

## 05049995 MUD LAKE ABOVE WHITE ROCK DAM NEAR WHITE ROCK, SD

LOCATION.--Lat 45°51'41", long 96°34'20", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 34, T.128 N., R.47 W., Roberts County, Hydrologic Unit 09020101, on Sisseton Indian Reservation, on left bank, 10 ft west of White Rock Dam, 4 mi south of White Rock and 5 mi northwest of Wheaton, MN.

DRAINAGE AREA.--

PERIOD OF RECORD.--October 2000 to current year. Gage height record prior to October 2000 can be obtained from Corp of Engineers.

GAGE.--Water-stage recorder. Datum of gage is 960.00 ft, adjustment of 1912 (levels by U.S. Army Corps of Engineers).

REMARKS.--Records poor. Lake regulated by Lake Traverse-Boise de Sioux Flood Control and Water Conservation project.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage-height, 80.90 ft, Apr. 29, 2001; maximum daily, 80.76 ft, Apr. 19, 2001; minimum gage-height recorded, 65.14 ft, many days, several years (due in part to regulation), stage was observed lower than the detection limits of gage but precise stage readings were not determined; minimum daily recorded, 65.22 ft, June 14, 2002.

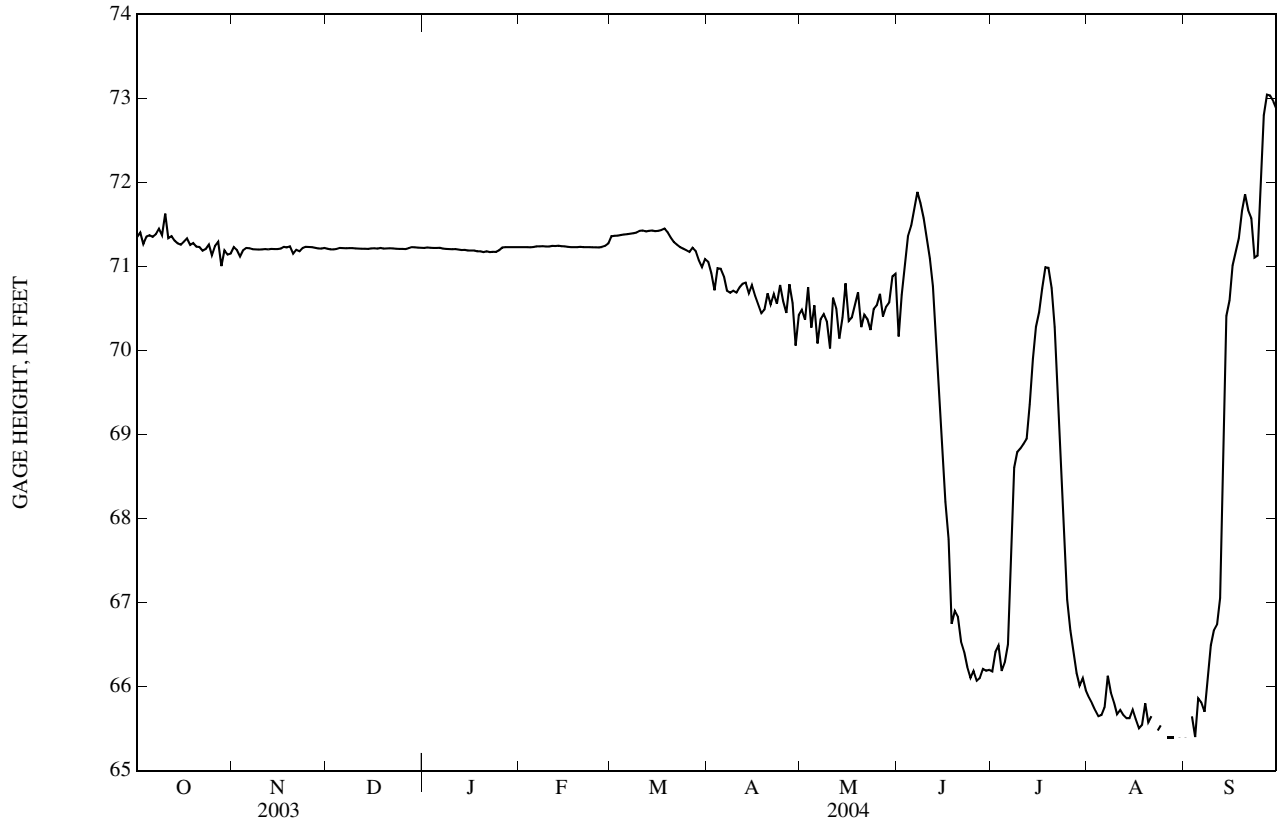
EXTREMES FOR CURRENT YEAR.--Maximum gage-height, 73.15 ft, Sept. 27; maximum daily, 73.04 ft, Sept. 27; minimum gage-height recorded, 65.39 ft. May have been lower at times between Aug. 22 and Sept. 4, but precise stage readings were not determined.

