

**LAKE OF THE WOODS BASIN**

**05127500 BASSWOOD RIVER NEAR WINTON, MN  
(International Gaging Station)**

LOCATION.--Lat 48° 04'57", long 91° 39'09", in SE¼SE¼ 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 48°06'21", long 91° 38'51", 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 1996 TO SEPTEMBER 1997**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
JUL	AUG	SEP							
1	622	794	2190	1450	1200	876	791	3590	3410
1560	546	249							
2	623	870	2210	1450	1180	879	815	3640	3290
1620	520	237							
3	608	964	2230	1430	1150	877	845	3680	3180
1640	506	231							
4	595	1040	2230	1430	1130	891	886	3790	3100
1680	498	225							
5	574	1090	2200	1470	1110	896	962	3910	3040
1720	473	227							
6	546	1140	2130	1460	1100	881	1110	3980	2950
1760	449	222							
7	533	1200	2050	1450	1090	877	1220	4040	2850

1780	433	218							
8	513	1250	1980	1440	1080	872	1310	4080	2710
1800	422	212							
9	495	1300	1940	1420	1070	858	1370	4160	2590
1790	402	203							
10	489	1360	1880	1400	1040	833	1430	4190	2470
1770	384	200							
11	478	1430	1820	1390	1030	815	1520	4200	2370
1720	373	195							
12	465	1480	1750	1370	1010	794	1610	4250	2260
1680	357	191							
13	453	1500	1700	1360	985	784	1720	4280	2160
1630	340	188							
14	457	1520	1660	1340	964	785	1830	4240	2050
1580	330	185							
15	449	1540	1630	1330	946	794	1940	4160	1960
1540	320	182							
16	445	1570	1620	1310	930	800	2050	4090	1890
1500	330	190							
17	483	1680	1610	1290	922	783	2150	4000	1840
1450	318	190							
18	490	1700	1610	1270	908	775	2250	3930	1820
1400	311	188							
19	507	1750	1590	1260	898	772	2370	3920	1760
1340	305	181							
20	520	1790	1580	1250	873	760	2480	3910	1710
1230	312	175							
21	539	1830	1570	1240	856	756	2600	3950	1660
1160	309	172							
22	549	1890	1550	1230	845	748	2710	4000	1610
1080	302	165							
23	574	1960	1530	1220	847	743	2830	4040	1610
1000	298	164							
24	605	2000	1520	1240	857	732	2950	4050	1650
931	295	159							
25	619	2030	1500	1250	868	747	3060	4050	1640
873	293	153							
26	629	2040	1490	1240	869	740	3180	4030	1620
815	285	151							
27	623	2050	1470	1220	863	729	3310	4010	1610
751	277	150							
28	626	2060	1470	1220	848	718	3420	3960	1590
702	275	154							
29	644	2080	1460	1210	---	723	3480	3840	1580
657	270	159							
30	734	2130	1460	1200	---	740	3540	3690	1570
623	262	162							
31	748	---	1460	1200	---	762	---	3550	---
586	258	---							
TOTAL	17235	47038	54090	41040	27469	24740	61739	123210	65550

41368	11053	5678							
MEAN	556	1568	1745	1324	981	798	2058	3975	2185
1334	357	189							
MAX	748	2130	2230	1470	1200	896	3540	4280	3410
1800	546	249							
MIN	445	794	1460	1200	845	718	791	3550	1570
586	258	150							
AC-FT	34190	93300	107300	81400	54480	49070	122500	244400	130000
82050	21920	11260							
CFSM	.32	.90	1.00	.76	.56	.46	1.18	2.28	1.26
.77	.20	.11							
IN.	.37	1.01	1.16	.88	.59	.53	1.32	2.63	1.40
.88	.24	.12							

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1997, BY WATER YEAR (WY)**

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
JUL	AUG	SEP							
MEAN	1095	1026	884	733	605	576	1211	3763	2887
1835	1115	992							
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	323	120							
(WY)	1977	1977	1977	1977	1977	1977	1977	1977	1980
1980	1980	1976							

*SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1931 - 1997*

	ANNUAL TOTAL	714580		520210	
	ANNUAL MEAN	1952		1425	1407
2643	HIGHEST ANNUAL MEAN	1950			
557	LOWEST ANNUAL MEAN	1958			
May 24	HIGHEST DAILY MEAN	6960	May 21	4280	May 13 15200
Nov 3	LOWEST DAILY MEAN	445	Oct 16	150	Sep 27 58
Nov 7	ANNUAL SEVEN-DAY MIN	461	Oct 11	155	Sep 24 58
May 24	INSTANTANEOUS PEAK FLOW			4300	May 13 15600
May 24	INSTANTANEOUS PEAK STAGE			5.57	May 13 9.94a
Nov 18	INSTANTANEOUS LOW FLOW			147	Sep 27 55
	ANNUAL RUNOFF (AC-FT)	1417000		1032000	1019000
	ANNUAL RUNOFF (CFSM)	1.12		.82	.81
	ANNUAL RUNOFF (INCHES)	15.28		11.12	10.98

10 PERCENT EXCEEDS	4260	3300	3250
50 PERCENT EXCEEDS	1400	1230	870
90 PERCENT EXCEEDS	641	290	382

- a Present datum.