

CHEYENNE RIVER BASIN

06364300 PORCUPINE CREEK NEAR TECKLA, WY

LOCATION.--Lat 43° 34' 41", log 105° 20' 19", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 25, T.42 N., R.71 W., Campbell County Hydrologic Unit 10120101, on left bank 0.2 mi downstream from culvert on County Road 69, 0.6 mi upstream from Boss Draw, and 1.2 mi northeast of Teckla.

DRAINAGE AREA.--78.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June to September 2003.

GAGE.--Water stage recorder. Elevation of gage is 4,685 ft above NGVD of 1929, from topographic map.

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

May 5. . . 1.80

June 4. . . 1.27

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	0.63	0.00	0.00
2	---	---	---	---	---	---	---	---	---	0.63	0.00	0.00
3	---	---	---	---	---	---	---	---	---	0.58	0.00	0.00
4	---	---	---	---	---	---	---	---	---	0.51	0.00	0.00
5	---	---	---	---	---	---	---	---	---	0.41	0.00	0.00
6	---	---	---	---	---	---	---	---	---	0.37	0.00	0.00
7	---	---	---	---	---	---	---	---	---	0.37	0.00	0.00
8	---	---	---	---	---	---	---	---	---	0.31	0.00	0.00
9	---	---	---	---	---	---	---	---	0.51	0.14	0.00	0.00
10	---	---	---	---	---	---	---	---	0.51	0.01	0.00	0.00
11	---	---	---	---	---	---	---	---	0.51	0.00	0.00	0.00
12	---	---	---	---	---	---	---	---	0.51	0.00	0.00	0.00
13	---	---	---	---	---	---	---	---	0.51	0.00	0.00	0.00
14	---	---	---	---	---	---	---	---	0.51	0.00	0.00	0.00
15	---	---	---	---	---	---	---	---	0.49	0.00	0.00	0.00
16	---	---	---	---	---	---	---	---	0.44	0.00	0.00	0.00
17	---	---	---	---	---	---	---	---	3.1	0.00	0.00	0.00
18	---	---	---	---	---	---	---	---	4.2	0.00	0.00	0.00
19	---	---	---	---	---	---	---	---	2.6	0.00	0.00	0.00
20	---	---	---	---	---	---	---	---	1.5	0.00	0.00	0.00
21	---	---	---	---	---	---	---	---	1.0	0.00	0.00	0.00
22	---	---	---	---	---	---	---	---	0.79	0.00	0.00	0.00
23	---	---	---	---	---	---	---	---	0.53	0.00	0.00	0.00
24	---	---	---	---	---	---	---	---	0.51	0.00	0.00	0.01
25	---	---	---	---	---	---	---	---	0.51	0.00	0.00	0.06
26	---	---	---	---	---	---	---	---	0.52	0.00	0.00	0.10
27	---	---	---	---	---	---	---	---	0.60	0.00	0.00	0.13
28	---	---	---	---	---	---	---	---	0.63	0.00	0.00	0.15
29	---	---	---	---	---	---	---	---	0.63	0.00	0.00	0.20
30	---	---	---	---	---	---	---	---	0.63	0.00	0.00	0.21
31	---	---	---	---	---	---	---	---	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	---	---	3.96	0.00	0.86
MEAN	---	---	---	---	---	---	---	---	---	0.13	0.000	0.029
MAX	---	---	---	---	---	---	---	---	---	0.63	0.00	0.21
MIN	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	---	---	---	7.9	0.00	1.7

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2003, BY WATER YEAR (WY)

MEAN	---	---	---	---	---	---	---	---	---	0.13	0.000	0.029
MAX	---	---	---	---	---	---	---	---	---	0.13	0.000	0.029
(WY)	---	---	---	---	---	---	---	---	---	(2003)	(2003)	(2003)
MIN	---	---	---	---	---	---	---	---	---	0.13	0.000	0.029
(WY)	---	---	---	---	---	---	---	---	---	(2003)	(2003)	(2003)

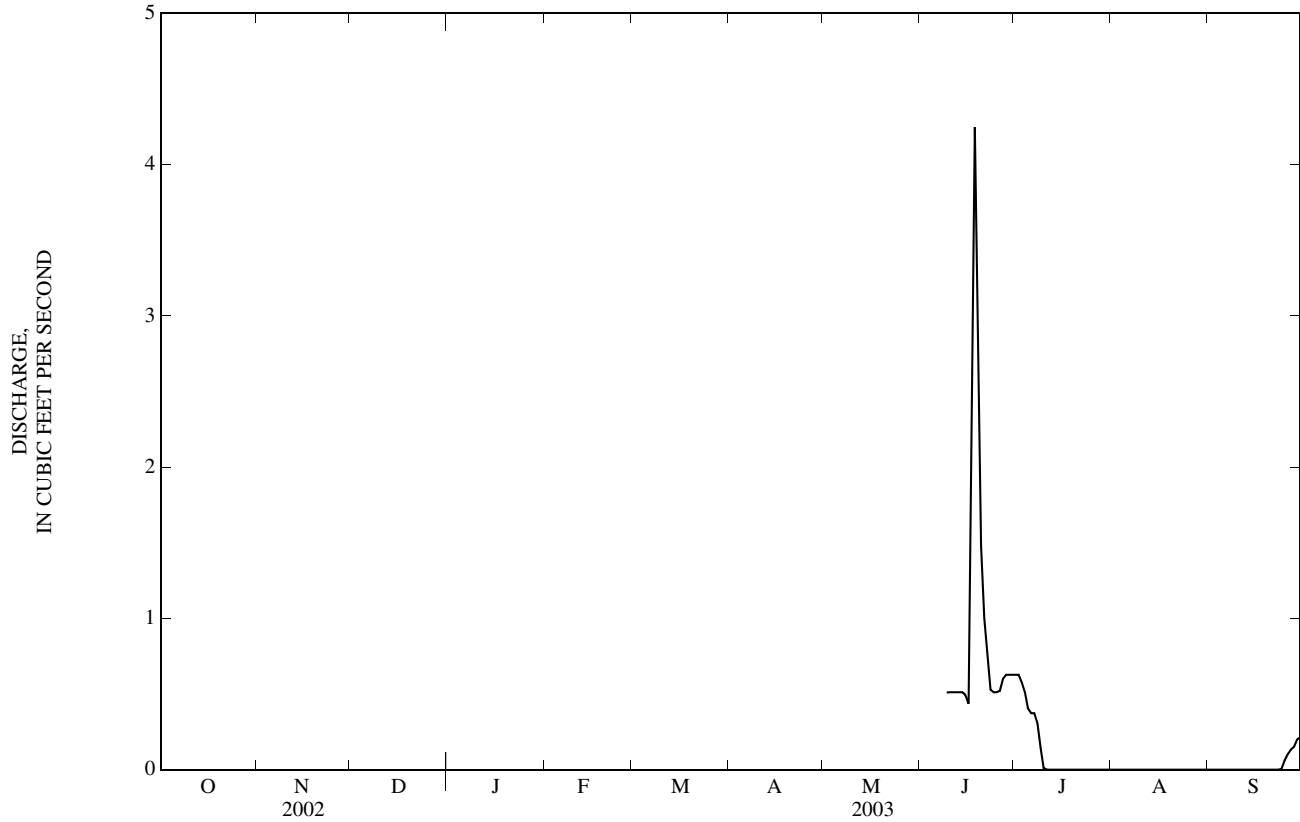
06364300 PORCUPINE CREEK NEAR TECKLA, WY—Continued

SUMMARY STATISTICS

FOR 2003 WATER YEAR*

HIGHEST DAILY MEAN	4.2	Jun 18
LOWEST DAILY MEAN	0.00	Many days
MAXIMUM PEAK FLOW	4.6	Jun 17
MAXIMUM PEAK STAGE	0.51	Jun 17

* For period of operation.



WATER-QUALITY RECORD

PERIOD OF RECORD.--May to September 2003.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
MAY 05...	1040	1.8	635	7.0	74	8.2	1,620	2.5	9.5	320	65.7	38.6	7.91
JUN 04...	1105	1.3	644	8.0	101	8.2	1,880	19.0	18.0	360	67.2	46.1	8.34
JUL 15...	0950	0.00	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	0905	0.00	--	--	--	--	--	--	--	--	--	--	--
SEP 08...	0930	0.00	--	--	--	--	--	--	--	--	--	--	--
Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)	Aluminum, water, unfltrd recover-able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)
MAY 05...	6	257	429	11.7	1.35	2.02	454	1,090	1.53	5.46	1,120	97	1.7
JUN 04...	7	298	375	11.6	1.2	2.37	607	1,270	1.83	4.73	1,350	88	3.2
JUL 15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
Date					Barium, water, unfltrd recover-able, ug/L (01007)	Beryllium, water, unfltrd recover-able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Selenium, water, unfltrd ug/L (01147)				
MAY 05...					98	<0.06	38	19.8	0.6				
JUN 04...					65	<0.06	111	35.2	0.8				
JUL 15...					--	--	--	--	--				
AUG 11...					--	--	--	--	--				
SEP 08...					--	--	--	--	--				

LOCATION.--Lat 43° 29' 08", long 105° 13' 39", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.35, T.41 N., R.70 W., Converse County, Hydrologic Unit 10120101, on left bank 0.4 mi downstream from Porcupine Creek, 9 mi southeast of Teckla, and 18 mi north of Bill.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

[illegible]

CHEYENNE RIVER BASIN

06364700 ANTELOPE CREEK NEAR TECKLA, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Barium, water, unfltrd recover- able, ug/L (01007)	Beryll- ium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)	Selen- ium, water, fltrd, ug/L (01145)	Selen- ium, water, unfltrd ug/L (01147)
OCT 10...	--	--	--	--	--	--
NOV 04...	28	<0.12	E28	541	E.8	E.8
DEC 10...	27	<0.12	119	1,870	--	E.8
JAN 15...	28	<0.12	414	2,840	--	1.1
FEB 11...	30	<0.12	414	2,860	--	E.6
MAR 06...	25	<0.12	255	2,820	--	E.9
APR 07...	28	<0.12	E22	1,290	--	1.6
MAY 05...	27	<0.12	35	844	--	E.8
JUN 04...	41	<0.06	22	617	--	1.1
JUL 15...	69	E.06	56	330	--	E.8
AUG 11...	--	--	--	--	--	--
SEP 08...	--	--	--	--	--	--

E -- Estimated value

LOCATION.--Lat 43° 34' 51", long 104° 43' 04", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.31, T.42 N., R.65 W., Weston County, Hydrologic Unit 10120103, 20 ft downstream from bridge on county road, 1.3 mi west of Hampshire, and 4.0 mi upstream from mouth.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

[illegible]

CHEYENNE RIVER BASIN

06376300 BLACK THUNDER CREEK NEAR HAMPSHIRE, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Barium, water, unfltrd recover- able, ug/L (01007)	Beryll- ium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)	Selen- ium, water, unfltrd ug/L (01147)
OCT 09...	--	--	--	--	--
NOV 04...	--	--	--	--	--
DEC 10...	--	--	--	--	--
JAN 15...	--	--	--	--	--
FEB 11...	--	--	--	--	--
MAR 06...	--	--	--	--	--
APR 07...	74	0.06	<10	12.8	1.0
MAY 05...	82	<0.06	<10	6.6	1.0
JUN 04...	--	--	--	--	--
JUL 15...	138	<0.06	<8	21.5	1.3
AUG 11...	--	--	--	--	--
SEP 08...	--	--	--	--	--

06386400 CHEYENNE RIVER AT RIVERVIEW, WY

LOCATION.--Lat 43° 25' 41", long 104° 11' 45", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T.40 N., R.61 W., Niobrara County, Hydrologic Unit 10120106, at bridge on U.S. Highway 85, 0.5 mi north of Riverview, 0.9 mi upstream from Bobcat Creek, 4.7 mi upstream from former gaging station, and 30 mi south of Newcastle.

DRAINAGE AREA.--5,160 mi², approximately.

PERIOD OF RECORD.--Water years 1951-54, 1969-70, 1972-92 October 2001 to September 2002. Published as South Fork Cheyenne River near Spencer prior to October 1951, as Cheyenne River near Spencer 1952-76, and as Cheyenne River near Riverview 1977-79.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous dis-charge, cfs (00061)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unfltrd uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	
OCT 09...	1430	0.59	670	10.8	127	8.0	4,310	17.0	16.0	1,100	265	113	10.4	
NOV 04...	1210	0.63	664	11.9	102	8.2	4,680	6.5	2.5	1,300	301	125	9.85	
DEC 10...	1125	0.62	667	12.8	102	7.9	5,440	4.5	0.0	1,500	373	135	12.2	
JAN 15...	1405	0.55	672	13.1	104	8.0	4,980	-6.0	0.0	1,500	359	141	11.0	
FEB 11...	1320	0.97	670	13.2	104	8.0	4,410	5.0	0.0	1,300	310	124	5.86	
MAR 06...	1150	1.1	657	12.5	101	7.8	4,430	2.0	0.0	1,300	316	125	8.35	
APR 07...	1820	6.1	677	11.7	110	8.7	3,150	4.5	7.0	560	129	58.1	9.53	
MAY 05...	1640	6.2	662	8.7	97	8.5	1,950	11.0	13.5	370	84.7	37.5	8.49	
JUN 04...	1740	23	670	6.5	85	7.9	1,150	20.0	22.0	310	77.6	27.9	7.93	
JUL 15...	1455	2.9	671	7.3	115	8.1	3,060	37.0	32.0	710	162	74.2	13.7	
AUG 11...	1325	0.63	675	10.9	161	8.3	2,640	33.0	28.5	630	145	66.0	12.5	
SEP 08...	1240	0.01	664	9.9	147	8.3	7,220	29.5	27.0	1,800	366	210	19.4	
Date		Sodium adsorp- tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alka- linity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti- tuents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)	Alum- inum, water, unfltrd recover- able, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)
OCT 09...	9	656	E169	62.5	0.66	7.04	2,140	--	--	--	3,630	83	0.9	
NOV 04...	8	688	E199	68.6	0.62	9.77	2,400	--	--	--	4,060	84	1.0	
DEC 10...	9	794	E345	74.2	0.62	10.4	2,780	--	--	--	4,700	41	1.1	
JAN 15...	8	698	328	69.5	0.60	11.2	2,630	4,110	6.16	6.72	4,530	37	1.5	
FEB 11...	8	672	325	66.3	0.58	10.7	2,170	3,560	5.17	10.0	3,800	118	1.1	
MAR 06...	8	684	370	64.8	0.56	11.3	2,130	3,570	5.10	11.0	3,750	82	0.9	
APR 07...	10	536	362	74.0	0.77	6.60	1,240	2,270	3.25	39.3	2,390	261	1.5	
MAY 05...	7	296	275	36.4	0.64	7.71	716	1,350	1.92	23.7	1,410	8,230	1.3	
JUN 04...	3	126	117	11.7	0.4	5.03	439	766	1.10	50.1	807	11,400	0.7	
JUL 15...	8	463	272	59.8	0.7	13.7	1,300	2,250	3.18	18.3	2,340	417	1.5	
AUG 11...	7	429	185	42.5	0.5	4.54	1,140	1,950	2.75	3.44	2,020	393	1.3	
SEP 08...	13	1,220	199	133	0.6	2.11	3,860	5,940	8.95	0.18	6,580	447	1.4	

CHEYENNE RIVER BASIN

06386400 CHEYENNE RIVER AT RIVERVIEW, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Barium, water, unfltrd recover- able, ug/L (01007)	Beryll- ium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)	Selen- ium, water, unfltrd ug/L (01147)
OCT 09...	56	<0.12	<30	407	1.7
NOV 04...	49	<0.12	<30	732	2.5
DEC 10...	32	<0.12	15	775	2.7
JAN 15...	27	<0.12	<30	785	2.3
FEB 11...	23	<0.12	<30	666	2.2
MAR 06...	21	<0.12	<30	699	2.5
APR 07...	31	<0.12	<30	169	2.3
MAY 05...	70	0.70	<10	86.3	1.7
JUN 04...	74	1.63	9	9.3	2.5
JUL 15...	87	<0.12	<24	96.9	1.3
AUG 11...	65	<0.12	<24	210	1.1
SEP 08...	43	<0.18	46	41.3	2.0

E -- Estimated value

06392900 BEAVER CREEK AT MALLO CAMP, NEAR FOUR CORNERS, WY

LOCATION.--Lat 44°05'06", long 104°03'36", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.4, T.47 N., R.60 W., Weston County, Hydrologic Unit 10120107, on right bank in Mallo Campgrounds, 250 ft upstream from mouth, 750 ft upstream from dam on Stockade Beaver Creek, and 3.8 mi east of Four Corners.

DRAINAGE AREA.--10.3 mi².

PERIOD OF RECORD.--October 1974 to September 1982, April 1991 to current year.

REVISED RECORD.--WDR-85-1: 1981, 1982.

