

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 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	740	175	e105	e4.3	.00	e300	116	94	116	448	99	40
2	728	172	e99	e4.1	.00	e295	138	132	108	459	93	38
3	707	223	e98	e3.8	.00	e290	330	94	94	409	86	36
4	667	227	e97	e3.6	.00	e285	336	88	82	363	87	35
5	546	223	e99	e3.4	.00	e280	366	119	86	342	72	33
6	527	168	e100	e3.2	.00	e270	408	95	62	318	77	35
7	551	153	e100	e3.0	.00	e260	408	85	89	356	75	29
8	681	244	e97	e2.8	.00	e250	366	100	69	474	72	19
9	675	433	e93	e2.5	.00	e225	339	101	92	459	53	32
10	673	150	e92	e2.2	.00	e200	321	120	70	423	47	24
11	665	138	e91	e2.1	.00	e165	308	121	22	433	47	13
12	649	140	e89	e1.9	.00	e145	297	127	21	411	57	21
13	638	140	e87	e1.7	.00	e140	300	112	17	370	59	18
14	618	139	e87	e1.4	.00	e120	364	142	121	338	63	24
15	581	137	e64	e1.2	.00	e115	327	161	298	293	50	23
16	533	136	e66	e1.0	.00	e110	350	142	305	271	40	24
17	499	136	e64	e.92	.00	e105	298	130	258	251	47	19
18	445	132	e57	e.80	.00	e105	202	143	210	263	40	18
19	344	104	e47	e.74	.00	e100	218	109	181	222	40	17
20	324	94	e35	e.65	.00	e100	197	69	625	213	38	15
21	325	e97	e25	e.57	.00	99	155	100	1090	215	41	10
22	356	e95	e10	e.45	.00	96	111	107	1600	207	42	35
23	297	e93	e7.5	e.30	.00	99	141	111	1620	191	42	68
24	289	e92	e6.7	e.20	.00	121	120	119	1460	168	41	48
25	271	e105	e6.3	e.10	e20	180	102	136	1260	163	33	32
26	217	e95	e5.9	.00	e200	197	102	159	1050	166	34	28
27	225	e95	e5.6	.00	e700	174	120	145	872	152	33	39
28	225	e100	e5.3	.00	e450	143	123	123	723	139	31	42
29	228	e105	e5.0	.00	e340	133	128	90	604	124	23	32
30	201	e105	e4.8	.00	---	125	95	101	518	108	24	20
31	189	---	e4.5	.00	---	118	---	104	---	97	29	---
TOTAL	14614	4446	1753.6	46.93	1710.00	5345	7186	3579	13723	8846	1615	867
MEAN	471	148	56.6	1.51	59.0	172	240	115	457	285	52.1	28.9
MAX	740	433	105	4.3	700	300	408	161	1620	474	99	68
MIN	189	92	4.5	.00	.00	96	95	69	17	97	23	10
AC-FT	28990	8820	3480	93	3390	10600	14250	7100	27220	17550	3200	1720
CFSM	.48	.15	.06	.00	.06	.18	.24	.12	.46	.29	.05	.03
IN.	.55	.17	.07	.00	.06	.20	.27	.14	.52	.33	.06	.03

