

U. S. GEOLOGICAL SURVEY  
 ANNUAL PEAK FLOW FREQUENCY ANALYSIS  
 Following Bulletin 17-B Guidelines  
 Program peakfq  
 (Version 4.0, December, 2000)

Station - 04024430 NEMADJI RIVER NEAR SOUTH SUPERIOR, WI  
 2002 MAR 13 09:01:59

I N P U T   D A T A   S U M M A R Y

Number of peaks in record	=	27
Peaks not used in analysis	=	0
Systematic peaks in analysis	=	27
Historic peaks in analysis	=	0
Years of historic record	=	0
Generalized skew	=	-0.185
Standard error of generalized skew	=	0.550
Skew option	=	WEIGHTED
Gage base discharge	=	0.0
User supplied high outlier threshold	=	--
User supplied low outlier criterion	=	--
Plotting position parameter	=	0.00

\*\*\*\*\* NOTICE -- Preliminary machine computations. \*\*\*\*\*  
 \*\*\*\*\* User responsible for assessment and interpretation. \*\*\*\*\*

WCF134I-NO SYSTEMATIC PEAKS WERE BELOW GAGE BASE.	0.0
WCF195I-NO LOW OUTLIERS WERE DETECTED BELOW CRITERION.	1755.2
WCF163I-NO HIGH OUTLIERS OR HISTORIC PEAKS EXCEEDED HHBASE.	15464.0

Station - 04024430 NEMADJI RIVER NEAR SOUTH SUPERIOR, WI  
 2002 MAR 13 09:01:59

ANNUAL FREQUENCY CURVE PARAMETERS -- LOG-PEARSON TYPE III

	FLOOD BASE		LOGARITHMIC		
	DISCHARGE	EXCEEDANCE PROBABILITY	MEAN	STANDARD DEVIATION	SKEW
SYSTEMATIC RECORD	0.0	1.0000	3.7168	0.1876	-0.036
BULL.17B ESTIMATE	0.0	1.0000	3.7168	0.1876	-0.093

ANNUAL FREQUENCY CURVE -- DISCHARGES AT SELECTED EXCEEDANCE PROBABILITIES

ANNUAL EXCEEDANCE PROBABILITY	BULL.17B ESTIMATE	SYSTEMATIC RECORD	'EXPECTED PROBABILITY' ESTIMATE	95-PCT CONFIDENCE LIMITS FOR BULL. 17B ESTIMATES	
				LOWER	UPPER
0.9950	1649.0	1688.0	1464.0	1135.0	2112.0
0.9900	1852.0	1886.0	1689.0	1315.0	2329.0
0.9500	2532.0	2549.0	2427.0	1946.0	3042.0
0.9000	2983.0	2990.0	2906.0	2382.0	3513.0
0.8000	3630.0	3625.0	3582.0	3017.0	4198.0
0.5000	5245.0	5223.0	5245.0	4559.0	6038.0
0.2000	7507.0	7499.0	7600.0	6490.0	9040.0
0.1000	9021.0	9046.0	9239.0	7667.0	11270.0
0.0400	10940.0	11040.0	11420.0	9081.0	14310.0
0.0200	12380.0	12540.0	13140.0	10100.0	16690.0
0.0100	13810.0	14070.0	14960.0	11090.0	19160.0
0.0050	15260.0	15620.0	16880.0	12060.0	21730.0
0.0020	17200.0	17720.0	19640.0	13340.0	25290.0
0.6667	4349.8	( 1.50-year flood )			
0.4292	5665.0	( 2.33-year flood )			

Station - 04024430 NEMADJI RIVER NEAR SOUTH SUPERIOR, WI  
2002 MAR 13 09:01:59

I N P U T   D A T A   L I S T I N G

WATER YEAR	DISCHARGE	CODES	WATER YEAR	DISCHARGE	CODES
1974	5770.0		1988	4500.0	
1975	4850.0		1989	3480.0	
1976	5880.0		1990	13700.0	
1977	4150.0		1991	4780.0	
1978	4220.0		1992	5350.0	
1979	10700.0		1993	5190.0	
1980	3620.0		1994	5750.0	
1981	5580.0		1995	3540.0	
1982	4740.0		1996	6450.0	
1983	5950.0		1997	5000.0	
1984	6060.0		1998	2380.0	
1985	10400.0		1999	7320.0	
1986	8840.0		2000	3920.0	
1987	1810.0				

