

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

Station - 05408800 BISHOPS BRANCH NEAR VIROQUA, WI
2002 MAR 13 09:03:13

I N P U T D A T A S U M M A R Y

Number of peaks in record	=	11
Peaks not used in analysis	=	0
Systematic peaks in analysis	=	11
Historic peaks in analysis	=	0
Years of historic record	=	0
Generalized skew	=	-0.398
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
WCF195I-NO LOW OUTLIERS WERE DETECTED BELOW CRITERION.	91.4
WCF163I-NO HIGH OUTLIERS OR HISTORIC PEAKS EXCEEDED HHBASE.	10735.9
**WCF233W-EXPECTED PROB OUT OF RANGE AT TAB PROB.	0.00005 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	2.9959	0.4957	-0.288
BULL.17B ESTIMATE	0.0	1.0000	2.9959	0.4957	-0.354

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	35.9	38.5	11.4	4.6	99.4
0.9900	52.0	54.8	22.3	8.1	132.1
0.9500	136.1	138.7	96.4	35.2	282.5
0.9000	221.3	222.5	180.5	72.5	422.6
0.8000	388.6	386.5	352.5	162.2	694.8
0.5000	1060.0	1046.0	1060.0	582.1	1970.0
0.2000	2626.0	2621.0	2833.0	1464.0	6390.0
0.1000	4068.0	4110.0	4696.0	2157.0	11940.0
0.0400	6316.0	6496.0	8141.0	3118.0	22850.0
0.0200	8271.0	8626.0	11710.0	3880.0	34250.0
0.0100	10440.0	11050.0	16410.0	4674.0	48760.0
0.0050	12820.0	13760.0	22530.0	5496.0	66700.0
0.0020	16290.0	17810.0	--	6626.0	96240.0
0.6667	641.5	(1.50-year flood)			
0.4292	1299.5	(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
1959	5800.0		1965	1380.0	
1960	2600.0		1966	1250.0	
1961	620.0		1967	2300.0	
1962	530.0		1968	2800.0	
1963	390.0		1969	350.0	
1964	120.0				

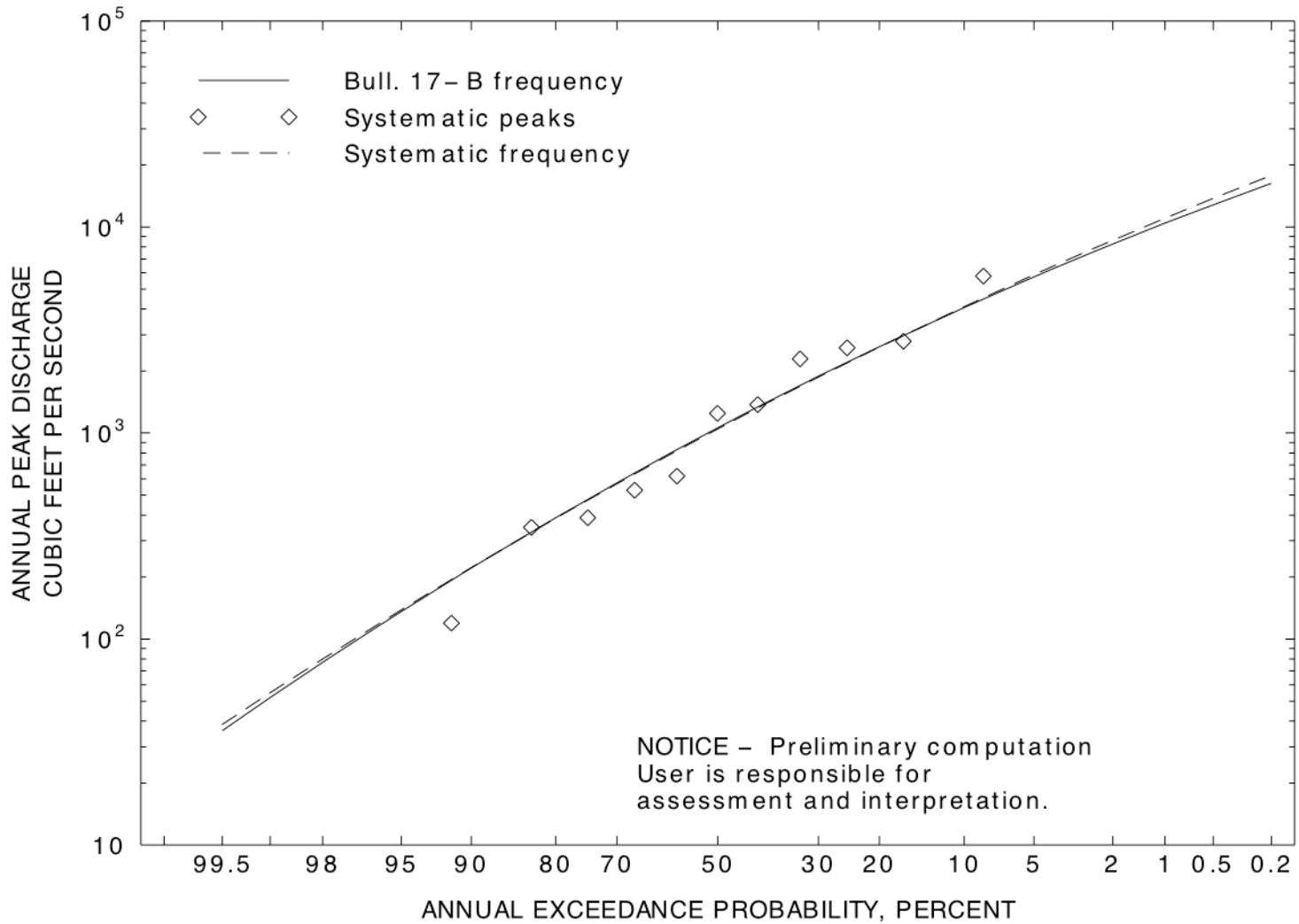
Explanation of peak discharge qualification codes

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
1959	5800.0	0.0833	0.0833
1968	2800.0	0.1667	0.1667
1960	2600.0	0.2500	0.2500
1967	2300.0	0.3333	0.3333
1965	1380.0	0.4167	0.4167
1966	1250.0	0.5000	0.5000
1961	620.0	0.5833	0.5833
1962	530.0	0.6667	0.6667
1963	390.0	0.7500	0.7500
1969	350.0	0.8333	0.8333
1964	120.0	0.9167	0.9167



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