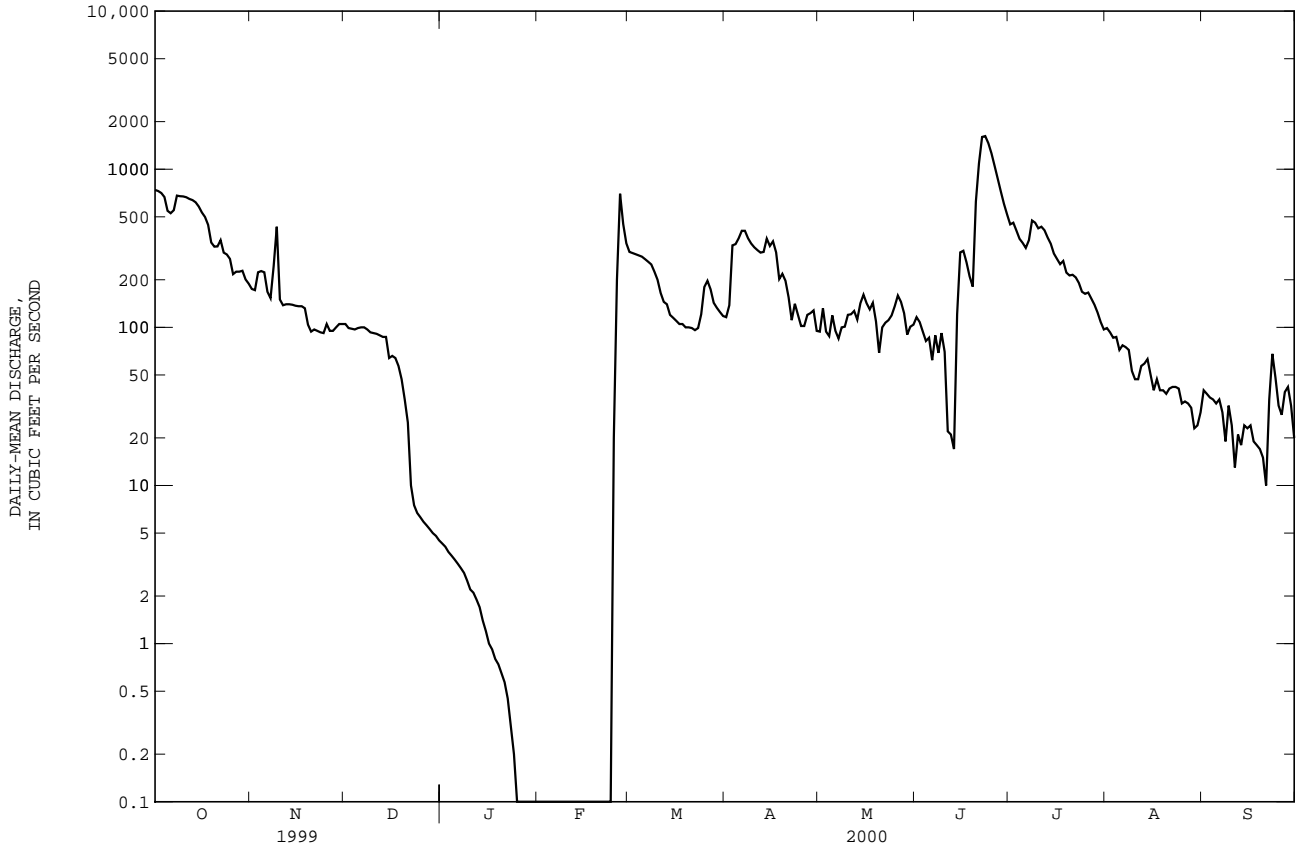
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	95.7	72.3	23.6	5.64	5.40	79.0	614	505	314	234	102	114
MAX	637	844	215	100	101	773	2827	4274	1774	2103	1012	1619
(WY)	1986	1972	1999	1910	1998	1995	1966	1950	1962	1975	1993	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

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SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1909 - 2000	
ANNUAL TOTAL	280197.3		63731.53			
ANNUAL MEAN	768		174		180 ^a	
HIGHEST ANNUAL MEAN					791 1999	
LOWEST ANNUAL MEAN					1.28 1939	
HIGHEST DAILY MEAN	3900	Apr 6	1620	Jun 23	5580	May 13 1950
LOWEST DAILY MEAN	4.5	Dec 31	.00	Jan 26-Feb 24	.00 ^b	Oct 1 1910
ANNUAL SEVEN-DAY MINIMUM	5.3	Dec 25	.00	Jan 26	.00	Oct 1 1910
INSTANTANEOUS PEAK FLOW			1670 Jun 22		5610 May 13 1950	
INSTANTANEOUS PEAK STAGE			10.47 Jun 22		17.38 May 13 1950	
ANNUAL RUNOFF (AC-FT)	555800		126400		130400	
ANNUAL RUNOFF (CFSM)	.78		.18		.18	
ANNUAL RUNOFF (INCHES)	10.58		2.41		2.48	
10 PERCENT EXCEEDS	2180		433		567	
50 PERCENT EXCEEDS	367		101		9.5	
90 PERCENT EXCEEDS	9.2		.71		.00	

^a Median of annual mean discharges is 130 ft³/s.
^b Many days, several years.
^e Estimated.



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1963-66, 1975, 1979, 2000.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)
SEP 27...	1520	40	468	8.1	9.0	9.8	10.2