TECHNIQUES FOR ESTIMATING MAGNITUDE AND FREQUENCY OF FLOODS IN SOUTH CAROLINA, 1988

By Wladmir B. Guimaraes and Larry R. Bohman

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ABSTRACT

Methods are provided for estimating the magnitude and frequency of floods on ungaged, unregulated rural streams with drainage areas greater than 0.6, 4.4, 0.1, and 0.6 square miles for the lower Coastal Plain, upper Coastal Plain, Piedmont, and Blue Ridge physiographic regions of South Carolina, respectively. Data from 174 gaging stations in or near South Carolina with 10 or more years of record through September 30, 1988, and 4 stations with synthesized streamflow records were used in the analyses. The frequency of peak discharges at these stations was computed by fitting the logarithms of the annual peak discharges at each station to a Pearson type III distribution or by a graphical method. Frequencies of peak discharges were regionalized by using generalized least squares regression techniques to define the relation of magnitude and frequency of flood discharges to various basin characteristics. The analyses indicated that the contributing drainage area is the only significant basin characteristic necessary to determine peak discharge at selected recurrence intervals.

Rural relations are presented for four physiographic regions: (1) lower Coastal Plain, (2) upper Coastal Plain, (3) Piedmont,and (4) Blue Ridge. A table of weighted peak discharges for selected recurrence intervals for all gaging stations in South Carolina, Georgia, and North Carolina used in the regionalization analysis also is presented. Flood-frequency analyses were also made for gaging stations that drain basins, which spans more than one physiographic province. A supplemental data section contains gaging station information; Pearson type III and graphical frequency statistics; information on stage-discharge relations; and annual peak discharges.

INTRODUCTION

The U.S. Geological Survey (USGS), in cooperation with state and local agencies, has made many studies to estimate flood frequency and magnitude in rural basins. Information on flood frequency and magnitude is needed for the economic and safe design of bridges, culverts, embankments, dams, levees, and other structures at or near a stream. Flood-frequency information also is essential for effective flood-plain management and for setting appropriate flood insurance rates.

The U.S. Water Resources Council (1981) presented a standardized method for estimating the magnitude of flood discharges for various recurrence intervals at gaged sites. This method, along with the most recent regionalization techniques, were used in this investigation to provide the user in South Carolina with the best possible estimates of flood magnitude and frequency at gaged and ungaged sites on unregulated streams.

This report was prepared by the USGS in cooperation with the South Carolina Department of Highways and Public Transportation and is based primarily on data collected by the USGS as part of a cooperative stream gaging program with various State and Federal agencies. Most of the data for small streams were collected as part of a separate program with the South Carolina Department of Highways and Public Transportation and the Federal Highway Administration.

Purpose and Scope

This report presents methods for estimating the magnitude and frequency of floods in South Carolina at ungaged rural sites and provides frequency information at gaged sites on unregulated rural streams. All flood data in South Carolina through September 1988 were analyzed. Data from bordering states (Georgia and North Carolina) were also included in the data base. The report includes:

1. Equations and graphs for estimating the magnitude and frequency of flood discharge on ungaged, rural, non-regulated streams.

2. A method for estimating flood discharge and frequency at or near gaged sites on the same rural streams.

3. Flood discharge and frequency for selected sites on the main stems of major streams with drainage basins located in more than one physiographic province.

4. A compilation of annual flood peaks at gaged sites on streams in South Carolina.

Previous Investigations

The earliest descriptions of flood frequency of streams in South Carolina were those made by Speer and Gamble (1964), who presented methods for estimating the magnitude of flood discharges for various recurrence intervals for streams in the South Atlantic slope basin. The area covered by their work extended from the James River in Virginia to the Savannah River along the South Carolina-Georgia State line. A more comprehensive treatment of flood frequency for streams in the State was that by Whetstone (1982), who presented methods of estimating flood magnitude and frequency that were based on streamflow data compiled through 1978. This report incorporates flood data used by these earlier investigations and includes additional flood data collected through 1988.

Description of Study Area

The study area includes all of South Carolina which is located on the South Atlantic slope adjacent to the Atlantic Ocean. The state has an area of 31,055 square miles, and lies in parts of three physiographic provinces, (1) the Blue Ridge, (2) the Piedmont and, (3) the Coastal Plain (Cooke, 1936). The Coastal Plain is divided into the upper Coastal Plain and the lower Coastal Plain. The physiographic provinces and locations of data collection sites in South Carolina and in adjacent areas in North Carolina and Georgia are shown in figure 1.

The Blue Ridge physiographical province in South Carolina consists of dissected, rugged mountains with narrow valleys. The land-surface elevation ranges from 1,000 to more than 3,500 ft above sea level. The steep terrain contains some areas where stream gradients exceed 250 ft/mi. Overlying the crystalline bedrock is a layer of weathered bedrock or saprolite. Although some rainfall infiltrates the saprolite layer, the steep sideslopes and semipermeable soils in this region cause much of the rainfall to run off rapidly into stream channels. Seventy percent of the area is forested with a mixture of oak, hickory, and pine (S.C. Water Resources Commission, 1983, p. 12 and 53).

In the Piedmont physiographic province, land surface elevations range from about 1,000 ft above sea level at the Blue Ridge foothills to about 400 ft at the upper Coastal Plain boundary. Rolling hills, elongated ridges, and moderately deep to shallow valleys are typical land forms. The drainage pattern is well developed with stream gradients ranging from about 5 to 60 ft/mi. The Piedmont is underlain by fractured crystalline rock consisting of intrusive granite and gneiss, schist and metamorphosed volcanic rock. Most overlying soil is moderately to poorly permeable silty clay loams. Alluvial deposits of clay, silt, and sand occur along the valley floors (Bloxham, 1981, p. 2-4).

The upper Coastal Plain physiographic province in South Carolina is characterized by gradual slopes and rounded summits although there are several areas of intensely irregular terrain. Stream gradients range from 5 to 20 ft/mi. Some hilltop elevations exceed 700 ft above sea level at the boundary between the upper Coastal Plain and the Piedmont but commonly are less than 200 ft above sea level at the boundary of the lower Coastal Plain. Extensive swamps and very wide flood plains are common to the four large through-flowing rivers (Bloxham, 1976, p. 3-5).

In the lower Coastal Plain physiographic province, the land surface slopes from elevations of about 200 ft above sea level near the boundary of the upper Coastal Plain to the sea. Topographic relief in this area is much less than that in other areas of the state, and small stream drainage patterns are characteristically more erratic in the seaward direction. Stream gradients range from about 20 ft/mi near the upper boundary to 1 ft/mi near the coast. Swamplands associated with large portions of the river systems occupy much of the province. The highly permeable soils in this region are similar to those of the upper Coastal plain, which readily absorb rainfall and retard runoff to stream channels. Streamflows, therefore, rise and fall gradually (Bloxham, 1981, p. 4).

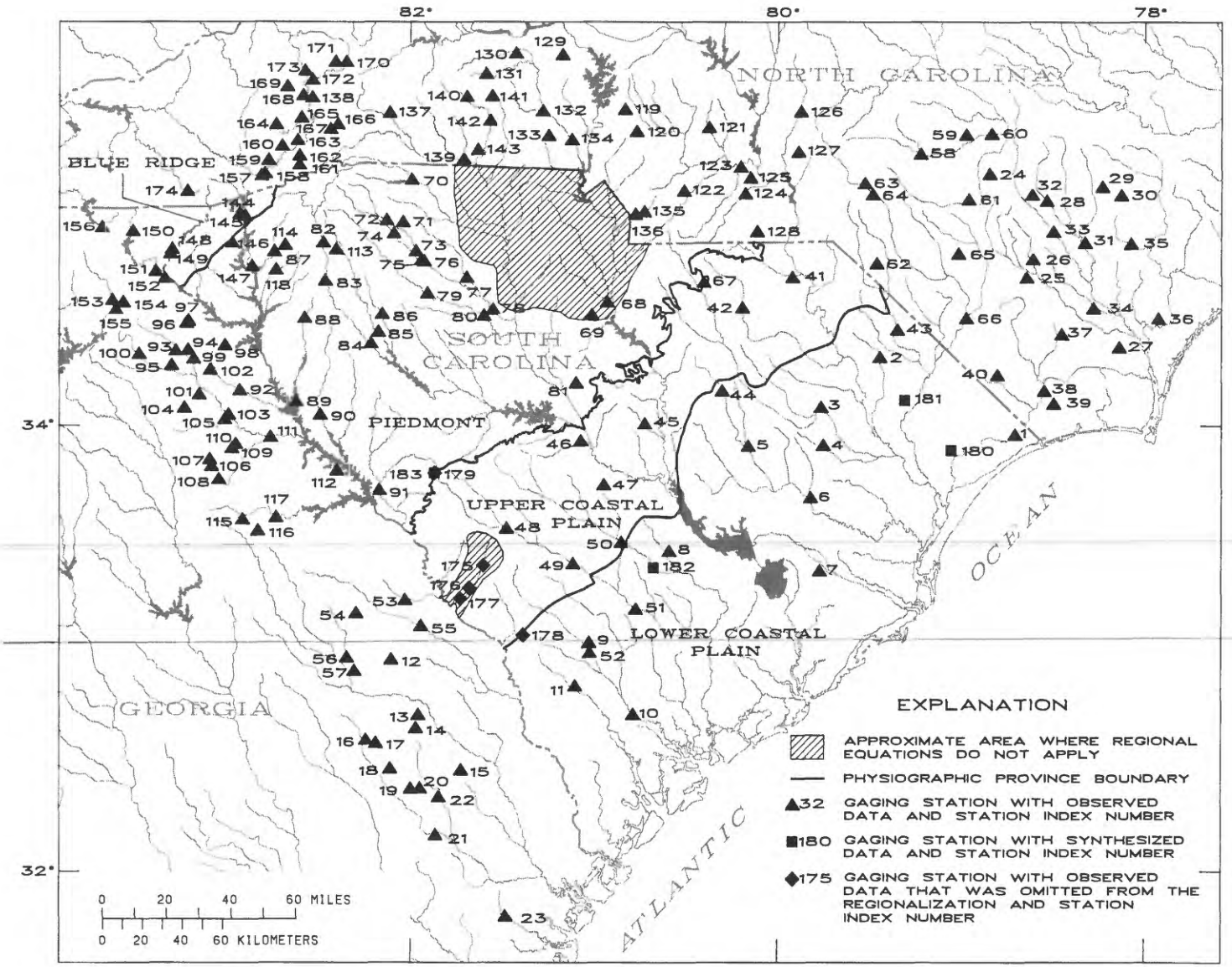

Figure 1.--Physiographic provinces and locations of streamflow gaging stations in South Carolina and parts of North Carolina and Georgia.

OBSERVED FLOOD DATA

Techniques for estimating peak discharge for a specific recurrence interval are based on the assessment of long-term flood records. The first streamflow data collected in the study area was for the Savannah River at Augusta, Ga. The U.S. Weather Bureau, now the National Weather Service, began collecting data at this site in 1884. By 1930, streamflow data were collected at a network of sites by the USGS in cooperation with the South Carolina State Highway Department. The data collection program continued to expand and by 1988 data from 174 gaging stations on streams in South Carolina and adjacent areas of North Carolina and Georgia were available for analysis. Each station used in this analysis had at least 10 years of record and the data were not substantially affected by regulation or urbanization. Data for these stations were used in the development of regionalized flood-frequency relations presented in this report. The supplemental data section of this report contains for each of these stations: a station description; the drainage area; the type of data recorder; extreme gage heights and discharges; a description of the stage-discharge relation; and annual peak stages and discharges for the period of record. Flood-frequency data derived from the peak discharges are also included in the supplemental data.

The discharges presented in table 1 (at back of report) are the weighted discharges computed for each site using regression equations and the individual station flood-frequency data. The distribution of gaging stations used to develop these regression equations are presented by state and physiographic province in table 2.

Table 2.--Distribution of stations used in the regionalization analysis with observed flood data by state and physiographic province

Physiographic province	South Carolina	North Carolina	Georgia	Total
Lower Coastal Plain	11	17	12	40
Upper Coastal Plain	12	9	5	26
Piedmont	25	25	27	77
Blue Ridge	4	18	9	31
Totals	52	69	53	174

Five stations for which streamflow data are available were not included in the regionalization analysis for various reasons (fig. 1). Three stations (map index numbers 175, 176, 177, station numbers 02197300, 02197310, and 02197315, respectively) in the Upper Three Runs basin of the upper Coastal Plain physiographic province were omitted because this basin is flatter, has more deeply incised channels, and has fewer tributaries to the main stream than other basins in the same province.

As would be expected, peak discharges for selected recurrence intervals are much lower for the Upper Three Runs basin than for other basins in the upper Coastal Plains province. The regionalized flood-frequency equations devloped for the upper Coastal Plain province do not apply to this basin or to other basins physiographically similar to the Upper Three Runs basin.

Miller Creek Tributary near Baldoc, S.C. (map index number 178, station number 02197410) was not used in the regional analysis because of incomplete data. Dutchman Creek near Pauline, S.C. (map index number 179, station number 02159600) also was not used because the stage-discharge relation at this station was not defined for the higher discharges.

SYNTHESIZED FLOOD DATA

Long-term discharge records are not always available at a site; however, if concurrent rainfall data are available, a rainfall-runoff model may be used to extend the records. Frequency data for four stations used in this report were from a study by Whetstone (1982) in which the USGS Rainfall-Runoff Model (Dawdy and others, 1972) was used to synthesize a series of annual peak discharges. The model utilizes ten parameters to simulate the hydrologic processes of antecedent soil moisture, infiltration, and surface-runoff routing. Daily rainfall, evaporation, unit-value discharge, and rainfall data from several storm events collected over a period of 3 to 5 years were used to calibrate the model for each of the four basins. Long-term precipitation and evaporation data (more than 50 years of record) were then used to synthesize a series of annual peaks for use in subsequent frequency analyses. Synthesized flood discharges for these stations are not listed in this report; however, flood-frequency data derived from the synthesized discharges are listed in table 3 along with the weighted discharges computed for each site using the appropriate regression equations for each physiographic province and individual station flood-frequency data.

METHODS OF FLOOD-FREQUENCY ANALYSIS AT GAGING STATIONS

A frequency analysis of annual peak-flow data at gaging stations provided relations between the magnitude of the peak flow and its recurrence interval or probability of occurrence. These relations were regionalized to provide flood-frequency data at ungaged sites and were used to define flood frequency for specific sites on streams draining more than one physiographic province. Probability of occurrence is the percentage chance that a flood of a specific magnitude will be equaled or exceeded in any one year. Recurrence interval (the reciprocal of the probability of occurrence) is the average time interval, in years, between floods that equal or exceed a given magnitude. For example, a flood with a 100-year recurrence interval may be expected to be equaled or exceeded an average of once in 100 years. Stated another way, it is a flood that has a 1 percent probability of being

Table 3.--Flood-frequency data derived from the synthesized peak discharges used in the regionalization analysis and weighted flood-frequency data for rural streamflow stations used in the regionalization study

Map index number	Station name and number	Drainage area (square miles)	Physiographic province	Type of data	Flood discharges in cubic feet per second indicatied recurrence interval in years					
					2	5	10	25	50	100
180	Crabtree Swamp near Conway, S.C. (02110700)	14.0	Lower Coastal Plain	Station[1]	206	389	544	780	987	1,220
				Weighted[2]	247	450	607	872	1,060	1,310
181	Reedy Creek near Rains, S.C. (02135050)	10.4	Lower Coastal Plain	Station[1]	244	478	677	977	1,240	1,520
				Weighted[2]	244	472	658	939	1,190	1,450
182	Buck Branch at Bowman, S.C. (02174300)	11.9	Lower Coastal Plain	Station[1]	213	439	633	925	1,180	1,450
				Weighted[2]	238	464	648	935	1,170	1,440
183	Log Creek near Edgefield, S.C. (02195660)	1.26	Piedmont	Station[1]	41.0	93.0	141	220	293	378
				Weighted[2]	51.0	123	181	276	358	445

[1]The station data are computed by fitting the logarithms of annual peak discharges to a Pearson Type III distribution.

[2]The weighted data are computed by weighting the station data with discharges computed using the regional flood-frequency relations. The weighted data should be used rather than the station data.

equalled or exceeded in any given year. The risk of exceeding the 1-percent chance flood magnitude increases with time periods longer than 1 year. During any 50-year period there is about a 40 percent chance, and for any 90-year period there is about a 60 percent chance of one or more floods exceeding the 1-percent chance flood magnitude.

In 1981 the U.S. Water Resources Council developed and published standard guidelines for determining flood magnitude and frequency. The report (Bulletin 17B) defines a uniform method of fitting the logarithms of annual peaks at each site to a Pearson Type III frequency distribution. This distribution is defined by three statistical parameters; the mean, the standard deviation, and the skew. The peak discharge for a given recurrence interval can be computed using the following equation from Bulletin 17B:

$$\log Q_T = \overline{X} + K S, \qquad (1)$$

where Q_T is the estimate of the T-year flood from the log-Pearson Type III distribution, in cubic feet per second;

$\overline{X}$ is the mean of the logarithms of the annual maximum discharges;

K is the a scale factor that is a function of the skew coefficient and recurrence interval; and

S is the standard deviation of the logarithms of the annual maximum discharges.

The accuracy of the station skew coefficient, as an estimate of the true skew of the frequency distribution, is generally a function of the length of the record. The station skew is a measure of the past history of annual floods, and may be unreliable when computed from periods of record less than 10 years because of extreme floods that may be included in the record. The generalized skew coefficient for an area is the average of the station skew coefficients of sites having at least 25 years of streamflow records. By weighting the station skew and the generalized skew, the

effects of extreme floods can be dampened. It is recommended in Bulletin 17B that the station skew and generalized skew be weighted inversely to their respective mean-square errors as follows:

$$G_w = \frac{MSE_{\bar{G}}(G) + MSE_G(\bar{G})}{MSE_{\bar{G}} + MSE_G} \qquad (2)$$

where G_w is the weighted skew coefficient;

$MSE_{\bar{G}}$ is the mean-square error of generalized skew coefficient;

G is the station skew coefficient;

MSE_G is the mean-square error of station skew coefficient; and

$\bar{G}$ is the generalized skew coefficient.

The USGS computer program J407, described by Kirby (1979), was used to compute the relation between flood magnitude and probability of occurrence. Program J407 includes the features described in Bulletin 17B, but requires the user to exercise judgment when providing data on historic peaks, specifying screening levels for outliers, and interpreting the appropriateness of the resultant frequency curve to the observed data set. The weighted skew coefficient was used for most stations. The weighted or station skew coefficients used in the flood-frequency analyses are listed in the Supplemental Data section as appropriate for all stations in South Carolina.

The graphical method documented by Dalrymple (1960) was used at several stations where the logarithms of annual peaks could not be fitted to a Pearson Type III distribution. For example, abrupt changes in storage in unregulated streams can cause abrupt changes in the flood-frequency relation, such as where the flow moves from a deeply incised channel to a broad floodplain. Circumstances at specific stations requiring use of the graphical method are documented in the supplemental data section of this report. A typical flood-frequency relation is shown in figure 2.

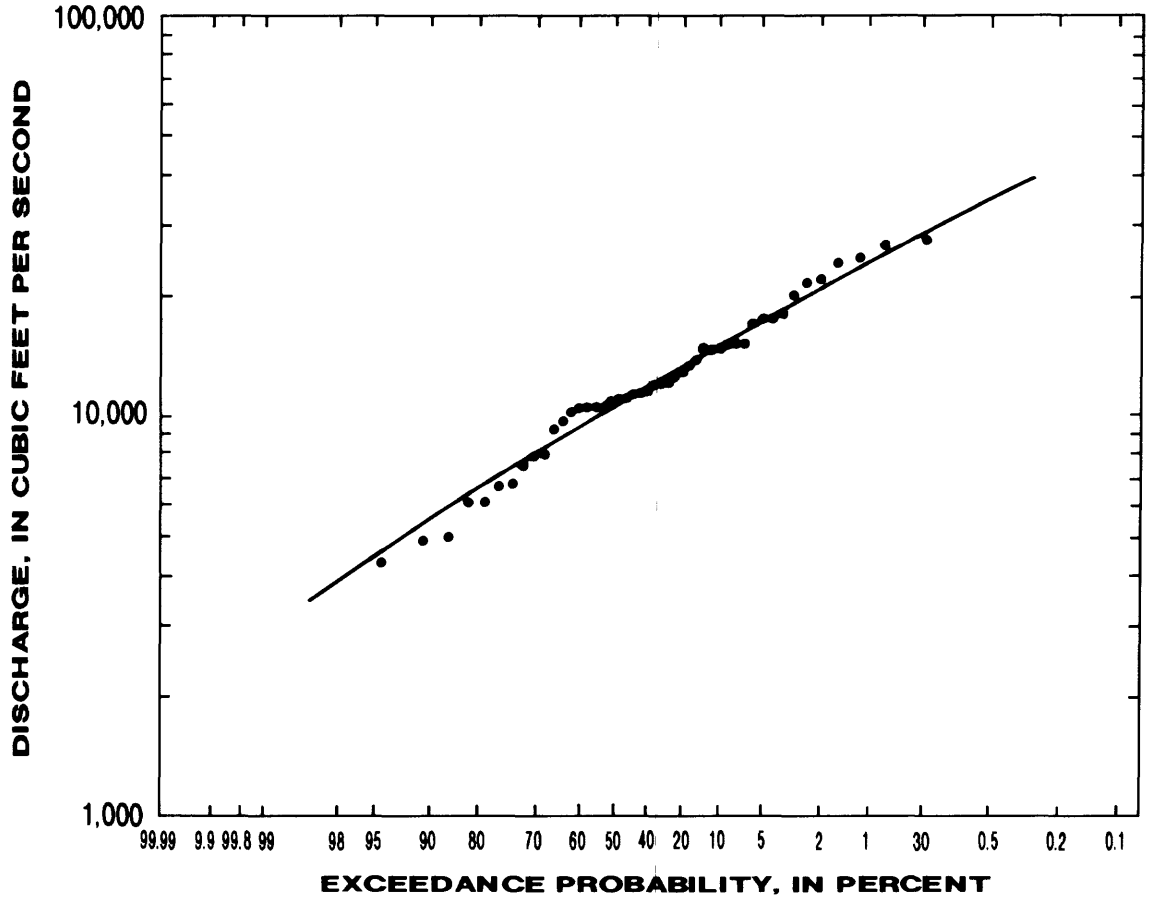

Figure 2.--Flood-frequency relation for Little Pee Dee River at Galivants Ferry, S.C. (map index number 188, station number 02135000).

