

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

Station - 05371300 BY GOLLY CREEK NEAR NELSON, 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	=	18
Peaks not used in analysis	=	0
Systematic peaks in analysis	=	18
Historic peaks in analysis	=	0
Years of historic record	=	0
Generalized skew	=	-0.381
Standard error of generalized skew	=	0.550
Skew option	=	WEIGHTED
Gage base discharge	=	10.0
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. \*\*\*\*\*

WCF133I-SYSTEMATIC PEAKS BELOW GAGE BASE WERE NOTED.	8	10.0	
WCF163I-NO HIGH OUTLIERS OR HISTORIC PEAKS EXCEEDED HHBASE.		206.4	
WCF195I-NO LOW OUTLIERS WERE DETECTED BELOW CRITERION.		4.3	
**WCF199W-NUMBER OF PEAKS BELOW FLOOD BASE EXCEEDS 17B SPEC.	8	10.0	4
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	10.0	0.5556	0.9477	0.7102	-0.243
BULL.17B ESTIMATE	10.0	0.5556	0.9477	0.7102	-0.311

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
0.5000	10.0	10.0	10.0	5.2	19.6
0.2000	35.8	35.7	38.2	18.4	88.7
0.1000	67.8	68.8	76.7	32.6	200.5
0.0400	129.4	134.8	160.6	56.8	468.5
0.0200	193.0	205.3	259.3	79.5	797.6
0.0100	273.1	296.7	400.2	106.1	1271.0
0.0050	371.5	412.4	598.2	136.8	1925.0
0.0020	532.7	608.3	977.8	183.7	3138.0
0.6667	1.50-year flood below base				
0.4292	12.9 ( 2.33-year flood )				

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WATER YEAR	DISCHARGE	CODES	WATER YEAR	DISCHARGE	CODES
1962	12.0		1971	5.0	
1963	10.0	L	1972	10.0	L
1964	10.0	L	1973	10.0	L
1965	20.0		1975	154.0	
1966	11.0		1976	10.0	L
1967	12.0		1977	15.0	
1968	64.0		1978	95.0	
1969	10.0		1979	25.0	
1970	5.0	L	1980	48.0	

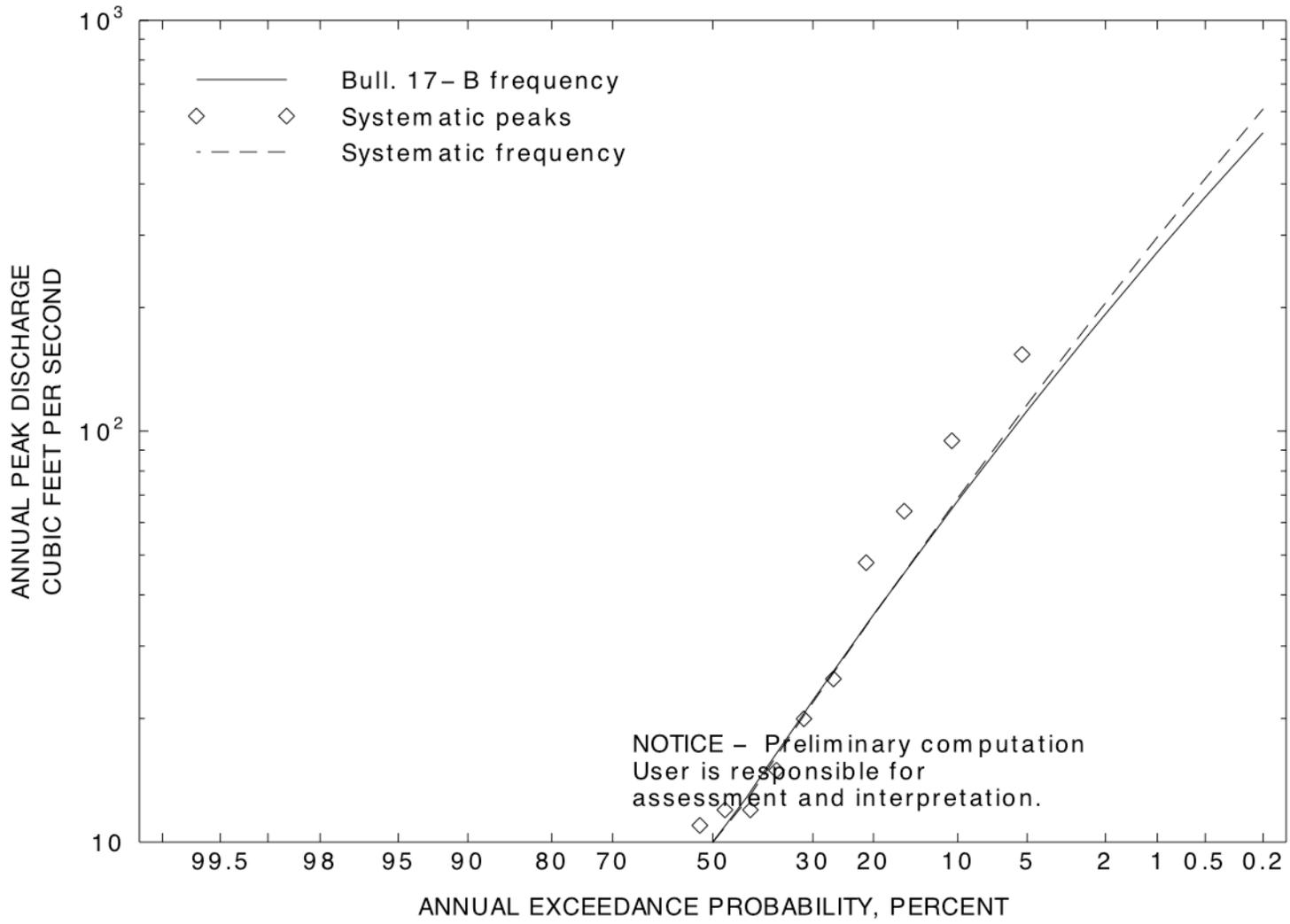
Explanation of peak discharge qualification codes

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
1975	154.0	0.0526	0.0526
1978	95.0	0.1053	0.1053
1968	64.0	0.1579	0.1579
1980	48.0	0.2105	0.2105
1979	25.0	0.2632	0.2632
1965	20.0	0.3158	0.3158
1977	15.0	0.3684	0.3684
1962	12.0	0.4211	0.4211
1967	12.0	0.4737	0.4737
1966	11.0	0.5263	0.5263
1963	10.0	--	--
1964	10.0	--	--
1969	10.0	--	--
1972	10.0	--	--
1973	10.0	--	--
1976	10.0	--	--
1970	5.0	--	--
1971	5.0	--	--



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