06342500 MISSOURI RIVER AT BISMARCK, ND

LOCATION.--Lat 46°48'51", long 100°49'17", in SE¼NW¼SE¼ sec.31, T.139 N., R.80 W., Burleigh County, Hydrologic Unit 10130101, on left bank 40 ft upstream from Bismarck City waterplant, 2,100 ft downstream from Burlington Northern Railway bridge, 1.6 mi northwest of Bismarck Post Office, 3.5 mi upstream from Heart River, and at mile 1,314.5.

DRAINAGE AREA.--186,400 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October to November 1927, April 1928 to current year. See WSP 1729 or 1917 for history of data prior to April 1928.

GAGE.--Water-stage recorder. Datum of gage is 1,618.28 ft above National Geodetic Vertical Datum of 1929, revised. See WSP 1729 or 1917 for history of changes prior to Sept. 30, 1937.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Lake Sakakawea (station 06338000), 75.4 mi upstream, since November 1953.

EXTREMES PRIOR TO COMPLETION OF GARRISON DAM.--Maximum discharge, 500,000 ft^3/s, Apr. 6, 1952, gage height, 27.90 ft.

EXTREMES SINCE COMPLETION OF GARRISON DAM.--Since completion of Garrison Dam in 1953, maximum discharge, 68,900 ft^3/s, July 13, 1975, gage height, 14.24 ft; maximum gage height, 14.58 ft, Dec. 18, 1979, backwater from ice.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 31.6 ft, Mar. 31, 1881, present site and datum.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14,100	10,300	e13,000	e18,100	e23,400	e25,300	15,500	14,300	18,900	17,600	18,000	16,900
2	14,000	10,200	e13,000	e18,000	e23,500	e24,500	15,600	13,700	19,200	18,300	17,900	16,200
3	13,100	10,700	12,400	e17,800	e23,600	e24,400	15,100	13,600	19,000	18,300	18,300	17,400
4	12,100	10,500	12,600	e18,000	e23,200	e24,200	14,600	13,500	18,300	17,800	18,200	17,500
5	11,400	10,400	12,700	e18,000	e23,100	e23,600	14,600	13,600	18,800	17,800	17,400	17,000
6	e10,800	10,600	12,600	e18,000	e23,200	e23,200	15,700	13,600	18,700	18,300	17,000	17,000
7	e10,500	10,600	13,700	e18,200	e23,300	e22,700	16,600	13,800	19,200	18,000	17,200	16,900
8	e10,500	10,500	12,800	e18,700	e23,800	e22,100	15,600	13,800	19,600	18,100	17,500	17,000
9	e10,600	10,700	13,100	e18,900	e25,000	e21,400	16,600	14,400	18,500	18,200	17,400	17,100
10	10,300	10,600	13,800	e18,700	e24,300	e21,100	16,400	14,000	18,400	18,100	16,800	17,000
11	10,400	10,600	15,100	e18,500	e24,000	e20,300	16,600	13,300	19,400	17,900	16,900	16,900
12	10,000	10,500	e15,500	e18,300	e24,200	e19,700	16,600	14,600	19,100	18,300	17,000	17,000
13	10,400	10,200	e16,000	e18,500	e24,100	e19,000	16,300	13,700	18,800	18,300	17,200	17,100
14	10,300	10,300	e16,600	e18,700	e24,100	e18,500	16,500	13,300	18,700	18,000	17,000	16,300
15	10,500	10,500	e16,600	e19,400	e24,300	e17,500	18,400	14,000	17,000	18,400	17,300	16,900
16	10,800	10,400	e17,400	e19,700	e25,100	e16,200	19,000	15,500	17,700	18,100	17,100	17,100
17	10,900	10,800	17,300	e20,000	e25,400	18,000	19,600	18,200	19,200	18,100	17,000	15,900
18	10,900	11,000	17,600	e20,400	e25,300	17,000	19,800	16,000	18,200	18,000	17,200	16,600
19	11,000	e13,100	17,400	e21,000	e25,100	17,000	19,900	15,900	18,000	18,100	17,100	15,100
20	10,800	e13,200	17,400	e21,300	e25,300	17,700	20,600	18,100	18,100	18,000	16,800	14,000
21	10,300	12,000	18,000	e21,200	e25,400	17,300	19,100	15,900	18,000	18,000	16,600	13,400
22	10,100	12,400	18,300	e21,300	e25,300	17,200	20,400	17,000	18,000	18,100	16,900	13,100
23	9,760	12,500	18,100	e21,500	e25,600	16,700	20,700	18,600	18,100	18,200	17,000	12,800
24	10,200	12,700	18,200	e21,500	e25,700	16,600	20,200	16,200	17,900	18,000	17,700	11,700
25	9,850	13,300	18,200	e21,500	e25,600	16,200	21,400	17,200	18,000	18,000	17,500	11,300
26	9,790	12,600	18,000	e21,400	e25,600	16,000	21,000	18,700	18,000	18,200	16,800	11,300
27	10,100	13,300	18,200	e21,600	e25,700	16,700	20,200	16,200	18,100	18,100	17,100	11,200
28	9,970	12,900	17,800	e22,100	e25,700	16,800	17,200	16,900	18,000	18,300	17,200	11,300
29	9,780	13,500	17,300	e22,400	e25,700	16,400	13,900	18,200	18,200	18,000	17,100	11,600
30	10,300	12,900	18,100	e22,600	---	16,000	14,000	16,500	18,200	18,200	17,000	11,300
31	10,300	---	e18,000	e23,100	---	15,400	---	16,600	---	17,900	16,900	---
TOTAL	333,850	343,800	494,800	618,400	713,600	594,700	527,700	478,900	553,300	560,700	534,100	451,900
MEAN	10,770	11,460	15,960	19,950	24,610	19,180	17,590	15,450	18,440	18,090	17,230	15,060
MAX	14,100	13,500	18,300	23,100	25,700	25,300	21,400	18,700	19,600	18,400	18,300	17,500
MIN	9,760	10,200	12,400	17,800	23,100	15,400	13,900	13,300	17,000	17,600	16,600	11,200
AC-FT	662,200	681,900	981,400	1,227,000	1,415,000	1,180,000	1,047,000	949,900	1,097,000	1,112,000	1,059,000	896,300

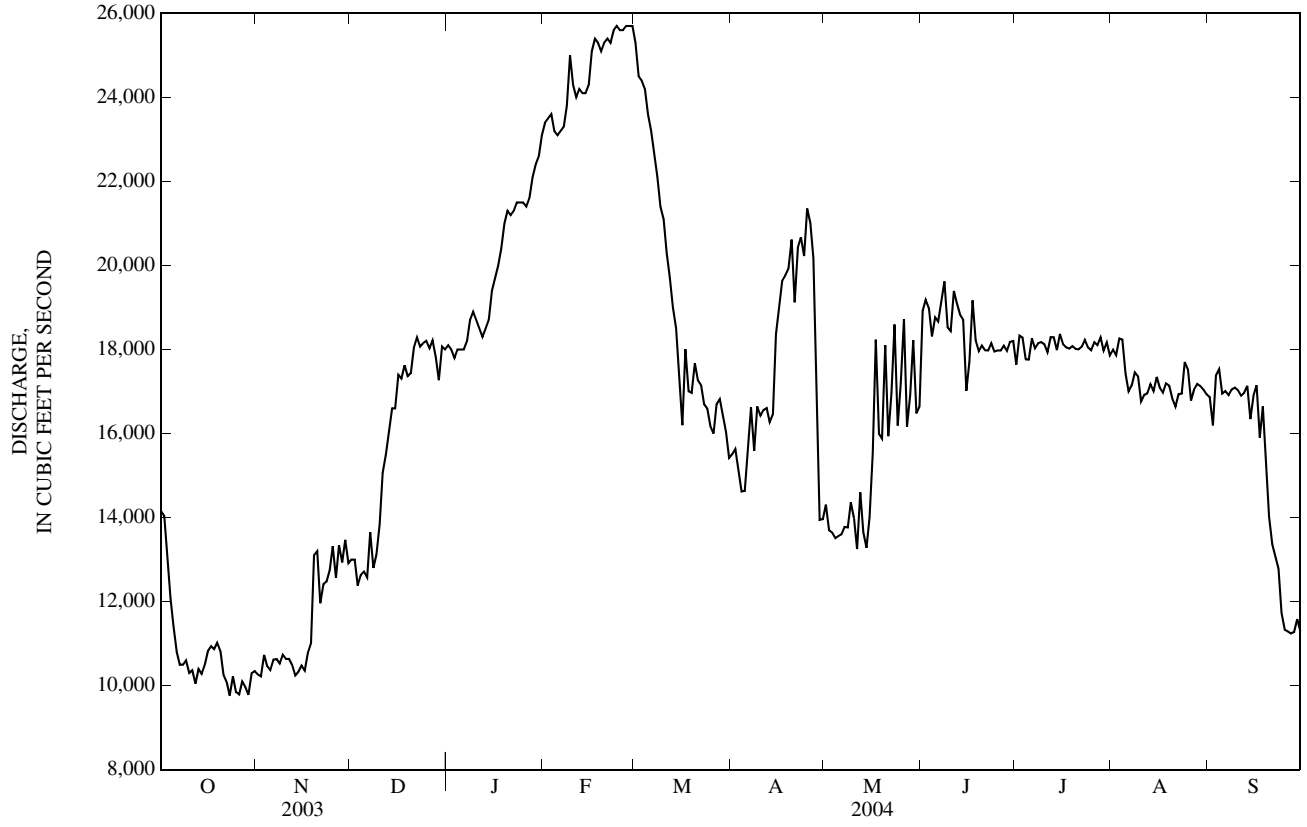
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2004, BY WATER YEAR (WY)

MEAN	20,930	21,030	20,610	22,650	24,810	22,360	21,160	22,560	24,210	25,120	24,890	21,980
MAX	48,180	43,240	31,690	32,350	34,840	34,370	40,370	42,030	43,540	64,610	57,010	45,060
(WY)	(1998)	(1998)	(1970)	(1969)	(1969)	(1972)	(1972)	(1972)	(1975)	(1975)	(1975)	(1997)
MIN	8,399	8,155	7,890	6,519	5,883	6,317	10,420	9,234	8,445	10,840	9,271	8,121
(WY)	(1963)	(1963)	(1955)	(1955)	(1956)	(1955)	(1993)	(1963)	(1960)	(1960)	(1962)	(1962)

06342500 MISSOURI RIVER AT BISMARCK, ND—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1954 - 2004[c]	
ANNUAL TOTAL	6,769,150		6,205,750			
ANNUAL MEAN	18,550		16,960		22,680	
HIGHEST ANNUAL MEAN					35,630	1975
LOWEST ANNUAL MEAN					14,320	1960
HIGHEST DAILY MEAN	24,800	Feb 25	25,700	Feb 24	68,800	Jul 13, 1975
LOWEST DAILY MEAN	9,760	Oct 23	9,760	Oct 23	4,000	Mar 25, 1955
ANNUAL SEVEN-DAY MINIMUM	9,920	Oct 23	9,920	Oct 23	4,860	Mar 21, 1955
MAXIMUM PEAK FLOW			[a]26,000	Feb 24	68,900	Jul 13, 1975
MAXIMUM PEAK STAGE			[b]12.08	Jan 2	[b]14.80	Jan 13, 1983
ANNUAL RUNOFF (AC-FT)	13,430,000		12,310,000		16,430,000	
10 PERCENT EXCEEDS	23,000		22,800		33,900	
50 PERCENT EXCEEDS	19,500		17,300		21,800	
90 PERCENT EXCEEDS	10,800		10,800		12,000	

a About.
b Backwater from ice.
c Since completion of Garrison Dam.
e Estimated.



06354882 OAK CREEK NEAR WAKPALA, SD

LOCATION.--Lat 45°42'43", long 100°33'32", in SW¼ SE¼ NW¼ sec.9, T.20 N., R.29 E., Corson County, Hydrologic Unit 10130102, on right bank at upstream side of bridge on farm access road, 1.6 mi east of Rattlesnake Butte, and 4.0 mi northwest of Wakpala.

DRAINAGE AREA.--356 mi^2, approximately.

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

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,690 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	e0.00	e35	9.3	0.14	5.4	e0.01	0.00	0.00
2	0.00	0.00	0.00	0.00	e0.00	e25	8.0	0.15	2.9	e0.60	0.00	0.00
3	0.00	0.00	0.00	0.00	e0.00	e18	6.7	0.15	2.3	e0.35	0.00	0.00
4	0.00	0.00	0.00	0.00	e0.00	e16	5.4	0.16	2.3	e0.25	0.00	0.00
5	0.00	0.00	0.00	0.00	e0.00	e15	4.7	0.23	1.4	4.5	0.00	0.00
6	0.00	0.00	0.00	0.00	e0.00	e30	4.4	0.24	0.67	2.5	0.00	0.00
7	0.00	0.00	0.00	0.00	e0.00	e38	4.0	0.25	0.22	1.4	0.00	0.00
8	0.00	0.00	0.00	0.00	e0.00	e70	3.5	0.18	e0.02	1.2	0.00	0.00
9	0.00	0.00	0.00	0.00	e0.00	e200	3.0	0.14	e0.00	1.5	0.00	0.00
10	0.00	0.00	0.00	0.00	e0.00	e600	2.5	e0.10	68	0.95	0.00	0.00
11	0.00	0.00	0.00	0.00	e0.00	e600	2.5	e0.45	183	0.64	0.00	0.00
12	0.00	0.00	0.00	0.00	e0.00	e270	2.6	0.39	24	0.39	0.00	0.00
13	0.00	0.00	0.00	0.00	e0.00	e250	2.8	0.16	10	1.1	0.00	0.00
14	0.00	0.00	0.00	0.00	e0.00	e165	2.3	e0.02	12	0.95	0.00	0.00
15	0.00	0.00	0.00	0.00	e0.00	148	1.9	e0.07	65	0.59	0.00	0.00
16	0.00	0.00	0.00	e0.02	e0.00	113	1.5	0.38	20	e0.20	0.00	0.00
17	0.00	0.00	0.00	e1.6	e0.00	88	1.4	0.90	20	e0.10	0.00	0.00
18	0.00	0.00	0.00	e1.3	e0.10	86	1.6	0.70	14	e0.05	0.00	0.00
19	0.00	0.00	0.00	e0.96	e1.0	77	1.6	1.1	18	e0.00	0.00	0.00
20	0.00	0.00	0.00	e0.45	e4.0	67	1.9	1.1	11	e0.00	0.00	0.00
21	0.00	0.00	0.00	e0.20	e5.0	54	2.4	0.79	7.1	e0.00	0.00	0.00
22	0.00	0.00	0.00	e0.10	e7.0	36	2.1	0.55	4.4	e0.00	0.00	0.00
23	0.00	0.00	0.00	e0.05	e8.0	26	1.5	0.47	2.3	e0.00	0.00	0.00
24	0.00	0.00	0.00	e0.01	e10	22	1.2	0.37	1.7	e0.00	0.00	0.00
25	0.00	0.00	0.00	e0.00	e15	18	0.88	0.28	1.3	e0.00	0.00	0.00
26	0.00	0.00	0.00	e0.00	e30	16	0.65	0.38	0.91	e0.00	0.00	0.00
27	0.00	0.00	0.00	e0.00	e50	16	0.54	0.79	0.79	e0.00	0.00	0.00
28	0.00	0.00	0.00	e0.00	e70	17	0.45	0.76	0.48	e0.00	0.00	0.00
29	0.00	0.00	0.00	e0.00	e50	15	0.20	0.41	e0.25	0.00	0.00	0.00
30	0.00	0.00	0.00	e0.00	---	13	0.16	4.7	e0.10	0.00	0.00	0.00
31	0.00	---	0.00	e0.00	---	11	---	11	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	4.69	250.10	3,155	81.68	27.51	479.54	17.28	0.00	0.00
MEAN	0.00	0.00	0.00	0.15	8.62	102	2.72	0.89	16.0	0.56	0.00	0.00
MAX	0.00	0.00	0.00	1.6	70	600	9.3	11	183	4.5	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	11	0.16	0.02	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	9.3	496	6,260	162	55	951	34	0.00	0.00

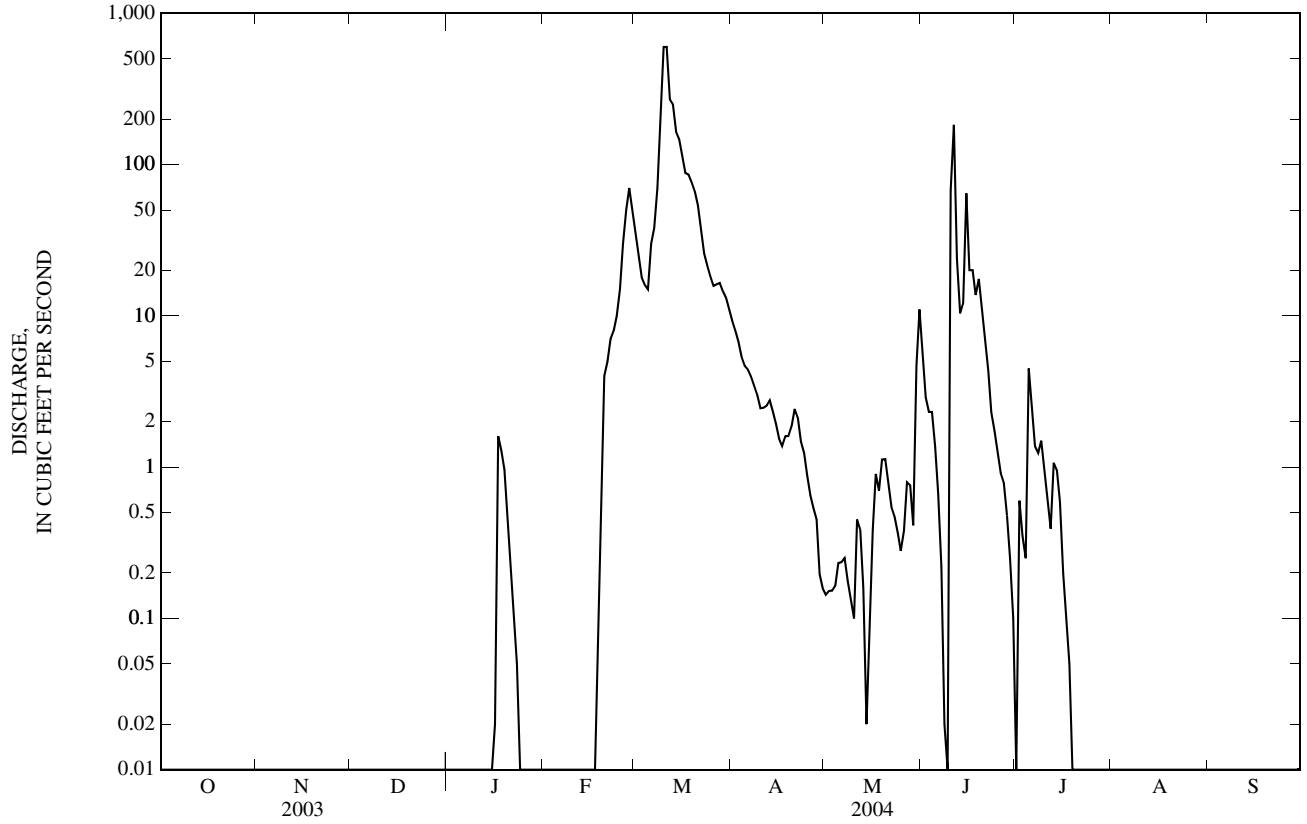
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2004, BY WATER YEAR (WY)

MEAN	4.41	2.48	1.57	1.35	19.4	159	62.8	40.9	11.2	16.4	3.02	1.20
MAX	33.5	17.7	6.80	5.53	149	820	511	240	49.0	134	20.3	13.3
(WY)	(1997)	(1999)	(1999)	(1996)	(1995)	(1997)	(1997)	(1999)	(1995)	(2001)	(1998)	(1999)
MIN	0.00	0.00	0.00	0.00	0.00	1.81	0.79	0.10	0.00	0.00	0.00	0.00
(WY)	(1985)	(1989)	(1989)	(1989)	(1985)	(1992)	(1992)	(1992)	(1992)	(1985)	(1987)	(1987)

06354882 OAK CREEK NEAR WAKPALA, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1985 - 2004	
ANNUAL TOTAL	303.72		4,015.80			
ANNUAL MEAN	0.83		11.0		[a]27.2	
HIGHEST ANNUAL MEAN					126	1997
LOWEST ANNUAL MEAN					0.65	1992
HIGHEST DAILY MEAN	30	Mar 17	600	Mar 10	6,800	Mar 28, 1997
LOWEST DAILY MEAN	0.00	Jan 19	0.00	Oct 1	[b]0.00	Oct 1, 1984
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 19	0.00	Oct 1	0.00	Oct 1, 1984
MAXIMUM PEAK FLOW			900	Mar 10	7,500	Mar 27, 1997
MAXIMUM PEAK STAGE			[c]10.34	Mar 10	[d]19.83	Mar 27, 1997
ANNUAL RUNOFF (AC-FT)	602		7,970		19,670	
10 PERCENT EXCEEDS	2.5		16		27	
50 PERCENT EXCEEDS	0.00		0.00		1.2	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a Median of annual mean discharges, 16 ft^3/s.
b No flow for many days in most years.
c From floodmark, backwater from ice.
d Backwater from ice.
e Estimated.



06355500 NORTH FORK GRAND RIVER NEAR WHITE BUTTE, SD

LOCATION.--Lat 45°48'08", long 102°21'43", in SW¼ NW¼ NW¼ sec.11, T.21 N., R.14 E., Perkins County, Hydrologic Unit 10130301, on left bank on upstream side of highway bridge and 9.8 mi south of White Butte.

DRAINAGE AREA.--1,190 mi^2, approximately.

PERIOD OF RECORD.--October 1945 to current year. Monthly discharge only for some periods, published in WSP 1309.

REVISED RECORDS.--WSP 1279: 1947, 1950.

GAGE.--Water-stage recorder. Elevation of gage is 2,296 ft above NGVD of 1929, from topographic map. See WSP 1917 for history of changes prior to June 12, 1951. June 12, 1951, to Aug. 20, 1975, water-stage recorder, and Aug. 21 to Sept. 10, 1975, nonrecording gage at site 100 ft upstream; Sept. 11, 1975, to Mar. 22, 1976, nonrecording gage, and July 29, 1976, to Sept. 30, 1989, water-stage recorder at site 1,400 ft upstream, and Mar. 23 to July 28, 1976, nonrecording gage at present site, all at present datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow regulated by Bowman-Haley Dam, capacity, 93,000 acre-ft, 71 mi upstream, beginning August 1966. Maximum discharge prior to October 1966, 30,900 ft^3/s, Apr. 16, 1950, gage height, 20.0 ft, from floodmarks, from rating curve extended above 19,000 ft^3/s on basis of slope-area measurement of peak flow; no flow at times most years. Satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.63	0.00	e2.2	e1.2	e0.50	642	106	15	2.6	e0.14	0.00	0.00
2	0.46	0.00	e2.2	e1.1	e0.50	297	79	14	7.0	e0.31	0.00	0.00
3	0.44	0.00	e2.2	e0.90	e0.50	161	62	12	5.8	e0.51	0.00	0.00
4	0.36	0.00	e2.2	e0.60	e0.50	128	56	11	5.2	e0.76	0.00	0.00
5	0.31	0.01	e2.2	e0.50	e0.50	111	51	10	5.1	e2.5	0.00	0.00
6	0.19	0.12	e2.1	e0.40	e0.50	103	44	8.5	2.4	e4.9	0.00	0.00
7	0.13	e0.40	e2.0	e0.40	e0.50	99	39	7.5	0.57	e3.7	0.00	0.00
8	0.09	e0.50	e1.8	e0.30	e0.50	143	33	7.3	1.2	e3.1	0.00	0.00
9	0.07	e0.50	e1.7	e0.40	e0.60	938	32	6.6	0.47	e2.4	0.00	0.00
10	0.05	e0.50	e1.4	e0.40	e0.60	1,890	30	5.3	0.43	e3.8	0.00	0.00
11	0.04	e0.80	e1.3	e0.70	e0.60	1,480	29	4.8	0.58	e4.9	0.00	0.00
12	0.02	e1.3	e1.2	e1.2	e0.60	767	27	4.7	e0.31	e4.2	0.00	0.00
13	0.01	e1.5	e1.2	e1.1	e0.60	520	26	4.5	e0.25	e3.2	0.00	0.00
14	0.01	e2.0	e1.2	e1.2	e0.70	339	26	5.0	e0.26	3.1	0.00	0.00
15	0.01	e2.3	e1.2	e1.7	e0.70	228	25	5.4	e0.25	5.6	0.00	0.00
16	0.00	2.2	e1.3	e1.8	e0.80	198	24	6.5	e0.19	5.0	0.00	0.00
17	0.00	2.5	e1.3	e1.9	e0.90	189	24	9.0	e0.21	3.0	0.00	0.00
18	0.00	2.9	e1.4	e1.9	e1.2	192	26	7.2	e0.28	1.2	0.00	0.00
19	0.00	3.1	e1.6	e2.4	e1.6	190	25	4.3	e0.14	0.68	0.00	0.00
20	0.00	3.3	e1.7	e2.1	e3.0	184	25	1.6	e0.15	0.33	0.00	0.00
21	0.00	3.1	e1.6	e2.3	e7.0	173	24	1.3	e0.11	0.18	0.00	0.00
22	0.00	e2.9	e1.5	e2.2	e20	155	23	2.1	e0.08	0.08	0.00	0.00
23	0.00	e2.2	e1.5	e2.2	e54	139	23	3.2	e0.10	0.02	0.00	0.00
24	0.00	e1.8	e1.5	e1.9	e60	127	22	3.3	e0.12	0.02	0.00	0.00
25	0.00	e1.7	e1.7	e1.1	e85	118	21	10	e0.06	0.01	0.00	0.00
26	0.00	e1.7	e1.8	e0.60	e160	108	20	9.7	e0.04	0.01	0.00	0.00
27	0.00	e1.8	e1.9	e0.40	e300	110	18	5.6	e0.03	0.00	0.00	0.00
28	0.00	e2.0	e1.9	e0.40	e600	545	18	2.3	e0.02	0.00	0.00	0.00
29	0.00	e2.1	e1.8	e0.40	1,020	246	17	2.0	e0.03	0.00	0.00	0.00
30	0.00	e2.2	e1.7	e0.40	---	155	16	1.9	e0.06	0.00	0.00	0.00
31	0.00	---	e1.5	e0.50	---	123	---	1.8	---	0.00	0.00	---
TOTAL	2.82	45.43	51.8	34.60	2,321.90	10,798	991	193.4	34.04	53.65	0.00	0.00
MEAN	0.09	1.51	1.67	1.12	80.1	348	33.0	6.24	1.13	1.73	0.00	0.00
MAX	0.63	3.3	2.2	2.4	1,020	1,890	106	15	7.0	5.6	0.00	0.00
MIN	0.00	0.00	1.2	0.30	0.50	99	16	1.3	0.02	0.00	0.00	0.00
AC-FT	5.6	90	103	69	4,610	21,420	1,970	384	68	106	0.00	0.00

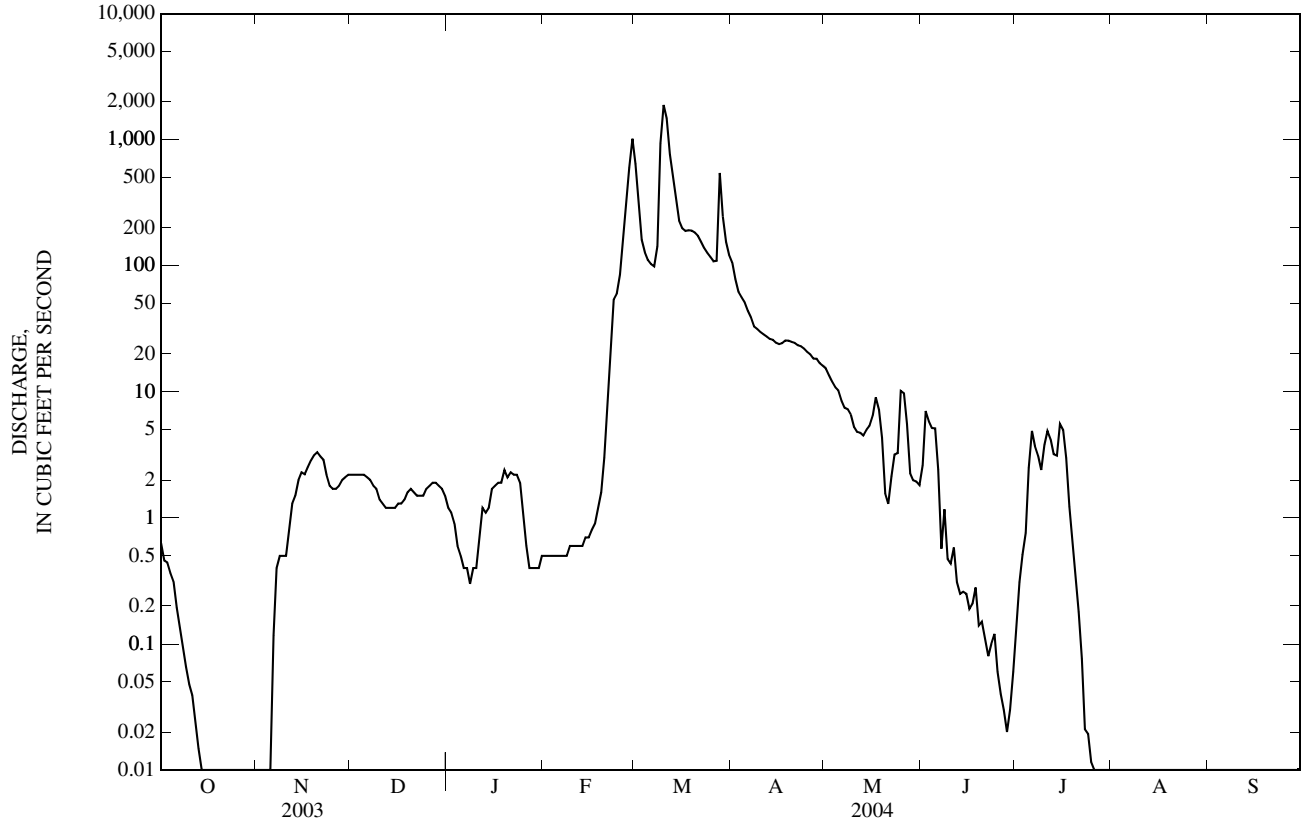
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2004, BY WATER YEAR (WY)*

MEAN	7.33	7.33	4.68	6.32	18.3	176	122	85.7	52.8	24.6	10.3	4.08
MAX	72.1	56.9	21.2	61.1	169	964	895	414	230	154	79.7	27.1
(WY)	(1983)	(1983)	(1983)	(1973)	(1999)	(1978)	(1997)	(1982)	(1982)	(1993)	(2001)	(1979)
MIN	0.00	0.00	0.00	0.00	0.00	2.22	0.01	0.07	0.03	0.00	0.00	0.00
(WY)	(1969)	(1989)	(1989)	(1991)	(1969)	(1975)	(1981)	(1981)	(1981)	(1980)	(1968)	(1968)

06355500 NORTH FORK GRAND RIVER NEAR WHITE BUTTE, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1967 - 2004*	
ANNUAL TOTAL	2,585.33		14,526.64			
ANNUAL MEAN	7.08		39.7		[a]43.4	
HIGHEST ANNUAL MEAN					160	1978
LOWEST ANNUAL MEAN					2.72	1981
HIGHEST DAILY MEAN	248	Mar 18	1,890	Mar 10	6,030	Mar 28, 1978
LOWEST DAILY MEAN	0.00	Jul 15	0.00	Oct 16	[b]0.00	Aug 3, 1967
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 15	0.00	Oct 16	0.00	Aug 3, 1967
MAXIMUM PEAK FLOW			2,320	Mar 10	[c]6,710	Mar 28, 1978
MAXIMUM PEAK STAGE			6.96	Mar 10	[d]12.08	Mar 23, 1978
ANNUAL RUNOFF (AC-FT)	5,130		28,810		31,460	
10 PERCENT EXCEEDS	12		89		89	
50 PERCENT EXCEEDS	1.7		1.2		5.5	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

* Regulated period only (1967-2004). See REMARKS.
a Median of annual mean discharges, 36 ft^3/s.
b No flow at times in most years.
c Gage height, 11.63 ft.
d Backwater from ice.
e Estimated.



06356500 SOUTH FORK GRAND RIVER NEAR CASH, SD

LOCATION.--Lat 45°38'56", long 102°38'27", in SE¼ NE¼ SE¼ SE¼ sec.33, T.20 N., R.12 E., Perkins County, Hydrologic Unit 10130302, on left bank at downstream side of highway bridge, 1.0 mi upstream from Little Nasty Creek, 4.0 mi north of Cash, 10 mi south of Lodgepole, 12 mi northwest of Bison, and 16 mi downstream from Big Nasty Creek.

DRAINAGE AREA.--1,350 mi^2, approximately.

PERIOD OF RECORD.--October 1945 to August 2001 (October 1995 to August 2001 seasonal records only), and April 2003 to September 2004. Monthly discharge only for some periods, published n WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 2,422.75 ft above NGVD of 1929. Prior to Oct. 25, 1946, nonrecording gage, and Oct. 25, 1946, to May 16, 1966, water-stage recorder, at site 500 ft upstream. May 17, 1966, to May 2, 1968, nonrecording gage, at present site, all at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	e11	e15	e8.0	e1.8	e700	27	13	13	9.8	8.1	6.6
2	9.3	e10	e16	e6.0	e1.8	e500	23	13	13	9.9	8.2	6.5
3	9.6	e9.5	e16	e4.0	e1.9	e360	20	13	12	9.5	9.2	6.5
4	9.5	e9.0	e16	e3.0	e1.8	e210	18	12	13	11	11	7.0
5	9.6	e9.0	e16	e2.0	e1.8	e180	17	13	13	22	270	6.7
6	9.6	e8.8	e15	e1.8	e1.8	e170	16	13	12	38	393	6.8
7	9.6	e8.6	e14	e1.7	e1.8	e200	16	12	11	53	106	6.7
8	9.6	e8.4	e13	e1.8	e1.9	e1,750	15	12	11	46	52	6.9
9	9.4	e8.2	e12	e1.8	e2.0	e2,300	15	12	11	39	31	7.0
10	10	e8.0	e11	e1.9	e2.0	e2,000	15	12	11	33	22	7.1
11	10	e8.2	e9.0	e2.1	e2.3	717	15	12	13	21	17	6.9
12	10	e8.4	e9.0	e2.5	e2.8	301	15	12	64	15	13	7.1
13	9.9	e8.6	e10	e2.7	e3.2	220	14	12	44	16	13	7.3
14	9.9	e8.8	e11	e3.1	e3.7	149	14	12	22	18	12	8.2
15	10	e9.0	e12	e3.8	e3.9	100	14	12	17	11	11	9.1
16	11	e9.5	e13	e4.0	e4.2	75	14	13	15	11	10	11
17	11	e10	e14	e3.9	e5.0	69	15	15	14	8.7	9.5	14
18	11	e17	e15	e3.8	e6.1	61	16	15	13	8.3	9.1	11
19	11	e26	e16	e3.9	e10	58	16	16	12	7.8	8.3	10
20	10	e26	e16	e4.0	e20	53	16	16	12	9.5	7.6	10
21	10	e20	e17	e4.0	e30	50	16	16	12	8.9	7.4	9.7
22	10	e13	e16	e3.9	e100	45	16	25	11	8.0	7.2	9.7
23	10	e11	e15	e3.8	e400	38	15	26	11	8.2	7.2	11
24	11	e10	e14	e3.0	e550	34	14	33	11	8.1	7.1	11
25	10	e11	e13	e2.3	e750	32	14	47	11	7.8	6.8	10
26	10	e12	e13	e2.0	e1,000	29	13	34	11	7.8	6.8	9.4
27	11	e12	e12	e1.9	e1,200	31	13	28	11	8.1	6.7	9.0
28	11	e13	e11	e1.8	e1,300	58	13	21	11	7.9	6.8	8.9
29	14	e14	e10	e1.6	e950	48	13	18	10	8.1	7.2	9.0
30	14	e15	e9.0	e1.7	---	34	13	16	10	8.3	7.1	8.8
31	e12	---	e9.0	e1.7	---	34	---	14	---	8.4	7.1	---
TOTAL	322.1	353.0	408.0	93.5	6,359.8	10,606	471	538	455	487.1	1,098.4	258.9
MEAN	10.4	11.8	13.2	3.02	219	342	15.7	17.4	15.2	15.7	35.4	8.63
MAX	14	26	17	8.0	1,300	2,300	27	47	64	53	393	14
MIN	9.1	8.0	9.0	1.6	1.8	29	13	12	10	7.8	6.7	6.5
AC-FT	639	700	809	185	12,610	21,040	934	1,070	902	966	2,180	514

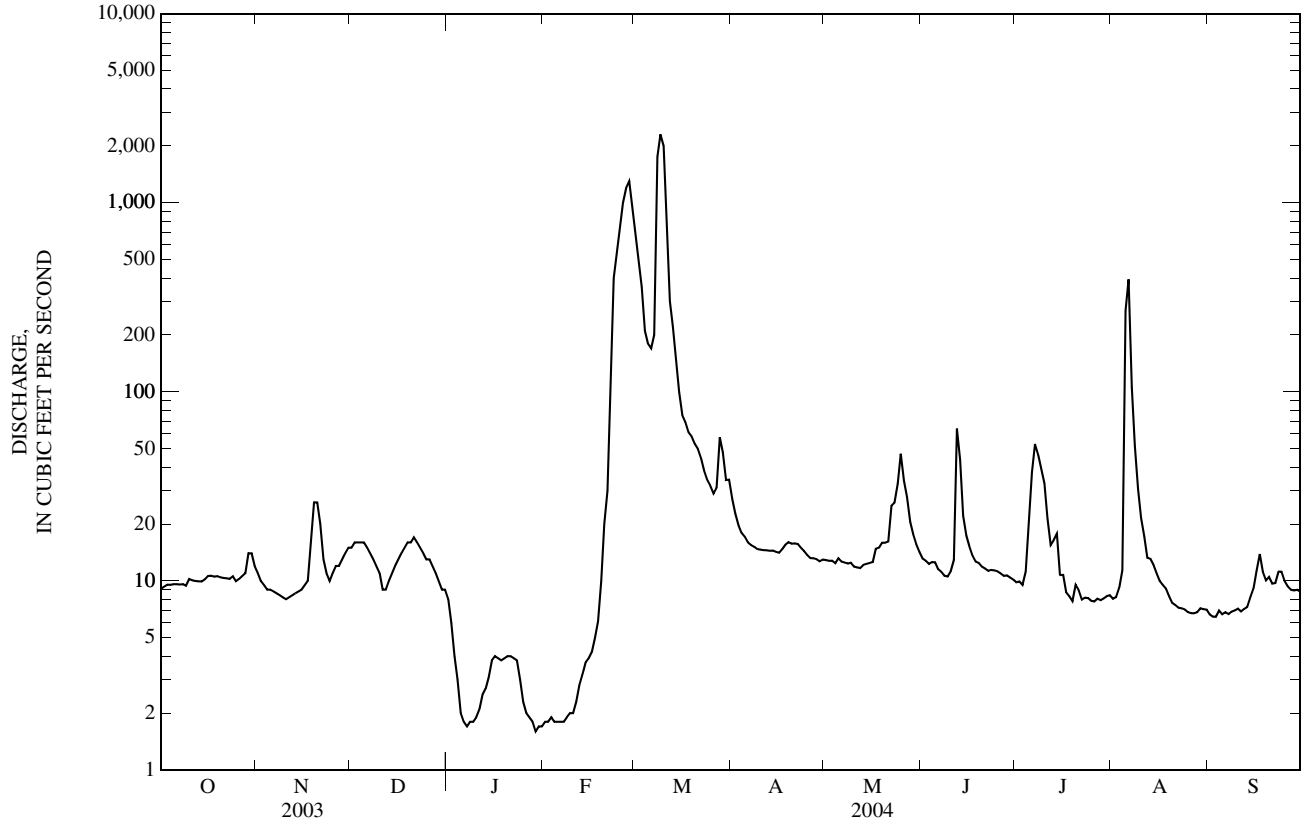
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1995, 2004, BY WATER YEAR (WY)*

MEAN	21.8	11.6	6.88	6.35	26.0	164	162	86.5	75.4	45.1	20.5	15.3
MAX	135	26.6	20.5	64.1	267	807	2,446	523	336	590	85.6	62.8
(WY)	(1983)	(1973)	(1973)	(1973)	(1972)	(1972)	(1952)	(1995)	(1967)	(1993)	(1981)	(1986)
MIN	6.32	3.57	0.00	0.00	0.00	5.58	10.7	9.39	5.37	2.84	1.16	4.40
(WY)	(1959)	(1956)	(1956)	(1949)	(1949)	(1975)	(1981)	(1992)	(1961)	(1961)	(1959)	(1981)

06356500 SOUTH FORK GRAND RIVER NEAR CASH, SD—Continued

SUMMARY STATISTICS	FOR 2004 WATER YEAR		WATER YEARS 1947-1995, 2004*	
ANNUAL TOTAL	21,450.8			
ANNUAL MEAN	58.6		[a]52.1	
HIGHEST ANNUAL MEAN			221	1950
LOWEST ANNUAL MEAN			10.1	1961
HIGHEST DAILY MEAN	2,300	Mar 9	15,600	Apr 16, 1950
LOWEST DAILY MEAN	1.6	Jan 29	[b]0.00	Feb 6, 1948
ANNUAL SEVEN-DAY MINIMUM	1.8	Jan 27	0.00	Feb 6, 1948
MAXIMUM PEAK FLOW	2,700	Mar 10	[c]27,000	Apr 15, 1950
MAXIMUM PEAK STAGE	[d]6.20	Mar 10	15.40	Apr 15, 1950
ANNUAL RUNOFF (AC-FT)	42,550		37,760	
10 PERCENT EXCEEDS	49		72	
50 PERCENT EXCEEDS	11		12	
90 PERCENT EXCEEDS	3.9		2.1	

* Period reflects only complete water years.
a Median of annual mean discharges, 39 ft^3/s.
b No flow at times in most years.
c From rating curve extended above 14,000 ft^3/s on basis of slope-area measurement of peak flow.
d From floodmark, backwater from ice.
e Estimated.



06357000 SHADEHILL RESERVOIR AT SHADEHILL, SD

LOCATION.--Lat 45°45'12", long 102°12'12", in E$^1/_2$ sec.25, T.21 N., R.15 E., Perkins County, Hydrologic Unit 10130302, at dam on Grand River, 1.3 mi southwest of Shadehill.

DRAINAGE AREA.--3,120 mi^2, approximately.

PERIOD OF RECORD.--June 1950 to current year (monthend contents only).

GAGE.--Water-stage recorder. Elevations listed to NGVD of 1929. Prior to Apr. 3, 1952, occasional elevations obtained by level circuits and Apr. 3, 1952, to Apr. 28, 1970, nonrecording gage at same site and datum.

REMARKS.--Reservoir formed by earthfill dam. Storage began July 1, 1950; dam completed August 1951. Conservation storage, 81,400 acre-ft between elevations 2,250.8 ft (invert of canal and river outlet) and elevation 2,272.0 ft (crest of morning-glory spillway). Dead storage, 58,231 acre-ft below elevation 2,250.8 ft. Flood control, 217,708 acre-ft between elevations 2,272.0 ft and 2,302.0 ft (crest of emergency spillway). Surcharge, 111,203 acre-ft at elevation 2,312.0 ft (maximum pool elevation). Total reservoir capacity is 468,585 acre-ft at elevation 2,312.0 ft. The reservoir provides flood control and water for irrigation purposes. Figures given herein represent usable contents above elevation 2,250.8 ft. Prior to Oct. 1, 1968, reservoir contents published as total contents and included dead storage.

COOPERATION.--Records of elevation and contents provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum usable contents observed, 260,207 acre-ft, Apr. 10, 1952, elevation, 2,297.90 ft; minimum usable observed since first filling to spillway level, 14,357 acre-ft, Feb. 18, 2004, elevation, 2,260.80 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 53,800 acre-ft, Apr. 5, elevation, 2,270.34 ft; minimum, 14,400 acre-ft, Feb. 18, elevation, 2,260.80 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	2,262.31	19,700	--
Oct. 31	2,261.75	17,700	-2,000
Nov. 30	2,261.53	16,900	-800
Dec. 31	2,261.34	16,200	-700
CAL YR 2003	--	--	-1,200
Jan. 31	2,261.01	15,100	-1,100
Feb. 29	2,263.73	25,100	+10,000
Mar. 31	2,270.26	53,400	+28,300
Apr. 30	2,270.15	52,900	-500
May 31	2,269.69	50,700	-2,200
June 30	2,269.11	48,000	-2,700
July 31	2,268.65	45,900	-2,100
Aug. 31	2,268.19	43,800	-2,100
Sept. 30	2,267.58	41,100	-2,700
WTR YR 2004	--	--	+21,400

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06357800 GRAND RIVER AT LITTLE EAGLE, SD

LOCATION.--Lat 45°39'28", long 100°49'04", in NE¼ NE¼ sec.32, T.20 N., R.27 E., Corson County, Hydrologic Unit 10130303, on left bank at downstream side of bridge on State Highway 63, 1.3 mi southwest of Little Eagle, and 4.7 mi downstream from Little Oak Creek.

