Magnitude and Frequency of Low Streamflows in South Carolina

Report Number 166

South Carolina Water Resources Commission
Surface Water Division
1201 Main Street, Suite 1100
Columbia, South Carolina

June 1989

Magnitude and Frequency of Low Streamflows in South Carolina

by

Terry L. Steinert

South Carolina Water Resources Commission

Surface Water Division

Columbia, South Carolina

1989

STATE OF SOUTH CAROLINA
Honorable Carroll A. Campbell, Jr., Governor

South Carolina Water Resources Commission

Appointed Members

Mr. Erick B. Ficken, Chairman
Mr. Lynn H. Youmans Jr., Vice-Chairman

Agriculture
Mr. Lynn H. Youmans, Jr.....Furman
Mr. Levan Wilson.....Bishopville

Industry
Mr. Floyd E. Williams.....Fort Mill
Mr. Kenneth C. Lillard.....Camden
Mr. Dan E. Jones.....Columbia

Municipalities
Mr. Tom W. Dunaway, III.....Anderson
Mayor Elsie Rast Stuart.....Pelion
Mr. Erick B. Ficken.....Myrtle Beach

Salt Water

Ex Officio Members and Appointees

Mr. D. Leslie Tindal
Commissioner
S.C. Department of Agriculture
App: Mr. David L. Tompkins

Mr. Michael D. Jarrett,
Commissioner
S.C. Department of Health and
Environmental Control
App: Mr. R. Lewis Shaw

Mr. Eugene S. Kneece
Chairman
S.C. Forestry Commission
App: Mr. Robert J. Gould

Mr. Marion Burnside
Chairman
S.C. Wildlife & Marine
Resources Commission
App: Mr. Larry D. Cartee

Mr. Glenn C. Alexander
Chairman
S.C. Land Resources
Conservation Commission
App: Mr. Cary D. Chamblee

Mr. Richard E. Greer
Chairman
S.C. Development Board
App: Mr. O'Neal Laird

Dr. Maxwell Lennon
President
Clemson University
App: Dr. Paul Zielinski

Mr. Joe G. Rideoutte
Commissioner
S.C. Department of Highways
and Public Transportation
App: Mr. Robert B. Ferrell

ACKNOWLEDGMENTS

Several people have contributed their time and efforts to the publication of this document. To them, a debt of gratitude is owed. Of special note are David Frontz, Information Resources Consultant, South Carolina Budget and Control Board, Division of Research and Statistical Services; Dr. Kai F. Yu, Professor, Statistics Department, University of South Carolina; Dr. James T. Ligon, Professor, Department of Agricultural Engineering, Clemson University; Carroll Barker, Hydrologist, formerly with the U.S. Geological Survey, Ted Cooney, Hydrologist, U.S. Geological Survey; and Roy Newcome, Buddy Atkins, and Dr. Abdel-Wahed "Bud" Badr of the South Carolina Water Resources Commission. David was extremely helpful in verifying the low flow estimating procedures and his detection of errors is appreciated. He also assisted in loading the typed document into the software package for publishing. Kai did an outstanding job of developing the non-parametric distribution selection technique while under contract with the South Carolina Water Resources Commission. Carroll and Ted were largely responsible for supplying the input data used in the analysis. David, Kai, Jim, Roy, Buddy, and Bud deserve credit for reviewing and editing the document. Without their assistance, this document would not have been publishable. Additional mention is extended to Alfred Vang, Executive Director of the South Carolina Water Resources Commission and Danny Johnson, Director of the Commission's Surface Water Division, for their assistance and support of this study.

CONTENTS

ILLUSTRATIONS

TABLES

SUMMARY

This report contains the most comprehensive study of low streamflow distributions undertaken in South Carolina to date. Presented are low-flow estimates for 104 South Carolina streamflow gaging stations, updated through the 1987 climatic year using a method that statistically determines which of 13 solutions to nine distribution functions best represent the observed low-flow distributions for 1, 3, 7, 14, 30, 60, 90, 120, and 183 consecutive days. This technique differs from past studies that have applied fewer distributions and graphical analysis to lesser numbers of gaging stations.

The present method has a number of advantages over previously used techniques. First, the model resides at the South Carolina Water Resources Commission and additional low-flow analysis can be accommodated. Second, the model runs on a 80286 processor and fits on two floppy disks, making it easily transportable. Third, the development costs have been incurred and thus, the only additional costs are for operation. Fourth, the model provides a systematic method for generating reproducible low flow estimates which do not require the construction of hand drawn curves. Fifth, the model can produce regular updates of low-flow estimates as additional data is gathered. Finally, the model structure allows for comparisons between distributions and solution techniques. These comparisons can yield greater insight into the stochastic behavior of consecutive-day period low flows.

The low-flow estimates produced by this technique are not significantly different from estimates made by using graphical analysis at stations having identical data sets. This finding reinforces the assertion that the technique does not "trade off" precision for reproducibility and ease of use. The finding that no single low-flow estimation technique accounted for more than 30 percent of the total, further indicates that flows for each gaging station and, perhaps each consecutive-day period at each gaging station, have a unique population of low flows which are best represented by statistically selecting the most appropriate distribution for each station from the full range of available distributions.

The information provided in this report should prove beneficial to Federal and State planning and regulating agencies. The low-flow estimates at long term gaging sites appear stable and the information can be used with a high level of confidence. At short term stations, the low flows experienced during the 1980's have probably skewed the distributions toward the low end, and periodic updates of this report will be essential.

INTRODUCTION

Current, accurate estimates of low streamflows are of vital importance to the management of South Carolina's water resources. Both State and Federal agencies have regulatory programs and management responsibilities directly or indirectly requiring analysis or consideration of low streamflows. These agencies include the South Carolina Water Resources Commission (SCWRC), the South Carolina Department of Health and Environmental Control (SCDHEC), the South Carolina Wildlife and Marine Resources Department (SCWMRD), the U.S. Geological Survey (USGS), the U.S. Army Corps of Engineers (USCE), the U.S. Fish and Wildlife Service (USFWS), and the U.S. Environmental Protection Agency (USEPA). Other users of low-flow information are public and private utilities that require flow reliability information for power generation and engineering firms that design water supply and wastewater treatment systems.

One of the most widely used low-flow statistics is the 7Q10, defined as the lowest mean flow during a 7 consecutive day period (CDP) that has the probability of recurring once every 10 years. Thus, 7Q10 has a 10 percent probability of being reached in any given year. 7Q10 has regulatory significance in the State's permitting program for interbasin transfers of water and the National Pollutant Discharge Elimination System (NPDES) waste-discharge permitting program. Additional State programs that may require consideration of 7Q10 include the permitting of construction activities in navigable waters, water quality certification, drought planning, and the evaluation of minimum instream flow requirements. Estimates of low-flow magnitudes and frequencies for other CDP are important for analyzing the time period that flows may remain low. The durations of extended low-flow periods must be considered to properly design storage for reliable water supplies.

Low-flow analysis in South Carolina has previously been performed by the USGS, and information for continuously gaged stream sites is available in two publications. An open-file report by Stallings (1967) contained low-flow duration, low-flow frequency, and minimum-flow array tables for 61 sites in South Carolina through 1965. Bloxham (1979) updated the stations in Stallings (1967) report through 1976 by attempting to fit a Log-Pearson Type III distribution to the observed data. However, because the Log-Pearson Type III distribution did not consistently provide an acceptable fit, graphical analyses (hand drawn lines of best fit) were used at all locations for uniformity.

Other researchers have used different approaches. Generally, most work has focused on comparing only a few techniques over a limited range of conditions. Loganathan and associates (1985A) compared seven methods on 20 Virginia streams and concluded the Log-Boughton distribution offered the most flexibility. Tasker (1987) compared four probability distributions including the Log-Boughton distribution by using the bootstrap resampling technique for the same 20 Virginia streams. He concluded the Log-Pearson Type III distribution was the most consistent estimator of the low-flow distributions. Knox and Delleur (1988) tested six theoretical probability distributions using 11 distribution parameter estimation method combinations on the annual low flows in Indiana streams. They concluded that two- and three-parameter log-normal probability distributions, with parameter estimation by maximum likelihood, more consistently represented ob-

served low flows. Prakash (1981) used 10 streams throughout the United States to compare four probability distributions, concluding the SMEMAX transformation was easy to apply and provided results similar the the log-normal, Log-Pearson Type III, and extreme value type III distributions. O'Conner (1964) compared three commonly used probability distributions on the low flows of New York streams and found that the differences between the observed data and any of the three calculated curves were generally greater than the differences between the three calculated curves. He further suggested that a hand-drawn line of best fit may be the most reliable procedure.

The purposes of this report are to evaluate the procedures available for estimating the magnitude and frequencies of low streamflows, develop a standardized procedure for making low-flow estimates that utilize the available techniques, and present updated low flow estimates for South Carolina streams. To accomplish this, 13 solutions to nine distribution functions were calculated for nine CDP at 104 locations throughout South Carolina. Chi-squared and non-parametric empirical distribution function (edf) statistics were used to determine which distribution solution best represented the observed low flows for each CDP. This new method eliminates reproducibility problems associated with constructing hand drawn curves while maintaining the curve shape flexibility available from the different distributions.

LOW-FLOW DISTRIBUTIONS

The 104 stations in this report have discharge records ranging from 5 to 57 years in length. Stations with periods of record less than 5 years are not presented because many of the statistical procedures fail when using annual series of less than 5 years, plus the degree of freedom is very small, leading to the possibility of large error in the low-flow estimates. Annual series lengths of the 104 stations are distributed relatively evenly for periods of record from 5 to 50 years (Table 1). Thirty-eight of the stations were discontinued prior to the end of the 1987 climatic year.

Minimum-flow array tables (Table 2) are generated by computing moving averages for the annual climatic year minimum mean flows for periods of 1, 3, 7, 14, 30, 60, 90, 120, and 183 consecutive days from annual low-flow data published by the USGS. A climatic year begins on April 1 and extends through March 31 of the following year. The climatic year is used because it is less likely that a low flow period will be bisected than if the calendar or water years were used. Each CDP forms an annual series such that the summation of the probabilities of each event is

$$\Sigma\, p(x_i) = 1 \qquad (1)$$

where Σ is the summation of the argument from i = 1 to n
n is the number of observations
p is the probability of occurrence of the event x_i, defined by the probability density function (pdf) as

$$f(x) = \lim_{\Delta x \to 0} \Delta F(x)/\Delta x = dF(x)/dx \qquad (2)$$

where F(x) is defined from the cumulative distribution function (cdf) as the probability that X is less than or equal to a limiting value, x:

$$F(x) = P(X \leq x) \qquad (3)$$

Table 1. Streamflow gaging record lengths of 104 South Carolina streams

Record length (years) from	to	Percent
5	9	21.2
10	19	21.2
20	29	16.3
30	39	17.3
40	49	18.3
50	57	5.8

Riggs (1965) noted that drainage basin characteristics have a significant impact on the shape of the cdf and thus, no single distribution is generally applicable. To overcome this deficiency, 13 solutions to nine distributions were calculated for each CDP at each station. The distributions used in the analysis are the normal, log-normal, Log-Pearson Type III, Gumbel Type III, Weibull, Log-Boughton, and power and general SMEMAX transformations to the normal distribution. Solution techniques used are method of moments, maximum likelihood, order statistic, and frequency factor estimators. The best-fitting distributions are chosen using non-parametric techniques and low-flow estimates are calculated for each CDP for recurrence intervals of 2, 5, 10, 15, 20, 25, 30, 40, 50, and 75 years. From these estimates, low-flow frequency array tables (Table 3) are constructed such that the recurrence intervals listed extend to the equivalent number of observations or to the first return period greater than the number of observations. Further extrapolation of the tables is not made because of the error involved.

Additional data necessitate the recalculation of the low-flow frequency array tables because adding data alters both the interval Δx and the shape of the CDP low-flow distribution (Viessman and associates, 1977). The redefined pdf accounts for the differences between the magnitude of 7Q10 flows at like stations in the Stallings (1967) and Bloxham (1979) reports and those presented in this report (Table 4). Differences between previously published low-flow estimates and those presented herein for stations discontinued prior to the end of the 1977 climatic year and having equivalent periods of record are attributable to the flexible-estimation technique utilizing the most appropriate low-flow estimations.

Table 2. Minimum-flow array table for Congaree Creek at Cayce

	Lowest mean flow (cfs) in year ending March 31 for:								
	1	consecutive days							
Year	Day	3	7	14	30	60	90	120	183
1961	163	165	171	176	188	193	201	206	210
1962	151	153	159	171	176	181	192	207	218
1963	153	154	156	158	160	169	175	177	179
1964	126	126	127	128	137	142	149	154	164
1965	160	161	167	174	180	186	208	231	258
1966	183	185	191	204	215	226	233	235	248
1967	146	146	148	149	154	165	170	171	174
1968	121	136	140	144	152	167	180	185	196
1969	118	119	122	129	136	141	145	157	163
1970	127	128	130	136	145	146	149	153	153
1971	111	113	115	120	128	142	145	153	158
1972	130	130	130	136	155	184	196	206	212
1973	148	149	150	156	163	165	171	178	191
1974	172	172	174	176	183	185	196	199	220
1975	120	120	124	127	139	142	149	150	159
1976	164	165	169	172	177	191	196	198	206
1977	137	139	142	147	150	158	175	188	190
1978	126	128	129	131	134	148	153	159	162
1979	112	113	117	124	128	142	148	151	151
1980	135	136	139	142	156	179	187	192	194

Table 3. Low-flow frequency array table for Congaree Creek at Cayce

Return	1	Consecutive days							
Period	Day	3	7	14	30	60	90	120	183
2	137	139	142	147	155	164	172	179	186
5	121	123	125	129	137	146	153	158	162
10	114	116	118	122	129	139	145	149	152
15	111	113	115	118	126	135	141	145	147
20	109	111	113	116	124	133	139	143	144

Table 4. Current and historical estimates of 7Q10 for South Carolina streams

Station Number	Stream	Stallings 1967	Bloxham 1979	SCWRC 1989
02110500	Waccamaw R nr Longs	3.7	6.8	12
02130600	Cedar Cr nr Society Hill		18.5	15
02130900	Big Black Cr nr McBee	22	22	23
02130910	Black Cr nr Hartsville	72	67	60
02131000	Pee Dee R at Peedee	1500	1500	1710
02131150	Catfish Canal at Sellers		0.05	0.0
02131500	Lynches R nr Bishopville	131	140	138
02132000	Lynches R nr Effingham	131	132	138
02132500	Little Pee Dee R nr Dillon	53	57	57
02135000	Little Pee Dee at Galivants Ferry	259	315	314
02135300	Scape Ore Swamp nr Bishopville		6.7	7.0
02135500	Black R nr Gable	0.59	0.41	0.68
02136000	Black R at Kingstree	5.2	5.7	6.2
02146000	Catawba R nr Rock Hill	648	710	633
02147000	Catawba R nr Catawba		900	842
02147500	Rocky Cr nr Great Falls	0.13	1.8	3.3
02148000	Wateree R nr Camden	505	490	486
02148300	Colonels Cr nr Leesburg		11.5	13
02148315	Wateree R bl Eastover		800	916
02153500	Broad R nr Gaffney	470	540	562
02154500	North Pacolet R at Fingerville	40	43	46
02155500	Pacolet R nr Fingerville	59	61	66
02156000	Pacolet R nr Clifton	78	84	89
02156500	Broad R nr Carlisle	620	740	751
02157000	North Tyger R nr Fairmont	11	10	10
02157500	Middle Tyger R at Lyman	17	18	17
02158000	North Tyger R nr Moore	36	36	38
02158500	South Tyger R nr Reidville	15	17	15
02159000	South Tyger R nr Woodruff	25	29	32
02159500	Tyger R nr Woodruff	65	71	77
02160000	Fairforest Cr nr Union	14	16	19
02160500	Enoree R nr Enoree	48	58	62
02161500	Broad R at Richtex	860	970	973
02162010	Cedar Cr nr Blythewood		0.50	0.46
02162500	Saluda R nr Greenville	112	130	139

Table 4. (Continued)

Station Number	Stream	Stallings 1967	Bloxham 1979	SCWRC 1989
02163000	Saluda R nr Pelzer	151	168	165
02163500	Saluda R nr Ware Shoals	169	190	182
02164000	Reedy R nr Greenville	15	16	15
02165000	Reedy R nr Ware Shoals	32	36	38
02165200	South Rabon Cr nr Gray Court		6.4	7.8
02167000	Saluda R at Chappells	276	320	269
02167500	Saluda R nr Silverstreet	292	355	373
02169000	Saluda R nr Columbia	230	260	264
02169500	Congaree R at Columbia	1590	1800	1680
02169550	Congaree Cr at Cayce	94	118	118
02169570	Gills Cr at Columbia		9.8	5.3
02169630	Big Beaver Cr nr St. Matthews		5.0	4.8
02171500	Santee R nr Pineville	390	420	409
02171680	Wedboo Cr nr Jamestown		0.0	0.0
02172500	South Edisto R nr Montmorenci	59	65	61
02173000	South Edisto R nr Denmark	191	211	208
02173500	North Edisto R nr Orangeburg	215	225	258
02174000	Edisto R nr Branchville	390	455	482
02174250	Cow Castle Cr nr Bowman		0.74	0.79
02175000	Edisto R nr Givhans	373	442	481
02175500	Salkehatchie R nr Miley	29	33	33
02176500	Coosawhatchie R nr Hampton	0.10	0.03	0.0
02177000	Chattooga R nr Clayton, GA		124	128
02185200	Little R nr Walhalla		24	30
02187500	Savannah R near Iva		650	896
02188000	Rocky R nr Calhoun Falls	42	38	47
02189000	Savannah R nr Calhoun Falls	1110	1350	1480
02192500	Little R nr Mount Carmel	5.1	7.2	9.3
02196000	Stevens Cr nr Modoc	1.7	1.6	2.5
02197000	Savannah R at Augusta	4210	4700	4560
02197300	Upper Three Runs nr New Ellenton		58	62
02197500	Savannah R nr Millhaven, GA	4850	4950	4860
02198500	Savannah R nr Clyo, GA	5600	5800	5460

Low-flow frequency analysis of annual-series data relates magnitude to recurrence intervals that are derived from the cumulative probabilities. Low-flow frequency curves are developed for each individual CDP low-flow annual series (Figure 1) and plotted on a normal probability scale to show the variability of low flow with respect to duration (Figure 2). Low-flow frequency curves are constructed by ranking the observed flows for each CDP low-flow annual series in descending order of magnitude and calculating cumulative probabilities (CP) from the cdf (Equation 3) by using the standard USGS formula (Riggs, 1968) as

$$CP = m/(n+1) = F(x) \quad (4)$$

where m is the rank.

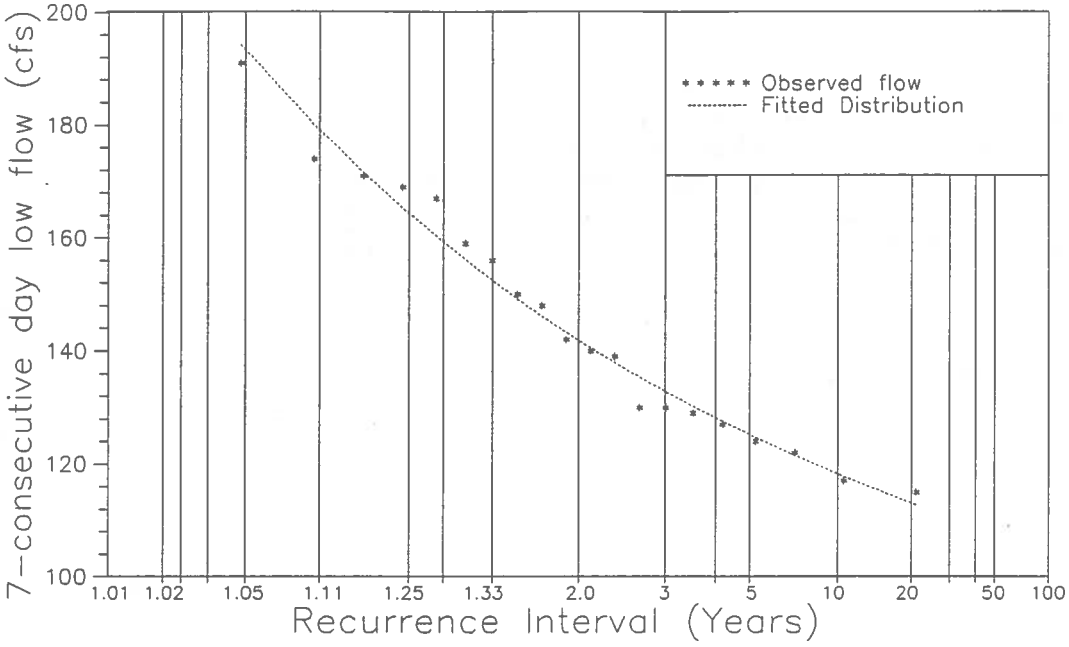

Figure 1. Seven consecutive day low-flow frequency curve for Congaree Creek at Cayce.

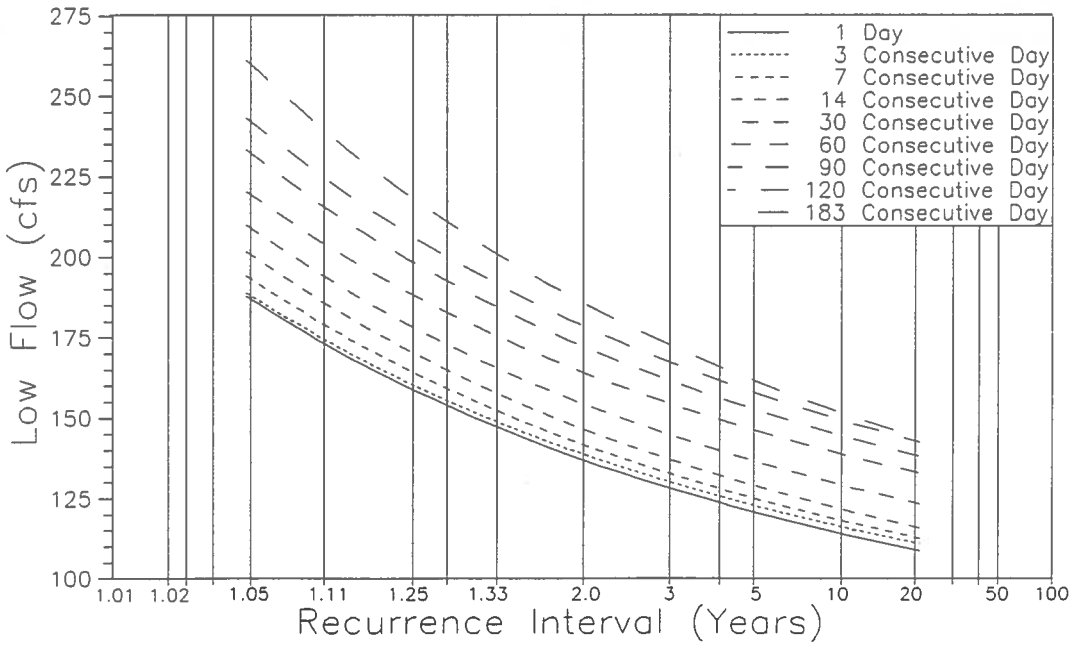

Figure 2. Low-flow frequency curves of various consecutive day periods for Congaree Creek at Cayce.

Expected recurrence intervals (RI) are determined from

$$RI = 1/CP \tag{5}$$

In cases where streamflow is intermittent, the cumulative probabilities of all observed flows are conditioned on the fact that a certain probability of zero flow exists (Jennings and Benson, 1969), because some of the low-flow estimation techniques cannot accept zero values. Such is the case when the logarithms of the observed flows are computed. The conditional probability adjustment (CP_{ADJ}) is achieved by noting that a certain probability mass exists for zero flows:

$$P(X=0) = (n-NL)/n \tag{6}$$

where NL is the number of non-zero observations, and

$$CP_{ADJ} = CP/(NL/n) \tag{7}$$

which reduces to the following two cases:

Case 1.	$CP_{ADJ} = CP/(NL/n)$	for $NL \leq n$ and $CP_{ADJ} \leq 1.0$;
Case 2.	$CP_{ADJ} = 1.0$	for $NL < n$ and $CP_{ADJ} > 1.0$;

Equation 7 may generate an adjusted cumulative probability greater than one, but in the theoretical sense this is not possible, so Case 2 is arbitrarily applied. Also, recurrence interval is based on CP and not CP_{ADJ}, so no problem arises in the calculation of RI.

The calculation of low-flow estimates creates a lower boundary for all durations of greater length. In cases where low-flow estimates of a discrete duration are greater than low-flow estimates of a longer duration for the same recurrence interval, the flow constraint created by the shorter duration is applied to the longer duration, raising the low-flow estimates until they are equivalent to the low-flow estimates of the shorter duration (Figure 3).

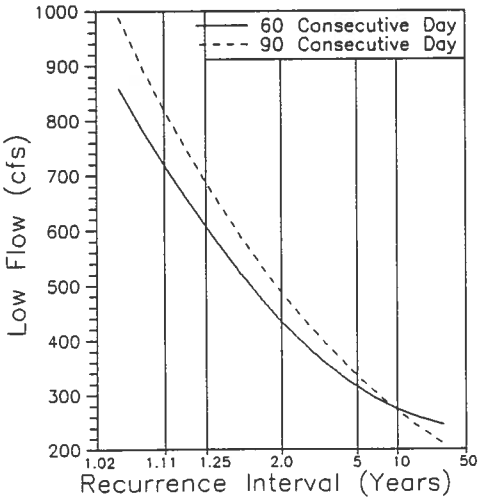

Figure 3a. Crossing CDP low-flow estimates.

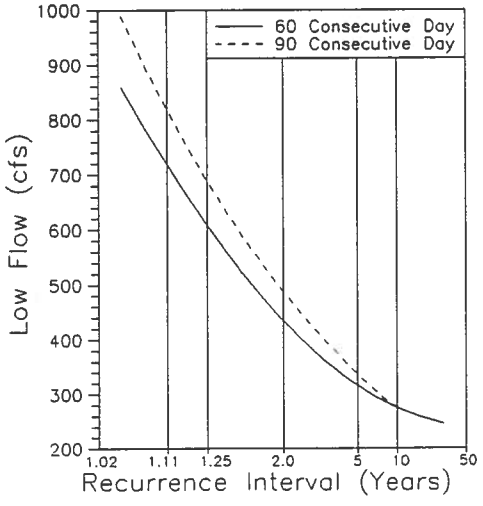

Figure 3b. CDP low-flow estimates adjusted using the shorter CDP constraint.

The nine distribution functions used in the analysis are of four types: Transformation methods, hypothetical distribution based methods, theoretical distribution based methods, and plotting position based methods. The 13 methods have varying levels of acceptance in the literature, but all have been applied to low-flow analysis. Past studies have focused on determining which probability distribution should be regionally applied to several streamflow stations. In this report, the assumption is made that each gaging station is a fixed, independent point for which unique populations of low flows exist for each CDP annual series. Rather than fit each CDP annual series to a regional probability distribution, this report assigns the probability distribution that provides the most appropriate low-flow estimates for each CDP annual series.

Transformation Methods

The premise behind transforming data from the original distribution into a transformed distribution is that no probability distribution adequately fits the underlying distribution with acceptable reliability. Thus, the flows estimated from the underlying distribution are greatly influenced by the choice of the fitting distribution. Transformation methods are used to find a unique transformed distribution for each station, independent of the original underlying distribution.

The methods attempt to transform the original unknown distribution data into known distributions. Both the power transformation and general SMEMAX (Smallest, MEdian, and MAXimum) transformation techniques used in this analysis attempt to transform the data into a normal distribution. In so doing, no assumptions about the original distribution are made. Low-flow estimates are computed for the transformed distribution by using standard techniques established for the normal distribution. The resultant low-flow estimates are then inversely transformed to represent estimates from the original distribution.

Power Transformation

Box and Cox (1964) proposed that the power transformation method be used to transform sample data to a near normal distribution. The transformation process creates a transformed data family of the form

$$z_i = [(x_i)^{\lambda} - 1]/\lambda \qquad \text{for } \lambda \neq 0 \qquad (8)$$

and

$$z_i = \ln(x_i)^{\lambda} \qquad \text{for } \lambda = 0 \qquad (9)$$

where z_i is the transformed value
x_i is the original sample value
λ is the transformation constant.

The assumption is made that normality is approximated as the skewness coefficient of the transformed sample approaches zero. The skewness coefficient is defined as

$$g_z = m_3/(m_2)^{1.5} \qquad (10)$$

where m_3 is the third-order moment of the sample about the mean
m_2 is the second-order moment of the sample about the mean.

Moments of order r, are computed from the moment generating function

$$m_r = [\Sigma(z_i - \bar{z})^r]/n \qquad (11)$$

where $\bar{z}$ is the mean of the transformed sample computed from

$$\bar{z} = (1/n)\Sigma z_i \qquad (12)$$

The variance is the second-order moment about the mean from which the standard deviation is computed:

$$s_z = (m_2)^{0.5} \qquad (13)$$

Loganathan and associates (1985A) suggested establishing upper and lower limits for λ, then using the method of bisection in an iterative process to arrive at λ. An inverse transformation is required to convert the transformed distribution back to the low flows of interest:

$$Q_{RI} = (\lambda(\bar{z}+K_{RI}s_z) + 1)^{(1/\lambda)} \qquad (14)$$

where Q_{RI} is the discharge having a recurrence interval of RI
K_{RI} is the frequency factor for the recurrence interval, RI.

In this case, the frequency factor is the standard normal deviant (Nt) for the recurrence interval of interest RI, calculated by the method listed in Abramowitz and Stegun (1972)

$$Nt_{RI} \approx w_{RI} - (a_1+a_2w_{RI}+a_3w_{RI})/(1+a_4w_{RI}+a_5w_{RI}+a_6w_{RI}) \qquad (15)$$

where $a_1 = 2.515517$
$a_2 = 0.802853$
$a_3 = 0.010328$
$a_4 = 1.432788$
$a_5 = 0.189269$
$a_6 = 0.001308.$

The variable (w_{RI}) for recurrence intervals of 2 years or more is calculated by

$$w_{RI} = \ln(1/(CP_{ADJ}-1)^2) \qquad (16)$$

General SMEMAX Transformation

The general SMEMAX transformation proposed by Loganathan and associates (1985B) includes the SMEMAX transformation (Bethlahmy, 1977) and modified SMEMAX transformation (Rasheed and associates, 1982) as special cases. The SMEMAX transformation is designed to ensure that the transformed sample contains equal numbers of observations above and below the mean with an arbitrarily established range for the transformed data. The general SMEMAX uses the actual range of sample data in the transformation process. By adhering to the natural range of data and forcing the condition of equal numbers of observations above and below the mean, the general SMEMAX approaches symmetry. However, this attribute alone does not ensure normality. Sample transformation is accomplished by

$$z_i = (x_i - x_s)\|x_l - x_s\|/[2(x_m - x_s)] \quad \text{for } x_s \le x_i \le x_m \quad (17)$$

and

$$z_i = (x_m - x_s) + [(x_i - x_m)(x_m - x_s)/(x_l - x_m)][\|x_l - x_s\|/\{2(x_m - x_s)\}] \quad \text{for } x_m < x_i \le x_l \quad (18)$$

where x_s is the lowest observed flow from the original sample
x_m is the median flow from the original sample
x_l is the highest observed flow from the original sample

and

$$\|x_l - x_s\| = [(x_l - x_m)^2 + (x_m - x_s)^2]^{0.5} \quad (19)$$

Only one reverse transformation:

$$Q_{RI} = x_s + 2(\bar{z} + K_{RI}s_z)(x_m - x_s)/\|x_l - x_s\| \quad (20)$$

is required to estimate low flows greater than or equal to the median flow which by definition, has a recurrence interval of 2 years.

Hypothetical Distribution Based Methods

The use of hypothetical distributions for extreme-value analysis of hydrologic time series data is widely accepted. These methods calculate distribution parameters from the original sample and fit these parameters to a hypothetical distribution, thereby reproducing the underlying distribution to the greatest extent possible. Cutoff values are calculated from the cdf for the return periods of interest that represent the desired low flows. All hypothetical distribution based methods utilize the frequency factor equation

$$Q_{RI} = \bar{x} + K_{RI}s \quad (21)$$

where K_{RI} is the frequency factor which is the standard normal deviant for the recurrence interval RI (Equation 15).

Normal Distribution

The normal distribution is applicable to low-flow analysis when the observations are continuous, the consecutive values are independent, and the probabilities are stable (Kite, 1978). The normal distribution is not frequently used in extreme-value analysis even though these criteria are generally met, because these data tend to be skewed. Since a skewed distribution cannot easily be approximated by using normal distribution statistics unless the data are transformed, most work has focused on using other methods to describe the sample distribution. However, low flows downstream of impoundments are not subjected to the extremes found under free-flowing conditions, and thus they may be normally distributed.

Calculation of the sample mean and standard deviation is achieved by using Equations 12 and 13 respectively, noting that in this case the actual observations are used instead of transformed data. Using Equation 15 to calculate the standard normal deviant for the recurrence intervals of interest, low flow estimates are generated with Equation 21.

Two-Parameter Log-Normal Distribution

Chow (1964) demonstrated that the parameters of many hydrologic variables act multiplicatively; and thus the conditions for normal distributions are satisfied by the logarithms of these parameters. The sample is logarithmically transformed and the inverse product of the logarithms of these parameters yields

$$\ln(Q_{RI}) = \bar{z} + K_{RI}s_z \tag{22}$$

where z denotes the natural logarithmically transformed data

which is a form of Equation 21 that reduces to

$$Q_{RI} = \exp(\bar{z} + K_{RI}s_z) \tag{23}$$

Log-Pearson Type III Distribution

The Log-Pearson Type III distribution is widely used for flood-frequency analysis and endorsed by the U.S. Water Resources Council (1977). This acceptance is largely due to the distribution shape flexibility achieved by varying the three distribution parameters (Bobee, 1975). The cdf of the distribution cannot be stated in a closed form so, as an estimator of the cdf, the pdf

$$f(x) = [(\ln(x)-\gamma)/\alpha]^{(\beta-1)}(\exp\{-[(\ln(x)-\gamma)/\alpha]\})/[|\alpha|x\Gamma(\beta)] \tag{24}$$

is integrated from negative infinity to the cutoff value of interest, x. The gamma function [$\Gamma(\ )$] is solved from the recurrence formula (Abramowitz and Stegun, 1972)

$$\Gamma(n+z) = (n-1+z)(n-2+z)...(1+z)\Gamma(1+z) \tag{25}$$

and the remainder, $\Gamma(1+z)$, is solved by the polynomial approximation

$$\Gamma(1+z) = 1+c_1z+c_2z^2+c_3z^3+c_4z^4+c_5z^5+c_6z^6+c_7z^7+c_8z^8 \tag{26}$$

where $c_1 = -0.577191652$
$c_2 = 0.988205891$
$c_3 = -0.897056937$
$c_4 = 0.918206857$
$c_5 = -0.756704078$
$c_6 = 0.482199394$
$c_7 = -0.193527818$
$c_8 = 0.035868343.$

Parameter estimation by direct application of method of moments.--In this technique, the Log-Pearson Type III distribution moments are fitted to the sample moments, avoiding the distortion of the logarithmic transformation. Moments about the origin of the Log-Pearson Type III distribution are generated by

$$\ln(u_r) = r\gamma-\beta[\ln(1-r\alpha)] = [\ln\Sigma(x_i)^r]/n \tag{27}$$

The mean, standard deviation, and coefficient of skew are then computed by

$$\bar{z} = \ln(u_1)+\{[\ln(u_2)-2\ln(u_1)]/[\ln(1-\{1/(A+3)\}^2-\ln(1-2\{1/(A+3)\}))][\ln(1-\{1/(A+3)\})]\} +$$

$$[1/(A+3)]\{[\ln(u_2)-2\ln(u_1)]/[\ln(1-\{1/(A+3)\}^2-\ln(1-2\{1/(A+3)\})] \quad (28)$$

$$s_z = [1/(A+3)]\{[\ln(u_2)-2\ln(u_1)]/[\ln(1-\{1/(A+3)\}^2-\ln(1-2\{1/(A+3)\})]\}^{0.5} \quad (29)$$

and

$$g_z = 2.0/\{[\ln(u_2)-2\ln(u_1)]/[\ln(1-\{1/(A+3)\}^2-\ln(1-2\{1/(A+3)\})]\}^{0.5} \quad (30)$$

where

$$A = -0.23019+1.65262C+0.20911C^2-0.04557C^3 \qquad \text{for } 3.5 < B \leq 6.0 \quad (31)$$

or

$$A = -0.47157+1.99955C \qquad \text{for } 3.0 < B \leq 3.5 \quad (32)$$

with

$$B = [\ln(u_3) - 3\ln(u_1)]/[\ln(u_2) - \ln(u_1)] \quad (33)$$

and

$$C = 1/(B - 3) \quad (34)$$

Bobee and Robitaille (1977) correct for bias in the standard deviation and skew by

$$s_{z(ADJ)} = s_z(n/(n-1))^{0.5} \quad (35)$$

and

$$g_{z(ADJ)} = g_z[n-(n-1)]^{0.5}[1+(8.5/n)]/(n-2) \quad (36)$$

The frequency factor is computed from the Wilson-Hilferty approximation of the Chi-squared distribution (Kite, 1978) by

$$K_{RI} \approx vg_{z(ADJ)}\{1-[2/(9v)]+Nt_{RI}[2/(9v)]^{(1/2)}\}^3 - (2/g_{z(ADJ)}) \quad (37)$$

with

$$v = 8/g_{z(ADJ)}^2 \quad (38)$$

degrees of freedom. The low flows for the desired recurrence intervals are inversely transformed to the original distribution by Equation 23.

Distribution solution by frequency factors.--This technique uses the mean, variance, and coefficient of skew (Equations 12, 11, and 10) of the logarithmically transformed sample. The frequency factors for the recurrence intervals of interest are calculated from Equation 37. Equation 23 is then used to compute the low-flow estimates for the chosen recurrence intervals.

Theoretical Distribution Based Methods

First proposed by Gumbel (1954), the theoretically based methods are derived from the asymptotic theory of smallest values taken from an unlimited exponential distribution with an unbounded upper limit and a bounded lower limit of flow. These methods represent the only true solution to Equation 3 (Yu and associates, 1988) and the only true means for estimating annual low flows (Galambos, 1987). Extrapolating that hypothesis portends that the Extreme Value Type III distribution performs well on any CDP annual series. An inconsistency of theoretical distribution based methods is that they establish a lower limit of flow which may or may not fall in the interval from zero to x_s.

Gumbel Type I Distribution

The Gumbel Type I or Extreme Value Type I method is an unbounded two-parameter hypothetical distribution with concentration (α) and central tendency (β) parameters. The distribution is more often used for maximum events resulting from an initial unlimited exponential distribution. Kite (1978) stated the cdf as

$$F(x) = \exp^{**}(-\exp^{**}(-\alpha(x-\beta))) \tag{39}$$

Calculations of the parameters requires determining the expected mean and standard deviation of the reduced variate (y), from the series

$$y_i = -\ln[-\ln(1-CP_{ADJ})] \tag{40}$$

The expected mean ($\overline{y}$) and standard deviation (s_y) of the reduced variate series are calculated and the distribution parameters are computed from

$$\alpha = s_y/s \tag{41}$$

and

$$\beta = \overline{x} - \overline{y}/\alpha \tag{42}$$

The low flows of interest are determined from

$$Q_{RI} = -\ln(-\ln(CP_{ADJ}))/\alpha + \beta \tag{43}$$

Gumbel Type III Distribution

Gumbel (1954) first applied the Extreme Value Type III or Gumbel Type III distribution to extreme-value analysis of low streamflows. Since that time, this three-parameter distribution based method has received much attention, and several different techniques for estimating the distribution parameters have been proposed. The cdf of Gumbel's third asymptotic distribution is

$$F(x) = \exp^{**}\{-[(x-\gamma)/(\beta-\gamma))]^{\alpha}\} \tag{44}$$

which is rearranged to provide the low flows leaving

$$Q_{RI} = \gamma+(\beta-\gamma)[-\ln(CP_{ADJ})]^{(1/\alpha)} \tag{45}$$

Parameter estimation by the method of moments.--Loganathan and associates (1985A) describes in detail the use of this technique for estimating the Type III distribution parameters. The three parameters are calculated such that the first three Type III distribution moments (mean, variance, and coefficient of skewness) are assumed to be the corresponding sample moments. The sample moments are calculated (Equations 10, 12, and 13); and by assigning the sample moments as the Type III distribution moments, three equations containing the three unknowns α, β, and γ are produced.

By calculating g for the sample, the coefficient of skewness for the distribution is estimated. Kite (1978) presented the regression equation for estimating α when g is between -1.02 and 2.00

$$\alpha = 1/(b_1+b_2g+b_3g^2+b_4g^3+b_5g^4) \tag{46}$$

where $b_1 = 0.2777757913$
$b_2 = 0.3132617714$
$b_3 = 0.0575670910$
$b_4 = 0.0013038566$
$b_5 = 0.0081523408.$

β and γ are then calculated from

$$\beta = \bar{x} + s[1-\Gamma(1+1/\alpha)][\Gamma(1+2/\alpha)-\Gamma^2(1+1/\alpha)]^{-0.5} \tag{47}$$

and

$$\gamma = \beta - s[\Gamma(1+2/\alpha)-\Gamma^2(1+1/\alpha)]^{-0.5} \tag{48}$$

Equation 45 calculates the low-flow magnitudes for the return periods of interest.

Parameter estimation by the smallest observed drought.--Gumbel (1963) proposed estimating γ from the probability function of the smallest drought in the n years of observation. This ensures that γ is a positive number or zero, unlike the method-of-moments parameter estimation technique where γ can be negative. Since γ is defined as the lowest theoretical flow (Equation 51), a negative value has little validity in the real universe of potential low flows. Gumbel (1963) states the cdf of the third asymptotic distribution, using the lowest observed flow x_s, as

$$F(x) = \exp^{**}\{-[(x-\gamma)/((\beta-\gamma)/n^{(1/\alpha)})]^{\alpha}\} \tag{49}$$

This equation is solved for any recurrence interval of interest with the equation

$$(\bar{x}-x_s)/s = \Gamma(1+1/\alpha)[\Gamma(1+2/\alpha)-\Gamma^2(1+1/\alpha)]^{-0.5}[1-n^{(-1/\alpha)}] \tag{50}$$

by starting with an initial value of α and proceeding through a series of iterations, using the recurrence and remainder formulae (Equations 25 and 26) until a value of α is found that satisfies Equation 50. Once α is determined, γ is found by

$$\gamma = x_s - [(\bar{x}-x_s)/(n^{(1/\alpha)}-1)] \tag{51}$$

and β is determined from

$$\beta = [(\bar{x}-\gamma)/\Gamma(1+1/\alpha)] + \gamma \quad (52)$$

Equation 45 is used to calculate the low flows for the desired recurrence interval.

Parameter estimation by an order statistic.--Deininger and Westfield (1969) suggested estimating the characteristic low flow β, by using an order statistic. By definition, the characteristic low flow is the flow that will be exceeded in 36.788 percent of the years. The parameter β is estimated by an interpolation between the mth and (m+1)th ranks of low flows after the low flows are ordered from highest to lowest magnitude such that:

$$[m/(n+1)] < 0.36788 < [(m+1)/(n+1)] \quad (53)$$

The interpolated low flow associated with the cumulative probability 0.36788 is assigned as β, and α is determined from the appropriate polynomial approximation:

$$\alpha = 1/(0.99982+14.7323|q|^3+0.24436|q|^{1/3}) \quad \text{for } -20 \le q \le 0 \quad (54)$$

$$\alpha = 1/(12.13282q^3-6.67604q^2+0.00668/q-0.000003576/q^2- 0.41309/q^{1/2}+0.964254/q^{1/3}) \quad \text{for } 0 < q \le 0.19 \quad (55)$$

$$\alpha = 1/(4.40081q^2+0.04389/q^2-11.4q^3-0.00445/q^3) \quad \text{for } 0.19 < q \le 0.38 \quad (56)$$

$$\alpha = 1/(1.54439-9.35297q^3-0.308976/q) \quad \text{for } 0.38 < q \le 0.44 \quad (57)$$

$$\alpha = 1/(0.68691-7.5147q^3) \quad \text{for } 0.44 < q \le 0.448 \quad (58)$$

where

$$q = (\beta-\bar{x})/s \quad (59)$$

and γ is calculated from Equation 49. Finally, the low flows for the recurrence intervals of interest are determined from Equation 45.

Parameter estimation by maximum likelihood.--The method of maximum likelihood proposed by Condie (1979) estimates the three distribution parameters α, β, and γ such that the joint probability (L) of obtaining a sample of n values $(x_1,x_2...x_n)$ from a distribution with a pdf $p(x;\alpha,\beta,\gamma)$ is proportional to the product

$$L = \prod_{i=1}^{n} p(x_i;\alpha,\beta,\gamma) \quad (60)$$

The natural logarithm of L is taken to simplify the product of the pdf and the function is partially differentiated with respect to α, β, and γ. The partial differential with respect to β is substituted into the partial differentials with respect to α and γ to eliminate β, leaving

$$[(\alpha-1)/\Sigma(x_i-\gamma)]-\{[(n\alpha\ \Sigma(x_i-\gamma)^{(\alpha-1)}]/[\Sigma(x_i-\alpha)^{\alpha}]\} = 0 \quad (61)$$

and

$$n+\{\alpha\ \Sigma[\ln(x_i-\gamma)]\}-\{[(n\alpha\ \Sigma(x_i-\gamma)^{\alpha})(\ln(x_i-\gamma)]/[\Sigma(x_i-\gamma)^{\alpha}]\} = 0 \quad (62)$$

Equations 61 and 62 are solved by searching the interval from zero to the smallest observed event x_s, to determine where the two functions cross after assuming γ. By calculating α_1 from Equation 61 and α_2 from Equation 62, successive iterations refine γ in the stated interval. β is then determined from

$$\beta = \Sigma(x_i-\gamma)^{\alpha} \quad (63)$$

Equation 48 is used to estimate the low flows of interest once α, β, and γ are known. If Equations 61 and 62 do not converge in the interval from zero to x_s, a solution by maximum likelihood is not possible.

Weibull Distribution

The Weibull distribution is a special case of the Gumbel Type III distribution where the lower limit of flow γ, is set to zero (Loganathan and associates, 1985A). Thus, the cdf of the Weibull distribution reduces to

$$F(x) = \exp^{**}[-(x/\beta)^{\alpha}] \quad (64)$$

The parameter α is iteratively solved from

$$(\bar{x}/s)-\Gamma(1+1/\alpha)[\Gamma(1+2/\alpha)-\Gamma^2(1+1/\alpha)]^{-0.5} = 0 \quad (65)$$

and β is found by using

$$\beta = \bar{x}/\Gamma(1+1/\alpha) \quad (66)$$

The low-flow estimates for the recurrence intervals of interest are calculated from

$$Q_{RI} = \beta[-\ln(CP_{ADJ})]^{(1/\alpha)} \quad (67)$$

Plotting Position Based Methods

Plotting position based methods compute a plotting position from any one of several formulae (Viessman and associates, 1977) from which the cumulative probability is estimated. One plotting position method, the Log-Boughton distribution, first proposed by Boughton (1980) for flood-frequency analysis, was later applied to low flows by Loganathan and associates (1985A). This method transforms the data by using common logarithms and generates normalized discharges (K_i) by using

$$K_i = (z_i - \bar{z})/s_z \quad (68)$$

where z denotes the common logarithmically transformed data.

The cdf of the Log-Boughton distribution, estimated by

$$F(z) = \exp^{**}(-\exp^{**}\{A+[C/(K_i-As_z)]\}) \quad (69)$$

directly fits the cumulative probabilities because it is generated directly from them. A and C are determined by fitting a least squares curve through the plot-

ting positions calculated from the Cunnane (1978) estimation of the cdf

$$P(X \leq x) = (m-0.4)/(n+0.2) = pp \tag{70}$$

so that

$$A = ([\Sigma\{(K_iG_i)(K_i+G_i)\}/n]-[\{\Sigma(K_iG_i)\Sigma(K_i+G_i)\}/n^2])/$$
$$(\Sigma[(K_i+G_i)^2/n]-[\Sigma(K_i+G_i)/n]^2) \tag{71}$$

and

$$C = \Sigma(K_iG_i)/n - (A/n)[\Sigma(K_i+G_i)] + A^2 \tag{72}$$

where

$$G_i = \ln[\ln(1/pp_i)] \tag{73}$$

New means (m^*), standard deviations (s^*), and frequency factors (K_i^*) are found

$$m^* = \bar{z} - s^*K_i/n \tag{74}$$

$$s^* = [\Sigma K_i\log(x_i)-(\Sigma\log(x_i)\Sigma K_i)/n][\Sigma(K_i)^2-(\Sigma K_i)^2/n] \tag{75}$$

and

$$K_i^* = A + C/(G_i-A) \tag{76}$$

and the low flows for the recurrence intervals of interest are calculated from

$$Q_{RI} = 10^{**}(m^* + K_{RI}^*s^*) \tag{77}$$

DETERMINATION OF MOST-APPROPRIATE LOW-FLOW ESTIMATES

Low-flow estimates for each of the 13 distribution solutions are calculated from model cumulative probabilities [$CP^m(x)$] defined by the cdf. Model probabilities are based on the distribution parameters that are generated by fitting the sample data to the model distribution. Thus, the cdf provides the model cumulative probabilities for the theoretical distribution and plotting position based methods. Model probabilities can not be directly computed for transformation and hypothetical distribution based methods because these methods reduce to frequency factors:

Power Transformation:

$$K_{RI} = ([(Q_{RI}^{\lambda}-1)/\lambda] - \bar{z}/s_z \tag{78}$$

General SMEMAX Transformation:

$$K_{RI} = \{(Q_{RI}-x_s)\|x_1-x_s\|/[2(x_m-x_s)] - \bar{z}\}/s_z \tag{79}$$

Normal Distribution:

$$K_{RI} = (Q_{RI} - \bar{x})/s \tag{80}$$

Two Parameter Log Normal Distribution:

$$K_{RI} = (\ln(Q_{RI}) - \bar{z})/s_z \tag{81}$$

Log Pearson Type III:

$$K_{RI} = [(\{[\ln(Q_{RI}) - \bar{z}]/s_{z(ADJ)}+(2/g_{z(ADJ)})\}^*[4/vg_{z(ADJ)}])^{(1/3)} +[2/(9v)]-1)/[2/(9v)]^{(1/2)} \tag{82}$$

Abramowitz and Stegun (1972) cite

$$CP^m(x) = 0.5(1+d_1K_{RI}+d_2K_{RI}+d_3K_{RI}+d_4K_{RI}+d_5K_{RI}+d_6K_{RI})^{-16} \tag{83}$$

where $d_1 = 0.0498673470$
$d_2 = 0.0211410061$
$d_3 = 0.0032776263$
$d_4 = 0.0003800360$
$d_5 = 0.0000488906$
$d_6 = 0.0000053830$

as a polynomial approximation for converting the frequency factor to an estimate of the cumulative probability of each observation for the associated recurrence interval. For the Log Pearson Type III methods, the frequency factor must be converted to the standard normal deviant by working back through the Wilson-Hilferty approximation. Comparison of the model cumulative probabilities with the adjusted cumulative probabilities (Equation 6) provides an indication of the "goodness" of fit for each of the models.

Yu and associates (1988) derived an empirical comparison of the model cumulative probability versus adjusted cumulative probability [$CP_{ADJ}(x)$], using non-parametric Chi-squared and edf statistics. Their technique is based on eight criteria:

1. To describe the maximum discrepancy between the model and adjusted cumulative probabilities, a statistic of the form

$$\underset{1 \le i \le n}{\text{maximum}} \; |CP_{ADJ}(x_i) - CP^m(x_i)| \; n^{0.5} \tag{84}$$

is used which resembles the Kolmogorov-Smirnov test statistic for goodness of fit.

2. To account for and describe the maximum discrepancy between the model and cumulative probabilities if the model probabilities are shifted, the statistic

$$\underset{1 \le i \le n}{\text{maximum}} \; |CP_{ADJ}(x_{i-1}) - CP^m(x_i)| \; n^{0.5} \tag{85}$$

is calculated where $CP_{ADJ}(x_0) = (1/(n+1))$.

3. To account for and describe the maximum discrepancy between the model and cumulative probabilities if the shift is in the direction opposite that of Criteria 2, the statistic

$$\underset{1 \le i \le n}{\text{maximum}} \; |CP_{ADJ}(x_{i+1}) - CP^m(x_i)| \; n^{0.5} \tag{86}$$

is calculated where $CP_{ADJ}(x_{n+1}) = 1$.

4. To describe an average discrepancy between the model and cumulative probabilities, the sum of the squares of the deviations is computed as

$$\Sigma[CP_{ADJ}(x_i) - CP^m(x_i)]^2 \tag{87}$$

5. To describe the average discrepancy between the model and adjusted cumulative probabilities, giving greater consideration to the less frequent recurrence tail, where the fit of the distribution is of greater interest, the statistic

$$\Sigma\{W_j[CP_{ADJ}(x_i) - CP^m(x_i)]^2\} \tag{88}$$

is calculated where W_j is a weighting factor assigned as

$$W_j = 1 \text{ for } RI < 2$$
$$W_j = 2 \text{ for } RI \ge 2$$

which doubles the importance of the discrepancies between the model and adjusted cumulative probabilities for recurrence intervals of 2 years and longer.

6. To describe the discrepancy between the mean return period of the adjusted and model cumulative probabilities, the statistic

$$\Sigma[M_n(x_i) - M^m(x_i)]^2 \tag{89}$$

is computed from the fundamental relationships between the mean return periods and the cumulative probabilities where

$$M_n(x) = 1/(1-CP_{ADJ}(x)) \tag{90}$$

and

$$M^m(x) = 1/(1-CP^m(x)) \tag{91}$$

are the means of the first time that the observation exceeds x, estimated by the data for the adjusted and model cumulative probabilities, respectively.

7. To describe the discrepancy between the mean return periods of the adjusted and model distributions giving relative importance at each x_i, the statistic

$$\Sigma\{[(1-CP_{ADJ}(x_i))^3/CP_{ADJ}(x_i)][M_n(x_i) - M^m(x_i)]^2\} \tag{92}$$

is computed which is derived from the reciprocals of the asymptotic variances.

8. To test the fit of the model with the adjusted cumulative probability distribution, the Chi squared statistic is calculated for samples of 25 observations or more:

$$\sum_{k=1}^{6} = \{[C^m(x_k) - C_n(x_k)]^2/C_n(x_k)\} \tag{93}$$

where $C_n(x_k)$ is the expected number of observations within class k, each k having a mass of (1/6).
$C^m(x_k)$ is the actual number of observations within class k.

The smallest value of each of the eight statistics indicates the least amount of discrepancy between the model and adjusted cumulative probabilities. The statistics are ranked in ascending order and weights are applied to the models based on the ranks. Yu and associates (1988) propose weights based on the reliability of each test criteria and a variation of their system is used (Table 5). The weighted criteria for each distribution are totaled and the model receiving the highest score becomes the representative distribution for the CDP annual series.

Table 5. Weights for eight test statistics based on relative reliabilities

	Rank			
Criteria	First (minimum)	Second	Third	All Others
Statistic #1	8	4	2	0
Statistic #2	2	1	0.5	0
Statistic #3	2	1	0.5	0
Statistic #4	4	2	1	0
Statistic #5	8	4	2	0
Statistic #6	4	2	1	0
Statistic #7	8	4	2	0
Statistic #8	2	1	0.5	0

RESULTS

Comparisons between the low-flow estimating method used in this report and past methods are useful for evaluating the method's performance. The average difference between the 7Q10 published in Bloxham (1979) and the new 7Q10 is 14.9 percent for the 68 stations (Table 4). For the 30 stations having record lengths of 35 years or more which incorporate the mid 1950's drought flows, the average difference is 12.7 percent. Comparing the 19 stations having equivalent records (discontinued before the 1977 climatic year), the mean difference is 12.9 percent with station 02130500 accounting for a large portion of that discrepancy (Table 6). A comparison of the low-flow estimates from Bloxham (1979) with the new estimates for each CDP is made by using a paired-observations t test with the null hypothesis that no significant difference exists between the paired means. This hypothesis is not rejected for any CDP using a two tailed test with $\alpha = 0.001$ (Table 7). Therefore, the hypothesis that a significant difference exists between the new low-flow estimates and those in Bloxham (1979) is rejected.

Low-flow frequency analysis of the nine CDP at the 104 sites yields 936 sets of low-flow estimates for which 919 sets were actually calculated. Low-flow estimates for the remaining 17 sets are not listed because either all observed flows are zero (station 02176875) or data for CDP in excess of 30 consecutive days is unreliable (stations 02148315, 02169625, and 02197320).

Table 6. Bloxham (1979) 7Q10 estimates compared with new 7Q10 estimates at stations with equivalent periods of record

Station	Bloxham (1979) (cfs)	(1988) (cfs)	Difference (percent)
02130500	4.3	0.76	82.3
02131500	140	138	1.4
02132500	57	57	0.0
02153500	540	562	4.1
02156000	84	89	6.0
02157500	18	17	5.6
02158000	36	38	5.6
02158500	17	15	11.8
02159000	29	32	10.3
02159500	71	77	8.5
02160000	16	19	18.8
02160500	58	62	6.9
02163000	168	165	1.8
02164000	16	15	6.3
02167500	355	373	5.1
02172500	65	61	6.2
02186000	33	37	12.1
02188000	38	47	23.7
02192500	7.2	9.3	29.2
sum	1752.5	1821.06	245.7
mean	92.2	95.8	12.9

The nine distributions used in the analysis consist of two- and three-parameter distributions. Two-parameter distributions are the normal, Gumbel Type I, Log-Boughton, power transformation, general SMEMAX transformation, and log-normal distributions and three-parameter distributions include the Gumbel Type III (plus the Weibull as a special case) and the Log-Pearson Type III distributions. Two-parameter distributions account for 642 of the 936 CDP sets (68.6 percent) from which the Gumbel Type I accounted for 280 of the 936 CDP solution sets (29.9 percent). The Gumbel Type I was the most frequently applied of any distributions (Table 8). Three-parameter distributions make up 277 of the 936 CDP solution sets (29.6 percent) with the Gumbel Type III plus the Weibull distributions being the most widely applied. The Gumbel Type III and Weibull distributions are applied to 168 of the 936 CDP solution sets (17.9 percent) which make it the second most widely applied distribution overall. Because no distribution consistently out-performs the others over the range of drainage basin characteristics represented by the 104 stations, the use of multiple distributions from which the most appropriate single distribution is statistically selected for each CDP at each station is preferable to the use of a single distribution for all stations.

Table 7. Hypothesis tests that Bloxham (1979) and new 7-consecutive-day low-flow estimates are not significantly different at stations with equivalent periods of record

	Difference between old and new low-flow estimates for indicated return period (in years)					
Station	2	5	10	20	30	50
02130500	-3.6	-3.4	-3.54	-2.9		
02131500	0	2	-2	-6	-8	
02132500	2	-1	0	2	3	
02153500	3	9	22	37	42	
02156000	11	8	5	4	2	
02157500	2	1	-1	-2	-3.1	
02158000	1	2	2	0	-1	
02158500	2	-1	-2	-2.7	-3.2	
02159000	-9	1	3	2	2	
02159500	-7	2	6	9	10	
02160000	-3	2	3	2.4	1.8	
02160500	9	1	4	9	12	16
02163000	-8	-10	-3	9	17	26
02164000	0	-1	-1	-1	0	
02167500	-27	7	18	15		
02172500	4	-3	-4	-4	-4	
02186000	1	4	4			
02188000	-3	8	9	6		
02192500	1	3	2.1	0.3	-1	
sum	-24.6	30.6	61.6	77.1	69.5	42
mean (u)	-1.29	1.61	3.24	4.28	4.63	21
stan dev (s)	1.84	1.05	1.58	2.32	3.16	5
$t = \lvert u/s \rvert$	0.70	1.54	2.05	1.85	1.47	4.2
$t_{\alpha = 0.001}$	4.07	4.07	4.07	4.14	4.4	636.62

The superior performance of two-parameter methods may result because there are more unique two-parameter techniques applied (six) as opposed to three-parameter techniques (two). However, as data availability increases, the performance of three-parameter distributions increases (Figure 4). The reason for the two-parameter distributions out-performing three-parameter distributions as a whole is largely a function of the short periods of record at most gaging stations. Over 58 percent of the stations have periods of record less than 30 years (Table 1). In fact, as Figure 4 indicates, at least 50 years of data is required before three-parameter distributions consistently out-perform two-parameter distributions.

Problems may exist when applying low-flow estimation techniques to data of unknown distributions. For example, the one-day low-flow estimate at the Broad River near Carlisle gage (02156500) is zero for a recurrence interval of 50 years. At this site, 48 years of data are available and the lowest mean daily flow is 44 cfs measured in 1957. However, this observation, together with mean daily flows of 57 cfs and 50 cfs recorded in 1953 and 1955 combine to pull the slope of the prediction curve downward to such an extent that it intersects the zero flow. This problem is generally limited to the 1-day and 3-consecutive-day low flow es-estimates. Bloxham (1979) avoided this problem by omitting the 1-day and 3-consecutive-day low-flow estimates. In this report, these estimates are presented along with the descriptive statistics of each CDP distribution. When the low-flow

Table 8. Distribution solution matrix of analysis technique versus consecutive day period

	1	----------Consecutive days----------							
Method	Day	3	7	14	30	60	90	120	183	Total
Normal	1	1	7	4	2	2	0	0	1	18
Gumbel I	35	30	27	31	29	29	32	35	32	280
Gumbel III[1]	4	4	5	4	6	5	1	1	5	35
Gumbel III[2]	7	11	12	12	7	6	7	7	5	74
Gumbel III[3]	2	0	2	1	1	1	2	2	3	14
Gumbel III[4]	2	3	2	3	2	2	4	2	0	20
Weibull	2	6	4	5	3	1	1	1	2	25
Log-Boughton	15	16	15	9	9	10	8	12	5	99
Log-Pearson III[5]	9	7	7	6	9	6	10	8	8	70
Log-Pearson III[6]	3	3	2	3	9	7	5	5	2	39
Power Trans.	9	8	6	9	11	9	15	12	17	96
Gen. SMEMAX Trans.	8	10	8	13	13	20	12	8	14	106
Log-normal	6	4	6	3	2	3	4	8	7	43
None[7]	1	1	1	1	1	3	3	3	3	17

[1] is the Gumbel Type III distribution (method of moments)
[2] is the Gumbel Type III distribution (smallest observed drought)
[3] is the Gumbel Type III distribution (order statistic)
[4] is the Gumbel Type III distribution (maximum likelihood)
[5] is the Log-Pearson Type III distribution (frequency factor)
[6] is the Log-Pearson Type III distribution (direct method of moments)
[7] indicates no analysis because either all observed flows are zero (station 02176875) or data for CDP in excess of 30 consecutive days is unreliable (stations 02148315, 02169625, and 02197320)

estimate for the recurrence interval closest to the number of observations deviates substantially from the minimum flow observed, this indicates that the low-flow estimation technique did not adequately fit the low end of the observed data. Caution should be exercised when using the estimates of low-flow magnitude and frequency in these instances. Users may benefit by plotting the observed low flows versus cumulative probability to obtain a clearer picture of the distribution tail.

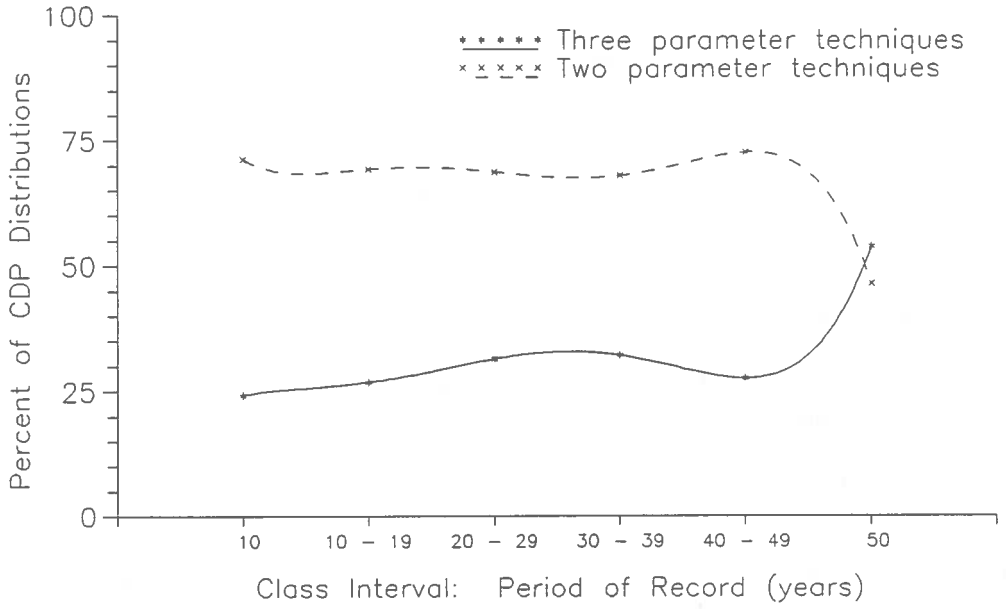

Figure 4. Performance of two- and three-parameter distribution low-flow estimation methods.

LITERATURE CITED

Abramowitz, M. and Stegun, I. A. (Eds.), 1972, Handbook of mathematical functions with formulas, graphs, and mathematical tables: Applied Mathematics, series 55, National Bureau of Standards, Washington, D.C., 1046 p.

Bethlahmy, N., 1977, Flood analysis by SMEMAX transformation: Journal of the Hydraulics Division, American Society of Civil Engineers, v. 103 no. HY1, p. 69-78.

Bloxham, W. M., 1979, Low flow frequency and flow duration of South Carolina Streams: S.C. Water Resources Commission, report no. 11, Columbia, 90 p.

