

06414000 RAPID CREEK AT RAPID CITY, SD

LOCATION.--Lat 44°05'09", long 103°14'31", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.35, T.2 N., R.7 E., Pennington County, Hydrologic Unit 10120110, on left bank 1,300 ft upstream from 12th Street in Rapid City and 3.6 mi downstream from Canyon Lake Dam.

DRAINAGE AREA.--410 mi², approximately.

PERIOD OF RECORD.--June 1903 to November 1906, July 1942 to current year. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 3,230.14 ft above NGVD of 1929. Prior to Nov. 30, 1906, nonrecording gage at site 1.0 mi downstream at different datum, and June 10, 1972, to Nov. 1, 1972, nonrecording gage at site 800 ft downstream at datum 0.80 ft higher. July 1942 to June 9, 1972, water-stage recorder at site 300 ft downstream at datum 0.80 ft higher (destroyed by flood).

REMARKS.--Records good. Several small diversions upstream from station to municipal park pools and for irrigation of about 320 acres. Flow regulated by Pactola Dam 25.4 mi upstream since Aug. 22, 1956 (reservoir filled from August 1956 to June 1963). Maximum discharge prior to Sept. 30, 1963, 3,300 ft³/s, July 13, 1962, gage height, 8.37 ft, datum then in use; minimum daily discharge, 2.0 ft³/s, Apr. 20, 1962. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section. National Weather Service telemeter at station. U.S. Army Corps of Engineers satellite data-collection platform at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 12, 13, 1920, reached a stage of 14.4 ft present datum, from floodmarks.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	32	31	22	26	25	25	25	33	38	33	39
2	23	31	32	20	28	28	24	25	29	70	31	38
3	22	31	30	19	29	27	23	24	27	55	52	37
4	21	31	30	18	29	26	23	23	26	56	54	37
5	22	31	29	e17	29	26	24	21	28	63	51	36
6	22	31	29	e17	29	26	25	20	25	64	53	36
7	21	31	26	e16	21	27	23	21	27	58	56	34
8	20	31	30	e15	20	27	23	24	27	95	56	35
9	20	31	29	e14	23	26	23	24	35	101	55	36
10	20	32	28	e13	26	25	23	29	32	100	49	37
11	20	32	29	e12	29	25	23	48	31	98	79	37
12	22	33	28	e11	31	26	23	80	30	103	65	39
13	24	33	23	e8.3	31	26	23	48	48	102	41	37
14	25	33	21	e6.7	29	26	22	40	32	86	30	34
15	24	31	30	e6.0	28	24	21	35	29	85	28	33
16	25	31	33	e5.5	21	28	21	33	27	84	26	31
17	26	31	30	e11	23	27	21	33	25	83	25	29
18	28	31	30	e24	26	27	20	31	25	78	25	30
19	29	31	28	33	26	26	20	31	22	78	25	31
20	29	32	30	32	26	25	28	28	20	77	25	28
21	25	32	25	30	26	27	55	25	18	77	23	27
22	26	32	e24	20	27	27	33	23	17	76	23	27
23	26	32	e25	27	28	26	27	22	16	64	21	28
24	26	31	26	30	25	28	25	22	16	95	21	30
25	27	31	30	30	28	25	23	70	17	87	20	33
26	29	31	35	29	28	26	23	26	15	70	21	31
27	27	31	33	28	28	26	23	25	15	51	21	30
28	28	30	31	29	26	26	24	24	17	43	19	31
29	31	28	31	29	---	26	24	24	26	44	19	31
30	31	25	32	29	---	25	25	25	26	37	20	30
31	31	---	26	28	---	25	---	64	---	34	34	---
TOTAL	771	933	894	629.5	746	810	740	993	761	2,252	1,101	992
MEAN	24.9	31.1	28.8	20.3	26.6	26.1	24.7	32.0	25.4	72.6	35.5	33.1
MAX	31	33	35	33	31	28	55	80	48	103	79	39
MIN	20	25	21	5.5	20	24	20	20	15	34	19	27
AC-FT	1,530	1,850	1,770	1,250	1,480	1,610	1,470	1,970	1,510	4,470	2,180	1,970

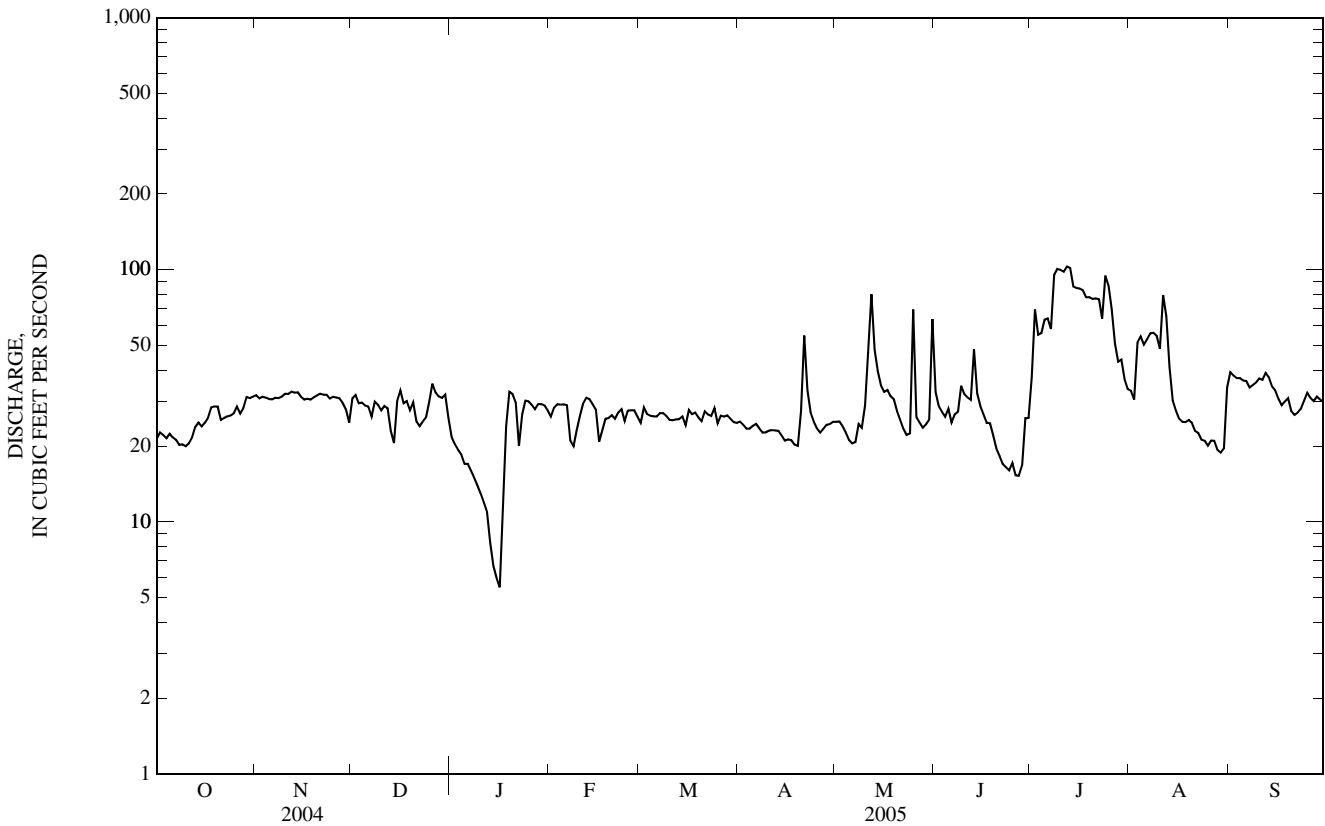
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2005, BY WATER YEAR (WY)*

MEAN	44.4	41.2	39.6	37.0	37.8	47.2	71.7	127	154	104	79.0	57.1
MAX	170	192	167	112	111	152	232	490	505	296	263	158
(WY)	(1999)	(1999)	(1999)	(1997)	(1997)	(1996)	(1999)	(1997)	(1999)	(1999)	(1998)	(1997)
MIN	15.4	20.8	20.1	15.9	15.9	18.3	17.6	32.0	25.4	45.8	35.5	26.5
(WY)	(1989)	(1982)	(1991)	(1978)	(1978)	(1991)	(1981)	(2005)	(2005)	(1986)	(2005)	(1989)

06414000 RAPID CREEK AT RAPID CITY, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1964 - 2005*	
ANNUAL TOTAL	13,744		11,622.5		70.1	
ANNUAL MEAN	37.6		31.8		31.5	
HIGHEST ANNUAL MEAN					207	1999
LOWEST ANNUAL MEAN					31.5	1990
HIGHEST DAILY MEAN	131	Jul 3	103	Jul 12	5,600	Jun 10, 1972
LOWEST DAILY MEAN	13	Jan 28	5.5	Jan 16	5.5	Jan 16, 2005
ANNUAL SEVEN-DAY MINIMUM	19	Jan 26	8.6	Jan 11	8.6	Jan 24, 1978
MAXIMUM PEAK FLOW			274	Aug 11	^a 50,000	Jun 9, 1972
MAXIMUM PEAK STAGE			4.62	Aug 11	^b 19.66	Jun 9, 1972
ANNUAL RUNOFF (AC-FT)	27,260		23,050		50,770	
10 PERCENT EXCEEDS	64		52		127	
50 PERCENT EXCEEDS	32		28		45	
90 PERCENT EXCEEDS	23		20		23	

* Regulated period only (1964-2005). See REMARKS.
 a On basis of slope-area measurement of peak flow.
 b From floodmarks.
 e Estimated.



06418900 RAPID CREEK BELOW SEWAGE TREATMENT PLANT, NEAR RAPID CITY, SD

LOCATION.--Lat 44°01'24", long 103°05'43", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.25, T.1 N., R.8 E., Pennington County, Hydrologic Unit 10120110, on right bank 120 ft downstream from sewage treatment plant effluent and 6.7 mi southeast of Rapid City.

DRAINAGE AREA.--452 mi², approximately.

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

GAGE.--Water-stage recorder. Elevation of gage is 3,000 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good. Flow regulated by Pactola Dam 40.9 mi upstream since Aug. 22, 1956. Reservoir filled from August 1956 to June 1963. Diversions for irrigation of about 7,000 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	51	45	e34	40	39	41	24	54	25	26	18
2	16	48	50	e32	41	40	41	24	37	38	23	19
3	16	48	45	e30	42	41	41	23	37	42	39	18
4	17	46	45	e29	41	40	41	23	36	38	42	19
5	19	47	44	e27	42	40	42	23	35	38	32	19
6	20	48	44	e26	41	40	43	22	38	42	32	19
7	20	46	43	e25	39	42	43	22	36	39	39	23
8	20	46	43	e24	36	43	43	25	44	45	43	26
9	20	46	44	e23	38	41	43	24	52	53	36	28
10	22	46	43	e22	40	41	44	28	55	55	31	29
11	24	47	43	e22	42	39	45	75	45	53	30	30
12	24	48	44	e22	42	40	35	130	44	53	111	31
13	29	48	40	e21	42	41	34	113	74	52	71	35
14	32	48	37	e21	41	41	35	66	47	45	32	34
15	30	47	40	e20	40	41	33	40	40	41	25	35
16	30	46	48	e28	38	41	34	37	36	40	22	30
17	31	47	46	e32	35	41	35	35	35	39	20	28
18	32	47	45	e38	38	43	36	35	35	39	17	29
19	34	47	44	58	41	43	35	31	33	39	19	31
20	35	47	44	49	42	42	51	28	32	47	18	28
21	35	48	41	46	41	43	141	27	32	45	17	26
22	34	48	35	41	41	47	74	25	28	47	17	23
23	38	49	31	41	40	42	41	24	27	42	17	26
24	36	48	33	43	39	51	35	22	26	63	17	31
25	36	48	36	44	39	47	31	94	25	94	16	33
26	39	47	44	43	40	44	28	29	23	64	16	28
27	40	47	45	41	41	43	28	23	23	42	16	25
28	40	47	45	42	39	44	28	23	23	29	15	26
29	53	45	44	42	---	43	26	20	23	35	16	24
30	55	43	45	42	---	42	24	22	24	25	14	23
31	49	---	43	42	---	40	---	99	---	24	14	---
TOTAL	944	1,414	1,319	1,050	1,121	1,305	1,251	1,236	1,099	1,373	883	794
MEAN	30.5	47.1	42.5	33.9	40.0	42.1	41.7	39.9	36.6	44.3	28.5	26.5
MAX	55	51	50	58	42	51	141	130	74	94	111	35
MIN	16	43	31	20	35	39	24	20	23	24	14	18
AC-FT	1,870	2,800	2,620	2,080	2,220	2,590	2,480	2,450	2,180	2,720	1,750	1,570

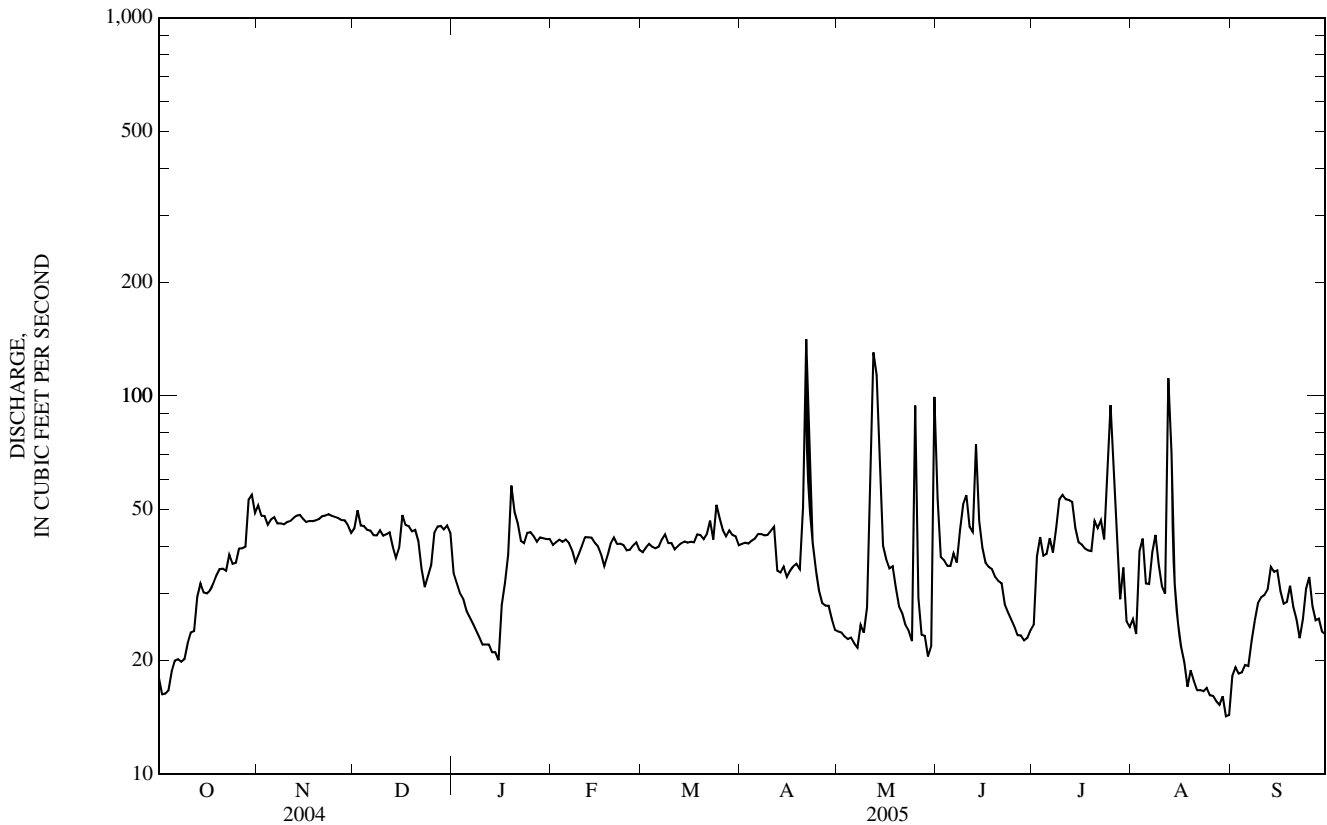
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2005, BY WATER YEAR (WY)

MEAN	58.2	62.1	61.7	60.0	62.1	74.1	101	142	160	104	83.2	59.4
MAX	216	230	196	141	158	172	285	552	523	313	339	192
(WY)	(1999)	(1999)	(1999)	(1997)	(1997)	(1996)	(1999)	(1997)	(1999)	(1999)	(1997)	(1997)
MIN	18.7	23.7	31.5	28.8	32.7	32.3	31.1	30.5	32.7	32.3	28.5	22.2
(WY)	(1991)	(1982)	(1991)	(1991)	(1991)	(1991)	(1988)	(1989)	(1985)	(1991)	(2005)	(1990)

06418900 RAPID CREEK BELOW SEWAGE TREATMENT PLANT, NEAR RAPID CITY, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1982 - 2005	
ANNUAL TOTAL	15,448		13,789		85.7	
ANNUAL MEAN	42.2		37.8		35.5	
HIGHEST ANNUAL MEAN					239	1997
LOWEST ANNUAL MEAN					11	1989
HIGHEST DAILY MEAN	169	Jul 5	141	Apr 21	1,270	Jun 3, 1997
LOWEST DAILY MEAN	16	Sep 25	14	Aug 30,31	13	Sep 26, 1992
ANNUAL SEVEN-DAY MINIMUM	17	Sep 22	15	Aug 25	13	Oct 4, 1990
MAXIMUM PEAK FLOW			316	May 25	2,260	Jun 3, 1997
MAXIMUM PEAK STAGE			4.21	May 25	10.05	Jun 3, 1997
ANNUAL RUNOFF (AC-FT)	30,640		27,350		62,120	
10 PERCENT EXCEEDS	53		48		177	
50 PERCENT EXCEEDS	43		39		53	
90 PERCENT EXCEEDS	22		22		27	

e Estimated.



06421500 RAPID CREEK NEAR FARMINGDALE, SD

LOCATION.--Lat 43°56'31", long 102°51'12", in SW¹/₄ SW¹/₄ SW¹/₄ sec.19, T.1 S., R.11 E., Pennington County, Hydrologic Unit 10120110, on right bank at downstream side of bridge, 2 mi southeast of Farmingdale, and 4.8 mi downstream from Antelope Creek.

DRAINAGE AREA.--602 mi².

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

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,700 ft above NGVD of 1929, from topographic map. Prior to Sept. 19, 1947, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Pactola Dam 67 mi upstream since Aug. 22, 1956 (reservoir filled from August 1956 to June 1963). Maximum discharge prior to regulation, 2,640 ft³/s, June 21, 1947, gage height, 8.40 ft; no flow at times in 1949, 1952-56, 1958-63. Diversions of irrigation of about 10,000 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	50	e43	e41	e40	41	38	18	139	2.9	8.3	3.0
2	17	51	e44	e35	e42	e41	39	17	75	1.7	6.6	2.1
3	18	48	e50	e34	e44	41	38	19	49	1.1	5.4	5.9
4	18	48	e46	e34	e44	42	39	15	44	5.8	6.1	6.0
5	20	46	e44	e32	e39	41	39	17	41	6.2	18	4.9
6	20	47	e43	e30	e37	41	32	15	40	3.1	11	4.3
7	20	47	e42	e28	e35	41	31	16	42	1.6	11	4.9
8	20	45	e42	e26	e34	45	30	16	40	1.1	11	4.2
9	19	46	e42	e24	e35	45	29	18	49	1.2	18	9.8
10	18	45	e43	e23	e38	42	30	26	63	6.2	12	11
11	19	45	e41	e22	e42	41	29	37	64	14	12	10
12	16	46	e41	e22	e44	40	33	149	50	12	29	11
13	18	46	e42	e21	e44	39	22	218	50	11	86	12
14	18	46	e38	e20	e42	39	17	152	93	9.6	53	8.7
15	24	46	e36	e19	e38	40	18	92	56	11	22	7.7
16	29	45	e38	e18	e34	40	16	54	45	7.1	15	9.0
17	30	44	e47	e26	e31	40	16	48	38	6.1	11	8.7
18	30	45	e45	e34	e28	41	19	44	34	4.8	8.3	8.9
19	29	45	e43	e47	e30	43	19	44	31	4.6	8.7	10
20	31	45	e42	e61	e33	43	18	36	26	6.3	8.5	11
21	32	44	e40	e56	e38	44	39	31	25	8.8	11	11
22	33	48	e39	e53	e44	48	169	25	24	13	11	9.5
23	35	45	e34	e45	e46	50	73	21	18	12	9.4	8.9
24	37	45	e31	e46	46	47	34	16	11	13	5.4	4.3
25	31	45	e33	e45	43	59	21	13	7.7	39	5.0	6.8
26	33	46	e35	e42	42	52	17	96	7.5	74	5.4	11
27	30	45	e41	e41	43	47	15	32	6.1	47	4.8	15
28	36	45	e41	e41	43	44	14	16	5.1	24	4.9	11
29	38	e45	e41	e42	---	46	16	11	4.1	13	5.5	9.2
30	53	e44	e41	e42	---	43	19	11	3.6	15	4.0	11
31	55	---	e43	e40	---	42	---	19	---	12	3.9	---
TOTAL	848	1,378	1,271	1,090	1,099	1,348	969	1,342	1,181.1	388.2	431.2	250.8
MEAN	27.4	45.9	41.0	35.2	39.2	43.5	32.3	43.3	39.4	12.5	13.9	8.36
MAX	55	51	50	61	46	59	169	218	139	74	86	15
MIN	16	44	31	18	28	39	14	11	3.6	1.1	3.9	2.1
AC-FT	1,680	2,730	2,520	2,160	2,180	2,670	1,920	2,660	2,340	770	855	497

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2005, BY WATER YEAR (WY)*

MEAN	54.1	58.5	54.1	50.9	56.4	78.8	103	144	166	76.8	52.4	45.6
MAX	246	257	215	147	180	176	343	754	607	305	340	155
(WY)	(1999)	(1999)	(1999)	(1997)	(1997)	(1996)	(1999)	(1997)	(1997)	(1999)	(1997)	(1997)
MIN	17.3	29.1	27.2	17.7	15.0	30.9	11.5	17.2	13.1	12.5	11.1	8.36
(WY)	(1993)	(1991)	(1989)	(1988)	(1988)	(1981)	(1981)	(1979)	(1966)	(2005)	(2004)	(2005)

06421500 RAPID CREEK NEAR FARMINGDALE, SD—Continued

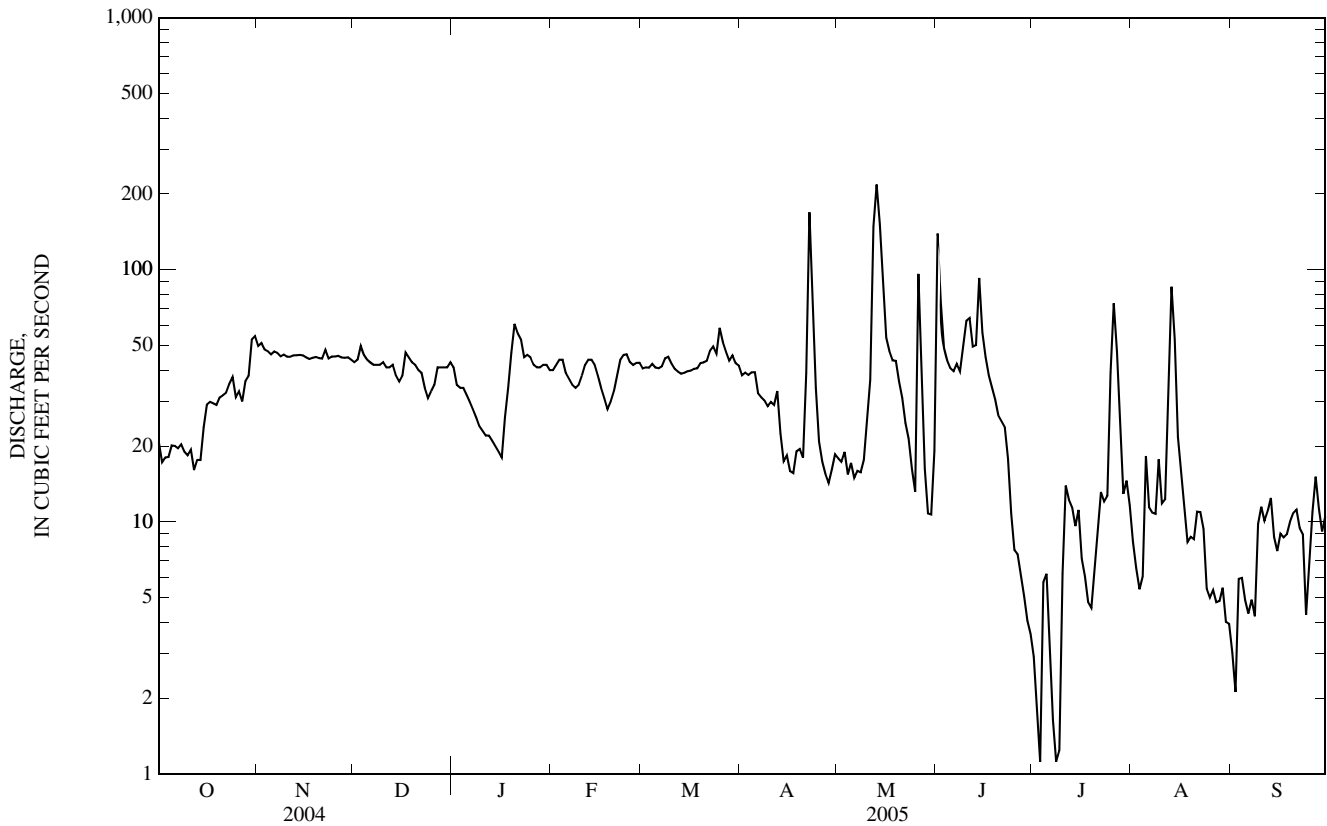
SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1964 - 2005*	
ANNUAL TOTAL	12,608.18		11,596.3		78.3	
ANNUAL MEAN	34.4		31.8		24.8	
HIGHEST ANNUAL MEAN					269	1997
LOWEST ANNUAL MEAN					24.8	1989
HIGHEST DAILY MEAN	199	Jul 4	218	May 13	2,860	Jun 10, 1972
LOWEST DAILY MEAN	0.78	Aug 20	1.1	Jul 3	^a 0.00	May 30, 1969
ANNUAL SEVEN-DAY MINIMUM	2.5	Aug 15	2.9	Jul 3	0.00	Jun 1, 1969
MAXIMUM PEAK FLOW			338	May 13	^b 7,320	Jun 10, 1972
MAXIMUM PEAK STAGE			7.42	May 13	^b 11.85	Jun 10, 1972
ANNUAL RUNOFF (AC-FT)	25,010		23,000		56,750	
10 PERCENT EXCEEDS	51		48		157	
50 PERCENT EXCEEDS	36		33		48	
90 PERCENT EXCEEDS	8.5		6.3		17	

* Regulated period only (1964-2005). See REMARKS.

a No flow at times in 1969-71.

b From floodmarks, from rating curve extended above 400 ft³/s on basis of contracted-opening and flow-over-road measurement of peak flow.

c Estimated.



06422500 BOXELDER CREEK NEAR NEMO, SD

LOCATION.--Lat 44°08'38", long 103°27'16", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.12, T.2 N., R.5 E., Lawrence County, Hydrologic Unit 10120111, on right bank at ranch 0.2 mi upstream from county line, 0.9 mi downstream from Jim Creek, and 4.5 mi southeast of Nemo.

DRAINAGE AREA.--96 mi², approximately.

PERIOD OF RECORD.--July 1945 to July 1947, May 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,320.27 ft above NGVD of 1929. July 1945 to July 1947 nonrecording gage at site 100 ft upstream at different datum. May 17, 1966, to June 9, 1972, water-stage recorder (destroyed by flood) and June 10, 1972, to Aug. 8, 1972, nonrecording gage, both at site 100 ft upstream at datum 2.00 ft higher.

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. Satellite data-collection platform at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1911 reached a stage of about 16 ft, present datum.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	e2.3	e1.8	e2.0	e2.5	e3.2	3.9	3.6	10	5.0	3.7	1.5
2	1.3	2.3	e1.9	e2.0	e2.6	e3.2	3.8	3.2	7.2	5.0	3.4	1.5
3	1.4	2.4	e1.9	e1.9	e2.7	e3.2	3.9	3.2	6.2	4.7	4.0	1.4
4	1.3	2.5	e1.9	e1.9	e2.8	e3.3	4.0	3.1	5.8	4.5	3.6	1.4
5	1.3	2.5	e2.0	e1.8	e2.9	e3.3	4.5	3.2	5.5	4.3	3.2	1.4
6	1.3	2.5	e1.8	e1.8	e2.8	e3.2	6.4	3.0	5.3	4.6	3.1	1.3
7	1.4	2.4	e1.8	e1.8	e2.6	e3.1	5.5	3.1	6.4	4.9	3.0	1.3
8	1.4	2.5	e1.8	e1.8	e2.5	e3.1	4.6	3.9	9.7	5.6	3.0	1.3
9	1.4	2.5	e1.8	e1.8	e2.5	e3.1	4.2	7.1	9.6	6.2	2.7	1.4
10	1.3	2.5	e1.9	e1.7	e2.4	e3.1	4.0	7.9	9.3	5.0	2.4	1.3
11	1.3	2.3	e1.9	e1.7	e2.5	e3.1	3.8	11	9.1	4.4	2.7	1.3
12	1.3	2.2	e1.9	e1.7	e2.6	e3.0	3.5	12	7.8	4.2	4.9	1.4
13	1.4	2.2	e1.8	e1.6	e2.7	e2.9	3.3	19	10	4.1	4.5	1.4
14	1.6	e2.2	e1.6	e1.5	e2.7	e2.9	3.1	19	15	3.6	4.0	1.3
15	1.7	e2.2	e1.7	e1.6	e2.7	e2.9	3.0	12	11	3.6	3.6	1.3
16	1.8	e2.3	e1.7	e1.6	e2.6	e3.0	3.0	9.5	8.8	3.4	3.2	1.3
17	1.9	2.5	e1.8	e1.7	e2.5	e3.1	2.9	8.6	8.3	3.3	2.6	1.3
18	1.8	2.5	e1.8	e1.8	e2.5	e3.1	2.7	8.6	7.8	3.2	2.6	1.4
19	1.8	2.3	e1.8	e1.9	e2.5	e3.1	2.9	8.1	7.0	3.2	2.7	1.4
20	1.8	2.3	e1.8	e2.0	e2.5	e3.2	3.7	7.0	6.5	3.1	2.7	1.4
21	1.9	e2.2	e1.7	e2.0	e2.4	e3.3	6.3	6.2	6.4	3.1	2.5	1.5
22	1.9	e2.2	e1.5	e2.0	e2.5	e3.4	7.5	5.7	6.3	3.0	2.4	1.5
23	1.9	e2.2	e1.4	e2.0	e2.6	e3.6	7.1	5.3	8.0	3.0	2.8	1.4
24	1.9	e2.2	e1.5	e2.1	e2.8	e3.7	6.2	5.1	8.0	3.7	2.6	1.6
25	1.9	e2.2	e1.5	e2.2	e3.0	e3.8	5.2	6.5	7.5	3.6	2.5	1.9
26	1.9	e2.0	e1.6	e2.3	e3.1	e3.9	4.5	8.1	6.5	4.3	2.3	2.0
27	1.9	e1.9	e1.7	e2.3	e3.2	4.0	4.2	6.7	5.6	4.7	2.1	1.9
28	2.0	e1.7	e1.8	e2.3	e3.2	4.5	4.1	5.8	5.2	4.2	1.9	1.9
29	2.2	e1.6	e1.9	e2.4	---	5.4	3.9	5.1	5.0	3.9	1.8	1.9
30	2.4	e1.7	e2.0	e2.4	---	5.1	3.6	5.2	4.9	4.0	1.7	1.7
31	2.3	---	e2.0	e2.4	---	4.4	---	8.5	---	3.9	1.6	---
TOTAL	52.0	67.3	55.0	60.0	74.9	107.2	129.3	224.3	229.7	127.3	89.8	44.6
MEAN	1.68	2.24	1.77	1.94	2.67	3.46	4.31	7.24	7.66	4.11	2.90	1.49
MAX	2.4	2.5	2.0	2.4	3.2	5.4	7.5	19	15	6.2	4.9	2.0
MIN	1.3	1.6	1.4	1.5	2.4	2.9	2.7	3.0	4.9	3.0	1.6	1.3
AC-FT	103	133	109	119	149	213	256	445	456	252	178	88

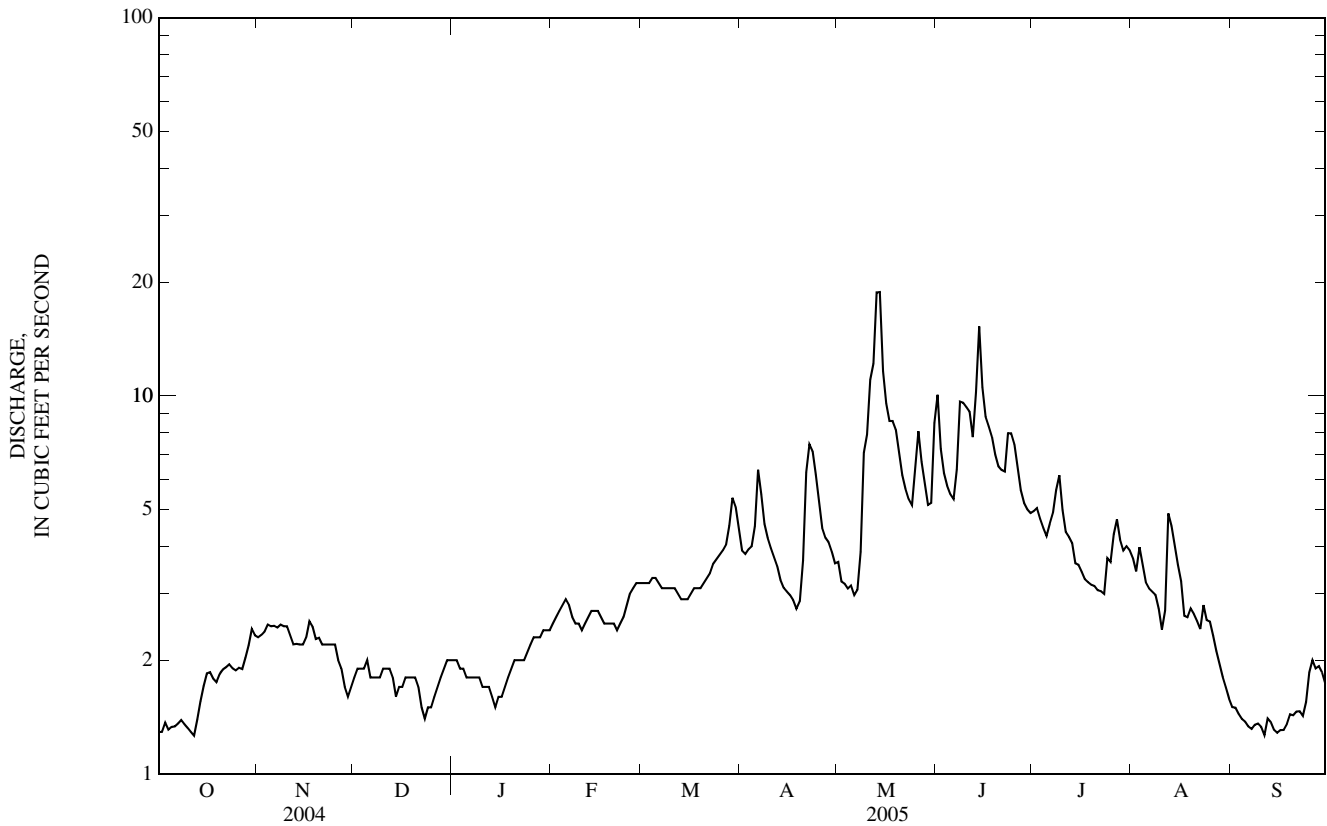
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2005, BY WATER YEAR (WY)

MEAN	10.0	9.29	6.72	5.73	6.04	12.2	28.9	48.5	56.9	20.7	12.8	8.70
MAX	71.1	64.1	37.7	26.4	18.2	44.5	149	275	489	64.6	57.0	40.0
(WY)	(1999)	(1999)	(1999)	(1999)	(1997)	(1997)	(1997)	(1995)	(1972)	(1999)	(1998)	(1997)
MIN	1.68	1.66	1.65	1.42	1.36	2.66	3.03	4.51	3.44	1.70	0.76	1.15
(WY)	(2005)	(1989)	(1989)	(1982)	(1989)	(1981)	(1981)	(2004)	(2004)	(1988)	(1989)	(2004)

06422500 BOXELDER CREEK NEAR NEMO, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1946, 1967 - 2005	
ANNUAL TOTAL	1,214.67		1,261.4		18.9	
ANNUAL MEAN	3.32		3.46		63.1	
HIGHEST ANNUAL MEAN					1997	
LOWEST ANNUAL MEAN					2005	
HIGHEST DAILY MEAN	12	Mar 19	19	May 13	6,700	Jun 10, 1972
LOWEST DAILY MEAN	0.78	Sep 1	1.3	Oct 1	0.10	Aug 8, 1989
ANNUAL SEVEN-DAY MINIMUM	0.91	Aug 28	1.3	Oct 1	^a 0.14	Aug 4, 1989
MAXIMUM PEAK FLOW			24	May 14	^b 30,100	Jun 9, 1972
MAXIMUM PEAK STAGE			1.94	May 14	^c 20.40	Jun 9, 1972
ANNUAL RUNOFF (AC-FT)	2,410		2,500		13,690	
10 PERCENT EXCEEDS	6.0		6.5		^a 42	
50 PERCENT EXCEEDS	2.6		2.7		^a 8.0	
90 PERCENT EXCEEDS	1.3		1.5		^a 2.5	

- a Reflects water years 1967-2005.
- b From rating curve extended above 600 ft³/s on basis of slope-area measurement of peak flow.
- c Site and datum then in use (22.0 ft, present site and datum, from floodmarks).
- e Estimated.



06423010 BOXELDER CREEK NEAR RAPID CITY, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1979 - 2005	
ANNUAL TOTAL	0.00		0.00			
ANNUAL MEAN	0.00		0.00		5.91	
HIGHEST ANNUAL MEAN					42.3	1997
LOWEST ANNUAL MEAN					^a 0.00	1979
HIGHEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	879	May 9, 1995
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	^b 0.00	Oct 1, 1978
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1978
MAXIMUM PEAK FLOW					^c 1,080	May 10, 1995
MAXIMUM PEAK STAGE					33.46	May 31, 1996
ANNUAL RUNOFF (AC-FT)	0.00		0.00		4,280	
10 PERCENT EXCEEDS	0.00		0.00		8.1	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a Also 1980, 1981, 1985-90, 1992, and 2002-05.

b For most months in most years.

c Gage height, 33.09 ft.

06423500 CHEYENNE RIVER NEAR WASTA, SD

LOCATION.--Lat 44°04'52", long 102°24'03", in NE¹/₄ NE¹/₄ NW¹/₄ sec.2, T.1 N., R.14 E., Pennington County, Hydrologic Unit 10120111, on left bank at downstream side of highway bridge, 200 ft downstream from railroad bridge, 3.0 mi east of Wasta, and 8.6 mi downstream from Boxelder Creek.

DRAINAGE AREA.--12,800 mi², approximately.

PERIOD OF RECORD.--July 1914 to June 1915, August 1928 to June 1932, March 1934 to current year. Monthly discharge only for some periods, published in WSP 1309. Records for Feb. 19-28, 1930, published in WSP 701, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 786: Drainage area. WSP 1279: 1930(M), 1931, 1937. See also Period of Record.

