

RED RIVER OF THE NORTH BASIN

05062000 BUFFALO RIVER NEAR DILWORTH, MN

LOCATION--Lat 4657'40", long 9639'40", in SW 1 / 4 SE 1 / 4 sec. 6, T.140 N., R.47 W., Clay County, Hydrologic Unit 09020106, on left bank 4.5 mi southeast of Kragnes, 6.5 mi northeast of Dilworth, and 9 mi downstream from South Branch.

DRAINAGE AREA.--975 mi² (revised).

PERIOD OF RECORD.--March 1931 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1308: 1931(M).

GAGE.--Water-stage recorder. Datum of gage is 878.31 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to April 5, 1937, nonrecording gage at same site and datum.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	151	e160	e100	e83	2520	903	203	529	2960	181	62
2	57	156	e160	e98	e83	2370	1030	201	491	2700	167	60
3	54	151	e160	e96	e83	2060	1080	201	460	2490	153	58
4	52	143	e160	e93	e83	1790	1020	198	449	2330	142	59
5	51	127	e160	e91	e83	1540	933	187	422	2090	131	59
6	52	103	e155	e89	e83	e1300	888	177	391	1950	122	58
7	50	113	e155	e88	e83	e1150	863	175	367	2370	114	56
8	49	161	e155	e87	e83	e950	815	180	340	3510	105	54
9	57	201	e150	e86	e83	e850	764	215	314	3950	99	52
10	88	222	e150	e85	e83	e714	710	246	288	3510	93	50
11	103	213	e150	e84	e83	618	652	265	282	2940	87	49
12	126	e215	e150	e84	e83	540	593	418	303	2430	80	47
13	168	e215	e145	e83	e84	472	554	851	326	1990	76	49

14	229	e210	e145	e83	e84	414	563	937	328	1690	72	53
15	318	e205	e140	e83	e85	368	544	1020	321	1430	71	53
16	388	e200	e140	e83	e87	324	504	1660	299	1150	71	55
17	437	e195	e140	e83	e90	308	470	2740	279	930	72	62
18	455	e190	e135	e83	e100	288	441	4160	330	766	71	61
19	444	e185	e135	e83	e105	303	410	4680	405	645	72	58
20	408	e180	e130	e83	e130	345	374	3890	616	548	79	55
21	359	e175	e130	e83	e170	366	340	2900	681	478	80	51
22	e315	e170	e125	e83	e200	387	322	2210	724	423	84	49
23	267	e165	e125	e83	e300	420	300	1770	774	375	99	48
24	236	e165	e120	e83	e447	421	286	1450	802	336	97	47
25	218	e165	e120	e83	e700	400	267	1130	869	302	90	47
26	202	e165	e115	e83	e1000	389	249	863	846	275	80	51
27	187	e165	e115	e83	e1400	380	234	643	1220	253	76	85
28	172	e160	e110	e83	e2000	396	223	515	2010	238	75	105
29	158	e160	e110	e83	---	430	212	433	2730	222	72	95
30	148	e160	e105	e83	---	697	202	437	2990	207	67	91
31	145	---	e102	e83	---	833	---	514	---	195	64	---
TOTAL	6052	5186	4252	2658	7978	24343	16746	35469	21186	45683	2942	1779
MEAN	195	173	137	85.7	285	785	558	1144	706	1474	94.9	59.3
MAX	455	222	160	100	2000	2520	1080	4680	2990	3950	181	105
MIN	49	103	102	83	83	288	202	175	279	195	64	47
AC-FT	12000	10290	8430	5270	15820	48280	33220	70350	42020	90610	5840	3530
CFSM	.20	.18	.14	.09	.29	.81	.57	1.17	.72	1.51	.10	.06
IN.	.23	.20	.16	.10	.30	.93	.64	1.35	.81	1.74	.11	.07

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1998, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	55.9	52.8	32.1	21.3	24.3	190	584	241	205	206	72.6	54.2
MAX	200	305	137	85.7	285	1308	3412	1144	2138	2814	910	517
(WY)	1996	1972	1998	1998	1998	1966	1997	1998	1962	1975	1993	1944
MIN	5.48	8.74	4.75	.87	.76	2.26	33.5	27.2	15.1	2.23	.000	.79
(WY)	1940	1937	1938	1940	1940	1940	1931	1931	1934	1936	1936	1936

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1931 - 1998		
ANNUAL TOTAL	165642		174274				
ANNUAL MEAN	454		477		147		
HIGHEST ANNUAL MEAN					477		1998
LOWEST ANNUAL MEAN					25.6		1934
HIGHEST DAILY MEAN	8370	Apr 6	4680	May 19	13500	Jul 2	1975
LOWEST DAILY MEAN	32	Mar 3	47	Sep 12, 24, 25	.00a	Jul 22	1936
ANNUAL SEVEN-DAY MINIMUM	32	Mar 3	50	Sep 20	.00	Jul 28	1936
INSTANTANEOUS PEAK FLOW			4770	May 19	13600	Jul 2	1975
INSTANTANEOUS PEAK STAGE			21.77	May 19	27.10	Jul 2	1975
INSTANTANEOUS LOW FLOW			47	Sep 12			
ANNUAL RUNOFF (AC-FT)	328600		345700		106200		
ANNUAL RUNOFF (CFSM)	.47		.49		.15		
ANNUAL RUNOFF (INCHES)	6.32		6.65		2.04		
10 PERCENT EXCEEDS	688		1180		309		
50 PERCENT EXCEEDS	150		181		38		
90 PERCENT EXCEEDS	33		66		9.6		

a Occurred many days in 1936.

