

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

Station - 05387100 NORTH FORK BAD AXE RIVER NEAR GENOA, WI
 2002 MAR 13 09:02:59

I N P U T D A T A S U M M A R Y

Number of peaks in record	=	41
Peaks not used in analysis	=	0
Systematic peaks in analysis	=	41
Historic peaks in analysis	=	0
Years of historic record	=	0
Generalized skew	=	-0.400
Standard error of generalized skew	=	0.550
Skew option	=	WEIGHTED
Gage base discharge	=	500.0
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. *****

WCF133I-SYSTEMATIC PEAKS BELOW GAGE BASE WERE NOTED.	15	500.0	
WCF163I-NO HIGH OUTLIERS OR HISTORIC PEAKS EXCEEDED HHBASE.		10589.5	
WCF195I-NO LOW OUTLIERS WERE DETECTED BELOW CRITERION.		230.6	
**WCF199W-NUMBER OF PEAKS BELOW FLOOD BASE EXCEEDS 17B SPEC.	15	500.0	10
WCF002J-CALCS COMPLETED. RETURN CODE = 2			

Station - 05387100 NORTH FORK BAD AXE RIVER NEAR GENOA, WI
 2002 MAR 13 09:02:59

ANNUAL FREQUENCY CURVE PARAMETERS -- LOG-PEARSON TYPE III

	FLOOD BASE		LOGARITHMIC		
	DISCHARGE	EXCEEDANCE PROBABILITY	MEAN	STANDARD DEVIATION	SKEW
SYSTEMATIC RECORD	500.0	0.6341	2.9194	0.4724	-0.021
BULL.17B ESTIMATE	500.0	0.6341	2.9194	0.4724	-0.132

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
0.5000	850.7	833.8	850.7	640.7	1131.0
0.2000	2088.0	2077.0	2129.0	1544.0	3012.0
0.1000	3294.0	3339.0	3422.0	2348.0	5089.0
0.0400	5302.0	5532.0	5676.0	3596.0	8901.0
0.0200	7172.0	7658.0	7881.0	4695.0	12740.0
0.0100	9378.0	10250.0	10610.0	5937.0	17550.0
0.0050	11950.0	13390.0	13960.0	7332.0	23480.0
0.0020	15970.0	18480.0	19560.0	9428.0	33270.0
0.6667	1.50-year flood below base				
0.4292	1033.1 (2.33-year flood)				

Station - 05387100 NORTH FORK BAD AXE RIVER NEAR GENOA, WI
 2002 MAR 13 09:02:59

I N P U T D A T A L I S T I N G

WATER YEAR	DISCHARGE	CODES	WATER YEAR	DISCHARGE	CODES
1959	10000.0		1981	2100.0	
1960	6500.0		1982	500.0	L
1961	2900.0		1983	500.0	L
1962	2850.0		1984	500.0	L
1963	1250.0		1985	820.0	
1964	500.0	L	1986	710.0	
1965	2650.0		1987	730.0	
1966	3800.0		1988	500.0	L
1967	2200.0		1989	280.0	
1968	920.0		1990	515.0	
1969	570.0		1991	500.0	L
1970	225.0		1992	860.0	
1971	540.0		1993	270.0	
1972	820.0		1994	940.0	
1973	1600.0		1995	270.0	L
1974	1400.0		1996	250.0	
1975	1450.0		1997	430.0	
1976	1800.0		1998	390.0	
1978	3150.0		1999	75.0	L
1979	500.0	L	2000	1900.0	
1980	2450.0				