GAGE.--Water-stage recorder. Datum of gage is 2,260.78 ft above NGVD of 1929. Prior to Aug. 1, 1940, nonrecording gage at site 50 ft upstream; Aug. 1, 1940, to Dec. 3, 1940, nonrecording gage and Dec. 4, 1940, to Sept. 30, 1968, water-stage recorder at present site all at datum 2.00 ft higher. Oct. 1, 1968, to Sept. 30, 1972, at datum 1.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Angostura Dam 108 mi upstream since October 1949 and by upstream reservoirs in the Rapid Creek Basin. The most downstream of the reservoirs in the Rapid Creek Basin, Pactola Reservoir, was the last to fill, and reached maximum pool elevation in June 1963 (began filling in August 1956). Prior to Oct. 1, 1963, maximum discharge observed, 46,300 ft³/s, May 6, 1932, gage height, 13.28 ft, present datum, from rating curve extended above 11,000 ft³/s on basis of an incomplete discharge measurement, at gage height, 10.65 ft, present datum; maximum gage height observed, 14.5 ft, present datum, June 13, 1915; minimum daily discharge, 1.0 ft³/s, July 27, 1961. 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 May 1920 reached a stage of 18 ft, present datum, from information by local residents.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	142	e64	e130	e140	118	123	87	756	66	101	38
2	87	124	e65	e120	e130	121	118	83	335	35	62	37
3	87	126	e129	e110	e120	118	114	78	180	25	50	37
4	86	118	153	e100	e110	117	109	83	141	20	35	37
5	83	116	127	e90	e100	116	111	81	124	21	30	37
6	83	114	125	e80	e80	113	105	65	119	16	31	34
7	85	114	107	e70	e60	114	103	1,950	184	17	47	38
8	83	113	138	e75	e100	118	e95	526	809	23	39	43
9	82	113	140	e80	e120	121	90	228	275	26	39	44
10	81	116	110	e80	e130	123	91	157	163	25	42	42
11	81	115	117	e80	e140	120	91	498	166	20	53	47
12	81	115	122	e80	e130	115	91	4,540	144	128	50	51
13	85	116	e60	e78	e120	114	89	3,180	141	49	1,800	56
14	88	117	e63	e75	e100	116	86	746	688	30	540	60
15	86	117	e80	e70	e90	112	73	340	312	29	236	64
16	91	119	e100	e65	e80	120	67	219	192	26	137	56
17	96	116	e90	e65	e85	116	62	167	146	19	104	51
18	102	118	e100	e70	e90	117	57	145	118	9.7	80	53
19	103	118	e110	e75	e100	118	57	130	105	6.9	68	54
20	103	115	e90	e80	e120	118	67	124	97	11	63	52
21	105	113	e60	e300	e130	124	85	111	83	10	58	56
22	107	110	e56	e400	e140	137	872	99	72	7.7	52	56
23	207	126	e54	e350	130	211	355	89	68	12	52	47
24	236	118	e56	e350	116	224	192	75	62	20	47	45
25	156	120	e70	e300	125	314	133	85	55	30	37	55
26	122	119	e90	e250	124	327	104	85	50	295	33	52
27	116	116	e120	e230	121	367	94	160	47	145	69	52
28	109	113	e130	e200	120	218	87	121	39	111	67	61
29	119	e75	e120	e180	---	165	84	92	38	93	50	60
30	272	e66	e140	e160	---	140	81	77	37	69	44	56
31	204	---	e150	e150	---	130	---	108	---	66	38	---
TOTAL	3,512	3,438	3,136	4,543	3,151	4,702	3,886	14,529	5,746	1,461.3	4,154	1,471
MEAN	113	115	101	147	113	152	130	469	192	47.1	134	49.0
MAX	272	142	153	400	140	367	872	4,540	809	295	1,800	64
MIN	81	66	54	65	60	112	57	65	37	6.9	30	34
AC-FT	6,970	6,820	6,220	9,010	6,250	9,330	7,710	28,820	11,400	2,900	8,240	2,920

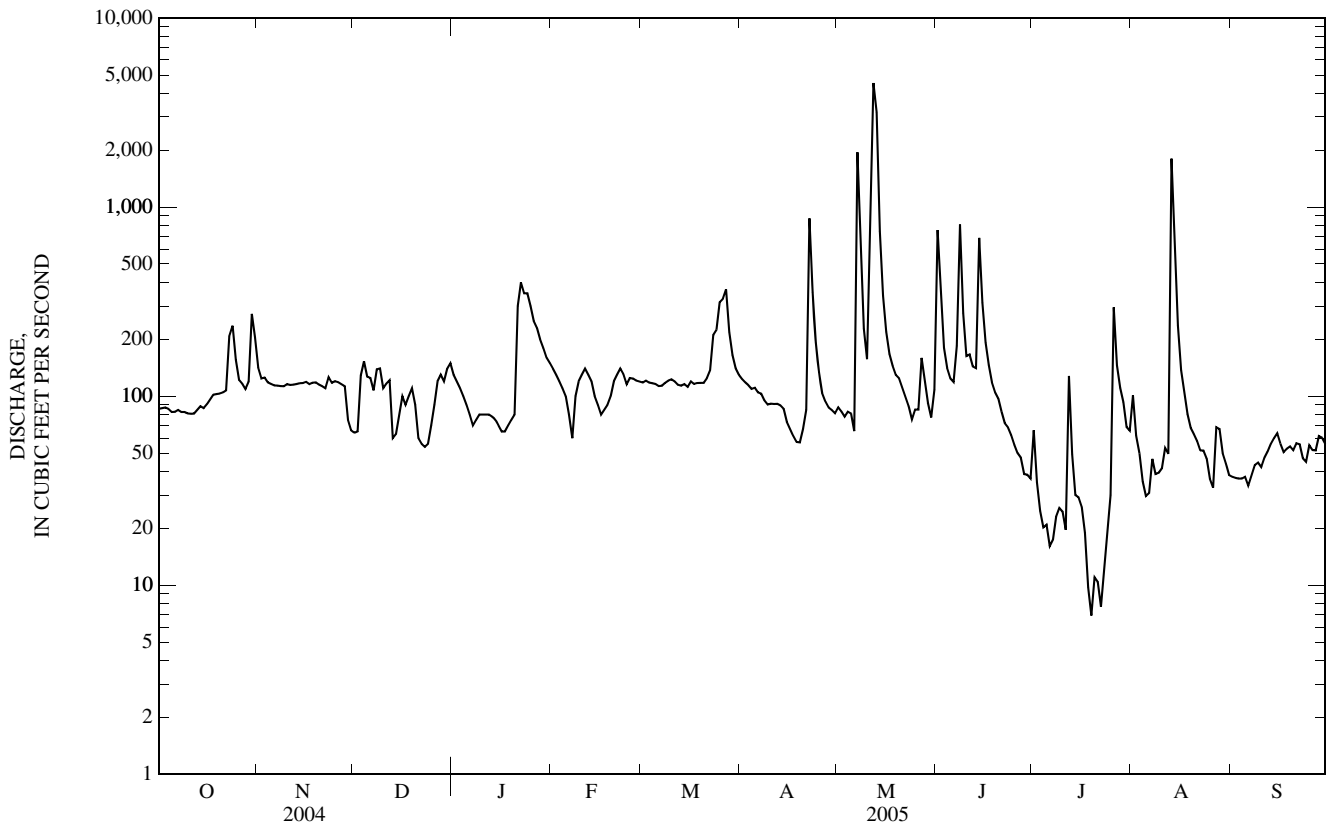
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2005, BY WATER YEAR (WY)*

MEAN	190	188	135	128	229	417	517	786	916	335	196	157
MAX	1,023	1,602	551	683	2,024	1,247	3,398	2,555	5,270	1,528	1,280	390
(WY)	(1999)	(1999)	(1999)	(1997)	(1997)	(1994)	(2000)	(1997)	(1967)	(1969)	(1997)	(1997)
MIN	58.6	81.4	38.4	5.04	25.1	90.8	68.4	65.8	36.9	34.9	25.4	49.0
(WY)	(1991)	(1989)	(1991)	(1991)	(1991)	(1981)	(1981)	(1989)	(1989)	(1989)	(1989)	(1975)

06423500 CHEYENNE RIVER NEAR WASTA, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1964 - 2005*	
ANNUAL TOTAL	45,151		53,729.3			
ANNUAL MEAN	123		147		^a 349	
HIGHEST ANNUAL MEAN					1,143	1997
LOWEST ANNUAL MEAN					81.0	1989
HIGHEST DAILY MEAN	3,200	Sep 6	4,540	May 12	19,200	Jun 16, 1967
LOWEST DAILY MEAN	24	Jul 20	6.9	Jul 19	3.0	Dec 23, 1990
ANNUAL SEVEN-DAY MINIMUM	29	Jul 14	11	Jul 17	4.0	Jan 21, 1991
MAXIMUM PEAK FLOW			7,330	May 12	^b 26,900	May 25, 1957
MAXIMUM PEAK STAGE			6.80	May 12	^c 16.25	Mar 5, 1982
ANNUAL RUNOFF (AC-FT)	89,560		106,600		253,100	
10 PERCENT EXCEEDS	185		209		690	
50 PERCENT EXCEEDS	98		100		132	
90 PERCENT EXCEEDS	50		38		55	

- * Regulated period only (1964-2005). See REMARKS.
- a Median of annual mean discharges, 280 ft³/s.
- b Gage height, 12.82 ft.
- c Backwater from ice.
- e Estimated.



CHEYENNE RIVER BASIN

06424000 ELK CREEK NEAR ROUBAIX, SD

LOCATION.--Lat 44°17'41", long 103°35'47", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.23, T.4 N., R.4 E., Lawrence County, Hydrologic Unit 10120111, on right bank approximately 2.5 mi upstream from mouth of Meadow Creek, 3.0 mi east of Roubaix, and 9.0 mi southwest of Sturgis.

DRAINAGE AREA.--21.5 mi².

PERIOD OF RECORD.--July 1945 to July 1947, October 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,881 ft above NGVD of 1929, from topographic map. Prior to July 1947, nonrecording gage at site 0.5 mi upstream at different 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	e2.1	e1.3	e0.77	e1.8	e1.6	2.5	2.9	7.1	3.0	1.7	1.1
2	1.1	1.8	e1.5	e0.61	e1.8	e1.7	3.0	2.9	5.5	2.8	1.4	1.1
3	1.1	2.8	e1.5	e0.59	e1.7	e1.7	3.3	2.7	4.9	2.5	1.4	1.1
4	1.1	2.4	e1.4	e0.47	e1.6	e1.7	3.3	2.6	4.6	2.3	1.5	1.1
5	1.1	2.1	e1.3	e0.49	e1.6	e1.8	12	2.5	4.5	2.8	1.2	1.1
6	1.1	2.3	e1.2	e0.70	e1.5	e1.9	7.4	2.4	4.0	3.2	1.0	1.0
7	1.1	2.3	e1.3	e0.81	e1.4	e1.2	4.1	2.9	7.0	2.4	1.1	1.0
8	1.1	2.0	e1.5	e1.0	e1.4	e0.90	3.7	14	9.3	2.1	1.1	1.1
9	1.1	1.8	e1.7	e1.0	e1.3	e1.9	3.7	12	7.3	1.9	1.1	1.1
10	1.1	1.8	e1.9	e1.0	e1.4	e2.4	2.9	10	6.8	1.6	1.4	0.96
11	1.1	1.2	e1.8	e1.0	e1.6	e2.2	2.5	11	5.2	1.7	4.7	0.82
12	1.2	1.3	e1.5	e1.0	e1.5	e1.9	2.2	14	5.7	1.7	2.1	1.1
13	2.0	2.0	e1.1	e0.85	e1.4	e1.6	2.1	25	15	1.4	2.1	1.4
14	2.1	1.5	e1.2	e0.74	e1.4	e1.3	2.2	16	9.1	1.2	2.0	1.2
15	2.3	1.1	e1.3	e0.71	e1.3	e1.2	2.1	11	6.3	1.2	1.7	1.1
16	2.0	1.7	e1.5	e0.63	e1.3	e1.2	2.0	9.7	5.7	1.1	1.6	1.1
17	1.7	1.6	e1.7	e0.68	e1.1	e1.1	1.9	9.1	5.5	1.1	1.6	0.95
18	1.5	1.1	e1.6	e1.0	e1.2	e1.1	1.9	14	4.7	1.2	1.7	1.2
19	1.6	1.5	e1.5	e2.0	e1.2	e1.1	2.1	8.8	4.3	1.1	2.8	1.8
20	1.9	1.2	e1.8	e2.0	e1.3	e1.2	3.3	7.4	4.3	1.1	2.7	1.3
21	1.6	e1.4	e1.6	e1.9	e1.3	e1.6	7.0	6.7	4.3	1.1	1.8	1.1
22	1.6	e1.6	e1.3	e1.8	e1.4	e1.9	6.9	5.9	4.0	1.2	1.7	1.2
23	1.7	e1.8	e1.1	e1.7	e1.4	e2.0	8.7	5.5	3.7	0.93	1.8	1.3
24	1.6	e1.9	e1.0	e2.0	e1.3	e2.0	7.8	5.2	4.9	0.90	3.2	1.5
25	1.6	e1.6	e1.0	e1.9	e1.4	e1.9	4.5	14	4.0	1.5	2.0	1.8
26	1.7	e1.3	e0.90	e1.8	e1.8	e1.9	3.7	8.6	3.4	2.8	1.7	1.5
27	1.6	e1.2	e0.85	e1.8	e1.9	e2.3	4.1	6.5	3.2	2.1	1.4	1.4
28	1.6	e1.2	e0.85	e1.8	e1.7	e2.9	3.7	5.3	3.1	1.4	1.3	1.6
29	2.5	e1.1	e0.85	e1.8	---	e2.6	3.4	4.9	3.0	1.3	1.3	1.4
30	2.6	e1.0	e0.85	e1.8	---	e2.5	3.4	5.1	3.3	1.8	1.2	1.2
31	e2.5	---	e0.80	e1.7	---	e2.4	---	12	---	1.9	1.1	---
TOTAL	49.0	49.7	40.70	38.05	41.0	54.70	121.4	260.6	163.7	54.33	54.4	36.63
MEAN	1.58	1.66	1.31	1.23	1.46	1.76	4.05	8.41	5.46	1.75	1.75	1.22
MAX	2.6	2.8	1.9	2.0	1.9	2.9	12	25	15	3.2	4.7	1.8
MIN	1.1	1.0	0.80	0.47	1.1	0.90	1.9	2.4	3.0	0.90	1.0	0.82
AC-FT	97	99	81	75	81	108	241	517	325	108	108	73

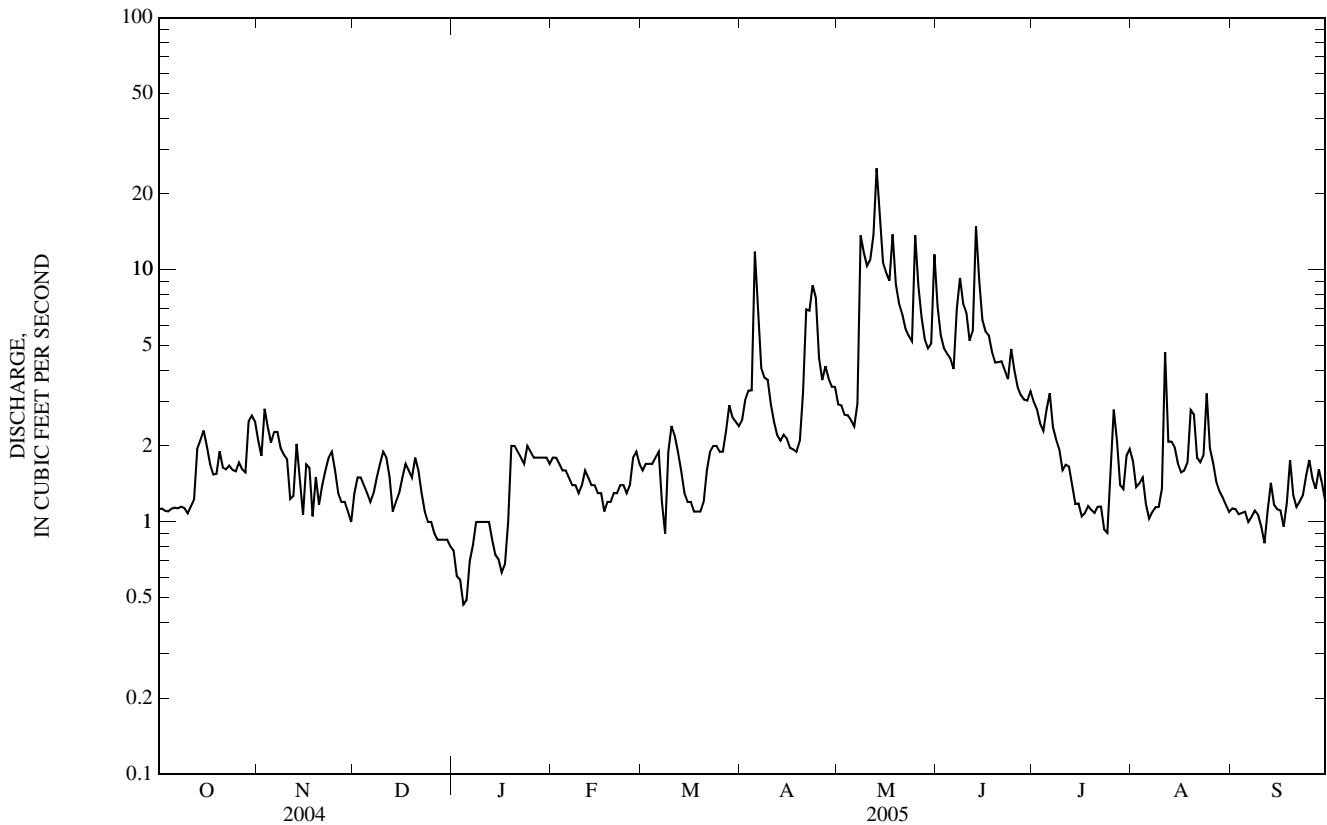
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2005, BY WATER YEAR (WY)

MEAN	6.22	4.65	3.47	3.23	3.62	10.2	23.8	29.0	20.6	7.83	5.96	3.89
MAX	37.3	21.3	11.0	7.46	7.47	28.2	78.1	113	53.9	18.7	22.5	9.86
(WY)	(1999)	(1999)	(1999)	(1999)	(1999)	(1994)	(1997)	(1995)	(1995)	(1997)	(1998)	(1998)
MIN	1.05	0.98	1.05	0.77	0.90	1.76	3.99	3.18	1.64	1.37	1.05	1.09
(WY)	(1993)	(2003)	(2003)	(2003)	(1993)	(2005)	(2004)	(2004)	(2004)	(2002)	(2004)	(2004)

06424000 ELK CREEK NEAR ROUBAIX, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1992 - 2005	
ANNUAL TOTAL	869.14		964.21			
ANNUAL MEAN	2.37		2.64		10.2	
HIGHEST ANNUAL MEAN					22.5	1997
LOWEST ANNUAL MEAN					2.48	2004
HIGHEST DAILY MEAN	17	Mar 27	25	May 13	500	May 8, 1995
LOWEST DAILY MEAN	0.65	Sep 2	0.47	Jan 4	0.30	Jan 22, 2003
ANNUAL SEVEN-DAY MINIMUM	0.78	Aug 15	0.63	Dec 31	0.44	Jan 20, 2003
MAXIMUM PEAK FLOW			45	May 13	515	May 8, 1995
MAXIMUM PEAK STAGE			7.32	May 13	12.32	May 8, 1995
ANNUAL RUNOFF (AC-FT)	1,720		1,910		7,400	
10 PERCENT EXCEEDS	4.2		5.5		25	
50 PERCENT EXCEEDS	1.8		1.7		4.5	
90 PERCENT EXCEEDS	0.93		1.1		1.3	

e Estimated.



06425100 ELK CREEK NEAR RAPID CITY, SD

LOCATION.--Lat 44°14'25", long 103°09'03", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.9, T.3 N., R.8 E., Meade County, Hydrologic Unit 10120111, on section line near right upstream corner of county road bridge, 1.7 mi downstream from Morris Creek tributary, and 10 mi north of Exit 61 and I-90 northeast of Rapid City.

DRAINAGE AREA.--190 mi².

PERIOD OF RECORD.--November 1978 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,950 ft above NGVD of 1929, from topographic map.

REMARKS.--No daily discharges. Records good. Some flow is pumped from stream for irrigation. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2005, BY WATER YEAR (WY)

MEAN	8.48	6.39	4.17	8.67	12.5	10.1	17.3	47.6	29.8	9.07	5.90	3.80
MAX	79.6	58.7	28.0	121	149	43.2	125	299	175	43.4	40.5	20.2
(WY)	(1999)	(1999)	(1999)	(1997)	(1997)	(1996)	(1997)	(1995)	(1996)	(1997)	(1997)	(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)	(1980)	(1981)	(1981)	(1981)	(1981)	(1981)	(1981)	(1981)	(1981)	(1988)	(1980)	(1980)

06425100 ELK CREEK NEAR RAPID CITY, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1980 - 2005	
ANNUAL TOTAL	27.67		0.00			
ANNUAL MEAN	0.08		0.00		13.7	
HIGHEST ANNUAL MEAN					77.1	1997
LOWEST ANNUAL MEAN					^a 0.00	1992
HIGHEST DAILY MEAN	4.7	Mar 19	0.00	Oct 1	2,360	May 9, 1995
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	^b 0.00	Oct 1, 1979
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1979
MAXIMUM PEAK FLOW					3,120	May 27, 1996
MAXIMUM PEAK STAGE					12.77	May 27, 1996
ANNUAL RUNOFF (AC-FT)	55		0.00		9,890	
10 PERCENT EXCEEDS	0.10		0.00		25	
50 PERCENT EXCEEDS	0.00		0.00		1.2	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a Also 2005.

b No flow for many days in most years.

CHEYENNE RIVER BASIN

06425500 ELK CREEK NEAR ELM SPRINGS, SD

LOCATION.--Lat 44°14'54", long 102°30'10", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.1, T.3 N., R.13 E., Meade County, Hydrologic Unit 10120111, on left bank near downstream end of county highway bridge, 1.4 mi downstream from Hay Draw, 5.0 mi southeast of Elm Springs, and 7.0 mi upstream from mouth.

DRAINAGE AREA.--540 mi², approximately.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,304.49 ft above NGVD of 1929. Prior to Nov. 2, 1976, nonrecording gage, and prior to Feb. 1, 1967, at site 350 ft downstream at present datum.

REMARKS.--Records fair 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 17 ft, at former site, in May 1920, from information by local residents.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	e0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.00
2	0.00	e0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	e0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.33	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	3.7	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.43	0.00	e0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14	0.15	0.00	e0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.8	0.22	0.00	e0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.0	0.15	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.36	0.00	0.00	0.00
22	e0.05	0.00	0.00	0.00	0.00	0.01	0.00	0.00	1.0	e0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.22	0.00	e0.00	0.00	e0.00
26	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	e0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00
29	e0.10	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	e0.01	0.00	0.00	0.00	---	0.00	0.00	0.08	0.00	0.00	0.00	0.00
31	e0.02	---	0.00	0.00	---	0.00	---	0.69	---	0.00	0.00	---
TOTAL	0.18	0.04	0.00	0.00	0.00	0.05	0.01	20.09	9.35	0.00	0.00	0.00
MEAN	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.31	0.00	0.00	0.00
MAX	0.10	0.03	0.00	0.00	0.00	0.02	0.01	14	3.7	0.00	0.00	0.00
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
AC-FT	0.4	0.08	0.00	0.00	0.00	0.1	0.02	40	19	0.00	0.00	0.00

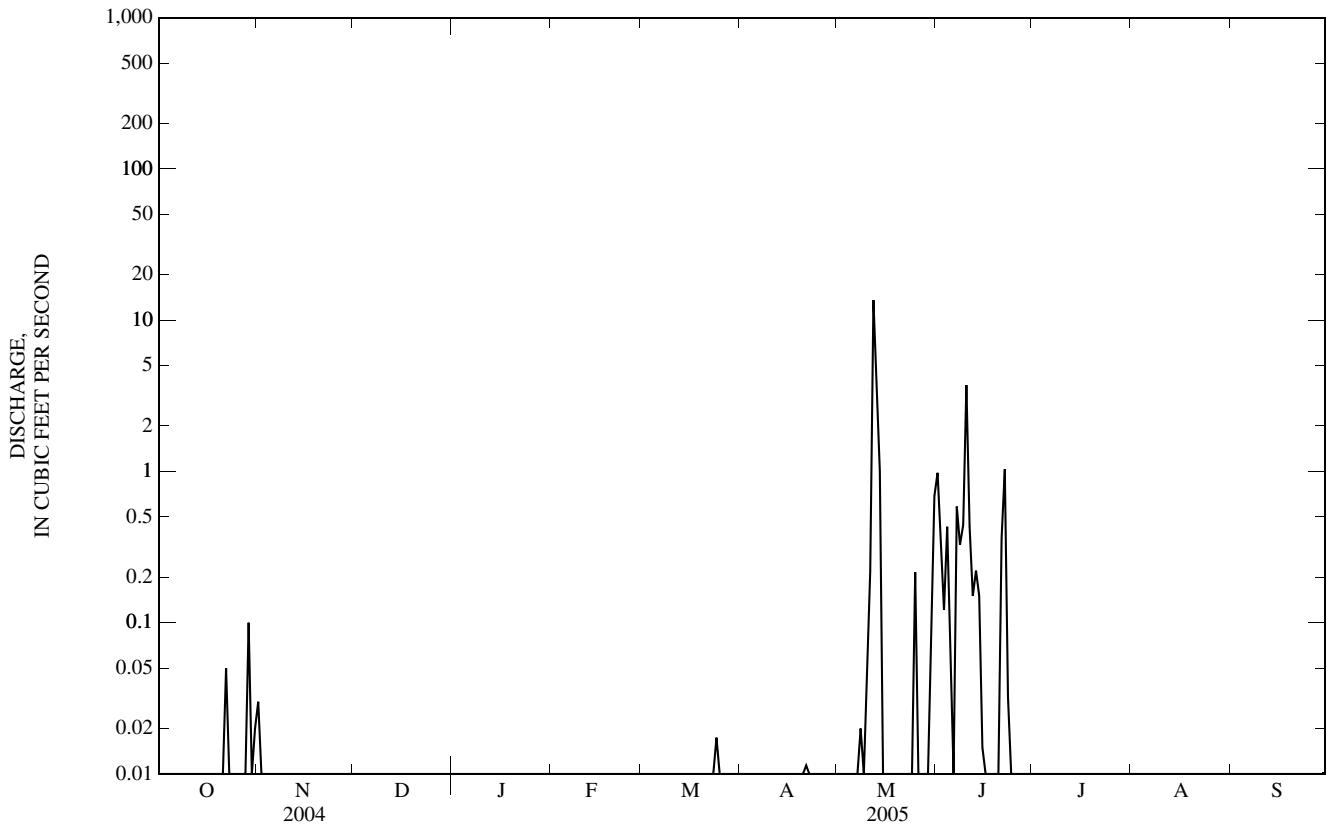
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2005, BY WATER YEAR (WY)

MEAN	9.59	4.55	2.51	4.13	16.1	40.3	58.0	96.0	65.4	12.1	4.12	1.97
MAX	295	87.2	23.7	103	334	327	493	519	708	88.8	40.4	26.8
(WY)	(1999)	(1999)	(1999)	(1997)	(1997)	(1978)	(2000)	(1995)	(1967)	(1996)	(1997)	(1951)
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)	(1950)	(1950)	(1950)	(1950)	(1950)	(1957)	(1959)	(1955)	(1955)	(1950)	(1952)	(1950)

06425500 ELK CREEK NEAR ELM SPRINGS, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1950 - 2005	
ANNUAL TOTAL	19.80		29.72			
ANNUAL MEAN	0.05		0.08		26.2	
HIGHEST ANNUAL MEAN					135	1997
LOWEST ANNUAL MEAN					0.00	1961
HIGHEST DAILY MEAN	9.5	May 23	14	May 12	5,010	May 28, 1996
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	^a 0.00	Oct 1, 1949
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1949
MAXIMUM PEAK FLOW			28	May 12	^b 8,540	Mar 29, 1952
MAXIMUM PEAK STAGE			5.74	May 12	^c 16.22	Feb 18, 1997
ANNUAL RUNOFF (AC-FT)	39		59		19,010	
10 PERCENT EXCEEDS	0.00		0.01		36	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

- a No flow for long periods in most years.
- b Gage height, 10.61 ft, from floodmarks, site and datum then in use, from rating curve extended above 5,100 ft³/s.
- c Backwater from ice; from floodmark.
- e Estimated.



BELLE FOURCHE RIVER BASIN

06427000 KEYHOLE RESERVOIR NEAR MOORCROFT, WY

LOCATION.--Lat 44°22'55", long 104°46'45", in NW¹/₄NW¹/₄sec.27, T.51 N., R.66 W., Crook County, Hydrologic Unit 10120201, at reservoir dam on Belle Fourche River, 12 mi northeast of Moorcroft.

DRAINAGE AREA.--2,000 mi², approximately.

PERIOD OF RECORD.--March 1952 to current year (monthend contents only).

GAGE.--Water-stage recorder. Elevations listed to NGVD of 1929 (Bureau of Reclamation datum). Prior to May 15, 1958, and Oct. 1, 1968, to Mar. 13, 1970, nonrecording gages, and May 15, 1958, to Sept. 30, 1968, water-stage recorder, all at present site and datum.

REMARKS.--Reservoir is formed by a zoned earth-fill dam completed by the Bureau of Reclamation Oct. 25, 1952. Storage began Feb. 12, 1952. Inactive storage, between elevations 4,036.0 ft and 4,051.0 ft, 7,230 acre-ft. Total active conservation pool below elevation 4,099.3 ft (crest of spillway), 185,800 acre-ft. Dead storage below elevation 4,036.0 ft, 726 acre-ft. Figures given herein represent inactive and active contents above elevation 4,036.0 ft. The reservoir provides flood control and water for irrigation in Wyoming and near Belle Fourche, SD.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 200,744 acre-ft, May 21, 1978, elevation, 4,100.38 ft; minimum daily contents (since appreciable storage was attained), 6,030 acre-ft, Mar. 8, 9, 1955, elevation, 4,046.35 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 99,800 acre-ft, May 20, elevation, 4,086.54 ft; minimum, 76,400 acre-ft, Sept. 27, elevation, 4,081.75 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	4,085.38	93,700	--
Oct. 31	4,085.30	93,300	+400
Nov. 30	4,085.22	92,800	-500
Dec. 31	4,085.22	92,800	0
CAL YR 2004	--	--	-8,600
Jan. 31	4,085.30	93,300	+500
Feb. 28	4,085.42	93,900	+600
Mar. 31	4,085.54	94,500	+600
Apr. 30	4,085.71	95,400	+900
May 31	4,086.47	99,400	+4,000
June 30	4,086.21	98,000	-1,400
July 31	4,083.96	86,600	-11,400
Aug. 31	4,082.19	78,400	-8,200
Sept. 30	4,081.75	76,400	-2,000
WTR YR 2005	--	--	-16,500

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06428500 BELLE FOURCHE RIVER AT WYOMING-SOUTH DAKOTA STATE LINE

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

DRAINAGE AREA.--3,280 mi², approximately.

PERIOD OF RECORD.--December 1946 to current year. Records for water year 1947 incomplete, yearly estimate published in WSP 1729.

GAGE.--Water-stage recorder. Datum of gage is 3,095.7 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 5,400 acres. Flow regulated by Keyhole Dam, usable capacity, 191,600 acre-ft, 143 mi upstream since Oct. 25, 1952. Maximum discharge prior to regulation, 3,620 ft³/s, June 23, 1947, gage height, 12.51 ft; maximum gage height, 14.33 ft, Mar. 22, 1949, backwater from ice; no flow at times some years. 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.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	23	e6.7	e3.0	e6.5	15	12	16	16	7.9	170	59
2	10	17	e7.2	e2.8	e6.5	18	11	14	11	7.1	144	50
3	9.8	16	e7.6	e2.8	e6.1	15	11	14	11	10	138	40
4	9.5	15	e7.6	e2.7	e6.0	14	11	13	10	47	142	34
5	9.3	14	e7.5	e2.7	e5.8	14	11	12	9.5	51	140	33
6	9.1	13	e7.4	e2.6	e5.3	13	11	11	8.4	52	139	32
7	8.8	13	e7.1	e2.6	e3.0	13	10	11	5.1	52	132	26
8	8.6	12	e7.0	e2.5	e4.2	14	10	14	4.9	52	129	23
9	8.4	12	e7.0	e2.5	e4.9	14	9.9	28	5.5	50	128	20
10	7.8	12	e7.0	e2.5	e5.4	13	10	30	5.8	49	128	17
11	7.3	11	e7.0	e2.4	e5.6	12	10	113	13	49	130	16
12	7.2	10	e6.8	e2.4	e6.0	12	10	171	13	44	137	15
13	7.3	9.9	e5.4	e2.3	e7.0	12	11	206	14	46	125	14
14	7.2	12	e6.0	e2.2	e7.0	13	10	120	13	35	102	13
15	7.6	11	e6.5	e2.2	e6.8	11	9.9	84	12	33	98	12
16	7.5	11	e6.8	e2.3	e6.5	14	9.6	93	13	40	94	12
17	7.4	12	e7.0	e2.3	e6.1	15	9.1	79	12	74	92	11
18	7.5	11	e7.0	e2.4	e6.0	14	8.5	63	10	90	99	11
19	8.2	10	e7.0	e3.0	e5.9	13	8.7	52	9.7	109	103	10
20	9.3	9.8	e5.5	e4.0	e5.8	13	9.7	44	9.8	115	101	9.5
21	9.3	8.2	e4.0	e7.5	e5.9	13	14	40	9.3	116	98	9.0
22	11	8.3	e3.4	e5.0	e6.0	14	28	38	7.8	119	95	8.8
23	14	e7.6	e3.0	e4.2	e6.8	13	19	32	3.9	122	95	8.4
24	12	e7.0	e3.4	e4.2	e7.0	14	17	19	5.3	126	111	8.6
25	12	e8.2	e3.7	e4.3	e14	14	15	20	4.3	125	98	8.8
26	13	e8.2	e3.7	e12	27	14	13	17	4.3	127	70	8.3
27	13	e8.0	e3.6	e8.0	24	16	16	20	2.9	145	175	7.5
28	12	e8.0	e3.5	e7.3	16	14	23	21	5.9	150	98	8.3
29	14	e5.0	e3.5	e7.0	---	13	20	20	7.4	142	74	8.6
30	21	e6.0	e3.3	e7.0	---	12	18	20	8.3	141	66	8.3
31	21	---	e3.1	e6.5	---	12	---	19	---	141	61	---
TOTAL	321.1	329.2	175.3	125.2	223.1	421	386.4	1,454	266.1	2,467.0	3,512	542.1
MEAN	10.4	11.0	5.65	4.04	7.97	13.6	12.9	46.9	8.87	79.6	113	18.1
MAX	21	23	7.6	12	27	18	28	206	16	150	175	59
MIN	7.2	5.0	3.0	2.2	3.0	11	8.5	11	2.9	7.1	61	7.5
AC-FT	637	653	348	248	443	835	766	2,880	528	4,890	6,970	1,080

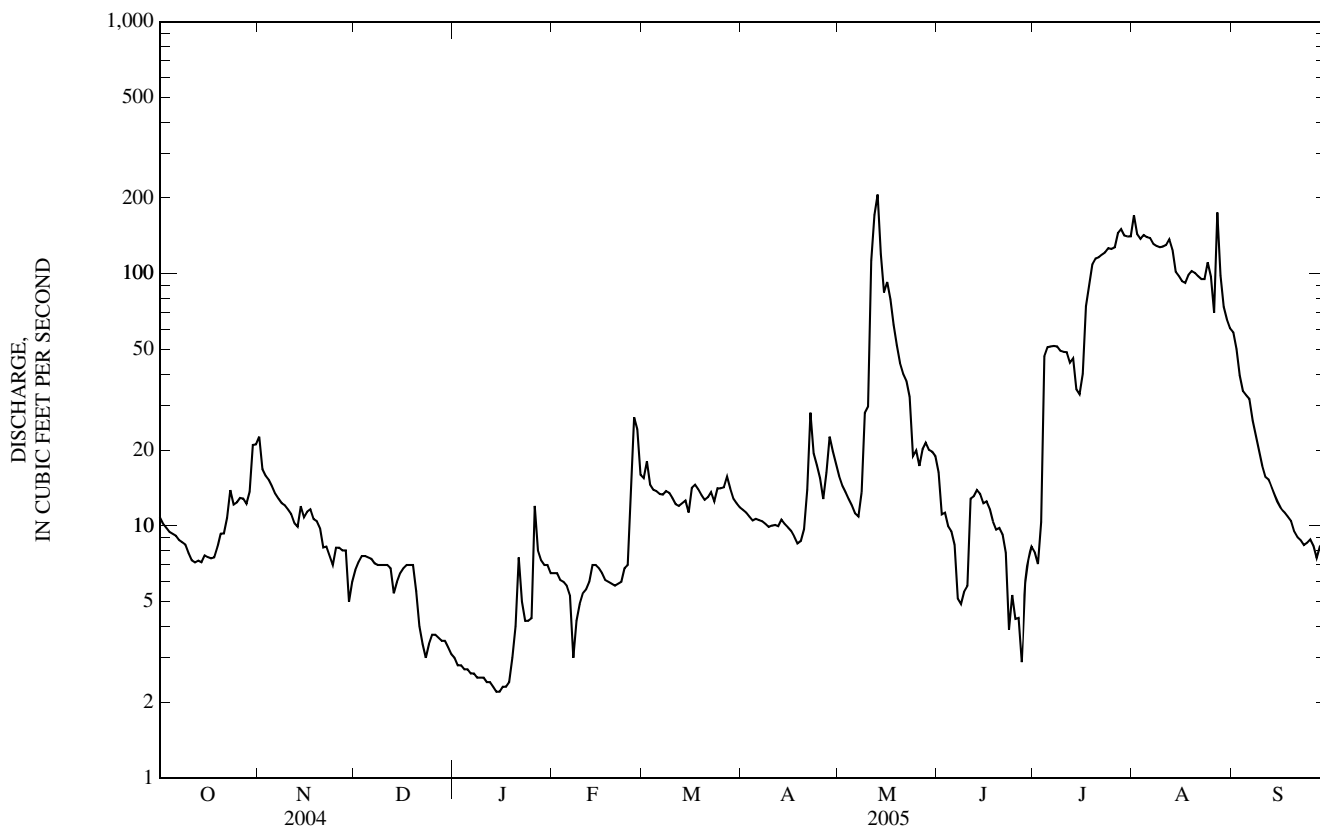
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2005, BY WATER YEAR (WY)

MEAN	27.9	27.3	17.4	20.3	42.4	151	156	208	174	95.0	73.2	34.3
MAX	134	277	51.5	247	459	931	823	1,104	812	303	271	109
(WY)	(1999)	(1999)	(1999)	(1997)	(1996)	(1972)	(1971)	(1978)	(1984)	(1981)	(1980)	(1955)
MIN	0.00	0.00	0.00	0.00	0.20	13.6	12.9	3.10	8.07	2.94	0.10	0.00
(WY)	(1955)	(1961)	(1961)	(1961)	(1959)	(2005)	(2005)	(1961)	(2004)	(1960)	(1961)	(1954)

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

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1954 - 2005	
ANNUAL TOTAL	9,631.1		10,222.5		85.9	
ANNUAL MEAN	26.3		28.0		7.69	
HIGHEST ANNUAL MEAN					229	1978
LOWEST ANNUAL MEAN					7.69	1961
HIGHEST DAILY MEAN	511	Jul 6	206	May 13	4,760	May 9, 1995
LOWEST DAILY MEAN	1.3	Aug 24	2.2	Jan 14	0.00	Jul 30, 1954
ANNUAL SEVEN-DAY MINIMUM	3.5	Dec 22	2.3	Jan 11	0.00	Jul 30, 1954
MAXIMUM PEAK FLOW			327	May 13	6,320	May 10, 1995
MAXIMUM PEAK STAGE			5.80	May 13	16.33	May 10, 1995
ANNUAL RUNOFF (AC-FT)	19,100		20,280		62,200	
10 PERCENT EXCEEDS	58		98		189	
50 PERCENT EXCEEDS	13		11		35	
90 PERCENT EXCEEDS	5.0		4.2		5.5	

- * Regulated period only (1954-2005). See REMARKS.
- a No flow at times in some years.
- b Based on slope-area measurement of peak flow.
- e Estimated.



CHEYENNE RIVER BASIN

06429500 COLD SPRINGS CREEK AT BUCKHORN, WY

LOCATION.--Lat 44°09'15", long 104°04'37" (NAD 27), in NW¹/₄ NW¹/₄ SW¹/₄ sec.9, T.48 N., R.60 W., Weston County, Hydrologic Unit 10120303, on right bank at downstream end of culvert at U.S. Highway 85 and 0.5 mi northeast of Buckhorn.