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	71.35	71.23	71.21	71.22	71.23	71.36	71.06	70.49	70.17	66.18	65.87	<65.40
2	71.40	71.20	71.20	71.23	71.23	71.37	70.92	70.37	70.66	66.41	65.80	---
3	71.27	71.12	71.20	71.22	71.23	71.37	70.72	70.75	71.03	66.49	65.72	65.65
4	71.36	71.19	71.21	71.22	71.23	71.37	70.98	70.27	71.36	66.19	65.65	<65.40
5	71.37	71.22	71.22	71.22	71.23	71.38	70.97	70.54	71.48	66.29	65.66	65.86
6	71.35	71.22	71.22	71.22	71.24	71.38	70.88	70.08	71.69	66.50	65.75	65.81
7	71.38	71.20	71.22	71.21	71.24	71.39	70.71	70.37	71.89	67.50	66.13	65.70
8	71.45	71.20	71.22	71.21	71.24	71.39	70.69	70.43	71.75	68.61	65.93	66.05
9	71.37	71.20	71.22	71.21	71.24	71.40	70.71	70.35	71.58	68.79	65.81	66.49
10	71.63	71.20	71.22	71.20	71.24	71.42	70.69	70.03	71.33	68.83	65.67	66.67
11	71.34	71.21	71.21	71.21	71.25	71.43	70.75	70.63	71.10	68.89	65.72	66.74
12	71.36	71.20	71.21	71.20	71.24	71.42	70.79	70.50	70.76	68.95	65.66	67.05
13	71.31	71.21	71.21	71.19	71.25	71.42	70.81	70.14	70.21	69.36	65.62	69.04
14	71.27	71.21	71.21	71.20	71.24	71.43	70.68	70.39	69.53	69.90	65.62	70.41
15	71.26	71.21	71.21	71.19	71.24	71.42	70.78	70.80	68.76	70.28	65.73	70.60
16	71.30	71.21	71.22	71.19	71.23	71.42	70.65	70.35	68.20	70.46	65.61	71.01
17	71.33	71.23	71.21	71.19	71.23	71.43	70.55	70.39	67.75	70.74	65.50	71.19
18	71.26	71.23	71.22	71.18	71.23	71.45	70.44	70.54	66.75	70.99	65.54	71.34
19	71.28	71.24	71.21	71.18	71.23	71.41	70.48	70.69	66.90	70.98	65.80	71.66
20	71.24	71.15	71.21	71.17	71.23	71.34	70.68	70.28	66.83	70.74	65.57	71.86
21	71.23	71.20	71.22	71.18	71.23	71.29	70.55	70.43	66.53	70.28	65.65	71.67
22	71.19	71.18	71.22	71.17	71.23	71.26	70.67	70.37	66.41	69.35	---	71.58
23	71.21	71.22	71.21	71.17	71.23	71.23	70.56	70.24	66.23	68.61	65.48	71.11
24	71.26	71.23	71.21	71.17	71.23	71.21	70.78	70.49	66.11	67.72	65.54	71.13
25	71.13	71.23	71.21	71.19	71.23	71.19	70.59	70.54	66.19	67.03	---	72.00
26	71.25	71.23	71.21	71.23	71.23	71.17	70.45	70.67	66.07	66.67	<65.40	72.80
27	71.29	71.22	71.22	71.23	71.23	71.22	70.79	70.40	66.10	66.43	<65.40	73.04
28	71.00	71.22	71.23	71.23	71.25	71.18	70.56	70.52	66.21	66.16	<65.40	73.03
29	71.19	71.21	71.23	71.23	71.27	71.08	70.06	70.57	66.19	66.01	---	72.97
30	71.14	71.22	71.22	71.23	---	70.99	70.42	70.88	66.20	66.10	<65.40	72.88
31	71.15	---	71.22	71.23	---	71.09	---	70.91	---	65.96	---	---
MEAN	71.29	71.21	71.21	71.20	71.24	71.32	70.68	70.46	68.73	68.17	---	---
MAX	71.63	71.24	71.23	71.23	71.27	71.45	71.06	70.91	71.89	70.99	---	---
MIN	71.00	71.12	71.20	71.17	71.23	70.99	70.06	70.03	66.07	65.96	---	---

