

## 05131500 LITTLE FORK RIVER AT LITTLEFORK, MN

LOCATION.--Lat 48°23'45", long 93°32'57", in NE $\frac{1}{4}$ SE $\frac{1}{4}$  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.--1,680 mi<sup>2</sup>.

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 (NGVD of 1929). June 23, 1909 to March 4, 1917, nonrecording gage, and July 21, 1937 to October 23, 1979, water-stage recorder at site 1.2 mi downstream at datum 10.53 ft lower; March 5 to September 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 fair.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	234	468	e260	e195	e76	e70	e480	699	1,240	1,660	649	461
2	228	462	e250	e189	e74	e70	e455	638	1,340	1,430	779	411
3	226	463	e245	e188	e74	e70	e424	580	1,250	1,280	803	361
4	240	465	e240	e188	e73	e70	e380	532	1,060	1,180	875	324
5	249	436	e235	e187	e72	e70	e350	497	886	1,020	910	287
6	289	455	e230	e187	e71	e70	e355	466	766	893	819	260
7	334	421	e230	e186	e70	e70	e360	429	689	802	741	235
8	426	467	e225	e185	e69	e70	e350	396	648	805	680	213
9	464	455	e220	e184	e68	e70	e365	380	627	826	606	199
10	472	448	e220	e182	e68	e70	e395	381	716	804	526	183
11	467	423	e215	e179	e68	e70	e450	398	811	916	472	171
12	451	e380	e215	e176	e68	e70	e510	439	871	1,170	432	169
13	484	e300	e215	e172	e69	e70	e620	482	902	1,350	392	161
14	635	e260	e220	e167	e69	e70	678	503	873	1,370	352	181
15	719	e244	e220	e160	e69	e71	619	510	774	1,310	317	412
16	694	e247	e225	e154	e70	e74	579	473	691	1,280	285	667
17	657	e284	e230	e147	e70	e77	595	430	609	1,410	257	760
18	621	e358	e230	e140	e70	e86	613	401	616	1,350	237	736
19	579	e399	e235	e133	e70	e96	616	390	605	1,200	223	658
20	550	e357	e235	e125	e70	e120	766	520	548	1,020	208	584
21	538	e340	e235	e118	e70	e210	1,400	1,270	502	1,070	206	634
22	530	e330	e235	e114	e70	e500	1,980	1,470	451	1,210	266	889
23	513	e330	e235	e108	e70	e760	2,130	1,530	410	1,100	285	1,000
24	492	e325	e230	e104	e70	e800	1,890	1,750	380	933	259	1,020
25	474	e310	e225	e100	e70	e795	1,580	1,600	509	786	261	998
26	483	e295	e220	e95	e70	e760	1,310	1,370	1,200	672	255	904
27	477	e290	e220	e92	e70	e720	1,120	1,150	1,490	580	242	792
28	462	e280	e215	e87	e70	e680	953	972	1,570	509	256	695
29	458	e270	e210	e84	---	e625	845	861	1,780	474	332	626
30	464	e265	e205	e81	---	e580	772	848	1,870	449	458	575
31	459	---	e195	e78	---	e520	---	960	---	433	483	---
TOTAL	14,369	10,827	7,020	4,485	1,968	8,454	23,940	23,325	26,684	31,292	13,866	15,566
MEAN	464	361	226	145	70.3	273	798	752	889	1,009	447	519
MAX	719	468	260	195	76	800	2,130	1,750	1,870	1,660	910	1,020
MIN	226	244	195	78	68	70	350	380	380	433	206	161
AC-FT	28,500	21,480	13,920	8,900	3,900	16,770	47,480	46,270	52,930	62,070	27,500	30,880
CFSM	0.28	0.21	0.13	0.09	0.04	0.16	0.47	0.45	0.53	0.60	0.27	0.31
IN.	0.32	0.24	0.16	0.10	0.04	0.19	0.53	0.52	0.59	0.69	0.31	0.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2003, BY WATER YEAR (WY)

MEAN	899	733	328	153	115	282	3,181	2,849	1,741	997	572	727
MAX	4,450	3,044	1,186	477	270	3,022	8,421	12,190	5,490	3,643	2,679	5,189
(WY)	(1996)	(1972)	(2002)	(1966)	(1969)	(1945)	(1966)	(1950)	(1944)	(1944)	(1988)	(1977)
MIN	43.4	60.8	52.6	43.5	42.2	50.2	292	173	182	75.4	34.3	29.2
(WY)	(1977)	(1977)	(1977)	(1931)	(1963)	(1940)	(1977)	(1977)	(1988)	(1988)	(1936)	(1976)

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SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1909 - 2003	
ANNUAL TOTAL	299,503		181,796			
ANNUAL MEAN	821		498		1,063	
HIGHEST ANNUAL MEAN					1,912	1966
LOWEST ANNUAL MEAN					306	1931
HIGHEST DAILY MEAN	7,630	Jun 26	2,130	Apr 23	25,000	Apr 18, 1916
LOWEST DAILY MEAN	110	Mar 10	68	Feb 9-12	21	Aug 26, 1936
ANNUAL SEVEN-DAY MINIMUM	114	Mar 8	68	Feb 8	22	Aug 21, 1936
MAXIMUM PEAK FLOW			2,190	Apr 23	25,000	Apr 18, 1916
MAXIMUM PEAK STAGE			5.24	Apr 23	a37.00	Apr 18, 1916
INSTANTANEOUS LOW FLOW			b68	Feb 9	21	Aug 26, 1936
ANNUAL RUNOFF (AC-FT)	594,100		360,600		769,800	
ANNUAL RUNOFF (CFSM)	0.49		0.30		0.63	
ANNUAL RUNOFF (INCHES)	6.63		4.03		8.59	
10 PERCENT EXCEEDS	1,930		1,080		2,800	
50 PERCENT EXCEEDS	421		412		375	
90 PERCENT EXCEEDS	131		71		87	

a Also occurred May 11, 1950, site and datum then in use.  
 b Estimated, minimum daily.  
 c Estimated.

