	8.2	10	3.0
4	4.9	4.2	3.3	2.8	2.4	2.5	2.3	22	26	8.2	9.1	2.9
5	4.9	4.1	3.1	2.7	2.4	2.5	2.2	43	25	7.9	6.5	2.8
6	4.9	3.8	3.1	2.7	2.3	2.5	2.2	60	23	12	5.6	2.8
7	6.1	4.0	3.2	2.7	2.3	2.5	2.3	76	24	19	5.1	2.8
8	7.8	4.1	3.2	2.7	2.3	2.4	2.3	78	38	21	5.1	2.8
9	7.7	4.2	3.2	2.6	2.3	2.4	2.2	83	32	11	5.5	2.7
10	6.8	4.2	3.3	2.5	2.3	2.4	2.2	85	25	9.4	5.6	2.7
11	6.6	4.3	3.2	2.5	2.3	2.4	2.2	92	22	8.9	5.2	2.7
12	7.0	4.4	3.3	2.5	2.3	2.4	2.3	109	22	8.4	5.0	2.8
13	7.5	4.5	3.3	2.6	2.4	2.4	2.6	105	20	9.0	4.7	3.6
14	7.5	4.4	3.2	2.6	2.5	2.4	2.6	71	21	9.1	4.5	3.1
15	7.1	4.2	3.1	2.6	2.5	2.3	2.4	63	23	8.2	4.2	4.3
16	7.7	4.2	3.0	2.6	2.3	2.4	2.5	68	39	10	4.0	4.6
17	7.4	4.1	3.0	2.6	2.3	2.4	3.5	68	29	9.0	3.9	3.5
18	6.3	3.9	3.0	2.5	2.3	2.4	7.4	54	20	7.5	3.7	3.1
19	6.0	3.9	2.9	2.4	2.3	2.4	18	48	16	6.9	3.8	2.9
20	4.9	3.9	2.8	2.4	2.3	2.4	34	47	16	6.9	3.6	2.8
21	6.1	3.9	2.8	2.5	2.3	2.4	136	43	17	6.3	3.6	3.4
22	6.2	3.9	2.7	2.4	2.3	2.4	145	40	20	6.3	3.6	3.7
23	6.0	3.8	2.7	2.4	2.3	2.4	127	37	21	5.8	3.6	4.4
24	5.9	3.5	2.7	2.5	2.4	2.3	104	36	15	6.0	3.3	3.5
25	5.0	3.2	2.6	2.5	2.4	2.3	55	35	13	6.3	3.3	3.1
26	4.0	3.0	2.6	2.6	2.5	2.3	19	33	12	6.4	3.2	2.9
27	4.8	3.0	2.7	2.6	2.5	2.3	11	33	11	6.3	3.0	2.8
28	3.6	3.2	2.7	2.6	2.5	2.2	13	30	11	6.8	3.2	2.8
29	3.3	3.4	2.7	2.6	---	2.2	13	27	11	5.9	3.2	2.7
30	3.0	3.4	2.7	2.6	---	2.2	14	26	9.9	5.7	3.2	2.8
31	3.4	---	2.7	2.6	---	2.2	---	27	---	5.9	3.2	---
TOTAL	177.6	116.3	92.8	80.2	66.7	73.8	736.9	1584	657.9	265.9	144.0	94.6
MEAN	5.73	3.88	2.99	2.59	2.38	2.38	24.6	51.1	21.9	8.58	4.65	3.15
MAX	7.8	4.5	3.4	2.8	2.6	2.5	145	109	39	21	10	4.6
MIN	3.0	3.0	2.6	2.4	2.3	2.2	2.2	13	9.9	5.7	3.0	2.7
AC-FT	352	231	184	159	132	146	1460	3140	1300	527	286	188

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1994, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1946	4.32	10.4	1983	2.03	1961
1947	3.48	10.1	1983	1.70	1981
1948	2.80	6.96	1983	1.41	1967
1949	2.27	4.50	1958	.80	1949
1950	2.12	4.00	1958	1.00	1959
1951	2.21	4.99	1960	1.19	1967
1952	9.22	35.7	1987	1.09	1961
1953	58.4	119	1947	23.4	1972
1954	62.4	178	1967	13.2	1960
1955	17.1	46.8	1975	4.88	1960
1956	7.00	11.8	1968	2.85	1960
1957	4.99	9.74	1982	2.47	1960

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1946 - 1994
ANNUAL TOTAL	6985.0	4085.1	--
ANNUAL MEAN	19.1	11.2	14.7
HIGHEST ANNUAL MEAN	--	--	26.7
LOWEST ANNUAL MEAN	--	--	6.91
HIGHEST DAILY MEAN	171	145	354
LOWEST DAILY MEAN	2.2	2.2	.60a
ANNUAL SEVEN-DAY MINIMUM	2.4	2.2	.64
INSTANTANEOUS PEAK FLOW	--	332b	886c
INSTANTANEOUS PEAK STAGE	--	4.84d	6.21e
ANNUAL RUNOFF (AC-FT)	13850	8100	10670
10 PERCENT EXCEEDS	68	29	42
50 PERCENT EXCEEDS	4.3	3.6	3.8
90 PERCENT EXCEEDS	2.5	2.4	1.8

a May have been less during winter months of water years 1947 and 1948.

b Gage height, 4.13 ft. Peak discharge and corresponding gage height are approximate. Effects of backwater from ice are uncertain on Apr. 21, during an ice flow period.

c 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.

d Backwater from ice.

e Backwater from ice, site and datum then in use.

06311400 NORTH FORK POWDER RIVER BELOW PASS CREEK, NEAR MAYOWORTH, WY

LOCATION.--Lat 43°54'41", long 106°53'20", in NW¹/₄ NE¹/₄ SE¹/₄ sec.36, T.46 N., R.84 W., Johnson County, Hydrologic Unit 10090201, on left bank 0.8 mi downstream from Pass Creek, 1.2 mi upstream from Hat Ranch, 7.2 mi northwest of Mayoworth, and 13 mi downstream from Dullknife Reservoir.

DRAINAGE AREA.--100 mi².

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,700 ft above sea level, from topographic map. Prior to Sept. 15, 1983, at site 60 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Nov. 23-28, Dec. 21, 22, Jan. 6-8, 17-19, Jan. 30 to Feb. 1, Feb. 6-11, 24-26, and Aug. 11-16. 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	21	21	20	19	20	18	56	50	25	46	39
2	22	21	21	19	19	20	18	58	50	25	46	39
3	22	21	20	20	21	20	18	59	48	25	45	35
4	22	21	20	20	21	19	18	58	46	24	45	34
5	22	21	20	20	21	19	18	60	44	23	44	34
6	22	20	20	18	20	19	18	63	42	24	40	33
7	23	21	20	16	19	19	18	63	41	37	38	33
8	23	21	20	19	17	19	18	62	47	36	38	32
9	23	21	20	20	18	19	18	62	51	34	38	32
10	23	21	20	20	19	18	18	64	47	38	38	32
11	23	20	20	20	19	18	17	111	43	38	38	32
12	22	21	20	19	20	18	18	114	41	38	39	32
13	23	21	20	19	20	18	19	134	40	39	42	32
14	22	20	20	20	20	18	19	109	39	39	43	30
15	22	20	20	19	20	18	18	94	39	39	43	30
16	22	20	20	21	20	18	18	92	45	43	43	30
17	22	20	20	19	20	18	19	89	49	45	43	29
18	22	20	20	18	20	18	20	81	45	45	43	28
19	21	20	20	19	20	18	23	78	39	45	43	27
20	21	20	19	21	20	18	38	78	35	45	46	27
21	21	20	19	21	20	18	53	71	34	45	47	28
22	21	20	17	21	20	18	64	65	35	45	47	27
23	21	18	18	20	20	18	60	63	38	47	47	27
24	22	14	20	20	19	18	66	61	35	48	47	24
25	21	16	21	20	17	18	64	53	30	49	47	24
26	21	18	20	20	19	18	58	56	29	48	47	23
27	21	19	20	20	19	17	56	57	30	48	43	23
28	22	21	20	20	20	18	56	56	27	49	41	22
29	21	23	20	20	---	18	56	54	26	49	41	23
30	21	22	20	19	---	18	55	51	26	47	40	23
31	21	---	20	18	---	18	---	48	---	46	40	---
TOTAL	678	602	616	606	547	569	977	2220	1191	1228	1328	884
MEAN	21.9	20.1	19.9	19.5	19.5	18.4	32.6	71.6	39.7	39.6	42.8	29.5
MAX	23	23	21	21	21	20	66	134	51	49	47	39
MIN	21	14	17	16	17	17	17	48	26	23	38	22
AC-FT	1340	1190	1220	1200	1080	1130	1940	4400	2360	2440	2630	1750

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1994, BY WATER YEAR (WY)

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	21.5	18.9	18.5	18.0	17.7	17.5	26.6	76.0	84.7	46.1	37.7	30.0									
MAX	31.5	21.9	23.1	20.2	20.8	21.0	47.9	176	187	80.5	49.9	43.3									
(WY)	1983	1983	1977	1977	1980	1980	1977	1978	1978	1975	1975	1982									
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									

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1974 - 1994
ANNUAL TOTAL	14700	11446	--
ANNUAL MEAN	40.3	31.4	34.5
HIGHEST ANNUAL MEAN	--	--	51.6
LOWEST ANNUAL MEAN	--	--	25.4
HIGHEST DAILY MEAN	227	May 28	356
LOWEST DAILY MEAN	14	Jan 12	9.5
ANNUAL SEVEN-DAY MINIMUM	15	Jan 8	11
INSTANTANEOUS PEAK FLOW	--	152a	1590b
INSTANTANEOUS PEAK STAGE	--	4.82c	8.89d
ANNUAL RUNOFF (AC-FT)	29160	22700	25000
10 PERCENT EXCEEDS	74	54	61
50 PERCENT EXCEEDS	21	22	21
90 PERCENT EXCEEDS	17	18	17

a Gage height, 4.76 ft.

b From rating curve extended above 400 ft³/s, on basis of slope-area measurement of peak flow.

c Backwater from ice.

d From floodmarks.

YELLOWSTONE RIVER BASIN

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 07...	1210	7.0	6850	8.4	11.0	--	645	8.9	98	920	200	100
JAN 04...	1100	9.2	6100	8.3	0.0	4.0	645	10.6	88	1100	280	97
APR 11...	1100	13	6670	8.3	7.5	7.0	654	12.6	126	1000	220	120
JUN 29...	0815	4.7	5540	8.3	17.0	21.5	--	--	--	920	220	88

DATE	TIME	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
OCT 07...	1300	19	--	--	--	--	--	--	20	--	--	--
JAN 04...	1000	13	32	293	1800	860	2.5	29	4280	5.83	106	
APR 11...	1200	16	30	462	2100	830	2.1	20	4810	6.54	169	
JUN 29...	940	14	28	204	1800	730	1.9	10	3950	5.37	50.1	

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)
OCT 07...	1210	7.0	<10	1	<100	<10	1200	<1.0	<1	2	2
JAN 04...	1100	9.2	<10	1	<100	<10	890	<1.0	<1	1	2
APR 11...	1100	13	10	1	<100	<10	1000	<1.0	<1	<1	2
11...	1110	13	<10	1	<100	<10	1000	<1.0	<1	<1	2
JUN 29...	0815	4.7	<10	1	61	<2	890	5.0	<1	<9	2

DATE	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 07...	30	<1	420	70	<0.1	<1	<1.0	4600	<10
JAN 04...	40	2	450	160	<0.1	<1	<1.0	5700	<10
APR 11...	30	<1	390	210	0.2	<1	<1.0	4900	<10
11...	30	<1	400	210	0.1	<1	<1.0	4800	<10
JUN 29...	<9	1	330	98	<0.1	1	<3.0	4100	14

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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.

DRAINAGE AREA.--3,090 mi², approximately.

PERIOD OF RECORD.--April 1938 to June 1940, February 1950 to September 1957, October 1977 to September 1984, October 1985 to current year.

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. 4-6, Nov. 23 to Feb. 19, and Feb. 23-26. Records good except those for estimated daily discharges, which are poor. Numerous small reservoirs and diversions for irrigation of about 17,000 acres upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 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)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 18	2400	ice jam	*10.32	July 7	2130	*6,830	9.14

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	114	115	125	100	439	149	273	29	13	15	7.7
2	61	115	115	125	100	574	149	269	151	13	201	9.5
3	66	117	115	120	100	562	149	273	83	12	71	7.9
4	66	110	115	120	98	490	147	275	52	12	186	6.1
5	66	100	110	115	92	397	149	290	43	12	64	6.0
6	66	92	105	110	88	330	145	347	31	15	38	5.4
7	66	114	110	115	85	297	141	396	28	3680	28	4.9
8	82	125	115	120	87	270	138	392	26	1660	22	4.2
9	107	123	120	125	89	242	133	360	25	335	17	3.4
10	127	126	125	130	91	233	128	323	23	166	16	2.4
11	195	123	130	135	96	242	125	288	22	103	14	2.4
12	193	131	135	135	99	232	122	290	23	70	101	2.6
13	151	129	135	130	100	223	122	336	23	51	320	26
14	126	133	140	125	105	216	125	431	23	47	121	25
15	116	126	140	115	108	209	134	388	25	121	59	11
16	114	137	140	110	112	204	133	298	24	74	40	7.3
17	110	129	135	110	123	199	130	263	23	56	29	5.7
18	113	135	130	110	290	190	136	214	21	49	24	4.1
19	112	131	125	115	1750	186	154	174	19	47	18	3.9
20	107	127	120	120	499	187	178	161	19	35	15	3.6
21	103	140	120	120	346	185	222	167	21	29	13	5.7
22	103	132	120	120	280	176	261	136	23	25	12	7.4
23	102	110	125	120	208	180	336	111	98	23	11	9.8
24	101	90	130	120	177	177	402	90	71	21	9.2	9.5
25	100	77	130	120	117	165	414	77	38	19	8.0	9.9
26	99	83	120	120	172	171	414	63	22	17	6.7	12
27	98	91	120	120	234	163	370	46	16	16	5.9	9.3
28	98	97	120	120	270	159	342	40	13	14	6.6	7.7
29	104	100	125	115	---	154	317	33	12	14	6.2	14
30	101	110	130	110	---	154	286	29	13	13	6.1	19
31	89	---	130	105	---	149	---	26	---	12	6.3	---
TOTAL	3203	3467	3845	3700	6016	7755	6151	6859	1040	6774	1490.0	253.4
MEAN	103	116	124	119	215	250	205	221	34.7	219	48.1	8.45
MAX	195	140	140	135	1750	574	414	431	151	3680	320	26
MIN	61	77	105	105	85	149	122	26	12	12	5.9	2.4
AC-FT	6350	6880	7630	7340	11930	15380	12200	13600	2060	13440	2960	500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1994, BY WATER YEAR (WY)

MEAN	111	123	110	110	167	275	268	546	328	130	57.8	70.5
MAX	390	202	158	177	335	701	553	2553	1142	374	125	448
(WY)	1987	1987	1956	1983	1980	1987	1987	1978	1978	1978	1983	1982
MIN	24.2	77.7	79.5	58.6	69.4	110	136	72.0	22.2	29.2	3.54	4.90
(WY)	1957	1953	1991	1940	1939	1940	1953	1992	1954	1980	1939	1939

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1938 - 1994

	WATER YEAR 1950-1951		WATER YEAR 1951-1952		WATER YEARS 1952-1953	
ANNUAL TOTAL	106356		50553.4		--	--
ANNUAL MEAN	291		139		193	
HIGHEST ANNUAL MEAN	--		--		486	1978
LOWEST ANNUAL MEAN	--		--		115	1989
HIGHEST DAILY MEAN	5920	May 6	3680	Jul 7	14100	May 23 1952
LOWEST DAILY MEAN	21	Sep 14	2.4	Sep 10	1.5	Aug 25 1939
ANNUAL SEVEN-DAY MINIMUM	22	Sep 11	3.6	Sep 6	2.6	Aug 23 1939
INSTANTANEOUS PEAK FLOW	--		6830a	Jul 7	32500b	May 23 1952
INSTANTANEOUS PEAK STAGE	--		10.32c	Feb 18	4374.76d	May 23 1952
ANNUAL RUNOFF (AC-FT)	211000		100300		140000	
10 PERCENT EXCEEDS	623		277		405	
50 PERCENT EXCEEDS	128		114		120	
90 PERCENT EXCEEDS	62		12		25	

a Gage height, 9.14 ft.

b From rating curve extended above 1,500 ft³/s, on basis of slope-area measurement of peak flow.

c Backwater from ice.

d From floodmarks, site and datum then in use.

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT												
07...	1550	66	2100	8.2	10.5	7.0	648	8.5	90	610	150	56
NOV												
18...	0950	126	1690	8.3	0.5	3.5	645	10.1	83	530	130	49
JAN												
04...	1500	123	1760	8.2	0.0	5.0	644	12.2	99	500	130	43
04...	1505	123	1760	8.2	0.0	5.0	644	12.2	99	510	130	46
FEB												
16...	1000	111	1570	8.1	0.0	4.0	651	11.4	92	470	120	42
APR												
11...	1310	130	1950	8.2	12.0	10.0	655	10.8	118	540	130	52
MAY												
18...	1245	222	958	8.2	16.0	19.0	652	8.1	96	280	72	25
JUN												
17...	1310	24	3500	8.1	19.0	27.0	655	10.1	129	920	220	89
AUG												
05...	1230	64	2670	7.9	23.0	34.0	654	6.6	91	710	190	56
30...	1130	6.4	4100	7.8	17.0	21.0	655	7.7	94	1100	290	100
SEP												
26...	1030	13	4060	7.9	14.5	24.5	649	8.2	96	960	240	87

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
OCT											
07...	240	4	--	--	--	--	--	7.6	--	--	--
NOV											
18...	160	3	5.1	221	590	90	0.40	9.3	1170	1.59	397
JAN											
04...	170	3	5.0	224	530	130	0.50	9.7	1150	1.57	383
04...	180	3	5.0	224	530	120	0.60	11	1160	1.57	384
FEB											
16...	150	3	5.3	209	460	110	0.50	11	1020	1.39	307
APR											
11...	220	4	6.1	187	640	130	0.50	6.4	1300	1.77	456
MAY											
18...	93	2	3.0	132	300	39	0.30	9.5	621	0.84	372
JUN											
17...	490	7	12	250	1200	320	0.80	11	2490	3.39	162
AUG											
05...	340	6	12	146	1200	98	0.70	7.8	1990	2.71	345
30...	540	7	14	216	1600	390	0.90	13	3080	4.19	53.2
SEP											
26...	630	9	19	218	1300	500	1.4	14	2920	3.97	103

YELLOWSTONE RIVER BASIN

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06313500 POWDER RIVER AT SUSSEX, WY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)
OCT 07...	1550	66	<10	<1	38	<2	--	5.0	<1	<9
JAN 04...	1500	123	<10	<1	36	<0.5	190	<1.0	<1	<3
APR 11...	1310	130	<10	<1	35	<2	200	<3.0	<1	<9
AUG 05...	1230	64	<10	<1	74	<2	30	<3.0	<1	<9

DATE	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 07...	3	79	<1	96	29	<0.1	1	<3.0	1800	84
JAN 04...	2	<3	<1	72	24	<0.1	2	<1.0	1600	7
APR 11...	<1	<9	<1	74	15	<0.1	2	<3.0	1700	<9
AUG 05...	2	12	<1	100	<3	<0.1	4	4.0	2100	<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 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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SEDIMENT, DIS- CHARGE, SUS- PENDED (MG/L)	SEDIMENT, DIS- CHARGE, SUS- PENDED (T/DAY)
JUL 08...	0840	46	2550	8.1	15.5	16.0	667	7.5	87	1480
12...	1130	19	1000	7.6	21.0	24.0	665	7.4	96	444

YELLOWSTONE RIVER BASIN

06317000 POWDER RIVER AT ARVADA, WY

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.

DRAINAGE AREA.--6,050 mi², approximately.

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder. Elevation of gage is 3,620 ft above sea level, from topographic map. Prior to Oct. 24, 1938, non-contributing gage at bridge 0.2 mi upstream at datum 3,621.87 ft. Oct. 24, 1938 to Apr. 27, 1983, at site 0.7 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 27-31, Nov. 2 to Feb. 23, Feb. 25 to Mar. 2, and Aug. 28 to Sept. 15. 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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 19	1400	3,260a	*8.50	July 9	0430	*3,670	5.49

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	122	140	156	143	365	170	399	74	37	42	8.6
2	89	120	140	150	135	595	167	371	67	29	43	8.1
3	88	124	140	146	130	2150	159	345	63	25	39	7.3
4	87	129	140	150	130	1650	156	347	60	23	51	8.6
5	89	150	135	140	125	1090	157	329	88	23	89	9.8
6	92	151	135	127	125	769	160	326	112	27	88	11
7	92	155	140	134	120	528	171	337	92	136	114	9.0
8	93	160	140	142	125	427	172	336	78	949	87	6.0
9	105	160	140	153	125	341	165	439	67	2270	72	4.0
10	115	165	155	160	130	290	157	458	60	771	61	3.0
11	120	165	160	153	130	267	159	433	52	418	52	2.5
12	146	170	165	147	135	247	153	374	51	285	45	2.3
13	183	170	175	136	140	237	145	365	49	209	37	2.2
14	236	170	180	130	140	238	157	370	45	160	33	2.1
15	208	170	179	125	150	242	163	406	42	134	87	3.7
16	173	160	175	125	205	241	149	504	44	118	110	7.4
17	163	153	160	125	252	230	156	484	66	114	74	7.5
18	162	150	150	130	660	219	170	379	62	118	59	5.9
19	160	142	147	140	1820	202	175	323	69	117	48	8.9
20	159	138	149	140	1300	199	219	295	71	101	40	10
21	157	130	153	150	750	195	249	256	79	95	34	9.2
22	155	110	163	150	810	188	232	224	94	84	29	9.6
23	145	100	153	155	470	192	244	188	69	78	23	9.7
24	140	95	148	155	226	183	289	185	56	72	20	9.7
25	134	97	158	155	148	172	448	172	49	67	16	8.7
26	122	100	164	155	198	172	660	154	43	62	14	8.2
27	120	110	154	155	240	172	629	128	33	58	12	7.6
28	112	120	147	150	320	169	566	111	61	52	11	12
29	108	130	140	150	---	172	515	98	55	49	9.7	16
30	109	135	150	150	---	170	455	90	47	43	8.7	18
31	112	---	160	148	---	168	---	83	---	41	9.6	---
TOTAL	4070	4151	4735	4482	9382	12480	7567	9309	1898	6765	1458.0	236.6
MEAN	131	138	153	145	335	403	252	300	63.3	218	47.0	7.89
MAX	236	170	180	160	1820	2150	660	504	112	2270	114	18
MIN	87	95	135	125	120	168	145	83	33	23	8.7	2.1
AC-FT	8070	8230	9390	8890	18610	24750	15010	18460	3760	13420	2890	469

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1994, BY WATER YEAR (WY)

	MEAN	121	123	95.9	86.5	165	398	356	718	745	262	97.3	74.5
MAX	430	303	290	242	567	953	1107	4025	3319	1703	861	451	
(WY)	1987	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	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1931 - 1994
ANNUAL TOTAL	141592	66533.6	--
ANNUAL MEAN	388	182	272
HIGHEST ANNUAL MEAN	--	--	735
LOWEST ANNUAL MEAN	--	--	70.3
HIGHEST DAILY MEAN	4880	Jun 8 2270	22600
LOWEST DAILY MEAN	56	Sep 16 2.1	.00
ANNUAL SEVEN-DAY MINIMUM	59	Sep 12 2.8	.00
INSTANTANEOUS PEAK FLOW	--	3670	100000b
INSTANTANEOUS PEAK STAGE	--	8.50c	23.70d
ANNUAL RUNOFF (AC-FT)	280800	132000	196800
10 PERCENT EXCEEDS	1030	354	581
50 PERCENT EXCEEDS	158	140	125
90 PERCENT EXCEEDS	79	17	14

a About.

b About, from rating curve extended above 20,000 ft³/s.

c Backwater from ice.

d From floodmarks, site and datum then in use.

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
DEC 16...	0945	175	1890	8.1	0.0	-7.0	670	11.1	87	580	140	56
MAR 04...	1335	1720	1390	8.1	2.0	19.0	670	10.8	89	390	100	34
APR 12...	1135	147	2100	8.2	10.0	18.0	668	9.9	101	700	170	66
JUL 08...	1040	203	2290	7.8	18.0	20.0	668	7.4	90	980	260	81

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
DEC 16...	190	3	5.5	228	620	99	0.4	9.9	1260	1.71	594
MAR 04...	140	3	6.1	90	470	71	0.3	6.9	882	1.20	4100
APR 12...	280	5	6.9	205	840	140	0.5	6.8	1630	2.22	648
JUL 08...	170	2	9.6	135	1100	70	0.4	6.2	1780	2.42	975

YELLOWSTONE RIVER BASIN

06320000 ROCK CREEK NEAR BUFFALO, WY

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.

DRAINAGE AREA.--60.0 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 5,280 ft above 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.--No estimated daily discharges. Records good. Water is imported into drainage basin upstream from station from South Piney Creek. Diversions for irrigation of about 250 acres upstream from station.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1941, about 8.05 ft, probably during 1944.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	8.5	64	77	38	34	23
2	---	---	---	---	---	---	8.5	61	72	37	37	17
3	---	---	---	---	---	---	8.0	61	66	37	36	13
4	---	---	---	---	---	---	8.3	59	63	37	44	13
5	---	---	---	---	---	---	9.0	65	59	36	31	13
6	---	---	---	---	---	---	7.4	101	57	42	27	11
7	---	---	---	---	---	---	7.4	96	56	55	26	8.3
8	---	---	---	---	---	---	8.3	123	59	61	24	7.2
9	---	---	---	---	---	---	7.4	126	52	50	22	7.4
10	---	---	---	---	---	---	7.8	134	49	43	22	7.8
11	---	---	---	---	---	---	7.6	143	48	38	22	7.8
12	---	---	---	---	---	---	9.0	156	48	37	24	8.0
13	---	---	---	---	---	---	13	214	46	37	22	9.7
14	---	---	---	---	---	---	14	142	54	42	24	10
15	---	---	---	---	---	---	11	113	49	46	22	27
16	---	---	---	---	---	---	15	133	46	54	21	19
17	---	---	---	---	---	---	29	138	50	54	20	14
18	---	---	---	---	---	---	46	110	54	47	19	13
19	---	---	---	---	---	---	48	123	49	48	19	12
20	---	---	---	---	---	---	63	166	46	49	19	11
21	---	---	---	---	---	---	84	112	45	46	19	14
22	---	---	---	---	---	---	129	92	45	37	19	15
23	---	---	---	---	---	---	179	89	47	35	19	14
24	---	---	---	---	---	---	170	88	39	36	18	13
25	---	---	---	---	---	---	142	84	37	47	17	11
26	---	---	---	---	---	---	94	76	37	46	19	10
27	---	---	---	---	---	---	75	77	35	37	19	10
28	---	---	---	---	---	---	66	75	34	32	19	10
29	---	---	---	---	---	---	63	81	37	40	19	9.7
30	---	---	---	---	---	---	64	75	34	35	20	9.7
31	---	---	---	---	---	---	---	76	---	34	23	---
TOTAL	---	---	---	---	---	---	1402.2	3253	1490	1313	726	368.6
MEAN	---	---	---	---	---	---	46.7	105	49.7	42.4	23.4	12.3
MAX	---	---	---	---	---	---	179	214	77	61	44	27
MIN	---	---	---	---	---	---	7.4	59	34	32	17	7.2
AC-FT	---	---	---	---	---	---	2780	6450	2960	2600	1440	731

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1971, BY WATER YEAR (WY)

	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
MEAN	9.05	7.11	5.57	4.58	4.43	4.81	13.6	90.1	155	68.1	42.9	15.6															
MAX	20.1	12.7	8.75	6.40	6.57	7.13	37.3	189	309	99.5	69.2	43.4															
(WY)	1969	1969	1969	1965	1969	1960	1962	1947	1967	1947	1968	1968															
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															

SUMMARY STATISTICS

	FOR 1994 WATER YEAR*	WATER YEARS 1945 - 1971**
ANNUAL MEAN	---	34.7
HIGHEST ANNUAL MEAN	---	54.7
LOWEST ANNUAL MEAN	---	16.1
HIGHEST DAILY MEAN	214 May 13	945 Jun 9 1968
LOWEST DAILY MEAN	7.2 Sep 8	.50 Sep 19 1954#
ANNUAL SEVEN-DAY MINIMUM	---	.59 Sep 17 1954
INSTANTANEOUS PEAK FLOW	278 May 13	1860a Jun 15 1963#
INSTANTANEOUS PEAK STAGE	5.37 May 13	7.98 Jun 15 1963#
ANNUAL RUNOFF (AC-FT)	---	25120
10 PERCENT EXCEEDS	---	102
50 PERCENT EXCEEDS	---	8.2
90 PERCENT EXCEEDS	---	3.7

* During period of operation.

** April 1941 to November 1944 not used in computation.

For period of record through 1994.

a From rating curve extended above 450 ft³/s on basis of slope-area measurement of peak flow.

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (MG/L)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)
OCT								
13...	1530	107	772	649	11.0	107	8.6	7.0
JAN								
09...	1315	48	788	644	12.4	102	8.2	0.5
MAY								
03...	1700	154	362	650	10.2	106	8.5	10.0
SEP								
14...	1700	6.8	151	646	8.6	105	8.2	17.0

DATE	TEMPER- ATURE AIR (DEG C)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
OCT								
13...	18.0	51	<0.01	<0.05	<0.01	<0.2	0.02	0.01
JAN								
09...	4.0	K9	<0.01	0.25	0.17	0.4	0.07	0.05
MAY								
03...	--	76	<0.01	<0.05	0.02	0.3	0.04	0.01
SEP								
14...	14.5	420	<0.01	<0.05	0.03	0.6	0.04	0.02

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

YELLOWSTONE RIVER BASIN

06320500 SOUTH PINEY CREEK AT WILLOW PARK, WY

LOCATION.--Lat 44°27'59", long 107°02'03", in NW¹/₄ sec.24, T.52 N., R.85 W., Johnson County, Hydrologic Unit 10090206, Bighorn National Forest, on left bank about 300 ft downstream from Willow Park Dam, 1.4 mi upstream from Kearny Creek, and 10 mi southwest of Story.

DRAINAGE AREA.--33.6 mi².

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

REVISED RECORDS.--WSP 1309: 1949(M). WSP 1709: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,540 ft above sea level, from topographic map. Prior to Oct. 1, 1957, at site about 600 ft upstream at different datum. Oct. 1, 1959, to Sept. 30, 1965, at present site at datum 1.00 ft higher.

REMARKS.--Estimated daily discharges: May 1-11. Records good except those for estimated daily discharges, which are poor. Some regulation by Cloud Peak Reservoir, capacity, 3,385 acre-ft, and Willow Park Reservoir, capacity, 4,457 acre-ft. Storage began in Willow Park Reservoir in April 1959. Cloud Peak Reservoir enlarged December 1958. Water released from storage in Cloud Peak Reservoir is diverted just downstream from station into Rock Creek basin.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	17	100	79	95	82
2	---	---	---	---	---	---	---	17	101	75	95	74
3	---	---	---	---	---	---	---	15	80	75	91	69
4	---	---	---	---	---	---	---	13	81	75	87	67
5	---	---	---	---	---	---	---	13	82	74	82	64
6	---	---	---	---	---	---	---	13	79	81	83	58
7	---	---	---	---	---	---	---	13	75	118	83	55
8	---	---	---	---	---	---	---	13	76	140	79	52
9	---	---	---	---	---	---	---	13	77	142	75	48
10	---	---	---	---	---	---	---	13	80	131	81	48
11	---	---	---	---	---	---	---	57	72	108	89	48
12	---	---	---	---	---	---	---	122	67	102	91	48
13	---	---	---	---	---	---	---	212	68	98	90	48
14	---	---	---	---	---	---	---	173	68	99	90	46
15	---	---	---	---	---	---	---	131	68	104	89	47
16	---	---	---	---	---	---	---	112	81	104	89	48
17	---	---	---	---	---	---	---	140	95	104	89	48
18	---	---	---	---	---	---	---	119	95	101	89	48
19	---	---	---	---	---	---	---	131	99	101	89	45
20	---	---	---	---	---	---	---	151	99	103	89	43
21	---	---	---	---	---	---	---	114	98	122	88	43
22	---	---	---	---	---	---	---	115	98	108	87	40
23	---	---	---	---	---	---	---	95	100	88	87	36
24	---	---	---	---	---	---	---	89	105	89	87	31
25	---	---	---	---	---	---	---	88	98	89	88	29
26	---	---	---	---	---	---	---	84	88	90	91	28
27	---	---	---	---	---	---	---	96	83	89	90	28
28	---	---	---	---	---	---	---	104	73	89	90	27
29	---	---	---	---	---	---	---	99	70	94	89	27
30	---	---	---	---	---	---	---	91	74	94	89	26
31	---	---	---	---	---	---	---	94	---	94	87	---
TOTAL	---	---	---	---	---	---	---	2557	2530	3060	2718	1401
MEAN	---	---	---	---	---	---	---	82.5	84.3	98.7	87.7	46.7
MAX	---	---	---	---	---	---	---	212	105	142	95	82
MIN	---	---	---	---	---	---	---	13	67	74	75	26
AC-FT	---	---	---	---	---	---	---	5070	5020	6070	5390	2780

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1971, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1947	15.0	26.8	1962	6.47	1967
1948	9.77	16.8	1960	.52	1967
1949	8.20	14.2	1968	1.94	1964
1950	6.93	12.4	1968	1.26	1964
1951	6.21	11.7	1968	1.27	1964
1952	6.29	10.6	1968	1.58	1964
1953	10.1	27.0	1949	1.27	1960
1954	47.9	153	1948	2.77	1967
1955	163	321	1963	66.4	1954
1956	113	169	1964	74.1	1956
1957	82.7	123	1964	30.9	1954
1958	38.5	70.9	1967	17.0	1954

SUMMARY STATISTICS

	FOR 1994 WATER YEAR*	WATER YEARS 1947 - 1971
ANNUAL MEAN	---	42.4a
HIGHEST ANNUAL MEAN	---	55.9
LOWEST ANNUAL MEAN	---	27.5
HIGHEST DAILY MEAN	212	1080
LOWEST DAILY MEAN	13	.13b
ANNUAL SEVEN-DAY MINIMUM	---	.33
INSTANTANEOUS PEAK FLOW	227	1620c
INSTANTANEOUS PEAK STAGE	3.29	5.68
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 1994.

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.

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.

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

GAGE.--Water-stage recorder. Datum of gage is 4,655.11 ft above 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: Oct. 30 to Nov. 1, Nov. 6-11, 15-17, Nov. 19 to Mar. 4, and Mar. 8-10, 24, 25. 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.--Records provided by Office of the Wyoming State Engineer and reviewed by the Geological Survey.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	38	30	31	43	48	60	182	86	9.1	13	13
2	25	40	30	33	43	50	61	184	86	8.3	13	9.9
3	25	43	30	34	42	51	58	179	74	7.6	14	8.7
4	25	40	30	35	41	50	64	172	50	7.4	14	6.2
5	25	37	30	35	39	47	60	187	50	7.9	11	5.3
6	25	37	30	34	40	44	60	230	36	17	9.9	5.9
7	28	37	29	32	39	40	58	233	23	97	9.1	6.2
8	37	36	29	31	37	40	57	269	32	86	9.1	5.6
9	33	37	30	31	36	40	57	288	53	78	9.1	3.4
10	32	38	30	32	37	42	60	321	57	62	8.3	7.2
11	28	38	31	33	38	43	60	363	37	61	14	11
12	26	39	32	34	40	43	62	459	20	48	16	10
13	27	38	32	35	43	44	69	667	18	51	14	12
14	30	38	32	36	45	52	69	541	39	45	13	13
15	33	38	32	37	46	52	68	427	95	38	11	54
16	31	38	31	38	48	54	74	408	71	34	10	48
17	30	37	30	39	51	58	90	435	66	31	7.9	35
18	28	37	29	38	53	54	113	370	34	25	7.9	32
19	28	37	29	36	54	56	133	369	31	23	9.1	31
20	27	37	29	35	54	52	157	396	38	20	10	30
21	27	36	29	36	52	51	205	308	48	19	9.9	34
22	27	35	28	35	49	52	266	257	50	30	8.7	33
23	25	33	28	35	47	51	318	233	50	14	9.1	30
24	25	32	29	36	45	49	331	226	57	14	15	25
25	27	31	30	37	43	49	342	210	48	17	15	21
26	32	30	31	38	42	48	285	184	32	20	15	20
27	35	30	33	40	43	48	245	165	21	17	12	20
28	42	30	33	43	45	50	216	151	15	15	12	18
29	34	30	33	45	---	48	194	117	8.3	15	9.9	17
30	34	30	32	45	---	48	187	101	7.9	14	12	17
31	35	---	31	44	---	56	---	102	---	14	15	---
TOTAL	911	1077	942	1123	1235	1510	4079	8734	1333.2	945.3	357.0	582.4
MEAN	29.4	35.9	30.4	36.2	44.1	48.7	136	282	44.4	30.5	11.5	19.4
MAX	42	43	33	45	54	58	342	667	95	97	16	54
MIN	25	30	28	31	36	40	57	101	7.9	7.4	7.9	3.4
AC-FT	1810	2140	1870	2230	2450	3000	8090	17320	2640	1880	708	1160

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1994, BY WATER YEAR (WY)												
MEAN	29.1	34.6	30.6	26.7	26.2	30.7	70.1	272	370	92.1	28.0	25.8
MAX	85.4	67.7	53.6	42.7	54.4	72.8	204	683	910	413	130	185
(WY)	1913	1962	1977	1973	1962	1972	1943	1944	1944	1975	1978	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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1903 - 1994	
ANNUAL TOTAL	36303.2		22828.9		--	
ANNUAL MEAN	99.5		62.5		84.1	
HIGHEST ANNUAL MEAN	--		--		168	
LOWEST ANNUAL MEAN	--		--		27.8	
HIGHEST DAILY MEAN	746	May 29	667	May 13	1780	Jun 15 1963
LOWEST DAILY MEAN	5.3	Sep 24	3.4	Sep 9	1.9	Oct 3 1981
ANNUAL SEVEN-DAY MINIMUM	6.7	Sep 19	5.7	Sep 4	2.1	Sep 13 1985
INSTANTANEOUS PEAK FLOW	--		732		3410a	Jun 15 1963
INSTANTANEOUS PEAK STAGE	--		3.82		6.05	Jun 15 1963
ANNUAL RUNOFF (AC-FT)	72010		45280		60920	
10 PERCENT EXCEEDS	383		168		249	
50 PERCENT EXCEEDS	36		36		33	
90 PERCENT EXCEEDS	25		12		14	

a From rating curve extended above 1,800 ft³/s.

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.--Water-discharge records good 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.

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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	199	241	e260	e260	e190	585	281	787	100	45	45	25
2	215	267	e250	e250	e180	1270	292	739	88	41	43	27
3	221	292	e260	e230	e170	1880	298	723	79	47	45	45
4	223	285	e260	e220	e160	2450	322	692	76	47	46	36
5	223	e280	e250	e210	e180	2120	323	679	68	35	44	31
6	222	e270	e220	e150	e170	1550	334	667	65	37	50	29
7	218	e290	e250	e180	e160	1200	306	692	122	36	93	27
8	226	e280	e270	e200	e150	876	302	791	121	49	103	32
9	247	e290	e280	e230	e170	726	296	799	107	2360	105	32
10	266	e300	e260	e240	e190	611	292	882	86	1470	85	27
11	276	e310	e250	e250	e210	606	280	894	70	819	70	22
12	292	e280	e250	e240	e230	568	281	868	62	510	61	26
13	324	e270	e240	e200	e250	523	275	881	62	366	52	27
14	398	e260	e200	e180	e270	486	317	1050	63	244	48	25
15	451	e270	e220	e190	e290	470	336	1150	63	187	46	35
16	424	e280	e210	e170	e310	471	354	1020	61	164	45	39
17	399	e260	e210	e150	e330	449	303	1040	67	164	163	49
18	376	e220	e200	e170	e350	427	317	935	123	140	119	85
19	349	e230	e210	e190	e400	411	439	804	118	115	90	77
20	336	e260	e200	e180	e1000	381	531	691	99	128	73	70
21	335	e280	e200	e200	e2000	365	631	676	87	104	57	77
22	329	e250	e170	e230	e1500	352	745	637	103	91	48	73
23	325	e170	e190	e240	e1100	358	800	519	106	78	47	63
24	317	e100	e210	e210	e500	371	914	440	95	68	44	68
25	307	e150	e250	e180	e160	354	987	392	69	63	40	67
26	303	e200	e210	e190	e300	323	1220	314	54	68	37	67
27	294	e250	e190	e200	e550	329	1140	250	44	56	34	60
28	297	e270	e170	e210	379	330	1040	216	40	48	31	55
29	292	e250	e200	e200	---	310	956	186	36	47	28	54
30	e230	e260	e230	e190	---	302	859	143	41	48	25	55
31	e240	---	e250	e200	---	290	---	120	---	47	23	---
TOTAL	9154	7615	7020	6340	11849	21744	15771	20677	2375	7722	1840	1405
MEAN	295	254	226	205	423	701	526	667	79.2	249	59.4	46.8
MAX	451	310	280	260	2000	2450	1220	1150	123	2360	163	85
MIN	199	100	170	150	150	290	275	120	36	35	23	22
AC-FT	18160	15100	13920	12580	23500	43130	31280	41010	4710	15320	3650	2790

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1994, BY WATER YEAR (WY)*

	MEAN	209	216	157	148	278	633	511	1047	1368	475	171	144
MAX	700	491	326	445	1200	2290	1313	5553	4131	2500	1219	686	
(WY)	1941	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	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1930 - 1994*
ANNUAL TOTAL	218894	113512	
ANNUAL MEAN	600	311	447
HIGHEST ANNUAL MEAN			1091
LOWEST ANNUAL MEAN			109
HIGHEST DAILY MEAN	5560	Jun 9	2450
LOWEST DAILY MEAN	85	Jan 6	22
ANNUAL SEVEN-DAY MINIMUM	89	Jan 8	27
INSTANTANEOUS PEAK FLOW			a3920
INSTANTANEOUS PEAK STAGE			b13.27
INSTANTANEOUS LOW FLOW			20
ANNUAL RUNOFF (AC-FT)	434200	225200	323500
10 PERCENT EXCEEDS	1640	741	1040
50 PERCENT EXCEEDS	280	226	213
90 PERCENT EXCEEDS	120	45	45

* During period of operation (1930-72, 1975 to current year).

a gage height, 5.60 ft.

b Ice jam.

c Gage height, 15.24 ft.

d Ice jam, site and datum then in use.

e Estimated.

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 current year (seasonal records only).

REMARKS.--Unpublished records for many days of instantaneous water temperature and specific conductance are available in files of the District office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (water years 1986-90): Maximum daily, 4,150 microsiemens, July 17, 1988; minimum daily, 642 microsiemens, 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, 5 mg/L, Sept. 15, 1975.

SEDIMENT LOAD: Maximum daily, 2,230,000 tons, May 20, 1978; minimum daily, 0.17 ton, Aug. 1, 1988.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION: Maximum observed daily mean, 42,800 mg/L, July 10; minimum observed daily mean, 26 mg/L, July 2.

SEDIMENT LOAD: Maximum observed daily, 178,000 tons, July 9; minimum observed daily, 2.9 tons, July 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAR								
10...	0755	570	1430	4.0	0.0	1760	2710	78
MAY								
05...	1005	692	1010	15.5	14.0	1060	1980	67
JUN								
22...	1300	102	1860	22.5	21.5	89	25	94
JUL								
09...	2010	2610	--	23.0	21.0	44200	311000	91
10...	1420	1290	--	31.0	22.5	41400	144000	95
28...	0910	49	2800	24.0	20.0	130	17	94
SEP								
01...	0915	25	2530	11.0	12.5	174	12	98

YELLOWSTONE RIVER BASIN

06324500 POWDER RIVER AT MOORHEAD, MT--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MEAN CONCEN- TRATION		MEAN CONCEN- TRATION		MEAN CONCEN- TRATION		MEAN CONCEN- TRATION		MEAN CONCEN- TRATION		MEAN CONCEN- TRATION	
	(MG/L)	LOADS (T/DAY)	(MG/L)	LOADS (T/DAY)	(MG/L)	LOADS (T/DAY)	(MG/L)	LOADS (T/DAY)	(MG/L)	LOADS (T/DAY)	(MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1											268	423
2											875	3000
3											3420	17400
4											4290	28400
5											4590	26300
6											4340	18200
7											3950	12800
8											2800	6620
9											2150	4210
10											1610	2660
11											1440	2360
12											1170	1790
13											970	1390
14											810	1080
15											710	920
16											675	877
17											610	754
18											530	627
19											445	513
20											456	496
21											487	513
22											425	431
23											370	382
24											375	402
25											380	388
26											328	306
27											345	327
28											352	335
29											401	361
30											356	321
31											311	270
TOTAL											---	134856

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	292	246	1280	2930	128	35	34	4.1	123	15	172	12
2	263	229	1080	2370	136	32	26	2.9	116	13	169	12
3	224	200	905	1950	157	33	35	4.4	111	13	342	42
4	209	205	785	1630	137	28	44	5.6	111	14	222	22
5	224	223	803	1500	119	22	37	3.5	111	13	181	15
6	198	204	660	1190	110	19	36	3.6	240	32	178	14
7	210	198	785	1470	225	74	36	3.5	689	173	176	13
8	203	189	885	1890	181	59	1100	146	689	192	172	15
9	207	190	800	1730	418	121	28000	178000	689	195	170	15
10	208	194	1140	2710	390	91	42800	170000	399	92	168	12
11	211	189	1130	2730	298	56	31000	68600	355	67	160	9.5
12	223	200	1120	2620	188	31	22900	31500	5030	828	157	11
13	220	194	1090	2590	119	20	16300	16100	320	45	152	11
14	223	224	1330	3770	113	19	11300	7440	301	39	145	9.8
15	174	188	1300	4040	111	19	7340	3710	288	36	144	14
16	201	227	1030	2840	88	14	5190	2300	267	32	147	15
17	197	197	1450	4070	87	16	3810	1690	582	256	159	21
18	177	184	1300	3280	166	55	2660	1010	292	94	333	76
19	304	406	1200	2600	153	49	2030	630	296	72	301	63
20	500	799	1460	2720	117	31	2350	812	309	61	186	35
21	700	1310	1400	2560	89	21	1410	396	16900	2600	153	32
22	907	1970	905	1560	83	23	1020	251	462	60	142	28
23	912	2100	577	809	81	23	747	157	656	83	136	23
24	1200	3130	404	480	111	28	492	90	881	105	129	24
25	1070	3000	342	362	74	14	313	53	1020	110	123	22
26	2440	8500	307	260	44	6.4	226	41	924	92	116	21
27	2700	8750	268	181	97	12	173	26	738	68	110	18
28	2430	7280	218	127	64	6.9	136	18	554	46	102	15
29	1950	5370	187	94	52	5.1	142	18	381	29	96	14
30	1590	3940	163	63	44	4.9	134	17	236	16	89	13
31	---	---	142	46	---	---	129	16	187	12	---	---
TOTAL	---	50236	---	57172	---	968.3	---	483048.6	---	5503	---	647.3

TOTAL LOAD FOR YEAR: 732431.2 TONS.

06324970 LITTLE POWDER RIVER ABOVE DRY CREEK, NEAR WESTON, WY

LOCATION.--Lat 44°55'37", long 105°21'10", in NW¹/₄ SW¹/₄ SW¹/₄ sec.13, T.57 N., R.71 W., Campbell County, Hydrologic Unit 10090208, on left bank 3.1 mi upstream from Dry Creek, 5.0 mi south of the Wyoming-Montana State line, and 20 mi north of Weston.
DRAINAGE AREA.--1,235 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR WY-77-1: Drainage area. WDR WY-78-1: 1976(M).

GAGE.--Water-stage recorder. Elevation of gage is 3,410 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 8-18, 20, 21, Nov. 26 to Dec. 15, Jan. 7-10 and Jan. 17 to Mar. 3. 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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 130 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 20	0130	*a1500	*b10.48	May 2	0430	136	4.54
Mar. 2	2230	a1050	b8.72				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	3.7	3.2	3.5	3.3	150	18	101	5.8	3.6	1.4	.61
2	3.7	3.5	3.1	3.5	3.3	300	17	110	5.7	3.4	1.3	.97
3	3.7	3.5	3.3	3.3	3.2	960	16	80	5.5	3.2	1.2	1.3
4	3.6	3.5	3.4	3.2	3.1	829	16	59	5.7	3.4	1.2	1.4
5	3.4	3.4	3.3	3.2	3.0	596	16	43	5.5	3.5	1.1	1.4
6	3.5	3.3	3.4	2.7	3.1	309	16	32	54	14	.90	1.5
7	3.6	3.7	3.5	2.4	2.8	185	16	22	49	63	.88	1.3
8	3.5	3.4	3.3	2.5	2.3	139	19	17	28	48	.94	1.1
9	3.6	3.2	3.1	2.7	2.7	99	17	14	21	65	1.0	1.2
10	3.7	3.1	3.0	2.8	2.8	79	16	13	12	44	1.3	1.2
11	3.7	3.0	3.5	2.9	2.6	66	14	12	8.6	26	1.3	.98
12	3.9	3.1	3.5	2.9	2.3	58	14	11	7.2	11	1.3	.70
13	3.9	2.9	3.4	2.9	2.8	47	13	11	6.3	6.8	1.2	.78
14	4.0	2.8	3.2	2.9	2.8	39	12	11	6.0	5.4	1.1	.57
15	4.2	2.7	3.1	3.1	3.0	38	12	10	5.5	7.3	.97	1.9
16	4.1	2.8	3.1	3.1	3.6	37	12	10	6.1	4.6	.76	4.4
17	3.9	3.0	3.1	3.0	4.6	35	11	9.3	6.3	3.4	.71	21
18	4.1	2.9	2.8	2.8	40	32	11	8.7	6.0	2.9	1.4	9.7
19	4.0	3.0	2.7	2.7	325	29	11	9.6	5.7	4.0	1.2	4.2
20	3.9	2.9	3.3	2.6	1300	26	11	11	5.4	3.4	1.0	2.5
21	3.9	3.0	3.5	2.6	900	24	10	8.7	4.6	2.8	.87	2.1
22	4.1	2.6	3.5	2.6	450	22	9.3	9.5	4.6	2.5	.80	1.7
23	4.3	3.0	3.6	2.8	180	22	9.1	9.0	4.6	2.1	.69	1.5
24	4.1	2.9	3.7	2.9	160	22	8.9	8.3	4.6	1.6	.64	1.3
25	4.0	3.1	3.5	3.0	200	21	9.7	7.9	4.4	1.6	.56	1.2
26	3.9	2.9	3.5	3.2	180	20	13	7.3	3.8	1.7	.51	1.2
27	3.9	2.5	3.5	3.5	130	19	13	7.0	3.6	1.5	.56	.92
28	3.6	2.8	3.5	3.4	110	19	14	6.8	3.5	1.4	.56	1.1
29	3.7	3.1	3.5	3.3	---	19	36	6.6	3.6	1.4	.56	1.3
30	3.3	3.3	3.5	3.1	---	18	60	6.1	3.5	1.5	.46	1.2
31	3.6	---	3.5	3.2	---	19	---	6.0	---	1.4	.46	---
TOTAL	118.1	92.6	103.1	92.3	4026.3	4278	471.0	677.8	296.1	345.4	28.83	72.23
MEAN	3.81	3.09	3.33	2.98	144	138	15.7	21.9	9.87	11.1	.93	2.41
MAX	4.3	3.7	3.7	3.5	1300	960	60	110	54	65	1.4	21
MIN	3.3	2.5	2.7	2.4	2.3	18	8.9	6.0	3.5	1.4	.46	.57
AC-FT	234	184	204	183	7990	8490	934	1340	587	685	57	143

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1994, BY WATER YEAR (WY)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	5.40	2.30	1.81	7.01	21.7	55.1	18.3	62.5	29.4	11.2	6.32	4.74										
MAX	36.4	20.4	5.63	89.0	144	613	58.5	703	187	68.8	44.8	60.8										
(WY)	1987	1987	1987	1974	1994	1978	1977	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										

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1973 - 1994
ANNUAL TOTAL	9167.43	10601.76	---
ANNUAL MEAN	25.1	29.0	18.9
HIGHEST ANNUAL MEAN	---	---	127
LOWEST ANNUAL MEAN	---	---	1.49
HIGHEST DAILY MEAN	610	1300	5000
LOWEST DAILY MEAN	.13	.46	.00
ANNUAL SEVEN-DAY MINIMUM	.15	.52	.00
INSTANTANEOUS PEAK FLOW	---	1500a	5300c
INSTANTANEOUS PEAK STAGE	---	10.48b	11.63b
ANNUAL RUNOFF (AC-FT)	18180	21030	13660
10 PERCENT EXCEEDS	52	39	30
50 PERCENT EXCEEDS	4.1	3.5	2.3
90 PERCENT EXCEEDS	.56	1.2	.02

a About

b Backwater from ice.

c Gage height, 11.62 ft.

YELLOWSTONE RIVER BASIN

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
NOV 01...	1215	3.7	4000	8.2	3.5	9.0	640	10.5	96	850	160	110
MAR 04...	0945	790	394	7.9	1.5	5.0	675	10.0	81	98	21	11
APR 12...	1535	14	3320	8.3	14.5	23.0	671	11.0	124	1100	200	140
JUL 07...	1520	83	1510	8.0	16.0	15.0	677	7.6	87	330	70	37

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
NOV 01...	570	8	18	393	1800	74	0.8	8.7	2980	4.05	29.7
MAR 04...	35	2	8.6	69	110	3.4	0.1	5.6	236	0.32	504
APR 12...	550	7	19	410	1800	30	0.5	6.8	2990	4.07	113
JUL 07...	190	5	11	132	630	19	0.4	4.8	1040	1.42	233

Reservoirs in Yellowstone River basin in Wyoming

06224500 BULL LAKE.--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 is probably 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. 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, 111,100 acre-ft, June 7, elevation, 5,791.17 ft; minimum daily contents, 41,400 acre-ft, Sept. 12, elevation, 5,762.35 ft.

06258900 BOYSEN RESERVOIR.--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 development. COOPERATION, records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD: Maximum daily contents, 922,400 acre-ft, July 6, 7, 1967, elevation, 4,730.83 ft; minimum daily contents (since normal use of water started), 251,800 acre-ft, Mar. 18, 19, 1956, elevation, 4,684.18 ft.

EXTREMES FOR CURRENT YEAR: Maximum daily contents, 736,000 acre-ft, Oct. 1, elevation, 4,721.52 ft; minimum daily contents, 504,100 acre-ft, Sept. 30, elevation, 4,707.21 ft.

06260300 ANCHOR RESERVOIR.--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).

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, 821 acre-ft, May 12, elevation, 6,368.50 ft; minimum daily contents, 34 acre-ft, Sept. 2, elevation, 6,340.00 ft.

06281500 BUFFALO BILL RESERVOIR.--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 development and irrigation of lands east of Cody. COOPERATION, records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD: Maximum daily contents, 526,800 acre-ft, Aug. 2, 1993, elevation, 5,378.14 ft; minimum daily contents, 19,000 acre-ft, Jan 23-25, 1941, elevation, 5,225.3 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 433,600 acre-ft, June 25, elevation, 5,365.19 ft; minimum daily contents, 209,100 acre-ft, Sept. 30, elevation, 5,324.90 ft.

YELLOWSTONE RIVER BASIN

Reservoirs in Yellowstone River basin in Wyoming--Continued

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
06224500 BULL LAKE			
Sept. 30	5,785.44	95,500	-
Oct. 31	5,783.48	90,300	-5,200
Nov. 30	5,783.16	89,500	-800
Dec. 31	5,782.82	88,600	-900
CAL YR 1993	-	-	+33,900
Jan. 31	5,782.37	87,400	-1,200
Feb. 28	5,781.89	86,200	-1,200
Mar. 31	5,781.53	85,200	-1,000
Apr. 30	5,781.92	86,200	+1,000
May 31	5,789.25	105,800	+19,600
June 30	5,790.25	108,600	+2,800
July 31	5,778.10	76,700	-31,900
Aug. 31	5,768.42	54,100	-22,600
Sept. 30	5,763.48	7,700	-46,500
WTR YR 1994	-	-	-87,800
06258900 BOYSEN RESERVOIR			
Sept. 30	4,721.58	737,100	-
Oct. 31	4,720.06	709,400	-27,700
Nov. 30	4,718.94	689,500	-19,900
Dec. 31	4,717.51	664,700	-24,800
CAL YR 1993	-	-	-86,100
Jan. 31	4,716.23	642,900	-21,800
Feb. 28	4,715.88	637,100	-5,800
Mar. 31	4,715.49	630,600	-6,500
Apr. 30	4,715.68	633,800	+3,200
May 31	4,716.43	646,300	+12,500
June 30	4,714.81	619,500	-26,800
July 31	4,711.52	567,700	-51,800
Aug. 31	4,708.63	524,600	-43,100
Sept. 30	4,707.21	504,100	-20,500
WTR YR 1994	-	-	-233,000

Reservoirs in Yellowstone River basin in Wyoming--Continued

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
06260300 ANCHOR RESERVOIR			
Sept. 30	6,343.50	64	-
Oct. 31	6,342.00	51	-13
Nov. 30	6,344.00	68	+17
Dec. 31	6,343.00	59	-9
CAL YR 1993	-	-	-86
Jan. 31	6,343.00	59	0
Feb. 28	6,356.30	292	+233
Mar. 31	6,355.00	254	-38
Apr. 30	6,366.00	679	+425
May 31	6,347.70	116	-563
June 30	6,455.20	70	-46
July 31	6,344.00	68	-2
Aug. 31	6,344.00	68	0
Sept. 30	6,340.00	34	-34
WTR YR 1994	-	-	-30
06281500 BUFFALO BILL RESERVOIR			
Sept. 30	5,362.85	417,900	-
Oct. 31	5,361.08	406,400	-11,500
Nov. 30	5,359.03	393,000	-13,400
Dec. 31	5,357.66	384,300	-8,700
CAL YR 1993	-	-	+104,900
Jan. 31	5,356.14	374,600	-9,700
Feb. 28	5,354.50	364,300	-10,300
Mar. 31	5,353.82	360,000	-4,300
Apr. 30	5,353.34	357,000	-3,000
May 31	5,362.00	412,400	+55,400
June 30	5,364.53	429,100	+16,700
July 31	5,353.56	358,400	-70,700
Aug. 31	5,338.45	271,900	-86,500
Sept. 30	5,335.90	209,100	-62,800
WTR YR 1994	-	-	-208,800

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. 14, 15, 22-27, Dec. 18-25, Dec. 28 to Jan. 7, and Jan. 12 to Feb. 26.

Records good except those less than 1 ft³/s, which are fair and December to March, which are poor. Numerous small stock water reservoirs upstream from station.EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 40 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb 18	0130	*a53	*b4.08	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.01	.01	.01	.00	1.2	.10	.20	.00	.00	.00	.00
2	.00	.01	.01	.00	.00	4.4	.11	.19	.00	.00	.00	.00
3	.00	.01	.01	.00	.00	4.9	.09	.16	.00	.00	.00	.00
4	.00	.01	.01	.00	.00	2.6	.13	.16	.00	.00	.00	.00
5	.00	.01	.01	.00	.00	2.0	.16	.16	.00	.00	.00	.00
6	.00	.01	.01	.00	.00	1.3	.16	.16	.00	.00	.00	.00
7	.00	.01	.01	.00	.00	.72	.16	.16	.00	.00	.00	.00
8	.01	.01	.01	.01	.00	.47	.16	.15	.00	.00	.00	.00
9	.01	.01	.01	.01	.00	.35	.16	.13	.00	.00	.00	.00
10	.01	.01	.01	.01	.00	.29	.16	.13	.00	.00	.00	.00
11	.01	.01	.01	.01	.00	.22	.15	.12	.00	.00	.00	.00
12	.01	.01	.01	.01	.00	.24	.13	.08	.00	.00	.00	.00
13	.01	.01	.01	.01	.01	.21	.13	.06	.00	.00	.00	.00
14	.01	.00	.01	.00	.03	.20	.13	.07	.00	.00	.00	.00
15	.01	.00	.01	.00	.09	.20	.10	.02	.00	.00	.00	.00
16	.01	.01	.01	.00	.47	.16	.08	.01	.00	.00	.00	.00
17	.01	.01	.01	.00	3.0	.18	.05	.00	.00	.00	.00	.00
18	.01	.01	.00	.00	22	.16	.03	.00	.00	1.6	.00	.00
19	.01	.01	.00	.00	14	.16	.01	.00	.00	.92	.00	.00
20	.01	.01	.00	.00	8.2	.16	.01	.00	.00	.56	.00	.00
21	.01	.01	.00	.00	4.5	.13	.01	.00	.00	.30	.00	.00
22	.01	.00	.00	.01	3.1	.10	.01	.00	.00	.18	.00	.00
23	.01	.00	.00	.01	2.5	.08	.01	.07	.04	.15	.00	.00
24	.01	.00	.00	.02	2.0	.04	.01	.16	.16	.13	.00	.00
25	.01	.00	.01	.02	.90	.03	.08	.13	.10	.10	.00	.00
26	.01	.00	.01	.01	.48	.03	.17	.08	.01	.03	.00	.00
27	.01	.00	.01	.00	.45	.03	.30	.02	.00	.00	.00	.00
28	.01	.01	.00	.00	.63	.03	.34	.00	.00	.00	.00	.00
29	.01	.01	.00	.00	---	.05	.30	.00	.00	.00	.00	.00
30	.01	.01	.00	.00	---	.05	.25	.00	.00	.00	.00	.00
31	.01	---	.01	.00	---	.08	---	.00	---	.00	.00	---
TOTAL	0.24	0.22	0.21	0.14	62.36	20.77	3.69	2.42	0.31	3.97	0.00	0.00
MEAN	.008	.007	.007	.005	2.23	.67	.12	.078	.010	.13	.000	.000
MAX	.01	.01	.01	.02	22	4.9	.34	.20	.16	1.6	.00	.00
MIN	.00	.00	.00	.00	.00	.03	.01	.00	.00	.00	.00	.00
AC-FT	.5	.4	.4	.3	124	41	7.3	4.8	.6	7.9	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1994, BY WATER YEAR (WY)

	1977	1978	1979	1981	1984	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	.030	.015	.024	.010	.40	1.68	.12	16.2	2.61	1.91	1.65	.008	.008
MAX	.24	.090	.11	.050	2.23	10.8	.48	114	8.97	8.18	6.82	.064	.064
(WY)	1978	1979	1979	1981	1984	1987	1988	1989	1990	1991	1992	1993	1994
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1988	1989	1989	1978	1978	1989	1989	1992	1981	1988	1988	1981	1981

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1977 - 1994
ANNUAL TOTAL	596.81	94.33	---
ANNUAL MEAN	1.64	.26	2.08
HIGHEST ANNUAL MEAN	---	---	11.8
LOWEST ANNUAL MEAN	---	---	.003
HIGHEST DAILY MEAN	151	22	1570
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
INSTANTANEOUS PEAK FLOW	---	53a	3030b
INSTANTANEOUS PEAK STAGE	---	4.08c	9.02
ANNUAL RUNOFF (AC-FT)	1180	187	1510
10 PERCENT EXCEEDS	2.0	.20	.57
50 PERCENT EXCEEDS	.01	.01	.00
90 PERCENT EXCEEDS	.00	.00	.00

a About.

b From rating curve extended above 180 ft³/s on basis of slope-area measurements of peak flow at gage height 7.67 ft and 9.02 ft.

c Backwater from ice.

WATER-QUALITY RECORDS

REMARKS.--No flow observed July 14, Sept. 12.

		DIS- CHARGE, CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)
MAR									
03...	1020	3.4	925	8.0	0.5	8.0	656	11.2	91
JUL									
05...	1540	0.0	--	--	--	--	--	--	--
SEP									
12...	0940	0.0	--	--	--	--	--	--	--

[illegible][illegible][illegible][illegible]

CHEYENNE RIVER BASIN

06392900 BEAVER CREEK AT MALLO CAMP, NEAR FOUR CORNERS, WY

LOCATION.--Lat 44°05'06", long 104°03'36", in SE¹/₄ NE¹/₄ NE¹/₄ sec.4, T.47 N., R.60 W., Weston County, Hydrologic Unit 10120107, on right bank in Mallo Campgrounds, 250 ft upstream from mouth, 750 ft upstream from dam on Stockade Beaver Creek, and 3.8 mi east of Four Corners.

DRAINAGE AREA.--10.3 mi².

PERIOD OF RECORD.--October 1974 to September 1982 and April 1991 to current year.

REVISED RECORD.--WDR-85-1: 1981, 1982.

GAGE.--Water-stage recorder. Elevation of gage is 6,030 ft above sea level, from topographic map. October 1974 to September 1982 at site 50 ft upstream and datum 3.11 ft lower.

REMARKS.--Estimated daily discharges: Oct. 29 to Nov. 1, Nov. 5-11, 20-29, Dec. 6-12, Dec. 15 to Jan. 1, Jan. 4-13, 16-29, Feb. 4-18, 23-28, and Mar. 8-10, 27-31. Records good except those for estimated daily discharges, which are poor. No diversions upstream from station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 22	1715	*103	*2.14	Apr. 25	0445	53	1.82
Apr. 23	1945	19	1.45				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.7	1.8	1.7	1.4	1.4	1.4	2.6	1.8	.94	1.4	1.6
2	1.6	1.7	1.7	1.7	1.6	1.3	1.4	2.7	1.8	.92	1.5	1.6
3	1.6	1.7	1.7	1.6	1.7	1.3	1.4	2.5	1.7	1.2	1.4	1.6
4	1.6	1.6	1.7	1.4	1.6	1.3	1.5	2.4	1.7	1.6	1.5	1.6
5	1.6	1.5	1.7	1.2	1.5	1.3	1.4	2.1	1.7	1.3	1.4	1.6
6	1.6	1.4	1.6	.95	1.6	1.3	1.5	2.7	1.6	1.7	1.4	1.6
7	1.6	1.3	1.4	1.2	1.6	1.3	1.5	2.4	1.7	1.6	1.3	1.6
8	1.7	1.4	1.6	1.4	1.3	1.1	1.4	2.2	1.7	1.4	1.5	1.6
9	1.7	1.5	1.7	1.6	1.1	1.3	1.4	2.4	1.6	1.5	1.2	1.6
10	1.7	1.6	1.5	1.7	1.2	1.4	1.4	2.2	1.6	1.4	1.2	1.6
11	1.7	1.7	1.6	1.7	1.3	1.6	1.4	2.2	1.6	1.4	2.3	1.5
12	1.7	1.8	1.6	1.7	1.2	1.3	1.5	2.0	1.6	1.5	1.7	1.5
13	1.7	1.8	1.6	1.6	1.2	1.3	1.5	2.1	1.6	1.5	1.7	1.5
14	1.8	1.8	1.6	1.6	1.3	1.3	1.4	2.2	1.6	1.5	1.7	1.6
15	1.8	1.7	1.5	1.5	1.2	1.3	1.4	2.0	1.1	1.4	1.6	1.8
16	2.1	1.8	1.5	1.4	1.3	1.3	1.5	1.9	1.4	1.4	1.7	1.6
17	1.8	1.8	1.6	1.2	1.4	1.3	1.8	2.0	1.2	1.4	1.7	1.6
18	1.8	1.8	1.5	1.0	1.5	1.3	2.2	1.9	1.3	1.6	1.7	1.6
19	1.7	1.7	1.4	1.1	1.5	1.4	2.5	1.9	1.2	1.2	1.7	1.6
20	1.7	1.5	1.5	1.2	1.4	1.4	3.0	2.0	1.2	1.4	1.8	1.6
21	1.7	1.6	1.5	1.3	1.4	1.4	6.5	1.8	1.1	1.4	1.6	1.6
22	1.7	1.5	1.5	1.4	1.4	1.4	28	2.0	1.1	1.4	1.6	1.5
23	1.7	1.2	1.3	1.4	1.3	1.4	13	1.9	1.0	1.4	1.6	1.4
24	1.7	1.1	1.3	1.5	1.2	1.4	5.6	1.9	.91	1.4	1.6	1.4
25	1.7	1.2	1.4	1.5	1.0	1.4	18	1.9	.89	1.5	1.5	1.4
26	1.7	1.4	1.5	1.5	1.1	1.4	5.2	1.8	.94	1.4	1.5	1.4
27	1.7	1.5	1.6	1.4	1.2	1.3	3.9	1.8	.91	1.6	1.5	1.5
28	1.7	1.6	1.6	1.4	1.3	1.3	3.4	1.8	.90	1.4	1.5	1.5
29	1.6	1.7	1.6	1.4	---	1.2	3.1	1.9	.91	1.3	1.5	1.5
30	1.3	1.9	1.7	1.4	---	1.3	2.8	1.8	.96	1.4	1.6	1.4
31	1.5	---	1.7	1.4	---	1.3	---	1.7	---	1.5	1.7	---
TOTAL	52.1	47.5	48.5	44.05	37.8	41.3	122.0	64.7	40.32	43.56	48.6	46.5
MEAN	1.68	1.58	1.56	1.42	1.35	1.33	4.07	2.09	1.34	1.41	1.57	1.55
MAX	2.1	1.9	1.8	1.7	1.7	1.6	28	2.7	1.8	1.7	2.3	1.8
MIN	1.3	1.1	1.3	.95	1.0	1.1	1.4	1.7	.89	.92	1.2	1.4
AC-FT	103	94	96	87	75	82	242	128	80	86	96	92

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1994, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	1.71	1.57	1.50	1.40	1.62	1.68	2.19	2.10	2.25	1.96	1.83	1.76								
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								

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1975 - 1994
ANNUAL TOTAL	481.83	636.93	--
ANNUAL MEAN	1.32	1.75	1.81
HIGHEST ANNUAL MEAN	--	--	2.59
LOWEST ANNUAL MEAN	--	--	.94
HIGHEST DAILY MEAN	27 Jun 8	28 Apr 22	28 Apr 22 1994
LOWEST DAILY MEAN	.10 Jan 20	.89 Jun 25	.10 Jan 20 1993
ANNUAL SEVEN-DAY MINIMUM	.12 Jan 17	.92 Jun 24	.12 Jan 17 1993
INSTANTANEOUS PEAK FLOW	--	103a Apr 22	103a Apr 22 1994
INSTANTANEOUS PEAK STAGE	--	2.14 Apr 22	2.14 Apr 22 1994
ANNUAL RUNOFF (AC-FT)	956	1260	

06392950 STOCKADE BEAVER CREEK NEAR NEWCASTLE, WY

LOCATION.--Lat 43°51'32", long 104°06'24", in SW¹/₄ SE¹/₄ 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.

DRAINAGE AREA.--107 mi².

PERIOD OF RECORD.--October 1974 to September 1982, April 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,460 ft above sea level, from topographic map. October 1974 to September 1982, at same site and datum.

REMARKS.--Estimated daily discharges: Nov. 23-25, Jan. 7, 8, and Feb. 3-5, 8, 9, 13, 18, 25. Records fair except those for estimated discharges, which are poor. A few small diversions upstream from station for irrigation.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 9	1030	ice jam	*7.60	No peak greater than base discharge.			
July 24	1730	*38	7.31				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	9.6	11	12	11	14	12	8.3	6.6	8.5	8.1	12
2	11	9.3	11	12	11	16	12	8.1	6.5	7.2	9.7	12
3	11	8.5	12	12	10	18	12	8.1	6.5	7.3	9.1	11
4	11	8.4	12	12	9.5	20	12	8.0	6.1	7.4	8.6	12
5	11	8.3	12	12	11	19	12	7.9	6.2	7.5	8.6	12
6	11	8.4	12	12	12	16	12	8.7	6.4	7.8	8.5	12
7	11	8.6	12	10	12	14	12	8.1	6.3	8.1	8.3	11
8	11	8.6	12	11	11	13	13	8.0	7.5	8.3	8.7	11
9	11	9.1	12	12	9.4	13	12	7.9	7.6	7.6	9.6	11
10	11	9.1	13	12	12	13	12	7.9	7.8	7.6	9.8	11
11	11	9.3	12	12	12	14	12	8.1	7.8	8.3	9.8	11
12	11	9.4	13	12	12	14	12	7.8	7.9	8.1	8.8	11
13	11	9.8	13	12	11	14	12	8.4	7.9	8.9	8.7	10
14	11	9.9	12	12	12	14	12	8.7	8.0	8.8	9.1	10
15	11	10	12	12	12	14	12	8.3	9.9	7.9	9.4	10
16	11	10	12	12	12	13	11	8.3	10	8.0	10	11
17	11	10	12	12	12	13	8.7	8.3	10	8.1	10	11
18	11	10	12	12	11	13	8.6	8.0	10	7.8	9.5	11
19	10	10	12	12	12	13	8.4	7.7	10	8.1	9.5	11
20	10	10	12	12	12	13	8.3	8.2	9.8	8.6	9.5	11
21	10	11	12	11	12	13	8.3	8.1	9.3	8.8	9.4	11
22	10	11	12	11	12	13	8.4	8.1	8.6	8.8	7.5	11
23	10	9.8	12	11	12	13	9.0	7.9	8.6	8.9	7.5	11
24	10	9.2	12	11	12	12	8.5	8.1	8.5	15	7.0	11
25	10	10	12	11	11	12	11	8.0	8.3	12	8.6	11
26	10	11	12	11	13	12	9.9	7.7	8.5	9.9	8.8	11
27	10	11	12	11	13	12	9.1	7.5	9.5	9.4	9.5	11
28	10	11	12	11	13	12	9.0	7.5	9.6	9.3	11	11
29	10	11	11	11	---	12	8.9	7.5	8.2	9.1	11	11
30	9.8	11	11	11	---	12	8.5	7.5	8.7	8.5	11	11
31	9.6	---	12	11	---	12	---	7.3	---	8.0	12	---
TOTAL	327.4	292.3	371	358	324.9	426	316.6	248.0	246.6	267.6	286.6	332
MEAN	10.6	9.74	12.0	11.5	11.6	13.7	10.6	8.00	8.22	8.63	9.25	11.1
MAX	11	11	13	12	13	20	13	8.7	10	15	12	12
MIN	9.6	8.3	11	10	9.4	12	8.3	7.3	6.1	7.2	7.0	10
AC-FT	649	580	736	710	644	845	628	492	489	531	568	659

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1994, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	11.9	12.3	12.4	12.1	12.4	13.3	12.0	8.92	10.3	10.3	10.3	11.3								
MAX	14.1	14.8	14.4	14.8	14.4	15.7	16.5	12.3	12.5	13.7	13.8	13.5								
(WY)	1975	1977	1976	1977	1977	1979	1975	1978	1991	1993	1979	1979								
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								

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1975 - 1994
ANNUAL TOTAL	3770.8	3797.0	--
ANNUAL MEAN	10.3	10.4	11.5
HIGHEST ANNUAL MEAN	--	--	13.0
LOWEST ANNUAL MEAN	--	--	9.80
HIGHEST DAILY MEAN	143	20	143
LOWEST DAILY MEAN	5.2	6.1	3.9
ANNUAL SEVEN-DAY MINIMUM	5.4	6.4	4.6
INSTANTANEOUS PEAK FLOW	--	38a	776b
INSTANTANEOUS PEAK STAGE	--	7.60c	12.44
ANNUAL RUNOFF (AC-FT)	7480	7530	8310
10 PERCENT EXCEEDS	12	12	14
50 PERCENT EXCEEDS	10	11	11
90 PERCENT EXCEEDS	6.9	7.9	8.1

CHEYENNE RIVER BASIN

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, approximately.

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: Nov. 5 to Mar. 5. Records good 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)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 8	0500	*1,210	*10.28	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	16	15	20	13	468	24	97	2.6	.24	1.3	.30
2	12	14	14	20	14	650	23	65	3.0	.23	1.7	.30
3	12	17	13	21	15	600	24	58	2.2	.22	1.6	.36
4	13	15	13	21	16	700	29	45	1.5	.21	1.5	.59
5	13	13	13	20	15	800	31	30	1.1	.21	1.5	.63
6	13	11	12	19	15	851	29	22	1.0	.30	1.9	.61
7	12	13	13	18	15	1100	27	16	.73	.40	1.7	.52
8	12	14	14	18	16	1050	29	14	.71	.33	1.2	.44
9	12	15	14	19	18	466	35	24	.62	.30	1.2	.39
10	13	17	15	19	20	229	28	22	.52	17	1.1	.32
11	17	17	15	19	21	157	26	16	.55	17	.95	.30
12	16	16	16	20	22	146	26	12	.55	6.4	.71	.30
13	14	15	16	19	23	274	24	11	.56	4.2	.76	1.0
14	14	15	17	18	28	389	20	11	.52	2.5	.77	4.3
15	14	14	18	16	35	266	18	9.5	.51	2.0	.69	.80
16	14	15	17	15	44	224	16	8.9	.45	3.0	.61	.63
17	14	16	17	15	65	201	16	20	.42	3.5	.54	.71
18	15	14	17	15	132	138	15	21	.45	2.2	.46	.78
19	39	15	17	15	182	94	11	15	.39	1.7	.41	.70
20	43	15	16	14	134	78	13	11	.48	1.2	.35	.61
21	26	16	16	14	120	65	12	9.4	.52	1.2	.53	.51
22	21	14	17	14	97	55	11	8.6	.48	2.2	.95	.49
23	18	12	18	14	91	46	11	21	.47	1.9	1.4	.58
24	17	11	18	14	86	37	15	18	.48	1.0	1.8	.67
25	16	10	20	14	99	37	12	12	.41	1.3	1.6	.72
26	16	11	19	14	133	33	46	8.4	.35	21	1.2	.68
27	16	12	19	14	180	29	56	6.4	.19	21	.69	.71
28	15	13	18	13	270	29	50	5.4	.24	6.2	.48	.72
29	13	15	17	13	---	27	63	4.8	.25	3.0	.33	1.2
30	9.3	16	18	13	---	25	84	3.3	.23	1.8	.25	2.0
31	14	---	19	12	---	25	---	2.4	---	1.3	.29	---
TOTAL	505.3	427	501	510	1919	9289	824	628.1	22.48	125.04	30.47	22.87
MEAN	16.3	14.2	16.2	16.5	68.5	300	27.5	20.3	.75	4.03	.98	.76
MAX	43	17	20	21	270	1100	84	97	3.0	21	1.9	4.3
MIN	9.3	10	12	12	13	25	11	2.4	.19	.21	.25	.30
AC-FT	1000	847	994	1010	3810	18420	1630	1250	45	248	60	45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1994, BY WATER YEAR (WY)

	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
MEAN	11.1	10.3	9.93	10.5	29.9	80.8	31.8	50.4	68.8	33.0	16.5	8.95
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	.16	.17	.010	.000
(WY)	1953	1961	1962	1962	1946	1961	1961	1961	1974	1950	1960	1956

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1945 - 1994
ANNUAL TOTAL	13368.5	14804.26	---
ANNUAL MEAN	36.6	40.6	30.2
HIGHEST ANNUAL MEAN	---	---	130
LOWEST ANNUAL MEAN	---	---	5.13
HIGHEST DAILY MEAN	590	1100	6550
LOWEST DAILY MEAN	2.9	.19	.00
ANNUAL SEVEN-DAY MINIMUM	3.6	.23	.00
INSTANTANEOUS PEAK FLOW	---	1210	11900a
INSTANTANEOUS PEAK STAGE	---	10.28	19.98
ANNUAL RUNOFF (AC-FT)	26520	29360	21870
10 PERCENT EXCEEDS	71	64	50
50 PERCENT EXCEEDS	14	14	8.8
90 PERCENT EXCEEDS	6.8	.48	.50

a From rating curve extended above 4,000 ft³/s on basis of contracted opening measurement of peak flow.

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 above station used for stock and irrigation water, total capacity, about 45,000 acre-ft.. U.S. Bureau of Reclamation satellite data-collection platform at station.

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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	15	e7.0	e8.5	e8.0	e70	64	133	14	.43	8.3	.07
2	13	17	e6.5	e8.5	e8.0	e300	55	159	13	.35	7.1	.09
3	14	18	e8.0	e8.0	e9.0	e1700	54	111	12	.31	6.9	.10
4	15	18	e8.0	e9.0	e8.0	1280	59	102	10	.25	5.2	.10
5	16	33	e8.0	e9.5	e7.0	1280	65	78	11	.24	3.9	.09
6	17	32	e7.5	e9.0	e9.0	1300	67	65	11	.27	3.2	.08
7	21	34	e6.0	e8.0	e8.0	1310	65	62	9.7	2.5	2.4	.08
8	29	32	e6.0	e7.5	e7.0	1390	66	53	13	1.6	1.8	.08
9	33	30	e7.0	e7.5	e6.0	1220	63	46	10	.36	1.6	.07
10	31	38	e7.5	e7.5	e7.0	653	67	45	8.3	.22	1.3	.07
11	30	29	e7.5	e8.0	e8.5	499	62	55	7.8	.13	.86	.08
12	36	32	e8.0	e8.0	e9.0	377	56	51	7.2	.21	1.7	.15
13	40	19	e8.0	e8.5	e9.0	366	57	70	6.7	.21	.63	.11
14	37	e17	e7.0	e9.0	e17	563	55	70	5.5	.14	.51	.09
15	40	e16	e6.0	e7.5	e35	567	47	42	4.2	.14	.38	.12
16	43	e15	e5.5	e7.5	e80	438	42	35	4.7	.18	.27	.09
17	42	e20	e5.5	e7.0	e58	399	39	29	3.3	.243	.15	.09
18	40	e20	e5.0	e6.0	e40	355	40	31	2.7	.199	.13	.09
19	38	e20	e5.0	e5.5	e70	281	38	38	2.8	.168	.11	.09
20	46	e27	e5.0	e5.5	e52	218	32	35	3.6	.87	.09	.10
21	65	e29	e5.0	e6.0	e40	182	27	31	3.6	.42	.08	.10
22	53	e35	e5.0	e7.0	e35	143	29	29	4.8	.28	.07	.10
23	46	e15	e4.5	e8.0	e30	125	25	28	6.9	.19	.06	.10
24	41	e9.0	e4.5	e9.0	e30	114	20	28	4.9	.14	.06	.11
25	36	e8.0	e5.0	e9.0	e25	91	26	40	3.3	.12	.05	.12
26	36	e7.0	e6.0	e8.0	e20	86	40	35	2.0	.13	.05	.13
27	36	e7.0	e7.0	e7.0	e30	83	60	30	1.2	.11	.05	.13
28	36	e7.0	e8.0	e7.0	e50	78	96	26	.72	.27	.05	.14
29	29	e6.8	e8.0	e8.0	---	74	86	20	.76	.19	.06	.15
30	e25	e6.8	e8.0	e8.0	---	69	112	17	.59	.15	.06	.18
31	e20	---	e8.0	e7.0	---	68	---	14	---	.10	.06	---
TOTAL	1017	612.6	203.0	239.5	715.5	15679	1614	1608	189.27	1071.95	47.18	3.10
MEAN	32.8	20.4	6.55	7.73	25.6	506	53.8	51.9	6.31	34.6	1.52	.10
MAX	65	38	8.0	9.5	80	1700	112	159	14	243	8.3	.18
MIN	13	6.8	4.5	5.5	6.0	68	20	14	.59	.24	.05	.07
AC-FT	2020	1220	403	475	1420	31100	3200	3190	375	2130	94	6.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1994, BY WATER YEAR (WY)

	MEAN	16.3	11.5	7.23	6.57	31.7	120	62.4	227	263	133	71.4	28.3
MAX	202	51.0	32.3	34.0	156	506	558	2192	2084	806	388	275	
(WY)	1987	1983	1983	1974	1984	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	

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1929-32, 1947-1994
ANNUAL TOTAL	35904.60	23000.10	---
ANNUAL MEAN	98.4	63.0	81.8a
HIGHEST ANNUAL MEAN	---	---	434
LOWEST ANNUAL MEAN	---	---	12.0
HIGHEST DAILY MEAN	1680	1700	24000
LOWEST DAILY MEAN	.50	.05	.00
ANNUAL SEVEN-DAY MINIMUM	.53	.05	.00
INSTANTANEOUS PEAK FLOW	---	1700	28000
INSTANTANEOUS PEAK STAGE	---	11.94	13.65
ANNUAL RUNOFF (AC-FT)	71220	45620	59250
10 PERCENT EXCEEDS	286	84	150c
50 PERCENT EXCEEDS	34	13	10c
90 PERCENT EXCEEDS	3.0	.12	.10c

e Estimated

a Median of annual mean discharges, 73 ft³/s.

b No flow at times in most years.

c Reflects water years 1947-94 only.

LOCATION (REVISED).--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.

DRAINAGE AREA.--1.690 mi².

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.

REMARKS.--Estimated daily discharges: Nov. 4, 5, Nov. 22 to Mar. 11, and Mar. 13, 17. Records fair except those for estimated daily discharges, which are poor. Numerous small stockwater and soil conservation reservoirs upstream from station. Diversions for irrigation upstream from station.

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)	Date		Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 3	unknown		ice jam(a)	13.65				No peak greater than base discharge.	

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	9.4	11	11	8.0	91	22	56	11	6.1	2.5	2.1
2	6.2	9.0	12	11	7.7	350	20	99	10	6.0	2.2	1.9
3	6.5	9.1	12	11	7.5	1400	21	67	8.6	5.9	2.2	1.7
4	7.1	8.9	12	10	7.6	1000	25	49	7.6	5.5	3.7	1.4
5	7.4	8.2	11	9.4	8.0	700	21	31	6.9	6.1	3.0	1.2
6	9.5	9.0	9.2	8.2	7.7	500	18	28	6.8	6.6	2.4	1.0
7	11	8.6	9.5	7.5	7.4	400	17	25	6.5	6.8	2.1	.92
8	11	8.3	10	8.2	7.0	320	17	25	9.3	12	1.8	.85
9	11	8.0	10	9.1	6.0	250	18	23	10	22	2.1	.78
10	11	7.6	11	10	6.8	200	18	25	8.1	21	2.5	.74
11	9.8	8.0	12	10	7.4	150	18	21	7.5	16	4.3	.70
12	9.6	7.6	12	9.7	8.4	113	18	16	6.8	12	12	.68
13	9.0	7.4	12	9.1	8.0	99	16	16	6.7	10	5.7	.66
14	9.6	7.0	11	8.3	7.3	82	14	165	7.7	8.8	3.6	.65
15	10	7.2	11	7.5	8.0	69	12	94	7.5	7.5	2.6	.80
16	9.7	7.9	11	7.0	12	58	14	45	7.4	8.4	2.1	1.2
17	9.0	8.2	11	6.5	27	52	15	30	7.6	9.1	3.4	1.6
18	9.2	7.8	11	5.7	100	46	15	25	7.0	7.7	3.4	1.3
19	11	8.2	10	6.3	800	42	14	19	6.7	7.1	2.5	1.1
20	12	8.7	9.3	7.0	220	37	13	17	7.4	6.0	2.3	3.3
21	12	9.3	9.0	7.8	160	33	13	108	9.4	5.7	2.3	5.9
22	11	8.9	9.5	8.0	130	31	13	46	9.6	5.1	2.2	4.3
23	10	6.8	9.7	8.2	107	27	11	22	12	4.8	2.2	2.2
24	11	5.4	10	8.7	85	26	11	19	11	4.3	2.1	1.3
25	12	4.1	11	9.0	73	23	12	19	8.8	3.8	2.1	.92
26	11	5.6	11	8.4	62	21	17	16	7.7	4.4	2.0	1.9
27	11	7.5	11	8.8	51	22	20	15	6.7	4.0	1.9	5.4
28	9.8	8.7	10	8.3	60	21	25	14	6.8	3.3	1.9	3.8
29	8.2	9.6	9.1	8.3	---	21	35	13	6.4	3.3	2.0	2.2
30	8.8	11	10	8.2	---	20	52	12	6.0	3.5	2.1	1.7
31	9.6	---	11	8.0	---	22	---	11	---	2.9	2.3	---
TOTAL	300.2	241.0	329.3	264.2	1999.8	6226	555	1171	241.5	235.7	89.5	54.20
MEAN	9.68	8.03	10.6	8.52	71.4	201	18.5	37.8	8.05	7.60	2.89	1.81
MAX	12	11	12	11	800	1400	52	165	12	22	12	5.9
MIN	6.2	4.1	9.0	5.7	6.0	20	11	11	6.0	2.9	1.8	.65
AC-FT	595	478	653	524	3970	12350	1100	2320	479	468	178	100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1994, BY WATER YEAR (WY)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1954, BY WATER YEAR (WY)												
MEAN	2.51	1.16	1.55	1.84	17.5	60.7	23.3	71.4	67.1	20.4	10.7	5.50
MAX	33.1	9.92	22.3	27.7	260	374	190	1057	509	72.5	57.3	63.5
(WY)	1987	1987	1956	1983	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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1944 - 1994
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SUMMARY STATISTICS FOR 1955 CAL YEAR		FOR 1956 CAL YEAR		FOR 1957 CAL YEAR		FOR 1958 CAL YEAR		FOR 1959 CAL YEAR	
ANNUAL TOTAL	21880.75		11699.40		--				
ANNUAL MEAN	59.9		32.1		23.7				
HIGHEST ANNUAL MEAN	--		--		136				1978
LOWEST ANNUAL MEAN	--		--		1.14				1961
HIGHEST DAILY MEAN	1680	May 6	1400b	Mar 3	10300				May 19 1978
LOWEST DAILY MEAN	.20	Feb 25	.65	Sep 14	.00				Oct 1 1943
ANNUAL SEVEN-DAY MINIMUM	.23	Feb 20	.72	Sep 9	.00				Oct 1 1943
INSTANTANEOUS PEAK FLOW	--		c		15300d				May 19 1978
INSTANTANEOUS PEAK STAGE	--		13.65a		14.60e				May 19 1978
ANNUAL RUNOFF (AC-FT)	43400		23210		17160				
10 PERCENT EXCEEDS	125		47		32				
50 PERCENT EXCEEDS	11		9.1		.75				
90 PERCENT EXCEEDS	.39		2.2		.00				

a From floodmarks, backwater from ice and/or ice jam, discharge not computed, probably occurred Mar. 3, 1994.

b About.

c Discharge not determined.

d From rating curve extended above 11,000 ft³/s, site and datum then in use.

e From floodmarks in gage shelter, site and datum then in use.

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, 210,200 acre-ft, May 21, 1978, elevation, 4,100.38 ft; minimum daily contents (since appreciable storage was attained), 6,030 acre-ft, May 8, 9, 1955, elevation, 4,046.35 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 106,400 acre-ft, May 16, elevation, 4,087.60 ft; minimum daily contents, 67,940 acre-ft, Oct. 8, elevation, 4,079.52 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	4,079.58	68,180	-
Oct. 31	4,079.58	68,180	0
Nov. 30	4,079.61	68,300	+120
Dec. 31	4,079.77	68,930	+630
CAL YR 1993	-	-	+50,340
Jan. 31	4,079.98	69,760	+830
Feb. 28	4,082.63	81,060	-11,300
Mar. 31	4,086.92	102,600	+21,540
Apr. 30	4,087.14	103,800	+1,200
May 31	4,087.42	105,400	+1,600
June 30	4,086.70	101,400	-4,000
July 31	4,085.38	94,390	-7,010
Aug. 31	4,083.90	87,010	-7,380
Sept. 30	4,083.57	85,430	-1,580
WTR YR 1994	-	-	+17,250

06427500 BELLE FOURCHE RIVER BELOW KEYHOLE RESERVOIR, WY

LOCATION.--Lat 44°23'18", long 104°46'12", in SE¹/₄ NE¹/₄ SW¹/₄ sec.22, T.51 N., R.66 W., Crook County, Hydrologic Unit 10120201, on right bank 0.9 mi downstream from Keyhole Dam, 1.7 mi downstream from Mule Creek, 2.9 mi upstream from Spring Creek, and 12 mi northeast of Moorcroft.

DRAINAGE AREA.--1,954 mi².

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

REVISED RECORDS.--WDR WY-89-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,020 ft above sea level, from topographic map. Prior to Aug. 30, 1979, at site 0.7 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 28, Dec. 16-30, Jan. 13-24, Jan. 30 to Feb. 16, Feb. 24, 25, Mar. 3 to Apr. 10, Apr. 17 to June 5, and Sept. 8-14. Records fair except those for estimated daily discharges and those below 10 ft³/s, which are poor. Flow completely regulated by Keyhole Reservoir, 0.9 mi upstream, since February 1952. (See Sta 06427000.)

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.7	1.4	1.1	1.1	1.6	1.5	1.6	1.6	81	81	38
2	1.4	1.6	1.1	1.0	1.0	1.4	1.5	1.6	1.6	82	78	21
3	1.5	1.6	1.1	1.1	1.0	1.6	1.5	1.6	1.6	83	74	21
4	1.5	1.5	1.1	1.0	1.0	1.7	1.5	1.6	1.6	83	74	21
5	1.5	1.5	1.1	.91	1.1	1.6	1.5	1.6	1.6	83	74	21
6	1.5	1.5	1.1	1.1	1.0	1.5	1.6	1.6	20	83	75	21
7	1.6	1.6	.99	1.2	.98	1.4	1.6	1.6	39	82	75	21
8	1.6	1.6	.98	1.3	.90	1.5	1.5	1.6	39	81	75	11
9	1.6	1.6	1.2	1.3	.97	1.5	1.5	1.6	38	81	75	2.0
10	1.6	1.6	1.3	1.2	1.1	1.6	1.5	1.6	38	81	75	2.0
11	1.7	1.5	1.4	1.1	1.0	1.6	1.5	1.6	39	81	76	2.0
12	1.7	1.4	1.5	1.1	1.0	1.6	1.5	1.6	38	82	76	2.0
13	1.7	1.4	1.6	1.1	1.2	1.6	1.9	1.6	39	82	75	2.0
14	1.8	1.4	1.7	1.0	1.3	1.6	1.8	1.6	39	82	76	2.0
15	1.8	1.4	1.4	1.0	1.4	1.5	1.8	1.6	39	82	75	2.0
16	2.0	1.3	1.3	1.0	1.5	1.5	1.7	1.6	39	83	75	1.9
17	2.1	1.3	1.3	1.0	1.6	1.5	1.7	1.6	39	83	76	2.0
18	2.1	1.3	1.2	.98	1.6	1.5	1.7	1.6	39	84	75	1.9
19	2.1	1.2	1.2	.98	1.4	1.5	1.7	1.6	39	84	75	1.9
20	2.1	1.2	1.2	1.0	1.3	1.5	1.7	1.6	39	83	75	2.0
21	2.0	1.2	1.2	1.0	1.3	1.5	1.7	1.6	39	82	75	2.2
22	2.0	1.2	1.2	1.0	1.3	1.5	1.7	1.6	39	82	74	2.3
23	2.0	1.3	1.2	1.1	1.3	1.5	1.7	1.6	39	82	64	2.3
24	2.0	1.1	1.3	1.2	1.2	1.5	1.6	1.6	39	80	54	2.3
25	2.0	1.1	1.3	1.3	1.2	1.4	1.6	1.6	39	80	55	2.3
26	1.9	1.1	1.3	1.3	1.3	1.3	1.6	1.6	38	81	56	2.3
27	1.9	1.4	1.3	1.3	1.4	1.3	1.6	1.6	38	80	55	2.4
28	1.8	1.4	1.2	1.3	1.4	1.4	1.6	1.6	59	81	55	2.4
29	1.7	1.4	1.2	1.3	---	1.4	1.6	1.6	81	81	55	2.3
30	1.8	1.4	1.2	1.2	---	1.5	1.6	1.6	81	81	55	2.2
31	1.8	---	1.2	1.2	---	1.5	---	1.6	---	81	54	---
TOTAL	55.2	41.8	38.77	34.67	33.85	46.6	48.5	49.6	1063.0	2537	2162	221.7
MEAN	1.78	1.39	1.25	1.12	1.21	1.50	1.62	1.60	35.4	81.8	69.7	7.39
MAX	2.1	1.7	1.7	1.3	1.6	1.7	1.9	1.6	81	84	81	38
MIN	1.4	1.1	.98	.91	.90	1.3	1.5	1.6	1.6	80	54	1.9
AC-FT	109	83	77	69	67	92	96	98	2110	5030	4290	440

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1994, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1951	2.36	20.8	1973	.50	1962
1952	1.59	8.70	1955	.12	1952
1953	1.50	5.56	1955	.10	1952
1954	1.46	3.65	1955	.000	1952
1955	4.23	120	1962	.000	1952
1956	17.7	423	1972	.33	1952
1957	14.2	154	1962	.34	1952
1958	33.7	459	1978	.45	1952
1959	35.9	317	1978	.54	1959
1960	67.2	195	1981	.62	1961
1961	67.8	307	1980	.70	1961
1962	17.7	126	1955	.45	1959

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1951 - 1994
ANNUAL TOTAL	2294.80	6332.69	--
ANNUAL MEAN	6.29	17.3	22.5
HIGHEST ANNUAL MEAN	--	--	80.6
LOWEST ANNUAL MEAN	--	--	1.75
HIGHEST DAILY MEAN	94 Sep 2	84 Jul 18,19	1350 May 24 1978
LOWEST DAILY MEAN	.71 May 24	.90 Feb 8	.00 Several days, 1951-1952
ANNUAL SEVEN-DAY MINIMUM	.85 May 20	.99 Feb 3	.00 Several days, 1951-1952
INSTANTANEOUS PEAK FLOW	--	87 Jul 6	1410 May 23 1978
INSTANTANEOUS PEAK STAGE	--	6.66 Jul 6	10.65a May 23 1978
ANNUAL RUNOFF (AC-FT)	4550	12560	16290
10 PERCENT EXCEEDS	2.0	76	92
50 PERCENT EXCEEDS	1.2	1.6	1.7
90 PERCENT EXCEEDS	.94	1.1	.60

a Present site and datum.