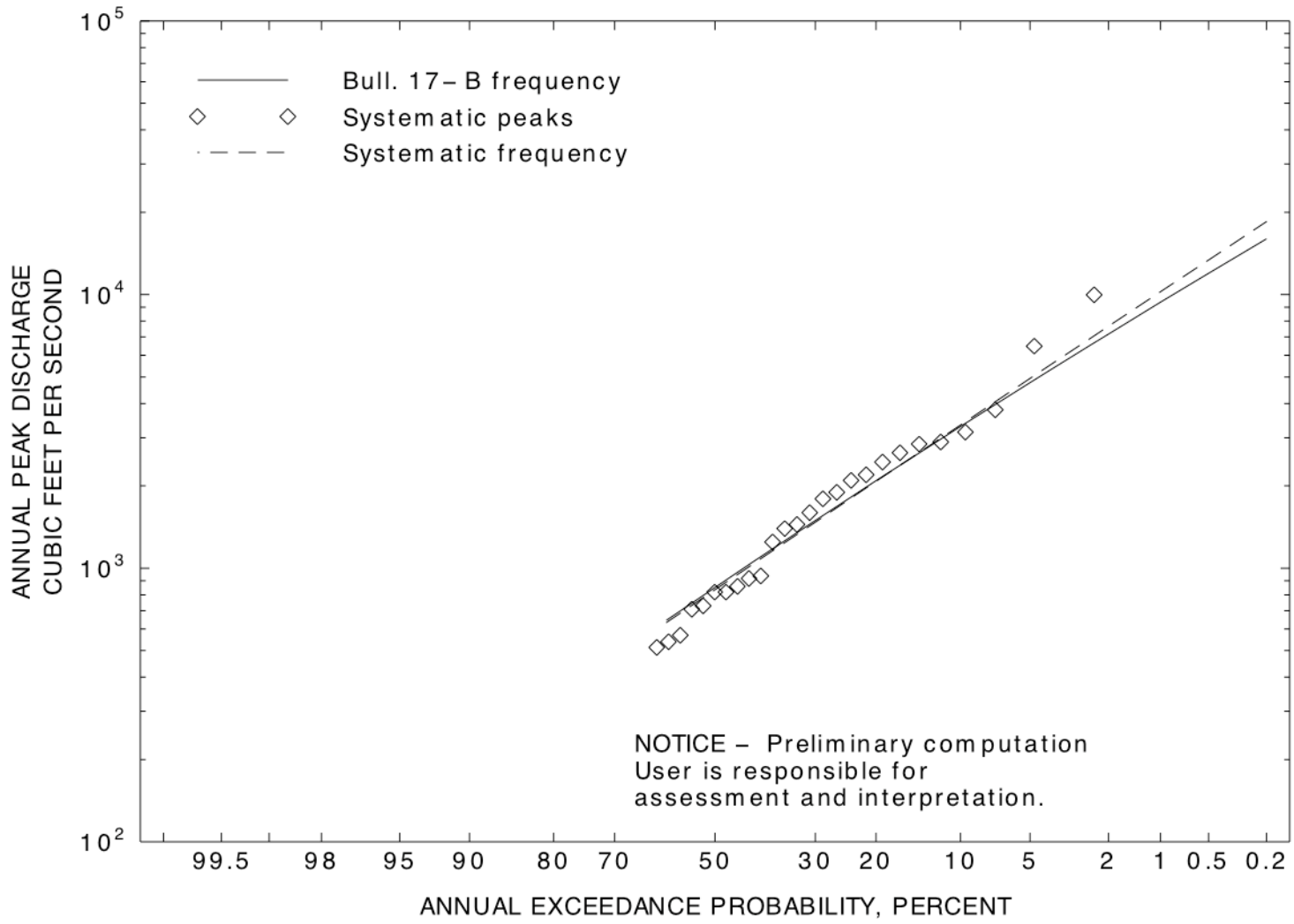
Explanation of peak discharge qualification codes

PEAKFQ	WATSTORE	DEFINITION
CODE	CODE	
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 - 05387100 NORTH FORK BAD AXE RIVER NEAR GENOA, WI
2002 MAR 13 09:02:59

EMPIRICAL FREQUENCY CURVES -- WEIBULL PLOTTING POSITIONS

WATER YEAR	RANKED DISCHARGE	SYSTEMATIC RECORD	BULL.17B ESTIMATE
1959	10000.0	0.0238	0.0238
1960	6500.0	0.0476	0.0476
1966	3800.0	0.0714	0.0714
1978	3150.0	0.0952	0.0952
1961	2900.0	0.1190	0.1190
1962	2850.0	0.1429	0.1429
1965	2650.0	0.1667	0.1667
1980	2450.0	0.1905	0.1905
1967	2200.0	0.2143	0.2143
1981	2100.0	0.2381	0.2381
2000	1900.0	0.2619	0.2619
1976	1800.0	0.2857	0.2857
1973	1600.0	0.3095	0.3095
1975	1450.0	0.3333	0.3333
1974	1400.0	0.3571	0.3571
1963	1250.0	0.3810	0.3810
1994	940.0	0.4048	0.4048
1968	920.0	0.4286	0.4286
1992	860.0	0.4524	0.4524
1972	820.0	0.4762	0.4762
1985	820.0	0.5000	0.5000
1987	730.0	0.5238	0.5238
1986	710.0	0.5476	0.5476
1969	570.0	0.5714	0.5714
1971	540.0	0.5952	0.5952
1990	515.0	0.6190	0.6190
1964	500.0	--	--
1979	500.0	--	--
1982	500.0	--	--
1983	500.0	--	--
1984	500.0	--	--
1988	500.0	--	--
1991	500.0	--	--
1997	430.0	--	--
1998	390.0	--	--
1989	280.0	--	--
1993	270.0	--	--
1995	270.0	--	--
1996	250.0	--	--
1970	225.0	--	--
1999	75.0	--	--



Station - 05387100 NORTH FORK BAD AXE RIVER NEAR GENOA, WI
2002 MAR 13 09:02:59