METHOD OF REGIONALIZATION

Flood-frequency information is needed at many sites that are ungaged. Flood-frequency information can be transferred from a gaged site to an ungaged site using the regression method as described by Riggs (1973). The discharge for a given frequency, for example, can be related to physical and climatic basin characteristics. Multiple regression analysis provides a mathematical relation between a single response variable (the 2- to 500-year flood) and any number of explanatory variables (drainage area, channel slope, and so on).

Numerous studies have indicated that if the logarithmic transformation of peak discharge and basin characteristics are used, the relation between them will be linear. To facilitate the regression analyses presented in this report, all flood peaks and basin characteristics were transformed to their logarithmic values before multiple regression analyses.

The significance of each explanatory variable (basin characteristic) to the regression was assessed in this study by its ability to decrease the standard error of the regression and to increase the coefficient of determination (R-squared). For this study, a 95-percent confidence limit was used to select the significant variables.

Initially, exploratory regression analyses were made using an ordinary least squares "step-forward" regression technique to find the most significant variables. In this type of analysis, the most highly-related variable is determined, then another variable is added and the standard error and coefficient of determination are computed with both explanatory variables included in the predictive equation. This process is continued until all significant variables are selected.

The ordinary least squares (OLS) regression method has been traditionally used in the past for regionalization. This method is based on the assumptions that the residuals from the regression are homoscedastic and independent of each other. The assumption of homoscedacity means that the variance of the residuals remains constant regardless of which time period is used to compute the data being regressed. Obviously, this assumption is violated because different flood-frequency relations and variances will be obtained for differing periods of record. This is called the time-sampling error. Because the flood-frequency relation has time-sampling error, the OLS regression method will also have time-sampling error. Also, the assumption of independence of the residuals from each other is violated, because many of the flood events used to derive the flood-frequency relations are cross-correlated, because they experience the same climatic events (G.D. Tasker, A.M. Lumb, W.O. Thomas, and K.M. Flynn, U.S. Geological Survey, written commun., 1987).

Recent research by Stedinger and Tasker (1985, 1986) has indicated that generalized least squares (GLS) may be more appropriate for hydrologic regression. Their Monte Carlo analysis showed that the GLS technique was superior to the OLS technique when streamflow data were cross correlated or of different record lengths. In the generalized least squares technique, each basin data set in the regional regression analysis is weighted appropriately by taking into consideration the variance (time-sampling error). The spatial correlation structure of the streamflow characteristic is also accounted for in evaluating the accuracy of the regression equation. The prediction error for ungaged sites is partitioned into model error (error in assuming an incomplete model form) and sampling error (including both time- and spatial-sampling errors). The model error cannot be reduced by additional data collection, but the sampling error can be reduced by operating the existing stations longer or by installing new stations or some combination of both.

The hydrologic model is of the form:

$$Q_T = AB^aC^bD^c...$$

where

Q_T is the flood magnitude having T-year recurrence interval;

A is a constant;

B,C,D are basin characteristics (explanatory variables); and

a,b,c are regression coefficients.

The hydrologic model also has a linear form as follows:

$$\log Q_T = \log A + a \log B + b \log C + c \log D + \ldots$$

This logarithmic relation is the form that was used in this study.

In some cases "qualitative variables" were included in the model to differentiate between physiographic provinces. An example of the linear form of the model including qualitative variables is:

$$\log Q_t = \log A + a \log B + b \log C + c \log D + \ldots + dV$$

where V is a qualitative variable that is set to zero if the variable is in province "x" or one if in province "y". If the qualitative variable is determined to be significant by the regression analysis, the regression line for the two provinces have the same slope, but different intercepts. The qualitative variable was used to detect significant differences between provinces and to utilize data from both provinces where data were sparse.

The basin characteristics used in the regionalization study are described below. These variables were found to be significant in at least some of the exploratory regression analyses. Other explanatory variables were tested but were not statistically significant.

1. Drainage area, A, in square miles, as determined from the best available topographic map.

2. Channel slope, SL, in feet per mile, is the average slope between points located at 10 and 85 percent of the main channel length upstream from the gage to the basin divide.

3. Length of main channel, L, in miles, is the distance along the length of the stream from the gage to the basin divide.

4. Storage, ST, in percent, is the percentage of the drainage area that is covered by lakes, ponds, and swamps.

5. $L/SL^{0.5}$, ratio of length in feet to the square root of slope, in feet per mile.

FLOOD FREQUENCY AT UNGAGED SITES ON STREAMS DRAINING ONE PHYSIOGRAPHIC PROVINCE

Flood frequency at ungaged sites was determined using the OLS and GLS regression methods. An ordinary least squares regression for exploratory purposes was first made using data from every station in the study area. A geographical bias was detected; floods in the mountainous regions of South Carolina were underpredicted while those in coastal regions were overpredicted. Four regional boundaries were then delineated using a residual map, geologic and soils maps, and previous flood frequency studies (Whetstone, 1982).

Next, separate regression analyses were made using data from each of the four provinces (fig. 1). Drainage area was found to be the most significant variable. Main channel length, main channel slope, and basin storage were found to be significant at the 95 percent confidence level for some recurrence intervals and some provinces. The addition of these variables to the regression equations, however, did not improve the standard error by more than 3 percent and therefore, these variables were not included in any of the regression equations.

Within each physiographic province, the 100-year discharge was regressed against the explanatory variables and a qualitative variable that denotes location by state. These regressions indicated that Georgia and North Carolina Piedmont data were not significantly different from each other, but were both significantly different from South Carolina Piedmont data, as shown in figure 3. Note that the South Carolina data in figure 3 plots generally below the data points from Georgia and North Carolina. Inclusion of the qualitative variable allows the data from all three states to influence the slope of the overall relation, and at the same time permits a unique intercept value for the South Carolina relation. Although it is possible to use only South Carolina data in the regression, the relation using the data from all three states with the qualitative variable was considered to be more definitive because of the sparseness of the South Carolina data for stations with drainage areas less than about 20 mi^2.

The explanatory variables determined as significant in the ordinary least squares analyses were then used in the generalized least squares regression procedures. The 2-, 5-, 10-, 25-, 50-, 100-, and 500-year flood-frequency equations that resulted are listed in table 4. Graphs were also prepared for ease in computing the discharge estimates and are shown in figures 4-7. The upper coastal plain physiographic province tends to have lower discharges than any other physiographic region because the soil consists mainly of sand that has high infiltration and low runoff potential.

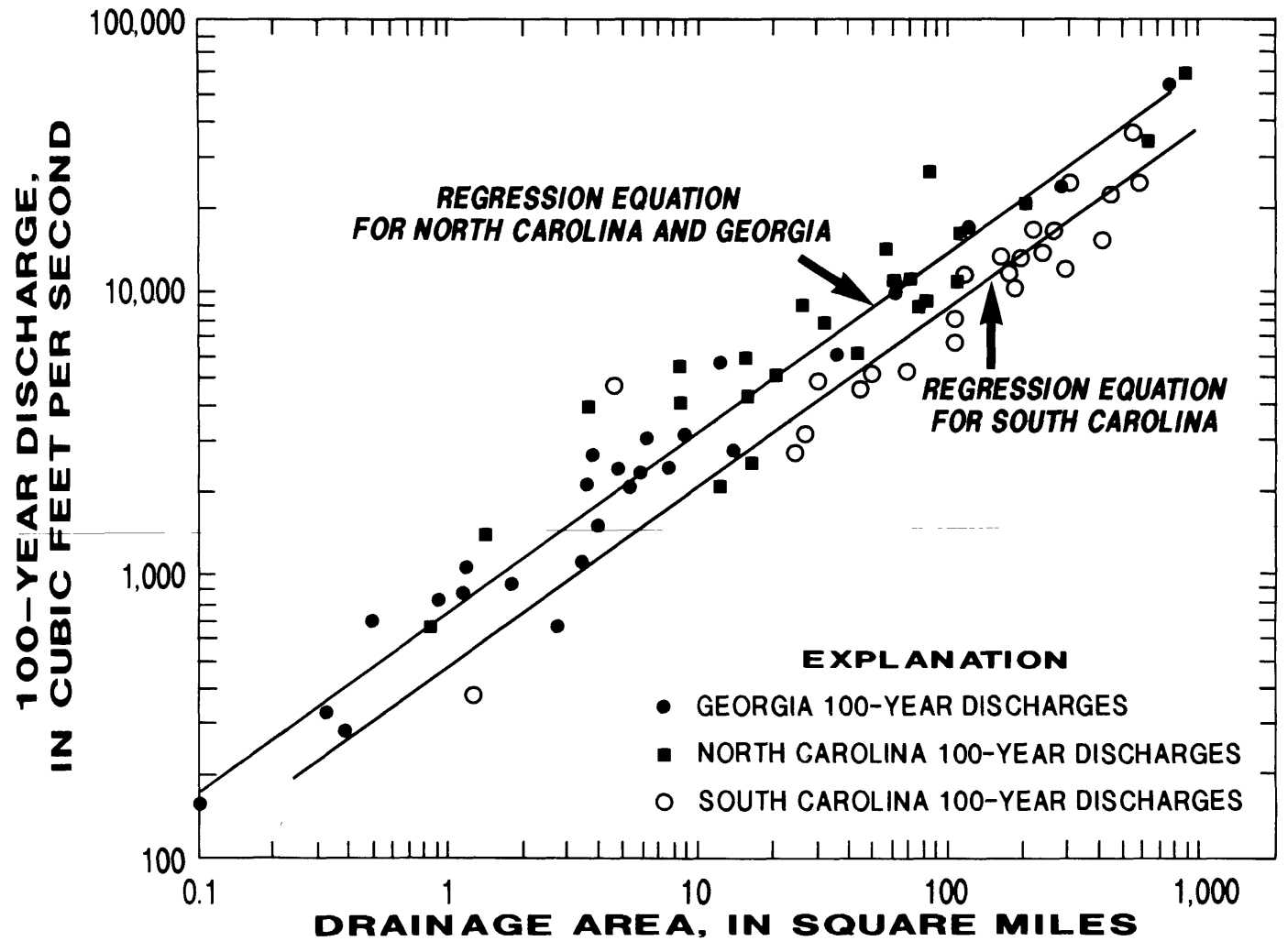

Figure 3.--Relation between drainage area and 100-year discharge for stations on streams draining the Piedmont physiographic province in South Carolina, North Carolina, and Georgia.

Table 4.--Flood-frequency equations for ungaged sites on streams in South Carolina

Flood discharge Q_T, in cubic feet per second, for recurrence interval T, in years	Regression equations for the indicated physiographic provinces			
	Lower Coastal Plain	Upper Coastal Plain	Piedmont	Blue Ridge
Q_2 =	$56A^{0.63}$	$25A^{0.74}$	$127A^{0.66}$	$103A^{0.79}$
Q_5 =	$111A^{0.61}$	$44A^{0.72}$	$211A^{0.64}$	$196A^{0.76}$
Q_{10} =	$157A^{0.59}$	$59A^{0.71}$	$267A^{0.64}$	$286A^{0.73}$
Q_{25} =	$221A^{0.59}$	$80A^{0.70}$	$347A^{0.63}$	$429A^{0.70}$
Q_{50} =	$275A^{0.58}$	$97A^{0.70}$	$410A^{0.63}$	$558A^{0.69}$
Q_{100} =	$335A^{0.58}$	$116A^{0.69}$	$474A^{0.63}$	$705A^{0.67}$
Q_{500} =	$569A^{0.52}$	$179A^{0.66}$	$615A^{0.63}$	$1,150A^{0.63}$

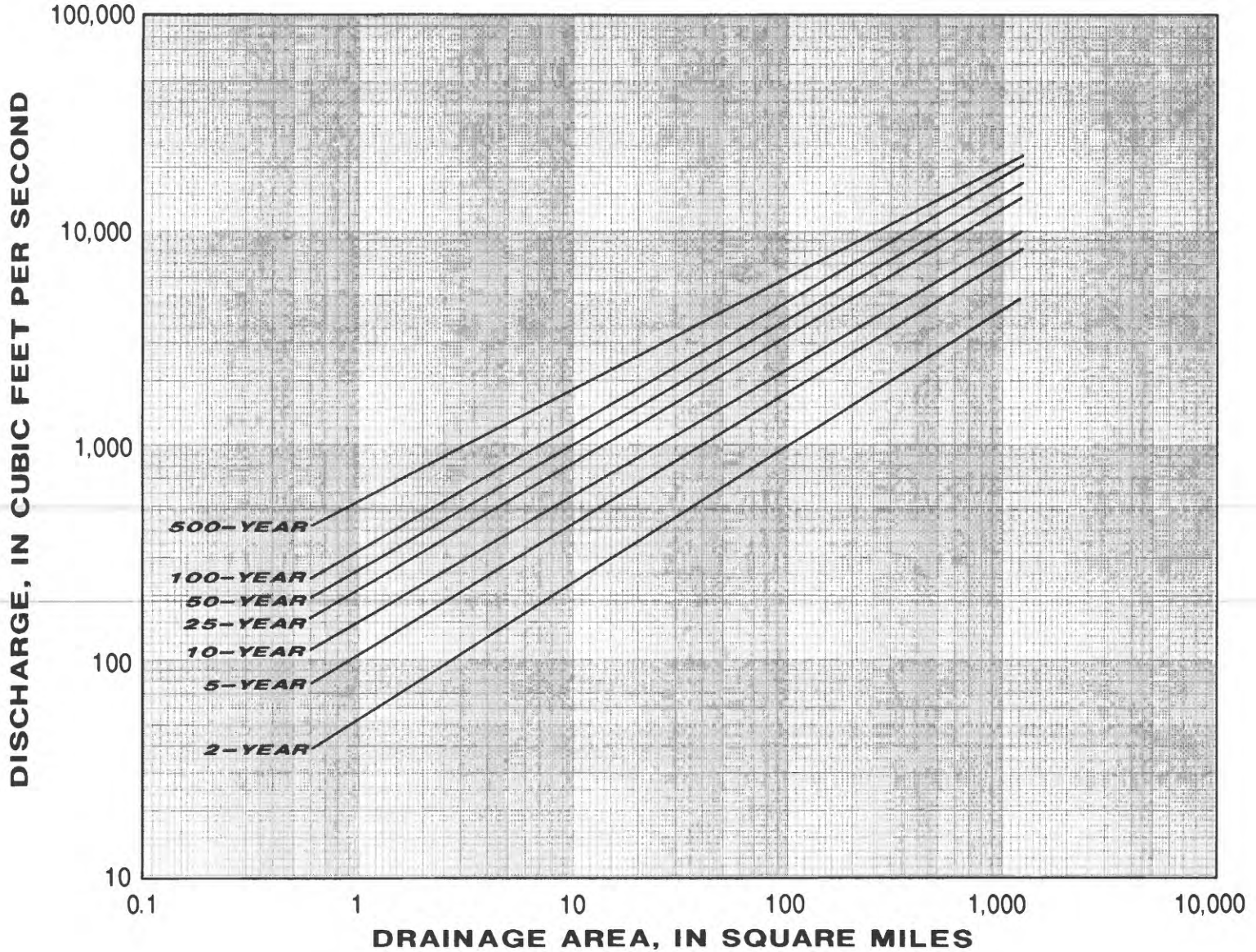

Figure 4.--Relation between drainage area and flood discharge for selected frequencies for stations on streams draining the lower Coastal Plain physiographic province.

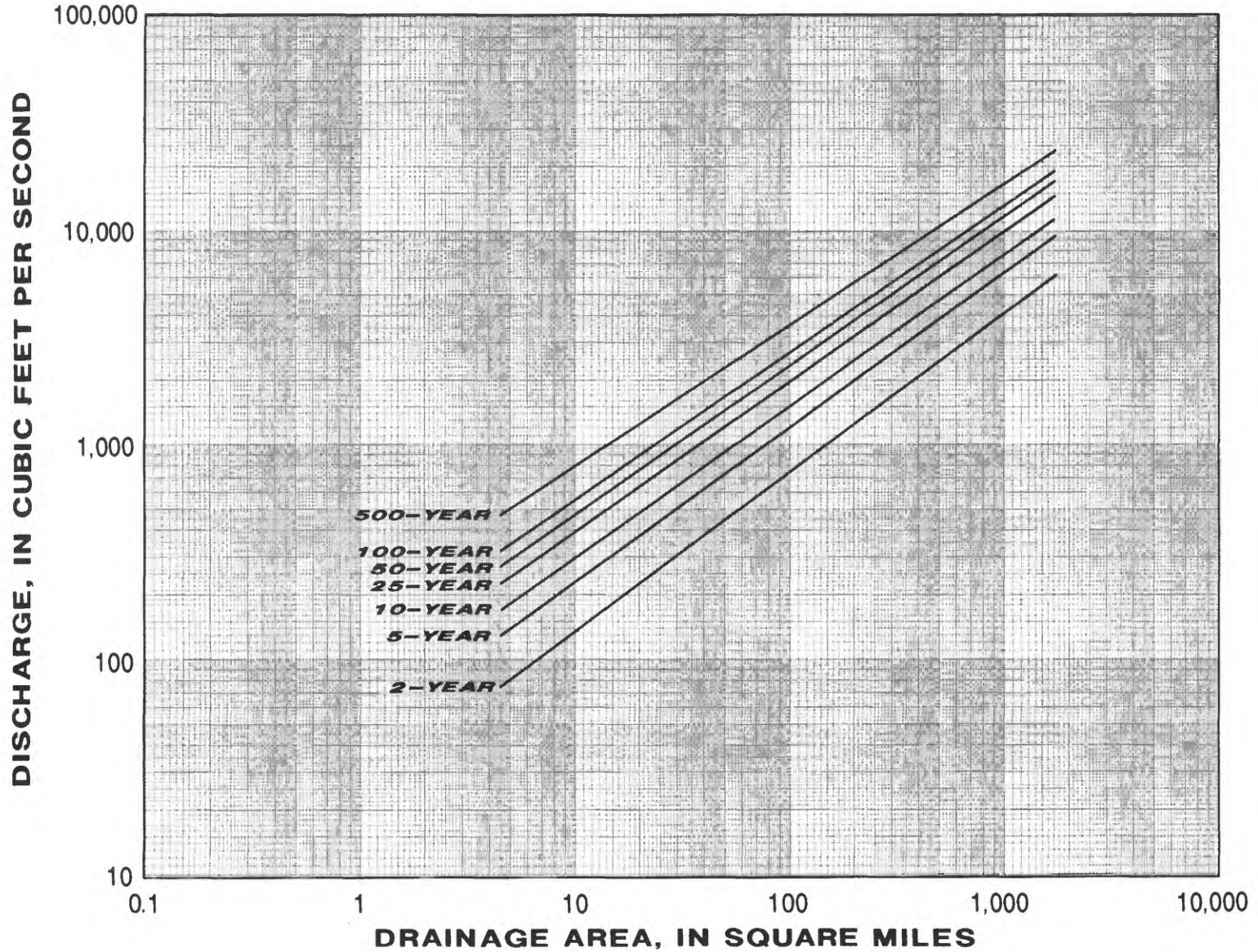

Figure 5.--Relation between drainage area and flood discharge for selected frequencies for stations on streams draining the upper Coastal Plain physiographic province.

