

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

Station - 04063700 POPPLE RIVER NEAR FENCE, WI
2002 MAR 13 09:02:14

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

Number of peaks in record	=	37
Peaks not used in analysis	=	0
Systematic peaks in analysis	=	37
Historic peaks in analysis	=	0
Years of historic record	=	0
Generalized skew	=	-0.129
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.	214.2
WCF163I-NO HIGH OUTLIERS OR HISTORIC PEAKS EXCEEDED HHBASE.	1911.7

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 2002 MAR 13 09:02:14

ANNUAL FREQUENCY CURVE PARAMETERS -- LOG-PEARSON TYPE III

	FLOOD BASE		LOGARITHMIC		
	DISCHARGE	EXCEEDANCE PROBABILITY	MEAN	STANDARD DEVIATION	SKEW
SYSTEMATIC RECORD	0.0	1.0000	2.8061	0.1794	0.225
BULL.17B ESTIMATE	0.0	1.0000	2.8061	0.1794	0.105

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	230.0	240.9	215.0	174.6	279.7
0.9900	252.8	262.2	239.6	195.8	303.4
0.9500	328.5	333.4	320.0	268.3	381.6
0.9000	378.7	381.0	372.5	317.6	433.4
0.8000	451.1	450.3	447.3	389.2	508.7
0.5000	635.2	630.0	635.2	566.7	711.7
0.2000	903.7	901.1	912.0	801.6	1047.0
0.1000	1091.0	1096.0	1111.0	952.6	1303.0
0.0400	1338.0	1360.0	1384.0	1142.0	1661.0
0.0200	1529.0	1569.0	1604.0	1284.0	1951.0
0.0100	1727.0	1790.0	1840.0	1426.0	2259.0
0.0050	1931.0	2022.0	2096.0	1570.0	2589.0
0.0020	2215.0	2352.0	2471.0	1766.0	3060.0
0.6667	532.6	(1.50-year flood)			
0.4292	683.6	(2.33-year flood)			

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2002 MAR 13 09:02:14

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

WATER YEAR	DISCHARGE	CODES	WATER YEAR	DISCHARGE	CODES
1964	433.0		1983	690.0	
1965	1100.0		1984	497.0	
1966	522.0		1985	695.0	
1967	862.0		1986	1100.0	
1968	664.0		1987	474.0	
1969	772.0		1988	563.0	
1970	476.0		1989	307.0	
1971	825.0		1990	394.0	
1972	1120.0		1991	981.0	
1973	700.0		1992	690.0	
1974	600.0		1993	603.0	
1975	1020.0		1994	391.0	
1976	786.0		1995	318.0	
1977	487.0		1996	1490.0	
1978	455.0		1997	620.0	
1979	1640.0		1998	665.0	
1980	555.0		1999	568.0	
1981	906.0		2000	291.0	
1982	515.0				