GAGE.--Water-stage recorder. Elevation of gage is 6,030 ft above NGVD of 1929, from topographic map. October 1974 to September 1982, at site 50 ft upstream and datum 3.11 ft lower. U.S. Geological Survey data collection with satellite telemetry at station.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.98	e0.66	e0.70	e0.80	0.83	0.94	e2.3	1.4	1.5	2.3	1.2	1.5
2	0.91	e0.70	0.72	e0.78	0.80	0.95	e2.5	1.5	1.3	1.7	1.1	1.5
3	0.86	e0.72	0.74	e0.76	0.78	0.98	e2.2	1.4	1.0	1.6	1.1	1.5
4	0.87	e0.76	0.73	e0.74	0.80	0.97	e2.0	1.4	1.0	1.5	1.1	1.5
5	0.87	e0.80	e0.72	e0.72	0.79	0.93	1.9	1.4	0.98	1.6	2.8	1.4
6	0.90	e0.84	e0.68	0.71	0.71	0.98	1.6	1.3	1.1	1.5	1.8	1.3
7	0.90	e0.86	e0.72	e0.74	0.70	0.98	1.4	1.3	1.3	1.6	1.8	1.4
8	0.91	0.87	e0.74	e0.84	e0.78	0.94	1.3	1.2	1.2	1.6	1.8	1.4
9	0.76	0.84	e0.72	e0.80	e0.72	0.92	2.5	1.2	1.0	0.92	1.7	1.4
10	0.77	0.81	e0.72	e0.74	e0.76	0.92	e2.7	1.2	1.0	0.96	1.7	1.6
11	0.78	0.78	e0.74	e0.72	e0.80	0.92	e2.6	1.2	1.00	2.0	1.7	1.4
12	0.78	0.76	e0.72	e0.74	e0.82	0.92	e2.9	1.1	2.3	1.6	1.7	1.4
13	0.78	0.77	e0.72	e0.90	0.85	0.91	2.2	1.1	1.00	1.7	1.6	1.4
14	0.75	0.74	e0.74	e0.84	0.87	0.96	1.8	1.1	2.1	1.6	1.6	1.2
15	0.75	0.74	e0.78	e0.82	0.83	1.0	2.9	2.3	2.1	1.5	1.5	1.1
16	2.0	e0.72	e0.78	e0.74	0.83	1.0	1.2	1.6	2.0	1.3	1.5	1.0
17	0.50	0.73	e0.76	e0.76	0.86	1.2	e1.1	1.9	2.3	1.2	1.6	1.0
18	0.84	0.74	e0.74	e0.82	0.84	e2.6	e1.2	1.7	1.8	0.90	1.6	1.0
19	0.83	0.70	e0.72	0.92	0.84	e2.3	1.3	1.2	1.4	0.86	1.7	1.1
20	0.82	0.68	e0.70	e0.84	0.84	e1.8	1.2	1.2	1.4	0.94	1.6	1.1
21	0.79	0.66	e0.70	0.88	0.88	e2.0	1.1	1.2	1.1	0.92	1.6	1.1
22	0.79	0.68	e0.66	0.85	0.88	e2.3	1.1	1.1	1.1	1.1	1.5	1.2
23	0.76	0.69	e0.66	0.87	0.78	e2.6	1.1	1.1	1.1	1.1	1.5	1.1
24	0.74	e0.66	e0.68	0.87	0.68	e2.5	1.3	1.0	1.0	2.3	1.5	1.2
25	0.74	e0.64	e0.66	0.87	0.84	e2.3	2.5	1.0	1.0	1.7	1.5	1.3
26	e0.72	e0.66	e0.68	0.87	0.92	e2.5	2.2	1.0	0.99	1.4	1.5	1.3
27	0.74	e0.70	e0.72	0.87	0.98	1.7	2.2	0.88	0.95	1.5	1.5	1.3
28	0.74	e0.74	e0.78	0.87	0.96	1.4	2.3	0.91	0.94	1.5	1.5	1.3
29	e0.72	0.76	e0.80	0.85	---	1.2	2.0	0.89	0.94	1.3	1.5	1.3
30	e0.68	e0.76	e0.82	0.85	---	1.3	1.9	0.91	0.91	1.2	1.6	1.3
31	e0.62	---	e0.76	0.85	---	e2.0	---	1.8	---	1.2	1.6	---
TOTAL	25.60	22.17	22.51	25.23	22.97	44.92	56.5	40.48	38.81	44.10	49.0	38.6
MEAN	0.83	0.74	0.73	0.81	0.82	1.45	1.88	1.31	1.29	1.42	1.58	1.29
MAX	2.0	0.87	0.82	0.92	0.98	2.6	2.9	2.3	2.3	2.3	2.8	1.6
MIN	0.50	0.64	0.66	0.71	0.68	0.91	1.1	0.88	0.91	0.86	1.1	1.0
AC-FT	51	44	45	50	46	89	112	80	77	87	97	77

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2003, BY WATER YEAR (WY)

MEAN	1.89	1.75	1.64	1.57	1.72	2.01	2.30	2.21	2.38	2.12	2.00	1.89
MAX	3.16	3.30	2.68	2.95	2.90	5.83	4.07	3.44	4.05	3.09	2.89	3.08
(WY)	(2000)	(2000)	(1999)	(1999)	(1999)	(1999)	(1994)	(1978)	(1980)	(1979)	(1978)	(2000)
MIN	0.31	0.47	0.44	0.42	0.46	0.71	0.88	0.81	1.29	1.34	0.75	0.62
(WY)	(1977)	(1977)	(1977)	(1993)	(1977)	(1977)	(1993)	(1993)	(2003)	(1993)	(1976)	(1976)

06392900 BEAVER CREEK AT MALLO CAMP, NEAR FOUR CORNERS, WY—Continued

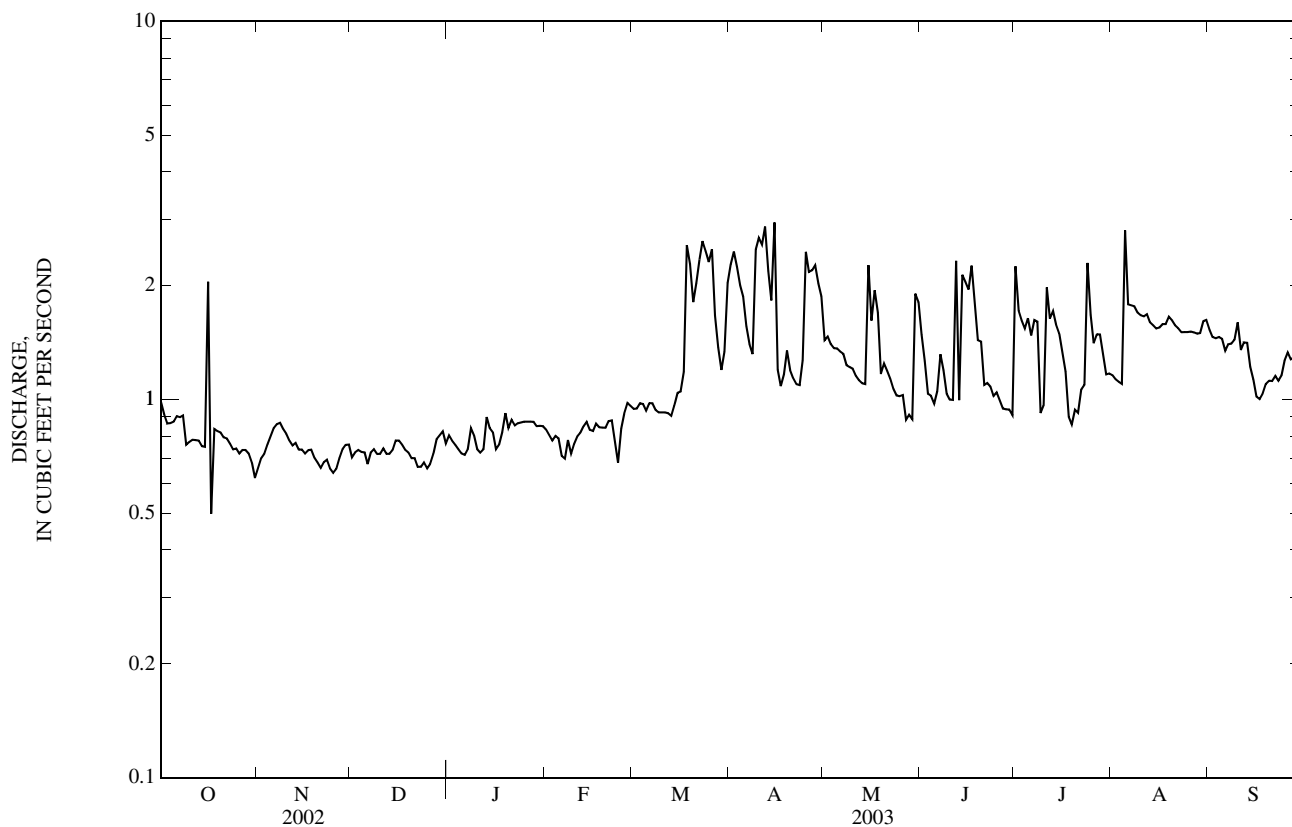
SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1975 - 2003	
ANNUAL TOTAL	549.45		430.89		--	
ANNUAL MEAN	1.51		1.18		1.97	
HIGHEST ANNUAL MEAN	--		--		3.20	
LOWEST ANNUAL MEAN	--		--		0.94	
HIGHEST DAILY MEAN	3.1	Jun 20	2.9 ^e	Apr 12	34	Mar 26, 1999
LOWEST DAILY MEAN	0.50	Oct 17	0.50	Oct 17	0.10	Jan 20, 1993
ANNUAL SEVEN-DAY MINIMUM	0.67	Nov 20	0.67	Nov 20	0.12	Jan 17, 1993
MAXIMUM PEAK FLOW	--		25 ^a	Apr 15	103 ^b	Apr 22, 1994
MAXIMUM PEAK STAGE	--		2.54 ^c	Apr 1	2.88 ^c	Dec 25, 1998
ANNUAL RUNOFF (AC-FT)	1,090		855		1,430	
10 PERCENT EXCEEDS	2.3		1.9		2.9	
50 PERCENT EXCEEDS	1.5		1.0		1.9	
90 PERCENT EXCEEDS	0.73		0.72		1.1	

a Gage height, 1.52 ft, may have been higher during period affected by backwater from ice.

b From rating curve extended above 85 ft³/s.

c Backwater from ice.

e Estimated.



06392950 STOCKADE BEAVER CREEK NEAR NEWCASTLE, WY

LOCATION.--Lat 43° 51' 32", long 104° 06' 24", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.19, T.45 N., R.60 W., Weston County, Hydrologic Unit 10120107, on right bank 20 ft upstream from culverts on county road, 0.6 mi upstream from South Draw, 2.5 mi upstream from LAK Reservoir Dam, and 4.7 mi east of Newcastle.

DRAINAGE AREA.--107 mi².

PERIOD OF RECORD.--October 1974 to September 1982, April 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,460 ft above NGVD of 1929, from topographic map. October 1974 to September 1982, at same site and datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. A few small diversions upstream from station for irrigation.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	17	14	16	15	11	17	18	14	14	13	13
2	15	17	14	16	15	11	17	17	14	14	13	13
3	15	17	15	15	14	11	17	14	13	14	13	11
4	15	17	14	15	14	12	18	11	12	12	13	9.8
5	16	17	14	15	14	11	17	11	13	10	12	9.9
6	16	17	15	15	14	12	17	11	11	10	12	9.9
7	16	16	14	15	16	12	17	11	13	10	12	10
8	16	15	14	15	14	12	17	11	12	12	10	10
9	16	17	15	15	14	12	17	11	14	11	9.9	11
10	16	18	16	15	15	12	17	11	14	11	9.6	13
11	15	18	16	15	14	13	17	11	14	9.2	9.3	11
12	15	16	16	15	14	15	17	11	15	11	8.4	11
13	15	15	16	15	15	20	16	12	15	8.1	7.1	11
14	15	15	16	15	15	34	16	11	14	8.0	7.1	11
15	16	15	16	15	14	36	16	11	14	8.3	7.4	11
16	17	15	17	14	15	28	16	11	14	9.0	9.2	10
17	18	15	17	14	15	40	16	10	15	9.5	13	10
18	18	15	17	14	14	45	16	11	16	11	13	11
19	17	16	e17	14	14	35	16	10	15	12	13	10
20	16	16	e17	14	14	33	16	10	15	13	13	10
21	16	16	e17	14	14	32	16	10	15	13	13	10
22	18	16	e17	14	14	30	16	11	15	13	13	10
23	18	e16	e17	14	14	29	16	10	15	13	13	10
24	e18	e16	e17	14	18	26	17	10	15	13	13	10
25	18	e17	e17	14	16	22	17	11	15	13	13	10
26	18	17	e16	14	11	18	16	12	15	13	13	10
27	18	17	e16	14	11	17	16	12	14	13	13	11
28	18	16	e16	14	11	17	16	12	14	13	13	11
29	18	14	e16	14	---	17	16	13	14	12	13	11
30	18	14	16	14	---	17	19	10	14	12	13	12
31	18	---	16	14	---	17	---	13	---	13	14	---
TOTAL	514	483	491	451	398	657	498	358	423	358.1	362.0	321.6
MEAN	16.6	16.1	15.8	14.5	14.2	21.2	16.6	11.5	14.1	11.6	11.7	10.7
MAX	18	18	17	16	18	45	19	18	16	14	14	13
MIN	15	14	14	14	11	11	16	10	11	8.0	7.1	9.8
AC-FT	1,020	958	974	895	789	1,300	988	710	839	710	718	638

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2003, BY WATER YEAR (WY)

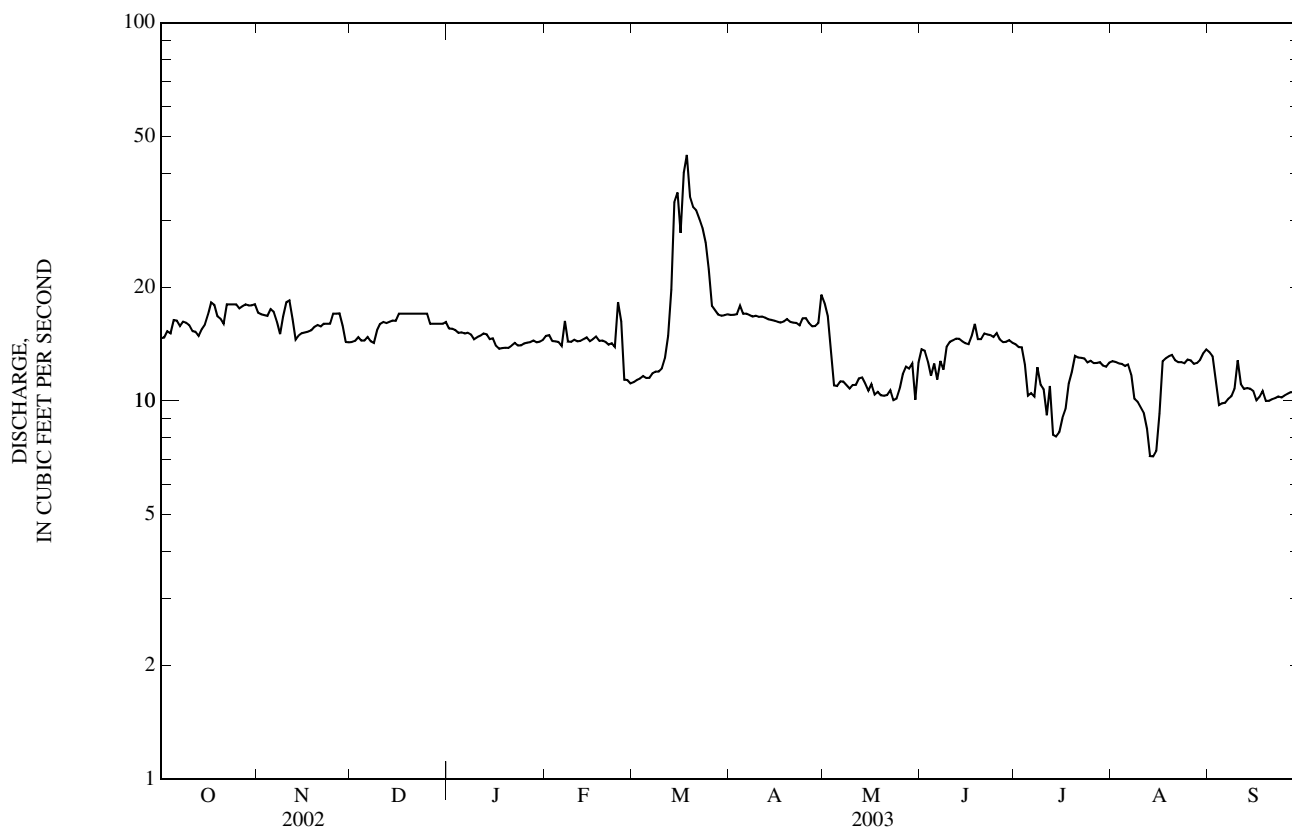
	13.6	13.7	13.5	13.2	13.5	15.1	14.0	11.7	11.8	11.7	12.4	12.8
MEAN	13.6	13.7	13.5	13.2	13.5	15.1	14.0	11.7	11.8	11.7	12.4	12.8
MAX	18.9	19.0	18.1	17.6	17.6	21.3	19.4	18.5	17.8	17.0	20.9	20.0
(WY)	(2000)	(2001)	(2000)	(2000)	(2000)	(1996)	(2000)	(2000)	(1999)	(1999)	(1999)	(1999)
MIN	9.40	9.74	10.2	9.52	10.6	10.8	9.53	6.45	5.92	8.24	6.33	8.89
(WY)	(1982)	(1994)	(1993)	(1980)	(1993)	(1993)	(1981)	(1992)	(1992)	(1981)	(1992)	(1991)

06392950 STOCKADE BEAVER CREEK NEAR NEWCASTLE, WY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1975 - 2003	
ANNUAL TOTAL	5,454.7		5,314.7		--	
ANNUAL MEAN	14.9		14.6		13.1	
HIGHEST ANNUAL MEAN	--		--		17.4	
LOWEST ANNUAL MEAN	--		--		9.80	
HIGHEST DAILY MEAN	21	Aug 29	45	Mar 18	143	Jul 16, 1993
LOWEST DAILY MEAN	7.1	Jul 5	7.1	Aug 13,14	3.9	May 21, 1992
ANNUAL SEVEN-DAY MINIMUM	7.6	Jul 3	8.3	Aug 10	4.6	Aug 2, 1992
MAXIMUM PEAK FLOW	--		66		776 ^a	
MAXIMUM PEAK STAGE	--		7.64		12.44	
ANNUAL RUNOFF (AC-FT)	10,820		10,540		9,510	
10 PERCENT EXCEEDS	18		17		17	
50 PERCENT EXCEEDS	15		14		13	
90 PERCENT EXCEEDS	11		10		9.3	

a From rating curve extended above 18 ft³/s on basis of culvert backwater computation.

e Estimated.



