

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, ND.

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 sea level, National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for periods of estimated daily discharges, 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	561	454	e770	e660	e650	e640	e1100	6280	2990	e2950	1720	343
2	498	462	e830	e660	e640	e660	e1100	6000	3050	e2920	1680	383
3	455	447	e850	e660	e640	e670	e1150	5710	3040	2850	1630	477
4	443	411	e840	e660	e640	e670	e1250	5390	2980	2830	1590	488
5	442	410	e810	e660	e640	e680	e1460	5110	2910	2770	1530	481
6	440	428	e770	e660	e640	e690	e1850	4830	2870	2690	1440	489
7	434	500	e720	e660	e640	e720	e3000	4540	2850	2640	1390	505
8	423	575	e680	e660	e640	e810	5390	4250	2830	2600	1310	507
9	398	620	e630	e660	e630	e1000	7340	4000	2810	2550	1140	515
10	379	669	e590	e660	e610	e1440	9510	3780	2810	2510	981	524
11	379	703	e560	e670	e610	e1510	10900	3550	2900	2480	861	518
12	401	703	e550	e700	e630	e1570	11400	3320	3150	2470	790	504
13	416	693	e550	e740	e640	e1590	11200	3140	3570	2460	712	496
14	428	687	e570	e760	e640	e1600	10500	3020	3880	2460	682	492
15	414	654	e580	e740	e640	e1600	9590	2950	3760	2450	637	494
16	387	555	e600	e730	e640	e1590	9150	2900	3490	2460	421	501
17	362	e570	e610	e720	e640	e1560	8820	2860	3430	2470	260	489
18	354	e620	e630	e720	e630	e1540	8420	2860	3530	2500	188	471
19	352	e680	e640	e700	e620	e1450	7860	2870	3710	2510	366	471
20	362	e680	e720	e690	e620	e1360	7310	2860	3840	2500	672	498
21	327	574	e830	e670	e620	e1340	6980	2850	3800	2500	753	507
22	290	425	e860	e660	e620	e1310	6770	2840	3670	2510	757	505
23	297	462	e820	e650	e620	e1310	6630	2840	3610	2470	717	478
24	311	e500	e760	e650	e620	e1310	6510	2830	3520	2370	575	462
25	323	e560	e740	e650	e620	e1340	6520	2840	3410	2220	533	459
26	281	e600	e720	e650	e620	e1350	6790	2850	3280	1970	555	451
27	202	e620	e700	e650	e620	e1320	7120	2870	3150	1790	549	435
28	177	e650	e690	e650	e620	e1200	7080	2900	3060	1630	537	370
29	190	e680	e680	e650	---	e1140	6860	2950	3020	1490	518	331
30	301	e720	e670	e650	---	e1110	6580	2960	e3000	1650	445	333
31	422	---	e660	e650	---	e1100	---	2940	---	1770	396	---
TOTAL	11449	17312	21630	20950	17640	37180	196140	111890	97920	74440	26335	13977
MEAN	369	577	698	676	630	1199	6538	3609	3264	2401	850	466
MAX	561	720	860	760	650	1600	11400	6280	3880	2950	1720	524
MIN	177	410	550	650	610	640	1100	2830	2810	1490	188	331
AC-FT	22710	34340	42900	41550	34990	73750	389000	221900	194200	147700	52240	27720
CFSM	.09	.13	.16	.16	.15	.28	1.52	.84	.76	.56	.20	.11
IN.	.10	.15	.19	.18	.15	.32	1.70	.97	.85	.64	.23	.12

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	417	358	321	314	382	995	2301	1378	1130	959	548	440
MAX	1558	900	817	747	1058	2687	9864	3925	3264	2674	2674	2135
(WY)	1994	1987	1986	1986	1998	1995	1997	1997	2001	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 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1975 - 2001
ANNUAL TOTAL	286210	646863	
ANNUAL MEAN	782	1772	795
HIGHEST ANNUAL MEAN			1772
LOWEST ANNUAL MEAN			53.1
HIGHEST DAILY MEAN	2720	Mar 11	11400
LOWEST DAILY MEAN	177	Oct 28	177
ANNUAL SEVEN-DAY MINIMUM	254	Oct 23	254
MAXIMUM PEAK FLOW			11500a
MAXIMUM PEAK STAGE			35.80
ANNUAL RUNOFF (AC-FT)	567700	1283000	576300
ANNUAL RUNOFF (CFSM)	.18	.41	.18
ANNUAL RUNOFF (INCHES)	2.48	5.60	2.51
10 PERCENT EXCEEDS	1200	3770	1890
50 PERCENT EXCEEDS	686	717	440
90 PERCENT EXCEEDS	390	427	95

a Gage height, 35.30 ft.
e Estimated.