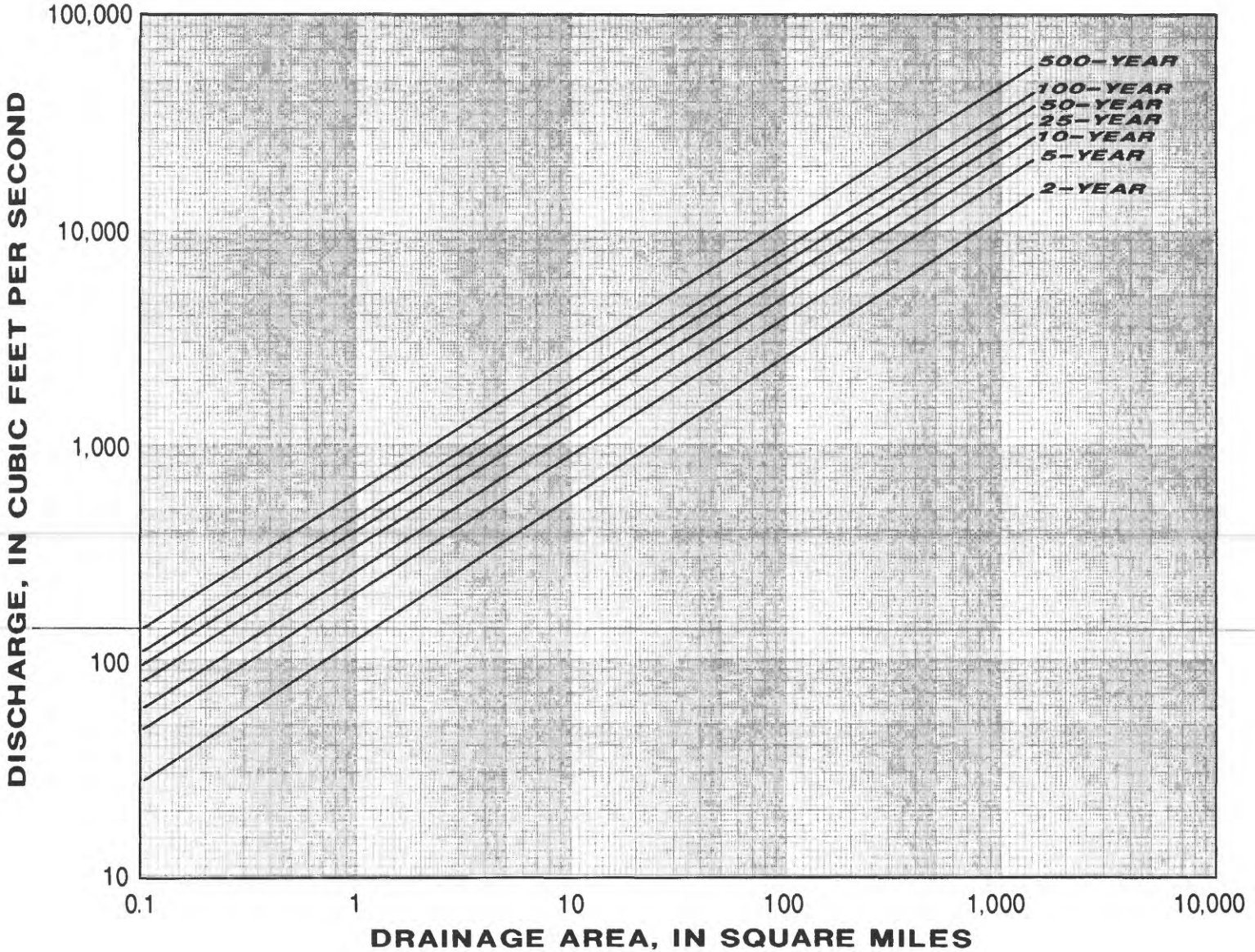

Figure 6.--Relation between drainage area and flood discharge for selected frequencies for stations on streams draining the Piedmont physiographic province.

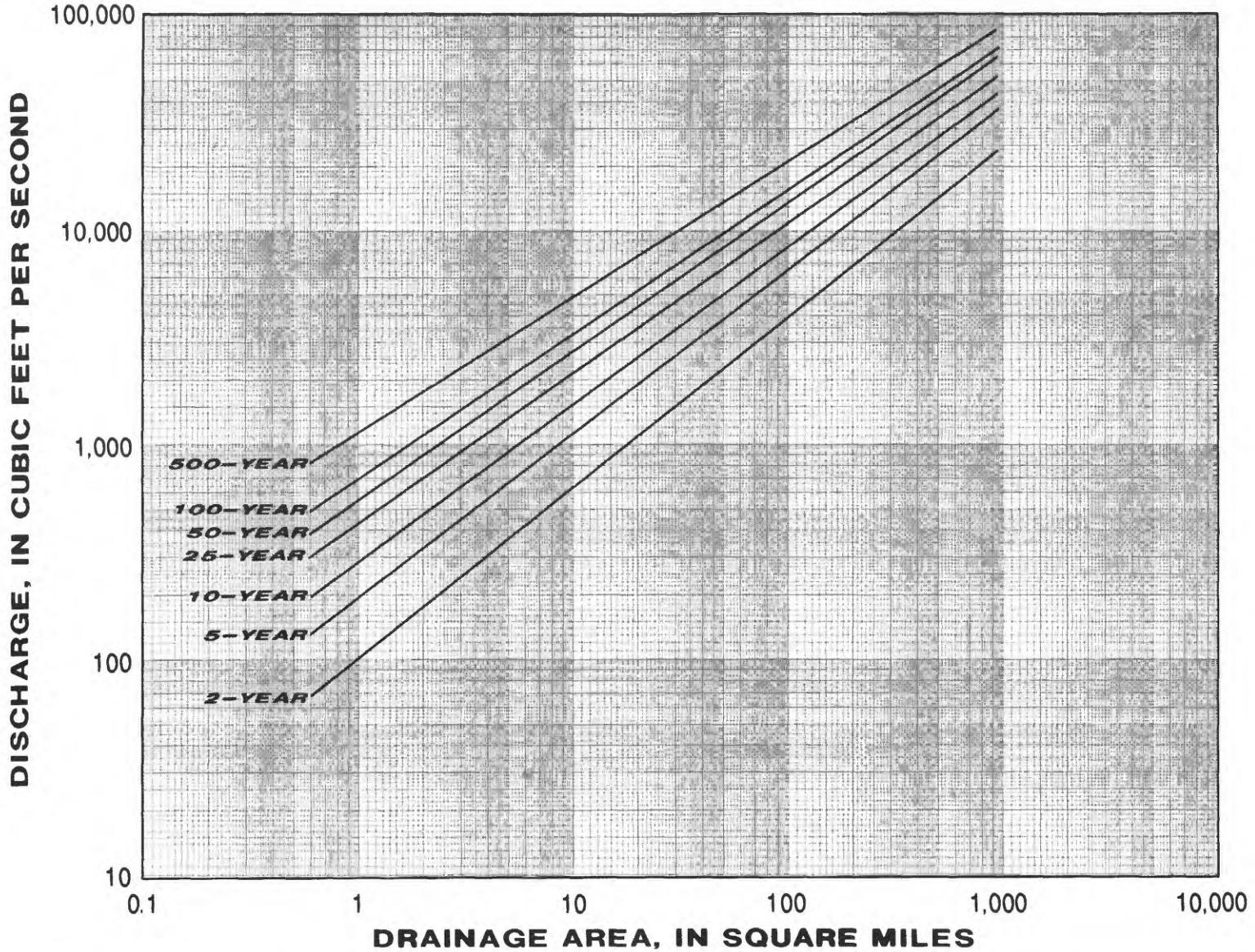

Figure 7.--Relation between drainage area and flood discharge for selected frequencies for stations on streams draining the Blue Ridge physiographic province.

Accuracy of Equations

The accuracy of the regression equations may be measured by the standard error of prediction and in equivalent years of record. These values are listed in table 5 for all the regression equations derived for use in South Carolina. The prediction error for ungaged sites is partitioned into model error and sampling error (including both time- and spatial-sampling errors). The model error is that portion of the total error (prediction error) that cannot be reduced by additional data collection. The sampling error, however, can be reduced by operating the existing stations longer, or by installing new stations, or some combination of both. The average variance of prediction (sum of average sampling error variance and average model error variance) can be converted to an average standard error of prediction such as that shown in table 5. The standard error of prediction resulting from the regression analyses ranged from 23 percent for the 2-year flood in the upper Coastal Plain to 53 percent for the 2-year flood in the Piedmont province.

The equivalent years of record (Hardison, 1971) is defined as the number of years of streamflow records needed to provide an estimate equal in accuracy to the regional relation. For instance, the 100-year flood-frequency equation for the Lower Coastal Plain has a value of 10 years for the equivalent years of record (table 5). Therefore, the 100-year flood can be estimated from the regression equations with the same degree of accuracy, on the average, that could be obtained from 10 years of actual record. The equivalent years of record resulting from the regional relations ranged from 1 year to 22 years for the 2- and 500-year floods, respectively, in the Piedmont province.

Limitations

The following guidelines apply when using the regression equations and graphs:

1. The equations should be used only for ungaged sites where the basin drainage area is between 0.6 and 1,252 mi^2 for the lower Coastal Plain, 4.4 and 1,720 mi^2 for the upper Coastal Plain, 0.1 and 1,430 mi^2 for the Piedmont, and 0.6 and 945 mi^2 for the Blue Ridge physiographic provinces.

2. The equations should not be used for sites where the watershed is substantially affected by regulation from impoundments, channelization, levees, or other man-made structures.

3. The equations should not be used for sites on streams in urban areas unless the effects of urbanization are insignificant.

4. The equations should be used with caution in areas where the streamflow characteristics have not been sufficiently defined by flood measurements (fig. 1). In York and Chester Counties, the regional equations tend to produce discharge results that may be significantly lower than those obtained using discharge records.

Table 5.--Equivalent years of record and standard error of prediction for flood-frequency equations

Flood discharge Q_T, in cubic feet per second for recurrence interval T, in years	Lower Coastal Plain		Upper Coastal Plain		Piedmont		Blue Ridge	
	Equivalent years of record	Standard error of prediction (percent)	Equivalent years of record	Standard error of prediction (percent)	Equivalent years of record	Standard error of prediction (percent)	Equivalent years of record	Standard error of prediction (percent)
Q_2	5	30	5	23	1	53	3	32
Q_5	7	31	8	25	4	38	5	31
Q_{10}	8	34	10	26	7	31	8	30
Q_{25}	9	40	12	29	12	29	11	31
Q_{50}	9	44	13	31	15	28	12	33
Q_{100}	10	47	14	33	18	28	13	35
Q_{500}	14	47	15	39	22	30	15	40

5. The equations should be used with caution in the Upper Three Runs basin in Aiken and Barnwell counties in the western part of the Upper Coastal Plain physiographic province. The regional equations tend to produce discharges that may be significantly higher than those obtained using observed discharge records in the Upper Three basin. To obtain flood discharges for the Upper Three Runs basin, either the station discharge should be used (Supplemental data) or the discharge at an ungaged site should be adjusted by drainage area.

Application of Regional Equations

Flood magnitude and frequency for ungaged rural basins in South Carolina can be estimated by solving the regional equations provided in table 4 or by using the graphs presented in figures (4-7). The location of regional boundaries are shown in figure 1. Step-by-step procedures for determining the magnitude and frequency of flood discharges are given below.

1. Determine that discharge at the site is not affected by regulation, urbanization, channel improvement, diversion, or tide.

2. Determine the drainage area of the basin upstream of the site using the best avaiable topographic map or aerial photograph.

3. Determine the physiographic province (see fig. 1) in which the drainage basin is located. For basins located near a boundary between physiographic provinces, consult a soils map to determine the proper physiographic province and associated equations.

4. Using the appropriate equations in table 4, solve for the discharge.

For a 50-mi^2 watershed in the Upper Coastal Plain, the 100-year flood discharge can be computed as follows:

$$Q_{100} = 116A^{0.69}$$
$$= 116(50)^{0.69}$$
$$= 1{,}720 \text{ ft}^3/\text{s}$$

Maximum Floods of Record

The drainage area and the maximum known flood for sites on streams in the lower Coastal Plain, upper Coastal Plain, Piedmont, and Blue Ridge physiographic provinces in South Carolina are shown in figures 8-11, respectively. Lines representing the solutions of the 100- and 500-year flood equations are also shown in these figures for purposes of comparison.

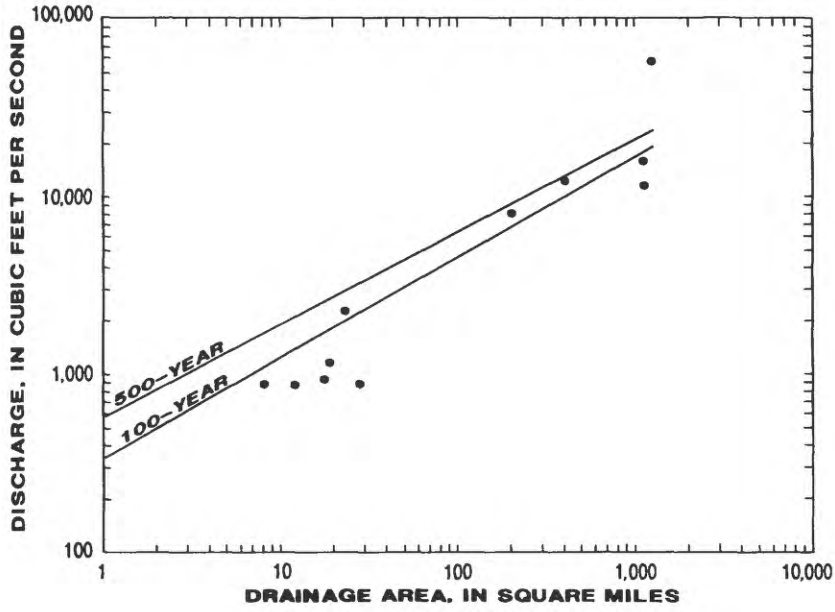

Figure 8.--Relation between drainage area and observed maximum flood discharge for South Carolina stations and the regional relations for the 100- and 500-year floods at ungaged sites on streams draining the lower Coastal Plain physiographic province.

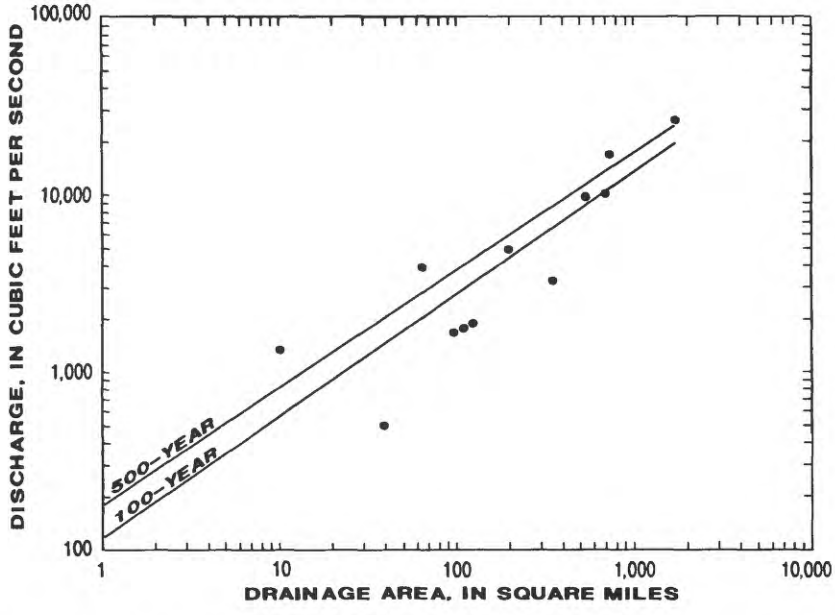

Figure 9.--Relation between drainage area and observed maximum flood discharge for South Carolina stations and the regional relations for the 100- and 500-year floods at ungaged sites on streams draining the upper Coastal Plain physiographic province.

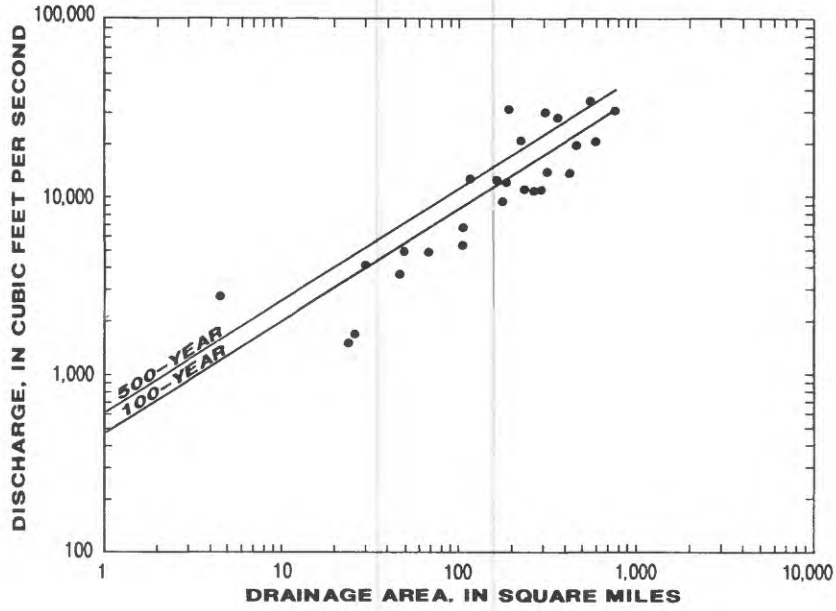

Figure 10.--Relation between drainage area and observed maximum flood discharge for South Carolina stations and the regional relations for the 100- and 500-year floods at ungaged sites on streams draining the Piedmont physiographic province.

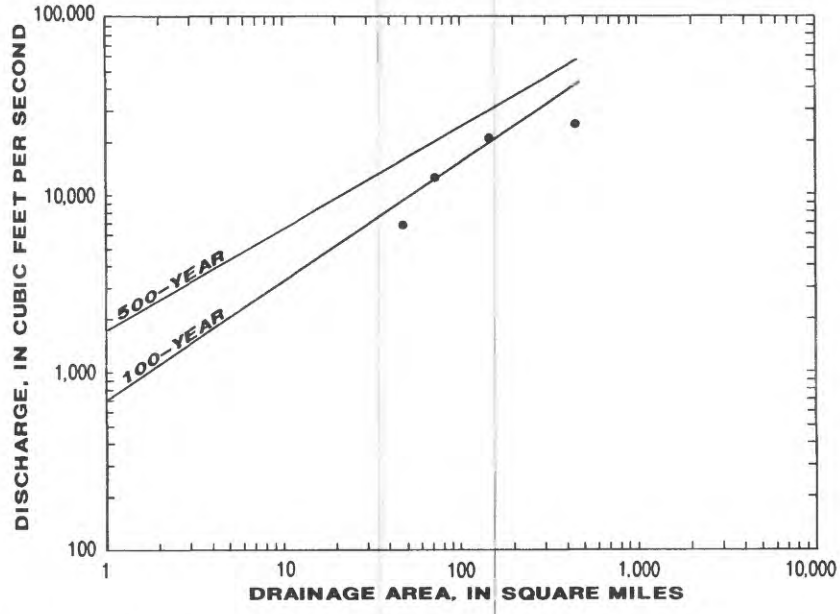

Figure 11.--Relation between drainage area and observed maximum flood discharge for South Carolina stations and the regional relations for the 100- and 500-year floods at ungaged sites on streams draining the Blue Ridge physiographic province.

FLOOD FREQUENCY AT UNGAGED SITES ON STREAMS DRAINING MORE THAN ONE PHYSIOGRAPHIC PROVINCE

If the drainage area of the ungaged basin is located in more than one physiographic province, solve the appropriate equations for each physiographic province as though the drainage area were located entirely in each province, and then weight the discharge as described below. For example, if the drainage area is 100 square miles with 60 percent of the basin located in the Piedmont, and 40 percent in the Blue Ridge, computation of the 100-year discharge is as follows:

Piedmont: $Q_{100} = 474(100)^{0.63} = 8{,}630 \times 60 \text{ percent} = 5{,}180 \text{ ft}^3/\text{s}$

Blue Ridge: $Q_{100} = 705(100)^{0.67} = 15{,}400 \times 40 \text{ percent} = \underline{6{,}160 \text{ ft}^3/\text{s}}$

Sum 11,300 ft^3/s

FLOOD FREQUENCY AT OR NEAR A GAGED SITE ON THE SAME STREAM IN ONE PHYSIOGRAPHIC PROVINCE

Flood magnitude and frequency can be determined for gaged sites in South Carolina by weighting the results of the regression relations (table 4), or graphs (figs. 4-7), and the gaging station frequency data (supplemental data in appendix 1) determined by fitting the log of the annual peaks to a Pearson Type III distribution. Assuming that the two estimates are independent, the accuracy in equivalent years for the weighted estimate is equivalent to the sum of the accuracy of each estimate. The best estimate of flood discharges at a gaged site can be determined from the following equation:

$$\log Q_{T(w)} = \frac{N \log Q_{T(s)} + EY \log Q_{T(r)}}{N+EY} \qquad (3)$$

where $Q_{T(w)}$ is the weighted discharge for selected T-year recurrence interval, in cubic feet per second;

N is the number of years of record used to compute $Q_{T(s)}$;

$Q_{T(s)}$ is the station discharge for selected T-year recurrence interval, in cubic feet per second;

EY is the equivalent years of record for $Q_{T(r)}$ from table 6; and;

$Q_{T(r)}$ is the regional discharge for selected T-year recurrence interval, in cubic feet per second.

