

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

Station - 05396000 RIB RIVER AT RIB FALLS, WI  
 2002 MAR 15 14:49:28

I N P U T   D A T A   S U M M A R Y

Number of peaks in record	=	33
Peaks not used in analysis	=	0
Systematic peaks in analysis	=	32
Historic peaks in analysis	=	1
Years of historic record	=	95
Generalized skew	=	-0.269
Standard error of generalized skew	=	0.550
Skew option	=	WEIGHTED
Gage base discharge	=	0.0
User supplied high outlier threshold	=	23800.0
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.		1103.7
*WCF161I-USER HIGH OUTLIER CRITERION REPLACES 17B.	23800.0	38160.4
WCF165I-HIGH OUTLIERS AND HISTORIC PEAKS ABOVE HHBASE.	0 1	23800.0

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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	3.8122	0.2969	-0.601
BULL.17B ESTIMATE	0.0	1.0000	3.8182	0.2979	-0.480

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	827.4	762.0	669.7	457.9	1237.0
0.9900	1053.0	986.2	897.2	617.6	1517.0
0.9500	1954.0	1899.0	1826.0	1323.0	2584.0
0.9000	2657.0	2617.0	2550.0	1918.0	3387.0
0.8000	3774.0	3757.0	3701.0	2902.0	4666.0
0.5000	6949.0	6947.0	6949.0	5678.0	8546.0
0.2000	11840.0	11660.0	12010.0	9556.0	15480.0
0.1000	15190.0	14740.0	15580.0	12000.0	20750.0
0.0400	19390.0	18450.0	20240.0	14910.0	27830.0
0.0200	22450.0	21040.0	23750.0	16950.0	33250.0
0.0100	25420.0	23470.0	27300.0	18880.0	38710.0
0.0050	28310.0	25750.0	30860.0	20720.0	44180.0
0.0020	32020.0	28580.0	35630.0	23040.0	51430.0
0.6667	5132.0	( 1.50-year flood )			
0.4292	7854.6	( 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
-1938	23800.0	H	1942	19100.0	
1925	2500.0		1943	11700.0	
1926	15200.0		1944	2860.0	
1927	5960.0		1945	6620.0	
1928	10400.0		1946	6420.0	
1929	10400.0		1947	4180.0	
1930	7660.0		1948	3030.0	
1931	1130.0		1949	3820.0	
1932	10300.0		1950	4440.0	
1933	4430.0		1951	9400.0	
1934	13300.0		1952	5430.0	
1935	11300.0		1953	11200.0	
1936	18000.0		1954	4960.0	
1937	4510.0		1955	4750.0	
1939	7590.0		1956	6500.0	
1940	8580.0		1957	1560.0	
1941	16000.0				

