

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

Station - 05396100 PET BROOK NEAR EDGAR, WI  
 2002 MAR 13 09:03:04

I N P U T   D A T A   S U M M A R Y

Number of peaks in record	=	31
Peaks not used in analysis	=	0
Systematic peaks in analysis	=	31
Historic peaks in analysis	=	0
Years of historic record	=	0
Generalized skew	=	-0.274
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.	158.8
WCF163I-NO HIGH OUTLIERS OR HISTORIC PEAKS EXCEEDED HHBASE.	3235.0

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ANNUAL FREQUENCY CURVE PARAMETERS -- LOG-PEARSON TYPE III

	FLOOD BASE		LOGARITHMIC		
	DISCHARGE	EXCEEDANCE PROBABILITY	MEAN	STANDARD DEVIATION	SKEW
SYSTEMATIC RECORD	0.0	1.0000	2.8554	0.2540	0.143
BULL.17B ESTIMATE	0.0	1.0000	2.8554	0.2540	-0.009

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	158.2	171.9	139.0	100.7	215.3
0.9900	183.2	195.6	165.6	120.9	244.1
0.9500	273.5	280.7	260.9	198.0	345.1
0.9000	338.6	342.0	328.7	256.3	416.7
0.8000	438.3	436.6	431.8	347.8	527.2
0.5000	717.4	706.9	717.4	601.1	856.2
0.2000	1173.0	1167.0	1190.0	975.0	1478.0
0.1000	1516.0	1529.0	1561.0	1232.0	2002.0
0.0400	1992.0	2053.0	2100.0	1567.0	2788.0
0.0200	2376.0	2491.0	2560.0	1826.0	3462.0
0.0100	2784.0	2971.0	3075.0	2092.0	4211.0
0.0050	3218.0	3497.0	3654.0	2367.0	5041.0
0.0020	3835.0	4272.0	4537.0	2747.0	6272.0
0.6667	557.7	( 1.50-year flood )			
0.4292	796.1	( 2.33-year flood )			

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I N P U T   D A T A   L I S T I N G

WATER YEAR	DISCHARGE	CODES	WATER YEAR	DISCHARGE	CODES
1962	460.0		1978	540.0	
1963	455.0		1979	900.0	
1964	250.0		1980	2280.0	
1965	1380.0		1981	550.0	
1966	560.0		1982	1140.0	
1967	730.0		1983	950.0	
1968	420.0		1984	800.0	
1969	2250.0		1985	720.0	
1970	380.0		1986	670.0	
1971	980.0		1987	1220.0	
1972	1960.0		1988	1180.0	
1973	580.0		1989	670.0	
1974	330.0		1990	650.0	
1975	360.0		1991	1100.0	
1976	580.0		1992	1000.0	
1977	230.0				

