

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

LOCATION.--Lat 45°24'25", long 92°38'49", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> 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 mi<sup>2</sup>.

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, MN, 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.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,950	8,100	3,170	2,780	2,280	2,430	19,400	5,330	6,430	4,590	1,730	1,600
2	4,070	8,030	2,980	e2,620	e2,430	2,450	22,400	5,150	5,940	5,500	1,680	1,470
3	4,370	7,490	2,450	e2,500	2,360	2,380	24,700	4,890	5,490	5,790	1,580	1,460
4	4,700	7,290	3,040	e2,480	2,410	2,470	23,300	4,690	5,200	5,360	1,430	1,460
5	4,660	6,520	3,470	e2,420	e2,650	2,330	21,400	4,480	4,880	4,890	1,450	1,630
6	4,560	6,310	3,340	2,280	2,780	2,580	20,600	4,210	4,940	4,490	1,340	1,650
7	4,190	5,940	3,270	2,420	2,720	2,920	22,100	4,190	5,410	4,020	1,350	1,720
8	4,190	5,390	3,930	2,490	2,790	3,110	21,800	4,250	5,960	3,790	1,400	1,670
9	4,080	5,430	3,710	2,370	2,840	2,810	21,700	4,220	6,360	3,500	1,370	1,470
10	3,250	5,220	3,730	2,180	2,830	2,800	20,400	4,140	7,310	3,350	1,370	1,640
11	3,460	4,530	4,220	e2,420	2,810	2,660	18,200	4,550	7,490	3,150	1,390	1,510
12	3,530	4,290	3,640	2,220	2,750	2,830	16,200	4,570	8,040	3,100	1,480	1,530
13	3,580	4,300	2,800	2,220	2,510	2,670	14,800	4,650	8,260	2,660	1,480	3,620
14	3,350	4,240	1,930	e2,200	3,130	2,550	13,400	4,770	9,060	2,520	1,370	4,350
15	3,080	4,050	1,650	e2,120	2,850	2,600	12,000	4,720	10,300	2,490	1,300	3,670
16	3,200	3,600	2,200	e2,160	2,880	2,530	10,900	4,740	11,200	2,310	1,280	3,360
17	3,210	3,850	2,620	e2,090	2,710	2,530	9,990	4,610	10,900	2,260	1,330	2,990
18	3,180	3,840	3,150	e2,060	2,650	2,530	9,270	4,540	9,780	2,140	1,440	2,670
19	3,170	4,210	2,760	e2,030	2,650	2,570	8,790	4,910	8,610	2,010	1,360	2,470
20	3,090	3,770	2,450	e1,980	2,470	2,490	8,320	5,990	7,710	1,980	1,590	2,510
21	3,230	4,300	e2,170	e1,980	2,520	2,630	7,880	7,300	7,680	2,010	1,460	2,570
22	3,140	4,260	e2,120	e2,100	2,520	2,690	7,700	7,490	7,990	1,750	1,350	2,610
23	3,380	4,160	e2,240	e2,330	2,500	2,860	7,390	7,300	7,570	1,920	1,410	2,330
24	3,640	4,060	e2,240	e2,340	2,510	3,310	7,080	6,540	6,700	1,820	1,260	2,290
25	4,090	3,760	e2,100	2,280	2,530	3,540	6,840	6,350	6,140	1,910	1,320	2,270
26	4,340	3,800	e2,120	e2,380	2,430	4,000	7,140	6,380	5,280	1,910	1,600	2,520
27	4,340	3,800	e2,100	e2,380	2,480	4,350	6,020	6,860	4,910	1,910	1,860	2,710
28	4,590	3,800	2,290	2,340	2,470	5,330	4,970	7,260	4,860	1,780	1,660	2,920
29	5,490	3,680	2,510	e2,380	---	6,770	5,240	7,200	4,450	1,550	1,680	2,730
30	6,700	3,580	e2,450	e2,390	---	9,110	5,590	6,940	4,370	1,710	1,520	2,600
31	7,520	---	e2,560	e2,430	---	14,300	---	6,740	---	1,720	1,580	---
TOTAL	125,330	145,600	85,410	71,370	73,460	111,130	405,520	169,960	209,220	89,890	45,420	70,000
MEAN	4,043	4,853	2,755	2,302	2,624	3,585	13,520	5,483	6,974	2,900	1,465	2,333
MAX	7,520	8,100	4,220	2,780	3,130	14,300	24,700	7,490	11,200	5,790	1,860	4,350
MIN	3,080	3,580	1,650	1,980	2,280	2,330	4,970	4,140	4,370	1,550	1,260	1,460
CFSM	0.65	0.78	0.44	0.37	0.42	0.57	2.17	0.88	1.12	0.46	0.23	0.37
IN.	0.75	0.87	0.51	0.43	0.44	0.66	2.42	1.01	1.25	0.54	0.27	0.42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1902 - 2005, BY WATER YEAR (WY)

MEAN	3,690	3,517	2,571	2,165	2,151	4,227	10,500	7,462	5,714	4,180	2,911	3,373
MAX	14,270	11,910	5,821	4,279	6,021	14,420	29,600	21,840	19,510	17,260	9,777	14,590
(WY)	(1969)	(1972)	(1984)	(1984)	(1984)	(1945)	(2001)	(1950)	(1944)	(1952)	(1955)	(1941)
MIN	1,380	1,342	1,288	1,157	1,257	1,538	2,212	2,430	1,481	1,014	839	1,152
(WY)	(1933)	(1911)	(1911)	(1911)	(1913)	(1912)	(1902)	(1934)	(1934)	(1934)	(1934)	(1933)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1902 - 2005	
ANNUAL TOTAL	1,711,040		1,602,310			
ANNUAL MEAN	4,675		4,390		4,382	
HIGHEST ANNUAL MEAN					8,569 1986	
LOWEST ANNUAL MEAN					1,754 1934	
HIGHEST DAILY MEAN	21,400	Jun 3	24,700	Apr 3	59,500	Apr 26, 2001
LOWEST DAILY MEAN	1,650	Dec 15	1,260	Aug 24	75	Jul 17, 1910
ANNUAL SEVEN-DAY MINIMUM	2,020	Jan 6	1,370	Aug 13	754	Jul 29, 1934
MAXIMUM PEAK FLOW			31,100	Apr 3	60,900	Apr 25, 2001
MAXIMUM PEAK STAGE			14.51	Apr 3	25.88	Apr 25, 2001
ANNUAL RUNOFF (CFSM)	0.749		0.704		0.702	
ANNUAL RUNOFF (INCHES)	10.20		9.55		9.54	
10 PERCENT EXCEEDS	9,120		7,690		8,980	
50 PERCENT EXCEEDS	3,640		3,140		2,810	
90 PERCENT EXCEEDS	2,200		1,650		1,580	

e Estimated.

