

Annual Peak-Flow Frequency Analysis

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

**Streamgauge number and name:**

05384100 Duschee Creek near Lanesboro, Minn.

**Peak-flow information:**

Number of systematic peak flows in record	26
Systematic period begins	1959
Systematic period ends	1984
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	-0.243
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
2.3109	0.5219	-0.201

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

Low	10.1	0
High	4136.7	0

**Bulletin 17B Final analysis results:**

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

	Standard		
Mean	deviation	Skewness	
2.3109	0.5219	-0.223	

**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	7.2	2.4	14.8	--	--	--
0.9900	10.3	3.8	20.0	--	--	--
0.9500	26.3	12.3	44.6	--	--	--
0.9000	42.7	22.4	68.0	--	--	--
0.8000	75.6	44.7	114.0	--	--	--
0.6667	127.0	81.3	187.0	--	--	--
0.5000	214.0	144.0	320.0	228	153	341
0.4292	265.0	179.0	402.0	--	--	--
0.2000	569.0	376.0	966.0	586	405	847
0.1000	925.0	585.0	1,740.0	920	636	1,330
0.0400	1,520.0	907.0	3,230.0	1,450	986	2,130
0.0200	2,090.0	1,190.0	4,780.0	1,920	1,270	2,910
0.0100	2,750.0	1,500.0	6,770.0	2,480	1,560	3,940
0.0050	3,510.0	1,850.0	9,250.0	--	--	--
0.0020	4,700.0	2,360.0	13,400.0	4,060	2,270	7,290

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

Explanation of symbols and codes

-- none

Water	Peak	Peak-flow
year	flow	code
1959	185	--
1960	561	--
1961	307	--
1962	188	--
1963	85	--
1964	267	--
1965	333	--
1966	74	--
1967	550	--
1968	236	--
1969	1,680	--
1970	47	--
1971	218	--
1972	480	--
1973	73	--
1974	1,310	--
1975	13	--
1976	251	--
1977	48	--
1978	152	--
1979	210	--
1980	790	--
1981	1,580	--
1982	29	--
1983	130	--
1984	150	--