Bobee, B., 1975, The Log-Pearson Type 3 distribution and its application in hydrology: Water Resources Research, v. 11, no. 5, p. 681-689.

Bobee, B., and Robitaille, R., 1977, The use of the Pearson Type 3 and Log-Pearson Type 3 distributions revisited: Water Resources Research, v. 13, no. 2, p. 427-433.

Boughton, W. C., 1980, A frequency distribution for annual floods: Water Resources Research, v. 16, no. 2, p. 347-354.

Box, G. E. P. and Cox, D. R., 1964, An analysis of transformation: Journal of the Royal Statistical Society, series B, v. 26, no. 2, p. 211-252.

Chow, V. T. (Ed.), 1964, Handbook of Applied Hydrology: McGraw-Hill, New York, p. 8.1-8.42.

Condie, R., 1979, Drought frequency analysis for intermittent streams: International Symposium on Hydrologic Aspects of Drought, New Dehli, India, 1979, Proceedings, p. 242-248.

Cunnane, C., 1978, Unbiased plotting position - a review: Journal of Hydrology, v. 37, no. 3, p. 205-222.

Deininger, R. A. and Westfield, J. D., 1969, Estimation of the parameters of Gumbel's third asymptotic distribution by different methods: Water Resources Research, v. 5, no. 6, p. 1238-1243.

Galambos, J., 1987, The asymptotic theory of extreme order statistics: Robert E. Krieger Publishing Co.

Gumbel, E. J., 1963, Statistical forecast of droughts: Bulletin of the International Association of Scientific Hydrology, v. 8, no. 1, p. 5-23.

Gumbel E. J., 1954, Statistical theory of droughts: American Society of Civil Engineers, Proceedings, v. 80, separate 439, 19 p.

Jennings, M. E. and Benson, M. A., 1969, Frequency curves for annual flood series with some zero events or incomplete data: Water Resources Research, v. 5, no. 1, p. 276-280.

Kite, G. W., 1978, Frequency and risk analysis in hydrology: Water Resources Publications, Fort Collins, CO, 224 p.

Knox, B. L. and Delleur, J. W., 1988, Frequency analysis of low flows in Indiana Streams: EOS, Transactions of the American Geophysical Union, v. 69, no. 44, p. 1180.

Loganathan, G. V., Kuo, C. Y., and McCormick, T. C., 1985A, Methods of analyzing instream flows: Virginia Water Resources Research Center, Virginia Polytechnic Institute, bulletin 148, Blacksburg, 70 p.

Loganathan, G. V., Kuo, C. Y., and McCormick, T. C., 1985B, Frequency analysis of low flows. Nordic Hydrology, v. 16. p. 105-128.

O'Conner, D. J., 1964, A comparison of probability distributions in the analysis of drought flows: Water and Sewage Works, v. 111, no. 4, p. 180-185.

Prakash, A., 1981, Statistical determination of design low flows: Journal of Hydrology, v. 51, p. 109-118.

Rasheed, H. R., Ramamoorthy, M.V., and Al-Dabbagh, A. S., 1982, Modified SMEMAX transformation for frequency analysis: Water Resources Bulletin, v. 18, no. 3, p. 509-511.

Riggs, H. C., 1968, Frequency curves: U.S. Geological Survey Techniques of Water Resources Investigations, book 4, ch. A2, 15 p.

Riggs, H. C., 1965, Estimating probability distributions of drought flows: Water and Sewage Works, v. 112, no. 5, p. 153-157.

Stallings, J. S., 1967, South Carolina streamflow characteristics, low flow frequency and flow duration: U.S. Geological Survey Open File Report, Columbia, 83 p.

Tasker, G. D., 1987, A comparison of methods for estimating low flow characteristics of streams: Water Resources Bulletin, v. 23, no. 6, p. 1077-1083.

U.S. Geological Survey, Published annually since 1961, Water resources data for South Carolina: U.S. Geological Survey Water Data Reports, Surface Water Records, Part 1

U.S. Geological Survey, Published annually through 1960, Surface water supply of the United States, South Atlantic Slope Basins, James River to Savannah River: U.S. Geological Survey Water Supply Papers, Part 2-A.

U.S. Water Resources Council, 1977, Guidelines for determining flood flow frequency, bulletin 17A, Washington, D.C., p. 3.1-3.27

Viessman, W. J., Knapp, J. W., Lewis, G. L., and Harbaugh, T. E., 1977, Introduction to hydrology: Harper and Row, New York, 704 p.

Yu, K. F., Kohta, S., and Spurrier, P., 1988, Report on the evaluation and testing of probability models for estimating low flow magnitudes and recurrence intervals: Statistical Laboratory, University of South Carolina, Columbia, 15 p.

APPENDIX

CONSECUTIVE-DAY PERIOD DESCRIPTIVE STATISTICS AND ESTIMATES OF THE MAGNITUDE AND FREQUENCY OF LOW FLOWS

Results of the low-flow analysis for the 104 South Carolina streamflow gaging stations are presented on the following pages. Each gaging station is described by identity number, name, and location (county and latitude-longitude). Other information includes the period of gaged record and the drainage area above the gage. Three tables are listed for each station. The first table is the minimum-flow array table which lists the observed low flows for each CDP during each complete climatic year of record. The second table lists the descriptive statistics for each CDP. Abbreviations used in these tables are

N =	Number of observations
Non 0 N =	Number of observed flows greater than zero
Max--Year =	Maximum flow observed and year of occurrence
Min--Year =	Minimum flow observed and year of occurrence
Mean =	Mean of original sample (Equation 12)
Var =	Variance of original sample (Equation 11; r=2)
Sd =	Standard deviation of original sample (Equation 13)
Skew =	Coefficient of skewness of original sample (Equation 10)
Cov =	Coefficient of variation of original sample defined as

$$Cov = s/\bar{x} \tag{94}$$

1 SCC =	First order serial correlation coefficient of original sample defined as

$$1\ SCC = \{(1/(n-1))\Sigma[x_i x_{(i+1)}]\}-[(1/(n-1)^2\Sigma x_i \Sigma x_{(i+1)}]/(\{[(1/(n-1))\Sigma x_i^2]-$$

$$[(1/(n-1)^2)(\Sigma x_i)^2]\}^{(1/2)}\{[(1/(n-1))\Sigma x_{(i+1)}^2]-[(1/(n-1)^2)(\Sigma x_{(i+1)})^2]\}^{(1/2)}) \tag{95}$$

where the summations are from i=1 to n-1.

The third table presents the low-flow estimates for each CDP for the specified return periods. At the bottom of each column of low-flow estimates for each CDP is the method used to calculate the low-flow estimate. These abbreviations are

NORMAL =	Normal distribution
GUMBEL1 =	Gumbel Type I distribution
GUMBEL3A =	Gumbel Type III distribution with parameter estimation by method of moments
GUMBEL3B =	Gumbel Type III distribution with parameter estimation by smallest observed drought
GUMBEL3C =	Gumbel Type III distribution with parameter estimation by order statistic
GUMBEL3D =	Gumbel Type III distribution with parameter estimation by maximum likelihood
WEIBULL =	Weibull distribution
LOGBOUGH =	Log-Boughton distribution
LNPEARFF =	Log-Pearson Type III distribution solution by frequency factor estimator
LNPEARDI =	Log-Pearson Type III distribution with parameter estimation by direct method of moments
POWTRAN =	Power transformation
GENSME =	General SMEMAX transformation
LOGNORM =	Log-normal distribution.

02110500 WACCAMAW RIVER NEAR LONGS
Location: Lat 335445, Long 784255. Horry County
Period of record: Mar 1950 through Sep 1987
Drainage area: 1110.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1952	23.00	24.00	25.00	28.00	34.00	42.00	58.00	70.00	156.00
1953	9.00	9.00	9.70	10.00	13.00	15.00	21.00	44.00	300.00
1954	8.00	8.00	8.30	8.90	11.00	25.00	26.00	64.00	52.00
1955	1.00	1.70	2.00	2.50	3.30	5.20	11.00	13.00	20.00
1956	24.00	25.00	29.00	33.00	69.00	75.00	106.00	215.00	1260.00
1957	68.00	70.00	74.00	85.00	117.00	143.00	182.00	206.00	259.00
1958	21.00	23.00	25.00	26.00	30.00	54.00	173.00	240.00	367.00
1959	89.00	99.00	123.00	179.00	405.00	573.00	850.00	858.00	910.00
1960	42.00	42.00	44.00	51.00	109.00	319.00	710.00	689.00	910.00
1961	42.00	43.00	47.00	53.00	81.00	241.00	388.00	508.00	784.00
1962	24.00	24.00	25.00	25.00	30.00	54.00	71.00	113.00	304.00
1963	68.00	71.00	76.00	83.00	144.00	296.00	279.00	385.00	449.00
1964	6.60	7.10	8.00	10.00	13.00	20.00	48.00	98.00	149.00
1965	80.00	80.00	82.00	96.00	250.00	305.00	525.00	855.00	1220.00
1966	40.00	40.00	41.00	43.00	44.00	58.00	102.00	144.00	411.00
1967	22.00	22.00	22.00	23.00	25.00	35.00	68.00	100.00	365.00
1968	26.00	27.00	30.00	35.00	44.00	52.00	214.00	609.00	939.00
1969	30.00	30.00	31.00	33.00	57.00	170.00	254.00	358.00	332.00
1970	57.00	58.00	62.00	65.00	99.00	199.00	671.00	692.00	1160.00
1971	20.00	21.00	22.00	23.00	24.00	27.00	36.00	91.00	309.00
1972	114.00	128.00	159.00	226.00	347.00	619.00	744.00	1010.00	1550.00
1973	34.00	34.00	36.00	39.00	47.00	60.00	91.00	116.00	251.00
1974	36.00	36.00	36.00	37.00	41.00	64.00	142.00	232.00	335.00
1975	122.00	124.00	127.00	135.00	164.00	272.00	547.00	869.00	1370.00
1976	145.00	150.00	156.00	176.00	244.00	462.00	827.00	745.00	896.00
1977	72.00	75.00	79.00	87.00	137.00	152.00	243.00	555.00	806.00
1978	35.00	37.00	38.00	41.00	71.00	214.00	241.00	239.00	272.00
1979	14.00	15.00	15.00	16.00	19.00	25.00	59.00	158.00	359.00
1980	47.00	51.00	57.00	80.00	119.00	200.00	511.00	616.00	1360.00
1981	24.00	24.00	25.00	29.00	33.00	35.00	45.00	44.00	46.00
1982	41.00	41.00	41.00	43.00	51.00	63.00	162.00	319.00	1420.00
1983	31.00	32.00	36.00	44.00	75.00	159.00	347.00	675.00	853.00
1984	2.80	2.90	3.10	3.60	4.30	5.60	7.50	15.00	60.00
1985	38.00	39.00	41.00	53.00	55.00	124.00	210.00	289.00	609.00
1986	19.00	20.00	22.00	26.00	35.00	62.00	93.00	169.00	361.00
1987	23.00	24.00	26.00	30.00	50.00	122.00	323.00	500.00	635.00

02110500 WACCAMAW RIVER NEAR LONGS
LOCATION: Lat 335445, Long 784255. Horry County
PERIOD OF RECORD: Mar 1950 through Sep 1987
DRAINAGE AREA: 1110.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	36	36	145.00-1976	1.00-1955	41.62	1113.38	33.37	1.4187	0.80167	0.22030
3	36	36	150.00-1976	1.70-1955	43.27	1241.52	35.24	1.4423	0.81432	0.19514
7	36	36	159.00-1972	2.00-1955	46.75	1550.31	39.37	1.5107	0.84217	0.13037
14	36	36	226.00-1972	2.50-1955	54.94	2586.20	50.85	1.7978	0.92557	0.02534
30	36	36	405.00-1959	3.30-1955	85.96	8467.59	92.02	1.9683	1.07048	-0.06389
60	36	36	619.00-1972	5.20-1955	148.52	23293.99	152.62	1.5646	1.02762	-0.02498
90	36	36	850.00-1959	7.50-1984	260.71	61097.45	247.18	1.0633	0.94811	0.07186
120	36	36	1010.00-1972	13.00-1955	358.42	83582.52	289.11	0.6355	0.80662	-0.05997
183	36	36	1550.00-1972	20.00-1955	606.64	196743.45	443.56	0.5913	0.73117	-0.29179

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	30	31	33	35	55	91	162	268	407
5	18	18	19	21	21	28	49	95	237
10	11	12	12	14	14	15	25	50	147
15	7.8	8.3	8.3	10	10	11	18	35	103
20	5.7	6.1	6.1	7.9	7.9	9.2	15	27	74
25	4.1	4.6	4.6	6.1	6.7	8.3	13	23	52
30	2.9	3.3	3.3	4.8	6.0	7.7	12	19	35
40	1.0	1.4	1.4	2.7	5.0	6.9	11	15	15
	GENSME	GENSME	GENSME	GENSME	POWTRAN	GUMBEL3D	GUMBEL3D	LNPEARFF	GENSME

02129590 WHITES CREEK NEAR WALLACE
Location: Lat 344520, Long 795300. Marlboro County
Period of record: Oct 1979 through Sep 1987
Drainage area: 26.40 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1981	2.20	2.20	2.40	2.50	3.00	3.70	4.70	5.70	11.00
1982	0.11	0.12	0.33	0.60	1.10	3.00	5.10	5.70	5.70
1983	4.80	5.20	5.70	5.80	6.90	7.90	12.00	14.00	17.00
1984	0.05	0.15	0.52	1.19	3.80	6.10	6.00	6.70	10.00
1985	6.40	6.50	6.60	6.70	6.80	7.60	9.00	10.00	15.00
1986	3.50	3.50	3.80	4.30	4.60	9.70	12.00	15.00	25.00
1987	0.24	0.25	0.26	0.29	0.69	2.70	4.50	5.10	6.80

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	7	7	6.40-1985	0.05-1984	2.47	5.49	2.34	0.3985	0.94777	-0.51960
3	7	7	6.50-1985	0.12-1982	2.56	5.80	2.41	0.4039	0.94080	-0.53704
7	7	7	6.60-1985	0.26-1987	2.80	5.97	2.44	0.3599	0.87188	-0.53990
14	7	7	6.70-1985	0.29-1987	3.05	5.69	2.39	0.3003	0.78099	-0.47095
30	7	7	6.90-1983	0.69-1987	3.84	5.26	2.29	0.0290	0.59720	-0.22932
60	7	7	9.70-1986	2.70-1987	5.81	6.40	2.53	0.1016	0.43515	-0.13932
90	7	7	12.00-1983	4.50-1987	7.61	9.64	3.11	0.4594	0.40785	-0.38863
120	7	7	15.00-1986	5.10-1987	8.89	14.88	3.86	0.5831	0.43418	-0.42394
183	7	7	25.00-1986	5.70-1982	12.93	38.38	6.20	0.7180	0.47921	-0.34626

Low flow frequency array table

Return Period	Consecutive days: 1 Day	3	7	14	30	60	90	120	183
2	2.2	2.3	2.5	2.8	3.6	5.5	7.2	7.4	12
5	0.00	0.00	0.14	0.46	1.3	3.1	4.2	5.3	6.2
10	0.00	0.00	0.00	0.00	0.40	2.0	3.0	4.7	4.7
	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	LNPEARDI	GUMBEL1

02130500 JUNIPER CREEK NEAR CHERAW
Location: Lat 343836, Long 795344. Chesterfield County
Period of record: Oct 1940 - Sep 1958
Drainage area: 64.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1942	5.70	6.00	7.30	8.20	10.00	18.00	21.00	27.00	41.00
1943	15.00	15.00	18.00	29.00	34.00	47.00	60.00	60.00	65.00
1944	13.00	14.00	16.00	18.00	20.00	25.00	27.00	29.00	41.00
1945	10.00	11.00	13.00	19.00	23.00	36.00	40.00	40.00	48.00
1946	0.00	1.80	5.00	7.90	11.00	19.00	22.00	26.00	87.00
1947	20.00	21.00	23.00	29.00	32.00	41.00	56.00	54.00	61.00
1948	14.00	16.00	18.00	20.00	32.00	39.00	46.00	52.00	54.00
1949	17.00	17.00	18.00	23.00	33.00	42.00	49.00	53.00	62.00
1950	1.00	1.00	1.00	1.00	20.00	45.00	55.00	68.00	70.00
1951	13.00	13.00	15.00	20.00	25.00	37.00	36.00	41.00	43.00
1952	5.30	6.00	7.20	10.00	12.00	14.00	18.00	24.00	32.00
1953	6.20	7.70	10.00	11.00	16.00	25.00	45.00	45.00	56.00
1954	18.00	20.00	21.00	23.00	39.00	43.00	52.00	55.00	69.00
1955	0.80	0.80	1.40	3.00	3.60	5.40	8.10	9.90	20.00
1956	2.20	2.20	6.10	9.10	13.00	14.00	15.00	15.00	19.00
1957	0.00	0.00	0.00	0.00	0.20	6.50	10.00	16.00	27.00
1958	5.80	6.10	7.60	11.00	20.00	28.00	33.00	43.00	55.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	17	15	20.00-1947	0.00-1957	8.65	43.53	6.60	0.1739	0.76301	-0.08064
3	17	16	21.00-1947	0.00-1957	9.33	46.80	6.84	0.1800	0.73327	-0.01136
7	17	16	23.00-1947	0.00-1957	11.04	49.99	7.07	0.0281	0.64071	-0.02635
14	17	16	29.00-1943	0.00-1957	14.25	78.75	8.87	0.0763	0.62289	-0.12027
30	17	17	39.00-1954	0.20-1957	20.22	118.71	10.90	-0.0349	0.53876	-0.06141
60	17	17	47.00-1943	5.40-1955	28.52	180.31	13.43	-0.2650	0.47077	0.12206
90	17	17	60.00-1943	8.10-1955	34.89	274.61	16.57	-0.1150	0.47499	0.08123
120	17	17	68.00-1950	9.90-1955	38.70	280.78	16.76	-0.1036	0.43299	0.17775
183	17	17	87.00-1946	19.00-1956	50.00	330.94	18.19	-0.0415	0.36384	0.24523

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	7.9	7.9	9.4	15	19	29	37	40	51
5	1.7	2.4	3.2	4.4	9.8	16	21	24	34
10	0.00	0.76	0.76	0.76	6.1	10	12	15	24
15	0.00	0.17	0.17	0.17	4.4	7.9	7.9	11	20
20	0.00	0.00	0.00	0.00	3.3	6.6	6.6	8.5	17
	LNPEARFF	LNPEARFF	GUMBEL1	GENSME	GUMBEL1	LNPEARFF	LOGBOUGH	LOGBOUGH	LOGBOUGH

02130600 CEDAR CREEK AT SOCIETY HILL
Location: Lat 343130, Long 795105. Darlington County
Period of record: Oct 1970 - Sep 1981
Drainage area: 58.20 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1972	18.00	19.00	23.00	38.00	48.00	58.00	67.00	74.00	90.00
1973	24.00	24.00	25.00	28.00	38.00	45.00	50.00	54.00	64.00
1974	41.00	41.00	42.00	42.00	44.00	49.00	57.00	67.00	83.00
1975	31.00	32.00	35.00	36.00	42.00	45.00	52.00	61.00	68.00
1976	24.00	25.00	27.00	32.00	48.00	58.00	66.00	77.00	83.00
1977	28.00	29.00	31.00	33.00	36.00	43.00	50.00	63.00	75.00
1978	10.00	12.00	18.00	20.00	29.00	36.00	37.00	42.00	44.00
1979	22.00	23.00	25.00	36.00	39.00	42.00	47.00	57.00	70.00
1980	20.00	22.00	24.00	27.00	31.00	41.00	64.00	68.00	72.00
1981	9.30	9.50	9.90	12.00	13.00	16.00	17.00	19.00	31.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	10	10	41.00-1974	9.30-1981	22.73	80.60	8.98	0.3044	0.39496	0.23161
3	10	10	41.00-1974	9.50-1981	23.65	76.20	8.73	0.2166	0.36911	0.20628
7	10	10	42.00-1974	9.90-1981	25.99	70.12	8.37	0.0425	0.32219	0.26566
14	10	10	42.00-1974	12.00-1981	30.40	72.84	8.53	-0.8099	0.28074	0.01195
30	10	10	48.00-1972	13.00-1981	36.80	99.76	9.99	-1.0854	0.27141	0.44966
60	10	10	58.00-1972	16.00-1981	43.30	127.61	11.30	-0.9852	0.26089	0.27449
90	10	10	67.00-1972	17.00-1981	50.70	205.61	14.34	-1.0304	0.28282	-0.31672
120	10	10	77.00-1976	19.00-1981	58.20	262.56	16.20	-1.2274	0.27841	-0.21876
183	10	10	90.00-1972	31.00-1981	68.00	296.40	17.22	-0.9157	0.25318	-0.16491

Low flow frequency array table

Return Period	1 Day	Consecutive days: 3	7	14	30	60	90	120	183
2	22	23	26	32	39	43	54	62	71
5	14	16	19	23	27	34	37	50	53
10	10	12	16	17	19	29	29	41	41
	GUMBEL1	LOGBOUGH	GENSME	GUMBEL3B	GUMBEL3B	NORMAL	GUMBEL3B	POWTRAN	GUMBEL3B

02130900 BLACK CREEK NEAR McBEE
Location: Lat 343050, Long 801100. Chesterfield County
Period of record: Oct 1959 through Sep 1987
Drainage area: 108.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1961	91.00	92.00	97.00	105.00	111.00	119.00	123.00	128.00	137.00
1962	67.00	69.00	70.00	73.00	80.00	88.00	100.00	121.00	143.00
1963	26.00	27.00	30.00	33.00	38.00	49.00	64.00	63.00	73.00
1964	26.00	29.00	31.00	34.00	50.00	63.00	65.00	67.00	83.00
1965	56.00	60.00	64.00	76.00	92.00	98.00	125.00	149.00	176.00
1966	68.00	74.00	82.00	95.00	111.00	134.00	142.00	142.00	165.00
1967	31.00	33.00	34.00	36.00	39.00	51.00	54.00	59.00	66.00
1968	24.00	26.00	28.00	31.00	40.00	54.00	66.00	68.00	97.00
1969	22.00	22.00	23.00	24.00	26.00	30.00	52.00	65.00	70.00
1970	89.00	94.00	105.00	111.00	113.00	118.00	135.00	144.00	160.00
1971	27.00	28.00	29.00	32.00	33.00	43.00	54.00	75.00	90.00
1972	79.00	82.00	95.00	102.00	151.00	177.00	201.00	216.00	235.00
1973	39.00	39.00	40.00	45.00	50.00	64.00	75.00	84.00	96.00
1974	53.00	55.00	59.00	63.00	67.00	73.00	81.00	85.00	112.00
1975	45.00	46.00	51.00	55.00	68.00	81.00	102.00	118.00	125.00
1976	60.00	62.00	71.00	87.00	115.00	133.00	149.00	156.00	169.00
1977	48.00	50.00	53.00	59.00	62.00	74.00	86.00	99.00	134.00
1978	33.00	34.00	36.00	38.00	44.00	51.00	56.00	54.00	68.00
1979	41.00	42.00	43.00	46.00	50.00	57.00	63.00	76.00	90.00
1980	53.00	55.00	62.00	70.00	78.00	119.00	138.00	150.00	156.00
1981	32.00	32.00	33.00	37.00	38.00	41.00	49.00	60.00	78.00
1982	17.00	18.00	20.00	25.00	29.00	41.00	52.00	64.00	78.00
1983	30.00	30.00	32.00	35.00	37.00	53.00	64.00	71.00	84.00
1984	26.00	26.00	28.00	28.00	30.00	38.00	43.00	48.00	65.00
1985	48.00	49.00	50.00	55.00	59.00	69.00	69.00	75.00	93.00
1986	23.00	24.00	26.00	31.00	36.00	55.00	61.00	68.00	88.00
1987	18.00	19.00	19.00	20.00	22.00	26.00	35.00	42.00	50.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	27	27	91.00-1961	17.00-1982	43.41	437.20	20.91	0.7961	0.48170	0.01874
3	27	27	94.00-1970	18.00-1982	45.07	474.88	21.79	0.7940	0.48347	0.00270
7	27	27	105.00-1970	19.00-1987	48.56	594.40	24.38	0.8474	0.50211	-0.03932
14	27	27	111.00-1970	20.00-1987	53.56	720.69	26.85	0.7624	0.50127	-0.03064
30	27	27	151.00-1972	22.00-1987	61.81	1102.00	33.20	0.9893	0.53703	-0.04746
60	27	27	177.00-1972	26.00-1987	74.04	1355.29	36.81	1.0235	0.49724	-0.10095
90	27	27	201.00-1972	35.00-1987	85.33	1601.56	40.02	1.0988	0.46898	-0.06333
120	27	27	216.00-1972	42.00-1987	94.33	1759.85	41.95	1.0553	0.44471	0.02078
183	27	27	235.00-1972	50.00-1987	110.41	1903.95	43.63	0.9471	0.39521	-0.01607

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	37	38	41	45	51	61	68	75	94
5	25	25	27	30	33	46	55	62	76
10	21	22	23	25	27	38	48	55	67
15	20	20	22	23	25	34	44	52	62
20	19	20	21	22	23	31	42	49	59
25	19	19	21	21	22	29	40	48	57
30	18	19	20	20	21	27	39	46	55
	GUMBEL3D	GUMBEL3D	GUMBEL3D	LNPEARDI	LNPEARDI	GENSME	GENSME	GENSME	GENSME

02130910 BLACK CREEK NEAR HARTSVILLE
Location: Lat 342350, Long 800900. Darlington County
Period of record: Oct 1960 through Sep 1987
Drainage area: 173.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1962	141.00	144.00	146.00	147.00	152.00	159.00	170.00	196.00	217.00
1963	101.00	101.00	101.00	103.00	113.00	119.00	131.00	134.00	142.00
1964	96.00	97.00	98.00	99.00	106.00	122.00	122.00	126.00	141.00
1965	116.00	118.00	121.00	129.00	149.00	153.00	183.00	217.00	247.00
1966	136.00	141.00	150.00	161.00	172.00	196.00	206.00	206.00	236.00
1967	80.00	81.00	82.00	88.00	99.00	107.00	112.00	118.00	128.00
1968	76.00	77.00	79.00	86.00	97.00	117.00	126.00	129.00	167.00
1969	64.00	65.00	66.00	72.00	77.00	86.00	108.00	122.00	127.00
1970	142.00	148.00	152.00	158.00	163.00	168.00	191.00	198.00	215.00
1971	63.00	64.00	67.00	71.00	77.00	85.00	95.00	113.00	144.00
1972	86.00	92.00	112.00	124.00	184.00	191.00	223.00	245.00	281.00
1973	80.00	80.00	82.00	86.00	94.00	103.00	119.00	132.00	152.00
1974	105.00	106.00	108.00	111.00	114.00	124.00	134.00	144.00	183.00
1975	91.00	92.00	95.00	98.00	112.00	123.00	152.00	173.00	182.00
1976	118.00	123.00	130.00	145.00	173.00	193.00	230.00	237.00	255.00
1977	93.00	95.00	100.00	105.00	110.00	120.00	133.00	158.00	202.00
1978	85.00	86.00	87.00	89.00	96.00	112.00	113.00	113.00	132.00
1979	89.00	89.00	90.00	92.00	97.00	103.00	109.00	128.00	148.00
1980	107.00	108.00	112.00	116.00	127.00	175.00	196.00	212.00	221.00
1981	63.00	69.00	76.00	79.00	82.00	84.00	90.00	96.00	119.00
1982	39.00	48.00	49.00	54.00	70.00	82.00	94.00	106.00	124.00
1983	78.00	78.00	80.00	85.00	97.00	105.00	125.00	136.00	153.00
1984	58.00	73.00	73.00	74.00	77.00	85.00	89.00	97.00	119.00
1985	97.00	97.00	99.00	101.00	103.00	115.00	119.00	131.00	152.00
1986	66.00	67.00	68.00	69.00	73.00	94.00	98.00	103.00	131.00
1987	37.00	38.00	39.00	40.00	44.00	58.00	70.00	77.00	93.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	26	26	142.00-1970	37.00-1987	88.73	742.12	27.24	0.1943	0.30702	0.13506
3	26	26	148.00-1970	38.00-1987	91.42	733.55	27.08	0.3751	0.29625	0.09322
7	26	26	152.00-1970	39.00-1987	94.69	806.37	28.40	0.3485	0.29988	0.04250
14	26	26	161.00-1966	40.00-1987	99.31	904.06	30.07	0.3975	0.30277	0.04170
30	26	26	184.00-1972	44.00-1987	109.92	1239.30	35.20	0.5653	0.32026	-0.00653
60	26	26	196.00-1966	58.00-1987	122.27	1381.43	37.17	0.6104	0.30398	-0.11051
90	26	26	230.00-1976	70.00-1987	136.08	1875.84	43.31	0.7486	0.31828	-0.06505
120	26	26	245.00-1972	77.00-1987	147.96	2130.27	46.15	0.6635	0.31194	0.01032
183	26	26	281.00-1972	93.00-1987	169.65	2367.53	48.66	0.6597	0.28680	0.00294

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	87	87	90	95	100	112	124	135	154
5	65	67	69	72	77	88	96	105	130
10	54	58	60	63	69	79	86	95	118
15	50	55	56	59	66	75	82	90	111
20	47	52	54	56	64	73	79	87	107
25	45	50	52	54	62	72	77	85	104
30	44	49	50	53	61	71	76	84	102
	GUMBEL3C	LOGNORM	LOGNORM	LOGNORM	LNPEARDI	LNPEARDI	LNPEARDI	LNPEARDI	GENSME

02131000 PEE DEE RIVER AT PEE DEE
Location: Lat 341215, Long 793255. Marion County
Period of record: Oct 1938 through Sep 1987
Drainage area: 8830.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1940	1380.00	1910.00	2580.00	2750.00	2900.00	3140.00	3610.00	4030.00	5370.00
1941	1000.00	1760.00	2590.00	2800.00	3380.00	3450.00	3980.00	4390.00	5550.00
1942	1040.00	1500.00	1920.00	2210.00	2390.00	2820.00	3010.00	3200.00	3620.00
1943	1900.00	2720.00	3070.00	3610.00	4160.00	4980.00	5650.00	6310.00	6340.00
1944	1040.00	1270.00	1970.00	2250.00	2430.00	2650.00	2880.00	3140.00	4750.00
1945	1160.00	1780.00	2550.00	2940.00	3680.00	5210.00	6110.00	5840.00	6780.00
1946	2020.00	2410.00	2950.00	3260.00	3710.00	4680.00	5450.00	5770.00	13200.00
1947	1620.00	2180.00	3230.00	3690.00	3870.00	4650.00	4770.00	4860.00	5690.00
1948	1520.00	2270.00	3330.00	3440.00	3890.00	4380.00	4920.00	5060.00	5260.00
1949	2240.00	3180.00	4040.00	4230.00	4500.00	5120.00	5390.00	5500.00	6230.00
1950	2910.00	3690.00	4250.00	4710.00	5390.00	6450.00	7120.00	7660.00	8050.00
1951	2130.00	2860.00	3130.00	3940.00	4270.00	4570.00	4690.00	4720.00	4940.00
1952	880.00	1150.00	1880.00	2020.00	2090.00	2330.00	2430.00	2720.00	3160.00
1953	1440.00	1530.00	2310.00	2530.00	2890.00	3880.00	4090.00	5130.00	5770.00
1954	1040.00	1290.00	1600.00	1680.00	1840.00	2040.00	2590.00	2750.00	3490.00
1955	720.00	762.00	814.00	855.00	1070.00	1340.00	2050.00	2390.00	3160.00
1956	1700.00	2080.00	2400.00	2550.00	3160.00	3440.00	3530.00	3550.00	3990.00
1957	1260.00	1630.00	2010.00	2490.00	2720.00	2960.00	3140.00	3210.00	3780.00
1958	1880.00	2580.00	3300.00	3400.00	3530.00	3750.00	4550.00	4950.00	5730.00
1959	2400.00	3050.00	3400.00	3500.00	3660.00	4050.00	4230.00	4400.00	5220.00
1960	2210.00	3020.00	3600.00	3740.00	4440.00	6000.00	7390.00	7960.00	10100.00
1961	2800.00	3700.00	4200.00	4270.00	4340.00	4650.00	4900.00	5060.00	5730.00
1962	1640.00	1680.00	1920.00	2100.00	2420.00	2980.00	3840.00	4810.00	5950.00
1963	2020.00	2430.00	3070.00	3190.00	3480.00	4170.00	4280.00	4540.00	5960.00
1964	1160.00	1370.00	1810.00	2160.00	2590.00	3090.00	3170.00	3430.00	3830.00
1965	2470.00	3000.00	3610.00	3820.00	4340.00	4720.00	5970.00	7350.00	9940.00
1966	2640.00	2910.00	3990.00	4110.00	4290.00	4800.00	4960.00	4980.00	5760.00
1967	1770.00	2120.00	3080.00	3210.00	3420.00	3760.00	3820.00	3870.00	4060.00
1968	1760.00	2250.00	2650.00	3000.00	3080.00	3410.00	3830.00	3880.00	4870.00
1969	1000.00	1300.00	1890.00	2140.00	2140.00	2590.00	3080.00	3750.00	4660.00
1970	1620.00	2060.00	2900.00	3120.00	3400.00	3930.00	4610.00	4820.00	5550.00
1971	1830.00	1990.00	2850.00	3290.00	3320.00	3630.00	4310.00	5190.00	6710.00
1972	3020.00	3850.00	4690.00	4900.00	5650.00	7590.00	7810.00	7980.00	10100.00
1973	2080.00	2250.00	2920.00	3200.00	3380.00	4040.00	4350.00	4850.00	7450.00
1974	2190.00	2750.00	3770.00	4040.00	4330.00	4440.00	4800.00	5220.00	6960.00
1975	2280.00	2730.00	2990.00	3740.00	3950.00	4450.00	6230.00	7270.00	7300.00
1976	2720.00	2960.00	3870.00	4290.00	4970.00	7680.00	8370.00	8490.00	9340.00
1977	1490.00	2020.00	2480.00	2640.00	2860.00	2980.00	3650.00	5850.00	6300.00
1978	1280.00	1540.00	2530.00	2710.00	2900.00	3110.00	3340.00	3550.00	4530.00
1979	1670.00	2310.00	3000.00	3160.00	3210.00	3380.00	3830.00	4450.00	5450.00
1980	2380.00	2460.00	3060.00	3500.00	4070.00	6060.00	8970.00	9860.00	11200.00
1981	1800.00	2710.00	3220.00	3410.00	3570.00	3740.00	4100.00	4300.00	4510.00
1982	900.00	1120.00	1550.00	2010.00	2580.00	3280.00	3370.00	3820.00	4680.00
1983	1000.00	1130.00	2130.00	2270.00	2640.00	3220.00	4220.00	4720.00	6450.00
1984	1400.00	1520.00	2150.00	2540.00	2760.00	3040.00	3130.00	3170.00	4200.00
1985	1220.00	1840.00	2780.00	3510.00	3960.00	4210.00	4600.00	4800.00	6140.00
1986	1360.00	1380.00	2030.00	3170.00	3380.00	4690.00	4760.00	4830.00	6950.00
1987	968.00	1100.00	1630.00	1980.00	2120.00	2380.00	2780.00	3040.00	3250.00

02131000 PEE DEE RIVER AT PEE DEE
LOCATION: Lat 341215, Long 793255. Marion County
PERIOD OF RECORD: Oct 1938 through Sep 1987
DRAINAGE AREA: 8830.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	48	48	3020.00-1972	720.00-1955	1707.46	359396.89	599.50	0.3962	0.35111	0.38282
3	48	48	3850.00-1972	762.00-1955	2147.96	568281.79	753.84	0.3400	0.35096	0.33317
7	48	48	4690.00-1972	814.00-1955	2785.29	676336.42	822.40	0.0857	0.29526	0.32257
14	48	48	4900.00-1972	855.00-1955	3084.90	700588.82	837.01	-0.1327	0.27133	0.34245
30	48	48	5650.00-1972	1070.00-1955	3398.33	853571.63	923.89	0.0743	0.27187	0.24844
60	48	48	7680.00-1976	1340.00-1955	3998.13	1681624.07	1296.77	0.8603	0.32435	0.10629
90	48	48	8970.00-1980	2050.00-1955	4513.75	2334134.57	1527.79	1.1006	0.33847	0.09397
120	48	48	9860.00-1980	2390.00-1955	4904.58	2642361.52	1625.53	1.0426	0.33143	0.11808
183	48	48	13200.00-1946	3160.00-1955	6000.21	4711265.91	2170.55	1.3264	0.36174	0.08461

Low flow frequency array table

Return Period	1 Day	Consecutive days: 3	7	14	30	60	90	120	183
2	1670	2100	2780	3190	3390	3860	4240	4600	5540
5	1170	1480	2060	2370	2590	2900	3270	3570	4280
10	952	1190	1710	1940	2190	2480	2870	3140	3780
15	854	1070	1540	1730	2000	2280	2690	2960	3560
20	795	992	1440	1590	1880	2160	2580	2840	3430
25	754	939	1370	1490	1800	2070	2510	2760	3330
30	723	900	1310	1410	1730	2010	2450	2700	3260
40	680	844	1230	1290	1640	1910	2360	2610	3160
50	650	804	1170	1200	1570	1840	2300	2550	3090
	GUMBEL3A	GUMBEL3B	GUMBEL3A	GENSME	GUMBEL3A	POWTRAN	POWTRAN	LNPEARFF	POWTRAN

02131150 CATFISH CANAL AT SELLERS
Location: Lat 341704, Long 792632. Marion County
Period of record: Nov 1966 through Sep 1987
Drainage area: 27.40 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1968	2.60	2.70	3.10	3.60	4.90	5.90	6.80	6.80	8.10
1969	0.10	0.12	0.15	0.18	0.24	0.73	2.20	4.00	4.80
1970	5.90	6.10	6.20	6.60	11.00	12.00	16.00	17.00	22.00
1971	0.39	0.40	0.43	0.46	0.70	1.60	3.40	7.00	9.60
1972	5.40	5.40	6.80	7.00	9.00	13.00	14.00	19.00	27.00
1973	1.00	1.00	1.00	1.10	1.50	2.00	3.40	4.20	7.20
1974	2.10	2.10	2.10	3.20	3.70	5.40	9.30	8.40	13.00
1975	3.50	3.50	3.90	4.60	5.70	9.70	10.00	15.00	40.00
1976	2.50	2.70	3.10	3.40	4.00	5.10	5.80	6.00	10.00
1977	1.19	1.30	1.30	1.60	1.80	2.10	2.20	3.50	10.00
1978	0.80	0.80	0.88	1.10	1.50	2.20	3.70	4.20	5.40
1979	0.00	0.00	0.00	0.00	0.00	0.19	0.51	1.50	3.20
1980	0.60	0.67	0.71	0.74	1.19	3.00	5.60	7.80	17.00
1981	0.00	0.00	0.00	0.00	0.00	0.56	1.60	2.40	3.10
1982	1.40	1.40	1.70	1.80	2.10	4.00	6.30	9.10	22.00
1983	1.40	1.50	1.50	1.60	1.90	2.40	7.90	9.60	15.00
1984	0.00	0.00	0.00	0.03	0.04	0.12	0.28	0.75	5.70
1985	1.10	1.19	1.19	1.30	1.40	1.70	2.20	2.50	7.00
1986	0.85	0.96	1.30	2.20	2.60	4.30	4.10	8.50	17.00
1987	0.72	0.81	0.97	1.30	1.60	2.20	3.80	4.80	6.10

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	20	17	5.90-1970	0.00-1984	1.58	2.69	1.64	1.4300	1.03988	-0.20204
3	20	17	6.10-1970	0.00-1984	1.63	2.77	1.67	1.4137	1.02011	-0.21398
7	20	17	6.80-1972	0.00-1984	1.82	3.54	1.88	1.4396	1.03643	-0.21748
14	20	18	7.00-1972	0.00-1981	2.09	4.04	2.01	1.1617	0.96189	-0.20052
30	20	18	11.00-1970	0.00-1981	2.74	8.33	2.89	1.5547	1.05219	-0.22947
60	20	20	13.00-1972	0.12-1984	3.91	13.25	3.64	1.3080	0.93095	-0.19276
90	20	20	16.00-1970	0.28-1984	5.45	17.11	4.14	1.0702	0.75844	-0.18414
120	20	20	19.00-1972	0.75-1984	7.10	23.87	4.89	1.0301	0.68784	-0.09690
183	20	20	40.00-1975	3.10-1981	12.66	83.19	9.12	1.4152	0.72046	-0.20858

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	1.0	1.1	1.2	1.6	1.9	2.8	4.5	5.9	10
5	0.28	0.31	0.34	0.34	0.43	0.98	1.9	2.8	5.2
10	0.00	0.00	0.00	0.00	0.00	0.48	1.1	1.8	3.8
15	0.00	0.00	0.00	0.00	0.00	0.32	0.80	1.5	3.4
20	0.00	0.00	0.00	0.00	0.00	0.23	0.64	1.3	3.2
	LOGNORM	LOGNORM	LOGNORM	POWTRAN	POWTRAN	POWTRAN	WEIBULL	GUMBEL3D	GUMBEL3B

02131309 FORK CREEK AT JEFFERSON
Location: Lat 343819, Long 802320. Chesterfield County
Period of record: Oct 1976 through Sep 1987
Drainage area: 24.30 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1978	0.45	0.50	0.61	0.80	1.10	2.40	2.60	2.90	5.40
1979	0.60	0.70	0.77	0.79	1.10	1.60	2.60	3.90	6.80
1980	3.70	3.80	3.90	4.10	6.50	11.00	12.00	14.00	21.00
1981	0.11	0.12	0.13	0.19	0.79	1.30	1.80	2.00	3.90
1982	0.10	0.11	0.17	0.25	0.65	1.40	2.80	4.40	8.50
1983	0.67	0.94	1.10	1.19	2.30	3.50	4.80	5.30	9.90
1984	0.00	0.00	0.00	0.02	0.12	0.32	0.42	0.67	2.30
1985	0.26	0.40	0.63	0.92	1.19	1.60	2.20	3.00	6.10
1986	0.18	0.20	0.34	0.56	1.30	3.20	4.40	6.60	13.00
1987	0.00	0.00	0.00	0.00	0.00	0.05	0.91	1.40	2.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	10	8	3.70-1980	0.00-1987	0.61	1.24	1.11	2.9016	1.83279	-0.07039
3	10	8	3.80-1980	0.00-1987	0.68	1.30	1.14	2.7493	1.68465	-0.09218
7	10	8	3.90-1980	0.00-1987	0.77	1.34	1.16	2.6227	1.51513	-0.13457
14	10	9	4.10-1980	0.00-1987	0.88	1.44	1.20	2.5215	1.36107	-0.18418
30	10	9	6.50-1980	0.00-1987	1.51	3.50	1.87	2.5035	1.24262	-0.19459
60	10	10	11.00-1980	0.05-1987	2.64	9.84	3.14	2.4712	1.18975	-0.24454
90	10	10	12.00-1980	0.42-1984	3.45	10.85	3.29	2.2371	0.95375	-0.26306
120	10	10	14.00-1980	0.67-1984	4.42	14.55	3.81	1.9784	0.86355	-0.28498
183	10	10	21.00-1980	2.00-1987	7.89	32.76	5.72	1.4295	0.72544	-0.39458

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	0.25	0.30	0.40	0.60	0.98	1.6	2.5	3.5	6.5
5	0.00	0.00	0.00	0.16	0.32	0.33	1.1	1.6	3.1
10	0.00	0.00	0.00	0.00	0.00	0.05	0.73	0.99	2.1
	LOGNORM	LOGNORM	LOGNORM	POWTRAN	POWTRAN	GUMBEL3B	POWTRAN	LOGBOUGH	GUMBEL3A

02131472 HANGING ROCK CREEK NEAR KERSHAW
Location: Lat 343058, Long 803459. Lancaster County
Period of record: Oct 1980 through Sep 1987
Drainage area: 10.40 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1982	0.31	0.32	0.34	0.62	1.40	1.90	2.30	2.80	3.70
1983	3.50	3.80	4.30	5.30	5.90	7.00	7.70	8.50	10.00
1984	0.20	0.58	0.66	0.73	1.60	2.60	2.70	2.90	5.50
1985	2.60	2.80	2.90	3.20	4.20	4.80	5.30	5.60	8.90
1986	0.61	0.68	0.80	1.19	1.90	3.60	5.30	11.00	13.00
1987	0.13	0.17	0.19	0.22	0.23	0.39	1.40	1.90	3.20

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	6	6	3.50-1983	0.13-1987	1.23	1.76	1.32	0.7874	1.08151	-0.66567
3	6	6	3.80-1983	0.17-1987	1.39	1.93	1.39	0.7954	0.99868	-0.60717
7	6	6	4.30-1983	0.19-1987	1.53	2.34	1.53	0.8658	0.99912	-0.59784
14	6	6	5.30-1983	0.22-1987	1.88	3.26	1.81	0.9633	0.96261	-0.58522
30	6	6	5.90-1983	0.23-1987	2.54	3.66	1.91	0.6591	0.75393	-0.48514
60	6	6	7.00-1983	0.39-1987	3.38	4.48	2.12	0.3462	0.62623	-0.53144
90	6	6	7.70-1983	1.40-1987	4.12	4.72	2.17	0.3320	0.52782	-0.73746
120	6	6	11.00-1986	1.90-1987	5.45	11.04	3.32	0.5423	0.60973	-0.68032
183	6	6	13.00-1986	3.20-1987	7.38	12.55	3.54	0.2576	0.47984	-0.62668

Low flow frequency array table

Return Period	Consecutive days: 1 Day	3	7	14	30	60	90	120	183
2	0.47	0.68	0.77	1.1	2.3	3.1	3.9	5.0	7.0
5	0.19	0.28	0.31	0.42	0.42	1.00	1.7	1.7	3.4
10	0.13	0.19	0.20	0.26	0.26	0.26	0.74	0.74	1.9
	LNPEARFF	LNPEARFF	LNPEARFF	LNPEARFF	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1

02131500 LYNCHES RIVER NEAR BISHOPVILLE
Location: Lat 341500, Long 801250. Lee County
Period of record: May 1942 - Sep 1971
Drainage area: 524.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1944	185.00	185.00	191.00	198.00	209.00	225.00	242.00	253.00	371.00
1945	145.00	148.00	166.00	194.00	213.00	291.00	329.00	345.00	395.00
1946	138.00	143.00	144.00	151.00	160.00	207.00	259.00	292.00	885.00
1947	210.00	210.00	218.00	236.00	271.00	314.00	389.00	385.00	464.00
1948	221.00	228.00	256.00	286.00	306.00	356.00	407.00	438.00	424.00
1949	203.00	210.00	222.00	242.00	347.00	394.00	398.00	433.00	559.00
1950	282.00	286.00	311.00	370.00	416.00	442.00	478.00	591.00	599.00
1951	184.00	184.00	192.00	196.00	203.00	258.00	273.00	290.00	335.00
1952	134.00	137.00	143.00	145.00	148.00	168.00	178.00	188.00	221.00
1953	203.00	206.00	224.00	234.00	262.00	345.00	376.00	450.00	607.00
1954	184.00	187.00	202.00	224.00	240.00	271.00	296.00	298.00	331.00
1955	125.00	131.00	133.00	136.00	137.00	153.00	182.00	206.00	236.00
1956	163.00	166.00	172.00	178.00	217.00	236.00	262.00	274.00	289.00
1957	126.00	128.00	133.00	147.00	179.00	195.00	200.00	217.00	247.00
1958	129.00	132.00	139.00	160.00	168.00	179.00	200.00	219.00	281.00
1959	214.00	220.00	232.00	252.00	265.00	334.00	339.00	354.00	456.00
1960	232.00	238.00	279.00	292.00	330.00	431.00	582.00	563.00	735.00
1961	280.00	283.00	322.00	355.00	411.00	443.00	481.00	518.00	518.00
1962	319.00	326.00	329.00	331.00	350.00	380.00	421.00	519.00	600.00
1963	203.00	203.00	207.00	210.00	234.00	289.00	343.00	355.00	379.00
1964	172.00	172.00	176.00	193.00	221.00	229.00	249.00	271.00	366.00
1965	268.00	272.00	295.00	328.00	379.00	413.00	533.00	698.00	907.00
1966	314.00	321.00	338.00	380.00	405.00	450.00	486.00	498.00	610.00
1967	212.00	213.00	214.00	216.00	259.00	303.00	304.00	315.00	348.00
1968	213.00	214.00	217.00	234.00	271.00	325.00	389.00	397.00	676.00
1969	178.00	179.00	182.00	183.00	200.00	222.00	306.00	410.00	448.00
1970	326.00	327.00	346.00	377.00	407.00	419.00	497.00	510.00	594.00
1971	162.00	165.00	168.00	176.00	189.00	228.00	267.00	300.00	319.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	28	28	326.00-1970	125.00-1955	204.46	3500.30	59.16	0.6355	0.28936	0.27938
3	28	28	327.00-1970	128.00-1957	207.64	3572.80	59.77	0.6638	0.28786	0.27921
7	28	28	346.00-1970	133.00-1957	219.68	4363.10	66.05	0.5806	0.30068	0.27439
14	28	28	380.00-1966	136.00-1955	236.57	5666.80	75.28	0.6721	0.31820	0.20257
30	28	28	416.00-1950	137.00-1955	264.18	7416.40	86.12	0.4829	0.32599	0.27632
60	28	28	450.00-1966	153.00-1955	303.57	8570.90	92.58	0.1269	0.30497	0.28407
90	28	28	582.00-1960	178.00-1952	345.21	12434.40	111.51	0.3619	0.32302	0.26213
120	28	28	698.00-1965	188.00-1952	378.11	16855.70	129.83	0.5819	0.34337	0.24361
183	28	28	907.00-1965	221.00-1952	471.43	34106.00	184.68	0.7910	0.39174	0.07082

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	195	199	210	225	251	290	328	358	443
5	150	153	159	168	185	219	243	259	303
10	131	134	138	143	158	189	207	217	243
15	123	125	128	132	145	175	191	198	216
20	117	119	122	125	137	167	181	186	199
25	113	115	118	121	131	161	173	178	187
30	110	113	115	117	127	156	168	171	177
	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1

02132000 LYNCHES RIVER AT EFFINGHAM
Location: Lat 340305, Long 794515. Florence County
Period of record: Aug 1929 through Sep 1987
Drainage area: 1030.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1931	237.00	241.00	252.00	267.00	324.00	388.00	401.00	409.00	452.00
1932	152.00	152.00	155.00	159.00	162.00	175.00	206.00	328.00	371.00
1933	160.00	163.00	171.00	188.00	268.00	392.00	433.00	465.00	512.00
1934	160.00	165.00	169.00	183.00	196.00	219.00	230.00	258.00	328.00
1935	182.00	183.00	186.00	193.00	206.00	238.00	307.00	337.00	418.00
1936	120.00	123.00	133.00	151.00	167.00	226.00	245.00	272.00	468.00
1937	288.00	293.00	302.00	316.00	406.00	446.00	468.00	495.00	558.00
1938	313.00	313.00	316.00	332.00	374.00	398.00	453.00	522.00	549.00
1939	222.00	228.00	233.00	240.00	308.00	363.00	360.00	412.00	550.00
1940	234.00	236.00	244.00	245.00	258.00	304.00	321.00	359.00	497.00
1941	151.00	152.00	156.00	157.00	163.00	187.00	257.00	343.00	372.00
1942	149.00	150.00	151.00	158.00	178.00	220.00	236.00	324.00	556.00
1943	302.00	305.00	314.00	330.00	460.00	494.00	497.00	585.00	731.00
1944	196.00	200.00	204.00	211.00	218.00	248.00	267.00	283.00	482.00
1945	196.00	198.00	213.00	262.00	311.00	382.00	425.00	434.00	484.00
1946	166.00	173.00	190.00	203.00	209.00	286.00	363.00	411.00	1480.00
1947	235.00	242.00	257.00	284.00	304.00	386.00	480.00	470.00	571.00
1948	250.00	255.00	265.00	291.00	361.00	426.00	479.00	562.00	563.00
1949	222.00	226.00	237.00	264.00	337.00	367.00	374.00	429.00	594.00
1950	302.00	315.00	340.00	388.00	450.00	472.00	508.00	737.00	753.00
1951	183.00	188.00	198.00	237.00	269.00	327.00	386.00	397.00	413.00
1952	139.00	141.00	145.00	148.00	154.00	191.00	209.00	230.00	252.00
1953	205.00	210.00	237.00	252.00	285.00	378.00	463.00	570.00	759.00
1954	220.00	220.00	223.00	255.00	280.00	301.00	326.00	323.00	350.00
1955	95.00	95.00	97.00	98.00	102.00	122.00	155.00	163.00	201.00
1956	147.00	154.00	179.00	188.00	237.00	269.00	314.00	317.00	346.00
1957	130.00	134.00	142.00	172.00	192.00	214.00	220.00	236.00	268.00
1958	130.00	133.00	147.00	180.00	199.00	207.00	223.00	238.00	310.00
1959	242.00	242.00	251.00	278.00	285.00	339.00	344.00	357.00	496.00
1960	305.00	329.00	359.00	402.00	462.00	626.00	852.00	880.00	1100.00
1961	284.00	286.00	315.00	364.00	430.00	491.00	529.00	576.00	617.00
1962	277.00	279.00	281.00	283.00	299.00	339.00	393.00	507.00	686.00
1963	209.00	211.00	216.00	222.00	250.00	331.00	386.00	395.00	420.00
1964	176.00	177.00	182.00	199.00	228.00	245.00	259.00	290.00	404.00
1965	291.00	298.00	320.00	352.00	407.00	443.00	662.00	856.00	1260.00
1966	385.00	389.00	391.00	397.00	418.00	483.00	547.00	550.00	713.00
1967	195.00	198.00	204.00	216.00	264.00	304.00	326.00	330.00	350.00
1968	208.00	215.00	224.00	238.00	294.00	349.00	445.00	441.00	732.00
1969	147.00	149.00	151.00	154.00	171.00	204.00	337.00	494.00	625.00
1970	348.00	349.00	358.00	373.00	420.00	437.00	512.00	541.00	678.00
1971	141.00	143.00	144.00	156.00	173.00	211.00	251.00	307.00	319.00
1972	324.00	356.00	390.00	441.00	638.00	895.00	984.00	1070.00	1210.00
1973	226.00	232.00	236.00	241.00	285.00	301.00	327.00	372.00	467.00
1974	260.00	261.00	263.00	266.00	283.00	319.00	347.00	386.00	577.00
1975	260.00	263.00	279.00	297.00	325.00	380.00	507.00	640.00	729.00
1976	338.00	345.00	364.00	428.00	542.00	734.00	729.00	764.00	1020.00
1977	240.00	244.00	252.00	265.00	296.00	358.00	432.00	521.00	945.00
1978	203.00	207.00	214.00	226.00	309.00	340.00	499.00	496.00	529.00
1979	204.00	206.00	208.00	216.00	224.00	243.00	269.00	325.00	440.00
1980	280.00	292.00	313.00	330.00	389.00	572.00	692.00	858.00	1010.00
1981	160.00	160.00	163.00	173.00	188.00	197.00	219.00	252.00	317.00
1982	150.00	152.00	157.00	161.00	170.00	244.00	275.00	324.00	418.00
1983	234.00	237.00	240.00	263.00	281.00	324.00	420.00	467.00	587.00
1984	144.00	147.00	150.00	151.00	158.00	192.00	204.00	224.00	356.00
1985	265.00	269.00	273.00	289.00	301.00	322.00	336.00	377.00	548.00
1986	187.00	188.00	206.00	223.00	274.00	321.00	337.00	381.00	614.00
1987	110.00	110.00	110.00	115.00	123.00	145.00	184.00	217.00	287.00

02132000 LYNCHES RIVER AT EFFINGHAM
LOCATION: Lat 340305, Long 794515. Florence County
PERIOD OF RECORD: Aug 1929 through Sep 1987
DRAINAGE AREA: 1030.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	57	57	385.00-1966	95.00-1955	215.42	4384.17	66.21	0.3936	0.30737	0.11087
3	57	57	389.00-1966	95.00-1955	219.68	4693.27	68.51	0.4199	0.31185	0.10284
7	57	57	391.00-1966	97.00-1955	229.30	5239.02	72.38	0.4357	0.31566	0.08111
14	57	57	441.00-1972	98.00-1955	246.86	6487.88	80.55	0.5244	0.32629	0.07579
30	57	57	638.00-1972	102.00-1955	285.35	11383.56	106.69	0.8550	0.37390	0.00154
60	57	57	895.00-1972	122.00-1955	338.86	19509.21	139.68	1.5076	0.41219	-0.04969
90	57	57	984.00-1972	155.00-1955	389.65	26191.03	161.84	1.3764	0.41534	-0.03807
120	57	57	1070.00-1972	163.00-1955	440.47	33403.55	182.77	1.2905	0.41493	-0.01027
183	57	57	1480.00-1946	201.00-1955	572.67	67896.71	260.57	1.4290	0.45501	0.01285

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	210	215	224	241	269	318	359	401	513
5	156	159	165	176	192	223	257	293	368
10	132	134	138	147	159	184	216	251	313
15	122	123	127	134	144	167	199	233	289
20	116	116	120	125	135	157	188	222	275
25	111	112	115	119	129	150	180	214	265
30	108	108	111	115	124	144	174	208	257
40	103	104	106	108	116	136	166	200	246
50	100	100	103	103	111	131	160	194	239
75	95	95	97	97	102	121	151	184	226
	GUMBEL3B	GUMBEL3B	GUMBEL3B	LOGBOUGH	GUMBEL1	LOGBOUGH	LNPEARDI	LNPEARFF	POWTRAN

02132500 LITTLE PEE DEE RIVER NEAR DILLON
Location: Lat 342417, Long 792025. Dillon County
Period of record: Mar 1939 - Sep 1971
Drainage area: 675.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1940	127.00	134.00	152.00	171.00	188.00	220.00	237.00	265.00	379.00
1941	64.00	65.00	68.00	70.00	75.00	95.00	123.00	143.00	151.00
1942	54.00	57.00	61.00	70.00	93.00	145.00	162.00	200.00	295.00
1943	127.00	134.00	140.00	150.00	157.00	179.00	207.00	246.00	242.00
1944	111.00	113.00	117.00	119.00	126.00	149.00	159.00	170.00	271.00
1945	134.00	145.00	156.00	158.00	182.00	191.00	202.00	222.00	249.00
1946	113.00	115.00	120.00	131.00	154.00	213.00	235.00	250.00	663.00
1947	113.00	118.00	130.00	145.00	149.00	204.00	237.00	261.00	275.00
1948	89.00	96.00	117.00	128.00	175.00	270.00	343.00	381.00	402.00
1949	148.00	149.00	157.00	199.00	253.00	301.00	338.00	402.00	472.00
1950	124.00	127.00	132.00	145.00	181.00	275.00	311.00	449.00	478.00
1951	70.00	74.00	78.00	88.00	140.00	181.00	214.00	229.00	235.00
1952	48.00	50.00	56.00	62.00	70.00	97.00	101.00	109.00	122.00
1953	50.00	54.00	62.00	67.00	82.00	147.00	230.00	257.00	321.00
1954	62.00	68.00	78.00	89.00	127.00	141.00	159.00	154.00	236.00
1955	24.00	27.00	33.00	34.00	36.00	38.00	50.00	60.00	128.00
1956	96.00	102.00	125.00	155.00	214.00	243.00	255.00	271.00	451.00
1957	94.00	96.00	103.00	121.00	130.00	148.00	164.00	182.00	262.00
1958	100.00	104.00	113.00	128.00	137.00	165.00	248.00	280.00	329.00
1959	126.00	128.00	138.00	141.00	175.00	214.00	264.00	266.00	365.00
1960	189.00	189.00	197.00	205.00	276.00	419.00	529.00	526.00	645.00
1961	158.00	170.00	189.00	264.00	296.00	335.00	388.00	406.00	439.00
1962	152.00	154.00	160.00	165.00	174.00	188.00	232.00	290.00	395.00
1963	116.00	118.00	120.00	129.00	137.00	165.00	231.00	235.00	300.00
1964	97.00	99.00	111.00	138.00	163.00	175.00	177.00	185.00	237.00
1965	165.00	167.00	178.00	195.00	258.00	271.00	367.00	497.00	723.00
1966	252.00	262.00	275.00	279.00	327.00	416.00	431.00	448.00	591.00
1967	236.00	236.00	237.00	239.00	260.00	268.00	277.00	308.00	350.00
1968	152.00	152.00	152.00	155.00	164.00	173.00	189.00	208.00	308.00
1969	40.00	41.00	43.00	44.00	47.00	58.00	89.00	109.00	126.00
1970	276.00	283.00	287.00	316.00	427.00	435.00	508.00	562.00	608.00
1971	93.00	94.00	98.00	108.00	128.00	179.00	243.00	303.00	349.00

02132500 LITTLE PEE DEE RIVER NEAR DILLON
LOCATION: Lat 342417, Long 792025. Dillon County
PERIOD OF RECORD: Mar 1939 - Sep 1971
DRAINAGE AREA: 675.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	32	32	276.00-1970	24.00-1955	118.75	3428.00	58.55	0.8775	0.49305	0.29578
3	32	32	283.00-1970	27.00-1955	122.53	3515.50	59.29	0.8889	0.48389	0.27499
7	32	32	287.00-1970	33.00-1955	130.72	3589.95	59.92	0.7831	0.45836	0.25388
14	32	32	316.00-1970	34.00-1955	144.00	4296.69	65.55	0.6785	0.45520	0.19792
30	32	32	427.00-1970	36.00-1955	171.91	6874.33	82.91	0.9416	0.48231	0.10053
60	32	32	435.00-1970	38.00-1955	209.31	8945.21	94.58	0.7479	0.45186	0.18694
90	32	32	529.00-1960	50.00-1955	246.88	11962.61	109.37	0.7915	0.44303	0.22672
120	32	32	562.00-1970	60.00-1955	277.31	15041.71	122.64	0.6118	0.44226	0.24577
183	32	32	723.00-1965	122.00-1952	356.16	24463.19	156.41	0.6550	0.43915	0.05579

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	110	113	125	134	153	190	229	259	319
5	69	72	77	85	107	133	160	166	230
10	52	55	57	64	83	104	123	127	183
15	45	47	48	54	71	89	105	109	160
20	40	43	43	48	64	79	93	98	145
25	37	40	40	44	58	72	85	90	134
30	35	37	37	41	53	67	78	84	125
40	31	34	34	36	47	58	67	75	112
	POWTRAN	POWTRAN	GUMBEL3B	GUMBEL1	GENSME	GENSME	GENSME	GUMBEL1	GENSME

02135000 LITTLE PEE DEE RIVER AT GALIVANTS FERRY
Location: Lat 340325, Long 791450. Horry/Marion County
Period of record: Oct 1941 through Sep 1987
Drainage area: 2790.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1943	520.00	520.00	530.00	590.00	740.00	792.00	906.00	985.00	1190.00
1944	452.00	452.00	462.00	471.00	508.00	599.00	727.00	1050.00	1890.00
1945	724.00	735.00	753.00	792.00	847.00	954.00	983.00	1100.00	1340.00
1946	629.00	629.00	644.00	670.00	888.00	1110.00	1140.00	1830.00	4350.00
1947	867.00	878.00	901.00	932.00	1060.00	1500.00	1720.00	1770.00	2070.00
1948	697.00	697.00	716.00	746.00	825.00	1080.00	1580.00	1800.00	2370.00
1949	622.00	656.00	714.00	858.00	983.00	1310.00	1360.00	1410.00	1600.00
1950	1070.00	1070.00	1120.00	1280.00	1430.00	1920.00	2010.00	2090.00	2150.00
1951	588.00	588.00	598.00	612.00	706.00	806.00	1050.00	1040.00	1310.00
1952	282.00	288.00	299.00	316.00	331.00	355.00	408.00	460.00	500.00
1953	459.00	459.00	464.00	471.00	526.00	705.00	723.00	839.00	1320.00
1954	367.00	378.00	403.00	434.00	451.00	537.00	539.00	561.00	736.00
1955	158.00	159.00	164.00	171.00	186.00	209.00	264.00	310.00	465.00
1956	554.00	565.00	603.00	646.00	705.00	826.00	883.00	1040.00	2780.00
1957	520.00	543.00	564.00	593.00	694.00	731.00	823.00	851.00	1080.00
1958	452.00	475.00	481.00	491.00	560.00	703.00	906.00	1110.00	1450.00
1959	622.00	633.00	656.00	712.00	961.00	1500.00	1420.00	1520.00	2010.00
1960	690.00	701.00	714.00	736.00	1100.00	1530.00	2230.00	2230.00	3070.00
1961	930.00	965.00	1010.00	1030.00	1160.00	1340.00	1520.00	1610.00	2140.00
1962	520.00	531.00	544.00	559.00	581.00	697.00	856.00	1140.00	1620.00
1963	588.00	611.00	651.00	702.00	773.00	896.00	1130.00	1140.00	1340.00
1964	407.00	416.00	442.00	466.00	501.00	574.00	586.00	633.00	887.00
1965	709.00	710.00	730.00	853.00	1200.00	1330.00	1670.00	2040.00	3620.00
1966	1050.00	1050.00	1060.00	1060.00	1130.00	1450.00	1520.00	1620.00	2580.00
1967	698.00	702.00	711.00	745.00	839.00	879.00	1020.00	1200.00	1240.00
1968	584.00	586.00	598.00	654.00	810.00	862.00	907.00	1090.00	1850.00
1969	158.00	162.00	169.00	172.00	184.00	231.00	340.00	405.00	517.00
1970	1160.00	1180.00	1220.00	1300.00	1540.00	1960.00	2180.00	2190.00	3100.00
1971	461.00	464.00	479.00	512.00	567.00	619.00	805.00	1040.00	1220.00
1972	941.00	948.00	981.00	1050.00	1530.00	1690.00	1950.00	2190.00	2830.00
1973	692.00	693.00	702.00	762.00	821.00	838.00	876.00	1010.00	1320.00
1974	423.00	428.00	433.00	444.00	467.00	541.00	729.00	939.00	1700.00
1975	806.00	812.00	815.00	823.00	880.00	1090.00	1870.00	2620.00	3640.00
1976	929.00	937.00	965.00	1080.00	1180.00	1600.00	1920.00	1830.00	2340.00
1977	416.00	421.00	429.00	439.00	460.00	522.00	581.00	714.00	1370.00
1978	402.00	409.00	416.00	431.00	535.00	711.00	794.00	810.00	1240.00
1979	386.00	386.00	387.00	389.00	405.00	445.00	578.00	798.00	1200.00
1980	488.00	494.00	512.00	528.00	904.00	1170.00	1620.00	1830.00	3010.00
1981	290.00	294.00	297.00	302.00	312.00	338.00	409.00	482.00	578.00
1982	328.00	329.00	332.00	338.00	372.00	560.00	636.00	884.00	1630.00
1983	462.00	466.00	476.00	492.00	570.00	647.00	1260.00	1480.00	2110.00
1984	324.00	325.00	330.00	339.00	361.00	383.00	399.00	441.00	907.00
1985	757.00	770.00	809.00	818.00	906.00	943.00	1040.00	1280.00	1680.00
1986	514.00	529.00	555.00	640.00	761.00	796.00	799.00	931.00	1650.00
1987	361.00	366.00	374.00	386.00	425.00	630.00	769.00	739.00	869.00