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)
NOV 01...	1700	15	1900	645	11.7	106	8.2	4.0
JAN 26...	0900	19	2080	665	11.3	91	7.8	0.5
APR 13...	1120	78	1450	662	11.6	122	8.4	11.0
JUL 06...	1645	110	1080	663	7.2	87	8.1	17.5

DATE	TEMPER- ATURE AIR (DEG C)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
NOV 01...	4.0	K11	<0.01	0.11	0.06	<0.2	0.01	0.02
JAN 26...	-5.0	K15	0.04	0.29	0.18	0.4	0.02	0.02
APR 13...	13.0	29	<0.01	<0.05	0.01	0.3	<0.01	<0.01
JUL 06...	15.0	2800	<0.01	0.07	0.02	0.9	0.24	<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.--Graphic water-stage recorder. Elevation of gage is 3,600 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Apr. 7 to May 4. Records good except those for estimated daily discharges, which are poor. Major regulation by Keyhole Reservoir. Streamflow also affected by diversions for irrigation and return flow from irrigated areas. Results of discharge measurements, in cubic feet per second, made during the period when station was not in operation are given below:

Oct. 5 . . . 16.9

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	93	430	61	82	77	65
2	---	---	---	---	---	---	108	364	58	79	77	63
3	---	---	---	---	---	---	108	295	59	74	84	56
4	---	---	---	---	---	---	115	247	63	73	79	43
5	---	---	---	---	---	---	113	203	58	74	74	40
6	---	---	---	---	---	---	111	175	53	103	72	38
7	---	---	---	---	---	---	111	158	52	113	69	36
8	---	---	---	---	---	---	117	141	58	104	69	36
9	---	---	---	---	---	---	116	126	85	94	69	38
10	---	---	---	---	---	---	115	115	85	96	69	36
11	---	---	---	---	---	---	118	106	80	96	92	27
12	---	---	---	---	---	---	112	104	74	94	73	22
13	---	---	---	---	---	---	111	110	74	93	69	20
14	---	---	---	---	---	---	118	143	76	94	67	17
15	---	---	---	---	---	---	125	228	77	88	67	19
16	---	---	---	---	---	---	124	167	88	86	66	21
17	---	---	---	---	---	---	128	132	101	89	65	19
18	---	---	---	---	---	---	139	113	103	85	67	18
19	---	---	---	---	---	---	164	104	91	80	65	16
20	---	---	---	---	---	---	180	103	88	79	63	16
21	---	---	---	---	---	---	189	103	82	80	63	16
22	---	---	---	---	---	---	187	122	79	83	65	16
23	---	---	---	---	---	---	182	101	76	83	62	15
24	---	---	---	---	---	---	175	96	67	82	63	15
25	---	---	---	---	---	---	175	88	59	82	58	15
26	---	---	---	---	---	---	171	83	61	83	54	14
27	---	---	---	---	---	---	171	79	54	82	53	14
28	---	---	---	---	---	---	162	72	51	82	53	14
29	---	---	---	---	---	---	161	67	50	83	52	14
30	---	---	---	---	---	---	187	66	67	82	53	14
31	---	---	---	---	---	96	---	62	---	77	58	---
TOTAL	---	---	---	---	---	96	4186	4503	2130	2675	2067	793
MEAN	---	---	---	---	---	96.0	140	145	71.0	86.3	66.7	26.4
MAX	---	---	---	---	---	96	189	430	103	113	92	65
MIN	---	---	---	---	---	96	93	62	50	73	52	14
AC-FT	---	---	---	---	---	190	8300	8930	4220	5310	4100	1570

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1994, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993	1994
MEAN	12.4	---	---	---	---	44.8
MAX	14.4	---	---	---	---	140
(WY)	1989	---	---	---	---	1994
MIN	10.3	---	---	---	---	8.82
(WY)	1990	---	---	---	---	1992

SUMMARY STATISTICS

	FOR 1994 WATER YEAR*	WATER YEARS 1989 - 1994*
HIGHEST DAILY MEAN	430 May 1	1090 Jun 9 1993
LOWEST DAILY MEAN	14 Sep 26-30	3.1 Jun 11 1992
ANNUAL SEVEN-DAY MINIMUM	---	5.2 Apr 4 1992
INSTANTANEOUS PEAK FLOW	478 May 1	1240 Jun 9 1993
INSTANTANEOUS PEAK STAGE	35.1a May 1	6.15 Mar 10 1989b
10 PERCENT EXCEEDS	---	113
50 PERCENT EXCEEDS	---	53
90 PERCENT EXCEEDS	---	11

* During period of operation.

a About.

b From floodmarks, backwater from ice.

06428500 BELLE FOURCHE RIVER AT WYOMING-SOUTH DAKOTA STATE LINE

LOCATION.--Lat 44°44'59", long 104°02'49", in NE¹/₄ NW¹/₄ NW¹/₄ sec.18, T.9 N., R.1 E., Butte County, Hydrologic Unit 10120202, on left bank 0.3 mi downstream from State line, 3.7 mi downstream from Oak Creek, and 11 mi northwest of Belle Fourche, 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 Dam, 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. U.S. Bureau of Reclamation satellite data-collection platform at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	29	e24	e28	e17	e14	123	493	87	56	90	62
2	24	26	e24	e28	e16	e30	121	527	88	84	92	63
3	24	26	e27	e27	e16	e800	128	474	90	78	95	66
4	25	24	e24	e25	e16	e800	139	399	86	74	93	61
5	24	21	e24	e25	e17	e450	141	341	82	72	93	54
6	24	20	e23	e24	e16	337	148	293	79	133	88	47
7	23	24	e23	e20	e15	254	139	255	76	302	82	49
8	24	24	e24	e20	e14	238	137	224	71	169	75	47
9	25	20	e24	e20	e9.0	277	137	198	72	134	78	45
10	25	23	e25	e20	e9.0	343	141	181	79	119	83	47
11	25	24	e25	e22	e10	281	135	168	96	156	81	46
12	25	26	e26	e26	e11	282	140	157	93	125	86	45
13	26	25	e28	e22	e11	302	136	175	88	117	104	39
14	26	22	e26	e20	e12	509	134	183	86	110	83	33
15	25	20	e23	e18	e11	448	139	184	81	111	76	32
16	25	24	e21	e17	e12	470	144	237	81	111	74	36
17	25	38	e21	e15	e12	487	137	213	93	106	72	26
18	25	32	e20	e16	e12	435	136	173	97	103	73	28
19	25	33	e20	e15	e10	374	148	153	101	104	72	29
20	25	24	e20	e14	e10	333	165	145	95	102	71	29
21	25	28	e20	e15	e9.5	298	185	137	85	98	75	22
22	27	33	e18	e18	e9.5	264	197	133	83	97	71	22
23	27	e22	e20	e18	e9.0	240	202	142	83	99	69	21
24	26	e16	e20	e19	e9.0	210	203	136	79	99	68	22
25	24	e18	e24	e17	e9.0	184	214	127	75	93	66	21
26	24	e20	e26	e17	e9.0	163	243	120	67	93	65	20
27	24	e20	e24	e17	e9.0	146	261	112	63	91	60	20
28	23	e22	e18	e17	e10	131	270	109	62	87	58	20
29	23	e26	e20	e17	---	127	269	103	57	87	56	19
30	22	e24	e25	e17	---	122	345	97	56	97	59	19
31	22	---	e25	e17	---	120	---	90	---	94	62	---
TOTAL	761	734	712	611	330.0	9469	5157	6479	2431	3401	2370	1090
MEAN	24.5	24.5	23.0	19.7	11.8	305	172	209	81.0	110	76.5	36.3
MAX	27	38	28	28	17	800	345	527	101	302	104	66
MIN	22	16	18	14	9.0	14	121	90	56	56	56	19
AC-FT	1510	1460	1410	1210	655	18780	10230	12850	4820	6750	4700	2160

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1994, BY WATER YEAR (WY)*

	MEAN	24.2	20.0	15.5	13.8	26.7	141	150	208	182	96.5	75.2	34.2
MAX	118	65.9	41.0	59.4	117	931	823	1104	812	303	271	109	
(WY)	1972	1972	1974	1974	1962	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	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1954 - 1994*
ANNUAL TOTAL	32800.40	33545.0	--
ANNUAL MEAN	89.9	91.9	82.5
HIGHEST ANNUAL MEAN	--	--	229
LOWEST ANNUAL MEAN	--	--	7.69
HIGHEST DAILY MEAN	1690	800	3760
LOWEST DAILY MEAN	.20	9.0	.00
ANNUAL SEVEN-DAY MINIMUM	.25	9.1	.00
INSTANTANEOUS PEAK FLOW	--	800	4550
INSTANTANEOUS PEAK STAGE	--	11.01	15.59
ANNUAL RUNOFF (AC-FT)	65060	66540	59770
10 PERCENT EXCEEDS	201	218	177
50 PERCENT EXCEEDS	45	57	33
90 PERCENT EXCEEDS	.76	17	4.0

e Estimated.

* Regulated period only (1954-94). See REMARKS.

a No flow at times n some years.

b Gage height, 14.03 ft.

c Backwater from ice.

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. 9, Nov. 5-8, 15-17, 19-21, 23-25, Dec. 13, 14, Jan. 4-8, Jan. 10 to Mar. 2, and Mar. 7-10, 24, 26, 30, 31. Records excellent except those for estimated daily discharges which are poor. No diversion upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	3.6	3.1	2.8	2.3	3.3	3.6	4.4	3.1	3.1	2.9	2.8
2	3.5	3.6	3.4	3.1	2.4	3.4	3.5	4.4	3.1	3.1	3.0	2.8
3	3.5	3.6	3.3	2.6	2.3	3.5	3.5	4.3	3.3	3.2	2.8	2.8
4	3.5	3.6	3.4	2.5	2.4	3.5	3.4	4.2	3.3	3.2	2.8	2.8
5	3.5	2.2	1.7	2.3	2.5	3.5	3.9	4.2	3.3	3.1	2.8	2.8
6	3.5	2.7	2.1	2.2	2.4	3.5	3.7	4.2	3.3	3.4	2.8	2.8
7	3.5	3.0	2.4	2.0	2.3	3.3	3.5	4.2	3.1	3.2	2.8	2.8
8	3.5	3.3	2.7	2.8	2.2	3.1	3.5	4.0	3.2	3.1	2.8	2.8
9	3.3	3.9	3.0	3.5	2.4	3.0	3.5	4.0	3.2	3.1	2.8	2.8
10	3.6	3.7	3.1	3.2	2.5	3.4	3.5	4.0	3.1	3.0	2.8	2.8
11	3.6	4.2	3.2	3.1	2.6	3.5	3.4	4.0	3.1	3.0	2.8	2.8
12	3.6	3.9	3.2	2.8	2.6	3.5	3.4	4.0	3.1	3.1	2.8	2.8
13	3.5	3.5	3.1	2.6	2.7	3.5	3.4	4.0	3.1	3.1	2.8	2.8
14	3.5	3.5	2.8	2.5	2.7	3.5	3.3	3.8	3.1	3.0	2.8	2.8
15	3.6	3.4	2.5	2.3	2.9	3.5	3.3	3.8	3.2	3.0	2.7	3.0
16	3.7	3.0	2.7	2.2	3.1	3.5	3.5	3.8	3.3	3.0	2.7	3.0
17	3.6	3.3	2.7	2.1	3.3	3.5	3.7	3.6	3.1	3.0	2.7	3.0
18	3.5	3.5	2.9	2.1	3.2	3.5	3.7	3.6	3.1	3.0	2.7	3.0
19	3.5	3.1	3.0	2.2	3.1	3.6	3.8	3.5	3.2	3.0	2.7	3.0
20	3.5	3.3	3.1	2.2	3.0	3.5	4.0	3.6	3.3	3.0	2.7	3.0
21	3.3	3.4	2.8	2.3	2.9	3.5	4.2	3.6	3.3	3.0	2.7	3.0
22	3.1	3.5	3.0	2.4	2.9	3.5	4.4	3.6	3.3	3.0	2.8	3.0
23	3.1	1.6	2.2	2.4	2.9	3.3	4.7	3.5	3.3	3.0	2.8	3.0
24	3.1	1.9	2.2	2.5	2.8	3.7	4.7	3.5	3.3	3.0	2.8	3.0
25	3.1	2.1	1.6	2.3	2.7	3.5	4.9	3.5	3.3	3.0	2.8	3.0
26	3.1	2.3	2.4	2.3	2.8	3.5	2.5	3.5	3.1	3.0	2.8	3.0
27	2.5	2.5	2.6	2.4	3.0	3.2	3.8	3.4	3.1	3.0	2.8	3.0
28	1.5	2.7	2.6	2.5	3.2	3.1	4.5	3.3	3.1	2.9	2.8	3.1
29	1.2	2.7	2.7	2.5	---	3.5	4.5	3.2	3.1	2.8	2.8	3.1
30	2.9	2.8	2.8	2.4	---	3.6	4.4	3.1	3.1	2.8	2.8	3.1
31	3.4	---	2.8	2.4	---	3.8	---	3.1	---	2.8	2.8	---
TOTAL	100.8	93.4	85.1	77.5	76.1	106.8	113.7	116.9	95.6	94.0	86.4	87.5
MEAN	3.25	3.11	2.75	2.50	2.72	3.45	3.79	3.77	3.19	3.03	2.79	2.92
MAX	3.7	4.2	3.4	3.5	3.3	3.8	4.9	4.4	3.3	3.4	3.0	3.1
MIN	1.2	1.6	1.6	2.0	2.2	3.0	2.5	3.1	3.1	2.8	2.7	2.8
AC-FT	200	185	169	154	151	212	226	232	190	186	171	174

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1994, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1975	4.24	5.58	1978	2.53	1975
1976	4.06	5.48	1977	2.09	1993
1977	4.05	5.59	1977	2.06	1993
1978	3.90	5.09	1981	2.50	1994
1979	4.03	5.43	1976	2.61	1993
1980	4.25	5.54	1976	2.91	1993
1981	4.54	6.17	1976	3.07	1993
1982	4.32	5.37	1976	3.10	1993
1983	4.44	5.55	1978	3.19	1994
1984	4.34	5.90	1976	3.03	1994
1985	4.48	5.84	1980	2.79	1994
1986	4.35	5.63	1975	2.92	1994

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1975 - 1994
ANNUAL TOTAL	1127.5	1133.8	---
ANNUAL MEAN	3.09	3.11	4.28
HIGHEST ANNUAL MEAN	---	---	5.37
LOWEST ANNUAL MEAN	---	---	2.92
HIGHEST DAILY MEAN	4.2 Nov 11	4.9 Apr 25	9.5 Apr 22 1980
LOWEST DAILY MEAN	1.2 Oct 29	1.2 Oct 29	.36 Nov 4 1992
ANNUAL SEVEN-DAY MINIMUM	2.3 Nov 23	2.2 Jan 15	1.2 Nov 2 1992
INSTANTANEOUS PEAK FLOW	---	6.8a Apr 5	13b Apr 1 1981
INSTANTANEOUS PEAK STAGE	---	3.23c Nov 23	8.61d Jan 12 1978
ANNUAL RUNOFF (AC-FT)	2240	2250	3100
10 PERCENT EXCEEDS	3.5	3.7	5.5
50 PERCENT EXCEEDS	3.1	3.1	4.4
90 PERCENT EXCEEDS	2.6	2.4	3.0

a Gage height, 2.32 ft, release from anchor ice.

06429905 SAND CREEK NEAR RANCH A, NEAR BEULAH, WY

LOCATION.--Lat 44°31'07", long 104°04'57", in SE¹/₄ SE¹/₄ SW¹/₄ sec.5, T.52 N., R.60 W., Crook County, Hydrologic Unit 10120303, on right bank 1.0 mi upstream from Bear Gulch and 1.8 mi south of Beulah.

DRAINAGE AREA.--267 mi².

PERIOD OF RECORD.--October 1976 to September 1983, April 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,580 ft above sea level, from topographic map. October 1976 to September 1983, at site 500 ft downstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 24, 25, Dec. 5, 17, Jan. 2, 3, 6, 7, 17-19, 29-31 and Feb. 7-9, 24-26. Records good except those for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 700 ft³/s, June 15, 1976, gage height, 7.77 ft, site and datum then in use, from slope-area measurement of peak flow at site 3 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	16	17	17	16	16	16	19	19	18	17	17
2	17	16	17	17	16	16	16	19	19	18	17	17
3	17	16	17	17	16	16	16	21	19	18	17	17
4	17	16	17	17	16	16	17	24	19	18	17	17
5	17	16	16	17	16	16	17	26	19	18	17	17
6	17	16	17	16	16	16	17	27	19	20	16	17
7	17	16	17	15	15	16	17	25	19	19	16	17
8	17	16	17	17	13	16	17	20	19	18	16	17
9	17	16	17	17	15	16	17	19	19	18	17	17
10	17	16	17	17	16	16	16	19	19	18	16	17
11	17	16	17	17	16	16	16	19	19	18	17	17
12	17	16	17	17	16	16	16	19	19	18	17	17
13	17	16	18	17	16	16	16	20	19	18	16	17
14	17	16	18	17	16	16	17	19	19	18	16	17
15	17	16	18	17	16	16	17	19	19	18	16	17
16	17	16	18	17	16	16	17	19	19	18	16	17
17	17	16	17	16	16	16	17	19	19	17	16	17
18	16	16	18	15	17	16	17	19	19	17	16	17
19	16	16	18	17	17	16	17	19	19	17	16	17
20	16	16	18	16	16	17	16	20	19	17	16	17
21	16	16	18	16	16	17	16	19	19	17	16	17
22	16	17	18	16	16	17	17	19	19	17	16	17
23	16	17	18	16	16	17	25	20	19	17	16	17
24	16	14	18	16	15	16	26	20	19	17	16	16
25	16	15	18	16	14	16	30	20	19	17	16	16
26	17	17	17	16	15	16	25	20	19	17	16	16
27	17	17	17	16	16	16	19	19	19	17	17	16
28	16	17	17	16	16	17	19	19	18	17	17	16
29	16	18	17	16	---	17	19	19	18	16	17	16
30	16	17	17	15	---	16	19	19	19	16	17	16
31	16	---	17	16	---	16	---	19	---	17	18	---
TOTAL	515	485	538	508	441	502	547	624	568	544	510	503
MEAN	16.6	16.2	17.4	16.4	15.7	16.2	18.2	20.1	18.9	17.5	16.5	16.8
MAX	17	18	18	17	17	17	30	27	19	20	18	17
MIN	16	14	16	15	13	16	16	19	18	16	16	16
AC-FT	1020	962	1070	1010	875	996	1080	1240	1130	1080	1010	998

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1994, BY WATER YEAR (WY)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	21.2	21.2	20.8	20.1	19.1	19.5	20.7	27.9	24.3	22.6	20.7	20.3						
MAX	28.5	28.2	26.3	25.9	25.0	27.0	30.8	53.9	36.3	31.2	28.5	28.3						
(WY)	1978	1978	1979	1979	1977	1978	1978	1982	1978	1978	1978	1978						
MIN	15.3	16.0	15.7	15.6	14.9	14.7	15.3	15.5	15.5	15.2	14.4	15.1						
(WY)	1993	1993	1993	1993	1993	1992	1992	1992	1992	1992	1992	1992						

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1977 - 1994
ANNUAL TOTAL	6089	6285	--
ANNUAL MEAN	16.7	17.2	21.8
HIGHEST ANNUAL MEAN	--	--	29.5
LOWEST ANNUAL MEAN	--	--	15.7
HIGHEST DAILY MEAN	30	30	322
LOWEST DAILY MEAN	13	13	12
ANNUAL SEVEN-DAY MINIMUM	14	15	13
INSTANTANEOUS PEAK FLOW	--	37a	514
INSTANTANEOUS PEAK STAGE	--	1.97b Jan 7	7.35c May 16 1982
ANNUAL RUNOFF (AC-FT)	12080	12470	15820
10 PERCENT EXCEEDS	18	19	28
50 PERCENT EXCEEDS	17	17	20
90 PERCENT EXCEEDS	15	16	16

a Gage height, 1.67 ft.

b Backwater from ice.

c Site and datum then in use.

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, 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.

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 good except those for estimated daily discharges, which are 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	28	.00	e.00	e.00	e.00	e.00	e.00	.00	12	.00	19
2	.19	.22	.00	e.00	e.00	e.00	e.00	e.00	.00	13	.00	20
3	.15	.00	.00	e.00	e.00	e.00	e.00	e.00	5.6	13	.00	20
4	.06	.00	.00	e.00	e.00	e.00	e.00	e.00	7.2	13	.00	21
5	.01	.00	.00	e.00	e.00	e.00	e.00	.00	8.2	13	.00	21
6	.00	.00	.00	e.00	e.00	e.00	e.00	.00	9.9	18	.00	21
7	5.0	.00	.00	e.00	e.00	e.00	e.00	.00	12	18	.00	21
8	7.2	.00	.00	e.00	e.00	e.00	e.00	.00	11	16	.00	25
9	7.3	.00	.00	e.00	e.00	e.00	e.00	.00	11	16	.00	25
10	5.3	.00	.00	e.00	e.00	e.00	e.00	.00	13	18	14	26
11	3.4	.00	.00	e.00	e.00	e.00	e.00	.00	13	19	36	27
12	4.1	.00	.00	e.00	e.00	e.00	e.00	.00	15	20	37	26
13	8.7	.00	.00	e.00	e.00	e.00	e.00	.00	19	14	44	25
14	8.7	.00	e.00	e.00	e.00	e.00	e.00	.00	9.1	12	32	16
15	8.7	.00	e.00	e.00	e.00	e.00	e.00	.00	.66	12	3.7	11
16	8.7	.00	e.00	e.00	e.00	e.00	e.00	.00	6.8	23	8.7	20
17	8.7	.00	e.00	e.00	e.00	e.00	e.00	.00	13	32	8.7	24
18	8.7	.00	e.00	e.00	e.00	e.00	e.00	.00	13	15	8.7	26
19	8.9	.00	e.00	e.00	e.00	e.00	e.00	.00	13	11	8.6	28
20	9.3	.00	e.00	e.00	e.00	e.00	e.00	.00	13	12	8.5	28
21	10	.00	e.00	e.00	e.00	e.00	e.00	.00	13	12	8.5	29
22	12	.00	e.00	e.00	e.00	e.00	e.00	.00	13	12	8.2	30
23	15	.00	e.00	e.00	e.00	e.00	e.00	.00	13	12	9.4	15
24	15	.00	e.00	e.00	e.00	e.00	e.00	.00	15	11	9.4	5.7
25	17	.00	e.00	e.00	e.00	e.00	e.00	.00	12	1.0	9.0	5.5
26	20	.00	e.00	e.00	e.00	e.00	e.00	.00	12	.01	11	5.7
27	22	.00	e.00	e.00	e.00	e.00	e.00	.00	12	.00	12	5.5
28	26	.00	e.00	e.00	e.00	e.00	e.00	.00	14	.00	13	5.5
29	27	.00	e.00	e.00	---	e.00	e.00	.00	14	.00	13	5.5
30	29	.00	e.00	e.00	---	e.00	e.00	.00	12	.00	14	5.5
31	31	---	e.00	e.00	---	e.00	---	.00	---	.00	15	---
TOTAL	327.24	28.22	0.00	0.00	0.00	0.00	0.00	0.00	323.46	368.01	332.40	562.9
MEAN	10.6	.94	.000	.000	.000	.000	.000	.000	10.8	11.9	10.7	18.8
MAX	31	28	.00	.00	.00	.00	.00	.00	19	32	44	30
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	5.5
AC-FT	649	56	.00	.00	.00	.00	.00	.00	642	730	659	1120

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1994, BY WATER YEAR (WY)

	MEAN	7.40	.24	.000	.000	.000	.000	.008	1.59	8.13	10.4	9.60	9.37
MAX	20.6	.94	.000	.000	.000	.000	.000	.054	6.30	13.9	16.4	18.2	18.8
(WY)	1991	1994	1988	1988	1988	1988	1988	1989	1992	1988	1991	1991	1994
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.84	3.71	.80
(WY)	1988	1988	1988	1988	1988	1988	1988	1990	1991	1991	1993	1993	1993

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1988 - 1994
ANNUAL TOTAL	643.98	1942.23	---
ANNUAL MEAN	1.76	5.32	3.92
HIGHEST ANNUAL MEAN	---	---	5.32
LOWEST ANNUAL MEAN	---	---	.92
HIGHEST DAILY MEAN	31	44	46
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
ANNUAL RUNOFF (AC-FT)	1280	3850	2840
10 PERCENT EXCEEDS	4.3	18	13
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

e Estimated.

a No flow for many days in each year.

LOCATION.--Lat 44°34'26", long 104°02'54", in NW¹/₄ NW¹/₄ sec.18 T.7 N., R.1 E., Butte County, Hydrologic Unit 10120203, on left bank 800 ft downstream from State line, 5.7 mi upstream from Crow Creek, and 12 mi southwest of Belle Fourche, SD.

PERIOD OF RECORD.--April 1929 to September 1931 and February 1936 to July 1937 (published as "near Beulah, WY"),
June 1954 to current year.

REVISED RECORDS.--WSP 1309: 1931(M), 1936-37(M).

GAGE.--Water-stage recorder. Elevation of gage is 3,410 ft above 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 except those for estimated daily discharges, which are poor. Large diversions for irrigation upstream from station. Total flow passing State line may be obtained by adding flow of Murray ditch (see station 06429997).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	e15	26	25	e22	29	23	39	39	6.0	28	15
2	25	e20	26	25	e23	31	23	46	40	4.5	29	14
3	24	e23	26	25	e22	32	23	64	32	4.4	30	14
4	24	e23	26	25	e20	32	24	73	32	4.5	28	15
5	24	e23	26	26	e22	35	26	78	31	4.5	28	14
6	24	e23	25	e20	e22	34	26	78	33	7.8	28	13
7	20	e23	25	e18	e20	33	26	72	31	5.9	28	15
8	18	e23	24	e20	e17	32	26	62	32	5.1	29	14
9	18	e23	24	25	e15	27	26	51	26	4.9	29	13
10	20	e23	24	26	e20	26	26	47	22	4.7	21	13
11	22	e23	25	25	e22	25	26	42	24	4.8	16	13
12	21	e23	25	25	e26	25	26	40	23	5.2	16	12
13	16	e22	25	24	26	25	26	35	9.8	12	13	12
14	16	e22	24	24	25	25	27	37	26	11	17	13
15	16	e22	23	24	25	25	29	39	42	10	24	16
16	16	e22	23	22	25	26	29	39	34	8.6	17	16
17	16	e22	24	e18	e22	28	28	37	22	6.0	17	15
18	16	e22	24	e20	e22	28	28	37	19	10	17	16
19	16	e22	25	e20	e23	28	29	36	18	11	17	16
20	17	e22	25	e18	e23	27	30	37	19	11	17	16
21	16	e22	25	e20	e23	25	30	37	19	11	18	16
22	17	e22	26	e22	e23	24	30	38	17	11	17	16
23	18	e20	26	e24	25	24	35	37	16	11	13	16
24	18	e18	26	e24	25	24	39	37	12	11	14	16
25	22	e18	26	e24	e23	24	42	36	12	22	11	16
26	22	e20	24	e22	e25	23	47	37	12	23	9.5	17
27	18	e22	25	e22	29	23	42	38	10	25	14	16
28	e16	e24	24	e23	26	23	39	37	7.2	25	14	14
29	e17	26	24	e23	---	23	39	37	7.7	25	14	14
30	e17	26	24	e20	---	23	41	38	7.0	28	15	14
31	e15	---	25	e22	---	23	---	38	---	28	14	---
TOTAL	590	659	770	701	641	832	911	1399	674.7	361.9	602.5	440
MEAN	19.0	22.0	24.8	22.6	22.9	26.8	30.4	45.1	22.5	11.7	19.4	14.7
MAX	25	26	26	26	29	35	47	78	42	28	30	17
MIN	15	15	23	18	15	23	23	35	7.0	4.4	9.5	12
AC-FT	1170	1310	1530	1390	1270	1650	1810	2770	1340	718	1200	870

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1994, BY WATER YEAR (WY)*

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1994, BY WATER YEAR (WY)												
MEAN	27.8	31.8	31.7	31.0	31.9	33.2	36.1	50.6	45.3	22.0	21.3	24.5
MAX	45.0	47.9	47.1	46.1	57.8	58.9	60.9	132	128	54.9	58.9	50.4
(WY)	1973	1974	1974	1974	1971	1978	1971	1965	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	1988

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1955 - 1994*
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SUMMARY STATISTICS FOR 1993 CALENDAR YEAR			FOR 1994 WATER YEAR			WATER YEARS 1955 - 1994*		
ANNUAL TOTAL	8649		8582.1		--			
ANNUAL MEAN	23.7		23.5		32.3			
HIGHEST ANNUAL MEAN	--		--		56.0			1973
LOWEST ANNUAL MEAN	--		--		17.9			1961
HIGHEST DAILY MEAN	138	Jun 9	78	May 5	732			Jun 15 1976
LOWEST DAILY MEAN	15	Oct 31	4.4	Jul 3	1.3			May 22 1985a
ANNUAL SEVEN-DAY MINIMUM	16	Oct 13	5.2	Jul 2	1.9			May 21 1985
INSTANTANEOUS PEAK FLOW	--		82	May 6	2440			Aug 22 1973b
INSTANTANEOUS PEAK STAGE	--		3.66	May 6	12.19			Aug 22 1973
ANNUAL RUNOFF (AC-FT)	17160		17020		23370			
10 PERCENT EXCEEDS	27		37		45			
50 PERCENT EXCEEDS	23		23		30			
90 PERCENT EXCEEDS	19		13		14			

e Estimated.

* Period using present site and datum only (1955-94). See GAGE.

a No flow Aug. 13-15, 1929, during partial year.

b From rating curve extended above 1,000 ft³/s, on basis of slope-area measurement of gage height, 11.95 ft.

NIOBRARA RIVER BASIN

06454000 NIOBRARA RIVER AT WYOMING-NEBRASKA STATE LINE

LOCATION.--Lat 42°39'33", long 104°03'54", in SE¹/₄ SW¹/₄ sec.15, T.31 N., R.60 W., Niobrara County, Wyoming,
Hydrologic Unit 10150002, on left bank 0.2 mi downstream from Van Tassel Creek, 0.3 mi upstream from Wyoming-
Nebraska State line, 3 mi east of Van Tassel, WY, and at mile 358.1.
DRAINAGE AREA (REVISED).--455 mi².
PERIOD OF RECORD.--October 1955 to current year.
GAGE.--Water-stage recorder. Datum of gage is 4,687.70 ft above sea level.
REMARKS.--Records good except for estimated record which is fair. Diversions for irrigation of about 4,700
acres above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	2.4	2.3	2.6	e2.5	2.8	5.6	4.7	3.0	2.2	1.8	1.5
2	2.1	2.5	2.3	2.7	e2.7	3.1	5.6	4.9	3.0	2.3	1.8	1.5
3	2.1	2.6	2.5	2.7	2.7	3.2	5.5	4.8	2.9	2.4	1.7	1.7
4	2.2	2.7	2.5	2.6	2.4	5.2	5.5	4.7	3.0	2.4	1.7	1.7
5	2.2	2.7	e2.4	2.6	2.4	5.7	5.3	4.4	2.7	2.2	1.7	1.7
6	2.3	2.5	e2.5	2.6	2.4	5.8	5.1	4.3	2.6	2.4	1.7	1.7
7	2.5	2.5	2.1	2.5	2.4	4.9	5.0	4.1	2.5	3.5	1.7	1.6
8	2.7	2.4	2.0	2.4	2.4	4.3	5.1	3.9	2.4	3.1	1.7	1.5
9	2.5	2.4	2.1	2.4	2.3	4.1	4.8	3.8	2.3	2.6	1.6	1.5
10	2.9	2.4	2.0	2.4	2.2	5.2	4.8	3.7	2.3	2.3	1.6	1.5
11	3.6	2.4	2.0	2.4	2.3	10	4.8	3.5	2.2	1.9	1.6	1.4
12	2.8	2.6	2.0	2.5	2.3	9.1	4.7	3.3	2.2	2.1	1.6	1.4
13	2.5	2.7	2.0	2.6	2.3	9.1	4.5	3.2	2.2	2.9	1.5	1.4
14	3.5	2.6	2.0	2.6	2.4	9.5	4.7	3.8	2.2	2.9	1.5	1.4
15	4.1	2.6	2.0	2.7	2.6	9.3	4.5	3.4	2.2	3.6	1.5	1.4
16	4.5	2.5	2.0	2.7	2.8	9.2	4.3	3.3	2.2	2.7	1.5	1.5
17	4.2	2.5	e2.0	e2.6	3.5	9.6	4.2	3.0	2.2	2.4	1.5	1.5
18	4.2	2.7	e2.0	2.6	3.6	9.7	4.1	3.0	2.2	2.2	1.5	1.4
19	3.9	2.6	2.0	2.6	3.2	9.9	4.0	3.0	2.2	1.9	1.5	1.5
20	3.4	2.7	2.4	2.7	3.2	9.7	3.9	3.4	2.2	1.7	1.5	1.5
21	3.3	2.7	2.2	2.7	3.0	9.1	3.8	3.5	2.2	1.7	1.5	1.5
22	3.5	2.7	2.1	2.7	2.9	7.8	3.8	3.2	3.9	1.8	1.5	1.6
23	3.3	e2.7	e1.8	2.6	3.0	7.3	3.9	3.2	2.3	1.8	1.5	1.5
24	3.2	e2.7	e2.3	2.6	e2.9	6.4	3.8	3.3	2.2	1.8	1.5	1.5
25	3.2	e2.5	2.3	2.6	e2.9	6.3	3.9	3.4	2.2	1.8	1.5	1.4
26	3.1	e2.0	2.3	2.6	2.7	6.3	e3.8	3.3	2.3	1.8	1.5	1.4
27	3.0	e2.8	2.4	2.7	2.6	5.7	e4.2	3.4	2.3	1.9	1.5	1.4
28	3.0	2.5	2.5	2.7	2.6	5.7	4.5	3.2	2.2	1.8	1.6	1.4
29	2.9	2.4	2.6	e2.7	---	5.5	4.4	3.1	2.2	1.8	1.8	1.4
30	2.9	2.4	2.5	e2.7	---	5.6	4.5	3.1	2.2	1.8	2.1	1.5
31	2.5	---	2.6	e2.7	---	5.6	---	3.1	---	1.8	1.9	---
TOTAL	94.2	76.4	68.7	80.8	75.2	210.7	136.6	112.0	72.7	69.5	50.1	44.9
MEAN	3.04	2.55	2.22	2.61	2.69	6.80	4.55	3.61	2.42	2.24	1.62	1.50
MAX	4.5	2.8	2.6	2.7	3.6	10	5.6	4.9	3.9	3.6	2.1	1.7
MIN	2.1	2.0	1.8	2.4	2.2	2.8	3.8	3.0	2.2	1.7	1.5	1.4
AC-FT	187	152	136	160	149	418	271	222	144	138	99	89

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 1994, BY WATER YEAR (WY)

	MEAN	2.69	2.91	2.92	3.10	4.33	5.60	5.43	4.54	3.99	3.37	2.55	2.21
MAX	4.24	4.95	4.66	12.6	18.1	19.3	16.3	10.2	12.6	22.2	15.6	3.68	
(WY)	1987	1958	1958	1974	1963	1960	1974	1957	1962	1969	1977	1965	
MIN	1.71	1.98	1.56	1.58	2.17	2.23	2.74	2.46	1.55	1.22	.94	1.01	
(WY)	1982	1984	1984	1986	1985	1982	1981	1992	1977	1977	1975	1975	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1956 - 1994

ANNUAL TOTAL	1365.1	1091.8	--
ANNUAL MEAN	3.74	2.99	3.63
HIGHEST ANNUAL MEAN	--	--	5.77
LOWEST ANNUAL MEAN	--	--	2.14
HIGHEST DAILY MEAN	14	Mar 24	352
LOWEST DAILY MEAN	1.8	Dec 23	.54
ANNUAL SEVEN-DAY MINIMUM	2.0	Sep 21	.58
INSTANTANEOUS PEAK FLOW (STAGE)	--	12(1.98)Mar 11	2120
INSTANTANEOUS PEAK STAGE	--	*3.66 Feb 1	8.28
ANNUAL RUNOFF (AC-FT)	2710	2170	2630
10 PERCENT EXCEEDS	7.8	4.8	5.5
50 PERCENT EXCEEDS	2.5	2.6	2.9
90 PERCENT EXCEEDS	2.0	1.5	1.8

e Estimated.

* Backwater from snow in channel.

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.

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.

REVISED RECORDS.--WSP 1510: 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. 28 to Apr. 7. Records good except those for estimated daily discharges, which are poor. Diversions for irrigation of about 130,000 acres of hay meadows upstream from station. Transbasin diversions upstream from station to Cache la Poudre River basin. National Weather Service satellite telemeter at station.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	200	165	93	71	112	260	634	832	203	122	58
2	118	195	160	94	72	120	275	688	1010	190	157	64
3	115	190	150	97	75	126	300	727	958	193	169	79
4	122	182	140	100	75	130	325	607	824	234	163	78
5	123	180	130	98	79	135	350	525	744	236	140	75
6	122	190	140	90	82	140	330	523	699	213	124	62
7	118	210	145	84	83	131	320	571	629	197	111	52
8	133	230	150	92	80	125	317	672	579	204	102	46
9	144	220	140	90	75	120	295	711	513	219	99	44
10	152	210	135	84	80	129	285	697	470	206	107	44
11	161	200	130	80	78	139	292	674	416	181	116	43
12	173	190	125	85	76	140	272	662	384	176	109	38
13	182	185	125	90	81	134	302	718	380	184	99	39
14	193	180	125	86	84	144	370	781	394	223	96	38
15	218	170	130	81	89	150	433	754	350	189	91	39
16	260	180	130	86	93	155	432	727	328	169	88	45
17	245	190	125	90	97	160	497	583	294	169	82	45
18	243	195	120	94	101	160	576	648	282	170	79	44
19	250	190	115	91	97	168	676	651	298	179	75	42
20	244	180	110	90	95	188	748	618	347	160	76	41
21	223	190	115	86	94	200	779	598	473	143	90	44
22	212	190	110	88	94	210	825	525	576	144	91	46
23	197	180	100	89	94	228	952	470	683	149	84	50
24	177	160	98	90	98	220	1040	440	546	157	80	50
25	170	150	97	88	102	210	1080	405	428	156	74	50
26	163	160	100	84	115	210	1050	413	341	147	65	51
27	151	165	98	81	112	200	866	448	269	136	61	46
28	148	165	95	77	109	210	727	486	216	124	59	45
29	143	165	89	75	---	240	671	649	193	125	58	38
30	155	170	88	73	---	230	638	802	208	125	65	39
31	172	---	90	68	---	250	---	760	---	120	63	---
TOTAL	5353	5562	3770	2694	2481	5214	16283	19167	14664	5421	2995	1475
MEAN	173	185	122	86.9	88.6	168	543	618	489	175	96.6	49.2
MAX	260	230	165	100	115	250	1080	802	1010	236	169	79
MIN	115	150	88	68	71	112	260	405	193	120	58	38
AC=FT	10620	11030	7480	5340	4920	10340	32300	38020	29090	10750	5940	2930

	STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961-1962					STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962-1963						
MEAN	162	150	101	81.3	86.1	168	757	1134	1469	631	265	145
MAX	538	366	200	177	199	722	2444	3649	3296	2367	763	502
(WY)	1962	1962	1928	1984	1986	1986	1962	1984	1983	1957	1983	1929
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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR			FOR 1994 WATER YEAR			WATER YEARS 1904 - 1994		
ANNUAL TOTAL	164210			85079			--		
ANNUAL MEAN	450			233			430		
HIGHEST ANNUAL MEAN	--			--			878		
LOWEST ANNUAL MEAN	--			--			117		
HIGHEST DAILY MEAN	2360	Jun	19	1080	Apr	25	6450	Jun	10
LOWEST DAILY MEAN	65	Jan	3	38	Sep	12, 14, 29	19	Jul	17
ANNUAL SEVEN-DAY MINIMUM	68	Jan	1	41	Sep	9	20	Jul	15
INSTANTANEOUS PEAK FLOW	--			1100	Apr	25	6720a	Jun	11
INSTANTANEOUS PEAK STAGE	--			5.23b	Feb	1	9.65b	Apr	25
ANNUAL RUNOFF (AC-FT)	325700			168800			311800		
10 PERCENT EXCEEDS	1260			631			1210		
50 PERCENT EXCEEDS	190			151			160		
90 PERCENT EXCEEDS	86			73			68		

b Backwater from ice jam.

DRAINAGE AREA. --37.4 mi².

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

PERIOD OF RECORD: May 1968 to 1984, during the 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 0.22 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. 27 to Nov. 14, Nov. 20 to Dec. 19, Dec. 29 to Feb. 3, Mar. 2-5, 7, 21, 22, Mar. 24 to Apr. 1, and Apr. 5, 8, 9, 12. 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)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 16	2000	*524	*3.86	June 1	0100	477	3.75

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	11	11	9.8	9.7	9.5	13	47	335	16	12	17
2	9.4	10	10	9.8	9.8	9.7	13	49	231	15	17	21
3	9.4	11	11	9.9	9.9	9.8	13	46	201	20	11	15
4	9.6	10	12	10	9.9	9.8	12	45	195	22	9.4	14
5	9.7	9.6	11	10	9.9	10	11	53	172	17	9.0	11
6	9.5	9.1	11	9.9	9.9	10	11	87	140	14	8.1	8.9
7	14	9.5	12	9.8	9.9	10	11	132	116	15	7.3	7.6
8	24	10	12	9.8	9.9	10	10	171	94	16	7.3	7.2
9	17	11	12	9.7	9.9	11	11	190	78	14	12	6.8
10	15	11	12	9.7	9.9	12	11	246	72	12	15	6.9
11	16	12	12	9.7	9.7	11	11	277	71	12	11	6.8
12	35	12	11	9.7	9.8	11	10	348	70	12	8.9	6.5
13	34	12	11	9.8	9.9	11	12	335	67	12	9.2	7.0
14	29	12	11	10	9.9	11	12	337	65	11	8.1	8.5
15	25	13	11	10	9.9	12	16	325	60	11	7.7	10
16	25	14	11	10	9.7	12	19	388	53	11	7.3	10
17	23	13	11	9.9	9.6	12	28	404	47	11	7.0	9.2
18	22	13	11	10	9.6	13	37	357	42	9.9	6.5	8.0
19	20	13	11	10	9.4	13	48	350	42	9.3	6.9	7.7
20	19	12	11	10	9.4	12	57	341	51	9.5	7.1	7.7
21	18	12	11	10	9.5	11	65	290	47	9.6	7.1	8.9
22	17	12	11	10	9.3	12	76	284	50	9.2	7.0	9.4
23	16	11	11	10	9.3	12	112	283	43	8.9	6.5	9.6
24	16	9.7	11	10	9.3	13	139	273	34	10	6.1	9.1
25	17	9.2	11	10	9.3	14	115	263	27	10	6.0	8.0
26	14	9.5	11	9.9	9.3	13	81	260	23	9.4	6.0	7.9
27	12	10	10	9.8	9.3	12	71	252	20	8.9	5.8	7.6
28	13	11	10	9.7	9.4	13	58	258	18	8.7	13	7.3
29	11	12	9.9	9.7	---	12	51	245	17	8.4	16	7.1
30	9.0	12	9.9	9.7	---	12	49	258	17	7.9	16	7.2
31	9.7	---	9.9	9.6	---	12	---	259	---	8.6	14	---
TOTAL	527.8	336.6	340.7	305.9	270.3	355.8	1183	7453	2498	369.3	291.3	278.9
MEAN	17.0	11.2	11.0	9.87	9.65	11.5	39.4	240	83.3	11.9	9.40	9.30
MAX	35	14	12	10	9.9	14	139	404	335	22	17	21
MIN	9.0	9.1	9.9	9.6	9.3	9.5	10	45	17	7.9	5.8	6.5
AC-FT	1050	668	676	607	536	706	2350	14780	4950	733	578	553

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1994, BY WATER YEAR (WY)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961-1994, BY WATER YEAR (WY)												
MEAN	14.1	11.6	10.0	9.17	9.24	10.6	24.4	165	252	56.3	13.8	12.6
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	60.0	57.4	11.9	7.75	7.22
(WY)	1990	1977	1991	1970	1970	1970	1993	1975	1987	1994	1989	1989

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1961 - 1994
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SUB-AREA STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1961 - 1994	
ANNUAL TOTAL	21983.8		14210.6		--	
ANNUAL MEAN	60.2		38.9		49.1	
HIGHEST ANNUAL MEAN	--		--		82.0	1983
LOWEST ANNUAL MEAN	--		--		27.3	1989
HIGHEST DAILY MEAN	561	May 28	404	May 17	955	Jun 25 1983
LOWEST DAILY MEAN	7.5	Jan 4	5.8	Aug 27	4.3	Dec 21 1990
ANNUAL SEVEN-DAY MINIMUM	7.9	Jan 1	6.4	Aug 21	5.1	Oct 25 1976
INSTANTANEOUS PEAK FLOW	--		524	May 16	1360	Jun 25 1983
INSTANTANEOUS PEAK STAGE	--		3.86	May 16	4.23a	Jun 25 1983
ANNUAL RUNOFF (AC-FT)	43600		28190		35550	
10 PERCENT EXCEEDS	237		90		156	
50 PERCENT EXCEEDS	12		11		12	
90 PERCENT EXCEEDS	8.9		8.6		8.1	

a Site and datum then in use.

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.--No estimated daily discharges. Records good. Transbasin diversion 0.3 mi upstream from station for irrigation in North Brush Creek basin.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	31	232	39	14	8.0
2	---	---	---	---	---	---	---	33	145	39	14	12
3	---	---	---	---	---	---	---	33	120	43	11	9.6
4	---	---	---	---	---	---	---	30	118	39	11	10
5	---	---	---	---	---	---	---	36	105	36	10	8.0
6	---	---	---	---	---	---	---	55	86	34	9.6	7.4
7	---	---	---	---	---	---	---	80	71	34	8.6	7.2
8	---	---	---	---	---	---	---	93	52	32	8.6	7.2
9	---	---	---	---	---	---	---	98	46	28	15	7.2
10	---	---	---	---	---	---	---	127	58	27	14	7.4
11	---	---	---	---	---	---	---	144	69	25	11	7.2
12	---	---	---	---	---	---	---	164	67	24	10	7.2
13	---	---	---	---	---	---	---	166	63	22	10	7.2
14	---	---	---	---	---	---	---	162	61	22	9.6	7.7
15	---	---	---	---	---	---	---	160	57	21	8.6	9.3
16	---	---	---	---	---	---	---	178	50	20	8.3	9.3
17	---	---	---	---	---	---	---	206	44	19	8.0	8.0
18	---	---	---	---	---	---	---	205	47	18	7.7	7.7
19	---	---	---	---	---	---	---	197	54	16	7.7	7.4
20	---	---	---	---	---	---	---	212	61	15	7.7	7.4
21	---	---	---	---	---	---	---	184	58	14	7.7	8.6
22	---	---	---	---	---	---	---	190	54	13	7.7	8.6
23	---	---	---	---	---	---	---	202	47	12	7.4	9.3
24	---	---	---	---	---	---	---	195	51	12	7.0	8.6
25	---	---	---	---	---	---	---	202	38	12	6.8	8.0
26	---	---	---	---	---	---	---	210	32	11	7.0	8.0
27	---	---	---	---	---	---	---	188	28	11	7.2	8.0
28	---	---	---	---	---	---	---	192	34	10	8.0	7.7
29	---	---	---	---	---	---	---	186	39	10	8.0	7.0
30	---	---	---	---	---	---	---	200	41	10	7.7	7.0
31	---	---	---	---	---	---	---	202	---	10	7.4	---
TOTAL	---	---	---	---	---	---	---	4561	2028	678	286.3	243.2
MEAN	---	---	---	---	---	---	---	147	67.6	21.9	9.24	8.11
MAX	---	---	---	---	---	---	---	212	232	43	15	12
MIN	---	---	---	---	---	---	---	30	28	10	6.8	7.0
AC-FT	---	---	---	---	---	---	---	9050	4020	1340	568	482

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	1962	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

SUMMARY STATISTICS

ANNUAL MEAN
HIGHEST ANNUAL MEAN
LOWEST ANNUAL MEAN
HIGHEST DAILY MEAN
LOWEST DAILY MEAN

FOR 1994 WATER YEAR*

232 Jun 1
6.8 Aug 25

WATER YEARS 1961 - 1972

31.8
45.9 1962
18.6 1963
501 Jun 10 1965
.80 Aug 15-20,
28,29 1963*
.84 Aug 14 1963
559 Jun 10 1965#
4.09 Jun 10 1965#
23070
91
8.2
4.6

ANNUAL SEVEN-DAY MINIMUM
INSTANTANEOUS PEAK FLOW
INSTANTANEOUS PEAK STAGE
ANNUAL RUNOFF (AC-FT)
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

305 May 31
3.40 May 31

* During period of operation.

For period of record through 1994.

PLATTE RIVER BASIN

06623800 ENCAMPMENT RIVER ABOVE HOG PARK CREEK, NEAR ENCAMPMENT, WY
(Hydrologic bench-mark station)

LOCATION.--Lat 41°01'25", long 106°49'27", in NE¹/₄ SW¹/₄ sec.10, T.12 N., R.84 W., Carbon County, Hydrologic Unit 10180002, Medicine Bow National Forest, on left bank 0.6 mi upstream from Hog Park Creek and 13 mi south of Encampment.

DRAINAGE AREA.--72.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,270 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 28 to Nov. 17, Mar. 18, 19, 21, 24, Mar. 26 to Apr. 1, and Apr. 3-6, 9, 12, 15. 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 750 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 1	0030	*940	*4.16	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	25	23	20	18	20	26	67	726	78	58	20
2	23	23	23	18	18	20	24	69	567	75	49	23
3	23	24	23	19	18	20	23	71	528	76	33	22
4	22	21	23	20	18	20	22	71	540	70	31	21
5	22	18	22	20	18	22	21	97	504	64	29	18
6	22	16	24	20	18	21	22	136	471	60	27	18
7	30	18	24	20	18	19	22	173	439	61	25	17
8	38	20	23	21	18	20	22	217	389	61	25	17
9	33	21	23	21	18	20	21	254	342	56	36	17
10	34	23	22	22	18	21	22	278	312	53	41	18
11	35	30	22	21	18	21	21	326	304	51	31	16
12	55	27	22	21	17	20	22	373	300	51	28	16
13	55	25	21	20	18	20	24	371	285	47	27	17
14	57	24	21	20	20	20	26	379	272	46	25	24
15	50	25	23	20	19	21	27	394	246	44	24	25
16	46	26	22	20	19	23	31	468	216	43	24	21
17	43	24	21	19	19	23	37	525	196	41	23	19
18	45	24	21	20	20	21	50	533	180	39	22	17
19	40	24	21	20	19	22	67	542	198	38	27	17
20	38	24	21	19	20	23	85	535	219	36	30	18
21	34	24	22	19	20	22	108	493	177	34	26	19
22	34	24	22	20	20	24	124	487	187	33	25	18
23	31	24	21	20	20	23	147	482	151	33	23	18
24	32	24	21	19	20	22	159	470	127	34	21	17
25	31	23	21	19	20	23	130	500	113	33	21	16
26	26	23	21	19	20	22	106	522	104	31	20	16
27	23	23	21	19	20	28	90	528	96	29	19	15
28	25	23	21	18	20	37	81	583	90	28	22	15
29	21	23	20	18	---	31	74	557	88	29	23	14
30	17	24	20	18	---	34	69	574	84	28	22	15
31	21	---	20	18	---	28	---	609	---	29	19	---
TOTAL	1029	697	675	608	529	711	1703	11684	8451	1431	856	544
MEAN	33.2	23.2	21.8	19.6	18.9	22.9	56.8	377	282	46.2	27.6	18.1
MAX	57	30	24	22	20	37	159	609	726	78	58	25
MIN	17	16	20	18	17	19	21	67	84	28	19	14
AC-FT	2040	1380	1340	1210	1050	1410	3380	23180	16760	2840	1700	1080

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1994, BY WATER YEAR (WY)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	30.0	24.1	21.7	19.3	18.3	19.2	40.6	270	588	203	46.0	31.4																		
MAX	60.5	38.7	32.1	28.9	28.1	30.5	76.5	468	914	475	75.3	63.4																		
(WY)	1966	1985	1984	1971	1971	1986	1989	1974	1978	1982	1983	1984																		
MIN	17.5	15.6	11.7	10.9	10.8	10.9	19.3	135	171	46.2	25.2	18.1																		
(WY)	1992	1978	1969	1969	1969	1969	1975	1983	1992	1994	1977	1994																		

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1965 - 1994
ANNUAL TOTAL	43864	28918	--
ANNUAL MEAN	120	79.2	109
HIGHEST ANNUAL MEAN	--	--	159
LOWEST ANNUAL MEAN	--	--	51.2
HIGHEST DAILY MEAN	1000	726	1360
LOWEST DAILY MEAN	16	14	9.5
ANNUAL SEVEN-DAY MINIMUM	18	15	10
INSTANTANEOUS PEAK FLOW	--	940	1680a
INSTANTANEOUS PEAK STAGE	--	4.16	--
ANNUAL RUNOFF (AC-FT)	87000	57360	79190
10 PERCENT EXCEEDS	481	261	365
50 PERCENT EXCEEDS	29	23	27
90 PERCENT EXCEEDS	18	18	16

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--Continued
(Hydrologic bench-mark station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
OCT 01...	0945	23	68	8.0	4.0	11.0	565	0.30	13.3	137
MAR 22...	1100	28	62	8.1	0.0	10.0	625	0.60	11.5	96
JUN 18...	1430	182	38	8.0	14.0	15.0	565	0.70	8.0	105
AUG 23...	1155	23	66	7.8	9.5	--	567	0.20	8.0	94

DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3
OCT 01...	K2	K2	28	8.4	1.7	2.5	0.2	0.8	0	38
MAR 22...	K1	K1	27	8.0	1.8	2.6	0.2	0.8	0	55
JUN 18...	K5	K2	15	4.4	0.87	1.3	0.1	0.5	0	21
AUG 23...	13	K4	28	8.4	1.7	2.4	0.2	1.0	0	36

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

DATE	ALKA- LIVITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA- LIVITY LAB (MG/L CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
OCT 01...	32	33	2.9	0.6	0.2	11	50	47	0.07	3.11
MAR 22...	--	31	2.7	0.3	<0.1	11	47	55	0.06	3.55
JUN 18...	17	18	1.8	0.2	<0.1	7.4	29	27	0.04	14.3
AUG 23...	30	32	2.6	0.3	<0.1	11	54	45	0.07	3.35

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 01...	<0.01	<0.05	<0.01	<0.2	0.02	0.02	0.02	1	0.06	67
MAR 22...	0.02	0.07	<0.01	<0.2	<0.01	<0.01	<0.01	4	0.30	67
JUN 18...	<0.01	<0.05	0.02	<0.2	<0.01	<0.01	<0.01	5	2.5	39
AUG 23...	<0.01	<0.05	0.02	<0.2	<0.01	<0.01	0.01	2	0.12	59

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
1...	<4	1	<10	<1	<1	<1.0	43	<6
2...	<4	3	<10	<1	<1	<1.0	42	<6
8...	<4	3	<10	<1	<1	<1.0	23	<6
3...	<4	2	<10	<1	<1	<1.0	43	<6

[illegible]

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.--No estimated daily discharges. Records good. Diversions for irrigation of about 2,000 acres upstream from station.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	17	51	105	13	3.6	1.7
2	---	---	---	---	---	---	19	57	92	13	5.3	2.6
3	---	---	---	---	---	---	21	61	79	16	6.4	2.8
4	---	---	---	---	---	---	27	59	72	16	4.9	2.8
5	---	---	---	---	---	---	24	72	71	15	3.9	2.3
6	---	---	---	---	---	---	21	101	65	12	3.1	1.9
7	---	---	---	---	---	---	23	112	58	13	1.9	1.7
8	---	---	---	---	---	---	19	116	52	14	1.7	1.5
9	---	---	---	---	---	---	20	117	47	12	2.8	1.2
10	---	---	---	---	---	---	20	124	42	9.8	4.9	1.5
11	---	---	---	---	---	---	18	123	40	8.9	5.3	1.5
12	---	---	---	---	---	---	17	140	36	8.0	3.9	1.7
13	---	---	---	---	---	---	20	170	28	7.6	3.3	2.3
14	---	---	---	---	---	---	29	165	26	7.6	3.0	3.9
15	---	---	---	---	---	---	28	145	32	7.2	2.6	7.6
16	---	---	---	---	---	---	30	135	31	7.2	1.9	6.0
17	---	---	---	---	---	---	40	141	28	7.2	1.7	4.3
18	---	---	---	---	---	---	56	133	26	6.4	1.2	3.5
19	---	---	---	---	---	---	62	123	25	5.3	1.2	3.3
20	---	---	---	---	---	---	63	112	25	4.6	1.7	3.3
21	---	---	---	---	---	---	73	94	25	5.3	2.6	3.6
22	---	---	---	---	---	---	74	86	27	4.6	2.3	4.6
23	---	---	---	---	---	---	86	79	28	4.9	1.7	4.3
24	---	---	---	---	---	---	100	76	23	5.5	1.2	3.9
25	---	---	---	---	---	---	96	68	19	4.9	.73	3.9
26	---	---	---	---	---	---	72	73	16	4.3	.55	3.8
27	---	---	---	---	---	---	60	75	13	3.6	.40	3.6
28	---	---	---	---	---	---	56	84	13	3.3	.73	3.0
29	---	---	---	---	---	---	55	87	16	3.3	.95	3.0
30	---	---	---	---	---	---	50	82	15	3.3	1.5	3.3
31	---	---	---	---	---	---	---	82	---	3.3	1.5	---
TOTAL	---	---	---	---	---	---	1296	3143	1175	250.1	78.46	94.4
MEAN	---	---	---	---	---	---	43.2	101	39.2	8.07	2.53	3.15
MAX	---	---	---	---	---	---	100	170	105	16	6.4	7.6
MIN	---	---	---	---	---	---	17	51	13	3.3	.40	1.2
AC-FT	---	---	---	---	---	---	2570	6230	2330	496	156	187

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1994, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994
MEAN	26.5	83.9	71.0	16.8	4.89
MAX	43.2	149	145	40.1	12.1
(WY)	1994	1993	1993	1993	1993
MIN	15.6	39.7	32.9	8.07	2.53
(WY)	1991	1990	1992	1994	1990

SUMMARY STATISTICS

	FOR 1994 WATER YEAR*	WATER YEARS 1990 - 1994*
HIGHEST DAILY MEAN	170 May 13	339 May 22 1993
LOWEST DAILY MEAN	.40 Aug 27	.40 Aug 27 1994
ANNUAL SEVEN-DAY MINIMUM	---	.87 Aug 24 1994
INSTANTANEOUS PEAK FLOW	188 May 13	461 Jun 9 1993
INSTANTANEOUS PEAK STAGE	5.58 May 13	7.08 Jun 9 1993
10 PERCENT EXCEEDS	---	91
50 PERCENT EXCEEDS	---	17
90 PERCENT EXCEEDS	---	2.6

* During period of operation.

06628900 PASS CREEK NEAR ELK MOUNTAIN, WY

LOCATION.--Lat 41°35'12", long 106°36'40", in NE¹/₄ 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.--No estimated daily discharges. Records good. Diversions for irrigation of about 6,300 acres upstream from station. Diversion to Kerr ditch 7.5 mi upstream.

COOPERATION.--Records provided by Office of the Wyoming State Engineer and reviewed by the 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)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 13	0200	*318	*6.56	No other peak above base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	37	85	132	9.3	4.0	3.6
2	---	---	---	---	---	---	44	89	81	8.9	7.3	3.9
3	---	---	---	---	---	---	54	93	69	11	6.0	3.7
4	---	---	---	---	---	---	61	103	59	14	4.9	3.7
5	---	---	---	---	---	---	48	121	51	12	4.2	3.4
6	---	---	---	---	---	---	41	176	48	9.7	3.7	3.2
7	---	---	---	---	---	---	37	203	41	8.9	3.1	3.1
8	---	---	---	---	---	---	34	207	38	10	3.0	3.0
9	---	---	---	---	---	---	35	191	48	8.9	3.2	3.1
10	---	---	---	---	---	---	35	201	68	7.8	4.2	3.1
11	---	---	---	---	---	---	32	196	65	7.1	4.0	2.7
12	---	---	---	---	---	---	38	226	62	6.8	3.6	2.4
13	---	---	---	---	---	---	61	255	59	6.4	3.6	3.0
14	---	---	---	---	---	---	70	234	54	6.4	3.4	3.7
15	---	---	---	---	---	---	59	187	52	8.1	3.0	4.4
16	---	---	---	---	---	---	91	176	50	6.2	3.0	4.8
17	---	---	---	---	---	---	126	176	49	6.0	2.7	4.4
18	---	---	---	---	---	---	133	143	46	5.3	2.3	4.2
19	---	---	---	---	---	---	139	122	54	4.8	2.3	4.0
20	---	---	---	---	---	---	144	115	58	4.6	2.4	4.2
21	---	---	---	---	---	---	166	93	52	4.7	2.4	4.6
22	---	---	---	---	---	---	188	82	52	4.6	2.8	4.9
23	---	---	---	---	---	---	211	76	34	4.4	2.6	5.3
24	---	---	---	---	---	---	220	80	23	5.3	2.2	4.9
25	---	---	---	---	---	---	209	94	17	5.3	1.8	4.8
26	---	---	---	---	---	---	135	87	14	4.8	1.7	4.8
27	---	---	---	---	---	---	103	84	11	4.2	1.5	4.6
28	---	---	---	---	---	---	98	86	10	4.0	2.2	4.6
29	---	---	---	---	---	---	97	87	11	3.9	2.8	4.2
30	---	---	---	---	---	---	91	69	11	4.0	3.4	4.4
31	---	---	---	---	---	---	---	67	---	3.7	3.2	---
TOTAL	---	---	---	---	---	---	2837	4204	1419	211.1	100.5	118.7
MEAN	---	---	---	---	---	---	94.6	136	47.3	6.81	3.24	3.96
MAX	---	---	---	---	---	---	220	255	132	14	7.3	5.3
MIN	---	---	---	---	---	---	32	67	10	3.7	1.5	2.4
AC-FT	---	---	---	---	---	---	5630	8340	2810	419	199	235

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1992, BY WATER YEAR (WY)

	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	

SUMMARY STATISTICS

	FOR 1994 WATER YEAR*	WATER YEARS 1957 - 1992
ANNUAL MEAN	--	41.1
HIGHEST ANNUAL MEAN	--	86.4
LOWEST ANNUAL MEAN	--	20.2
HIGHEST DAILY MEAN	255 May 13	1780 May 12 1984
LOWEST DAILY MEAN	1.5 Aug 27	.93 Sep 7 1989#
ANNUAL SEVEN-DAY MINIMUM	--	1.0 Sep 1 1989
INSTANTANEOUS PEAK FLOW	318 May 13	4660a May 12 1984#
INSTANTANEOUS PEAK STAGE	6.56 May 13	9.12b 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 1994.

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.

LOCATION.--Lat 41°52'20", long 107°03'25", in SW¼ SW¼ 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 is probably non-contributing.

DRAINAGE AREA.--4,175 mi², of which 114 mi² is probably 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: Oct. 29, 30, Nov. 5-11 and Nov. 14 to Mar. 13. Records excellent except those for estimated daily discharges, which are poor. Diversions for irrigation of about 215,000 acres upstream from station. Transbasin diversions upstream from station.

COOPERATION.--Eleven discharge measurements provided by the Bureau of Reclamation and eight discharge measurements provided by the Wyoming State Engineer's office.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	391	445	460	405	335	560	716	1710	3230	408	202	112
2	375	617	450	400	345	590	750	1640	3480	382	211	104
3	373	623	430	410	350	610	850	1770	3060	388	260	101
4	369	573	420	415	360	580	978	1790	2850	428	249	104
5	367	590	400	400	380	570	1180	1650	2550	439	247	112
6	361	540	365	390	395	570	1090	1630	2290	423	229	128
7	393	500	380	375	400	600	987	1940	2050	400	219	129
8	467	520	400	360	380	630	891	2350	1860	381	202	115
9	589	560	420	370	380	650	821	2740	1650	397	199	104
10	557	580	450	380	405	630	804	2940	1460	371	206	99
11	539	620	470	370	385	660	756	3280	1320	352	226	94
12	547	646	460	355	365	680	751	3610	1200	337	220	93
13	587	687	440	365	380	710	719	3940	1110	311	210	102
14	718	610	400	375	415	728	762	4170	1020	299	220	100
15	686	580	410	390	470	768	958	4160	944	293	219	97
16	743	560	425	380	505	796	1020	3920	924	308	207	103
17	757	540	435	375	525	857	1110	4030	820	298	188	111
18	768	510	400	370	500	922	1290	4050	737	296	176	117
19	859	480	385	375	460	981	1520	3900	685	270	169	115
20	824	460	385	380	430	1170	1690	3840	692	260	162	116
21	758	500	400	375	415	1240	1870	3570	825	255	166	121
22	698	510	410	370	430	1170	2090	3190	903	251	171	133
23	659	490	400	370	455	1260	2320	2970	1130	241	161	136
24	633	470	420	380	500	1370	2650	2680	1160	232	168	142
25	601	355	440	375	525	1020	2870	2470	1030	243	158	161
26	578	370	460	370	625	614	2930	2480	844	246	140	167
27	561	410	460	365	600	957	2570	2480	700	243	124	170
28	518	440	460	360	560	810	2220	2400	586	233	117	168
29	525	460	435	350	---	725	2010	2710	501	224	117	169
30	500	480	410	340	---	754	1890	2820	443	218	121	169
31	457	---	395	340	---	685	---	2950	---	208	122	---
TOTAL	17758	15726	13075	11635	12275	24867	43063	89780	42054	9635	5786	3692
MEAN	573	524	422	375	438	802	1435	2896	1402	311	187	123
MAX	859	687	470	415	625	1370	2930	4170	3480	439	260	170
MIN	361	355	365	340	335	560	716	1630	443	208	117	93
AC-FT	35220	31190	25930	23080	24350	49320	85420	178100	83410	19110	11480	7320

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1994, BY WATER YEAR (WY)

	MEAN	404	415	341	306	335	523	1427	3136	4323	1383	492	297
MAX	1036	745	499	449	643	1190	4390	8568	9999	5256	1484	821	
(WY)	1966	1966	1983	1980	1962	1986	1962	1984	1983	1983	1983	1965	
MIN	157	240	226	181	193	205	508	1149	830	204	135	93.3	
(WY)	1957	1953	1953	1963	1964	1964	1981	1990	1954	1939	1940	1944	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1939 - 1994

ANNUAL TOTAL	497964		289346		--	
ANNUAL MEAN	1364		793		1118	
HIGHEST ANNUAL MEAN	--		--		2169	1984
LOWEST ANNUAL MEAN	--		--		467	1954
HIGHEST DAILY MEAN	7530	Jun 19	4170	May 14	14800	Jun 11 1986
LOWEST DAILY MEAN	260	Feb 17	93	Sep 12	70	Sep 17 1944
ANNUAL SEVEN-DAY MINIMUM	279	Feb 15	98	Sep 10	77	Sep 12 1944
INSTANTANEOUS PEAK FLOW	--		4470	May 14	16200	Jun 11 1986
INSTANTANEOUS PEAK STAGE	--		5.93	May 14	11.30	Jun 11 1986
ANNUAL RUNOFF (AC-FT)	987700		573900		810000	
10 PERCENT EXCEEDS	4550		2140		3120	
50 PERCENT EXCEEDS	560		460		430	
90 PERCENT EXCEEDS	325		168		225	

06630000 NORTH PLATTE RIVER ABOVE SEMINOLE RESERVOIR, NEAR SINCLAIR, WY--Continued
(National stream-quality accounting network station)

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
OCT										
12...	1125	547	478	8.6	8.5	10.5	607	5.4	9.4	101
DEC										
20...	1130	350	445	8.3	0.0	-10.0	605	0.80	13.6	117
MAR										
01...	1110	550	522	8.1	0.0	3.0	610	37	10.3	88
MAY										
02...	1215	1540	323	8.0	10.0	13.0	602	15	9.4	106
JUL										
27...	0945	244	437	8.1	19.5	24.0	608	1.7	7.2	99
AUG										
22...	0945	173	425	8.4	17.0	18.0	605	1.0	7.5	98

DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOC- CI, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3
OCT										
12...	K11	120	180	49	14	28	0.9	3.1	6	132
DEC										
20...	K2	K1	170	48	12	22	0.7	2.1	0	156
MAR										
01...	K1	410	170	45	14	32	1	3.4	0	144
MAY										
02...	K7	K2	120	31	9.1	17	0.7	2.1	0	111
JUL										
27...	340	12	160	43	13	27	0.9	2.9	0	172
AUG										
22...	27	23	150	40	12	28	1	3.3	0	157

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

DATE	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
OCT										
12...	118	128	100	9.9	0.5	15	274	291	0.37	405
DEC										
20...	128	130	86	7.7	0.3	16	283	271	0.38	267
MAR										
01...	118	121	120	13	0.3	15	335	314	0.46	497
MAY										
02...	91	95	61	4.8	0.3	12	214	192	0.29	890
JUL										
27...	141	163	57	7.9	0.5	5.9	274	242	0.37	181
AUG										
22...	129	131	69	11	0.4	12	271	253	0.37	127

PLATTE RIVER BASIN

06630000 NORTH PLATTE RIVER ABOVE SEMINOE RESERVOIR, NEAR SINCLAIR, WY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 12...	<0.01	<0.05	<0.01	<0.2	0.03	<0.01	<0.01	17 25	98
DEC 20...	<0.01	<0.05	0.02	<0.2	0.02	<0.01	<0.01	30 28	84
MAR 01...	<0.01	<0.05	0.03	0.4	0.07	0.01	<0.01	72 107	96
MAY 02...	<0.01	<0.05	0.01	0.4	0.07	0.02	<0.01	32 133	84
JUL 27...	<0.01	<0.05	0.01	0.5	0.03	0.02	<0.01	6 4.0	60
AUG 22...	<0.01	<0.05	0.01	0.3	0.01	<0.01	0.01	11 5.1	45

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BARIUM, DIS- SOLVED (UG/L AS BA)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 12...	1125	547	8.5	10.5	20	45	<3	60
DEC 20...	1130	350	0.0	-10.0	<10	44	<3	47
MAY 02...	1215	1540	10.0	13.0	40	36	<3	200
AUG 22...	0945	173	17.0	18.0	30	47	<3	30

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
OCT 12...	35	7	<10	<1	<1	<1.0	320	<6
DEC 20...	22	9	<10	<1	<1	<1.0	290	<6
MAY 02...	14	17	<10	1	<1	<1.0	220	<6
AUG 22...	25	11	<10	<1	<1	<1.0	330	<6

06632050 CARLSON CREEK DITCH NEAR ARLINGTON, WY

LOCATION.--Lat 41°29'45", long 106°16'42", unsurveyed, T.18 N., R.79 W., Carbon County, Hydrologic Unit 10180004, Medicine Bow National Forest, on left bank 250 ft downstream from diversion on Carlson Creek (diversion 3.0 mi upstream from mouth of Carlson Creek) and 7.8 mi south of Arlington.

PERIOD OF RECORD.--April 1992 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 9,500 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Apr. 1 to May 17. Records good except those for estimated daily discharges, which are poor. Results of discharge measurements, in cubic feet per second, for Carlson Creek upstream from the diversion are given below:

May	4	. . .	1.99	July	14	. . .	.94
June	6	. . .	10.8	Aug.	24	. . .	.51

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.00	.08	.16	.45	.16
2	---	---	---	---	---	---	.00	.00	.06	.59	.48	.14
3	---	---	---	---	---	---	.00	.00	.06	.61	.39	.13
4	---	---	---	---	---	---	.00	.00	.05	.60	.39	.11
5	---	---	---	---	---	---	.00	.00	.05	.58	.39	.08
6	---	---	---	---	---	---	.00	.00	3.4	.56	.36	.06
7	---	---	---	---	---	---	.00	.01	5.8	.56	.33	.06
8	---	---	---	---	---	---	.00	.02	4.5	.56	.33	.06
9	---	---	---	---	---	---	.00	.02	3.7	.54	.44	.06
10	---	---	---	---	---	---	.00	.02	3.2	.51	.28	.05
11	---	---	---	---	---	---	.00	.03	3.1	.52	.21	.05
12	---	---	---	---	---	---	.00	.04	3.2	.51	.18	.05
13	---	---	---	---	---	---	.00	.05	4.1	.50	.17	.07
14	---	---	---	---	---	---	.00	.06	4.6	.49	.16	.11
15	---	---	---	---	---	---	.00	.07	4.1	.48	.15	.19
16	---	---	---	---	---	---	.00	.10	3.4	.43	.15	.21
17	---	---	---	---	---	---	.00	.15	2.1	.37	.15	.17
18	---	---	---	---	---	---	.00	.20	.29	.34	.15	.15
19	---	---	---	---	---	---	.00	.20	.28	.32	.15	.14
20	---	---	---	---	---	---	.00	.15	.29	.32	.15	.13
21	---	---	---	---	---	---	.00	.13	.28	.33	.15	.14
22	---	---	---	---	---	---	.00	.14	.28	.33	.14	.17
23	---	---	---	---	---	---	.00	.10	.29	.39	.12	.10
24	---	---	---	---	---	---	.00	.10	.28	.43	.12	.08
25	---	---	---	---	---	---	.00	.10	.26	.38	.12	.07
26	---	---	---	---	---	---	.00	.14	.21	.36	.10	.05
27	---	---	---	---	---	---	.00	.13	.17	.33	.09	.05
28	---	---	---	---	---	---	.00	.14	.16	.35	.10	.05
29	---	---	---	---	---	---	.00	.13	.14	.38	.11	.07
30	---	---	---	---	---	---	.00	.12	.12	.32	.15	.07
31	---	---	---	---	---	---	---	.09	---	.34	.16	---
TOTAL	---	---	---	---	---	---	0.00	2.44	48.55	13.49	6.82	3.03
MEAN	---	---	---	---	---	---	.000	.079	1.62	.44	.22	.10
MAX	---	---	---	---	---	---	.00	.20	5.8	.61	.48	.21
MIN	---	---	---	---	---	---	.00	.00	.05	.16	.09	.05
AC-FT	---	---	---	---	---	---	.00	4.8	96	27	14	6.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1994, BY WATER YEAR (WY)*

	1992	1993	1994	1992	1993	1994
MEAN	---	---	---	.005	1.07	1.27
MAX	---	---	---	.016	3.11	2.19
(WY)	---	---	---	1992	1993	1994
MIN	---	---	---	.000	.011	.007
(WY)	---	---	---	1993	1993	1992

SUMMARY STATISTICS

HIGHEST DAILY MEAN
LOWEST DAILY MEAN
ANNUAL SEVEN-DAY MINIMUM
INSTANTANEOUS PEAK FLOW
INSTANTANEOUS PEAK STAGE
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

FOR 1994 WATER YEAR*

5.8 Jun 7
.00 Many days
.00 Many days
7.8a Jun 6
2.88c May 12

WATER YEARS 1992 - 1994*

20 May 7 1992
.00 Apr 1 1992
.00 Apr 1 1992
23b May 6 1992
3.76c Apr 29 1992
1.2
.03
.00

* During period of operation.

a Gage height, 1.71 ft.

b Gage height, 2.37 ft.

c Backwater from snow.

PLATTE RIVER BASIN

06632055 CARLSON CREEK DITCH ABOVE WAGONHOUND CREEK, NEAR ARLINGTON, WY

LOCATION.--Lat 41°30'51", long 106°17'19", unsurveyed, T.18 N., R.79 W., Carbon County, Hydrologic Unit 10180004, Medicine Bow National Forest, on right bank 30 ft downstream from U S Forest Service Road 111, and 6.9 mi southwest of Arlington.

PERIOD OF RECORD.--April to September 1994 (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 9,470 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Apr. 1 to May 14 and Sept. 4-10. Records good except those for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.00	5.1	.21	.76	.00
2	---	---	---	---	---	---	.00	.00	2.2	.72	.67	.00
3	---	---	---	---	---	---	.00	.00	1.6	.81	.52	.00
4	---	---	---	---	---	---	.00	.00	1.3	.74	.42	.00
5	---	---	---	---	---	---	.00	.01	1.1	.68	.37	.00
6	---	---	---	---	---	---	.00	.03	3.9	.64	.29	.00
7	---	---	---	---	---	---	.00	.07	6.3	.65	.27	.00
8	---	---	---	---	---	---	.00	.20	4.9	.66	.26	.00
9	---	---	---	---	---	---	.00	.80	3.9	.62	.37	.00
10	---	---	---	---	---	---	.00	1.5	3.3	.55	.25	.00
11	---	---	---	---	---	---	.00	2.0	3.1	.54	.09	.00
12	---	---	---	---	---	---	.00	2.7	3.1	.54	.08	.00
13	---	---	---	---	---	---	.00	3.5	3.8	.52	.09	.00
14	---	---	---	---	---	---	.00	4.5	4.3	.53	.08	.00
15	---	---	---	---	---	---	.00	5.3	3.8	.56	.07	.00
16	---	---	---	---	---	---	.00	7.9	3.1	.55	.06	.01
17	---	---	---	---	---	---	.00	11	2.2	.54	.04	.01
18	---	---	---	---	---	---	.00	9.4	.53	.50	.03	.01
19	---	---	---	---	---	---	.00	12	.56	.49	.02	.01
20	---	---	---	---	---	---	.00	9.4	.67	.49	.04	.01
21	---	---	---	---	---	---	.00	7.5	.66	.48	.09	.02
22	---	---	---	---	---	---	.00	7.7	.67	.46	.03	.03
23	---	---	---	---	---	---	.00	7.3	.62	.49	.01	.03
24	---	---	---	---	---	---	.00	6.8	.49	.55	.01	.02
25	---	---	---	---	---	---	.00	6.6	.40	.48	.00	.03
26	---	---	---	---	---	---	.00	5.7	.32	.46	.00	.03
27	---	---	---	---	---	---	.00	4.9	.28	.46	.00	.02
28	---	---	---	---	---	---	.00	4.5	.28	.47	.00	.02
29	---	---	---	---	---	---	.00	3.8	.26	.55	.00	.02
30	---	---	---	---	---	---	.00	3.2	.23	.47	.00	.03
31	---	---	---	---	---	---	---	4.1	---	.48	.00	---
TOTAL	---	---	---	---	---	---	0.00	132.41	62.97	16.89	4.92	0.30
MEAN	---	---	---	---	---	---	.000	4.27	2.10	.54	.16	.010
MAX	---	---	---	---	---	---	.00	12	6.3	.81	.76	.03
MIN	---	---	---	---	---	---	.00	.00	.23	.21	.00	.00
AC-FT	---	---	---	---	---	---	.00	263	125	34	9.8	.6

SUMMARY STATISTICS FOR 1994 WATER YEAR*
 HIGHEST DAILY MEAN 12 May 19
 LOWEST DAILY MEAN .00 Many days
 INSTANTANEOUS PEAK FLOW 17a May 19
 INATANTANEOUS PEAK STAGE 2.31b May 11

* During period of operation.

a Gage height, 2.21 ft.

b Backwater from snow.

06632400 ROCK CREEK ABOVE KING CANYON CANAL, NEAR ARLINGTON, WY

LOCATION.--Lat 41°35'07", long 106°13'20", in SE¹/₄ SW¹/₄ sec. 25, T.19 N., R.79 W., Carbon County, Hydrologic Unit 10180004, on left bank 200 ft upstream from point of diversion to King Canyon Canal, 0.4 mi downstream from Overland Creek, 1.0 mi southwest of Arlington, and 6.9 mi southwest of McFadden.

DRAINAGE AREA.--62.9 mi².

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

REVISED RECORDS.--WDR WY-86: 1985(m). WDR WY-87: 1985.

GAGE.--Water-stage recorder. Elevation of gage is 7,790 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 27-30, Dec. 18 to Feb. 28, Mar. 7-10, 12, 13, 15, 18, 21, 22, 24, Mar. 26 to Apr. 1, and Apr. 3, 6, 8, 9, 12, 13. 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)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 16	2200	866	4.03	June 1	0200	*1150	*4.44

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	18	14	14	9.7	10	12	52	753	50	22	11
2	12	16	14	14	9.3	9.9	11	49	514	47	27	13
3	12	14	13	14	10	9.9	12	51	450	51	21	13
4	12	14	14	15	9.5	10	11	52	449	52	18	12
5	12	14	14	14	9.3	9.9	11	62	409	46	17	11
6	11	14	13	13	10	9.5	13	101	358	41	15	9.8
7	13	15	13	13	12	9.0	11	140	319	41	14	9.8
8	14	15	13	12	11	8.7	12	183	263	41	14	9.8
9	14	15	14	12	9.4	8.4	12	180	212	39	17	9.5
10	14	14	13	11	10	8.7	10	265	191	36	18	9.4
11	13	14	13	11	10	9.1	11	334	190	35	16	9.4
12	13	14	12	11	9.0	8.5	12	419	197	34	15	9.1
13	13	14	12	11	9.5	8.2	11	455	186	32	14	9.4
14	13	14	13	12	9.8	8.9	12	488	174	30	14	9.4
15	13	14	14	13	9.4	9.3	13	472	163	44	13	9.5
16	13	14	14	13	11	9.7	14	593	143	85	13	10
17	13	13	13	13	11	10	19	677	130	82	12	9.9
18	13	14	13	13	10	11	25	587	117	76	11	9.8
19	14	14	12	14	9.3	11	32	600	114	70	12	9.5
20	15	14	12	14	8.7	12	39	554	130	67	12	9.8
21	16	14	13	14	9.7	12	47	476	126	60	12	11
22	18	14	13	14	8.7	12	60	475	126	46	12	12
23	16	14	13	13	9.8	12	84	442	116	34	11	13
24	17	13	13	12	10	11	111	426	97	24	11	11
25	19	13	14	12	9.4	12	120	447	82	22	11	11
26	13	13	15	11	10	11	95	458	74	20	11	10
27	9.2	14	14	11	10	10	81	504	66	19	10	10
28	14	15	14	10	10	12	75	498	58	19	11	9.5
29	12	15	13	10	---	11	64	499	55	19	11	9.3
30	12	14	14	9.5	---	12	61	567	55	19	12	9.5
31	16	---	14	8.8	---	12	---	543	---	18	12	---
TOTAL	422.2	427	413	382.3	275.5	318.7	1101	11649	6317	1299	439	310.4
MEAN	13.6	14.2	13.3	12.3	9.84	10.3	36.7	376	211	41.9	14.2	10.3
MAX	19	18	15	15	12	12	120	677	753	85	27	13
MIN	9.2	13	12	8.8	8.7	8.2	10	49	55	18	10	9.1
AC-FT	837	847	819	758	546	632	2180	23110	12530	2580	871	616

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1994, BY WATER YEAR (WY)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	
MEAN	16.7	13.5	11.7	10.8	10.6	10.4	23.1	224	502	130	31.7	21.8																		
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	7.02	7.08	11.3	59.3	158	30.9	14.2	10.3																		
(WY)	1990	1977	1968	1969	1969	1969	1991	1968	1987	1977	1994	1994																		

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1966 - 1994
ANNUAL TOTAL	32697.8	23362.1	--
ANNUAL MEAN	89.6	64.0	83.9a
HIGHEST ANNUAL MEAN	--	--	142
LOWEST ANNUAL MEAN	--	--	48.9
HIGHEST DAILY MEAN	969	753	1690
LOWEST DAILY MEAN	6.7	8.2	4.8
ANNUAL SEVEN-DAY MINIMUM	7.5	8.6	6.0
INSTANTANEOUS PEAK FLOW	--	1150	2590b
INSTANTANEOUS PEAK STAGE	--	4.44	5.92
ANNUAL RUNOFF (AC-FT)	64860	46340	60790
10 PERCENT EXCEEDS	346	181	268
50 PERCENT EXCEEDS	14	14	15
90 PERCENT EXCEEDS	8.5	9.7	9.0

a Annual mean, water years 1955-1994, 80.8 ft³/s, includes records for station 06632500 Rock Creek at Arlington for water years 1955-65, adjusted for diversion by King Canyon Canal.

b Gage height, 5.83 ft.

PLATTE RIVER BASIN

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" (Sta 06634600) do not include flow of Boles Spring. Discharge records considered equivalent except for low flow. Miscellaneous discharge measurements of Boles Spring are made periodically and are tabulated in this report for water years 1985, 1988-92.

GAGE.--Water-stage recorder. Elevation of gage is 6,570 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Diversions for irrigation of about 5,200 acres 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)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 25	1600	*256	*3.23	No peaks greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	5.8	6.6	2.0	3.4	6.2	45	133	19	1.8	1.9	.87
2	7.9	5.6	6.6	2.2	2.6	8.8	41	125	14	1.6	1.9	.94
3	8.0	4.9	6.3	2.1	2.4	16	40	120	11	1.4	1.8	1.1
4	8.1	8.3	6.2	2.1	2.3	26	42	107	9.6	1.4	1.5	1.0
5	7.7	7.0	5.6	2.3	2.6	29	42	98	8.7	1.4	1.5	1.1
6	7.3	5.4	5.2	2.3	2.6	55	45	100	7.8	1.4	1.6	1.0
7	7.9	6.2	5.1	2.4	2.5	51	41	106	7.3	1.3	1.6	.93
8	12	7.4	5.1	2.5	2.5	40	35	120	6.5	1.3	1.5	.97
9	11	6.9	5.5	2.2	2.8	36	39	114	5.5	1.4	1.6	.94
10	12	7.9	5.8	2.2	2.8	37	34	125	5.1	1.5	1.4	.93
11	12	9.1	5.8	2.2	2.8	37	33	115	4.8	1.5	1.4	.95
12	11	8.4	5.6	2.0	2.8	41	33	98	4.6	1.5	1.5	.84
13	12	7.8	5.0	2.1	2.9	38	32	95	4.2	1.8	1.5	.80
14	13	8.7	5.0	2.0	2.9	49	30	90	3.7	1.6	1.7	.80
15	12	6.0	4.8	1.9	3.0	56	35	86	3.1	1.5	1.7	.85
16	12	11	5.0	1.9	3.2	92	40	81	2.9	2.4	1.6	.88
17	13	10	4.9	2.0	3.3	166	39	70	2.5	4.9	1.6	.89
18	15	8.9	4.8	2.1	3.5	173	38	58	2.4	5.0	1.7	.80
19	18	7.3	4.6	2.3	3.3	157	46	48	2.3	4.8	1.5	.79
20	18	6.9	4.2	2.3	3.4	149	61	41	2.3	4.0	1.6	.88
21	16	8.2	3.8	2.6	3.6	156	78	37	2.9	3.6	1.2	.80
22	15	8.4	3.5	2.8	3.6	126	97	34	12	3.6	1.0	.79
23	14	7.1	2.9	3.1	3.5	107	163	29	12	2.8	1.1	.99
24	13	7.5	2.5	4.0	3.7	79	213	26	7.5	10	1.1	.84
25	12	8.0	2.2	3.8	3.3	69	231	25	5.1	68	1.1	.85
26	12	7.6	2.2	3.8	4.1	59	233	23	3.6	10	1.1	.87
27	11	6.3	2.2	3.8	5.5	36	203	20	2.5	7.0	.94	.93
28	11	5.7	2.3	3.7	5.2	19	155	18	2.2	4.5	.93	.87
29	7.7	5.4	2.2	3.5	---	37	152	16	1.8	3.1	.90	.75
30	4.1	5.6	2.1	3.4	---	45	147	14	1.8	2.4	.89	.88
31	5.7	---	1.9	3.8	---	65	---	12	---	1.9	.93	---
TOTAL	347.9	219.3	135.5	81.4	90.7	2061.0	2463	2184	178.7	160.4	43.29	26.83
MEAN	11.2	7.31	4.37	2.63	3.22	66.5	82.1	70.5	5.96	5.17	1.40	.89
MAX	18	11	6.6	4.0	5.5	173	233	133	19	68	1.9	1.1
MIN	4.1	4.9	1.9	1.9	2.3	6.2	30	12	1.8	1.3	.89	.75
AC-FT	690	435	269	161	179	4090	4890	4330	354	318	86	53

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1994, BY WATER YEAR (WY)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	
MEAN	9.46	8.80	4.05	2.00	13.2	48.3	122	127	55.1	16.6	8.15
MAX	18.0	17.3	11.5	4.92	110	114	246	298	184	40.0	19.5
(WY)	1985	1985	1987	1985	1986	1986	1988	1993	1993	1991	1985
MIN	3.80	4.93	1.59	1.06	1.05	15.0	28.5	21.2	5.96	5.17	.89
(WY)	1993	1993	1992	1992	1990	1993	1992	1992	1994	1994	1994

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1985 - 1994
ANNUAL TOTAL	22250.11	7992.02	---
ANNUAL MEAN	61.0	21.9	35.2a
HIGHEST ANNUAL MEAN	---	---	65.3
LOWEST ANNUAL MEAN	---	---	12.7
HIGHEST DAILY MEAN	479	May 16	691
LOWEST DAILY MEAN	.94	Mar 5	.51b
ANNUAL SEVEN-DAY MINIMUM	1.0	Feb 28	.64
INSTANTANEOUS PEAK FLOW	---	256	9500c
INSTANTANEOUS PEAK STAGE	---	3.23	14.10d
ANNUAL RUNOFF (AC-FT)	44130	15850	25500
10 PERCENT EXCEEDS	212	69	107
50 PERCENT EXCEEDS	9.1	5.1	7.8
90 PERCENT EXCEEDS	1.4	1.1	1.4

a Average discharge, water years 1974-94, 50.9 ft³/s, unadjusted for flow from Boles Spring.

b No flow at times, water years 1974-84, site then in use.

c From slope-area measurement of peak flow.

d From floodmark in gage well, site and datum then in use.

LOCATION.--Lat 42°00'35", long 106°30'45", in SE 1/4 NW 1/4 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 is probably 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: Nov. 18, 20, 22, 23, Nov. 26 to Dec. 24, Jan. 5-19, Jan. 21 to Feb. 17, Feb. 22-27, and Mar. 2-13. 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.

COOPERATION.--Eleven discharge measurements provided by the Bureau of Reclamation and ten discharge measurements provided by the Wyoming State Engineer's office.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	54	80	71	42	102	139	351	300	16	11	3.2
2	39	48	77	71	40	120	132	345	362	14	11	2.6
3	40	43	74	72	42	150	125	350	499	13	10	2.8
4	40	53	83	61	41	148	128	339	480	13	9.3	2.1
5	39	46	73	57	40	160	132	316	435	15	8.0	2.9
6	38	36	66	54	47	180	143	306	358	14	7.3	2.9
7	41	52	69	51	56	190	144	319	308	14	7.4	3.7
8	51	65	71	54	56	200	135	382	246	14	6.9	7.3
9	46	85	72	58	54	190	125	434	208	13	6.7	8.5
10	47	76	67	56	60	200	118	460	178	12	6.6	8.8
11	54	74	65	52	50	210	113	462	144	11	6.1	8.5
12	59	77	70	56	43	220	111	494	114	11	6.5	7.3
13	63	65	62	61	50	200	108	520	91	11	3.6	7.3
14	66	63	51	65	56	196	105	584	75	11	2.6	6.7
15	71	52	56	65	58	202	109	604	66	17	2.5	8.0
16	86	55	54	70	58	211	130	602	54	18	2.3	8.0
17	81	60	52	65	88	258	135	555	43	16	2.2	7.3
18	111	77	52	65	84	320	133	552	35	12	2.1	7.1
19	113	70	47	61	72	309	150	599	22	13	1.4	6.8
20	107	77	50	53	69	278	186	582	20	12	1.3	6.7
21	101	63	43	56	70	287	203	565	18	11	1.0	7.5
22	99	75	47	58	70	287	216	538	24	9.9	1.1	8.7
23	95	80	43	60	70	242	262	465	36	11	1.3	10
24	93	72	51	58	72	230	357	391	43	13	1.9	14
25	88	66	62	56	70	204	422	338	37	334	2.0	14
26	84	64	59	53	74	178	483	281	34	60	1.8	14
27	75	66	55	50	94	141	497	255	29	29	1.4	12
28	72	70	61	47	100	116	429	278	24	20	1.4	12
29	45	73	61	45	---	67	386	278	21	16	1.5	12
30	26	79	65	43	---	146	371	301	19	13	1.6	12
31	43	---	74	40	---	136	---	301	---	12	1.6	---
TOTAL	2051	1936	1912	1784	1726	6078	6227	13147	4323	798.9	131.4	234.7
MEAN	66.2	64.5	61.7	57.5	61.6	196	208	424	144	25.8	4.24	7.82
MAX	113	85	83	72	100	320	497	604	499	334	11	14
MIN	26	36	43	40	40	67	105	255	18	9.9	1.0	2.1
AC-FT	4070	3840	3790	3540	3420	12060	12350	26080	8570	1580	261	466

	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
MEAN	42.7	50.0	38.1	30.7	47.4	137	338	568	656	175	56.0	29.7
MAX	132	114	72.9	57.5	397	516	950	3059	2076	1030	246	235
(WY)	1963	1974	1974	1994	1962	1943	1983	1973	1983	1983	1983	1973
MIN	9.65	16.3	8.70	7.76	10.0	20.4	77.3	81.5	58.6	5.71	4.24	3.78
(WY)	1957	1940	1979	1979	1949	1944	1981	1954	1954	1939	1994	1956

SUMMARY STATISTICS		FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1939 - 1994	
ANNUAL TOTAL	78164			40349.0		--	
ANNUAL MEAN	214			111		181	
HIGHEST ANNUAL MEAN	--			--		531	1973
LOWEST ANNUAL MEAN	--			--		43.7	1954
HIGHEST DAILY MEAN	1290	Jun 10		604	May 15	5330	May 11 1973
LOWEST DAILY MEAN	11	Sep 1		1.0	Aug 21	1.0	Aug 21 1994
ANNUAL SEVEN-DAY MINIMUM	15	Aug 28		1.4	Aug 19	1.1	Sep 7 1959
INSTANTANEOUS PEAK FLOW	--			788	Jul 25	6010a	May 12 1973
INSTANTANEOUS PEAK STAGE	--			3.94	Jul 25	8.20b	Feb 26 1986
ANNUAL RUNOFF (AC-FT)	155000			80030		131300	
10 PERCENT EXCEEDS	741			319		533	
50 PERCENT EXCEEDS	66			61		51	
90 PERCENT EXCEEDS	23			7.3		14	

b From floodmarks, backwater from ice.

PLATTE RIVER BASIN

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 (since appreciable storage was attained), 19,040 acre-ft, Sept. 1, 1939, elevation, 6,228.00 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 714,000 acre-ft, June 5-7, maximum elevation, 6,339.90 ft, June 5-6; minimum daily contents, 347,000 acre-ft, Sept. 30, elevation, 6,308.50 ft.

