

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

Station - 05380970 CAWLEY CREEK NEAR NEILLSVILLE, WI
 2002 MAR 13 09:02:57

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

Number of peaks in record	=	40
Peaks not used in analysis	=	0
Systematic peaks in analysis	=	40
Historic peaks in analysis	=	0
Years of historic record	=	0
Generalized skew	=	-0.328
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.	262.0
WCF163I-NO HIGH OUTLIERS OR HISTORIC PEAKS EXCEEDED HHBASE.	14862.6

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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	3.2952	0.3270	-0.127
BULL.17B ESTIMATE	0.0	1.0000	3.2952	0.3270	-0.189

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	248.3	259.4	214.3	147.4	360.3
0.9900	308.6	319.3	275.4	191.6	434.9
0.9500	550.0	556.9	522.4	382.6	721.3
0.9000	741.4	744.6	718.2	543.9	942.0
0.8000	1055.0	1052.0	1039.0	817.4	1303.0
0.5000	2021.0	2005.0	2021.0	1657.0	2468.0
0.2000	3741.0	3734.0	3792.0	3028.0	4839.0
0.1000	5093.0	5123.0	5230.0	4021.0	6908.0
0.0400	7010.0	7129.0	7345.0	5352.0	10060.0
0.0200	8571.0	8795.0	9137.0	6390.0	12780.0
0.0100	10230.0	10600.0	11120.0	7462.0	15800.0
0.0050	12000.0	12540.0	13320.0	8572.0	19130.0
0.0020	14500.0	15350.0	16600.0	10100.0	24040.0
0.6667	1455.3	(1.50-year flood)			
0.4292	2311.5	(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
1961	1500.0		1981	2760.0	
1962	1150.0		1982	795.0	
1963	970.0		1983	3840.0	
1964	300.0		1984	3000.0	
1965	1330.0		1985	760.0	
1966	1450.0		1986	7880.0	
1967	3400.0		1987	2850.0	
1968	1430.0		1988	3050.0	
1969	4850.0		1989	2100.0	
1970	1600.0		1990	1700.0	
1971	1790.0		1991	1700.0	
1972	2840.0		1992	5400.0	
1973	3080.0		1993	7000.0	
1974	1200.0		1994	1600.0	
1975	2400.0		1995	630.0	
1976	1760.0		1996	1420.0	
1977	880.0		1997	2540.0	
1978	7400.0		1998	1120.0	
1979	2060.0		1999	500.0	
1980	7000.0		2000	3830.0	