02135000 LITTLE PEE DEE RIVER AT GALIVANTS FERRY
LOCATION: Lat 340325, Long 791450. Horry/Marion County
PERIOD OF RECORD: Oct 1941 through Sep 1987
DRAINAGE AREA: 2790.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	45	45	1160.00-1970	158.00-1969	579.04	54099.73	232.59	0.5591	0.40169	0.08358
3	45	45	1180.00-1970	159.00-1955	586.89	55101.08	234.74	0.5461	0.39997	0.08038
7	45	45	1220.00-1970	164.00-1955	604.73	59057.13	243.02	0.5471	0.40186	0.07409
14	45	45	1300.00-1970	171.00-1955	640.78	70294.97	265.13	0.5617	0.41377	0.09034
30	45	45	1540.00-1970	184.00-1969	748.33	110252.04	332.04	0.5194	0.44371	0.04197
60	45	45	1960.00-1970	209.00-1955	909.09	191102.57	437.15	0.6464	0.48087	0.07286
90	45	45	2230.00-1960	264.00-1955	1076.36	271717.87	521.27	0.5875	0.48429	0.09328
120	45	45	2620.00-1975	310.00-1955	1224.04	316169.55	562.29	0.5164	0.45937	0.10718
183	45	45	4350.00-1946	465.00-1955	1774.87	792941.05	890.47	0.8340	0.50171	-0.09782

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	543	550	567	599	721	812	926	1090	1540
5	373	379	389	405	452	556	650	764	1070
10	300	306	314	323	335	422	506	595	827
15	268	273	279	286	286	356	434	511	706
20	247	252	258	262	262	312	387	456	626
25	233	237	243	246	246	280	352	415	567
30	222	226	231	233	233	255	325	383	521
40	205	210	214	215	215	216	283	335	451
50	193	198	202	202	202	202	252	299	400
	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	LOGBOUGH	GENSME	GENSME	GENSME	GENSME

02135300 SCAPE ORE SWAMP NEAR BISHOPVILLE
Location: Lat 340902, Long 801818. Lee County
Period of record: Jul 1968 through Sep 1987
Drainage area: 96.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1970	14.00	14.00	16.00	21.00	39.00	44.00	49.00	51.00	57.00
1971	6.70	6.90	7.50	7.60	11.00	14.00	20.00	29.00	35.00
1972	23.00	23.00	26.00	30.00	48.00	81.00	93.00	102.00	105.00
1973	18.00	19.00	20.00	23.00	26.00	36.00	39.00	43.00	55.00
1974	28.00	29.00	30.00	30.00	33.00	37.00	46.00	49.00	64.00
1975	17.00	17.00	18.00	19.00	21.00	33.00	45.00	62.00	59.00
1976	23.00	24.00	27.00	32.00	46.00	71.00	75.00	83.00	101.00
1977	16.00	16.00	17.00	24.00	32.00	35.00	42.00	58.00	88.00
1978	9.30	9.80	11.00	12.00	19.00	24.00	33.00	35.00	37.00
1979	16.00	16.00	18.00	21.00	23.00	33.00	38.00	43.00	48.00
1980	18.00	19.00	22.00	26.00	41.00	62.00	82.00	95.00	120.00
1981	9.80	10.00	11.00	11.00	13.00	15.00	17.00	30.00	44.00
1982	7.70	8.10	9.10	10.00	11.00	14.00	19.00	28.00	27.00
1983	13.00	14.00	15.00	15.00	18.00	32.00	43.00	48.00	56.00
1984	8.00	8.30	8.70	9.60	10.00	15.00	20.00	24.00	31.00
1985	17.00	17.00	17.00	19.00	23.00	32.00	37.00	47.00	66.00
1986	11.00	11.00	12.00	16.00	19.00	31.00	31.00	38.00	53.00
1987	3.50	3.60	3.90	4.90	5.40	9.10	13.00	15.00	30.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	18	18	28.00-1974	3.50-1987	14.39	39.01	6.25	0.3103	0.43409	0.19135
3	18	18	29.00-1974	3.60-1987	14.76	41.12	6.41	0.3557	0.43440	0.19919
7	18	18	30.00-1974	3.90-1987	16.07	48.08	6.93	0.2969	0.43159	0.15815
14	18	18	32.00-1976	4.90-1987	18.39	63.25	7.95	0.0761	0.43236	0.10067
30	18	18	48.00-1972	5.40-1987	24.36	156.59	12.51	0.4424	0.51379	-0.06657
60	18	18	81.00-1972	9.10-1987	34.34	374.16	19.34	0.9550	0.56331	-0.16071
90	18	18	93.00-1972	13.00-1987	41.22	476.06	21.82	0.9481	0.52930	-0.17536
120	18	18	102.00-1972	15.00-1987	48.89	539.54	23.23	0.9226	0.47512	-0.10609
183	18	18	120.00-1980	27.00-1982	59.78	701.40	26.48	0.8529	0.44304	-0.12093

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	14	14	16	18	23	31	37	44	53
5	8.7	8.9	9.7	11	13	17	22	29	37
10	6.2	6.5	7.0	8.2	9.4	12	17	24	31
15	5.1	5.4	5.8	6.9	7.9	10	14	21	29
20	4.5	4.7	5.0	6.1	7.0	9.4	13	20	27
	LOGBOUGH	LOGBOUGH	LOGBOUGH	LNPEARFF	LNPEARFF	GUMBEL3B	GUMBEL3B	LOGNORM	LNPEARFF

02135500 BLACK RIVER NEAR GABLE
Location: Lat 335400, Long 800955. Sumter County
Period of record: Jun 1951 - Jun 1966; Apr 1972 through Sep 1987
Drainage area: 401.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1953	34.00	35.00	36.00	43.00	82.00	168.00	239.00	289.00	368.00
1954	2.00	2.00	3.10	6.90	24.00	49.00	54.00	63.00	78.00
1955	0.00	0.00	0.00	0.00	0.00	0.00	0.47	1.60	14.00
1956	40.00	47.00	53.00	58.00	80.00	88.00	102.00	108.00	123.00
1957	0.00	0.67	2.40	6.40	17.00	38.00	65.00	97.00	136.00
1958	0.00	0.00	0.00	0.64	2.40	3.30	11.00	18.00	57.00
1959	9.00	11.00	20.00	30.00	38.00	62.00	70.00	80.00	136.00
1960	10.00	10.00	20.00	88.00	233.00	309.00	353.00	366.00	394.00
1961	11.00	16.00	31.00	56.00	70.00	112.00	153.00	175.00	203.00
1962	39.00	40.00	41.00	43.00	65.00	105.00	145.00	184.00	278.00
1963	9.00	9.70	10.00	15.00	30.00	86.00	97.00	102.00	120.00
1964	4.00	4.70	5.70	6.10	27.00	67.00	86.00	117.00	140.00
1965	13.00	15.00	19.00	34.00	70.00	95.00	211.00	254.00	432.00
1966	54.00	56.00	59.00	63.00	79.00	103.00	129.00	143.00	208.00
1974	21.00	21.00	22.00	23.00	27.00	36.00	49.00	66.00	111.00
1975	10.00	10.00	12.00	13.00	18.00	45.00	69.00	159.00	195.00
1976	38.00	47.00	61.00	77.00	168.00	242.00	240.00	251.00	358.00
1977	22.00	23.00	25.00	38.00	56.00	64.00	91.00	116.00	310.00
1978	5.50	6.00	6.50	7.50	24.00	40.00	59.00	84.00	120.00
1979	13.00	16.00	16.00	19.00	26.00	27.00	37.00	48.00	79.00
1980	17.00	19.00	22.00	28.00	48.00	170.00	236.00	278.00	369.00
1981	2.00	2.30	2.60	3.20	6.30	7.60	25.00	45.00	75.00
1982	1.50	1.50	1.60	2.00	2.80	6.90	15.00	39.00	141.00
1983	14.00	16.00	20.00	23.00	48.00	57.00	74.00	99.00	187.00
1984	1.70	2.00	2.50	3.40	4.60	10.00	21.00	30.00	79.00
1985	7.80	8.00	8.50	10.00	14.00	21.00	29.00	51.00	149.00
1986	8.80	9.00	9.60	12.00	22.00	42.00	75.00	117.00	194.00
1987	0.11	0.14	0.45	0.48	1.10	6.00	34.00	43.00	62.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	28	25	54.00-1966	0.00-1958	13.84	211.30	14.54	1.3261	1.05063	-0.01725
3	28	26	56.00-1966	0.00-1958	15.29	251.70	15.86	1.2821	1.03778	-0.03168
7	28	26	61.00-1976	0.00-1958	18.21	318.00	17.83	1.1605	0.97913	-0.00357
14	28	27	88.00-1960	0.00-1955	25.34	607.60	24.65	1.0617	0.97261	0.20469
30	28	27	233.00-1960	0.00-1955	45.83	2660.70	51.58	2.3029	1.12554	0.08063
60	28	27	309.00-1960	0.00-1955	73.56	5393.10	73.44	1.7466	0.99828	0.05814
90	28	28	353.00-1960	0.47-1955	98.91	7435.10	86.23	1.3611	0.87178	0.06406
120	28	28	366.00-1960	1.60-1955	122.27	8492.60	92.16	1.0807	0.75369	0.05508
183	28	28	432.00-1965	14.00-1955	182.71	13397.50	115.75	0.8088	0.63349	-0.00315

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	7.7	9.3	13	17	31	58	75	101	146
5	1.0	1.8	3.1	4.2	8.5	19	27	43	78
10	0.00	0.00	0.68	1.4	3.1	8.4	14	24	56
15	0.00	0.00	0.00	0.61	1.5	5.3	9.7	18	48
20	0.00	0.00	0.00	0.26	0.71	3.8	7.4	14	43
25	0.00	0.00	0.00	0.07	0.23	2.9	6.1	12	40
30	0.00	0.00	0.00	0.00	0.00	0.00	5.1	10	37
	GUMBEL3A	GUMBEL3A	LNPEARFF	LNPEARFF	LNPEARFF	LOGBOUGH	GUMBEL3D	GUMBEL3D	LOGNORM

02136000 BLACK RIVER AT KINGSTREE
Location: Lat 333940, Long 795010. Williamsburg County
Period of record: Aug 1929 through Sep 1987
Drainage area: 1250.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1931	15.00	16.00	19.00	24.00	59.00	118.00	149.00	191.00	199.00
1932	5.00	5.00	5.00	5.00	5.00	5.60	9.10	25.00	87.00
1933	13.00	14.00	16.00	17.00	55.00	96.00	96.00	154.00	263.00
1934	13.00	13.00	13.00	13.00	16.00	19.00	29.00	51.00	117.00
1935	15.00	15.00	16.00	17.00	19.00	46.00	109.00	127.00	130.00
1936	4.00	4.30	4.60	5.60	7.70	9.10	11.00	19.00	242.00
1937	9.00	9.00	9.30	12.00	16.00	34.00	36.00	51.00	117.00
1938	20.00	21.00	24.00	32.00	59.00	160.00	177.00	267.00	269.00
1939	14.00	14.00	15.00	18.00	22.00	129.00	118.00	162.00	259.00
1940	32.00	32.00	33.00	35.00	48.00	97.00	126.00	168.00	247.00
1941	5.00	5.00	5.70	6.10	6.30	11.00	26.00	55.00	60.00
1942	9.00	9.00	11.00	12.00	15.00	22.00	34.00	123.00	623.00
1943	24.00	25.00	25.00	27.00	32.00	45.00	95.00	166.00	369.00
1944	9.00	9.00	9.00	9.20	10.00	17.00	26.00	33.00	149.00
1945	4.00	4.00	4.40	5.40	6.20	7.60	11.00	11.00	53.00
1946	51.00	58.00	65.00	82.00	116.00	152.00	195.00	234.00	1520.00
1947	23.00	24.00	28.00	41.00	58.00	92.00	193.00	168.00	276.00
1948	56.00	60.00	75.00	100.00	147.00	196.00	279.00	418.00	446.00
1949	36.00	38.00	42.00	50.00	61.00	88.00	102.00	150.00	350.00
1950	30.00	32.00	42.00	82.00	132.00	270.00	317.00	407.00	527.00
1951	18.00	18.00	22.00	30.00	46.00	54.00	113.00	114.00	246.00
1952	10.00	10.00	11.00	12.00	15.00	30.00	56.00	78.00	70.00
1953	12.00	13.00	14.00	19.00	51.00	125.00	190.00	302.00	474.00
1954	8.00	8.70	9.00	11.00	18.00	21.00	31.00	49.00	65.00
1955	2.00	2.00	2.60	3.00	3.90	4.20	7.00	9.70	17.00
1956	34.00	35.00	36.00	39.00	45.00	82.00	131.00	140.00	326.00
1957	8.00	8.70	9.30	12.00	26.00	31.00	46.00	65.00	105.00
1958	18.00	19.00	22.00	28.00	41.00	51.00	60.00	58.00	110.00
1959	75.00	75.00	78.00	84.00	93.00	100.00	108.00	152.00	295.00
1960	104.00	107.00	116.00	140.00	288.00	570.00	646.00	1030.00	1120.00
1961	69.00	72.00	85.00	91.00	135.00	205.00	270.00	311.00	369.00
1962	63.00	64.00	67.00	72.00	89.00	142.00	223.00	332.00	652.00
1963	44.00	44.00	47.00	57.00	104.00	210.00	214.00	227.00	232.00
1964	19.00	20.00	21.00	25.00	33.00	78.00	164.00	165.00	191.00
1965	108.00	111.00	124.00	135.00	155.00	213.00	611.00	798.00	1380.00
1966	148.00	148.00	150.00	160.00	200.00	240.00	304.00	341.00	525.00
1967	98.00	98.00	100.00	106.00	110.00	131.00	176.00	232.00	338.00
1968	48.00	48.00	49.00	49.00	51.00	61.00	134.00	201.00	232.00
1969	11.00	11.00	12.00	12.00	16.00	27.00	108.00	190.00	337.00
1970	79.00	80.00	92.00	125.00	228.00	252.00	271.00	317.00	550.00
1971	45.00	47.00	55.00	60.00	75.00	163.00	164.00	198.00	215.00
1972	131.00	139.00	150.00	185.00	293.00	570.00	784.00	979.00	920.00
1973	78.00	78.00	84.00	96.00	115.00	143.00	181.00	251.00	318.00
1974	120.00	120.00	121.00	123.00	131.00	162.00	235.00	298.00	483.00
1975	75.00	78.00	86.00	99.00	107.00	146.00	227.00	419.00	478.00
1976	206.00	211.00	217.00	235.00	338.00	417.00	423.00	439.00	736.00
1977	105.00	108.00	118.00	138.00	183.00	229.00	278.00	328.00	848.00
1978	20.00	21.00	24.00	29.00	77.00	101.00	134.00	213.00	296.00
1979	25.00	25.00	26.00	27.00	31.00	42.00	60.00	115.00	154.00
1980	71.00	71.00	73.00	86.00	199.00	430.00	546.00	668.00	1010.00
1981	10.00	10.00	10.00	11.00	14.00	20.00	42.00	76.00	129.00
1982	10.00	10.00	10.00	11.00	14.00	42.00	56.00	102.00	231.00
1983	51.00	52.00	57.00	67.00	94.00	151.00	193.00	220.00	432.00
1984	29.00	29.00	30.00	34.00	54.00	74.00	83.00	98.00	241.00
1985	56.00	57.00	59.00	65.00	72.00	94.00	109.00	151.00	355.00
1986	37.00	38.00	44.00	50.00	57.00	91.00	132.00	161.00	431.00
1987	7.20	7.30	7.60	7.90	9.10	25.00	53.00	62.00	121.00

02136000 BLACK RIVER AT KINGSTREE
LOCATION: Lat 333940, Long 795010. Williamsburg County
PERIOD OF RECORD: Aug 1929 through Sep 1987
DRAINAGE AREA: 1250.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	57	57	206.00-1976	2.00-1955	42.79	1787.67	42.28	1.5939	0.98803	0.52811
3	57	57	211.00-1976	2.00-1955	43.88	1864.74	43.18	1.5910	0.98417	0.52309
7	57	57	217.00-1976	2.60-1955	47.38	2065.67	45.45	1.4584	0.95932	0.53219
14	57	57	235.00-1976	3.00-1955	54.86	2636.35	51.35	1.3193	0.93588	0.49040
30	57	57	338.00-1976	3.90-1955	78.97	5925.38	76.98	1.5324	0.97478	0.28932
60	57	57	570.00-1960	4.20-1955	125.29	15680.45	125.22	1.9371	0.99946	0.15069
90	57	57	784.00-1972	7.00-1955	170.19	25779.38	160.56	1.9370	0.94339	0.15377
120	57	57	1030.00-1960	9.70-1955	225.78	44661.81	211.33	2.1555	0.93600	0.11046
183	57	57	1520.00-1946	17.00-1955	374.30	98993.89	314.63	1.7976	0.84059	-0.05865

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	28	29	31	36	51	88	123	172	287
5	9.5	9.7	11	12	17	28	49	68	136
10	5.3	5.4	6.2	7.1	9.6	13	28	38	88
15	4.1	4.1	4.8	5.6	7.5	7.7	20	28	70
20	3.5	3.5	4.2	4.9	6.5	6.5	16	22	60
25	3.2	3.2	3.8	4.4	5.9	5.9	14	19	54
30	2.9	3.0	3.6	4.2	5.5	5.5	12	16	49
40	2.7	2.7	3.3	3.9	5.1	5.1	9.6	13	42
50	2.5	2.5	3.2	3.7	4.8	4.8	8.1	11	38
75	2.3	2.4	3.0	3.4	4.5	4.5	5.9	8.2	31
	GUMBEL3D	GUMBEL3D	GUMBEL3D	GUMBEL3D	GUMBEL3D	GUMBEL3A	POWTRAN	LOGBOUGH	POWTRAN

02146000 CATAWBA RIVER NEAR ROCK HILL
Location: Lat 345905, Long 805827. York County
Period of record: Sep 1895 - Sep 1903; Apr 1942 through Sep 1987
Drainage area: 3050.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1943	890.00	976.00	1130.00	1230.00	1730.00	2140.00	2400.00	2950.00	2980.00
1944	906.00	1030.00	1100.00	1380.00	1560.00	1700.00	1730.00	1740.00	2230.00
1945	1070.00	1180.00	1320.00	1520.00	1690.00	1980.00	2180.00	2180.00	3010.00
1946	815.00	1040.00	1050.00	1250.00	1440.00	1950.00	2280.00	2520.00	3950.00
1947	850.00	1070.00	1080.00	1910.00	2320.00	2480.00	2660.00	2640.00	2690.00
1948	986.00	1030.00	1120.00	2010.00	2230.00	2570.00	2680.00	2930.00	2960.00
1949	906.00	927.00	1040.00	1570.00	2140.00	2690.00	2980.00	3370.00	3230.00
1950	1020.00	1220.00	1850.00	2780.00	3270.00	3730.00	3960.00	4030.00	4790.00
1951	938.00	1030.00	1060.00	1760.00	2290.00	2700.00	2690.00	2790.00	2990.00
1952	845.00	875.00	927.00	988.00	1130.00	1430.00	1500.00	1530.00	1690.00
1953	860.00	969.00	1010.00	1280.00	1550.00	1600.00	1720.00	2130.00	2590.00
1954	899.00	979.00	1020.00	1090.00	1230.00	1370.00	1470.00	1610.00	1840.00
1955	490.00	514.00	541.00	556.00	630.00	746.00	831.00	967.00	1220.00
1956	512.00	614.00	691.00	706.00	964.00	1150.00	1180.00	1340.00	1540.00
1957	528.00	578.00	719.00	789.00	1030.00	1180.00	1200.00	1230.00	1680.00
1958	535.00	603.00	1190.00	1480.00	1560.00	1770.00	2330.00	2700.00	3430.00
1959	592.00	667.00	966.00	1490.00	1640.00	1730.00	1880.00	1890.00	2320.00
1960	530.00	551.00	608.00	766.00	1710.00	2710.00	2970.00	3100.00	3940.00
1961	518.00	548.00	1350.00	2190.00	2400.00	2530.00	2790.00	3000.00	3350.00
1962	702.00	1020.00	1390.00	1490.00	1700.00	2010.00	2400.00	2800.00	3400.00
1963	632.00	792.00	855.00	990.00	1060.00	1170.00	1220.00	1230.00	1480.00
1964	672.00	781.00	1290.00	1420.00	1560.00	1950.00	2010.00	2060.00	2310.00
1965	547.00	641.00	755.00	1080.00	1740.00	2300.00	3140.00	3680.00	4360.00
1966	562.00	611.00	1320.00	1670.00	2270.00	2590.00	2870.00	2990.00	3370.00
1967	550.00	653.00	870.00	1240.00	1550.00	1950.00	2170.00	2310.00	2380.00
1968	572.00	612.00	656.00	842.00	1200.00	1360.00	1400.00	1730.00	2670.00
1969	509.00	710.00	918.00	1830.00	2100.00	2550.00	2890.00	2930.00	3190.00
1970	730.00	784.00	1090.00	1630.00	2830.00	3080.00	3430.00	3650.00	3880.00
1971	670.00	698.00	828.00	922.00	1250.00	1760.00	1790.00	2480.00	3350.00
1972	678.00	712.00	775.00	1540.00	1920.00	2380.00	3130.00	3910.00	4260.00
1973	560.00	881.00	1280.00	1800.00	2670.00	3030.00	3060.00	3370.00	3850.00
1974	672.00	916.00	1390.00	1490.00	1980.00	2450.00	2980.00	3470.00	3920.00
1975	810.00	862.00	1670.00	2770.00	3300.00	3710.00	3800.00	3960.00	4150.00
1976	781.00	1190.00	1690.00	2170.00	2790.00	4090.00	4440.00	4690.00	4860.00
1977	582.00	630.00	926.00	997.00	1390.00	1860.00	2290.00	3060.00	3020.00
1978	607.00	646.00	1280.00	1590.00	2010.00	2200.00	2230.00	2440.00	2620.00
1979	642.00	825.00	1020.00	1100.00	1630.00	1970.00	2380.00	2910.00	3210.00
1980	676.00	947.00	1670.00	2440.00	3040.00	4430.00	4710.00	4950.00	5750.00
1981	396.00	492.00	693.00	1160.00	1540.00	1880.00	2060.00	2290.00	2480.00
1982	457.00	527.00	573.00	854.00	1050.00	1320.00	1420.00	1490.00	1850.00
1983	468.00	506.00	604.00	1060.00	1090.00	1450.00	1700.00	1920.00	2550.00
1984	535.00	689.00	905.00	1360.00	1730.00	1850.00	1900.00	2050.00	2810.00
1985	544.00	593.00	923.00	1150.00	1240.00	1870.00	2110.00	2330.00	3040.00
1986	468.00	567.00	571.00	768.00	841.00	1310.00	1630.00	1550.00	2190.00
1987	227.00	466.00	626.00	676.00	845.00	1010.00	1100.00	1110.00	1190.00

02146000 CATAWBA RIVER NEAR ROCK HILL
LOCATION: Lat 345905, Long 805827. York County
PERIOD OF RECORD: Sep 1895 - Sep 1903; Apr 1942 through Sep 1987
DRAINAGE AREA: 3050.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	45	45	1070.00-1945	227.00-1987	665.31	33376.21	182.69	0.2951	0.27460	0.75913
3	45	45	1220.00-1950	466.00-1987	781.16	43910.44	209.55	0.3767	0.26825	0.59665
7	45	45	1850.00-1950	541.00-1955	1029.78	103458.44	321.65	0.5658	0.31235	0.24826
14	45	45	2780.00-1950	556.00-1955	1395.20	273113.98	522.60	0.8063	0.37457	0.21195
30	45	45	3300.00-1975	630.00-1955	1752.00	418516.04	646.93	0.6397	0.36925	0.37015
60	45	45	4430.00-1980	746.00-1955	2126.36	637263.52	798.29	0.9061	0.37543	0.39856
90	45	45	4710.00-1980	831.00-1955	2348.69	748868.53	865.37	0.6468	0.36845	0.40646
120	45	45	4950.00-1980	967.00-1955	2577.93	876230.60	936.07	0.4017	0.36311	0.46698
183	45	45	5750.00-1980	1190.00-1987	2990.44	990817.58	995.40	0.3657	0.33286	0.33400

Low flow frequency array table

Return Period	1 Day	Consecutive days: 3	7	14	30	60	90	120	183
2	639	748	1000	1310	1650	1990	2260	2510	2940
5	500	595	749	931	1180	1450	1580	1750	2100
10	440	530	633	769	977	1230	1290	1400	1710
15	413	501	580	695	886	1130	1160	1240	1520
20	396	482	546	650	829	1080	1080	1140	1410
25	384	469	522	617	789	1030	1030	1070	1320
30	374	459	503	592	758	1000	1000	1020	1260
40	361	444	476	555	712	956	956	956	1170
50	351	434	457	528	679	923	923	923	1100
	LOGNORM	GUMBEL1	LOGBOUGH	GUMBEL1	GUMBEL1	LOGNORM	LOGBOUGH	LOGBOUGH	LOGBOUGH

02147000 CATAWBA RIVER NEAR CATAWBA
Location: Lat 345109, Long 805206. York County
Period of record: Oct 1968 through Sep 1987
Drainage area: 3530.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1969	900.00	969.00	1210.00	2050.00	2350.00	2770.00	3110.00	3140.00	3410.00
1970	850.00	917.00	1210.00	1810.00	3000.00	3220.00	3550.00	3780.00	4000.00
1971	798.00	846.00	967.00	1040.00	1360.00	1850.00	1940.00	2690.00	3640.00
1972	823.00	875.00	1190.00	1810.00	2160.00	2360.00	3170.00	3930.00	4420.00
1973	931.00	1060.00	1370.00	1910.00	2760.00	3080.00	3140.00	3530.00	4220.00
1974	868.00	1010.00	1620.00	1680.00	2220.00	2710.00	3290.00	3770.00	4280.00
1975	869.00	1070.00	1890.00	2880.00	3550.00	3950.00	4270.00	4490.00	4580.00
1976	1050.00	1690.00	2010.00	3030.00	3440.00	4870.00	5100.00	5350.00	5590.00
1977	798.00	806.00	1120.00	1290.00	1680.00	2060.00	2500.00	3420.00	3360.00
1978	830.00	1010.00	1360.00	1770.00	2080.00	2330.00	2320.00	2600.00	2840.00
1979	869.00	914.00	1030.00	1160.00	1720.00	2060.00	2470.00	3050.00	3380.00
1980	876.00	919.00	1500.00	2210.00	3350.00	4310.00	4680.00	5140.00	6200.00
1981	755.00	803.00	960.00	1290.00	1670.00	2140.00	2290.00	2510.00	2770.00
1982	759.00	787.00	817.00	1060.00	1390.00	1690.00	1810.00	1920.00	2270.00
1983	757.00	771.00	822.00	1290.00	1290.00	1710.00	2040.00	2320.00	3070.00
1984	734.00	784.00	1010.00	1300.00	1670.00	1930.00	2010.00	2110.00	2990.00
1985	819.00	835.00	1140.00	1250.00	1430.00	2120.00	2380.00	2660.00	3580.00
1986	750.00	858.00	1000.00	1120.00	1190.00	1690.00	1980.00	1900.00	2730.00
1987	480.00	743.00	751.00	811.00	1080.00	1300.00	1440.00	1450.00	1520.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	19	19	1050.00-1976	480.00-1987	816.63	11759.81	108.44	-0.9988	0.13279	0.36493
3	19	19	1690.00-1976	743.00-1987	929.84	41409.29	203.49	2.6410	0.21885	0.15756
7	19	19	2010.00-1976	751.00-1987	1209.32	114200.74	337.94	0.9024	0.27944	0.53824
14	19	19	3030.00-1976	811.00-1987	1619.00	348587.47	590.41	0.9810	0.36468	0.31396
30	19	19	3550.00-1975	1080.00-1987	2073.16	604695.29	777.62	0.6346	0.37509	0.29927
60	19	19	4870.00-1976	1300.00-1987	2534.21	883077.01	939.72	1.0872	0.37081	0.25724
90	19	19	5100.00-1976	1440.00-1987	2815.26	970593.35	985.19	0.8706	0.34994	0.30782
120	19	19	5350.00-1976	1450.00-1987	3145.26	1111161.77	1054.12	0.5034	0.33514	0.44068
183	19	19	6200.00-1980	1520.00-1987	3623.68	1171833.80	1082.51	0.5209	0.29873	0.22978

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	825	874	1130	1490	1840	2280	2490	2990	3460
5	734	803	924	1100	1360	1770	2030	2150	2660
10	681	775	842	970	1190	1580	1790	1790	2320
15	653	763	807	921	1120	1510	1670	1670	2160
20	634	756	785	894	1080	1460	1600	1600	2070
	POWTRAN	POWTRAN	LNPEARFF	GUMBEL3D	LNPEARDI	LNPEARFF	GENSME	GUMBEL1	LOGNORM

02147500 ROCKY CREEK AT GREAT FALLS
Location: Lat 343345, Long 805500. Chester County
Period of record: Feb 1951 - Sep 1981; Aug 1986 through Sep 1981
Drainage area: 194.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1952	2.90	3.30	3.90	5.10	10.00	16.00	20.00	25.00	27.00
1953	5.30	6.60	8.00	12.00	18.00	22.00	35.00	50.00	104.00
1954	2.30	2.50	3.00	3.50	7.30	13.00	14.00	18.00	21.00
1955	0.04	0.04	0.04	0.05	0.19	1.30	3.60	6.10	23.00
1956	5.30	6.00	7.90	12.00	16.00	31.00	30.00	36.00	73.00
1957	0.12	0.25	0.35	1.30	7.10	11.00	13.00	15.00	16.00
1958	0.08	0.13	0.63	1.40	2.70	8.00	14.00	23.00	36.00
1959	12.00	13.00	15.00	18.00	20.00	26.00	27.00	29.00	58.00
1960	14.00	14.00	16.00	19.00	31.00	76.00	116.00	229.00	311.00
1961	24.00	25.00	27.00	30.00	35.00	45.00	49.00	56.00	70.00
1962	11.00	11.00	12.00	12.00	14.00	15.00	18.00	21.00	36.00
1963	14.00	15.00	17.00	20.00	27.00	35.00	40.00	43.00	63.00
1964	12.00	12.00	13.00	15.00	16.00	21.00	43.00	41.00	58.00
1965	22.00	22.00	26.00	31.00	34.00	39.00	75.00	91.00	211.00
1966	26.00	26.00	27.00	29.00	30.00	33.00	39.00	47.00	68.00
1967	5.90	6.00	6.50	8.20	16.00	31.00	37.00	47.00	49.00
1968	15.00	17.00	21.00	24.00	25.00	36.00	48.00	60.00	170.00
1969	12.00	13.00	14.00	14.00	18.00	20.00	25.00	35.00	59.00
1970	20.00	21.00	22.00	27.00	37.00	40.00	60.00	62.00	66.00
1971	9.10	9.10	9.20	9.90	11.00	14.00	25.00	22.00	44.00
1972	31.00	34.00	39.00	40.00	71.00	107.00	131.00	130.00	145.00
1973	20.00	21.00	24.00	26.00	33.00	36.00	44.00	50.00	75.00
1974	29.00	30.00	31.00	34.00	43.00	49.00	81.00	84.00	102.00
1975	15.00	15.00	19.00	20.00	23.00	26.00	40.00	46.00	44.00
1976	21.00	22.00	25.00	29.00	36.00	57.00	60.00	65.00	77.00
1977	13.00	14.00	16.00	20.00	23.00	34.00	49.00	96.00	88.00
1978	11.00	12.00	12.00	13.00	17.00	34.00	45.00	52.00	79.00
1979	19.00	20.00	20.00	21.00	23.00	25.00	29.00	33.00	44.00
1980	21.00	21.00	23.00	29.00	39.00	61.00	79.00	101.00	108.00
1981	8.60	8.70	9.50	12.00	15.00	20.00	22.00	28.00	80.00

02147500 ROCKY CREEK AT GREAT FALLS
LOCATION: Lat 343345, Long 805500. Chester County
PERIOD OF RECORD: Feb 1951 - Sep 1981; Aug 1986 through Sep 1981
DRAINAGE AREA: 194.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	30	30	31.00-1972	0.04-1955	13.39	71.68	8.47	0.1903	0.63238	0.39975
3	30	30	34.00-1972	0.04-1955	14.02	77.33	8.79	0.2370	0.62720	0.35512
7	30	30	39.00-1972	0.04-1955	15.60	92.60	9.62	0.2394	0.61681	0.34256
14	30	30	40.00-1972	0.05-1955	17.88	107.58	10.37	0.0763	0.58005	0.24942
30	30	30	71.00-1972	0.19-1955	23.28	198.41	14.09	1.1076	0.60516	0.12176
60	30	30	107.00-1972	1.30-1955	32.74	448.43	21.18	1.5618	0.64673	-0.03912
90	30	30	131.00-1972	3.60-1955	43.72	821.13	28.66	1.3691	0.65543	-0.02941
120	30	30	229.00-1960	6.10-1955	54.70	1826.49	42.74	2.3664	0.78126	-0.08082
183	30	30	311.00-1960	16.00-1957	80.17	3644.41	60.37	2.1798	0.75304	-0.12016

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	13	14	16	17	21	29	38	43	64
5	6.0	6.6	7.5	8.6	11	15	20	24	37
10	2.7	2.7	3.3	4.8	6.7	10	14	17	28
15	1.2	1.2	1.2	3.1	4.9	8.0	11	15	24
20	0.34	0.34	0.34	2.1	3.9	6.8	9.9	14	22
25	0.00	0.00	0.00	1.4	3.2	5.9	8.9	13	21
30	0.00	0.00	0.00	0.85	2.7	5.3	8.2	12	20
	POWTRAN	NORMAL	NORMAL	GUMBEL3B	POWTRAN	POWTRAN	POWTRAN	LOGNORM	LOGNORM

02148000 WATEREE RIVER NEAR CAMDEN
Location: Lat 341440, Long 803915. Kershaw County
Period of record: Oct 1904 - Sep 1910; Oct 1929 through Sep 1987
Drainage area: 5070.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1931	365.00	708.00	1350.00	1480.00	1560.00	2010.00	2160.00	2640.00	3550.00
1932	296.00	520.00	630.00	850.00	909.00	1250.00	2000.00	2860.00	3680.00
1933	498.00	1620.00	1940.00	2320.00	2770.00	3540.00	3690.00	4000.00	4450.00
1934	202.00	778.00	1450.00	1710.00	2010.00	2470.00	2800.00	2750.00	3020.00
1935	264.00	850.00	2750.00	3210.00	3350.00	3520.00	3690.00	3940.00	4240.00
1936	270.00	1700.00	2440.00	2740.00	3060.00	3380.00	3760.00	4240.00	4190.00
1937	656.00	1480.00	2450.00	2770.00	2750.00	3050.00	3630.00	3980.00	4750.00
1938	471.00	1430.00	1990.00	2490.00	3080.00	3200.00	3600.00	4280.00	4750.00
1939	181.00	945.00	1700.00	1820.00	1870.00	2180.00	2370.00	2690.00	3250.00
1940	253.00	320.00	1010.00	1550.00	1770.00	1860.00	1910.00	2040.00	2900.00
1941	184.00	405.00	980.00	1050.00	1280.00	1480.00	1900.00	2470.00	3030.00
1942	170.00	264.00	495.00	969.00	1120.00	1510.00	2460.00	2720.00	2680.00
1943	281.00	728.00	1510.00	1980.00	2500.00	3080.00	3440.00	3810.00	4060.00
1944	361.00	1180.00	1580.00	1870.00	1930.00	2120.00	2170.00	2240.00	3160.00
1945	481.00	1390.00	1950.00	2030.00	2300.00	2660.00	2930.00	3070.00	4030.00
1946	208.00	608.00	676.00	899.00	1700.00	2500.00	3270.00	3440.00	6590.00
1947	466.00	1250.00	1320.00	2250.00	2680.00	3400.00	3770.00	3630.00	4060.00
1948	274.00	556.00	1920.00	2480.00	2720.00	3480.00	3480.00	3570.00	3760.00
1949	243.00	853.00	1470.00	2260.00	3100.00	3550.00	3820.00	4080.00	4100.00
1950	514.00	1510.00	2810.00	3450.00	3990.00	4550.00	5430.00	5490.00	6380.00
1951	412.00	928.00	1160.00	1990.00	2620.00	2960.00	3220.00	3270.00	3590.00
1952	182.00	270.00	619.00	721.00	1110.00	1640.00	1730.00	1820.00	2020.00
1953	316.00	326.00	1410.00	1680.00	1900.00	2030.00	2510.00	3040.00	3890.00
1954	179.00	302.00	920.00	1150.00	1580.00	2110.00	2140.00	2170.00	2340.00
1955	321.00	334.00	356.00	570.00	841.00	981.00	1160.00	1410.00	1870.00
1956	336.00	397.00	814.00	1170.00	1510.00	1820.00	1770.00	2030.00	2430.00
1957	302.00	329.00	336.00	366.00	630.00	1140.00	1370.00	1560.00	2130.00
1958	230.00	301.00	1110.00	1490.00	1660.00	2010.00	2610.00	3100.00	4110.00
1959	299.00	377.00	1190.00	1960.00	2050.00	2270.00	2430.00	2460.00	3270.00
1960	230.00	245.00	279.00	1560.00	2710.00	3820.00	5520.00	5500.00	6660.00
1961	332.00	1110.00	2070.00	2600.00	2930.00	3710.00	3900.00	4060.00	4350.00
1962	338.00	843.00	1000.00	1670.00	1820.00	2230.00	2750.00	3280.00	4140.00
1963	257.00	350.00	927.00	1100.00	1500.00	1690.00	1990.00	2000.00	2480.00
1964	178.00	444.00	1370.00	1590.00	1830.00	2190.00	2340.00	2430.00	2920.00
1965	338.00	441.00	712.00	1190.00	2260.00	2880.00	4230.00	5040.00	6680.00
1966	360.00	438.00	2090.00	2220.00	2900.00	3310.00	3590.00	3750.00	4480.00
1967	225.00	353.00	747.00	1340.00	2240.00	2480.00	2670.00	2770.00	2910.00
1968	200.00	247.00	351.00	905.00	1610.00	2030.00	2050.00	2430.00	4750.00
1969	163.00	361.00	867.00	1880.00	2160.00	3080.00	3350.00	3430.00	4050.00
1970	220.00	307.00	1320.00	2250.00	3580.00	4040.00	4390.00	4470.00	4740.00
1971	187.00	250.00	849.00	919.00	1470.00	2830.00	2870.00	3650.00	4200.00
1972	306.00	467.00	1670.00	2470.00	3350.00	3670.00	4220.00	5020.00	5690.00
1973	295.00	1100.00	1510.00	1970.00	3000.00	3450.00	3560.00	4040.00	4820.00
1974	155.00	705.00	1620.00	1880.00	2260.00	2770.00	3520.00	4050.00	4770.00
1975	223.00	533.00	1190.00	2790.00	3330.00	3850.00	4410.00	4870.00	4830.00
1976	518.00	1580.00	3010.00	4270.00	4650.00	5770.00	5900.00	6090.00	6750.00
1977	211.00	282.00	959.00	1330.00	1880.00	2350.00	2880.00	4290.00	4110.00
1978	196.00	294.00	1610.00	1970.00	2320.00	2720.00	2840.00	2980.00	3140.00
1979	230.00	491.00	899.00	1430.00	1740.00	2320.00	2860.00	3530.00	4270.00
1980	239.00	440.00	1950.00	2870.00	4060.00	5300.00	6040.00	6680.00	7740.00
1981	143.00	467.00	835.00	1140.00	1540.00	2620.00	2980.00	3180.00	3540.00
1982	276.00	311.00	518.00	811.00	1200.00	1590.00	1790.00	1940.00	2750.00
1983	334.00	490.00	1190.00	1520.00	1740.00	2030.00	2430.00	2870.00	4000.00
1984	386.00	508.00	1050.00	1320.00	1690.00	1970.00	2010.00	2090.00	3050.00
1985	194.00	200.00	497.00	1110.00	1580.00	1870.00	2220.00	2560.00	3640.00
1986	187.00	200.00	486.00	950.00	1070.00	1690.00	2100.00	2070.00	3220.00
1987	207.00	335.00	387.00	726.00	1020.00	1150.00	1210.00	1240.00	1770.00

02148000 WATEREE RIVER NEAR CAMDEN
LOCATION: Lat 341440, Long 803915. Kershaw County
PERIOD OF RECORD: Oct 1904 - Sep 1910; Oct 1929 through Sep 1987
DRAINAGE AREA: 5070.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	57	57	656.00-1937	143.00-1981	286.72	11745.99	108.38	1.1801	0.37800	0.09431
3	57	57	1700.00-1936	200.00-1986	639.49	177302.78	421.07	1.1278	0.65845	0.43238
7	57	57	3010.00-1976	279.00-1960	1268.40	436670.24	660.81	0.6683	0.52098	0.20357
14	57	57	4270.00-1976	366.00-1957	1737.82	594034.95	770.74	0.7491	0.44351	0.27523
30	57	57	4650.00-1976	630.00-1957	2171.75	746615.55	864.07	0.6136	0.39787	0.29711
60	57	57	5770.00-1976	981.00-1955	2651.95	972286.75	986.05	0.7943	0.37182	0.36543
90	57	57	6040.00-1980	1160.00-1955	3014.74	1209245.98	1099.66	0.7951	0.36476	0.36519
120	57	57	6680.00-1980	1240.00-1987	3317.72	1350470.24	1162.10	0.6236	0.35027	0.39388
183	57	57	7740.00-1980	1770.00-1987	3977.72	1652424.62	1285.47	0.7927	0.32317	0.19613

Low flow frequency array table

Return Period	1 Day	Consecutive days: 3	7	14	30	60	90	120	183
2	262	476	1180	1650	1970	2550	2870	3200	3810
5	194	277	685	1050	1460	1770	2030	2290	2890
10	172	233	486	805	1200	1450	1700	1890	2490
15	163	220	402	703	1070	1310	1560	1710	2310
20	159	215	352	643	985	1230	1480	1600	2200
25	156	211	318	603	922	1170	1430	1520	2120
30	154	209	292	574	872	1130	1390	1460	2060
40	152	207	257	533	797	1080	1340	1370	1970
50	150	205	232	505	741	1040	1300	1300	1900
75	148	203	203	463	644	979	1250	1250	1800
	GUMBEL3C	GUMBEL3D	LOGBOUGH	GUMBEL3D	GENSME	GUMBEL3B	GUMBEL3D	LOGBOUGH	POWTRAN

02148300 COLONELS CREEK NEAR LEESBURG
Location: Lat 340025, Long 804358. Richland County
Period of record: Sep 1966 - Sep 1980
Drainage area: 38.10 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1968	19.00	20.00	22.00	23.00	32.00	38.00	40.00	44.00	51.00
1969	16.00	16.00	17.00	18.00	20.00	22.00	25.00	29.00	33.00
1970	14.00	14.00	14.00	17.00	23.00	28.00	29.00	29.00	31.00
1971	12.00	12.00	12.00	13.00	16.00	18.00	21.00	21.00	23.00
1972	18.00	19.00	20.00	22.00	26.00	27.00	34.00	35.00	38.00
1973	16.00	16.00	17.00	18.00	20.00	23.00	26.00	28.00	30.00
1974	26.00	26.00	29.00	30.00	32.00	34.00	35.00	36.00	42.00
1975	18.00	19.00	19.00	20.00	22.00	26.00	28.00	33.00	33.00
1976	24.00	24.00	24.00	28.00	35.00	42.00	43.00	46.00	51.00
1977	19.00	20.00	22.00	24.00	26.00	28.00	32.00	35.00	41.00
1978	15.00	16.00	16.00	17.00	20.00	25.00	26.00	26.00	27.00
1979	14.00	14.00	15.00	17.00	18.00	19.00	21.00	23.00	22.00
1980	24.00	24.00	27.00	30.00	35.00	45.00	47.00	49.00	54.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	13	13	26.00-1974	12.00-1971	18.08	17.15	4.14	0.5498	0.22908	0.02468
3	13	13	26.00-1974	12.00-1971	18.46	17.17	4.14	0.3066	0.22446	0.04884
7	13	13	29.00-1974	12.00-1971	19.54	23.94	4.89	0.4020	0.25043	-0.01326
14	13	13	30.00-1974	13.00-1971	21.31	27.29	5.22	0.4048	0.24517	-0.08446
30	13	13	35.00-1976	16.00-1971	25.00	39.85	6.31	0.3688	0.25250	-0.32729
60	13	13	45.00-1980	18.00-1971	28.85	66.75	8.17	0.6428	0.28322	-0.35674
90	13	13	47.00-1980	21.00-1979	31.31	61.91	7.87	0.5371	0.25131	-0.38965
120	13	13	49.00-1980	21.00-1971	33.38	70.08	8.37	0.4315	0.25076	-0.15747
183	13	13	54.00-1980	22.00-1979	36.62	104.54	10.22	0.3133	0.27925	-0.18838

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	17	18	19	21	24	28	30	32	35
5	14	14	15	16	19	21	24	25	27
10	13	13	13	14	17	18	21	22	23
15	12	12	12	13	15	17	19	21	21
	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1

02148315 WATEREE RIVER BELOW EASTOVER
Location: Lat 334942, Long 803714. Richland County
Period of record: Jul 1968 through Sep 1987
Drainage area: 5590.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1970	813.00	1650.00	2290.00	2790.00	3890.00	0.00	0.00	0.00	0.00
1971	788.00	829.00	1170.00	1340.00	1720.00	0.00	0.00	0.00	0.00
1972	936.00	1430.00	2140.00	2650.00	3520.00	0.00	0.00	0.00	0.00
1973	1300.00	1800.00	1910.00	2200.00	3010.00	0.00	0.00	0.00	0.00
1974	1160.00	1430.00	1950.00	2190.00	2480.00	0.00	0.00	0.00	0.00
1975	1170.00	1540.00	1960.00	3200.00	3770.00	0.00	0.00	0.00	0.00
1976	1490.00	2640.00	3550.00	4510.00	5340.00	0.00	0.00	0.00	0.00
1977	760.00	805.00	1430.00	1710.00	2330.00	0.00	0.00	0.00	0.00
1978	1170.00	1310.00	1790.00	2130.00	2610.00	0.00	0.00	0.00	0.00
1979	860.00	896.00	1090.00	1430.00	1660.00	0.00	0.00	0.00	0.00
1980	1160.00	1300.00	2190.00	2920.00	4000.00	0.00	0.00	0.00	0.00
1981	782.00	847.00	1080.00	1320.00	1690.00	0.00	0.00	0.00	0.00
1982	664.00	745.00	1100.00	1180.00	1540.00	0.00	0.00	0.00	0.00
1983	840.00	944.00	1440.00	1810.00	1860.00	0.00	0.00	0.00	0.00
1984	722.00	869.00	1200.00	1560.00	1980.00	0.00	0.00	0.00	0.00
1985	648.00	673.00	1020.00	1680.00	2120.00	0.00	0.00	0.00	0.00
1986	763.00	880.00	1210.00	1380.00	1450.00	0.00	0.00	0.00	0.00
1987	549.00	603.00	698.00	1130.00	1440.00	0.00	0.00	0.00	0.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	18	18	1490.00-1976	549.00-1987	920.83	66722.03	258.31	0.7125	0.28051	0.32462
3	18	18	2640.00-1976	603.00-1987	1177.28	264685.74	514.48	1.4298	0.43700	0.18676
7	18	18	3550.00-1976	698.00-1987	1623.22	457346.89	676.27	1.3162	0.41662	0.10472
14	18	18	4510.00-1976	1130.00-1987	2062.78	771056.54	878.10	1.3925	0.42569	0.17010
30	18	18	5340.00-1976	1440.00-1987	2578.33	1237308.82	1112.34	1.0561	0.43142	0.13244

Low flow frequency array table

Return Period	1 Day	3	7	14	30	60	90	120	183
		Consecutive days							
2	883	916	1470	1850	2250				
5	675	786	1050	1320	1600				
10	587	717	916	1160	1380				
15	547	683	868	1100	1290				
20	522	661	843	1070	1230				
	GUMBEL1	GENSME	GUMBEL3A	GUMBEL3A	LNPEARDI				

02153500 BROAD RIVER NEAR GAFFNEY
Location: Lat 350520, Long 813420. Cherokee County
Period of record: Jul 1896 - Dec 1899; Oct 1938 - Sep 1971; Oct 1984 through Sep 1971
Drainage area: 1490.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1940	586.00	712.00	772.00	813.00	825.00	861.00	907.00	959.00	1170.00
1941	443.00	480.00	569.00	674.00	901.00	1080.00	1080.00	1170.00	1350.00
1942	466.00	486.00	566.00	616.00	668.00	809.00	850.00	982.00	1150.00
1943	659.00	809.00	994.00	1010.00	1110.00	1210.00	1390.00	1600.00	1720.00
1944	699.00	853.00	931.00	985.00	1000.00	1140.00	1200.00	1250.00	1550.00
1945	730.00	855.00	967.00	1050.00	1110.00	1490.00	1540.00	1710.00	1830.00
1946	743.00	845.00	918.00	1000.00	1110.00	1420.00	1550.00	1590.00	2280.00
1947	811.00	1020.00	1140.00	1220.00	1490.00	1640.00	1730.00	1730.00	1840.00
1948	657.00	721.00	893.00	1020.00	1070.00	1210.00	1420.00	1620.00	1840.00
1949	845.00	910.00	1020.00	1300.00	1320.00	1670.00	1810.00	2140.00	2090.00
1950	1260.00	1410.00	1680.00	1860.00	2190.00	2380.00	2560.00	2530.00	3080.00
1951	991.00	1030.00	1170.00	1290.00	1440.00	1900.00	2040.00	2070.00	2120.00
1952	598.00	685.00	729.00	738.00	799.00	906.00	997.00	1070.00	1260.00
1953	746.00	804.00	867.00	986.00	1060.00	1120.00	1180.00	1230.00	1460.00
1954	466.00	623.00	682.00	760.00	836.00	904.00	1070.00	1140.00	1220.00
1955	224.00	363.00	387.00	407.00	440.00	479.00	563.00	618.00	738.00
1956	444.00	489.00	533.00	578.00	705.00	747.00	769.00	788.00	917.00
1957	300.00	353.00	374.00	401.00	445.00	486.00	656.00	724.00	883.00
1958	381.00	621.00	703.00	754.00	1010.00	1130.00	1330.00	1720.00	1990.00
1959	867.00	967.00	1130.00	1160.00	1210.00	1250.00	1260.00	1270.00	1620.00
1960	986.00	1070.00	1120.00	1190.00	1620.00	1860.00	1990.00	2230.00	2800.00
1961	1050.00	1200.00	1370.00	1390.00	1440.00	1530.00	1600.00	1730.00	1860.00
1962	908.00	989.00	1080.00	1120.00	1150.00	1270.00	1410.00	1760.00	2300.00
1963	947.00	1080.00	1160.00	1310.00	1420.00	1580.00	1620.00	1650.00	1880.00
1964	651.00	716.00	790.00	855.00	884.00	1010.00	1060.00	1080.00	1270.00
1965	942.00	1020.00	1220.00	1270.00	1490.00	1850.00	2240.00	2180.00	2770.00
1966	916.00	1050.00	1230.00	1290.00	1390.00	1600.00	1640.00	1680.00	1800.00
1967	682.00	707.00	811.00	888.00	1060.00	1120.00	1190.00	1410.00	1620.00
1968	874.00	949.00	1010.00	1130.00	1290.00	1540.00	1610.00	2150.00	2330.00
1969	468.00	700.00	822.00	866.00	940.00	1000.00	1170.00	1410.00	1530.00
1970	1140.00	1210.00	1310.00	1500.00	1600.00	2040.00	2070.00	2190.00	2290.00
1971	836.00	843.00	913.00	962.00	1130.00	1290.00	1540.00	1700.00	2010.00

02153500 BROAD RIVER NEAR GAFFNEY
LOCATION: Lat 350520, Long 813420. Cherokee County
PERIOD OF RECORD: Jul 1896 - Dec 1899; Oct 1938 - Sep 1971; Oct 1984 through Sep 1971
DRAINAGE AREA: 1490.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	32	32	1260.00-1950	224.00-1955	728.63	61523.73	248.04	-0.0596	0.34042	0.46959
3	32	32	1410.00-1950	353.00-1957	830.31	62799.77	250.60	0.0137	0.30181	0.45645
7	32	32	1680.00-1950	374.00-1957	933.16	83917.81	289.69	0.1541	0.31044	0.44998
14	32	32	1860.00-1950	401.00-1957	1012.28	100834.14	317.54	0.2214	0.31369	0.45353
30	32	32	2190.00-1950	440.00-1955	1129.78	131599.10	362.77	0.4811	0.32109	0.36440
60	32	32	2380.00-1950	479.00-1955	1297.56	194245.50	440.73	0.3087	0.33966	0.36709
90	32	32	2560.00-1950	563.00-1955	1407.56	215561.10	464.29	0.4034	0.32985	0.38681
120	32	32	2530.00-1950	618.00-1955	1533.78	235433.30	485.21	0.0275	0.31635	0.36904
183	32	32	3080.00-1950	738.00-1955	1767.75	317085.20	563.10	0.3231	0.31854	0.30587

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	743	841	933	1010	1130	1230	1380	1540	1750
5	509	611	689	745	825	931	994	1110	1270
10	386	490	562	605	665	777	814	896	1040
15	327	430	498	536	585	700	730	794	932
20	289	392	457	490	533	650	678	729	864
25	261	364	426	456	495	613	640	683	815
30	240	343	402	430	464	583	611	648	778
40	209	311	365	390	419	539	569	596	722
	LOGBOUGH	LOGBOUGH	NORMAL	NORMAL	NORMAL	GENSME	LOGBOUGH	GUMBEL3B	LOGBOUGH

02153780 CLARKS FORK NEAR SMYRNA
Location: Lat 350445, Long 812317. York County
Period of record: Oct 1980 through Sep 1987
Drainage area: 24.10 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1982	1.10	1.10	1.10	1.10	1.50	3.60	4.70	5.10	6.70
1983	4.30	4.50	4.60	5.10	5.50	6.30	7.30	8.50	11.00
1984	1.10	1.19	1.40	1.40	1.70	2.20	3.00	4.10	7.80
1985	6.30	6.50	6.90	7.50	8.80	9.40	10.00	11.00	18.00
1986	3.30	3.40	3.70	3.90	5.30	6.40	7.60	9.10	15.00
1987	1.70	1.90	2.20	2.60	3.10	4.50	5.60	5.60	6.70

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	6	6	6.30-1985	1.10-1984	2.97	3.60	1.90	0.5966	0.63917	-0.59419
3	6	6	6.50-1985	1.10-1982	3.10	3.78	1.94	0.5774	0.62776	-0.60793
7	6	6	6.90-1985	1.10-1982	3.32	4.08	2.02	0.5840	0.60887	-0.56751
14	6	6	7.50-1985	1.10-1982	3.60	4.94	2.22	0.5381	0.61739	-0.60814
30	6	6	8.80-1985	1.50-1982	4.32	6.45	2.54	0.5149	0.58856	-0.47588
60	6	6	9.40-1985	2.20-1984	5.40	5.35	2.31	0.3556	0.42833	-0.49011
90	6	6	10.00-1985	3.00-1984	6.37	5.05	2.25	0.1089	0.35293	-0.48330
120	6	6	11.00-1985	4.10-1984	7.23	6.05	2.46	0.1920	0.34011	-0.47519
183	6	6	18.00-1985	6.70-1987	10.87	18.69	4.32	0.5367	0.39779	-0.15392

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	2.7	2.9	3.1	3.3	4.0	5.1	6.1	6.9	10
5	0.83	0.91	1.0	1.1	1.5	2.8	3.8	4.5	6.0
10	0.02	0.08	0.18	0.18	0.37	1.8	2.9	3.4	4.2
	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1

02154500 NORTH PACOLET RIVER AT FINGERVILLE
Location: Lat 350715, Long 815910. Spartanburg County
Period of record: Oct 1929 through Sep 1987
Drainage area: 116.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1931	59.00	60.00	61.00	65.00	67.00	71.00	76.00	80.00	94.00
1932	34.00	37.00	40.00	41.00	43.00	50.00	53.00	62.00	71.00
1933	55.00	56.00	61.00	68.00	85.00	97.00	140.00	138.00	150.00
1934	63.00	66.00	68.00	71.00	77.00	87.00	89.00	102.00	113.00
1935	59.00	64.00	71.00	82.00	107.00	129.00	160.00	174.00	180.00
1936	59.00	64.00	70.00	81.00	85.00	106.00	121.00	131.00	152.00
1937	89.00	96.00	104.00	107.00	128.00	166.00	173.00	174.00	222.00
1938	104.00	109.00	115.00	125.00	146.00	157.00	176.00	177.00	232.00
1939	79.00	84.00	88.00	90.00	94.00	100.00	104.00	112.00	130.00
1940	62.00	66.00	70.00	72.00	74.00	78.00	82.00	87.00	108.00
1941	40.00	47.00	50.00	56.00	72.00	83.00	89.00	96.00	113.00
1942	35.00	39.00	40.00	42.00	45.00	54.00	60.00	73.00	92.00
1943	59.00	64.00	82.00	97.00	103.00	108.00	129.00	159.00	160.00
1944	78.00	80.00	82.00	89.00	91.00	103.00	107.00	110.00	140.00
1945	66.00	69.00	73.00	78.00	88.00	107.00	114.00	122.00	135.00
1946	64.00	65.00	68.00	74.00	82.00	101.00	129.00	144.00	174.00
1947	96.00	100.00	102.00	106.00	125.00	139.00	148.00	153.00	165.00
1948	72.00	76.00	77.00	84.00	85.00	105.00	111.00	123.00	148.00
1949	96.00	97.00	100.00	114.00	119.00	141.00	155.00	176.00	173.00
1950	132.00	136.00	139.00	150.00	176.00	180.00	195.00	205.00	248.00
1951	98.00	99.00	106.00	116.00	131.00	152.00	165.00	171.00	182.00
1952	57.00	59.00	63.00	65.00	74.00	85.00	85.00	89.00	106.00
1953	65.00	66.00	68.00	74.00	79.00	84.00	93.00	99.00	109.00
1954	42.00	43.00	45.00	50.00	54.00	64.00	69.00	70.00	91.00
1955	28.00	28.00	29.00	31.00	32.00	35.00	39.00	45.00	66.00
1956	41.00	41.00	43.00	47.00	55.00	58.00	60.00	62.00	66.00
1957	29.00	29.00	30.00	34.00	42.00	45.00	60.00	63.00	74.00
1958	49.00	51.00	55.00	57.00	68.00	85.00	100.00	118.00	146.00
1959	90.00	92.00	93.00	97.00	102.00	105.00	106.00	109.00	134.00
1960	91.00	96.00	101.00	102.00	117.00	142.00	162.00	177.00	207.00
1961	116.00	117.00	119.00	122.00	129.00	136.00	142.00	155.00	165.00
1962	96.00	98.00	100.00	101.00	106.00	117.00	129.00	154.00	217.00
1963	93.00	95.00	103.00	104.00	110.00	131.00	139.00	140.00	156.00
1964	72.00	72.00	73.00	81.00	82.00	91.00	92.00	94.00	109.00
1965	99.00	101.00	103.00	108.00	122.00	153.00	174.00	182.00	228.00
1966	95.00	100.00	104.00	108.00	115.00	122.00	128.00	133.00	141.00
1967	60.00	60.00	62.00	64.00	79.00	83.00	92.00	106.00	138.00
1968	79.00	80.00	83.00	92.00	102.00	121.00	125.00	158.00	173.00
1969	65.00	67.00	69.00	74.00	82.00	85.00	97.00	118.00	130.00
1970	104.00	108.00	115.00	134.00	138.00	150.00	161.00	167.00	190.00
1971	60.00	61.00	64.00	67.00	76.00	86.00	113.00	108.00	118.00
1972	97.00	100.00	109.00	110.00	122.00	128.00	150.00	145.00	162.00
1973	97.00	99.00	102.00	105.00	113.00	133.00	137.00	146.00	193.00
1974	111.00	112.00	114.00	115.00	117.00	126.00	134.00	145.00	174.00
1975	97.00	98.00	99.00	99.00	101.00	107.00	111.00	121.00	132.00
1976	103.00	105.00	107.00	116.00	121.00	158.00	180.00	207.00	245.00
1977	84.00	86.00	91.00	98.00	108.00	122.00	139.00	177.00	202.00
1978	79.00	79.00	82.00	84.00	92.00	97.00	110.00	121.00	139.00
1979	82.00	83.00	83.00	84.00	85.00	90.00	99.00	108.00	123.00
1980	127.00	130.00	134.00	141.00	170.00	196.00	211.00	225.00	268.00
1981	95.00	97.00	101.00	103.00	110.00	116.00	131.00	134.00	139.00
1982	45.00	46.00	46.00	47.00	53.00	65.00	69.00	72.00	74.00
1983	70.00	71.00	73.00	76.00	82.00	92.00	99.00	110.00	138.00
1984	77.00	78.00	80.00	82.00	90.00	92.00	97.00	101.00	134.00
1985	84.00	97.00	99.00	102.00	105.00	114.00	116.00	120.00	142.00
1986	57.00	58.00	60.00	61.00	64.00	71.00	89.00	99.00	104.00
1987	35.00	35.00	38.00	39.00	43.00	60.00	84.00	83.00	117.00

02154500 NORTH PACOLET RIVER AT FINGERVILLE
LOCATION: Lat 350715, Long 815910. Spartanburg County
PERIOD OF RECORD: Oct 1929 through Sep 1987
DRAINAGE AREA: 116.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	57	57	132.00-1950	28.00-1955	74.91	611.94	24.74	0.0340	0.33022	0.53757
3	57	57	136.00-1950	28.00-1955	77.40	635.96	25.22	0.0094	0.32580	0.51429
7	57	57	139.00-1950	29.00-1955	80.82	666.99	25.83	-0.0424	0.31953	0.48463
14	57	57	150.00-1950	31.00-1955	85.65	739.25	27.19	0.0033	0.31745	0.43337
30	57	57	176.00-1950	32.00-1955	94.09	922.85	30.38	0.2692	0.32287	0.37774
60	57	57	196.00-1980	35.00-1955	106.30	1183.79	34.41	0.2715	0.32368	0.37581
90	57	57	211.00-1980	39.00-1955	117.51	1403.41	37.46	0.2387	0.31880	0.31924
120	57	57	225.00-1980	45.00-1955	126.84	1614.24	40.18	0.2082	0.31675	0.33232
183	57	57	268.00-1980	66.00-1956	147.93	2251.92	47.45	0.4550	0.32079	0.28677

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	76	79	82	86	94	103	116	126	143
5	53	55	58	62	68	78	84	91	107
10	42	43	46	49	54	64	70	74	90
15	36	37	39	43	48	58	64	66	82
20	32	34	35	39	44	53	60	61	78
25	30	31	32	36	41	50	57	58	74
30	28	29	30	34	39	48	55	55	72
40	25	26	27	30	36	44	53	53	68
50	23	23	24	28	33	41	51	51	65
75	19	20	20	24	30	36	47	47	61
	LOGBOUGH	LOGBOUGH	LOGBOUGH	LOGBOUGH	WEIBULL	GENSME	GUMBEL3C	LOGBOUGH	LNPEARFF