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

6,300	277,000	6,320	458,000	6,340	716,000
6,310	359,000	6,330	575,000		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	609000	614000	615000	596000	573000	550000	563000	599000	705000	655000	534000	408000
2	609000	615000	614000	595000	572000	549000	564000	601000	708000	651000	530000	405000
3	608000	614000	614000	593000	571000	549000	564000	603000	712000	646000	527000	401000
4	608000	614000	614000	592000	569000	550000	565000	605000	713000	641000	523000	398000
5	608000	615000	614000	591000	568000	550000	565000	608000	714000	638000	519000	392000
6	607000	614000	612000	591000	568000	551000	565000	609000	714000	635000	517000	387000
7	607000	614000	610000	589000	567000	551000	565000	610000	714000	632000	514000	382000
8	607000	614000	609000	587000	567000	551000	564000	614000	712000	628000	510000	379000
9	608000	614000	609000	587000	566000	550000	565000	618000	710000	625000	506000	376000
10	608000	614000	608000	585000	564000	550000	565000	622000	708000	624000	501000	374000
11	608000	615000	608000	583000	563000	550000	564000	627000	707000	621000	496000	373000
12	608000	615000	607000	582000	562000	551000	563000	633000	705000	618000	491000	370000
13	608000	615000	606000	581000	562000	552000	562000	639000	703000	615000	487000	369000
14	608000	616000	605000	581000	560000	553000	562000	646000	699000	611000	482000	366000
15	609000	616000	603000	581000	560000	553000	563000	653000	696000	608000	477000	362000
16	609000	616000	601000	581000	559000	554000	563000	659000	692000	603000	474000	359000
17	610000	616000	601000	581000	559000	553000	564000	664000	689000	598000	469000	358000
18	611000	615000	600000	580000	559000	554000	565000	669000	685000	593000	464000	357000
19	612000	616000	600000	578000	558000	556000	565000	674000	681000	588000	460000	356000
20	613000	615000	599000	577000	559000	557000	567000	678000	678000	583000	456000	355000
21	614000	615000	599000	577000	559000	558000	569000	683000	677000	578000	451000	354000
22	614000	615000	598000	577000	558000	560000	570000	688000	675000	573000	447000	353000
23	614000	615000	599000	577000	556000	562000	573000	691000	673000	569000	442000	352000
24	615000	615000	598000	577000	554000	563000	577000	693000	672000	564000	438000	352000
25	615000	615000	598000	577000	553000	563000	581000	694000	671000	559000	434000	351000
26	615000	614000	598000	577000	551000	563000	585000	695000	669000	555000	429000	350000
27	614000	615000	598000	576000	551000	565000	589000	696000	665000	551000	425000	349000
28	615000	614000	598000	576000	549000	564000	592000	697000	663000	546000	420000	349000
29	615000	614000	598000	575000	---	564000	594000	699000	661000	542000	416000	348000
30	615000	614000	597000	574000	---	563000	597000	700000	658000	539000	412000	347000
31	614000	---	597000	574000	---	563000	---	702000	---	536000	411000	---
MAX	615000	616000	615000	596000	573000	565000	597000	702000	714000	655000	534000	408000
MIN	607000	614000	597000	574000	549000	549000	562000	599000	658000	536000	411000	347000
(#)	6,332.94	6,332.94	6,331.67	6,329.91	6,329.95	6,329.07	6,331.67	6,339.12	6,336.07	6,326.87	6,315.45	6,308.58
(*)	+5,000	0	-17,000	-23,000	-25,000	+14,000	+34,000	+105,000	-44,000	-122,000	-125,000	-64,000

CAL YR 1993 MAX 796000 MIN 219000 (*) +361,000

WTR YR 1994 MAX 714000 MIN 347000 (*) -262,000

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

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

06637750 ROCK CREEK ABOVE ROCK CREEK RESERVOIR, WY

LOCATION.--Lat 42°32'59", long 108°46'26", in NW¹/₄ NW¹/₄ sec.27, T.30 N., R.100 W., Fremont County, Hydrologic Unit 10180006, Shoshone National Forest, on left bank 200 ft upstream from high-water line of Rock Creek Reservoir, 2.7 mi downstream from Little Rock Creek, and 4.3 mi northwest of Atlantic City.

DRAINAGE AREA.--9.2 mi², approximately.

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

GAGE.--Water-stage recorders and concrete control. Elevation of gage is 8,330 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 30 to Nov. 8, Nov. 10, 12-20, 22-26, Dec. 1, 7, and Dec. 9 to May 11. Records fair except those for estimated daily discharges, which are poor. No diversions upstream from station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 70 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 11	1800	*68	*6.34	No peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	1.9	1.7	1.5	1.4	1.4	2.0	7.0	22	4.7	2.2	1.7
2	1.9	1.8	1.8	1.5	1.5	1.4	2.1	9.0	19	4.5	3.2	1.7
3	2.0	1.7	1.8	1.5	1.6	1.4	2.1	13	18	4.6	2.7	1.6
4	1.9	1.8	1.8	1.5	1.7	1.4	2.1	17	17	4.6	2.3	1.5
5	1.9	1.9	1.8	1.5	1.6	1.5	2.2	21	16	4.4	2.0	1.5
6	1.9	1.8	1.8	1.5	1.5	1.5	2.2	23	15	4.4	1.9	1.5
7	3.4	1.7	1.7	1.4	1.4	1.5	2.2	27	13	5.0	1.8	1.5
8	3.5	1.6	1.8	1.3	1.3	1.5	2.2	30	13	4.8	1.9	1.4
9	2.5	1.6	1.8	1.4	1.2	1.5	2.3	34	12	4.2	2.3	1.4
10	2.8	1.6	1.8	1.5	1.3	1.5	2.3	37	12	3.8	2.4	1.4
11	3.3	1.7	1.7	1.5	1.4	1.5	2.3	39	11	3.7	2.0	1.5
12	3.4	1.7	1.7	1.5	1.5	1.5	2.4	49	10	3.5	1.9	1.6
13	3.3	1.7	1.7	1.5	1.4	1.5	2.5	49	9.7	3.6	2.3	2.1
14	2.9	1.8	1.7	1.5	1.5	1.5	2.7	49	9.5	3.7	2.0	1.9
15	2.6	1.8	1.6	1.5	1.5	1.6	2.9	51	11	3.4	1.8	1.7
16	2.4	1.8	1.6	1.5	1.5	1.6	3.4	52	11	3.2	1.7	1.6
17	2.3	1.8	1.6	1.4	1.5	1.6	4.0	47	9.5	3.0	1.7	1.6
18	2.4	1.8	1.6	1.4	1.5	1.6	4.6	42	8.4	2.8	1.6	1.5
19	2.2	1.8	1.5	1.4	1.4	1.6	5.0	40	8.3	2.7	2.0	1.5
20	2.2	1.7	1.6	1.4	1.4	1.6	6.0	36	8.0	2.7	2.0	1.5
21	2.2	1.8	1.6	1.4	1.3	1.7	6.8	33	7.4	2.5	1.8	1.5
22	2.2	1.8	1.5	1.4	1.4	1.7	7.2	32	12	2.3	2.6	1.6
23	2.1	1.8	1.6	1.4	1.4	1.7	7.2	30	8.4	2.3	1.9	1.5
24	2.1	1.7	1.6	1.4	1.4	1.8	7.2	29	6.9	2.3	1.7	1.4
25	2.0	1.6	1.6	1.4	1.3	1.9	6.8	29	6.4	2.2	1.7	1.4
26	2.0	1.7	1.6	1.4	1.4	2.0	6.4	28	5.9	2.1	1.6	1.4
27	1.9	1.8	1.6	1.4	1.4	2.1	6.0	27	5.5	2.0	1.6	1.4
28	2.0	1.8	1.5	1.4	1.4	2.2	5.6	28	5.3	2.3	1.7	1.4
29	1.7	1.8	1.4	1.4	---	2.0	5.6	25	5.1	2.3	1.6	1.4
30	1.7	1.8	1.5	1.4	---	1.8	6.2	23	4.8	2.1	1.7	1.5
31	1.8	---	1.5	1.3	---	1.9	---	24	---	2.2	1.7	---
TOTAL	72.5	52.6	51.1	44.5	40.1	51.0	122.5	980.0	321.1	101.9	61.3	46.2
MEAN	2.34	1.75	1.65	1.44	1.43	1.65	4.08	31.6	10.7	3.29	1.98	1.54
MAX	3.5	1.9	1.8	1.5	1.7	2.2	7.2	52	22	5.0	3.2	2.1
MIN	1.7	1.6	1.4	1.3	1.2	1.4	2.0	7.0	4.8	2.0	1.6	1.4
AC-FT	144	104	101	88	80	101	243	1940	637	202	122	92

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1994, BY WATER YEAR (WY)

	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	2.27	1.83	1.56	1.35	1.28	1.36	4.07	32.8	38.5	7.76	3.03	2.38																					
MAX	3.84	3.05	2.61	2.31	1.92	2.35	10.6	61.7	95.8	19.8	5.13	5.69																					
(WY)	1983	1974	1974	1974	1974	1972	1987	1980	1965	1983	1979	1973																					
MIN	1.03	.94	.79	.62	.60	.65	1.20	7.50	3.76	2.42	1.22	.88																					
(WY)	1963	1963	1963	1963	1963	1963	1964	1992	1977	1977	1962	1962																					

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1962 - 1994
ANNUAL TOTAL	3104.14	1944.8	--
ANNUAL MEAN	8.50	5.33	8.22
HIGHEST ANNUAL MEAN	--	--	15.6
LOWEST ANNUAL MEAN	--	--	2.63
HIGHEST DAILY MEAN	88 May 21	52 May 16	190 Jun 10 1965
LOWEST DAILY MEAN	.72 Feb 17	1.2 Feb 9	.50 Jan 12-14 1963,
			Feb 1 1985
ANNUAL SEVEN-DAY MINIMUM	.83 Jan 8	1.4 Feb 7	.55 Jan 28 1985
INSTANTANEOUS PEAK FLOW	--	68 May 11	218a Jun 1 1986
INSTANTANEOUS PEAK STAGE	--	6.34 May 11	8.54b Apr 22 1965
ANNUAL RUNOFF (AC-FT)	6160	3860	5950
10 PERCENT EXCEEDS	29	13	24
50 PERCENT EXCEEDS	2.3	1.8	2.1
90 PERCENT EXCEEDS	.97	1.4	1.0

a Gage height, 7.17 ft.

b Backwater from ice.

LOCATION.--Lat 42°29'24", long 107°08'00", in SE 1/4 NE 1/4 NE 1/4 sec.16, T.29 N., R.86 W., Natrona County, Hydrologic Unit 10180006, on left bank 270 ft upstream from State Highway 220, 0.2 mi southwest of Independence Rock, 7 mi upstream from high-water line of Pathfinder Reservoir at elevation 5,850 ft, and 22 mi southwest of Alcova.

DRAINAGE AREA.--2,338 mi². Area at site prior to 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.--Estimated daily discharges: Apr. 1-11. Records good except those for estimated daily discharges, which are poor. 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. U.S. Bureau of Reclamation satellite telemeter at station.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	113	349	205	37	27	20
2	---	---	---	---	---	---	106	331	205	35	30	20
3	---	---	---	---	---	---	105	320	195	34	27	19
4	---	---	---	---	---	---	106	313	191	33	26	18
5	---	---	---	---	---	---	108	309	185	32	25	17
6	---	---	---	---	---	---	115	313	178	32	24	18
7	---	---	---	---	---	---	127	313	168	33	25	17
8	---	---	---	---	---	---	139	324	153	37	27	17
9	---	---	---	---	---	---	139	334	133	35	27	18
10	---	---	---	---	---	---	136	353	122	33	27	18
11	---	---	---	---	---	---	133	360	115	31	28	16
12	---	---	---	---	---	---	125	375	107	30	29	16
13	---	---	---	---	---	---	130	390	101	29	29	19
14	---	---	---	---	---	---	130	405	92	29	28	18
15	---	---	---	---	---	---	125	423	82	27	27	18
16	---	---	---	---	---	---	128	458	81	25	25	18
17	---	---	---	---	---	---	139	461	69	24	24	21
18	---	---	---	---	---	---	147	454	60	24	23	20
19	---	---	---	---	---	---	165	435	59	23	23	20
20	---	---	---	---	---	---	201	408	59	20	23	19
21	---	---	---	---	---	---	246	375	59	18	25	21
22	---	---	---	---	---	---	316	338	56	16	25	23
23	---	---	---	---	---	---	401	306	54	13	24	23
24	---	---	---	---	---	---	439	281	60	13	23	24
25	---	---	---	---	---	---	465	253	52	12	23	23
26	---	---	---	---	---	---	535	239	49	12	21	22
27	---	---	---	---	---	---	571	229	44	15	22	21
28	---	---	---	---	---	---	547	215	40	25	23	21
29	---	---	---	---	---	---	461	212	40	25	21	21
30	---	---	---	---	---	---	393	208	39	25	21	21
31	---	---	---	---	---	---	---	201	---	25	20	---
TOTAL	---	---	---	---	---	---	6991	10285	3053	802	772	587
MEAN	---	---	---	---	---	---	233	332	102	25.9	24.9	19.6
MAX	---	---	---	---	---	---	571	461	205	37	30	24
MIN	---	---	---	---	---	---	105	201	39	12	20	16
AC-FT	---	---	---	---	---	---	13870	20400	6060	1590	1530	1160

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1983, BY WATER YEAR (WY)

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	1129	362	96.8	114
(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

SUMMARY STATISTICS

SUMMARY STATISTICS	FOR 1994	WATER YEAR*	WATER YEARS	1914 - 1983
ANNUAL MEAN	--		126	
HIGHEST ANNUAL MEAN	--		312	1924
LOWEST ANNUAL MEAN	--		25.8	1940
HIGHEST DAILY MEAN	571	Apr 27	4290	Apr 13 1924
LOWEST DAILY MEAN	12	Jul 25, 26	.50	Jul 30 to Aug 12 1940#
ANNUAL SEVEN-DAY MINIMUM	--		.50	Jul 30 1940
INSTANTANEOUS PEAK FLOW	575	Apr 27	4290a	Apr 13 1924#
INSTANTANEOUS PEAK STAGE	3.63	Apr 27	9.90	Apr 27 1983#
ANNUAL RUNOFF (AC-FT)	--		91260	
10 PERCENT EXCEEDS	--		376	
50 PERCENT EXCEEDS	--		50	
90 PERCENT EXCEEDS	--		18	

* During period of operation.

For period of record through 1994.

a Maximum observed.

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 Alcovia.

DRAINAGE AREA.--10,711 mi², of which 700 mi² is probably noncontributing.

PERIOD OF RECORD.--January 1909 to current year. Monthend 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, 471,000 acre-ft, May 11, elevation, 5,817.68; minimum daily contents, 218,000 acre-ft, Sept. 13, 14, minimum elevation, 5,789.13 ft, Sept. 13.

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

5,785	192,000	5,800	297,000	5,815	440,000
5,790	224,000	5,805	340,000	5,820	499,000
5,795	259,000	5,810	387,000		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	307000	328000	331000	356000	382000	407000	436000	460000	450000	418000	336000	241000
2	308000	329000	332000	357000	383000	409000	434000	462000	449000	418000	333000	238000
3	309000	328000	332000	358000	384000	411000	432000	462000	447000	417000	329000	235000
4	310000	329000	332000	360000	385000	410000	431000	463000	447000	416000	325000	231000
5	311000	328000	332000	361000	386000	411000	431000	464000	447000	415000	322000	230000
6	312000	329000	333000	363000	387000	412000	431000	465000	446000	411000	318000	229000
7	313000	330000	335000	363000	387000	413000	432000	468000	446000	408000	314000	228000
8	314000	330000	336000	365000	387000	414000	433000	469000	445000	404000	310000	227000
9	316000	329000	337000	366000	389000	415000	434000	470000	445000	402000	306000	225000
10	317000	328000	339000	367000	390000	416000	434000	470000	445000	395000	304000	223000
11	318000	328000	338000	370000	391000	418000	434000	471000	444000	391000	301000	220000
12	319000	328000	340000	371000	393000	419000	435000	470000	443000	387000	298000	219000
13	320000	329000	341000	372000	394000	420000	436000	470000	443000	384000	296000	218000
14	321000	330000	343000	372000	395000	421000	436000	469000	442000	381000	294000	218000
15	322000	330000	345000	373000	395000	421000	435000	469000	442000	377000	291000	219000
16	323000	330000	347000	373000	395000	421000	437000	469000	442000	375000	288000	220000
17	324000	329000	349000	374000	396000	422000	438000	466000	441000	373000	285000	220000
18	326000	328000	350000	374000	396000	423000	437000	465000	441000	371000	282000	219000
19	326000	328000	350000	375000	396000	424000	439000	464000	441000	369000	280000	219000
20	327000	328000	350000	376000	397000	425000	440000	463000	441000	368000	277000	220000
21	327000	329000	351000	376000	397000	426000	440000	462000	438000	366000	274000	220000
22	327000	329000	352000	377000	397000	426000	442000	460000	437000	365000	272000	219000
23	328000	329000	353000	378000	398000	426000	445000	458000	435000	364000	269000	219000
24	329000	328000	353000	378000	400000	428000	444000	456000	433000	361000	267000	220000
25	329000	330000	353000	377000	402000	430000	446000	456000	431000	359000	264000	220000
26	328000	331000	354000	377000	404000	430000	447000	456000	429000	356000	261000	220000
27	328000	331000	354000	378000	405000	431000	449000	455000	427000	353000	259000	220000
28	327000	330000	355000	378000	406000	432000	451000	454000	425000	351000	256000	220000
29	327000	330000	355000	378000	---	434000	455000	453000	423000	348000	254000	221000
30	328000	330000	355000	380000	---	435000	457000	451000	421000	344000	251000	221000
31	328000	---	356000	381000	---	437000	---	451000	---	340000	246000	---
MAX	329000	331000	356000	381000	406000	437000	457000	471000	450000	418000	336000	241000
MIN	307000	328000	331000	356000	382000	407000	431000	451000	421000	340000	246000	218000
(#)	5,803.70	5,803.88	5,806.73	5,809.37	5,811.89	5,814.74	5,816.52	5,815.95	5,813.24	5,805.02	5,793.14	5,789.60
(*)	+22,000	+5,000	+26,000	+25,000	+25,000	+31,000	+20,000	-6,000	-30,000	-81,000	-94,000	-25,000

CAL YR 1993 MAX 356000 MIN 202000 (*) +152,000
WTR YR 1994 MAX 471000 MIN 218000 (*) -850,000

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

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

PLATTE RIVER BASIN

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 Alcoa.

DRAINAGE AREA.--10,766 mi², of which 700 mi² is probably noncontributing.

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, 190,300 acre-ft, Aug. 14, 15, 1952, elevation, 5,499.92 ft; minimum daily (since appreciable storage was attained), 1,980 acre-ft, Sept. 30, 1940, elevation, 5,353.56 ft. No usable storage prior to February 1938.

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 182,000 acre-ft, Sept. 1, elevation, 5,498.83 ft; minimum daily contents, 154,000 acre-ft, Nov. 15, Jan. 23, Feb. 14, Mar. 5, minimum elevation, 5,487.27 ft, Mar. 5.

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

5,485	149,000	5,495	172,000
5,490	160,000	5,500	184,000

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180000	156000	156000	155000	156000	156000	156000	178000	180000	180000	181000	182000
2	179000	156000	155000	155000	156000	155000	159000	177000	180000	180000	180000	181000
3	178000	156000	155000	156000	156000	155000	162000	178000	180000	180000	180000	181000
4	176000	156000	155000	155000	157000	155000	164000	178000	181000	180000	179000	181000
5	175000	156000	156000	155000	156000	154000	165000	178000	181000	181000	179000	180000
6	174000	156000	156000	155000	156000	155000	167000	179000	181000	181000	179000	180000
7	173000	155000	156000	155000	156000	155000	168000	178000	181000	180000	179000	180000
8	173000	155000	157000	155000	156000	156000	169000	178000	181000	180000	180000	180000
9	172000	156000	156000	155000	156000	155000	169000	178000	180000	181000	180000	180000
10	171000	156000	156000	155000	156000	156000	170000	179000	180000	181000	180000	180000
11	170000	156000	157000	155000	156000	156000	170000	179000	180000	181000	181000	181000
12	169000	156000	156000	156000	156000	155000	173000	178000	180000	181000	181000	181000
13	165000	156000	157000	155000	155000	155000	173000	178000	180000	181000	181000	181000
14	164000	155000	156000	156000	154000	155000	174000	178000	180000	181000	181000	180000
15	164000	154000	156000	155000	155000	156000	175000	177000	180000	181000	181000	181000
16	162000	155000	157000	155000	155000	156000	175000	178000	180000	181000	181000	181000
17	161000	155000	156000	155000	155000	156000	174000	179000	180000	181000	181000	180000
18	160000	156000	155000	156000	155000	156000	176000	180000	181000	181000	181000	180000
19	159000	157000	156000	156000	156000	155000	177000	180000	181000	181000	181000	180000
20	158000	156000	156000	156000	155000	155000	177000	181000	181000	180000	181000	179000
21	158000	156000	156000	156000	155000	156000	178000	181000	181000	180000	181000	178000
22	157000	156000	156000	155000	155000	156000	178000	181000	181000	180000	181000	179000
23	157000	156000	156000	154000	156000	156000	178000	181000	181000	180000	180000	179000
24	157000	157000	155000	155000	156000	156000	179000	181000	181000	181000	180000	178000
25	156000	156000	155000	156000	156000	156000	179000	181000	180000	181000	180000	179000
26	156000	155000	155000	156000	156000	156000	181000	181000	180000	181000	180000	179000
27	157000	155000	155000	157000	155000	156000	181000	181000	180000	181000	180000	179000
28	157000	156000	155000	157000	156000	157000	181000	181000	180000	181000	180000	179000
29	158000	156000	155000	157000	---	156000	180000	180000	180000	180000	180000	178000
30	157000	156000	155000	156000	---	155000	179000	180000	180000	180000	181000	178000
31	156000	---	155000	156000	---	155000	---	180000	---	181000	181000	---
MAX	180000	157000	157000	157000	157000	157000	181000	181000	181000	181000	181000	182000
MIN	156000	154000	155000	154000	154000	154000	156000	177000	180000	180000	179000	178000
(#)	5,488.10	5,488.14	5,487.66	5,487.88	5,487.78	5,487.56	5,497.75	5,498.40	5,498.18	5,498.43	5,498.81	5,497.18
(*)	-25,000	0	-1,000	+1,000	0	-1,000	+24,000	+1,000	0	+1,000	0	-3,000

CAL YR 1993 MAX 182000 MIN 154000 (*) 0

WTR YR 1994 MAX 182000 MIN 154000 (*) -3,000

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

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

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 101800007, 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.

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.--No estimated daily discharges. Records good except those for October and July to September, which are fair. Flow completely regulated by Seminole, Pathfinder, and Alcova Reservoirs. (See 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.--Sixteen discharge measurements provided by the Bureau of Reclamation and eleven provided by the Wyoming State Engineer's Office.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	595	547	556	502	476	493	505	517	2370	2340	3370	3240
2	605	555	561	505	471	494	500	514	2360	2310	3610	3380
3	610	567	564	511	474	493	495	519	2340	2280	3650	3370
4	618	579	566	508	483	517	499	523	2330	2260	3620	3400
5	479	588	572	512	479	532	500	517	2320	2270	3610	3410
6	468	598	577	513	480	532	498	511	2320	3450	3620	3330
7	481	607	560	514	484	525	501	503	2300	3450	3600	2860
8	489	623	511	515	474	531	498	529	2360	3310	3570	2590
9	503	631	508	514	474	528	496	812	2390	3220	3620	2320
10	513	637	517	521	478	528	501	830	2380	3210	3590	2140
11	532	654	514	522	475	530	496	857	2360	3160	3560	1880
12	549	660	518	452	475	528	496	1190	2360	3260	3660	1610
13	2440	663	524	454	478	529	500	1180	2340	3210	3680	1330
14	586	664	528	463	476	528	500	1230	2330	3150	3660	1240
15	420	677	467	502	474	531	506	1850	2320	3120	3740	1230
16	606	682	469	501	478	537	506	1840	2320	3220	3720	1040
17	628	683	471	495	474	538	505	1850	2310	3260	3690	971
18	650	512	476	495	474	535	507	1860	2300	3260	3670	736
19	665	498	479	489	469	528	503	2020	2310	3360	3690	541
20	461	500	481	479	476	530	510	2120	2330	3310	3650	543
21	461	507	484	482	473	530	505	2130	2420	3280	3620	539
22	483	513	487	479	470	533	510	2140	2560	3230	3690	521
23	491	513	491	482	484	508	513	2130	2610	3290	3880	517
24	504	521	492	483	494	508	510	2140	2590	3360	3850	519
25	518	522	489	483	490	504	509	2250	2600	3330	3690	511
26	453	526	496	483	495	509	507	2270	2540	3280	3430	501
27	490	535	497	481	494	504	511	2260	2490	3410	3330	506
28	518	539	498	483	491	506	511	2260	2350	3600	3310	501
29	521	545	499	481	---	502	519	2260	2430	3560	3280	500
30	617	547	500	477	---	509	520	2270	2350	3470	3230	494
31	539	---	501	480	---	507	---	2280	---	3410	3210	---
TOTAL	18493	17393	15853	15261	13413	16107	15137	46162	71690	97630	111100	46270
MEAN	597	580	511	492	479	520	505	1489	2390	3149	3584	1542
MAX	2440	683	577	522	495	538	520	2280	2610	3600	3880	3410
MIN	420	498	467	452	469	493	495	503	2300	2260	3210	494
AC-FT	36680	34500	31440	30270	26600	31950	30020	91560	142200	193600	220400	91780

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 1994, BY WATER YEAR (WY)

MEAN	638	558	490	473	467	539	851	1629	2334	3041	2914	1477
MAX	1543	1754	1163	955	1039	2571	3476	5894	8850	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

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1904 - 1994

	FOR 1960-1961 WATER YEAR		WATER YEAR		WATER YEARS 1964 - 1964	
ANNUAL TOTAL	330106		484509		--	
ANNUAL MEAN	904		1327		1284	
HIGHEST ANNUAL MEAN	--		--		2575	1984
LOWEST ANNUAL MEAN	--		--		711	1955
HIGHEST DAILY MEAN	3180	Jul 15	3880	Aug 23	13400	Jun 11 1905
LOWEST DAILY MEAN	420	Oct 15	420	Oct 15	3.0	Oct 1 1937
ANNUAL SEVEN-DAY MINIMUM	475	Dec 15	473	Feb 16	3.0	Oct 1 1937
INSTANTANEOUS PEAK FLOW	--		4300a	Oct 13	13400	Jun 6 1905
INSTANTANEOUS PEAK STAGE	--		6.08	Aug 23	11.50b	Jun 6 1905
ANNUAL RUNOFF (AC-FT)	654800		961000		930200	
10 PERCENT EXCEEDS	2210		3370		3560	
50 PERCENT EXCEEDS	532		532		885	
90 PERCENT EXCEEDS	486		480		5.0	

a Gage height, 5.92 ft.

b Site and datum then in use.

PLATTE RIVER BASIN

06643500 NORTH PLATTE RIVER NEAR GOOSE EGG, WY

LOCATION.--Lat 42°42'38", long 106°33'34", in NW¹/₄ NW¹/₄ SW¹/₄ sec.28, T.32 N., R.81 W., Natrona County, Hydrologic Unit 10180007, on right bank 1.0 mi upstream from Coal Creek, 5.2 mi southwest of Goose Egg, 6.4 mi downstream from Bates Creek, and 16 mi southwest of Casper.

DRAINAGE AREA.--11,423 mi², of which 700 mi² is non-contributing. (Area at site used prior to March 1988, 11,439 mi², of which 700 mi² is non-contributing.)

PERIOD OF RECORD.--April 1917 to September 1919 (irrigation seasons only), May to September 1924, May to September 1947, May 1950 to September 1960, April 1983 to September 1984, October 1985 to September 1986, March 1988 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as "near Casper" 1917-19, 1924.

REVISED RECORDS.--WDR WY-83-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,210 ft above sea level, from topographic map. April 1917 to September 1919, staff gage at site 3.2 mi downstream at different datum. May to September 1924 and May to September 1947, staff gages at site 6.0 mi downstream at different datum. May 1950 to September 1960, water-stage recorder at site 1.5 mi downstream at different datum. April 1983 to September 1984 and October 1985 to September 1986, water-stage recorder at site 4.2 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 23 to Dec. 1, Dec. 5-8, and Dec. 14 to Mar 2. Records good except those for estimated daily discharges, which are poor. Natural flow of stream affected by transbasin diversions, storage reservoirs, power development, diversions for irrigation, and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	604	588	570	530	515	550	514	556	2280	2300	3400	3310
2	616	605	584	530	510	550	515	555	2280	2280	3560	3460
3	613	595	591	530	520	560	515	551	2280	2230	3690	3460
4	623	616	593	535	520	558	521	553	2260	2210	3670	3470
5	583	626	590	535	520	571	517	557	2270	2170	3610	3470
6	512	629	585	540	520	573	517	556	2270	3040	3570	3470
7	526	638	565	530	520	555	520	537	2250	3470	3530	3000
8	546	646	545	530	520	542	522	544	2250	3260	3490	2670
9	538	654	544	540	515	546	522	725	2330	3170	3480	2370
10	534	659	538	545	515	545	516	837	2330	3110	3480	2140
11	537	662	540	550	520	541	521	868	2320	3100	3460	1900
12	550	660	542	490	520	540	520	1100	2310	3170	3510	1640
13	2130	689	547	485	520	534	522	1180	2280	3180	3570	1340
14	1250	688	545	510	520	528	528	1190	2270	3130	3570	1190
15	641	705	500	540	520	517	528	1620	2270	3090	3660	1140
16	609	719	505	535	520	515	527	1800	2280	3160	3650	1050
17	729	707	510	530	515	517	530	1800	2270	3270	3640	949
18	739	620	510	525	515	516	538	1800	2260	3240	3610	817
19	738	545	515	525	510	518	543	1880	2250	3370	3620	633
20	640	541	520	520	510	532	552	2060	2250	3330	3650	559
21	529	555	520	520	510	529	561	2040	2320	3300	3610	557
22	524	550	520	520	505	538	562	2070	2460	3220	3610	545
23	534	520	525	515	525	533	566	2050	2580	3230	3890	530
24	540	520	525	515	525	519	576	2020	2550	3360	3930	525
25	547	530	525	515	535	511	578	2120	2580	3330	3850	525
26	551	540	520	515	545	514	602	2170	2540	3260	3550	524
27	511	540	525	510	550	520	580	2160	2490	3250	3410	528
28	541	550	525	520	550	516	573	2170	2320	3650	3380	530
29	563	555	525	515	---	522	570	2170	2390	3620	3360	530
30	571	560	525	515	---	518	563	2190	2310	3530	3310	535
31	629	---	530	515	---	516	---	2190	---	3450	3290	---
TOTAL	20298	18212	16704	16230	14590	16544	16219	44619	70100	96480	110610	47367
MEAN	655	607	539	524	521	534	541	1439	2337	3112	3568	1579
MAX	2130	719	593	550	550	573	602	2190	2580	3650	3930	3470
MIN	511	520	500	485	505	511	514	537	2250	2170	3290	524
AC-FT	40260	36120	33130	32190	28940	32820	32170	88500	139000	191400	219400	93950

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1994, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
MEAN	522	1529	1986	33.4	1957
MAX	446	1206	1960	26.6	1957
(WY)	392	971	1984	23.7	1957
MIN	392	941	1986	17.3	1957
(WY)	364	901	1984	22.0	1955
MEAN	475	2596	1984	24.0	1957
MAX	957	3546	1984	21.9	1957
(WY)	1622	4122	1984	28.8	1955
MIN	2303	7757	1984	18.0	1955
(WY)	3431	7758	1983	1353	1991
MEAN	3170	5127	1952	1085	1992
MAX	1534	3606	1952	418	1954
(WY)	1952	3606	1952	418	1954

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1947 - 1994
ANNUAL TOTAL	337229	487973	--
ANNUAL MEAN	924	1337	1286
HIGHEST ANNUAL MEAN	--	--	2572
LOWEST ANNUAL MEAN	--	--	717
HIGHEST DAILY MEAN	2960	3930	8830
LOWEST DAILY MEAN	465	485	8.7
ANNUAL SEVEN-DAY MINIMUM	497	511	9.6
INSTANTANEOUS PEAK FLOW	--	3960a	19200b
INSTANTANEOUS PEAK STAGE	--	6.38c	11.80d
ANNUAL RUNOFF (AC-FT)	668900	967900	931300
10 PERCENT EXCEEDS	2180	3400	3760
50 PERCENT EXCEEDS	581	565	688
90 PERCENT EXCEEDS	520	516	29

For period of record, 1917 to 1994.

a Gage height, 5.77 ft.

b Maximum observed.

c Backwater from ice jam.

d Site and datum then in use.

06645000 NORTH PLATTE RIVER BELOW CASPER, 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.

DRAINAGE AREA.--12,574 mi², of which 831 mi² is probably noncontributing.

PERIOD OF RECORD.--Water years 1947-52, 1957-59, 1968-89, October 1990 to current year.

REVISED RECORDS.--WDR WY-76-1: Drainage area.

REMARKS.--Discharge records furnished by U.S. Bureau of Reclamation.

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)
NOV 05...	0935	647	855	8.3	2.0	-4.0	640	12.0	104	5
MAR 07...	0940	596	900	8.1	3.0	-3.0	638	10.6	94	7
MAY 09...	0915	586	661	8.4	12.0	12.5	638	9.4	105	4
AUG 10...	1230	3700	504	8.1	20.0	26.0	640	7.7	101	1

PLATTE RIVER BASIN

06645150 SMITH CREEK ABOVE OTTER CREEK, NEAR CASPER, WY

LOCATION.--Lat 42°38'59", long 106°10'46", in NE¹/₄ NW¹/₄ NW¹/₄ sec.22, T.31 N., R.78 W., Natrona County, Hydrologic Unit 10180007, on right bank 1.3 mi upstream from Otter Creek and 16 mi southeast of Casper.

DRAINAGE.--9.91 mi².

PERIOD OF RECORD.--October 1974 to September 1979, October 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,550 ft above sea level, from topographic map. Prior to Oct. 1, 1976, at site 200 ft downstream at datum 7.22 ft lower.

REMARKS.--Estimated daily discharges: Oct. 29-31, Nov. 2, 5-9, 12-20, 29, Dec. 2-9, 14, 15, 18-22, and Dec. 28 to Feb. 27. 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 9.0 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 22	2130	*7.0	*0.93	No peaks greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	2.3	1.5	1.5	1.4	1.7	2.0	4.4	2.8	1.7	2.1	1.5
2	2.3	2.2	1.5	1.5	1.5	1.9	1.8	4.2	2.7	1.7	2.0	1.5
3	2.2	2.3	1.5	1.5	1.5	2.0	1.9	4.1	2.6	1.8	1.9	1.5
4	2.2	2.3	1.6	1.5	1.5	2.1	2.0	4.2	2.5	1.8	1.8	1.4
5	2.2	2.2	1.6	1.5	1.5	2.0	1.9	4.2	2.5	1.9	1.8	1.3
6	2.2	2.1	1.6	1.5	1.5	2.0	1.8	4.3	2.3	2.0	1.7	1.4
7	2.3	2.1	1.6	1.5	1.5	1.9	1.8	4.3	2.2	2.0	1.7	1.3
8	2.4	2.1	1.6	1.5	1.4	1.8	1.8	4.3	2.1	2.0	1.7	1.3
9	2.4	2.0	1.6	1.5	1.4	1.8	1.8	4.3	2.2	2.0	1.8	1.3
10	2.4	2.0	1.6	1.5	1.5	1.8	1.9	4.3	2.1	1.9	1.8	1.3
11	2.3	2.0	1.5	1.5	1.5	2.0	1.9	4.3	2.2	1.9	1.8	1.3
12	2.2	2.0	1.5	1.5	1.4	1.9	2.1	4.2	2.3	2.0	2.1	1.4
13	2.2	1.9	1.5	1.5	1.4	1.9	2.5	4.7	2.3	2.0	1.8	1.4
14	2.2	1.9	1.4	1.5	1.4	2.1	2.9	4.4	2.1	2.0	1.7	1.4
15	2.2	1.9	1.5	1.5	1.4	2.2	2.7	4.1	2.2	1.9	1.8	1.9
16	2.2	1.9	1.5	1.5	1.4	2.3	3.3	3.9	2.3	1.9	1.6	1.5
17	2.2	2.0	1.4	1.4	1.4	2.2	4.2	3.8	2.3	2.0	1.6	1.4
18	2.5	1.9	1.4	1.4	1.6	2.1	5.1	3.7	2.2	1.8	1.6	1.4
19	2.4	1.9	1.4	1.4	1.7	2.4	5.6	3.5	2.1	1.8	1.6	1.4
20	2.5	1.8	1.4	1.4	1.6	2.1	5.5	3.5	2.1	1.9	1.6	1.4
21	2.4	1.8	1.3	1.4	1.6	1.9	5.9	3.2	2.0	1.9	1.5	1.5
22	2.2	1.8	1.3	1.4	1.5	1.9	6.0	3.0	2.1	1.9	1.5	1.6
23	2.2	1.8	1.3	1.4	1.5	1.8	6.0	2.9	1.9	2.0	1.5	1.5
24	2.1	1.8	1.6	1.4	1.5	1.8	5.5	2.9	1.7	2.1	1.5	1.5
25	2.1	1.8	1.6	1.4	1.6	1.8	5.5	2.8	1.7	2.4	1.5	1.5
26	2.1	1.8	1.5	1.4	1.6	1.8	5.2	2.8	1.6	2.1	1.4	1.5
27	2.2	1.8	1.5	1.4	1.7	2.4	4.8	2.7	1.7	2.0	1.4	1.5
28	2.2	1.7	1.5	1.5	1.8	3.2	4.3	2.6	1.7	2.0	1.5	1.5
29	2.2	1.6	1.5	1.5	---	4.1	4.1	2.4	1.8	2.0	1.5	1.5
30	2.1	1.6	1.5	1.5	---	1.8	4.5	2.3	1.8	1.9	1.4	1.5
31	2.2	---	1.5	1.4	---	1.9	---	2.4	---	1.8	1.5	---
TOTAL	69.8	58.3	46.3	45.3	42.3	64.6	106.3	112.7	64.1	60.1	51.7	43.4
MEAN	2.25	1.94	1.49	1.46	1.51	2.08	3.54	3.64	2.14	1.94	1.67	1.45
MAX	2.5	2.3	1.6	1.5	1.8	4.1	6.0	4.7	2.8	2.4	2.1	1.9
MIN	2.1	1.6	1.3	1.4	1.4	1.7	1.8	2.3	1.6	1.7	1.4	1.3
AC-FT	138	116	92	90	84	128	211	224	127	119	103	86

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1994, BY WATER YEAR (WY)

	1975	1976	1976	1976	1976	1976	1977	1975	1975	1975	1975	1975
MEAN	1.68	1.60	1.53	1.41	1.40	1.51	2.97	6.59	3.84	2.32	1.91	1.70
MAX	2.65	2.40	2.26	2.06	1.96	2.08	7.09	14.4	9.55	4.30	3.37	2.97
(WY)	1976	1976	1976	1976	1976	1994	1977	1975	1975	1975	1975	1975
MIN	.73	.92	.62	.61	.72	.93	1.11	1.20	.95	.85	.70	.75
(WY)	1991	1993	1991	1991	1991	1991	1990	1990	1990	1990	1990	1990

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1975 - 1994
ANNUAL TOTAL	1172.53	764.9	--
ANNUAL MEAN	3.21	2.10	2.38
HIGHEST ANNUAL MEAN	--	--	4.13
LOWEST ANNUAL MEAN	--	--	.94
HIGHEST DAILY MEAN	37 May 5	6.0 Apr 22	37 May 5 1993
LOWEST DAILY MEAN	.76 Apr 6	1.3 Dec 21-23, Sep 5,7-11	.32 Dec 21 1990
ANNUAL SEVEN-DAY MINIMUM	1.0 Mar 12	1.3 Sep 5	.43 Dec 19 1990
INSTANTANEOUS PEAK FLOW	--	7.0 Apr 22	143a May 5 1993
INSTANTANEOUS PEAK STAGE	--	.93 Apr 22	2.95 May 5 1993
ANNUAL RUNOFF (AC-FT)	2330	1520	1720
10 PERCENT EXCEEDS	6.5	3.2	4.1
50 PERCENT EXCEEDS	2.2	1.8	1.7
90 PERCENT EXCEEDS	1.1	1.4	.92

a From rating curve extended above 20 ft³/s, on basis of slope-area measurement of peak flow.

06645164 OTTER CREEK AT MOUTH, NEAR CASPER, WY

LOCATION.--Lat 42°39'28", long 106°09'48", in SW¹/₄ SW¹/₄ NW¹/₄ sec.14, T.31 N., R.78 W., Natrona County, Hydrologic Unit 10180007, on left bank 0.2 mi upstream from mouth and 15.0 mi southeast of Casper.

DRAINAGE AREA.--6.50 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 6,370 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 15, 19, 23, 25, Dec. 19, 21-23, and Jan. 6. 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 6.0 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 23	1930	*13	*1.84	May 5	2030	10	1.74

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	2.0	1.6	1.4	1.3	1.6	2.2	6.3	2.6	1.9	1.5	1.2
2	1.7	1.9	1.7	1.4	1.4	1.8	2.1	6.7	2.1	1.9	1.5	1.3
3	1.7	1.9	1.6	1.4	1.4	2.1	2.1	7.0	2.1	1.9	1.5	1.2
4	1.7	1.8	1.6	1.4	1.4	2.1	2.6	6.7	2.0	1.9	1.5	1.1
5	1.6	1.6	1.6	1.4	1.4	2.1	2.2	7.9	1.9	1.9	1.4	1.1
6	1.5	1.5	1.6	1.2	1.5	1.9	2.2	9.3	1.8	1.9	1.3	1.1
7	1.8	1.5	1.6	1.4	1.5	1.7	2.3	9.1	1.8	1.9	1.3	1.1
8	1.9	1.4	1.6	1.5	1.4	1.6	2.2	9.4	1.8	1.9	1.3	1.1
9	1.8	1.4	1.6	1.5	1.4	1.6	2.1	8.7	1.8	1.7	1.3	1.1
10	1.9	1.4	1.6	1.4	1.4	1.7	2.0	8.1	1.8	1.6	1.3	1.1
11	1.8	1.4	1.6	1.4	1.4	1.8	1.9	7.5	1.7	1.7	1.3	1.1
12	1.8	1.5	1.7	1.4	1.4	1.8	2.1	7.1	1.8	1.8	1.4	1.0
13	1.8	1.6	1.6	1.4	1.4	1.7	2.6	7.0	1.8	1.8	1.3	1.1
14	1.8	1.6	1.6	1.4	1.5	1.9	3.0	6.6	1.7	1.9	1.3	1.1
15	1.7	1.5	1.6	1.4	1.4	2.1	2.4	5.8	1.7	1.8	1.3	1.5
16	1.7	1.6	1.6	1.3	1.4	2.3	3.1	5.3	1.8	1.7	1.3	1.2
17	1.8	1.6	1.6	1.3	1.5	2.5	4.7	4.9	1.9	1.6	1.4	1.2
18	2.1	1.6	1.5	1.3	1.8	2.3	5.8	4.5	1.8	1.5	1.3	1.1
19	1.9	1.5	1.4	1.3	1.5	2.9	7.2	4.4	1.8	1.5	1.3	1.1
20	2.0	1.6	1.5	1.3	1.4	3.0	8.4	4.2	1.9	1.5	1.3	1.1
21	1.9	1.6	1.4	1.2	1.4	2.3	9.6	3.8	1.9	1.5	1.3	1.3
22	1.8	1.6	1.3	1.3	1.4	2.3	11	3.6	2.1	1.4	1.2	1.3
23	1.8	1.5	1.4	1.3	1.4	2.4	11	3.4	2.1	1.5	1.2	1.2
24	1.8	1.7	1.5	1.3	1.4	2.0	11	3.3	1.9	1.5	1.2	1.2
25	1.7	1.6	1.5	1.3	1.4	2.0	11	3.1	1.8	1.4	1.2	1.1
26	1.7	1.6	1.5	1.3	1.6	1.9	8.6	3.0	1.8	1.4	1.2	1.1
27	1.7	1.6	1.5	1.3	1.8	1.9	7.1	2.8	1.9	1.4	1.2	1.1
28	1.9	1.6	1.4	1.3	1.7	1.8	6.3	2.7	2.0	1.4	1.3	1.1
29	1.8	1.6	1.4	1.3	---	1.8	5.5	2.5	2.0	1.3	1.2	1.1
30	1.8	1.6	1.4	1.3	---	1.8	5.9	2.4	2.0	1.3	1.2	1.1
31	2.0	---	1.5	1.3	---	2.0	---	2.3	---	1.3	1.2	---
TOTAL	55.6	47.9	47.6	41.7	40.9	62.7	150.2	169.4	57.1	50.7	40.5	34.5
MEAN	1.79	1.60	1.54	1.35	1.46	2.02	5.01	5.46	1.90	1.64	1.31	1.15
MAX	2.1	2.0	1.7	1.5	1.8	3.0	11	9.4	2.6	1.9	1.5	1.5
MIN	1.5	1.4	1.3	1.2	1.3	1.6	1.9	2.3	1.7	1.3	1.2	1.0
AC-FT	110	95	94	83	81	124	298	336	113	101	80	68

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1994, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994
MEAN	1.12	1.11	1.00	.93	.98	1.29	2.94
MAX	1.79	1.60	1.54	1.35	1.46	2.02	5.01
(WY)	1994	1994	1994	1994	1994	1994	1993
MIN	.73	.69	.67	.60	.56	.78	1.53
(WY)	1993	1993	1993	1991	1990	1990	1989

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1988 - 1994
ANNUAL TOTAL	1380.44	798.8	--
ANNUAL MEAN	3.78	2.19	2.02
HIGHEST ANNUAL MEAN	--	--	3.54
LOWEST ANNUAL MEAN	--	--	1.14
HIGHEST DAILY MEAN	22 May 14	11 Apr 22-25	22 May 14 1993
LOWEST DAILY MEAN	.61 Jan 7	1.0 Sep 12	.43 Dec 22 1990
ANNUAL SEVEN-DAY MINIMUM	.63 Jan 5	1.1 Sep 6	.50 Feb 4 1990
INSTANTANEOUS PEAK FLOW	--	13 Apr 23	29a May 16 1993
INSTANTANEOUS PEAK STAGE	--	1.84 Apr 23	5.11b Mar 16 1988
ANNUAL RUNOFF (AC-FT)	2740	1580	1460
10 PERCENT EXCEEDS	11	3.5	4.2
50 PERCENT EXCEEDS	1.8	1.6	1.2
90 PERCENT EXCEEDS	.79	1.2	.67

a Gage height 2.12 ft.

b Backwater from ice.

PLATTE RIVER BASIN

06645166 SMITH CREEK BELOW OTTER CREEK, NEAR CASPER, WY

LOCATION.--Lat 42°40'20", long 106°09'03", in SE¹/₄ SW¹/₄ NE¹/₄ sec.11, T.31 N., R.78 W., Natrona County, Hydrologic Unit 10180007, on left bank 0.4 mi upstream from Spring Creek, 1.2 mi downstream from Otter Creek, and 14.6 mi southeast of Casper.

DRAINAGE AREA.--18.5 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 5,980 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Feb. 23 to Mar. 1, and June 2-4. 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 15 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 23	2030	*20	*2.44	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	3.2	3.0	2.9	2.5	2.9	3.3	11	5.4	3.5	2.3	1.6
2	3.2	3.2	3.0	2.9	2.6	3.0	3.3	11	5.2	3.2	2.5	1.6
3	3.2	3.3	3.0	2.9	2.6	3.3	3.3	11	5.0	3.2	2.5	1.6
4	3.2	3.3	3.0	2.9	2.6	3.4	3.5	11	4.7	3.2	2.5	1.6
5	3.2	3.0	3.0	3.0	2.6	3.3	3.4	11	4.6	3.2	2.5	1.6
6	3.2	2.8	3.2	2.9	2.6	3.3	3.5	13	4.5	3.2	2.5	1.6
7	3.3	3.0	3.3	2.9	2.6	3.2	3.5	13	4.5	3.0	2.5	1.5
8	3.7	3.1	3.2	2.9	2.5	3.0	3.5	13	4.6	3.0	2.5	1.5
9	3.6	3.0	3.2	2.9	2.5	3.0	3.5	13	4.6	3.0	2.5	1.5
10	3.5	3.0	3.2	2.9	2.6	3.0	3.6	12	4.6	3.0	2.5	1.5
11	3.5	3.0	3.2	2.8	2.5	2.9	3.6	12	4.6	2.8	2.4	1.5
12	3.3	3.0	3.2	2.8	2.5	3.0	3.8	12	4.5	2.9	2.7	1.5
13	3.3	3.0	3.1	2.8	2.5	3.0	4.2	11	4.5	3.0	2.5	1.4
14	3.3	3.0	2.9	2.8	2.4	3.1	5.2	11	4.3	3.3	2.4	1.5
15	3.3	2.9	3.0	2.8	2.4	3.2	5.0	10	4.1	3.2	2.3	1.9
16	3.3	3.0	3.0	2.8	2.4	3.5	5.4	9.3	4.1	3.1	2.2	2.1
17	3.3	3.0	3.0	2.7	2.4	3.8	7.3	8.5	4.1	3.0	2.2	2.0
18	3.6	3.2	3.0	2.6	2.8	3.7	9.1	8.2	4.1	3.0	2.1	1.9
19	3.6	2.9	2.9	2.6	2.9	3.9	12	8.1	4.3	2.8	2.1	1.8
20	3.6	3.0	3.0	2.6	2.8	4.4	13	7.7	4.3	2.8	2.2	1.8
21	3.6	3.0	3.0	2.6	2.8	3.7	15	6.9	4.1	2.8	2.1	1.8
22	3.5	3.0	3.0	2.6	2.6	3.8	16	6.8	4.2	2.7	2.0	1.8
23	3.5	3.0	3.0	2.6	2.6	3.8	19	6.4	4.3	2.5	2.0	1.7
24	3.4	2.9	3.0	2.6	2.6	3.5	18	6.3	4.1	2.5	1.8	1.5
25	3.3	2.9	3.0	2.6	2.6	3.6	17	6.1	3.8	2.5	1.8	1.5
26	3.3	2.9	3.0	2.6	2.7	3.5	14	6.1	3.6	2.5	1.8	1.4
27	3.2	3.1	3.0	2.6	2.9	3.2	12	5.9	3.6	2.4	1.8	1.4
28	3.2	3.0	3.0	2.6	2.7	3.3	11	5.9	3.6	2.4	1.8	1.4
29	3.2	3.0	3.0	2.6	---	3.2	10	5.6	3.5	2.4	1.8	1.4
30	3.1	3.0	3.0	2.6	---	2.9	10	5.1	3.6	2.3	1.7	1.4
31	3.2	---	2.9	2.4	---	3.1	---	5.0	---	2.3	1.7	---
TOTAL	103.9	90.7	94.3	84.8	72.8	103.5	245.0	282.9	129.0	88.7	68.2	48.3
MEAN	3.35	3.02	3.04	2.74	2.60	3.34	8.17	9.13	4.30	2.86	2.20	1.61
MAX	3.7	3.3	3.3	3.0	2.9	4.4	19	13	5.4	3.5	2.7	2.1
MIN	3.1	2.8	2.9	2.4	2.4	2.9	3.3	5.0	3.5	2.3	1.7	1.4
AC-FT	206	180	187	168	144	205	486	561	256	176	135	96

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1994, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994
MEAN	1.90	1.82	1.73	1.55	1.49	1.93	4.95
MAX	3.35	3.02	3.04	2.74	2.60	3.34	10.7
(WY)	1994	1994	1994	1994	1994	1988	1993
MIN	.79	.72	.58	.52	.59	.84	2.17
(WY)	1991	1993	1991	1991	1991	1991	1989

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1988 - 1994
ANNUAL TOTAL	2104.60	1412.1	---
ANNUAL MEAN	5.77	3.87	3.24
HIGHEST ANNUAL MEAN	---	---	5.55
LOWEST ANNUAL MEAN	---	---	1.61
HIGHEST DAILY MEAN	50	19	50
LOWEST DAILY MEAN	.64	1.4	.26
ANNUAL SEVEN-DAY MINIMUM	.65	1.4	.45
INSTANTANEOUS PEAK FLOW	---	20	120a
INSTANTANEOUS PEAK STAGE	---	2.44	3.39
ANNUAL RUNOFF (AC-FT)	4170	2800	2350
10 PERCENT EXCEEDS	16	6.6	5.9
50 PERCENT EXCEEDS	3.1	3.0	2.1
90 PERCENT EXCEEDS	.83	2.0	.73

06645174 BEAVER CREEK ABOVE POLE CREEK, NEAR CASPER, WY

LOCATION.--Lat 42°42'50", long 106°10'56", in NW¹/₄ NW¹/₄ SW¹/₄ sec.27, T.32 N., R.78 W., Natrona County, Hydrologic Unit 10180007, on left bank 80 ft downstream from unnamed tributary, 1.6 mi upstream from Pole Creek, and 11.3 mi southeast of Casper.

DRAINAGE AREA.--4.67 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 5,800 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. One small pipeline diverts water upstream for landowner's drinking water supply.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6.0 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr 25	1930	*7.6	*1.30	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	4.4	4.6	4.1	3.9	4.2	4.0	4.7	3.8	3.4	3.3	3.4
2	4.3	4.4	4.6	4.0	3.9	4.4	3.9	4.6	3.7	3.4	3.3	3.4
3	4.4	4.4	4.4	3.9	3.9	4.5	3.9	4.7	3.7	3.4	3.2	3.4
4	4.3	4.4	4.4	3.9	3.9	4.2	3.9	4.8	3.6	3.4	3.2	3.4
5	4.1	4.4	4.4	4.0	3.9	4.0	3.8	4.9	3.6	3.4	3.2	3.4
6	4.1	4.3	4.3	3.9	3.9	3.9	3.8	5.0	3.6	3.4	3.2	3.4
7	4.3	4.4	4.3	3.9	3.9	3.7	3.9	5.0	3.5	3.4	3.2	3.4
8	4.5	4.4	4.4	3.9	3.9	3.7	4.0	4.8	3.6	3.5	3.2	3.2
9	4.4	4.4	4.4	3.9	3.9	3.6	3.9	4.8	3.6	3.4	3.2	3.4
10	4.6	4.6	4.3	3.9	3.9	3.6	3.8	4.7	3.5	3.4	3.2	3.4
11	4.6	4.4	4.2	4.0	3.7	3.7	3.8	4.6	3.5	3.4	3.2	3.4
12	4.6	4.5	4.4	3.9	3.7	3.7	3.7	4.4	3.5	3.4	3.2	3.4
13	4.6	4.4	4.2	3.9	3.7	3.6	3.8	4.4	3.5	3.5	3.2	3.4
14	4.5	4.4	4.1	4.0	3.7	3.7	3.9	4.3	3.5	3.4	3.2	3.6
15	4.4	4.4	4.1	4.0	3.7	3.7	3.9	4.2	3.6	3.4	3.2	3.8
16	4.4	4.4	4.1	4.0	3.9	3.6	3.9	4.2	3.6	3.4	3.2	3.9
17	4.2	4.4	4.1	3.9	4.0	3.7	3.9	4.1	3.6	3.4	3.2	3.9
18	4.5	4.4	4.1	4.0	4.4	3.6	4.1	4.1	3.6	3.3	3.2	3.8
19	4.2	4.4	4.1	4.0	4.1	3.7	4.9	4.1	3.4	3.4	3.2	3.9
20	4.4	4.4	4.1	3.9	3.9	3.7	5.6	4.0	3.5	3.4	3.2	3.9
21	4.2	4.4	4.1	3.9	3.9	3.5	5.9	3.9	3.6	3.4	3.2	4.0
22	4.1	4.6	4.1	3.9	3.9	3.4	6.2	3.9	3.7	3.4	3.2	3.9
23	4.1	4.4	4.1	3.9	3.9	3.4	6.5	3.9	3.5	3.5	3.1	3.7
24	4.3	4.4	4.1	3.9	3.9	3.5	6.2	3.9	3.4	3.5	3.2	3.7
25	4.4	4.6	4.1	3.9	3.9	3.7	6.3	3.8	3.4	3.5	3.1	3.7
26	4.4	4.6	4.1	3.9	4.0	3.7	5.9	3.8	3.4	3.4	3.2	3.7
27	4.4	4.6	4.1	4.0	4.3	3.7	5.2	3.8	3.4	3.4	3.2	3.7
28	4.5	4.7	4.1	3.9	4.2	3.7	4.9	3.8	3.4	3.4	3.2	3.4
29	4.4	4.6	4.1	3.9	---	3.7	4.7	3.7	3.4	3.4	3.2	3.4
30	4.1	4.6	4.1	3.9	---	3.8	5.1	3.7	3.4	3.4	3.2	3.5
31	4.2	---	4.1	3.9	---	4.0	---	3.7	---	3.3	3.3	---
TOTAL	134.8	133.7	130.7	122.0	109.8	116.6	137.3	132.3	106.1	105.7	99.3	107.5
MEAN	4.35	4.46	4.22	3.94	3.92	3.76	4.58	4.27	3.54	3.41	3.20	3.58
MAX	4.6	4.7	4.6	4.1	4.4	4.5	6.5	5.0	3.8	3.5	3.3	4.0
MIN	4.1	4.3	4.1	3.9	3.7	3.4	3.7	3.7	3.4	3.3	3.1	3.2
AC-FT	267	265	259	242	218	231	272	262	210	210	197	213

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1994, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994
MEAN	3.79	3.81	3.63	3.54	3.64	3.85	4.13
MAX	4.35	4.46	4.22	3.94	4.13	4.78	5.33
(WY)	1994	1994	1994	1994	1988	1988	1993
MIN	3.16	3.21	3.00	2.88	3.16	3.36	3.66
(WY)	1993	1993	1993	1993	1993	1990	1992

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1988 - 1994
ANNUAL TOTAL	1751.9	1435.8	--
ANNUAL MEAN	4.80	3.93	3.95
HIGHEST ANNUAL MEAN	--	--	4.49
LOWEST ANNUAL MEAN	--	--	3.52
HIGHEST DAILY MEAN	15	6.5	15
LOWEST DAILY MEAN	2.6	3.1	2.6
ANNUAL SEVEN-DAY MINIMUM	2.8	3.2	2.7
INSTANTANEOUS PEAK FLOW	--	7.6	28a
INSTANTANEOUS PEAK STAGE	--	1.30	1.91
ANNUAL RUNOFF (AC-FT)	3470	2850	2860
10 PERCENT EXCEEDS	7.7	4.6	4.6
50 PERCENT EXCEEDS	4.4	3.9	3.7
90 PERCENT EXCEEDS	3.0	3.4	3.2

a From rating curve extended above 10 ft³/s on basis of critical-depth computations.

PLATTE RIVER BASIN

06645178 POLE CREEK NEAR CASPER, WY

LOCATION.--Lat 42°41'48", long 106°10'42", in SW¹/₄ NE¹/₄ SW¹/₄ sec.34, T.32 N., R.78 W., Natrona County, Hydrologic Unit 10180007, on left bank 200 ft upstream from unnamed tributary, 1.9 mi upstream from mouth, and 12.4 mi southeast of Casper.

DRAINAGE AREA.--2.70 mi².

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

GAGE.--Water-stage recorder and bedrock control. Elevation of gage is 5,880 ft above sea level.

REMARKS.--Estimated daily discharges: Oct. 30 to Nov. 1, Nov. 6, 14-16, 23-26, Dec. 14, Feb. 5-8, 18, Mar. 8, 9, 24, and May 13-28. 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 3.0 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 19	1930	*8.3	*1.35	May 12	1100	6.8	1.29
May 6	0630	7.4	1.32				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.78	.80	.86	.70	.62	.85	.97	4.0	1.6	.84	.65	.54
2	.75	.84	.83	.72	.65	.96	.94	4.5	1.4	.83	.67	.53
3	.74	.88	.82	.76	.66	1.1	1.0	4.3	1.4	.82	.67	.52
4	.73	.87	.81	.77	.70	1.0	1.1	4.5	1.3	.82	.66	.51
5	.74	.78	.80	.76	.73	.93	.92	5.4	1.2	.82	.62	.50
6	.74	.72	.79	.77	.71	.88	.86	6.3	1.2	.82	.62	.50
7	.77	.74	.79	.76	.70	.77	.94	6.1	1.2	.83	.61	.49
8	.82	.69	.83	.77	.71	.67	.91	5.8	1.2	.83	.59	.46
9	.80	.69	.85	.77	.73	.69	.92	5.4	1.1	.80	.60	.46
10	.86	.73	.87	.75	.75	.71	.96	5.3	1.1	.76	.60	.47
11	.83	.77	.89	.73	.75	.73	.92	5.5	1.1	.74	.63	.48
12	.80	.80	.92	.72	.74	.75	1.1	6.5	1.1	.72	.80	.48
13	.80	.80	.81	.72	.72	.75	1.4	6.4	1.1	.73	.65	.48
14	.80	.75	.77	.72	.66	.94	1.4	6.1	1.0	.78	.64	.48
15	.78	.72	.78	.71	.64	.95	1.3	5.5	1.0	.74	.61	.64
16	.79	.74	.77	.72	.68	1.1	1.8	5.0	1.1	.73	.58	.53
17	.79	.77	.76	.74	.71	1.1	2.5	4.7	1.1	.73	.58	.53
18	.99	.76	.70	.73	.69	1.0	4.4	3.9	1.1	.70	.59	.52
19	.92	.75	.71	.73	.73	1.3	5.4	3.5	1.0	.73	.58	.53
20	.92	.77	.71	.74	.73	1.2	5.0	3.1	1.0	.73	.58	.53
21	.89	.78	.71	.70	.73	.97	3.8	2.8	1.0	.72	.58	.55
22	.82	.79	.73	.67	.72	1.0	4.5	2.6	1.1	.69	.58	.58
23	.80	.73	.72	.66	.68	.98	5.0	2.3	1.1	.66	.56	.57
24	.80	.60	.69	.65	.66	.90	5.3	2.1	.94	.66	.53	.55
25	.79	.49	.71	.65	.67	.87	5.1	1.9	.92	.67	.52	.55
26	.80	.76	.70	.66	.77	.81	3.3	1.8	.90	.69	.52	.55
27	.79	.85	.69	.66	.84	.84	2.5	1.7	.87	.68	.50	.54
28	.79	.85	.70	.65	.83	.85	2.5	1.6	.86	.67	.52	.54
29	.78	.86	.70	.68	---	.83	3.1	1.4	.85	.65	.51	.52
30	.76	.88	.71	.65	---	.84	4.4	1.3	.84	.64	.51	.52
31	.76	---	.71	.59	---	.91	---	1.3	---	.64	.53	---
TOTAL	24.93	22.96	23.84	22.01	19.91	28.18	74.24	122.6	32.68	22.87	18.39	15.65
MEAN	.80	.77	.77	.71	.71	.91	2.47	3.95	1.09	.74	.59	.52
MAX	.99	.88	.92	.77	.84	1.3	5.4	6.5	1.6	.84	.80	.64
MIN	.73	.49	.69	.59	.62	.67	.86	1.3	.84	.64	.50	.46
AC-FT	49	46	47	44	39	56	147	243	65	45	36	31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1994, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994
MEAN	.52	.53	.47	.44	.44	.61	1.49
MAX	.80	.77	.77	.71	.71	.91	2.47
(WY)	1994	1994	1994	1994	1994	1994	1993
MIN	.32	.33	.29	.27	.32	.43	.66
(WY)	1990	1993	1991	1991	1993	1989	1989

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1988 - 1994
ANNUAL TOTAL	599.94	428.26	---
ANNUAL MEAN	1.64	1.17	.94
HIGHEST ANNUAL MEAN	---	---	1.53
LOWEST ANNUAL MEAN	---	---	.54
HIGHEST DAILY MEAN	16	6.5	16
LOWEST DAILY MEAN	.28	.46	.12
ANNUAL SEVEN-DAY MINIMUM	.30	.47	.23
INSTANTANEOUS PEAK FLOW	---	8.3	41a
INSTANTANEOUS PEAK STAGE	---	1.35	3.02b
ANNUAL RUNOFF (AC-FT)	1190	849	679
10 PERCENT EXCEEDS	4.3	2.4	1.7
50 PERCENT EXCEEDS	.89	.77	.59
90 PERCENT EXCEEDS	.32	.56	.34

a From rating curve extended above 18 ft³/s on basis of critical depth computations. Gage Height 2.10 ft.

b Backwater from ice.

06647500 BOX ELDER CREEK AT BOXELDER, WY

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 101800007, on left bank at Hiser Ranch (old Boxelder Post Office), 0.8 mi downstream from Snowshoe Creek, and 17 mi south of Glenrock.

DRAINAGE AREA.--63.0 mi².

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: Oct. 28 to Mar. 12. Records good except those for 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)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 23	2230	*314	*3.74	May 13	1930	256	3.53

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	2.5	2.1	2.1	2.0	3.2	24	149	31	1.4	.16	.13
2	.78	2.3	1.9	2.0	2.1	3.9	19	141	25	1.1	.18	.13
3	.80	2.4	2.1	2.0	2.2	4.5	24	137	21	.98	.16	.11
4	.78	2.3	1.9	1.9	2.3	5.5	31	134	19	.87	.14	.10
5	.75	2.1	1.7	1.8	2.4	4.6	36	144	17	.80	.11	.09
6	.74	2.0	1.8	1.7	2.3	4.2	31	167	15	.84	.11	.10
7	.80	2.1	1.9	1.8	2.0	3.8	28	174	14	.81	.10	.10
8	1.3	2.0	2.0	1.8	1.8	3.9	28	202	13	1.1	.13	.10
9	1.4	2.2	2.1	2.0	1.9	4.3	28	199	12	.99	.19	.09
10	1.6	2.3	2.2	2.0	2.2	5.1	28	197	11	.80	.16	.10
11	1.6	2.2	2.3	2.0	2.1	6.0	26	194	10	.64	.15	.10
12	1.8	2.0	2.1	1.9	2.1	6.8	28	192	9.4	.61	.30	.10
13	2.1	1.9	1.8	1.9	2.1	7.7	38	204	8.6	.68	.17	.10
14	2.0	1.7	1.9	2.0	2.3	8.7	44	189	7.4	1.1	.14	.10
15	2.0	2.0	1.8	2.1	2.4	14	40	160	6.7	.97	.13	.17
16	1.9	2.1	1.7	1.9	2.4	14	52	139	6.6	.91	.11	.16
17	2.0	2.0	1.7	1.8	2.5	16	76	120	6.6	.99	.12	.14
18	2.6	1.8	1.7	1.9	2.5	31	101	106	6.3	.97	.11	.14
19	2.8	1.9	1.7	2.0	2.3	20	133	93	5.3	.80	.11	.14
20	3.7	2.0	1.6	2.0	2.2	25	160	82	5.4	.65	.11	.14
21	3.6	1.8	1.6	2.1	2.2	34	211	71	6.2	.54	.11	.20
22	3.3	1.4	1.7	2.2	2.2	28	253	62	6.2	.48	.11	.18
23	3.1	1.2	1.8	2.3	2.3	24	281	55	7.3	.39	.10	.15
24	2.9	1.3	1.9	2.2	2.2	27	278	51	5.9	.35	.10	.13
25	2.8	1.6	2.1	2.1	2.1	24	291	46	4.4	.32	.10	.13
26	2.7	1.8	2.1	2.1	2.2	26	240	42	3.3	.32	.09	.13
27	2.3	2.0	2.0	2.1	2.5	24	209	38	2.5	.30	.08	.13
28	2.2	2.2	1.9	2.0	2.8	28	181	36	2.1	.24	.14	.13
29	2.1	2.4	2.0	2.0	---	19	155	31	1.8	.18	.13	.12
30	2.2	2.3	2.1	1.9	---	21	151	27	1.6	.14	.11	.13
31	2.4	---	2.1	1.9	---	21	---	24	---	.14	.12	---
TOTAL	61.85	59.8	59.3	61.5	62.6	468.2	3225	3606	291.6	21.41	4.08	3.77
MEAN	2.00	1.99	1.91	1.98	2.24	15.1	107	116	9.72	.69	.13	.13
MAX	3.7	2.5	2.3	2.3	2.8	34	291	204	31	1.4	.30	.20
MIN	.74	1.2	1.6	1.7	1.8	3.2	19	24	1.6	.14	.08	.09
AC-FT	123	119	118	122	124	929	6400	7150	578	42	8.1	7.7

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1994, BY WATER YEAR (WY)

MEAN	2.12	2.80	2.32	2.15	2.58	7.60	75.5	234	74.4	8.96	1.47	.81
MAX	12.5	17.6	9.94	7.52	9.25	31.1	220	562	331	48.8	4.95	4.11
(WY)	1983	1983	1983	1983	1962	1983	1962	1973	1983	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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1946 - 1994	
ANNUAL TOTAL	16875.78		7925.11		--	
ANNUAL MEAN	46.2		21.7		34.6	
HIGHEST ANNUAL MEAN	--		--		85.8	
LOWEST ANNUAL MEAN	--		--		6.95	
HIGHEST DAILY MEAN	535	May 15	291	Apr 25	2460	May 14
LOWEST DAILY MEAN	.63	Aug 30	.08	Aug 27	.00	Aug 17
ANNUAL SEVEN-DAY MINIMUM	.69	Aug 26	.10	Sep 4	.00	Aug 17
INSTANTANEOUS PEAK FLOW	--		314	Apr 23	4530	May 14
INSTANTANEOUS PEAK STAGE	--		3.74	Apr 23	8.58a	May 14
ANNUAL RUNOFF (AC-FT')	33470		15720		25090	
10 PERCENT EXCEEDS	175		58		105	
50 PERCENT EXCEEDS	2.3		2.1		2.8	
90 PERCENT EXCEEDS	1.1		.13		.38	

a Site and datum then in use.

06652000 NORTH PLATTE RIVER AT ORIN, WY

LOCATION.--Lat 42°39'10", long 105°09'32", in NE¹/₄ SE¹/₄ SW¹/₄ 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.

DRAINAGE AREA.--15,025 mi², of which 1,203 mi² is probably noncontributing.

PERIOD OF RECORD.--January, April to November 1895, April to October 1896, January 1897 to December 1898, April to November 1899, April to September 1917, April to September 1918, May to September 1924, April 1958 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as "at Orin Junction" 1895, 1897-99 and as "at McKinley" 1917-18.

REVISED RECORDS.--WSP 1310: 1896, 1899. WDR WY-76-1: Drainage area.

GAGE.--Water-stage recorder, and concrete weir since Mar. 6, 1994. Datum of gage is 4,656.85 ft above sea level. 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.

REMARKS.--Estimated daily discharges: Nov. 23 to Dec. 2, Dec. 19-30, Jan. 6-8, 17, 18, and Jan. 30 to Feb. 26. Records good except those for estimated daily discharges, which are poor. Major regulation began after completion of Pathfinder Reservoir in April 1909. Natural flow of stream affected by storage reservoirs, power development, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

COOPERATION.--Twelve discharge measurements provided by the Bureau of Reclamation and eight provided by the Wyoming State Engineer's office.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	689	667	905	700	465	1020	727	1280	2070	2260	3320	3190
2	695	719	860	693	430	979	736	1320	2090	2190	3260	3280
3	704	705	824	708	465	890	731	1230	2140	2200	3330	3320
4	711	695	773	689	520	942	724	1160	2150	2210	3520	3350
5	707	719	785	685	580	799	760	1100	2130	2190	3540	3340
6	703	709	785	650	620	764	777	1090	2110	2120	3500	3350
7	691	724	749	590	570	764	764	1090	2090	2300	3450	3350
8	674	730	661	625	485	715	750	1060	2110	3310	3410	3180
9	720	741	752	659	450	668	729	1080	2120	3170	3420	2850
10	713	726	804	696	520	636	706	1050	2190	3120	3380	2630
11	692	766	751	734	540	649	711	1170	2210	3080	3420	2390
12	666	809	778	665	510	667	688	1220	2230	3110	3430	2210
13	665	856	776	659	505	649	681	1250	2210	3300	3400	1980
14	674	894	707	658	570	646	673	1540	2190	3380	3460	1770
15	2440	876	611	664	630	636	730	1650	2170	3490	3470	1530
16	2120	854	641	670	695	648	745	1620	2190	3340	3450	1390
17	2120	851	641	635	800	664	764	1960	2210	3340	3500	1360
18	1400	878	554	555	880	675	825	1910	2190	3350	3480	1220
19	926	869	495	577	875	686	924	1870	2210	3280	3510	1120
20	912	799	420	616	820	709	992	1850	2200	3300	3510	974
21	901	636	395	711	780	769	1120	1980	2220	3280	3520	850
22	808	697	425	680	720	746	1290	2000	2270	3250	3460	765
23	695	605	465	682	675	748	1350	1990	2370	3210	3390	746
24	674	455	585	679	640	755	1430	1980	2470	3190	3530	711
25	675	360	680	703	565	725	1470	1960	2480	3240	3630	695
26	661	405	760	698	465	712	1620	1980	2480	3230	3600	680
27	659	475	790	716	434	696	1590	2050	2440	3170	3450	657
28	646	600	770	690	699	697	1480	2040	2340	3120	3320	632
29	617	705	760	637	---	712	1410	2050	2280	3290	3290	616
30	635	820	735	600	---	727	1340	2010	2230	3410	3250	616
31	649	---	717	555	---	722	---	2000	---	3340	3210	---
TOTAL	27242	21345	21354	20479	16908	22815	29237	49540	66790	93770	106410	54752
MEAN	879	711	689	661	604	736	975	1598	2226	3025	3433	1825
MAX	2440	894	905	734	880	1020	1620	2050	2480	3490	3630	3350
MIN	617	360	395	555	430	636	673	1050	2070	2120	3210	616
AC-FT	54030	42340	42360	40620	33540	45250	57990	98260	132500	186000	211100	108600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1895 - 1994, BY WATER YEAR (WY)

	MEAN	1216	1106	919	924	1014	1166	1860	3298	3209	2672	2337	1658
MAX	1708	2191	1223	1171	1472	2911	4578	9274	14420	9963	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	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1895 - 1994
ANNUAL TOTAL	479176	530642	--
ANNUAL MEAN	1313	1454	1629
HIGHEST ANNUAL MEAN	--	--	3110
LOWEST ANNUAL MEAN	--	--	935
HIGHEST DAILY MEAN	4440	Jun 4	20300
LOWEST DAILY MEAN	360	Nov 25	140
ANNUAL SEVEN-DAY MINIMUM	477	Dec 18	324
INSTANTANEOUS PEAK FLOW	--	--	23800
INSTANTANEOUS PEAK STAGE	--	5.57a	10.45b
ANNUAL RUNOFF (AC-FT)	950400	1053000	1180000
10 PERCENT EXCEEDS	2410	3320	3780
50 PERCENT EXCEEDS	869	809	1300
90 PERCENT EXCEEDS	607	616	700

a Backwater from ice.

b Site and datum then in use.

PLATTE RIVER BASIN

06652700 GLEND0 RESERVOIR NEAR GLEND0, 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 is probably 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 development of power.

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 (since appreciable storage was attained), 15,140 acre-ft, Sept. 28, 1966, elevation, 4,548.10 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 422,000 acre-ft, Apr. 27, 29, 30, May 1-7, maximum elevation, 4,626.54 ft, Apr. 30; minimum daily contents, 99,000 acre-ft, Sept. 23-26, elevation, 4,580.05 ft, Sept. 23-26.

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

4,580	98,800	4,600	202,000	4,620	358,000
4,590	144,000	4,610	274,000	4,630	459,000

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123000	174000	216000	259000	298000	333000	379000	422000	354000	309000	193000	114000
2	124000	176000	218000	259000	299000	336000	380000	422000	355000	302000	190000	112000
3	126000	177000	220000	259000	299000	337000	381000	422000	357000	296000	187000	111000
4	127000	178000	222000	261000	300000	340000	382000	422000	361000	289000	184000	109000
5	129000	180000	223000	262000	301000	341000	384000	422000	363000	287000	182000	109000
6	131000	181000	224000	264000	303000	343000	385000	422000	365000	287000	179000	108000
7	132000	183000	225000	265000	304000	345000	386000	422000	366000	286000	177000	108000
8	134000	184000	227000	266000	305000	346000	388000	421000	366000	285000	175000	108000
9	135000	186000	228000	268000	305000	348000	389000	421000	367000	283000	173000	108000
10	137000	187000	230000	269000	306000	349000	391000	420000	369000	280000	170000	108000
11	139000	189000	231000	270000	308000	351000	392000	418000	371000	277000	168000	108000
12	140000	190000	223000	272000	309000	352000	393000	415000	372000	274000	165000	108000
13	141000	192000	234000	273000	311000	353000	395000	411000	374000	271000	162000	108000
14	143000	194000	237000	275000	312000	355000	396000	407000	374000	268000	160000	107000
15	146000	195000	237000	276000	312000	356000	397000	403000	374000	264000	157000	107000
16	149000	197000	239000	278000	314000	357000	398000	399000	374000	262000	154000	106000
17	151000	199000	241000	279000	316000	358000	400000	394000	371000	260000	152000	105000
18	153000	201000	241000	280000	318000	359000	402000	391000	368000	257000	149000	103000
19	155000	203000	242000	281000	320000	361000	404000	386000	364000	256000	147000	102000
20	157000	206000	243000	283000	322000	362000	406000	383000	359000	254000	144000	101000
21	159000	207000	243000	284000	323000	364000	408000	380000	354000	253000	142000	100000
22	160000	207000	244000	285000	324000	365000	410000	376000	351000	250000	139000	99200
23	162000	208000	245000	287000	326000	367000	413000	373000	347000	247000	136000	99000
24	163000	209000	246000	288000	327000	368000	416000	370000	343000	243000	134000	99000
25	165000	210000	247000	290000	328000	369000	419000	367000	340000	236000	130000	99000
26	166000	210000	248000	291000	329000	371000	420000	364000	336000	230000	128000	99000
27	167000	210000	249000	292000	330000	372000	422000	362000	331000	222000	126000	99200
28	169000	211000	253000	293000	331000	373000	421000	360000	326000	213000	124000	99600
29	170000	212000	255000	295000	---	374000	422000	357000	318000	207000	121000	99600
30	171000	214000	256000	297000	---	376000	422000	356000	315000	201000	118000	99600
31	173000	---	258000	297000	---	377000	---	354000	---	197000	116000	---
MAX	173000	214000	258000	297000	331000	377000	422000	422000	374000	309000	193000	114000
MIN	123000	174000	216000	259000	298000	333000	379000	354000	315000	197000	116000	99000
(#)	4,595.22	4,601.79	4,607.91	4,612.92	4,616.97	4,621.97	4,626.54	4,619.55	4,615.06	4,599.12	4,584.12	4,580.20
(*)	+52,000	+41,000	+44,000	+39,000	+34,000	+46,000	+45,000	-68,000	-39,000	-118,000	-81,000	-16,000

CAL YR 1993 MAX 488000 MIN 114000 (*) +57,000

WTR YR 1994 MAX 422000 MIN 99000 (*) -21,400

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

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

06652800 NORTH PLATTE RIVER BELOW GLEND0 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 is probably 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: Nov. 23-27, Dec. 5-7, 14, 15, 17-25, Jan. 6-10, 12, 17-24, Jan. 28 to Feb. 9, and Feb. 12-15, 23-26. Records excellent 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.

(See sta 06652700.) Natural flow of stream affected by transbasin diversions, storage reservoirs, power development, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

COOPERATION.--Twenty-five discharge measurements provided by the Bureau of Reclamation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	28	29	34	27	31	28	1270	1350	5210	4720	4110
2	38	28	29	34	28	31	27	1270	1320	5290	4670	3790
3	41	28	29	33	30	31	28	1210	1260	5340	4650	3560
4	41	27	29	32	32	30	28	1190	1120	4940	4600	3450
5	38	27	28	32	33	30	28	1190	1090	1670	4590	3550
6	36	28	28	32	32	31	27	1210	1080	1480	4630	3480
7	35	28	29	32	31	29	29	1290	1040	1500	4660	3250
8	36	28	29	33	32	30	27	1410	1060	1850	4650	2910
9	33	28	29	34	34	30	26	2080	1180	5080	4520	2560
10	33	28	29	35	35	30	26	2740	1250	4900	4570	2610
11	33	29	29	35	34	30	29	2970	1270	4880	4800	2590
12	33	31	30	34	33	30	33	3680	1340	4870	4790	2240
13	33	30	30	34	32	30	39	4000	1460	4860	4770	2270
14	33	30	30	33	32	30	39	3800	2070	4830	4720	2230
15	33	29	30	33	31	31	38	3640	3060	4370	4640	2210
16	32	31	31	32	31	31	38	3680	3840	4330	4640	2060
17	33	29	31	31	31	30	38	3790	4300	4400	4670	1920
18	35	29	32	31	30	30	37	3760	4600	4310	4830	1910
19	34	28	32	32	30	30	45	3510	4860	4250	4840	1880
20	32	28	32	32	29	29	40	3460	4920	4140	4830	1620
21	32	29	32	33	30	30	40	3430	4330	4140	4820	1160
22	31	29	33	33	29	30	39	3500	3740	5020	4800	806
23	31	27	33	34	29	29	39	3520	3520	5770	4760	699
24	30	25	34	33	29	29	39	3400	4130	6110	4680	614
25	30	25	35	33	30	30	421	3230	4440	7460	4570	611
26	30	27	35	33	30	30	851	2950	5010	7450	4560	716
27	30	29	35	33	31	30	1160	2860	5260	7420	4550	807
28	30	32	35	31	32	31	1280	2780	5330	7370	4560	811
29	29	31	36	30	---	30	1270	2730	5190	5210	4510	812
30	28	30	36	31	---	30	1270	2260	5080	4680	4390	876
31	29	---	35	28	---	30	---	1730	---	4710	4350	---
TOTAL	1028	856	974	1010	867	933	7059	83540	89500	147840	144340	62112
MEAN	33.2	28.5	31.4	32.6	31.0	30.1	235	2695	2983	4769	4656	2070
MAX	41	32	36	35	35	31	1280	4000	5330	7460	4840	4110
MIN	28	25	28	28	27	29	26	1190	1040	1480	4350	611
AC-FT	2040	1700	1930	2000	1720	1850	14000	165700	177500	293200	286300	123200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1994, BY WATER YEAR (WY)												
MEAN	70.4	30.7	15.0	12.7	112	493	1138	2151	2672	4871	4953	2555
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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1958 - 1994
ANNUAL TOTAL	445104.7	540059	--
ANNUAL MEAN	1219	1480	1601
HIGHEST ANNUAL MEAN	--	--	3126
LOWEST ANNUAL MEAN	--	--	920
HIGHEST DAILY MEAN	7600	7460	10300
LOWEST DAILY MEAN	7.1	25	.41
ANNUAL SEVEN-DAY MINIMUM	7.4	27	.64
INSTANTANEOUS PEAK FLOW	--	7500	10300
INSTANTANEOUS PEAK STAGE	--	9.97	11.16
ANNUAL RUNOFF (AC-FT)	882900	1071000	1160000
10 PERCENT EXCEEDS	4410	4710	4910
50 PERCENT EXCEEDS	41	35	220
90 PERCENT EXCEEDS	9.0	29	2.0

PLATTE RIVER BASIN

06653300 HORSESHOE CREEK NEAR CASSA, WY

LOCATION.--Lat 42°27'57", long 105°04'22", SE¹/₄ NW¹/₄ SE¹/₄ sec.24, T.29 N., R.69 W., Platte County, Hydrologic Unit 10180008, on right bank on downstream side of bridge on Horseshoe Creek Road, 3.3 mi southwest of Glendo, and 3.5 mi upstream from I-25.

DRAINAGE AREA.--195 mi².

PERIOD OF RECORD.--October 1961 to September 1968, August 1988 to current year. Low-flow records at current site may not be equivalent to site used prior to Oct. 1, 1968, because of undetermined channel-flow loss or gain between sites.

REVISED RECORDS.--WDR WY-88-1: Drainage area. WDR WY-91-1: 1990 (M).

GAGE.--Water-stage recorder. Elevation of gage is 4,700 ft above sea level, from topographic map. October 1961 to September 1968 at site 2.2 mi upstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by diversions for irrigation and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	11	11	8.1	7.2	9.3	21	56	23	20	6.2	3.3
2	11	11	11	8.2	7.3	8.7	21	55	21	19	5.9	3.4
3	11	11	11	9.3	6.9	9.1	19	53	22	17	5.8	3.1
4	11	11	11	9.1	7.0	10	21	41	21	17	5.6	2.6
5	11	11	11	9.6	7.6	12	24	37	19	16	5.3	2.2
6	11	11	10	10	7.5	15	24	39	20	15	5.0	2.1
7	10	11	11	7.8	8.2	17	26	40	19	16	4.2	1.9
8	11	11	10	9.7	6.5	15	25	37	19	16	3.9	1.7
9	11	11	9.5	10	7.2	14	25	34	19	15	4.2	1.6
10	11	11	9.7	9.8	8.7	14	26	28	19	13	4.4	1.5
11	11	10	10	10	8.4	15	26	25	18	12	4.2	1.2
12	11	11	10	9.3	7.9	15	22	24	17	12	3.9	1.1
13	12	12	10	9.9	7.8	15	19	27	16	12	4.2	1.1
14	11	11	10	9.7	9.3	15	18	32	15	14	3.6	1.1
15	11	11	9.8	9.4	8.5	18	16	31	14	13	3.5	1.1
16	11	11	10	10	8.7	20	24	28	14	12	3.2	1.2
17	11	11	9.7	9.6	8.5	21	21	27	14	13	3.3	1.2
18	12	10	8.6	8.3	8.6	19	24	27	13	12	3.2	1.2
19	12	11	9.6	9.8	8.1	22	22	23	13	12	3.2	1.2
20	13	11	8.6	9.3	8.0	25	25	27	13	11	3.5	1.3
21	13	11	9.3	9.1	7.8	24	33	29	13	10	3.5	1.5
22	13	11	8.9	8.7	8.1	24	35	28	13	9.1	3.6	1.7
23	13	12	8.7	8.4	7.7	23	31	35	13	9.1	3.5	1.7
24	13	11	8.8	8.1	5.9	21	28	33	13	8.9	3.5	1.8
25	12	11	9.7	8.1	5.8	19	37	30	13	8.3	3.5	1.9
26	12	12	9.1	8.5	8.2	18	58	28	13	7.8	3.5	1.7
27	12	11	8.7	8.1	9.0	16	54	28	14	7.6	3.0	1.8
28	12	11	8.7	7.8	9.0	13	52	28	20	7.1	3.1	2.0
29	12	11	8.4	8.1	---	16	51	27	21	6.6	2.9	2.2
30	12	11	8.3	7.0	---	17	52	24	21	6.0	2.8	2.0
31	11	---	8.5	6.9	---	19	---	22	---	6.2	2.8	---
TOTAL	359	331	298.6	275.7	219.4	519.1	880	1003	503	373.7	122.0	53.4
MEAN	11.6	11.0	9.63	8.89	7.84	16.7	29.3	32.4	16.8	12.1	3.94	1.78
MAX	13	12	11	10	9.3	25	58	56	23	20	6.2	3.4
MIN	10	10	8.3	6.9	5.8	8.7	16	22	13	6.0	2.8	1.1
AC-FT	712	657	592	547	435	1030	1750	1990	998	741	242	106

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1994, BY WATER YEAR (WY)

MEAN	5.73	6.43	5.72	5.06	5.60	10.3	46.5	121	123	25.0	8.61	4.91
MAX	25.9	17.0	11.3	10.5	9.40	21.7	131	361	345	101	21.4	14.3
(WY)	1966	1966	1992	1968	1968	1993	1968	1965	1965	1967	1967	1965
MIN	.79	.81	.50	.80	2.06	2.51	10.6	16.7	11.1	1.91	.78	.063
(WY)	1990	1990	1964	1990	1990	1964	1989	1992	1989	1989	1989	1966

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1962 - 1994
ANNUAL TOTAL	16335.8	4937.9	--
ANNUAL MEAN	44.8	13.5	30.7
HIGHEST ANNUAL MEAN	--	--	68.7
LOWEST ANNUAL MEAN	--	--	5.51
HIGHEST DAILY MEAN	348	May 6	2790
LOWEST DAILY MEAN	3.8	Feb 16	.00
ANNUAL SEVEN-DAY MINIMUM	4.4	Feb 14	.00
INSTANTANEOUS PEAK FLOW	--	--	7850a
INSTANTANEOUS PEAK STAGE	--	3.20	8.42b
ANNUAL RUNOFF (AC-FT)	32400	9790	22230
10 PERCENT EXCEEDS	153	26	61
50 PERCENT EXCEEDS	12	11	8.5
90 PERCENT EXCEEDS	5.1	3.3	1.5

a From rating curve extended above 1,190 ft³/s on basis of slope-conveyance study.

b Site and datum then in use.

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LOCATION.--Lat 42°27'09", long 104°58'11", in SE¹/₄ NE¹/₄ SE¹/₄ sec.26, T.29 N., R.68 W., Platte County, Hydrologic Unit 10180008, on left bank 0.6 mi upstream from mouth and 4.8 mi southeast of Glendo.

DRAINAGE AREA.--211 mi².

PERIOD OF RECORD.--April 1916 to September 1918, April 1921 to September 1924, May 1928 to November 1932, April to September 1933, April 1935 to September 1970, and August 1988 to current year. Monthly discharge only for some periods, published in WSP 1310. Records for April to September 1919, published in WSP 469 and 506, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 1730: Drainage area. WDR WY-70-1: 1965 (M).

GAGE.--Water-stage recorder. Elevation of gage is 4,500 ft above sea level from topographic map. Prior to June 9, 1935, non-recording gages at sites about 2 mi upstream at different datums. June 9, 1935 to September 1970 at same site and datum.

REMARKS.--Estimated daily discharges: Nov. 14, 23-26, Dec. 18-20, 24, Jan. 7, 18, Jan. 30 to Feb. 10, Feb. 12, 13, 25, 26, and May 10-30. Records fair except those for estimated daily discharges, which are poor. Diversions for irrigation of about 7,600 acres upstream from station.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	12	13	11	10	12	12	37	12	4.2	6.2	3.5
2	9.7	11	13	11	9.5	12	13	36	11	3.8	5.8	3.9
3	9.9	11	13	11	9.2	12	13	32	11	3.7	5.9	4.0
4	9.6	11	13	11	9.4	12	12	29	11	3.8	5.9	3.9
5	9.6	11	14	12	10	13	14	25	11	4.0	5.5	3.2
6	9.5	11	13	12	11	14	15	22	11	3.3	5.2	3.1
7	9.6	11	13	10	10	15	16	23	8.4	3.5	4.9	3.0
8	11	10	13	11	9.5	16	17	23	3.8	3.6	4.6	3.1
9	11	10	13	11	10	16	16	22	3.7	4.1	4.9	2.7
10	11	10	13	11	10	16	16	21	5.4	4.0	4.8	2.6
11	11	10	13	12	11	16	16	17	5.6	4.2	4.4	2.5
12	11	11	13	12	10	17	12	14	4.8	4.3	4.7	2.4
13	11	11	13	11	10	16	9.5	16	5.1	4.9	5.2	2.5
14	13	10	12	12	10	17	5.9	18	4.7	5.4	4.4	2.4
15	13	11	13	11	11	17	5.9	17	4.1	4.9	4.2	2.4
16	13	11	13	11	11	19	6.2	16	3.6	5.2	4.0	2.4
17	13	11	12	11	10	21	7.1	15	5.2	6.5	3.8	2.3
18	13	11	11	10	10	22	6.7	15	4.8	6.4	3.6	2.1
19	12	11	10	11	10	23	2.3	13	2.6	6.4	3.4	2.0
20	12	12	10	11	9.7	24	2.3	14	3.2	6.4	3.3	2.1
21	12	13	11	11	9.7	25	2.5	16	3.8	6.3	3.1	2.1
22	12	13	11	11	10	25	2.7	15	3.9	5.8	3.0	2.4
23	12	12	11	11	11	19	3.0	17	4.3	5.2	2.7	2.2
24	12	10	10	11	11	17	3.4	30	4.2	5.5	2.9	2.1
25	12	9.5	11	11	9.5	15	4.8	20	4.1	7.0	2.7	2.2
26	12	12	11	11	10	14	21	16	4.2	6.0	2.7	2.4
27	12	14	11	12	11	12	29	15	3.4	4.9	2.7	2.0
28	12	14	11	11	12	11	30	15	4.2	4.9	2.8	2.1
29	12	14	10	11	---	11	30	15	4.2	4.9	2.7	2.0
30	12	13	10	9.5	---	11	31	13	4.3	5.3	2.7	2.0
31	12	---	11	8.9	---	11	---	12	---	5.9	3.0	---
TOTAL	354.9	341.5	369	341.4	285.5	501	375.3	609	172.6	154.3	125.7	77.6
MEAN	11.4	11.4	11.9	11.0	10.2	16.2	12.5	19.6	5.75	4.98	4.05	2.59
MAX	13	14	14	12	12	25	31	37	12	7.0	6.2	4.0
MIN	9.5	9.5	10	8.9	9.2	11	2.3	12	2.6	3.3	2.7	2.0
AC-FT	704	677	732	677	566	994	744	1210	342	306	249	154

MEAN	5.75	6.46	6.21	5.73	6.07	9.58	54.9	125	86.7	16.6	5.43	4.68
MAX	29.7	20.5	17.0	16.3	15.0	25.3	185	455	405	104	23.3	16.6
(WY)	1966	1966	1966	1966	1923	1993	1924	1917	1965	1967	1967	1938
MIN	1.00	1.00	1.23	1.15	.98	1.48	.020	1.56	1.10	.52	.000	.000
(WY)	1922	1922	1990	1990	1990	1990	1935	1954	1940	1918	1918	1918

SUMMARY STATISTICS			FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1916 - 1994	
ANNUAL TOTAL	15327.3		3707.8		--			
ANNUAL MEAN	42.0		10.2		27.9			
HIGHEST ANNUAL MEAN	--		--		84.2			1917
LOWEST ANNUAL MEAN	--		--		2.11			1940
HIGHEST DAILY MEAN	281	May 6	37	May 1	3000			May 15 1965
LOWEST DAILY MEAN	1.1	Feb 28	2.0	Several days	.00			Jul 9 1918
ANNUAL SEVEN-DAY MINIMUM	1.2	Feb 28	2.1	Sep 24	.00			Jul 9 1918
INSTANTANEOUS PEAK FLOW	--		168	May 24	11900a			May 30 1935
INSTANTANEOUS PEAK STAGE	--		4.02	May 24	8.80b			May 30 1935
ANNUAL RUNOFF (AC-FT)	30400		7350		20190			
10 PERCENT EXCEEDS	138		16		73			
50 PERCENT EXCEEDS	13		11		5.8			
90 PERCENT EXCEEDS	5.3		3.0		1.8			

a From rating curve extended above 750 ft³/s on basis of slope-area measurement of peak flow.

b From floodmarks, present site and datum.

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 is probably noncontributing.

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 development of power.

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, 36,000 acre-ft, June 21, elevation, 4,415.76 ft; minimum daily contents, 566 acre-ft, Oct. 4, elevation, 4,381.51 ft.

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

4,380	375	4,395	5,360	4,410	24,300
4,385	1,200	4,400	9,690	4,415	34,300
4,390	2,710	4,405	16,000	4,420	45,600

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4400	4630	8390	11600	14600	17200	19900	22500	35700	34700	33400	32000
2	2670	4750	8520	11700	14700	17300	20000	23200	35600	34500	33400	32300
3	1030	4900	8650	11800	14800	17400	20000	23700	35700	34200	33300	32700
4	566	5010	8770	11900	14900	17500	20100	24200	35900	34100	33000	33000
5	714	5110	8870	12000	15000	17600	20200	24700	35900	27900	32800	33300
6	948	5230	8970	12100	15100	17700	20300	25200	35800	20300	32500	33600
7	1140	5350	9100	12200	15200	17800	20400	25800	35700	12500	32200	33900
8	1340	5470	9210	12300	15300	17900	20500	26500	35600	4580	31900	33700
9	1530	5580	9300	12400	15400	17900	20500	26800	35400	2300	31400	32500
10	1700	5690	9420	12500	15500	18000	20600	27200	35300	2220	30700	31300
11	1850	5820	9520	12600	15600	18100	20700	27800	35300	2070	30600	30000
12	2000	6020	9640	12700	15600	18200	20800	28100	35200	1950	30500	28200
13	2140	6160	9730	12800	15700	18300	20900	29100	35100	1830	30500	26400
14	2280	6310	9810	12900	15800	18400	21000	30300	34700	1710	30500	24600
15	2420	6450	9910	13000	15900	18400	21100	31400	34300	1330	30400	22900
16	2560	6580	10100	13100	16000	18500	21200	32400	34200	655	30300	21400
17	2700	6720	10100	13200	16100	18700	21200	33500	34400	675	30200	19800
18	2870	6860	10200	13300	16200	18700	21300	34500	34700	795	30400	18200
19	3030	6990	10300	13400	16300	18800	21400	34700	34900	854	30600	16600
20	3180	7120	10400	13500	16400	18900	21500	34800	35500	854	30800	15200
21	3320	7240	10500	13600	16500	19000	21600	34800	36000	585	31000	13800
22	3450	7360	10600	13700	16600	19000	21700	34700	35900	1480	31300	12500
23	3570	7470	10700	13800	16700	19200	21700	34900	35200	5170	31500	11000
24	3700	7560	10800	13900	16700	19200	21200	35200	34900	8080	31800	9330
25	3810	7640	10900	14000	16800	19300	20100	35400	34800	13700	31800	7530
26	3920	7750	11000	14100	16900	19400	19800	35400	34800	19500	31700	5680
27	4050	7870	11100	14200	17000	19500	20000	35400	35100	25300	31600	4580
28	4170	7990	11200	14300	17100	19600	20600	35300	35100	31200	31500	3970
29	4270	8130	11300	14400	---	19600	21200	35200	35300	33800	31400	3510
30	4390	8270	11400	14500	---	19700	21900	35400	35000	33700	31400	3050
31	4510	---	11500	14600	---	19800	---	35600	---	33500	31500	---
MAX	4510	8270	11500	14600	17100	19800	21900	35600	36000	34700	33400	33900
MIN	566	4630	8390	11600	14600	17200	19800	22500	34200	585	30200	3050
(#)	4,393.66	4,398.58	4,401.62	4,403.99	4,405.73	4,407.40	4,408.63	4,415.59	4,415.32	4,414.63	4,413.66	4,390.82
(*)	-1,640	+3,760	+3,230	+3,100	+2,500	+2,700	+2,100	+13,700	-600	-1,500	-2,000	-28,000

CAL YR 1993 MAX 44300 MIN 566 (*) +3,350

WTR YR 1994 MAX 36000 MIN 566 (*) -3,100

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

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

06656000 NORTH PLATTE RIVER BELOW GUERNSEY RESERVOIR, WY

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.

