

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

Station - 05401500 WISCONSIN RIVER NEAR NECEDAH, WI
 2002 JUL 10 11:21:12

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	7474.1	
WCF163I-NO HIGH OUTLIERS OR HISTORIC PEAKS EXCEEDED HHBASE.		118294.9	
*WCF151I-17B WEIGHTED SKEW REPLACED BY USER OPTION.	-0.469	-0.621	-1

Station - 05401500 WISCONSIN RIVER NEAR NECEDAH, WI
 2002 JUL 10 11:21:12

ANNUAL FREQUENCY CURVE PARAMETERS -- LOG-PEARSON TYPE III

	FLOOD BASE		LOGARITHMIC		
	DISCHARGE	EXCEEDANCE PROBABILITY	MEAN	STANDARD DEVIATION	SKEW
SYSTEMATIC RECORD	0.0	1.0000	4.4863	0.2066	-0.776
BULL.17B ESTIMATE	7474.1	0.9884	4.4907	0.1971	-0.621

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	--	6403.0	--	--	--
0.9900	--	7804.0	--	--	--
0.9500	13660.0	12800.0	13430.0	11810.0	15400.0
0.9000	16930.0	16230.0	16750.0	14990.0	18750.0
0.8000	21550.0	21120.0	21450.0	19510.0	23530.0
0.5000	32430.0	32570.0	32430.0	29920.0	35210.0
0.2000	45670.0	46050.0	45820.0	41790.0	50560.0
0.1000	53290.0	53460.0	53590.0	48300.0	59830.0
0.0400	61710.0	61310.0	62280.0	55340.0	70360.0
0.0200	67210.0	66210.0	68010.0	59860.0	77380.0
0.0100	72160.0	70450.0	73200.0	63880.0	83770.0
0.0050	76630.0	74150.0	77920.0	67490.0	89610.0
0.0020	81950.0	78360.0	83620.0	71740.0	96630.0
0.6667	26521.1	(1.50-year flood)			
0.4292	35161.0	(2.33-year flood)			

Station - 05401500 WISCONSIN RIVER NEAR NECEDAH, WI
 2002 JUL 10 11:21:12

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	18500.0		1958	12700.0	
1916	43000.0		1959	49400.0	
1917	17700.0		1960	64600.0	
1918	31300.0		1961	35900.0	
1919	25000.0		1962	26600.0	
1920	41300.0		1963	22800.0	
1921	29100.0		1964	17100.0	
1922	55300.0		1965	51600.0	
1923	35000.0		1966	36900.0	
1924	28600.0		1967	52400.0	
1925	14500.0		1968	39800.0	
1926	39000.0		1969	45600.0	
1927	34800.0		1970	24600.0	
1928	45700.0		1971	40300.0	
1929	42500.0		1972	45700.0	
1930	31700.0		1973	58300.0	
1931	7960.0		1974	22600.0	
1932	24600.0		1975	31000.0	
1933	16600.0		1976	45900.0	
1934	19500.0		1977	9400.0	
1935	43200.0		1978	26100.0	
1936	27300.0		1979	33800.0	
1937	21800.0		1980	54700.0	
1938	59800.0		1981	27200.0	
1939	32300.0		1982	39400.0	
1940	48100.0		1983	57400.0	
1941	49900.0		1984	38300.0	
1942	52800.0		1985	24100.0	
1943	49100.0		1986	57800.0	
1944	24000.0	K	1987	45400.0	
1945	30300.0	K	1988	17600.0	
1946	30600.0	K	1989	32600.0	
1947	20800.0	K	1990	54700.0	
1948	18300.0	K	1991	39200.0	
1949	11700.0	K	1992	25700.0	
1950	33300.0	K	1993	62400.0	
1951	49500.0		1994	23700.0	
1952	24200.0		1995	25900.0	
1953	23300.0		1996	45200.0	
1954	23400.0		1997	46100.0	
1955	23900.0		1998	33000.0	
1956	24200.0		1999	20400.0	
1957	7010.0		2000	16500.0	