DRAINAGE AREA.--19 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 6,050 ft above NGVD of 1929, from topographic map. October 1974 to September 1982, 200 ft upstream from station at different datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	e4.2	e4.1	3.8	e3.7	e3.4	e3.3	3.4	3.2	e3.2	3.5	3.3
2	4.2	e4.3	e4.1	e3.9	e3.8	e3.4	e3.8	3.5	3.2	e3.2	3.4	3.2
3	4.2	e4.4	e4.1	3.9	3.8	e3.4	e4.2	3.3	3.2	e3.2	3.5	3.2
4	4.2	4.4	e4.2	e3.8	e3.7	e3.4	e4.5	3.4	3.2	e3.2	3.5	3.2
5	4.2	e4.2	4.2	e3.6	3.8	e3.4	e4.9	3.4	3.2	e3.3	3.5	3.2
6	4.3	4.2	4.1	e3.5	e3.7	e3.4	4.5	3.3	3.2	e3.3	3.5	3.3
7	4.2	4.2	e4.0	e3.6	3.8	3.4	4.5	3.4	e3.2	e3.3	3.5	3.3
8	4.2	4.2	e4.1	e3.7	e3.7	3.3	4.3	4.0	3.2	e3.3	3.5	3.2
9	4.2	4.2	4.1	3.8	e3.6	e3.3	4.2	3.6	e3.2	e3.3	3.5	3.2
10	4.2	4.1	4.2	3.8	e3.6	3.5	3.8	3.6	e3.2	e3.3	3.6	3.2
11	4.2	e4.0	4.1	3.7	e3.6	e3.4	3.7	3.6	e3.2	e3.3	3.6	3.2
12	4.2	e4.1	4.0	3.7	e3.6	3.5	3.7	3.6	e3.2	e3.3	3.6	3.3
13	4.2	4.2	e4.0	e3.4	3.8	e3.2	3.6	3.6	e3.2	e3.3	3.6	3.2
14	4.3	4.2	e4.1	e3.3	3.6	e3.4	3.5	3.5	e3.2	e3.3	3.4	3.0
15	4.3	e4.1	e4.1	e3.2	e3.1	e3.4	3.6	3.4	e3.2	e3.3	3.4	3.1
16	4.3	e4.2	4.1	e3.4	e3.3	e3.3	3.6	3.4	e3.2	e3.3	3.4	3.0
17	4.2	4.2	e4.0	e3.6	e3.3	3.3	3.6	3.4	e3.2	e3.3	3.4	3.0
18	4.2	e4.1	4.1	3.8	e3.1	3.3	3.5	3.5	e3.2	3.3	3.4	3.0
19	4.3	4.1	4.1	3.8	e3.5	e3.2	3.6	3.3	e3.2	3.4	3.4	2.9
20	4.2	e4.1	3.3	3.8	3.6	e3.3	3.6	3.3	e3.2	3.4	3.3	2.8
21	4.2	e4.1	e3.2	3.7	3.5	e3.4	3.7	3.3	e3.2	3.4	3.3	2.9
22	4.3	e4.1	e3.1	3.4	3.5	e3.5	3.6	3.3	e3.2	3.4	3.3	2.9
23	4.3	e4.1	e3.0	3.8	3.6	e3.6	3.5	3.3	e3.2	3.4	3.4	2.9
24	4.3	e4.1	e3.3	3.9	e3.4	3.5	3.5	3.3	e3.2	3.5	3.4	2.7
25	4.3	4.1	e3.7	3.8	e3.5	3.4	3.5	3.5	e3.2	3.6	3.3	2.5
26	4.3	4.1	4.0	3.8	e3.5	3.4	3.5	3.3	e3.2	3.6	3.3	2.5
27	4.3	e4.1	4.0	3.8	3.5	e3.5	3.5	3.3	e3.2	3.5	3.3	2.4
28	4.3	e4.1	4.0	3.8	e3.4	e3.7	3.5	3.2	e3.2	3.4	3.3	2.5
29	e4.3	e4.1	e3.9	3.8	---	e4.1	3.2	3.3	e3.2	3.5	3.3	2.5
30	e4.3	e4.1	3.9	3.7	---	4.0	3.3	3.3	e3.2	3.4	3.3	2.5
31	4.3	---	3.9	3.7	---	3.8	---	3.4	---	3.5	3.3	---
TOTAL	131.7	124.7	121.1	114.3	99.6	107.1	112.8	106.0	96.0	104.0	106.0	89.1
MEAN	4.25	4.16	3.91	3.69	3.56	3.45	3.76	3.42	3.20	3.35	3.42	2.97
MAX	4.3	4.4	4.2	3.9	3.8	4.1	4.9	4.0	3.2	3.6	3.6	3.3
MIN	4.2	4.0	3.0	3.2	3.1	3.2	3.2	3.2	3.2	3.2	3.3	2.4
AC-FT	261	247	240	227	198	212	224	210	190	206	210	177

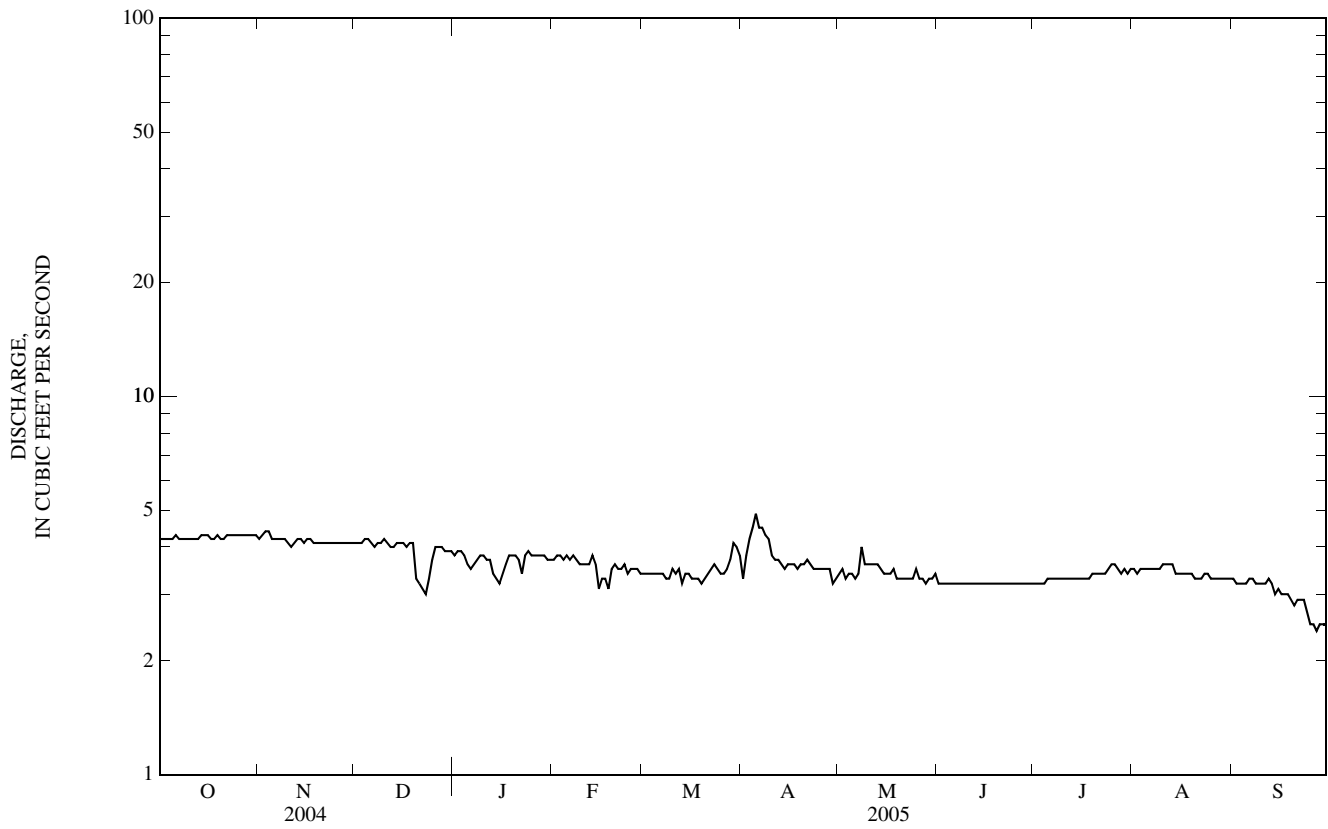
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975-1982, 1992 - 2005, BY WATER YEAR (WY)

MEAN	4.50	4.31	4.19	4.14	4.29	4.63	4.93	4.65	4.73	4.60	4.66	4.58
MAX	7.00	7.15	7.04	7.01	6.75	8.03	7.43	7.29	7.77	7.58	7.28	7.14
(WY)	(2000)	(2000)	(2000)	(2000)	(2000)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)
MIN	2.53	2.09	2.06	2.50	2.61	2.91	3.07	2.48	2.98	2.62	2.71	2.92
(WY)	(1975)	(1993)	(1993)	(1994)	(1993)	(1993)	(1993)	(2004)	(2004)	(1995)	(1995)	(1994)

06429500 COLD SPRINGS CREEK AT BUCKHORN, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1975-1982, 1992-2005	
ANNUAL TOTAL	1,254.4	1,312.4	--	
ANNUAL MEAN	3.43	3.60	4.54	
HIGHEST ANNUAL MEAN	--	--	7.06	1999
LOWEST ANNUAL MEAN	--	--	2.92	1993
HIGHEST DAILY MEAN	5.8 Mar 26	4.9 Apr 5	22	Mar 26, 1999
LOWEST DAILY MEAN	1.6 Jan 5	2.4 Sep 27	0.30	Dec 20, 1996
ANNUAL SEVEN-DAY MINIMUM	2.2 May 4	2.5 Sep 24	0.75	Dec 18, 1996
MAXIMUM PEAK FLOW	--	^a 5.0 Apr 5	^b 42	Mar 26, 1999
MAXIMUM PEAK STAGE	--	^c 3.47 Jan 6	^d 8.61	Jan 12, 1978
ANNUAL RUNOFF (AC-FT)	2,490	2,600	3,290	
10 PERCENT EXCEEDS	4.2	4.2	6.5	
50 PERCENT EXCEEDS	3.4	3.5	4.4	
90 PERCENT EXCEEDS	2.7	3.2	3.0	

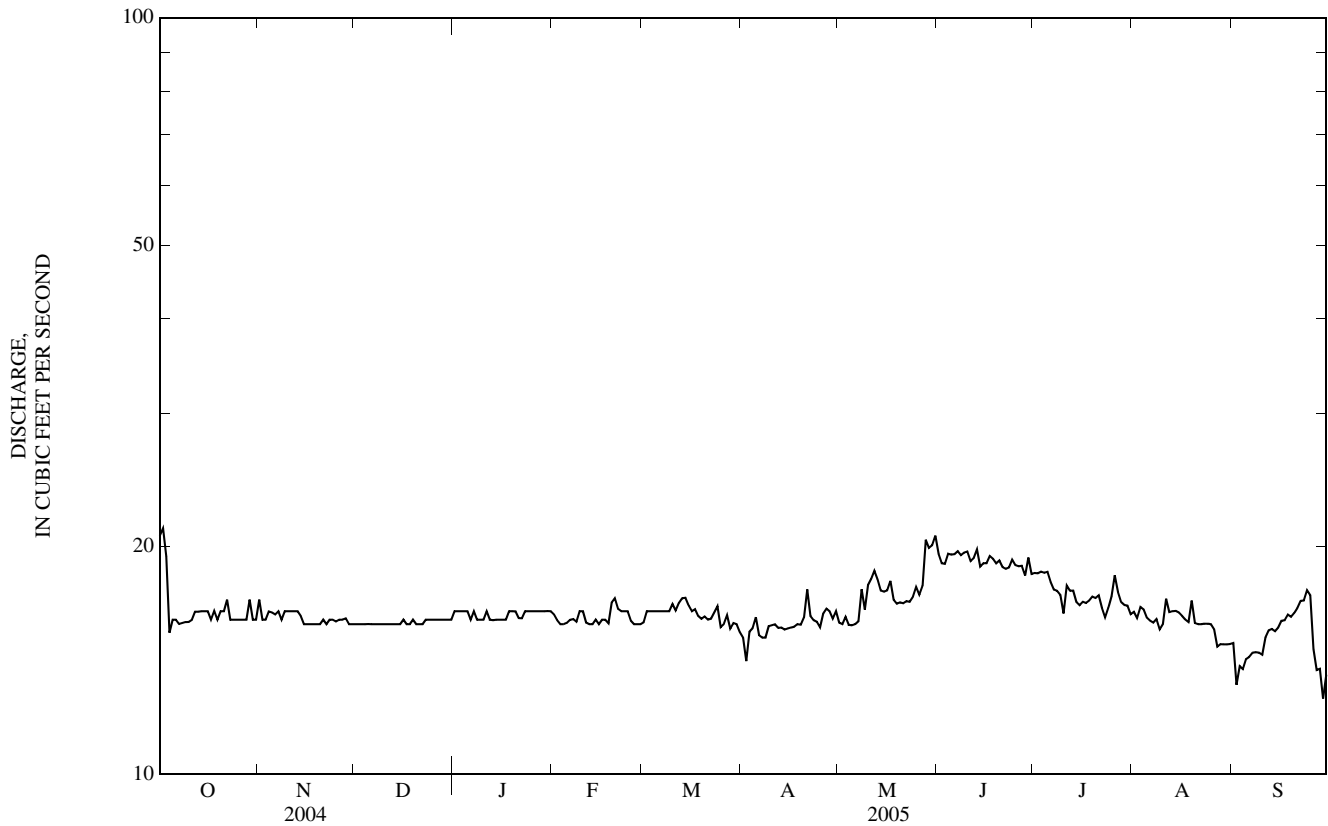
- a Gage height, 2.26 ft.
- b Gage height, 3.33 ft.
- c Backwater from ice.
- d Backwater from ice, site and datum then in use.
- e Estimated.



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

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1977-1983, 1992-2005	
ANNUAL TOTAL	6,428		6,011		--	
ANNUAL MEAN	17.6		16.5		22.7	
HIGHEST ANNUAL MEAN	--		--		30.5 1999	
LOWEST ANNUAL MEAN	--		--		15.7 1992	
HIGHEST DAILY MEAN	23	Jul 1	21	Oct 1,2, May 31	455	May 9, 1995
LOWEST DAILY MEAN	15	Mar 5	13	Sep 2,29	12	Mar 10, 1992
ANNUAL SEVEN-DAY MINIMUM	16	Oct 4	14	Sep 2	13	Mar 8, 1992
MAXIMUM PEAK FLOW	--		^a 25	Apr 21	1,230	May 8, 1995
MAXIMUM PEAK STAGE	--		^b 1.99	Dec 24	^c 3.80	May 8, 1995
ANNUAL RUNOFF (AC-FT)	12,750		11,920		16,440	
10 PERCENT EXCEEDS	19		19		30	
50 PERCENT EXCEEDS	18		16		22	
90 PERCENT EXCEEDS	16		16		16	

- a Gage height, 1.70 ft.
- b Backwater from ice.
- c From floodmarks, present site and datum.
- e Estimated.



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

LOCATION.--Lat 44°34'35", long 104°03'20", in SW¹/₄ SW¹/₄ sec.7, T.7 N., R.1 E., Butte County, Hydrologic Unit 10120203, on right bank at State line and 12 mi southwest of Belle Fourche, SD.

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

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

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

REMARKS.--Records fair. Ditch diverts water from left bank of Redwater Creek, 2.0 mi upstream, for irrigation of about 700 acres. Flow maintained during irrigation season and in some years for livestock watering. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	3.2	0.00	0.00	0.00	0.00	0.00	6.9	13	12	10	5.3
2	4.7	3.1	0.00	0.00	0.00	0.00	0.00	6.7	13	11	18	5.8
3	14	3.0	0.00	0.00	0.00	0.00	0.00	6.4	13	11	22	13
4	e16	3.0	0.00	0.00	0.00	0.00	0.00	6.1	12	11	12	13
5	e14	2.9	0.00	0.00	0.00	0.00	0.00	6.1	13	10	12	12
6	e7.0	2.8	0.00	0.00	0.00	0.00	0.00	6.3	13	10	12	11
7	6.9	2.8	0.00	0.00	0.00	0.00	0.00	6.6	12	14	12	11
8	7.1	1.9	0.00	0.00	0.00	0.00	0.00	8.6	13	17	12	12
9	7.2	0.16	0.00	0.00	0.00	0.00	0.00	8.6	12	20	11	12
10	7.6	0.00	0.00	0.00	0.00	0.00	0.00	8.7	12	22	12	13
11	7.7	0.00	0.00	0.00	0.00	0.00	0.00	9.1	12	20	12	13
12	7.8	0.00	0.00	0.00	0.00	0.00	0.00	4.8	12	21	12	14
13	e7.7	0.00	0.00	0.00	0.00	0.00	0.00	4.4	12	22	12	15
14	e8.7	0.00	0.00	0.00	0.00	0.00	9.4	4.2	12	27	12	15
15	9.6	0.00	0.00	0.00	0.00	0.00	13	4.2	12	20	13	14
16	e10	0.00	0.00	0.00	0.00	0.00	17	4.4	11	22	13	8.4
17	e10	0.00	0.00	0.00	0.00	0.00	22	4.2	12	22	13	8.4
18	e10	0.00	0.00	0.00	0.00	0.00	22	4.0	12	22	13	8.4
19	e10	0.00	0.00	0.00	0.00	0.00	17	4.4	11	23	5.7	8.5
20	e10	0.00	0.00	0.00	0.00	0.00	18	7.9	5.8	23	5.3	6.4
21	e9.0	0.00	0.00	0.00	0.00	0.00	14	7.8	0.19	21	5.3	2.8
22	e17	0.00	0.00	0.00	0.00	0.00	14	7.4	0.00	22	5.0	2.8
23	11	0.00	0.00	0.00	0.00	0.00	15	9.1	0.00	22	5.1	2.8
24	4.2	0.00	0.00	0.00	0.00	0.00	14	18	0.00	23	5.0	2.8
25	4.0	0.00	0.00	0.00	0.00	0.00	13	26	0.00	30	5.0	2.7
26	4.0	0.00	0.00	0.00	0.00	0.00	13	17	0.00	33	5.0	2.4
27	3.9	0.00	0.00	0.00	0.00	0.00	12	11	0.00	20	5.0	2.4
28	3.8	0.00	0.00	0.00	0.00	0.00	12	12	12	5.6	5.0	2.4
29	3.5	0.00	0.00	0.00	---	0.00	12	12	20	5.6	5.0	2.5
30	3.3	0.00	0.00	0.00	---	0.00	8.7	12	17	5.5	5.1	2.6
31	3.2	---	0.00	0.00	---	0.00	---	12	---	5.4	5.3	---
TOTAL	247.6	22.86	0.00	0.00	0.00	0.00	246.10	266.9	286.99	553.1	299.8	245.4
MEAN	7.99	0.76	0.00	0.00	0.00	0.00	8.20	8.61	9.57	17.8	9.67	8.18
MAX	17	3.2	0.00	0.00	0.00	0.00	22	26	20	33	22	15
MIN	3.2	0.00	0.00	0.00	0.00	0.00	0.00	4.0	0.00	5.4	5.0	2.4
AC-FT	491	45	0.00	0.00	0.00	0.00	488	529	569	1,100	595	487

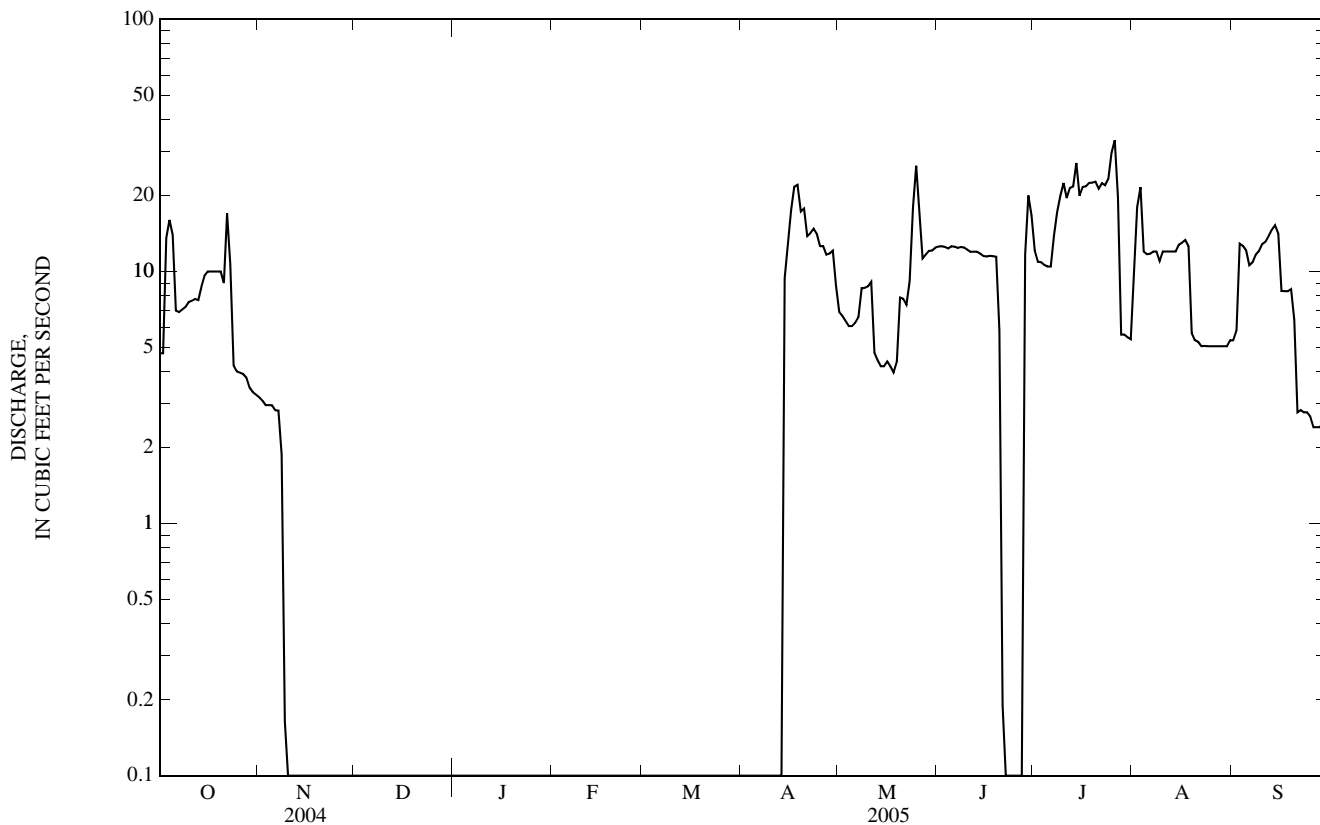
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2005, BY WATER YEAR (WY)

MEAN	6.21	0.42	0.00	0.00	0.00	0.00	0.68	2.48	5.78	10.4	8.85	7.92
MAX	20.6	2.52	0.00	0.00	0.00	0.00	8.20	8.61	13.9	17.8	18.2	18.8
(WY)	(1991)	(2004)	(1988)	(1988)	(1988)	(1988)	(2005)	(2005)	(1988)	(2005)	(1991)	(1994)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.84	2.24	0.80
(WY)	(1988)	(1988)	(1988)	(1988)	(1988)	(1988)	(1988)	(1990)	(1991)	(1993)	(1998)	(1993)

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

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1988 - 2005	
ANNUAL TOTAL	1,532.12		2,168.75			
ANNUAL MEAN	4.19		5.94		3.59	
HIGHEST ANNUAL MEAN					5.94	2005
LOWEST ANNUAL MEAN					0.92	1993
HIGHEST DAILY MEAN	26	Jul 13	33	Jul 26	46	Oct 8, 1990
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Nov 10	^a 0.00	Oct 1, 1987
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Nov 10	0.00	Oct 1, 1987
ANNUAL RUNOFF (AC-FT)	3,040		4,300		2,600	
10 PERCENT EXCEEDS	13		15		12	
50 PERCENT EXCEEDS	2.7		3.3		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a No flow for many days in each year.
 e Estimated.



06430500 REDWATER CREEK AT WYOMING-SOUTH DAKOTA STATE LINE

LOCATION.--Lat 44°34'19", long 104°03'13", in NW¹/₄ NW¹/₄ sec.18 T.7 N., R.1 E., Butte County, Hydrologic Unit 10120203, on left bank 800 ft downstream from State line, 5.7 mi upstream from Crow Creek, and 12 mi southwest of Belle Fourche, SD.

DRAINAGE AREA.--471 mi².

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

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

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

REMARKS.--Records good. Large diversions for irrigation upstream from station. Total flow passing State line may be obtained by adding flow of Murray ditch (see station 06429997). 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	22	27	26	25	24	25	22	15	17	14	15
2	19	22	26	e24	24	24	25	22	14	17	9.8	15
3	14	22	27	e22	25	24	25	22	16	17	8.3	9.0
4	9.3	22	27	e20	27	24	26	22	17	16	10	8.8
5	11	21	27	e21	28	24	27	22	18	16	10	8.4
6	17	20	26	e24	26	24	25	22	16	16	12	7.6
7	17	21	26	e28	e23	23	23	23	18	12	12	6.6
8	17	22	26	e28	e23	22	24	23	18	8.3	12	6.5
9	17	24	26	e26	e24	22	27	24	19	6.9	10	6.2
10	16	23	26	e25	25	22	28	25	20	6.2	9.3	6.9
11	15	23	26	e26	26	23	28	26	21	6.1	11	6.7
12	14	23	26	e26	26	22	26	34	22	5.8	11	7.2
13	15	23	26	e20	26	22	26	32	24	5.9	11	7.7
14	14	23	26	e19	26	24	19	30	23	5.5	12	7.8
15	14	23	26	e17	26	25	13	29	22	5.0	13	9.2
16	14	23	26	e20	25	25	9.9	28	22	4.9	13	13
17	13	23	26	e24	26	25	2.9	28	22	4.7	15	13
18	13	24	26	e30	25	22	2.7	27	21	4.9	15	14
19	14	26	26	27	26	23	3.2	25	19	5.0	21	14
20	14	26	26	26	25	23	3.7	19	27	5.0	16	15
21	15	26	26	26	25	24	5.9	19	33	4.7	15	19
22	16	26	26	25	25	23	7.1	19	32	4.6	16	19
23	16	27	e22	25	25	22	4.3	19	31	4.0	19	19
24	14	28	e23	26	25	25	5.9	18	32	3.7	21	20
25	17	28	27	25	25	24	8.9	15	31	4.3	21	20
26	18	27	26	26	25	25	9.1	16	31	5.0	21	20
27	18	27	26	25	24	25	11	15	30	7.8	21	19
28	19	27	26	25	24	25	16	15	21	14	21	18
29	20	27	26	e24	---	25	19	14	12	14	21	18
30	20	27	27	25	---	25	24	15	14	14	20	19
31	22	---	26	25	---	25	---	16	---	14	18	---
TOTAL	491.3	726	805	756	705	735	500.6	686	661	275.3	459.4	388.6
MEAN	15.8	24.2	26.0	24.4	25.2	23.7	16.7	22.1	22.0	8.88	14.8	13.0
MAX	22	28	27	30	28	25	28	34	33	17	21	20
MIN	9.3	20	22	17	23	22	2.7	14	12	3.7	8.3	6.2
AC-FT	974	1,440	1,600	1,500	1,400	1,460	993	1,360	1,310	546	911	771

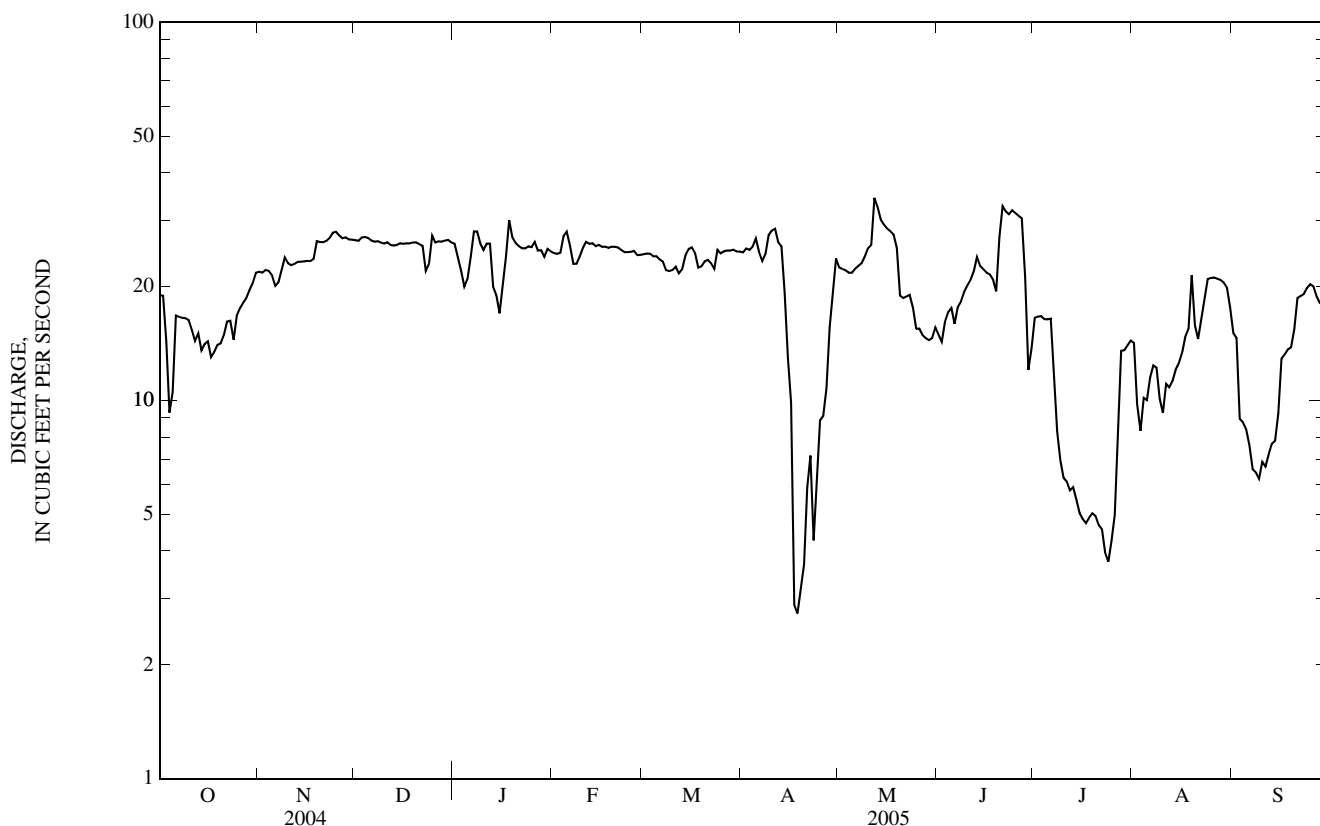
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2005, BY WATER YEAR (WY)*

MEAN	28.5	32.9	32.7	31.9	33.1	34.6	37.3	51.7	44.7	23.2	22.9	25.1
MAX	45.0	47.9	48.0	48.5	57.8	66.0	65.4	168	128	54.9	58.9	50.4
(WY)	(1973)	(1974)	(1999)	(1999)	(1971)	(1996)	(1999)	(1995)	(1976)	(1976)	(1973)	(1973)
MIN	14.2	20.8	21.5	20.7	21.2	22.1	16.7	7.44	6.29	7.62	6.78	11.8
(WY)	(1991)	(1961)	(1993)	(1993)	(1993)	(1962)	(2005)	(1985)	(1961)	(1990)	(1985)	(1985)

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

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1955 - 2005*	
ANNUAL TOTAL	7,918.7		7,189.2			
ANNUAL MEAN	21.6		19.7		33.2	
HIGHEST ANNUAL MEAN					56.0	1973
LOWEST ANNUAL MEAN					17.9	1961
HIGHEST DAILY MEAN	34	Apr 3	34	May 12	1,330	May 9, 1995
LOWEST DAILY MEAN	3.3	Aug 26	2.7	Apr 18	^a 1.3	May 22, 1985
ANNUAL SEVEN-DAY MINIMUM	4.4	Aug 23	4.3	Apr 17	1.9	May 21, 1985
MAXIMUM PEAK FLOW			^b 48	Feb 5	^c 2,440	Aug 22, 1973
MAXIMUM PEAK STAGE			^d 3.82	Jan 3	12.19	Aug 22, 1973
ANNUAL RUNOFF (AC-FT)	15,710		14,260		24,060	
10 PERCENT EXCEEDS	29		27		47	
50 PERCENT EXCEEDS	23		22		30	
90 PERCENT EXCEEDS	13		8.1		15	

- * Period using present site and datum only. See GAGE.
- a No flow Aug. 13-15, 1929, during partial year.
- b Gage height, 3.44 ft.
- c From rating curve extended above 1000 ft³/s on basis of slope-area measurement.
- d Backwater from ice.
- e Estimated.



BELLE FOURCHE RIVER BASIN

06430532 CROW CREEK NEAR BEULAH, WY

LOCATION.--Lat 44°34'14", long 104°00'19" (NAD 27), in NW¹/₄ SE¹/₄ NW¹/₄ sec.16, T.7 N., R.1 E., Lawrence County, Hydrologic Unit 10120203, on left bank 1,500 ft upstream from confluence with Redwater River, 0.8 mi north of McNenny Fish Hatchery, and approximately 4.4 mi east of Beulah.

DRAINAGE AREA.--40.8 mi².

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

REVISED RECORDS.--WDR SD-97-1: 1996.

GAGE.--Water-stage recorder. Elevation of gage is 3,360 ft above NGVD of 1929, from topographic map.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	40	32	34	35	33	33	31	34	33	e34	e32
2	41	40	32	33	35	34	33	31	33	33	e34	e32
3	41	39	32	33	35	34	33	31	33	32	e33	e32
4	41	39	32	34	35	34	33	31	33	32	e30	e32
5	40	39	32	34	35	34	34	31	33	32	e30	e30
6	40	39	32	35	35	34	33	31	32	31	e31	e31
7	40	38	32	34	35	34	33	31	32	31	e31	e31
8	41	38	31	34	36	34	33	33	32	31	e32	e31
9	40	38	32	34	36	34	33	34	32	31	e32	e32
10	41	38	31	34	36	34	33	37	32	31	e31	e32
11	41	38	31	34	35	34	33	34	32	31	e31	e32
12	40	37	31	34	36	34	33	36	32	31	e31	e32
13	41	37	31	34	35	35	33	37	33	31	e31	e32
14	41	37	31	34	35	35	33	34	34	31	e32	e32
15	41	37	31	34	34	35	33	33	33	31	e33	e31
16	42	36	32	34	34	35	33	32	33	31	e33	e32
17	42	36	32	34	34	35	33	32	33	31	e32	e31
18	41	35	32	35	34	35	33	32	33	31	e32	e32
19	41	35	31	35	34	35	33	32	33	e31	e33	e32
20	41	35	32	35	34	35	33	32	35	e28	e32	e33
21	41	35	32	34	34	34	35	32	34	e28	e32	e33
22	42	35	32	34	34	34	35	32	34	e28	e32	e33
23	41	34	32	35	34	34	34	32	33	e27	e33	e33
24	41	34	32	35	34	35	33	32	34	e27	e33	e33
25	40	34	32	35	34	35	33	33	34	e29	e33	e33
26	40	34	32	35	34	35	32	32	33	e32	e33	e33
27	40	33	33	35	34	34	32	33	33	e31	e33	e32
28	40	33	33	35	34	34	32	32	33	e31	e33	e33
29	40	33	33	34	---	34	32	32	34	e31	e33	e32
30	40	32	34	35	---	34	32	32	33	e33	e32	e32
31	41	---	34	35	---	34	---	34	---	e32	e31	---
TOTAL	1,264	1,088	991	1,064	970	1,064	991	1,011	992	953	996	961
MEAN	40.8	36.3	32.0	34.3	34.6	34.3	33.0	32.6	33.1	30.7	32.1	32.0
MAX	42	40	34	35	36	35	35	37	35	33	34	33
MIN	40	32	31	33	34	33	32	31	32	27	30	30
AC-FT	2,510	2,160	1,970	2,110	1,920	2,110	1,970	2,010	1,970	1,890	1,980	1,910

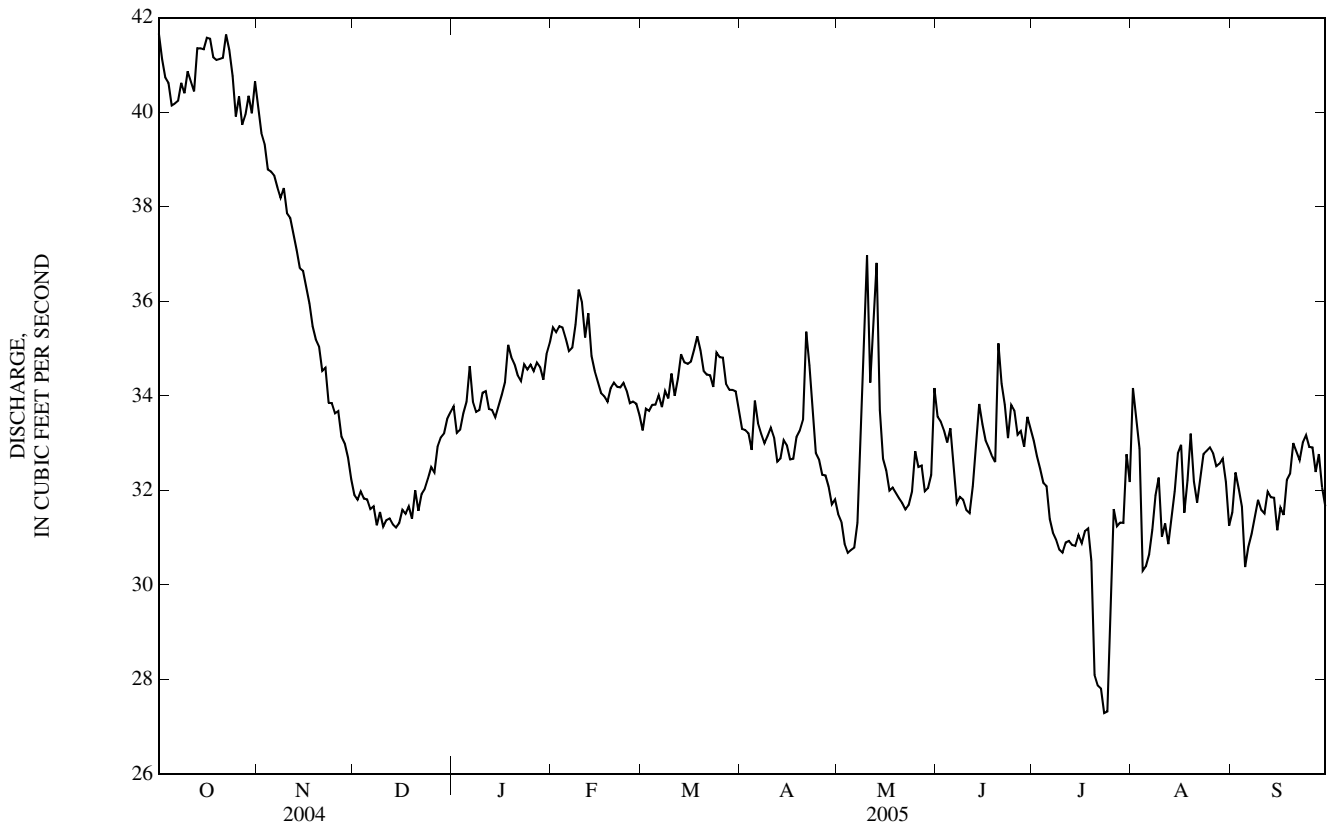
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2005, BY WATER YEAR (WY)

	37.8	37.0	35.8	36.1	35.8	37.2	43.5	47.6	39.8	34.5	35.6	37.5
MEAN	50.0	46.7	48.3	44.8	41.7	42.7	60.3	118	54.9	43.3	41.8	42.8
(WY)	(1999)	(1999)	(1996)	(1996)	(1996)	(1996)	(1994)	(1995)	(1993)	(1999)	(1999)	(2004)
MIN	31.8	30.7	31.9	31.2	33.0	33.4	32.6	30.2	30.8	30.7	30.3	32.0
(WY)	(2000)	(2000)	(1995)	(1995)	(2000)	(2004)	(2004)	(1992)	(2002)	(2005)	(2003)	(2005)

06430532 CROW CREEK NEAR BEULAH, WY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1992 - 2005	
ANNUAL TOTAL	12,656	12,345	--	
ANNUAL MEAN	34.6	33.8	38.4	
HIGHEST ANNUAL MEAN	--	--	44.7 1999	
LOWEST ANNUAL MEAN	--	--	33.4 2002	
HIGHEST DAILY MEAN	44 Several days	42 Several days	502	May 9, 1995
LOWEST DAILY MEAN	29 Several days	27 Jul 23,24	21	Jul 1, 1998
ANNUAL SEVEN-DAY MINIMUM	29 May 7	28 Jul 19	22	Jun 28, 1998
MAXIMUM PEAK FLOW	--	^a 43 Oct 1	530	May 9, 1995
MAXIMUM PEAK STAGE	--	^b 5.16 Sep 23	10.17	May 9, 1995
ANNUAL RUNOFF (AC-FT)	25,100	24,490	27,800	
10 PERCENT EXCEEDS	41	39	45	
50 PERCENT EXCEEDS	33	33	36	
90 PERCENT EXCEEDS	31	31	32	

- a Gage height, 4.45 ft.
- b Backwater from aquatic plant growth.
- e Estimated.



