

U. S. GEOLOGICAL SURVEY
ANNUAL PEAK FLOW FREQUENCY ANALYSIS
Following Bulletin 17-B Guidelines
Program peakfq
(Version 4.1, February, 2002)

Station - 05426031 ROCK RIVER AT JEFFERSON, WI

2005 MAR 27 14:33:55

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

Number of peaks in record	=	17
Peaks not used in analysis	=	0
Systematic peaks in analysis	=	17
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	=	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
WCF163I-NO HIGH OUTLIERS OR HISTORIC PEAKS EXCEEDED HHBASE.	11422.7
WCF195I-NO LOW OUTLIERS WERE DETECTED BELOW CRITERION.	1886.4

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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	3.6667	0.1694	0.626
BULL.17B ESTIMATE	0.0	1.0000	3.6667	0.1694	0.077

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	1749.0	2134.0	1496.0	1126.0	2268.0
0.9900	1916.0	2246.0	1697.0	1276.0	2443.0
0.9500	2465.0	2638.0	2329.0	1796.0	3012.0
0.9000	2826.0	2912.0	2727.0	2152.0	3385.0
0.8000	3339.0	3323.0	3279.0	2669.0	3930.0
0.5000	4619.0	4458.0	4619.0	3924.0	5432.0
0.2000	6435.0	6334.0	6560.0	5469.0	8044.0
0.1000	7676.0	7797.0	7974.0	6401.0	10100.0
0.0400	9283.0	9916.0	9966.0	7527.0	13010.0
0.0200	10510.0	11710.0	11640.0	8342.0	15390.0
0.0100	11760.0	13690.0	13500.0	9146.0	17950.0
0.0050	13040.0	15890.0	15610.0	9946.0	20690.0
0.0020	14790.0	19190.0	18890.0	11010.0	24630.0
0.6667	3909.3	(1.50-year flood)			
0.4292	4950.1	(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
1978	3870.0		1987	7190.0	
1979	10300.0		1988	2610.0	
1980	5270.0		1989	3110.0	
1981	3830.0		1990	4400.0	
1982	5370.0		1991	3550.0	
1983	3560.0		1992	3110.0	
1984	3400.0		1993	8660.0	
1985	5340.0		1994	4370.0	
1986	7200.0				

Explanation of peak discharge qualification codes

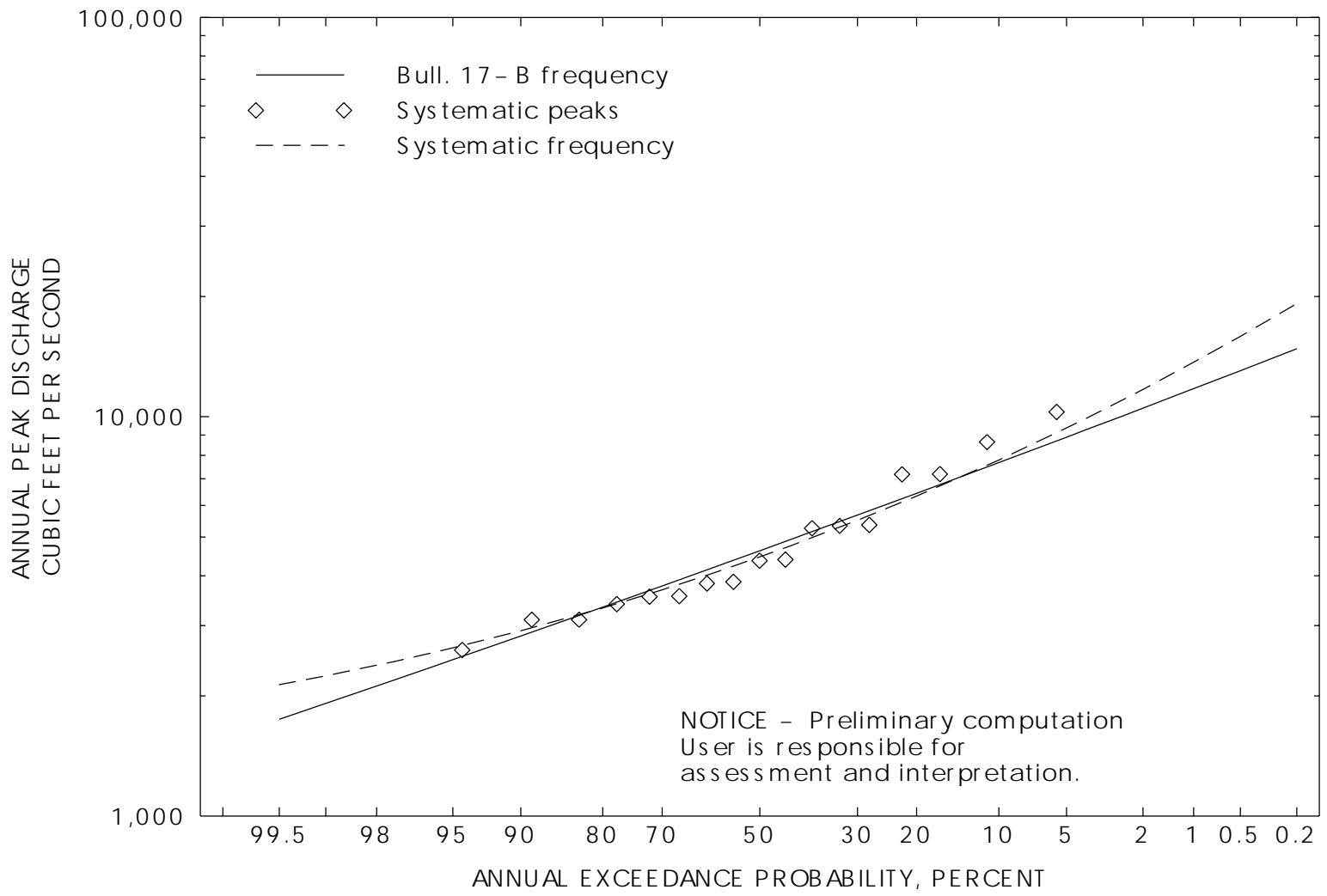
PEAKFQ	WATSTORE	
CODE	CODE	DEFINITION
D	3	Dam failure, non-recurrent flow anomaly
G	8	Discharge greater than stated value
X	3+8	Both of the above
L	4	Discharge less than stated value
K	6 OR C	Known effect of regulation or urbanization
H	7	Historic peak

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EMPIRICAL FREQUENCY CURVES -- WEIBULL PLOTTING POSITIONS

WATER YEAR	RANKED DISCHARGE	SYSTEMATIC RECORD	BULL.17B ESTIMATE
1979	10300.0	0.0556	0.0556
1993	8660.0	0.1111	0.1111
1986	7200.0	0.1667	0.1667
1987	7190.0	0.2222	0.2222
1982	5370.0	0.2778	0.2778
1985	5340.0	0.3333	0.3333
1980	5270.0	0.3889	0.3889
1990	4400.0	0.4444	0.4444
1994	4370.0	0.5000	0.5000
1978	3870.0	0.5556	0.5556
1981	3830.0	0.6111	0.6111
1983	3560.0	0.6667	0.6667
1991	3550.0	0.7222	0.7222
1984	3400.0	0.7778	0.7778
1989	3110.0	0.8333	0.8333
1992	3110.0	0.8889	0.8889
1988	2610.0	0.9444	0.9444



NOTICE - Preliminary computation
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ANNUAL EXCEEDANCE PROBABILITY, PERCENT
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 2005 MAR 27 13:52:04