

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

Station - 05404000 WISCONSIN RIVER NEAR WISCONSIN DELLS, WI
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I N P U T D A T A S U M M A R Y

Number of peaks in record	=	86
Peaks not used in analysis	=	0
Systematic peaks in analysis	=	86
Historic peaks in analysis	=	0
Years of historic record	=	0
Generalized skew	=	0.000
Standard error of generalized skew	=	0.550
Skew option	=	STATION SKEW
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	8101.0		
WCF163I-NO HIGH OUTLIERS OR HISTORIC PEAKS EXCEEDED HHBASE.		119119.0		
*WCF151I-17B WEIGHTED SKEW REPLACED BY USER OPTION.	-0.562	-0.764	-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	4.5051	0.2011	-0.897
BULL.17B ESTIMATE	8101.0	0.9884	4.5092	0.1923	-0.764

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	--	6632.0	--	--	--
0.9900	--	8142.0	--	--	--
0.9500	14350.0	13530.0	14090.0	12430.0	16140.0
0.9000	17880.0	17210.0	17690.0	15870.0	19760.0
0.8000	22830.0	22400.0	22720.0	20730.0	24860.0
0.5000	34150.0	34250.0	34150.0	31570.0	37020.0
0.2000	47200.0	47520.0	47330.0	43270.0	52110.0
0.1000	54280.0	54440.0	54550.0	49360.0	60700.0
0.0400	61730.0	61420.0	62210.0	55610.0	69960.0
0.0200	66370.0	65610.0	67020.0	59460.0	75840.0
0.0100	70380.0	69090.0	71200.0	62740.0	80960.0
0.0050	73870.0	72020.0	74840.0	65580.0	85470.0
0.0020	77850.0	75220.0	79040.0	68800.0	90630.0
0.6667	28057.9	(1.50-year flood)			
0.4292	36940.2	(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
1915	19000.0		1958	12000.0	K
1916	47800.0		1959	49900.0	K
1917	20800.0		1960	70500.0	K
1918	36000.0		1961	28000.0	K
1919	27100.0		1962	27500.0	K
1920	43700.0		1963	24600.0	K
1921	31200.0		1964	13600.0	K
1922	59000.0		1965	52600.0	K
1923	35700.0		1966	33100.0	K
1924	30400.0		1967	49100.0	K
1925	18600.0		1968	40400.0	K
1926	48100.0		1969	49600.0	K
1927	33900.0		1970	25000.0	K
1928	51800.0		1971	36900.0	K
1929	47300.0		1972	48900.0	K
1930	40200.0		1973	70200.0	K
1931	7590.0		1974	21400.0	K
1932	24700.0		1975	29200.0	K
1933	17600.0		1976	44200.0	
1934	23200.0		1977	8460.0	
1935	43900.0	K	1978	28900.0	K
1936	25600.0	K	1979	36900.0	K
1937	25400.0	K	1980	45100.0	
1938	71100.0	K	1981	28700.0	
1939	33100.0	K	1982	40500.0	
1940	53200.0	K	1983	49400.0	
1941	42700.0	K	1984	38600.0	
1942	51900.0	K	1985	29600.0	
1943	57600.0	K	1986	53400.0	
1944	23100.0	K	1987	40600.0	
1945	31800.0	K	1988	13800.0	
1946	39700.0	K	1989	26100.0	
1947	22200.0	K	1990	44700.0	
1948	22100.0	K	1991	36600.0	K
1949	11800.0	K	1992	33300.0	K
1950	33500.0	K	1993	59100.0	K
1951	51900.0	K	1994	31200.0	K
1952	34000.0	K	1995	27300.0	K
1953	22600.0	K	1996	44900.0	K
1954	27000.0	K	1997	37700.0	K
1955	30100.0	K	1998	33600.0	K
1956	30100.0	K	1999	23800.0	K
1957	9740.0	K	2000	23900.0	K

