Annual Peak-Flow Frequency Analysis
For more information on the contents of this documentation, see Kessler and others (2013).

Streamgage number and name:

05340500 St. Croix River at St. Croix Falls, Wis.

Peak-flow information:

Number of systematic peak flows in record	106
Systematic period begins	1902
Systematic period ends	2011
Length of systematic record	110
Years without information	4
Number of historical peak flows in record	0

Frequency analysis options:

Method	Bulletin 17B
Skew option	STATION SKEW
Low-outlier method	Bulletin 17B Grubbs-Beck test

Bulletin 17B systematic record analysis results:

Moments of the common logarithms of the peak flows:

Mean	Standard deviation	Skewness
4.3423	0.2134	-0.547

Outlier criteria and number of peak flows exceeding:

Low	4949.5	0
High	97713.7	0

Bulletin 17B Final analysis results:

Moments of the common logarithms of the peak flows:

Mean	Standard deviation	Skewness
4.3423	0.2134	-0.547

Annual frequency curve at selected exceedance probabilities:

Exceedance probability	Peak estimate	Lower-95 level	Upper-95 level
0.9950	4,830	3,910	5,740
0.9900	5,780	4,780	6,760
0.9500	9,150	7,960	10,300
0.9000	11,500	10,200	12,700
0.8000	14,800	13,400	16,100
0.6667	18,500	17,000	20,000
0.5000	23,000	21,300	24,900
0.4292	25,000	23,100	27,200
0.2000	33,500	30,700	37,000
0.1000	39,800	36,200	44,600
0.0400	47,100	42,300	53,500
0.0200	52,000	46,300	59,700
0.0100	56,500	50,000	65,400
0.0050	60,700	53,400	70,800
0.0020	65,800	57,500	77,400

Peak-flow data used in the analysis:

Explanation of symbols and codes

−− none

Water year	Peak flow	Peak-flow code	Water year	Peak flow	Peak-flow code
1902	12,900	−−	1943	28,500	−−
1903	20,200	−−	1944	37,100	−−
1904	23,600	−−	1945	44,600	−−
1905	18,700	−−	1946	35,500	−−
Gap in systematic record			1947	18,400	−−
1910	9,870	−−	1948	18,500	−−
1911	7,500	−−	1949	23,800	−−
1912	33,500	−−	1950	54,900	−−
1913	8,980	−−	1951	33,700	−−
1914	15,300	−−	1952	43,000	−−
1915	15,100	−−	1953	32,600	−−
1916	35,100	−−	1954	44,400	−−
1917	17,700	−−	1955	22,000	−−
1918	10,100	−−	1956	31,600	−−
1919	14,900	−−	1957	25,800	−−
1920	35,800	−−	1958	28,200	−−
1921	11,500	−−	1959	14,500	−−
1922	18,600	−−	1960	16,700	−−
1923	8,880	−−	1961	27,500	−−
1924	9,800	−−	1962	30,100	−−
1925	5,860	−−	1963	10,500	−−
1926	6,140	−−	1964	27,700	−−
1927	27,600	−−	1965	45,700	−−
1928	21,800	−−	1966	35,600	−−
1929	16,900	−−	1967	33,600	−−
1930	17,500	−−	1968	19,700	−−
1931	16,600	−−	1969	41,600	−−
1932	18,500	−−	1970	20,000	−−
1933	7,060	−−	1971	34,400	−−
1934	12,100	−−	1972	43,700	−−
1935	26,400	−−	1973	25,100	−−
1936	31,000	−−	1974	26,000	−−
1937	12,500	−−	1975	34,200	−−
1938	30,000	−−	1976	35,600	−−
1939	24,800	−−	1977	15,600	−−
1940	14,300	−−	1978	26,700	−−
1941	29,600	−−	1979	34,400	−−
1942	18,600	−−	1980	13,400	−−

Water year	Peak flow	Peak-flow code
1981	25,600	−−
1982	30,600	−−
1983	23,700	−−
1984	35,400	−−
1985	27,600	−−
1986	37,000	−−
1987	9,530	−−
1988	11,600	−−
1989	18,100	−−
1990	15,900	−−
1991	25,300	−−
1992	22,600	−−
1993	20,700	−−
1994	21,300	−−
1995	31,200	−−
1996	35,900	−−
1997	41,500	−−
1998	17,800	−−
1999	14,800	−−
2000	13,300	−−
2001	60,900	−−
2002	32,500	−−
2003	22,600	−−
2004	21,700	−−
2005	31,100	−−
2006	25,800	−−
2007	15,400	−−
2008	24,700	−−
2009	23,700	−−
2010	22,300	−−
2011	39,500	−−