

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

Station - 04059900 ALLEN CREEK TRIBUTARY NEAR ALVIN, WI  
 2002 MAR 13 09:02:14

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	=	0
Systematic peaks in analysis	=	40
Historic peaks in analysis	=	0
Years of historic record	=	0
Generalized skew	=	-0.104
Standard error of generalized skew	=	0.550
Skew option	=	WEIGHTED
Gage base discharge	=	6.0
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.	3	6.0
WCF163I-NO HIGH OUTLIERS OR HISTORIC PEAKS EXCEEDED HHBASE.		50.7
WCF195I-NO LOW OUTLIERS WERE DETECTED BELOW CRITERION.		3.9

Station - 04059900 ALLEN CREEK TRIBUTARY NEAR ALVIN, WI  
 2002 MAR 13 09:02:14

ANNUAL FREQUENCY CURVE PARAMETERS -- LOG-PEARSON TYPE III

	FLOOD BASE		LOGARITHMIC		
	DISCHARGE	EXCEEDANCE PROBABILITY	MEAN	STANDARD DEVIATION	SKEW
SYSTEMATIC RECORD	6.0	0.9250	1.1270	0.2195	0.355
BULL.17B ESTIMATE	6.0	0.9250	1.1270	0.2195	0.200

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
0.9000	7.1	7.2	7.0	5.8	8.3
0.8000	8.7	8.7	8.6	7.3	10.0
0.5000	13.2	13.0	13.2	11.5	15.1
0.2000	20.4	20.3	20.6	17.7	24.2
0.1000	25.9	26.0	26.4	22.0	31.8
0.0400	33.6	34.4	34.9	27.8	43.3
0.0200	39.9	41.5	42.2	32.3	53.3
0.0100	46.7	49.4	50.5	37.1	64.4
0.0050	54.1	58.2	59.8	42.1	76.9
0.0020	64.9	71.4	74.2	49.2	95.8
0.6667	10.6	( 1.50-year flood )			
0.4292	14.4	( 2.33-year flood )			

Station - 04059900 ALLEN CREEK TRIBUTARY NEAR ALVIN, WI  
 2002 MAR 13 09:02:14

I N P U T   D A T A   L I S T I N G

WATER YEAR	DISCHARGE	CODES	WATER YEAR	DISCHARGE	CODES
1960	18.0		1980	25.0	
1961	9.0		1981	28.0	
1962	7.0		1982	26.0	
1963	6.0	L	1983	40.0	
1964	5.0		1984	19.0	
1965	15.0		1985	28.0	
1966	10.0		1986	19.0	
1967	13.0		1987	33.0	
1968	13.0		1988	33.0	
1969	14.0		1989	14.0	
1970	9.0		1990	10.0	
1971	11.0		1991	11.0	
1972	13.0		1992	20.0	
1973	15.0		1993	6.0	L
1974	10.0		1994	8.0	
1975	15.0		1996	8.3	
1976	8.0		1997	7.7	
1977	21.0		1998	8.3	
1978	15.0		1999	7.9	
1979	18.0		2000	8.0	