06395000 CHEYENNE RIVER AT EDMONT, SD

LOCATION.--Lat 43° 18'20", long 103° 49'14", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ 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 NGVD of 1929. Prior to December 1, 1906, nonrecording gage 20 ft upstream at datum 0.7 ft lower. April 11, 1928 to February 28, 1933, October 4, 1946 to October 23, 1947, and January 11, 1961 to April 24, 1963, nonrecording gage, and October 24, 1947 to January 10, 1961, and April 25, 1963 to September 30, 1972, water-stage recorder all at present site at datum 2.00 ft higher. Bureau of Reclamation data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Many small reservoirs upstream from station used for stock and irrigation water, total capacity, about 45,000 acre-ft. Station operated and record provided by the South Dakota District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	e12	e21	e18	e27	e13	28	28	8.6	49	0.37	0.81
2	2.5	e12	e22	e18	e27	e13	30	35	8.1	57	0.33	0.72
3	2.5	e12	e19	e18	e25	e12	33	57	7.0	31	0.32	0.68
4	2.2	e12	e18	e20	e23	e12	42	73	14	29	0.28	0.72
5	2.1	13	e17	e22	e21	e12	35	55	31	24	0.19	0.94
6	2.0	15	e17	e24	e19	e11	42	57	18	19	0.15	1.9
7	2.0	16	e16	e24	e17	e11	46	43	15	17	0.15	2.3
8	1.9	16	e16	e24	e16	e11	44	44	12	14	4.4	2.6
9	1.9	16	e17	e24	e15	e12	44	53	9.5	13	4.0	2.2
10	1.8	16	e17	e23	e14	e35	41	43	9.3	12	1.5	15
11	1.7	16	e18	e21	e14	e75	38	31	14	11	0.84	29
12	1.8	16	e20	e20	e15	e100	34	23	27	9.9	0.58	15
13	1.9	16	e22	e19	e16	e125	28	21	13	9.0	0.39	9.9
14	1.8	15	e23	e18	e17	e250	24	22	58	8.5	0.27	12
15	1.7	16	e23	e18	e16	393	24	23	229	7.7	0.24	13
16	1.7	16	e24	e18	e15	784	23	25	80	6.7	0.31	13
17	1.7	15	e25	e17	e16	941	24	24	126	5.6	1.3	17
18	1.7	14	e27	e17	e17	1,050	23	22	501	5.7	11	19
19	1.6	13	e26	e16	e17	1,440	24	24	547	5.0	6.1	19
20	1.6	15	e24	e15	e16	933	22	21	241	4.0	2.9	19
21	1.5	15	e23	e15	e16	481	20	19	241	3.3	2.0	16
22	1.4	15	e22	e14	e16	242	19	18	169	2.7	1.4	16
23	1.7	17	e21	e13	e15	159	20	18	113	2.3	1.1	15
24	3.4	18	e20	e12	e15	134	22	15	93	1.9	0.96	14
25	11	17	e19	e12	e15	140	24	13	95	1.4	0.76	13
26	14	e13	e18	e13	e14	122	22	13	120	1.0	0.64	12
27	14	e13	e17	e20	e14	103	19	11	121	0.86	0.64	11
28	14	e13	e24	e18	e13	81	17	9.4	76	0.67	0.52	8.3
29	14	e16	e24	e11	---	72	18	8.3	59	0.60	0.49	6.2
30	15	e16	e22	e19	---	54	24	9.6	45	0.52	0.67	4.9
31	12	---	e20	e25	---	36	---	7.7	---	0.45	0.93	---
TOTAL	140.8	445	642	566	481	7,857	854	866.0	3,100.5	353.80	45.73	310.17
MEAN	4.54	14.8	20.7	18.3	17.2	253	28.5	27.9	103	11.4	1.48	10.3
MAX	15	18	27	25	27	1,440	46	73	547	57	11	29
MIN	1.4	12	16	11	13	11	17	7.7	7.0	0.45	0.15	0.68
AC-FT	279	883	1,270	1,120	954	15,580	1,690	1,720	6,150	702	91	615

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2003, BY WATER YEAR (WY)

MEAN	21.5	16.6	9.18	9.05	41.1	124	66.9	207	245	121	64.5	26.0
MAX	291	266	50.5	37.3	302	506	558	2,192	2,084	806	388	275
(WY)	(1999)	(1999)	(1999)	(1999)	(1997)	(1994)	(1955)	(1978)	(1962)	(1958)	(1955)	(1973)
MIN	0.000	0.023	0.000	0.000	0.000	3.39	0.22	0.27	1.76	0.15	0.000	0.000
(WY)	(1961)	(1962)	(1960)	(1950)	(1960)	(1961)	(1961)	(1960)	(1966)	(1985)	(1960)	(1956)

CHEYENNE RIVER BASIN

06395000 CHEYENNE RIVER AT EDGEMONT, SD—Continued

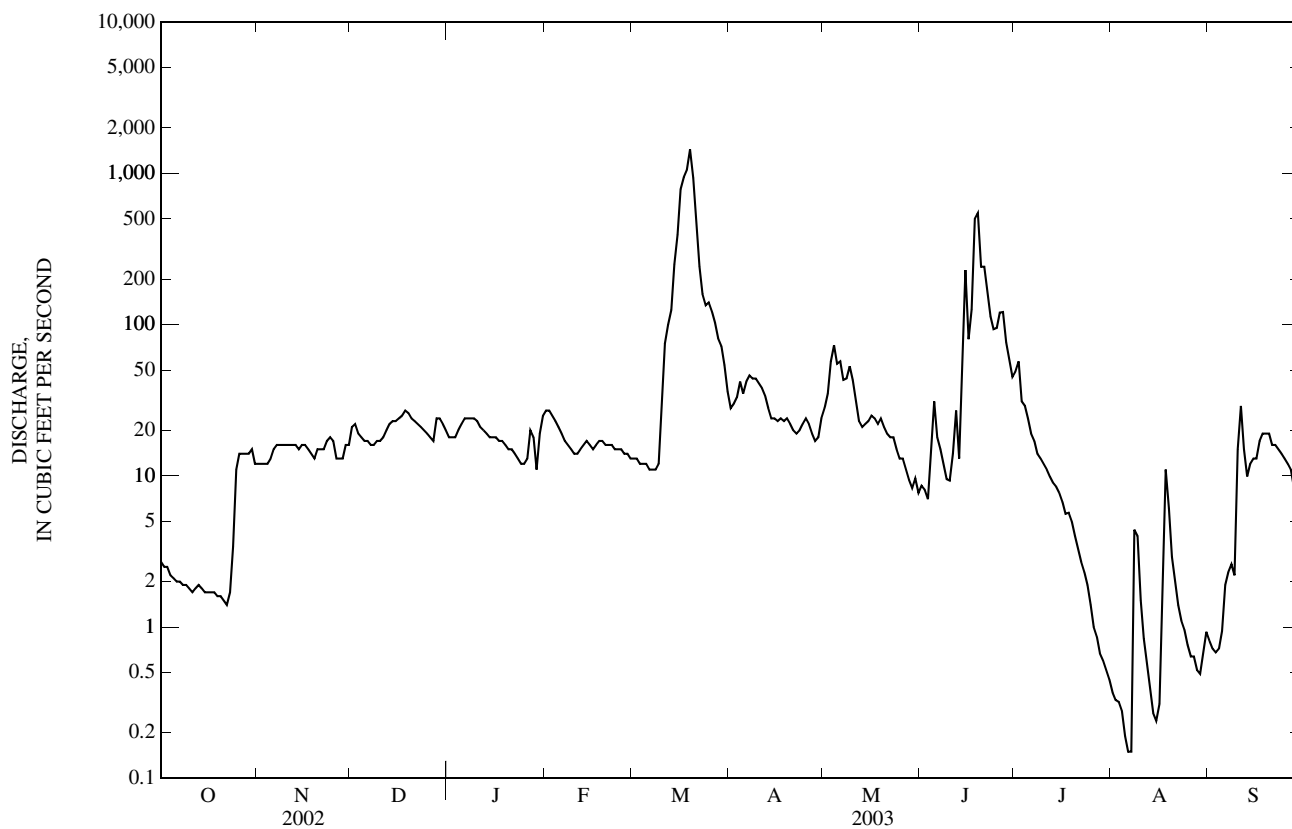
SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1929-1932,1947-2003
ANNUAL TOTAL	5,015.39	15,657.00	--
ANNUAL MEAN	13.7	42.9	79.4 ^a
HIGHEST ANNUAL MEAN	--	--	434 1962
LOWEST ANNUAL MEAN	--	--	12.0 1988
HIGHEST DAILY MEAN	181 Aug 31	1,440 Mar 19	24,000 May 20, 1978
LOWEST DAILY MEAN	0.07 Aug 20,24	0.15 Aug 6,7	0.00 ^b Jan 5, 1947
ANNUAL SEVEN-DAY MINIMUM	0.10 Aug 18	0.26 Aug 1	0.00 ^c Aug 31, 1947
MAXIMUM PEAK FLOW	--	1,550 Mar 19	28,000 May 20, 1978
MAXIMUM PEAK STAGE	--	5.83 Mar 19	13.65 May 20, 1978
ANNUAL RUNOFF (AC-FT)	9,950	31,060	57,540
10 PERCENT EXCEEDS	30	57	150 ^c
50 PERCENT EXCEEDS	8.7	16	12 ^c
90 PERCENT EXCEEDS	0.38	1.4	0.14 ^c

a Median of annual mean discharge, 63 ft³/s.

b No flow at times in most years.

c Reflects water years 1947-2003.

e Estimated.



06425720 BELLE FOURCHE RIVER BELOW RATTLESNAKE CREEK, NEAR PINEY, WY

LOCATION.--Lat 43° 59'04", long 105° 23'16", in NW¹/₄ NE¹/₄ NE¹/₄ sec.9, T.46 N., R.71 W., Campbell County, Hydrologic Unit 10120201, on right bank 200 ft downstream from bridge on county road, 1.2 mi downstream from Rattlesnake Creek, 10.0 mi southwest of Piney, 15.5 mi north of Reno Junction, and 22 mi south of Gillette.

DRAINAGE AREA.--495 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to April 1983, March 2001 to current year.

REVISED RECORD.--WDR WY-78-1.

GAGE.--Water-stage recorder and metal v-notch weir. Elevation of gage is 4,540 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except those for September 14-30 and those for estimated daily discharges, which are poor. No diversions upstream from station. Several small stockwater reservoirs upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.54	e1.4	2.5	e1.9	e4.3	e2.3	6.5	5.9	1.1	3.9	0.13	0.00
2	0.60	e1.6	2.5	e2.0	e3.7	e2.4	6.1	6.1	1.2	3.5	0.14	0.00
3	0.75	e1.7	2.3	2.3	e2.9	e2.2	6.5	6.4	1.1	3.4	0.08	0.00
4	0.70	1.9	2.2	2.2	e2.6	e1.9	6.2	6.2	1.1	3.1	0.08	0.00
5	0.77	2.0	2.4	e2.1	e2.3	e2.2	6.5	6.2	1.3	2.6	0.06	0.00
6	0.80	2.0	2.3	e2.0	e2.0	e2.3	6.2	5.1	1.5	2.3	0.07	0.00
7	0.80	2.1	2.3	e2.1	e2.4	e2.6	5.9	4.8	1.4	2.1	0.03	0.00
8	0.80	2.1	2.3	e2.0	e2.7	e2.3	5.5	4.7	1.3	2.0	0.03	0.00
9	0.73	2.1	2.3	e1.9	e2.9	e2.1	5.2	4.5	1.3	1.9	0.02	0.00
10	0.77	2.1	2.2	e1.8	e2.9	e2.8	5.1	4.5	1.2	1.6	0.02	0.07
11	0.77	2.2	2.3	e1.9	e3.0	e4.6	4.7	4.1	1.1	1.5	0.01	0.36
12	0.80	2.3	2.1	2.0	e3.2	e9.0	4.7	4.0	0.97	1.4	0.01	0.40
13	0.77	2.4	2.2	e2.0	e3.4	15	4.2	3.5	1.2	1.4	0.01	0.35
14	0.77	2.3	2.5	e1.9	e3.4	17	4.1	3.5	3.8	1.2	0.01	0.37
15	0.79	2.3	2.6	e1.9	e3.2	e17	4.0	3.4	3.6	1.1	0.01	0.37
16	0.77	2.2	2.5	e1.7	e3.3	13	3.5	3.2	5.3	0.92	0.01	0.37
17	0.77	2.3	e2.4	e1.8	e3.3	11	3.4	3.1	25	0.84	0.01	0.43
18	0.80	2.1	e2.0	1.9	e3.1	e11	3.4	2.9	18	0.76	0.01	0.43
19	0.80	2.1	e1.8	2.2	e3.0	e10	3.5	2.6	15	0.66	0.01	0.50
20	0.82	2.2	e1.6	2.1	e3.0	e9.0	3.7	2.7	12	0.64	0.00	0.43
21	1.1	2.1	e1.5	e1.9	e2.8	8.5	3.6	2.2	8.5	0.45	0.00	0.43
22	1.1	2.3	e1.4	e1.7	e2.1	8.5	3.4	2.1	7.5	0.43	0.00	0.43
23	1.1	2.4	e1.3	e1.6	e1.6	8.9	3.4	1.8	6.1	0.36	0.00	0.43
24	1.1	2.3	e1.4	e1.6	e1.5	8.9	3.7	1.7	5.6	0.35	0.00	0.43
25	1.2	2.3	e1.6	e1.7	e1.7	8.9	3.9	1.4	4.7	0.39	0.00	0.43
26	1.3	2.2	1.7	e2.1	e1.9	7.5	4.1	1.5	4.5	0.34	0.00	0.43
27	1.3	2.4	1.8	e3.0	e2.2	7.5	3.8	1.5	4.1	0.32	0.00	0.43
28	1.4	2.4	2.3	e3.8	e2.1	7.4	3.8	1.4	4.0	0.24	0.00	0.37
29	e1.3	2.4	e2.2	4.2	---	7.0	4.5	1.1	4.0	0.16	0.00	0.43
30	e1.2	2.1	2.1	4.1	---	6.8	5.4	1.0	4.5	0.15	0.00	0.43
31	e1.3	---	e2.0	e4.5	---	6.6	---	1.0	---	0.14	0.00	---
TOTAL	28.52	64.3	64.6	69.9	76.5	226.2	138.5	104.1	151.97	40.15	0.75	8.32
MEAN	0.92	2.14	2.08	2.25	2.73	7.30	4.62	3.36	5.07	1.30	0.024	0.28
MAX	1.4	2.4	2.6	4.5	4.3	17	6.5	6.4	25	3.9	0.14	0.50
MIN	0.54	1.4	1.3	1.6	1.5	1.9	3.4	1.0	0.97	0.14	0.00	0.00
AC-FT	57	128	128	139	152	449	275	206	301	80	1.5	17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2003, BY WATER YEAR (WY)*

	MEAN	0.27	0.50	0.61	0.90	1.83	4.69	2.22	10.2	4.33	1.64	2.01	0.43
MAX	0.94	2.14	2.26	3.25	7.36	15.8	5.62	88.3	15.6	6.22	15.8	2.71	
(WY)	(1983)	(2003)	(2002)	(2002)	(1982)	(1978)	(2001)	(1978)	(1979)	(1982)	(1982)	(1982)	(1982)
MIN	0.000	0.000	0.000	0.000	0.000	0.051	0.010	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	(1976)	(1976)	(1982)	(1977)	(1978)	(1981)	(1981)	(1981)	(1981)	(1976)	(1976)	(1976)	(1976)

06425720 BELLE FOURCHE RIVER BELOW RATTLESNAKE CREEK, NEAR PINEY, WY—Continued

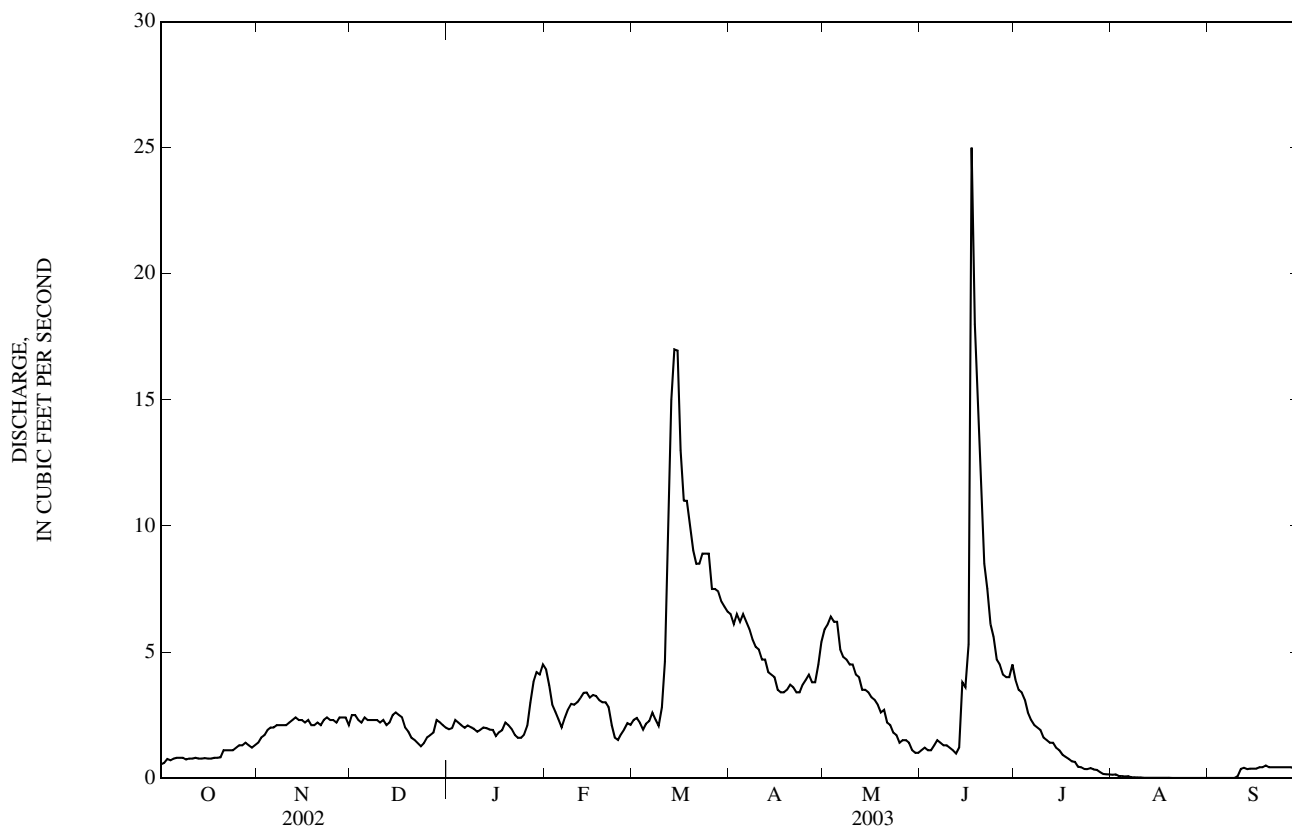
SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1976 - 2003
ANNUAL TOTAL	806.75		973.81		--
ANNUAL MEAN	2.21		2.67		2.50
HIGHEST ANNUAL MEAN	--		--		9.76 1978
LOWEST ANNUAL MEAN	--		--		0.19 1976
HIGHEST DAILY MEAN	12	Jun 5	25	Jun 17	1,060. May 19, 1978
LOWEST DAILY MEAN	0.00	Many days	0.00	Aug 20-Sep 9	0.00 Many days, most years
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 5	0.00	Aug 20	0.00 Most years
MAXIMUM PEAK FLOW	--		36.		4,100 ^a May 18, 1978
MAXIMUM PEAK STAGE	--		2.36		11.33 ^b May 18, 1978
ANNUAL RUNOFF (AC-FT)	1,600		1,930		1,810
10 PERCENT EXCEEDS	4.6		6.1		4.0
50 PERCENT EXCEEDS	2.1		2.1		0.05
90 PERCENT EXCEEDS	0.00		0.07		0.00

* For period of operation.

a From rating curve extended above 1,200 ft³/s on basis of peak flow over road and culvert computations.

b From floodmarks.

c Estimated.



