

LAKE OF THE WOODS BASIN

05131500 LITTLE FORK RIVER AT LITTLEFORK, MN

LOCATION.--Lat 48° 23'45", long 93° 32'57", in NE¼SE¼ sec. 9, T.68 N., R.25 W., Koochiching County, Hydrologic Unit 09030005, on right bank at town of Littlefork, 0.9 mi upstream from bridge on State Highway 217, 2.8 mi upstream from Beaver Creek, and 19 mi upstream from mouth.

DRAINAGE AREA.--1,730 mi², approximately.

PERIOD OF RECORD.--June to November 1909, April to November 1910, April 1911 to June 1917, September 1917, October 1917 to March 1919 (gage heights only), June 1928 to current year.

REVISED RECORDS.--WSP 955: Drainage area. WSP 1508: 1913, 1916, 1928-32, 1934. WRD MN-74: 1963.

GAGE.--Water-stage recorder. Datum of gage is 1,083.59 ft above sea level. June 23, 1909 to Mar. 4, 1917, nonrecording gage and July 21, 1937 to Oct. 23, 1979, water-stage recorder at site 1.2 mi downstream at datum 10.53 ft lower; Mar. 5 to Sept. 30, 1917, and June 22, 1928 to July 20, 1937, non-recording gage at site 1.18 mi downstream at datum 10.53 ft lower.

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

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	591	4240	e1220	e490	e310	e220	e600	4040	1290
1590	401	169							
2	633	3950	e1190	e480	e300	e220	e900	3720	1150
1680	360	159							
3	614	3510	e1160	e470	e300	e220	e1500	3400	1030
2420	324	149							
4	565	3210	e1120	e460	e290	e220	e2500	3090	941
3760	295	143							
5	524	2780	e1080	e450	e290	e220	e4000	2790	794
4320	270	139							
6	501	2540	e1040	e440	e280	e220	e6000	2610	750
3970	276	134							
7	473	2610	e1000	e430	e280	e220	e9000	2480	761
3590	270	129							
8	447	2800	e960	e430	e280	e220	e11000	2510	745
3030	245	125							
9	433	2820	e930	e420	e270	e220	e12400	2600	668
2440	240	120							

10	420	2630	e900	e410	e270	e220	e11000	2550	600
1890	229	116							
11	397	2270	e870	e400	e270	e220	e10000	2490	528
1480	210	115							
12	378	1940	e840	e400	e260	e220	e9100	2400	466
1200	205	115							
13	365	e1870	e810	e390	e260	e220	e8000	2300	417
1200	191	115							
14	351	e1830	e780	e390	e260	e220	e7700	2190	386
1490	179	118							
15	346	e1790	e750	e380	e250	e220	e8400	2160	348
1430	175	120							
16	343	e1900	e730	e380	e250	e220	e9500	2220	311
1620	180	119							
17	370	e2650	e700	e370	e250	e220	e7000	2160	277
1610	168	126							
18	527	e3400	e680	e360	e250	e220	e6000	2020	268
1510	161	138							
19	1230	e3750	e660	e360	e240	e220	5720	1960	261
1220	158	176							
20	1780	e3650	e640	e350	e240	e220	6280	2390	259
979	168	302							
21	1940	e3050	e620	e350	e240	e220	6530	2820	265
833	176	298							
22	1840	e2500	e600	e340	e240	e220	6480	2690	277
761	184	272							
23	1660	e2100	e590	e340	e230	e220	6160	2440	270
715	203	251							
24	1510	e1800	e570	e330	e230	e224	5740	2680	296
659	238	240							
25	1410	e1650	e560	e330	e230	e225	5320	3340	612
609	237	226							
26	1360	e1530	e550	e330	e220	e225	4890	3240	1740
574	228	212							
27	1360	e1450	e540	e320	e220	e230	4530	2860	1900
545	219	200							
28	1480	e1360	e530	e320	e220	e260	4510	2390	1810
525	211	222							
29	1570	e1320	e520	e320	---	e300	4490	1970	1670
524	205	233							
30	2260	e1280	e510	e320	---	e350	4290	1680	1560
506	195	296							
31	4180	---	e500	e315	---	e450	---	1470	---
456	183	---							
TOTAL	31858	74180	24150	11875	7230	7324	189540	79660	22650
49136	6984	5277							
MEAN	1028	2473	779	383	258	236	6318	2570	755
1585	225	176							
MAX	4180	4240	1220	490	310	450	12400	4040	1900
4320	401	302							

MIN	343	1280	500	315	220	220	600	1470	259
456	158	115							
AC-FT	63190	147100	47900	23550	14340	14530	376000	158000	44930
97460	13850	10470							
CFSM	.59	1.43	.45	.22	.15	.14	3.65	1.49	.44
.92	.13	.10							
IN.	.69	1.60	.52	.26	.16	.16	4.08	1.71	.49
1.06	.15	.11							

- e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
JUL	AUG	SEP							
MEAN	909	719	313	149	113	277	3201	2886	1758
985	549	736							
MAX	4450	3044	972	477	271	3022	8421	12190	5490
3643	2679	5189							
(WY)	1996	1972	1983	1966	1969	1945	1966	1950	1944
1944	1988	1977							
MIN	43.4	60.8	52.6	43.5	42.3	50.2	292	173	182
75.4	34.3	29.2							
(WY)	1977	1977	1977	1931	1963	1940	1977	1977	1988
1988	1936	1976							

<i>SUMMARY STATISTICS</i>	<i>FOR 1996 CALENDAR YEAR</i>	<i>FOR 1997 WATER YEAR</i>	<i>WATER YEARS 1909 - 1997</i>					
ANNUAL TOTAL		506735		509864				
ANNUAL MEAN		1385		1397		1065		
HIGHEST ANNUAL MEAN								
1912		1966						
LOWEST ANNUAL MEAN								
306		1931						
HIGHEST DAILY MEAN			14300	Apr 23	12400a	Apr 9	25000	Apr
18	1916							
LOWEST DAILY MEAN			162	Sep 21	115	Sep 11	21	Aug
26	1936							
ANNUAL SEVEN-DAY MINIMUM			165	Sep 20	117	Sep 10	22	Aug
21	1936							
INSTANTANEOUS PEAK FLOW							25000b	Apr
18	1916							
INSTANTANEOUS PEAK STAGE					19.34c	Apr 9	37.00b	Apr
18	1916							
INSTANTANEOUS LOW FLOW					112	Sep 16	21	Aug
26	1936							
ANNUAL RUNOFF (AC-FT)			1005000		1011000		771400	
ANNUAL RUNOFF (CFSM)			.80		.81		.62	
ANNUAL RUNOFF (INCHES)			10.90		10.96		8.36	
10 PERCENT EXCEEDS			3680		3610		2800	
50 PERCENT EXCEEDS			531		524		364	
90 PERCENT EXCEEDS			206		211		85	

- a Estimated.

b Also occurred May 11, 1950, site and datum then in use.

c Backwater from ice.