

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

Station - 04069500 PESHTIGO RIVER AT PESHTIGO, WI
 2002 MAR 13 09:02:31

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

Number of peaks in record	=	47
Peaks not used in analysis	=	1
Systematic peaks in analysis	=	46
Historic peaks in analysis	=	0
Years of historic record	=	0
Generalized skew	=	-0.217
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. *****

**WCF109W-PEAKS WITH MINUS-FLAGGED DISCHARGES WERE BYPASSED.	1
**WCF113W-NUMBER OF SYSTEMATIC PEAKS HAS BEEN REDUCED TO NSYS =	46
WCF134I-NO SYSTEMATIC PEAKS WERE BELOW GAGE BASE.	0.0
WCF195I-NO LOW OUTLIERS WERE DETECTED BELOW CRITERION.	1734.8
WCF163I-NO HIGH OUTLIERS OR HISTORIC PEAKS EXCEEDED HHBASE.	10652.0
WCF002J-CALCS COMPLETED. RETURN CODE = 2	

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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	3.6333	0.1440	0.102
BULL.17B ESTIMATE	0.0	1.0000	3.6333	0.1440	0.013

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	1837.0	1889.0	1752.0	1505.0	2126.0
0.9900	1993.0	2038.0	1921.0	1659.0	2284.0
0.9500	2494.0	2516.0	2451.0	2160.0	2785.0
0.9000	2812.0	2821.0	2781.0	2482.0	3102.0
0.8000	3251.0	3247.0	3233.0	2929.0	3547.0
0.5000	4296.0	4275.0	4296.0	3959.0	4661.0
0.2000	5682.0	5673.0	5714.0	5208.0	6307.0
0.1000	6579.0	6598.0	6653.0	5962.0	7453.0
0.0400	7694.0	7772.0	7851.0	6863.0	8942.0
0.0200	8514.0	8650.0	8760.0	7508.0	10070.0
0.0100	9327.0	9533.0	9687.0	8135.0	11220.0
0.0050	10140.0	10430.0	10640.0	8752.0	12390.0
0.0020	11220.0	11640.0	11960.0	9561.0	13980.0
0.6667	3725.0	(1.50-year flood)			
0.4292	4557.1	(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
1954	4380.0		1978	3230.0	
1955	3360.0		1979	-5330.0	K
1956	3920.0		1980	4780.0	
1957	3680.0		1981	4670.0	
1958	3290.0		1982	4030.0	
1959	4400.0		1983	4410.0	
1960	9790.0		1984	3220.0	
1961	3750.0		1985	3720.0	
1962	4020.0		1986	5030.0	
1963	3140.0		1987	2840.0	
1964	3240.0		1988	3240.0	
1965	6440.0		1989	3240.0	
1966	3470.0		1990	5250.0	
1967	7280.0		1991	4020.0	
1968	4860.0		1992	4430.0	
1969	6880.0		1993	5880.0	
1970	6720.0		1994	3290.0	
1971	5690.0		1995	2710.0	
1972	5920.0		1996	5660.0	
1973	7550.0		1997	5010.0	
1974	3960.0		1998	5510.0	
1975	5130.0		1999	2350.0	
1976	6380.0		2000	1900.0	
1977	3110.0				

