

RED RIVER OF THE NORTH BASIN--Continued

05051522 RED RIVER OF THE NORTH AT HICKSON, ND

LOCATION.--Lat 46°39'35", long 96°47'44", in SW¹/₄ sec.19, T.137 N., R.48 W., Clay County, MN, Hydrologic Unit 09020104, on right bank 60 ft downstream from bridge on township road, and 1 mi southeast of Hickson.

DRAINAGE AREA.--4,300 mi², approximately.

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 877.06 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for period of estimated discharge, which are poor. Flow regulated by; Orwell Reservoir, flood storage capacity, 13,300 acre-ft at elevation 1,070 ft, above mean sea level, adjustment of 1912; Mud Lake, flood storage capacity, 78,600 acre-ft at elevation 981 ft, above mean sea level, adjustment of 1912; Lake Traverse, flood storage capacity, 75,100 acre-ft at elevation 981 ft, above mean sea level, adjustment of 1912; and numerous other controlled lakes and ponds and several powerplants.

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	772	680	610	e460	e400	e1250	940	1080	865	860	897	579
2	765	674	550	e450	e400	e1600	911	1100	855	844	857	560
3	721	662	527	e450	e400	e2000	927	1090	869	874	816	570
4	666	631	524	e450	e400	e2100	933	1090	984	876	785	547
5	641	613	524	e450	e400	e1950	936	1060	1070	876	760	533
6	645	610	416	e450	e400	e1900	933	1040	1080	1020	729	519
7	697	608	385	e450	e395	e1900	913	1030	1070	1160	684	511
8	730	609	413	e450	e390	e1850	874	1040	1060	1120	670	506
9	743	611	590	e450	e390	e2600	847	1080	1050	1070	673	487
10	760	610	558	e445	e390	2620	856	1100	1040	1090	674	447
11	780	605	488	e440	e390	2720	874	1090	1010	1110	669	417
12	788	617	492	e440	e390	2450	878	1100	986	1150	622	415
13	796	616	e470	e440	e390	2020	877	1110	970	1220	603	420
14	800	615	e430	e435	e390	1650	881	1160	961	1300	607	428
15	804	610	e370	e430	e390	1450	874	1170	953	1440	602	439
16	796	609	e310	e430	e390	1280	878	1160	982	1440	605	445
17	787	608	e270	e425	e390	1130	877	1140	952	1250	607	434
18	775	606	e230	e420	e390	1070	880	1110	964	1160	613	391
19	762	600	e260	e420	e385	1050	883	1060	982	1190	575	371
20	e750	576	e340	e415	e385	1030	967	1030	1850	1290	585	357
21	725	575	e390	e410	e380	1040	1200	1010	1910	1370	596	336
22	716	540	e410	e410	e390	1080	1240	1000	1460	1310	596	349
23	715	515	419	e410	e400	1130	1220	996	1120	1130	590	406
24	725	518	448	e410	e450	1260	1280	983	1050	1040	603	430
25	720	540	479	e410	e520	1260	1280	972	1050	1020	547	405
26	714	541	476	e410	e620	1090	1250	960	1050	1010	342	392
27	700	560	453	e405	e760	1070	1210	958	1020	1030	274	312
28	692	570	442	e405	e950	1030	1200	918	970	1070	506	185
29	688	532	439	e400	e1100	1020	1170	893	956	1080	665	231
30	690	578	454	e400	---	1070	1090	878	926	1040	673	495
31	688	---	e460	e400	---	1030	---	868	---	959	663	---
TOTAL	22751	17839	13627	13270	13425	47700	30079	32276	32065	34399	19688	12917
MEAN	734	595	440	428	463	1539	1003	1041	1069	1110	635	431
MAX	804	680	610	460	1100	2720	1280	1170	1910	1440	897	579
MIN	641	515	230	400	380	1020	847	868	855	844	274	185
AC-FT	45130	35380	27030	26320	26630	94610	59660	64020	63600	68230	39050	25620

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2000, BY WATER YEAR (WY)

MEAN	430	363	331	312	382	1010	2096	1294	1085	914	559	464
MAX	1558	900	932	747	1058	2687	9864	3925	2485	2674	2674	2135
(WY)	1994	1987	1999	1986	1998	1995	1997	1997	1986	1993	1993	1993
MIN	2.02	.000	.000	4.95	14.0	75.9	165	22.0	86.4	73.4	35.6	12.6
(WY)	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977	1976

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1975 - 2000	
ANNUAL TOTAL	399475		290036			
ANNUAL MEAN	1094		792		770	
HIGHEST ANNUAL MEAN					1729	
LOWEST ANNUAL MEAN					53.1	
HIGHEST DAILY MEAN	3630	Jun 10	2720	Mar 11	13100	Apr 15 1997
LOWEST DAILY MEAN	230	Dec 18	185	Sep 28	.00 ^a	Oct 26 1976
ANNUAL SEVEN-DAY MINIMUM	310	Dec 15	310	Dec 15	.00	Oct 26 1976
INSTANTANEOUS PEAK FLOW			2750 ^b		13300	Apr 14 1997
INSTANTANEOUS PEAK STAGE			16.90 ^c		37.60	Apr 16 1997
ANNUAL RUNOFF (AC-FT)	792400		575300		558000	
10 PERCENT EXCEEDS	1800		1200		1780	
50 PERCENT EXCEEDS	923		714		444	
90 PERCENT EXCEEDS	520		400		95	

^a Many days in 1977.
^b Gage height, 15.65 ft
^c Backwater from ice
^e Estimated

