06440000 MISSOURI RIVER AT PIERRE, SD

LOCATION.--Lat 44°22'23", long 100°22'03" in NW¼ SW¼ sec.32, T.111 N., R.79 W., Hughes County, Hydrologic Unit 10140101, on left bank downstream from Dakota Minnesota and Eastern Railroad bridge, 1.3 mi upstream from Bad River, 5.8 mi downstream from Oahe Dam, and at mile 1,066.5.

PERIOD OF RECORD.--October 1929 to September 1965, October 1988 to current year (daily gage height). Daily discharges, October 1929 to September 1965 and October 1996 to September 2000.

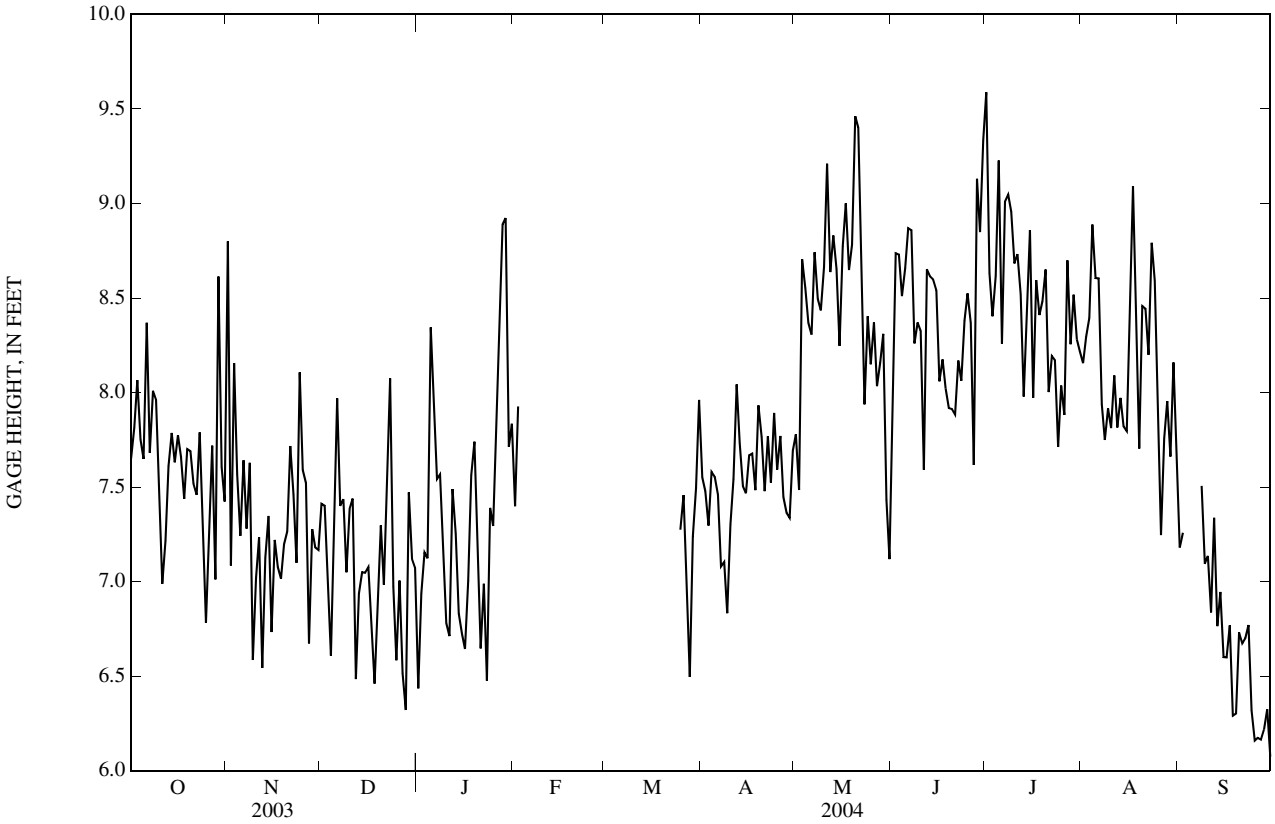
GAGE.--Water-stage recorder. Datum of gage is 1,414.26 ft above NGVD of 1929. Prior to Mar. 11, 1932, chain gage at same site at datum 2.00 ft higher.

REMARKS.--Records good. Stage regulated by Big Bend Dam approximately 82 mi downstream. Flow regulated by Oahe Dam 5.8 mi upstream. Gage heights for period of October 1965 to September 1988 in files of U.S. Army Corps of Engineers.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.65	8.80	7.41	6.44	7.40	---	7.55	7.78	8.05	9.59	8.15	7.18
2	7.81	7.08	7.40	6.94	7.93	---	7.48	7.48	8.74	8.63	8.29	7.26
3	8.07	8.16	7.01	7.15	---	---	7.30	8.70	8.73	8.40	8.39	---
4	7.75	7.57	6.61	7.12	---	---	7.58	8.55	8.51	8.62	8.89	---
5	7.65	7.24	7.19	8.34	---	---	7.55	8.37	8.66	9.23	8.61	---
6	8.37	7.64	7.97	7.91	---	---	7.46	8.31	8.87	8.26	8.60	---
7	7.68	7.28	7.40	7.54	---	---	7.08	8.74	8.86	9.01	7.94	---
8	8.01	7.63	7.43	7.57	---	---	7.10	8.49	8.26	9.05	7.75	7.51
9	7.96	6.59	7.05	7.24	---	---	6.83	8.43	8.37	8.96	7.92	7.09
10	7.39	7.02	7.38	6.78	---	---	7.30	8.66	8.33	8.68	7.81	7.14
11	6.99	7.23	7.44	6.71	---	---	7.54	9.21	7.59	8.73	8.09	6.84
12	7.22	6.54	6.48	7.49	---	---	8.04	8.64	8.65	8.52	7.82	7.34
13	7.61	7.13	6.94	7.25	---	---	7.73	8.83	8.61	7.98	7.97	6.76
14	7.79	7.35	7.05	6.83	---	---	7.51	8.65	8.60	8.49	7.82	6.95
15	7.63	6.73	7.05	6.72	---	---	7.47	8.25	8.54	8.86	7.80	6.60
16	7.77	7.22	7.08	6.64	---	---	7.67	8.77	8.06	7.97	8.63	6.60
17	7.66	7.08	6.80	7.00	---	---	7.68	9.00	8.17	8.59	9.09	6.77
18	7.44	7.02	6.46	7.56	---	---	7.48	8.65	8.02	8.41	8.29	6.29
19	7.70	7.20	6.93	7.74	---	---	7.93	8.78	7.92	8.48	7.70	6.30
20	7.69	7.26	7.30	7.24	---	---	7.76	9.46	7.91	8.65	8.46	6.73
21	7.52	7.72	6.98	6.65	---	---	7.48	9.40	7.88	8.00	8.44	6.67
22	7.46	7.46	7.49	6.99	---	---	7.77	8.47	8.17	8.19	8.20	6.70
23	7.79	7.10	8.07	6.48	---	---	7.52	7.94	8.06	8.17	8.79	6.77
24	7.24	8.11	6.97	7.39	---	---	7.89	8.40	8.38	7.71	8.59	6.32
25	6.78	7.59	6.58	7.29	---	7.27	7.59	8.15	8.52	8.04	7.90	6.16
26	7.23	7.52	7.01	7.81	---	7.46	7.77	8.37	8.37	7.88	7.25	6.17
27	7.72	6.67	6.51	8.34	---	7.00	7.45	8.03	7.62	8.70	7.76	6.16
28	7.01	7.28	6.32	8.89	---	6.49	7.36	8.16	9.13	8.26	7.95	6.22
29	8.61	7.18	7.47	8.92	---	7.24	7.34	8.31	8.85	8.52	7.66	6.32
30	7.61	7.17	7.12	7.71	---	7.50	7.69	7.43	9.34	8.28	8.16	6.07
31	7.42	---	7.07	7.83	---	7.96	---	7.12	---	8.22	7.66	---
MEAN	7.62	7.32	7.10	7.37	---	---	7.53	8.44	8.39	8.49	8.14	---
MAX	8.61	8.80	8.07	8.92	---	---	8.04	9.46	9.34	9.59	9.09	---
MIN	6.78	6.54	6.32	6.44	---	---	6.83	7.12	7.59	7.71	7.25	---

06440000 MISSOURI RIVER AT PIERRE, SD—Continued



06440200 SOUTH FORK BAD RIVER NEAR COTTONWOOD, SD
(Formerly published as Buffalo Creek near Cottonwood)

LOCATION.--Lat 43°58'08", long 101°46'00", in NE¼ SW¼ SE¼ sec.7, T.1 S., R.20 E., Jackson County, Hydrologic Unit 10140102, on right bank at upstream side of bridge on old U.S. Highway 16, 1.0 mi above confluence with Cottonwood Creek, and 7.0 mi east of Cottonwood.

DRAINAGE AREA.--250 mi^2.

PERIOD OF RECORD.--October 1954 to September 1960 (discharge measurements only), October 1988 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,242.96 ft above NGVD of 1929. October 1954 to September 1960, nonrecording gage at same site 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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	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	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	213
8	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.9
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.4
11	0.00	0.00	0.00	0.00	0.00	26	0.00	0.00	0.00	0.00	0.00	1.2
12	0.00	0.00	0.00	0.00	0.00	22	0.00	0.00	124	0.00	0.00	12
13	0.00	0.00	0.00	0.00	0.00	13	0.00	0.00	19	0.00	0.00	24
14	0.00	0.00	0.00	0.00	0.00	5.4	0.00	0.00	6.3	0.00	0.00	4.9
15	0.00	0.00	0.00	0.00	0.00	2.3	0.00	0.00	2.9	0.00	0.00	1.8
16	0.00	0.00	0.00	0.00	0.00	3.9	0.00	0.00	1.7	0.00	0.00	0.59
17	0.00	0.00	0.00	0.00	0.00	2.4	0.00	0.00	1.0	0.00	0.00	0.15
18	0.00	0.00	0.00	0.00	0.00	2.1	0.00	0.00	0.38	0.00	0.00	0.05
19	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.15	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.09	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.05	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.01	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.03
24	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	6.4
25	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	72
26	0.00	0.00	0.00	0.00	0.00	0.04	0.00	6.6	0.00	0.00	0.00	16
27	0.00	0.00	0.00	0.00	0.00	0.03	0.00	8.0	0.00	0.00	0.00	4.7
28	0.00	0.00	0.00	0.00	0.00	0.01	0.00	2.8	0.00	0.00	0.00	1.8
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.3	0.00	0.00	0.00	0.75
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.51	0.00	0.00	0.00	0.22
31	0.00	---	0.00	0.00	---	0.00	---	0.28	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	78.81	0.00	19.49	155.66	0.00	0.00	388.89
MEAN	0.00	0.00	0.00	0.00	0.00	2.54	0.00	0.63	5.19	0.00	0.00	13.0
MAX	0.00	0.00	0.00	0.00	0.00	26	0.00	8.0	124	0.00	0.00	213
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	156	0.00	39	309	0.00	0.00	771

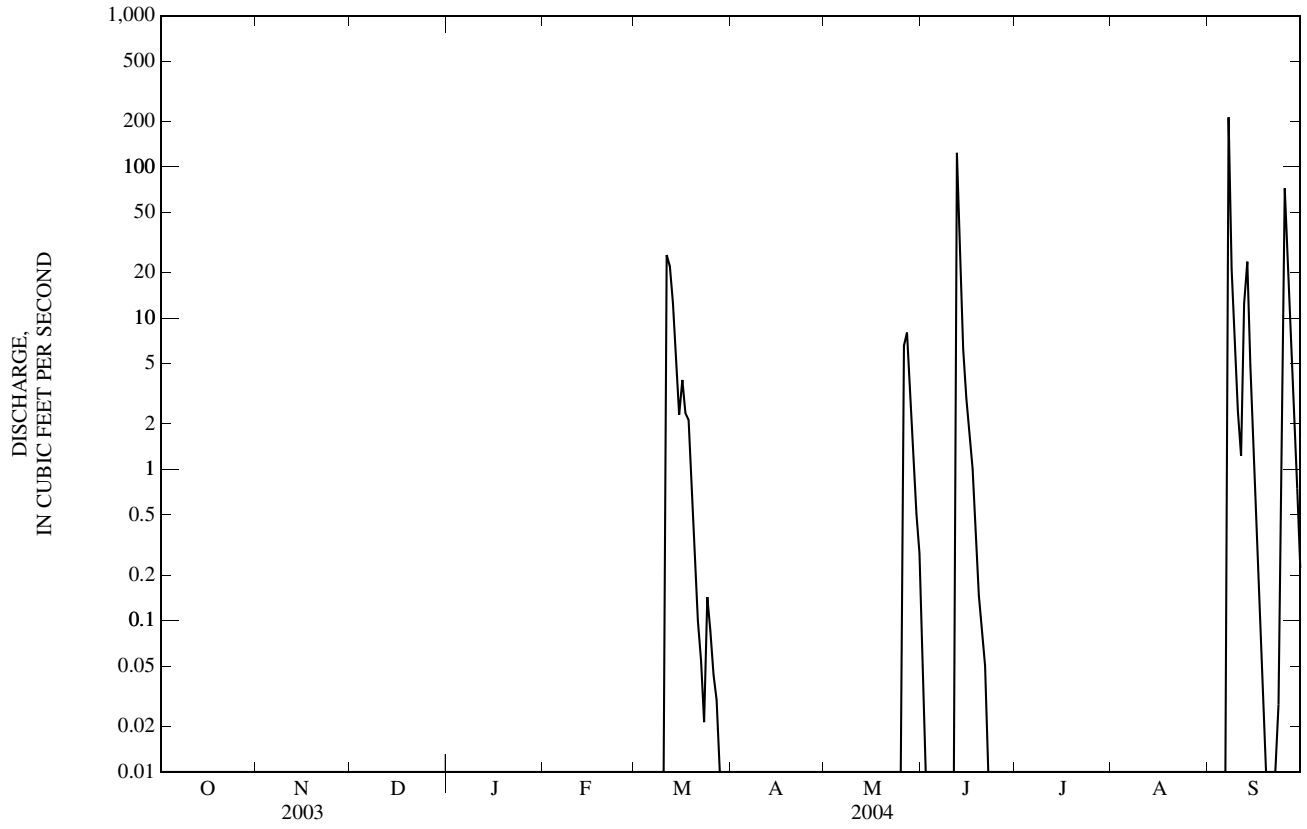
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2004, BY WATER YEAR (WY)

MEAN	5.22	3.05	0.41	0.84	38.5	31.5	23.2	70.1	57.0	13.0	9.34	4.31
MAX	39.9	29.3	3.50	4.46	555	122	150	324	347	99.5	72.6	13.0
(WY)	(1999)	(1999)	(1994)	(1994)	(1997)	(2001)	(2000)	(1995)	(1991)	(1997)	(1997)	(2004)
MIN	0.00	0.00	0.00	0.00	0.00	0.64	0.00	0.63	0.00	0.00	0.00	0.00
(WY)	(1991)	(1990)	(1991)	(1989)	(1989)	(1991)	(2004)	(2004)	(2002)	(2002)	(1989)	(2000)

06440200 SOUTH FORK BAD RIVER NEAR COTTONWOOD, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1989 - 2004	
ANNUAL TOTAL	1,222.04		642.85			
ANNUAL MEAN	3.35		1.76		[a]21.2	
HIGHEST ANNUAL MEAN					94.5	1997
LOWEST ANNUAL MEAN					1.53	2002
HIGHEST DAILY MEAN	154	Mar 20	213	Sep 7	3,990	May 31, 1991
LOWEST DAILY MEAN	0.00	Jan 6	0.00	Oct 1	[b]0.00	Oct 2, 1988
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 6	0.00	Oct 1	0.00	Oct 2, 1988
MAXIMUM PEAK FLOW			397	Sep 7	15,200	May 31, 1991
MAXIMUM PEAK STAGE			8.05	Sep 7	17.89	May 31, 1991
ANNUAL RUNOFF (AC-FT)	2,420		1,280		15,390	
10 PERCENT EXCEEDS	5.5		0.42		21	
50 PERCENT EXCEEDS	0.00		0.00		0.09	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a Median of annual mean discharges, 16 ft^3/s.
b No flow for many days in most years.
e Estimated.



06441000 BAD RIVER NEAR MIDLAND, SD

LOCATION.--Lat 44°04'01", long 101°09'36", in NE¼ NW¼ sec.7, T.1 N., R.25 E., Haakon County, Hydrologic Unit 10140102, on right bank at downstream side of bridge on State Highway 63, 0.4 mi southwest of Midland, 2.0 mi upstream from Mitchell Creek, and 3.7 mi upstream from Ash Creek.

DRAINAGE AREA.--1,460 mi^2, approximately.

PERIOD OF RECORD.--October 1945 to current year. Prior to February 1946 monthly discharge only, published in WSP 1309.

REVISED RECORDS.--WSP 2117: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,849.14 ft above NGVD of 1929. Prior to Feb. 21, 1961, nonrecording gage, and Feb. 21, 1961, to June 14, 1967, water-stage recorder at site 4.2 mi downstream at datum 15.72 ft lower. June 15 to July 26, 1967, nonrecording gage at site 30 ft upstream and July 27, 1967, to June 14, 1971, water-stage recorder at site 60 ft upstream, both at present datum.

REMARKS.--Records poor. Only daily discharges above 100 ft^3/s are being published. Satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,400 ft^3/s, June 15, 1967, gage height, 24.44 ft, from floodmarks, 20.10 ft, from floodmarks, at former site and datum, from rating curve extended above 16,000 ft^3/s; no flow for many days in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,500 ft^3/s, June 12, gage height, 11.30 ft.

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

Daily discharge above 100 ft^3/s are given herewith:

June 11	e200	June 13	217
12	908	14	111

e Estimated.

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06441500 BAD RIVER NEAR FORT PIERRE, SD

LOCATION.--Lat 44°19'36", long 100°23'02", in NW¼ NW¼ sec.10, T.4 N., R.31 E., Stanley County, Hydrologic Unit 10140102, on right bank at downstream side of highway bridge, 2.1 mi south of Fort Pierre, 4.3 mi downstream from Willow Creek, and 6.0 mi upstream from mouth.

DRAINAGE AREA.--3,107 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1928 to current year. Monthly discharge only for July 1932 to February 1934, published in WSP 1309.

REVISED RECORDS.--WSP 786: Drainage area. WSP 856: 1929(M), 1937.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,427.83 ft above NGVD of 1929. Prior to July 10, 1951, nonrecording gage at same site and datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in April 1927 reached a stage of 30.89 ft, from floodmarks, discharge, about 55,000 ft^3/s. Flood in July 1905 reached a stage about 2 ft higher than that in April 1927.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	16	1.7	0.00	0.00	12	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	e9.0	1.9	0.00	0.00	2.0	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	6.6	1.7	0.00	0.00	2.9	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	4.7	1.3	0.00	0.00	2.4	0.09	0.00
5	0.00	0.00	0.00	0.00	0.00	4.2	0.88	0.00	0.00	4.2	0.00	2.9
6	0.00	0.00	0.00	0.00	0.00	5.5	0.52	0.00	0.00	1.4	0.00	214
7	0.00	0.00	0.00	0.00	0.00	4.0	0.16	0.00	0.00	1.3	4.9	87
8	0.00	0.00	0.00	0.00	0.00	4.8	0.00	0.00	0.00	1.2	115	36
9	0.00	0.00	0.00	0.00	0.00	7.9	0.00	0.00	0.00	0.85	113	e18
10	0.00	0.00	0.00	0.00	0.00	18	0.00	0.00	0.00	0.75	27	e10
11	0.00	0.00	0.00	0.00	0.00	7.4	0.00	0.00	602	2.2	e12	627
12	0.00	0.00	0.00	0.00	0.00	3.5	0.00	0.00	197	47	e4.0	210
13	0.00	0.00	0.00	0.00	0.00	2.2	0.00	0.00	309	28	e1.0	e60
14	0.00	0.00	0.00	0.00	0.00	2.6	0.00	0.00	447	11	e0.00	e20
15	0.00	0.00	0.00	0.00	0.00	2.9	0.00	0.00	237	6.9	e0.00	e5.0
16	0.00	0.00	0.00	0.00	0.00	2.4	0.00	0.00	150	4.9	e0.00	e1.0
17	0.00	0.00	0.00	0.00	0.00	2.5	0.00	0.00	85	4.0	e0.00	e0.00
18	0.00	0.00	0.00	0.00	e0.00	3.1	0.00	0.00	49	4.4	e0.00	e0.00
19	0.00	0.00	0.00	0.00	e0.00	3.5	0.00	0.00	30	4.2	e0.00	e0.00
20	0.00	0.00	0.00	0.00	e0.00	2.4	0.00	0.00	19	3.4	e0.00	0.00
21	0.00	0.00	0.00	0.00	e0.10	1.8	0.00	0.00	12	2.7	e0.00	e0.00
22	0.00	0.00	0.00	0.00	e0.25	1.4	0.00	0.00	7.0	1.7	e0.00	e0.00
23	0.00	0.00	0.00	0.00	e0.50	1.1	0.00	0.00	4.6	0.93	0.00	1,780
24	0.00	0.00	0.00	0.00	e1.0	0.97	0.00	0.00	5.2	0.45	0.00	1,860
25	0.00	0.00	0.00	0.00	e1.2	0.88	0.00	0.00	4.0	0.07	0.00	366
26	0.00	0.00	0.00	0.00	e1.5	0.69	0.00	0.00	3.1	0.00	0.00	158
27	0.00	0.00	0.00	0.00	e2.5	2.2	0.00	0.00	2.9	0.00	0.00	92
28	0.00	0.00	0.00	0.00	6.6	23	0.00	0.00	2.5	0.00	0.00	58
29	0.00	0.00	0.00	0.00	15	4.8	0.00	0.00	2.1	0.00	0.00	36
30	0.00	0.00	0.00	0.00	---	2.1	0.00	0.00	61	0.00	0.00	25
31	0.00	---	0.00	0.00	---	1.6	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	28.65	153.74	8.16	0.00	2,229.40	150.85	276.99	5,665.90
MEAN	0.00	0.00	0.00	0.00	0.99	4.96	0.27	0.00	74.3	4.87	8.94	189
MAX	0.00	0.00	0.00	0.00	15	23	1.9	0.00	602	47	115	1,860
MIN	0.00	0.00	0.00	0.00	0.00	0.69	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	57	305	16	0.00	4,420	299	549	11,240

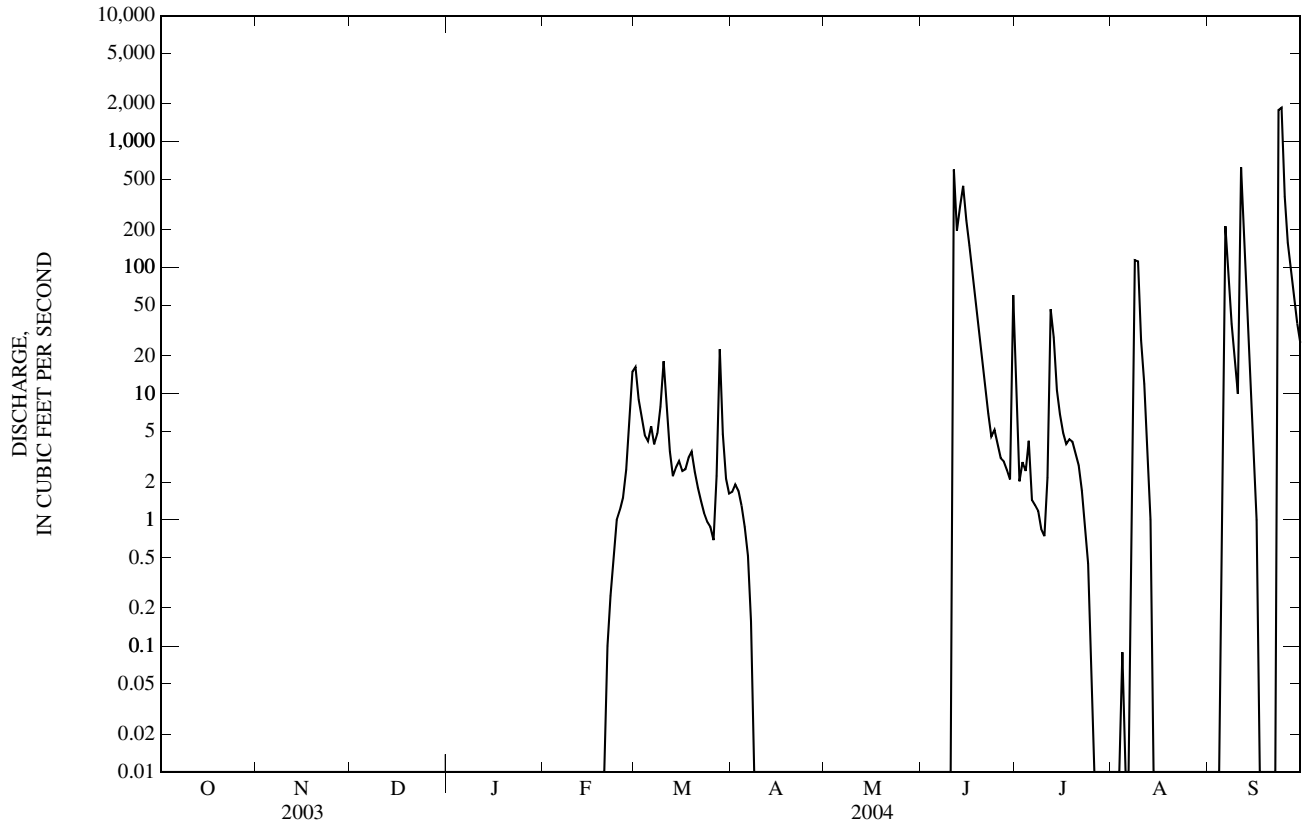
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2004, BY WATER YEAR (WY)

MEAN	18.6	5.58	2.35	11.6	133	513	417	405	355	79.5	47.9	38.4
MAX	295	199	51.1	434	3,436	4,480	7,306	6,663	2,567	561	706	1,027
(WY)	(1983)	(1999)	(1999)	(1997)	(1997)	(1997)	(1952)	(1942)	(1967)	(1937)	(1930)	(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)	(1929)	(1929)	(1929)	(1929)	(1936)	(1934)	(1934)	(1980)	(1930)	(1930)	(1929)	(1929)

06441500 BAD RIVER NEAR FORT PIERRE, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1929 - 2004	
ANNUAL TOTAL	15,299.99		8,513.69			
ANNUAL MEAN	41.9		23.3		[a]169	
HIGHEST ANNUAL MEAN					1,203	1997
LOWEST ANNUAL MEAN					6.07	1980
HIGHEST DAILY MEAN	3,860	May 9	1,860	Sep 24	27,200	May 1, 1942
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	[b]0.00	Oct 1, 1928
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1928
MAXIMUM PEAK FLOW			4,320	Sep 23	43,800	Jun 18, 1967
MAXIMUM PEAK STAGE			12.04	Sep 23	29.55	Jun 18, 1967
ANNUAL RUNOFF (AC-FT)	30,350		16,890		122,300	
10 PERCENT EXCEEDS	79		13		226	
50 PERCENT EXCEEDS	0.00		0.00		0.80	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a Median of annual mean discharges, 110 ft^3/s.
b No flow for long periods in most years.
e Estimated.



06441500 BAD RIVER NEAR FORT PIERRE, SD—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1945 to September 1953, October 1971 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: October 1971 to current year.
WATER TEMPERATURE: October 1972 to June 1983.

REVISED RECORDS.--WDR SD-81-1: 1979-80.

