

## RED RIVER OF THE NORTH BASIN--Continued

05051300 BOIS DE SIOUX RIVER NEAR DORAN, MN

LOCATION.--Lat 46°09'08", long 96°34'44", in NE<sup>1</sup>/<sub>4</sub> NE<sup>1</sup>/<sub>4</sub> sec. 21, T.131 N., R.47 W., Wilken County, MN, Hydrologic Unit 09020101, on right bank, 10 ft downstream from bridge on County Highway 6, 3 miles downstream from Rabbit River, 4.3 mi southwest of Doran.

DRAINAGE AREA.--1,880 mi<sup>2</sup> (approximately).

PERIOD OF RECORD.--October 12, 1989 to current year.

GAGE.--Water-stage recorder. Datum of gage is 943.90 ft above sea level (NGVD of 1929), elevation data obtained from Wilkin County Highway Engineers.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by Lake Traverse-Bois de Sioux Flood Control and Water Conservation project near White Rock, S.D.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e12	8.2	8.2	e4.0	e2.0	e290	62	201	17	7.4	18	.07
2	e12	8.5	8.4	e3.8	e2.1	e200	58	201	20	8.0	3.3	.08
3	e12	10	8.3	e3.6	e2.1	e550	55	201	28	9.5	1.4	.08
4	e11	9.1	7.9	e3.4	e2.1	e730	50	197	32	9.5	.85	.08
5	e11	8.9	7.6	e3.2	e2.1	e710	43	189	34	45	.63	.13
6	e11	9.2	7.7	e3.1	e2.1	e650	46	193	34	94	.45	.14
7	e11	10	7.5	e2.9	e2.1	610	49	187	30	63	.34	.11
8	e10	9.1	7.5	e2.8	e2.0	704	45	196	23	130	.32	.09
9	e10	8.0	7.6	e2.7	e2.0	1220	39	208	18	202	.31	.07
10	e10	11	7.3	e2.8	e2.1	1070	36	210	14	188	.26	.05
11	e10	10	7.3	e2.8	e2.0	858	29	207	17	182	.22	.03
12	e10	9.4	7.4	e2.8	e2.0	633	33	211	14	299	.17	.01
13	e11	9.0	6.8	e2.8	e2.0	548	33	214	11	510	.16	.00
14	e11	8.8	7.0	e2.7	e1.9	506	33	208	13	566	.15	.00
15	e11	8.9	e6.2	e2.6	e1.9	383	29	202	14	561	.14	.00
16	e11	8.9	e5.7	e2.5	e1.9	343	31	192	18	544	.14	.00
17	e11	8.9	e5.6	e2.3	e1.9	346	30	161	26	533	.21	.00
18	e10	8.7	e5.5	e2.2	e1.9	330	32	132	32	535	.21	.00
19	e10	8.1	e5.5	e2.1	e2.0	322	37	128	27	535	.20	.00
20	e9.9	8.8	e5.1	e2.1	e1.9	315	63	127	23	528	.16	.00
21	e9.8	9.2	e4.5	e2.0	e1.9	242	111	122	21	388	.15	.00
22	e9.8	9.1	e4.0	e2.0	e1.8	204	176	119	20	271	.13	.00
23	e9.8	8.8	e3.8	e2.0	e1.9	199	228	115	19	241	.13	.00
24	e9.7	8.9	e3.7	e1.9	e1.9	137	215	108	16	234	.12	.00
25	9.3	9.5	e3.7	e1.9	e3.5	99	206	109	15	230	.12	.33
26	9.5	9.1	e3.7	e1.9	e50	102	199	86	14	227	.12	.35
27	9.5	8.3	e3.8	e1.9	e150	94	196	52	11	184	.11	.31
28	10	8.2	e3.9	e1.9	e260	89	193	27	11	145	.09	.27
29	10	8.3	e4.1	e1.9	e300	80	192	19	9.3	79	.06	.24
30	9.8	8.2	e4.2	e1.9	---	67	196	19	8.1	35	.04	.22
31	9.6	---	e4.1	e1.9	---	64	---	22	---	28	.07	---
TOTAL	321.7	269.1	183.6	78.4	811.1	12695	2745	4563	589.4	7611.4	28.76	2.66
MEAN	10.4	8.97	5.92	2.53	28.0	410	91.5	147	19.6	246	.93	.089
MAX	12	11	8.4	4.0	300	1220	228	214	34	566	18	.35
MIN	9.3	8.0	3.7	1.9	1.8	64	29	19	8.1	7.4	.04	.00
AC-FT	638	534	364	156	1610	25180	5440	9050	1170	15100	57	5.3
CFSM	.01	.00	.00	.00	.01	.22	.05	.08	.01	.13	.00	.00
IN.	.01	.01	.00	.00	.02	.25	.05	.09	.01	.15	.00	.00

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	105	55.8	27.4	7.42	34.3	486	1146	645	388	413	213	174
MAX	592	465	222	43.9	155	1757	5936	1893	749	1477	1486	1244
(WY)	1994	1996	1999	1997	1998	1995	1997	1997	1995	1993	1993	1993
MIN	.026	1.97	.65	.077	.000	25.5	12.6	11.8	12.6	4.37	.000	.000
(WY)	1991	1991	1991	1991	1990	1990	1990	1990	1990	1990	1990	1990

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1990 - 2000
ANNUAL TOTAL	73106.6	29899.12	
ANNUAL MEAN	200	81.7	308
HIGHEST ANNUAL MEAN			754 1997
LOWEST ANNUAL MEAN			8.77 1990
HIGHEST DAILY MEAN	2520 Jun 7	1220 Mar 9	11500 Apr 16 1997
LOWEST DAILY MEAN	3.7 Dec 24	.00 Sep 13-24	.00 <sup>a</sup> Jan 7 1990
ANNUAL SEVEN-DAY MINIMUM	3.8 Dec 22	.00 Sep 13	.00 Jan 7 1990
INSTANTANEOUS PEAK FLOW		1340 Mar 9	12300 Apr 16 1997
INSTANTANEOUS PEAK STAGE		13.95 Mar 9	24.42 Apr 16 1997
INSTANTANEOUS LOW FLOW		.00 Sep 12	
ANNUAL RUNOFF (AC-FT)	145000	59300	223400
ANNUAL RUNOFF (CFSM)	.11	.043	.16
ANNUAL RUNOFF (INCHES)	1.45	.59	2.23
10 PERCENT EXCEEDS	540	229	1090
50 PERCENT EXCEEDS	103	9.6	13
90 PERCENT EXCEEDS	5.4	.15	.33

<sup>a</sup> Many days, several years; result of regulation.  
<sup>e</sup> Estimated.