06430770 SPEARFISH CREEK NEAR LEAD, SD

LOCATION.--Lat 44°17'57", long 103°52'06", in NE¼ NW¼ sec.22, T.4 N., R.2 E., Lawrence County, Hydrologic Unit 10120203, on right bank 0.5 mi below confluence of East Spearfish Creek, in the vicinity of Cheyenne Crossing, approximately 5 mi southwest of Lead.

DRAINAGE AREA.--63.5 mi².

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

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 5,310 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good. Occasional minor upstream diversions by Lead-Deadwood Sanitary District out of drainage basin into Whitewood Creek Basin. Upstream diversions by Homestake Mining Company discontinued March 2003. 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.--Maximum discharge, 673 ft³/s, May 14, 1965, from contracted-opening measurement of peak flow 2.0 mi downstream.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	24	24	24	25	26	26	26	27	26	23	21
2	22	24	23	24	24	26	26	26	27	25	23	20
3	22	24	24	24	25	26	26	25	27	25	23	21
4	23	24	23	24	25	26	26	25	27	25	23	21
5	24	24	23	24	25	26	32	25	27	26	23	21
6	24	23	23	22	25	26	28	26	27	26	22	20
7	24	23	23	25	25	25	27	27	28	24	22	20
8	24	24	23	24	25	26	28	35	27	23	22	21
9	24	24	24	24	25	27	28	34	27	23	22	20
10	24	24	23	24	25	27	27	34	26	23	22	19
11	24	24	23	24	26	28	27	32	26	23	25	19
12	24	24	24	24	26	27	26	32	27	23	23	19
13	25	24	24	22	26	27	26	32	30	23	23	19
14	25	24	24	e19	26	26	27	31	28	23	23	18
15	25	24	24	e20	26	26	26	30	27	22	22	18
16	24	24	24	e21	25	25	26	28	28	21	22	18
17	24	24	24	26	26	25	26	28	28	22	22	18
18	24	24	24	25	26	25	26	29	28	22	23	19
19	25	24	24	25	27	25	27	28	28	22	23	19
20	25	24	25	26	27	25	28	27	27	22	22	20
21	25	24	24	25	26	25	28	27	27	22	22	20
22	25	24	24	25	26	25	28	27	27	22	22	20
23	25	24	21	25	26	25	28	26	27	22	22	20
24	25	24	25	25	27	25	27	26	30	23	24	20
25	25	25	25	25	27	24	27	29	27	23	24	20
26	25	25	24	26	27	25	27	27	27	24	21	19
27	25	24	24	27	26	25	27	27	27	23	21	19
28	24	24	24	27	26	26	26	27	27	23	21	19
29	25	23	24	27	---	26	26	26	28	23	20	19
30	24	24	24	26	---	25	26	27	27	24	20	18
31	24	---	24	26	---	25	---	28	---	24	20	---
TOTAL	750	719	736	755	721	796	809	877	821	722	690	585
MEAN	24.2	24.0	23.7	24.4	25.8	25.7	27.0	28.3	27.4	23.3	22.3	19.5
MAX	25	25	25	27	27	28	32	35	30	26	25	21
MIN	22	23	21	19	24	24	26	25	26	21	20	18
AC-FT	1,490	1,430	1,460	1,500	1,430	1,580	1,600	1,740	1,630	1,430	1,370	1,160

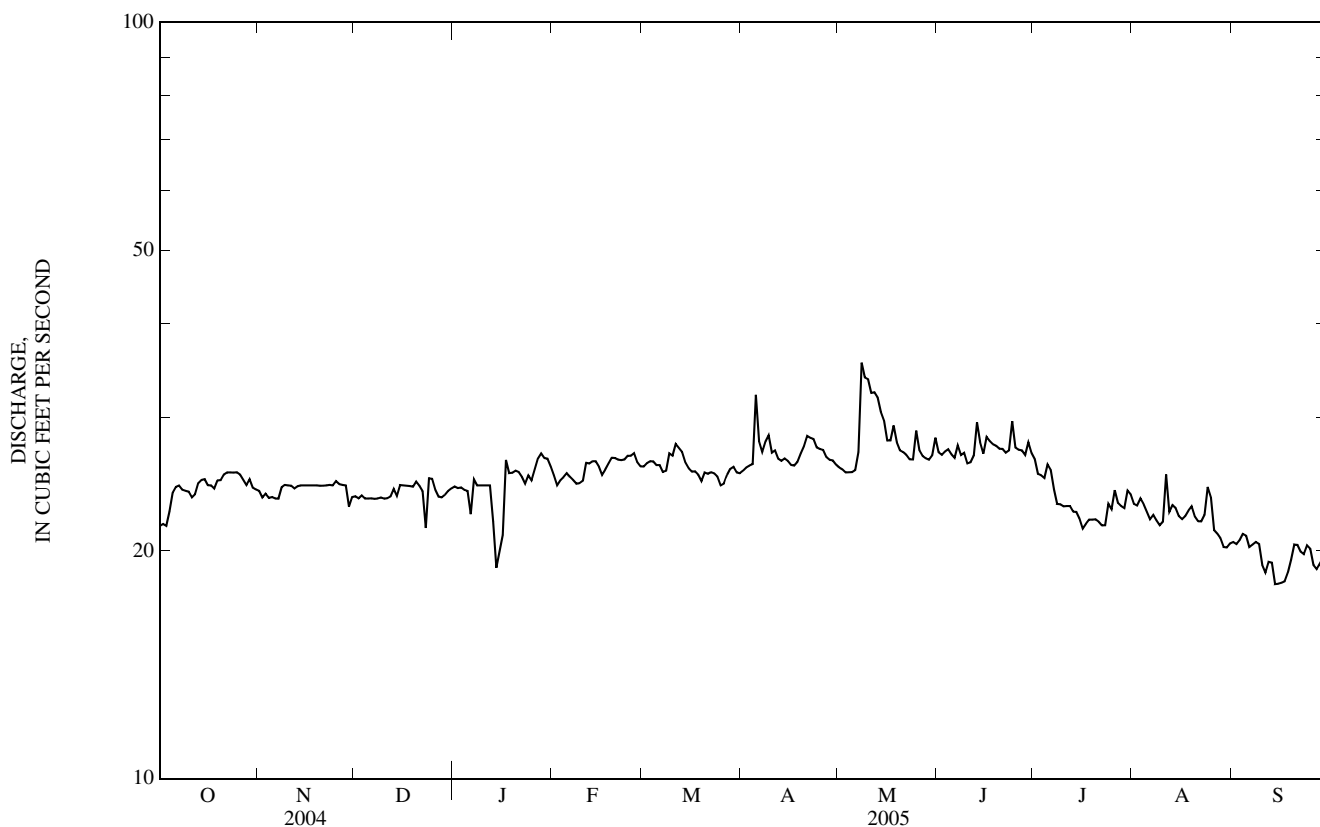
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2005, BY WATER YEAR (WY)

MEAN	27.1	26.9	25.3	25.0	25.1	26.3	31.3	37.7	34.9	30.7	29.3	27.7
MAX	49.4	45.5	46.0	43.3	44.1	45.0	50.4	67.4	60.8	52.2	59.3	51.5
(WY)	(1999)	(2000)	(2000)	(2000)	(1999)	(1999)	(1999)	(1997)	(1999)	(1998)	(1998)	(1998)
MIN	13.0	13.3	11.9	12.2	11.4	12.1	15.0	16.5	16.1	12.5	10.3	11.1
(WY)	(1991)	(1991)	(1991)	(1990)	(1990)	(1990)	(1989)	(1992)	(1990)	(1990)	(1990)	(1990)

06430770 SPEARFISH CREEK NEAR LEAD, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1989 - 2005	
ANNUAL TOTAL	9,447		8,981		29.0	
ANNUAL MEAN	25.8		24.6		14.2	
HIGHEST ANNUAL MEAN					48.1	1999
LOWEST ANNUAL MEAN					14.2	1990
HIGHEST DAILY MEAN	34	Jul 4	35	May 8	108	May 10, 1995
LOWEST DAILY MEAN	21	Dec 23	18	Sep 14	7.5	Dec 22, 1990
ANNUAL SEVEN-DAY MINIMUM	22	Sep 28	18	Sep 11	9.5	Aug 24, 1990
MAXIMUM PEAK FLOW			^a 42	May 8	181	Aug 20, 1998
MAXIMUM PEAK STAGE			^b 7.66	Dec 23	8.39	Aug 20, 1998
ANNUAL RUNOFF (AC-FT)	18,740		17,810		20,990	
10 PERCENT EXCEEDS	30		27		46	
50 PERCENT EXCEEDS	25		25		27	
90 PERCENT EXCEEDS	23		21		14	

a Gage height, 7.60 ft.
 b Backwater from ice.
 e Estimated.



BELLE FOURCHE RIVER BASIN

06430800 ANNIE CREEK NEAR LEAD, SD

LOCATION.--Lat 44°19'37", long 103°53'38", in NW¹/₄ NW¹/₄ NW¹/₄ sec.9, T.4 N., R.2 E., Lawrence County, Hydrologic Unit 10120203, on left bank 200 ft upstream from mouth and about 6 mi southwest of Lead.

DRAINAGE AREA.--3.55 mi².

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

GAGE.--Water-stage recorder and V-notch weir. Elevation of gage is 5,125 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.02	0.10	0.00	0.00	e0.00	e0.00	e0.00	0.71	1.9	0.70	0.13	0.09
2	0.03	e0.08	0.00	0.00	e0.00	e0.00	e0.04	0.69	1.8	0.66	0.12	0.08
3	0.04	0.08	e0.01	0.00	0.01	e0.00	e0.80	0.66	2.0	0.59	0.15	0.08
4	0.03	0.08	e0.01	0.00	e0.02	e0.00	e2.0	0.58	1.9	0.55	0.14	0.08
5	0.03	0.07	e0.00	0.00	e0.01	e0.01	e1.0	0.33	1.7	0.54	0.12	0.07
6	0.03	0.09	e0.00	0.00	0.00	e0.01	e1.0	0.33	1.6	0.50	0.12	0.07
7	0.03	0.10	e0.00	0.00	0.00	e0.01	1.0	0.53	1.7	0.59	0.11	0.06
8	0.03	0.09	e0.00	0.00	0.00	e0.01	1.1	4.3	1.5	0.54	0.08	0.08
9	0.03	0.10	e0.00	0.00	0.00	e0.02	0.95	11	1.5	0.52	0.15	0.07
10	0.03	0.10	e0.00	0.00	0.00	e0.01	0.75	10	1.4	0.51	0.12	0.06
11	0.03	0.07	e0.01	0.00	e0.01	e0.02	0.73	8.7	1.3	0.44	0.20	0.06
12	0.03	0.07	e0.00	0.00	e0.03	e0.01	0.70	8.0	1.3	0.39	0.16	0.06
13	0.03	e0.06	e0.00	0.00	e0.03	e0.00	0.68	8.3	2.1	0.50	0.17	0.07
14	0.03	e0.05	0.00	0.00	e0.01	e0.00	0.67	7.7	2.2	0.47	0.16	0.06
15	0.07	e0.04	0.00	0.00	0.00	e0.00	0.46	6.6	2.5	0.43	0.14	0.06
16	0.05	e0.04	e0.00	0.00	0.00	e0.00	0.25	5.2	2.5	0.39	0.13	0.06
17	0.04	e0.04	e0.00	0.00	0.00	e0.00	0.31	4.6	2.5	0.37	0.10	0.04
18	0.05	e0.04	e0.00	0.00	0.00	e0.00	0.46	4.8	2.5	0.36	0.11	0.05
19	0.05	e0.03	e0.00	e0.02	e0.02	e0.00	0.47	4.3	2.3	0.35	0.18	0.05
20	0.06	e0.03	e0.00	e0.08	0.00	e0.00	0.56	3.9	1.9	0.33	0.13	0.05
21	0.04	e0.03	e0.00	e0.03	0.00	e0.01	0.55	3.6	1.8	0.22	0.12	0.04
22	0.05	e0.03	e0.00	e0.02	e0.00	e0.02	0.63	3.2	1.4	0.18	0.11	0.05
23	0.06	e0.03	e0.00	e0.02	e0.01	e0.02	0.74	2.9	1.2	0.16	0.17	0.04
24	0.05	e0.04	e0.00	e0.01	e0.01	e0.00	0.82	2.8	1.3	0.19	0.24	0.07
25	0.05	e0.06	0.00	e0.01	e0.02	e0.00	0.76	3.0	1.1	0.23	0.18	0.07
26	0.04	e0.05	0.00	e0.01	e0.02	e0.00	0.82	2.8	0.99	0.32	0.19	0.07
27	0.04	e0.04	0.00	e0.00	e0.01	e0.01	0.93	2.7	0.90	0.25	0.14	0.06
28	0.03	e0.03	0.00	e0.00	e0.00	e0.03	0.89	2.5	0.83	0.19	0.13	0.08
29	0.05	e0.03	0.00	e0.00	---	e0.01	0.83	2.4	0.89	0.16	0.11	0.08
30	0.12	e0.02	0.00	e0.00	---	e0.00	0.88	2.3	0.77	0.15	0.10	0.07
31	0.15	---	0.00	e0.00	---	e0.00	---	2.4	---	0.14	0.10	---
TOTAL	1.42	1.72	0.03	0.20	0.21	0.20	21.78	121.83	49.28	11.92	4.31	1.93
MEAN	0.05	0.06	0.00	0.01	0.01	0.01	0.73	3.93	1.64	0.38	0.14	0.06
MAX	0.15	0.10	0.01	0.08	0.03	0.03	2.0	11	2.5	0.70	0.24	0.09
MIN	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.33	0.77	0.14	0.08	0.04
AC-FT	2.8	3.4	0.06	0.4	0.4	0.4	43	242	98	24	8.5	3.8

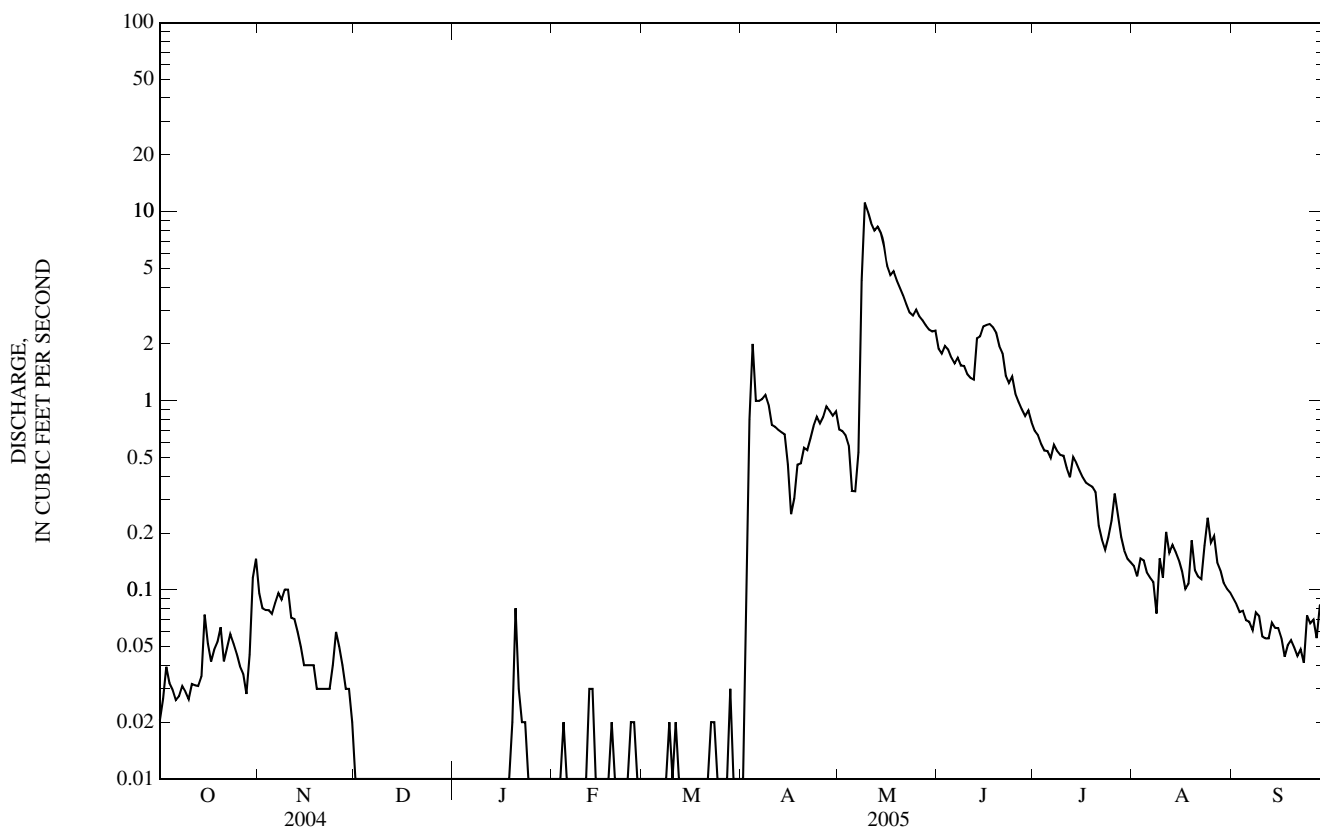
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2005, BY WATER YEAR (WY)

MEAN	0.66	0.44	0.33	0.32	0.33	0.96	3.70	5.79	2.65	0.94	0.60	0.38
MAX	4.27	2.05	1.20	0.91	1.02	3.03	9.79	28.5	8.54	2.31	2.43	1.51
(WY)	(1999)	(1999)	(1999)	(1997)	(1999)	(1999)	(1997)	(1995)	(1998)	(1995)	(1998)	(1998)
MIN	0.05	0.06	0.00	0.00	0.00	0.01	0.73	0.49	0.32	0.18	0.07	0.03
(WY)	(2005)	(2005)	(2005)	(2003)	(1993)	(2005)	(2005)	(2004)	(2004)	(2004)	(2004)	(2004)

06430800 ANNIE CREEK NEAR LEAD, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1989 - 2005	
ANNUAL TOTAL	95.92		214.83			
ANNUAL MEAN	0.26		0.59		^a 1.43	
HIGHEST ANNUAL MEAN					4.04	1995
LOWEST ANNUAL MEAN					0.32	2004
HIGHEST DAILY MEAN	1.7	Feb 17	11	May 9	188	May 8, 1995
LOWEST DAILY MEAN	0.00	Dec 1	0.00	Dec 1	^b 0.00	Mar 2, 1989
ANNUAL SEVEN-DAY MINIMUM	0.00	Dec 12	0.00	Dec 12	0.00	Jan 6, 1993
MAXIMUM PEAK FLOW			^c 13	May 9	^d 270	May 8, 1995
MAXIMUM PEAK STAGE			^e 5.76	Jan 28	^f 6.38	Jan 28, 2003
ANNUAL RUNOFF (AC-FT)	190		426		1,040	
10 PERCENT EXCEEDS	0.64		1.8		3.5	
50 PERCENT EXCEEDS	0.18		0.06		0.49	
90 PERCENT EXCEEDS	0.02		0.00		0.07	

- a Median of annual mean discharges, 1.1 ft³/s.
- b No flow at times in some years.
- c Gage height, 4.72 ft.
- d Gage height, 6.12 ft.
- e Estimated.
- f Backwater from ice, from floodmark.
- g Backwater from ice, observed.



BELLE FOURCHE RIVER BASIN

06430850 LITTLE SPEARFISH CREEK NEAR LEAD, SD

LOCATION.--Lat 44°20'58", long 103°56'08", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.36, T.5 N., R.1 E., Lawrence County, Hydrologic Unit 10120203, on left bank 0.3 mi upstream from Savoy, 0.4 mi upstream from mouth, 0.6 mi downstream from Roughlock Falls, and 13.6 mi northwest of Lead.

DRAINAGE AREA.--25.8 mi².

PERIOD OF RECORD.--October 1988 to September 1998, October 1999 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 5,020 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	12	10	11	12	9.3	15	11	12	13	17	10
2	12	11	11	9.8	13	9.5	15	10	12	13	16	10
3	12	12	11	9.9	13	9.3	16	9.8	12	12	16	10
4	12	12	12	11	15	8.8	17	9.5	12	12	16	10
5	12	12	12	e11	15	8.5	22	9.5	12	12	16	10
6	12	11	12	11	14	9.6	22	9.1	12	12	15	9.9
7	11	12	12	11	14	12	21	9.5	13	12	15	9.9
8	11	12	11	11	14	12	20	15	14	12	16	9.8
9	11	11	12	11	14	11	21	15	14	12	15	9.8
10	11	11	12	11	13	16	21	14	13	13	15	9.9
11	12	11	13	10	13	16	20	13	13	14	15	9.9
12	12	12	12	9.8	12	15	20	13	14	14	13	10
13	12	12	11	9.6	12	14	19	12	15	14	14	11
14	12	11	10	10	11	13	19	11	14	14	16	11
15	12	11	13	10	11	12	18	10	14	17	14	11
16	12	12	14	11	10	12	17	9.7	13	15	12	10
17	12	12	14	10	10	11	17	9.7	13	17	11	10
18	13	11	14	11	10	9.9	17	11	13	17	11	10
19	12	11	14	10	10	9.3	17	10	13	17	11	10
20	12	11	14	12	10	9.4	17	9.6	13	18	11	10
21	12	10	13	14	10	10	18	9.6	13	17	11	10
22	12	10	12	14	9.5	9.7	17	9.4	13	18	11	10
23	12	11	12	14	8.7	9.5	17	9.4	13	18	11	10
24	13	11	11	14	8.1	10	16	9.7	14	19	11	10
25	13	11	12	13	7.8	9.3	15	11	13	21	11	10
26	12	11	12	13	7.8	9.4	15	11	13	21	10	10
27	12	10	11	13	7.5	9.6	16	11	13	20	10	9.8
28	12	10	11	12	8.0	10	16	11	13	19	10	9.7
29	12	10	11	12	---	11	16	10	14	18	10	9.5
30	12	9.9	11	12	---	11	11	11	13	18	10	9.7
31	12	---	11	13	---	15	---	13	---	17	10	---
TOTAL	372	333.9	371	355.1	313.4	342.1	528	337.5	393	486	400	300.9
MEAN	12.0	11.1	12.0	11.5	11.2	11.0	17.6	10.9	13.1	15.7	12.9	10.0
MAX	13	12	14	14	15	16	22	15	15	21	17	11
MIN	11	9.9	10	9.6	7.5	8.5	11	9.1	12	12	10	9.5
AC-FT	738	662	736	704	622	679	1,050	669	780	964	793	597

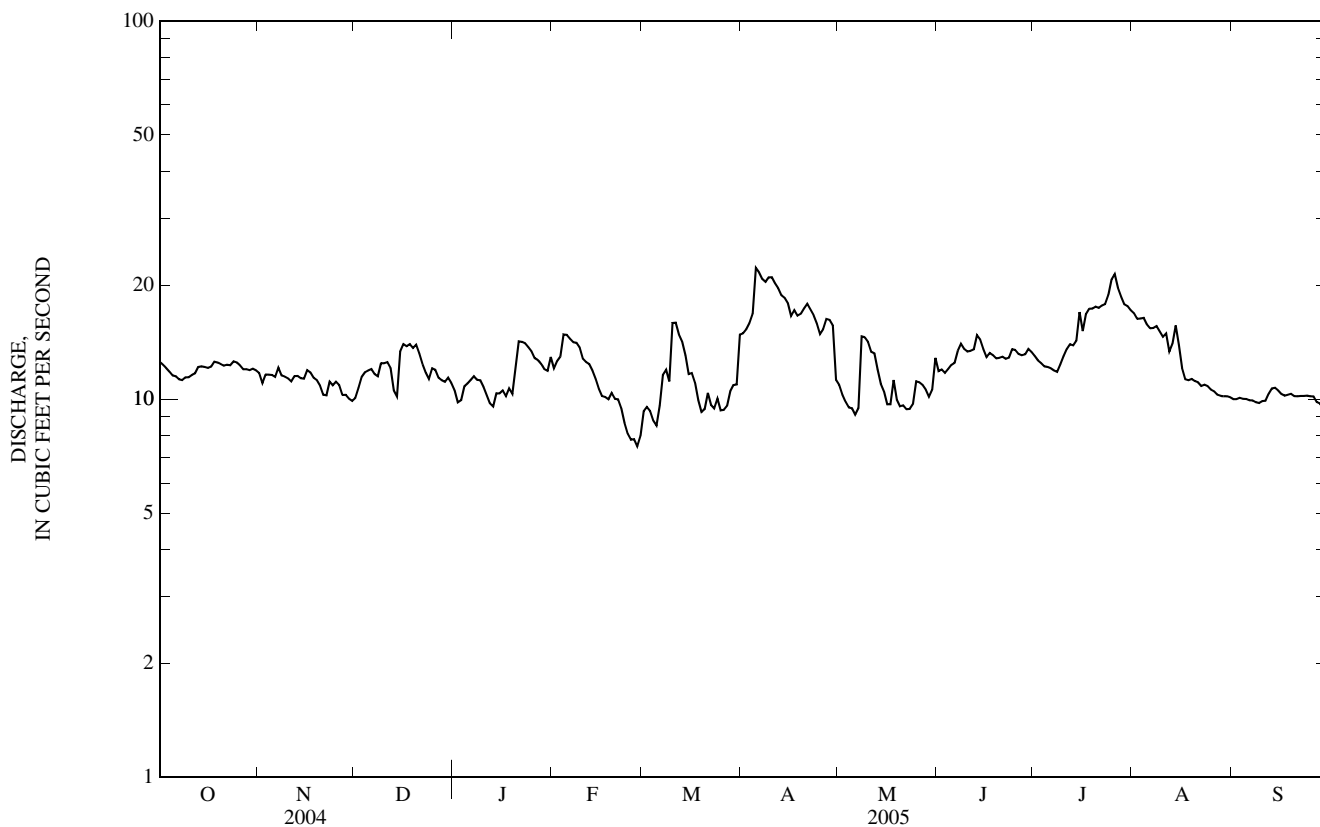
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989-1998, 2000 - 2005, BY WATER YEAR (WY)

MEAN	16.3	16.0	15.7	15.0	15.0	15.4	16.8	18.7	18.7	17.3	16.6	16.1
MAX	23.2	25.1	25.7	23.1	22.4	21.6	25.1	34.6	28.7	26.1	24.4	23.8
(WY)	(2000)	(2000)	(2000)	(2000)	(2000)	(1998)	(1997)	(1995)	(1997)	(1997)	(1996)	(1996)
MIN	11.5	11.1	10.3	9.96	11.0	11.0	12.0	10.9	10.9	12.1	11.7	10.0
(WY)	(2004)	(1993)	(1993)	(1993)	(1993)	(2005)	(1993)	(2005)	(2004)	(2004)	(2004)	(2005)

06430850 LITTLE SPEARFISH CREEK NEAR LEAD, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1989-1998, 2000-2005	
ANNUAL TOTAL	4,342.9		4,532.9		16.5	
ANNUAL MEAN	11.9		12.4		11.7	
HIGHEST ANNUAL MEAN					23.1	2000
LOWEST ANNUAL MEAN					11.7	2004
HIGHEST DAILY MEAN	15	Mar 10	22	Apr 5	61	May 10, 1995
LOWEST DAILY MEAN	9.9	Nov 30	7.5	Feb 27	7.5	Feb 27, 2005
ANNUAL SEVEN-DAY MINIMUM	10	Jun 2	8.2	Feb 23	8.2	Feb 23, 2005
ANNUAL RUNOFF (AC-FT)	8,610		8,990		11,940	
10 PERCENT EXCEEDS	13		17		23	
50 PERCENT EXCEEDS	12		12		15	
90 PERCENT EXCEEDS	11		9.8		12	

e Estimated.



BELLE FOURCHE RIVER BASIN

06430900 SPEARFISH CREEK ABOVE SPEARFISH, SD

LOCATION.--Lat 44°24'06", long 103°53'40", in NW¹/₄ NE¹/₄ NE¹/₄ sec.17, T.5 N., R.2 E., Lawrence County, Hydrologic Unit 10120203, on left bank immediately below confluence of Squaw Creek and 8.0 mi south of Spearfish.

DRAINAGE AREA.--139 mi².

PERIOD OF RECORD.--October 1988 to current year. Operated as partial-record crest-stage gage station from October 1997 to September 2001.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 4,440 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Occasional minor upstream diversions by Lead-Deadwood Sanitary District out of drainage basin into Whitewood Creek Basin. Upstream diversions by Homestake Mining Company discontinued March 2003. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	49	e46	50	51	e46	50	55	61	51	43	42
2	44	48	e47	e48	51	50	51	54	60	50	43	42
3	44	48	e48	e47	51	50	52	54	60	49	43	42
4	45	48	48	e44	52	50	53	53	59	49	43	43
5	46	48	48	e40	52	50	71	53	58	49	43	42
6	46	48	48	e42	52	50	64	53	57	48	42	42
7	46	48	48	e44	e45	51	60	56	58	47	41	42
8	46	48	48	e47	e45	51	60	91	59	46	41	42
9	46	48	48	e48	e46	51	60	126	58	45	41	42
10	47	48	48	e48	e47	51	58	110	58	45	42	42
11	47	48	48	e48	52	51	56	101	57	45	45	42
12	48	48	48	e46	52	51	54	98	56	45	42	43
13	51	47	47	e34	52	51	53	99	64	45	42	43
14	51	48	e46	e35	52	50	53	93	62	44	42	43
15	51	47	48	e40	51	51	52	88	61	44	42	43
16	50	47	48	e45	e37	50	52	82	61	44	42	43
17	49	47	48	e48	e38	50	52	78	61	44	42	43
18	48	47	47	e50	e41	50	52	80	59	43	42	44
19	49	47	47	58	53	50	53	73	57	43	42	44
20	49	47	48	57	52	51	55	70	56	43	42	45
21	48	46	47	56	52	51	59	68	56	43	42	45
22	49	47	e43	55	51	50	59	65	55	42	43	45
23	49	47	e41	55	51	50	60	64	54	42	43	45
24	49	47	e47	54	50	51	59	64	57	43	46	46
25	49	48	e50	54	50	49	59	68	55	45	44	46
26	48	48	53	54	50	49	59	65	53	47	44	46
27	48	47	52	53	50	51	58	63	52	44	43	46
28	48	47	51	52	50	52	57	62	51	43	43	48
29	50	e42	51	52	---	53	56	61	53	43	43	47
30	50	e44	51	53	---	52	56	61	52	43	42	46
31	50	---	50	52	---	51	---	63	---	44	42	---
TOTAL	1,485	1,417	1,488	1,509	1,376	1,564	1,693	2,271	1,720	1,398	1,320	1,314
MEAN	47.9	47.2	48.0	48.7	49.1	50.5	56.4	73.3	57.3	45.1	42.6	43.8
MAX	51	49	53	58	53	53	71	126	64	51	46	48
MIN	44	42	41	34	37	46	50	53	51	42	41	42
AC-FT	2,950	2,810	2,950	2,990	2,730	3,100	3,360	4,500	3,410	2,770	2,620	2,610

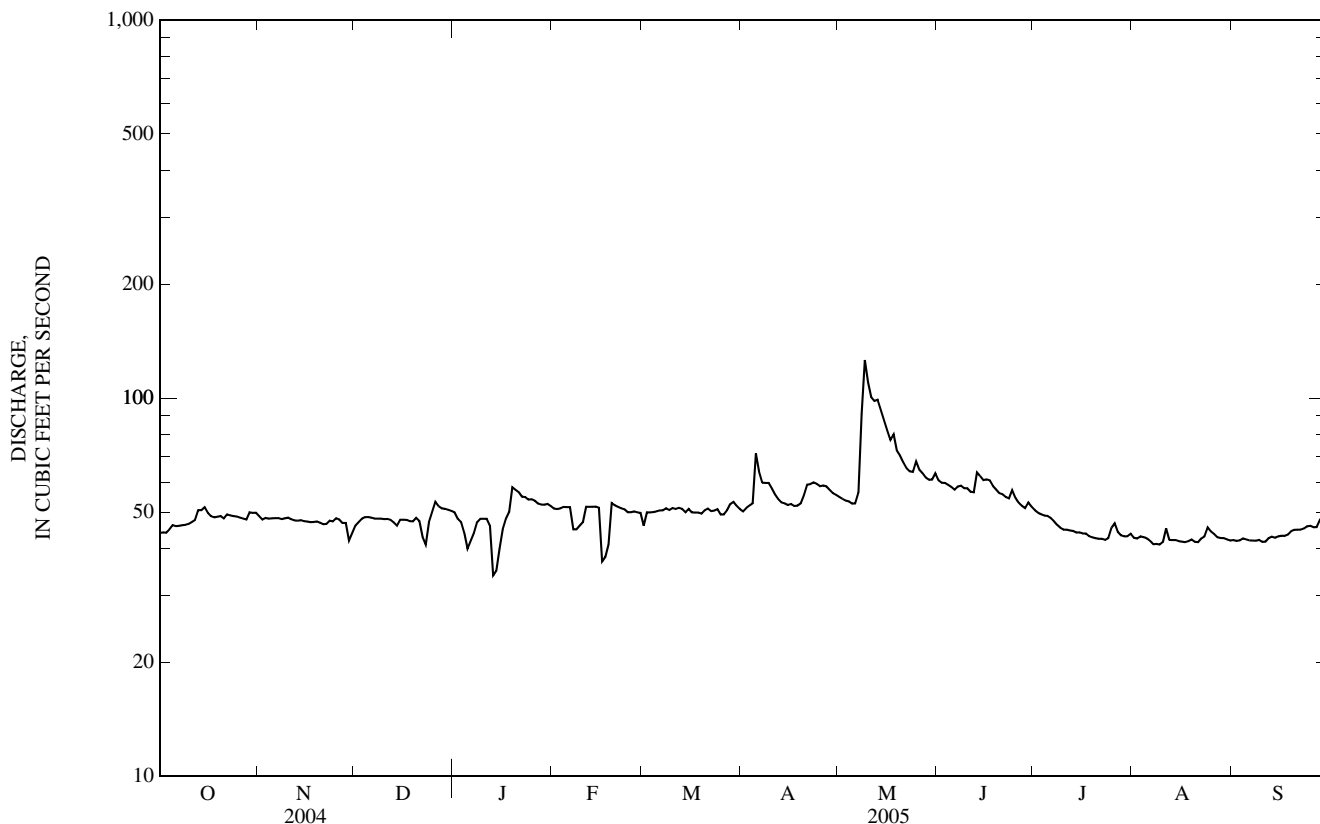
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989-1997, 2002 - 2005, BY WATER YEAR (WY)

MEAN	52.4	51.1	49.0	48.4	48.4	55.5	75.0	106	77.0	58.6	54.4	52.8
MAX	80.2	79.8	77.7	75.2	75.3	87.3	149	307	129	101	99.8	87.5
(WY)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)	(1995)	(1996)	(1997)	(1997)	(1997)
MIN	35.5	37.2	29.8	31.8	37.0	39.5	44.8	45.3	41.4	37.7	35.9	34.9
(WY)	(1993)	(1991)	(1992)	(1992)	(1993)	(1993)	(1992)	(1992)	(1992)	(1990)	(1992)	(1991)

06430900 SPEARFISH CREEK ABOVE SPEARFISH, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1989-1997,2002 - 2005	
ANNUAL TOTAL	18,838		18,555		^a 60.6	
ANNUAL MEAN	51.5		50.8		103	
HIGHEST ANNUAL MEAN					1997	
LOWEST ANNUAL MEAN					38.1	
HIGHEST DAILY MEAN	72	Mar 27	126	May 9	1,470	May 8, 1995
LOWEST DAILY MEAN	41	Dec 23	34	Jan 13	18	Jan 15, 1992
ANNUAL SEVEN-DAY MINIMUM	45	Sep 28	42	Aug 4	26	Jan 11, 1992
MAXIMUM PEAK FLOW			^b 139	May 9	^c 2,890	May 8, 1995
MAXIMUM PEAK STAGE			^d 4.41	Jan 16	7.42	May 8, 1995
ANNUAL RUNOFF (AC-FT)	37,370		36,800		43,900	
10 PERCENT EXCEEDS	58		60		89	
50 PERCENT EXCEEDS	51		49		53	
90 PERCENT EXCEEDS	47		42		37	

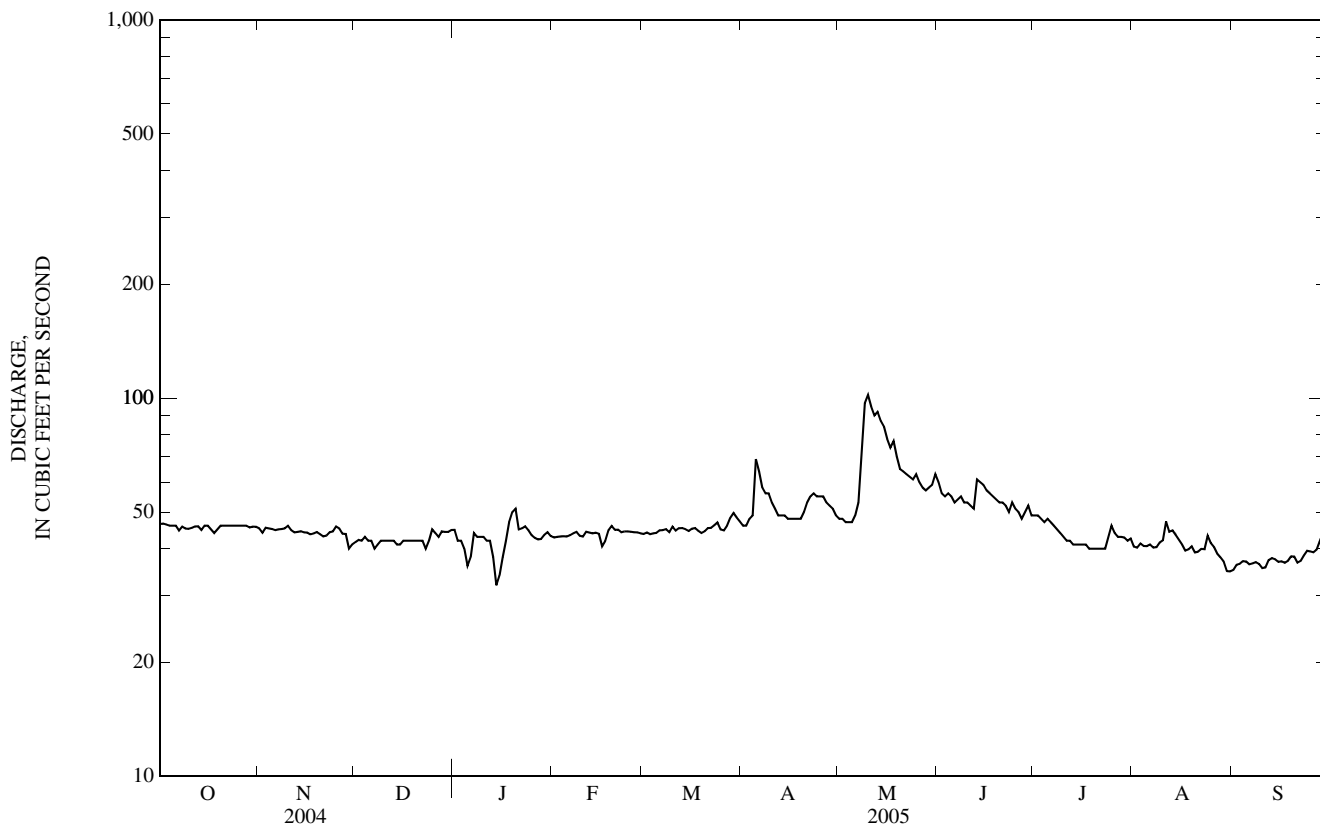
- a Median of annual mean discharges, 53 ft³/s.
- b Gage height, 3.52 ft.
- c Reflects water years 1998-2001 during crest-stage gage partial-record year.
- d Backwater from ice.
- e Estimated.