REMARKS.--Sediment discharge records fair except those for estimated daily concentrations and/or discharges, which are poor. Observer collects samples on a daily basis during most periods of open-water flow and less often during winter ice period. Flow affected by ice Mar. 2. Size analyses for suspended-sediment samples collected for low flows may be affected by dissolved solids. Sediment-discharge records prior to Oct. 1, 1971, on file in the District office, U.S. Army Corps of Engineers, Omaha, NE.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATION: Maximum daily mean, 124,000 mg/L, July 17, 1981; minimum daily mean, 0 mg/L, estimated, on many days some years.
SEDIMENT LOAD: Maximum daily, 949,000 tons, May 14, 1982; minimum daily, 0 ton on many days each year.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATION: Maximum daily mean, 33,300 mg/L, Aug. 9; minimum daily mean, 0 mg/L, on many days.
SEDIMENT LOAD: Maximum daily, 81,600 tons, Sept. 24; minimum daily, 0.00 ton, on many days.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
	OCTOBER			NOVEMBER			DECEMBER		
1	0.00	---	---	0.00	---	---	0.00	---	---
2	0.00	---	---	0.00	---	---	0.00	---	---
3	0.00	---	---	0.00	---	---	0.00	---	---
4	0.00	---	---	0.00	---	---	0.00	---	---
5	0.00	---	---	0.00	---	---	0.00	---	---
6	0.00	---	---	0.00	---	---	0.00	---	---
7	0.00	---	---	0.00	---	---	0.00	---	---
8	0.00	---	---	0.00	---	---	0.00	---	---
9	0.00	---	---	0.00	---	---	0.00	---	---
10	0.00	---	---	0.00	---	---	0.00	---	---
11	0.00	---	---	0.00	---	---	0.00	---	---
12	0.00	---	---	0.00	---	---	0.00	---	---
13	0.00	---	---	0.00	---	---	0.00	---	---
14	0.00	---	---	0.00	---	---	0.00	---	---
15	0.00	---	---	0.00	---	---	0.00	---	---
16	0.00	---	---	0.00	---	---	0.00	---	---
17	0.00	---	---	0.00	---	---	0.00	---	---
18	0.00	---	---	0.00	---	---	0.00	---	---
19	0.00	---	---	0.00	---	---	0.00	---	---
20	0.00	---	---	0.00	---	---	0.00	---	---
21	0.00	---	---	0.00	---	---	0.00	---	---
22	0.00	---	---	0.00	---	---	0.00	---	---
23	0.00	---	---	0.00	---	---	0.00	---	---
24	0.00	---	---	0.00	---	---	0.00	---	---
25	0.00	---	---	0.00	---	---	0.00	---	---
26	0.00	---	---	0.00	---	---	0.00	---	---
27	0.00	---	---	0.00	---	---	0.00	---	---
28	0.00	---	---	0.00	---	---	0.00	---	---
29	0.00	---	---	0.00	---	---	0.00	---	---
30	0.00	---	---	0.00	---	---	0.00	---	---
31	0.00	---	---	---	---	---	0.00	---	---
TOTAL	0.00	---	0	0.00	---	0	0.00	---	0

06441500 BAD RIVER NEAR FORT PIERRE, SD—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
		JANUARY			FEBRUARY			MARCH	
1	0.00	---	---	0.00	---	---	16	e25	1.1
2	0.00	---	---	0.00	---	---	e9.0	e24	0.58
3	0.00	---	---	0.00	---	---	6.6	e23	0.42
4	0.00	---	---	0.00	---	---	4.7	e22	0.28
5	0.00	---	---	0.00	---	---	4.2	e22	0.25
6	0.00	---	---	0.00	---	---	5.5	e21	0.31
7	0.00	---	---	0.00	---	---	4.0	e20	0.22
8	0.00	---	---	0.00	---	---	4.8	e21	0.28
9	0.00	---	---	0.00	---	---	7.9	e23	0.49
10	0.00	---	---	0.00	---	---	18	e28	1.4
11	0.00	---	---	0.00	---	---	7.4	e28	0.56
12	0.00	---	---	0.00	---	---	3.5	e26	0.24
13	0.00	---	---	0.00	---	---	2.2	e24	0.14
14	0.00	---	---	0.00	---	---	2.6	e21	0.15
15	0.00	---	---	0.00	---	---	2.9	18	0.14
16	0.00	---	---	0.00	---	---	2.4	e15	0.10
17	0.00	---	---	0.00	---	---	2.5	e16	0.11
18	0.00	---	---	e0.00	---	---	3.1	e16	0.14
19	0.00	---	---	e0.00	---	---	3.5	e17	0.16
20	0.00	---	---	e0.00	---	---	2.4	e17	0.11
21	0.00	---	---	e0.10	e15	0.00	1.8	e18	0.09
22	0.00	---	---	e0.25	e16	0.01	1.4	e18	0.07
23	0.00	---	---	e0.50	e16	0.02	1.1	e18	0.06
24	0.00	---	---	e1.0	e17	0.04	0.97	e19	0.05
25	0.00	---	---	e1.2	e17	0.06	0.88	e19	0.05
26	0.00	---	---	e1.5	e18	0.07	0.69	e20	0.04
27	0.00	---	---	e2.5	e18	0.12	2.2	e28	0.21
28	0.00	---	---	6.6	e21	0.37	23	e98	6.0
29	0.00	---	---	15	e24	0.96	4.8	91	1.2
30	0.00	---	---	---	---	---	2.1	e87	0.50
31	0.00	---	---	---	---	---	1.6	e85	0.37
TOTAL	0.00	---	0	28.65	---	1.65	153.74	---	15.82
		APRIL			MAY			JUNE	
1	1.7	e84	0.38	0.00	---	---	0.00	---	---
2	1.9	e83	0.42	0.00	---	---	0.00	---	---
3	1.7	e81	0.37	0.00	---	---	0.00	---	---
4	1.3	e80	0.28	0.00	---	---	0.00	---	---
5	0.88	e79	0.19	0.00	---	---	0.00	---	---
6	0.52	77	0.11	0.00	---	---	0.00	---	---
7	0.16	e63	0.03	0.00	---	---	0.00	---	---
8	0.00	---	---	0.00	---	---	0.00	---	---
9	0.00	---	---	0.00	---	---	0.00	---	---
10	0.00	---	---	0.00	---	---	0.00	---	---
11	0.00	---	---	0.00	---	---	602	11,900	33,300
12	0.00	---	---	0.00	---	---	197	6,520	4,430
13	0.00	---	---	0.00	---	---	309	5,380	7,070
14	0.00	---	---	0.00	---	---	447	6,820	9,130
15	0.00	---	---	0.00	---	---	237	2,650	1,710
16	0.00	---	---	0.00	---	---	150	951	411
17	0.00	---	---	0.00	---	---	85	311	75
18	0.00	---	---	0.00	---	---	49	148	20
19	0.00	---	---	0.00	---	---	30	108	8.7
20	0.00	---	---	0.00	---	---	19	84	4.4
21	0.00	---	---	0.00	---	---	12	57	1.8
22	0.00	---	---	0.00	---	---	7.0	e49	0.92
23	0.00	---	---	0.00	---	---	4.6	e44	0.55
24	0.00	---	---	0.00	---	---	5.2	44	0.61
25	0.00	---	---	0.00	---	---	4.0	e45	0.48
26	0.00	---	---	0.00	---	---	3.1	e46	0.38
27	0.00	---	---	0.00	---	---	2.9	46	0.36
28	0.00	---	---	0.00	---	---	2.5	e41	0.28
29	0.00	---	---	0.00	---	---	2.1	35	0.20
30	0.00	---	---	0.00	---	---	61	e4,250	2,510
31	---	---	---	0.00	---	---	---	---	---
TOTAL	8.16	---	1.78	0.00	---	0	2,229.40	---	58,674.68

06441500 BAD RIVER NEAR FORT PIERRE, SD—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
		JULY			AUGUST			SEPTEMBER	
1	12	e1,690	126	0.00	---	---	0.00	---	---
2	2.0	e696	3.9	0.00	---	---	0.00	---	---
3	2.9	e468	3.5	0.00	---	---	0.00	---	---
4	2.4	e239	1.7	0.09	---	---	0.00	---	---
5	4.2	e196	3.4	0.00	---	---	2.9	e123	26
6	1.4	62	0.25	0.00	---	---	214	e23,800	14,300
7	1.3	e48	0.17	4.9	e986	183	87	18,100	4,560
8	1.2	41	0.13	115	27,400	10,100	36	e7,410	764
9	0.85	e40	0.09	113	33,300	10,500	e18	e1,370	67
10	0.75	e40	0.08	27	15,600	1,240	e10	e249	6.9
11	2.2	e54	0.51	e12	e2,440	80	627	15,100	35,400
12	47	198	26	e4.0	e191	2.1	210	5,430	3,890
13	28	109	9.2	e1.0	e143	0.40	e60	e1,290	212
14	11	51	1.5	e0.00	---	---	e20	e303	17
15	6.9	e45	0.82	e0.00	---	---	e5.0	e149	2.1
16	4.9	e50	0.66	e0.00	---	---	e1.0	e113	0.32
17	4.0	55	0.59	e0.00	---	---	e0.00	---	---
18	4.4	e54	0.63	e0.00	---	---	e0.00	---	---
19	4.2	e50	0.57	e0.00	---	---	e0.00	---	---
20	3.4	e47	0.43	e0.00	---	---	0.00	---	---
21	2.7	e44	0.32	e0.00	---	---	e0.00	---	---
22	1.7	e40	0.19	e0.00	---	---	e0.00	---	---
23	0.93	e37	0.09	0.00	---	---	1,780	15,200	73,200
24	0.45	e34	0.04	0.00	---	---	1,860	16,300	81,600
25	0.07	e18	0.00	0.00	---	---	366	9,780	10,200
26	0.00	---	---	0.00	---	---	158	2,400	1,060
27	0.00	---	---	0.00	---	---	92	347	87
28	0.00	---	---	0.00	---	---	58	149	24
29	0.00	---	---	0.00	---	---	36	e128	13
30	0.00	---	---	0.00	---	---	25	e129	8.7
31	0.00	---	---	0.00	---	---	---	---	---
TOTAL	150.85	---	180.77	276.99	---	22,105.50	5,665.90	---	225,438.02
YEAR	8,513.69	306,418.22							

e Estimated

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

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)	Suspnd. sediment, sieve diametr percent <.063mm (70331)
MAR								
15...	1510	3.2	2,920	3.5	5.0	10	.09	100
JUN								
14...	1255	399	1,350	26.0	23.0	5,560	5,990	100
JUL								
08...	0940	1.2	2,220	18.5	20.0	42	.14	100
12...	1420	52	2,580	30.5	26.0	212	30	98
SEP								
24...	1620	1,230	1,260	20.5	13.5	15,000	49,800	99

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06441590 MISSOURI RIVER AT LA FRAMBOISE ISLAND, AT PIERRE, SD

LOCATION.--Lat 44°21'07", long 100°21'31", in NW¼ SW¼ NE¼ sec.34, T.110 N., R.79 W., Hughes County, Hydrologic Unit 10140101, on left bank of La Framboise Island Recreation Area, 0.2 mi downstream from Bad River, 1.5 mi downstream from U.S. Highways 14 and 83, 7.8 mi downstream from Oahe Dam, and at mile 1,064.5.

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

REVISED RECORDS.--WDR SD-90-1: Datum.

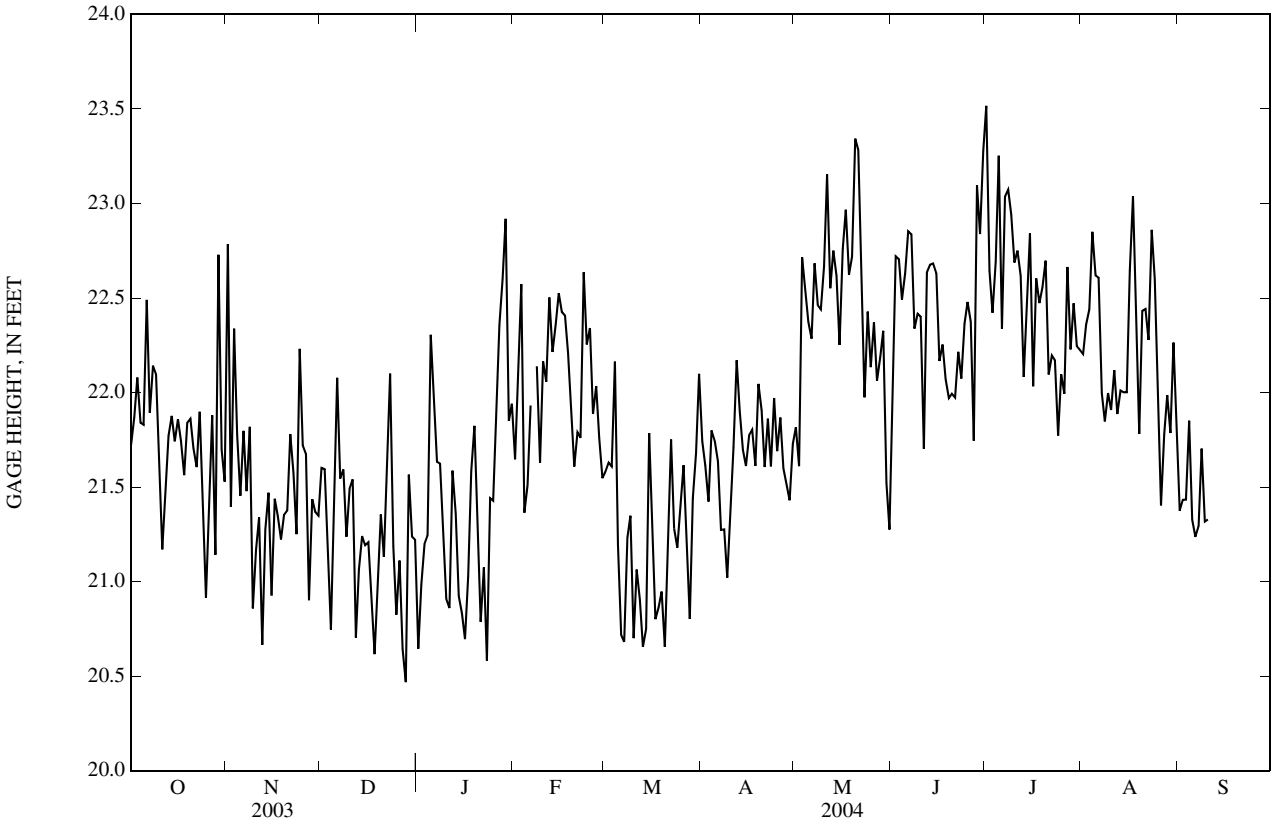
GAGE.--Water-stage recorder. Datum of gage is 1,400.00 ft above NGVD of 1929.

REMARKS.--Records good. Stage regulated by Big Bend Dam approximately 80 mi downstream. Flows regulated by Oahe Dam 7.8 mi upstream. Gage heights prior to October 1988 in files of U.S. Army Corps of Engineers. U.S. Army Corps of Engineers satellite data-collection platform at station.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.72	22.78	21.60	20.64	21.65	21.58	21.74	21.82	22.07	23.52	22.20	21.37
2	21.87	21.39	21.59	20.98	22.13	21.63	21.61	21.61	22.72	22.64	22.36	21.43
3	22.08	22.34	21.19	21.20	22.57	21.61	21.42	22.71	22.70	22.42	22.44	21.43
4	21.84	21.78	20.75	21.24	21.36	22.16	21.80	22.54	22.49	22.69	22.85	21.85
5	21.83	21.45	21.22	22.31	21.51	21.19	21.74	22.37	22.63	23.25	22.62	21.33
6	22.49	21.80	22.08	21.97	21.93	20.72	21.63	22.28	22.85	22.34	22.61	21.24
7	21.89	21.48	21.54	21.63	---	20.68	21.27	22.68	22.84	23.04	22.00	21.29
8	22.14	21.82	21.59	21.62	22.14	21.23	21.28	22.46	22.34	23.07	21.85	21.70
9	22.10	20.86	21.24	21.31	21.63	21.35	21.02	22.44	22.42	22.94	22.00	21.32
10	21.60	21.17	21.49	20.91	22.16	20.70	21.42	22.67	22.40	22.69	21.91	21.33
11	21.17	21.34	21.54	20.86	22.06	21.06	21.71	23.15	21.70	22.75	22.12	---
12	21.46	20.67	20.70	21.59	22.50	20.90	22.17	22.55	22.63	22.62	21.89	---
13	21.77	21.28	21.06	21.36	22.21	20.66	21.90	22.75	22.68	22.08	22.01	---
14	21.88	21.47	21.24	20.92	22.35	20.75	21.70	22.62	22.68	22.53	22.00	---
15	21.74	20.93	21.19	20.83	22.53	21.79	21.61	22.25	22.63	22.84	22.00	---
16	21.86	21.44	21.21	20.70	22.43	21.22	21.77	22.76	22.17	22.03	22.64	---
17	21.74	21.35	20.94	21.03	22.41	20.80	21.80	22.97	22.25	22.60	23.04	---
18	21.56	21.22	20.62	21.58	22.21	20.86	21.61	22.62	22.07	22.47	22.33	---
19	21.84	21.35	21.04	21.82	21.87	20.95	22.05	22.72	21.97	22.56	21.78	---
20	21.86	21.38	21.35	21.34	21.61	20.66	21.90	23.34	21.99	22.70	22.43	---
21	21.70	21.78	21.13	20.79	21.79	21.09	21.61	23.28	21.97	22.10	22.44	---
22	21.61	21.57	21.58	21.07	21.76	21.75	21.86	22.46	22.22	22.20	22.28	---
23	21.90	21.25	22.10	20.58	22.64	21.28	21.61	21.97	22.07	22.17	22.86	---
24	21.35	22.23	21.19	21.44	22.25	21.18	21.97	22.43	22.36	21.77	22.60	---
25	20.91	21.72	20.82	21.43	22.34	21.41	21.69	22.13	22.48	22.10	21.99	---
26	21.44	21.68	21.11	21.94	21.89	21.62	21.87	22.37	22.37	21.99	21.40	---
27	21.88	20.90	20.64	22.36	22.03	21.19	21.60	22.06	21.74	22.66	21.78	---
28	21.14	21.44	20.47	22.60	21.76	20.80	21.51	22.18	23.10	22.23	21.99	---
29	22.73	21.37	21.57	22.92	21.55	21.44	21.43	22.33	22.84	22.47	21.79	---
30	21.70	21.35	21.24	21.85	---	21.68	21.73	21.52	23.28	22.24	22.26	---
31	21.53	---	21.22	21.94	---	22.10	---	21.28	---	22.23	21.80	---
MEAN	21.75	21.49	21.23	21.44	---	21.23	21.67	22.43	22.42	22.51	22.20	---
MAX	22.73	22.78	22.10	22.92	---	22.16	22.17	23.34	23.28	23.52	23.04	---
MIN	20.91	20.67	20.47	20.58	---	20.66	21.02	21.28	21.70	21.77	21.40	---

06441590 MISSOURI RIVER AT LA FRAMBOISE ISLAND, AT PIERRE, SD—Continued



06441592 MISSOURI RIVER BELOW LA FRAMBOISE ISLAND, AT PIERRE, SD

LOCATION.--Lat 44°20'46", long 100°19'12", in SE¼ SE¼ NW¼ sec.10, T.110 N., R.79 W., Hughes County, Hydrologic Unit 10140101, on left bank at downstream end of La Framboise Island Recreation Area, 2.4 mi downstream from Bad River, 3.0 mi downstream from U.S. Highways 14 and 83, 9.9 mi downstream from Oahe Dam, and at mile 1,062.4.

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

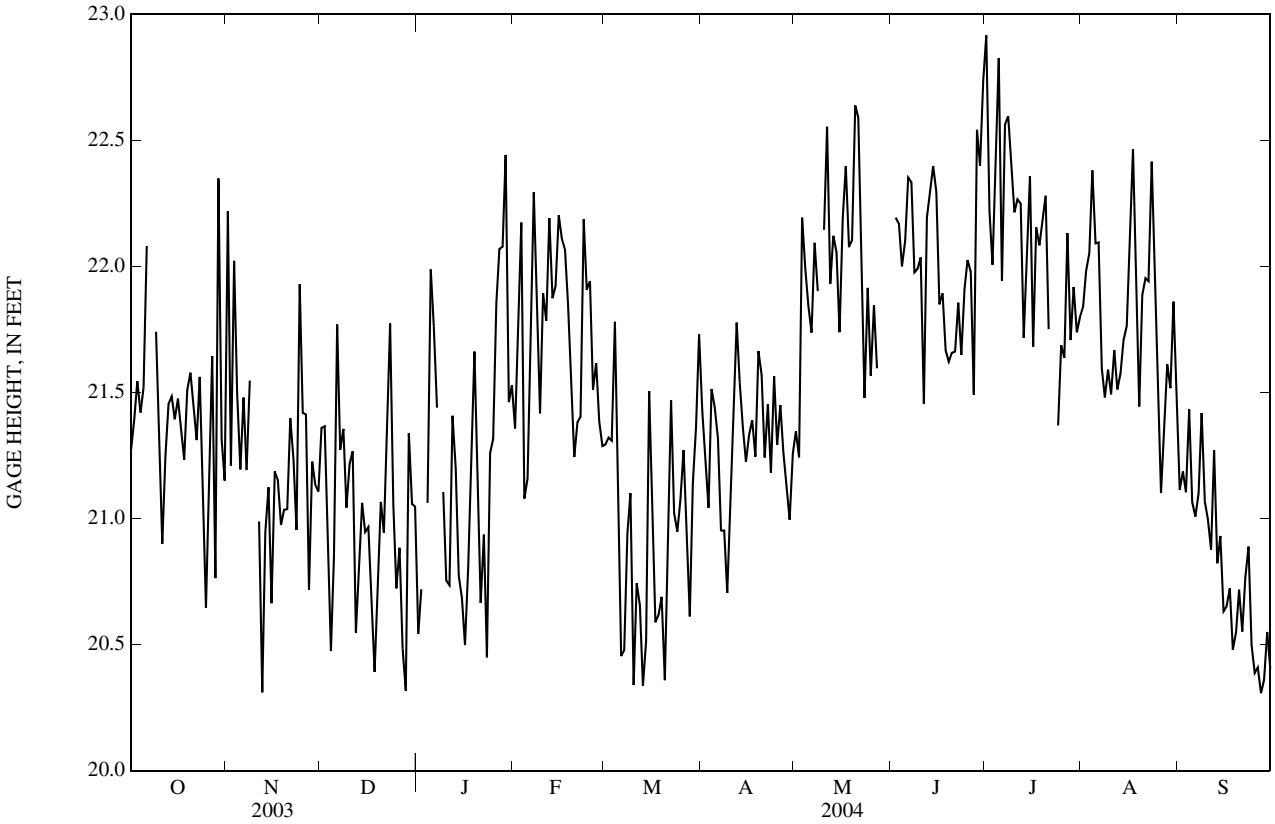
GAGE.--Water-stage recorder. Datum of gage is 1,400.00 ft above NGVD of 1929.

REMARKS.--Records good. Stage regulated by Big Bend Dam approximately 78 mi downstream. Flows regulated by Oahe Dam 9.9 mi upstream. Gage heights prior to October 1998 in files of U.S. Army Corps of Engineers. U.S. Army Corps of Engineers satellite data-collection platform at station.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.27	22.22	21.36	20.54	21.36	21.29	21.43	21.35	---	22.92	21.84	21.11
2	21.39	21.21	21.37	20.72	21.78	21.32	21.25	21.24	22.19	22.22	21.98	21.19
3	21.54	22.02	20.95	---	22.17	21.31	21.04	22.19	22.17	22.01	22.05	21.10
4	21.42	21.50	20.47	21.06	21.08	21.78	21.51	21.99	22.00	22.35	22.38	21.43
5	21.52	21.20	20.85	21.99	21.16	20.88	21.44	21.84	22.10	22.83	22.09	21.07
6	22.08	21.48	21.77	21.76	21.57	20.45	21.32	21.74	22.35	21.94	22.10	21.01
7	---	21.19	21.27	21.44	22.29	20.48	20.95	22.09	22.33	22.56	21.60	21.10
8	---	21.55	21.36	---	21.85	20.94	20.95	21.90	21.98	22.60	21.48	21.42
9	21.74	---	21.04	21.10	21.42	21.10	20.70	---	21.99	22.41	21.59	21.07
10	21.35	---	21.22	20.75	21.89	20.34	21.03	22.15	22.04	22.22	21.49	21.00
11	20.90	20.99	21.27	20.74	21.78	20.74	21.35	22.55	21.45	22.27	21.67	20.88
12	21.25	20.31	20.55	21.41	22.19	20.66	21.78	21.93	22.19	22.25	21.51	21.27
13	21.45	20.95	20.82	21.20	21.87	20.34	21.54	22.12	22.29	21.72	21.58	20.82
14	21.48	21.12	21.06	20.77	21.92	20.51	21.36	22.06	22.40	22.08	21.71	20.93
15	21.39	20.66	20.95	20.68	22.20	21.51	21.22	21.74	22.29	22.36	21.76	20.63
16	21.48	21.19	20.97	20.50	22.11	20.97	21.33	22.19	21.85	21.68	22.13	20.65
17	21.35	21.15	20.74	20.81	22.07	20.59	21.39	22.40	21.89	22.16	22.46	20.72
18	21.23	20.97	20.39	21.33	21.85	20.62	21.25	22.08	21.67	22.08	21.92	20.48
19	21.51	21.03	20.79	21.66	21.51	20.69	21.66	22.10	21.62	22.18	21.44	20.55
20	21.58	21.04	21.07	21.20	21.24	20.36	21.57	22.64	21.66	22.28	21.89	20.72
21	21.45	21.40	20.94	20.67	21.38	20.86	21.24	22.59	21.66	21.75	21.95	20.55
22	21.31	21.24	21.33	20.94	21.40	21.47	21.45	21.94	21.86	---	21.94	20.77
23	21.56	20.95	21.77	20.45	22.19	21.02	21.18	21.48	21.65	---	22.42	20.89
24	21.01	21.93	21.06	21.26	21.91	20.95	21.56	21.91	21.91	21.37	22.09	20.50
25	20.65	21.42	20.72	21.32	21.94	21.07	21.29	21.57	22.03	21.69	21.67	20.39
26	21.24	21.41	20.88	21.85	21.51	21.27	21.45	21.85	21.98	21.64	21.10	20.41
27	21.64	20.72	20.49	22.07	21.62	20.91	21.26	21.60	21.49	22.13	21.39	20.31
28	20.76	21.23	20.32	22.08	21.38	20.61	21.13	---	22.54	21.71	21.61	20.36
29	22.35	21.14	21.34	22.44	21.29	21.14	21.00	---	22.40	21.92	21.52	20.55
30	21.31	21.11	21.06	21.46	---	21.36	21.26	---	22.74	21.74	21.86	20.40
31	21.15	---	21.05	21.53	---	21.73	---	---	---	21.80	21.48	---
MEAN	---	---	21.01	---	21.72	20.94	21.30	---	---	---	21.80	20.81
MAX	---	---	21.77	---	22.29	21.78	21.78	---	---	---	22.46	21.43
MIN	---	---	20.32	---	21.08	20.34	20.70	---	---	---	21.10	20.31

06441592 MISSOURI RIVER BELOW LA FRAMBOISE ISLAND, AT PIERRE, SD—Continued



06441595 MISSOURI RIVER AT FARM ISLAND, NEAR PIERRE, SD

LOCATION.--Lat 44°20'03", long 100°15'54", in NW¼ SW¼ NE¼ sec.18, T.110 N., R.78 W., Hughes County, Hydrologic Unit 10140101, on left bank of Farm Island Recreation Area, 4.8 mi downstream from La Framboise gage, 4.9 mi southeast of Pierre, 5.2 mi downstream from Bad River, 13.1 mi downstream from Oahe Dam, and at mile 1,059.2.

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

REVISED RECORDS.--WDR SD-90-1: Datum.

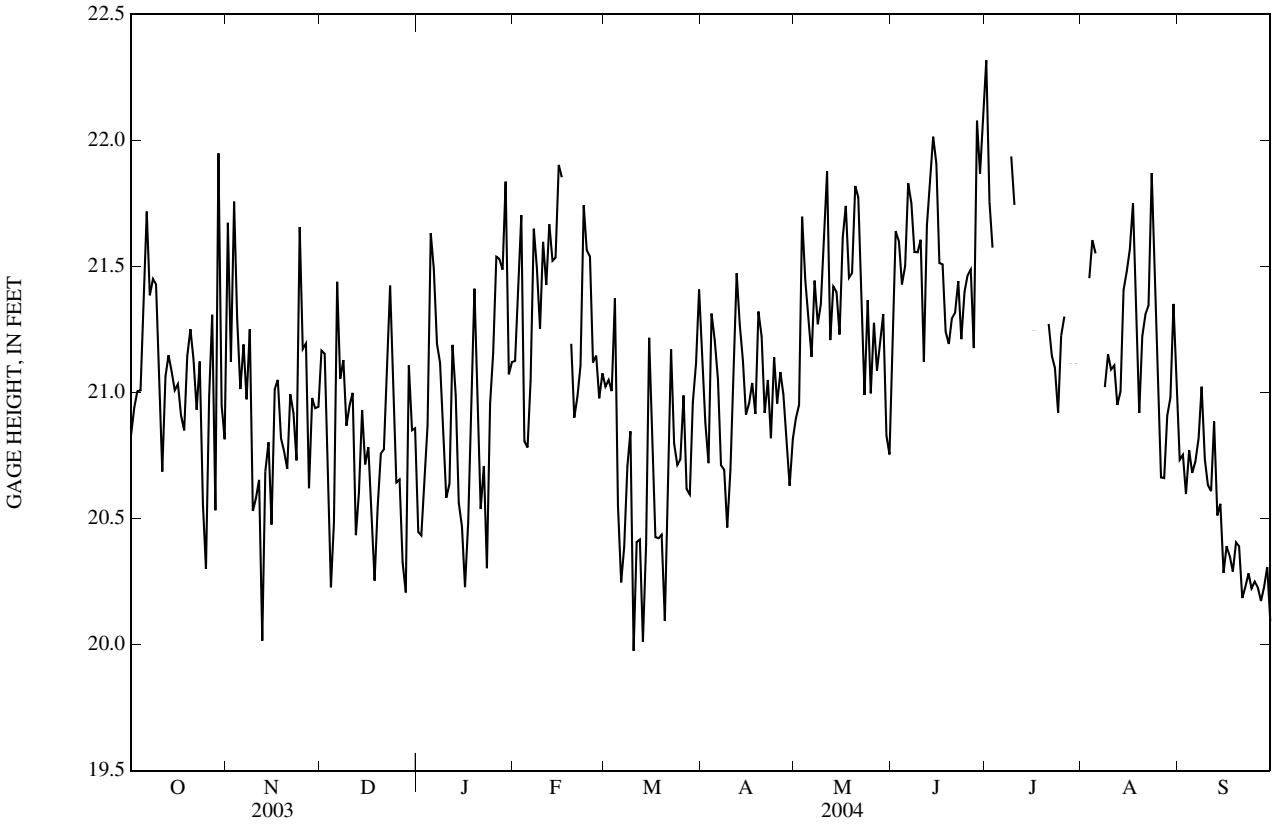
GAGE.--Water-stage recorder. Datum of gage is 1,400.00 ft above NGVD of 1929.

REMARKS.--Records good. Stage regulated by Big Bend Dam approximately 75 mi downstream. Flows regulated by Oahe Dam 12.6 mi upstream. Gage heights prior to October 1988 in files of U.S. Army Corps of Engineers. U.S. Army Corps of Engineers satellite data-collection platform at station.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.83	21.67	21.17	20.45	21.12	21.02	21.18	20.90	21.14	22.32	---	20.73
2	20.94	21.12	21.15	20.43	21.46	21.05	20.88	20.95	21.64	21.76	---	20.75
3	21.00	21.76	20.75	20.63	21.70	21.01	20.72	21.70	21.60	21.57	21.45	20.60
4	21.01	21.29	20.23	20.87	20.81	21.37	21.31	21.44	21.43	---	21.60	20.77
5	21.28	21.01	20.49	21.63	20.78	20.55	21.21	21.30	21.50	---	21.55	20.68
6	21.72	21.19	21.44	21.49	21.05	20.25	21.05	21.14	21.83	---	---	20.73
7	21.39	20.97	21.05	21.19	21.65	20.39	20.71	21.44	21.75	---	---	20.82
8	21.45	21.25	21.13	21.12	21.50	20.71	20.69	21.27	21.56	---	21.02	21.02
9	21.43	20.53	20.87	20.84	21.25	20.85	20.46	21.35	21.56	21.94	21.15	20.74
10	21.13	20.58	20.95	20.58	21.60	19.98	20.69	21.58	21.61	21.74	21.09	20.63
11	20.69	20.65	21.00	20.64	21.43	20.41	21.12	21.88	21.12	---	21.11	20.61
12	21.06	20.02	20.43	21.19	21.67	20.42	21.47	21.21	21.66	---	20.95	20.88
13	21.15	20.69	20.60	20.99	21.52	20.01	21.27	21.42	21.85	---	21.00	20.51
14	21.08	20.80	20.93	20.56	21.53	20.40	21.13	21.40	22.01	---	21.41	20.56
15	21.01	20.48	20.71	20.47	21.90	21.22	20.91	21.23	21.91	---	21.48	20.28
16	21.03	21.01	20.78	20.23	21.85	20.77	20.96	21.62	21.51	21.25	21.57	20.39
17	20.91	21.05	20.53	20.49	---	20.43	21.04	21.74	21.51	---	21.75	20.35
18	20.85	20.82	20.25	21.03	---	20.42	20.92	21.46	21.24	---	21.27	20.29
19	21.14	20.77	20.54	21.41	21.19	20.44	21.32	21.47	21.19	---	20.92	20.41
20	21.25	20.70	20.76	21.00	20.90	20.09	21.22	21.82	21.29	---	21.22	20.39
21	21.13	20.99	20.77	20.54	20.99	20.72	20.92	21.77	21.32	21.27	21.31	20.18
22	20.93	20.92	21.09	20.71	21.11	21.17	21.05	21.29	21.44	21.15	21.34	20.23
23	21.12	20.73	21.42	20.30	21.74	20.80	20.82	20.99	21.21	21.10	21.87	20.28
24	20.56	21.66	20.94	20.96	21.56	20.71	21.14	21.37	21.40	20.92	21.46	20.22
25	20.30	21.17	20.64	21.15	21.54	20.73	20.96	21.00	21.46	21.22	21.08	20.25
26	20.99	21.19	20.65	21.54	21.12	20.99	21.08	21.28	21.49	21.30	20.66	20.23
27	21.31	20.62	20.33	21.53	21.15	20.62	20.99	21.09	21.18	---	20.66	20.17
28	20.53	20.98	20.21	21.49	20.98	20.60	20.83	21.20	22.08	21.12	20.91	20.23
29	21.95	20.94	21.11	21.84	21.08	20.96	20.63	21.31	21.87	---	20.98	20.31
30	20.95	20.94	20.85	21.07	---	21.12	20.82	20.83	22.13	21.11	21.35	20.09
31	20.81	---	20.86	21.12	---	21.41	---	20.75	---	---	21.04	---
MEAN	21.06	20.95	20.79	20.95	---	20.70	20.98	21.33	21.55	---	---	20.48
MAX	21.95	21.76	21.44	21.84	---	21.41	21.47	21.88	22.13	---	---	21.02
MIN	20.30	20.02	20.21	20.23	---	19.98	20.46	20.75	21.12	---	---	20.09

06441595 MISSOURI RIVER AT FARM ISLAND, NEAR PIERRE, SD—Continued



06442700 LAKE SHARPE NEAR FORT THOMPSON, SD

LOCATION.--Lat 44°02'18", long 99°26'45", in SE$^1/_4$ sec.27, T.107 N., R.72 W., Lyman County, Hydrologic Unit 10140101, at left approach wall of powerhouse at Big Bend Dam on Missouri River, 2.5 mi south of Fort Thompson, and at mile 987.4.

