

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

Station - 04085400 KILLSNAKE RIVER NEAR CHILTON, WI
 2002 MAR 13 09:02:38

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

Number of peaks in record	=	40
Peaks not used in analysis	=	1
Systematic peaks in analysis	=	39
Historic peaks in analysis	=	0
Years of historic record	=	0
Generalized skew	=	-0.344
Standard error of generalized skew	=	0.550
Skew option	=	WEIGHTED
Gage base discharge	=	350.0
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. *****

**WCF109W-PEAKS WITH MINUS-FLAGGED DISCHARGES WERE BYPASSED.	1	
**WCF113W-NUMBER OF SYSTEMATIC PEAKS HAS BEEN REDUCED TO NSYS =	39	
WCF133I-SYSTEMATIC PEAKS BELOW GAGE BASE WERE NOTED.	14	350.0
WCF195I-NO LOW OUTLIERS WERE DETECTED BELOW CRITERION.		306.5
**WCF199W-NUMBER OF PEAKS BELOW FLOOD BASE EXCEEDS 17B SPEC.	14	350.0
WCF163I-NO HIGH OUTLIERS OR HISTORIC PEAKS EXCEEDED HHBASE.		2358.4
WCF002J-CALCS COMPLETED. RETURN CODE = 2		

Station - 04085400 KILLSNAKE RIVER NEAR CHILTON, WI
 2002 MAR 13 09:02:38

ANNUAL FREQUENCY CURVE PARAMETERS -- LOG-PEARSON TYPE III

	FLOOD BASE		LOGARITHMIC		
	DISCHARGE	EXCEEDANCE PROBABILITY	MEAN	STANDARD DEVIATION	SKEW
SYSTEMATIC RECORD	350.0	0.6410	2.7522	0.3095	-0.892
BULL.17B ESTIMATE	350.0	0.6410	2.7522	0.3095	-0.667

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	611.5	627.6	611.5	506.3	743.0
0.2000	1041.0	1039.0	1053.0	850.0	1335.0
0.1000	1319.0	1282.0	1345.0	1057.0	1753.0
0.0400	1648.0	1545.0	1700.0	1291.0	2277.0
0.0200	1875.0	1711.0	1950.0	1448.0	2652.0
0.0100	2084.0	1853.0	2186.0	1590.0	3008.0
0.0050	2278.0	1976.0	2408.0	1719.0	3346.0
0.0020	2513.0	2114.0	2687.0	1873.0	3765.0
0.6667	1.50-year flood below base				
0.4292	694.1 (2.33-year flood)				

Station - 04085400 KILLSNAKE RIVER NEAR CHILTON, WI
 2002 MAR 13 09:02:38

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

WATER YEAR	DISCHARGE	CODES	WATER YEAR	DISCHARGE	CODES
1961	95.0	L	1981	320.0	
1962	1060.0		1982	600.0	
1963	1200.0		1983	350.0	
1964	100.0		1984	500.0	
1965	200.0		1985	630.0	
1966	1100.0		1986	1380.0	
1967	700.0		1987	350.0	L
1968	250.0		1988	350.0	
1969	900.0		1989	-99999.0	
1970	265.0		1990	1060.0	
1971	880.0		1991	860.0	
1972	660.0		1992	180.0	
1973	710.0		1993	1470.0	
1974	920.0		1994	960.0	
1975	1300.0		1995	100.0	L
1976	900.0		1996	430.0	
1977	180.0		1997	420.0	
1978	1100.0		1998	1000.0	
1979	1840.0		1999	100.0	L
1980	360.0		2000	100.0	L