06431500 SPEARFISH CREEK AT SPEARFISH, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1947 - 2005	
ANNUAL TOTAL	16,542		16,991			
ANNUAL MEAN	45.2		46.6		55.5	
HIGHEST ANNUAL MEAN					106	1999
LOWEST ANNUAL MEAN					27.1	1961
HIGHEST DAILY MEAN	63	Jul 5	102	May 10	1,880	May 15, 1965
LOWEST DAILY MEAN	28	Jan 4	32	Jan 14	^a 9.0	Dec 2, 1959
ANNUAL SEVEN-DAY MINIMUM	40	Aug 28	36	Aug 29	18	Dec 18, 1981
MAXIMUM PEAK FLOW			^b 114	May 9	^c 4,240	May 15, 1965
MAXIMUM PEAK STAGE			^d 7.60	Jan 15	10.54	Jun 15, 1976
ANNUAL RUNOFF (AC-FT)	32,810		33,700		40,200	
10 PERCENT EXCEEDS	49		56		86	
50 PERCENT EXCEEDS	45		44		47	
90 PERCENT EXCEEDS	41		39		32	

- a No flow for part of Oct. 18, 1970.
- b Gage height, 6.98 ft.
- c From rating curve extended above 520 ft³/s on basis of slope-area measurement of peak flow, gage height, 10.53 ft.
- d Backwater from ice.
- e Estimated.



06433000 REDWATER RIVER ABOVE BELLE FOURCHE, SD

LOCATION.--Lat 44°40'02", long 103°50'20", in NW¹/₄ SE¹/₄ sec.11, T.8 N., R.2 E., Butte County, Hydrologic Unit 10120203, on right bank near downstream end of bridge on old U.S. Highway 212 in Belle Fourche, 0.5 mi upstream from Hay Creek, and 0.9 mi upstream from mouth.

DRAINAGE AREA.--920 mi².

PERIOD OF RECORD.--November 1945 to current year. Daily discharges for October 1946 estimated; yearly discharge published in WSP 1309 does not include October. Prior to October 1960, published as Redwater Creek above Belle Fourche.

REVISED RECORDS.--WSP 1389: 1954 (maximum gage height only).

GAGE.--Water-stage recorder. Elevation of gage is 3,000 ft above NGVD of 1929, from topographic map. Prior to Dec. 13, 1946, nonrecording gage at same site and datum.

REMARKS.--Records good. Diversions for irrigation of about 13,000 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	154	137	e140	139	128	129	116	119	84	10	31
2	112	152	145	e120	137	129	129	114	105	88	11	31
3	109	156	148	e105	137	128	129	110	102	82	13	39
4	103	154	147	e98	137	128	130	98	104	79	14	38
5	105	154	147	e92	135	127	162	95	102	69	13	29
6	109	150	146	e90	136	128	167	100	76	e51	12	18
7	112	147	145	e92	135	127	146	108	87	37	11	25
8	111	146	144	e95	138	130	139	124	108	26	12	36
9	103	149	145	e97	e130	128	138	169	109	16	13	33
10	103	150	144	e99	133	127	139	199	109	13	14	36
11	103	148	145	e100	137	125	136	191	105	12	25	38
12	102	150	143	e100	138	126	133	202	113	9.5	26	43
13	104	150	139	e95	138	126	128	218	131	7.9	33	51
14	112	150	142	e89	139	128	122	195	139	7.9	35	59
15	118	151	145	e87	137	128	112	185	128	7.6	30	59
16	115	149	142	e89	130	130	104	185	127	7.1	27	62
17	112	148	141	e92	130	129	93	170	126	6.6	25	81
18	112	147	141	e100	136	130	84	168	116	6.5	26	82
19	111	147	141	e115	139	125	84	157	114	6.9	35	81
20	114	149	143	e125	139	124	93	148	117	6.9	36	80
21	109	149	142	e145	136	126	123	134	106	6.6	29	78
22	112	148	e130	171	134	125	122	119	100	6.5	28	79
23	120	148	e125	152	134	125	109	104	106	7.0	34	86
24	117	149	120	154	133	133	105	102	121	6.5	48	96
25	116	151	153	150	132	134	106	109	123	9.7	50	102
26	119	153	149	147	131	130	106	97	120	13	58	99
27	118	150	147	144	129	132	113	97	107	15	52	94
28	119	150	147	143	128	131	117	73	102	11	47	99
29	131	145	147	143	---	133	119	66	94	8.8	42	85
30	136	140	148	143	---	133	119	77	82	8.2	34	79
31	149	---	145	144	---	132	---	117	---	8.5	30	---
TOTAL	3,519	4,484	4,423	3,656	3,777	3,985	3,636	4,147	3,298	724.7	873	1,849
MEAN	114	149	143	118	135	129	121	134	110	23.4	28.2	61.6
MAX	149	156	153	171	139	134	167	218	139	88	58	102
MIN	102	140	120	87	128	124	84	66	76	6.5	10	18
AC-FT	6,980	8,890	8,770	7,250	7,490	7,900	7,210	8,230	6,540	1,440	1,730	3,670

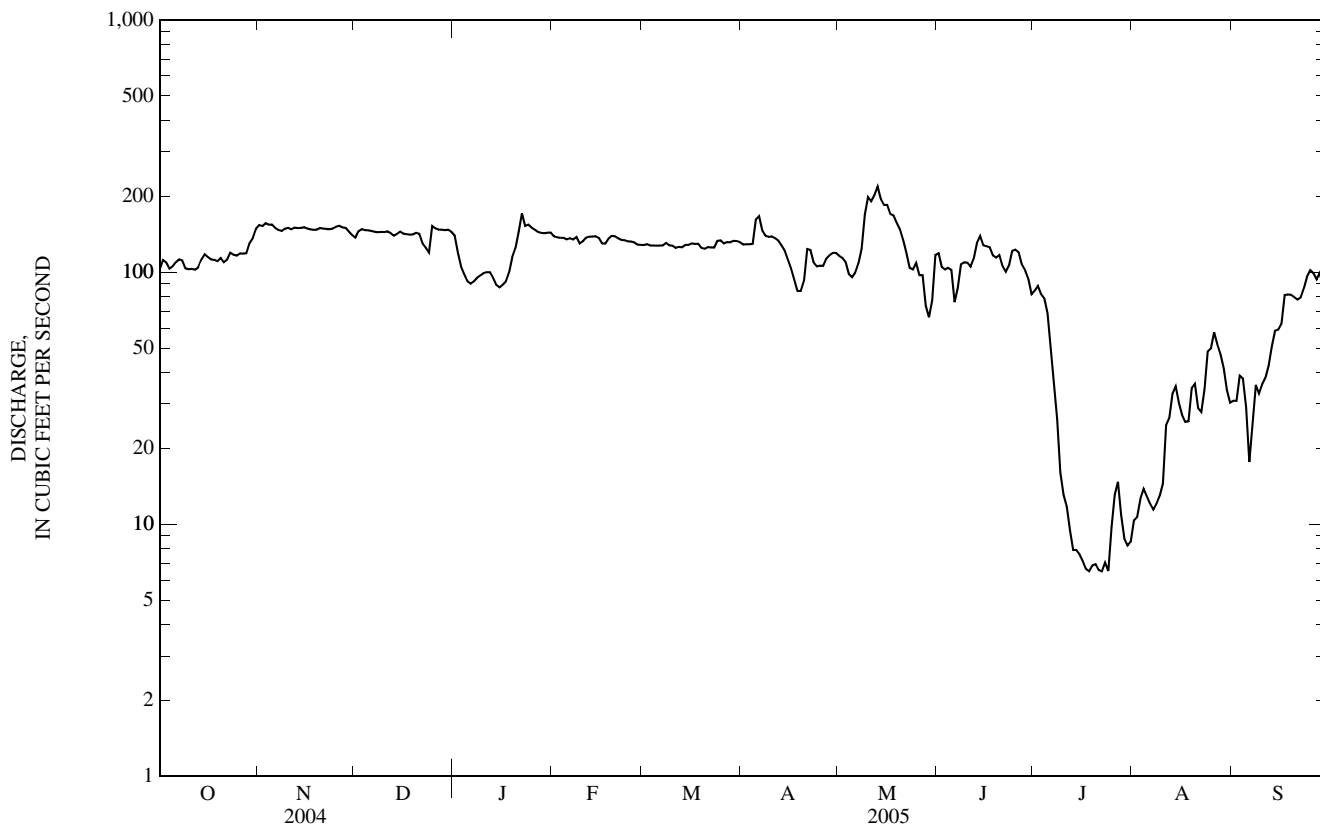
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2005, BY WATER YEAR (WY)

	136	148	144	138	148	160	181	235	186	61.1	47.8	90.3
MEAN	136	148	144	138	148	160	181	235	186	61.1	47.8	90.3
MAX	313	268	229	246	278	276	359	988	834	263	178	192
(WY)	(1999)	(1999)	(1999)	(1997)	(1996)	(1996)	(1997)	(1995)	(1946)	(1946)	(1998)	(1946)
MIN	50.6	82.7	69.9	83.5	91.7	105	62.9	20.0	4.07	2.13	2.72	19.3
(WY)	(1961)	(1961)	(1962)	(1957)	(1993)	(1961)	(1981)	(1992)	(1988)	(1960)	(1959)	(1959)

06433000 REDWATER RIVER ABOVE BELLE FOURCHE, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1946 - 2005	
ANNUAL TOTAL	38,703		38,371.7		139	
ANNUAL MEAN	106		105		251	
HIGHEST ANNUAL MEAN					57.1 1961	
LOWEST ANNUAL MEAN					1999	
HIGHEST DAILY MEAN	165	Mar 10	218	May 13	5,790	May 20, 1982
LOWEST DAILY MEAN	19	May 8	6.5	Jul 18	^a 0.00	May 1, 1981
ANNUAL SEVEN-DAY MINIMUM	22	May 10	6.7	Jul 18	0.56	Jul 30, 1960
MAXIMUM PEAK FLOW			^b 272	May 13	^c 16,400	Jun 16, 1962
MAXIMUM PEAK STAGE			^d 5.44	Jan 16	11.69	Jun 16, 1962
ANNUAL RUNOFF (AC-FT)	76,770		76,110		101,000	
10 PERCENT EXCEEDS	150		149		218	
50 PERCENT EXCEEDS	117		118		130	
90 PERCENT EXCEEDS	37		25		23	

- a No flow at times in 1960, 1968-69, 1981-82, and 1988.
- b Gage height, 3.48 ft.
- c From rating curve extended above 6,000 ft³/s on basis of slope-area measurement of peak flow.
- d Backwater from ice.
- e Estimated.



BELLE FOURCHE RIVER BASIN

06434505 INLET CANAL ABOVE BELLE FOURCHE RESERVOIR, SD

LOCATION.--Lat 44°42'05", long 103°44'00", in NW¹/₄ SE¹/₄ NE¹/₄ sec.34, T.9 N., R.3 E., Butte County, Hydrologic Unit 10120202, on left bank 6.5 mi downstream from diversion dam on Belle Fourche River, and 2.5 mi northwest of Fruitdale.

PERIOD OF RECORD.--October 1994 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,980 ft above NGVD of 1929 from topographic map. Prior to October 1994, another station located on Inlet Canal near Belle Fourche (station 06434500) at site 5.6 mi upstream (discharge records are not equivalent because of diversions for irrigation).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Records show actual diversions to Belle Fourche Reservoir (see station 06435000), from Belle Fourche River and Crow Creek. 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.

COOPERATION.--Records of diversion from the canal provided by the Belle Fourche Irrigation District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	169	150	e122	150	144	137	136	136	55	86	56
2	122	165	140	e120	150	148	136	133	117	63	97	59
3	123	165	142	e115	156	150	135	131	111	60	79	54
4	120	160	142	e108	154	148	135	122	111	52	78	39
5	115	166	142	e90	155	149	152	119	109	77	82	23
6	118	157	144	e82	154	150	164	119	92	67	81	23
7	121	148	142	e86	146	146	148	124	96	39	85	31
8	122	146	142	e88	143	150	141	133	110	34	88	20
9	120	149	142	e90	e140	147	141	169	111	13	81	12
10	120	153	139	e92	e150	147	143	212	115	1.3	86	11
11	121	156	143	e96	153	146	141	223	107	1.1	107	11
12	123	154	140	e102	152	147	139	353	118	0.63	108	e7.0
13	124	157	136	e98	158	146	136	526	133	0.25	121	e6.9
14	130	152	147	e92	158	146	132	467	142	0.02	110	e17
15	135	163	149	e86	158	146	127	325	132	0.00	95	e15
16	132	163	150	e90	148	149	119	269	130	0.00	85	e21
17	135	167	143	e98	145	147	114	256	135	0.00	75	e28
18	132	165	139	e125	153	149	106	232	126	0.00	80	e29
19	123	159	141	e190	160	148	105	203	119	15	95	e35
20	123	156	49	183	170	146	111	184	124	37	94	e64
21	122	152	172	174	162	147	138	170	116	52	86	e73
22	126	151	147	158	162	145	142	148	59	42	87	95
23	133	153	94	163	152	149	135	139	99	39	83	99
24	136	151	151	169	144	155	129	126	118	43	98	106
25	131	159	158	169	145	159	128	123	132	56	109	111
26	131	158	149	168	155	152	126	113	133	55	99	114
27	135	153	154	155	160	141	129	105	104	76	106	107
28	133	146	151	159	153	144	132	96	84	71	155	109
29	145	168	147	160	---	146	139	87	76	78	94	100
30	150	162	136	150	---	142	140	98	57	72	76	97
31	159	---	e130	148	---	141	---	127	---	69	59	---
TOTAL	3,978	4,723	4,351	3,926	4,286	4,570	4,000	5,768	3,352	1,168.30	2,865	1,572.9
MEAN	128	157	140	127	153	147	133	186	112	37.7	92.4	52.4
MAX	159	169	172	190	170	159	164	526	142	78	155	114
MIN	115	146	49	82	140	141	105	87	57	0.00	59	6.9
AC-FT	7,890	9,370	8,630	7,790	8,500	9,060	7,930	11,440	6,650	2,320	5,680	3,120

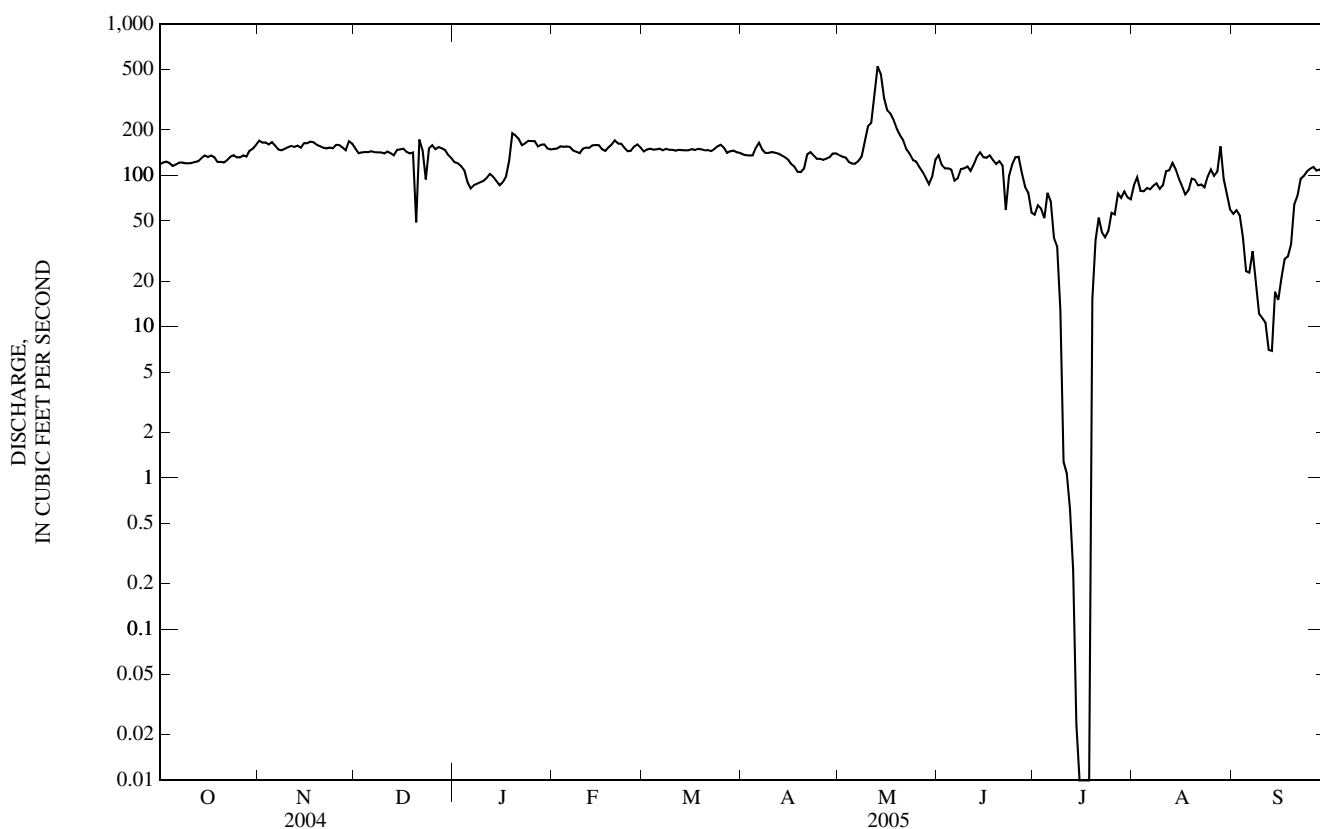
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2005, BY WATER YEAR (WY)

	203	173	137	158	126	164	112	158	175	132	112	141
MEAN	203	173	137	158	126	164	112	158	175	132	112	141
MAX	462	296	220	372	193	378	210	254	291	314	240	211
(WY)	(1999)	(2001)	(1998)	(1997)	(1997)	(2003)	(2003)	(2001)	(2001)	(1999)	(1998)	(2002)
MIN	54.5	0.04	1.70	1.64	2.06	0.95	4.88	70.3	57.4	37.7	52.5	52.4
(WY)	(2000)	(1997)	(1999)	(2000)	(2000)	(1996)	(1997)	(2004)	(2004)	(2005)	(2000)	(2005)

06434505 INLET CANAL ABOVE BELLE FOURCHE RESERVOIR, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1995 - 2005	
ANNUAL TOTAL	45,990.79		44,560.20			
ANNUAL MEAN	126		122		149	
HIGHEST ANNUAL MEAN					183	2001
LOWEST ANNUAL MEAN					113	2000
HIGHEST DAILY MEAN	549	Jul 6	526	May 13	1,300	Oct 17, 1998
LOWEST DAILY MEAN	0.00	May 19	0.00	Jul 15	^a 0.00	Dec 31, 1995
ANNUAL SEVEN-DAY MINIMUM	0.01	Aug 20	0.13	Jul 12	0.00	Nov 16, 1996
MAXIMUM PEAK FLOW			725	Dec 21	1,630	Oct 17, 1998
MAXIMUM PEAK STAGE			7.01	Dec 21	9.00	Oct 17, 1998
ANNUAL RUNOFF (AC-FT)	91,220		88,390		108,300	
10 PERCENT EXCEEDS	188		160		259	
50 PERCENT EXCEEDS	135		132		155	
90 PERCENT EXCEEDS	32		53		1.5	

a No flow at times in some years.
 e Estimated.



BELLE FOURCHE RIVER BASIN

06435000 BELLE FOURCHE RESERVOIR NEAR BELLE FOURCHE, SD

LOCATION.--Lat 44°44'12", long 103°40'27", in SW¹/₄ SE¹/₄ sec.18, T.9 N., R.4 E., Butte County, Hydrologic Unit 10120202, at dam on Owl Creek, 9.8 mi northeast of Belle Fourche.

PERIOD OF RECORD.--January 1912 to current year (monthend contents only).

GAGE.--Water-stage recorder. Elevations listed to NGVD of adjustment of 1912. Prior to June 6, 1967, nonrecording gage at present site and datum.

REMARKS.--Offstream reservoir formed by earthfill dam. Storage began in May 1910; dam completed in April 1911. Conservation capacity, 185,277 acre-ft (1949 survey), between elevations 2,927.0 ft (lowest outlet) and 2,975.0 ft. Dead storage below elevation 2,927.0 ft, 6,800 acre-ft. Figures given herein represent contents above elevation 2,927.0 ft. Water diverted from Belle Fourche River through Inlet Canal (see station 06434505) is stored in Belle Fourche Reservoir for irrigation.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 197,400 acre-ft, Apr. 30, 1919, May 20, 1920, elevation, 2,974.9 ft; minimum observed, -3,000 acre-ft, Sept. 30, 1936, water was lowered below dead storage level of 2,927.0 ft by opening holes in crib walls.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 103,200 acre-ft, June 19, elevation, 2,963.35 ft; minimum, 11,700 acre-ft, Sept. 25, elevation, 2,937.17 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	2,944.03	24,700	--
Oct. 31	2,947.53	33,500	+8,800
Nov. 30	2,950.75	43,600	+10,100
Dec. 31	2,953.25	53,000	+9,400
CAL YR 2004	--	--	-24,900
Jan. 31	2,955.34	61,800	+8,800
Feb. 28	2,957.19	70,300	+8,500
Mar. 31	2,958.89	78,700	+8,400
Apr. 30	2,960.33	86,200	+7,500
May 31	2,962.60	98,800	+12,600
June 30	2,963.21	102,400	+3,600
July 31	2,955.19	61,100	-41,300
Aug. 31	2,946.52	30,700	-30,400
Sept. 30	2,937.72	12,600	-18,100
WTR YR 2005	--	--	-12,100

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06436000 BELLE FOURCHE RIVER NEAR FRUITDALE, SD

LOCATION.--Lat 44°41'27", long 103°44'14", in NW¼ NE¼ sec.3, T.8 N., R.3 E., Butte County, Hydrologic Unit 10120202, on left bank near downstream end of bridge on U.S. Highway 212, 2.5 mi northwest of Fruitdale, and 8.8 mi downstream from point of diversion to Belle Fourche Reservoir.

DRAINAGE AREA.--4,540 mi², approximately.

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

GAGE.--Water-stage recorder. Elevation of gage is 2,925 ft above NGVD of 1929, from topographic map. Prior to Apr. 9, 1947, nonrecording gage and Apr. 10, 1947, to Oct. 14, 1948, water-stage recorder, at site 100 ft upstream at same datum. Oct. 15, 1948, to Dec. 30, 1958, water-stage recorder and Dec. 31, 1958, to Sept. 23, 1959, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Keyhole Dam since Oct. 25, 1952, usable capacity, 191,600 acre-ft, 180 mi upstream. Maximum discharge prior to Sept. 30, 1953, 7,460 ft³/s, June 23, 1947, gage height, 11.03 ft; no flow at times in 1945 and 1948. At a point 8.8 mi above station, water is diverted to Belle Fourche Reservoir (see station 06435000) through Inlet Canal (see station 06434505), with other smaller diversions from the main stem and tributaries for irrigation. Total diversions for irrigation of about 60,000 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	5.0	4.1	e4.5	3.9	3.6	4.6	5.1	9.1	5.0	8.8	11
2	4.7	4.5	4.1	e4.6	3.9	3.6	4.6	5.0	7.3	4.5	9.9	9.2
3	4.5	4.0	4.7	e4.6	3.9	3.6	4.6	4.9	6.0	4.3	11	11
4	4.6	3.6	4.8	e4.5	4.0	3.7	4.6	4.9	5.8	3.9	11	10
5	4.5	3.7	4.8	e4.3	4.1	3.7	5.9	4.6	6.2	3.7	12	11
6	4.9	3.4	4.7	e4.1	4.1	3.7	5.9	4.4	6.3	3.9	12	8.9
7	4.6	4.8	4.7	e4.2	4.3	4.0	5.3	5.0	7.1	4.7	11	5.4
8	4.2	5.1	4.7	e4.3	4.3	4.8	5.0	6.2	7.6	5.1	11	5.5
9	4.0	5.1	4.7	e4.8	4.0	6.5	5.4	6.5	7.3	4.5	10	5.0
10	4.0	4.9	4.6	e5.2	4.1	6.3	4.8	7.2	7.5	4.9	12	4.5
11	3.9	5.0	4.7	e6.0	4.1	6.1	4.7	7.5	7.4	4.5	24	4.7
12	4.0	5.0	4.8	e6.0	4.1	6.0	4.8	9.8	8.1	2.4	14	6.7
13	3.8	5.2	e4.0	e6.0	4.1	4.8	4.7	11	9.7	2.3	15	9.4
14	3.6	4.9	e4.0	e5.7	4.4	4.5	4.7	6.5	9.0	1.3	15	12
15	3.6	4.9	4.1	e4.7	4.3	4.6	4.7	4.6	8.1	0.82	14	12
16	3.6	4.9	4.4	e4.0	4.0	4.4	4.7	3.8	8.0	0.84	13	13
17	3.7	4.9	4.5	e4.3	3.9	4.3	4.5	3.9	7.3	0.60	12	13
18	3.8	5.0	4.5	e5.2	3.7	5.3	4.4	3.4	5.2	0.85	13	14
19	3.8	4.9	4.5	e7.0	3.7	5.3	4.1	2.9	5.4	0.77	14	14
20	4.8	4.7	5.3	e7.0	3.7	5.0	5.1	7.0	4.6	3.9	14	12
21	4.7	4.9	92	e5.8	3.7	4.9	8.4	4.5	3.6	6.5	13	9.9
22	4.4	4.5	27	e5.6	3.8	4.9	7.7	3.6	3.8	6.5	13	9.8
23	4.5	4.9	6.8	e5.6	3.7	4.9	5.3	3.2	4.2	3.7	13	9.9
24	4.9	5.0	6.3	e5.7	3.7	5.6	5.0	2.9	7.2	4.8	14	10
25	4.5	5.1	6.7	6.0	3.7	5.3	4.7	3.2	7.3	8.1	15	11
26	4.4	5.0	7.5	5.3	3.6	5.0	4.5	3.1	5.8	8.8	14	11
27	4.8	4.9	7.3	4.5	3.7	4.8	4.9	2.9	5.8	11	12	9.9
28	4.5	4.9	7.2	4.4	3.7	4.9	4.9	5.8	5.6	7.7	12	15
29	5.8	4.8	6.3	4.4	---	4.9	5.0	6.3	5.7	9.7	14	18
30	5.9	4.6	5.7	4.2	---	4.9	5.0	6.7	5.7	9.3	13	16
31	5.2	---	4.7	4.1	---	4.7	---	9.6	---	8.7	12	---
TOTAL	137.3	142.1	268.2	156.6	110.2	148.6	152.5	166.0	197.7	147.58	401.7	312.8
MEAN	4.43	4.74	8.65	5.05	3.94	4.79	5.08	5.35	6.59	4.76	13.0	10.4
MAX	5.9	5.2	92	7.0	4.4	6.5	8.4	11	9.7	11	24	18
MIN	3.6	3.4	4.0	4.0	3.6	3.6	4.1	2.9	3.6	0.60	8.8	4.5
AC-FT	272	282	532	311	219	295	302	329	392	293	797	620

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2005, BY WATER YEAR (WY)*

MEAN	18.7	27.7	20.2	21.6	50.2	110	155	304	205	39.9	14.3	11.2
MAX	228	594	298	280	535	1,125	984	2,256	1,149	525	88.0	54.4
(WY)	(2000)	(1999)	(1999)	(1999)	(1996)	(1996)	(1997)	(1995)	(1976)	(1993)	(1993)	(1993)
MIN	3.82	3.33	3.23	1.97	1.32	2.46	2.30	3.12	0.33	0.22	0.30	2.24
(WY)	(1961)	(1979)	(1968)	(1957)	(1955)	(1977)	(1981)	(1985)	(1961)	(1960)	(1960)	(1959)

06436000 BELLE FOURCHE RIVER NEAR FRUITDALE, SD—Continued

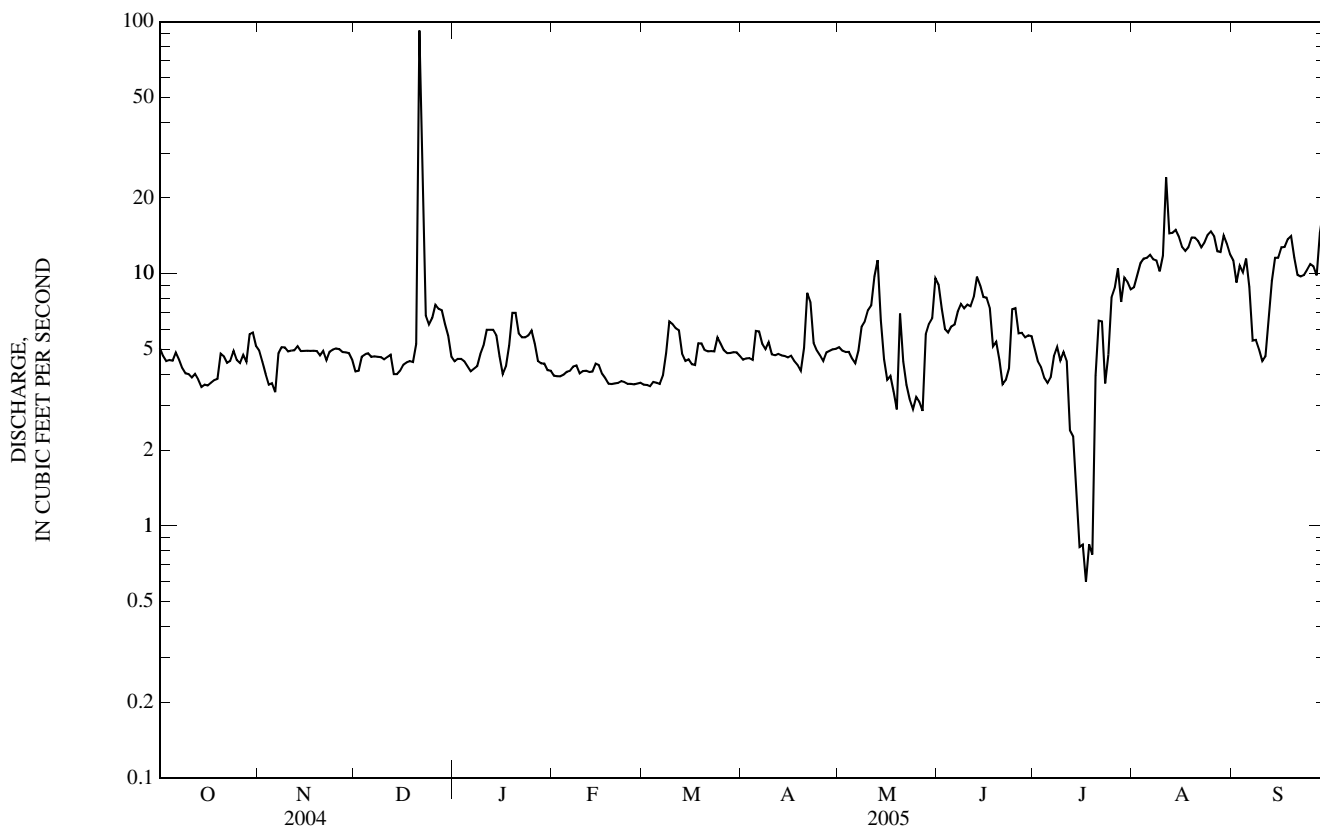
SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1954 - 2005*	
ANNUAL TOTAL	2,797.3		2,341.28		81.5	
ANNUAL MEAN	7.64		6.41		3.00	
HIGHEST ANNUAL MEAN					351	1999
LOWEST ANNUAL MEAN					3.00	1961
HIGHEST DAILY MEAN	92	Dec 21	92	Dec 21	11,100	May 10, 1995
LOWEST DAILY MEAN	1.8	May 10	0.60	Jul 17	0.00	Sep 10, 1959
ANNUAL SEVEN-DAY MINIMUM	3.1	May 9	1.1	Jul 13	0.00	Jun 4, 1961
MAXIMUM PEAK FLOW			201	Dec 21	12,700	May 20, 1982
MAXIMUM PEAK STAGE			3.26	Dec 21	14.32	May 20, 1982
ANNUAL RUNOFF (AC-FT)	5,550		4,640		59,040	
10 PERCENT EXCEEDS	12		11		240	
50 PERCENT EXCEEDS	6.0		4.9		6.7	
90 PERCENT EXCEEDS	4.1		3.7		3.1	

* Regulated period only(1954-2005). See REMARKS.

a Median of annual mean discharges, 50 ft³/s.

b No flow at times in 1959-62 and 1977.

c Estimated.



06436165 DEADWOOD CREEK AT CENTRAL CITY, SD—Continued

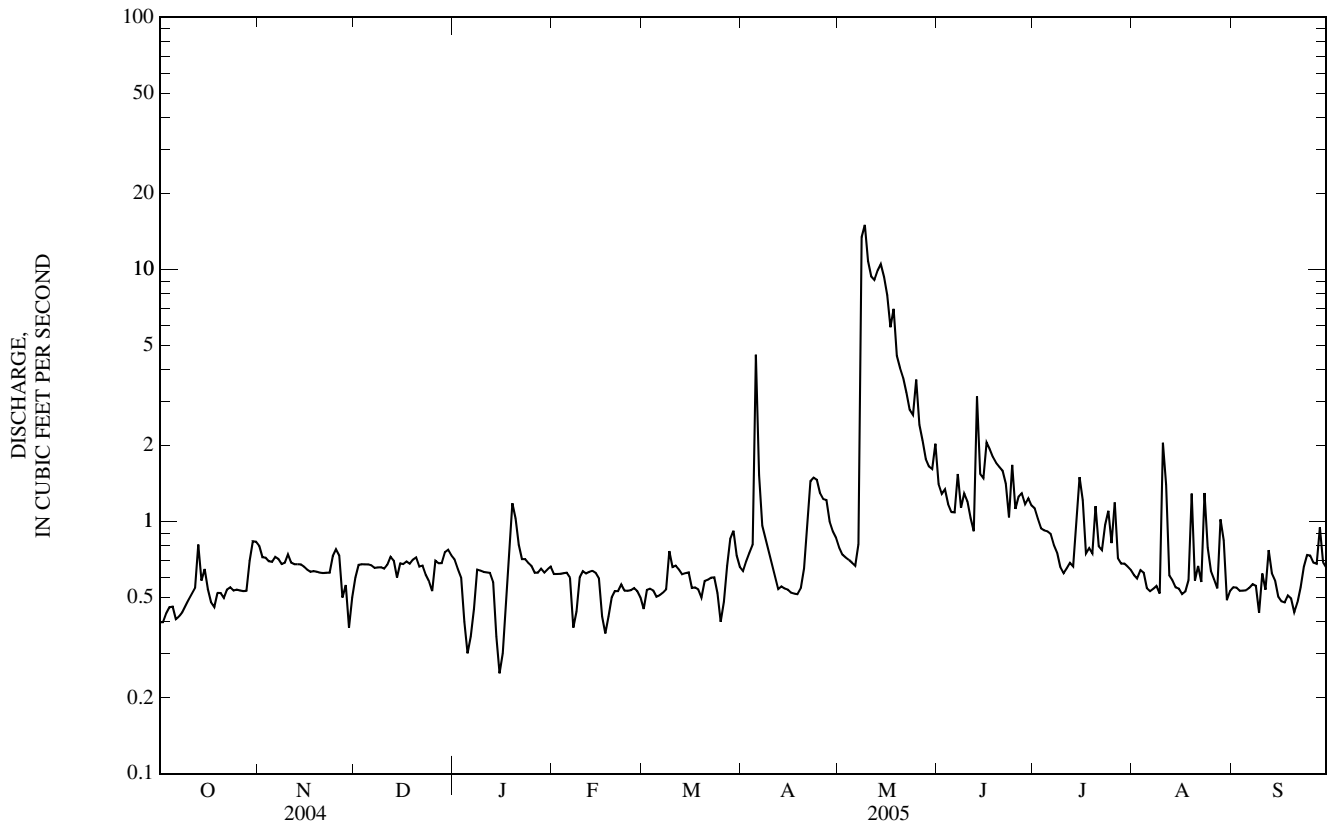
SUMMARY STATISTICS

FOR 2005 WATER YEAR

ANNUAL TOTAL	398.06	
ANNUAL MEAN	1.09	
HIGHEST DAILY MEAN	15	May 9
LOWEST DAILY MEAN	0.25	Jan 15
ANNUAL SEVEN-DAY MINIMUM	0.43	Oct 1
MAXIMUM PEAK FLOW	^a 29	Aug 10
MAXIMUM PEAK STAGE	3.93	Aug 10
ANNUAL RUNOFF (AC-FT)	790	
10 PERCENT EXCEEDS	1.5	
50 PERCENT EXCEEDS	0.66	
90 PERCENT EXCEEDS	0.50	

a Maximum discharge for period of record(revised) 39 ft³/s, gage height 4.11 ft, July 1, 2004.

e Estimated.



06436180 WHITEWOOD CREEK ABOVE WHITEWOOD, SD

LOCATION.--Lat 44°26'32", long 103°37'44", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.33, T.6 N., R.4 E., Lawrence County, Hydrologic Unit 10120202, on left bank 90 ft downstream from Crook Mountain Road and 1.1 mi south of Whitewood.