02155500 PACOLET RIVER NEAR FINGERVILLE
Location: Lat 350635, Long 815735. Spartanburg County
Period of record: Oct 1929 through Sep 1987
Drainage area: 212.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1931	65.00	85.00	91.00	93.00	99.00	118.00	124.00	129.00	149.00
1932	38.00	47.00	58.00	60.00	64.00	75.00	85.00	102.00	120.00
1933	97.00	110.00	116.00	119.00	140.00	158.00	225.00	229.00	252.00
1934	100.00	118.00	123.00	125.00	130.00	137.00	145.00	169.00	185.00
1935	122.00	130.00	140.00	151.00	177.00	208.00	261.00	286.00	280.00
1936	116.00	126.00	129.00	141.00	143.00	168.00	202.00	213.00	245.00
1937	148.00	159.00	170.00	173.00	196.00	255.00	275.00	275.00	351.00
1938	172.00	181.00	187.00	200.00	226.00	243.00	279.00	284.00	365.00
1939	95.00	105.00	132.00	133.00	137.00	153.00	163.00	173.00	208.00
1940	65.00	84.00	98.00	98.00	99.00	112.00	125.00	138.00	179.00
1941	40.00	62.00	85.00	94.00	100.00	123.00	139.00	154.00	167.00
1942	41.00	51.00	63.00	64.00	67.00	82.00	89.00	113.00	146.00
1943	76.00	90.00	112.00	125.00	141.00	160.00	195.00	229.00	234.00
1944	83.00	98.00	108.00	119.00	130.00	144.00	168.00	167.00	220.00
1945	87.00	101.00	108.00	116.00	140.00	168.00	178.00	194.00	216.00
1946	93.00	100.00	105.00	120.00	127.00	158.00	217.00	262.00	307.00
1947	118.00	132.00	154.00	156.00	201.00	226.00	249.00	255.00	276.00
1948	86.00	96.00	109.00	121.00	124.00	161.00	179.00	199.00	241.00
1949	146.00	151.00	165.00	170.00	174.00	208.00	235.00	287.00	278.00
1950	191.00	193.00	202.00	218.00	266.00	278.00	327.00	339.00	414.00
1951	137.00	142.00	151.00	167.00	183.00	239.00	261.00	276.00	280.00
1952	69.00	82.00	89.00	97.00	110.00	132.00	131.00	138.00	166.00
1953	115.00	117.00	120.00	122.00	124.00	132.00	142.00	152.00	164.00
1954	66.00	66.00	67.00	76.00	78.00	102.00	106.00	110.00	147.00
1955	32.00	33.00	35.00	37.00	41.00	46.00	53.00	65.00	99.00
1956	50.00	60.00	64.00	67.00	76.00	86.00	88.00	96.00	103.00
1957	38.00	40.00	40.00	43.00	51.00	62.00	85.00	90.00	113.00
1958	73.00	79.00	82.00	90.00	103.00	132.00	154.00	184.00	239.00
1959	109.00	123.00	138.00	147.00	158.00	165.00	168.00	171.00	214.00
1960	136.00	142.00	151.00	164.00	192.00	256.00	284.00	317.00	355.00
1961	136.00	137.00	147.00	184.00	223.00	245.00	254.00	270.00	278.00
1962	122.00	139.00	148.00	153.00	160.00	176.00	211.00	262.00	353.00
1963	153.00	153.00	154.00	163.00	184.00	212.00	219.00	223.00	255.00
1964	111.00	112.00	114.00	124.00	129.00	145.00	144.00	153.00	184.00
1965	159.00	169.00	177.00	196.00	223.00	276.00	304.00	306.00	395.00
1966	94.00	98.00	104.00	131.00	181.00	193.00	201.00	213.00	224.00
1967	88.00	92.00	98.00	102.00	120.00	121.00	132.00	152.00	218.00
1968	125.00	128.00	131.00	139.00	156.00	182.00	207.00	256.00	279.00
1969	80.00	88.00	100.00	103.00	112.00	125.00	151.00	171.00	186.00
1970	135.00	141.00	178.00	200.00	219.00	240.00	270.00	277.00	322.00
1971	86.00	87.00	93.00	100.00	111.00	134.00	149.00	156.00	171.00
1972	130.00	130.00	146.00	157.00	173.00	185.00	218.00	212.00	256.00
1973	108.00	110.00	114.00	126.00	144.00	170.00	180.00	193.00	293.00
1974	137.00	139.00	148.00	161.00	175.00	197.00	207.00	216.00	270.00
1975	122.00	124.00	128.00	132.00	139.00	171.00	184.00	199.00	209.00
1976	179.00	187.00	193.00	205.00	209.00	296.00	347.00	397.00	466.00
1977	96.00	106.00	120.00	157.00	178.00	180.00	210.00	277.00	321.00
1978	91.00	92.00	94.00	96.00	108.00	116.00	145.00	167.00	226.00
1979	91.00	92.00	92.00	93.00	95.00	107.00	125.00	151.00	178.00
1980	153.00	153.00	158.00	175.00	232.00	309.00	338.00	369.00	407.00
1981	110.00	117.00	121.00	130.00	148.00	168.00	184.00	215.00	239.00
1982	58.00	58.00	60.00	63.00	67.00	78.00	85.00	86.00	90.00
1983	87.00	88.00	98.00	102.00	103.00	120.00	126.00	149.00	196.00
1984	84.00	87.00	91.00	94.00	98.00	107.00	119.00	126.00	180.00
1985	136.00	141.00	143.00	150.00	162.00	176.00	176.00	201.00	250.00
1986	71.00	71.00	72.00	73.00	78.00	90.00	105.00	115.00	141.00
1987	39.00	39.00	41.00	42.00	45.00	69.00	98.00	103.00	144.00

02155500 PACOLET RIVER NEAR FINGERVILLE
LOCATION: Lat 350635, Long 815735. Spartanburg County
PERIOD OF RECORD: Oct 1929 through Sep 1987
DRAINAGE AREA: 212.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	57	57	191.00-1950	32.00-1955	101.49	1426.39	37.77	0.1500	0.37213	0.43757
3	57	57	193.00-1950	33.00-1955	108.44	1389.33	37.27	0.0836	0.34373	0.41230
7	57	57	202.00-1950	35.00-1955	116.75	1519.41	38.98	0.0014	0.33386	0.38609
14	57	57	218.00-1950	37.00-1955	125.56	1849.09	43.00	-0.0016	0.34247	0.40047
30	57	57	266.00-1950	41.00-1955	139.81	2645.49	51.43	0.1821	0.36790	0.34502
60	57	57	309.00-1980	46.00-1955	162.72	3777.61	61.46	0.4033	0.37772	0.32419
90	57	57	347.00-1976	53.00-1955	182.82	4782.78	69.16	0.4458	0.37827	0.29457
120	57	57	397.00-1976	65.00-1955	200.19	5523.35	74.32	0.4376	0.37124	0.32072
183	57	57	466.00-1976	90.00-1982	235.86	7051.95	83.98	0.5531	0.35604	0.27010

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	102	108	116	125	137	157	176	195	226
5	68	76	83	88	94	108	121	134	163
10	51	60	66	69	74	87	98	107	135
15	44	52	58	61	65	77	88	95	123
20	39	48	53	55	59	71	82	87	115
25	35	44	49	52	55	67	78	82	110
30	33	42	47	49	53	64	75	78	106
40	29	38	43	45	48	60	70	72	100
50	26	36	40	41	45	56	67	67	95
75	22	31	35	37	40	51	63	63	88
	LOGBOUGH	WEIBULL	WEIBULL	WEIBULL	LNPEARFF	LNPEARFF	GUMBEL3D	LOGBOUGH	LNPEARFF

02156000 PACOLET RIVER NEAR CLIFTON
Location: Lat 345810, Long 814805. Spartanburg County
Period of record: Oct 1939 - Sep 1971
Drainage area: 320.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1941	30.00	93.00	115.00	125.00	136.00	167.00	196.00	214.00	232.00
1942	17.00	75.00	92.00	95.00	98.00	117.00	127.00	158.00	209.00
1943	76.00	131.00	163.00	171.00	207.00	215.00	265.00	306.00	320.00
1944	71.00	133.00	154.00	177.00	193.00	208.00	240.00	237.00	309.00
1945	97.00	139.00	152.00	168.00	187.00	238.00	255.00	279.00	313.00
1946	58.00	122.00	150.00	172.00	195.00	244.00	332.00	371.00	449.00
1947	97.00	164.00	202.00	207.00	280.00	316.00	350.00	362.00	390.00
1948	105.00	149.00	163.00	173.00	183.00	229.00	256.00	279.00	338.00
1949	151.00	210.00	237.00	250.00	257.00	311.00	349.00	416.00	409.00
1950	226.00	251.00	281.00	317.00	402.00	417.00	456.00	499.00	629.00
1951	163.00	210.00	222.00	242.00	260.00	347.00	388.00	388.00	401.00
1952	68.00	116.00	127.00	137.00	155.00	192.00	195.00	203.00	243.00
1953	110.00	161.00	170.00	175.00	188.00	195.00	203.00	216.00	231.00
1954	66.00	97.00	112.00	124.00	133.00	160.00	169.00	172.00	218.00
1955	34.00	41.00	49.00	50.00	53.00	62.00	76.00	92.00	138.00
1956	69.00	88.00	97.00	102.00	124.00	145.00	147.00	156.00	170.00
1957	42.00	51.00	61.00	67.00	78.00	95.00	136.00	146.00	192.00
1958	94.00	113.00	120.00	135.00	176.00	232.00	258.00	293.00	360.00
1959	141.00	204.00	212.00	222.00	235.00	239.00	242.00	255.00	324.00
1960	198.00	217.00	223.00	241.00	284.00	365.00	389.00	439.00	518.00
1961	169.00	195.00	214.00	256.00	317.00	357.00	368.00	392.00	403.00
1962	169.00	193.00	200.00	206.00	214.00	237.00	281.00	351.00	462.00
1963	173.00	215.00	219.00	224.00	259.00	293.00	305.00	313.00	363.00
1964	118.00	140.00	156.00	172.00	178.00	206.00	206.00	215.00	259.00
1965	240.00	250.00	262.00	291.00	327.00	400.00	452.00	503.00	613.00
1966	121.00	172.00	191.00	220.00	265.00	287.00	298.00	308.00	329.00
1967	107.00	148.00	164.00	168.00	216.00	229.00	241.00	273.00	349.00
1968	147.00	184.00	196.00	215.00	243.00	257.00	286.00	397.00	415.00
1969	81.00	117.00	137.00	148.00	161.00	180.00	213.00	235.00	263.00
1970	195.00	218.00	248.00	275.00	293.00	334.00	377.00	387.00	434.00
1971	125.00	140.00	153.00	169.00	185.00	211.00	260.00	253.00	272.00

02156000 PACOLET RIVER NEAR CLIFTON
LOCATION: Lat 345810, Long 814805. Spartanburg County
PERIOD OF RECORD: Oct 1939 - Sep 1971
DRAINAGE AREA: 320.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	31	31	240.00-1965	17.00-1942	114.77	3240.63	56.93	0.3507	0.49599	0.48476
3	31	31	251.00-1950	41.00-1955	152.81	2962.09	54.43	-0.0925	0.35617	0.47624
7	31	31	281.00-1950	49.00-1955	169.10	3140.28	56.04	-0.1320	0.33140	0.46680
14	31	31	317.00-1950	50.00-1955	183.68	3890.48	62.37	-0.0354	0.33958	0.47813
30	31	31	402.00-1950	53.00-1955	209.10	5646.99	75.15	0.2105	0.35939	0.40034
60	31	31	417.00-1950	62.00-1955	241.45	7196.44	84.83	0.1318	0.35134	0.42646
90	31	31	456.00-1950	76.00-1955	268.26	8488.90	92.14	0.1430	0.34346	0.41028
120	31	31	503.00-1965	92.00-1955	293.81	10541.19	102.67	0.1855	0.34945	0.36681
183	31	31	629.00-1950	138.00-1955	340.48	13648.57	116.83	0.5974	0.34312	0.31258

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	111	158	174	183	203	228	262	292	333
5	62	105	119	129	146	164	186	202	236
10	41	76	89	102	117	137	153	158	193
15	32	62	75	90	102	125	138	138	174
20	27	53	66	82	93	117	130	130	162
25	23	47	59	76	86	112	124	124	154
30	20	42	54	72	80	108	119	119	148
40	17	35	46	66	72	101	113	113	139
	LOGBOUGH	LOGBOUGH	LOGBOUGH	WEIBULL	GENSME	GUMBEL1	GUMBEL3C	LOGBOUGH	GUMBEL3B

02156050 LAWSONS FORK CREEK AT DEWEY PLANT NEAR INMAN
Location: Lat 350131, Long 820427. Spartanburg County
Period of record: Oct 1979 through Sep 1987
Drainage area: 6.46 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1981	4.10	4.20	4.30	4.40	4.80	5.00	5.80	6.80	8.30
1982	2.00	2.10	2.20	2.40	2.70	3.80	3.90	4.10	4.50
1983	3.70	3.80	3.90	4.20	4.50	4.70	4.90	5.90	7.40
1984	3.00	3.10	3.20	3.30	3.50	3.70	4.10	4.50	5.50
1985	4.90	5.00	5.10	5.20	5.60	6.30	7.50	8.30	9.30
1986	2.80	2.80	2.90	2.90	3.30	3.80	4.80	4.70	5.20
1987	0.98	1.00	1.19	1.30	1.50	2.00	2.90	2.90	3.60

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	7	7	4.90-1985	0.98-1987	3.07	1.49	1.22	-0.2256	0.39717	-0.21769
3	7	7	5.00-1985	1.00-1987	3.14	1.54	1.24	-0.2344	0.39517	-0.19760
7	7	7	5.10-1985	1.19-1987	3.26	1.49	1.22	-0.1855	0.37472	-0.21024
14	7	7	5.20-1985	1.30-1987	3.39	1.51	1.23	-0.2001	0.36257	-0.21576
30	7	7	5.60-1985	1.50-1987	3.70	1.64	1.28	-0.2047	0.34642	-0.24942
60	7	7	6.30-1985	2.00-1987	4.19	1.53	1.24	-0.0411	0.29549	-0.20511
90	7	7	7.50-1985	2.90-1987	4.84	1.89	1.37	0.6101	0.28352	-0.26080
120	7	7	8.30-1985	2.90-1987	5.31	2.83	1.68	0.4040	0.31654	-0.34574
183	7	7	9.30-1985	3.60-1987	6.26	3.80	1.95	0.2393	0.31141	-0.41447

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	3.1	3.4	3.4	3.4	3.5	4.2	4.7	5.1	6.0
5	1.9	2.1	2.1	2.1	2.3	3.1	3.3	3.5	4.1
10	1.3	1.3	1.4	1.5	1.8	2.6	2.8	2.8	3.3
	LOGBOUGH	GUMBEL3B	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL3D	GUMBEL1	GUMBEL1	GUMBEL1

02156450 NEALS CREEK NEAR CARLISLE
Location: Lat 343953, Long 812728. Union County
Period of record: Oct 1980 through Sep 1987
Drainage area: 12.30 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1983	2.30	2.40	2.50	2.60	2.70	3.40	3.80	3.90	5.30
1984	0.81	0.88	0.94	1.10	1.19	1.50	1.80	2.00	3.40
1985	0.83	0.88	1.00	1.30	1.70	2.20	2.60	3.00	3.70
1986	0.78	0.85	1.10	1.50	1.70	2.10	2.30	2.60	3.60
1987	0.68	0.72	0.84	0.95	1.19	1.60	1.90	2.50	2.70

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	5	5	2.30-1983	0.68-1987	1.08	0.47	0.68	2.1956	0.63374	0.36930
3	5	5	2.40-1983	0.72-1987	1.15	0.50	0.70	2.1855	0.61441	0.43139
7	5	5	2.50-1983	0.84-1987	1.28	0.48	0.69	2.1325	0.54131	-0.24520
14	5	5	2.60-1983	0.95-1987	1.49	0.43	0.65	1.7023	0.43907	-0.44935
30	5	5	2.70-1983	1.19-1987	1.70	0.38	0.62	1.3391	0.36348	-0.68920
60	5	5	3.40-1983	1.50-1984	2.16	0.57	0.76	1.3865	0.35045	-0.76331
90	5	5	3.80-1983	1.80-1984	2.48	0.65	0.80	1.4302	0.32434	-0.74786
120	5	5	3.90-1983	2.00-1984	2.80	0.51	0.71	0.9196	0.25380	-0.95284
183	5	5	5.30-1983	2.70-1987	3.74	0.91	0.96	1.2559	0.25548	0.03377

Low flow frequency array table

Return Period	1 Day	Consecutive days: 3	7	14	30	60	90	120	183
2	0.81	0.87	1.0	1.3	1.6	2.0	2.3	2.7	3.6
5	0.72	0.78	0.89	0.97	1.2	1.5	1.8	2.0	3.0
	POWTRAN	GENSME	POWTRAN	GUMBEL3A	GUMBEL3B	GUMBEL3B	GUMBEL3B	GUMBEL1	GENSME

02156500 BROAD RIVER NEAR CARLISLE
Location: Lat 343546, Long 812520. Union County
Period of record: Oct 1938 through Sep 1987
Drainage area: 2790.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1940	201.00	873.00	1050.00	1090.00	1090.00	1200.00	1290.00	1390.00	1810.00
1941	90.00	584.00	950.00	1010.00	1240.00	1530.00	1700.00	1820.00	2120.00
1942	150.00	436.00	745.00	827.00	890.00	1120.00	1220.00	1480.00	1860.00
1943	347.00	1070.00	1470.00	1540.00	1680.00	1740.00	2030.00	2380.00	2590.00
1944	308.00	902.00	1290.00	1420.00	1410.00	1610.00	1640.00	1700.00	2280.00
1945	380.00	952.00	1340.00	1450.00	1440.00	2150.00	2210.00	2380.00	2520.00
1946	372.00	1010.00	1220.00	1390.00	1500.00	1930.00	2390.00	2360.00	3560.00
1947	462.00	1380.00	1680.00	1780.00	2300.00	2590.00	2810.00	2780.00	2980.00
1948	180.00	931.00	1310.00	1400.00	1580.00	1750.00	2010.00	2340.00	2570.00
1949	324.00	1390.00	1710.00	1840.00	1870.00	2330.00	2520.00	3020.00	3050.00
1950	1190.00	2080.00	2340.00	2520.00	3280.00	3460.00	3780.00	3750.00	4590.00
1951	225.00	1210.00	1640.00	1800.00	2020.00	2620.00	2730.00	2800.00	2890.00
1952	112.00	667.00	768.00	926.00	1150.00	1450.00	1530.00	1600.00	1820.00
1953	57.00	715.00	1080.00	1410.00	1420.00	1520.00	1650.00	1760.00	2080.00
1954	460.00	641.00	862.00	1030.00	1130.00	1230.00	1470.00	1500.00	1700.00
1955	50.00	209.00	475.00	482.00	507.00	577.00	705.00	783.00	980.00
1956	172.00	411.00	583.00	666.00	866.00	1210.00	1200.00	1240.00	1320.00
1957	44.00	300.00	518.00	609.00	683.00	758.00	1020.00	1120.00	1450.00
1958	228.00	638.00	1020.00	1160.00	1380.00	1610.00	1810.00	2350.00	2730.00
1959	917.00	1120.00	1450.00	1480.00	1540.00	1620.00	1650.00	1690.00	2300.00
1960	813.00	1410.00	1720.00	1810.00	2370.00	3010.00	3170.00	3490.00	4250.00
1961	1710.00	1830.00	2180.00	2390.00	2470.00	2620.00	2730.00	2980.00	2970.00
1962	891.00	1360.00	1640.00	1710.00	1800.00	1960.00	2170.00	2650.00	3540.00
1963	1280.00	1540.00	1870.00	1980.00	2160.00	2490.00	2510.00	2570.00	2870.00
1964	855.00	1110.00	1270.00	1370.00	1420.00	1630.00	1670.00	1690.00	2030.00
1965	1030.00	1540.00	1740.00	1860.00	2190.00	2750.00	3310.00	3300.00	4530.00
1966	1500.00	1560.00	1840.00	2020.00	2130.00	2300.00	2370.00	2470.00	2650.00
1967	615.00	1060.00	1240.00	1300.00	1600.00	1720.00	1820.00	2120.00	2420.00
1968	790.00	1240.00	1440.00	1690.00	1970.00	2240.00	2430.00	3270.00	3780.00
1969	847.00	1070.00	1090.00	1130.00	1220.00	1400.00	1630.00	1880.00	2090.00
1970	1480.00	1680.00	1800.00	2040.00	2180.00	2770.00	2940.00	3090.00	3190.00
1971	996.00	1170.00	1250.00	1290.00	1450.00	1640.00	2150.00	2340.00	2600.00
1972	1660.00	1770.00	1940.00	1960.00	2180.00	2680.00	2810.00	2800.00	3390.00
1973	1090.00	1510.00	1600.00	1630.00	1740.00	1990.00	2080.00	2270.00	3190.00
1974	1760.00	1860.00	1930.00	2090.00	2170.00	2310.00	2620.00	2690.00	3040.00
1975	867.00	1280.00	1400.00	1700.00	1790.00	2020.00	2050.00	2220.00	2640.00
1976	1720.00	1910.00	2120.00	2150.00	2470.00	3010.00	3460.00	4040.00	4280.00
1977	880.00	1270.00	1500.00	1640.00	1800.00	1890.00	2290.00	2930.00	3370.00
1978	1000.00	1170.00	1310.00	1480.00	1630.00	1700.00	1930.00	2120.00	2490.00
1979	947.00	1270.00	1490.00	1550.00	1630.00	1730.00	1890.00	2030.00	2310.00
1980	1700.00	1800.00	1880.00	2060.00	2370.00	2870.00	3060.00	3370.00	3890.00
1981	1730.00	1880.00	2010.00	2070.00	2190.00	2300.00	2570.00	2900.00	2960.00
1982	474.00	626.00	720.00	795.00	903.00	1140.00	1210.00	1250.00	1380.00
1983	790.00	994.00	1020.00	1150.00	1220.00	1360.00	1500.00	1740.00	2110.00
1984	1100.00	1200.00	1300.00	1320.00	1450.00	1480.00	1600.00	1680.00	2120.00
1985	1420.00	1580.00	1720.00	1750.00	1910.00	2100.00	2160.00	2340.00	2770.00
1986	750.00	990.00	1100.00	1170.00	1310.00	1440.00	1640.00	1810.00	2170.00
1987	322.00	537.00	613.00	625.00	759.00	949.00	1230.00	1330.00	2040.00

02156500 BROAD RIVER NEAR CARLISLE
LOCATION: Lat 343546, Long 812520. Union County
PERIOD OF RECORD: Oct 1938 through Sep 1987
DRAINAGE AREA: 2790.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	48	48	1760.00-1974	44.00-1957	776.79	283035.79	532.01	0.3712	0.68488	0.51931
3	48	48	2080.00-1950	209.00-1955	1161.17	208126.81	456.21	-0.0645	0.39289	0.51354
7	48	48	2340.00-1950	475.00-1955	1379.88	207499.15	455.52	-0.1092	0.33012	0.43646
14	48	48	2520.00-1950	482.00-1955	1490.83	225660.06	475.04	-0.1408	0.31864	0.41243
30	48	48	3280.00-1950	507.00-1955	1655.38	301474.94	549.07	0.2644	0.33169	0.36125
60	48	48	3460.00-1950	577.00-1955	1906.33	400282.68	632.68	0.2561	0.33188	0.31683
90	48	48	3780.00-1950	705.00-1955	2090.94	453047.56	673.09	0.3602	0.32191	0.32096
120	48	48	4040.00-1976	783.00-1955	2283.60	531005.95	728.70	0.2368	0.31910	0.31701
183	48	48	4590.00-1950	980.00-1955	2672.29	683642.66	826.83	0.4232	0.30941	0.26871

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	700	1160	1410	1530	1660	1800	2050	2260	2610
5	304	762	979	1070	1170	1370	1490	1630	1960
10	148	564	751	827	924	1150	1230	1330	1660
15	86	469	638	706	809	1040	1100	1190	1520
20	53	410	566	627	736	970	1030	1100	1430
25	32	368	514	571	683	916	972	1040	1370
30	19	336	474	527	643	874	929	990	1320
40	3.8	289	415	462	584	811	867	917	1250
50	0.00	255	372	416	541	763	822	865	1190
	POWTRAN	GUMBEL3B	LOGBOUGH	LOGBOUGH	LOGBOUGH	GENSME	LOGBOUGH	LOGBOUGH	POWTRAN

02157000 NORTH TYGER RIVER NEAR FAIRMONT
Location: Lat 345545, Long 820240. Spartanburg County
Period of record: Oct 1950 through Sep 1987
Drainage area: 44.40 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1952	11.00	11.00	12.00	13.00	17.00	19.00	23.00	24.00	28.00
1953	17.00	18.00	18.00	20.00	24.00	26.00	27.00	28.00	30.00
1954	12.00	13.00	13.00	15.00	17.00	18.00	21.00	22.00	27.00
1955	7.00	7.80	8.00	8.10	8.20	9.60	11.00	13.00	19.00
1956	9.40	9.60	10.00	13.00	15.00	21.00	24.00	24.00	25.00
1957	9.80	11.00	12.00	13.00	15.00	16.00	22.00	24.00	32.00
1958	11.00	11.00	11.00	12.00	14.00	16.00	19.00	23.00	31.00
1959	24.00	25.00	27.00	28.00	29.00	30.00	30.00	31.00	40.00
1960	37.00	38.00	41.00	45.00	50.00	66.00	75.00	79.00	89.00
1961	35.00	36.00	37.00	39.00	47.00	50.00	53.00	57.00	66.00
1962	24.00	25.00	25.00	26.00	26.00	27.00	31.00	35.00	44.00
1963	24.00	25.00	29.00	29.00	32.00	37.00	38.00	38.00	43.00
1964	18.00	18.00	18.00	20.00	22.00	24.00	26.00	27.00	32.00
1965	29.00	29.00	31.00	33.00	39.00	45.00	56.00	56.00	81.00
1966	27.00	27.00	27.00	29.00	31.00	35.00	37.00	38.00	40.00
1967	14.00	14.00	15.00	17.00	23.00	26.00	31.00	35.00	50.00
1968	26.00	26.00	27.00	33.00	34.00	37.00	40.00	48.00	50.00
1969	20.00	21.00	22.00	23.00	25.00	29.00	32.00	34.00	39.00
1970	30.00	31.00	33.00	37.00	39.00	51.00	55.00	60.00	62.00
1971	11.00	11.00	13.00	15.00	16.00	20.00	25.00	25.00	32.00
1972	23.00	23.00	25.00	26.00	28.00	29.00	34.00	34.00	44.00
1973	24.00	24.00	25.00	26.00	27.00	30.00	34.00	38.00	55.00
1974	30.00	31.00	32.00	33.00	36.00	39.00	42.00	51.00	53.00
1975	24.00	24.00	25.00	26.00	27.00	28.00	29.00	31.00	35.00
1976	30.00	31.00	32.00	35.00	36.00	42.00	50.00	66.00	75.00
1977	17.00	18.00	19.00	20.00	21.00	24.00	28.00	33.00	46.00
1978	18.00	19.00	21.00	23.00	25.00	26.00	41.00	43.00	54.00
1979	17.00	18.00	18.00	18.00	19.00	21.00	22.00	25.00	29.00
1980	29.00	29.00	30.00	33.00	40.00	43.00	49.00	54.00	57.00
1981	16.00	16.00	18.00	19.00	22.00	27.00	36.00	41.00	44.00
1982	8.30	8.50	9.00	9.30	13.00	17.00	17.00	17.00	21.00
1983	15.00	16.00	19.00	23.00	28.00	30.00	32.00	38.00	42.00
1984	13.00	13.00	15.00	15.00	17.00	18.00	20.00	23.00	30.00
1985	29.00	29.00	30.00	31.00	35.00	45.00	44.00	46.00	53.00
1986	15.00	15.00	16.00	16.00	18.00	23.00	30.00	30.00	31.00
1987	5.40	5.60	8.50	10.00	12.00	12.00	15.00	16.00	19.00

02157000 NORTH TYGER RIVER NEAR FAIRMONT
LOCATION: Lat 345545, Long 820240. Spartanburg County
PERIOD OF RECORD: Oct 1950 through Sep 1987
DRAINAGE AREA: 44.40 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	36	36	37.00-1960	5.40-1987	19.72	68.24	8.26	0.1783	0.41891	0.36959
3	36	36	38.00-1960	5.60-1987	20.21	69.86	8.36	0.1938	0.41361	0.36029
7	36	36	41.00-1960	8.00-1955	21.43	73.77	8.59	0.2436	0.40077	0.34670
14	36	36	45.00-1960	8.10-1955	23.09	83.93	9.16	0.3166	0.39668	0.27207
30	36	36	50.00-1960	8.20-1955	25.76	99.16	9.96	0.4829	0.38663	0.22461
60	36	36	66.00-1960	9.60-1955	29.35	145.94	12.08	0.8839	0.41161	0.16190
90	36	36	75.00-1960	11.00-1955	33.31	174.99	13.23	0.9396	0.39718	0.10221
120	36	36	79.00-1960	13.00-1955	36.31	216.49	14.71	0.8644	0.40527	0.08072
183	36	36	89.00-1960	19.00-1987	43.00	276.94	16.64	0.8782	0.38702	0.13914

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	19	20	21	23	25	27	31	34	40
5	12	13	14	15	17	19	22	24	28
10	9.4	9.5	10	11	13	16	19	20	23
15	8.2	8.2	8.9	9.7	12	14	17	18	20
20	7.4	7.4	8.0	8.7	11	14	16	17	19
25	6.9	6.9	7.3	8.0	10	13	15	16	18
30	6.5	6.5	6.8	7.5	9.7	13	15	16	17
40	6.0	6.0	6.1	6.7	8.9	12	14	15	16
	LNPEARFF	LOGBOUGH	WEIBULL	WEIBULL	LOGBOUGH	LOGNORM	LOGNORM	LNPEARFF	GUMBEL1

02157500 MIDDLE TYGER RIVER AT LYMAN
Location: Lat 345635, Long 820800. Spartanburg County
Period of record: Feb 1938 - Dec 1967
Drainage area: 68.30 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1939	26.00	28.00	29.00	29.00	31.00	35.00	39.00	42.00	58.00
1940	30.00	32.00	33.00	35.00	36.00	38.00	40.00	44.00	54.00
1941	20.00	22.00	24.00	25.00	27.00	33.00	40.00	42.00	48.00
1942	13.00	14.00	14.00	15.00	16.00	21.00	24.00	30.00	42.00
1943	21.00	23.00	27.00	30.00	34.00	39.00	42.00	48.00	47.00
1944	34.00	35.00	36.00	38.00	40.00	44.00	49.00	49.00	64.00
1945	32.00	33.00	34.00	37.00	41.00	48.00	58.00	62.00	68.00
1946	28.00	31.00	33.00	35.00	38.00	45.00	66.00	74.00	81.00
1947	42.00	44.00	44.00	45.00	51.00	57.00	67.00	69.00	77.00
1948	29.00	45.00	31.00	33.00	34.00	41.00	44.00	49.00	60.00
1949	43.00	45.30	46.00	48.00	49.00	54.00	62.00	92.00	97.00
1950	53.00	54.00	55.00	58.00	71.00	76.00	90.00	100.00	120.00
1951	41.00	43.00	44.00	45.00	48.00	61.00	68.00	66.00	72.00
1952	25.00	26.00	29.00	30.00	34.00	40.00	44.00	42.00	50.00
1953	30.00	30.00	31.00	33.00	37.00	41.00	44.00	48.00	52.00
1954	20.00	21.00	22.00	26.00	29.00	37.00	39.00	40.00	49.00
1955	9.00	11.00	12.00	13.00	13.00	16.00	20.00	22.00	31.00
1956	5.00	9.30	12.00	15.00	19.00	22.00	23.00	23.00	25.00
1957	13.00	14.00	14.00	15.00	17.00	24.00	27.00	28.00	31.00
1958	26.00	27.00	29.00	32.00	33.00	40.00	45.00	48.00	63.00
1959	41.00	44.00	45.00	47.00	50.00	52.00	52.00	53.00	73.00
1960	54.00	55.00	57.00	59.00	66.00	84.00	91.00	104.00	123.00
1961	51.00	53.00	57.00	61.00	66.00	69.00	72.00	79.00	84.00
1962	45.00	46.00	48.00	48.00	51.00	56.00	61.00	86.00	105.00
1963	35.00	36.00	38.00	39.00	49.00	56.00	58.00	57.00	70.00
1964	24.00	25.00	27.00	31.00	34.00	39.00	40.00	41.00	49.00
1965	47.00	48.00	50.00	51.00	58.00	72.00	97.00	92.00	129.00
1966	43.00	44.00	45.00	46.00	49.00	58.00	62.00	66.00	67.00
1967	39.00	39.00	40.00	41.00	45.00	48.00	53.00	56.00	79.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	29	29	54.00-1960	5.00-1956	31.69	167.25	12.93	-0.1498	0.40810	0.66822
3	29	29	55.00-1960	9.30-1956	33.71	166.63	12.91	-0.1758	0.38293	0.71782
7	29	29	57.00-1960	12.00-1956	34.69	164.97	12.84	-0.0641	0.37026	0.67549
14	29	29	61.00-1961	13.00-1955	36.55	166.18	12.89	-0.0332	0.35268	0.67100
30	29	29	71.00-1950	13.00-1955	40.21	213.06	14.60	0.1434	0.36304	0.60976
60	29	29	84.00-1960	16.00-1955	46.41	261.62	16.17	0.3107	0.34849	0.58404
90	29	29	97.00-1965	20.00-1955	52.31	372.83	19.31	0.5241	0.36912	0.48039
120	29	29	104.00-1960	22.00-1955	56.97	489.00	22.11	0.5196	0.38819	0.52090
183	29	29	129.00-1965	25.00-1956	67.86	694.46	26.35	0.7200	0.38833	0.41045

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	32	35	36	38	40	45	50	54	64
5	21	23	24	25	27	33	36	37	44
10	15	16	17	19	21	27	29	30	35
15	12	12	14	15	18	24	26	26	31
20	9.6	9.8	12	13	17	22	24	24	29
25	8.2	8.2	10	12	15	20	22	23	27
30	7.1	7.1	8.9	11	15	19	20	22	26
	GUMBEL3B	LOGBOUGH	LOGBOUGH	LOGBOUGH	GUMBEL3B	GENSME	GENSME	GUMBEL1	GUMBEL1

02158000 NORTH TYGER RIVER NEAR MOORE
Location: Lat 344810, Long 815757. Spartanburg County
Period of record: Oct 1933 - Jan 1968
Drainage area: 162.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1935	53.00	69.00	88.00	95.00	111.00	122.00	138.00	155.00	153.00
1936	29.00	58.00	72.00	75.00	79.00	101.00	135.00	137.00	155.00
1937	54.00	83.00	101.00	106.00	139.00	162.00	169.00	213.00	259.00
1938	61.00	76.00	106.00	115.00	132.00	151.00	171.00	185.00	255.00
1939	34.00	52.00	60.00	63.00	66.00	76.00	91.00	99.00	124.00
1940	34.00	52.00	62.00	69.00	70.00	75.00	80.00	86.00	113.00
1941	28.00	39.00	51.00	53.00	56.00	70.00	87.00	93.00	106.00
1942	21.00	25.00	31.00	32.00	37.00	46.00	53.00	66.00	92.00
1943	38.00	47.00	66.00	71.00	81.00	93.00	108.00	115.00	118.00
1944	48.00	64.00	76.00	80.00	83.00	94.00	107.00	108.00	137.00
1945	52.00	62.00	73.00	79.00	88.00	104.00	119.00	131.00	145.00
1946	48.00	62.00	69.00	84.00	89.00	101.00	141.00	149.00	185.00
1947	54.00	72.00	88.00	93.00	102.00	113.00	136.00	141.00	156.00
1948	37.00	38.00	52.00	66.00	68.00	84.00	87.00	95.00	113.00
1949	55.00	72.00	97.00	106.00	111.00	127.00	139.00	193.00	186.00
1950	58.00	92.00	107.00	125.00	159.00	178.00	187.00	223.00	284.00
1951	62.00	74.00	88.00	92.00	102.00	128.00	140.00	137.00	151.00
1952	21.00	27.00	55.00	60.00	71.00	80.00	93.00	100.00	113.00
1953	48.00	66.00	81.00	88.00	93.00	100.00	104.00	113.00	121.00
1954	29.00	30.00	37.00	56.00	58.00	71.00	76.00	78.00	100.00
1955	16.00	18.00	20.00	25.00	29.00	34.00	38.00	44.00	65.00
1956	39.00	42.00	43.00	44.00	48.00	63.00	65.00	68.00	71.00
1957	32.00	33.00	34.00	38.00	52.00	60.00	72.00	80.00	96.00
1958	42.00	50.00	55.00	57.00	63.00	77.00	85.00	95.00	130.00
1959	67.00	77.00	100.00	102.00	109.00	114.00	116.00	118.00	158.00
1960	117.00	127.00	136.00	143.00	165.00	214.00	224.00	255.00	293.00
1961	129.00	133.00	141.00	152.00	165.00	171.00	175.00	190.00	214.00
1962	89.00	91.00	99.00	101.00	107.00	116.00	126.00	151.00	194.00
1963	89.00	92.00	97.00	100.00	111.00	128.00	132.00	134.00	153.00
1964	65.00	65.00	69.00	77.00	84.00	97.00	98.00	103.00	121.00
1965	78.00	114.00	123.00	133.00	153.00	183.00	220.00	217.00	293.00
1966	68.00	94.00	103.00	107.00	114.00	133.00	141.00	143.00	148.00
1967	51.00	62.00	73.00	80.00	92.00	101.00	120.00	139.00	196.00

02158000 NORTH TYGER RIVER NEAR MOORE
LOCATION: Lat 344810, Long 815757. Spartanburg County
PERIOD OF RECORD: Oct 1933 - Jan 1968
DRAINAGE AREA: 162.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	33	33	129.00-1961	16.00-1955	52.91	658.27	25.66	1.2422	0.48492	0.69663
3	33	33	133.00-1961	18.00-1955	65.39	782.00	27.96	0.5640	0.42763	0.57324
7	33	33	141.00-1961	20.00-1955	77.36	872.93	29.55	0.1668	0.38190	0.56211
14	33	33	152.00-1961	25.00-1955	83.85	940.38	30.67	0.2148	0.36573	0.56080
30	33	33	165.00-1960	29.00-1955	93.55	1291.88	35.94	0.4235	0.38423	0.50926
60	33	33	214.00-1960	34.00-1955	108.09	1695.84	41.18	0.6555	0.38098	0.49141
90	33	33	224.00-1960	38.00-1955	120.39	1939.87	44.04	0.5302	0.36583	0.45190
120	33	33	255.00-1960	44.00-1955	131.94	2535.68	50.36	0.6419	0.38166	0.45420
183	33	33	293.00-1960	65.00-1955	157.52	3843.07	61.99	0.9110	0.39357	0.37573

Low flow frequency array table

Return Period	1 Day	Consecutive days: 3	7	14	30	60	90	120	183
2	49	64	78	84	88	102	114	124	140
5	31	40	51	56	61	71	81	86	102
10	24	30	38	43	50	58	67	70	89
15	21	25	32	37	44	52	60	63	83
20	20	22	28	33	41	48	56	59	79
25	18	20	25	30	39	45	53	55	77
30	18	19	23	28	37	43	51	53	75
40	16	17	20	25	35	40	48	49	73
	LOGBOUGH	WEIBULL	LOGBOUGH	LOGBOUGH	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	LNPEARDI

02158500 SOUTH TYGER RIVER NEAR REIDVILLE
Location: Lat 345235, Long 820510. Spartanburg County
Period of record: Apr 1934 - Dec 1968
Drainage area: 106.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1936	8.70	22.00	42.00	50.00	56.00	75.00	102.00	104.00	125.00
1937	12.00	26.00	64.00	72.00	103.00	122.00	130.00	147.00	187.00
1938	11.00	29.00	73.00	94.00	103.00	112.00	127.00	128.00	169.00
1939	21.00	39.00	48.00	51.00	51.00	55.00	63.00	68.00	87.00
1940	13.00	14.00	40.00	45.00	46.00	55.00	60.00	65.00	83.00
1941	6.30	8.90	30.00	33.00	39.00	49.00	58.00	67.00	72.00
1942	5.50	5.90	8.50	16.00	21.00	30.00	36.00	43.00	62.00
1943	7.70	9.90	25.00	43.00	48.00	58.00	70.00	78.00	75.00
1944	11.00	40.00	55.00	59.00	63.00	73.00	78.00	79.00	101.00
1945	10.00	35.00	50.00	57.00	63.00	78.00	89.00	90.00	103.00
1946	10.00	11.00	24.00	55.00	62.00	83.00	106.00	104.00	114.00
1947	9.60	28.00	55.00	69.00	72.00	82.00	89.00	95.00	105.00
1948	8.90	11.00	25.00	32.00	38.00	54.00	61.00	67.00	82.00
1949	9.50	23.00	48.00	65.00	69.00	85.00	96.00	117.00	123.00
1950	16.00	46.00	81.00	101.00	123.00	135.00	163.00	170.00	220.00
1951	7.70	18.00	53.00	68.00	70.00	86.00	93.00	94.00	108.00
1952	11.00	21.00	37.00	43.00	48.00	68.00	76.00	74.00	83.00
1953	9.00	18.00	26.00	51.00	62.00	67.00	72.00	77.00	85.00
1954	8.00	12.00	31.00	41.00	44.00	54.00	61.00	60.00	77.00
1955	9.60	9.60	9.60	9.60	10.00	17.00	23.00	28.00	42.00
1956	6.50	7.30	10.00	20.00	28.00	41.00	46.00	50.00	53.00
1957	8.50	8.70	12.00	19.00	31.00	33.00	50.00	55.00	65.00
1958	6.90	18.00	29.00	38.00	37.00	66.00	76.00	83.00	102.00
1959	9.00	22.00	53.00	56.00	59.00	70.00	75.00	80.00	101.00
1960	13.00	24.00	58.00	77.00	88.00	115.00	132.00	151.00	176.00
1961	12.00	13.00	78.00	97.00	101.00	108.00	118.00	126.00	142.00
1962	7.30	12.00	43.00	63.00	75.00	80.00	92.00	114.00	141.00
1963	11.00	13.00	34.00	59.00	77.00	87.00	89.00	94.00	107.00
1964	7.70	7.70	25.00	40.00	52.00	66.00	64.00	70.00	88.00
1965	7.30	11.00	48.00	68.00	101.00	137.00	167.00	164.00	197.00
1966	9.00	14.00	48.00	69.00	81.00	94.00	95.00	101.00	106.00
1967	14.00	14.00	32.00	54.00	66.00	76.00	87.00	93.00	118.00

02158500 SOUTH TYGER RIVER NEAR REIDVILLE
LOCATION: Lat 345235, Long 820510. Spartanburg County
PERIOD OF RECORD: Apr 1934 - Dec 1968
DRAINAGE AREA: 106.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	32	32	21.00-1939	5.50-1942	9.93	9.43	3.07	1.5554	0.30933	0.17922
3	32	32	46.00-1950	5.90-1942	18.50	105.20	10.26	1.0537	0.55442	0.30062
7	32	32	81.00-1950	8.50-1942	40.47	356.32	18.88	0.2248	0.46641	0.45990
14	32	32	101.00-1950	9.60-1955	53.58	478.52	21.88	0.1257	0.40826	0.50116
30	32	32	123.00-1950	10.00-1955	62.09	664.27	25.77	0.3125	0.41507	0.46870
60	32	32	137.00-1965	17.00-1955	75.34	807.54	28.42	0.3199	0.37717	0.46149
90	32	32	167.00-1965	23.00-1955	85.75	1066.25	32.65	0.6483	0.38080	0.37616
120	32	32	170.00-1950	28.00-1955	91.75	1142.38	33.80	0.5942	0.36838	0.41653
183	32	32	220.00-1950	42.00-1955	109.34	1751.54	41.85	0.9296	0.38275	0.38713

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	9.3	15	41	54	61	74	82	85	102
5	7.4	9.8	23	35	40	51	58	62	75
10	6.7	7.9	15	26	30	40	47	52	63
15	6.4	7.1	11	21	25	35	42	48	58
20	6.2	6.7	9.3	18	22	31	38	45	55
25	6.1	6.4	7.8	15	20	29	36	43	53
30	6.0	6.2	6.7	13	19	27	35	42	52
40	5.9	5.9	5.9	11	16	25	32	40	49
	LNPEARDI	LNPEARDI	LOGBOUGH	NORMAL	POWTRAN	POWTRAN	POWTRAN	LOGNORM	POWTRAN

02159000 SOUTH TYGER RIVER NEAR WOODRUFF
Location: Lat 344521, Long 815619. Spartanburg County
Period of record: Oct 1933 - Sep 1971
Drainage area: 174.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1935	37.00	49.00	75.00	89.00	109.00	125.00	136.00	145.00	147.00
1936	33.00	42.00	63.00	73.00	80.00	105.00	136.00	140.00	167.00
1937	62.00	79.00	98.00	104.00	150.00	170.00	181.00	214.00	271.00
1938	55.00	71.00	118.00	130.00	151.00	168.00	188.00	188.00	243.00
1939	50.00	59.00	66.00	69.00	71.00	76.00	91.00	101.00	121.00
1940	32.00	40.00	58.00	64.00	67.00	78.00	83.00	89.00	121.00
1941	23.00	26.00	44.00	48.00	54.00	70.00	91.00	100.00	112.00
1942	14.00	15.00	18.00	25.00	33.00	48.00	56.00	69.00	98.00
1943	32.00	37.00	52.00	67.00	74.00	87.00	104.00	119.00	117.00
1944	34.00	70.00	79.00	83.00	86.00	97.00	108.00	108.00	143.00
1945	41.00	69.00	82.00	87.00	90.00	113.00	126.00	131.00	147.00
1946	36.00	38.00	60.00	74.00	88.00	119.00	146.00	146.00	176.00
1947	40.00	61.00	88.00	93.00	105.00	115.00	131.00	141.00	151.00
1948	29.00	36.00	54.00	61.00	63.00	79.00	86.00	96.00	114.00
1949	53.00	70.00	80.00	100.00	105.00	132.00	141.00	164.00	173.00
1950	83.00	100.00	120.00	143.00	164.00	193.00	226.00	241.00	299.00
1951	39.00	57.00	76.00	89.00	91.00	108.00	119.00	125.00	145.00
1952	24.00	38.00	46.00	52.00	79.00	84.00	103.00	106.00	119.00
1953	41.00	54.00	61.00	83.00	90.00	96.00	102.00	110.00	125.00
1954	28.00	28.00	45.00	55.00	63.00	71.00	82.00	82.00	105.00
1955	13.00	13.00	13.00	14.00	15.00	21.00	27.00	34.00	54.00
1956	12.00	15.00	18.00	32.00	41.00	58.00	65.00	69.00	73.00
1957	18.00	18.00	20.00	30.00	44.00	46.00	63.00	70.00	90.00
1958	21.00	30.00	39.00	47.00	47.00	77.00	99.00	108.00	134.00
1959	48.00	65.00	91.00	96.00	97.00	107.00	111.00	115.00	141.00
1960	59.00	62.00	84.00	111.00	128.00	185.00	190.00	213.00	250.00
1961	69.00	77.00	134.00	156.00	164.00	179.00	189.00	205.00	215.00
1962	43.00	44.00	75.00	89.00	99.00	108.00	121.00	142.00	187.00
1963	41.00	43.00	69.00	90.00	108.00	122.00	121.00	128.00	147.00
1964	35.00	37.00	49.00	69.00	81.00	93.00	104.00	106.00	131.00
1965	49.00	62.00	91.00	104.00	149.00	211.00	239.00	237.00	309.00
1966	53.00	61.00	86.00	110.00	125.00	144.00	146.00	151.00	161.00
1967	38.00	40.00	62.00	80.00	98.00	110.00	124.00	131.00	157.00
1968	43.00	58.00	89.00	100.00	105.00	120.00	135.00	155.00	164.00
1969	50.00	53.00	62.00	77.00	84.00	96.00	106.00	116.00	148.00
1970	79.00	80.00	85.00	105.00	135.00	151.00	177.00	181.00	187.00
1971	38.00	42.00	49.00	53.00	61.00	73.00	97.00	91.00	114.00

02159000 SOUTH TYGER RIVER NEAR WOODRUFF
LOCATION: Lat 344521, Long 815619. Spartanburg County
PERIOD OF RECORD: Oct 1933 - Sep 1971
DRAINAGE AREA: 174.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	37	37	83.00-1950	12.00-1956	40.41	272.84	16.52	0.5332	0.40880	0.45365
3	37	37	100.00-1950	13.00-1955	49.70	407.61	20.19	0.1215	0.40620	0.41048
7	37	37	134.00-1961	13.00-1955	67.54	759.22	27.55	0.0921	0.40796	0.43461
14	37	37	156.00-1961	14.00-1955	79.78	947.95	30.79	0.1212	0.38590	0.45423
30	37	37	164.00-1950	15.00-1955	91.73	1303.55	36.10	0.2200	0.39360	0.41740
60	37	37	211.00-1965	21.00-1955	109.05	1829.56	42.77	0.4770	0.39222	0.40714
90	37	37	239.00-1965	27.00-1955	122.97	2059.92	45.39	0.5764	0.36908	0.35822
120	37	37	241.00-1950	34.00-1955	131.54	2271.33	47.66	0.5606	0.36231	0.37304
183	37	37	309.00-1965	54.00-1955	155.57	3273.49	57.21	1.0404	0.36778	0.34712

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	38	50	68	80	90	102	116	125	147
5	27	32	44	54	61	71	82	90	111
10	21	22	32	40	46	57	68	76	99
15	18	18	26	34	39	51	61	71	94
20	16	16	22	29	35	47	57	68	92
25	15	15	19	26	32	45	54	66	90
30	14	14	17	23	29	42	52	65	89
40	12	12	14	19	26	39	49	63	87
	GENSME	LOGBOUGH	NORMAL	NORMAL	POWTRAN	GUMBEL1	GUMBEL1	GUMBEL3C	GUMBEL3A

02159500 TYGER RIVER NEAR WOODRUFF
Location: Lat 344515, Long 815530. Spartanburg County
Period of record: Oct 1929 - Sep 1956
Drainage area: 351.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1931	97.00	133.00	159.00	162.00	174.00	188.00	215.00	240.00	286.00
1932	80.00	91.00	112.00	113.00	125.00	134.00	145.00	171.00	205.00
1933	61.00	83.00	110.00	119.00	146.00	171.00	219.00	222.00	285.00
1934	90.00	106.00	153.00	181.00	186.00	207.00	222.00	269.00	310.00
1935	90.00	124.00	161.00	196.00	234.00	264.00	285.00	318.00	314.00
1936	87.00	118.00	144.00	150.00	162.00	210.00	278.00	284.00	335.00
1937	154.00	182.00	218.00	219.00	303.00	342.00	363.00	442.00	552.00
1938	134.00	175.00	240.00	257.00	299.00	332.00	370.00	387.00	516.00
1939	103.00	130.00	139.00	142.00	148.00	162.00	193.00	212.00	257.00
1940	80.00	120.00	130.00	136.00	140.00	156.00	165.00	178.00	243.00
1941	75.00	82.00	102.00	108.00	119.00	150.00	191.00	205.00	231.00
1942	40.00	46.00	53.00	62.00	73.00	100.00	114.00	142.00	198.00
1943	106.00	120.00	130.00	148.00	163.00	184.00	218.00	243.00	244.00
1944	128.00	149.00	159.00	178.00	179.00	202.00	224.00	226.00	298.00
1945	122.00	153.00	160.00	177.00	189.00	232.00	269.00	284.00	316.00
1946	86.00	99.00	146.00	170.00	186.00	231.00	315.00	311.00	379.00
1947	103.00	136.00	184.00	197.00	218.00	239.00	279.00	297.00	327.00
1948	75.00	84.00	121.00	140.00	141.00	173.00	185.00	201.00	238.00
1949	120.00	160.00	182.00	215.00	220.00	270.00	290.00	371.00	370.00
1950	167.00	200.00	235.00	285.00	340.00	390.00	433.00	476.00	611.00
1951	109.00	128.00	165.00	187.00	200.00	245.00	267.00	271.00	307.00
1952	66.00	71.00	106.00	119.00	161.00	171.00	203.00	214.00	243.00
1953	103.00	131.00	150.00	172.00	183.00	197.00	209.00	227.00	253.00
1954	63.00	78.00	99.00	118.00	129.00	150.00	168.00	168.00	214.00
1955	29.00	31.00	34.00	40.00	47.00	57.00	68.00	81.00	125.00
1956	50.00	54.00	61.00	77.00	90.00	128.00	132.00	142.00	148.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	26	26	167.00-1950	29.00-1955	93.00	1035.00	32.17	0.2435	0.34593	0.41627
3	26	26	200.00-1950	31.00-1955	114.77	1704.72	41.29	-0.0156	0.35975	0.41125
7	26	26	240.00-1938	34.00-1955	140.50	2418.63	49.18	-0.0377	0.35003	0.49378
14	26	26	285.00-1950	40.00-1955	156.46	3014.86	54.91	0.1122	0.35093	0.46137
30	26	26	340.00-1950	47.00-1955	175.19	4373.39	66.13	0.6017	0.37748	0.42663
60	26	26	390.00-1950	57.00-1955	203.27	5356.89	73.19	0.6303	0.36007	0.48552
90	26	26	433.00-1950	68.00-1955	231.54	6582.86	81.13	0.4241	0.35042	0.50529
120	26	26	476.00-1950	81.00-1955	253.15	8230.82	90.72	0.6467	0.35837	0.51504
183	26	26	611.00-1950	125.00-1955	300.19	12455.85	111.61	1.2216	0.37178	0.46744

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	92	116	141	156	167	193	220	237	279
5	65	77	99	110	121	144	165	179	214
10	53	57	77	86	97	118	135	149	192
15	46	48	67	74	86	105	121	134	184
20	43	43	60	66	78	97	111	124	180
25	40	40	54	60	72	90	104	117	178
30	38	38	50	56	67	86	99	111	176
	POWTRAN	LOGBOUGH	NORMAL	NORMAL	GENSME	GENSME	GENSME	GENSME	GUMBEL3A

02160000 FAIRFOREST CREEK NEAR UNION
Location: Lat 344045, Long 814125. Union County
Period of record: Jun 1940 - Sep 1971
Drainage area: 183.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1942	22.00	23.00	25.00	25.00	31.00	40.00	63.00	76.00	117.00
1943	33.00	35.00	36.00	42.00	45.00	54.00	65.00	77.00	77.00
1944	33.00	34.00	36.00	44.00	48.00	56.00	62.00	65.00	106.00
1945	34.00	34.00	36.00	41.00	44.00	54.00	65.00	67.00	81.00
1946	32.00	34.00	36.00	41.00	48.00	66.00	80.00	80.00	142.00
1947	48.00	51.00	59.00	60.00	73.00	84.00	125.00	120.00	142.00
1948	27.00	29.00	30.00	38.00	50.00	56.00	70.00	76.00	97.00
1949	49.00	50.00	51.00	57.00	72.00	75.00	79.00	89.00	98.00
1950	64.00	67.00	70.00	80.00	113.00	126.00	139.00	163.00	195.00
1951	43.00	44.00	45.00	49.00	55.00	75.00	72.00	82.00	92.00
1952	14.00	14.00	16.00	20.00	37.00	40.00	48.00	54.00	62.00
1953	38.00	40.00	44.00	52.00	56.00	60.00	63.00	69.00	83.00
1954	19.00	19.00	21.00	27.00	29.00	35.00	44.00	45.00	54.00
1955	5.00	5.40	5.90	6.70	7.70	10.00	15.00	19.00	32.00
1956	18.00	18.00	19.00	21.00	28.00	39.00	42.00	46.00	51.00
1957	12.00	13.00	14.00	16.00	19.00	23.00	32.00	44.00	70.00
1958	17.00	19.00	20.00	24.00	29.00	34.00	42.00	57.00	80.00
1959	42.00	45.00	48.00	51.00	54.00	55.00	59.00	62.00	89.00
1960	52.00	54.00	60.00	63.00	81.00	146.00	160.00	205.00	249.00
1961	67.00	69.00	73.00	84.00	98.00	109.00	120.00	124.00	142.00
1962	52.00	53.00	55.00	57.00	60.00	66.00	74.00	86.00	153.00
1963	56.00	57.00	60.00	65.00	69.00	77.00	80.00	82.00	101.00
1964	38.00	39.00	41.00	47.00	51.00	62.00	73.00	79.00	97.00
1965	74.00	76.00	79.00	89.00	104.00	136.00	164.00	177.00	248.00
1966	76.00	76.00	77.00	78.00	79.00	90.00	98.00	99.00	122.00
1967	48.00	50.00	52.00	57.00	71.00	86.00	88.00	98.00	107.00
1968	63.00	64.00	67.00	78.00	89.00	104.00	121.00	149.00	181.00
1969	57.00	57.00	61.00	64.00	67.00	74.00	76.00	86.00	115.00
1970	65.00	68.00	70.00	82.00	99.00	111.00	136.00	161.00	182.00
1971	40.00	42.00	48.00	49.00	52.00	60.00	78.00	79.00	87.00

02160000 FAIRFOREST CREEK NEAR UNION
LOCATION: Lat 344045, Long 814125. Union County
PERIOD OF RECORD: Jun 1940 - Sep 1971
DRAINAGE AREA: 183.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	30	30	76.00-1966	5.00-1955	41.27	370.89	19.26	-0.0174	0.46669	0.58758
3	30	30	76.00-1965	5.40-1955	42.65	383.90	19.59	-0.0607	0.45943	0.57701
7	30	30	79.00-1965	5.90-1955	45.16	412.97	20.32	-0.1324	0.44996	0.56560
14	30	30	89.00-1965	6.70-1955	50.26	483.72	21.99	-0.0672	0.43763	0.52630
30	30	30	113.00-1950	7.70-1955	58.62	678.74	26.05	0.2549	0.44441	0.47075
60	30	30	146.00-1960	10.00-1955	70.10	1072.71	32.75	0.5920	0.46722	0.40851
90	30	30	164.00-1965	15.00-1955	81.10	1363.13	36.92	0.7175	0.45525	0.32035
120	30	30	205.00-1960	19.00-1955	90.53	1854.60	43.07	1.0767	0.47568	0.23203
183	30	30	249.00-1960	32.00-1955	115.07	2835.51	53.25	1.0800	0.46277	0.17804

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	44	44	45	50	56	65	75	80	100
5	24	25	27	31	37	40	48	58	74
10	14	17	19	21	27	30	36	46	60
15	10	13	14	17	22	25	30	40	53
20	7.5	11	12	14	18	22	27	36	49
25	5.9	9.1	10	12	16	20	25	34	45
30	4.7	7.8	8.6	9.9	14	18	23	31	43
	LOGBOUGH	GUMBEL3A	GUMBEL3A	GUMBEL3A	GENSME	GUMBEL1	GUMBEL1	GENSME	GENSME

02160105 TYGER RIVER NEAR DELTA
Location: Lat 343207, Long 813254. Union County
Period of record: Oct 1973 through Sep 1987
Drainage area: 759.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1975	384.00	396.00	407.00	416.00	422.00	471.00	501.00	586.00	685.00
1976	444.00	468.00	517.00	561.00	619.00	796.00	844.00	1020.00	1070.00
1977	265.00	281.00	296.00	319.00	331.00	434.00	586.00	705.00	851.00
1978	307.00	312.00	332.00	373.00	392.00	411.00	543.00	568.00	656.00
1979	340.00	349.00	353.00	356.00	362.00	388.00	412.00	449.00	533.00
1980	395.00	400.00	414.00	443.00	558.00	613.00	680.00	777.00	829.00
1981	262.00	272.00	288.00	322.00	351.00	364.00	464.00	609.00	726.00
1982	120.00	123.00	130.00	142.00	159.00	213.00	267.00	287.00	328.00
1983	214.00	217.00	231.00	261.00	297.00	330.00	360.00	424.00	523.00
1984	199.00	203.00	213.00	217.00	245.00	268.00	287.00	299.00	408.00
1985	320.00	365.00	381.00	415.00	461.00	519.00	551.00	600.00	686.00
1986	211.00	222.00	240.00	242.00	290.00	341.00	382.00	427.00	535.00
1987	141.00	146.00	158.00	170.00	175.00	204.00	284.00	319.00	391.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	13	13	444.00-1976	120.00-1982	277.08	9825.24	99.12	0.0457	0.35774	0.43514
3	13	13	468.00-1976	123.00-1982	288.77	10928.53	104.54	0.0234	0.36202	0.38579
7	13	13	517.00-1976	130.00-1982	304.62	12233.76	110.61	0.1909	0.36310	0.35386
14	13	13	561.00-1976	142.00-1982	325.92	14121.91	118.84	0.2344	0.36461	0.26715
30	13	13	619.00-1976	159.00-1982	358.62	18247.92	135.08	0.4297	0.37668	0.11821
60	13	13	796.00-1976	204.00-1987	411.69	26793.06	163.69	1.0236	0.39759	0.15956
90	13	13	844.00-1976	267.00-1982	473.92	28551.74	168.97	0.7536	0.35654	0.25914
120	13	13	1020.00-1976	287.00-1982	543.85	44191.64	210.22	0.8290	0.38654	0.28255
183	13	13	1070.00-1976	328.00-1982	632.38	43792.76	209.27	0.4966	0.33092	0.31948

Low flow frequency array table

Return Period	1 Day	Consecutive days: 3	7	14	30	60	90	120	183
2	263	274	302	323	340	384	450	514	603
5	179	186	207	221	225	285	307	337	426
10	144	148	161	172	177	233	247	261	351
15	128	131	139	149	155	207	219	227	317
	GUMBEL1	GUMBEL1	LOGBOUGH	WEIBULL	GUMBEL1	GENSME	GUMBEL1	GUMBEL1	GUMBEL1

02160500 ENOREE RIVER NEAR ENOREE
Location: Lat 343638, Long 815435. Spartanburg County
Period of record: Aug 1929 - Sep 1976
Drainage area: 307.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1931	84.00	137.00	145.00	151.00	171.00	176.00	196.00	219.00	268.00
1932	92.00	107.00	115.00	123.00	128.00	141.00	150.00	189.00	231.00
1933	50.00	80.00	105.00	114.00	145.00	220.00	224.00	233.00	295.00
1934	59.00	78.00	100.00	121.00	135.00	146.00	155.00	192.00	233.00
1935	103.00	118.00	134.00	153.00	174.00	206.00	267.00	268.00	282.00
1936	101.00	123.00	140.00	147.00	154.00	194.00	233.00	244.00	332.00
1937	120.00	139.00	152.00	165.00	225.00	252.00	277.00	319.00	422.00
1938	103.00	152.00	170.00	181.00	223.00	260.00	278.00	310.00	395.00
1939	70.00	82.00	94.00	102.00	105.00	117.00	137.00	153.00	186.00
1940	74.00	84.00	98.00	104.00	105.00	118.00	129.00	147.00	206.00
1941	35.00	57.00	59.00	79.00	87.00	110.00	147.00	163.00	189.00
1942	32.00	37.00	41.00	45.00	53.00	74.00	93.00	110.00	163.00
1943	92.00	98.00	105.00	117.00	124.00	138.00	155.00	176.00	191.00
1944	42.00	94.00	97.00	107.00	130.00	148.00	160.00	170.00	220.00
1945	82.00	97.00	117.00	137.00	144.00	174.00	187.00	198.00	217.00
1946	82.00	92.00	107.00	125.00	137.00	193.00	209.00	219.00	289.00
1947	131.00	163.00	170.00	180.00	210.00	232.00	268.00	271.00	292.00
1948	80.00	83.00	91.00	110.00	128.00	145.00	155.00	168.00	195.00
1949	87.00	114.00	127.00	145.00	166.00	188.00	198.00	225.00	276.00
1950	194.00	197.00	212.00	248.00	280.00	333.00	353.00	408.00	500.00
1951	110.00	125.00	127.00	133.00	146.00	179.00	186.00	199.00	223.00
1952	47.00	62.00	69.00	82.00	111.00	138.00	164.00	162.00	180.00
1953	74.00	109.00	126.00	136.00	159.00	166.00	169.00	176.00	228.00
1954	51.00	66.00	76.00	90.00	109.00	125.00	142.00	141.00	173.00
1955	20.00	20.00	21.00	23.00	26.00	33.00	41.00	50.00	86.00
1956	33.00	43.00	50.00	57.00	83.00	100.00	111.00	123.00	131.00
1957	32.00	41.00	42.00	50.00	61.00	74.00	97.00	119.00	165.00
1958	47.00	52.00	57.00	67.00	87.00	103.00	128.00	155.00	198.00
1959	77.00	130.00	143.00	146.00	156.00	163.00	168.00	172.00	212.00
1960	98.00	118.00	142.00	159.00	188.00	296.00	288.00	344.00	410.00
1961	145.00	191.00	206.00	209.00	227.00	276.00	279.00	292.00	302.00
1962	96.00	119.00	125.00	129.00	135.00	151.00	170.00	194.00	253.00
1963	86.00	111.00	128.00	132.00	155.00	175.00	183.00	192.00	227.00
1964	65.00	85.00	104.00	116.00	120.00	128.00	162.00	163.00	202.00
1965	200.00	205.00	218.00	228.00	264.00	373.00	432.00	454.00	544.00
1966	161.00	168.00	169.00	176.00	183.00	213.00	222.00	239.00	257.00
1967	81.00	101.00	108.00	120.00	144.00	191.00	198.00	220.00	267.00
1968	99.00	113.00	115.00	128.00	154.00	188.00	205.00	212.00	237.00
1969	115.00	115.00	118.00	123.00	137.00	156.00	171.00	192.00	275.00
1970	165.00	168.00	179.00	204.00	217.00	230.00	242.00	252.00	276.00
1971	75.00	78.00	80.00	87.00	100.00	128.00	170.00	162.00	186.00
1972	172.00	176.00	183.00	190.00	207.00	224.00	282.00	286.00	355.00
1973	183.00	187.00	191.00	204.00	211.00	228.00	249.00	305.00	465.00
1974	183.00	185.00	186.00	189.00	221.00	230.00	252.00	364.00	363.00
1975	150.00	150.00	154.00	158.00	160.00	178.00	197.00	220.00	267.00
1976	200.00	206.00	217.00	235.00	249.00	291.00	322.00	384.00	480.00

02160500 ENOREE RIVER NEAR ENOREE
LOCATION: Lat 343638, Long 815435. Spartanburg County
PERIOD OF RECORD: Aug 1929 - Sep 1976
DRAINAGE AREA: 307.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	46	46	200.00-1965	20.00-1955	97.35	2356.23	48.54	0.6235	0.49863	0.50698
3	46	46	206.00-1976	20.00-1955	114.26	2234.98	47.28	0.2156	0.41375	0.43270
7	46	46	218.00-1965	21.00-1955	124.20	2343.77	48.41	0.0712	0.38981	0.41347
14	46	46	248.00-1950	23.00-1955	135.33	2510.26	50.10	0.1115	0.37024	0.38567
30	46	46	280.00-1950	26.00-1955	152.91	3023.91	54.99	0.1648	0.35962	0.32414
60	46	46	373.00-1965	33.00-1955	180.48	4590.03	67.75	0.5385	0.37539	0.29490
90	46	46	432.00-1965	41.00-1955	200.02	5150.67	71.77	0.7323	0.35880	0.27347
120	46	46	454.00-1965	50.00-1955	220.74	6636.71	81.47	0.8151	0.36906	0.29045
183	46	46	544.00-1965	86.00-1955	268.35	9767.71	98.83	0.9948	0.36830	0.28973

