

ST. CROIX RIVER BASIN--Continued

05340500 ST. CROIX RIVER AT ST. CROIX FALLS, WI

LOCATION.--Lat 45°24'25", long 92°38'49", in SW¹/₄NW¹/₄ sec. 30, T.34 N., R.18 W., Polk County, Hydrologic Unit 07030005, St. Croix National Scenic Riverway, on left bank, 1,500 ft downstream from power plant of Northern States Power Co., in St. Croix Falls, and at mile 52.2.

DRAINAGE AREA.--6,240 mi².

PERIOD OF RECORD.--January 1902 to current year. Prior to January 1910, monthly discharge only, published in WSP 1308. Prior to October 1939, published as "near St. Croix Falls."

REVISED RECORDS.--WSP 1115: 1929. WDR WI-82-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 689.94 ft above sea level. Prior to July 1905, gage heights and discharge measurements were used by Loweth and Wolff, consulting engineers of St. Paul, Minn., to determine the flow. July 1905 to February 1940, records were computed from power generation at the St. Croix Falls power plant. February 1940 to Sept. 30, 1979, water-stage recorder at site 300 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diurnal fluctuation caused by St. Croix Falls Powerplant 1,500 ft upstream. Gage-height telemeter and data-collection platform at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2140	2430	3840	e2100	2340	2510	8360	4190	3620	4300	7500	4930
2	2030	2570	3520	e2100	2260	2320	8500	3680	3600	4070	8150	4430
3	1980	2450	3420	2170	2310	2360	8550	3520	3460	4250	8840	4210
4	2060	2520	3560	e2100	2330	2530	8170	3430	3530	4850	8530	3760
5	2010	2560	3750	e2100	2430	2490	8880	3640	3380	4660	8580	3870
6	2050	2540	3660	e2100	2410	2390	11400	3870	3790	4870	8810	3730
7	2150	2550	4490	e2100	2420	2460	12700	4450	4450	5050	8060	3640
8	2320	2420	4690	e2300	2510	2340	13200	5730	4750	5150	7080	4100
9	2120	2420	4220	e2300	2360	2130	14300	6380	5610	5310	6320	4520
10	2110	2490	4320	e2000	2310	2110	14000	6960	5430	5240	6180	5020
11	2050	3490	3870	e1900	e2500	2400	13000	7120	5450	5450	5680	4970
12	2050	3850	4040	e2000	e2400	2320	11800	8070	5550	5510	5120	4710
13	2020	4300	3890	2020	e2400	2450	11100	9750	5720	5470	5370	4290
14	2040	3880	3630	2280	2640	2370	10600	10500	5700	5080	7130	4080
15	1940	3720	3360	2070	2510	2480	9830	11000	5280	4480	8490	4560
16	2170	3720	3380	2110	2460	2200	9590	11200	4700	4380	8510	4480
17	2500	3780	3090	2180	2440	2930	9470	11600	3900	4030	7530	4210
18	2750	3620	2990	2180	2580	3020	9440	11200	3870	4180	7240	4010
19	3450	3980	2290	2180	2690	3560	8830	10700	3530	3940	7070	3820
20	3360	4400	1670	2150	2680	3430	8040	10100	3380	3840	6950	3390
21	3210	4110	1290	2150	2250	3730	7460	9170	2970	3820	6900	3280
22	3050	4230	1440	2320	2550	3610	7010	8170	2770	3610	6470	3590
23	2870	4200	1680	2190	2200	3610	6810	7790	4800	3300	6610	3370
24	3040	4330	2070	2310	2190	3790	6450	7180	5860	3270	6240	3230
25	2920	4440	2240	2270	2260	3720	6170	6670	6500	3160	7240	3190
26	2680	4320	2520	2380	2300	3480	5390	6390	6260	3940	8170	2940
27	2630	4190	2510	2170	2180	3540	5040	6060	5710	4870	7670	3080
28	2620	4030	2440	2320	2240	4360	4700	5270	5390	6670	7060	3810
29	2680	3900	2560	2230	---	5640	4570	4700	5110	9320	6490	4320
30	2670	3950	2390	2410	---	7370	4470	4070	4410	9700	6080	4030
31	2620	---	2230	2340	---	8460	---	3990	---	8080	5320	---
TOTAL	76290	105390	95050	67530	67150	102110	267830	216550	138480	153850	221390	119570
MEAN	2461	3513	3066	2178	2398	3294	8928	6985	4616	4963	7142	3986
MAX	3450	4440	4690	2410	2690	8460	14300	11600	6500	9700	8840	5020
MIN	1940	2420	1290	1900	2180	2110	4470	3430	2770	3160	5120	2940
AC-FT	151300	209000	188500	133900	133200	202500	531200	429500	274700	305200	439100	237200
CFSM	.39	.56	.49	.35	.38	.53	1.43	1.12	.74	.80	1.14	.64
IN.	.45	.63	.57	.40	.40	.61	1.60	1.29	.83	.92	1.32	.71

e Estimated

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1902 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3693	3486	2554	2156	2134	4250	10320	7405	5647	4137	2901	3388
MAX	14270	11910	5821	4279	6021	14420	22320	21840	19510	17260	9777	14590
(WY)	1969	1972	1984	1984	1984	1945	1952	1950	1944	1952	1955	1941
MIN	1380	1342	1287	1157	1257	1538	2212	2430	1481	1014	839	1152
(WY)	1933	1911	1911	1911	1913	1912	1902	1934	1934	1934	1934	1933

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1902 - 1999
ANNUAL TOTAL	1367540	1631190	
ANNUAL MEAN	3747	4469	4348
HIGHEST ANNUAL MEAN			8569
LOWEST ANNUAL MEAN			1754
HIGHEST DAILY MEAN	17600	Apr 4	53900
LOWEST DAILY MEAN	1290	Dec 21	75
ANNUAL SEVEN-DAY MINIMUM	1550	Sep 13	754
INSTANTANEOUS PEAK FLOW			54900
INSTANTANEOUS PEAK STAGE			25.19
ANNUAL RUNOFF (AC-FT)	2713000	3235000	3150000
ANNUAL RUNOFF (CFSM)	.60	.72	.70
ANNUAL RUNOFF (INCHES)	8.15	9.72	9.47
10 PERCENT EXCEEDS	6310	8250	9070
50 PERCENT EXCEEDS	2840	3790	2790
90 PERCENT EXCEEDS	1780	2170	1570