DRAINAGE AREA.--16,237 mi², of which 1,216 mi² is probably non-contributing.

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.

REVISED RECORDS.--WSP 1310: 1903-4, 1924. WDR WY-76-1: Drainage area.

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.

REMARKS.--Estimated daily discharges: Nov. 12, 13, 24-29. Records excellent for flows above 1,000 ft³/s and fair below, except those for estimated daily discharges, which are poor. Flow completely regulated by Guernsey Reservoir since 1927. (See sta 06655500.) Small diversions for irrigation between this station and diversion dam at Whalen. Natural flow of stream affected by transbasin diversions, storage reservoirs, power development, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

COOPERATION.--Twenty-one discharge measurements provided by the Bureau of Reclamation and three discharge measurements provided by the Wyoming State Engineer's Office.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	899	3.1	2.9	6.4	8.3	11	9.1	1010	1430	5250	4670	3970
2	896	2.7	3.9	6.3	8.3	12	8.8	1010	1380	5350	4620	3650
3	844	2.4	4.2	6.3	8.3	13	9.0	1020	1250	5420	4600	3470
4	314	1.9	4.3	6.3	8.3	13	9.4	998	1130	5450	4610	3300
5	10	1.9	3.9	7.0	8.3	14	9.9	966	1100	5330	4620	3360
6	7.9	1.9	3.8	7.1	7.7	14	9.9	974	1080	5330	4660	3340
7	7.3	2.1	4.3	6.9	7.2	15	10	975	1050	5400	4680	3240
8	7.0	2.0	4.7	6.9	7.1	15	9.7	1110	1050	5300	4680	3210
9	6.6	1.9	4.7	6.9	7.0	14	9.6	1760	1170	5200	4700	3210
10	6.6	2.0	4.2	6.9	8.1	14	9.9	2400	1250	4970	4750	3260
11	6.9	2.2	4.2	7.0	11	13	9.9	2640	1250	4940	4760	3330
12	6.9	2.1	4.6	6.9	11	14	9.7	3350	1310	4940	4740	3290
13	7.6	2.1	4.3	6.9	11	13	9.6	3550	1440	4950	4700	3210
14	8.3	2.2	4.6	7.5	10	13	9.5	3290	2000	4950	4650	3170
15	8.3	1.9	4.7	7.7	9.8	13	9.2	3140	2900	4720	4590	3040
16	8.9	1.9	5.4	7.9	9.9	13	9.5	3180	3590	4420	4590	2910
17	9.2	1.9	5.4	7.5	9.9	13	9.7	3270	3990	4380	4600	2780
18	9.9	2.1	5.1	7.7	10	12	9.9	3360	4310	4250	4610	2770
19	9.2	1.9	5.3	8.2	9.9	11	10	3470	4560	4210	4620	2740
20	9.4	1.9	5.7	7.5	9.9	9.8	12	3510	4580	4180	4620	2470
21	9.1	2.1	5.7	7.5	9.9	11	10	3490	4180	4060	4620	2000
22	9.1	2.2	5.7	7.5	10	11	10	3550	3930	4150	4620	1630
23	9.1	2.4	6.0	7.5	11	11	9.9	3570	3770	4260	4540	1520
24	9.5	2.2	5.8	7.9	11	9.8	366	3470	3970	4410	4520	1460
25	8.9	2.1	5.7	8.3	10	9.8	644	3290	4290	4590	4550	1430
26	8.7	2.1	5.7	8.3	10	9.5	819	3060	4750	4560	4550	1430
27	8.7	2.2	5.7	8.1	10	9.1	939	2950	4960	4520	4550	1260
28	8.4	2.2	5.7	8.1	11	9.6	995	2910	5150	4470	4560	1020
29	6.8	2.3	5.7	9.1	---	9.3	996	2850	5160	4550	4510	951
30	5.8	2.7	5.7	8.8	---	9.6	990	2340	5100	4610	4350	945
31	4.4	---	6.4	8.3	---	9.1	---	1810	---	4680	4240	---
TOTAL	3171.5	64.6	154.0	231.2	263.9	368.6	5973.2	78273	87080	147800	142680	77366
MEAN	102	2.15	4.97	7.46	9.42	11.9	199	2525	2903	4768	4603	2579
MAX	899	3.1	6.4	9.1	11	15	996	3570	5160	5450	4760	3970
MIN	4.4	1.9	2.9	6.3	7.0	9.1	8.8	966	1050	4060	4240	945
AC-FT	6290	128	305	459	523	731	11850	155300	172700	293200	283000	153500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1901 - 1994, BY WATER YEAR (WY)

	MEAN	552	252	181	168	209	460	1154	2958	4222	4751	4195	2653
MAX	5690	2610	1000	800	900	3837	5680	8585	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	1304	400	196	
(WY)	1990	1976	1963	1990	1991	1991	1957	1990	1982	1902	1902	1902	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1901 - 1994
ANNUAL TOTAL	470495.2	543426.0	--
ANNUAL MEAN	1289	1489	1824
HIGHEST ANNUAL MEAN	--	--	3556
LOWEST ANNUAL MEAN	--	--	832
HIGHEST DAILY MEAN	5520	Jul 11	30000
LOWEST DAILY MEAN	1.9	Nov 4-6, 9, 15-17, 19-20	.00
ANNUAL SEVEN-DAY MINIMUM	2.0	Nov 4	.00
INSTANTANEOUS PEAK FLOW	--	5530	30000a
INSTANTANEOUS PEAK STAGE	--	6.34	11.50b
ANNUAL RUNOFF (AC-FT)	933200	1078000	1321000
10 PERCENT EXCEEDS	4470	4620	4960
50 PERCENT EXCEEDS	8.7	11	744
90 PERCENT EXCEEDS	3.4	4.2	4.6

a From rating curve extended above 13,000 ft³/s.

b From floodmark, site and datum then in use.

LOCATION (REVISED).--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".

REVISED RECORDS.--WSP 1310: 1924. WDR WY-76-1: Drainage area.

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.--No estimated daily discharges. Records good except those for October to April, which are fair. 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 satellite telemeter at station.

COOPERATION.--Two discharge measurements provided by the Bureau of Reclamation and sixteen discharge measurements provided by the Wyoming State Engineer's Office.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	136	20	6.0	7.8	5.5	7.1	4.5	16	424	1580	1250	780
2	124	19	4.8	8.0	5.4	6.6	3.7	17	380	1660	1210	650
3	117	17	4.1	7.2	4.9	4.9	4.4	18	330	1710	1190	577
4	188	16	3.7	7.0	5.6	5.0	4.4	18	258	1770	1180	421
5	191	16	3.6	8.1	5.8	5.8	6.2	17	245	1640	1190	513
6	105	15	3.5	8.8	5.9	5.6	5.9	15	245	1630	1200	540
7	88	14	4.0	5.7	4.0	5.9	5.9	15	255	1700	1200	530
8	83	13	4.5	6.7	3.2	7.2	7.0	17	247	1610	1190	496
9	68	11	4.5	8.7	3.1	8.4	6.5	61	326	1540	1260	508
10	58	9.6	3.9	9.1	4.9	8.4	5.9	424	422	1320	1310	523
11	55	7.3	3.7	9.2	6.7	7.4	6.1	522	422	1310	1310	572
12	54	11	3.6	8.5	6.5	6.5	6.6	1050	475	1350	1290	547
13	55	11	3.7	9.4	10	6.2	4.5	1100	465	1370	1270	480
14	51	9.1	4.3	6.9	10	6.0	3.8	889	596	1390	1220	447
15	49	7.5	4.1	6.0	9.0	5.6	5.0	741	863	1410	1150	451
16	51	6.0	5.6	6.6	7.9	6.4	3.2	744	1190	1200	1130	455
17	48	5.4	5.4	5.5	7.1	6.3	3.0	751	1210	1220	1130	465
18	47	4.9	4.5	4.9	7.2	6.1	4.6	719	1200	1110	1130	468
19	43	4.9	5.7	7.7	5.9	6.7	4.3	692	1340	1110	1130	452
20	43	4.9	5.6	8.3	5.8	5.0	2.6	703	1360	1080	1140	447
21	39	4.4	6.5	7.6	8.2	5.2	5.5	701	1110	950	1130	507
22	36	3.8	7.7	7.0	5.5	4.2	2.6	736	982	1010	1120	233
23	35	3.5	7.9	6.4	6.3	5.1	2.4	763	829	1030	1050	140
24	34	2.7	5.4	6.5	6.1	5.8	5.6	794	918	1140	1040	56
25	33	2.6	9.3	6.5	3.0	5.4	75	688	1170	1290	1070	30
26	34	2.9	8.4	5.9	6.5	5.4	81	531	1560	1280	1080	31
27	33	3.7	8.4	5.3	7.4	6.0	21	485	1670	1200	1070	25
28	30	4.8	8.4	3.5	7.1	5.8	17	453	1680	1130	1080	33
29	29	5.8	7.7	6.1	---	5.9	17	421	1570	1190	1060	36
30	28	6.5	7.9	4.7	---	5.5	16	360	1490	1220	986	37
31	26	---	8.3	5.0	---	5.1	---	392	---	1260	925	---
TOTAL	2011	263.3	174.7	214.6	174.5	186.5	341.2	14853	25232	41410	35691	11450
MEAN	64.9	8.78	5.64	6.92	6.23	6.02	11.4	479	841	1336	1151	382
MAX	191	20	9.3	9.4	10	8.4	81	1100	1680	1770	1310	780
MIN	26	2.6	3.5	3.5	3.0	4.2	2.4	15	245	950	925	25
AC-FT	3990	522	347	426	346	370	677	29460	50050	82140	70790	22711

MEAN	198	102	65.6	58.2	85.4	257	460	1250	1963	1863	1408	701
MAX	1389	1130	405	494	604	3885	5410	6175	14360	8330	5465	3976
(WY)	1918	1987	1930	1927	1930	1974	1924	1924	1917	1917	1983	1983
MIN	4.20	.71	.30	.24	.012	.000	2.83	13.6	126	559	86.6	43.8
(WY)	1967	1967	1967	1962	1967	1976	1954	1990	1982	1934	1934	1934

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR			FOR 1994 WATER YEAR			WATER YEARS 1917 - 1994*		
ANNUAL TOTAL	119515.6			132001.8			--		
ANNUAL MEAN	327			362			704		
HIGHEST ANNUAL MEAN	--			--			2992 1917		
LOWEST ANNUAL MEAN	--			--			178 1954		
HIGHEST DAILY MEAN	1900	Jul	7	1770	Jul	4	19500	Jun	28 1917
LOWEST DAILY MEAN	1.3	Jan	15	2.4	Apr	23	.00	Many days,	
								several years#	
ANNUAL SEVEN-DAY MINIMUM	1.5	Jan	13	3.4	Nov	21	.00	Jan	8 1962
INSTANTANEOUS PEAK FLOW	--			1820	Jul	6	22000a	Jun	26 1955#
INSTANTANEOUS PEAK STAGE	--			6.71	Jul	6	9.85b	Jun	26 1955#
ANNUAL RUNOFF (AC-FT)	237100			261800			510300		
10 PERCENT EXCEEDS	1220			1200			1850		
50 PERCENT EXCEEDS	13			18			145		
90 PERCENT EXCEEDS	2.8			4.5			3.5		

* Period prior to 1917 water year not used in computations, monthly and seasonal only.

For period of record through 1994.

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

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.

PERIOD OF RECORD.--April 1912 to September 1924, October 1926 to September 1927, October 1931 to current year (no winter records since 1972). Monthly discharge only for some periods, published in WSP 1310.

GAGE.--River: Water-stage recorder and concrete control. Datum of gage is 7,388.99 ft 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. 1-6. 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.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	51	196	576	69	42	51
2	---	---	---	---	---	---	56	209	597	67	55	51
3	---	---	---	---	---	---	56	218	612	70	56	55
4	---	---	---	---	---	---	61	212	581	84	50	50
5	---	---	---	---	---	---	61	213	554	78	42	36
6	---	---	---	---	---	---	66	261	515	68	39	27
7	---	---	---	---	---	---	67	372	477	66	39	24
8	---	---	---	---	---	---	62	497	428	70	32	23
9	---	---	---	---	---	---	64	466	338	64	33	22
10	---	---	---	---	---	---	67	521	281	64	38	22
11	---	---	---	---	---	---	64	592	238	55	39	31
12	---	---	---	---	---	---	59	680	233	57	36	38
13	---	---	---	---	---	---	63	712	224	50	33	36
14	---	---	---	---	---	---	75	760	204	50	39	37
15	---	---	---	---	---	---	79	711	184	51	39	34
16	---	---	---	---	---	---	85	714	171	52	34	34
17	---	---	---	---	---	---	107	814	160	52	28	37
18	---	---	---	---	---	---	128	768	149	47	26	34
19	---	---	---	---	---	---	146	695	151	45	26	34
20	---	---	---	---	---	---	179	716	160	44	28	34
21	---	---	---	---	---	---	213	648	200	45	29	36
22	---	---	---	---	---	---	265	622	225	43	28	36
23	---	---	---	---	---	---	325	606	234	46	28	40
24	---	---	---	---	---	---	395	559	179	53	26	37
25	---	---	---	---	---	---	468	545	136	50	23	36
26	---	---	---	---	---	---	334	558	111	45	22	37
27	---	---	---	---	---	---	242	541	96	45	20	35
28	---	---	---	---	---	---	226	558	82	46	22	33
29	---	---	---	---	---	---	210	579	81	42	39	31
30	---	---	---	---	---	---	196	541	78	42	47	31
31	---	---	---	---	---	---	---	535	---	40	61	---
TOTAL	---	---	---	---	---	---	4470	16619	8255	1700	1099	1062
MEAN	---	---	---	---	---	---	149	536	275	54.8	35.5	35.4
MAX	---	---	---	---	---	---	468	814	612	84	61	55
MIN	---	---	---	---	---	---	51	196	78	40	20	22
AC-FT	---	---	---	---	---	---	8870	32960	16370	3370	2180	2110

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

WATER YEARS 1912 - 1971

ANNUAL MEAN	--		171	
HIGHEST ANNUAL MEAN	--		319	1957
LOWEST ANNUAL MEAN	--		64.9	1934
HIGHEST DAILY MEAN	814	May 27	3320	Jun 14 1957
LOWEST DAILY MEAN	20	Aug 27	.00	May 1 1912
ANNUAL SEVEN-DAY MINIMUM	--		6.0	Oct 15 1913
INSTANTANEOUS PEAK FLOW	945	May 17	5060	Jun 10 1923#
ANNUAL RUNOFF (AC-FT)	--		123600	
10 PERCENT EXCEEDS	--		469	
50 PERCENT EXCEEDS	--		57	
90 PERCENT EXCEEDS	--		31	

* During period of operation
For period of record through 1994.

PLATTE RIVER BASIN

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.--No estimated daily discharges. Records good. Natural flow affected by diversion upstream from station to Cache la Poudre River basin through Wilson Supply ditch. Water imported upstream from station from Deadman Creek in Laramie River basin is rediverted through Wilson Supply ditch but is wasted down Sand Creek at times. Diversions for irrigation of about 170 acres upstream from station.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	3.9	21	38	2.7	.85	.41
2	---	---	---	---	---	---	4.1	21	30	2.5	2.7	.56
3	---	---	---	---	---	---	4.3	21	25	2.5	3.0	.65
4	---	---	---	---	---	---	5.8	19	22	2.3	2.0	.65
5	---	---	---	---	---	---	4.5	19	19	2.2	1.5	.56
6	---	---	---	---	---	---	3.9	23	16	2.0	1.1	.48
7	---	---	---	---	---	---	3.9	29	15	1.9	.95	.41
8	---	---	---	---	---	---	3.6	34	14	2.0	.75	.34
9	---	---	---	---	---	---	3.6	34	13	2.1	.75	.28
10	---	---	---	---	---	---	3.9	33	12	1.9	.75	.28
11	---	---	---	---	---	---	3.4	36	11	1.6	.75	.28
12	---	---	---	---	---	---	3.4	43	9.6	1.7	.75	.34
13	---	---	---	---	---	---	4.8	44	8.0	1.7	.95	.34
14	---	---	---	---	---	---	7.1	51	6.8	1.6	.75	.34
15	---	---	---	---	---	---	6.0	48	6.3	1.6	.65	.41
16	---	---	---	---	---	---	8.0	45	6.0	1.4	.56	.41
17	---	---	---	---	---	---	11	52	5.5	1.4	.48	.41
18	---	---	---	---	---	---	11	49	5.2	1.2	.41	.41
19	---	---	---	---	---	---	13	45	5.5	1.1	.34	.48
20	---	---	---	---	---	---	13	44	7.7	.95	.41	.56
21	---	---	---	---	---	---	15	40	9.6	.95	.41	.75
22	---	---	---	---	---	---	18	36	11	.95	.56	.95
23	---	---	---	---	---	---	22	30	13	.75	.48	1.1
24	---	---	---	---	---	---	28	28	9.9	.85	.41	1.1
25	---	---	---	---	---	---	34	28	6.8	.85	.34	1.1
26	---	---	---	---	---	---	30	32	5.2	.95	.28	.95
27	---	---	---	---	---	---	24	36	3.9	.95	.17	.95
28	---	---	---	---	---	---	23	33	3.2	.65	.28	.85
29	---	---	---	---	---	---	21	34	2.9	.56	.22	.85
30	---	---	---	---	---	---	20	30	2.7	.48	.17	.85
31	---	---	---	---	---	---	---	30	---	.41	.22	---
TOTAL	---	---	---	---	---	---	357.2	1068	343.8	44.70	23.94	18.05
MEAN	---	---	---	---	---	---	11.9	34.5	11.5	1.44	.77	.60
MAX	---	---	---	---	---	---	34	52	38	2.7	3.0	1.1
MIN	---	---	---	---	---	---	3.4	19	2.7	.41	.17	.28
AC-FT	---	---	---	---	---	---	709	2120	682	89	47	36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1971, BY WATER YEAR (WY)

	1969	1970	1971	1969	1970	1971	1969	1970	1971	1969	1970	1971
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

SUMMARY STATISTICS

	FOR 1994 WATER YEAR*	WATER YEARS 1969 - 1971
ANNUAL MEAN	--	12.7
HIGHEST ANNUAL MEAN	--	18.0
LOWEST ANNUAL MEAN	--	6.41
HIGHEST DAILY MEAN	52 May 17	193 Jun 15 1970
LOWEST DAILY MEAN	.17 Aug. 27,30	.13 Jul 26-28 1972#
ANNUAL SEVEN-DAY MINIMUM	--	.30 Sep 4 1969
INSTANTANEOUS PEAK FLOW	68 May 17	6710a Jul 19 1977#
INSTANTANEOUS PEAK STAGE	1.35 May 17	6.65b 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 1994.

a From slope-area measurement of peak flow.

b From floodmarks.

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 Fillmore, and 4.4 mi downstream from North Fork.

PERIOD OF RECORD.--July 1902 to September 1903 (published as "near Hatton"), May 1911 to November 1926, October 1932 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. 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. 1-3, 5-10. Records good except those for estimated daily discharges, which are poor. 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.--Records provided by Office of the Wyoming State Engineer and reviewed by Geological Survey.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	26	63	765	75	28	18
2	---	---	---	---	---	---	26	61	539	70	33	20
3	---	---	---	---	---	---	24	59	453	77	35	19
4	---	---	---	---	---	---	33	54	409	81	29	16
5	---	---	---	---	---	---	27	48	378	67	26	15
6	---	---	---	---	---	---	23	54	338	64	21	14
7	---	---	---	---	---	---	27	69	301	63	20	13
8	---	---	---	---	---	---	27	119	241	59	18	13
9	---	---	---	---	---	---	26	119	214	57	22	13
10	---	---	---	---	---	---	25	155	193	52	26	12
11	---	---	---	---	---	---	24	195	187	48	23	12
12	---	---	---	---	---	---	29	259	187	55	22	13
13	---	---	---	---	---	---	32	294	185	48	22	13
14	---	---	---	---	---	---	33	338	177	45	21	13
15	---	---	---	---	---	---	29	353	187	43	20	13
16	---	---	---	---	---	---	31	349	172	41	18	13
17	---	---	---	---	---	---	31	413	160	40	17	13
18	---	---	---	---	---	---	35	437	152	36	16	14
19	---	---	---	---	---	---	40	433	160	33	18	14
20	---	---	---	---	---	---	44	486	185	33	24	16
21	---	---	---	---	---	---	47	425	193	34	24	18
22	---	---	---	---	---	---	52	397	203	32	18	20
23	---	---	---	---	---	---	58	413	169	31	18	18
24	---	---	---	---	---	---	70	417	145	32	16	17
25	---	---	---	---	---	---	84	453	117	30	14	16
26	---	---	---	---	---	---	79	534	103	28	13	15
27	---	---	---	---	---	---	67	495	88	27	13	15
28	---	---	---	---	---	---	72	512	77	26	16	13
29	---	---	---	---	---	---	75	470	81	28	18	13
30	---	---	---	---	---	---	68	512	81	25	16	15
31	---	---	---	---	---	---	---	530	---	26	16	---
TOTAL	---	---	---	---	---	---	1264	9516	6840	1406	641	447
MEAN	---	42.1	---	---	---	---	42.1	307	228	45.4	20.7	14.9
MAX	---	---	534	---	84	---	84	534	765	81	35	20
MIN	---	---	---	---	---	---	23	48	77	25	13	12
AC-FT	---	---	---	---	---	---	2510	18870	13570	2790	1270	880

	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2
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WATER YEARS 1903 - 1971

ANNUAL MEAN	FOR 1954	WATER YEAR	WATER YEARS 1903 - 1971
HIGHEST ANNUAL MEAN	--		103
LOWEST ANNUAL MEAN	--		184
HIGHEST DAILY MEAN	765	Jun 1	32.7 1917
LOWEST DAILY MEAN	12	Sep 10,11	2400 1934
ANNUAL SEVEN-DAY MINIMUM	--		1.0 Jun 1 1914
INSTANTANEOUS PEAK FLOW	958	Jun 1	1.7 Sep 17-20 1913#
INSTANTANEOUS PEAK STAGE	3.74	Jun 1	1.7 Sep 15 1913
ANNUAL RUNOFF (AC-FT)	--		3450 Jun 10 1965#
10 PERCENT EXCEEDS	--		5.33 Jun 10 1965
50 PERCENT EXCEEDS	--		74370
90 PERCENT EXCEEDS	--		275
	--		31
	--		16

* During period of operation.

For period of record through 1994.

PLATTE RIVER BASIN

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 is probably 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: Oct. 1-4, Oct. 29 to Mar. 19, Mar. 27-30, July 13-18, July 26 to Aug. 3, Aug. 16-26, 29, Aug. 31 to Sept. 19, and Sept. 21-28. Records good except those greater than 200 ft³/s, which are fair and those for period of estimated daily discharges, which are poor. Natural flow of stream affected by transbasin diversions, storage reservoirs, diversion upstream from station for irrigation of about 54,700 acres, of which about 2,300 acres are downstream from station, and return flow from irrigated areas.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	58	61	49	38	63	106	168	158	20	5.0	2.0
2	40	64	60	49	39	73	93	138	209	17	4.2	1.8
3	35	70	59	49	40	74	86	126	270	16	5.5	1.6
4	35	80	58	49	44	72	81	123	321	15	10	1.4
5	36	74	57	50	47	72	81	114	236	15	11	1.4
6	44	70	60	50	50	68	81	106	192	13	8.7	1.2
7	57	65	62	49	49	71	81	91	154	12	6.0	1.0
8	65	62	64	49	48	72	76	86	132	12	5.5	1.0
9	70	60	65	49	47	75	76	106	111	12	5.5	.95
10	67	55	66	48	47	78	67	151	91	12	4.2	.80
11	63	54	64	48	46	80	65	215	70	12	3.9	.75
12	64	50	63	48	44	86	65	232	51	12	3.5	.70
13	74	48	62	48	44	90	63	249	41	12	3.6	.60
14	91	46	60	48	48	96	63	280	32	12	5.0	.55
15	96	45	58	49	52	100	61	324	27	11	5.5	.50
16	106	45	57	51	60	105	59	362	21	10	5.4	.40
17	117	45	56	52	66	115	57	362	17	8.0	5.0	.30
18	126	46	56	54	64	120	53	317	16	7.0	4.5	.20
19	132	47	55	55	62	135	49	294	15	6.6	4.0	.15
20	144	48	54	56	62	141	38	314	14	6.3	3.5	.10
21	144	48	53	57	62	123	37	290	16	6.6	3.0	.20
22	141	50	52	59	63	123	35	263	24	5.4	3.0	.35
23	132	50	52	60	64	114	33	229	44	4.2	2.5	.50
24	126	49	52	63	66	109	31	185	63	4.2	2.0	.60
25	117	47	51	64	68	106	33	168	74	4.2	2.0	.80
26	111	48	51	59	65	101	65	151	63	4.2	1.9	1.0
27	109	50	50	50	62	65	141	144	47	4.2	2.5	1.5
28	106	52	50	44	58	58	154	154	33	4.2	3.3	2.0
29	70	60	50	41	---	66	168	168	27	5.0	3.0	2.3
30	45	62	50	39	---	100	168	164	22	5.0	2.3	2.3
31	50	---	49	38	---	117	---	151	---	5.0	2.2	---
TOTAL	2653	1648	1757	1574	1505	2868	2266	6225	2591	293.1	137.2	28.95
MEAN	85.6	54.9	56.7	50.8	53.7	92.5	75.5	201	86.4	9.45	4.43	.96
MAX	144	80	66	64	68	141	168	362	321	20	11	2.3
MIN	35	45	49	38	38	58	31	86	14	4.2	1.9	.10
AC-FT	5260	3270	3490	3120	2990	5690	4490	12350	5140	581	272	57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1994, BY WATER YEAR (WY)

	MEAN	55.9	72.2	55.7	44.5	53.5	109	166	290	731	275	87.9	30.8
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	33.3	17.1	18.8	29.8	47.7	23.4	17.0	86.4	9.45	4.43	.96	
(WY)	1993	1990	1977	1991	1989	1981	1991	1990	1994	1994	1994	1994	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1973 - 1994
ANNUAL TOTAL	52835	23546.25	--
ANNUAL MEAN	145	64.5	164
HIGHEST ANNUAL MEAN	--	--	475
LOWEST ANNUAL MEAN	--	--	39.4
HIGHEST DAILY MEAN	1400	362	4390
LOWEST DAILY MEAN	12	.10	.00
ANNUAL SEVEN-DAY MINIMUM	15	.24	.03
INSTANTANEOUS PEAK FLOW	--	382a	4480b
INSTANTANEOUS PEAK STAGE	--	2.70c	8.40c
ANNUAL RUNOFF (AC-FT)	104800	46700	118900
10 PERCENT EXCEEDS	463	141	373
50 PERCENT EXCEEDS	57	52	61
90 PERCENT EXCEEDS	32	2.5	15

a Gage height, 2.24 ft.

b Gage height, 7.39 ft.

c Backwater from ice.

LOCATION.--Lat 41°45'44", long 105°41'16", in NE¹/₄ NW¹/₄ SE¹/₄ sec.27, T.21 N., R.74 W., Albany County, Hydrologic Unit 10180010, on right bank 155 ft downstream from bridge on county road, 1.0 mi upstream from Wheatland Reservoir No. 2, and 9.0 mi northeast of Lookout.

PERIOD OF RECORD.--May 1912 to December 1917, January 1921 to December 1927, April 1929 to current year (no winter records since 1972). Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 6,962.68 ft above sea level. Prior to Apr. 22, 1915, nonrecording gage and Apr. 22, 1915, to Aug. 31, 1917, water-stage recorder, at bridge, 155 ft upstream at same datum.

Oct. 14, 1931, to Sept. 17, 1938, at site 125 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Apr. 8, 26, 27. Records good. Natural flow of stream affected by transbasin diversions, storage reservoirs, diversion for irrigation of about 108,000 acres upstream from station, and return flow from irrigated areas.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	120	178	210	8.8	37	2.1
2	---	---	---	---	---	---	105	171	236	7.4	37	2.1
3	---	---	---	---	---	---	94	140	281	6.8	33	1.4
4	---	---	---	---	---	---	91	133	319	5.1	31	.90
5	---	---	---	---	---	---	88	130	331	4.2	30	1.6
6	---	---	---	---	---	---	88	127	264	6.3	30	.80
7	---	---	---	---	---	---	88	114	219	47	32	1.0
8	---	---	---	---	---	---	88	105	173	69	30	.80
9	---	---	---	---	---	---	91	105	149	71	33	.61
10	---	---	---	---	---	---	86	127	117	69	31	1.3
11	---	---	---	---	---	---	76	185	101	69	30	.70
12	---	---	---	---	---	---	71	229	72	69	28	.53
13	---	---	---	---	---	---	66	244	54	66	28	.46
14	---	---	---	---	---	---	71	259	44	66	11	.40
15	---	---	---	---	---	---	71	296	30	64	6.8	.29
16	---	---	---	---	---	---	71	343	24	62	5.4	.61
17	---	---	---	---	---	---	69	376	19	57	5.1	.27
18	---	---	---	---	---	---	66	365	13	51	4.2	.17
19	---	---	---	---	---	---	64	335	8.8	40	3.8	.15
20	---	---	---	---	---	---	62	331	9.6	37	3.8	.17
21	---	---	---	---	---	---	53	335	8.8	37	3.2	.20
22	---	---	---	---	---	---	51	308	11	39	2.9	.31
23	---	---	---	---	---	---	49	281	11	35	2.4	.27
24	---	---	---	---	---	---	45	240	17	33	9.5	.23
25	---	---	---	---	---	---	49	206	35	37	17	.18
26	---	---	---	---	---	---	53	199	49	35	14	.14
27	---	---	---	---	---	---	108	181	39	33	11	.10
28	---	---	---	---	---	---	167	181	28	36	8.1	.07
29	---	---	---	---	---	---	174	185	19	39	5.1	.05
30	---	---	---	---	---	---	178	206	13	39	3.8	.05
31	---	---	---	---	---	---	---	203	---	37	2.9	---
TOTAL	---	---	---	---	---	---	2553	6818	2905.2	1275.6	530.0	17.96
MEAN	---	---	---	---	---	---	85.1	220	96.8	41.1	17.1	.60
MAX	---	---	---	---	---	---	178	376	331	71	37	2.1
MIN	---	---	---	---	---	---	45	105	8.8	4.2	2.4	.05
AC-FT	---	---	---	---	---	---	5060	13520	5760	2530	1050	33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1972, BY WATER YEAR (WY)												
MEAN	42.0	45.5	35.4	30.5	38.7	61.6	99.9	207	643	200	59.0	26.1
MAX	204	119	85.1	73.0	74.4	120	544	656	1898	1163	267	97.4
(WY)	1966	1966	1947	1971	1954	1939	1917	1917	1917	1917	1945	1938
MIN	.000	.000	.000	.65	.40	9.34	13.0	10.3	8.99	.065	.000	.000
(WY)	1935	1935	1935	1955	1955	1964	1940	1953	1954	1954	1954	1934

WATER YEARS 1912 - 1972*

CHARACTERISTICS	FOR 1994	WATER YEAR	WATER YEARS 1912 - 1972
ANNUAL MEAN	--		122
HIGHEST ANNUAL MEAN	--		401
LOWEST ANNUAL MEAN	--		15.9
HIGHEST DAILY MEAN	376	May 17	3130
LOWEST DAILY MEAN	--	Sep 29,30	.00
ANNUAL SEVEN-DAY MINIMUM	--		.00
INSTANTANEOUS PEAK FLOW	384	May 17	4380a
INSTANTANEOUS PEAK STAGE	2.36	May 17	8.0b
ANNUAL RUNOFF (AC-FT)	--		88600
10 PERCENT EXCEEDS	--		299
50 PERCENT EXCEEDS	--		47
90 PERCENT EXCEEDS	--		6.5

a Gage height, 6.99 ft.

b Backwater from ice.

For period or record through 1994.

PLATTE RIVER BASIN

06664400 SYBILLE CREEK ABOVE MULE CREEK, NEAR WHEATLAND, WY

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.

DRAINAGE AREA.--194 mi².

PERIOD OF RECORD.--April 1974 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 5,340 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Apr. 1-27 and July 20-24. Records good except those for estimated daily discharges, which are poor. Seven small diversions upstream from station, combined capacity, about 400 acre-ft, for irrigation. Diversions upstream from station for irrigation of about 2,020 acres, of which about 80 acres are downstream from station.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	20	29	16	5.9	2.2	3.3
2	---	---	---	---	---	---	19	28	15	7.2	2.2	4.7
3	---	---	---	---	---	---	17	28	14	6.9	2.4	3.8
4	---	---	---	---	---	---	19	29	14	6.3	2.2	3.7
5	---	---	---	---	---	---	18	29	13	5.1	2.4	3.0
6	---	---	---	---	---	---	14	31	12	4.3	2.2	3.0
7	---	---	---	---	---	---	13	29	12	4.7	1.8	3.0
8	---	---	---	---	---	---	12	29	12	5.5	1.9	3.0
9	---	---	---	---	---	---	12	32	9.0	4.7	2.2	2.7
10	---	---	---	---	---	---	15	29	8.1	4.3	2.2	2.4
11	---	---	---	---	---	---	16	28	7.2	4.3	2.2	2.2
12	---	---	---	---	---	---	14	27	6.7	5.5	2.2	2.2
13	---	---	---	---	---	---	11	26	6.7	4.7	2.2	1.9
14	---	---	---	---	---	---	16	26	6.7	5.5	2.4	1.9
15	---	---	---	---	---	---	19	26	6.1	5.5	2.7	1.7
16	---	---	---	---	---	---	14	23	6.3	5.1	2.7	1.9
17	---	---	---	---	---	---	9.0	22	6.7	5.1	2.2	2.4
18	---	---	---	---	---	---	12	22	7.2	3.8	2.4	2.2
19	---	---	---	---	---	---	14	21	6.3	3.7	2.7	2.2
20	---	---	---	---	---	---	18	21	5.9	3.6	2.2	2.2
21	---	---	---	---	---	---	26	20	5.9	3.4	2.2	3.0
22	---	---	---	---	---	---	24	19	5.9	3.2	2.4	3.3
23	---	---	---	---	---	---	24	19	6.7	3.0	1.9	3.0
24	---	---	---	---	---	---	19	20	6.1	2.9	2.2	2.2
25	---	---	---	---	---	---	22	19	5.1	2.7	1.9	2.4
26	---	---	---	---	---	---	28	18	5.1	3.0	1.9	2.4
27	---	---	---	---	---	---	29	19	4.7	3.0	1.9	2.2
28	---	---	---	---	---	---	29	19	4.7	2.4	2.2	2.4
29	---	---	---	---	---	---	29	17	5.5	1.5	2.2	2.4
30	---	---	---	---	---	---	29	16	5.1	1.5	2.2	2.7
31	---	---	---	---	---	---	---	15	---	1.7	2.4	---
TOTAL	---	---	---	---	---	---	561.0	736	245.7	130.0	69.0	79.4
MEAN	---	---	---	---	---	---	18.7	23.7	8.19	4.19	2.23	2.65
MAX	---	---	---	---	---	---	29	32	16	7.2	2.7	4.7
MIN	---	---	---	---	---	---	9.0	15	4.7	1.5	1.8	1.7
AC-FT	---	---	---	---	---	---	1110	1460	487	258	137	157

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1994, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1974	4.24	7.75	34.8	73.5	43.9
1975	4.24	7.75	201	533	382
1976	1989	1987	1983	1983	1983
1977	4.24	7.75	2.27	4.14	2.67
1978	1989	1987	1977	1977	1989
1979	---	---	---	---	---
1980	---	---	---	---	---
1981	---	---	---	---	---
1982	---	---	---	---	---
1983	---	---	---	---	---
1984	---	---	---	---	---
1985	---	---	---	---	---
1986	---	---	---	---	---
1987	---	---	---	---	---
1988	---	---	---	---	---
1989	---	---	---	---	---
1990	---	---	---	---	---
1991	---	---	---	---	---
1992	---	---	---	---	---
1993	---	---	---	---	---
1994	---	---	---	---	---

SUMMARY STATISTICS

	FOR 1994 WATER YEAR*	WATER YEARS 1974 - 1994*
HIGHEST DAILY MEAN	32 May 9	1280 Aug 20 1990
LOWEST DAILY MEAN	1.5 Jul 29,30	.49 Sep 8,9 1977
ANNUAL SEVEN-DAY MINIMUM	---	.55 Jul 21 1989
INSTANTANEOUS PEAK FLOW	34 May 9	19900a Aug 20 1990
INSTANTANEOUS PEAK STAGE	2.11b Apr 21	15.60 Aug 20 1990
10 PERCENT EXCEEDS	---	57
50 PERCENT EXCEEDS	---	8.6
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.

b Backwater from beaver dam.

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.--Records provided by Office of the Wyoming State Engineer and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	31	51	29	73	29	62
2	---	---	---	---	---	---	31	50	27	89	63	59
3	---	---	---	---	---	---	31	50	30	96	74	46
4	---	---	---	---	---	---	31	52	30	102	69	29
5	---	---	---	---	---	---	32	50	28	89	69	19
6	---	---	---	---	---	---	32	56	24	85	64	16
7	---	---	---	---	---	---	32	55	21	87	59	15
8	---	---	---	---	---	---	32	59	52	75	59	14
9	---	---	---	---	---	---	31	74	64	76	61	14
10	---	---	---	---	---	---	32	65	65	62	55	15
11	---	---	---	---	---	---	34	67	76	55	42	21
12	---	---	---	---	---	---	32	24	76	55	53	30
13	---	---	---	---	---	---	30	27	78	56	50	24
14	---	---	---	---	---	---	31	27	72	90	45	16
15	---	---	---	---	---	---	34	22	67	62	46	13
16	---	---	---	---	---	---	32	19	78	43	49	11
17	---	---	---	---	---	---	31	24	84	30	29	9.3
18	---	---	---	---	---	---	32	27	84	23	31	8.1
19	---	---	---	---	---	---	34	25	85	18	27	6.9
20	---	---	---	---	---	---	38	31	87	14	24	6.4
21	---	---	---	---	---	---	42	28	89	19	21	6.9
22	---	---	---	---	---	---	45	23	82	22	19	8.1
23	---	---	---	---	---	---	45	21	65	21	12	6.4
24	---	---	---	---	---	---	38	20	59	20	23	6.4
25	---	---	---	---	---	---	43	58	55	14	25	5.9
26	---	---	---	---	---	---	55	43	53	18	31	5.4
27	---	---	---	---	---	---	52	38	50	20	34	5.9
28	---	---	---	---	---	---	53	35	53	16	34	5.9
29	---	---	---	---	---	---	53	32	55	16	30	5.4
30	---	---	---	---	---	---	53	29	49	15	35	5.4
31	---	---	---	---	---	---	---	27	---	19	47	---
TOTAL	---	---	---	---	---	---	1122	1209	1767	1480	1309	496.4
MEAN	---	---	---	---	---	---	37.4	39.0	58.9	47.7	42.2	16.5
MAX	---	---	---	---	---	---	55	74	89	102	74	62
MIN	---	---	---	---	---	---	30	19	21	14	12	5.4
AC-FT	---	---	---	---	---	---	2230	2400	3500	2940	2600	985

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1994, BY WATER YEAR (WY)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	29.0	---	---	---	---	25.5	67.0	128	86.8	92.6	78.2	36.7			
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			

SUMMARY STATISTICS

	FOR 1994 WATER YEAR*	WATER YEARS 1980 - 1994*
HIGHEST DAILY MEAN	102 Jul 4	1280 May 22 1983
LOWEST DAILY MEAN	5.4 Sep 26,29,30	.00 Sep 1-4,11 1981
ANNUAL SEVEN-DAY MINIMUM	--	.86 Aug 29 1981
INSTANTANEOUS PEAK FLOW	129 Jul 1	6900a Aug 20 1990
INSTANTANEOUS PEAK STAGE	1.43 Jul 1	8.35b Aug 20 1990
10 PERCENT EXCEEDS	--	143
50 PERCENT EXCEEDS	--	49
90 PERCENT EXCEEDS	--	12

* During period of operation.

a From rating curve extended above 1,300 ft³/s on basis of contracted-opening measurement of peak flow.

b From floodmarks.

PLATTE RIVER BASIN

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	PH WATER WHOLE FIELD (STAND- ARD WATER UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)
OCT									
20...	1000	1.7	1140	648	9.8	98	8.0	8.0	3.5
JAN									
20...	1030	1.0	1320	646	13.7	118	8.0	2.0	2.0
APR									
18...	1030	E0.50	1260	660	10.6	133	8.3	19.0	12.0
SEP									
01...	1345	1.0	1280	643	11.6	137	8.5	15.0	14.0
01...	1350	1.0	1280	643	11.6	137	8.5	15.0	14.0

E-Estimate.

DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
OCT							
20...	93	0.01	3.0	<0.01	3.8	0.63	0.10
JAN							
20...	K13	0.07	3.3	4.90	8.2	1.90	1.50
APR							
18...	37	0.18	2.0	1.00	6.0	1.70	1.00
SEP							
01...	360	0.03	2.6	0.15	3.7	0.69	0.18
01...	--	0.03	2.6	0.14	3.6	0.61	0.18

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

06670500 LARAMIE RIVER NEAR FORT LARAMIE, WY

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.

DRAINAGE AREA.--4,564 mi², of which 631 mi² is probably non-contributing. Drainage area at mouth, 4,565 mi².

PERIOD OF RECORD.--April 1915 to current year (no winter records prior to 1927). Monthly discharge only for some periods, published in WSP 1310. Records for water years 1926-39, previously published including diversions to Gering-Fort Laramie Canal, were adjusted to exclude flow in the canal in WSP 1310. Prior to October 1931, published as "at Fort Laramie." No diversion to Gering-Fort Laramie Canal since 1956.

REVISED RECORDS.--WSP 1918: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,220 ft above 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.

REMARKS.--Estimated daily discharges: Nov. 25-27, Dec. 14-25, 29, 30, Jan. 6-13, 18-21, Jan. 29 to Feb. 15, and Feb. 22-26. Records good except those for estimated daily discharges, which are poor. Diversion, at times, to Gering-Fort Laramie Canal, 5.4 mi upstream. Natural flow of stream affected by transbasin diversions, storage reservoirs, ground-water withdrawals and diversions for irrigation of about 176,000 acres upstream from station, and return flow from irrigated areas. U.S. Corps of Engineers satellite telemeter at station.

COOPERATION.--Fifteen discharge measurements provided by the Wyoming State Engineer's office.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	45	40	42	37	46	48	61	45	44	44	46
2	51	44	41	43	39	45	50	61	43	40	46	50
3	51	44	41	39	40	45	51	65	41	32	42	55
4	51	43	40	42	42	44	52	82	42	42	32	51
5	52	42	39	46	42	42	51	94	37	39	30	50
6	51	43	39	41	42	41	51	97	37	31	28	53
7	51	44	40	37	39	41	53	102	38	37	28	56
8	52	44	40	39	38	41	54	112	37	39	27	55
9	50	43	40	40	43	41	54	113	39	47	27	54
10	50	43	38	39	47	41	55	114	41	47	32	52
11	49	44	38	39	35	42	55	118	44	47	59	52
12	50	49	38	39	39	45	55	112	45	46	47	53
13	49	47	37	43	41	45	55	99	47	47	45	54
14	49	44	35	46	42	47	55	68	47	52	69	53
15	49	42	37	43	43	47	55	56	39	126	72	52
16	50	42	40	42	41	45	54	55	41	103	50	51
17	49	44	39	39	42	44	49	54	43	76	44	51
18	50	45	39	37	41	40	49	53	44	65	30	51
19	48	44	38	39	42	44	51	45	45	62	29	51
20	49	44	39	40	43	45	51	45	46	66	29	57
21	47	44	40	41	43	45	52	44	47	64	31	53
22	47	42	40	41	42	45	51	43	49	56	35	52
23	47	42	39	41	40	44	52	44	88	28	43	52
24	47	38	38	41	40	44	53	45	52	29	43	51
25	47	31	40	43	38	45	57	46	42	51	43	50
26	47	33	42	46	44	45	56	46	47	51	43	50
27	47	34	42	46	47	45	54	47	45	53	42	44
28	46	35	43	49	47	45	56	50	48	53	43	36
29	43	36	39	43	---	45	56	49	46	52	44	47
30	42	39	41	42	---	45	61	46	47	48	45	48
31	45	---	42	38	---	45	---	44	---	44	44	---
TOTAL	1508	1254	1224	1286	1159	1364	1596	2110	1352	1617	1266	1530
MEAN	48.6	41.8	39.5	41.5	41.4	44.0	53.2	68.1	45.1	52.2	40.8	51.0
MAX	52	49	43	49	47	47	61	118	88	126	72	57
MIN	42	31	35	37	35	40	48	43	37	28	27	36
AC-FT	2990	2490	2430	2550	2300	2710	3170	4190	2680	3210	2510	3030

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1994, BY WATER YEAR (WY)

	MEAN	73.8	87.4	93.9	91.2	96.1	108	165	425	319	138	67.3	63.3
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	10.3	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	

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1957 - 1994*
ANNUAL TOTAL	25214	17266	--
ANNUAL MEAN	69.1	47.3	144
HIGHEST ANNUAL MEAN	--	--	672
LOWEST ANNUAL MEAN	--	--	26.1
HIGHEST DAILY MEAN	821	126	5810
LOWEST DAILY MEAN	31	27	2.0a
ANNUAL SEVEN-DAY MINIMUM	35	29	3.1
INSTANTANEOUS PEAK FLOW	--	267	6260
INSTANTANEOUS PEAK STAGE	--	3.27	9.40b
ANNUAL RUNOFF (AC-FT)	50010	34250	104500
10 PERCENT EXCEEDS	163	55	227
50 PERCENT EXCEEDS	48	45	69
90 PERCENT EXCEEDS	39	38	27

* For period of record following discontinuance of diversion to Gering-Fort Laramie Canal. See PERIOD OF RECORD.

For period of record, 1915-1994.

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 Gering-Fort Laramie Canal.

b Site and datum then in use.

LOCATION (REVISED)--Lat 41°59'19", long 104°03'10", in SE 1/4 SE 1/4 SE 1/4 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 is probably noncontributing.

WATER-DISCHARGE RECORDS

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. 18, 24, Jan. 8, and Jan. 27 to Feb. 10. Records fair 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. Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	635	303	242	198	178	188	164	166	364	1290	1140	1100
2	544	297	242	199	188	187	164	168	384	1360	1180	1050
3	509	295	246	201	185	186	161	168	384	1370	1200	921
4	490	297	246	200	179	186	162	163	453	1400	1170	839
5	486	295	243	204	187	183	162	168	391	1390	1160	690
6	512	291	239	203	187	187	159	177	362	1290	1150	703
7	469	294	236	199	183	189	160	179	343	1450	1120	706
8	471	289	234	200	179	183	159	166	330	1530	1100	694
9	459	281	236	204	170	176	159	176	325	1420	1100	640
10	452	276	242	204	173	177	162	180	342	1340	1140	655
11	437	275	252	201	177	176	165	222	394	1200	1190	656
12	422	293	247	199	174	173	165	245	412	1170	1240	716
13	412	302	242	193	170	173	164	524	435	1190	1250	716
14	402	294	231	190	166	173	164	833	450	1290	1240	677
15	394	292	223	192	170	173	160	723	439	1750	1230	633
16	385	287	225	191	179	173	155	635	564	1650	1160	655
17	378	284	221	183	182	174	155	605	817	1690	1120	650
18	379	288	210	180	186	170	151	623	937	1530	1110	648
19	378	288	208	173	188	169	144	585	985	1420	1130	638
20	375	285	207	176	190	169	144	560	1220	1370	1130	640
21	363	282	205	176	190	169	142	568	1180	1270	1160	667
22	354	280	198	176	190	166	143	556	1140	1150	1160	705
23	347	275	199	178	190	167	150	575	1040	1120	1120	685
24	340	260	199	179	190	164	145	634	910	1100	1070	587
25	336	261	199	176	187	164	151	666	940	1130	1070	507
26	328	262	204	176	190	166	167	593	1100	1180	1070	460
27	322	257	204	175	188	167	166	497	1290	1150	1090	422
28	316	227	204	173	186	165	173	465	1350	1080	1110	406
29	309	225	202	172	---	165	169	432	1390	1030	1130	381
30	301	234	201	178	---	164	168	413	1340	1070	1100	376
31	300	---	201	170	---	164	---	367	---	1090	1080	---
TOTAL	12605	8369	6888	5819	5102	5386	4753	13032	22011	40470	35420	19823
MEAN	407	279	222	188	182	174	158	420	734	1305	1143	661
MAX	635	303	252	204	190	189	173	833	1390	1750	1250	1100
MIN	300	225	198	170	166	164	142	163	325	1030	1070	376
AC-FT	25000	16600	13660	11540	10120	10680	9430	25850	43660	80270	70260	39320

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1994, BY WATER YEAR (WY)

MEAN	516	434	385	340	347	502	607	1171	1599	1530	1275	873
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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1929 - 1994
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ANNUAL TOTAL	176152		179678		--	
ANNUAL MEAN	483		492		780	
HIGHEST ANNUAL MEAN	--		--		2863	1984
LOWEST ANNUAL MEAN	--		--		388	1992
HIGHEST DAILY MEAN	3080	Aug 20	1750	Jul 15	17600	Jun 2 1929
LOWEST DAILY MEAN	132	Feb 17	142	Apr 21	3.9	May 13 1992
ANNUAL SEVEN-DAY MINIMUM	137	Feb 24	146	Apr 18	4.4	Jun 20 1992
INSTANTANEOUS PEAK FLOW	--		2090	Jul 15	17900a	Jun 2 1929
INSTANTANEOUS PEAK STAGE	--		3.73	Jul 15	7.04b	Jun 2 1929
ANNUAL RUNOFF (AC-FT)	349400		356400		565200	
10 PERCENT EXCEEDS	1160		1160		1440	
50 PERCENT EXCEEDS	287		291		490	
90 PERCENT EXCEEDS	158		166		210	

b site and datum then in use.

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)
NOV					
03...	0850	295	967	5.5	9.0
DEC					
09...	1610	241	996	5.0	10.0
JAN					
21...	1545	176	1010	6.0	8.0
MAR					
03...	0730	187	1020	6.5	2.0
APR					
08...	1530	160	1020	14.0	10.0
MAY					
04...	1030	163	980	15.0	16.5
17...	1715	601	860	20.5	26.0
JUN					
01...	0730	380	880	22.0	15.0
28...	0845	1310	777	19.5	--
JUL					
26...	0915	1190	695	25.5	--

PLATTE RIVER BASIN

06679500 NORTH PLATTE RIVER AT MITCHELL, NE

LOCATION.--Lat 41°55'38", long 103°48'48", in NE¹/₄ NE¹/₄ sec.33, T.23 N., R.56 W., Scotts Bluff County, Hydrologic Unit 10180009, on right bank of main channel 10 ft downstream from bridge on State Highway 29, 0.5 mi south of Mitchell, and at mile 186.

DRAINAGE AREA.--24,300 mi², approximately, of which about 22,300 mi² contributes directly to surface runoff. PERIOD OF RECORD.--June 1901 to September 1910, May to December 1911, February 1912 to July 1913 (gage heights only), May 1916 to October 1918 (irrigation seasons only), May 1920 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WDR NE-67, WDR NE-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,928.3 ft above sea level. See WSP 1918 for history of changes prior to May 27, 1960. May 27, 1960, to Aug. 24, 1971, at datum 2.00 ft higher; Aug. 25, 1971, to May 18, 1992, at datum 1.00 ft higher.

REMARKS.--Records good except for period of sandpoint plugging in June, which is fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	979	625	580	478	427	498	383	355	396	380	339	421
2	930	613	571	476	431	535	372	346	379	352	356	488
3	868	614	558	479	440	523	378	339	359	345	376	474
4	840	595	556	478	444	515	375	333	393	358	358	430
5	825	574	550	473	449	507	373	309	418	381	328	423
6	860	566	537	471	461	518	372	300	381	348	325	412
7	841	568	541	466	435	518	375	308	329	364	303	407
8	858	566	543	440	410	498	360	298	312	548	287	397
9	843	552	545	445	403	488	345	255	296	537	274	373
10	834	537	559	455	452	481	337	181	281	485	255	361
11	821	540	566	454	465	475	337	155	267	435	262	349
12	802	558	570	453	447	462	349	153	270	372	290	352
13	787	595	557	450	452	461	349	303	301	353	307	367
14	777	583	537	452	464	464	337	435	251	421	327	378
15	756	578	525	454	470	457	334	552	212	906	332	350
16	746	556	518	453	484	454	333	512	229	1280	314	351
17	735	552	524	456	491	452	336	361	212	1320	296	371
18	758	555	509	428	507	445	330	290	233	1150	273	367
19	770	561	495	429	501	442	328	254	446	956	269	381
20	760	563	498	435	500	423	334	229	553	860	273	417
21	740	564	497	433	497	423	332	238	807	784	286	494
22	721	583	498	441	483	426	326	253	879	636	308	621
23	709	579	493	447	489	420	337	256	714	520	296	742
24	694	577	492	453	488	411	330	510	597	456	279	979
25	685	582	488	449	451	411	320	431	533	436	279	944
26	664	588	500	446	440	395	329	413	494	441	273	921
27	659	585	502	468	460	387	331	384	475	432	274	839
28	655	592	494	472	483	385	340	381	484	405	280	774
29	627	595	487	477	---	387	342	401	475	361	322	785
30	615	585	479	467	---	383	352	419	443	342	378	767
31	627	---	478	443	---	388	---	411	---	337	381	---
TOTAL	23786	17281	16247	14121	12924	14032	10376	10365	12419	17301	9500	15735
MEAN	767	576	524	456	462	453	346	334	414	558	306	524
MAX	979	625	580	479	507	535	383	552	879	1320	381	979
MIN	615	537	478	428	403	383	320	153	212	337	255	349
AC-FT	47180	34280	32230	28010	25630	27830	20580	20560	24630	34320	18840	31210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1994, BY WATER YEAR (WY)

	MEAN	849	671	568	505	495	758	970	1198	1486	807	581	744
MAX	2235	1833	1251	1040	1236	4091	5244	7388	7693	6868	5294	4987	
(WY)	1987	1987	1985	1985	1984	1974	1984	1971	1984	1983	1983	1983	
MIN	478	478	377	366	347	308	278	166	128	130	137	171	
(WY)	1961	1961	1991	1991	1991	1991	1967	1992	1992	1963	1963	1960	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1958 - 1994 (SINCE GLENDON PROJECT)
ANNUAL TOTAL	181718	174087	--
ANNUAL MEAN	498	477	803
MEDIAN OF ANNUAL MEANS	--	--	539
HIGHEST ANNUAL MEAN	--	--	3008
LOWEST ANNUAL MEAN	--	--	330
HIGHEST DAILY MEAN	2060	Aug 21	11400
LOWEST DAILY MEAN	128	May 16	54
ANNUAL SEVEN-DAY MINIMUM	201	May 11	65
INSTANTANEOUS PEAK FLOW	--	1470	27500 (*6.45)
INSTANTANEOUS PEAK STAGE	--	3.91	*7.80
ANNUAL RUNOFF (AC-FT)	360400	345300	581700
10 PERCENT EXCEEDS	780	741	1330
50 PERCENT EXCEEDS	422	452	495
90 PERCENT EXCEEDS	302	299	238

06753400 LONETREE CREEK AT CARR, CO
(National Water-Quality Assessment Program station)

LOCATION.--Lat 40°53'54", long 104°52'03", in NE¹/4NE¹/4 sec.27, T.11 N., R.67 W., Weld County, Hydrologic Unit 10190008, on left bank upstream from bridge on Weld County Road 126, at the east end of Carr.
DRAINAGE AREA.--167 mi².
PERIOD OF RECORD.--March 1993 to current year.

WATER-DISCHARGE RECORDS

GAGE.--Water-stage recorder. Concrete control since Sept. 2, 1993. Elevation of gage is 5,670 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 18 to Mar. 10. Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.55	.61	.64	.39	.38	1.1	.67	.86	.82	.05	.27	.14
2	.51	.57	.57	.41	.37	1.0	.68	.82	.78	.08	.33	.11
3	.57	.57	.51	.39	.36	.98	.73	.79	1.6	.09	.26	.11
4	.54	.51	.51	.39	.35	.96	.67	.75	1.1	.07	.18	.09
5	.49	.47	.46	.41	.37	.95	.63	.73	.76	.07	.13	.08
6	.44	.51	.49	.40	.38	.92	.68	.73	.62	.07	.10	.10
7	.37	.55	.50	.39	.39	.90	.70	.77	.58	.05	.09	.09
8	.41	.54	.49	.38	.41	.90	.66	.72	.52	.05	.07	.10
9	.37	.53	.55	.40	.42	.90	.71	.68	.48	.04	.07	.10
10	.42	.56	.54	.41	.40	.84	.98	.68	.47	.03	.06	.10
11	.42	.59	.51	.38	.40	.82	.92	.65	.45	.02	.07	.10
12	.46	.68	.51	.36	.39	.82	.92	.62	.42	.04	.09	.12
13	.48	.60	.45	.39	.37	.82	.87	.75	.40	.04	.20	.12
14	.51	.50	.42	.37	.38	.78	.76	.98	.37	.06	.26	.15
15	.54	.45	.43	.36	.40	.75	.73	.74	.35	.07	.15	.13
16	.56	.42	.41	.37	.44	.79	.70	.70	.36	.06	.09	.14
17	.61	.43	.40	.39	.46	.77	.69	.63	.39	.06	.14	.14
18	1.2	.45	.41	.39	.50	.72	.68	.59	.42	.04	.13	.13
19	.97	.47	.43	.41	.62	.76	.68	.57	.35	.03	.14	.14
20	.69	.48	.40	.40	.60	.69	.68	.59	.33	.07	.18	.14
21	.61	.49	.39	.38	.60	.82	.70	.58	.41	.08	.14	.19
22	.61	.51	.41	.37	.60	.82	.68	.58	.46	.09	.15	.21
23	.61	.53	.41	.37	.64	.68	.68	.57	.45	.11	.13	.19
24	.58	.50	.39	.37	.70	.61	.68	.57	.36	.16	.12	.17
25	.56	.52	.42	.36	.80	.68	.75	.60	.28	.19	.11	.18
26	.50	.53	.44	.33	.80	.72	.86	.61	.20	.37	.14	.18
27	.53	.53	.40	.35	.90	.67	.75	.65	.14	.37	.12	.17
28	.53	.55	.41	.37	1.0	.66	.84	.74	.10	.29	.16	.19
29	.51	.61	.39	.38	---	.70	.91	.78	.09	.29	.18	.18
30	.54	.63	.38	.38	---	.69	.93	.65	.05	.23	.17	.20
31	.58	---	.40	.39	---	.67	---	.55	---	.17	.20	---
TOTAL	17.27	15.89	14.07	11.84	14.43	24.89	22.52	21.23	14.11	3.44	4.63	4.19
MEAN	.56	.53	.45	.38	.52	.80	.75	.68	.47	.11	.15	.14
MAX	1.2	.68	.64	.41	1.0	1.1	.98	.98	1.6	.37	.33	.21
MIN	.37	.42	.38	.33	.35	.61	.63	.55	.05	.02	.06	.08
AC-FT	34	32	28	23	29	49	45	42	28	6.8	9.2	8.3

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1994, BY WATER YEAR (WY)

	1993	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994
MEAN	.56	.53	.45	.38	.52	.80	.78	.57	.60	.23	.15	.25
MAX	.56	.53	.45	.38	.52	.80	.81	.68	.72	.36	.15	.36
(WY)	1994	1994	1994	1994	1994	1994	1993	1994	1993	1993	1993	1993
MIN	.56	.53	.45	.38	.52	.80	.75	.46	.47	.11	.15	.14
(WY)	1994	1994	1994	1994	1994	1994	1994	1993	1994	1994	1994	1994

SUMMARY STATISTICS

ANNUAL TOTAL
ANNUAL MEAN
HIGHEST ANNUAL MEAN
LOWEST ANNUAL MEAN
HIGHEST DAILY MEAN
LOWEST DAILY MEAN
ANNUAL SEVEN-DAY MINIMUM
INSTANTANEOUS PEAK FLOW
INSTANTANEOUS PEAK STAGE
ANNUAL RUNOFF (AC-FT)
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

FOR 1994 WATER YEAR

168.51
.46
--
--
1.6 Jun 3
.02 Jul 11
.04 Jul 7
3.1 Jun 3
4.98 Jun 3
334
.79
.45
.10

WATER YEARS 1993 - 1994

--
.46
.46
.46
2.0 Jun 3 1993
a.02 Jul 31 1993
.03 Jul 28 1993
3.1 Jun 3 1994
4.98 Jun 3 1994
334
.83
.45
.10

a Also occurred Jul 11, 1994.

PLATTE RIVER BASIN

06753400 LONETREE CREEK AT CARR, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
OCT										
06...	1630	0.40	493	8.3	17.0	--	210	62	13	26
NOV										
02...	1500	0.61	541	8.3	5.5	10.6	220	66	14	26
DEC										
16...	1420	0.42	543	8.0	1.5	12.1	220	65	13	24
JAN										
14...	0945	0.37	530	7.9	1.0	11.0	230	70	13	25
FEB										
15...	1510	0.40	537	8.1	1.0	12.0	230	71	13	25
MAR										
08...	0930	0.87	456	8.3	1.5	12.8	190	57	11	20
APR										
20...	1500	0.65	505	8.2	15.5	9.4	190	58	12	24
MAY										
03...	1100	0.79	515	8.3	10.0	10.0	210	64	13	25
JUN										
06...	1500	0.65	440	8.2	25.0	8.1	170	48	11	23
JUL										
06...	1225	0.09	433	8.1	25.5	8.9	180	51	12	20
AUG										
04...	1340	0.18	419	8.1	25.0	8.9	170	48	11	20
SEP										
01...	1245	0.15	414	8.2	18.0	10.2	180	53	11	17

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA-A LINITY WAT DIS TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
OCT										
06...	6.5	216	16	12	0.8	25	285	<0.01	0.19	0.02
NOV										
02...	6.5	247	18	14	0.8	27	320	<0.01	0.29	0.04
DEC										
16...	5.6	281	18	12	0.7	26	323	0.03	0.59	0.05
JAN										
14...	4.5	241	17	11	0.7	25	316	0.02	0.63	0.03
FEB										
15...	5.4	248	20	12	0.8	25	319	0.02	0.68	0.03
MAR										
08...	5.2	199	16	10	0.7	21	273	<0.01	0.26	0.04
APR										
20...	5.0	221	19	14	0.7	20	303	0.01	0.17	0.04
MAY										
03...	5.3	228	18	13	0.6	24	307	<0.01	0.14	0.02
JUN										
06...	6.6	194	13	11	--	24	--	<0.01	0.08	0.03
JUL										
06...	5.7	177	14	8.7	0.8	23	273	0.01	0.15	0.08
AUG										
04...	6.1	190	14	9.1	0.8	22	258	<0.01	0.15	0.06
SEP										
01...	5.9	191	14	7.3	0.8	22	247	<0.01	0.19	0.06

A-Total alkalinity, determined in field by fixed end-point titration method on filtered sample

06753400 LONETREE CREEK AT CARR, CO--Continued
(National Water-Quality Assessment Program station)

DATE	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)	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- PENDE TOTAL (MG/L AS C) (00689)
OCT 06...	0.40	<0.20	<0.01	0.01	<0.01	11	7	3.8	0.3
NOV 02...	<0.20	0.30	<0.01	<0.01	<0.01	24	20	3.3	0.1
DEC 16...	<0.20	<0.20	0.02	0.02	0.02	6	23	2.5	0.2
JAN 14...	<0.20	<0.20	<0.01	<0.01	<0.01	6	21	2.6	0.1
FEB 15...	0.20	<0.20	0.02	0.01	<0.01	10	39	2.5	0.3
MAR 08...	0.30	0.20	<0.01	<0.01	<0.01	19	23	3.0	0.5
APR 20...	0.40	<0.20	0.02	<0.01	<0.01	3	36	3.4	0.5
MAY 03...	0.20	<0.20	<0.01	<0.01	<0.01	15	26	--	--
JUN 06...	<0.20	0.40	0.03	<0.01	<0.01	60	30	6.1	0.4
JUL 06...	0.40	0.30	0.01	<0.01	<0.01	22	14	3.1	0.4
AUG 04...	0.30	0.30	0.02	0.01	<0.01	37	8	3.0	0.4
SEP 01...	0.30	<0.20	<0.01	<0.01	<0.01	21	8	2.4	0.4

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 06...	1620	0.40	27	0.03
NOV 02...	1450	0.61	25	0.04
DEC 16...	1410	0.42	43	0.05
JAN 14...	0945	0.37	28	0.03
FEB 15...	1500	0.40	26	0.03
MAR 08...	1010	0.87	32	0.08
APR 20...	1505	0.65	102	0.18
MAY 03...	1105	0.79	110	0.23

PLATTE RIVER BASIN

06755800 CROW CREEK AT ROUND TOP ROAD, NEAR CHEYENNE, WY

LOCATION.--Lat 41°09'30", long 104°52'44", in SW¹/₄ NE¹/₄ NW¹/₄ sec.27, T.14 N., R.67 W., Laramie County, Hydrologic Unit 10190009, at west edge of F. E. Warren AFB, at bridge on Round Top Road, 1.1 mi upstream from Diamond Creek, and 3 mi northwest of Cheyenne.

DRAINAGE AREA.--239 mi².

PERIOD OF RECORD.--March to September 1994.

GAGE.--Water-stage recorder. Datum of gage is 6,140 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Mar. 21 to June 16 and Sept. 4-30. Records fair except those for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	2.7	2.0	.22	.08	.31	.19
2	---	---	---	---	---	---	2.7	1.5	.19	.10	.45	.24
3	---	---	---	---	---	---	2.6	1.6	.24	.14	.43	.28
4	---	---	---	---	---	---	2.5	1.3	.22	.15	.25	.14
5	---	---	---	---	---	---	2.7	1.1	.21	.13	.24	.12
6	---	---	---	---	---	---	2.7	.92	.21	.12	.21	.12
7	---	---	---	---	---	---	2.9	.85	.20	.13	.14	.12
8	---	---	---	---	---	---	2.7	.78	.18	.14	.12	.12
9	---	---	---	---	---	---	2.7	.70	.17	.13	.13	.12
10	---	---	---	---	---	---	3.0	.69	.15	.11	.14	.12
11	---	---	---	---	---	---	3.5	.69	.15	.07	.19	.12
12	---	---	---	---	---	---	4.0	.65	.15	.09	.13	.12
13	---	---	---	---	---	---	4.5	.56	.15	.11	.10	.13
14	---	---	---	---	---	---	4.0	5.0	.19	.27	.13	.15
15	---	---	---	---	---	---	3.1	1.6	.19	.30	.10	.20
16	---	---	---	---	---	---	2.6	1.3	.18	.34	.06	.22
17	---	---	---	---	---	---	1.8	.90	.18	.31	.03	.22
18	---	---	---	---	---	---	1.4	.70	.20	.25	.02	.22
19	---	---	---	---	---	---	1.3	.54	.21	.21	.02	.22
20	---	---	---	---	---	---	1.2	.46	.24	.25	.03	.22
21	---	---	---	---	---	5.1	1.3	.38	.26	.23	.03	.21
22	---	---	---	---	---	4.5	.92	.35	.25	.19	.03	.20
23	---	---	---	---	---	3.5	.85	.30	.23	.17	.05	.19
24	---	---	---	---	---	2.9	.76	.28	.21	.19	.06	.18
25	---	---	---	---	---	2.4	.73	.24	.20	.34	.04	.17
26	---	---	---	---	---	2.5	.90	.22	.18	.26	.02	.18
27	---	---	---	---	---	2.5	.80	.20	.13	.27	.02	.19
28	---	---	---	---	---	2.3	.95	.19	.10	.22	.03	.20
29	---	---	---	---	---	2.3	1.9	.18	.11	.20	.04	.20
30	---	---	---	---	---	2.3	2.4	.17	.10	.18	.04	.20
31	---	---	---	---	---	2.3	---	.20	---	.16	.08	---
TOTAL	---	---	---	---	---	---	66.11	26.55	5.60	5.84	3.67	5.31
MEAN	---	---	---	---	---	---	2.20	.86	.19	.19	.12	.18
MAX	---	---	---	---	---	---	4.5	5.0	.26	.34	.45	.28
MIN	---	---	---	---	---	---	.73	.17	.10	.07	.02	.12
AC-FT	---	---	---	---	---	---	131	53	11	12	7.3	11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1994, BY WATER YEAR (WY)

	1994	1994	1994	1994	1994
MEAN	---	---	---	---	---
MAX	---	---	---	---	---
(WY)	---	---	---	---	---
MIN	---	---	---	---	---
(WY)	---	---	---	---	---

SUMMARY STATISTICS

HIGHEST DAILY MEAN

LOWEST DAILY MEAN

ANNUAL SEVEN-DAY MINIMUM

INSTANTANEOUS PEAK FLOW

INSTANTANEOUS PEAK STAGE

10 PERCENT EXCEEDS

50 PERCENT EXCEEDS

90 PERCENT EXCEEDS

FOR 1994 WATER YEAR*

5.1 Mar 21

.02 Aug 18,

19,26,27

.03 Aug 17

a May 13

a May 13

2.6

.22

.09

* During period of operation.

a Not determined, during period of estimated record.

06755840 DIAMOND CREEK BELOW ROUND TOP ROAD, AT F.E. WARREN AIR FORCE BASE, WY

LOCATION.--Lat 41°08'38", long 104°52'46", in NW¹/₄ NE¹/₄ NW¹/₄ sec.34, T.14 N., R.67 W., Laramie County, Hydrologic Unit 10190009, F.E. Warren Air Force Base, on right bank 0.25 mi downstream from Round Top Road.

DRAINAGE AREA.--10.75 mi².

PERIOD OF RECORD.--March to September 1994.

GAGE.--Water-stage recorder and V-notch weir. Elevation of gage is 6,160 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Mar. 21 to June 14. Records good except those above 2 ft³/s and those for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.14	.87	.09	.00	.02	.00
2	---	---	---	---	---	---	.13	.91	.21	.00	.01	.00
3	---	---	---	---	---	---	.14	.74	.08	.00	.00	.00
4	---	---	---	---	---	---	.09	.74	.05	.00	.00	.00
5	---	---	---	---	---	---	.05	.78	.05	.00	.00	.00
6	---	---	---	---	---	---	.06	.49	.04	.00	.00	.00
7	---	---	---	---	---	---	.06	.59	.04	.00	.00	.00
8	---	---	---	---	---	---	.12	.74	.03	.00	.00	.00
9	---	---	---	---	---	---	.19	.49	.02	.00	.00	.00
10	---	---	---	---	---	---	.36	.18	.02	.00	.00	.00
11	---	---	---	---	---	---	.32	.16	.02	.00	.00	.00
12	---	---	---	---	---	---	.32	.12	.02	.00	.00	.00
13	---	---	---	---	---	---	.49	.78	.02	.00	.00	.00
14	---	---	---	---	---	---	.52	.90	.02	.00	.00	.00
15	---	---	---	---	---	---	.30	.98	.01	.00	.00	.00
16	---	---	---	---	---	---	.19	.90	.01	.01	.00	.00
17	---	---	---	---	---	---	.14	.85	.01	.00	.00	.00
18	---	---	---	---	---	---	.09	.78	.01	.00	.00	.00
19	---	---	---	---	---	---	.08	.49	.02	.00	.00	.00
20	---	---	---	---	---	---	.06	.16	.02	.00	.00	.00
21	---	---	---	---	---	.38	.01	.14	.02	.00	.00	.01
22	---	---	---	---	---	.24	.02	.14	.02	.00	.00	.01
23	---	---	---	---	---	.66	.02	.13	.01	.00	.00	.01
24	---	---	---	---	---	.03	.04	.09	.01	.00	.00	.01
25	---	---	---	---	---	.02	.25	.07	.00	.00	.00	.01
26	---	---	---	---	---	.02	.40	.06	.00	.00	.00	.01
27	---	---	---	---	---	.02	.28	.03	.00	.00	.00	.01
28	---	---	---	---	---	.04	.40	.02	.00	.00	.00	.01
29	---	---	---	---	---	.10	.37	.01	.00	.00	.00	.01
30	---	---	---	---	---	.16	.46	.01	.00	.00	.00	.01
31	---	---	---	---	---	.14	---	.13	---	.00	.00	---
TOTAL	---	---	---	---	---	1.81	6.10	13.48	0.85	0.01	0.03	0.10
MEAN	---	---	---	---	---	.16	.20	.43	.028	.000	.001	.003
MAX	---	---	---	---	---	.66	.52	.98	.21	.01	.02	.01
MIN	---	---	---	---	---	.02	.01	.01	.00	.00	.00	.00
AC-FT	---	---	---	---	---	3.6	12	27	1.7	.02	.06	.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1994, BY WATER YEAR (WY)

	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994
MEAN	---	---	---	---	---	---	.20	.43	.028	.000	.001	.003
MAX	---	---	---	---	---	---	.20	.43	.028	.000	.001	.003
(WY)	---	---	---	---	---	---	1994	1994	1994	1994	1994	1994
MIN	---	---	---	---	---	---	.20	.43	.028	.000	.001	.003
(WY)	---	---	---	---	---	---	1994	1994	1994	1994	1994	1994

SUMMARY STATISTICS

HIGHEST DAILY MEAN

LOWEST DAILY MEAN

ANNUAL SEVEN-DAY MINIMUM

INSTANTANEOUS PEAK FLOW

INSTANTANEOUS PEAK STAGE

10 PERCENT EXCEEDS

50 PERCENT EXCEEDS

90 PERCENT EXCEEDS

FOR 1994 WATER YEAR*

.98 May 15

.00 Many days

.00 Jun 25

2.4a Mar 23

b Mar 23

.47

.01

.00

* During period of operation.

a From discharge measurement.

b Undetermined.

PLATTE RIVER BASIN

06755860 DIAMOND CREEK AT F.E. WARREN AIR FORCE BASE, WY

LOCATION.--Lat 41°08'51", long 104°52'22", in SE¹/₄ sec.27, T.14 N., R.67 W., Laramie County, Hydrologic Unit 10190009, F.E. Warren Air Force Base, on left bank 0.3 mi upstream from Missile Drive and 0.35 mi upstream from mouth.

DRAINAGE AREA.--10.8 mi².

PERIOD OF RECORD.--May 1992 to current year.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 6,140 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 28, Nov. 13, 24-27, Jan. 27 to Feb. 13, Feb. 24-26, Mar. 8, 9, and Apr. 28 to May 2. Records good except those below 0.1 ft³/s and above 2 ft³/s, which are fair, and those for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.13	.14	.09	.12	.15	.21	.38	.13	.01	.37	.07
2	.09	.12	.14	.09	.10	.17	.24	.45	.30	.01	.09	.05
3	.09	.11	.14	.09	.10	.19	.23	.45	.15	.02	.05	.04
4	.09	.11	.13	.09	.11	.19	.25	.39	.10	.02	.04	.04
5	.09	.10	.12	.11	.10	.21	.22	.32	.06	.02	.05	.04
6	.10	.08	.11	.10	.09	.26	.19	.30	.05	.02	.05	.04
7	.21	.07	.10	.12	.08	.17	.22	.31	.05	.03	.03	.04
8	.16	.07	.11	.11	.08	.14	.25	.33	.04	.02	.04	.04
9	.14	.07	.13	.10	.09	.16	.27	.26	.03	.01	.04	.04
10	.14	.08	.16	.08	.09	.15	.35	.22	.03	.01	.16	.04
11	.13	.08	.17	.07	.10	.12	.36	.20	.03	.05	.06	.03
12	.11	.08	.18	.10	.11	.10	.54	.17	.02	.02	.05	.03
13	.12	.09	.16	.12	.13	.35	.69	.97	.03	.18	.13	.08
14	.17	.10	.14	.11	.12	.64	.61	.60	.02	.06	.05	.05
15	.15	.11	.13	.13	.14	.48	.44	.98	.03	.05	.04	.04
16	.15	.10	.13	.13	.15	.53	.36	.84	.03	.03	.04	.04
17	.27	.11	.13	.13	.15	.71	.28	.54	.02	.04	.04	.04
18	.80	.13	.12	.13	.18	.40	.26	.37	.02	.04	.03	.05
19	.28	.11	.11	.12	.17	.41	.22	.27	.13	.04	.04	.05
20	.17	.10	.10	.13	.15	.36	.20	.21	.05	.03	.04	.05
21	.15	.12	.09	.13	.15	.35	.19	.17	.06	.03	.04	.06
22	.14	.13	.08	.13	.15	.31	.18	.15	.05	.03	.05	.07
23	.14	.12	.07	.13	.12	.65	.16	.13	.04	.03	.04	.06
24	.13	.10	.06	.13	.12	.29	.15	.13	.03	.25	.04	.06
25	.12	.09	.06	.14	.12	.16	.37	.12	.02	.12	.05	.07
26	.11	.09	.07	.14	.15	.15	.26	.11	.01	.04	.04	.07
27	.11	.10	.08	.12	.17	.14	.20	.11	.01	.03	.03	.07
28	.11	.10	.08	.11	.16	.14	.19	.11	.01	.03	.06	.06
29	.11	.12	.08	.11	---	.16	.20	.10	.01	.03	.04	.06
30	.09	.14	.08	.11	---	.18	.28	.09	.01	.03	.04	.06
31	.12	---	.09	.12	---	.21	---	.11	---	.14	.08	---
TOTAL	4.88	3.06	3.49	3.52	3.50	8.63	8.57	9.89	1.57	1.47	1.95	1.54
MEAN	.16	.10	.11	.11	.12	.28	.29	.32	.052	.047	.063	.051
MAX	.80	.14	.18	.14	.18	.71	.69	.98	.30	.25	.37	.08
MIN	.09	.07	.06	.07	.08	.10	.15	.09	.01	.01	.03	.03
AC-FT	9.7	6.1	6.9	7.0	6.9	17	17	20	3.1	2.9	3.9	3.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1994, BY WATER YEAR (WY)

	1992	1993	1994	1993	1994	1993	1994	1993	1994	1993	1994
MEAN	.12	.10	.11	.10	.12	.21	.37	.24	.22	.071	.093
MAX	.16	.10	.11	.11	.12	.28	.45	.32	.50	.096	.11
(WY)	1994	1993	1994	1994	1994	1994	1993	1994	1993	1992	1993
MIN	.075	.10	.098	.091	.12	.15	.29	.17	.052	.047	.063
(WY)	1993	1994	1993	1993	1993	1993	1994	1993	1994	1994	1994

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1992 - 1994
ANNUAL TOTAL	65.58	52.07	--
ANNUAL MEAN	.18	.14	.16
HIGHEST ANNUAL MEAN	--	--	.17
LOWEST ANNUAL MEAN	--	--	.14
HIGHEST DAILY MEAN	2.0 Jun 3	.98 May 15	2.0 Jun 3 1993
LOWEST DAILY MEAN	.03 Jul 28	.01 Jun 26	.01 Jun 26 1994
ANNUAL SEVEN-DAY MINIMUM	.04 Jul 26	.01 Jun 26-Jul 2, Jul 9, 10	.01 Jun 26-Jul 2, Jul 9, 10, 1994
INSTANTANEOUS PEAK FLOW	--	6.6 May 13	8.6 Aug 21 1993
INSTANTANEOUS PEAK STAGE	--	2.60 May 13	2.71 Aug 21 1993
ANNUAL RUNOFF (AC-FT)	130	103	114
10 PERCENT EXCEEDS	.34	.29	.29
50 PERCENT EXCEEDS	.11	.11	

06755880 DIAMOND CREEK AT MOUTH, AT F.E. WARREN AIR FORCE BASE, WY

LOCATION.--Lat 41°08'56", long 104°52'06", in SE¹/₄ sec.27, T.14 N., R.67 W., Laramie County, Hydrologic Unit 10190009, F.E. Warren Air Force Base, on right bank 60 ft upstream from Missile Drive and 300 ft from mouth.

DRAINAGE AREA.--10.9 mi².

PERIOD OF RECORD.--May 1992 to current year.

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

REMARKS.--Estimated daily discharges: Oct. 28 to Nov. 1, Nov. 5-10, 13, 14, Nov. 18 to Dec. 2, Dec. 14 to Mar. 16, May 21 to June 22, June 27 to July 2, and July 10. Records good except those below 0.1 ft³/s and above 2 ft³/s, which are fair, and those for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	.17	.18	.10	.13	.16	.22	.40	.13	.03	.28	.08
2	.13	.15	.17	.10	.12	.18	.25	.48	.32	.03	.12	.05
3	.13	.15	.16	.10	.11	.20	.23	.46	.26	.03	.05	.05
4	.12	.15	.15	.10	.12	.21	.25	.40	.12	.04	.02	.05
5	.11	.12	.13	.11	.13	.23	.22	.33	.08	.04	.05	.05
6	.11	.11	.13	.11	.11	.28	.18	.31	.06	.04	.02	.04
7	.23	.11	.16	.13	.10	.22	.21	.29	.05	.04	.01	.05
8	.18	.11	.20	.12	.10	.17	.23	.36	.04	.03	.01	.05
9	.15	.11	.23	.10	.11	.19	.26	.27	.03	.02	.01	.05
10	.14	.11	.21	.09	.11	.17	.35	.22	.03	.02	.05	.05
11	.14	.19	.19	.09	.11	.14	.36	.20	.03	.02	.08	.05
12	.14	.15	.18	.10	.11	.11	.52	.18	.03	.04	.01	.05
13	.14	.15	.16	.12	.11	.35	.65	1.1	.03	.05	.08	.06
14	.18	.15	.14	.12	.10	.66	.58	.67	.03	.15	.04	.09
15	.18	.16	.14	.14	.10	.56	.44	.97	.03	.09	.01	.07
16	.17	.16	.14	.14	.13	.60	.37	.86	.03	.06	.01	.07
17	.31	.16	.14	.14	.17	.77	.28	.58	.03	.03	.01	.07
18	.91	.17	.13	.14	.19	.51	.25	.41	.05	.03	.02	.07
19	.37	.15	.12	.13	.18	.46	.22	.25	.15	.03	.02	.07
20	.20	.13	.11	.14	.17	.41	.20	.16	.12	.03	.02	.07
21	.18	.14	.10	.14	.17	.38	.18	.15	.09	.02	.01	.09
22	.17	.15	.09	.14	.17	.35	.17	.15	.12	.02	.02	.10
23	.15	.14	.08	.14	.15	.64	.15	.13	.09	.03	.01	.09
24	.15	.12	.08	.14	.16	.37	.14	.12	.06	.05	.02	.09
25	.15	.11	.08	.14	.17	.20	.34	.12	.04	.23	.02	.10
26	.14	.11	.08	.14	.23	.19	.25	.12	.03	.03	.02	.10
27	.14	.11	.09	.13	.21	.18	.19	.12	.03	.01	.05	.09
28	.14	.12	.09	.12	.17	.18	.21	.12	.03	.01	.07	.08
29	.13	.15	.09	.12	---	.19	.27	.12	.03	.01	.05	.09
30	.12	.17	.09	.12	---	.22	.35	.10	.03	.01	.04	.09
31	.14	---	.10	.13	---	.24	---	.11	---	.06	.06	---
TOTAL	5.78	4.18	4.14	3.78	3.94	9.72	8.52	10.26	2.20	1.33	1.29	2.11
MEAN	.19	.14	.13	.12	.14	.31	.28	.33	.073	.043	.042	.070
MAX	.91	.19	.23	.14	.23	.77	.65	1.1	.32	.23	.28	.10
MIN	.11	.11	.08	.09	.10	.11	.14	.10	.03	.01	.01	.04
AC-FT	11	8.3	8.2	7.5	7.8	19	17	20	4.4	2.6	2.6	4.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1994, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1992	.15	.14	1992	.13	.12
1993	.19	.15	1993	.13	.12
1994	.15	.13	1994	.12	.11
1995	.15	.13	1995	.12	.11
1996	.15	.13	1996	.12	.11
1997	.15	.13	1997	.12	.11
1998	.15	.13	1998	.12	.11
1999	.15	.13	1999	.12	.11
2000	.15	.13	2000	.12	.11
2001	.15	.13	2001	.12	.11
2002	.15	.13	2002	.12	.11
2003	.15	.13	2003	.12	.11
2004	.15	.13	2004	.12	.11
2005	.15	.13	2005	.12	.11
2006	.15	.13	2006	.12	.11
2007	.15	.13	2007	.12	.11
2008	.15	.13	2008	.12	.11
2009	.15	.13	2009	.12	.11
2010	.15	.13	2010	.12	.11
2011	.15	.13	2011	.12	.11
2012	.15	.13	2012	.12	.11
2013	.15	.13	2013	.12	.11
2014	.15	.13	2014	.12	.11
2015	.15	.13	2015	.12	.11
2016	.15	.13	2016	.12	.11
2017	.15	.13	2017	.12	.11
2018	.15	.13	2018	.12	.11
2019	.15	.13	2019	.12	.11
2020	.15	.13	2020	.12	.11
2021	.15	.13	2021	.12	.11
2022	.15	.13	2022	.12	.11
2023	.15	.13	2023	.12	.11
2024	.15	.13	2024	.12	.11
2025	.15	.13	2025	.12	.11
2026	.15	.13	2026	.12	.11
2027	.15	.13	2027	.12	.11
2028	.15	.13	2028	.12	.11
2029	.15	.13	2029	.12	.11
2030	.15	.13	2030	.12	.11
2031	.15	.13	2031	.12	.11

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1992 - 1994
ANNUAL TOTAL	73.38	57.25	---
ANNUAL MEAN	.20	.16	.18
HIGHEST ANNUAL MEAN	---	---	.19
LOWEST ANNUAL MEAN	---	---	.16
HIGHEST DAILY MEAN	2.5 Jun 3	1.1 May 13	2.5 Jun 3 1993
LOWEST DAILY MEAN	.01 Jul 28	.01 Jul 27-30, Aug 7-9, 12, 15-17, 21, 23	.01 Jul 28, 29, Aug 1, 1993; Jul 27-30, Aug 7-9, 12, 15-17, 21, 23, 1994
ANNUAL SEVEN-DAY MINIMUM	.02 Jul 26	.01 Aug 15	.01 Aug 15 1994
INSTANTANEOUS PEAK FLOW	---	5.1 May 13	8.5 Jun 3 1993
INSTANTANEOUS PEAK STAGE	---	2.34 May 13	2.56 Jun 3 1993
ANNUAL RUNOFF (AC-FT)	146	114	127
10 PERCENT EXCEEDS	.38	.31	.31
50 PERCENT EXCEEDS	.13	.13	.12
90 PERCENT EXCEEDS	.06	.03	.04

PLATTE RIVER BASIN

06755950 CROW CREEK AT F.E. WARREN AFB, WY

LOCATION.--Lat 41°08'02", long 104°50'25", in NE¹/₄ NW¹/₄ SW¹/₄ sec.36, T.14 N., R.67 W., Laramie County, Hydrologic Unit 10190009, 1,400 ft upstream from bridge on U.S. Interstate 25, 0.2 mi southeast of Gate No. 1 of F.E. Warren AFB, and 2 mi downstream from mouth of Diamond Creek.

DRAINAGE AREA.--253 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March to September 1994.

GAGE.--Water-stage recorder. Elevation of gage is 6,070 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Mar. 21 to June 14 and Sept. 2-14, 21-30. Records fair except those for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	3.2	4.0	1.1	.42	3.5	3.0
2	---	---	---	---	---	---	3.2	4.2	.93	.45	2.0	2.0
3	---	---	---	---	---	---	3.5	3.2	1.1	.46	1.1	.85
4	---	---	---	---	---	---	3.8	2.9	1.0	.45	.78	.80
5	---	---	---	---	---	---	3.8	2.7	.90	.44	.72	.75
6	---	---	---	---	---	---	3.6	2.5	.85	.44	.63	.75
7	---	---	---	---	---	---	3.8	2.4	.80	.45	.54	.75
8	---	---	---	---	---	---	3.8	2.6	.77	.43	.58	.76
9	---	---	---	---	---	---	3.9	2.2	.70	.40	.61	.80
10	---	---	---	---	---	---	4.4	1.9	.62	.38	.59	1.1
11	---	---	---	---	---	---	5.4	1.9	.60	.43	.86	1.3
12	---	---	---	---	---	---	5.8	1.9	.60	.51	.64	1.5
13	---	---	---	---	---	---	6.4	11	.58	.54	.95	1.7
14	---	---	---	---	---	---	7.0	7.0	.58	.81	.89	2.0
15	---	---	---	---	---	---	4.8	4.5	.58	2.4	.67	2.3
16	---	---	---	---	---	---	3.8	3.8	.59	.97	.59	2.7
17	---	---	---	---	---	---	3.3	2.8	.57	.73	.55	2.7
18	---	---	---	---	---	---	3.0	2.2	.55	.58	.50	2.9
19	---	---	---	---	---	---	2.6	1.8	.82	.51	.51	2.0
20	---	---	---	---	---	---	3.0	1.6	.84	.47	.51	2.7
21	---	---	---	---	---	5.8	2.8	1.5	.74	.44	.53	2.6
22	---	---	---	---	---	5.8	2.6	1.4	.76	.39	.54	2.5
23	---	---	---	---	---	3.8	2.2	1.3	.54	.39	.53	2.2
24	---	---	---	---	---	4.5	1.9	1.2	.58	.66	.50	2.0
25	---	---	---	---	---	3.8	2.2	1.4	.51	1.4	.48	1.9
26	---	---	---	---	---	3.6	2.0	1.2	.45	.53	.46	2.0
27	---	---	---	---	---	4.0	1.9	.95	.41	.48	.45	2.2
28	---	---	---	---	---	3.6	2.5	.85	.41	.44	.52	2.4
29	---	---	---	---	---	3.2	3.2	.78	.40	.41	.51	2.6
30	---	---	---	---	---	2.8	3.6	.72	.42	.41	.48	2.6
31	---	---	---	---	---	2.8	---	.90	---	.54	.40	---
TOTAL	---	---	---	---	---	43.7	107.0	79.30	20.30	18.36	23.12	56.36
MEAN	---	---	---	---	---	3.97	3.57	2.56	.68	.59	.75	1.88
MAX	---	---	---	---	---	5.8	7.0	11	1.1	2.4	3.5	3.0
MIN	---	---	---	---	---	2.8	1.9	.72	.40	.38	.40	.75
AC-FT	---	---	---	---	---	87	212	157	40	36	46	112

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1994, BY WATER YEAR (WY)

MEAN	---	---	---	---	---	---	3.57	2.56	.68	.59	.75	1.88
MAX	---	---	---	---	---	---	3.57	2.56	.68	.59	.75	1.88
(WY)	---	---	---	---	---	---	1994	1994	1994	1994	1994	1994
MIN	---	---	---	---	---	---	3.57	2.56	.68	.59	.75	1.88
(WY)	---	---	---	---	---	---	1994	1994	1994	1994	1994	1994

SUMMARY STATISTICS

HIGHEST DAILY MEAN
 LOWEST DAILY MEAN
 ANNUAL SEVEN-DAY MINIMUM
 INSTANTANEOUS PEAK FLOW
 INSTANTANEOUS PEAK STAGE
 10 PERCENT EXCEEDS
 50 PERCENT EXCEEDS
 90 PERCENT EXCEEDS

FOR 1994 WATER YEAR*

11 May 13
 .38 Jul 10
 .42 Jun 26
 a May 13
 a May 13
 3.8
 1.0
 .45

* During period of operation.

a Not determined, during period of estimated record.

06755950 CROW CREEK AT F.E. WARREN AFB, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1983 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)
OCT 21...	0830	1.6	605	610	10.6	101	7.8	4.0
JAN 19...	0830	1.5	650	605	10.9	94	7.7	0.0
APR 19...	0900	2.6	525	610	9.8	106	7.8	9.0
AUG 18...	1515	0.16	575	610	12.4	172	8.1	20.0

DATE	TEMPER-ATURE AIR (DEG C)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)
OCT 21...	3.0	K5	0.01	1.2	0.01	0.4	0.03	0.01
JAN 19...	5.0	K3	0.02	1.8	0.03	0.3	<0.01	<0.01
APR 19...	10.0	K10	0.02	0.57	0.05	0.6	0.03	0.01
AUG 18...	31.0	14	0.03	0.64	0.10	0.4	0.02	<0.01

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

DATE	TIME	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	SILICA, DIS-SOLVED (MG/L AS SIO2)	ALUM-INUM, DIS-SOLVED (MG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)
OCT 21...	0830	270	88	12	20	0.5	24	<10	1
JAN 19...	0830	270	89	12	18	0.5	20	20	2
APR 19...	0900	230	74	11	17	0.5	18	<10	2
AUG 18...	1515	250	79	12	22	0.6	21	<10	2

DATE	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 21...	200	<0.5	120	<1.0	<1	<3	1	11
JAN 19...	190	<0.5	100	<1.0	<1	<3	2	8
APR 19...	170	<0.5	70	4.0	<1	<3	3	22
AUG 18...	160	<0.5	200	<1.0	<1	<3	<1	11

PLATTE RIVER BASIN

06755960 CROW CREEK AT 19TH STREET, AT CHEYENNE, WY

LOCATION.--Lat 41°07'52", long 107°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 September 1994.

GAGE.--Water-stage recorder. Elevation of gage is 6,050 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 21, 24, Nov. 13, 23-26, Dec. 3-7, 13-20, Dec. 30 to Jan. 7, Jan. 11-13, Jan. 15 to Feb. 17, Feb. 19-26, Mar. 5, 6, 8-10, and Mar. 28 to May 1. Records fair except those for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 20, 1904, stage unknown, estimated 8,500 ft³/s; flood of August 1, 1985, reached a stage of 9.6 ft, present datum, from floodmarks, discharge, 2,980 ft³/s, on basis of indirect measurement of peak flow.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	2.6	2.2	2.0	1.6	2.8	3.9	3.4	2.0	1.1	7.7	1.6
2	1.9	2.2	2.2	1.9	1.6	3.1	3.9	3.6	5.9	1.1	3.0	1.4
3	1.9	2.1	2.2	2.0	1.7	4.2	3.9	3.0	2.2	1.2	1.6	1.4
4	2.1	2.0	2.0	2.1	1.7	5.2	3.9	2.7	1.7	1.1	1.3	1.3
5	1.9	1.9	2.0	2.0	1.7	5.0	3.7	2.6	1.5	1.1	1.3	1.3
6	1.9	2.0	2.0	2.1	1.7	5.2	3.3	2.4	1.4	1.1	1.2	1.3
7	2.5	1.9	2.1	2.1	1.7	5.7	3.5	2.4	1.4	1.2	1.1	1.3
8	2.0	1.9	2.1	2.3	1.7	5.2	4.0	3.1	1.4	1.2	1.2	1.3
9	1.8	1.8	2.1	2.2	1.7	4.9	4.5	2.4	1.4	1.1	1.3	1.4
10	1.8	1.8	2.2	2.3	1.7	4.7	5.0	2.3	1.3	1.0	1.4	2.1
11	1.8	1.8	2.3	2.0	1.7	4.6	6.6	2.3	1.3	1.5	1.4	2.2
12	1.8	2.0	2.3	1.9	1.7	5.2	7.8	2.2	1.3	1.2	1.3	2.3
13	1.8	2.0	2.2	1.8	1.8	5.4	6.0	12	1.3	3.4	2.1	3.5
14	1.8	2.2	2.0	2.0	1.9	5.9	6.0	8.8	1.3	2.5	1.5	3.7
15	1.8	2.1	2.1	1.9	1.9	5.4	5.0	5.7	1.3	3.9	1.3	3.2
16	1.9	2.2	2.2	1.8	2.2	5.7	4.5	4.3	1.3	1.6	1.3	3.2
17	5.2	2.1	2.2	1.6	2.6	5.7	3.7	3.3	1.3	1.2	1.3	3.2
18	14	2.5	2.1	1.7	3.0	5.2	3.0	2.7	1.3	1.0	1.3	3.1
19	2.8	2.3	2.0	1.9	2.0	5.2	2.8	2.4	2.4	.97	1.3	3.3
20	2.3	2.3	2.0	1.9	1.9	5.2	2.6	2.1	1.7	.97	1.3	3.3
21	2.3	2.3	2.2	2.0	1.8	4.6	2.4	2.0	1.7	.95	1.3	3.4
22	2.4	2.2	2.3	2.0	1.8	4.6	2.3	1.8	1.7	1.0	1.5	3.6
23	2.3	2.1	2.4	2.0	1.8	4.4	2.1	1.7	1.5	1.1	1.2	3.3
24	2.4	2.1	2.5	2.0	2.0	3.8	2.0	1.7	1.4	2.7	1.2	3.1
25	2.4	2.0	2.5	1.9	1.9	3.3	2.7	2.8	1.3	3.4	1.2	2.1
26	2.4	2.3	2.4	1.8	2.1	3.1	2.5	2.1	1.2	1.2	1.2	2.2
27	2.6	2.8	2.3	1.7	2.8	2.8	2.4	1.8	1.2	1.1	1.1	2.5
28	2.6	2.8	2.2	1.7	3.0	2.8	2.6	1.7	1.3	1.1	1.4	3.6
29	2.6	2.5	2.1	1.7	---	2.8	2.9	1.7	1.2	1.1	1.2	3.5
30	2.6	2.3	2.0	1.6	---	3.2	3.1	1.6	1.1	1.1	1.3	3.5
31	2.6	---	1.8	1.6	---	3.6	---	2.7	---	1.8	1.6	---
TOTAL	82.0	65.1	67.2	59.5	54.7	138.5	112.6	95.3	48.3	45.99	49.4	76.2
MEAN	2.65	2.17	2.17	1.92	1.95	4.47	3.75	3.07	1.61	1.48	1.59	2.54
MAX	14	2.8	2.5	2.3	3.0	5.9	7.8	12	5.9	3.9	7.7	3.7
MIN	1.8	1.8	1.8	1.6	1.6	2.8	2.0	1.6	1.1	.95	1.1	1.3
AC-FT	163	129	133	118	108	275	223	189	96	91	98	151

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1994, BY WATER YEAR (WY)

	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994
MEAN	2.65	2.17	2.17	1.92	1.95	4.47	3.75	3.07	1.61	1.48	1.59	2.54
MAX	2.65	2.17	2.17	1.92	1.95	4.47	3.75	3.07	1.61	1.48	1.59	2.54
(WY)	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994
MIN	2.65	2.17	2.17	1.92	1.95	4.47	3.75	3.07	1.61	1.48	1.59	2.54
(WY)	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994

SUMMARY STATISTICS

	FOR 1994 WATER YEAR
ANNUAL TOTAL	894.79
ANNUAL MEAN	2.45
HIGHEST DAILY MEAN	14 Oct 18
LOWEST DAILY MEAN	.95 Jul 21
ANNUAL SEVEN-DAY MINIMUM	1.0 Jul 17
INSTANTANEOUS PEAK FLOW	65 May 13
INSTANTANEOUS PEAK STAGE	3.03 May 13
ANNUAL RUNOFF (AC-FT)	1770
10 PERCENT EXCEEDS	4.2
50 PERCENT EXCEEDS	2.1
90 PERCENT EXCEEDS	1.3

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED SATUR-ATION	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)
OCT 21...	1100	15	750	618	9.2	94	7.6	7.0
JAN 19...	1300	13	920	605	10.0	97	7.7	4.0
APR 19...	1200	2.9	830	615	12.8	148	7.4	12.0
AUG 19...	1135	8.3	759	612	9.4	119	8.1	16.0

DATE	TEMPER-ATURE AIR (DEG C)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS ORTHO, DIS-SOLVED TOTAL (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)
OCT 21...	10.0	K440	0.20	3.8	1.5	2.6	1.6	1.6
JAN 19...	11.0	600	0.15	3.1	5.8	7.5	2.1	1.9
APR 19...	15.0	80	0.28	3.1	7.3	8.8	5.4	2.3
AUG 19...	24.0	K260	0.35	2.8	7.9	9.5	1.9	1.7

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

DATE	TIME	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	SILICA, DIS-SOLVED (MG/L AS SIO2)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)
OCT 21...	1100	240	76	12	54	2	19	<10	3
JAN 19...	1300	240	76	13	73	2	19	10	3
APR 19...	1200	240	74	13	62	2	20	<10	3
AUG 19...	1135	200	62	11	59	2	18	<10	3

DATE	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 21...	110	<0.5	220	<1.0	<1	<3	3	27
JAN 19...	100	<0.5	270	<1.0	1	<3	4	27
APR 19...	120	<0.5	240	<1.0	<1	<3	4	52
AUG 19...	91	<0.5	250	<1.0	<1	<3	<1	23

PLATTE RIVER BASIN

06756100 CROW CREEK NEAR CARPENTER, WY

LOCATION.--Lat 41°04'58", long 104°23'56", in SE¹/₄ NE¹/₄ NW¹/₄ sec.23, T.13 N., R.63 W., Laramie County, Hydrologic Unit 10190009, on left bank 0.6 mi downstream from county road and 3.0 mi northwest of Carpenter.