DRAINAGE AREA.--5,370 mi^2, approximately.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,624.63 ft above NGVD of 1929. Prior to May 12, 1959, nonrecording gage, and May 12, 1959, to Aug. 11, 1970, water-stage recorder at site 0.6 mi downstream at datum 2.00 ft higher. From Aug. 12, 1970, to Sept. 30, 1997, at present site at datum 4.00 ft higher than original datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite data-collection platform at station. Flow regulated by Shadehill Dam 144 mi upstream since July 1, 1950. (See station 06357000.) Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	e28	e39	e39	e7.0	e900	84	39	35	33	27	24
2	9.3	e25	e39	e39	e7.0	e600	78	38	35	64	25	22
3	15	e19	e35	e37	e7.0	e400	71	37	34	86	31	23
4	19	e25	e36	e29	e7.5	e300	66	37	35	62	42	25
5	19	e29	e36	e24	e8.0	e300	63	36	35	102	48	31
6	20	e29	e38	e28	e8.0	e250	64	35	33	146	40	38
7	20	e27	e40	e25	e8.0	e300	61	34	39	126	41	98
8	20	e28	e34	e22	e8.0	e200	59	34	45	545	61	86
9	20	e33	e37	e18	e9.0	e400	57	33	32	365	87	57
10	20	e29	e37	e17	e9.0	e700	57	33	39	199	51	40
11	21	e37	e36	e16	e9.0	2,320	54	34	93	122	39	34
12	22	e40	e30	e16	e9.0	1,050	53	33	86	84	34	32
13	22	e41	e25	e14	e9.0	771	53	34	113	63	31	30
14	22	e42	e24	e14	e10	859	52	34	113	51	29	29
15	21	e43	e27	e13	e10	543	50	34	101	44	28	31
16	21	e44	e29	e13	e9.0	376	47	36	89	39	28	32
17	21	e46	e34	e12	e9.0	289	48	42	94	36	28	31
18	22	e48	e34	e12	e10	253	47	43	132	33	26	33
19	22	e52	e35	e11	e11	223	50	46	103	32	25	48
20	22	e42	e34	e11	e12	198	52	44	73	31	25	48
21	22	e25	e32	e10	e15	177	57	45	55	28	24	36
22	22	e19	e36	e10	e20	159	58	41	53	27	24	32
23	22	e25	e40	e10	e14	141	57	40	40	26	24	39
24	21	e28	e40	e9.0	e250	127	51	44	36	25	23	47
25	20	e50	e40	e9.0	e400	117	46	72	32	24	24	39
26	21	e48	e42	e8.0	e500	109	43	69	31	23	23	46
27	22	e39	e44	e8.0	e1,000	106	41	52	32	22	24	58
28	22	e35	e45	e8.0	e1,500	103	39	47	30	22	25	53
29	26	e29	e44	e7.0	e1,600	101	38	53	29	23	24	41
30	28	e30	e41	e7.0	---	96	37	153	27	24	25	36
31	e28	---	e38	e7.0	---	93	---	40	---	26	24	---
TOTAL	643.3	1,035	1,121	503.0	5,475.5	12,561	1,633	1,392	1,724	2,533	1,010	1,219
MEAN	20.8	34.5	36.2	16.2	189	405	54.4	44.9	57.5	81.7	32.6	40.6
MAX	28	52	45	39	1,600	2,320	84	153	132	545	87	98
MIN	9.3	19	24	7.0	7.0	93	37	33	27	22	23	22
AC-FT	1,280	2,050	2,220	998	10,860	24,910	3,240	2,760	3,420	5,020	2,000	2,420

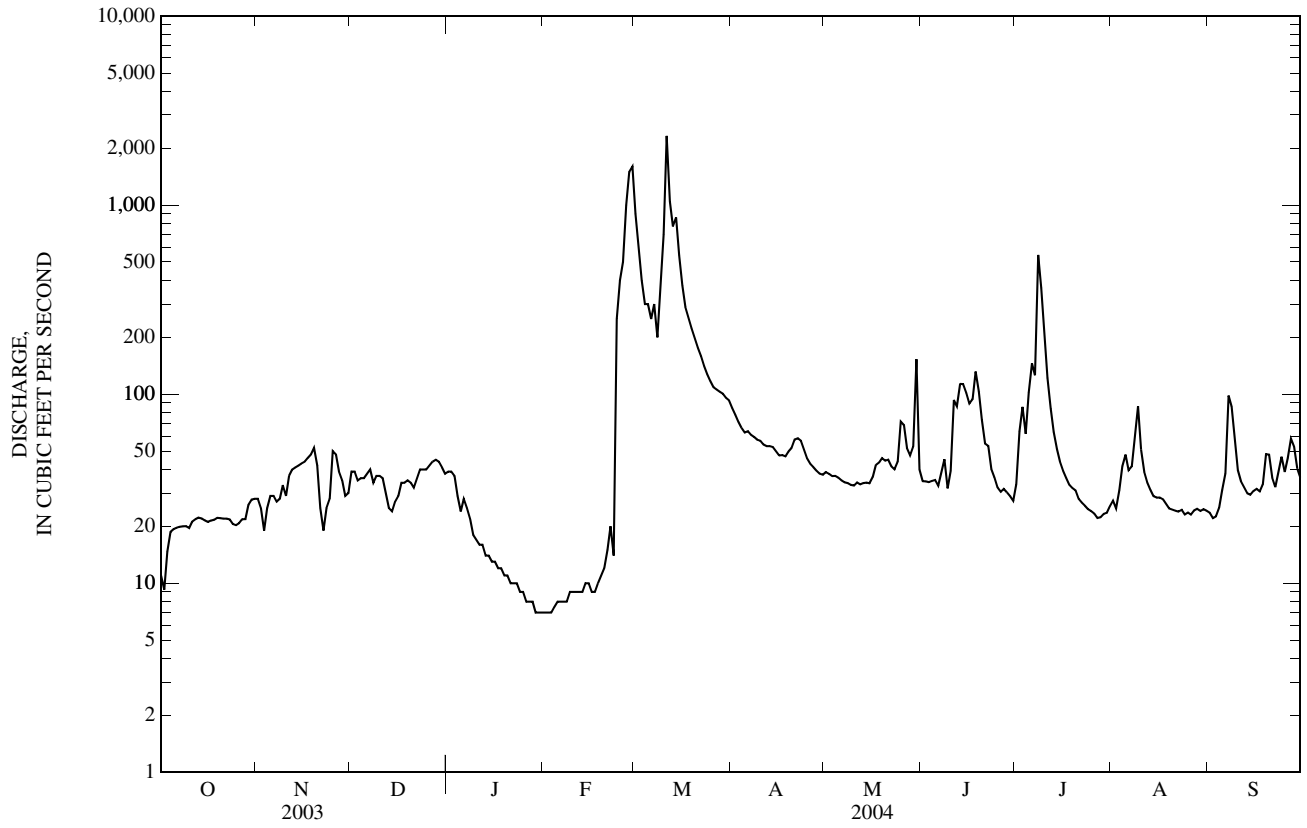
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2004, BY WATER YEAR (WY)

MEAN	90.3	58.3	36.1	46.0	151	826	563	475	314	210	109	87.3
MAX	317	204	103	867	1,564	3,866	4,919	2,292	1,045	2,298	554	318
(WY)	(1995)	(1961)	(1983)	(1973)	(1999)	(1987)	(1997)	(1986)	(1967)	(1993)	(1993)	(1996)
MIN	2.92	2.14	0.00	0.00	0.00	18.2	10.3	5.45	20.5	10.8	0.00	2.29
(WY)	(1959)	(1960)	(1960)	(1959)	(1959)	(1981)	(1981)	(1981)	(1989)	(1991)	(1959)	(1960)

06357800 GRAND RIVER AT LITTLE EAGLE, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1959 - 2004	
ANNUAL TOTAL	18,603.8		30,849.8			
ANNUAL MEAN	51.0		84.3		[a]248	
HIGHEST ANNUAL MEAN					1,007	1997
LOWEST ANNUAL MEAN					44.8	2002
HIGHEST DAILY MEAN	1,300	Mar 18	2,320	Mar 11	26,500	Mar 23, 1987
LOWEST DAILY MEAN	1.0	Feb 9	7.0	Jan 29	[b]0.00	Oct 2, 1958
ANNUAL SEVEN-DAY MINIMUM	1.0	Feb 9	7.1	Jan 29	0.00	Oct 2, 1958
MAXIMUM PEAK FLOW			[c]3,250	Mar 11	[d]31,000	Mar 23, 1987
MAXIMUM PEAK STAGE			[f]13.73	Feb 28	[g]21.76	Mar 18, 1966
ANNUAL RUNOFF (AC-FT)	36,900		61,190		179,600	
10 PERCENT EXCEEDS	81		126		463	
50 PERCENT EXCEEDS	27		35		65	
90 PERCENT EXCEEDS	2.3		12		5.1	

a Median of annual mean discharges, 180 ft^3/s.
b No flow at times.
c Gage height, 11.08 ft.
d Gage height, 19.16 ft, datum then in use.
e Estimated.
f Backwater from ice.
g From floodmarks, ice jam, site and datum then in use.



06359500 MOREAU RIVER NEAR FAITH, SD

LOCATION.--Lat 45°11'52", long 102°09'22", in NW¼ NW¼ sec.10, T.14 N., R.16 E., Perkins County, Hydrologic Unit 10130306, on left bank 10 ft downstream from bridge on State Highway 73, 3.1 mi downstream from Rabbit Creek, and 13.5 mi northwest of Faith.

DRAINAGE AREA.--2,660 mi^2, approximately.

PERIOD OF RECORD.--March 1943 to current year.

REVISED RECORDS.--WSP 1176: 1944. WSP 1279: 1946(M).

GAGE.--Water-stage recorder. Datum of gage is 2,238.68 ft above NGVD of 1929. Prior to Oct. 5, 1949, nonrecording gage 0.3 mi upstream and Oct. 5, 1949, to July 16, 1959, nonrecording gage and crest-stage gage at present site; both at datum 1.0 ft higher. July 17, 1959, to Sept. 1, 1971, recording gage at site 500 ft downstream at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	15	e10	e3.1	e0.80	e371	24	7.3	42	3.9	9.1	1.8
2	3.3	14	e10	e2.6	e0.80	426	27	6.8	35	15	7.2	1.6
3	3.8	e13	e9.9	e2.1	e0.70	483	21	6.7	29	9.8	7.3	3.1
4	5.2	e12	e9.1	e1.7	e0.80	412	21	6.3	24	5.7	185	24
5	4.8	e11	e9.0	e1.3	e0.80	373	21	6.2	21	70	1,060	25
6	4.2	e10	e9.7	e1.1	e0.90	338	19	5.4	18	215	639	14
7	3.5	e10	e9.7	e0.90	e1.3	270	16	5.0	15	144	321	6.5
8	3.5	e11	e9.2	e0.70	e1.4	272	15	4.8	13	165	253	3.3
9	3.3	e11	e8.0	e0.60	e1.5	330	14	4.7	12	118	239	2.0
10	3.2	e11	e6.9	e0.60	e1.5	474	13	4.7	16	120	129	2.0
11	4.0	e12	e6.1	e0.70	e1.4	384	13	5.3	29	94	83	1.8
12	3.8	e13	e6.2	e0.90	e1.3	682	12	5.4	25	67	59	1.4
13	3.8	e15	e6.4	e1.1	e1.4	727	12	5.7	19	50	43	1.1
14	3.9	e17	e6.8	e1.3	e1.5	382	12	5.4	16	38	34	1.4
15	4.4	e18	e7.1	e2.0	e1.8	261	11	5.3	13	29	27	51
16	5.2	e20	e7.5	e2.2	e2.0	213	10	5.8	22	23	22	52
17	5.8	e21	e7.9	e2.3	e2.7	191	12	7.9	21	19	18	16
18	6.2	e22	e8.2	e2.1	e3.9	138	12	8.4	17	15	15	8.7
19	6.1	e22	e8.4	e1.8	e7.0	109	12	10	15	12	12	16
20	7.1	e23	e8.2	e1.8	e14	89	13	9.4	13	10	11	24
21	8.3	e20	e8.0	e2.0	e33	80	13	11	11	11	9.2	15
22	9.7	e17	e7.6	e2.2	e75	79	13	14	11	12	8.7	11
23	7.8	e14	e7.3	e2.1	e300	78	13	26	9.3	10	9.3	16
24	8.1	e11	e7.2	e1.6	e500	68	12	53	8.0	9.5	7.7	26
25	8.2	e9.3	e7.1	e1.2	e580	59	11	85	6.8	8.5	6.6	12
26	8.5	e9.0	e6.8	e0.80	e660	53	9.7	165	5.4	7.6	4.4	9.2
27	10	e9.0	e6.3	e0.60	e700	47	9.0	217	4.6	8.2	4.0	8.1
28	9.6	e9.6	e5.9	e0.50	e730	40	8.9	157	3.9	8.9	4.4	8.8
29	11	e9.9	e5.2	e0.60	e670	35	7.9	105	3.5	9.2	3.2	6.5
30	13	e10	e4.6	e0.70	---	33	7.6	75	3.4	10	3.2	5.1
31	15	---	e3.8	e0.80	---	26	---	55	---	10	2.4	---
TOTAL	197.6	419.8	234.1	44.00	4,295.50	7,523	415.1	1,089.5	481.9	1,328.3	3,236.7	374.4
MEAN	6.37	14.0	7.55	1.42	148	243	13.8	35.1	16.1	42.8	104	12.5
MAX	15	23	10	3.1	730	727	27	217	42	215	1,060	52
MIN	3.2	9.0	3.8	0.50	0.70	26	7.6	4.7	3.4	3.9	2.4	1.1
AC-FT	392	833	464	87	8,520	14,920	823	2,160	956	2,630	6,420	743

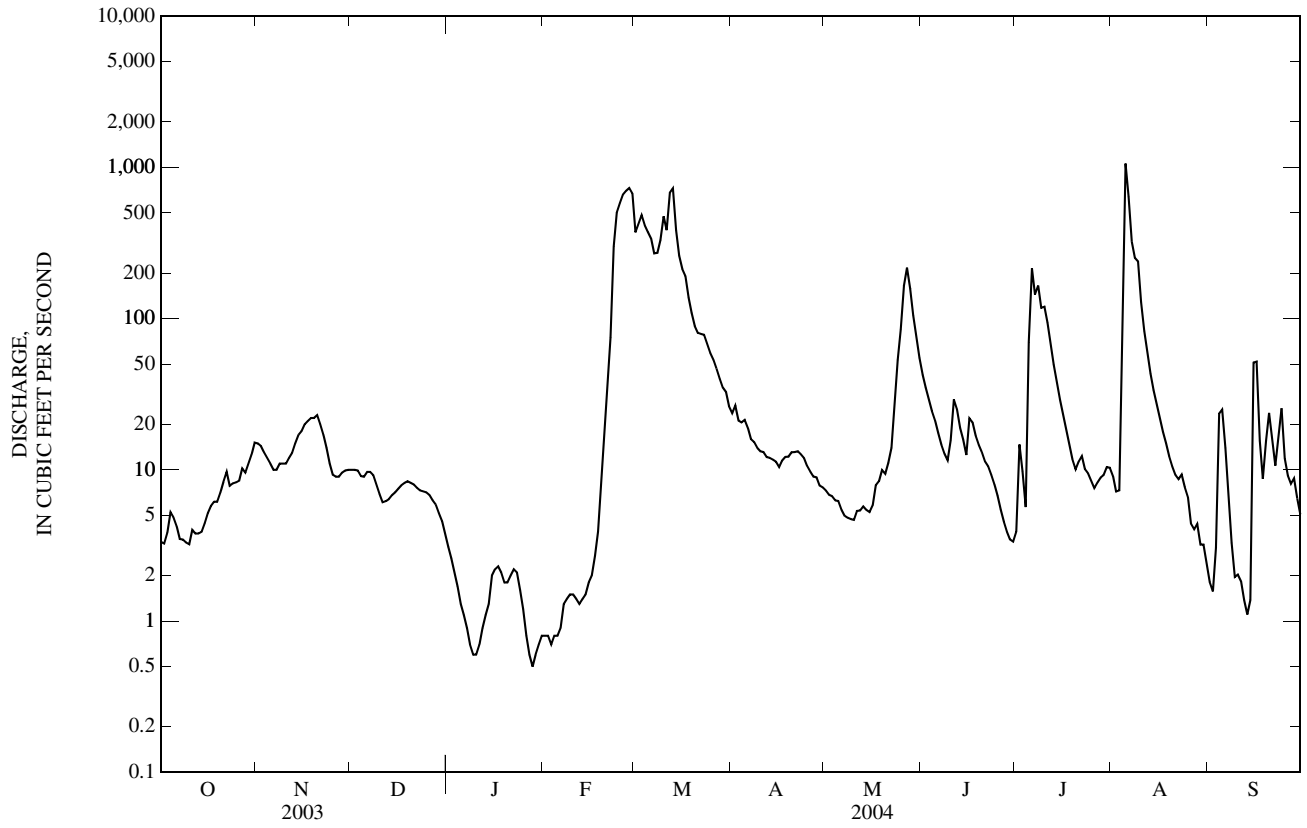
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2004, BY WATER YEAR (WY)

MEAN	32.6	15.1	7.74	7.18	74.1	398	372	296	273	113	34.7	16.9
MAX	463	139	44.8	99.0	1,045	2,757	4,355	2,203	1,850	1,530	258	262
(WY)	(1983)	(1999)	(1999)	(1973)	(1996)	(1978)	(1952)	(1982)	(1944)	(1993)	(1993)	(1986)
MIN	0.00	1.10	0.00	0.00	0.00	0.19	5.27	4.60	2.04	0.00	0.00	0.00
(WY)	(1959)	(1946)	(1956)	(1944)	(1944)	(1944)	(1981)	(1980)	(2002)	(2002)	(1949)	(1958)

06359500 MOREAU RIVER NEAR FAITH, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1944 - 2004	
ANNUAL TOTAL	14,173.11		19,639.90			
ANNUAL MEAN	38.8		53.7		[a]137	
HIGHEST ANNUAL MEAN					496	1997
LOWEST ANNUAL MEAN					7.60	1961
HIGHEST DAILY MEAN	990	Mar 20	1,060	Aug 5	25,300	Apr 8, 1944
LOWEST DAILY MEAN	0.00	Jul 30	0.50	Jan 28	[b]0.00	Dec 15, 1943
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 30	0.69	Jan 26	0.00	Dec 15, 1943
MAXIMUM PEAK FLOW			[c]1,300	Aug 5	[d]26,000	Apr 9, 1944
MAXIMUM PEAK STAGE			[f]6.40	Feb 23	[g]20.90	Apr 9, 1944
ANNUAL RUNOFF (AC-FT)	28,110		38,960		99,150	
10 PERCENT EXCEEDS	59		140		194	
50 PERCENT EXCEEDS	10		9.9		12	
90 PERCENT EXCEEDS	0.00		1.7		0.22	

a Median of annual mean discharges, 95 ft^3/s.
b No flow at times in most years.
c Gage height, 5.63 ft.
d From rating curve extended above 12,000 ft^3/s on basis of slope-area measurement of peak flow.
e Estimated.
f Backwater from ice.
g From floodmarks, site and datum then in use.



06360500 MOREAU RIVER NEAR WHITEHORSE, SD

LOCATION.--Lat 45°15'21", long 100°50'33", in SW¼ SE¼ sec.17, T.15 N., R.27 E., Dewey County, Hydrologic Unit 10130306, on left bank 30 ft downstream from bridge, 2.4 mi southeast of Whitehorse, 8.8 mi downstream from Little Moreau River, and 16.3 mi southeast of town of Timber Lake.

DRAINAGE AREA.--4,880 mi^2, approximately.

PERIOD OF RECORD.--June 1954 to current year.

REVISED RECORDS.--WDR SD-78-1: 1977.

GAGE.--Water-stage recorder. Datum of gage is 1,661.48 ft above NGVD of 1929. Prior to Nov. 24, 1954, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1953 reached a stage of about 26.2 ft. Flood in March 1947 was probably higher.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	e0.40	e1.3	e0.80	e0.00	e350	41	7.3	120	5.4	1.7	2.4
2	10	e0.30	e1.3	e0.80	e0.00	e250	35	6.6	92	5.1	1.8	1.9
3	10	e0.20	e1.2	e0.60	e0.00	e150	31	6.1	72	4.5	2.7	1.6
4	7.5	e0.15	e1.2	e0.40	e0.00	e100	29	5.6	58	179	2.3	1.7
5	5.3	e0.10	e1.1	e0.30	e0.00	e90	26	4.8	47	290	1.8	2.2
6	3.7	e0.07	e1.1	e0.20	e0.00	e60	23	4.4	36	249	1.3	2.4
7	3.2	e0.05	e1.2	e0.10	e0.00	e100	20	3.7	29	241	0.96	2.3
8	2.8	e0.04	e1.2	e0.09	e0.00	e150	18	3.3	24	1,070	172	2.4
9	2.4	e0.04	e1.1	e0.09	e0.00	e250	18	3.6	22	831	609	2.0
10	2.1	e0.04	e1.0	e0.09	e0.00	e350	17	3.4	23	514	281	2.6
11	2.0	e0.05	e0.80	e0.09	e0.00	e700	16	3.2	97	272	186	2.7
12	1.6	e0.06	e0.70	e0.10	e0.00	e600	15	3.4	179	242	187	6.2
13	1.5	e0.07	e0.70	e0.10	e0.00	555	14	3.2	61	218	148	5.3
14	1.3	e0.10	e0.70	e0.10	e0.00	685	13	2.8	39	148	93	4.3
15	1.3	e0.20	e0.70	e0.12	e0.00	1,000	12	2.5	36	101	63	3.8
16	1.4	e1.0	e0.70	e0.14	e0.00	600	11	3.2	29	69	44	3.4
17	1.1	2.6	e0.80	e0.12	e0.00	365	11	4.3	24	48	32	3.1
18	0.99	3.3	e0.80	e0.10	e0.01	281	11	4.7	25	36	24	2.7
19	0.95	5.0	e0.80	e0.09	e0.05	224	11	5.1	23	27	18	2.2
20	0.92	7.3	e0.90	e0.08	e0.10	204	11	4.7	19	21	14	2.3
21	0.81	e6.0	e1.0	e0.08	e0.50	167	11	5.5	16	16	11	20
22	0.71	e5.0	e1.0	e0.08	e50	139	10	6.9	13	12	9.1	14
23	0.66	e3.0	e1.0	e0.09	e300	118	9.0	34	11	10	8.1	13
24	0.56	e2.0	e1.1	e0.08	e350	104	8.3	30	9.5	7.9	7.2	20
25	0.54	e1.5	e1.1	e0.07	e300	93	8.4	20	8.6	6.2	6.2	17
26	0.53	e1.2	e1.2	e0.05	e500	74	8.5	16	10	4.8	5.3	13
27	0.57	e1.0	e1.2	e0.03	e480	78	8.2	10	9.6	3.7	4.9	12
28	0.52	e1.0	e1.1	e0.02	e420	81	7.6	12	8.6	3.1	4.3	12
29	0.70	e1.2	e1.0	e0.01	e400	65	7.4	10	7.5	2.8	3.8	8.1
30	0.62	e1.3	e0.90	e0.00	---	56	7.5	41	6.3	2.6	3.4	9.6
31	e0.50	---	e0.80	e0.00	---	48	---	143	---	2.2	3.0	---
TOTAL	74.38	44.27	30.70	5.02	2,800.66	8,087	468.9	414.3	1,155.1	4,642.3	1,949.86	196.2
MEAN	2.40	1.48	0.99	0.16	96.6	261	15.6	13.4	38.5	150	62.9	6.54
MAX	10	7.3	1.3	0.80	500	1,000	41	143	179	1,070	609	20
MIN	0.50	0.04	0.70	0.00	0.00	48	7.4	2.5	6.3	2.2	0.96	1.6
AC-FT	148	88	61	10	5,560	16,040	930	822	2,290	9,210	3,870	389

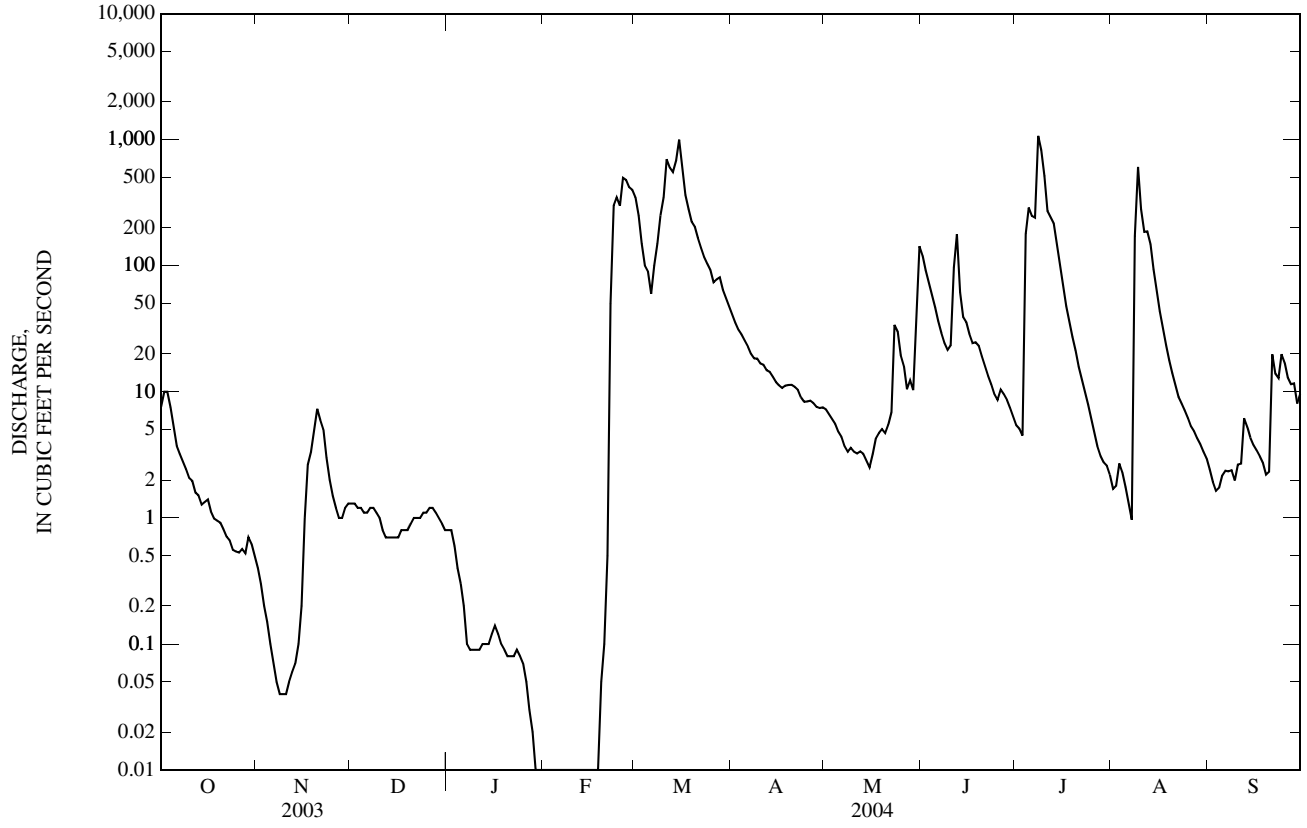
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2004, BY WATER YEAR (WY)

MEAN	52.0	16.0	6.57	7.62	99.9	942	475	621	379	188	55.0	27.6
MAX	642	182	59.1	210	1,253	8,022	5,071	3,759	2,433	2,438	452	362
(WY)	(1983)	(1999)	(1999)	(1973)	(1996)	(1997)	(1997)	(1982)	(1967)	(1993)	(1993)	(1996)
MIN	0.00	0.00	0.00	0.00	0.00	2.28	0.00	0.00	0.17	0.00	0.00	0.00
(WY)	(1957)	(1959)	(1956)	(1956)	(1955)	(1964)	(1981)	(1981)	(2002)	(2002)	(1955)	(1958)

06360500 MOREAU RIVER NEAR WHITEHORSE, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1955 - 2004	
ANNUAL TOTAL	21,723.89		19,868.69			
ANNUAL MEAN	59.5		54.3		[a]240	
HIGHEST ANNUAL MEAN					1,428	1997
LOWEST ANNUAL MEAN					8.39	1980
HIGHEST DAILY MEAN	3,390	May 4	1,070	Jul 8	28,100	Mar 23, 1997
LOWEST DAILY MEAN	0.00	Jan 15	0.00	Jan 30	[b]0.00	Jan 12, 1955
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 15	0.00	Jan 30	0.00	Jan 12, 1955
MAXIMUM PEAK FLOW			[c]1,210	Mar 15	[d]29,700	Mar 23, 1997
MAXIMUM PEAK STAGE			[f]8.12	Feb 26	[f]27.68	Mar 21, 1997
ANNUAL RUNOFF (AC-FT)	43,090		39,410		174,200	
10 PERCENT EXCEEDS	104		174		442	
50 PERCENT EXCEEDS	1.2		4.7		12	
90 PERCENT EXCEEDS	0.00		0.08		0.00	

a Median of annual mean discharges, 140 ft^3/s.
b No flow at times in most years.
c Gage height, 5.74 ft.
d Gage height, 26.93 ft.
e Estimated.
f Backwater from ice.



06386500 CHEYENNE RIVER NEAR SPENCER, WY

LOCATION.--Lat 43°25'16", long 104°07'52", in NE¼NW¼NE¼ sec. 25, T.40 N., R.61 W., Niobrara County, Hydrologic Unit 10120106, on right bank at downstream side of old highway bridge, 0.1 mi downstream from Sage Creek, 1.8 mi downstream from Robbers Roost Creek, and 17.0 mi northwest of Edgemont, SD.

DRAINAGE AREA.--5,270 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1948 to September 1974, October 2003 to September 2004. Published as South Fork Cheyenne River near Spencer October 1949 to September 1951.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 3,600 ft above NGVD of 1929, from topographic map. Prior to Oct. 18, 1955, water-stage recorder at site 400 ft upstream. Oct. 18, 1955, to Aug. 1, 1961, at site 2,500 ft upstream, and Aug. 1, 1961, to Aug. 22, 1962, at site 2,200 ft upstream, all at different datums.

REMARKS.--Records poor. Many small reservoirs above station used for stock and irrigation water, total capacity, about 45,000 acre-ft. Rain gage and satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section. Station operated by the Wyoming District from October 1948 to September 1974.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.05	0.10	e0.08	e0.08	e0.00	e0.04	0.07	0.14	0.15	0.02	0.00	0.00
2	0.05	0.11	e0.08	e0.07	e0.00	e0.06	0.15	0.14	0.14	0.02	0.00	0.00
3	0.05	e0.12	e0.09	e0.06	e0.00	e0.05	0.15	0.14	0.13	e0.02	0.00	0.00
4	0.05	e0.13	e0.09	e0.05	e0.00	e0.04	0.18	0.15	0.13	e0.02	0.00	0.00
5	0.05	e0.10	e0.10	e0.04	e0.00	e0.04	0.15	0.15	0.12	e0.02	0.00	0.00
6	0.05	e0.09	e0.10	e0.04	e0.00	e0.06	0.14	0.14	0.11	e0.01	0.00	0.00
7	0.05	e0.08	e0.10	e0.07	e0.00	e0.10	0.14	0.15	0.10	e0.01	0.00	0.00
8	0.05	e0.08	e0.10	e0.07	e0.00	e0.20	0.22	0.15	0.09	0.01	0.00	0.00
9	0.05	e0.08	e0.09	e0.06	e0.00	e0.40	0.23	0.15	0.08	0.01	0.00	0.00
10	0.05	e0.09	e0.08	e0.06	e0.00	1.0	0.20	0.15	0.09	e0.01	0.00	0.00
11	0.05	e0.10	e0.06	e0.06	e0.00	1.8	0.20	0.22	0.08	e0.01	0.00	0.00
12	0.05	e0.11	e0.06	e0.06	e0.00	0.33	0.22	1.1	0.07	e0.01	0.00	0.00
13	0.06	e0.12	e0.07	e0.06	e0.00	0.23	0.18	0.10	0.07	e0.01	0.00	0.00
14	0.05	0.12	e0.07	e0.06	e0.00	0.51	0.16	0.17	0.06	e0.00	0.00	0.00
15	0.06	0.12	e0.07	e0.06	e0.01	0.30	0.14	0.22	0.05	e0.00	0.00	0.00
16	0.06	0.12	e0.07	e0.06	e0.02	0.21	0.10	0.19	0.05	e0.00	0.00	0.00
17	0.06	0.11	e0.07	e0.05	e0.02	0.18	0.09	0.21	0.06	e0.00	0.00	0.00
18	0.06	0.11	e0.07	e0.05	e0.03	0.12	0.09	0.23	0.06	e0.00	0.00	0.00
19	0.06	0.11	e0.07	e0.05	e0.03	0.17	0.10	0.22	0.07	e0.00	0.00	0.00
20	0.06	0.10	e0.07	e0.05	e0.04	e0.26	0.10	0.23	0.07	e0.00	0.00	0.00
21	0.06	e0.09	e0.07	e0.05	e0.04	e0.32	0.10	0.27	0.07	e0.00	0.00	0.00
22	0.06	e0.08	e0.07	e0.06	e0.05	0.34	0.11	0.27	0.06	e0.00	0.00	0.00
23	0.07	e0.08	e0.07	e0.06	e0.05	0.36	0.11	0.25	0.05	e0.00	0.00	0.00
24	0.07	e0.07	e0.08	e0.06	e0.05	0.31	0.11	0.21	e0.04	e0.00	0.00	0.00
25	0.07	e0.07	e0.08	e0.03	e0.04	0.31	0.12	0.21	0.04	e0.00	0.00	0.00
26	0.07	e0.06	e0.08	e0.00	e0.04	0.31	0.12	0.21	0.04	e0.00	0.00	0.00
27	0.07	e0.06	e0.08	e0.00	e0.03	e0.30	0.13	0.21	0.04	0.00	0.00	0.00
28	0.07	e0.06	e0.07	e0.00	e0.03	e0.26	0.13	0.19	0.03	0.00	0.00	0.00
29	0.07	e0.07	e0.07	e0.00	e0.03	e0.22	0.13	0.18	0.02	0.00	0.00	0.00
30	0.07	e0.07	e0.07	e0.00	---	e0.15	0.14	0.16	0.02	0.00	0.00	0.00
31	0.09	---	e0.07	e0.00	---	e0.10	---	0.16	---	0.00	0.00	---
TOTAL	1.84	2.81	2.40	1.42	0.51	9.08	4.21	6.67	2.19	0.18	0.00	0.00
MEAN	0.06	0.09	0.08	0.05	0.02	0.29	0.14	0.22	0.07	0.01	0.00	0.00
MAX	0.09	0.13	0.10	0.08	0.05	1.8	0.23	1.1	0.15	0.02	0.00	0.00
MIN	0.05	0.06	0.06	0.00	0.00	0.04	0.07	0.10	0.02	0.00	0.00	0.00
AC-FT	3.6	5.6	4.8	2.8	1.0	18	8.4	13	4.3	0.4	0.00	0.00

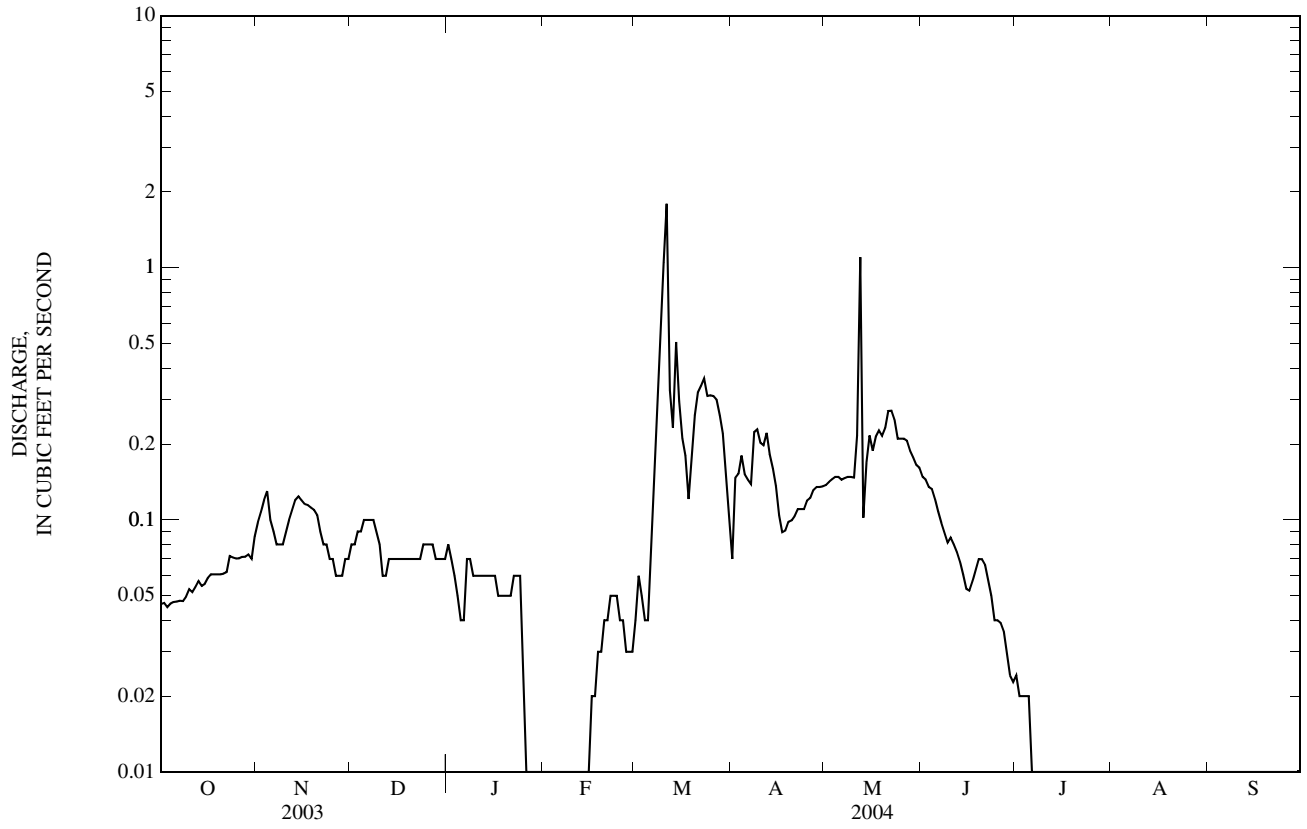
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1974, 2004, BY WATER YEAR (WY)

MEAN	2.40	0.94	0.36	3.33	15.5	16.2	32.6	181	223	117	50.1	28.2
MAX	28.4	19.9	5.94	84.9	120	80.0	502	1,663	1,260	680	409	292
(WY)	(1963)	(1974)	(1974)	(1974)	(1963)	(1955)	(1955)	(1962)	(1962)	(1958)	(1955)	(1973)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
(WY)	(1951)	(1950)	(1949)	(1949)	(1950)	(1951)	(1951)	(1951)	(1966)	(2004)	(1959)	(1953)

06386500 CHEYENNE RIVER NEAR SPENCER, WY—Continued

SUMMARY STATISTICS	FOR 2004 WATER YEAR		WATER YEARS 1949 - 1974, 2004	
ANNUAL TOTAL	31.31			
ANNUAL MEAN	0.09		56.0	
HIGHEST ANNUAL MEAN			280	1962
LOWEST ANNUAL MEAN			0.09	2004
HIGHEST DAILY MEAN	1.8	Mar 11	12,100	May 27, 1962
LOWEST DAILY MEAN	0.00	Jan 26	[a]0.00	Oct 4, 1948
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 26	0.00	Oct 4, 1948
MAXIMUM PEAK FLOW	7.7	May 12	16,000	May 27, 1962
MAXIMUM PEAK STAGE	5.47	May 12	[b]13.74	May 27, 1962
ANNUAL RUNOFF (AC-FT)	62		40,590	
10 PERCENT EXCEEDS	0.20		71	
50 PERCENT EXCEEDS	0.06		0.00	
90 PERCENT EXCEEDS	0.00		0.00	

a No flow at times in most years.
b Site and datum then in use.
e Estimated.



06386500 CHEYENNE RIVER NEAR SPENCER, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analysis: Water years 1951-54, 1969-70, and 1972-79. Sediment records: Periodic samples taken May 1971 to July 1974.

PERIOD OF DAILY RECORD.--March to September 2004.
WATER TEMPERATURE: March to September 2004.
SPECIFIC CONDUCTANCE: March to September 2004.
pH: March to September 2004.
DISSOLVED OXYGEN: March to September 2004.
TURBIDITY: March to September 2004.