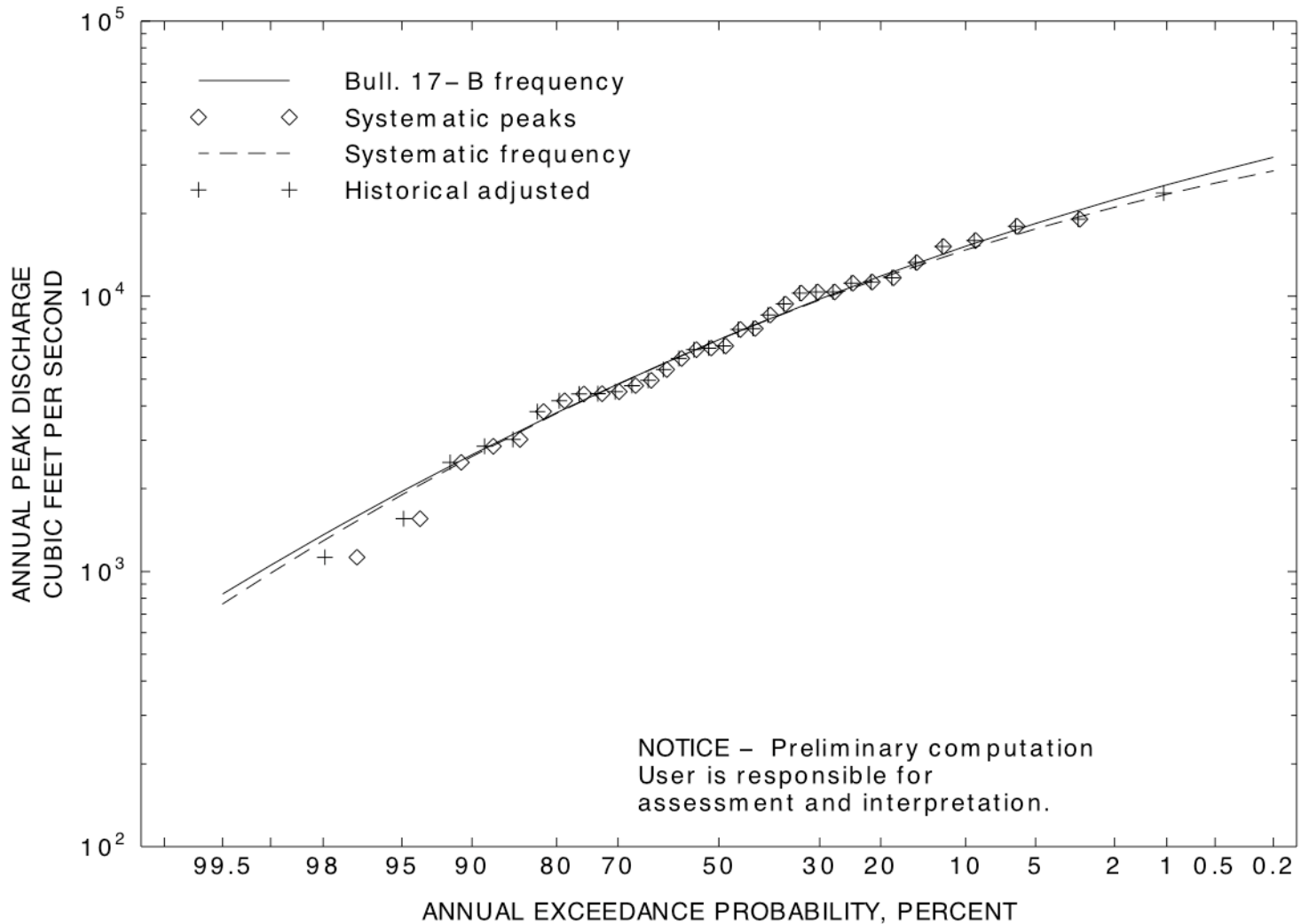
Explanation of peak discharge qualification codes

PEAKFQ CODE	WATSTORE 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	23800.0	--	0.0104
1942	19100.0	0.0303	0.0309
1936	18000.0	0.0606	0.0615
1941	16000.0	0.0909	0.0921
1926	15200.0	0.1212	0.1227
1934	13300.0	0.1515	0.1533
1943	11700.0	0.1818	0.1839
1935	11300.0	0.2121	0.2145
1953	11200.0	0.2424	0.2451
1928	10400.0	0.2727	0.2757
1929	10400.0	0.3030	0.3063
1932	10300.0	0.3333	0.3369
1951	9400.0	0.3636	0.3675
1940	8580.0	0.3939	0.3981
1930	7660.0	0.4242	0.4287
1939	7590.0	0.4545	0.4593
1945	6620.0	0.4848	0.4899
1956	6500.0	0.5152	0.5205
1946	6420.0	0.5455	0.5511
1927	5960.0	0.5758	0.5817
1952	5430.0	0.6061	0.6123
1954	4960.0	0.6364	0.6429
1955	4750.0	0.6667	0.6735
1937	4510.0	0.6970	0.7041
1950	4440.0	0.7273	0.7347
1933	4430.0	0.7576	0.7653
1947	4180.0	0.7879	0.7959
1949	3820.0	0.8182	0.8265
1948	3030.0	0.8485	0.8571
1944	2860.0	0.8788	0.8877
1925	2500.0	0.9091	0.9183
1957	1560.0	0.9394	0.9489
1931	1130.0	0.9697	0.9795



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ANNUAL EXCEEDANCE PROBABILITY, PERCENT  
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