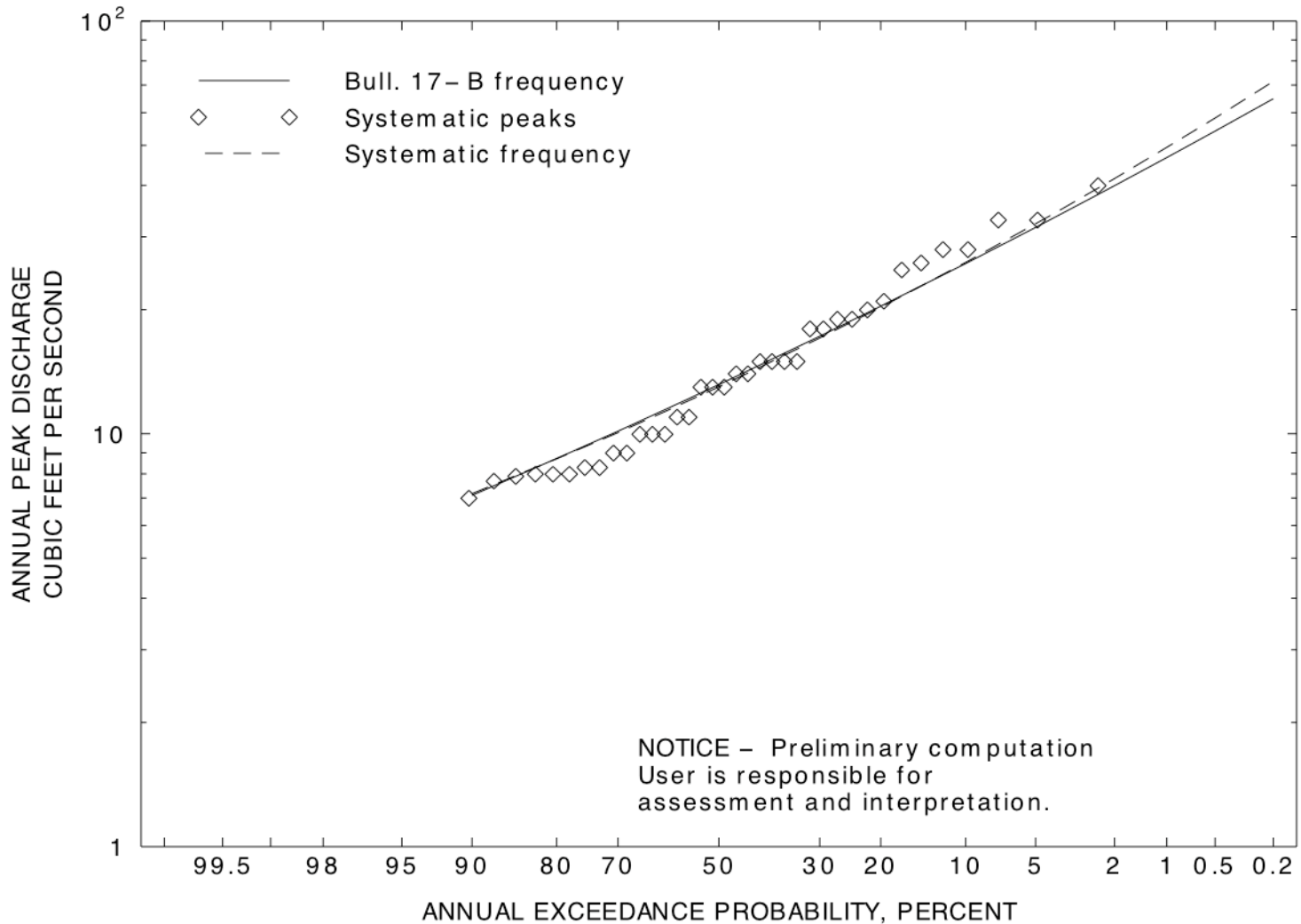
Explanation of peak discharge qualification codes

PEAKFQ	WATSTORE	DEFINITION
CODE	CODE	
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 - 04059900 ALLEN CREEK TRIBUTARY NEAR ALVIN, WI  
2002 MAR 13 09:02:14

EMPIRICAL FREQUENCY CURVES -- WEIBULL PLOTTING POSITIONS

WATER YEAR	RANKED DISCHARGE	SYSTEMATIC RECORD	BULL.17B ESTIMATE
1983	40.0	0.0244	0.0244
1987	33.0	0.0488	0.0488
1988	33.0	0.0732	0.0732
1981	28.0	0.0976	0.0976
1985	28.0	0.1220	0.1220
1982	26.0	0.1463	0.1463
1980	25.0	0.1707	0.1707
1977	21.0	0.1951	0.1951
1992	20.0	0.2195	0.2195
1984	19.0	0.2439	0.2439
1986	19.0	0.2683	0.2683
1960	18.0	0.2927	0.2927
1979	18.0	0.3171	0.3171
1965	15.0	0.3415	0.3415
1973	15.0	0.3659	0.3659
1975	15.0	0.3902	0.3902
1978	15.0	0.4146	0.4146
1969	14.0	0.4390	0.4390
1989	14.0	0.4634	0.4634
1967	13.0	0.4878	0.4878
1968	13.0	0.5122	0.5122
1972	13.0	0.5366	0.5366
1971	11.0	0.5610	0.5610
1991	11.0	0.5854	0.5854
1966	10.0	0.6098	0.6098
1974	10.0	0.6341	0.6341
1990	10.0	0.6585	0.6585
1961	9.0	0.6829	0.6829
1970	9.0	0.7073	0.7073
1996	8.3	0.7317	0.7317
1998	8.3	0.7561	0.7561
1976	8.0	0.7805	0.7805
1994	8.0	0.8049	0.8049
2000	8.0	0.8293	0.8293
1999	7.9	0.8537	0.8537
1997	7.7	0.8780	0.8780
1962	7.0	0.9024	0.9024
1963	6.0	--	--
1993	6.0	--	--
1964	5.0	--	--



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

Station - 04059900 ALLEN CREEK TRIBUTARY NEAR ALVIN, WI  
 2002 MAR 13 09:02:14