

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

Station - 05360500 FLAMBEAU RIVER NEAR BRUCE, 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	=	74
Peaks not used in analysis	=	0
Systematic peaks in analysis	=	74
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	
WCF195I-NO LOW OUTLIERS WERE DETECTED BELOW CRITERION.		3326.4	
WCF163I-NO HIGH OUTLIERS OR HISTORIC PEAKS EXCEEDED HHBASE.		32588.0	
*WCF151I-17B WEIGHTED SKEW REPLACED BY USER OPTION.	0.000	-0.001	-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	4.0175	0.1702	-0.001
BULL.17B ESTIMATE	0.0	1.0000	4.0175	0.1702	-0.001

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	3794.0	3794.0	3666.0	3175.0	4365.0
0.9900	4184.0	4184.0	4072.0	3549.0	4765.0
0.9500	5465.0	5465.0	5394.0	4802.0	6070.0
0.9000	6301.0	6301.0	6250.0	5632.0	6918.0
0.8000	7487.0	7487.0	7457.0	6811.0	8128.0
0.5000	10410.0	10410.0	10410.0	9653.0	11230.0
0.2000	14480.0	14480.0	14540.0	13340.0	15920.0
0.1000	17200.0	17200.0	17340.0	15670.0	19250.0
0.0400	20670.0	20670.0	20980.0	18550.0	23650.0
0.0200	23280.0	23280.0	23760.0	20650.0	27050.0
0.0100	25900.0	25900.0	26610.0	22740.0	30530.0
0.0050	28560.0	28560.0	29560.0	24830.0	34130.0
0.0020	32150.0	32150.0	33630.0	27600.0	39070.0
0.6667	8796.4	( 1.50-year flood )			
0.4292	11164.6	( 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
1927	10200.0	K	1964	5340.0	K
1928	9900.0	K	1965	10500.0	K
1929	8810.0	K	1966	9620.0	K
1930	6920.0	K	1967	17000.0	K
1931	6580.0	K	1968	11900.0	K
1932	9080.0	K	1969	10200.0	K
1933	6210.0	K	1970	10000.0	K
1934	8610.0	K	1971	12700.0	K
1935	9950.0	K	1972	10800.0	K
1936	13400.0	K	1973	12300.0	K
1937	6610.0	K	1974	8250.0	K
1938	12240.0	K	1975	11800.0	K
1939	12100.0	K	1976	9920.0	K
1940	6650.0	K	1977	10500.0	K
1941	22100.0	K	1978	8970.0	K
1942	7280.0	K	1979	11900.0	K
1943	22000.0	K	1980	8610.0	K
1944	12500.0	K	1981	10700.0	K
1945	16600.0	K	1982	15800.0	K
1946	23000.0	K	1983	11900.0	K
1947	7960.0	K	1984	8200.0	K
1948	5350.0	K	1985	10000.0	K
1949	17400.0	K	1986	17600.0	K
1950	16000.0	K	1987	8310.0	K
1951	17500.0	K	1988	5630.0	K
1952	11000.0	K	1989	5330.0	K
1953	12000.0	K	1990	7710.0	K
1954	17400.0	K	1991	9150.0	K
1955	8100.0	K	1992	12500.0	K
1956	7150.0	K	1993	16500.0	K
1957	4710.0	K	1994	24100.0	K
1958	14000.0	K	1995	11000.0	K
1959	10600.0	K	1996	17900.0	K
1960	13600.0	K	1997	16200.0	K
1961	9830.0	K	1998	13100.0	K
1962	5030.0	K	1999	7110.0	K
1963	4610.0	K	2000	8690.0	K