DRAINAGE AREA.--415 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 5,480 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 29-31, Nov. 4-9, 12-16, Nov. 19 to Mar. 1, Mar. 8-10, 23-30, Apr. 27-29, and May 30 to June 26. Records fair except those for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs and diversions for irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	15	18	.45	1.0	1.3	5.5	1.2	1.1	.85	.80	1.4
2	34	15	16	.50	1.1	1.8	5.1	2.5	.80	1.1	.84	1.6
3	34	15	15	2.8	1.4	2.2	4.8	2.7	.65	1.1	.78	1.5
4	38	15	16	9.0	1.5	2.9	4.1	1.5	.55	1.1	.73	1.7
5	38	13	12	6.0	1.6	2.3	3.5	1.0	.50	1.2	.79	1.5
6	35	14	11	3.0	1.7	2.4	3.7	1.1	.45	1.3	.77	1.6
7	32	16	12	2.0	1.8	2.1	3.4	2.0	.40	1.4	.69	1.6
8	30	18	15	2.5	1.6	1.6	3.1	2.1	.38	1.6	.73	1.6
9	29	20	20	2.7	1.3	2.0	3.8	1.1	.36	1.4	.73	1.5
10	29	22	27	3.0	1.5	2.5	4.5	.96	.36	1.4	.75	1.5
11	27	22	30	3.2	1.6	2.2	4.6	.87	.36	1.6	.78	1.4
12	27	21	5.0	3.5	1.3	3.1	33	.82	.36	1.5	.81	1.4
13	18	19	4.5	3.8	1.7	16	9.0	1.1	.35	1.5	1.0	1.4
14	16	17	7.0	4.0	3.0	11	3.0	.81	.35	1.6	.87	1.4
15	16	18	2.4	4.5	5.5	13	2.3	.74	.35	1.3	.86	1.2
16	18	20	1.8	4.0	13	12	2.4	.67	.35	1.2	.74	1.3
17	20	21	1.0	3.0	15	11	2.9	.63	.35	1.2	.71	1.4
18	26	19	.70	3.0	16	10	3.6	.61	.34	1.2	.89	1.4
19	32	18	.60	4.0	10	14	3.5	.57	.37	1.1	.87	1.4
20	37	19	.55	4.8	6.0	22	3.1	.52	.45	1.5	1.2	1.5
21	25	19	.48	5.6	4.0	25	3.1	.51	.50	1.0	1.2	1.5
22	20	13	.40	7.0	2.0	27	2.7	.52	.45	.94	1.1	2.3
23	17	10	.40	9.0	2.5	20	2.2	.52	.43	.95	1.2	4.8
24	17	8.0	.45	9.5	6.0	12	1.6	.50	.43	.90	1.2	4.1
25	18	7.0	.60	8.0	1.0	9.5	1.3	.55	.43	.97	1.2	2.6
26	17	6.5	.65	4.0	1.1	8.0	1.1	.61	.42	.89	1.2	2.8
27	17	7.5	.40	3.2	1.3	7.0	1.2	.65	.41	.84	1.2	2.9
28	17	12	.42	2.8	1.1	7.5	1.5	.51	.57	.79	1.3	2.7
29	16	17	.43	2.2	---	7.6	2.3	.36	.71	.79	1.3	2.0
30	14	20	.43	1.5	---	7.8	3.2	.35	.72	.74	1.3	1.6
31	17	---	.44	1.1	---	7.9	---	.50	---	.73	1.3	---
TOTAL	764	477.0	220.65	123.65	106.6	274.7	129.1	29.08	14.25	35.69	29.84	56.6
MEAN	24.6	15.9	7.12	3.99	3.81	8.86	4.30	.94	.47	1.15	.96	1.89
MAX	38	22	30	9.5	16	27	33	2.7	1.1	1.6	1.3	4.8
MIN	14	6.5	.40	.45	1.0	1.3	1.1	.35	.34	.73	.69	1.2
AC-FT	1520	946	438	245	211	545	256	58	28	71	59	112

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1994, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994
MEAN	14.4	15.4	8.09	7.27	7.25
MAX	24.6	24.2	15.5	16.0	11.5
(WY)	1994	1992	1992	1991	1992
MIN	4.87	6.86	3.65	2.26	2.15
(WY)	1993	1993	1991	1993	1993

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1990 - 1994
ANNUAL TOTAL	3086.75	2261.16	--
ANNUAL MEAN	8.46	6.19	12.8
HIGHEST ANNUAL MEAN	--	--	28.2
LOWEST ANNUAL MEAN	--	--	5.94
HIGHEST DAILY MEAN	78	38	636
LOWEST DAILY MEAN	.40	.34	.34
ANNUAL SEVEN-DAY MINIMUM	.47	.35	.35
INSTANTANEOUS PEAK FLOW	--	51a	789
INSTANTANEOUS PEAK STAGE	--	4.06b	6.09
ANNUAL RUNOFF (AC-FT)	6120	4490	9290
10 PERCENT EXCEEDS	25	19	24
50 PERCENT EXCEEDS	2.9	1.7	4.6
90 PERCENT EXCEEDS	1.4	.50	1.3

a Gage height, 2.50 ft.

b Backwater from ice.

09188500 GREEN RIVER AT WARREN BRIDGE, NEAR DANIEL, WY

DRAINAGE AREA.--468 mi²

REVISED 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. 29 to Apr. 8. Records good except those for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 10,200 acres, of which about 6,100 acres are downstream from station. National Weather Service satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	169	80	110	110	80	110	130	375	1350	658	407	211
2	166	62	110	110	100	100	130	358	1450	651	441	217
3	164	62	110	110	96	100	130	351	1290	646	454	218
4	162	62	110	100	90	100	140	396	1180	622	450	219
5	161	60	110	110	86	100	130	505	1180	567	427	231
6	160	54	110	110	86	100	150	730	1200	511	394	240
7	175	58	100	100	90	100	160	810	1230	497	366	224
8	228	56	120	100	90	105	180	855	1170	497	352	204
9	231	54	120	100	80	110	233	885	959	451	353	192
10	212	62	110	100	86	110	230	998	738	411	357	182
11	215	62	110	100	90	110	251	1090	614	405	381	179
12	214	62	110	100	90	110	275	1220	618	428	370	188
13	206	62	100	110	80	110	329	1550	745	448	353	202
14	201	62	100	120	84	120	351	1830	918	446	342	213
15	201	62	100	100	90	120	346	1650	997	424	332	239
16	201	66	110	100	100	120	431	1510	861	398	324	260
17	193	70	100	100	100	120	543	1390	672	381	304	268
18	186	64	90	100	100	120	540	1230	566	369	292	270
19	179	56	98	110	90	120	579	1070	555	369	280	255
20	178	62	100	110	80	110	589	979	669	383	276	241
21	198	66	100	110	86	120	660	870	833	392	356	225
22	198	64	100	110	80	120	694	756	1030	379	334	209
23	195	60	100	100	90	110	795	727	1220	369	307	194
24	193	54	100	100	100	100	738	749	1290	373	303	182
25	189	50	100	100	110	110	683	836	1150	381	288	177
26	186	70	110	100	110	110	598	1010	969	382	267	169
27	176	80	120	100	110	100	487	1180	869	395	248	163
28	178	100	110	100	100	112	428	1380	807	413	242	160
29	150	130	100	90	---	120	400	1410	726	406	234	157
30	120	120	100	80	---	130	394	1260	663	388	217	172
31	100	---	110	70	---	130	---	1220	---	393	214	---
TOTAL	5685	2032	3278	3160	2574	3457	11724	31180	28519	13833	10265	6261
MEAN	183	67.7	106	102	91.9	112	391	1006	951	446	331	209
MAX	231	130	120	120	110	130	795	1830	1450	658	454	270
MIN	100	50	90	70	80	100	130	351	555	369	214	157
AC-FT	11280	4030	6500	6270	5110	6860	23250	61850	56570	27440	20360	12420

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1994, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	198	144	126	118	110	123	289	1014	1767	1245	540	299	
MAX	433	223	390	710	166	240	600	1811	3813	2424	997	592	
(WY)	1984	1983	1993	1993	1967	1932	1943	1956	1986	1975	1982	1963	
MIN	102	67.7	70.0	50.0	60.0	70.0	129	263	610	399	213	150	
(WY)	1989	1994	1933	1933	1933	1933	1970	1993	1934	1988	1988	1988	

SUMMARY STATISTICS

SUMMARY STATISTICS	FOR 1994 WATER YEAR		WATER YEARS 1932 - 1994*	
ANNUAL TOTAL	121968		--	
ANNUAL MEAN	334		499	
HIGHEST ANNUAL MEAN	--		768	1986
LOWEST ANNUAL MEAN	--		281	1977
HIGHEST DAILY MEAN	1830	May 14	5450	Jun 6 1986
LOWEST DAILY MEAN	50	Nov 25	36	Nov 26 1933
ANNUAL SEVEN-DAY MINIMUM	58	Nov 3	43	Nov 24 1933
INSTANTANEOUS PEAK FLOW	1910	May 14	5490a	Jun 6 1986
INSTANTANEOUS PEAK STAGE	4.06	May 14	5.77	Jun 9 1972
ANNUAL RUNOFF (AC-FT)	241900		361700	
10 PERCENT EXCEEDS	864		1400	
50 PERCENT EXCEEDS	186		201	
90 PERCENT EXCEEDS	86		100	

* No record for 1993 water year.
a Gage height, 5.65 ft.

LOCATION.--Lat 43°01'50", long 109°46'10", in S¹/2 sec.5, T.35 N., R.108 W., Sublette County, Hydrologic Unit 14040102, Bridger National Forest, on right bank 0.5 mi upstream from Fremont Lake, 0.5 mi downstream from Fremont Creek, and 12 mi northeast of Pinedale.

DRAINAGE AREA.--75.8 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1443: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,450 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 24-27, Dec. 3, 5, 6, 13, 18, 20-24, Jan. 9-14, Feb. 1-8, 24, 25, and Mar. 7, 9, 10, 20, 21, 23, 24, 27, 30. Records good except those for estimated daily discharges, which are poor. No diversion upstream from station. Satellite telemeter at station.

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)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 13	2400	*1,100	*5.34	May 28	0600	1,000	5.19

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1994, BY WATER YEAR (WY)												
MEAN	54.8	32.4	23.8	19.1	16.6	16.5	37.5	294	830	511	159	88.2
MAX	165	71.8	53.0	37.6	36.7	35.0	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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1955 - 1994	
ANNUAL TOTAL	65116		43410		--	
ANNUAL MEAN	178		119		174	
HIGHEST ANNUAL MEAN	--		--		253	1986
LOWEST ANNUAL MEAN	--		--		96.7	1977
HIGHEST DAILY MEAN	1270	Jun 22	1010	May 14	2280	Jun 16 1959
LOWEST DAILY MEAN	12	Nov 25	10	Feb 1	3.3	Apr 4 1977
ANNUAL SEVEN-DAY MINIMUM	13	Dec 25	11	Jan 26	3.4	Mar 31 1977
INSTANTANEOUS PEAK FLOW	--		1100	May 13	2550a	Jun 16 1959
INSTANTANEOUS PEAK STAGE	--		5.34	May 13	7.65	Jun 6 1986
ANNUAL RUNOFF (AC-FT)	129200		86100		126000	
10 PERCENT EXCEEDS	595		384		559	
50 PERCENT EXCEEDS	31		36			
90 PERCENT EXCEEDS	14		11		13	

a Gage height, 7.15 ft.

09196500 PINE CREEK ABOVE FREMONT LAKE, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1985 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May and June 1987.

pH: March to July 1987.

WATER TEMPERATURE: March to June 1987, April 1989 to current year.

INSTRUMENTATION.--Water temperature recorder since March 1987, provides continuous recordings. Sensor is located in stream.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Brief interruptions occurred in the record during period June 18 to Aug. 3. Actual daily maximums may have exceeded daily recorded maximum on some days during this period, but probably did not exceed recorded maximum for the year. Daily recorded minimums were not affected. No record June 24.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum and minimum daily, 18 microsiemens, entire period of operation.

pH: Maximum recorded, 7.0, July 6, 1987; minimum recorded, 6.1, May 19, 1987.

WATER TEMPERATURE: Maximum recorded, 25.1°C, Aug. 4, 1994; minimum recorded, 0.0°C, on many days during March and April 1987, Nov. 3, 1992, and December 1993 to February 1994.

EXTREMES FOR CURRENT YEAR:

WATER TEMPERATURE: Maximum recorded, 25.1°C, Aug. 4; minimum recorded, 0.0°C on many days during December to February.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	11.3	7.5	4.6	1.7	.9	.6	.4	.2	.3	.1	1.1	.9
2	11.4	7.3	3.6	.8	.9	.7	.5	.3	.3	.0	1.1	.9
3	11.8	7.3	3.3	1.7	.8	.5	.6	.4	.2	.0	.9	.7
4	12.2	7.7	3.6	1.6	.9	.7	.8	.5	.2	.0	.9	.7
5	11.5	8.0	2.5	.9	.9	.5	.7	.6	.2	.0	.9	.6
6	12.5	8.7	1.1	.8	.7	.4	.8	.6	.2	.0	.9	.7
7	9.7	8.4	1.2	.8	.7	.5	.8	.5	.4	.2	.9	.6
8	8.4	6.7	1.0	.8	.9	.6	.8	.6	.4	.2	1.0	.7
9	6.7	5.3	.8	.4	.8	.6	.8	.6	.4	.2	.9	.4
10	9.4	4.9	.9	.6	.7	.5	.8	.6	.5	.3	1.1	.4
11	8.4	5.7	1.1	.6	.6	.4	.8	.3	.6	.4	1.1	.8
12	9.4	6.5	1.3	.7	.7	.4	.4	.2	.8	.6	1.2	.8
13	8.4	5.9	1.1	.8	.5	.2	.3	.1	.8	.7	1.3	.9
14	8.3	6.1	1.0	.8	.4	.3	.3	.0	.9	.8	1.2	1.0
15	7.5	6.3	1.1	.6	.5	.3	.2	.0	.9	.8	1.2	1.0
16	7.6	5.8	1.2	.8	.5	.4	.3	.1	1.0	.8	1.2	1.0
17	7.5	5.1	1.1	.7	.5	.2	.3	.1	1.0	.9	1.3	1.0
18	8.5	5.1	1.0	.7	.4	.1	.4	.1	1.1	.9	1.3	.9
19	8.3	5.0	1.1	.7	.4	.4	.4	.1	1.2	1.0	1.2	1.0
20	7.7	4.4	.9	.7	.4	.2	.3	.0	1.2	1.1	1.2	.7
21	7.6	4.4	.9	.6	.4	.3	.3	.0	1.2	1.0	1.3	.6
22	8.5	5.2	.8	.7	.3	.1	.3	.0	1.2	1.1	1.4	1.1
23	8.5	5.0	.9	.7	.2	.0	.3	.0	1.2	1.0	1.2	.8
24	8.1	5.3	1.0	.7	.2	.0	.3	.0	1.1	.4	1.0	.7
25	7.8	4.7	1.0	.5	.2	.0	.4	.2	.8	.4	1.4	.7
26	7.1	3.8	1.0	.5	.2	.0	.4	.0	.9	.6	1.3	.8
27	6.3	3.7	.7	.5	.3	.2	.4	.2	1.0	.8	1.3	.5
28	6.5	3.7	.7	.5	.4	.2	.4	.3	1.0	.8	1.7	.8
29	4.4	2.1	.6	.5	.3	.1	.4	.3	---	---	1.9	.7
30	5.5	1.5	.8	.6	.2	.1	.4	.2	---	---	2.4	.8
31	6.3	2.2	---	---	.3	.0	.3	.2	---	---	3.4	1.0
MONTH	12.5	1.5	4.6	.4	.9	.0	.8	.0	1.2	.0	3.4	.4

GREEN RIVER BASIN

09196500 PINE CREEK ABOVE FREMONT LAKE, WY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.4	1.4	4.9	2.4	8.0	4.0	15.9	8.2	20.2	13.5	19.8	13.8
2	5.0	1.1	5.7	2.2	9.8	2.8	16.1	8.0	20.5	13.7	21.3	13.5
3	3.3	1.3	6.2	3.2	9.9	4.3	13.6	8.7	24.7	13.5	18.8	14.2
4	5.8	1.3	5.5	3.2	11.8	5.2	15.9	7.7	25.1	18.1	19.0	12.4
5	7.1	1.2	5.9	3.8	12.2	4.2	16.1	7.8	24.7	18.4	19.1	11.4
6	3.6	1.4	7.4	3.1	13.2	5.4	12.1	8.0	24.7	17.7	19.9	12.6
7	2.7	1.2	6.2	2.8	9.4	5.1	14.7	6.9	24.5	17.7	20.0	13.1
8	5.1	.9	5.5	3.0	5.4	3.4	16.3	8.2	21.6	19.0	18.7	13.8
9	4.3	1.1	6.7	2.9	8.6	2.5	16.6	8.5	21.3	18.1	19.0	14.3
10	5.7	1.5	5.9	3.0	11.5	3.7	16.6	10.4	23.5	16.3	18.1	13.7
11	8.3	1.2	5.9	3.2	13.7	4.7	16.8	9.0	23.9	18.1	18.0	13.1
12	8.6	1.4	5.6	3.5	10.9	6.2	16.9	8.3	23.1	17.6	16.2	13.6
13	8.4	1.9	6.0	4.2	10.2	6.7	15.7	8.5	24.5	17.6	16.8	12.4
14	6.7	1.9	6.1	4.1	9.2	5.2	16.8	8.7	24.1	17.9	13.5	11.6
15	8.6	1.1	5.8	4.4	6.5	4.2	17.1	8.5	24.4	18.2	15.6	10.0
16	8.3	1.3	6.2	4.4	9.7	5.4	17.3	9.2	24.0	17.2	16.2	10.1
17	6.7	2.0	5.8	4.4	12.6	4.3	17.2	9.1	23.5	16.5	16.9	10.9
18	6.4	2.0	5.8	4.4	14.5	6.5	17.1	9.9	23.2	17.1	17.5	11.0
19	4.9	1.8	7.9	4.9	14.0	7.7	17.4	9.4	23.4	17.1	17.5	11.5
20	5.6	1.7	4.5	1.2	14.9	8.1	17.6	9.5	22.9	16.9	16.5	11.7
21	5.6	1.7	6.3	.6	14.8	8.8	17.4	9.4	23.3	17.2	16.2	11.6
22	3.8	1.9	10.1	2.1	13.5	8.0	17.6	10.6	22.3	17.0	16.1	10.0
23	4.1	1.8	8.4	2.6	15.1	7.2	16.8	13.0	22.0	14.3	17.8	10.5
24	4.0	2.4	10.8	2.4	---	---	17.5	10.7	22.5	15.5	18.2	11.5
25	4.4	2.3	10.8	3.0	15.5	7.1	18.0	10.8	23.0	15.5	17.9	11.4
26	3.4	2.1	10.9	3.3	15.3	7.9	17.5	11.6	23.2	15.7	17.5	11.0
27	4.5	1.9	9.1	3.3	14.1	5.8	17.8	11.7	18.1	15.8	18.1	11.0
28	4.4	1.9	8.5	3.0	15.4	7.4	18.2	11.8	22.2	14.6	17.7	10.8
29	4.2	1.9	8.1	3.2	15.8	8.2	18.4	12.1	20.8	15.4	13.5	12.1
30	5.5	1.8	11.0	3.3	15.6	7.3	19.2	12.5	20.9	13.5	12.9	11.6
31	---	---	8.7	4.2	---	---	17.3	13.6	20.4	13.6	---	---
MONTH	8.6	.9	11.0	.6	---	---	19.2	6.9	25.1	13.5	21.3	10.0

GREEN RIVER BASIN

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09196940 FREMONT DITCH NEAR PINEDALE, WY

LOCATION.--Lat 42°53'41", long 109°51'10", in NE¹/₄ NE¹/₄ NW¹/₄ sec.27, T.34 N., R.109 W., Sublette County, Hydrologic Unit 14040102, on right bank 1.1 mi downstream from headgate on Pine Creek and 1.5 mi northeast of Pinedale.
 PERIOD OF RECORD.--April 1985 to September 1986, April 1988 to current year (no winter records).
 GAGE.--Water-stage recorder. Elevation of gage is 7,400 ft above sea level, from topographic map.
 REMARKS.--No estimated daily discharges. Records good. Ditch diverts water from right bank of Pine Creek for irrigation downstream.
 COOPERATION.--Record provided by Office of the Wyoming State Engineer and reviewed by Geological Survey.

 DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.00	8.8	28	6.9	5.4
2	---	---	---	---	---	---	.00	.00	17	28	7.0	5.4
3	---	---	---	---	---	---	.00	.00	27	28	7.1	5.4
4	---	---	---	---	---	---	.00	.00	31	28	7.1	5.4
5	---	---	---	---	---	---	.00	.00	31	27	7.1	5.3
6	---	---	---	---	---	---	.00	1.3	33	27	7.1	5.3
7	---	---	---	---	---	---	.00	6.6	32	27	7.1	5.3
8	---	---	---	---	---	---	.00	6.5	32	27	7.1	5.2
9	---	---	---	---	---	---	.00	6.4	32	27	7.1	5.2
10	---	---	---	---	---	---	.00	6.4	32	27	7.1	5.2
11	---	---	---	---	---	---	.00	6.3	32	27	7.0	5.2
12	---	---	---	---	---	---	.00	6.4	32	26	7.0	5.2
13	---	---	---	---	---	---	.00	6.5	32	26	6.9	5.2
14	---	---	---	---	---	---	.00	6.6	33	26	6.9	5.3
15	---	---	---	---	---	---	.00	6.7	32	25	6.8	5.2
16	---	---	---	---	---	---	.00	6.9	30	25	6.6	5.2
17	---	---	---	---	---	---	.00	6.8	30	25	6.6	5.2
18	---	---	---	---	---	---	.00	6.7	30	25	6.5	5.2
19	---	---	---	---	---	---	.00	6.7	30	24	6.5	5.2
20	---	---	---	---	---	---	.00	6.7	29	22	6.5	5.1
21	---	---	---	---	---	---	.00	6.7	29	22	6.7	5.0
22	---	---	---	---	---	---	.00	6.7	29	22	6.6	3.8
23	---	---	---	---	---	---	.00	6.6	29	22	6.6	.02
24	---	---	---	---	---	---	.00	6.5	29	22	6.3	.00
25	---	---	---	---	---	---	.00	6.7	29	21	5.4	.00
26	---	---	---	---	---	---	.00	6.7	29	14	5.4	.00
27	---	---	---	---	---	---	.00	6.7	29	6.9	5.4	.00
28	---	---	---	---	---	---	.00	6.7	28	6.8	5.5	.00
29	---	---	---	---	---	---	.00	6.7	28	6.7	5.5	.00
30	---	---	---	---	---	---	.00	6.7	28	6.8	5.5	.00
31	---	---	---	---	---	---	---	6.7	---	6.9	5.4	---
TOTAL	---	---	---	---	---	---	0.00	166.90	872.8	682.1	202.3	113.92
MEAN	---	---	---	---	---	---	.000	5.38	29.1	22.0	6.53	3.80
MAX	---	---	---	---	---	---	.00	6.9	33	28	7.1	5.4
MIN	---	---	---	---	---	---	.00	.00	8.8	6.7	5.4	.00
AC-FT	---	---	---	---	---	---	.00	331	1730	1350	401	226

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1994, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1985	.24	1.21	1985	.000	1986
1986	7.43	13.6	1990	3.36	1986
1987	21.9	29.1	1994	16.5	1985
1988	20.4	30.1	1993	14.0	1985
1989	3.39	6.78	1993	.45	1985
1990	3.17	9.38	1989	.19	1985

SUMMARY STATISTICS

	FOR 1994 WATER YEAR*	WATER YEARS 1985 - 1994*
HIGHEST DAILY MEAN	33 Jun 6	33 Jun 14 1989
LOWEST DAILY MEAN	.00 Many days	.00 Many days
ANNUAL SEVEN-DAY MINIMUM	.00 Many days	.00 Many days
INSTANTANEOUS PEAK FLOW	34 Jun 6	36 Jul 11 1988
INSTANTANEOUS PEAK STAGE	2.46 Jun 6	2.46 Jun 6 1994
10 PERCENT EXCEEDS	--	27
50 PERCENT EXCEEDS	--	4.4
90 PERCENT EXCEEDS	--	.00

* During period of operation.

GREEN RIVER BASIN

09196960 HIGHLAND DITCH NEAR PINEDALE, WY

LOCATION.--Lat 42°53'56", long 109°50'18", in NW¹/4 SW¹/4 SW¹/4 sec.23, T.34 N., R.109 W., Sublette County, Hydrologic Unit 14040102, on left bank 60 ft downstream from headgate on Pine Creek and 2.2 mi northeast of Pinedale.

PERIOD OF RECORD.--April 1985 to September 1986, April 1988 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 7,410 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Ditch diverts water from left bank of Pine Creek for irrigation downstream.

COOPERATION.--Record provided by Office of the Wyoming State Engineer and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.44	247	186	29	24
2	---	---	---	---	---	---	.00	.38	245	183	27	24
3	---	---	---	---	---	---	.00	23	240	181	23	23
4	---	---	---	---	---	---	.00	48	237	178	23	23
5	---	---	---	---	---	---	.00	49	242	175	23	23
6	---	---	---	---	---	---	.00	52	245	172	23	23
7	---	---	---	---	---	---	.00	58	248	169	23	22
8	---	---	---	---	---	---	.00	66	248	166	23	22
9	---	---	---	---	---	---	.00	80	242	163	23	22
10	---	---	---	---	---	---	.00	81	236	160	22	22
11	---	---	---	---	---	---	.00	83	231	161	22	22
12	---	---	---	---	---	---	.00	86	227	178	22	21
13	---	---	---	---	---	---	.00	89	227	169	22	21
14	---	---	---	---	---	---	.00	94	229	141	22	22
15	---	---	---	---	---	---	.00	96	226	138	22	22
16	---	---	---	---	---	---	.00	117	202	136	22	21
17	---	---	---	---	---	---	.00	129	201	77	20	21
18	---	---	---	---	---	---	.00	138	199	55	35	21
19	---	---	---	---	---	---	.00	155	198	70	35	21
20	---	---	---	---	---	---	.00	154	199	69	35	21
21	---	---	---	---	---	---	.71	167	201	68	35	21
22	---	---	---	---	---	---	2.0	180	203	68	24	21
23	---	---	---	---	---	---	.62	194	209	67	15	21
24	---	---	---	---	---	---	.58	204	193	67	21	21
25	---	---	---	---	---	---	.58	206	164	66	25	21
26	---	---	---	---	---	---	.58	212	163	38	25	21
27	---	---	---	---	---	---	.58	237	162	30	25	21
28	---	---	---	---	---	---	.58	248	161	29	25	21
29	---	---	---	---	---	---	.57	244	170	29	24	21
30	---	---	---	---	---	---	.54	242	188	29	24	21
31	---	---	---	---	---	---	---	244	---	29	24	---
TOTAL	---	---	---	---	---	---	7.34	3976.82	6383	3447	763	651
MEAN	---	---	---	---	---	---	.24	128	213	111	24.6	21.7
MAX	---	---	---	---	---	---	2.0	248	248	186	35	24
MIN	---	---	---	---	---	---	.00	.38	161	29	15	21
AC-FT	---	---	---	---	---	---	15	7890	12660	6840	1510	1290

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1994, BY WATER YEAR (WY)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	---	---	---	---	---	---	1.98	66.5	191	122
MAX	---	---	---	---	---	---	5.11	128	215	164
(WY)	---	---	---	---	---	---	1988	1994	1989	1993
MIN	---	---	---	---	---	---	.043	19.6	162	87.0
(WY)	---	---	---	---	---	---	1986	1986	1991	1988

SUMMARY STATISTICS

	FOR 1994 WATER YEAR*	WATER YEARS 1985 - 1994*
HIGHEST DAILY MEAN	248 May 28, Jun 7, 8	279 Jun 28 1990
LOWEST DAILY MEAN	.00 Many days	.00 Many days, most years
ANNUAL SEVEN-DAY MINIMUM	.00 Many days	.00 Many days, most years
INSTANTANEOUS PEAK FLOW	253 May 28	281 Jun 28 1990
INSTANTANEOUS PEAK STAGE	4.62 May 28	4.64 Jun 16 1993
10 PERCENT EXCEEDS	--	194
50 PERCENT EXCEEDS	--	40
90 PERCENT EXCEEDS	--	.27

* During period of operation.

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) is 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.--Estimated daily discharges: Apr. 6 to May 5. Records fair except those for Apr. 1 to June 10, which are poor. Some regulation by Fremont Lake. Fremont Ditch (station 09196940) and Highland Ditch (station 09196960) divert water upstream from station for irrigation downstream from station.

COOPERATION.--Records provided by Office of the Wyoming State Engineer and reviewed by Geological Survey after Sept. 30, 1992.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	23	41	573	158	85	71
2	---	---	---	---	---	---	23	42	575	151	78	71
3	---	---	---	---	---	---	24	42	581	144	74	71
4	---	---	---	---	---	---	23	43	523	139	75	70
5	---	---	---	---	---	---	23	43	379	136	76	69
6	---	---	---	---	---	---	25	44	354	127	77	69
7	---	---	---	---	---	---	26	60	370	117	77	69
8	---	---	---	---	---	---	34	72	379	117	77	68
9	---	---	---	---	---	---	34	75	373	115	77	68
10	---	---	---	---	---	---	34	78	338	115	77	68
11	---	---	---	---	---	---	35	98	275	114	77	68
12	---	---	---	---	---	---	35	124	265	113	76	68
13	---	---	---	---	---	---	35	113	221	106	75	68
14	---	---	---	---	---	---	35	225	187	95	75	68
15	---	---	---	---	---	---	35	411	192	95	75	62
16	---	---	---	---	---	---	35	475	193	95	74	47
17	---	---	---	---	---	---	36	521	188	94	74	41
18	---	---	---	---	---	---	36	521	173	94	73	41
19	---	---	---	---	---	---	36	489	126	94	72	41
20	---	---	---	---	---	---	37	391	127	86	72	40
21	---	---	---	---	---	---	37	232	131	77	72	41
22	---	---	---	---	---	---	38	179	138	77	72	41
23	---	---	---	---	---	---	38	169	168	77	72	41
24	---	---	---	---	---	---	39	170	202	75	72	41
25	---	---	---	---	---	---	39	180	207	75	72	41
26	---	---	---	---	---	---	40	199	205	78	72	45
27	---	---	---	---	---	---	40	320	196	82	72	59
28	---	---	---	---	---	---	41	568	187	83	71	60
29	---	---	---	---	---	---	41	702	177	83	71	60
30	---	---	---	---	---	---	41	612	167	83	71	61
31	---	---	---	---	---	---	---	568	---	84	71	---
TOTAL	---	---	---	---	---	---	1018	7807	8170	3179	2304	1728
MEAN	---	---	---	---	---	---	33.9	252	272	103	74.3	57.6
MAX	---	---	---	---	---	---	41	702	581	158	85	71
MIN	---	---	---	---	---	---	23	41	126	75	71	40
AC-FT	---	---	---	---	---	---	2020	15490	16210	6310	4570	3430

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1918, BY WATER YEAR (WY)

	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922
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

SUMMARY STATISTICS

FOR 1994 WATER YEAR*

WATER YEARS 1911 - 1918

ANNUAL MEAN	---	---	197
HIGHEST ANNUAL MEAN	---	---	211
LOWEST ANNUAL MEAN	---	---	183
HIGHEST DAILY MEAN	702	May 29	2330
LOWEST DAILY MEAN	23	Apr 1, 2, 4, 5	8.6
ANNUAL SEVEN-DAY MINIMUM	---	---	18
INSTANTANEOUS PEAK FLOW	717	May 29	2330
INSTANTANEOUS PEAK STAGE	3.19	May 29	---
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 1994.

GREEN RIVER BASIN

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, approximately.

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. 21 to Mar. 26. Records fair 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 satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	322	366	260	220	160	300	298	475	2450	500	349	223
2	310	365	260	240	170	300	307	429	2580	481	358	226
3	311	375	250	240	170	300	317	424	2430	479	357	227
4	315	378	230	240	170	290	327	420	2190	481	343	227
5	311	372	230	220	170	280	323	427	1950	479	327	227
6	315	348	230	190	190	280	294	484	1670	472	320	227
7	330	368	230	190	190	280	289	593	1500	489	296	229
8	376	385	230	200	200	280	287	871	1370	507	295	231
9	415	377	220	200	170	270	268	1120	1290	508	310	231
10	411	383	230	200	180	250	276	1410	1140	501	344	231
11	429	371	250	190	210	250	256	1960	966	496	346	231
12	414	393	240	190	170	270	258	2420	848	483	327	231
13	380	355	230	200	180	280	281	2960	798	455	312	256
14	378	349	220	190	180	280	290	3530	707	454	292	279
15	380	318	220	190	190	270	300	4100	649	441	290	303
16	388	328	220	190	200	270	325	3950	697	429	281	297
17	393	331	240	190	210	270	324	3600	697	419	267	276
18	391	325	230	190	220	260	345	3230	662	414	242	279
19	384	250	220	190	200	250	347	2640	619	403	241	271
20	374	303	220	190	170	220	339	2280	618	404	241	270
21	369	300	220	190	170	240	364	1940	642	402	238	261
22	366	300	220	190	170	260	403	1540	672	404	248	245
23	363	270	220	200	170	260	424	1380	808	393	258	245
24	359	230	220	190	210	230	482	1430	754	394	245	245
25	356	220	220	190	250	230	533	1520	666	380	232	245
26	351	210	220	190	300	230	544	1730	643	358	234	245
27	351	220	220	190	300	208	532	1860	606	344	228	240
28	355	230	230	190	280	225	534	2160	577	339	231	236
29	362	250	230	180	---	237	535	2590	553	339	231	241
30	365	260	230	170	---	242	530	2520	532	326	230	247
31	373	---	220	150	---	270	---	2300	---	326	223	---
TOTAL	11297	9530	7110	6080	5550	8082	10932	58293	32284	13300	8736	7422
MEAN	364	318	229	196	198	261	364	1880	1076	429	282	247
MAX	429	393	260	240	300	300	544	4100	2580	508	358	303
MIN	310	210	220	150	160	208	256	420	532	326	223	223
AC-FT	22410	18900	14100	12060	11010	16030	21680	115600	64040	26380	17330	14720

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1994, BY WATER YEAR (WY)

	MEAN	376	321	240	198	206	261	441	1141	2954	1600	586	373
MAX	989	608	397	277	337	597	1114	2539	7064	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	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1954 - 1994
ANNUAL TOTAL	306123	178616	--
ANNUAL MEAN	839	489	726
HIGHEST ANNUAL MEAN	--	--	1288
LOWEST ANNUAL MEAN	--	--	313
HIGHEST DAILY MEAN	4580	May 23	4100 May 15
LOWEST DAILY MEAN	140	Feb 17	150 Jan 31
ANNUAL SEVEN-DAY MINIMUM	153	Feb 14	166 Jan 30
INSTANTANEOUS PEAK FLOW	--	--	4260 May 15
INSTANTANEOUS PEAK STAGE	--	5.53	May 15
ANNUAL RUNOFF (AC-FT)	607200	354300	525600
10 PERCENT EXCEEDS	2340	824	1820
50 PERCENT EXCEEDS	373	297	326
90 PERCENT EXCEEDS	170	190	185

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, approximately.

WATER-DISCHARGE RECORDS

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. 15 to Mar. 26. 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 satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	590	738	420	440	400	640	722	1350	3250	990	675	426
2	577	762	420	440	400	600	754	1220	3420	905	751	431
3	568	720	410	440	410	600	780	1130	3500	869	801	427
4	570	722	410	440	430	620	847	1060	3260	822	792	422
5	560	740	410	430	430	640	872	1040	2940	826	749	427
6	559	744	410	430	430	640	813	1070	2670	808	710	429
7	577	741	420	430	460	620	819	1330	2470	805	672	431
8	659	857	400	430	500	620	785	1620	2360	825	629	445
9	798	831	400	430	500	610	777	1980	2300	820	647	424
10	868	817	420	430	500	610	763	2210	2150	794	655	407
11	925	803	420	430	500	620	749	2700	1860	746	652	400
12	948	792	410	440	500	680	749	3130	1540	705	626	402
13	887	841	400	440	500	700	756	3630	1360	668	611	410
14	846	780	400	440	500	740	892	4260	1260	642	587	427
15	845	700	420	440	500	800	971	5150	1220	643	559	462
16	839	660	450	440	520	800	971	5180	1390	646	545	477
17	849	600	410	440	520	800	1050	4560	1480	657	525	460
18	838	540	400	440	520	780	1260	4150	1320	631	509	446
19	821	520	400	440	500	760	1450	3660	1140	609	493	444
20	798	500	400	440	470	760	1630	3170	1030	604	483	448
21	781	460	400	440	470	760	1550	2770	1020	597	471	445
22	774	440	400	440	470	760	1650	2360	1080	616	479	428
23	774	400	400	440	470	760	1710	1940	1190	637	523	424
24	774	370	400	440	470	740	1750	1830	1350	636	501	416
25	774	350	400	430	500	720	1740	1840	1510	637	456	406
26	769	370	410	430	560	700	1730	1960	1520	620	477	399
27	751	380	420	430	600	681	1710	2250	1380	610	474	393
28	737	390	430	430	580	670	1600	2600	1240	651	466	385
29	741	400	430	410	---	682	1490	3130	1160	680	464	374
30	742	400	430	400	---	708	1390	3410	1080	665	454	389
31	737	---	440	400	---	681	---	3230	---	652	437	---
TOTAL	23276	18368	12790	13420	13610	21502	34730	80920	54450	22016	17873	12704
MEAN	751	612	413	433	486	694	1158	2610	1815	710	577	423
MAX	948	857	450	440	600	800	1750	5180	3500	990	801	477
MIN	559	350	400	400	400	600	722	1040	1020	597	437	374
AC-FT	46170	36430	25370	26620	27000	42650	68890	160500	108000	43670	35450	25200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1994, BY WATER YEAR (WY)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	846	743	542	466	493	704	1436	2853	5584	3415	1480	899																			
MAX	2049	1306	866	608	678	1565	2692	5091	14230	7993	3185	1768																			
(WY)	1983	1984	1984	1984	1966	1969	1972	1986	1976	1986	1982	1983																			
MIN	368	469	367	314	270	426	469	305	1080	710	466	365																			
(WY)	1989	1989	1989	1989	1989	1989	1970	1977	1992	1994	1988	1988																			

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1964 - 1994
ANNUAL TOTAL	578925	325659	--
ANNUAL MEAN	1586	892	1624a
HIGHEST ANNUAL MEAN	--	--	2908
LOWEST ANNUAL MEAN	--	--	668
HIGHEST DAILY MEAN	7470	5180	18800
LOWEST DAILY MEAN	340	350	188
ANNUAL SEVEN-DAY MINIMUM	350	380	215
INSTANTANEOUS PEAK FLOW	--	5320	18800
INSTANTANEOUS PEAK STAGE	--	7.48	10.50
ANNUAL RUNOFF (AC-FT)	1148000	645900	1177000
10 PERCENT EXCEEDS	4070	1730	3950
50 PERCENT EXCEEDS	792	640	802
90 PERCENT EXCEEDS	366	410	430

a Average discharge, water years 1947-94, 1,604 ft³/s.

GREEN RIVER BASIN

09209400 GREEN RIVER NEAR LA BARGE, WY--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1963 to September 1976.

WATER TEMPERATURES: October 1963 to September 1976.

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
NOV 30...	1150	E610	425	8.2	0.5	3.0	600	1.2	11.9	105
JAN 21...	1100	E430	398	8.1	0.0	2.0	610	0.40	11.8	101
MAR 29...	1100	753	441	8.4	1.5	2.0	608	1.5	11.1	100
MAY 13...	1145	3690	165	8.3	12.0	16.0	598	27	8.2	97
JUL 21...	0900	590	310	8.4	18.0	25.0	610	1.0	7.8	104
SEP 14...	1100	429	327	8.6	14.0	10.5	602	1.5	9.3	115

E-Estimate.

DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3
NOV 30...	K3	20	190	52	15	15	0.5	1.7	0	190
JAN 21...	<1	K5	190	53	14	14	0.4	1.3	0	150
MAR 29...	<1	K4	190	52	15	15	0.5	1.8	0	203
MAY 13...	120	65	77	22	5.2	4.4	0.2	1.1	0	79
JUL 21...	K9	3	130	35	10	17	0.7	1.5	0	173
SEP 14...	21	K16	130	35	10	17	0.7	1.7	3	138

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

DATE	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
NOV 30...	156	167	68	3.3	0.2	9.3	262	258	0.36	E425
JAN 21...	123	151	71	3.1	0.2	9.0	263	240	0.36	E279
MAR 29...	167	154	69	4.2	0.2	6.5	259	264	0.35	527
MAY 13...	65	73	18	1.2	0.1	5.1	99	96	0.13	986
JUL 21...	142	136	31	2.5	0.2	5.2	188	187	0.26	299
SEP 14...	119	125	45	3.1	0.2	5.4	205	189	0.28	237

E-Estimate.

09209400 GREEN RIVER NEAR LA BARGE, WY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	SEDI- MENT, SUS- PENDEDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 30...	<0.01	<0.05	0.02	0.2	<0.01	0.02	<0.01	5	E8.2	63
JAN 21...	0.02	0.08	0.02	<0.2	<0.01	<0.01	<0.01	4	E4.6	58
MAR 29...	<0.01	<0.05	0.01	<0.2	<0.01	<0.01	<0.01	20	41	79
MAY 13...	<0.01	<0.05	0.02	0.5	0.12	<0.01	0.01	203	2020	72
JUL 21...	<0.01	<0.05	0.01	0.2	<0.01	<0.01	<0.01	4	6.4	82
SEP 14...	<0.01	<0.05	0.02	<0.2	<0.01	<0.01	<0.01	11	13	81

E-Estimate.

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BARIUM, DIS- SOLVED (UG/L AS BA)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)
NOV 30...	1150	E610	0.5	3.0	<10	66	<3	7
MAR 29...	1100	753	1.5	2.0	10	56	<3	35
MAY 13...	1145	3690	12.0	16.0	50	30	<3	99
SEP 14...	1100	429	14.0	10.5	<10	46	<3	17

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
NOV 30...	7	6	<10	<1	<1	<1.0	410	<6
MAR 29...	7	19	<10	<1	<1	<1.0	390	<6
MAY 13...	4	8	<10	<1	<1	<1.0	140	<6
SEP 14...	<4	6	<10	<1	<1	<1.0	310	<6

GREEN RIVER BASIN

09210500 FONTENELLE CREEK NEAR HERSCHLER RANCH, NEAR FONTENELLE, WY

LOCATION.--Lat 42°05'46", long 110°24'57", in NW¹/₄ SW¹/₄ NE¹/₄ sec.2, T.24 N., R.115 W., Lincoln County, Hydrologic Unit 14040101, on left bank 2.0 mi downstream from Dutch George Creek and 14 mi west of Fontenelle.

DRAINAGE AREA.--152 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 6,950 ft above sea level, from topographic map. Prior to May 5, 1970, at site 300 ft downstream at present datum.

REMARKS.--Estimated daily discharges: Oct. 29 to Mar. 31. Records good except those for estimated daily discharges, which are poor. Diversion for irrigation of about 780 acres upstream from station.

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)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 20	0500	ice jam	*6.45	May 14	1200	*132	6.09
Mar. 02	1100	ice jam	*6.45	No peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	25	28	23	23	37	59	68	108	27	20	11
2	26	22	28	24	23	38	62	63	94	26	21	11
3	27	22	27	25	22	38	71	64	85	24	19	11
4	28	20	26	26	22	34	77	65	82	24	18	11
5	27	17	26	26	22	32	64	67	77	24	16	10
6	28	16	25	26	22	30	54	71	72	24	13	10
7	30	16	24	26	23	32	52	80	67	26	12	11
8	31	17	23	24	24	34	58	83	66	25	12	11
9	35	16	26	23	26	35	53	86	64	23	14	12
10	37	17	23	22	23	27	53	94	61	21	16	11
11	40	18	23	23	25	25	52	104	60	20	16	11
12	36	18	23	23	24	24	63	111	58	20	14	13
13	35	19	22	24	23	26	75	118	55	18	13	15
14	33	19	21	24	23	28	80	128	50	18	13	18
15	34	18	20	24	23	28	76	126	54	16	13	17
16	34	17	22	23	23	27	86	123	57	17	12	16
17	32	17	23	24	26	27	99	122	52	15	11	15
18	31	18	22	24	27	34	106	118	48	15	11	15
19	31	18	20	24	25	38	109	114	45	15	11	15
20	31	18	21	23	25	37	108	107	43	14	12	15
21	30	18	21	23	27	37	106	101	41	15	13	15
22	31	19	21	23	26	36	106	96	50	16	12	15
23	31	18	22	23	24	35	107	94	43	16	13	15
24	31	17	23	23	26	33	97	86	40	16	11	15
25	31	15	24	23	30	30	90	85	36	15	9.4	15
26	30	16	24	24	33	34	84	85	33	14	9.1	15
27	30	17	24	24	36	35	78	93	31	15	9.4	15
28	30	20	24	24	35	35	74	113	31	16	12	15
29	28	23	24	21	---	34	75	103	31	16	13	16
30	25	26	23	21	---	43	73	96	29	15	11	18
31	24	---	23	21	---	50	---	93	---	18	11	---
TOTAL	953	557	726	731	711	1033	2347	2957	1663	584	410.9	413
MEAN	30.7	18.6	23.4	23.6	25.4	33.3	78.2	95.4	55.4	18.8	13.3	13.8
MAX	40	26	28	26	36	50	109	128	108	27	21	18
MIN	24	15	20	21	22	24	52	63	29	14	9.1	10
AC-FT	1890	1100	1440	1450	1410	2050	4660	5870	3300	1160	815	815

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1994, BY WATER YEAR (WY)

STATISTICS OF MONTHLY MEAN RAIN FOR WATER YEARS 1952-1957, BY WATER YEAR (WY)												
MEAN	31.9	29.7	26.2	25.4	27.1	32.7	101	216	223	75.3	36.8	30.0
MAX	55.3	44.9	42.1	41.3	51.3	76.3	280	437	628	185	76.0	55.7
(WY)	1987	1952	1985	1985	1985	1986	1986	1980	1986	1975	1983	1965
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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1952 - 1994
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ANNUAL TOTAL	22212		13085.9		--	
ANNUAL MEAN	60.9		35.9		71.3	
HIGHEST ANNUAL MEAN	--		--		155	1986
LOWEST ANNUAL MEAN	--		--		24.8	1977
HIGHEST DAILY MEAN	298	May 29	128	May 14	865	Jun 6 1986
LOWEST DAILY MEAN	13	Jan 5	9.1	Aug 26	5.6	Aug 14 1992
ANNUAL SEVEN-DAY MINIMUM	14	Jan 1	11	Aug 24	6.2	Aug 10 1992
INSTANTANEOUS PEAK FLOW	--		132a	May 14	907	Apr 23 1986
INSTANTANEOUS PEAK STAGE	--		6.45b	Feb 20, Mar 2	9.51	Apr 23 1986
ANNUAL RUNOFF (AC-FT)	44060		25960		51620	
10 PERCENT EXCEEDS	179		84		183	
50 PERCENT EXCEEDS	28		24		33	
90 PERCENT EXCEEDS	17		14		20	

a Gage height, 6.09 ft.

b Backwater from ice.

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, approximately.

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WSP 2125: Drainage area.

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

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 development.

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, 312,700 acre-ft, Oct. 1, elevation, 6,501.84 ft; minimum daily, 119,500 acre-ft, Apr. 17, 18, minimum elevation, 6,470.14, Apr. 18.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	6,501.84	312,700	-
Oct. 31	6,500.84	305,100	-7,600
Nov. 30	6,495.89	268,500	-36,600
Dec. 31	6,487.93	214,000	-54,500
CAL YR 1993	-	-	+46,700
Jan. 31	6,479.67	165,400	-48,700
Feb. 28	6,471.71	126,300	-39,000
Mar. 31	6,472.54	130,000	+3,700
Apr. 30	6,471.86	127,000	-3,000
May 31	6,490.25	229,300	+102,300
June 30	6,496.80	275,100	+45,800
July 31	6,493.58	252,200	-22,900
Aug. 31	6,492.43	244,200	-8,000
Sept. 30	6,490.89	233,700	-10,500
WTR YR 1994	-	-	-79,000

GREEN RIVER BASIN

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, approximately.

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 1.0 mi upstream. (See sta 09211150.) Natural flow of stream affected by storage reservoirs and diversions for irrigation of about 202,000 acres upstream from station. National Weather Service satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	635	883	1320	1300	1080	669	1020	1000	778	762	1060	564
2	920	861	1330	1290	1090	675	1020	889	910	760	1050	562
3	941	854	1340	1300	1090	682	1020	692	1000	760	1090	562
4	941	854	1360	1300	1090	688	1020	532	1000	754	1110	560
5	941	848	1360	1300	1090	688	1020	508	1020	911	1130	554
6	941	854	1340	1300	1080	682	1020	560	1020	971	994	560
7	941	857	1330	1240	1080	679	1020	808	1030	968	858	562
8	922	873	1290	1100	1090	679	1100	804	1040	964	846	556
9	912	872	1280	1120	1090	679	1230	798	1040	966	849	539
10	912	876	1280	1120	1090	693	1230	1610	1020	961	849	539
11	912	892	1290	1120	1090	685	1240	1720	1020	968	670	539
12	908	1040	1290	1120	1090	684	1240	918	1010	971	608	541
13	902	1280	1310	1120	1080	675	1240	814	1020	970	587	551
14	895	1280	1310	1120	1060	679	1230	808	1020	991	501	564
15	892	1280	1280	1120	1050	688	1230	808	1020	981	504	557
16	892	1280	1280	1130	1050	692	1230	803	1010	979	536	554
17	892	1280	1280	1150	1050	692	1240	794	997	976	522	559
18	892	1270	1280	1140	1060	684	1260	794	992	977	541	563
19	888	1260	1280	1130	1080	675	1260	816	985	971	530	507
20	880	1260	1290	1130	1070	675	1250	805	984	975	524	490
21	873	1270	1290	1120	1090	679	1240	792	904	981	538	474
22	879	1290	1290	1110	1090	679	1240	789	789	981	546	469
23	883	1300	1280	1110	1030	684	1230	789	779	981	557	467
24	883	1290	1280	1110	789	688	1230	784	779	979	549	458
25	883	1290	1280	1110	678	694	1220	779	770	991	548	454
26	883	1300	1280	1090	670	697	1200	791	770	1010	541	522
27	876	1300	1280	1080	664	697	1200	798	770	1020	539	655
28	873	1310	1290	1080	662	780	1080	784	752	1030	540	812
29	873	1310	1300	1080	---	888	1010	779	758	1040	558	887
30	873	1320	1300	1070	---	990	1010	779	762	1040	567	883
31	873	---	1300	1060	---	1020	---	779	---	1050	570	---
TOTAL	27611	33734	40290	35670	28223	22139	34780	25924	27749	29639	21412	17064
MEAN	891	1124	1300	1151	1008	714	1159	836	925	956	691	569
MAX	941	1320	1360	1300	1090	1020	1260	1720	1040	1050	1130	887
MIN	635	848	1280	1060	662	669	1010	508	752	754	501	454
AC-FT	54770	66910	79920	70750	55980	43910	68990	51420	55040	58790	42470	33850

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1994, BY WATER YEAR (WY)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	1008	855	772	786	841	917	1533	2427	4448	3202	1632	1262																			
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																			

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1964 - 1994
ANNUAL TOTAL	569256	344235	--
ANNUAL MEAN	1560	943	1643
HIGHEST ANNUAL MEAN	--	--	3060
LOWEST ANNUAL MEAN	--	--	690
HIGHEST DAILY MEAN	4320	1720	18600
LOWEST DAILY MEAN	483	454	209
ANNUAL SEVEN-DAY MINIMUM	486	474	251
INSTANTANEOUS PEAK FLOW	--	1890	19400a
INSTANTANEOUS PEAK STAGE	--	12.02	18.74b
ANNUAL RUNOFF (AC-FT)	1129000	682800	1190000
10 PERCENT EXCEEDS	3400	1280	3630
50 PERCENT EXCEEDS	1280	971	1080
90 PERCENT EXCEEDS	679	560	476

a Caused by emergency release from Fontenelle Reservoir.

b From floodmarks.

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
NOV										
05...	1550	846	312	8.0	0.5	608	130	35	11	14
DEC										
06...	1300	1340	315	3.0	0.0	600	140	36	11	12
JAN										
20...	1350	1130	395	3.5	1.0	610	180	48	14	16
MAR										
09...	1520	690	451	4.5	9.0	597	200	56	15	19
30...	1400	1020	436	5.0	13.5	610	180	48	15	18
APR										
12...	1430	1220	430	6.0	21.0	610	180	47	14	19
MAY										
18...	1115	798	381	11.0	21.0	605	170	45	13	16
JUN										
28...	0925	892	287	11.0	24.0	610	120	34	9.3	12
JUL										
21...	1240	950	299	18.5	25.0	612	130	35	9.8	13
AUG										
29...	1350	611	323	19.0	24.0	608	140	39	10	15
SEP										
20...	1430	715	353	17.0	25.0	609	140	38	11	19

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
NOV									
05...	0.5	1.4	120	44	2.2	0.2	6.4	186	0.25
DEC									
06...	0.4	1.4	125	42	2.4	0.1	6.9	187	0.25
JAN									
20...	0.5	2.4	150	63	3.3	0.2	8.7	246	0.33
MAR									
09...	0.6	1.6	155	84	4.0	0.2	9.3	282	0.38
30...	0.6	1.7	148	77	3.9	0.2	8.0	261	0.35
APR									
12...	0.6	1.7	141	77	3.9	0.2	6.8	254	0.35
MAY									
18...	0.5	1.8	139	61	3.1	0.2	7.0	231	0.31
JUN									
28...	0.5	1.4	108	40	2.2	0.1	7.1	171	0.23
JUL									
21...	0.5	1.5	114	41	2.4	0.2	7.3	179	0.24
AUG									
29...	0.6	1.6	123	43	2.5	0.2	8.1	193	0.26
SEP									
20...	0.7	1.6	125	58	2.8	0.2	8.0	214	0.29

GREEN RIVER BASIN

09211200 GREEN RIVER BELOW FONTENELLE RESERVOIR, WY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
NOV									
05...	425	<0.01	--	<0.05	0.02	0.3	0.02	0.02	0.01
DEC									
06...	676	<0.01	--	<0.05	0.04	0.3	<0.01	0.01	<0.01
JAN									
20...	750	0.02	0.07	0.07	0.05	0.3	<0.01	<0.01	<0.01
MAR									
09...	526	<0.01	0.08	0.08	0.06	0.2	0.03	0.01	<0.01
30...	718	<0.01	--	<0.05	0.05	0.2	<0.01	<0.01	<0.01
APR									
12...	837	<0.01	--	<0.05	0.03	0.2	<0.01	<0.01	<0.01
MAY									
18...	497	0.01	--	<0.05	0.03	<0.2	<0.01	<0.01	<0.01
JUN									
28...	412	<0.01	--	<0.05	0.06	0.3	0.02	<0.01	<0.01
JUL									
21...	459	<0.01	0.11	0.11	0.02	0.2	0.02	<0.01	<0.01
AUG									
29...	319	<0.01	0.05	0.05	0.01	<0.2	0.02	0.03	0.02
SEP									
20...	412	<0.01	--	<0.05	0.02	<0.2	0.02	<0.01	<0.01

LOCATION.--Lat 42°19'01", long 109°29'06", in NW¹/₄ SE¹/₄ NW¹/₄ sec.17, T.27 N., R.106 W., Sublette County, Hydrologic Unit 14040104, on left upstream side of Eden Canal diversion, about 1.0 mi upstream from high-water line of Big Sandy Reservoir, 14.5 mi north of Farson, and 24.5 mi upstream from Little Sandy Creek.

PERIOD OF RECORD: --October 1914 to September 1917, October 1920 to October 1924, October 1926 to September 1934, April 1953 to current year (no winter records since 1971). Prior to October 1968, published as Big Sandy Creek near Farson. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,770 ft above sea level, from topographic map. Prior to Apr. 28, 1921, nonrecording gage, and Apr. 28, 1921, to Aug. 3, 1934, water-stage recorder at site 0.5 mi upstream at different datum. Apr. 17, 1953, to Nov. 11, 1954, water-stage recorder at site 1.5 mi upstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation of about 1,000 acres upstream from station. The Eden Canal, which bypasses the station, has not been used since station was established at present site in November 1954. National Weather Service satellite telemeter at station. Result of discharge measurement, in cubic feet per second, made during the period when station was not in operation is given below:

Mar. 28 . . . 47.8

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 14	2330	*591	*6.67	June 21	1000	378	6.03
June 2	0330	564	6.60				

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	37	93	417	86	24	17
2	---	---	---	---	---	---	36	95	454	79	27	18
3	---	---	---	---	---	---	38	89	362	74	27	18
4	---	---	---	---	---	---	39	91	326	71	53	18
5	---	---	---	---	---	---	36	87	331	67	44	17
6	---	---	---	---	---	---	34	104	305	63	34	18
7	---	---	---	---	---	---	29	152	288	62	30	19
8	---	---	---	---	---	---	31	253	254	64	27	18
9	---	---	---	---	---	---	29	307	212	61	26	18
10	---	---	---	---	---	---	30	359	176	55	24	20
11	---	---	---	---	---	---	33	437	149	50	31	23
12	---	---	---	---	---	---	28	460	145	47	28	20
13	---	---	---	---	---	---	32	492	160	45	25	23
14	---	---	---	---	---	---	45	496	170	43	24	25
15	---	---	---	---	---	---	52	512	192	41	23	23
16	---	---	---	---	---	---	48	430	183	40	23	22
17	---	---	---	---	---	---	50	381	172	39	22	22
18	---	---	---	---	---	---	72	374	158	37	22	22
19	---	---	---	---	---	---	93	284	140	35	20	22
20	---	---	---	---	---	---	92	241	139	32	20	21
21	---	---	---	---	---	---	81	248	218	31	18	20
22	---	---	---	---	---	---	97	199	144	31	19	20
23	---	---	---	---	---	---	120	197	153	30	18	19
24	---	---	---	---	---	---	156	265	177	31	20	18
25	---	---	---	---	---	---	204	278	151	29	20	18
26	---	---	---	---	---	---	198	349	129	26	18	19
27	---	---	---	---	---	---	153	399	114	25	17	18
28	---	---	---	---	---	---	133	355	106	23	18	18
29	---	---	---	---	---	---	113	437	99	23	18	19
30	---	---	---	---	---	---	103	365	91	24	17	19
31	---	---	---	---	---	---	---	378	---	24	17	---
TOTAL	---	---	---	---	---	---	2242	9207	6115	1388	754	592
MEAN	---	---	---	---	---	---	74.7	297	204	44.8	24.3	19.7
MAX	---	---	---	---	---	---	204	512	454	86	53	25
MIN	---	---	---	---	---	---	28	87	91	23	17	17
AC-FT	---	---	---	---	---	---	4450	18260	12130	2750	1500	1170

MEAN	30.2	21.2	13.2	11.1	12.1	21.8	60.8	237	411	172	49.1	30.5
MAX	75.6	41.0	21.7	22.9	26.0	46.7	148	454	905	458	155	83.9
(WY)	1928	1934	1969	1969	1969	1967	1983	1928	1986	1975	1930	1927
MIN	8.90	9.17	3.00	.30	.10	2.98	22.1	89.1	55.5	14.3	8.48	2.07
(WY)	1932	1961	1960	1960	1960	1961	1975	1933	1934	1934	1931	1931

WATER YEARS 1915 - 1971

ANNUAL MEAN	--			86.7	
HIGHEST ANNUAL MEAN	--			148	1917
LOWEST ANNUAL MEAN	--			33.0	1934
HIGHEST DAILY MEAN	512	May 15		1320	Jun 12 1965
LOWEST DAILY MEAN	17	Aug. 27,30,31,	Sep 1,5	.00	Jan 27-31 1963
ANNUAL SEVEN-DAY MINIMUM	--			.10	Feb 1 1960
INSTANTANEOUS PEAK FLOW	591	May 14		1890	Jun 3 1986#
INSTANTANEOUS PEAK STAGE	6.67	May 14		8.46	Jun 3 1986#
ANNUAL RUNOFF (AC-FT)	--			62800	
10 PERCENT EXCEEDS	--			330	

GREEN RIVER BASIN

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. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 40,000 acre-ft, June 15, 1991, elevation, 6,758.14 ft; minimum contents, 920 acre-ft, Sept. 15, 1988, elevation, 6,724.66 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 39,000 acre-ft, May 16, elevation, 6,757.76 ft; minimum contents, 1,290 acre-ft, Sept. 15, elevation, 6,726.13 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 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22900	24300	24900	25500	25800	26400	28400	32500	33500	25300	11300	3510
2	22900	24300	24900	25500	25900	26400	28400	32700	33600	24900	10900	3380
3	22900	24300	25000	25500	25900	26500	28500	32800	33700	24500	10600	3270
4	22900	24300	25000	25500	25900	26600	28600	33000	33600	24000	10400	3140
5	23000	24400	25000	25500	25900	26600	28600	33200	33600	23600	10100	3010
6	23000	24300	25000	25500	25900	26600	28700	33300	33400	23000	9830	2870
7	23000	24300	25000	25500	26000	26700	28800	33600	33000	22700	9460	2730
8	23000	24400	25000	25500	26000	26700	28800	34000	32700	22400	9040	2590
9	23100	24400	25100	25500	26000	26800	28900	34600	32500	22000	8550	2420
10	23200	24400	25100	25500	26000	26900	29000	35300	32300	21600	8120	2230
11	23300	24400	25100	25600	26100	26900	29000	36000	32000	21100	7780	2030
12	23400	24500	25200	25600	26100	27000	29100	36700	31600	20700	7540	1810
13	23500	24600	25200	25600	26100	27100	29100	37400	31200	20200	7320	1580
14	23500	24600	25200	25600	26100	27200	29200	38100	30800	19800	7130	1370
15	23600	24600	25200	25700	26100	27200	29300	38700	30500	19300	6880	1310
16	23600	24600	25200	25700	26100	27400	29400	38900	30400	18800	6570	1370
17	23700	24600	25200	25700	26200	27400	29500	38800	30300	18400	6260	1410
18	23800	24700	25200	25700	26300	27500	29600	38700	30000	17900	5950	1460
19	23800	24700	25300	25700	26300	27600	29800	38200	29700	17200	5690	1500
20	23800	24700	25300	25700	26300	27700	30000	37400	29400	16600	5460	1540
21	23900	24700	25300	25700	26300	27800	30100	36900	29200	16100	5220	1560
22	23900	24800	25300	25700	26300	27900	30300	36300	28800	15600	4980	1600
23	24000	24800	25300	25700	26300	27900	30500	35500	28500	15000	4810	1630
24	24100	24800	25400	25800	26400	27900	30700	35000	28200	14500	4650	1660
25	24100	24800	25400	25800	26300	28000	31000	34500	27900	14000	4550	1690
26	24100	24800	25400	25800	26300	28000	31200	34100	27400	13600	4430	1720
27	24200	24800	25400	25800	26400	28000	31400	34000	27000	13200	4330	1750
28	24100	24800	25400	25800	26400	28200	31800	33800	26600	12800	4230	1770
29	24100	24900	25400	25800	---	28200	32000	33700	26200	12400	4060	1790
30	24200	24900	25400	25800	---	28200	32200	33600	25700	12000	3840	1810
31	24200	---	25400	25800	---	28300	---	33400	---	11600	3660	---
MAX	24200	24900	25400	25800	26400	28300	32200	38900	33700	25300	11300	3510
MIN	22900	24300	24900	25500	25800	26400	28400	32500	25700	11600	3660	1310
(#)	6,751.11	6,751.46	6,751.72	6,751.91	6,752.20	6,753.12	6,754.95	6,755.45	6,751.87	6,742.99	6,732.57	6,727.90
(*)	+1,300	+700	+500	+400	+600	+1,900	+3,900	+1,200	-7,700	-14,100	-7,940	-1,850
CAL YR 1993	MAX 33600	MIN 4890	(*)+20,540									
WIR YR 1994	MAX 38900	MIN 1310	(*)-21,090									

(#) 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 14.9 mi² is probably 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. 30 to Mar. 20. Records good except those for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs and diversions for irrigation of about 19,300 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	18	10	6.8	5.2	21	32	20	39	33	29	19
2	24	17	9.6	7.0	5.4	26	38	19	38	37	32	21
3	24	16	9.2	7.2	5.2	26	40	19	33	34	27	22
4	29	17	8.6	7.4	5.2	24	47	17	33	31	23	22
5	31	17	8.0	6.8	5.2	22	52	17	32	24	21	21
6	31	16	8.2	6.6	5.6	28	48	16	30	23	20	22
7	32	15	8.4	6.4	6.0	28	35	15	27	27	19	23
8	30	15	8.8	6.2	5.8	32	28	15	27	32	21	29
9	30	15	9.4	6.2	5.6	41	27	16	27	26	24	26
10	34	16	9.8	6.4	5.4	53	25	16	25	23	24	19
11	34	16	9.0	6.6	5.2	67	25	17	24	25	27	16
12	33	16	8.6	6.8	5.0	62	25	18	25	23	30	16
13	30	15	8.2	7.0	4.8	58	27	17	28	22	26	16
14	29	14	7.6	7.2	5.0	70	31	16	24	25	23	18
15	28	13	7.2	7.0	5.2	88	35	16	25	24	26	24
16	25	13	6.8	7.0	5.6	84	35	15	30	22	27	24
17	24	14	6.2	7.0	5.4	80	30	18	31	21	30	17
18	24	14	5.6	6.8	5.4	70	29	21	30	22	30	14
19	24	14	5.6	6.8	5.4	64	31	24	31	20	30	13
20	23	13	5.8	6.8	5.6	66	30	21	33	20	27	13
21	23	12	6.2	7.0	5.4	68	28	20	31	25	22	13
22	23	11	6.6	7.2	5.4	97	24	21	34	27	24	13
23	22	9.2	7.4	7.2	5.8	99	22	21	35	26	23	13
24	21	8.2	7.8	7.4	6.6	91	22	22	32	27	21	13
25	20	8.0	7.6	7.4	7.8	61	22	22	28	28	21	13
26	20	8.0	7.4	7.2	9.0	54	21	27	28	30	16	13
27	19	8.8	7.2	6.8	12	45	19	32	29	23	16	13
28	18	9.4	7.2	6.4	16	36	19	36	32	23	17	13
29	17	9.8	7.0	5.8	---	33	20	34	29	24	17	13
30	16	10	6.6	5.4	---	33	20	36	29	23	17	13
31	17	---	6.8	5.0	---	32	---	38	---	24	18	---
TOTAL	780	398.4	238.4	208.8	175.2	1659	887	662	899	794	728	525
MEAN	25.2	13.3	7.69	6.74	6.26	53.5	29.6	21.4	30.0	25.6	23.5	17.5
MAX	34	18	10	7.4	16	99	52	38	39	37	32	29
MIN	16	8.0	5.6	5.0	4.8	21	19	15	24	20	16	13
AC-FT	1550	790	473	414	348	3290	1760	1310	1780	1570	1440	1040

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1994, BY WATER YEAR (WY)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	26.3	26.7	13.5	8.55	10.6	38.5	71.9	54.2	99.5	61.7	40.9	32.7		
MAX	51.4	105	39.2	30.5	37.8	71.8	224	138	515	223	78.9	53.9		
(WY)	1984	1984	1984	1984	1982	1987	1985	1983	1986	1983	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		

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1981 - 1994
ANNUAL TOTAL	9199.2	7954.8	--
ANNUAL MEAN	25.2	21.8	41.1
HIGHEST ANNUAL MEAN	--	--	95.5
LOWEST ANNUAL MEAN	--	--	12.0
HIGHEST DAILY MEAN	102	99	897
LOWEST DAILY MEAN	4.0	4.8	.00
			Dec 23-27 1990,
			Jan 22 to
			Feb 4 1991
ANNUAL SEVEN-DAY MINIMUM	4.6	5.2	.00
INSTANTANEOUS PEAK FLOW	--	128a	1120b
INSTANTANEOUS PEAK STAGE	--	5.34c	7.71c
ANNUAL RUNOFF (AC-FT)	18250	15780	29740
10 PERCENT EXCEEDS	46	34	68
50 PERCENT EXCEEDS	24	21	22
90 PERCENT EXCEEDS	6.5	6.5	6.2

a Gage height, 2.87 ft.

b Gage height, 7.30 ft.

c Backwater from ice.

GREEN RIVER BASIN

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT												
27...	1145	18	2100	8.5	3.5	5.5	E602	E10.9	E104	610	160	51
NOV												
19...	1145	14	2510	8.3	0.0	-3.5	612	10.5	90	690	180	58
JAN												
05...	1055	6.8	2130	7.8	0.0	-1.0	594	5.9	52	710	190	57
MAR												
25...	1215	59	1830	8.5	2.5	5.5	593	10.4	99	330	80	32
APR												
14...	1345	28	2010	8.5	9.0	9.0	600	9.2	102	450	110	43
MAY												
27...	1210	36	1390	8.4	16.0	24.0	601	8.9	115	350	91	29
JUN												
29...	1305	38	1310	8.5	20.0	24.5	606	10.1	141	350	92	28
JUL												
26...	1250	50	990	8.3	19.0	22.0	609	8.6	117	260	71	21
AUG												
31...	0900	18	1400	8.2	10.0	15.0	597	8.9	101	410	110	33
SEP												
20...	1100	12	1910	8.6	12.0	18.5	608	12.2	143	570	150	47

E-Estimate.

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
OCT											
27...	270	5	2.8	214	930	35	0.8	11	1590	2.16	77.2
NOV											
19...	370	6	1.0	279	1100	50	0.9	14	1940	2.64	73.4
JAN											
05...	280	5	2.7	243	970	32	0.8	14	1690	2.30	31.1
MAR											
25...	260	6	2.9	184	680	40	0.6	11	1220	1.65	194
APR											
14...	320	7	3.3	243	790	45	0.9	13	1470	2.00	111
MAY											
27...	170	4	2.5	160	530	26	0.5	10	955	1.30	92.8
JUN											
29...	150	4	2.4	169	460	20	0.5	10	864	1.18	88.7
JUL											
26...	100	3	2.8	155	330	16	0.4	10	644	0.88	87.0
AUG											
31...	170	4	2.7	202	530	24	0.6	9.5	1000	1.36	48.6
SEP											
20...	230	4	3.3	233	790	31	0.8	9.6	1400	1.91	45.4

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, approximately.

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: Nov. 8 to Mar. 24. Records good except those for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs and diversions for irrigation of about 19,300 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	58	44	38	20	46	52	47	65	55	60	57
2	58	54	43	39	21	49	53	46	62	61	68	58
3	58	52	42	40	21	50	56	44	57	68	66	58
4	57	56	41	40	22	48	57	44	55	65	60	58
5	57	54	40	37	23	47	61	43	57	62	55	59
6	58	50	42	36	24	54	64	42	54	56	53	57
7	60	46	42	35	24	56	57	42	52	56	50	57
8	62	46	43	34	23	56	50	41	50	58	50	60
9	64	46	44	33	22	58	47	41	50	59	55	64
10	65	48	45	33	21	75	45	41	51	52	60	58
11	68	49	42	34	20	81	42	41	48	51	62	55
12	67	50	41	35	20	78	41	42	48	52	62	53
13	63	49	39	36	19	94	42	44	50	51	64	56
14	61	47	38	36	20	110	43	42	52	51	61	59
15	61	43	36	36	22	120	47	40	49	55	58	60
16	60	45	35	35	21	110	50	40	55	52	60	64
17	59	46	34	34	21	96	49	39	59	50	61	57
18	60	45	32	33	22	88	47	44	60	52	62	51
19	59	42	33	32	23	72	47	49	58	53	63	48
20	59	43	35	31	23	100	49	49	61	47	63	45
21	58	44	38	32	23	140	49	46	61	49	63	45
22	58	43	41	33	24	150	47	49	58	56	57	46
23	57	40	43	34	25	110	44	46	63	59	57	47
24	57	36	44	34	26	94	42	46	62	55	56	48
25	56	33	45	34	28	80	43	47	56	58	54	48
26	55	35	44	33	29	75	44	46	53	60	55	48
27	54	36	40	32	33	66	42	51	53	62	54	48
28	54	40	37	29	37	61	43	59	57	56	53	47
29	54	43	36	24	---	56	44	59	58	59	54	48
30	49	44	36	21	---	54	46	58	52	58	54	49
31	53	---	37	20	---	53	---	61	---	56	60	---
TOTAL	1820	1363	1232	1033	657	2427	1443	1429	1666	1734	1810	1608
MEAN	58.7	45.4	39.7	33.3	23.5	78.3	48.1	46.1	55.5	55.9	58.4	53.6
MAX	68	58	45	40	37	150	64	61	65	68	68	64
MIN	49	33	32	20	19	46	41	39	48	47	50	45
AC-FT	3610	2700	2440	2050	1300	4810	2860	2830	3300	3440	3590	3190

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1994, BY WATER YEAR (WY)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	63.3	55.2	38.8	31.3	34.3	67.6	122	78.0	133	102	79.6	73.0											
MAX	102	149	60.4	55.5	74.0	196	462	208	627	290	119	100											
(WY)	1984	1984	1976	1984	1982	1974	1980	1984	1986	1983	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											

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1972 - 1994
ANNUAL TOTAL	17949	18222	--
ANNUAL MEAN	49.2	49.9	71.7
HIGHEST ANNUAL MEAN	--	--	139
LOWEST ANNUAL MEAN	--	--	30.6
HIGHEST DAILY MEAN	132	150	5530
LOWEST DAILY MEAN	14	19	7.0
ANNUAL SEVEN-DAY MINIMUM	15	20	11
INSTANTANEOUS PEAK FLOW	--	150a	7430b
INSTANTANEOUS PEAK STAGE	--	5.37c	10.58
ANNUAL RUNOFF (AC-FT)	35600	36140	51970
10 PERCENT EXCEEDS	78	62	110
50 PERCENT EXCEEDS	49	50	54
90 PERCENT EXCEEDS	18	33	28

a Highest daily mean, estimated.

b From rating curve extended above 2,000 ft³/s on basis of slope-area measurement of peak flow.

c Backwater from ice.

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 25...	1645	57	3260	8.5	9.5	12.0	603	9.1	102	950	200	110
NOV 15...	1045	41	3610	8.5	0.5	-5.0	610	10.9	96	1100	220	130
JAN 05...	1415	37	3590	8.2	0.0	-3.0	676	10.8	84	1200	240	140
MAR 24...	1015	83	2230	7.9	0.0	-3.0	601	11.9	104	510	100	62
APR 12...	1230	54	3300	8.4	10.0	20.0	610	9.8	110	930	190	110
MAY 27...	1010	52	2840	8.4	14.0	18.0	607	8.4	104	360	95	29
JUN 29...	1100	58	2580	8.3	17.0	24.0	609	8.1	106	790	160	96
JUL 26...	1250	59	2690	8.3	22.0	26.0	613	7.9	114	740	150	88
AUG 31...	1050	63	2550	8.3	14.0	18.0	597	8.6	108	750	150	91
SEP 20...	1230	48	3310	8.4	15.0	20.0	610	8.5	107	990	200	120

DATE	SODIUM, DIS- SOLVED (MG/L AS Na)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CaCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
OCT 25...	430	6	3.7	239	1600	41	1.3	11	2540	3.45	391
NOV 15...	480	6	3.7	278	1900	43	1.3	14	2960	4.02	328
JAN 05...	510	6	3.2	280	1900	32	1.0	13	3010	4.09	300
MAR 24...	310	6	3.0	212	960	34	0.7	12	1610	2.19	361
APR 12...	500	7	3.7	298	1600	47	1.0	12	2640	3.59	385
MAY 27...	340	8	2.7	153	1400	36	0.8	11	2010	2.73	282
JUN 29...	360	6	3.1	211	1200	27	0.8	11	1980	2.70	311
JUL 26...	350	6	3.4	214	1200	27	0.7	12	1960	2.66	312
AUG 31...	340	5	3.2	212	1200	27	0.7	11	1950	2.65	332
SEP 20...	450	6	4.0	240	1700	33	0.8	11	2660	3.62	345

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.--About 14,000 mi², of which 4,260 mi², including 3,959 mi² in Great Divide Basin in southern Wyoming, is probably noncontributing.

REMARKS.--Estimated daily discharges: Nov. 19-21 and Nov. 24 to Mar. 13. Records good except those for estimated daily discharges, which are poor. Some regulation by Fontenelle Reservoir since August 1963. (See sta 09211150.) Natural flow of stream affected by transbasin diversions, storage reservoirs, power development, and diversions for irrigation of about 223,000 acres upstream from station. National Weather Service satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1994, BY WATER YEAR (WY)												
MEAN	953	824	690	703	790	1001	1684	2610	4811	3197	1573	1145
MAX	3109	1844	1419	1382	1980	1852	3416	5665	11700	9415	3577	7746
(WY)	1983	1984	1972	1972	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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1952 - 1994	
ANNUAL TOTAL	568674		334903		--	
ANNUAL MEAN	1558		918		1667	
HIGHEST ANNUAL MEAN	--		--		3089	
LOWEST ANNUAL MEAN	--		--		689	
HIGHEST DAILY MEAN	4610	Jun 15	1540	May 11	16700	Sep 7 1965
LOWEST DAILY MEAN	440	Jan 1	416	Sep 21	170	Nov 16 1955
ANNUAL SEVEN-DAY MINIMUM	447	Jan 6	438	Sep 20	214	Dec 24 1962
INSTANTANEOUS PEAK FLOW	--	--	1750a	May 11	16800b	Sep 7 1965
INSTANTANEOUS PEAK STAGE	--	--	5.01c	Nov 25	8.53	Sep 7 1965
ANNUAL RUNOFF (AC-FT)	1128000	--	664300	--	1207000	--
10 PERCENT EXCEEDS	3290	--	1280	--	3710	--
50 PERCENT EXCEEDS	1250	--	940	--	1030	--
90 PERCENT EXCEEDS	620	--	497	--	439	--

c Backwater from ice.

GREEN RIVER BASIN

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
NOV 18...	1200	1330	461	8.7	3.0	4.0	610	11.4	106	170	43	15
JAN 06...	1120	1140	514	8.7	0.0	-2.0	E600	E10.6	92	190	49	16
MAR 24...	1515	739	753	8.7	3.5	4.0	605	12.0	114	240	60	23
MAY 20...	0900	728	609	8.6	10.0	15.0	610	8.6	96	210	53	20
JUL 27...	0845	964	438	8.7	18.0	13.0	617	7.8	102	140	34	14
SEP 21...	0830	442	629	8.8	14.0	12.5	616	7.5	91	190	44	20

E-Estimate.

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
NOV 18...	33	1	1.6	132	110	4.6	0.2	5.8	292	0.40	1050
JAN 06...	30	1	1.5	150	110	4.7	0.2	6.6	308	0.42	948
MAR 24...	70	2	1.7	170	230	11	0.3	6.1	504	0.69	1010
MAY 20...	47	1	1.8	152	160	6.4	0.2	4.9	384	0.52	756
JUL 27...	32	1	1.6	107	100	4.2	0.2	4.3	254	0.35	662
SEP 21...	57	2	1.8	129	190	6.5	0.2	4.5	401	0.55	479

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
NOV 18...	1345	1330	514	3.0	3.5	<0.01	0.07	0.03	0.3	0.02	<0.01	0.01
JAN 06...	1335	1140	514	0.0	-2.0	<0.01	0.06	0.08	0.3	0.02	0.01	0.02
MAR 24...	1815	749	887	3.5	4.0	<0.01	0.11	0.12	0.5	0.06	0.03	0.04
MAY 20...	1110	728	644	11.0	16.5	0.01	<0.05	0.03	0.3	0.01	<0.01	<0.01
JUL 27...	1030	964	466	19.5	29.0	<0.01	<0.05	0.03	0.3	0.03	<0.01	0.01
SEP 21...	1000	442	683	15.0	16.0	0.01	0.11	0.07	0.5	0.10	0.06	0.06

GREEN RIVER BASIN

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, UT, 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, approximately.

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 bench mark). 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. 19 to Mar.31 and May 10-24. Records fair except those for estimated daily discharges, which are poor.

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)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 16	unknown	*1,070	*4.00	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	22	27	26	18	19	4.3	67	499	129	49	44
2	27	23	27	26	19	19	3.2	67	477	125	41	45
3	27	24	28	27	19	18	4.9	68	509	121	36	50
4	26	22	27	26	18	17	3.2	84	528	114	34	45
5	26	21	26	26	19	16	3.2	155	496	109	32	43
6	32	20	25	26	20	14	4.9	237	444	98	31	43
7	37	20	27	26	21	14	4.0	270	386	93	32	46
8	37	20	29	25	20	13	3.8	288	326	84	33	43
9	35	20	30	26	19	12	4.3	382	303	79	60	42
10	34	21	28	25	20	11	3.8	520	300	73	53	40
11	38	22	26	24	18	10	4.3	630	319	68	51	39
12	46	23	24	25	17	9.0	12	670	323	65	46	46
13	41	24	24	26	16	8.4	16	690	316	62	45	58
14	39	23	23	26	16	8.6	19	730	293	59	45	57
15	37	22	24	24	17	8.4	20	690	273	57	43	53
16	34	23	24	24	18	8.0	27	750	252	55	42	49
17	37	23	23	25	19	6.8	36	540	240	52	41	47
18	38	23	22	25	20	6.8	51	470	232	49	47	45
19	32	22	23	25	19	7.2	70	410	237	47	78	45
20	32	23	23	24	17	7.0	91	370	226	42	62	45
21	31	23	24	23	18	7.2	142	320	257	40	59	44
22	32	24	24	22	17	7.0	246	360	275	41	51	42
23	30	22	26	21	18	6.8	264	420	230	41	50	42
24	31	20	29	20	19	6.6	203	470	210	41	47	41
25	28	18	30	20	20	6.8	155	516	192	40	46	40
26	24	20	29	20	20	6.6	122	547	179	35	46	40
27	24	19	28	21	20	6.4	99	515	170	34	46	40
28	27	23	27	20	20	6.2	80	736	157	37	49	40
29	25	26	25	19	---	5.8	73	623	147	35	49	44
30	21	26	25	18	---	5.6	69	689	139	35	46	50
31	22	---	25	17	---	5.0	---	728	---	41	44	---
TOTAL	977	662	802	728	522	303.2	1838.9	14012	8935	2001	1434	1348
MEAN	31.5	22.1	25.9	23.5	18.6	9.78	61.3	452	298	64.5	46.3	44.9
MAX	46	26	30	27	21	19	264	750	528	129	78	58
MIN	21	18	22	17	16	5.0	3.2	67	139	34	31	39
AC-FT	1940	1310	1590	1440	1040	601	3650	27790	17720	3970	2840	2670

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1994, BY WATER YEAR (WY)

	MEAN	54.4	60.2	51.6	26.3	23.4	25.2	51.3	405	777	324	110	68.6
MAX	136	482	452	41.4	36.9	38.6	112	789	1273	1003	232	157	
(WY)	1983	1990	1990	1974	1974	1969	1985	1984	1983	1975	1983	1982	
MIN	23.9	22.1	11.1	6.73	9.32	9.78	19.4	134	297	64.5	46.3	37.3	
(WY)	1993	1994	1977	1977	1977	1994	1975	1975	1994	1994	1994	1976	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1966 - 1994
ANNUAL TOTAL	65944	33563.1	--
ANNUAL MEAN	181	92.0	162
HIGHEST ANNUAL MEAN	--	--	228
LOWEST ANNUAL MEAN	--	--	79.3
HIGHEST DAILY MEAN	1440	750	1880
LOWEST DAILY MEAN	14	3.2	3.2
ANNUAL SEVEN-DAY MINIMUM	15	3.9	3.9
INSTANTANEOUS PEAK FLOW	--	1070	2480
INSTANTANEOUS PEAK STAGE	--	4.00	4.91a
ANNUAL RUNOFF (AC-FT)	130800	66570	117400
10 PERCENT EXCEEDS	747	296	504
50 PERCENT EXCEEDS	37	31	46
90 PERCENT EXCEEDS	19	14	21

a Site and datum then in use.

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 1-13. Records good except those for estimated daily discharges, which are poor. Flow completely regulated by Meeks Cabin Reservoir, capacity, 32,470 acre-ft, since June 1971. Result of discharge measurements, in cubic feet per second, made during period when station was not in operation, is given below:

Oct. 4 . . . 62.5

Apr. 26 . . . 30.9

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	45	775	404	104	75
2	---	---	---	---	---	---	---	45	771	404	89	75
3	---	---	---	---	---	---	---	45	707	400	78	74
4	---	---	---	---	---	---	---	45	677	398	78	72
5	---	---	---	---	---	---	---	45	687	367	78	72
6	---	---	---	---	---	---	---	45	685	347	78	75
7	---	---	---	---	---	---	---	45	703	351	78	78
8	---	---	---	---	---	---	---	45	727	347	78	78
9	---	---	---	---	---	---	---	45	730	344	62	78
10	---	---	---	---	---	---	---	45	602	339	52	78
11	---	---	---	---	---	---	---	45	507	335	53	78
12	---	---	---	---	---	---	---	45	507	310	53	78
13	---	---	---	---	---	---	---	75	507	289	52	66
14	---	---	---	---	---	---	---	75	533	283	52	57
15	---	---	---	---	---	---	---	76	555	279	51	57
16	---	---	---	---	---	---	---	363	549	274	48	57
17	---	---	---	---	---	---	---	665	512	271	47	57
18	---	---	---	---	---	---	---	703	487	269	47	57
19	---	---	---	---	---	---	---	721	487	206	47	57
20	---	---	---	---	---	---	---	721	487	159	47	81
21	---	---	---	---	---	---	---	711	455	160	47	102
22	---	---	---	---	---	---	---	705	426	152	47	102
23	---	---	---	---	---	---	---	699	415	144	76	102
24	---	---	---	---	---	---	---	696	415	142	102	102
25	---	---	---	---	---	---	---	685	412	141	102	101
26	---	---	---	---	---	---	---	682	409	119	104	100
27	---	---	---	---	---	---	---	687	406	104	104	74
28	---	---	---	---	---	---	---	689	404	106	104	54
29	---	---	---	---	---	---	---	688	404	104	103	54
30	---	---	---	---	---	---	---	687	404	104	87	54
31	---	---	---	---	---	---	---	737	---	104	75	---
TOTAL	---	---	---	---	---	---	---	11605	16345	7756	2223	2245
MEAN	---	---	---	---	---	---	---	374	545	250	71.7	74.8
MAX	---	---	---	---	---	---	---	737	775	404	104	102
MIN	---	---	---	---	---	---	---	45	404	104	47	54
AC-FT	---	---	---	---	---	---	---	23020	32420	15380	4410	4450

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

SUMMARY STATISTICS

	FOR 1994 WATER YEAR*	WATER YEARS 1940 - 1992
ANNUAL MEAN	--	161a
HIGHEST ANNUAL MEAN	--	281
LOWEST ANNUAL MEAN	--	82.9
HIGHEST DAILY MEAN	775 Jun 1	2180 Jun 7 1957
LOWEST DAILY MEAN	45 May 1-12	1.0 Sep 15,16 1983
ANNUAL SEVEN-DAY MINIMUM	--	5.7 Nov 7 1970
INSTANTANEOUS PEAK FLOW	784 Jun 2	2530b Jun 7 1957#
INSTANTANEOUS PEAK STAGE	3.94 Jun 2	6.76c 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 1993.

a Unadjusted.

b From rating curve extended above 1,500 ft³/s.

c From floodmarks, site and datum then in use.

GREEN RIVER BASIN

09220000 EAST FORK OF SMITHS 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 1 to June 14 and Aug. 20 to Sept. 16. 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.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	11	150	75	22	20
2	---	---	---	---	---	---	---	11	173	66	22	20
3	---	---	---	---	---	---	---	11	173	66	22	20
4	---	---	---	---	---	---	---	11	173	66	22	20
5	---	---	---	---	---	---	---	11	173	76	21	20
6	---	---	---	---	---	---	---	11	173	95	21	25
7	---	---	---	---	---	---	---	11	160	94	21	30
8	---	---	---	---	---	---	---	11	160	92	21	28
9	---	---	---	---	---	---	---	11	160	90	23	23
10	---	---	---	---	---	---	---	12	140	90	21	20
11	---	---	---	---	---	---	---	12	130	88	21	20
12	---	---	---	---	---	---	---	12	120	81	21	20
13	---	---	---	---	---	---	---	13	120	66	21	19
14	---	---	---	---	---	---	---	13	113	66	21	20
15	---	---	---	---	---	---	---	13	114	66	21	20
16	---	---	---	---	---	---	---	13	115	66	20	20
17	---	---	---	---	---	---	---	13	119	66	19	20
18	---	---	---	---	---	---	---	100	119	66	20	20
19	---	---	---	---	---	---	---	120	119	57	20	20
20	---	---	---	---	---	---	---	120	119	38	20	19
21	---	---	---	---	---	---	---	120	130	38	20	18
22	---	---	---	---	---	---	---	120	144	38	20	18
23	---	---	---	---	---	---	---	120	144	38	20	18
24	---	---	---	---	---	---	---	120	142	39	20	18
25	---	---	---	---	---	---	---	130	142	38	20	18
26	---	---	---	---	---	---	---	150	142	34	20	18
27	---	---	---	---	---	---	---	150	140	25	20	17
28	---	---	---	---	---	---	---	150	118	25	20	17
29	---	---	---	---	---	---	---	150	83	24	20	18
30	---	---	---	---	---	---	---	155	82	21	20	18
31	---	---	---	---	---	---	---	160	---	21	20	---
TOTAL	---	---	---	---	---	---	---	2065	4090	1811	640	602
MEAN	---	---	---	---	---	---	---	66.6	136	58.4	20.6	20.1
MAX	---	---	---	---	---	---	---	160	173	95	23	30
MIN	---	---	---	---	---	---	---	11	82	21	19	17
AC-FT	---	---	---	---	---	---	---	4100	8110	3590	1270	1190

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	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
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																					

SUMMARY STATISTICS

	FOR 1994 WATER YEAR*	WATER YEARS 1939 - 1971
ANNUAL MEAN	---	47.1
HIGHEST ANNUAL MEAN	---	88.9
LOWEST ANNUAL MEAN	---	25.4
HIGHEST DAILY MEAN	173 Jun 2-6	1030 Jun 10 1965
LOWEST DAILY MEAN	11 May 1-9	1.0 Dec 17 1962
ANNUAL SEVEN-DAY MINIMUM	---	1.0 Dec 17 1962
INSTANTANEOUS PEAK FLOW	173 Jun 2	1450 Jun 10 1965#
INSTANTANEOUS PEAK STAGE	4.81 Jun 2	6.75 Jun 10 1965#
ANNUAL RUNOFF (AC-FT)	---	34160
10 PERCENT EXCEEDS	148	140
50 PERCENT EXCEEDS	23	13
90 PERCENT EXCEEDS	13	5.6

* During period of operation.

For period of record through 1994.

LOCATION.--Lat 42°06'38", long 110°42'32", in NE1/4 SE1/4 NW1/4 sec.35, T.25 N., R.117 W., Lincoln County, Hydrologic Unit 14040107, on left bank 2.0 mi downstream from Pole Creek, 4.6 mi upstream from Taylor Creek, and 22 mi northwest of Frontier.

PERIOD OF RECORD.--October 1952 to current year. Prior to October 1970, published as "near Elk Creek ranger station."

GAGE.--Water-stage recorder. Elevation of gage is 7,455 ft above sea level, from topographic map. October 1952 to Sept. 2, 1971, at site 270 ft upstream at present datum, Sept. 3, 1971, to July 30, 1980, at site 150 ft upstream at present datum.