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975-83, March 2001 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

[illegible]

06425720 BELLE FOURCHE RIVER BELOW RATTLESNAKE CREEK, NEAR PINEY, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Barium, water, unfltrd recover- able, ug/L (01007)	Beryll- ium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)	Selen- ium, water, unfltrd ug/L (01147)
OCT 09...	38	<0.06	25	106	1.0
JAN 15...	90	<0.12	<30	49.0	1.1
APR 07...	65	<0.06	50	346	0.9
MAY 05...	83	<0.06	17	325	0.7
JUN 04...	78	<0.12	26	110	1.1
JUL 15...	87	<0.12	E14	27.9	1.1
AUG 11...	113	<0.12	40	376	1.8
SEP 08...	--	--	--	--	--

E -- Estimated value

06425900 CABALLO CREEK AT MOUTH, NEAR PINEY, WY

LOCATION.--Lat 44°04'48", long 105°15'59", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.4, T.47 N., R.70 W., Campbell County, Hydrologic Unit 10120201, 0.1 mi downstream from bridge on county road, 0.7 mi southwest of Piney, 1.3 mi upstream from mouth, and 18 mi southeast of Gillette.

PERIOD OF RECORD.--Water years 1978-80, 1982, 1983, 2001 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
OCT 10...	0725	2.0	670	8.0	74	8.3	1,560	4.0	6.5	280	44.5	41.9	11.2	
NOV 05...	1540	2.8	650	13.1	109	8.6	1,490	8.5	1.0	280	49.2	39.1	9.60	
DEC 11...	0845	2.3	653	12.4	100	8.4	1,640	-3.5	0.0	330	58.9	44.0	9.98	
JAN 16...	1130	2.0	661	9.9	79	8.3	1,490	-4.0	0.0	300	57.3	39.2	9.22	
FEB 12...	1210	1.9	652	11.9	96	8.3	1,490	2.0	0.0	360	67.8	46.0	8.87	
MAR 07...	0915	1.7	642	11.0	90	8.4	1,690	-3.5	0.0	390	71.4	51.5	8.52	
APR 08...	1215	2.1	657	10.2	97	8.3	1,860	14.0	6.5	540	96.2	72.2	11.1	
MAY 06...	1315	2.6	646	10.7	114	8.5	1,990	10.5	10.5	500	83.7	70.7	11.9	
JUN 05...	1540	2.0	--	--	--	8.7	1,990	11.5	14.0	470	67.5	72.0	12.6	
JUL 16...	1015	2.8	653	7.7	105	8.0	1,980	33.0	22.5	570	113	71.3	5.36	
AUG 12...	0840	1.9	654	5.2	67	8.1	2,530	27.5	20.0	730	122	102	25.5	
SEP 09...	0845	1.0	648	5.3	60	8.5	1,630	12.5	13.5	260	40.8	39.5	13.3	
Date		Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)	Aluminum, water, unfltrd recoverable, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)
OCT 10...	6	246	E363	15.0	1.08	1.08	429	--	--	--	1,080	755	1.6	
NOV 05...	6	222	E365	13.9	1.01	1.05	376	--	--	--	980	257	0.8	
DEC 11...	6	250	E407	15.6	1.01	0.67	419	--	--	--	1,110	326	0.7	
JAN 16...	5	217	409	13.7	0.94	2.61	368	953	1.37	5.47	1,010	519	0.9	
FEB 12...	5	218	385	14.5	0.88	5.06	431	1,020	1.43	5.35	1,050	343	0.7	
MAR 07...	5	236	350	20.3	0.92	4.66	487	1,090	1.62	5.53	1,190	509	0.7	
APR 08...	4	239	320	18.0	0.75	1.73	695	1,330	1.88	8.04	1,390	432	0.9	
MAY 06...	6	288	400	21.1	0.92	2.60	707	1,430	2.01	10.4	1,480	517	1.1	
JUN 05...	6	288	331	21.7	0.9	0.92	731	1,390	1.98	7.86	1,460	680	1.2	
JUL 16...	4	204	250	28.8	0.9	2.50	791	1,370	2.06	11.4	1,510	307	1.2	
AUG 12...	4	275	301	27.7	0.9	1.14	1,050	1,790	2.65	9.98	1,950	486	1.7	
SEP 09...	7	270	455	20.9	1.2	1.58	388	1,050	1.53	3.05	1,130	1,250	1.9	

CHEYENNE RIVER BASIN

06425900 CABALLO CREEK AT MOUTH, NEAR PINEY, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Barium, water, unfltrd recover- able, ug/L (01007)	Beryll- ium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)	Selen- ium, water, unfltrd ug/L (01147)
OCT 10...	53	0.09	10	16.1	1.0
NOV 05...	48	E.03	E6	19.3	0.7
DEC 11...	79	E.03	<10	23.6	0.8
JAN 16...	93	E.04	<10	32.9	0.8
FEB 12...	105	E.04	E8	61.8	1.0
MAR 07...	105	E.05	E6	79.2	0.7
APR 08...	80	E.05	11	268	1.2
MAY 06...	78	E.06	<10	64.6	1.0
JUN 05...	84	0.09	E4	36.0	1.4
JUL 16...	111	E.04	E8	59.4	2.3
AUG 12...	100	0.07	<24	184	2.2
SEP 09...	78	0.13	E7	30.1	1.5

E -- Estimated value

06426130 DONKEY CREEK NEAR GILLETTE, WY

LOCATION.--Lat 44° 16'04", long 105° 26'17", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 31, T.50 N., R.71 W., Campbell County, Hydrologic Unit 10120201, on right bank 0.2 mi upstream from mouth and 3.0 mi southeast of Gillette.

DRAINAGE AREA.--63.4 mi².

PERIOD OF RECORD.--July 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,460 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records excellent except those for daily discharges greater than .00 ft³/s, which are fair and those for estimated daily discharges, which are poor. Natural flow of stream affected by numerous small reservoirs and diversions for irrigation and coalbed methane production water.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.17	0.57	0.94	e0.60	1.8	e1.4	1.7	5.0	0.05	0.37	0.00	0.00
2	0.20	0.59	e0.80	e0.55	2.1	e1.5	1.6	5.3	0.87	0.31	0.00	0.00
3	0.22	0.54	e0.70	e0.55	1.8	e1.5	1.4	3.6	3.0	0.24	0.00	0.00
4	0.27	0.55	e0.60	0.60	1.6	1.6	1.6	2.7	2.9	0.13	0.00	0.00
5	0.26	0.57	e0.64	e0.55	1.4	1.5	2.5	2.5	2.2	0.08	0.00	0.00
6	0.26	0.58	0.65	e0.60	1.0	1.4	1.9	2.2	2.0	0.13	0.00	0.00
7	0.26	0.60	0.67	e0.65	e1.1	1.6	1.5	1.8	4.6	0.34	0.00	0.00
8	0.32	0.54	0.68	e0.65	e1.1	1.7	1.4	3.3	5.3	0.11	0.00	0.00
9	0.38	0.42	0.67	e0.65	e1.1	2.1	1.3	4.7	3.2	0.01	0.00	0.00
10	0.66	0.41	0.63	e0.60	e1.0	e3.5	1.1	3.3	2.2	0.00	0.00	0.00
11	0.50	0.41	0.65	e0.50	1.2	e8.0	0.98	4.7	1.6	0.00	0.00	0.00
12	0.46	0.39	0.65	e0.45	1.2	e12	0.87	3.0	0.86	0.00	0.00	0.51
13	1.0	0.40	0.63	e0.45	1.3	e9.0	0.78	2.1	0.84	0.00	0.00	1.3
14	0.76	0.40	0.66	e0.50	1.3	6.9	0.69	1.7	1.1	0.00	0.00	1.0
15	0.51	0.41	0.71	e0.50	1.6	5.5	0.64	1.4	1.2	0.06	0.00	0.61
16	0.45	0.41	0.78	e0.55	2.8	4.1	0.62	1.1	0.65	0.16	0.00	0.19
17	0.41	0.41	0.79	e0.60	2.0	e6.5	0.68	0.67	1.1	0.29	0.00	0.08
18	0.43	0.43	e0.70	e0.60	4.2	e7.0	0.77	0.54	2.8	0.29	0.00	0.02
19	0.38	0.43	e0.60	e0.60	2.9	e6.0	0.78	0.49	2.5	0.53	0.00	0.00
20	0.37	0.46	e0.45	e0.55	2.1	5.1	1.2	0.69	1.8	0.00	0.00	0.33
21	0.35	0.47	e0.35	0.50	1.9	7.4	1.1	0.71	0.69	0.00	0.00	0.37
22	0.66	0.46	e0.30	e0.50	e1.5	9.0	0.90	0.57	0.30	0.00	0.00	0.25
23	1.2	e0.46	e0.35	0.54	e1.6	13	0.75	0.31	0.19	0.02	0.00	0.13
24	1.1	0.46	e0.35	e0.60	e1.8	9.2	0.57	0.23	0.27	0.03	0.00	0.05
25	0.84	0.47	e0.40	0.69	e1.5	5.9	0.58	0.26	5.9	0.00	0.00	0.00
26	0.64	0.66	e0.50	0.75	e1.3	4.3	0.66	0.36	5.0	0.00	0.00	0.00
27	0.59	0.59	e0.55	e0.80	e1.3	3.3	0.64	0.33	3.2	0.00	0.00	0.00
28	0.53	0.67	e0.55	1.3	e1.4	2.4	0.57	0.21	2.4	0.00	0.00	0.00
29	0.52	0.73	0.60	2.6	---	2.0	0.51	0.06	1.9	0.00	0.00	0.00
30	0.49	0.91	e0.60	2.4	---	1.7	0.56	0.00	0.75	0.00	0.00	0.00
31	0.49	---	e0.60	1.9	---	1.7	---	0.00	---	0.00	0.00	---
TOTAL	15.68	15.40	18.75	23.88	46.9	147.8	30.85	53.83	61.37	3.10	0.00	4.84
MEAN	0.51	0.51	0.60	0.77	1.68	4.77	1.03	1.74	2.05	0.10	0.000	0.16
MAX	1.2	0.91	0.94	2.6	4.2	13	2.5	5.3	5.9	0.53	0.00	1.3
MIN	0.17	0.39	0.30	0.45	1.0	1.4	0.51	0.00	0.05	0.00	0.00	0.00
AC-FT	31	31	37	47	93	293	61	107	122	6.1	0.00	9.6

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2003, BY WATER YEAR (WY)

MEAN	0.33	0.46	0.47	0.58	0.84	3.06	1.74	7.25	2.05	0.17	0.000	0.11
MAX	0.51	0.51	0.60	0.77	1.67	4.77	2.99	18.8	3.38	0.34	0.000	0.24
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2001)	(2001)	(2001)	(2001)	(2000)	(2002)
MIN	0.13	0.38	0.40	0.30	0.29	0.40	1.03	1.19	0.72	0.081	0.000	0.000
(WY)	(2002)	(2002)	(2001)	(2002)	(2002)	(2002)	(2003)	(2002)	(2002)	(2002)	(2000)	(2001)

06426130 DONKEY CREEK NEAR GILLETTE, WY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2000 - 2003	
ANNUAL TOTAL	183.95		422.40		--	
ANNUAL MEAN	0.50		1.16		1.43	
HIGHEST ANNUAL MEAN	--		--		2.70	
LOWEST ANNUAL MEAN	--		--		0.44	
HIGHEST DAILY MEAN	3.8	Sep 22	13	Mar 23	442	May 29, 2001
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	Many days, most years
ANNUAL SEVEN-DAY MINIMUM	0.00	Jun 29	0.00	Jul 25	0.00	Most years
MAXIMUM PEAK FLOW	--		18 ^a	Mar 23	3,400 ^b	May 28, 2001
MAXIMUM PEAK STAGE	--		4.74 ^c	Mar 18	10.89 ^d	May 28, 2001
ANNUAL RUNOFF (AC-FT)	365		838		1,040	
10 PERCENT EXCEEDS	1.2		2.8		2.1	
50 PERCENT EXCEEDS	0.38		0.60		0.40	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

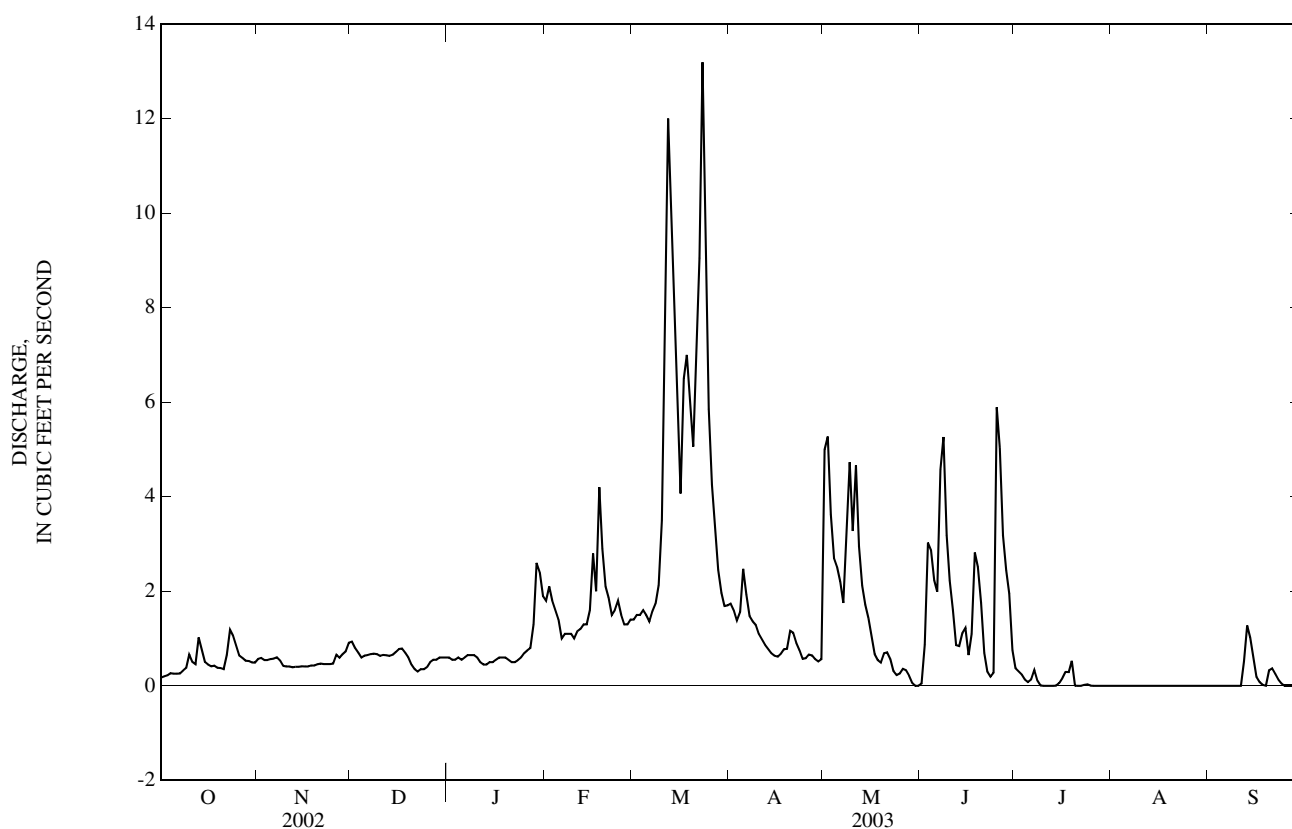
a Gage height, 2.63 ft.

b From rating curve extended above 150 ft³/s on basis of slope-area measurement of peak flow.

c Backwater from ice.

d From floodmarks.

e Estimated.



06426160 STONEPILE CREEK AT MOUTH NEAR GILLETTE, WY

LOCATION.--Lat 44° 16'04", long 105° 26'17", in NW¹/₄ NW¹/₄ SW¹/₄ sec. 31. T.50 N., R.71 W., Campbell County, Hydrologic Unit 10120201, on right bank 0.2 mi upstream from mouth and 3.0 mi southeast of Gillette.

DRAINAGE AREA.--14.5 mi².