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

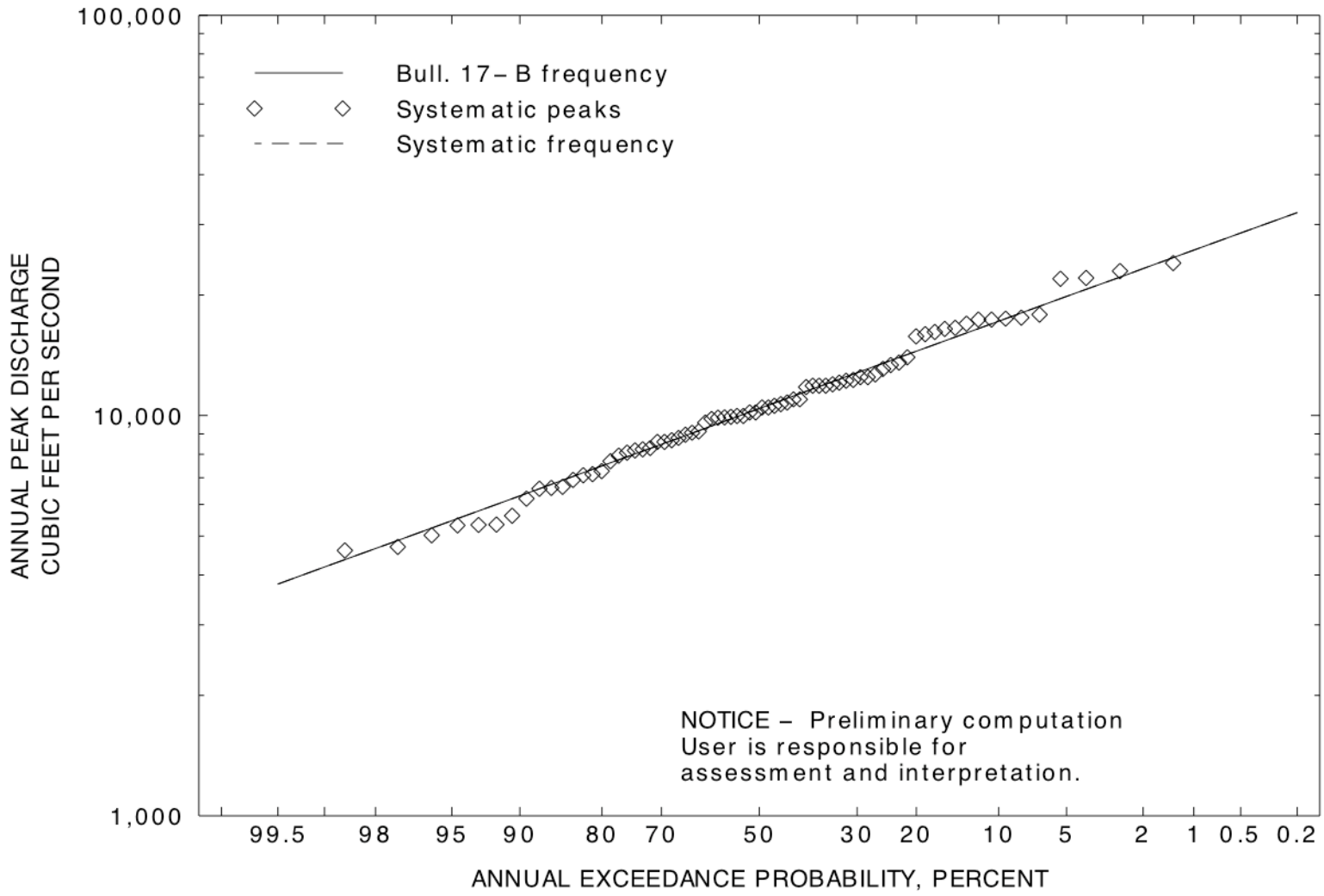
K 6 OR C Known effect of regulation or urbanization  
H 7 Historic peak

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EMPIRICAL FREQUENCY CURVES -- WEIBULL PLOTTING POSITIONS

WATER YEAR	RANKED DISCHARGE	SYSTEMATIC RECORD	BULL.17B ESTIMATE
1994	24100.0	0.0133	0.0133
1946	23000.0	0.0267	0.0267
1941	22100.0	0.0400	0.0400
1943	22000.0	0.0533	0.0533
1996	17900.0	0.0667	0.0667
1986	17600.0	0.0800	0.0800
1951	17500.0	0.0933	0.0933
1949	17400.0	0.1067	0.1067
1954	17400.0	0.1200	0.1200
1967	17000.0	0.1333	0.1333
1945	16600.0	0.1467	0.1467
1993	16500.0	0.1600	0.1600
1997	16200.0	0.1733	0.1733
1950	16000.0	0.1867	0.1867
1982	15800.0	0.2000	0.2000
1958	14000.0	0.2133	0.2133
1960	13600.0	0.2267	0.2267
1936	13400.0	0.2400	0.2400
1998	13100.0	0.2533	0.2533
1971	12700.0	0.2667	0.2667
1944	12500.0	0.2800	0.2800
1992	12500.0	0.2933	0.2933
1973	12300.0	0.3067	0.3067
1938	12240.0	0.3200	0.3200
1939	12100.0	0.3333	0.3333
1953	12000.0	0.3467	0.3467
1968	11900.0	0.3600	0.3600
1979	11900.0	0.3733	0.3733
1983	11900.0	0.3867	0.3867
1975	11800.0	0.4000	0.4000
1952	11000.0	0.4133	0.4133
1995	11000.0	0.4267	0.4267
1972	10800.0	0.4400	0.4400
1981	10700.0	0.4533	0.4533
1959	10600.0	0.4667	0.4667
1965	10500.0	0.4800	0.4800
1977	10500.0	0.4933	0.4933
1927	10200.0	0.5067	0.5067
1969	10200.0	0.5200	0.5200
1970	10000.0	0.5333	0.5333
1985	10000.0	0.5467	0.5467
1935	9950.0	0.5600	0.5600
1976	9920.0	0.5733	0.5733
1928	9900.0	0.5867	0.5867
1961	9830.0	0.6000	0.6000
1966	9620.0	0.6133	0.6133
1991	9150.0	0.6267	0.6267
1932	9080.0	0.6400	0.6400

1978	8970.0	0.6533	0.6533
1929	8810.0	0.6667	0.6667
2000	8690.0	0.6800	0.6800
1934	8610.0	0.6933	0.6933
1980	8610.0	0.7067	0.7067
1987	8310.0	0.7200	0.7200
1974	8250.0	0.7333	0.7333
1984	8200.0	0.7467	0.7467
1955	8100.0	0.7600	0.7600
1947	7960.0	0.7733	0.7733
1990	7710.0	0.7867	0.7867
1942	7280.0	0.8000	0.8000
1956	7150.0	0.8133	0.8133
1999	7110.0	0.8267	0.8267
1930	6920.0	0.8400	0.8400
1940	6650.0	0.8533	0.8533
1937	6610.0	0.8667	0.8667
1931	6580.0	0.8800	0.8800
1933	6210.0	0.8933	0.8933
1988	5630.0	0.9067	0.9067
1948	5350.0	0.9200	0.9200
1964	5340.0	0.9333	0.9333
1989	5330.0	0.9467	0.9467
1962	5030.0	0.9600	0.9600
1957	4710.0	0.9733	0.9733
1963	4610.0	0.9867	0.9867



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