

## RED RIVER OF THE NORTH BASIN--Continued

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

LOCATION.--Lat 48°02'34", long 95°48'28", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 28, T.153 N., R.40 W., Pennington County, Hydrologic Unit 09020303, on left bank 50 ft upstream from County Highway 24 bridge at High Landing, 7 mi south of Goodridge and 33 mi upstream from Thief River.

DRAINAGE AREA.--2,300 mi<sup>2</sup> (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, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	837	754	e690	e680	e680	e700	2180	1190	1390	1070	e1190	1210
2	814	758	e680	e680	e680	e700	e1830	1170	1380	1060	e1180	1620
3	756	758	e680	e680	e680	e700	1460	1150	1360	1060	1170	1880
4	703	753	e680	e680	e690	e700	1420	1140	1360	1060	1150	2120
5	695	739	e680	e680	e690	e700	1940	1160	1300	1060	1140	2360
6	706	724	e520	e680	e690	e700	1950	1180	1010	1040	1130	2150
7	676	714	e500	e680	e690	e700	1830	1200	881	1030	1140	1840
8	654	709	e660	e680	e690	e710	1730	e1220	854	1070	1160	1480
9	639	706	e680	e680	e690	e710	1570	e1280	734	1120	1160	1200
10	625	717	e680	e680	e690	e710	1450	1800	e810	1140	1150	1000
11	631	670	e680	e680	e690	e710	1350	2280	1140	1140	1150	907
12	628	e555	e680	e680	e690	e710	1280	1860	1170	1140	1350	1110
13	610	e500	e680	e680	e690	e710	1390	1800	1230	1140	1590	1350
14	617	e535	e680	e680	e690	e710	1570	1470	1250	1150	1500	e1550
15	622	e695	e680	e680	e690	e710	1580	1170	1250	1150	1200	1600
16	625	e675	e670	e680	e690	e720	1540	1050	1230	1170	1050	1520
17	710	e630	e660	e680	e690	e720	1510	940	1210	1160	926	1310
18	821	e600	e650	e680	e690	e720	1560	1050	1190	1160	960	1050
19	797	e575	e630	e680	e690	e720	1560	1300	1170	1160	1070	835
20	756	e560	e600	e680	e690	e720	1540	1340	1170	1160	1150	728
21	745	e540	e620	e680	e690	e720	1510	1320	1150	1150	1190	813
22	739	e590	e650	e680	e690	e720	1470	1290	1140	1140	1210	958
23	731	e630	e670	e680	e690	e720	1420	1250	1170	1170	1320	1070
24	727	e670	e680	e680	e700	e650	1370	1210	1190	1150	1390	1130
25	741	e690	e680	e680	e700	e600	1330	1210	1170	1140	1320	1170
26	753	e690	e680	e680	e700	e590	1300	1280	1160	e1200	1090	1230
27	747	e690	e680	e680	e700	e580	1270	1310	1140	e1250	1030	1320
28	744	e690	e680	e680	e700	990	1250	1310	1120	e1250	1060	1340
29	750	e690	e680	e680	---	1540	1230	1300	1110	e1240	1090	1290
30	758	e690	e680	e680	---	1990	1200	1290	1100	e1220	1110	1200
31	754	---	e680	e680	---	2220	---	1350	---	e1200	1120	---
TOTAL	22111	19897	20440	21080	19340	25500	45590	40870	34539	35350	36446	40341
MEAN	713	663	659	680	691	823	1520	1318	1151	1140	1176	1345
MAX	837	758	690	680	700	2220	2180	2280	1390	1250	1590	2360
MIN	610	500	500	680	680	580	1200	940	734	1030	926	728
AC-FT	43860	39470	40540	41810	38360	50580	90430	81070	68510	70120	72290	80020
CFSM	.31	.29	.29	.30	.30	.36	.66	.57	.50	.50	.51	.58
IN.	.36	.32	.33	.34	.31	.41	.74	.66	.56	.57	.59	.65

e Estimated

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	550	520	482	476	475	516	699	692	685	601	532	548
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 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1930 - 1999	
ANNUAL TOTAL	342974		361504			
ANNUAL MEAN	940		990		565	
HIGHEST ANNUAL MEAN					1407	
LOWEST ANNUAL MEAN					6.21	
HIGHEST DAILY MEAN	2480		May 17		2360	
LOWEST DAILY MEAN	380		Jun 30		500 <sup>a</sup>	
ANNUAL SEVEN-DAY MINIMUM	589		Nov 17		589	
INSTANTANEOUS PEAK FLOW					2390	
INSTANTANEOUS PEAK STAGE					11.85	
ANNUAL RUNOFF (AC-FT)	680300		717000		409200	
ANNUAL RUNOFF (CFSM)	.41		.43		.25	
ANNUAL RUNOFF (INCHES)	5.55		5.85		3.34	
10 PERCENT EXCEEDS	1150		1460		1190	
50 PERCENT EXCEEDS	980		837		490	
90 PERCENT EXCEEDS	660		673		37	

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

