

Annual Peak-Flow Frequency Analysis

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

**Streamgauge number and name:**

05330600 Sand Creek tributary number 2 near Jordan, Minn.

**Peak-flow information:**

Number of systematic peak flows in record	26
Systematic period begins	1960
Systematic period ends	1985
Length of systematic record	26
Years without information	0
Number of historical peak flows in record	0

**Frequency analysis options:**

Method	Bulletin 17B
Skew option	Weighted
Generalized skew	-0.157
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
1.6958	0.3838	0.668

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

Low	5.4	0
High	452.9	1

**Bulletin 17B Final analysis results:**

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

	Standard		
Mean	deviation	Skewness	
1.6958	0.3838	0.187	

**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	5.9	2.9	9.6	--	--	--
0.9900	7.2	3.7	11.2	--	--	--
0.9500	12.2	7.1	17.7	--	--	--
0.9000	16.3	10.2	22.8	--	--	--
0.8000	23.4	15.9	31.7	--	--	--
0.6667	33.2	23.8	44.2	--	--	--
0.5000	48.3	36.0	64.6	49.7	35.8	69
0.4292	56.6	42.4	76.5	--	--	--
0.2000	104.0	76.5	152.0	108.0	74.5	156
0.1000	156.0	111.0	251.0	164.0	107.0	250
0.0400	246.0	165.0	441.0	255.0	155.0	419
0.0200	332.0	214.0	644.0	338.0	192.0	593
0.0100	437.0	269.0	912.0	435.0	234.0	808
0.0050	564.0	333.0	1,260.0	--	--	--
0.0020	772.0	433.0	1,890.0	711.0	330.0	1,530

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

Explanation of symbols and codes

-- none

Water	Peak	Peak-flow
year	flow	code
1960	558	--
1961	72	--
1962	51	--
1963	21	--
1964	10	--
1965	106	--
1966	85	--
1967	143	--
1968	75	--
1969	64	--
1970	37	--
1971	91	--
1972	34	--
1973	29	--
1974	107	--
1975	37	--
1976	26	--
1977	18	--
1978	42	--
1979	51	--
1980	23	--
1981	20	--
1982	16	--
1983	206	--
1984	34	--
1985	68	--