Weighted station flood discharges for selected recurrence intervals (2, 5, 10, 25, 50, and 100 years) using table 4, table 5, and equation 3 for all stations used in the regression analysis are listed in table 1. The weighted values shown were computed using all available data through 1988 and supersedes values previously published by Whetstone (1982). These weighted values are considered the best estimates for design purposes.

Flood discharges for selected recurrence intervals (2, 5, 10, 25, 50, and 100 years) computed from peak flows synthesized from a rainfall-runoff model were also weighted with flood-frequency data from the regression equations of table 4. Equivalent years for the synthetic peak discharges were estimated from a regression of synthetic T-year floods as a function of rainfall-runoff model parameters made by Lichty and Liscum (1978) and modified by Thomas (U.S. Geological Survey, written commun., May 1991). The equivalent years for synthetic flood data are listed below:

Recurrence intervals (years)	Equivalent years of record
2	5
5	10
10	15
25	20
50	21
100	23

These data, the data in table 4 and equation 3, were used to compute the weighted discharge in table 3 for stations with synthesized peak-flow data.

Flood-frequency estimates at sites near a gaging station on the same stream can be improved by transferring the nearby weighted station data to the ungaged site (adjusted estimate) and weighting it with the regression data for the ungaged site. The adjusted estimate is determined first as follows:

$$Q_u = \left(\frac{A_u}{A_g}\right)^b Q_{g(w)} \qquad (4)$$

and the final weighted value can be computed by the equation

$$Q_{u(w)} = \left(\frac{2\Delta A}{A_g}\right) Q_n + \left(1 - \frac{2\Delta A}{A_g}\right) Q_u \qquad (5)$$

Where,

Q_u is the adjusted discharge at the ungaged site transferred from the gaged site by the drainage area ratio, in cubic feet per second.

$Q_{g(w)}$ is the weighted discharge for the nearby gaging station, in cubic feet per second.

Q_n is the discharge using regional relation for ungaged sites, in cubic feet per second.

$Q_{u(w)}$ is the weighted discharge at the ungaged site, in cubic feet per second.

b is the drainage area exponent of the regional relation from table 4 for the applicable physiographic province.

A_u is the drainage area of ungaged site, in square miles.

A_g is the drainage area of gaged site, in square miles.

ΔA is the difference in drainage area between the gaged site and the ungaged site, in square miles.

This procedure should only be used to transfer flood discharge if the drainage area of the ungaged site near a gaged site is within 50 percent of the drainage area of the gaged site. If it is not, use of the regional regression equations as described in the previous section will provide the best estimate of flood discharge.

FLOOD FREQUENCY AT GAGED SITES ON STREAMS DRAINING MORE THAN ONE PHYSIOGRAPHIC PROVINCE

Flood frequencies for gaged sites on unregulated streams draining one physiographic province are presented in table 1. Gaging stations located on streams draining more than one physiographic province in South Carolina are shown in figure 12 and are described in unnumbered text tables that follow. Some of these streams are subject to minor regulation that does not significantly affect annual peak discharges. The logarithm of annual peak discharge values for these stations were fitted to a Pearson Type III distribution to determine flood discharges for selected reccurrence intervals. This type of analysis was made for stations on the Broad River, Little Pee Dee River, Lynches River, and Edisto River.

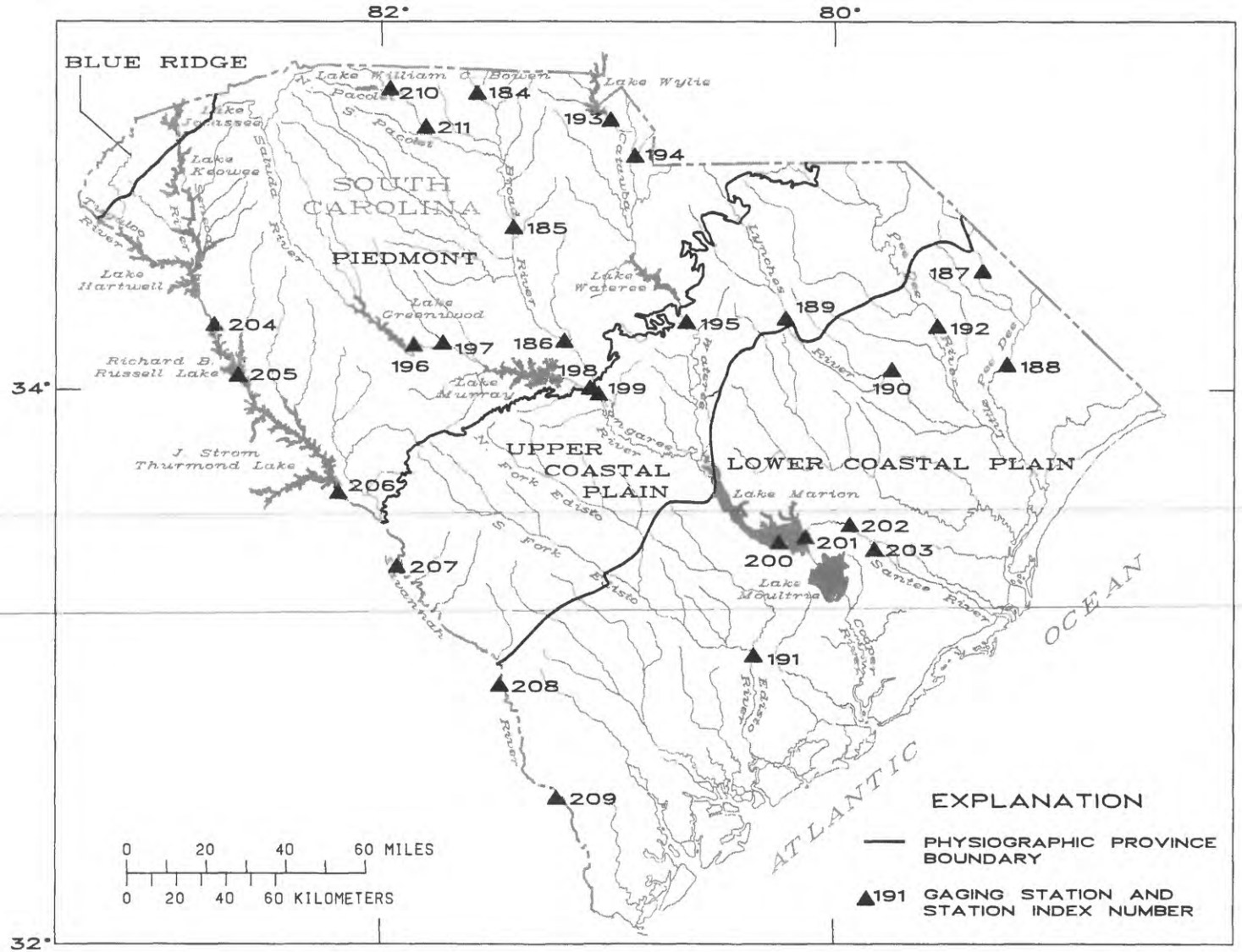

Figure 12.--Locations of gaging stations on regulated streams and gaging stations on streams draining more than one physiographic province in South Carolina.

Broad River

The Broad River originates in the Blue Ridge province of North Carolina and flows eastward and southward through the Piedmont to Columbia, S.C., where it merges with the Saluda River to form the Congaree River (fig. 12). Floods on the Broad River consist primarily of unregulated runoff, although there is some regulation at low to medium flows.

Flood discharges were computed for Broad River near Gaffney (map index number 184, station number 02153500, 1939-88); Broad River near Carlisle (map index number 185, station number 02156500, 1939-88); and Broad River at Richtex (map index number 186, station number 02161500, 1926-83). Flood discharges were initially computed for the three stations using the concurrent period of 1939-83. When flood discharge was computed for Broad River at Richtex using the entire period of record, 1926-83, the 100-year discharge increased substantially. The flood records for Broad River near Gaffney and Broad River near Carlisle did not include the extreme flood events recorded at Richtex, which occurred between 1926 and 1939. Therefore, an adjustment was made in accordance with Appendix 7 of U.S. Water Resources Council Bulletin 17B. The mean and standard deviation of the stations with short periods of record were adjusted to agree with the mean and standard deviation of the station with the longer period of record. Statistically, no adjustment was needed for Broad River near Gaffney, but an adjustment for the standard deviation was required for Broad River near Carlisle. The relations between flood discharge and drainage area for Broad River near Gaffney, Broad River near Carlisle, and Broad River at Richtex are shown in figure 13. The unadjusted 100-year flood discharges for all three Broad River stations are shown for the period 1939-83 along with the adjusted 100-year flood discharge to reflect the period from 1926-83 in figure 13.

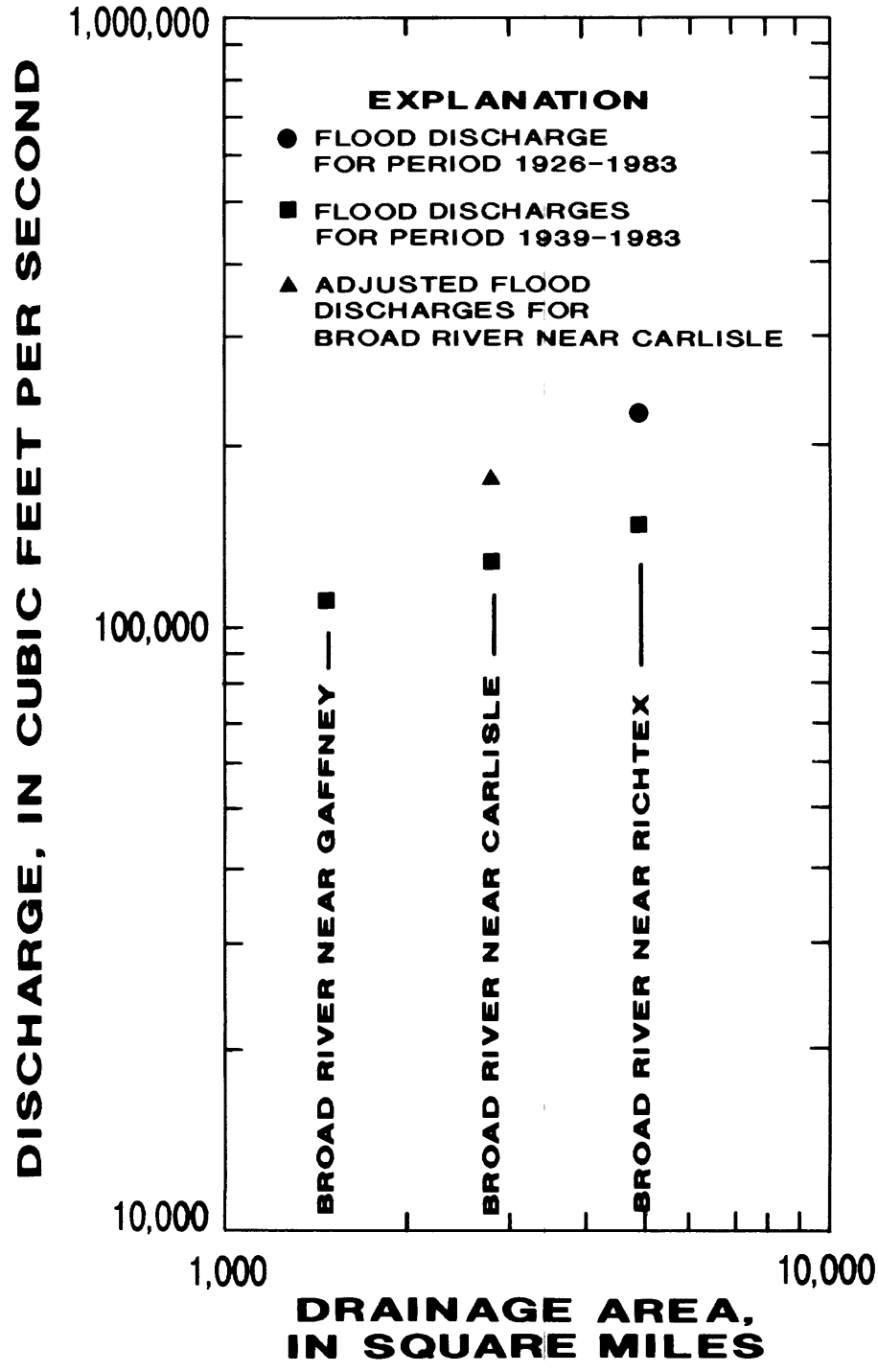

Figure 13.--Relation between drainage area and 100-year flood discharge for Broad River near Gaffney (map index number 184, station number 02153500), Broad River near Carlisle (map index number 185, station number 02156500), and Broad River at Richtex (map index number 186, station number 02161500).

The adjusted flood discharges for selected recurrence intervals are tabulated below for Broad River near Gaffney, Broad River near Carlisle, and Broad River at Richtex.

Map index number	Station name and number	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
			2	5	10	25	50	100
184	Broad River near Gaffney (02153500)	1,490	31,500	45,800	57,700	75,900	92,100	111,000
185	Broad River near Carlisle[1] (02156500)	2,790	41,200	64,000	84,000	115,000	144,000	178,000
186	Broad River at Richtex (02161500)	4,850	59,000	89,700	115,000	153,000	187,000	225,000

[1]Flood discharges were adjusted in accordance to Appendix 7 of Water Resources Council Bulletin 17B.

Little Pee Dee River

The Little Pee Dee River originates in the upper Coastal Plain of North Carolina and flows southward and eastward to the lower Coastal Plain of South Carolina (fig. 12). The Little Pee Dee River, known as the Lumber River in North Carolina, is not regulated. Flood discharges for selected recurrence intervals are tabulated below for Little Pee Dee River near Dillon (map index number 187, station number 02132500, 1940-88) and Little Pee Dee River near Galivants Ferry (map index number 188, station number 02135000, 1942-88).

Map index number	Station name and number	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
			2	5	10	25	50	100
187	Little Pee Dee River near Dillon (02132500)	524	2,490	3,880	4,950	6,450	7,690	9,030
188	Little Pee Dee River near Galivants Ferry (02135000)	2,790	12,000	17,600	21,100	25,600	28,900	32,200

Lynches River

The Lynches River originates in the Piedmont of North Carolina, and flows southeastward through the upper Coastal Plain to the lower Coastal Plain of South Carolina (fig. 12). The Lynches River is not regulated. Flood discharges for selected recurrence intervals are tabulated below for Lynches River near Bishopville (map index number 189, station number 02131500, 1943-88), and Lynches River at Effingham (map index number 190, station number 02132000, 1930-88). Flood discharges for the 2-, 5-, and 10-year recurrence interval are smaller for the downstream station, Lynches River near Effingham, because as the Lynches River flows from the upper to lower Coastal Plain the flood peaks are attenuated due to increased storage in the flood plain.

Map index number	Station name and number	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
			2	5	10	25	50	100
189	Lynches River near Bishopville (02131500)	675	6,770	10,200	12,400	15,400	17,600	19,800
190	Lynches River near Effingham (02132000)	1,030	5,610	9,190	11,900	15,800	18,900	22,300

Edisto River

The North Fork Edisto River and South Fork Edisto River originate in the upper Coastal Plain of South Carolina and flow southeastward to the lower Coastal Plain. The South and North Fork of the Edisto River merge near Branchville in the lower Coastal Plain forming the Edisto River (fig. 12). Flood discharges for selected recurrence intervals for Edisto River near Givhans (map index number 191, station number 02175000, 1939-88) are tabulated below.

Map index number	Station name and number	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
			2	5	10	25	50	100
191	Edisto River near Givhans (02175000)	2,730	10,100	15,400	18,800	22,500	25,900	28,700

FLOOD FREQUENCY AT GAGED SITES ON REGULATED STREAMS

Many streams in South Carolina, especially the larger streams, are regulated by reservoirs. Flood-frequency relations for these streams are dependent on a number of factors and are therefore quite complex.

Flows from reservoirs are regulated to satisfy requirements for in-stream water-use downstream of the reservoirs, power generation, maintenance of lake levels for recreation, and flood control. Regulation procedures may change as requirements change or when other reservoirs are constructed on the same stream. In general, flows during operation for flood control pass through tainter gates, whereas flows for most other requirements pass through generators. Operational procedures and the use of storage are greatly different for the two flow regimes. The flood-frequency characteristics of higher and lower magnitude floods are also greatly different. For extremely large floods, not only do the relative effects of storage diminish but operations are also directed more toward preventing dam failure than toward flood control and protection of downstream property.

Sanders and others (1990) showed that the period after 1951 for the Savannah River at Augusta, Ga. (station number 02197000) was significantly free of extremely large floods, based on an unusually long period of flood data (1796-1985). A flood-frequency relation was established for the site using peak discharges computed by the routing of synthesized inflow hydrographs through the reservoirs to the site using current operating conditions. This method produced considerably larger discharges than the frequency relation derived by Whetstone (1982) in which the logarithms of annual peak discharges were fitted to a Pearson Type III distribution for the relatively flood-free period (1952-80).

Therefore, to accurately determine the flood frequency of regulated streams, a representative number of extremely large flood events should be included in the analysis, using methods similar to those used by Sanders and others (1990). Flood frequency data for gaged sites on regulated streams were not determined for this report (except for Savannah River at Augusta, Ga., map index no. 207, station number 02197000) because observed data were not available for hydrograph simulations, and because hydrograph simulation by rainfall-runoff modeling was beyond the scope of the study.

The location of USGS gaging stations on regulated streams is shown in figure 12. Annual peak discharge data for these stations are provided in the supplemental data section of this report. Other useful information pertaining to regulated streams for which observed record is available is provided in the following sections. The reservoir data were taken from a report by Ruddy and Hitt (1990).

Pee Dee River

The Pee Dee River originates in the Blue Ridge province of North Carolina and flows through the Piedmont, upper Coastal Plain, and lower Coastal Plain physiographic provinces (fig. 12). Through most of North Carolina it is known as the Yadkin River.

Three reservoirs on the Yadkin River and two reservoirs on the Pee Dee River are used for hydroelectric power generation. A sixth reservoir, located on the Yadkin River, W. Kerr Scott Reservoir, is used for flood control and water supply. Selected data on these reservoirs are listed below.

Name of reservoir	Date of completion	Name of stream	Drainage area (square miles)	Flood-storage capacity (acre-feet)
W. Kerr Scott Reservoir	1963	Yadkin	350	112,000
High Rock Lake	1927	Yadkin	4,000	64,400
Tuckertown Reservoir	1962	Yadkin	4,120	0
Badin Lake	1917	Yadkin	4,180	75,800
Lake Tillery	1928	Pee Dee	4,600	29,500
Blewett Falls Lake	1912	Pee Dee	6,830	7,000

Annual peak discharge data are available for one gaging station on the Pee Dee River downstream from the lakes. The Pee Dee River at Peedee (map index number 192, station number 02131000, 1939-88) (Supplemental data).

Catawba River

The Catawba River originates in the Blue Ridge province of North Carolina and flows through the Piedmont province of South Carolina and becomes the Wateree River below Lake Wateree (fig. 12). Ten reservoirs, six in North Carolina and four in South Carolina, are located on the Catawba River and are storage facilities for hydroelectric power generation. Selected data on eight of these reservoirs are presented below.

Name of reservoir	Date of completion	Drainage area (square miles)	Flood-storage capacity (acre-feet)
Lake James	1919	380	67,900
Rhodhiss Lake	1925	1,090	50,200
Lake Hickory	1928	1,310	61,140
Lookout Shoals Lake	1915	1,450	6,240
Lake Norman	1963	1,790	182,000
Mountain Island Reservoir	1923	1,860	23,300
Lake Wylie	1900	3,020	33,000
Fishing Creek Reservoir	1916	3,810	0

Annual peak discharge data are available for the Catawba River near Rock Hill (map index number 193, station number 02146000, 1963-88) and Catawba River near Catawba (map index number 194, station number 02147000, 1968-88) (Supplemental data).

Wateree River

The Wateree River originates at the outflow of Lake Wateree, which was built on the Catawba River. The Wateree River flows southeastward through the upper Coastal Plain where it merges with the Congaree River to form the Santee River (fig. 12). Lake Wateree is used for hydroelectric power generation. Selected data for Lake Wateree are presented below.

Station name	Date of completion	Drainage area (square miles)	Flood-storage capacity (acre-feet)
Lake Wateree	1919	4,750	45,100

Annual peak discharge data are available for Wateree River near Camden (map index number 195, station number 02148000, 1963-88) (Supplemental data).

Saluda River

The Saluda River originates in the Blue Ridge province and flows southeastwardly through the Piedmont province of South Carolina where it merges with the Broad River near Columbia forming the Congaree River (fig. 12). Two reservoirs, Lake Greenwood and Lake Murray, are located on the Saluda River. Selected data for these reservoirs are presented below.

