

## RED RIVER OF THE NORTH BASIN--Continued

05092000 RED RIVER OF THE NORTH AT DRAYTON, ND

LOCATION.--Lat 48°34'20", long 97°08'50", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec.24, T.159 N., R.51 W., Pembina County, Hydrologic Unit 09020311, on downstream side of bridge on North Dakota State Highway 66, at the North Dakota-Minnesota border, 1.5 mi northeast of Drayton, and at mile 206.7.

DRAINAGE AREA.--34,800 mi<sup>2</sup> (approximately) includes 3,800 mi<sup>2</sup> in closed basins.

PERIOD OF RECORD.--April 1936 to June 1937, April 1941 to current year (fragmentary prior to April 1949).

REVISED RECORDS.--WSP 1388: 1949-50. WSP 1728: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 755.00 ft above sea level, National Geodetic Vertical Datum of 1929 (Minnesota Department of Transportation benchmark). Prior to Nov. 30, 1954, nonrecording gage at site 1.5 mi upstream at datum 1.59 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of April 1897 reached a stage of about 41 ft at site and datum in use prior to Nov. 30, 1954.

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	2790	3980	e5500	e2750	e2600	e2500	e8000	37700	13300	8080	7940	e3000
2	2720	4130	e5400	e2700	e2600	e2500	e9000	36900	13100	7630	9210	e2950
3	2590	4590	e5400	e2700	e2600	e2500	e10000	36300	12800	7210	10200	e2900
4	2470	5540	e5300	e2700	e2600	e2500	e12500	35800	12600	6860	11200	e2850
5	2430	7380	e5200	e2700	e2600	e2500	e14300	35200	12400	6600	11700	e2850
6	2480	9420	e5100	e2700	e2600	e2500	e16500	34700	12100	6310	11600	e2870
7	2490	12600	e5000	e2700	e2550	e2500	e20000	34500	11700	6060	10900	e2870
8	2410	15800	e4900	e2700	e2550	e2500	e24000	34100	11000	5920	9910	e2930
9	2270	17900	e4700	e2700	e2550	e2500	e29000	33500	10300	5820	8910	e3100
10	2150	19900	e4600	e2700	e2550	e2500	32000	32800	9630	5720	8110	e3300
11	2110	21600	e4500	e2700	e2550	e2500	33700	32100	9120	5580	7540	e3400
12	2110	22700	e4400	e2700	e2550	e2500	35300	31300	8610	5420	7400	e3400
13	2050	23100	e4250	e2700	e2550	e2500	37400	30400	8160	5250	7490	e3380
14	1970	22700	e4100	e2700	e2550	e2500	40400	29300	7970	5140	7430	e3300
15	1940	21900	e4000	e2700	e2550	e2500	44000	28100	8220	5100	7190	e3200
16	1950	20600	e3900	e2700	e2550	e2600	48500	26500	8700	5030	6880	e3000
17	1960	18900	e3800	e2700	e2550	e2700	53600	24600	9240	4920	6380	e2860
18	2040	e15000	e3650	e2700	e2550	e2800	55000	22400	9960	4810	5960	e2780
19	2410	e12700	e3500	e2650	e2550	e2950	55000	19900	10800	4840	5640	e2700
20	2970	e10500	e3450	e2650	e2550	e3100	54700	17300	11200	5200	5340	e2620
21	3240	e8500	e3350	e2650	e2550	e3400	53900	14800	11200	5330	4970	e2580
22	3260	e7400	e3250	e2650	e2550	e3600	53600	12700	11000	5350	4570	e2560
23	3200	e6800	e3200	e2650	e2550	e3800	52500	12300	10800	5420	e4300	e2550
24	3090	e6400	e3100	e2650	e2550	e4100	51400	11800	10700	5640	e4000	e2540
25	3000	e6200	e3050	e2650	e2550	e4300	49800	11400	10600	5930	e3800	e2520
26	2930	e6000	e3000	e2650	e2550	e4600	46800	11200	10400	6100	e3750	e2500
27	2990	e5900	e2950	e2650	e2550	e5000	44100	11600	9960	6280	e3750	2470
28	3140	e5800	e2900	e2650	e2500	e5400	42000	12100	9470	8060	e3600	2470
29	3350	e5700	e2850	e2650	---	e5800	40100	12400	9000	7950	e3400	2470
30	3620	e5600	e2800	e2650	---	e6400	38800	12800	8550	6690	e3200	2470
31	3850	---	e2800	e2600	---	e7000	---	13100	---	6150	e3080	---
TOTAL	81980	355240	123900	83050	71650	105050	1105900	749600	312590	186400	209350	85390
MEAN	2645	11840	3997	2679	2559	3389	36860	24180	10420	6013	6753	2846
MAX	3850	23100	5500	2750	2600	7000	55000	37700	13300	8080	11700	3400
MIN	1940	3980	2800	2600	2500	2500	8000	11200	7970	4810	3080	2470
AC-FT	162600	704600	245800	164700	142100	208400	2194000	1487000	620000	369700	415200	169400
CFSM	.09	.38	.13	.09	.08	.11	1.19	.78	.34	.19	.22	.09
IN.	.10	.43	.15	.10	.09	.13	1.33	.90	.38	.22	.25	.10

05092000 RED RIVER OF THE NORTH AT DRAYTON, ND--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1933	1870	1434	1183	1153	3411	15120	9375	5583	5115	2577	2054
MAX	5194	11840	4168	2679	2598	16290	54710	58890	23420	28240	21580	12140
(WY)	1995	2001	1999	2001	1998	1998	1997	1950	1962	1975	1993	1999
MIN	13.8	277	149	174	201	280	1275	938	399	118	50.1	27.4
(WY)	1937	1977	1977	1990	1977	1962	1981	1977	1936	1936	1936	1936

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1936 - 2001
ANNUAL TOTAL	2234880	3470100	
ANNUAL MEAN	6106	9507	4375
HIGHEST ANNUAL MEAN			11280
LOWEST ANNUAL MEAN			536
HIGHEST DAILY MEAN	29300	Jun 30	55000
LOWEST DAILY MEAN	1700	Feb 18	1940
ANNUAL SEVEN-DAY MINIMUM	1710	Feb 16	2000
MAXIMUM PEAK FLOW			55300
MAXIMUM PEAK STAGE			41.33
INSTANTANEOUS LOW FLOW			7.7
ANNUAL RUNOFF (AC-FT)	4433000	6883000	3169000
ANNUAL RUNOFF (CFSM)	.20	.31	.14
ANNUAL RUNOFF (INCHES)	2.68	4.16	1.92
10 PERCENT EXCEEDS	14400	28500	10600
50 PERCENT EXCEEDS	3980	4810	1940
90 PERCENT EXCEEDS	1950	2500	480

e Estimated