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	90	107	122	133	150	173	186	203	242
5	54	72	81	93	107	125	142	155	187
10	39	58	62	72	84	100	119	130	170
15	32	51	53	62	73	88	107	118	165
20	28	47	48	55	66	79	99	109	162
25	25	44	44	50	60	73	94	103	160
30	23	42	42	46	56	69	90	99	159
40	19	38	38	40	49	62	83	91	157
50	17	36	36	36	45	56	78	86	156
	GUMBEL1	GUMBEL1	WEIBULL	GENSME	GENSME	GENSME	GENSME	GENSME	GUMBEL3C

02160700 ENOREE RIVER AT WHITMIRE
Location: Lat 343033, Long 813554. Union County
Period of record: Oct 1973 through Sep 1987
Drainage area: 444.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1975	186.00	195.00	199.00	202.00	208.00	225.00	249.00	288.00	337.00
1976	195.00	207.00	220.00	238.00	264.00	344.00	376.00	444.00	541.00
1977	168.00	175.00	187.00	199.00	217.00	275.00	326.00	392.00	482.00
1978	114.00	115.00	130.00	160.00	167.00	186.00	244.00	254.00	334.00
1979	140.00	142.00	146.00	151.00	165.00	177.00	189.00	209.00	249.00
1980	217.00	223.00	231.00	251.00	321.00	342.00	364.00	420.00	445.00
1981	116.00	120.00	127.00	141.00	157.00	171.00	223.00	288.00	358.00
1982	51.00	53.00	57.00	63.00	71.00	113.00	126.00	126.00	149.00
1983	147.00	151.00	156.00	166.00	185.00	208.00	220.00	258.00	323.00
1984	131.00	136.00	138.00	140.00	159.00	177.00	186.00	194.00	252.00
1985	245.00	246.00	249.00	263.00	285.00	319.00	340.00	386.00	442.00
1986	137.00	138.00	152.00	159.00	190.00	217.00	245.00	272.00	293.00
1987	61.00	65.00	66.00	80.00	100.00	116.00	162.00	180.00	210.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	13	13	245.00-1985	51.00-1982	146.77	3153.03	56.15	-0.0570	0.38259	0.04066
3	13	13	246.00-1985	53.00-1982	151.23	3299.03	57.44	-0.0947	0.37980	0.06362
7	13	13	249.00-1985	57.00-1982	158.31	3414.06	58.43	-0.2144	0.36909	0.07317
14	13	13	263.00-1985	63.00-1982	170.23	3632.19	60.27	-0.1518	0.35404	0.03155
30	13	13	321.00-1980	71.00-1982	191.46	4848.10	69.63	0.2256	0.36367	-0.04860
60	13	13	344.00-1976	113.00-1982	220.77	6064.69	77.88	0.4220	0.35275	-0.02161
90	13	13	376.00-1976	126.00-1982	250.00	6281.33	79.25	0.3018	0.31702	0.03573
120	13	13	444.00-1976	126.00-1982	285.46	9782.77	98.91	0.2190	0.34648	0.03399
183	13	13	541.00-1976	149.00-1982	339.62	12855.42	113.38	0.1809	0.33385	0.09411

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	148	149	158	169	182	210	239	272	324
5	98	100	109	117	123	144	172	188	228
10	73	77	83	92	98	116	143	152	187
15	60	67	71	80	87	103	131	136	169
	GUMBEL3A	WEIBULL	NORMAL	WEIBULL	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1

02160775 HELLERS CREEK NEAR POMARIA
Location: Lat 342138, Long 812932. Newberry County
Period of record: Oct 1980 through Sep 1987
Drainage area: 8.16 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1982	1.30	1.40	1.40	1.50	1.60	2.40	2.50	4.00	4.10
1983	1.30	1.30	1.50	1.70	2.00	2.20	2.50	2.90	3.50
1984	0.85	0.89	1.00	1.19	1.40	1.60	1.80	1.90	2.30
1985	1.00	1.00	1.10	1.19	1.40	1.50	1.50	1.70	2.10
1986	0.60	0.61	0.71	0.85	0.94	1.19	1.30	1.40	1.70
1987	0.47	0.50	0.57	0.71	1.00	1.30	1.70	1.90	3.10

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	6	6	1.30-1982	0.47-1987	0.92	0.10	0.32	-0.0728	0.34516	0.66983
3	6	6	1.40-1982	0.50-1987	0.95	0.11	0.33	0.0163	0.34625	0.76317
7	6	6	1.50-1983	0.57-1987	1.05	0.11	0.34	-0.0403	0.32068	0.67895
14	6	6	1.70-1983	0.71-1987	1.19	0.12	0.34	0.0522	0.28748	0.70234
30	6	6	2.00-1983	0.94-1986	1.39	0.13	0.36	0.3104	0.25789	0.49485
60	6	6	2.40-1982	1.19-1986	1.70	0.20	0.45	0.4939	0.26443	0.85746
90	6	6	2.50-1982	1.30-1986	1.88	0.21	0.46	0.3475	0.24604	0.70070
120	6	6	4.00-1982	1.40-1986	2.30	0.79	0.89	0.9627	0.38644	0.85481
183	6	6	4.10-1982	1.70-1986	2.80	0.70	0.84	0.2170	0.29952	0.42368

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	0.88	0.91	1.0	1.1	1.3	1.6	1.8	1.9	2.7
5	0.56	0.58	0.67	0.80	0.99	1.2	1.4	1.5	1.9
10	0.43	0.44	0.53	0.66	0.83	1.0	1.2	1.3	1.5
	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	LNPEARDI	GUMBEL1

02161000 BROAD RIVER AT ALSTON
Location: Lat 341435, Long 811911. Fairfield County
Period of record: Oct 1980 through Sep 1987
Drainage area: 4790.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1982	541.00	923.00	954.00	1200.00	1320.00	1720.00	1880.00	2020.00	2100.00
1983	1160.00	1170.00	1470.00	1570.00	1690.00	1900.00	2120.00	2550.00	3200.00
1984	838.00	1150.00	1530.00	1780.00	1920.00	1970.00	2040.00	2120.00	2790.00
1985	506.00	1090.00	1930.00	2140.00	2460.00	2810.00	2890.00	3230.00	4040.00
1986	242.00	1220.00	1650.00	1790.00	2020.00	2170.00	2480.00	2740.00	3330.00
1987	801.00	840.00	902.00	1020.00	1180.00	1420.00	1860.00	2000.00	3010.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	6	6	1160.00-1983	242.00-1986	681.33	85239.22	291.96	0.1492	0.42851	0.01663
3	6	6	1220.00-1986	840.00-1987	1065.50	18947.92	137.65	-0.5696	0.12919	-0.60466
7	6	6	1930.00-1985	902.00-1987	1406.00	135317.33	367.86	-0.2002	0.26163	0.00616
14	6	6	2140.00-1985	1020.00-1987	1583.33	142622.22	377.65	-0.1429	0.23852	0.11866
30	6	6	2460.00-1985	1180.00-1987	1765.00	186325.00	431.65	0.1394	0.24456	0.13365
60	6	6	2810.00-1985	1420.00-1987	1998.33	185113.89	430.25	0.6776	0.21530	0.01768
90	6	6	2890.00-1985	1860.00-1987	2211.67	133947.22	365.99	0.8351	0.16548	-0.00901
120	6	6	3230.00-1985	2000.00-1987	2443.33	199755.56	446.94	0.5924	0.18292	-0.27716
183	6	6	4040.00-1985	2100.00-1982	3078.33	341313.89	584.22	-0.0448	0.18978	-0.16229

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	646	1090	1360	1540	1710	1950	2120	2390	3010
5	352	948	992	1160	1280	1510	1880	1940	2420
10	228	854	854	997	1090	1330	1790	1790	2170
	GUMBEL1	GUMBEL3B	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	LNPEARDI	GUMBEL1	GUMBEL1

02161500 BROAD RIVER AT RICHTEX
Location: Lat 341105, Long 811148. Fairfield County
Period of record: Oct 1925 - Sep 1983
Drainage area: 4850.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1927	375.00	717.00	959.00	1160.00	1200.00	1450.00	1940.00	2290.00	2540.00
1928	305.00	664.00	1020.00	1170.00	1310.00	1530.00	1890.00	2030.00	2740.00
1931	260.00	627.00	1280.00	1450.00	1580.00	2050.00	2150.00	2410.00	2850.00
1932	295.00	730.00	966.00	1050.00	1090.00	1190.00	1330.00	2360.00	2690.00
1933	250.00	1040.00	1300.00	1450.00	1660.00	2220.00	2910.00	3000.00	3580.00
1934	450.00	1150.00	1640.00	2100.00	2130.00	2220.00	2300.00	2660.00	3210.00
1935	1010.00	1920.00	2400.00	2610.00	2880.00	3470.00	3910.00	4160.00	4880.00
1936	149.00	635.00	1280.00	1530.00	1770.00	2440.00	2940.00	3530.00	3950.00
1937	855.00	1530.00	2380.00	2480.00	2980.00	3240.00	3640.00	4290.00	5510.00
1938	1300.00	2200.00	2760.00	2980.00	3330.00	3850.00	4220.00	4580.00	5570.00
1939	335.00	1280.00	1650.00	1680.00	1760.00	2030.00	2480.00	2720.00	3520.00
1940	608.00	1180.00	1340.00	1410.00	1430.00	1620.00	1740.00	1890.00	2800.00
1941	389.00	815.00	1200.00	1360.00	1490.00	1880.00	2260.00	2450.00	3070.00
1942	417.00	672.00	899.00	977.00	1180.00	1460.00	1620.00	1990.00	2720.00
1943	1210.00	1530.00	1900.00	1940.00	2150.00	2390.00	2820.00	3240.00	3570.00
1944	1090.00	1430.00	1680.00	1860.00	1900.00	2160.00	2280.00	2350.00	3390.00
1945	1070.00	1390.00	1750.00	1890.00	1910.00	2720.00	2920.00	3080.00	3330.00
1946	926.00	1550.00	1600.00	1830.00	2030.00	2650.00	3290.00	3260.00	5180.00
1947	1370.00	1850.00	2260.00	2430.00	3090.00	3620.00	4010.00	3910.00	4180.00
1948	813.00	1380.00	1700.00	1790.00	2180.00	2370.00	2690.00	3080.00	3430.00
1949	1590.00	2050.00	2340.00	2530.00	2610.00	3160.00	3580.00	4130.00	4310.00
1950	2020.00	2740.00	2940.00	3280.00	4000.00	4270.00	5080.00	5050.00	6060.00
1951	1280.00	1690.00	2150.00	2330.00	2550.00	3360.00	3460.00	3530.00	3720.00
1952	698.00	1120.00	1180.00	1330.00	1610.00	2020.00	2160.00	2220.00	2440.00
1953	900.00	1350.00	1630.00	1820.00	1900.00	2010.00	2160.00	2320.00	2780.00
1954	1010.00	1150.00	1230.00	1450.00	1650.00	1760.00	2040.00	2000.00	2300.00
1955	232.00	408.00	593.00	608.00	646.00	727.00	894.00	1010.00	1420.00
1956	482.00	694.00	951.00	1050.00	1350.00	1730.00	1720.00	1790.00	1930.00
1957	269.00	529.00	646.00	843.00	981.00	1090.00	1430.00	1610.00	2080.00
1958	149.00	869.00	1240.00	1470.00	1780.00	2070.00	2380.00	3140.00	3710.00
1959	1150.00	1830.00	2120.00	2190.00	2310.00	2390.00	2430.00	2470.00	3350.00
1960	1700.00	2280.00	2410.00	2470.00	3300.00	4760.00	4900.00	5600.00	6450.00
1961	1970.00	2610.00	2930.00	3220.00	3340.00	3600.00	3810.00	4150.00	4100.00
1962	1310.00	1930.00	2200.00	2210.00	2280.00	2480.00	2750.00	3330.00	4550.00
1963	1560.00	1950.00	2250.00	2360.00	2560.00	3000.00	3050.00	3130.00	3590.00
1964	890.00	1380.00	1570.00	1780.00	1830.00	2000.00	2240.00	2290.00	2890.00
1965	2290.00	2620.00	2710.00	2870.00	3330.00	4100.00	4890.00	5440.00	7260.00
1966	1770.00	2190.00	2510.00	2700.00	2940.00	3230.00	3260.00	3330.00	3770.00
1967	1310.00	1510.00	1600.00	1760.00	2190.00	2420.00	2560.00	3040.00	3310.00
1968	1350.00	1710.00	1930.00	2280.00	2640.00	2790.00	3310.00	4350.00	5290.00
1969	907.00	1280.00	1360.00	1450.00	1580.00	1760.00	2060.00	2350.00	2930.00
1970	1850.00	2060.00	2190.00	2510.00	2750.00	3380.00	3770.00	4230.00	4300.00
1971	660.00	1050.00	1190.00	1280.00	1450.00	1730.00	2480.00	2930.00	3000.00
1972	1530.00	2130.00	2290.00	2350.00	2740.00	3720.00	4010.00	3980.00	4910.00
1973	1650.00	2160.00	2270.00	2280.00	2460.00	2700.00	2870.00	3410.00	4880.00
1974	2330.00	2590.00	2670.00	2910.00	3000.00	3210.00	3720.00	4370.00	4780.00
1975	1960.00	2410.00	2520.00	2570.00	2620.00	2820.00	3090.00	3640.00	4080.00
1976	2610.00	2730.00	2970.00	3080.00	3490.00	4420.00	5220.00	5990.00	6160.00
1977	1750.00	1930.00	2030.00	2230.00	2390.00	2750.00	3340.00	4230.00	4860.00
1978	332.00	413.00	1210.00	1410.00	2060.00	2160.00	2570.00	2850.00	3300.00
1979	848.00	1080.00	1310.00	1590.00	1990.00	2120.00	2440.00	2620.00	3090.00
1980	845.00	1460.00	1970.00	2200.00	2880.00	3430.00	3980.00	4430.00	5150.00
1981	1090.00	1260.00	1610.00	2120.00	2320.00	2520.00	2980.00	3830.00	4350.00
1982	764.00	920.00	988.00	1260.00	1350.00	1820.00	2000.00	2290.00	2330.00
1983	1110.00	1150.00	1510.00	1690.00	1870.00	2090.00	2280.00	2740.00	3460.00

02161500 BROAD RIVER AT RICHTEX
LOCATION: Lat 341105, Long 811148. Fairfield County
PERIOD OF RECORD: Oct 1925 - Sep 1983
DRAINAGE AREA: 4850.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	55	55	2610.00-1976	149.00-1958	1048.05	382460.89	618.43	0.4637	0.59008	0.54724
3	55	55	2740.00-1950	408.00-1955	1482.24	405888.44	637.09	0.2466	0.42982	0.53995
7	55	55	2970.00-1976	593.00-1955	1766.95	385150.09	620.60	0.1696	0.35123	0.48790
14	55	55	3280.00-1950	608.00-1955	1938.69	403263.78	635.03	0.1499	0.32756	0.43609
30	55	55	4000.00-1950	646.00-1955	2178.13	525841.17	725.15	0.2566	0.33292	0.39520
60	55	55	4760.00-1960	727.00-1955	2548.31	764361.30	874.28	0.4411	0.34308	0.30626
90	55	55	5220.00-1976	894.00-1955	2877.35	926549.24	962.57	0.5158	0.33454	0.29457
120	55	55	5990.00-1976	1010.00-1955	3220.00	1106047.27	1051.69	0.5007	0.32661	0.32282
183	55	55	7260.00-1965	1420.00-1955	3810.91	1466259.17	1210.89	0.6303	0.31774	0.26619

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	991	1440	1730	1940	2160	2410	2730	3100	3570
5	494	914	1210	1380	1530	1780	2030	2290	2820
10	297	676	978	1100	1230	1510	1740	1960	2440
15	218	570	872	970	1090	1390	1600	1820	2240
20	173	506	807	887	1000	1320	1520	1740	2110
25	144	462	763	826	942	1260	1460	1690	2020
30	123	429	729	780	893	1220	1420	1650	1950
40	95	381	681	712	822	1160	1350	1600	1840
50	77	348	647	662	771	1120	1300	1560	1750
75	52	295	593	593	685	1040	1220	1500	1610
	LOGBOUGH	WEIBULL	GUMBEL3B	LOGBOUGH	LOGBOUGH	GUMBEL1	GUMBEL1	GUMBEL3C	GENSME

02161700 WEST FORK LITTLE RIVER NEAR SALEM CROSSROADS
Location: Lat 342708, Long 811545. Fairfield County
Period of record: Oct 1980 through Sep 1987
Drainage area: 25.50 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1982	0.38	0.42	0.48	0.56	0.88	1.60	1.60	2.50	2.60
1983	0.00	0.00	0.00	0.52	0.96	2.10	2.80	2.70	5.30
1984	0.00	0.00	0.00	0.00	0.00	0.22	0.42	0.70	2.00
1985	1.30	1.40	1.50	1.60	1.90	2.00	2.20	2.80	6.30
1986	1.10	1.19	1.30	1.40	2.10	2.60	3.20	5.40	14.00
1987	1.19	1.19	1.30	1.30	1.50	2.00	3.20	3.40	8.40

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	6	4	1.30-1985	0.00-1984	0.66	0.31	0.55	-0.1084	0.83550	0.46028
3	6	4	1.40-1985	0.00-1984	0.70	0.34	0.58	-0.1099	0.83066	0.43955
7	6	4	1.50-1985	0.00-1984	0.76	0.39	0.63	-0.1370	0.82236	0.44417
14	6	5	1.60-1985	0.00-1984	0.90	0.33	0.57	-0.2405	0.63903	0.23174
30	6	5	2.10-1986	0.00-1984	1.22	0.50	0.71	-0.4199	0.57674	0.15314
60	6	6	2.60-1986	0.22-1984	1.75	0.56	0.75	-1.1793	0.42511	-0.16379
90	6	6	3.20-1986	0.42-1984	2.24	0.98	0.99	-0.7364	0.44261	-0.05918
120	6	6	5.40-1986	0.70-1984	2.92	1.92	1.39	0.2778	0.47566	0.15747
183	6	6	14.00-1986	2.00-1984	6.43	16.13	4.02	0.7614	0.62426	0.29676

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	1.0	1.0	1.1	1.1	1.3	1.9	2.4	2.7	5.9
5	0.00	0.00	0.00	0.00	0.64	0.96	1.3	1.4	1.9
10	0.00	0.00	0.00	0.00	0.00	0.32	0.53	0.76	0.76
	POWTRAN	POWTRAN	POWTRAN	POWTRAN	LNPEARFF	GUMBEL3B	GUMBEL3B	GUMBEL1	GUMBEL1

02162010 CEDAR CREEK NEAR BLYTHWOOD
Location: Lat 341144, Long 810613. Richland County
Period of record: Nov 1966 - Sep 1983; Feb 1985 through Sep 1987
Drainage area: 48.90 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1968	4.40	5.20	6.10	6.10	6.50	7.70	11.00	15.00	24.00
1969	0.66	0.66	0.81	1.00	1.60	2.40	3.40	5.90	10.00
1970	1.70	1.80	2.20	3.30	4.20	4.60	7.60	8.40	10.00
1971	1.10	1.19	1.60	2.00	2.90	3.60	4.30	4.30	5.90
1972	4.00	4.30	4.70	5.10	8.90	10.00	12.00	14.00	17.00
1973	2.20	2.40	2.70	2.80	4.10	5.00	7.10	9.20	16.00
1974	5.00	5.00	5.30	5.70	6.50	7.50	8.70	9.20	15.00
1975	0.80	0.82	0.84	2.50	3.10	4.90	5.50	5.80	5.90
1976	4.80	5.00	5.40	5.80	7.60	9.50	13.00	13.00	21.00
1977	3.00	3.50	4.60	6.60	6.90	10.00	14.00	20.00	35.00
1978	1.40	1.50	1.80	2.50	3.70	6.40	7.20	9.40	14.00
1979	3.00	3.00	3.20	3.50	4.40	5.10	5.90	6.30	13.00
1980	5.70	7.40	9.00	9.80	11.00	14.00	15.00	16.00	30.00
1981	5.40	5.60	6.00	6.40	9.10	11.00	12.00	12.00	27.00
1982	1.00	1.00	1.10	1.30	1.80	6.40	7.50	11.00	13.00
1983	4.60	4.70	4.80	5.20	5.90	6.80	7.50	8.60	19.00
1986	0.59	0.63	1.00	1.70	1.80	4.00	7.50	9.80	11.00
1987	0.07	0.08	0.09	0.13	0.39	1.30	2.10	3.00	4.80

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	18	18	5.70-1980	0.07-1987	2.75	3.44	1.85	0.1606	0.67517	-0.16475
3	18	18	7.40-1980	0.08-1987	2.99	4.42	2.10	0.3528	0.70333	-0.09469
7	18	18	9.00-1980	0.09-1987	3.40	5.62	2.37	0.5226	0.69675	-0.06714
14	18	18	9.80-1980	0.13-1987	3.97	5.92	2.43	0.4857	0.61316	-0.04283
30	18	18	11.00-1980	0.39-1987	5.02	8.25	2.87	0.3374	0.57198	-0.00805
60	18	18	14.00-1980	1.30-1987	6.68	10.05	3.17	0.4628	0.47470	0.17890
90	18	18	15.00-1980	2.10-1987	8.41	12.84	3.58	0.2135	0.42638	-0.02657
120	18	18	20.00-1977	3.00-1987	10.05	18.15	4.26	0.4755	0.42396	-0.06691
183	18	18	35.00-1977	4.80-1987	16.20	68.10	8.25	0.6701	0.50939	0.15650

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	2.5	2.9	3.3	3.6	4.6	6.2	7.9	9.4	15
5	0.98	1.0	1.2	1.7	2.3	3.7	5.0	6.0	8.4
10	0.35	0.38	0.46	0.83	1.3	2.6	3.8	4.5	5.5
15	0.06	0.19	0.23	0.45	0.87	2.1	3.2	3.9	4.3
20	0.00	0.10	0.13	0.21	0.59	1.8	2.9	3.5	3.5
	GUMBEL1	LOGBOUGH	LOGBOUGH	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1

02162080 CRANE CREEK AT COLUMBIA
Location: Lat 340314, Long 810336. Richland County
Period of record: Dec 1967 - Sep 1974
Drainage area: 66.50 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1969	0.45	1.00	1.00	1.00	1.00	2.40	9.80	17.00	30.00
1970	1.90	2.40	2.90	4.70	9.00	10.00	11.00	13.00	15.00
1971	0.10	0.12	0.16	0.32	1.60	2.80	6.20	9.70	14.00
1972	7.00	7.30	8.90	11.00	23.00	38.00	40.00	58.00	77.00
1973	2.70	2.70	3.00	3.50	5.20	7.20	8.20	17.00	26.00
1974	1.60	1.70	1.90	3.40	4.60	6.60	9.90	11.00	18.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	6	6	7.00-1972	0.10-1971	2.29	5.19	2.28	1.2290	0.99446	-0.25546
3	6	6	7.30-1972	0.12-1971	2.54	5.27	2.30	1.2355	0.90522	-0.35547
7	6	6	8.90-1972	0.16-1971	2.98	8.02	2.83	1.2964	0.95111	-0.36935
14	6	6	11.00-1972	0.32-1971	3.99	12.11	3.48	1.0646	0.87278	-0.50743
30	6	6	23.00-1972	1.00-1969	7.40	55.53	7.45	1.3333	1.00704	-0.46739
60	6	6	38.00-1972	2.40-1969	11.17	150.81	12.28	1.6111	1.09973	-0.35581
90	6	6	40.00-1972	6.20-1971	14.18	135.62	11.65	1.7189	0.82108	-0.37833
120	6	6	58.00-1972	9.70-1971	20.95	282.11	16.80	1.6821	0.80173	-0.25314
183	6	6	77.00-1972	14.00-1971	30.00	475.00	21.79	1.5224	0.72648	-0.23604

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	1.7	1.9	2.1	3.4	5.2	6.2	9.6	15	23
5	0.36	0.64	0.71	0.92	1.5	2.8	7.5	10.0	15
10	0.00	0.29	0.34	0.34	0.52	2.0	6.7	9.1	13
	GUMBEL3B	POWTRAN	POWTRAN	GUMBEL3B	GUMBEL3B	LNPEARDI	POWTRAN	GUMBEL3B	GUMBEL3B

02162093 SMITH BRANCH AT NORTH MAIN STREET AT COLUMBIA
Location: Lat 340138, Long 810231. Richland County
Period of record: Oct 1976 through Sep 1987
Drainage area: 5.67 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1978	1.80	1.80	1.90	2.00	2.70	3.50	5.50	5.70	7.30
1979	1.40	1.40	1.40	1.50	1.70	1.90	2.60	3.00	3.60
1980	1.50	1.50	1.50	1.60	2.60	4.00	5.20	5.30	7.30
1981	1.50	1.50	1.50	1.80	2.10	3.40	3.90	4.20	5.90
1982	1.80	1.80	2.00	2.20	2.50	3.40	3.50	4.80	8.40
1983	1.80	1.80	1.90	2.20	2.60	3.20	3.50	3.40	5.60
1984	0.88	0.92	1.00	1.10	1.50	2.20	2.60	2.90	4.50
1986	0.89	0.98	1.10	1.19	1.30	2.80	3.10	5.00	5.30
1987	0.82	0.84	0.92	1.19	1.50	2.50	2.70	3.60	6.80

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	9	9	1.80-1978	0.82-1987	1.38	0.15	0.39	-0.3377	0.28258	0.54520
3	9	9	1.80-1978	0.84-1987	1.39	0.14	0.37	-0.3159	0.26424	0.50822
7	9	9	2.00-1982	0.92-1987	1.47	0.15	0.38	-0.0176	0.26049	0.40081
14	9	9	2.20-1982	1.10-1984	1.64	0.17	0.41	0.0808	0.24861	0.39246
30	9	9	2.70-1978	1.30-1986	2.06	0.28	0.53	-0.1055	0.25754	0.21049
60	9	9	4.00-1980	1.90-1979	2.99	0.42	0.65	-0.2439	0.21593	-0.25379
90	9	9	5.50-1978	2.60-1984	3.62	1.04	1.02	0.7892	0.28117	-0.26185
120	9	9	5.70-1978	2.90-1984	4.21	0.95	0.98	0.0590	0.23198	-0.56086
183	9	9	8.40-1982	3.60-1979	6.08	2.04	1.43	-0.1207	0.23523	-0.37602

Low flow frequency array table

Return Period	Consecutive days: 1 Day	3	7	14	30	60	90	120	183
2	1.3	1.3	1.4	1.6	2.0	3.1	3.2	4.1	5.9
5	0.97	1.0	1.1	1.2	1.5	2.4	2.7	3.2	4.6
10	0.82	0.87	0.92	1.1	1.3	2.0	2.5	2.8	4.0
	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GENSME	LNPEARDI	GUMBEL1	GUMBEL1

02162500 SALUDA RIVER NEAR GREENVILLE
Location: Lat 345032, Long 822851. Pickens County
Period of record: Oct 1941 - Sep 1978
Drainage area: 295.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1943	216.00	255.00	265.00	278.00	305.00	310.00	373.00	404.00	418.00
1944	150.00	220.00	235.00	262.00	271.00	298.00	307.00	313.00	384.00
1945	137.00	167.00	208.00	244.00	256.00	282.00	298.00	299.00	333.00
1946	124.00	175.00	203.00	217.00	240.00	297.00	340.00	350.00	353.00
1947	220.00	241.00	266.00	280.00	303.00	333.00	351.00	368.00	406.00
1948	134.00	158.00	164.00	180.00	194.00	212.00	230.00	268.00	330.00
1949	186.00	191.00	225.00	230.00	243.00	309.00	347.00	403.00	403.00
1950	490.00	536.00	562.00	605.00	669.00	750.00	814.00	792.00	947.00
1951	276.00	296.00	310.00	325.00	366.00	424.00	466.00	472.00	497.00
1952	107.00	124.00	125.00	128.00	187.00	240.00	236.00	256.00	309.00
1953	158.00	165.00	175.00	184.00	189.00	205.00	229.00	248.00	283.00
1954	186.00	188.00	192.00	206.00	210.00	231.00	244.00	256.00	321.00
1955	70.00	79.00	86.00	87.00	89.00	96.00	112.00	135.00	179.00
1956	117.00	117.00	120.00	129.00	157.00	166.00	176.00	176.00	185.00
1957	97.00	98.00	101.00	107.00	116.00	134.00	144.00	164.00	193.00
1958	160.00	160.00	161.00	175.00	205.00	243.00	330.00	354.00	448.00
1959	115.00	135.00	189.00	211.00	232.00	240.00	245.00	258.00	326.00
1960	160.00	171.00	224.00	261.00	288.00	370.00	467.00	495.00	567.00
1961	265.00	297.00	304.00	318.00	371.00	384.00	398.00	432.00	465.00
1962	327.00	337.00	361.00	372.00	378.00	441.00	493.00	612.00	773.00
1963	216.00	219.00	236.00	245.00	276.00	317.00	342.00	361.00	396.00
1964	219.00	222.00	247.00	257.00	273.00	301.00	306.00	325.00	400.00
1965	311.00	327.00	338.00	354.00	484.00	514.00	562.00	567.00	756.00
1966	285.00	321.00	321.00	329.00	337.00	372.00	386.00	399.00	462.00
1967	193.00	197.00	218.00	229.00	274.00	280.00	318.00	335.00	419.00
1968	237.00	245.00	268.00	292.00	366.00	428.00	484.00	546.00	593.00
1969	220.00	223.00	231.00	233.00	252.00	268.00	320.00	385.00	442.00
1970	255.00	264.00	332.00	366.00	449.00	511.00	581.00	589.00	599.00
1971	99.00	118.00	162.00	171.00	195.00	231.00	287.00	278.00	319.00
1972	257.00	260.00	280.00	299.00	318.00	374.00	426.00	428.00	478.00
1973	257.00	264.00	267.00	281.00	292.00	309.00	345.00	395.00	507.00
1974	265.00	276.00	294.00	299.00	307.00	349.00	364.00	398.00	511.00
1975	285.00	296.00	305.00	308.00	311.00	330.00	355.00	362.00	433.00
1976	289.00	304.00	322.00	341.00	389.00	532.00	595.00	694.00	739.00
1977	260.00	267.00	278.00	294.00	324.00	351.00	408.00	488.00	576.00
1978	210.00	224.00	225.00	225.00	231.00	248.00	278.00	326.00	440.00

02162500 SALUDA RIVER NEAR GREENVILLE
LOCATION: Lat 345032, Long 822851. Pickens County
PERIOD OF RECORD: Oct 1941 - Sep 1978
DRAINAGE AREA: 295.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	36	36	490.00-1950	70.00-1955	209.81	6789.71	82.40	0.8300	0.39274	0.34613
3	36	36	536.00-1950	79.00-1955	226.03	7329.97	85.62	1.0544	0.37878	0.33210
7	36	36	562.00-1950	86.00-1955	244.44	7572.47	87.02	1.0090	0.35599	0.33932
14	36	36	605.00-1950	87.00-1955	258.94	8497.89	92.18	1.1012	0.35600	0.28757
30	36	36	669.00-1950	89.00-1955	287.42	11209.85	105.88	1.1857	0.36837	0.24647
60	36	36	750.00-1950	96.00-1955	324.44	14868.41	121.94	1.1246	0.37583	0.24444
90	36	36	814.00-1950	112.00-1955	359.92	18359.58	135.50	1.0076	0.37647	0.22101
120	36	36	792.00-1950	135.00-1955	386.97	20076.30	141.69	0.7555	0.36615	0.26318
183	36	36	947.00-1950	179.00-1955	449.72	26987.76	164.28	0.9155	0.36529	0.22672

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	206	221	244	255	275	304	340	361	428
5	137	153	171	181	198	230	255	263	323
10	104	122	133	147	165	205	225	225	284
15	89	108	114	131	150	196	214	214	269
20	80	99	101	121	141	191	207	207	261
25	74	93	93	114	134	187	203	203	255
30	69	88	88	109	129	185	200	200	251
40	62	81	81	102	122	182	196	196	245
	WEIBULL	LOGBOUGH	NORMAL	LNPEARFF	POWTRAN	GUMBEL3A	GUMBEL3A	LOGNORM	GUMBEL3A

02163000 SALUDA RIVER NEAR PELZER
Location: Lat 344005, Long 822755. Anderson County
Period of record: Sep 1929 - Sep 1971
Drainage area: 405.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1931	102.00	141.00	199.00	211.00	229.00	247.00	249.00	259.00	328.00
1932	62.00	114.00	139.00	150.00	162.00	198.00	218.00	249.00	320.00
1933	279.00	285.00	297.00	332.00	386.00	460.00	570.00	583.00	630.00
1934	141.00	208.00	279.00	306.00	332.00	336.00	356.00	428.00	463.00
1935	252.00	350.00	395.00	420.00	457.00	558.00	575.00	619.00	625.00
1936	240.00	284.00	292.00	297.00	312.00	366.00	519.00	531.00	571.00
1937	251.00	264.00	276.00	307.00	386.00	469.00	485.00	526.00	725.00
1938	361.00	403.00	415.00	426.00	507.00	572.00	607.00	655.00	784.00
1939	218.00	259.00	270.00	278.00	289.00	314.00	328.00	359.00	461.00
1940	94.00	172.00	212.00	229.00	238.00	261.00	275.00	302.00	392.00
1941	189.00	207.00	209.00	216.00	238.00	316.00	339.00	413.00	434.00
1942	130.00	167.00	174.00	177.00	184.00	203.00	217.00	250.00	351.00
1943	246.00	267.00	312.00	328.00	371.00	378.00	450.00	489.00	488.00
1944	238.00	284.00	296.00	315.00	333.00	372.00	370.00	382.00	480.00
1945	225.00	230.00	268.00	321.00	335.00	371.00	379.00	385.00	433.00
1946	213.00	241.00	267.00	275.00	298.00	382.00	438.00	452.00	457.00
1947	272.00	310.00	348.00	365.00	398.00	438.00	474.00	491.00	539.00
1948	192.00	206.00	218.00	247.00	250.00	281.00	302.00	348.00	427.00
1949	250.00	281.00	299.00	306.00	319.00	401.00	461.00	536.00	546.00
1950	620.00	662.00	700.00	751.00	840.00	936.00	1030.00	1010.00	1200.00
1951	344.00	374.00	385.00	403.00	456.00	536.00	579.00	581.00	614.00
1952	156.00	163.00	170.00	180.00	239.00	321.00	319.00	334.00	389.00
1953	190.00	218.00	226.00	251.00	261.00	274.00	300.00	323.00	373.00
1954	210.00	226.00	241.00	248.00	252.00	278.00	306.00	321.00	407.00
1955	57.00	98.00	104.00	109.00	115.00	124.00	145.00	170.00	230.00
1956	138.00	154.00	158.00	167.00	211.00	220.00	231.00	239.00	248.00
1957	96.00	124.00	131.00	139.00	157.00	183.00	220.00	241.00	274.00
1958	151.00	177.00	180.00	208.00	246.00	281.00	372.00	403.00	508.00
1959	111.00	191.00	245.00	269.00	296.00	302.00	308.00	320.00	400.00
1960	224.00	244.00	293.00	323.00	363.00	470.00	576.00	622.00	735.00
1961	395.00	397.00	406.00	425.00	452.00	477.00	496.00	527.00	579.00
1962	356.00	396.00	407.00	414.00	424.00	485.00	539.00	692.00	881.00
1963	241.00	262.00	272.00	284.00	318.00	359.00	383.00	408.00	459.00
1964	222.00	235.00	260.00	276.00	295.00	328.00	334.00	350.00	448.00
1965	413.00	419.00	433.00	450.00	601.00	648.00	740.00	742.00	941.00
1966	314.00	359.00	387.00	395.00	404.00	452.00	465.00	489.00	544.00
1967	158.00	229.00	247.00	268.00	336.00	342.00	398.00	413.00	508.00
1968	275.00	290.00	313.00	340.00	412.00	477.00	522.00	659.00	660.00
1969	247.00	255.00	261.00	269.00	291.00	312.00	366.00	442.00	537.00
1970	344.00	359.00	419.00	453.00	520.00	586.00	652.00	673.00	684.00
1971	140.00	174.00	214.00	226.00	256.00	306.00	364.00	349.00	400.00

02163000 SALUDA RIVER NEAR PELZER
Location: Lat 344005, Long 822755. Anderson County
Period of record: Sep 1929 - Sep 1971
Drainage area: 405.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	41	41	620.00-1950	57.00-1955	228.22	11447.15	106.99	1.1404	0.46881	0.29202
3	41	41	662.00-1950	98.00-1955	260.46	10774.49	103.80	1.3827	0.39852	0.31011
7	41	41	700.00-1950	104.00-1955	283.34	11372.37	106.64	1.3585	0.37637	0.29802
14	41	41	751.00-1950	109.00-1955	301.32	12575.78	112.14	1.4241	0.37217	0.27453
30	41	41	840.00-1950	115.00-1955	335.83	16914.14	130.05	1.4490	0.38726	0.22974
60	41	41	936.00-1950	124.00-1955	380.98	21462.80	146.50	1.3090	0.38454	0.25806
90	41	41	1030.00-1950	145.00-1955	420.90	26834.43	163.81	1.2489	0.38919	0.22952
120	41	41	1010.00-1950	170.00-1955	452.80	27791.04	166.71	0.9014	0.36816	0.24287
183	41	41	1200.00-1950	230.00-1955	523.73	36113.56	190.04	1.3226	0.36285	0.23500

Low flow frequency array table

Return Period	Consecutive days: 1 Day	3	7	14	30	60	90	120	183
2	215	243	267	287	315	359	395	427	490
5	137	175	195	208	230	260	285	304	370
10	105	147	165	175	194	219	238	252	321
15	91	135	152	160	178	200	218	228	299
20	82	127	144	150	168	189	205	214	285
25	76	122	138	144	162	181	197	203	276
30	72	118	133	139	156	175	190	195	269
40	66	112	127	132	149	166	180	183	258
50	61	108	122	126	143	160	173	175	251
	LNPEARFF	LNPEARFF	POWTRAN	LNPEARFF	POWTRAN	POWTRAN	LNPEARFF	GUMBEL1	POWTRAN

02163500 SALUDA RIVER NEAR WARE SHOALS
Location: Lat 342301, Long 821312. Greenwood County
Period of record: Oct 1938 through Sep 1987
Drainage area: 581.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1940	152.00	246.00	286.00	304.00	324.00	348.00	367.00	398.00	543.00
1941	74.00	135.00	218.00	257.00	276.00	378.00	415.00	510.00	551.00
1942	11.00	136.00	184.00	190.00	207.00	247.00	271.00	305.00	437.00
1943	206.00	314.00	333.00	359.00	415.00	426.00	520.00	570.00	595.00
1944	180.00	285.00	305.00	348.00	399.00	465.00	494.00	494.00	617.00
1945	192.00	285.00	327.00	370.00	392.00	441.00	435.00	455.00	504.00
1946	168.00	224.00	248.00	289.00	346.00	460.00	516.00	534.00	595.00
1947	292.00	378.00	413.00	425.00	467.00	556.00	607.00	618.00	681.00
1948	129.00	158.00	207.00	245.00	289.00	351.00	392.00	460.00	547.00
1949	117.00	236.00	293.00	382.00	388.00	484.00	575.00	687.00	703.00
1950	187.00	615.00	726.00	856.00	962.00	1070.00	1230.00	1200.00	1380.00
1951	295.00	358.00	416.00	437.00	491.00	632.00	678.00	670.00	745.00
1952	146.00	214.00	234.00	254.00	306.00	377.00	397.00	415.00	481.00
1953	148.00	217.00	246.00	281.00	295.00	307.00	335.00	366.00	461.00
1954	207.00	242.00	279.00	327.00	336.00	363.00	391.00	401.00	508.00
1955	36.00	112.00	134.00	140.00	145.00	150.00	178.00	209.00	286.00
1956	82.00	157.00	191.00	231.00	262.00	282.00	282.00	300.00	315.00
1957	61.00	126.00	149.00	169.00	194.00	214.00	281.00	321.00	375.00
1958	170.00	228.00	258.00	275.00	313.00	341.00	439.00	477.00	599.00
1959	106.00	251.00	324.00	335.00	369.00	379.00	388.00	399.00	493.00
1960	228.00	234.00	319.00	356.00	382.00	530.00	623.00	719.00	888.00
1961	278.00	492.00	506.00	529.00	589.00	610.00	625.00	660.00	707.00
1962	216.00	391.00	427.00	449.00	473.00	547.00	622.00	797.00	1020.00
1963	270.00	296.00	334.00	347.00	376.00	412.00	451.00	477.00	547.00
1964	247.00	284.00	315.00	335.00	355.00	402.00	424.00	435.00	548.00
1965	359.00	462.00	522.00	550.00	779.00	899.00	1030.00	1010.00	1270.00
1966	427.00	456.00	458.00	479.00	500.00	549.00	558.00	595.00	645.00
1967	247.00	287.00	321.00	390.00	474.00	506.00	537.00	584.00	677.00
1968	260.00	363.00	430.00	461.00	533.00	601.00	684.00	849.00	872.00
1969	228.00	299.00	323.00	346.00	378.00	430.00	484.00	594.00	722.00
1970	403.00	438.00	463.00	493.00	594.00	629.00	703.00	712.00	765.00
1971	166.00	207.00	244.00	261.00	291.00	345.00	434.00	451.00	493.00
1972	348.00	367.00	403.00	448.00	477.00	546.00	656.00	644.00	742.00
1973	348.00	379.00	412.00	427.00	459.00	487.00	543.00	645.00	888.00
1974	420.00	448.00	488.00	496.00	506.00	545.00	662.00	786.00	892.00
1975	352.00	386.00	422.00	436.00	445.00	457.00	485.00	519.00	634.00
1976	446.00	513.00	566.00	631.00	656.00	753.00	840.00	1010.00	1170.00
1977	307.00	329.00	383.00	460.00	481.00	518.00	593.00	756.00	875.00
1978	165.00	207.00	253.00	286.00	332.00	371.00	457.00	555.00	686.00
1979	250.00	300.00	332.00	337.00	348.00	365.00	396.00	446.00	560.00
1980	439.00	516.00	595.00	624.00	716.00	761.00	835.00	965.00	1030.00
1981	263.00	278.00	305.00	332.00	386.00	454.00	534.00	572.00	573.00
1982	48.00	57.00	66.00	71.00	112.00	135.00	173.00	195.00	243.00
1983	234.00	239.00	267.00	313.00	369.00	432.00	461.00	515.00	609.00
1984	251.00	294.00	360.00	384.00	433.00	445.00	469.00	485.00	598.00
1985	226.00	338.00	419.00	449.00	479.00	551.00	576.00	605.00	706.00
1986	153.00	266.00	295.00	304.00	348.00	381.00	426.00	466.00	500.00
1987	13.00	41.00	61.00	84.00	114.00	180.00	251.00	258.00	324.00

02163500 SALUDA RIVER NEAR WARE SHOALS
Location: Lat 342301, Long 821312. Greenwood County
Period of record: Oct 1938 through Sep 1987
Drainage area: 581.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	48	48	446.00-1976	11.00-1942	219.81	12469.28	111.67	0.1805	0.50801	0.46465
3	48	48	615.00-1950	41.00-1987	293.42	14839.91	121.82	0.2996	0.41517	0.28511
7	48	48	726.00-1950	61.00-1987	334.58	16883.24	129.94	0.4261	0.38835	0.27107
14	48	48	856.00-1950	71.00-1982	365.67	19594.10	139.98	0.6925	0.38280	0.26160
30	48	48	962.00-1950	112.00-1982	407.52	25158.92	158.62	0.9606	0.38922	0.19845
60	48	48	1070.00-1950	135.00-1982	460.67	30331.60	174.16	0.9912	0.37806	0.24192
90	48	48	1230.00-1950	173.00-1982	515.06	38220.64	195.50	1.2175	0.37957	0.21064
120	48	48	1200.00-1950	195.00-1982	564.46	43559.37	208.71	0.8089	0.36975	0.23804
183	48	48	1380.00-1950	243.00-1982	658.33	55875.26	236.38	0.9774	0.35906	0.22648

Low flow frequency array table

Return Period	1 Day	Consecutive days: 3	7	14	30	60	90	120	183
2	214	280	315	355	385	435	489	538	598
5	120	193	228	245	285	326	352	387	472
10	78	147	182	193	249	287	293	321	407
15	59	124	160	169	235	272	272	291	374
20	47	109	145	154	227	264	264	273	353
25	39	98	134	143	222	258	258	260	337
30	33	89	125	134	218	254	254	254	324
40	24	76	112	122	213	249	249	249	306
50	18	66	102	113	210	246	246	246	292
	GUMBEL3B	GENSME	GENSME	POWTRAN	GUMBEL3A	GUMBEL3A	POWTRAN	POWTRAN	GENSME

02164000 REEDY RIVER NEAR GREENVILLE
Location: Lat 344800, Long 822155. Greenville County
Period of record: Oct 1941 - Sep 1971; Jun 1987 through Sep 1971
Drainage area: 48.60 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1943	16.00	16.00	18.00	22.00	25.00	28.00	31.00	36.00	37.00
1944	17.00	18.00	21.00	22.00	25.00	28.00	32.00	32.00	42.00
1945	20.00	21.00	24.00	28.00	34.00	38.00	42.00	42.00	46.00
1946	21.00	24.00	28.00	30.00	36.00	42.00	55.00	54.00	59.00
1947	28.00	30.00	32.00	37.00	43.00	52.00	57.00	56.00	62.00
1948	15.00	16.00	22.00	24.00	28.00	31.00	37.00	38.00	44.00
1949	26.00	27.00	30.00	33.00	34.00	40.00	44.00	51.00	58.00
1950	43.00	44.00	48.00	52.00	69.00	76.00	81.00	82.00	117.00
1951	27.00	28.00	30.00	33.00	34.00	44.00	50.00	51.00	58.00
1952	17.00	17.00	20.00	24.00	29.00	36.00	41.00	43.00	55.00
1953	16.00	16.00	19.00	20.00	22.00	24.00	25.00	26.00	33.00
1954	10.00	10.00	15.00	19.00	22.00	25.00	28.00	29.00	33.00
1955	8.00	10.00	11.00	12.00	13.00	13.00	15.00	16.00	21.00
1956	14.00	14.00	16.00	17.00	21.00	24.00	26.00	28.00	28.00
1957	15.00	15.00	17.00	18.00	23.00	25.00	34.00	34.00	40.00
1958	11.00	15.00	18.00	21.00	29.00	34.00	43.00	43.00	54.00
1959	22.00	24.00	28.00	29.00	33.00	34.00	35.00	35.00	48.00
1960	33.00	35.00	36.00	37.00	41.00	73.00	70.00	83.00	97.00
1961	32.00	33.00	35.00	38.00	41.00	44.00	50.00	56.00	61.00
1962	27.00	27.00	28.00	28.00	29.00	34.00	39.00	50.00	62.00
1963	29.00	30.00	32.00	33.00	34.00	41.00	43.00	46.00	54.00
1964	19.00	19.00	20.00	22.00	24.00	28.00	34.00	34.00	44.00
1965	40.00	43.00	46.00	51.00	60.00	76.00	84.00	88.00	96.00
1966	24.00	25.00	27.00	31.00	34.00	41.00	42.00	49.00	50.00
1967	18.00	20.00	21.00	23.00	27.00	32.00	40.00	44.00	63.00
1968	24.00	24.00	25.00	28.00	32.00	37.00	41.00	46.00	51.00
1969	24.00	26.00	27.00	28.00	31.00	39.00	46.00	53.00	63.00
1970	38.00	39.00	40.00	48.00	54.00	65.00	66.00	73.00	75.00
1971	22.00	23.00	25.00	26.00	30.00	35.00	40.00	46.00	52.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	29	29	43.00-1950	8.00-1955	22.62	74.79	8.65	0.5645	0.38230	0.37542
3	29	29	44.00-1950	10.00-1955	23.76	78.60	8.87	0.6060	0.37315	0.36937
7	29	29	48.00-1950	11.00-1955	26.17	76.76	8.76	0.7177	0.33476	0.34247
14	29	29	52.00-1950	12.00-1955	28.76	92.39	9.61	0.8476	0.33423	0.27756
30	29	29	69.00-1950	13.00-1955	33.00	135.38	11.64	1.3560	0.35258	0.15075
60	29	29	76.00-1950	13.00-1955	39.28	238.06	15.43	1.1249	0.39284	0.15741
90	29	29	84.00-1965	15.00-1955	43.83	241.52	15.54	0.9368	0.35459	0.19640
120	29	29	88.00-1965	16.00-1955	47.03	283.96	16.85	0.8199	0.35827	0.24099
183	29	29	117.00-1950	21.00-1955	55.28	413.03	20.32	1.1742	0.36767	0.21324

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	21	22	25	27	31	35	41	44	52
5	15	16	18	21	24	25	31	33	38
10	12	13	15	18	22	22	26	28	33
15	11	12	14	17	21	21	24	26	30
20	9.9	11	13	16	21	21	23	24	29
25	9.3	10	13	15	21	21	22	23	28
30	8.9	9.7	12	15	20	20	22	23	27
	GUMBEL1	GUMBEL1	GUMBEL1	LOGNORM	GUMBEL3A	LNPEARDI	LOGNORM	LOGNORM	LOGNORM

02165000 REEDY RIVER NEAR WARE SHOALS
Location: Lat 342502, Long 820910. Laurens County
Period of record: Mar 1939 through Sep 1987
Drainage area: 236.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1940	17.00	49.00	63.00	68.00	72.00	83.00	89.00	100.00	155.00
1941	14.00	25.00	42.00	65.00	75.00	92.00	127.00	136.00	148.00
1942	15.00	16.00	40.00	42.00	48.00	60.00	71.00	82.00	125.00
1943	16.00	43.00	75.00	85.00	102.00	108.00	120.00	135.00	156.00
1944	15.00	52.00	88.00	94.00	99.00	109.00	121.00	124.00	173.00
1945	17.00	52.00	97.00	104.00	116.00	126.00	133.00	148.00	165.00
1946	15.00	46.00	83.00	96.00	111.00	145.00	158.00	166.00	206.00
1947	30.00	77.00	140.00	144.00	162.00	201.00	215.00	209.00	241.00
1948	22.00	50.00	60.00	80.00	99.00	113.00	130.00	142.00	159.00
1949	14.00	59.00	98.00	106.00	109.00	126.00	138.00	155.00	185.00
1950	17.00	94.00	127.00	177.00	236.00	252.00	270.00	287.00	338.00
1951	10.00	48.00	94.00	106.00	113.00	144.00	159.00	171.00	193.00
1952	12.00	15.00	20.00	53.00	79.00	98.00	120.00	136.00	142.00
1953	22.00	23.00	62.00	97.00	111.00	117.00	123.00	134.00	175.00
1954	22.00	27.00	75.00	87.00	90.00	104.00	109.00	112.00	132.00
1955	14.00	16.00	27.00	34.00	37.00	42.00	47.00	56.00	81.00
1956	18.00	21.00	60.00	71.00	79.00	104.00	106.00	111.00	117.00
1957	9.00	11.00	44.00	59.00	68.00	77.00	97.00	111.00	148.00
1958	11.00	12.00	45.00	77.00	94.00	104.00	128.00	146.00	171.00
1959	15.00	31.00	100.00	106.00	113.00	122.00	125.00	127.00	161.00
1960	17.00	20.00	71.00	102.00	106.00	192.00	189.00	233.00	279.00
1961	14.00	40.00	112.00	126.00	156.00	174.00	192.00	204.00	229.00
1962	19.00	20.00	94.00	108.00	120.00	150.00	165.00	189.00	225.00
1963	10.00	16.00	69.00	95.00	111.00	126.00	129.00	142.00	176.00
1964	13.00	20.00	101.00	115.00	117.00	136.00	165.00	163.00	201.00
1965	77.00	127.00	195.00	199.00	261.00	341.00	424.00	449.00	473.00
1966	13.00	25.00	136.00	148.00	162.00	192.00	200.00	206.00	221.00
1967	7.50	11.00	97.00	128.00	168.00	181.00	207.00	219.00	262.00
1968	8.30	14.00	75.00	138.00	156.00	186.00	212.00	220.00	242.00
1969	20.00	30.00	103.00	110.00	138.00	161.00	177.00	201.00	262.00
1970	22.00	74.00	123.00	183.00	201.00	213.00	238.00	243.00	253.00
1971	11.00	15.00	51.00	89.00	114.00	129.00	158.00	151.00	171.00
1972	13.00	46.00	150.00	175.00	209.00	223.00	288.00	288.00	324.00
1973	18.00	103.00	168.00	177.00	192.00	208.00	228.00	264.00	327.00
1974	4.80	81.00	138.00	145.00	177.00	193.00	216.00	309.00	300.00
1975	17.00	55.00	113.00	154.00	165.00	176.00	195.00	208.00	237.00
1976	54.00	128.00	186.00	204.00	222.00	272.00	308.00	344.00	445.00
1977	33.00	47.00	93.00	115.00	144.00	196.00	223.00	270.00	335.00
1978	12.00	30.00	124.00	136.00	142.00	157.00	174.00	196.00	235.00
1979	14.00	16.00	108.00	132.00	144.00	153.00	163.00	182.00	219.00
1980	22.00	42.00	179.00	190.00	209.00	225.00	235.00	257.00	298.00
1981	144.00	148.00	167.00	176.00	195.00	213.00	223.00	253.00	264.00
1982	17.00	20.00	25.00	29.00	56.00	104.00	138.00	152.00	173.00
1983	10.00	45.00	86.00	124.00	157.00	170.00	183.00	208.00	235.00
1984	15.00	15.00	28.00	97.00	121.00	142.00	147.00	157.00	186.00
1985	17.00	19.00	105.00	143.00	178.00	206.00	212.00	238.00	282.00
1986	86.00	93.00	110.00	114.00	137.00	174.00	196.00	216.00	231.00
1987	31.00	32.00	33.00	36.00	46.00	76.00	92.00	89.00	113.00

02165000 REEDY RIVER NEAR WARE SHOALS
Location: Lat 342502, Long 820910. Laurens County
Period of record: Mar 1939 through Sep 1987
Drainage area: 236.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	48	48	144.00-1981	4.80-1974	22.18	555.20	23.56	3.7935	1.06238	0.02321
3	48	48	148.00-1981	11.00-1967	43.73	1116.24	33.41	1.4804	0.76403	0.10414
7	48	48	195.00-1965	20.00-1952	93.33	1954.10	44.21	0.4066	0.47363	0.29874
14	48	48	204.00-1976	29.00-1982	113.31	1989.41	44.60	0.1608	0.39363	0.32874
30	48	48	261.00-1965	37.00-1955	131.60	2695.99	51.92	0.3854	0.39454	0.32216
60	48	48	341.00-1965	42.00-1955	154.08	3401.82	58.33	0.6758	0.37853	0.35414
90	48	48	424.00-1965	47.00-1955	172.15	4491.83	67.02	1.1910	0.38933	0.34165
120	48	48	449.00-1965	56.00-1955	188.31	5474.22	73.99	1.0457	0.39290	0.34062
183	48	48	473.00-1965	81.00-1955	220.19	6431.86	80.20	1.0774	0.36423	0.36240

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	15	33	90	109	120	150	166	180	206
5	11	18	54	76	88	103	117	124	150
10	9.7	14	38	59	72	81	95	101	129
15	9.4	13	31	50	63	71	85	90	121
20	9.2	12	26	44	58	65	79	84	116
25	9.1	12	23	40	54	61	75	79	113
30	9.0	11	21	37	51	58	72	76	111
40	8.9	11	18	32	46	53	67	71	108
50	8.9	11	16	28	43	50	64	67	106
	LNPEARFF	GUMBEL3B	GUMBEL3A	GENSME	GENSME	LOGBOUGH	LNPEARFF	LOGBOUGH	GUMBEL3C

02165200 SOUTH RABON CREEK NEAR GRAY COURT
Location: Lat 343112, Long 820926. Laurens County
Period of record: Jan 1967 - Sep 1981
Drainage area: 29.50 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1968	17.00	17.00	18.00	19.00	20.00	23.00	25.00	26.00	29.00
1969	9.20	9.20	9.20	9.50	12.00	14.00	15.00	17.00	25.00
1970	13.00	14.00	14.00	14.00	15.00	17.00	18.00	20.00	22.00
1971	7.00	7.00	7.30	7.70	9.10	11.00	13.00	13.00	14.00
1972	15.00	15.00	16.00	17.00	18.00	19.00	26.00	26.00	29.00
1973	13.00	13.00	14.00	14.00	15.00	16.00	17.00	21.00	33.00
1974	14.00	14.00	15.00	16.00	18.00	20.00	22.00	31.00	39.00
1975	14.00	14.00	14.00	14.00	15.00	16.00	17.00	19.00	22.00
1976	16.00	16.00	17.00	18.00	19.00	22.00	24.00	27.00	30.00
1977	12.00	12.00	12.00	12.00	13.00	15.00	18.00	25.00	31.00
1978	8.50	8.70	9.00	9.40	11.00	11.00	12.00	13.00	18.00
1979	9.50	9.50	9.70	9.90	10.00	11.00	11.00	13.00	14.00
1980	14.00	14.00	15.00	16.00	19.00	19.00	22.00	24.00	26.00
1981	6.90	6.90	7.50	8.60	9.10	10.00	12.00	16.00	21.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	14	14	17.00-1968	6.90-1981	12.08	10.09	3.18	-0.2884	0.26299	-0.21437
3	14	14	17.00-1968	6.90-1981	12.16	10.19	3.19	-0.3351	0.26238	-0.28688
7	14	14	18.00-1968	7.30-1971	12.69	11.77	3.43	-0.2126	0.27026	-0.28240
14	14	14	19.00-1968	7.70-1971	13.22	12.90	3.59	-0.0193	0.27164	-0.31178
30	14	14	20.00-1968	9.10-1981	14.51	13.95	3.74	-0.0570	0.25734	-0.34971
60	14	14	23.00-1968	10.00-1981	16.00	16.86	4.11	0.0805	0.25661	-0.21972
90	14	14	26.00-1972	11.00-1979	18.00	24.14	4.91	0.1626	0.27297	-0.30727
120	14	14	31.00-1974	13.00-1979	20.79	32.03	5.66	0.0439	0.27226	-0.14659
183	14	14	39.00-1974	14.00-1979	25.21	48.45	6.96	0.0353	0.27607	0.19141

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	13	13	13	13	14	15	17	20	25
5	9.4	9.5	9.8	9.8	11	12	13	15	19
10	7.8	7.8	8.0	8.4	9.5	11	11	13	16
15	7.0	7.0	7.1	7.9	8.9	9.9	11	12	14
	GENSME	GENSME	GENSME	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	LOGBOUGH

02166970 NINETY SIX CREEK NEAR NINETY SIX
Location: Lat 340757, Long 815948. Greenwood County
Period of record: Oct 1980 through Sep 1987
Drainage area: 17.40 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1982	0.29	0.29	0.30	0.32	0.37	0.49	0.68	0.76	1.40
1983	0.51	0.53	0.58	0.59	0.70	0.84	1.80	1.80	2.20
1984	0.08	0.08	0.08	0.09	0.11	0.17	0.23	0.39	2.00
1985	0.70	0.71	0.77	0.91	1.00	1.30	1.40	1.70	3.40
1986	0.43	0.45	0.47	0.48	0.58	0.74	0.97	1.30	1.80
1987	0.29	0.30	0.33	0.36	0.49	0.72	1.19	2.10	2.80

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	6	6	0.70-1985	0.08-1984	0.38	0.04	0.19	0.0980	0.50845	-0.63279
3	6	6	0.71-1985	0.08-1984	0.39	0.04	0.20	0.0378	0.50819	-0.63762
7	6	6	0.77-1985	0.08-1984	0.42	0.05	0.22	0.0615	0.52019	-0.66319
14	6	6	0.91-1985	0.09-1984	0.46	0.06	0.25	0.4169	0.55360	-0.61834
30	6	6	1.00-1985	0.11-1984	0.54	0.08	0.28	0.1171	0.50844	-0.64192
60	6	6	1.30-1985	0.17-1984	0.71	0.12	0.34	0.1631	0.48313	-0.58993
90	6	6	1.80-1983	0.23-1984	1.05	0.25	0.50	-0.1467	0.48167	-0.84651
120	6	6	2.10-1987	0.39-1984	1.34	0.36	0.60	-0.3708	0.44713	-0.62437
183	6	6	3.40-1985	1.40-1982	2.27	0.44	0.66	0.4845	0.29116	-0.46242

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	0.36	0.37	0.39	0.43	0.51	0.67	0.98	1.4	2.2
5	0.16	0.17	0.17	0.17	0.23	0.32	0.48	0.84	1.5
10	0.08	0.08	0.08	0.08	0.11	0.18	0.26	0.45	1.2
	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL3B	GUMBEL1

02167000 SALUDA RIVER AT CHAPPELLS
Location: Lat 341040, Long 815140. Newberry County
Period of record: Oct 1926 through Sep 1987
Drainage area: 1360.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1943	148.00	461.00	693.00	728.00	806.00	845.00	953.00	998.00	1020.00
1944	420.00	643.00	791.00	815.00	834.00	902.00	926.00	978.00	1230.00
1945	162.00	511.00	770.00	806.00	806.00	862.00	890.00	914.00	1010.00
1946	341.00	453.00	730.00	907.00	941.00	1030.00	1080.00	1150.00	1340.00
1947	348.00	474.00	764.00	1160.00	1260.00	1330.00	1350.00	1380.00	1420.00
1948	402.00	545.00	694.00	1070.00	1130.00	1180.00	1210.00	1240.00	1290.00
1949	410.00	565.00	667.00	688.00	792.00	1060.00	1300.00	1450.00	1540.00
1950	457.00	612.00	990.00	1450.00	1630.00	1740.00	1880.00	1870.00	2160.00
1951	489.00	526.00	649.00	870.00	1030.00	1160.00	1200.00	1210.00	1230.00
1952	375.00	439.00	592.00	624.00	650.00	676.00	728.00	771.00	892.00
1953	312.00	328.00	714.00	911.00	909.00	950.00	992.00	1020.00	1060.00
1954	124.00	152.00	204.00	207.00	258.00	370.00	635.00	790.00	983.00
1955	47.00	68.00	184.00	189.00	202.00	256.00	296.00	358.00	503.00
1956	38.00	214.00	414.00	465.00	469.00	477.00	491.00	507.00	648.00
1957	43.00	239.00	342.00	383.00	406.00	511.00	594.00	685.00	772.00
1958	122.00	303.00	489.00	507.00	527.00	567.00	695.00	778.00	954.00
1959	146.00	362.00	572.00	629.00	703.00	767.00	824.00	837.00	978.00
1960	209.00	281.00	584.00	649.00	728.00	1020.00	1090.00	1240.00	1390.00
1961	429.00	506.00	782.00	853.00	940.00	1100.00	1210.00	1230.00	1300.00
1962	335.00	529.00	631.00	898.00	964.00	1080.00	1220.00	1460.00	1640.00
1963	341.00	397.00	413.00	460.00	540.00	588.00	764.00	881.00	1030.00
1964	318.00	452.00	567.00	635.00	754.00	906.00	971.00	1010.00	1140.00
1965	541.00	747.00	963.00	1190.00	1360.00	1710.00	1900.00	2140.00	2600.00
1966	395.00	558.00	694.00	735.00	797.00	1070.00	1230.00	1200.00	1330.00
1967	285.00	410.00	544.00	571.00	833.00	907.00	988.00	1150.00	1320.00
1968	103.00	129.00	268.00	451.00	506.00	788.00	1180.00	1230.00	1490.00
1969	83.00	192.00	259.00	433.00	552.00	770.00	853.00	1080.00	1350.00
1970	263.00	502.00	536.00	662.00	974.00	1130.00	1290.00	1390.00	1470.00
1971	143.00	241.00	286.00	308.00	473.00	650.00	756.00	806.00	858.00
1972	228.00	408.00	691.00	813.00	974.00	1090.00	1340.00	1320.00	1600.00
1973	142.00	268.00	447.00	511.00	851.00	1000.00	1180.00	1270.00	1650.00
1974	278.00	535.00	754.00	889.00	1180.00	1330.00	1550.00	1730.00	1720.00
1975	215.00	379.00	481.00	837.00	952.00	1140.00	1160.00	1310.00	1470.00
1976	386.00	395.00	765.00	996.00	1150.00	1400.00	1520.00	1740.00	2280.00
1977	312.00	381.00	728.00	821.00	869.00	983.00	1220.00	1480.00	1750.00
1978	237.00	321.00	399.00	500.00	502.00	662.00	747.00	911.00	1210.00
1979	272.00	348.00	541.00	648.00	779.00	901.00	938.00	984.00	1090.00
1980	345.00	537.00	896.00	974.00	1170.00	1450.00	1590.00	1720.00	1830.00
1981	136.00	344.00	443.00	535.00	569.00	635.00	772.00	945.00	1160.00
1982	23.00	42.00	87.00	110.00	200.00	346.00	402.00	426.00	482.00
1983	171.00	275.00	317.00	474.00	620.00	667.00	712.00	790.00	939.00
1984	192.00	294.00	401.00	441.00	520.00	617.00	637.00	644.00	845.00
1985	174.00	262.00	465.00	579.00	693.00	835.00	877.00	1020.00	1270.00
1986	93.00	250.00	340.00	411.00	508.00	536.00	597.00	655.00	762.00
1987	190.00	230.00	251.00	276.00	364.00	377.00	431.00	436.00	462.00