REMARKS.--Data published in the tables below are rated as follows: temperature, good; specific conductance, good except those for Apr. 16 to May 18, which are poor; pH, good; dissolved oxygen, fair; turbidity, fair. Daily records are collected at 15-minute intervals using multi-parameter water-quality instrument. Satellite data-collection platform at station. Interruptions in daily record between Mar. 25 and July 13 due to probe fouling and/or instrument malfunction. Daily records not computed during period of no flow, July 14 to Sept. 30.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum daily, 28.0°C, July 9, 2004; minimum daily, 2.3°C, Apr. 12, 2004.
SPECIFIC CONDUCTANCE: Maximum daily, 6,110 µS/cm, June 30, 2004; minimum daily, 3,940 µS/cm, May 15, 2004.
pH: Maximum daily, 8.4 standard units, Apr. 2, 17, 18 and June 21, 2004; minimum daily, 7.2 standard units, July 1, 2004.
DISSOLVED OXYGEN: Maximum daily, 16.6 mg/L, June 16, 2004; minimum daily, 1.6 mg/L, July 1, 2004.
TURBIDITY: Maximum daily, 260 NT units, May 12, 2004; minimum daily, 2.0 NT units, June 30, 2004.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	21.2	---	---	14.3	8.3	11.0
2	---	---	---	---	---	---	14.4	6.5	10.2	18.0	7.0	11.6
3	---	---	---	---	---	---	14.5	6.8	9.5	19.5	10.1	15.0
4	---	---	---	---	---	---	19.3	5.1	11.4	24.0	14.7	18.3
5	---	---	---	---	---	---	18.8	9.4	12.9	21.5	14.6	18.2
6	---	---	---	---	---	---	19.5	6.6	12.9	19.3	12.5	15.7
7	---	---	---	---	---	---	14.8	10.1	12.3	21.1	10.6	15.4
8	---	---	---	---	---	---	16.4	6.6	11.0	23.1	14.9	19.1
9	---	---	---	---	---	---	11.9	7.8	9.6	21.9	14.7	18.2
10	---	---	---	---	---	---	14.1	4.3	8.8	18.0	12.9	15.6
11	---	---	---	---	---	---	10.1	5.1	7.0	20.5	14.2	16.7
12	---	---	---	---	---	---	15.0	2.3	7.9	15.1	10.1	12.3
13	---	---	---	---	---	---	21.0	5.4	11.5	12.2	7.6	10.1
14	---	---	---	---	---	---	17.4	8.7	13.3	19.2	9.0	13.6
15	---	---	---	---	---	---	17.1	9.1	12.8	24.5	11.7	17.3
16	---	---	---	---	---	---	19.1	9.5	12.9	18.0	11.9	14.5
17	---	---	---	---	---	---	17.2	6.6	11.7	22.2	11.4	15.5
18	---	---	---	---	---	---	13.1	9.3	11.3	15.1	12.2	13.6
19	---	---	---	---	---	---	15.9	6.3	10.9	21.3	11.9	16.0
20	---	---	---	---	---	---	14.1	7.8	11.3	17.8	13.1	15.2
21	---	---	---	---	---	---	14.0	8.5	11.1	19.7	12.0	15.5
22	---	---	---	---	---	---	12.9	7.3	9.7	18.0	13.7	16.1
23	---	---	---	---	---	---	19.6	5.2	10.9	---	12.0	---
24	---	---	---	---	---	---	15.9	7.0	11.3	18.0	---	---
25	---	---	---	---	---	---	13.3	6.3	10.1	19.2	9.7	14.1
26	---	---	---	18.7	6.9	11.9	16.6	6.7	11.9	19.1	13.4	16.4
27	---	---	---	---	---	---	18.4	8.6	13.3	21.3	13.7	17.2
28	---	---	---	---	---	---	17.2	9.1	13.0	22.2	15.6	19.0
29	---	---	---	---	---	---	9.1	6.2	7.4	20.5	14.7	17.9
30	---	---	---	---	---	---	15.2	6.3	10.0	14.7	11.1	13.2
31	---	---	---	---	---	---	---	---	---	16.4	9.7	12.9
MONTH	---	---	---	18.7	6.9	11.9	21.2	2.3	11.0	24.5	7.0	15.4

06386500 CHEYENNE RIVER NEAR SPENCER, WY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.0	10.6	14.8	25.8	18.0	21.9	---	---	---	---	---	---
2	22.9	12.6	17.1	---	17.1	---	---	---	---	---	---	---
3	24.3	14.1	18.6	---	---	---	---	---	---	---	---	---
4	23.1	15.6	19.5	---	---	---	---	---	---	---	---	---
5	26.8	17.5	21.1	---	---	---	---	---	---	---	---	---
6	24.3	16.4	19.9	---	---	---	---	---	---	---	---	---
7	27.2	15.9	20.2	---	---	---	---	---	---	---	---	---
8	18.5	13.9	16.2	25.6	---	---	---	---	---	---	---	---
9	16.9	12.3	14.2	28.0	16.7	21.1	---	---	---	---	---	---
10	20.5	13.5	16.3	---	---	---	---	---	---	---	---	---
11	19.9	12.2	16.1	---	---	---	---	---	---	---	---	---
12	21.5	13.0	17.5	---	---	---	---	---	---	---	---	---
13	21.4	14.6	18.3	---	---	---	---	---	---	---	---	---
14	23.8	14.5	18.9	---	---	---	---	---	---	---	---	---
15	25.7	14.9	19.2	---	---	---	---	---	---	---	---	---
16	17.0	13.7	14.9	---	---	---	---	---	---	---	---	---
17	18.8	13.3	15.1	---	---	---	---	---	---	---	---	---
18	15.9	11.4	12.6	---	---	---	---	---	---	---	---	---
19	18.1	10.0	13.1	---	---	---	---	---	---	---	---	---
20	21.9	13.3	17.2	---	---	---	---	---	---	---	---	---
21	19.4	14.3	16.9	---	---	---	---	---	---	---	---	---
22	22.4	12.5	17.2	---	---	---	---	---	---	---	---	---
23	24.1	15.1	19.5	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	22.0	---	---	---	---	---	---	---	---	---	---	---
26	24.1	14.5	19.0	---	---	---	---	---	---	---	---	---
27	25.7	15.1	19.6	---	---	---	---	---	---	---	---	---
28	25.9	13.4	19.1	---	---	---	---	---	---	---	---	---
29	27.4	15.0	21.0	---	---	---	---	---	---	---	---	---
30	27.1	17.4	21.7	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	27.4	10.0	17.7	28.0	16.7	21.5	---	---	---	---	---	---
YEAR	28.0	2.3	14.8									

06386500 CHEYENNE RIVER NEAR SPENCER, WY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	---	---	---	4,960	4,830	4,880
2	---	---	---	---	---	---	4,930	4,850	4,900	4,980	4,850	4,920
3	---	---	---	---	---	---	5,030	4,840	4,900	4,930	4,850	4,900
4	---	---	---	---	---	---	5,060	4,610	4,890	4,910	4,790	4,860
5	---	---	---	---	---	---	5,050	4,950	5,000	5,020	4,860	4,930
6	---	---	---	---	---	---	5,100	4,900	4,980	5,160	5,020	5,070
7	---	---	---	---	---	---	5,170	4,920	5,010	5,240	5,130	5,180
8	---	---	---	---	---	---	5,150	4,970	5,110	5,320	5,160	5,220
9	---	---	---	---	---	---	5,150	5,060	5,090	5,460	5,260	5,330
10	---	---	---	---	---	---	5,190	5,050	5,080	5,560	5,210	5,490
11	---	---	---	---	---	---	5,170	4,870	5,010	5,660	5,130	5,310
12	---	---	---	---	---	---	5,200	4,910	5,060	5,990	4,790	5,330
13	---	---	---	---	---	---	5,360	5,000	5,120	4,810	4,310	4,550
14	---	---	---	---	---	---	5,420	5,000	5,120	4,310	4,090	4,180
15	---	---	---	---	---	---	5,340	5,080	5,160	4,160	3,940	4,080
16	---	---	---	---	---	---	5,270	5,110	5,170	4,420	4,160	4,290
17	---	---	---	---	---	---	5,160	5,120	5,140	4,460	4,280	4,370
18	---	---	---	---	---	---	5,130	5,040	5,080	4,560	4,460	4,530
19	---	---	---	---	---	---	5,130	4,980	5,070	4,720	4,560	4,630
20	---	---	---	---	---	---	5,130	4,980	5,040	4,770	4,650	4,720
21	---	---	---	---	---	---	5,150	4,920	5,020	4,750	4,480	4,610
22	---	---	---	---	---	---	5,130	4,920	5,010	4,890	4,670	4,760
23	---	---	---	---	---	---	5,210	4,980	5,070	---	4,730	---
24	---	---	---	---	---	---	5,100	4,980	5,030	4,920	---	---
25	---	---	---	---	---	---	5,060	4,950	5,010	5,190	4,910	4,960
26	---	---	---	---	---	---	5,090	4,940	5,010	5,150	5,000	5,060
27	---	---	---	---	---	---	5,100	4,900	5,000	5,190	5,070	5,110
28	---	---	---	---	---	---	5,050	4,910	4,970	5,250	5,120	5,160
29	---	---	---	---	---	---	4,980	4,840	4,910	5,200	5,150	5,180
30	---	---	---	---	---	---	4,920	4,800	4,850	5,260	5,200	5,220
31	---	---	---	---	---	---	---	---	---	5,330	5,240	5,280
MONTH	---	---	---	---	---	---	5,420	4,610	5,030	5,990	3,940	4,900
		JUNE			JULY			AUGUST			SEPTEMBER	
1	5,410	5,310	5,350	6,050	5,320	5,680	---	---	---	---	---	---
2	5,480	5,330	5,400	---	---	---	---	---	---	---	---	---
3	5,490	5,370	5,420	---	---	---	---	---	---	---	---	---
4	5,650	5,270	5,410	---	---	---	---	---	---	---	---	---
5	5,590	5,370	5,460	---	---	---	---	---	---	---	---	---
6	5,580	5,430	5,480	---	---	---	---	---	---	---	---	---
7	5,710	5,430	5,580	---	---	---	---	---	---	---	---	---
8	5,610	5,530	5,550	---	---	---	---	---	---	---	---	---
9	5,530	5,430	5,470	---	---	---	---	---	---	---	---	---
10	5,500	5,370	5,430	---	---	---	---	---	---	---	---	---
11	5,610	5,460	5,520	---	---	---	---	---	---	---	---	---
12	5,710	5,450	5,580	---	---	---	---	---	---	---	---	---
13	5,710	5,370	5,580	---	---	---	---	---	---	---	---	---
14	5,780	5,270	5,600	---	---	---	---	---	---	---	---	---
15	5,800	5,440	5,640	---	---	---	---	---	---	---	---	---
16	5,750	5,030	5,440	---	---	---	---	---	---	---	---	---
17	5,720	5,120	5,410	---	---	---	---	---	---	---	---	---
18	5,580	5,110	5,410	---	---	---	---	---	---	---	---	---
19	5,450	5,220	5,360	---	---	---	---	---	---	---	---	---
20	5,500	5,200	5,420	---	---	---	---	---	---	---	---	---
21	5,580	5,340	5,510	---	---	---	---	---	---	---	---	---
22	5,660	5,270	5,530	---	---	---	---	---	---	---	---	---
23	---	5,510	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	5,770	5,210	5,580	---	---	---	---	---	---	---	---	---
27	5,890	5,430	5,690	---	---	---	---	---	---	---	---	---
28	6,050	5,400	5,810	---	---	---	---	---	---	---	---	---
29	6,100	5,430	5,860	---	---	---	---	---	---	---	---	---
30	6,110	5,460	5,900	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	6,110	5,030	5,530	6,050	5,320	5,680	---	---	---	---	---	---
YEAR	6,110	3,940	5,150									

06386500 CHEYENNE RIVER NEAR SPENCER, WY—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	8.3	8.1	8.3	8.1	7.7	7.2	---	---	---	---
2	8.4	8.1	8.3	8.1	8.2	8.0	---	---	---	---	---	---
3	8.3	8.2	8.3	8.1	8.2	8.0	---	---	---	---	---	---
4	8.2	8.0	8.2	7.9	8.2	7.9	---	---	---	---	---	---
5	8.2	7.8	8.3	7.9	8.3	7.7	---	---	---	---	---	---
6	8.2	7.8	8.3	8.1	8.3	7.9	---	---	---	---	---	---
7	8.3	7.9	8.3	8.0	8.2	7.9	---	---	---	---	---	---
8	8.3	8.1	8.2	7.9	8.3	7.9	---	---	---	---	---	---
9	8.2	8.0	8.2	7.9	8.3	8.0	---	---	---	---	---	---
10	8.3	8.1	8.3	7.9	8.3	8.0	---	---	---	---	---	---
11	8.3	8.0	8.3	8.1	8.3	8.0	---	---	---	---	---	---
12	8.2	8.0	8.3	8.1	8.3	7.8	---	---	---	---	---	---
13	8.1	7.9	8.2	8.2	8.3	7.8	---	---	---	---	---	---
14	8.2	7.9	8.2	8.1	8.3	7.6	---	---	---	---	---	---
15	8.3	8.0	8.2	8.1	8.3	7.8	---	---	---	---	---	---
16	8.3	8.0	8.3	8.0	8.1	7.6	---	---	---	---	---	---
17	8.4	8.2	8.3	8.0	8.1	7.5	---	---	---	---	---	---
18	8.4	8.1	8.3	8.1	8.3	7.8	---	---	---	---	---	---
19	8.3	8.0	8.3	8.0	8.3	8.0	---	---	---	---	---	---
20	8.3	8.1	8.2	8.1	8.2	7.9	---	---	---	---	---	---
21	8.3	8.0	8.2	8.0	8.4	7.8	---	---	---	---	---	---
22	8.3	8.1	8.2	7.9	8.3	7.8	---	---	---	---	---	---
23	8.2	8.0	---	---	8.3	7.7	---	---	---	---	---	---
24	8.2	8.0	---	---	---	---	---	---	---	---	---	---
25	8.3	8.0	8.2	8.0	8.1	---	---	---	---	---	---	---
26	8.3	8.1	8.2	7.9	8.0	7.6	---	---	---	---	---	---
27	8.2	8.0	8.2	8.0	8.0	7.6	---	---	---	---	---	---
28	8.3	8.0	8.2	7.9	7.9	7.5	---	---	---	---	---	---
29	8.3	8.2	8.3	8.0	7.8	7.5	---	---	---	---	---	---
30	8.2	8.1	8.3	8.1	7.7	7.3	---	---	---	---	---	---
31	---	---	8.3	8.2	---	---	---	---	---	---	---	---
MONTH	8.4	7.8	8.3	7.9	8.4	7.3	7.7	7.2	---	---	---	---
YEAR	8.4	7.2										

06386500 CHEYENNE RIVER NEAR SPENCER, WY—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	11.8	---	---	11.6	9.5	10.6
2	---	---	---	---	---	---	11.9	8.9	10.5	12.4	9.6	10.7
3	---	---	---	---	---	---	12.3	8.8	10.4	11.8	9.0	10.4
4	---	---	---	---	---	---	11.8	7.5	10.1	12.9	6.8	9.5
5	---	---	---	---	---	---	11.1	6.1	8.7	10.7	6.4	8.9
6	---	---	---	---	---	---	11.0	5.5	8.6	11.0	8.2	9.7
7	---	---	---	---	---	---	10.9	5.8	8.8	13.2	9.0	10.4
8	---	---	---	---	---	---	11.1	7.4	9.4	12.3	7.2	9.9
9	---	---	---	---	---	---	11.7	7.1	9.3	12.9	6.8	9.8
10	---	---	---	---	---	---	11.3	7.6	9.8	10.5	7.2	9.1
11	---	---	---	---	---	---	11.5	7.5	9.7	9.8	7.4	8.4
12	---	---	---	---	---	---	12.1	8.1	10	9.1	7.3	8.5
13	---	---	---	---	---	---	10.6	6.5	8.4	9.9	8.1	9.0
14	---	---	---	---	---	---	8.9	4.8	7.3	9.6	7.8	8.7
15	---	---	---	---	---	---	9.2	6.1	8.0	9.5	6.5	8.2
16	---	---	---	---	---	---	9.6	7.2	8.4	8.9	6.1	7.6
17	---	---	---	---	---	---	10.4	8.0	9.2	9.6	6.2	7.7
18	---	---	---	---	---	---	10.2	6.1	8.6	8.9	6.4	7.4
19	---	---	---	---	---	---	11.6	---	---	8.4	6.0	7.3
20	---	---	---	---	---	---	10.4	---	---	8.4	5.5	6.8
21	---	---	---	---	---	---	11.1	6.7	9.2	9.0	6.2	7.4
22	---	---	---	---	---	---	11.4	9.0	10.2	8.4	4.0	6.5
23	---	---	---	---	---	---	11.8	6.9	9.6	---	5.8	---
24	---	---	---	---	---	---	11.3	7.8	9.7	10.7	---	---
25	---	---	---	---	---	---	11.1	7.0	9.5	13.8	8.3	10.4
26	---	---	---	---	---	---	11.2	7.8	9.8	12.9	8.0	10.1
27	---	---	---	---	---	---	10.7	7.5	9.1	13.3	7.2	9.8
28	---	---	---	---	---	---	10.8	7.3	9.5	12.6	7.4	10.0
29	---	---	---	---	---	---	12.8	10.5	11.3	12.8	7.0	9.7
30	---	---	---	---	---	---	12.1	9.9	11.3	11.4	8.1	10.1
31	---	---	---	---	---	---	---	---	---	11.4	9.2	10.5
MONTH	---	---	---	---	---	---	12.8	4.8	9.4	13.8	4.0	9.1
		JUNE			JULY			AUGUST			SEPTEMBER	
1	12.0	8.3	10.6	12.2	1.6	7.5	---	---	---	---	---	---
2	14.6	8.4	10.6	---	3.5	---	---	---	---	---	---	---
3	13.8	8.3	10.3	---	---	---	---	---	---	---	---	---
4	13.6	6.9	9.9	---	---	---	---	---	---	---	---	---
5	15.4	6.3	10.2	---	---	---	---	---	---	---	---	---
6	12.1	7.3	9.2	---	---	---	---	---	---	---	---	---
7	14.1	5.0	9.1	---	---	---	---	---	---	---	---	---
8	12.9	7.6	10.2	---	---	---	---	---	---	---	---	---
9	14.3	9.8	11.6	---	---	---	---	---	---	---	---	---
10	14.4	8.9	11.4	---	---	---	---	---	---	---	---	---
11	13.1	9.4	11.4	---	---	---	---	---	---	---	---	---
12	14.6	7.6	11.6	---	---	---	---	---	---	---	---	---
13	14.4	7.5	11.3	---	---	---	---	---	---	---	---	---
14	14.5	7.8	11.7	---	---	---	---	---	---	---	---	---
15	15.1	7.1	10.8	---	---	---	---	---	---	---	---	---
16	16.6	7.0	10.7	---	---	---	---	---	---	---	---	---
17	13.2	5.7	10.2	---	---	---	---	---	---	---	---	---
18	13.2	6.1	9.7	---	---	---	---	---	---	---	---	---
19	12.5	8.2	10.2	---	---	---	---	---	---	---	---	---
20	11.0	6.0	8.1	---	---	---	---	---	---	---	---	---
21	9.6	4.7	7.2	---	---	---	---	---	---	---	---	---
22	9.7	4.6	7.0	---	---	---	---	---	---	---	---	---
23	10.5	2.6	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	10.1	---	---	---	---	---	---	---	---	---	---	---
26	10.7	2.5	7.0	---	---	---	---	---	---	---	---	---
27	10.7	4.1	7.1	---	---	---	---	---	---	---	---	---
28	11.1	2.9	7.2	---	---	---	---	---	---	---	---	---
29	10.3	3.8	6.6	---	---	---	---	---	---	---	---	---
30	9.0	1.8	5.7	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	16.6	1.8	9.5	12.2	1.6	7.5	---	---	---	---	---	---
YEAR	16.6	1.6	9.3									

06386500 CHEYENNE RIVER NEAR SPENCER, WY—Continued

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	28	7.8	11	17	9.1	11
2	---	---	---	---	---	---	11	7.8	9.2	15	8.2	10
3	---	---	---	---	---	---	18	3.5	9.7	15	8.9	10
4	---	---	---	---	---	---	17	8.1	12	20	10	14
5	---	---	---	---	---	---	25	10	14	150	20	49
6	---	---	---	---	---	---	40	6.0	14	76	18	33
7	---	---	---	---	---	---	52	9.4	21	120	17	47
8	---	---	---	---	---	---	76	12	24	130	22	56
9	---	---	---	---	---	---	94	13	30	170	19	54
10	---	---	---	---	---	---	51	11	21	160	24	48
11	---	---	---	---	---	---	78	11	26	54	14	28
12	---	---	---	---	---	---	120	9.3	44	260	12	56
13	---	---	---	---	---	---	94	9.7	30	17	5.6	10
14	---	---	---	---	---	---	98	12	30	24	10	16
15	---	---	---	---	---	---	29	11	16	49	17	29
16	---	---	---	---	---	---	95	12	28	48	17	23
17	---	---	---	---	---	---	29	13	17	39	12	22
18	---	---	---	---	---	---	140	11	39	49	13	19
19	---	---	---	---	---	---	61	9.0	24	33	9.1	17
20	---	---	---	---	---	---	110	11	35	46	11	17
21	---	---	---	---	---	---	100	12	30	55	13	24
22	---	---	---	---	---	---	180	12	27	76	12	30
23	---	---	---	---	---	---	50	9.7	19	---	13	17
24	---	---	---	---	---	---	57	9.6	20	---	11	15
25	---	---	---	---	---	---	120	13	37	14	7.3	9.7
26	---	---	---	---	---	---	---	14	45	45	8.2	21
27	---	---	---	---	---	---	120	16	42	54	11	22
28	---	---	---	---	---	---	86	15	28	34	11	17
29	---	---	---	---	---	---	29	11	16	74	10	22
30	---	---	---	---	---	---	38	11	15	14	7.8	10
31	---	---	---	---	---	---	---	---	---	48	6.9	10
MONTH	---	---	---	---	---	---	180	3.5	24	260	5.6	25
		JUNE			JULY			AUGUST			SEPTEMBER	
1	34	6.7	12	22	3.1	9.5	---	---	---	---	---	---
2	36	8.8	14	---	---	---	---	---	---	---	---	---
3	15	8.7	11	---	---	---	---	---	---	---	---	---
4	22	9.0	13	---	---	---	---	---	---	---	---	---
5	35	11	19	---	---	---	---	---	---	---	---	---
6	28	12	17	---	---	---	---	---	---	---	---	---
7	43	11	16	---	---	---	---	---	---	---	---	---
8	32	9.1	15	---	---	---	---	---	---	---	---	---
9	21	6.2	9.2	---	---	---	---	---	---	---	---	---
10	24	5.8	11	---	---	---	---	---	---	---	---	---
11	23	6.8	12	---	---	---	---	---	---	---	---	---
12	29	6.6	10	---	---	---	---	---	---	---	---	---
13	55	6.1	19	---	---	---	---	---	---	---	---	---
14	75	4.7	22	---	---	---	---	---	---	---	---	---
15	62	9.1	20	---	---	---	---	---	---	---	---	---
16	28	3.5	11	---	---	---	---	---	---	---	---	---
17	13	2.3	5.9	---	---	---	---	---	---	---	---	---
18	51	6.5	14	---	---	---	---	---	---	---	---	---
19	41	5.7	15	---	---	---	---	---	---	---	---	---
20	120	7.4	38	---	---	---	---	---	---	---	---	---
21	60	18	30	---	---	---	---	---	---	---	---	---
22	50	7.4	23	---	---	---	---	---	---	---	---	---
23	160	---	28	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	24	6.7	12	---	---	---	---	---	---	---	---	---
27	130	7.2	22	---	---	---	---	---	---	---	---	---
28	19	3.4	10	---	---	---	---	---	---	---	---	---
29	27	3.5	12	---	---	---	---	---	---	---	---	---
30	30	2.0	12	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	160	2.0	16	22	3.1	9.5	---	---	---	---	---	---
YEAR	260	2.0	22									

06386500 CHEYENNE RIVER NEAR SPENCER, WY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Turbidity, IR LED light, det ang 90 deg, FNU (63680)	Suspended sediment concentration mg/L (80154)
APR							
16...	1500	.11	--	20.0	19.0	--	55
MAY							
24...	1630	.21	4,970	17.0	17.0	13.0	62
JUN							
17...	1220	E.05	5,250	15.5	13.5	9.00	50

E Estimated value

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

LOCATION.--Lat 44°05'06", long 104°03'36", in SE¼ NE¼ NE¼ 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 mi^2.

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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	e1.4	e1.4	e1.5	1.5	e1.5	0.92	1.0	1.2	0.97	1.5	1.3
2	1.3	1.4	1.4	1.6	1.5	e1.6	0.85	1.0	1.2	1.4	e1.6	1.0
3	1.3	1.4	1.4	e1.5	1.6	1.6	0.86	1.0	1.1	0.94	e1.6	1.0
4	1.3	1.4	1.3	e1.5	e1.6	1.6	0.75	0.88	1.5	1.8	1.7	1.2
5	1.3	e1.4	e1.2	e1.5	e1.6	1.6	0.76	0.89	1.3	1.5	1.4	1.0
6	1.3	e1.3	e1.3	e1.5	e1.6	1.6	1.5	0.84	1.3	1.6	1.6	0.99
7	1.4	e1.3	1.4	e1.5	e1.6	e1.5	2.0	0.83	1.2	1.5	1.3	0.99
8	1.4	e1.3	1.4	e1.4	e1.6	1.6	1.1	0.64	1.3	1.4	1.0	1.0
9	1.4	e1.3	1.4	e1.4	e1.6	1.6	1.0	0.68	1.3	1.4	1.5	1.1
10	1.4	e1.3	1.3	e1.4	e1.6	1.6	0.99	0.66	1.2	1.4	1.4	1.7
11	1.5	1.3	1.5	e1.4	e1.6	e1.6	1.0	1.3	1.2	1.4	1.5	1.5
12	1.5	1.3	e1.4	1.4	e1.6	1.6	0.98	1.4	1.2	1.3	1.4	1.6
13	1.5	1.2	e1.3	1.4	e1.5	1.6	0.90	1.3	1.1	1.2	1.4	1.6
14	1.5	1.2	e1.4	e1.4	e1.5	e1.6	0.86	1.3	1.1	1.5	1.3	1.6
15	1.5	1.2	e1.4	1.4	e1.5	1.6	0.84	0.87	1.1	1.1	0.91	1.5
16	1.5	1.2	1.4	1.4	e1.5	1.6	0.84	0.57	1.1	1.2	0.85	1.5
17	1.5	1.2	1.5	1.4	1.6	1.6	0.77	0.64	1.1	1.2	1.5	1.4
18	1.5	1.2	1.4	1.4	1.6	1.6	0.77	1.4	0.95	0.95	1.0	1.5
19	1.6	1.2	e1.3	1.5	1.6	1.6	0.76	1.0	0.69	1.5	1.5	1.5
20	1.5	1.2	e1.4	1.4	1.6	1.6	0.76	1.3	0.62	0.83	1.4	1.5
21	1.4	1.2	1.5	1.4	1.6	1.6	0.75	1.3	0.54	1.2	1.1	1.5
22	1.5	e1.2	1.5	1.4	1.6	1.6	0.71	1.2	0.57	1.7	1.1	1.5
23	1.5	e1.2	1.5	1.4	1.6	1.6	1.3	1.4	1.6	1.6	0.94	1.4
24	1.4	e1.2	1.5	1.4	1.6	1.7	1.4	1.3	1.2	1.5	0.88	1.5
25	1.5	e1.2	1.5	1.4	1.6	1.6	1.9	1.3	1.4	1.5	0.92	1.5
26	1.5	e1.2	1.5	e1.3	1.6	1.7	1.1	1.5	1.4	1.4	0.88	1.5
27	1.3	e1.3	1.5	e1.3	1.6	2.0	1.2	1.3	1.2	1.2	0.83	1.5
28	1.3	e1.3	1.3	e1.4	1.6	1.6	1.1	1.3	1.2	1.5	1.5	1.5
29	1.4	e1.3	1.4	e1.4	1.6	0.86	1.0	1.6	1.2	1.6	1.1	1.4
30	1.5	e1.3	e1.4	1.5	---	0.89	1.1	1.6	0.93	1.6	1.2	1.5
31	e1.5	---	e1.4	1.5	---	0.91	---	1.5	---	1.6	1.2	---
TOTAL	44.4	38.1	43.5	44.3	45.8	47.86	30.77	34.80	34.00	42.49	39.01	41.28
MEAN	1.43	1.27	1.40	1.43	1.58	1.54	1.03	1.12	1.13	1.37	1.26	1.38
MAX	1.6	1.4	1.5	1.6	1.6	2.0	2.0	1.6	1.6	1.8	1.7	1.7
MIN	1.3	1.2	1.2	1.3	1.5	0.86	0.71	0.57	0.54	0.83	0.83	0.99
AC-FT	88	76	86	88	91	95	61	69	67	84	77	82

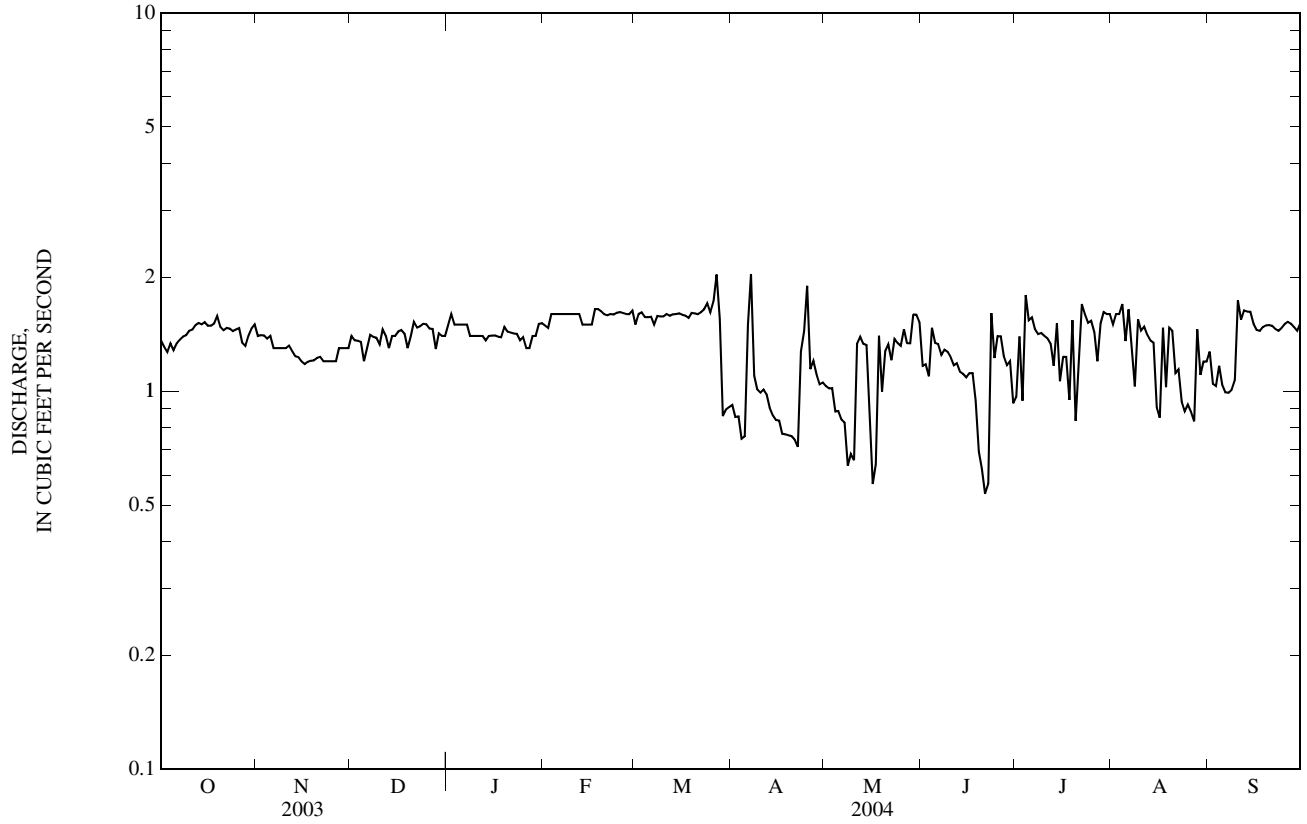
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2004, BY WATER YEAR (WY)

MEAN	1.87	1.73	1.63	1.56	1.72	1.99	2.24	2.16	2.32	2.08	1.97	1.87
MAX	3.16	3.30	2.68	2.95	2.90	5.83	4.07	3.44	4.05	3.09	2.89	3.08
(WY)	(2000)	(2000)	(1999)	(1999)	(1999)	(1999)	(1994)	(1978)	(1980)	(1979)	(1978)	(2000)
MIN	0.31	0.47	0.44	0.42	0.46	0.71	0.88	0.81	1.13	1.34	0.75	0.62
(WY)	(1977)	(1977)	(1977)	(1993)	(1977)	(1977)	(1993)	(1993)	(2004)	(1993)	(1976)	(1976)

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

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1975 - 2004	
ANNUAL TOTAL	486.61		486.31		--	
ANNUAL MEAN	1.33		1.33		1.94	
HIGHEST ANNUAL MEAN	--		--		3.20	1999
LOWEST ANNUAL MEAN	--		--		0.94	1977
HIGHEST DAILY MEAN	2.9	Apr 12	2.0	Mar 27, Apr 7	34	Mar 26, 1999
LOWEST DAILY MEAN	0.68	Feb 24	0.54	Jun 21	0.10	Jan 20, 1993
ANNUAL SEVEN-DAY MINIMUM	0.75	Jan 1	0.77	Apr 16	0.12	Jan 17, 1993
MAXIMUM PEAK FLOW	--		[a]13	Sep 10	[b]103	Apr 22, 1994
MAXIMUM PEAK STAGE	--		[c]1.92	Mar 11	[c]2.88	Dec 25, 1998
ANNUAL RUNOFF (AC-FT)	965		965		1,400	
10 PERCENT EXCEEDS	1.9		1.6		2.9	
50 PERCENT EXCEEDS	1.3		1.4		1.9	
90 PERCENT EXCEEDS	0.84		0.91		1.0	

a Gage height, 1.54 ft.
b From rating curve extended above 85 ft^3/s.
c Backwater from ice.
e Estimated.



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

PRECIPITATION RECORDS

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

INSTRUMENTATION.--Precipitation recorder with shielded 8.0-in. orifice and 12-in. capacity. Elevation of gage is 6,000 ft above NGVD of 1929, from topographic map.

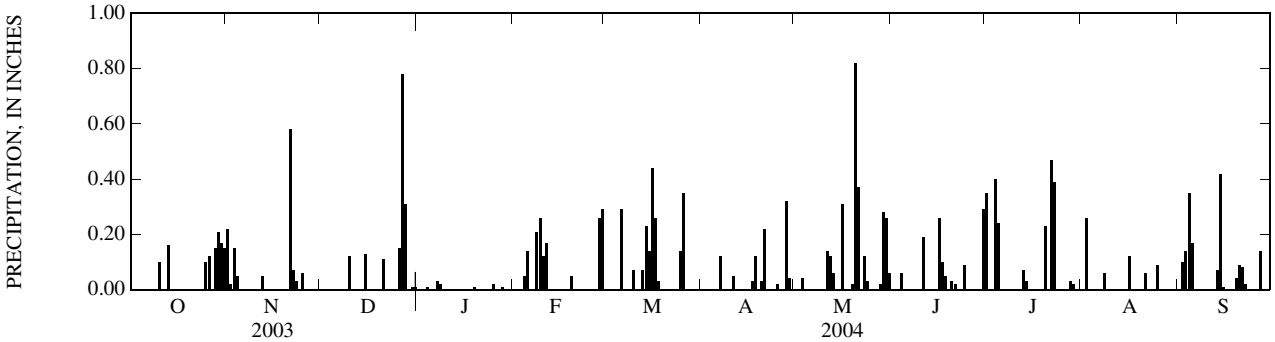
REMARKS.--Records fair. Precipitation gage is located 0.2 mi south of streamflow gaging station.

PRECIPITATION, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	e0.00	0.00
2	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.26	0.10
3	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	e0.00	0.14
4	0.00	0.05	0.00	0.01	0.05	0.00	0.00	0.00	0.06	0.40	e0.00	0.35
5	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.24	e0.00	0.17
6	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00	e0.00	0.00
7	0.00	0.00	0.00	0.03	0.00	0.00	0.12	0.00	0.00	0.00	e0.00	0.00
8	0.00	0.00	0.00	0.02	0.21	0.00	0.00	0.00	0.00	0.00	e0.06	0.00
9	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	e0.00	0.00
10	0.10	0.00	0.12	0.00	0.12	0.07	0.00	0.00	0.00	0.00	e0.00	0.00
11	0.00	0.00	0.00	0.00	0.17	0.00	0.05	0.14	0.19	0.00	e0.00	0.00
12	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	e0.00	0.00
13	0.16	0.00	0.00	0.00	0.00	0.07	0.00	0.06	0.00	0.07	e0.00	0.07
14	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.03	e0.00	e0.42
15	0.00	0.00	0.13	0.00	0.00	0.14	0.00	0.00	0.00	0.00	e0.00	e0.01
16	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.31	0.26	0.00	e0.12	e0.00
17	0.00	0.00	0.00	0.00	0.00	0.26	0.03	0.00	0.10	0.00	e0.00	e0.00
18	0.00	0.00	0.00	0.00	0.00	0.03	0.12	0.00	0.05	0.00	e0.00	e0.00
19	0.00	0.00	0.00	0.01	0.05	0.00	0.00	0.02	0.00	0.00	e0.00	e0.04
20	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.82	0.03	0.23	e0.00	e0.09
21	0.00	0.58	0.11	0.00	0.00	0.00	0.22	0.37	0.02	0.00	e0.06	e0.08
22	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	e0.00	e0.02
23	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.39	e0.00	e0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.09	0.00	e0.00	e0.00
25	0.10	0.06	0.00	0.02	0.00	0.14	0.02	0.00	0.00	0.00	e0.09	e0.00
26	0.12	0.00	0.15	0.00	0.00	0.35	0.00	0.00	0.00	0.00	e0.00	e0.00
27	0.00	0.00	0.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.14
28	0.15	0.00	0.31	0.01	0.26	0.00	0.32	0.02	0.00	0.03	e0.00	e0.00
29	0.21	0.00	0.00	0.00	0.29	0.00	0.04	0.28	0.00	0.02	e0.00	e0.00
30	0.17	0.00	0.01	0.00	---	0.00	0.00	0.26	0.29	e0.00	0.00	e0.00
31	0.15	---	0.01	0.00	---	0.00	---	0.06	---	e0.00	0.00	---
TOTAL	1.16	1.23	1.62	0.10	1.55	2.02	0.95	2.65	1.09	2.23	0.59	1.63

CAL YR 2003 TOTAL 22.88
WTR YR 2004 TOTAL 16.82

e Estimated.



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06392950 STOCKADE BEAVER CREEK NEAR NEWCASTLE, WY

LOCATION.--Lat 43°51'32", long 104°06'24", in SW¼ SW¼ SE¼ 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 mi^2.

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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	14	15	15	15	14	15	9.0	12	12	8.4	9.7
2	12	13	16	16	15	13	15	9.1	11	12	8.9	9.7
3	13	13	16	15	15	13	15	9.5	11	11	10	9.8
4	13	15	16	15	15	13	15	9.0	11	11	11	9.8
5	11	14	15	e14	15	13	15	8.6	11	12	11	9.8
6	11	15	15	e13	14	13	15	8.4	11	12	12	9.8
7	12	14	15	e14	14	14	15	8.3	11	12	12	9.8
8	13	15	16	e15	14	14	15	8.3	11	11	12	9.8
9	13	15	15	e15	14	14	14	8.6	11	11	12	9.8
10	13	15	15	16	14	14	13	8.6	11	12	12	9.7
11	14	15	15	17	14	14	12	8.9	11	12	12	9.5
12	14	15	15	17	15	13	12	9.5	11	12	11	9.5
13	15	14	15	17	15	13	12	9.1	11	11	11	9.7
14	15	15	15	17	15	13	12	9.0	11	9.5	11	9.5
15	15	15	15	17	14	13	12	9.1	10	9.7	11	9.5
16	14	15	15	e17	14	14	12	10	10	8.5	11	9.5
17	14	15	15	17	14	14	12	11	11	6.9	10	9.5
18	14	14	14	16	14	14	12	11	11	6.8	10	9.7
19	15	15	14	16	15	14	12	11	11	7.0	9.9	9.8
20	14	14	15	16	15	14	12	11	11	7.9	9.7	9.9
21	14	e14	15	16	14	14	12	12	11	7.4	9.6	10
22	14	e14	15	17	14	14	11	12	11	7.6	9.5	10
23	14	e14	15	17	14	14	11	12	11	8.3	9.5	10
24	14	e14	15	17	13	15	10	12	11	10	9.6	10
25	14	e14	15	16	13	15	9.3	12	11	11	9.6	10
26	14	e15	15	e15	13	15	8.9	12	11	10	9.6	10
27	14	e15	15	e14	13	16	8.6	12	11	9.5	9.5	10
28	14	e15	16	e13	14	16	8.6	11	11	8.1	9.5	10
29	15	e15	16	e14	14	15	8.6	11	11	7.3	9.5	10
30	15	e15	16	15	---	15	8.8	11	11	8.3	9.6	10
31	15	---	16	15	---	15	---	12	---	8.5	9.6	---
TOTAL	425	435	471	484	412	435	363.8	316.0	329	303.3	321.0	293.8
MEAN	13.7	14.5	15.2	15.6	14.2	14.0	12.1	10.2	11.0	9.78	10.4	9.79
MAX	15	15	16	17	15	16	15	12	12	12	12	10
MIN	11	13	14	13	13	13	8.6	8.3	10	6.8	8.4	9.5
AC-FT	843	863	934	960	817	863	722	627	653	602	637	583

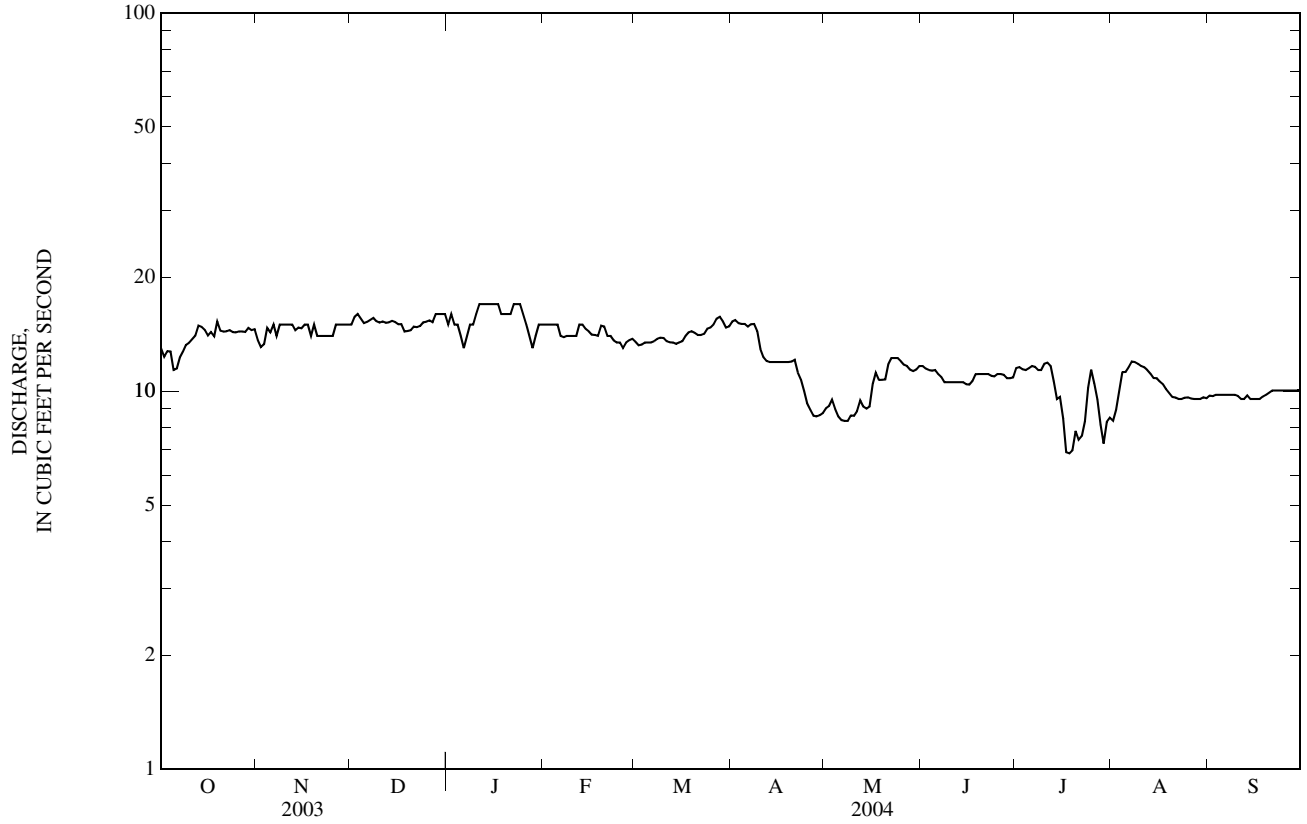
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2004, BY WATER YEAR (WY)

MEAN	13.6	13.7	13.6	13.3	13.5	15.0	13.9	11.6	11.8	11.6	12.3	12.7
MAX	18.9	19.0	18.1	17.6	17.6	21.3	19.4	18.5	17.8	17.0	20.9	20.0
(WY)	(2000)	(2001)	(2000)	(2000)	(2000)	(1996)	(2000)	(2000)	(1999)	(1999)	(1999)	(1999)
MIN	9.40	9.74	10.2	9.52	10.6	10.8	9.53	6.45	5.92	8.24	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 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1975 - 2004	
ANNUAL TOTAL	5,157.7		4,588.9		--	
ANNUAL MEAN	14.1		12.5		13.1	
HIGHEST ANNUAL MEAN	--		--		17.4	2000
LOWEST ANNUAL MEAN	--		--		9.80	1992
HIGHEST DAILY MEAN	45	Mar 18	17	Many days	143	Jul 16, 1993
LOWEST DAILY MEAN	7.1	Aug 13	6.8	Jul 18	3.9	May 21, 1992
ANNUAL SEVEN-DAY MINIMUM	8.3	Aug 10	7.4	Jul 17	4.6	Aug 2, 1992
MAXIMUM PEAK FLOW	--		[a]27	Dec 31	[b]776	Jul 16, 1993
MAXIMUM PEAK STAGE	--		[c]7.36	Jan 6	12.44	Jul 16, 1993
ANNUAL RUNOFF (AC-FT)	10,230		9,100		9,490	
10 PERCENT EXCEEDS	17		15		17	
50 PERCENT EXCEEDS	14		13		13	
90 PERCENT EXCEEDS	10		9.5		9.3	

a Gage height, 7.04 ft.
b From rating curve extended above 18 ft^3/s on basis of culvert backwater computation.
c Backwater from ice.
e Estimated.



06395000 CHEYENNE RIVER AT EDGEMONT, SD

LOCATION.--Lat 43°18'20", long 103°49'14", in SW¼ SE¼ SE¼ sec.36, T.8 S., R.2 E., Fall River County, Hydrologic Unit 10120106, on right bank at downstream side of bridge on old 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 mi^2.