REMARKS.--Estimated daily discharges: Oct. 30 to Apr. 10. Records fair 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)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 14	1000	*386	*4.21	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	16	13	12	8.0	21	28	123	170	35	19	6.4
2	21	14	14	12	9.0	21	28	119	151	34	19	6.4
3	21	15	13	12	9.0	21	29	131	141	33	14	6.4
4	21	14	12	13	9.0	21	29	142	132	32	11	5.9
5	21	13	11	12	9.0	21	30	160	127	32	10	5.5
6	21	12	10	11	9.4	21	31	196	120	31	9.2	5.2
7	22	11	10	10	10	21	34	268	116	34	8.0	5.2
8	23	11	10	9.0	12	21	34	256	112	31	8.2	5.3
9	24	11	12	9.0	11	21	37	269	104	29	9.2	4.8
10	25	11	11	10	11	22	35	294	94	26	12	4.7
11	26	11	11	11	12	23	33	317	91	25	10	4.5
12	26	11	11	10	11	25	47	339	85	23	8.5	5.5
13	25	11	10	11	11	24	52	355	81	23	7.4	9.2
14	24	12	10	12	11	23	56	356	77	23	6.9	9.7
15	26	12	10	12	13	23	61	325	78	22	6.7	9.0
16	26	12	12	12	16	24	74	315	78	20	5.7	9.0
17	24	12	11	12	17	25	94	288	71	17	4.5	7.9
18	23	12	9.0	12	17	24	123	254	68	16	3.9	7.4
19	22	11	10	11	16	24	154	239	64	16	4.3	7.2
20	21	11	9.6	10	15	23	186	205	62	15	5.6	7.6
21	21	11	11	10	14	23	213	182	58	14	5.9	7.9
22	20	12	9.4	10	14	24	243	169	64	13	5.9	7.9
23	20	13	10	10	15	24	273	165	58	13	6.3	7.9
24	20	11	11	10	16	24	218	162	52	14	5.0	7.9
25	20	9.0	11	11	17	26	176	163	49	12	3.9	8.1
26	19	9.0	11	11	20	27	156	165	45	11	3.6	8.8
27	18	10	11	11	21	28	130	167	44	11	4.2	9.1
28	19	12	12	12	21	28	122	186	42	10	5.2	9.6
29	19	13	11	10	---	29	122	174	40	11	6.4	10
30	17	12	11	9.0	---	29	119	163	38	11	6.2	14
31	15	---	12	8.0	---	30	---	161	---	12	6.1	---
TOTAL	671	355.0	340.0	335.0	374.4	741	2967	6808	2512	649	241.8	224.0
MEAN	21.6	11.8	11.0	10.8	13.4	23.9	98.9	220	83.7	20.9	7.80	7.47
MAX	26	16	14	13	21	30	273	356	170	35	19	14
MIN	15	9.0	9.0	8.0	8.0	21	28	119	38	10	3.6	4.5
AC-FT	1330	704	674	664	743	1470	5890	13500	4980	1290	480	445

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1994, BY WATER YEAR (WY)

MEAN	22.1	19.3	16.0	14.4	15.2	20.7	107	423	393	96.7	29.3	21.3
MAX	54.2	34.4	27.8	26.4	29.1	38.2	398	970	1038	296	64.0	51.9
(WY)	1983	1983	1984	1984	1958	1958	1971	1971	1986	1975	1983	1984
MIN	11.1	9.37	9.37	6.23	5.61	6.77	19.8	40.5	24.0	9.32	4.55	7.47
(WY)	1993	1961	1991	1967	1967	1965	1975	1977	1977	1977	1992	1992

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1953 - 1994

	FOR 1977-1978 YEAR		FOR 1978-1979 YEAR		FOR 1979-1980 YEAR	
ANNUAL TOTAL	39025.7		16218.2		--	
ANNUAL MEAN	107		44.4		98.4	
HIGHEST ANNUAL MEAN	--		--		214	1971
LOWEST ANNUAL MEAN	--		--		17.7	1977
HIGHEST DAILY MEAN	1120	May 22	356	May 14	2000	Jun 5 1986
LOWEST DAILY MEAN	7.6	Feb 17	3.6	Aug 26	.10	Aug 17 1977
ANNUAL SEVEN-DAY MINIMUM	8.4	Jan 27	4.9	Aug 22	.62	Aug 11 1977
INSTANTANEOUS PEAK FLOW	--		386	May 14	2230a	Jun 5 1986
INSTANTANEOUS PEAK STAGE	--		4.21	May 14	8.10b	May 28 1971
ANNUAL RUNOFF (AC-FT)	77410		32170		71270	
10 PERCENT EXCEEDS	383		152		307	
50 PERCENT EXCEEDS	25		16		22	
90 PERCENT EXCEEDS	9.5		7.9		12	

a Gage height, 6.72 ft.

b Site then in use.

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.31 N., R.116 W., Lincoln County, Hydrologic Unit 14040107, at bridge on U.S. Highway 30N, 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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED CENT SATUR- ATION)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)
OCT								
05...	1615	38	374	590	10.1	127	9.4	14.0
FEB								
23...	0945	18	572	595	7.2	64	7.9	0.5
MAR								
21...	1545	41	596	590	9.4	95	8.5	5.0
MAY								
18...	1500	298	382	590	9.4	112	8.4	11.5
AUG								
29...	1700	11	385	596	13.1	182	9.5	19.0

DATE	TEMPER- ATURE AIR (DEG C)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
OCT								
05...	20.0	K4	<0.01	0.15	0.05	0.6	0.07	0.05
FEB								
23...	-4.0	--	--	--	--	--	--	--
MAR								
21...	9.0	K2	<0.01	0.28	0.04	0.3	0.06	0.03
MAY								
18...	18.0	40	<0.01	0.06	0.02	0.4	0.05	0.01
AUG								
29...	24.0	K9	<0.01	0.41	0.02	0.3	0.09	0.07

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

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, approximately.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 6,127.66 ft above sea level.

REMARKS.--Estimated daily discharges: Nov. 6 to Mar. 13. 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 satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119	124	54	50	48	130	107	147	109	24	3.2	.00
2	108	126	56	62	50	140	107	140	93	23	2.8	.00
3	101	128	56	64	52	150	108	129	84	23	2.8	.00
4	100	120	54	68	52	150	118	118	138	20	2.0	.00
5	106	127	52	66	54	150	119	112	145	18	1.4	.00
6	104	90	54	64	56	140	122	103	138	18	.97	.00
7	98	60	56	62	58	140	124	94	97	16	.66	.00
8	96	72	56	62	58	190	121	81	72	21	.66	.00
9	111	80	56	60	56	240	113	85	65	23	1.1	.00
10	126	94	56	60	54	270	109	92	65	21	.86	.00
11	134	100	52	60	50	320	107	101	67	18	.50	.00
12	155	140	52	60	46	300	106	105	65	14	.16	.00
13	159	170	52	58	44	260	105	133	71	16	.03	.00
14	161	190	52	56	46	217	101	148	60	14	.00	.00
15	161	180	54	58	50	194	86	175	51	12	.00	.00
16	170	130	50	60	54	200	88	234	50	8.8	.00	.00
17	169	130	48	62	52	201	98	262	49	8.1	.00	.00
18	169	110	46	58	50	187	103	304	47	7.2	.00	.00
19	202	70	47	56	52	189	99	297	55	6.0	.00	.00
20	205	70	48	54	54	175	101	259	49	5.2	.00	.00
21	183	74	50	54	50	172	130	218	47	4.7	.00	.00
22	166	66	54	56	49	172	279	219	47	4.8	.00	.00
23	157	56	58	58	52	169	282	184	49	5.3	.00	.00
24	153	50	56	56	54	172	253	145	53	5.4	.00	.00
25	142	50	56	56	54	170	302	134	61	5.1	.00	.00
26	137	50	58	54	56	156	281	125	52	4.7	.00	.00
27	133	52	56	52	58	146	222	126	40	4.1	.00	.00
28	132	54	52	52	64	137	184	123	32	3.5	.00	.00
29	128	54	54	49	---	124	169	113	29	2.9	.00	.00
30	127	52	56	47	---	113	157	106	27	3.6	.00	.00
31	125	---	56	45	---	108	---	114	---	3.5	.00	---
TOTAL	4337	2869	1657	1779	1473	5582	4401	4726	2007	363.9	17.14	0.00
MEAN	140	95.6	53.5	57.4	52.6	180	147	152	66.9	11.7	.55	.000
MAX	205	190	58	68	64	320	302	304	145	24	3.2	.00
MIN	96	50	46	45	44	108	86	81	27	2.9	.00	.00
AC-FT	8600	5690	3290	3530	2920	11070	8730	9370	3980	722	34	.00

GSTATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1994, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1962	98.0	376	1983	7.05	1980
1963	105	336	1983	16.3	1980
1964	78.4	230	1984	20.2	1989
1965	79.0	371	1971	3.94	1991
1966	109	318	1984	26.4	1989
1967	317	765	1972	33.9	1964
1968	514	1310	1973	51.2	1990
1969	984	2918	1984	21.1	1977
1970	1088	4573	1983	14.0	1977
1971	304	1349	1975	4.36	1977
1972	110	542	1983	.55	1994
1973	83.6	576	1983	.000	1994

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1962 - 1994
ANNUAL TOTAL	110208	29212.04	--
ANNUAL MEAN	302	80.0	324
HIGHEST ANNUAL MEAN	--	--	888
LOWEST ANNUAL MEAN	--	--	29.0
HIGHEST DAILY MEAN	2080	May 24	320
LOWEST DAILY MEAN	21	Jan 13	.00
ANNUAL SEVEN-DAY MINIMUM	24	Jan 10	.00
INSTANTANEOUS PEAK FLOW	--	328a	May 18
INSTANTANEOUS PEAK STAGE	--	6.00b	Mar 9
ANNUAL RUNOFF (AC-FT)	218600	57940	234600
10 PERCENT EXCEEDS	894	172	932
50 PERCENT EXCEEDS	127	58	110
90 PERCENT EXCEEDS	28	.00	20

a Gage height 4.87, peak discharge may have been higher Mar. 11.

b Backwater from ice.

GREEN RIVER BASIN

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.

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. No flow Aug 13 to Sept. 30, 1994.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 6,010 microsiemens, Oct. 1, 1953; minimum daily, 194 microsiemens, 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, 2,470 microsiemens, Aug. 12; minimum mean daily, 575 microsiemens, May 20.

WATER TEMPERATURES: Maximum, 32.1°C, July 22; minimum, 0.0°C on many days Decmber through March.

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible][illegible]

09224700 BLACKS FORK NEAR LITTLE AMERICA, WY--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1310	1530	1860	1530	1350	914	1540	904	1040	1600	2000	---
2	1290	1500	1830	1500	1350	951	1550	1020	1030	1530	2050	---
3	1290	1530	1900	1470	1410	969	1540	1120	1060	1460	2130	---
4	1420	1570	1900	1410	1460	978	1540	1200	1240	1470	2200	---
5	1440	1460	1750	1420	1500	966	1510	1280	1130	1520	2250	---
6	1520	1500	1590	1450	1520	959	1490	1350	1050	1540	2320	---
7	1460	1460	1520	1460	1560	1040	1480	1390	1020	1550	2390	---
8	1390	1580	1520	1430	1560	1080	1490	1470	1110	1610	2430	---
9	1370	1530	1550	1400	1560	---	1540	1560	1340	1650	2400	---
10	1420	1480	1590	1400	1540	---	1560	1610	1450	1560	2390	---
11	1530	1410	1590	1420	1490	---	1570	1450	1450	1390	2430	---
12	1560	1550	1600	1430	1460	---	1560	1130	1400	1440	2470	---
13	1610	1540	1590	1420	1450	---	1590	1100	1480	1390	---	---
14	1550	1420	1590	1390	1430	---	1650	1040	1450	1380	---	---
15	1470	1330	1600	1340	1420	1320	1700	942	1340	1440	---	---
16	1470	1240	1600	1310	1370	1340	1760	807	1310	1460	---	---
17	1480	1290	1580	1300	1380	1410	1790	771	1310	1440	---	---
18	1460	1370	1570	1310	1340	1420	1780	667	1350	1350	---	---
19	1450	1570	1570	1300	1300	1390	1750	596	1410	1350	---	---
20	1510	1580	1580	1270	1280	1380	1650	575	1350	1420	---	---
21	1460	1690	1590	1290	1270	1390	1570	586	1320	1480	---	---
22	1410	1790	1600	1300	1230	1380	1370	627	1300	1500	---	---
23	1400	1780	1590	1290	1160	1410	989	674	1300	1550	---	---
24	1390	1720	1580	1330	1200	1490	932	869	1320	1620	---	---
25	1420	1680	1580	1320	1200	1550	938	1020	1370	1700	---	---
26	1430	1740	1590	1330	1170	1500	821	969	1550	1790	---	---
27	1450	1880	1600	1340	1090	1510	802	923	1540	1860	---	---
28	1500	1870	1540	1330	948	1530	779	941	1520	1920	---	---
29	1550	1830	1600	1340	---	1510	789	926	1490	1960	---	---
30	1560	1920	1590	1330	---	1520	812	981	1510	1980	---	---
31	1570	---	1580	1350	---	1520	---	987	---	2000	---	---
MEAN	1460	1580	1620	1370	1360	---	1390	1020	1320	1580	---	---
MAX	1610	1920	1900	1530	1560	---	1790	1610	1550	2000	---	---
MIN	1290	1240	1520	1270	948	---	779	575	1020	1350	---	---

. 09224700 BLACKS FORK NEAR LITTLE AMERICA, WY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	12.6	8.3	4.4	1.1	.5	.2	.2	.0	.0	.0	.1	.0
2	14.6	8.3	2.3	.2	.5	.2	.2	.0	.0	.0	.0	.0
3	15.4	8.3	3.4	.1	.5	.2	.1	.0	.0	.0	.1	.0
4	15.6	9.3	4.3	.3	.5	.2	.2	.0	.0	.0	.1	.1
5	16.1	9.9	3.9	1.3	.4	.2	.2	.0	.0	.0	.1	.1
6	14.9	11.3	1.7	.2	.3	.2	.0	.0	.0	.0	.1	.1
7	13.6	10.2	1.1	.1	.3	.1	.0	.0	.0	.0	.1	.1
8	10.5	6.0	.6	.1	.3	.1	.0	.0	.0	.0	.1	.1
9	8.8	3.9	.4	.1	.3	.1	.0	.0	.0	.0	---	---
10	10.5	5.5	.4	.1	.4	.1	.0	.0	.0	.0	---	---
11	9.5	6.1	.6	.1	.3	.1	.0	.0	.0	.0	---	---
12	11.8	8.0	.4	.1	.3	.1	.0	.0	.0	.0	---	---
13	10.5	7.3	1.1	.1	.4	.1	.0	.0	.0	.0	---	---
14	10.3	8.2	.6	.1	.4	.1	.0	.0	.0	.0	---	---
15	8.8	7.0	1.1	.1	.3	.1	.0	.0	.0	.0	6.2	1.7
16	9.0	6.0	1.1	.1	.1	.1	.0	.0	.0	.0	6.3	3.0
17	9.1	6.9	.6	.1	.2	.1	.0	.0	.0	.0	6.7	3.5
18	10.4	6.3	.3	.1	.2	.0	.0	.0	.0	.0	4.6	2.4
19	8.6	5.3	.5	.2	.1	.0	.0	.0	.0	.0	4.2	2.4
20	8.1	5.3	.5	.2	.1	.0	.0	.0	.0	.0	5.5	1.1
21	7.6	4.3	.4	.3	.1	.0	.0	.0	.0	.0	6.8	1.9
22	8.3	5.1	.3	.3	.1	.0	.0	.0	.0	.0	7.4	3.6
23	8.6	4.3	.4	.3	.1	.0	.0	.0	.0	.0	4.6	1.8
24	9.1	5.1	.4	.3	.2	.0	.0	.0	.0	.0	4.9	.2
25	8.9	5.1	.3	.2	.3	.0	.0	.0	.0	.0	6.6	3.0
26	6.6	4.3	.4	.2	.2	.0	.0	.0	.0	.0	5.2	2.0
27	5.6	2.3	.6	.2	.2	.0	.0	.0	.0	.0	5.7	.8
28	4.3	2.6	.6	.2	.3	.0	.0	.0	.0	.0	6.2	1.1
29	2.9	.1	.7	.2	.2	.0	.0	.0	---	---	7.9	2.1
30	2.6	.2	.6	.2	.1	.0	.0	.0	---	---	9.1	2.0
31	3.1	.2	---	---	.2	.0	.0	.0	---	---	10.7	3.5
MONTH	16.1	.1	4.4	.1	.5	.0	.2	.0	.0	.0	---	---
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	9.4	6.0	12.6	8.1	18.4	11.9	21.7	14.3	27.7	21.8	---	---
2	10.7	5.2	14.1	7.7	21.1	12.8	18.7	14.5	30.8	19.8	---	---
3	9.9	5.7	12.7	9.0	21.1	15.1	22.6	13.1	30.8	21.2	---	---
4	7.9	4.5	15.0	7.8	21.1	15.8	21.6	14.1	28.5	19.9	---	---
5	8.1	2.9	14.6	11.2	21.0	15.0	23.4	13.6	27.4	22.1	---	---
6	7.3	3.9	16.7	10.1	19.7	15.8	18.2	11.7	26.2	19.5	---	---
7	7.1	4.0	14.0	9.4	17.5	12.9	23.3	9.9	25.1	19.3	---	---
8	9.2	2.1	16.7	9.1	19.4	10.1	27.2	15.1	22.7	20.6	---	---
9	9.2	4.9	17.6	10.0	19.0	12.3	27.5	17.9	22.5	16.6	---	---
10	7.7	5.3	18.5	11.3	21.1	12.6	24.6	17.9	26.3	18.7	---	---
11	10.5	3.7	20.0	12.9	22.1	15.0	26.7	16.9	28.0	21.7	---	---
12	12.5	5.6	17.1	13.6	21.0	15.9	27.1	15.6	26.5	20.9	---	---
13	11.5	6.6	17.7	13.5	19.5	16.2	27.7	16.8	---	---	---	---
14	11.6	7.1	17.0	11.7	18.5	13.7	28.8	15.7	---	---	---	---
15	13.5	5.6	15.8	12.6	15.9	11.4	30.1	17.7	---	---	---	---
16	15.7	7.2	15.7	11.5	20.3	12.6	27.9	18.7	---	---	---	---
17	17.0	9.4	14.4	11.7	23.6	13.8	29.3	17.1	---	---	---	---
18	18.1	11.1	15.1	10.9	21.4	17.0	27.9	19.3	---	---	---	---
19	17.9	12.7	15.2	11.3	23.0	17.3	26.9	18.2	---	---	---	---
20	18.2	11.9	13.6	10.5	25.2	17.8	29.4	17.7	---	---	---	---
21	19.3	12.1	16.4	9.8	23.9	20.2	30.6	18.2	---	---	---	---
22	16.3	13.5	18.3	12.1	23.4	18.7	32.1	20.8	---	---	---	---
23	14.7	12.1	17.8	13.5	27.0	17.6	29.8	21.6	---	---	---	---
24	14.1	10.8	19.7	12.9	27.6	18.2	31.8	21.0	---	---	---	---
25	12.4	10.0	19.6	14.0	31.0	19.6	29.5	20.3	---	---	---	---
26	10.5	5.4	21.0	13.4	28.4	18.7	29.7	19.9	---	---	---	---
27	6.1	2.7	19.4	14.4	25.2	13.8	30.8	20.2	---	---	---	---
28	5.8	2.3	19.4	14.1	25.7	15.3	30.3	20.7	---	---	---	---
29	7.5	4.0	18.2	13.7	24.8	16.6	31.1	20.4	---	---	---	---
30	11.5	4.4	19.9	12.8	24.1	14.8	29.7	21.2	---	---	---	---
31	---	---	16.9	13.5	---	---	29.9	21.1	---	---	---	---
MONTH	19.3	2.1	21.0	7.7	31.0	10.1	32.1	9.9	---	---	---	---

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, is probably 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 development. 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, 3,469,000 acre-ft Oct. 1, elevation, 6,033.14 ft; minimum observed, 2,887,000 acre-ft Sept. 30, elevation, 6,017.43 ft.

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

6,015	2,804,000	6,030	3,346,000
6,020	2,977,000	6,034	3,503,000
6,025	3,157,000		

RESERVOIR STORAGE, IN THOUSANDS OF ACRE FEET, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3469	3449	3382	3316	3276	3247	3258	3271	3131	3059	3026	2959
2	3468	3446	3380	3315	3274	3247	3259	3271	3124	3058	3025	2957
3	3467	3443	3378	3313	3273	3247	3259	3270	3116	3058	3023	2954
4	3466	3442	3377	3312	3271	3248	3260	3268	3110	3058	3022	2951
5	3465	3438	3375	3311	3270	3250	3260	3267	3104	3058	3020	2949
6	3464	3437	3374	3309	3270	3251	3261	3266	3097	3057	3019	2946
7	3465	3436	3372	3308	3269	3251	3260	3264	3089	3057	3017	2944
8	3465	3433	3369	3306	3268	3251	3259	3264	3083	3056	3015	2941
9	3464	3431	3367	3305	3267	3251	3260	3262	3077	3054	3013	2939
10	3463	3428	3365	3303	3266	3252	3261	3260	3074	3053	3012	2936
11	3463	3425	3364	3301	3265	3253	3262	3258	3070	3052	3010	2934
12	3462	3422	3362	3299	3264	3254	3262	3255	3067	3050	3008	2931
13	3462	3419	3359	3298	3263	3254	3263	3251	3065	3049	3006	2928
14	3462	3417	3357	3297	3262	3254	3264	3247	3064	3048	3004	2925
15	3461	3415	3355	3296	3261	3255	3265	3242	3063	3047	3002	2923
16	3461	3412	3353	3295	3260	3255	3266	3238	3063	3046	3000	2920
17	3462	3410	3350	3293	3259	3255	3267	3230	3063	3045	2997	2917
18	3461	3408	3348	3292	3258	3256	3268	3224	3064	3044	2995	2914
19	3463	3406	3346	3290	3257	3256	3269	3216	3064	3043	2992	2912
20	3461	3403	3343	3289	3257	3257	3268	3209	3065	3041	2990	2909
21	3460	3402	3340	3288	3255	3257	3270	3202	3064	3040	2987	2907
22	3460	3400	3338	3287	3254	3258	3270	3195	3064	3039	2985	2905
23	3460	3398	3335	3286	3252	3258	3273	3188	3065	3038	2982	2902
24	3460	3395	3334	3285	3251	3258	3273	3182	3065	3036	2980	2900
25	3460	3394	3332	3284	3249	3257	3272	3175	3064	3036	2977	2897
26	3459	3392	3330	3282	3249	3257	3272	3170	3063	3035	2975	2895
27	3458	3390	3329	3281	3248	3257	3272	3161	3062	3034	2972	2892
28	3457	3389	3326	3279	3247	3257	3271	3156	3062	3032	2969	2890
29	3455	3387	3323	3278	---	3257	3271	3150	3061	3031	2966	2889
30	3454	3384	3320	3278	---	3257	3271	3143	3060	3029	2964	2887
31	3452	---	3317	3277	---	3257	---	3137	---	3028	2962	---
MAX	3470	3450	3380	3320	3280	3260	3270	3270	3130	3060	3030	2960
MIN	3450	3380	3320	3280	3250	3250	3260	3140	3060	3030	2960	2890
(#)	6032.71	6030.99	6029.25	6028.19	6027.40	6027.67	6028.03	6024.45	6022.34	6021.44	6019.56	6017.43
(*)	-19	-68	-67	-40	-30	+10	+14	-134	-77	-32	-66	-75
CAL YR 1993	(*) +303											
WTR YR 1994	(*) -584											

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

(*) Change in contents, in thousands of 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.

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

REVISED RECORDS.--WDR UT-76-1: Drainage area

GAGE.--Water-stage recorder. Datum of gage is 5,594.48 ft above sea level. Prior to Sept. 2, 1959, water-stage recorder at site 2.2 mi upstream at different datum. Sept. 3, 1959, to Sept. 30, 1985, at datum 5.0 ft lower.

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated by Flaming Gorge Reservoir 0.5 mi upstream, beginning Nov. 1, 1962 (see station 09234400).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,600 ft³/s, June 12, 1957, gage height, 10.60 ft, site and datum then in use; maximum gage height, 14.51 ft, May 12, June 6, 1986, datum then in use; minimum, 2.3 ft³/s, Mar. 20, 22, 27, 28, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,720 ft³/s, June 6, gage height, 11.71 ft; minimum daily discharge, 909 ft³/s, June 17-19.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1340	2620	2580	2190	1970	1660	1080	1730	4660	1090	1610	1540
2	1400	2480	2570	2130	1970	1330	1090	1740	4670	1090	1610	1540
3	1330	2460	2580	2430	1970	1110	1110	1730	4670	1120	1610	1550
4	1310	2380	2240	2430	2080	1120	1070	1700	4670	1120	1680	1550
5	1320	2450	2460	2420	1900	1110	1290	1740	4670	1100	1720	1550
6	1320	2230	2620	2420	1740	1050	1330	1740	4680	1100	1680	1590
7	1320	1580	2390	2420	1980	1110	1370	1740	4670	1230	1690	1560
8	1320	2540	2580	2170	1880	1160	1340	1730	4080	1340	1610	1560
9	1360	2170	2570	1800	1930	1310	1080	1750	3670	1340	1580	1560
10	1330	2410	2580	2460	1890	1160	1090	2270	3260	1350	1580	1560
11	1310	2330	2580	2490	1930	1160	1090	2770	2860	1330	1580	1560
12	1320	2650	2580	2120	1970	1120	1090	3350	2480	1330	1480	1560
13	1320	2470	2590	2140	1750	1110	1090	3970	1890	1330	1470	1560
14	1320	1820	2590	2140	1900	1090	1080	3950	1630	1420	1470	1570
15	1330	2630	2580	1760	1900	1080	1090	3950	1260	1430	1490	1560
16	1340	2520	2590	1780	1900	1080	1110	4310	917	1430	1490	1560
17	1320	2460	2580	2040	1930	1070	1120	4620	909	1420	1600	1550
18	1350	2510	2580	2120	1950	1070	1080	4620	909	1420	1600	1550
19	1350	2360	2580	2000	2040	1060	1080	4620	909	1440	1570	1560
20	1320	2480	2590	2120	1750	1080	1640	4630	911	1440	1560	1560
21	1200	1750	2590	2140	2140	1080	1570	4630	913	1430	1570	1560
22	1190	2350	2590	1740	2120	1080	1590	4630	967	1430	1580	1560
23	1190	2520	2590	1780	2260	1070	1620	4630	914	1430	1570	1560
24	1190	2520	2160	2120	2110	1070	1620	4630	911	1440	1580	1540
25	1190	2290	2160	2020	1930	1070	1660	4640	910	1420	1580	1550
26	1180	2270	2580	2120	1870	1070	1760	4200	911	1430	1580	1570
27	1570	2480	2580	2140	1740	1080	1800	4650	910	1430	1680	1580
28	1570	1730	3020	2140	1900	1070	1870	4650	911	1430	1650	1550
29	1870	2540	3040	1760	---	1070	1750	4650	911	1440	1650	1550
30	1880	2480	3050	1810	---	1080	1750	4660	1090	1600	1480	1570
31	1860	---	2720	2090	---	1090	---	4660	---	1610	1500	---
TOTAL	42520	70480	80090	65440	54400	34870	40310	109290	67723	41960	49100	46740
MEAN	1372	2349	2584	2111	1943	1125	1344	3525	2257	1354	1584	1558
MAX	1880	2650	3050	2490	2260	1660	1870	4660	4680	1610	1720	1590

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1994, BY WATER YEAR (WY)

[illegible]

SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1951 - 1994

ANNUAL TOTAL	588314	702923	--	--
ANNUAL MEAN	1612	1926	2059	
HIGHEST ANNUAL MEAN	--	--	4270	1983
LOWEST ANNUAL MEAN	--	--	231	1963
HIGHEST DAILY MEAN	4620	4680	19200	Jun 12 1957
LOWEST DAILY MEAN	884	909	40	Nov 13 1962
ANNUAL SEVEN-DAY MINIMUM	886	911	57	Nov 13 1962
ANNUAL RUNOFF (AC-FT)	1167000	1394000	1492000	
10 PERCENT EXCEEDS	2600	2680	3860	
50 PERCENT EXCEEDS	1190	1620	1580	
90 PERCENT EXCEEDS	930	1080	660	

LOCATION.--Lat 40°59'58", long 107°08'34", in SW¹/4NW¹/4 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.

PERIOD OF RECORD.--October 1942 to September 1947, October 1950 to current year.
REVISED RECORDS.--WSP 1733: 1960.

GAGE.--Water-stage recorder. Datu

REMARKS.--Estimated daily discharges: Nov. 15 to Mar. 26. Records good ex

REMARKS: Estimated daily discharges: Nov. 15 to Mar. 20. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 2,000 acres upstream from station.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	51	40	38	32	29	69	313	748	59	32	16
2	27	48	41	37	31	28	77	347	595	55	44	15
3	27	48	41	37	31	27	90	377	537	58	27	15
4	27	44	41	38	32	27	113	360	500	58	22	15
5	27	46	41	38	31	27	98	443	450	52	20	15
6	27	56	41	38	30	28	90	672	387	48	18	15
7	32	56	41	38	30	28	85	923	284	49	16	15
8	78	57	41	36	31	28	78	979	256	55	16	15
9	58	53	41	34	28	31	78	1050	225	47	27	15
10	51	49	38	32	27	30	79	1060	202	42	43	15
11	47	45	40	30	27	29	77	1110	183	40	30	15
12	60	41	39	29	27	28	74	1190	173	39	25	15
13	90	42	36	31	27	28	104	1090	160	37	23	15
14	82	44	36	31	29	29	147	1080	141	35	21	15
15	98	43	38	31	28	32	142	1030	133	33	19	14
16	87	44	36	31	28	35	187	1060	120	31	17	14
17	75	45	34	32	28	38	267	1130	111	30	16	15
18	86	44	32	32	29	42	341	1100	104	30	15	15
19	82	45	35	31	30	46	418	1040	108	28	21	15
20	70	46	34	32	29	50	505	990	106	27	27	15
21	56	44	34	33	29	52	622	857	102	27	26	14
22	57	43	35	33	29	54	778	783	111	26	27	14
23	51	42	35	34	28	56	928	741	108	26	23	14
24	50	43	35	34	28	58	928	679	88	28	19	14
25	50	42	34	34	26	60	772	661	74	28	16	14
26	46	41	34	33	28	62	541	673	66	25	14	14
27	34	41	35	32	30	63	431	691	59	23	13	14
28	47	41	35	30	31	64	377	726	55	23	15	14
29	44	40	34	31	---	66	351	669	55	24	19	15
30	36	40	34	32	---	62	330	612	61	26	19	17
31	48	---	36	31	---	57	---	619	---	24	18	---
TOTAL	1677	1364	1147	1033	814	1294	9177	25055	6302	1133	688	443
MEAN	54.1	45.5	37.0	33.3	29.1	41.7	306	808	210	36.5	22.2	14.8
MAX	98	57	41	38	32	66	928	1190	748	59	44	17
MIN	27	40	32	29	26	27	69	313	55	23	13	14
AC-FT	3330	2710	2280	2050	1610	2570	18200	49700	12500	2250	1360	870

	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2
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ANNUAL TOTAL	96669		50127		--		
ANNUAL MEAN	265		137		226		
HIGHEST ANNUAL MEAN	--		--		423		1984
LOWEST ANNUAL MEAN	--		--		86.6		1977
HIGHEST DAILY MEAN	2250	May 22	1190	May 12	3960	May 24	1984
LOWEST DAILY MEAN	a19	Jan 30	13	Aug 27	4.2	Sep 9	1988
ANNUAL SEVEN-DAY MINIMUM	20	Jan 30	14	Sep 21	6.2	Sep 4	1988
INSTANTANEOUS PEAK FLOW	--		1550	May 11	4780	May 23	1984
INSTANTANEOUS PEAK STAGE	--		6.26	May 11	b8.78	May 23	1984
ANNUAL RUNOFF (AC-FT)	191700		99430		164000		
10 PERCENT EXCEEDS	1140		502		815		
50 PERCENT EXCEEDS	47		38		40		
90 PERCENT EXCEEDS	25		16		20		

a Also occurred Feb 15.

b Maximum gage height, 8.95 ft, Apr 25, 1974.

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
JUN												
16...	1650	18	28	7.8	11.5	26.5	556	8.5	107	11	3.3	0.70
SEP												
21...	1625	1.4	46	7.8	7.5	6.0	559	8.7	99	19	5.5	1.2
21...	1630	1.4	46	7.8	7.5	6.0	559	8.7	99	19	5.5	1.2

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SILICA, DIS- SOLVED (MG/L AS SiO2)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)
JUN											
16...	1.0	0.1	6.9	40	<1	12	<0.5	<10	<1.0	<1	<3
SEP											
21...	1.5	0.2	9.5	10	<1	15	<0.5	<10	1.0	<1	<3
21...	1.4	0.1	9.4	20	<1	15	<0.5	<10	<1.0	<1	<3

DATE	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
JUN										
16...	58	20	<1	<4	2	<0.1	<1	<1.0	16	<3
SEP										
21...	14	42	<1	<4	5	<0.1	<1	<1.0	22	<3
21...	14	44	<1	<4	5	<0.1	<1	<1.0	22	<3

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
JUN 16...	1200	12	61	8.1	10.5	20.5	581	8.2	97	25	7.8
SEP 21...	1230	1.4	256	8.0	9.0	10.0	584	8.7	99	110	34

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SILICA, DIS- SOLVED (MG/L AS SIO2)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
JUN 16...	1.4	1.9	0.2	7.7	40	<1	18	<0.5	<10	1.0	<1
SEP 21...	5.3	9.3	0.4	9.2	<10	<1	52	<0.5	30	<1.0	<1

DATE	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
JUN 16...	<3	17	33	<1	<4	4	<0.1	<1	2.0	48	<3
SEP 21...	<3	4	15	<1	<4	13	<0.1	<1	<1.0	230	4

09255000 SLATER FORK NEAR SLATER, CO

LOCATION.--Lat 40°58'57", long 107°22'56", in SW1/4NE1/4 sec.21, T.12 N., R.89 W., Moffat County, Hydrologic Unit 14050003, on right bank 15 ft downstream from highway bridge, 1.0 mi upstream from mouth, and 1.5 mi south of Slater.

DRAINAGE AREA.--161 mi².

PERIOD OF RECORD.--May to October, December 1910, March to October 1911, and April to May 1912 (published as Slater Creek), July 1931 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 618: 1910-11. WSP 764: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,600 ft above sea level, from river-profile map. May 28, 1910, to May 25, 1912, nonrecording gage at site 1.5 mi upstream at different datum. July 9, 1931, to May 6, 1932, nonrecording gage at site 0.2 mi downstream at different datum.

REMARKS.-Estimated daily discharges: Oct. 28, Nov. 1, 3-4, 12-13, 18, 23, and Mar. 11-17. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 500 acres upstream from station. Several measurements of specific conductance and water temperature were obtained and are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	20	24	22	24	25	38	104	177	6.0	.85	1.6
2	17	19	24	22	21	25	40	116	126	5.0	1.2	2.9
3	18	21	24	22	22	29	39	144	98	6.5	1.5	3.6
4	19	19	23	22	25	33	59	139	91	7.7	.90	3.6
5	20	14	22	22	23	33	48	192	81	7.1	.82	3.8
6	21	17	23	22	24	32	45	332	64	5.7	.63	3.6
7	27	18	23	21	24	28	46	423	58	6.8	.37	3.0
8	32	17	22	22	25	23	40	409	51	8.1	.33	3.3
9	29	18	23	23	23	20	42	383	44	6.9	.58	1.6
10	28	22	22	22	23	24	44	373	38	4.5	1.9	1.4
11	27	23	22	21	23	27	37	358	32	3.4	2.5	1.7
12	30	20	23	22	22	31	30	395	31	3.2	2.2	1.8
13	33	21	23	22	22	34	47	434	30	2.7	2.2	3.2
14	32	22	17	22	22	37	78	428	26	2.7	2.0	5.0
15	41	16	23	20	22	37	68	404	22	3.1	1.5	6.1
16	33	18	26	23	22	41	88	365	20	3.0	1.2	6.0
17	28	21	24	22	22	45	123	394	16	2.8	.96	6.0
18	28	20	21	22	26	47	158	363	15	2.7	1.0	5.9
19	27	17	22	21	25	57	196	323	15	2.0	.85	6.0
20	25	18	22	20	21	64	244	282	15	1.8	1.2	6.1
21	22	21	22	21	22	49	306	231	20	1.6	2.8	6.9
22	22	27	22	22	23	54	382	204	21	1.2	3.0	7.2
23	21	21	22	25	22	60	435	199	22	1.5	2.6	6.9
24	21	21	22	23	22	47	452	161	18	1.2	1.7	6.9
25	22	20	22	22	23	51	354	154	13	1.6	1.1	6.9
26	21	19	22	22	27	41	213	146	9.9	1.0	.66	6.9
27	17	21	22	20	31	33	152	134	7.8	.98	.57	6.9
28	21	24	22	18	28	34	126	161	6.3	.69	.49	7.4
29	23	25	22	21	---	53	112	183	7.2	.45	.89	9.8
30	10	24	21	21	---	31	110	146	6.3	.55	2.6	13
31	21	---	22	19	---	31	---	126	---	.46	1.9	---
TOTAL	752	604	694	669	659	1176	4152	8206	1181.5	102.93	43.00	155.0
MEAN	24.3	20.1	22.4	21.6	23.5	37.9	138	265	39.4	3.32	1.39	5.17
MAX	41	27	26	25	31	64	452	434	177	8.1	3.0	13
MIN	10	14	17	18	21	20	30	104	6.3	.45	.33	1.4
AC-FT	1490	1200	1380	1330	1310	2330	8240	16280	2340	204	85	200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1994, BY WATER YEAR (WY)

	1986	1985	1985	1985	1986	1986	1985	1984	1983	1983	1945	1984
MEAN	19.8	19.0	17.2	16.9	18.4	27.6	117	369	247	37.4	9.79	11.3
MAX	62.4	49.2	44.1	36.9	46.5	79.2	323	801	630	189	38.4	55.0
(WY)	1986	1985	1985	1985	1986	1986	1985	1984	1983	1983	1945	1984
MIN	7.29	7.73	7.30	4.42	9.82	12.6	25.2	45.7	23.6	1.27	1.39	3.20
(WY)	1934	1934	1932	1992	1981	1965	1933	1934	1977	1977	1994	1960

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1932 - 1994
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	1981-1982 YEAR		1982-1983 YEAR		WINTER YEARS 1981-1982	
ANNUAL TOTAL	35328.6		18394.43			
ANNUAL MEAN	96.8		50.4		76.1	
HIGHEST ANNUAL MEAN	--		--		157	1984
LOWEST ANNUAL MEAN	--		--		20.5	1934
HIGHEST DAILY MEAN	924	May 22	452	Apr 24	1500	May 16 1984
LOWEST DAILY MEAN	6.3	Sep 12	.33	Aug 8	.00	Aug 2 1934
ANNUAL SEVEN-DAY MINIMUM	7.4	Sep 10	.71	Jul 26	.00	Aug 2 1934
INSTANTANEOUS PEAK FLOW	--		582	Apr 24	a2250	May 16 1984
INSTANTANEOUS PEAK STAGE	--		6.51	Apr 24	b11.78	May 16 1984
ANNUAL RUNOFF (AC-FT)	70070		36490		55100	
10 PERCENT EXCEEDS	333		145		248	
50 PERCENT EXCEEDS	22		22		19	
90 PERCENT EXCEEDS	11		1.8		7.0	

a From rating curve extended above 1000 ft³/s.

b From floodmark.

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.

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.--No estimated daily discharges. Records 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 satellite telemeter at station.

COOPERATION.--Records provided by Office of the Wyoming State Engineer and reviewed by the Geological Survey.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,200 ft³/s and maximum (*) during period of operation:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr 24	0400	*3,240	*7.98	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	195	804	1600	1.8	.72	.46
2	---	---	---	---	---	---	240	850	1230	2.3	.77	.58
3	---	---	---	---	---	---	270	982	1010	2.9	.82	.54
4	---	---	---	---	---	---	363	959	873	2.9	.88	.54
5	---	---	---	---	---	---	328	1110	782	2.5	.72	.50
6	---	---	---	---	---	---	287	1720	698	2.3	.72	.67
7	---	---	---	---	---	---	263	2180	541	2.9	.67	.88
8	---	---	---	---	---	---	230	2360	465	4.2	.58	.62
9	---	---	---	---	---	---	236	2430	382	2.9	.67	.50
10	---	---	---	---	---	---	230	2360	266	2.9	.88	.40
11	---	---	---	---	---	---	223	2310	193	1.4	.77	.37
12	---	---	---	---	---	---	198	2600	152	1.2	.62	.34
13	---	---	---	---	---	---	270	2550	146	1.1	.58	.34
14	---	---	---	---	---	---	444	2530	97	.94	.50	.40
15	---	---	---	---	---	---	450	2420	75	1.2	.50	.40
16	---	---	---	---	---	---	497	2280	67	1.6	.46	.43
17	---	---	---	---	---	---	775	2480	52	2.2	.43	.40
18	---	---	---	---	---	---	1170	2420	38	2.2	.58	.37
19	---	---	---	---	---	---	1450	2280	15	2.0	.54	.34
20	---	---	---	---	---	---	1710	2210	4.5	1.3	1.0	.34
21	---	---	---	---	---	---	1960	1950	4.0	.94	1.8	.37
22	---	---	---	---	---	---	2350	1740	4.8	.82	1.9	.37
23	---	---	---	---	---	---	2550	1590	5.0	.77	2.2	.37
24	---	---	---	---	---	---	2660	1490	4.2	.72	2.0	.40
25	---	---	---	---	---	---	2280	1410	4.2	.72	1.8	.40
26	---	---	---	---	---	---	1820	1450	4.8	.67	1.0	.40
27	---	---	---	---	---	---	1360	1440	3.7	.58	.72	.40
28	---	---	---	---	---	---	1170	1500	2.5	.62	.54	.43
29	---	---	---	---	---	---	1030	1470	1.9	.58	.50	.43
30	---	---	---	---	---	---	896	1290	1.8	.62	.46	.46
31	---	---	---	---	---	---	---	1240	---	.58	.50	---
TOTAL	---	---	---	---	---	---	27905	56405	8723.4	50.36	26.83	13.45
MEAN	---	---	---	---	---	---	930	1820	291	1.62	.87	.45
MAX	---	---	---	---	---	---	2660	2600	1600	4.2	2.2	.88
MIN	---	---	---	---	---	---	195	804	1.8	.58	.43	.34
AC-FT	---	---	---	---	---	---	55350	111900	17300	100	53	24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1971, BY WATER YEAR (WY)

	MEAN	79.5	94.3	88.8	85.4	101	215	879	2559	1827	175	27.6	27.5
MAX	282	245	160	130	433	744	1991	5698	4035	1160	198	105	
(WY)	1917	1921	1921	1917	1962	1919	1962	1920	1917	1917	1916	1965	
MIN	6.18	36.3	45.0	37.1	47.8	82.8	298	1065	217	5.17	1.58	.78	
(WY)	1961	1956	1923	1963	1967	1965	1961	1954	1954	1966	1966	1962	

SUMMARY STATISTICS

ANNUAL MEAN	266.0	Apr 24	8960	May 23 1920
HIGHEST ANNUAL MEAN	--		514	1920
LOWEST ANNUAL MEAN	--		930	1961
HIGHEST DAILY MEAN	266.0	Apr 24	8960	May 23 1920
LOWEST DAILY MEAN	266.0	Sep 12, 13, 19, 20	8960	Several days, 1977, 1982, 1992#
ANNUAL SEVEN-DAY MINIMUM	--		.35	Sep 3 1969
INSTANTANEOUS PEAK FLOW	3240	Apr 24	13000a	May 16 1984#
INSTANTANEOUS PEAK STAGE	7.98	Apr 24	13.56b	May 16 1984#
INSTANTANEOUS LOW FLOW	--		.00	Sep 17 1992
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 1994.

a From rating curve extended above 10,000 ft³/s, some increase in peak caused by dam failure.

b From floodmarks.

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)
JUN 16...	1500	44	326	8.1	20.0	23.0	605	8.9	124
AUG 27...	1215	0.51	750	8.4	22.5	25.0	650	9.4	128
27...	1230	0.51	750	8.4	22.5	25.0	650	9.4	128

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
JUN 16...	130	35	10	19	0.7	1.9	141	27	3.4
AUG 27...	190	33	27	92	3	3.7	235	130	22
27...	200	35	27	94	3	3.7	235	130	22

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	SEDI- MENT, SUS- PENDEDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY)
JUN 16...	0.3	15	196	0.27	23.3	6	0.71
AUG 27...	0.5	9.4	459	0.62	0.63	19	0.03
27...	0.5	9.3	462	0.63	0.64	--	--

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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft³/s and maximum (*):

e Estimated.

BEAR RIVER BASIN

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 current year. 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 for estimated daily discharges, which are poor. Several diversions for irrigation above station.

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, 74 ft³/s Apr. 12, gage height, 6.51 ft; no flow several days in August and September.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	e4.4	e5.6	6.4	6.7	11	24	17	5.8	.77	.40	.00
2	1.6	e4.1	e5.6	6.2	6.3	13	24	15	5.2	.74	.35	.06
3	1.6	e4.1	e5.4	6.3	6.3	14	25	20	4.6	.73	.30	.06
4	1.4	e4.9	e5.9	6.7	6.5	16	25	24	3.7	.63	.20	.00
5	1.3	e5.0	e6.2	7.3	6.5	22	26	24	3.5	.60	.10	.00
6	1.5	e3.9	e5.8	7.3	6.5	30	25	33	3.2	.50	.04	.00
7	1.9	e4.0	e5.6	7.6	6.7	27	24	43	2.4	.74	.02	.01
8	2.9	e4.1	e5.6	7.6	7.2	25	21	37	2.3	.72	.04	.02
9	3.4	e4.2	e6.2	7.6	7.4	23	21	33	2.4	.64	.18	.00
10	3.3	e4.7	e6.5	7.6	7.8	22	23	49	2.4	.59	.24	.00
11	3.4	e4.7	e6.7	7.6	8.9	25	29	49	2.7	.54	.19	.00
12	4.8	e4.8	e6.0	8.0	9.0	21	45	41	3.1	.52	.21	.00
13	4.4	e5.3	e6.6	8.1	9.1	23	34	47	3.2	.44	.30	.00
14	7.2	e4.7	6.4	8.6	9.4	36	24	40	2.2	.49	.43	.04
15	7.3	e4.8	6.0	8.8	9.8	50	19	26	6.6	.50	.50	.07
16	7.3	e5.0	5.9	8.8	10	53	19	29	8.4	.48	.58	.07
17	6.8	e4.9	5.9	8.8	11	52	21	17	4.6	.42	.42	.06
18	9.1	e4.6	5.9	8.5	11	38	23	12	2.5	.34	.07	.06
19	9.2	e4.3	5.6	8.4	11	41	22	12	2.0	.30	.07	.06
20	6.7	e4.1	5.6	8.1	11	33	23	11	2.7	.15	.07	.05
21	5.6	e4.4	5.3	7.6	11	37	25	12	2.7	.12	.06	.06
22	5.6	e4.9	5.3	6.9	11	43	32	14	3.9	.09	.02	.06
23	5.5	e4.6	5.3	6.9	11	26	42	15	4.1	.16	.00	.05
24	5.0	e4.4	5.3	7.7	10	32	33	15	2.8	.30	.00	.05
25	4.6	e5.6	5.3	8.4	10	34	25	15	2.3	.47	.00	.04
26	4.4	e4.5	5.3	8.1	11	34	19	12	1.7	.49	.00	.05
27	4.2	e3.9	5.8	8.1	11	25	16	9.7	1.2	.21	.00	.05
28	4.4	e4.8	6.0	7.8	11	22	16	21	1.1	.19	.00	.04
29	e4.5	e6.0	6.2	7.3	---	23	19	14	1.1	.41	.01	.03
30	e4.0	e6.4	6.2	7.2	---	21	20	6.8	.88	.52	.00	.16
31	e4.1	---	6.4	7.2	---	23	---	4.3	---	.38	.00	---
TOTAL	138.7	140.1	181.4	237.5	254.1	895	744	717.8	95.28	14.18	4.80	1.15
MEAN	4.47	4.67	5.85	7.66	9.07	28.9	24.8	23.2	3.18	.46	.15	.038
MAX	9.2	6.4	6.7	8.8	11	53	45	49	8.4	.77	.58	.16
MIN	1.3	3.9	5.3	6.2	6.3	11	16	4.3	.88	.09	.00	.00
AC-FT	275	278	360	471	504	1780	1480	1420	189	28	9.5	2.3

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1994, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994
MEAN	1.87	3.67	3.48	3.30	3.46	22.2	36.9
MAX	6.77	11.8	6.31	7.66	9.07	52.7	64.6
(WY)	1992	1992	1992	1994	1994	1989	1993
MIN	.18	.59	1.17	1.11	1.18	2.80	17.3
(WY)	1991	1991	1991	1991	1991	1992	1992

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1988 - 1994
ANNUAL TOTAL	9370.35	3424.01	--
ANNUAL MEAN	25.7	9.38	12.5
HIGHEST ANNUAL MEAN	--	--	25.1
LOWEST ANNUAL MEAN	--	--	7.09
HIGHEST DAILY MEAN	394	53	394
LOWEST DAILY MEAN	.95	.00	.00
ANNUAL SEVEN-DAY MINIMUM	1.1	.00	.00
ANNUAL RUNOFF (AC-FT)	18590	6790	9040
10 PERCENT EXCEEDS	64	25	37
50 PERCENT EXCEEDS	5.4	5.6	3.2
90 PERCENT EXCEEDS	1.9	.06	.07

e Estimated.

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.--Estimated daily discharges: May 26, 27. Records good. Natural flow of stream affected by storage reservoirs, diversions for irrigation, and return flow from irrigated areas. Results of discharge measurements, in cubic feet per second, made during the period when the station was not in operation, are given below:

Oct. 6 . . . 27.6
Mar. 23 . . . 235

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	237	263	719	76	38	11
2	---	---	---	---	---	---	221	244	604	76	36	11
3	---	---	---	---	---	---	165	248	565	70	30	11
4	---	---	---	---	---	---	204	264	577	57	24	7.8
5	---	---	---	---	---	---	180	287	541	61	19	6.5
6	---	---	---	---	---	---	167	393	479	65	12	6.1
7	---	---	---	---	---	---	171	534	401	66	9.8	6.5
8	---	---	---	---	---	---	155	554	337	63	9.9	9.7
9	---	---	---	---	---	---	157	577	283	60	16	11
10	---	---	---	---	---	---	177	734	235	62	29	8.2
11	---	---	---	---	---	---	185	837	200	61	36	7.8
12	---	---	---	---	---	---	237	932	204	58	24	9.3
13	---	---	---	---	---	---	306	1020	182	52	17	11
14	---	---	---	---	---	---	276	1170	157	46	21	22
15	---	---	---	---	---	---	257	1020	144	26	18	21
16	---	---	---	---	---	---	251	1150	122	24	19	26
17	---	---	---	---	---	---	280	909	112	22	21	21
18	---	---	---	---	---	---	324	675	105	20	20	15
19	---	---	---	---	---	---	351	615	89	20	21	16
20	---	---	---	---	---	---	293	547	87	24	29	16
21	---	---	---	---	---	---	352	472	143	25	27	16
22	---	---	---	---	---	---	405	452	167	25	28	17
23	---	---	---	---	---	---	610	488	114	24	22	15
24	---	---	---	---	---	---	515	527	93	23	22	12
25	---	---	---	---	---	---	404	626	97	19	19	12
26	---	---	---	---	---	---	351	629	81	12	16	9.0
27	---	---	---	---	---	---	290	701	60	17	13	8.2
28	---	---	---	---	---	---	291	756	63	21	12	9.7
29	---	---	---	---	---	---	270	778	84	19	14	11
30	---	---	---	---	---	---	244	752	77	21	12	14
31	---	---	---	---	---	---	---	767	---	24	13	---
TOTAL	---	---	---	---	---	---	8326	19921	7122	1239	647.7	377.8
MEAN	---	---	---	---	---	---	278	643	237	40.0	20.9	12.6
MAX	---	---	---	---	---	---	610	1170	719	76	38	26
MIN	---	---	---	---	---	---	155	244	60	12	9.8	6.1
AC-FT	---	---	---	---	---	---	16510	39510	14130	2460	1280	749

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1994, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---
(WY)	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---
(WY)	---	---	---	---	---	---	---	---	---	---	---

SUMMARY STATISTICS

	FOR 1994 WATER YEAR*	WATER YEARS 1984 - 1994*
HIGHEST DAILY MEAN	1170 May 14	3160 May 16 1984
LOWEST DAILY MEAN	6.1 Sep 6	3.8 Sep 30 1992
ANNUAL SEVEN-DAY MINIMUM	--	5.3 Aug 18 1988
INSTANTANEOUS PEAK FLOW	1330 May 14	3680 May 16 1984
INSTANTANEOUS PEAK STAGE	4.47 May 14	7.35 May 16 1984
10 PERCENT EXCEEDS	--	943
50 PERCENT EXCEEDS	--	153
90 PERCENT EXCEEDS	--	21

* During period of operation.

BEAR RIVER BASIN

10020100 BEAR RIVER ABOVE RESERVOIR, NEAR WOODRUFF, UT

LOCATION.--Lat 41°26'04", long 111°01'01", in NE¹/₄ 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.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,455 ft above sea level, from river-profile map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversion for irrigation of about 43,500 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,150 ft³/s June 2, 1983, gage height, 6.17 ft; minimum, no flow several days during August and September 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,190 ft³/s May 14, gage height, 4.14 ft; minimum daily discharge, 0.24 ft³/s Sept. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	68	e53	e62	e42	e56	159	178	611	14	3.9	3.0
2	39	81	e56	e70	e42	e62	162	181	481	13	7.5	2.7
3	38	78	e53	e64	e44	e78	133	177	414	11	7.4	1.4
4	33	82	e74	e68	e44	e98	142	215	408	10	5.3	.98
5	35	92	e62	e70	e49	e115	141	198	380	9.4	4.8	.94
6	39	87	e59	e66	e56	e110	127	280	340	9.4	4.2	1.2
7	42	70	e58	e64	e52	e100	122	405	283	9.0	3.3	.83
8	65	e64	e54	e66	e47	e96	120	472	245	8.8	2.8	.38
9	106	e60	e74	e62	e49	e96	110	572	205	8.4	2.5	.32
10	137	e56	e56	e63	e55	e90	131	688	167	7.0	2.9	.28
11	137	e52	e92	e66	e49	e105	142	808	125	5.8	3.0	.28
12	159	e58	e80	e68	e42	e130	174	837	95	5.5	3.0	.26
13	170	e56	e72	e65	e43	e167	243	881	98	5.6	3.0	.26
14	166	e51	e66	e58	e45	e170	241	1030	82	5.5	2.7	.24
15	175	e47	e62	e54	e46	151	222	959	69	6.1	2.3	.32
16	129	e48	e64	e57	e51	195	204	987	64	3.8	2.4	.38
17	110	e54	e62	e58	e58	267	221	891	49	3.3	1.2	.54
18	106	e56	e54	e61	e58	240	256	647	45	3.1	.68	2.5
19	112	e50	e52	e56	e62	242	285	529	41	2.7	.64	3.2
20	104	e42	e51	e54	e68	241	265	452	35	1.8	.67	3.3
21	100	e40	e48	e56	e79	209	273	367	32	1.6	.67	3.7
22	92	e48	e48	e59	e84	245	315	291	40	2.3	.75	4.1
23	88	e47	e49	e64	e70	226	498	309	57	3.1	1.9	4.3
24	86	e43	e52	e64	e72	176	489	341	30	2.7	2.7	1.3
25	83	e33	e50	e64	e72	185	393	408	26	2.3	.97	.65
26	80	e36	e55	e60	e66	178	316	461	24	3.1	.67	1.8
27	77	e40	e62	e56	e66	159	258	441	20	3.2	.77	1.1
28	72	e47	e74	e52	e59	142	211	489	16	3.9	2.0	1.2
29	80	e51	e64	e52	---	146	203	650	14	4.1	2.8	.65
30	80	e56	e58	e52	---	144	195	589	15	3.5	2.5	.50
31	70	---	e56	e45	---	145	---	585	---	3.4	2.3	---
TOTAL	2848	1693	1870	1876	1570	4764	6751	16318	4511	176.4	82.22	42.61
MEAN	91.9	56.4	60.3	60.5	56.1	154	225	526	150	5.69	2.65	1.42
MAX	175	92	92	70	84	267	498	1030	611	14	7.5	4.3
MIN	33	33	48	45	42	56	110	177	14	1.6	.64	.24
AC-FT	5650	3360	3710	3720	3110	9450	13390	32370	8950	350	163	85

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1994, BY WATER YEAR (WY)

	MEAN	77.0	72.2	70.9	67.5	84.1	161	348	826	846	179	50.9	52.2
MAX	437	198	181	147	312	627	671	1957	2564	870	340	288	
(WY)	1983	1974	1984	1984	1986	1986	1969	1984	1986	1975	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	
(WY)	1965	1989	1989	1989	1993	1977	1977	1977	1992	1988	1988	1988	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1962 - 1994
ANNUAL TOTAL	101801	42502.23	--
ANNUAL MEAN	279	116	236
HIGHEST ANNUAL MEAN	--	--	583
LOWEST ANNUAL MEAN	--	--	45.1
HIGHEST DAILY MEAN	2420	May 23	3900
LOWEST DAILY MEAN	10	Jan 5	.00
ANNUAL SEVEN-DAY MINIMUM	12	Jan 25	.00
ANNUAL RUNOFF (AC-FT)	201900	84300	171300
10 PERCENT EXCEEDS	825	287	694
50 PERCENT EXCEEDS	74	59	82
90 PERCENT EXCEEDS	14	2.3	9.0

e Estimated.

10020100 BEAR RIVER ABOVE RESERVOIR, NEAR WOODRUFF, UT--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
NOV 17...	1030	17	542	8.7	1.0	2.0	605	11.5	102
MAR 22...	1700	262	600	8.8	6.0	0.5	586	8.7	91
APR 13...	1745	280	605	8.5	8.0	6.5	600	9.3	100
MAY 19...	1620	492	200	8.1	11.0	8.0	600	9.8	113

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 17...	240	57	23	21	0.6	1.6	230	24
MAR 22...	270	60	28	19	0.5	3.1	248	31
APR 13...	270	65	27	19	0.5	2.5	256	30
MAY 19...	96	26	7.5	3.9	0.2	0.80	96	6.2

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
NOV 17...	31	0.2	7.8	304	0.41	13.9	15	0.69
MAR 22...	32	0.2	10	332	0.45	235	220	156
APR 13...	32	0.2	8.6	338	0.46	255	220	166
MAY 19...	4.4	<0.1	5.9	112	0.15	149	97	129

BEAR RIVER BASIN

10020200 WOODRUFF NARROWS RESERVOIR NEAR WOODRUFF, UT

LOCATION.--Lat 41°30'10", long 111°00'55", in SE¹/₄ NW¹/₄ NW¹/₄ sec. 32, T. 18 N., R. 120 W., Uinta County, Wyoming, Hydrologic Unit 16010101, in gate house at Woodruff Narrows Dam on Bear River, 5.6 mi upstream from Wyoming-Utah State line, and 7.7 mi east of Woodruff.

DRAINAGE AREA.--784 mi².

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

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,405 ft above sea level, from levels by Bureau of Reclamation.

REMARKS.--Records fair. Reservoir formed by earthfill, rock-faced dam. Storage began Jan. 5, 1962. Total capacity, 28,000 acre-ft below spillway crest. Total capacity increased to 57,300 in 1980. Elevation of spillway is 6,454.50 ft; gage height, 50.4 ft. Figures given herein represent total contents.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 64,310 acre-ft, June 2, 1983, gage height, 53.5 ft; minimum observed, 880 acre-ft, Sept. 15-25, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 60,780 acre-ft, May 17, gage height, 51.9 ft; minimum contents, 7,220 acre-ft, Sept. 30, gage height, 17.2 ft.

CAPACITY TABLE (GAGE-HEIGHT, IN FEET, AND TOTAL CONTENTS, IN ACRE-FEET)

17.0	7,090	35.0	27,620
18.0	7,900	40.0	36,160
20.0	9,520	45.0	45,660
25.0	14,390	50.0	56,400
30.0	20,280	52.0	60,920

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24570	28130	30500	33010	e35200	36680	45280	56660	49510	e17200	9350	8660
2	24570	28250	30560	33020	e35300	36750	45530	56900	48860	e16800	9320	8640
3	24560	28310	30780	33050	e35300	36930	45900	56990	48080	e16500	9230	8580
4	24540	28540	30910	33090	e35400	36940	46260	57470	47370	e16100	9230	8580
5	24660	28720	30970	33230	e35400	37100	46500	58190	46150	e15600	9230	8570
6	24710	28810	31070	33520	e35490	e37300	46720	58290	e45500	e15300	9180	8500
7	24840	e29000	31100	33620	e35490	e37500	46970	57740	e44300	e14900	9140	8500
8	24260	e29100	31120	e33700	e35500	e37600	47130	58020	e43000	e14500	9150	8490
9	24140	e29100	31180	33700	e35500	e37800	47280	58250	e41800	e14200	9140	8500
10	24280	e29200	31250	33780	e35500	e38000	47710	58430	e40500	e13700	9150	8500
11	24530	e29300	31290	33860	e35500	e38400	47850	59220	e39500	e13300	9140	8580
12	24780	e29300	31420	33910	e35500	e38500	48110	59410	38840	e12900	9140	8580
13	25090	e29400	31540	33960	e35550	e38800	48450	59630	37460	e12500	9080	8580
14	25370	e29400	31700	33990	e35600	e39200	48900	60140	35830	e12200	9070	8580
15	25690	e29500	31860	34110	e35600	e39400	49270	60440	e34700	e11700	9060	8580
16	25970	e29500	31940	34180	e35700	e39800	49700	60550	32670	e11400	9060	8580
17	26300	e29500	32010	34380	e35700	e40000	50040	60780	28850	e11000	9070	8580
18	26520	e29600	e32200	34450	e35800	40650	50410	60720	28450	e10500	8990	8660
19	26710	e29600	e32300	34490	e35850	41200	50900	60480	28130	e10200	8980	8660
20	26870	e29700	e32350	34520	e35900	41720	51360	60230	25650	e9800	8980	8660
21	27030	e29800	e32400	34570	e35950	42110	51620	59950	25140	9520	8920	7840
22	27130	e29900	e32400	34610	e36000	43010	52120	59400	23630	9520	8900	7570
23	27220	e29900	e32500	34540	e36000	43330	52880	58880	22230	9520	8890	7500
24	27310	e30000	e32500	34610	36170	43320	54050	57220	21700	9440	8850	7480
25	27420	e30000	e32600	34680	36260	43500	54900	55630	20320	9440	8820	7520
26	27580	e30100	e32600	34710	36370	44000	55400	54170	19590	9440	8820	7470
27	27700	e30200	e32700	34770	36490	44450	55950	53060	19040	9430	8790	7430
28	27760	e30300	e32700	34920	36580	44630	56100	51920	e18500	9440	8740	7380
29	27910	e30300	e32800	35020	---	44760	56310	51130	e18000	9440	8740	7300
30	27990	30390	e32900	e35100	---	44860	56550	50480	e17600	9420	8710	7220
31	28060	---	e32900	e35100	---	45000	---	49940	---	9350	8660	---
MAX	28060	30390	32900	35100	36580	45000	56550	60780	49510	17200	9350	8660
MIN	24140	28130	30500	33010	35200	36680	45280	49940	17600	9350	8660	7220
(#)	35.3	36.6	--	--	40.2	44.7	50.1	47.1	--	19.8	18.9	17.2
(*)	+3500	+2330	+2510	+2200	+1480	+8420	+11550	-6610	-32340	-8250	-690	-1440

CAL YR 1993 (*) +27680
WTR YR 1994 (*) -17340

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

(*) Change in contents.

(e) No gage reading, contents interpolated.

10020300 BEAR RIVER BELOW RESERVOIR, NEAR WOODRUFF, UT

LOCATION.--Lat 41°30'20", long 111°00'50", in NW¹/₄ 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 except for estimated daily discharges, which are fair. Flow regulated by Woodruff Narrows Reservoir (station 10020200) beginning January 1962. Diversions for irrigation of about 43,500 acres above 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, Oct. 30, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,440 ft³/s, May 23, gage height, 6.21 ft; minimum daily discharge, 6.9 ft³/s, Aug. 31.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	32	34	e37	e35	35	34	42	915	558	12	9.9
2	30	32	34	e37	e34	35	33	71	891	629	11	13
3	30	32	34	e37	e35	35	33	119	878	662	9.4	13
4	30	32	34	e37	e36	35	33	162	874	433	8.1	13
5	29	32	33	e37	e37	36	33	194	873	61	7.2	12
6	30	32	33	e36	e37	35	33	220	868	46	7.4	12
7	30	33	34	e36	e38	35	33	282	866	46	8.7	13
8	30	33	33	e36	e38	35	33	389	862	26	8.5	13
9	30	33	33	e36	38	36	32	468	857	12	8.5	13
10	30	33	33	e36	38	35	32	572	852	11	8.9	13
11	31	33	33	e35	37	34	31	713	844	11	8.8	13
12	31	33	34	e35	38	34	32	817	839	10	8.9	13
13	31	33	34	e35	38	34	31	889	832	10	11	13
14	31	33	34	e35	38	34	31	951	826	10	12	13
15	31	33	34	e36	38	34	31	1040	818	10	12	14
16	31	33	34	e37	37	34	32	1030	810	9.9	12	14
17	31	33	35	e36	37	34	33	1060	798	12	12	14
18	31	33	35	e36	37	34	32	890	790	13	12	14
19	32	33	35	e36	37	34	32	712	779	13	12	14
20	32	33	35	e35	36	34	33	599	766	14	12	14
21	31	33	35	e36	37	34	33	509	760	14	12	14
22	31	33	35	e37	37	34	33	432	693	13	11	16
23	32	33	35	e36	37	34	34	869	634	13	11	21
24	32	33	35	e36	37	34	35	1130	626	13	11	22
25	33	33	35	e36	36	34	35	1100	617	13	11	22
26	32	33	35	e35	36	34	36	1100	608	14	11	22
27	32	33	35	e36	35	34	36	1090	599	13	11	22
28	32	33	36	e35	36	34	37	1090	589	12	11	22
29	32	33	35	e36	---	33	37	1030	581	12	7.5	22
30	32	34	36	e37	---	33	38	916	570	12	7.1	20
31	33	---	e37	e36	---	33	---	914	---	12	6.9	---
TOTAL	958	985	1067	1117	1030	1063	1001	21400	23115	2737.9	312.9	463.9
MEAN	30.9	32.8	34.4	36.0	36.8	34.3	33.4	690	770	88.3	10.1	15.5
MAX	33	34	37	37	38	36	38	1130	915	662	12	22
MIN	25	32	33	35	34	33	31	42	570	9.9	6.9	9.9
AC-FT	1900	1950	2120	2220	2040	2110	1990	42450	45850	5430	621	920

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1994, BY WATER YEAR (WY)

	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	
MEAN	57.4	56.2	47.0	45.3	49.6	102	287	790	988	277	78.2	53.4																						
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																						

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1962 - 1994
ANNUAL TOTAL	96562	55250.7	--
ANNUAL MEAN	265	151	236
HIGHEST ANNUAL MEAN	--	--	509
LOWEST ANNUAL MEAN	--	--	44.3
HIGHEST DAILY MEAN	1640	1130	3630
LOWEST DAILY MEAN	13	6.9	.00
ANNUAL SEVEN-DAY MINIMUM	13	8.2	.07
ANNUAL RUNOFF (AC-FT)	191500	109600	171100
10 PERCENT EXCEEDS	1160	762	790
50 PERCENT EXCEEDS	35	34	40
90 PERCENT EXCEEDS	15	12	8.5

e Estimated.

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CaCO ₃)	CALCIUM DIS- SOLVED (MG/L AS Ca)
NOV											
15...	1500	9.6	1000	8.6	1.0	3.0	610	11.4	101	420	93
15...	1530	9.6	1000	8.6	1.0	3.0	610	11.4	101	430	95
MAR											
22...	0915	27	1050	8.4	4.0	0.0	595	10.3	101	380	81
APR											
13...	0800	15	1080	8.5	3.5	6.0	606	9.8	93	430	93
MAY											
19...	0900	6.9	942	8.4	9.0	13.5	605	9.3	102	390	76
JUN											
28...	1240	4.6	764	8.4	19.0	29.0	613	9.5	128	290	54

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CaCO ₃)	SULFATE DIS- SOLVED (MG/L AS SO ₄)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO ₂)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
NOV											
15...	45	49	1	2.3	234	260	31	0.4	11	632	0.86
15...	47	50	1	2.4	236	270	33	0.4	12	651	0.89
MAR											
22...	43	67	1	4.1	237	280	42	0.4	11	671	0.91
APR											
13...	47	67	1	3.5	258	280	44	0.4	9.2	699	0.95
MAY											
19...	48	58	1	3.4	238	240	36	0.4	9.2	614	0.83
JUN											
28...	38	45	1	2.6	138	210	38	0.4	2.8	474	0.64

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHOPHOS- PHATE DIS- SOLVED (MG/L AS P)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
NOV										
15...	16.4	0.06	<0.2	0.02	0.01	0.05	0.01	<0.01	55	1.4
15...	16.9	--	--	--	--	--	--	--	--	--
MAR										
22...	48.9	0.06	0.4	0.04	<0.01	0.06	0.15	0.03	266	19
APR										
13...	28.3	<0.05	0.3	0.03	<0.01	--	0.05	<0.01	154	6.2
MAY										
19...	11.4	<0.05	0.3	0.02	<0.01	--	<0.01	<0.01	36	0.67
JUN										
28...	5.88	<0.05	0.3	0.03	<0.01	--	0.04	<0.01	18	0.22

BEAR RIVER BASIN

275

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, except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation, return flow from irrigated areas, and regulation by upstream reservoirs.

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 daily discharge, 197 ft³/s, July 11; minimum daily discharge, 16 ft³/s, Sept. 24, 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e116	59	91	104	51	19
2	---	---	---	---	---	---	e117	57	86	94	49	19
3	---	---	---	---	---	---	e117	57	110	87	48	18
4	---	---	---	---	---	---	e118	57	101	83	46	17
5	---	---	---	---	---	---	119	57	138	81	43	17
6	---	---	---	---	---	---	115	64	140	79	44	19
7	---	---	---	---	---	---	113	69	139	149	48	24
8	---	---	---	---	---	---	112	53	130	142	47	19
9	---	---	---	---	---	---	110	52	121	164	45	17
10	---	---	---	---	---	---	111	74	120	153	44	17
11	---	---	---	---	---	---	117	102	92	197	42	17
12	---	---	---	---	---	---	120	101	82	172	42	17
13	---	---	---	---	---	---	118	116	82	153	41	18
14	---	---	---	---	---	---	114	145	88	171	41	18
15	---	---	---	---	---	---	113	172	122	137	39	19
16	---	---	---	---	---	---	110	187	140	117	38	18
17	---	---	---	---	---	---	104	171	143	99	38	19
18	---	---	---	---	---	---	99	151	143	87	37	18
19	---	---	---	---	---	---	97	140	148	75	30	18
20	---	---	---	---	---	---	93	144	141	67	25	17
21	---	---	---	---	---	---	67	117	110	60	24	17
22	---	---	---	---	---	---	51	70	137	56	25	17
23	---	---	---	---	---	---	60	56	146	51	26	17
24	---	---	---	---	---	---	60	48	149	48	24	16
25	---	---	---	---	---	---	61	44	135	46	23	16
26	---	---	---	---	---	---	64	43	111	43	23	20
27	---	---	---	---	---	---	63	49	106	41	23	20
28	---	---	---	---	---	---	60	55	109	38	23	19
29	---	---	---	---	---	---	62	81	111	38	22	19
30	---	---	---	---	---	---	62	102	108	38	22	20
31	---	---	---	---	---	---	---	98	---	45	22	---
TOTAL	---	---	---	---	---	---	2843	2791	3579	2915	1095	546
MEAN	---	---	---	---	---	---	94.8	90.0	119	94.0	35.3	18.2
MAX	---	---	---	---	---	---	120	187	149	197	51	24
MIN	---	---	---	---	---	---	51	43	82	38	22	16
AC-FT	---	---	---	---	---	---	5640	5540	7100	5780	2170	1080

e Estimated.

10032000 SMITHS FORK NEAR BORDER, 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.

DRAINAGE AREA.--165 mi².

PERIOD OF RECORD.--May 1942 to current year.

REVISED RECORDS.--WSP 1734: 1952(M)

GAGE.--Water-stage recorder. Elevation of gage is 6,720 ft above sea level, from topographic map. Prior to Oct. 16, 1945, at site 1.2 mi downstream at different datum. Oct. 16, 1945 to Nov. 1986 at site 0.4 mi downstream at different datum.

REMARKS.--Records good, except for estimated daily discharges, which are poor. One diversion for irrigation of about 200 acres above station.

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, 455 ft³/s, May 14, gage height, 3.13 ft; minimum daily discharge, 32 ft³/s, Dec. 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	98	e37	e66	e62	50	78	150	285	120	80	73
2	101	95	38	e73	e58	61	80	145	282	104	80	72
3	99	96	39	61	e62	63	83	152	270	99	76	75
4	98	96	34	56	e64	65	86	156	258	95	74	73
5	97	92	e33	54	e74	66	79	173	248	94	75	71
6	98	98	e32	e52	e72	64	81	199	229	96	72	71
7	99	103	e34	e52	e66	61	79	240	229	99	73	71
8	101	95	37	e55	e65	62	75	245	225	92	72	71
9	101	98	39	57	e66	63	79	254	205	88	74	70
10	101	87	43	56	e69	64	81	280	195	85	74	69
11	102	87	e45	57	e70	66	87	318	189	83	72	71
12	102	84	e50	e50	e69	66	92	356	187	83	e72	72
13	99	83	e58	53	e65	66	100	408	186	82	e71	72
14	99	80	e66	52	e60	68	106	424	183	80	e71	75
15	101	82	e79	50	e68	70	101	397	185	78	e70	73
16	99	e78	e76	52	e74	71	111	396	166	78	e70	70
17	97	e73	e74	e55	e76	75	132	396	159	80	e70	69
18	97	57	e72	60	e74	72	154	350	153	84	e70	68
19	97	54	e69	e58	e70	76	167	325	157	88	69	68
20	97	e48	67	e56	66	67	181	313	156	92	71	68
21	96	e45	e74	e58	67	69	205	296	160	97	e71	67
22	96	43	79	e57	65	77	226	280	163	101	e72	67
23	99	42	e78	e54	63	69	286	284	151	106	e72	67
24	99	e40	e78	52	61	66	239	278	143	105	e73	67
25	98	e38	e74	e51	53	71	218	282	141	e98	74	67
26	97	e37	e70	e50	52	65	199	285	135	e95	73	66
27	97	e36	e76	53	55	65	175	280	132	e92	73	65
28	98	e35	e86	e54	51	69	165	296	130	e88	74	66
29	96	e36	e76	e55	---	69	160	282	129	e86	73	69
30	93	e37	e68	e56	---	68	152	277	121	e83	72	71
31	96	---	e60	e56	---	72	---	282	---	e80	72	---
TOTAL	3050	2073	1841	1721	1817	2076	4057	8799	5552	2831	2255	2094
MEAN	98.4	69.1	59.4	55.5	64.9	67.0	135	284	185	91.3	72.7	69.8
MAX	102	103	86	73	76	77	286	424	285	120	80	75
MIN	93	35	32	50	51	50	75	145	121	78	69	65
AC-FT	6050	4110	3650	3410	3600	4120	8050	17450	11010	5620	4470	4150

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1994, BY WATER YEAR (WY)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1994, BY WATER YEAR (WY)												
MEAN	91.7	79.0	69.8	63.9	61.1	62.7	162	543	623	293	152	109
MAX	156	113	88.4	85.0	82.8	99.4	385	956	1377	602	242	166
(WY)	1987	1986	1983	1983	1984	1986	1946	1982	1986	1975	1983	1986
MIN	51.0	50.7	48.4	40.1	38.1	39.5	58.6	99.1	96.2	61.4	55.1	52.1
(WY)	1978	1978	1988	1988	1988	1988	1975	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1943 - 1994	
ANNUAL TOTAL	80758		38166		--	
ANNUAL MEAN	221		105		193	
HIGHEST ANNUAL MEAN	--		--		324	1986
LOWEST ANNUAL MEAN	--		--		71.1	1977
HIGHEST DAILY MEAN	1200	May 27	424	May 14	2000	Jun 4 1986
LOWEST DAILY MEAN	32	Dec 6	32	Dec 6	32	Dec 6 1993
ANNUAL SEVEN-DAY MINIMUM	35	Dec 1	35	Dec 1	35	Dec 1 1993
ANNUAL RUNOFF (AC-FT)	160200		75700		139800	
10 PERCENT EXCEEDS	732		221		516	
50 PERCENT EXCEEDS	108		75		91	
90 PERCENT EXCEEDS	43		53		59	

BEAR RIVER BASIN

277

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 September 1994.

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
NOV 16...	1315	93	408	8.5	1.5	5.5	610	11.3	101
APR 13...	1100	116	416	8.4	5.0	7.0	600	10.1	101
MAY 19...	1230	344	325	8.3	11.0	12.0	604	9.0	103
AUG 30...	0930	66	369	8.3	11.0	10.0	597	8.0	93

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	SEDI- MENT, SUS- PENDEDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY)
NOV 16...	<0.01	0.06	0.03	<0.2	0.01	<0.01	28	7.0
APR 13...	<0.01	<0.05	0.02	<0.2	0.03	0.01	114	36
MAY 19...	<0.01	<0.05	0.03	<0.2	0.03	0.01	97	90
AUG 30...	<0.01	<0.05	0.01	<0.2	0.01	<0.01	7	1.2

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 current year.

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 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.

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 discharge, 556 ft³/s, May 17, gage height, 3.84 ft; minimum discharge, 73 ft³/s, Sept. 26.DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	174	206	e170	e170	e111	148	320	246	318	260	130	90
2	176	200	e170	e184	e111	160	323	242	310	250	136	92
3	177	206	e150	e210	e115	e172	328	234	298	232	137	90
4	166	215	e170	e200	e115	e173	326	229	315	224	153	90
5	165	213	e140	e210	e130	e173	324	230	328	218	160	88
6	172	203	e155	e182	e150	e184	315	248	376	210	154	88
7	165	208	e160	e182	e130	e193	315	271	398	219	154	88
8	182	209	e160	e152	e125	e205	311	293	392	332	157	91
9	195	209	e160	e210	e132	e210	304	274	369	280	162	84
10	204	202	e160	e174	e148	e205	306	287	346	292	158	79
11	202	e190	e140	e188	e130	e191	317	343	316	265	148	82
12	199	e190	e166	e201	e92	e191	325	385	283	324	141	84
13	204	e203	e143	e219	e138	e195	326	413	263	239	142	90
14	213	e210	e165	e189	e122	e203	335	461	247	269	138	92
15	229	e183	e180	e190	e138	e210	324	490	266	241	135	102
16	239	e190	e163	e166	e155	e205	324	532	303	211	132	97
17	242	e200	e180	e155	e178	e200	337	545	315	181	129	92
18	237	e199	e149	e160	e141	e210	352	489	317	165	126	91
19	233	e200	e150	e150	e160	e212	363	442	309	146	127	88
20	230	e210	e140	e140	e150	e228	340	419	310	131	118	85
21	229	e220	e139	e132	e133	e260	313	370	283	117	109	85
22	235	e205	e139	e132	e130	e310	302	312	278	108	110	84
23	245	e206	e140	e140	e100	e346	333	264	295	120	112	83
24	241	e160	e150	e152	137	396	330	242	312	118	106	82
25	237	e130	e141	e150	139	387	321	235	317	120	100	81
26	231	e160	e139	e143	128	373	306	235	288	119	92	79
27	219	e178	e133	e143	140	360	284	247	265	114	91	78
28	219	e177	e180	e130	149	352	267	274	258	111	99	80
29	219	e162	e173	e130	---	339	265	279	258	108	95	89
30	210	e171	e165	e130	---	334	251	304	252	106	90	97
31	208	---	e155	e119	---	327	---	322	---	112	89	---
TOTAL	6497	5815	4825	5133	3727	7652	9487	10157	9185	5942	3930	2621
MEAN	210	194	156	166	133	247	316	328	306	192	127	87.4
MAX	245	220	180	219	178	396	363	545	398	332	162	102
MIN	165	130	133	119	92	148	251	229	247	106	89	78
AC-FT	12890	11530	9570	10180	7390	15180	18820	20150	18220	11790	7800	5200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1994, BY WATER YEAR (WY)

	MEAN	220	230	200	181	207	371	699	1017	1239	579	239	200
MAX	755	692	536	344	429	1159	1945	2794	3712	1556	707	658	
(WY)	1983	1983	1983	1984	1986	1986	1985	1984	1983	1983	1983	1983	1983
MIN	55.6	83.1	96.5	86.2	82.4	116	69.2	115	96.7	71.4	80.1	55.9	
(WY)	1978	1978	1978	1993	1993	1988	1977	1977	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1955 - 1994
ANNUAL TOTAL	186211	74971	--
ANNUAL MEAN	510	205	449
HIGHEST ANNUAL MEAN	--	--	1049
LOWEST ANNUAL MEAN	--	--	112
HIGHEST DAILY MEAN	1980	May 22	5400
LOWEST DAILY MEAN	72	Feb 25	31
ANNUAL SEVEN-DAY MINIMUM	75	Feb 23	36
ANNUAL RUNOFF (AC-FT)	369300	148700	325000
10 PERCENT EXCEEDS	1630	326	1110
50 PERCENT EXCEEDS	231	190	223
90 PERCENT EXCEEDS	86	100	112

e Estimated.

10038000 BEAR RIVER BELOW SMITHS FOR, NEAR COKEVILLE, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1992 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)
NOV 16...	1545	191	592	610	12.0	109	8.7	2.0
MAR 22...	1230	315	750	595	10.4	102	8.6	4.0
APR 13...	1430	290	699	600	10.5	116	8.5	9.0
AUG 30...	1200	92	556	597	9.5	121	8.5	15.0

DATE	TEMPER-ATURE AIR (DEG C)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)
NOV 16...	9.0	<1	<0.01	0.10	0.03	0.2	0.02	<0.01
MAR 22...	0.0	K6	<0.01	0.09	0.05	0.8	0.10	0.02
APR 13...	9.0	K11	<0.01	<0.05	0.04	0.3	0.03	<0.01
AUG 30...	20.0	70	<0.01	0.09	0.02	0.2	0.04	<0.01

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

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.

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

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 discharge, 441 ft³/s, May 17, gage height, 2.80 ft; minimum daily discharge, 62 ft³/s, Sept. 2.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168	194	e170	e170	e114	e150	294	257	271	233	82	69
2	166	188	e170	e188	e113	e160	298	260	271	236	92	62
3	152	189	e150	e210	e113	e169	306	253	262	219	86	67
4	147	192	e170	e200	e118	e172	303	263	270	208	91	74
5	148	195	e140	e210	e122	e176	305	231	267	205	111	80
6	156	197	e158	e190	e150	e181	293	238	309	199	165	75
7	158	e210	e160	e183	e130	e190	295	256	329	204	159	76
8	163	e210	e160	e183	e130	e200	291	290	334	299	157	80
9	178	e210	e160	e160	e140	e210	284	278	365	289	132	77
10	188	e208	e160	e210	e105	e209	283	268	341	312	140	74
11	188	e200	e147	e180	e120	e198	288	305	304	289	129	72
12	188	e190	e171	e191	e140	e192	295	339	265	328	116	75
13	183	e198	e147	e205	e140	e198	298	330	252	276	114	81
14	192	e205	e160	e220	e125	e200	304	350	225	276	114	82
15	206	e188	e170	e190	e138	e210	299	382	219	288	109	88
16	225	e190	e155	e190	e150	e209	291	414	254	235	104	88
17	228	e199	e175	e170	e158	e202	298	438	250	189	100	84
18	225	e200	e153	e158	e150	e205	308	416	255	164	102	81
19	220	e200	e150	e160	e160	e212	317	384	244	139	105	82
20	222	e210	e142	e150	e149	e228	327	389	254	112	103	78
21	217	e220	e140	e142	e130	e250	327	353	242	103	94	77
22	219	e210	e140	e135	e130	e300	290	292	226	89	92	81
23	225	e208	e142	e135	e105	e376	300	244	238	65	94	80
24	225	e170	e150	e140	e125	354	314	214	260	78	86	80
25	222	e132	e143	e150	e139	336	308	191	276	78	81	77
26	218	e150	e140	e148	e130	332	297	190	259	77	77	80
27	210	e170	e138	e142	e140	308	283	202	237	76	74	78
28	207	e173	e180	e132	e150	307	273	218	235	75	79	81
29	209	e169	e172	e131	---	302	275	228	241	75	80	88
30	201	e170	e168	e130	---	295	265	243	241	75	75	97
31	197	---	e160	e125	---	292	---	260	---	76	72	---
TOTAL	6051	5745	4841	5228	3714	7323	8909	8976	7996	5567	3215	2364
MEAN	195	191	156	169	133	236	297	290	267	180	104	78.8
MAX	228	220	180	220	160	376	327	438	365	328	165	97
MIN	147	132	138	125	105	150	265	190	219	65	72	62
AC-FT	12000	11400	9600	10370	7370	14530	17670	17800	15860	11040	6380	4690

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1994, BY WATER YEAR (WY)

MEAN	208	225	199	183	209	385	756	1015	1136	504	219	177
MAX	751	693	563	381	479	1294	1979	3158	3829	1670	752	671
(WY)	1983	1983	1983	1985	1986	1986	1985	1952	1983	1983	1983	1983
MIN	51.4	81.2	106	77.6	75.2	105	71.2	74.4	62.2	54.2	42.3	38.5
(WY)	1978	1978	1993	1993	1993	1988	1977	1977	1977	1977	1977	1940

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1938 - 1994
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ANNUAL TOTAL	173215		69929		--		
ANNUAL MEAN	475		192		435		
HIGHEST ANNUAL MEAN	--		--		1068		1983
LOWEST ANNUAL MEAN	--		--		103		1977
HIGHEST DAILY MEAN	1940	May 23	438	May 17	4840	Jun 8	1983
LOWEST DAILY MEAN	70	Jan 5	62	Sep 2	25	Apr 29	1977
ANNUAL SEVEN-DAY MINIMUM	70	Jan 25	71	Aug 29	29	Apr 28	1977
ANNUAL RUNOFF (AC-FT)	343600		138700		315000		
10 PERCENT EXCEEDS	1500		301		1110		
50 PERCENT EXCEEDS	219		188		223		
90 PERCENT EXCEEDS	78		81		110		

e Estimated.

13010065 SNAKE RIVER ABOVE JACKSON LAKE AT FLAGG RANCH, WY

LOCATION.--Lat 44°05'21", long 110°41'38", in Hydrologic Unit 17040101, Grand Teton National Park, on left bank 50 ft upstream from State Highway 89 bridge, 2 mi downstream from the south boundary of Yellowstone National Park, and 600 ft downstream from the confluence with Sheffield Creek.

DRAINAGE AREA.--486 mi².

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 for estimated daily discharges, which are fair. Station equipment includes satellite telemetry.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	295	294	260	302	e270	356	308	1140	2190	461	257	171
2	290	264	273	306	277	355	321	1180	1900	438	251	171
3	290	275	280	317	281	353	326	1470	1700	423	247	170
4	290	280	282	315	275	350	340	1660	1630	407	244	166
5	287	265	285	338	276	347	323	2400	1490	398	241	163
6	294	249	297	335	276	343	333	3310	1350	430	232	161
7	329	259	307	336	287	328	332	3680	1250	427	222	161
8	374	252	312	345	311	319	323	3960	1190	400	221	163
9	336	243	326	351	308	317	316	4500	1140	378	234	166
10	328	253	343	350	e300	309	321	4520	1030	364	234	163
11	325	242	330	346	e290	316	313	4660	971	353	225	172
12	321	246	332	341	e285	318	327	4960	955	343	228	173
13	347	242	322	337	e290	309	354	5590	960	336	239	168
14	407	248	332	336	e295	308	356	4370	1200	340	224	173
15	434	227	338	333	e300	312	346	3630	1060	336	217	182
16	425	226	318	325	309	315	387	3530	1000	321	208	176
17	393	227	312	318	306	311	482	3350	936	308	202	171
18	365	232	305	317	308	304	674	2690	849	299	199	168
19	352	226	307	e310	310	307	929	2680	798	293	196	169
20	333	226	303	e300	309	303	1300	2580	753	290	193	169
21	322	242	301	e298	308	302	1770	2200	729	286	193	169
22	330	250	297	e295	305	304	2130	2190	744	277	198	167
23	323	253	e295	e290	305	306	2400	2380	690	275	201	166
24	319	e250	e290	e295	368	297	2250	2460	635	284	192	165
25	315	e238	e280	e300	359	297	1790	2510	596	279	183	164
26	303	e247	e285	303	345	296	1470	2480	567	269	177	163
27	293	e250	e280	300	354	294	1210	2410	538	263	174	163
28	299	e258	e285	293	354	292	1070	2560	520	262	174	161
29	271	259	287	e285	---	283	955	2310	500	278	175	163
30	264	262	291	e280	---	285	1000	2120	480	261	175	174
31	282	---	291	e265	---	293	---	2070	---	260	173	---
TOTAL	10136	7485	9346	9762	8561	9729	24756	91550	30351	10339	6529	5031
MEAN	327	249	301	315	306	314	825	2953	1012	334	211	168
MAX	434	294	343	351	368	356	2400	5590	2190	461	257	182
MIN	264	226	260	265	270	283	308	1140	480	260	173	161
AC-FT	20100	1485	18540	1936	16980	1930	49100	181600	60200	2051	12950	9980

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1994, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	
MEAN	351	350	340	319	328	343	766	2755	2566	711	380	316
MAX	679	607	527	383	429	506	1509	3947	5726	1325	660	523
(WY)	1984	1984	1984	1985	1986	1986	1990	1993	1986	1986	1986	1986
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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1984 - 1994
ANNUAL TOTAL	331360	223575	--
ANNUAL MEAN	908	613	795
HIGHEST ANNUAL MEAN	--	--	1151
LOWEST ANNUAL MEAN	--	--	526
HIGHEST DAILY MEAN	7850	5590	9350
LOWEST DAILY MEAN	220	161	161
ANNUAL SEVEN-DAY MINIMUM	229	163	163
INSTANTANEOUS PEAK FLOW	--	6580	a11000
INSTANTANEOUS PEAK STAGE	--	7.62	9.41
INSTANTANEOUS LOW FLOW	--	a160	b160
ANNUAL RUNOFF (AC-FT)	657300	443500	576000
ANNUAL RUNOFF (CFSM)	1.87	1.26	22.23
10 PERCENT EXCEEDS	2830	1640	2100
50 PERCENT EXCEEDS	336	308	369
90 PERCENT EXCEEDS	265	183	255

a Gage height, 8.39 ft.

b Also occurred Sept. 6-8, 10, 26-29; gage height, 3.19 ft.

e Estimated.

SNAKE RIVER MAIN STEM

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 (discontinued).

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum daily 22.5°C July 22, 24, Aug. 11, 1994.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 22.5°C July 22, 24, Aug. 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	BARO- METRIC PRES- SURE (MM OF HG)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT												
21...	1300	321	267	8.2	8.0	6.0	10.1	102	604	59	18	3.3
NOV												
18...	1200	237	314	7.6	-3.5	2.0	10.5	97	595	72	22	4.1
DEC												
16...	1245	308	282	7.9	-2.0	2.0	10.8	101	595	56	17	3.2
JAN												
13...	1200	336	269	7.6	-3.5	2.0	10.9	100	605	51	16	2.8
FEB												
17...	1210	303	285	7.8	4.0	2.0	11.1	105	590	51	16	2.8
MAR												
17...	1230	316	283	8.1	2.5	4.0	10.7	106	590	55	17	3.1
APR												
14...	1150	387	273	8.0	1.0	4.5	10.4	105	589	59	18	3.3
MAY												
03...	1115	1380	156	7.8	9.0	4.0	10.4	103	593	46	14	2.8
23...	1100	2230	118	8.2	16.0	6.0	--	--	599	33	10	2.0
JUN												
14...	1325	1310	158	7.7	8.0	11.0	9.0	106	590	42	13	2.4
30...	1230	486	223	8.3	26.5	15.5	8.9	114	598	52	16	3.0
JUL												
21...	1320	306	280	8.3	25.5	18.0	8.8	119	600	64	20	3.5
AUG												
18...	1445	203	334	8.4	28.0	19.0	8.8	121	597	71	22	4.0
SEP												
08...	1140	166	368	8.0	25.0	12.5	8.7	105	598	81	25	4.5

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WAT. DIS FET FIELD HCO3 (MG/L)	CAR- BONATE WAT. DIS FET FIELD CO3 (MG/L)	ALKA- LINITY WAT DIS TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
OCT											
21...	31	51	4.6	92	0	76	29	17	2.2	34	181
NOV											
18...	38	51	5.2	100	0	84	40	21	2.3	36	219
DEC											
16...	35	55	4.5	110	0	87	31	19	2.2	37	201
JAN											
13...	33	55	4.8	96	0	78	28	19	2.7	38	189
FEB											
17...	34	56	4.9	100	0	80	30	19	2.7	38	194
MAR											
17...	34	55	4.9	100	0	85	30	19	2.4	36	196
APR											
14...	32	52	4.3	93	0	76	28	17	2.4	33	191
MAY											
03...	13	37	2.0	66	0	54	12	6.7	1.0	17	102
23...	9.4	37	1.6	50	0	41	8.4	4.7	0.8	16	86
JUN											
14...	15	42	2.4	62	0	51	13	7.5	1.3	22	111
30...	24	48	3.5	77	0	63	22	13	1.9	30	160
JUL											
21...	30	48	4.7	90	0	74	32	16	2.1	32	181
AUG											
18...	37	50	6.0	100	1	85	39	20	2.3	35	221
SEP											
08...	41	50	5.5	110	0	93	46	22	2.3	36	251

13010065 SNAKE RIVER ABOVE JACKSON LAKE AT FLAGG RANCH, WY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
OCT											
21...	185	0.25	157	<0.01	<0.05	0.02	<0.2	<0.2	<0.01	<0.01	<0.01
NOV											
18...	220	0.30	140	<0.01	0.06	0.03	<0.2	<0.2	<0.01	<0.01	<0.01
DEC											
16...	201	0.27	167	<0.01	0.06	0.02	<0.2	<0.2	<0.01	<0.01	<0.01
JAN											
13...	192	0.26	171	<0.01	0.07	0.03	<0.2	<0.2	0.01	<0.01	<0.01
FEB											
17...	198	0.26	159	0.04	0.09	0.03	<0.2	<0.2	0.02	<0.01	<0.01
MAR											
17...	198	0.27	167	<0.01	0.05	0.01	<0.2	<0.2	<0.01	<0.01	<0.01
APR											
14...	184	0.26	200	<0.01	<0.05	0.03	<0.2	<0.2	<0.01	<0.01	<0.01
MAY											
03...	101	0.14	380	<0.01	0.06	0.02	0.2	<0.2	0.03	<0.01	<0.01
23...	78	0.12	518	0.01	0.10	0.03	<0.2	<0.2	0.03	<0.01	<0.01
JUN											
14...	107	0.15	393	<0.01	<0.05	0.02	<0.2	<0.2	0.02	<0.01	<0.01
30...	151	0.22	210	<0.01	<0.05	<0.01	<0.2	<0.2	<0.01	<0.01	<0.01
JUL											
21...	185	0.25	150	<0.01	<0.05	<0.01	<0.2	<0.2	0.02	<0.01	<0.01
AUG											
18...	216	0.30	121	<0.01	<0.05	0.01	<0.2	<0.2	<0.01	<0.01	<0.01
SEP											
08...	238	0.34	112	<0.01	<0.05	0.02	<0.2	<0.2	<0.01	<0.01	<0.01

DATE	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL	O-18 / O-16 STABLE ISOTOPE RATIO PER MIL	TRITIUM TOTAL (PCI/L)	TRITIUM 2 SIGMA WATER, WHOLE, TOTAL (PCI/L)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT											
21...	11	3	-131	-16.91	72	5.1	1.6	0.1	2	1.7	88
NOV											
18...	10	3	--	--	--	--	--	0.2	3	1.9	60
DEC											
16...	13	3	--	--	--	--	1.5	0.2	1	0.83	67
JAN											
13...	13	1	-133	-17.63	73	5.1	2.1	0.2	1	0.91	88
FEB											
17...	14	2	--	--	--	--	1.3	0.2	4	3.3	84
MAR											
17...	18	4	--	--	--	--	1.2	0.2	3	2.6	80
APR											
14...	21	5	-133	-17.29	61	3.8	1.4	0.2	8	8.4	63
MAY											
03...	60	6	--	--	--	--	2.9	0.4	18	67	84
23...	46	4	--	--	--	--	2.4	0.2	26	157	81
JUN											
14...	33	4	--	--	--	--	2.3	0.3	17	60	80
30...	15	3	--	--	--	--	1.2	0.2	--	--	50
JUL											
21...	12	3	-132	-17.06	--	--	1.2	0.3	2	1.7	100
AUG											
18...	10	3	--	--	--	--	1.0	0.2	2	1.1	73
SEP											
08...	10	4	--	--	--	--	0.9	0.1	2	0.90	75

13010065 SNAKE RIVER ABOVE JACKSON LAKE AT FLAGG RANCH, WY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, JUNE TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	20.5	14.0	22.0	17.0	15.5	12.0
2	---	---	19.0	12.5	21.0	16.0	17.0	12.0
3	---	---	18.5	12.5	22.0	15.5	16.5	13.5
4	---	---	19.0	11.0	21.0	15.5	16.0	11.0
5	---	---	17.5	11.5	22.0	16.0	16.0	10.0
6	---	---	16.0	12.0	21.0	15.0	---	---
7	---	---	18.0	10.5	21.0	14.0	---	---
8	---	---	20.5	12.5	18.5	15.0	---	---
9	---	---	20.5	13.0	17.5	15.0	---	---
10	---	---	20.5	14.5	21.0	14.0	---	---
11	---	---	20.5	13.5	22.5	17.0	---	---
12	---	---	20.0	13.0	20.5	16.0	---	---
13	---	---	19.0	14.0	21.5	15.0	---	---
14	---	---	18.0	13.0	20.0	14.5	---	---
15	11.5	7.5	20.5	13.5	20.0	14.5	---	---
16	11.0	8.5	21.0	14.5	20.0	14.0	---	---
17	15.5	7.0	22.0	14.5	19.0	13.0	---	---
18	17.5	10.0	20.5	14.5	19.5	13.0	---	---
19	18.5	11.0	21.0	15.0	20.0	13.5	---	---
20	19.5	11.5	21.0	13.5	20.0	14.0	---	---
21	16.5	13.0	22.0	14.0	19.5	15.5	---	---
22	19.5	12.5	22.5	14.5	19.0	14.5	---	---
23	20.0	13.0	20.5	17.0	17.5	11.5	---	---
24	19.5	12.5	22.5	15.5	17.0	11.5	---	---
25	20.5	11.5	22.0	16.5	18.5	12.0	---	---
26	18.0	13.5	21.5	15.5	18.5	12.0	---	---
27	18.0	10.0	22.0	15.5	17.0	12.5	---	---
28	19.0	11.5	21.0	16.0	18.5	12.5	---	---
29	20.0	12.5	22.0	15.0	17.5	13.5	---	---
30	20.0	12.5	20.5	16.5	17.5	12.0	---	---
31	---	---	21.5	17.0	17.5	12.5	---	---
MONTH	---	---	22.5	10.5	22.5	11.5	---	---

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. Datum of gage is 6,700.00 ft, U.S. 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.--Station equipment includes satellite telemetry. 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.