Explanation of peak discharge qualification codes

PEAKFQ WATSTORE

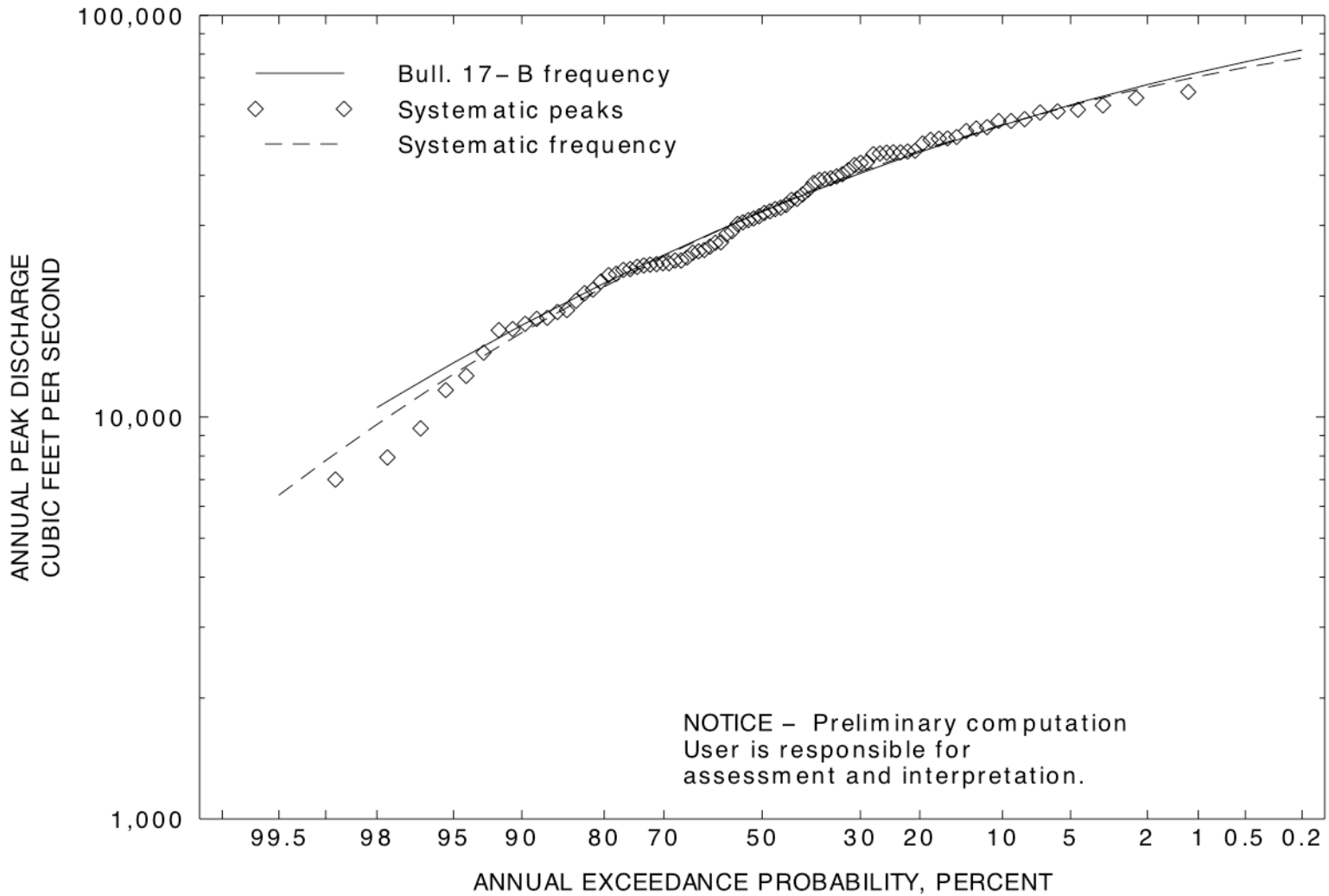
CODE	CODE	DEFINITION
D	3	Dam failure, non-recurrent flow anomaly
G	8	Discharge greater than stated value
X	3+8	Both of the above
L	4	Discharge less than stated value
K	6 OR C	Known effect of regulation or urbanization
H	7	Historic peak