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 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 fair 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. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	11	e13	e14	e16	e25	6.4	3.4	2.2	0.68	0.00	e0.01
2	3.3	10	e16	e14	e15	e20	6.2	3.6	2.3	0.95	0.00	e0.01
3	2.7	9.3	e15	e13	e14	e25	6.1	3.3	2.5	0.65	0.00	e0.01
4	2.2	e9.0	e15	e13	e14	e20	7.6	3.5	2.1	0.97	0.01	e0.01
5	1.8	e8.7	e14	e13	e13	e30	6.9	3.3	2.2	0.75	0.03	e0.01
6	1.4	8.5	e14	e12	e13	e40	6.7	3.4	1.9	1.8	0.03	e0.01
7	1.4	8.5	e14	e12	e12	e50	6.4	2.9	1.8	0.80	0.05	e0.01
8	1.4	8.4	e13	e12	e12	e73	6.2	2.3	1.4	0.49	0.02	e0.01
9	1.5	8.3	e13	e13	e12	58	6.0	2.1	1.4	0.25	0.01	e0.01
10	1.9	8.9	e13	e13	e12	55	5.6	2.3	1.4	0.30	0.05	e0.01
11	2.4	8.8	e13	e14	e11	36	5.6	2.1	1.3	0.23	0.02	e0.01
12	2.9	8.8	e13	e13	e11	48	5.6	2.2	0.99	0.14	0.01	e0.01
13	3.4	9.0	e13	e13	e10	39	5.3	5.2	0.83	0.10	0.01	e0.01
14	4.1	17	e14	e12	e10	32	5.0	5.9	0.74	0.18	0.00	e0.01
15	4.7	19	e15	e11	e11	31	4.7	4.6	0.70	0.08	0.00	e0.01
16	4.8	18	e14	e11	e11	30	4.4	4.4	0.78	0.05	e0.00	e0.01
17	5.3	19	e14	e11	e11	28	4.5	3.6	0.89	0.02	e0.00	e0.01
18	6.3	17	e14	e11	e12	28	4.4	3.5	1.3	0.01	e0.00	0.01
19	6.5	17	e13	e12	e18	19	4.2	3.3	1.2	0.01	e0.00	0.00
20	6.5	18	e14	e13	e20	13	4.1	2.3	1.0	0.01	e0.00	0.00
21	7.2	16	e15	e14	e26	12	4.3	2.1	0.97	0.00	e0.00	0.04
22	7.5	7.4	e15	e15	e30	11	4.4	27	0.96	0.00	e0.00	0.00
23	8.3	e7.4	e14	e16	e35	14	4.1	56	0.98	0.02	e0.00	0.02
24	7.5	e7.4	e14	e17	e40	18	4.0	67	1.1	0.00	e0.00	0.00
25	7.8	e7.3	e15	e16	e80	14	4.1	33	1.1	0.00	e0.00	0.00
26	7.9	e7.3	e16	e16	e60	12	3.6	6.5	1.1	0.01	e0.00	0.00
27	8.2	e7.2	e16	e15	e70	16	3.3	4.9	0.85	0.00	e0.00	0.00
28	8.3	e7.1	e15	e15	e45	15	3.4	3.4	1.1	0.00	e0.00	0.00
29	9.3	e8.5	e15	e15	e30	9.1	3.2	3.0	0.71	0.00	e0.01	0.00
30	10	e11	e15	e15	---	7.4	3.0	2.2	0.49	0.00	e0.01	0.00
31	11	---	e14	e15	---	8.5	---	1.9	---	0.00	e0.01	---
TOTAL	161.3	328.8	441	419	674	837.0	149.3	274.2	38.29	8.50	0.27	0.24
MEAN	5.20	11.0	14.2	13.5	23.2	27.0	4.98	8.85	1.28	0.27	0.01	0.01
MAX	11	19	16	17	80	73	7.6	67	2.5	1.8	0.05	0.04
MIN	1.4	7.1	13	11	10	7.4	3.0	1.9	0.49	0.00	0.00	0.00
AC-FT	320	652	875	831	1,340	1,660	296	544	76	17	0.5	0.5

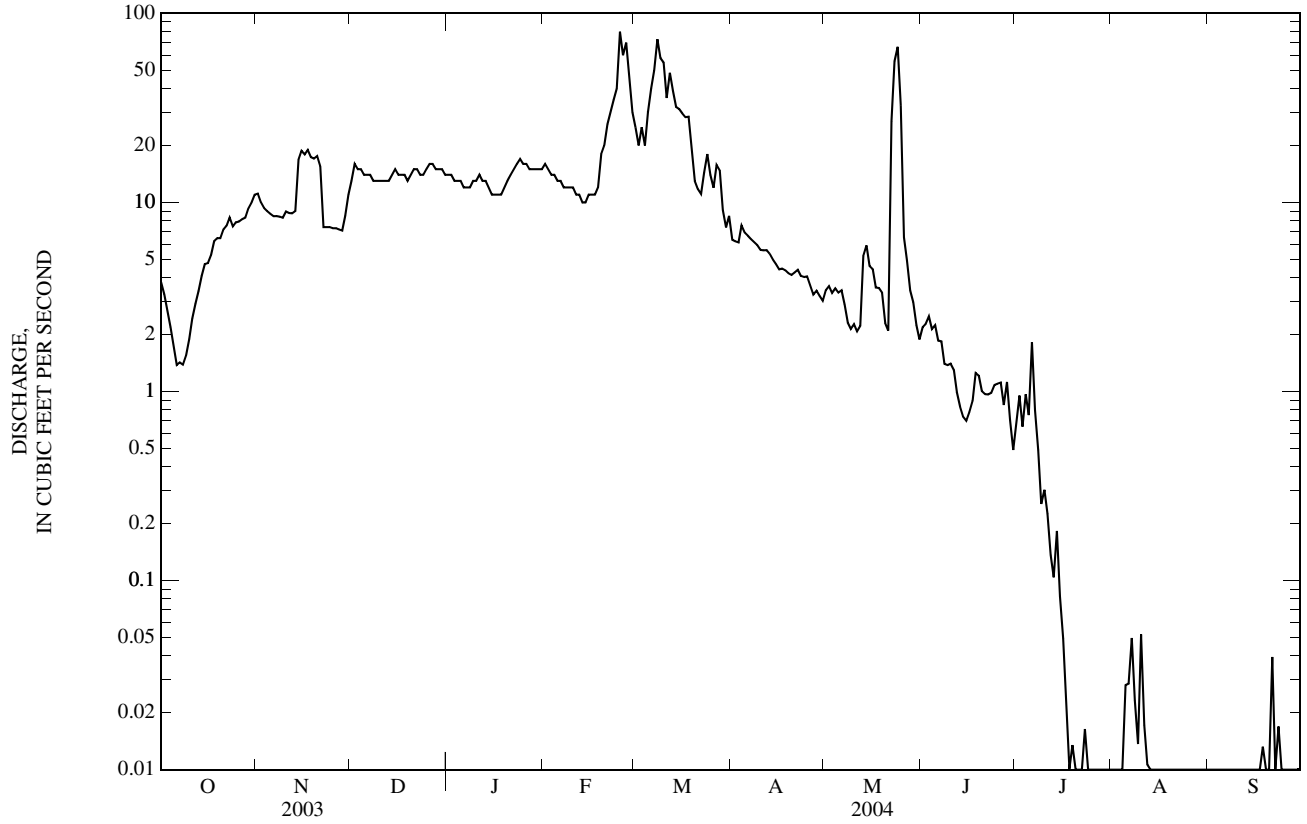
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2004, BY WATER YEAR (WY)

MEAN	21.2	16.5	9.27	9.13	40.8	122	65.8	203	241	119	63.4	25.6
MAX	291	266	50.5	37.3	302	506	558	2,192	2,084	806	388	275
(WY)	(1999)	(1999)	(1999)	(1999)	(1997)	(1994)	(1955)	(1978)	(1962)	(1958)	(1955)	(1973)
MIN	0.00	0.02	0.00	0.00	0.00	3.39	0.22	0.27	1.28	0.15	0.00	0.00
(WY)	(1961)	(1962)	(1960)	(1950)	(1960)	(1961)	(1961)	(1960)	(2004)	(1985)	(1960)	(1956)

06395000 CHEYENNE RIVER AT EDGEMONT, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1947 - 2004	
ANNUAL TOTAL	15,360.30		3,331.90			
ANNUAL MEAN	42.1		9.10		[a]78.2	
HIGHEST ANNUAL MEAN					434	1962
LOWEST ANNUAL MEAN					9.10	2004
HIGHEST DAILY MEAN	1,440	Mar 19	80	Feb 25	24,000	May 20, 1978
LOWEST DAILY MEAN	0.15	Aug 6	0.00	Jul 21	[b]0.00	Jan 5, 1947
ANNUAL SEVEN-DAY MINIMUM	0.26	Aug 1	0.00	Jul 27	[c]0.00	Aug 31, 1947
MAXIMUM PEAK FLOW			100	Feb 25	28,000	May 20, 1978
MAXIMUM PEAK STAGE			[d]3.86	Feb 25	13.65	May 20, 1978
ANNUAL RUNOFF (AC-FT)	30,470		6,610		56,660	
10 PERCENT EXCEEDS	57		18		[c]148	
50 PERCENT EXCEEDS	14		5.6		[c]12	
90 PERCENT EXCEEDS	1.4		0.00		[c]0.11	

a Median of annual mean discharges, 62 ft^3/s.
b No flow at times in most years.
c Reflects water years 1947-2004 only.
d Backwater from ice.
e Estimated.



06400000 HAT CREEK NEAR EDGEMONT, SD

LOCATION.--Lat 43°14'24", long 103°35'16", in SW¼ SE¼ NE¼ sec.25, T.9 S., R.4 E., Fall River County, Hydrologic Unit 10120108, on right bank at upstream side of bridge on State Highway 71, 2.4 mi upstream from mouth, 2.0 mi west of Heppner, and 12.5 mi southeast of Edgemont.

DRAINAGE AREA.--1,044 mi^2.

PERIOD OF RECORD.--April 1905 to September 1906, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 3,295.71 ft above NGVD of 1929. Nonrecording gage Apr. 8, 1905, to May 2, 1906, at site 0.6 mi downstream and May 3 to July 7, 1906, at site 0.4 mi upstream at different datum. Nov. 6, 1950, to May 1, 1951, and July 18 to Sept. 7, 1975, nonrecording gage and May 2, 1951, to July 17, 1975, recording gage, at site 0.4 mi downstream at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. A few small diversions upstream from station for irrigation. Lander ditch diverts water from Hat Creek 0.4 mi upstream from gaging station for irrigating hay meadows downstream from station. Satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section. Results of discharge measurements, in cubic feet per second, of Lander ditch during water year 2004 are given herewith:

Oct. 6	0	Feb. 9	0	July 12	0
Nov. 17	0	Apr. 5	0	Aug. 16	0
Dec. 31	0	May 17	0	Sept. 27	0

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	1.9	e0.20	e0.25	e0.50	0.36	0.01	0.00	0.00	0.00	0.00
2	0.00	0.00	2.0	e0.20	e0.25	e0.50	0.41	0.01	0.00	0.00	0.00	0.00
3	0.00	0.00	2.2	e0.20	e0.20	0.62	0.41	0.01	0.00	0.00	0.00	0.00
4	0.00	0.00	2.2	e0.20	e0.20	0.65	0.50	0.02	0.00	0.00	0.00	0.00
5	0.00	0.00	2.1	e0.20	e0.20	0.81	0.49	0.01	0.00	0.00	0.00	0.00
6	0.00	0.00	2.1	e0.20	e0.15	1.1	0.39	0.05	0.00	0.00	0.00	0.00
7	0.00	0.00	2.3	e0.20	e0.15	1.0	0.14	0.07	0.00	0.00	0.00	0.00
8	0.00	0.00	2.6	e0.21	e0.15	1.4	0.13	0.06	0.00	0.00	0.00	0.00
9	0.00	0.00	e2.5	e0.22	e0.13	e1.5	0.12	0.07	0.00	0.00	0.00	0.00
10	0.00	0.00	e2.4	e0.25	e0.13	1.9	0.13	0.02	0.00	0.00	0.00	0.00
11	0.00	0.00	e2.3	e0.24	e0.12	2.7	0.13	0.01	0.00	0.00	0.00	0.00
12	0.00	0.00	e2.1	e0.22	e0.12	6.7	0.16	0.04	0.00	0.00	0.00	0.00
13	0.00	0.00	e2.1	e0.21	e0.11	2.8	0.23	0.02	0.00	0.00	0.00	0.00
14	0.00	0.00	e2.1	e0.20	e0.11	2.4	0.33	0.01	0.00	0.00	0.00	0.00
15	0.00	0.00	e2.1	e0.20	e0.10	0.56	0.19	0.00	0.00	0.00	0.00	0.00
16	0.00	0.17	e2.1	e0.20	e0.10	0.24	0.04	0.01	0.00	0.00	0.00	0.00
17	0.00	3.0	e2.2	e0.21	e0.20	0.17	0.02	0.00	0.00	0.00	0.00	0.00
18	0.00	4.3	e2.4	e0.30	e0.50	0.05	0.01	0.04	0.00	0.00	0.00	0.00
19	0.00	3.7	e2.1	e0.40	e0.60	0.06	0.01	0.02	0.00	0.00	0.00	0.00
20	0.00	4.2	e2.0	e0.40	e0.55	0.04	0.00	0.03	0.00	0.00	0.00	0.00
21	0.00	4.5	e2.0	e0.42	e0.55	0.04	0.00	0.01	0.00	0.00	0.00	0.00
22	0.00	4.6	e1.9	e0.50	e0.53	0.07	0.00	0.04	0.00	0.00	0.00	0.00
23	0.00	3.3	e1.5	e0.58	e0.50	0.08	0.00	0.10	0.00	0.00	0.00	0.00
24	0.00	2.4	e1.4	e0.60	e0.49	0.17	0.01	0.07	0.00	0.00	0.00	0.00
25	0.00	2.4	e1.3	e0.56	e0.48	0.21	0.03	0.02	0.00	0.00	0.00	0.00
26	0.00	2.5	e1.3	e0.42	e0.41	0.20	0.02	0.01	0.00	0.00	0.00	e0.00
27	0.00	2.2	e1.0	e0.40	0.98	0.19	0.02	0.03	0.00	0.00	0.00	e0.00
28	0.00	2.0	e0.90	e0.30	1.0	0.24	0.01	0.05	0.00	0.00	0.00	e0.00
29	0.00	2.0	e0.50	e0.22	0.59	0.28	0.01	0.01	0.00	0.00	0.00	0.00
30	0.00	2.0	e0.30	e0.30	---	0.24	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	e0.25	e0.30	---	0.31	---	0.00	---	0.00	0.00	---
TOTAL	0.00	43.27	56.15	9.26	9.85	27.73	4.30	0.85	0.00	0.00	0.00	0.00
MEAN	0.00	1.44	1.81	0.30	0.34	0.89	0.14	0.03	0.00	0.00	0.00	0.00
MAX	0.00	4.6	2.6	0.60	1.0	6.7	0.50	0.10	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.25	0.20	0.10	0.04	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	86	111	18	20	55	8.5	1.7	0.00	0.00	0.00	0.00

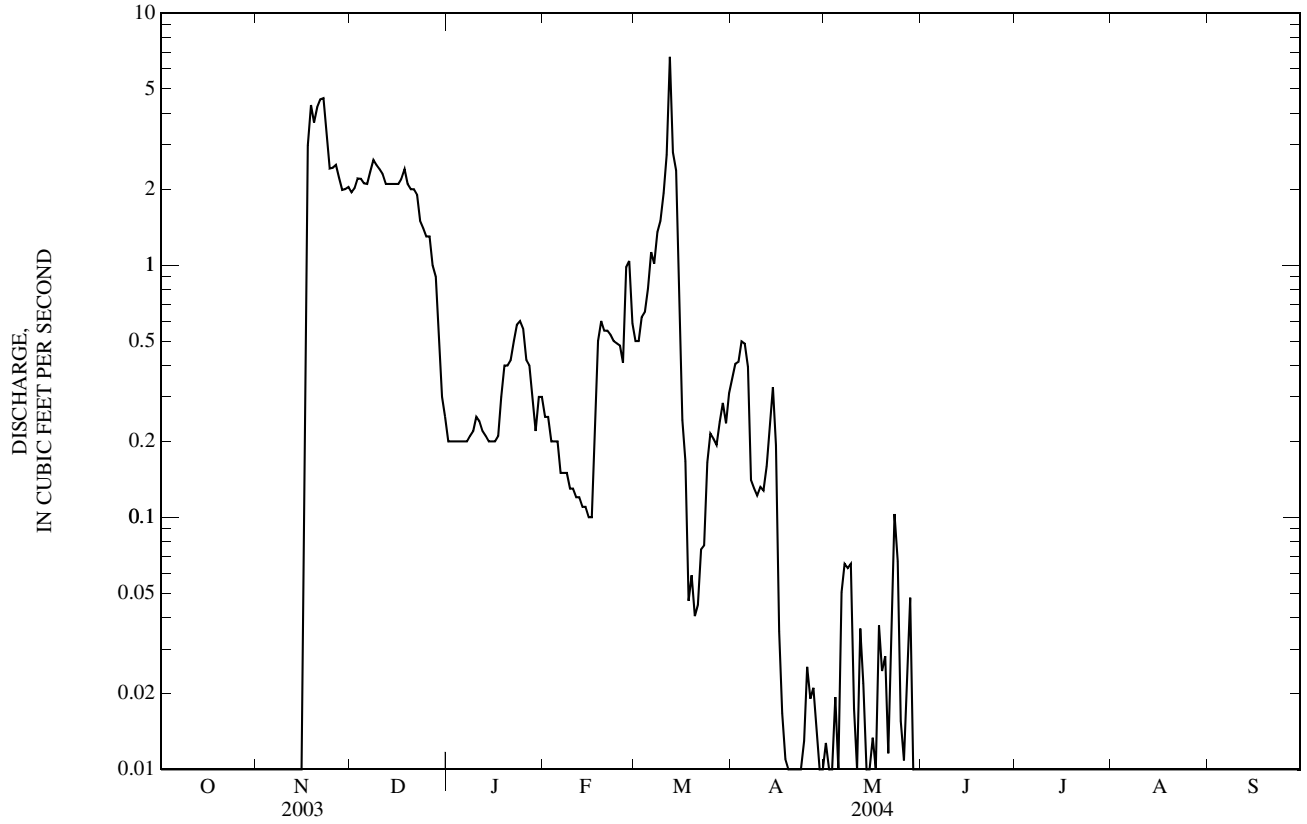
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2004, BY WATER YEAR (WY)

MEAN	1.59	2.51	1.61	2.16	5.10	22.1	28.1	44.2	66.7	18.3	6.09	2.61
MAX	19.8	68.7	16.0	25.5	52.6	150	456	444	1,223	174	68.4	70.1
(WY)	(1999)	(1999)	(1956)	(1974)	(1980)	(1993)	(2000)	(1957)	(1967)	(1951)	(1955)	(1955)
MIN	0.00	0.00	0.00	0.00	0.00	0.10	0.04	0.03	0.00	0.00	0.00	0.00
(WY)	(1954)	(1951)	(1954)	(1954)	(1954)	(1981)	(1981)	(2004)	(2004)	(1953)	(1960)	(1954)

06400000 HAT CREEK NEAR EDGEMONT, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1951 - 2004	
ANNUAL TOTAL	1,508.76		151.41			
ANNUAL MEAN	4.13		0.41		[a]16.7	
HIGHEST ANNUAL MEAN					112	1967
LOWEST ANNUAL MEAN					0.16	1989
HIGHEST DAILY MEAN	175	Jun 19	6.7	Mar 12	8,350	Jun 16, 1967
LOWEST DAILY MEAN	0.00	Jul 15	0.00	Oct 1	[b]0.00	Nov 1, 1950
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 15	0.00	Oct 1	0.00	Nov 1, 1950
MAXIMUM PEAK FLOW			12	Mar 12	[c]13,300	Jun 16, 1967
MAXIMUM PEAK STAGE			9.23	Mar 12	15.40	Apr 23, 2000
ANNUAL RUNOFF (AC-FT)	2,990		300		12,130	
10 PERCENT EXCEEDS	12		2.0		20	
50 PERCENT EXCEEDS	1.2		0.01		0.52	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a Median of annual mean discharges, 11 ft^3/s.
b No flow for many days in most years.
c Gage height, 13.35 ft, at different site, same datum.
e Estimated.



06400875 HORSEHEAD CREEK AT OELRICHS, SD

LOCATION.--Lat 43°11'17", long 103°13'34", in SW¼ SW¼ SW¼ SW¼ sec.7, T.10 S., R.8 E., Fall River County, Hydrologic Unit 10120106, on left bank on downstream side of bridge on Highway 18, 1.5 mi upstream from Lone Well Creek, and 0.6 mi northeast of Oelrichs.

DRAINAGE AREA.--187 mi^2.

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

REVISED RECORDS.--WDR SD-86-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 3,320 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good. Diversions for irrigation of 624 acres upstream from station. Satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.02	0.03	e0.03	e0.05	0.02	0.02	0.00	0.00	0.00	0.00
2	0.00	0.00	0.02	0.03	e0.03	e0.04	0.02	0.02	0.00	0.00	0.00	0.00
3	0.00	0.00	0.02	0.03	e0.03	e0.03	0.02	0.01	0.00	0.00	0.00	0.00
4	0.00	0.00	0.02	0.02	e0.03	e0.03	0.02	0.01	0.00	0.00	0.00	0.00
5	0.00	0.00	0.02	e0.02	e0.03	e0.03	0.02	0.01	0.00	0.00	0.00	0.00
6	0.00	0.00	0.02	e0.02	e0.03	e0.04	0.02	0.01	0.00	0.00	0.00	0.00
7	0.00	0.00	0.03	e0.02	e0.03	0.07	0.02	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.02	0.03	e0.04	0.10	0.03	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	e0.02	0.03	e0.04	0.10	0.03	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	e0.02	0.03	e0.04	0.09	0.03	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	e0.02	0.03	e0.05	0.07	0.03	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	e0.02	0.03	e0.05	0.07	0.02	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	e0.02	0.03	e0.05	0.06	0.02	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	e0.02	0.03	e0.04	0.05	0.03	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.03	0.03	e0.04	0.06	0.03	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.03	0.03	e0.04	0.07	0.02	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.03	0.03	e0.06	0.07	0.03	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.03	0.03	e0.09	0.07	0.03	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.03	0.03	e0.13	0.06	0.04	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.03	0.03	0.15	0.05	0.07	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.03	0.03	0.12	0.05	0.07	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.03	0.03	0.11	0.05	0.03	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.03	0.03	0.10	0.05	0.03	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.03	0.03	0.11	0.04	0.03	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.03	0.03	0.10	0.04	0.02	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.03	e0.03	0.09	0.05	0.02	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.03	e0.03	0.07	0.04	0.02	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	e0.02	e0.03	0.07	0.03	0.01	0.00	0.00	0.00	0.00	0.00
29	0.00	0.02	e0.02	e0.03	0.06	0.03	0.01	0.00	0.00	0.00	0.00	0.00
30	0.00	0.02	e0.02	e0.03	---	0.03	0.01	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.03	e0.03	---	0.03	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.04	0.77	0.89	1.86	1.65	0.80	0.08	0.00	0.00	0.00	0.00
MEAN	0.00	0.00	0.02	0.03	0.06	0.05	0.03	0.00	0.00	0.00	0.00	0.00
MAX	0.00	0.02	0.03	0.03	0.15	0.10	0.07	0.02	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.02	0.02	0.03	0.03	0.01	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.08	1.5	1.8	3.7	3.3	1.6	0.2	0.00	0.00	0.00	0.00

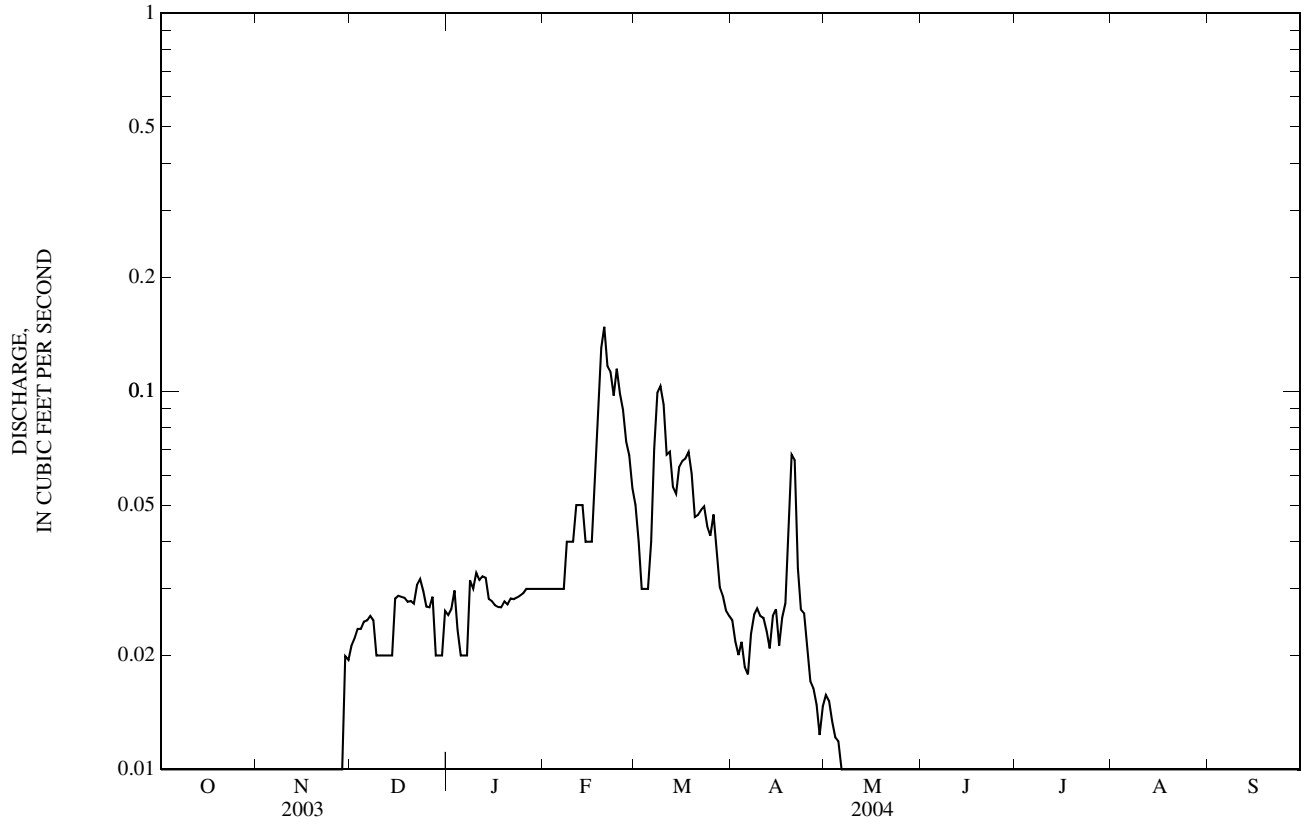
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2004, BY WATER YEAR (WY)

MEAN	0.05	0.33	0.22	0.42	1.33	7.26	19.5	20.3	25.6	3.64	0.11	0.00
MAX	0.46	5.66	2.72	6.39	11.6	58.9	164	246	187	31.4	0.74	0.07
(WY)	(2000)	(1999)	(1997)	(1997)	(1994)	(1986)	(2000)	(1991)	(1986)	(1993)	(1986)	(1999)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1984)	(1984)	(1984)	(1985)	(1989)	(1989)	(1989)	(1985)	(1985)	(1985)	(1985)	(1984)

06400875 HORSEHEAD CREEK AT OELRICHS, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1984 - 2004	
ANNUAL TOTAL	1,289.50		6.09			
ANNUAL MEAN	3.53		0.02		6.55	
HIGHEST ANNUAL MEAN					29.3	1986
LOWEST ANNUAL MEAN					0.00	1990
HIGHEST DAILY MEAN	376	Jun 15	0.15	Feb 20	4,080	May 11, 1991
LOWEST DAILY MEAN	0.00	Apr 26	0.00	Oct 1	[a]0.00	Oct 1, 1983
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 15	0.00	Oct 1	0.00	Oct 1, 1983
MAXIMUM PEAK FLOW			[b]0.19	Feb 20	8,270	May 11, 1991
MAXIMUM PEAK STAGE			[c]2.82	Feb 1	18.57	May 11, 1991
ANNUAL RUNOFF (AC-FT)	2,560		12		4,750	
10 PERCENT EXCEEDS	0.67		0.05		3.7	
50 PERCENT EXCEEDS	0.02		0.00		0.02	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a No flow for many days in most years.
b Gage height, 2.41 ft.
c Backwater from ice.
e Estimated.



06401000 ANGOSTURA RESERVOIR NEAR HOT SPRINGS, SD

LOCATION.--Lat 43°20'35", long 103°26'16", in $SW^1/_4$ $NW^1/_4$ sec.20, T.8 S., R.6 E., Fall River County, Hydrologic Unit 10120106, at dam on Cheyenne River, 6.5 mi southeast of Hot Springs.

DRAINAGE AREA.--9,100 mi^2, approximately.

REVISED RECORDS.--WDR SD-04-01: 1960-2003 minimum observed contents; 1962-2003 maximum observed contents.

PERIOD OF RECORD.--October 1949 to current year (monthend contents only).

GAGE.--Water-stage recorder. Elevations listed to NGVD of 1929. Prior to Aug. 26, 1965, nonrecording gage at same site and datum.

REMARKS.--Reservoir formed by concrete gravity dam with earth embankment with gated concrete gravity spillway section. Storage began Oct. 3, 1949; dam completed December 1949. Conservation capacity, 82,400 acre-ft between elevations 3,163.0 ft and 3,187.2 ft (top of spillway gates). Inactive storage, 39,700 acre-ft between elevations 3,139.75 ft (invert of lowest outlet) and 3,163.0 ft. Dead storage below elevation 3,139.75 ft, 8,600 acre-ft. Surcharge capacity, 56,400 acre-ft between elevations 3,187.2 ft and 3,198.1 ft (maximum water surface). Figures given herein represent contents above elevation 3,139.75 ft. Water stored for irrigation.

COOPERATION.--Records of elevation, contents, and diversions to Angostura project provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 160,400 acre-ft, June 18, 1962, elevation, 3,189.00 ft; minimum observed since normal operating level reached, 60,600 acre-ft, Sept. 28, 1960, elevation, 3,162.90 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 88,400 acre-ft, Apr. 27, elevation, 3,179.18 ft; minimum, 45,600 acre-ft, Sept. 16, elevation, 3,165.38 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	3,174.82	73,300	--
Oct. 31	3,175.05	74,000	+700
Nov. 30	3,175.48	75,500	+1,500
Dec. 31	3,176.15	77,800	+2,300
CAL YR 2003	--	--	+3,100
Jan. 31	3,176.72	79,700	+1,900
Feb. 29	3,177.82	83,700	+4,000
Mar. 31	3,178.92	87,700	+4,000
Apr. 30	3,179.08	88,300	+600
May 31	3,176.96	80,600	-7,700
June 30	3,174.74	73,000	-7,600
July 31	3,170.43	59,600	-13,400
Aug. 31	3,166.07	47,500	-12,100
Sept. 30	3,165.53	46,100	-1,400
WTR YR 2004	--	--	-27,200

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06401500 CHEYENNE RIVER BELOW ANGOSTURA DAM, SD

LOCATION.--Lat 43°20'42", long 103°26'12", in NE¼ NW¼ NW¼ sec.20, T.8 S., R.6 E., Fall River County, Hydrologic Unit 10120109, on right bank 800 ft downstream from Angostura Dam, 4.8 mi upstream from Fall River, and 6.5 mi southeast of Hot Springs.

DRAINAGE AREA.--9,100 mi^2, approximately.

PERIOD OF RECORD.--October 1945 to current year, seasonal records only beginning October 1978. Monthly discharge only for some periods, published in WSP 1309.

REVISED RECORDS.--WSP 1309: 1946(M). WDR SD-78-1: 1962(M), 1967(M), 1971(M).

GAGE.--Water-stage recorder. Datum of gage is 3,058.02 ft above NGVD of 1929 (Bureau of Reclamation bench mark). Prior to Oct. 17, 1946, nonrecording gage and Oct. 17, 1946, to July 7, 1953, water-stage recorder at site 4.8 mi downstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by Angostura Dam 800 ft upstream since October 1949. Bureau of Reclamation satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,300 ft^3/s, May 20, 1978, gage height, 15.97 ft, from rating curve extended above 12,000 ft^3/s; no flow Oct. 9, 1949, to Feb. 5, 1950, Apr. 28, Aug. 26, 30, 1951.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2.7 ft^3/s, Sept. 5, 17, gage height, 2.99 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	e0.55	0.77	0.63	0.53	0.54	0.57	---	---
2	---	---	---	---	e0.55	0.73	0.63	0.58	0.56	0.55	---	---
3	---	---	---	---	e0.54	0.74	0.65	0.55	0.56	0.54	---	---
4	---	---	---	---	e0.54	0.80	0.63	0.59	0.57	0.57	---	---
5	---	---	---	---	e0.54	0.81	0.63	0.53	0.58	0.56	---	---
6	---	---	---	---	e0.53	0.80	0.61	0.57	0.54	0.48	---	---
7	---	---	---	---	e0.53	0.79	e0.58	0.57	0.57	0.46	---	---
8	---	---	---	---	e0.53	0.84	0.55	0.59	0.61	0.47	---	---
9	---	---	---	---	e0.53	0.78	0.52	0.59	0.63	0.30	---	---
10	---	---	---	---	e0.53	0.68	0.52	0.62	0.63	0.36	---	---
11	---	---	---	---	e0.55	0.67	0.57	0.59	0.59	0.55	---	---
12	---	---	---	---	e0.55	0.68	0.56	0.65	0.59	0.62	---	---
13	---	---	---	---	e0.55	0.66	0.54	0.63	0.60	0.37	---	---
14	---	---	---	---	e0.55	0.67	0.53	0.61	0.60	0.57	---	---
15	---	---	---	---	e0.57	e0.66	0.52	0.59	0.58	0.60	---	---
16	---	---	---	---	e0.60	e0.67	0.53	0.69	0.65	0.57	---	---
17	---	---	---	---	e0.66	e0.67	0.54	0.62	0.60	0.50	---	---
18	---	---	---	---	0.66	e0.68	0.56	0.62	0.55	0.51	---	---
19	---	---	---	---	0.69	e0.68	0.57	0.58	0.52	0.59	---	---
20	---	---	---	---	0.67	e0.68	0.56	0.53	0.53	0.58	---	---
21	---	---	---	---	0.69	e0.69	0.57	0.53	0.51	0.57	---	---
22	---	---	---	---	0.73	e0.69	0.58	0.60	0.50	0.38	---	---
23	---	---	---	---	0.75	0.69	0.57	0.55	0.50	0.57	---	---
24	---	---	---	---	0.73	0.68	0.59	0.55	0.52	0.64	---	---
25	---	---	---	---	0.77	0.70	0.58	0.53	0.51	0.60	---	---
26	---	---	---	---	0.78	0.70	0.57	0.53	0.52	0.55	---	---
27	---	---	---	---	0.74	0.69	0.57	0.53	0.53	0.67	---	---
28	---	---	---	---	0.85	0.67	0.51	0.53	0.54	0.59	---	---
29	---	---	---	---	0.87	0.68	0.55	0.54	0.54	0.60	---	---
30	---	---	---	---	---	0.67	0.52	0.54	0.57	0.56	---	---
31	---	---	---	---	---	0.64	---	0.55	---	0.46	---	---
TOTAL	---	---	---	---	18.33	21.96	17.04	17.81	16.84	16.51	---	---
MEAN	---	---	---	---	0.63	0.71	0.57	0.57	0.56	0.53	---	---
MAX	---	---	---	---	0.87	0.84	0.65	0.69	0.65	0.67	---	---
MIN	---	---	---	---	0.53	0.64	0.51	0.53	0.50	0.30	---	---
AC-FT	---	---	---	---	36	44	34	35	33	33	---	---

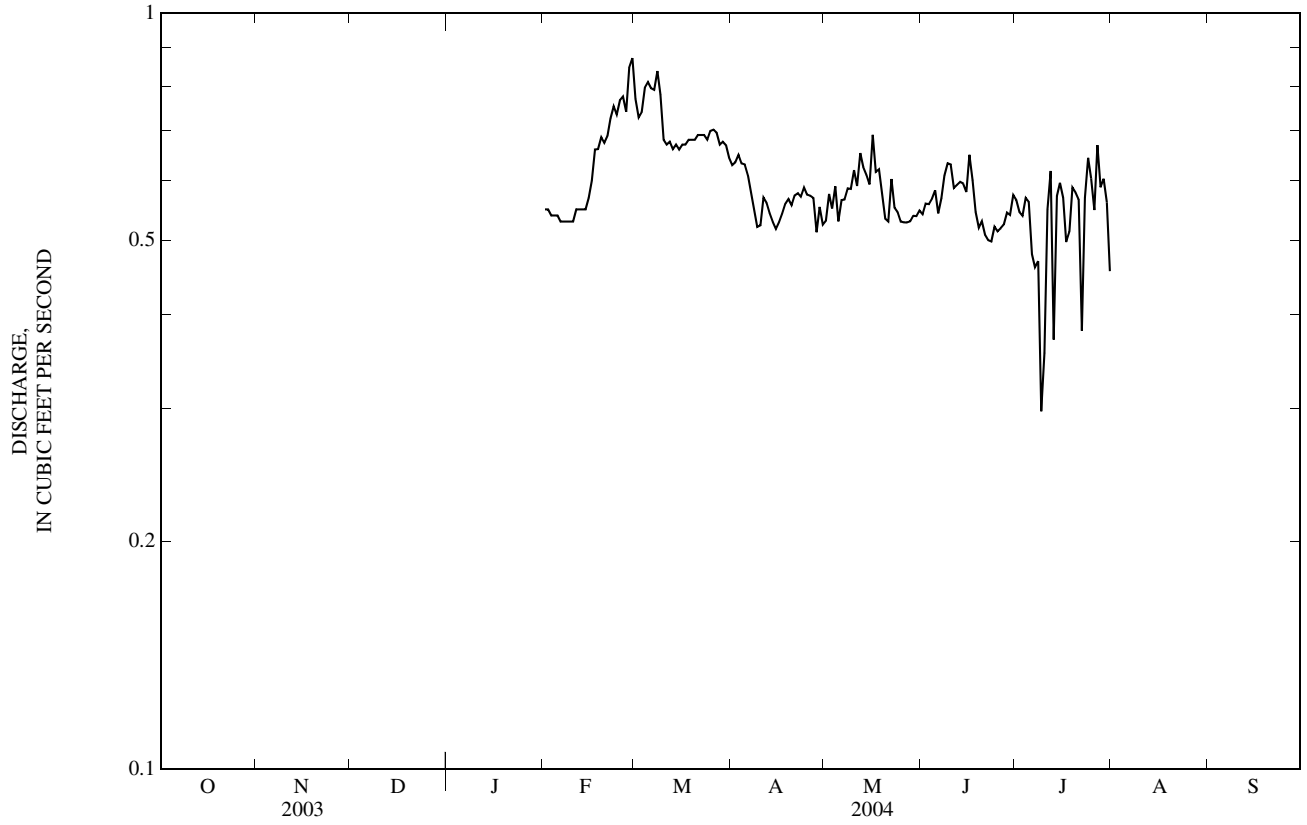
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1978, BY WATER YEAR (WY)*

MEAN	9.65	11.2	14.1	18.1	27.7	31.7	30.5	205	314	108	25.2	10.9
MAX	104	103	108	118	211	174	188	2,203	2,802	1,210	201	158
(WY)	(1953)	(1953)	(1953)	(1953)	(1974)	(1967)	(1952)	(1978)	(1962)	(1962)	(1958)	(1952)
MIN	0.81	0.79	0.75	0.84	0.66	0.82	0.87	0.42	0.78	0.89	0.70	0.70
(WY)	(1961)	(1961)	(1961)	(1961)	(1970)	(1970)	(1962)	(1951)	(1977)	(1961)	(1961)	(1960)

06401500 CHEYENNE RIVER BELOW ANGOSTURA DAM, SD—Continued

SUMMARY STATISTICS	WATER YEARS 1951 - 1978*	
ANNUAL MEAN	67.1	
HIGHEST ANNUAL MEAN	404	1962
LOWEST ANNUAL MEAN	0.83	1961
HIGHEST DAILY MEAN	20,600	Jun 18, 1962
LOWEST DAILY MEAN	0.00	Apr 28, 1951
ANNUAL SEVEN-DAY MINIMUM	0.20	Apr 26, 1951
MAXIMUM PEAK FLOW	30,300	May 20, 1978
MAXIMUM PEAK STAGE	15.97	May 20, 1978
ANNUAL RUNOFF (AC-FT)	48,630	
10 PERCENT EXCEEDS	107	
50 PERCENT EXCEEDS	1.4	
90 PERCENT EXCEEDS	0.91	

* Period reflects regulated and complete water years.
e Estimated.



06402000 FALL RIVER AT HOT SPRINGS, SD

LOCATION.--Lat 43°25'50", long 103°28'33", in NW $^1/_4$ NW $^1/_4$ sec.24, T.7 S., R.5 E., Fall River County, Hydrologic Unit 10120109, on left bank at intersection of River Street and University Avenue in Hot Springs, and 6.0 mi upstream from mouth.

DRAINAGE AREA.--137 mi^2.

PERIOD OF RECORD.--October 1937 to current year (monthly discharge only for October 1937, published in WSP 1309). Daily discharge November 1937 to September 2001 and October 2003 to September 2004. Stage only October 2001 to September 2003.

REVISED RECORDS.--WSP 1279: 1938, 1941(M), 1947(M). WSP 1729: 1959(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 3,413.20 ft above NGVD of 1929. Prior to June 2, 1939, nonrecording gage at site 300 ft upstream at datum 3.00 ft higher.

REMARKS.--Records fair. Flow regulated by dam forming Coldbrook Reservoir, capacity, 7,200 acre-ft, since September 1952, and dam forming Cottonwood Springs Lake, capacity, 8,385 acre-ft since June 1969. Some diversions above station for municipal supply of Hot Springs. U.S. Army Corps of Engineers satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	29	29	27	28	29	29	28	28	29	29	26
2	29	29	28	27	28	28	29	28	28	28	29	27
3	29	29	29	27	28	29	30	28	28	28	29	27
4	29	29	28	27	28	29	30	28	29	30	29	28
5	29	29	28	27	28	28	29	28	28	29	29	34
6	28	28	28	27	28	29	28	27	29	29	30	27
7	28	28	28	27	28	29	28	28	29	29	30	27
8	29	28	28	27	29	29	29	28	29	29	30	27
9	28	29	28	27	28	29	29	28	30	29	29	27
10	29	29	28	27	29	29	28	29	30	30	31	27
11	28	28	28	27	28	29	28	29	30	33	30	27
12	28	28	28	27	28	29	28	30	30	32	29	27
13	28	28	28	27	29	29	28	29	30	31	31	27
14	28	29	28	27	28	29	28	29	30	33	31	28
15	29	28	28	28	28	29	28	28	30	32	30	28
16	29	28	28	27	29	29	27	29	31	29	29	28
17	28	28	28	28	29	29	28	28	32	29	29	27
18	28	29	28	28	29	29	28	28	31	29	29	27
19	28	29	28	28	29	29	28	28	32	29	29	27
20	28	29	28	27	29	29	28	28	39	30	29	28
21	28	29	28	27	29	29	28	29	28	29	29	28
22	28	29	28	28	29	29	28	30	28	31	31	28
23	29	29	28	28	29	29	28	30	28	31	28	28
24	28	29	28	28	29	29	28	29	29	31	27	28
25	28	28	28	28	29	30	28	29	29	31	27	28
26	28	29	28	28	29	30	28	29	29	30	27	28
27	28	29	28	28	29	29	28	29	28	30	28	28
28	28	29	28	28	29	29	28	29	28	30	28	28
29	29	29	28	28	29	29	28	29	28	30	27	28
30	29	28	28	28	---	29	27	29	28	30	26	29
31	28	---	28	28	---	29	---	29	---	30	27	---
TOTAL	879	859	870	851	829	899	847	887	886	930	896	832
MEAN	28.4	28.6	28.1	27.5	28.6	29.0	28.2	28.6	29.5	30.0	28.9	27.7
MAX	29	29	29	28	29	30	30	30	39	33	31	34
MIN	28	28	28	27	28	28	27	27	28	28	26	26
AC-FT	1,740	1,700	1,730	1,690	1,640	1,780	1,680	1,760	1,760	1,840	1,780	1,650

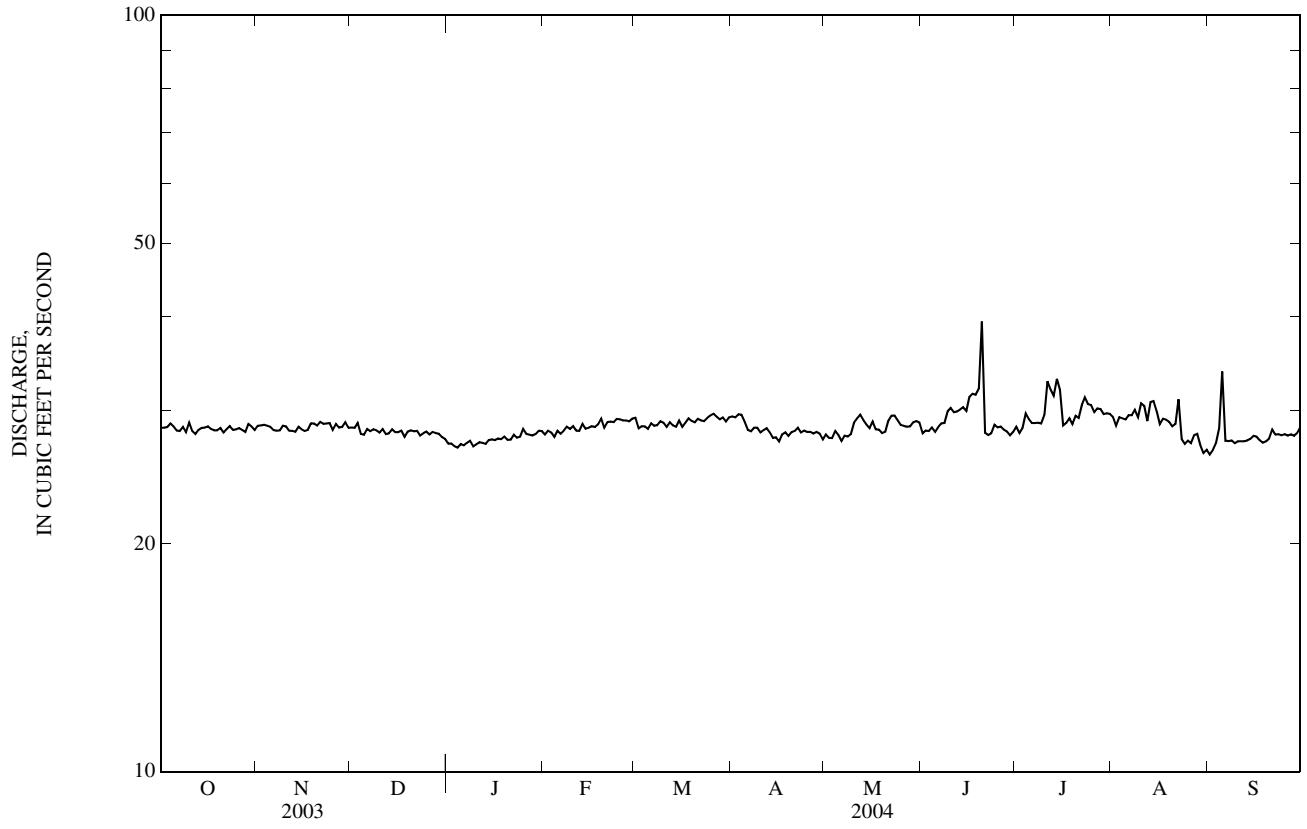
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2001, 2004, BY WATER YEAR (WY)*

MEAN	23.3	23.3	23.8	23.3	23.5	23.9	23.5	23.6	23.5	22.6	22.6	23.1
MAX	31.8	31.8	31.7	31.3	32.8	32.6	31.7	34.9	41.3	38.8	33.6	32.4
(WY)	(2000)	(2000)	(2003)	(2003)	(2002)	(2002)	(2000)	(1999)	(1999)	(1999)	(1999)	(1999)
MIN	18.8	18.3	19.0	19.4	19.8	20.0	19.5	19.0	17.9	18.0	18.6	17.7
(WY)	(1973)	(1987)	(1987)	(1984)	(1977)	(1982)	(1970)	(1976)	(1981)	(1980)	(1972)	(1983)

06402000 FALL RIVER AT HOT SPRINGS, SD—Continued

SUMMARY STATISTICS	FOR 2004 WATER YEAR		WATER YEARS 1970 - 2001, 2004*	
ANNUAL TOTAL	10,465			
ANNUAL MEAN	28.6		23.2	
HIGHEST ANNUAL MEAN			30.6	1999
LOWEST ANNUAL MEAN			20.9	1981
HIGHEST DAILY MEAN	39	Jun 20	75	Mar 19, 1978
LOWEST DAILY MEAN	26	Aug 30	[a]14	May 2, 1982
ANNUAL SEVEN-DAY MINIMUM	27	Aug 28	15	Sep 23, 1983
MAXIMUM PEAK FLOW	469	Jun 20	1,170	Jul 19, 1997
MAXIMUM PEAK STAGE	3.64	Jun 20	4.62	Jul 17, 1988
ANNUAL RUNOFF (AC-FT)	20,760		16,800	
10 PERCENT EXCEEDS	30		29	
50 PERCENT EXCEEDS	28		22	
90 PERCENT EXCEEDS	27		19	

* Regulated period only (1970-2001, 2004). See REMARKS.
a For some days in 1982, 1983, and 1985.



06402430 BEAVER CREEK NEAR PRINGLE, SD

LOCATION.--Lat 43°34'53", long 103°28'34", in NE¼ SW¼ SW¼ sec.25, T.5 S., R.5 E., Custer County, Hydrologic Unit 10120109, on right bank 2.0 mi north of Wind Cave National Park Headquarters.

