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

Streamgage number and name:
    05333500 St. Croix River near Danbury, Wis.

Peak-flow information:

Number of systematic peak flows in record	95
Systematic period begins	1914
Systematic period ends	2011
Length of systematic record	98
Years without information	3
Number of historical peak flows in record	0

Frequency analysis options:

Method	Bulletin 17B
Skew option	Weighted
Generalized skew	-0.265
Standard error of generalized skew	0.426
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
3.6707	0.1651	-0.084

Outlier criteria and number of peak flows exceeding:

Low	1497.8	0
High	14657.0	0

Bulletin 17B Final analysis results:

Moments of the common logarithms of the peak flows:

Mean	Standard deviation	Skewness
3.6707	0.1651	-0.129

Annual frequency curve at selected exceedance probabilities:

Exceedance probability	Peak estimate	Lower-95 level	Upper-95 level
0.9950	1,680	1,440	1,910
0.9900	1,870	1,620	2,100
0.9500	2,470	2,220	2,710
0.9000	2,860	2,600	3,110
0.8000	3,410	3,150	3,660
0.6667	4,000	3,740	4,270
0.5000	4,720	4,430	5,040
0.4292	5,050	4,740	5,400
0.2000	6,470	6,020	7,010
0.1000	7,580	7,000	8,330
0.0400	8,960	8,170	10,000
0.0200	9,960	9,000	11,300
0.0100	10,900	9,810	12,500
0.0050	11,900	10,600	13,800
0.0020	13,200	11,600	15,400

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
1914	4,030	——	1952	6,980	——
1915	4,640	——	1953	6,540	——
1916	8,480	——	1954	8,900	——
1917	2,840	——	1955	4,200	——
1918	3,000	——	1956	4,950	——
1919	3,330	——	1957	3,600	——
1920	6,300	——	1958	8,500	——
1921	2,630	——	1959	3,420	——
1922	7,380	——	1960	3,910	——
1923	3,290	——	1961	7,130	——
1924	3,100	——	1962	5,160	——
1925	2,970	——	1963	2,460	——
1926	2,030	——	1964	4,600	——
1927	6,540	——	1965	6,460	——
1928	3,690	——	1966	5,700	——
1929	3,460	——	1967	6,260	——
1930	3,130	——	1968	6,830	——
1931	3,080	——	1969	6,600	——
1932	3,240	——	1970	3,120	——
1933	3,160	——	1971	5,750	——
1934	5,090	——	1972	7,140	——
1935	5,630	——	1973	4,070	——
1936	4,980	——	1974	4,960	——
1937	3,400	——	1975	4,590	——
1938	4,000	——	1976	6,360	——
1939	4,920	——	1977	5,830	——
1940	2,930	——	1978	4,870	——
1941	8,630	——	1979	5,950	——
1942	3,480	——	1980	2,490	——
1943	4,250	——	1981	5,380	——
1944	8,990	——	Gap in systematic record		
1945	5,600	——	1985	4,480	——
1946	6,900	——	1986	6,640	——
1947	3,530	——	1987	2,390	——
1948	4,450	——	1988	2,630	——
1949	4,580	——	1989	3,450	——
1950	10,200	——	1990	6,000	——
1951	5,840	——	1991	4,550	——

Water year	Peak flow	Peak-flow code
1992	5,640	––
1993	3,260	––
1994	6,900	––
1995	3,670	––
1996	7,220	––
1997	6,750	––
1998	5,510	––
1999	6,870	––
2000	2,300	––
2001	11,000	––
2002	7,470	––
2003	4,800	––
2004	4,100	––
2005	5,430	––
2006	4,790	––
2007	2,080	––
2008	4,480	––
2009	3,410	––
2010	4,320	––
2011	6,920	––