Name of reservoir	Date of completion	Drainage area (square miles)	Flood-storage capacity (acre-feet)
Lake Greenwood	1940	1,150	147,000
Lake Murray	1930	2,420	125,000

The Saluda River above Lake Greenwood is not affected significantly by regulation. Flood discharges for drainage areas less than 800 mi^2 in this part of the basin should be determined as described in previous sections of this report by (1) estimating flood discharge at an ungaged site, or (2) estimating flood discharge at or near a gaged site. The three gaging

stations on the Saluda River upstream from Lake Greenwood (fig. 1) are Saluda River near Greenville (map index number 82, station number 02162500, 1942-78), Saluda River near Pelzer (map index number 83, station number 02163000, 1930-77), and Saluda River near Ware Shoals (map index number 84, station number 02163500, 1939-78). Records also are available for three stations downstream from Lake Greenwood. These are Saluda River at Chappells (map index number 196, station number 02167000, 1927-88), Saluda River near Silverstreet (map index number 197, station number 02167500, 1927-65), and Saluda River near Columbia (map index number 198, station number 02169000, 1926-88) (Supplemental data).

Congaree River

The Congaree River is formed at the confluence of the Broad River and Saluda River at Columbia, S.C. The Congaree River flows southeastward and joins the Wateree River to form the Santee River (fig. 12). The Broad River basin comprises approximately two-thirds of the drainage area of the Congaree River. Flow of the Congaree River is highly regulated by Lake Murray, which is located on the Saluda River. Annual peak-discharge data are available for the Congaree River at Columbia (map index number 199, station number 02169500) (Supplemental data).

Santee River

Formed at the confluence of the Congaree and Wateree Rivers, the Santee River flows directly into Lake Marion - the largest reservoir by surface area in the State.

Name of reservoir	Date of completion	Drainage area (square miles)	Flood-storage capacity (acre-feet)
Lake Marion	1941	14,680	255,000

Since 1941, most of the discharge from Lake Marion has been diverted to the Cooper River through a diversion canal to Lake Moultrie (fig. 12). A rediversion canal, completed in 1986, restores approximately 80 percent of the previously diverted flow back to the Santee River. Due to the extensive hydrologic modification, which has taken place over the last 40 to 50 years, frequency computations were not made for stations along the Santee River. However, annual peak discharges for the four stations with 10 or more years of record are listed in the supplemental data section; Santee River at Ferguson (map index number 200, station number 02170000, 1908 to 1941), Santee River near Pineville (map index number 201, station number 02171500, 1942 to current year), Santee River near Russellville, (map index number 202, station number 02171560, 1978 to current year), Santee River below St. Stephens (map index number 203, station number 02171650, 1971 to 1981) (Supplemental data).

Savannah River

The Tugaloo and Seneca Rivers, which originate in the Blue Ridge province, converge to form the Savannah River. The Savannah River is the state boundary between Georgia and South Carolina and is regulated by three reservoirs along its main stem. The reservoirs are operated by the U.S. Army Corps of Engineers for flood control, generation of power, and navigation. Data pertaining to the reservoirs are listed below (Sanders and others, 1990).

Name of reservoir	Date of completion	Drainage area (square miles)	Flood-storage capacity (acre-feet)
Lake Hartwell	1960	2,088	293,000
Richard B. Russell Lake	1984	2,900	140,000
Strom Thurmond Lake	1953	6,150	390,000

Frequency data for Savannah River at Augusta (map index number 207, station number 02197000) recently published in USGS Water-Resources Investigations Report 90-4024 (Sanders and others, 1990), are tabulated below.

Map index number	Station name and number	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
			2	5	10	25	50	100
207	Savannah River at Augusta (02197000)	7,508	34,500	51,500	69,000	105,000	140,000	180,000

Annual peak-discharge data for five other stations with 10 or more years of record on the Savannah River are listed in the supplemental data section of this report; Savannah River near Iva (map index number 204, station number 02187500, 1949 to 1981), Savannah River near Calhoun Falls (map index number 205, station number 02189000, 1900 to 1979), Savannah River near Clarks Hill, S.C. (map index number 206, station number 02195000, 1940 to 1954), Savannah River at Burtons Ferry Bridge near Millhaven, Ga. (map index number 208, station number 02197500, 1930 to current year), and Savannah River near Clyo, Ga. (map index number 209, station number 02198500, 1925 to current year).

Pacolet River

The Pacolet River originates in the Blue Ridge province and flows southeastward to the Piedmont Province where it merges with the Broad River (fig. 12). The South Pacolet River is regulated by Lake William C. Bowen, and the North Pacolet River is unregulated. Selected data for the reservoir are presented below.

Name of lake	Date of completion	Drainage area (square miles)	Flood-storage capacity (acre-feet)
William C. Bowen	1956	79.4	9,600

Annual peak-discharge data are available for Pacolet River near Fingerville (map index number 210, station number 02155500, 1903-88), and Pacolet River near Clifton (map index number 211, station number 02156000, 1940-78) (Supplemental data).

FREQUENCY OF STORM TIDES ALONG THE SOUTH CAROLINA COAST

The magnitude and frequency of discharges presented in previous sections of this report do not apply where flooding is influenced by extreme tidal events. The theoretical frequency of storm-tide elevations along the South Carolina coast has been investigated by Myers (1975) and more recently in a series of flood-insurance studies by the Federal Emergency Management Agency (1986, 1987, 1988, 1989, 1991). These references should be consulted for information related to storm tide frequency.

SUMMARY

Flood frequencies were determined from observed streamflow data at 174 gaging stations on rural, unregulated streams and from synthetic record at 4 additional stations on rural, unregulated streams by fitting the logarithm of annual peak discharges to a Pearson type III distribution or by graphical methods. Fifty-six of these gaging stations were in South Carolina, and 122 were near the South Carolina border, in either North Carolina or Georgia. Regional relations between flood discharge and drainage area were determined by generalized least squares regression analyses for each physiographic province. Equations, maps, and graphs are provided for estimating flood discharges with recurrence intervals of 2, 5, 10, 25, 50, 100, and 500 years on ungaged streams in South Carolina. Standard errors of prediction for the regional equations ranged from 23 to 53 percent.

Flood discharges at gaged sites can be computed using a weighted average of the discharge determined from regional regression equations and the discharge determined from the Pearson type III analysis for the gaging station. Methods for estimating flood discharges for sites on gaged and ungaged streams that drain in more than one physiographic province are also presented. A weighting method for determining peak discharges at sites at or near gaging stations on the same stream is given. Relations between flood discharges and recurrence interval are presented for gaging stations on streams draining more than one physiographic province.

A supplemental data section provides the data used in the frequency analyses. Included in this section are annual peak stages, and discharges, frequency and statistical data, and a station description for each gaging station with 10 or more years of data on streams in South Carolina.

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SUPPLEMENTAL DATA

SUPPLEMENTAL DATA

Explanation of Tables

The following tables contain flood data for streamflow gaging stations in South Carolina. The tables contain a brief description of the gage location, type of gage, gage datum (if known), drainage area in square miles, stage-discharge relation, historical data, hydrologic unit number[1] and explanatory remarks.

The log-Pearson Type III flood-frequency data using either a weighted or station skew coefficient, and adjusted for historic peaks, high and low outliers, and truncated or incomplete record, are given for most stations with 10 or more years of record.

The tables of peak stages and discharges show only the annual maximums. Underlined data in these tables signify the following:

1. An underlined entry in the "Water year" column indicates discontinuous record.

2. An underlined entry in the "Gage height" column indicates a change in gage datum and means that the gage height above and below the line are not comparable.

3. Underlined entries in the "Date" and "Discharge" columns indicate a change in the site location that significantly affects the stage-dishcarge relation.

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[1]The hydrologic unit number is determined from a set of maps developed by the U.S. Geological Survey that depict the approved boundaries of river-basin units of the United States (Seaber and others, 1984). These maps and associated codes provide a standardized base for use by water-resources organizations in locating, storing, retrieving, and exchanging hydrologic data; indexing and inventorying of hydrologic data and informaton; cataloging of water-data aquisition activities; and a variety of other applications.

02110500 WACCAMAW RIVER NEAR LONGS, SC

LOCATION.--Lat 33°54'45'', long 78°42'55'', Horry County, Hydrologic Unit 03040206, near right bank, on downstream side of bridge on State Highway 9, 500 ft downstream from Buck Creek, 2.1 mi southeast of Longs, and at mile 85.4.

DRAINAGE AREA.--1,110 mi^2, approximately.

PERIOD OF RECORD.--March 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5.28 ft above National Geodetic Vertical datum of 1929 (levels of Corps of Engineers). Prior to Aug. 11, 1967, nonrecording gage at same site and datum.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,200 ft^3/s Aug. 23, 1981, gage height, 14.87 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 11,800 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
38 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 5,640
Q_5	= 8,660
Q_{10}	= 10,700
Q_{25}	= 13,400
Q_{50}	= 15,300
Q_{100}	= 17,300

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.744
Standard Deviation	= 0.228
Weighted Skew	= -0.210

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1951	Jan. 8	9.41	1,860	1966	Mar. 10	12.64	7,750	1981	Aug. 23	14.87	16,200
1952	Apr. 2	10.05	2,520	1967	Aug. 20	11.73	5,530	1982	Feb. 22	11.97	5,540
1953	Mar. 15	11.50	6,360	1968	Jan. 21	10.42	2,970	1983	Mar. 26	14.40	12,200
1954	Apr. 11	10.00	2,520	1969	Aug. 13	13.26	9,440	1984	Apr. 5	11.50	4,800
1955	Sept.29	13.82	10,300	1970	Mar. 31	11.96	6,060	1985	Feb. 21	11.31	4,250
1956	Feb. 19	9.89	2,230	1971	Mar. 12	12.85	8,300	1986	Aug. 27	9.94	2,150
1957	Mar. 15	10.38	3,780	1972	Feb. 14	12.19	6,100	1987	Mar. 9	12.75	7,550
1958	Apr. 18	12.46	7,540	1973	Feb. 20	13.10	8,620	1988	Jan. 26	10.12	2,440
1959	Mar. 13	13.40	9,760	1974	Aug. 26	12.01	5,720				
1960	Aug. 4	13.52	10,000	1975	Feb. 25	11.27	4,240				
1961	July 6	13.94	11,100	1976	July 13	11.54	4,780				
1962	Mar. 16	11.11	4,520	1977	Mar. 14	10.95	3,630				
1963	Feb. 1	11.90	6,180	1978	Jan. 28	11.92	5,540				
1964	Mar. 5	12.02	6,200	1979	Sept.16	12.72	7,470				
1965	Oct. 17	12.09	6,380	1980	Mar. 24	12.24	6,200				

02130500 JUNIPER CREEK NEAR CHERAW, SC

LOCATION.--Lat 34°39', long 79°54', Chesterfield County, Hydrologic Unit 03040201, at left end of Eureka Lake Dam, 1.5 mi upstream from mouth and 3.5 mi south of Cheraw.

DRAINAGE AREA.--64 mi^2, approximately.

PERIOD OF RECORD.--May 1940 to September 1958.

GAGE.--Recording. Altitude of gage is 90 ft (from Corps of Engineers maps.)

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,910 ft^3/s, Sept. 18, 1945, gage height, 5.71 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 810 ft^3/s and graphically extended on logarithmic plotting paper and using a computation of flow over dam at 3,190 ft^3/s.

FLOOD-FREQUENCY DATA (ft^3/s)
[1]18 YEARS OF RECORD
[1]GRAPHICAL SOLUTION

Q_2	=	365
Q_5	=	642
Q_{10}	=	900
Q_{25}	=	1,410
Q_{50}	=	1,980
Q_{100}	=	2,760

STATISTICS (LOG UNITS)

Mean	=	2.619
[2]Standard Deviation	=	0.251
[2]Station Skew	=	1.374

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1941	July 15	1.33	395	1947	Oct. 10	1.32	369	1953	June 9	2.30	880
1942	Aug. 20	1.22	332	1948	Feb. 15	1.41	430	1954	Dec. 15	1.20	316
1943	Jan. 20	1.12	295	1949	May 2	1.50	459	1955	Oct. 17	1.01	235
1944	Mar. 22	1.10	286	1950	Nov. 3	1.00	224	1956	Sept.15	--	360
1945	Sept.18	5.71	3,910	1951	Sept. 8	1.34	392	1957	Sept.12	1.20	316
1946	May 5	1.30	410	1952	Sept. 1	2.05	778	1958	July 22	1.92	712

[1]The logarithms of annual peak discharges could not be fitted to a Pearson type III distribution because of regulation at low to medium flows; therefore, a graphical solution was used that followed the systematic record at the lower end and the WRC weighted estimate at the upper end of the flood frequency curve.

[2]Station skew computed using graphical frequency relation.

02130900 BLACK CREEK NEAR MCBEE, SC

LOCATION.--Lat 34°30'50'', long 80°11'00'', Chesterfield County, Hydrologic Unit 03040201, near right bank, at downstream side of bridge on U.S. Highway 1, 0.2 mi upstream from Little Alligator Creek, 5.3 mi northeast of McBee, and at mile 59.1.
DRAINAGE AREA.--108 mi^2.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 224.72 ft above National Geodetic Vertical Datum of 1929. Prior to December 22, 1959, nonrecording gage at same site and datum.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,770 ft^3/s, July 16, 1975, gage height, 11.29 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements throughout entire range of discharge.

FLOOD-FREQUENCY DATA (ft^3/s)
29 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	=	722
Q_5	=	1,040
Q_{10}	=	1,210
Q_{25}	=	1,430
Q_{50}	=	1,590
Q_{100}	=	1,760

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	2.889
Standard Deviation	=	0.150
Weighted Skew	=	0.059

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1960	Apr. 7	9.59	804	1970	Mar. 24	8.83	411	1980	Mar. 31	10.21	1,010
1961	Feb. 26	9.65	840	1971	Aug. 19	10.44	1,120	1981	July 5	9.47	666
1962	Mar. 13	9.76	906	1972	Oct. 4	10.06	930	1982	Jan. 6	9.51	683
1963	Jan. 22	9.37	678	1973	Apr. 2	9.80	800	1983	Mar. 19	10.61	1,240
1964	Mar. 17	10.04	1,070	1974	Aug. 10	8.97	471	1984	Mar. 31	9.21	563
1965	Oct. 18	10.08	1,100	1975	July 16	11.29	1,770	1985	Aug. 27	9.08	517
1966	Mar. 6	9.34	670	1976	June 23	9.51	694	1986	Nov. 23	8.85	440
1967	Aug. 26	9.43	715	1977	Mar. 15	9.68	762	1987	Mar. 2	10.03	921
1968	Jan. 13	9.27	640	1978	Jan. 28	9.51	694	1988	Jan. 21	8.01	286
1969	June 18	10.08	1,110	1979	Feb. 27	10.35	1,090				

02130910 BLACK CREEK NEAR HARTSVILLE, SC

LOCATION.--Lat 34°23'50'', long 80°09'00'', Darlington County, Hydrologic Unit 03040201, at downstream side of bridge on State Road 23, 1,000 ft downstream from dam at H. B. Robinson Steam Electric Plant, 2.1 mi upstream from Beaverdam Creek, 4.6 mi west of Hartsville, and at mile 49.9.

DRAINAGE AREA.--173 mi^2.

PERIOD OR RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 177.48 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Some regulation by storage in steam electric plant reservoir above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,010 ft^3/s, Aug. 18, 1971, gage height, 10.08 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,070 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
29 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	=	828
Q_5	=	1,150
Q_{10}	=	1,370
Q_{25}	=	1,660
Q_{50}	=	1,880
Q_{100}	=	2,100

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	2.920
Standard Deviation	=	0.168
Station Skew	=	0.095

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1960	Apr. 7	9.59	804	1970	Mar. 23	7.21	505	1980	Mar. 31	8.57	1,160
1961	Feb. 25	8.82	1,060	1971	Aug. 18	10.08	2,010	1981	Aug. 6	6.99	510
1962	Mar. 14	7.93	860	1972	Jan. 14	8.21	915	1982	Jan. 7	8.94	1,360
1963	Jan. 22	8.10	950	1973	June 22	8.34	988	1983	Mar. 20	8.47	984
1964	Mar. 18	8.17	896	1974	Aug. 9	7.40	624	1984	Dec. 7	7.86	741
1965	Oct. 19	8.23	924	1975	July 17	9.52	1,740	1985	Feb. 11	7.72	686
1966	Mar. 7	7.60	668	1976	June 27	6.97	541	1986	Nov. 22	7.11	481
1967	Aug. 26	7.67	692	1977	Mar. 25	7.67	770	1987	Mar. 3	8.56	1,160
1968	Jan. 12	7.85	760	1978	Jan. 26	7.69	776	1988	Jan. 25	6.24	347
1969	June 24	7.93	792	1979	Feb. 27	8.59	1,170				

02131000 PEE DEE RIVER AT PEEDEE, SC

LOCATION.--Lat 34°12'15'', long 79°32'55'', Marion County, Hydrologic Unit 03040201, at downstream side of downstream bridge on U.S. Highway 76 at Peedee, 0.2 mi downstream from Seaboard Coast Line Railroad bridge, 8.2 mi downstream from Black Creek, and at mile 100.2.

DRAINAGE AREA.--8,830 mi^2, approximately.

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1303. Prior to October 1947, published as "near Mars Bluff." Gage-height records collected at practically same site since 1923 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder and data collection platform. Datum of gage is 24.73 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1947, at site 1.6 mi downstream at datum 1.27 ft lower.

REMARKS.--Flow regulated by six powerplants above station. Combined usable capacity of reservoirs, 30,819,624,000 ft^3.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 220,000 ft^3/s, Sept. 22, 1945, gage height, 33.30 ft (site and datum then in use).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 76,000 ft^3/s and extended on basis of discharge measurement of 221,000 ft^3/s at Cheraw, SC.

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1939	Mar. 6	25.61	66,700	1959	Apr. 26	21.44	28,800	1979	Mar. 2	29.03	102,600
1940	Aug. 22	22.35	35,300	1960	Apr. 10	26.28	70,400	1980	Apr. 2	24.11	42,600
1941	Apr. 9	19.32	17,400	1961	Mar. 3	23.86	46,300	1981	July 3	18.72	19,000
1942	Mar. 15	22.26	34,400	1962	Jan. 14	22.98	39,300	1982	Jan. 9	22.75	34,100
1943	Feb. 3	22.31	34,400	1963	Mar. 20	24.54	53,400	1983	Mar. 25	24.59	46,000
1944	Mar. 26	24.32	51,800	1964	Apr. 14	23.95	47,600	1984	Apr. 4	26.55	65,200
1945	Sept.22	33.30	220,000	1965	Oct. 23	26.01	62,100	1985	Aug. 29	21.74	29,600
1946	Jan. 4	23.76	45,400	1966	Mar. 10	25.28	57,000	1986	Nov. 28	21.99	30,900
1947	Jan. 26	22.16	30,900	1967	Aug. 29	20.84	26,300	1987	Mar. 7	29.06	96,500
1948	Feb. 19	26.23	69,300	1968	Jan. 19	23.01	36,900	1988	Jan. 20	19.48	20,100
1949	Dec. 5	24.12	47,800	1969	Feb. 27	21.78	32,500				
1950	Nov. 7	21.22	25,600	1970	Aug. 19	21.69	31,800				
1951	Apr. 14	20.36	21,600	1971	Mar. 10	23.98	47,900				
1952	Mar. 10	25.95	62,600	1972	June 29	24.09	47,200				
1953	Feb. 28	23.54	39,700	1973	Apr. 6	26.97	74,600				
1954	Jan. 29	25.76	60,500	1974	Apr. 12	22.45	35,800				
1955	Apr. 21	22.44	32,200	1975	Mar. 20	27.81	85,300				
1956	Mar. 22	20.46	22,000	1976	June 26	20.49	23,100				
1957	Apr. 13	21.58	30,000	1977	Dec. 20	22.56	36,500				
1958	Dec. 1	24.58	52,600	1978	Feb. 1	26.58	70,000				

02131150 CATFISH CANAL AT SELLERS, SC

LOCATION.--Lat 34°17'04'', long 79°26'32'', Marion County, Hydrologic Unit 03040201, on right downstream wingwall of culvert on State Highway 38, 2.0 mi east of Sellers, 2.3 mi upstream from Stackhouse Creek, and at mile 25.6.

DRAINAGE AREA.--27.4 mi^2.

PERIOD OF RECORD.--November 1966 to current year.

REVISED RECORDS.--WRD SC-77: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 75 ft above National Geodetic Vertical Datum of 1929 (from topographic map).

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 890 ft^3/s, Mar. 4, 1971, gage height, 9.15 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements throughout entire range of discharges.

