

RED RIVER OF THE NORTH BASIN--Continued

05062500 WILD RICE RIVER AT TWIN VALLEY, MN

LOCATION.--Lat 47°16'00", long 96°14'40", in NW¹/₄NE¹/₄ sec. 27, T.144 N., R.44, Norman County, Hydrologic Unit 09020108, on left bank, 100 ft upstream from County Highway 29 bridge, 0.8 mi northeast of Twin Valley, and 2 mi upstream from small tributary.

DRAINAGE AREA.--934 mi².

PERIOD OF RECORD.--June 1909 to September 1917, July 1930 to September 1983, October 1989 to current year. Monthly discharge only for some periods, published in WSP 1308. October 1983 to September 1989, annual maximums only.

REVISED RECORDS.--WSP 955: 1941. WSP 1308: 1915(M), 1917(M).

GAGE.--Water-stage recorder. Datum of gage is 1,008.16 ft above sea level (NGVD of 1929, U.S. Army Corps of Engineers bench mark). June 1909 to September 1917, nonrecording gage at site 0.2 mi downstream at different datum. July 23, 1930 to Nov. 24, 1934, nonrecording gage at highway bridge 100 ft downstream from present site at present datum. Nov. 25, 1934 to Aug. 2, 1950, water-stage recorder 80 ft upstream from present site at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow slightly regulated by Rice Lake and many other small lakes above station.

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	417	263	e235	e150	e103	e410	486	348	228	1250	178	220
2	398	258	e235	e148	e100	e450	475	358	215	1070	169	248
3	379	260	e230	e145	e100	e480	527	345	208	950	161	229
4	367	262	e225	e143	e100	e500	558	323	205	855	152	262
5	355	261	e210	e140	e100	e505	512	316	199	803	145	243
6	347	267	e210	e140	e98	e505	546	304	193	740	139	221
7	335	259	e225	e135	e98	e510	581	295	183	676	133	215
8	332	258	e230	e135	e96	e510	523	314	169	630	126	210
9	341	262	e230	e135	e96	e510	481	336	161	587	119	207
10	339	266	e230	e133	e96	e505	476	342	152	546	115	194
11	336	262	e230	e130	e94	e500	464	327	145	509	110	184
12	324	258	e225	e128	e94	e480	448	327	140	478	108	174
13	316	257	e220	e125	e94	e460	438	338	138	447	105	164
14	309	259	e215	e125	e92	e435	434	329	158	413	135	158
15	301	262	e205	e120	e92	420	447	314	214	381	204	151
16	295	265	e185	e120	e92	390	442	300	287	350	216	145
17	290	255	e165	e118	e92	391	445	311	304	322	180	141
18	286	250	e185	e118	e92	362	444	298	291	300	171	138
19	287	258	e200	e115	e92	405	436	280	291	282	162	135
20	300	254	e195	e115	e91	545	433	261	2050	268	167	131
21	315	249	e188	e113	e91	495	413	254	4280	257	168	129
22	322	252	e183	e113	e91	461	398	255	5110	243	173	146
23	298	247	e178	e110	e91	475	388	248	4660	227	167	196
24	283	243	e173	e110	e96	602	385	235	3490	214	152	240
25	274	231	e170	e110	e110	757	374	223	2640	213	141	217
26	274	e228	e163	e108	e150	786	379	203	2210	211	141	194
27	271	e223	e160	e105	e250	700	378	190	1970	230	127	185
28	269	e220	e160	e105	e340	612	364	190	1780	217	123	175
29	265	e219	e155	e105	e370	546	354	201	1610	203	120	e165
30	260	e230	e155	e103	---	507	346	214	1430	195	118	e155
31	263	---	e150	e103	---	488	---	225	---	187	141	---
TOTAL	9748	7538	6120	3803	3501	15702	13375	8804	35111	14254	4566	5572
MEAN	314	251	197	123	121	507	446	284	1170	460	147	186
MAX	417	267	235	150	370	786	581	358	5110	1250	216	262
MIN	260	219	150	103	91	362	346	190	138	187	105	129
AC--FT	19340	14950	12140	7540	6940	31140	26530	17460	69640	28270	9060	11050
CFSM	.34	.27	.21	.13	.13	.54	.48	.30	1.25	.49	.16	.20
IN.	.39	.30	.24	.15	.14	.63	.53	.35	1.40	.57	.18	.22