DRAINAGE AREA.--56.3 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Elevation of gage is 3,680 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow affected by occasional transbasin diversions for municipal water supplies. Satellite data-collection platform at station. Additional 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 15, 1962, discharge, 8,460 ft³/s, by contracted-opening measurement, 1.8 mi downstream from gage.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	11	e2.5	e1.6	e1.8	e2.5	5.9	12	25	12	6.3	5.3
2	5.7	8.7	e2.7	e1.8	e1.9	e2.5	6.7	11	22	12	5.4	5.0
3	6.0	8.2	e2.9	e1.9	e2.0	e2.5	7.0	11	22	11	6.2	5.1
4	5.7	8.1	e3.2	e1.8	e3.0	e2.5	8.1	10	22	10	7.1	4.4
5	3.7	7.8	e3.2	e1.8	e2.8	e2.5	28	9.9	20	9.3	6.3	3.9
6	3.4	8.1	e3.1	e1.7	e2.5	e2.7	21	9.3	20	9.2	5.3	3.6
7	3.6	8.3	e3.0	e1.7	e2.0	e3.0	14	11	23	8.5	4.9	4.5
8	3.5	7.4	e2.8	e1.7	e1.4	e3.8	13	77	23	8.9	5.0	4.5
9	3.4	7.4	e2.7	e1.6	e1.8	e4.5	13	111	23	9.3	5.3	4.1
10	3.5	7.4	e2.6	e1.6	e2.2	e5.0	11	94	22	8.0	5.5	3.8
11	3.8	7.7	e2.5	e1.5	e2.3	e6.0	9.7	88	20	8.4	21	3.6
12	4.1	e6.0	e2.2	e1.5	e2.4	e8.3	9.1	86	19	7.8	8.2	5.7
13	10	e5.0	e2.1	e1.5	e2.4	e4.6	8.4	94	36	7.2	8.1	7.8
14	7.5	e5.8	e1.9	e1.5	e2.6	e3.9	8.0	98	28	6.3	7.9	5.2
15	8.1	e6.0	e2.0	e1.5	e2.5	e3.2	7.8	84	25	6.1	7.1	5.0
16	7.5	e6.0	e2.3	e1.5	e2.2	e3.3	7.1	70	23	6.0	6.5	4.7
17	5.6	6.2	e2.6	e1.5	e2.2	e3.4	6.6	59	25	6.0	6.3	4.6
18	5.3	6.1	e2.6	e1.6	e2.3	e3.3	6.6	66	22	6.4	6.5	4.9
19	4.8	6.0	e2.4	e2.4	e2.5	e3.3	7.2	48	21	6.0	14	6.5
20	6.5	e4.7	e2.2	e4.4	e2.8	e3.4	9.9	42	20	5.5	7.6	3.8
21	5.0	e4.0	e2.0	e3.2	e2.8	e3.7	17	39	19	5.3	6.7	2.9
22	5.1	e3.8	e1.7	e2.0	e2.8	e4.0	17	34	17	5.0	6.5	3.4
23	6.4	e4.0	e1.6	e2.3	e2.7	e4.1	17	32	16	4.1	7.1	3.0
24	5.3	e5.0	e1.7	e2.7	e2.7	e4.2	17	31	23	4.2	15	5.6
25	5.2	e5.2	e1.8	e2.4	e2.7	e4.0	15	42	17	7.5	6.9	5.7
26	4.7	e5.2	e2.0	e2.2	e2.5	e4.0	14	32	14	15	8.8	3.9
27	5.2	e5.0	e2.1	e2.1	e2.5	e5.0	15	29	14	9.1	6.9	3.6
28	4.8	e4.0	e2.4	e2.0	e2.5	e9.0	14	27	13	6.5	6.1	7.9
29	8.9	e2.3	e2.5	e2.0	---	11	12	25	14	6.0	5.5	4.5
30	10	e2.1	e2.5	e2.0	---	8.9	12	24	13	5.7	5.3	4.0
31	12	---	e1.9	e2.0	---	7.4	---	32	---	6.3	5.5	---
TOTAL	178.1	182.5	73.7	61.0	66.8	139.5	358.1	1,438.2	621	238.6	230.8	140.5
MEAN	5.75	6.08	2.38	1.97	2.39	4.50	11.9	46.4	20.7	7.70	7.45	4.68
MAX	12	11	3.2	4.4	3.0	11	28	111	36	15	21	7.9
MIN	3.4	2.1	1.6	1.5	1.4	2.5	5.9	9.3	13	4.1	4.9	2.9
AC-FT	353	362	146	121	132	277	710	2,850	1,230	473	458	279

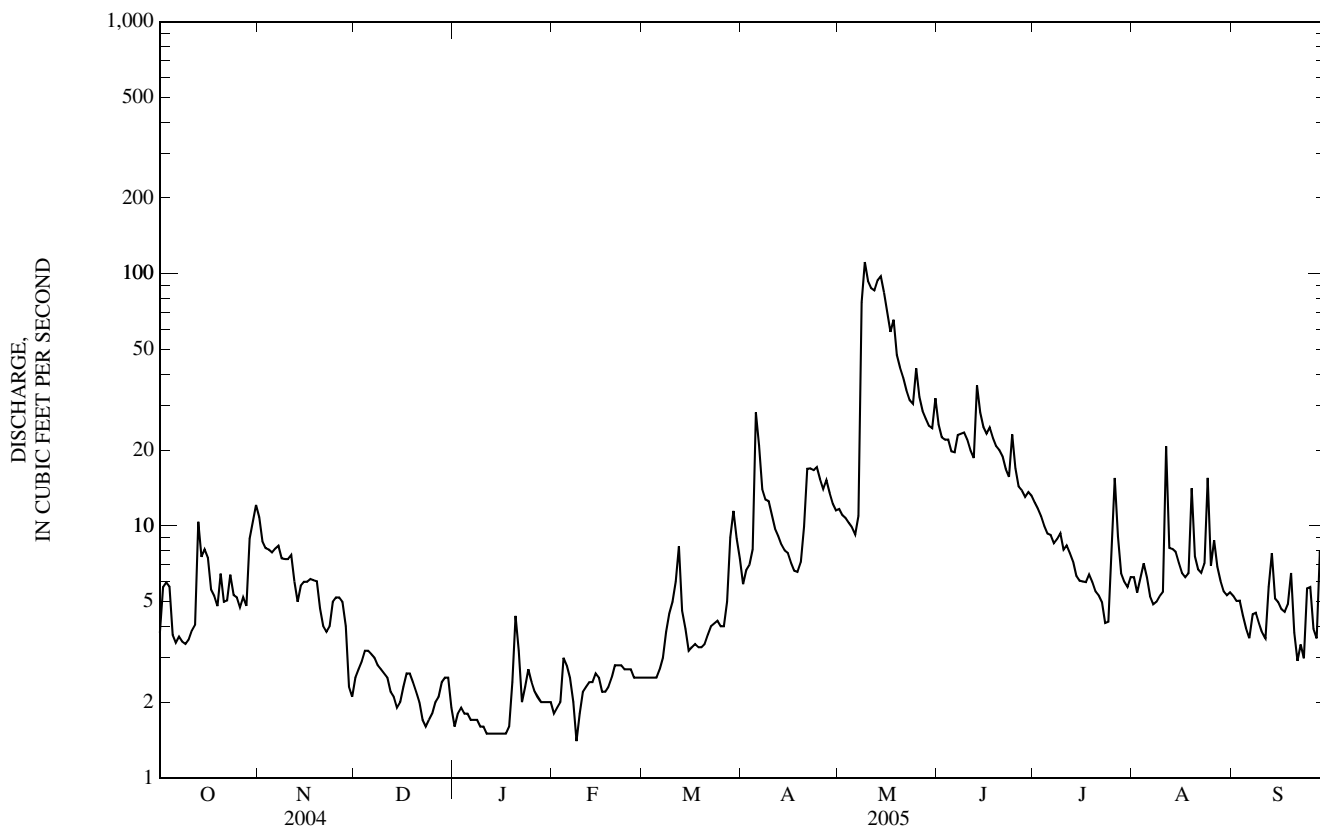
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2005, BY WATER YEAR (WY)

MEAN	19.0	16.9	11.7	11.2	13.2	23.3	53.0	78.3	44.5	21.5	16.3	13.5
MAX	89.8	52.2	23.1	18.4	28.7	49.5	140	384	101	48.7	45.3	22.7
(WY)	(1999)	(1999)	(1999)	(1996)	(1996)	(1994)	(1997)	(1995)	(1984)	(1997)	(1998)	(1998)
MIN	5.75	6.08	2.38	1.97	2.39	3.07	11.9	13.1	9.23	5.17	7.45	3.82
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2002)	(2005)	(2004)	(2004)	(2002)	(2005)	(2004)

06436180 WHITEWOOD CREEK ABOVE WHITEWOOD, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1983 - 2005	
ANNUAL TOTAL	3,448.5		3,728.8			
ANNUAL MEAN	9.42		10.2		26.2	
HIGHEST ANNUAL MEAN					59.5	1995
LOWEST ANNUAL MEAN					9.59	2002
HIGHEST DAILY MEAN	49	Jul 1	111	May 9	2,370	May 9, 1995
LOWEST DAILY MEAN	1.5	Sep 2	1.4	Feb 8	1.4	Feb 8, 2005
ANNUAL SEVEN-DAY MINIMUM	1.8	Dec 21	1.5	Jan 11	1.5	Jan 11, 2005
MAXIMUM PEAK FLOW			^a 185	May 8	^b 3,800	May 8, 1995
MAXIMUM PEAK STAGE			^c 4.84	Dec 14	9.06	May 8, 1995
ANNUAL RUNOFF (AC-FT)	6,840		7,400		18,950	
10 PERCENT EXCEEDS	18		22		53	
50 PERCENT EXCEEDS	7.8		5.5		15	
90 PERCENT EXCEEDS	2.8		2.0		7.5	

- a Gage height, 2.60 ft.
- b On basis of slope-area measurement of peak flow.
- c Backwater from ice.
- e Estimated.



WATER-QUALITY RECORDS

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

REMARKS.--On Sept. 1, 2005, a field duplicate sample was collected at this site for quality-control purposes. The analytical results for the field duplicate sample are noted in the water-quality results.

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

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unfiltered, uS/cm 25 degC (00095)	pH, water, unfiltered, field, std units (00400)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Turbidity, IR LED light, det ang 90 deg, FNU (63680)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Oxidation-reduction potential, mV (00090)	Hardness, water, mg/L as CaCO3 (00900)	ANC, wat unfiltered end pt, lab, mg/L as CaCO3 (90410)
DEC 14...	1300	1.9	1020	8.5	11.0	0.0	.7	675	14.0	96	184	460	247
APR 06...	1240	22	603	8.8	15.0	7.5	21	673	10.9	90	128	280	143
MAY 09...	1340	102	411	8.3	14.0	9.0	150	662	9.4	90	156	180	92
SEP 01...	0905	5.0	778	9.0	17.5	12.5	--	670	13.5	127	78	370	183
a01...	0906	5.0	778	9.0	17.5	12.5	--	670	13.5	127	78	370	183
Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	Sodium adsorption ratio (00931)	Sulfate water, fltrd, mg/L (00945)	Silica, water, fltrd, mg/L (00955)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, unfiltered, ug/L (01002)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Cadmium water, unfiltered, ug/L (01027)
DEC 14...	104	48.5	43.4	0.9	198	7.86	<2	55	40	42.5	59	<0.06	0.05
APR 06...	61.7	29.4	20.2	0.5	117	10.3	13	91	19	15.9	49	<0.06	0.04
MAY 09...	43.0	17.1	14.1	0.5	72.2	12.7	22	52	46	10.4	44	<0.06	0.23
SEP 01...	75.4	44.9	32.2	0.7	157	0.34	2	0.56	28.7	28.9	52	<0.06	0.04
a01...	74.1	44.2	32.5	0.7	157	0.34	3	0.43	28.6	29.0	52	<0.06	0.04
Date	Cadmium water, fltrd, ug/L (01025)	Chromium, water, unfiltered, recoverable, ug/L (01034)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, unfiltered, recoverable, ug/L (01042)	Copper, water, fltrd, ug/L (01040)	Cyanide water, fltrd, mg/L (00723)	Iron, water, unfiltered, recoverable, ug/L (01045)	Iron, water, fltrd, ug/L (01046)	Lead, water, unfiltered, recoverable, ug/L (01051)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Manganese, water, unfiltered, recoverable, ug/L (01055)
DEC 14...	0.06	<0.8	<0.8	0.771	6.6	2.9	<0.01	10	<6	20	0.18	13.8	M
APR 06...	E02	<0.8	<0.8	0.468	6.4	2.8	<0.01	590	32	70	E05	14.5	29
MAY 09...	<0.04	2.7	<0.8	0.360	13.9	2.3	M	4050	23	7.24	<0.08	9.0	252
SEP 01...	E03	E03	0.05	0.533	2.2	2.6	E01	40	E5	0.10	0.10	10.1	2
a01...	E04	0.05	0.07	0.501	2.2	2.4	E01	40	9	0.11	0.11	10.0	2
Date	Manganese, water, fltrd, ug/L (01056)	Mercury water, unfiltered, recoverable, ug/L (71900)	Mercury water, fltrd, ug/L (71890)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, unfiltered, recoverable, ug/L (01067)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, unfiltered, ug/L (01147)	Selenium, water, fltrd, ug/L (01145)	Silver, water, unfiltered, recoverable, ug/L (01077)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, unfiltered, recoverable, ug/L (01092)
DEC 14...	0.5	<0.01	<0.01	2.0	4.58	4.88	1.3	1.2	<0.16	<0.2	371	0.9	11
APR 06...	9.6	E01	<0.01	1.5	3.06	5.17	1.6	1.6	<0.16	<0.2	342	0.4	7
MAY 09...	24.7	0.6	<0.01	.9	8.37	2.64	1.4	1.0	0.18	<0.2	213	0.6	37
SEP 01...	0.9	<0.01	<0.01	1.9	2.95	4.47	0.53	0.6	<0.16	<0.2	308	0.6	4
a01...	0.9	<0.01	<0.01	1.9	2.96	3.93	0.54	0.7	<0.16	<0.2	311	0.5	4

06436180 WHITEWOOD CREEK ABOVE WHITEWOOD, SD—Continued

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

Date	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)	Sus- pended sedi- ment concen- tatopm mg/L (80154)
DEC 14...	9.3	3.63	1
APR 06...	2.3	2.58	9
MAY 09...	1.9	1.51	109
SEP 01...	4.5	2.52	5
a01...	4.7	2.54	--

- < Less than.
- a Field duplicate sample collected for quality-control purposes.
- E Estimated value.
- M Presence verified but not quantified.

06436190 WHITEWOOD CREEK NEAR WHITEWOOD, SD

LOCATION.--Lat 44°32'30", long 103°34'16", in SE¹/₄ NW¹/₄ SE¹/₄ NE¹/₄ sec.25, T.7 N., R.4 E., Lawrence County, Hydrologic Unit 10120202, on right bank 30 ft downstream from county highway bridge and 6.9 mi northeast of Whitewood.

DRAINAGE AREA.--77.4 mi², approximately.

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

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 3,175 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Small diversions upstream for irrigation of 256 acres. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	13	3.0	2.1	3.6	3.6	5.4	8.6	29	14	2.8	2.4
2	1.7	8.3	2.9	2.3	3.7	3.9	4.9	8.2	24	13	2.1	2.0
3	2.6	7.0	3.5	2.5	4.0	3.8	5.0	7.9	22	11	2.1	1.9
4	2.7	7.0	4.0	2.3	4.0	3.9	5.2	7.5	24	9.9	2.8	1.7
5	2.9	6.8	4.0	2.3	3.8	3.9	18	6.9	19	9.0	2.3	1.5
6	2.3	6.3	4.2	2.4	3.8	3.8	22	6.1	18	8.9	2.0	1.2
7	2.0	6.6	3.9	2.6	3.0	4.3	11	6.6	22	7.6	1.6	1.3
8	2.1	5.8	3.7	2.5	3.2	4.5	9.0	52	27	7.3	1.5	1.5
9	2.0	5.5	4.7	2.4	3.6	4.4	8.6	126	26	7.5	1.5	1.3
10	1.9	5.5	4.2	2.5	3.8	5.5	8.0	110	23	6.3	1.6	1.2
11	2.1	5.1	4.2	2.7	3.9	5.5	7.4	100	22	6.0	7.5	1.1
12	2.8	4.5	4.2	2.9	3.9	6.1	7.0	101	19	5.9	4.3	1.5
13	4.8	4.6	3.0	2.5	4.1	5.7	6.3	114	38	4.9	3.8	3.0
14	5.3	4.7	3.0	2.6	4.2	4.4	6.0	129	35	3.9	3.9	2.5
15	5.2	4.5	3.3	2.3	3.8	3.6	5.6	104	28	3.7	3.4	2.2
16	6.0	4.9	4.5	2.1	3.4	4.2	5.4	85	25	3.3	2.9	1.8
17	5.2	5.5	4.3	2.2	3.4	4.9	4.8	72	25	3.2	2.5	1.6
18	4.7	5.2	3.9	3.2	3.6	4.3	4.6	78	23	3.4	2.7	1.8
19	4.3	5.1	3.6	4.3	3.8	3.7	4.7	60	21	3.3	6.7	2.4
20	5.0	4.6	4.1	6.4	4.3	3.9	7.4	50	20	2.7	4.5	2.4
21	4.7	3.6	2.6	5.6	4.1	4.3	13	44	20	2.4	3.4	1.2
22	4.6	3.2	2.6	2.8	4.1	5.1	15	38	18	2.1	3.3	0.98
23	5.5	5.4	2.1	3.3	4.1	5.4	13	34	16	1.9	4.7	1.1
24	4.9	4.2	2.5	4.7	3.9	6.0	12	33	28	1.5	12	1.9
25	5.0	6.1	2.9	4.4	3.9	4.7	11	47	22	2.4	5.2	2.8
26	4.8	6.1	2.8	3.8	3.9	4.6	11	39	18	6.9	4.7	2.2
27	4.5	4.4	3.4	3.5	4.0	6.0	11	32	16	5.2	3.9	1.6
28	4.2	3.4	3.4	3.6	3.7	6.2	12	28	15	3.4	3.4	2.9
29	7.6	3.0	3.4	4.0	---	7.0	9.5	26	15	2.6	2.9	2.5
30	11	3.1	3.5	3.7	---	6.7	8.7	25	16	2.5	2.3	1.6
31	12	---	2.8	3.6	---	5.8	---	37	---	2.4	2.3	---
TOTAL	135.6	163.0	108.2	98.1	106.6	149.7	272.5	1,615.8	674	168.1	110.6	55.08
MEAN	4.37	5.43	3.49	3.16	3.81	4.83	9.08	52.1	22.5	5.42	3.57	1.84
MAX	12	13	4.7	6.4	4.3	7.0	22	129	38	14	12	3.0
MIN	1.2	3.0	2.1	2.1	3.0	3.6	4.6	6.1	15	1.5	1.5	0.98
AC-FT	269	323	215	195	211	297	541	3,200	1,340	333	219	109

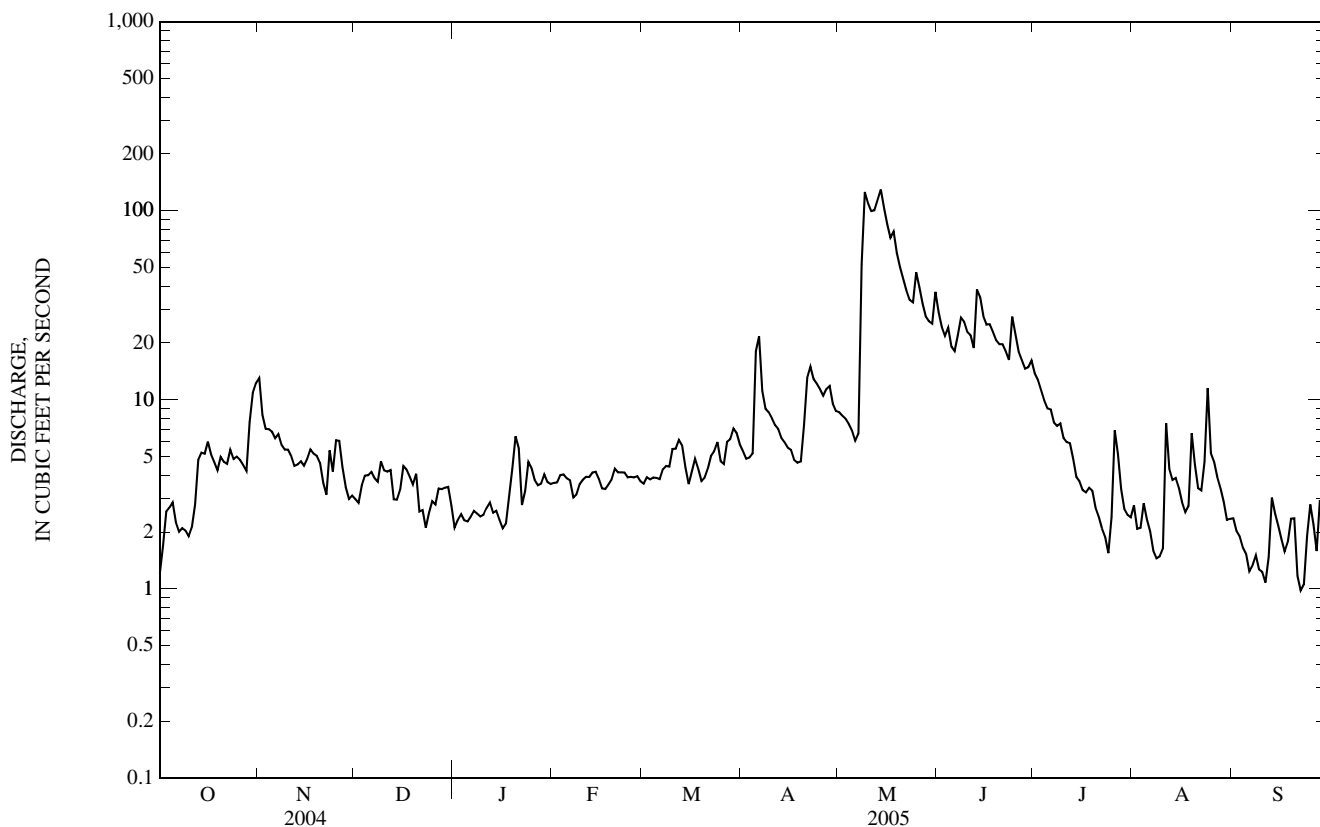
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2005, BY WATER YEAR (WY)

MEAN	21.1	17.9	12.8	12.7	15.1	24.9	57.2	91.2	48.0	20.7	14.3	12.6
MAX	104	56.2	27.2	23.9	26.5	53.2	165	404	122	40.5	42.0	24.5
(WY)	(1999)	(1999)	(1999)	(1983)	(1996)	(1997)	(1997)	(1995)	(1999)	(1997)	(1998)	(1986)
MIN	4.37	5.43	3.49	3.16	3.81	4.83	9.08	12.8	4.45	1.74	3.57	1.47
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(2004)	(2002)	(2005)	(2004)

06436190 WHITEWOOD CREEK NEAR WHITEWOOD, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1982 - 2005	
ANNUAL TOTAL	2,969.15		3,657.28			
ANNUAL MEAN	8.11		10.0		^a 29.1	
HIGHEST ANNUAL MEAN					62.8	1995
LOWEST ANNUAL MEAN					8.51	2004
HIGHEST DAILY MEAN	69	Jul 2	129	May 14	2,060	May 9, 1995
LOWEST DAILY MEAN	0.85	Sep 20	0.98	Sep 22	0.39	Aug 6, 2002
ANNUAL SEVEN-DAY MINIMUM	1.1	Sep 25	1.3	Sep 5	0.42	Aug 1, 2002
MAXIMUM PEAK FLOW			209	May 8	3,930	May 8, 1995
MAXIMUM PEAK STAGE			2.28	May 8	6.01	May 8, 1995
ANNUAL RUNOFF (AC-FT)	5,890		7,250		21,070	
10 PERCENT EXCEEDS	16		23		59	
50 PERCENT EXCEEDS	5.8		4.3		17	
90 PERCENT EXCEEDS	2.1		2.1		6.4	

a Median of annual mean discharges, 26 ft³/s.



06436198 WHITEWOOD CREEK ABOVE VALE, SD

LOCATION.--Lat 44°37'04", long 103°28'52", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.35, T.8 N., R.5 E., Butte County, Hydrologic Unit 10120202, on right bank at point where South Canal crosses creek, 3.2 mi above mouth, and 3.7 mi west of Vale.

DRAINAGE AREA.--102 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Elevation of gage is 2,840 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 800 acres. Additional water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurement and Field Determinations section.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.04	7.3	3.5	e1.6	2.5	1.5	2.6	12	31	7.2	0.73	0.57
2	0.05	5.8	3.7	e1.3	e2.0	1.8	2.2	12	23	6.7	0.94	0.55
3	0.06	5.3	3.9	e1.4	2.1	1.8	4.0	11	20	5.8	1.0	0.43
4	0.06	4.9	3.8	e1.5	2.3	1.8	3.8	10	21	5.1	1.9	0.38
5	0.08	5.1	3.9	e1.5	2.2	1.8	5.4	9.9	17	4.4	1.6	0.25
6	0.93	5.2	4.0	e1.6	1.7	1.9	22	8.6	16	3.2	1.0	0.08
7	0.90	5.0	3.0	e1.7	1.6	2.2	11	8.5	19	1.8	0.27	0.00
8	0.90	5.2	4.1	e1.8	e1.3	2.7	8.4	18	24	1.9	0.05	0.00
9	1.0	5.4	4.6	e1.8	e1.4	2.5	7.8	112	23	0.94	0.00	0.00
10	1.2	5.2	4.2	e1.8	e2.0	2.7	7.8	91	21	0.37	0.00	0.00
11	1.2	5.3	4.1	e1.8	3.9	3.3	7.2	86	20	0.82	0.09	0.00
12	1.6	5.3	4.5	e1.8	4.9	3.2	6.6	91	15	0.48	0.22	0.00
13	2.2	4.9	4.7	e1.7	3.0	4.4	5.9	131	38	0.36	0.36	0.00
14	3.5	5.2	2.6	e1.5	1.6	3.5	5.5	129	38	0.90	0.32	0.09
15	3.6	5.6	4.6	e1.2	1.0	3.0	5.2	112	25	0.81	0.08	1.0
16	3.7	5.4	4.1	e0.90	0.62	2.9	5.1	94	21	0.65	0.16	1.1
17	4.0	5.6	4.7	e0.80	1.2	3.4	4.8	78	21	0.51	0.28	0.89
18	3.5	5.7	3.9	e1.0	1.2	3.5	4.5	80	19	0.39	0.37	0.68
19	3.4	5.7	3.7	e2.0	e1.1	3.1	4.7	64	16	0.33	1.2	0.99
20	3.5	5.4	3.5	e4.0	e1.1	2.9	7.4	51	15	0.18	0.41	1.0
21	3.9	4.5	2.7	e1.0	e1.4	3.1	12	44	14	0.95	0.27	1.0
22	3.7	4.1	e2.0	e8.0	1.6	3.5	17	37	13	0.63	0.34	0.47
23	3.8	4.7	e1.7	4.4	1.7	3.7	13	32	9.9	0.38	1.9	0.16
24	3.8	4.9	e1.9	4.1	1.5	4.7	13	28	17	0.13	6.4	0.04
25	3.6	5.1	e2.0	4.2	1.4	5.2	14	37	16	0.27	1.4	0.86
26	3.9	6.3	e2.3	3.9	1.4	4.6	13	36	11	2.0	0.68	1.8
27	3.3	5.4	e2.5	e3.8	1.4	5.1	13	32	9.6	2.1	0.68	1.2
28	3.2	4.2	e2.5	e4.0	1.4	4.9	14	28	9.2	0.57	0.55	1.3
29	4.9	2.9	e2.4	2.8	---	3.5	13	25	9.1	0.49	0.33	2.1
30	6.4	3.0	e2.0	2.9	---	3.5	12	23	9.2	0.30	0.23	1.4
31	6.2	---	e1.8	2.6	---	2.8	---	38	---	0.80	0.47	---
TOTAL	82.12	153.6	102.9	83.40	50.52	98.5	265.9	1,569.0	561.0	51.46	24.23	18.34
MEAN	2.65	5.12	3.32	2.69	1.80	3.18	8.86	50.6	18.7	1.66	0.78	0.61
MAX	6.4	7.3	4.7	10	4.9	5.2	22	131	38	7.2	6.4	2.1
MIN	0.04	2.9	1.7	0.80	0.62	1.5	2.2	8.5	9.1	0.13	0.00	0.00
AC-FT	163	305	204	165	100	195	527	3,110	1,110	102	48	36

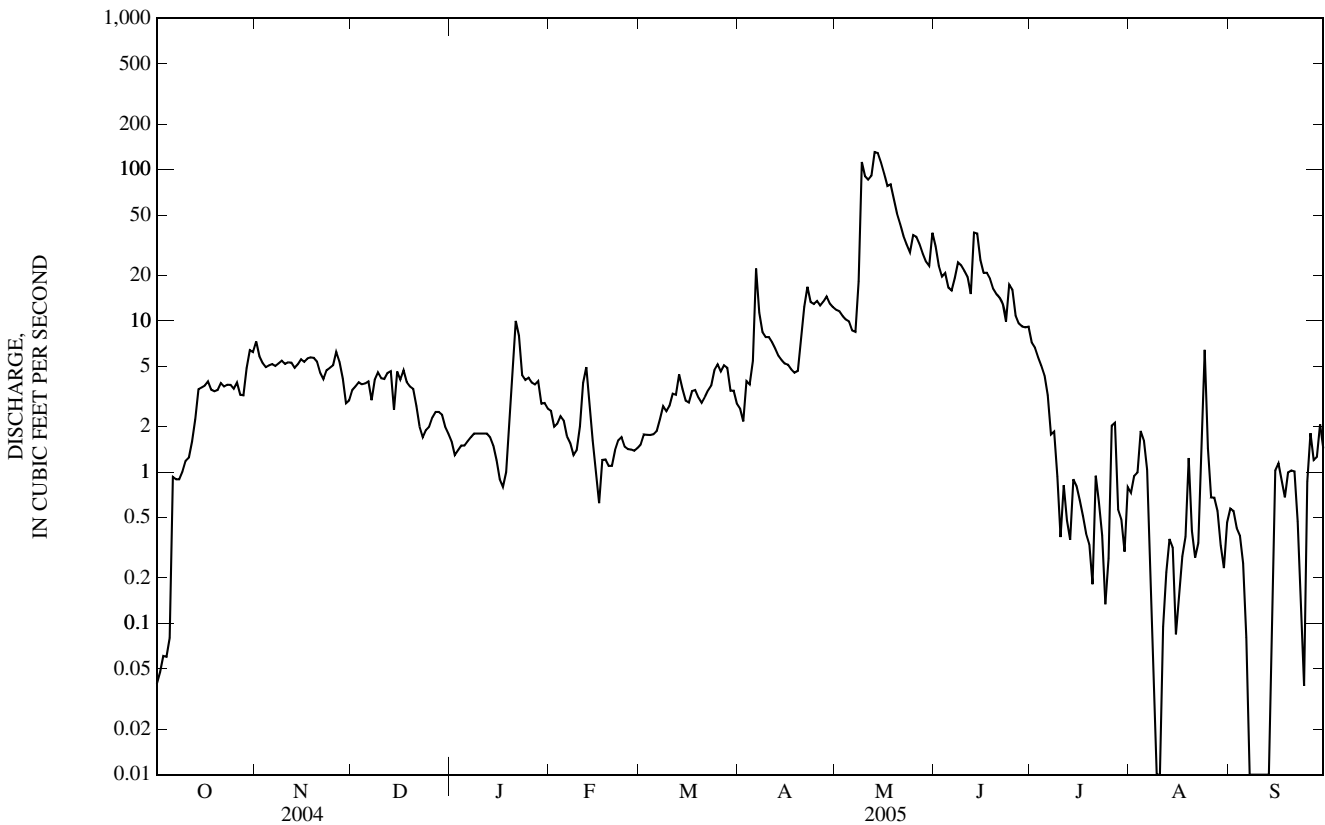
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2005, BY WATER YEAR (WY)

MEAN	20.2	16.8	12.6	12.8	17.9	28.2	57.4	85.6	53.9	19.7	12.4	10.8
MAX	126	55.7	27.1	44.3	60.1	59.7	173	435	163	47.5	52.1	38.9
(WY)	(1999)	(1999)	(1999)	(1997)	(1997)	(1997)	(1997)	(1995)	(1999)	(1997)	(1998)	(1986)
MIN	2.65	5.12	3.32	2.69	1.80	3.18	8.86	10.7	5.35	0.18	0.72	0.19
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(2002)	(2002)	(2003)	(2004)

06436198 WHITEWOOD CREEK ABOVE VALE, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1984 - 2005	
ANNUAL TOTAL	2,684.15		3,060.97		a29.0	
ANNUAL MEAN	7.33		8.39		64.1 1995	
HIGHEST ANNUAL MEAN					7.82 2002	
LOWEST ANNUAL MEAN					2,920 May 9, 1995	
HIGHEST DAILY MEAN	37	Mar 27	131	May 13	b0.00 Jul 21, 1985	
LOWEST DAILY MEAN	0.04	Sep 22	0.00	Aug 9	0.00 Jul 11, 2002	
ANNUAL SEVEN-DAY MINIMUM	0.05	Sep 28	0.00	Sep 7	4,250 May 8, 1995	
MAXIMUM PEAK FLOW			147	May 9, 13	5.72 May 8, 1995	
MAXIMUM PEAK STAGE			2.21	May 9, 13		
ANNUAL RUNOFF (AC-FT)	5,320		6,070		21,040	
10 PERCENT EXCEEDS	16		20		62	
50 PERCENT EXCEEDS	5.2		3.3		16	
90 PERCENT EXCEEDS	0.64		0.35		4.6	

a Median of annual mean discharges, 25 ft³/s.
 b Also July 22 and Aug. 19, 1985, July 11 to Aug. 8, 2002, Aug. 9-10, Sept. 7-13, 2005.
 c Estimated.



WATER-QUALITY RECORDS

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

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

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unfiltered, uS/cm 25 degC (00095)	pH, water, unfiltered, std units (00400)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Turbidity, IR LED light, det ang 90 deg, FNU (63680)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Oxidation-reduction potential, mV (00090)	Hardness, water, mg/L as CaCO3 (00900)	ANC, wat unfiltered end pt, lab, mg/L as CaCO3 (90410)
DEC 15...	1005	5.0	1570	8.2	8.0	0.5	6.0	697	12.3	85	20	780	210
APR 06...	0930	28	913	8.3	11.0	7.5	75	695	9.2	85	60	410	163
MAY 09...	0930	123	570	7.9	11.0	9.5	600	683	10.0	98	85	240	161
SEP 01...	1235	068	1320	8.5	20.0	17.5	--	689	12.5	132	29	620	156
Date	Calcium water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Sodium, water, filtered, mg/L (00930)	Sodium adsorption ratio (00931)	Sulfate water, filtered, mg/L (00945)	Silica, water, filtered, mg/L (00955)	Aluminum, water, filtered, ug/L (01106)	Antimony, water, filtered, ug/L (01095)	Arsenic water unfiltered, ug/L (01002)	Arsenic water, filtered, ug/L (01000)	Barium, water, filtered, ug/L (01005)	Beryllium, water, filtered, ug/L (01010)	Cadmium water, unfiltered, ug/L (01027)
DEC 15...	187	75.9	76.2	1	573	7.72	<2	E.17	41	24.4	26	<0.06	E.03
APR 06...	100	38.6	43.1	0.9	254	7.10	3	0.46	86	31.3	18	<0.06	0.07
MAY 09...	60.6	22.1	23.3	0.7	128	9.42	7	0.68	403	23.0	26	E.04	0.63
SEP 01...	128	73.2	62.1	1	491	9.19	E1	0.49	114	75.0	23	<0.06	E.03
Date	Cadmium water, filtered, ug/L (01025)	Chromium, water, unfiltered recoverable, ug/L (01034)	Chromium, water, filtered, ug/L (01030)	Cobalt water, filtered, ug/L (01035)	Copper, water, unfiltered recoverable, ug/L (01042)	Copper, water, filtered, ug/L (01040)	Cyanide water, filtered, mg/L (00723)	Iron, water, unfiltered recoverable, ug/L (01045)	Iron, water, filtered, ug/L (01046)	Lead, water, unfiltered recoverable, ug/L (01051)	Lead, water, filtered, ug/L (01049)	Lithium water, filtered, ug/L (01130)	Manganese, water, unfiltered recoverable, ug/L (01055)
DEC 15...	E.03	E.7	1.1	1.15	12.0	2.3	<0.01	330	29	0.06	<0.08	23.4	99
APR 06...	E.03	E.8	<0.8	1.01	8.6	2.0	<0.01	2,050	21	1.70	0.09	16.6	144
MAY 09...	<0.04	9.4	<0.8	0.643	40.9	1.3	M	20,000	30	25.6	E.07	11.4	1,020
SEP 01...	<0.04	0.04	<0.04	0.473	2.0	2.6	E.01	560	56	0.09	<0.08	33.8	79
Date	Manganese, water, filtered, ug/L (01056)	Mercury water, unfiltered recoverable, ug/L (71900)	Mercury water, filtered, ug/L (71890)	Molybdenum, water, filtered, ug/L (01060)	Nickel, water, unfiltered recoverable, ug/L (01067)	Nickel, water, filtered, ug/L (01065)	Selenium, water, unfiltered, ug/L (01147)	Selenium, water, filtered, ug/L (01145)	Silver, water, unfiltered recoverable, ug/L (01077)	Silver, water, filtered, ug/L (01075)	Strontium, water, filtered, ug/L (01080)	Vanadium, water, filtered, ug/L (01085)	Zinc, water, unfiltered recoverable, ug/L (01092)
DEC 15...	104	<0.01	<0.01	2.5	6.06	5.75	2.4	2.1	<0.16	<0.2	999	0.3	4
APR 06...	72.0	0.02	<0.01	2.2	3.98	4.39	1.6	1.8	<0.16	<0.2	629	0.3	11
MAY 09...	76.9	0.48	<0.01	1.9	22.7	2.66	2.5	1.5	0.65	<0.2	319	0.6	90
SEP 01...	58.3	<0.01	<0.01	4.0	3.12	2.17	0.57	0.7	<0.16	<0.2	856	0.3	E2

06436198 WHITEWOOD CREEK ABOVE VALE, SD—Continued

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

Date	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)	Sus- pended sedi- ment concen- tatopm mg/L (80154)
DEC 15...	2.0	3.98	2
APR 06...	3.3	2.63	57
MAY 09...	1.6	1.88	660
SEP 01...	1.4	2.35	39

- < Less than.
- E Estimated value.
- M Presence verified but not quantified.

BELLE FOURCHE RIVER BASIN
06436760 HORSE CREEK ABOVE VALE, SD

LOCATION.--Lat 44°39'08", long 103°21'59", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.14, T.8 N., R.6 E., Butte County, Hydrologic Unit 10120202, on left bank 2.6 mi upstream from Dry Creek, 5.5 mi upstream from mouth, 3.0 mi northeast of Vale, and 4.5 mi southeast of Newell.

DRAINAGE AREA.--464 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,710 ft above NGVD of 1929, from topographic map. April 1962 to September 1980, water-stage recorder, at site 2.7 mi downstream, at different datum.

