

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

Station - 05403700 DELL CREEK NEAR LAKE DELTON, WI
 2002 MAR 13 09:03:09

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

Number of peaks in record	=	41
Peaks not used in analysis	=	0
Systematic peaks in analysis	=	41
Historic peaks in analysis	=	0
Years of historic record	=	0
Generalized skew	=	-0.387
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.	1789.1
WCF195I-NO LOW OUTLIERS WERE DETECTED BELOW CRITERION.	48.0

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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	2.4671	0.2918	0.530
BULL.17B ESTIMATE	0.0	1.0000	2.4671	0.2918	0.205

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	59.1	72.4	54.0	39.3	79.4
0.9900	68.0	80.0	63.3	46.5	89.8
0.9500	101.1	108.4	97.5	74.5	127.3
0.9000	125.9	129.9	123.1	96.3	155.1
0.8000	165.6	164.8	163.6	132.0	199.5
0.5000	286.5	276.3	286.5	240.1	341.3
0.2000	512.0	503.7	519.1	425.3	641.1
0.1000	702.8	713.9	722.7	568.9	923.1
0.0400	995.2	1064.0	1048.0	776.0	1390.0
0.0200	1253.0	1399.0	1349.0	950.0	1829.0
0.0100	1547.0	1807.0	1710.0	1142.0	2355.0
0.0050	1882.0	2304.0	2143.0	1353.0	2983.0
0.0020	2397.0	3129.0	2852.0	1667.0	3994.0
0.6667	215.7	(1.50-year flood)			
0.4292	322.6	(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
1958	98.0		1979	168.0	
1959	753.0		1980	1110.0	
1960	485.0		1983	260.0	
1961	236.0		1984	240.0	
1962	307.0		1985	300.0	
1963	411.0		1986	159.0	
1964	142.0		1987	135.0	
1965	992.0		1988	107.0	
1966	200.0		1989	190.0	
1967	317.0		1990	117.0	
1968	1130.0		1991	130.0	
1969	252.0		1992	1200.0	
1970	225.0		1993	270.0	
1971	250.0		1994	284.0	
1972	276.0		1995	167.0	
1973	586.0		1996	327.0	
1974	357.0		1997	139.0	
1975	662.0		1998	298.0	
1976	562.0		1999	192.0	
1977	173.0		2000	588.0	
1978	457.0				

