Annual Peak-Flow Frequency Analysis
For more information on the contents of this documentation, see Kessler and others (2013).

Streamgage number and name:
05273700 Otsego Creek near Otsego, Minn.

Peak-flow information:

Number of systematic peak flows in record	26
Systematic period begins	1964
Systematic period ends	1989
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	-0.202
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
1.9479	0.3139	-0.290

Outlier criteria and number of peak flows exceeding:

Low	14.5	0
High	540.9	0

Bulletin 17B Final analysis results:

Moments of the common logarithms of the peak flows:

Mean	Standard deviation	Skewness
1.9479	0.3139	-0.242

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	11.7	6.0	18.1	−−	−−	−−
0.9900	14.5	7.9	21.7	−−	−−	−−
0.9500	25.8	16.3	35.3	−−	−−	−−
0.9000	34.5	23.4	45.7	−−	−−	−−
0.8000	48.8	35.6	62.4	−−	−−	−−
0.6667	66.6	51.0	84.1	−−	−−	−−
0.5000	91.3	72.0	116.0	82.7	63.7	107
0.4292	104.0	82.1	133.0	−−	−−	−−
0.2000	164.0	128.0	226.0	154.0	116.0	203
0.1000	219.0	166.0	320.0	207.0	152.0	282
0.0400	295.0	216.0	463.0	281.0	195.0	405
0.0200	356.0	254.0	585.0	341.0	226.0	516
0.0100	419.0	292.0	718.0	407.0	256.0	647
0.0050	484.0	330.0	864.0	−−	−−	−−
0.0020	575.0	381.0	1,080.0	581.0	325.0	1,040

Peak-flow data used in the analysis:

Explanation of symbols and codes

−−   none

Water year	Peak flow	Peak-flow code
1964	23	−−
1965	202	−−
1966	303	−−
1967	263	−−
1968	22	−−
1969	171	−−
1970	33	−−
1971	37	−−
1972	63	−−
1973	60	−−
1974	88	−−
1975	154	−−
1976	70	−−
1977	123	−−
1978	121	−−
1979	158	−−
1980	145	−−
1981	54	−−
1982	58	−−
1983	193	−−
1984	124	−−
1985	153	−−
1986	100	−−
1987	42	−−
1988	50	−−
1989	88	−−