

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

Station - 04087230 W BR ROOT R CANAL TRIB NEAR NORTH CAPE, WI
 2002 MAR 13 09:02:45

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

Number of peaks in record	=	32
Peaks not used in analysis	=	0
Systematic peaks in analysis	=	32
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
WCF195I-NO LOW OUTLIERS WERE DETECTED BELOW CRITERION.	24.2
WCF163I-NO HIGH OUTLIERS OR HISTORIC PEAKS EXCEEDED HHBASE.	336.8

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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	1.9557	0.2206	-0.993
BULL.17B ESTIMATE	0.0	1.0000	1.9557	0.2206	-0.713

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	17.5	15.4	14.6	11.0	23.9
0.9900	21.4	19.5	18.7	14.2	28.4
0.9500	35.8	34.8	33.9	26.7	44.2
0.9000	45.9	45.7	44.4	36.0	54.9
0.8000	60.5	61.4	59.6	49.9	70.7
0.5000	95.9	98.1	95.9	82.6	111.9
0.2000	139.6	139.2	140.9	119.1	170.2
0.1000	164.6	160.3	167.3	138.5	206.6
0.0400	191.9	181.0	196.9	158.8	248.3
0.0200	209.5	193.1	216.4	171.6	276.1
0.0100	225.0	202.9	234.1	182.6	301.3
0.0050	238.9	210.9	250.0	192.4	324.1
0.0020	255.0	219.4	269.1	203.6	351.1
0.6667	76.5	(1.50-year flood)			
0.4292	104.9	(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	108.0		1978	82.0	
1963	30.0		1979	72.0	
1964	70.0		1980	100.0	
1965	47.0		1981	80.0	
1966	150.0		1982	96.0	
1967	65.0		1983	155.0	
1968	60.0		1984	140.0	
1969	107.0		1985	128.0	
1970	98.0		1986	168.0	
1971	100.0		1987	182.0	
1972	85.0		1988	152.0	
1973	48.0		1989	142.0	
1974	105.0		1990	132.0	
1975	32.0		1991	123.0	
1976	90.0		1992	95.0	
1977	25.0		1993	148.0	

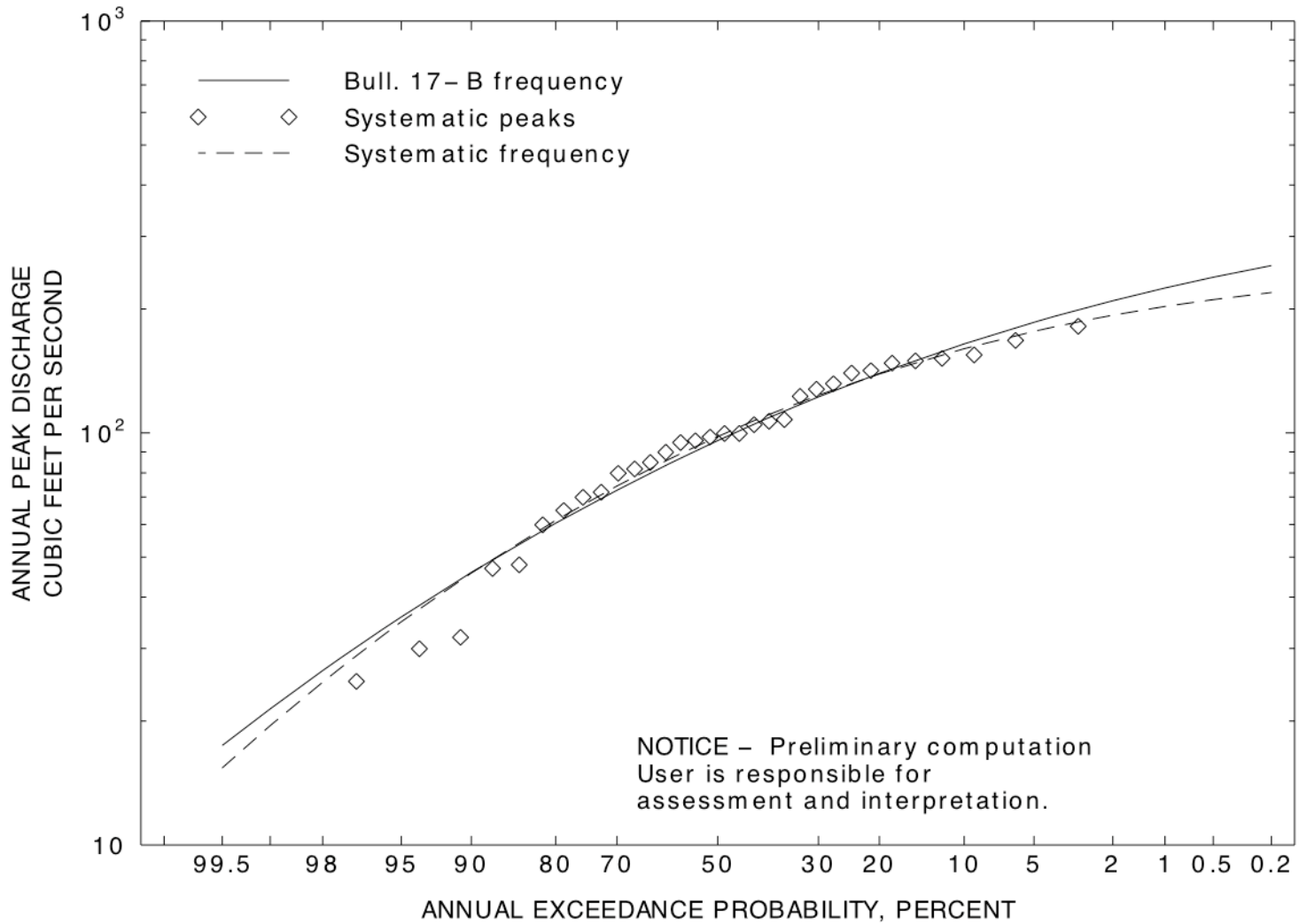
Explanation of peak discharge qualification codes

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
1987	182.0	0.0303	0.0303
1986	168.0	0.0606	0.0606
1983	155.0	0.0909	0.0909
1988	152.0	0.1212	0.1212
1966	150.0	0.1515	0.1515
1993	148.0	0.1818	0.1818
1989	142.0	0.2121	0.2121
1984	140.0	0.2424	0.2424
1990	132.0	0.2727	0.2727
1985	128.0	0.3030	0.3030
1991	123.0	0.3333	0.3333
1962	108.0	0.3636	0.3636
1969	107.0	0.3939	0.3939
1974	105.0	0.4242	0.4242
1971	100.0	0.4545	0.4545
1980	100.0	0.4848	0.4848
1970	98.0	0.5152	0.5152
1982	96.0	0.5455	0.5455
1992	95.0	0.5758	0.5758
1976	90.0	0.6061	0.6061
1972	85.0	0.6364	0.6364
1978	82.0	0.6667	0.6667
1981	80.0	0.6970	0.6970
1979	72.0	0.7273	0.7273
1964	70.0	0.7576	0.7576
1967	65.0	0.7879	0.7879
1968	60.0	0.8182	0.8182
1973	48.0	0.8485	0.8485
1965	47.0	0.8788	0.8788
1975	32.0	0.9091	0.9091
1963	30.0	0.9394	0.9394
1977	25.0	0.9697	0.9697



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