< Actual value is known to be less than the value shown

05049995 MUD LAKE ABOVE WHITE ROCK DAM NEAR WHITE ROCK, SD—Continued



## RED RIVER OF THE NORTH BASIN

## 05050000 BOIS DE SIOUX RIVER NEAR WHITE ROCK, SD

LOCATION.--Lat 45°51'45", long 96°34'25", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 27, T.128 N., R.47 W., Roberts County, Hydrologic Unit 09020101, on Sisseton Indian Reservation, on left bank at Big Slough Outlet, 300 ft downstream from White Rock Dam, 4 mi south of White Rock and 5 mi northwest of Wheaton, MN.

DRAINAGE AREA.--1,160 mi<sup>2</sup> (approximately).

PERIOD OF RECORD.--October 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is 960.00 ft. above sea level, (adjustment of 1912, levels by U.S. Army Corps of Engineers). Prior to Jan. 14, 1943, nonrecording gage at same site at datum 0.11 ft lower. Jan. 15, 1943 to Sept. 30, 1963, water-stage recorder at same site at datum 0.11 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Lake Traverse-Boise de Sioux Flood Control and Water Conservation project.

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	0.47	e0.70	e0.00	e0.00	e2.0	69	8.4	485	72	35	2.1
2	0.00	0.56	e0.62	e0.00	e0.00	e1.8	62	8.5	497	101	27	26
3	0.00	0.68	e0.70	e0.00	e0.00	e1.6	48	10	492	110	20	18
4	0.00	e0.62	e0.76	e0.00	e0.00	e1.5	43	9.8	493	73	14	2.3
5	0.00	e0.54	e0.72	e0.00	e0.00	e1.5	32	7.8	494	85	15	55
6	0.00	e0.48	e0.72	e0.00	e0.00	e1.7	25	7.1	489	123	22	94
7	0.00	e0.46	e0.70	e0.00	e0.00	e2.1	19	7.7	493	234	67	73
8	0.00	e0.46	e0.90	e0.00	e0.00	e2.0	15	7.5	489	291	55	84
9	0.00	e0.52	e0.60	e0.00	e0.00	e3.0	14	6.1	479	298	35	131
10	0.00	0.58	e0.20	e0.00	e0.00	e4.0	14	5.4	465	296	21	156
11	0.00	0.91	e0.00	e0.00	e0.00	e3.2	14	5.4	452	323	23	167
12	0.00	1.3	e0.00	e0.00	e0.00	e3.0	14	16	434	316	17	203
13	0.00	1.2	e0.00	e0.00	e0.00	e4.1	14	22	405	323	13	160
14	0.00	1.2	e0.00	e0.00	e0.00	e4.6	14	13	358	335	13	66
15	0.00	1.3	e0.00	e0.00	e0.00	e4.0	15	9.5	312	344	20	26
16	0.00	1.5	e0.00	e0.00	e0.00	e4.3	17	7.2	275	351	12	33
17	0.00	1.6	e0.00	e0.00	e0.00	e4.0	15	18	250	357	5.8	27
18	0.00	1.7	e0.00	e0.00	e0.00	e4.0	15	31	168	360	7.6	21
19	0.00	1.7	e0.00	e0.00	e0.00	e5.0	11	9.4	179	361	24	21
20	0.00	1.7	e0.00	e0.00	e0.00	e15	9.9	8.0	170	351	9.6	56
21	0.00	1.5	e0.00	e0.00	e0.00	e12	28	10	124	336	13	121
22	0.00	e1.4	e0.00	e0.00	e0.00	e18	26	10	105	303	8.5	240
23	0.00	e0.80	e0.00	e0.00	e0.00	e29	21	13	e83	269	4.9	433
24	0.00	e0.40	e0.00	e0.00	e0.00	e47	12	17	68	228	7.0	515
25	0.00	0.21	e0.00	e0.00	e0.00	80	10	32	e74	181	3.8	532
26	0.00	0.15	e0.00	e0.00	e0.00	80	9.2	32	e66	130	2.9	539
27	0.00	e0.20	e0.00	e0.00	e0.00	91	8.7	20	e72	99	2.8	574
28	0.00	e0.18	e0.00	e0.00	e0.10	94	9.3	20	e80	66	2.6	624
29	0.00	e0.18	e0.00	e0.00	e0.19	91	8.4	9.6	e77	48	5.1	644
30	0.00	e0.40	e0.00	e0.00	---	85	8.8	87	e73	59	3.1	641
31	0.28	---	e0.00	e0.00	---	79	---	271	---	45	5.4	---
TOTAL	0.28	24.90	6.62	0.00	0.29	778.4	621.3	739.4	8,701	6,868	515.1	6,284.4
MEAN	0.01	0.83	0.21	0.00	0.01	25.1	20.7	23.9	290	222	16.6	209
MAX	0.28	1.7	0.90	0.00	0.19	94	69	271	497	361	67	644
MIN	0.00	0.15	0.00	0.00	0.00	1.5	8.4	5.4	66	45	2.6	2.1
AC-FT	0.6	49	13	0.00	0.6	1,540	1,230	1,470	17,260	13,620	1,020	12,470
CFSM	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.25	0.19	0.01	0.18
IN.	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.28	0.22	0.02	0.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2004, BY WATER YEAR (WY)