DRAINAGE AREA.--45.8 mi^2.

PERIOD OF RECORD.--October 1990 to current year. Partial monthly discharge October 1990.

GAGE.--Water-stage recorder. Datum of gage is 4,180 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Minor diversions for irrigation of hay meadows and domestic use may occur upstream of the gage. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.34	e0.76	0.68	0.85	0.67	e0.35	0.65	0.76	0.29	0.44	0.25	0.40
2	0.34	e0.74	0.68	0.85	0.56	e0.33	0.66	0.74	0.34	0.48	0.23	0.43
3	0.35	e0.70	0.68	0.65	0.51	e0.33	0.68	0.73	0.30	0.48	0.27	0.35
4	0.36	e0.66	0.70	e0.40	0.46	e0.33	0.69	0.77	0.28	0.43	0.33	0.61
5	0.36	e0.64	0.51	e0.30	e0.40	e0.40	0.68	0.73	0.29	0.61	0.36	1.4
6	0.42	e0.60	0.66	e0.30	e0.38	e0.54	0.69	0.70	0.26	0.58	0.31	1.0
7	0.47	e0.55	0.82	e0.30	e0.50	0.57	0.74	0.71	0.23	0.47	0.21	0.66
8	0.56	e0.52	0.83	e0.60	0.60	0.72	0.73	0.70	0.23	0.28	0.22	0.65
9	0.56	0.59	0.73	0.84	0.58	e0.78	0.74	0.73	0.25	0.25	0.21	0.71
10	0.51	0.81	0.61	0.84	0.57	e0.87	0.71	0.73	0.32	0.20	0.26	0.43
11	0.54	0.76	e0.62	0.83	0.56	0.65	0.78	0.70	0.31	0.20	0.34	0.47
12	0.49	0.64	0.71	0.77	0.66	0.67	0.80	0.86	0.26	0.17	0.32	0.55
13	0.56	0.69	0.79	0.69	0.52	0.65	0.74	0.84	0.26	0.19	0.30	0.49
14	0.61	0.74	0.84	0.70	0.58	0.63	0.64	0.80	0.24	0.20	0.24	0.61
15	0.50	0.63	0.88	0.69	0.57	0.55	0.65	0.65	0.20	0.16	0.29	0.61
16	0.44	0.64	0.77	0.70	0.58	0.54	0.65	0.93	0.25	0.14	0.20	0.39
17	0.43	0.66	0.82	0.69	0.60	0.58	0.69	0.93	0.35	0.14	0.16	0.33
18	0.48	0.67	0.68	0.66	0.71	0.61	0.73	0.83	0.39	0.14	0.16	0.33
19	0.51	0.61	0.69	0.66	0.80	0.60	0.75	0.77	0.39	0.14	0.17	0.15
20	0.52	0.57	0.82	0.65	0.66	0.58	0.76	0.55	0.35	0.15	0.20	0.15
21	0.50	0.45	0.84	0.66	0.67	0.66	0.77	0.56	0.31	0.15	0.22	0.18
22	0.50	e0.45	0.78	0.65	0.65	0.73	0.79	0.53	0.31	0.28	0.30	0.25
23	0.63	e0.45	0.74	0.65	0.67	0.79	0.67	0.49	0.34	0.42	0.60	0.20
24	0.64	e0.46	0.75	0.65	0.68	0.72	0.65	0.45	0.35	0.46	0.40	0.19
25	0.62	e0.46	0.79	0.63	0.71	0.71	0.66	0.41	0.42	0.27	0.25	0.20
26	0.62	e0.47	0.84	0.57	0.68	0.74	0.65	0.41	0.38	0.23	0.20	0.20
27	0.65	e0.47	0.83	0.49	0.57	0.75	0.65	0.39	0.44	0.30	0.33	0.20
28	0.75	0.47	0.78	e0.40	0.41	0.72	0.68	0.36	0.44	0.33	0.56	0.20
29	0.74	0.53	0.61	0.50	e0.38	0.71	0.76	0.32	0.44	0.38	0.40	0.20
30	0.82	0.61	e0.60	0.54	---	0.68	0.76	0.33	0.35	0.34	0.37	0.20
31	e0.80	---	0.72	0.64	---	0.68	---	0.29	---	0.24	0.39	---
TOTAL	16.62	18.00	22.80	19.35	16.89	19.17	21.20	19.70	9.57	9.25	9.05	12.74
MEAN	0.54	0.60	0.74	0.62	0.58	0.62	0.71	0.64	0.32	0.30	0.29	0.42
MAX	0.82	0.81	0.88	0.85	0.80	0.87	0.80	0.93	0.44	0.61	0.60	1.4
MIN	0.34	0.45	0.51	0.30	0.38	0.33	0.64	0.29	0.20	0.14	0.16	0.15
AC-FT	33	36	45	38	34	38	42	39	19	18	18	25

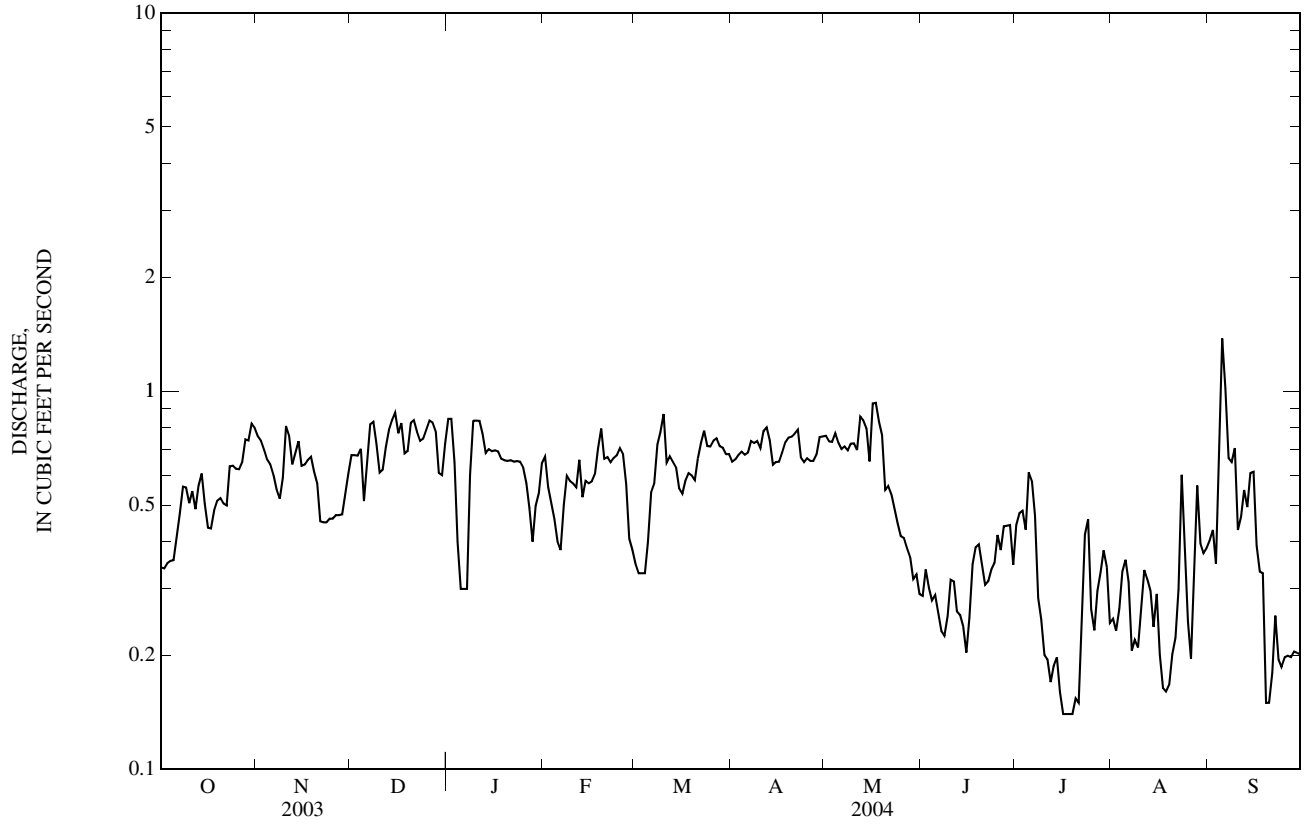
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

MEAN	2.16	2.30	1.88	1.54	1.56	2.42	2.94	4.59	6.70	4.36	2.95	2.30
MAX	5.78	6.90	5.35	4.19	3.81	4.72	8.24	16.2	35.8	16.8	12.0	7.69
(WY)	(2000)	(1999)	(1999)	(1999)	(1997)	(1997)	(1999)	(1999)	(1995)	(1999)	(1999)	(1999)
MIN	0.10	0.21	0.22	0.14	0.25	0.45	0.39	0.54	0.32	0.30	0.23	0.18
(WY)	(1992)	(1992)	(1993)	(1992)	(1992)	(1992)	(1992)	(1992)	(2004)	(2004)	(1992)	(1992)

06402430 BEAVER CREEK NEAR PRINGLE, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004	
ANNUAL TOTAL	267.54		194.34			
ANNUAL MEAN	0.73		0.53		[a]2.98	
HIGHEST ANNUAL MEAN					8.93	1999
LOWEST ANNUAL MEAN					0.32	1992
HIGHEST DAILY MEAN	2.9	May 1	1.4	Sep 5	85	Jun 10, 1995
LOWEST DAILY MEAN	0.28	Sep 26	0.14	Jul 16	0.06	Oct 1, 1991
ANNUAL SEVEN-DAY MINIMUM	0.31	Sep 24	0.15	Jul 15	0.07	Oct 1, 1991
MAXIMUM PEAK FLOW			[b]2.3	Sep 5	90	Jun 10, 1995
MAXIMUM PEAK STAGE			[c]8.10	Jan 6	9.17	Jun 10, 1995
ANNUAL RUNOFF (AC-FT)	531		385		2,160	
10 PERCENT EXCEEDS	1.1		0.77		6.5	
50 PERCENT EXCEEDS	0.70		0.57		1.4	
90 PERCENT EXCEEDS	0.42		0.23		0.35	

a Median of annual mean discharges, 1.4 ft^3/s.
b Gage height, 8.06 ft.
c Backwater from ice.
e Estimated.



06402500 BEAVER CREEK NEAR BUFFALO GAP, SD

LOCATION.--Lat 43°28'00", long 103°18'20", in NE¼ SE¼ sec.5, T.7 S., R.7 E., Fall River County, Hydrologic Unit 10120109, on left bank 1.5 mi south of Buffalo Gap and 4.5 mi upstream from mouth.

DRAINAGE AREA.--130 mi^2, approximately.

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for October, November, 1957, published in WSP 1309.

REVISED RECORDS.--WSP 956: 1941. WSP 1309: 1939-40(M), 1947(M).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 3,150 ft above NGVD of 1929, from topographic map. Prior to June 20, 1939, nonrecording gage at site 0.8 mi downstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Nearly all flow is diverted above station during irrigation season. Satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1927 reached a stage of 18.0 ft, former site and datum, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	9.0	7.2	7.2	e7.0	e8.1	8.4	6.4	2.2	7.2	4.4	4.0
2	8.1	8.8	7.2	7.2	e6.8	7.8	8.3	4.9	2.6	7.5	3.0	3.1
3	7.9	e8.5	7.1	7.1	e6.3	7.8	8.6	3.6	3.2	6.7	4.2	3.4
4	7.9	e8.4	7.1	e6.5	e6.0	7.9	8.6	5.0	4.6	6.9	5.2	5.0
5	7.9	e8.3	7.0	e6.0	e6.0	7.9	8.4	3.7	4.7	8.5	4.3	8.6
6	7.9	e8.2	7.2	e6.0	e6.0	8.1	8.5	3.4	3.9	8.2	3.6	6.1
7	7.3	e8.2	7.2	e6.0	e5.9	7.9	8.4	3.1	2.4	8.2	3.4	5.5
8	5.1	e8.4	7.1	e6.2	e5.8	8.0	8.7	2.8	2.7	7.4	2.3	6.7
9	6.7	e8.5	7.1	e6.8	e6.1	8.0	8.6	3.2	3.2	4.3	0.69	6.6
10	7.4	e8.8	7.1	7.3	e6.6	7.7	8.7	3.9	3.6	3.7	3.3	6.7
11	7.8	e8.6	7.1	7.2	e7.0	7.6	9.0	3.7	3.0	2.1	4.1	6.6
12	7.8	8.5	e7.1	7.1	e7.5	7.5	8.9	3.7	3.0	1.9	3.9	6.6
13	7.9	8.7	7.1	7.1	e8.0	7.4	8.6	2.7	3.1	1.5	3.1	5.3
14	8.0	8.7	7.1	7.1	e8.0	6.1	8.7	2.4	5.2	1.5	2.5	2.7
15	8.0	7.9	6.9	7.1	e8.0	6.3	8.7	2.2	5.4	1.9	2.8	2.1
16	8.0	7.7	7.0	7.1	e8.0	5.9	8.6	2.9	5.9	1.6	5.2	2.3
17	8.0	7.7	7.0	7.2	8.2	6.1	8.9	2.6	7.6	1.5	5.4	4.1
18	7.9	7.7	6.9	7.2	8.2	6.0	9.1	2.8	5.8	1.5	5.6	4.9
19	7.1	8.0	7.0	7.3	8.2	5.8	9.0	3.2	5.9	1.7	5.7	4.5
20	6.9	8.0	7.2	7.2	8.2	5.9	8.7	3.2	5.8	1.4	4.4	5.5
21	7.7	8.5	7.2	7.3	8.1	5.8	6.4	3.0	5.5	1.7	5.4	4.4
22	7.8	8.5	7.2	7.2	8.0	5.6	6.7	2.8	4.2	3.7	5.4	7.6
23	8.1	8.1	7.1	7.4	7.9	5.6	6.4	3.9	3.5	1.3	5.5	5.8
24	8.1	e8.0	7.0	7.4	7.8	5.6	6.4	3.5	2.8	2.6	5.4	8.2
25	8.2	7.8	6.9	7.3	7.8	5.6	6.4	2.0	3.0	1.9	5.0	9.1
26	8.2	7.7	6.9	e6.5	7.8	5.6	6.2	2.0	3.3	2.2	3.8	9.1
27	8.3	7.4	7.2	e6.0	7.8	8.1	6.1	2.9	3.0	2.8	3.0	9.1
28	8.3	7.5	7.2	e6.0	7.9	8.4	6.0	3.8	3.6	4.8	3.2	9.1
29	8.5	7.6	7.2	e6.0	e8.1	8.3	6.2	4.3	3.3	3.8	3.3	9.1
30	9.0	7.3	7.2	e6.0	---	8.3	6.2	4.8	5.9	5.0	4.0	8.2
31	8.8	---	e7.2	e6.5	---	8.3	---	3.8	---	4.4	2.3	---
TOTAL	242.5	245.0	220.0	211.5	213.0	219.0	236.4	106.2	121.9	119.4	123.39	180.0
MEAN	7.82	8.17	7.10	6.82	7.34	7.06	7.88	3.43	4.06	3.85	3.98	6.00
MAX	9.0	9.0	7.2	7.4	8.2	8.4	9.1	6.4	7.6	8.5	5.7	9.1
MIN	5.1	7.3	6.9	6.0	5.8	5.6	6.0	2.0	2.2	1.3	0.69	2.1
AC-FT	481	486	436	420	422	434	469	211	242	237	245	357

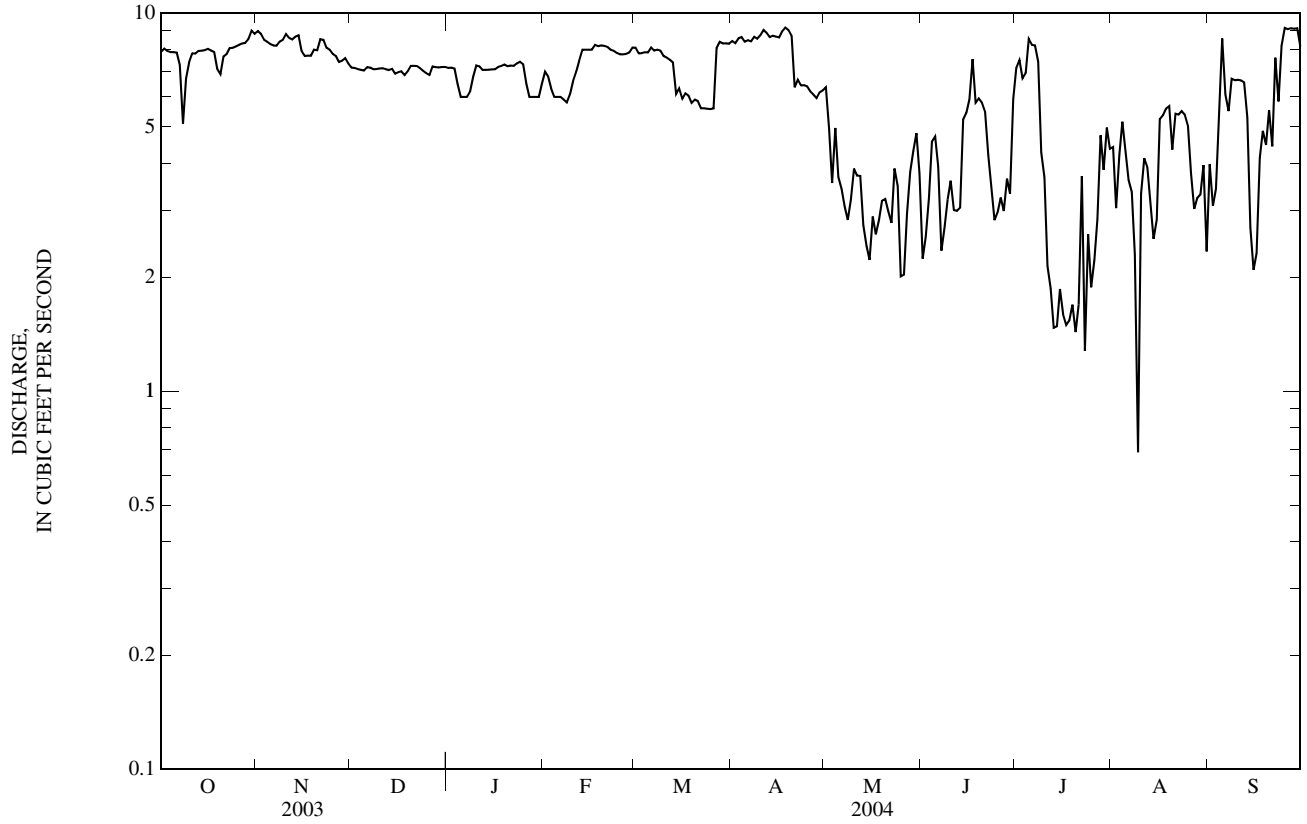
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2004, BY WATER YEAR (WY)

MEAN	7.40	9.08	9.64	9.86	9.87	9.23	6.83	5.13	7.60	5.55	4.18	5.56
MAX	16.0	19.9	19.3	18.4	15.1	16.1	16.9	21.7	43.4	32.4	22.3	15.4
(WY)	(1999)	(1999)	(1999)	(1999)	(1999)	(1978)	(1941)	(1999)	(1999)	(1999)	(1999)	(1999)
MIN	0.67	3.40	5.96	6.82	7.00	4.34	0.79	0.61	0.39	0.24	0.25	0.37
(WY)	(1961)	(1950)	(1991)	(2004)	(1942)	(1961)	(1967)	(1960)	(1974)	(1953)	(1961)	(1960)

06402500 BEAVER CREEK NEAR BUFFALO GAP, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1939 - 2004	
ANNUAL TOTAL	2,451.76		2,238.29			
ANNUAL MEAN	6.72		6.12		7.48	
HIGHEST ANNUAL MEAN					21.2	1999
LOWEST ANNUAL MEAN					3.78	1961
HIGHEST DAILY MEAN	14	Jan 23	9.1	Apr 18	313	Aug 10, 1955
LOWEST DAILY MEAN	0.67	Aug 10	0.69	Aug 9	[a]0.00	Jul 29, 1952
ANNUAL SEVEN-DAY MINIMUM	1.1	Aug 6	1.6	Jul 14	0.06	Jul 28, 1952
MAXIMUM PEAK FLOW			29	Feb 7	[b]11,700	Sep 4, 1938
MAXIMUM PEAK STAGE			4.65	Feb 7	[c]16.46	Sep 4, 1938
ANNUAL RUNOFF (AC-FT)	4,860		4,440		5,420	
10 PERCENT EXCEEDS	9.2		8.5		12	
50 PERCENT EXCEEDS	7.2		6.9		8.0	
90 PERCENT EXCEEDS	2.1		2.8		0.76	

a No flow at times in some years.
b From rating curve extended above 11 ft^3/s on basis of slope-area measurement.
c Site and datum then in use.
e Estimated.



06403300 FRENCH CREEK ABOVE FAIRBURN, SD

LOCATION.--Lat 43°43'02", long 103°22'03", in SW¼ SW¼ NE¼ sec.11, T.4 S., R.6 E., Custer County, Hydrologic Unit 10120109, on right bank 500 ft upstream from concrete diversion dam, 1.0 mi southwest of landing strip in Custer State Park, 1.5 mi west of east boundary of Custer State Park, 2.6 mi southwest of abandoned Fairview School, and 3.5 mi southeast of Custer State Park Headquarters.

DRAINAGE AREA.--105 mi^2, approximately.

PERIOD OF RECORD.--April 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,850 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Stockade Reservoir, capacity, 1,820 acre-ft, 12 mi upstream. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	e1.8	2.3	2.0	e1.2	e4.2	4.7	2.3	1.8	1.4	1.4	0.52
2	1.3	e1.7	2.3	e1.6	e1.4	e4.1	4.4	2.3	1.8	1.3	1.2	0.47
3	1.4	e1.7	2.2	e1.5	e1.4	e4.0	4.4	2.2	1.7	1.2	1.1	0.46
4	1.3	e1.6	e2.1	e1.2	e1.4	e4.0	4.1	2.2	1.7	1.3	1.1	0.72
5	1.3	e1.6	e2.1	e0.95	e1.4	e3.9	3.8	2.1	1.8	1.8	1.0	1.4
6	1.4	e1.6	2.1	e0.95	e1.4	e5.0	3.7	2.0	1.6	2.7	0.94	1.5
7	1.4	e1.6	2.5	e0.95	e1.4	7.3	3.7	1.8	1.5	2.6	0.86	1.7
8	1.4	e1.6	2.9	e1.5	e1.7	5.0	3.5	1.7	1.5	2.1	0.79	1.5
9	1.4	2.1	e2.8	2.2	e2.0	6.1	3.5	1.7	1.7	1.8	0.73	1.2
10	1.6	2.5	e2.7	2.7	e1.6	7.5	3.5	1.8	2.0	1.6	0.84	0.99
11	1.9	2.7	e2.7	3.0	e1.4	e10	3.8	2.3	1.9	1.6	0.81	0.92
12	1.8	2.7	e2.8	3.1	e1.4	12	3.7	2.2	2.0	1.4	0.73	0.77
13	2.0	2.4	e2.9	3.2	e1.4	7.4	3.2	2.2	1.8	1.2	0.69	0.71
14	2.0	2.4	e3.0	3.2	e1.4	e7.0	3.2	2.0	1.7	1.2	0.62	0.71
15	2.1	2.4	e2.8	3.1	e1.4	6.4	2.8	1.8	1.6	1.1	0.63	0.72
16	2.2	2.3	e2.8	2.6	e2.0	5.4	2.9	2.2	1.7	0.93	0.58	0.69
17	2.0	2.2	e2.7	2.4	e2.5	6.0	2.8	2.2	1.8	0.89	0.54	0.65
18	1.9	2.1	e2.6	2.2	e3.0	6.3	3.1	2.1	2.0	0.85	0.54	0.64
19	2.0	2.1	e2.3	e2.1	e4.0	6.9	2.9	2.4	2.1	0.70	0.48	0.65
20	2.0	2.1	e2.1	2.1	e4.5	7.1	2.8	2.8	2.2	0.78	0.46	0.70
21	1.9	e2.0	2.3	2.5	e5.0	6.5	3.4	3.2	2.1	1.2	0.42	0.86
22	1.9	e2.0	e2.7	2.0	e5.5	6.0	4.4	3.2	2.0	1.4	0.43	0.89
23	2.0	e2.0	e3.2	1.9	6.4	5.6	4.2	4.2	1.9	1.6	0.61	0.81
24	1.9	e1.9	e2.7	1.9	6.1	5.4	4.7	3.9	1.9	1.6	0.47	0.89
25	1.9	e1.9	e2.1	e1.5	5.6	5.6	4.0	4.1	2.2	1.5	0.38	0.92
26	1.9	e1.9	2.3	e1.0	4.9	6.1	3.8	3.7	2.0	1.4	0.43	0.91
27	1.9	e1.9	2.4	e1.0	4.5	6.7	3.3	3.1	1.9	1.3	0.71	0.89
28	1.9	e2.0	e2.4	e1.0	4.4	9.7	2.9	2.7	1.7	1.2	0.72	0.83
29	1.9	e2.1	e2.4	e1.0	e4.3	8.0	2.5	2.6	1.6	1.2	0.68	0.82
30	e1.9	2.3	2.5	e1.0	---	6.8	2.4	2.3	1.4	1.6	0.64	0.81
31	e1.8	---	2.3	e1.0	---	5.7	---	1.9	---	1.8	0.56	---
TOTAL	54.6	61.2	78.0	58.35	84.6	197.7	106.1	77.2	54.6	44.25	22.09	26.25
MEAN	1.76	2.04	2.52	1.88	2.92	6.38	3.54	2.49	1.82	1.43	0.71	0.88
MAX	2.2	2.7	3.2	3.2	6.4	12	4.7	4.2	2.2	2.7	1.4	1.7
MIN	1.3	1.6	2.1	0.95	1.2	3.9	2.4	1.7	1.4	0.70	0.38	0.46
AC-FT	108	121	155	116	168	392	210	153	108	88	44	52

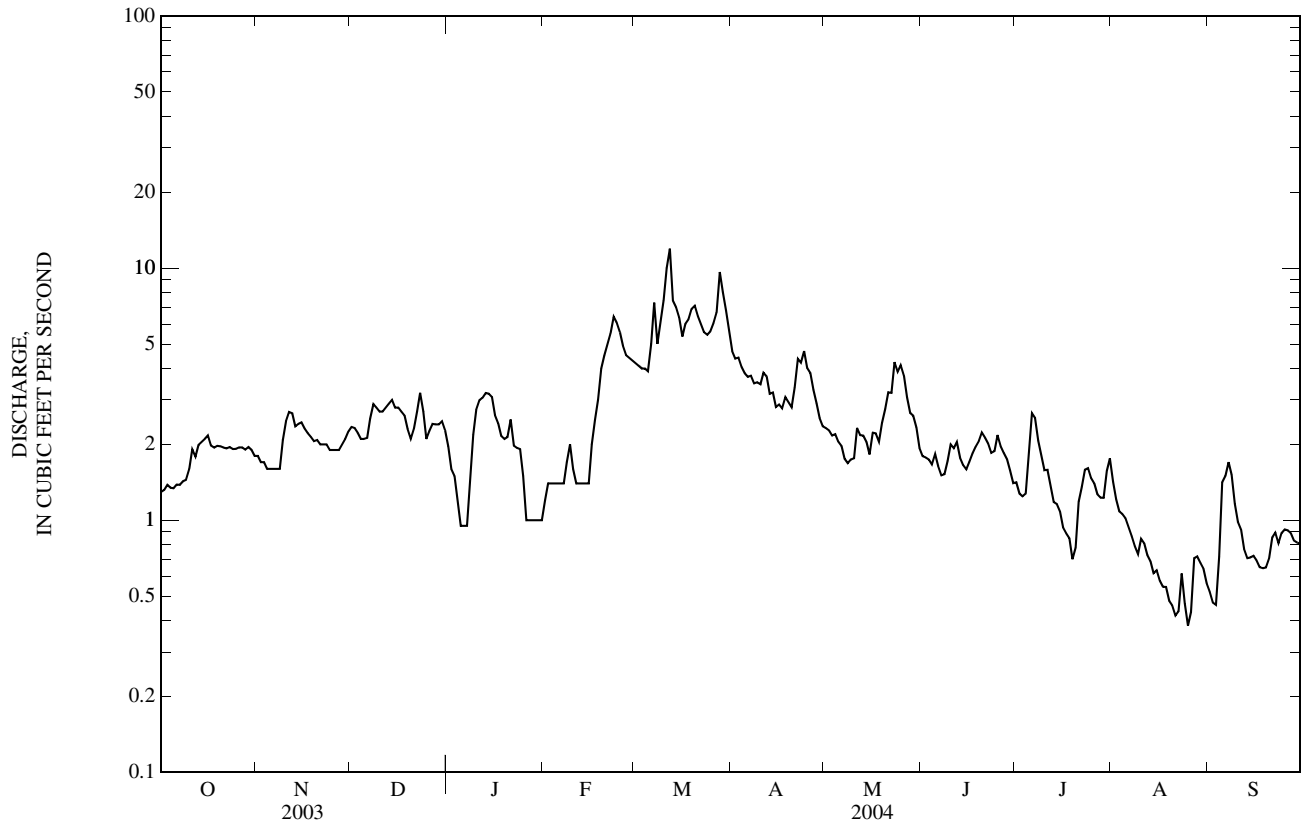
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2004, BY WATER YEAR (WY)

MEAN	6.73	7.10	4.28	3.88	4.45	10.6	13.0	26.5	28.4	12.5	9.07	5.21
MAX	24.8	46.0	24.5	15.0	17.8	24.8	45.4	147	143	46.4	42.7	17.3
(WY)	(1999)	(1999)	(1999)	(1999)	(1999)	(1987)	(1999)	(1995)	(1995)	(1995)	(1997)	(1999)
MIN	0.84	1.07	0.69	0.39	0.19	1.55	1.63	1.00	0.46	0.44	0.53	0.65
(WY)	(1988)	(1986)	(1990)	(1989)	(1989)	(2002)	(1989)	(1989)	(1989)	(1985)	(1985)	(1987)

06403300 FRENCH CREEK ABOVE FAIRBURN, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1983 - 2004	
ANNUAL TOTAL	1,942.42		864.94			
ANNUAL MEAN	5.32		2.36		[a]11.0	
HIGHEST ANNUAL MEAN					34.7	1995
LOWEST ANNUAL MEAN					1.01	1989
HIGHEST DAILY MEAN	40	Mar 19	12	Mar 12	536	May 8, 1995
LOWEST DAILY MEAN	0.83	Sep 7	0.38	Aug 25	[b]0.02	Feb 3, 1989
ANNUAL SEVEN-DAY MINIMUM	0.95	Sep 3	0.46	Aug 20	0.03	Feb 2, 1989
MAXIMUM PEAK FLOW			[c]23	Mar 12	[d]1,060	May 8, 1995
MAXIMUM PEAK STAGE			[f]1.34	Feb 10	[g]4.08	May 8, 1995
ANNUAL RUNOFF (AC-FT)	3,850		1,720		7,970	
10 PERCENT EXCEEDS	13		4.4		24	
50 PERCENT EXCEEDS	2.1		2.0		4.6	
90 PERCENT EXCEEDS	1.3		0.79		0.90	

a Median of annual mean discharges, 7.3 ft^3/s.
b Also Feb. 4, 5, 1989.
c Gage height, 1.15 ft.
d Peak flow determined from slope-area measurement.
e Estimated.
f Backwater from ice.
g From floodmarks.



06403700 CHEYENNE RIVER AT REDSHIRT, SD

LOCATION.--Lat 43°40'23", long 102°53'36", in SW¼ SE¼ NW¼ sec.26, T.4 S., R.10 E., Custer County, Hydrologic Unit 10120109, 0.8 mi northeast of Redshirt, approximately 22 mi southeast of Hermosa on State Highway 40, on right stream bank.

DRAINAGE AREA.--10,220 mi^2, approximately.

PERIOD OF RECORD.--October 1998 to current year.

REVISED RECORDS.--WDR SD-99-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,670 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Angostura Dam, conservation capacity, 82,400 acre-ft, 45 mi upstream since October 1949. Satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	e78	e85	e68	e43	e55	65	52	69	49	59	59
2	75	e79	e85	e63	e43	e60	67	50	53	80	65	53
3	76	e80	e85	e57	e43	e63	64	53	49	88	64	49
4	75	e80	e80	e51	e43	e65	65	63	45	84	64	77
5	75	e79	e70	e45	e43	e68	63	73	77	134	71	246
6	74	e79	e65	e45	e43	e70	63	63	47	98	63	177
7	73	e78	e90	e45	e43	e75	63	51	38	84	56	106
8	73	e78	e82	e51	e45	e81	63	46	30	89	50	85
9	70	e78	e75	e53	e47	85	64	47	34	87	45	80
10	71	e78	e60	e58	e49	85	64	48	56	70	51	81
11	76	e80	e50	e63	e48	77	62	51	61	62	62	73
12	78	82	e40	e70	e46	75	64	53	44	52	77	75
13	78	78	e80	e70	e46	76	64	57	38	39	66	71
14	77	78	e140	e70	e45	75	63	61	36	38	48	74
15	77	79	e125	e70	e49	75	61	55	40	42	51	74
16	76	79	e107	e70	e57	77	58	54	48	44	43	74
17	77	79	e90	e70	e68	75	53	64	64	40	40	71
18	77	80	e75	e68	e100	74	54	64	69	37	40	70
19	75	79	e70	e65	e95	76	56	58	74	37	47	71
20	75	78	e70	e66	e90	74	60	57	88	41	54	71
21	74	79	e87	e69	e88	71	87	58	97	67	58	79
22	76	81	e65	e70	e85	70	128	60	90	42	59	83
23	77	53	e66	e70	e83	71	69	84	55	58	73	83
24	76	e70	e68	e64	e81	70	66	72	45	76	72	80
25	75	e80	e70	e60	e80	68	63	65	48	77	63	79
26	76	e80	e71	e55	e84	71	63	65	57	79	60	78
27	78	e80	e71	e50	e85	69	59	71	43	72	56	77
28	77	e85	e75	e45	e90	72	55	66	42	57	63	77
29	77	e85	e71	e43	e72	70	55	76	40	66	65	78
30	e77	e85	e71	e43	---	69	57	71	35	85	66	77
31	e78	---	e71	e43	---	69	---	67	---	75	63	---
TOTAL	2,344	2,357	2,410	1,830	1,834	2,231	1,938	1,875	1,612	2,049	1,814	2,528
MEAN	75.6	78.6	77.7	59.0	63.2	72.0	64.6	60.5	53.7	66.1	58.5	84.3
MAX	78	85	140	70	100	85	128	84	97	134	77	246
MIN	70	53	40	43	43	55	53	46	30	37	40	49
AC-FT	4,650	4,680	4,780	3,630	3,640	4,430	3,840	3,720	3,200	4,060	3,600	5,010

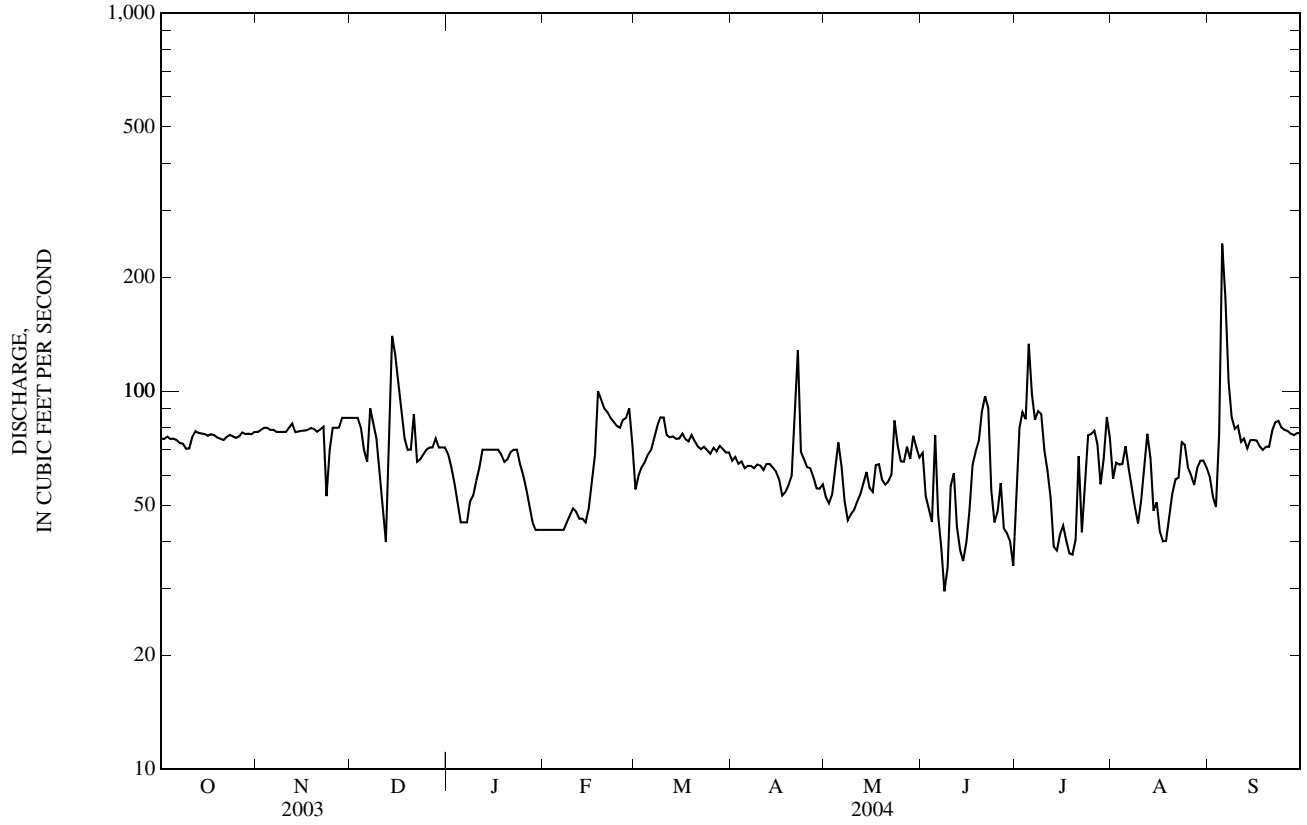
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

MEAN	122	228	89.3	77.0	83.5	143	349	202	287	90.2	83.2	92.0
MAX	277	926	147	116	139	287	1,215	441	1,344	262	185	132
(WY)	(1999)	(1999)	(1999)	(1999)	(1999)	(2001)	(2000)	(2000)	(1999)	(1999)	(1999)	(1999)
MIN	75.6	75.3	59.4	59.0	61.9	67.9	64.6	60.5	53.7	35.2	53.3	79.4
(WY)	(2004)	(2003)	(2001)	(2004)	(2001)	(2003)	(2004)	(2004)	(2004)	(2002)	(2003)	(2003)

06403700 CHEYENNE RIVER AT REDSHIRT, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL TOTAL	27,377		24,822			
ANNUAL MEAN	75.0		67.8		154	
HIGHEST ANNUAL MEAN					395	1999
LOWEST ANNUAL MEAN					67.8	2004
HIGHEST DAILY MEAN	305	May 1	246	Sep 5	7,320	Apr 24, 2000
LOWEST DAILY MEAN	33	Jul 30	30	Jun 8	20	Jan 1, 2002
ANNUAL SEVEN-DAY MINIMUM	36	Jul 27	40	Jul 13	29	Jun 30, 2002
MAXIMUM PEAK FLOW			479	Sep 5	9,070	Apr 23, 2000
MAXIMUM PEAK STAGE			11.54	Sep 5	17.48	Apr 23, 2000
ANNUAL RUNOFF (AC-FT)	54,300		49,230		111,200	
10 PERCENT EXCEEDS	110		84		224	
50 PERCENT EXCEEDS	74		70		81	
90 PERCENT EXCEEDS	45		45		50	

e Estimated.



06404000 BATTLE CREEK NEAR KEYSTONE, SD

LOCATION.--Lat 43°52'21", long 103°20'10", in SW¼ SW¼ sec.18, T.2 S., R.7 E., Pennington County, Hydrologic Unit 10120109, at right downstream end county highway bridge, 0.6 mi downstream from Iron Creek, and 4.5 mi southeast of Keystone.

DRAINAGE AREA.--58.5 mi^2.

PERIOD OF RECORD.--July 1945 to July 1947, October 1961 to current year.

REVISED RECORDS.--WDR SD-03-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 3,800 ft above NGVD of 1929, from topographic map. Prior to Nov. 13, 1961, nonrecording gage at site 250 ft downstream at different datum and Nov. 13 to Dec. 5, 1961, at same site at present datum. Dec. 6, 1961, to June 9, 1972, water-stage recorder at site 210 ft downstream at present datum (destroyed by flood); June 10 to Nov. 20, 1972, nonrecording gage 180 ft downstream at present datum; Nov. 21, 1972, to Nov. 27, 1973, water-stage recorder at present site and datum; Nov. 28, 1973, to Nov. 7, 1974, nonrecording gage 180 ft downstream at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.05	e0.18	1.1	0.47	e0.45	e1.3	2.3	1.2	1.6	1.8	0.47	0.00
2	0.06	e0.16	1.1	0.61	e0.45	e1.3	2.2	1.1	1.3	1.5	0.32	0.00
3	0.03	e0.14	0.98	0.55	e0.45	e1.3	2.4	0.91	1.3	1.6	0.26	0.00
4	0.02	e0.12	0.83	e0.40	e0.44	e1.3	2.9	0.81	1.3	1.3	0.41	0.00
5	0.02	e0.11	0.63	e0.35	e0.44	e1.3	2.6	0.74	2.9	1.9	0.50	1.5
6	0.04	e0.10	0.57	e0.20	e0.43	2.0	3.1	0.65	1.6	1.7	0.52	2.3
7	0.04	e0.10	0.88	e0.15	e0.43	2.5	1.7	0.57	1.1	1.2	0.72	1.5
8	0.04	e0.10	1.1	e0.02	e0.50	1.8	1.6	0.54	0.92	0.98	0.49	1.1
9	0.06	e0.20	0.98	e0.01	e0.50	3.3	1.6	0.49	1.1	0.82	0.33	0.74
10	0.04	e0.58	e0.93	e0.02	e0.52	e4.0	1.3	0.56	2.1	0.67	0.26	0.83
11	0.10	0.77	e0.87	e0.01	e0.53	e4.5	1.4	1.7	1.8	0.64	0.18	2.3
12	0.11	0.83	e0.84	e0.12	e0.42	e3.5	1.5	1.5	1.4	0.53	0.10	1.5
13	0.11	0.76	e0.77	e0.20	e0.40	2.8	1.3	1.7	1.1	0.36	0.08	0.76
14	0.17	0.89	0.74	e0.30	0.38	2.6	1.1	1.4	0.96	0.24	0.06	0.57
15	0.17	1.0	0.80	0.41	0.43	2.0	1.1	1.1	0.81	0.21	0.03	0.53
16	0.18	0.90	0.90	0.43	0.37	2.1	2.0	1.4	1.0	0.37	0.00	0.45
17	0.16	0.95	0.75	0.51	0.52	2.6	0.85	1.8	1.7	0.25	0.00	0.28
18	0.13	0.90	0.92	0.58	0.59	3.5	0.92	1.5	1.7	0.12	0.00	0.24
19	0.14	0.93	0.79	e0.60	0.81	4.3	0.96	1.3	1.4	0.05	0.00	0.19
20	0.15	0.99	0.52	0.72	0.99	3.9	0.85	1.3	1.5	2.0	0.00	0.27
21	0.15	0.68	0.70	0.76	e2.0	2.8	1.2	3.3	3.6	2.7	0.00	0.95
22	0.13	e0.65	0.89	0.74	e1.5	2.3	4.1	4.3	2.4	1.4	0.00	0.82
23	0.14	e0.60	1.4	0.64	e1.1	2.2	3.0	8.2	2.0	1.8	0.00	0.71
24	0.13	e0.55	1.0	0.75	e2.0	2.4	2.5	6.5	1.8	2.2	0.00	0.66
25	0.13	e0.53	0.91	e0.70	1.9	2.6	2.1	4.4	1.7	1.6	0.00	0.50
26	0.16	e0.52	0.98	e0.65	2.0	2.6	1.8	3.2	1.4	1.1	0.00	0.36
27	0.14	e0.50	1.0	e0.60	1.9	3.6	1.5	2.5	1.3	0.87	0.00	0.30
28	0.18	e0.65	e0.90	e0.55	1.9	3.5	1.3	2.1	1.0	0.81	0.00	0.30
29	0.21	e0.81	e0.70	e0.50	e1.5	2.3	1.4	1.9	0.87	0.73	0.00	0.24
30	e0.21	0.98	0.60	e0.48	---	1.6	1.3	3.3	0.91	0.76	0.00	0.23
31	e0.20	---	0.61	e0.45	---	1.8	---	2.1	---	0.67	0.00	---
TOTAL	3.60	17.18	26.69	13.48	25.85	79.6	53.88	64.07	45.57	32.88	4.73	20.13
MEAN	0.12	0.57	0.86	0.43	0.89	2.57	1.80	2.07	1.52	1.06	0.15	0.67
MAX	0.21	1.0	1.4	0.76	2.0	4.5	4.1	8.2	3.6	2.7	0.72	2.3
MIN	0.02	0.10	0.52	0.01	0.37	1.3	0.85	0.49	0.81	0.05	0.00	0.00
AC-FT	7.1	34	53	27	51	158	107	127	90	65	9.4	40

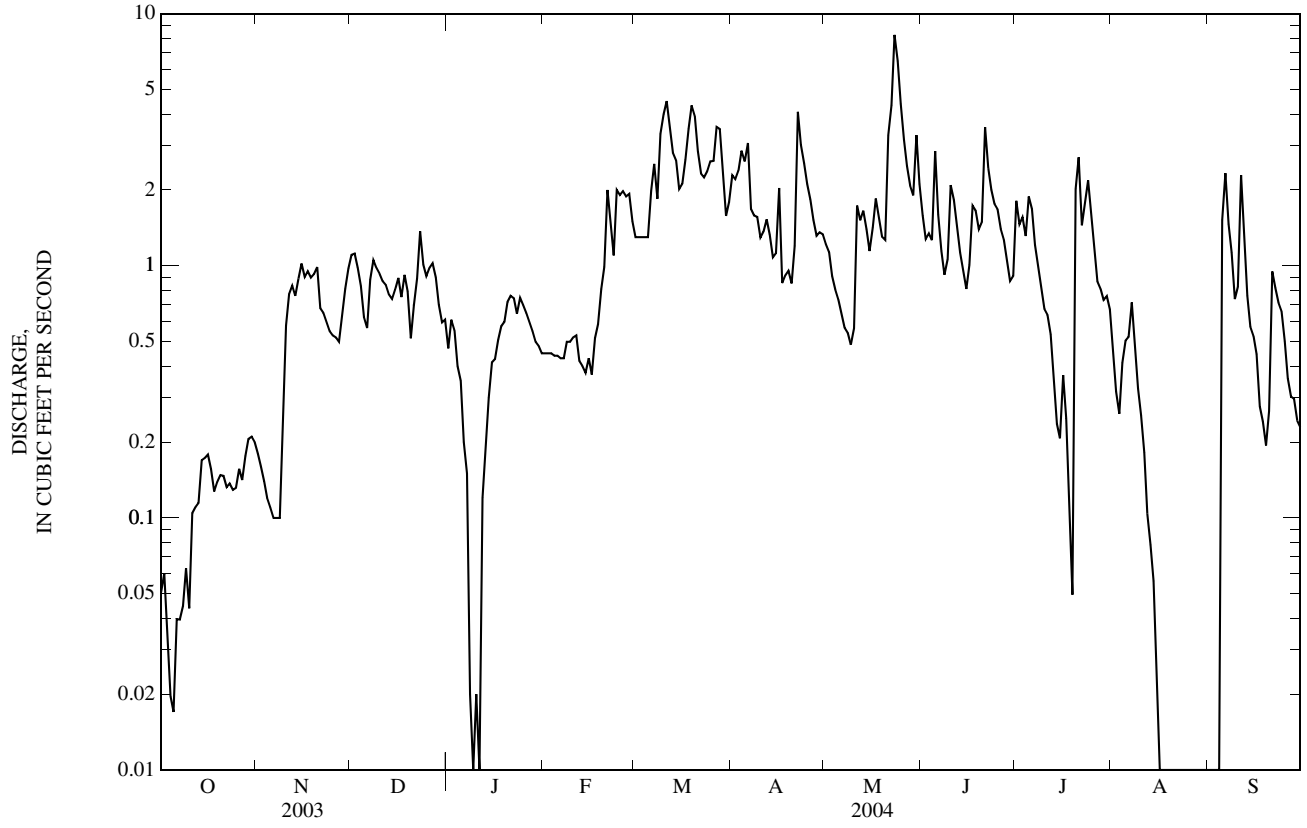
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2004, BY WATER YEAR (WY)

MEAN	3.00	3.43	2.47	1.78	2.03	3.93	9.80	28.6	36.8	11.8	4.86	2.18
MAX	22.5	36.0	25.8	12.7	9.57	12.8	38.8	153	199	46.3	20.5	7.20
(WY)	(1999)	(1999)	(1999)	(1997)	(1996)	(1987)	(1971)	(1995)	(1972)	(1962)	(1999)	(1997)
MIN	0.00	0.00	0.00	0.00	0.00	0.46	1.49	1.24	0.22	0.04	0.00	0.00
(WY)	(1962)	(1989)	(1989)	(1962)	(1989)	(1962)	(1981)	(1985)	(1985)	(1989)	(1989)	(1975)

06404000 BATTLE CREEK NEAR KEYSTONE, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1962 - 2004	
ANNUAL TOTAL	1,484.36		387.66			
ANNUAL MEAN	4.07		1.06		[a]9.23	
HIGHEST ANNUAL MEAN					27.7	1995
LOWEST ANNUAL MEAN					0.69	1988
HIGHEST DAILY MEAN	56	May 2	8.2	May 23	2,400	Jun 10, 1972
LOWEST DAILY MEAN	0.00	Aug 4	0.00	Aug 16	[b]0.00	Oct 1, 1961
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 24	0.00	Aug 16	0.00	Oct 1, 1961
MAXIMUM PEAK FLOW			[c]19	May 22	[d]26,200	Jun 9, 1972
MAXIMUM PEAK STAGE			[f]3.83	Jan 13	[d]14.50	Jun 9, 1972
ANNUAL RUNOFF (AC-FT)	2,940		769		6,690	
10 PERCENT EXCEEDS	11		2.3		18	
50 PERCENT EXCEEDS	0.88		0.81		2.5	
90 PERCENT EXCEEDS	0.04		0.06		0.26	

a Median of annual mean discharges, 7.1 ft^3/s.
b No flow at times in some years.
c Gage height, 3.77 ft.
d From floodmarks, site then in use, from rating curve extended above 5.5 ft^3/s on basis of slope-area measurement of peak flow.
e Estimated.
f Backwater from ice.



