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

Streamgage number and name:

05276000 North Fork Crow River near Regal, Minn.

Peak-flow information:

Number of systematic peak flows in record	11
Systematic period begins	1944
Systematic period ends	1954
Length of systematic record	11
Years without information	0
Number of historical peak flows in record	0

Frequency analysis options:

Method	Bulletin 17B
Skew option	Weighted
Generalized skew	-0.138
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
2.9090	0.2238	0.065

Outlier criteria and number of peak flows exceeding:

Low	276.5	0
High	2377.8	0

Bulletin 17B Final analysis results:

Moments of the common logarithms of the peak flows:

Mean	Standard deviation	Skewness
2.9090	0.2238	-0.078

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	207	88	318	−−	−−	−−
0.9900	238	109	354	−−	−−	−−
0.9500	344	190	474	−−	−−	−−
0.9000	417	254	558	−−	−−	−−
0.8000	527	354	685	−−	−−	−−
0.6667	653	472	844	−−	−−	−−
0.5000	816	621	1,080	795	592	1,070
0.4292	895	688	1,200	−−	−−	−−
0.2000	1,250	963	1,870	1,270	925	1,750
0.1000	1,560	1,170	2,560	1,650	1,160	2,360
0.0400	1,970	1,420	3,610	2,220	1,470	3,370
0.0200	2,290	1,600	4,520	2,700	1,700	4,290
0.0100	2,610	1,780	5,530	3,260	1,960	5,420
0.0050	2,940	1,950	6,650	−−	−−	−−
0.0020	3,400	2,180	8,320	4,700	2,520	8,760

Peak-flow data used in the analysis:

Explanation of symbols and codes

−− none

Water year	Peak flow	Peak-flow code
1944	698	−−
1945	723	−−
1946	576	−−
1947	1,030	−−
1948	899	−−
1949	444	−−
1950	953	−−
1951	1,400	−−
1952	2,120	−−
1953	896	−−
1954	329	−−