PERIOD OF RECORD.--July 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,460 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow of stream affected by City of Gillette Wastewater Treatment Facility.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	2.9	2.7	2.6	5.5	4.2	4.4	14	6.4	3.9	3.8	4.3
2	3.8	3.3	2.8	2.6	4.6	4.1	4.4	5.3	5.6	4.2	3.5	3.5
3	4.6	2.9	3.0	3.0	4.4	4.1	4.1	3.1	9.1	4.2	3.5	3.3
4	3.5	3.1	2.7	3.0	4.2	4.6	6.4	3.2	4.2	3.5	3.1	3.4
5	3.7	2.8	2.9	3.2	4.6	4.1	5.2	3.6	4.5	3.4	3.7	3.6
6	4.4	2.7	2.9	3.4	4.7	4.0	4.3	2.8	9.9	3.5	3.7	3.2
7	3.4	3.0	2.7	3.3	4.7	4.2	4.1	3.3	7.8	4.1	3.9	3.3
8	3.2	2.9	2.9	3.1	4.7	4.2	4.1	6.3	4.5	4.0	4.0	3.3
9	3.7	2.7	2.6	2.7	4.6	4.4	4.1	3.5	3.8	3.8	4.1	3.3
10	3.1	2.8	2.6	2.9	4.6	5.3	3.9	4.6	3.5	3.6	4.3	21
11	3.2	2.6	2.7	3.1	4.4	13	4.1	4.4	4.0	3.7	4.2	6.4
12	3.9	2.6	2.4	3.0	4.3	9.6	3.5	3.0	3.6	4.0	4.4	3.4
13	3.4	2.7	2.6	3.1	4.4	7.7	4.0	3.0	3.7	3.9	4.0	6.0
14	3.2	2.7	2.5	3.3	4.3	7.5	3.5	2.8	3.4	3.9	3.9	3.4
15	2.4	2.5	3.0	3.5	4.6	5.5	3.5	3.1	3.7	3.7	4.2	3.1
16	2.5	2.6	3.0	2.8	4.6	5.0	3.7	2.9	4.9	4.2	4.2	3.1
17	3.1	2.8	3.3	3.0	5.3	12	3.8	2.9	6.2	3.8	4.1	3.5
18	3.0	2.9	3.4	2.9	6.0	5.6	3.8	3.2	4.3	4.1	4.1	5.1
19	3.4	2.8	3.2	3.1	4.9	5.0	4.2	2.7	4.1	5.8	4.3	3.3
20	2.6	2.7	3.3	3.7	4.7	6.1	3.7	2.9	3.7	3.9	4.2	3.3
21	2.5	2.6	3.9	3.4	4.8	9.2	3.0	2.8	3.5	4.2	4.0	3.5
22	2.6	2.9	3.6	3.4	4.4	13	3.3	2.8	6.3	3.7	4.2	3.2
23	3.8	e2.9	3.6	3.2	4.7	14	3.1	2.8	3.9	3.8	3.9	3.2
24	3.2	e2.9	3.4	2.5	4.2	6.9	3.0	2.6	16	3.7	3.7	2.9
25	3.0	2.9	2.7	3.0	4.4	5.8	3.5	2.3	17	3.9	4.0	3.1
26	3.2	2.9	3.1	3.0	4.1	5.3	2.9	2.8	5.6	3.8	3.6	3.1
27	3.1	3.0	3.1	4.8	4.3	5.1	3.1	2.8	4.4	6.8	3.7	3.2
28	2.7	2.5	3.2	4.8	4.1	4.6	3.1	2.5	3.7	4.3	3.7	3.2
29	2.9	3.0	3.7	4.2	---	4.3	2.8	2.9	3.7	3.9	3.6	2.8
30	3.0	2.8	3.4	4.5	---	4.4	5.2	2.4	3.9	4.1	3.2	3.0
31	2.7	---	2.8	5.2	---	4.3	---	2.5	---	3.7	3.3	---
TOTAL	100.2	84.4	93.7	103.3	129.1	197.1	115.8	109.8	168.9	125.1	120.1	124.0
MEAN	3.23	2.81	3.02	3.33	4.61	6.36	3.86	3.54	5.63	4.04	3.87	4.13
MAX	4.6	3.3	3.9	5.2	6.0	14	6.4	14	17	6.8	4.4	21
MIN	2.4	2.5	2.4	2.5	4.1	4.0	2.8	2.3	3.4	3.4	3.1	2.8
AC-FT	199	167	186	205	256	391	230	218	335	248	238	246

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2003, BY WATER YEAR (WY)

MEAN	2.95	3.00	3.09	3.25	3.44	5.09	4.18	6.01	4.47	3.98	3.52	3.13
MAX	3.23	3.29	3.33	3.55	4.61	6.36	4.95	10.9	5.63	4.39	4.34	4.13
(WY)	(2003)	(2001)	(2001)	(2001)	(2003)	(2003)	(2001)	(2001)	(2003)	(2002)	(2002)	(2003)
MIN	2.67	2.81	2.92	2.87	2.84	3.32	3.72	3.54	3.09	3.52	2.87	2.15
(WY)	(2002)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)	(2003)	(2002)	(2001)	(2000)	(2001)

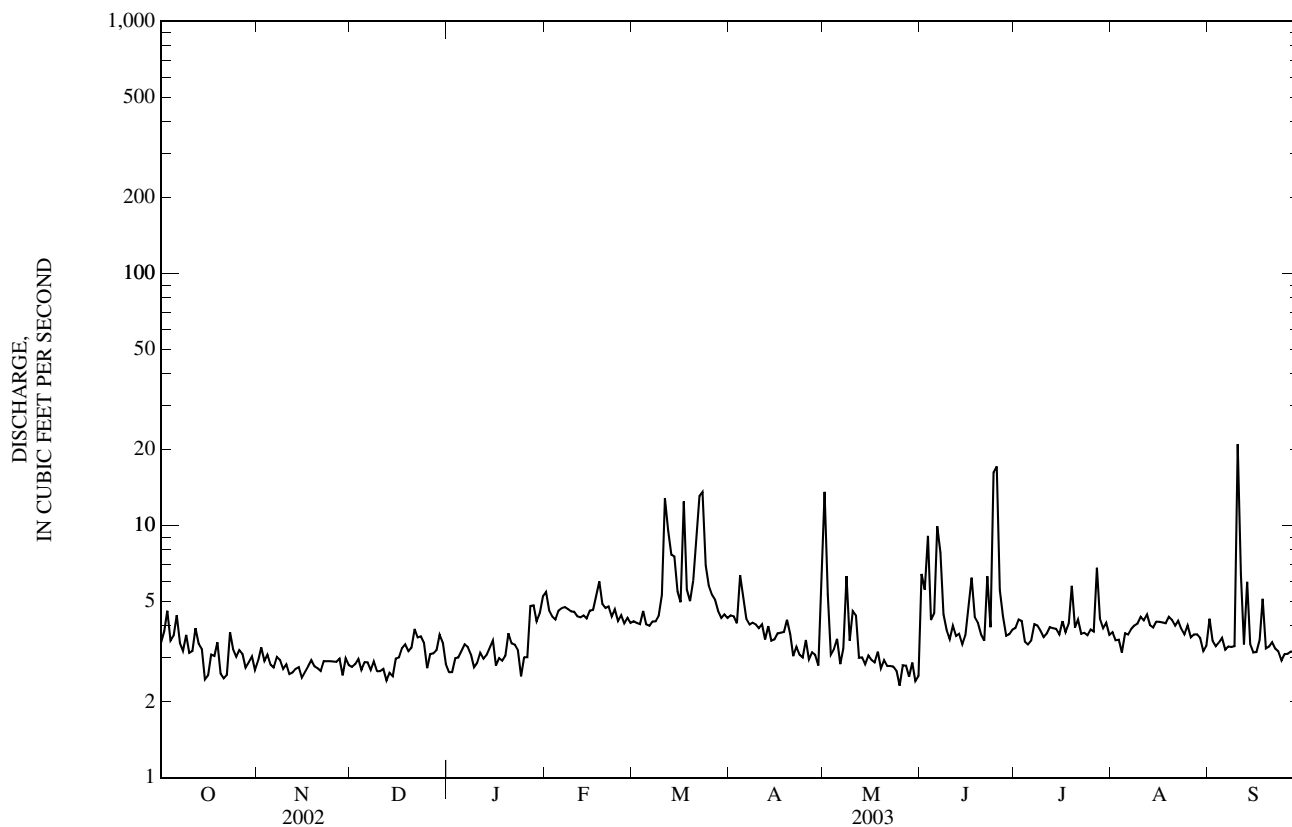
06426160 STONEPILE CREEK AT MOUTH NEAR GILLETTE, WY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2000 - 2003	
ANNUAL TOTAL	1,240.8		1,471.5		--	
ANNUAL MEAN	3.40		4.03		3.88	
HIGHEST ANNUAL MEAN	--		--		4.25	
LOWEST ANNUAL MEAN	--		--		3.35	
HIGHEST DAILY MEAN	14	Sep 21	21	Sep 10	192	May 29, 2001
LOWEST DAILY MEAN	1.9	Mar 9, Jul 6, 10	2.3	May 25	1.2	Sep 14, 2001
ANNUAL SEVEN-DAY MINIMUM	2.3	Jun 30	2.6	May 25	1.7	Sep 10, 2001
MAXIMUM PEAK FLOW	--		71	Sep 10	800 ^a	May 28, 2001
MAXIMUM PEAK STAGE	--		3.00	Sep 10	9.14 ^b	May 28, 2001
ANNUAL RUNOFF (AC-FT)	2,460		2,920		2,810	
10 PERCENT EXCEEDS	4.6		5.3		4.9	
50 PERCENT EXCEEDS	3.1		3.6		3.2	
90 PERCENT EXCEEDS	2.5		2.7		2.6	

a From rating curve extended above 39 ft³/s on basis of slope-area measurement of peak flow.

b From floodmarks.

c Estimated.



06426400 DONKEY CREEK NEAR MOORCROFT, WY

LOCATION.--Lat 44° 16'58", long 105° 03'48", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.30, T.50 N., R.68 W., Crook County, Hydrologic Unit 10120201, 25 ft upstream from county bridge, 1.2 mi downstream from Well Creek, and 6.0 mi west of Moorcroft.

DRAINAGE AREA.--246 mi².

PERIOD OF RECORD.--Water years 1977-89, 2001 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
OCT 09...	0800	3.5	656	8.1	75	8.6	2,250	7.0	5.5	660	124	84.7	12.7	
NOV 05...	1430	4.3	644	12.3	103	8.8	2,670	8.5	1.0	810	132	117	14.5	
DEC 11...	0730	1.6	650	10.4	85	8.0	3,350	-8.0	0.0	980	167	137	17.1	
JAN 16...	1015	1.3	666	7.9	63	7.9	2,950	-7.0	0.0	850	156	112	16.2	
FEB 12...	1110	2.9	656	5.8	47	7.7	2,880	-5.0	0.0	750	141	95.7	12.4	
MAR 07...	0750	3.4	646	5.5	45	7.7	2,890	-6.0	0.0	890	164	116	14.2	
APR 08...	1100	7.5	662	15.0	137	8.8	2,730	10.0	5.0	960	173	129	14.0	
MAY 06...	1150	10	651	12.4	130	9.0	2,590	9.5	10.0	1,000	157	147	13.3	
JUN 18...	1750	23	656	4.8	67	7.7	1,320	20.5	24.5	390	73.5	50.7	8.53	
JUL 16...	0815	1.9	657	4.5	58	7.9	2,780	28.5	20.0	750	118	110	50.2	
AUG 12...	0740	0.05	658	2.9	36	7.7	4,030	26.5	18.0	740	91.5	125	17.2	
SEP 09...	0745	0.91	652	5.1	57	8.0	2,430	10.0	13.0	590	95.1	84.6	15.5	
Date		Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)	Aluminum, water, unfltrd recoverable, ug/L (01105)	Arsenic water, fltrd, ug/L (01000)
OCT 09...	4	239	E290	210	1.27	1.37	602	--	--	--	1,590	278	2.6	
NOV 05...	4	267	E285	205	1.17	1.61	838	--	--	--	1,930	256	2.6	
DEC 11...	5	371	E407	267	1.33	6.18	1,010	--	--	--	2,460	315	2.7	
JAN 16...	5	314	435	214	1.21	7.92	884	1,970	2.97	7.67	2,180	152	3.4	
FEB 12...	6	353	341	260	1.22	11.3	792	1,870	2.78	15.9	2,040	205	2.1	
MAR 07...	5	356	454	229	1.27	12.8	834	2,000	2.86	19.2	2,110	356	2.8	
APR 08...	4	271	235	198	0.97	1.87	1,050	1,970	3.01	44.9	2,220	212	2.0	
MAY 06...	3	221	338	129	1.03	2.62	1,070	1,950	3.00	59.5	2,200	283	2.8	
JUN 18...	3	139	121	50.8	0.4	4.89	465	865	1.25	56.5	921	2,200	3.4	
JUL 16...	5	286	282	231	1.3	0.24	899	1,870	2.81	10.6	2,070	1,900	3.6	
AUG 12...	11	679	512	152	1.6	2.12	1,480	2,860	4.04	0.40	2,970	1,090	7.4	
SEP 09...	5	304	305	237	1.5	1.32	658	1,580	2.32	4.19	1,710	611	3.2	

06426400 DONKEY CREEK NEAR MOORCROFT, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Barium, water, unfltrd recover- able, ug/L (01007)	Beryll- ium, water, unfltrd recover- able, ug/L (01012)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)	Selen- ium, water, unfltrd ug/L (01147)
OCT 09...	30	E.03	15	73.2	2.0
NOV 05...	29	<0.12	19	75.2	1.9
DEC 11...	32	<0.12	E22	168	2.9
JAN 16...	29	<0.12	32	235	2.1
FEB 12...	41	<0.12	33	118	4.1
MAR 07...	51	<0.12	47	154	3.8
APR 08...	52	<0.12	12	208	4.0
MAY 06...	44	<0.12	15	121	2.2
JUN 18...	89	0.22	25	170	0.7
JUL 16...	74	0.18	E15	282	1.4
AUG 12...	60	E.11	42	569	1.5
SEP 09...	46	0.06	21	318	1.5

E -- Estimated value

06426500 BELLE FOURCHE RIVER BELOW MOORCROFT, WY

LOCATION.--Lat 44° 19'19", long 104° 56'24", in NW¹/₄ NW¹/₄ sec.17, T.50 N., R.67 W., Crook County, Hydrologic Unit 10120201, on right bank 3.1 mi upstream from bridge on Highway 14, and 4.0 mi northeast of Moorcroft.

DRAINAGE AREA.--1,690 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1943 to September 1970, October 1975 to September 1983, October 1985 to September 1987, October 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,110 ft above NGVD of 1929, from topographic map. Prior to March 28, 1947, nonrecording gage, and March 28, 1947 to January 16, 1951, water-stage recorder at site 4 mi downstream at different datum. January 17, 1951 to September 1970, water-stage recorder at site 7.9 mi upstream at different datum. September 1970 to October 22, 1993, water-stage recorder at site 8.0 mi upstream at different datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records fair except those for July 24 to August 6 and those for estimated discharges, which are poor. Numerous small stockwater and soil conservation reservoirs upstream from station. Diversions for irrigation upstream from station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	e5.0	e5.6	e5.0	e7.2	e7.0	26	13	3.2	24	7.1	1.2
2	4.9	e6.0	e6.0	e5.2	e7.8	e8.0	25	41	3.3	22	7.3	0.91
3	3.4	e7.0	e5.0	e5.4	e6.0	e9.0	33	47	3.0	22	6.8	0.70
4	2.5	e7.7	e4.3	e5.6	e5.4	e9.0	29	34	3.8	19	6.1	0.68
5	2.1	e8.0	e4.0	e5.4	e5.2	e8.6	25	31	5.8	18	5.0	0.88
6	2.2	e8.4	e4.2	e5.6	e5.4	e8.5	22	27	15	17	4.9	1.5
7	4.2	e8.8	e4.6	e6.0	e4.7	e8.0	21	23	15	14	4.3	2.1
8	5.3	e8.8	e4.6	e5.6	e5.2	e7.4	20	20	18	11	3.3	2.1
9	7.1	8.7	e4.8	e5.0	e5.6	e6.6	19	18	23	10	2.9	1.8
10	6.6	8.3	e4.8	e4.3	e6.2	e6.4	15	17	18	8.7	2.3	2.4
11	6.2	7.6	e5.0	e4.0	e6.8	e15	13	14	17	7.7	1.9	5.0
12	5.7	7.3	e4.7	e4.4	e7.7	e150	12	10	18	7.1	1.4	10
13	5.5	9.9	e4.7	e5.4	e8.0	e320	11	12	31	7.3	1.1	12
14	5.2	10	e4.9	e5.8	e8.0	e500	11	15	18	7.6	0.86	6.9
15	5.9	8.0	e5.4	e5.4	e7.2	557	10	13	12	10	0.68	5.5
16	6.0	7.3	e5.6	e5.0	e7.4	324	9.7	12	24	9.9	0.47	6.0
17	5.2	7.4	e5.8	e4.5	e8.6	144	8.9	10	121	8.3	0.42	7.3
18	5.1	e7.4	e5.6	e4.9	e8.2	62	8.0	8.8	502	7.6	0.34	7.8
19	5.2	e7.8	e5.2	e5.0	e8.0	33	7.9	8.2	395	7.7	0.30	6.9
20	5.4	8.5	e5.0	e5.6	e10	43	7.4	7.7	330	6.8	0.31	5.9
21	5.3	8.0	e4.8	e5.2	e9.4	56	7.2	7.4	190	5.6	0.27	5.6
22	5.3	7.7	e4.4	e4.1	e8.0	52	6.9	7.1	115	4.6	0.15	5.5
23	5.4	7.2	e4.3	e3.8	e6.8	57	7.5	6.8	82	3.6	0.09	5.1
24	5.9	e6.8	e4.3	e4.3	e6.0	139	9.5	5.3	64	6.2	0.00	5.1
25	5.8	e4.8	e4.3	e4.9	e5.0	216	11	4.3	56	4.4	0.00	5.0
26	5.8	e4.5	e4.2	e4.5	e5.8	114	11	3.5	109	3.9	1.5	5.1
27	5.9	e4.3	e4.5	e5.0	e6.0	81	10	3.6	77	4.8	2.3	5.0
28	6.0	e5.4	e4.7	e5.6	e6.4	55	9.2	3.7	50	8.0	1.7	5.2
29	e5.6	e6.4	e5.4	e6.0	---	40	9.0	2.5	39	9.5	1.5	10
30	e4.3	e5.2	e5.6	e6.4	---	34	9.8	4.8	32	7.2	1.6	8.6
31	e4.6	---	e5.4	e6.8	---	33	---	3.9	---	6.3	1.5	---
TOTAL	159.4	218.2	151.7	159.7	192.0	3,103.5	425.0	434.6	2,390.1	309.8	68.39	147.77
MEAN	5.14	7.27	4.89	5.15	6.86	100	14.2	14.0	79.7	9.99	2.21	4.93
MAX	7.1	10	6.0	6.8	10	557	33	47	502	24	7.3	12
MIN	2.1	4.3	4.0	3.8	4.7	6.4	6.9	2.5	3.0	3.6	0.00	0.68
AC-FT	316	433	301	317	381	6,160	843	862	4,740	614	136	293