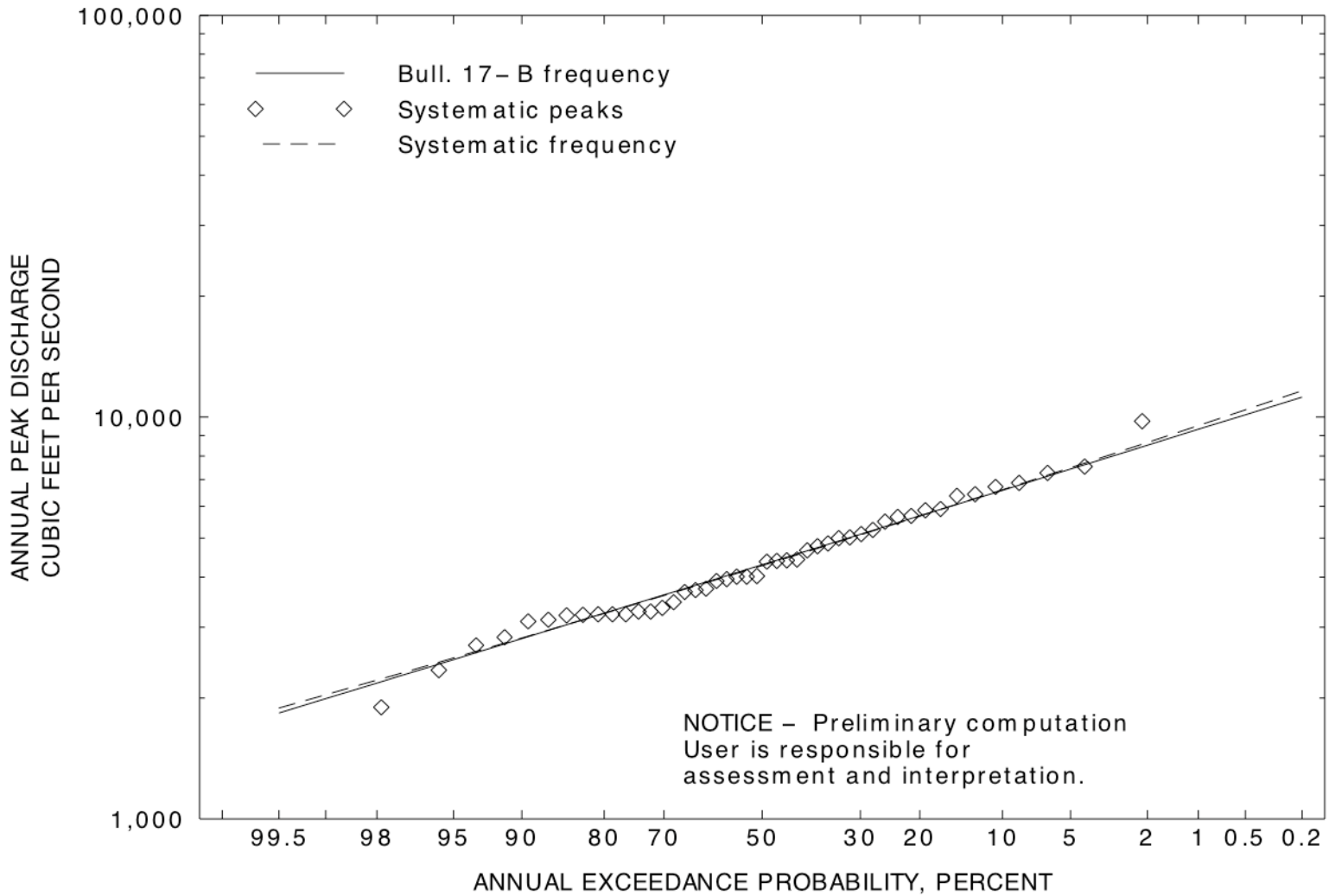
Explanation of peak discharge qualification codes

PEAKFQ	WATSTORE	DEFINITION
CODE	CODE	
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
1960	9790.0	0.0213	0.0213
1973	7550.0	0.0426	0.0426
1967	7280.0	0.0638	0.0638
1969	6880.0	0.0851	0.0851
1970	6720.0	0.1064	0.1064
1965	6440.0	0.1277	0.1277
1976	6380.0	0.1489	0.1489
1972	5920.0	0.1702	0.1702
1993	5880.0	0.1915	0.1915
1971	5690.0	0.2128	0.2128
1996	5660.0	0.2340	0.2340
1998	5510.0	0.2553	0.2553
1990	5250.0	0.2766	0.2766
1975	5130.0	0.2979	0.2979
1986	5030.0	0.3191	0.3191
1997	5010.0	0.3404	0.3404
1968	4860.0	0.3617	0.3617
1980	4780.0	0.3830	0.3830
1981	4670.0	0.4043	0.4043
1992	4430.0	0.4255	0.4255
1983	4410.0	0.4468	0.4468
1959	4400.0	0.4681	0.4681
1954	4380.0	0.4894	0.4894
1982	4030.0	0.5106	0.5106
1962	4020.0	0.5319	0.5319
1991	4020.0	0.5532	0.5532
1974	3960.0	0.5745	0.5745
1956	3920.0	0.5957	0.5957
1961	3750.0	0.6170	0.6170
1985	3720.0	0.6383	0.6383
1957	3680.0	0.6596	0.6596
1966	3470.0	0.6809	0.6809
1955	3360.0	0.7021	0.7021
1958	3290.0	0.7234	0.7234
1994	3290.0	0.7447	0.7447
1964	3240.0	0.7660	0.7660
1988	3240.0	0.7872	0.7872
1989	3240.0	0.8085	0.8085
1978	3230.0	0.8298	0.8298
1984	3220.0	0.8511	0.8511
1963	3140.0	0.8723	0.8723
1977	3110.0	0.8936	0.8936
1987	2840.0	0.9149	0.9149
1995	2710.0	0.9362	0.9362
1999	2350.0	0.9574	0.9574
2000	1900.0	0.9787	0.9787
1979	-5330.0	--	--



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