

Annual Peak-Flow Frequency Analysis

For more information on the contents of this documentation, see Kessler and others (2013).

**Streamgauge number and name:**

05344500 Mississippi River at Prescott, Wis.

**Peak-flow information:**

Number of systematic peak flows in record	83
Systematic period begins	1929
Systematic period ends	2011
Length of systematic record	83
Years without information	0
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:**

	Standard		
Mean	deviation	Skewness	
4.8014	0.2237	-0.158	

**Outlier criteria and number of peak flows exceeding:**

Low	13833.6	0
High	289629.3	0

**Bulletin 17B Final analysis results:**

**Moments of the common logarithms of the peak flows:**

	Standard	
Mean	deviation	Skewness
4.8014	0.2237	-0.158

**Annual frequency curve at selected exceedance probabilities:**

Exceedance probability	Peak estimate	Lower-95 level	Upper-95 level
0.9950	15,600	12,400	18,700
0.9900	18,000	14,600	21,300
0.9500	26,500	22,600	30,300
0.9000	32,400	28,200	36,500
0.8000	41,200	36,700	45,600
0.6667	51,300	46,300	56,400
0.5000	64,200	58,400	70,500
0.4292	70,300	64,100	77,400
0.2000	98,000	88,400	110,000
0.1000	121,000	108,000	139,000
0.0400	152,000	133,000	178,000
0.0200	174,000	151,000	209,000
0.0100	198,000	169,000	240,000
0.0050	221,000	187,000	272,000
0.0020	252,000	211,000	317,000

**Peak-flow data used in the analysis:**

Explanation of symbols and codes

-- none

Water year	Peak flow	Peak-flow code
1929	49,600	--
1930	33,700	--
1931	22,400	--
1932	30,300	--
1933	19,800	--
1934	15,000	--
1935	36,200	--
1936	52,500	--
1937	31,000	--
1938	60,700	--
1939	65,000	--
1940	33,800	--
1941	67,600	--
1942	42,400	--
1943	80,200	--
1944	84,700	--
1945	87,500	--
1946	65,500	--
1947	63,100	--
1948	63,100	--
1949	53,800	--
1950	101,000	--
1951	128,000	--
1952	155,000	--
1953	67,700	--
1954	82,800	--
1955	45,200	--
1956	62,700	--
1957	94,000	--
1958	28,400	--
1959	35,300	--
1960	54,000	--
1961	46,300	--
1962	76,300	--
1963	41,400	--
1964	57,600	--
1965	228,000	--
1966	74,800	--

Water year	Peak flow	Peak-flow code
1967	87,800	--
1968	40,200	--
1969	199,000	--
1970	54,900	--
1971	83,000	--
1972	95,500	--
1973	78,300	--
1974	65,200	--
1975	112,000	--
1976	72,800	--
1977	26,100	--
1978	65,400	--
1979	100,400	--
1980	43,100	--
1981	43,400	--
1982	86,700	--
1983	84,200	--
1984	90,900	--
1985	73,400	--
1986	116,000	--
1987	29,400	--
1988	28,200	--
1989	49,000	--
1990	42,900	--
1991	74,300	--
1992	69,400	--
1993	130,000	--
1994	72,900	--
1995	65,000	--
1996	82,600	--
1997	161,000	--
1998	70,400	--
1999	72,500	--
2000	32,000	--
2001	187,000	--
2002	68,000	--
2003	59,200	--
2004	58,500	--

Water year	Peak flow	Peak-flow code
2005	56,600	--
2006	72,800	--
2007	68,300	--
2008	67,100	--
2009	75,700	--
2010	102,000	--
2011	125,000	--