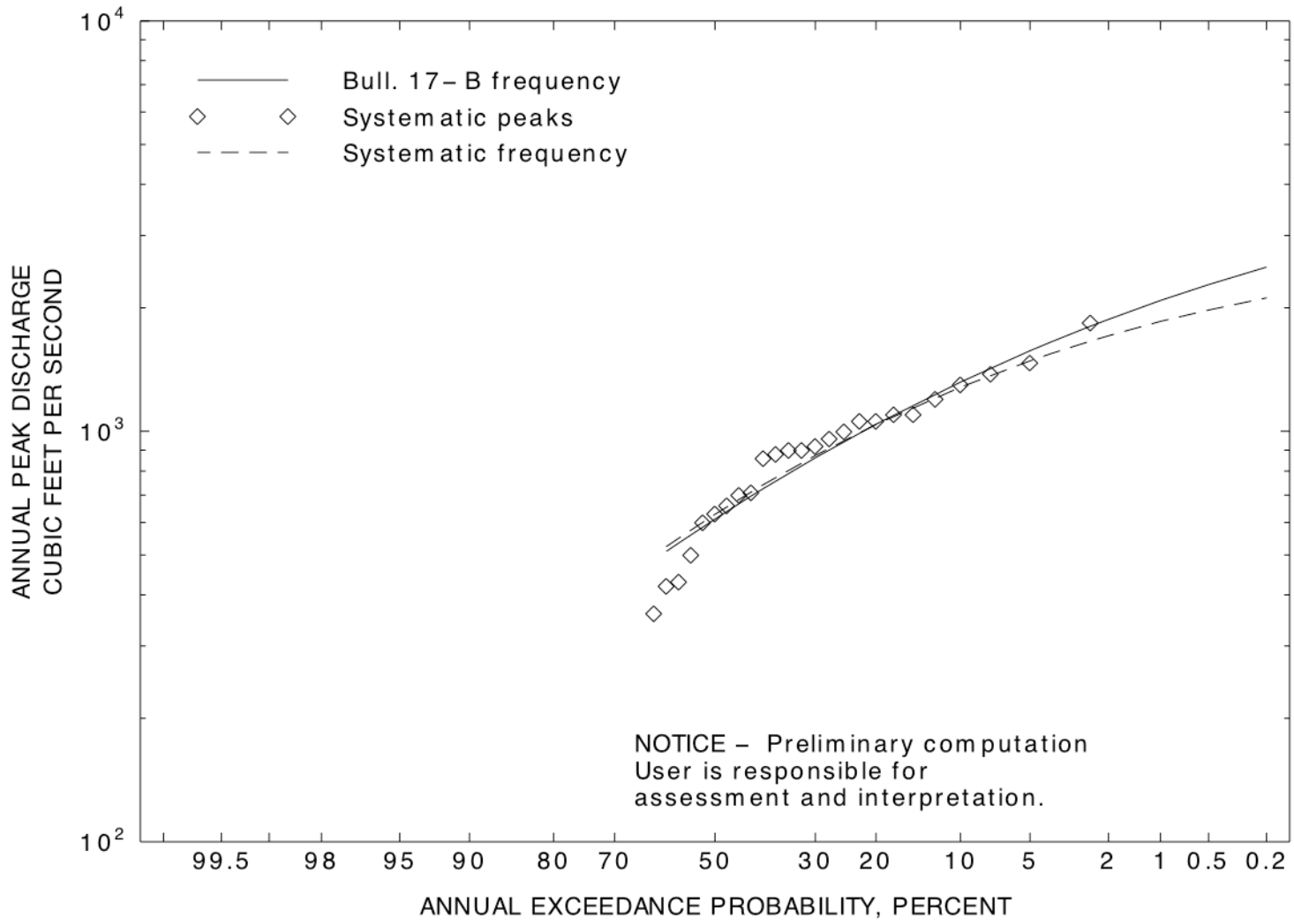
Explanation of peak discharge qualification codes

PEAKFQ	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 - 04085400 KILLSNAKE RIVER NEAR CHILTON, WI
2002 MAR 13 09:02:38

EMPIRICAL FREQUENCY CURVES -- WEIBULL PLOTTING POSITIONS

WATER YEAR	RANKED DISCHARGE	SYSTEMATIC RECORD	BULL.17B ESTIMATE
1979	1840.0	0.0250	0.0250
1993	1470.0	0.0500	0.0500
1986	1380.0	0.0750	0.0750
1975	1300.0	0.1000	0.1000
1963	1200.0	0.1250	0.1250
1966	1100.0	0.1500	0.1500
1978	1100.0	0.1750	0.1750
1962	1060.0	0.2000	0.2000
1990	1060.0	0.2250	0.2250
1998	1000.0	0.2500	0.2500
1994	960.0	0.2750	0.2750
1974	920.0	0.3000	0.3000
1969	900.0	0.3250	0.3250
1976	900.0	0.3500	0.3500
1971	880.0	0.3750	0.3750
1991	860.0	0.4000	0.4000
1973	710.0	0.4250	0.4250
1967	700.0	0.4500	0.4500
1972	660.0	0.4750	0.4750
1985	630.0	0.5000	0.5000
1982	600.0	0.5250	0.5250
1984	500.0	0.5500	0.5500
1996	430.0	0.5750	0.5750
1997	420.0	0.6000	0.6000
1980	360.0	0.6250	0.6250
1983	350.0	--	--
1987	350.0	--	--
1988	350.0	--	--
1981	320.0	--	--
1970	265.0	--	--
1968	250.0	--	--
1965	200.0	--	--
1977	180.0	--	--
1992	180.0	--	--
1964	100.0	--	--
1995	100.0	--	--
1999	100.0	--	--
2000	100.0	--	--
1961	95.0	--	--
1989	-99999.0	--	--



Station - 04085400 KILLSNAKE RIVER NEAR CHILTON, WI
 2002 MAR 13 09:02:38