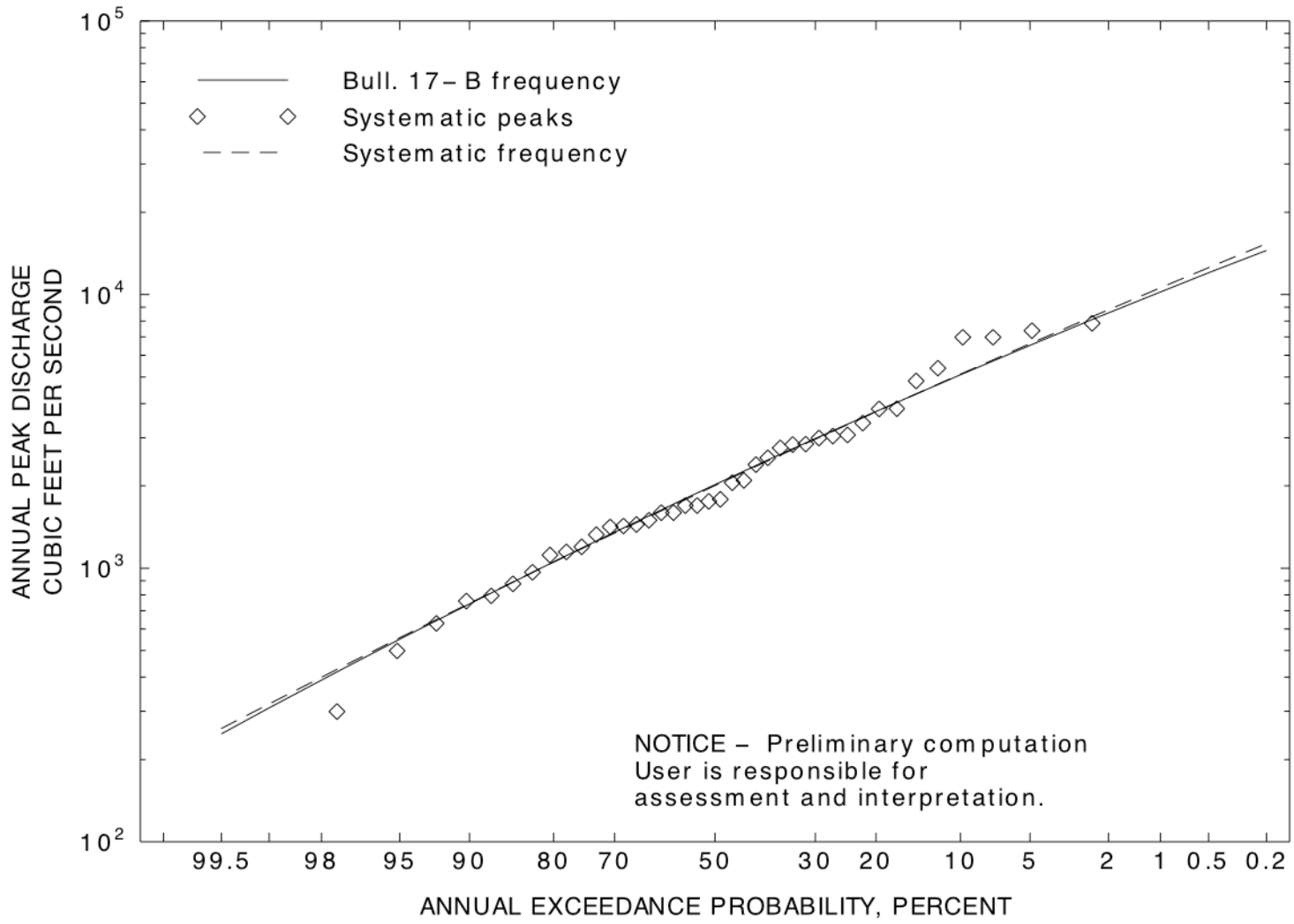
Explanation of peak discharge qualification codes

PEAKFQ	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
1986	7880.0	0.0244	0.0244
1978	7400.0	0.0488	0.0488
1980	7000.0	0.0732	0.0732
1993	7000.0	0.0976	0.0976
1992	5400.0	0.1220	0.1220
1969	4850.0	0.1463	0.1463
1983	3840.0	0.1707	0.1707
2000	3830.0	0.1951	0.1951
1967	3400.0	0.2195	0.2195
1973	3080.0	0.2439	0.2439
1988	3050.0	0.2683	0.2683
1984	3000.0	0.2927	0.2927
1987	2850.0	0.3171	0.3171
1972	2840.0	0.3415	0.3415
1981	2760.0	0.3659	0.3659
1997	2540.0	0.3902	0.3902
1975	2400.0	0.4146	0.4146
1989	2100.0	0.4390	0.4390
1979	2060.0	0.4634	0.4634
1971	1790.0	0.4878	0.4878
1976	1760.0	0.5122	0.5122
1990	1700.0	0.5366	0.5366
1991	1700.0	0.5610	0.5610
1970	1600.0	0.5854	0.5854
1994	1600.0	0.6098	0.6098
1961	1500.0	0.6341	0.6341
1966	1450.0	0.6585	0.6585
1968	1430.0	0.6829	0.6829
1996	1420.0	0.7073	0.7073
1965	1330.0	0.7317	0.7317
1974	1200.0	0.7561	0.7561
1962	1150.0	0.7805	0.7805
1998	1120.0	0.8049	0.8049
1963	970.0	0.8293	0.8293
1977	880.0	0.8537	0.8537
1982	795.0	0.8780	0.8780
1985	760.0	0.9024	0.9024
1995	630.0	0.9268	0.9268
1999	500.0	0.9512	0.9512
1964	300.0	0.9756	0.9756



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