DRAINAGE AREA.--249,300 mi^2, approximately.

PERIOD OF RECORD.--July 1963 to current year (monthend contents only).

GAGE.--Water-stage recorder. Elevations listed to NGVD of 1929.

REMARKS.--Reservoir is formed by earthfill dam; closure made July 1963; intentional storage began November 1963. Maximum capacity, 1,874,000 acre-ft below elevation, 1,423.0 ft (top of spillway gates). Normal maximum, 1,697,000 acre-ft below elevation 1,422.0 ft. Inactive storage, 1,424,000 acre-ft below elevation 1,415.0 ft. Figures given herein represent elevations at powerhouse and total contents adjusted for wind effect.

The spillway consists of a concrete chute with flat crest at elevation 1,385.0 ft surmounted by 8 taintor gates, each 40 by 38 ft; design capacity, 390,000 ft^3/s. Normal releases are through 8 power units (completed in July 1966), with a generating capacity of 58,500 kilowatts each. Maximum release through powerplant about 100,000 ft^3/s. 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, 1,829,000 acre-ft, Apr. 22, 1971, affected by wind; maximum elevation, 1,422.1 ft, June 4, 1991; minimum since initial filling, 1,417,000 acre-ft, Oct. 24, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,756,000 acre-ft, Oct. 5; minimum contents, 1,657,000 acre-ft, May 21.

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

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	1,420.15	1,693,000	--
Oct. 31	1,420.23	1,703,000	+10,000
Nov. 30	1,421.01	1,741,000	+38,000
Dec. 31	1,420.25	1,705,000	-36,000
CAL YR 2003	--	--	-17,000
Jan. 31	1,420.61	1,718,000	+13,000
Feb. 29	1,421.11	1,748,000	+30,000
Mar. 31	1,420.42	1,708,000	-40,000
Apr. 30	1,420.04	1,683,000	-25,000
May 31	1,420.81	1,727,000	+44,000
June 30	1,419.68	1,668,000	-59,000
July 31	1,420.50	1,710,000	+42,000
Aug. 31	1,420.30	1,699,000	-11,000
Sept. 30	1,420.14	1,689,000	-10,000
WTR YR 2004	--	--	-4,000

NOTE.--Lake frozen over Dec. 23 to Mar. 16.

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06442996 LAKE FRANCIS CASE (AMERICAN CREEK BAY) AT CHAMBERLAIN, SD

LOCATION.--Lat 43°48'58", long 099°19'37", in NW¼ NE¼ NW¼ sec.15, T.104 N., R.71 W., Brule County, Hydrologic Unit 10140101, on right bank of American Creek Bay and left bank of Lake Francis Case 10 ft downstream of Highway 50 bridge over American Creek Bay, 0.5 mi upstream from intersection of I-90 and State Highway 50 Business Loop, 1.6 mi upstream from Lewis and Clark Memorial Bridge, and at mile 967.5.

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

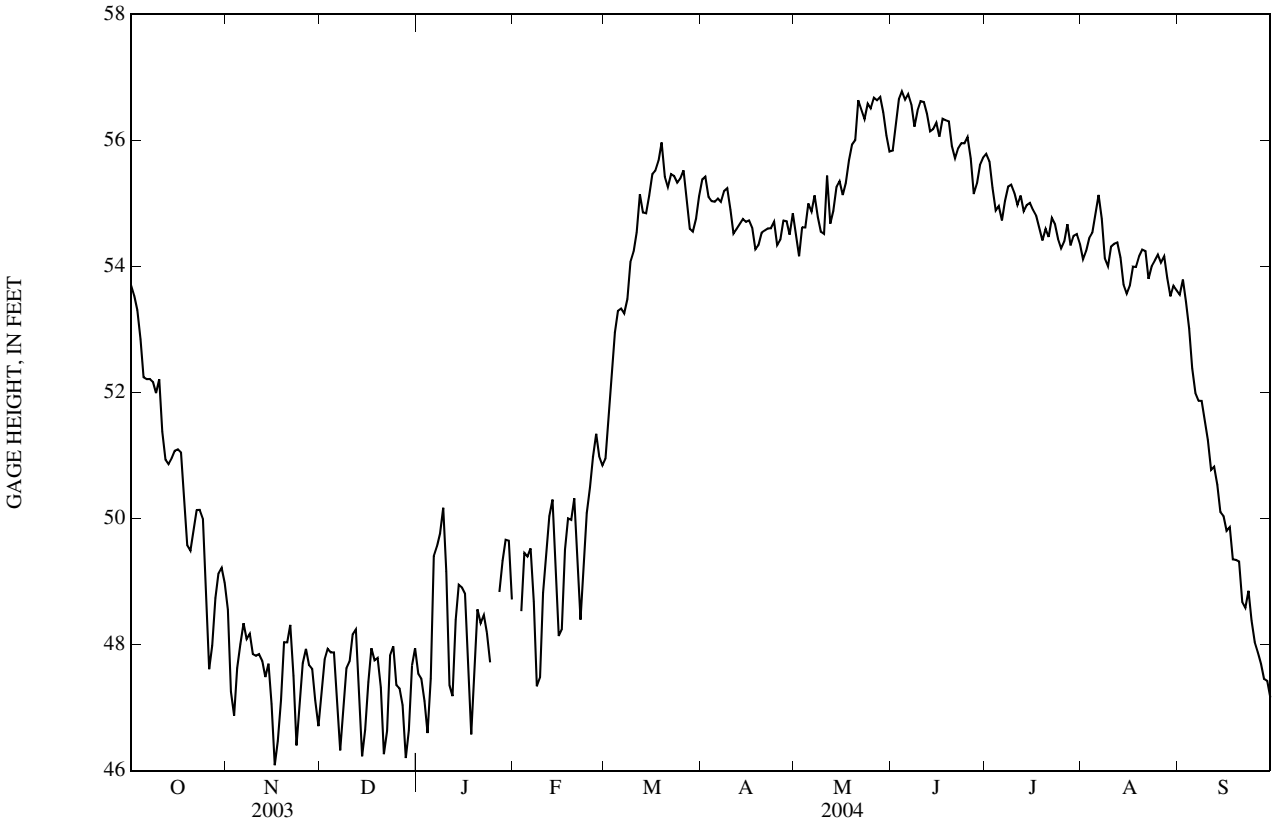
GAGE.--Water-stage recorder. Datum of gage is 1,300.00 ft above NGVD of 1929. Prior to Oct. 1, 1993, at datum 0.24 ft higher.

REMARKS.--Records fair. Stage regulated by Ft. Randall Reservoir. Gage heights prior to October 1988 in files of U.S. Army Corps of Engineers.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53.70	48.55	47.21	47.54	---	50.95	55.38	54.51	55.84	55.79	54.11	53.55
2	53.53	47.25	47.76	47.46	---	51.62	55.42	54.16	56.26	55.67	54.24	53.79
3	53.31	46.87	47.93	47.10	48.53	52.28	55.10	54.62	56.65	55.25	54.45	53.44
4	52.85	47.62	47.88	46.60	49.45	52.95	55.04	54.62	56.78	54.89	54.54	53.01
5	52.24	48.01	47.88	47.46	49.40	53.29	55.03	55.00	56.65	54.96	54.84	52.38
6	52.21	48.34	47.13	49.40	49.53	53.33	55.08	54.87	56.74	54.73	55.13	51.99
7	52.21	48.09	46.32	49.56	48.68	53.25	55.02	55.13	56.57	55.04	54.75	51.87
8	52.17	48.17	47.02	49.76	47.34	53.48	55.20	54.79	56.22	55.27	54.13	51.87
9	51.99	47.85	47.62	50.17	47.48	54.07	55.24	54.55	56.48	55.30	54.01	51.53
10	52.21	47.82	47.74	49.16	48.82	54.23	54.90	54.52	56.62	55.17	54.31	51.24
11	51.38	47.85	48.16	47.36	49.48	54.54	54.52	55.44	56.61	54.98	54.36	50.77
12	50.93	47.74	48.24	47.18	50.04	55.14	54.60	54.68	56.43	55.12	54.38	50.82
13	50.87	47.48	47.32	48.40	50.30	54.86	54.67	54.88	56.14	54.88	54.14	50.53
14	50.96	47.70	46.23	48.95	49.41	54.85	54.75	55.26	56.18	54.98	53.71	50.11
15	51.08	47.06	46.65	48.91	48.14	55.12	54.71	55.35	56.28	55.01	53.57	50.04
16	51.10	46.09	47.41	48.81	48.24	55.46	54.73	55.13	56.06	54.89	53.69	49.81
17	51.05	46.47	47.94	47.73	49.51	55.52	54.62	55.32	56.34	54.80	54.00	49.86
18	50.25	47.12	47.75	46.58	50.00	55.68	54.27	55.69	56.32	54.61	53.99	49.35
19	49.58	48.04	47.79	47.69	49.98	55.97	54.34	55.93	56.30	54.41	54.16	49.34
20	49.49	48.04	47.32	48.56	50.32	55.42	54.54	56.01	55.91	54.60	54.26	49.32
21	49.81	48.31	46.26	48.34	49.34	55.26	54.57	56.64	55.71	54.47	54.24	48.67
22	50.13	47.51	46.63	48.47	48.40	55.46	54.60	56.48	55.88	54.77	53.80	48.58
23	50.14	46.40	47.83	48.19	49.18	55.44	54.61	56.34	55.96	54.68	54.00	48.85
24	50.00	47.02	47.97	47.72	50.08	55.33	54.71	56.58	55.95	54.43	54.09	48.38
25	48.91	47.71	47.36	---	50.49	55.39	54.34	56.51	56.05	54.29	54.19	48.04
26	47.61	47.93	47.30	---	50.98	55.53	54.43	56.68	55.71	54.40	54.06	47.88
27	47.98	47.68	47.04	48.83	51.34	55.10	54.73	56.64	55.15	54.67	54.16	47.70
28	48.74	47.61	46.20	49.33	50.99	54.60	54.72	56.69	55.32	54.33	53.82	47.46
29	49.13	47.11	46.64	49.66	50.84	54.55	54.50	56.45	55.61	54.49	53.52	47.42
30	49.22	46.71	47.67	49.65	---	54.76	54.84	56.08	55.73	54.51	53.69	47.16
31	48.98	---	47.94	48.72	---	55.11	---	55.82	---	54.36	53.62	---
MEAN	50.77	47.54	47.36	---	---	54.47	54.77	55.53	56.15	54.83	54.13	50.16
MAX	53.70	48.55	48.24	---	---	55.97	55.42	56.69	56.78	55.79	55.13	53.79
MIN	47.61	46.09	46.20	---	---	50.95	54.27	54.16	55.15	54.29	53.52	47.16

06442996 LAKE FRANCIS CASE (AMERICAN CREEK BAY) AT CHAMBERLAIN, SD—Continued



06445685 WHITE RIVER NEAR NEBRASKA-SOUTH DAKOTA STATE LINE

LOCATION.--Lat 43°00'47", long 102°50'07", in NE¼ SW¼ NE¼ sec.15, T.35 N., R.47 W., Shannon County, Hydrologic Unit 10140201, on left bank 1.0 mi north of Nebraska-South Dakota State line, and 4.3 mi south of Slim Butte.

DRAINAGE AREA.--1,440 mi^2, approximately.

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

GAGE.--Water-stage recorder. Elevation of gage is 3,030 ft above NGVD of 1929, from topographic map.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	0.94	2.9	4.6	e6.8	e45	38	28	3.2	11	6.0	0.05
2	12	1.1	3.3	6.3	e6.8	e44	39	26	3.7	15	4.8	0.03
3	14	e1.0	3.4	e6.1	e6.8	e43	39	27	5.9	34	3.5	0.01
4	12	e1.0	3.4	e6.0	e6.8	33	38	30	5.2	20	2.1	0.00
5	15	e1.1	e3.2	e5.9	e6.8	30	39	28	3.5	9.9	1.9	81
6	16	e1.2	e3.1	e5.7	e6.8	29	28	20	4.7	9.6	2.4	175
7	17	e1.3	3.0	e5.6	e6.8	20	15	11	5.6	10	2.4	63
8	18	e1.4	3.2	e6.0	e6.8	33	13	7.1	5.2	8.1	3.5	66
9	16	1.5	e3.0	e8.0	e6.8	e60	13	5.8	4.0	5.2	5.1	74
10	15	1.5	e2.6	e9.0	e6.8	e95	13	4.2	3.5	3.8	6.8	32
11	15	1.9	e2.5	e9.5	e6.7	e110	12	4.3	3.3	4.0	7.6	20
12	13	2.7	e2.2	e8.9	e6.6	e100	12	3.5	3.1	5.1	5.2	20
13	17	6.3	2.0	e8.5	e6.5	e98	12	3.3	3.0	3.7	4.0	17
14	16	5.2	1.8	e8.5	e6.4	90	16	4.1	1.7	13	3.0	14
15	18	5.2	2.1	e8.5	e6.3	76	24	6.9	2.0	16	2.7	13
16	22	3.3	2.0	e9.0	e13	65	25	4.9	2.4	12	1.9	17
17	21	13	2.4	e9.5	e18	61	24	9.2	2.5	10	1.4	26
18	13	11	3.1	e9.9	e20	57	23	13	2.1	6.8	1.2	24
19	10	5.0	4.0	e9.8	e26	52	23	15	6.8	6.0	1.1	25
20	11	3.5	3.7	e9.7	e50	50	21	13	6.0	3.7	1.3	24
21	10	2.8	5.4	e9.5	e40	49	22	11	5.8	3.3	1.6	19
22	5.2	2.2	4.0	e10	e38	47	22	12	10	1.5	1.7	17
23	2.5	1.8	6.9	e11	e47	44	23	13	11	1.8	1.4	17
24	e2.2	1.6	8.2	e10	e42	46	23	13	11	3.9	1.3	27
25	e2.1	e1.5	8.3	e9.0	e45	45	24	12	10	3.7	0.65	63
26	e2.0	1.3	6.5	e8.5	e50	45	26	9.4	13	3.1	0.34	57
27	e2.0	1.5	7.9	e8.0	e53	43	33	5.6	11	3.2	0.22	49
28	0.87	1.6	e7.7	e7.0	e48	41	33	4.3	7.2	3.7	0.16	48
29	0.64	2.0	e7.5	e6.8	e50	39	30	3.3	5.2	2.6	0.11	49
30	1.1	2.4	e7.5	e6.8	---	40	27	3.3	6.5	3.3	0.09	48
31	0.97	---	4.4	e6.8	---	39	---	3.2	---	4.1	0.08	---
TOTAL	332.58	87.84	131.2	248.4	640.5	1,669	730	354.4	168.1	241.1	75.55	1,085.09
MEAN	10.7	2.93	4.23	8.01	22.1	53.8	24.3	11.4	5.60	7.78	2.44	36.2
MAX	22	13	8.3	11	53	110	39	30	13	34	7.6	175
MIN	0.64	0.94	1.8	4.6	6.3	20	12	3.2	1.7	1.5	0.08	0.00
AC-FT	660	174	260	493	1,270	3,310	1,450	703	333	478	150	2,150

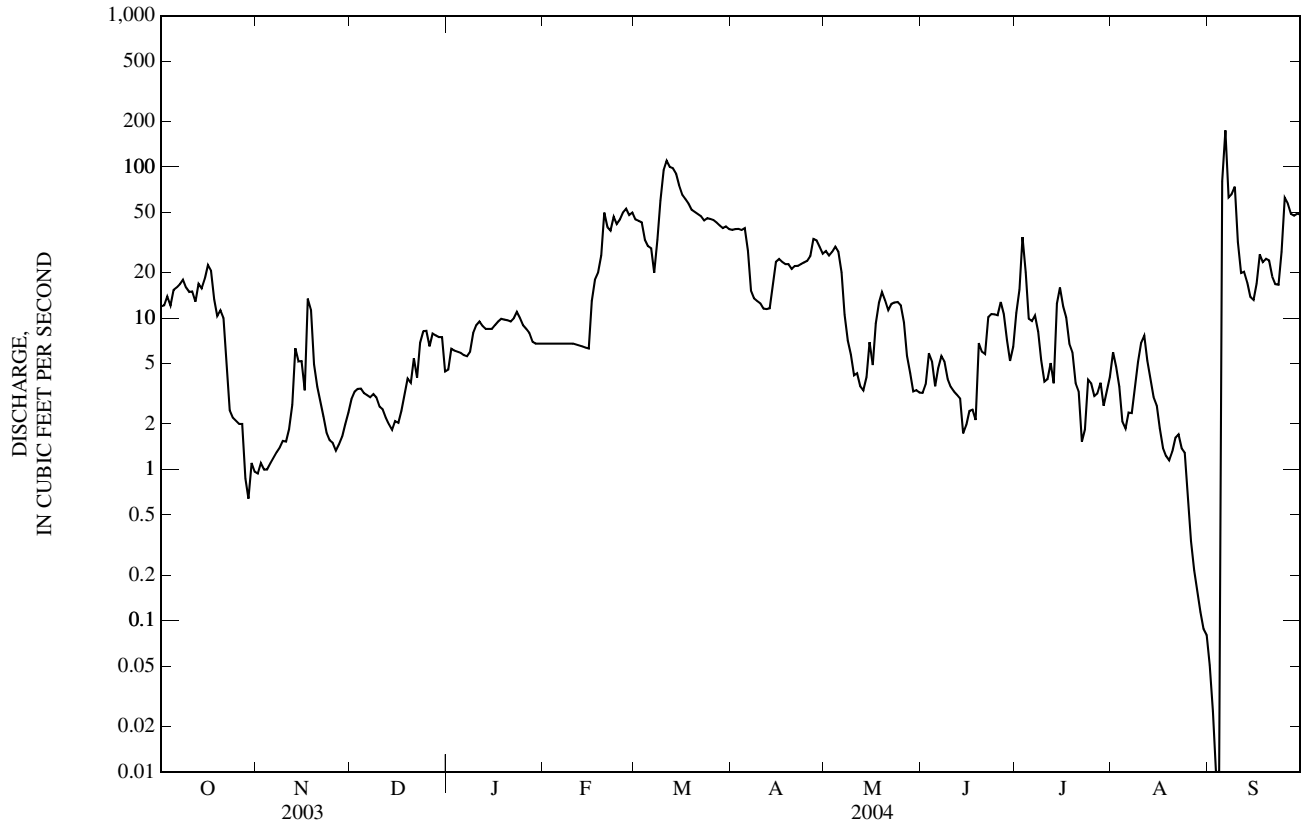
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004, BY WATER YEAR (WY)

MEAN	10.8	13.7	16.4	25.3	58.7	80.7	73.3	104	90.2	28.2	12.1	13.0
MAX	29.4	45.1	54.9	96.1	186	297	303	514	360	78.3	42.9	36.2
(WY)	(1994)	(1994)	(1994)	(1998)	(1997)	(1993)	(2000)	(1991)	(1997)	(2001)	(1997)	(2004)
MIN	2.07	2.93	3.35	1.53	1.82	5.02	18.3	11.4	5.60	0.56	0.08	2.08
(WY)	(1991)	(2004)	(1991)	(1991)	(1991)	(1991)	(2003)	(2004)	(2004)	(2002)	(2002)	(1994)

06445685 WHITE RIVER NEAR NEBRASKA-SOUTH DAKOTA STATE LINE—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1988 - 2004	
ANNUAL TOTAL	6,821.28		5,763.76			
ANNUAL MEAN	18.7		15.7		[a]43.7	
HIGHEST ANNUAL MEAN					92.9	1997
LOWEST ANNUAL MEAN					14.2	1989
HIGHEST DAILY MEAN	150	May 11	175	Sep 6	1,910	May 12, 1991
LOWEST DAILY MEAN	0.00	Sep 1	0.00	Sep 4	[b]0.00	Jul 13, 1989
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 31	0.05	Aug 29	0.00	Aug 3, 1989
MAXIMUM PEAK FLOW			370	Sep 5	3,820	May 12, 1991
MAXIMUM PEAK STAGE			7.42	Sep 5	19.07	May 12, 1991
ANNUAL RUNOFF (AC-FT)	13,530		11,430		31,650	
10 PERCENT EXCEEDS	46		44		88	
50 PERCENT EXCEEDS	13		7.6		17	
90 PERCENT EXCEEDS	0.68		1.6		3.1	

a Median of annual mean discharges, 45 ft^3/s.
b No flow at times in most years.
e Estimated.



06446000 WHITE RIVER NEAR OGLALA, SD

LOCATION.--Lat 43°15'17", long 102°49'29", in SW¼ NE¼ sec.24, T.38 N., R.47 W., Shannon County, Hydrologic Unit 10140201, on right bank at downstream side of bridge, 3.0 mi downstream from Blacktail Creek, and 7.0 mi northwest of Oglala.

DRAINAGE AREA.--2,200 mi^2, approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 2,853.54 ft above NGVD of 1929. Prior to May 6, 1947, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Some diversions for irrigation upstream from station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	e4.0	4.7	e6.6	e5.0	e41	44	35	5.8	9.1	4.6	0.73
2	9.5	e4.1	4.9	e6.6	e5.0	e41	43	34	4.5	11	6.2	0.68
3	10	e4.0	5.2	e6.2	e5.1	e40	42	34	5.3	8.0	6.7	1.0
4	11	e4.0	5.6	e5.9	e4.9	e41	42	33	6.0	11	7.9	0.78
5	9.5	e3.9	5.5	e5.5	e4.9	e37	42	33	8.8	25	8.1	211
6	12	e3.9	5.3	e5.0	e5.1	e35	41	35	12	20	7.3	240
7	12	e3.8	5.7	e5.0	e5.3	e25	41	34	11	13	8.5	235
8	15	e3.8	e6.0	e5.0	e5.4	e25	36	30	9.7	9.7	7.7	75
9	16	e3.9	e6.0	e5.2	e5.5	e25	30	22	8.3	9.5	6.9	35
10	16	e5.0	e6.0	e5.3	e5.4	e23	29	17	15	11	7.5	64
11	15	e6.1	e6.0	e5.4	e5.6	e81	27	15	21	9.6	6.7	30
12	14	7.9	e6.0	e5.6	e6.1	e88	27	13	17	7.3	6.4	13
13	18	6.9	e6.0	e5.8	e6.1	e67	25	11	12	4.7	6.1	9.8
14	16	6.6	5.9	e6.0	e6.6	e71	24	11	6.8	3.0	4.3	9.7
15	12	6.6	5.7	e6.2	e6.9	e110	24	11	4.9	20	4.0	8.2
16	13	7.5	5.2	e6.4	e7.7	80	28	9.4	4.5	11	2.6	6.7
17	13	7.6	5.1	e6.6	e12	76	33	9.4	5.4	12	2.1	6.7
18	12	6.8	e5.0	e6.9	e17	71	33	10	5.4	9.8	1.5	8.3
19	17	6.5	5.2	e7.2	e17	65	33	8.6	5.0	7.9	0.89	12
20	16	9.9	5.4	e7.7	e18	60	34	12	4.4	6.4	0.90	11
21	13	8.8	5.9	e8.1	e21	56	34	14	6.3	4.7	0.77	12
22	13	7.5	6.6	e8.8	e30	55	33	14	12	4.5	0.61	12
23	11	5.7	6.6	e9.9	e38	54	34	12	12	4.9	3.5	11
24	13	e5.5	6.5	e8.0	e42	53	34	13	8.1	4.7	4.8	11
25	12	e5.0	7.0	e7.5	e29	51	34	14	13	4.2	4.5	13
26	9.5	e4.8	7.4	e6.5	e44	51	34	13	13	4.6	4.4	26
27	6.9	4.6	7.8	e6.0	e46	49	33	14	12	3.7	4.3	42
28	4.4	4.3	e7.0	e5.0	e43	48	34	12	14	3.0	3.9	33
29	e4.4	4.2	e6.5	e4.5	e46	48	37	10	15	4.5	3.9	29
30	e4.4	4.5	e6.0	e4.5	---	46	36	7.8	11	10	3.2	28
31	e4.0	---	e7.8	e4.8	---	44	---	7.2	---	6.5	2.5	---
TOTAL	361.9	167.7	185.5	193.7	493.6	1,657	1,021	548.4	289.2	274.3	143.27	1,195.59
MEAN	11.7	5.59	5.98	6.25	17.0	53.5	34.0	17.7	9.64	8.85	4.62	39.9
MAX	18	9.9	7.8	9.9	46	110	44	35	21	25	8.5	240
MIN	4.0	3.8	4.7	4.5	4.9	23	24	7.2	4.4	3.0	0.61	0.68
AC-FT	718	333	368	384	979	3,290	2,030	1,090	574	544	284	2,370

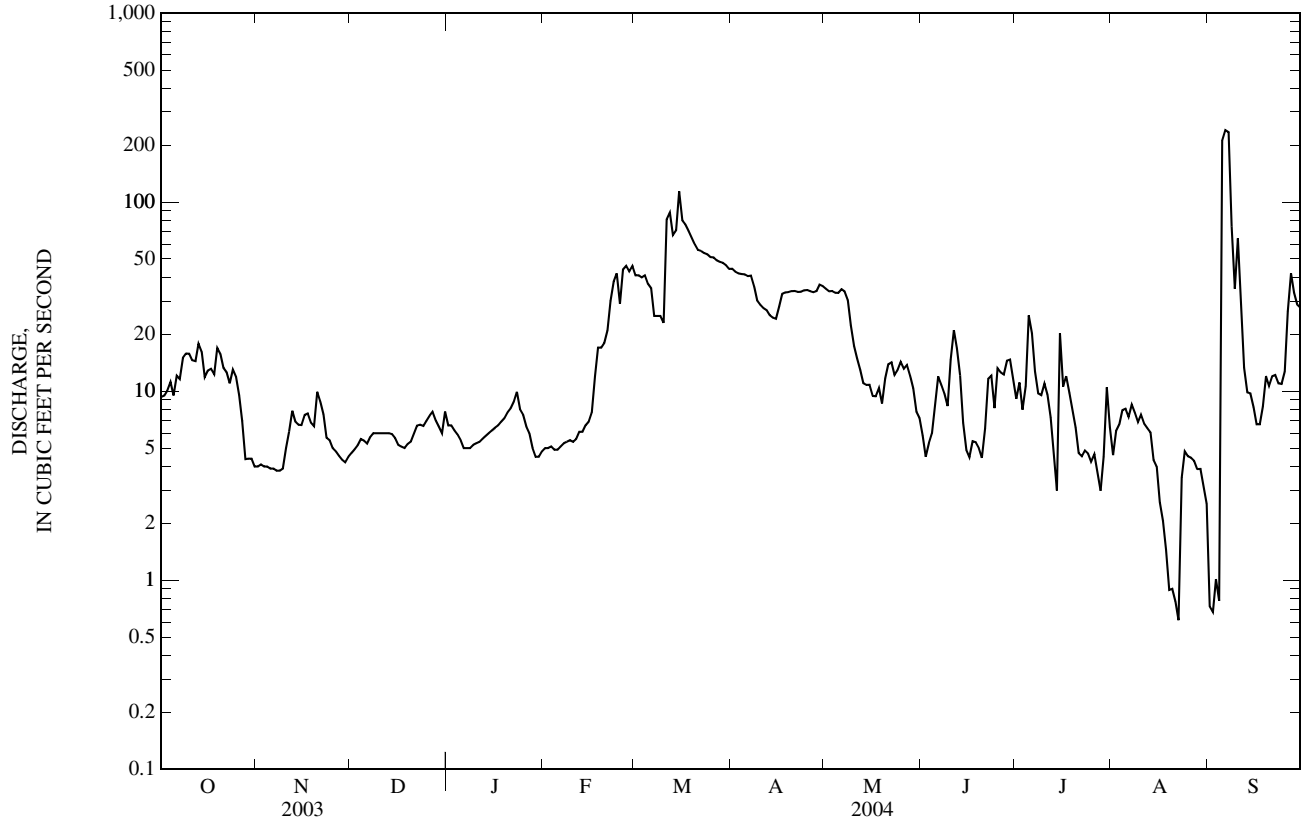
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2004, BY WATER YEAR (WY)

MEAN	15.4	18.0	16.1	17.0	43.7	111	82.5	110	149	53.5	25.2	20.6
MAX	63.1	55.8	55.7	97.0	281	807	465	583	1,037	314	130	181
(WY)	(1968)	(1987)	(1947)	(1997)	(1997)	(1949)	(2000)	(1957)	(1967)	(1969)	(1979)	(1955)
MIN	0.00	0.76	1.83	0.64	1.21	13.5	12.3	13.4	4.88	0.00	0.00	0.00
(WY)	(1965)	(1977)	(1965)	(1991)	(1991)	(1991)	(1962)	(1985)	(1981)	(1985)	(2003)	(1964)

06446000 WHITE RIVER NEAR OGLALA, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1944 - 2004	
ANNUAL TOTAL	8,969.26		6,531.16			
ANNUAL MEAN	24.6		17.8		[a]55.1	
HIGHEST ANNUAL MEAN					152	1997
LOWEST ANNUAL MEAN					13.0	1985
HIGHEST DAILY MEAN	149	May 13	240	Sep 6	3,870	Jun 23, 1947
LOWEST DAILY MEAN	0.00	Jul 26	0.61	Aug 22	[b]0.00	Sep 25, 1952
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 26	1.3	Aug 16	0.00	Sep 25, 1952
MAXIMUM PEAK FLOW			456	Sep 5	[c]5,200	Jun 21, 1947
MAXIMUM PEAK STAGE			10.99	Sep 5	23.61	Jun 16, 1967
ANNUAL RUNOFF (AC-FT)	17,790		12,950		39,910	
10 PERCENT EXCEEDS	57		42		100	
50 PERCENT EXCEEDS	12		8.8		22	
90 PERCENT EXCEEDS	0.00		4.4		4.0	

a Median of annual mean discharges, 49 ft^3/s.
b No flow at times in most years.
c Rating curve extended above 2,800 ft^3/s on basis of velocity-area studies, gage height, 23.50 ft.
e Estimated.



06446500 WHITE RIVER NEAR INTERIOR, SD

LOCATION.--Lat 43°41'38", long 101°55'56", in SE¼ SW¼ sec.14, T.43 N., R.18 E., Jackson County, Hydrologic Unit 10140202, on left bank downstream side of bridge on U.S. Highway 44, 9.5 mi downstream from Potato Creek, 3.9 mi southeast of Interior, and 7.5 mi downstream from Pennington-Jackson County lines.

DRAINAGE AREA.--4,103 mi^2.

PERIOD OF RECORD.--June 1904 to November 1906, August 1911 to September 1918, August 1928 to June 1932. Monthly discharges only for some periods, published in WSP 1309. September 1939 to September 1942 and October 2002 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,300 ft above NGVD of 1929, from topographic map. Nonrecording gage at different site and datum, June 24, 1904, to Nov. 6, 1906, Aug. 24, 1911, to Sept. 30, 1918, Aug. 9, 1928, to June 30, 1932, and Sept. 24, 1939, to Sept. 30, 1942.