06404998 GRACE COOLIDGE CREEK NEAR GAME LODGE, NEAR CUSTER, SD

LOCATION.--Lat 43°45'40", long 103°21'49", in SW¼ NE¼ sec.26, T.3 S., R.6 E., Custer County, Hydrologic Unit 10120109, on right bank 0.3 mi downstream from bridge on U.S. Highway 16A, 0.9 mi east of Game Lodge, 1.5 mi southwest of junction of State Highway 36 and U.S. Highway 16A, and 11.5 mi east of Custer.

DRAINAGE AREA.--26.8 mi^2 (revised).

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

REVISED RECORDS.--WDR SD-88-1: 1988(M).

GAGE.--Water-stage recorder. Elevation of gage is 4,100 ft above NGVD of 1929, from topographic map. From July 17, 1945, to July 31, 1947, nonrecording gage at site 1,800 ft upstream and different datum. June 1967 to June 13, 1976, at site 500 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Considerable loss occurs to sinkholes downstream from gage. Satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 10, 1972, reached a stage of 10.35 ft, from floodmarks, discharge, 709 ft^3/s from slope-area measurement of peak flow. Flood of June 15, 1976, reached a stage of 10.90 ft, from floodmarks, discharge, 980 ft^3/s on basis of slope-area measurement of 10.35 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.92	e0.90	e1.2	1.4	e0.80	e0.65	1.0	1.1	1.1	0.58	0.51	0.43
2	0.88	e0.89	e1.2	1.5	e0.75	e0.63	1.0	1.0	0.96	0.64	0.52	0.41
3	0.85	e0.89	e1.2	2.0	e0.75	e0.60	1.1	0.97	0.90	0.67	1.0	0.43
4	0.86	e0.89	e1.1	1.5	e0.70	e0.68	1.0	1.0	0.86	0.60	1.6	0.68
5	0.86	e0.89	e1.1	0.89	e0.70	e0.75	1.0	0.89	1.1	0.90	0.85	1.4
6	0.87	e0.88	e1.1	0.73	e0.65	0.86	1.0	0.84	0.87	0.72	0.81	0.96
7	0.87	0.95	e1.1	e1.2	e0.60	0.83	0.98	0.83	0.74	0.59	0.84	0.54
8	e0.67	0.95	e1.1	e2.0	e1.0	0.98	1.0	0.81	0.72	0.53	0.63	0.47
9	e0.71	1.0	e1.0	e2.1	e1.1	1.3	1.0	0.83	0.85	0.53	0.58	0.45
10	e0.67	1.3	e1.0	2.2	e1.1	1.4	1.0	0.88	1.0	0.51	0.63	0.42
11	e0.64	1.3	e0.99	1.5	e0.70	1.1	1.1	1.5	0.93	0.52	0.64	0.42
12	e0.61	1.2	e0.99	1.3	e0.60	1.1	1.1	1.3	0.78	0.46	0.59	0.41
13	e0.58	1.0	e1.0	1.3	e0.60	1.1	1.1	1.2	0.74	0.46	0.59	0.40
14	e0.55	1.1	e1.1	1.3	e0.60	1.2	1.0	1.1	0.73	0.52	0.54	0.45
15	e0.58	1.1	e1.1	1.2	e0.60	1.2	0.96	1.0	0.71	0.59	0.52	0.54
16	e0.67	1.1	e1.2	1.2	e1.0	1.2	0.93	1.4	0.80	0.54	0.49	0.47
17	e0.86	1.1	e1.2	1.2	e1.3	1.3	0.96	1.4	0.99	0.46	0.48	0.44
18	e0.67	1.1	e1.1	1.1	e1.5	1.4	1.2	1.2	0.88	0.43	0.51	0.41
19	e0.53	1.1	e1.0	e1.1	1.7	1.5	1.4	1.1	0.85	0.38	0.48	0.39
20	e0.48	e1.3	e1.0	e1.1	1.3	1.5	1.1	1.2	1.0	0.66	0.48	0.44
21	e0.53	e1.2	e0.90	e1.1	1.2	1.4	1.4	1.6	1.0	0.74	0.48	0.52
22	e0.67	e1.1	e0.80	1.1	1.1	1.3	2.0	1.3	0.79	0.61	0.50	0.58
23	e0.61	e1.1	e0.70	1.1	1.1	1.2	1.7	1.6	0.72	0.82	0.62	0.55
24	e0.45	e1.0	e1.0	1.1	0.98	1.2	1.5	1.6	0.72	1.00	0.51	0.51
25	e0.39	e1.0	e1.3	1.1	0.82	1.3	1.6	1.5	0.78	0.72	0.44	0.47
26	e0.31	e1.0	e1.3	e1.0	0.70	1.3	1.4	1.3	0.72	0.61	0.47	0.46
27	e0.94	e0.99	e1.3	e1.0	0.68	1.7	1.2	1.3	0.70	0.56	0.61	0.44
28	e0.94	e0.98	e1.3	e0.99	0.70	1.5	1.1	1.2	0.64	0.57	0.63	0.46
29	e0.94	e1.1	e1.3	e0.90	e0.69	1.3	1.2	1.2	0.61	0.58	0.54	0.47
30	e0.94	e1.1	e1.3	e0.85	---	1.3	1.1	1.2	0.57	0.65	0.49	0.48
31	e0.94	---	e1.3	e0.85	---	1.1	---	1.2	---	0.60	0.46	---
TOTAL	21.99	31.51	34.28	38.91	26.02	35.88	35.13	36.55	24.76	18.75	19.04	15.50
MEAN	0.71	1.05	1.11	1.26	0.90	1.16	1.17	1.18	0.83	0.60	0.61	0.52
MAX	0.94	1.3	1.3	2.2	1.7	1.7	2.0	1.6	1.1	1.0	1.6	1.4
MIN	0.31	0.88	0.70	0.73	0.60	0.60	0.93	0.81	0.57	0.38	0.44	0.39
AC-FT	44	63	68	77	52	71	70	72	49	37	38	31

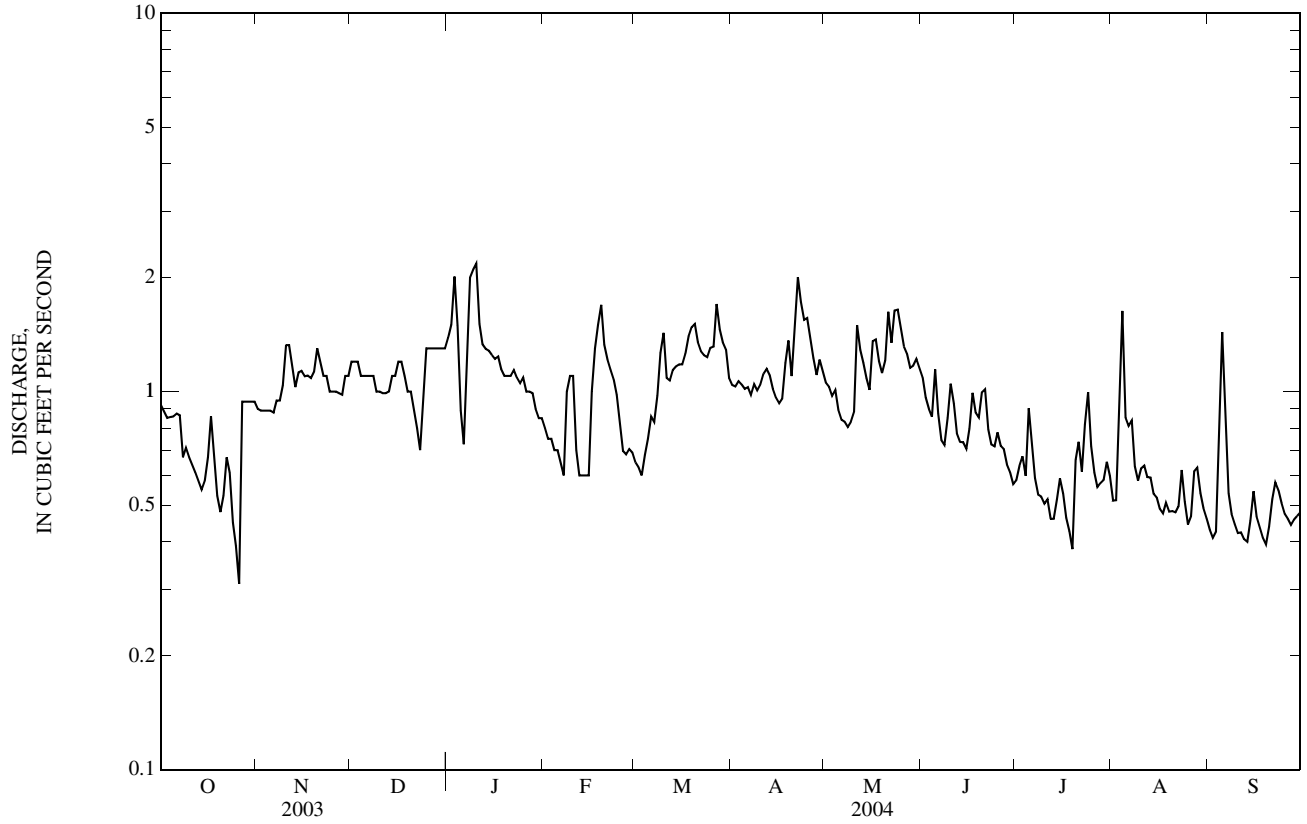
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2004, BY WATER YEAR (WY)

MEAN	3.14	3.27	2.21	1.92	1.73	2.39	4.47	16.3	12.6	5.38	3.85	2.57
MAX	14.7	25.2	11.9	8.13	6.44	6.41	25.3	115	66.8	22.3	14.3	7.51
(WY)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(1995)	(1995)	(1979)	(1997)	(1997)
MIN	0.36	0.41	0.32	0.45	0.00	0.61	0.63	0.67	0.25	0.10	0.26	0.13
(WY)	(1989)	(1986)	(1986)	(1988)	(1989)	(1981)	(1981)	(1977)	(1988)	(1988)	(1985)	(1988)

06404998 GRACE COOLIDGE CREEK NEAR GAME LODGE, NEAR CUSTER, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1977 - 2004	
ANNUAL TOTAL	927.47		338.32			
ANNUAL MEAN	2.54		0.92		5.01	
HIGHEST ANNUAL MEAN					19.1	1995
LOWEST ANNUAL MEAN					0.61	1988
HIGHEST DAILY MEAN	33	May 9	2.2	Jan 10	505	May 8, 1995
LOWEST DAILY MEAN	0.31	Oct 26	0.31	Oct 26	[a]0.00	Jun 5, 1977
ANNUAL SEVEN-DAY MINIMUM	0.49	Oct 20	0.43	Sep 8	0.00	Sep 1, 1988
MAXIMUM PEAK FLOW			[b]2.8	Aug 4	[c]1,030	Sep 7, 1989
MAXIMUM PEAK STAGE			[d]7.40	Feb 17	[d]12.76	Feb 9, 1979
ANNUAL RUNOFF (AC-FT)	1,840		671		3,630	
10 PERCENT EXCEEDS	5.5		1.3		9.8	
50 PERCENT EXCEEDS	1.3		0.94		2.0	
90 PERCENT EXCEEDS	0.66		0.48		0.58	

a No flow for some days in 1977, part of June 14, 1979, 1985, 1988, and 1989.
b Gage height, 6.79 ft.
c Gage height, 10.84 ft, from floodmarks, from rating curve extended above 709 ft^3/s on basis of slope-area measurement of peak flow.
d Backwater from ice.
e Estimated.



06406000 BATTLE CREEK AT HERMOSA, SD

LOCATION.--Lat 43°49'41", long 103°11'44", in NE¼ SW¼ SW¼ sec.32, T.2 S., R.8 E., Custer County, Hydrologic Unit 10120109, on right bank 50 ft downstream from Chicago and North Western Transportation Company bridge, 0.8 mi south of Hermosa, and 2.9 mi downstream from Grace Coolidge Creek.

DRAINAGE AREA.--178 mi^2.

PERIOD OF RECORD.--August to December 1903 (gage heights only), July 1949 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,290 ft above NGVD of 1929, from topographic map. Nonrecording gage, August to December 1903, at site 50 ft upstream, July 7, 1949, to Nov. 2, 1950, at site 0.5 mi upstream, Nov. 3, 1950, to Dec. 6, 1961, at site 170 ft downstream, all at different datum. Dec. 7, 1961, to June 10, 1972, water-stage recorder (destroyed by flood), and June 11, 1972, to Aug. 28, 1972, nonrecording gage at site 80 ft downstream at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	7.1	8.4	7.8	8.1	6.4	6.9	7.2	4.5	4.8	3.6	2.3
2	8.5	7.1	8.0	7.6	7.7	e5.5	6.9	7.2	5.9	4.8	3.1	2.1
3	8.3	8.0	8.0	6.3	7.3	e5.5	6.9	7.1	5.7	2.5	3.6	1.9
4	8.2	7.7	7.9	6.3	e7.0	e5.5	7.2	6.8	5.8	4.1	5.4	3.0
5	8.2	7.7	6.9	6.2	e6.5	e6.0	7.3	6.6	6.4	6.5	4.7	5.1
6	8.3	e7.6	8.1	5.8	e6.0	6.8	7.1	6.5	2.0	6.2	4.4	4.2
7	8.0	e7.6	8.3	6.7	e5.5	6.6	7.2	6.3	3.2	5.1	4.9	3.0
8	8.1	e7.6	8.0	8.0	e5.0	6.8	7.1	5.9	5.1	4.6	4.2	2.7
9	7.9	e7.5	7.9	8.4	e5.0	7.1	6.4	5.7	6.0	4.4	3.8	2.4
10	7.4	e8.0	7.3	8.2	e5.0	7.1	4.0	5.7	6.8	4.2	3.8	2.2
11	8.3	e8.3	7.0	8.0	e5.0	6.6	7.7	7.0	6.3	4.1	4.0	2.4
12	7.8	8.5	6.3	7.6	e5.0	6.7	7.9	7.3	4.1	3.1	3.9	2.1
13	8.0	8.7	7.5	7.4	e5.0	6.7	4.2	7.5	4.6	3.2	3.8	1.9
14	8.6	8.9	8.3	7.5	e5.0	6.6	3.8	7.4	4.5	3.0	3.8	2.2
15	8.8	8.8	8.2	7.4	e5.0	7.2	3.6	6.8	4.4	3.7	3.4	2.4
16	8.9	8.7	7.4	7.4	e5.2	7.3	6.6	7.6	4.9	3.7	3.1	2.3
17	8.9	8.7	7.7	7.2	e5.8	6.8	6.6	7.8	5.9	2.9	3.2	2.2
18	8.6	9.1	7.2	7.3	e6.5	6.7	6.5	7.2	6.0	3.3	3.5	2.2
19	8.7	8.6	6.8	7.3	6.4	6.5	7.1	7.0	5.9	2.8	3.4	1.9
20	8.3	8.0	7.6	7.6	5.9	6.2	6.8	6.7	6.2	2.7	3.8	2.2
21	8.3	e7.9	7.6	7.5	5.8	6.1	7.5	7.9	6.4	3.2	3.6	2.6
22	8.2	e7.8	7.7	7.5	6.2	6.5	9.2	7.5	5.4	3.3	4.2	3.2
23	8.5	e7.7	7.2	7.6	5.8	6.6	7.7	7.8	5.2	4.0	3.8	3.3
24	8.5	e7.8	7.1	7.7	5.8	6.4	7.3	7.2	4.3	4.8	3.1	3.4
25	9.3	e7.9	7.4	7.8	5.9	6.5	7.1	6.8	4.0	4.0	2.7	3.1
26	9.5	8.0	7.4	6.8	5.8	6.6	7.1	6.6	4.9	3.6	2.9	2.6
27	9.5	8.2	7.5	6.3	5.8	7.1	6.9	6.4	4.4	3.3	3.5	2.3
28	8.0	7.7	7.2	6.3	6.0	6.9	6.9	6.3	3.8	3.5	3.5	2.2
29	6.0	8.6	6.2	6.8	7.2	6.9	7.3	6.4	3.7	3.9	3.1	2.4
30	6.2	8.4	6.8	7.4	---	6.9	7.3	7.4	4.5	4.0	2.9	2.6
31	6.7	---	6.9	7.9	---	6.9	---	6.1	---	3.4	2.7	---
TOTAL	255.0	242.2	231.8	225.6	172.2	204.0	202.1	213.7	150.8	120.7	113.4	78.4
MEAN	8.23	8.07	7.48	7.28	5.94	6.58	6.74	6.89	5.03	3.89	3.66	2.61
MAX	9.5	9.1	8.4	8.4	8.1	7.3	9.2	7.9	6.8	6.5	5.4	5.1
MIN	6.0	7.1	6.2	5.8	5.0	5.5	3.6	5.7	2.0	2.5	2.7	1.9
AC-FT	506	480	460	447	342	405	401	424	299	239	225	156

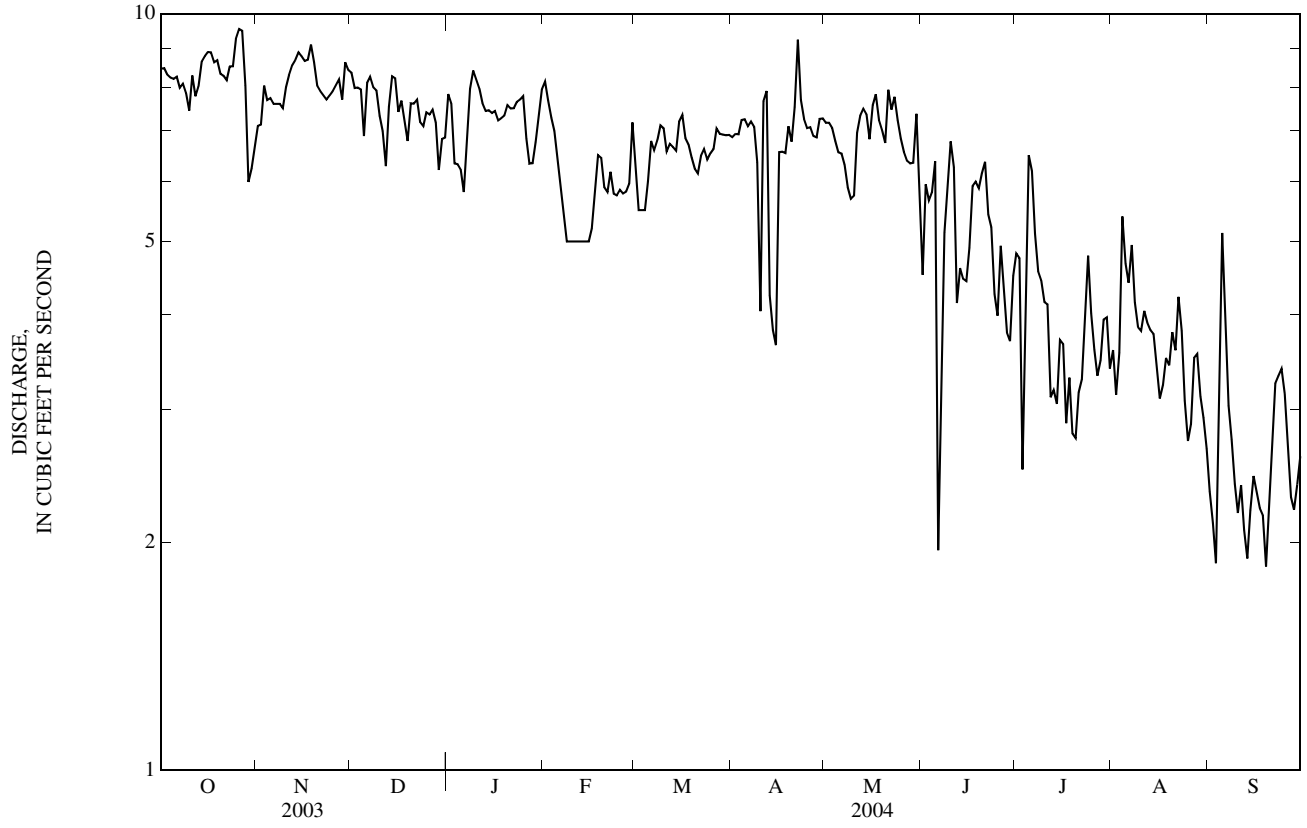
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2004, BY WATER YEAR (WY)

MEAN	7.75	8.35	7.14	6.44	6.06	6.51	9.23	32.3	42.1	16.4	9.22	7.20
MAX	39.5	62.4	48.3	41.6	38.0	34.8	68.7	234	231	75.5	53.1	41.7
(WY)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(1995)	(1995)	(1962)	(1999)	(1999)
MIN	0.10	0.10	0.10	0.19	0.31	0.41	0.34	0.74	0.78	0.23	0.17	0.05
(WY)	(1956)	(1962)	(1962)	(1962)	(1962)	(1962)	(1962)	(1955)	(1954)	(1989)	(1961)	(1955)

06406000 BATTLE CREEK AT HERMOSA, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1950 - 2004	
ANNUAL TOTAL	3,820.0		2,209.9			
ANNUAL MEAN	10.5		6.04		[a]13.2	
HIGHEST ANNUAL MEAN					59.8	1999
LOWEST ANNUAL MEAN					0.99	1955
HIGHEST DAILY MEAN	34	May 10	9.5	Oct 26	1,750	Jun 10, 1972
LOWEST DAILY MEAN	4.5	Aug 22	1.9	Sep 3	[b]0.00	Oct 6, 1954
ANNUAL SEVEN-DAY MINIMUM	5.5	Aug 21	2.2	Sep 13	0.00	Oct 9, 1954
MAXIMUM PEAK FLOW			[c]13	Nov 28	[d]21,400	Jun 10, 1972
MAXIMUM PEAK STAGE			2.69	Nov 28	[d]17.72	Jun 10, 1972
ANNUAL RUNOFF (AC-FT)	7,580		4,380		9,590	
10 PERCENT EXCEEDS	17		8.2		29	
50 PERCENT EXCEEDS	8.8		6.6		4.5	
90 PERCENT EXCEEDS	7.0		3.1		1.2	

a Median of annual mean discharges, 6.9 ft^3/s.
b No flow at times in 1954-57, 1959, and 1989.
c Also Oct. 25, gage height, 2.68 ft.
d From floodmarks, from rating curve extended above 2,800 ft^3/s on basis of contracted-opening and flow-over-railroad embankment measurement of peak flow.
e Estimated.



06406500 BATTLE CREEK BELOW HERMOSA, SD

LOCATION.--Lat 43°43'32", long 102°54'22" (revised), in NE¼ SW¼ SE¼ sec.3, T.4 S., R.10 E., Pennington County, Hydrologic Unit 10120109, at left downstream side of bridge on State Highway 40, approximately 9 mi upstream from mouth, and 18.0 mi southeast of Hermosa.

DRAINAGE AREA.--285 mi^2.

PERIOD OF RECORD.--October 1950 to September 1953, October 1988 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,810 ft above NGVD of 1929, from topographic map. Oct. 1, 1950, to Sept. 30, 1953, nonrecording gage at same site and different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Most of the flow is diverted, except after large storm events, for irrigation of about 1,000 acres upstream from station during irrigation season. Satellite data-collection platform at site. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1972 reached a stage of about 4 ft (present datum) higher than that of May 23, 1952, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	5.7	11	e9.0	e9.2	e7.5	4.6	6.6	2.4	2.0	0.64	0.18
2	5.0	5.6	11	e8.5	e9.0	e7.0	4.5	6.4	3.0	1.4	0.46	0.10
3	5.0	6.4	15	e7.5	e8.9	e7.5	4.4	6.7	3.5	1.1	0.45	0.01
4	4.7	e6.2	12	e7.0	e8.4	e9.2	4.6	6.9	3.6	1.3	0.49	0.87
5	4.8	e6.0	e11	e6.5	e8.0	e10	4.8	6.5	5.4	2.1	0.51	1.5
6	4.9	e5.9	e11	e6.5	e7.3	e11	4.7	6.3	3.6	5.4	0.47	0.95
7	4.9	e5.7	9.5	e7.0	e7.0	e12	4.5	5.7	3.2	4.3	0.42	0.76
8	4.7	e5.5	11	e8.0	e6.5	e12	4.7	5.0	3.2	3.7	0.41	0.74
9	4.3	e5.0	10	e8.5	e6.2	e11	4.8	3.5	3.1	2.3	0.37	0.93
10	3.9	e7.0	e9.5	e8.5	e6.0	e11	4.7	3.5	2.4	1.8	0.37	0.95
11	3.9	11	e8.0	e8.9	e6.0	e11	4.7	3.2	1.9	1.8	0.36	0.86
12	4.4	8.9	e7.5	e8.9	e5.8	e12	4.9	3.6	1.9	1.5	0.36	0.83
13	4.5	8.9	e7.5	e8.9	e5.4	16	4.6	4.3	2.4	1.3	0.35	0.82
14	5.5	9.0	e10	e8.9	e5.0	13	4.4	4.8	2.3	0.83	0.33	1.1
15	5.3	8.6	e13	e8.9	e5.2	11	4.6	5.4	2.3	0.67	0.32	1.2
16	5.5	8.3	e12	e8.9	e6.0	10	4.3	6.2	1.8	0.46	0.28	1.1
17	5.5	8.1	e11	e8.9	e8.0	10	4.0	5.6	1.5	0.41	0.25	0.99
18	5.8	8.6	e12	e8.9	e8.5	9.5	4.1	5.4	1.7	0.58	0.30	0.90
19	5.8	7.9	e12	e9.0	e8.0	9.5	5.4	6.0	2.2	0.42	0.28	0.82
20	5.7	8.3	e13	e9.0	e7.0	8.7	5.2	6.1	3.0	0.36	0.29	0.81
21	5.6	8.7	e11	e9.0	e8.0	8.2	5.6	5.6	3.4	0.46	0.28	0.86
22	6.1	e8.2	e9.5	e9.0	e7.0	7.9	6.7	6.1	3.2	0.55	0.34	0.92
23	5.8	e8.0	e9.0	e9.0	e6.5	6.5	4.9	6.5	2.9	0.63	0.26	1.1
24	5.6	e7.9	e9.0	e8.5	e7.0	4.0	4.8	6.3	2.6	0.85	0.25	1.2
25	5.6	e7.9	e9.1	e8.4	e7.0	4.1	4.7	5.6	2.1	0.83	0.25	1.1
26	5.8	e10	e9.1	e8.0	e7.9	4.4	4.3	6.2	1.8	0.75	0.21	1.2
27	6.1	e11	e9.0	e7.6	e8.8	4.9	4.2	5.6	1.9	0.76	0.21	1.2
28	6.7	12	e8.9	e8.0	e10	4.4	4.0	4.5	1.8	0.79	0.24	1.2
29	6.9	9.8	e8.0	e8.9	e9.0	4.1	4.0	3.5	1.7	0.88	0.26	1.3
30	7.0	11	e8.0	e9.0	---	4.2	5.6	3.4	1.6	0.91	0.22	1.3
31	6.4	---	e8.0	e9.5	---	4.3	---	2.6	---	0.79	0.20	---
TOTAL	166.8	241.1	315.6	261.1	212.6	265.9	141.3	163.6	77.4	41.93	10.43	27.80
MEAN	5.38	8.04	10.2	8.42	7.33	8.58	4.71	5.28	2.58	1.35	0.34	0.93
MAX	7.0	12	15	9.5	10	16	6.7	6.9	5.4	5.4	0.64	1.5
MIN	3.9	5.0	7.5	6.5	5.0	4.0	4.0	2.6	1.5	0.36	0.20	0.01
AC-FT	331	478	626	518	422	527	280	325	154	83	21	55

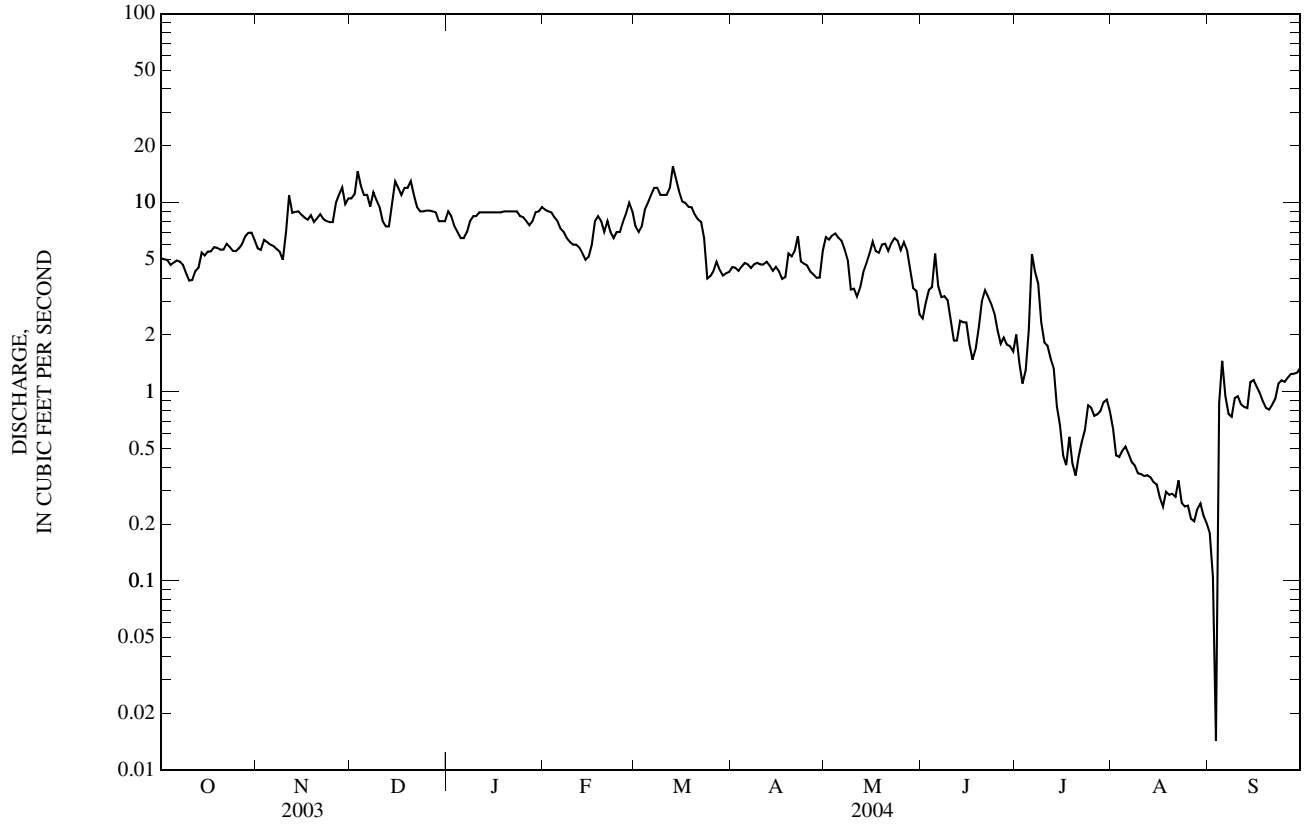
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1953, 1989 - 2004, BY WATER YEAR (WY)

MEAN	13.4	15.8	12.8	12.0	14.4	14.5	18.5	60.3	66.9	22.1	15.6	12.4
MAX	41.5	59.7	39.4	37.4	68.9	41.5	78.9	233	266	72.1	57.9	44.4
(WY)	(2000)	(1999)	(1999)	(1997)	(1997)	(1999)	(1999)	(1995)	(1995)	(1999)	(1999)	(1999)
MIN	0.00	0.00	0.00	0.00	0.00	0.44	0.59	0.71	0.03	0.00	0.00	0.00
(WY)	(1953)	(1989)	(1989)	(1989)	(1989)	(1990)	(1990)	(1989)	(1989)	(1989)	(1989)	(1952)

06406500 BATTLE CREEK BELOW HERMOSA, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1951-1953, 1989-2004	
ANNUAL TOTAL	3,523.9		1,925.56			
ANNUAL MEAN	9.65		5.26		[a]23.2	
HIGHEST ANNUAL MEAN					63.3	1999
LOWEST ANNUAL MEAN					0.40	1989
HIGHEST DAILY MEAN	34	May 11	16	Mar 13	1,760	May 23, 1952
LOWEST DAILY MEAN	1.2	Aug 28	0.01	Sep 3	[b]0.00	Oct 1, 1950
ANNUAL SEVEN-DAY MINIMUM	1.5	Aug 23	0.17	Aug 28	0.00	Oct 1, 1950
MAXIMUM PEAK FLOW			[c]26	Sep 4	[d]2,060	May 23, 1952
MAXIMUM PEAK STAGE			[f]2.85	Feb 17	9.30	May 9, 1995
ANNUAL RUNOFF (AC-FT)	6,990		3,820		16,830	
10 PERCENT EXCEEDS	21		9.6		45	
50 PERCENT EXCEEDS	8.0		5.4		9.0	
90 PERCENT EXCEEDS	3.9		0.48		0.10	

a Median of annual mean discharges, 21 ft^3/s.
b No flow for many days in most years.
c Gage height, 2.73 ft.
d From rating curve extended above 110 ft^3/s, gage height, 8.13 ft, different datum.
e Estimated.
f Backwater from ice.



06406920 SPRING CREEK ABOVE SHERIDAN LAKE, NEAR KEYSTONE, SD

LOCATION.--Lat 43°57'39", long 103°29'18", in SE¼ NE¼ SW¼ sec.14, T.1 S., R.5 E., Pennington County, Hydrologic Unit 10120109, on left bank 0.25 mi upstream from Sheridan Lake and 1.5 mi northeast of the junction of State Highways 16 and 385.

DRAINAGE AREA.--127 mi^2.

REVISED RECORDS.--WDR SD-93-1: Drainage area.

PERIOD OF RECORD.--August 1990 to September 2004 (discontinued).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 4,650 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	3.0	e2.4	e1.1	e0.70	e1.8	5.8	5.3	2.6	2.5	7.4	0.04
2	2.8	e2.9	e2.5	e1.0	e0.70	e1.7	5.7	4.9	2.3	2.0	6.3	0.00
3	2.8	e2.9	e2.5	e0.70	e0.70	e1.6	5.7	4.6	2.1	2.0	6.2	0.00
4	2.9	e2.9	e2.4	e0.50	e0.80	e1.6	5.6	4.5	1.9	1.7	8.1	0.07
5	2.6	e2.9	e2.3	e0.40	e0.80	e1.6	5.5	4.3	2.2	4.6	6.8	0.58
6	2.5	e2.9	e2.4	e0.30	e0.90	e1.7	5.4	3.9	2.7	4.6	7.2	1.6
7	2.5	e3.0	e2.4	e0.60	e0.90	e1.8	5.3	3.7	2.1	3.4	6.7	0.97
8	2.5	e3.2	e2.3	e0.70	e1.0	e2.0	5.2	3.4	1.7	2.5	5.1	0.97
9	2.4	e3.6	e2.1	e0.90	e1.1	e2.2	5.1	3.2	1.7	2.0	3.2	1.1
10	2.5	e3.8	e2.0	e1.0	e1.2	e2.7	4.9	3.1	3.2	1.6	2.5	1.4
11	2.6	e3.9	e1.9	e1.2	e1.1	e3.1	4.8	4.2	2.8	1.4	2.2	2.2
12	2.6	e3.8	e1.8	e1.3	e1.1	e3.7	4.5	4.9	2.4	1.1	1.7	1.1
13	2.7	e3.6	e1.8	e1.4	e1.0	e4.1	4.9	4.6	2.0	0.90	1.2	1.2
14	2.7	e3.8	e1.8	e1.4	e1.0	e4.6	5.0	4.4	1.7	2.6	0.92	1.5
15	2.8	e3.9	e1.8	e1.4	e1.0	e5.1	4.9	4.0	1.4	1.7	0.54	1.8
16	2.9	e4.0	e1.9	e1.4	e1.0	e6.1	4.5	4.1	1.5	1.1	0.19	1.6
17	2.8	e4.0	e1.9	e1.3	e1.2	e7.0	4.5	4.4	2.4	0.96	0.09	1.6
18	2.7	e4.0	e1.9	e1.3	e1.3	8.4	4.5	4.3	3.2	0.77	0.04	1.3
19	2.5	e3.9	e1.9	e1.3	e1.4	10	4.5	3.9	3.1	0.62	0.09	1.1
20	2.4	e3.7	e1.8	e1.3	e1.4	11	4.4	3.6	2.7	0.60	0.13	1.0
21	2.4	e3.3	e1.7	e1.3	e1.4	7.5	5.5	5.7	4.3	1.4	0.08	1.2
22	2.4	e2.8	e1.7	e1.3	e1.4	7.1	9.0	6.1	2.7	1.2	0.01	1.9
23	2.3	e2.5	e1.7	e1.3	e1.4	7.9	7.7	5.4	2.1	2.1	0.12	2.6
24	2.3	e2.2	e1.8	e1.2	e1.5	8.1	6.6	4.5	1.8	3.6	0.15	2.8
25	2.3	e2.2	e1.8	e1.1	e1.6	8.6	6.0	3.8	1.9	3.3	0.05	2.5
26	2.3	e2.2	e1.7	e0.90	e1.8	8.5	5.3	3.5	1.7	4.1	0.00	2.2
27	2.4	e2.2	e1.5	e0.80	e1.9	12	4.9	3.1	1.8	4.7	0.12	1.7
28	2.6	e2.2	e1.3	e0.80	e1.9	10	4.8	2.9	1.6	4.9	0.26	1.3
29	2.6	e2.3	e1.2	e0.80	e1.9	7.3	5.4	2.8	1.4	6.9	0.22	1.2
30	2.8	e2.4	e1.2	e0.70	---	6.0	5.4	3.7	1.3	11	0.13	1.1
31	2.9	---	e1.1	e0.70	---	5.8	---	2.9	---	8.6	0.05	---
TOTAL	80.2	94.0	58.5	31.40	35.10	170.6	161.3	127.7	66.3	90.45	67.79	39.63
MEAN	2.59	3.13	1.89	1.01	1.21	5.50	5.38	4.12	2.21	2.92	2.19	1.32
MAX	2.9	4.0	2.5	1.4	1.9	12	9.0	6.1	4.3	11	8.1	2.8
MIN	2.3	2.2	1.1	0.30	0.70	1.6	4.4	2.8	1.3	0.60	0.00	0.00
AC-FT	159	186	116	62	70	338	320	253	132	179	134	79

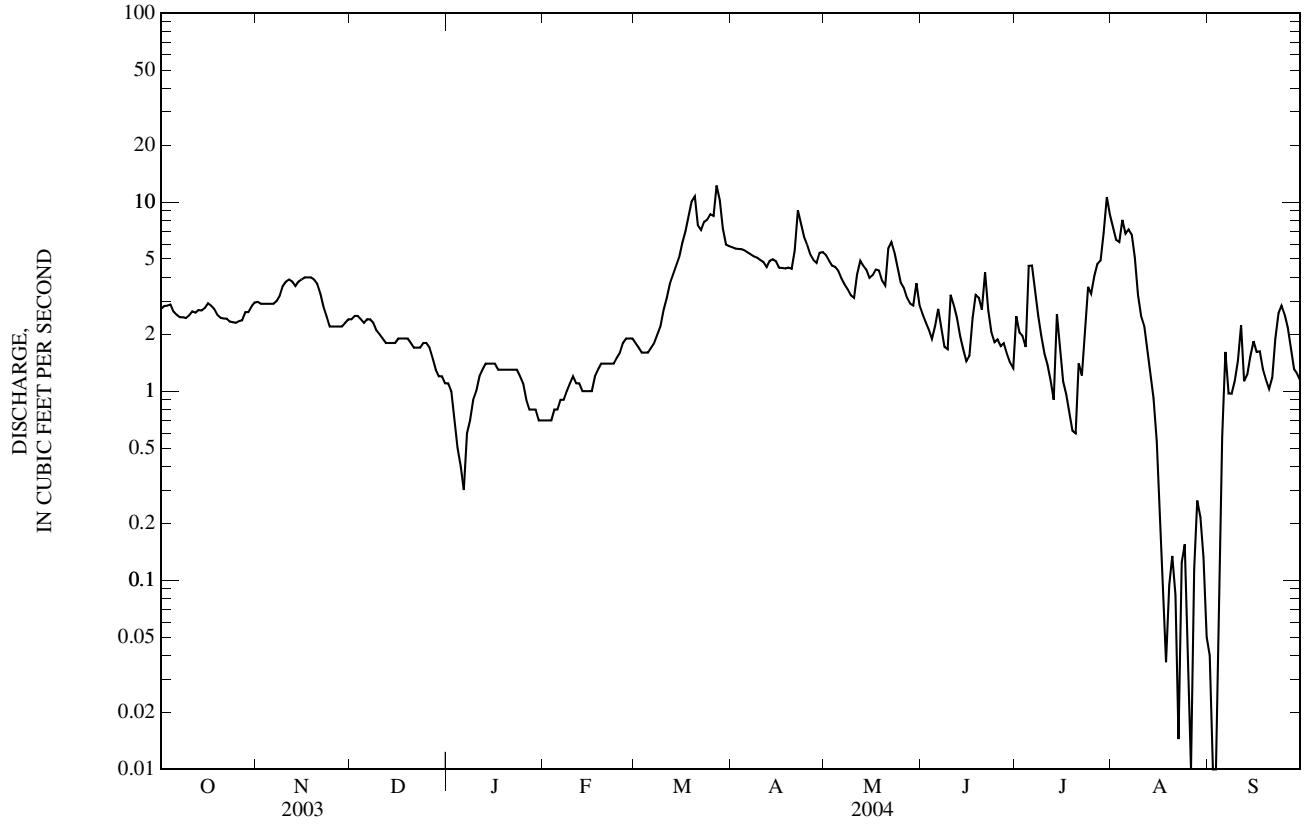
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)

MEAN	10.9	11.3	8.19	5.74	6.20	11.6	21.0	55.2	72.0	28.5	17.3	10.8
MAX	35.8	51.2	34.8	21.9	19.2	21.8	64.2	144	185	63.3	50.1	26.2
(WY)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(1995)	(1995)	(1998)	(1997)	(1997)
MIN	2.59	2.37	1.62	1.01	1.21	4.66	5.38	4.12	2.21	2.92	2.19	1.32
(WY)	(2004)	(1993)	(1993)	(2004)	(2004)	(2002)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)

06406920 SPRING CREEK ABOVE SHERIDAN LAKE, NEAR KEYSTONE, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1991 - 2004	
ANNUAL TOTAL	3,177.28		1,022.97			
ANNUAL MEAN	8.70		2.80		21.6	
HIGHEST ANNUAL MEAN					50.7	1999
LOWEST ANNUAL MEAN					2.80	2004
HIGHEST DAILY MEAN	50	May 4	12	Mar 27	525	May 8, 1995
LOWEST DAILY MEAN	0.62	Jan 13	[a]0.00	Aug 26	[a]0.00	Aug 26, 2004
ANNUAL SEVEN-DAY MINIMUM	0.74	Jan 10	0.07	Aug 29	0.07	Aug 29, 2004
MAXIMUM PEAK FLOW			[b]22	Mar 19	809	Jun 18, 1999
MAXIMUM PEAK STAGE			[c]11.57	Mar 9	12.58	Jun 18, 1999
ANNUAL RUNOFF (AC-FT)	6,300		2,030		15,650	
10 PERCENT EXCEEDS	23		5.5		48	
50 PERCENT EXCEEDS	3.3		2.3		9.8	
90 PERCENT EXCEEDS	1.7		0.79		2.2	

a Also Sept. 2, 3.
b Gage height, 8.29 ft, backwater from ice.
c Backwater from ice.
e Estimated.



