

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

Station - 04087257 PIKE RIVER NEAR RACINE, WI
 2002 MAR 13 09:02:45

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

Number of peaks in record	=	29
Peaks not used in analysis	=	0
Systematic peaks in analysis	=	29
Historic peaks in analysis	=	0
Years of historic record	=	0
Generalized skew	=	-0.400
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	314.5
WCF163I-NO HIGH OUTLIERS OR HISTORIC PEAKS EXCEEDED HHBASE.		1979.1

Station - 04087257 PIKE RIVER NEAR RACINE, WI
 2002 MAR 13 09:02:45

ANNUAL FREQUENCY CURVE PARAMETERS -- LOG-PEARSON TYPE III

	FLOOD BASE		LOGARITHMIC		
	DISCHARGE	EXCEEDANCE PROBABILITY	MEAN	STANDARD DEVIATION	SKEW
SYSTEMATIC RECORD	0.0	1.0000	2.9489	0.1770	-1.825
BULL.17B ESTIMATE	314.5	0.9655	2.9655	0.1316	-0.436

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	--	162.7	--	--	--
0.9900	--	212.3	--	--	--
0.9500	542.1	396.1	524.7	451.6	616.3
0.9000	619.4	519.9	607.3	531.7	692.8
0.8000	721.9	685.0	715.1	638.2	796.3
0.5000	944.2	998.3	944.2	859.6	1040.0
0.2000	1197.0	1230.0	1205.0	1084.0	1357.0
0.1000	1339.0	1303.0	1357.0	1201.0	1551.0
0.0400	1496.0	1350.0	1529.0	1325.0	1775.0
0.0200	1600.0	1368.0	1647.0	1404.0	1928.0
0.0100	1694.0	1377.0	1758.0	1475.0	2070.0
0.0050	1781.0	1383.0	1863.0	1540.0	2203.0
0.0020	1887.0	1386.0	1995.0	1617.0	2367.0
0.6667	826.1	(1.50-year flood)			
0.4292	996.7	(2.33-year flood)			

Station - 04087257 PIKE RIVER NEAR RACINE, WI
2002 MAR 13 09:02:45

I N P U T D A T A L I S T I N G

WATER YEAR	DISCHARGE	CODES	WATER YEAR	DISCHARGE	CODES
1972	1200.0		1987	836.0	
1973	824.0		1988	915.0	
1974	1240.0		1989	601.0	
1975	862.0		1990	1040.0	
1976	1480.0		1991	801.0	
1977	200.0		1992	791.0	
1978	1340.0		1993	1140.0	
1979	1100.0		1994	940.0	
1980	443.0		1995	878.0	
1981	820.0		1996	1360.0	
1982	674.0		1997	944.0	
1983	959.0		1998	959.0	
1984	695.0		1999	1230.0	
1985	588.0		2000	1580.0	
1986	1090.0				

