

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

Station - 05408000 KICKAPOO RIVER AT LA FARGE, 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	=	62
Peaks not used in analysis	=	0
Systematic peaks in analysis	=	62
Historic peaks in analysis	=	0
Years of historic record	=	0
Generalized skew	=	-0.396
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
WCF163I-NO HIGH OUTLIERS OR HISTORIC PEAKS EXCEEDED HHBASE.	14510.8
WCF195I-NO LOW OUTLIERS WERE DETECTED BELOW CRITERION.	451.5

Station - 05408000 KICKAPOO RIVER AT LA FARGE, WI
 2002 MAR 13 09:03:13

ANNUAL FREQUENCY CURVE PARAMETERS -- LOG-PEARSON TYPE III

	FLOOD BASE		LOGARITHMIC		
	DISCHARGE	EXCEEDANCE PROBABILITY	MEAN	STANDARD DEVIATION	SKEW
SYSTEMATIC RECORD	0.0	1.0000	3.4082	0.2645	0.412
BULL.17B ESTIMATE	0.0	1.0000	3.4082	0.2645	0.196

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	596.4	674.4	565.6	446.4	745.7
0.9900	677.9	747.7	649.7	517.5	836.1
0.9500	973.5	1014.0	952.9	783.2	1158.0
0.9000	1189.0	1211.0	1173.0	982.3	1391.0
0.8000	1526.0	1520.0	1515.0	1297.0	1753.0
0.5000	2509.0	2455.0	2509.0	2205.0	2853.0
0.2000	4245.0	4206.0	4280.0	3696.0	4989.0
0.1000	5652.0	5710.0	5746.0	4824.0	6864.0
0.0400	7736.0	8062.0	7976.0	6417.0	9806.0
0.0200	9521.0	10180.0	9946.0	7733.0	12440.0
0.0100	11510.0	12650.0	12210.0	9161.0	15490.0
0.0050	13740.0	15520.0	14820.0	10720.0	19010.0
0.0020	17080.0	20050.0	18890.0	12990.0	24470.0
0.6667	1939.5	(1.50-year flood)			
0.4292	2794.7	(2.33-year flood)			

Station - 05408000 KICKAPOO RIVER AT LA FARGE, WI
 2002 MAR 13 09:03:13

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

WATER YEAR	DISCHARGE	CODES	WATER YEAR	DISCHARGE	CODES
1939	1610.0		1970	1100.0	
1940	2860.0		1971	1340.0	
1941	1810.0		1972	2420.0	
1942	1630.0		1973	4670.0	
1943	2210.0		1974	2800.0	
1944	3180.0		1975	1950.0	
1945	3290.0		1976	1910.0	
1946	5730.0		1977	1220.0	
1947	2470.0		1978	14300.0	
1948	5200.0		1979	2250.0	
1949	1370.0		1980	3200.0	
1950	5460.0		1981	4010.0	
1951	6600.0		1982	1600.0	
1952	3480.0		1983	2900.0	
1953	1560.0		1984	3710.0	
1954	4370.0		1985	2250.0	
1955	2510.0		1986	2220.0	
1956	6750.0		1987	1450.0	
1957	1570.0		1988	940.0	
1958	902.0		1989	1740.0	
1959	5100.0		1990	2340.0	
1960	4330.0		1991	970.0	
1961	7040.0		1992	2520.0	
1962	4530.0		1993	2390.0	
1963	2740.0		1994	2120.0	
1964	1290.0		1995	1910.0	
1965	3990.0		1996	2410.0	
1966	9910.0		1997	721.0	
1967	6010.0		1998	2150.0	
1968	3140.0		1999	1390.0	
1969	1760.0		2000	1860.0	