COOPERATION.--Reservoir elevations and capacity table provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 859,530 acre-ft July 11, 1965, elevation, 6,769.49 ft; no usable contents for several days during period August to October 1919.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 851,100 acre-ft May 28, elevation, 6,769.16 ft; minimum, 353,400 acre-ft Sept. 30, elevation, 6,748.21 ft.

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

6,735	88,100
6,740	182,500
6,750	392,900
6,760	624,400
6,770	862,600

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	633700	624600	617900	620500	622700	627500	624800	672100	849300	835800	714400	457400
2	631300	623600	617900	620500	622400	627500	625100	674600	848200	833500	708000	453300
3	629900	624100	617900	620800	622400	627500	625800	677700	848000	830900	701400	449900
4	629400	623600	619600	621200	622200	627500	626300	681200	845200	828600	694300	444900
5	628700	623200	619600	622200	622000	627500	626300	687000	843900	827100	686300	440300
6	628400	622900	619600	622200	622000	627500	626800	694100	842600	824300	677000	436000
7	628400	622400	619600	622400	623200	627500	627500	702600	841900	822300	668000	432000
8	627700	622200	619600	623200	623200	627500	627500	712000	840900	819800	657800	427400
9	627000	621700	619800	623400	623600	627200	627700	723000	840100	817700	648200	423600
10	626500	621700	620300	623400	623900	627200	627700	734200	839800	815200	638300	421100
11	626300	621500	620800	623600	624400	627000	627700	745300	840100	813200	628400	415000
12	626000	621000	620800	623600	624100	626800	628000	758700	840600	810400	617400	411000
13	626300	620800	620500	623900	624100	626800	628000	773400	842400	808100	607900	407900
14	627000	620100	620100	623900	623900	626800	628000	785500	844200	805400	598300	404800
15	627700	619800	619800	623900	623900	626800	628200	795000	845400	801800	587000	401800
16	628400	619300	619800	624100	623900	626800	628700	803800	844900	797500	576500	398700
17	628400	619300	619800	624400	624100	626500	629200	813700	844700	793000	566400	395400
18	628200	619300	619800	623900	624400	626300	629900	820000	844700	787500	557200	392000
19	628000	619100	619600	623900	624400	626300	631800	826400	844400	783000	547300	388700
20	628000	618900	619600	623600	624400	626300	634200	833200	844400	778200	539400	385200
21	627700	618900	619600	623400	624600	626300	638300	838100	844700	773900	529600	381800
22	627500	618900	619600	623400	624800	626300	642600	841600	844900	768900	521400	378500
23	627500	618900	619600	623400	625100	626300	647900	844900	844900	763700	513100	375000
24	627000	618600	619600	623400	625800	626300	653700	848000	844700	759200	504500	371600
25	627000	618400	619600	623400	626800	626300	658100	848800	843900	754800	497300	368300
26	626800	617900	619600	623200	627200	625800	661500	848800	842600	749500	490400	365000
27	626500	617400	619600	623200	627500	625800	663900	849000	841600	744100	484600	362000
28	626500	617200	619300	623200	627500	625600	666300	851100	840400	737900	481400	359800
29	625600	617200	619300	622900	---	625300	668300	850800	838800	731700	474500	355600
30	625100	617200	618900	622700	---	625300	670000	849800	839300	725800	467700	353400
31	624800	---	619800	622700	---	625100	---	849300	---	721300	462200	---
MAX	633700	624600	620800	624400	627500	627500	670000	851100	849300	835800	714400	457400
MIN	624800	617200	617900	620500	622000	625100	624800	672100	838800	721300	462200	353400
(#)	6760.02	6759.70	6759.81	6759.93	6760.13	6760.03	6761.89	6769.09	6768.70	6763.99	6753.07	6748.21
(*)	-12300	-7600	2600	290	4800	-2400	44900	179300	-10000	-118000	-25	-108800
CAL YR 1993	MAX	848800	MIN	139300	#	480800						
WTR YR 1994	MAX	851100	MIN	353400	#	-283700						

(#) 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 SW¹/4SE¹/4 sec.18, T.45 N., R.114 W., Teton County, Grand Teton National Park, Hydrologic Unit 17040101, on left bank 1,000 ft downstream from Jackson Lake Dam, 4.1 mi west of Moran, and at mile 988.7.

DRAINAGE AREA.--807 mi². Mean elevation, 8,040 ft.

PERIOD OF RECORD.--September 1903 to current year. Monthly discharge only for some periods, published in WSP 1317. Published as "South Fork Snake River at Moran" prior to October 1910 and as "Snake River at Moran" October 1910 to September 1968.

REVISED RECORDS.--WSP 1217: 1944(m). WSP 1347: 1906-10. WDR Idaho 1974: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,727.84 ft above sea level (levels by U.S. Bureau of Reclamation). Prior to June 13, 1917, nonrecording gage, and June 14, 1917 to May 20, 1940, water-stage recorder, at site 1.5 mi downstream at different datums.

REMARKS.--No estimated daily discharges. Records good. Station equipment includes satellite telemetry.

COOPERATION.--Gage readings for current reporting purposes provided by U.S. Bureau of Reclamation.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood during early June 1894 was considerably higher than that of June 12, 1918.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	1890	426	395	409	407	375	347	382	4110	1770	3590	2700	
2	1780	423	395	412	404	377	347	382	4110	1800	3730	2510	
3	1100	414	392	414	405	377	347	382	3870	1800	3980	2530	
4	736	386	391	414	403	377	349	383	3650	1800	4170	2530	
5	733	385	391	414	396	378	351	386	3600	1800	4710	2520	
6	731	386	391	414	396	381	351	392	3360	1800	5080	2510	
7	728	386	391	416	394	380	351	396	2820	1800	5200	2500	
8	733	386	394	419	391	379	351	396	2340	1800	5650	2490	
9	733	386	391	419	391	378	351	396	2060	1790	6000	2470	
10	730	387	391	419	391	381	353	400	1820	1790	5980	2500	
11	604	387	392	421	391	383	359	400	1550	1780	5940	2510	
12	466	386	391	423	391	382	363	400	1550	1780	5970	2410	
13	440	386	394	419	388	380	365	400	1540	1790	5990	2000	
14	441	386	396	419	386	381	365	400	1550	1940	5970	2010	
15	443	386	396	418	386	382	365	400	1540	2350	5980	2010	
16	443	387	396	414	383	382	370	401	1540	2720	5940	2010	
17	443	387	396	414	382	370	373	403	1540	2990	5900	2010	
18	440	383	396	415	382	375	378	406	1540	2980	5710	2000	
19	440	382	396	414	378	374	378	411	1540	2980	5270	2010	
20	443	382	396	412	377	373	383	414	1520	2970	4940	2020	
21	443	383	396	412	375	373	388	498	1490	2970	4900	2010	
22	443	387	397	411	369	374	384	1100	1490	2970	4890	2000	
23	443	386	400	414	369	374	384	1590	1490	2980	4920	2000	
24	442	386	402	412	369	373	384	2150	1480	2990	4770	1990	
25	440	391	405	409	371	373	382	3640	1480	2980	4240	1990	
26	438	391	405	410	373	373	382	4090	1490	3070	3750	1970	
27	443	391	408	411	374	377	383	4100	1500	3400	3400	1960	
28	443	391	409	409	374	377	383	4110	1510	3630	3410	1950	
29	437	391	409	409	---	377	382	4120	1580	3620	3420	1940	
30	428	391	409	406	---	373	382	4110	1660	3610	3300	1650	
31	427	---	409	405	---	354	---	4110	---	3600	3000	---	
TOTAL	19324	11705	12320	12827	10796	11663	1103	41548	62320	78050	149700	65710	
MEAN	623	390	397	414	386	376	368	1340	2077	2518	4829	2190	
MAX	1890	426	409	423	407	383	388	4120	4110	3630	6000	2700	
MIN	427	382	391	405	369	354	347	382	1480	1770	3000	1650	
AC-FT	38330	23220	24440	25440	21410	23130	21880	82410	123600	154800	296900	130300	
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 1994, BY WATER YEAR (WY)													
MEAN	338	289	327	294	355	444	697	1402	3377	4017	3562	1950	
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	
SUMMARY STATISTICS													
			FOR 1993 CALENDAR YEAR				FOR 1994 WATER YEAR				WATER YEARS 1904 - 1994		
ANNUAL TOTAL				279283				486994				--	
ANNUAL MEAN				765				1334				1427	
HIGHEST ANNUAL MEAN				--				--				2154	
LOWEST ANNUAL MEAN				--				--				687	
HIGHEST DAILY MEAN				3030				Aug 21				6000	
LOWEST DAILY MEAN				251				Jan 28				347	
ANNUAL SEVEN-DAY MINIMUM				251				Feb 4				349	
INSTANTANEOUS PEAK FLOW				--				a6020				Aug 8	
INSTANTANEOUS PEAK STAGE				--				b7.89				Aug 8	
INSTANTANEOUS LOW FLOW				--				c326				Nov 3	
ANNUAL RUNOFF (AC-FT)				554000				966000				1034000	
10 PERCENT EXCEEDS				2370				3630				4340	
50 PERCENT EXCEEDS				382				414				480	
90 PERCENT EXCEEDS				259				375				17	

a Also occurred Aug. 9, 12.

b Gage height, 10.41 ft, site and datum then in use.

c Gage height, 2.48 ft.

d Occurred Oct. 26-28, 1969; gage height, 0.89 ft.

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 for estimated daily discharges, which are poor. Station equipment includes satellite telemetry. No diversion or regulation.

Peak discharges greater than a base discharge of 1300 ft³/s are available. No peaks greater than the base discharge occurred this year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	e55	e57	e52	e40	e37	e58	310	506	100	48	37
2	66	e56	e56	e53	e41	e38	e56	313	457	97	46	38
3	65	e58	e55	e54	e42	e40	e54	342	409	94	45	37
4	64	e57	e55	e55	e40	e38	e56	370	388	95	42	37
5	65	e56	e54	e53	e38	e36	e55	476	367	90	41	36
6	66	e55	e53	e51	e39	e37	e54	586	324	90	40	36
7	69	e56	e55	e48	e39	e36	e54	687	301	92	39	36
8	75	e57	e56	e51	e38	e35	e62	731	291	87	38	36
9	72	e58	e57	e52	e37	e35	e72	895	283	83	42	36
10	71	e61	e58	e51	e37	e35	e83	967	260	79	44	35
11	69	e59	e56	e51	e38	e36	e90	1010	241	77	41	36
12	68	e57	e54	e52	e35	e37	e110	1220	228	75	59	37
13	69	e56	e52	e53	e35	e39	e108	1430	220	73	58	37
14	73	e56	e53	e54	e36	e41	e105	1150	270	72	52	39
15	75	e55	e53	e52	e35	e45	139	887	254	72	48	43
16	77	e57	e54	e51	e36	e44	153	812	235	69	45	42
17	75	e59	e53	e50	e37	e42	186	766	216	66	43	39
18	71	e56	e52	e50	e36	e43	217	681	196	63	42	38
19	69	e54	e51	e49	e35	e41	241	640	182	62	41	37
20	66	e55	e50	e48	e34	e42	311	640	172	60	40	38
21	65	e58	e52	e47	e33	e43	376	591	162	58	39	38E
22	66	e57	e51	e46	e32	e42	408	607	161	56	43	37
23	65	e55	e51	e45	e33	e41	417	607	157	56	48	37
24	64	e54	e52	e46	e34	e40	441	596	146	56	45	37
25	63	e52	e50	e48	e35	e46	387	610	136	54	41	36
26	62	e53	e51	e47	e35	e45	363	600	127	52	39	36
27	60	e54	e49	e45	e36	e47	321	579	122	51	38	36
28	e58	e55	e52	e44	e36	e53	301	622	115	49	38	36
29	e56	e56	e51	e43	---	e51	287	585	112	48	39	36
30	e54	e58	e50	e41	---	e55	293	522	103	47	40	37
31	e54	---	e51	e39	---	e60	---	527	---	48	38	---
TOTAL	2058	1685	1644	1521	1022	1300	5858	21359	7141	2171	1342	1116
MEAN	66.4	56.2	53.0	49.1	36.5	41.9	195	689	238	70.0	43	37.2
MAX	77	61	58	55	42	60	441	1430	506	100	59	43
MIN	54	52	49	39	32	35	54	310	103	47	38	35EE
AC-FT	4080	3340	3260	3020	2030	2580	11620	42370	14160	4310	2660	2210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 1994, BY WATER YEAR (WY)

	MEAN	65.5	55.4	49.1	44.4	44.5	51.1	152	927	1202	335	98.1	70.9
MAX	142	105	93.5	70.7	65.5	94.5	418	1606	2383	1527	191	127	
(WY)	1973	1973	1984	1951	1962	1972	1946	1954	1974	1982	1982	1972	
MIN	34.6	32.6	29.7	25.3	26.6	34.6	56.2	345	238	70.0	43.0	37.2	
(WY)	1988	1953	1955	1979	1955	1963	1975	1975	1994	1994	1988	1994	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1917 - 1994
ANNUAL TOTAL	94275	48217	--
ANNUAL MEAN	258	132	258
HIGHEST ANNUAL MEAN	--	--	403
LOWEST ANNUAL MEAN	--	--	132
HIGHEST DAILY MEAN	2740	May 21	1430
LOWEST DAILY MEAN	21	Jan 7	32
ANNUAL SEVEN-DAY MINIMUM	23	Jan 6	34
INSTANTANEOUS PEAK FLOW	--	--	1560
INSTANTANEOUS PEAK STAGE	--	--	5.29
ANNUAL RUNOFF (AC-FT)	187000	95640	187000
10 PERCENT EXCEEDS	792	372	890
50 PERCENT EXCEEDS	73	54	66
90 PERCENT EXCEEDS	35	37	39

a Gage height, 6.33 ft.

b Extrapolated from gage height record.

e Estimated

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 for estimated daily discharges, which are fair. Station equipment includes satellite telemetry.

Peak discharges greater than a base discharge of 3,100 ft³/s are available. No peaks greater than the base discharge occurred this year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	223	e175	e190	e160	e107	e115	e143	330	2090	518	197	138
2	221	e180	e185	e165	e108	e120	e137	316	1890	489	192	140
3	221	e190	e180	e168	e112	e125	e132	328	1660	459	188	138
4	215	e185	e175	e170	e108	e118	e140	366	1620	428	185	137
5	214	e180	e170	e160	e102	e112	e138	476	1830	400	183	134
6	213	e170	e165	e150	e103	e114	e135	656	1650	390	178	134
7	218	e175	e170	e145	e105	e112	e130	907	1520	382	172	133
8	246	e180	e180	e150	e103	e110	e132	1030	1130	360	168	132
9	224	e185	e185	e155	e100	e110	e135	1240	921	348	190	132
10	221	e195	e190	e150	e102	e112	e140	1450	797	338	204	131
11	220	e205	e185	e152	e104	e114	e145	1600	866	331	186	133
12	220	e195	e175	e155	e94	e115	e152	1870	1220	317	187	133
13	221	e190	e160	e160	e96	e118	e148	2530	1330	303	184	134
14	224	e185	e165	e165	e100	e122	e145	2330	1780	297	177	147
15	232	e180	e170	e160	e98	e130	164	1820	1080	288	184	163
16	233	e185	e175	e155	e105	e125	187	1740	869	278	168	153
17	225	e200	e170	e152	e110	e116	220	1570	749	269	157	145
18	217	e185	e165	e150	e105	e118	282	1250	798	261	154	139
19	211	e170	e160	e145	e102	e110	341	1360	1010	255	150	134
20	204	e175	e150	e140	e100	e112	422	1470	1030	249	148	133
21	195	e195	e160	e135	e98	e118	514	1180	955	237	148	131
22	209	e185	e155	e130	e96	e112	609	1130	1080	226	162	130
23	203	e175	e160	e125	e98	e108	654	1300	1020	223	157	130
24	200	e165	e160	e130	e100	e103	603	1310	869	226	148	130
25	198	e155	e150	e135	e102	e115	525	1520	778	216	142	128
26	189	e165	e155	e130	e105	e112	440	1770	713	212	139	126
27	185	e170	e150	e128	e108	e119	360	1900	658	209	137	126
28	e180	e175	e160	e125	e110	e128	339	1970	584	207	138	126
29	e170	e185	e158	e120	---	e126	315	1810	566	206	140	128
30	e165	e190	e155	e115	---	e135	309	1610	548	201	144	142
31	e170	---	e158	e105	---	e149	---	2100	---	202	140	---
TOTAL	6487	5445	5186	4485	2881	3653	8236	42239	33611	9325	5147	4060
MEAN	209	181	167	145	103	118	275	1363	1120	301	166	135
MAX	246	205	190	170	112	149	654	2530	2090	518	204	163
MIN	165	155	150	105	94	103	130	316	548	201	137	126
AC-FT	12870	10800	10290	8900	5710	7250	16340	83780	66670	18500	10210	8050

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1994, BY WATER YEAR (WY)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	215	170	140	122	118	127	220	1007	2239	1306	413	256																	
MAX	304	229	180	145	191	175	367	1768	4113	3056	946	428																	
(WY)	1973	1984	1985	1994	1984	1984	1987	1969	1974	1975	1982	1982																	
MIN	128	122	99.5	87.3	93.1	101	124	397	1049	230	163	135																	
(WY)	1988	1988	1980	1989	1969	1973	1967	1975	1992	1977	1977	1994																	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1966 - 1994
ANNUAL TOTAL	199135	130755	--
ANNUAL MEAN	546	358	529
HIGHEST ANNUAL MEAN	--	--	751
LOWEST ANNUAL MEAN	--	--	286
HIGHEST DAILY MEAN	2920	Jun 22	2530 May 13
LOWEST DAILY MEAN	100	Feb 16	94 Feb 12
ANNUAL SEVEN-DAY MINIMUM	103	Jan 30	99 Feb 9
INSTANTANEOUS PEAK FLOW			2920 May 14
INSTANTANEOUS PEAK STAGE			5.24 May 14
ANNUAL RUNOFF (AC-FT)	395000	259400	383000
10 PERCENT EXCEEDS	1700	1050	1600
50 PERCENT EXCEEDS	190	172	192
90 PERCENT EXCEEDS	110	112	112

e Estimated.

13012490 SPREAD CREEK AT DIVERSION DAM NEAR MORAN, WY

LOCATION.--Lat 43°46'22", long 110°28'59", in NE¹/₄ SW¹/₄ sec.13, T.44 N., R.114 W., Teton County, Hydrologic Unit 17040101, Teton National Forest, on left bank 40 ft upstream from diversion dam, 0.25 miles south of Grand Teton National Park boundary, and 4.3 mi southwest of Moran Junction.

DRAINAGE AREA.--97.4 mi².

PERIOD OF RECORD.--June 1993 (discharge measurement only), May to July 1994.

GAGE.--Water-stage recorder. Elevation of gage is 7,100 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: May 1-10. Records good except those for discharges below 70 ft³/s and those for May 1-10, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	50	60	5.4	---	---
2	---	---	---	---	---	---	---	50	41	4.7	---	---
3	---	---	---	---	---	---	---	51	30	4.3	---	---
4	---	---	---	---	---	---	---	48	29	4.2	---	---
5	---	---	---	---	---	---	---	59	29	3.9	---	---
6	---	---	---	---	---	---	---	74	29	4.3	---	---
7	---	---	---	---	---	---	---	89	28	5.2	---	---
8	---	---	---	---	---	---	---	101	28	3.5	---	---
9	---	---	---	---	---	---	---	142	27	2.4	---	---
10	---	---	---	---	---	---	---	180	25	1.6	---	---
11	---	---	---	---	---	---	---	295	23	2.1	---	---
12	---	---	---	---	---	---	---	339	23	3.1	---	---
13	---	---	---	---	---	---	---	432	24	3.1	---	---
14	---	---	---	---	---	---	---	324	41	---	---	---
15	---	---	---	---	---	---	---	279	31	---	---	---
16	---	---	---	---	---	---	---	273	31	---	---	---
17	---	---	---	---	---	---	---	267	27	---	---	---
18	---	---	---	---	---	---	---	218	22	---	---	---
19	---	---	---	---	---	---	---	215	19	---	---	---
20	---	---	---	---	---	---	---	197	17	---	---	---
21	---	---	---	---	---	---	---	139	17	---	---	---
22	---	---	---	---	---	---	---	118	20	---	---	---
23	---	---	---	---	---	---	---	102	16	---	---	---
24	---	---	---	---	---	---	---	83	13	---	---	---
25	---	---	---	---	---	---	---	90	12	---	---	---
26	---	---	---	---	---	---	---	80	10	---	---	---
27	---	---	---	---	---	---	---	82	10	---	---	---
28	---	---	---	---	---	---	---	116	9.1	---	---	---
29	---	---	---	---	---	---	---	97	7.6	---	---	---
30	---	---	---	---	---	---	---	72	6.3	---	---	---
31	---	---	---	---	---	---	---	61	---	---	---	---
TOTAL	---	---	---	---	---	---	---	4723	705.0	---	---	---
MEAN	---	---	---	---	---	---	---	152	23.5	---	---	---
MAX	---	---	---	---	---	---	---	432	60	---	---	---
MIN	---	---	---	---	---	---	---	48	6.3	---	---	---
AC-FT	---	---	---	---	---	---	---	9370	1400	---	---	---
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEAR 1994, BY WATER YEAR (WY)												
MEAN	---	---	---	---	---	---	---	152	23.5	---	---	---
MAX	---	---	---	---	---	---	---	152	23.5	---	---	---
(WY)	---	---	---	---	---	---	---	1994	1994	---	---	---
MIN	---	---	---	---	---	---	---	152	23.5	---	---	---
(WY)	---	---	---	---	---	---	---	1994	1994	---	---	---

SUMMARY STATISTICS

HIGHEST DAILY MEAN

LOWEST DAILY MEAN

INSTANTANEOUS PEAK FLOW

INSTANTANEOUS PEAK STAGE

FOR 1994 WATER YEAR*

432 May 13

1.6 Jul 10

485a May 13

6.56c Jun 14

WATER YEAR 1993 - 1994*

432 May 13 1994

1.6 Jul 10 1994

1040b May 21 1993

6.56c Jun 14 1994c

* During period of operation.

a Gage height, 5.39 ft.

b Gage height, 6.52 ft.

c Backwater from diversion dam; discharge, 56 ft³/s.

GROS VENTURE RIVER BASIN

13015000 GROS VENTURE 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, Wyoming.

DRAINAGE AREA.--683 mi².

PERIOD OF RECORD.--July to September 1917, July to September 1918 (monthly discharge only, published in WSP 1317), October 1987 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 6,260 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Station equipment includes satellite telemetry. Diversions of about 300 ft³/s for irrigation above station. No regulation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,400 ft³/s June 7, 1991, gage height, 20.69 ft; maximum gage height, 21.57 ft, May 14, 1994; 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, 2,490 ft³/s May 14; no flow Aug. 18 to Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e47	158	794	16	4.6	.00
2	---	---	---	---	---	---	e46	152	872	15	3.9	.00
3	---	---	---	---	---	---	e44	142	807	15	3.4	.00
4	---	---	---	---	---	---	e43	166	688	15	2.9	.00
5	---	---	---	---	---	---	e48	326	662	15	2.6	.00
6	---	---	---	---	---	---	e46	677	648	15	2.0	.00
7	---	---	---	---	---	---	e45	949	602	14	1.5	.00
8	---	---	---	---	---	---	e44	1180	531	14	1.3	.00
9	---	---	---	---	---	---	e48	1300	425	14	1.0	.00
10	---	---	---	---	---	---	e52	1520	254	14	.75	.00
11	---	---	---	---	---	---	e60	1670	110	14	.44	.00
12	---	---	---	---	---	---	e67	1810	20	13	.53	.00
13	---	---	---	---	---	---	e80	2100	62	11	.75	.00
14	---	---	---	---	---	---	e78	2490	172	10	.33	.00
15	---	---	---	---	---	---	e76	2010	325	9.7	.25	.00
16	---	---	---	---	---	---	e93	1650	216	9.3	.24	.00
17	---	---	---	---	---	---	e103	1470	122	9.3	.23	.00
18	---	---	---	---	---	---	e114	1230	39	9.6	.00	.00
19	---	---	---	---	---	---	e126	927	15	9.0	.00	.00
20	---	---	---	---	---	---	e140	855	15	8.7	.00	.00
21	---	---	---	---	---	---	e155	753	21	8.3	.00	.00
22	---	---	---	---	---	---	e185	608	39	7.7	.00	.00
23	---	---	---	---	---	---	e215	505	25	7.1	.00	.00
24	---	---	---	---	---	---	e250	484	26	7.0	.00	.00
25	---	---	---	---	---	---	e285	448	21	7.0	.00	.00
26	---	---	---	---	---	---	e260	504	20	7.3	.00	.00
27	---	---	---	---	---	---	e230	634	20	7.0	.00	.00
28	---	---	---	---	---	---	e36	e210	787	19	6.8	.00
29	---	---	---	---	---	---	e39	e190	959	19	5.8	.00
30	---	---	---	---	---	---	e38	170	850	18	5.2	.00
31	---	---	---	---	---	---	e41	---	788	---	4.9	.00
TOTAL	---	---	---	---	---	---	3550	30102	7607	324.7	26.72	0.00
MEAN	---	---	---	---	---	---	118	971	254	10.5	.86	.000
MAX	---	---	---	---	---	---	285	2490	872	16	4.6	.00
MIN	---	---	---	---	---	---	43	142	15	4.9	.00	.00
AC-FT	---	---	---	---	---	---	7040	59710	15090	644	53	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 1994, BY WATER YEAR (WY)

	MEAN	64.9	64.4	29.5	---	---	---	130	687	779	198	136	60.6
MAX	89.4	81.3	29.5	---	---	---	---	219	97	1554	482	406	209
(WY)	1990	1990	1988	---	---	---	---	1990	1994	1991	1993	1917	1917
MIN	50.3	49.2	29.5	---	---	---	---	41.1	325	88.3	10.5	.86	.000
(WY)	1988	1988	1988	---	---	---	---	1993	1992	1992	1994	1994	1994

e Estimated.

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.--Undetermined.

PERIOD OF RECORD.--March to September 1994.

GAGE.--Water-stage recorder. Elevation of gage is 6,150 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by diversions for irrigation. Results of discharge measurements, in cubic feet per second, made during the period when station was not in operation, are given below:

Jan. 20 . . . 42.9
Mar. 8 . . . 42.5
Mar. 17 . . . 47.0

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	46	72	517	297	300	204
2	---	---	---	---	---	---	50	74	514	293	296	194
3	---	---	---	---	---	---	53	76	482	287	294	181
4	---	---	---	---	---	---	54	77	448	285	296	171
5	---	---	---	---	---	---	54	90	434	281	292	166
6	---	---	---	---	---	---	54	110	396	284	272	167
7	---	---	---	---	---	---	54	138	365	286	261	163
8	---	---	---	---	---	---	52	169	354	279	260	160
9	---	---	---	---	---	---	51	172	309	268	268	157
10	---	---	---	---	---	---	51	168	278	263	270	153
11	---	---	---	---	---	---	53	189	278	258	262	153
12	---	---	---	---	---	---	55	206	288	256	268	154
13	---	---	---	---	---	---	57	258	315	254	287	153
14	---	---	---	---	---	---	57	310	373	256	273	149
15	---	---	---	---	---	---	58	310	372	262	266	147
16	---	---	---	---	---	---	58	297	348	267	257	142
17	---	---	---	---	---	---	59	307	314	274	251	139
18	---	---	---	---	---	---	59	296	299	280	246	140
19	---	---	---	---	---	---	60	279	302	283	240	131
20	---	---	---	---	---	---	61	269	324	288	231	122
21	---	---	---	---	---	---	61	272	342	292	223	116
22	---	---	---	---	---	---	83	269	361	288	226	110
23	---	---	---	---	---	---	114	274	368	287	233	107
24	---	---	---	---	---	46	127	294	354	296	241	103
25	---	---	---	---	---	45	130	333	327	291	244	98
26	---	---	---	---	---	45	119	382	303	280	241	94
27	---	---	---	---	---	45	105	404	288	280	234	87
28	---	---	---	---	---	45	95	439	284	287	222	86
29	---	---	---	---	---	45	87	468	289	288	221	85
30	---	---	---	---	---	45	75	426	294	290	216	87
31	---	---	---	---	---	45	---	443	---	299	211	---
TOTAL	---	---	---	---	---	---	2092	7871	10520	8679	7902	4119
MEAN	---	---	---	---	---	---	69.7	254	351	280	255	137
MAX	---	---	---	---	---	---	130	468	517	299	300	204
MIN	---	---	---	---	---	---	46	72	278	254	211	85
AC-FT	---	---	---	---	---	---	4150	15610	20870	17210	15670	8170

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1994, BY WATER YEAR (WY)

	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994
MEAN	---	---	---	---	---	---	69.7	254	351	280	255	137
MAX	---	---	---	---	---	---	69.7	254	351	280	255	137
(WY)	---	---	---	---	---	---	1994	1994	1994	1994	1994	1994
MIN	---	---	---	---	---	---	69.7	254	351	280	255	137
(WY)	---	---	---	---	---	---	1994	1994	1994	1994	1994	1994

SUMMARY STATISTICS

HIGHEST DAILY MEAN

LOWEST DAILY MEAN

INSTANTANEOUS PEAK FLOW

INSTANTANEOUS PEAK STAGE

FOR WATER YEAR 1994*

517 Jun 1
45 Mar 25-31
541 Jun 1
3.83 Jun 1

* During period of operation.

FLAT CREEK BASIN

13018300 CACHE CREEK NEAR JACKSON, WY
(Hydrologic bench-mark station)

LOCATION.--Lat 43°27'08", long 110°42'12", in SW¹/₄ SW¹/₄ SE¹/₄ sec.1, T.40 N., R.116 W., Teton County, Hydrologic Unit 17040103, Teton National Forest, on right bank 0.7 mi upstream from Salt Lick Draw, 2.4 mi southeast of Jackson, and 4.0 mi upstream from mouth.
DRAINAGE AREA.--10.6 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR WY-76-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,750 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 29-31, Nov. 2, 5-12, 14-22, 24-29, Dec. 13, 14, Jan. 1-25, Jan. 31 to Feb. 8, and Mar. 7, 9, 10, 20, 24. Records good except those prior to May 26, which are fair, and those for estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 52 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 24	0830	ice jam	*3.72	May 12	2300	*58	3.56

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	6.8	6.4	3.6	2.6	2.3	3.8	11	30	12	8.2	5.6
2	7.6	6.8	6.3	3.4	2.6	2.4	3.8	11	29	11	8.3	5.5
3	7.6	6.8	6.1	3.3	2.5	2.4	3.9	12	28	11	7.8	5.3
4	7.2	6.8	5.9	3.1	2.5	2.4	4.0	13	28	11	7.5	5.2
5	7.2	6.9	5.8	3.1	2.5	2.6	4.2	22	27	11	7.2	5.3
6	7.1	6.6	5.5	3.1	2.6	2.6	4.1	25	26	11	7.2	5.2
7	7.4	6.6	5.5	3.0	2.7	2.7	4.1	29	25	11	7.1	5.3
8	7.7	6.8	5.4	3.0	2.6	2.7	4.3	31	24	10	7.2	5.1
9	7.6	7.0	5.4	3.0	2.6	2.8	4.4	34	23	10	7.5	5.0
10	7.3	7.2	5.4	3.1	2.6	2.8	4.4	36	22	9.8	7.0	4.9
11	7.3	7.2	5.2	3.2	2.5	2.8	4.5	39	21	9.7	6.8	5.0
12	7.3	7.0	5.2	3.3	2.3	2.8	4.7	45	20	9.8	6.8	5.0
13	7.3	6.6	5.0	3.4	2.4	2.8	5.1	53	20	10	7.0	5.0
14	7.4	6.6	5.2	3.5	2.5	2.8	5.5	46	21	10	6.7	5.2
15	7.6	6.8	5.0	3.7	2.5	2.9	5.6	41	20	10	6.4	5.4
16	7.6	7.0	5.0	3.9	2.4	3.0	6.3	40	19	9.9	6.4	5.2
17	7.3	7.0	4.8	4.0	2.2	3.0	7.2	37	18	9.7	6.2	5.2
18	7.1	6.3	4.9	4.2	2.1	2.9	8.7	34	17	9.7	6.1	5.2
19	6.9	6.0	5.0	4.5	2.0	3.0	10	33	17	9.6	5.9	5.0
20	6.7	5.8	4.9	4.4	2.0	3.0	12	31	16	9.3	6.0	5.0
21	6.9	6.2	4.8	4.2	2.0	3.1	13	29	16	9.1	6.0	5.0
22	6.8	6.6	4.8	4.0	2.0	3.1	14	28	16	9.0	5.8	4.4
23	6.8	6.4	4.7	3.7	2.1	3.2	14	29	15	9.0	5.6	4.3
24	6.8	6.2	4.4	3.6	2.2	3.2	13	29	15	9.0	5.6	4.3
25	6.6	5.8	4.4	3.4	2.2	3.4	12	30	15	8.5	5.5	4.2
26	6.5	5.6	4.4	3.1	2.3	3.9	11	31	14	8.3	5.6	4.1
27	6.7	6.0	4.3	3.1	2.3	4.5	11	31	13	8.1	5.6	4.1
28	6.8	6.4	4.1	3.0	2.3	3.6	11	32	13	8.1	5.6	4.1
29	6.6	7.0	4.1	2.9	---	3.6	11	31	13	8.0	5.8	4.2
30	6.6	6.7	3.9	2.8	---	3.2	10	30	12	8.0	5.6	4.6
31	6.8	---	3.8	2.7	---	3.8	---	30	---	8.1	5.5	---
TOTAL	220.7	197.5	155.6	106.3	66.1	93.3	230.6	953	593	298.7	201.5	146.9
MEAN	7.12	6.58	5.02	3.43	2.36	3.01	7.69	30.7	19.8	9.64	6.50	4.90
MAX	7.7	7.2	6.4	4.5	2.7	4.5	14	53	30	12	8.3	5.6
MIN	6.5	5.6	3.8	2.7	2.0	2.3	3.8	11	12	8.0	5.5	4.1
AC-FT	438	392	309	211	131	185	457	1890	1180	592	400	291

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1994, BY WATER YEAR (WY)

	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	6.75	5.64	4.85	4.24	3.89	3.96	6.47	25.3	48.0	23.6	11.8	8.19																					
MAX	9.43	7.29	6.65	5.91	6.09	7.25	14.2	47.1	103	42.0	18.5	12.3																					
(WY)	1972	1987	1984	1981	1984	1984	1987	1969	1971	1965	1971	1971																					
MIN	3.83	3.14	1.53	2.42	2.06	2.23	3.21	5.86	10.6	6.51	4.19	3.83																					
(WY)	1993	1978	1991	1978	1992	1991	1991	1977	1992	1977	1992	1992																					

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1962 - 1994
ANNUAL TOTAL	4196.3	3263.2	--
ANNUAL MEAN	11.5	8.94	12.7
HIGHEST ANNUAL MEAN	--	--	20.2
LOWEST ANNUAL MEAN	--	--	5.64
HIGHEST DAILY MEAN	54	53	161
LOWEST DAILY MEAN	2.3	2.0	1.1
ANNUAL SEVEN-DAY MINIMUM	2.5	2.1	1.3
INSTANTANEOUS PEAK FLOW	--	58a	225b
INSTANTANEOUS PEAK STAGE	--	3.72c	3.97
ANNUAL RUNOFF (AC-FT)	8320	6470	9220
10 PERCENT EXCEEDS	32	22	32
50 PERCENT EXCEEDS	6.8	6.1	6.4
90 PERCENT EXCEEDS	2.7	2.7	3.6

a Gage height, 3.56 ft.

b Gage height, 3.90 ft.

c Ice jam.

FLAT CREEK BASIN

293

13018300 CACHE CREEK NEAR JACKSON, WY--Continued
(Hydrologic benchmark station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
NOV 29...	1400	7.0	325	8.4	0.0	-2.0	610	1.1	11.9	102
JAN 20...	1500	4.4	319	8.4	0.0	-2.0	603	1.2	11.5	100
MAR 28...	1500	3.6	325	8.6	1.0	4.0	597	0.20	11.8	106
MAY 12...	1445	45	292	8.6	4.0	22.5	595	21	9.7	95
JUL 20...	1300	9.5	280	8.5	10.0	18.0	603	0.30	8.9	100
SEP 13...	1400	4.9	305	8.4	8.5	13.0	595	0.30	10.5	115

DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3
NOV 29...	K2	K2	170	43	14	2.2	0.1	0.5	1	197
JAN 20...	K2	K2	170	45	14	2.3	0.1	3.3	1	209
MAR 28...	<1	<1	170	45	14	2.5	0.1	0.6	1	223
MAY 12...	<1	K7	170	48	11	2.5	0.1	0.7	3	204
JUL 20...	K4	K2	160	42	13	1.7	0.1	0.4	0	206
SEP 13...	K2	55	160	42	14	1.8	0.1	0.5	0	194

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

DATE	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
NOV 29...	164	173	8.5	0.7	0.1	4.4	178	172	0.24	3.36
JAN 20...	173	180	4.6	0.6	0.1	5.5	167	180	0.23	1.98
MAR 28...	185	176	5.2	0.6	0.1	4.6	177	184	0.24	1.72
MAY 12...	172	174	3.6	0.5	0.1	4.5	166	175	0.23	20.2
JUL 20...	169	166	3.8	0.4	0.1	4.5	175	167	0.24	4.49
SEP 13...	159	169	3.8	0.4	<0.1	4.3	173	163	0.24	2.29

13018300 CACHE CREEK NEAR JACKSON, WY--Continued
 WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	SEDI- MENT, SUS- PENDEDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 29...	<0.01	0.12	0.03	<0.2	0.02	0.03	0.01	9	0.17	62
JAN 20...	0.01	0.12	0.02	<0.2	0.02	<0.01	<0.01	7	0.08	60
MAR 28...	<0.01	0.07	0.02	<0.2	<0.01	<0.01	<0.01	13	0.13	49
MAY 12...	<0.01	0.06	0.01	0.3	0.04	<0.01	0.01	141	17	49
JUL 20...	<0.01	<0.05	0.02	<0.2	<0.01	<0.01	<0.01	21	0.54	40
SEP 13...	<0.01	0.11	0.02	<0.2	<0.01	0.02	0.01	3	0.04	60

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BARIUM, DIS- SOLVED (UG/L AS BA)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)
NOV 29...	1400	7.0	0.0	-2.0	<10	30	<3	10
MAR 28...	1500	3.6	1.0	4.0	<10	29	<3	<3
MAY 12...	1445	45	4.0	22.5	20	48	3	19
SEP 13...	1400	4.9	8.5	13.0	<10	28	<3	<3

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
NOV 29...	<4	2	<10	<1	<1	<1.0	78	<6
MAR 28...	<4	<1	<10	<1	<1	<1.0	60	<6
MAY 12...	<4	2	<10	<1	<1	<1.0	79	<6
SEP 13...	<4	<1	<10	<1	<1	<1.0	52	<6

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS- SOLVED (UG/L AS U)
MAR 28...	1500	3.6	1.0	4.0	0.07	0.53
MAY 12...	1445	45	4.0	22.5	0.08	0.43

13018300 CACHE CREEK NEAR JACKSON, WY--Continued

TOTAL PRECIPITATION (INCHES), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	.15	.00	.00
2	---	---	---	---	---	---	---	---	---	.10	.30	.15
3	---	---	---	---	---	---	---	---	---	.00	.00	.00
4	---	---	---	---	---	---	---	---	---	.00	.05	.00
5	---	---	---	---	---	---	---	---	---	.05	.00	.00
6	---	---	---	---	---	---	---	---	---	.00	.00	.00
7	---	---	---	---	---	---	---	---	---	.00	.00	.00
8	---	---	---	---	---	---	---	---	---	.00	.00	.05
9	---	---	---	---	---	---	---	---	---	.20	.00	.00
10	---	---	---	---	---	---	---	---	---	.15	.00	.00
11	---	---	---	---	---	---	---	---	---	.00	.00	.00
12	---	---	---	---	---	---	---	---	---	.00	.00	.00
13	---	---	---	---	---	---	---	---	.35	.20	.25	.00
14	---	---	---	---	---	---	---	---	.50	.00	.10	.00
15	---	---	---	---	---	---	---	---	.40	.00	.05	---
16	---	---	---	---	---	---	---	---	.30	.10	.00	---
17	---	---	---	---	---	---	---	---	.15	.00	.00	---
18	---	---	---	---	---	---	---	---	.25	.00	.00	---
19	---	---	---	---	---	---	---	---	.45	.00	.10	---
20	---	---	---	---	---	---	---	---	.20	.05	.55	---
21	---	---	---	---	---	---	---	---	.20	.00	.55	---
22	---	---	---	---	---	---	---	---	.30	.05	.10	---
23	---	---	---	---	---	---	---	---	.40	.45	.00	---
24	---	---	---	---	---	---	---	---	.05	.00	.00	---
25	---	---	---	---	---	---	---	---	.30	.00	.00	---
26	---	---	---	---	---	---	---	---	.35	.40	.00	---
27	---	---	---	---	---	---	---	---	.30	.00	.00	---
28	---	---	---	---	---	---	---	---	.20	.00	.00	---
29	---	---	---	---	---	---	---	---	.30	.10	.00	---
30	---	---	---	---	---	---	---	---	.30	.20	.10	---
31	---	---	---	---	---	---	---	---	---	.00	.45	---
TOTAL	---	---	---	---	---	---	---	---	---	2.20	2.60	---

FLAT CREEK BASIN

13018350 FLAT CREEK BELOW CACHE CREEK, NEAR JACKSON, WY

LOCATION.--Lat 43°27'30", long 110°47'46", in SW¹/₄ SE¹/₄ NE¹/₄ sec.6, T.40 N., R.116 W., Teton County, Hydrologic Unit 17040103, on left bank 8 ft upstream from county bridge on High School Road, 2.1 mi southwest of Post Office in Jackson, and 3.0 mi downstream from Cache Creek.

DRAINAGE AREA.--129 mi².

PERIOD OF RECORD.--April 1989 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 6,130 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by diversions for irrigation. Results of discharge measurements, in cubic feet per second, made during the period when station was not in operation, are given below:

Oct. 5 . . .	43.2	Jan. 21 . . .	58.9
Nov. 29 . . .	79.7	Mar. 8 . . .	67.1
Jan. 4 . . .	71.8	Mar. 29 . . .	55.6

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	56	76	97	51	30	47
2	---	---	---	---	---	---	56	74	96	48	29	44
3	---	---	---	---	---	---	59	72	94	48	29	40
4	---	---	---	---	---	---	55	73	87	48	28	40
5	---	---	---	---	---	---	49	90	86	46	28	40
6	---	---	---	---	---	---	49	90	82	46	27	41
7	---	---	---	---	---	---	53	105	79	50	26	41
8	---	---	---	---	---	---	52	116	77	53	28	41
9	---	---	---	---	---	---	52	126	69	69	36	41
10	---	---	---	---	---	---	49	129	59	86	37	41
11	---	---	---	---	---	---	48	135	52	84	37	44
12	---	---	---	---	---	---	50	143	50	82	41	45
13	---	---	---	---	---	---	56	169	54	79	49	45
14	---	---	---	---	---	---	58	167	59	78	46	45
15	---	---	---	---	---	---	57	166	66	77	49	47
16	---	---	---	---	---	---	57	159	61	73	49	47
17	---	---	---	---	---	---	57	154	50	70	48	48
18	---	---	---	---	---	---	58	145	44	69	49	47
19	---	---	---	---	---	---	58	132	55	70	47	47
20	---	---	---	---	---	---	62	121	60	70	47	48
21	---	---	---	---	---	---	60	117	64	70	46	47
22	---	---	---	---	---	---	61	107	67	73	47	45
23	---	---	---	---	---	---	61	101	68	71	47	45
24	---	---	---	---	---	---	63	98	71	69	48	44
25	---	---	---	---	---	---	66	95	70	70	48	45
26	---	---	---	---	---	---	117	91	63	65	47	45
27	---	---	---	---	---	---	113	97	61	59	46	45
28	---	---	---	---	---	---	97	104	59	60	45	46
29	---	---	---	---	---	---	88	105	56	45	46	49
30	---	---	---	---	---	---	81	104	54	29	45	59
31	---	---	---	---	---	---	---	99	---	28	45	---
TOTAL	---	---	---	---	---	---	1898	3560	2010	1936	1270	1349
MEAN	---	---	---	---	---	---	63.3	115	67.0	62.5	41.0	45.0
MAX	---	---	---	---	---	---	117	169	97	86	49	59
MIN	---	---	---	---	---	---	48	72	44	28	26	40
AC-FT	---	---	---	---	---	---	3760	7060	3990	3840	2520	2680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1994, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993	1994
MEAN	61.2	98.0	120	106	84.6	52.5
MAX	70.1	123	168	154	162	84.2
(WY)	1990	1993	1991	1989	1993	1991
MIN	55.3	82.1	57.1	58.3	40.5	30.7
(WY)	1993	1989	1992	1992	1992	1992

SUMMARY STATISTICS

HIGHEST DAILY MEAN

LOWEST DAILY MEAN

ANNUAL SEVEN-DAY MINIMUM

INSTANTANEOUS PEAK FLOW

INSTANTANEOUS PEAK STAGE

INSTANTANEOUS LOW FLOW

10 PERCENT EXCEEDS

50 PERCENT EXCEEDS

90 PERCENT EXCEEDS

FOR 1994 WATER YEAR

169 May 13

26 Aug 7

176 May 13

2.40 May 13

WATER YEARS 1989 - 1994*

225 Jun 16 1991

23 Aug 30, 1990

24 Aug 29 1990

233a Jun 16 1991

2.65 Jul 26 1993

23 Aug 30 1990

157

71

43

* During period of operation.

a Gage height, 2.61 ft.

13018750 SNAKE RIVER BELOW FLAT CREEK, NEAR JACKSON, WY

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.

DRAINAGE AREA.--2,627 mi².

PERIOD OF RECORD.--November 1975 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,950 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Station equipment includes satellite telemetry.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3000	1480	1320	1240	e1170	1230	1310	2090	9440	3470	4760	3950
2	2970	1490	1340	1250	e1190	1260	1350	2090	9440	3510	4730	3680
3	2750	1470	1310	1260	e1210	1280	1390	2090	8980	3480	4960	3540
4	2160	1510	1320	1260	e1190	1280	1420	2200	8260	3420	5070	3500
5	1920	1480	1320	1290	e1170	1290	1380	2710	8270	3380	5430	3470
6	1890	1420	1320	1250	e1180	1280	1370	3420	7990	3350	5930	3470
7	1900	1370	1300	e1220	e1190	1250	1370	4110	7340	3370	6050	3460
8	2050	1400	1310	e1230	1180	1230	1350	4740	6560	3310	6330	3420
9	2030	1380	1330	1240	e1170	1230	1310	5220	5690	3220	6840	3400
10	1980	1370	1320	1250	e1190	1210	1310	5850	5080	3160	7050	3350
11	1950	1370	1290	1240	1170	1240	1330	6230	4400	3130	7010	3420
12	1820	1360	1300	1260	e1160	1260	1360	6810	4330	3100	6990	3410
13	1730	1370	1260	1260	e1170	1250	1430	7750	4640	3070	7150	3180
14	1720	1380	e1270	1260	e1180	1260	1470	8770	4960	3030	7050	2980
15	1730	1330	e1280	1250	1190	1310	1450	7540	5240	3290	7020	2960
16	1720	1300	e1290	1250	1190	1330	1450	6660	4630	3620	6970	2940
17	1700	1300	1270	1240	1190	1390	1540	6330	4300	4000	6890	2930
18	1660	1320	e1260	1230	1210	1390	1710	5730	4000	4150	6840	2950
19	1640	1290	e1240	1220	1190	1380	1910	5120	4060	4130	6520	2950
20	1630	1250	e1220	1200	1180	1350	2160	5220	4170	4130	6080	2940
21	1620	1250	e1230	e1200	1190	1310	2460	4880	4140	4120	5910	2920
22	1610	1300	e1220	e1190	1180	1340	2850	4640	4200	4110	5920	2890
23	1610	1330	e1230	e1180	1180	1330	3160	5190	4410	4110	5830	2910
24	1600	e1290	e1220	e1190	1200	1270	3310	5630	4170	4200	5850	2890
25	1580	e1260	e1210	1200	1200	1250	3250	6730	3960	4150	5570	2860
26	1560	e1270	e1220	1210	1220	1250	2910	8260	3780	4090	5100	2850
27	1560	e1270	e1190	1200	1260	1230	2590	8830	3700	4280	4630	2840
28	1550	e1280	e1210	1200	1250	1240	2350	9240	3580	4600	4440	2830
29	1540	1280	1220	1210	---	1240	2210	9500	3480	4710	4460	2830
30	1470	1300	e1210	e1190	---	1240	2100	9050	3470	4700	4430	2910
31	1450	---	e1220	e1150	---	1270	---	9190	---	4730	4210	---
TOTAL	57100	40470	39250	38020	33350	39670	56560	181820	160670	117120	182020	94630
MEAN	1842	1349	1266	1226	1191	1280	1885	5865	5356	3778	5872	3154
MAX	3000	1510	1340	1290	1260	1390	3310	9500	9440	4730	7150	3950
MIN	1450	1250	1190	1150	1160	1210	1310	2090	3470	3030	4210	2830
AC-FT	113300	80270	77850	75410	66150	78690	11220	360600	318700	232300	361000	187700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1994, BY WATER YEAR (WY)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	1797	1521	1370	1256	1270	1480	2545	6522	10250	6445	4227	3281							
MAX	3093	2747	1998	1899	1612	2689	5435	10840	19590	14090	7253	6464							
(WY)	1983	1984	1984	1983	1983	1986	1985	1976	1986	1982	1976	1984							
MIN	977	967	846	879	825	910	1292	2570	5356	3245	2305	1801							
(WY)	1989	1988	1988	1988	1989	1977	1977	1994	1994	1988	1981	1979							

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1976 - 1994
ANNUAL TOTAL	1075096	1040680	--
ANNUAL MEAN	2945	2851	3439
HIGHEST ANNUAL MEAN	--	--	5015
LOWEST ANNUAL MEAN	--	--	2469
HIGHEST DAILY MEAN	11600	May 22 9500	24900
LOWEST DAILY MEAN	850	Jan 7 1150	690
ANNUAL SEVEN-DAY MINIMUM	901	Jan 5 1170	785
INSTANTANEOUS PEAK FLOW	--	9800	25600
INSTANTANEOUS PEAK STAGE	--	6.07	10.22
ANNUAL RUNOFF (AC-FT)	2132000	2064000	2492000
10 PERCENT EXCEEDS	6280	5980	8080
50 PERCENT EXCEEDS	1580	1700	2010
90 PERCENT EXCEEDS	960	1210	1110

e Estimated.

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.

GAGE.--Water-stage recorder. Datum of gage is 5,683.90 ft above sea level. Mar. 16, 1937 to Mar. 31, 1939 at site 6.0 mi downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Station equipment includes satellite telemetry.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3530	1890	1700	e1480	e1400	1450	1590	2920	11000	3960	4900	4250
2	3500	1870	1710	e1490	e1420	1490	1650	2920	10900	3970	4860	4010
3	3340	1860	1660	e1500	e1430	1500	1740	2950	10300	3930	5060	3830
4	2770	1910	1680	e1500	e1420	1510	1800	3130	9600	3860	5210	3780
5	2430	1860	e1660	e1530	e1390	1530	1730	3990	9530	3790	5490	3730
6	2380	1770	e1630	e1500	e1410	1510	1700	4950	9280	3760	5990	3680
7	2390	1730	e1640	e1470	e1430	1470	1690	5840	8640	3770	6180	3690
8	2580	1750	1660	e1490	e1420	1450	1660	6550	7690	3690	6410	3660
9	2580	1720	1700	e1520	e1410	1440	1620	7080	6630	3600	6900	3620
10	2510	1730	1670	1550	e1400	1430	1620	7890	5900	3520	7220	3560
11	2460	1730	1630	1520	e1380	1460	1700	8420	5230	3460	7210	3610
12	2350	1730	1650	1540	e1370	1490	1780	9140	5130	3430	7150	3590
13	2240	1760	1580	1540	e1380	1470	1960	10500	5520	3430	7340	3500
14	2250	1750	e1590	1550	e1390	1480	2060	11700	5840	3380	7230	3240
15	2270	1670	e1600	1530	e1400	1540	1970	10000	6140	3560	7200	3250
16	2260	1640	e1620	1540	e1420	1570	2070	8960	5420	3880	7170	3200
17	2220	1630	e1600	1510	e1430	1650	2310	8440	5030	4210	7080	3190
18	2170	1660	e1590	1500	1440	1660	2670	7640	4710	4380	7020	3210
19	2120	e1580	e1550	1480	1400	1660	3120	6920	4770	4350	6780	3190
20	2080	e1570	e1490	e1440	1360	1600	3480	6860	4940	4360	6330	3190
21	2040	e1590	e1510	e1430	1380	1560	3960	6490	4930	4340	6100	3170
22	2030	1650	e1480	e1420	1370	1590	4440	6090	4930	4320	6130	3140
23	2020	1690	e1490	e1390	1370	1590	4770	6660	5150	4320	6020	3160
24	2010	e1620	e1460	e1420	1430	1480	4780	7150	4910	4400	6040	3130
25	1990	e1590	e1430	e1450	1410	1470	4620	8140	4680	4350	5830	3090
26	1960	e1600	e1470	e1480	1450	1470	4160	9820	4460	4300	5420	3080
27	1950	e1600	e1460	e1430	1480	1440	3730	10500	4320	4430	4940	3060
28	1960	e1610	e1460	e1420	1480	1460	3360	11100	4180	4730	4660	3050
29	1950	e1640	e1480	e1420	---	1470	3150	11200	4000	4860	4690	3060
30	1850	e1670	e1460	e1410	---	1460	2990	10700	3960	4830	4670	3180
31	1830	---	e1470	e1370	---	1510	---	10700	---	4880	4520	---
TOTAL	72020	51070	48780	45820	39470	46860	79880	235350	187720	126050	187750	102100
MEAN	2323	1702	1574	1478	1410	1512	2663	7592	6257	4066	6056	3403
MAX	3530	1910	1710	1550	1480	1660	4780	11700	11000			

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1994, BY WATER YEAR (WY)												
MEAN	2156	1851	1697	1488	1582	1787	3284	8749	12990	8466	5373	3998
MAX	3605	4244	5795	2225	3381	3475	6820	15410	24090	15790	7541	7595
(WY)	1983	1957	1957	1983	1961	1986	1985	1971	1986	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

ANNUAL TOTAL	1380310		1222870		--		
ANNUAL MEAN	3782		3350		4474		
HIGHEST ANNUAL MEAN	--				6587		1971
LOWEST ANNUAL MEAN	--				2726		1977
HIGHEST DAILY MEAN	14800	May 22	11700	May 14	31300	Jun 6	1986
LOWEST DAILY MEAN	1040	Jan 7	1360	Feb 20	900	Dec 31	1978
ANNUAL SEVEN-DAY MINIMUM	1080	Jan 5	1390	Feb 19	957	Jan 9	1964
INSTANTANEOUS PEAK FLOW	--		11900	May 14	32000	Jun 6	1986
INSTANTANEOUS PEAK STAGE	--		7.58	May 14	12.74	Jun 6	1986
INSTANTANEOUS LOW FLOW	--		--		a740	Nov 16	1955
ANNUAL RUNOFF (AC-FT)	2738000		2426000		3241000		
10 PERCENT EXCEEDS	8530		6910		10700		
50 PERCENT EXCEEDS	2020		2240		2410		
90 PERCENT EXCEEDS	1150		1440		1310		

a Gage height, 2.19 ft.
e Estimated.

13023000 GREYS RIVER ABOVE RESERVOIR, NEAR ALPINE, WY

LOCATION.--Lat 43°08'35", long 110°58'34", in SW¹/₄ SE¹/₄ sec.34, T.37 N., R.118 W. (unsurveyed), Lincoln County, Hydrologic Unit 17040103, on right bank at Bridge Campground, 3.6 mi southeast of Alpine, 3.0 mi upstream from maximum flowline of Palisades Reservoir.

DRAINAGE AREA.--448 mi². Mean elevation, 8,080 ft.

PERIOD OF RECORD.--July to September 1917, June to September 1918, March 1937 to March 1939, October 1953 to current year. Published as "Greys River near Alpine, Idaho", 1917-1918, and as "Greys River near Alpine, Wyo.", 1937-39.

GAGE.--Water-stage recorder. Elevation of gage is 5,729 ft above sea level, from topographic map. July 6 to Sept. 30, 1917, and June 4 to Sept. 30, 1918, nonrecording gage, and Mar. 17, 1937 to Mar. 31, 1939, water-stage recorder, at site 1.8 mi downstream, and October 1953 to Sept. 22, 1965, water-stage recorder at site 1 mi downstream at different datums.

REMARKS.--Records fair except for estimated daily discharges which are poor. Station equipment includes satellite telemetry. Less than 500 acres irrigated by diversions from Greys River and tributaries above station. Peak discharges greater than a base discharge of 2,000 ft³/s are available.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	347	278	269	e260	e150	e160	268	988	1630	536	326	239
2	346	251	267	e255	e160	156	287	991	1540	519	322	233
3	339	274	e247	e250	e155	154	335	1060	1440	508	312	234
4	338	271	245	e240	e150	156	359	1160	1380	499	307	235
5	333	264	239	e230	e145	163	336	1360	1360	488	300	229
6	333	236	e217	e225	e150	165	331	1590	1290	480	293	229
7	343	262	e240	e220	e155	153	325	1820	1230	477	287	226
8	377	250	e252	e225	e145	154	306	1830	1140	460	288	225
9	369	238	e242	e235	e150	149	310	1910	1040	450	301	222
10	357	257	e217	e250	e160	152	329	1970	961	440	311	218
11	358	250	e210	e235	e150	165	353	2150	935	430	300	218
12	365	255	e216	e230	e140	168	435	2350	936	418	293	218
13	353	263	e190	e235	e135	166	556	2830	935	411	285	220
14	361	250	e168	e225	e150	173	588	2210	967	406	280	227
15	366	222	e172	e205	e145	188	548	2030	896	401	278	232
16	377	235	e208	e195	e155	208	663	2020	843	396	266	226
17	349	238	e196	e185	e160	229	838	1910	799	386	262	219
18	334	253	e169	e175	e165	220	1020	1680	768	374	261	218
19	320	207	e173	e170	e160	223	1170	1620	754	368	254	213
20	312	216	e168	e172	e155	190	1310	1520	739	368	254	208
21	302	221	e179	e165	e150	203	1530	1400	728	364	251	208
22	299	265	e173	e160	e145	212	1640	1350	706	357	278	208
23	294	259	e193	e175	e155	205	1690	1390	707	351	270	208
24	291	226	e189	e185	e160	172	1550	1370	671	354	257	208
25	291	186	e198	e180	e165	201	1420	1450	627	343	250	204
26	282	172	e208	e175	e170	184	1270	1500	599	338	243	204
27	281	170	e229	e180	e160	181	1150	1540	594	332	237	202
28	289	226	e219	e175	e150	188	1070	1730	582	330	237	201
29	270	291	e210	e170	---	199	1010	1630	570	322	239	205
30	249	277	e220	e170	---	198	987	1580	553	320	239	229
31	264	---	e270	e140	---	226	---	1610	---	320	239	---
TOTAL	10089	7263	6593	6292	4290	5661	23984	51549	27920	12546	8520	6566
MEAN	325	242	213	203	153	183	799	1663	931	405	275	219
MAX	377	291	270	260	170	229	1690	2830	1630	536	326	239
MIN	249	170	168	140	135	149	268	988	553	320	237	201
AC-FT	20010	14410	13080	12480	8510	11230	47570	102200	55380	24880	16900	13020

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1994, BY WATER YEAR (WY)

	MEAN	314	266	233	212	204	225	624	1767	1985	930	477	363
MAX	472	455	366	315	293	406	1324	2843	3998	1904	809	559	
(WY)	1983	1984	1984	1971	1963	1986	1962	1956	1971	1975	1971	1982	
MIN	191	150	142	133	132	173	238	333	387	228	205	198	
(WY)	1993	1993	1993	1993	1993	1967	1975	1977	1977	1977	1977	1977	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1937 - 1994

ANNUAL TOTAL	248721	171273	---
ANNUAL MEAN	681	469	638
HIGHEST ANNUAL MEAN	---	---	1022
LOWEST ANNUAL MEAN	---	---	259
HIGHEST DAILY MEAN	3020	May 20	6170
LOWEST DAILY MEAN	118	Feb 17	92
ANNUAL SEVEN-DAY MINIMUM	124	Feb 26	124
INSTANTANEOUS PEAK FLOW	---	a3120	b7230
INSTANTANEOUS PEAK STAGE	---	c5.85	d19.10
INSTANTANEOUS LOW FLOW	---	---	f84
ANNUAL RUNOFF (AC-FT)	493300	339700	462400
ANNUAL RUNOFF (CFSM)	1.52	1.05	1.42
ANNUAL RUNOFF (INCHES)	20.65	14.22	19.36
10 PERCENT EXCEEDS	2060	1350	1710
50 PERCENT EXCEEDS	357	262	314
90 PERCENT EXCEEDS	132	164	188

a Gage height, 4.73 ft.

b Gage height, 6.33 ft.

c Backwater from ice jam.

d At former site and datum about Dec, 18, 1965 (backwater from ice jam).

e Estimated.

f Result of current meter measurement.

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.

WATER-DISCHARGE RECORDS

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 U.S. Bureau of Reclamation).

REMARKS.--No estimated daily discharges. Records good. Station equipment includes satellite telemetry. Diversions above station for power developments, industry, municipal supply, and irrigation of about 60,500 acres of which about 1,000 acres are below station (1966 determination). For details on adjudication of diversions, see Remarks for this station in WSP 1347.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	673	643	574	514	453	443	641	949	922	421	359	375
2	672	637	571	511	430	453	661	943	922	416	342	370
3	665	637	570	512	426	458	708	937	887	413	335	375
4	660	638	576	507	431	459	764	947	863	414	332	374
5	659	635	570	514	434	466	735	1050	822	414	327	383
6	665	621	553	509	432	468	717	1140	798	424	322	392
7	694	616	568	506	465	472	718	1190	743	445	321	397
8	744	612	565	504	464	492	699	1200	712	435	331	398
9	742	610	566	513	420	498	691	1190	690	422	358	394
10	739	610	561	503	459	497	718	1200	660	409	363	392
11	733	609	559	500	453	496	760	1210	636	400	354	400
12	736	617	559	500	406	499	826	1220	590	388	354	403
13	725	615	552	500	410	502	897	1420	634	377	358	414
14	735	595	516	497	435	506	877	1510	591	372	354	434
15	753	590	531	494	429	522	841	1410	572	367	356	442
16	785	587	549	494	439	539	874	1350	556	362	348	437
17	736	586	541	494	434	592	958	1370	544	356	353	433
18	706	592	534	491	442	607	1080	1330	538	357	354	431
19	691	581	526	480	430	625	1180	1240	513	355	355	429
20	680	574	502	473	420	619	1250	1190	505	352	362	435
21	672	583	517	466	424	609	1320	1150	495	354	362	430
22	691	594	498	464	419	659	1380	1100	502	353	375	424
23	688	607	522	463	421	646	1400	1050	492	354	377	422
24	684	597	484	490	436	588	1340	1000	467	367	367	420
25	677	561	505	477	435	578	1280	958	461	362	358	416
26	670	541	498	472	441	565	1200	892	461	356	365	416
27	667	567	518	474	465	550	1140	894	470	354	370	422
28	668	547	529	468	455	550	1070	949	529	346	379	437
29	669	574	512	465	---	565	1020	985	502	343	378	446
30	654	581	484	434	---	576	973	957	426	336	377	448
31	646	---	512	374	---	599	---	891	---	340	377	---
TOTAL	21579	17957	16622	15063	12208	16698	28718	34822	18503	11764	11023	12389
MEAN	696	599	536	486	436	539	957	1123	617	379	356	413
MAX	785	643	576	514	465	659	1400	1510	922	445	379	448
MIN	646	541	484	374	406	443	641	891	426	336	321	370
AC-FT	42800	35620	32970	29880	24210	33120	56960	69070	36700	23330	21860	24570

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1994, BY WATER YEAR (WY)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
MEAN	621	589	515	447	437	474	948	1693	1407	839	624
MAX	912	838	712	583	702	1121	2204	3252	3356	1809	997
(WY)	1983	1984	1984	1965	1963	1986	1986	1971	1971	1975	1983
MIN	336	347	342	318	309	362	503	306	275	271	266
(WY)	1978	1978	1993	1993	1993	1988	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1954 - 1994
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CHARACTERISTICS	FOR 1993 CALENDAR YEAR			FOR 1994 WATER YEAR			WATER YEARS 1994		1994	
ANNUAL TOTAL	318213			217346			--			
ANNUAL MEAN	872			595			771			
HIGHEST ANNUAL MEAN	--			--			1266			1986
LOWEST ANNUAL MEAN	--			--			430			1992
HIGHEST DAILY MEAN	3140	May 22		1510	May 14		5030	Jun 2		1986
LOWEST DAILY MEAN	277	Feb 17		321	Aug 7		180	Jan 7		1971
ANNUAL SEVEN-DAY MINIMUM	295	Mar 6		330	Aug 2		226	May 10		1977
INSTANTANEOUS PEAK FLOW	--			1520	May 14		5090	Jun 2		1986
INSTANTANEOUS PEAK STAGE	--			3.31	May 14		5.71	Jun 2		1986
INSTANTANEOUS LOW FLOW	--			a318	Jan 31		b160	Jan 7		1971
ANNUAL RUNOFF (AC-FT)	631200			431100			558400			
10 PERCENT EXCEEDS	1880			957			1490			
50 PERCENT EXCEEDS	686			514			574			
90 PERCENT EXCEEDS	311			363			380			

a Also occurred Aug. 5-7; gage height, 1.69 ft.

b Occurred Jan. 7, 8, 1971; gage height, 1.53 ft.

13027500 SALT RIVER ABOVE RESERVOIR, NEAR ETNA, WY--Continued
(National water-quality assessment station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1986 to current year.

PERIOD OF DAILY RECORD:

Water temperatures: May 1977 to September 1979, June to September 1993, June to September 1994 (discontinued).
INSTRUMENTATION.--Temperature recorder May 1977 to Sept. 1979. Temperature recording data logger from June to Sept. 1993, and June to Sept. 1994.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 19.5°C July 16-18, 29, 1979; minimum, 0.0°C on several days during winter.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 18.5°C June 25.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION	BARO- METRIC PRES- SURE (MM OF HG)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT												
22...	1155	693	488	7.9	15.0	7.5	11.5	116	631	230	62	19
NOV												
19...	1130	541	480	7.8	-8.0	1.5	12.7	109	633	240	65	20
DEC												
17...	1240	525	478	8.3	-3.0	2.5	11.2	100	628	240	63	19
JAN												
14...	1150	487	480	7.8	3.5	4.5	10.6	99	630	240	64	19
FEB												
18...	1230	447	470	7.8	0.5	2.5	10.8	100	610	220	59	18
MAR												
18...	1015	602	529	8.1	2.0	4.0	10.0	95	613	230	62	18
APR												
15...	1130	808	525	8.2	10.5	6.0	10.1	99	625	230	63	17
MAY												
04...	1010	952	463	8.2	10.0	8.0	9.2	96	619	210	59	16
23...	1500	1040	445	8.4	22.5	12.5	10.4	120	622	210	57	16
JUN												
15...	1130	541	464	8.2	14.5	11.0	10.3	116	615	230	62	18
JUL												
01...	1050	422	483	8.2	13.0	25.0	9.7	146	619	230	61	19
22...	1155	359	477	8.2	28.5	14.0	9.8	116	623	230	61	19
AUG												
19...	1325	354	481	8.2	29.0	14.0	11.3	135	622	230	61	20
SEP												
09...	1040	397	489	8.0	22.0	11.0	9.1	102	618	240	62	20
DATE		SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WAT.DIS FET FIELD HCO3 (MG/L)	CAR- BONATE WAT.DIS FET FIELD CO3 (MG/L)	ALKA- LINITY WAT DIS TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
OCT												
22...	11	9		1.1	260	0	210	39	16	0.2	6.3	284
NOV												
19...	12	10		1.1	260	0	210	38	16	0.1	6.7	285
DEC												
17...	12	10		0.9	260	1	218	38	14	0.1	7.5	284
JAN												
14...	13	11		1.1	270	0	222	37	14	0.1	7.5	282
FEB												
18...	11	10		1.0	270	0	221	37	15	0.1	7.2	274
MAR												
18...	21	17		1.6	280	0	233	39	28	0.1	7.3	308
APR												
15...	22	17		1.3	240	0	197	34	29	0.1	7.2	310
MAY												
04...	14	12		1.0	240	0	195	28	17	0.1	6.2	262
23...	12	11		0.9	210	2	176	31	14	0.1	6.2	253
JUN												
15...	12	10		1.0	240	0	197	34	13	0.1	5.8	271
JUL												
01...	11	9		1.0	240	0	197	34	13	0.2	5.8	262
22...	10	9		1.0	240	0	194	34	12	0.2	6.3	273
AUG												
19...	10	8		1.2	240	0	197	33	13	0.1	6.8	260
SEP												
09...	11	9		1.2	240	0	195	35	13	0.1	7.1	274

SALT RIVER BASIN

13027500 SALT RIVER ABOVE RESERVOIR, NEAR ETNA, WY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
OCT											
22...	285	0.39	531	<0.01	1.1	0.01	<0.2	<0.2	0.02	0.02	<0.01
NOV											
19...	290	0.39	416	<0.01	1.2	0.01	<0.2	<0.2	<0.01	<0.01	<0.01
DEC											
17...	290	0.39	403	<0.01	1.1	0.02	<0.2	<0.2	<0.01	<0.01	<0.01
JAN											
14...	294	0.38	371	<0.01	1.2	0.04	<0.2	<0.2	0.03	0.01	<0.01
FEB											
18...	286	0.37	331	0.03	1.2	0.02	<0.2	<0.2	0.03	0.01	<0.01
MAR											
18...	321	0.42	501	0.02	1.0	0.04	<0.2	<0.2	<0.01	<0.01	<0.01
APR											
15...	295	0.42	676	<0.01	0.68	0.03	<0.2	<0.2	0.02	<0.01	0.01
MAY											
04...	261	0.36	673	<0.01	0.66	0.02	<0.2	0.2	0.02	<0.01	0.01
23...	245	0.34	710	0.01	0.50	0.03	<0.2	<0.2	0.03	0.01	<0.01
JUN											
15...	268	0.37	396	<0.01	0.72	0.02	<0.2	<0.2	0.04	<0.01	<0.01
JUL											
01...	267	0.36	299	<0.01	0.80	0.01	<0.2	<0.2	0.01	<0.01	<0.01
22...	264	0.37	265	<0.01	0.96	0.01	0.4	<0.2	0.02	<0.01	<0.01
AUG											
19...	267	0.35	249	0.01	0.98	0.02	<0.2	<0.2	<0.01	<0.01	<0.01
SEP											
09...	271	0.37	294	<0.01	0.96	0.02	<0.2	<0.2	0.01	<0.01	<0.01

DATE	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL	O-18 / O-16 STABLE ISOTOPE RATIO PER MIL	TRITIUM TOTAL (PCI/L)	TRITIUM 2 SIGMA WATER, WHOLE, TOTAL (PCI/L)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT											
22...	<3	3	-132	-17.60	77	5.1	0.9	0.2	5	9.4	70
NOV											
19...	<3	3	--	--	--	--	0.7	0.4	18	26	31
DEC											
17...	<3	4	--	--	--	--	0.6	0.5	18	26	73
JAN											
14...	<3	2	-129	-16.69	76	5.1	--	0.6	25	33	77
FEB											
18...	<3	3	--	--	--	--	0.6	0.5	41	49	54
MAR											
18...	8	10	--	--	--	--	1.3	1.5	68	111	67
APR											
15...	<3	9	-133	-17.58	67	4.5	1.6	1.0	33	72	70
MAY											
04...	3	6	--	--	--	--	1.5	1.0	49	126	88
23...	6	7	--	--	--	--	2.1	0.5	56	157	68
JUN											
15...	5	10	--	--	--	--	1.1	0.4	17	25	77
JUL											
01...	14	8	--	--	--	--	0.9	0.2	4	4.6	100
22...	4	5	-131	-17.54	--	--	0.9	0.2	3	2.9	96
AUG											
19...	<3	4	--	--	--	--	0.8	0.2	15	14	64
SEP											
09...	<3	5	--	--	--	--	0.7	0.2	9	9.6	88

13027500 SALT RIVER ABOVE RESERVOIR, NEAR ETNA, WY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, JUNE TO SEPTEMBER 1994

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	18.0	12.0	17.5	12.0	14.0	9.5
2	---	---	17.0	11.5	17.0	12.5	14.0	10.0
3	---	---	16.5	12.0	17.0	12.0	15.0	10.5
4	---	---	15.5	10.5	17.0	11.5	14.5	9.5
5	---	---	16.0	11.0	17.0	11.5	14.0	9.0
6	---	---	14.0	10.5	17.0	11.5	---	---
7	---	---	16.0	9.5	16.5	11.0	---	---
8	---	---	17.0	10.5	15.0	11.5	---	---
9	---	---	18.0	11.5	14.0	11.5	---	---
10	---	---	17.0	12.0	16.5	10.5	---	---
11	---	---	17.0	11.5	16.0	12.0	---	---
12	---	---	17.0	11.0	16.5	11.5	---	---
13	---	---	16.5	11.0	17.0	11.5	---	---
14	---	---	17.0	11.0	15.5	11.5	---	---
15	---	---	17.0	11.0	17.0	11.5	---	---
16	14.5	10.5	17.5	11.5	16.5	11.0	---	---
17	15.5	9.5	17.0	11.5	16.0	10.5	---	---
18	17.0	10.5	17.0	11.5	15.5	10.5	---	---
19	17.5	11.5	17.0	11.5	15.5	11.0	---	---
20	18.0	12.0	17.5	11.0	15.5	11.0	---	---
21	16.5	13.5	18.0	11.5	16.0	11.5	---	---
22	17.0	12.0	18.0	11.5	15.0	11.5	---	---
23	18.0	12.0	16.5	13.5	15.5	10.0	---	---
24	17.5	11.5	17.5	12.0	15.5	10.0	---	---
25	18.5	11.5	17.0	12.0	16.0	10.0	---	---
26	17.0	12.0	17.0	11.5	15.5	10.5	---	---
27	17.0	10.5	15.5	12.0	13.5	10.5	---	---
28	18.0	11.5	16.0	12.0	15.0	9.5	---	---
29	17.5	12.0	18.0	12.0	15.5	10.0	---	---
30	17.5	11.5	16.0	12.5	14.5	9.5	---	---
31	---	---	16.5	12.5	14.0	9.5	---	---
MONTH	---	---	18.0	9.5	17.5	9.5	---	---

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 good except for estimated daily discharges during May and June, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	77	e76	74	67	65	68	175	e380	62	74	65
2	79	77	e77	74	67	66	71	169	e410	62	71	65
3	79	77	77	74	e67	67	74	194	233	63	71	66
4	79	77	e75	73	68	67	78	210	158	64	70	66
5	79	77	e76	e73	e65	67	69	233	137	65	70	65
6	81	76	e76	73	e66	66	69	241	100	67	70	65
7	82	76	77	73	e65	65	70	222	87	69	69	65
8	83	77	e76	73	e66	64	67	185	81	69	71	65
9	80	76	e77	73	68	64	66	166	79	69	72	65
10	80	76	77	72	68	64	68	155	74	70	70	65
11	79	76	77	72	68	66	69	146	70	71	71	65
12	79	76	e76	71	e64	64	71	191	70	72	70	65
13	98	76	76	72	67	64	74	246	72	73	70	66
14	104	76	76	72	67	65	72	298	81	75	69	67
15	91	75	76	71	66	67	72	291	77	76	70	67
16	92	75	75	70	66	68	78	271	69	75	68	66
17	87	75	74	70	67	68	88	257	66	74	68	65
18	83	75	74	70	69	67	116	227	64	74	68	65
19	82	75	75	69	69	67	140	187	62	74	68	65
20	81	75	74	69	67	66	169	175	61	74	68	64
21	80	75	74	69	67	65	200	160	60	73	68	64
22	79	e75	73	69	66	65	233	153	61	74	68	64
23	79	e74	73	69	e65	67	259	177	60	74	67	63
24	78	75	73	70	e64	65	277	226	59	74	66	63
25	78	e74	73	69	e66	64	312	274	60	74	66	63
26	77	75	73	69	69	64	281	e330	60	72	66	63
27	77	75	73	69	68	63	229	e375	59	72	66	63
28	78	76	73	68	65	63	199	e430	60	72	66	63
29	77	75	72	68	---	63	155	e580	60	71	66	65
30	77	76	72	67	---	64	161	e370	61	71	66	71
31	77	---	72	e67	---	66	---	e400	---	71	66	---
TOTAL	2535	2270	2318	2192	1867	2026	3955	7714	3031	2196	2129	1949
MEAN	81.8	75.7	74.8	70.7	66.7	65.4	132	249	101	70.8	68.7	65.0
MAX	104	77	77	74	69	68	312	580	410	76	74	71
MIN	77	74	72	67	64	63	66	146	59	62	66	63
AC-FT	5030	4500	4600	4350	3700	4020	7840	15300	6010	4360	4220	3870

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1994, BY WATER YEAR (WY)

	MEAN	77.6	76.1	72.7	69.8	66.6	68.2	129	262	210	85.4	76.5	74.2
MAX	101	97.9	94.0	88.4	82.8	87.9	215	395	566	122	106	103	
(WY)	1985	1985	1985	1985	1986	1986	1990	1993	1986	1986	1986	1986	1986
MIN	61.6	61.9	58.8	58.1	53.7	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	1988

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1984 - 1994
ANNUAL TOTAL	44737	34182	--
ANNUAL MEAN	123	93.6	106
HIGHEST ANNUAL MEAN	--	--	157
LOWEST ANNUAL MEAN	--	--	84.4
HIGHEST DAILY MEAN	700	May 16	810
LOWEST DAILY MEAN	53	Mar 12	a53
ANNUAL SEVEN-DAY MINIMUM	54	Mar 7	53
INSTANTANEOUS PEAK STAGE	--	b5.71	b5.71
INSTANTANEOUS LOW FLOW	--	--	c52
ANNUAL RUNOFF (AC-FT)	88740	67800	76620
10 PERCENT EXCEEDS	271	171	185
50 PERCENT EXCEEDS	79	72	75
90 PERCENT EXCEEDS	56	64	61

a Occurred Feb. 4-6, 13-18, 21-24, Mar. 5, Apr. 5, 1989, Mar. 12, 1993.

b Result of backwater from Bechler River.

c Result of discharge measurement.

e Estimated.

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 1994

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 Morrie Avenue, at Cheyenne	South Platte River	Lat 41°07'22", long 104°47'40", in NE ¹ / ₄ NW ¹ / ₄ SE ¹ / ₄ sec.5, T.13 N., R.66 W., Laramie County, Hydrologic Unit 10190009, 25 ft upstream from culvert on Morrie Avenue in Cheyenne.			08-01-94	10.74	(a)
Henderson Drain at Nationaway, in Cheyenne	Crow Creek	Lat 41°08'08", lon 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, 35 ft upstream from culvert on Nationway, in Cheyenne			07-12-94	7.48	(a)
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, 15 ft upstream from culvrt on Vista Lane in Cheyenne.		1987-94	07-12-94	2.90	(a)
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, 20 ft upstream from culvert on Seminole Road in Cheyenne.			08-01-94	10.88	(a)
Dry Creek tributary at Briarwood Court, in Cheyenne	Dry Creek	Lat 41°09'52", long 104°47'08", in SE ¹ / ₄ NW ¹ / ₄ SW ¹ / ₄ sec.21, T.14 N., R.66 W., Laramie County, Hydrologic Unit 10190009, 30 ft upstream from culvert on Briarwood Court, in Cheyenne			07-12-94	3.18	(a)
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, 25 ft upstream from culvrt on Windmill Road in Cheyenne.			08-01-94	8.63	(a)
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, 25 ft upstream from culvert on College Drive, in Cheyenne.			07-12-94	11.48	(a)
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, 25 ft upstream from culvert on Rawlins SStreet, in Cheyenne.			08-01-94	4.37	(a)
Spread Creek basin							
Spread Creek near Moran 13012500	Snake River	Lat 43°47'27", long 110°32'12", in NW ¹ / ₄ NW ¹ / ₄ SE ¹ / ₄ sec.9, T.44 N., R.114 W., Teton County, Hydrologic Unit 17040101, Grand Teton National Park, 250 ft upstream from U.S. Highway 191 bridge, 3.9 mi south of Moran, and 26 mi north of Jackson.	101	1917,1918, 1990,1992, 1993#,1994	05-13-94	3.70	526
Flat Creek basin							
Flat Creek near Jackson 13018000	Snake River	Lat 43°33'24", long 110°37'15", in SW ¹ / ₄ NW ¹ / ₄ SW ¹ / ₄ sec.35, T.42 N., R.115 W., Teton County, Hydrologic Unit 17040103, Teton National Forest, 0.1 mi upstream from National Forest boundary and 9 miles northeast of Jackson.	40.1	1989-93#, 1994	06-01-94	4.17	183
Flat Creek near Cheney 13018500	Snake River	Lat 43°23'54", long 110°45'19", in SW ¹ / ₄ NE ¹ / ₄ SE ¹ / ₄ sec.28, T.40 N., R.116 W., Teton County, Hydrologic Unit 17040103, on left bank 1.1 mi upstream from mouth, 1.5 mi south of Cheney, and 5.5 mi south of Jackson.	142	1917,1918, 1989-93#, 1994			

Operated at a continuous-record gaging station
a Discharge not determined.

Discharge measurements made at miscellaneous sites during water year 1994

Stream	Tributary to	Location	Drainage area (sq mi)	Measured pre- viously (water years)	Date	Discharge (cfs)
Yellowstone River basin						
Dinwoody Canal 432302109215601	Wind River	Lat 43°23'02", long 109°21'56", in NE ¹ / ₄ SW ¹ / ₄ NW ¹ / ₄ sec.28, T.5 N., R.5 W., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, on left bank 600 ft downstream from headgate, 2.7 mi upstream from aqueduct, and 2.7 mi south of Wilderness.		1988-93	5-06-94 6-23-94 8-31-94 9-23-94	70.0 228 192 92.0
Upper Wind River "A" Canal 432609109205001	Wind River	Lat 43°26'09", long 109°20'50", in NW ¹ / ₄ SW ¹ / ₄ SW ¹ / ₄ sec.32, T.5 N., R.4 W., Fremont County, Hydrologic Unit 10080001, Wind River Indian Reservation, on left bank 200 ft downstream from headgates and 1.2 mi northeast of Wilderness.		1988-93	5-27-94 7-12-94 8-22-94 9-28-94	105 82.5 45.6 59.0
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.		1989-93	5-27-94 7-12-94 8-22-94 9-18-94	39.7 41.2 29.0 15.5
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.		1989-93	5-31-94 7-13-94 8-22-94 9-29-94	87.5 91.0 70.6 24.0
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.		1988-93	5-31-94 7-13-94 8-22-94 9-28-94	88.0 59.5 45.6 17.5
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.		1988-93	5-18-94 7-11-94 8-18-94 9-29-94	34.3 35.8 15.1 8.54
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.		1991-93	5-18-94 7-11-94 8-18-94	134 178 54.5
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.		1989-93	5-18-94 7-14-94 8-18-94 9-19-94	91.6 54.0 20.0 6.02
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.		1988-93	5-17-94 7-12-94 8-18-94 9-29-94	38.2 51.8 7.75 7.91
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.		1989-93	5-26-94 6-28-94 7-25-94 9-09-94	34.8 94 71.8 0

Discharge measurements made at miscellaneous sites during water year 1994

Stream	Tributary to	Location	Drainage area (sq mi)	Measured pre- viously (water years)	Date	Discharge (cfs)
Yellowstone River basin--Continued						
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		1988-93	5-17-94 7-12-94 8-18-94 9-29-94	77.6 94.4 35.1 9.87
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.		1988-93	5-19-94 7-12-94 8-17-94 9-30-94	36.4 55.6 27.9 7.44
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.		1991-93	5-19-94 7-05-94 8-17-94 9-30-94	45.4 38.6 12.7 8.37
Mill Creek below 14-B Lateral 425956108405201	Little Wind River	Lat 42°59'56", long 108°40'52", 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, 60 ft downstream from 14-B Lateral Headworks, 2.1 mi upstream from mouth, and 5 mi southeast of Ethete.		1991-93	4-26-94 5-19-94 7-05-94 8-17-94 9-30-94	12.8 16.7 14.2 28.2 6.97
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.		1991-93	5-09-94 6-13-94 7-11-94 8-23-94 9-26-94	14.4 49.3 59.5 9.59 5.87
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.		1991-93	5-20-94 7-12-94 8-17-94 9-30-94	10.5 33.0 8.00 2.52
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.		1988-93	5-09-94 6-13-94 7-11-94 8-11-94	6.46 17.5 17.2 0
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 River Indian Reservation, on right bank 0.1 mi downstream from State Highway 137, 1.7 mi downstream from headgates, and 5.3 mi northeast of Arapahoe.		1988-93	5-13-94 6-09-94 7-11-94 8-08-94 9-06-94	103 117 69.3 71.0 28.3
Dugout Creek	Salt Creek	Lat 43°28'39", long 106°24'40", in NW ¹ / ₄ NW ¹ / ₄ SE ¹ / ₄ sec.36, T.41 N., R.80 W., Natrona County, Hydrologic Unit 10090204, 8.5 mi northwest of Midwest on U.S. Highway 87.	35.6		7-07-94	1,280

DISCHARGE AT MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1994

Stream	Tributary to	Location	Drainage area (sq mi)	Measured pre- viously (water years)	Date	Discharge (cfs)
Snake River basin						
Spread Creek near Moran 13012500	Snake River	Lat 43°47'27", long 110°32'12", in NW ¹ / ₄ NW ¹ / ₄ SE ¹ / ₄ sec.9, T.44 N., R.114 W., Teton County, Hydrologic Unit 17040101, Grand Teton National Park, 250 ft upstream from U.S. Highway 191 bridge, 3.9 mi south of Moran, and 26 mi north of Jackson.	101	1917, 1918, 1990-92 1993#	05-03-94 05-13-94 05-27-94 06-29-94	52.0 426 69.1 3.48
Flat Creek near Jackson 13018000	Snake River	Lat 43°33'24", long 110°37'15", in SW ¹ / ₄ NW ¹ / ₄ SW ¹ / ₄ sec.35, T.42 N., R.115 W., Teton County, Hydrologic Unit 17040103, Teton National Forest, on right bank 0.1 mi upstream from forest boundary and 9 mi northeast of Jackson.	40.1	1933-41, 1989-93#	10-05-93 03-29-94 05-04-94 06-03-94	26.5 7.82 20.3 158
Flat Creek near Cheney 13018500	Snake River	Lat 43°23'54", long 110°45'19", in SW ¹ / ₄ NE ¹ / ₄ SE ¹ / ₄ sec.28, T.40 N., R.116 W., Teton County, Hydrologic Unit 17040103, on left bank 1.1 mi upstream from mouth, 1.5 mi south of Cheney, and 5.5 mi south of Jackson.	142	1917, 1918, 1989-93#	10-05-93 03-29-94 05-03-94 06-03-94	79.2 63.2 43.8 109

Operated as a continuous-record gaging station.

PLATTE RIVER BASIN

STATION	NUMBER	DATE	TIME	CALCIUM	MAGNE-	SODIUM,	POTAS-	SULFATE	ALUM-	ARSENIC	BARIUM,	BERYL-
				RECOV. FM BOT- TOM MA- TERIAL (MG/KG AS CA)	SIVM, RECOV. FM BOT- TOM MA- TERIAL (MG/KG)	RECOV. FM BOT- TOM MA- TERIAL (MG/KG AS NA)	SIVM, RECOV. FM BOT- TOM MA- TERIAL (MG/KG)		INUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	RECOV. FM BOT- TOM MA- TERIAL (UG/G AS BA)	LIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)
	06755800	09-28-94	1230	9500	690	<500	<500	0.05	1400	1	37	<0.2
	06755960	09-28-94	1150	2600	<500	<500	<500	0.02	780	<1	17	<0.2
410722104474001	09-28-94	1115	3000	<500	<500	<500	<500	0.02	1100	<1	18	<0.2
410657104445701	09-28-94	1030	<500	<500	<500	<500	<500	0.02	180	1	<10	<0.2
410736104392001	09-28-94	0930	610	<500	<500	<500	<500	0.01	410	<1	12	<0.2
410609104272101	09-28-94	0840	1100	<500	<500	<500	<500	0.03	470	<1	25	<0.2

DATE	CADMIUM RECOV. FM BOT- TOM MA- THERIAL	CHRO- MIUM, RECOV. FM BOT- TOM MA- THERIAL	COBALT, RECOV. FM BOT- TOM MA- THERIAL	COPPER, RECOV. FM BOT- TOM MA- THERIAL	IRON, RECOV. FM BOT- TOM MA- THERIAL	LEAD, RECOV. FM BOT- TOM MA- THERIAL	MANGA- NESE, RECOV. FM BOT- TOM MA- THERIAL	MERCURY RECOV. FM BOT- TOM MA- THERIAL	MOLYB- DENUM, RECOV. FM BOT- TOM MA- THERIAL	NICKEL, RECOV. FM BOT- TOM MA- THERIAL	SELE- NIUM, TOTAL IN BOT- TOM MA- THERIAL	
	(UG/G	TOM MA- THERIAL	THERIAL	THERIAL	THERIAL	THERIAL	TOM MA- THERIAL	THERIAL	TOM MA- THERIAL	THERIAL	TOM MA- THERIAL	
	AS CD)	(UG/G)	(UG/G	(UG/G	(UG/G	(UG/G	(UG/G)	AS HG)	(UG/G)	(UG/G	(UG/G)	
			AS CO)	AS CU)	AS FE)	AS PB)					AS NI)	
09-28-94	<2	<2	<4	<3	2200	5	75	<0.10	<4.0	<4	<1	
09-28-94	<2	<2	<4	<3	1400	2	36	<0.10	<4.0	<4	<1	
09-28-94	<2	<2	<4	<3	1500	8	26	<0.10	<4.0	<4	<1	
09-28-94	<2	<2	<4	4	230	10	4	<0.10	<4.0	<4	1	
09-28-94	<2	<2	<4	<3	1100	2	18	<0.10	<4.0	<4	<1	
09-28-94	<2	<2	<4	<3	560	2	27	<0.10	<4.0	<4	<1	

DATE	SILVER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS AG)	VANA- DIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ACRO- LEIN BOT.MAT (UG/KG)	BROMO- FORM BOT.MAT (UG/KG)	CARBON TETRA- CHLOR- IDE BOT.MAT (UG/KG)	2- CHLORO- ETHYL VINYL ETHER BOT.MAT (UG/KG)	DI- BROMO- CHLORO- METHANE BOT.MAT (UG/KG)	1,1-DI- CHLORO- ETHANE BOT.MAT (UG/KG)	1,2-DI- CHLORO- ETHANE BOT.MAT (UG/KG)	1,2-DI- CHLORO- PROPANE BOT.MAT (UG/KG)	TRANS- 1,3-DI- CHLORO- PROPENE BOT.MAT (UG/KG)
	09-28-94	<3	6	<300	<100	<100	<500	<100	<100	<100	<100
09-28-94	<3	<4	<300	<100	<100	<500	<100	<100	<100	<100	<100
09-28-94	<3	<4	<300	<100	<100	<500	<100	<100	<100	<100	<100
09-28-94	<3	<4	<300	<100	<100	<500	<100	<100	<100	<100	<100
09-28-94	<3	<3	<300	<100	<100	<500	<100	<100	<100	<100	<100
09-28-94	<3	<4	<300	<100	<100	<500	<100	<100	<100	<100	<100

[illegible]

ANALYSIS OF SAMPLES COLELCTED AT SPECIAL STUDY AND MISCELLANEOUS SITES

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	DICAMBA (MED- IBEN) (BAN- VEL D) TOTAL (UG/L)
NOV							
10...	1425	5.9	1.0	7.0	971	697	<0.01
FEB							
08...	1350	4.0	0.0	-14.0	1010	792	<0.01
MAY							
11...	0940	18	10.0	20.0	400	253	<0.01
JUN							
08...	1245	10	14.0	15.0	812	599	--
JUL							
12...	1425	6.7	20.0	33.0	974	702	0.07
AUG							
10...	1125	5.2	16.0	26.5	1030	733	<0.01
SEP							
09...	0950	5.0	12.0	22.5	990	684	<0.01

DATE	PICLO- RAM (TOR- DON) (AMDON) TOTAL (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY)
NOV							
10...	<0.01	<0.01	<0.01	<0.01	<0.01	9	0.14
FEB							
08...	0.21	<0.01	<0.01	<0.01	<0.01	401	4.3
MAY							
11...	<0.01	<0.01	<0.01	<0.01	<0.01	848	41
JUN							
08...	--	--	--	--	--	97	2.6
JUL							
12...	0.29	0.15	<0.01	<0.01	<0.01	44	0.80
AUG							
10...	0.24	<0.01	<0.01	<0.01	<0.01	55	0.77
SEP							
09...	0.17	<0.01	<0.01	<0.01	<0.01	7	0.09

KENDRICK IRRIGATION DRAINAGE STUDY
Fish and Wildlife Sites

PLATTE RIVER BASIN

424822106362301 FW-7 NEAR CASPER, WY (LAT 42 48 22 LONG 106 36 23)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)
JUN									
14...	1435	4470	10.2	16.0	18.0	620	11.2	142	1300
14...	1440	4470	10.2	16.0	18.0	620	11.2	142	1300

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
JUN								
14...	190	200	740	9	8.7	66	70	48
14...	180	200	730	9	8.9	66	70	48

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
JUN							
14...	12	2500	49	1.4	2.7	3740	2
14...	12	2500	49	1.4	2.7	3720	2

424844106345901 FW-2 NEAR CASPER, WY (LAT 42 48 44 LONG 106 34 59)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)
JUN									
13...	1450	1560	8.2	17.0	28.5	620	7.8	100	480

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
JUN								
13...	100	55	180	4	12	192	236	0

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
JUN							
13...	288	620	24	0.5	5.3	1140	5

ANALYSIS OF SAMPLES COLECTED AT SPECIAL STUDY AND MISCELLANEOUS SITES

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
Fish and Wildlife Sites--Continued

PLATTE RIVER BASIN--Continued

424924106334801 FW-4 NEAR CASPER, WY (LAT 42 49 24 LONG 106 33 48)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)
JUN 13...	1330	1730	7.8	20.0	25.0	622	4.9	67
								550

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
JUN 13...	120	61	190	4	15	280	276	0

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
JUN 13...	337	660	23	0.7	22	1260	<1

424956106263701 FW-5 NEAR CASPER, WY (LAT 42 49 56 LONG 106 26 37)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)
JUN 13...	1300	9260	9.2	19.0	30.0	620	9.2	126
JUN 13...	1305	9260	9.2	19.0	30.0	620	9.2	126
								4200
								4400

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
JUN 13...	310	840	1200	8	20	174	168	48
JUN 13...	330	870	1200	8	20	174	168	48

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
JUN 13...	107	6400	110	0.3	0.4	8980	<1
JUN 13...	107	6500	110	0.3	0.4	9130	<1

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
Fish and Wildlife Sites--Continued

PLATTE RIVER BASIN--Continued

425130106292301 FW-6 NEAR CASPER, WY (LAT 42 51 30 LONG 106 29 23)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)
JUN 13...	1520	10200	8.3	19.0	31.0	617	7.1	98	3700

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
JUN 13...	440	630	1700	12	16	352	344	0

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
JUN 13...	420	6600	91	0.5	5.1	9690	<1

ANALYSIS OF SAMPLES COLELCTED AT SPECIAL STUDY AND MISCELLANEOUS SITES

KENDRICK IRRIGATION DRAINAGE STUDY
North Platte River, Tributaries, Lakes and Reservoir Sites

PLATTE RIVER BASIN

423338106441601 CASPER CANAL AT ALCOVA, WY (LAT 42 33 38 LONG 106 44 16)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)
JUL 18...	1400	298	443	8.4	19.5	621	7.6	102	170

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	SODIUM PERCENT	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CACO3)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)
JUL 18...	45	15	28	0.9	26	2.6	124	126	0

DATE	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L AS SE)
JUL 18...	154	94	6.9	0.4	13	281

06642000 NORTH PLATTE RIVER AT ALCOVA, WY (LAT 42 34 27 LONG 106 42 31)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)
DEC 07...	0920	600	504	8.4	1.0	630	13.0	111	180
MAR 16...	0915	506	484	8.3	5.0	626	14.0	134	180
MAY 16...	0930	1830	455	7.9	9.0	625	11.2	119	170
JUL 18...	1200	3350	443	8.3	18.0	627	9.5	123	170
SEP 06...	0930	3470	440	8.3	20.0	635	9.3	124	170

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	SODIUM PERCENT	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CACO3)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)
DEC 07...	48	15	32	1	27	3.1	125	118	0
MAR 16...	47	14	30	1	27	3.4	125	122	12
MAY 16...	45	14	28	0.9	26	3.2	126	--	--
JUL 18...	44	15	29	1	26	2.9	124	118	0
SEP 06...	44	14	26	0.9	25	2.6	120	125	5

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

06642000 NORTH PLATTE RIVER AT ALCOVA, WY (LAT 42 34 27 LONG 106 42 31)--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SELE- NIUM, TOTAL (UG/L AS SE)
DEC 07...	144	110	9.6	0.3	14	303	--	<1
MAR 16...	124	110	9.8	0.4	15	303	--	<1
MAY 16...	--	99	7.7	0.4	14	287	--	<1
JUL 18...	144	94	7.2	0.3	13	276	<1	--
SEP 06...	143	93	7.5	0.3	14	277	--	<1

424121106345301 NORTH PLATTE RIVER OXBOW BELOW BATES CREEK, NEAR ALCOVA, WY (LAT 42 41 21 LONG 106 34 53)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
JUL 20...	0920	3510	7.4	17.0	637	1.5	19	1700	390	
AUG 16...	A0810	--	--	--	--	--	--	--	--	--

A-No water available for sampling.