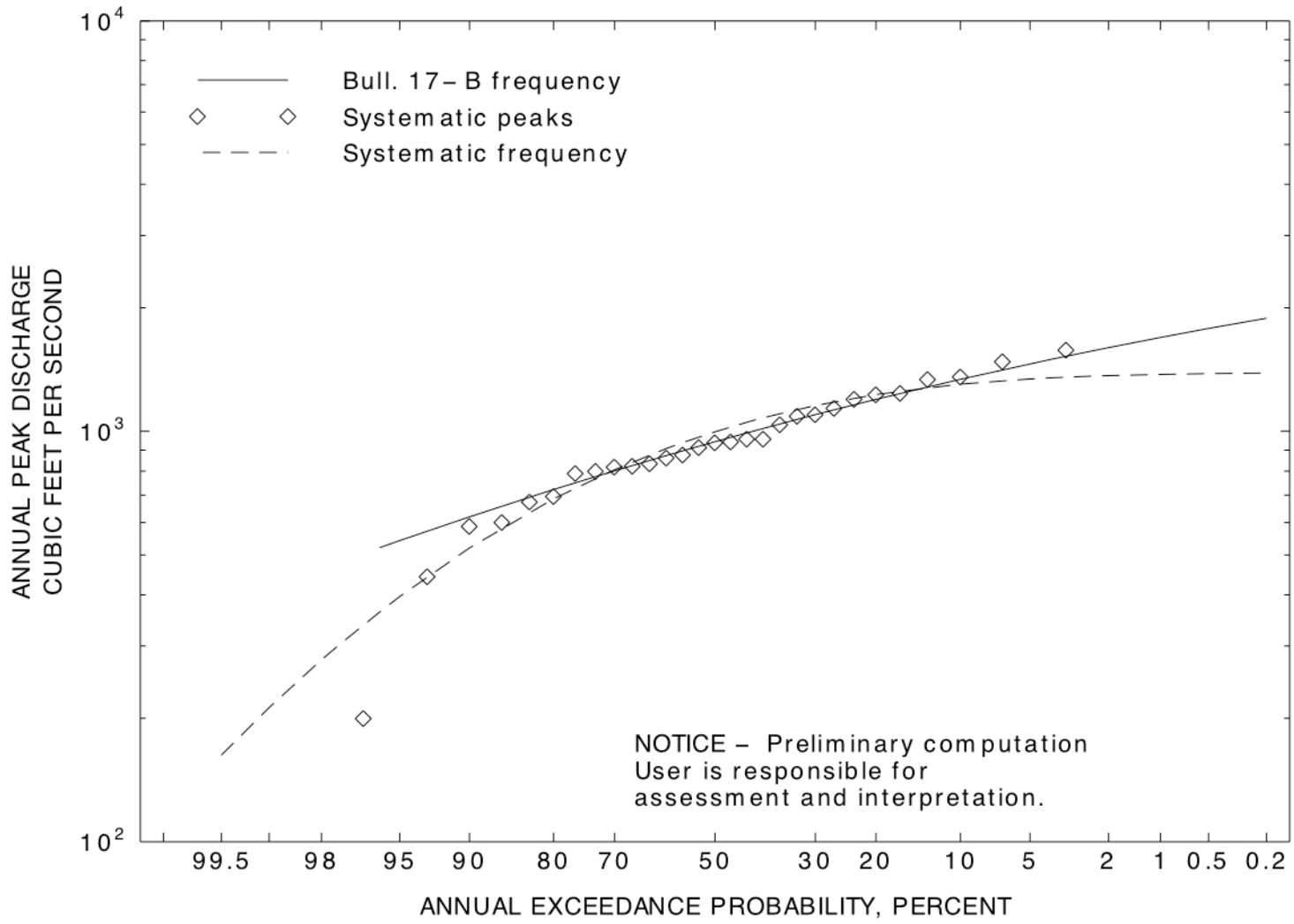
Explanation of peak discharge qualification codes

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

Station - 04087257 PIKE RIVER NEAR RACINE, WI
2002 MAR 13 09:02:45

EMPIRICAL FREQUENCY CURVES -- WEIBULL PLOTTING POSITIONS

WATER YEAR	RANKED DISCHARGE	SYSTEMATIC RECORD	BULL.17B ESTIMATE
2000	1580.0	0.0333	0.0333
1976	1480.0	0.0667	0.0667
1996	1360.0	0.1000	0.1000
1978	1340.0	0.1333	0.1333
1974	1240.0	0.1667	0.1667
1999	1230.0	0.2000	0.2000
1972	1200.0	0.2333	0.2333
1993	1140.0	0.2667	0.2667
1979	1100.0	0.3000	0.3000
1986	1090.0	0.3333	0.3333
1990	1040.0	0.3667	0.3667
1983	959.0	0.4000	0.4000
1998	959.0	0.4333	0.4333
1997	944.0	0.4667	0.4667
1994	940.0	0.5000	0.5000
1988	915.0	0.5333	0.5333
1995	878.0	0.5667	0.5667
1975	862.0	0.6000	0.6000
1987	836.0	0.6333	0.6333
1973	824.0	0.6667	0.6667
1981	820.0	0.7000	0.7000
1991	801.0	0.7333	0.7333
1992	791.0	0.7667	0.7667
1984	695.0	0.8000	0.8000
1982	674.0	0.8333	0.8333
1989	601.0	0.8667	0.8667
1985	588.0	0.9000	0.9000
1980	443.0	0.9333	0.9333
1977	200.0	0.9667	0.9667



NOTICE - Preliminary computation
 User is responsible for
 assessment and interpretation.

Station - 04087257 PIKE RIVER NEAR RACINE, WI
 2002 MAR 13 09:02:45