REMARKS.--Records good except those for May 31 to June 10 and Sept. 10-30, which are fair, and those for estimated daily discharges, which are poor. Satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	9.3	e5.0	e20	e6.8	e44	41	35	26	168	191	3.3
2	8.7	10	e6.0	e19	e6.2	e40	48	34	23	274	95	2.5
3	8.6	9.7	e7.0	e17	e6.0	e50	46	34	27	226	30	1.8
4	8.1	e9.4	e8.5	e15	e6.0	e65	46	32	28	529	14	1.8
5	7.7	e9.0	e10	e13	e5.8	e100	47	28	45	516	9.2	2,860
6	7.3	e9.0	e13	e11	e6.0	e170	50	26	131	336	16	6,820
7	6.9	e9.0	e17	e10	e6.6	e200	44	29	149	169	385	1,710
8	6.4	e9.5	e20	e10	e7.0	e280	39	30	61	53	214	379
9	5.9	e12	e18	e11	e7.2	e500	37	26	68	32	99	318
10	5.5	e19	e17	e12	e7.5	e460	35	22	63	23	25	219
11	49	e30	e15	e13	e7.8	424	48	22	e1,400	16	15	106
12	108	e72	e13	e14	e8.0	236	40	21	e528	12	8.4	77
13	59	71	e12	e15	e8.5	172	31	20	e120	7.6	6.0	109
14	25	39	e10	e16	e9.0	175	36	19	e47	4.9	4.2	73
15	15	35	e10	e17	e9.5	190	31	18	e27	7.3	3.4	51
16	13	27	e11	e18	e10	153	24	17	25	4.0	3.7	30
17	12	22	e12	e20	e13	174	23	17	23	1.8	3.0	30
18	12	19	e14	e18	e15	162	22	17	21	1.3	2.4	30
19	13	18	e16	e17	e20	154	24	17	16	1.00	1.7	23
20	11	15	e18	e17	e60	130	28	17	16	0.84	1.5	21
21	8.6	13	e20	e17	e200	107	21	17	16	7.4	0.88	18
22	6.8	10	e22	e18	e300	96	127	16	12	88	0.58	18
23	6.6	e7.5	e25	e18	e270	90	176	19	32	62	0.88	115
24	6.8	e5.0	e28	e16	e240	108	105	133	24	32	262	223
25	8.6	e4.5	e30	e14	e200	77	66	e236	18	21	83	110
26	9.4	e4.0	e30	e12	e190	74	53	e115	16	12	24	49
27	9.3	e3.8	e29	e10	e180	72	38	e63	14	7.9	17	31
28	8.7	e3.7	e27	e9.0	e150	74	31	e50	13	4.1	12	26
29	8.2	e4.0	e25	e8.0	e100	66	30	e59	12	5.5	8.2	22
30	8.0	e4.5	e22	e7.5	---	52	34	e36	8.9	6.9	5.6	24
31	7.9	---	e20	e7.0	---	58	---	31	---	150	4.2	---
TOTAL	480.3	513.9	530.5	439.5	2,055.9	4,753	1,421	1,256	3,009.9	2,779.54	1,545.84	13,501.4
MEAN	15.5	17.1	17.1	14.2	70.9	153	47.4	40.5	100	89.7	49.9	450
MAX	108	72	30	20	300	500	176	236	1,400	529	385	6,820
MIN	5.5	3.7	5.0	7.0	5.8	40	21	16	8.9	0.84	0.58	1.8
AC-FT	953	1,020	1,050	872	4,080	9,430	2,820	2,490	5,970	5,510	3,070	26,780

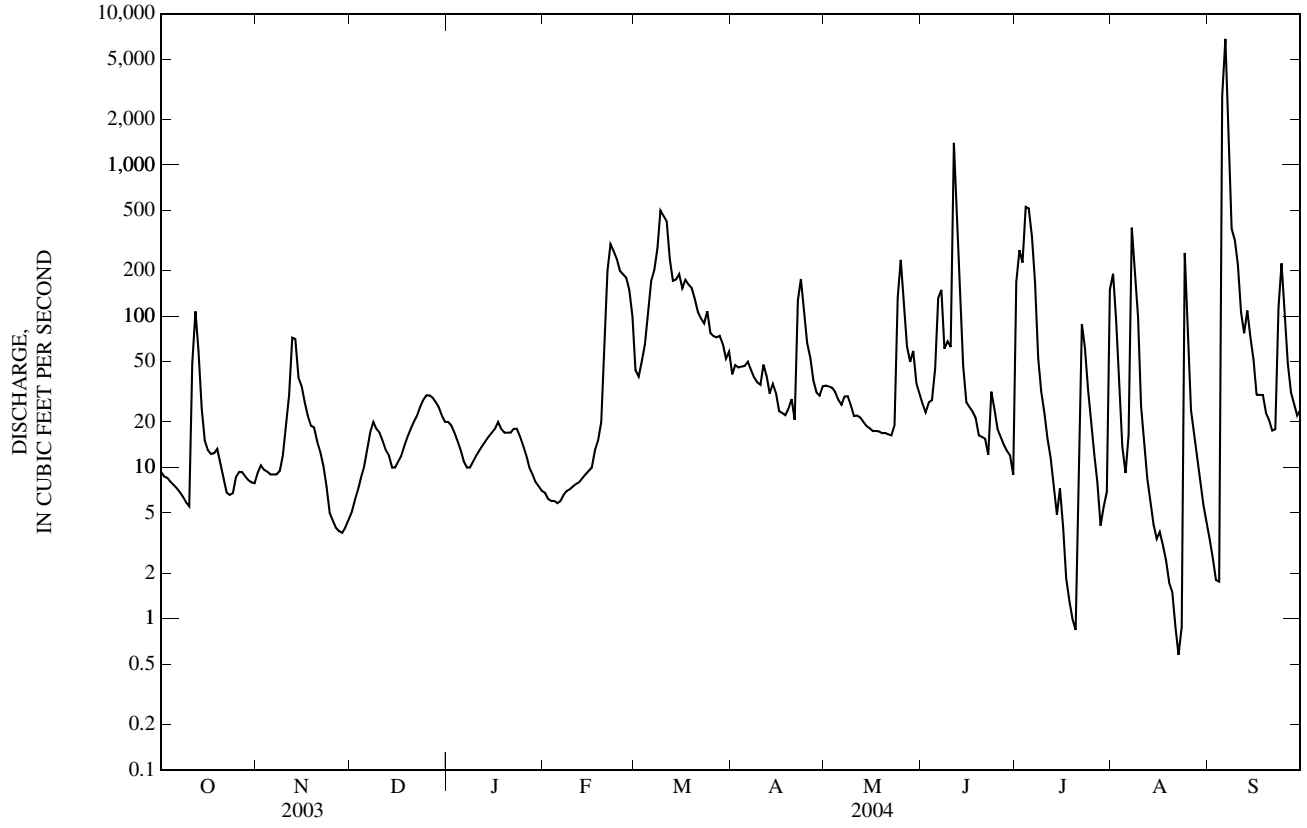
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1905-1906, 1913-1918, 1929-1931, 1940-1942, 2003-2004, BY WATER YEAR (WY)

MEAN	82.9	51.5	27.9	19.9	111	301	400	647	532	293	232	133
MAX	250	110	57.0	61.6	570	984	1,010	4,157	1,700	2,150	1,060	463
(WY)	(1916)	(1929)	(1913)	(2003)	(1916)	(1929)	(1915)	(1942)	(1915)	(1905)	(1915)	(1915)
MIN	12.6	1.18	2.29	0.71	6.7	20.0	47.4	40.5	67.0	43.6	18.9	13.3
(WY)	(2003)	(1941)	(1941)	(1941)	(1914)	(1913)	(2004)	(2004)	(1940)	(2003)	(2003)	(2003)

06446500 WHITE RIVER NEAR INTERIOR, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1905-1906, 1913-1918, 1929-1931, 1940-1942, 2003-2004	
ANNUAL TOTAL	41,061.30		32,286.78			
ANNUAL MEAN	112		88.2		236	
HIGHEST ANNUAL MEAN					575	1942
LOWEST ANNUAL MEAN					88.1	1931
HIGHEST DAILY MEAN	2,760	May 1	6,820	Sep 6	12,900	May 1, 1942
LOWEST DAILY MEAN	0.20	Sep 2	0.58	Aug 22	[a]0.00	Jul 27, 1931
ANNUAL SEVEN-DAY MINIMUM	0.64	Aug 28	1.6	Aug 17	0.00	Sep 5, 1931
MAXIMUM PEAK FLOW			11,200	Sep 6	[b]17,100	May 1, 1942
MAXIMUM PEAK STAGE			13.69	Sep 6	[c]12.40	May 1, 1942
ANNUAL RUNOFF (AC-FT)	81,450		64,040		171,000	
10 PERCENT EXCEEDS	230		173		[d]313	
50 PERCENT EXCEEDS	46		20		[d]35	
90 PERCENT EXCEEDS	3.8		6.0		[d]2.3	

a No flow at times in some years.
b From rating curve extended above 7,100 ft^3/s.
c Site and datum then in use.
d Reflects periods 1940-42, 2003 to current year.
e Estimated.



06446700 BEAR IN THE LODGE CREEK NEAR WANBLEE, SD

Location.--Lat 43°32'13", long 101°47'55" (revised), in NE¼ SW¼ SW¼ sec.12, T.41 N., R.38 W., Jackson County, Hydrologic Unit 10140202, on right bank at downstream side of bridge on State Highway 44, 0.9 mi south of Garner School, 8.2 mi southwest of Wanblee, and 25.3 mi upstream from mouth.

DRAINAGE AREA.--365 mi^2, approximately.

PERIOD OF RECORD.--June 1992 to May 1993 and May 1994 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,500 ft above NGVD of 1929, from topographic map. In 1951 and 1954-57, operated as nonrecording gage at same site and datum.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.5	7.7	e7.7	e6.0	e5.0	e11	14	9.3	13	58	2.8	1.7
2	e2.5	7.9	e7.5	e5.7	e5.0	e9.5	13	9.0	11	24	2.6	1.4
3	e2.4	e7.5	e7.6	e5.3	e5.0	e9.0	12	9.0	16	54	2.4	1.4
4	e2.5	e7.0	e7.8	e4.8	e5.0	e10	12	8.9	13	26	2.4	1.3
5	e2.7	e6.0	e7.3	e4.4	e4.9	e15	11	8.7	16	16	2.3	26
6	e2.9	e5.0	e7.1	e4.0	e4.8	e20	11	8.1	7.5	11	2.1	4.2
7	e3.0	e6.0	e6.3	e4.0	e4.7	e30	11	8.0	6.5	8.7	2.2	1.4
8	e3.2	e7.0	e5.9	e4.1	e4.7	e44	11	7.6	5.8	7.5	2.1	e2.0
9	e3.5	e7.5	e5.8	e4.2	e4.8	e60	10	7.0	5.4	7.2	2.1	e2.0
10	e5.0	e8.0	e5.8	e4.4	e4.8	e52	11	6.3	7.0	6.5	4.3	e2.1
11	e12	e8.4	e5.7	e4.6	e4.8	e47	11	6.1	9.0	6.1	4.4	e2.1
12	e9.7	e8.1	e5.6	e4.8	e4.9	e40	12	6.2	6.1	5.5	3.0	e2.2
13	e8.0	e8.2	e5.8	e5.0	e4.9	e35	11	6.2	5.9	5.2	2.5	e2.3
14	e8.5	e8.3	e6.0	e5.3	e4.9	e30	11	6.2	6.0	4.8	2.5	2.2
15	e9.0	e8.3	e6.4	e5.5	e4.9	e26	11	6.4	5.7	4.4	2.2	2.7
16	e8.0	7.6	e6.8	e5.8	e5.0	20	10	6.6	5.4	4.2	2.0	2.9
17	7.6	7.4	e7.0	e6.0	e5.5	19	10	6.8	5.4	4.0	1.9	2.9
18	7.4	7.3	e7.4	e5.5	e6.0	19	10	7.1	6.3	3.8	2.1	3.5
19	7.3	6.4	e8.0	e6.0	e7.0	18	10	7.2	6.6	3.6	1.8	4.3
20	7.0	6.2	e8.5	e5.4	e8.0	17	10	7.0	7.5	4.1	1.6	4.0
21	6.9	5.8	e9.0	e5.0	e9.0	16	9.9	6.5	7.7	4.0	1.4	1.9
22	6.8	e4.8	e9.1	e4.7	e10	15	10	6.5	7.7	3.7	1.3	3.5
23	7.0	e4.0	e8.8	e4.3	e12	14	11	9.1	7.5	4.4	1.6	19
24	7.2	e4.5	e8.4	e3.9	e13	14	12	16	8.1	15	1.5	6.0
25	6.7	e5.0	e8.2	e4.0	e14	14	13	11	7.5	13	1.7	4.8
26	6.7	e5.7	e8.0	e4.3	e15	14	12	12	6.9	5.8	2.3	4.8
27	7.0	e6.3	e7.6	e4.7	e14	15	12	8.9	6.6	4.7	2.6	4.7
28	7.3	e7.2	e7.3	e5.0	e14	15	11	8.5	6.2	4.1	2.0	4.1
29	7.3	e7.5	e7.0	e5.0	e12	15	9.9	7.7	6.3	3.5	2.0	3.1
30	7.5	e7.4	e6.5	e5.0	---	14	9.5	7.2	8.8	3.2	1.9	2.6
31	7.6	---	e6.0	e5.0	---	14	---	6.9	---	3.0	1.9	---
TOTAL	192.7	204.0	221.9	151.7	217.6	691.5	332.3	248.0	238.4	329.0	69.5	127.1
MEAN	6.22	6.80	7.16	4.89	7.50	22.3	11.1	8.00	7.95	10.6	2.24	4.24
MAX	12	8.4	9.1	6.0	15	60	14	16	16	58	4.4	26
MIN	2.4	4.0	5.6	3.9	4.7	9.0	9.5	6.1	5.4	3.0	1.3	1.3
AC-FT	382	405	440	301	432	1,370	659	492	473	653	138	252

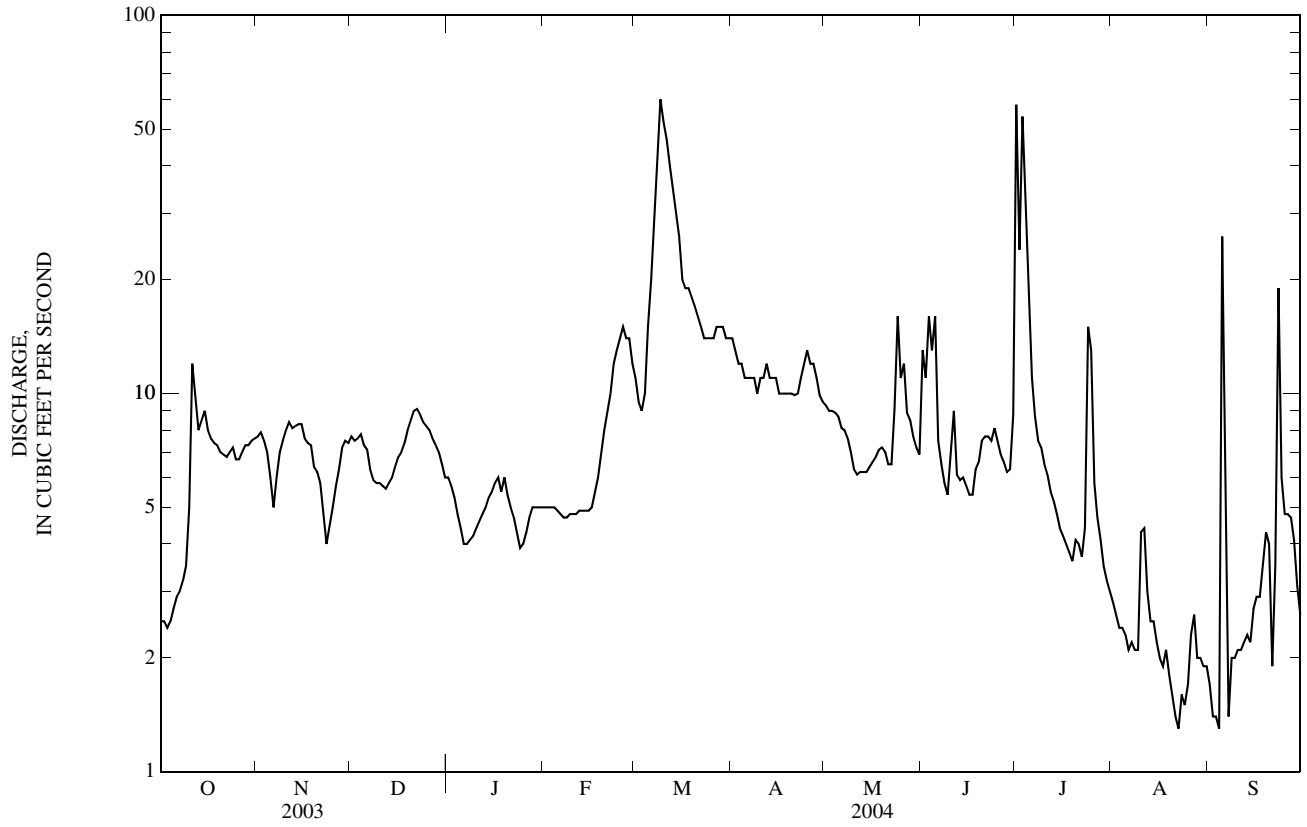
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2004, BY WATER YEAR (WY)

MEAN	11.7	14.1	12.5	13.7	35.3	38.1	31.8	33.7	53.1	30.5	10.0	8.12
MAX	21.1	30.4	20.5	29.8	156	98.9	59.2	74.6	306	153	27.7	13.5
(WY)	(1999)	(1999)	(1999)	(1997)	(1997)	(2001)	(1997)	(1997)	(1997)	(1997)	(1997)	(1999)
MIN	5.28	6.80	7.16	4.89	7.50	14.1	11.1	8.00	3.88	3.56	0.66	3.32
(WY)	(2003)	(2004)	(2004)	(2004)	(2004)	(1995)	(2004)	(2004)	(2003)	(2002)	(2003)	(2003)

06446700 BEAR IN THE LODGE CREEK NEAR WANBLEE, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1995 - 2004	
ANNUAL TOTAL	3,452.30		3,023.7			
ANNUAL MEAN	9.46		8.26		24.3	
HIGHEST ANNUAL MEAN					75.2	1997
LOWEST ANNUAL MEAN					8.26	2004
HIGHEST DAILY MEAN	70	Mar 14	60	Mar 9	900	Jun 3, 1997
LOWEST DAILY MEAN	0.19	Aug 22	1.3	Aug 22	0.19	Aug 22, 2003
ANNUAL SEVEN-DAY MINIMUM	0.48	Aug 4	1.6	Aug 19	0.48	Aug 4, 2003
MAXIMUM PEAK FLOW			329	Jul 3	1,100	Jun 3, 1997
MAXIMUM PEAK STAGE			5.00	Jul 3	[a]9.11	Jun 3, 1997
ANNUAL RUNOFF (AC-FT)	6,850		6,000		17,590	
10 PERCENT EXCEEDS	19		14		42	
50 PERCENT EXCEEDS	7.3		6.6		14	
90 PERCENT EXCEEDS	1.6		2.4		5.1	

a From floodmark.
e Estimated.



06447000 WHITE RIVER NEAR KADOKA, SD

LOCATION.--Lat 43°45'09", long 101°31'28", in SE¼ SE¼ sec.30, T.3 S., R.22 E., Black Hills meridian, Jackson County, Hydrologic Unit 10140202, on left bank 1,000 ft downstream from bridge on State Highway 73, 5.0 mi upstream from Pass Creek, 5.5 mi downstream from Cottonwood Creek, and 5.8 mi south of Kadoka.

DRAINAGE AREA.--5,000 mi^2, approximately.

PERIOD OF RECORD.--July 1942 to current year.

REVISED RECORDS.--WSP 1279: 1944(M), 1948.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,122.18 ft above NGVD of 1929. Prior to June 14, 1949, nonrecording gage, and June 14, 1949, to Mar. 8, 1955, water-stage recorder at site 0.3 mi downstream at same datum. Mar. 9, 1955, to May 17, 1957, nonrecording gage at present site and datum.

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. National Weather Service telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 4, 1942, reached a stage of 16.24 ft, from floodmarks (discharge, about 32,000 ft^3/s, from rating curve extended above 16,000 ft^3/s). Floods of Mar. 8, 1905, and in spring of 1927 were 1 or 2 ft higher than flood of June 4, 1942, from information by local residents.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	10	e9.0	e28	e7.5	e200	51	47	43	65	51	2.9
2	12	9.4	e10	e25	e7.0	e160	43	48	33	180	148	2.0
3	9.7	e9.0	e12	e20	e6.8	e120	36	46	26	284	97	1.3
4	9.3	e8.5	e15	e17	e6.6	e100	43	46	25	471	48	0.88
5	9.2	e8.0	e17	e14	e6.4	e150	40	51	39	661	28	549
6	9.0	e8.0	e20	e10	e6.2	e220	50	40	145	634	18	8,270
7	9.0	e8.5	e23	e10	e6.0	e300	37	34	102	379	11	4,450
8	8.5	e9.0	e26	e10	e6.0	455	35	31	128	184	199	1,830
9	8.0	e9.5	e30	e11	e6.1	694	30	34	85	85	211	593
10	8.0	e10	e28	e13	e6.3	890	27	32	66	51	122	382
11	7.8	e12	e26	e15	e6.5	575	25	26	189	36	56	264
12	23	e14	e23	e16	e6.7	410	21	23	1,220	26	22	159
13	106	e20	e21	e17	e6.9	241	30	30	462	20	10	96
14	67	e70	e19	e18	e7.0	179	30	25	152	15	5.2	80
15	37	51	e20	e20	e7.3	172	28	22	69	12	2.4	87
16	22	44	e20	e22	e7.7	212	28	25	45	10	1.3	62
17	15	38	e21	e24	e8.0	175	27	28	33	30	2.1	45
18	12	32	e22	e25	e8.5	164	28	26	26	22	1.4	35
19	12	25	e24	e23	e10	159	31	30	27	8.6	1.2	28
20	11	20	e26	e20	e20	112	32	23	26	6.5	0.94	26
21	12	e17	e28	e18	e40	112	33	27	22	29	1.0	22
22	11	e10	e30	e16	e100	95	34	30	21	19	0.85	24
23	9.2	e5.4	e35	e15	e300	104	51	238	17	33	34	223
24	8.2	e5.5	e40	e14	e400	89	198	346	13	69	13	863
25	7.2	e5.7	e45	e13	e380	87	153	260	31	46	70	317
26	6.9	e6.0	e50	e13	e360	74	91	285	20	35	98	150
27	8.6	e6.3	e52	e12	e320	63	80	166	15	28	40	77
28	10	e7.0	e50	e10	e300	66	71	108	13	17	24	51
29	10	e7.5	e40	e9.3	e240	64	52	76	9.0	12	13	38
30	9.7	e8.0	e35	e8.7	---	64	45	62	11	11	7.2	29
31	9.8	---	e30	e8.0	---	50	---	50	---	21	4.4	---
TOTAL	512.1	494.3	847.0	495.0	2,593.5	6,556	1,480	2,315	3,113.0	3,500.1	1,340.99	18,757.08
MEAN	16.5	16.5	27.3	16.0	89.4	211	49.3	74.7	104	113	43.3	625
MAX	106	70	52	28	400	890	198	346	1,220	661	211	8,270
MIN	6.9	5.4	9.0	8.0	6.0	50	21	22	9.0	6.5	0.85	0.88
AC-FT	1,020	980	1,680	982	5,140	13,000	2,940	4,590	6,170	6,940	2,660	37,200

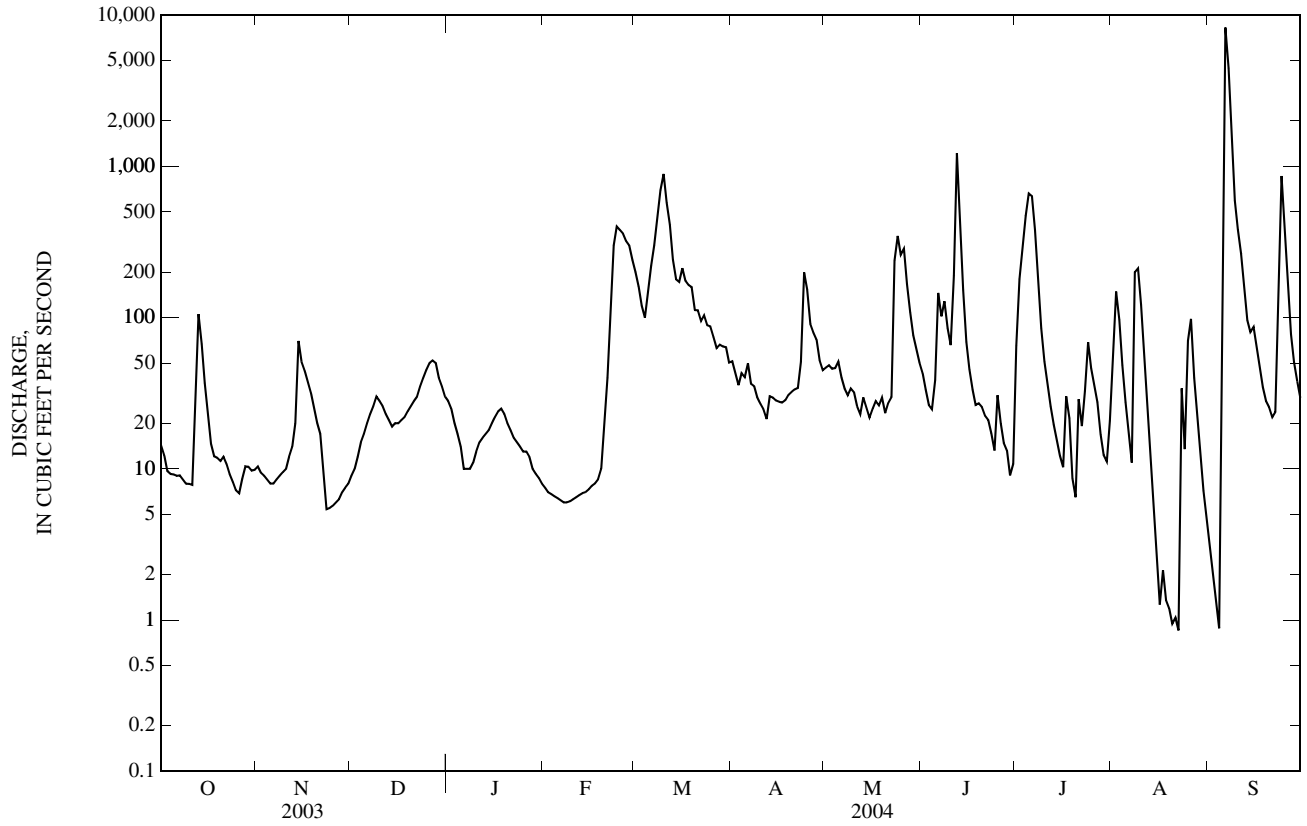
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2004, BY WATER YEAR (WY)

MEAN	104	66.0	40.1	38.4	167	542	404	592	705	284	171	126
MAX	820	425	283	380	945	2,479	1,555	2,802	3,984	986	873	1,060
(WY)	(1999)	(1999)	(1994)	(1997)	(1997)	(1944)	(1970)	(1982)	(1967)	(1969)	(1997)	(1955)
MIN	0.00	1.74	0.00	0.00	0.00	33.8	22.8	23.2	7.29	4.94	2.60	0.17
(WY)	(1965)	(1977)	(1977)	(1977)	(1979)	(1981)	(1981)	(1985)	(1989)	(2002)	(1989)	(1975)

06447000 WHITE RIVER NEAR KADOKA, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1943 - 2004	
ANNUAL TOTAL	49,282.02		42,004.07			
ANNUAL MEAN	135		115		270	
HIGHEST ANNUAL MEAN					612	1997
LOWEST ANNUAL MEAN					90.0	1961
HIGHEST DAILY MEAN	3,340	May 2	8,270	Sep 6	16,500	Jun 18, 1962
LOWEST DAILY MEAN	0.00	Aug 2	0.85	Aug 22	[a]0.00	Oct 11, 1943
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 2	1.3	Aug 16	0.00	Aug 3, 1946
MAXIMUM PEAK FLOW			10,500	Sep 6	[b]21,700	Jun 7, 1951
MAXIMUM PEAK STAGE			11.10	Sep 6	[c]16.18	May 20, 1982
ANNUAL RUNOFF (AC-FT)	97,750		83,320		195,600	
10 PERCENT EXCEEDS	357		214		600	
50 PERCENT EXCEEDS	46		27		62	
90 PERCENT EXCEEDS	1.4		7.2		4.0	

a No flow for many days in most years.
b Gage height, 13.83 ft, site then in use, from rating curve extended above 16,000 ft^3/s.
c Discharge, 21,300 ft^3/s.
e Estimated.



06447230 BLACK PIPE CREEK NEAR BELVIDERE, SD

LOCATION.--Lat 43°45'28", long 101°13'40", in NW¼ NW¼ sec.27, T.44 N., R.33 W., Black Hills meridian, Jackson County, Hydrologic Unit 10140202, on left bank at downstream side of State Highway 63 bridge, 0.9 mi upstream from Porcupine Creek, 3.7 mi upstream from mouth, and 5.6 mi southeast of Belvidere.

DRAINAGE AREA.--250 mi^2, approximately.

