

# RAINY RIVER BASIN

## 05127500 BASSWOOD RIVER NEAR WINTON, MN

(International Gaging Station)

LOCATION.--Lat 4804'57", long 9139'09", in SE 1 / 4 SE 1 / 4 sec. 30, T.65 N., R.10 W., Lake County, Hydrologic Unit 09030001, in Superior National Forest, on island in Jackfish Bay of Basswood Lake, used to determine discharge at outlet [lat 4806'21", long 9138'51", in sec. 19, T.65 N., R.10 W., on international boundary 14 mi northeast of Winton].

DRAINAGE AREA.--1,740 mi<sup>2</sup>, approximately (above outlet of Basswood Lake).

PERIOD OF RECORD.--March to June 1924, September 1925 to March 1928, January 1930 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 955: Drainage area. WSP 1145: 1935, 1937.

GAGE.--Water-stage recorder. Datum of gage is 1,296.80 ft above sea level, 1928 datum, (levels by Geodetic Survey of Canada). Prior to Oct. 27, 1938, nonrecording gages at several sites in vicinity of gage, at datum 3.0 ft higher. Oct. 28, 1938 to Sept. 30, 1966, water-stage recorder at datum 3.0 ft higher.

REMARKS.--Records good. Satellite telemeter at station. Some regulation by power plant on Kawishiwi River at Winton, and by many lakes located upstream from station.

COOPERATION.--This station is one of the international gaging stations maintained by the United States under agreement with Canada.

## 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	165	153	321	335	307	335	459	2420	1600	818	337	246
2	163	159	327	333	304	342	479	2360	1560	795	333	237
3	166	169	332	330	300	351	499	2300	1480	785	330	230
4	166	169	336	329	297	356	523	2260	1430	763	331	222

5	169	169	345	326	292	361	546	2210	1380	743	337	215
6	168	171	350	328	288	365	567	2140	1340	735	326	206
7	169	177	353	330	287	369	627	2060	1290	714	317	196
8	170	179	356	329	285	369	673	1960	1250	699	307	188
9	168	186	359	329	284	369	717	1870	1190	684	294	182
10	165	193	360	333	284	370	764	1780	1140	669	283	173
11	174	199	360	331	284	374	815	1710	1100	640	275	170
12	182	206	362	330	283	379	876	1660	1080	615	263	165
13	183	214	361	328	282	384	983	1590	1060	584	256	160
14	176	219	360	330	281	388	1100	1610	1050	563	251	164
15	174	219	359	332	285	390	1260	1610	1050	535	247	161
16	175	223	356	332	284	390	1410	1670	1080	512	243	158
17	175	230	355	332	287	390	1540	1680	1060	487	252	158
18	174	234	352	332	285	390	1680	1680	1060	472	245	156
19	166	239	350	332	284	390	1830	1660	1040	449	242	179
20	166	245	350	328	284	390	1970	1650	1010	452	263	176
21	166	251	349	324	285	389	2110	1680	977	446	258	172
22	162	265	344	322	286	385	2240	1680	944	427	258	168
23	161	273	341	322	289	381	2360	1680	922	405	265	163
24	156	281	340	321	294	379	2460	1670	912	394	260	160
25	149	286	338	322	296	377	2540	1670	895	381	257	157
26	145	291	337	320	301	376	2570	1680	872	383	257	159
27	142	299	339	318	322	378	2570	1670	851	380	262	159
28	135	306	336	315	331	375	2560	1690	854	370	276	158
29	130	313	336	314	---	384	2520	1670	842	360	273	162
30	133	315	334	314	---	427	2470	1670	843	349	266	158
31	135	---	336	311	---	436	---	1600	---	341	261	---
TOTAL	5028	6833	10734	10112	8171	11739	43718	56240	33162	16950	8625	5358
MEAN	162	228	346	326	292	379	1457	1814	1105	547	278	179

MAX	183	315	362	335	331	436	2570	2420	1600	818	337	246
MIN	130	153	321	311	281	335	459	1590	842	341	242	156
AC-FT	9970	13550	21290	20060	16210	23280	86710	111600	65780	33620	17110	10630
CFSM	.09	.13	.20	.19	.17	.22	.84	1.04	.64	.31	.16	.10
IN.	.11	.15	.23	.22	.17	.25	.93	1.20	.71	.36	.18	.11

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1998, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1081	1014	876	727	600	573	1215	3734	2861	1816	1103	980
MAX	5320	3879	2510	1475	1229	1143	5069	9114	7332	4453	3487	5034
(WY)	1978	1971	1983	1966	1966	1966	1945	1950	1950	1944	1944	1988
MIN	65.1	60.2	76.2	86.2	95.0	135	269	225	696	512	278	120
(WY)	1977	1977	1977	1977	1977	1977	1977	1977	1980	1980	1998	1976

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1931 - 1998		
ANNUAL TOTAL	424442			216670			
ANNUAL MEAN	1163			594		1394	
HIGHEST ANNUAL MEAN						2643	1950
LOWEST ANNUAL MEAN						557	1958
HIGHEST DAILY MEAN	4280	May 13	2570	Apr 26,27	15200	May 24	1950
LOWEST DAILY MEAN	130	Oct 29	130	Oct 29	58	Nov 3	1976
ANNUAL SEVEN-DAY MINIMUM	138	Oct 25	138	Oct 25	58	Nov 7	1976
INSTANTANEOUS PEAK FLOW			2590	Apr 26	15600	May 24	1950
INSTANTANEOUS PEAK STAGE			4.58	Apr 26	9.94a	May 24	1950
INSTANTANEOUS LOW FLOW			130	Oct 28	55	Nov 18	1976

ANNUAL RUNOFF (AC-FT)	841900		429800		1010000		
ANNUAL RUNOFF (CFSM)	.67		.34		.80		
ANNUAL RUNOFF (INCHES)	9.07		4.63		10.89		
10 PERCENT EXCEEDS	3300		1670		3240		
50 PERCENT EXCEEDS	833		335		861		
90 PERCENT EXCEEDS	170		168		371		

a Present datum.

