

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

Station - 04085300 NESHOTA RIVER TRIBUTARY NEAR DENMARK, WI
 2002 MAR 13 09:02:38

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

Number of peaks in record	=	34
Peaks not used in analysis	=	0
Systematic peaks in analysis	=	34
Historic peaks in analysis	=	0
Years of historic record	=	0
Generalized skew	=	-0.301
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
WCF198I-LOW OUTLIERS BELOW FLOOD BASE WERE DROPPED.	1	24.2
WCF163I-NO HIGH OUTLIERS OR HISTORIC PEAKS EXCEEDED HHBASE.		1165.1

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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	2.2613	0.3358	-0.444
BULL.17B ESTIMATE	24.2	0.9706	2.2768	0.3040	-0.101

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	--	18.1	--	--	--
0.9900	--	23.6	--	--	--
0.9500	58.6	46.8	55.6	40.5	76.7
0.9000	76.6	65.8	74.0	55.8	97.2
0.8000	105.3	97.4	103.6	81.1	130.1
0.5000	191.4	193.2	191.4	156.5	234.3
0.2000	342.0	353.7	347.4	276.7	444.7
0.1000	460.2	470.5	474.4	362.9	629.7
0.0400	628.5	623.6	663.6	478.5	914.8
0.0200	766.6	739.1	826.8	569.1	1164.0
0.0100	914.9	854.5	1011.0	663.2	1445.0
0.0050	1074.0	969.8	1219.0	761.3	1758.0
0.0020	1302.0	1122.0	1536.0	897.5	2228.0
0.6667	141.3	(1.50-year flood)			
0.4292	216.8	(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
1959	390.0		1976	260.0	
1960	430.0		1977	165.0	
1961	250.0		1978	140.0	
1962	245.0		1979	224.0	
1963	250.0		1980	285.0	
1964	50.0		1981	250.0	
1965	22.0		1982	290.0	
1966	330.0		1983	60.0	
1967	250.0		1984	255.0	
1968	110.0		1985	190.0	
1969	520.0		1986	560.0	
1970	120.0		1987	65.0	
1971	80.0		1988	145.0	
1972	75.0		1989	100.0	
1973	300.0		1990	1040.0	
1974	105.0		1991	190.0	
1975	215.0		1992	140.0	

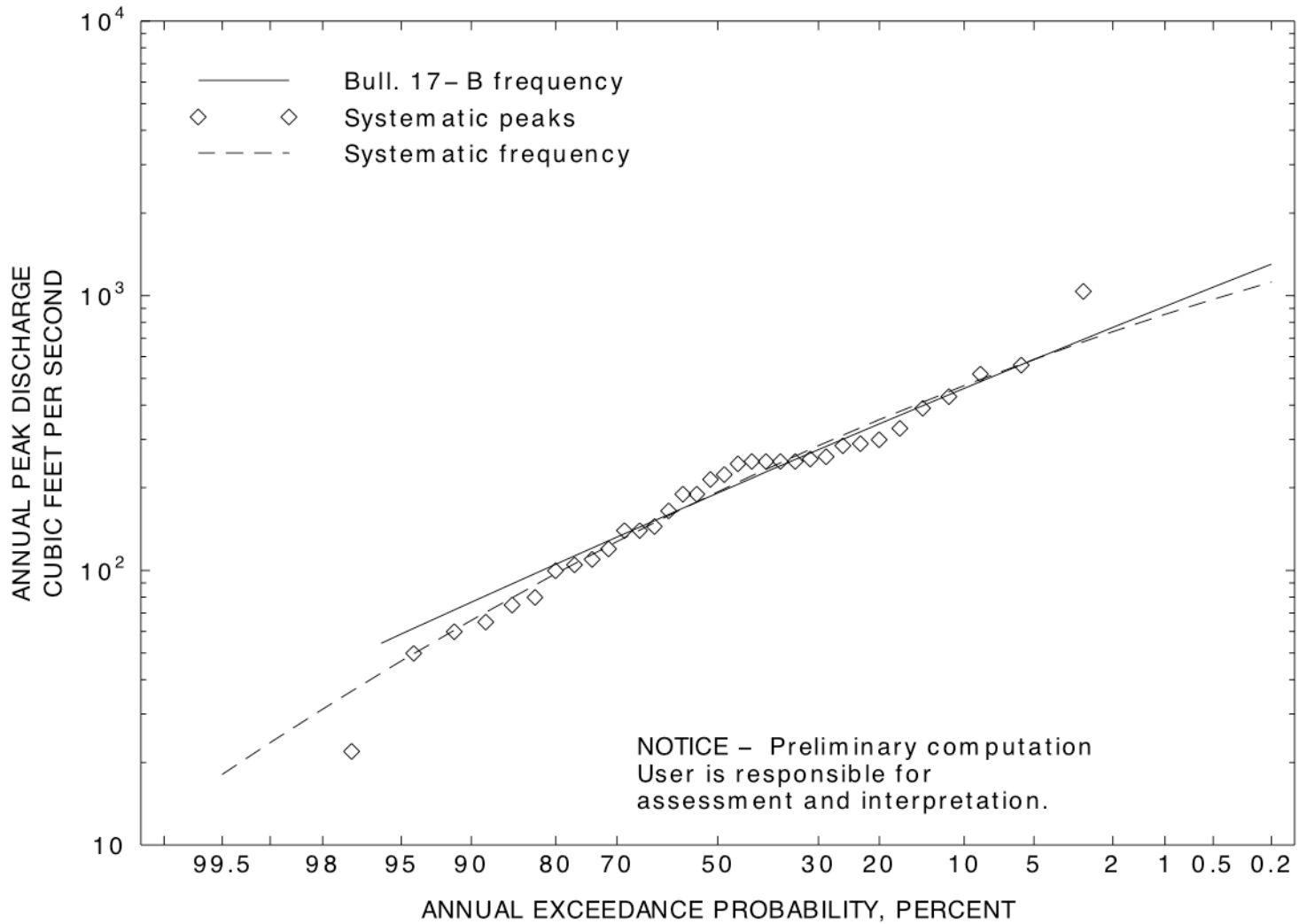
Explanation of peak discharge qualification codes

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
1990	1040.0	0.0286	0.0286
1986	560.0	0.0571	0.0571
1969	520.0	0.0857	0.0857
1960	430.0	0.1143	0.1143
1959	390.0	0.1429	0.1429
1966	330.0	0.1714	0.1714
1973	300.0	0.2000	0.2000
1982	290.0	0.2286	0.2286
1980	285.0	0.2571	0.2571
1976	260.0	0.2857	0.2857
1984	255.0	0.3143	0.3143
1961	250.0	0.3429	0.3429
1963	250.0	0.3714	0.3714
1967	250.0	0.4000	0.4000
1981	250.0	0.4286	0.4286
1962	245.0	0.4571	0.4571
1979	224.0	0.4857	0.4857
1975	215.0	0.5143	0.5143
1985	190.0	0.5429	0.5429
1991	190.0	0.5714	0.5714
1977	165.0	0.6000	0.6000
1988	145.0	0.6286	0.6286
1978	140.0	0.6571	0.6571
1992	140.0	0.6857	0.6857
1970	120.0	0.7143	0.7143
1968	110.0	0.7429	0.7429
1974	105.0	0.7714	0.7714
1989	100.0	0.8000	0.8000
1971	80.0	0.8286	0.8286
1972	75.0	0.8571	0.8571
1987	65.0	0.8857	0.8857
1983	60.0	0.9143	0.9143
1964	50.0	0.9429	0.9429
1965	22.0	0.9714	0.9714



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