

RED RIVER OF THE NORTH BASIN--Continued

05076000 THIEF RIVER NEAR THIEF RIVER FALLS, MN

LOCATION.--Lat 48°11'08", long 96°10'11", in NW¹/₄SW¹/₄ sec. 3, T.154 N., R.43 W., Marshall County, Hydrologic Unit 09020304, on right bank, 0.2 mi upstream from highway bridge, 5 mi north of Thief River Falls, 7 mi upstream from mouth, and 9 mi downstream from Mud Lake National Wildlife Refuge.

DRAINAGE AREA.--985 mi².

PERIOD OF RECORD.--July 1909 to September 1917, April 1920 to September 1921, October 1922 to September 1924, October 1928 to September 1981, March 1982 to current year. Monthly discharge only for some periods, annual maximums for water years 1919, 1922, 1925, 1926, published in WSP 1308. October 1981 to February 1982, operated as a high-flow partial-record station.

REVISED RECORDS.--WSP 925: Drainage area. WSP 1308: 1917(M), 1924(M), 1929(M), 1931-33(M), 1935(M), 1937(M).

GAGE.--Water-stage recorder and control of grouted boulders. Datum of gage is 1,112.33 ft above sea level (NGVD of 1929, levels by Minnesota Department of Transportation). Prior to May 4, 1939, nonrecording gages at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some regulation by Thief and Mud Lakes.

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	25	677	e375	20	12	2.7	e281	1320	929	498	1330	403
2	28	1110	e334	20	11	2.6	e325	1180	1040	468	1630	402
3	28	955	e297	20	10	2.6	e406	873	1050	201	1610	393
4	17	954	e272	19	9.8	2.7	e507	1200	984	242	1610	367
5	21	841	e242	19	9.1	2.8	e621	1050	911	267	1650	296
6	28	1020	e202	19	8.8	e2.7	e865	986	862	269	1710	292
7	25	1770	e178	19	8.7	e2.7	e1290	949	835	260	1710	321
8	28	2330	e157	20	8.4	e2.6	e1940	821	733	255	1710	473
9	25	2160	e144	20	8.2	e2.5	e3400	948	460	262	1740	491
10	21	1790	e127	19	7.8	e2.4	2820	946	431	300	1720	459
11	19	1520	e103	19	7.4	e2.3	2390	922	457	296	1670	280
12	22	1400	e90	19	7.0	e2.4	2350	893	538	282	1610	259
13	22	e1310	e79	19	6.4	e2.5	2330	818	534	207	1490	256
14	26	e1190	e70	19	6.0	e2.5	2330	614	541	198	1360	234
15	25	e1090	e61	20	5.9	e2.6	2160	593	595	199	1310	129
16	24	e1030	e52	e20	5.6	e2.7	1910	583	651	201	1270	120
17	18	e942	e44	e20	5.0	e2.7	1700	571	644	197	1200	122
18	12	e883	e36	e19	4.8	e2.8	1620	552	606	663	1060	120
19	11	e812	e30	e19	4.5	e3.0	1680	501	601	568	1000	132
20	13	e778	e28	19	4.0	e3.8	1710	490	611	680	920	133
21	10	e755	e26	18	3.7	e5.8	1770	497	605	560	771	132
22	18	e726	e25	17	3.6	e29	1670	576	583	625	740	131
23	13	e699	e24	16	3.3	e320	1580	740	556	620	617	141
24	11	e681	e23	15	3.2	e246	1590	1180	538	502	570	143
25	16	e625	e22	14	3.1	e206	1600	1220	528	427	470	154
26	56	e598	e21	14	2.9	e179	1560	1170	516	374	428	142
27	126	e563	e20	13	2.8	e144	1520	1130	508	343	413	136
28	124	e514	20	13	2.8	e160	1470	1260	499	452	443	131
29	111	e447	20	12	---	e178	1400	1170	486	465	429	128
30	134	e414	20	12	---	e205	1360	1130	494	435	417	131
31	240	---	20	12	---	e236	---	1030	---	469	411	---
TOTAL	1297	30584	3162	544	175.8	1962.4	48155	27913	19326	11785	35019	7051
MEAN	41.8	1019	102	17.5	6.28	63.3	1605	900	644	380	1130	235
MAX	240	2330	375	20	12	320	3400	1320	1050	680	1740	491
MIN	10	414	20	12	2.8	2.3	281	490	431	197	411	120
AC-FT	2570	60660	6270	1080	349	3890	95520	55370	38330	23380	69460	13990
CFSM	.04	1.03	.10	.02	.01	.06	1.63	.91	.65	.39	1.15	.24
IN.	.05	1.16	.12	.02	.01	.07	1.82	1.05	.73	.45	1.32	.27

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	95.1	83.7	24.6	5.78	5.41	78.8	625	510	318	236	114	116
MAX	637	1019	215	100	101	773	2827	4274	1774	2103	1130	1619
(WY)	1986	2001	1999	1910	1998	1995	1966	1950	1962	1975	2001	1999
MIN	.000	.000	.000	.000	.000	.000	7.75	1.83	.032	.000	.000	.000
(WY)	1911	1911	1911	1911	1911	1930	1981	1990	1980	1932	1932	1929

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1909 - 2001

ANNUAL TOTAL		77960.93		186974.2								
ANNUAL MEAN		213		512						184a		
HIGHEST ANNUAL MEAN										791		1999
LOWEST ANNUAL MEAN										1.28		1939
HIGHEST DAILY MEAN				2330	Nov 8		3400e	Apr 9		5580	May 13	1950
LOWEST DAILY MEAN				.00	Jan 26		2.3e	Mar 11		.00b	Oct 1	1910
ANNUAL SEVEN-DAY MINIMUM				.00	Jan 26		2.5	Mar 8		.00	Oct 1	1910
MAXIMUM PEAK FLOW							3400e	Apr 9		5610	May 13	1950
MAXIMUM PEAK STAGE							16.58c	Apr 9		17.38	May 13	1950
INSTANTANEOUS LOW FLOW							2.3d	Mar 11				
ANNUAL RUNOFF (AC-FT)		154600		370900					133300			
ANNUAL RUNOFF (CFSM)		.22		.52					.19			
ANNUAL RUNOFF (INCHES)		2.94		7.06					2.54			
10 PERCENT EXCEEDS		600		1500					582			
50 PERCENT EXCEEDS		98		292					10			
90 PERCENT EXCEEDS		.71		6.2					.00			

- a Median of annual mean discharges is 143 ft³/s.
- b Many days, several years.
- c Backwater from ice.
- d Estimated daily discharge, backwater from ice.
- e Estimated.