06407500 SPRING CREEK NEAR KEYSTONE, SD
(Formerly published as 06407900 Spring Creek near Rockerville)

LOCATION.--Lat 43°58'43", long 103°20'48" (revised), in SW$^1/_4$ NE$^1/_4$ sec.12, T.1 S., R.6 E., Pennington County, Hydrologic Unit 10120109, on right bank 0.5 mi upstream from Deadman Creek tributary at bottom of Stratosphere Bowl.

DRAINAGE AREA.--163 mi^2.

PERIOD OF RECORD.--July 1945 to July 1947, October 1986 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 3,885 ft above NGVD of 1929, from topographic map. Prior to October 1986, nonrecording gage 0.2 mi downstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Sheridan Lake, capacity, 12,657 acre-ft, 11.2 mi upstream from station. Satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 10, 1972, reached a stage of about 14 ft, present datum.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.96	e2.0	e2.2	e1.8	e1.6	e3.7	8.4	6.0	5.4	0.84	0.57	0.00
2	1.0	e1.9	e2.3	e1.5	e1.7	e3.6	7.1	5.8	4.0	1.0	0.60	0.00
3	0.96	e1.9	e2.3	e1.3	e1.8	e3.6	6.6	5.0	3.6	1.3	0.73	0.00
4	1.0	e1.8	e2.2	e0.90	e1.9	e3.7	6.4	5.1	3.3	1.8	1.8	0.00
5	1.1	e1.9	e2.1	e0.70	e1.9	e4.0	6.3	4.7	4.2	3.7	2.3	0.05
6	1.1	e2.0	e2.1	e0.80	e2.0	e4.9	6.2	4.5	3.5	3.3	2.0	0.07
7	1.2	e2.2	e2.1	e1.3	e2.1	6.2	6.0	3.7	3.6	3.3	2.1	0.04
8	1.1	e2.5	e2.2	e1.9	e2.1	7.0	5.8	3.3	2.6	3.1	1.7	0.03
9	1.3	e2.9	e2.1	e2.1	e2.2	7.9	5.4	3.4	2.3	3.1	1.2	0.02
10	1.3	3.3	e2.0	e2.2	e2.1	8.4	5.1	3.5	2.3	2.5	0.84	0.02
11	1.5	3.2	e1.9	e2.3	e1.9	10	5.1	4.7	2.7	2.4	0.36	0.03
12	1.5	3.6	e1.8	e2.4	e1.8	10	5.2	5.1	3.1	1.7	0.13	0.01
13	1.4	2.7	e1.9	e2.5	e2.0	9.5	5.0	4.4	2.2	1.3	0.07	0.02
14	1.3	3.4	e2.0	e2.5	e2.1	10	4.7	4.0	1.8	1.0	0.05	0.02
15	1.5	3.6	e2.1	e2.5	e2.2	8.7	4.7	3.9	1.6	0.85	0.04	0.02
16	1.4	3.5	e2.1	e2.5	e2.6	9.1	4.9	4.0	1.6	0.84	0.03	0.01
17	1.5	3.8	e2.1	e2.4	e2.9	9.6	4.3	4.3	1.7	0.99	0.02	0.02
18	1.7	3.6	e2.1	e2.4	e3.4	9.4	4.1	4.4	1.8	0.79	0.02	0.02
19	1.8	e3.3	e2.1	e2.3	e3.5	9.7	4.2	4.4	1.9	0.59	0.01	0.03
20	1.8	e3.1	e2.1	e2.3	e3.5	8.7	4.1	4.7	1.8	0.64	0.01	0.09
21	1.8	e2.6	e2.1	e2.4	e3.5	9.0	4.6	5.6	1.8	0.47	0.01	0.07
22	1.8	e2.3	e2.1	e2.4	e3.5	8.8	8.6	6.5	1.7	0.37	0.00	0.06
23	1.9	e2.1	e2.2	e2.4	e3.5	8.6	9.7	8.7	1.8	0.29	0.00	0.05
24	1.9	e1.9	e2.2	e2.3	e3.7	8.8	9.2	8.1	1.6	0.25	0.00	0.05
25	1.8	e1.9	e2.1	e2.2	e3.9	8.9	8.5	7.4	1.6	0.17	0.00	0.05
26	1.8	e1.9	e2.0	e2.1	e4.1	9.3	7.9	5.9	1.4	0.10	0.00	0.04
27	1.8	e2.0	e1.9	e1.9	e4.2	12	6.9	5.3	1.3	0.08	0.00	0.04
28	1.7	e2.1	e1.8	e1.8	e4.1	12	6.4	4.6	1.2	0.28	0.00	0.03
29	2.0	e2.2	e1.7	e1.7	e3.9	12	6.6	5.0	1.0	0.26	0.00	0.02
30	2.0	e2.2	e1.7	e1.7	---	10	6.1	6.1	0.93	0.32	0.00	0.02
31	e2.0	---	e1.8	e1.7	---	8.9	---	6.1	---	0.29	0.00	---
TOTAL	46.92	77.4	63.4	61.20	79.7	256.0	184.1	158.2	69.33	37.92	14.59	0.93
MEAN	1.51	2.58	2.05	1.97	2.75	8.26	6.14	5.10	2.31	1.22	0.47	0.03
MAX	2.0	3.8	2.3	2.5	4.2	12	9.7	8.7	5.4	3.7	2.3	0.09
MIN	0.96	1.8	1.7	0.70	1.6	3.6	4.1	3.3	0.93	0.08	0.00	0.00
AC-FT	93	154	126	121	158	508	365	314	138	75	29	1.8

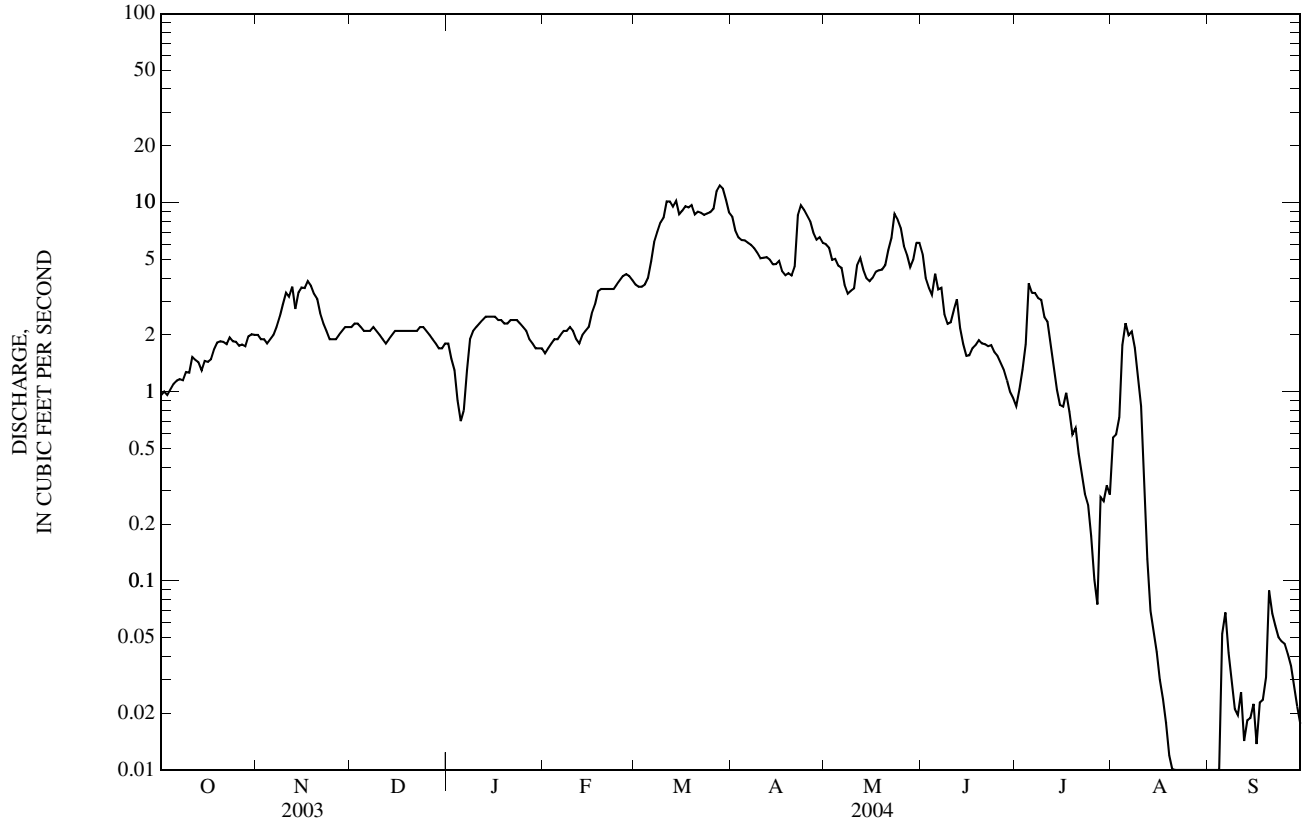
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2004, BY WATER YEAR (WY)*

MEAN	11.0	11.2	7.93	6.17	6.29	13.1	22.2	60.6	79.7	31.9	17.4	9.39
MAX	42.1	63.8	43.6	29.7	22.6	25.2	76.9	211	292	95.8	67.0	32.5
(WY)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(1995)	(1995)	(1995)	(1997)	(1997)
MIN	0.00	0.01	0.08	0.10	0.01	0.74	3.47	5.10	1.58	0.05	0.00	0.00
(WY)	(1989)	(1989)	(1989)	(1989)	(1989)	(1989)	(1989)	(2004)	(1988)	(1988)	(1989)	(1988)

06407500 SPRING CREEK NEAR KEYSTONE, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1987 - 2004*	
ANNUAL TOTAL	3,635.77		1,049.69			
ANNUAL MEAN	9.96		2.87		[a]23.1	
HIGHEST ANNUAL MEAN					64.7	1999
LOWEST ANNUAL MEAN					0.98	1989
HIGHEST DAILY MEAN	61	May 10	12	Mar 27	771	May 9, 1995
LOWEST DAILY MEAN	0.58	Aug 4	[b]0.00	Aug 22	[b]0.00	Jul 27, 1988
ANNUAL SEVEN-DAY MINIMUM	0.74	Aug 1	0.00	Aug 22	0.00	Jul 27, 1988
MAXIMUM PEAK FLOW			[c]14	Mar 11	913	May 9, 1995
MAXIMUM PEAK STAGE			[d]4.57	Feb 13	7.96	May 9, 1995
ANNUAL RUNOFF (AC-FT)	7,210		2,080		16,750	
10 PERCENT EXCEEDS	26		6.6		52	
50 PERCENT EXCEEDS	3.6		2.1		8.2	
90 PERCENT EXCEEDS	1.4		0.04		0.63	

* Period using present site and datum only. See GAGE.
a Median of annual mean discharges, 14 ft^3/s.
b No flow for many days in 1988-89, 2004.
c Backwater from ice.
d Gage height, 4.56 ft.
e Estimated.



06408500 SPRING CREEK NEAR HERMOSA, SD

LOCATION.--Lat 43°56'31", long 103°09'32", in SE¼ SE¼ SE¼ sec.21, T.1 S., R.8 E., Pennington County, Hydrologic Unit 10120109, at left upstream end of county highway bridge, 0.3 mi upstream from Dakota Minnesota and Eastern Railroad bridge, and 7.5 mi north of Hermosa.

DRAINAGE AREA.--205 mi^2 (revised).

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

REVISED RECORDS.--WSP 1729: 1950.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 3,265.30 ft above NGVD of 1929. Prior to Mar. 30, 1973, nonrecording gage and crest-stage gage 210 ft upstream, and Mar. 30 to Sept. 30, 1973, water-stage recorder at present site, both at datum 2.00 ft higher.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Considerable loss occurs to sinkholes in reach 10 to 15 mi upstream from station. Flow slightly regulated by Sheridan Lake, capacity, 12,657 acre-ft, 24 mi upstream from station. Satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	e0.23	0.47	0.42	e0.21	e0.09	0.24	0.12	0.00	0.00	0.00	0.00
2	0.00	e0.23	0.46	0.37	e0.21	e0.10	0.24	0.10	0.00	0.00	0.00	0.00
3	0.00	e0.22	0.45	0.49	e0.21	e0.10	0.23	0.10	0.00	0.00	0.00	0.00
4	0.00	e0.22	0.47	0.31	e0.21	e0.10	0.24	0.09	0.00	0.00	0.00	0.00
5	0.00	e0.21	0.45	e0.29	e0.21	e0.10	0.23	0.08	0.04	0.09	0.00	0.00
6	0.00	e0.21	0.43	e0.31	e0.21	e0.10	0.23	0.07	0.01	0.05	0.00	0.00
7	0.00	e0.21	0.48	e0.40	e0.21	e0.13	0.23	0.05	0.00	0.05	0.00	0.00
8	0.00	e0.21	0.44	e0.51	e0.20	e0.16	0.22	0.05	0.00	0.01	0.00	0.00
9	0.00	e0.21	0.44	e0.70	e0.20	e0.18	0.21	0.04	0.00	0.00	0.00	0.00
10	0.00	e0.26	0.43	1.3	e0.20	e0.20	0.20	0.02	0.04	0.00	0.00	0.00
11	0.00	0.28	0.37	0.95	e0.20	0.30	0.22	0.06	0.04	0.00	0.00	0.00
12	0.00	0.28	0.23	0.93	e0.20	0.34	0.22	0.07	0.02	0.00	0.00	0.00
13	0.00	0.27	0.37	1.1	e0.20	0.36	0.20	0.06	0.00	0.00	0.00	0.00
14	0.00	0.28	0.53	0.87	e0.20	0.27	0.17	0.06	0.00	0.00	0.00	0.00
15	0.10	0.28	0.52	0.69	e0.20	0.27	0.17	0.04	0.00	0.00	0.00	0.00
16	0.17	0.28	1.0	0.88	e0.24	0.28	0.15	0.08	0.00	0.00	0.00	0.00
17	0.18	0.27	1.7	0.35	e0.29	0.29	0.15	0.09	0.00	0.00	0.00	0.00
18	0.19	0.29	1.4	0.27	e0.31	0.27	0.16	0.06	0.01	0.00	0.00	0.00
19	0.18	0.31	0.62	0.26	e0.39	0.26	0.15	0.05	0.01	0.00	0.00	0.00
20	0.18	0.33	0.62	0.26	e0.46	0.24	0.15	0.04	0.02	0.00	0.00	0.00
21	0.18	e0.29	0.63	0.25	e0.45	0.24	0.15	0.07	0.02	0.00	0.00	0.00
22	0.19	e0.26	0.55	0.24	e0.41	0.24	0.19	0.33	0.00	0.00	0.00	0.00
23	0.19	e0.21	0.47	0.24	e0.40	0.24	0.15	0.53	0.00	0.00	0.00	0.00
24	0.19	e0.21	0.46	0.24	e0.39	0.25	0.13	0.06	0.00	0.00	0.00	0.00
25	0.20	e0.21	0.43	0.23	e0.40	0.25	0.13	0.03	0.00	0.00	0.00	0.00
26	0.21	e0.21	0.42	e0.23	e0.45	0.25	0.12	0.02	0.00	0.00	0.00	0.00
27	0.23	e0.21	0.43	e0.23	e0.49	0.33	0.12	0.01	0.00	0.00	0.00	0.00
28	0.24	0.32	0.41	e0.22	e0.25	0.25	0.12	0.01	0.00	0.00	0.00	0.00
29	0.24	0.55	0.41	e0.22	e0.18	0.23	0.13	0.01	0.00	0.00	0.00	0.00
30	e0.24	0.49	0.45	e0.22	---	0.24	0.13	0.01	0.00	0.00	0.00	0.00
31	e0.24	---	0.52	e0.22	---	0.24	---	0.01	---	0.00	0.00	---
TOTAL	3.35	8.04	17.06	14.20	8.18	6.90	5.38	2.42	0.21	0.20	0.00	0.00
MEAN	0.11	0.27	0.55	0.46	0.28	0.22	0.18	0.08	0.01	0.01	0.00	0.00
MAX	0.24	0.55	1.7	1.3	0.49	0.36	0.24	0.53	0.04	0.09	0.00	0.00
MIN	0.00	0.21	0.23	0.22	0.18	0.09	0.12	0.01	0.00	0.00	0.00	0.00
AC-FT	6.6	16	34	28	16	14	11	4.8	0.4	0.4	0.00	0.00

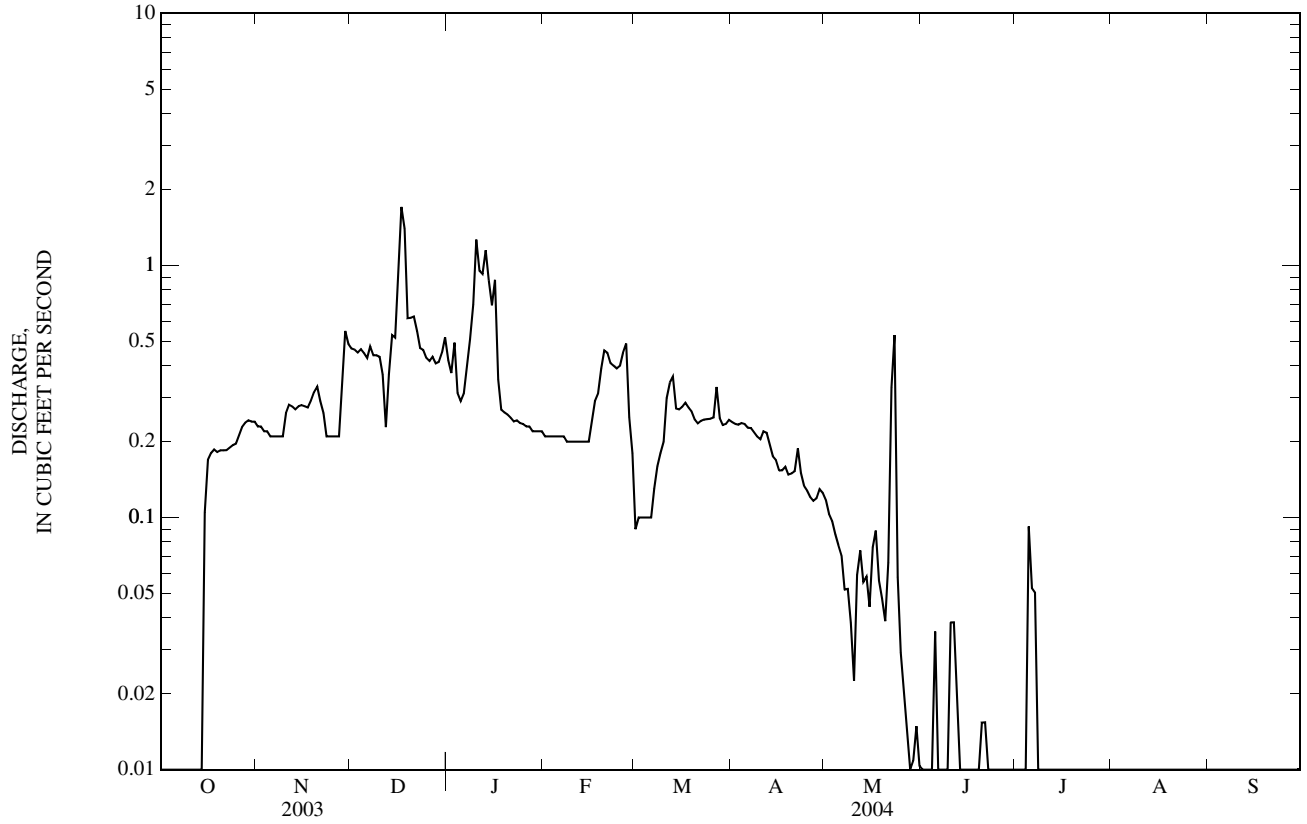
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2004, BY WATER YEAR (WY)

MEAN	1.92	2.49	1.88	1.40	1.79	1.38	2.78	18.3	40.2	12.1	4.30	1.78
MAX	24.6	48.2	28.9	10.1	20.8	7.35	54.0	166	271	73.2	53.8	17.0
(WY)	(1999)	(1999)	(1999)	(1999)	(1971)	(1999)	(1999)	(1997)	(1972)	(1962)	(1997)	(1997)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1956)	(1956)	(1957)	(1957)	(1957)	(1957)	(1961)	(1960)	(1956)	(1954)	(1951)	(1954)

06408500 SPRING CREEK NEAR HERMOSA, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1950 - 2004	
ANNUAL TOTAL	133.40		65.94			
ANNUAL MEAN	0.37		0.18		[a]7.52	
HIGHEST ANNUAL MEAN					50.7	1999
LOWEST ANNUAL MEAN					0.00	1990
HIGHEST DAILY MEAN	1.7	Dec 17	1.7	Dec 17	3,300	Jun 10, 1972
LOWEST DAILY MEAN	0.00	Jul 13	0.00	Oct 1	[b]0.00	Jan 26, 1951
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 13	0.00	Oct 1	0.00	Jan 26, 1951
MAXIMUM PEAK FLOW			2.5	Jan 10	[c]13,400	Jun 10, 1972
MAXIMUM PEAK STAGE			2.41	Jan 10	[d]13.12	Jun 10, 1972
ANNUAL RUNOFF (AC-FT)	265		131		5,450	
10 PERCENT EXCEEDS	0.66		0.44		7.9	
50 PERCENT EXCEEDS	0.37		0.15		0.80	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a Median of annual mean discharges, 1.6 ft^3/s.
b No flow for many days in most years.
c From rating curve extended above 350 ft^3/s on basis of contracted-opening measurement of peak flow.
d From floodmarks, site and datum then in use.
e Estimated.



06408700 RHOADS FORK NEAR ROCHFORD, SD

LOCATION.--Lat 44°08'12", long 103°51'29", in NW¼ SE¼ NE¼ sec.15, T.2 N., R.2 E., Pennington County, Hydrologic Unit 10120110, Black Hills National Forest, on left bank 1.1 mi upstream from South Fork Rapid Creek and 8.7 mi west of Rochford.

DRAINAGE AREA.--7.95 mi^2, approximately.

PERIOD OF RECORD.--November 1981 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,965 ft above NGVD of 1929, from topographic map. Prior to Oct. 1, 1992, at site 35 ft downstream at datum 1.82 ft lower.

REMARKS.--No estimated daily discharges. Records good. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	4.6	4.3	4.3	4.1	4.0	4.2	4.1	4.1	3.9	3.7	3.7
2	4.6	4.5	4.4	4.3	3.9	4.0	4.0	4.1	4.1	3.8	3.7	3.8
3	4.6	4.5	4.3	4.2	3.9	4.0	4.0	4.1	4.1	3.9	3.8	3.8
4	4.6	4.5	4.3	4.1	4.0	4.0	4.0	4.1	4.1	4.0	3.7	3.9
5	4.6	4.3	4.2	3.9	4.0	4.0	4.1	4.1	4.1	3.9	3.7	4.0
6	4.6	4.4	4.5	3.6	3.9	4.0	4.0	4.1	4.1	3.8	3.7	3.8
7	4.6	4.6	4.4	3.8	3.8	4.0	4.1	4.1	4.0	3.8	3.7	3.7
8	4.6	4.5	4.4	4.3	3.9	4.1	4.0	4.1	4.1	3.8	3.6	3.7
9	4.6	4.5	4.3	4.3	3.8	4.1	4.0	4.2	4.1	3.7	3.6	3.7
10	4.6	4.5	4.2	4.2	3.8	4.1	4.0	4.2	4.1	3.7	3.7	3.7
11	4.5	4.5	4.4	4.1	3.8	4.0	4.0	4.2	4.1	3.7	3.7	3.7
12	4.5	4.5	4.2	4.1	3.7	4.1	3.9	4.2	4.0	3.7	3.7	3.7
13	4.5	4.5	4.3	4.1	3.8	4.1	4.0	4.2	3.9	3.7	3.7	3.7
14	4.5	4.5	4.4	4.1	3.7	4.0	4.0	4.2	3.9	3.7	3.6	4.0
15	4.5	4.5	4.4	4.1	3.7	4.1	4.0	4.2	3.9	3.7	3.6	3.7
16	4.5	4.4	4.3	4.1	3.7	4.1	4.0	4.2	3.9	3.7	3.6	3.6
17	4.5	4.4	4.3	4.1	3.8	4.1	4.0	4.2	3.9	3.7	3.7	3.6
18	4.5	4.4	4.3	4.1	3.9	4.2	4.0	4.2	4.0	3.7	3.7	3.6
19	4.5	4.4	4.3	4.1	4.0	4.2	4.0	4.2	4.0	3.7	3.7	3.6
20	4.5	4.4	4.3	4.1	4.0	4.1	4.1	4.2	3.9	3.7	3.7	3.6
21	4.5	4.4	4.3	4.1	4.0	4.1	4.1	4.2	3.9	3.7	3.7	3.6
22	4.5	4.4	4.3	4.1	4.1	4.1	4.1	4.2	3.9	3.7	3.8	3.6
23	4.5	4.2	4.3	4.1	4.0	4.2	4.1	4.2	3.9	3.8	3.7	3.6
24	4.5	4.5	4.3	4.1	4.1	4.2	4.1	4.2	3.9	3.7	3.7	3.6
25	4.5	4.4	4.4	4.1	4.1	4.2	4.1	4.2	3.9	3.7	3.7	3.6
26	4.5	4.3	4.4	3.9	4.1	4.3	4.1	4.2	3.9	3.7	3.7	3.6
27	4.5	4.4	4.3	4.0	4.1	4.3	4.1	4.1	3.9	3.7	3.7	3.6
28	4.6	4.3	4.2	4.2	4.1	4.3	4.1	4.1	3.9	3.7	3.7	3.6
29	4.6	4.4	4.2	4.1	4.1	4.2	4.2	4.1	3.9	3.8	3.7	3.6
30	4.6	4.3	4.3	4.2	---	4.2	4.1	4.1	3.9	3.7	3.7	3.6
31	4.5	---	4.2	4.1	---	4.2	---	4.1	---	3.7	3.7	---
TOTAL	140.8	133.0	133.7	127.0	113.9	127.6	121.5	128.9	119.4	116.2	114.4	110.6
MEAN	4.54	4.43	4.31	4.10	3.93	4.12	4.05	4.16	3.98	3.75	3.69	3.69
MAX	4.6	4.6	4.5	4.3	4.1	4.3	4.2	4.2	4.1	4.0	3.8	4.0
MIN	4.5	4.2	4.2	3.6	3.7	4.0	3.9	4.1	3.9	3.7	3.6	3.6
AC-FT	279	264	265	252	226	253	241	256	237	230	227	219

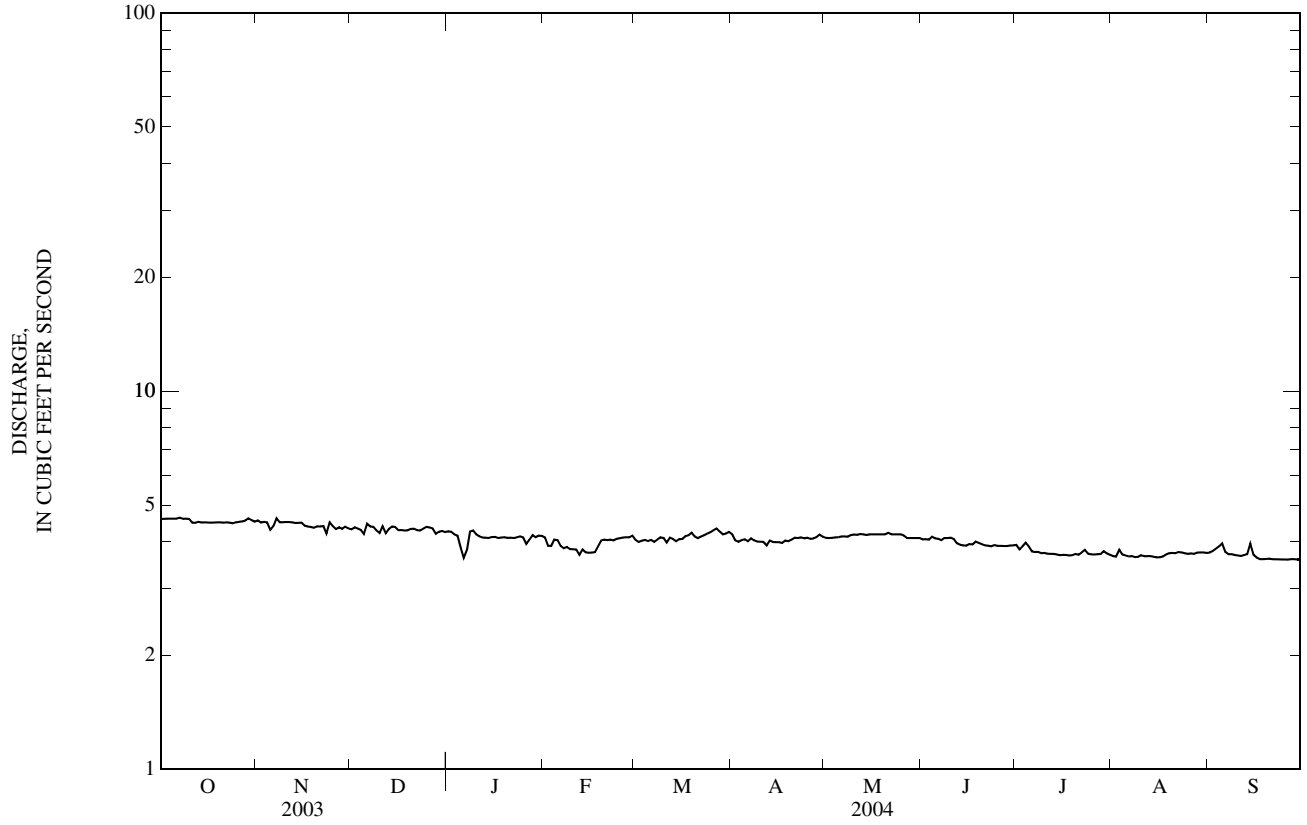
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2004, BY WATER YEAR (WY)

MEAN	5.93	5.85	5.72	5.66	5.70	5.77	5.85	5.93	6.01	5.99	5.86	5.84
MAX	9.41	9.70	9.78	10.0	10.0	9.82	9.82	9.51	9.51	9.50	9.53	9.96
(WY)	(2000)	(2000)	(2000)	(2000)	(2000)	(2000)	(2000)	(2000)	(2000)	(1999)	(1998)	(1999)
MIN	3.66	3.42	3.30	3.25	3.57	3.60	3.77	3.92	3.79	3.75	3.69	3.69
(WY)	(1991)	(1991)	(1991)	(1991)	(1993)	(1993)	(1993)	(1992)	(1992)	(2004)	(2004)	(2004)

06408700 RHOADS FORK NEAR ROCHFORD, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1983 - 2004	
ANNUAL TOTAL	1,710.8		1,487.0			
ANNUAL MEAN	4.69		4.06		5.84	
HIGHEST ANNUAL MEAN					9.55	2000
LOWEST ANNUAL MEAN					3.69	1991
HIGHEST DAILY MEAN	7.4	Apr 2	4.6	Oct 1	12	Jun 18, 1998
LOWEST DAILY MEAN	4.2	Nov 23	3.6	Jan 6	3.1	Jan 19, 1991
ANNUAL SEVEN-DAY MINIMUM	4.3	Dec 25	3.6	Sep 16	3.1	Jan 18, 1991
MAXIMUM PEAK FLOW			[a]5.7	Jul 4	17	Jul 9, 2001
MAXIMUM PEAK STAGE			[a]3.71	Jul 4	4.13	Jul 9, 2001
ANNUAL RUNOFF (AC-FT)	3,390		2,950		4,230	
10 PERCENT EXCEEDS	5.1		4.5		8.6	
50 PERCENT EXCEEDS	4.6		4.1		5.4	
90 PERCENT EXCEEDS	4.4		3.7		3.8	

a Also Sept. 14.



06409000 CASTLE CREEK ABOVE DEERFIELD RESERVOIR, NEAR HILL CITY, SD
(Hydrologic bench-mark station)

LOCATION.--Lat 44°00'49", long 103°49'48", in NE¼ SW¼ SW¼ sec.25, T.1 N., R.2 E., Pennington County, Hydrologic Unit 10120110, at downstream end of highway culvert, 330 ft downstream from South Fork Castle Creek, 500 ft upstream from high-water line of Deerfield Reservoir, 2.5 mi southwest of Deerfield Dam, and 14 mi northwest of Hill City.

DRAINAGE AREA.--79.2 mi^2.

PERIOD OF RECORD.--June 1948 to current year. Prior to October 1953, published as "above Deerfield Reservoir, near Deerfield."

REVISED RECORDS.--WSP 1917: 1952(M). WDR SD-84-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 5,920 ft above NGVD of 1929, from Highway Department bench mark. Prior to Aug. 31, 1948, nonrecording gage at site 130 ft upstream at datum 2.05 ft higher. Sept. 1, 1948, to May 17, 1983, at same location and datum. May 18, 1983, to Oct. 11, 1985, at site 300 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	e9.0	e14	9.1	8.5	e9.0	14	12	10	9.8	7.9	8.2
2	10	e8.5	e13	9.1	e8.5	e9.0	14	12	9.9	9.0	7.8	8.3
3	10	e8.0	e12	8.2	e8.4	e8.9	14	11	9.8	10	8.8	8.7
4	10	e7.5	e10	8.1	e8.4	e8.8	13	11	9.8	12	8.6	9.6
5	10	e7.2	e9.5	e8.0	e8.2	e8.7	14	11	10	12	8.2	11
6	9.9	e7.2	e9.0	e8.0	e8.1	e8.4	13	11	9.6	9.6	7.8	9.0
7	9.9	e7.2	e8.9	e8.0	e8.0	e8.4	14	10	9.6	9.0	7.7	8.7
8	9.9	e7.2	e8.8	e7.9	e8.0	10	13	10	9.8	8.9	7.6	8.6
9	9.8	e7.5	e8.8	e7.9	e8.0	13	13	10	9.6	8.7	7.7	8.4
10	10	e8.0	e8.3	e8.5	e8.0	10	12	9.7	9.8	8.8	7.9	8.4
11	11	e8.7	e8.1	9.7	e8.1	14	12	9.8	10	8.6	7.8	8.5
12	10	e9.0	e8.0	8.7	e8.1	12	14	10	9.8	8.2	7.8	8.5
13	11	e9.8	e8.0	8.7	e8.2	10	12	10	9.7	8.0	7.9	8.6
14	11	e10	e8.0	8.7	e8.2	e9.9	13	10	9.4	8.1	7.8	8.6
15	10	e11	e8.0	8.7	e8.5	9.8	12	10	9.1	8.0	7.7	8.5
16	10	12	e8.0	8.5	e8.7	9.6	12	11	9.8	8.2	7.5	8.1
17	10	11	e8.0	8.4	8.9	11	12	11	10	8.3	7.7	8.0
18	10	11	e8.1	8.4	9.2	13	12	10	9.9	8.2	7.9	8.0
19	10	11	e8.2	e8.4	9.2	15	12	10	9.8	7.8	7.9	8.0
20	10	11	e8.5	8.8	8.9	13	12	11	9.7	7.7	8.0	8.4
21	10	e11	e8.7	8.7	8.8	12	13	14	9.5	7.9	8.0	9.4
22	10	e11	e8.9	8.7	8.9	12	14	12	9.4	8.8	8.0	8.8
23	10	e11	9.1	8.8	8.9	14	13	11	9.1	9.4	8.3	8.6
24	10	e10	8.7	8.8	9.2	15	13	11	9.8	8.9	8.2	8.5
25	10	e10	8.8	8.8	9.4	16	12	11	9.5	8.2	8.2	8.4
26	10	e10	8.9	e8.8	9.4	18	12	10	9.5	8.0	8.3	8.3
27	10	e10	8.9	e8.8	9.4	20	12	10	9.4	7.9	8.8	8.4
28	11	e13	7.5	e8.8	9.0	15	12	10	9.1	8.0	8.6	8.6
29	11	e15	9.3	e8.8	9.2	14	12	11	9.0	8.6	8.5	8.3
30	10	e14	9.0	8.9	---	13	12	11	10	8.6	8.3	8.3
31	e9.5	---	8.9	8.7	---	14	---	11	---	8.1	8.3	---
TOTAL	314.0	296.8	279.9	266.4	250.3	374.5	382	332.5	289.4	271.3	249.5	257.7
MEAN	10.1	9.89	9.03	8.59	8.63	12.1	12.7	10.7	9.65	8.75	8.05	8.59
MAX	11	15	14	9.7	9.4	20	14	14	10	12	8.8	11
MIN	9.5	7.2	7.5	7.9	8.0	8.4	12	9.7	9.0	7.7	7.5	8.0
AC-FT	623	589	555	528	496	743	758	660	574	538	495	511

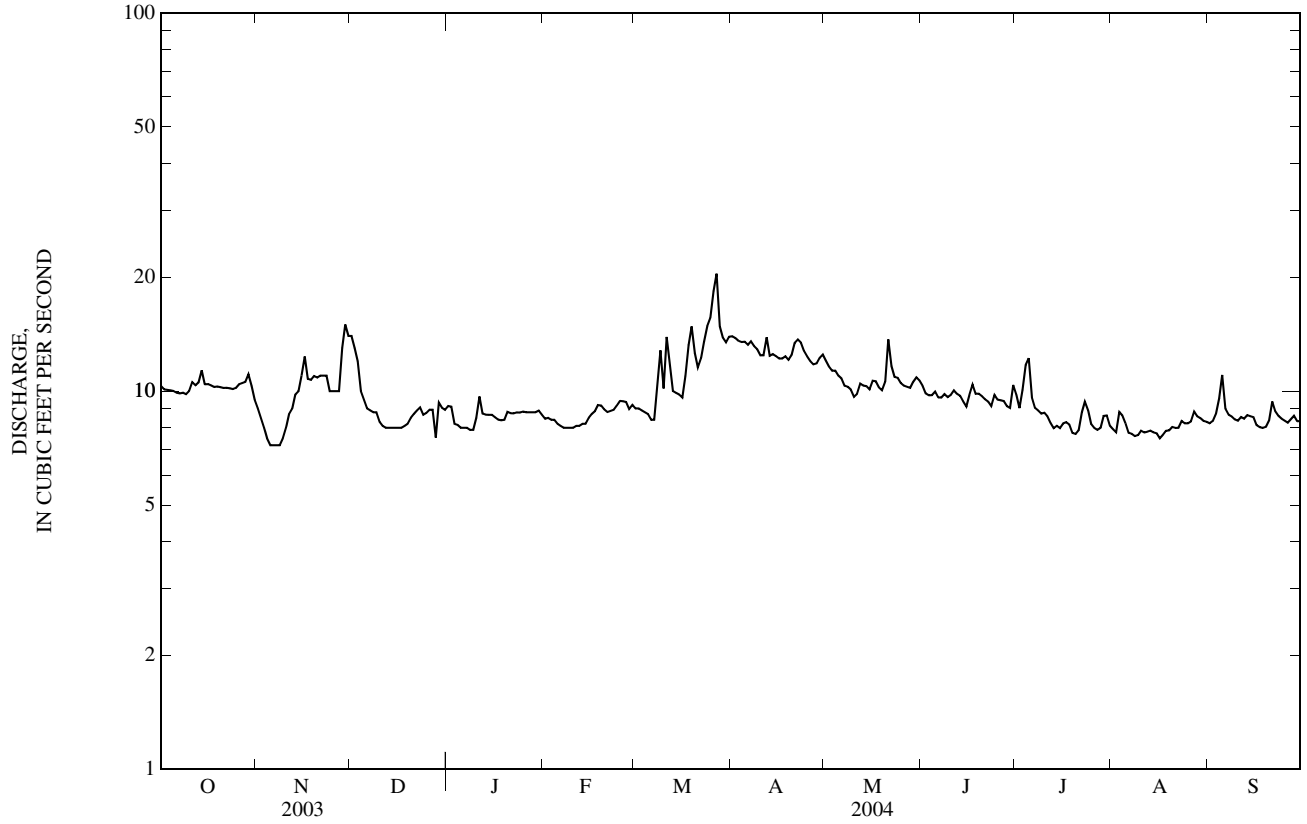
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2004, BY WATER YEAR (WY)

MEAN	11.2	10.5	9.85	9.41	9.52	12.0	16.9	18.1	16.3	13.0	11.4	10.9
MAX	26.5	25.8	22.7	21.9	23.6	34.7	36.2	45.2	50.5	42.0	34.1	30.8
(WY)	(1998)	(1999)	(2000)	(1999)	(2000)	(1999)	(1999)	(1997)	(1999)	(1999)	(1999)	(1999)
MIN	3.93	3.85	2.74	3.98	5.06	5.81	6.83	6.56	4.69	4.05	4.63	4.36
(WY)	(1961)	(1962)	(1962)	(1962)	(1962)	(1961)	(1961)	(1961)	(1961)	(1961)	(1960)	(1961)

06409000 CASTLE CREEK ABOVE DEERFIELD RESERVOIR, NEAR HILL CITY, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1949 - 2004	
ANNUAL TOTAL	4,521.4		3,564.3			
ANNUAL MEAN	12.4		9.74		12.4	
HIGHEST ANNUAL MEAN					32.1	1999
LOWEST ANNUAL MEAN					5.13	1961
HIGHEST DAILY MEAN	110	Mar 31	20	Mar 27	232	May 22, 1952
LOWEST DAILY MEAN	5.0	Feb 25	7.2	Nov 5	2.0	Dec 10, 1961
ANNUAL SEVEN-DAY MINIMUM	6.6	Jan 11	7.4	Nov 3	2.2	Dec 15, 1961
MAXIMUM PEAK FLOW			[a]31	Mar 27	[b]1,120	May 22, 1952
MAXIMUM PEAK STAGE			[c]4.39	Mar 2	5.81	May 22, 1952
ANNUAL RUNOFF (AC-FT)	8,970		7,070		9,010	
10 PERCENT EXCEEDS	18		12		21	
50 PERCENT EXCEEDS	10		9.1		10	
90 PERCENT EXCEEDS	8.0		8.0		6.4	

a Gage height, 2.97 ft.
b From rating curve extended on basis of slope-area measurement.
c Backwater from ice.
e Estimated.



06409500 DEERFIELD RESERVOIR NEAR HILL CITY, SD

LOCATION.--Lat 44°01'41", long 103°47'09", in NE$^1/_4$ SW$^1/_4$ sec.20, T.1 N., R.3 E., at dam on Castle Creek, Hydrologic Unit 10120110, 0.4 mi upstream from Dutchman Creek and 12.5 mi northwest of Hill City.

DRAINAGE AREA.--95 mi^2, approximately.

PERIOD OF RECORD.--May 1947 to current year (monthend contents only). Some elevations obtained during period of initial filling, December 1945 to May 1947, are available in Bureau of Reclamation files. Prior to October 1953, published as "near Deerfield."

GAGE.--Water-stage recorder. Elevations listed to NGVD of 1929 (levels by Bureau of Reclamation). Prior to July 20, 1964, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by earthfill dam. Storage began Dec. 3, 1945; dam completed in 1947. Conservation capacity, 15,504 acre-ft between elevations 5,839.0 ft (lowest outlet) and 5,908.0 ft (crest of spillway). Dead storage below elevation 5,839.0 ft, 151 acre-ft. Surcharge capacity, 26,700 acre-ft between elevations 5,908.0 ft and 5,953.0 ft. Figures given herein represent conservation and surcharge contents above elevation 5,839.0 ft. Water is used to supplement Rapid City water supply and for irrigation in Rapid Creek basin downstream from Rapid City.

