

**RED RIVER OF THE NORTH BASIN**

**05078230 LOST RIVER AT OKLEE, MN**

LOCATION.--Lat 47° 50'35", long 95°51'30", in SE¼NE¼ sec. 2, T.150 N., R.41 W., Red Lake County, Hydrologic Unit 09020305, on downstream side of bridge on State Highway 222 at northwest edge of Oklee, 12 mi upstream from mouth.

DRAINAGE AREA.--266 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1960 to September 1981, February 1982 to current year. Monthly and daily figures for April 1960 to June 1960, published in WSP 2113.

GAGE.--Water-stage recorder. Datum of gage is 1,126.94 ft above sea level, adjustment of 1912 (levels by U.S. Army Corps of Engineers). Prior to Sept. 9, 1960, reference points at same site at datum 8.00 ft higher. Sept. 9, 1960 to Sept. 30, 1964, nonrecording gage at same site at datum 8.00 ft higher. Oct. 1, 1964 to Sept. 30, 1981, and Feb. 24, 1982 to Sept. 6, 1989, nonrecording gage at same site and datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1897, 18.39 ft, present datum, Apr. 21, 1950, from floodmarks, discharge, 2,790 ft<sup>3</sup>/s.

**DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
JUL	AUG	SEP							
1	20	45	e27	e26	e30	e18	e30	149	73
498	77	1.1							
2	21	43	e29	e27	e30	e18	e90	137	64
430	58	1.2							
3	21	47	e31	e27	e29	e18	e300	124	66
610	51	.23							
4	23	40	e33	e26	e28	e17	e380	111	58
1080	49	.18							
5	24	38	e34	e26	e27	e17	e370	108	48
1020	50	.18							
6	29	38	e35	e26	e25	e17	e350	104	45
795	52	.81							
7	27	41	e35	e26	e24	e17	e340	97	44
520	48	1.7							
8	29	40	e34	e26	e23	e18	e340	118	39
377	41	6.3							
9	30	34	e34	e26	e22	e18	e340	121	34
310	34	8.8							

10	30	31	e33	e26	e21	e18	e360	115	27
264	28	8.4							
11	31	e31	e32	e26	e20	e19	e500	119	21
231	22	9.1							
12	32	e29	e32	e26	e19	e19	e1000	116	16
212	17	9.2							
13	31	e27	e31	e26	e19	e19	e1400	101	11
218	14	9.7							
14	32	e25	e31	e25	e18	e20	e1700	107	8.4
231	12	12							
15	36	e24	e31	e25	e18	e20	1900	112	8.9
252	11	14							
16	37	e24	e30	e25	e18	e20	1350	107	9.4
231	12	18							
17	36	e24	e30	e25	e18	e20	1060	100	9.5
206	12	21							
18	41	e24	e30	e26	e18	e20	1150	98	17
181	10	37							
19	40	e23	e30	e28	e18	e20	982	102	20
162	11	60							
20	38	e24	e30	e29	e18	e20	704	96	24
149	17	61							
21	37	e23	e30	e29	e18	e20	546	90	42
136	22	57							
22	37	e23	e29	e28	e18	e20	434	89	47
129	23	54							
23	37	e23	e29	e28	e19	e20	352	160	47
119	21	52							
24	35	e22	e29	e27	e19	e20	292	222	407
112	18	50							
25	34	e22	e28	e26	e19	e20	256	202	1050
106	14	50							
26	33	e22	e28	e25	e19	e20	221	173	1150
101	11	49							
27	33	e22	e27	e25	e19	e21	202	146	1210
98	9.3	47							
28	34	e23	e27	e24	e18	e22	189	123	845
93	7.3	49							
29	35	e24	e27	e24	---	e22	185	104	672
93	5.7	53							
30	42	e24	e27	e25	---	e23	167	87	588
87	3.9	52							
31	44	---	e26	e27	---	e25	---	91	---
83	2.1	---							
TOTAL	1009	880	939	811	592	606	17490	3729	6701.2
9134	763.3	792.90							
MEAN	32.5	29.3	30.3	26.2	21.1	19.5	583	120	223
295	24.6	26.4							
MAX	44	47	35	29	30	25	1900	222	1210
1080	77	61							

MIN	20	22	26	24	18	17	30	87	8.4
83	2.1	.18							
AC-FT	2000	1750	1860	1610	1170	1200	34690	7400	13290
18120	1510	1570							
CFSM	.12	.11	.11	.10	.08	.07	2.19	.45	.84
1.11	.09	.10							
IN.	.14	.12	.13	.11	.08	.08	2.45	.52	.94
1.28	.11	.11							

- e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1997, BY WATER YEAR (WY)**

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
JUL	AUG	SEP							
MEAN	48.4	31.2	14.3	8.95	8.40	72.9	312	134	89.1
85.3	40.0	38.0							
MAX	470	232	56.6	26.2	25.8	243	904	622	657
442	351	330							
(WY)	1972	1972	1978	1997	1984	1995	1996	1962	1962
1962	1985	1973							
MIN	1.02	1.11	.050	.002	.000	.19	29.5	10.5	8.20
1.99	1.17	.000							
(WY)	1991	1977	1977	1977	1977	1964	1991	1980	1980
1961	1961	1990							

<i>SUMMARY STATISTICS</i>	<i>FOR 1996 CALENDAR YEAR</i>	<i>FOR 1997 WATER YEAR</i>	<i>WATER YEARS 1960 - 1997</i>							
ANNUAL TOTAL		48262.0				43447.40				
ANNUAL MEAN		132				119				73.5
HIGHEST ANNUAL MEAN										
177		1962								
LOWEST ANNUAL MEAN										
18.2		1990								
HIGHEST DAILY MEAN			2750	Apr	20	1900	Apr	15		3040
Apr 11		1969								
LOWEST DAILY MEAN			9.2	Sep	20	.18	Sep	4-5a		.00b
Feb 16		1963								
ANNUAL SEVEN-DAY MINIMUM			9.8	Aug	16	.77	Sep	1		.00
Feb 16		1963								
INSTANTANEOUS PEAK FLOW						2030	Apr	15c		
3210d		Apr 11								
INSTANTANEOUS PEAK STAGE						16.91	Apr	8e		
16.91e		Apr 8								
ANNUAL RUNOFF (AC-FT)			95730			86180				53230
ANNUAL RUNOFF (CFSM)			.50			.45				.28
ANNUAL RUNOFF (INCHES)			6.75			6.08				3.75
10 PERCENT EXCEEDS			195			304				174
50 PERCENT EXCEEDS			25			30				19
90 PERCENT EXCEEDS			17			17				2.5

- a Drop in discharge from undetermined cause.

b Many days, several years.

c Gage height, 14.54 ft.

d Gage height, 14.91 ft; from floodmark.

e Backwater from ice.