

# RAINY RIVER BASIN

## 05131500 LITTLE FORK RIVER AT LITTLEFORK, MN

LOCATION.--Lat 4823'45", long 9332'57", in NE 1 / 4 SE 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> (revised).

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 1997 TO SEPTEMBER 1998

### DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	415	405	e340	e172	e135	e1050	e1700	921	872	1200	228	140
2	435	442	e330	e170	e134	e1700	e2150	864	808	1090	208	140
3	411	527	e320	e167	e134	e2000	e2400	811	776	976	192	132
4	380	616	e310	e165	e133	e1870	e2700	768	708	923	179	123
5	351	666	e300	e162	e132	e1650	e2600	721	649	885	159	116
6	330	680	e295	e160	e132	e1430	2450	613	623	870	150	110
7	321	676	e290	e157	e132	e1250	2250	461	581	833	142	103
8	317	663	e280	e152	e132	e1050	2630	417	542	782	133	96
9	324	663	e275	e150	e132	e900	2890	397	503	733	127	89

10	305	719	e265	e147	e132	e780	2850	374	466	684	120	85
11	315	752	e255	e143	e132	e700	2630	350	430	644	115	84
12	333	663	e250	e140	e132	e590	2380	346	426	580	110	80
13	377	566	e245	e138	e132	e520	2260	388	419	515	106	76
14	530	e540	e240	e138	e132	e460	2380	514	394	468	103	74
15	816	e540	e240	e138	e132	e400	2600	1180	389	441	94	72
16	897	e530	e240	e138	e132	e370	2570	3440	437	424	94	73
17	864	e490	e240	e138	e132	e340	2410	4290	453	414	99	76
18	802	e470	e235	e138	e132	e325	2130	4100	433	415	103	77
19	743	e450	e230	e138	e132	e310	1880	3610	473	389	97	94
20	685	e430	e225	e138	e132	e300	1700	3210	1080	361	92	124
21	632	e410	e220	e138	e140	e295	1570	2580	2040	343	91	117
22	585	e380	e215	e138	e165	e295	1480	2080	1940	358	98	112
23	545	e370	e210	e138	e210	e295	1420	1680	1640	358	110	111
24	515	e350	e200	e138	e255	e298	1330	1440	1370	363	119	112
25	493	e330	e197	e138	e290	e300	1250	1220	1160	334	129	114
26	469	e340	e192	e138	e350	e315	1170	1020	986	309	138	114
27	448	e360	e189	e138	e440	e330	1090	882	849	287	151	114
28	430	e370	e185	e138	e620	e350	1010	813	982	277	173	119
29	416	e360	e182	e137	---	e430	962	962	1260	263	163	116
30	401	e350	e178	e136	---	e530	964	985	1290	259	146	112
31	395	---	e175	e135	---	e680	---	946	---	248	139	---
TOTAL	15280	15108	7548	4501	5118	22113	59806	42383	24979	17026	4108	3105
MEAN	493	504	243	145	183	713	1994	1367	833	549	133	104
MAX	897	752	340	172	620	2000	2890	4290	2040	1200	228	140
MIN	305	330	175	135	132	295	962	346	389	248	91	72
AC-FT	30310	29970	14970	8930	10150	43860	118600	84070	49550	33770	8150	6160
CFSM	.29	.30	.14	.09	.11	.42	1.19	.81	.50	.33	.08	.06
IN.	.34	.33	.17	.10	.11	.49	1.32	.94	.55	.38	.09	.07

e Estimated

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 1998, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	904	716	312	149	114	283	3185	2867	1746	979	543	728
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

  

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	FOR 1998 WATER YEAR	FOR 1998 WATER YEAR	FOR 1998 WATER YEAR	FOR 1998 WATER YEAR	FOR 1998 WATER YEAR
ANNUAL TOTAL	417612		221075				
ANNUAL MEAN	1144		606		1059		
HIGHEST ANNUAL MEAN					1912		1966
LOWEST ANNUAL MEAN					306		1931
HIGHEST DAILY MEAN	12400	Apr 9	4290	May 17	25000	Apr 18	1916
LOWEST DAILY MEAN	115	Sep 11	72	Sep 15	21	Aug 26	1936
ANNUAL SEVEN-DAY MINIMUM	117	Sep 10	75	Sep 12	22	Aug 21	1936
INSTANTANEOUS PEAK FLOW			4370	May 17	25000a	Apr 18	1916
INSTANTANEOUS PEAK STAGE			7.10	May 17	37.00a	Apr 18	1916
INSTANTANEOUS LOW FLOW			70	Sep 16	21	Aug 26	1936
ANNUAL RUNOFF (AC-FT)	828300		438500		767000		
ANNUAL RUNOFF (CFSM)	.68		.36		.63		
ANNUAL RUNOFF	9.25		4.90		8.56		

(INCHES)							
10 PERCENT EXCEEDS	3050		1520		2800		
50 PERCENT EXCEEDS	360		351		363		
90 PERCENT EXCEEDS	194		117		85		

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

