RED RIVER OF THE NORTH BASIN

05075000 RED LAKE RIVER AT HIGH LANDING, NEAR GOODRIDGE, MN

LOCATION.--Lat 4802'34", long 9548'28", in NW *1* / *4* NW *1* / *4* sec. 28, T.153 N., R.40 W., Pennington County, Hydrologic Unit 09020303, on left bank 50 ft upstream from highway bridge at High Landing, 7 mi south of Goodridge and 33 mi upstream from Thief River.
DRAINAGE AREA.--2,300 mi *2* , approximately.
PERIOD OF RECORD.--September 1929 to current year. Prior to October 1930, published as "at Kratka".
GAGE.--Water-stage recorder. Datum of gage is 1,141.57 ft above sea level, adjustment of 1912 (levels by U.S. Army Corps of Engineers). See WSP 1308 or 1738 for history of changes prior to Oct. 1, 1949.
REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow regulated by outlet dam on Lower Red Lake.

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	1140	1490	e890	e750	e950	1520	973	1000	1130	415	1010	1010
2	1140	1490	e880	e730	e940	1500	960	1010	1120	655	1010	1000
3	1140	1500	e870	e710	e920	1400	984	1010	1100	1450	1000	1000
4	1140	1510	e860	e710	e910	1360	989	998	1080	1300	1010	1020
5	1130	1510	e850	e700	e910	1310	988	980	1070	867	1010	1030
6	1130	1520	e1000	e690	e900	1270	999	977	1060	585	1000	1020
7	1140	1530	e1230	e800	e910	1230	1020	988	1050	477	1000	1010
8	1150	1530	e1220	e1150	e930	1200	1020	985	1030	535	1000	1000
9	1180	1530	e1220	e1140	e930	e1170	1000	980	1020	717	1000	1010
10	1150	1520	e1220	e1120	e930	e1150	998	972	1000	842	994	997
11	1150	1520	e1210	e1100	e930	e1120	991	990	1000	952	989	954

12	1170	1580	e1210	e1060	e920	e1120	993	1110	1000	984	991	932
13	1230	1360	e1210	e1000	e920	e1130	1010	1410	1030	993	994	929
14	1280	1140	e1220	e1000	e930	e800	1090	1240	1090	1030	994	923
15	1270	1130	e1240	e1000	e940	e650	1160	1180	1150	1160	988	909
16	1300	e1120	e1250	e1000	e960	e750	1170	2430	1180	1120	989	900
17	1340	e1110	e1250	e990	e970	835	1160	2480	1230	1080	984	888
18	1360	e1110	e1240	e990	e990	1040	1150	2020	1260	1070	986	877
19	1370	e1100	e1240	e990	e1030	1030	1140	1130	1570	1110	997	887
20	1380	e1100	e1230	e980	e1050	867	1120	1000	1750	1130	994	889
21	1380	e750	e1240	e980	e1080	865	1100	1180	1330	1140	981	862
22	1400	e720	e1250	e980	1100	867	1090	1160	862	1140	982	842
23	1410	e720	e1250	e970	1230	871	1080	1110	656	1120	989	846
24	1430	e700	e1240	e970	1260	881	1080	1060	696	1110	980	849
25	1430	e700	e1240	e970	1340	889	1080	1020	1150	1100	967	847
26	1430	e720	e1230	e960	1550	915	1070	985	1420	1090	972	847
27	1440	e750	e1220	e960	1610	941	1050	1010	1140	1070	994	848
28	1440	e900	e1210	e960	1530	970	1030	1100	729	1050	1020	841
29	1430	e900	e1200	e960	---	1010	1010	1140	477	1040	1020	834
30	1450	e890	e900	e950	---	991	1010	1150	380	1020	1010	840
31	1470	---	e800	e950	---	986	---	1140	---	1020	1010	---
TOTAL	40000	35150	35320	29220	29570	32638	31515	36945	31760	30372	30865	27641
MEAN	1290	1172	1139	943	1056	1053	1051	1192	1059	980	996	921
MAX	1470	1580	1250	1150	1610	1520	1170	2480	1750	1450	1020	1030
MIN	1130	700	800	690	900	650	960	972	380	415	967	834
AC-FT	79340	69720	70060	57960	58650	64740	62510	73280	63000	60240	61220	54830
CFSM	.56	.51	.50	.41	.46	.46	.46	.52	.46	.43	.43	.40
IN.	.65	.57	.57	.47	.48	.53	.51	.60	.51	.49	.50	.45

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1998, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	547	518	479	473	472	512	687	683	678	593	523	536
MAX	1955	1730	1539	1424	1366	1453	1980	3179	2161	2474	1478	1733
(WY)	1951	1951	1951	1951	1951	1951	1951	1950	1950	1975	1975	1950
MIN	2.11	1.61	.000	.000	.000	.000	24.7	5.58	1.04	5.92	.026	.000
(WY)	1934	1934	1934	1934	1934	1936	1933	1933	1936	1934	1934	1934

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1930 - 1998		
ANNUAL TOTAL	420362		390996				
ANNUAL MEAN	1152		1071		559		
HIGHEST ANNUAL MEAN					1407		1951
LOWEST ANNUAL MEAN					6.21		1934
HIGHEST DAILY MEAN	2200	Apr 10	2480	May 17	4040	Jul 7	1975
LOWEST DAILY MEAN	456	May 7	380	Jun 30	.00a	Oct 11	1931
ANNUAL SEVEN-DAY MINIMUM	507	May 5	711	Jul 5	.00	Nov 16	1933
INSTANTANEOUS PEAK FLOW			2610	May 16	4060b	Jul 7	1975
INSTANTANEOUS PEAK STAGE			11.22	May 16	13.44	Jul 3	1975
ANNUAL RUNOFF (AC-FT)	833800		775500		404800		
ANNUAL RUNOFF (CFSM)	.50		.47		.24		
ANNUAL RUNOFF (INCHES)	6.80		6.32		3.30		
10 PERCENT EXCEEDS	1490		1390		1180		
50 PERCENT EXCEEDS	1140		1020		480		

90 PERCENT EXCEEDS	856		847		36		

a Many days, several years.
b Gage-height, 13.39 ft.