

## 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 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	534	337	e610	e330	e138	e115	e3,000	1,710	6,070	448	179	126
2	502	358	e570	e320	e135	e115	e3,900	1,550	6,800	409	173	125
3	451	386	e550	e310	e132	e115	e4,350	1,420	6,350	401	168	125
4	429	e380	e550	e300	e130	e116	e4,650	1,300	5,410	396	160	128
5	410	e360	e570	e295	e128	e117	e4,950	1,210	4,550	380	155	143
6	392	e330	e600	e285	e126	e118	e5,400	1,130	4,120	416	145	426
7	380	e310	e590	e275	e124	e120	e5,650	1,060	4,100	497	135	1,310
8	354	e290	e580	e270	e122	e120	e5,750	993	4,090	501	126	1,810
9	335	e305	e558	e260	e120	e122	e5,650	941	3,650	452	124	1,720
10	319	e375	e540	e255	e120	e124	5,380	905	3,050	443	133	1,510
11	311	e420	e530	e250	e118	e125	4,810	864	2,510	624	142	1,290
12	306	e390	e520	e240	e116	e126	4,260	1,110	2,160	753	158	1,100
13	302	e365	e510	e235	e115	e127	3,740	1,710	1,920	1,520	171	918
14	319	e365	e500	e230	e115	e128	3,210	1,610	1,700	1,620	185	760
15	372	e385	e480	e220	e115	e129	2,760	1,530	1,560	1,400	186	675
16	418	e415	e475	e215	e115	e130	2,510	1,550	1,440	1,150	177	1,450
17	438	e435	e470	e210	e115	e135	2,420	1,570	1,390	935	165	4,070
18	425	e470	e460	e200	e115	e140	2,340	1,730	1,340	769	161	4,100
19	399	e520	e450	e195	e115	e150	2,500	1,970	1,240	656	168	3,620
20	376	e610	e445	e185	e115	e160	3,450	2,150	1,070	562	155	3,030
21	354	e720	e435	e180	e115	e170	3,880	2,160	959	491	145	2,650
22	334	e820	e425	e175	e115	e180	3,860	2,020	850	446	138	2,460
23	324	e750	e415	e170	e115	e190	3,660	1,850	784	400	130	2,370
24	314	e600	e410	e165	e115	e205	3,290	1,700	715	358	129	2,470
25	304	e530	e395	e160	e115	e225	2,860	1,670	677	328	137	2,720
26	299	e500	e385	e158	e115	e245	2,510	1,780	625	302	138	2,500
27	294	e560	e375	e153	e115	e265	2,220	1,920	590	273	126	2,150
28	301	e650	e365	e150	e115	e300	2,030	2,000	557	250	119	1,840
29	313	e650	e355	e148	e115	e360	1,930	1,860	531	236	117	1,560
30	322	e640	e350	e145	---	e540	1,840	1,730	497	213	117	1,340
31	330	---	e340	e142	---	e1,100	---	3,200	---	190	120	---
TOTAL	11,261	14,226	14,808	6,826	3,464	6,312	108,760	49,903	71,305	17,819	4,582	50,496
MEAN	363	474	478	220	119	204	3,625	1,610	2,377	575	148	1,683
MAX	534	820	610	330	138	1,100	5,750	3,200	6,800	1,620	186	4,100
MIN	294	290	340	142	115	115	1,840	864	497	190	117	125
AC-FT	22,340	28,220	29,370	13,540	6,870	12,520	215,700	98,980	141,400	35,340	9,090	100,200
CFSM	0.22	0.28	0.28	0.13	0.07	0.12	2.16	0.96	1.41	0.34	0.09	1.00
IN.	0.25	0.32	0.33	0.15	0.08	0.14	2.41	1.10	1.58	0.39	0.10	1.12

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2004, BY WATER YEAR (WY)

MEAN	893	730	330	154	115	281	3,186	2,834	1,749	992	567	739
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 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1909 - 2004	
ANNUAL TOTAL	189,875		359,762			
ANNUAL MEAN	520		983		1,062	
HIGHEST ANNUAL MEAN					1,912	1966
LOWEST ANNUAL MEAN					306	1931
HIGHEST DAILY MEAN	2,130	Apr 23	6,800	Jun 2	25,000	Apr 18, 1916
LOWEST DAILY MEAN	68	Feb 9	115	Feb 13-Mar 3	21	Aug 26, 1936
ANNUAL SEVEN-DAY MINIMUM	68	Feb 8	115	Feb 13	22	Aug 21, 1936
MAXIMUM PEAK FLOW			a6,880	Jun 2	25,000	Apr 18, 1916
MAXIMUM PEAK STAGE			b17.77	Apr 7	c37.00	Apr 18, 1916
INSTANTANEOUS LOW FLOW			111	Aug 29	21	Aug 26, 1936
ANNUAL RUNOFF (AC-FT)	376,600		713,600		769,100	
ANNUAL RUNOFF (CFSM)	0.310		0.585		0.632	
ANNUAL RUNOFF (INCHES)	4.20		7.97		8.59	
10 PERCENT EXCEEDS	1,080		2,730		2,800	
50 PERCENT EXCEEDS	432		410		376	
90 PERCENT EXCEEDS	71		124		88	

- a Gage height, 9.38 ft.
- b Backwater from ice.
- c Also occurred May 11, 1950, site and datum then in use.
- e Estimated.