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

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,060 ft above NGVD of 1929, from topographic map.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	12	5.4	2.4	2.4	7.7	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	7.8	4.3	2.6	2.3	1.8	0.00	0.00
3	0.00	0.00	e0.00	0.00	0.00	7.4	4.2	2.3	2.1	0.68	0.00	0.00
4	0.00	0.00	e0.00	0.00	0.00	30	3.8	2.3	2.1	0.69	0.00	0.00
5	0.00	0.00	e0.00	0.00	0.00	31	4.0	2.2	2.0	30	0.00	186
6	0.00	0.00	e0.20	0.00	0.00	42	3.7	2.1	1.8	1.3	0.00	27
7	0.00	0.00	e3.0	0.00	0.00	36	3.6	2.1	1.4	0.83	15	2.2
8	0.00	0.00	e1.0	0.00	0.00	99	3.6	2.2	1.2	0.46	3.0	1.1
9	0.00	0.00	e0.30	0.00	0.00	115	3.8	1.9	1.3	0.78	e2.0	0.74
10	0.00	0.00	e0.09	0.00	0.00	111	3.7	1.9	145	0.67	e0.86	0.45
11	0.00	0.00	e0.03	0.00	0.00	48	3.8	1.8	150	0.41	e0.21	2.1
12	0.00	e0.00	0.00	0.00	0.00	46	3.9	18	8.2	0.09	e0.04	2.1
13	0.00	e0.00	0.00	0.00	0.00	40	3.9	e2.7	2.7	0.00	0.00	1.0
14	0.00	e0.00	0.00	0.00	0.00	26	4.0	e1.9	2.0	0.00	0.00	0.79
15	0.00	0.00	0.00	0.00	0.00	20	4.3	2.0	1.4	0.00	0.00	2.6
16	0.00	0.00	0.00	0.00	0.00	18	4.7	2.5	1.4	0.00	0.00	2.8
17	0.00	0.00	0.00	0.00	0.00	20	4.3	2.5	1.8	0.00	0.00	1.5
18	0.00	0.00	0.00	0.00	0.00	19	3.6	2.2	1.5	0.00	0.00	1.2
19	0.00	0.00	e0.00	0.00	0.00	15	3.3	1.8	1.5	0.00	0.00	1.1
20	0.00	0.00	0.00	0.00	0.00	13	3.9	1.8	1.5	0.00	0.00	90
21	0.00	0.00	e0.00	0.00	0.00	9.4	4.3	1.8	1.0	2.6	0.00	17
22	0.00	0.00	e0.20	e0.00	0.00	9.6	3.6	2.3	0.71	1.9	0.00	61
23	0.00	0.00	e0.00	e0.50	0.00	8.9	3.0	286	0.49	0.79	0.00	340
24	0.00	0.00	0.00	e1.0	0.00	8.8	4.5	239	0.29	0.51	0.00	106
25	0.00	0.00	e0.00	e0.80	3.2	8.2	3.8	30	0.11	0.26	0.00	20
26	0.00	0.00	e0.10	e0.00	e8.0	8.5	3.9	5.8	0.00	0.10	0.00	e7.6
27	0.00	0.00	e0.20	e0.00	6.7	28	3.5	5.3	0.00	0.00	0.00	e6.5
28	0.00	0.00	e0.04	0.00	8.1	51	2.8	4.9	0.00	0.00	0.00	e4.1
29	0.00	0.00	0.00	0.00	12	9.0	2.6	4.1	0.00	0.00	0.00	e1.8
30	0.00	0.00	0.00	0.00	---	6.5	2.4	3.4	0.00	0.00	0.00	e1.4
31	0.00	---	0.00	0.00	---	6.4	---	2.6	---	0.00	0.00	---
TOTAL	0.00	0.00	5.16	2.30	38.00	910.5	114.2	644.4	336.20	51.57	21.11	888.08
MEAN	0.00	0.00	0.17	0.07	1.31	29.4	3.81	20.8	11.2	1.66	0.68	29.6
MAX	0.00	0.00	3.0	1.0	12	115	5.4	286	150	30	15	340
MIN	0.00	0.00	0.00	0.00	0.00	6.4	2.4	1.8	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	10	4.6	75	1,810	227	1,280	667	102	42	1,760

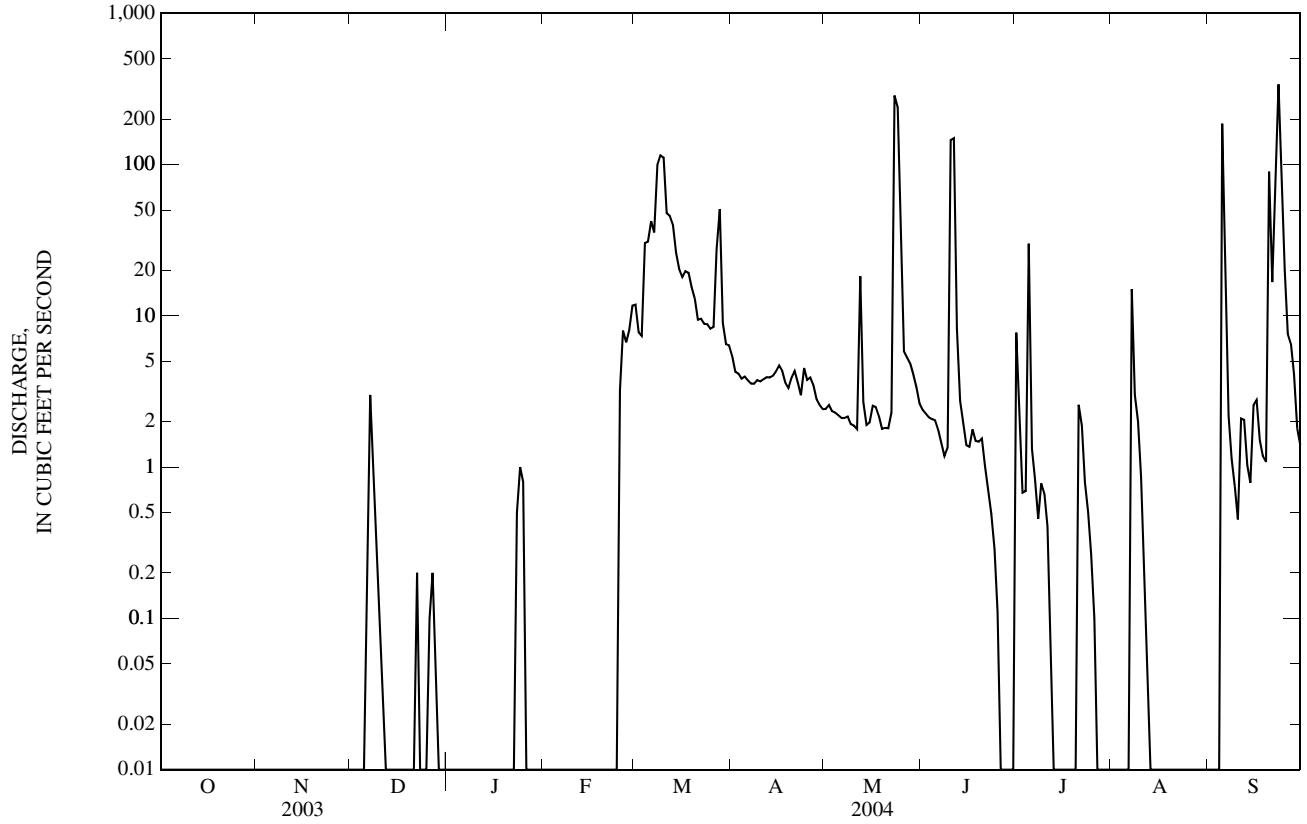
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2004, BY WATER YEAR (WY)

MEAN	11.5	6.76	6.33	16.6	45.7	52.8	59.7	66.3	73.7	27.9	8.02	12.0
MAX	54.1	27.9	27.2	154	218	116	166	197	346	121	29.5	52.7
(WY)	(1999)	(1999)	(1998)	(1997)	(1997)	(1998)	(1995)	(1995)	(1997)	(1998)	(1997)	(1999)
MIN	0.00	0.00	0.00	0.07	0.72	14.5	3.81	17.8	1.10	0.00	0.14	0.00
(WY)	(1993)	(2004)	(1993)	(2004)	(2001)	(1993)	(2004)	(2000)	(2003)	(2002)	(2003)	(2000)

06447230 BLACK PIPE CREEK NEAR BELVIDERE, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1993 - 2004	
ANNUAL TOTAL	9,446.25		3,011.52			
ANNUAL MEAN	25.9		8.23		[a]32.1	
HIGHEST ANNUAL MEAN					97.2	1997
LOWEST ANNUAL MEAN					8.00	2002
HIGHEST DAILY MEAN	700	Feb 18	340	Sep 23	3,490	Jun 3, 1997
LOWEST DAILY MEAN	0.00	Jun 16	0.00	Oct 1	[b]0.00	Oct 1, 1992
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 17	0.00	Oct 1	0.00	Oct 1, 1992
MAXIMUM PEAK FLOW			873	May 23	[c]3,580	Jun 3, 1997
MAXIMUM PEAK STAGE			6.15	May 23	[d]15.70	Feb 17, 1997
ANNUAL RUNOFF (AC-FT)	18,740		5,970		23,270	
10 PERCENT EXCEEDS	32		12		69	
50 PERCENT EXCEEDS	0.30		0.04		5.5	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a Median of annual mean discharges, 25 ft^3/s.
b No flow at times in most years.
c Gage height, 10.93 ft.
d Backwater from ice.
e Estimated.



06447450 WHITE RIVER NEAR WHITE RIVER, SD

LOCATION.--Lat 43°42'50", long 100°41'05", in NW¼ SE¼ SW¼ sec.8, T.4 N., R.28 W., Jones County, Hydrologic Unit 10140202, on left bank retaining wall 50 ft downstream from U.S. Hwy. 83 bridge, 11 mi north of White River.

DRAINAGE AREA.--6,280 mi^2, approximately, of which about 5,000 mi^2 probably contributes directly to surface runoff.

PERIOD OF RECORD.--June 2001 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,770 ft above NGVD of 1929, from topographic map. Nonrecording gage June 1 to July 26, 2001.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	e0.00	8.9	e40	e5.6	e250	83	68	87	14	15	10
2	0.00	e0.00	8.7	e30	e5.5	e230	78	60	68	10	11	4.7
3	0.00	e0.00	7.2	e24	e5.4	e200	69	55	57	64	9.1	2.6
4	0.00	e0.00	6.2	e18	e5.3	e180	64	56	51	120	92	2.0
5	0.00	e0.00	5.1	e14	e5.2	e180	61	57	46	284	136	6.9
6	0.00	e0.00	6.8	e10	e5.1	e200	51	50	41	459	90	7.2
7	5.1	e0.00	9.3	e8.0	e5.0	e260	51	43	36	595	67	5,920
8	1.1	e0.00	8.3	e8.5	e5.0	e300	50	37	35	546	62	3,330
9	0.00	e0.01	5.2	e9.0	e5.0	e500	51	32	87	386	30	1,720
10	0.00	e0.10	3.4	e10	e5.0	673	51	26	91	224	60	753
11	0.10	e1.0	2.5	e12	e5.0	717	45	24	157	139	200	430
12	0.00	e12	e1.9	e14	e5.0	876	42	29	220	85	158	322
13	0.01	e10	e1.5	e16	e5.0	535	39	29	286	60	98	251
14	0.00	18	e1.0	e17	e5.3	405	37	29	864	38	55	155
15	0.00	30	e1.0	e18	e5.6	288	34	33	394	26	29	111
16	1.9	166	e4.0	e20	e6.0	218	31	32	211	21	18	87
17	1.4	154	e20	e20	e7.0	188	34	32	117	16	12	76
18	7.9	87	e60	e20	e10	220	33	24	78	11	8.2	66
19	40	56	e70	e19	e20	197	31	24	52	8.7	5.7	50
20	4.1	59	e90	e18	e35	171	36	26	37	7.0	4.7	66
21	1.7	e40	e110	e17	e60	168	42	29	28	12	4.1	57
22	1.6	e30	e120	e16	e100	144	41	28	23	19	3.5	e68
23	0.26	e20	e130	e15	e180	127	39	45	21	12	3.2	e65
24	0.24	e15	e140	e12	e240	121	39	210	19	9.4	2.7	e278
25	0.01	e10	e172	e9.0	e300	113	40	677	16	37	2.2	1,060
26	0.08	e9.8	e184	e7.0	e400	113	40	490	15	22	1.8	532
27	0.17	e9.6	e161	e6.5	e500	110	110	253	14	75	3.8	280
28	0.02	e9.5	e130	e6.0	e440	116	96	254	12	58	101	160
29	0.02	e9.4	e100	e5.9	e380	109	87	164	19	31	69	93
30	0.00	10	e80	e5.8	---	111	74	148	17	34	34	60
31	0.00	---	e60	e5.7	---	94	---	113	---	24	18	---
TOTAL	65.71	756.41	1,708.0	451.4	2,756.0	8,114	1,579	3,177	3,199	3,447.1	1,404.0	16,023.4
MEAN	2.12	25.2	55.1	14.6	95.0	262	52.6	102	107	111	45.3	534
MAX	40	166	184	40	500	876	110	677	864	595	200	5,920
MIN	0.00	0.00	1.0	5.7	5.0	94	31	24	12	7.0	1.8	2.0
MED	0.02	9.9	9.3	14	5.6	197	44	43	48	34	18	90
AC-FT	130	1,500	3,390	895	5,470	16,090	3,130	6,300	6,350	6,840	2,780	31,780

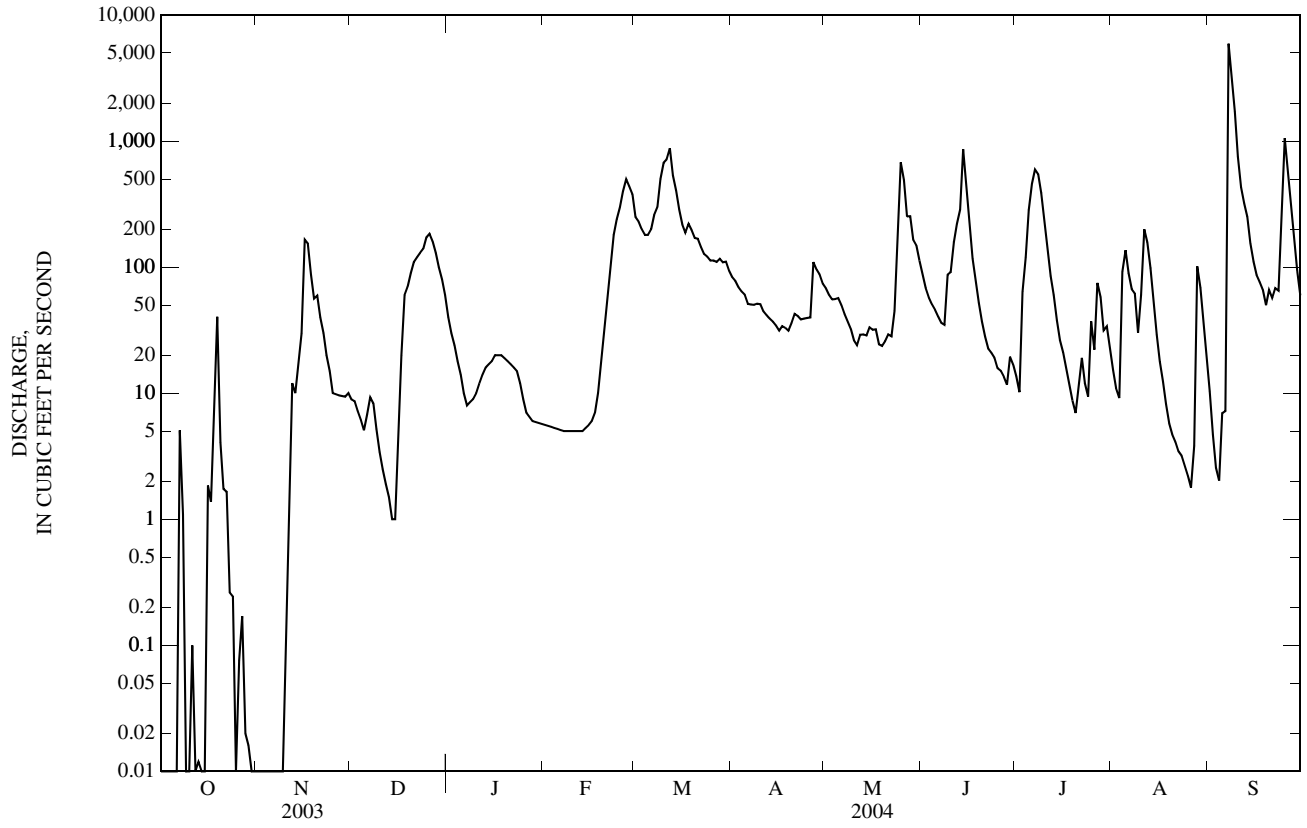
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

MEAN	21.4	47.5	74.8	26.7	148	313	193	344	80.0	76.1	28.7	274
MAX	43.1	69.1	130	34.2	284	492	318	533	107	113	45.3	534
(WY)	(2002)	(2003)	(2002)	(2003)	(2003)	(2003)	(2002)	(2003)	(2004)	(2003)	(2004)	(2004)
MIN	2.12	25.2	39.5	14.6	66.5	184	52.6	102	39.3	3.61	9.50	9.52
(WY)	(2004)	(2004)	(2003)	(2004)	(2002)	(2002)	(2004)	(2004)	(2002)	(2002)	(2003)	(2003)

06447450 WHITE RIVER NEAR WHITE RIVER, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2002 - 2004	
ANNUAL TOTAL	56,445.47		42,681.02			
ANNUAL MEAN	155		117		135	
HIGHEST ANNUAL MEAN					158	2003
LOWEST ANNUAL MEAN					117	2004
HIGHEST DAILY MEAN	3,320	May 3	5,920	Sep 7	5,920	Sep 7, 2004
LOWEST DAILY MEAN	0.00	Sep 10	0.00	Oct 1	[a]0.00	Sep 10, 2003
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep 10	0.00	Oct 30	0.00	Sep 10, 2003
MAXIMUM PEAK FLOW			7,310	Sep 7	[b]7,310	Sep 7, 2004
MAXIMUM PEAK STAGE			11.33	Sep 7	[c]13.37	Feb 19, 2003
ANNUAL RUNOFF (AC-FT)	112,000		84,660		98,000	
10 PERCENT EXCEEDS	429		252		300	
50 PERCENT EXCEEDS	58		32		46	
90 PERCENT EXCEEDS	0.09		1.3		2.8	

a No flow for some days in most years.
b Gage height, 8.92 ft.
c Ice jam.
e Estimated.



06447500 LITTLE WHITE RIVER NEAR MARTIN, SD

LOCATION.--Lat 43°10'00", long 101°37'47", in NW¼ SW¼ NW¼ sec.19, T.37 N., R.36 W., Bennett County, Hydrologic Unit 10140203, on right bank 110 ft downstream from highway culvert and 5.4 mi east of Martin.

DRAINAGE AREA.--310 mi^2, approximately, of which about 230 mi^2 probably contributes directly to surface runoff.

PERIOD OF RECORD.--February 1938 to September 1940, July 1962 to current year. Prior to October 1965, published as South Fork White River near Martin.

GAGE.--Water-stage recorder. Elevation of gage is 3,045 ft above NGVD of 1929, by barometer. Prior to Aug. 14, 1938, nonrecording gage at same site and datum. Prior to June 17, 1997, gage 40 ft upstream at same datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 5, 1932, reached a stage of 13.3 ft, from floodmarks.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	13	12	e8.0	e9.5	e25	21	17	11	9.0	7.9	5.5
2	8.8	13	13	e7.8	e10	e24	20	17	10	9.7	7.2	5.8
3	8.7	13	14	e7.6	e10	e24	19	17	10	11	7.1	5.5
4	8.9	14	13	e7.3	e9.7	e24	19	18	10	11	7.5	5.3
5	9.3	e12	e10	e7.0	e9.4	e25	19	18	10	18	7.6	6.7
6	9.4	e11	e6.6	e7.0	e9.2	e27	18	18	9.8	17	7.6	7.7
7	8.9	e11	e8.0	e7.5	e9.0	e30	18	17	9.0	14	7.9	9.8
8	8.7	e10	e9.8	e8.0	e8.8	e40	18	17	8.8	12	8.4	8.9
9	9.1	e11	e9.5	e8.5	e8.6	57	19	17	8.8	11	7.9	9.2
10	9.9	e12	e9.0	e9.0	e8.4	53	19	16	9.3	10	7.4	8.6
11	9.9	e15	e8.5	e10	e8.2	43	19	15	9.9	9.4	7.2	7.6
12	10	e15	e8.0	e12	e8.0	37	19	15	9.6	8.9	7.3	6.9
13	11	e14	e7.5	e14	e8.0	34	19	15	8.9	8.4	7.8	6.4
14	10	15	e7.0	e16	e8.0	31	18	14	8.8	8.4	7.6	6.4
15	11	13	e10	e18	e8.5	29	18	14	8.7	8.6	6.8	6.9
16	11	13	e15	e17	e9.0	28	17	14	8.4	8.5	6.5	7.2
17	11	12	e6.2	e17	e9.5	29	16	14	8.6	8.5	6.3	7.4
18	11	12	e10	e16	e10	28	16	15	9.2	8.2	6.2	7.4
19	11	12	e12	e15	e12	28	16	14	10	7.5	5.9	7.5
20	11	11	e15	e14	e16	28	16	13	10	7.2	5.9	7.9
21	11	11	e14	e14	e20	26	16	13	11	7.1	5.9	8.4
22	11	e9.5	e14	e13	e25	25	17	17	12	7.5	5.9	9.1
23	11	e9.0	e13	e12	e30	24	19	18	11	7.6	6.3	9.5
24	11	e10	e13	e11	e32	23	22	15	11	8.4	6.4	11
25	11	e11	e12	e9.0	e33	22	22	14	11	8.7	5.8	12
26	11	e12	e11	e8.0	e30	22	22	13	10	8.2	5.5	12
27	12	e12	e10	e7.0	e28	22	20	13	9.5	7.8	5.6	11
28	12	e13	e9.5	e8.0	e27	24	20	12	8.9	7.5	5.9	9.6
29	12	e14	e9.0	e8.3	e26	25	19	12	9.0	7.5	6.3	8.9
30	13	13	e8.5	e8.7	---	24	18	11	9.0	8.1	6.0	8.6
31	13	---	e8.0	e9.0	---	22	---	11	---	8.4	5.9	---
TOTAL	325.3	366.5	326.1	334.7	440.8	903	559	464	291.2	293.1	209.5	244.7
MEAN	10.5	12.2	10.5	10.8	15.2	29.1	18.6	15.0	9.71	9.45	6.76	8.16
MAX	13	15	15	18	33	57	22	18	12	18	8.4	12
MIN	8.7	9.0	6.2	7.0	8.0	22	16	11	8.4	7.1	5.5	5.3
AC-FT	645	727	647	664	874	1,790	1,110	920	578	581	416	485

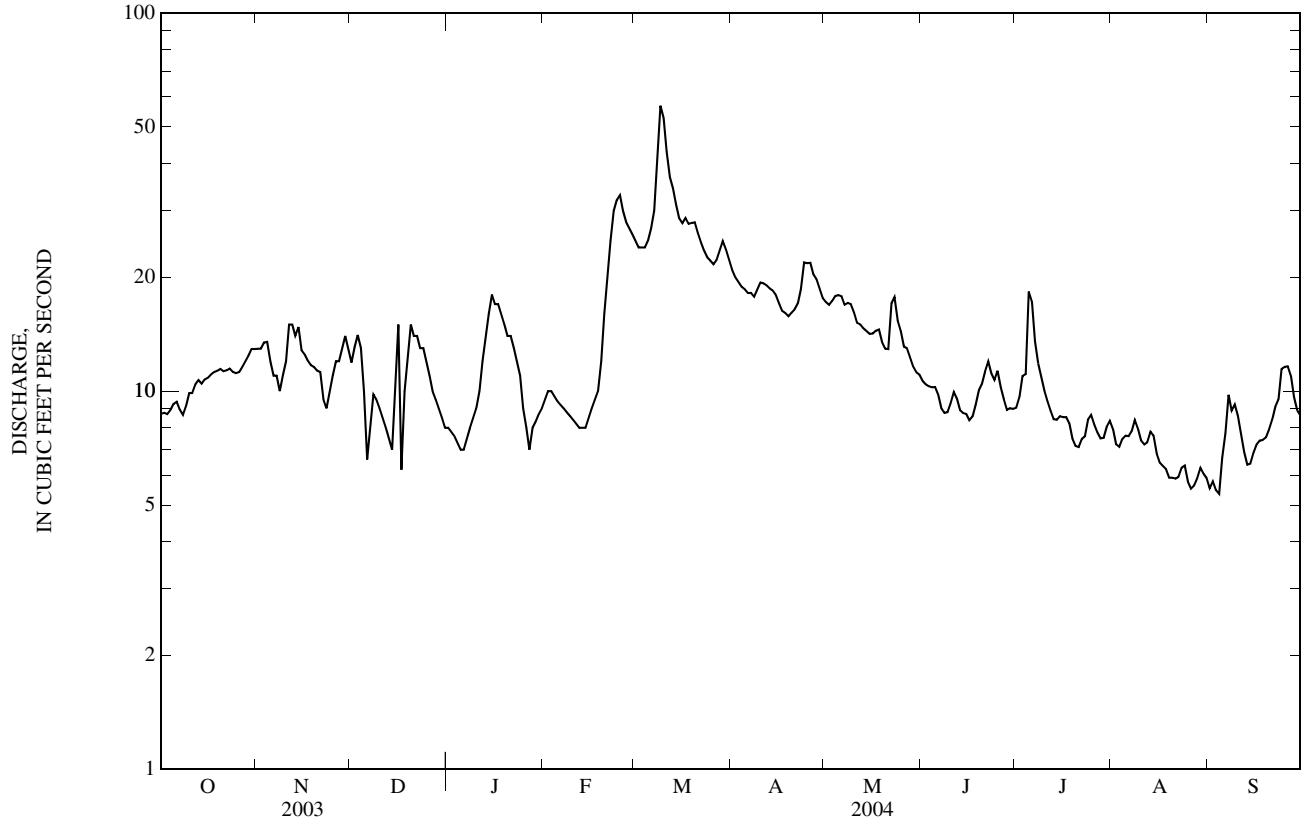
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1940, 1963 - 2004, BY WATER YEAR (WY)

MEAN	13.8	16.8	13.2	12.0	23.6	44.4	37.3	31.2	30.2	15.7	12.0	9.78
MAX	34.8	46.9	28.8	34.9	199	157	104	66.4	162	44.5	102	19.9
(WY)	(1999)	(1999)	(1994)	(1997)	(1997)	(1966)	(1977)	(2000)	(1997)	(1969)	(1983)	(1998)
MIN	7.86	9.73	5.59	4.51	6.26	11.4	13.0	12.2	5.65	2.01	1.80	4.87
(WY)	(1980)	(1965)	(1986)	(1982)	(1989)	(1977)	(1981)	(1940)	(1940)	(1940)	(1940)	(1939)

06447500 LITTLE WHITE RIVER NEAR MARTIN, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1939-1940, 1963-2004	
ANNUAL TOTAL	5,936.4		4,757.9			
ANNUAL MEAN	16.3		13.0		21.6	
HIGHEST ANNUAL MEAN					53.7	1997
LOWEST ANNUAL MEAN					10.9	1940
HIGHEST DAILY MEAN	65	Mar 15	57	Mar 9	1,110	Jun 4, 1997
LOWEST DAILY MEAN	4.7	Aug 11	5.3	Sep 4	[a]0.60	Aug 14, 1940
ANNUAL SEVEN-DAY MINIMUM	4.9	Aug 11	5.8	Aug 29	0.67	Aug 12, 1940
MAXIMUM PEAK FLOW			[b]73	Mar 9	1,300	Jun 4, 1997
MAXIMUM PEAK STAGE			[c]3.05	Mar 1	13.48	Jun 4, 1997
ANNUAL RUNOFF (AC-FT)	11,770		9,440		15,670	
10 PERCENT EXCEEDS	36		22		40	
50 PERCENT EXCEEDS	11		11		14	
90 PERCENT EXCEEDS	5.9		7.2		6.5	

a Also Aug. 16, 18, 1940, and no flow part of each day Oct. 19, 20, 22, 1962 (regulation due to construction).
b Gage height, 2.69 ft.
c Backwater from ice.
e Estimated.



06448000 LAKE CREEK ABOVE REFUGE, NEAR TUTHILL, SD

LOCATION.--Lat 43°05'14", long 101°36'12" (revised), in NE¼ SW¼ NE¼ sec.19, T.36 N., R.36 W., Bennett County, Hydrologic Unit 10140203, on right wingwall at upstream side of culvert, 80 ft downstream from west boundary of LaCreek game refuge and 7.5 mi southwest of Tuthill.

DRAINAGE AREA.--58 mi^2, approximately, of which about 23 mi^2 probably contributes directly to surface runoff.

PERIOD OF RECORD.--February 1938 to September 1940, July 1962 to February 1979, Apr. 11, 1996, to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 3,090 ft above NGVD of 1929, by barometer. Prior to Aug. 9, 1938, nonrecording gage and Aug. 9, 1938, to Sept. 30, 1940, water-stage recorder at site 110 ft upstream at same datum.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	24	29	e16	e24	e30	24	21	21	e24	20	18
2	20	24	28	e15	e22	e30	23	21	20	e25	19	e19
3	20	e23	26	e14	e21	e30	24	20	20	22	24	20
4	20	e22	26	e13	e20	e35	24	21	20	21	25	e22
5	20	e21	e25	e11	e19	e42	23	20	24	21	23	34
6	20	e20	e27	e10	e18	50	e23	19	20	22	21	29
7	20	e19	e29	e11	e18	46	23	19	20	21	21	24
8	20	e20	e26	e16	e18	48	23	19	e23	20	20	23
9	20	e23	e24	e20	e18	45	29	18	e25	20	18	21
10	20	27	e20	e26	e19	41	26	18	24	19	18	21
11	26	24	e18	32	e19	36	25	18	22	20	18	21
12	22	22	e16	30	e19	34	25	23	20	e23	17	21
13	22	22	e14	28	e19	34	24	22	18	e21	17	e23
14	22	22	e12	28	e19	33	23	22	18	24	18	26
15	22	22	e10	28	e20	36	22	21	17	22	17	29
16	23	22	e11	27	e22	37	21	22	18	20	17	25
17	22	22	e12	27	e24	35	22	23	22	21	17	24
18	22	20	e13	26	e27	32	22	23	21	22	17	24
19	22	21	e14	25	e30	31	22	21	22	19	16	22
20	22	21	e15	26	e29	29	23	21	25	19	17	33
21	21	20	e16	25	26	27	24	23	26	19	17	28
22	21	e19	e16	25	26	28	28	29	23	22	16	34
23	21	e17	e17	27	26	28	33	30	e20	25	23	35
24	20	e16	e18	30	27	27	28	29	e23	27	19	31
25	21	e21	e19	26	25	27	25	25	e24	26	24	27
26	22	e24	e20	e23	26	27	23	23	e22	23	21	25
27	23	25	e20	e20	27	30	22	21	e23	21	21	24
28	22	24	e20	e18	27	32	21	21	e24	20	20	25
29	22	27	e19	e19	e30	27	21	21	e22	20	19	25
30	24	30	e18	e20	---	26	22	24	e23	30	18	25
31	23	---	e17	e22	---	25	---	23	---	24	e18	---
TOTAL	665	664	595	684	665	1,038	718	681	650	683	596	758
MEAN	21.5	22.1	19.2	22.1	22.9	33.5	23.9	22.0	21.7	22.0	19.2	25.3
MAX	26	30	29	32	30	50	33	30	26	30	25	35
MIN	20	16	10	10	18	25	21	18	17	19	16	18
AC-FT	1,320	1,320	1,180	1,360	1,320	2,060	1,420	1,350	1,290	1,350	1,180	1,500

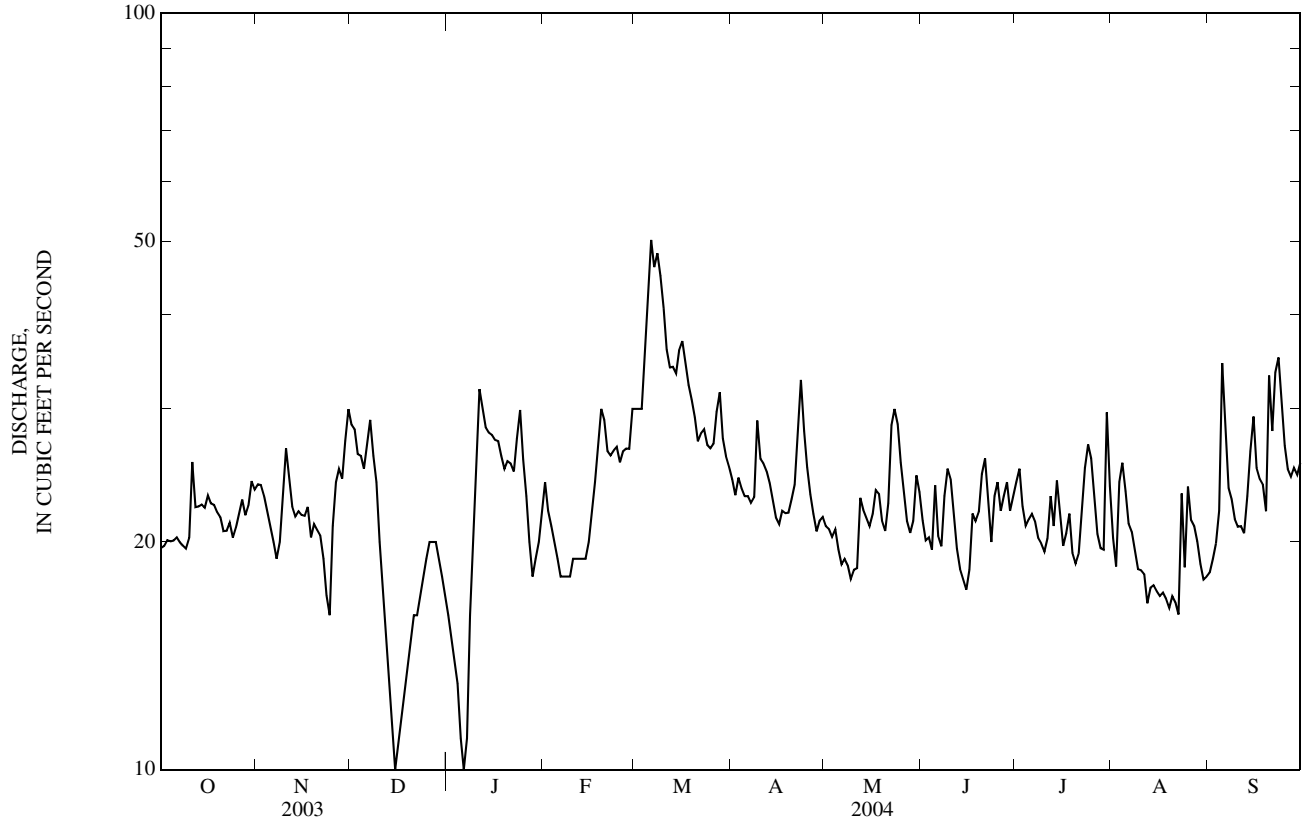
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1940, 1963 - 1979, 1997 - 2004, BY WATER YEAR (WY)

MEAN	19.9	21.4	20.7	20.8	24.1	29.1	27.8	24.5	21.4	17.2	16.1	17.5
MAX	28.0	28.1	28.8	32.2	34.6	38.7	44.7	50.9	44.6	28.6	23.5	25.3
(WY)	(1999)	(1999)	(2002)	(2001)	(1999)	(2001)	(2001)	(2000)	(1999)	(1999)	(1997)	(2004)
MIN	15.0	14.5	7.39	12.2	11.1	17.5	18.6	9.99	8.83	10.3	8.40	11.5
(WY)	(1976)	(1939)	(1939)	(1979)	(1939)	(1976)	(1976)	(1939)	(1939)	(1974)	(1970)	(1970)

06448000 LAKE CREEK ABOVE REFUGE, NEAR TUTHILL, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1939-1940, 1963-1979, 1997-2004	
ANNUAL TOTAL	8,230		8,397			
ANNUAL MEAN	22.5		22.9		21.7	
HIGHEST ANNUAL MEAN					28.7	2001
LOWEST ANNUAL MEAN					13.8	1939
HIGHEST DAILY MEAN	66	May 1	50	Mar 6	115	May 27, 1996
LOWEST DAILY MEAN	10	Dec 15	10	Dec 15	0.10	Jun 5, 1939
ANNUAL SEVEN-DAY MINIMUM	12	Dec 13	12	Dec 13	1.0	Jun 3, 1939
MAXIMUM PEAK FLOW			[a]57	Mar 6	[b]154	Mar 9, 1966
MAXIMUM PEAK STAGE			[c]2.75	Jan 4	[c]3.75	Feb 12, 1971
ANNUAL RUNOFF (AC-FT)	16,320		16,660		15,710	
10 PERCENT EXCEEDS	28		29		30	
50 PERCENT EXCEEDS	21		22		20	
90 PERCENT EXCEEDS	17		18		13	

a Gage height, 1.99 ft.
b Gage height, 2.83 ft.
c Backwater from ice.
e Estimated.



