

RED RIVER OF THE NORTH BASIN--Continued

05050000 BOIS DE SIOUX RIVER NEAR WHITE ROCK, SD

LOCATION.--Lat 45°51'45", long 96°34'25", in SW¹/₄SW¹/₄ 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, SD and 5 mi northwest of Wheaton.

DRAINAGE AREA.--1,160 mi² (approximately).

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

GAGE.--Water-stage recorder. Datum of gage is 960.00 ft, 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 fair, except those for estimated daily discharge, 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 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	10	e200	e5.9	e5.0	e30	35	127	72	146	1.2	219
2	1.2	9.0	341	e5.8	e5.0	e205	37	128	141	144	.85	142
3	1.1	8.2	509	e5.8	e5.0	e275	38	128	162	141	.76	131
4	1.5	7.8	522	e5.7	e5.0	e410	58	123	263	139	4.4	117
5	6.8	7.3	524	e5.6	e5.0	e410	48	124	415	139	7.8	124
6	7.0	7.1	520	e5.6	e5.0	e500	46	131	546	138	7.4	119
7	6.3	6.7	508	e5.5	e5.1	e500	47	132	427	66	5.1	182
8	5.3	6.7	559	e5.5	e5.1	e500	42	142	133	26	6.6	269
9	4.5	6.8	628	e5.4	e5.2	e500	39	136	216	51	7.6	273
10	3.8	24	567	e5.4	e5.3	e500	34	148	602	23	6.4	278
11	3.7	27	377	e5.3	e5.3	e500	39	242	734	13	6.5	278
12	4.3	5.7	323	e5.3	e5.4	e500	154	295	726	78	14	287
13	4.0	e5.7	317	e5.3	e5.5	e500	281	291	712	193	208	287
14	3.7	e5.6	258	e5.2	e5.7	e500	280	386	699	271	78	285
15	4.3	e5.6	132	e5.2	e5.8	e500	281	490	686	270	30	280
16	29	e5.5	13	e5.1	e6.0	517	e280	492	572	276	187	274
17	49	e5.5	13	e5.1	e6.1	524	e240	488	418	276	423	274
18	55	e5.4	12	e5.0	e6.3	460	e215	486	414	277	519	263
19	32	e5.4	e11	e5.0	e6.4	363	e195	450	410	280	524	251
20	21	e5.3	e10	e5.0	e6.5	320	175	382	404	190	531	198
21	16	e5.3	e9.5	e5.0	e6.7	312	164	273	397	29	515	133
22	14	e5.3	e9.0	e5.0	e6.9	289	161	159	400	2.6	500	107
23	13	e8.3	e8.5	e5.0	e7.1	218	163	155	369	2.9	451	71
24	11	e17	e8.0	e5.0	e7.3	182	164	152	258	3.1	404	39
25	11	25	e7.5	e4.9	e7.7	138	165	148	147	2.7	393	7.1
26	10	23	e7.2	e4.9	e8.3	79	164	146	146	102	349	10
27	9.6	21	e6.8	e5.0	e10	32	166	64	146	158	241	11
28	9.0	19	e6.6	e5.0	e16	48	166	15	147	102	159	9.7
29	10	19	e6.3	e5.0	---	58	165	14	146	100	156	12
30	12	e110	e6.1	e5.0	---	45	151	14	147	42	212	9.2
31	12	---	e6.0	e5.0	---	38	---	13	---	1.3	294	---
TOTAL	372.3	423.2	6425.5	162.5	179.7	9953	4193	6474	11055	3682.6	6242.61	4940.0
MEAN	12.0	14.1	207	5.24	6.42	321	140	209	368	119	201	165
MAX	55	110	628	5.9	16	524	281	492	734	280	531	287
MIN	1.1	5.3	6.0	4.9	5.0	30	34	13	72	1.3	.76	7.1
AC-FT	738	839	12740	322	356	19740	8320	12840	21930	7300	12380	9800
CFSM	.01	.01	.18	.00	.01	.28	.12	.18	.32	.10	.17	.14
IN.	.01	.01	.21	.01	.01	.32	.13	.21	.35	.12	.20	.16

e Estimated

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	29.8	16.7	8.85	3.43	7.50	60.5	306	304	248	161	72.3	36.9
MAX	535	307	207	42.4	148	628	3814	1445	1103	1035	1182	1062
(WY)	1994	1996	1999	1997	1997	1996	1997	1997	1986	1962	1993	1993
MIN	.000	.000	.000	.000	.000	.000	.000	.23	.010	.000	.000	.000
(WY)	1942	1942	1942	1942	1942	1942	1942	1977	1977	1961	1970	1960

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1942 - 1999
ANNUAL TOTAL	49887.90	54103.41	
ANNUAL MEAN	137	148	105 ^a
HIGHEST ANNUAL MEAN			536
LOWEST ANNUAL MEAN			.38
HIGHEST DAILY MEAN	1040	Mar 7	7710
LOWEST DAILY MEAN	.40	Sep 16	.00 ^b
ANNUAL SEVEN-DAY MINIMUM	.44	Jan 11	3.4
INSTANTANEOUS PEAK FLOW			737
INSTANTANEOUS PEAK STAGE			8.83
INSTANTANEOUS LOW FLOW			.25
ANNUAL RUNOFF (AC-FT)	98950	107300	75950
ANNUAL RUNOFF (CFSM)	.12	.13	.090
ANNUAL RUNOFF (INCHES)	1.60	1.74	1.23
10 PERCENT EXCEEDS	387	487	343
50 PERCENT EXCEEDS	17	49	3.0
90 PERCENT EXCEEDS	.64	5.0	.00

a Median of annual mean discharges is 60.4 ft³/s.

b Many days, several years.

c Estimated, from observed readings made under non-ideal conditions. Some evidence that peak occurred Apr. 16 at 7930 ft³/s.