02167000 SALUDA RIVER AT CHAPPELLS
Location: Lat 341040, Long 815140. ´ Newberry County
Period of record: Oct 1926 through Sep 1987
Drainage area: 1360.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	45	45	541.00-1965	23.00-1982	249.40	17363.71	131.77	0.1609	0.52835	0.58138
3	45	45	747.00-1965	42.00-1982	380.18	23556.46	153.48	-0.0440	0.40371	0.52455
7	45	45	990.00-1950	87.00-1982	550.93	45281.22	212.79	-0.0937	0.38624	0.40736
14	45	45	1450.00-1950	110.00-1982	668.20	77398.74	278.21	0.3556	0.41635	0.37517
30	45	45	1630.00-1950	200.00-1982	770.56	92554.20	304.23	0.3597	0.39482	0.35756
60	45	45	1740.00-1950	256.00-1955	897.13	114015.98	337.66	0.3692	0.37638	0.43495
90	45	45	1900.00-1965	296.00-1955	1003.76	131147.47	362.14	0.3830	0.36079	0.43325
120	45	45	2140.00-1965	358.00-1955	1091.87	150679.36	388.17	0.3986	0.35551	0.41584
183	45	45	2600.00-1965	462.00-1987	1254.84	197549.24	444.47	0.6877	0.35420	0.36181

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	240	384	556	663	757	886	990	1060	1210
5	123	248	367	423	501	598	678	757	874
10	78	177	269	306	380	461	532	613	722
15	60	142	222	252	326	398	464	546	653
20	50	119	191	218	292	359	422	504	609
25	44	103	169	194	269	332	392	474	579
30	39	91	152	175	251	311	369	450	555
40	33	72	127	149	226	281	336	416	520
50	29	59	109	130	208	260	312	391	495
	LNPEARFF	GUMBEL3B	GUMBEL3B	GUMBEL3B	WEIBULL	WEIBULL	LOGBOUGH	POWTRAN	POWTRAN

02167500 SALUDA RIVER NEAR SILVERSTREET
Location: Lat 341109, Long 814341. Newberry County
Period of record: Oct 1926 - Jun 1966
Drainage area: 1620.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1943	346.00	505.00	732.00	760.00	865.00	903.00	1030.00	1060.00	1110.00
1944	460.00	649.00	803.00	826.00	850.00	920.00	934.00	991.00	1290.00
1945	282.00	531.00	824.00	850.00	841.00	892.00	906.00	929.00	1030.00
1946	327.00	600.00	777.00	987.00	1040.00	1120.00	1160.00	1250.00	1480.00
1947	413.00	516.00	811.00	1210.00	1290.00	1420.00	1490.00	1520.00	1550.00
1948	364.00	726.00	996.00	1110.00	1180.00	1220.00	1250.00	1300.00	1380.00
1949	560.00	661.00	667.00	697.00	819.00	1120.00	1470.00	1630.00	1720.00
1950	784.00	1030.00	1310.00	1500.00	1720.00	1830.00	2010.00	2030.00	2290.00
1951	656.00	716.00	961.00	1020.00	1180.00	1220.00	1270.00	1290.00	1310.00
1952	319.00	435.00	597.00	608.00	616.00	695.00	750.00	800.00	939.00
1953	375.00	420.00	801.00	949.00	963.00	996.00	1060.00	1090.00	1150.00
1954	160.00	200.00	240.00	244.00	302.00	438.00	739.00	881.00	1060.00
1955	95.00	99.00	195.00	201.00	212.00	262.00	298.00	368.00	535.00
1956	139.00	247.00	461.00	500.00	501.00	518.00	528.00	546.00	689.00
1957	122.00	268.00	359.00	405.00	429.00	548.00	634.00	726.00	820.00
1958	362.00	443.00	528.00	556.00	603.00	666.00	787.00	872.00	1050.00
1959	388.00	497.00	593.00	657.00	735.00	802.00	876.00	898.00	1080.00
1960	587.00	656.00	777.00	817.00	906.00	1200.00	1260.00	1490.00	1560.00
1961	396.00	578.00	809.00	896.00	967.00	1180.00	1300.00	1350.00	1400.00
1962	360.00	601.00	691.00	999.00	1110.00	1220.00	1330.00	1580.00	1790.00
1963	428.00	511.00	535.00	613.00	687.00	751.00	909.00	1020.00	1160.00
1964	403.00	631.00	767.00	816.00	933.00	1080.00	1160.00	1190.00	1330.00
1965	521.00	847.00	1070.00	1320.00	1520.00	1830.00	2080.00	2410.00	3060.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	23	23	784.00-1950	95.00-1955	384.65	26836.14	163.82	0.2985	0.42588	0.60097
3	23	23	1030.00-1950	99.00-1955	537.70	42006.21	204.95	-0.0166	0.38117	0.66295
7	23	23	1310.00-1950	195.00-1955	708.87	63510.90	252.01	-0.0026	0.35551	0.46009
14	23	23	1500.00-1950	201.00-1955	806.13	98253.59	313.45	0.0882	0.38884	0.40719
30	23	23	1720.00-1950	212.00-1955	881.26	126005.32	354.97	0.2886	0.40280	0.44528
60	23	23	1830.00-1950	262.00-1955	992.65	149397.79	386.52	0.3523	0.38938	0.53256
90	23	23	2080.00-1965	298.00-1955	1097.00	171785.91	414.47	0.5606	0.37782	0.55958
120	23	23	2410.00-1965	368.00-1955	1183.52	204006.16	451.67	0.7605	0.38163	0.50507
183	23	23	3060.00-1965	535.00-1955	1338.39	273007.28	522.50	1.5312	0.39039	0.38807

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	385	555	723	813	884	968	1060	1130	1250
5	247	370	497	536	572	659	739	797	922
10	175	263	373	391	414	513	592	649	786
15	139	208	310	321	338	444	523	582	726
20	115	172	270	276	290	401	481	540	689
25	98	145	240	244	256	370	450	511	663
	NORMAL	GUMBEL3B	GUMBEL3B	GUMBEL3B	GUMBEL3B	POWTRAN	POWTRAN	POWTRAN	LOGNORM

02169000 SALUDA RIVER NEAR COLUMBIA
Location: Lat 340050, Long 810517. Richland County
Period of record: Aug 1925 through Sep 1987
Drainage area: 2520.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1943	102.00	150.00	533.00	701.00	1230.00	1730.00	2220.00	2250.00	2410.00
1944	116.00	375.00	485.00	577.00	935.00	1070.00	1280.00	1620.00	2230.00
1945	108.00	244.00	352.00	544.00	645.00	1040.00	1180.00	1210.00	1760.00
1946	90.00	147.00	296.00	409.00	435.00	673.00	1190.00	1530.00	1890.00
1947	127.00	334.00	507.00	643.00	1030.00	1800.00	1840.00	2280.00	2620.00
1948	112.00	294.00	422.00	583.00	733.00	1000.00	1220.00	1490.00	2190.00
1949	95.00	452.00	834.00	933.00	1600.00	2240.00	2450.00	2770.00	2900.00
1950	167.00	503.00	643.00	696.00	1780.00	2160.00	2400.00	2430.00	3270.00
1951	130.00	200.00	655.00	813.00	911.00	1250.00	1710.00	1840.00	2130.00
1952	110.00	261.00	412.00	522.00	717.00	815.00	975.00	1220.00	1460.00
1953	141.00	171.00	314.00	432.00	536.00	743.00	960.00	1470.00	2190.00
1954	155.00	269.00	372.00	522.00	675.00	743.00	1050.00	1040.00	1770.00
1955	125.00	184.00	366.00	543.00	748.00	773.00	1070.00	1150.00	1260.00
1956	116.00	126.00	145.00	154.00	171.00	627.00	657.00	713.00	826.00
1957	150.00	192.00	344.00	436.00	579.00	666.00	710.00	747.00	1090.00
1958	181.00	323.00	365.00	458.00	527.00	606.00	842.00	1150.00	1670.00
1959	181.00	207.00	382.00	499.00	584.00	640.00	1210.00	1200.00	1730.00
1960	191.00	290.00	383.00	400.00	407.00	448.00	1120.00	1530.00	2090.00
1961	238.00	407.00	570.00	841.00	1460.00	1670.00	1910.00	1900.00	2160.00
1962	256.00	472.00	753.00	998.00	1730.00	2140.00	2360.00	2700.00	3140.00
1963	242.00	304.00	364.00	600.00	937.00	1680.00	1880.00	1870.00	2030.00
1964	248.00	283.00	575.00	937.00	1250.00	2020.00	2370.00	2470.00	2690.00
1965	284.00	932.00	1760.00	1990.00	2220.00	2660.00	3280.00	3870.00	4950.00
1966	335.00	367.00	571.00	643.00	938.00	1230.00	1550.00	1910.00	2430.00
1967	260.00	301.00	367.00	457.00	790.00	845.00	1070.00	1290.00	1620.00
1968	261.00	285.00	305.00	352.00	407.00	528.00	833.00	1400.00	2230.00
1969	268.00	297.00	366.00	542.00	834.00	987.00	1330.00	1770.00	2140.00
1970	373.00	378.00	478.00	850.00	1180.00	1530.00	1660.00	1930.00	2130.00
1971	116.00	121.00	199.00	238.00	767.00	936.00	1140.00	1340.00	1500.00
1972	449.00	500.00	522.00	888.00	1460.00	2250.00	2540.00	2710.00	3060.00
1973	525.00	618.00	672.00	861.00	1020.00	1920.00	2430.00	2770.00	2930.00
1974	426.00	428.00	436.00	448.00	544.00	901.00	1290.00	1820.00	2490.00
1975	430.00	438.00	529.00	580.00	854.00	1180.00	1320.00	1480.00	2300.00
1976	470.00	516.00	551.00	610.00	962.00	1810.00	1820.00	2110.00	3160.00
1977	456.00	685.00	1020.00	1120.00	1210.00	1530.00	2280.00	2520.00	2780.00
1978	275.00	324.00	418.00	479.00	573.00	1120.00	1390.00	1610.00	1740.00
1979	250.00	329.00	458.00	492.00	606.00	788.00	1040.00	1170.00	1550.00
1980	365.00	390.00	440.00	678.00	1090.00	2120.00	2320.00	2520.00	2580.00
1981	395.00	405.00	412.00	419.00	545.00	729.00	1200.00	1430.00	1840.00
1982	366.00	390.00	418.00	445.00	459.00	471.00	508.00	671.00	876.00
1983	408.00	417.00	438.00	490.00	609.00	836.00	1200.00	1580.00	1680.00
1984	339.00	361.00	410.00	442.00	482.00	842.00	1150.00	1590.00	1740.00
1985	433.00	447.00	412.00	466.00	844.00	1210.00	1370.00	1400.00	1960.00
1986	262.00	266.00	270.00	299.00	341.00	356.00	451.00	559.00	1150.00
1987	211.00	216.00	219.00	224.00	423.00	436.00	541.00	567.00	875.00

02169000 SALUDA RIVER NEAR COLUMBIA
Location: Lat 340050, Long 810517. Richland County
Period of record: Aug 1925 through Sep 1987
Drainage area: 2520.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	45	45	525.00-1973	90.00-1946	251.96	15335.46	123.84	0.4452	0.49150	0.75904
3	45	45	932.00-1965	121.00-1971	346.64	23266.27	152.53	1.3453	0.44003	0.22399
7	45	45	1760.00-1965	145.00-1956	483.18	62748.41	250.50	3.0988	0.51844	0.19930
14	45	45	1990.00-1965	154.00-1956	605.64	87121.07	295.16	2.3276	0.48735	0.21725
30	45	45	2220.00-1965	171.00-1956	861.73	180581.00	424.95	1.0914	0.49313	0.34708
60	45	45	2660.00-1965	356.00-1986	1194.42	356995.53	597.49	0.6476	0.50023	0.38675
90	45	45	3280.00-1965	451.00-1986	1473.71	408508.29	639.15	0.6666	0.43370	0.43510
120	45	45	3870.00-1965	559.00-1986	1702.16	463657.33	680.92	0.6875	0.40004	0.42220
183	45	45	4950.00-1965	826.00-1956	2115.93	563818.95	750.88	1.0159	0.35487	0.40534

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	233	327	434	533	766	1010	1280	1600	2050
5	142	217	312	382	505	711	958	1100	1480
10	104	172	264	327	406	556	791	886	1220
15	86	152	244	304	364	478	708	790	1100
20	75	140	231	291	339	427	653	731	1030
25	68	131	222	281	322	390	613	688	980
30	62	125	216	274	309	360	581	656	942
40	53	116	206	264	290	316	534	608	885
50	47	109	200	257	277	283	498	573	844
	GUMBEL1	LOGBOUGH	POWTRAN	LNPEARDI	LOGNORM	GENSME	GENSME	GUMBEL1	LNPEARFF

02169500 CONGAREE RIVER AT COLUMBIA
Location: Lat 335935, Long 810300. Lexington County
Period of record: Oct 1939 through Sep 1987
Drainage area: 7850.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1941	850.00	1450.00	1770.00	1990.00	2650.00	2900.00	3150.00	3460.00	5340.00
1942	1040.00	2190.00	2920.00	3050.00	3520.00	3750.00	4440.00	5480.00	5600.00
1943	1910.00	2900.00	3650.00	3890.00	4260.00	4870.00	5220.00	5610.00	6300.00
1944	2150.00	2910.00	3420.00	4400.00	4450.00	4940.00	5040.00	5280.00	6010.00
1945	1430.00	2480.00	3560.00	3930.00	4510.00	5180.00	5420.00	5630.00	5670.00
1946	1810.00	2450.00	3190.00	3680.00	4000.00	4170.00	4990.00	5390.00	7660.00
1947	2350.00	3630.00	4190.00	5500.00	5870.00	6830.00	7000.00	7200.00	7610.00
1948	1840.00	2450.00	3230.00	4040.00	4410.00	5120.00	5270.00	5510.00	5780.00
1949	1840.00	2630.00	3000.00	4060.00	5110.00	5870.00	6790.00	7100.00	7130.00
1950	2860.00	4200.00	5090.00	5370.00	6410.00	7470.00	8200.00	8420.00	10000.00
1951	2380.00	2970.00	4580.00	5040.00	5290.00	5850.00	6120.00	6220.00	6550.00
1952	1480.00	1920.00	3050.00	3390.00	3600.00	4060.00	4410.00	4660.00	4810.00
1953	1300.00	2340.00	2990.00	4310.00	5320.00	5570.00	5660.00	5880.00	6300.00
1954	1380.00	2630.00	3520.00	3680.00	3850.00	4350.00	4670.00	4850.00	4930.00
1955	662.00	688.00	964.00	1250.00	1660.00	2140.00	2470.00	2680.00	2910.00
1956	890.00	1090.00	1310.00	1370.00	1760.00	2240.00	2220.00	2370.00	2830.00
1957	770.00	1290.00	1880.00	2080.00	2300.00	2500.00	2620.00	2680.00	3130.00
1958	1350.00	2110.00	2650.00	3070.00	3410.00	3950.00	4310.00	5090.00	5740.00
1959	1070.00	2040.00	2720.00	3380.00	3460.00	4280.00	4510.00	4580.00	5660.00
1960	2160.00	3130.00	3550.00	4200.00	5060.00	7740.00	4860.00	8040.00	8650.00
1961	2560.00	3900.00	4820.00	4980.00	5160.00	5720.00	5940.00	6430.00	6730.00
1962	2280.00	2820.00	3190.00	3390.00	4030.00	4700.00	5250.00	6200.00	7720.00
1963	2590.00	3040.00	3310.00	4000.00	4520.00	5160.00	5320.00	5560.00	5870.00
1964	1860.00	2600.00	2840.00	3210.00	4340.00	4800.00	4880.00	5100.00	6020.00
1965	3220.00	4070.00	5170.00	5600.00	6040.00	7220.00	8690.00	10000.00	12900.00
1966	3430.00	3470.00	3610.00	3670.00	4160.00	5140.00	5480.00	5850.00	6540.00
1967	1520.00	1940.00	2580.00	3600.00	4400.00	4490.00	4760.00	5180.00	5630.00
1968	2630.00	2960.00	3290.00	3530.00	3700.00	4510.00	5260.00	6230.00	8120.00
1969	1320.00	1750.00	1950.00	2400.00	2730.00	3240.00	3820.00	4690.00	5480.00
1970	2450.00	2910.00	3540.00	5190.00	6000.00	6490.00	6740.00	7100.00	7230.00
1971	1280.00	1600.00	1740.00	1910.00	2540.00	3570.00	4150.00	4640.00	4810.00
1972	1080.00	3650.00	4310.00	4540.00	6360.00	6640.00	7860.00	7750.00	8510.00
1973	2460.00	3140.00	3540.00	4110.00	4580.00	5040.00	5390.00	6330.00	8150.00
1974	3110.00	3310.00	3420.00	3530.00	3690.00	4320.00	5490.00	6620.00	7480.00
1975	2650.00	3180.00	3350.00	3590.00	3680.00	4370.00	5220.00	5920.00	6600.00
1976	3230.00	4200.00	5770.00	6460.00	7390.00	8650.00	9370.00	9640.00	10600.00
1977	2110.00	3240.00	3720.00	4640.00	5140.00	5450.00	6550.00	7820.00	8100.00
1978	1240.00	1690.00	1870.00	2110.00	2920.00	3190.00	4210.00	4430.00	5070.00
1979	677.00	1100.00	1600.00	1930.00	2380.00	2700.00	3300.00	3720.00	4530.00
1980	1850.00	2640.00	3060.00	3740.00	5110.00	6250.00	7040.00	7600.00	7950.00
1981	1250.00	1780.00	2460.00	2810.00	3190.00	3780.00	4800.00	5780.00	6050.00
1982	718.00	1210.00	1710.00	1930.00	2190.00	2720.00	2860.00	3050.00	3120.00
1983	902.00	1410.00	1960.00	2300.00	2580.00	3090.00	3200.00	3960.00	4840.00
1984	1260.00	1750.00	2210.00	2620.00	3190.00	3490.00	3500.00	3820.00	4600.00
1985	1040.00	1790.00	2520.00	2880.00	3200.00	3990.00	4330.00	4720.00	5920.00
1986	696.00	1730.00	2080.00	2270.00	2450.00	2620.00	3060.00	3540.00	4670.00
1987	967.00	1300.00	1560.00	1640.00	1840.00	2030.00	2490.00	2690.00	4070.00

02169500 CONGAREE RIVER AT COLUMBIA
Location: Lat 335935, Long 810300. Lexington County
Period of record: Oct 1939 through Sep 1987
Drainage area: 7850.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	47	47	3430.00-1966	662.00-1955	1742.60	593879.35	770.64	0.4348	0.44223	0.52135
3	47	47	4200.00-1950	688.00-1955	2461.23	786613.03	886.91	0.1078	0.36035	0.43141
7	47	47	5770.00-1976	964.00-1955	3030.09	1109247.99	1053.21	0.3629	0.34758	0.34724
14	47	47	6460.00-1976	1250.00-1955	3494.89	1430033.50	1195.84	0.1610	0.34217	0.32664
30	47	47	7390.00-1976	1660.00-1955	4008.72	1790772.84	1338.20	0.2859	0.33382	0.28330
60	47	47	8650.00-1976	2030.00-1987	4620.21	2393504.21	1547.10	0.4431	0.33485	0.29954
90	47	47	9370.00-1976	2220.00-1956	5028.30	2610916.25	1615.83	0.5305	0.32135	0.34709
120	47	47	10000.00-1965	2370.00-1956	5542.55	3013448.80	1735.93	0.3598	0.31320	0.33900
183	47	47	12900.00-1965	2830.00-1956	6296.17	3820274.69	1954.55	0.8237	0.31044	0.28294

Low flow frequency array table

Return Period	1 Day	Consecutive days: 3	7	14	30	60	90	120	183
2	1620	2480	3030	3500	3960	4510	4870	5430	6080
5	1060	1680	2140	2450	2820	3240	3640	4050	4800
10	821	1280	1680	1930	2280	2660	3080	3400	4300
15	713	1090	1450	1690	2020	2400	2820	3090	4110
20	646	968	1300	1530	1860	2230	2660	2900	3990
25	598	882	1190	1420	1750	2110	2550	2760	3920
30	561	817	1100	1340	1660	2020	2460	2650	3870
40	507	721	965	1220	1530	1890	2330	2490	3790
50	468	653	867	1130	1440	1790	2230	2370	3740
	GUMBEL1	LOGBOUGH	NORMAL	GUMBEL3C	LOGBOUGH	LOGBOUGH	POWTRAN	POWTRAN	GUMBEL3A

02169550 CONGAREE CREEK AT CAYCE
Location: Lat 335615, Long 810440. Lexington County
Period of record: Oct 1959 - Sep 1980
Drainage area: 122.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1961	163.00	165.00	171.00	176.00	188.00	193.00	201.00	206.00	210.00
1962	151.00	153.00	159.00	171.00	176.00	181.00	192.00	207.00	218.00
1963	153.00	154.00	156.00	158.00	160.00	169.00	175.00	177.00	179.00
1964	126.00	126.00	127.00	128.00	137.00	142.00	149.00	154.00	164.00
1965	160.00	161.00	167.00	174.00	180.00	186.00	208.00	231.00	258.00
1966	183.00	185.00	191.00	204.00	215.00	226.00	233.00	235.00	248.00
1967	146.00	146.00	148.00	149.00	154.00	165.00	170.00	171.00	174.00
1968	121.00	136.00	140.00	144.00	152.00	167.00	180.00	185.00	196.00
1969	118.00	119.00	122.00	129.00	136.00	141.00	145.00	157.00	163.00
1970	127.00	128.00	130.00	136.00	145.00	146.00	149.00	153.00	153.00
1971	111.00	113.00	115.00	120.00	128.00	142.00	145.00	153.00	158.00
1972	130.00	130.00	130.00	136.00	155.00	184.00	196.00	206.00	212.00
1973	148.00	149.00	150.00	156.00	163.00	165.00	171.00	178.00	191.00
1974	172.00	172.00	174.00	176.00	183.00	185.00	196.00	199.00	220.00
1975	120.00	120.00	124.00	127.00	139.00	142.00	149.00	150.00	159.00
1976	164.00	165.00	169.00	172.00	177.00	191.00	196.00	198.00	206.00
1977	137.00	139.00	142.00	147.00	150.00	158.00	175.00	188.00	190.00
1978	126.00	128.00	129.00	131.00	134.00	148.00	153.00	159.00	162.00
1979	112.00	113.00	117.00	124.00	128.00	142.00	148.00	151.00	151.00
1980	135.00	136.00	139.00	142.00	156.00	179.00	187.00	192.00	194.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	20	20	183.00-1966	111.00-1971	140.15	416.63	20.41	0.3886	0.14564	0.23327
3	20	20	185.00-1966	113.00-1979	141.90	403.29	20.08	0.3718	0.14152	0.20436
7	20	20	191.00-1966	115.00-1971	145.00	439.90	20.97	0.4367	0.14465	0.23480
14	20	20	204.00-1966	120.00-1971	150.00	488.10	22.09	0.6367	0.14729	0.23379
30	20	20	215.00-1966	128.00-1979	157.80	496.56	22.28	0.7213	0.14121	0.22362
60	20	20	226.00-1966	141.00-1969	167.60	505.54	22.48	0.6322	0.13415	0.05423
90	20	20	233.00-1966	145.00-1971	175.90	598.79	24.47	0.3876	0.13911	0.08427
120	20	20	235.00-1966	150.00-1975	182.50	671.95	25.92	0.3941	0.14204	0.08856
183	20	20	258.00-1965	151.00-1979	190.30	915.21	30.25	0.5921	0.15897	0.14208

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	137	139	142	147	155	164	172	179	186
5	121	123	125	129	137	146	153	158	162
10	114	116	118	122	129	139	145	149	152
15	111	113	115	118	126	135	141	145	147
20	109	111	113	116	124	133	139	143	144
	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1

02169570 GILLS CREEK AT COLUMBIA
Location: Lat 335922, Long 805828. Richland County
Period of record: Sep 1966 through Sep 1987
Drainage area: 59.60 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1968	11.00	13.00	13.00	14.00	31.00	39.00	51.00	55.00	66.00
1969	11.00	11.00	12.00	13.00	15.00	20.00	29.00	37.00	43.00
1970	12.00	15.00	18.00	23.00	31.00	33.00	37.00	39.00	42.00
1971	13.00	13.00	13.00	15.00	17.00	25.00	26.00	30.00	38.00
1972	15.00	21.00	23.00	42.00	56.00	66.00	69.00	79.00	90.00
1973	14.00	14.00	15.00	16.00	18.00	20.00	27.00	34.00	44.00
1974	22.00	23.00	24.00	25.00	31.00	37.00	43.00	44.00	57.00
1975	11.00	11.00	11.00	12.00	12.00	15.00	22.00	32.00	33.00
1976	21.00	22.00	24.00	28.00	36.00	53.00	55.00	61.00	75.00
1977	18.00	18.00	19.00	20.00	23.00	27.00	35.00	49.00	57.00
1978	12.00	12.00	12.00	12.00	17.00	27.00	31.00	35.00	41.00
1979	9.40	9.50	9.80	9.90	10.00	11.00	13.00	17.00	19.00
1980	19.00	19.00	20.00	22.00	27.00	55.00	62.00	61.00	72.00
1981	9.80	9.90	9.90	10.00	12.00	20.00	19.00	23.00	41.00
1982	12.00	12.00	12.00	12.00	13.00	15.00	19.00	27.00	44.00
1983	11.00	11.00	12.00	17.00	23.00	25.00	32.00	36.00	49.00
1984	1.60	1.70	1.90	2.30	3.30	7.00	11.00	16.00	24.00
1985	6.70	6.90	7.20	7.90	12.00	15.00	19.00	27.00	40.00
1986	4.10	4.40	5.20	8.80	13.00	22.00	26.00	37.00	34.00
1987	3.60	3.60	3.80	4.10	5.60	6.00	8.80	19.00	62.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	20	20	22.00-1974	1.60-1984	11.86	28.22	5.31	0.0565	0.44792	0.39033
3	20	20	23.00-1974	1.70-1984	12.55	33.50	5.79	0.0676	0.46120	0.33530
7	20	20	24.00-1974	1.90-1984	13.29	39.22	6.26	0.1588	0.47125	0.27749
14	20	20	42.00-1972	2.30-1984	15.70	79.16	8.90	1.1537	0.56669	0.07574
30	20	20	56.00-1972	3.30-1984	20.30	145.18	12.05	1.1868	0.59369	-0.12358
60	20	20	66.00-1972	6.00-1987	26.90	248.49	15.76	0.9646	0.58601	-0.22917
90	20	20	69.00-1972	8.80-1987	31.74	268.34	16.38	0.7458	0.51611	-0.22413
120	20	20	79.00-1972	16.00-1984	37.90	253.49	15.92	0.8375	0.42009	-0.15673
183	20	20	90.00-1972	19.00-1979	48.55	296.95	17.23	0.5944	0.35494	-0.27065

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	12	12	12	14	16	22	29	36	44
5	7.3	7.7	7.7	8.2	11	15	17	23	35
10	4.8	5.2	5.3	5.8	8.2	11	13	18	29
15	3.5	4.0	4.3	4.8	6.8	8.7	11	15	27
20	2.7	3.2	3.7	4.2	5.9	7.3	9.8	14	25
	GUMBEL3B	GENSME	GUMBEL1	POWTRAN	GENSME	GENSME	LOGBOUGH	GUMBEL1	GENSME

02169625 CONGAREE RIVER WEST OF WISE LAKE NEAR GADSDEN
Location: Lat 334838, Long 805202. Richland County
Period of record: Apr 1981 through Sep 1987
Drainage area: 8290.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1983	1530.00	1790.00	2330.00	2640.00	3010.00	0.00	0.00	0.00	0.00
1984	1740.00	1820.00	2580.00	2700.00	3310.00	0.00	0.00	0.00	0.00
1985	1940.00	2280.00	3260.00	3580.00	3880.00	0.00	0.00	0.00	0.00
1986	1520.00	1850.00	2110.00	2360.00	2550.00	0.00	0.00	0.00	0.00
1987	1260.00	1300.00	1520.00	1600.00	1760.00	0.00	0.00	0.00	0.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	5	5	1940.00-1985	1260.00-1987	1598.00	65520.00	255.97	0.0860	0.16018	0.18788
3	5	5	2280.00-1985	1300.00-1987	1808.00	120770.00	347.52	-0.2569	0.19221	0.00593
7	5	5	3260.00-1985	1520.00-1987	2360.00	406850.00	637.85	0.2108	0.27027	0.15449
14	5	5	3580.00-1985	1600.00-1987	2576.00	506680.00	711.81	0.0860	0.27633	0.10923
30	5	5	3880.00-1985	1760.00-1987	2902.00	640670.00	800.42	-0.4293	0.27582	0.34490

Low flow frequency array table

Return Period	1 Day	3	7	14	30	60	90	120	183
		Consecutive days							
2	1570	1770	2290	2490	3040	0.00	0.00	0.00	0.00
5	1300	1400	1610	1740	2230	0.00	0.00	0.00	0.00
	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL3B				

02169630 BIG BEAVER CREEK NEAR ST. MATTHEWS
Location: Lat 334412, Long 805730. Calhoun County
Period of record: Jul 1966 through Sep 1987
Drainage area: 10.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1968	5.40	5.60	5.90	6.20	6.70	7.30	8.00	8.10	8.30
1969	6.10	6.20	6.20	6.50	7.20	7.80	8.20	8.40	9.00
1970	5.50	5.60	5.70	6.50	7.30	8.00	8.40	8.80	9.60
1971	4.70	4.80	4.90	5.00	5.50	5.50	6.20	6.80	7.20
1972	6.60	7.40	8.20	9.00	11.00	12.00	14.00	16.00	19.00
1973	7.00	7.00	7.10	8.20	10.00	11.00	13.00	13.00	14.00
1974	9.20	9.40	9.60	9.70	10.00	12.00	12.00	13.00	14.00
1975	8.40	8.50	8.50	8.60	9.20	10.00	10.00	11.00	12.00
1976	10.00	10.00	10.00	10.00	12.00	13.00	13.00	13.00	14.00
1977	8.00	8.00	8.20	8.20	8.80	9.00	9.60	10.00	12.00
1978	5.10	5.30	5.40	5.60	6.30	8.00	8.30	8.60	8.90
1979	6.20	6.80	7.00	7.10	7.20	7.60	8.20	8.90	9.60
1980	9.00	9.30	11.00	11.00	12.00	15.00	15.00	15.00	16.00
1981	7.00	7.00	7.70	8.20	8.60	9.10	9.20	9.80	11.00
1982	4.50	4.50	4.90	5.10	5.80	7.10	7.40	7.70	8.60
1983	5.50	5.60	5.80	6.30	7.50	8.40	8.60	8.60	9.00
1984	6.50	6.60	6.80	7.30	7.90	8.40	8.90	9.20	9.60
1985	10.00	10.00	11.00	11.00	11.00	11.00	12.00	12.00	13.00
1986	6.40	6.50	6.60	6.60	6.70	7.50	7.70	8.30	8.50
1987	4.70	4.70	4.80	4.90	5.10	5.60	6.00	6.30	6.80

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	20	20	10.00-1976	4.50-1982	6.79	2.93	1.71	0.5399	0.25218	0.32148
3	20	20	10.00-1976	4.50-1982	6.94	2.93	1.71	0.4253	0.24671	0.29479
7	20	20	11.00-1980	4.80-1987	7.27	3.67	1.92	0.5828	0.26367	0.18264
14	20	20	11.00-1980	4.90-1987	7.55	3.45	1.86	0.3652	0.24600	0.16389
30	20	20	12.00-1976	5.10-1987	8.29	4.33	2.08	0.3510	0.25095	0.14540
60	20	20	15.00-1980	5.50-1971	9.17	5.86	2.42	0.6656	0.26407	0.08558
90	20	20	15.00-1980	6.00-1987	9.69	6.37	2.52	0.6160	0.26060	0.11835
120	20	20	16.00-1972	6.30-1987	10.13	6.91	2.63	0.7117	0.25964	0.17385
183	20	20	19.00-1972	6.80-1987	11.01	9.58	3.10	0.8655	0.28130	0.16044

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	6.5	6.7	7.0	7.3	8.0	8.4	9.3	9.3	9.6
5	5.2	5.3	5.5	5.8	6.3	7.2	7.3	8.0	8.5
10	4.6	4.8	4.8	5.2	5.6	6.6	6.6	7.4	7.9
15	4.3	4.5	4.5	4.9	5.3	6.2	6.2	7.1	7.6
20	4.2	4.3	4.3	4.7	5.1	6.0	6.0	6.9	7.4
	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GENSME	GUMBEL1	GENSME	GENSME

02169670 CEDAR CREEK BELOW MYERS CREEK NEAR HOPKINS
Location: Lat 335023, Long 805138. Richland County
Period of record: Nov 1980 - May 1986
Drainage area: 66.90 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1982	7.30	8.80	12.00	17.00	19.00	23.00	26.00	30.00	33.00
1983	4.20	4.30	4.60	10.00	20.00	28.00	32.00	34.00	42.00
1984	9.10	12.00	17.00	20.00	24.00	28.00	30.00	32.00	36.00
1985	15.00	18.00	25.00	27.00	31.00	35.00	36.00	39.00	47.00
1986	5.20	5.30	5.90	13.00	21.00	23.00	28.00	33.00	36.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	5	5	15.00-1985	4.20-1983	8.16	14.57	3.82	0.8349	0.46778	-0.22135
3	5	5	18.00-1985	4.30-1983	9.68	24.70	4.97	0.5669	0.51344	-0.23407
7	5	5	25.00-1985	4.60-1983	12.90	56.38	7.51	0.4369	0.58209	-0.25394
14	5	5	27.00-1985	10.00-1983	17.40	34.64	5.89	0.4040	0.33825	-0.21177
30	5	5	31.00-1985	19.00-1982	23.00	18.80	4.34	1.0158	0.18852	-0.01232
60	5	5	35.00-1985	23.00-1986	27.40	19.44	4.41	0.6278	0.16092	-0.49315
90	5	5	36.00-1985	26.00-1982	30.40	11.84	3.44	0.3959	0.11319	-0.60945
120	5	5	39.00-1985	30.00-1982	33.60	9.04	3.01	0.7841	0.08948	-0.40251
183	5	5	47.00-1985	33.00-1982	38.80	25.36	5.04	0.5405	0.12979	-0.77829

Low flow frequency array table

Return Period	1 Day	Consecutive days: 3	7	14	30	60	90	120	183
2	7.7	9.1	12	17	22	27	30	33	38
5	3.7	3.8	4.0	10	19	22	26	30	33
	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	LNPEARDI	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1

02170000 SANTEE RIVER AT FERGUSON
Location: Lat 332615, Long 801620. Orangeburg County
Period of record: Oct 1907 - Sep 1941
Drainage area: 14600.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1909	9430.00	9620.00	10600.00	11300.00	12500.00	15100.00	16400.00	16700.00	20700.00
1910	7340.00	8330.00	9050.00	9160.00	9650.00	10800.00	11600.00	12200.00	14300.00
1911	5030.00	5200.00	5490.00	5900.00	7320.00	8430.00	11200.00	11200.00	12000.00
1912	3520.00	3600.00	4320.00	4500.00	5460.00	5870.00	5990.00	6580.00	8160.00
1913	6340.00	6790.00	7030.00	7900.00	9530.00	11800.00	13200.00	14200.00	14100.00
1914	6100.00	6460.00	6600.00	7310.00	9360.00	10600.00	11200.00	11300.00	12000.00
1915	4280.00	4740.00	4950.00	5010.00	5650.00	6910.00	7930.00	8340.00	8550.00
1916	5230.00	5590.00	6300.00	7090.00	9870.00	11400.00	12000.00	12400.00	12700.00
1917	5330.00	5590.00	6930.00	6940.00	7550.00	8570.00	9270.00	9680.00	11500.00
1918	4730.00	5290.00	6230.00	6530.00	6730.00	6950.00	7780.00	8610.00	10400.00
1919	3480.00	3580.00	3740.00	4510.00	5820.00	7430.00	9820.00	9480.00	10500.00
1920	4120.00	4530.00	5080.00	5390.00	5870.00	7980.00	8300.00	11000.00	13600.00
1921	6950.00	7170.00	9240.00	9690.00	10400.00	13300.00	14900.00	17200.00	18100.00
1922	4730.00	5350.00	6600.00	7030.00	8580.00	9850.00	10800.00	11700.00	13000.00
1923	4980.00	5800.00	7310.00	7550.00	8400.00	11100.00	11000.00	11500.00	14200.00
1924	4980.00	5530.00	6540.00	6760.00	7280.00	8400.00	9550.00	11300.00	12100.00
1925	5600.00	6430.00	7400.00	7630.00	8790.00	13000.00	17400.00	17300.00	20000.00
1926	2630.00	2750.00	3120.00	3210.00	3370.00	3540.00	4090.00	4750.00	5630.00
1927	3270.00	3700.00	4620.00	4700.00	4740.00	5140.00	5860.00	6390.00	7110.00
1928	3510.00	3960.00	4710.00	4910.00	5200.00	5780.00	6010.00	6480.00	7960.00
1929	9340.00	10100.00	11700.00	12100.00	13200.00	14200.00	15300.00	16000.00	25500.00
1930	8470.00	9300.00	10300.00	10500.00	11800.00	14400.00	16000.00	17600.00	21800.00
1931	3160.00	3310.00	3670.00	4220.00	4780.00	5290.00	5490.00	6570.00	7990.00
1932	3450.00	3660.00	3810.00	3950.00	4080.00	4850.00	6990.00	9290.00	10500.00
1933	6780.00	8130.00	9350.00	10400.00	11100.00	12200.00	12400.00	13200.00	13800.00
1934	4380.00	5450.00	6730.00	7270.00	7690.00	8270.00	8540.00	8970.00	10800.00
1935	5320.00	7370.00	10200.00	11000.00	11700.00	12400.00	12600.00	13700.00	14200.00
1936	6300.00	6950.00	7400.00	8420.00	9490.00	11100.00	11800.00	12500.00	14500.00
1937	7500.00	9240.00	11600.00	11700.00	11900.00	12400.00	13200.00	14200.00	17600.00
1938	7620.00	8410.00	9760.00	10300.00	10400.00	11100.00	13500.00	14000.00	16700.00
1939	4220.00	5080.00	6700.00	6920.00	6900.00	7430.00	8080.00	8510.00	9940.00
1940	3910.00	4640.00	5770.00	5870.00	6070.00	6710.00	6990.00	7380.00	9230.00
1941	2970.00	3530.00	4010.00	4390.00	4940.00	5460.00	6150.00	7020.00	10500.00

02170000 SANTEE RIVER AT FERGUSON
Location: Lat 332615, Long 801620. Orangeburg County
Period of record: Oct 1907 - Sep 1941
Drainage area: 14600.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	33	33	9430.00-1909	2630.00-1926	5303.03	3350396.80	1830.41	0.6933	0.34516	0.24946
3	33	33	10100.00-1929	2750.00-1926	5914.55	4104925.60	2026.06	0.4866	0.34256	0.25666
7	33	33	11700.00-1929	3120.00-1926	6874.55	5845000.60	2417.64	0.4355	0.35168	0.23341
14	33	33	12100.00-1929	3210.00-1926	7274.55	6251594.30	2500.32	0.3764	0.34371	0.24118
30	33	33	13200.00-1929	3370.00-1926	8064.24	7170868.90	2677.85	0.1595	0.33206	0.18569
60	33	33	15100.00-1909	3540.00-1926	9326.06	10021449.60	3165.67	0.0509	0.33944	0.09865
90	33	33	17400.00-1925	4090.00-1926	10343.64	12360405.10	3515.74	0.1986	0.33989	-0.01348
120	33	33	17600.00-1930	4750.00-1926	11128.79	12680917.20	3561.03	0.2027	0.31998	0.05311
183	33	33	25500.00-1929	5630.00-1926	13020.30	20427240.50	4519.65	0.8873	0.34712	0.13649

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	5020	5600	6500	6890	7900	9190	10200	11000	12300
5	3650	4080	4690	5010	5680	6520	7240	7980	9240
10	3060	3440	3920	4220	4680	5270	5800	6530	7950
15	2800	3140	3570	3860	4230	4700	5130	5860	7380
20	2640	2960	3350	3630	3970	4350	4720	5440	7030
25	2520	2830	3200	3470	3780	4110	4440	5150	6780
30	2430	2730	3080	3350	3640	3920	4220	4930	6590
40	2300	2590	2900	3170	3440	3660	3900	4610	6310
	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL3A	GUMBEL3A	GUMBEL3B	GUMBEL3B	POWTRAN

02170500 LAKES MARION-MOULTRIE DIVERSION CANAL NR PINEVILLE
Location: Lat 332314, Long 800825. Berkeley County
Period of record:
Drainage area: 0.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1945	8290.00	8860.00	9510.00	9580.00	9810.00	10400.00	10600.00	10900.00	11200.00
1946	4520.00	6090.00	6640.00	7160.00	7600.00	8320.00	8980.00	9380.00	11000.00
1947	5320.00	7040.00	7500.00	8290.00	9300.00	11200.00	11300.00	11500.00	12200.00
1948	6630.00	7080.00	7610.00	8050.00	8270.00	9730.00	9950.00	10200.00	10100.00
1949	6130.00	7190.00	8960.00	10200.00	11400.00	12400.00	12800.00	12900.00	13000.00
1950	8760.00	9180.00	11700.00	12100.00	12700.00	13500.00	14200.00	14700.00	17300.00
1951	5830.00	6740.00	8650.00	8750.00	9320.00	10100.00	10300.00	10500.00	11000.00
1952	4360.00	4500.00	4890.00	5050.00	5360.00	6230.00	6890.00	7430.00	8240.00
1953	5570.00	6160.00	8410.00	9580.00	10500.00	11100.00	11500.00	11600.00	11900.00
1954	1170.00	2580.00	4740.00	5850.00	6560.00	7620.00	8570.00	9370.00	9090.00
1955	578.00	1140.00	1420.00	1610.00	2970.00	3150.00	3340.00	3670.00	4470.00
1956	850.00	2020.00	3350.00	3840.00	4210.00	4340.00	5020.00	5830.00	5940.00
1957	61.00	142.00	1620.00	2480.00	3080.00	3430.00	4160.00	4780.00	5750.00
1958	3060.00	3840.00	4690.00	5630.00	5890.00	6340.00	6850.00	7630.00	9380.00
1959	133.00	542.00	3360.00	5130.00	6250.00	7320.00	7560.00	7990.00	9340.00
1960	3330.00	3900.00	5000.00	7450.00	10500.00	12200.00	14000.00	15400.00	16100.00
1961	5690.00	6680.00	7670.00	8190.00	8610.00	9390.00	9910.00	10600.00	11100.00
1962	4830.00	5680.00	6750.00	7020.00	7170.00	7760.00	8810.00	10700.00	12800.00
1963	2200.00	2440.00	3640.00	4580.00	5110.00	5820.00	6570.00	7330.00	9060.00
1964	1130.00	2160.00	2620.00	4250.00	5180.00	5740.00	6180.00	7050.00	8900.00
1965	2190.00	3040.00	5240.00	6600.00	9230.00	10800.00	14300.00	16100.00	19100.00
1966	7170.00	7330.00	7930.00	8770.00	9990.00	10800.00	11000.00	11000.00	12100.00
1967	628.00	1500.00	2880.00	4970.00	7690.00	8040.00	8600.00	8940.00	9680.00
1968	2770.00	2890.00	4170.00	5640.00	6310.00	7350.00	7970.00	9050.00	11200.00
1969	500.00	1550.00	2600.00	3430.00	4220.00	5450.00	7090.00	8430.00	9810.00
1970	943.00	1600.00	2190.00	3220.00	5380.00	9630.00	10700.00	11000.00	11800.00
1971	950.00	2490.00	3250.00	3540.00	5160.00	8330.00	9120.00	9760.00	10200.00
1972	3580.00	7030.00	7930.00	10500.00	13500.00	13800.00	15500.00	15500.00	16300.00
1973	1000.00	1090.00	1640.00	4160.00	6540.00	7280.00	8010.00	8740.00	11800.00
1974	1600.00	4100.00	4180.00	4540.00	5660.00	7210.00	9550.00	10500.00	12700.00
1975	4900.00	6070.00	6900.00	7310.00	7870.00	8840.00	10100.00	11200.00	11500.00
1976	9010.00	9240.00	9890.00	10600.00	11900.00	15800.00	16800.00	17600.00	18000.00
1977	4370.00	5330.00	6360.00	7270.00	7500.00	8670.00	9880.00	13100.00	13100.00
1978	2880.00	3760.00	4370.00	4460.00	4910.00	5520.00	5980.00	6270.00	7060.00
1979	4430.00	4630.00	5220.00	5370.00	5720.00	6170.00	6860.00	8140.00	9820.00
1980	7370.00	8020.00	8750.00	9630.00	11400.00	14400.00	15300.00	16300.00	17500.00
1981	1470.00	2180.00	2630.00	3000.00	3620.00	5800.00	7900.00	8460.00	9680.00
1982	380.00	1820.00	2850.00	3110.00	3830.00	4030.00	4770.00	5200.00	5950.00
1983	1470.00	3370.00	4200.00	4830.00	5170.00	5900.00	6460.00	7500.00	9440.00
1984	1340.00	2200.00	2680.00	3370.00	4290.00	4910.00	5220.00	5720.00	7290.00
1985	500.00	2050.00	3870.00	4820.00	5460.00	6120.00	6740.00	7890.00	10300.00
1986	118.00	1520.00	2390.00	2800.00	3020.00	4000.00	4740.00	5210.00	6680.00

02170500 LAKES MARION-MOULTRIE DIVERSION CANAL NR PINEVILLE
Location: Lat 332314, Long 800825. Berkeley County
Period of record:
Drainage area: 0.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	42	42	9010.00-1976	61.00-1957	3285.98	6826464.07	2612.75	0.5699	0.79512	0.46045
3	42	42	9240.00-1976	142.00-1957	4208.90	6526368.99	2554.68	0.3683	0.60697	0.41370
7	42	42	11700.00-1950	1420.00-1955	5258.33	6801590.08	2607.99	0.4795	0.49597	0.41075
14	42	42	12100.00-1950	1610.00-1955	6112.62	6727376.47	2593.72	0.4036	0.42432	0.34887
30	42	42	13500.00-1972	2970.00-1955	7099.05	7706584.81	2776.07	0.5051	0.39105	0.29478
60	42	42	15800.00-1976	3150.00-1955	8212.86	9555058.50	3091.13	0.5085	0.37638	0.29357
90	42	42	16800.00-1976	3340.00-1955	9049.52	10550823.58	3248.20	0.5238	0.35894	0.26807
120	42	42	17600.00-1976	3670.00-1955	9787.38	10980881.24	3313.74	0.4969	0.33857	0.24769
183	42	42	19100.00-1965	4470.00-1955	10925.71	11304381.63	3362.20	0.5503	0.30773	0.20741

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	2510	3810	4850	5710	6670	7730	8540	9270	10600
5	808	1930	2940	3800	4630	5460	6160	6840	8040
10	383	1130	2120	2990	3760	4490	5140	5800	6870
15	253	773	1750	2620	3370	4060	4680	5330	6330
20	189	548	1520	2400	3120	3780	4390	5040	5990
25	152	388	1360	2230	2950	3590	4190	4830	5750
30	127	265	1230	2110	2810	3440	4030	4670	5560
40	96	96	1050	1920	2620	3220	3800	4440	5290
50	77	77	914	1790	2470	3060	3640	4270	5090
	LNPEARFF	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	POWTRAN

02171500 SANTEE RIVER NEAR PINEVILLE
Location: Lat 332715, Long 800925. Berkeley County
Period of record: Apr 1942 through Sep 1985
Drainage area: 14700.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1944	422.00	469.00	488.00	529.00	550.00	572.00	574.00	589.00	595.00
1945	225.00	308.00	410.00	466.00	493.00	502.00	515.00	528.00	547.00
1946	257.00	386.00	402.00	448.00	468.00	482.00	490.00	498.00	4600.00
1947	9.00	13.00	25.00	164.00	260.00	504.00	510.00	514.00	522.00
1948	303.00	389.00	435.00	442.00	462.00	478.00	489.00	498.00	505.00
1949	207.00	214.00	236.00	404.00	523.00	525.00	535.00	541.00	545.00
1950	396.00	400.00	415.00	415.00	426.00	458.00	478.00	500.00	509.00
1951	438.00	458.00	478.00	485.00	489.00	495.00	506.00	508.00	521.00
1952	408.00	441.00	465.00	474.00	489.00	500.00	507.00	506.00	511.00
1953	403.00	411.00	416.00	423.00	443.00	466.00	482.00	490.00	503.00
1954	423.00	469.00	480.00	485.00	495.00	498.00	500.00	500.00	507.00
1955	165.00	350.00	436.00	464.00	469.00	474.00	478.00	481.00	497.00
1956	200.00	393.00	445.00	470.00	480.00	489.00	489.00	493.00	500.00
1957	294.00	403.00	447.00	460.00	468.00	480.00	484.00	488.00	491.00
1958	354.00	458.00	473.00	480.00	484.00	491.00	497.00	498.00	503.00
1959	410.00	440.00	453.00	470.00	475.00	507.00	510.00	510.00	531.00
1960	440.00	469.00	480.00	484.00	502.00	510.00	512.00	681.00	629.00
1961	396.00	472.00	502.00	504.00	511.00	523.00	536.00	542.00	556.00
1962	392.00	429.00	477.00	481.00	485.00	494.00	498.00	502.00	506.00
1963	432.00	448.00	455.00	456.00	462.00	473.00	488.00	498.00	506.00
1964	441.00	454.00	464.00	473.00	482.00	486.00	491.00	495.00	504.00
1965	460.00	477.00	482.00	486.00	498.00	512.00	516.00	548.00	2660.00
1966	379.00	469.00	472.00	479.00	503.00	512.00	513.00	518.00	520.00
1967	500.00	500.00	504.00	510.00	519.00	537.00	543.00	546.00	549.00
1968	475.00	497.00	500.00	503.00	509.00	521.00	532.00	539.00	1260.00
1969	497.00	506.00	515.00	515.00	523.00	529.00	533.00	539.00	556.00
1970	491.00	501.00	504.00	509.00	518.00	522.00	523.00	532.00	543.00
1971	423.00	486.00	516.00	520.00	521.00	546.00	543.00	554.00	560.00
1972	472.00	477.00	485.00	493.00	502.00	519.00	530.00	541.00	543.00
1973	424.00	470.00	471.00	474.00	510.00	524.00	530.00	532.00	662.00
1974	509.00	510.00	511.00	512.00	513.00	521.00	526.00	534.00	532.00
1975	467.00	470.00	496.00	502.00	506.00	520.00	525.00	529.00	536.00
1976	421.00	424.00	430.00	442.00	492.00	539.00	553.00	560.00	565.00
1977	484.00	489.00	496.00	499.00	500.00	503.00	524.00	569.00	563.00
1978	492.00	493.00	497.00	500.00	503.00	539.00	543.00	544.00	548.00
1979	402.00	468.00	478.00	480.00	482.00	489.00	489.00	491.00	497.00
1980	435.00	440.00	446.00	455.00	456.00	464.00	467.00	470.00	476.00
1981	461.00	483.00	489.00	493.00	500.00	503.00	507.00	509.00	514.00
1982	433.00	440.00	443.00	449.00	459.00	465.00	467.00	468.00	475.00
1983	387.00	413.00	422.00	429.00	438.00	445.00	454.00	463.00	483.00
1984	391.00	480.00	483.00	489.00	499.00	517.00	567.00	576.00	615.00
1985	386.00	408.00	434.00	441.00	455.00	464.00	468.00	469.00	474.00

02171500 SANTEE RIVER NEAR PINEVILLE
Location: Lat 332715, Long 800925. Berkeley County
Period of record: Apr 1942 through Sep 1985
Drainage area: 14700.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	42	42	509.00-1974	9.00-1947	390.57	10594.01	102.93	-1.7161	0.26353	0.56839
3	42	42	510.00-1974	13.00-1947	432.74	7419.05	86.13	-3.1344	0.19904	0.29945
7	42	42	516.00-1971	25.00-1947	451.33	6587.60	81.16	-3.8261	0.17983	0.22120
14	42	42	529.00-1944	164.00-1947	468.02	3078.93	55.49	-3.8716	0.11856	0.21318
30	42	42	550.00-1944	260.00-1947	483.86	1869.50	43.24	-3.2381	0.08936	0.17090
60	42	42	572.00-1944	445.00-1983	502.33	711.98	26.68	0.0824	0.05312	0.25458
90	42	42	574.00-1944	454.00-1983	510.05	752.76	27.44	0.1647	0.05379	0.15199
120	42	42	681.00-1960	463.00-1983	521.21	1524.31	39.04	1.5743	0.07491	0.19190
183	42	42	4600.00-1946	474.00-1985	695.69	489240.64	699.46	4.6666	1.00541	-0.05731

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	418	455	470	478	491	503	510	515	516
5	352	413	436	449	464	479	486	487	499
10	295	377	409	428	446	466	473	476	491
15	249	347	390	415	435	459	466	471	486
20	196	317	373	405	427	455	462	469	483
25	0.00	275	356	396	421	452	459	467	481
30	0.00	0.00	339	389	415	449	456	466	480
40	0.00	0.00	293	376	406	445	453	464	477
50	0.00	0.00	0.00	365	399	442	450	463	475
	POWTRAN	POWTRAN	POWTRAN	POWTRAN	POWTRAN	LOGBOUGH	LOGBOUGH	GUMBEL3B	GENSME

02171560 SANTEE RIVER NEAR RUSSELLVILLE
Location: Lat 332938, Long 805738. Berkeley County
Period of record: Oct 1978 through Sep 1985
Drainage area: 14800.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1980	489.00	494.00	498.00	503.00	506.00	528.00	547.00	544.00	556.00
1981	484.00	491.00	498.00	500.00	504.00	506.00	508.00	511.00	522.00
1982	441.00	446.00	453.00	458.00	468.00	476.00	483.00	488.00	490.00
1983	398.00	432.00	438.00	447.00	454.00	468.00	479.00	494.00	533.00
1984	481.00	515.00	524.00	541.00	565.00	574.00	582.00	596.00	674.00
1985	394.00	433.00	466.00	470.00	485.00	499.00	503.00	507.00	513.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	6	6	489.00-1980	394.00-1985	447.83	1588.47	39.86	-0.3331	0.08900	-0.20972
3	6	6	515.00-1984	432.00-1983	468.50	1069.58	32.70	0.1132	0.06981	-0.43324
7	6	6	524.00-1984	438.00-1983	479.50	878.58	29.64	0.0527	0.06182	-0.29173
14	6	6	541.00-1984	447.00-1983	486.50	1011.58	31.81	0.4121	0.06538	-0.35415
30	6	6	565.00-1984	454.00-1983	497.00	1264.67	35.56	0.7778	0.07155	-0.35039
60	6	6	574.00-1984	468.00-1983	508.50	1243.92	35.27	0.7096	0.06936	-0.26315
90	6	6	582.00-1984	479.00-1983	517.00	1333.67	36.52	0.6980	0.07064	-0.26840
120	6	6	596.00-1984	488.00-1982	523.33	1372.56	37.05	1.0388	0.07079	-0.26010
183	6	6	674.00-1984	490.00-1982	548.00	3571.67	59.76	1.3601	0.10906	-0.19734

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	443	465	476	483	493	504	513	514	534
5	403	432	446	451	457	469	476	492	497
10	386	418	433	437	442	454	460	485	485
	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL3B	GUMBEL3B

02171680 WEDBOO CREEK NEAR JAMESTOWN
Location: Lat 331950, Long 794810. Berkeley County
Period of record: Sep 1966 - Feb 1972; Feb 1983 through Sep 1987
Drainage area: 17.40 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1968	0.00	0.00	0.00	0.00	0.15	0.67	0.88	1.00	1.00
1969	0.00	0.00	0.00	0.00	0.00	0.08	0.83	1.60	2.10
1971	0.08	0.08	0.16	0.23	0.36	0.67	1.19	4.20	5.80
1974	0.00	0.00	0.00	0.14	0.46	0.70	0.75	0.95	1.70
1975	0.80	0.85	0.93	1.00	1.30	1.60	2.00	3.60	10.00
1976	0.88	1.10	1.19	1.30	1.50	1.60	1.80	2.00	3.30
1977	0.00	0.00	0.00	0.00	0.27	0.40	0.75	2.70	6.70
1978	0.00	0.00	0.00	0.00	0.08	0.29	0.59	0.58	0.73
1979	0.32	0.35	0.41	0.54	0.59	0.61	0.65	0.70	0.85
1980	0.55	0.60	0.62	0.67	0.82	2.60	6.30	10.00	16.00
1981	0.00	0.00	0.00	0.00	0.02	0.06	0.11	0.19	0.61
1982	0.01	0.01	0.02	0.03	0.04	0.11	0.23	0.32	0.41
1983	0.68	0.79	0.96	1.19	1.30	2.30	4.40	4.70	7.80
1984	0.22	0.28	0.33	0.38	0.62	0.84	0.84	0.89	1.00
1985	0.16	0.17	0.19	0.25	0.39	0.48	0.60	0.66	0.74
1986	0.20	0.20	0.21	0.22	0.24	0.32	0.34	0.57	2.20
1987	0.09	0.10	0.12	0.16	0.22	0.46	0.56	0.78	1.30

Distribution statistics

Cons. Days	N	Non C N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	17	11	0.88-1976	0.00-1981	0.23	0.09	0.29	1.0911	1.25451	0.10398
3	17	11	1.10-1976	0.00-1981	0.27	0.12	0.34	1.1937	1.28583	0.11396
7	17	11	1.19-1976	0.00-1981	0.30	0.14	0.38	1.1587	1.25057	0.08969
14	17	12	1.30-1976	0.00-1981	0.36	0.18	0.42	1.1171	1.16976	0.08060
30	17	16	1.50-1976	0.00-1969	0.49	0.21	0.46	0.9808	0.93925	0.21494
60	17	17	2.60-1980	0.06-1981	0.81	0.54	0.74	1.2323	0.90984	-0.12020
90	17	17	6.30-1980	0.11-1981	1.34	2.47	1.57	2.1840	1.17083	-0.24590
120	17	17	10.00-1980	0.19-1981	2.08	5.75	2.40	2.1159	1.14987	-0.29377
183	17	17	16.00-1980	0.41-1982	3.66	17.44	4.18	1.6482	1.14081	-0.31621

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	0.08	0.12	0.13	0.19	0.34	0.59	0.75	0.92	1.8
5	0.00	0.00	0.00	0.00	0.07	0.29	0.46	0.59	0.80
10	0.00	0.00	0.00	0.00	0.00	0.13	0.31	0.42	0.55
15	0.00	0.00	0.00	0.00	0.00	0.05	0.23	0.33	0.47
20	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.28	0.42
	LOGNORM	POWTRAN	LOGNORM	LOGNORM	GUMBEL3B	GENSME	GENSME	GENSME	LNPEARFF

02172500 SOUTH FORK EDISTO RIVER NEAR MONTMORENCI
Location: Lat 333435, Long 813050. Aiken County
Period of record: Oct 1939 - Sep 1966
Drainage area: 198.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1941	84.00	87.00	88.00	90.00	96.00	104.00	122.00	146.00	152.00
1942	62.00	63.00	69.00	69.00	77.00	105.00	134.00	153.00	196.00
1943	102.00	106.00	112.00	125.00	145.00	156.00	162.00	163.00	175.00
1944	82.00	85.00	97.00	109.00	116.00	124.00	130.00	134.00	154.00
1945	82.00	83.00	89.00	98.00	106.00	116.00	127.00	145.00	158.00
1946	74.00	75.00	79.00	88.00	106.00	115.00	124.00	127.00	147.00
1947	98.00	100.00	101.00	107.00	118.00	131.00	136.00	137.00	172.00
1948	92.00	94.00	103.00	106.00	124.00	132.00	144.00	149.00	160.00
1949	148.00	154.00	163.00	173.00	185.00	197.00	204.00	218.00	243.00
1950	141.00	148.00	156.00	172.00	188.00	197.00	220.00	249.00	254.00
1951	104.00	105.00	113.00	117.00	152.00	180.00	185.00	189.00	194.00
1952	94.00	97.00	99.00	102.00	109.00	134.00	140.00	145.00	154.00
1953	86.00	87.00	90.00	94.00	109.00	121.00	123.00	123.00	130.00
1954	84.00	86.00	89.00	104.00	106.00	121.00	134.00	143.00	153.00
1955	40.00	49.00	54.00	57.00	70.00	72.00	74.00	75.00	85.00
1956	61.00	61.00	66.00	78.00	85.00	100.00	102.00	102.00	106.00
1957	48.00	49.00	57.00	60.00	65.00	72.00	74.00	76.00	93.00
1958	48.00	48.00	51.00	57.00	72.00	74.00	87.00	97.00	108.00
1959	85.00	87.00	90.00	93.00	105.00	116.00	118.00	119.00	132.00
1960	112.00	116.00	120.00	134.00	137.00	187.00	184.00	200.00	235.00
1961	149.00	152.00	167.00	175.00	181.00	186.00	189.00	193.00	198.00
1962	122.00	122.00	122.00	123.00	127.00	134.00	146.00	163.00	172.00
1963	106.00	106.00	108.00	111.00	124.00	135.00	138.00	146.00	154.00
1964	88.00	89.00	90.00	94.00	106.00	121.00	138.00	139.00	160.00
1965	146.00	149.00	163.00	180.00	192.00	201.00	229.00	265.00	355.00
1966	186.00	198.00	208.00	220.00	227.00	248.00	258.00	256.00	275.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	26	26	186.00-1966	40.00-1955	97.08	1186.07	34.44	0.6185	0.35476	0.63654
3	26	26	198.00-1966	48.00-1958	99.85	1291.13	35.93	0.7856	0.35988	0.63173
7	26	26	208.00-1966	51.00-1958	105.54	1435.40	37.89	0.8872	0.35898	0.62551
14	26	26	220.00-1966	57.00-1958	112.92	1638.99	40.48	0.8832	0.35851	0.57526
30	26	26	227.00-1966	65.00-1957	124.15	1673.98	40.91	0.7686	0.32954	0.60417
60	26	26	248.00-1966	72.00-1957	137.65	1884.76	43.41	0.6261	0.31538	0.62318
90	26	26	258.00-1966	74.00-1957	147.00	2024.92	45.00	0.6351	0.30612	0.67196
120	26	26	265.00-1965	75.00-1955	155.85	2435.59	49.35	0.6376	0.31667	0.62272
183	26	26	355.00-1965	85.00-1955	173.65	3460.53	58.83	1.1492	0.33876	0.52751

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	92	94	102	102	117	126	137	148	165
5	65	69	73	82	89	103	111	113	120
10	54	59	61	71	78	91	98	98	100
15	49	54	55	65	73	85	91	92	92
20	46	51	52	62	70	81	86	88	88
25	44	49	49	59	68	78	83	85	85
30	42	48	48	57	66	75	81	83	83
	GUMBEL1	POWTRAN	LOGBOUGH	GENSME	LNPEARFF	GENSME	GENSME	LOGNORM	GUMBEL1

02172640 DEAN SWAMP CREEK NEAR SALLEY
Location: Lat 333521, Long 812157. Aiken County
Period of record: Oct 1980 through Sep 1987
Drainage area: 31.20 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1982	18.00	18.00	18.00	19.00	20.00	21.00	22.00	22.00	22.00
1983	20.00	21.00	21.00	22.00	23.00	23.00	24.00	24.00	24.00
1984	16.00	16.00	16.00	17.00	20.00	21.00	22.00	23.00	24.00
1985	16.00	16.00	17.00	18.00	21.00	24.00	24.00	24.00	25.00
1986	17.00	17.00	18.00	18.00	19.00	20.00	20.00	20.00	20.00
1987	15.00	15.00	16.00	16.00	17.00	17.00	18.00	18.00	19.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	6	6	20.00-1983	15.00-1987	17.00	3.20	1.79	0.9433	0.10523	0.10874
3	6	6	21.00-1983	15.00-1987	17.17	4.57	2.14	1.3390	0.12448	0.05141
7	6	6	21.00-1983	16.00-1987	17.67	3.47	1.86	1.2807	0.10539	-0.25777
14	6	6	22.00-1983	16.00-1987	18.33	4.27	2.07	1.1725	0.11267	-0.04560
30	6	6	23.00-1983	17.00-1987	20.00	4.00	2.00	0.0000	0.10000	0.14744
60	6	6	24.00-1985	17.00-1987	21.00	6.00	2.45	-0.6124	0.11664	0.05556
90	6	6	24.00-1983	18.00-1987	21.67	5.47	2.34	-0.6676	0.10791	0.27501
120	6	6	24.00-1983	18.00-1987	21.83	5.77	2.40	-0.8786	0.10999	0.47884
183	6	6	25.00-1985	19.00-1987	22.33	5.87	2.42	-0.4551	0.10845	0.37012

Low flow frequency array table

Return Period	1 Day	Consecutive days: 3	7	14	30	60	90	120	183
2	17	17	17	18	20	21	22	22	22
5	15	15	16	16	18	19	20	20	20
10	14	15	16	16	17	17	18	18	19
	GUMBEL1	GUMBEL3A	GUMBEL3C	GUMBEL3B	GUMBEL3A	GUMBEL3B	GUMBEL3B	GUMBEL3B	GUMBEL1

