

Annual Peak-Flow Frequency Analysis

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

**Streamgauge number and name:**

05299750 Florida Creek near Burr, Minn.

**Peak-flow information:**

Number of systematic peak flows in record	23
Systematic period begins	1983
Systematic period ends	2011
Length of systematic record	29
Years without information	6
Number of historical peak flows in record	0

**Frequency analysis options:**

Method	Bulletin 17B
Skew option	Weighted
Generalized skew	-0.317
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
	2.5079	0.5009	-0.167

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

Low	19.1	0
High	5422.6	0

**Bulletin 17B Final analysis results:**

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

	Standard	
Mean	deviation	Skewness
2.5079	0.5009	-0.250

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

[WIE, Weighted independent estimate; --, not computed]

Exceedance probability	Peak estimate	Lower-95 level	Upper 95 level	WIE estimate	Lower-95 WIE level	Upper 95 WIE level
0.9950	12.6	3.9	26.3	--	--	--
0.9900	17.8	6.2	35.1	--	--	--
0.9500	44.7	20.2	76.1	--	--	--
0.9000	71.5	36.6	114.0	--	--	--
0.8000	124.0	72.1	188.0	--	--	--
0.6667	204.0	129.0	303.0	--	--	--
0.5000	338.0	225.0	510.0	324	211	499
0.4292	414.0	278.0	637.0	--	--	--
0.2000	860.0	565.0	1,490.0	811	526	1,250
0.1000	1,360.0	858.0	2,620.0	1,270	797	2,020
0.0400	2,190.0	1,300.0	4,760.0	2,000	1,180	3,390
0.0200	2,940.0	1,670.0	6,930.0	2,670	1,490	4,790
0.0100	3,800.0	2,070.0	9,660.0	3,430	1,810	6,500
0.0050	4,790.0	2,510.0	13,000.0	--	--	--
0.0020	6,290.0	3,150.0	18,500.0	5,560	2,550	12,100

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

Explanation of symbols and codes

-- none

Water	Peak	Peak-flow
year	flow	code
1983	154	--
1984	471	--
Gap in systematic record		
1991	81	--
1992	996	--
1993	810	--
1994	455	--
1995	760	--
1996	230	--
1997	2,490	--
1998	371	--
1999	75	--
2000	30	--
2001	1,740	--
2002	214	--
2003	63	--
2004	126	--
2005	118	--
2006	222	--
2007	1,000	--
2008	250	--
2009	319	--
2010	1,090	--
2011	912	--