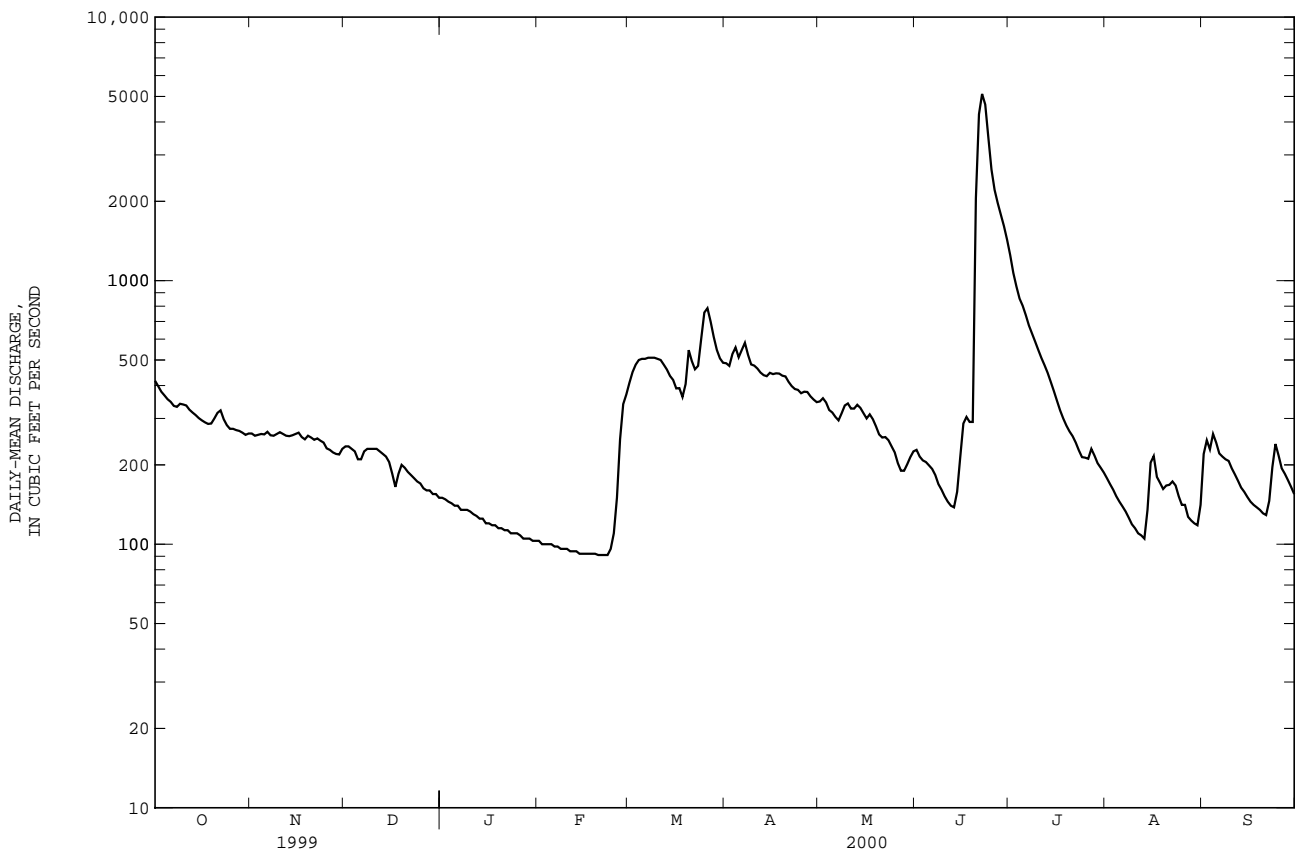
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	95.8	87.0	59.7	45.5	45.7	154	612	441	333	263	115	97.9
MAX	614	488	208	138	336	828	2471	2259	1560	1926	1024	842
(WY)	1974	1972	1999	1999	1998	1995	1997	1950	1943	1909	1993	1999
MIN	6.10	9.31	6.00	4.00	4.00	12.8	73.8	30.9	26.4	8.04	3.02	2.96
(WY)	1933	1933	1933	1933	1933	1940	1931	1977	1977	1934	1932	1936

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SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1909 - 2000	
ANNUAL TOTAL	202952		128094			
ANNUAL MEAN	556		350		193 ^a	
HIGHEST ANNUAL MEAN					537 1999	
LOWEST ANNUAL MEAN					22.7 1977	
HIGHEST DAILY MEAN	2410	May 14	5110	Jun 22	9100	Jul 22 1909
LOWEST DAILY MEAN	120	Feb 5	91	Feb 20	1.1	Aug 13 1932
ANNUAL SEVEN-DAY MINIMUM	121	Feb 19	91	Feb 17	1.3	Aug 11 1932
INSTANTANEOUS PEAK FLOW			5340	Jun 22	10000 ^b	Apr 6 1997
INSTANTANEOUS PEAK STAGE			12.52	Jun 22	20.00 ^c	Jul 22 1909
INSTANTANEOUS LOW FLOW			91 ^d	Aug 13	.50	Nov 4 1939
ANNUAL RUNOFF (AC-FT)	402600		254100		139900	
ANNUAL RUNOFF (CFSM)	.60		.37		.21	
ANNUAL RUNOFF (INCHES)	8.08		5.10		2.81	
10 PERCENT EXCEEDS	1240		510		500	
50 PERCENT EXCEEDS	417		238		72	
90 PERCENT EXCEEDS	133		110		16	

- a Median of annual mean discharges is 170 ft³/s.
- b Gage-height 15.91 ft.
- c Approximately, site and datum then in use; equivalent stage at present site is approximately 16.0 ft.
- d Estimated daily, backwater from ice.
- e Estimated.



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1966, 1973-79, 1992-98, 2000.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SOLVED SATUR-ATION (00301)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
SEP	14...	155	450	8.5	16.4	55	742	8.5	89	9	93