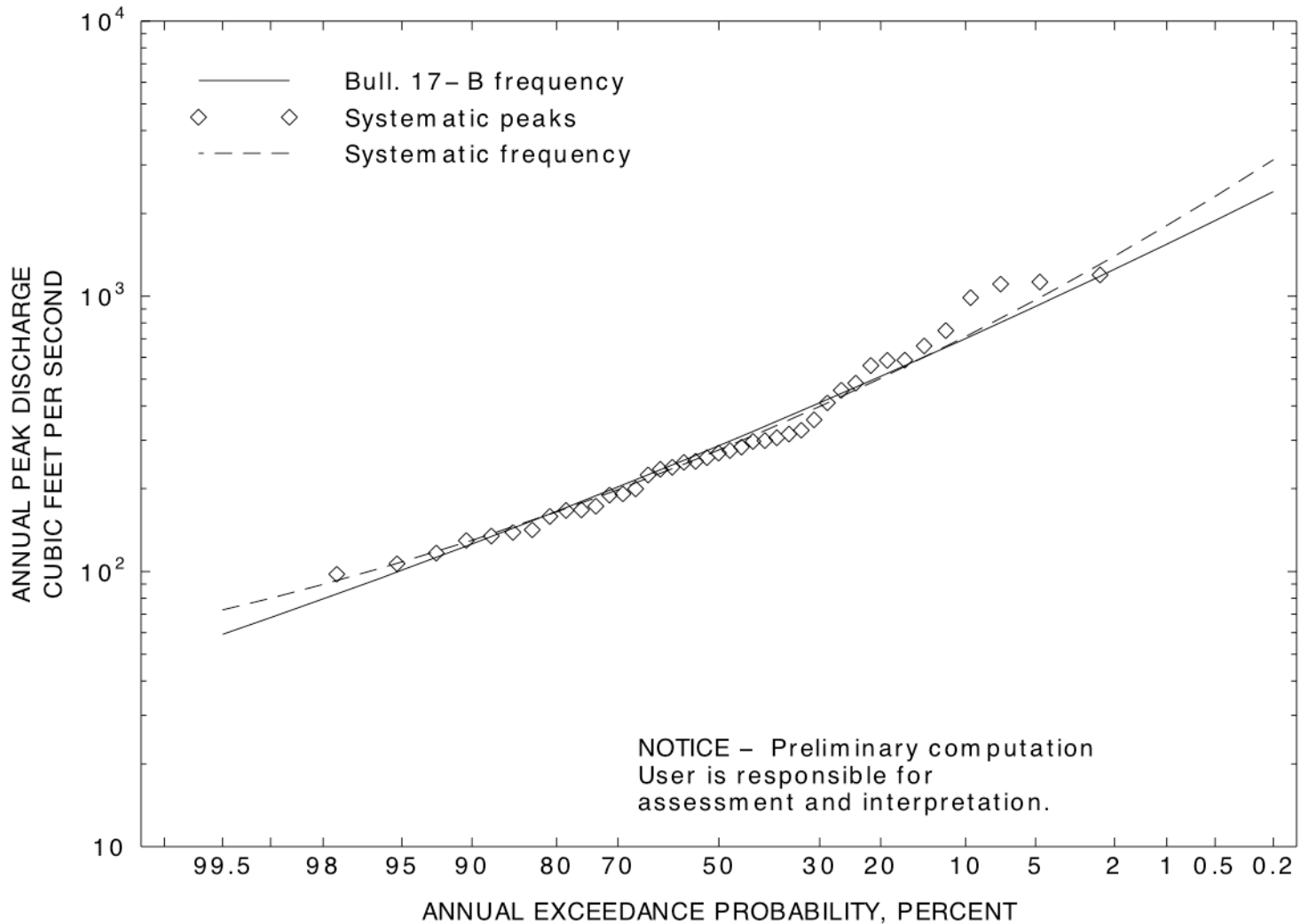
Explanation of peak discharge qualification codes

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
1992	1200.0	0.0238	0.0238
1968	1130.0	0.0476	0.0476
1980	1110.0	0.0714	0.0714
1965	992.0	0.0952	0.0952
1959	753.0	0.1190	0.1190
1975	662.0	0.1429	0.1429
2000	588.0	0.1667	0.1667
1973	586.0	0.1905	0.1905
1976	562.0	0.2143	0.2143
1960	485.0	0.2381	0.2381
1978	457.0	0.2619	0.2619
1963	411.0	0.2857	0.2857
1974	357.0	0.3095	0.3095
1996	327.0	0.3333	0.3333
1967	317.0	0.3571	0.3571
1962	307.0	0.3810	0.3810
1985	300.0	0.4048	0.4048
1998	298.0	0.4286	0.4286
1994	284.0	0.4524	0.4524
1972	276.0	0.4762	0.4762
1993	270.0	0.5000	0.5000
1983	260.0	0.5238	0.5238
1969	252.0	0.5476	0.5476
1971	250.0	0.5714	0.5714
1984	240.0	0.5952	0.5952
1961	236.0	0.6190	0.6190
1970	225.0	0.6429	0.6429
1966	200.0	0.6667	0.6667
1999	192.0	0.6905	0.6905
1989	190.0	0.7143	0.7143
1977	173.0	0.7381	0.7381
1979	168.0	0.7619	0.7619
1995	167.0	0.7857	0.7857
1986	159.0	0.8095	0.8095
1964	142.0	0.8333	0.8333
1997	139.0	0.8571	0.8571
1987	135.0	0.8810	0.8810
1991	130.0	0.9048	0.9048
1990	117.0	0.9286	0.9286
1988	107.0	0.9524	0.9524
1958	98.0	0.9762	0.9762



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