

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

Station - 04067800 ARMSTRONG CREEK NEAR ARMSTRONG CREEK, WI  
 2002 MAR 13 09:02:31

I N P U T   D A T A   S U M M A R Y

Number of peaks in record	=	35
Peaks not used in analysis	=	0
Systematic peaks in analysis	=	35
Historic peaks in analysis	=	0
Years of historic record	=	0
Generalized skew	=	-0.143
Standard error of generalized skew	=	0.550
Skew option	=	WEIGHTED
Gage base discharge	=	70.0
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.	6	70.0
WCF163I-NO HIGH OUTLIERS OR HISTORIC PEAKS EXCEEDED HHBASE.		307.3
WCF195I-NO LOW OUTLIERS WERE DETECTED BELOW CRITERION.		44.4

Station - 04067800 ARMSTRONG CREEK NEAR ARMSTRONG CREEK, WI  
 2002 MAR 13 09:02:31

ANNUAL FREQUENCY CURVE PARAMETERS -- LOG-PEARSON TYPE III

	FLOOD BASE		LOGARITHMIC		
	DISCHARGE	EXCEEDANCE PROBABILITY	MEAN	STANDARD DEVIATION	SKEW
SYSTEMATIC RECORD	70.0	0.8286	2.0273	0.1761	1.055
BULL.17B ESTIMATE	70.0	0.8286	2.0273	0.1761	0.488

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
0.8000	75.2	75.4	75.0	64.7	85.0
0.5000	103.0	99.3	103.0	91.7	115.5
0.2000	147.9	144.4	149.4	131.1	171.3
0.1000	182.1	183.4	186.2	158.6	218.5
0.0400	230.8	245.1	240.8	195.5	290.3
0.0200	271.2	301.4	288.7	224.9	353.3
0.0100	315.4	368.0	343.8	256.1	425.1
0.0050	363.9	446.9	407.9	289.4	506.7
0.0020	435.5	573.8	509.3	337.1	632.3
0.6667	87.3	( 1.50-year flood )			
0.4292	110.6	( 2.33-year flood )			

Station - 04067800 ARMSTRONG CREEK NEAR ARMSTRONG CREEK, WI  
 2002 MAR 13 09:02:31

I N P U T   D A T A   L I S T I N G

WATER YEAR	DISCHARGE	CODES	WATER YEAR	DISCHARGE	CODES
1958	90.0		1976	126.0	
1959	53.0		1977	86.0	
1960	215.0		1978	86.0	
1961	72.0		1979	160.0	
1962	100.0		1980	70.0	L
1963	90.0		1981	260.0	
1964	88.0		1982	94.0	
1965	99.0		1983	98.0	
1966	70.0	L	1984	91.0	
1967	102.0		1985	97.0	
1968	98.0		1986	152.0	
1969	90.0		1987	106.0	
1970	70.0	L	1988	70.0	L
1971	104.0		1989	70.0	L
1972	145.0		1990	91.0	
1973	125.0		1991	172.0	
1974	81.0		1992	287.0	
1975	260.0				

