

Annual Peak-Flow Frequency Analysis

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

**Streamgauge number and name:**

05062800 Coon Creek near Twin Valley, Minn.

**Peak-flow information:**

Number of systematic peak flows in record	23
Systematic period begins	1962
Systematic period ends	1984
Length of systematic record	23
Years without information	0
Number of historical peak flows in record	0

**Frequency analysis options:**

Method	Bulletin 17B
Skew option	Weighted
Generalized skew	-0.39
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:**

	Standard	
Mean	deviation	Skewness
2.6219	0.5504	-0.856

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

Low	18.8	0
High	9319.2	0

**Bulletin 17B Final analysis results:**

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

	Standard		
Mean	deviation	Skewness	
2.6219	0.5504	-0.565	

**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	8.2	2.1	19.7	--	--	--
0.9900	13.1	3.8	29.0	--	--	--
0.9500	43.4	17.7	79.0	--	--	--
0.9000	77.9	37.1	131.0	--	--	--
0.8000	151.0	83.9	239.0	--	--	--
0.6667	269.0	165.0	416.0	--	--	--
0.5000	472.0	303.0	745.0	408	275	606
0.4292	587.0	380.0	948.0	--	--	--
0.2000	1,240.0	782.0	2,270.0	1,060	721	1,560
0.1000	1,930.0	1,170.0	3,900.0	1,650	1,090	2,500
0.0400	2,960.0	1,700.0	6,660.0	2,530	1,570	4,090
0.0200	3,800.0	2,100.0	9,160.0	3,270	1,920	5,570
0.0100	4,690.0	2,520.0	12,000.0	4,070	2,260	7,340
0.0050	5,620.0	2,930.0	15,100.0	--	--	--
0.0020	6,880.0	3,480.0	19,600.0	6,190	3,020	12,700

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

Explanation of symbols and codes

-- none

Water	Peak	Peak-flow
year	flow	code
1962	896	--
1963	415	--
1964	565	--
1965	745	--
1966	630	--
1967	267	--
1968	44	--
1969	1,520	--
1970	1,090	--
1971	42	--
1972	722	--
1973	290	--
1974	1,060	--
1975	2,700	--
1976	460	--
1977	40	--
1978	850	--
1979	1,650	--
1980	500	--
1981	40	--
1982	410	--
1983	136	--
1984	1,450	--