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2003, BY WATER YEAR (WY)

MEAN	5.69	2.49	2.44	3.57	17.7	59.2	27.2	66.1	61.6	19.0	10.4	5.32
MAX	68.0	23.1	22.3	53.5	260	374	190	1,057	509	72.5	57.3	63.5
(WY)	(1995)	(1999)	(1956)	(1997)	(1962)	(1978)	(1944)	(1978)	(1964)	(1948)	(1993)	(1951)
MIN	0.000	0.000	0.000	0.000	0.000	0.10	0.000	0.045	0.097	0.000	0.000	0.000
(WY)	(1944)	(1944)	(1944)	(1944)	(1944)	(1951)	(1961)	(1958)	(1966)	(1954)	(1944)	(1944)

06426500 BELLE FOURCHE RIVER BELOW MOORCROFT, WY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1944 - 2003	
ANNUAL TOTAL	4,534.98		7,760.16		--	
ANNUAL MEAN	12.4		21.3		23.4	
HIGHEST ANNUAL MEAN	--		--		136	
LOWEST ANNUAL MEAN	--		--		1.14	
HIGHEST DAILY MEAN	126	Aug 31	557	Mar 15	10,300	May 19, 1978
LOWEST DAILY MEAN	0.03	Jul 10	0.00	Aug 24,25	0.00	Several days, most years
ANNUAL SEVEN-DAY MINIMUM	0.36	Aug 1	0.16	Aug 19	0.00	Most years
MAXIMUM PEAK FLOW	--		752 ^a	Mar 15	15,300 ^b	May 19, 1978
MAXIMUM PEAK STAGE	--		10.23 ^c	Mar 14	14.60 ^d	May 19, 1978
ANNUAL RUNOFF (AC-FT)	9,000		15,390		16,970	
10 PERCENT EXCEEDS	29		33		35	
50 PERCENT EXCEEDS	5.8		6.4		1.8	
90 PERCENT EXCEEDS	2.3		2.7		0.00	

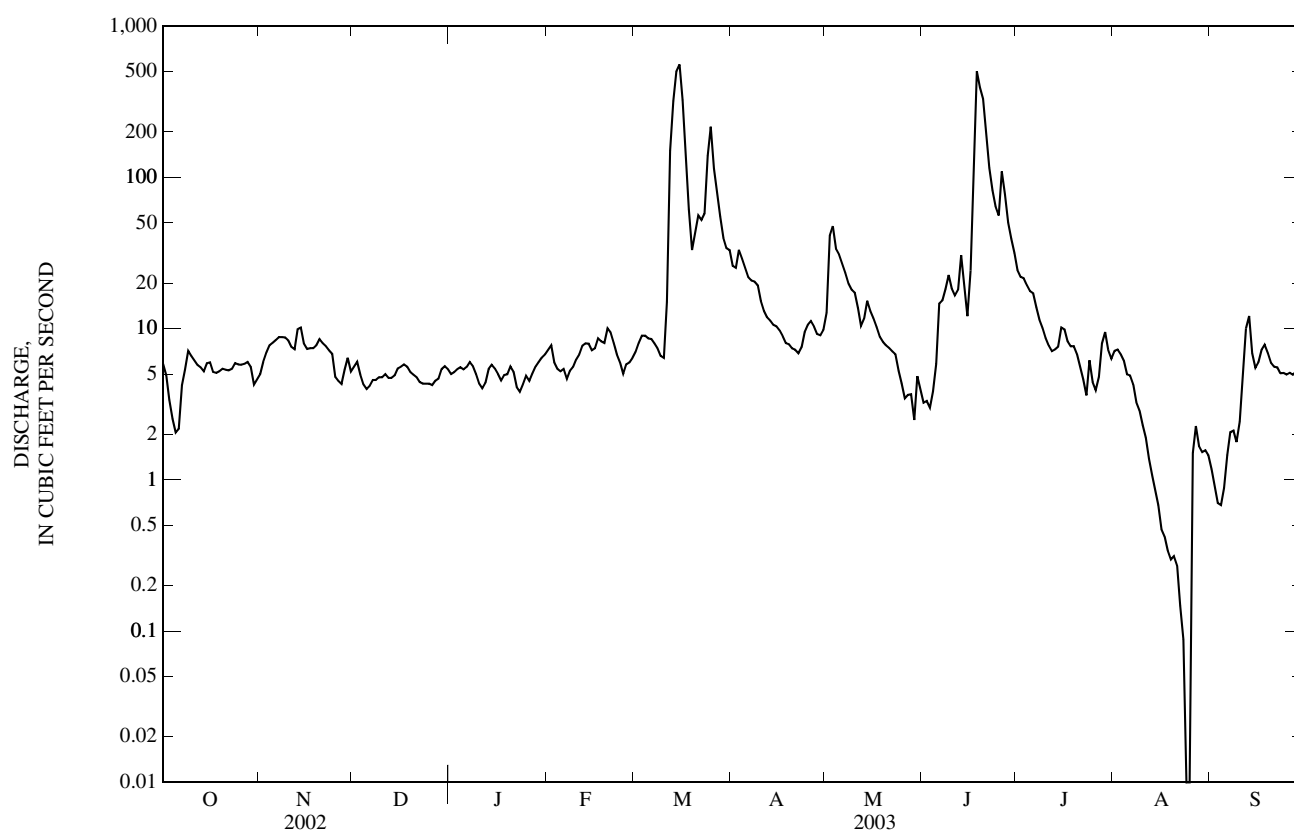
a Gage height, 10.10 ft.

b From rating curve extended above 11,000 ft³/s, site and datum then in use.

c Backwater from ice.

d From floodmarks in shelter, site and datum then in use.

e Estimated.



06426500 BELLE FOURCHE RIVER BELOW MOORCROFT, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1947-57, 1975-93, October 1994 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
OCT 09...	0920	7.1	659	9.4	89	8.7	2,340	3.0	6.5	580	94.7	82.8	11.9	
NOV 04...	1640	7.7	651	12.1	98	8.6	2,470	2.5	0.0	700	124	93.4	13.1	
DEC 10...	1605	4.8	651	16.3	132	8.4	2,850	2.0	0.0	670	119	90.7	14.2	
JAN 16...	0845	5.0	666	11.4	90	8.2	2,700	-12.0	0.0	630	117	83.1	15.6	
FEB 12...	0845	7.7	658	8.3	66	8.0	2,450	-12.0	0.0	600	116	76.5	13.6	
MAR 06...	1715	8.5	650	8.9	72	7.8	2,670	-13.0	0.0	740	145	91.4	12.0	
APR 08...	0930	19	664	11.3	98	8.8	2,050	6.5	3.5	670	121	88.9	10.4	
MAY 06...	0930	29	635	9.7	99	8.9	1,790	12.0	8.0	550	99.8	72.6	10.3	
JUN 18...	1500	599	660	3.6	45	7.5	300	26.0	19.0	90	21.4	8.76	6.44	
JUL 16...	0700	10	658	5.7	77	8.2	2,580	21.0	22.5	700	118	99.6	15.0	
AUG 11...	1810	1.6	660	8.3	123	8.5	3,170	34.5	27.5	820	128	122	29.6	
SEP 08...	1715	2.0	650	8.3	114	8.6	3,200	29.0	22.5	700	101	110	20.5	
Date		Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
OCT 09...	6	314	E322	102	0.90	0.48	833	--	--	--	1,790	--	--	--
NOV 04...	5	305	318	106	0.90	E0.38	897	1,750	2.51	38.4	1,850	<0.04	3.42	--
DEC 10...	7	389	E472	113	1.16	0.63	945	--	--	--	2,070	--	--	--
JAN 16...	6	366	506	117	1.18	2.43	822	1,830	2.62	26.0	1,930	--	--	--
FEB 12...	6	321	395	158	1.05	6.30	670	1,620	2.32	35.5	1,710	0.32	3.09	--
MAR 06...	5	340	524	127	1.09	6.53	879	1,910	2.68	45.2	1,970	--	--	--
APR 08...	4	226	246	80.3	0.78	2.45	779	1,460	2.15	80.6	1,580	--	--	--
MAY 06...	3	178	267	66.8	0.72	3.45	666	1,260	1.88	108	1,380	<0.04	0.63	--
JUN 18...	1	25.7	66	3.42	0.4	6.12	70.5	183	0.28	329	203	--	--	--
JUL 16...	5	291	299	84.1	0.8	1.08	10,10	1,790	2.69	53.4	1,980	--	--	--
AUG 11...	6	406	246	117	0.9	1.06	13,10	2,270	3.35	10.7	2,470	--	--	--
SEP 08...	8	516	343	187	1.1	0.20	11,10	2,250	3.14	12.5	2,310	<0.04	E.03	--

06426500 BELLE FOURCHE RIVER BELOW MOORCROFT, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nitrite water, ftrd, mg/L as N (00613)	Ortho- phos- phate, water, ftrd, mg/L as P (00671)	E coli, modif. m-TEC, water, col/ 100 mL (90902)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli- form, M-FC 0.7u MF col/ 100 mL (31625)	Alum- inum, water, unfltrd recover- able, ug/L (01105)	Arsenic water, ftrd, ug/L (01000)	Barium, water, unfltrd recover- able, ug/L (01007)	Beryll- ium, water, unfltrd recover- able, ug/L (01012)	Iron, water, ftrd, ug/L (01046)	Mangan- ese, water, ftrd, ug/L (01056)	Selen- ium, water, unfltrd ug/L (01147)
OCT 09...	--	--	--	--	--	542	1.2	82	0.07	<10	25.1	1.4
NOV 04...	0.084	0.26	--	E22k	93	181	2.0	60	<0.06	<30	31.1	2.7
DEC 10...	--	--	--	--	--	178	1.5	49	<0.12	<30	42.6	1.4
JAN 16...	--	--	--	--	--	128	2.0	54	<0.12	<30	49.0	1.5
FEB 12...	0.027	0.54	--	E14k	E13k	329	1.8	55	E.03	23	46.3	1.7
MAR 06...	--	--	--	--	--	173	1.4	65	<0.12	E10	43.7	2.2
APR 08...	--	--	--	--	--	618	1.5	65	0.07	E8	81.2	2.4
MAY 06...	0.038	0.04	470	--	550	4,060	1.6	304	0.29	<10	40.6	1.8
JUN 18...	--	--	--	--	--	24,900	0.8	537	4.01	29	5.0	2.1
JUL 16...	--	--	--	--	--	910	1.7	132	0.10	<24	17.0	1.2
AUG 11...	--	--	--	--	--	454	1.7	130	E.07	<24	51.1	1.8
SEP 08...	<0.008	<0.02	190	--	600	484	1.9	82	<0.12	<24	26.5	1.6

E -- Estimated value

k -- Counts outside acceptable range (Non-ideal colony count)

06428050 BELLE FOURCHE RIVER BELOW HULETT, WY

LOCATION.--Lat 44° 42'04", long 104° 35'07", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ 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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
OCT 09...	1115	14	670	11.4	114	8.5	1,910	13.0	9.5	840	217	71.6	8.47	
NOV 04...	1500	19	660	13.8	111	8.2	1,980	9.5	0.5	900	243	70.5	6.98	
DEC 10...	1415	10	661	17.0	135	8.1	2,240	3.5	0.0	1,100	296	82.3	8.06	
JAN 15...	1655	7.6	675	11.8	92	7.9	2,150	-10.0	0.0	1,100	302	74.9	7.73	
FEB 11...	1630	8.2	666	11.1	88	7.8	1,950	0.0	0.0	1,000	288	69.5	6.80	
MAR 06...	1500	10	660	13.5	108	7.8	2,100	-10.0	0.0	1,100	303	74.2	6.61	
APR 08...	0730	34	675	10.9	93	8.4	1,710	3.0	3.5	860	236	64.4	7.92	
MAY 06...	0750	33	663	10.0	96	8.2	1,480	3.5	7.5	630	169	49.9	6.97	
JUN 05...	0830	13	--	--	--	8.2	1,860	9.0	14.0	790	217	58.9	7.79	
JUL 15...	1840	125	666	7.1	104	8.3	1,660	34.0	27.5	440	82.7	57.0	11.9	
AUG 11...	1620	115	670	9.1	134	8.5	1,640	35.5	28.0	440	78.0	59.7	12.7	
SEP 08...	1515	66	659	8.5	118	8.5	1,700	33.0	24.0	450	87.0	56.2	12.6	
Date		Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
OCT 09...	2	136	E111	25.5	0.54	3.87	888	--	--	--	1,610	--	--	--
NOV 04...	2	120	145	24.9	0.44	9.02	931	1,490	2.30	86.9	1,690	E.02	0.08	0.08
DEC 10...	2	131	E201	20.3	0.47	10.7	1,070	--	--	--	1,910	--	--	--
JAN 15...	1	110	255	28.4	0.45	11.2	1,040	1,720	2.58	38.9	1,890	--	--	--
FEB 11...	1	90.9	238	14.6	0.42	10.8	912	1,540	2.30	37.4	1,690	0.12	0.13	0.13
MAR 06...	1	96.7	234	21.7	0.44	10.1	998	1,650	2.43	50.1	1,780	--	--	--
APR 08...	1	76.9	187	9.45	0.32	7.39	797	1,310	1.96	133	1,440	--	--	--
MAY 06...	2	92.2	158	7.01	0.37	6.24	691	1,120	1.66	109	1,220	<0.04	<0.06	<0.06
JUN 05...	1	75.0	143	11.6	0.4	6.07	831	1,290	1.94	50.0	1,420	--	--	--
JUL 15...	4	191	189	43.4	0.7	0.95	598	1,100	1.60	397	1,180	--	--	--
AUG 11...	4	206	177	44.3	0.7	0.53	606	1,110	1.54	352	1,130	--	--	--
SEP 08...	4	186	176	43.6	0.7	0.68	640	1,130	1.65	216	1,210	<0.04	<0.06	<0.06

06428050 BELLE FOURCHE RIVER BELOW HULETT, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nitrite water, ftrd, mg/L as N (00613)	Ortho- phos- phate, water, ftrd, mg/L as P (00671)	E coli, modif. m-TEC, water, col/ 100 mL (90902)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli- form, M-FC 0.7u MF col/ 100 mL (31625)	Alum- inum, water, unfltrd recover- able, ug/L (01105)	Arsenic water, ftrd, ug/L (01000)	Barium, water, unfltrd recover- able, ug/L (01007)	Beryll- ium, water, unfltrd recover- able, ug/L (01012)	Iron, water, ftrd, ug/L (01046)	Mangan- ese, water, ftrd, ug/L (01056)	Selen- ium, water, unfltrd ug/L (01147)
OCT 09...	--	--	--	--	--	11	0.6	38	<0.06	<10	9.5	1.8
NOV 04...	<0.008	E.01	--	E19k	23	12	0.7	27	<0.06	<10	10.5	2.6
DEC 10...	--	--	--	--	--	8	0.6	24	<0.06	<10	11.7	3.3
JAN 15...	--	--	--	--	--	7	0.7	24	<0.06	11	13.0	3.3
FEB 11...	<0.008	E.01	--	E15k	29	8	0.5	22	<0.06	22	23.5	3.2
MAR 06...	--	--	--	--	--	9	0.6	22	<0.06	27	20.2	3.2
APR 08...	--	--	--	--	--	52	0.7	44	<0.06	21	182	2.0
MAY 06...	<0.008	<0.02	51	--	77	151	0.5	34	<0.06	<10	54.3	1.5
JUN 05...	--	--	--	--	--	48	0.5	41	<0.06	12	63.4	2.3
JUL 15...	--	--	--	--	--	659	1.1	65	0.06	<8	5.7	1.0
AUG 11...	--	--	--	--	--	206	1.2	57	<0.06	E5	5.1	1.4
SEP 08...	<0.008	<0.02	33	--	78	50	1.1	58	<0.06	E5	4.3	1.6

E -- Estimated value

k -- Counts outside acceptable range (Non-ideal colony count)