02173000 SOUTH FORK EDISTO RIVER NEAR DENMARK
Location: Lat 332335, Long 810800. Bamberg/Orangeburg County
Period of record: Aug 1931 - Sep 1971; Oct 1980 through Sep 1987
Drainage area: 720.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1933	234.00	237.00	260.00	293.00	320.00	459.00	451.00	494.00	596.00
1934	230.00	236.00	245.00	269.00	312.00	348.00	364.00	379.00	403.00
1935	284.00	292.00	313.00	332.00	391.00	420.00	421.00	445.00	471.00
1936	183.00	183.00	187.00	195.00	229.00	266.00	308.00	330.00	541.00
1937	312.00	319.00	329.00	358.00	433.00	531.00	593.00	600.00	663.00
1938	412.00	415.00	425.00	462.00	513.00	567.00	624.00	676.00	655.00
1939	292.00	298.00	309.00	337.00	380.00	390.00	411.00	463.00	506.00
1940	287.00	302.00	324.00	331.00	353.00	401.00	430.00	455.00	451.00
1941	258.00	262.00	278.00	283.00	297.00	328.00	402.00	438.00	460.00
1942	222.00	225.00	229.00	240.00	258.00	368.00	453.00	517.00	631.00
1943	331.00	337.00	355.00	422.00	472.00	495.00	504.00	514.00	590.00
1944	302.00	304.00	311.00	335.00	347.00	380.00	391.00	410.00	475.00
1945	302.00	306.00	319.00	350.00	359.00	388.00	432.00	447.00	478.00
1946	231.00	233.00	238.00	262.00	295.00	343.00	370.00	403.00	541.00
1947	277.00	277.00	297.00	332.00	361.00	393.00	392.00	398.00	519.00
1948	300.00	300.00	308.00	331.00	380.00	426.00	449.00	507.00	538.00
1949	483.00	491.00	506.00	572.00	591.00	663.00	658.00	786.00	960.00
1950	415.00	422.00	464.00	497.00	522.00	598.00	651.00	737.00	773.00
1951	279.00	288.00	294.00	315.00	396.00	430.00	453.00	478.00	504.00
1952	274.00	277.00	280.00	291.00	323.00	372.00	399.00	412.00	425.00
1953	245.00	259.00	272.00	283.00	326.00	393.00	408.00	404.00	434.00
1954	272.00	276.00	293.00	322.00	347.00	365.00	399.00	399.00	491.00
1955	171.00	174.00	179.00	193.00	228.00	235.00	241.00	245.00	284.00
1956	220.00	224.00	233.00	252.00	308.00	327.00	334.00	341.00	361.00
1957	156.00	165.00	181.00	205.00	211.00	224.00	236.00	241.00	301.00
1958	167.00	169.00	178.00	199.00	217.00	226.00	267.00	305.00	355.00
1959	220.00	229.00	247.00	253.00	292.00	301.00	312.00	324.00	367.00
1960	292.00	294.00	305.00	327.00	375.00	556.00	534.00	572.00	692.00
1961	445.00	450.00	453.00	461.00	553.00	563.00	565.00	574.00	596.00
1962	390.00	390.00	392.00	396.00	404.00	428.00	466.00	518.00	559.00
1963	390.00	390.00	396.00	404.00	443.00	473.00	486.00	534.00	567.00
1964	261.00	265.00	274.00	291.00	322.00	407.00	472.00	488.00	523.00
1965	585.00	585.00	604.00	634.00	652.00	670.00	899.00	1060.00	1390.00
1966	596.00	613.00	628.00	666.00	705.00	790.00	819.00	835.00	925.00
1967	422.00	423.00	435.00	459.00	535.00	596.00	617.00	632.00	657.00
1968	412.00	421.00	438.00	458.00	518.00	550.00	606.00	649.00	679.00
1969	279.00	281.00	286.00	293.00	316.00	352.00	377.00	427.00	505.00
1970	292.00	298.00	308.00	369.00	407.00	459.00	553.00	601.00	580.00
1971	268.00	269.00	279.00	297.00	322.00	354.00	413.00	397.00	466.00
1982	240.00	240.00	254.00	274.00	294.00	315.00	347.00	369.00	387.00
1983	194.00	200.00	214.00	225.00	265.00	312.00	349.00	373.00	390.00
1984	206.00	216.00	236.00	252.00	321.00	355.00	366.00	383.00	414.00
1985	331.00	335.00	339.00	347.00	379.00	417.00	441.00	487.00	552.00
1986	248.00	252.00	255.00	259.00	320.00	339.00	347.00	361.00	386.00
1987	148.00	153.00	161.00	178.00	193.00	222.00	259.00	287.00	317.00

02173000 SOUTH FORK EDISTO RIVER NEAR DENMARK
Location: Lat 332335, Long 810800. Bamberg/Orangeburg County
Period of record: Aug 1931 - Sep 1971; Oct 1980 through Sep 1987
Drainage area: 720.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	45	45	596.00-1966	148.00-1987	296.84	10371.27	101.84	1.1800	0.34307	0.55752
3	45	45	613.00-1966	153.00-1987	301.67	10482.14	102.38	1.2122	0.33939	0.55127
7	45	45	628.00-1966	161.00-1987	313.58	10844.52	104.14	1.2155	0.33209	0.53188
14	45	45	666.00-1966	178.00-1987	335.64	12216.55	110.53	1.2070	0.32930	0.49884
30	45	45	705.00-1966	193.00-1987	373.00	13279.09	115.23	0.9819	0.30894	0.48620
60	45	45	790.00-1966	222.00-1987	417.67	15770.64	125.58	0.8209	0.30067	0.53889
90	45	45	899.00-1965	236.00-1957	450.42	19331.66	139.04	1.1632	0.30868	0.56073
120	45	45	1060.00-1965	241.00-1957	482.11	25440.46	159.50	1.4120	0.33084	0.53355
183	45	45	1390.00-1965	284.00-1955	541.29	37328.35	193.21	2.2581	0.35694	0.45827

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	271	277	287	311	344	384	415	452	502
5	220	225	235	252	284	318	344	353	399
10	193	198	208	222	252	284	307	313	358
15	180	184	194	207	236	267	289	295	340
20	171	175	186	197	225	255	277	284	329
25	165	169	179	189	218	247	268	277	321
30	160	164	174	183	212	241	261	271	315
40	152	156	166	175	203	231	250	263	307
50	147	150	160	168	196	223	242	257	301
	GENSME	GENSME	GENSME	GENSME	GENSME	GENSME	GENSME	LNPEARDI	POWTRAN

02173500 NORTH FORK EDISTO RIVER AT ORANGEBURG
Location: Lat 332900, Long 805225. Orangeburg County
Period of record: Oct 1938 through Sep 1987
Drainage area: 683.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1940	320.00	323.00	329.00	348.00	370.00	399.00	442.00	457.00	472.00
1941	268.00	270.00	274.00	282.00	315.00	342.00	418.00	442.00	477.00
1942	251.00	251.00	254.00	263.00	285.00	379.00	436.00	524.00	701.00
1943	372.00	377.00	379.00	400.00	429.00	445.00	459.00	485.00	556.00
1944	320.00	323.00	332.00	345.00	356.00	392.00	395.00	411.00	466.00
1945	328.00	330.00	344.00	353.00	362.00	383.00	407.00	411.00	465.00
1946	243.00	248.00	253.00	265.00	286.00	315.00	350.00	396.00	634.00
1947	299.00	313.00	340.00	368.00	395.00	467.00	493.00	474.00	535.00
1948	284.00	291.00	309.00	348.00	449.00	492.00	512.00	544.00	561.00
1949	433.00	438.00	457.00	504.00	517.00	554.00	573.00	649.00	852.00
1950	410.00	428.00	465.00	499.00	547.00	618.00	665.00	731.00	776.00
1951	328.00	328.00	343.00	375.00	439.00	513.00	534.00	544.00	589.00
1952	299.00	306.00	308.00	315.00	370.00	399.00	438.00	443.00	448.00
1953	285.00	292.00	302.00	309.00	349.00	421.00	493.00	518.00	518.00
1954	271.00	276.00	284.00	299.00	348.00	371.00	375.00	377.00	427.00
1955	190.00	192.00	194.00	195.00	214.00	229.00	232.00	236.00	266.00
1956	209.00	214.00	225.00	244.00	302.00	322.00	339.00	350.00	359.00
1957	208.00	211.00	220.00	227.00	239.00	244.00	248.00	260.00	326.00
1958	208.00	212.00	221.00	229.00	245.00	269.00	296.00	319.00	403.00
1959	316.00	320.00	333.00	368.00	372.00	382.00	386.00	400.00	439.00
1960	384.00	388.00	399.00	415.00	492.00	761.00	736.00	819.00	846.00
1961	545.00	556.00	579.00	594.00	605.00	652.00	660.00	672.00	717.00
1962	529.00	529.00	538.00	542.00	553.00	583.00	641.00	723.00	824.00
1963	471.00	480.00	500.00	532.00	563.00	654.00	640.00	687.00	716.00
1964	360.00	364.00	372.00	394.00	427.00	516.00	543.00	566.00	603.00
1965	599.00	619.00	631.00	662.00	703.00	760.00	1000.00	1190.00	1400.00
1966	662.00	664.00	676.00	698.00	715.00	759.00	784.00	793.00	875.00
1967	428.00	431.00	437.00	452.00	519.00	599.00	605.00	614.00	645.00
1968	437.00	443.00	454.00	458.00	467.00	488.00	559.00	599.00	662.00
1969	328.00	331.00	336.00	338.00	349.00	374.00	402.00	454.00	524.00
1970	340.00	345.00	358.00	384.00	431.00	479.00	520.00	538.00	535.00
1971	327.00	332.00	339.00	345.00	367.00	399.00	430.00	453.00	470.00
1972	454.00	458.00	477.00	506.00	590.00	690.00	763.00	843.00	882.00
1973	450.00	451.00	452.00	456.00	485.00	504.00	542.00	558.00	634.00
1974	480.00	485.00	532.00	536.00	562.00	587.00	609.00	637.00	737.00
1975	460.00	461.00	463.00	467.00	471.00	513.00	559.00	596.00	624.00
1976	517.00	532.00	559.00	591.00	629.00	684.00	720.00	727.00	809.00
1977	475.00	481.00	503.00	516.00	523.00	554.00	619.00	662.00	791.00
1978	384.00	390.00	394.00	397.00	426.00	483.00	524.00	574.00	597.00
1979	427.00	428.00	428.00	431.00	438.00	449.00	481.00	507.00	531.00
1980	464.00	473.00	502.00	520.00	580.00	750.00	746.00	774.00	855.00
1981	367.00	373.00	381.00	388.00	409.00	434.00	484.00	521.00	578.00
1982	300.00	301.00	303.00	310.00	325.00	348.00	371.00	411.00	424.00
1983	318.00	320.00	322.00	325.00	363.00	436.00	452.00	465.00	483.00
1984	340.00	342.00	352.00	389.00	412.00	451.00	456.00	459.00	486.00
1985	388.00	389.00	392.00	402.00	441.00	466.00	483.00	512.00	601.00
1986	310.00	323.00	346.00	361.00	371.00	397.00	420.00	451.00	534.00
1987	200.00	201.00	206.00	212.00	234.00	267.00	295.00	305.00	334.00

02173500 NORTH FORK EDISTO RIVER AT ORANGEBURG
Location: Lat 332900, Long 805225. Orangeburg County
Period of record: Oct 1938 through Sep 1987
Drainage area: 683.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	48	48	662.00-1966	190.00-1955	366.38	11224.48	105.95	0.5238	0.28917	0.69106
3	48	48	664.00-1966	192.00-1955	371.52	11528.58	107.37	0.5301	0.28900	0.68073
7	48	48	676.00-1966	194.00-1955	383.27	12414.91	111.42	0.5084	0.29071	0.65224
14	48	48	698.00-1966	195.00-1955	399.10	13243.72	115.08	0.4779	0.28835	0.62329
30	48	48	715.00-1966	214.00-1955	429.98	13861.15	117.73	0.3775	0.27381	0.60061
60	48	48	761.00-1960	229.00-1955	478.60	19143.41	138.36	0.4325	0.28909	0.52576
90	48	48	1000.00-1965	232.00-1955	511.15	22587.71	150.29	0.7179	0.29403	0.52653
120	48	48	1190.00-1965	236.00-1955	543.35	29248.85	171.02	1.1076	0.31475	0.47225
183	48	48	1400.00-1965	266.00-1955	603.90	37901.80	194.68	1.3789	0.32238	0.40150

Low flow frequency array table

Return Period	1 Day	Consecutive days: 3	7	14	30	60	90	120	183
2	358	360	360	379	420	457	495	520	574
5	273	276	291	305	325	356	383	401	445
10	234	240	258	266	283	313	333	349	390
15	215	225	242	246	266	294	310	325	365
20	204	216	231	234	255	282	296	310	350
25	196	210	223	224	248	273	286	300	340
30	190	206	217	217	242	267	278	292	331
40	180	200	207	207	235	257	266	280	319
50	173	196	200	200	230	250	258	272	311
	LOGBOUGH	GUMBEL3B	GENSME	GENSME	GUMBEL3D	GUMBEL1	POWTRAN	POWTRAN	POWTRAN

02174000 EDISTO RIVER NEAR BRANCHVILLE
Location: Lat 331035, Long 804505. Bamburg County
Period of record: Oct 1945 through Sep 1987
Drainage area: 1720.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1947	622.00	639.00	686.00	755.00	807.00	881.00	950.00	923.00	1130.00
1948	656.00	667.00	729.00	806.00	969.00	974.00	1010.00	1130.00	1210.00
1949	970.00	980.00	1020.00	1100.00	1120.00	1280.00	1300.00	1590.00	2020.00
1950	1040.00	1040.00	1070.00	1140.00	1260.00	1480.00	1570.00	1630.00	1710.00
1951	645.00	660.00	686.00	741.00	879.00	984.00	1030.00	1060.00	1150.00
1952	596.00	600.00	616.00	621.00	683.00	758.00	819.00	836.00	855.00
1953	557.00	566.00	577.00	591.00	674.00	831.00	949.00	985.00	1010.00
1954	614.00	630.00	652.00	695.00	714.00	741.00	787.00	790.00	920.00
1955	380.00	380.00	389.00	404.00	444.00	462.00	472.00	479.00	545.00
1956	488.00	492.00	501.00	533.00	648.00	699.00	720.00	737.00	796.00
1957	334.00	342.00	359.00	393.00	420.00	442.00	458.00	466.00	612.00
1958	402.00	402.00	413.00	459.00	488.00	507.00	579.00	650.00	796.00
1959	657.00	662.00	669.00	708.00	727.00	738.00	756.00	772.00	874.00
1960	797.00	816.00	837.00	851.00	1030.00	1580.00	1570.00	1720.00	1980.00
1961	1100.00	1100.00	1150.00	1180.00	1220.00	1290.00	1310.00	1330.00	1450.00
1962	942.00	942.00	958.00	964.00	983.00	1050.00	1190.00	1440.00	1650.00
1963	970.00	970.00	978.00	985.00	1040.00	1210.00	1250.00	1360.00	1450.00
1964	710.00	726.00	755.00	812.00	834.00	1040.00	1100.00	1160.00	1280.00
1965	1460.00	1480.00	1500.00	1570.00	1630.00	1710.00	2470.00	2910.00	3590.00
1966	1330.00	1330.00	1340.00	1360.00	1400.00	1530.00	1580.00	1620.00	1880.00
1967	962.00	967.00	989.00	1030.00	1190.00	1220.00	1280.00	1300.00	1440.00
1968	955.00	980.00	993.00	1030.00	1070.00	1100.00	1210.00	1300.00	1490.00
1969	608.00	611.00	617.00	630.00	667.00	762.00	858.00	984.00	1160.00
1970	587.00	597.00	636.00	762.00	902.00	1140.00	1340.00	1460.00	1400.00
1971	551.00	556.00	572.00	601.00	662.00	710.00	854.00	853.00	934.00
1972	1050.00	1050.00	1090.00	1150.00	1300.00	1660.00	1810.00	2030.00	2100.00
1973	854.00	855.00	857.00	875.00	921.00	977.00	1090.00	1150.00	1380.00
1974	1190.00	1190.00	1200.00	1210.00	1260.00	1320.00	1420.00	1480.00	1740.00
1975	953.00	974.00	992.00	1020.00	1030.00	1150.00	1260.00	1430.00	1440.00
1976	1170.00	1180.00	1210.00	1280.00	1340.00	1510.00	1640.00	1670.00	1970.00
1977	1040.00	1060.00	1090.00	1100.00	1130.00	1240.00	1410.00	1550.00	2000.00
1978	779.00	786.00	795.00	815.00	894.00	1050.00	1150.00	1290.00	1340.00
1979	851.00	851.00	851.00	857.00	872.00	903.00	1020.00	1080.00	1150.00
1980	968.00	981.00	1040.00	1070.00	1230.00	1610.00	1870.00	2060.00	2100.00
1981	737.00	741.00	759.00	771.00	815.00	894.00	1010.00	1110.00	1240.00
1982	560.00	564.00	577.00	599.00	644.00	702.00	751.00	852.00	890.00
1983	656.00	658.00	664.00	682.00	787.00	908.00	953.00	1000.00	1070.00
1984	674.00	683.00	713.00	779.00	843.00	917.00	922.00	930.00	1010.00
1985	869.00	873.00	879.00	897.00	945.00	1010.00	1040.00	1110.00	1370.00
1986	705.00	711.00	726.00	744.00	819.00	857.00	874.00	943.00	1060.00
1987	409.00	415.00	431.00	447.00	482.00	563.00	628.00	646.00	709.00

02174000 EDISTO RIVER NEAR BRANCHVILLE
Location: Lat 331035, Long 804505. Bamburg County
Period of record: Oct 1945 through Sep 1987
Drainage area: 1720.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	41	41	1460.00-1965	334.00-1957	790.20	67164.21	259.16	0.4223	0.32797	0.56436
3	41	41	1480.00-1965	342.00-1957	797.73	67559.66	259.92	0.4176	0.32583	0.56837
7	41	41	1500.00-1965	359.00-1957	818.68	69139.44	262.94	0.3864	0.32118	0.56151
14	41	41	1570.00-1965	393.00-1957	854.07	71248.26	266.92	0.4070	0.31253	0.53893
30	41	41	1630.00-1965	420.00-1957	921.29	75604.11	274.96	0.2845	0.29845	0.47630
60	41	41	1710.00-1965	442.00-1957	1033.90	109662.67	331.15	0.2916	0.32029	0.35566
90	41	41	2470.00-1965	458.00-1957	1128.29	158791.96	398.49	0.9284	0.35318	0.33548
120	41	41	2910.00-1965	466.00-1957	1215.02	214953.15	463.63	1.1766	0.38158	0.29289
183	41	41	3590.00-1965	545.00-1955	1363.44	301305.71	548.91	1.5881	0.40259	0.30130

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	776	784	805	839	913	982	1080	1150	1260
5	560	567	584	615	676	739	789	827	924
10	460	466	482	512	561	635	664	691	788
15	413	419	434	463	507	588	607	630	728
20	384	389	404	433	472	559	572	593	692
25	364	368	382	411	448	538	548	567	667
30	348	352	366	395	429	522	529	547	647
40	324	328	342	370	400	498	501	518	619
50	307	311	324	352	380	481	482	498	599
	LOGBOUGH	LOGBOUGH	LOGBOUGH	LOGBOUGH	LOGBOUGH	GUMBEL1	LNPEARFF	LNPEARFF	POWTRAN

02174250 COW CASTLE CREEK NEAR BOWMAN
Location: Lat 332243, Long 804200. Orangeburg County
Period of record: Oct 1970 - Sep 1981
Drainage area: 23.40 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1972	0.00	2.30	2.40	2.60	3.80	7.10	7.80	13.00	19.00
1973	1.19	1.30	1.30	1.30	1.50	1.70	2.30	3.90	7.60
1974	1.70	1.80	1.90	2.10	2.10	2.20	2.40	3.00	5.50
1975	1.50	1.50	1.60	1.60	1.80	2.30	3.90	4.80	4.60
1976	2.50	2.60	2.60	2.80	3.60	4.50	6.20	7.90	12.00
1977	1.70	1.70	1.90	2.00	2.50	3.20	3.60	4.00	13.00
1978	0.70	0.70	0.75	0.79	0.87	1.30	2.00	2.30	2.70
1979	0.64	0.67	0.70	0.77	0.81	0.94	1.19	1.50	2.30
1980	4.90	5.10	5.30	5.80	7.80	17.00	22.00	24.00	31.00
1981	1.19	1.30	1.40	1.40	1.60	2.20	2.50	2.80	2.90

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	10	9	4.90-1980	0.00-1972	1.60	1.64	1.28	1.4684	0.79836	-0.21785
3	10	10	5.10-1980	0.67-1979	1.90	1.48	1.22	1.6270	0.64071	-0.32261
7	10	10	5.30-1980	0.70-1979	1.99	1.57	1.25	1.6357	0.63104	-0.32215
14	10	10	5.80-1980	0.77-1979	2.12	1.93	1.39	1.6636	0.65658	-0.34019
30	10	10	7.80-1980	0.81-1979	2.64	3.88	1.97	1.6377	0.74643	-0.33088
60	10	10	17.00-1980	0.94-1979	4.24	21.02	4.58	2.0702	1.08034	-0.26371
90	10	10	22.00-1980	1.19-1979	5.39	34.38	5.86	2.1810	1.08797	-0.27716
120	10	10	24.00-1980	1.50-1979	6.72	43.45	6.59	1.7527	0.98085	-0.31121
183	10	10	31.00-1980	2.30-1979	10.06	75.31	8.68	1.2888	0.86265	-0.38321

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	1.4	1.7	1.7	1.7	1.9	2.5	2.8	4.2	7.7
5	0.72	0.83	0.94	0.99	1.1	1.1	2.0	2.0	2.9
10	0.00	0.52	0.73	0.79	0.82	0.82	1.6	1.6	1.6
	LOGNORM	WEIBULL	GUMBEL3B	GUMBEL3B	LNPEARDI	LNPEARDI	GENSME	LNPEARDI	WEIBULL

02175000 EDISTO RIVER NEAR GIVHANS
Location: Lat 330140, Long 802330. Dorchester County
Period of record: Jan 1939 through Sep 1987
Drainage area: 2730.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1940	653.00	658.00	664.00	691.00	717.00	792.00	839.00	901.00	1020.00
1941	593.00	593.00	604.00	619.00	634.00	683.00	854.00	977.00	1180.00
1942	455.00	455.00	459.00	479.00	536.00	934.00	1090.00	1750.00	2950.00
1943	701.00	712.00	729.00	760.00	824.00	859.00	901.00	975.00	1240.00
1944	593.00	593.00	593.00	601.00	619.00	705.00	739.00	796.00	991.00
1945	681.00	686.00	697.00	709.00	750.00	784.00	847.00	868.00	980.00
1946	569.00	583.00	619.00	701.00	729.00	937.00	986.00	1060.00	2470.00
1947	660.00	670.00	694.00	736.00	790.00	957.00	1140.00	1060.00	1280.00
1948	846.00	867.00	883.00	913.00	1050.00	1150.00	1390.00	1620.00	1730.00
1949	1020.00	1050.00	1070.00	1110.00	1130.00	1360.00	1380.00	1680.00	2350.00
1950	1020.00	1080.00	1120.00	1250.00	1420.00	1630.00	1700.00	1700.00	1820.00
1951	615.00	625.00	649.00	685.00	851.00	962.00	1070.00	1110.00	1320.00
1952	625.00	625.00	631.00	652.00	750.00	833.00	942.00	1020.00	989.00
1953	565.00	570.00	574.00	585.00	672.00	848.00	1130.00	1290.00	1310.00
1954	574.00	579.00	617.00	657.00	701.00	741.00	769.00	762.00	883.00
1955	310.00	312.00	321.00	336.00	378.00	396.00	406.00	415.00	474.00
1956	490.00	513.00	566.00	599.00	622.00	901.00	908.00	952.00	1240.00
1957	292.00	300.00	311.00	336.00	372.00	393.00	414.00	428.00	608.00
1958	352.00	356.00	375.00	405.00	434.00	451.00	521.00	578.00	829.00
1959	578.00	593.00	604.00	617.00	622.00	637.00	655.00	692.00	856.00
1960	720.00	730.00	767.00	797.00	1250.00	2450.00	2370.00	2630.00	2850.00
1961	1080.00	1090.00	1100.00	1110.00	1150.00	1260.00	1300.00	1350.00	1560.00
1962	810.00	810.00	810.00	814.00	836.00	927.00	1110.00	1460.00	1900.00
1963	770.00	770.00	789.00	841.00	955.00	1340.00	1380.00	1600.00	1660.00
1964	600.00	610.00	615.00	654.00	706.00	952.00	1040.00	1130.00	1260.00
1965	1480.00	1510.00	1560.00	1660.00	1720.00	1880.00	3120.00	4340.00	5490.00
1966	1210.00	1220.00	1230.00	1260.00	1290.00	1410.00	1470.00	1540.00	1960.00
1967	846.00	855.00	879.00	966.00	1070.00	1110.00	1210.00	1270.00	1720.00
1968	785.00	817.00	849.00	881.00	898.00	925.00	1080.00	1220.00	1550.00
1969	630.00	631.00	633.00	649.00	662.00	716.00	943.00	1190.00	1340.00
1970	693.00	711.00	738.00	868.00	1100.00	1490.00	1780.00	1910.00	2030.00
1971	597.00	599.00	615.00	636.00	732.00	791.00	951.00	1010.00	1050.00
1972	1080.00	1080.00	1120.00	1210.00	1420.00	2010.00	2350.00	2740.00	3130.00
1973	741.00	743.00	750.00	770.00	815.00	884.00	1050.00	1140.00	1470.00
1974	968.00	968.00	969.00	984.00	1040.00	1150.00	1250.00	1410.00	1820.00
1975	779.00	781.00	785.00	789.00	804.00	948.00	1240.00	1360.00	1510.00
1976	1050.00	1050.00	1070.00	1120.00	1190.00	1380.00	1570.00	1630.00	2020.00
1977	828.00	838.00	876.00	946.00	1020.00	1250.00	1410.00	1560.00	2520.00
1978	563.00	570.00	577.00	595.00	678.00	880.00	969.00	1170.00	1200.00
1979	589.00	677.00	677.00	682.00	696.00	735.00	838.00	942.00	1040.00
1980	874.00	888.00	937.00	1030.00	1360.00	2310.00	2690.00	2880.00	3430.00
1981	577.00	586.00	594.00	598.00	634.00	724.00	863.00	961.00	1080.00
1982	494.00	495.00	502.00	515.00	538.00	583.00	624.00	727.00	838.00
1983	580.00	587.00	601.00	614.00	720.00	806.00	836.00	935.00	1220.00
1984	604.00	609.00	628.00	675.00	715.00	774.00	770.00	779.00	878.00
1985	723.00	724.00	740.00	764.00	802.00	873.00	909.00	980.00	1270.00
1986	599.00	604.00	609.00	631.00	647.00	686.00	709.00	808.00	1150.00
1987	387.00	390.00	396.00	399.00	409.00	459.00	510.00	551.00	601.00

02175000 EDISTO RIVER NEAR GIVHANS
Location: Lat 330140, Long 802330. Dorchester County
Period of record: Jan 1939 through Sep 1987
Drainage area: 2730.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	48	48	1480.00-1965	292.00-1957	705.19	53611.61	231.54	0.9469	0.32834	0.46200
3	48	48	1510.00-1965	300.00-1957	715.90	55389.09	235.35	0.9571	0.32875	0.45793
7	48	48	1560.00-1965	311.00-1957	733.25	58013.40	240.86	0.9875	0.32848	0.42575
14	48	48	1660.00-1965	336.00-1957	768.73	66566.53	258.00	1.0208	0.33563	0.38980
30	48	48	1720.00-1965	372.00-1957	842.88	85678.11	292.71	0.8274	0.34727	0.31177
60	48	48	2450.00-1960	393.00-1957	1013.67	199455.01	446.60	1.4295	0.44058	0.07933
90	48	48	3120.00-1965	406.00-1955	1146.31	301382.42	548.98	1.6974	0.47891	0.10534
120	48	48	4340.00-1965	415.00-1955	1288.69	476350.05	690.18	2.2241	0.53557	0.07104
183	48	48	5490.00-1965	474.00-1955	1584.73	770169.66	877.59	2.1395	0.55378	0.00869

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	674	683	683	730	747	869	1030	1130	1360
5	527	535	543	570	609	688	726	785	935
10	473	480	481	513	537	593	610	654	783
15	452	459	459	491	501	546	561	598	720
20	441	448	448	479	479	515	531	564	683
25	433	440	440	471	471	492	510	541	658
30	427	434	434	465	465	474	494	524	638
40	420	427	427	458	458	458	472	499	611
50	415	422	422	453	453	453	456	481	592
	GUMBEL3A	GUMBEL3A	GENSME	GUMBEL3A	GENSME	GENSME	POWTRAN	POWTRAN	LNPEARFF

02175500 SALKEHATCHIE RIVER NEAR MILEY
Location: Lat 325920, Long 810310. Hampton County
Period of record: Feb 1951 through Sep 1987
Drainage area: 341.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1952	40.00	41.00	46.00	62.00	84.00	104.00	121.00	127.00	127.00
1953	44.00	48.00	52.00	65.00	104.00	123.00	130.00	140.00	154.00
1954	43.00	43.00	45.00	52.00	74.00	107.00	131.00	126.00	154.00
1955	18.00	19.00	22.00	26.00	37.00	44.00	52.00	57.00	74.00
1956	38.00	39.00	39.00	41.00	79.00	105.00	124.00	114.00	134.00
1957	38.00	39.00	41.00	45.00	59.00	80.00	85.00	103.00	136.00
1958	38.00	38.00	42.00	58.00	68.00	84.00	100.00	143.00	185.00
1959	45.00	47.00	50.00	57.00	71.00	81.00	88.00	95.00	116.00
1960	74.00	74.00	81.00	86.00	102.00	156.00	169.00	174.00	225.00
1961	109.00	109.00	112.00	116.00	140.00	199.00	201.00	203.00	218.00
1962	118.00	118.00	118.00	118.00	123.00	149.00	196.00	240.00	262.00
1963	76.00	79.00	91.00	114.00	127.00	150.00	148.00	175.00	202.00
1964	51.00	54.00	57.00	66.00	87.00	120.00	153.00	161.00	187.00
1965	109.00	112.00	145.00	151.00	165.00	199.00	346.00	409.00	516.00
1966	100.00	103.00	114.00	124.00	167.00	198.00	200.00	226.00	260.00
1967	119.00	120.00	126.00	140.00	185.00	196.00	203.00	214.00	245.00
1968	96.00	97.00	101.00	116.00	132.00	136.00	156.00	194.00	229.00
1969	47.00	51.00	59.00	64.00	75.00	80.00	85.00	117.00	156.00
1970	48.00	50.00	55.00	68.00	91.00	152.00	194.00	247.00	255.00
1971	49.00	51.00	56.00	66.00	78.00	84.00	113.00	125.00	143.00
1972	89.00	92.00	105.00	128.00	162.00	215.00	244.00	280.00	350.00
1973	87.00	89.00	94.00	95.00	100.00	130.00	156.00	172.00	225.00
1974	174.00	181.00	185.00	193.00	208.00	245.00	272.00	297.00	371.00
1975	119.00	119.00	120.00	123.00	133.00	161.00	170.00	208.00	226.00
1976	145.00	156.00	193.00	201.00	231.00	263.00	276.00	286.00	365.00
1977	115.00	119.00	132.00	138.00	140.00	168.00	234.00	268.00	388.00
1978	61.00	64.00	74.00	76.00	96.00	129.00	162.00	182.00	190.00
1979	80.00	82.00	85.00	90.00	108.00	115.00	131.00	152.00	171.00
1980	91.00	96.00	116.00	142.00	169.00	192.00	243.00	296.00	377.00
1981	62.00	64.00	67.00	70.00	82.00	123.00	131.00	159.00	194.00
1982	44.00	44.00	47.00	50.00	61.00	75.00	98.00	105.00	121.00
1983	65.00	68.00	72.00	85.00	108.00	125.00	143.00	163.00	201.00
1984	40.00	42.00	48.00	56.00	67.00	87.00	98.00	102.00	143.00
1985	111.00	116.00	121.00	128.00	149.00	160.00	182.00	203.00	245.00
1986	60.00	61.00	64.00	68.00	86.00	105.00	106.00	122.00	158.00
1987	26.00	27.00	29.00	34.00	56.00	77.00	93.00	106.00	118.00

02175500 SALKEHATCHIE RIVER NEAR MILEY
Location: Lat 325920, Long 810310. Hampton County
Period of record: Feb 1951 through Sep 1987
Drainage area: 341.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	36	36	174.00-1974	18.00-1955	74.14	1300.01	36.06	0.6902	0.48633	0.54947
3	36	36	181.00-1974	19.00-1955	76.44	1382.86	37.19	0.7500	0.48646	0.53740
7	36	36	193.00-1976	22.00-1955	83.44	1708.52	41.33	0.8036	0.49535	0.50739
14	36	36	201.00-1976	26.00-1955	92.00	1797.17	42.39	0.7083	0.46079	0.43500
30	36	36	231.00-1976	37.00-1955	111.22	2035.67	45.12	0.7464	0.40566	0.31683
60	36	36	263.00-1976	44.00-1955	136.58	2605.63	51.05	0.5467	0.37373	0.26455
90	36	36	346.00-1965	52.00-1955	159.28	4000.09	63.25	0.8398	0.39708	0.22437
120	36	36	409.00-1965	57.00-1955	180.31	5356.71	73.19	0.9191	0.40592	0.20715
183	36	36	516.00-1965	74.00-1955	217.25	8829.91	93.97	1.1894	0.43253	0.17644

Low flow frequency array table

Return Period	1 Day	Consecutive days: 3	7	14	30	60	90	120	183
2	69	71	77	85	104	129	150	169	194
5	42	43	46	54	71	91	102	115	138
10	30	31	33	40	56	75	82	91	122
15	25	26	27	34	50	67	73	81	116
20	22	23	24	31	46	63	68	74	113
25	20	20	21	28	43	59	64	70	111
30	18	18	19	26	41	57	61	66	109
40	15	16	16	23	38	53	56	61	108
	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL3C

02176000 COMBAHEE RIVER NEAR YEMASSEE
Location: Lat 324225, Long 804935. Hampton County
Period of record: Jun 1951 - Jun 1957
Drainage area: 1100.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1953	43.00	47.00	49.00	59.00	93.00	120.00	140.00	200.00	218.00
1954	37.00	43.00	51.00	62.00	98.00	128.00	140.00	135.00	171.00
1955	9.00	16.00	20.00	29.00	37.00	40.00	41.00	48.00	62.00
1956	29.00	41.00	57.00	82.00	131.00	170.00	236.00	223.00	299.00
1957	14.00	24.00	34.00	42.00	53.00	63.00	68.00	83.00	150.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	5	5	43.00-1953	9.00-1955	26.40	170.24	13.05	-0.1253	0.49423	-0.05970
3	5	5	47.00-1953	16.00-1955	34.20	144.56	12.02	-0.4599	0.35156	-0.37537
7	5	5	57.00-1956	20.00-1955	42.20	180.56	13.44	-0.5980	0.31842	-0.68709
14	5	5	82.00-1956	29.00-1955	54.80	327.76	18.10	0.0438	0.33037	-0.78285
30	5	5	131.00-1956	37.00-1955	82.40	1128.64	33.60	0.0042	0.40771	-0.81829
60	5	5	170.00-1956	40.00-1955	104.20	2192.96	46.83	-0.0628	0.44942	-0.81647
90	5	5	236.00-1956	41.00-1955	125.00	4615.20	67.94	0.3805	0.54348	-0.79121
120	5	5	223.00-1956	48.00-1955	137.80	4440.56	66.64	-0.0200	0.48358	-0.63635
183	5	5	299.00-1956	62.00-1955	180.00	6102.00	78.12	0.0291	0.43397	-0.57181

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	25	33	45	53	78	99	117	130	171
5	11	20	29	33	43	49	49	59	88
	GUMBEL1	GUMBEL1	GUMBEL3B	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1

02176500 COOSAWHATCHIE RIVER NEAR HAMPTON
Location: Lat 325010, Long 810755. Hampton County
Period of record: Feb 1951 through Sep 1987
Drainage area: 203.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1952	0.00	0.03	0.13	0.52	2.30	12.00	11.00	19.00	20.00
1953	0.10	0.23	0.66	1.30	5.40	13.00	21.00	40.00	43.00
1954	0.10	0.10	0.36	0.79	9.90	14.00	17.00	24.00	49.00
1955	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.84
1956	1.10	1.50	2.30	3.10	29.00	40.00	69.00	73.00	100.00
1957	0.00	0.00	0.00	0.00	0.41	4.50	6.40	9.20	9.60
1958	0.00	0.03	0.23	1.10	8.10	20.00	41.00	50.00	89.00
1959	0.10	0.10	0.21	0.71	1.80	4.90	4.90	5.60	19.00
1960	2.40	3.10	7.10	10.00	43.00	73.00	83.00	92.00	128.00
1961	1.00	1.19	1.80	3.90	4.70	8.40	11.00	15.00	28.00
1962	5.90	6.00	6.30	6.40	7.30	13.00	41.00	72.00	140.00
1963	1.00	1.40	2.30	6.00	13.00	20.00	20.00	33.00	54.00
1964	0.40	0.63	2.00	3.60	12.00	24.00	62.00	62.00	121.00
1965	4.30	6.10	7.80	12.00	21.00	35.00	99.00	143.00	281.00
1966	3.30	3.50	3.70	4.70	7.50	12.00	19.00	25.00	70.00
1967	2.60	2.60	3.40	5.70	6.80	8.50	13.00	17.00	50.00
1968	1.60	1.60	1.60	1.90	2.10	2.90	12.00	21.00	39.00
1969	0.00	0.00	0.00	0.01	0.35	0.77	1.90	4.00	13.00
1970	1.60	1.80	2.50	4.80	26.00	139.00	186.00	171.00	314.00
1971	0.46	0.49	0.74	1.10	1.90	6.10	7.60	16.00	15.00
1972	2.10	2.60	4.60	6.00	14.00	35.00	66.00	111.00	187.00
1973	1.19	1.19	1.40	1.50	1.80	4.70	17.00	31.00	62.00
1974	9.80	9.90	11.00	12.00	14.00	20.00	37.00	54.00	111.00
1975	1.80	1.80	2.00	3.40	5.00	9.90	22.00	35.00	54.00
1976	17.00	17.00	17.00	19.00	26.00	30.00	38.00	55.00	103.00
1977	6.20	6.70	7.80	10.00	22.00	46.00	66.00	86.00	197.00
1978	0.94	1.00	1.10	1.40	3.00	7.20	10.00	12.00	12.00
1979	0.88	0.94	1.00	1.10	1.30	1.60	2.30	4.20	13.00
1980	5.60	6.20	9.10	12.00	23.00	75.00	96.00	164.00	200.00
1981	0.00	0.00	0.00	0.08	0.50	1.10	1.70	7.10	18.00
1982	0.00	0.00	0.00	0.00	0.80	2.10	4.30	14.00	22.00
1983	3.10	3.10	3.60	5.00	5.80	7.20	8.30	17.00	78.00
1984	0.42	0.52	0.61	0.92	1.30	2.00	2.80	6.30	40.00
1985	3.30	3.40	3.80	4.80	6.20	8.40	11.00	16.00	30.00
1986	0.50	0.60	1.19	2.40	3.90	5.10	7.10	19.00	65.00
1987	0.00	0.00	0.00	0.00	0.16	4.30	9.20	12.00	25.00

02176500 COOSAWHATCHIE RIVER NEAR HAMPTON
Location: Lat 325010, Long 810755. Hampton County
Period of record: Feb 1951 through Sep 1987
Drainage area: 203.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	36	28	17.00-1976	0.00-1987	2.19	11.10	3.33	2.7922	1.52207	0.13067
3	36	30	17.00-1976	0.00-1987	2.37	11.58	3.40	2.5530	1.43564	0.11933
7	36	30	17.00-1976	0.00-1987	2.98	13.78	3.71	1.9132	1.24528	0.04580
14	36	32	19.00-1976	0.00-1987	4.09	19.44	4.41	1.4681	1.07820	0.05578
30	36	35	43.00-1960	0.00-1955	9.20	101.89	10.09	1.4794	1.09679	-0.25350
60	36	35	139.00-1970	0.00-1955	19.74	735.95	27.13	2.7511	1.37422	-0.23633
90	36	35	186.00-1970	0.00-1955	31.24	1452.05	38.11	2.1624	1.21993	-0.23602
120	36	36	171.00-1970	0.01-1955	42.65	1982.14	44.52	1.5419	1.04387	-0.27339
183	36	36	314.00-1970	0.84-1955	77.79	5677.74	75.35	1.5362	0.96864	-0.24637

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	0.97	1.1	1.6	2.7	5.2	9.9	16	21	54
5	0.00	0.05	0.19	0.43	1.3	3.3	5.5	12	20
10	0.00	0.00	0.00	0.00	0.53	1.7	2.9	6.7	11
15	0.00	0.00	0.00	0.00	0.30	1.2	2.0	4.3	7.5
20	0.00	0.00	0.00	0.00	0.18	0.86	1.5	2.7	5.9
25	0.00	0.00	0.00	0.00	0.11	0.64	1.1	1.5	4.8
30	0.00	0.00	0.00	0.00	0.06	0.44	0.75	0.75	4.2
40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.2
	LNPEARFF	LNPEARFF	LNPEARFF	POWTRAN	LNPEARFF	LNPEARFF	LNPEARFF	GENSME	POWTRAN

02176875 GREAT SWAMP NEAR RIDGELAND
Location: Lat 322945, Long 810107. Jasper County
Period of record: Oct 1968 - Sep 1984
Drainage area: 48.80 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1979	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1980	0.00	0.00	0.00	0.00	0.00	0.00	0.06	5.90	10.00
1981	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
1982	0.00	0.00	0.00	0.00	0.00	0.03	0.12	1.50	20.00
1984	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	5	0	0.00-1979	0.00-1984	0.00	0.00	0.00	0.0000	0.00000	0.00000
3	5	0	0.00-1979	0.00-1984	0.00	0.00	0.00	0.0000	0.00000	0.00000
7	5	0	0.00-1979	0.00-1984	0.00	0.00	0.00	0.0000	0.00000	0.00000
14	5	0	0.00-1979	0.00-1984	0.00	0.00	0.00	0.0000	0.00000	0.00000
30	5	0	0.00-1979	0.00-1984	0.00	0.00	0.00	0.0000	0.00000	0.00000
60	5	1	0.03-1982	0.00-1984	0.01	0.00	0.01	2.2361	2.23607	-0.33333
90	5	2	0.12-1982	0.00-1984	0.04	0.00	0.05	1.2578	1.49071	-0.81818
120	5	2	5.90-1980	0.00-1984	1.48	6.53	2.55	1.9147	1.72622	-0.58579
183	5	4	20.00-1982	0.00-1979	6.15	77.83	8.82	1.2724	1.43491	-0.80664

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.3
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NONE	NONE	NONE	NONE	NONE	GUMBEL3C	LNPEARFF	LNPEARFF	GUMBEL1

02177000 CHATTOOGA RIVER NEAR CLAYTON, GA
Location: Lat 344850, Long 831822. Oconee County
Period of record: May 1907 - Jun 1908; Oct 1939 through Sep 1987
Drainage area: 207.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1941	181.00	188.00	200.00	210.00	250.00	276.00	296.00	381.00	399.00
1942	162.00	163.00	170.00	192.00	201.00	235.00	246.00	294.00	380.00
1943	275.00	279.00	286.00	315.00	323.00	339.00	413.00	438.00	468.00
1944	190.00	206.00	212.00	215.00	228.00	277.00	277.00	304.00	376.00
1945	169.00	169.00	177.00	181.00	195.00	238.00	246.00	258.00	289.00
1946	213.00	220.00	226.00	250.00	277.00	337.00	340.00	367.00	380.00
1947	185.00	190.00	205.00	230.00	247.00	259.00	272.00	286.00	334.00
1948	122.00	124.00	127.00	133.00	152.00	173.00	191.00	233.00	325.00
1949	238.00	247.00	261.00	288.00	331.00	423.00	497.00	629.00	608.00
1950	454.00	463.00	475.00	498.00	563.00	722.00	762.00	764.00	819.00
1951	266.00	279.00	289.00	317.00	347.00	453.00	477.00	469.00	541.00
1952	130.00	131.00	133.00	136.00	165.00	180.00	206.00	238.00	307.00
1953	136.00	137.00	140.00	143.00	147.00	167.00	200.00	223.00	271.00
1954	151.00	152.00	154.00	156.00	168.00	198.00	212.00	242.00	315.00
1955	88.00	89.00	90.00	95.00	97.00	103.00	120.00	140.00	174.00
1956	125.00	130.00	132.00	135.00	149.00	169.00	177.00	185.00	231.00
1957	110.00	111.00	114.00	123.00	148.00	164.00	184.00	201.00	239.00
1958	160.00	165.00	172.00	185.00	228.00	276.00	323.00	372.00	441.00
1959	178.00	178.00	178.00	183.00	198.00	208.00	221.00	238.00	313.00
1960	290.00	296.00	312.00	330.00	354.00	445.00	486.00	522.00	630.00
1961	280.00	296.00	305.00	321.00	355.00	368.00	383.00	402.00	446.00
1962	244.00	245.00	252.00	258.00	265.00	326.00	374.00	437.00	494.00
1963	161.00	168.00	182.00	188.00	208.00	249.00	277.00	288.00	311.00
1964	200.00	201.00	203.00	211.00	227.00	254.00	277.00	315.00	416.00
1965	221.00	224.00	242.00	258.00	385.00	395.00	408.00	437.00	678.00
1966	243.00	245.00	252.00	264.00	275.00	304.00	339.00	367.00	442.00
1967	242.00	245.00	251.00	267.00	321.00	351.00	372.00	398.00	513.00
1968	352.00	358:00	373.00	401.00	479.00	508.00	648.00	747.00	768.00
1969	186.00	194.00	199.00	219.00	239.00	258.00	278.00	293.00	344.00
1970	324.00	333.00	367.00	410.00	442.00	538.00	589.00	585.00	602.00
1971	166.00	166.00	172.00	191.00	219.00	271.00	325.00	323.00	385.00
1972	237.00	244.00	272.00	289.00	346.00	381.00	485.00	510.00	516.00
1973	259.00	265.00	281.00	298.00	335.00	353.00	404.00	454.00	558.00
1974	265.00	267.00	275.00	278.00	290.00	329.00	363.00	428.00	550.00
1975	300.00	301.00	314.00	317.00	328.00	374.00	420.00	438.00	568.00
1976	233.00	239.00	255.00	266.00	304.00	378.00	398.00	485.00	668.00
1977	255.00	258.00	273.00	299.00	353.00	400.00	480.00	507.00	559.00
1978	215.00	217.00	229.00	250.00	256.00	279.00	330.00	426.00	558.00
1979	170.00	170.00	172.00	174.00	180.00	209.00	247.00	323.00	350.00
1980	357.00	365.00	376.00	403.00	511.00	603.00	635.00	749.00	866.00
1981	171.00	174.00	175.00	184.00	190.00	208.00	244.00	244.00	255.00
1982	113.00	115.00	117.00	125.00	130.00	168.00	188.00	192.00	226.00
1983	232.00	236.00	239.00	253.00	288.00	331.00	369.00	405.00	451.00
1984	190.00	191.00	207.00	214.00	269.00	285.00	303.00	311.00	412.00
1985	232.00	234.00	245.00	251.00	267.00	325.00	354.00	376.00	438.00
1986	212.00	217.00	225.00	231.00	260.00	299.00	348.00	386.00	395.00
1987	97.00	98.00	106.00	113.00	129.00	166.00	167.00	178.00	228.00

02177000 CHATTOOGA RIVER NEAR CLAYTON, GA
Location: Lat 344850, Long 831822. Oconee County
Period of record: May 1907 - Jun 1908; Oct 1939 through Sep 1987
Drainage area: 207.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	47	47	454.00-1950	88.00-1955	212.34	5319.03	72.93	0.7987	0.34347	0.22442
3	47	47	463.00-1950	89.00-1955	216.66	5589.71	74.76	0.7818	0.34508	0.22886
7	47	47	475.00-1950	90.00-1955	225.79	6186.68	78.66	0.7062	0.34836	0.22401
14	47	47	498.00-1950	95.00-1955	239.32	7198.56	84.84	0.6937	0.35452	0.22071
30	47	47	563.00-1950	97.00-1955	268.49	10114.72	100.57	0.7885	0.37458	0.17200
60	47	47	722.00-1950	103.00-1955	309.62	14708.58	121.28	1.0787	0.39171	0.18742
90	47	47	762.00-1950	120.00-1955	343.64	18269.25	135.16	0.9376	0.39333	0.18292
120	47	47	764.00-1950	140.00-1955	378.47	21611.06	147.01	0.8672	0.38843	0.16293
183	47	47	866.00-1980	174.00-1955	443.34	25222.35	158.82	0.6528	0.35822	0.20285

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	205	209	219	231	257	293	322	355	419
5	147	150	155	163	180	205	224	248	303
10	122	124	128	135	148	169	182	203	254
15	112	114	117	123	133	152	163	182	231
20	106	107	110	115	124	142	151	169	217
25	101	103	105	110	118	135	143	160	207
30	98	99	101	107	113	130	136	153	200
40	94	95	96	101	106	122	127	143	189
50	91	92	93	98	101	117	120	135	181
	GUMBEL3B	GUMBEL3B	GUMBEL3B	GUMBEL3B	LOGBOUGH	LOGBOUGH	GUMBEL1	GUMBEL1	GUMBEL1

02184500 WHITEWATER RIVER AT JOCASSEE
Location: Lat 345819, Long 825624. Oconee County
Period of record: Jan 1951 - Apr 1968
Drainage area: 47.30 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1952	36.00	36.00	38.00	39.00	51.00	51.00	57.00	65.00	86.00
1953	44.00	44.00	45.00	47.00	48.00	56.00	73.00	86.00	94.00
1954	44.00	44.00	45.00	46.00	49.00	59.00	67.00	77.00	96.00
1955	24.00	24.00	25.00	27.00	28.00	35.00	40.00	41.00	54.00
1956	35.00	36.00	37.00	37.00	39.00	45.00	44.00	46.00	59.00
1957	34.00	35.00	36.00	41.00	50.00	59.00	62.00	73.00	79.00
1958	39.00	42.00	43.00	45.00	51.00	62.00	82.00	100.00	122.00
1959	43.00	43.00	43.00	46.00	54.00	57.00	61.00	66.00	91.00
1960	86.00	88.00	96.00	102.00	116.00	138.00	167.00	167.00	200.00
1961	75.00	76.00	77.00	81.00	90.00	96.00	105.00	111.00	129.00
1962	64.00	65.00	68.00	70.00	73.00	100.00	125.00	148.00	152.00
1963	44.00	44.00	50.00	54.00	60.00	73.00	79.00	97.00	100.00
1964	44.00	44.00	45.00	47.00	51.00	62.00	68.00	80.00	106.00
1965	60.00	61.00	67.00	74.00	98.00	109.00	116.00	120.00	194.00
1966	52.00	53.00	57.00	61.00	70.00	80.00	90.00	97.00	110.00
1967	45.00	46.00	48.00	50.00	58.00	78.00	84.00	96.00	121.00
1968	75.00	77.00	82.00	90.00	110.00	120.00	155.00	176.00	181.00

Distribution statistics

Cons. Days	N	Non C N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	17	17	86.00-1960	24.00-1955	49.65	266.82	16.33	0.7559	0.32901	0.47685
3	17	17	88.00-1960	24.00-1955	50.47	280.37	16.74	0.7758	0.33176	0.45802
7	17	17	96.00-1960	25.00-1955	53.06	334.29	18.28	0.8169	0.34459	0.42019
14	17	17	102.00-1960	27.00-1955	56.29	392.91	19.82	0.8348	0.35212	0.40809
30	17	17	116.00-1960	28.00-1955	64.47	589.54	24.28	0.8270	0.37661	0.35723
60	17	17	138.00-1960	35.00-1955	75.29	756.68	27.51	0.7462	0.36534	0.36310
90	17	17	167.00-1960	40.00-1955	86.76	1232.65	35.11	0.9033	0.40465	0.24152
120	17	17	176.00-1968	41.00-1955	96.82	1387.32	37.25	0.6799	0.38469	0.24643
183	17	17	200.00-1960	54.00-1955	116.12	1773.75	42.12	0.6612	0.36270	0.21286

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	45	45	48	50	57	67	79	91	110
5	35	35	36	38	42	50	57	61	76
10	31	31	32	34	37	44	49	49	61
15	29	30	31	32	35	42	45	45	55
20	29	29	30	31	34	40	43	43	51
	LNPEARDI	LNPEARDI	LNPEARDI	LNPEARDI	LNPEARDI	LNPEARDI	LNPEARFF	GUMBEL1	GUMBEL1

02185000 KEOWEE RIVER NEAR JOCASSEE
Location: Lat 345721, Long 825441. Oconee County
Period of record: Dec 1949 - Apr 1968
Drainage area: 148.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1951	208.00	214.00	221.00	243.00	274.00	345.00	374.00	388.00	402.00
1952	92.00	93.00	96.00	99.00	128.00	144.00	168.00	194.00	253.00
1953	111.00	111.00	111.00	113.00	119.00	135.00	169.00	213.00	241.00
1954	113.00	114.00	115.00	118.00	123.00	151.00	177.00	208.00	262.00
1955	57.00	58.00	58.00	61.00	64.00	70.00	82.00	92.00	118.00
1956	84.00	94.00	100.00	102.00	111.00	126.00	128.00	131.00	174.00
1957	91.00	93.00	97.00	107.00	134.00	147.00	154.00	185.00	203.00
1958	110.00	116.00	123.00	129.00	159.00	183.00	242.00	299.00	358.00
1959	142.00	148.00	149.00	155.00	170.00	174.00	186.00	201.00	277.00
1960	220.00	224.00	246.00	253.00	292.00	338.00	407.00	418.00	500.00
1961	211.00	215.00	225.00	234.00	256.00	270.00	290.00	302.00	347.00
1962	202.00	203.00	214.00	219.00	228.00	303.00	375.00	426.00	458.00
1963	131.00	132.00	143.00	152.00	174.00	207.00	224.00	267.00	285.00
1964	122.00	124.00	128.00	131.00	142.00	178.00	195.00	218.00	277.00
1965	202.00	203.00	218.00	232.00	272.00	329.00	352.00	366.00	603.00
1966	186.00	193.00	204.00	219.00	243.00	274.00	285.00	298.00	357.00
1967	125.00	127.00	131.00	145.00	172.00	209.00	226.00	256.00	339.00
1968	229.00	232.00	244.00	267.00	320.00	325.00	437.00	529.00	538.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	18	18	229.00-1968	57.00-1955	146.44	2826.47	53.16	0.1546	0.36304	0.42965
3	18	18	232.00-1968	58.00-1955	149.67	2866.11	53.54	0.1509	0.35770	0.41332
7	18	18	246.00-1960	58.00-1955	156.83	3365.14	58.01	0.1798	0.36988	0.41315
14	18	18	267.00-1968	61.00-1955	165.50	3880.47	62.29	0.1971	0.37640	0.40493
30	18	18	320.00-1968	64.00-1955	187.83	5137.81	71.68	0.2671	0.38161	0.40924
60	18	18	345.00-1951	70.00-1955	217.11	6920.88	83.19	0.1719	0.38318	0.36959
90	18	18	437.00-1968	82.00-1955	248.39	10176.46	100.88	0.3760	0.40613	0.24569
120	18	18	529.00-1968	92.00-1955	277.28	12051.42	109.78	0.5040	0.39592	0.20025
183	18	18	603.00-1965	118.00-1955	332.89	15639.99	125.06	0.4856	0.37568	0.22322

Low flow frequency array table

Return Period	1 Day	Consecutive days: 3	7	14	30	60	90	120	183
2	139	142	148	156	177	205	234	261	315
5	96	99	102	106	120	138	153	173	214
10	78	81	82	85	95	110	118	135	171
15	70	72	73	75	84	97	102	118	152
20	64	67	67	69	77	89	93	108	140
	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1

02185200 LITTLE RIVER NEAR WALHALLA
Location: Lat 345011, Long 825848. Oconee County
Period of record: Mar 1967 through Sep 1987
Drainage area: 72.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1968	75.00	78.00	87.00	99.00	111.00	117.00	135.00	187.00	176.00
1969	35.00	35.00	43.00	54.00	68.00	72.00	85.00	99.00	114.00
1970	95.00	96.00	98.00	101.00	119.00	134.00	149.00	154.00	158.00
1971	15.00	15.00	15.00	17.00	24.00	29.00	33.00	33.00	50.00
1972	76.00	81.00	85.00	91.00	100.00	108.00	126.00	135.00	133.00
1973	64.00	66.00	69.00	75.00	78.00	83.00	92.00	102.00	125.00
1974	75.00	78.00	80.00	81.00	82.00	88.00	97.00	110.00	133.00
1975	79.00	80.00	82.00	83.00	85.00	91.00	104.00	117.00	133.00
1976	55.00	57.00	63.00	67.00	82.00	106.00	114.00	126.00	168.00
1977	70.00	70.00	75.00	85.00	99.00	112.00	125.00	128.00	153.00
1978	56.00	58.00	59.00	61.00	62.00	72.00	82.00	103.00	147.00
1979	57.00	58.00	59.00	59.00	60.00	68.00	77.00	91.00	111.00
1980	100.00	101.00	105.00	113.00	140.00	169.00	187.00	207.00	236.00
1981	53.00	56.00	62.00	68.00	72.00	83.00	93.00	97.00	99.00
1982	25.00	25.00	27.00	29.00	31.00	44.00	49.00	50.00	56.00
1983	46.00	47.00	48.00	50.00	59.00	75.00	86.00	88.00	97.00
1984	43.00	43.00	46.00	52.00	62.00	70.00	71.00	81.00	102.00
1985	66.00	67.00	73.00	75.00	77.00	89.00	96.00	101.00	121.00
1986	47.00	50.00	52.00	53.00	56.00	67.00	84.00	95.00	99.00
1987	12.00	13.00	15.00	18.00	19.00	25.00	32.00	33.00	44.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	20	20	100.00-1980	12.00-1987	57.20	540.96	23.26	-0.2124	0.40662	-0.24354
3	20	20	101.00-1980	13.00-1987	58.70	564.61	23.76	-0.2665	0.40480	-0.25385
7	20	20	105.00-1980	15.00-1987	62.15	596.83	24.43	-0.3394	0.39308	-0.23590
14	20	20	113.00-1980	17.00-1971	66.55	654.85	25.59	-0.2890	0.38452	-0.19578
30	20	20	140.00-1980	19.00-1987	74.30	888.51	29.81	0.1178	0.40118	-0.18200
60	20	20	169.00-1980	25.00-1987	85.10	1097.09	33.12	0.4099	0.38922	-0.22943
90	20	20	187.00-1980	32.00-1987	95.85	1329.33	36.46	0.3983	0.38039	-0.25721
120	20	20	207.00-1980	33.00-1987	106.85	1809.13	42.53	0.4181	0.39807	-0.17205
183	20	20	236.00-1980	44.00-1987	122.75	1958.19	44.25	0.3227	0.36050	0.00975

Low flow frequency array table

Return Period	1 Day	Consecutive days: 3	7	14	30	60	90	120	183
2	58	60	63	68	74	85	94	106	123
5	37	38	41	45	49	55	64	75	86
10	26	27	30	32	36	40	51	61	66
15	21	22	24	26	30	33	44	55	56
20	17	18	20	22	25	29	40	51	51
	GUMBEL3B	GUMBEL3B	GUMBEL3B	GUMBEL3B	NORMAL	LOGBOUGH	POWTRAN	GUMBEL3A	NORMAL

02185500 KEOWEE RIVER NEAR NEWRY
Location: Lat 344420, Long 825150. Oconee County
Period of record: Oct 1939 - Jun 1961
Drainage area: 455.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1941	276.00	283.00	289.00	293.00	322.00	493.00	525.00	698.00	710.00
1942	224.00	246.00	249.00	255.00	269.00	332.00	356.00	414.00	602.00
1943	437.00	454.00	475.00	535.00	550.00	578.00	706.00	772.00	838.00
1944	389.00	409.00	420.00	429.00	456.00	545.00	543.00	590.00	750.00
1945	378.00	401.00	425.00	501.00	525.00	569.00	613.00	604.00	664.00
1946	356.00	369.00	391.00	449.00	526.00	613.00	635.00	676.00	685.00
1947	415.00	447.00	469.00	553.00	588.00	613.00	654.00	704.00	789.00
1948	275.00	282.00	291.00	317.00	351.00	391.00	403.00	482.00	620.00
1949	350.00	365.00	401.00	448.00	524.00	701.00	813.00	1090.00	1090.00
1950	680.00	691.00	790.00	936.00	1100.00	1360.00	1470.00	1420.00	1590.00
1951	274.00	277.00	289.00	335.00	426.00	646.00	800.00	793.00	870.00
1952	197.00	239.00	263.00	277.00	323.00	364.00	410.00	450.00	602.00
1953	175.00	179.00	188.00	236.00	316.00	349.00	451.00	528.00	577.00
1954	300.00	360.00	378.00	380.00	391.00	484.00	509.00	560.00	729.00
1955	152.00	154.00	157.00	159.00	166.00	195.00	221.00	239.00	320.00
1956	192.00	229.00	249.00	255.00	274.00	308.00	309.00	319.00	373.00
1957	178.00	215.00	231.00	252.00	327.00	359.00	403.00	438.00	489.00
1958	202.00	218.00	231.00	251.00	319.00	389.00	546.00	666.00	799.00
1959	376.00	389.00	396.00	409.00	463.00	467.00	494.00	503.00	660.00
1960	396.00	404.00	419.00	476.00	610.00	720.00	857.00	877.00	1010.00
1961	556.00	562.00	573.00	596.00	642.00	695.00	740.00	788.00	848.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	21	21	680.00-1950	152.00-1955	322.76	17029.80	130.50	0.9232	0.40432	0.31175
3	21	21	691.00-1950	154.00-1955	341.57	16509.01	128.49	0.8532	0.37617	0.21434
7	21	21	790.00-1950	157.00-1955	360.67	20185.84	142.08	1.1547	0.39393	0.17448
14	21	21	936.00-1950	159.00-1955	397.24	28476.85	168.75	1.3798	0.42481	0.20831
30	21	21	1100.00-1950	166.00-1955	450.86	36765.93	191.74	1.6385	0.42529	0.26697
60	21	21	1360.00-1950	195.00-1955	531.95	54742.71	233.97	1.8834	0.43984	0.36296
90	21	21	1470.00-1950	221.00-1955	593.24	66551.80	257.98	1.6749	0.43486	0.37927
120	21	21	1420.00-1950	239.00-1955	648.14	66482.88	257.84	1.1715	0.39782	0.40654
183	21	21	1590.00-1950	320.00-1955	743.57	68150.05	261.06	1.3765	0.35108	0.41961

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	303	323	341	373	413	487	547	607	693
5	201	221	234	247	296	351	390	435	547
10	157	178	192	199	251	297	327	363	471
15	137	159	175	179	231	273	300	331	433
20	125	147	165	168	219	259	283	312	408
25	116	138	159	161	210	249	271	298	390
	GUMBEL1	GUMBEL1	GUMBEL3B	GUMBEL3B	LNPEARFF	POWTRAN	LOGNORM	POWTRAN	GENSME

02186000 TWELVEMILE CREEK NEAR LIBERTY
Location: Lat 344805, Long 824455. Pickens County
Period of record: Jul 1954 - Sep 1964
Drainage area: 106.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1956	32.00	33.00	34.00	37.00	42.00	48.00	50.00	54.00	54.00
1957	35.00	36.00	37.00	40.00	48.00	53.00	61.00	65.00	75.00
1958	39.00	41.00	43.00	46.00	59.00	61.00	73.00	83.00	99.00
1959	85.00	86.00	90.00	92.00	100.00	103.00	105.00	107.00	124.00
1960	74.00	76.00	77.00	84.00	99.00	132.00	150.00	146.00	156.00
1961	107.00	111.00	114.00	119.00	122.00	133.00	142.00	153.00	171.00
1962	97.00	100.00	103.00	105.00	107.00	114.00	126.00	157.00	203.00
1963	69.00	69.00	76.00	78.00	87.00	104.00	109.00	116.00	130.00
1964	80.00	82.00	82.00	84.00	88.00	97.00	107.00	106.00	124.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	9	9	107.00-1961	32.00-1956	68.67	672.67	25.94	-0.1817	0.37771	0.61606
3	9	9	111.00-1961	33.00-1956	70.44	709.14	26.63	-0.1230	0.37802	0.61238
7	9	9	114.00-1961	34.00-1956	72.89	743.65	27.27	-0.1594	0.37413	0.62732
14	9	9	119.00-1961	37.00-1956	76.11	754.99	27.48	-0.1404	0.36101	0.65601
30	9	9	122.00-1961	42.00-1956	83.56	684.69	26.17	-0.3321	0.31316	0.74951
60	9	9	133.00-1961	48.00-1956	93.89	937.88	30.62	-0.2918	0.32618	0.81048
90	9	9	150.00-1960	50.00-1956	102.56	1087.36	32.98	-0.1900	0.32153	0.80008
120	9	9	157.00-1962	54.00-1956	109.67	1256.00	35.44	-0.1123	0.32316	0.80137
183	9	9	203.00-1962	54.00-1956	126.22	1932.40	43.96	0.0491	0.34827	0.71504

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	73	73	73	79	89	101	101	105	120
5	46	46	48	53	60	68	68	73	81
10	32	32	37	39	45	50	56	59	64
	GENSME	GUMBEL1	LNPEARFF	GENSME	GENSME	GENSME	GUMBEL1	GUMBEL1	GUMBEL1

