

Annual Peak-Flow Frequency Analysis

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

**Streamgauge number and name:**

05316900 Dry Creek near Jeffers, Minn.

**Peak-flow information:**

Number of systematic peak flows in record	25
Systematic period begins	1961
Systematic period ends	1985
Length of systematic record	25
Years without information	0
Number of historical peak flows in record	0

**Frequency analysis options:**

Method	Bulletin 17B
Skew option	Weighted
Generalized skew	-0.171
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
2.1124	0.4263	-0.151

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

Low	11.3	0
High	1486.7	0

**Bulletin 17B Final analysis results:**

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

	Standard		
Mean	deviation	Skewness	
2.1124	0.4263	-0.162	

**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	8.9	3.6	16.1	--	--	--
0.9900	11.8	5.1	20.3	--	--	--
0.9500	24.7	13.1	38.1	--	--	--
0.9000	36.2	21.2	53.3	--	--	--
0.8000	57.2	36.8	80.5	--	--	--
0.6667	86.8	59.8	120.0	--	--	--
0.5000	133.0	95.5	186.0	127	88	183
0.4292	158.0	114.0	224.0	--	--	--
0.2000	298.0	211.0	464.0	278	191	407
0.1000	448.0	306.0	760.0	410	270	621
0.0400	683.0	442.0	1,290.0	607	376	980
0.0200	892.0	556.0	1,800.0	780	456	1,340
0.0100	1,130.0	679.0	2,440.0	970	537	1,750
0.0050	1,400.0	813.0	3,200.0	--	--	--
0.0020	1,800.0	1,000.0	4,430.0	1,490	719	3,100

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

Explanation of symbols and codes

-- none

Water	Peak	Peak-flow
year	flow	code
1961	26	--
1962	158	--
1963	508	--
1964	37	--
1965	400	--
1966	83	--
1967	332	--
1968	360	--
1969	435	--
1970	188	--
1971	163	--
1972	41	--
1973	66	--
1974	25	--
1975	71	--
1976	31	--
1977	187	--
1978	153	--
1979	162	--
1980	88	--
1981	52	--
1982	142	--
1983	520	--
1984	530	--
1985	128	--