Explanation of peak discharge qualification codes

PEAKFQ WATSTORE

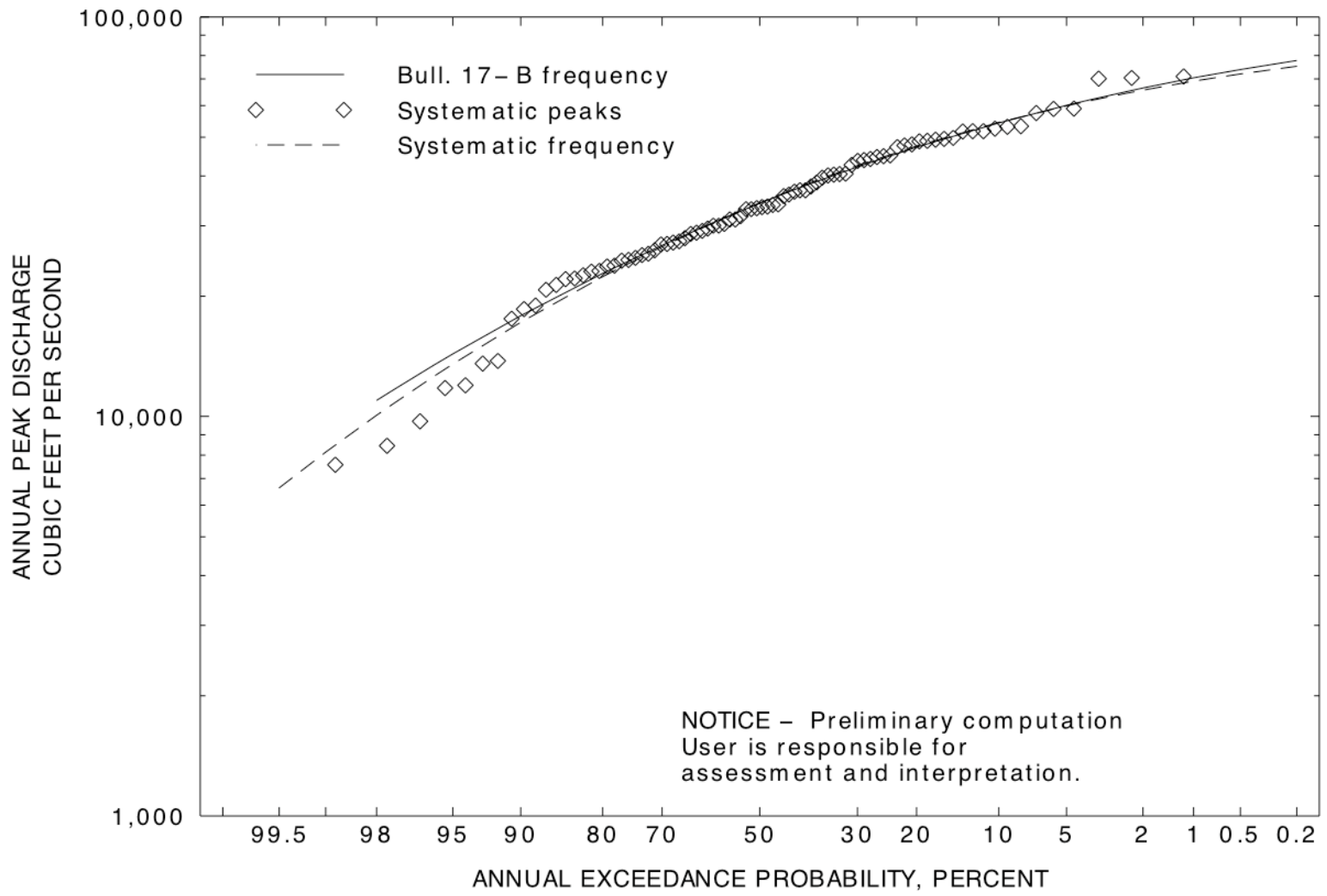
CODE	CODE	DEFINITION
D	3	Dam failure, non-recurrent flow anomaly
G	8	Discharge greater than stated value
X	3+8	Both of the above
L	4	Discharge less than stated value
K	6 OR C	Known effect of regulation or urbanization
H	7	Historic peak

