

Water-Data Report 2009

05078230 LOST RIVER AT OKLEE, MN

Lower Red Basin
Clearwater Subbasin

LOCATION.--Lat 47°50'35", long 95°51'30" referenced to North American Datum of 1927, in SE ¼ NE ¼ sec.2, T.150 N., R.41 W., Red Lake County, MN, Hydrologic Unit 09020305, on left bank 30 ft upstream of bridge on State Highway 222 at northwest edge of Oklee, 12 mi upstream from mouth.

DRAINAGE AREA.--254 mi².

SURFACE-WATER RECORDS

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, non-recording 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, non-recording 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 ft³/s.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	28	77	e45	e21	e14	e24	563	226	87	32	e7.2	15
2	27	77	e37	e21	e13	e25	482	202	82	30	e12	14
3	27	73	e31	e21	e12	e27	429	183	73	26	e17	13
4	26	70	e27	e20	e11	e27	425	162	57	25	e12	13
5	26	70	e26	e20	e11	e27	469	148	51	24	e10	10
6	36	91	e26	e19	e11	e26	452	145	47	22	e8.6	8.6
7	70	227	e24	e19	e11	e26	439	135	45	19	e8.1	6.9
8	82	273	e24	e19	e11	e26	504	134	45	16	e9.6	5.6
9	70	230	e24	e19	e12	e25	536	123	49	12	e12	7.1
10	60	187	e24	e19	e14	e24	493	112	51	10	e15	13
11	55	156	e24	e18	e18	e23	461	103	49	8.6	e15	18
12	145	139	e23	e18	e21	e23	450	99	47	8.5	e23	18
13	325	139	e23	e18	e23	e22	437	124	43	7.8	e30	18
14	289	150	e22	e17	e24	e23	425	142	42	7.5	e23	17
15	217	145	e20	e17	e24	e25	404	138	38	7.1	e36	16
16	164	134	e21	e17	e23	e37	369	142	31	6.7	e68	15
17	135	e115	e20	e17	e22	e61	340	133	36	6.3	e107	14
18	117	e99	e20	e17	e22	e361	319	120	36	5.9	e96	14
19	101	e87	e20	e18	e21	e460	297	102	32	5.5	62	13
20	91	e80	e20	e19	e20	e557	278	97	30	5.3	144	12
21	82	e71	e20	e19	e19	e952	259	91	28	e5.2	146	12
22	77	e67	e20	e19	e19	e1,570	235	84	28	e5.6	100	11
23	85	e65	e20	e17	e20	2,330	217	79	26	e7.7	68	11
24	93	e62	e21	e16	e24	2,690	204	73	26	e11	45	11
25	108	e61	e21	e16	e25	2,780	202	72	25	e21	33	11
26	111	e60	e21	e14	e25	2,510	190	106	23	e28	28	10
27	103	e59	e22	e14	e24	2,430	203	143	55	e21	22	9.9
28	93	e57	e21	e13	e24	2,240	204	132	57	e13	20	16
29	87	e55	e21	e13	---	1,920	185	116	46	e10	18	16
30	84	e51	e21	e14	---	1,410	219	101	37	e8.0	17	16
31	81	---	e21	e15	---	861	---	90	---	e7.6	16	---
Total	3,095	3,227	730	544	518	23,542	10,690	3,857	1,322	423.3	1,228.5	385.1
Mean	99.8	108	23.5	17.5	18.5	759	356	124	44.1	13.7	39.6	12.8
Max	325	273	45	21	25	2,780	563	226	87	32	146	18
Min	26	51	20	13	11	22	185	72	23	5.2	7.2	5.6
Ac-ft	6,140	6,400	1,450	1,080	1,030	46,700	21,200	7,650	2,620	840	2,440	764
Cfs/m	0.39	0.42	0.09	0.07	0.07	2.99	1.40	0.49	0.17	0.05	0.16	0.05
In.	0.45	0.47	0.11	0.08	0.08	3.45	1.57	0.56	0.19	0.06	0.18	0.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	49.0	40.7	16.4	10.4	10.7	90.5	293	136	106	77.2	35.9	38.0
Max	470	242	56.6	26.7	76.3	759	904	622	657	442	351	330
(WY)	(1972)	(2005)	(1978)	(1998)	(1998)	(2009)	(1996)	(1962)	(1962)	(1962)	(1985)	(1973)
Min	1.02	1.11	0.05	0.00	0.00	0.19	29.5	10.5	8.20	1.48	1.17	0.00
(WY)	(1991)	(1977)	(1977)	(1977)	(1977)	(1964)	(1991)	(1980)	(1980)	(2006)	(1961)	(1990)

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SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1960 - 2009	
Annual total	21,493.0		49,561.9			
Annual mean	58.7		136		75.2	
Highest annual mean					177	1962
Lowest annual mean					18.2	1990
Highest daily mean	340	May 1	2,780	Mar 25	3,040	Apr 11, 1969
Lowest daily mean	3.4	Aug 26	5.2	Jul 21	^a 0.00	Feb 16, 1963
Annual seven-day minimum	3.6	Aug 25	5.8	Jul 16	0.00	Feb 16, 1963
Maximum peak flow			^b 2,800	Mar 25	^c 3,210	Apr 11, 1969
Maximum peak stage			16.92	Mar 25	16.92	Mar 25, 2009
Instantaneous low flow			^d 4.5	Jul 21	^a 0.00	Feb 16, 1963
Annual runoff (ac-ft)	42,630		98,310		54,490	
Annual runoff (cfsm)	0.231		0.535		0.296	
Annual runoff (inches)	3.15		7.26		4.02	
10 percent exceeds	163		275		166	
50 percent exceeds	24		27		20	
90 percent exceeds	5.6		11		2.8	

^a Many days, several years

^b Measured flow, gage height 16.87 ft.

^c Gage-height, 14.91 ft.

^d Minimum recorded.