Explanation of peak discharge qualification codes

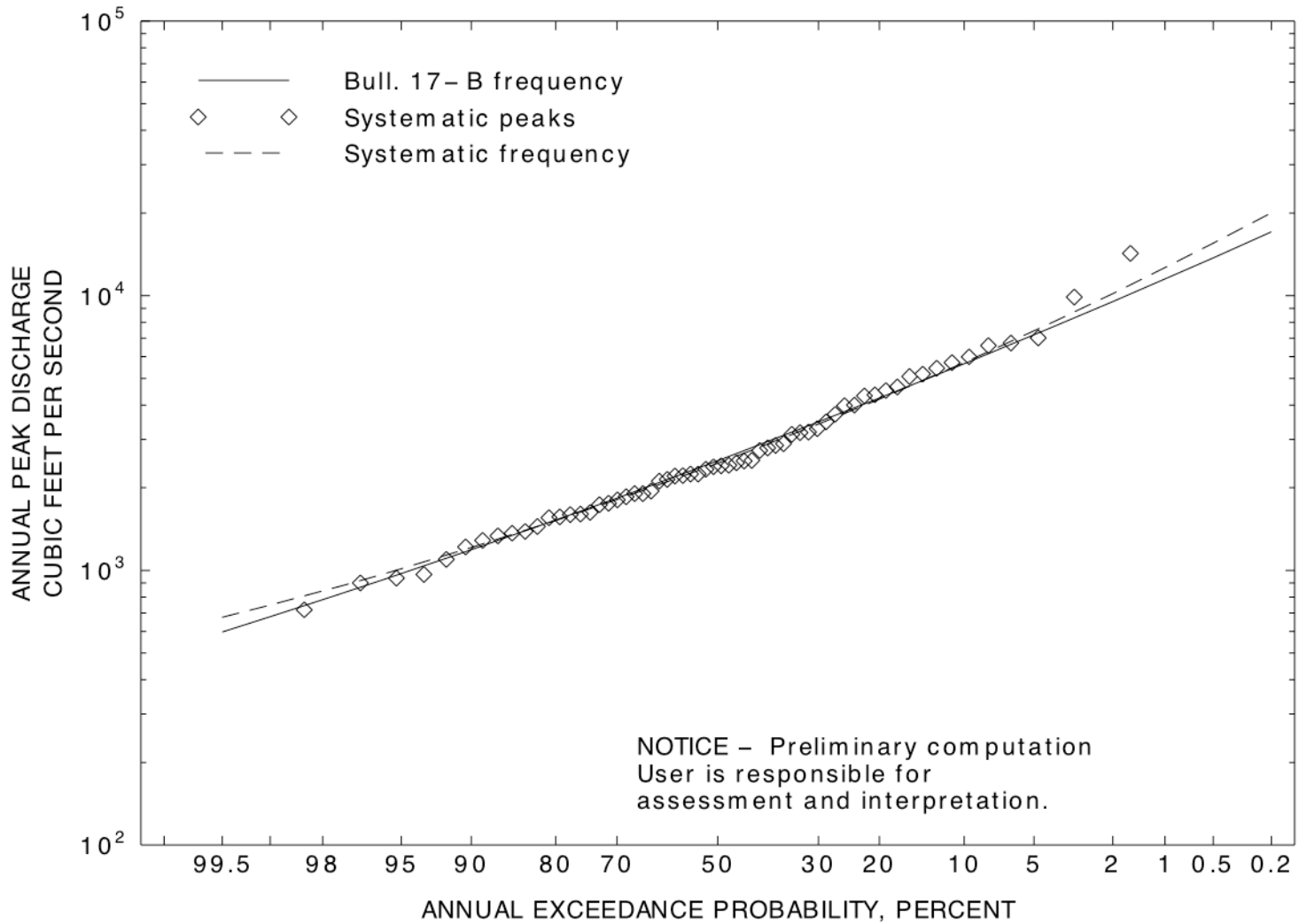
PEAKFQ	WATSTORE	
CODE	CODE	DEFINITION
D	3	Dam failure, non-recurrent flow anomaly
G	8	Discharge greater than stated value
X	3+8	Both of the above
L	4	Discharge less than stated value
K	6 OR C	Known effect of regulation or urbanization
H	7	Historic peak

Station - 05408000 KICKAPOO RIVER AT LA FARGE, WI
2002 MAR 13 09:03:13

EMPIRICAL FREQUENCY CURVES -- WEIBULL PLOTTING POSITIONS

WATER YEAR	RANKED DISCHARGE	SYSTEMATIC RECORD	BULL.17B ESTIMATE
1978	14300.0	0.0159	0.0159
1966	9910.0	0.0317	0.0317
1961	7040.0	0.0476	0.0476
1956	6750.0	0.0635	0.0635
1951	6600.0	0.0794	0.0794
1967	6010.0	0.0952	0.0952
1946	5730.0	0.1111	0.1111
1950	5460.0	0.1270	0.1270
1948	5200.0	0.1429	0.1429
1959	5100.0	0.1587	0.1587
1973	4670.0	0.1746	0.1746
1962	4530.0	0.1905	0.1905
1954	4370.0	0.2063	0.2063
1960	4330.0	0.2222	0.2222
1981	4010.0	0.2381	0.2381
1965	3990.0	0.2540	0.2540
1984	3710.0	0.2698	0.2698
1952	3480.0	0.2857	0.2857
1945	3290.0	0.3016	0.3016
1980	3200.0	0.3175	0.3175
1944	3180.0	0.3333	0.3333
1968	3140.0	0.3492	0.3492
1983	2900.0	0.3651	0.3651
1940	2860.0	0.3810	0.3810
1974	2800.0	0.3968	0.3968
1963	2740.0	0.4127	0.4127
1992	2520.0	0.4286	0.4286
1955	2510.0	0.4444	0.4444
1947	2470.0	0.4603	0.4603
1972	2420.0	0.4762	0.4762
1996	2410.0	0.4921	0.4921
1993	2390.0	0.5079	0.5079
1990	2340.0	0.5238	0.5238
1979	2250.0	0.5397	0.5397
1985	2250.0	0.5556	0.5556
1986	2220.0	0.5714	0.5714
1943	2210.0	0.5873	0.5873
1998	2150.0	0.6032	0.6032
1994	2120.0	0.6190	0.6190
1975	1950.0	0.6349	0.6349
1976	1910.0	0.6508	0.6508
1995	1910.0	0.6667	0.6667
2000	1860.0	0.6825	0.6825
1941	1810.0	0.6984	0.6984
1969	1760.0	0.7143	0.7143
1989	1740.0	0.7302	0.7302
1942	1630.0	0.7460	0.7460
1939	1610.0	0.7619	0.7619

1982	1600.0	0.7778	0.7778
1957	1570.0	0.7937	0.7937
1953	1560.0	0.8095	0.8095
1987	1450.0	0.8254	0.8254
1999	1390.0	0.8413	0.8413
1949	1370.0	0.8571	0.8571
1971	1340.0	0.8730	0.8730
1964	1290.0	0.8889	0.8889
1977	1220.0	0.9048	0.9048
1970	1100.0	0.9206	0.9206
1991	970.0	0.9365	0.9365
1988	940.0	0.9524	0.9524
1958	902.0	0.9683	0.9683
1997	721.0	0.9841	0.9841



Station - 05408000 KICKAPOO RIVER AT LA FARGE, WI
 2002 MAR 13 09:03:13