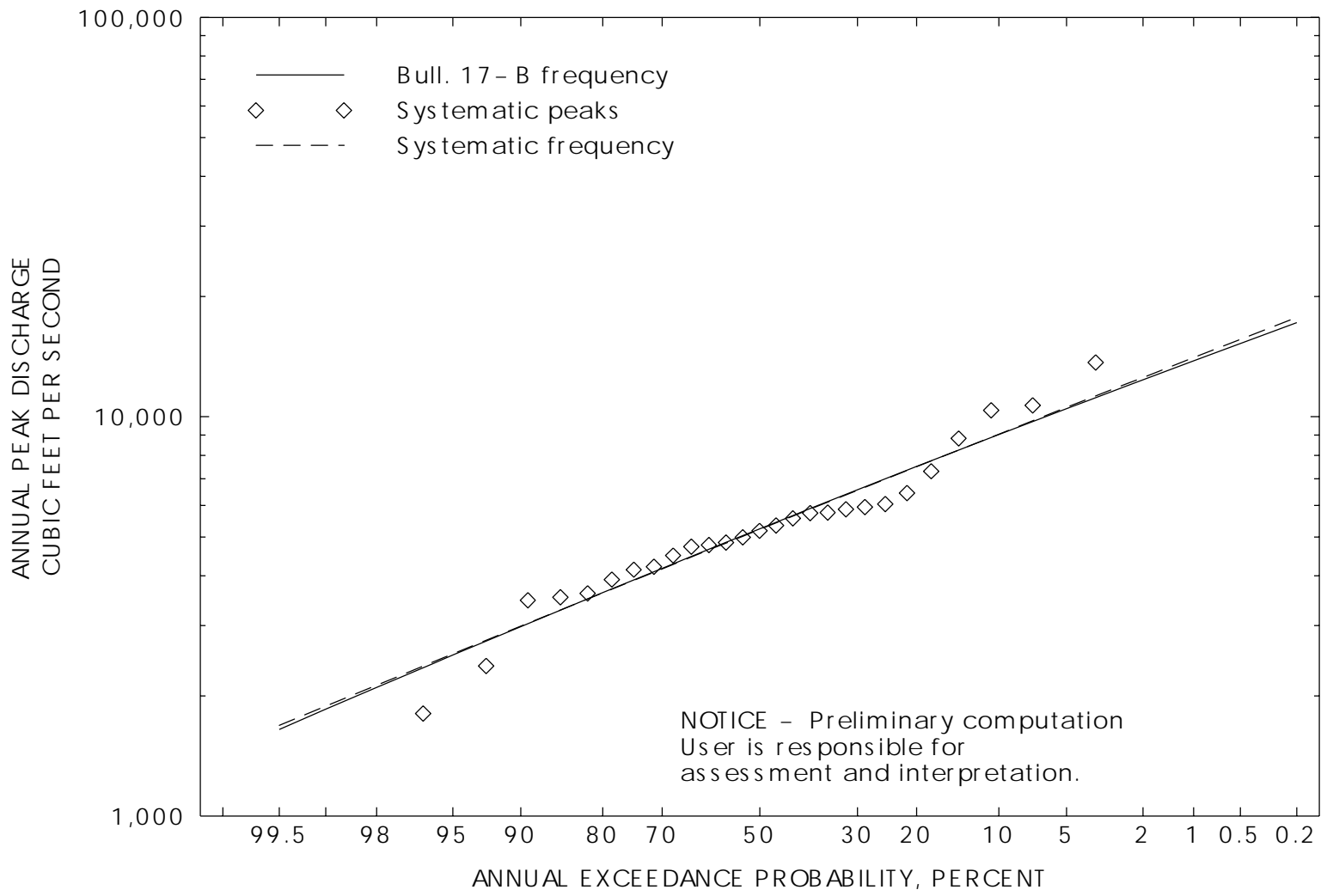
Explanation of peak discharge qualification codes

PEAKFQ	WATSTORE	
CODE	CODE	DEFINITION
D	3	Dam failure, non-recurrent flow anomaly
G	8	Discharge greater than stated value
X	3+8	Both of the above
L	4	Discharge less than stated value
K	6 OR C	Known effect of regulation or urbanization
H	7	Historic peak

Station - 04024430 NEMADJI RIVER NEAR SOUTH SUPERIOR, WI  
2002 MAR 13 09:01:59

EMPIRICAL FREQUENCY CURVES -- WEIBULL PLOTTING POSITIONS

WATER YEAR	RANKED DISCHARGE	SYSTEMATIC RECORD	BULL.17B ESTIMATE
1990	13700.0	0.0357	0.0357
1979	10700.0	0.0714	0.0714
1985	10400.0	0.1071	0.1071
1986	8840.0	0.1429	0.1429
1999	7320.0	0.1786	0.1786
1996	6450.0	0.2143	0.2143
1984	6060.0	0.2500	0.2500
1983	5950.0	0.2857	0.2857
1976	5880.0	0.3214	0.3214
1974	5770.0	0.3571	0.3571
1994	5750.0	0.3929	0.3929
1981	5580.0	0.4286	0.4286
1992	5350.0	0.4643	0.4643
1993	5190.0	0.5000	0.5000
1997	5000.0	0.5357	0.5357
1975	4850.0	0.5714	0.5714
1991	4780.0	0.6071	0.6071
1982	4740.0	0.6429	0.6429
1988	4500.0	0.6786	0.6786
1978	4220.0	0.7143	0.7143
1977	4150.0	0.7500	0.7500
2000	3920.0	0.7857	0.7857
1980	3620.0	0.8214	0.8214
1995	3540.0	0.8571	0.8571
1989	3480.0	0.8929	0.8929
1998	2380.0	0.9286	0.9286
1987	1810.0	0.9643	0.9643



Station - 04024430 NEMADJI RIVER NEAR SOUTH SUPERIOR, WI  
2002 MAR 13 09:01:59