06449000 LAKE CREEK BELOW REFUGE, NEAR TUTHILL, SD

LOCATION.--Lat 43°08'49", long 101°30'51", in SE¼SE¼ sec.25, T.37 N., R.36 W., Bennett County, Hydrologic Unit 10140203, on left bank 40 ft upstream from east boundary of LaCreek game refuge, 1.2 mi southwest of Tuthill, and 5.5 mi upstream from mouth.

DRAINAGE AREA.--120 mi^2, approximately, of which about 60 mi^2 probably contributes directly to surface runoff.

PERIOD OF RECORD.--February 1938 to September 1940, July 1962 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 3,055 ft above NGVD of 1929, by barometer. Prior to Oct. 1, 1999, at site 400 ft downstream at same datum. Prior to Aug. 4, 1938, nonrecording gage at site 400 ft downstream at same datum.

REMARKS.--Records good except those for Oct. 1-28 and May 5 to July 13, and those for estimated daily discharges, which are 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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	26	31	29	28	e27	34	47	22	9.2	6.0	e3.0
2	1.8	25	31	29	28	e28	34	45	0.41	16	4.6	e7.4
3	1.0	24	31	29	e28	29	33	45	4.0	7.9	3.1	e7.0
4	1.1	23	30	30	28	30	32	41	7.8	5.8	1.3	e6.0
5	0.99	23	30	e30	28	30	32	40	20	13	0.72	e6.0
6	1.8	23	31	30	e27	30	31	21	11	12	4.4	e5.5
7	5.1	23	30	31	e27	30	27	31	11	1.3	3.1	e5.0
8	5.1	23	30	31	27	30	24	22	7.1	13	11	e5.0
9	3.0	22	30	31	27	31	23	31	10	13	8.7	e4.0
10	2.9	21	24	31	26	32	23	7.8	21	11	1.4	e4.0
11	2.9	20	25	30	26	36	22	29	41	5.5	3.1	e3.5
12	3.0	31	24	30	e25	42	22	35	14	11	0.49	e3.5
13	1.9	32	25	30	25	42	18	16	4.9	4.0	3.4	e3.0
14	13	27	24	30	25	39	16	18	6.4	8.0	1.4	e3.0
15	18	22	24	30	25	40	15	19	8.3	8.1	11	e2.8
16	17	21	24	30	25	40	11	17	9.2	5.2	3.2	3.2
17	15	27	24	30	25	40	8.1	17	15	7.2	0.41	3.5
18	14	30	23	30	25	37	8.7	10	8.3	9.1	2.6	2.7
19	13	30	23	30	25	36	7.6	29	19	6.7	3.6	2.3
20	9.9	24	23	30	25	35	7.9	8.6	30	9.6	0.37	e1.9
21	8.6	23	25	30	26	34	5.2	17	27	9.6	3.5	e3.1
22	11	e21	27	30	26	33	20	28	17	8.6	1.0	3.7
23	12	e21	28	30	26	30	50	25	8.5	7.7	3.6	3.7
24	9.5	e28	28	30	27	30	37	37	5.0	8.2	4.3	3.8
25	9.5	34	29	30	27	30	23	27	8.2	7.4	17	4.1
26	9.8	34	28	30	27	29	30	37	8.7	6.5	1.5	3.5
27	15	33	29	e29	28	31	36	15	12	7.8	6.9	6.4
28	17	33	29	e29	28	30	40	24	12	13	2.1	7.4
29	22	32	29	28	28	29	42	28	8.2	7.5	6.1	12
30	26	32	29	28	---	13	45	55	13	7.6	2.7	13
31	26	---	29	28	---	24	---	45	---	8.6	e3.0	---
TOTAL	299.29	788	847	923	768	997	757.5	867.4	390.01	269.1	125.59	143.0
MEAN	9.65	26.3	27.3	29.8	26.5	32.2	25.2	28.0	13.0	8.68	4.05	4.77
MAX	26	34	31	31	28	42	50	55	41	16	17	13
MIN	0.99	20	23	28	25	13	5.2	7.8	0.41	1.3	0.37	1.9
AC-FT	594	1,560	1,680	1,830	1,520	1,980	1,500	1,720	774	534	249	284

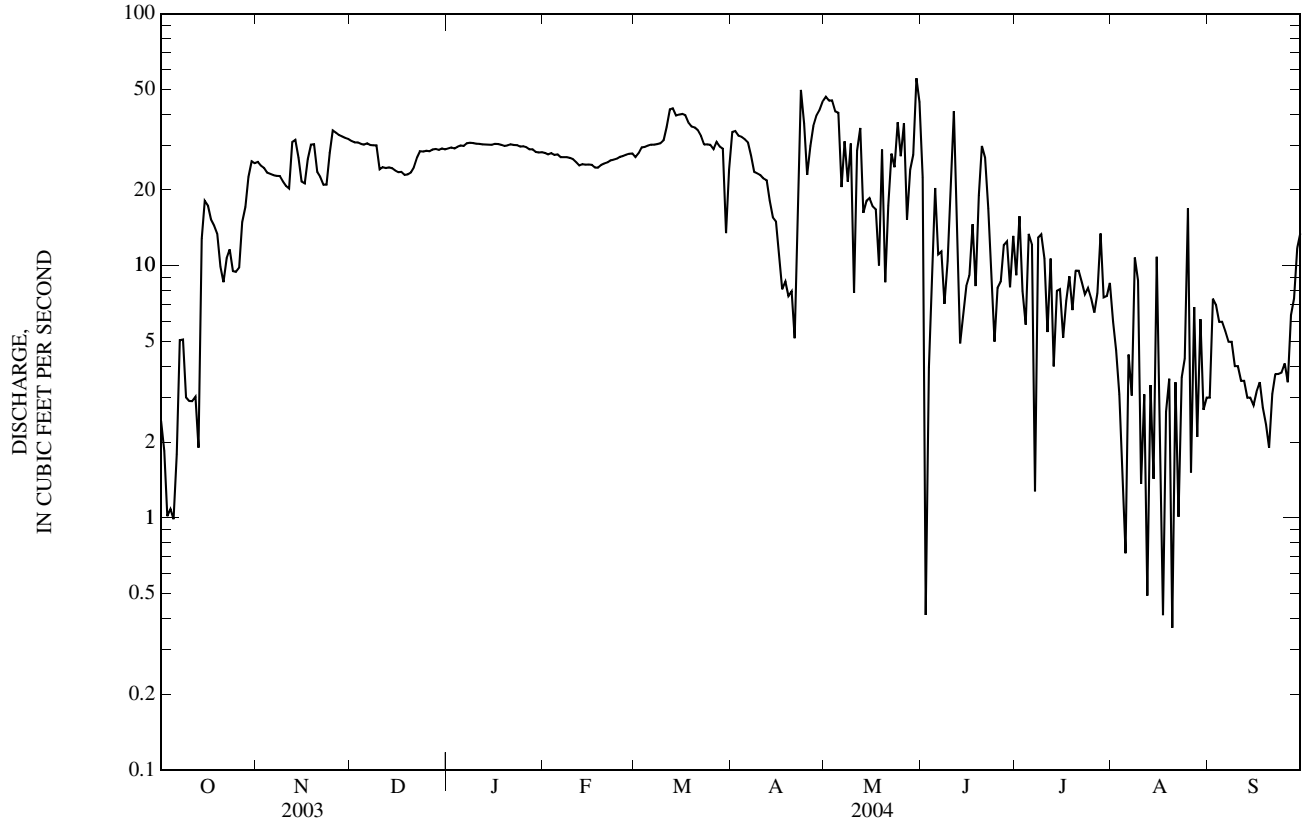
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939, 1963 - 2004, BY WATER YEAR (WY)

MEAN	6.53	11.2	16.3	18.9	22.7	33.2	37.2	32.2	28.8	15.8	11.1	8.58
MAX	23.8	43.4	48.3	49.9	49.9	109	96.1	79.3	139	63.4	42.8	35.8
(WY)	(1939)	(1999)	(1999)	(1997)	(1997)	(1987)	(1977)	(1991)	(1991)	(1967)	(1994)	(1993)
MIN	0.00	0.00	0.00	0.00	0.00	0.06	0.09	0.03	0.03	0.24	0.08	0.11
(WY)	(1940)	(1940)	(1940)	(1940)	(1940)	(1940)	(1965)	(1939)	(1939)	(1939)	(1939)	(1939)

06449000 LAKE CREEK BELOW REFUGE, NEAR TUTHILL, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1939, 1963 - 2004	
ANNUAL TOTAL	8,241.69		7,174.89			
ANNUAL MEAN	22.6		19.6		20.2	
HIGHEST ANNUAL MEAN					41.9	1997
LOWEST ANNUAL MEAN					3.09	1940
HIGHEST DAILY MEAN	66	Apr 9	55	May 30	424	Mar 25, 1987
LOWEST DAILY MEAN	0.10	Jul 20	0.37	Aug 20	[a]0.00	Mar 25, 1939
ANNUAL SEVEN-DAY MINIMUM	0.43	Jul 17	2.0	Oct 1	0.00	Mar 25, 1939
MAXIMUM PEAK FLOW			[b]85	Jun 11	[c]594	Mar 25, 1987
MAXIMUM PEAK STAGE			[d]4.25	Mar 1	[f]6.46	Mar 12, 1988
ANNUAL RUNOFF (AC-FT)	16,350		14,230		14,630	
10 PERCENT EXCEEDS	40		32		48	
50 PERCENT EXCEEDS	23		23		15	
90 PERCENT EXCEEDS	2.6		3.1		0.64	

a No flow at times in some years.
b Gage height, 4.17 ft.
c Gage height, 5.57 ft, from rating curve extended above 150 ft^3/s.
d Backwater from ice.
e Estimated.
f Backwater from ice, at site 400 ft downstream.



06449100 LITTLE WHITE RIVER NEAR VETAL, SD

LOCATION.--Lat 43°06'03", long 101°13'49", in NE¼ NW¼ sec.17, T.36 N., R.33 W., Bennett County, Hydrologic Unit 10140203, on left bank downstream side of highway culvert, 0.3 mi downstream from small right-bank tributary, 10.8 mi southeast of Vetal, and 15.3 mi upstream from Spring Creek.

DRAINAGE AREA.--590 mi^2, approximately, of which about 415 mi^2 probably contributes directly to surface runoff.

PERIOD OF RECORD.--August 1959 to current year. Prior to October 1965, published as South Fork White River near Vetal.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,780.69 ft above NGVD of 1929. Prior to Nov. 14, 1959, nonrecording gage at same site and datum.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	e37	e84	e45	e50	67	53	74	63	40	30	24
2	21	e37	e82	e40	e48	47	69	76	52	38	29	22
3	20	42	e84	e37	e46	94	71	76	36	32	29	22
4	20	39	e82	e34	e45	117	71	76	26	36	28	25
5	20	40	e79	e30	e44	111	71	76	26	33	26	32
6	20	e37	e76	e30	e42	100	69	70	32	32	25	30
7	19	e30	e87	e32	e40	98	70	59	32	49	23	38
8	19	e36	e85	e35	e40	99	68	50	30	37	25	33
9	18	e50	e68	e40	e40	98	66	52	30	32	25	27
10	19	58	64	e50	e42	102	61	49	41	49	30	26
11	21	47	73	e60	e44	98	58	47	35	34	30	26
12	24	45	66	e74	e43	110	57	41	42	31	26	27
13	23	44	72	91	e40	156	56	60	43	29	25	25
14	22	57	77	82	e42	149	55	49	31	34	23	28
15	20	58	67	75	e45	145	49	42	26	30	22	32
16	22	56	59	71	e50	139	45	42	30	30	22	29
17	24	e54	59	70	e60	135	43	41	38	34	22	26
18	24	e57	65	69	e66	133	40	43	37	33	23	24
19	27	e64	62	70	72	121	38	37	42	31	23	23
20	e26	e65	63	70	72	95	38	34	43	34	22	28
21	e34	e65	61	71	73	89	36	42	53	34	23	28
22	e34	e60	60	71	76	88	38	35	50	41	22	29
23	e32	e40	65	71	e72	85	38	61	42	38	24	31
24	e30	e50	68	73	e75	70	56	57	36	39	23	31
25	e32	e60	65	70	e78	66	76	49	32	37	23	28
26	e33	e70	65	e60	e78	66	56	57	33	36	23	25
27	e31	e80	66	e50	e84	72	53	46	36	34	32	24
28	e28	e100	65	e40	87	73	62	48	39	29	27	24
29	e29	e110	58	e44	91	70	67	37	43	31	27	25
30	e34	e95	e54	e47	---	67	70	47	41	34	25	30
31	e36	---	e50	e50	---	65	---	56	---	32	26	---
TOTAL	782	1,683	2,131	1,752	1,685	3,025	1,700	1,629	1,140	1,083	783	822
MEAN	25.2	56.1	68.7	56.5	58.1	97.6	56.7	52.5	38.0	34.9	25.3	27.4
MAX	36	110	87	91	91	156	76	76	63	49	32	38
MIN	18	30	50	30	40	47	36	34	26	29	22	22
AC-FT	1,550	3,340	4,230	3,480	3,340	6,000	3,370	3,230	2,260	2,150	1,550	1,630

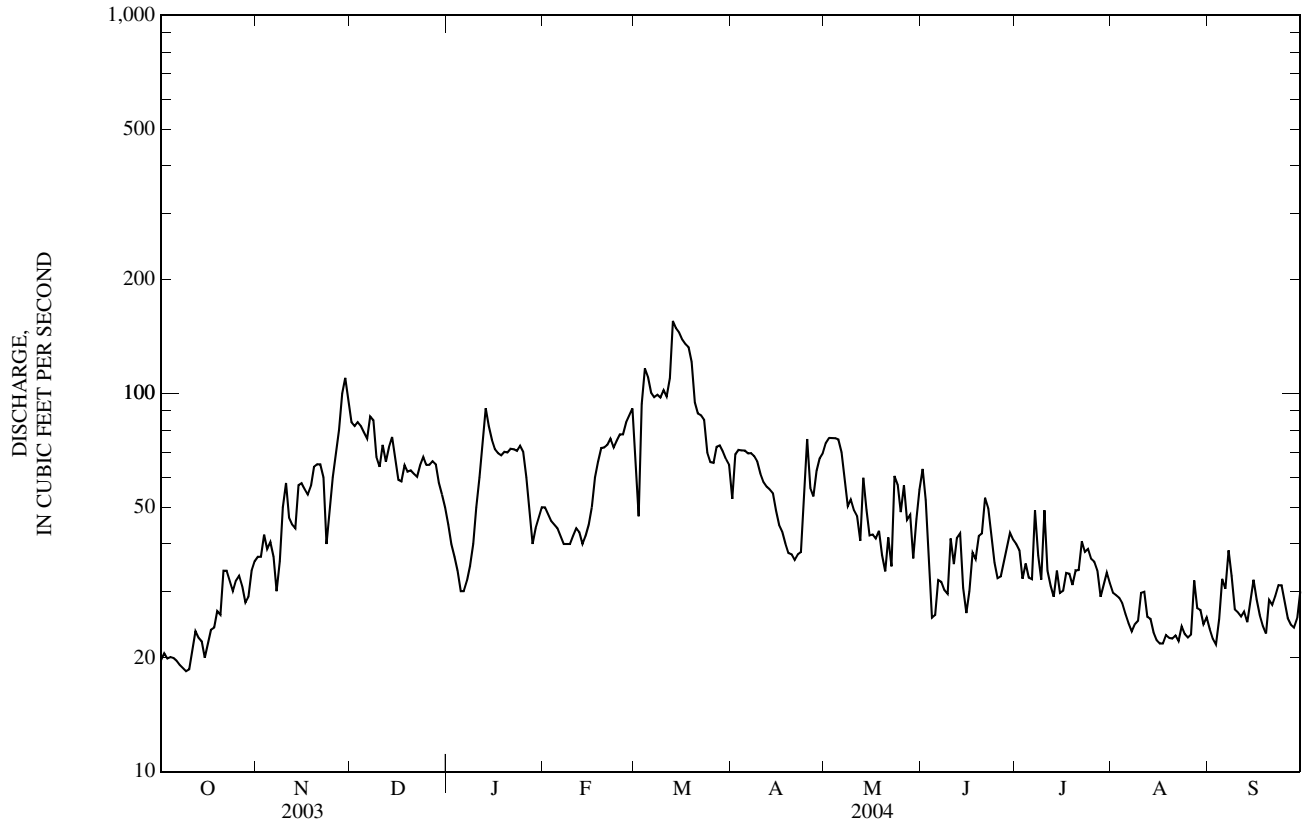
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2004, BY WATER YEAR (WY)

MEAN	34.9	43.6	43.1	40.9	58.3	98.6	102	91.6	85.5	51.3	40.2	33.4
MAX	80.4	146	115	96.7	188	205	273	185	272	156	137	89.0
(WY)	(1999)	(1999)	(1999)	(1999)	(1997)	(1978)	(1977)	(1991)	(1997)	(1967)	(1983)	(1997)
MIN	18.0	21.3	12.5	18.5	19.2	33.5	27.3	28.5	20.3	16.2	15.1	16.5
(WY)	(1977)	(1977)	(1975)	(1981)	(1977)	(1981)	(1981)	(1992)	(1985)	(1974)	(1961)	(1975)

06449100 LITTLE WHITE RIVER NEAR VETAL, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1960 - 2004	
ANNUAL TOTAL	21,398		18,215			
ANNUAL MEAN	58.6		49.8		60.2	
HIGHEST ANNUAL MEAN					117	1997
LOWEST ANNUAL MEAN					28.2	1981
HIGHEST DAILY MEAN	130	Feb 1	156	Mar 13	1,200	May 16, 1991
LOWEST DAILY MEAN	16	Aug 15	18	Oct 9	9.0	Dec 24, 1974
ANNUAL SEVEN-DAY MINIMUM	17	Aug 14	19	Oct 4	9.6	Dec 19, 1974
MAXIMUM PEAK FLOW			[a]165	Mar 13	3,540	May 16, 1991
MAXIMUM PEAK STAGE			[b]5.36	Jan 30	12.53	May 16, 1991
ANNUAL RUNOFF (AC-FT)	42,440		36,130		43,610	
10 PERCENT EXCEEDS	102		79		116	
50 PERCENT EXCEEDS	59		42		45	
90 PERCENT EXCEEDS	20		24		21	

a Gage height, 4.78 ft.
b Backwater from ice.
e Estimated.



06449500 LITTLE WHITE RIVER NEAR ROSEBUD, SD

LOCATION.--Lat 43°19'32", long 100°53'00", in SW¼ NW¼ sec.28, T.39 N., R.30 W., Todd County, Hydrologic Unit 10140203, on right bank at downstream side of bridge on U.S. Highway 18, 0.3 mi downstream from Scabby Creek, 0.7 mi downstream from Soldier Creek, and 6.4 mi north of Rosebud.

DRAINAGE AREA.--1,020 mi^2, approximately, of which about 760 mi^2 probably contributes directly to surface runoff.

PERIOD OF RECORD.--May 1943 to current year. Prior to October 1965, published as South Fork White River near Rosebud.

REVISED RECORDS.--WSP 1056: Drainage area. WSP 1309: 1946(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,294.99 ft above NGVD of 1929. Prior to May 11, 1948, nonrecording gage at same site and datum.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	87	167	e90	e83	222	167	136	117	83	70	65
2	71	90	157	e85	e77	158	142	139	122	83	68	63
3	73	101	146	e80	e70	126	152	141	114	99	67	61
4	72	e105	146	e75	e65	180	150	134	103	90	71	62
5	73	e100	129	e70	e60	209	147	133	99	84	69	76
6	75	e97	118	e70	e58	185	144	127	91	88	64	84
7	74	e94	145	e75	e56	180	141	121	86	79	65	75
8	75	e90	150	e80	e54	192	138	113	102	83	68	91
9	74	e100	e145	e86	e53	205	143	102	106	86	65	84
10	74	114	e140	e92	e52	205	137	107	103	81	66	75
11	82	120	e130	e100	e51	198	133	107	101	80	71	72
12	78	109	e120	e110	e50	185	130	138	96	77	71	71
13	78	102	e100	e115	e53	195	127	104	99	74	69	70
14	77	105	e100	e120	e56	211	125	116	106	69	67	73
15	77	117	e115	e110	e60	218	124	112	94	71	71	80
16	80	123	e125	e100	e70	214	118	107	90	65	115	80
17	79	121	e135	e92	e80	205	114	112	95	66	70	76
18	83	121	e140	e86	e90	195	111	105	96	66	66	73
19	83	118	e145	e80	e100	189	107	105	98	65	64	70
20	82	121	e150	e76	e115	182	111	103	108	64	63	68
21	75	124	e155	e75	e130	166	112	99	101	67	63	80
22	77	122	145	e78	e140	156	108	114	104	72	61	93
23	77	e67	154	e80	e150	148	105	158	103	79	65	114
24	76	e75	154	e75	e160	149	104	157	98	79	65	102
25	73	e80	146	e70	e170	137	117	137	91	75	64	90
26	73	e100	136	e40	178	145	132	123	86	71	60	86
27	79	e140	129	e20	178	166	117	128	81	69	65	82
28	80	e155	e125	e50	179	169	110	117	84	74	73	79
29	81	e170	e115	e100	192	155	117	122	81	69	70	79
30	85	176	e105	e95	---	154	122	112	83	72	66	86
31	86	---	e100	e90	---	160	---	117	---	75	63	---
TOTAL	2,391	3,344	4,167	2,565	2,830	5,559	3,805	3,746	2,938	2,355	2,115	2,360
MEAN	77.1	111	134	82.7	97.6	179	127	121	97.9	76.0	68.2	78.7
MAX	86	176	167	120	192	222	167	158	122	99	115	114
MIN	69	67	100	20	50	126	104	99	81	64	60	61
AC-FT	4,740	6,630	8,270	5,090	5,610	11,030	7,550	7,430	5,830	4,670	4,200	4,680

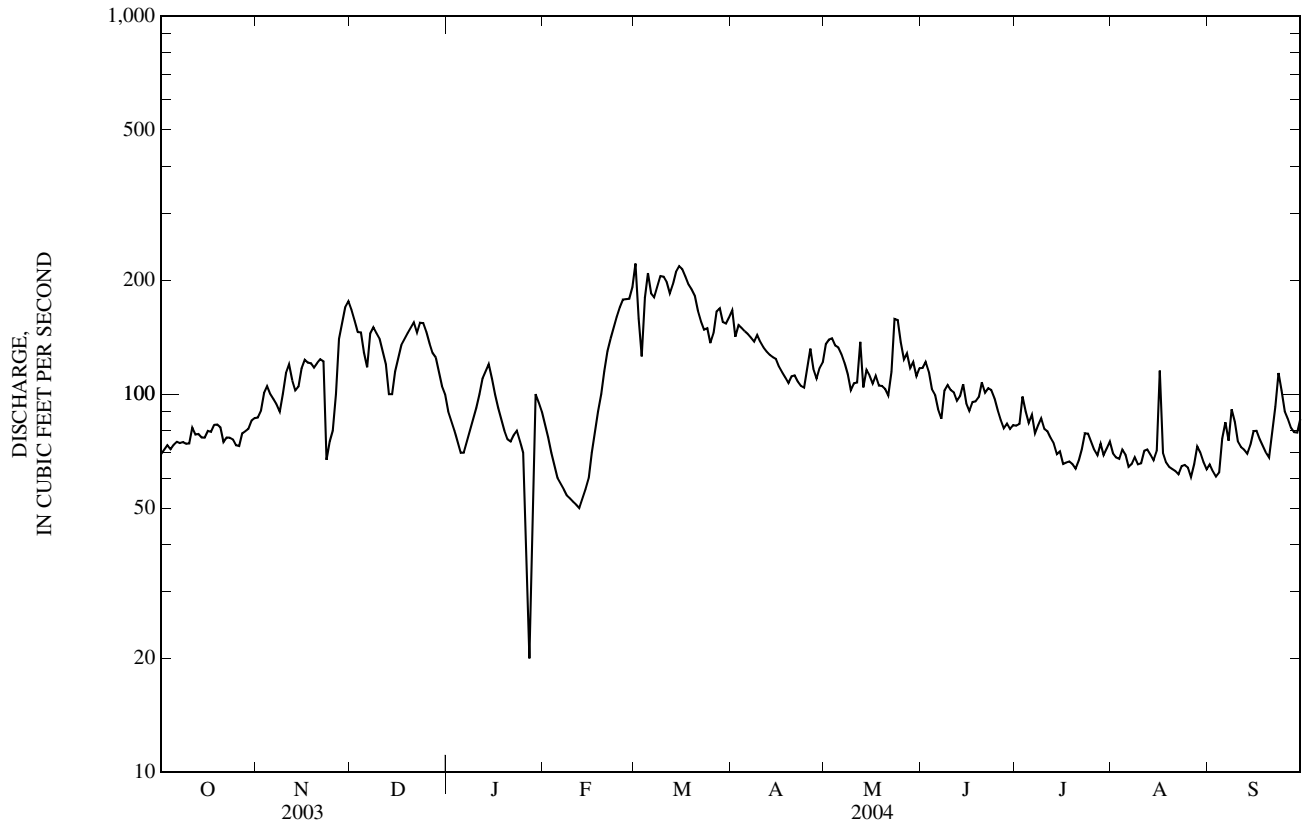
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2004, BY WATER YEAR (WY)

MEAN	82.8	92.8	88.9	84.6	118	196	187	165	154	100	79.8	74.3
MAX	146	227	190	152	348	396	401	302	511	228	164	120
(WY)	(1999)	(1999)	(1999)	(1999)	(1997)	(1949)	(1977)	(1995)	(1997)	(1944)	(1983)	(1997)
MIN	61.1	60.0	51.4	23.1	60.2	91.6	85.9	87.5	62.5	44.1	45.3	50.2
(WY)	(1979)	(1979)	(1993)	(1962)	(1949)	(1981)	(1981)	(1992)	(1985)	(1974)	(1973)	(1975)

06449500 LITTLE WHITE RIVER NEAR ROSEBUD, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1944 - 2004	
ANNUAL TOTAL	46,040		38,175			
ANNUAL MEAN	126		104		[a]118	
HIGHEST ANNUAL MEAN					207	1997
LOWEST ANNUAL MEAN					78.0	1976
HIGHEST DAILY MEAN	350	Mar 6	222	Mar 1	1,810	May 17, 1944
LOWEST DAILY MEAN	53	Aug 15	20	Jan 27	[b]10	Jan 4, 1949
ANNUAL SEVEN-DAY MINIMUM	56	Aug 12	53	Feb 7	16	Jan 18, 1962
MAXIMUM PEAK FLOW			[c]242	Mar 1	[d]4,640	Jun 11, 1967
MAXIMUM PEAK STAGE			[f]7.19	Jan 4	14.09	Jun 11, 1967
INSTANTANEOUS LOW FLOW					10	Jan 4, 1949
ANNUAL RUNOFF (AC-FT)	91,320		75,720		85,850	
10 PERCENT EXCEEDS	200		156		204	
50 PERCENT EXCEEDS	118		98		95	
90 PERCENT EXCEEDS	62		66		59	

a Median of annual mean discharges, 120 ft^3/s.
b Also Feb. 20, 1955.
c Gage height, 5.09 ft.
d From rating curve extended above 1,300 ft^3/s.
e Estimated.
f Backwater from ice.



06450500 LITTLE WHITE RIVER BELOW WHITE RIVER, SD

LOCATION.--Lat 43°36'05", long 100°44'58", in SW¼ NW¼ sec.23, T.42 N., R.29 W., Mellette County, Hydrologic Unit 10140203, on left bank at downstream side of bridge on U.S. Highway 83, 1.3 mi downstream from Pine Creek, and 2.0 mi north of town of White River.

DRAINAGE AREA.--1,570 mi^2, approximately, of which about 1,310 mi^2 probably contributes directly to surface runoff.