02187000 SENECA RIVER NEAR ANDERSON
Location: Lat 342910, Long 824945. Anderson County
Period of record: Jul 1928 - Sep 1959
Drainage area: 1026.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1930	715.00	798.00	887.00	925.00	1100.00	1370.00	1660.00	1850.00	2500.00
1931	270.00	490.00	574.00	602.00	634.00	735.00	746.00	802.00	1000.00
1932	170.00	340.00	402.00	417.00	451.00	522.00	579.00	721.00	906.00
1933	608.00	697.00	763.00	809.00	1000.00	1200.00	1380.00	1440.00	1630.00
1934	502.00	624.00	647.00	683.00	766.00	812.00	844.00	998.00	1130.00
1935	878.00	949.00	1070.00	1110.00	1230.00	1510.00	1550.00	1710.00	1730.00
1936	585.00	612.00	640.00	663.00	719.00	861.00	1280.00	1340.00	1340.00
1937	499.00	671.00	723.00	760.00	964.00	1120.00	1140.00	1230.00	2050.00
1938	695.00	800.00	944.00	1040.00	1240.00	1390.00	1500.00	1500.00	1830.00
1939	553.00	619.00	644.00	650.00	667.00	789.00	820.00	894.00	1160.00
1940	429.00	490.00	557.00	588.00	612.00	648.00	676.00	739.00	997.00
1941	518.00	589.00	640.00	670.00	731.00	937.00	965.00	1190.00	1200.00
1942	326.00	387.00	393.00	403.00	439.00	520.00	565.00	665.00	981.00
1943	704.00	733.00	782.00	804.00	900.00	924.00	1040.00	1140.00	1250.00
1944	731.00	788.00	803.00	817.00	857.00	1000.00	981.00	1050.00	1320.00
1945	668.00	714.00	755.00	820.00	878.00	1010.00	1010.00	1030.00	1160.00
1946	600.00	633.00	671.00	769.00	883.00	995.00	1070.00	1130.00	1170.00
1947	787.00	806.00	843.00	948.00	1010.00	1100.00	1220.00	1240.00	1380.00
1948	444.00	467.00	485.00	531.00	597.00	638.00	678.00	793.00	1040.00
1949	735.00	816.00	827.00	848.00	896.00	1230.00	1380.00	1740.00	1660.00
1950	1400.00	1400.00	1430.00	1600.00	1830.00	2200.00	2400.00	2340.00	2630.00
1951	911.00	997.00	1020.00	1070.00	1190.00	1430.00	1540.00	1560.00	1640.00
1952	489.00	542.00	555.00	567.00	691.00	749.00	814.00	865.00	1050.00
1953	599.00	604.00	628.00	651.00	660.00	687.00	782.00	873.00	990.00
1954	455.00	573.00	649.00	698.00	718.00	813.00	828.00	866.00	1050.00
1955	215.00	252.00	258.00	263.00	276.00	314.00	375.00	427.00	579.00
1956	372.00	387.00	405.00	450.00	488.00	521.00	547.00	569.00	634.00
1957	342.00	357.00	382.00	448.00	525.00	580.00	710.00	774.00	873.00
1958	320.00	403.00	432.00	488.00	633.00	687.00	891.00	1110.00	1290.00
1959	696.00	764.00	784.00	808.00	858.00	880.00	906.00	925.00	1180.00

02187000 SENECA RIVER NEAR ANDERSON
Location: Lat 342910, Long 824945. Anderson County
Period of record: Jul 1928 - Sep 1959
Drainage area: 1026.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	30	30	1400.00-1950	170.00-1932	573.87	58025.92	240.89	1.0889	0.41976	0.34082
3	30	30	1400.00-1950	252.00-1955	643.40	52138.77	228.34	0.9954	0.35489	0.36516
7	30	30	1430.00-1950	258.00-1955	686.43	56446.98	237.59	0.8255	0.34612	0.29636
14	30	30	1600.00-1950	263.00-1955	730.00	67150.67	259.13	1.0725	0.35498	0.26737
30	30	30	1830.00-1950	276.00-1955	814.77	90826.45	301.37	1.1340	0.36989	0.25828
60	30	30	2200.00-1950	314.00-1955	939.07	141925.73	376.73	1.1951	0.40118	0.29778
90	30	30	2400.00-1950	375.00-1955	1029.23	172206.05	414.98	1.1830	0.40319	0.30697
120	30	30	2340.00-1950	427.00-1955	1117.03	173495.90	416.53	0.9180	0.37289	0.32876
183	30	30	2630.00-1950	579.00-1955	1311.67	219361.62	468.36	1.1785	0.35707	0.31823

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	554	625	676	696	773	871	954	1040	1170
5	366	447	476	512	563	626	684	767	955
10	283	367	382	432	473	527	576	653	841
15	246	330	339	396	432	483	528	602	783
20	222	308	313	374	407	457	499	571	746
25	206	291	295	358	389	438	479	550	718
30	194	279	281	346	376	424	464	533	697
	LOGBOUGH	LOGBOUGH	GUMBEL3B	POWTRAN	POWTRAN	LOGNORM	LNPEARFF	LOGNORM	GENSME

02187500 SAVANNAH RIVER NEAR IVA
Location: Lat 341520, Long 824442. Anderson County
Period of record: Oct 1949 - Sep 1981
Drainage area: 2231.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1964	144.00	410.00	1140.00	1490.00	1990.00	2770.00	3040.00	3300.00	3650.00
1965	205.00	866.00	2680.00	2800.00	2810.00	3430.00	4130.00	4150.00	5180.00
1966	137.00	223.00	2400.00	2580.00	2600.00	3160.00	3320.00	3340.00	3730.00
1967	152.00	293.00	2390.00	2400.00	2500.00	2730.00	3220.00	3270.00	3330.00
1968	114.00	837.00	1650.00	1650.00	1660.00	2840.00	4370.00	4320.00	4920.00
1969	119.00	802.00	1940.00	2070.00	2570.00	3080.00	3090.00	3180.00	3480.00
1970	130.00	257.00	1510.00	1660.00	1840.00	2290.00	2550.00	2840.00	2960.00
1971	100.00	136.00	227.00	512.00	1320.00	1740.00	1790.00	1950.00	1990.00
1972	152.00	304.00	1220.00	1750.00	1970.00	2610.00	2730.00	2750.00	2920.00
1973	277.00	444.00	1420.00	1990.00	2340.00	3020.00	3470.00	3870.00	4200.00
1974	264.00	1120.00	2540.00	2590.00	2620.00	3430.00	3720.00	3910.00	4210.00
1975	204.00	376.00	1760.00	1960.00	2070.00	2310.00	3110.00	3200.00	3910.00
1976	252.00	1130.00	2410.00	3360.00	3580.00	3960.00	4230.00	4220.00	5010.00
1977	126.00	364.00	1660.00	2390.00	2520.00	2990.00	3760.00	4160.00	4670.00
1978	152.00	549.00	2490.00	2650.00	2970.00	3750.00	3990.00	4040.00	4110.00
1979	132.00	394.00	2190.00	2490.00	2570.00	3030.00	3170.00	3270.00	3520.00
1980	207.00	766.00	2380.00	2900.00	3300.00	4620.00	4790.00	4900.00	5400.00
1981	240.00	524.00	894.00	1030.00	1070.00	1270.00	1700.00	1850.00	2060.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	18	18	277.00-1973	100.00-1971	172.61	3170.02	56.30	0.6429	0.32618	0.42654
3	18	18	1130.00-1976	136.00-1971	544.17	92031.32	303.37	0.7267	0.55749	-0.19089
7	18	18	2680.00-1965	227.00-1971	1827.83	453636.50	673.53	-0.7640	0.36848	0.15673
14	18	18	3360.00-1976	512.00-1971	2126.22	493786.30	702.70	-0.5683	0.33049	0.13756
30	18	18	3580.00-1976	1070.00-1981	2350.00	416647.06	645.48	-0.1614	0.27467	-0.07646
60	18	18	4620.00-1980	1270.00-1981	2946.11	607272.22	779.28	-0.0792	0.26451	-0.27454
90	18	18	4790.00-1980	1700.00-1981	3343.33	686882.35	828.78	-0.3822	0.24789	-0.07028
120	18	18	4900.00-1980	1850.00-1981	3473.33	651741.18	807.30	-0.4562	0.23243	-0.06496
183	18	18	5400.00-1980	1990.00-1971	3847.22	973456.54	986.64	-0.2933	0.25645	0.00461

Low flow frequency array table

Return Period	1 Day	Consecutive days: 3	7	14	30	60	90	120	183
2	154	440	1940	2240	2410	2950	3450	3520	3890
5	127	300	1310	1540	1790	2290	2640	2790	3010
10	114	227	896	1170	1470	1950	2150	2400	2530
15	107	191	662	983	1310	1780	1880	2200	2300
20	102	167	499	862	1210	1660	1700	2070	2150
	GENSME	GENSME	GUMBEL3A	GENSME	GENSME	NORMAL	LOGBOUGH	WEIBULL	WEIBULL

02188000 ROCKY RIVER NEAR CALHOUN FALLS
Location: Lat 340741, Long 823756. Abbeville County
Period of record: Feb 1950 - Sep 1966
Drainage area: 267.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1951	54.00	88.00	125.00	139.00	140.00	155.00	161.00	158.00	163.00
1952	24.00	52.00	62.00	68.00	72.00	88.00	90.00	101.00	118.00
1953	54.00	71.00	83.00	104.00	106.00	126.00	142.00	149.00	150.00
1954	38.00	46.00	48.00	50.00	54.00	66.00	92.00	110.00	126.00
1955	9.00	11.00	13.00	22.00	31.00	37.00	45.00	57.00	78.00
1956	25.00	51.00	77.00	89.00	94.00	101.00	105.00	107.00	113.00
1957	26.00	59.00	90.00	92.00	94.00	97.00	104.00	111.00	189.00
1958	18.00	63.00	90.00	92.00	95.00	102.00	114.00	120.00	139.00
1959	73.00	95.00	104.00	120.00	128.00	132.00	141.00	146.00	152.00
1960	43.00	78.00	112.00	131.00	152.00	155.00	167.00	205.00	231.00
1961	102.00	127.00	140.00	143.00	146.00	149.00	157.00	164.00	169.00
1962	106.00	121.00	129.00	152.00	175.00	193.00	208.00	216.00	242.00
1963	102.00	119.00	133.00	135.00	134.00	147.00	155.00	162.00	180.00
1964	136.00	145.00	148.00	151.00	157.00	166.00	184.00	181.00	202.00
1965	185.00	195.00	199.00	209.00	231.00	257.00	426.00	434.00	500.00
1966	166.00	169.00	183.00	188.00	191.00	201.00	200.00	204.00	227.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	16	16	185.00-1965	9.00-1955	72.56	2800.75	52.92	0.7416	0.72933	0.83339
3	16	16	195.00-1965	11.00-1955	93.13	2291.98	47.87	0.4712	0.51409	0.81947
7	16	16	199.00-1965	13.00-1955	108.50	2180.50	46.70	0.0134	0.43038	0.76445
14	16	16	209.00-1965	22.00-1955	117.81	2230.15	47.22	-0.0965	0.40084	0.69933
30	16	16	231.00-1965	31.00-1955	125.00	2529.38	50.29	0.1172	0.40234	0.67719
60	16	16	257.00-1965	37.00-1955	135.75	2815.56	53.06	0.3108	0.39088	0.62892
90	16	16	426.00-1965	45.00-1955	155.69	6670.84	81.68	2.0375	0.52461	0.36858
120	16	16	434.00-1965	57.00-1955	164.06	6630.68	81.43	2.0697	0.49633	0.32967
183	16	16	500.00-1965	78.00-1955	186.19	8527.15	92.34	2.2888	0.49597	0.26659

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	65	86	110	121	125	135	140	147	165
5	22	47	68	78	78	87	94	104	122
10	3.3	30	47	55	55	64	76	87	105
15	0.00	23	36	43	45	54	68	79	98
20	0.00	18	29	36	38	47	64	75	94
	GUMBEL1	GUMBEL1	GUMBEL3C	GENSME	LOGBOUGH	LOGBOUGH	POWTRAN	POWTRAN	POWTRAN

02189000 SAVANNAH RIVER NEAR CALHOUN FALLS
Location: Lat 340415, Long 823830. Abbeville County
Period of record: Oct 1978 - Sep 1981
Drainage area: 2876.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1964	670.00	1130.00	1690.00	2010.00	2620.00	3450.00	3680.00	3940.00	4300.00
1965	844.00	2310.00	3860.00	3900.00	3860.00	4860.00	5680.00	5600.00	6770.00
1966	770.00	877.00	3180.00	3560.00	4210.00	4310.00	4480.00	4540.00	4920.00
1967	580.00	1140.00	3120.00	3320.00	3450.00	3530.00	3740.00	3970.00	4140.00
1968	550.00	1400.00	2330.00	2350.00	2350.00	3720.00	4920.00	4880.00	5720.00
1969	560.00	1730.00	2560.00	2840.00	3410.00	3900.00	4090.00	4210.00	4450.00
1970	700.00	1230.00	2240.00	2510.00	2830.00	3260.00	3650.00	3970.00	3990.00
1971	443.00	528.00	1040.00	1550.00	2110.00	2790.00	2840.00	3060.00	3530.00
1972	690.00	1050.00	1910.00	1930.00	2260.00	3670.00	3910.00	3950.00	4100.00
1973	478.00	810.00	1640.00	2240.00	2520.00	3260.00	3700.00	4090.00	4560.00
1974	688.00	1560.00	2890.00	2960.00	3020.00	3900.00	4290.00	4510.00	4880.00
1975	332.00	766.00	1800.00	2020.00	2230.00	2430.00	3330.00	3720.00	4500.00
1976	868.00	1530.00	2710.00	3750.00	4010.00	4310.00	4510.00	4660.00	5670.00
1977	768.00	1170.00	2380.00	3010.00	3450.00	3870.00	4200.00	4660.00	5610.00
1978	388.00	642.00	2600.00	3070.00	3450.00	4100.00	4300.00	4430.00	4570.00
1979	354.00	983.00	2230.00	2560.00	2830.00	3270.00	3530.00	3690.00	3990.00
1980	764.00	1520.00	3290.00	4230.00	4560.00	5060.00	5510.00	5570.00	6710.00

Distribution statistics

Cons. Days	N	Non C N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	17	17	868.00-1976	332.00-1975	614.53	28990.76	170.27	-0.2758	0.27707	-0.16102
3	17	17	2310.00-1965	528.00-1971	1198.59	198843.01	445.92	0.7887	0.37204	-0.17550
7	17	17	3860.00-1965	1040.00-1971	2439.41	501068.38	707.86	0.0440	0.29018	0.10964
14	17	17	4230.00-1980	1550.00-1971	2812.35	584794.12	764.72	0.2367	0.27191	0.12697
30	17	17	4560.00-1980	2110.00-1971	3127.65	559006.62	747.67	0.3558	0.23905	0.15801
60	17	17	5060.00-1980	2430.00-1975	3746.47	454836.76	674.42	0.1216	0.18001	-0.15948
90	17	17	5680.00-1965	2840.00-1971	4138.82	546248.53	739.09	0.6132	0.17857	-0.12677
120	17	17	5600.00-1965	3060.00-1971	4320.59	423630.88	650.87	0.4214	0.15064	-0.09339
183	17	17	6770.00-1965	3530.00-1971	4847.65	887144.12	941.88	0.8978	0.19430	-0.03680

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	640	1150	2460	2700	3020	3730	4050	4290	4630
5	478	811	1810	2080	2410	3180	3510	3770	4070
10	377	662	1480	1820	2160	2890	3270	3520	3860
15	321	594	1310	1700	2040	2750	3160	3400	3770
20	284	553	1200	1620	1970	2660	3090	3320	3720
	LOGBOUGH	LOGBOUGH	LOGBOUGH	GUMBEL1	GUMBEL1	POWTRAN	LNPEARFF	LNPEARFF	LNPEARFF

02192500 LITTLE RIVER NEAR MOUNT CARMEL
Location: Lat 340413, Long 823002. McCormick County
Period of record: Dec 1939 - Sep 1967; Aug 1986 through Sep 1970
Drainage area: 217.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1941	20.00	21.00	27.00	36.00	39.00	53.00	77.00	89.00	122.00
1942	20.00	22.00	23.00	24.00	33.00	42.00	45.00	56.00	107.00
1943	30.00	32.00	34.00	40.00	49.00	59.00	67.00	77.00	114.00
1944	32.00	34.00	36.00	50.00	53.00	66.00	66.00	71.00	106.00
1945	25.00	25.00	28.00	32.00	37.00	39.00	44.00	48.00	58.00
1946	30.00	34.00	43.00	44.00	61.00	78.00	95.00	111.00	133.00
1947	50.00	51.00	53.00	68.00	77.00	79.00	93.00	95.00	111.00
1948	21.00	23.00	26.00	35.00	42.00	50.00	58.00	80.00	89.00
1949	53.00	56.00	58.00	60.00	63.00	69.00	77.00	93.00	114.00
1950	82.00	83.00	88.00	88.00	91.00	99.00	99.00	105.00	123.00
1951	40.00	40.00	42.00	47.00	51.00	70.00	83.00	82.00	95.00
1952	20.00	20.00	20.00	21.00	27.00	35.00	42.00	47.00	61.00
1953	24.00	26.00	28.00	31.00	35.00	37.00	40.00	44.00	53.00
1954	17.00	18.00	20.00	28.00	33.00	42.00	50.00	54.00	58.00
1955	1.00	1.10	1.19	1.60	2.50	4.90	8.90	13.00	27.00
1956	9.60	9.70	10.00	12.00	18.00	20.00	24.00	29.00	37.00
1957	2.80	2.90	3.70	7.00	13.00	14.00	19.00	24.00	54.00
1958	2.90	3.10	3.90	6.10	11.00	15.00	22.00	30.00	46.00
1959	21.00	22.00	24.00	27.00	29.00	31.00	34.00	37.00	48.00
1960	20.00	21.00	24.00	29.00	33.00	68.00	67.00	115.00	167.00
1961	39.00	41.00	45.00	47.00	51.00	61.00	62.00	67.00	78.00
1962	40.00	41.00	41.00	41.00	43.00	49.00	57.00	67.00	95.00
1963	24.00	25.00	26.00	32.00	38.00	44.00	47.00	52.00	72.00
1964	41.00	42.00	45.00	50.00	54.00	58.00	80.00	104.00	126.00
1965	78.00	80.00	88.00	103.00	136.00	183.00	284.00	290.00	327.00
1966	88.00	89.00	92.00	94.00	96.00	105.00	104.00	108.00	129.00
1967	42.00	42.00	45.00	54.00	65.00	76.00	85.00	93.00	105.00
1968	56.00	64.00	66.00	74.00	78.00	92.00	114.00	138.00	148.00
1969	42.00	42.00	44.00	47.00	54.00	60.00	64.00	75.00	116.00
1970	51.00	51.00	51.00	51.00	56.00	63.00	66.00	75.00	95.00

02192500 LITTLE RIVER NEAR MOUNT CARMEL
Location: Lat 340413, Long 823002. McCormick County
Period of record: Dec 1939 - Sep 1967; Aug 1986 through Sep 1970
Drainage area: 217.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	30	30	88.00-1966	1.00-1955	34.08	472.43	21.74	0.7932	0.63784	0.59958
3	30	30	89.00-1966	1.10-1955	35.39	493.19	22.21	0.7359	0.62746	0.58908
7	30	30	92.00-1966	1.19-1955	37.86	536.62	23.17	0.7294	0.61187	0.59691
14	30	30	103.00-1965	1.60-1955	42.66	593.20	24.36	0.6472	0.57097	0.60050
30	30	30	136.00-1965	2.50-1955	48.95	734.91	27.11	1.0459	0.55381	0.58302
60	30	30	183.00-1965	4.90-1955	58.73	1109.15	33.30	1.5255	0.56707	0.48233
90	30	30	284.00-1965	8.90-1955	69.13	2262.65	47.57	2.9233	0.68809	0.33043
120	30	30	290.00-1965	13.00-1955	78.97	2424.97	49.24	2.4638	0.62360	0.33953
183	30	30	327.00-1965	27.00-1955	100.47	2952.32	54.34	2.2269	0.54083	0.30547

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	31	32	34	39	43	54	62	73	96
5	14	15	17	23	28	31	35	42	60
10	7.3	8.0	9.3	15	20	21	24	29	44
15	4.1	4.8	5.9	11	16	17	20	24	37
20	2.2	2.8	3.8	7.9	13	15	18	21	33
25	0.76	1.3	2.3	5.9	11	13	16	18	30
30	0.00	0.25	1.2	4.3	9.7	12	15	17	28
	GUMBEL1	GUMBEL1	GUMBEL1	GENSME	GENSME	POWTRAN	LNPEARFF	LOGBOUGH	LOGBOUGH

02195000 SAVANNAH RIVER NEAR CLARKS HILL
Location: Lat 333840, Long 821205. McCormick County
Period of record: May 1940 - Jun 1954
Drainage area: 6150.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1942	1120.00	1510.00	1630.00	2000.00	2180.00	2390.00	2440.00	2850.00	4670.00
1943	1530.00	2290.00	2840.00	2930.00	3480.00	3820.00	4160.00	4720.00	4940.00
1944	2130.00	2640.00	3210.00	3330.00	3450.00	3870.00	3940.00	4160.00	5480.00
1945	1930.00	2440.00	2770.00	2970.00	3370.00	3440.00	3480.00	3660.00	4010.00
1946	1800.00	2020.00	2610.00	2900.00	3590.00	4080.00	4390.00	4550.00	4850.00
1947	2070.00	2100.00	2330.00	3380.00	3410.00	3880.00	4490.00	4830.00	5120.00
1948	1960.00	2050.00	2470.00	2640.00	2970.00	3180.00	3320.00	3740.00	4400.00
1949	2920.00	3270.00	3750.00	4370.00	4410.00	5310.00	5630.00	6540.00	6940.00
1950	5000.00	5760.00	6210.00	6370.00	6850.00	7690.00	8200.00	8230.00	8810.00
1951	2510.00	2800.00	3190.00	3490.00	3810.00	5350.00	5660.00	5630.00	5990.00
1952	1390.00	1700.00	2060.00	2110.00	2400.00	2720.00	2940.00	3160.00	3800.00
1953	2100.00	2230.00	2440.00	2790.00	3150.00	3290.00	3340.00	3340.00	3490.00
1954	1730.00	3580.00	4710.00	5040.00	5140.00	5340.00	5470.00	5830.00	6180.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	13	13	5000.00-1950	1120.00-1942	2168.46	865859.17	930.52	2.0168	0.42911	0.33810
3	13	13	5760.00-1950	1510.00-1942	2645.38	1119640.24	1058.13	1.8327	0.39999	0.23932
7	13	13	6210.00-1950	1630.00-1942	3093.85	1368531.36	1169.84	1.4122	0.37812	0.19452
14	13	13	6370.00-1950	2000.00-1942	3409.23	1361022.49	1166.63	1.2192	0.34220	0.21322
30	13	13	6850.00-1950	2180.00-1942	3708.46	1358705.33	1165.64	1.3503	0.31432	0.18167
60	13	13	7690.00-1950	2390.00-1942	4181.54	1870197.63	1367.55	1.1030	0.32705	0.32365
90	13	13	8200.00-1950	2440.00-1942	4420.00	2159015.38	1469.36	1.0740	0.33243	0.30720
120	13	13	8230.00-1950	2850.00-1942	4710.77	2151160.95	1466.68	0.8995	0.31135	0.30835
183	13	13	8810.00-1950	3490.00-1953	5283.08	1926959.76	1388.15	1.0746	0.26275	0.31054

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	1940	2320	2760	3150	3470	3790	4180	4470	5020
5	1560	1930	2250	2550	2790	3140	3160	3420	4090
10	1360	1730	1990	2240	2520	2800	2800	3000	3710
15	1260	1630	1860	2080	2400	2630	2630	2810	3540
	GENSME	GENSME	GENSME	GENSME	POWTRAN	GENSME	LNPEARDI	LOGBOUGH	LNPEARDI

02196000 STEVENS CREEK NEAR MODOC
Location: Lat 334345, Long 821055. Edgefield County
Period of record: Nov 1929 - Sep 1931; Feb 1940 - Sep 1978; Nov 1983 through Sep 1987
Drainage area: 545.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1931	14.00	16.00	19.00	20.00	38.00	57.00	70.00	80.00	116.00
1941	4.30	5.30	7.30	9.10	11.00	22.00	55.00	99.00	281.00
1942	2.20	2.40	3.00	4.00	6.60	14.00	19.00	33.00	145.00
1943	8.60	9.00	9.40	12.00	20.00	56.00	70.00	108.00	121.00
1944	4.50	7.40	8.50	9.30	9.80	19.00	22.00	26.00	92.00
1945	2.50	2.60	3.20	4.50	7.70	13.00	16.00	18.00	38.00
1946	2.90	4.10	5.60	8.30	18.00	31.00	66.00	74.00	115.00
1947	3.10	4.50	6.70	13.00	28.00	35.00	41.00	45.00	107.00
1948	8.00	11.00	14.00	17.00	29.00	41.00	70.00	74.00	86.00
1949	16.00	17.00	18.00	22.00	29.00	40.00	57.00	63.00	121.00
1950	33.00	37.00	40.00	42.00	46.00	52.00	63.00	70.00	119.00
1951	8.20	8.80	12.00	20.00	31.00	63.00	78.00	89.00	105.00
1952	1.40	2.20	3.00	4.20	8.70	24.00	29.00	31.00	45.00
1953	3.30	3.70	6.70	7.20	8.80	12.00	19.00	23.00	55.00
1954	1.60	1.70	6.20	7.30	8.50	11.00	30.00	28.00	40.00
1955	0.00	0.00	0.00	0.00	0.00	0.02	0.57	3.60	16.00
1956	0.40	0.40	0.69	1.10	3.70	12.00	13.00	16.00	39.00
1957	2.30	3.50	5.30	6.70	8.00	16.00	20.00	24.00	65.00
1958	2.10	2.30	4.10	4.70	10.00	45.00	61.00	72.00	122.00
1959	0.40	0.43	0.79	0.99	2.30	4.00	4.70	7.30	25.00
1960	6.00	7.30	8.50	11.00	18.00	139.00	115.00	158.00	242.00
1961	8.80	11.00	14.00	16.00	17.00	19.00	27.00	33.00	44.00
1962	3.60	5.70	11.00	11.00	12.00	17.00	24.00	39.00	133.00
1963	0.90	1.40	2.30	3.40	8.70	15.00	17.00	21.00	26.00
1964	8.60	8.60	9.10	15.00	23.00	40.00	56.00	71.00	139.00
1965	19.00	20.00	27.00	40.00	48.00	71.00	203.00	416.00	675.00
1966	40.00	46.00	52.00	58.00	62.00	77.00	83.00	94.00	138.00
1967	10.00	12.00	13.00	14.00	25.00	36.00	39.00	43.00	59.00
1968	8.60	9.40	14.00	18.00	22.00	28.00	37.00	80.00	91.00
1969	3.70	5.20	7.50	8.50	11.00	16.00	23.00	35.00	62.00
1970	10.00	13.00	14.00	15.00	22.00	25.00	27.00	32.00	51.00
1971	7.50	7.70	9.00	12.00	24.00	33.00	35.00	91.00	88.00
1972	34.00	36.00	40.00	44.00	61.00	94.00	107.00	163.00	150.00
1973	9.50	11.00	13.00	14.00	16.00	17.00	23.00	39.00	102.00
1974	20.00	23.00	23.00	25.00	26.00	32.00	41.00	52.00	102.00
1975	14.00	16.00	17.00	17.00	19.00	25.00	42.00	58.00	96.00
1976	36.00	37.00	39.00	44.00	65.00	68.00	99.00	147.00	170.00
1977	11.00	12.00	14.00	17.00	23.00	37.00	64.00	228.00	209.00
1978	6.50	7.30	8.30	15.00	18.00	30.00	41.00	43.00	57.00
1985	11.00	13.00	14.00	14.00	17.00	19.00	25.00	36.00	89.00
1986	5.00	5.20	5.40	6.20	21.00	30.00	51.00	54.00	68.00
1987	4.20	5.10	6.00	7.20	9.60	25.00	49.00	62.00	73.00

02196000 STEVENS CREEK NEAR MODOC
Location: Lat 334345, Long 821055. Edgefield County
Period of record: Nov 1929 - Sep 1931; Feb 1940 - Sep 1978; Nov 1983 through Sep 1987
Drainage area: 545.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	42	41	40.00-1966	0.00-1955	9.45	96.76	9.84	1.7636	1.04142	0.31903
3	42	41	46.00-1966	0.00-1955	10.77	113.63	10.66	1.7572	0.99001	0.30754
7	42	41	52.00-1966	0.00-1955	12.73	131.22	11.46	1.7564	0.89998	0.30460
14	42	41	58.00-1966	0.00-1955	15.21	163.00	12.77	1.6242	0.83956	0.36941
30	42	41	65.00-1976	0.00-1955	21.25	242.66	15.58	1.3231	0.73314	0.35208
60	42	42	139.00-1960	0.02-1955	34.76	681.72	26.11	1.8353	0.75109	-0.03921
90	42	42	203.00-1965	0.57-1955	48.39	1292.79	35.96	2.0197	0.74307	0.09719
120	42	42	416.00-1965	3.60-1955	70.93	4956.62	70.40	3.0772	0.99263	0.09530
183	42	42	675.00-1965	16.00-1955	112.31	10793.31	103.89	3.8469	0.92504	0.09651

Low flow frequency array table

Return Period	1 Day	Consecutive days: 3	7	14	30	60	90	120	183
2	6.2	7.5	8.8	12	18	27	41	52	88
5	2.3	2.8	3.9	5.4	8.6	14	20	25	49
10	1.2	1.5	2.5	3.2	5.7	11	12	16	36
15	0.78	0.96	1.9	2.3	4.6	10.0	10.0	13	31
20	0.56	0.68	1.5	1.7	4.0	9.4	9.4	12	28
25	0.41	0.48	1.3	1.3	3.6	9.1	9.1	10	26
30	0.29	0.33	1.1	1.1	3.3	8.9	8.9	9.6	25
40	0.08	0.08	0.56	0.56	2.9	8.6	8.6	8.6	23
50	0.00	0.00	0.00	0.00	0.00	8.5	8.5	8.5	22
	POWTRAN	POWTRAN	LOGNORM	POWTRAN	GUMBEL3A	GUMBEL3A	POWTRAN	POWTRAN	LOGNORM

02196250 HORN CREEK NEAR COLLIERS
Location: Lat 334255, Long 815623. Edgefield County
Period of record: Oct 1980 through Sep 1987
Drainage area: 13.90 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1982	0.92	0.92	0.94	1.00	1.30	1.70	2.20	2.40	3.30
1983	0.77	0.81	0.86	1.00	1.60	1.90	2.60	3.60	5.00
1984	4.70	4.70	4.80	4.90	5.20	5.50	5.90	6.20	6.60
1985	1.50	1.50	1.50	1.70	2.00	3.00	3.50	3.80	4.30
1986	3.00	3.40	3.70	3.80	4.30	5.10	5.80	6.20	8.00
1987	0.98	1.00	1.00	1.00	1.60	2.00	3.00	3.50	4.20

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	6	6	4.70-1984	0.77-1983	1.98	2.04	1.43	0.9803	0.72246	-0.45799
3	6	6	4.70-1984	0.81-1983	2.06	2.18	1.48	0.8404	0.71805	-0.49495
7	6	6	4.80-1984	0.86-1983	2.13	2.38	1.54	0.7855	0.72357	-0.52112
14	6	6	4.90-1984	1.00-1987	2.23	2.40	1.55	0.7623	0.69399	-0.49746
30	6	6	5.20-1984	1.30-1982	2.67	2.28	1.51	0.7432	0.56610	-0.51054
60	6	6	5.50-1984	1.70-1982	3.20	2.39	1.54	0.5297	0.48278	-0.37367
90	6	6	5.90-1984	2.20-1982	3.83	2.19	1.48	0.4933	0.38595	-0.34290
120	6	6	6.20-1984	2.40-1982	4.28	2.03	1.43	0.3726	0.33302	-0.38445
183	6	6	8.00-1986	3.30-1982	5.23	2.54	1.59	0.5993	0.30467	-0.56939

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	1.4	1.4	1.5	2.0	2.0	3.0	3.7	4.1	5.0
5	0.80	0.84	0.86	0.86	1.3	1.5	2.2	2.7	3.4
10	0.64	0.67	0.69	0.69	1.1	1.1	1.5	2.1	2.8
	LNPEARDI	LNPEARDI	LNPEARDI	GUMBEL1	LNPEARDI	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1

02197000 SAVANNAH RIVER AT AUGUSTA, GA
Location: Lat 332225, Long 815635. Richmond County
Period of record: Oct 1883 - Dec 1891; Jan 1896 - Dec 1906; Jan 1925 through Sep 1987
Drainage area: 7510.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1954	3740.00	4350.00	5240.00	5570.00	5670.00	5700.00	5740.00	6030.00	6350.00
1955	4180.00	4210.00	4240.00	4310.00	4440.00	4680.00	4920.00	5120.00	5340.00
1956	3580.00	3730.00	4180.00	4250.00	4350.00	4590.00	4780.00	4850.00	4900.00
1957	4720.00	4800.00	4830.00	4860.00	5260.00	5320.00	5390.00	5520.00	5570.00
1958	5170.00	5170.00	5690.00	5860.00	6010.00	6080.00	6120.00	6230.00	6520.00
1959	5000.00	5390.00	5550.00	5610.00	5650.00	5680.00	5690.00	5740.00	6050.00
1960	5260.00	5360.00	5400.00	5490.00	5690.00	6120.00	6890.00	7420.00	7940.00
1961	5170.00	5260.00	5660.00	5800.00	5850.00	5880.00	5990.00	6040.00	6240.00
1962	4760.00	4860.00	5110.00	5230.00	5370.00	5520.00	5630.00	6610.00	7020.00
1963	5130.00	5240.00	5380.00	5470.00	5640.00	5780.00	5830.00	5910.00	5890.00
1964	5460.00	5530.00	5810.00	6060.00	6440.00	6650.00	6850.00	7020.00	7860.00
1965	6560.00	6710.00	6840.00	6920.00	7020.00	7470.00	9330.00	11000.00	12100.00
1966	6300.00	6350.00	6610.00	6790.00	6840.00	6920.00	6960.00	7110.00	7580.00
1967	6120.00	6180.00	6250.00	6370.00	6450.00	6470.00	6530.00	6610.00	6690.00
1968	5740.00	5880.00	6020.00	6050.00	6270.00	6330.00	7320.00	7540.00	8730.00
1969	5800.00	5850.00	6010.00	6130.00	6390.00	6510.00	6550.00	6590.00	6790.00
1970	5920.00	6070.00	6170.00	6260.00	6420.00	6500.00	6650.00	6720.00	6840.00
1971	4460.00	5450.00	5760.00	5770.00	5840.00	6250.00	6290.00	6380.00	6580.00
1972	5710.00	5980.00	6340.00	6810.00	7000.00	7140.00	7230.00	7510.00	7490.00
1973	5460.00	5800.00	6030.00	6140.00	6250.00	6360.00	6520.00	6640.00	7590.00
1974	5450.00	5600.00	5750.00	5970.00	6000.00	6050.00	6160.00	6330.00	6930.00
1975	5810.00	6040.00	6240.00	6300.00	6370.00	6510.00	6620.00	6780.00	7140.00
1976	6720.00	6910.00	7330.00	7480.00	7470.00	7670.00	7810.00	8000.00	9350.00
1977	6000.00	6740.00	7240.00	7280.00	7300.00	7470.00	7950.00	8000.00	9990.00
1978	6530.00	6620.00	6770.00	6830.00	6870.00	6930.00	6990.00	7120.00	7370.00
1979	5940.00	6200.00	6300.00	6350.00	6390.00	6430.00	6440.00	6480.00	6600.00
1980	6150.00	6310.00	6740.00	6820.00	6980.00	7470.00	7560.00	7800.00	8890.00
1981	5410.00	5680.00	6180.00	6270.00	6290.00	6570.00	6630.00	6640.00	6710.00
1982	2810.00	3060.00	3750.00	3890.00	4200.00	4670.00	5010.00	5200.00	5360.00
1983	4650.00	5070.00	5470.00	5590.00	5840.00	5900.00	5940.00	5970.00	6240.00
1984	4740.00	4860.00	5030.00	5180.00	5370.00	5730.00	5970.00	6130.00	6640.00
1985	5180.00	5330.00	5380.00	5510.00	5720.00	5870.00	5950.00	6050.00	7070.00
1986	4750.00	4870.00	5030.00	5060.00	5160.00	5310.00	5460.00	5510.00	5640.00
1987	3790.00	3830.00	3940.00	4050.00	4140.00	4480.00	4810.00	5030.00	5360.00

02197000 SAVANNAH RIVER AT AUGUSTA, GA
Location: Lat 332225, Long 815635. Richmond County
Period of record: Oct 1883 - Dec 1891; Jan 1896 - Dec 1906; Jan 1925 through Sep 1987
Drainage area: 7510.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	34	34	6720.00-1976	2810.00-1982	5240.29	802932.27	896.06	-0.6424	0.17100	0.56192
3	34	34	6910.00-1976	3060.00-1982	5449.71	787838.15	887.60	-0.6456	0.16287	0.62865
7	34	34	7330.00-1976	3750.00-1982	5713.82	748388.32	865.09	-0.3876	0.15140	0.62881
14	34	34	7480.00-1976	3890.00-1982	5833.24	762498.36	873.21	-0.4147	0.14970	0.60533
30	34	34	7470.00-1976	4140.00-1987	5969.12	706672.75	840.64	-0.4906	0.14083	0.59313
60	34	34	7670.00-1976	4480.00-1987	6147.35	680166.52	824.72	-0.1973	0.13416	0.61971
90	34	34	9330.00-1965	4780.00-1956	6367.94	914598.70	956.35	0.6893	0.15018	0.50803
120	34	34	11000.00-1965	4850.00-1956	6577.35	1262448.88	1123.59	1.6196	0.17083	0.35882
183	34	34	12100.00-1965	4900.00-1956	7040.00	2082223.53	1442.99	1.4291	0.20497	0.33931

Low flow frequency array table

Return Period	1 Day	Consecutive days: 3	7	14	30	60	90	120	183
2	5320	5530	5800	5880	6050	6190	6300	6400	6760
5	4510	4730	5010	5100	5290	5450	5570	5690	5910
10	4040	4260	4560	4670	4840	5050	5220	5380	5550
15	3800	4020	4320	4450	4610	4850	5050	5240	5390
20	3640	3860	4160	4310	4450	4720	4940	5150	5290
25	3520	3740	4040	4200	4330	4620	4870	5090	5220
30	3430	3640	3940	4120	4240	4550	4810	5040	5160
40	3280	3500	3800	4000	4090	4430	4720	4970	5080
	WEIBULL	WEIBULL	WEIBULL	GUMBEL3B	WEIBULL	LNPEARFF	LOGNORM	POWTRAN	POWTRAN

02197300 UPPER THREE RUNS NEAR NEW ELLENTON
Location: Lat 332305, Long 813700. Aiken County
Period of record: Jun 1966 through Sep 1987
Drainage area: 87.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1968	88.00	89.00	93.00	95.00	97.00	104.00	106.00	107.00	111.00
1969	72.00	72.00	73.00	73.00	75.00	78.00	81.00	84.00	86.00
1970	69.00	70.00	70.00	73.00	78.00	82.00	83.00	85.00	86.00
1971	78.00	78.00	79.00	81.00	83.00	86.00	89.00	90.00	92.00
1972	89.00	89.00	91.00	98.00	102.00	104.00	107.00	110.00	114.00
1973	93.00	94.00	95.00	96.00	100.00	103.00	105.00	108.00	112.00
1974	93.00	98.00	102.00	106.00	109.00	114.00	116.00	116.00	118.00
1975	90.00	91.00	93.00	95.00	97.00	100.00	101.00	102.00	103.00
1976	95.00	96.00	98.00	99.00	102.00	105.00	107.00	110.00	111.00
1977	89.00	90.00	91.00	92.00	96.00	99.00	103.00	107.00	113.00
1978	90.00	91.00	93.00	95.00	99.00	102.00	104.00	106.00	108.00
1979	88.00	89.00	91.00	91.00	92.00	93.00	96.00	97.00	98.00
1980	83.00	83.00	84.00	85.00	89.00	98.00	99.00	101.00	102.00
1981	78.00	79.00	81.00	89.00	90.00	95.00	97.00	99.00	102.00
1982	58.00	61.00	64.00	68.00	72.00	77.00	81.00	84.00	86.00
1983	54.00	54.00	57.00	58.00	61.00	64.00	66.00	66.00	68.00
1984	53.00	54.00	55.00	58.00	64.00	65.00	69.00	72.00	73.00
1985	70.00	71.00	74.00	77.00	83.00	87.00	89.00	93.00	99.00
1986	64.00	66.00	68.00	70.00	73.00	78.00	81.00	83.00	84.00
1987	63.00	65.00	66.00	69.00	72.00	75.00	79.00	80.00	85.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	20	20	95.00-1976	53.00-1984	77.85	184.83	13.60	-0.4667	0.17463	0.81323
3	20	20	98.00-1974	54.00-1984	79.00	186.70	13.66	-0.4040	0.17296	0.81232
7	20	20	102.00-1974	55.00-1984	80.90	191.99	13.86	-0.3345	0.17127	0.77724
14	20	20	106.00-1974	58.00-1984	83.40	193.64	13.92	-0.3332	0.16685	0.71294
30	20	20	109.00-1974	61.00-1983	86.70	183.61	13.55	-0.2875	0.15629	0.69745
60	20	20	114.00-1974	64.00-1983	90.45	192.65	13.88	-0.3559	0.15345	0.64764
90	20	20	116.00-1974	66.00-1983	92.95	182.25	13.50	-0.3513	0.14524	0.65412
120	20	20	116.00-1974	66.00-1983	95.00	184.20	13.57	-0.4366	0.14286	0.64320
183	20	20	118.00-1974	68.00-1983	97.55	196.35	14.01	-0.4325	0.14364	0.58782

Low flow frequency array table

Return Period	1 Day	3	7	14	30	60	90	120	183
		Consecutive days							
2	83	83	83	84	87	93	94	96	99
5	69	69	69	72	75	80	82	84	86
10	58	60	62	65	68	71	75	76	78
15	50	57	59	61	65	66	71	73	75
20	44	55	57	59	63	63	69	70	72
	LOGBOUGH	LNPEARFF	LNPEARFF	LNPEARFF	LNPEARFF	LOGBOUGH	LNPEARFF	LNPEARFF	LNPEARFF

02197310 UPPER THREE RUNS ABOVE RD C AT SAVANNAH RIVER PLANT
Location: Lat 331708, Long 814140. Aiken County
Period of record: Jun 1974 through Sep 1987
Drainage area: 176.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1976	153.00	153.00	157.00	171.00	181.00	197.00	201.00	206.00	210.00
1977	141.00	142.00	145.00	147.00	157.00	166.00	177.00	190.00	199.00
1978	128.00	129.00	134.00	138.00	145.00	154.00	164.00	175.00	183.00
1979	113.00	128.00	129.00	131.00	133.00	139.00	150.00	154.00	160.00
1980	139.00	141.00	146.00	153.00	160.00	174.00	181.00	194.00	202.00
1981	122.00	124.00	126.00	136.00	142.00	146.00	151.00	155.00	173.00
1982	114.00	116.00	117.00	118.00	121.00	130.00	140.00	144.00	149.00
1983	118.00	118.00	122.00	127.00	137.00	156.00	159.00	161.00	169.00
1984	113.00	116.00	118.00	124.00	142.00	145.00	154.00	157.00	163.00
1985	153.00	155.00	159.00	160.00	170.00	173.00	177.00	184.00	200.00
1986	117.00	118.00	120.00	120.00	125.00	136.00	144.00	150.00	151.00
1987	90.00	93.00	99.00	101.00	106.00	122.00	133.00	135.00	143.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	12	12	153.00-1976	90.00-1987	125.08	315.41	17.76	0.0191	0.14198	0.09427
3	12	12	155.00-1985	93.00-1987	127.75	287.35	16.95	-0.0951	0.13269	0.18062
7	12	12	159.00-1985	99.00-1987	131.00	292.50	17.10	0.0962	0.13055	0.14118
14	12	12	171.00-1976	101.00-1987	135.50	355.58	18.86	0.1736	0.13917	0.19729
30	12	12	181.00-1976	106.00-1987	143.25	414.69	20.36	0.1000	0.14216	0.23047
60	12	12	197.00-1976	122.00-1987	153.17	420.31	20.50	0.4998	0.13385	0.10243
90	12	12	201.00-1976	133.00-1987	160.92	359.08	18.95	0.5204	0.11776	0.23328
120	12	12	206.00-1976	135.00-1987	167.08	451.91	21.26	0.3491	0.12723	0.24214
183	12	12	210.00-1976	143.00-1987	175.17	491.97	22.18	0.1533	0.12662	0.15033

Low flow frequency array table

Return Period	1 Day	Consecutive days: 3	7	14	30	60	90	120	183
2	124	127	131	135	140	150	158	164	172
5	110	113	116	119	123	133	142	146	153
10	103	106	108	110	116	125	135	138	145
15	100	103	105	106	112	122	132	135	141
	LOGNORM	LOGNORM	LNPEARFF	LOGBOUGH	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1

02197315 UPPER THREE RUNS AT ROAD A AT SAVANNAH RIVER PLANT
Location: Lat 331420, Long 814442. Aiken County
Period of record: Jun 1974 - Jan 1978; Oct 1978 through Sep 1987
Drainage area: 203.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1976	187.00	188.00	196.00	209.00	223.00	240.00	249.00	256.00	258.00
1977	190.00	192.00	197.00	205.00	216.00	229.00	244.00	261.00	268.00
1981	139.00	141.00	145.00	159.00	166.00	179.00	181.00	188.00	213.00
1982	127.00	129.00	130.00	132.00	137.00	153.00	169.00	170.00	179.00
1983	143.00	144.00	149.00	154.00	169.00	183.00	197.00	200.00	203.00
1984	119.00	121.00	124.00	132.00	157.00	160.00	175.00	180.00	188.00
1985	169.00	173.00	182.00	186.00	197.00	204.00	212.00	223.00	238.00
1986	115.00	118.00	126.00	129.00	137.00	147.00	153.00	161.00	159.00
1987	86.00	89.00	97.00	98.00	106.00	126.00	140.00	142.00	154.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	9	9	190.00-1977	86.00-1987	141.67	1076.22	32.81	0.0636	0.23157	0.37018
3	9	9	192.00-1977	89.00-1987	143.89	1060.54	32.57	0.0767	0.22633	0.34563
7	9	9	197.00-1977	97.00-1987	149.56	1092.69	33.06	0.1804	0.22103	0.29059
14	9	9	209.00-1976	98.00-1987	156.00	1263.11	35.54	0.1265	0.22782	0.40411
30	9	9	223.00-1976	106.00-1987	167.56	1340.02	36.61	0.0412	0.21847	0.45126
60	9	9	240.00-1976	126.00-1987	180.11	1302.32	36.09	0.2896	0.20036	0.45883
90	9	9	249.00-1976	140.00-1987	191.11	1281.65	35.80	0.3544	0.18733	0.45417
120	9	9	261.00-1977	142.00-1987	197.89	1519.43	38.98	0.3945	0.19698	0.43071
183	9	9	268.00-1977	154.00-1987	206.67	1510.22	38.86	0.2175	0.18804	0.40776

Low flow frequency array table

Return Period	1 Day	Consecutive days: 3	7	14	30	60	90	120	183
2	137	140	145	151	163	175	186	193	201
5	108	110	115	119	129	143	154	157	166
10	95	97	102	105	115	129	140	142	151
	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1

02197320 SAVANNAH RIVER NEAR JACKSON
Location: Lat 331301, Long 814604. Aiken County
Period of record: Oct 1971 through Sep 1987
Drainage area: 7800.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1973	6350.00	6480.00	6570.00	6650.00	6670.00	0.00	0.00	0.00	0.00
1974	6330.00	6410.00	6490.00	6550.00	6600.00	0.00	0.00	0.00	0.00
1975	6440.00	6590.00	6820.00	6900.00	7110.00	0.00	0.00	0.00	0.00
1976	6760.00	6840.00	7230.00	7400.00	7420.00	0.00	0.00	0.00	0.00
1977	6770.00	6870.00	7140.00	7200.00	7260.00	0.00	0.00	0.00	0.00
1978	6420.00	6550.00	6770.00	6950.00	7030.00	0.00	0.00	0.00	0.00
1979	5770.00	5970.00	6070.00	6140.00	6170.00	0.00	0.00	0.00	0.00
1980	6270.00	6450.00	6920.00	7070.00	7460.00	0.00	0.00	0.00	0.00
1981	5800.00	6090.00	6240.00	6360.00	6550.00	0.00	0.00	0.00	0.00
1982	3220.00	3360.00	3770.00	3920.00	4170.00	0.00	0.00	0.00	0.00
1983	5050.00	5170.00	5410.00	5540.00	5760.00	0.00	0.00	0.00	0.00
1984	4900.00	4960.00	5140.00	5310.00	5580.00	0.00	0.00	0.00	0.00
1985	5340.00	5560.00	5630.00	5690.00	5990.00	0.00	0.00	0.00	0.00
1986	4760.00	4840.00	4980.00	5060.00	5160.00	0.00	0.00	0.00	0.00
1987	4120.00	4180.00	4190.00	4240.00	4350.00	0.00	0.00	0.00	0.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	15	15	6770.00-1977	3220.00-1982	5620.00	1008013.33	1004.00	-0.8774	0.17865	0.57050
3	15	15	6870.00-1977	3360.00-1982	5754.67	1027464.89	1013.64	-0.9161	0.17614	0.54479
7	15	15	7230.00-1976	3770.00-1982	5958.00	1069282.67	1034.06	-0.6936	0.17356	0.58490
14	15	15	7400.00-1976	3920.00-1982	6065.33	1077264.89	1037.91	-0.6639	0.17112	0.58304
30	15	15	7460.00-1980	4170.00-1982	6218.67	1030851.56	1015.31	-0.6674	0.16327	0.52146

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	6110	6250	6290	6370	6530				
5	4670	4810	5210	5290	5480				
10	3920	4060	4330	4440	4630				
15	3540	3680	3750	3900	4070				
	GENSME	GENSME	LOGBOUGH	LOGBOUGH	LOGBOUGH				

02197339 SITE 5B AT SAVANNAH RIVER PLANT
Location: Lat 331629, Long 814006. Aiken County
Period of record: Oct 1980 through Sep 1987
Drainage area: 0.57 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1982	1.19	1.40	1.80	2.00	2.00	2.20	2.50	2.50	2.50
1983	2.00	2.20	2.40	2.50	3.00	3.10	3.30	3.40	3.50
1984	2.40	2.50	2.60	2.70	2.90	3.00	3.10	3.20	3.20
1985	2.60	2.80	2.90	3.20	3.30	3.70	3.70	4.00	4.20
1986	1.19	1.60	1.70	1.90	2.10	2.30	2.50	2.70	2.90
1987	0.91	1.50	1.70	2.10	2.40	2.50	2.50	2.60	2.70

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	6	6	2.60-1985	0.91-1987	1.72	0.42	0.65	0.1377	0.37886	0.26718
3	6	6	2.80-1985	1.40-1982	2.00	0.28	0.53	0.2652	0.26615	0.15011
7	6	6	2.90-1985	1.70-1987	2.18	0.22	0.47	0.2635	0.21712	0.13944
14	6	6	3.20-1985	1.90-1986	2.40	0.21	0.45	0.5748	0.18942	-0.04040
30	6	6	3.30-1985	2.00-1982	2.62	0.23	0.48	0.0233	0.18383	-0.18130
60	6	6	3.70-1985	2.20-1982	2.80	0.27	0.52	0.4619	0.18672	-0.20288
90	6	6	3.70-1985	2.50-1987	2.93	0.22	0.47	0.4239	0.15950	-0.13971
120	6	6	4.00-1985	2.50-1982	3.07	0.28	0.53	0.5879	0.17221	-0.18093
183	6	6	4.20-1985	2.50-1982	3.17	0.32	0.56	0.6697	0.17833	-0.25830

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	1.6	1.9	2.1	2.3	2.6	2.7	2.9	3.0	3.1
5	0.98	1.4	1.7	1.9	2.1	2.2	2.4	2.5	2.5
10	0.71	1.2	1.5	1.7	1.9	2.0	2.2	2.3	2.3
	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1

02197400 LOWER THREE RUNS NEAR SNELLING
Location: Lat 331035, Long 812850. Barnwell County
Period of record: Mar 1974 through Sep 1987
Drainage area: 59.30 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1975	31.00	32.00	34.00	35.00	36.00	39.00	44.00	49.00	67.00
1976	51.00	55.00	57.00	62.00	74.00	86.00	90.00	93.00	99.00
1977	29.00	30.00	32.00	33.00	37.00	38.00	47.00	56.00	60.00
1978	32.00	33.00	33.00	34.00	38.00	49.00	57.00	66.00	75.00
1979	28.00	28.00	31.00	36.00	37.00	42.00	49.00	56.00	60.00
1980	40.00	41.00	42.00	43.00	51.00	67.00	80.00	86.00	94.00
1981	24.00	25.00	26.00	28.00	34.00	41.00	49.00	50.00	53.00
1982	15.00	15.00	15.00	16.00	17.00	19.00	23.00	25.00	28.00
1983	17.00	17.00	17.00	18.00	22.00	25.00	28.00	32.00	41.00
1984	16.00	16.00	17.00	18.00	22.00	23.00	24.00	25.00	27.00
1986	17.00	18.00	18.00	19.00	20.00	27.00	32.00	33.00	41.00
1987	13.00	14.00	15.00	17.00	20.00	22.00	24.00	26.00	50.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	12	12	51.00-1976	13.00-1987	26.08	120.91	11.00	0.7765	0.42157	0.48667
3	12	12	55.00-1976	14.00-1987	27.00	139.17	11.80	0.9173	0.43692	0.45443
7	12	12	57.00-1976	15.00-1987	28.08	150.58	12.27	0.8591	0.43695	0.51710
14	12	12	62.00-1976	16.00-1982	29.92	171.41	13.09	0.9720	0.43763	0.49507
30	12	12	74.00-1976	17.00-1982	34.00	241.33	15.53	1.2266	0.45691	0.35532
60	12	12	86.00-1976	19.00-1982	39.83	365.31	19.11	1.1262	0.47982	0.22549
90	12	12	90.00-1976	23.00-1982	45.58	437.58	20.92	0.8229	0.45890	0.31381
120	12	12	93.00-1976	25.00-1984	49.75	492.69	22.20	0.6043	0.44616	0.42171
183	12	12	99.00-1976	27.00-1984	57.92	490.24	22.14	0.4257	0.38230	0.39067

Low flow frequency array table

Return Period	1 Day	Consecutive days 3	7	14	30	60	90	120	183
2	25	25	26	28	31	33	43	47	55
5	15	15	16	17	20	23	25	28	36
10	11	11	11	12	17	19	19	20	28
15	9.3	9.3	9.4	9.9	15	18	18	18	24
	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL1	GUMBEL3C	LNPEARDI	GUMBEL1	GUMBEL1	GUMBEL1

02197500 SAVANNAH RIVER @ BURTONS FERRY BR. NR MILLHAVEN, GA
Location: Lat 325620, Long 813010. Allendale/Screven County
Period of record: Oct 1939 - Sep 1970; Oct 1983 through Sep 1987
Drainage area: 8650.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1954	6060.00	6060.00	6100.00	6270.00	6310.00	6420.00	6560.00	6870.00	7160.00
1955	4770.00	4830.00	4920.00	5130.00	5350.00	5440.00	5660.00	5740.00	5770.00
1956	4590.00	4590.00	4810.00	4980.00	5000.00	5250.00	5410.00	5410.00	5470.00
1957	5220.00	5250.00	5360.00	5390.00	5470.00	5630.00	5740.00	5870.00	5940.00
1958	5590.00	5650.00	5930.00	6080.00	6300.00	6390.00	6550.00	6730.00	7240.00
1959	5500.00	5530.00	5580.00	5650.00	5720.00	5820.00	5920.00	6020.00	6520.00
1960	5590.00	5620.00	5670.00	5830.00	6120.00	6850.00	7400.00	8310.00	8580.00
1961	6060.00	6160.00	6350.00	6400.00	6420.00	6570.00	6760.00	6850.00	7080.00
1962	5700.00	5700.00	5870.00	5960.00	6150.00	6330.00	6490.00	7680.00	8180.00
1963	6260.00	6260.00	6350.00	6360.00	6450.00	6750.00	6780.00	6800.00	6920.00
1964	6350.00	6450.00	6530.00	7230.00	7280.00	7530.00	7840.00	7950.00	8910.00
1965	7400.00	7600.00	7830.00	7840.00	8320.00	8970.00	10800.00	13200.00	14500.00
1966	7390.00	7490.00	7630.00	7690.00	7770.00	7870.00	7960.00	8100.00	8740.00
1967	7110.00	7170.00	7290.00	7410.00	7480.00	7520.00	7600.00	7640.00	7780.00
1968	6780.00	6900.00	7010.00	7130.00	7210.00	7320.00	8460.00	8820.00	10200.00
1969	6970.00	6980.00	7130.00	7260.00	7330.00	7430.00	7610.00	7670.00	7750.00
1970	6710.00	6880.00	6980.00	7140.00	7210.00	7290.00	7480.00	7570.00	7720.00
1984	5210.00	5260.00	5440.00	5600.00	5910.00	6150.00	6440.00	6570.00	7180.00
1985	5730.00	5980.00	6090.00	6190.00	6470.00	6590.00	6660.00	6760.00	7910.00
1986	4830.00	4890.00	5020.00	5060.00	5520.00	5770.00	5890.00	5930.00	6000.00
1987	3960.00	3970.00	3990.00	4050.00	4120.00	4560.00	4890.00	5170.00	5410.00

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	21	21	7400.00-1965	3960.00-1987	5894.29	864443.54	929.75	-0.0976	0.15774	0.75265
3	21	21	7600.00-1965	3970.00-1987	5962.86	922020.41	960.22	-0.0842	0.16103	0.72953
7	21	21	7830.00-1965	3990.00-1987	6089.52	948395.01	973.86	-0.0858	0.15992	0.72633
14	21	21	7840.00-1965	4050.00-1987	6221.43	973840.82	986.83	-0.1652	0.15862	0.75763
30	21	21	8320.00-1965	4120.00-1987	6376.67	973298.41	986.56	-0.1400	0.15471	0.73851
60	21	21	8970.00-1965	4560.00-1987	6592.86	982344.22	991.13	0.1997	0.15033	0.70774
90	21	21	10800.00-1965	4890.00-1987	6900.00	1574504.76	1254.79	1.1816	0.18185	0.56519
120	21	21	13200.00-1965	5170.00-1987	7221.90	2734967.80	1653.77	2.0583	0.22899	0.35060
183	21	21	14500.00-1965	5410.00-1987	7664.76	3769339.23	1941.48	1.9438	0.25330	0.34811

Low flow frequency array table

Return Period	1 Day	Consecutive days: 3	7	14	30	60	90	120	183
2	5920	5990	6010	6070	6300	6590	6710	7070	7460
5	5100	5140	5230	5300	5500	5720	5880	5970	6200
10	4660	4690	4860	4970	5120	5270	5520	5520	5620
15	4450	4470	4690	4820	4940	5050	5360	5360	5360
20	4300	4330	4580	4720	4830	4900	5260	5260	5260
25	4200	4220	4500	4660	4750	4790	5180	5180	5180
	LNPEARFF	LNPEARFF	LOGNORM	GUMBEL1	LOGNORM	LOGBOUGH	POWTRAN	LOGNORM	LOGNORM

02198500 SAVANNAH RIVER NEAR CLYO, GA
Location: Lat 323130, Long 811545. Jasper/Effingham County
Period of record: Oct 1929 - Sep 1933; Oct 1937 through Sep 1987
Drainage area: 9850.00 square miles

Minimum flow array table

Year	1 Day	3 Day	7 Day	14 Day	30 Day	60 Day	90 Day	120 Day	183 Day
1954	6100.00	6130.00	6240.00	6410.00	6520.00	6610.00	6790.00	7140.00	7640.00
1955	5310.00	5370.00	5440.00	5710.00	5850.00	5890.00	5920.00	6030.00	6090.00
1956	5400.00	5460.00	5660.00	5710.00	5760.00	5900.00	6170.00	6160.00	6220.00
1957	5760.00	5790.00	5830.00	5910.00	6000.00	6070.00	6160.00	6300.00	6500.00
1958	5760.00	5830.00	6090.00	6270.00	6510.00	6700.00	6950.00	7230.00	7970.00
1959	5760.00	5830.00	5920.00	5970.00	6010.00	6080.00	6160.00	6330.00	6990.00
1960	6060.00	6130.00	6270.00	6420.00	6650.00	7790.00	8230.00	9090.00	9370.00
1961	6610.00	6640.00	6810.00	6900.00	6960.00	7250.00	7340.00	7440.00	7770.00
1962	6160.00	6160.00	6300.00	6350.00	6510.00	6710.00	6960.00	8330.00	8880.00
1963	6760.00	6760.00	6890.00	6990.00	7170.00	7230.00	7240.00	7470.00	7600.00
1964	7270.00	7380.00	7680.00	7910.00	8020.00	8380.00	8610.00	8720.00	9960.00
1965	8260.00	8260.00	8290.00	8450.00	8750.00	10100.00	12000.00	14900.00	16300.00
1966	8070.00	8100.00	8240.00	8310.00	8460.00	8600.00	8720.00	8920.00	9870.00
1967	7180.00	7250.00	7360.00	7490.00	7570.00	7630.00	7740.00	7810.00	8190.00
1968	6970.00	7080.00	7300.00	7510.00	7600.00	7710.00	9060.00	9430.00	11000.00
1969	6920.00	6950.00	7100.00	7190.00	7310.00	7530.00	7740.00	7800.00	7930.00
1970	7000.00	7040.00	7240.00	7340.00	7470.00	7580.00	7900.00	8140.00	8330.00
1971	6720.00	6830.00	6980.00	7140.00	7250.00	7520.00	7640.00	7600.00	7710.00
1972	8060.00	8190.00	8380.00	8620.00	9020.00	9330.00	9550.00	10100.00	9980.00
1973	7010.00	7090.00	7220.00	7320.00	7360.00	7480.00	7630.00	7830.00	9090.00
1974	7500.00	7790.00	7900.00	7910.00	7970.00	8160.00	8370.00	8620.00	9620.00
1975	7260.00	7340.00	7470.00	7510.00	7530.00	7690.00	7850.00	8130.00	8400.00
1976	7870.00	8110.00	8480.00	8650.00	8820.00	9440.00	9960.00	10300.00	11900.00
1977	7660.00	7740.00	7950.00	8040.00	8210.00	8620.00	9490.00	9670.00	12600.00
1978	6870.00	6950.00	7100.00	7360.00	7540.00	7620.00	7750.00	7750.00	7940.00
1979	5670.00	6320.00	6580.00	6650.00	6680.00	6720.00	6870.00	6990.00	7230.00
1980	7510.00	7710.00	7900.00	7960.00	8690.00	9090.00	9280.00	9450.00	10700.00
1981	5970.00	6120.00	6250.00	6410.00	6620.00	6990.00	7310.00	7390.00	7570.00
1982	4420.00	4500.00	4840.00	4940.00	5030.00	5320.00	5510.00	5750.00	5980.00
1983	5760.00	5810.00	6050.00	6290.00	6530.00	6850.00	7070.00	7090.00	7130.00
1984	5720.00	5750.00	5870.00	6010.00	6320.00	6510.00	6800.00	6890.00	7680.00
1985	6170.00	6330.00	6340.00	6460.00	6780.00	6820.00	6870.00	6980.00	8290.00
1986	5220.00	5240.00	5320.00	5350.00	5730.00	5860.00	6020.00	6110.00	6200.00
1987	4730.00	4760.00	4780.00	4800.00	4840.00	5130.00	5440.00	5670.00	5790.00

02198500 SAVANNAH RIVER NEAR CLYO, GA
Location: Lat 323130, Long 811545. Jasper/Effingham County
Period of record: Oct 1929 - Sep 1933; Oct 1937 through Sep 1987
Drainage area: 9850.00 square miles

Distribution statistics

Cons. Days	N	Non 0 N	Max--Year	Min--Year	Mean	Var	Sd	Skew	Cov	1 SCC
1	34	34	8260.00-1965	4420.00-1982	6513.82	944353.03	971.78	-0.0969	0.14919	0.65791
3	34	34	8260.00-1965	4500.00-1982	6610.00	970270.59	985.02	-0.1175	0.14902	0.68517
7	34	34	8480.00-1976	4780.00-1987	6766.76	1000304.24	1000.15	-0.0839	0.14780	0.69614
14	34	34	8650.00-1976	4800.00-1987	6890.00	1025200.00	1012.52	-0.1061	0.14696	0.68203
30	34	34	9020.00-1972	4840.00-1987	7060.00	1099241.18	1048.45	-0.0150	0.14851	0.57892
60	34	34	10100.00-1965	5130.00-1987	7320.88	1364272.75	1168.02	0.3294	0.15955	0.51608
90	34	34	12000.00-1965	5440.00-1987	7620.59	1912517.30	1382.94	0.8912	0.18147	0.44493
120	34	34	14900.00-1965	5670.00-1987	7928.24	2967943.94	1722.77	1.8686	0.21730	0.31308
183	34	34	16300.00-1965	5790.00-1987	8541.76	4530785.12	2128.56	1.5458	0.24919	0.33895

Low flow frequency array table

Return Period	1 Day	Consecutive days: 3	7	14	30	60	90	120	183
2	6580	6630	6760	6910	7070	7240	7410	7590	8090
5	5690	5770	5890	6010	6160	6310	6370	6620	6890
10	5190	5320	5460	5550	5690	5870	5930	6210	6410
15	4920	5090	5250	5330	5460	5650	5730	6030	6190
20	4750	4950	5120	5190	5310	5520	5610	5920	6060
25	4610	4840	5030	5080	5200	5420	5520	5840	5970
30	4510	4760	4950	5000	5120	5350	5450	5780	5900
40	4340	4630	4850	4890	4990	5230	5350	5690	5790
	LOGBOUGH	LNPEARFF	GUMBEL3B	GUMBEL3B	LNPEARFF	LNPEARFF	GUMBEL1	POWTRAN	POWTRAN