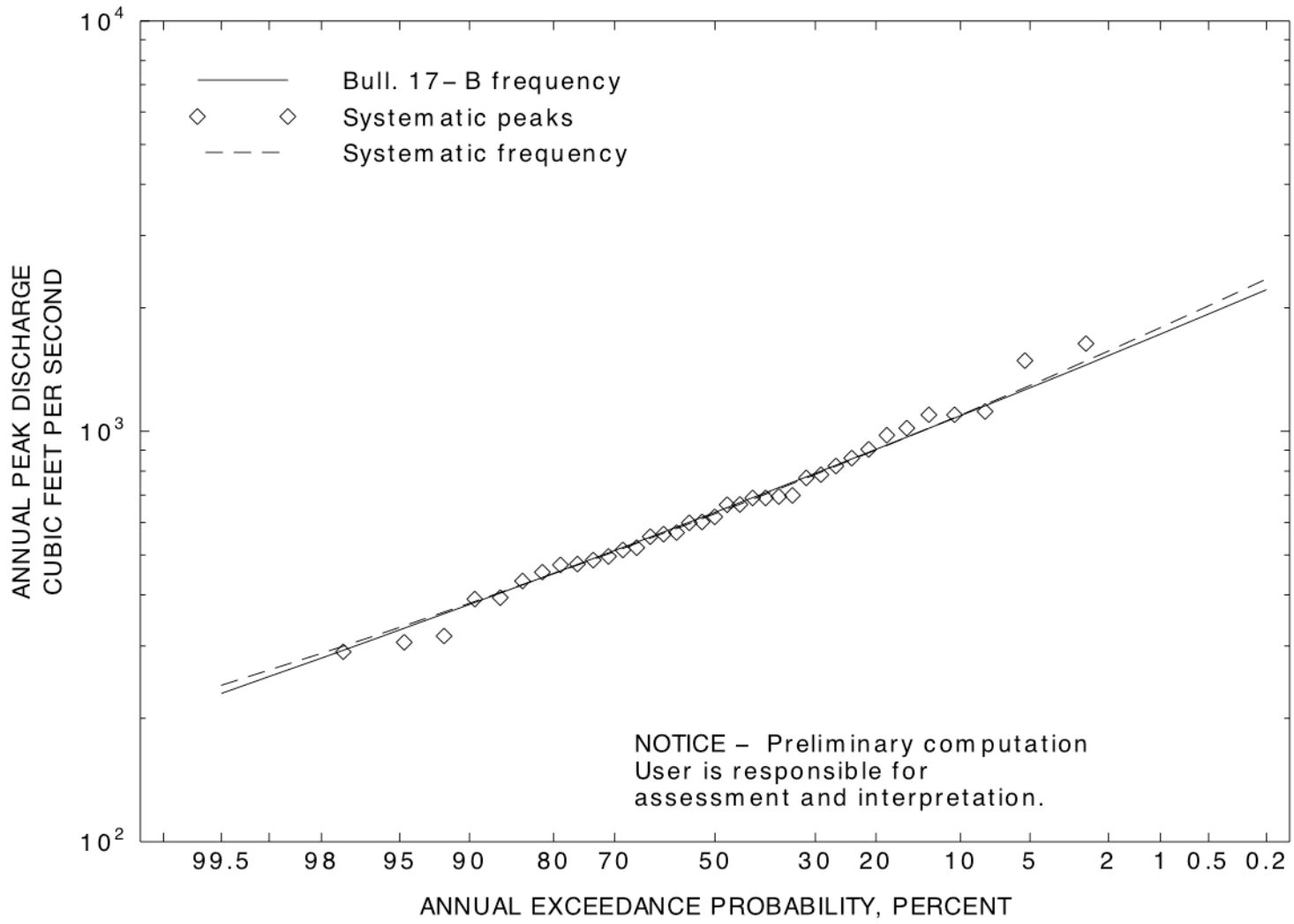
Explanation of peak discharge qualification codes

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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2002 MAR 13 09:02:14

EMPIRICAL FREQUENCY CURVES -- WEIBULL PLOTTING POSITIONS

WATER YEAR	RANKED DISCHARGE	SYSTEMATIC RECORD	BULL.17B ESTIMATE
1979	1640.0	0.0263	0.0263
1996	1490.0	0.0526	0.0526
1972	1120.0	0.0789	0.0789
1965	1100.0	0.1053	0.1053
1986	1100.0	0.1316	0.1316
1975	1020.0	0.1579	0.1579
1991	981.0	0.1842	0.1842
1981	906.0	0.2105	0.2105
1967	862.0	0.2368	0.2368
1971	825.0	0.2632	0.2632
1976	786.0	0.2895	0.2895
1969	772.0	0.3158	0.3158
1973	700.0	0.3421	0.3421
1985	695.0	0.3684	0.3684
1983	690.0	0.3947	0.3947
1992	690.0	0.4211	0.4211
1998	665.0	0.4474	0.4474
1968	664.0	0.4737	0.4737
1997	620.0	0.5000	0.5000
1993	603.0	0.5263	0.5263
1974	600.0	0.5526	0.5526
1999	568.0	0.5789	0.5789
1988	563.0	0.6053	0.6053
1980	555.0	0.6316	0.6316
1966	522.0	0.6579	0.6579
1982	515.0	0.6842	0.6842
1984	497.0	0.7105	0.7105
1977	487.0	0.7368	0.7368
1970	476.0	0.7632	0.7632
1987	474.0	0.7895	0.7895
1978	455.0	0.8158	0.8158
1964	433.0	0.8421	0.8421
1990	394.0	0.8684	0.8684
1994	391.0	0.8947	0.8947
1995	318.0	0.9211	0.9211
1989	307.0	0.9474	0.9474
2000	291.0	0.9737	0.9737



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