

## RED RIVER OF THE NORTH BASIN

### 05078230 LOST RIVER AT OKLEE, MN

LOCATION.--Lat 4750'35", long 9551'30", in SE 1 / 4 NE 1 / 4 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.--254 mi<sup>2</sup> (revised).

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 1997 TO SEPTEMBER 1998

### DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	e43	e49	e29	e25	488	76	57	71	100	26	9.8
2	46	e41	e48	e28	e25	399	77	56	69	92	23	10
3	43	e40	e47	e28	e24	302	85	44	66	81	19	11
4	41	e54	e46	e28	e24	e210	90	31	61	75	18	9.4
5	40	e73	e45	e28	e24	e160	89	26	57	72	23	9.2
6	39	69	e43	e28	e24	e130	95	21	55	71	24	5.0
7	38	e62	e43	e27	e24	e110	108	21	52	72	22	1.8
8	36	e56	e43	e27	e25	e98	110	24	48	80	20	1.4
9	43	e52	e43	e27	e25	e90	101	22	48	81	19	1.0
10	42	e50	e42	e27	e24	e83	98	18	46	76	19	.97

11	38	e50	e40	e27	e24	e78	92	26	46	75	20	.65
12	35	e50	e39	e27	e25	e76	88	239	45	71	19	.18
13	51	e51	e38	e26	e25	e73	109	374	52	66	20	.81
14	72	e50	e37	e26	e26	e74	144	231	63	68	21	1.0
15	79	e50	e37	e26	e27	e73	129	496	72	70	19	1.8
16	70	e49	e35	e26	e28	e72	112	1670	67	65	18	1.0
17	66	e47	e34	e26	e30	e74	100	1740	67	60	15	.55
18	64	e47	e33	e27	e32	e77	90	1340	74	69	15	.24
19	62	e47	e33	e27	e36	e80	82	552	232	96	15	.33
20	59	e47	e32	e27	e40	e80	77	318	510	82	17	.12
21	55	e46	e32	e27	e45	84	72	219	346	87	19	.04
22	54	e48	e31	e26	e53	85	70	169	217	80	16	.06
23	54	e49	e31	e26	e62	85	69	135	146	78	17	.02
24	48	e50	e31	e26	e70	85	67	119	124	75	19	.02
25	e46	e50	e31	e26	e140	94	66	106	116	73	15	.31
26	e44	e50	e31	e26	e250	105	65	100	122	70	10	.95
27	e45	e50	e30	e26	e450	102	64	92	125	63	12	.64
28	e45	e50	e30	e26	e530	89	63	81	131	54	12	.73
29	e43	e50	e30	e26	---	78	62	83	118	43	10	.86
30	e42	e50	e29	e25	---	79	60	81	109	33	9.1	.66
31	e45	---	e29	e25	---	78	---	76	---	27	5.8	---
TOTAL	1533	1521	1142	827	2137	3791	2610	8567	3355	2205	536.9	70.54
MEAN	49.5	50.7	36.8	26.7	76.3	122	87.0	276	112	71.1	17.3	2.35
MAX	79	73	49	29	530	488	144	1740	510	100	26	11
MIN	35	40	29	25	24	72	60	18	45	27	5.8	.02
AC-FT	3040	3020	2270	1640	4240	7520	5180	16990	6650	4370	1060	140
CFSM	.19	.20	.15	.11	.30	.48	.34	1.09	.44	.28	.07	.01
IN.	.22	.22	.17	.12	.31	.56	.38	1.25	.49	.32	.08	.01

e Estimated

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1998, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	48.4	31.7	14.9	9.43	10.2	74.2	307	137	89.7	84.9	39.4	37.1
MAX	470	232	56.6	26.7	76.3	243	904	622	657	442	351	330
(WY)	1972	1972	1978	1998	1998	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

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1960 - 1998		
ANNUAL TOTAL	44815.40		28295.44				
ANNUAL MEAN	123		77.5			73.6	
HIGHEST ANNUAL MEAN						177	1962
LOWEST ANNUAL MEAN						18.2	1990
HIGHEST DAILY MEAN	1900	Apr 15	1740	May 17	3040	Apr 11	1969
LOWEST DAILY MEAN	.18	Sep 4	.02	Sep 23	.00a	Feb 16	1963
ANNUAL SEVEN-DAY MINIMUM	.77	Sep 1	.12	Sep 18	.00	Feb 16	1963
INSTANTANEOUS PEAK FLOW			1850	May 16	3210b	Apr 11	1969
INSTANTANEOUS PEAK STAGE			14.71	May 16	16.91c	Apr 8	1997
ANNUAL RUNOFF (AC-FT)	88890		56120			53310	
ANNUAL RUNOFF (CFSM)	.48		.31			.29	
ANNUAL RUNOFF (INCHES)	6.56		4.14			3.94	
10 PERCENT EXCEEDS	304		114			171	
50 PERCENT EXCEEDS	43		47			19	

90 PERCENT EXCEEDS	17		14		2.5		
--------------------	----	--	----	--	-----	--	--

- a Many days, several years.
- b Gage-height, 14.91 ft.; from floodmark.
- c Backwater from ice.