Station - 05401500 WISCONSIN RIVER NEAR NECEDAH, WI
2002 JUL 10 11:21:12

EMPIRICAL FREQUENCY CURVES -- WEIBULL PLOTTING POSITIONS

WATER YEAR	RANKED DISCHARGE	SYSTEMATIC RECORD	BULL.17B ESTIMATE
1960	64600.0	0.0115	0.0115
1993	62400.0	0.0230	0.0230
1938	59800.0	0.0345	0.0345
1973	58300.0	0.0460	0.0460
1986	57800.0	0.0575	0.0575
1983	57400.0	0.0690	0.0690
1922	55300.0	0.0805	0.0805
1980	54700.0	0.0920	0.0920
1990	54700.0	0.1034	0.1034
1942	52800.0	0.1149	0.1149
1967	52400.0	0.1264	0.1264
1965	51600.0	0.1379	0.1379
1941	49900.0	0.1494	0.1494
1951	49500.0	0.1609	0.1609
1959	49400.0	0.1724	0.1724
1943	49100.0	0.1839	0.1839
1940	48100.0	0.1954	0.1954
1997	46100.0	0.2069	0.2069
1976	45900.0	0.2184	0.2184
1928	45700.0	0.2299	0.2299
1972	45700.0	0.2414	0.2414
1969	45600.0	0.2529	0.2529
1987	45400.0	0.2644	0.2644
1996	45200.0	0.2759	0.2759
1935	43200.0	0.2874	0.2874
1916	43000.0	0.2989	0.2989
1929	42500.0	0.3103	0.3103
1920	41300.0	0.3218	0.3218
1971	40300.0	0.3333	0.3333
1968	39800.0	0.3448	0.3448
1982	39400.0	0.3563	0.3563
1991	39200.0	0.3678	0.3678
1926	39000.0	0.3793	0.3793
1984	38300.0	0.3908	0.3908
1966	36900.0	0.4023	0.4023
1961	35900.0	0.4138	0.4138
1923	35000.0	0.4253	0.4253
1927	34800.0	0.4368	0.4368
1979	33800.0	0.4483	0.4483
1950	33300.0	0.4598	0.4598
1998	33000.0	0.4713	0.4713
1989	32600.0	0.4828	0.4828
1939	32300.0	0.4943	0.4943
1930	31700.0	0.5057	0.5057
1918	31300.0	0.5172	0.5172
1975	31000.0	0.5287	0.5287
1946	30600.0	0.5402	0.5402
1945	30300.0	0.5517	0.5517

1921	29100.0	0.5632	0.5632
1924	28600.0	0.5747	0.5747
1936	27300.0	0.5862	0.5862
1981	27200.0	0.5977	0.5977
1962	26600.0	0.6092	0.6092
1978	26100.0	0.6207	0.6207
1995	25900.0	0.6322	0.6322
1992	25700.0	0.6437	0.6437
1919	25000.0	0.6552	0.6552
1932	24600.0	0.6667	0.6667
1970	24600.0	0.6782	0.6782
1952	24200.0	0.6897	0.6897
1956	24200.0	0.7011	0.7011
1985	24100.0	0.7126	0.7126
1944	24000.0	0.7241	0.7241
1955	23900.0	0.7356	0.7356
1994	23700.0	0.7471	0.7471
1954	23400.0	0.7586	0.7586
1953	23300.0	0.7701	0.7701
1963	22800.0	0.7816	0.7816
1974	22600.0	0.7931	0.7931
1937	21800.0	0.8046	0.8046
1947	20800.0	0.8161	0.8161
1999	20400.0	0.8276	0.8276
1934	19500.0	0.8391	0.8391
1915	18500.0	0.8506	0.8506
1948	18300.0	0.8621	0.8621
1917	17700.0	0.8736	0.8736
1988	17600.0	0.8851	0.8851
1964	17100.0	0.8966	0.8966
1933	16600.0	0.9080	0.9080
2000	16500.0	0.9195	0.9195
1925	14500.0	0.9310	0.9310
1958	12700.0	0.9425	0.9425
1949	11700.0	0.9540	0.9540
1977	9400.0	0.9655	0.9655
1931	7960.0	0.9770	0.9770
1957	7010.0	0.9885	0.9885



NOTICE - Preliminary computation
 User is responsible for
 assessment and interpretation.

Station - 05401500 WISCONSIN RIVER NEAR NECEDAH, WI
 2002 JUL 10 11:21:12