06428500 BELLE FOURCHE RIVER AT WYOMING-SOUTH DAKOTA STATE LINE

LOCATION.--Lat 44° 44'59", long 104° 02'49", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.18, T.9 N., R.1 E., Butte County, Hydrologic Unit 10120202, on left bank 0.3 mi downstream from State line, 3.7 mi downstream from Oak Creek, and 11 mi northwest of Belle Fourche, 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 NGVD of 1929. Bureau of Reclamation data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. 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 October 25, 1952. Maximum discharge prior to regulation, 3,620 ft³/s, June 23, 1947, gage height, 12.51 ft; maximum gage height, 14.33 ft, March 22, 1949, backwater from ice; no flow at times some years. Station operated and record provided by the South Dakota District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	16	16	e14	e17	e11	73	40	23	26	89	104
2	26	19	19	e15	e21	e11	68	43	23	22	88	104
3	25	22	21	e15	e14	e12	65	39	23	19	87	100
4	24	19	20	e15	e12	e12	62	50	23	16	89	99
5	24	23	e10	e15	e11	e13	61	80	27	14	88	98
6	24	26	e11	e16	e10	e13	58	66	33	51	88	90
7	23	25	e12	e16	e8.8	e12	55	60	35	99	87	68
8	23	22	e13	e15	e8.5	e11	52	62	48	107	88	61
9	22	20	e13	e14	e9.0	e11	49	58	39	113	90	59
10	21	20	e13	e12	e9.5	e12	48	56	62	114	89	85
11	21	19	e14	e13	e10	e13	45	60	61	112	92	153
12	22	18	e14	e14	e11	e14	42	53	53	102	98	78
13	21	18	e14	e14	e11	e40	40	52	52	98	102	59
14	20	17	e15	e14	e11	e100	38	53	46	97	99	46
15	20	17	e15	e13	e12	378	37	46	40	96	95	39
16	19	17	e15	e13	e13	841	36	43	44	89	92	33
17	19	16	e15	e12	e15	842	35	42	46	91	94	33
18	19	16	e14	e12	e50	720	37	40	30	91	99	42
19	18	16	e13	e12	e40	648	38	40	28	84	101	29
20	18	16	e11	e12	e37	478	36	40	21	97	105	26
21	18	16	e12	e10	e30	340	35	39	20	85	103	24
22	19	16	e13	e8.0	e17	230	34	39	20	87	104	22
23	19	16	e13	e9.0	e9.5	172	33	38	22	86	102	20
24	20	16	e13	e9.0	e8.2	156	33	36	30	88	97	18
25	19	16	e13	e9.3	e7.0	264	32	34	58	88	89	17
26	19	16	e13	e9.5	e7.5	222	34	31	33	86	85	16
27	19	18	e13	e9.8	e8.8	176	33	30	31	97	82	15
28	19	24	e14	e10	e10	137	32	28	30	109	81	14
29	20	26	e15	e10	---	113	35	26	28	101	83	14
30	16	19	e14	e11	---	94	35	25	27	92	91	14
31	17	---	e14	e12	---	84	---	24	---	88	99	---
TOTAL	640	565	435	383.6	428.8	6,180	1,311	1,373	1,056	2,545	2,876	1,580
MEAN	20.6	18.8	14.0	12.4	15.3	199	43.7	44.3	35.2	82.1	92.8	52.7
MAX	26	26	21	16	50	842	73	80	62	114	105	153
MIN	16	16	10	8.0	7.0	11	32	24	20	14	81	14
AC-FT	1,270	1,120	863	761	851	12,260	2,600	2,720	2,090	5,050	5,700	3,130

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2003, BY WATER YEAR (WY)*

MEAN	28.6	27.8	17.7	20.9	43.6	156	162	215	181	96.0	73.0	34.4
MAX	134	277	51.5	247	459	931	823	1,104	812	303	271	109
(WY)	(1999)	(1999)	(1999)	(1997)	(1996)	(1972)	(1971)	(1978)	(1984)	(1981)	(1980)	(1955)
MIN	0.000	0.000	0.000	0.000	0.20	15.7	15.1	3.10	11.9	2.94	0.10	0.000
(WY)	(1955)	(1961)	(1961)	(1961)	(1959)	(1981)	(1992)	(1961)	(1961)	(1960)	(1961)	(1954)

06428500 BELLE FOURCHE RIVER AT WYOMING-SOUTH DAKOTA STATE LINE—Continued

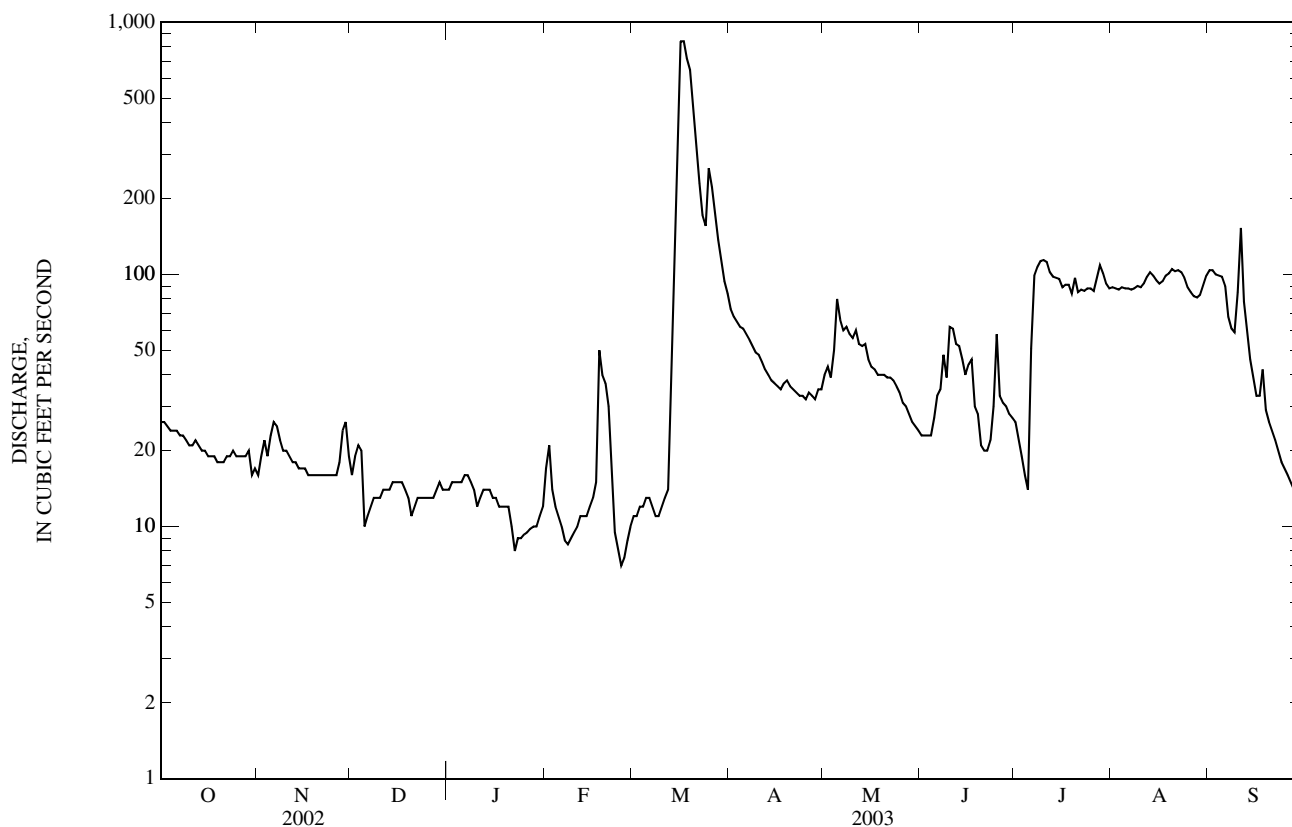
SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1954 - 2003*
ANNUAL TOTAL	20,389.5	19,373.4	--
ANNUAL MEAN	55.9	53.1	88.2
HIGHEST ANNUAL MEAN	--	--	229 1978
LOWEST ANNUAL MEAN	--	--	7.69 1961
HIGHEST DAILY MEAN	362 Aug 9	842 Mar 17	4,760 May 9, 1995
LOWEST DAILY MEAN	5.0 ^c Jan 1, 2	7.0 ^c Feb 25	0.00 ^a Jul 30, 1954
ANNUAL SEVEN-DAY MINIMUM	8.5 Jan 27	8.9 Feb 23	0.00 Jul 30, 1954
MAXIMUM PEAK FLOW	--	956 Mar 17	6,320 ^b May 10, 1995
MAXIMUM PEAK STAGE	--	9.06 Mar 17	16.33 May 10, 1995
ANNUAL RUNOFF (AC-FT)	40,440	38,430	63,880
10 PERCENT EXCEEDS	144	99	194
50 PERCENT EXCEEDS	24	26	36
90 PERCENT EXCEEDS	11	12	5.5

* Regulated period only (1954-2003). See REMARKS.

a No flow at times in some years.

b Based on slope-area measurement of peak flow.

c Estimated.



06429500 COLD SPRINGS CREEK AT BUCKHORN, WY

LOCATION.--Lat 44°09'15", long 104°04'37", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ 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 NGVD of 1929, from topographic map. October 1974 to September 1982, 200 ft upstream at different datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	e3.8	e4.1	4.3	4.1	e3.6	e6.5	3.6	e4.0	e3.9	4.0	3.0
2	3.8	e3.9	4.1	e4.2	4.2	e3.6	e6.0	3.5	e4.1	e3.9	3.8	2.9
3	3.8	e4.0	4.1	4.3	e4.0	3.8	e6.0	3.5	e4.1	e3.9	3.9	3.0
4	3.8	e4.1	4.1	4.3	4.2	3.8	e5.5	3.6	e4.1	e3.9	3.9	2.9
5	3.8	e4.1	e3.8	4.2	e4.1	e3.6	5.5	3.6	e4.1	e3.9	4.0	2.9
6	3.8	4.1	e3.9	4.2	e3.5	3.8	5.2	e3.6	e4.1	e3.9	e4.0	3.0
7	3.7	4.1	e4.0	4.2	e4.1	3.8	5.0	e3.6	e4.1	3.8	e3.9	3.0
8	3.9	4.1	e4.1	4.1	e4.1	3.8	e4.8	e3.6	e4.1	3.8	e3.9	3.1
9	3.8	4.1	e4.1	e4.0	4.2	3.8	6.0	e3.5	e4.1	3.8	e3.9	3.1
10	3.8	4.1	e4.1	e4.0	4.0	e3.7	8.6	e3.5	4.1	3.8	e3.9	3.5
11	3.9	4.0	e4.1	e4.0	e4.0	3.8	12	e3.5	4.1	3.8	e3.9	3.2
12	3.8	4.0	e4.1	e4.0	e4.1	3.9	6.7	e3.5	4.3	e3.8	e3.9	3.3
13	3.8	4.0	e4.1	e4.0	e4.1	4.0	4.6	3.5	4.2	e3.8	e3.9	3.3
14	3.8	4.0	e4.1	e4.1	4.2	e4.5	4.3	3.4	4.1	e3.8	e3.9	3.2
15	3.7	4.0	4.2	4.2	4.1	5.2	4.1	3.4	4.0	3.8	e3.9	3.2
16	3.6	e4.0	4.2	4.1	4.1	5.4	3.9	3.4	4.1	3.9	e3.9	3.2
17	3.6	4.1	4.2	e4.1	e3.5	6.0	3.9	3.4	4.1	3.8	e3.8	3.3
18	3.7	e4.0	3.9	e4.1	4.1	5.4	4.0	3.3	4.1	3.9	e3.8	3.5
19	3.7	4.0	e3.5	e4.2	4.1	4.8	3.9	3.4	4.0	3.7	e3.8	3.4
20	3.7	4.1	e3.6	4.3	4.1	4.6	3.8	3.4	4.0	3.7	e3.8	3.4
21	3.7	4.1	e3.6	4.4	4.1	4.6	3.8	3.4	4.0	3.7	e3.8	3.4
22	3.7	4.1	e3.6	e4.2	4.1	4.9	3.7	3.4	4.1	3.9	e3.8	3.5
23	3.7	e4.1	e3.7	e4.3	e3.6	5.2	3.8	3.5	4.1	4.0	e3.8	3.5
24	3.7	e4.0	e3.7	4.4	e3.0	5.0	4.0	3.6	4.2	4.0	e3.8	3.5
25	e3.6	e3.8	e3.7	4.4	e2.9	4.7	3.7	3.7	4.1	4.0	e3.8	3.6
26	e3.7	e4.0	e3.7	4.4	e3.4	4.7	3.5	4.0	4.1	4.0	e3.8	3.6
27	e3.7	e4.1	e3.7	4.4	e4.1	4.8	3.5	3.9	4.1	4.0	3.8	3.7
28	e3.7	e4.1	e3.7	4.4	e3.7	e4.3	3.6	4.0	e4.0	4.0	3.8	3.7
29	e3.7	e4.1	e3.9	4.3	---	e4.8	3.6	e4.0	4.0	4.0	3.8	3.7
30	e3.7	e4.0	4.3	4.3	---	4.9	3.8	e4.0	4.0	3.9	3.7	3.7
31	3.6	---	4.3	4.2	---	e4.8	---	e4.0	---	4.0	3.0	---
TOTAL	115.8	121.0	122.3	130.6	109.8	137.6	147.3	111.3	122.6	120.1	118.7	99.3
MEAN	3.74	4.03	3.95	4.21	3.92	4.44	4.91	3.59	4.09	3.87	3.83	3.31
MAX	3.9	4.1	4.3	4.4	4.2	6.0	12	4.0	4.3	4.0	4.0	3.7
MIN	3.6	3.8	3.5	4.0	2.9	3.6	3.5	3.3	4.0	3.7	3.0	2.9
AC-FT	230	240	243	259	218	273	292	221	243	238	235	197

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2003, BY WATER YEAR (WY)

MEAN	4.56	4.38	4.26	4.23	4.39	4.75	5.08	4.82	4.89	4.72	4.77	4.68
MAX	7.00	7.15	7.04	7.01	6.75	8.03	7.43	7.29	7.77	7.58	7.28	7.14
(WY)	(2000)	(2000)	(2000)	(2000)	(2000)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)
MIN	2.53	2.09	2.06	2.50	2.61	2.91	3.07	3.10	3.19	2.62	2.71	2.92
(WY)	(1975)	(1993)	(1993)	(1994)	(1993)	(1993)	(1993)	(1993)	(1994)	(1995)	(1995)	(1994)

06429500 COLD SPRINGS CREEK AT BUCKHORN, WY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1975 - 2003	
ANNUAL TOTAL	1,600.7		1,456.4		--	
ANNUAL MEAN	4.39		3.99		4.65	
HIGHEST ANNUAL MEAN	--		--		7.06	
LOWEST ANNUAL MEAN	--		--		2.92	
HIGHEST DAILY MEAN	6.5	Apr 11	12	Apr 11	22	Mar 26, 1999
LOWEST DAILY MEAN	3.1 ^c	Sep 17	2.9	Several days	0.30	Dec 20, 1996
ANNUAL SEVEN-DAY MINIMUM	3.4	Sep 11	3.0	Aug 31	0.75	Dec 18, 1996
MAXIMUM PEAK FLOW	--	--	30 ^a	Apr 11	42 ^b	Mar 26, 1999
MAXIMUM PEAK STAGE	--	--	3.35 ^c	Dec 20	8.61 ^d	Jan 12, 1978
ANNUAL RUNOFF (AC-FT)	3,170		2,890		3,370	
10 PERCENT EXCEEDS	4.9		4.3		6.6	
50 PERCENT EXCEEDS	4.4		3.9		4.6	
90 PERCENT EXCEEDS	3.7		3.5		3.0	

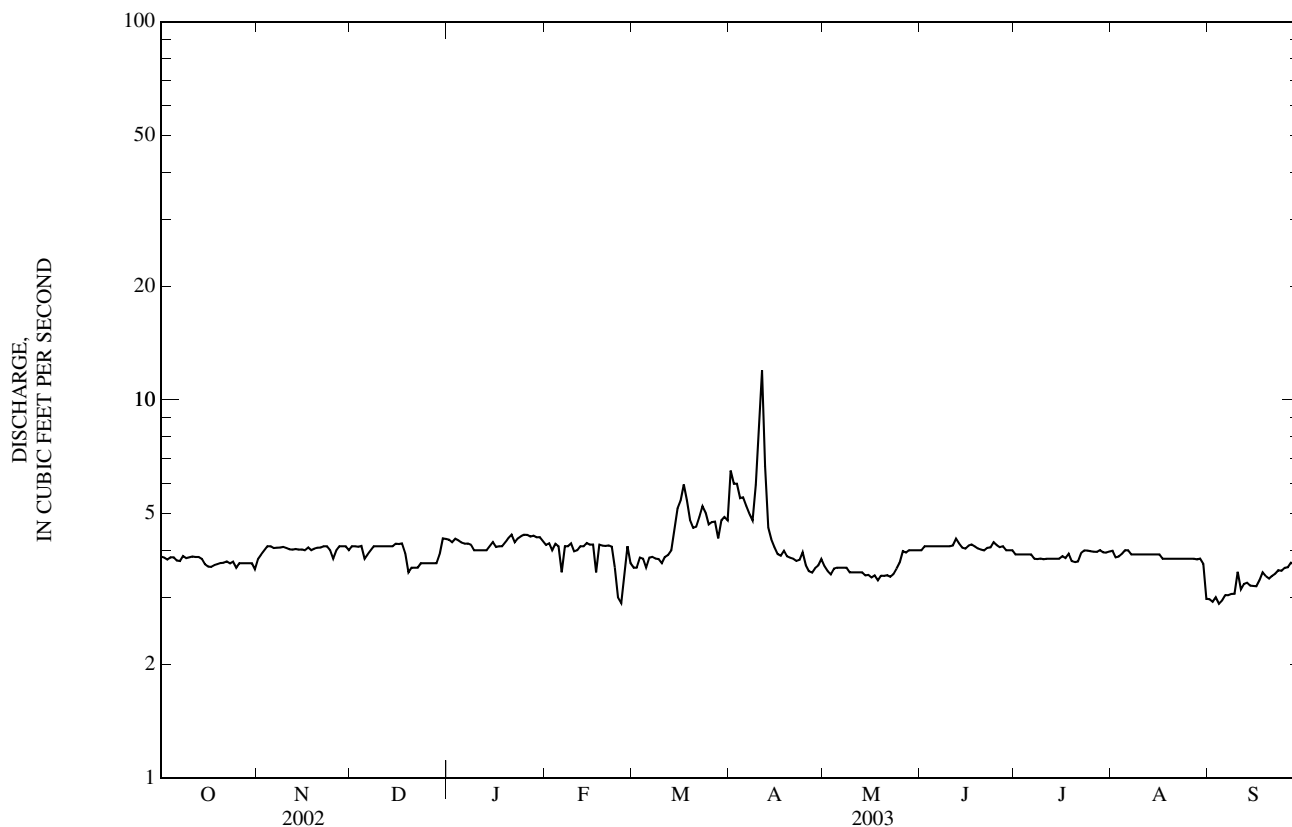
a Gage height, 3.05 ft.

b Gage height, 3.33 ft.

c Backwater from ice.

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

e Estimated.



LOCATION.--Lat 44° 31' 07", long 104° 04' 57", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ 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.

PERIOD OF RECORD.--October 1976 to September 1983, April 1991 to current year.