FLOOD-FREQUENCY DATA (ft^3/s)
22 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	=	263
Q_5	=	429
Q_{10}	=	557
Q_{25}	=	738
Q_{50}	=	887
Q_{100}	=	1,050

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	2.423
Standard Deviation	=	0.250
Weighted Skew	=	0.085

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1967	June 24	3.33	67	1977	Mar. 22	5.35	204	1987	Mar. 2	7.25	354
1968	Jan. 11	4.22	120	1978	Jan. 26	5.12	192	1988	Aug. 25	5.17	288
1969	Oct. 20	7.98	413	1979	Sept. 7	6.51	271				
1970	Mar. 23	6.43	260	1980	Apr. 14	5.81	223				
1971	Mar. 4	9.15	890	1981	Aug. 14	5.03	222				
1972	Feb. 4	4.51	162	1982	June 5	5.96	269				
1973	Feb. 15	6.84	304	1983	Mar. 18	9.04	830				
1974	Aug. 7	8.39	557	1984	Mar. 26	6.09	275				
1975	Apr. 3	6.88	308	1985	Sept.12	5.06	223				
1976	July 10	4.39	156	1986	Nov. 30	6.06	274				

02131309 FORK CREEK AT JEFFERSON, SC

LOCATION.--Lat 34°38'19'', long 80°23'20'', Chesterfield County, Hydrologic Unit 03040202, on upstream side, at center of span on State Highway 151 bridge, 1.0 mi south of intersection of State Highways 765 and 151, at Jefferson.

DRAINAGE AREA.--24.3 mi^2.

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 302.68 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,560 ft^3/s, Feb. 24, 1979, gage height, 7.89 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 862 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
12 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	=	615
Q_5	=	1,060
Q_{10}	=	1,400
Q_{25}	=	1,880
Q_{50}	=	2,280
Q_{100}	=	2,700

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	2.787
Standard Deviation	=	0.281
Weighted Skew	=	-0.041

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1977	Dec. 16	7.36	1,130	1982	Jan. 1	5.96	539	1987	Jan. 19	6.43	694
1978	Jan. 20	6.76	854	1983	Feb. 15	7.73	1,430	1988	Aug. 30	5.90	522
1979	Feb. 24	7.89	1,560	1984	Mar. 29	5.55	432				
1980	Mar. 29	6.65	782	1985	Aug. 18	5.37	392				
1981	Feb. 11	4.51	256	1986	Nov. 30	4.00	194				

02131500 LYNCHES RIVER NEAR BISHOPVILLE,SC

LOCATION.--Lat 34°15'00'', long 80°12'50'', Lee County, Hydrologic Unit 03040202, near center of span on downstream side of bridge on U.S. Highway 15, 1.0 mi upstream from Seaboard Coast Line Railroad bridge, 2.9 mi northeast of Bishopville, 3.0 mi downstream from Bells Branch, and at mile 89.5.

DRAINAGE AREA.--675 mi^2.

PERIOD OF RECORD.--May, 1942 to current year.

GAGE.--Water-stage recorder from May, 1942 to September, 1971. Partial record crest gage from October, 1971 to current year.

REMARKS.--Records good except for period of no gage-height record which is poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,400 ft^3/s, Sept. 19, 1945. (gage height, 22.35 ft, from floodmark).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 11,300 ft^3/s and extended by velocity-area studies.

FLOOD-FREQUENCY DATA (ft^3/s)
45 YEARS OF RECORD
LOG-PEARSON TYPE III
Q_2 = 6,770
Q_5 = 10,200
Q_{10} = 12,400
Q_{25} = 15,400
Q_{50} = 17,600
Q_{100} = 19,800

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.824
Standard Deviation	= 0.217
Weighted Skew	= -0.213

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1943	Jan. 21	15.66	7,210	1958	Jan. 27	15.41	7,260	1973	Apr. 4	17.40	12,400
1944	Mar. 22	17.43	12,400	1959	Apr. 15	14.75	6,400	1974	Apr. 10	13.80	4,600
1945	Sept.19	22.35	29,400	1960	Apr. 7	15.68	7,960	1975	July 16	15.99	8,980
1946	Dec. 29	14.06	3,980	1961	Feb. 27	15.90	9,320	1976	June 27	15.36	7,720
1947	Apr. 18	14.36	4,460	1962	Mar. 14	16.25	10,200	1977	Mar. 22	16.11	9,280
1948	Mar. 10	15.47	7,480	1963	Jan. 23	14.89	6,680	1978	Jan. 26	--	--
1949	Dec. 1	16.85	10,900	1964	Mar. 18	16.86	12,200	1979	Feb. 25	18.26	15,600
1950	Dec. 18	11.91	1,790	1965	Oct. 19	16.33	10,600	1980	Nov. 12	15.86	8,720
1951	Apr. 12	13.02	2,970	1966	Mar. 7	14.92	6,700	1981	Feb. 23	13.60	4,250
1952	Sept. 3	18.06	15,000	1967	Sept.12	--	[1]7,400	1982	Jan. 5	15.69	8,380
1953	Feb. 19	13.86	4,350	1968	Jan. 13	15.63	8,260	1983	---	18.36	16,000
1954	Apr. 4	14.73	5,800	1969	Apr. 22	14.35	5,700	1984	Mar. 31	15.12	7,010
1955	Apr. 17	15.40	7,720	1970	Mar. 25	14.12	5,240	1985	Sept.19	12.17	2,230
1956	Mar. 20	14.40	5,230	1971	Mar. 6	16.28	9,700	1986	Nov. 30	14.04	5,080
1957	May. 15	13.97	4,520	1972	Apr. 4	11.79	1,860	1987	Mar. 1	12.16	2,210
								1988	Oct. 29	12.38	2,450

[1]Estimated by hydrographic comparison with Lynches River at Effingham, station number 02132000

02131990 CARTER CREEK AT EFFINGHAM, SC

LOCATION.--Lat 34°03'51'', long 79°46'03'', Florence County, Hydrologic Unit 03040202, on upstream side of culvert on U.S. Highway 301, 0.8 mi. northwest of Effingham and 0.9 mi upstream from Lynches River.

DRAINAGE AREA.--8.28 mi^2.

PERIOD OF RECORD.--December 1966 to current year.

GAGE.--Dual digital water-stage and rainfall recorders, December 1966 to October 1974. Partial record crest gage, December 1974 to present.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 898 ft^3/s, Mar 3, 1971.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 715 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
18 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	=	210
Q_5	=	361
Q_{10}	=	477
Q_{25}	=	640
Q_{50}	=	773
Q_{100}	=	915

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	2.319
Standard Deviation	=	0.282
Weighted Skew	=	-0.065

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1969	Aug. 5	--	91.4	1975	Jan. 20	3.13	63.8	1981	July 3	5.20	222
1970	Mar. 22	--	274	1976	June 27	5.73	287	1982	June 5	5.20	222
1971	Mar. 3	--	898	1977	Mar. 22	5.33	237	1983	Mar. 24	6.48	409
1972	May. 18	--	176	1978	Jan. 26	5.31	235	1984	Feb. 21	3.61	96.0
1973	Feb. 2	--	326	1979	Mar. 24	5.73	288	1987	Mar. 7	5.97	321
1974	Aug. 5	--	374	1980	Mar. 13	5.17	219	1988	Mar. 11	3.74	104

02132000 LYNCHES RIVER AT EFFINGHAM, SC
(National stream-quality accounting network station)

LOCATION.--Lat 34°03'05'', long 79°45'15'', Florence County, Hydrologic Unit 03040202, on left bank at downstream side of bridge on U.S. Highway 52, 75 ft upstream from Seaboard Coast Line Railroad Bridge, 1.0 mi south of Effingham, and at mile 43.4.

DRAINAGE AREA.--1,030 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1929 to current. Gage-height records collected at same site since 1891 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 58.49 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 7, 1934, nonrecording gage at same site and datum.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft^3/s, Sept. 22, 1945, gage height, 21.21 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 16,900 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
62 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 5,610
Q_5	= 9,190
Q_{10}	= 11,900
Q_{25}	= 15,800
Q_{50}	= 18,900
Q_{100}	= 22,300

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.750
Standard Deviation	= 0.254
Weighted Skew	= 0.044

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1892	Jan. 24	17.50	--	1927	Mar. 12	8.80	--	1962	Mar. 18	15.83	7,800
1893	Sept. 4	16.00	--	1928	Sept.24	19.50	16,100	1963	Jan. 27	15.01	6,400
1894	Aug. 11	16.20	--	1929	Mar. 10	17.50	10,800	1964	Mar. 22	15.75	7,800
1895	Oct. 15	16.50	--	1930	Oct. 7	19.25	15,200	1965	Oct. 22	15.87	7,940
1896	July 15	16.00	--	1931	Aug. 31	10.40	2,330	1966	Mar. 7	15.38	7,020
1897	Feb. 13	14.40	--	1932	Jan. 15	13.70	4,780	1967	Sept.16	14.08	5,570
1898	Aug. 30	13.70	--	1933	Oct. 24	15.30	6,830	1968	Jan. 18	14.26	5,420
1899	Feb. 12	17.20	--	1934	June 13	10.30	2,300	1969	Apr. 26	12.52	3,790
1900	Apr. 25	16.60	--	1935	Sept.14	12.58	3,750	1970	Mar. 31	12.76	3,980
1901	June 22	17.20	--	1936	Apr. 12	18.66	14,400	1971	Mar. 5	17.46	11,700
1902	Feb. 8	15.00	--	1937	May 2	14.09	5,200	1972	Jan. 18	14.21	5,360
1903	Feb. 14	16.90	--	1938	Aug. 2	13.72	4,880	1973	Feb. 5	16.68	9,710
1904	Aug. 14	12.80	--	1939	Mar. 4	17.39	11,200	1974	Aug. 15	12.18	3,550
1905	Feb. 22	13.50	--	1940	Aug. 18	9.43	1,980	1975	July 20	16.69	9,740
1906	June 17	14.60	--	1941	July 18	12.22	3,420	1976	June 28	13.37	4,500
1907	July 5	10.00	--	1942	May 28	14.39	5,640	1977	Mar. 20	13.81	4,920
1908	Aug. 30	20.00	18,000	1943	Jan. 26	13.48	4,600	1978	Jan. 26	16.09	8,380
1909	June 12	12.90	--	1944	Mar. 26	16.42	9,050	1979	Mar. 2	17.45	11,100
1910	June 18	13.10	--	1945	Sept.22	21.21	25,000	1980	Apr. 3	16.69	9,380
1911	Mar. 16	9.50	--	1946	Jan. 2	13.10	4,200	1981	Feb. 21	10.23	2,430
1912	Feb. 21	16.50	--	1947	Apr. 16	13.57	4,700	1982	Jan. 10	15.28	6,850
1913	Mar. 21	15.70	--	1948	Feb. 16	14.67	6,180	1983	Mar. 24	17.19	10,400
1914	Mar. 6	12.80	--	1949	Dec. 5	15.92	8,320	1984	Apr. 5	13.54	4,670
1915	Jan. 25	13.60	--	1950	Dec. 24	8.43	1,630	1985	Feb. 11	11.92	3,550
1916	July 20	18.70	--	1951	Apr. 17	9.81	2,120	1986	Nov. 30	12.57	3,950
1917	June 18	12.00	--	1952	Sept. 6	16.76	10,900	1987	Mar. 7	17.07	10,200
1918	May 18	12.00	--	1953	Feb. 23	12.35	3,920	1988	Jan. 28	10.02	2,410
1919	July 29	16.00	--	1954	Apr. 8	12.35	3,720				
1920	Mar. 22	11.90	--	1955	Apr. 22	12.80	3,920				
1921	Feb. 16	16.50	--	1956	Mar. 25	11.41	2,840				
1922	Mar. 12	17.30	--	1957	May 21	10.09	2,260				
1923	Mar. 24	12.60	--	1958	Feb. 1	13.53	5,290				
1924	Apr. 13	13.40	--	1959	Feb. 12	12.74	3,840				
1925	Jan. 21	17.30	--	1960	Apr. 10	16.31	8,840				
1926	Apr. 18	14.30	--	1961	Mar. 3	15.74	7,600				

02132100 TWO MILE BRANCH NEAR LAKE CITY, SC

LOCATION.--Lat 33°53'38'', long 79°45'38'', Florence County, Hydrologic Unit 03040202, at culvert on U.S. Highway 378 By-Pass, and 1.4 mi north of Lake City.

DRAINAGE AREA.--19.0 mi^2.

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Crest stage partial record station.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,200 ft^3/s, Mar. 13, 1980, gage height, 7.31 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 480 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
13 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	=	236
Q_5	=	412
Q_{10}	=	563
Q_{25}	=	798
Q_{50}	=	1,010
Q_{100}	=	1,250

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	2.388
Standard Deviation	=	0.276
Weighted Skew	=	0.334

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1976	June 28	5.15	210	1981	July 3	4.46	102	1986	Nov. 30	4.37	95
1977	Mar. 20	4.87	156	1982	Jan. 10	5.46	285	1987	Sept.10	5.67	346
1978	Jan. 26	5.48	290	1983	July 10	5.73	364	1988	Mar. 11	5.43	278
1979	Feb. 24	5.31	248	1984	Mar. 31	5.01	182				
1980	Mar. 13	7.31	1,200	1985	Aug. 18	5.21	222				

02132500 LITTLE PEE DEE RIVER NEAR DILLON, SC

LOCATION.--Lat 34°24'17'', long 79°20'25'', Dillon County, Hydrologic Unit 03040204, near center of span on downstream side of bridge on State Highway 9, 1.9 mi southeast of Dillon, 3.9 mi (revised) upstream from Maple Swamp, and at mile 88.3.

DRAINAGE AREA.--524 mi^2.

PERIOD OF RECORD.--March 1939 to current year.

GAGE.--Water-stage recorder prior to Sept. 1971, crest-stage gage thereafter. Datum of gage is 75.14 ft National Geodetic Vertical Datum of 1929 (Levels by South Carolina Highway Department). Prior to July 31, 1967, nonrecording gage and crest-stage gage at same site and datum.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,810 ft^3/s, Sept. 20, 1945, gage height, 14.64 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6050 ft^3/s and graphically extended on logarithmic plotting papaer.

FLOOD-FREQUENCY DATA (ft^3/s)
49 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 2,490
Q_5	= 3,880
Q_{10}	= 4,950
Q_{25}	= 6,450
Q_{50}	= 7,690
Q_{100}	= 9,030

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.404
Standard Deviation	= 0.223
Weighted Skew	= 0.203

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1940	Feb. 13	8.45	1,080	1960	Oct. 17	11.42	4,650	1980	Mar. 13	9.69	2,320
1941	July 19	9.60	2,130	1961	Mar. 1	9.65	2,240	1981	Aug. 11	8.74	1,300
1942	Mar. 13	10.12	2,770	1962	Feb. 26	9.71	2,350	1982	Jan. 5	10.51	3,300
1943	July 12	9.46	2,020	1963	Jan. 23	10.73	3,440	1983	Apr. 10	12.38	6,130
1944	Mar. 25	9.55	2,130	1964	Feb. 22	10.44	3,050	1984	Apr. 5	10.43	3,210
1945	Sept.20	14.64	9,810	1965	Oct. 7	12.26	5,500	1985	Sept.19	9.98	2,660
1946	Jan. 3	9.40	2,020	1966	June 12	12.07	5,220	1986	Nov. 30	9.69	2,320
1947	Apr. 22	9.78	2,470	1967	Aug. 27	8.80	1,370	1987	Feb. 28	11.50	4,710
1948	Feb. 15	10.79	3,750	1968	Jan. 14	9.72	2,250	1988	Jan. 28	8.51	1,220
1949	Nov. 30	10.47	3,330	1969	Aug. 5	10.31	2,890				
1950	Nov. 7	8.06	915	1970	Mar. 24	9.60	2,200				
1951	Apr. 11	8.52	1,200	1971	Mar. 5	12.20	5,820				
1952	Sept. 6	8.87	1,540	1972	May 20	8.56	1,150				
1953	May 9	9.58	2,240	1973	Feb. 19	12.54	5,960				
1954	Apr. 13	9.01	1,630	1974	Aug. 12	9.90	2,560				
1955	Apr. 17	10.66	3,240	1975	Feb. 18	10.65	3,500				
1956	Feb. 9	9.22	1,820	1976	Feb. 4	8.93	1,500				
1957	June 12	--	1,200	1977	Jan. 10	9.82	2,460				
1958	Dec. 1	10.32	3,090	1978	Jan. 30	9.76	2,400				
1959	Apr. 17	10.04	2,710	1979	Feb. 24	10.49	3,290				

02135000 LITTLE PEE DEE RIVER AT GALIVANTS FERRY, SC

LOCATION.--Lat 34°03'25'', long 79°14'50'', Horry-Marion County Line, Hydrologic Unit 03040204, near left bank on downstream side of bridge on U.S. Highway 501, at Galivants Ferry, 1.0 mi downstream from Lake Swamp, and at mile 41.7.

DRAINAGE AREA.--2,790 mi^2, approximately.

PERIOD OF RECORD.--October 1941 to current year. Monthly discharge only for some periods, published in WSP 1303.

GAGE.--Water-stage recorder and data collection platform. Datum of gage is 23.95 ft above National Geodetic Vertical Datum of 1929. Prior to July 26, 1967, nonrecording gage and crest-stage gage at same site and datum.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,600 ft^3/s, Oct. 9, 10, 1964, gage height, 13.01 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 16.0 ft, in September 1928, from floodmark set by local resident.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 26,100 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
47 YEARS OF RECORD
LOG-PEARSON TYPE III
Q_2 = 12,100
Q_5 = 17,600
Q_{10} = 21,100
Q_{25} = 25,600
Q_{50} = 28,900
Q_{100} = 32,200

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	4.079
Standard Deviation	=	0.195
Weighted Skew	=	-0.171

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1928	Sept.--	16.00	--	1961	Apr. 18	10.09	12,500	1981	Aug. 23	10.67	11,400
1942	Mar. 14	9.87	11,000	1962	Mar. 18	9.95	11,100	1982	Feb. 20	10.87	11,400
1943	July 18	9.76	10,500	1963	Jan. 27	10.57	15,200	1983	Mar. 22	12.72	24,400
1944	Feb. 24	9.95	11,500	1964	Sept.17	10.30	13,400	1984	Apr. 5	10.44	10,500
1945	Sept.23	13.23	26,800	1965	Oct. 9	13.01	27,600	1985	Feb. 15	9.45	6,750
1946	Jan. 2	10.74	15,200	1966	Mar. 11	10.68	15,300	1986	Dec. 13	8.75	5,010
1947	Apr. 20	9.69	10,600	1967	Feb. 20	8.66	6,090	1987	Mar. 6	11.94	18,200
1948	Feb. 18	11.24	17,600	1968	Jan. 19	9.64	10,300	1988	Jan. 8	8.77	6,110
1949	Dec. 4	10.62	14,800	1969	Aug. 10	11.07	17,200				
1950	July 18	8.08	4,310	1970	Mar. 27	9.71	10,600				
1951	Apr. 16	8.32	4,890	1971	Mar. 8	12.29	25,000				
1952	Apr. 2	8.82	6,690	1972	Feb. 8	10.02	12,000				
1953	Mar. 19	9.47	9,730	1973	Apr. 10	11.86	22,100				
1954	Apr. 15	9.10	7,930	1974	Aug. 12	11.79	21,600				
1955	Sept.11	10.36	13,900	1975	Feb. 26	11.13	13,000				
1956	Feb. 14	9.48	9,270	1976	Feb. 4	9.91	8,030				
1957	Feb. 13	8.98	7,510	1977	Mar. 28	10.69	10,900				
1958	Apr. 7	10.00	12,000	1978	June 15	11.27	12,200				
1959	Mar. 10	11.21	17,600	1979	Sept.11	12.51	20,200				
1960	Aug. 2	10.66	14,800	1980	Apr. 1	11.60	14,800				

02135300 SCAPE ORE SWAMP NEAR BISHOPVILLE, SC

LOCATION.--Lat 34°09'02'', long 80°18'18'', Lee County, Hydrologic Unit 03040205, at bridge on U.S. Highway 15, 0.1 mi downstream from Beaverdam Creek, 0.9 mi upstream from Seaboard Coast Line Railroad bridge, and 5.8 mi southwest of Bishopville.

DRAINAGE AREA.--96.0 mi^2.

PERIOD OF RECORD.--July 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 164.53 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 1,700 ft^3/s, Sept. 7, 1979, gage height, 8.54 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,330 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
20 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	=	676
Q_5	=	999
Q_{10}	=	1,220
Q_{25}	=	1,510
Q_{50}	=	1,740
Q_{100}	=	1,960

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	2.828
Standard Deviation	=	0.203
Weighted Skew	=	-0.050

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1969	Feb.19	6.90	630	1976	June 20	6.60	490	1983	Mar. 19	7.82	1,150
1970	Mar.24	6.78	570	1977	Dec. 18	6.57	478	1984	May. 31	6.95	662
1971	Mar. 5	8.09	1,330	1978	Apr. 28	7.02	702	1985	Aug. 19	6.59	486
1972	Jan.15	7.14	764	1979	Sept. 7	8.54	1,700	1986	Aug. 22	6.83	574
1973	--	7.28	848	1980	Mar. 31	6.99	684	1987	Mar. 3	7.27	786
1974	Feb.19	6.07	273	1981	Feb. 13	5.96	278	1988	Aug. 30	7.90	1,180
1975	Apr. 5	7.26	846	1982	Jan. 4	6.61	494				

02135500 BLACK RIVER NEAR GABLE, SC

LOCATION.--Lat 33°54'00'', long 80°09'55'', Sumter County, Hydrologic Unit 03040205, near left bank on downstream side of McBride Crossing on U.S. Highway 378, 1.0 mi downstream from Church Branch, 6.3 mi northwest of Gable, and at mile 123.1.