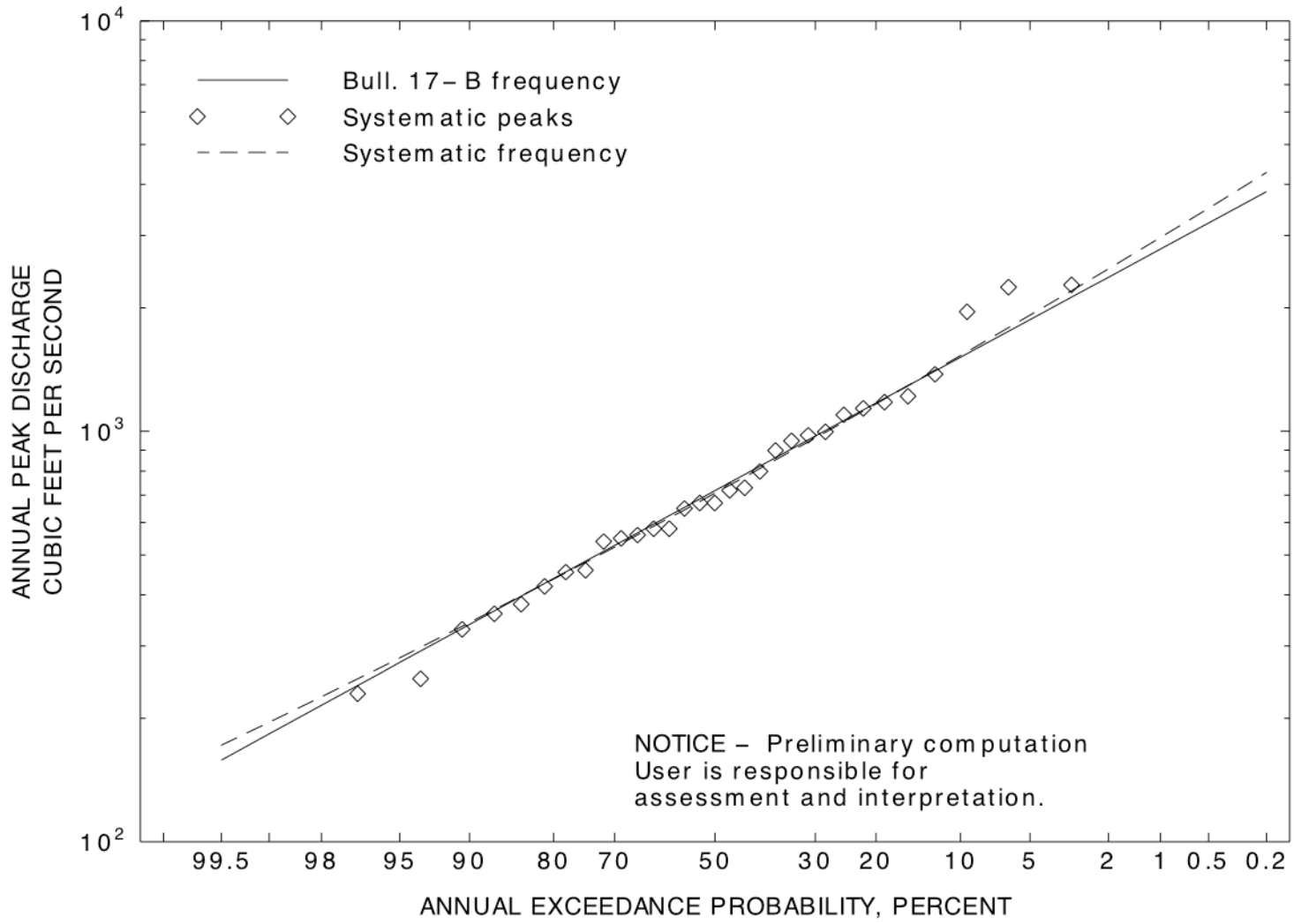
Explanation of peak discharge qualification codes

PEAKFQ CODE	WATSTORE 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

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EMPIRICAL FREQUENCY CURVES -- WEIBULL PLOTTING POSITIONS

WATER YEAR	RANKED DISCHARGE	SYSTEMATIC RECORD	BULL.17B ESTIMATE
1980	2280.0	0.0312	0.0312
1969	2250.0	0.0625	0.0625
1972	1960.0	0.0938	0.0938
1965	1380.0	0.1250	0.1250
1987	1220.0	0.1562	0.1562
1988	1180.0	0.1875	0.1875
1982	1140.0	0.2188	0.2188
1991	1100.0	0.2500	0.2500
1992	1000.0	0.2812	0.2812
1971	980.0	0.3125	0.3125
1983	950.0	0.3438	0.3438
1979	900.0	0.3750	0.3750
1984	800.0	0.4062	0.4062
1967	730.0	0.4375	0.4375
1985	720.0	0.4688	0.4688
1986	670.0	0.5000	0.5000
1989	670.0	0.5312	0.5312
1990	650.0	0.5625	0.5625
1973	580.0	0.5938	0.5938
1976	580.0	0.6250	0.6250
1966	560.0	0.6562	0.6562
1981	550.0	0.6875	0.6875
1978	540.0	0.7188	0.7188
1962	460.0	0.7500	0.7500
1963	455.0	0.7812	0.7812
1968	420.0	0.8125	0.8125
1970	380.0	0.8438	0.8438
1975	360.0	0.8750	0.8750
1974	330.0	0.9062	0.9062
1964	250.0	0.9375	0.9375
1977	230.0	0.9688	0.9688



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