PERIOD OF RECORD.--October 1949 to current year. Prior to October 1965, published as South Fork White River below White River.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,912.78 ft above NGVD of 1929. Prior to June 8, 1968, gage located at site 0.8 mi downstream at datum 4.50 ft lower.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Satellite data-collection platform at station. Diurnal fluctuations caused by small powerplant 2.2 mi upstream. Several small diversions for irrigation and some storage in several small lakes above station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	112	133	e140	e85	261	148	114	99	68	61	58
2	130	111	132	e135	e80	218	137	120	111	66	50	59
3	73	123	127	e120	e75	144	136	118	116	65	51	58
4	73	127	123	e110	e70	102	146	120	100	91	53	55
5	82	111	114	e100	e70	173	138	120	93	92	55	96
6	96	75	97	e90	e70	166	140	116	89	88	53	65
7	95	88	109	e80	e65	159	135	116	73	83	48	89
8	68	92	147	e95	e60	174	135	105	78	67	54	75
9	52	112	144	e110	e65	189	135	102	108	68	50	92
10	65	135	128	e120	e65	189	137	94	96	66	49	89
11	85	147	e120	e130	e65	195	126	110	102	60	49	78
12	79	128	e100	e140	e65	184	124	132	89	67	55	70
13	90	115	e100	e150	e60	174	144	128	82	50	55	78
14	92	94	e105	e140	e70	206	112	98	94	52	53	84
15	105	97	e110	e130	e80	216	111	110	89	47	97	105
16	99	114	e120	e125	e90	213	107	98	106	51	94	91
17	136	102	e130	e110	e100	210	101	104	86	48	74	92
18	94	122	e140	e100	e110	202	94	96	78	45	65	95
19	64	110	e150	e105	e120	194	108	87	82	46	50	92
20	81	117	e160	e110	e140	191	94	92	91	59	48	96
21	84	125	e170	e105	e160	171	101	86	92	52	56	101
22	84	115	185	e100	e180	158	102	95	85	42	51	122
23	84	56	195	e110	e200	151	96	163	87	58	50	170
24	76	44	192	e100	e220	143	94	198	84	61	57	172
25	74	52	164	e95	e240	132	97	155	79	60	50	129
26	79	e177	166	e90	e250	126	116	133	74	59	52	96
27	84	119	159	e80	e260	146	144	121	69	49	56	111
28	83	112	e155	e70	264	169	99	122	68	63	76	59
29	90	107	e150	e70	268	145	109	111	67	57	41	79
30	105	132	e145	e75	---	141	111	109	60	52	64	89
31	94	---	e140	e80	---	142	---	103	---	51	65	---
TOTAL	2,728	3,271	4,310	3,315	3,647	5,384	3,577	3,576	2,627	1,883	1,782	2,745
MEAN	88.0	109	139	107	126	174	119	115	87.6	60.7	57.5	91.5
MAX	136	177	195	150	268	261	148	198	116	92	97	172
MIN	52	44	97	70	60	102	94	86	60	42	41	55
AC-FT	5,410	6,490	8,550	6,580	7,230	10,680	7,090	7,090	5,210	3,730	3,530	5,440

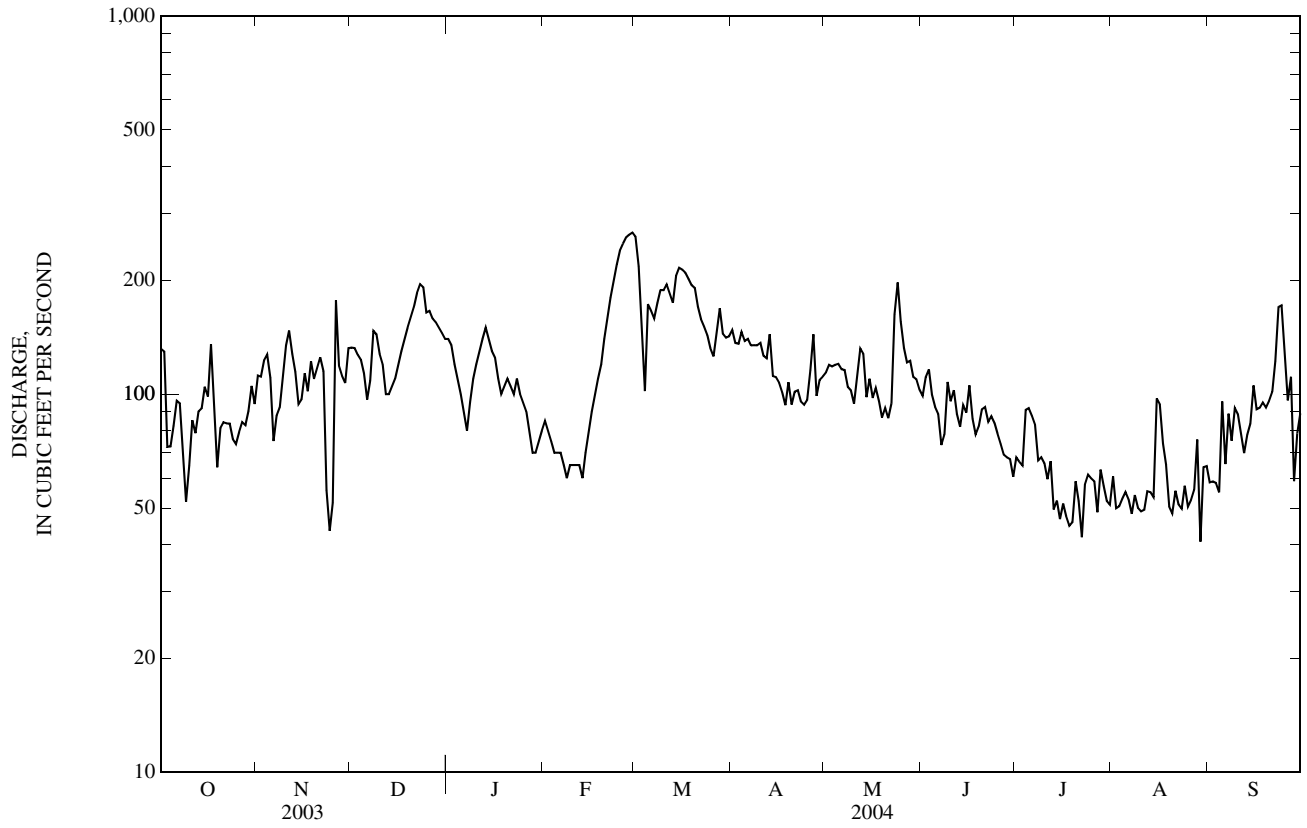
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2004, BY WATER YEAR (WY)

MEAN	83.8	92.9	94.3	90.0	135	259	235	216	213	114	79.3	74.4
MAX	160	271	225	175	590	815	613	614	988	574	182	140
(WY)	(1999)	(1999)	(1999)	(1999)	(1997)	(1978)	(1977)	(1983)	(1997)	(1962)	(1998)	(1997)
MIN	53.3	60.5	39.1	28.5	57.5	85.9	76.9	82.5	54.7	31.3	37.1	33.0
(WY)	(1977)	(1976)	(1952)	(1962)	(1962)	(1981)	(1981)	(1985)	(1985)	(1974)	(1974)	(1952)

06450500 LITTLE WHITE RIVER BELOW WHITE RIVER, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1950 - 2004	
ANNUAL TOTAL	48,908		38,845			
ANNUAL MEAN	134		106		[a]141	
HIGHEST ANNUAL MEAN					305	1997
LOWEST ANNUAL MEAN					79.0	1976
HIGHEST DAILY MEAN	400	Feb 21	268	Feb 29	7,880	Jun 3, 1997
LOWEST DAILY MEAN	34	Aug 15	41	Aug 29	[b]7.0	Jul 31, 1952
ANNUAL SEVEN-DAY MINIMUM	45	Aug 14	48	Jul 13	11	Aug 31, 1952
MAXIMUM PEAK FLOW			[c]566	Mar 9	[d]13,700	Jun 12, 1967
MAXIMUM PEAK STAGE			[f]4.95	Jan 27	[g]15.46	Jun 7, 1968
ANNUAL RUNOFF (AC-FT)	97,010		77,050		101,800	
10 PERCENT EXCEEDS	202		165		242	
50 PERCENT EXCEEDS	120		99		97	
90 PERCENT EXCEEDS	58		56		54	

a Median of annual mean discharges, 130 ft^3/s.
b Also Aug. 31 and Sept. 1, 1952.
c Gage height, 2.94 ft.
d Gage height, 10.02 ft, site and datum then in use.
e Estimated.
f Backwater from ice.
g From floodmarks, present site and datum.



06452000 WHITE RIVER NEAR OACOMA, SD

LOCATION.--Lat 43°44'54", long 99°33'22", in SE¼ SW¼ sec.3, T.103 N., R.73 W., Lyman County, Hydrologic Unit 10140204, on left bank at downstream side of bridge on State Highway 47, 1.5 mi downstream from Wagner Draw, 1.8 mi upstream from high-water line of Lake Francis Case, and 8.8 mi southwest of Oacoma.

DRAINAGE AREA.--10,200 mi^2, approximately, of which about 9,940 mi^2 contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1928 to current year.

REVISED RECORDS.--WSP 786: Drainage area. WSP 1309: 1929-30(M).

GAGE.--Water-stage recorders and crest-stage gage. Datum of gage is 1,377.29 ft above NGVD of 1929. See WSP 1709, 1729, or 1917 for history of changes prior to Feb. 27, 1960.

REMARKS.--Records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers 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.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	62	e75	e180	e25	692	241	161	312	89	56	79
2	43	65	e95	e175	e25	555	229	155	268	86	51	57
3	31	e62	e120	e170	e23	384	214	154	231	86	51	46
4	40	e60	e140	e160	e21	336	211	166	211	79	42	38
5	49	e55	e150	e150	e20	371	197	171	215	76	44	38
6	39	e62	e160	e140	e19	319	179	154	188	72	45	43
7	35	e59	e190	e130	e18	275	181	147	162	176	42	37
8	26	e60	e190	e120	e17	293	172	146	143	314	98	2,880
9	34	e90	e180	e110	e17	295	165	141	239	504	111	2,660
10	36	e100	e175	e100	e18	328	159	136	1,720	406	112	2,390
11	58	113	e170	e95	e17	541	159	132	5,940	432	84	2,070
12	49	93	e165	e95	e16	793	159	172	3,420	293	64	1,140
13	43	139	e160	e95	e17	880	168	162	1,600	229	54	674
14	32	161	e155	e100	e18	1,010	152	165	1,560	185	123	483
15	42	131	e150	e110	e17	740	145	166	807	133	139	460
16	45	110	e145	e120	e18	648	142	177	1,000	117	111	393
17	47	e100	e145	e130	e20	568	120	169	598	93	89	289
18	47	95	e150	e130	e21	481	118	177	458	85	64	227
19	51	142	e150	e125	e25	437	115	162	372	73	75	200
20	79	179	e160	e115	e30	406	127	151	295	66	67	177
21	100	156	e170	e110	e40	404	125	144	240	57	47	185
22	79	e130	e180	e110	e60	369	122	132	203	e42	38	164
23	63	e50	e190	e105	e80	351	128	141	184	e37	31	183
24	62	e70	e200	e105	e120	333	131	161	164	e35	26	206
25	e61	e100	e210	e100	e170	298	129	171	145	e35	24	251
26	e60	e100	e210	e100	e250	278	125	190	130	e32	22	213
27	59	e100	e210	e90	e350	314	120	578	123	29	22	1,020
28	58	e105	e205	e70	e500	409	116	617	116	31	21	847
29	62	e90	e200	e50	644	384	113	427	106	38	19	442
30	65	e80	e195	e40	---	293	184	401	99	38	22	339
31	61	---	e190	e30	---	268	---	352	---	54	45	---
TOTAL	1,609	2,919	5,185	3,460	2,616	14,053	4,646	6,478	21,249	4,022	1,839	18,231
MEAN	51.9	97.3	167	112	90.2	453	155	209	708	130	59.3	608
MAX	100	179	210	180	644	1,010	241	617	5,940	504	139	2,880
MIN	26	50	75	30	16	268	113	132	99	29	19	37
AC-FT	3,190	5,790	10,280	6,860	5,190	27,870	9,220	12,850	42,150	7,980	3,650	36,160

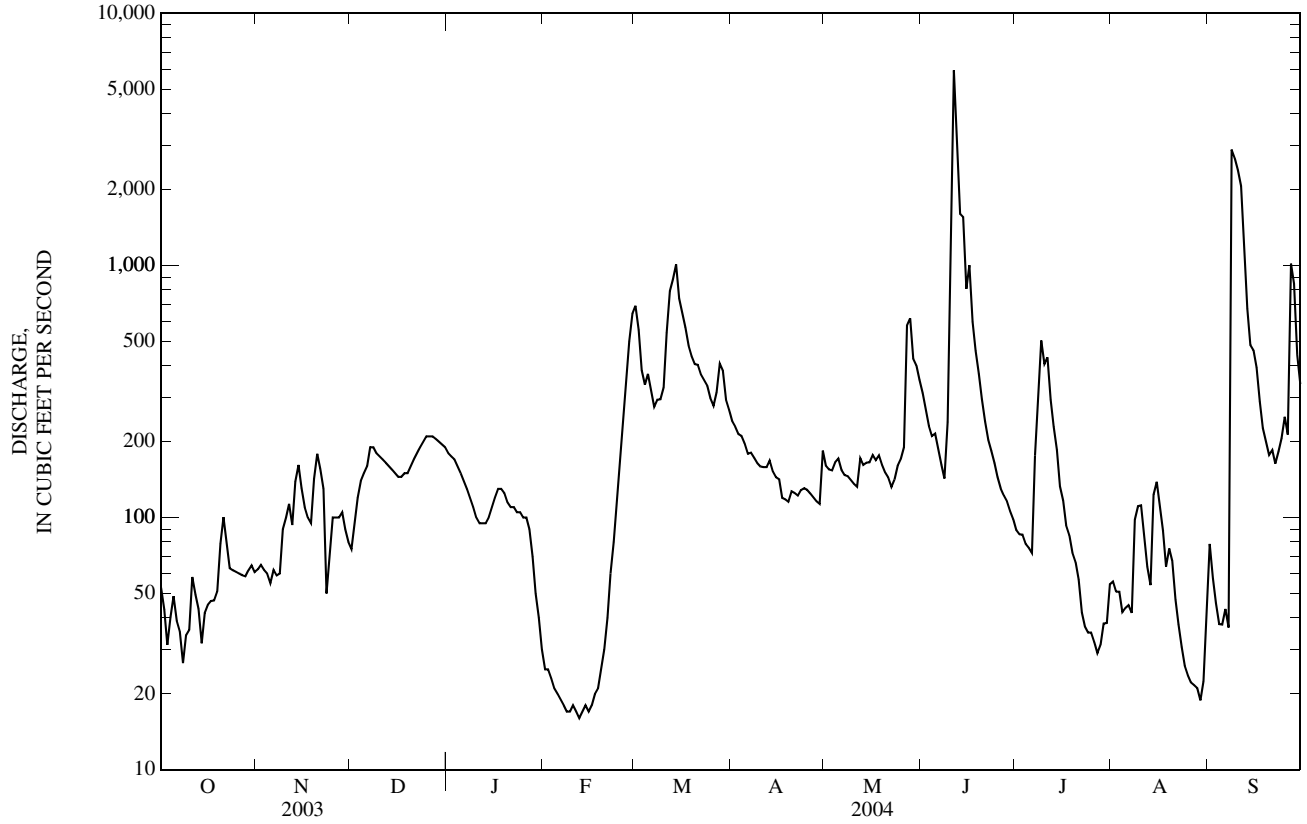
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2004, BY WATER YEAR (WY)

MEAN	192	166	94.2	82.5	329	1,319	1,038	1,337	1,292	497	305	203
MAX	1,217	1,445	449	592	3,146	5,856	4,726	13,630	5,985	3,553	1,702	1,074
(WY)	(1999)	(1999)	(1999)	(1997)	(1997)	(1978)	(1952)	(1942)	(1967)	(1962)	(1997)	(1999)
MIN	28.0	16.7	6.63	3.34	11.3	177	111	93.8	39.5	1.05	0.75	15.1
(WY)	(1938)	(1977)	(1976)	(1991)	(1950)	(1934)	(1981)	(1934)	(1989)	(1936)	(1936)	(1937)

06452000 WHITE RIVER NEAR OACOMA, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1929 - 2004	
ANNUAL TOTAL	99,677		86,307			
ANNUAL MEAN	273		236		[a]572	
HIGHEST ANNUAL MEAN					1,729	1942
LOWEST ANNUAL MEAN					151	1934
HIGHEST DAILY MEAN	3,410	Mar 22	5,940	Jun 11	44,000	Mar 30, 1952
LOWEST DAILY MEAN	12	Aug 16	16	Feb 12	[b]0.00	Aug 14, 1971
ANNUAL SEVEN-DAY MINIMUM	15	Aug 24	17	Feb 7	0.00	Aug 14, 1971
MAXIMUM PEAK FLOW			6,690	Jun 11	[c]51,900	Mar 30, 1952
MAXIMUM PEAK STAGE			12.91	Jun 11	[d]24.70	Mar 4, 1994
ANNUAL RUNOFF (AC-FT)	197,700		171,200		414,300	
10 PERCENT EXCEEDS	699		434		1,220	
50 PERCENT EXCEEDS	135		130		167	
90 PERCENT EXCEEDS	25		35		32	

a Median of annual mean discharges, 470 ft^3/s.
b No flow for some days in 1971, 1974, 1976, 1980, and 1989.
c Gage height, 15.40 ft, site and datum then in use.
d Ice jam.
e Estimated.



06452000 WHITE RIVER NEAR OACOMA, SD—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1945 to September 1953, October 1968 to September 1969, October 1971 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to September 1976, October 1977 to Sept. 30, 1981.
WATER TEMPERATURE: October 1974 to September 1976, October 1978 to September 1988.
SUSPENDED-SEDIMENT DISCHARGE: October 1971 to September 1976, October 1981 to current year.

REMARKS.--Sediment discharge records fair except those for estimated daily concentrations and/or discharges, which are poor. Observer collects samples on a daily basis during open water periods. Flow affected by ice Nov. 3-10 and Nov. 22 to Feb. 28. Sediment-discharge records prior to Oct. 1, 1971, on file in the District office, U.S. Army Corps of Engineers, Omaha, NE.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,950 microsiemens, Aug. 8, 1980; minimum daily, 370 microsiemens, Mar. 17, 1975.
WATER TEMPERATURE: Maximum daily, 33.5°C, July 18, 1986; minimum daily, -1.0°C on many days during winter periods.
SEDIMENT CONCENTRATION: Maximum daily mean, 72,300 mg/L, Apr. 15, 1974; minimum daily mean, 11 mg/L, Aug. 5, 2002.
SEDIMENT LOAD: Maximum daily, 1,640,000 tons, May 17, 1982; 0 ton, July 17-23, 1974, Aug. 29 to Sept. 9, Sept. 13, 1976, Aug. 11-23, Aug. 26 to Sept. 5, 1989.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATION: Maximum daily mean, 46,400 mg/L, Sept. 9; minimum daily mean, 50 mg/L, Feb. 3, 4.
SEDIMENT LOAD: Maximum daily, 442,000 tons, Sept. 8; minimum daily, 2.8 tons, Feb. 4, 12.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
		OCTOBER			NOVEMBER			DECEMBER	
1	53	18,800	2,610	62	848	143	e75	e2,030	412
2	43	13,300	1,560	65	e917	161	e95	e1,930	494
3	31	9,350	785	e62	e988	165	e120	e1,860	600
4	40	e6,500	703	e60	e997	162	e140	e1,790	674
5	49	4,110	541	e55	e998	148	e150	e1,710	694
6	39	e3,590	378	e62	e999	167	e160	e1,640	709
7	35	e3,330	318	e59	e999	159	e190	e1,570	805
8	26	e3,070	220	e60	e1,000	163	e190	e1,500	770
9	34	e2,810	260	e90	e1,030	249	e180	e1,430	695
10	36	e2,550	247	e100	e1,060	285	e175	e1,360	641
11	58	2,260	354	113	e1,080	331	e170	e1,290	590
12	49	e1,750	234	93	1,110	280	e165	e1,210	541
13	43	e1,210	144	139	1,120	419	e160	e1,140	494
14	32	781	67	161	1,040	451	e155	e1,070	449
15	42	930	106	131	974	345	e150	e1,000	407
16	45	e1,120	137	110	e736	219	e145	e965	378
17	47	e1,310	165	e100	e511	138	e145	e929	364
18	47	1,490	189	95	493	127	e150	e894	362
19	51	e1,800	249	142	1,230	532	e150	e859	348
20	79	9,650	2,120	179	4,970	2,410	e160	e824	356
21	100	11,000	2,990	156	5,570	2,350	e170	e788	362
22	79	7,750	1,670	e130	e5,220	1,840	e180	e753	366
23	63	4,680	806	e50	e4,820	661	e190	e718	368
24	62	e4,070	679	e70	e4,410	831	e200	e682	368
25	e61	e3,830	631	e100	e4,010	1,080	e210	e647	367
26	e60	e3,740	606	e100	e3,670	990	e210	e612	347
27	59	3,620	577	e100	e3,330	900	e210	e576	327
28	58	3,370	532	e105	e3,000	850	e205	e541	300
29	62	3,280	546	e90	e2,670	649	e200	e506	273
30	65	e2,130	374	e80	e2,330	505	e195	e471	248
31	61	1,010	166	---	---	---	e190	e435	223
TOTAL	1,609	---	20,964	2,919	---	17,710	5,185	---	14,332

06452000 WHITE RIVER NEAR OACOMA, SD—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
		JANUARY			FEBRUARY			MARCH	
1	e180	e403	196	e25	e71	4.8	692	4,630	8,650
2	e175	e389	184	e25	e60	4.1	555	4,690	7,050
3	e170	e379	174	e23	e50	3.1	384	3,200	3,340
4	e160	e368	159	e21	e50	2.8	336	e2,240	2,040
5	e150	e358	145	e20	e63	3.4	371	2,140	2,140
6	e140	e347	131	e19	e63	3.2	319	1,920	1,650
7	e130	e336	118	e18	e63	3.1	275	2,240	1,660
8	e120	e326	106	e17	e63	2.9	293	2,660	2,110
9	e110	e315	94	e17	e64	2.9	295	3,130	2,490
10	e100	e304	82	e18	e64	3.1	328	3,610	3,210
11	e95	e294	75	e17	e64	2.9	541	6,470	10,400
12	e95	e283	73	e16	e64	2.8	793	12,200	26,300
13	e95	e273	70	e17	e64	3.0	880	e14,000	33,200
14	e100	e262	71	e18	e65	3.1	1,010	e17,100	46,700
15	e110	e251	75	e17	e65	3.0	740	15,600	31,200
16	e120	e241	78	e18	e66	3.2	648	12,500	22,000
17	e130	e230	81	e20	e72	3.9	568	e10,000	15,400
18	e130	e220	77	e21	e79	4.5	481	7,990	10,400
19	e125	e209	71	e25	e86	5.8	437	6,400	7,570
20	e115	e198	62	e30	e93	7.5	406	4,920	5,390
21	e110	e188	56	e40	e162	18	404	e4,350	4,750
22	e110	e177	53	e60	e606	98	369	3,830	3,820
23	e105	e167	47	e80	e1,110	240	351	2,890	2,740
24	e105	e156	44	e120	e1,620	522	333	2,590	2,340
25	e100	e145	39	e170	e2,120	972	298	1,860	1,500
26	e100	e135	36	e250	e2,630	1,770	278	1,560	1,180
27	e90	e124	30	e350	e3,130	2,950	314	e2,030	1,820
28	e70	e113	22	e500	e3,640	4,900	409	e2,720	3,000
29	e50	e103	14	644	e4,150	7,180	384	2,150	2,250
30	e40	e92	10	---	---	---	293	1,390	1,100
31	e30	e82	6.6	---	---	---	268	1,020	737
TOTAL	3,460	---	2,479.6	2,616	---	18,723.1	14,053	---	268,137
		APRIL			MAY			JUNE	
1	241	948	616	161	721	314	312	16,400	13,800
2	229	699	434	155	e674	282	268	12,500	9,090
3	214	865	501	154	2,330	958	231	11,200	6,960
4	211	e2,400	1,360	166	9,320	4,190	211	10,600	6,050
5	197	3,550	1,890	171	8,960	4,150	215	10,500	6,100
6	179	1,690	820	154	5,890	2,460	188	e8,680	4,430
7	181	965	472	147	3,940	1,560	162	6,600	2,900
8	172	725	338	146	3,380	1,330	143	4,620	1,790
9	165	510	227	141	e3,050	1,160	239	5,180	3,380
10	159	472	203	136	2,600	957	1,720	7,350	32,300
11	159	e428	184	132	1,690	605	5,940	4,750	76,500
12	159	387	166	172	1,730	802	3,420	3,780	34,800
13	168	379	172	162	1,390	609	1,600	e4,480	19,200
14	152	371	153	165	1,140	507	1,560	5,170	21,700
15	145	367	143	166	1,120	499	807	5,730	12,300
16	142	323	124	177	e900	428	1,000	24,400	65,500
17	120	304	98	169	694	318	598	28,500	46,000
18	118	e339	108	177	629	301	458	24,300	30,200
19	115	368	115	162	418	183	372	20,000	20,100
20	127	344	118	151	354	144	295	e14,800	11,900
21	125	319	108	144	305	119	240	10,300	6,740
22	122	266	88	132	293	104	203	9,210	5,060
23	128	289	100	141	e358	137	184	7,110	3,540
24	131	314	111	161	426	185	164	e6,030	2,680
25	129	e279	97	171	478	221	145	4,890	1,920
26	125	247	83	190	1,390	732	130	2,910	1,030
27	120	245	80	578	15,000	31,400	123	1,820	602
28	116	224	70	617	29,600	49,500	116	2,920	917
29	113	285	87	427	25,900	29,900	106	2,560	737
30	184	724	374	401	e22,800	24,600	99	2,440	652
31	---	---	---	352	e19,700	18,700	---	---	---
TOTAL	4,646	---	9,440	6,478	---	177,355	21,249	---	448,878

06452000 WHITE RIVER NEAR OACOMA, SD—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
		JULY			AUGUST			SEPTEMBER	
1	89	e2,150	519	56	e18,400	2,770	79	28,100	5,980
2	86	1,880	436	51	16,600	2,280	57	28,800	4,460
3	86	1,810	419	51	13,100	1,810	46	31,500	3,890
4	79	e1,720	365	42	6,360	726	38	30,700	3,130
5	76	e1,630	334	44	5,930	700	38	e24,500	2,480
6	72	e1,610	316	45	7,220	876	43	e17,700	2,040
7	176	e8,080	4,400	42	6,390	724	37	11,900	1,180
8	314	18,600	15,900	98	e20,300	5,590	2,880	40,600	442,000
9	504	24,900	33,900	111	e21,900	6,560	2,660	46,400	335,000
10	406	25,900	28,400	112	18,900	5,690	2,390	36,900	239,000
11	432	e21,700	25,400	84	15,200	3,470	2,070	29,800	167,000
12	293	17,400	13,800	64	11,700	2,020	1,140	e23,800	74,400
13	229	15,600	9,640	54	9,840	1,440	674	18,400	33,900
14	185	15,200	7,620	123	15,800	5,310	483	14,500	19,000
15	133	13,800	4,950	139	e32,300	12,100	460	e10,800	13,400
16	117	12,700	4,000	111	30,900	9,330	393	8,050	8,600
17	93	e11,000	2,770	89	24,200	5,830	289	6,190	4,850
18	85	e9,360	2,160	64	16,000	2,790	227	4,990	3,060
19	73	7,660	1,500	75	11,200	2,280	200	e4,430	2,390
20	66	5,890	1,060	67	9,320	1,710	177	3,860	1,850
21	57	4,420	680	47	4,070	531	185	3,070	1,540
22	e42	3,860	439	38	e2,200	225	164	2,570	1,140
23	e37	3,170	317	31	950	80	183	2,470	1,220
24	e35	1,640	155	26	533	38	206	2,330	1,300
25	e35	e1,450	137	24	233	15	251	2,560	1,740
26	e32	1,420	123	22	200	12	213	e2,780	1,610
27	29	1,620	127	22	155	9.1	1,020	15,800	60,900
28	31	e3,800	323	21	393	23	847	27,300	62,900
29	38	e6,140	631	19	e1,570	79	442	24,600	29,400
30	38	e8,630	913	22	e2,850	174	339	20,900	18,900
31	54	e18,000	2,660	45	11,500	2,110	---	---	---
TOTAL	4,022	---	164,394	1,839	---	77,302.1	18,231	---	1,548,260
YEAR	86,307	2,767,974.8							

e Estimated

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

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)	Suspnd. sediment, sieve diametr percent <.063mm (70331)
OCT 14...	1220	30	573	11.0	12.0	683	55	100
NOV 18...	1145	95	461	12.0	5.0	492	126	99
FEB 04...	1245	21	774	-5.0	0.0	72	4.1	91
MAR 18...	1305	486	411	8.5	8.0	7,660	10,100	100
APR 21...	1210	120	592	23.0	17.0	350	113	98
JUN 12...	1055	3,480	562	26.0	20.5	3,650	34,300	93
JUL 27...	1220	28	624	31.0	23.0	1,360	104	100
SEP 08...	1445	5,240	664	30.0	19.5	58,100	822,000	96

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06452320 PLATTE CREEK NEAR PLATTE, SD

LOCATION.--Lat 43°19'38", long 98°58'13", in NW¼ NW¼ NE¼ sec.11, T.98 N., R.69 W., Charles Mix County, Hydrologic Unit 10140101, on right bank at upstream side of bridge on State Highway 1804, 0.5 mi above high-water line of Fort Randall Reservoir, and 8.0 mi southwest of Platte.

DRAINAGE AREA.--741 mi^2.