COOPERATION.--Records of elevation and contents provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 16,006 acre-ft Feb. 25, 1985 (elevation, 5,909.05 ft); minimum observed, 429 acre-ft, Oct. 2, 1959 (elevation, 5,839.10 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 15,300 acre-ft, Mar. 31, elevation, 5,907.51 ft; minimum, 14,000 acre-ft, Sept. 30, elevation, 5,904.27 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	5,906.84	15,000	--
Oct. 31	5,906.76	15,000	0
Nov. 30	5,906.75	15,000	0
Dec. 31	5,906.88	15,000	0
CAL YR 2003	--	--	+70
Jan. 31	5,906.90	15,100	+100
Feb. 29	5,906.99	15,100	0
Mar. 31	5,907.51	15,300	+200
Apr. 30	5,906.99	15,100	-200
May 31	5,906.60	14,900	-200
June 30	5,906.08	14,700	-200
July 31	5,905.59	14,500	-200
Aug. 31	5,904.77	14,200	-300
Sept. 30	5,904.27	14,000	-200
WTR YR 2004	--	--	-1,000

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06410000 CASTLE CREEK BELOW DEERFIELD DAM, SD

LOCATION.--Lat 44°01'45", long 103°46'53", in NW¼ SE¼ sec.20, T.1 N., R.3 E., Pennington County, Hydrologic Unit 10120110, on left bank 200 ft upstream from Dutchman Creek, 1,100 ft downstream from Deerfield Dam, and 12.5 mi northwest of Hill City.

DRAINAGE AREA.--96 mi^2, approximately.

PERIOD OF RECORD.--July 1946 to current year, seasonal records only beginning October 1983.

GAGE.--Water-stage recorder. Datum of gage is 5,784.52 ft above NGVD of 1929 (Bureau of Reclamation bench mark). Prior to Oct. 15, 1947, at site 400 ft downstream at datum 0.23 ft higher. Oct. 15, 1947, to Sept. 1, 1948, at site 550 ft downstream at datum 1.77 ft lower, and Sept. 2, 1948, to Nov. 2, 1971, at site 300 ft upstream at datum 4.0 ft higher.

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated by Deerfield Dam, 1,100 ft upstream. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 200 ft^3/s, May 22, 1952; maximum gage height, 5.08 ft, present datum, June 5, 1991; no flow at times in 1948, 1950-60.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 34 ft^3/s, Sept. 7, gage height, 3.91 ft; minimum daily discharge, 7.3 ft^3/s, Mar. 26.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	10	18	18	e12	e13	12	12
2	---	---	---	---	---	10	17	18	e12	e13	12	12
3	---	---	---	---	---	10	17	18	e12	e13	12	12
4	---	---	---	---	---	11	17	17	e12	e13	13	12
5	---	---	---	---	---	10	16	17	e12	e12	13	13
6	---	---	---	---	---	10	17	16	e12	e12	12	12
7	---	---	---	---	---	9.7	17	16	e12	e12	12	12
8	---	---	---	---	---	9.9	16	16	e13	e12	12	11
9	---	---	---	---	---	10	16	18	e13	e11	12	11
10	---	---	---	---	---	10	16	18	e13	e11	12	12
11	---	---	---	---	---	9.9	16	17	e12	e11	12	11
12	---	---	---	---	---	9.9	16	13	e12	e11	12	11
13	---	---	---	---	---	9.9	17	13	e12	e11	12	12
14	---	---	---	---	---	9.8	17	13	e12	11	11	12
15	---	---	---	---	---	9.7	16	12	e12	11	12	12
16	---	---	---	---	---	10	16	12	e12	11	12	12
17	---	---	---	---	---	10	17	13	e12	11	11	12
18	---	---	---	---	---	9.7	16	13	e12	12	11	12
19	---	---	---	---	---	9.1	16	12	e12	12	11	12
20	---	---	---	---	---	8.5	16	11	e12	12	11	12
21	---	---	---	---	---	8.9	16	12	e11	12	11	12
22	---	---	---	---	---	8.5	16	12	e11	11	11	12
23	---	---	---	---	---	8.3	16	13	e11	12	12	12
24	---	---	---	---	---	8.7	16	12	e11	12	12	12
25	---	---	---	---	---	8.2	16	12	e11	13	12	12
26	---	---	---	---	---	7.3	16	e12	e11	12	11	12
27	---	---	---	---	---	9.4	16	e12	e11	13	12	12
28	---	---	---	---	---	8.4	17	e12	e11	13	12	12
29	---	---	---	---	---	7.7	18	e12	e12	13	12	11
30	---	---	---	---	---	7.4	18	e12	e13	13	12	11
31	---	---	---	---	---	9.8	---	e12	---	12	12	---
TOTAL	---	---	---	---	---	289.7	495	434	356	371	366	355
MEAN	---	---	---	---	---	9.35	16.5	14.0	11.9	12.0	11.8	11.8
MAX	---	---	---	---	---	11	18	18	13	13	13	13
MIN	---	---	---	---	---	7.3	16	11	11	11	11	11
AC-FT	---	---	---	---	---	575	982	861	706	736	726	704

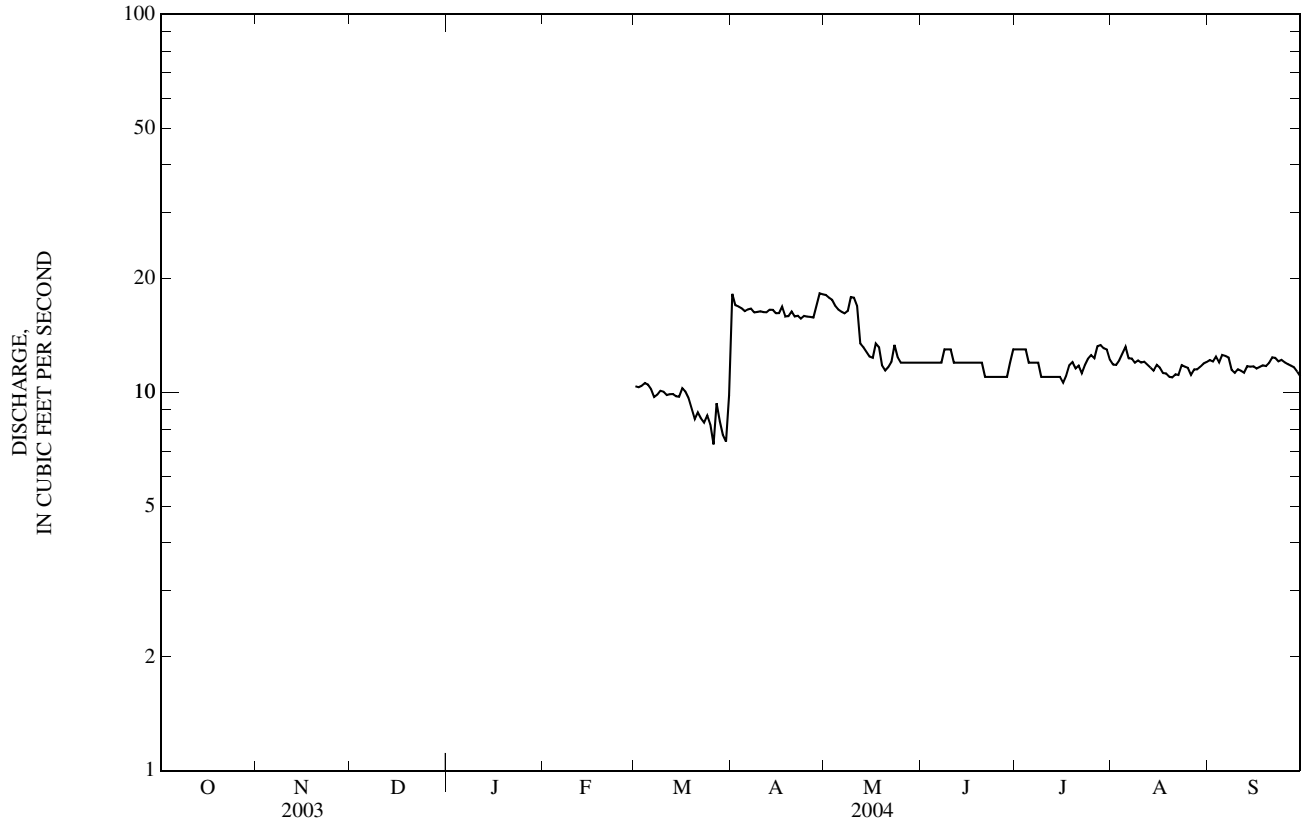
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1983, BY WATER YEAR (WY)

MEAN	11.2	2.43	2.08	2.22	2.85	5.25	14.1	19.0	16.9	16.7	18.8	21.1
MAX	40.0	7.69	2.72	3.48	12.6	15.5	44.1	46.8	50.0	81.1	72.7	64.2
(WY)	(1966)	(1949)	(1948)	(1978)	(1979)	(1979)	(1982)	(1978)	(1965)	(1982)	(1982)	(1959)
MIN	0.20	0.02	0.22	1.53	1.26	1.56	1.59	1.59	2.39	2.13	3.78	4.05
(WY)	(1947)	(1960)	(1947)	(1983)	(1971)	(1960)	(1960)	(1960)	(1962)	(1962)	(1962)	(1983)

06410000 CASTLE CREEK BELOW DEERFIELD DAM, SD—Continued

SUMMARY STATISTICS	WATER YEARS 1947 - 1983*	
ANNUAL MEAN	11.1	
HIGHEST ANNUAL MEAN	30.9	1982
LOWEST ANNUAL MEAN	2.62	1960
HIGHEST DAILY MEAN	200	May 22, 1952
LOWEST DAILY MEAN	0.00	Sep 9, 1948
ANNUAL SEVEN-DAY MINIMUM	0.00	Oct 15, 1959
ANNUAL RUNOFF (AC-FT)	8,030	
10 PERCENT EXCEEDS	26	
50 PERCENT EXCEEDS	4.9	
90 PERCENT EXCEEDS	1.9	

* Period reflects complete water years.
e Estimated.



06410500 RAPID CREEK ABOVE PACTOLA RESERVOIR, AT SILVER CITY, SD

LOCATION.--Lat 44°05'05", long 103°34'48", in SW¼ SE¼ sec.36, T.2 N., R.4 E., Pennington County, Hydrologic Unit 10120110, on right bank 0.8 mi west of Silver City and 3.0 mi downstream from Slate Creek.

DRAINAGE AREA.--292 mi^2.

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,620.00 ft above NGVD of 1929 (Bureau of Reclamation bench mark).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Deerfield Dam on Castle Creek since December 1945. Satellite data-collection platform at site. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	e21	e29	e17	e17	e22	42	36	26	21	17	17
2	24	e21	e29	e16	e18	e21	46	35	25	20	17	17
3	24	e20	e30	e16	e18	e21	45	33	24	20	18	19
4	24	e19	e29	e15	e18	e22	45	32	24	25	23	23
5	23	e18	e28	e15	e18	e23	44	31	25	34	20	26
6	23	e18	e28	e16	e17	e25	43	31	23	27	18	24
7	23	e19	e27	e17	e16	e26	44	30	22	23	18	22
8	24	e22	e24	e20	e16	e26	42	29	22	21	18	21
9	23	e25	e22	e21	e15	e28	41	29	23	21	17	20
10	22	e28	e20	e21	e13	e30	40	28	24	21	18	19
11	22	e30	e18	e21	e13	e31	41	28	23	21	18	19
12	22	e31	e17	e21	e12	e31	39	27	23	20	17	19
13	23	e32	e17	e20	e13	e30	41	26	21	20	17	18
14	22	e32	e17	e19	e14	e27	39	27	21	19	16	19
15	22	31	e18	e18	e15	e27	38	28	20	18	16	23
16	22	30	e18	e17	e16	27	37	28	20	18	16	21
17	22	27	e18	e17	e17	30	37	30	22	19	16	20
18	22	25	e18	e17	e21	35	37	28	22	18	17	19
19	23	27	e18	e17	e22	40	37	27	21	18	18	18
20	22	26	e18	e17	e23	41	38	27	21	18	18	19
21	22	e26	e18	e17	e24	34	39	34	21	19	19	20
22	22	e25	e18	e17	e24	35	44	33	20	20	18	20
23	22	e23	e19	e18	e25	36	41	31	19	22	19	20
24	22	e22	e19	e19	e26	39	39	29	19	23	18	20
25	21	e22	e19	e20	e26	42	37	28	20	20	18	20
26	22	e23	e18	e19	e26	43	35	27	20	19	18	20
27	23	e25	e25	e17	e25	51	34	26	20	19	18	20
28	23	e27	e16	e15	e24	42	34	25	19	18	18	20
29	23	e28	e16	e15	e23	39	36	26	19	19	17	20
30	e23	e28	e17	e16	---	36	36	27	19	20	17	19
31	e22	---	e17	e16	---	37	---	27	---	19	17	---
TOTAL	701	751	645	547	555	997	1,191	903	648	640	550	602
MEAN	22.6	25.0	20.8	17.6	19.1	32.2	39.7	29.1	21.6	20.6	17.7	20.1
MAX	24	32	30	21	26	51	46	36	26	34	23	26
MIN	21	18	16	15	12	21	34	25	19	18	16	17
AC-FT	1,390	1,490	1,280	1,080	1,100	1,980	2,360	1,790	1,290	1,270	1,090	1,190

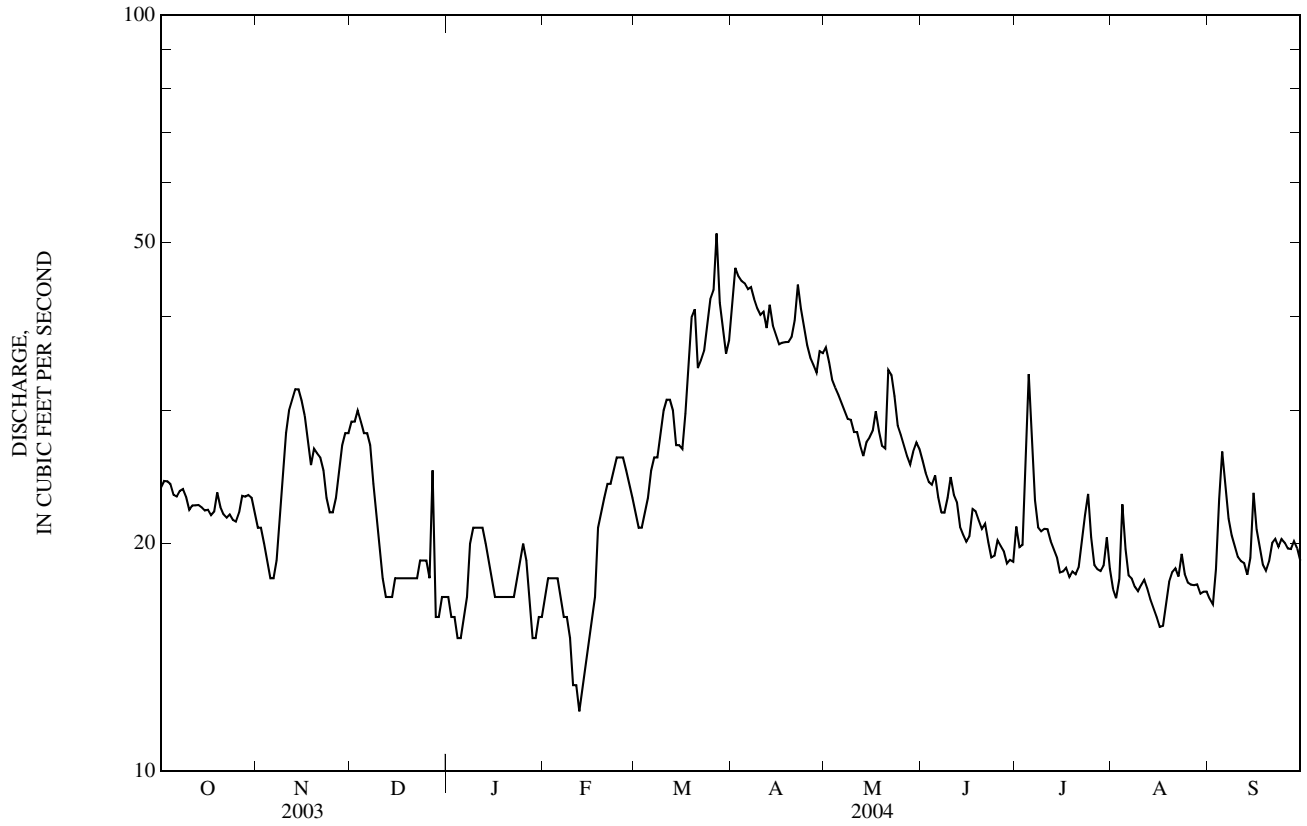
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2004, BY WATER YEAR (WY)

MEAN	33.4	24.8	20.0	19.2	21.8	36.8	68.2	95.9	101	58.7	47.5	40.1
MAX	134	129	103	83.7	68.4	118	232	322	330	230	205	117
(WY)	(1999)	(1999)	(1999)	(1999)	(1999)	(1996)	(1997)	(1997)	(1999)	(1998)	(1997)	(1998)
MIN	10.2	10.3	7.77	8.61	8.34	12.1	16.5	14.5	14.7	15.2	11.5	10.5
(WY)	(1962)	(1962)	(1962)	(1962)	(1993)	(1962)	(1961)	(1961)	(1961)	(1961)	(1961)	(1961)

06410500 RAPID CREEK ABOVE PACTOLA RESERVOIR, AT SILVER CITY, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1954 - 2004	
ANNUAL TOTAL	14,223		8,730			
ANNUAL MEAN	39.0		23.9		47.3	
HIGHEST ANNUAL MEAN					142	1999
LOWEST ANNUAL MEAN					15.1	1961
HIGHEST DAILY MEAN	190	Mar 14	51	Mar 27	1,330	May 15, 1965
LOWEST DAILY MEAN	15	Jan 23	12	Feb 12	2.5	Dec 2, 1985
ANNUAL SEVEN-DAY MINIMUM	17	Jan 20	14	Feb 9	3.6	Nov 27, 1985
MAXIMUM PEAK FLOW			[a]58	Mar 27	[b]2,060	May 15, 1965
MAXIMUM PEAK STAGE			[c]6.74	Jan 29	10.44	May 15, 1965
ANNUAL RUNOFF (AC-FT)	28,210		17,320		34,290	
10 PERCENT EXCEEDS	78		36		94	
50 PERCENT EXCEEDS	27		22		30	
90 PERCENT EXCEEDS	18		17		13	

a Gage height, 4.86 ft.
b From rating curve extended above 1,000 ft^3/s on basis of slope-area measurement of peak flow.
c Backwater from ice.
e Estimated.



06411000 PACTOLA RESERVOIR NEAR SILVER CITY, SD

LOCATION.--Lat 44°04'20", long 103°29'17", in NE$^1/_4$ SW$^1/_4$ sec.2, T.1 N., R.5 E., Pennington County, Hydrologic Unit 10120110, in outlet works of dam on Rapid Creek, 3.8 mi east of Silver City.

DRAINAGE AREA.--319 mi^2.

PERIOD OF RECORD.--August 1956 to current year (monthend contents only).

GAGE.--Water-stage recorder. Elevations listed to NGVD of 1929 (Bureau of Reclamation datum). Prior to Feb. 18, 1970, nonrecording gage at same site and datum.

REMARKS.--Reservoir formed by an earthfill dam completed August 1956. Storage began Aug. 22, 1956. Conservation capacity, 54,955 acre-ft between elevations 4,456.1 ft and 4,580.2 ft. Combined dead and inactive storage below elevation 4,456.1 ft is 1,017 acre-ft. Flood storage capacity, 43,057 acre-ft between elevations 4,580.2 ft and 4,621.5 ft (crest of spillway). Surcharge capacity, 41,892 acre-ft between elevations 4,621.5 ft and 4,651.7 ft (maximum pool elevation). Figures given herein represent contents above elevation 4,456.1 ft. Reservoir provides flood control and water for municipal and irrigation uses.

COOPERATION.--Records of elevation and contents provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 60,088 acre-ft, May 19, 1965, elevation, 4,585.87 ft; minimum observed, 23,000 acre-ft, Jan. 24, 1991, elevation, 4,531.53 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 49,500 acre-ft, Apr. 30, elevation, 4,573.55 ft; minimum, 41,600 acre-ft, Sept. 30, elevation, 4,562.99 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	4,570.44	47,000	--
Oct. 31	4,570.42	47,000	0
Nov. 30	4,570.50	47,100	+100
Dec. 31	4,570.66	47,200	+100
CAL YR 2003	--	--	+1,400
Jan. 31	4,570.25	47,400	+200
Feb. 29	4,571.22	47,600	+200
Mar. 31	4,572.40	48,600	+1,000
Apr. 30	4,573.55	49,500	+900
May 31	4,571.16	47,600	-1,900
June 30	4,570.07	46,800	-800
July 31	4,567.04	44,500	-2,300
Aug. 31	4,563.68	42,100	-2,400
Sept. 30	4,562.99	41,600	-500
WTR YR 2004	--	--	-5,400

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06411500 RAPID CREEK BELOW PACTOLA DAM, SD

LOCATION.--Lat 44°04'36", long 103°28'54", in SW¼ NE¼ sec.2, T.1 N., R.5 E., Pennington County, Hydrologic Unit 10120110, on right bank 2,000 ft downstream from Pactola Dam, 3.9 mi upstream from Deer Creek, and 13.0 mi west of Rapid City.

DRAINAGE AREA.--320 mi^2, approximately.

PERIOD OF RECORD.--October 1928 to September 1932 (combined records of Creek and Dakota Power and Light Co. flume), July 1946 to current year. Prior to October 1953, published as "near Pactola." Monthly discharge only for some periods, published in WSP 1309.

REVISED RECORDS.--WSP 1309: 1931(M).

GAGE.--Water-stage recorder and concrete control since Oct. 16, 1962. Datum of gage is 4,406.00 ft above NGVD of 1929 (Bureau of Reclamation bench mark). Apr. 19, 1929, to June 30, 1932, nonrecording gage at site 3,500 ft upstream at different datum. July 24, 1946, to Aug. 24, 1947, nonrecording gage and Aug. 25, 1947, to Nov. 18, 1953, water-stage recorder, at site 2.0 mi upstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by dam on Castle Creek since Dec. 3, 1945, and completely regulated by Pactola Dam 2,000 ft upstream since Aug. 22, 1956 (reservoir filled from August 1956 to June 1963). Maximum discharge prior to Sept. 30, 1963, 2,170 ft^3/s, May 22, 1952, gage height, 6.74 ft, site and datum then in use; minimum daily discharge, 0.0 ft^3/s, Oct. 11-17, 1962. Satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	21	21	22	22	21	22	50	46	79	53	53
2	22	21	21	22	22	22	22	60	40	81	55	53
3	20	21	21	22	22	22	22	65	34	80	52	55
4	20	21	22	22	22	22	22	78	32	79	37	37
5	20	21	21	22	22	22	22	83	32	67	25	26
6	20	21	21	22	22	21	22	83	33	44	25	26
7	20	21	21	22	21	22	22	81	37	35	25	26
8	20	21	21	23	22	21	22	79	37	38	25	26
9	20	21	21	22	22	22	22	79	34	39	25	26
10	20	21	21	22	22	22	22	80	32	45	25	25
11	20	21	21	22	22	21	22	77	32	50	25	25
12	20	20	21	22	22	21	22	71	32	47	35	25
13	20	21	22	22	21	21	22	63	32	45	44	22
14	21	21	22	22	22	21	22	59	32	45	47	20
15	20	21	22	22	22	22	22	60	33	53	47	20
16	21	21	22	22	22	22	22	60	32	59	52	20
17	20	21	22	22	22	22	22	56	28	63	60	20
18	20	21	22	22	22	22	22	54	28	64	70	20
19	21	21	22	22	22	22	22	54	28	73	78	20
20	20	21	22	22	22	22	22	54	28	79	89	20
21	21	21	22	22	22	22	22	46	28	79	89	20
22	21	21	22	22	22	22	22	41	28	65	89	20
23	21	21	22	22	21	22	22	41	30	48	82	20
24	21	21	21	22	21	22	22	41	32	44	71	20
25	21	21	22	22	22	22	22	41	32	44	68	20
26	21	21	22	22	21	22	22	44	32	44	69	20
27	21	21	22	22	21	22	22	46	32	50	64	20
28	21	21	22	22	22	22	27	46	43	54	62	20
29	21	21	22	21	22	22	32	46	52	53	62	20
30	21	21	22	21	---	22	32	46	67	52	57	20
31	21	---	22	22	---	22	---	46	---	52	53	---
TOTAL	641	629	670	681	632	675	685	1,830	1,038	1,750	1,660	765
MEAN	20.7	21.0	21.6	22.0	21.8	21.8	22.8	59.0	34.6	56.5	53.5	25.5
MAX	25	21	22	23	22	22	32	83	67	81	89	55
MIN	20	20	21	21	21	21	22	41	28	35	25	20
AC-FT	1,270	1,250	1,330	1,350	1,250	1,340	1,360	3,630	2,060	3,470	3,290	1,520

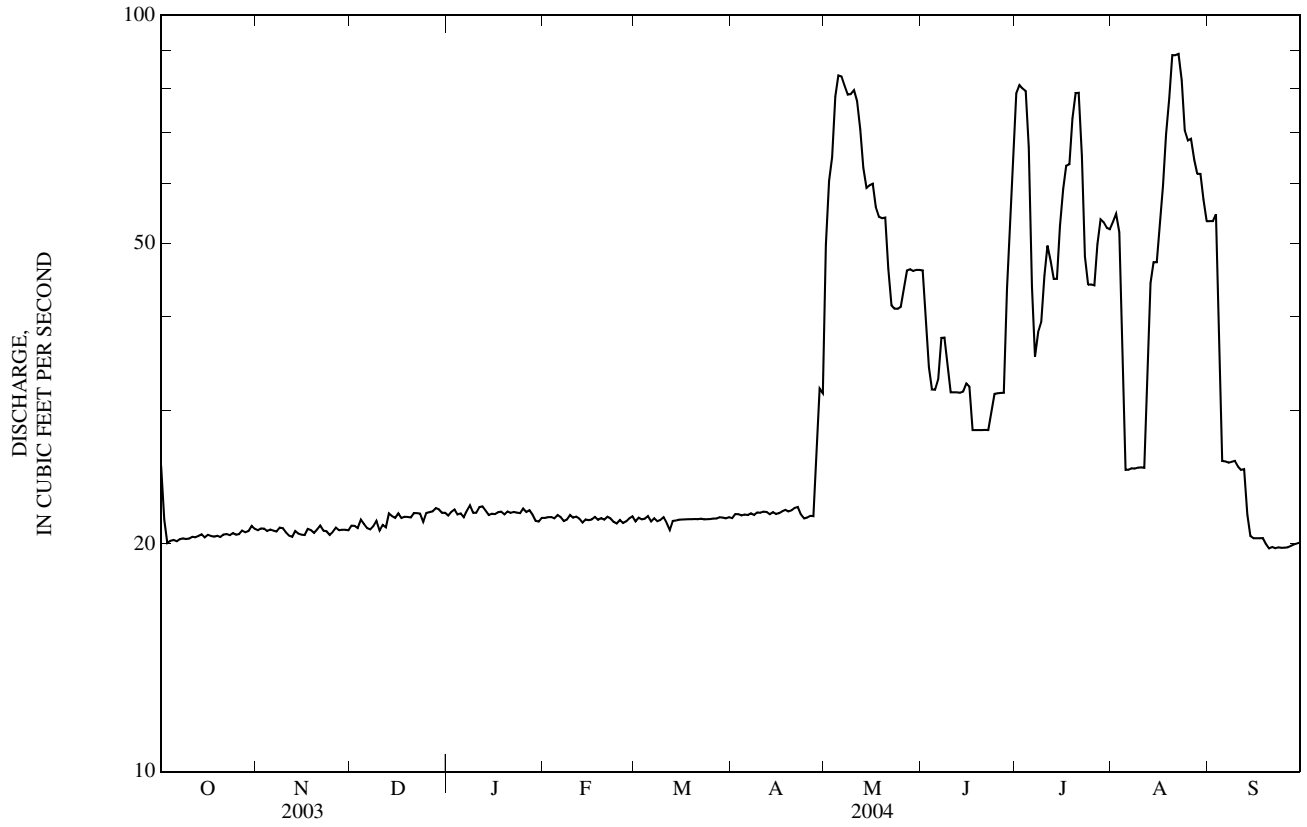
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)*

MEAN	28.8	25.1	25.2	23.3	23.6	32.3	53.9	99.7	114	91.4	71.7	47.6
MAX	127	150	130	71.4	73.8	125	182	324	415	227	213	120
(WY)	(1999)	(1999)	(1999)	(1997)	(1997)	(1996)	(1999)	(1997)	(1965)	(1998)	(1998)	(1997)
MIN	11.1	9.07	12.3	10.6	10.9	11.2	11.3	11.1	17.7	30.5	29.5	21.5
(WY)	(1991)	(1982)	(1991)	(1991)	(1991)	(1991)	(1991)	(1991)	(1991)	(1992)	(1966)	(1989)

06411500 RAPID CREEK BELOW PACTOLA DAM, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1964 - 2004*	
ANNUAL TOTAL	14,139		11,656			
ANNUAL MEAN	38.7		31.8		53.2	
HIGHEST ANNUAL MEAN					149	1999
LOWEST ANNUAL MEAN					20.7	1991
HIGHEST DAILY MEAN	107	Jun 19	89	Aug 20	[a]515	May 20, 1965
LOWEST DAILY MEAN	19	Feb 9	20	Oct 3	1.4	Oct 9, 1971
ANNUAL SEVEN-DAY MINIMUM	19	Feb 27	20	Oct 3	6.7	Oct 6, 1971
MAXIMUM PEAK FLOW			94	Aug 19	547	May 19, 1965
MAXIMUM PEAK STAGE			7.86	Aug 19	9.00	May 19, 1965
ANNUAL RUNOFF (AC-FT)	28,040		23,120		38,540	
10 PERCENT EXCEEDS	85		60		106	
50 PERCENT EXCEEDS	21		22		32	
90 PERCENT EXCEEDS	20		21		14	

* Regulated period only (1964-2004). See REMARKS.
a Also May 28, 29, 1965.



06412500 RAPID CREEK ABOVE CANYON LAKE, NEAR RAPID CITY, SD

LOCATION.--Lat 44°03'10", long 103°18'41", in NW¼ NW¼ NW¼ sec.17, T.1 N., R.7 E., Pennington County, Hydrologic Unit 10120110, on left bank between bridges on State Highway 44, at city limits of Rapid City, and 2.9 mi downstream from Victoria Creek.

DRAINAGE AREA.--371 mi^2.

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

GAGE.--Water-stage recorder and concrete broad-crested, V-notch weir. Datum of gage is 3,398.17 ft above NGVD of 1929. Prior to Oct. 6, 1947, nonrecording gage, Oct. 6, 1947, to Nov. 2, 1967, and Oct. 1, 1968, to Sept. 30, 1976, water-stage recorder all at datum 9.25 ft higher. Nov. 3, 1967, to Sept. 30, 1968, nonrecording gage at site 0.1 mi downstream at datum 6.13 ft higher. Oct. 1, 1968, to Oct. 1, 1989, at datum 7.22 ft higher. Prior to Oct. 1, 1991, at site 0.1 mi upstream at datum 7.25 ft higher.

REMARKS.--Records good. Flow regulated by Deerfield Reservoir since December 1945 and by Pactola Dam 21.0 mi upstream since August 1956 (reservoir filled from August 1956 to June 1963). Maximum discharge prior to Sept. 30, 1963, 2,600 ft^3/s, May 23, 1952, gage height, 10.08 ft, site and datum then in use; minimum daily discharge, no flow Jan. 6-8, 1959, Apr. 4-5, 1960. Gage located in loss zone and analysis of low-flow data would be unreliable due to differences in respective gage locations. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section. Satellite data-collection platform and National Weather Service telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	14	16	17	17	15	13	21	40	62	37	35
2	15	13	16	18	14	15	13	41	36	72	39	36
3	12	14	16	11	12	16	13	44	28	80	41	36
4	11	14	14	6.2	13	15	13	55	23	76	38	40
5	11	11	4.7	6.0	15	17	13	70	25	72	21	22
6	11	8.0	16	5.9	13	16	13	71	21	47	16	17
7	11	13	21	8.3	12	15	13	71	23	29	15	14
8	11	13	17	16	14	16	13	68	27	26	14	14
9	11	16	15	20	17	17	13	68	29	28	14	13
10	11	17	6.6	19	e14	16	13	68	27	30	14	13
11	12	e16	e7.0	18	e13	15	14	68	25	38	13	13
12	11	e16	7.2	17	11	15	14	65	24	37	13	13
13	12	15	9.5	17	14	15	13	55	22	34	23	13
14	12	15	17	17	17	15	13	48	21	34	29	10
15	12	15	20	17	16	15	13	47	21	34	30	10
16	e12	15	15	17	17	15	12	47	24	43	29	9.0
17	e12	14	17	17	16	15	13	47	22	49	36	8.8
18	e12	e14	15	16	18	15	12	41	20	50	44	8.4
19	e12	14	13	15	18	15	12	44	20	51	51	8.7
20	e12	14	17	16	17	15	12	49	20	67	68	9.1
21	12	14	17	16	17	14	13	51	19	69	71	9.5
22	12	12	16	16	17	15	16	39	18	70	70	9.7
23	12	8.6	14	16	17	14	14	40	18	46	72	9.4
24	12	10	14	16	17	14	13	36	20	34	59	9.4
25	12	e13	17	14	17	14	13	35	20	33	51	9.3
26	13	13	16	6.1	17	14	13	35	20	31	51	9.2
27	13	14	16	5.7	17	15	12	41	20	29	51	9.0
28	13	14	14	10	16	14	12	39	19	37	46	9.2
29	13	18	7.0	11	16	14	18	39	33	37	44	9.2
30	13	17	11	15	---	14	20	41	36	36	43	9.0
31	14	---	10	18	---	14	---	41	---	36	36	---
TOTAL	377	414.6	432.0	438.2	449	464	402	1,525	721	1,417	1,179	435.9
MEAN	12.2	13.8	13.9	14.1	15.5	15.0	13.4	49.2	24.0	45.7	38.0	14.5
MAX	15	18	21	20	18	17	20	71	40	80	72	40
MIN	11	8.0	4.7	5.7	11	14	12	21	18	26	13	8.4
AC-FT	748	822	857	869	891	920	797	3,020	1,430	2,810	2,340	865

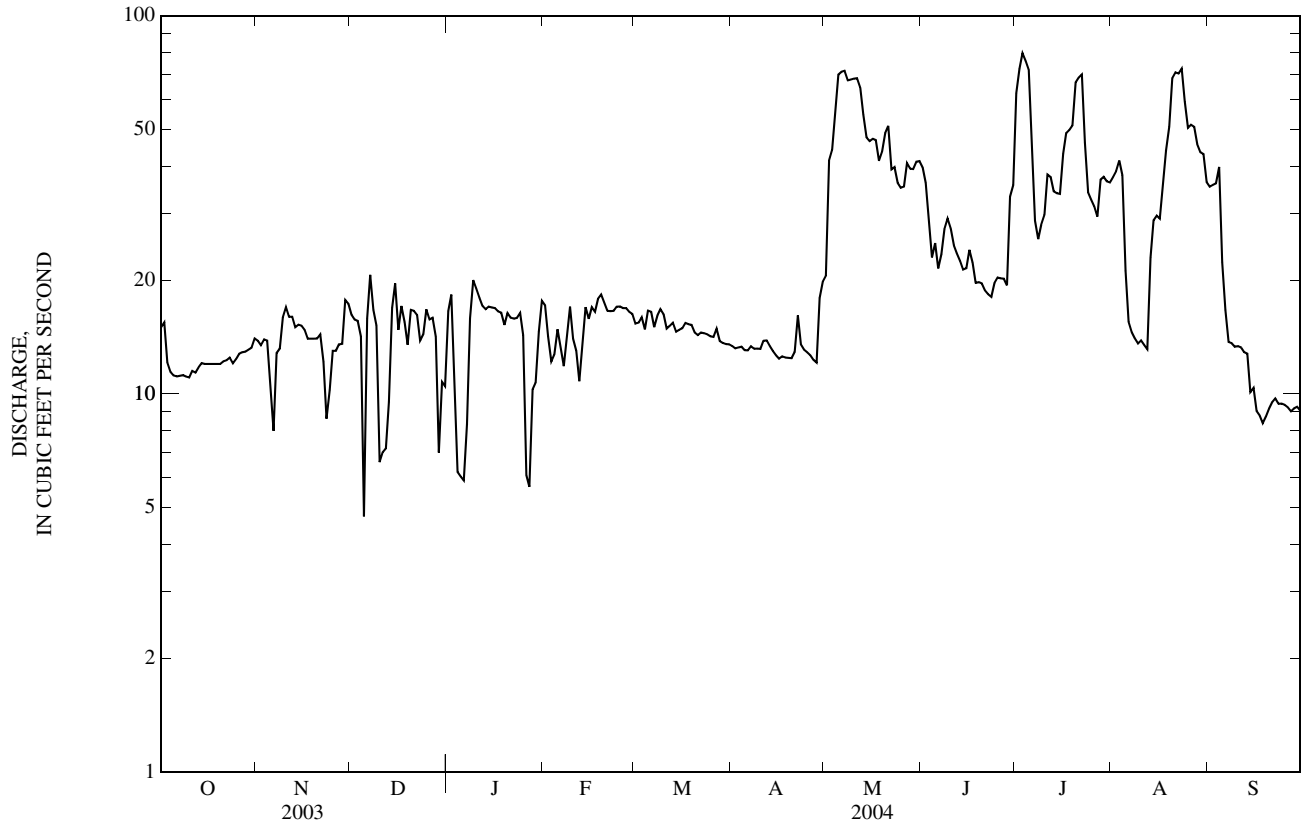
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)*

MEAN	25.4	20.7	19.4	18.1	19.0	28.7	53.0	109	137	95.0	68.6	41.9
MAX	135	154	135	80.4	84.1	133	217	449	466	275	239	123
(WY)	(1999)	(1999)	(1999)	(1997)	(1997)	(1996)	(1997)	(1997)	(1999)	(1998)	(1997)	(1997)
MIN	1.38	0.71	0.12	0.09	0.09	0.29	3.55	22.0	20.8	23.2	27.0	14.1
(WY)	(1991)	(1982)	(1991)	(1991)	(1991)	(1991)	(1991)	(1986)	(1990)	(1992)	(1966)	(1989)

06412500 RAPID CREEK ABOVE CANYON LAKE, NEAR RAPID CITY, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1964 - 2004*	
ANNUAL TOTAL	11,970.1		8,254.7			
ANNUAL MEAN	32.8		22.6		53.1	
HIGHEST ANNUAL MEAN					173	1997
LOWEST ANNUAL MEAN					17.5	1991
HIGHEST DAILY MEAN	113	Jun 21	80	Jul 3	2,600	Jun 10, 1972
LOWEST DAILY MEAN	2.6	Jan 11	4.7	Dec 5	[a]0.00	Dec 12, 1990
ANNUAL SEVEN-DAY MINIMUM	11	Jan 7	9.0	Sep 16	0.00	Dec 20, 1990
MAXIMUM PEAK FLOW			100	Jul 1	31,200	Jun 9, 1972
MAXIMUM PEAK STAGE			2.56	Jul 1	17.77	Jun 9, 1972
ANNUAL RUNOFF (AC-FT)	23,740		16,370		38,470	
10 PERCENT EXCEEDS	78		47		111	
50 PERCENT EXCEEDS	17		16		28	
90 PERCENT EXCEEDS	12		11		7.0	

* Regulated period only (1964-2004). See REMARKS.
a No flow for many days in 1991 water year.
e Estimated.



06412810 CLEGHORN SPRINGS AT RAPID CITY, SD

LOCATION.--Lat 44°03'32", long 103°17'49", in SE¼ NW¼ SE¼ sec.8, T.1 N, R.7 E., Pennington County, Hydrologic Unit 10120110, on left bank of the outflow of Cleghorn Springs, within Cleghorn Springs Fish Hatchery, and 0.2 mi west of Canyon Lake on State Highway 44.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Water-stage recorder and sharp-crested weir. Datum of gage is 3,369.1 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Discharges are the result of three springs routed into one. Flows may vary depending on operational activities of fish hatchery. From October 1987 to September 1992, Cleghorn Springs was published as three gaging stations: 06412600, 06412700, and 06412800. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	10	10	9.8	9.8	10	10	9.9	9.7	8.9	11	8.2
2	e8.8	10	10	10	9.8	10	10	10	9.7	9.1	11	8.2
3	e8.8	10	9.9	9.8	9.8	10	10	10	9.5	9.6	10	8.3
4	e8.8	10	9.9	9.6	9.8	10	10	10	9.3	9.7	9.3	8.6
5	e8.8	9.9	9.6	9.6	9.8	10	10	10	9.2	9.9	8.9	8.7
6	e8.8	9.7	9.8	9.6	9.9	11	10	10	9.1	9.7	8.5	8.5
7	e8.8	9.8	10	9.8	9.8	10	10	10	9.0	9.3	8.2	8.4
8	e8.8	9.8	10	9.8	9.8	10	10	10	9.0	9.4	8.1	8.3
9	e8.8	9.8	10	9.8	9.8	10	10	10	9.2	9.1	8.0	8.2
10	e8.8	9.7	9.8	9.8	9.8	10	10	10	9.4	8.8	7.9	7.9
11	e8.8	9.6	9.8	9.9	9.8	10	10	10	9.3	10	7.8	7.9
12	e8.9	9.6	9.8	9.8	9.8	10	11	10	9.3	12	7.7	8.0
13	e9.0	9.7	9.7	9.8	9.8	10	10	10	9.3	12	7.8	7.9
14	e9.0	9.8	9.8	10	9.8	10	10	9.9	9.0	12	7.9	7.9
15	e9.2	9.8	10	9.9	9.8	10	10	9.8	8.8	12	8.1	7.9
16	e9.2	9.8	9.9	10	9.8	10	9.8	9.7	8.9	12	8.0	7.9
17	9.1	9.8	9.8	9.9	9.8	10	9.8	9.9	8.9	12	8.0	7.8
18	8.9	10	9.9	10	9.8	10	9.8	9.8	9.3	12	8.2	7.7
19	8.8	9.9	9.8	9.9	9.8	10	9.8	9.9	9.3	12	8.4	7.8
20	8.8	9.8	9.8	9.8	9.8	10	9.8	9.8	9.2	12	8.5	7.8
21	9.1	9.8	9.8	9.8	10	10	9.8	9.9	9.1	12	8.6	8.0
22	9.0	9.8	9.9	9.9	10	11	9.9	9.8	8.8	12	8.8	7.9
23	9.1	9.6	9.8	10	9.9	10	9.8	9.9	8.6	12	8.9	8.3
24	9.5	9.6	9.8	10	10	11	9.8	9.8	8.6	12	8.9	8.4
25	9.2	9.7	10	10	10	11	9.6	9.8	8.6	12	8.6	8.2
26	9.3	9.8	10	9.9	10	11	9.6	9.7	8.6	12	8.5	8.2
27	9.4	9.9	10	9.8	10	10	9.5	9.7	8.6	12	8.5	8.0
28	9.4	9.8	10	9.9	10	10	9.4	9.6	8.5	12	8.5	8.0
29	9.7	10	9.8	9.9	10	10	9.7	9.7	8.5	12	8.4	7.9
30	9.8	10	9.7	10	---	10	9.8	9.8	8.6	12	8.4	7.9
31	9.8	---	9.8	10	---	10	---	9.8	---	11	8.1	---
TOTAL	280.9	294.5	305.9	305.8	286.0	315	296.9	306.2	270.9	342.5	265.5	242.7
MEAN	9.06	9.82	9.87	9.86	9.86	10.2	9.90	9.88	9.03	11.0	8.56	8.09
MAX	9.8	10	10	10	10	11	11	10	9.7	12	11	8.7
MIN	8.7	9.6	9.6	9.6	9.8	10	9.4	9.6	8.5	8.8	7.7	7.7
AC-FT	557	584	607	607	567	625	589	607	537	679	527	481

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2004, BY WATER YEAR (WY)

MEAN	11.3	11.5	11.6	11.5	11.3	11.5	12.1	12.6	12.4	11.6	10.8	10.6
MAX	14.2	14.0	13.9	13.1	13.0	13.0	13.7	15.0	14.9	13.7	13.7	12.9
(WY)	(1999)	(1999)	(1999)	(1999)	(1997)	(1997)	(1997)	(1997)	(1999)	(1998)	(1998)	(1998)
MIN	9.06	9.81	9.87	9.86	9.86	10.2	9.90	9.88	9.03	9.48	8.56	8.09
(WY)	(2004)	(1993)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2004)	(2004)

06412810 CLEGHORN SPRINGS AT RAPID CITY, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1993 - 2004	
ANNUAL TOTAL	3,661.2		3,512.8			
ANNUAL MEAN	10.0		9.60		11.6	
HIGHEST ANNUAL MEAN					13.3	1999
LOWEST ANNUAL MEAN					9.60	2004
HIGHEST DAILY MEAN	12	Apr 30	12	Jul 12	17	Jun 2, 1997
LOWEST DAILY MEAN	8.5	Sep 27	7.7	Aug 12	7.7	Aug 12, 2004
ANNUAL SEVEN-DAY MINIMUM	8.6	Sep 23	7.8	Sep 14	7.8	Sep 14, 2004
MAXIMUM PEAK FLOW			24	Jul 3	59	Jun 2, 1997
MAXIMUM PEAK STAGE			3.13	Jul 3	3.76	Jun 2, 1997
ANNUAL RUNOFF (AC-FT)	7,260		6,970		8,390	
10 PERCENT EXCEEDS	11		10		14	
50 PERCENT EXCEEDS	10		9.8		11	
90 PERCENT EXCEEDS	9.0		8.3		9.8	

e Estimated.