

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

Station - 05369945 EAU GALLE R @ LOW-WTR BRIDGE @ SPRING VALLEY, WI  
 2002 MAR 13 09:02:55

I N P U T   D A T A   S U M M A R Y

Number of peaks in record	=	12
Peaks not used in analysis	=	0
Systematic peaks in analysis	=	12
Historic peaks in analysis	=	0
Years of historic record	=	0
Generalized skew	=	-0.374
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. \*\*\*\*\*

WCF134I-NO SYSTEMATIC PEAKS WERE BELOW GAGE BASE.		0.0
WCF198I-LOW OUTLIERS BELOW FLOOD BASE WERE DROPPED.	1	455.2
WCF163I-NO HIGH OUTLIERS OR HISTORIC PEAKS EXCEEDED HHBASE.		8775.7
**WCF233W-EXPECTED PROB OUT OF RANGE AT TAB PROB.	0.00008	0.00200
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	3.3662	0.3318	-0.905
BULL.17B ESTIMATE	455.2	0.9167	3.4036	0.2594	-0.254

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	--	172.3	--	--	--
0.9900	--	242.0	--	--	--
0.9500	--	561.4	--	--	--
0.9000	1161.0	835.6	1058.0	673.7	1608.0
0.8000	1546.0	1292.0	1477.0	1004.0	2071.0
0.5000	2598.0	2604.0	2598.0	1925.0	3530.0
0.2000	4213.0	4463.0	4374.0	3141.0	6517.0
0.1000	5349.0	5579.0	5749.0	3881.0	9092.0
0.0400	6829.0	6799.0	7773.0	4764.0	12930.0
0.0200	7951.0	7571.0	9518.0	5393.0	16160.0
0.0100	9084.0	8237.0	11510.0	6000.0	19680.0
0.0050	10230.0	8813.0	13800.0	6593.0	23490.0
0.0020	11770.0	9457.0	--	7360.0	28970.0
0.6667	2000.3	( 1.50-year flood )			
0.4292	2890.7	( 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
1982	2650.0		1990	3850.0	
1983	1520.0		1991	2580.0	
1986	6000.0		1992	2230.0	
1987	1510.0		1993	5050.0	
1988	411.0		1994	1110.0	
1989	2460.0		1995	5420.0	

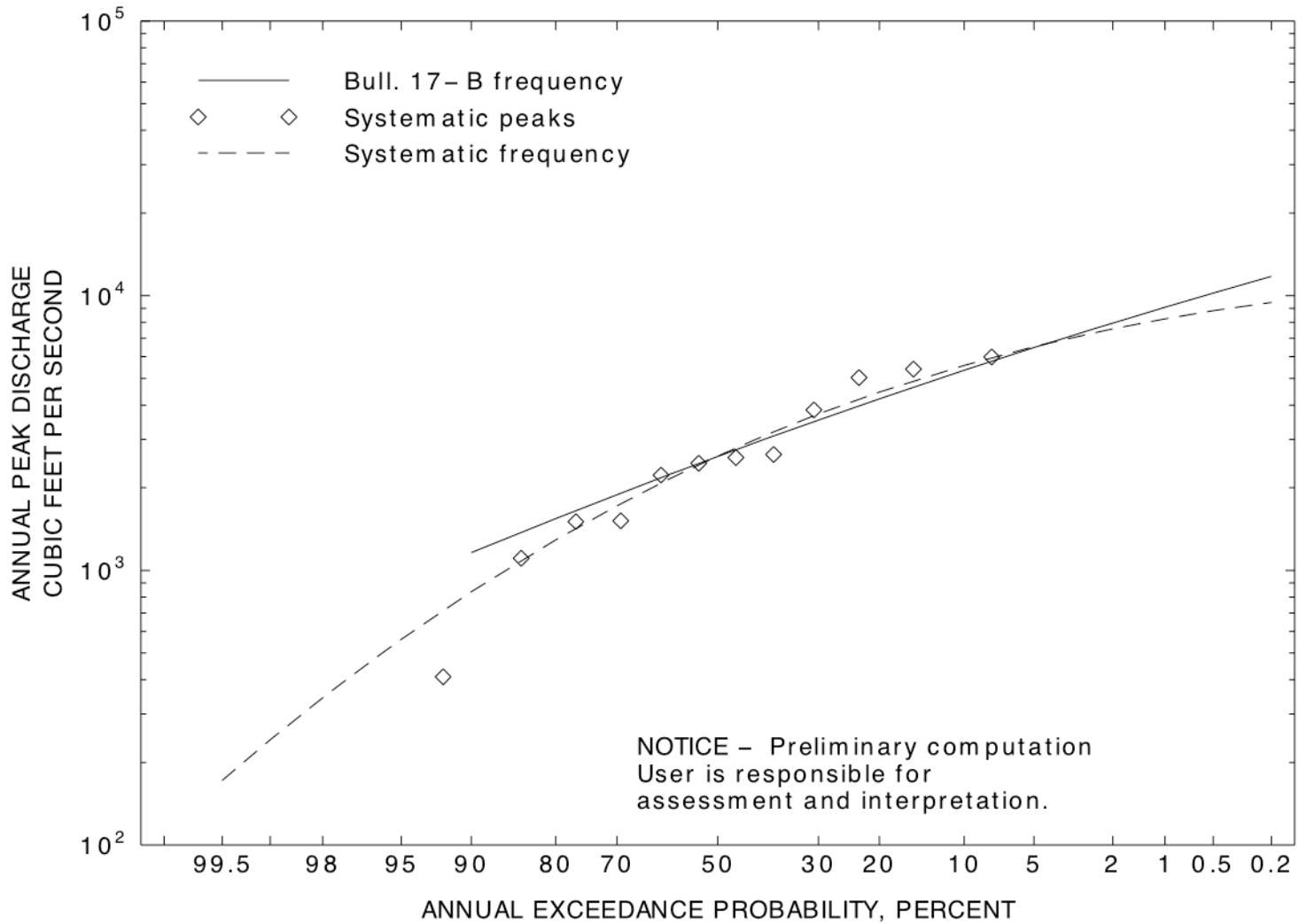
Explanation of peak discharge qualification codes

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

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EMPIRICAL FREQUENCY CURVES -- WEIBULL PLOTTING POSITIONS

WATER YEAR	RANKED DISCHARGE	SYSTEMATIC RECORD	BULL.17B ESTIMATE
1986	6000.0	0.0769	0.0769
1995	5420.0	0.1538	0.1538
1993	5050.0	0.2308	0.2308
1990	3850.0	0.3077	0.3077
1982	2650.0	0.3846	0.3846
1991	2580.0	0.4615	0.4615
1989	2460.0	0.5385	0.5385
1992	2230.0	0.6154	0.6154
1983	1520.0	0.6923	0.6923
1987	1510.0	0.7692	0.7692
1994	1110.0	0.8462	0.8462
1988	411.0	0.9231	0.9231



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