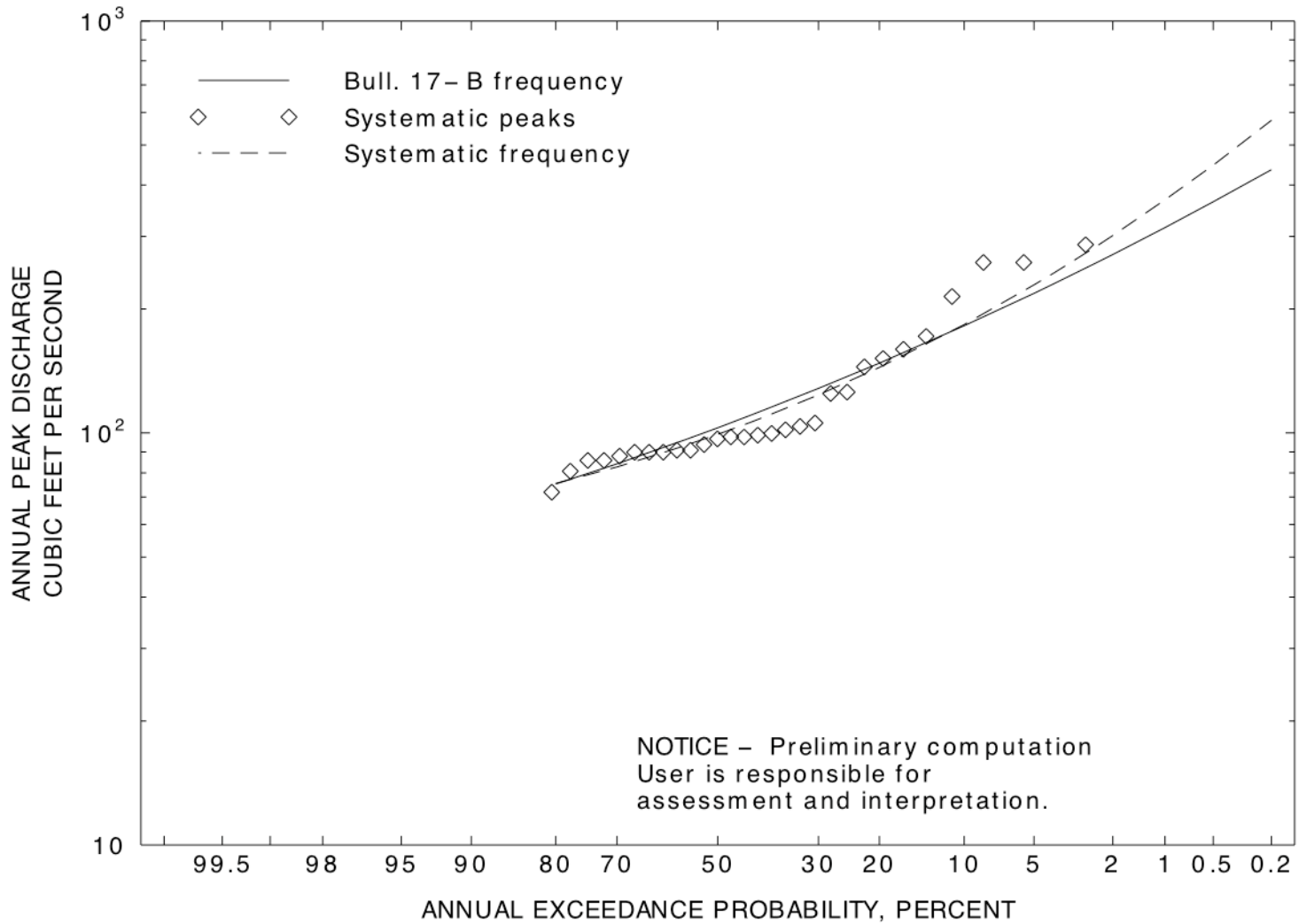
Explanation of peak discharge qualification codes

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

Station - 04067800 ARMSTRONG CREEK NEAR ARMSTRONG CREEK, WI  
2002 MAR 13 09:02:31

EMPIRICAL FREQUENCY CURVES -- WEIBULL PLOTTING POSITIONS

WATER YEAR	RANKED DISCHARGE	SYSTEMATIC RECORD	BULL.17B ESTIMATE
1992	287.0	0.0278	0.0278
1975	260.0	0.0556	0.0556
1981	260.0	0.0833	0.0833
1960	215.0	0.1111	0.1111
1991	172.0	0.1389	0.1389
1979	160.0	0.1667	0.1667
1986	152.0	0.1944	0.1944
1972	145.0	0.2222	0.2222
1976	126.0	0.2500	0.2500
1973	125.0	0.2778	0.2778
1987	106.0	0.3056	0.3056
1971	104.0	0.3333	0.3333
1967	102.0	0.3611	0.3611
1962	100.0	0.3889	0.3889
1965	99.0	0.4167	0.4167
1968	98.0	0.4444	0.4444
1983	98.0	0.4722	0.4722
1985	97.0	0.5000	0.5000
1982	94.0	0.5278	0.5278
1984	91.0	0.5556	0.5556
1990	91.0	0.5833	0.5833
1958	90.0	0.6111	0.6111
1963	90.0	0.6389	0.6389
1969	90.0	0.6667	0.6667
1964	88.0	0.6944	0.6944
1977	86.0	0.7222	0.7222
1978	86.0	0.7500	0.7500
1974	81.0	0.7778	0.7778
1961	72.0	0.8056	0.8056
1966	70.0	--	--
1970	70.0	--	--
1980	70.0	--	--
1988	70.0	--	--
1989	70.0	--	--
1959	53.0	--	--



Station - 04067800 ARMSTRONG CREEK NEAR ARMSTRONG CREEK, WI  
 2002 MAR 13 09:02:31