DRAINAGE AREA.--401 mi^2.

PERIOD OF RECORD.--June 1951 to June 1966, April 1972 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 95 ft above National Geodetic Vertical Datum of 1929, (from topographic map). Crest-stage station Oct. 1970 to Sept. 1971 at same site and datum. Prior to Dec. 9, 1955, wire-weight gage at same site and datum.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,500 ft^3/s, Mar. 5, 1971, gage height, 6.82 ft; maximum gage height 6.92 ft, June 13, 1973.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,970 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
32 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 2,770
Q_5	= 4,650
Q_{10}	= 5,950
Q_{25}	= 7,590
Q_{50}	= 8,790
Q_{100}	= 9,970

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.421
Standard Deviation	= 0.288
Weighted Skew	= -0.434

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1952	Sept. 3	5.22	4,150	1962	Feb. 25	4.33	2,340	1977	Dec. 16	4.46	1,840
1953	Feb. 28	3.95	1,660	1963	Jan. 23	4.45	2,520	1978	Jan. 28	4.56	2,080
1954	Dec. 17	3.30	742	1964	Sept. 1	5.80	6,650	1979	Sept. 7	5.68	4,320
1955	Apr. 18	3.26	518	1965	June 16	6.10	8,300	1980	Mar. 31	4.98	2,760
1956	Feb. 9	3.58	835	1966	Mar. 6	5.13	3,830	1981	July 4	5.03	2,860
1957	Mar. 28	3.77	713	[1]1971	Mar. 5	6.82	12,500	1982	Feb. 19	4.60	2,200
1958	Apr. 17	5.16	3,780	1973	June 13	6.92	7,900	1983	Mar. 19	5.92	4,950
1959	Mar. 8	4.44	2,320	1974	Aug. 6	4.79	2,540	1984	July 24	4.79	2,560
1960	Apr. 7	5.15	3,780	1975	Feb. 21	5.09	2,880	1985	Aug. 19	4.71	2,420
1961	Aug. 6	5.08	3,670	1976	June 20	5.12	3,060	1986	Nov. 23	5.97	5,080
								1987	Mar. 2	5.21	3,370
								1988	Sept. 3	4.24	1,750

[1] Stage-discharge relation altered by bridge construction.

02136000 BLACK RIVER AT KINGSTREE, SC

LOCATION.--Lat 33°39'40'', long 79°50'10'', Williamsburg County, Hydrologic Unit 03040205, on left bank at downstream side of bridge on U.S. Highway 52 at Kingstree, 1.0 mi downstream from Kingstree Swamp Canal, and at mile 86.7.

DRAINAGE AREA.--1,252 mi^2.

PERIOD OF RECORD.--August 1929 to current year. Gage-height records collected at same site since 1894 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1032: 1928(m), drainage area WSP 1333: 1930(m), 1931, 1936.

GAGE.--Datum of gage is 25.66 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 7, 1934, nonrecording gage at same site and datum.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 58,000 ft^3/s, June 14, 1973, gage height, 19.77 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 44,300 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
61 YEARS OF RECORD
[1]GRAPHICAL SOLUTION
Q_2 = 5,700
Q_5 = 10,500
Q_{10} = 16,000
Q_{25} = 32,500
Q_{50} = 52,500
Q_{100} = 80,000

STATISTICS (LOG UNITS)
Mean = 3.853
[2]Standard Deviation = 0.276
[2]Station Skew = 2.365

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1893	Sept.11	14.50	--	1928	Sept.21	18.00	41,600	1963	Jan. 27	11.67	4,920
1894	Aug. 9	12.50	--	1929	Feb. 22	11.70	6,060	1964	Sept. 5	12.52	7,310
1895	Feb. 5	11.60	--	1930	Jan. 25	12.20	7,760	1965	Oct. 7	14.73	17,900
1896	Feb. 14	10.70	--	1931	Jan. 20	10.10	3,120	1966	Mar. 8	13.00	9,240
1897	Feb. 15	10.30	--	1932	Mar. 16	8.60	1,550	1967	Jan. 13	9.08	1,680
1898	Sept. 7	9.90	--	1933	Feb. 19	11.20	4,600	1968	June 17	10.45	3,080
1899	Feb. 21	11.60	--	1934	June 12	6.80	908	1969	May 26	11.53	4,690
1900	Apr. 26	11.90	--	1935	Sept.17	9.83	2,510	1970	Mar. 28	12.42	6,520
1901	June 1	12.00	--	1936	Apr. 13	13.07	11,800	1971	Mar. 7	15.22	23,600
1902	Mar. 5	10.10	--	1937	Feb. 4	11.53	5,440	1972	Feb. 7	12.50	7,120
1903	June 16	11.80	--	1938	Apr. 14	12.00	6,730	1973	June 14	19.77	58,000
1904	Feb. 28	10.00	--	1939	Mar. 4	13.21	12,200	1974	Feb. 22	11.22	3,860
1905	May 9	10.90	--	1940	Feb. 23	9.70	2,400	1975	Feb. 25	12.42	7,120
1906	June 22	11.80	--	1941	July 24	11.32	5,000	1976	July 9	12.24	6,490
1907	Oct. 27	10.10	--	1942	Mar. 9	12.26	8,160	1977	Mar. 18	11.43	4,260
1908	May 3	10.40	--	1943	Mar. 29	10.44	3,310	1978	Jan. 29	12.16	6,230
1909	July 17	9.40	--	1944	Mar. 27	11.93	6,680	1979	Sept.11	12.88	8,880
1910	June 22	11.40	--	1945	Sept.20	16.07	29,100	1980	Mar. 23	12.68	8,060
1911	Oct. 22	8.20	--	1946	Jan. 2	11.62	5,780	1981	July 12	9.09	1,520
1912	Jan. 12	13.30	--	1947	Apr. 19	12.22	7,760	1982	Jan. 7	11.30	4,250
1913	Mar. 19	12.90	--	1948	Feb. 14	12.81	10,400	1983	Mar. 21	14.05	15,200
1914	Mar. 9	11.20	--	1949	Dec. 2	12.50	9,020	1984	Aug. 1	12.99	9,350
1915	May 16	12.70	--	1950	Sept.12	9.78	2,510	1985	Feb. 14	10.50	2,940
1916	July 17	15.50	--	1951	Apr. 9	9.63	2,300	1986	Nov. 28	12.59	7,720
1917	Jan. 30	10.90	--	1952	Sept. 7	11.61	5,780	1987	Mar. 5	12.92	9,050
1918	May 19	12.00	--	1953	Mar. 3	11.44	5,240	1988	Mar. 16	10.38	2,710
1919	July 28	12.50	--	1954	Jan. 4	9.09	1,860				
1920	Apr. 7	10.90	--	1955	Sept. 9	10.79	3,900				
1921	May 22	11.10	--	1956	Mar. 5	9.96	2,670				
1922	Mar. 14	12.70	--	1957	Mar. 29	8.92	1,590				
1923	Oct. 25	10.20	--	1958	Apr. 19	13.54	11,800				
1924	July 6	14.60	--	1959	Mar. 9	13.58	12,000				
1925	Jan. 21	15.20	--	1960	Dec. 22	12.65	7,420				
1926	Feb. 10	9.90	--	1961	Apr. 18	12.97	9,020				
1927	Aug. 19	10.50	--	1962	Mar. 1	11.70	5,020				

[1]The frequency relation for this stream had a sharp break at about 10-year recurrence interval where storage effect is reduced by water reaching the banks of the overflow section. This is verified by the station rating; therefore, the flood frequency was determined graphically.

[2]Station skew computed using graphical frequency relation.

02146000 CATAWBA RIVER NEAR ROCK HILL, SC

LOCATION.--Lat 34°59'05'', long 80°58'27'', York County, Hydrologic Unit 03050103, on right bank, at downstream side of bridge on U.S. Highway 21, 3.5 mi downstream from Lake Wylie Dam, 5.0 mi northeast of Rock Hill, 7.5 mi upstream from Sugar Creek, and at mile 137.6.

DRAINAGE AREA.--3,050 mi^2, approximately.

PERIOD OF RECORD.--September 1895 to September 1903, April 1942 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORDS.--WSP 1303: 1895-1903, WSP 1333: 1942-43(M), 1953(M). WSP 1623: 1942-51 (yearly runoff).

GAGE.--Water-stage recorder. Datum of gage is 485.82 ft above National Geodetic Vertical Datum of 1929. Sept. 23, 1895, to July 31, 1903, nonrecording gage at Southern Railway bridge, 2.0 mi downstream, at different datum.

REMARKS.--Records good. Flow regulated by Lake Wylie, usable capacity, 2,520,500,000 ft^3 and other power plants above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 151,000 ft^3/s, May 23, 1901, gage height, 24.15 ft, site and datum then in use.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 78,000 ft^3/s and graphically extended on logarithmic plotting paper.

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1896	July 10	15.20	71,500	1954	Jan. 23	16.01	51,000	1974	Apr. 6	10.31	25,200
1897	Feb. 7	14.80	68,500	1955	Apr. 15	7.69	14,200	1975	Mar. 15	17.57	62,400
1898	--	9.00	30,600	1956	Apr. 16	7.77	14,600	1976	Mar. 8	7.47	13,400
1899	Mar. 20	18.00	95,000	1957	Apr. 7	12.93	36,100	1977	Oct. 9	16.57	55,400
1900	--	12.30	50,000	1958	Apr. 28	15.82	50,000	1978	Nov. 7	13.44	39,000
1901	May 23	24.15	151,000	1959	Dec. 30	10.39	25,100	1979	Feb. 25	13.86	43,300
1902	Dec. 30	19.70	108,000	1960	Feb. 6	15.80	50,000	1980	Apr. 17	9.40	21,100
1903	Mar. 24	18.00	93,800	1961	Feb. 25	9.49	21,300	1981	Jan. 5	7.47	13,300
1942	Sept. 8	10.61	25,900	1962	Jan. 7	15.70	49,500	1982	Jan. 4	11.31	30,400
1943	July 10	16.99	56,100	1963	Mar. 6	10.73	26,300	1983	Apr. 10	10.86	28,100
1944	Sept.30	11.55	30,200	1964	Apr. 8	13.25	37,500	1984	Apr. 10	11.79	32,900
1945	Sept.19	20.84	76,800	1965	Oct. 17	14.64	44,700	1985	Feb. 2	7.55	13,600
1946	Feb. 11	15.05	46,000	1966	Mar. 5	7.66	15,000	1986	Nov. 22	10.72	27,500
1947	Jan. 20	13.57	39,300	1967	Aug. 23	13.53	39,200	1987	Mar. 1	12.06	34,300
1948	Mar. 31	13.63	39,300	1968	Jan. 11	7.74	15,000	1988	Feb. 17	7.52	13,500
1949	Nov. 28	17.79	60,200	1969	Feb. 3	7.72	14,900				
1950	Nov. 1	10.03	23,600	1970	Aug. 13	7.84	15,400				
1951	Jan. 23	7.49	13,600	1971	May 16	11.75	31,000				
1952	Mar. 4	16.96	56,100	1972	June 23	10.01	24,000				
1953	Mar. 24	13.49	38,900	1973	May 30	12.44	33,800				

02147000 CATAWBA RIVER NEAR CATAWBA, SC

LOCATION.--Lat 34°51'09'', long 80°52'06'', York County, Hydrologic Unit 03050103, on right bank, 60 ft downstream from Seaboard Coast Line Railroad bridge, 200 ft downstream from Twelvemile Creek, 2.5 mi east of Catawba, and at mile 122.8.

DRAINAGE AREA.--3,530 mi^2, approximately.

PERIOD OF RECORD.--October 1968 to current year. Annual peak stages from June 1906 to December 1948.

GAGE.--Water-stage recorder and data collection platform. Datum of gage is 446.18 ft above National Geodetic Vertical Datum of 1929 (levels by Bowaters Carolina Corporation). June 1906 to Dec. 21, 1948, nonrecording gage at site 2.1 mi downstream at different datum.

REMARKS.--Records good. Flow regulated by Lake Wylie, usable capacity, 2,520,500,000 ft^3 and other powerplants above the station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 73,600 ft^3/s, Oct. 9, 1976, gage height, 23.81 ft.

EXTREMES FOR OUTSIDE PERIOD OF RECORD.--Maximum stage known since June 1906, 40.4 ft, July 16, 1916 at site and datum then in use, from records furnished by the National Weather Service.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 63,300 ft^3/s and graphically extended on logarithmic plotting paper.

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
[2]1901	May 23	[1]24.80	--	1976	Dec. 31	8.48	15,700	1987	Mar. 1	21.10	59,200
1949	Nov.29	19.00	--	1977	Oct. 9	23.81	73,600	1988	Dec.28	9.23	17,900
1968	Jan.11	11.92	23,000	1978	Jan. 26	18.12	47,500				
1969	Feb. 3	9.79	18,100	1979	Feb. 25	19.16	51,700				
1970	Aug.13	10.22	19,200	1980	Mar. 29	14.00	32,300				
1971	May 16	14.01	28,500	1981	Feb. 19	8.08	14,400				
1972	Oct.17	12.15	23,900	1983	Apr. 10	13.40	30,700				
1973	Apr. 1	17.16	37,500	1984	Dec. 12	15.05	36,300				
1974	Apr. 6	13.43	27,100	1985	Feb. 2	11.74	25,400				
1975	Mar.15	21.76	63,400	1986	Nov. 22	15.80	39,000				

[1]From information by U.S. Weather Bureau.

[2]No record Jan 1 to Jun 30.

02147500 ROCKY CREEK AT GREAT FALLS, SC

LOCATION.--Lat 34°33'45'', long 80°55'00'', Chester County, Hydrologic Unit 03050103, on left bank, 350 ft downstream from Turkey Branch, 1.0 mi west of Great Falls, and at mile 1.8.

DRAINAGE AREA.--194 mi^2.

PERIOD OF RECORD.--February 1951 to September 1981, August 1986 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 299 ft above National Geodetic Vertical Datum of 1929, (by barometer).

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,300 ft^3/s, Aug. 23, 1967, gage height, 18.82 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 21,000 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
32 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 6,750
Q_5	= 10,300
Q_{10}	= 13,100
Q_{25}	= 17,400
Q_{50}	= 21,200
Q_{100}	= 25,400

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	3.849
Standard Deviation	=	0.204
Weighted Skew	=	0.570

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1952	Mar. 4	9.77	8,880	1962	Jan. 7	8.86	7,570	1972	Jan. 11	7.36	5,110
1953	Feb. 21	7.71	5,230	1963	Mar. 13	8.43	6,510	1973	Apr. 1	12.92	16,600
1954	Jan. 17	8.08	5,860	1964	Mar. 15	9.29	8,490	1974	Oct. 2	6.66	3,500
1955	Apr. 15	8.27	6,180	1965	Oct. 16	10.95	13,000	1975	Mar. 14	9.21	8,470
1956	Mar. 17	7.56	5,080	1966	Mar. 5	8.38	6,470	1976	Mar. 17	6.43	3,650
1957	Apr. 6	7.04	4,290	1967	Aug. 23	18.82	31,300	1977	Jan. 10	7.35	5,100
1958	Jan. 25	7.93	5,600	1968	July 10	9.53	9,110	1978	Oct. 26	11.62	13,300
1959	Sept.30	10.23	10,800	1969	Apr. 19	9.94	9,930	1979	Feb. 24	7.78	5,790
1960	Feb. 14	8.70	6,910	1970	Mar. 22	6.67	4,000	1980	Mar. 9	7.63	8,230
1961	Feb. 25	8.83	7,340	1971	Mar. 4	8.41	6,900	1981	Feb. 12	7.57	5,420
								1987	Mar. 1	8.64	7,320
								1988	Nov. 28	4.86	1,790

02147600 SCABBER BRANCH NEAR GREAT FALLS, SC

LOCATION.--Lat 34°30'17'', long 81°00'22'', Fairfield County, Hydrologic Unit 03050104, on the upstream side of box culvert on State Highway 200, 1.1 mi upstream of Big Wateree Creek and 7.0 mi southwest of Great Falls.

DRAINAGE AREA.--4.55 mi^2.

PERIOD OF RECORD.--November 1974 to current year.

GAGE.--Dual digital water-stage and rainfall recorders, December 1966 to October 1974. Partial record crest stage, November 1974 to current year.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,670 ft^3/s, October 26, 1978, gage height 10.07 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 100 ft^3/s and extended by indirect methods for computing peak discharge at culverts.

FLOOD-FREQUENCY DATA (ft^3/s)
10 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	=	1,150
Q_5	=	1,880
Q_{10}	=	2,440
Q_{25}	=	3,260
Q_{50}	=	3,940
Q_{100}	=	4,690

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	3.070
Standard Deviation	=	0.245
Weighted Skew	=	0.178

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1977	Mar. 31	6.17	1,110	1983	July 5	6.15	1,100	1988	--	--	--
1978	Oct. 26	10.07	2,670	1984	Mar. 6	5.51	878				
1979	Apr. 26	5.78	973	1985	Aug. 17	8.82	2,168				
1981	Feb. 11	5.59	906	1986	Aug. 18	9.95	2,620				
1982	Apr. 26	4.86	651	1987	Jan. 19	4.48	534				

SANTEE RIVER BASIN

02148000 WATEREE RIVER NEAR CAMDEN, SC

LOCATION.--Lat 34°14'40'', long 80°39'15'', Kershaw County, Hydrologic Unit 03050104, in pier of downstream bridge on U.S. Highway 1, 1,500 ft downstream from Five and Twenty Creek, 4,000 ft upstream from Seaboard Coast Line Railroad bridge, 2.2 mi west of Camden, 7.4 mi downstream from Wateree Dam, and at mile 68.8.

DRAINAGE AREA.--5,070 mi^2, approximately.

PERIOD OF RECORD.--January to December 1903 (gage heights only), October 1904 to September 1910, October 1929 to current year. Monthly discharge only for some periods, published in WSP 1303. Gage-height records collected at site 1.5 mi downstream 1891-1934, at site 830 ft upstream January 1935 to September 1942, and at present site since October 1942, are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 802: 1930. WSP 952: Drainage area. WSP 1082: 1934(M). WSP 1433: 1905-10. WSP 1623: 1930-51 (monthly and yearly runoff).

GAGE.--Water-stage recorder and data collection platform. Datum of gage is 119.36 ft above National Geodetic Vertical Datum of 1929. January 1903 to September 1910, nonrecording gage at site 1.5 mi downstream at datum 1.65 ft lower. Oct. 1, 1929 to Sept. 1, 1942, recording gage at site 830 ft upstream at same datum.

REMARKS.--Records good. Flow regulated by powerplant at Wateree Reservoir (usable capacity, 2,794,000,000 ft^3) and by other powerplants above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 366,000 ft^3/s, Aug. 26, 1908 gage height, 39.7 ft, site and datum then in use, from records of National Weather Service, from rating curve extended above 122,000 ft^3/s on basis of computation, by Duke Power Co., of peak flow 382,000 ft^3/s over dam at Rocky Creek Reservoir.

EXTREMES FOR OUTSIDE PERIOD OF RECORD.--The flood of July 18, 1916 reached a stage of 40.4 ft, datum 117.71 ft above mean sea level, at site 1.5 mi downstream, from records of National Weather Service, discharge, 400,000 ft^3/s, from rating curve extended above 122,000 ft^3/s, as explained above.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 102,000 ft^3/s at current site and graphically extended on logarithmic plotting paper.