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
JUL 20...	170	290	3	27	36	163	160	0
AUG 16...	--	--	--	--	--	--	--	--

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
JUL 20...	195	2000	54	0.5	32	3070	<1
AUG 16...	--	--	--	--	--	--	--

ANALYSIS OF SAMPLES COLECTED AT SPECIAL STUDY AND MISCELLANEOUS SITES

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

06643060 POISON SPRING CREEK AT CASPER CANAL, NEAR ALCOVA, WY (LAT 42 43 33 LONG 106 39 13)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)
OCT 05...	1425	0.32	1880	8.3	13.5	627	8.6	101	350
MAR 15...	1120	1.3	1870	8.3	3.5	629	10.0	92	390

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
OCT 05...	84	34	300	7	65	4.3	345	344	0
MAR 15...	95	36	280	6	61	5.7	365	370	5

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
OCT 05...	420	650	11	1.3	18	1310	<1
MAR 15...	441	630	13	1.4	21	1300	<1

424411106365101 UNNAMED SEEP NEAR RASMUS LEE LAKE SOUTH END, NEAR CASPER, WY (LAT 42 44 11 LONG 106 36 51)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
SEP 22...	1045	0.03	2060	7.7	9.0	633	8.3	87	910	270	57
27...	0905	0.03	1990	7.8	9.0	628	8.2	87	910	270	57

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
SEP 22...	130	2	24	8.3	236	245	0	299	960	16	1.2
27...	120	2	22	6.4	246	230	0	281	930	12	1.2

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SELE- NIUM, TOTAL (UG/L AS SE)
SEP 22...	12	1600	<0.01	<0.05	<0.01	<0.01	27	21	<1
27...	12	1550	<0.01	<0.05	<0.01	<0.01	54	50	--

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

424429106363201 UNNAMED SEEP NEAR RASMUS LEE LAKE EAST END, NEAR CASPER, WY (LAT 42 44 29 LONG 106 36 32)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
SEP											
22...	1150	0.02	1950	8.0	11.0	633	10.0	110	780	210	63
27...	1005	0.03	1850	7.9	9.5	628	9.9	106	720	190	60

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)	ALKA- LITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
SEP											
22...	150	2	29	8.6	279	280	0	342	810	35	1.0
27...	150	2	31	6.1	303	295	0	360	740	23	1.2

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)
SEP									
22...	20	1470	<0.01	<0.05	0.02	0.01	<3	6	<1
27...	16	1360	<0.01	<0.05	0.02	<0.01	<3	12	--

424423106363801 RASMUS LEE LAKE NEAR ISLAND ON EAST END, NEAR GOOSE EGG, WY (LAT 42 44 23 LONG 106 36 38)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
OCT											
05...	0900	17100	8.9	9.0	630	9.7	108	3800	190	800	3500
NOV											
09...	1355	18600	9.2	0.5	633	>20.0	--	4500	240	940	3500
DEC											
07...	0745	25400	8.5	0.0	625	>20.0	--	6500	300	1400	6200
JAN											
21...	0940	25000	8.5	0.0	636	0.9	8	6600	340	1400	6100
FEB											
15...	0845	31300	8.4	0.0	631	0.5	5	9100	520	1900	7900
MAR											
16...	1355	7810	8.9	12.0	622	9.4	110	1700	120	340	1500
APR											
15...	1320	16000	9.3	11.0	630	19.2	224	4500	220	960	3600
MAY											
16...	1200	21400	9.6	22.0	620	9.4	143	5000	190	1100	5200
JUN											
13...	0900	24600	9.5	16.0	620	6.6	90	6800	240	1500	6300
JUL											
19...	0815	31300	9.1	15.0	630	3.4	46	8800	280	2000	8300
AUG											
16...	0900	45200	8.8	17.0	629	1.2	18	14000	490	3000	13000
SEP											
06...	1315	11200	8.6	25.0	629	6.4	98	2200	110	470	2400

ANALYSIS OF SAMPLES COLELCTED AT SPECIAL STUDY AND MISCELLANEOUS SITES

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

424423106363801 RASMUS LEE LAKE NEAR ISLAND ON EAST END, NEAR GOOSE EGG, WY--Continued
(LAT 42 44 23 LONG 106 36 38)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)	ALKA- LITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)
OCT 05...	25	67	34	510	470	84	403	9900	380	1.3	5.7
NOV 09...	23	63	42	13	500	132	342	11000	410	1.8	7.3
DEC 07...	33	67	57	686	595	72	580	17000	700	0.8	9.2
JAN 21...	33	67	57	559	720	72	732	17000	630	1.1	14
FEB 15...	36	65	48	1030	1050	0	1280	22000	840	1.3	17
MAR 16...	16	65	16	286	250	46	212	4200	160	0.5	4.9
APR 15...	23	63	39	422	420	120	268	12000	420	0.8	0.60
MAY 16...	32	69	49	339	320	144	98	15000	540	0.8	3.7
JUN 13...	33	67	60	430	370	168	110	18000	1300	0.8	7.1
JUL 19...	38	67	81	468	395	132	214	24000	820	0.9	4.1
AUG 16...	49	67	140	653	660	132	537	39000	1300	0.8	6.6
SEP 06...	22	70	30	312	298	10	344	6400	340	0.6	17

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	SELE- NIUM, TOTAL (UG/L AS SE)
OCT 05...	15100	--	--	--	--	--	--	--	68
NOV 09...	16400	--	--	--	--	--	--	--	74
DEC 07...	26000	--	--	--	--	--	--	--	120
JAN 21...	26000	--	--	--	--	--	--	--	120
FEB 15...	33900	--	--	--	--	--	--	--	210
MAR 16...	6490	--	--	--	--	--	--	--	140
APR 15...	17500	--	--	--	--	--	--	--	130
MAY 16...	22200	--	--	--	--	--	--	--	100
JUN 13...	27600	0.10	0.43	0.06	33	1.2	0.03	0.01	130
JUL 19...	35800	--	--	--	--	--	--	--	120
AUG 16...	57300	--	--	--	--	--	--	--	110
SEP 06...	9950	--	--	--	--	--	--	--	25

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
 North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

424330106364301 WILLOW CREEK ABOVE POISON SPRING CREEK, NEAR BESSEMER BEND, WY (LAT 42 43 30 LONG 106 36 43)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	SODIUM PERCENT	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
OCT 06...	1550	E0.005	3380	8.1	15.0	980	180	130	470	7	51	10

E-Estimate.

DATE	TIME	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SELE-NIUM, TOTAL (UG/L AS SE)
OCT 06...	457		454	0	554	1400	33	1.1	34	2530	2

424334106364201 POISON SPRING CREEK ABOVE CONFLUENCE WITH WILLOW CREEK, NEAR CASPER, WY (LAT 42 43 34 LONG 106 36 42)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)
OCT 06...	1530	0.43	2410	8.3	11.0	629	7.4	82	480

DATE	TIME	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	SODIUM PERCENT	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)
OCT 06...	98	58	390	8	63	8.3	363	360	0	

DATE	TIME	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SELE-NIUM, TOTAL (UG/L AS SE)
OCT 06...		439	900	27	1.4	20	1720	6

ANALYSIS OF SAMPLES COLELCTED AT SPECIAL STUDY AND MISCELLANEOUS SITES

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

424509106361801 GOOSE LAKE NEAR EAST END, NEAR GOOSE EGG, WY (LAT 42 45 09 LONG 106 36 18)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
OCT											
06...	0820	18100	9.4	9.0	628	8.2	92	4200	50	1000	3900
06...	0825	18100	9.4	9.0	628	8.2	92	4200	50	1000	3800
06...	0820	--	--	--	--	--	--	--	--	--	--
NOV											
09...	1115	18900	9.4	0.0	632	12.6	112	4300	63	1000	3600
09...	1120	18900	9.4	0.0	632	12.6	112	4700	67	1100	4600
DEC											
07...	1010	19800	9.5	0.0	625	14.7	133	4700	72	1100	4000
JAN											
21...	0830	20900	9.4	0.0	634	4.2	38	5500	73	1300	4700
FEB											
15...	1015	22500	9.2	0.0	630	2.1	19	6000	98	1400	5100
MAR											
16...	1100	8940	9.5	6.5	624	10.6	109	2100	52	470	1700
APR											
15...	1420	17000	9.3	11.0	630	13.8	162	4700	83	1100	3700
15...	1425	17000	9.3	11.0	630	13.8	162	4500	62	1100	3500
MAY											
16...	1455	19500	9.2	18.0	620	7.6	106	5100	83	1200	3900
JUN											
13...	0840	18500	9.7	15.5	622	10.9	144	5100	79	1200	4000
JUL											
19...	0950	21000	9.4	18.0	630	5.4	75	5900	56	1400	4800
AUG											
16...	1120	22300	9.3	24.0	629	12.9	202	6400	67	1500	5400
SEP											
06...	0945	23900	9.2	21.0	630	14.5	215	6800	85	1600	5200

DATE	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)
OCT											
06...	26	66	37	724	540	264	122	11000	730	1.5	2.3
06...	25	66	34	724	540	264	122	11000	730	1.4	2.2
06...	--	--	--	--	--	--	--	--	--	--	--
NOV											
09...	24	65	26	--	805	276	421	11000	690	1.8	2.4
09...	29	68	36	726	805	276	421	12000	730	1.9	2.6
DEC											
07...	25	65	39	787	810	282	415	12000	860	1.3	2.7
JAN											
21...	27	65	45	842	880	312	439	13000	820	0.9	3.0
FEB											
15...	29	65	48	888	930	288	549	14000	880	1.0	3.3
MAR											
16...	16	64	19	337	358	101	232	4700	310	0.5	1.5
APR											
15...	23	63	41	754	720	228	415	12000	780	0.8	2.4
15...	23	62	43	755	720	228	415	12000	740	0.8	2.4
MAY											
16...	24	62	46	787	790	180	598	12000	790	0.8	1.8
JUN											
13...	24	63	43	734	730	322	237	12000	790	0.7	1.3
JUL											
19...	27	64	48	813	790	360	232	15000	980	0.8	0.20
AUG											
16...	29	64	48	823	860	300	439	14000	960	0.8	2.2
SEP											
06...	27	62	52	851	876	312	434	15000	1000	0.6	2.4

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

424509106361801 GOOSE LAKE NEAR EAST END, NEAR GOOSE EGG, WY (LAT 42 45 09 LONG 106 36 18)--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, IN BOT- TOM MA- TERIAL (UG/G)
OCT										
06...	17000	--	--	--	--	--	--	--	94	--
06...	16900	--	--	--	--	--	--	--	86	--
06...	--	--	--	--	--	--	--	--	--	8
NOV										
09...	16900	--	--	--	--	--	--	--	120	--
09...	19000	--	--	--	--	--	--	--	120	--
DEC										
07...	18600	--	--	--	--	--	--	--	120	--
JAN										
21...	20500	--	--	--	--	--	--	--	160	--
FEB										
15...	22100	--	--	--	--	--	--	--	150	--
MAR										
16...	7470	--	--	--	--	--	--	--	180	--
APR										
15...	18100	--	--	--	--	--	--	--	170	--
15...	17800	--	--	--	--	--	--	--	180	--
MAY										
16...	18500	--	--	--	--	--	--	--	180	--
JUN										
13...	18600	0.14	0.58	0.05	15	0.65	0.30	<0.01	180	--
JUL										
19...	--	--	--	--	--	--	--	--	120	--
AUG										
16...	--	--	--	--	--	--	--	--	120	--
SEP										
06...	23500	--	--	--	--	--	--	--	160	--

06643100 POISON SPRING CREEK NEAR ALCOVA, WY (LAT 42 42 55 LONG 106 34 43)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)
OCT									
05...	1825	0.94	3810	8.3	12.5	631	6.9	79	810
DEC									
08...	1250	1.2	4220	8.2	2.5	627	10.5	95	930
08...	1255	1.2	4220	8.2	2.5	627	10.5	95	930
MAR									
15...	1630	2.2	4250	8.5	10.0	630	9.1	99	940
MAY									
16...	1330	1.7	2750	8.2	18.0	625	9.2	120	600
JUL									
20...	1445	0.78	3510	8.0	19.5	634	7.8	104	720
SEP									
06...	1100	0.58	4640	8.0	11.0	636	8.9	99	900

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
OCT									
05...	160	99	670	10	64	9.3	436	406	0
DEC									
08...	190	110	710	10	62	9.7	464	451	0
08...	190	110	720	10	63	9.6	466	451	0
MAR									
15...	140	140	760	11	64	10	377	380	26
MAY									
16...	120	73	450	8	62	8.9	340	330	0
JUL									
20...	150	83	650	11	66	0.10	378	373	0
SEP									
06...	180	110	870	13	67	11	478	484	0

ANALYSIS OF SAMPLES COLECTED AT SPECIAL STUDY AND MISCELLANEOUS SITES

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

06643100 POISON SPRING CREEK NEAR ALCOVA, WY (LAT 42 42 55 LONG 106 34 43)--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
OCT 05...	495	1600	49	1.3	20	2850	45
DEC 08...	550	1900	51	1.4	26	3270	62
08...	550	1800	50	1.3	25	3180	63
MAR 15...	410	2000	62	1.3	16	3360	48
MAY 16...	403	1200	34	1.1	17	2100	33
JUL 20...	455	1500	47	1.3	20	2680	35
SEP 06...	591	2100	63	1.6	24	3650	42

06643510 NORTH PLATTE RIVER ABOVE POISON SPIDER CREEK, NEAR GOOSE EGG, WY (LAT 42 46 18 LONG 106 31 48)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)
DEC 07...	1310	736	594	8.6	0.5	630	13.3	112	220
MAR 16...	1200	524	596	8.4	8.0	627	11.6	119	210
MAY 17...	0840	1800	426	8.3	9.0	627	11.8	124	170
17...	0845	1800	426	8.3	9.0	627	11.8	124	170
JUL 19...	1230	3540	454	8.4	18.5	633	17.4	225	180
SEP 06...	1430	3450	450	8.6	19.0	644	9.6	123	170

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
DEC 07...	57	18	40	1	28	3.4	136	143	12
MAR 16...	58	17	39	1	28	3.4	138	143	12
MAY 17...	46	14	30	1	27	3.0	125	120	2
17...	46	14	29	1	26	3.0	125	120	2
JUL 19...	46	15	28	0.9	25	2.8	126	121	7
SEP 06...	46	14	27	0.9	25	3.0	123	132	22

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
 North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

06643510 NORTH PLATTE RIVER ABOVE POISON SPIDER CREEK, NEAR GOOSE EGG, WY--Continued
 (LAT 42 46 18 LONG 106 31 48)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
DEC 07...	150	150	9.5	0.40	13	377	2
MAR 16...	150	150	11	0.40	14	379	2
MAY 17...	142	100	7.8	0.30	13	286	1
17...	142	100	7.8	0.30	14	286	1
JUL 19...	133	97	7.2	0.40	13	282	<1
SEP 06...	117	97	7.3	0.30	12	286	<1

06643900 POISON SPIDER CREEK NEAR MILLS, WY (LAT 42 49 25 LONG 106 40 45)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)
MAR 16...	1615	3.4	3630	8.4	9.0	619	11.1	120	1000
16...	1620	3.4	3630	8.4	9.0	619	11.1	120	1000

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
MAR 16...	230	110	510	7	51	17	283	298	22
16...	230	110	490	7	50	17	282	298	22

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
MAR 16...	320	1500	190	1.3	20	2760	6
16...	320	1500	190	1.3	20	2740	6

ANALYSIS OF SAMPLES COLECTED AT SPECIAL STUDY AND MISCELLANEOUS SITES

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

424511106382401 CASPER CANAL NEAR IRON CREEK, NEAR ALCOVA, WY (LAT 42 45 11 LONG 106 38 24)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)
JUL 18...	1740	296	447	8.3	20.5	620	7.4	102	180
18...	1745	296	447	8.3	20.5	620	7.4	102	170

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	SODIUM PERCENT	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)
JUL 18...	46	15	29	0.9	26	2.8	125	116	0
18...	45	15	29	1	26	2.7	125	116	0

DATE	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)
JUL 18...	142	95	7.2	0.4	13	278	<1
18...	142	95	6.9	0.4	13	277	<2

424531106383101 IRON CREEK AT CASPER CANAL, NEAR ALCOVA, WY (LAT 42 45 31 LONG 106 38 31)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)
MAR 15...	1410	0.02	2310	8.6	15.0	628	11.7	142	36

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	SODIUM PERCENT	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)
MAR 15...	9.9	2.8	570	41	97	2.4	1100	1120	55

DATE	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SELE-NIUM, TOTAL (UG/L AS SE)
MAR 15...	1260	110	70	3.4	9.4	1450	<1

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
 North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

424655106322201 IRON CREEK ABOVE CONFLUENCE WITH POISON SPIDER CREEK, NEAR GOOSE EGG, WY
 (LAT 42 46 55 LONG 106 32 22)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)
DEC 08...	1455	1.6	3210	8.1	6.0	629	10.1	100	1200

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	SODIUM PERCENT	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)
DEC 08...	230	140	360	5	40	10	338	358	0

DATE	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SELE-NIUM, TOTAL (UG/L AS SE)
DEC 08...	437	1400	33	0.7	16	2400	120

06644000 POISON SPIDER CREEK NEAR GOOSE EGG, WY (LAT 42 46 44 LONG 106 31 46)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)
DEC 08...	1525	12	3070	8.2	5.0	627	10.2	98	980
MAR 16...	0830	11	3060	8.1	5.5	630	9.9	96	910
MAY 16...	1620	12	2560	8.2	20.0	625	11.1	151	820
JUL 20...	1445	9.4	2470	8.4	20.0	639	10.5	139	730
JUL 20...	1535	9.4	2470	8.4	20.0	639	10.5	139	780
SEP 06...	1420	12	2610	8.2	18.0	637	10.2	131	800

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	SODIUM PERCENT	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)
DEC 08...	210	110	380	5	46	8.6	335	350	0
MAR 16...	200	100	380	5	47	9.1	336	340	0
MAY 16...	180	90	330	5	46	8.8	314	300	0
JUL 20...	160	80	320	5	49	8.1	274	285	6
JUL 20...	170	86	310	5	46	8.1	276	285	6
SEP 06...	170	92	340	5	48	8.0	287	332	0

ANALYSIS OF SAMPLES COLELCTED AT SPECIAL STUDY AND MISCELLANEOUS SITES

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

06644000 POISON SPIDER CREEK NEAR GOOSE EGG, WY (LAT 42 46 44 LONG 106 31 46)--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
DEC 08...	427	1300	71	0.7	14	2300	58
MAR 16...	415	1300	71	0.7	13	2280	46
MAY 16...	366	1100	56	0.7	14	1960	45
JUL 20...	336	1000	43	0.6	13	1800	40
SEP 20...	336	1000	42	0.6	14	1800	43
SEP 06...	405	1100	47	0.6	13	1970	53

06644040 OREGON TRAIL DRAIN NEAR GOOSE EGG, WY (LAT 42 49 41 LONG 106 24 51)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)
DEC 08...	1045	0.72	5350	8.1	0.0	625	11.8	101

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
DEC 08...	400	320	600	5	36	9.5	437	460	0

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
DEC 08...	561	2900	80	0.5	16	4600	290

06644120 MIDDLE FORK CASPER CREEK NEAR BUCKNUM, WY (LAT 43 01 10 LONG 106 36 30)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)
MAR 17...	0930	0.53	2610	8.3	3.0	621	9.0	83

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

06644120 MIDDLE FORK CASPER CREEK NEAR BUCKNUM, WY (LAT 43 01 10 LONG 106 36 30)--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
MAR 17...	88	72	410	8	63	5.7	257	248	0

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
MAR 17...	303	1100	23	0.6	3.2	1850	<1

425950106333301 CASPER CANAL AT ENDPOINT, NEAR ILLCO, WY (LAT 42 59 50 LONG 106 33 33)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)
JUL 20...	0845	40	460	8.4	20.5	630	6.6	89	180

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
JUL 20...	47	15	30	1	26	2.9	129	124	7

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
JUL 20...	137	99	7.5	0.4	13	289	<1

430021106303801 SOUTHEAST TRIBUTARY TO UNNAMED POND ABOVE ILLCO SEEP, AT ILLCO, WY (LAT 43 00 21 LONG 106 30 38)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)
MAR 28...	1135	0.05	8360	7.9	0.5	629	7.9	69	3700
MAR 28...	1140	0.05	8360	7.9	0.5	629	7.9	69	3600

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

430021106303801 SOUTHEAST TRIBUTARY TO UNNAMED POND ABOVE ILLCO SEEP, AT ILLCO, WY--Continued
(LAT 43 00 21 LONG 106 30 38)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
MAR									
28...	370	670	1400	10	45	9.4	439	448	0
28...	360	660	1300	9	44	9.5	439	448	

DATE	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLORIDE, DIS- SOLVED (MG/L AS CL)	FLUORIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SELENIUM, TOTAL (UG/L AS SE)
MAR							
28...	547	6100	51	0.5	6.8	8880	30
28...	547	6000	50	0.5	7.4	8660	30

430029106304201 UNNAMED POND ABOVE ILLCO SEEP, AT ILLCO, WY (LAT 43 00 29 LONG 106 30 42)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
			WATER WHOLE FIELD (STAND- ARD UNITS)						
MAR 28...	1030	7360	8.5	2.0	627	11.2	101	3100	310

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
MAR 28...	570	1200	9	45	13	353	360	29

DATE	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLORIDE, DIS- SOLVED (MG/L AS CL)	FLUORIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SELENIUM, TOTAL (UG/L AS SE)
MAR 28...	381	5200	47	0.5	1.3	7560	6

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

430020106300801 SOUTHWEST INLET TRIBUTARY TO ILLCO SEEP, NEAR ILLCO, WY (LAT 43 00 20 LONG 106 30 08)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)
OCT 04...	1620	0.68	2220	8.1	13.0	630	8.2	95	1100
MAR 29...	1030	0.03	2080	8.1	0.5	636	10.3	86	920

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	SODIUM PERCENT	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)
OCT 04...	190	140	160	2	25	5.6	374	372	0
MAR 29...	170	120	200	3	32	6.1	357	364	0

DATE	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SELE-NIUM, TOTAL (UG/L AS SE)
OCT 04...	454	960	18	0.8	19	1720	4
MAR 29...	444	970	22	0.9	15	1720	6

430014106300301 MIDDLE TRIBUTARY ON SOUTH SIDE OF ILLCO SEEP, AT ILLCO, WY (LAT 43 00 14 LONG 106 30 03)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)
OCT 04...	1745	0.03	3320	8.1	12.0	630	7.9	90	1700
MAR 29...	0940	0.01	6750	7.9	0.5	636	9.0	77	3400

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	SODIUM PERCENT	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)
OCT 04...	300	220	280	3	27	6.9	378	356	0
MAR 29...	370	610	880	7	36	11	398	400	0

ANALYSIS OF SAMPLES COLECTED AT SPECIAL STUDY AND MISCELLANEOUS SITES

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
 North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

430014106300301 MIDDLE TRIBUTARY ON SOUTH SIDE OF ILLCO SEEP, AT ILLCO, WY--Continued
 (LAT 43 00 14 LONG 106 30 03)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
OCT 04...	434	1800	35	0.5	14	2870	2
MAR 29...	488	4900	62	0.7	10	7080	12

430012106295901 IR-51 NEAR CASPER, WY (LAT 43 00 12 LONG 106 29 59)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)
OCT 04...	1715	0.75	--	8.0	12.0	630	7.9	--	1300
MAR 29...	0830	0.05	3550	8.1	1.0	636	10.5	90	1600

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
OCT 04...	220	180	430	5	42	8.3	354	350	0
MAR 29...	280	220	390	4	34	7.2	377	366	0

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
OCT 04...	427	1800	24	0.8	15	2890	19
MAR 29...	447	2000	32	0.7	14	3160	21

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
 North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

430018106300201 ILLCO SEEP NEAR OUTLET, NEAR ILLCO, WY (LAT 43 00 18 LONG 106 30 02)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
OCT									
04...	1330	3280	8.2	14.0	630	11.5	137	1300	200
NOV									
09...	0815	3690	8.0	1.0	635	>20.0	--	1500	230
DEC									
07...	1355	3840	8.1	1.0	625	14.8	129	1500	260
JAN									
21...	1230	4030	8.1	0.0	636	18.1	151	1700	270
21...	1235	4030	8.1	0.0	636	18.1	151	1700	270
FEB									
15...	1245	3830	8.2	0.0	631	18.3	154	1700	320
MAR									
17...	0815	3460	8.2	5.0	622	9.4	91	1300	210
28...	1310	3660	8.2	2.5	629	10.5	95	1600	230
APR									
15...	0810	4100	8.3	4.0	631	8.5	80	1600	230
MAY									
16...	0840	5020	8.0	13.0	625	5.3	63	2100	300
JUN									
14...	0825	1420	8.1	15.0	620	5.2	64	480	85
JUL									
18...	1105	4970	8.7	22.5	630	9.2	131	1300	160
AUG									
17...	0845	1390	7.8	20.0	631	2.4	32	470	76
SEP									
07...	0915	890	7.8	15.0	630	5.7	69	290	58

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LILITY LAB (MG/L AS CACO3)	ALKA- LILITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
OCT								
04...	190	400	5	40	8.9	328	312	0
NOV								
09...	230	400	4	36	8.8	352	340	0
DEC								
07...	210	420	5	37	8.1	384	395	0
JAN								
21...	250	440	5	36	7.7	351	370	0
21...	250	420	4	35	8.1	351	370	0
FEB								
15...	230	410	4	34	10	349	352	0
MAR								
17...	200	370	4	37	9.4	311	308	0
28...	240	450	5	38	8.5	327	336	0
APR								
15...	250	510	6	41	11	286	258	14
MAY								
16...	340	750	7	43	14	301	386	0
JUN								
14...	64	140	3	39	5.1	187	194	0
JUL								
18...	220	820	10	57	11	191	183	23
AUG								
17...	68	150	3	41	6.1	198	218	0
SEP								
07...	36	76	2	36	3.9	165	163	0

ANALYSIS OF SAMPLES COLELCTED AT SPECIAL STUDY AND MISCELLANEOUS SITES

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

430018106300201 ILLCO SEEP NEAR OUTLET, NEAR ILLCO, WY (LAT 43 00 18 LONG 106 30 02)--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
OCT 04...	381	1700	30	0.7	4.2	2720	5
NOV 09...	415	2000	30	0.8	3.2	3110	8
DEC 07...	482	2000	27	0.9	14	3180	22
JAN 21...	452	2100	30	0.8	11	3330	21
JAN 21...	452	2100	29	0.8	11	3310	23
FEB 15...	430	2000	32	0.9	13	3230	23
MAR 17...	376	1700	31	0.7	11	2720	7
MAR 28...	410	2100	35	0.7	8.6	3270	7
APR 15...	286	2500	44	0.7	4.8	3710	7
MAY 16...	471	3200	58	0.7	9.6	4900	4
JUN 14...	237	550	12	0.6	11	984	4
JUL 18...	177	2700	37	0.6	1.7	4060	9
AUG 17...	266	550	12	0.4	19	1010	2
SEP 07...	199	280	9.7	0.4	10	572	1

430018106300001 ILLCO SEEP (COMPOSITE) NEAR ILLCO, WY (LAT 43 00 18 LONG 106 30 00)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
OCT 04...	1445	3290	8.2	14.0	11.5	1300	190	190	370	5	39	8.5

DATE	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
OCT 04...	322	312	0	381	1600	28	0.8	5.1	2580	8

430017106295201 ILLCO SEEP OUTLET TRIBUTARY NEAR ILLCO, WY (LAT 43 00 17 LONG 106 29 52)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)
OCT 06...	1140	0.47	3390	8.4	12.0	629	9.8	112	1500

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

430017106295201 ILLCO SEEP OUTLET TRIBUTARY NEAR ILLCO, WY (LAT 43 00 17 LONG 106 29 52)--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
OCT 06...	230	230	370	4	34	8.9	303	315	36

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
OCT 06...	311	1700	28	0.8	2.2	2760	9

430013106292001 OUTLET TRIBUTARY OF ILLCO SEEP AT CULVERT, AT ILLCO, WY (LAT 43 00 13 LONG 106 29 20)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)
OCT 06...	1115	0.16	3170	7.8	9.5	630	7.7	83	1200

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
OCT 06...	200	160	360	5	40	6.9	360	356	0

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
OCT 06...	434	1500	27	0.8	7.4	2480	2

ANALYSIS OF SAMPLES COLECTED AT SPECIAL STUDY AND MISCELLANEOUS SITES

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

425834106271301 CASPER CREEK ABOVE CONFLUENCE WITH SOUTH FORK CASPER CREEK, NEAR CASPER, WY
(LAT 42 58 34 LONG 106 27 13)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	
MAR 15...	0945	2.0	6250	8.1	6.0	631	10.6	105	1500

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
MAR 15...	240	220	1100	12	61	10	366	334	0

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L AS SE)	SELE- NIUM, TOTAL (UG/L AS SE)
MAR 15...	408	3300	81	0.5	6.9	5160	4

425733106392001 SOUTH FORK CASPER CREEK ABOVE CASPER CANAL, NEAR BUCKNUM, WY (LAT 42 57 33 LONG 106 39 20)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	
MAR 14...	1300	0.45	3980	8.6	9.0	626	10.2	109	380

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
MAR 14...	73	49	810	18	82	5.4	297	292	10

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L AS SE)	SELE- NIUM, TOTAL (UG/L AS SE)
MAR 14...	337	1800	48	1.0	5.4	2970	2

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

425840106313801 SOUTH FORK CASPER CREEK ABOVE INLET TO THIRTYTHREE MILE RESERVOIR, NEAR ILLCO, WY
(LAT 42 58 40 LONG 106 31 38)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MM SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)
OCT 07...	1300	0.08	8630	8.0	11.0	625	8.3	95	2400

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3)
OCT 07...	390	350	1500	13	57	8.1	429	435	0

DATE	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
OCT 07...	531	5200	110	0.9	5.2	7830	52

425818106302701 THIRTYTHREE MILE RESERVOIR NEAR OUTLET, NEAR ILLCO, WY (LAT 42 58 18 LONG 106 30 27)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MM SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
OCT 07...	0900	2480	8.7	12.5	625	8.1	94	710	130	94	360
OCT 07...	0915	--	--	--	--	--	--	--	--	--	--
NOV 09...	0940	4230	8.5	1.0	635	14.4	124	1600	270	220	940
DEC 07...	1230	6890	8.3	2.0	625	19.0	172	2100	350	290	1100
JAN 21...	1330	7160	7.9	0.0	635	18.5	156	2400	440	320	1200
FEB 15...	1340	7890	7.7	0.0	630	12.0	102	2800	510	360	1300
FEB 15...	1345	7890	7.7	0.0	630	12.0	102	2800	520	360	1300
MAR 15...	1400	5120	8.2	10.0	629	11.3	124	1400	230	190	820
MAR 15...	1405	5120	8.2	10.0	629	11.3	124	1400	230	190	830
APR 15...	0905	5900	8.6	7.0	631	10.4	106	1600	250	230	1000
MAY 16...	1050	4030	8.7	16.0	623	8.5	107	1100	180	160	730
JUN 14...	0750	1700	8.6	17.0	621	9.0	115	500	97	62	220
JUL 18...	1330	1480	7.7	22.0	629	5.1	71	400	78	49	190
AUG 17...	0950	2920	8.7	21.0	632	12.5	172	820	130	120	420
SEP 06...	1515	4160	9.0	21.0	631	11.4	157	1100	160	170	610
SEP 06...	1520	4160	9.0	21.0	631	11.4	157	1100	160	170	630

PLATTE RIVER BASIN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)
7... 7...	1850 --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	12 --	-- <1
9... 	4570	--	--	--	--	--	--	--	28	--
7... 	6050	--	--	--	--	--	--	--	40	--
1... 	6410	--	--	--	--	--	--	--	42	--
5... 5...	6850 7160	-- --	-- --	-- --	-- --	-- --	-- --	-- --	43 48	-- --
5... 5...	4190 4200	-- --	-- --	-- --	-- --	-- --	-- --	-- --	21 21	-- --
5... 	5410	--	--	--	--	--	--	--	23	--
6... 	3550	--	--	--	--	--	--	--	15	--
4... 	1240	<0.01	<0.05	0.02	1.2	0.10	0.01	<0.01	10	--
8... 	1030	--	--	--	--	--	--	--	7	--
7... 	2340	--	--	--	--	--	--	--	14	--
6... 6...	3280 3300	-- --	-- --	-- --	-- --	-- --	-- --	-- --	18 14	-- --

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

425818106293401 SOUTH FORK CASPER CREEK BELOW THIRTYTHREE MILE RESERVOIR, NEAR CASPER, WY
(LAT 42 58 18 LONG 106 29 34)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION	HARD- NESS TOTAL (MG/L AS CACO3)
OCT									
07...	1455	0.65	4100	8.0	11.0	625	7.7	87	1400
07...	1500	0.65	4100	8.0	11.0	625	7.7	87	1300
DEC									
07...	1535	0.71	6250	8.2	0.0	625	12.5	107	2000
07...	1540	0.71	6250	8.2	0.0	625	12.5	107	2000
MAR									
15...	1245	0.99	5050	8.0	10.0	630	11.5	126	1400
MAY									
16...	0945	3.0	4110	8.3	15.0	625	8.3	102	1100
JUL									
18...	1450	20	1600	7.5	22.0	630	4.7	66	440
SEP									
07...	1045	1.0	4640	7.8	11.0	634	9.2	102	1400
07...	1050	1.0	4640	7.8	11.0	634	9.2	102	1200

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
OCT									
07...	270	170	580	7	48	6.6	321	320	0
07...	260	170	580	7	48	6.5	321	320	0
DEC									
07...	360	260	950	9	51	8.2	382	390	0
07...	360	270	980	10	51	8.3	382	390	0
MAR									
15...	250	200	790	9	54	7.2	305	328	0
MAY									
16...	180	160	730	10	59	8.6	205	198	14
JUL									
18...	86	54	210	4	50	8.6	170	173	0
SEP									
07...	230	200	680	8	51	8.5	272	285	0
07...	220	170	690	8	54	8.8	272	285	0

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
OCT							
07...	391	2100	43	0.5	8.0	3370	18
07...	391	2100	42	0.5	7.8	3360	18
DEC							
07...	476	3500	69	0.5	6.6	5390	32
07...	476	3400	68	0.5	6.7	5330	37
MAR							
15...	400	2700	53	0.5	5.1	4200	20
MAY							
16...	212	2400	50	0.5	7.8	3660	13
JUL							
18...	211	650	18	0.4	15	1150	6
SEP							
07...	348	2600	48	0.5	4.8	3940	19
07...	348	2500	48	0.5	4.9	3810	18

ANALYSIS OF SAMPLES COLECTED AT SPECIAL STUDY AND MISCELLANEOUS SITES

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
 North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

06644490 SIX MILE DRAW NEAR MILLS, WY (LAT 42 53 47 LONG 106 25 57)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)
DEC 08...	0905	1.5	4310	8.2	1.0	625	11.0	96	1700

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
DEC 08...	310	220	480	5	38	7.3	391	405	0

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
DEC 08...	494	2100	90	0.8	16	3470	440

06644500 CASPER CREEK AT CASPER, WY (LAT 42 50 52 LONG 106 21 52)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)
DEC 08...	1240	11	5430	8.3	0.0	627	11.6	99	1700
MAR 14...	1530	13	5360	8.3	11.0	633	9.4	105	1700
MAY 16...	1310	9.9	4630	8.3	21.0	628	7.5	104	1500
JUL 19...	1330	70	2770	8.1	21.0	640	6.5	88	800
SEP 07...	0750	21	3320	8.3	11.0	638	8.3	91	1000

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
DEC 08...	300	220	800	9	51	8.5	323	355	0
MAR 14...	270	240	950	10	55	9.7	333	340	24
MAY 16...	270	210	790	9	53	10	288	296	5
JUL 19...	140	110	390	6	51	10	240	228	0
SEP 07...	190	130	440	6	48	7.8	289	286	0

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

06644500 CASPER CREEK AT CASPER, WY (LAT 42 50 52 LONG 106 21 52)--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
DEC 08...	433	2800	79	0.60	11	4430	85
MAR 14...	366	2900	77	0.70	9.4	4660	86
MAY 16...	351	2700	75	0.70	8.8	4240	68
JUL 19...	278	1300	35	0.50	15	2140	9
SEP 07...	174	1600	44	0.60	10	2510	29

06644550 NORTH PLATTE RIVER AT CASPER, WY (LAT 42 51 26 LONG 106 19 09)

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)
DEC 08...	0830	609	749	8.4	0.5	632	15.8	133	260
MAR 16...	1530	504	830	8.5	10.0	627	10.3	111	280
MAY 16...	1445	2050	475	8.1	14.5	628	8.8	105	190
MAY 16...	1450	2050	475	8.1	14.5	628	8.8	105	190
JUL 20...	1130	3790	512	8.3	19.0	638	7.8	101	190
SEP 07...	0900	3400	488	8.5	18.0	636	7.5	95	180
SEP 07...	0905	3400	488	8.5	18.0	636	7.5	95	180

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3
DEC 08...	65	23	59	2	33	3.7	148	141	12
MAR 16...	68	26	70	2	35	4.1	152	143	10
MAY 16...	48	16	36	1	29	3.3	128	118	0
MAY 16...	48	16	36	1	29	3.2	127	118	0
JUL 20...	49	17	37	1	29	2.9	129	120	5
SEP 07...	47	15	30	1	26	2.7	124	124	30
SEP 07...	48	15	31	1	27	2.6	124	124	30

ANALYSIS OF SAMPLES COLELCTED AT SPECIAL STUDY AND MISCELLANEOUS SITES

KENDRICK IRRIGATION DRAINAGE STUDY--Continued
 North Platte River, Tributaries, Lakes and Reservoir Sites--Continued

PLATTE RIVER BASIN--Continued

06644550 NORTH PLATTE RIVER AT CASPER, WY (LAT 42 51 26 LONG 106 19 09)--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, TOTAL (UG/L AS SE)
DEC							
08...	148	220	13	0.40	13	482	5
MAR							
16...	155	250	15	0.40	13	532	7
MAY							
16...	144	120	8.4	0.30	13	316	2
16...	144	130	8.6	0.30	14	327	2
JUL							
20...	137	120	7.9	0.40	13	319	1
SEP							
07...	90	110	7.8	0.30	13	300	1
07...	90	110	7.8	0.30	13	302	1

SALT RIVER SYNOPTIC SAMPLING

SALT RIVER BASIN

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION NUMBER	STATION NAME	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)
423132110525801	SALT RIVER ABOVE FISH CREEK, NEAR SMOOT, WY	7030	07-18-94	1400	19	349
423658110555701	SALT RIVER AT COUNTY ROAD 148, NEAR SMOOT, WY	6540	07-19-94	1100	18	365
424119110594701	CROW CREEK AT COUNTY ROAD 143, NEAR FAIRVIEW, WY	6179	07-19-94	1700	24	616
424526110581301	SALT RIVER BELOW CROW CREEK, NEAR AFTON, WY	6058	07-20-94	0900	64	449
424741110582801	SALT RIVER AT HIGHWAY 237, NEAR AUBURN, WY	6021	07-20-94	1900	129	432
425027110584801	SALT RIVER ABOVE NARROWS, NEAR AUBURN, WY	5980	07-21-94	0800	259	497
425250110595701	SALT RIVER ABOVE EAST SIDE CANAL, NEAR THAYNE, WY	5965	07-21-94	1530	251	476
425529111005801	SALT RIVER AT THAYNE, WY	5860	07-22-94	1000	145	481
425855111015001	SALT RIVER AT HIGHWAY 239, NEAR FREEDOM, WY	5771	07-22-94	1500	140	453
430244111020601	SALT RIVER AT COUNTY ROAD 111, NEAR ETNA, WY	5705	07-23-94	0900	249	490

DATE	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD- NESS TOTAL (MG/L CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
07-18-94	8.4	13.0	25.0	K20	190	33	54	13	2.9	0.1	3
07-19-94	8.6	12.0	22.0	200	200	28	57	13	3.5	0.1	4
07-19-94	8.6	15.0	27.0	79	230	50	56	21	47	1	31
07-20-94	8.1	9.5	15.0	47	230	43	64	18	5.1	0.1	5
07-20-94	8.5	17.0	26.0	27	230	51	60	19	6.6	0.2	6
07-21-94	8.1	11.0	15.0	K110	240	42	63	19	15	0.4	12
07-21-94	8.4	20.0	32.0	--	230	44	61	19	15	0.4	12
07-22-94	8.3	17.0	25.0	K53	230	43	61	19	15	0.4	12
07-22-94	8.5	18.0	34.5	K20	220	55	58	18	11	0.3	10
07-23-94	8.0	13.5	20.0	210	250	39	64	21	12	0.3	10

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

DATE	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
07-18-94	155	8	173	38	0.60	<0.1	6.0	209	208	0.28	10.7
07-19-94	167	8	189	32	0.90	<0.1	6.0	212	213	0.29	10.3
07-19-94	176	13	188	53	62	0.2	7.4	351	353	0.48	22.7
07-20-94	191	0	233	42	4.5	0.1	7.1	258	262	0.35	44.6
07-20-94	177	5	205	44	7.3	0.1	6.8	249	254	0.34	86.7
07-21-94	193	0	236	46	18	0.1	6.9	289	288	0.39	202
07-21-94	186	8	210	47	17	0.1	6.7	278	281	0.38	188
07-22-94	188	5	219	46	16	0.1	6.5	284	280	0.39	111
07-22-94	163	4	192	40	14	0.1	6.1	270	248	0.37	102
07-23-94	207	0	253	38	14	0.1	6.7	280	285	0.38	188

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	PHOS- PHORUS ORTHOPHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHOPHOS- PHORUS TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
07-18-94	--	--	<0.01	--	<0.05	0.03	0.04	0.02	<0.01	5	8
07-19-94	--	--	<0.01	--	<0.05	0.03	0.04	0.01	<0.01	12	4
07-19-94	--	--	<0.01	--	<0.05	0.03	0.04	0.02	<0.01	10	7
07-20-94	1.39	6.2	0.01	0.03	1.40	0.03	0.04	0.01	<0.01	<3	9
07-20-94	0.84	3.7	0.01	0.03	0.85	0.03	0.04	0.01	<0.01	3	5
07-21-94	0.61	2.7	0.02	0.07	0.63	0.04	0.05	0.02	<0.01	6	12
07-21-94	0.52	2.3	0.01	0.03	0.53	0.03	0.04	<0.01	<0.01	5	6
07-22-94	0.48	2.1	0.01	0.03	0.49	0.03	0.04	0.01	<0.01	4	7
07-22-94	0.51	2.3	0.01	0.03	0.52	0.03	0.04	<0.01	<0.01	4	4
07-23-94	0.74	3.3	0.01	0.03	0.75	0.03	0.04	<0.01	<0.01	7	6

SALT RIVER BASIN--Continued

[illegible][illegible][illegible][illegible]

[illegible]

GROUND-WATER LEVELS

GOSHEN COUNTY

414348104101301. Local number, 20-061-03dad01.

LOCATION.--Lat 41°43'48", long 104°10'13", in NE¹/₄ SE¹/₄ NE¹/₄ sec.3, T.20 N., R.61 W., Hydrologic Unit 10180012.

Owner: State of Wyoming.

AQUIFER.--White River Formation or Group.

WELL CHARACTERISTICS.--Depth of well, 100 ft.

DATUM.--Elevation of land-surface datum is 4,470 ft above sea level, from topographic map. Measuring point: top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.85 ft below land-surface datum, June 19, 1983; lowest, 25.74 ft below land-surface datum, Jan. 13-17, 1990.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Highest water level for the day, from digital recorder

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.73	22.95	22.90	22.39	21.76	21.18	20.63	20.25	20.13	20.66	21.47	22.39
10	22.83	22.97	22.86	22.32	21.61	21.06	20.58	20.21	20.18	20.77	21.61	22.60
15	22.88	22.98	22.74	22.22	21.50	20.97	20.52	20.16	20.26	20.91	21.75	22.75
20	22.92	22.98	22.66	22.11	21.39	20.86	20.45	20.13	20.36	21.00	21.92	22.90
25	22.93	22.97	22.54	21.99	21.29	20.79	20.35	20.13	20.43	21.14	22.03	23.02
EOM	22.94	22.90	22.47	21.88	21.27	20.68	20.30	20.13	20.53	21.31	22.25	23.16

WTR YR 1994 HIGHEST 20.13 MAY 20 to JUNE 6 LOWEST 23.16 SEPT 30

LARAMIE COUNTY

410111104223102. Local number, 12-063-15aaa02.

LOCATION.--Lat 41°01'11", long 104°22'31", in NE¹/₄ NE¹/₄ sec.15, T.12 N., R.63 W., Hydrologic Unit 10190009.

Owner: U. S. Geological Survey.

AQUIFER.--White River Formation or Group.

WELL CHARACTERISTICS.--Drilled unused water-table observation well, steel casing, diameter about 6.5 in, depth 110 ft, factory slotted perforations 86-110 ft.

DATUM.--Elevation of land-surface datum is about 5,384 ft above sea level, from topographic map. Measuring point: top of casing, 1.5 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.11 ft, below land-surface datum, Apr. 30, 1974; lowest, 46.28 ft, below land-surface datum, Sept. 7, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Highest water level for the day, from digital recorder

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.41	25.22	23.76	22.17	21.13	20.35	19.71	19.86	22.75	28.08	30.64	35.10
10	27.10	24.93	23.52	22.02	20.98	20.22	19.69	20.46	23.79	29.33	31.89	35.04
15	26.78	24.68	23.05	21.83	20.90	20.09	19.56	20.89	24.06	29.63	33.15	34.56
20	26.38	24.34	22.85	21.72	20.73	19.95	19.61	21.65	24.82	30.58	34.13	34.36
25	25.99	24.08	22.65	21.47	20.60	19.83	20.10	22.26	25.31	31.23	34.69	33.89
EOM	25.55	24.00	22.39	21.30	20.50	19.79	19.96	22.92	26.89	30.90	35.46	34.12

WTR YR 1994 HIGHEST 19.55 APR 14 LOWEST 35.46 AUG 30, 31

411210104452001 Local number, 14-066-10aba01.

LOCATION.--Lat 41°12'10", long 104°45'20", in NE¹/₄ NW¹/₄ NE¹/₄ sec.10, T.14 N., R.66 W., Hydrologic Unit 10190015.

Owner: State of Wyoming.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Depth of well, 190 ft.

DATUM.--Elevation of land-surface datum is about 6,230 ft above sea level, from topographic map. Measuring point: top of casing, 1.40 ft above land-surface datum.

PERIOD OF RECORD.--April 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 125.82 ft below land-surface datum, Feb. 13, 1979; lowest, 132.69 ft below land-surface datum, Aug. 18, 1994.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Highest water level for the day, from digital recorder

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	131.75	131.62	131.28	131.15	131.35	131.46	131.46	131.64	131.95	132.42	132.22	132.54
10	131.72	131.54	131.56	131.44	131.36	131.54	131.45	131.77	132.31	132.54	132.38	132.42
15	131.53	131.53	131.29	131.35	131.66	131.55	131.40	131.62	132.14	132.48	132.36	132.36
20	131.66	131.48	131.48	131.62	131.35	131.20	131.68	131.62	132.36	132.47	132.53	132.57
25	131.66	131.54	131.57	131.40	131.40	131.39	131.11	131.94	132.31	132.43	132.55	132.53
EOM	131.48	131.37	131.39	131.60	131.47	131.63	131.68	132.05	132.55	132.29	132.53	132.28

WTR YR 1994 HIGHEST 130.96 FEB 18 LOWEST 132.69 AUG 28

NIOBRARA COUNTY

424244104202001. Local number, 32-062-32bbb01.

LOCATION.--Lat 42°42'44", long 104°20'20", in NW¹/₄ NW¹/₄ NW¹/₄ sec.32, T.32 N., R.62 W., Hydrologic Unit 10150002.

Owner: Richard Pfister.

AQUIFER.--Tertiary Miocene, Arikaree group.

WELL CHARACTERISTICS.--Drilled unused water-table well, 12 in. diameter, galvanized casing, depth 485 ft, cased top 25 ft.

DATUM.--Elevation of land-surface datum is about 4,898 ft above sea level, from topographic map. Measuring point: bottom edge of recorder shelf, 3.0 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 20.93 ft below land-surface datum, June 10, 1970; lowest, 38.48 ft below land-surface datum, Aug. 19, 1990.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Highest water level for the day, from digital recorder

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	34.28	33.88	33.52	33.24	32.88	32.86	32.68	32.51	32.61	34.19	34.17	34.80
10	34.20	33.80	33.50	33.21	32.86	32.82	32.67	32.48	33.51	34.08	34.24	34.75
15	34.13	33.76	33.42	33.12	32.93	32.80	32.65	32.44	33.58	34.12	34.17	35.54
20	34.09	33.68	33.38	33.17	32.97	32.79	32.60	32.57	34.56	34.08	35.25	35.33
25	34.02	33.65	33.39	33.09	32.93	32.74	32.53	32.46	34.35	34.15	35.21	35.18
EOM	33.91	33.58	33.31	32.99	32.90	32.71	32.54	32.43	34.77	34.21	34.79	35.10

WTR YR 1994 HIGHEST 32.42 JUNE 1, 3 LOWEST 35.74 SEPT 12

PLATTE COUNTY

420613105024401. Local number, 25-068-31aaa01.

LOCATION.--Lat 42°06'13", long 105°02'44", in NE¹/₄ NE¹/₄ NE¹/₄ sec.31, T.25 N., R.68 W., Hydrologic Unit 10180011.

Owner: State of Wyoming.

AQUIFER.--Arikaree Formation.

WELL CHARACTERISTICS.--Depth of well, 400 ft.

DATUM.--Elevation of land-surface datum, 5,242 ft above sea level, from topographic map. Measuring point: top of casing, 1.50 ft above land-surface datum.

PERIOD OF RECORD.--December 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 20.13 ft below land-surface datum, Nov. 19, 1986; lowest, 35.04 ft below land-surface datum, Aug. 30, 1994.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Highest water level for the day, from digital recorder

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.56	28.51	28.01	27.85	27.90	27.92	28.02	28.58	31.30	31.76	32.72	---
10	29.28	28.44	28.12	28.01	27.95	27.92	28.06	28.72	31.82	32.82	32.74	33.60
15	29.03	28.30	28.01	27.86	28.00	27.93	---	28.99	31.47	33.41	33.41	33.95
20	28.93	28.19	28.05	28.05	28.00	27.94	---	29.16	31.19	32.90	34.12	34.17
25	28.78	28.21	28.03	27.92	28.01	27.97	---	29.99	30.76	32.93	34.69	33.27
EOM	28.61	28.09	27.94	27.98	27.94	28.01	28.70	30.86	30.72	33.10	34.95	32.51

WTR YR 1994 HIGHEST 27.79 FEB 18 LOWEST 35.04 AUG 30

GROUND-WATER LEVELS

TETON COUNTY

4330591105118802. Local number, 41-117-14bdc02.

LOCATION.--Lat 43°30'59", long 110°51'18", in SW¹/₄ SE¹/₄ NW¹/₄ sec.14, T.41 N., R.117 W., Hydrologic Unit 17040103.

Owner: Skip Wright-Clark.

AQUIFER.--Holocene alluvium.

WELL CHARACTERISTICS.--Depth of well, 20 ft.

DATUM.--Elevation of land-surface datum is 6,180 ft above sea level, from topographic map. Measuring point: top of casing, 1.20 ft above land-surface datum.

PERIOD OF RECORD.--April to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.60 ft below land-surface datum, June 24, 1994; lowest, 7.40 ft below land-surface datum, Apr. 22-24, 1994.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Highest water level for the day, from digital recorder

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	1.77	1.90	---	3.02
10	---	---	---	---	---	---	---	---	2.02	1.95	---	3.38
15	---	---	---	---	---	---	---	2.92	---	2.15	---	3.77
20	---	---	---	---	---	---	7.29	2.33	---	1.63	3.02	4.05
25	---	---	---	---	---	---	7.35	1.95	1.87	1.68	2.76	4.46
EOM	---	---	---	---	---	---	---	1.68	2.07	---	2.82	4.49

WTR YR 1994 HIGHEST 1.60 JUL 24 LOWEST 7.40 APR 22-24

433517110493001. Local number, 42-117-24dab01.

LOCATION.--Lat 43°35'17", long 110°49'30", in NW¹/₄ NE¹/₄ SE¹/₄ sec.24, T.42 N., R.117 W., Hydrologic Unit 17040103.

Owner: Snake River Ranch.

AQUIFER.--Holocene alluvium.

WELL CHARACTERISTICS.--Depth of well, 30 ft.

DATUM.--Elevation of land-surface datum is 6307.92 above sea level by survey. Measuring point: top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--June to September 1994.

EXTREMES FOR PERIOD OF RECORD.--Highest observed water level, 2.96 ft below land-surface datum, June 3, 1994; lowest, 17.77 ft below land-surface datum, Sept. 30, 1994.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Highest water level for the day, from digital recorder

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	---	4.98	5.61	8.93
10	---	---	---	---	---	---	---	---	---	5.26	6.88	10.74
15	---	---	---	---	---	---	---	---	---	5.80	7.25	11.54
20	---	---	---	---	---	---	---	---	---	5.53	6.60	13.81
25	---	---	---	---	---	---	---	---	4.07	5.73	7.29	16.34
EOM	---	---	---	---	---	---	---	---	4.47	5.68	7.79	17.62

WTR YR 1994 HIGHEST 2.96a JUN 3 LOWEST 17.77 SEP 30

a Observed water level.

LINCOLN COUNTY

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION	NUMBER	GEO-LOGIC UNIT	LOCAL IDENT- I- FIER	SITE	DATE	TIME	DEPTH BELOW SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	FLOW RATE (G/M)
414644111024101	111ALVM	21-120-21ccc01		GW	05-18-94	1300	42.4	75	15
414712110275001	217BRRV	21-115-21add01		GW	06-17-94	1200	--	--	E0.2
415210110082201	124GRRV	22-112-20dac01		GW	05-22-94	1000	--	616	1.0
415218110294501	111TRRC	22-115-20cba01		SP	06-15-94	--	--	--	--
415230110270701	111LDLD	22-115-22bda01		SP	05-22-94	1500	--	--	--
415243110281701	217BRRV	22-115-21baa01		SP	06-15-94	--	--	--	--
415315110333001	211HLRD	22-116-15add01		SP	06-16-94	0815	--	--	--
415411110242301	124NFRK	22-115-12adb01		SP	06-15-94	0930	--	--	--
415427110294701	217ASPN	22-115-08bba01		GW	06-14-94	1045	--	--	1.0
415445110111501	124LNEY	22-113-01cdb01		GW	05-21-94	1430	--	--	3.0
415541110363001	211FRNR	23-116-32cab01		SP	06-16-94	1030	--	--	--
415620110462800	111LDLD	23-118-26ddb01		SP	05-20-94	0930	--	--	--
415635110282801	217GNNT	23-115-29ddb01		SP	06-14-94	--	--	--	--
415645110281701	217GNNT	23-115-29acd01		SP	06-14-94	1430	--	--	--
415730110160301	120TRTR	23-113-20cbd01		GW	06-13-94	1730	--	900	15
415839110241901	124WSTC	23-115-13bbd01		SP	06-14-94	1730	--	--	--
415839110261901	124WSTC	23-115-15bad01		SP	06-14-94	--	--	--	--
415944110305301	211FRNR	23-115-06ccd01		SP	06-16-94	--	--	--	--
420023110285401	217ASPN	24-115-32cbd01		SP	06-16-94	1615	--	--	--
420120110250301	227NGGT	24-115-35abc01		SP	06-16-94	1915	--	--	--
420310110535701	121FWKS	24-119-23bab01		SP	05-31-94	--	--	--	--
421443110470400	237DNDY	26-117.5-13bad00		SP	09-13-94	1545	--	--	--
421545110452001	124WSTC	26-117-05ccc01		SP	09-14-94	--	--	--	--
422327110361901	237DNDY	28-116-28aac01		SP	09-16-94	--	--	--	--
422333110575500	221PRSS	28-119-27bad00		SP	09-17-94	--	--	--	--
422402110462501	111LDLD	28-117-19bcc01		SP	09-13-94	0930	--	--	--
422802110575901	221PRSS	29-119-26cac01		SP	07-24-94	1900	--	--	--
422828110581200	221PRSS	29-119-26bbc01		SP	09-15-94	--	--	--	--
423214110525101	111TRRC	30-118-33dbd01		SP	08-03-94	1000	--	--	--
423238110533201	111ALVM	30-118-33bcb01		GW	10-07-93	0845	25.5	85	8.0
				GW	03-15-94	0915	28.1	85	--
				GW	05-23-94	0900	17.7	85	--
				GW	07-25-94	0900	21.9	85	--
423319110395201	111LDLD	423319110395201		SP	08-02-94	1400	--	--	--
423645110395401	227NGGT	423645110395401		SP	08-02-94	1030	--	--	--
423714110544401	111ALVM	31-118-32ccc01		GW	08-03-94	1530	35.2	88	15
423838110551401	111ALVM	31-118-30acc01		GW	08-04-94	1000	220.9	262	9.0
424133110574301	111ALVM	31-119-11abb01		GW	08-03-94	1515	70.9	107	9.0
424216110585501	111ALVM	31-119-03bad01		GW	10-06-93	1030	17.0	70	6.0
				GW	03-15-94	1415	30.8	70	--
				GW	05-23-94	1145	20.6	70	--
				GW	07-25-94	1500	16.8	70	--
424423110570901	111ALVM	32-119-23dad01		GW	10-08-93	0845	25.5	75	8.0
				GW	03-15-94	1600	41.2	75	--
				GW	05-23-94	1445	34.5	75	--
				GW	07-25-94	1330	37.0	75	--
424440110505001	331MDSN	424440110505001		SP	10-04-93	1000	--	--	--
424521110594701	111ALVM	32-119-16dac01		GW	08-04-94	1230	16.6	70	9.0
424647110550501	227NGGT	32-118-07aba01		GW	08-07-94	0830	52.1	230	8.0
424740110572601	111ALVM	33-118-31ddc01		GW	10-06-93	1415	15.4	50	9.0
				GW	03-16-94	1630	16.8	50	--
				GW	05-24-94	1430	15.8	50	--
				GW	07-25-94	1100	14.6	50	--
424756110594801	111ALVM	33-119-35dac01		GW	08-04-94	1815	13.0	65	E9.0
424806110594701	111ALVM	33-119-35adc01		GW	08-04-94	1630	10.0	28	E4.0
424828110533601	121SLLK	33-118-34aaa01		SP	09-15-94	--	--	--	--
425127110592701	111ALVM	33-119-12cba02		GW	08-06-94	1030	3.9	33	50

E-Estimate.

GEOLOGIC UNIT (AQUIFER)

111ALVM	HOLOCENE SERIES	124LNEY	LANEY SHALE MEMBER OF GREEN RIVER FORMATION	217ASPN	ASPEN SHALE OR FORMATION
111LDLD	LANDSLIDE DEPOSITS			217BRRV	GEAR RIVER FORMATION
111TRRC	TERRACE DEPOSITS	124NFRK	NEW FORK TONGUE OF WASATCH FORMATION	217GNNT	GANNETT GROUP
120TRTR	TERTIARY SYSTEM			221PRSS	PREUSS SANDSTONE OR REDBEDS
121FWKS	FOWKES FORMATION	124WSTC	WASATCH FORMATION	227NGGT	NUGGET SANDSTONE
121SLLK	SALT LAKE FORMATION	211CODY	CODY SHALE	237DNDY	DINWOODY FORMATION
121TWNT	TEWINOT FORMATION	211FRNR	FRONTIER FORMATION	331MDSN	MADISON GROUP
124GRRV	GREEN RIVER FORMATION	211HLRD	HILLIARD SHALE OR FORMATION	337DRBY	DARBY FORMATION

QUALITY OF GROUND WATER

LINCOLN COUNTY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION	NUMBER	DATE	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
414644111024101		05-18-94	--	1620	7.5	8.5	480	160	98	57
414712110275001		06-17-94	--	720	8.7	7.5	42	--	6.7	6.1
415210110082201		05-22-94	--	1990	9.6	11.5	1	0	0.40	0.10
415218110294501		06-15-94	E3.5	463	7.7	9.0	--	--	--	--
415230110270701		05-22-94	3.0	396	8.3	9.5	70	0	17	6.6
415243110281701		06-15-94	E1.0	484	7.8	6.5	--	--	--	--
415315110333001		06-16-94	E5.0	560	7.6	7.0	260	31	70	21
415411110242301		06-15-94	E15	940	7.7	6.5	430	180	94	48
415427110294701		06-14-94	--	616	8.8	8.0	51	0	12	5.2
415445110111501		05-21-94	--	1440	9.6	12.0	2	0	0.47	0.18
415541110363001		06-16-94	E5.0	323	7.6	6.0	170	3	60	3.8
415620110462800		05-20-94	22	388	7.8	4.0	200	0	63	11
415635110282801		06-14-94	E10	462	7.8	9.0	--	--	--	--
415645110281701		06-14-94	E30	396	7.9	8.0	190	0	50	15
415730110160301		06-13-94	--	1240	9.6	12.0	3	0	0.65	0.25
415839110241901		06-14-94	E1.0	723	7.6	9.0	300	40	88	19
415839110261901		06-14-94	E5.0	801	7.6	6.0	--	--	--	--
415944110305301		06-16-94	E2.0	721	7.7	7.0	--	--	--	--
420023110285401		06-16-94	E2.5	949	7.5	7.5	300	65	90	18
420120110250301		06-16-94	E1.0	376	7.8	7.0	180	5	57	9.1
420310110535701		05-31-94	E5.0	525	7.8	7.0	--	--	--	--
421443110470400		09-13-94	1100	237	8.0	5.0	--	--	--	--
421545110452001		09-14-94	4.0	377	7.7	5.0	--	--	--	--
422327110361901		09-16-94	E5.0	271	8.0	5.0	--	--	--	--
422333110575500		09-17-94	1.0	1170	8.3	10.0	--	--	--	--
422402110462501		09-13-94	2000	325	8.0	11.5	--	--	--	--
422802110575901		07-24-94	0.1	249000	6.9	10.0	--	--	1300	200
422828110581200		09-15-94	E2.0	1670	7.7	9.0	--	--	--	--
423214110525101		08-03-94	E5.0	410	7.6	6.5	210	0	60	15
423238110533201		10-07-93	--	431	7.7	8.0	230	18	72	11
		03-15-94	--	421	7.8	6.0	200	14	63	10
		05-23-94	--	483	7.5	7.0	260	13	84	11
		07-25-94	--	449	7.7	7.0	240	20	75	12
423319110395201		08-02-94	E25	250	8.2	5.5	120	51	36	6.9
423645110395401		08-02-94	E8.0	180	8.0	4.5	91	4	25	7.0
423714110544401		08-03-94	--	440	7.9	5.0	220	67	65	15
423838110551401		08-04-94	--	425	7.7	8.0	220	62	64	15
424133110574301		08-03-94	--	375	7.8	9.0	190	23	55	13
424216110585501		10-06-93	--	543	7.6	9.0	260	34	77	16
		03-15-94	--	535	7.7	8.0	240	7	70	15
		05-23-94	--	533	7.6	9.5	260	15	79	15
		07-25-94	--	523	7.5	9.5	260	36	76	16
424423110570901		10-08-93	--	340	8.0	5.0	180	28	48	14
		03-15-94	--	387	7.9	5.0	200	83	56	15
		05-23-94	--	397	7.9	6.5	200	61	56	15
		07-25-94	--	389	7.9	6.0	200	56	56	15
424440110505001		10-04-93	--	189	8.3	4.5	98	12	25	8.6
424521110594701		08-04-94	--	599	7.5	10.0	250	29	77	14
424647110550501		08-07-94	--	462	7.8	11.0	240	61	50	27
424740110572601		10-06-93	--	453	7.7	9.0	240	49	71	15
		03-16-94	--	460	7.7	7.0	220	30	65	14
		05-24-94	--	457	7.7	8.0	240	--	72	14
		07-25-94	--	461	7.6	9.0	240	38	73	15
424756110594801		08-04-94	--	926	7.8	8.0	230	45	62	18
424806110594701		08-04-94	--	784	7.8	7.0	210	--	58	16
424828110533601		09-15-94	E5.0	290	7.5	9.0	--	--	--	--
425127110592701		08-06-94	--	554	7.6	9.0	250	41	66	21

E-Estimate.

QUALITY OF GROUND WATER

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LINCOLN COUNTY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION	NUMBER	DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
414644111024101		05-18-94	140	3	5.1	320	290	310	160	0.3
414712110275001		06-17-94	150	10	1.1	--	287	62	20	0.5
415210110082201		05-22-94	480	180	0.90	912	906	130	29	4.4
415218110294501		06-15-94	--	--	--	--	--	--	--	--
415230110270701		05-22-94	60	3	0.60	181	182	12	13	0.3
415243110281701		06-15-94	--	--	--	--	--	--	--	--
415315110333001		06-16-94	17	0.5	1.0	230	221	62	8.1	0.2
415411110242301		06-15-94	41	0.9	2.5	254	269	220	20	0.2
415427110294701		06-14-94	120	7	0.40	262	272	29	21	1.2
415445110111501		05-21-94	320	100	0.70	650	647	110	17	1.7
415541110363001		06-16-94	1.4	0.0	0.40	163	163	12	1.0	0.1
415620110462800		05-20-94	1.4	0.0	0.40	211	213	3.4	0.90	0.2
415635110282801		06-14-94	--	--	--	--	--	--	--	--
415645110281701		06-14-94	15	0.5	1.1	196	198	9.9	7.7	0.2
415730110160301		06-13-94	280	75	0.50	430	438	170	19	1.2
415839110241901		06-14-94	38	1	1.4	258	229	91	28	0.2
415839110261901		06-14-94	--	--	--	--	--	--	--	--
415944110305301		06-16-94	--	--	--	--	--	--	--	--
420023110285401		06-16-94	85	2	2.0	234	226	130	79	0.5
420120110250301		06-16-94	8.6	0.3	1.0	175	179	9.2	11	<0.1
420310110535701		05-31-94	--	--	--	--	--	--	--	--
421443110470400		09-13-94	--	--	--	108	--	--	--	--
421545110452001		09-14-94	--	--	--	--	--	--	--	--
422327110361901		09-16-94	--	--	--	--	--	--	--	--
422333110575500		09-17-94	--	--	--	--	--	--	--	--
422402110462501		09-13-94	--	--	--	104	--	--	--	--
422802110575901		07-24-94	120000	820	1.7	--	26	1600	75000	<0.1
422828110581200		09-15-94	--	--	--	--	--	--	--	--
423214110525101		08-03-94	3.8	0.1	0.70	216	217	9.1	1.2	0.2
423238110533201		10-07-93	2.8	0.1	0.70	207	207	29	0.90	0.1
		03-15-94	3.1	0.1	0.80	185	185	39	1.1	<0.1
		05-23-94	2.5	0.1	1.0	243	248	22	0.70	<0.1
		07-25-94	2.8	0.1	3.9	217	220	26	0.50	0.1
423319110395201		08-02-94	2.1	0.1	0.30	67	68	54	0.50	0.2
423645110395401		08-02-94	1.6	0.1	0.30	87	89	7.2	0.50	0.2
423714110544401		08-03-94	2.2	0.1	0.40	157	159	73	0.90	0.2
423838110551401		08-04-94	2.9	0.1	0.50	160	182	42	1.7	0.1
424133110574301		08-03-94	2.3	0.1	0.60	168	168	30	1.0	0.2
424216110585501		10-06-93	11	0.3	1.1	224	228	34	15	0.2
		03-15-94	12	0.3	1.2	230	227	34	13	<0.1
		05-23-94	12	0.3	1.2	244	192	36	14	0.1
		07-25-94	10	0.3	1.4	220	224	36	11	0.1
424423110570901		10-08-93	1.0	0.0	0.70	150	144	39	0.30	0.3
		03-15-94	1.1	0.0	0.70	119	122	79	0.50	0.3
		05-23-94	0.90	0.0	0.90	140	142	69	0.50	0.3
		07-25-94	0.90	0.0	1.0	146	148	58	0.70	0.3
424440110505001		10-04-93	0.40	0.0	0.20	85	91	11	0.60	0.4
424521110594701		08-04-94	26	0.7	1.3	221	224	26	34	0.2
424647110550501		08-07-94	3.6	0.1	1.3	175	177	69	2.5	0.2
424740110572601		10-06-93	2.0	0.1	1.0	190	201	39	4.3	0.1
		03-16-94	1.9	0.1	1.0	190	195	45	1.6	0.1
		05-24-94	1.7	0.0	1.1	--	194	47	1.9	0.1
		07-25-94	1.8	0.0	1.2	206	209	36	2.5	0.1
424756110594801		08-04-94	97	3	0.80	184	193	48	150	0.1
424806110594701		08-04-94	83	2	1.0	--	214	40	95	0.1
424828110533601		09-15-94	--	--	--	--	--	--	--	--
425127110592701		08-06-94	18	0.5	1.0	210	219	48	20	0.3

QUALITY OF GROUND WATER
LINCOLN COUNTY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION	NUMBER	DATE	SILICA, DIS- SOLVED (MG/L AS SIO ₂)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	BORON, DIS- SOLVED (UG/L AS B)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
414644111024101		05-18-94	16	960	--	--	--	--	--	--
414712110275001		06-17-94	9.5	428	--	--	--	--	--	--
415210110082201		05-22-94	10	1200	--	--	--	--	--	--
415218110294501		06-15-94	--	--	--	--	--	--	--	--
415230110270701		05-22-94	8.2	227	--	--	--	--	--	--
415243110281701		06-15-94	--	--	--	--	--	--	--	--
415315110333001		06-16-94	11	323	--	--	--	--	--	--
415411110242301		06-15-94	15	602	--	--	--	--	--	--
415427110294701		06-14-94	13	365	--	--	--	--	--	--
415445110111501		05-21-94	11	851	--	--	--	--	--	--
415541110363001		06-16-94	7.5	184	--	--	--	--	--	--
415620110462800		05-20-94	6.3	214	--	--	--	--	--	--
415635110282801		06-14-94	--	--	--	--	--	--	--	--
415645110281701		06-14-94	14	232	--	--	--	--	--	--
415730110160301		06-13-94	9.7	744	--	--	--	--	--	--
415839110241901		06-14-94	19	422	--	--	--	--	--	--
415839110261901		06-14-94	--	--	--	--	--	--	--	--
415944110305301		06-16-94	--	--	--	--	--	--	--	--
420023110285401		06-16-94	10	550	--	--	--	--	--	--
420120110250301		06-16-94	8.0	211	--	--	--	--	--	--
420310110535701		05-31-94	--	--	--	--	--	--	--	--
421443110470400		09-13-94	--	--	--	--	--	--	--	--
421545110452001		09-14-94	--	--	--	--	--	--	--	--
422327110361901		09-16-94	--	--	--	--	--	--	--	--
422333110575500		09-17-94	--	--	--	--	--	--	--	--
422402110462501		09-13-94	--	--	--	--	--	--	--	--
422802110575901		07-24-94	14	198000	--	--	--	--	--	--
422828110581200		09-15-94	--	--	--	--	--	--	--	--
423214110525101		08-03-94	11	231	--	--	--	--	--	--
423238110533201		10-07-93	7.9	250	20	0.30	<0.01	0.30	0.01	0.01
		03-15-94	8.5	237	10	0.17	<0.01	0.17	0.01	0.01
		05-23-94	8.2	281	<10	0.60	<0.01	0.60	0.02	0.01
		07-25-94	8.2	262	20	0.28	<0.01	0.28	<0.01	<0.01
423319110395201		08-02-94	9.0	150	--	--	--	--	--	--
423645110395401		08-02-94	7.6	103	--	--	--	--	--	--
423714110544401		08-03-94	6.6	263	--	0.98	<0.01	0.98	0.02	<0.01
423838110551401		08-04-94	8.5	249	--	1.20	<0.01	1.20	0.02	<0.01
424133110574301		08-03-94	7.3	213	--	0.63	<0.01	0.63	0.03	0.01
424216110585501		10-06-93	11	313	10	2.50	<0.01	2.50	0.01	<0.01
		03-15-94	12	304	20	2.40	<0.01	2.40	0.05	0.01
		05-23-94	12	295	30	2.30	<0.01	2.30	0.01	0.01
		07-25-94	11	306	20	2.40	<0.01	2.40	<0.01	0.01
424423110570901		10-08-93	4.8	196	<10	0.25	<0.01	0.25	0.01	<0.01
		03-15-94	5.3	232	10	0.15	0.02	0.17	0.01	<0.01
		05-23-94	5.2	234	<10	0.27	<0.01	0.27	0.01	<0.01
		07-25-94	5.1	228	<10	0.61	<0.01	0.61	<0.01	<0.01
424440110505001		10-04-93	4.0	105	--	--	--	--	--	--
424521110594701		08-04-94	14	343	--	3.70	<0.01	3.70	0.02	0.09
424647110550501		08-07-94	10	270	--	--	<0.01	<0.05	0.02	<0.01
424740110572601		10-06-93	10	273	<10	2.20	<0.01	2.20	0.01	0.01
		03-16-94	11	265	10	1.90	<0.01	1.90	0.04	0.02
		05-24-94	9.9	272	10	1.90	<0.01	1.90	0.01	0.01
		07-25-94	9.8	272	20	1.60	<0.01	1.60	<0.01	<0.01
424756110594801		08-04-94	9.6	503	--	0.31	<0.01	0.31	0.02	<0.01
424806110594701		08-04-94	9.7	433	--	0.36	<0.01	0.36	0.02	0.02
424828110533601		09-15-94	--	--	--	--	--	--	--	--
425127110592701		08-06-94	13	321	--	0.43	<0.01	0.43	0.02	0.02

QUALITY OF GROUND WATER

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LINCOLN COUNTY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION	NUMBER	GEO- LOGIC UNIT	LOCAL IDENT- I- FIER	SITE	DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	FLOW RATE (G/M)
425135110592201	111ALVM	33-119-12cba01		GW	10-06-93	1700	5.1	25	6.0
				GW	03-17-94	1215	4.4	25	--
				GW	05-24-94	1630	4.7	25	--
				GW	07-26-94	1700	5.9	25	--
425540110581801	111ALVM	34-118-18ccb01		GW	10-05-93	1700	12.8	70	6.0
425555111013301	111ALVM	34-119-15cab01		GW	08-05-94	1400	17.7	56	7.0
425638111002201	111ALVM	34-119-11cac01		GW	10-07-93	1500	8.6	60	12
				GW	03-17-94	0915	14.7	60	--
				GW	05-23-94	1930	9.3	60	--
				GW	07-25-94	1930	7.7	60	--
425843111023501	111ALVM	35-119-33bda01		GW	08-06-94	1330	17.9	50	8.0
425851110471201	111ALVM	23-118-11ccd01		SP	05-20-94	1400	--	--	--
425855111020601	111ALVM	35-119-33abb01		GW	10-08-93	1130	12.0	50	12
				GW	03-16-94	1030	19.8	50	--
				GW	05-25-94	0845	13.3	50	--
				GW	07-26-94	1045	12.6	50	--
425857110591901	111ALVM	35-119-25ccd01		GW	10-07-93	1200	95.3	119	10
				GW	03-16-94	1230	78.3	119	--
				GW	05-24-94	1130	98.3	119	--
				GW	07-26-94	0830	96.2	119	--
425857111021801	111ALVM	35-119-33aba01		GW	08-05-94	1730	14.4	60	11
425951110562201	337DRBY	425951110562201		SP	09-15-94	1330	--	--	--
430046111004301	111ALVM	35-119-15ddd01		GW	10-05-93	0945	25.8	30	6.0
430057111003801	111ALVM	35-119-14cbc01		GW	11-20-93	0830	31.8	75	--
				GW	03-16-94	1445	34.6	75	--
				GW	05-24-94	0945	32.6	75	--
				GW	07-26-94	1515	29.7	75	--
430331111013301	111ALVM	36-119-34cbd01		GW	10-07-93	1800	20.7	85	6.0
				GW	03-17-94	1430	21.8	85	--
				GW	05-25-94	1030	21.2	85	--
				GW	07-26-94	1400	21.7	85	--
430444111003701	111ALVM	36-119-26bcb01		GW	08-05-94	2030	98.2	110	6.0
430519111005801	121TWNT	36-119-22dbd01		GW	08-06-94	1730	101.2	309	9.0
430528111010201	121TWNT	36-119-22dba01		GW	08-06-94	1600	48.6	105	7.0
430626111014501	111ALVM	36-119-15bcc01		GW	10-04-93	1700	17.7	50	12

QUALITY OF GROUND WATER
LINCOLN COUNTY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION	NUMBER	DATE	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
425135110592201		10-06-93	--	536	7.7	9.0	270	35	65	25
		03-17-94	--	518	7.7	5.0	260	62	65	24
		05-24-94	--	493	7.8	8.0	240	17	60	22
		07-26-94	--	550	7.6	8.0	270	45	67	26
425540110581801		10-05-93	--	520	7.7	10.0	220	30	54	21
425555111013301		08-05-94	--	693	7.3	8.0	330	43	99	21
425638111002201		10-07-93	--	427	7.7	8.0	230	33	55	22
		03-17-94	--	390	7.9	7.0	210	40	52	20
		05-23-94	--	396	7.7	8.0	210	28	51	19
		07-25-94	--	417	7.8	7.5	220	30	54	21
425843111023501		08-06-94	--	593	7.5	7.5	290	39	80	21
425851110471201		05-20-94	E40	469	7.5	5.5	240	26	76	12
425855111020601		10-08-93	--	499	7.7	8.0	230	31	63	18
		03-16-94	--	496	7.8	5.0	230	40	64	18
		05-25-94	--	516	7.7	8.0	230	--	63	17
		07-26-94	--	498	7.8	7.0	230	32	63	18
425857110591901		10-07-93	--	393	7.8	8.0	210	15	52	19
		03-16-94	--	382	7.9	7.0	210	0	53	19
		05-24-94	--	381	7.7	8.0	200	7	50	18
		07-26-94	--	378	7.8	7.5	200	16	50	19
425857111021801		08-05-94	--	540	7.7	8.0	260	47	70	20
425951110562201		09-15-94	E15	287	8.3	4.0	--	--	--	--
430046111004301		10-05-93	--	582	7.6	8.5	290	50	84	20
430057111003801		11-20-93	--	544	7.9	7.0	270	0	70	23
		03-16-94	--	555	7.7	8.0	290	61	76	24
		05-24-94	--	510	7.7	9.5	260	7	66	22
		07-26-94	--	518	7.6	9.0	270	32	69	23
430331111013301		10-07-93	--	379	7.8	8.0	190	23	48	18
		03-17-94	--	357	7.9	6.0	170	12	42	17
		05-25-94	--	352	7.8	7.0	180	9	45	16
		07-26-94	--	351	7.8	7.0	180	16	45	17
430444111003701		08-05-94	--	466	7.6	8.0	250	40	62	22
430519111005801		08-06-94	--	582	7.6	9.0	300	0	80	25
430528111010201		08-06-94	--	607	7.6	8.0	320	8	84	26
430626111014501		10-04-93	--	582	7.6	10.0	260	22	72	20

E-Estimate.

QUALITY OF GROUND WATER

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LINCOLN COUNTY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION	NUMBER	DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
425135110592201		10-06-93	9.4	0.3	1.1	230	233	48	8.9	0.1
		03-17-94	9.3	0.3	1.0	199	226	45	9.0	<0.1
		05-24-94	8.6	0.2	1.0	223	223	38	7.5	<0.1
		07-26-94	10	0.3	1.2	229	235	51	11	0.1
425540110581801		10-05-93	0.90	0.0	0.50	191	196	30	1.1	0.2
425555111013301		08-05-94	17	0.4	5.6	291	309	37	20	0.4
425638111002201		10-07-93	1.3	0.0	0.50	195	200	30	1.1	0.3
		03-17-94	1.2	0.0	0.60	172	179	30	0.80	0.2
		05-23-94	1.1	0.0	0.60	178	176	31	0.80	0.2
		07-25-94	1.2	0.0	0.60	191	194	29	1.1	0.2
425843111023501		08-06-94	13	0.3	1.5	247	258	35	14	0.2
4258511110471201		05-20-94	2.4	0.1	1.4	213	220	36	2.6	0.2
425855111020601		10-08-93	13	0.4	0.80	200	204	38	15	0.2
		03-16-94	12	0.3	0.90	194	196	41	17	0.1
		05-25-94	14	0.4	0.90	--	200	40	23	0.1
		07-26-94	14	0.4	0.90	199	203	39	18	0.2
4258571110591901		10-07-93	1.3	0.0	0.60	193	196	16	1.1	0.2
		03-16-94	1.5	0.0	0.60	214	189	18	1.3	<0.1
		05-24-94	1.2	0.0	0.70	192	189	18	1.2	0.1
		07-26-94	1.2	0.0	0.50	187	188	18	1.2	0.1
425857111021801		08-05-94	14	0.4	0.80	210	221	38	18	0.2
4259511110562201		09-15-94	--	--	--	157	--	--	--	--
430046111004301		10-05-93	5.5	0.1	0.70	242	251	27	9.5	0.2
430057111003801		11-20-93	6.0	0.2	0.90	420	245	27	8.4	<0.1
		03-16-94	7.0	0.2	1.0	228	252	28	9.9	<0.1
		05-24-94	6.6	0.2	0.90	248	240	26	6.4	<0.1
		07-26-94	6.1	0.2	0.90	235	241	25	6.9	<0.1
430331111013301		10-07-93	3.0	0.1	0.60	171	176	17	4.0	0.1
		03-17-94	2.8	0.1	0.70	163	169	17	3.1	<0.1
		05-25-94	2.8	0.1	0.70	169	169	17	3.0	<0.1
		07-26-94	2.9	0.1	0.60	166	168	17	2.9	<0.1
430444111003701		08-05-94	2.4	0.1	0.50	205	218	16	1.5	0.1
430519111005801		08-06-94	8.1	0.2	0.90	323	318	9.1	4.2	0.2
430528111010201		08-06-94	8.0	0.2	0.90	309	317	22	4.1	0.2
430626111014501		10-04-93	6.5	0.2	0.90	240	241	26	7.6	0.2

QUALITY OF GROUND WATER

LINCOLN COUNTY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION	NUMBER	DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	BORON, DIS- SOLVED (UG/L AS B)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
425135110592201		10-06-93	12	312	20	0.71	<0.01	0.71	0.02	0.03
		03-17-94	13	305	30	0.67	0.02	0.69	0.01	0.03
		05-24-94	12	286	10	0.63	<0.01	0.63	0.02	0.09
		07-26-94	12	322	30	0.59	<0.01	0.59	<0.01	0.03
425540110581801		10-05-93	6.1	239	<10	1.80	<0.01	1.80	0.02	<0.01
425555111013301		08-05-94	23	417	--	1.90	<0.01	1.90	0.02	0.08
425638111002201		10-07-93	6.1	243	<10	1.50	<0.01	1.50	0.01	<0.01
		03-17-94	6.3	224	<10	1.17	0.03	1.20	0.02	<0.01
		05-23-94	6.2	222	<10	1.40	<0.01	1.40	0.02	0.03
		07-25-94	5.9	236	10	1.50	<0.01	1.50	<0.01	<0.01
425843111023501		08-06-94	11	341	--	2.40	<0.01	2.40	0.03	0.03
425851110471201		05-20-94	9.0	272	--	--	--	--	--	--
425855111020601		10-08-93	8.3	282	20	0.67	<0.01	0.67	0.02	<0.01
		03-16-94	8.5	283	20	0.90	0.01	0.91	0.01	<0.01
		05-25-94	8.4	290	10	0.81	<0.01	0.81	0.02	<0.01
		07-26-94	8.2	286	10	0.71	<0.01	0.71	<0.01	<0.01
425857110591901		10-07-93	7.3	220	<10	1.20	<0.01	1.20	0.01	0.01
		03-16-94	7.7	218	<10	0.84	0.02	0.86	0.04	0.02
		05-24-94	7.6	214	10	0.78	<0.01	0.78	0.02	0.02
		07-26-94	7.1	213	20	0.80	<0.01	0.80	<0.01	<0.01
425857111021801		08-05-94	8.9	302	--	--	--	--	--	--
425951110562201		09-15-94	--	--	--	--	--	--	--	--
430046111004301		10-05-93	7.9	337	10	7.20	<0.01	7.20	0.02	<0.01
430057111003801		11-20-93	9.3	305	--	3.10	<0.01	3.10	<0.01	0.02
		03-16-94	10	322	20	3.40	<0.01	3.40	0.04	0.01
		05-24-94	9.6	291	20	2.20	<0.01	2.20	0.02	0.03
		07-26-94	9.1	299	20	3.20	<0.01	3.20	<0.01	0.01
430331111013301		10-07-93	5.8	214	<10	2.60	<0.01	2.60	0.02	0.02
		03-17-94	6.0	197	10	1.50	<0.01	1.50	0.03	<0.01
		05-25-94	6.0	198	20	1.40	<0.01	1.40	0.02	<0.01
		07-26-94	5.7	198	10	1.30	<0.01	1.30	<0.01	<0.01
430444111003701		08-05-94	9.1	306	--	14.0	<0.01	14.0	0.02	<0.01
430519111005801		08-06-94	19	337	--	--	<0.01	<0.05	0.16	0.02
430528111010201		08-06-94	14	349	--	--	<0.01	<0.05	0.12	<0.01
430626111014501		10-04-93	7.6	303	--	4.10	<0.01	4.10	0.02	<0.01

NATRONA COUNTY

WATER QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION	NUMBER	LOCAL IDENT- IFIER	GEO- LOGIC UNIT	SITE	DATE	TIME	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)
424514106364001	32-082-12caa01		211CODY	GW	10-06-93	1755	14.42	2570
424508106355801	32-082-12dadd01		211CODY	GW	10-07-93	1020	19.70	3210
424508106360101	32-082-12dadac01		211CODY	GW	10-07-93	0825	14.05	12000
424504106355801	32-082-12ddaa01		211CODY	GW	10-07-93	0940	15.15	8860
424504106360101	32-082-12ddab01		211CODY	GW	10-07-93	0910	8.40	6020
424500106355801	32-082-12ddad01		211CODY	GW	10-06-93	1805	13.74	1650
424500106360101	32-082-12ddac01		211CODY	GW	10-07-93	1300	14.49	4020
424505106352601	32-081-07cda01		211CODY	GW	10-07-93	1100	19.75	652
424502106361801	32-082-12dca01		211CODY	GW	10-07-93	1230	12.68	31400
424459106361801	32-082-12dcdb01		211CODY	GW	10-07-93	1135	14.81	6210
424451106370801	32-082-14aaad01		211CODY	GW	10-07-93	1425	19.75	13000
424451106371101	32-082-14aaac01		211CODY	GW	10-07-93	1340	12.83	13100
424442106370801	32-082-14aad04		211CODY	GW	10-07-93	1600	23.50	24600
424442106371003	32-82-14aad03 RAS-6		211CODY	GW	10-07-93	1530	9.00	19500

DATE	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY LAB (MG/L AS CACO3)
10-06-93	7.4	13.0	890	200	94	300	4	3.4	471
10-07-93	7.3	10.0	1900	610	93	110	1	19	243
10-07-93	7.2	9.5	5000	580	860	1700	10	39	687
10-07-93	7.2	10.5	3000	580	370	1300	10	27	409
10-07-93	7.4	9.0	2600	550	290	610	5	27	305
10-06-93	7.3	10.0	690	180	59	120	2	6.5	343
10-07-93	7.3	11.0	2200	470	250	210	2	13	258
10-07-93	7.4	12.0	260	73	18	38	1	5.3	180
10-07-93	7.9	11.0	5400	360	1100	8500	50	38	563
10-07-93	7.3	11.0	2100	480	210	730	7	20	274
10-07-93	6.9	10.5	3800	910	370	1900	13	11	474
10-07-93	7.1	10.0	3400	740	380	2300	17	12	567
10-07-93	7.2	10.0	5000	620	830	5000	31	33	520
10-07-93	7.0	10.0	4900	790	710	3600	22	11	675

DATE	ALKA- LINEITY WAT DIS TOT IT FIELD MG/L AS CACO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)
10-06-93	485	0	592	1000	49	0.50	24	1960	<1
10-07-93	246	0	300	1600	38	0.50	16	2630	390
10-07-93	690	0	842	5700	98	0.40	16	9410	5000
10-07-93	420	0	513	3300	100	0.70	16	5950	5000
10-07-93	314	0	383	2600	69	0.60	17	4360	1500
10-06-93	336	0	410	510	76	1.0	19	1170	3
10-07-93	258	0	315	2500	14	0.30	18	3630	52
10-07-93	188	0	229	150	9.5	0.70	15	422	2
10-07-93	560	0	683	22000	640	3.4	9.6	33000	4600
10-07-93	290	0	354	3100	35	0.40	18	4770	94
10-07-93	470	0	573	2800	330	0.90	14	6640	22000
10-07-93	560	0	683	3600	140	0.50	11	7540	16000
10-07-93	530	0	647	6800	510	2.4	11	14200	27000
10-07-93	630	0	769	5900	380	2.7	7.9	11800	25000

GOOSE EGG SPRING DISCHARGE STUDY

PLATTE RIVER BASIN
424440106315601 GOOSE EGG SPRING (UPPER POOL) NEAR GOOSE EGG, WY

LOCATION.--Lat 42°44'40", long 106°31'56", in NE¹/₄ NE¹/₄ SE¹/₄ sec.15, T.32 N., R.81 W., Natrona County, Hydrologic Unit 10180007, in upper pool on left bank of Goose Egg Spring, 13.3 mi southwest of Casper.

PERIOD OF RECORD.--June 1992 to current year (gage heights only).

GAGE.--Water-stage recorder and steel sheet piling weir. Elevation of gage is 5,260 ft above sea level, from topographic map.

REMARKS.--Estimated daily gage heights: Feb. 23 to Mar. 22, Mar. 26 to Apr. 1, and Apr. 27 to May 31. Records good except those for estimated daily gage heights, which are poor. Gage heights listed below are for stage upstream from the weir crest. Flow over the weir is about 70 to 85 percent of the total flow of Goose Egg Spring. The weir crest is affected at times by algae growth. Results of discharge measurements, listed below, are the total outflow from the spring.

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 6	0935	17.4	2.06	Apr. 25	1350	18.1	2.09
Nov. 18	1245	16.3	2.08	June 20	1520	17.5	2.11
Dec. 22	1120	17.0	2.07	July 29	1105	15.6	2.09
Jan. 31	1315	14.6	2.07	Sept. 1	1105	16.3	2.08
Feb. 10	1330	16.0	2.08	Sept. 27	1400	18.5	2.08
Mar. 22	1445	15.1	2.09				

EXTREMES FOR CURRENT YEAR.--Maximum daily gage height, 2.14 ft, July 7, 12; minimum, 2.04 ft, several days.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.08	2.05	2.08	2.07	2.07	2.08	2.09	2.09	2.10	2.12	2.09	2.08*
2	2.07	2.06*	2.08	2.07	2.07	2.08	2.09	2.09	2.11	2.12	2.09	2.08
3	2.07	2.06	2.08	2.07	2.07	2.08	2.09	2.09	2.11	2.12	2.09	2.08
4	2.07	2.06	2.08	2.07	2.07	2.08	2.09	2.09	2.11	2.12	2.09	2.08
5	2.07	2.06	2.07	2.07	2.07	2.08	2.09	2.09	2.11	2.12	2.09	2.08
6	2.06*	2.06	2.07	2.07	2.08	2.08	2.09	2.09	2.11	2.13	2.09	2.08
7	2.05	2.06	2.07	2.07	2.08	2.08	2.09	2.09	2.11	2.14	2.08	2.08
8	2.05	2.06	2.07	2.07	2.08	2.08	2.09	2.09	2.11	2.13	2.09	2.08
9	2.05	2.06	2.07	2.07	2.08	2.08	2.08	2.09	2.11	2.13	2.09	2.08
10	2.04	2.06	2.07	2.07	2.07*	2.09	2.09	2.09	2.11	2.13	2.08	2.08
11	2.04	2.07	2.07	2.07	2.07	2.09	2.09	2.10	2.11	2.13	2.08	2.08
12	2.04	2.07	2.08	2.07	2.08	2.09	2.09	2.10	2.11	2.14	2.08	2.08
13	2.04	2.07	2.07	2.07	2.08	2.09	2.09	2.10	2.11	2.13	2.08	2.08
14	2.04	2.08	2.07	2.07	2.08	2.09	2.09	2.10	2.12	2.13	2.08	2.08
15	2.04	2.08	2.07	2.07	2.08	2.09	2.09	2.10	2.12	2.13	2.08	2.07
16	2.04	2.08	2.07	2.07	2.08	2.09	2.09	2.10	2.12	2.13	2.07*	2.07
17	2.04	2.08	2.07	2.07	2.08	2.09	2.09	2.10	2.12	2.13	2.07	2.07
18	2.04	2.08*	2.07	2.07	2.08	2.09	2.09	2.10	2.12	2.13	2.07	2.07
19	2.04	2.07	2.07	2.07	2.08	2.09	2.09	2.10	2.12	2.11*	2.07	2.07
20	2.04	2.08	2.07	2.07	2.08	2.09	2.09	2.10	2.12	2.09	2.06	2.07
21	2.04	2.08	2.07	2.07	2.08	2.09	2.09	2.10	2.11	2.08	2.07	2.07
22	2.04	2.08	2.07	2.07	2.08	2.09	2.09	2.10	2.11	2.08	2.07	2.07
23	2.05	2.08	2.07	2.07	2.08	2.09	2.09	2.10	2.11	2.08	2.07	2.07
24	2.05	2.08	2.07	2.07	2.08	2.09	2.09	2.10	2.11	2.09	2.07	2.07
25	2.05	2.08	2.07	2.07	2.08	2.09	2.09	2.10	2.11	2.09	2.07	2.07
26	2.05	2.08	2.07	2.07	2.08	2.09	2.09	2.10	2.11	2.09	2.08	2.07
27	2.05	2.08	2.07	2.07	2.08	2.09	2.09	2.10	2.11	2.09	2.08	2.08*
28	2.05	2.08	2.07	2.07	2.08	2.09	2.09	2.10	2.11	2.09	2.08	2.07
29	2.05	2.08	2.07	2.07	---	2.09	2.09	2.10	2.11	2.09*	2.08	2.05
30	2.05	2.08	2.07	2.07	---	2.09	2.09	2.10	2.12	2.09	2.08	2.05
31	2.05	---	2.07	2.07	---	2.09	---	2.10	---	2.09	2.08	---
MEAN	2.05	2.07	2.07	2.07	2.08	2.09	2.09	2.10	2.11	2.11	2.08	2.07
MAX	2.08	2.08	2.08	2.07	2.08	2.09	2.09	2.10	2.12	2.14	2.09	2.08
MIN	2.04	2.05	2.07	2.07	2.07	2.08	2.08	2.09	2.10	2.08	2.06	2.05

* Crest cleared.

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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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