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

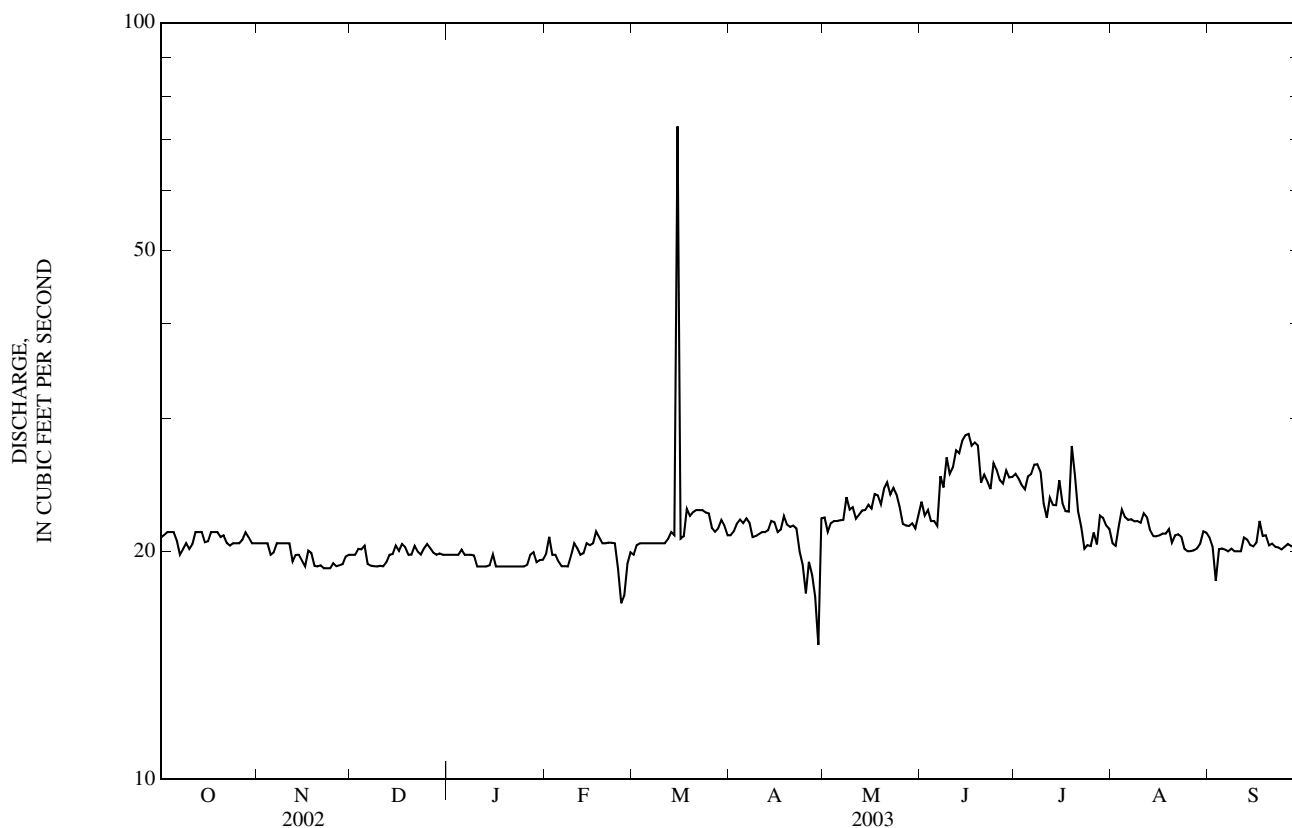
[illegible]

06429905 SAND CREEK NEAR RANCH A, NEAR BEULAH, WY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1977 - 2003	
ANNUAL TOTAL	7,469		7,770		--	
ANNUAL MEAN	20.5		21.3		23.2	
HIGHEST ANNUAL MEAN	--		--		30.5	1999
LOWEST ANNUAL MEAN	--		--		15.7	1992
HIGHEST DAILY MEAN	25	Sep 18	73	Mar 15	455	May 9, 1995
LOWEST DAILY MEAN	18	Jul 14-17	15	Apr 29	12	Mar 10, 1992
ANNUAL SEVEN-DAY MINIMUM	18	Jul 14	18	Apr 23	13	Mar 8, 1992
MAXIMUM PEAK FLOW	--		164	Mar 15	1,230	May 8, 1995
MAXIMUM PEAK STAGE	--		2.67	Mar 15	3.80 ^a	May 8, 1995
ANNUAL RUNOFF (AC-FT)	14,810		15,410		16,830	
10 PERCENT EXCEEDS	22		24		30	
50 PERCENT EXCEEDS	20		21		22	
90 PERCENT EXCEEDS	19		19		16	

a From floodmarks, present site and datum.

e Estimated.



06429997 MURRAY DITCH ABOVE HEADGATE AT WYOMING-SOUTH DAKOTA STATE LINE

LOCATION.--Lat 44° 34'35", long 104° 03'20", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ 4 sec.7, T.7 N., R.1 E., Butte County, Hydrologic Unit 10120203, on right bank at State line and 12 mi southwest of Belle Fourche, SD.

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

REVISED RECORDS.--WDR SD-96-1: September 1995 daily discharges, monthly, and water year statistics.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 3,440 ft above NGVD of 1929, from topographic map. Prior to April 23, 1987, published as 06430000 (below diversion at site 15 ft downstream).

REMARKS.--Records good. Ditch diverts water from left bank of Redwater Creek, 2.0 mi upstream, for irrigation of about 700 acres. Flow maintained during irrigation season only. Station operated and record provided by the South Dakota District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

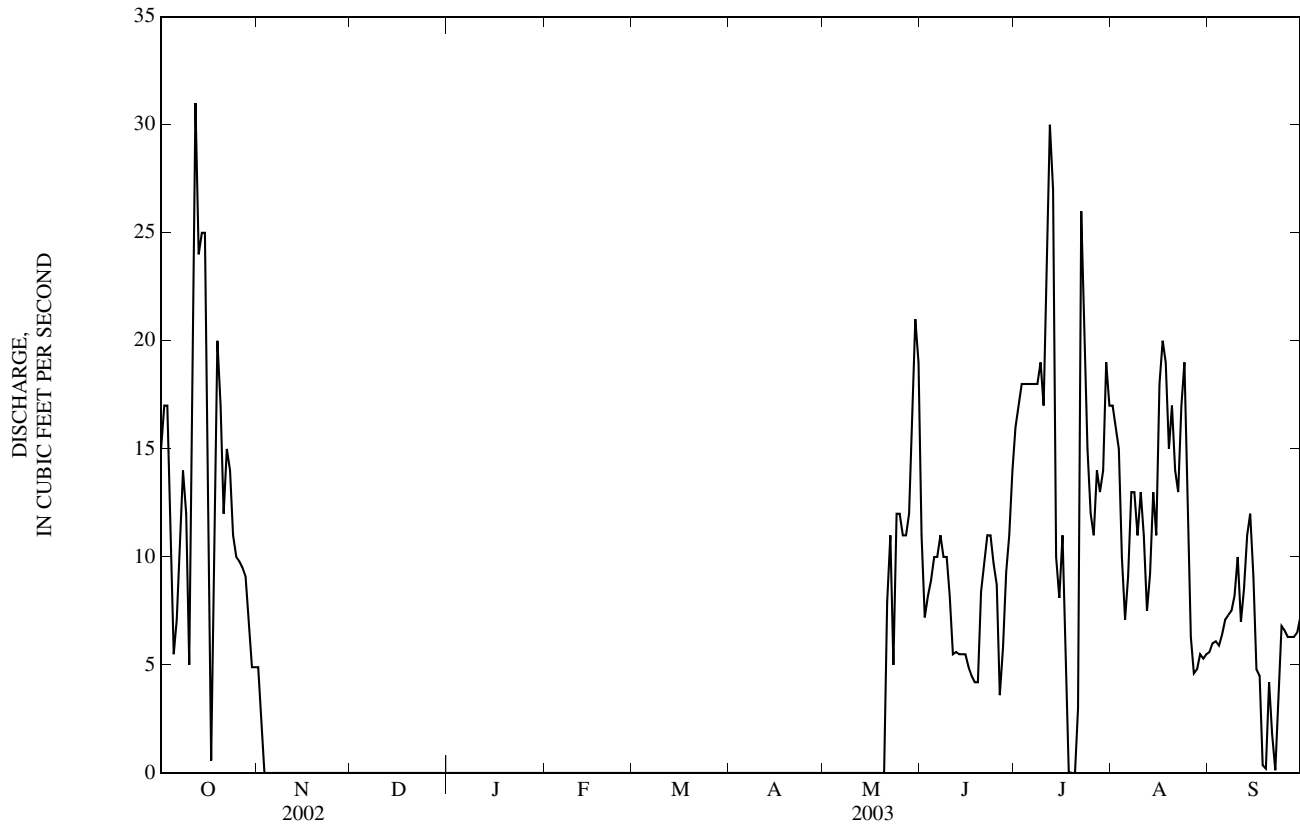
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	4.9	0.00	0.00	0.00	0.00	0.00	0.00	11	16	17	5.6
2	17	2.5	0.00	0.00	0.00	0.00	0.00	0.00	7.2	17	16	6.0
3	17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.2	18	15	6.1
4	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.9	18	10	5.9
5	5.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10	18	7.1	6.4
6	7.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10	18	9.1	7.1
7	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11	18	13	7.3
8	14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10	18	13	7.5
9	12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10	19	11	8.2
10	5.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.2	17	13	10
11	19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.5	22	11	7.0
12	31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.6	30	7.5	8.5
13	24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.5	27	9.2	11
14	25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.5	10	13	12
15	25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.5	8.1	11	9.1
16	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.9	11	18	4.8
17	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.5	5.9	20	4.5
18	8.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.2	0.04	19	0.36
19	20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.2	0.00	15	0.20
20	17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.4	0.00	17	4.2
21	12	0.00	0.00	0.00	0.00	0.00	0.00	7.9	9.7	3.0	14	1.8
22	15	0.00	0.00	0.00	0.00	0.00	0.00	11	11	26	13	0.13
23	14	0.00	0.00	0.00	0.00	0.00	0.00	5.0	11	20	17	3.0
24	11	0.00	0.00	0.00	0.00	0.00	0.00	12	9.7	15	19	6.8
25	10	0.00	0.00	0.00	0.00	0.00	0.00	12	8.7	12	13	6.6
26	9.8	0.00	0.00	0.00	0.00	0.00	0.00	11	3.6	11	6.3	6.3
27	9.5	0.00	0.00	0.00	0.00	0.00	0.00	11	5.8	14	4.6	6.3
28	9.1	0.00	0.00	0.00	0.00	0.00	0.00	12	9.3	13	4.8	6.3
29	7.0	0.00	0.00	0.00	---	0.00	0.00	17	11	14	5.5	6.5
30	4.9	0.00	0.00	0.00	---	0.00	0.00	21	14	19	5.3	7.2
31	4.9	---	0.00	0.00	---	0.00	---	19	---	17	5.5	---
TOTAL	401.77	7.40	0.00	0.00	0.00	0.00	0.00	138.90	242.1	455.04	372.9	182.69
MEAN	13.0	0.25	0.000	0.000	0.000	0.000	0.000	4.48	8.07	14.7	12.0	6.09
MAX	31	4.9	0.00	0.00	0.00	0.00	0.00	21	14	30	20	12
MIN	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.6	0.00	4.6	0.13
AC-FT	797	15	0.00	0.00	0.00	0.00	0.00	276	480	903	740	362

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2003, BY WATER YEAR (WY)

MEAN	5.86	0.27	0.000	0.000	0.000	0.000	0.009	1.95	5.33	10.0	8.71	8.12
MAX	20.6	2.01	0.000	0.000	0.000	0.000	0.085	6.30	13.9	16.4	18.2	18.8
(WY)	(1991)	(2000)	(1988)	(1988)	(1988)	(1988)	(1997)	(1992)	(1988)	(1991)	(1991)	(1994)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.84	2.24	0.80
(WY)	(1988)	(1988)	(1988)	(1988)	(1988)	(1988)	(1988)	(1990)	(1991)	(1993)	(1998)	(1993)

06429997 MURRAY DITCH ABOVE HEADGATE AT WYOMING-SOUTH DAKOTA STATE LINE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1988 - 2003
ANNUAL TOTAL	1,790.89	1,800.80	--
ANNUAL MEAN	4.91	4.93	3.38
HIGHEST ANNUAL MEAN	--	--	5.32 1994
LOWEST ANNUAL MEAN	--	--	0.92 1993
HIGHEST DAILY MEAN	31 Oct 12	31 Oct 12	46 Oct 8, 1990
LOWEST DAILY MEAN	0.00 Many days	0.00 Many days	0.00 Many days, each year
ANNUAL RUNOFF (AC-FT)	3,550	3,570	2,450
10 PERCENT EXCEEDS	15	16	12
50 PERCENT EXCEEDS	0.00	0.00	0.00
90 PERCENT EXCEEDS	0.00	0.00	0.00



06430500 REDWATER CREEK AT WYOMING-SOUTH DAKOTA STATE LINE

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.

DRAINAGE AREA.--471 mi².

PERIOD OF RECORD.--April 1929 to September 1931 and February 1936 to July 1937 (published as "near Beulah, WY"), June 1954 to current year.

REVISED RECORDS.--WSP 1309: 1931(M), 1936-37(M).

GAGE.--Water-stage recorder. Elevation of gage is 3,410 ft above NGVD of 1929, from topographic map. April 25, 1929 to September 30, 1931, and February 28, 1936 to July 31, 1937, nonrecording gage at site 2 mi upstream at different datum.

REMARKS.--Records good. Large diversions for irrigation upstream from station. Total flow passing State line may be obtained by adding flow of Murray Ditch. Satellite data-collection platform at station. Station operated and record provided by the South Dakota District.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	35	33	33	33	30	36	37	23	27	8.7	14
2	15	35	34	33	36	30	36	36	29	26	9.0	14
3	15	36	34	33	34	30	36	37	28	26	9.5	14
4	19	36	34	32	34	30	36	38	28	27	13	14
5	27	35	33	33	34	30	36	37	29	27	18	14
6	27	35	33	32	34	30	36	37	28	27	20	13
7	27	35	33	32	e34	31	36	37	30	26	16	11
8	25	35	34	32	35	31	35	37	29	22	13	11
9	28	34	34	31	35	30	35	37	30	17	12	10
10	32	33	34	31	36	30	35	38	31	15	10	15
11	23	33	33	31	36	31	35	37	31	14	11	22
12	17	33	33	31	37	31	35	36	30	15	10	20
13	21	33	33	31	37	34	35	36	31	15	8.7	20
14	23	33	33	31	34	46	35	36	31	15	8.3	21
15	23	33	33	32	32	128	35	37	32	16	8.2	25
16	30	33	34	32	33	51	34	38	33	14	6.5	25
17	31	33	34	31	36	46	34	37	33	25	6.8	33
18	28	33	33	32	34	46	36	38	32	32	7.9	35
19	25	33	33	32	33	43	35	38	31	31	11	34
20	25	33	33	32	33	41	35	38	25	32	12	32
21	27	33	33	32	33	40	35	30	21	31	15	32
22	30	33	33	e31	33	39	35	26	23	12	17	33
23	32	33	33	e31	33	38	36	34	23	11	15	28
24	35	33	33	32	e30	37	37	24	25	11	15	22
25	35	33	33	32	e29	37	36	24	26	9.5	19	22
26	35	34	33	32	e29	37	35	24	34	10	23	22
27	35	34	33	33	31	37	35	24	31	9.2	20	21
28	35	34	34	33	30	36	36	23	28	9.1	16	22
29	36	33	33	33	---	36	36	18	28	9.2	11	22
30	35	33	33	33	---	36	37	12	27	9.2	13	22
31	35	---	33	33	---	36	---	13	---	9.2	15	---
TOTAL	847	1,012	1,032	992	938	1,208	1,064	994	860	579.4	398.6	643
MEAN	27.3	33.7	33.3	32.0	33.5	39.0	35.5	32.1	28.7	18.7	12.9	21.4
MAX	36	36	34	33	37	128	37	38	34	32	23	35
MIN	15	33	33	31	29	30	34	12	21	9.1	6.5	10
AC-FT	1,680	2,010	2,050	1,970	1,860	2,400	2,110	1,970	1,710	1,150	791	1,280

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2003, BY WATER YEAR (WY)*

	MEAN	28.9	33.1	32.9	32.2	33.3	35.0	38.0	53.0	45.7	23.6	23.3	25.6
MAX	45.0	47.9	48.0	48.5	57.8	66.0	65.4	168	128	54.9	58.9	50.4	
(WY)	(1973)	(1974)	(1999)	(1999)	(1971)	(1996)	(1999)	(1995)	(1976)	(1976)	(1973)	(1973)	
MIN	14.2	20.8	21.5	20.7	21.2	22.1	18.8	7.44	6.29	7.62	6.78	11.8	
(WY)	(1991)	(1961)	(1993)	(1993)	(1993)	(1962)	(1981)	(1985)	(1961)	(1990)	(1985)	(1985)	

06430500 REDWATER CREEK AT WYOMING-SOUTH DAKOTA STATE LINE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1955 - 2003*
ANNUAL TOTAL	10,971.0	10,568.0	--
ANNUAL MEAN	30.1	29.0	33.7
HIGHEST ANNUAL MEAN	--	--	56.0 1973
LOWEST ANNUAL MEAN	--	--	17.9 1961
HIGHEST DAILY MEAN	45 Sep 18	128 Mar 15	1,330 May 9, 1995
LOWEST DAILY MEAN	5.9 Jul 9	6.5 Aug 16	1.3 ^a May 22, 1985
ANNUAL SEVEN-DAY MINIMUM	6.4 Jul 9	8.1 Aug 12	1.9 May 21, 1985
MAXIMUM PEAK FLOW	--	272 Mar 15	2,440 ^b Aug 22, 1973
MAXIMUM PEAK STAGE	--	4.97 Mar 15	12.19 Aug 22, 1973
ANNUAL RUNOFF (AC-FT)	21,760	20,960	24,410
10 PERCENT EXCEEDS	39	36	47
50 PERCENT EXCEEDS	33	32	31
90 PERCENT EXCEEDS	15	14	16

* Period using present site and datum only. 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.

e Estimated.