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

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,370 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Satellite data-collection platform at station. Some storage in Lake Platte, capacity, 100 acre-ft, 13.6 mi upstream. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.04	0.01	e0.00	e0.05	e0.03	2.2	1.4	0.33	0.55	2.7	0.00	0.03
2	0.04	0.02	e0.00	e0.06	e0.03	1.3	1.1	0.29	0.45	2.1	0.00	0.03
3	0.04	0.02	0.00	e0.05	e0.03	1.1	0.94	0.40	0.42	2.4	0.02	0.02
4	0.04	0.02	0.00	e0.04	e0.03	0.99	0.77	0.85	7.4	1.7	0.00	0.04
5	0.04	e0.02	e0.00	e0.03	e0.03	0.83	0.63	0.83	33	1.4	0.00	0.07
6	0.02	e0.02	e0.00	e0.02	e0.02	0.59	0.57	0.72	31	1.4	0.00	0.07
7	0.02	e0.02	0.00	e0.01	e0.02	0.43	0.59	0.67	27	1.3	0.00	0.07
8	0.02	e0.01	e0.00	e0.01	e0.03	0.69	0.47	0.82	24	1.2	0.00	0.07
9	0.02	e0.01	0.00	e0.02	e0.04	0.72	0.48	1.5	59	1.1	0.00	0.05
10	0.02	0.00	0.00	e0.03	e0.04	0.76	0.47	1.2	62	0.87	0.00	0.04
11	0.05	0.00	0.02	e0.04	e0.05	0.61	0.48	1.5	95	0.69	0.01	0.04
12	0.04	0.00	0.04	e0.06	e0.04	0.54	0.55	1.3	91	0.52	0.02	0.03
13	0.04	e0.00	0.04	e0.08	e0.05	0.51	0.52	1.0	92	0.46	0.02	0.03
14	0.04	0.00	0.06	e0.15	e0.04	0.43	0.49	0.78	73	0.32	0.03	0.04
15	0.03	0.00	0.08	e0.40	e0.04	0.60	0.47	0.95	58	0.27	0.03	0.07
16	0.02	0.00	0.09	e0.37	e0.05	0.65	0.40	1.2	46	0.20	0.04	0.06
17	0.02	0.00	0.12	e0.24	e0.06	0.82	0.38	1.4	37	0.13	0.05	0.04
18	0.01	0.00	e0.15	e0.18	e0.08	0.68	0.42	3.9	31	0.10	0.06	0.04
19	0.01	0.00	e0.20	e0.15	e0.10	0.68	0.37	2.4	24	0.07	0.06	0.04
20	0.02	0.00	e0.25	e0.15	e0.15	0.55	0.54	1.5	20	0.05	0.06	0.05
21	0.02	0.00	e0.23	e0.19	e0.10	0.62	0.86	1.0	17	0.05	0.05	0.07
22	0.03	0.00	e0.20	e0.22	e0.10	0.71	1.6	0.83	13	0.06	0.05	0.06
23	0.02	e0.00	e0.15	e0.30	e0.09	0.80	1.5	1.1	11	0.07	0.05	0.05
24	0.03	e0.00	e0.10	e0.33	e0.10	0.77	1.1	1.3	9.2	0.05	0.05	0.02
25	0.03	e0.00	e0.10	e0.29	e0.15	0.77	0.94	3.4	7.2	e0.03	0.04	0.05
26	0.03	e0.00	e0.08	e0.20	e0.20	0.71	0.69	3.9	5.9	e0.02	0.04	1.2
27	0.04	e0.00	e0.08	e0.06	e0.33	0.97	0.50	2.0	5.0	e0.02	0.04	0.73
28	0.03	e0.00	e0.07	e0.03	0.92	1.4	0.42	1.2	4.7	e0.02	0.04	0.29
29	0.02	e0.00	e0.06	e0.03	1.3	4.0	0.32	0.89	4.0	e0.02	0.05	0.13
30	0.02	e0.00	e0.05	e0.02	---	2.7	0.29	1.1	3.5	0.01	0.05	0.10
31	0.02	---	e0.04	e0.02	---	1.8	---	0.71	---	0.00	0.05	---
TOTAL	0.87	0.15	2.21	3.83	4.25	30.93	20.26	40.97	892.32	19.33	0.91	3.63
MEAN	0.03	0.01	0.07	0.12	0.15	1.00	0.68	1.32	29.7	0.62	0.03	0.12
MAX	0.05	0.02	0.25	0.40	1.3	4.0	1.6	3.9	95	2.7	0.06	1.2
MIN	0.01	0.00	0.00	0.01	0.02	0.43	0.29	0.29	0.42	0.00	0.00	0.02
AC-FT	1.7	0.3	4.4	7.6	8.4	61	40	81	1,770	38	1.8	7.2

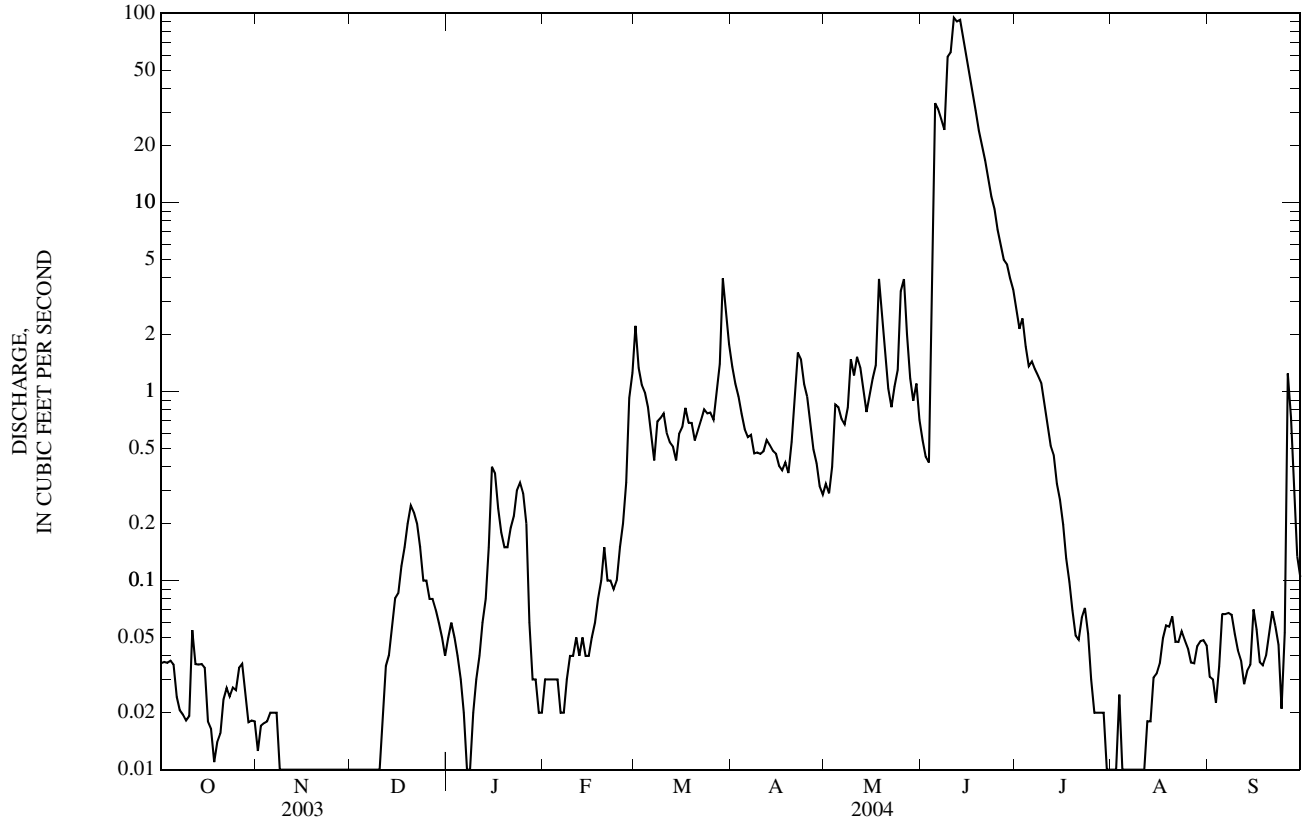
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2004, BY WATER YEAR (WY)

MEAN	8.75	10.3	4.61	2.10	22.6	38.7	72.6	141	59.1	55.8	12.3	6.58
MAX	82.1	89.2	30.4	6.99	223	290	386	796	268	449	103	34.1
(WY)	(1996)	(1999)	(1999)	(1997)	(1997)	(1997)	(2001)	(1995)	(1995)	(1999)	(1998)	(1995)
MIN	0.00	0.00	0.00	0.01	0.02	0.39	0.26	0.01	0.01	0.02	0.00	0.00
(WY)	(1990)	(1991)	(1990)	(1992)	(1993)	(1992)	(1990)	(1992)	(1992)	(2002)	(1991)	(1989)

06452320 PLATTE CREEK NEAR PLATTE, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1989 - 2004	
ANNUAL TOTAL	165.14		1,019.66			
ANNUAL MEAN	0.45		2.79		[a]36.3	
HIGHEST ANNUAL MEAN					159	1999
LOWEST ANNUAL MEAN					0.35	1992
HIGHEST DAILY MEAN	8.4	May 9	95	Jun 11	2,370	May 11, 1995
LOWEST DAILY MEAN	0.00	Jun 21	0.00	Nov 10	[b]0.00	Jul 9, 1989
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 17	0.00	Nov 10	0.00	Aug 21, 1989
MAXIMUM PEAK FLOW			118	Jun 11	[c]2,600	May 11, 1995
MAXIMUM PEAK STAGE			3.54	Jun 11	[d]12.67	May 8, 1997
ANNUAL RUNOFF (AC-FT)	328		2,020		26,330	
10 PERCENT EXCEEDS	1.4		2.1		66	
50 PERCENT EXCEEDS	0.09		0.08		1.5	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a Median of annual mean discharges, 8.1 ft^3/s.
b No flow at times in most years.
c From rating curve extended above 975 ft^3/s, gage height, 11.29 ft.
d Backwater from Lake Francis Case.
e Estimated.



06452500 LAKE FRANCIS CASE AT PICKSTOWN, SD

LOCATION.--Lat 43°04'05", long 98°33'15", in SE$^1/_4$ sec.5, T.95 N., R.65 W., Charles Mix County, Hydrologic Unit 10140101, in tower 6 of outlet works at Fort Randall Dam, on Missouri River at Pickstown, 1.0 mi upstream from Randall Creek, and at mile 880.0.

DRAINAGE AREA.--263,500 mi^2, approximately.

PERIOD OF RECORD.--December 1952 to current year (monthend contents only). Prior to October 1964, published as Fort Randall Reservoir at Pickstown.

GAGE.--Water-stage recorder. Elevations listed to NGVD of 1929. Prior to Mar. 25, 1953, elevations determined from temporary nonrecording gages.

REMARKS.--Reservoir is formed by earthfill dam; storage began in December 1952; initial closure made July 1952. Maximum capacity, 5,574,000 acre-ft below elevation 1,375.0 ft (top of spillway gates). Normal maximum, 4,589,000 acre-ft below elevation 1,365.0 ft. Inactive storage, 1,184,000 acre-ft below elevation 1,310.0 ft. No dead storage; elevation of invert of lowest outlet is 1,227.0 ft. Figures given herein represent elevations at outlet works and total contents adjusted for wind effect.

The spillway consists of 21 taintor gates, each 40 ft wide by 29 ft high; spillway capacity, 490,000 ft^3/s at pool elevation 1,375 ft. Crest of spillway is at elevation 1,346 ft. Normal releases are through 12 tunnels 22 ft in diameter. Installation of power units in 8 of these tunnels was completed in January 1956; maximum release through power tunnels is 46,000 ft^3/s; maximum release through 4 other tunnels is 130,000 ft^3/s at pool elevation 1,375 ft. 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, 5,102,000 acre-ft, May 6, 1997; maximum elevation, 1,372.17 ft, May 7, 1997; minimum since initial filling, 1,450,000 acre-ft, Oct. 23, 1956, affected by wind.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 3,630,000 acre-ft, May 27; minimum contents, 2,288,000 acre-ft, Nov. 18.

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

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	1,353.05	3,367,000	--
Oct. 31	1,345.33	2,784,000	-583,000
Nov. 30	1,339.84	2,430,000	-354,000
Dec. 31	1,343.19	2,643,000	+213,000
CAL YR 2003	--	--	+66,000
Jan. 31	1,343.78	2,669,000	+26,000
Feb. 29	1,350.61	3,172,000	+503,000
Mar. 31	1,354.55	3,494,000	+322,000
Apr. 30	1,354.30	3,466,000	-28,000
May 31	1,355.66	3,584,000	-118,000
June 30	1,355.04	3,535,000	-49,000
July 31	1,353.92	3,428,000	-107,000
Aug. 31	1,352.84	3,351,000	-77,000
Sept. 30	1,345.48	3,796,000	-555,000
WTR YR 2004	--	--	-807,000

NOTE.--Lake frozen over Jan. 7 to Mar. 17.

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06453000 MISSOURI RIVER AT FORT RANDALL DAM, SD

LOCATION.--Lat 43°03'54", long 98°33'11", in NW¼ NE¼ sec.8, T.95 N., R.65 W., Charles Mix County, Hydrologic Unit 10170101, in powerhouse of Fort Randall Dam on Missouri River at Pickstown, 0.8 mi upstream from Randall Creek, and at mile 879.8.

DRAINAGE AREA.--263,500 mi^2, approximately.

REMARKS.--On July 20, 2004, 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 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Hardness, water, mg/L as CaCO3 (00900)	Noncarb hardness, wat flt field, mg/L as CaCO3 (00904)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)
NOV													
18...	1130	28,800	711	8.1	9.0	9.4	726	11.2	103	240	72	165	158
FEB													
23...	1445	11,100	738	7.5	8.0	1.5	741	14.7	108	240	65	172	179
APR													
20...	1330	28,500	740	8.2	11.0	7.4	721	12.2	108	240	61	176	178
MAY													
25...	1230	39,300	722	8.4	12.0	14.6	734	9.4	97	250	85	163	172
JUL													
20...	1300	32,600	731	8.0	28.5	19.8	727	7.3	84	250	78	167	171
a20...	1305	32,600	731	8.0	28.5	19.8	727	7.3	84	240	74	167	171
SEP													
20...	1500	30,100	702	8.2	22.5	21.2	728	8.6	102	230	74	161	163

Date	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Pheophytin a, phytoplankton, ug/L (62360)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Sodium adsorption ratio (00931)	Potassium, water, fltrd, mg/L (00935)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Sulfate water, fltrd, mg/L (00945)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)
NOV													
18...	1.8	.6	55.3	23.8	72.0	39	2	4.89	194	3	190	11.2	.6
FEB													
23...	E1.1	E.3	56.7	23.2	73.7	40	2	4.62	200	5	194	11.1	.6
APR													
20...	1.7	.3	57.2	22.8	69.7	38	2	4.52	201	7	190	11.4	.6
MAY													
25...	.5	.1	59.1	24.4	73.2	39	2	4.58	187	6	186	11.3	.6
JUL													
20...	.6	.3	59.7	23.3	68.9	37	2	5.03	204	--	187	11.6	.7
a20...	.6	.3	58.9	22.9	68.4	38	2	5.05	204	--	187	11.6	.7
SEP													
20...	.9	.4	55.7	23.2	71.1	39	2	5.12	196	--	182	11.1	.7

Date	Silica, water, fltrd, mg/L (00955)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue water, fltrd, tons/d (70302)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Phosphorus, water, unfltrd mg/L (00665)	Phosphorus, water, fltrd, mg/L (00666)	Orthophosphate, water, fltrd, mg/L as P (00671)	Arsenic water, fltrd, ug/L (01000)
NOV													
18...	5.4	462	480	37,200	.010	.20	.23	<.008	<.06	.011	E.003	<.006	1.9
FEB													
23...	5.0	472	485	14,500	E.008	.23	.19	<.008	<.06	.010	.004	<.006	1.8
APR													
20...	5.3	467	489	37,700	E.005	.19	.18	<.008	<.06	.007	E.003	<.006	1.7
MAY													
25...	4.7	461	471	49,900	E.007	.20	.20	<.008	<.06	.012	.005	<.006	1.7
JUL													
20...	4.5	461	477	42,000	E.006	.20	.20	<.008	<.06	.010	E.003	<.006	1.7
a20...	4.5	460	481	42,300	E.006	.21	.20	<.008	<.06	.010	.005	<.006	1.8
SEP													
20...	5.3	451	451	36,700	E.009	.23	.19	<.008	<.06	.010	.004	<.006	1.9

06453000 MISSOURI RIVER AT FORT RANDALL DAM, SD—Continued

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

Date	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Zinc, water, fltrd, ug/L (01090)	Organic carbon, water, unfltrd mg/L (00680)	Organic carbon, water, fltrd, mg/L (00681)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	Atrazine, water, fltrd, ug/L (39632)
NOV													
18...	1.9	E5	1.4	3.3	2.43	1.6	8.6	5.0	3.1	--	--	--	--
FEB													
23...	2.0	<6	12.1	3.5	4.71	1.5	1.4	3.6	3.1	--	--	--	--
APR													
20...	2.1	<6	.6	3.5	2.82	1.1	1.2	4.6	3.1	.006	<.005	<.006	.022
MAY													
25...	2.7	<6	.9	3.4	3.42	1.4	1.5	3.1	3.1	.009	<.005	<.006	.022
JUL													
20...	2.2	<6	10.1	3.7	3.36	1.9	.9	3.4	3.2	--	--	--	--
a20...	2.2	<6	9.9	3.7	4.41	1.7	1.4	3.1	3.3	--	--	--	--
SEP													
20...	2.7	<6	.7	3.8	2.60	1.6	1.7	3.6	3.1	--	--	--	--

Date	CIAT, water, fltrd, ug/L (04040)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	alpha-HCH, water, fltrd, ug/L (34253)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	p,p-' DDE, water, fltrd, ug/L (34653)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Desulfinyl fipronil, water, fltrd, ug/L (62170)
NOV													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
20...	E.006	<.050	<.010	<.005	<.004	<.041	<.020	<.005	<.018	<.003	<.003	<.029	<.012
MAY													
25...	<.006	<.050	<.010	<.005	<.004	<.041	<.020	<.005	<.018	<.003	<.003	<.029	<.012
JUL													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
a20...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Fipronil, water, fltrd, ug/L (62166)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)
NOV													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
20...	<.005	<.009	<.02	<.004	<.009	<.005	<.016	<.013	<.024	<.003	<.004	<.035	<.027
MAY													
25...	<.005	<.009	<.02	<.004	<.009	<.005	<.016	<.013	<.024	<.003	<.004	<.035	<.027
JUL													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
a20...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--

06453000 MISSOURI RIVER AT FORT RANDALL DAM, SD—Continued

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

Date	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Parathion, water, fltrd, ug/L (39542)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)
NOV													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
20...	E.008	<.006	<.003	<.010	<.015	<.007	<.004	<.022	<.006	<.011	.01	<.004	<.025
MAY													
25...	E.006	<.006	<.003	<.010	<.015	<.007	<.004	<.022	<.006	<.011	<.01	<.004	<.025
JUL													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
a20...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	Suspended sediment concentration mg/L (80154)	Suspnd. sediment, sieve diametr percent <.063mm (70331)
NOV											
18...	--	--	--	--	--	--	--	--	--	3	91
FEB											
23...	--	--	--	--	--	--	--	--	--	1	100
APR											
20...	<.011	<.02	<.005	<.02	<.034	<.02	<.010	<.002	<.009	2	98
MAY											
25...	<.011	<.02	<.005	<.02	<.034	<.02	<.010	<.002	<.009	3	77
JUL											
20...	--	--	--	--	--	--	--	--	--	3	94
a20...	--	--	--	--	--	--	--	--	--	3	95
SEP											
20...	--	--	--	--	--	--	--	--	--	3	99

< Less than.
a Field duplicate sample collected for quality-control purposes.
E Estimated value.

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06453020 MISSOURI RIVER BELOW GREENWOOD, SD

LOCATION.--Lat 42°54'19", long 98°20'58", in SE¼ NE¼ NE¼ sec.1, T.93 N., R.64 W., Charles Mix County, Hydrologic Unit 10170101, on left bank 2.0 mi downstream from Greenwood and 1.3 mi downstream from the mouth of Slaughter Creek.

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

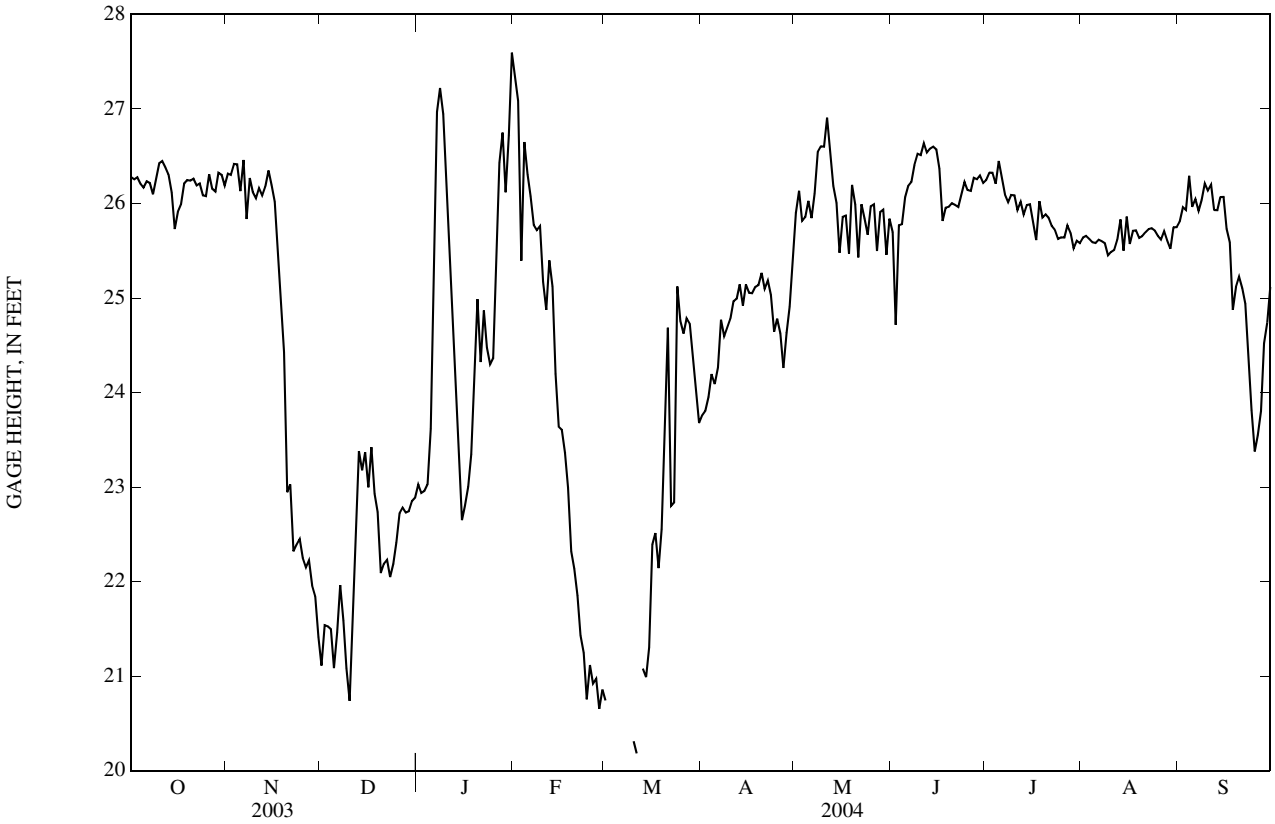
GAGE.--Water-stage recorder. Datum of gage is 1,200.00 ft above NGVD of 1929.

REMARKS.--Records good. U.S. Army Corps of Engineers satellite data-collection platform at station. Stage regulated by Fort Randall Dam about 17 mi upstream.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.28	26.31	21.11	23.03	27.34	20.74	23.76	25.90	25.70	26.25	25.64	25.81
2	26.25	26.30	21.54	22.94	27.09	---	23.81	26.13	24.72	26.33	25.66	25.96
3	26.28	26.42	21.53	22.96	25.39	---	23.95	25.81	25.77	26.32	25.62	25.93
4	26.21	26.41	21.50	23.03	26.65	---	24.19	25.86	25.78	26.21	25.59	26.29
5	26.17	26.13	21.09	23.62	26.31	---	24.09	26.03	26.07	26.45	25.58	25.96
6	26.23	26.46	21.46	25.85	26.08	---	24.26	25.84	26.18	26.27	25.61	26.05
7	26.22	25.84	21.96	26.97	25.77	---	24.77	26.10	26.23	26.09	25.60	25.92
8	26.10	26.27	21.59	27.22	25.72	---	24.59	26.55	26.41	26.01	25.58	26.03
9	26.26	26.12	21.08	26.94	25.76	---	24.68	26.60	26.53	26.09	25.45	26.21
10	26.42	26.05	20.74	26.42	25.17	20.31	24.78	26.60	26.51	26.09	25.49	26.14
11	26.45	26.16	21.86	25.66	24.87	20.18	24.96	26.91	26.64	25.93	25.51	26.20
12	26.38	26.08	22.74	24.85	25.40	---	24.99	26.56	26.54	26.02	25.62	25.93
13	26.31	26.18	23.38	24.15	25.12	21.08	25.14	26.18	26.58	25.88	25.83	25.93
14	26.11	26.35	23.18	23.49	24.20	20.99	24.92	26.00	26.60	25.98	25.50	26.07
15	25.73	26.20	23.37	22.65	23.64	21.30	25.14	25.48	26.57	25.99	25.86	26.07
16	25.91	26.02	23.00	22.80	23.61	22.39	25.05	25.86	26.37	25.80	25.57	25.73
17	25.99	25.57	23.42	23.00	23.36	22.51	25.05	25.87	25.82	25.61	25.71	25.59
18	26.21	24.99	22.93	23.35	22.99	22.14	25.12	25.47	25.95	26.02	25.71	24.87
19	26.25	24.43	22.74	24.24	22.32	22.55	25.14	26.20	25.96	25.85	25.64	25.12
20	26.24	22.95	22.09	24.99	22.14	23.52	25.27	25.99	26.00	25.88	25.65	25.23
21	26.26	23.03	22.19	24.32	21.85	24.69	25.10	25.43	25.98	25.85	25.70	25.10
22	26.19	22.32	22.23	24.87	21.43	22.80	25.18	25.99	25.96	25.76	25.73	24.94
23	26.21	22.39	22.05	24.48	21.24	22.84	25.03	25.84	26.09	25.72	25.74	24.43
24	26.09	22.45	22.19	24.30	20.75	25.12	24.64	25.67	26.23	25.62	25.71	23.81
25	26.08	22.25	22.41	24.36	21.12	24.76	24.78	25.97	26.14	25.64	25.66	23.38
26	26.31	22.15	22.72	25.29	20.92	24.62	24.63	25.99	26.13	25.64	25.62	23.55
27	26.16	22.22	22.78	26.43	20.97	24.78	24.26	25.50	26.27	25.77	25.71	23.80
28	26.12	21.96	22.73	26.75	20.65	24.73	24.63	25.91	26.25	25.69	25.61	24.52
29	26.32	21.84	22.74	26.12	20.86	24.37	24.91	25.93	26.30	25.52	25.52	24.74
30	26.30	21.41	22.85	26.72	---	24.02	25.44	25.46	26.22	25.60	25.75	25.12
31	26.19	---	22.89	27.59	---	23.68	---	25.84	---	25.58	25.75	---
MEAN	26.20	24.64	22.26	24.82	23.75	---	24.74	25.98	26.15	25.92	25.64	25.35
MAX	26.45	26.46	23.42	27.59	27.34	---	25.44	26.91	26.64	26.45	25.86	26.29
MIN	25.73	21.41	20.74	22.65	20.65	---	23.76	25.43	24.72	25.52	25.45	23.38

06453020 MISSOURI RIVER BELOW GREENWOOD, SD—Continued



06453305 MISSOURI RIVER BELOW CHOTEAU CREEK, NEAR VERDEL, NE

LOCATION.--Lat 42°50'05", long 98°08'20", in NW¼ SW¼ NW¼ sec.35, T.93 N., R.62 W., Bon Homme County, Hydrologic Unit 10170101, 1.7 mi upstream from mouth of Coffee Creek and 3.1 mi northeast of Verdel, NE.

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

REMARKS.--On May 26, 2004, a field blank sample was collected at this site for quality-control purposes.

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

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Hardness, water, mg/L as CaCO3 (00900)	Noncarb hardness, wat flt field, mg/L as CaCO3 (00904)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)
NOV													
19...	1315	23,500	712	8.3	16.0	8.9	738	11.4	102	220	59	165	171
FEB													
24...	1400	8,900	715	8.4	3.0	1.9	744	13.9	103	260	92	172	176
APR													
21...	1330	28,600	739	8.3	16.0	8.9	731	11.4	103	250	69	176	178
MAY													
26...	1330	32,000	723	8.2	23.0	15.5	725	9.2	98	250	81	164	172
JUL													
21...	1300	32,400	732	8.2	38.0	22.1	730	8.3	100	250	78	170	171
SEP													
22...	1400	15,600	696	8.5	18.0	19.2	736	--	--	220	78	143	161

Date	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Pheophytin a, phytoplankton, ug/L (62360)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Sodium adsorption ratio (00931)	Potassium, water, fltrd, mg/L (00935)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Sulfate water, fltrd, mg/L (00945)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)
NOV													
19...	1.2	.5	52.5	22.7	66.7	39	2	4.66	192	5	193	11.3	.6
FEB													
24...	E1.1	E.3	63.9	25.3	67.0	35	2	5.11	--	--	199	11.5	.6
APR													
21...	1.7	.3	59.7	23.3	70.1	38	2	4.63	208	3	190	11.4	.6
MAY													
26...	1.1	.3	59.7	23.5	68.9	37	2	4.91	193	4	185	11.4	.6
JUL													
21...	.6	.3	60.3	23.5	69.9	37	2	5.03	207	--	191	11.3	.6
SEP													
22...	1.6	.1	52.8	21.5	69.3	40	2	4.78	169	2	180	10.9	.6

Date	Silica, water, fltrd, mg/L (00955)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue water, fltrd, tons/d (70302)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Phosphorus, water, unfltrd mg/L (00665)	Phosphorus, water, fltrd, mg/L (00666)	Orthophosphate, water, fltrd, mg/L as P (00671)	Arsenic water, fltrd, ug/L (01000)
NOV													
19...	5.6	456	474	30,100	E.005	.18	.20	<.008	<.06	.011	E.003	<.006	1.7
FEB													
24...	5.2	481	504	12,100	.019	.23	.20	<.008	<.06	.010	.005	<.006	1.8
APR													
21...	5.2	470	486	37,500	<.010	.21	.18	<.008	<.06	.010	E.002	<.006	1.7
MAY													
26...	4.6	458	471	40,700	<.010	.21	.18	<.008	<.06	.012	.005	<.006	1.8
JUL													
21...	4.4	468	478	41,800	E.006	.23	.20	<.008	<.06	.014	.005	<.006	1.6
SEP													
22...	5.3	431	459	19,300	<.010	.26	.20	<.008	<.06	.012	.004	<.006	1.8

06453305 MISSOURI RIVER BELOW CHOTEAU CREEK, NEAR VERDEL, NE—Continued

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

Date	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Zinc, water, fltrd, ug/L (01090)	Organic carbon, water, unfltrd mg/L (00680)	Organic carbon, water, fltrd, mg/L (00681)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	Atrazine, water, fltrd, ug/L (39632)
NOV													
19...	3.0	<6	4.3	3.4	2.82	1.6	4.0	--	2.9	--	--	--	--
FEB													
24...	2.0	<6	--	3.5	4.68	1.6	1.2	2.9	3.0	--	--	--	--
APR													
21...	1.8	<6	5.4	3.3	2.96	1.4	1.1	3.7	3.2	.007	<.005	<.006	.021
MAY													
26...	2.4	<6	4.6	3.4	3.79	1.3	.9	7.4	3.0	.009	<.005	<.006	.024
JUL													
21...	2.8	<6	4.4	3.7	3.18	1.4	1.4	3.1	3.0	--	--	--	--
SEP													
22...	2.5	<6	2.2	3.8	2.50	1.4	1.0	6.0	2.9	--	--	--	--

Date	CIAT, water, fltrd, ug/L (04040)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	alpha-HCH, water, fltrd, ug/L (34253)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	p,p-' DDE, water, fltrd, ug/L (34653)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Desulfinyl fipronil, water, fltrd, ug/L (62170)
NOV													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
21...	E.006	<.050	<.010	<.005	<.004	<.041	<.020	<.005	<.018	<.003	<.003	<.029	<.012
MAY													
26...	E.006	<.050	<.010	<.005	<.004	<.041	<.020	<.005	<.018	<.003	<.003	<.029	<.012
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
22...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Fipronil, water, fltrd, ug/L (62166)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)
NOV													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
21...	<.005	<.009	<.02	<.004	<.009	<.005	<.016	<.013	<.024	<.003	<.004	<.035	<.027
MAY													
26...	<.005	<.009	<.02	<.004	<.009	<.005	<.016	<.013	<.024	<.003	<.004	<.035	<.027
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
22...	--	--	--	--	--	--	--	--	--	--	--	--	--

06453305 MISSOURI RIVER BELOW CHOTEAU CREEK, NEAR VERDEL, NE—Continued

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

Date	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Parathion, water, fltrd, ug/L (39542)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)
NOV 19...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 24...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 21...	E.008	<.006	<.003	<.010	<.015	<.007	<.004	<.022	<.006	<.011	<.01	<.004	<.025
MAY 26...	E.007	<.006	<.003	<.010	<.015	<.007	<.004	<.022	<.006	<.011	.01	<.004	<.025
JUL 21...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 22...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	Suspended sediment concentration mg/L (80154)	Suspnd. sediment, sieve diametr percent <.063mm (70331)
NOV 19...	--	--	--	--	--	--	--	--	--	10	98
FEB 24...	--	--	--	--	--	--	--	--	--	3	100
APR 21...	<.011	<.02	<.005	<.02	<.034	<.02	<.010	<.002	<.009	5	94
MAY 26...	<.011	<.02	<.005	<.02	<.034	<.02	<.010	<.002	E.004	7	85
JUL 21...	--	--	--	--	--	--	--	--	--	19	35
SEP 22...	--	--	--	--	--	--	--	--	--	6	96

Date	Time	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	Potassium, water, fltrd, mg/L (00935)	Sulfate water, fltrd, mg/L (00945)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)
MAY a26...	1325	.01	<.008	<.10	<.008	<.01	.01	<.01	<.04	<.010	<.002	<.016	<.006

Date	Arsenic water, fltrd, ug/L (01000)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Zinc, water, fltrd, ug/L (01090)
MAY a26...	<.2	<.4	<6	<.2	<.4	<.06	<.4	E.3

< Less than.
a Field blank sample collected for quality-control purposes.
E Estimated value.

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