REMARKS.--Records good except those for Oct. 1 to Nov.22, which are fair and those for estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation upstream from station and by return flow from Belle Fourche Irrigation Project. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	1.5	1.9	1.8	1.6	1.2	1.4	1.2	2.5	3.7	34	26
2	4.0	0.98	2.0	2.0	1.6	1.5	1.3	1.2	1.7	5.4	30	31
3	3.9	0.92	2.1	1.9	1.6	1.5	1.0	0.87	1.5	2.6	29	36
4	3.9	1.3	2.2	1.7	1.6	1.6	0.82	0.79	1.3	0.92	33	37
5	4.3	e1.8	2.3	e1.1	1.7	1.6	1.2	0.91	1.0	1.2	33	36
6	4.8	e2.1	2.3	e1.3	1.6	1.6	1.6	0.91	1.0	2.8	33	32
7	4.6	e2.3	2.3	e1.5	1.3	1.5	1.6	1.1	1.4	5.9	35	31
8	4.7	2.1	2.3	e1.5	1.5	1.7	1.2	1.9	1.6	3.6	42	36
9	5.0	2.1	2.2	e1.5	1.8	1.8	1.3	2.1	1.7	4.1	35	34
10	4.9	2.0	2.2	e1.4	1.7	1.7	1.4	2.1	2.0	6.2	39	37
11	5.1	2.0	2.3	e1.3	1.6	1.7	1.3	2.7	1.6	10	61	42
12	5.0	1.9	2.3	e1.2	1.6	1.5	1.6	6.9	1.4	7.5	69	41
13	4.6	2.0	2.0	e1.2	1.7	1.4	1.5	19	2.9	18	54	44
14	4.9	2.2	2.1	e1.1	1.9	1.3	1.6	11	3.2	16	44	35
15	4.7	2.0	2.1	e1.1	1.7	1.1	1.7	4.1	1.9	29	36	26
16	4.1	2.4	2.1	e0.90	1.4	1.2	1.2	2.5	1.4	29	29	33
17	3.4	2.9	2.1	e1.1	1.4	1.2	0.85	2.0	1.5	33	33	37
18	3.7	2.6	2.2	e1.6	1.4	1.3	0.91	2.3	1.6	29	33	33
19	3.4	2.0	2.1	2.5	1.4	1.3	1.1	2.4	1.6	27	41	34
20	3.1	2.2	2.2	2.7	1.2	1.3	1.5	1.9	1.5	25	42	32
21	3.1	2.2	1.7	3.0	1.2	1.3	3.6	1.4	1.4	22	38	27
22	2.9	1.9	e1.4	2.7	1.1	1.4	3.8	1.2	1.3	25	40	31
23	2.5	2.1	e1.3	2.3	1.2	1.5	3.8	1.2	2.1	27	33	27
24	2.2	2.1	e1.8	2.2	1.2	1.8	2.5	1.1	12	30	36	22
25	2.2	2.2	2.4	2.0	1.3	1.7	1.7	1.2	9.8	39	31	22
26	2.3	2.5	2.3	1.8	1.3	1.8	1.3	1.1	4.9	53	34	21
27	2.4	2.3	2.2	1.7	1.3	2.4	1.2	0.96	3.5	49	25	18
28	2.4	2.3	2.2	1.8	1.1	2.6	1.1	0.87	1.7	49	29	19
29	3.0	2.3	2.0	1.7	---	2.3	1.1	0.83	1.3	45	31	19
30	2.0	2.1	2.0	1.6	---	2.0	1.1	0.79	1.1	36	35	11
31	1.5	---	1.8	1.7	---	2.0	---	1.9	---	30	30	---
TOTAL	112.9	61.30	64.4	52.90	41.0	49.8	47.28	80.43	73.4	664.92	1,147	910
MEAN	3.64	2.04	2.08	1.71	1.46	1.61	1.58	2.59	2.45	21.4	37.0	30.3
MAX	5.1	2.9	2.4	3.0	1.9	2.6	3.8	19	12	53	69	44
MIN	1.5	0.92	1.3	0.90	1.1	1.1	0.82	0.79	1.0	0.92	25	11
AC-FT	224	122	128	105	81	99	94	160	146	1,320	2,280	1,800

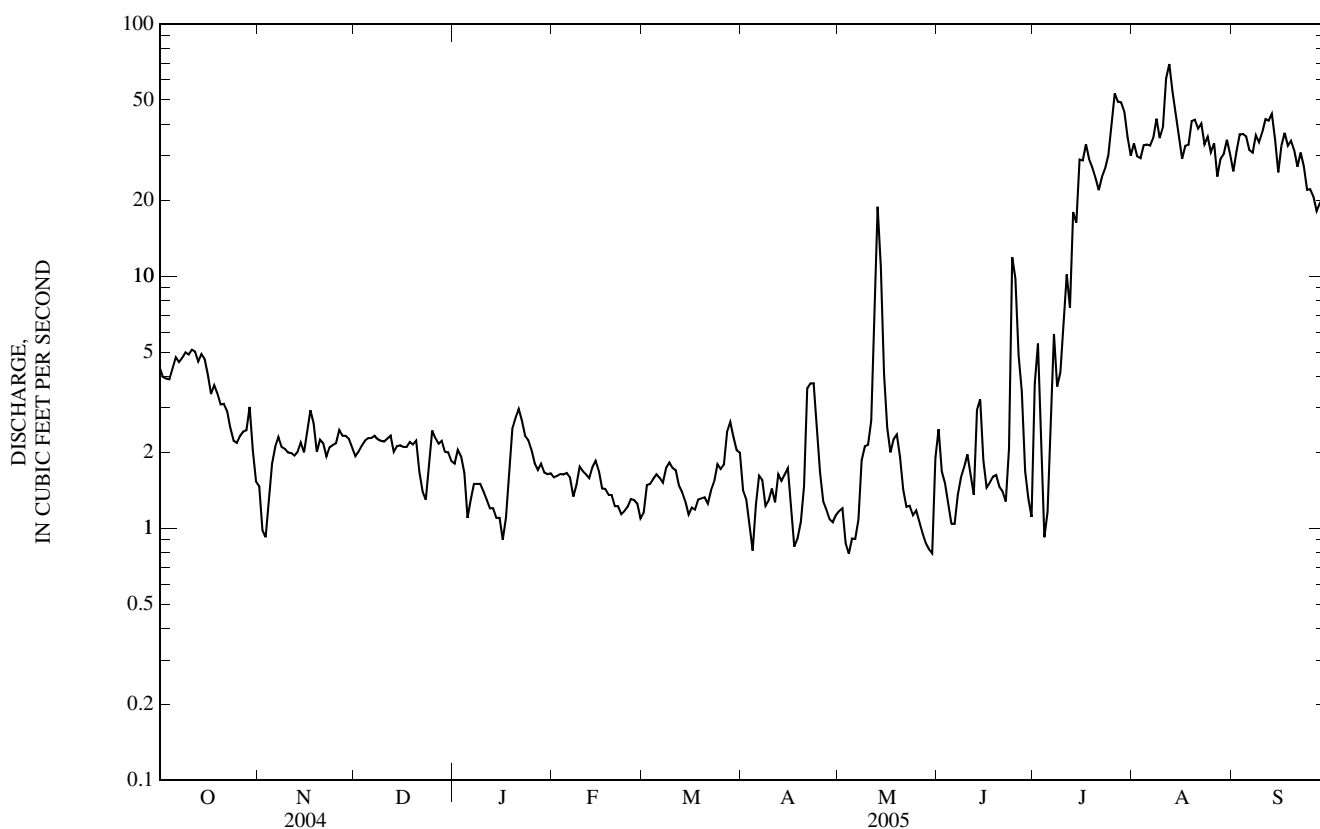
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2005, BY WATER YEAR (WY)

MEAN	17.1	4.85	2.94	3.87	37.8	64.6	42.9	141	69.2	68.4	47.7	48.7
MAX	169	26.9	8.50	31.7	424	251	229	901	272	464	82.6	311
(WY)	(1983)	(1999)	(1983)	(1983)	(1997)	(1986)	(1987)	(1982)	(1998)	(1993)	(1987)	(1986)
MIN	1.46	1.82	1.15	0.96	1.24	1.30	0.75	2.59	2.45	21.4	25.7	11.3
(WY)	(1992)	(1991)	(1993)	(1992)	(1992)	(1992)	(1992)	(2005)	(2005)	(2005)	(1992)	(1992)

06436760 HORSE CREEK ABOVE VALE, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1981 - 2005	
ANNUAL TOTAL	7,401.70		3,305.33			
ANNUAL MEAN	20.2		9.06		^a 45.8	
HIGHEST ANNUAL MEAN					131	1996
LOWEST ANNUAL MEAN					9.06	2005
HIGHEST DAILY MEAN	591	May 24	69	Aug 12	14,000	May 21, 1982
LOWEST DAILY MEAN	0.47	Jan 28	0.79	May 4	0.07	Nov 7, 1985
ANNUAL SEVEN-DAY MINIMUM	0.64	Apr 26	0.98	May 24	0.28	Dec 25, 1990
MAXIMUM PEAK FLOW			90	Aug 11	17,700	May 21, 1982
MAXIMUM PEAK STAGE			2.97	Aug 11	24.80	May 21, 1982
ANNUAL RUNOFF (AC-FT)	14,680		6,560		33,220	
10 PERCENT EXCEEDS	51		33		67	
50 PERCENT EXCEEDS	4.3		2.1		8.3	
90 PERCENT EXCEEDS	1.3		1.2		1.7	

a Median of annual mean discharges, 32 ft³/s.
 e Estimated.



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analysis: Water years 1986-91, 1994, 2002-03. Sediment records: Periodic samples taken August 1986 to March 1987 and May 2004 to current year.

PERIOD OF DAILY RECORD.--

- WATER TEMPERATURE: May 2004 to current year(seasonal).
- SPECIFIC CONDUCTANCE: May 2004 to current year(seasonal).
- pH: May 2004 to current year(seasonal).
- DISSOLVED OXYGEN: May 2004 to current year(seasonal).
- TURBIDITY: May 2004 to current year(seasonal).

REMARKS.--Data published in the tables below are rated as follows: temperature, good; specific conductance, good; pH, good; dissolved oxygen, good except those for March 22 to June 23, which are poor; turbidity, good except those for Aug. 11-21 which are fair and those for Apr. 18-20, May 10-24 and June 4-28, which are poor. Daily records are collected at 15-minute intervals using multi-parameter water-quality instrument. Satellite data-collection platform at station.

EXTREMES FOR PERIOD OF DAILY RECORD.--

- WATER TEMPERATURE: Maximum daily, 32.9°C, June 22, 2005; minimum daily, 1.3°C, March 25, 2005.
- SPECIFIC CONDUCTANCE: Maximum daily, 5,520 µS/cm, May 7, 2005; minimum daily, 1280 µS/cm, June 23, 2005.
- pH: Maximum daily, 8.6 standard units, May 15, 2005; minimum daily, 7.5 standard units, July 5, 6, 2005.
- DISSOLVED OXYGEN: Maximum daily, 17.0 mg/L, March 23-29, 2005; minimum daily, 1.0 mg/L, June 3, 5-8, 2005.
- TURBIDITY: Maximum daily, >1,200 FN units, Aug. 23, 2005; minimum daily, 1.0 FN units, Oct. 19, 26, 2004.

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	15.2	10.2	12.4	6.2	4.3	5.4	---	---	---	---	---	---
2	12.9	8.3	10.5	5.3	3.1	4.1	---	---	---	---	---	---
3	14.3	9.8	11.8	6.4	3.4	4.7	---	---	---	---	---	---
4	13.9	9.7	11.6	5.9	3.9	4.8	---	---	---	---	---	---
5	15.4	10.0	12.4	---	3.5	3.8	---	---	---	---	---	---
6	15.5	11.0	13.2	---	---	---	---	---	---	---	---	---
7	15.4	11.6	13.5	---	---	---	---	---	---	---	---	---
8	15.7	11.6	13.4	---	---	---	---	---	---	---	---	---
9	15.5	11.2	13.1	---	---	---	---	---	---	---	---	---
10	14.7	11.7	13.1	---	---	---	---	---	---	---	---	---
11	13.8	10.7	12.1	---	---	---	---	---	---	---	---	---
12	12.1	9.9	11.1	---	---	---	---	---	---	---	---	---
13	11.4	9.7	10.5	---	---	---	---	---	---	---	---	---
14	10.6	8.8	9.7	---	---	---	---	---	---	---	---	---
15	9.6	8.2	9.0	---	---	---	---	---	---	---	---	---
16	8.2	6.0	6.6	---	---	---	---	---	---	---	---	---
17	8.2	5.1	6.5	---	---	---	---	---	---	---	---	---
18	8.4	5.3	6.8	---	---	---	---	---	---	---	---	---
19	8.6	5.5	7.0	---	---	---	---	---	---	---	---	---
20	---	7.1	8.2	---	---	---	---	---	---	---	---	---
21	11.5	9.5	10.3	---	---	---	---	---	---	---	---	---
22	10.9	9.5	10.2	---	---	---	---	---	---	---	---	---
23	10.1	7.7	8.9	---	---	---	---	---	---	---	---	---
24	9.6	8.2	8.9	---	---	---	---	---	---	---	---	---
25	8.3	5.9	6.6	---	---	---	---	---	---	---	---	---
26	8.0	5.8	6.8	---	---	---	---	---	---	---	---	---
27	9.0	6.9	7.8	---	---	---	---	---	---	---	---	---
28	11.4	8.3	9.5	---	---	---	---	---	---	---	---	---
29	10.4	5.5	8.7	---	---	---	---	---	---	---	---	---
30	6.1	3.8	5.0	---	---	---	---	---	---	---	---	---
31	6.5	5.1	5.9	---	---	---	---	---	---	---	---	---
MONTH	15.7	3.8	9.7	6.4	3.1	4.6	---	---	---	---	---	---

BELLE FOURCHE RIVER BASIN

06436760 HORSE CREEK ABOVE VALE, SD—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	2,820	2,780	2,800	4,090	3,810	3,930	---	---	---	---	---	---
2	2,820	2,800	2,810	3,950	3,820	3,870	---	---	---	---	---	---
3	2,900	2,820	2,870	4,150	3,950	4,060	---	---	---	---	---	---
4	2,960	2,900	2,940	4,180	4,140	4,150	---	---	---	---	---	---
5	3,030	2,960	2,990	---	4,180	4,180	---	---	---	---	---	---
6	3,090	3,030	3,060	---	---	---	---	---	---	---	---	---
7	3,140	3,090	3,110	---	---	---	---	---	---	---	---	---
8	3,190	3,140	3,160	---	---	---	---	---	---	---	---	---
9	3,250	3,190	3,220	---	---	---	---	---	---	---	---	---
10	3,300	3,240	3,280	---	---	---	---	---	---	---	---	---
11	3,350	3,300	3,330	---	---	---	---	---	---	---	---	---
12	3,400	3,320	3,370	---	---	---	---	---	---	---	---	---
13	3,420	3,390	3,400	---	---	---	---	---	---	---	---	---
14	3,450	3,420	3,430	---	---	---	---	---	---	---	---	---
15	3,480	3,450	3,460	---	---	---	---	---	---	---	---	---
16	3,520	3,480	3,510	---	---	---	---	---	---	---	---	---
17	3,560	3,480	3,520	---	---	---	---	---	---	---	---	---
18	3,530	3,360	3,460	---	---	---	---	---	---	---	---	---
19	3,510	3,400	3,450	---	---	---	---	---	---	---	---	---
20	3,469	---	3,430	---	---	---	---	---	---	---	---	---
21	3,610	3,320	3,460	---	---	---	---	---	---	---	---	---
22	3,650	3,570	3,620	---	---	---	---	---	---	---	---	---
23	3,650	3,450	3,560	---	---	---	---	---	---	---	---	---
24	3,530	3,420	3,470	---	---	---	---	---	---	---	---	---
25	3,560	3,460	3,530	---	---	---	---	---	---	---	---	---
26	3,600	3,500	3,550	---	---	---	---	---	---	---	---	---
27	3,550	3,440	3,500	---	---	---	---	---	---	---	---	---
28	3,480	2,480	3,180	---	---	---	---	---	---	---	---	---
29	2,790	2,420	2,490	---	---	---	---	---	---	---	---	---
30	2,880	2,790	2,820	---	---	---	---	---	---	---	---	---
31	4,090	2,800	3,560	---	---	---	---	---	---	---	---	---
MONTH	4,090	2,420	3,270	4,180	3,810	4,040	---	---	---	---	---	---
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	4,800	4,750	4,770	5,310	5,260	5,290
2	---	---	---	---	---	---	4,840	4,770	4,790	5,300	5,200	5,260
3	---	---	---	---	---	---	4,930	4,800	4,870	5,410	5,240	5,290
4	---	---	---	---	---	---	5,020	4,880	4,920	5,490	5,310	5,390
5	---	---	---	---	---	---	4,900	4,780	4,840	5,490	5,420	5,460
6	---	---	---	---	---	---	4,900	4,830	4,860	5,500	5,470	5,490
7	---	---	---	---	---	---	4,880	4,840	4,860	5,520	5,430	5,490
8	---	---	---	---	---	---	4,970	4,880	4,920	5,440	5,330	5,370
9	---	---	---	---	---	---	5,010	4,970	4,990	5,330	5,250	5,290
10	---	---	---	---	---	---	5,070	5,010	5,030	5,260	5,120	5,180
11	---	---	---	---	---	---	5,130	5,070	5,100	5,190	4,810	5,040
12	---	---	---	---	---	---	5,160	5,100	5,130	4,840	4,130	4,640
13	---	---	---	---	---	---	5,150	5,100	5,130	4,950	4,420	4,700
14	---	---	---	---	---	---	5,140	5,090	5,120	4,700	4,420	4,550
15	---	---	---	---	---	---	5,220	5,080	5,140	4,680	4,350	4,460
16	---	---	---	---	---	---	5,180	5,130	5,150	4,710	4,480	4,620
17	---	---	---	---	---	---	5,180	5,130	5,160	4,690	4,480	4,590
18	---	---	---	---	---	---	5,190	5,130	5,160	4,650	4,450	4,520
19	---	---	---	---	---	---	5,180	5,100	5,160	4,700	4,620	4,660
20	---	---	---	---	---	---	5,160	5,030	5,100	4,800	4,700	4,760
21	---	---	---	---	---	---	5,070	4,520	4,820	4,910	4,780	4,840
22	---	---	---	---	---	---	4,830	4,610	4,720	5,020	4,900	4,960
23	---	---	---	---	4,510	4,520	5,100	4,650	4,910	5,040	4,960	4,960
24	---	---	---	4,590	4,520	4,560	4,990	4,890	4,920	5,100	4,960	5,030
25	---	---	---	4,610	4,530	4,570	4,980	4,880	4,920	4,980	4,900	4,920
26	---	---	---	4,600	4,520	4,560	5,170	4,980	5,070	4,910	4,870	4,890
27	---	---	---	4,590	4,520	4,560	5,370	5,170	5,270	4,910	4,850	4,880
28	---	---	---	4,620	4,550	4,580	5,400	5,330	5,370	4,920	4,850	4,890
29	---	---	---	4,670	4,590	4,610	5,400	5,290	5,340	4,980	4,880	4,930
30	---	---	---	4,680	4,640	4,670	5,340	5,280	5,310	4,990	4,960	4,980
31	---	---	---	4,760	4,680	4,710	---	---	---	4,990	4,640	4,830
MONTH	---	---	---	4,760	4,510	4,590	5,400	4,520	5,030	5,520	4,130	4,970

06436760 HORSE CREEK ABOVE VALE, SD—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	12.7	9.0	10.7	14.2	11.0	12.1	---	---	---	---	---	---
2	12.7	10.8	11.7	14.4	11.1	12.3	---	---	---	---	---	---
3	13.4	9.6	11.2	14.6	11.3	12.6	---	---	---	---	---	---
4	12.6	9.1	10.8	14.0	10.8	12.2	---	---	---	---	---	---
5	13.4	9.4	11.0	---	11.2	---	---	---	---	---	---	---
6	12.2	9.3	10.7	---	---	---	---	---	---	---	---	---
7	16.7	8.2	10.9	---	---	---	---	---	---	---	---	---
8	12.5	9.1	10.8	---	---	---	---	---	---	---	---	---
9	13.1	9.3	11.0	---	---	---	---	---	---	---	---	---
10	12.6	9.8	11.2	---	---	---	---	---	---	---	---	---
11	12.9	9.3	11.0	---	---	---	---	---	---	---	---	---
12	13.3	9.7	11.6	---	---	---	---	---	---	---	---	---
13	12.9	9.8	11.3	---	---	---	---	---	---	---	---	---
14	12.7	8.2	10.8	---	---	---	---	---	---	---	---	---
15	12.8	9.6	11.0	---	---	---	---	---	---	---	---	---
16	13.5	9.1	11.6	---	---	---	---	---	---	---	---	---
17	15.7	9.2	12.0	---	---	---	---	---	---	---	---	---
18	14.1	10.4	12.2	---	---	---	---	---	---	---	---	---
19	12.2	8.7	10.6	---	---	---	---	---	---	---	---	---
20	13.6	8.7	10.7	---	---	---	---	---	---	---	---	---
21	11.1	7.9	9.7	---	---	---	---	---	---	---	---	---
22	9.3	7.1	8.5	---	---	---	---	---	---	---	---	---
23	11.5	7.0	9.3	---	---	---	---	---	---	---	---	---
24	12.5	8.5	10.7	---	---	---	---	---	---	---	---	---
25	12.5	8.9	10.7	---	---	---	---	---	---	---	---	---
26	13.5	9.1	11.6	---	---	---	---	---	---	---	---	---
27	14.7	10.5	11.7	---	---	---	---	---	---	---	---	---
28	12.8	8.4	10.3	---	---	---	---	---	---	---	---	---
29	10.8	8.4	9.8	---	---	---	---	---	---	---	---	---
30	13.7	10.2	11.2	---	---	---	---	---	---	---	---	---
31	13.2	10.1	11.2	---	---	---	---	---	---	---	---	---
MONTH	16.7	7.0	10.9	14.6	10.8	12.3	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	13.1	9.6	11.5	11.5	9.6	10.5
2	---	---	---	---	---	---	11.7	8.7	10.4	11.6	9.8	10.7
3	---	---	---	---	---	---	10.9	8.5	9.6	13.2	9.9	11.7
4	---	---	---	---	---	---	10.8	8.3	9.3	12.7	8.8	11.0
5	---	---	---	---	---	---	9.8	8.1	8.8	13.1	6.3	9.9
6	---	---	---	---	---	---	10.0	8.1	8.9	11.2	6.1	9.0
7	---	---	---	---	---	---	9.8	8.0	8.8	11.3	3.1	7.1
8	---	---	---	---	---	---	11.5	8.1	9.5	10.7	2.7	6.9
9	---	---	---	---	---	---	13.8	6.3	9.7	13.1	7.2	9.4
10	---	---	---	---	---	---	15.2	8.5	11.8	10.2	5.7	8.1
11	---	---	---	---	---	---	17.1	10.5	13.7	11.7	7.0	9.4
12	---	---	---	---	---	---	18.4	12.1	15.0	13.4	8.9	11.1
13	---	---	---	---	---	---	16.4	11.4	13.4	11.4	2.5	8.7
14	---	---	---	---	---	---	17.1	10.8	13.3	13.2	8.0	10.6
15	---	---	---	---	---	---	16.8	9.3	13.2	12.9	8.2	10.6
16	---	---	---	---	---	---	15.8	9.0	12.8	11.0	6.2	8.9
17	---	---	---	---	---	---	17.6	9.9	13.3	8.1	1.9	5.3
18	---	---	---	---	---	---	16.2	8.8	12.2	10.3	---	7.1
19	---	---	---	---	---	---	14.4	7.2	10.1	7.4	---	---
20	---	---	---	---	---	---	11.8	5.2	8.7	5.3	---	---
21	---	---	---	---	---	---	12.2	8.1	9.9	7.9	---	---
22	---	---	---	---	---	---	11.7	1.5	7.5	---	---	---
23	---	---	---	18.5	---	15.7	14.8	9.6	12.4	7.1	---	---
24	---	---	---	18.9	12.2	14.8	15.6	11.1	13.1	5.9	1.3	3.2
25	---	---	---	19.7	13.8	16.6	14.9	10.6	12.8	8.2	0.9	4.4
26	---	---	---	19.3	14.9	16.5	16.3	8.7	12.5	7.8	1.0	4.9
27	---	---	---	19.8	13.6	15.4	15.5	9.4	12.9	8.6	1.9	5.8
28	---	---	---	17.1	11.5	14.1	14.1	9.6	12.1	9.4	1.8	4.9
29	---	---	---	17.5	10.4	13.2	12.1	9.1	10.7	8.9	2.4	4.3
30	---	---	---	14.0	9.2	11.2	11.3	8.6	10.2	6.4	2.8	3.7
31	---	---	---	12.1	8.4	10.1	---	---	---	8.9	3.3	5.2
MONTH	---	---	---	19.8	8.4	14.2	18.4	1.5	11.3	13.4	0.9	7.8

06436760 HORSE CREEK ABOVE VALE, SD—Continued

TURBIDITY, WATER, MONOCHROME NEAR INFRA-RED LED LIGHT, 780-900 NM, DETECTION ANGLE 90 +/- 2.5 DEGREES, FNU
 WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	17	2.6	8.3	11	4.0	6.5	---	---	---	---	---	---
2	9.2	1.0	3.1	9.0	2.4	5.2	---	---	---	---	---	---
3	16	4.4	7.7	9.2	2.9	5.5	---	---	---	---	---	---
4	18	5.9	11	8.6	2.4	5.6	---	---	---	---	---	---
5	13	5.4	8.6	7.3	1.7	---	---	---	---	---	---	---
6	15	3.5	9.0	---	---	---	---	---	---	---	---	---
7	18	5.6	8.2	---	---	---	---	---	---	---	---	---
8	14	5.3	9.0	---	---	---	---	---	---	---	---	---
9	14	4.3	9.0	---	---	---	---	---	---	---	---	---
10	20	4.3	11	---	---	---	---	---	---	---	---	---
11	14	2.3	8.1	---	---	---	---	---	---	---	---	---
12	12	3.3	8.1	---	---	---	---	---	---	---	---	---
13	13	3.7	9.3	---	---	---	---	---	---	---	---	---
14	12	1.8	8.4	---	---	---	---	---	---	---	---	---
15	14	4.0	9.5	---	---	---	---	---	---	---	---	---
16	12	3.8	7.3	---	---	---	---	---	---	---	---	---
17	12	2.3	4.6	---	---	---	---	---	---	---	---	---
18	11	3.0	5.4	---	---	---	---	---	---	---	---	---
19	7.6	1.0	3.7	---	---	---	---	---	---	---	---	---
20	16	1.4	6.9	---	---	---	---	---	---	---	---	---
21	16	3.5	8.8	---	---	---	---	---	---	---	---	---
22	14	2.2	9.6	---	---	---	---	---	---	---	---	---
23	11	1.3	6.6	---	---	---	---	---	---	---	---	---
24	11	2.3	7.2	---	---	---	---	---	---	---	---	---
25	9.0	1.5	4.9	---	---	---	---	---	---	---	---	---
26	6.5	1.0	3.1	---	---	---	---	---	---	---	---	---
27	7.8	1.1	5.6	---	---	---	---	---	---	---	---	---
28	13	3.5	7.0	---	---	---	---	---	---	---	---	---
29	28	9.7	17	---	---	---	---	---	---	---	---	---
30	19	7.2	12	---	---	---	---	---	---	---	---	---
31	13	3.9	7.9	---	---	---	---	---	---	---	---	---
MONTH	28	1.0	7.9	11	1.7	5.7	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	74	24	32	50	21	32
2	---	---	---	---	---	---	100	28	36	54	25	37
3	---	---	---	---	---	---	81	27	37	65	8.7	29
4	---	---	---	---	---	---	110	31	48	64	12	28
5	---	---	---	---	---	---	53	32	39	75	19	35
6	---	---	---	---	---	---	61	26	35	69	27	45
7	---	---	---	---	---	---	240	34	54	64	27	43
8	---	---	---	---	---	---	63	19	36	75	35	45
9	---	---	---	---	---	---	40	15	19	71	34	48
10	---	---	---	---	---	---	57	9.9	16	---	---	---
11	---	---	---	---	---	---	21	7.1	10	---	---	---
12	---	---	---	---	---	---	16	5.2	9.0	---	---	---
13	---	---	---	---	---	---	35	9.1	17	---	---	---
14	---	---	---	---	---	---	33	14	19	---	---	---
15	---	---	---	---	---	---	48	7.8	17	---	---	---
16	---	---	---	---	---	---	27	11	17	51	22	31
17	---	---	---	---	---	---	29	5.0	16	76	17	34
18	---	---	---	---	---	---	---	15	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	14	16	---	---	---
21	---	---	---	---	---	---	150	16	33	---	---	---
22	---	---	---	---	---	---	90	18	47	---	---	---
23	---	---	---	26	18	21	55	22	32	---	---	---
24	---	---	---	32	17	19	66	14	24	91	7.8	37
25	---	---	---	25	17	20	70	22	36	120	32	55
26	---	---	---	38	17	22	44	20	26	130	22	60
27	---	---	---	54	18	23	39	12	22	130	33	63
28	---	---	---	98	20	28	36	13	20	100	10	44
29	---	---	---	83	26	31	54	15	27	120	14	42
30	---	---	---	53	25	31	49	18	30	78	13	41
31	---	---	---	41	26	30	---	---	---	82	20	41
MONTH	---	---	---	98	17	25	240	5.0	28	130	7.8	42

BELLE FOURCHE RIVER BASIN

06436760 HORSE CREEK ABOVE VALE, SD—Continued

TURBIDITY, WATER, MONOCHROME NEAR INFRA-RED LED LIGHT, 780-900 NM, DETECTION ANGLE 90 +/- 2.5 DEGREES, FNU—
CONTINUED

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	95	30	56	70	19	45	80	27	41	46	24	34
2	77	35	55	79	29	49	95	30	45	50	23	36
3	86	31	54	71	21	46	81	31	51	47	21	34
4	---	46	---	40	4.4	20	73	26	36	49	24	35
5	---	---	---	75	14	31	110	27	41	48	16	31
6	---	---	---	55	18	35	78	27	40	47	18	31
7	---	---	---	61	35	44	87	33	42	35	14	23
8	---	---	---	76	15	40	98	35	49	30	14	22
9	---	---	---	58	13	36	75	33	55	42	14	26
10	---	---	---	87	44	57	100	33	52	46	16	30
11	---	---	---	94	50	64	160	55	95	36	16	25
12	---	---	---	78	46	57	200	47	90	54	18	32
13	---	---	---	130	50	81	230	39	93	61	14	26
14	---	---	---	130	60	88	220	29	130	27	13	20
15	---	---	---	140	64	95	210	26	66	31	16	23
16	---	---	---	130	63	86	68	25	44	48	17	27
17	---	---	---	150	80	110	97	27	42	47	22	32
18	---	---	---	150	62	91	210	39	83	47	26	33
19	---	---	---	150	66	99	120	27	50	61	20	34
20	---	---	---	140	56	90	110	24	50	53	21	31
21	---	---	---	130	53	86	90	32	50	39	19	28
22	---	---	---	150	51	81	90	31	45	38	19	25
23	---	---	---	160	50	79	>1,200	21	---	29	15	21
24	---	---	---	150	54	87	110	30	52	40	17	21
25	---	---	---	100	54	77	44	17	30	24	14	18
26	---	---	---	92	57	72	52	22	34	99	14	20
27	---	---	---	80	37	52	50	19	31	41	13	18
28	83	29	57	72	33	48	58	22	32	24	12	17
29	100	25	55	58	34	43	54	17	30	38	11	14
30	100	21	50	76	27	45	69	23	37	22	12	15
31	---	---	---	71	23	43	54	21	33	---	---	---
MONTH	100	21	54	160	4.4	64	>1,200	17	52	99	11	26
YEAR	>1,200	1.0	36									

> Actual value is known to be greater than the value shown

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

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, 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)	Suspended sediment discharge, tons/d (80155)
NOV 2004								
05...	0952	--	4,260	--	4.0	14	15	--
APR 2005								
08...	1200	1.3	4,900	25.5	14.0	42	52	0.18
JUN								
28...	0905	1.9	2,640	23.0	22.5	120	67	0.35
JUL								
29...	1130	48	1,740	30.5	25.0	60	79	10
AUG								
22...	1125	44	1,790	26.0	21.0	44	71	8.5
SEP								
07...	0920	E32	1,960	18.5	17.5	28	55	--

E Estimated value.

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06437000 BELLE FOURCHE RIVER NEAR STURGIS, SD

LOCATION.--Lat 44°30'47", long 103°08'11", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.3, T.6 N., R.8 E., Meade County, Hydrologic Unit 10120202, on right bank near upstream end of bridge on State Highway 34, 0.5 mi upstream from Bear Butte Creek, and 20 mi northeast of Sturgis.

DRAINAGE AREA.--5,870 mi², approximately.

PERIOD OF RECORD.--October 1945 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 2,526.13 ft above NGVD of 1929. Prior to Oct. 31, 1946, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Keyhole Dam, usable capacity, 191,600 acre-ft, 246 mi upstream since Oct. 25, 1952. At a point 75 mi upstream, water is diverted to Belle Fourche Reservoir (see station 06435000), through Inlet Canal (see station 06434505), with other small diversions from the main stem and tributaries for irrigation. Total diversion for irrigation of about 60,000 acres upstream from station. Maximum discharge prior to Sept. 30, 1953, 17,900 ft³/s, May 24, 1946, gage height, 13.86 ft; no flow for many days in 1945 and 1950. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	42	e26	e24	e22	e16	19	24	56	53	207	142
2	33	40	e28	e22	e22	e18	18	22	71	68	192	130
3	33	37	e30	e16	e24	20	18	21	56	77	166	130
4	31	33	e30	e16	e27	21	17	21	47	67	153	151
5	31	32	e29	e16	e26	22	21	20	41	64	171	188
6	31	30	e28	e16	e24	22	22	19	39	65	170	230
7	30	29	e27	e15	e23	22	25	18	36	66	160	212
8	29	28	e28	e15	e22	23	35	24	40	75	151	184
9	28	28	e28	e15	e21	24	30	25	43	80	158	177
10	27	28	e28	e15	e22	24	25	90	63	51	165	168
11	25	27	e28	e15	e23	23	23	116	68	59	198	182
12	25	28	e28	e14	e24	22	22	149	57	86	255	239
13	25	28	e28	e13	e25	23	22	207	57	93	298	244
14	26	27	e27	e12	e25	23	21	292	95	82	273	235
15	26	27	e27	e12	e24	e20	20	215	136	72	257	223
16	28	27	e27	e11	e24	22	19	156	87	135	229	224
17	28	29	e28	e12	e24	20	18	118	64	129	198	226
18	28	28	e28	e12	e24	21	15	100	52	129	158	221
19	28	29	e29	e13	e23	e22	15	89	43	151	168	225
20	28	28	e30	e15	e22	e21	19	83	35	136	201	211
21	28	e28	e30	e24	e22	21	31	69	30	123	195	177
22	30	e27	e24	e20	e21	20	43	59	26	136	218	158
23	31	e26	e25	e22	e20	21	54	52	32	158	210	148
24	29	e26	e26	e30	e19	24	47	50	37	167	250	146
25	29	e27	e27	e28	e18	e26	40	51	183	196	250	147
26	30	e27	e38	e26	e17	25	33	45	224	225	239	157
27	29	e28	e37	e25	e17	25	30	48	154	255	222	141
28	29	e28	e36	e24	e16	24	28	39	101	251	185	140
29	36	e26	e30	e22	---	24	26	36	64	253	185	143
30	44	e24	e26	e22	---	22	26	36	58	244	178	106
31	48	---	e24	e22	---	20	---	45	---	227	159	---
TOTAL	936	872	885	564	621	681	782	2,339	2,095	3,973	6,219	5,405
MEAN	30.2	29.1	28.5	18.2	22.2	22.0	26.1	75.5	69.8	128	201	180
MAX	48	42	38	30	27	26	54	292	224	255	298	244
MIN	25	24	24	11	16	16	15	18	26	51	151	106
AC-FT	1,860	1,730	1,760	1,120	1,230	1,350	1,550	4,640	4,160	7,880	12,340	10,720

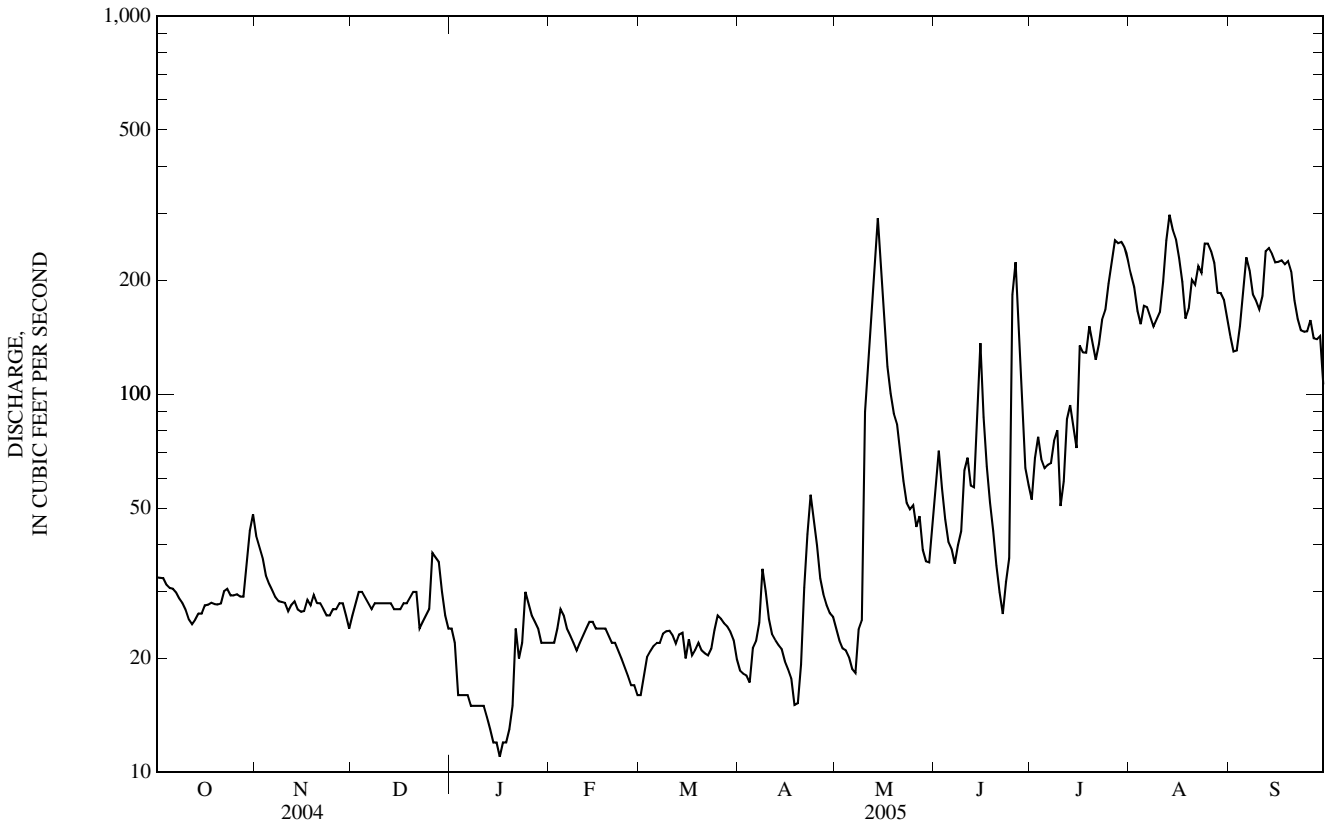
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2005, BY WATER YEAR (WY)*

MEAN	110	79.3	52.6	44.2	131	320	330	674	581	326	276	226
MAX	607	835	379	319	1,311	1,731	1,787	3,805	2,499	1,473	625	723
(WY)	(1999)	(1999)	(1999)	(1999)	(1996)	(1996)	(1997)	(1995)	(1976)	(1993)	(1976)	(1986)
MIN	16.2	20.1	11.5	4.71	6.62	22.0	21.2	15.8	69.8	52.4	2.39	10.2
(WY)	(1962)	(1960)	(1962)	(1979)	(1979)	(2005)	(1981)	(1961)	(2005)	(1960)	(1961)	(1961)

06437000 BELLE FOURCHE RIVER NEAR STURGIS, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1954 - 2005*	
ANNUAL TOTAL	33,348.9		25,372		^a 263	
ANNUAL MEAN	91.1		69.5		773	
HIGHEST ANNUAL MEAN					1996	
LOWEST ANNUAL MEAN					27.4	
HIGHEST DAILY MEAN	877	Jul 6	298	Aug 13	29,700	May 21, 1982
LOWEST DAILY MEAN	8.0	Jan 5	11	Jan 16	0.00	Aug 9, 1961
ANNUAL SEVEN-DAY MINIMUM	9.4	Jan 3	12	Jan 13	0.56	Aug 8, 1961
MAXIMUM PEAK FLOW			^b 329	May 14	36,400	May 21, 1982
MAXIMUM PEAK STAGE			^c 3.96	Aug 13	19.10	May 21, 1982
ANNUAL RUNOFF (AC-FT)	66,150		50,330		190,600	
10 PERCENT EXCEEDS	223		197		494	
50 PERCENT EXCEEDS	38		29		100	
90 PERCENT EXCEEDS	15		20		25	

* Regulated period only (1954-2005). See REMARKS.
 a Median of annual mean discharges, 220 ft³/s.
 b Gage height, 3.93 ft.
 c Backwater from vegetation.
 e Estimated.



06437020 BEAR BUTTE CREEK NEAR DEADWOOD, SD

LOCATION.--Lat 44°20'08", long 103°38'06", in NE¹/₄ SE¹/₄ sec.4, T.4 N., R.4 E., Lawrence County, Hydrologic Unit 10120202, on right bank 0.4 mi northeast of Galena, 0.5 mi downstream from Butcher Gulch, and 5.3 mi southeast of Deadwood.