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EMPIRICAL FREQUENCY CURVES -- WEIBULL PLOTTING POSITIONS

WATER YEAR	RANKED DISCHARGE	SYSTEMATIC RECORD	BULL.17B ESTIMATE
1938	71100.0	0.0115	0.0115
1960	70500.0	0.0230	0.0230
1973	70200.0	0.0345	0.0345
1993	59100.0	0.0460	0.0460
1922	59000.0	0.0575	0.0575
1943	57600.0	0.0690	0.0690
1986	53400.0	0.0805	0.0805
1940	53200.0	0.0920	0.0920
1965	52600.0	0.1034	0.1034
1942	51900.0	0.1149	0.1149
1951	51900.0	0.1264	0.1264
1928	51800.0	0.1379	0.1379
1959	49900.0	0.1494	0.1494
1969	49600.0	0.1609	0.1609
1983	49400.0	0.1724	0.1724
1967	49100.0	0.1839	0.1839
1972	48900.0	0.1954	0.1954
1926	48100.0	0.2069	0.2069
1916	47800.0	0.2184	0.2184
1929	47300.0	0.2299	0.2299
1980	45100.0	0.2414	0.2414
1996	44900.0	0.2529	0.2529
1990	44700.0	0.2644	0.2644
1976	44200.0	0.2759	0.2759
1935	43900.0	0.2874	0.2874
1920	43700.0	0.2989	0.2989
1941	42700.0	0.3103	0.3103
1987	40600.0	0.3218	0.3218
1982	40500.0	0.3333	0.3333
1968	40400.0	0.3448	0.3448
1930	40200.0	0.3563	0.3563
1946	39700.0	0.3678	0.3678
1984	38600.0	0.3793	0.3793
1997	37700.0	0.3908	0.3908
1971	36900.0	0.4023	0.4023
1979	36900.0	0.4138	0.4138
1991	36600.0	0.4253	0.4253
1918	36000.0	0.4368	0.4368
1923	35700.0	0.4483	0.4483
1952	34000.0	0.4598	0.4598
1927	33900.0	0.4713	0.4713
1998	33600.0	0.4828	0.4828
1950	33500.0	0.4943	0.4943
1992	33300.0	0.5057	0.5057
1939	33100.0	0.5172	0.5172
1966	33100.0	0.5287	0.5287
1945	31800.0	0.5402	0.5402
1921	31200.0	0.5517	0.5517

1994	31200.0	0.5632	0.5632
1924	30400.0	0.5747	0.5747
1955	30100.0	0.5862	0.5862
1956	30100.0	0.5977	0.5977
1985	29600.0	0.6092	0.6092
1975	29200.0	0.6207	0.6207
1978	28900.0	0.6322	0.6322
1981	28700.0	0.6437	0.6437
1961	28000.0	0.6552	0.6552
1962	27500.0	0.6667	0.6667
1995	27300.0	0.6782	0.6782
1919	27100.0	0.6897	0.6897
1954	27000.0	0.7011	0.7011
1989	26100.0	0.7126	0.7126
1936	25600.0	0.7241	0.7241
1937	25400.0	0.7356	0.7356
1970	25000.0	0.7471	0.7471
1932	24700.0	0.7586	0.7586
1963	24600.0	0.7701	0.7701
2000	23900.0	0.7816	0.7816
1999	23800.0	0.7931	0.7931
1934	23200.0	0.8046	0.8046
1944	23100.0	0.8161	0.8161
1953	22600.0	0.8276	0.8276
1947	22200.0	0.8391	0.8391
1948	22100.0	0.8506	0.8506
1974	21400.0	0.8621	0.8621
1917	20800.0	0.8736	0.8736
1915	19000.0	0.8851	0.8851
1925	18600.0	0.8966	0.8966
1933	17600.0	0.9080	0.9080
1988	13800.0	0.9195	0.9195
1964	13600.0	0.9310	0.9310
1958	12000.0	0.9425	0.9425
1949	11800.0	0.9540	0.9540
1957	9740.0	0.9655	0.9655
1977	8460.0	0.9770	0.9770
1931	7590.0	0.9885	0.9885



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