MEAN	27.8	15.8	10.1	3.33	7.31	72.5	322	309	251	180	70.8	37.4
MAX	535	307	207	42.4	148	628	3,814	1,445	1,103	1,035	1,182	1,062
(WY)	(1994)	(1996)	(1999)	(1997)	(1997)	(1996)	(1997)	(1997)	(1986)	(1962)	(1993)	(1993)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.01	0.00	0.00	0.00
(WY)	(1942)	(1942)	(1942)	(1942)	(1942)	(1942)	(1942)	(1977)	(1977)	(1961)	(1970)	(1960)

05050000 BOIS DE SIOUX RIVER NEAR WHITE ROCK, SD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1942 - 2004	
ANNUAL TOTAL	25,114.06		24,539.69			
ANNUAL MEAN	68.8		67.0		<sup>a</sup> 109	
HIGHEST ANNUAL MEAN					536	1997
LOWEST ANNUAL MEAN					0.38	1977
HIGHEST DAILY MEAN	773	Jul 4	644	Sep 29	7,710	Apr 16, 1997
LOWEST DAILY MEAN	0.00	Jan 24	<sup>b</sup> 0.00	Oct 1	<sup>c</sup> 0.00	Oct 1, 1941
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 24	0.00	Oct 1	0.00	Oct 1, 1941
MAXIMUM PEAK FLOW			648	Sep 28	<sup>d</sup> 8,750	Apr 20, 1997
MAXIMUM PEAK STAGE			7.74	Sep 28	16.90	Apr 20, 1997
INSTANTANEOUS LOW FLOW			0.00	Oct 1, Dec 11		
ANNUAL RUNOFF (AC-FT)	49,810		48,670		79,140	
ANNUAL RUNOFF (CFSM)	0.059		0.058		0.094	
ANNUAL RUNOFF (INCHES)	0.81		0.79		1.28	
10 PERCENT EXCEEDS	158		297		355	
50 PERCENT EXCEEDS	0.62		5.6		3.5	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a Median of annual mean discharges, 64 ft<sup>3</sup>/s.

b Many days.

c Many days, several years; result of regulation.

d Estimated, from observed readings made under non-ideal conditions. Some evidence that peak occurred Apr. 16 at 7,930 ft<sup>3</sup>/s.

e Estimated.