DRAINAGE AREA.--16.6 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 4,750 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 Miscellaneous Temperature Measurements and Field Determinations section.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.36	e0.90	e1.0	0.64	e0.65	e1.4	e1.0	1.4	9.2	3.3	0.69	0.64
2	0.37	e1.0	1.1	e0.80	e0.70	e1.4	1.1	1.4	7.8	2.9	0.61	0.64
3	0.37	e1.2	0.93	e1.0	0.62	e1.3	1.2	1.3	6.3	2.5	0.57	0.60
4	0.37	e1.1	0.80	e1.3	0.65	e1.3	1.3	1.2	5.7	2.2	0.61	0.58
5	0.37	e1.1	0.74	e1.1	0.63	e1.3	9.0	1.1	5.0	2.9	0.79	0.55
6	0.37	e1.0	0.65	e1.2	e0.90	e1.2	4.3	0.98	4.3	2.9	0.74	0.55
7	0.37	e1.0	0.63	e1.3	e0.80	0.99	2.3	1.1	6.8	2.1	0.75	0.53
8	0.38	e0.95	0.76	e1.2	e0.70	0.65	2.0	13	7.6	2.4	1.0	0.52
9	0.38	e0.95	0.68	e1.1	e0.80	1.2	1.9	16	7.2	2.0	0.94	0.52
10	0.37	e0.90	0.66	e1.0	e0.90	1.7	1.4	15	5.5	1.6	1.2	0.49
11	0.39	e1.0	0.66	e0.95	e1.1	2.0	1.3	15	4.3	1.5	6.3	0.50
12	0.49	e1.0	e0.70	e0.85	e1.3	1.4	1.1	17	5.6	1.3	2.2	0.67
13	0.86	e1.0	e0.65	e0.60	e1.2	1.6	1.1	20	15	1.0	2.1	0.80
14	0.80	e1.1	e0.60	e0.50	e1.1	1.5	1.1	21	13	0.92	2.0	0.73
15	0.83	e1.1	e0.60	e0.50	e1.0	1.2	1.1	18	12	0.89	1.7	0.65
16	0.77	e1.1	e0.70	e0.50	e0.85	1.1	0.96	16	11	0.80	0.89	0.65
17	0.65	0.89	e0.75	e0.60	e0.78	1.4	0.95	13	10	0.73	0.97	0.60
18	0.60	e1.2	e0.80	e0.70	e0.90	1.4	0.90	16	9.3	0.70	1.1	0.80
19	0.58	0.87	e0.85	e0.80	e1.2	1.3	0.97	e20	8.8	0.61	2.0	1.2
20	0.66	e0.80	e0.80	e1.0	e1.5	1.4	1.3	e15	8.6	0.54	1.5	0.83
21	0.59	e0.97	e0.70	e1.2	e1.6	1.6	2.9	10	8.4	0.56	0.97	0.72
22	0.59	0.83	e0.60	e1.5	e1.4	1.4	4.5	9.3	7.1	0.53	0.90	0.74
23	0.62	0.76	e0.50	e1.3	e1.1	1.8	5.2	8.6	5.9	0.43	1.8	0.75
24	0.61	0.82	e0.55	e1.4	e1.1	1.4	4.9	8.4	8.1	0.41	4.7	0.99
25	0.64	0.77	e0.60	e1.0	e1.2	e1.3	3.0	15	5.9	0.89	1.4	1.0
26	0.64	0.83	e0.65	e0.90	e1.3	1.1	2.4	11	4.9	2.4	1.1	0.88
27	0.64	e0.87	0.62	e0.80	e1.4	2.0	2.3	9.2	4.4	1.1	0.95	0.80
28	0.62	e0.70	0.59	e0.70	e1.3	2.5	1.9	8.1	3.8	0.74	0.84	1.3
29	0.82	e0.60	0.59	e0.65	---	2.3	1.9	7.0	3.9	0.63	0.77	0.94
30	1.1	e0.80	0.59	e0.60	---	2.1	1.6	7.5	3.7	0.63	0.71	1.0
31	1.1	---	0.59	e0.60	---	1.1	---	12	---	0.84	0.66	---
TOTAL	18.31	28.11	21.64	28.29	28.68	45.34	66.88	329.58	219.1	42.95	43.46	22.17
MEAN	0.59	0.94	0.70	0.91	1.02	1.46	2.23	10.6	7.30	1.39	1.40	0.74
MAX	1.1	1.2	1.1	1.5	1.6	2.5	9.0	21	15	3.3	6.3	1.3
MIN	0.36	0.60	0.50	0.50	0.62	0.65	0.90	0.98	3.7	0.41	0.57	0.49
AC-FT	36	56	43	56	57	90	133	654	435	85	86	44

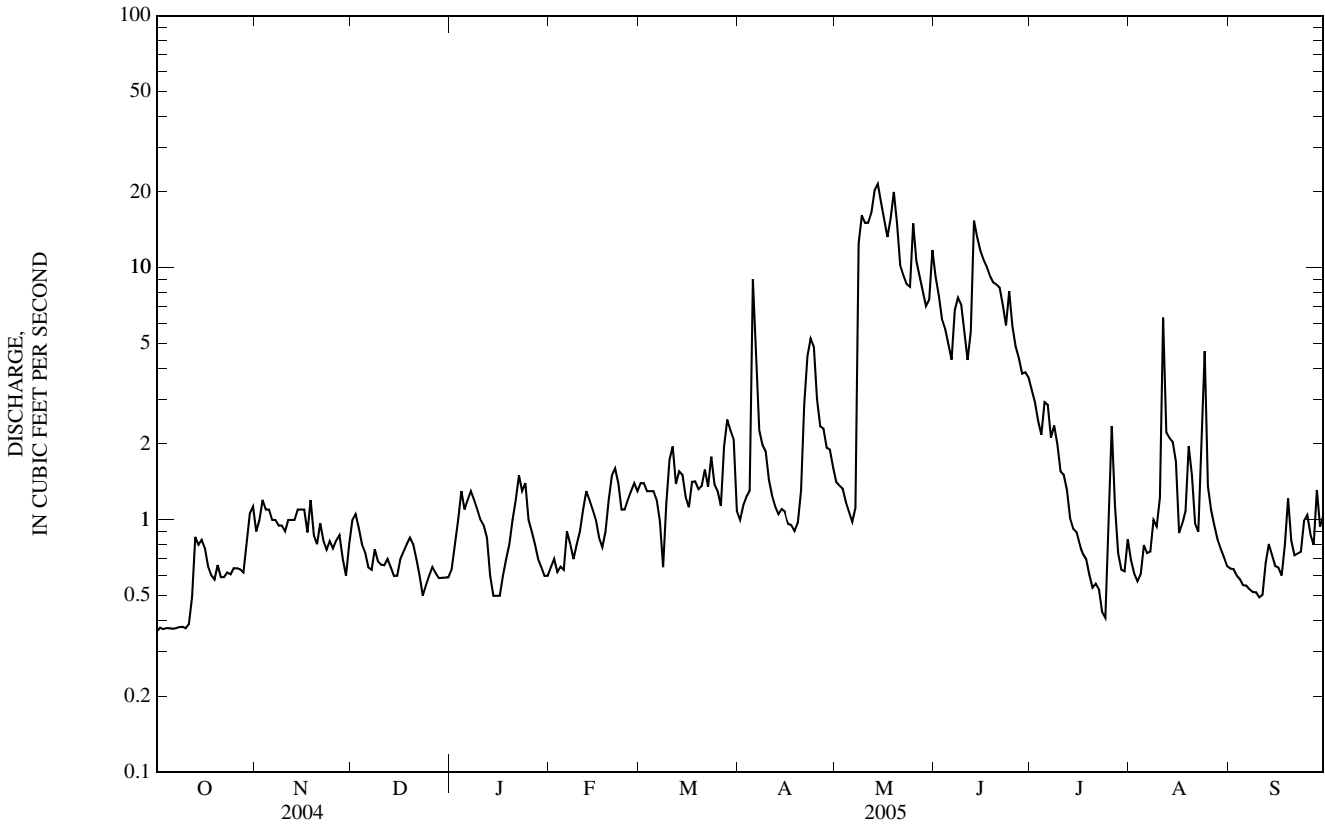
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2005, BY WATER YEAR (WY)

MEAN	4.44	2.84	1.93	1.66	1.86	6.31	18.3	22.7	15.6	4.21	2.84	1.92
MAX	37.5	15.8	6.53	4.42	4.66	21.2	73.7	94.8	44.7	9.68	10.3	6.26
(WY)	(1999)	(1999)	(1999)	(1997)	(1997)	(1997)	(1997)	(1995)	(1991)	(1997)	(1998)	(1998)
MIN	0.59	0.78	0.28	0.30	0.45	1.46	2.23	2.80	1.55	1.07	0.49	0.31
(WY)	(2005)	(2003)	(1991)	(1991)	(1991)	(2005)	(2005)	(2004)	(2004)	(2002)	(2004)	(1990)

06437020 BEAR BUTTE CREEK NEAR DEADWOOD, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1989 - 2005	
ANNUAL TOTAL	564.14		894.51		7.07	
ANNUAL MEAN	1.54		2.45		1.61	
HIGHEST ANNUAL MEAN					17.1	1997
LOWEST ANNUAL MEAN					1.61	2004
HIGHEST DAILY MEAN	11	Mar 27	21	May 14	543	May 8, 1995
LOWEST DAILY MEAN	0.27	Sep 2	0.36	Oct 1	0.00	Sep 1, 1990
ANNUAL SEVEN-DAY MINIMUM	0.31	Aug 27	0.37	Oct 1	0.05	Aug 29, 1990
MAXIMUM PEAK FLOW			32	May 19	1,590	May 8, 1995
MAXIMUM PEAK STAGE			4.55	May 19	8.34	May 8, 1995
ANNUAL RUNOFF (AC-FT)	1,120		1,770		5,120	
10 PERCENT EXCEEDS	3.3		7.5		17	
50 PERCENT EXCEEDS	0.95		1.0		2.4	
90 PERCENT EXCEEDS	0.37		0.59		0.72	

e Estimated.



06438000 BELLE FOURCHE RIVER NEAR ELM SPRINGS, SD

LOCATION.--Lat 44°22'11", long 102°33'56", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.29, T.5 N., R.13 E., Meade County, Hydrologic Unit 10120202, on right bank 50 ft downstream from highway bridge, 4.3 mi northwest of Elm Springs, and 4.7 mi downstream from Hay Creek.

DRAINAGE AREA.--7,210 mi², approximately.

PERIOD OF RECORD.--August 1928 to June 1932, March 1934 to current year. Monthly discharge only for some periods, published in WSP 1309.

REVISED RECORDS.--WSP 786: Drainage area. WSP 926: 1929, 1931(M), 1935, 1937.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,171.60 ft above NGVD of 1929. Prior to July 27, 1939, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Keyhole Dam, usable capacity, 191,600 acre-ft, 304 mi upstream since Oct. 25, 1952. At a point 133 mi above station, water is diverted to Belle Fourche Reservoir (see station 06435000), through Inlet Canal near Belle Fourche (see station 06434500), with other smaller diversions from the main stem and tributaries for irrigation. Total diversion for irrigation of about 60,000 acres upstream from station. Maximum discharge prior to Sept. 30, 1953, 35,700 ft³/s, June 10, 1941, gage height, 14.30 ft; no flow for many days in 1936-37, 1939-40. 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 1927 reached a stage of 21.8 ft. Flood in spring of 1933 reached a stage of about 20 ft, from floodmarks.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	45	e15	e22	e31	e24	18	25	53	60	204	147
2	30	49	e18	e15	e30	e24	18	23	53	51	179	132
3	29	44	e20	e12	e27	e25	14	21	60	45	187	115
4	28	41	e22	e10	e24	e30	12	19	68	55	165	114
5	28	40	e20	e8.0	e21	24	13	17	58	59	136	114
6	28	37	e18	e6.0	e19	25	14	15	48	51	138	145
7	27	34	e15	e5.5	e18	25	18	17	45	47	151	181
8	27	33	e12	e5.5	e17	26	17	48	114	48	148	186
9	26	34	e13	e5.5	e18	26	16	41	65	60	134	162
10	22	34	e15	e5.7	e20	26	25	45	127	61	141	150
11	21	33	e16	e5.9	e22	23	33	42	96	59	163	136
12	22	32	e16	e6.0	e23	25	30	395	84	41	175	151
13	22	31	e17	e6.0	e25	21	26	1,370	94	40	213	186
14	23	31	e18	e6.0	e27	22	21	710	148	65	258	197
15	23	31	e17	e5.7	e28	13	18	485	193	63	244	202
16	22	32	e18	e5.4	e27	26	16	319	271	56	231	187
17	21	32	e19	e5.2	e26	23	15	214	142	59	208	187
18	22	32	e20	e5.1	e24	28	12	163	96	108	190	189
19	25	32	e22	e5.1	e23	23	14	124	66	93	174	187
20	26	32	e24	e5.2	e22	20	18	103	53	114	159	188
21	27	e28	e22	e5.2	e21	23	29	96	44	116	180	186
22	29	e26	e17	e5.5	e20	29	44	78	36	105	182	160
23	32	e27	e15	e5.8	e22	27	60	68	29	96	197	140
24	31	e24	e15	e6.2	e24	26	43	59	22	125	200	134
25	31	e36	e16	e7.1	e25	27	52	65	18	154	212	132
26	30	e39	e16	e9.9	e26	24	45	64	115	181	235	124
27	30	e36	e17	e14	e24	27	40	54	311	205	219	136
28	30	e24	e20	e20	e24	28	35	46	189	222	203	134
29	37	e12	e25	e34	---	26	32	46	134	225	174	122
30	49	e13	e30	e33	---	23	28	41	86	227	162	120
31	43	---	e28	e32	---	21	---	53	---	222	160	---
TOTAL	873	974	576	323.5	658	760	776	4,866	2,918	3,113	5,722	4,644
MEAN	28.2	32.5	18.6	10.4	23.5	24.5	25.9	157	97.3	100	185	155
MAX	49	49	30	34	31	30	60	1,370	311	227	258	202
MIN	21	12	12	5.1	17	13	12	15	18	40	134	114
AC-FT	1,730	1,930	1,140	642	1,310	1,510	1,540	9,650	5,790	6,170	11,350	9,210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2005, BY WATER YEAR (WY)*

MEAN	136	84.2	55.0	47.9	181	463	476	975	790	349	270	226
MAX	1,361	1,081	479	440	2,283	2,457	2,671	6,264	2,985	1,791	634	768
(WY)	(1999)	(1999)	(1999)	(1999)	(1997)	(1978)	(1997)	(1995)	(1976)	(1993)	(1976)	(1986)
MIN	13.9	14.8	2.45	0.02	0.45	24.5	13.4	13.6	76.1	34.0	0.77	2.65
(WY)	(1962)	(1960)	(1962)	(1991)	(1991)	(2005)	(1981)	(1961)	(1961)	(1960)	(1961)	(1961)

06438000 BELLE FOURCHE RIVER NEAR ELM SPRINGS, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1954 - 2005*	
ANNUAL TOTAL	34,154.8		26,203.5		^a 338	
ANNUAL MEAN	93.3		71.8		1,036	
HIGHEST ANNUAL MEAN					28.4	
LOWEST ANNUAL MEAN					35,700	
HIGHEST DAILY MEAN	1,790	Jul 7	1,370	May 13	May 28, 1996	
LOWEST DAILY MEAN	3.0	Jan 9	5.1	Jan 18	^b 0.00	
ANNUAL SEVEN-DAY MINIMUM	4.4	Jan 6	5.2	Jan 16	Aug 9, 1961	
MAXIMUM PEAK FLOW			2,150	May 13	^c 45,100	
MAXIMUM PEAK STAGE			3.45	May 13	18.22	
ANNUAL RUNOFF (AC-FT)	67,750		51,970		245,100	
10 PERCENT EXCEEDS	210		186		631	
50 PERCENT EXCEEDS	38		31		104	
90 PERCENT EXCEEDS	12		15		20	

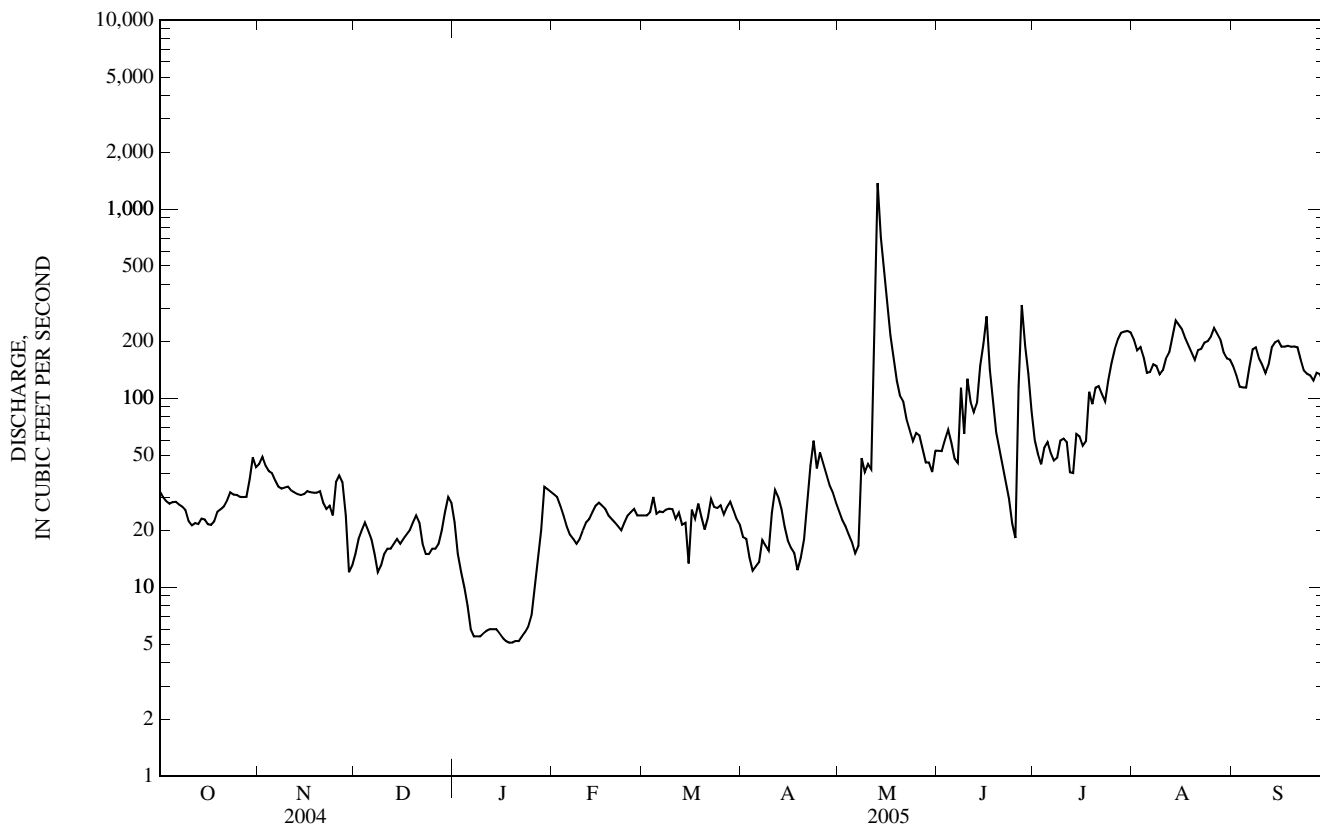
* Regulated period only (1954-2005). See REMARKS.

a Median of annual mean discharges, 250 ft³/s.

b No flow for many days in 1961-62, 1981, and 1991.

c Gage height, 15.90 ft.

e Estimated.



06438500 CHEYENNE RIVER NEAR PLAINVIEW, SD

LOCATION.--Lat 44°31'51", long 101°55'43", in NW¹/₄ NW¹/₄ NE¹/₄ sec.34, T.7 N., R.18 E., Ziebach County, Hydrologic Unit 10120112, on SD Highway 34 and 73 bridge, 10.5 mi south of Howes.

DRAINAGE AREA.--21,640 mi², approximately.

PERIOD OF RECORD.--October 1950 to September 1981, October 1994 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,868 ft above NGVD of 1929, from topographic map. Prior to October 1994 at site 3 mi upstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flows regulated by: Angostura Dam, 167 mi upstream on the Cheyenne River (see station 06401000) since October 1949 significantly affect peak flows; Pactola Reservoir, 25.4 mi upstream from Rapid City (see station 06411000) since June 1963; Keyhole Reservoir (see station 06427000) near Moorcroft, WY, since Oct. 25, 1952; and Belle Fourche Reservoir near Belle Fourche (see station 06435000) since May 1910. Flow also affected by diversions for irrigation of about 70,000 acres and return flow from irrigated areas. 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 late in May 1920 reached a stage of about 17.5 ft, previous datum, and flood in May 1927 reached a stage of about 14 ft, previous datum, from information by local residents.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	145	260	e80	e150	e180	133	137	107	215	141	195	201
2	135	194	e100	e140	e170	138	133	104	647	128	197	188
3	134	180	e135	e130	e160	134	129	107	369	119	165	172
4	133	174	e160	e120	e150	130	127	107	249	100	170	158
5	130	173	e155	e110	e130	129	121	107	219	94	143	150
6	131	171	e140	e105	e120	130	113	108	196	103	116	144
7	129	163	e128	e100	e105	123	114	94	224	96	103	161
8	129	156	e140	e95	e95	122	114	2,040	500	90	118	197
9	129	155	e150	e92	e100	127	111	489	894	90	125	213
10	126	151	e160	e90	e120	128	104	299	396	88	117	205
11	123	145	e160	e90	e130	125	106	237	277	122	133	185
12	122	143	e140	e87	e140	123	119	1,710	297	100	142	181
13	120	145	e120	e82	e150	117	114	7,730	258	98	151	191
14	118	146	e100	e76	e155	115	114	3,480	262	107	2,030	220
15	118	146	e90	e72	e150	117	108	1,250	777	78	660	240
16	117	147	e110	e78	e140	118	103	718	474	90	455	245
17	118	148	e120	e88	e130	117	103	497	407	76	360	231
18	123	147	e125	e95	e120	120	97	386	278	69	312	222
19	129	144	e130	e110	e120	119	90	308	222	87	295	224
20	129	140	e120	e120	e125	123	117	265	183	89	253	216
21	132	142	e100	e190	e140	125	107	235	159	99	226	213
22	136	151	e80	e320	e180	139	121	208	138	116	230	219
23	153	139	e70	e400	e220	142	740	194	124	93	229	205
24	187	135	e72	e460	e170	170	378	175	104	83	236	190
25	260	145	e90	e410	e190	214	236	188	99	90	238	185
26	196	144	e110	e330	e180	274	170	176	96	119	246	181
27	169	140	e125	e300	147	293	146	161	101	294	258	180
28	158	e140	e130	e280	138	338	127	184	270	271	250	179
29	224	e120	e130	e240	---	234	120	184	204	240	268	186
30	280	e85	e150	e200	---	171	112	161	169	237	235	188
31	305	---	e155	e180	---	148	---	153	---	214	203	---
TOTAL	4,738	4,569	3,775	5,340	4,055	4,736	4,531	22,162	8,808	3,821	8,859	5,870
MEAN	153	152	122	172	145	153	151	715	294	123	286	196
MAX	305	260	160	460	220	338	740	7,730	894	294	2,030	245
MIN	117	85	70	72	95	115	90	94	96	69	103	144
AC-FT	9,400	9,060	7,490	10,590	8,040	9,390	8,990	43,960	17,470	7,580	17,570	11,640

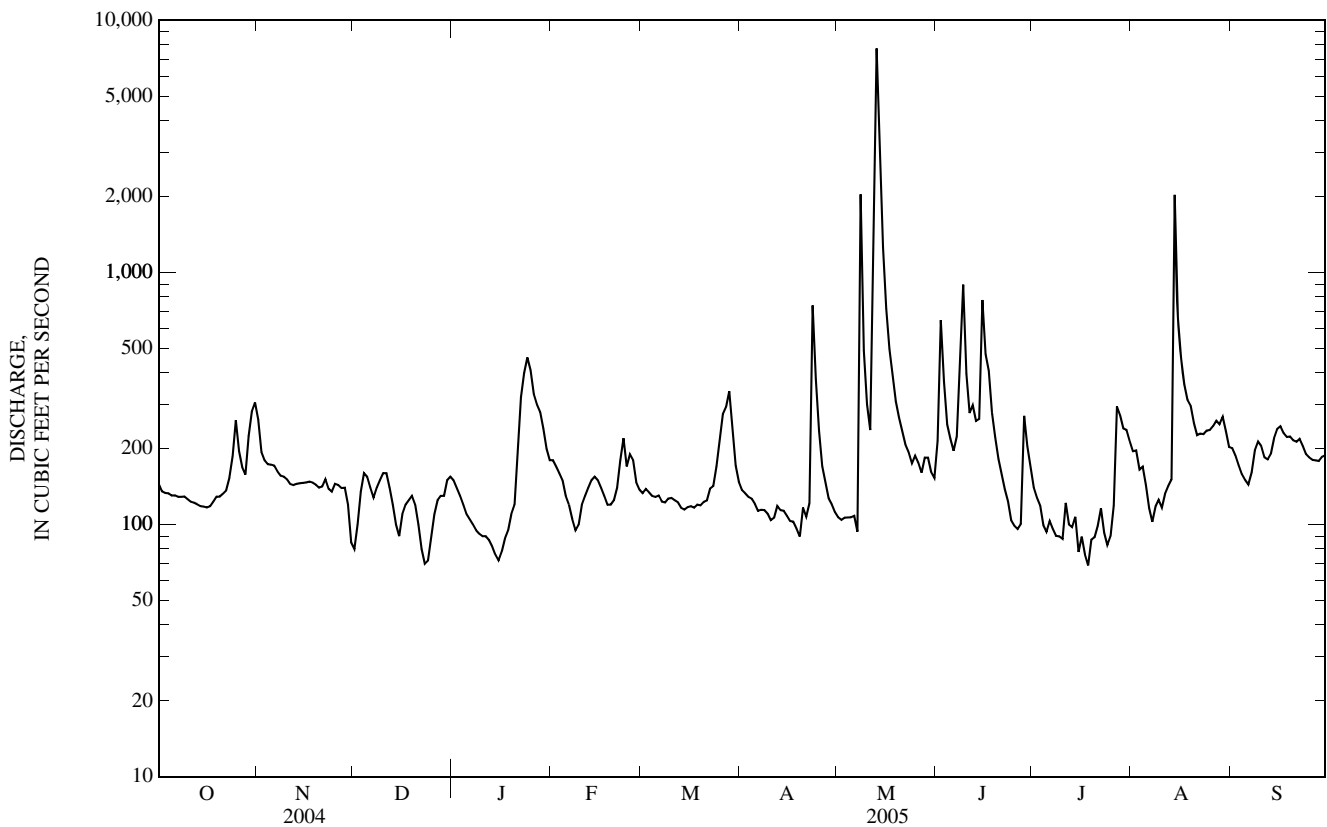
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951-1981, 1995 - 2005, BY WATER YEAR (WY)

MEAN	324	268	180	162	456	989	1,077	1,779	1,919	715	483	379
MAX	2,927	3,016	907	954	4,980	4,359	5,182	8,471	8,981	2,585	1,949	1,110
(WY)	(1999)	(1999)	(1999)	(1997)	(1997)	(1978)	(2000)	(1995)	(1967)	(1962)	(1997)	(1955)
MIN	39.2	93.8	28.6	10.0	42.1	124	71.3	83.3	172	61.8	48.0	16.2
(WY)	(1962)	(1960)	(1962)	(1962)	(1979)	(1981)	(1961)	(1961)	(1961)	(1960)	(1961)	(1961)

06438500 CHEYENNE RIVER NEAR PLAINVIEW, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1951-1981,1995- 2005	
ANNUAL TOTAL	82,085		81,264		a728	
ANNUAL MEAN	224		223		2,417	
HIGHEST ANNUAL MEAN					1997	
LOWEST ANNUAL MEAN					97.2	
HIGHEST DAILY MEAN	4,920	Sep 6	7,730	May 13	61,200	May 28, 1996
LOWEST DAILY MEAN	41	May 12	69	Jul 18	b0.00	Dec 14, 1961
ANNUAL SEVEN-DAY MINIMUM	54	May 7	82	Jan 11	1.0	Jan 17, 1962
MAXIMUM PEAK FLOW			9,620	May 13	69,700	May 28, 1996
MAXIMUM PEAK STAGE			14.14	May 13	22.10	May 28, 1996
ANNUAL RUNOFF (AC-FT)	162,800		161,200		527,200	
10 PERCENT EXCEEDS	379		294		1,450	
50 PERCENT EXCEEDS	153		143		270	
90 PERCENT EXCEEDS	95		97		83	

a Median of annual mean discharges, 630 ft³/s.
 b Also Dec. 19-21, 1961.
 e Estimated.



CHEYENNE RIVER BASIN

06439000 CHERRY CREEK NEAR PLAINVIEW, SD

LOCATION.--Lat 44°44'35", long 102°03'11", in SW¹/₄NE¹/₄ sec.16, T.9 N., R.17 E., Meade County, Hydrologic Unit 10120113, on right upstream wingwall of bridge on State Highway 73, 0.2 mi downstream from small right-bank tributary, 6.2 mi downstream from Red Owl Creek, and 11 mi northeast of Plainview.

DRAINAGE AREA.--1,190 mi², approximately.

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

REVISED RECORDS.--WDR SD-85-1: Location and datum.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,157.91 ft above NGVD of 1929. Prior to June 8, 1948, nonrecording gage at same site and datum. Prior to Sept. 27, 1985, recording gage at site 100 ft downstream at same datum.

REMARKS.--Records fair. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	89	0.00	e0.00	e0.00	e0.00	0.07	0.63	1.8	2.6	0.00	0.00
2	0.00	25	0.00	e0.00	e0.00	e0.00	0.02	0.47	1.3	2.6	0.00	0.00
3	0.00	8.9	0.00	e0.00	e0.00	e0.00	0.06	0.37	0.82	4.2	0.00	0.00
4	0.00	4.8	0.00	e0.00	e0.00	39	0.08	0.24	0.58	1.7	0.00	0.00
5	0.00	2.8	0.00	e0.00	e0.00	31	0.04	0.11	0.55	0.98	0.00	0.00
6	0.00	1.7	0.00	e0.00	e0.00	1.8	0.03	0.07	0.28	0.45	0.00	0.00
7	0.00	1.1	0.00	e0.00	e0.00	0.27	0.06	0.00	0.20	0.13	0.00	0.00
8	0.00	0.88	0.00	e0.00	e0.00	0.17	0.06	0.00	35	0.00	0.00	0.00
9	0.00	0.82	0.00	e0.00	e0.00	0.09	0.00	0.00	69	0.00	0.00	0.00
10	0.00	0.64	0.00	e0.00	e0.00	0.01	0.00	0.00	55	0.00	0.00	0.00
11	0.00	0.45	0.00	e0.00	e0.00	0.00	0.10	0.05	37	0.00	0.00	0.00
12	0.00	0.36	0.00	e0.00	e0.00	0.00	0.19	21	133	0.00	0.00	0.00
13	0.00	0.27	0.00	e0.00	e0.00	0.00	0.28	104	115	0.00	0.00	0.00
14	0.00	0.17	0.00	e0.00	e0.00	0.00	0.33	181	129	0.00	0.00	0.00
15	0.00	0.14	0.00	e0.00	e0.00	0.00	0.18	52	107	0.00	0.00	0.00
16	0.00	0.10	0.00	e0.00	e0.00	0.00	0.13	33	111	0.00	0.00	0.00
17	0.00	0.02	0.00	e0.00	e0.00	0.00	0.09	88	214	0.00	0.00	0.00
18	0.00	0.00	0.00	e0.00	e0.00	0.00	0.01	63	160	0.00	0.00	0.00
19	0.00	0.00	0.00	e0.00	e0.00	0.00	0.04	56	95	0.00	0.00	0.00
20	0.00	0.00	0.00	e0.00	e0.00	0.00	0.48	78	65	0.00	0.00	0.00
21	0.00	0.00	e0.00	e0.00	e0.00	0.00	2.5	43	43	0.00	0.00	0.00
22	0.00	0.00	e0.00	e0.00	0.00	0.03	44	27	31	0.00	0.00	0.00
23	0.00	0.00	e0.00	e0.00	0.00	0.05	14	19	22	0.00	0.00	0.00
24	0.00	0.00	e0.00	e0.00	e0.00	0.17	10	14	17	0.00	0.00	0.00
25	0.00	0.00	e0.00	e0.00	e0.00	0.14	6.0	11	13	0.00	0.00	0.00
26	0.00	0.00	e0.00	e0.00	e0.00	0.14	2.9	8.7	10	0.00	0.00	0.00
27	0.00	0.00	e0.00	e0.00	e0.00	0.14	1.5	5.6	8.1	0.00	0.00	0.00
28	0.00	0.00	e0.00	e0.00	e0.00	0.14	0.94	4.0	6.7	0.00	0.00	0.00
29	1.0	0.00	e0.00	e0.00	---	0.10	0.82	2.6	7.5	0.00	0.00	0.00
30	15	0.00	e0.00	e0.00	---	0.14	0.88	1.8	4.3	0.00	0.00	0.00
31	126	---	e0.00	e0.00	---	0.07	---	2.2	---	0.00	0.00	---
TOTAL	142.00	137.15	0.00	0.00	0.00	73.46	85.79	816.84	1,493.13	12.66	0.00	0.00
MEAN	4.58	4.57	0.00	0.00	0.00	2.37	2.86	26.3	49.8	0.41	0.00	0.00
MAX	126	89	0.00	0.00	0.00	39	44	181	214	4.2	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00
AC-FT	282	272	0.00	0.00	0.00	146	170	1,620	2,960	25	0.00	0.00

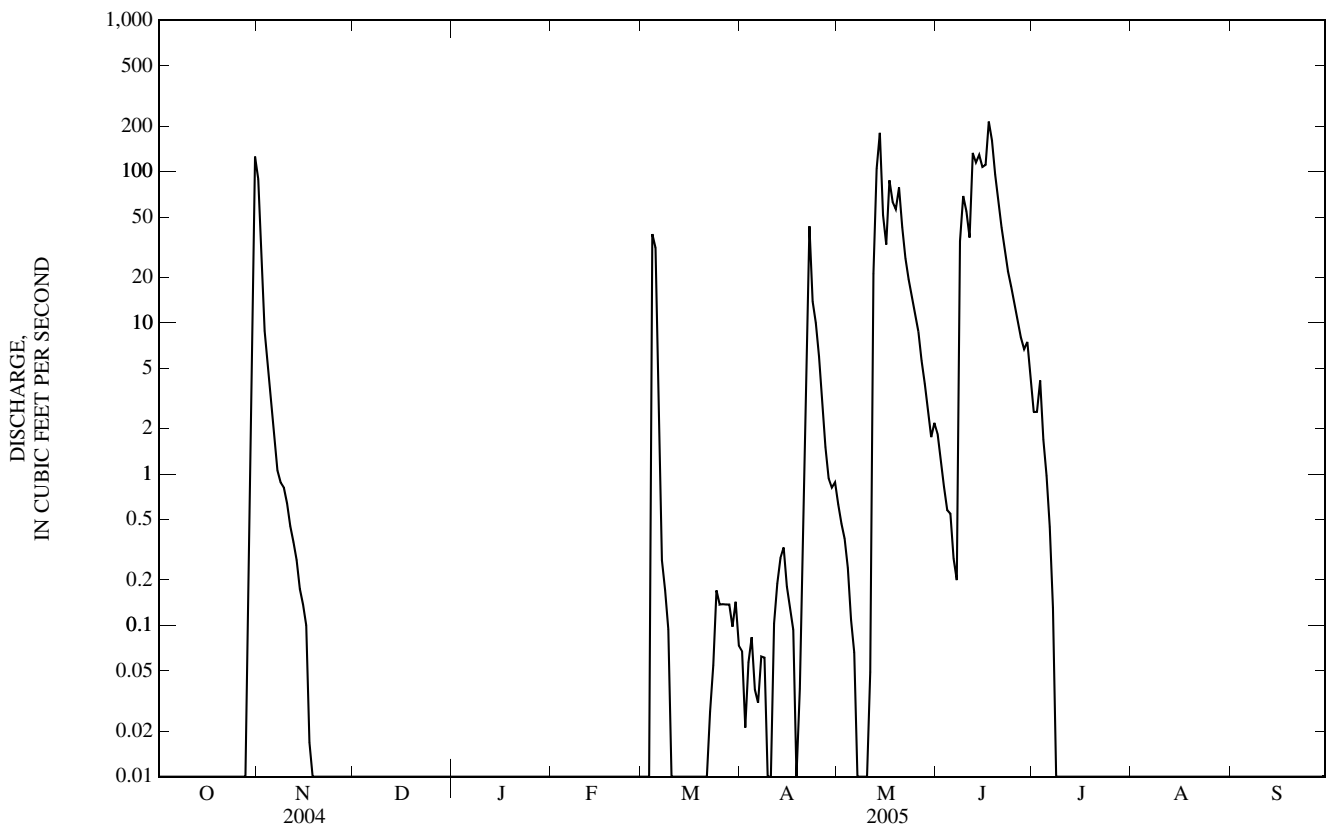
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2005, BY WATER YEAR (WY)

MEAN	4.73	1.89	0.89	1.11	28.7	163	138	128	107	27.3	8.95	0.76
MAX	109	50.7	10.6	16.5	721	1,475	2,221	1,215	794	685	175	16.6
(WY)	(1983)	(1999)	(1999)	(1947)	(1996)	(1997)	(1952)	(1982)	(1953)	(1993)	(1953)	(1986)
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)	(1946)	(1946)	(1946)	(1946)	(1946)	(1957)	(1957)	(1955)	(1955)	(1949)	(1946)	(1946)

06439000 CHERRY CREEK NEAR PLAINVIEW, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1946 - 2005	
ANNUAL TOTAL	4,368.78		2,761.03			
ANNUAL MEAN	11.9		7.56		^a 50.8	
HIGHEST ANNUAL MEAN					269	1997
LOWEST ANNUAL MEAN					0.00	1961
HIGHEST DAILY MEAN	673	Aug 5	214	Jun 17	13,800	Apr 2, 1952
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	^b 0.00	Oct 1, 1945
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1945
MAXIMUM PEAK FLOW			280	May 14	17,500	Apr 1, 1952
MAXIMUM PEAK STAGE			6.41	May 14	22.63	Apr 1, 1952
ANNUAL RUNOFF (AC-FT)	8,670		5,480		36,820	
10 PERCENT EXCEEDS	27		14		56	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

- a Median of annual mean discharges, 25 ft³/s.
- b No flow for long periods in most years.
- c Estimated.



MISSOURI-OAHE RIVER BASIN
06439980 LAKE OAHE NEAR PIERRE, SD

LOCATION.--Lat 44°27'30", long 100°23'29", in NE¹/₄ sec.1, T.111 N., R.80 W., 5th principal meridian, Hughes County, Hydrologic Unit 10130105, in Pier A of Control Tower No. 1 of powerhouse intake structure of dam on Missouri River, 6.0 mi northwest of Pierre, 7.1 mi upstream from Bad River, and at mile 1,072.3.

DRAINAGE AREA.--243,500 mi², approximately.

PERIOD OF RECORD.--August 1958 to current year (monthend contents only). Prior to October 1967, published as Oahe Reservoir near Pierre.

GAGE.--Water-stage recorder. Elevations listed to NGVD of 1929. Prior to Jan. 14, 1958, nonrecording gages at various locations upstream from outlet works, Jan. 14, 1959, to Sept. 30, 1962, recorder in Tower No. 1 of outlet works, all at same datum.

REVISED RECORDS.--WDR SD-88-1: September monthend elevation.

REMARKS.--Reservoir is formed by an earthfill dam; storage began in August 1958. Maximum capacity, 23,338,000 acre-ft below elevation 1,620.0 ft (top of spillway gates). Normal maximum, 22,240,000 acre-ft below 1,617.0 ft, of which about 2,390,000 acre-ft is designated for flood control. Inactive storage, 5,451,000 acre-ft below elevation 1,540.0 ft. Dead storage, 1,970 acre-ft below elevation 1,425.0 ft (invert of lowest outlet tunnel). Figures given herein represent elevations at powerhouse intake structure and total contents adjusted for wind effect.

The spillway consists of a gated chute with flat crest at elevation 1,596.5 ft, 8 gates, 50 by 23.5 ft each; design capacity, 300,000 ft³/s. The outlet works consist of 7 turbines with a generating capacity of 85,000 kilowatts each. Water is used for flood control, navigation, power, and incidental uses.

COOPERATION.--Records of elevation and contents provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 22,764,000 acre-ft, May 14, 1986, affected by wind; maximum elevation, 1,618.71 ft, June 25, 1995; minimum since initial filling, 10,102,000 acre-ft, Sept. 4, 2004.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 11,278,000 acre-ft, July 6; minimum contents, 10,267,000 acre-ft, Sept. 30.

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	1,573.21	10,316,000	--
Oct. 31	1,574.77	10,608,000	+292,000
Nov. 30	1,576.00	10,866,000	+258,000
Dec. 31	1,575.78	10,824,000	-42,000
CAL YR 2004	--	--	-225,000
Jan. 31	1,575.21	10,715,000	-109,000
Feb. 28	1,576.22	10,924,000	+209,000
Mar. 31	1,574.40	10,568,000	-356,000
Apr. 30	1,574.73	10,608,000	+40,000
May 31	1,576.47	10,980,000	+372,000
June 30	1,577.58	11,214,000	+234,000
July 31	1,576.38	10,958,000	-256,000
Aug. 31	1,573.06	10,363,000	-595,000
Sept. 30	1,572.89	10,267,000	-96,000
WTR YR 2005	--	--	-49,000

NOTE.--Lake frozen over Jan. 16.

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