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1886	Sept.--	31.50	--	1924	July 9	24.50	--	1957	Apr. 10	19.63	22,200
1892	Jan. 20	30.10	--	1925	Jan. 20	31.00	--	1958	Nov. 26	25.20	36,800
1893	Aug. 30	29.60	--	1926	Apr. 2	19.40	--	1959	July 11	17.45	18,300
1894	Oct. 24	30.50	--	1927	July 23	12.70	--	1960	Apr. 6	28.54	58,800
1895	Oct. 10	30.20	--	1928	Aug. 18	35.00	--	1961	Feb. 26	27.00	46,800
1896	July 11	28.80	--	1929	Mar. 1	31.80	--	1962	Jan. 8	22.87	30,000
1897	Feb. 8	29.70	--	1930	Oct. 3	36.20	163,000	1963	Mar. 15	--	20,100
1898	Sept.25	28.00	--	1931	Dec. 23	14.31	11,600	1964	Apr. 9	26.50	43,900
1899	Feb. 8	31.00	--	1932	Jan. 9	28.31	50,700	1965	Oct. 18	29.07	64,500
1900	Apr. 23	28.40	--	1933	Dec. 28	25.37	32,000	1966	Mar. 6	18.99	21,100
1901	May 24	32.50	--	1934	June 9	20.65	20,200	1967	Aug. 25	32.22	88,300
1902	Dec. 31	31.20	--	1935	Mar. 14	24.03	30,000	1968	Jan. 12	20.91	24,900
1903	Mar. 25	30.40	--	1936	Apr. 7	36.63	168,000	1969	Apr. 20	21.41	26,000
1904	Aug. 9	25.20	--	1937	Jan. 4	27.26	52,500	1970	Mar. 23	16.83	17,800
1905	July 15	29.60	66,800	1938	Apr. 9	14.92	13,300	1971	Mar. 5	23.46	31,300
1906	Dec. 22	28.60	54,100	1939	Mar. 2	29.01	70,500	1972	Jan. 14	19.70	22,400
1907	Oct. 21	28.70	55,000	1940	Aug. 16	30.50	89,000	1973	Apr. 2	28.53	56,100
1908	Aug. 26	39.70	366,000	1941	July 9	28.10	60,600	1974	Apr. 7	16.00	16,700
1909	June 5	31.70	103,000	1942	Mar. 10	24.85	35,400	1975	Mar. 16	30.55	70,200
1910	Mar. 2	26.90	39,700	1943	Jan. 20	24.76	35,400	1976	Mar. 17	16.44	17,300
1911	Oct. 10	26.90	--	1944	Mar. 21	29.08	71,700	1977	Oct. 11	28.36	55,100
1912	Mar. 17	35.40	--	1945	Sept.19	33.84	132,000	1978	Jan. 27	26.22	42,300
1913	Mar. 17	34.00	--	1946	Jan. 9	24.28	33,800	1979	Feb. 26	29.17	60,200
1914	Jan. 4	27.60	--	1947	Jan. 21	27.87	58,500	1980	Mar. 30	25.80	40,200
1915	Dec. 27	30.50	--	1948	Apr. 2	27.96	59,500	1981	Feb. 13	15.41	16,500
1916	July 18	40.40	400,000	1949	Nov. 30	31.44	101,000	1982	Jan. 5	25.99	41,200
1917	Mar. 6	30.30	--	1950	Nov. 3	19.21	20,500	1983	Mar. 19	23.16	30,500
1918	Apr. 21	28.20	--	1951	Apr. 11	15.11	15,200	1984	Feb. 16	21.62	26,500
1919	July 21	33.00	--	1952	Mar. 5	31.35	82,900	1985	Feb. 7	15.68	16,800
1920	Aug. 29	28.60	--	1953	Feb. 24	20.82	24,500	1986	Nov. 24	16.13	17,400
1921	Feb. 11	31.00	--	1954	Jan. 24	29.36	67,000	1987	Mar. 2	30.44	69,600
1922	Feb. 16	30.20	--	1955	Apr. 16	22.66	30,800	1988	Jan. 21	12.69	13,700
1923	Mar. 18	30.00	--	1956	Mar. 18	15.93	16,800				

02148300 COLONELS CREEK NEAR LEESBURG, SC

LOCATION.--Lat 34°00'25'', long 80°43'58'', Richand County, Hydrologic Unit 03050104, at bridge on State Highway 262, 0.2 mi above Jumping Run Creek, 1.9 mi southwest of Leesburg, and at mile 8.0.

DRAINAGE AREA.--38.1 mi^2.

PERIOD OF RECORD.--September 1966 to September 1980.

GAGE.--Water-stage recorder. Datum of gage is 157.97 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 494 ft^3/s, June 10, 1973, gage height, 5.28 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 350 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
14 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 280
Q_5	= 464
Q_{10}	= 617
Q_{25}	= 850
Q_{50}	= 1,060
Q_{100}	= 1,290

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 2.464
Standard Deviation	= 0.248
Weighted Skew	= 0.395

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1967	Aug. 11	7.78	[1]---	1972	Jan. 14	4.28	216	1977	Dec. 12	4.56	285
1968	Jan. 11	4.07	173	1973	June 10	5.28	494	1978	Jan. 26	4.07	174
1969	Oct. 20	4.13	273	1974	Jan. 2	4.17	194	1979	Sept. 5	5.27	491
1970	Mar. 22	4.13	186	1975	Apr. 3	4.28	216	1980	Nov. 3	4.46	257
1971	Mar. 3	5.06	428	1976	July 6	4.30	220				

[1]Discharge published in WRI 82-1 of 1350 ft^3/s was determined by a stage-discharge rating exceeding 300 percent and may be unreliable.

02153500 BROAD RIVER NEAR GAFFNEY, SC

LOCATION.--Lat 35°05'20'', long 81°34'20'', Cherokee County, Hydrologic Unit 03050105, on right bank at downstream side of bridge on U.S. Highway 29, 0.3 mi upstream from Cherokee Creek, 4.4 mi downstream from Gaston Shoals Dam, 4.5 mi east of Gaffney, and at mile 270.3.

DRAINAGE AREA.--1,490 mi^2, approximately.

PERIOD OF RECORD.--July 1896 to December 1899 (gage heights and discharge measurements only), October 1938 to September 1971, October 1971 to May 1986 (Crest-Stage partial record), June 1986 to current year. Monthly discharge only for some periods, published in WSP 1303. Discharge for July 12, 1896 to December 31, 1899, published in the 18th, 19th and 21st Annual Reports, Part 4, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 539.10 ft above National Geodetic Vertical Datum of 1929. July 12, 1896 to December 31, 1899, nonrecording gages at sites 1.1 miles upstream at different datum.

REMARKS.--Peaks prior to Jan. 1, 1900, are from graphs based on gage readings. Some regulation at medium and low flow by powerplants above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 119,000 ft^3/s, Aug. 14, 1940, gage height, 19.78 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 64,200 ft^3/s and extended by computation of peak flow over Gaston Shoals Dam.

FLOOD-FREQUENCY DATA (ft^3/s)
49 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 31,500
Q_5	= 45,800
Q_{10}	= 57,700
Q_{25}	= 75,900
Q_{50}	= 92,100
Q_{100}	= 111,000

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 4.4979
Standard Deviation	= 0.2183
Station Skew	= -0.161

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1897	Apr. 5	9.25	---	1956	Apr. 16	10.23	22,400	1976	Oct. 18	11.58	32,100
1898	Sept.23	12.18	---	1957	Apr. 6	10.40	23,400	1977	Oct. 10	17.24	84,900
1899	Mar. 19	12.70	---	1958	Apr. 28	12.72	37,900	1978	Nov. 7	12.39	38,100
1939	Aug. 18	10.51	21,000	1959	Sept.30	12.77	38,600	1980	July 21	12.33	37,600
1940	Aug. 14	19.78	119,000	1960	Feb. 6	12.63	37,200	1981	Oct. 1	7.56	10,500
1941	July 17	11.43	26,000	1961	June 22	11.00	26,600	1982	Jan. 4	11.84	33,900
1942	Feb. 17	10.70	21,800	1962	Dec. 13	11.31	28,400	1983	Feb. 3	9.98	21,900
1943	Jan. 28	12.39	38,400	1963	Mar. 13	13.03	41,800	1984	Feb. 14	12.67	39,900
1944	Mar. 20	9.82	21,700	1964	Apr. 8	11.44	31,100	1985	Aug. 18	10.78	26,600
1945	Sept.18	15.35	61,600	1965	Oct. 6	15.61	67,100	1986	Aug. 18	7.67	10,900
1946	Jan. 7	13.38	43,400	1966	Mar. 4	11.65	32,600	1987	Mar. 1	15.49	65,800
1947	June 15	11.09	27,800	1967	Aug. 24	11.83	33,800	1988	Jan. 20	7.04	8,770
1948	Aug. 4	10.80	25,600	1968	Mar. 13	10.65	25,900				
1949	Nov. 29	12.47	35,700	1969	Apr. 19	10.57	25,400				
1950	Oct. 7	11.70	31,000	1970	Aug. 10	13.50	47,500				
1951	Dec. 8	10.47	23,900	1971	Oct. 31	8.55	14,300				
1952	Mar. 4	13.52	44,200	1972	Oct. 16	13.43	46,900				
1953	Feb. 21	10.13	21,900	1973	Mar. 17	12.99	42,900				
1954	Jan. 23	13.24	41,000	1974	Apr. 5	11.91	34,400				
1955	Feb. 7	8.55	14,700	1975	Mar. 15	14.37	55,300				

02154500 NORTH PACOLET RIVER AT FINGERVILLE, SC

LOCATION.--Lat 35°07'15'', long 81°59'10'', Spartanburg County, Hydrologic Unit 03050105, on right bank at McMillin Mill, about 400 ft downstream from Obed Creek, 1.4 mi south of Fingerville, and at mile 48.5.

DRAINAGE AREA.--116 mi^2.

PERIOD OF RECORD.--October 1929 to current year. Monthly discharge only for some periods, published in WSP 1303.

GAGE.--Water-stage recorder. Datum of gage is 715.56 ft above National Geodetic Vertical Datum of 1929. From November 26, 1929 to November 24, 1933, recording gage at site about 400 ft downstream at datum 5.60 ft higher.

REMARKS.--Records good. Some diurnal fluctuation at low and medium flow caused by mill above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,500 ft^3/s, August 14, 1940, gage height, 27.13 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,300 ft^3/s and extended on basis of peak flow over dam 2.0 mi above station.

FLOOD-FREQUENCY DATA (ft^3/s)
58 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 3,010
Q_5	= 4,980
Q_{10}	= 6,430
Q_{25}	= 8,400
Q_{50}	= 9,960
Q_{100}	= 11,600

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.474
Standard Deviation	= 0.264
Weighted Skew	= -0.119

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1931	Dec. 7	--	872	1951	Dec. 8	9.91	2,320	1971	Oct. 31	8.92	2,020
1932	Dec. 15	--	2,120	1952	Mar. 4	12.69	3,880	1972	June 21	14.85	4,350
1933	Oct. 17	--	6,820	1953	Feb. 21	10.01	2,360	1973	May 24	14.77	4,320
1934	Mar. 4	12.00	2,100	1954	Jan. 23	15.96	5,040	1974	Apr. 5	9.71	2,330
1935	July 19	--	1,760	1955	Feb. 7	8.28	1,840	1975	Mar. 14	14.77	4,320
1936	Apr. 7	19.77	6,120	1956	Apr. 16	7.88	1,690	1976	Oct. 17	10.45	2,630
1937	Oct. 17	21.23	7,290	1957	Apr. 6	10.28	2,620	1977	Oct. 9	18.79	6,370
1938	Oct. 19	17.48	5,400	1958	Apr. 29	12.25	3,480	1978	Jan. 26	9.32	2,180
1939	Aug. 19	10.65	2,480	1959	May 26	18.64	6,680	1979	Sept.30	12.73	3,540
1940	Aug. 14	27.13	12,500	1960	Mar. 31	12.54	3,200	1980	Nov. 3	8.14	1,700
1941	July 17	8.51	1,540	1961	June 22	14.80	4,330	1981	Oct. 1	5.27	608
1942	Feb. 17	11.35	2,700	1962	Dec. 13	13.08	3,480	1982	June 18	11.44	3,030
1943	Jan. 28	10.16	2,200	1963	Mar. 13	14.45	4,010	1983	Apr. 10	7.67	1,540
1944	Mar. 29	9.70	1,620	1964	Aug. 10	9.41	2,440	1984	Feb. 14	13.12	3,700
1945	Sept.17	13.90	3,780	1965	Oct. 5	25.60	11,200	1985	Aug. 18	10.46	2,640
1946	Jan. 7	17.12	5,040	1966	Feb. 14	12.75	3,550	1986	Aug. 18	11.33	2,980
1947	June 15	12.30	3,110	1967	Aug. 24	15.19	4,480	1987	Mar. 1	18.76	6,350
1948	Feb. 13	7.30	1,370	1968	Feb. 13	9.79	2,370	1988	Jan. 20	5.65	731
1949	Nov. 29	13.74	3,780	1969	Sept. 4	10.60	2,690				
1950	Oct. 7	16.70	5,150	1970	Nov. 2	6.56	1,070				

02155500 PACOLET RIVER NEAR FINGERVILLE, SC

LOCATION.--Lat 35°06'35'', long 81°57'35'', Spartanburg County, Hydrologic Unit 03050105, on right bank, 100 ft upstream from bridge on State Road 55, 0.2 mi downstream from confluence of North Pacolet and South Pacolet Rivers, 2.8 mi southeast of Fingerville, and at mile 46.5.

DRAINAGE AREA.--212 mi^2.

PERIOD OF RECORD.--October 1929 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORDS.--WSP 1303: 1930-39 (monthly and yearly runoff).

GAGE.--Water-stage recorder. Datum of gage is 706.33 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Some regulation by South Pacolet River Reservoir and Lake William C. Bowen (02154950). Some diurnal fluctuation caused by mill on North Pacolet River. Some water diverted from South Pacolet River above station for City of Spartanburg water supply.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,800 ft^3/s August 14, 1940, gage height, 22.43 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1903 reached a stage of 46 ft, from floodmark (discharge not determined).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 9,600 ft^3/s and extended by velocity-area studies.

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1903	June 0	46.00	--	1950	Oct. 7	9.05	6,250	1970	Nov. 2	3.50	1,640
1931	Dec. 6	2.68	1,020	1951	Dec. 8	6.85	4,120	1971	Feb. 22	6.23	3,820
1932	Dec. 15	6.45	3,810	1952	Mar. 24	9.46	6,760	1972	June 21	10.15	7,650
1933	Oct. 17	13.31	11,000	1953	Feb. 21	6.27	3,710	1973	Feb. 3	8.58	6,080
1934	Mar. 4	6.39	3,810	1954	Jan. 23	10.38	7,750	1974	Apr. 5	7.16	4,660
1935	Oct. 11	4.76	2,510	1955	Feb. 7	5.10	2,810	1975	Mar. 14	9.88	7,380
1936	Apr. 7	12.53	10,100	1956	Apr. 17	5.55	3,160	1976	Oct. 17	9.69	7,190
1937	Oct. 17	13.63	11,300	1957	Apr. 6	7.33	4,570	1977	Oct. 9	14.89	12,900
1938	Oct. 19	12.73	10,300	1958	Apr. 29	8.20	5,450	1978	Jan. 26	7.58	5,080
1939	Aug. 19	7.09	4,390	1959	May 26	13.82	11,600	1979	Feb. 26	7.81	5,260
1940	Aug. 14	22.43	22,800	1960	Mar. 30	8.78	6,050	1980	May 24	--	6,500
1941	July 17	3.63	1,760	1961	June 22	8.65	5,850	1981	Oct. 1	3.43	1,580
1942	Feb. 17	9.54	6,760	1962	Apr. 11	6.31	3,710	1982	Feb. 4	7.45	4,920
1943	Jan. 28	6.84	4,120	1963	Mar. 13	10.46	7,860	1983	Apr. 10	5.44	3,140
1944	Mar. 20	6.50	3,870	1964	Aug. 10	7.05	4,560	1984	Feb. 14	6.51	4,060
1945	Sept.17	8.56	5,850	1965	Oct. 5	17.65	16,300	1985	Aug. 18	7.31	4,790
1946	Jan. 7	11.90	9,400	1966	Mar. 4	7.21	4,610	1986	Aug. 18	5.43	3,130
1947	June 15	7.99	5,250	1967	Aug. 24	--	6,500	1987	Mar. 1	11.71	9,250
1948	Aug. 5	5.62	3,160	1968	Mar. 13	5.83	3,470	1988	Feb. 9	3.94	1,960
1949	Nov. 29	9.66	6,980	1969	Apr. 19	7.71	5,210				

SANTEE RIVER BASIN

02156000 PACOLET RIVER NEAR CLIFTON, SC

LOCATION.--Lat 34°58'10'', long 81°48'05'', Spartanburg County, Hydrologic Unit 03050105, on left bank, 1.0 mi (revised) downstream from dam at Clifton Mill, 1.3 miles southeast of Clifton, 2.7 miles upstream from Lawsons Fork Creek, 2.7 miles northeast of Glendale, and at mile 28.2.

DRAINAGE AREA.--320 mi^2.

PERIOD OF RECORD.--October 1939 to September 1978.

GAGE.--Water-stage recorder October 1939 to September 1971. Partial record crest gage, October 1971 to September 1978.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,700 ft^3/s, October 9, 1977, gage height, 21.70 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 12,100 ft^3/s and extended on the basis of peak flow over dam computations.

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1940	Aug. 14	21.19	26,800	1955	Feb. 6	5.35	4,020	1970	July 27	6.16	4,560
1941	July 11	7.74	5,620	1956	Apr. 16	9.63	9,170	1971	Feb. 22	7.17	5,590
1942	Aug. 18	9.76	8,640	1957	Aug. 14	7.51	6,480	1972	June 21	13.39	14,000
1943	Jan. 28	11.10	9,300	1958	Nov. 19	12.06	12,600	1973	Feb. 3	11.24	10,800
1944	Mar. 20	8.08	7,220	1959	May 26	12.11	12,600	1974	Apr. 5	8.75	7,400
1945	Aug. 17	14.16	12,000	1960	Feb. 5	10.16	9,840	1975	Mar. 15	12.39	12,500
1946	Jan. 7	12.69	12,900	1961	Feb. 21	9.98	9,050	1976	Oct. 18	11.79	11,600
1947	Jan. 20	6.95	5,860	1962	Apr. 11	9.82	8,770	1977	Oct. 9	21.70	27,700
1948	Aug. 4	6.05	4,690	1963	Mar. 6	14.80	16,100	1978	Jan. 26	11.27	10,800
1949	Nov. 28	9.62	9,170	1964	Aug. 10	14.97	16,400				
1950	Oct. 7	14.64	16,300	1965	Oct. 5	17.31	20,100				
1951	Dec. 7	7.11	6,100	1966	Mar. 4	10.85	10,200				
1952	Mar. 24	11.16	11,400	1967	July 7	9.95	8,940				
1953	Feb. 21	6.12	4,800	1968	July 12	9.24	8,010				
1954	Jan. 22	9.14	8,520	1969	Apr. 18	9.43	8,260				

02156500 BROAD RIVER NEAR CARLISLE, SC

LOCATION.--Lat 34°35'46'', long 81°25'20'', Union County, Hydrologic Unit 03050106, on right bank at downstream side of bridge on State Highway 72, 1.3 mi upstream from Sandy River, 2.0 mi downstream from Seaboard Coast Line Railroad bridge, 2.5 mi east of Carlisle, 5.0 mi downstream from Neals Shoals Dam, and at mile 226.0.

DRAINAGE AREA.--2,790 mi^2, approximately.

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORDS.--WSP 892: 1939(M), drainage area.

GAGE.--Water-stage recorder. Datum of gage is 290.79 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Some regulation at low and medium flow by powerplants above station. Capacity of reservoirs insufficient to affect monthly figures of runoff.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 123,000 ft^3/s, Oct. 10, 1976, gage height, 31.51 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 65,800 ft^3/s and extended on basis of computation of peak flow over Neal Shoals Dam.

FLOOD-FREQUENCY DATA (ft^3/s)
50 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 41,200
Q_5	= 64,000
Q_{10}	= 84,000
Q_{25}	= 115,000
Q_{50}	= 144,000
Q_{100}	= 178,000

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	4.632
[1]Standard Deviation	=	0.184
Weighted Skew	=	0.050

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1939	Mar. 1	16.27	34,900	1959	Dec. 30	14.21	28,700	1979	Feb. 26	20.00	47,800
1940	Aug. 15	29.41	103,000	1960	Feb. 7	18.71	42,100	1980	Mar. 29	17.28	37,600
1941	July 18	17.06	37,600	1961	Feb. 22	15.82	33,200	1981	Oct. 2	10.09	15,600
1942	Feb. 18	18.42	42,200	1962	Apr. 12	17.25	37,400	1982	Jan. 5	17.89	39,700
1943	Jan. 29	18.96	44,500	1963	Mar. 14	21.78	57,200	1983	Mar. 18	14.21	27,600
1944	Mar. 20	19.58	46,900	1964	Apr. 8	23.90	69,500	1984	Feb. 15	18.40	41,500
1945	Sept.19	25.72	78,500	1965	Oct. 18	25.82	79,900	1985	Aug. 19	16.72	35,100
1946	Jan. 8	20.11	49,200	1966	Mar. 5	18.89	45,600	1986	Aug. 20	17.33	37,300
1947	Jan. 21	17.21	37,900	1967	Aug. 24	20.23	51,200	1987	Mar. 2	25.77	72,100
1948	Feb. 14	16.20	34,600	1968	Mar. 14	14.57	29,700	1988	Jan. 21	9.15	13,400
1949	Nov. 29	22.81	62,200	1969	Aug. 15	29.41	103,000				
1950	Oct. 8	19.32	44,200	1970	Aug. 12	17.48	39,900				
1951	Dec. 9	13.65	27,000	1971	Mar. 3	15.05	31,200				
1952	Mar. 5	22.43	57,700	1972	Oct. 17	19.31	47,200				
1953	Feb. 22	15.77	33,200	1973	Feb. 3	21.54	57,700				
1954	Jan. 24	20.63	49,200	1974	Apr. 6	17.61	40,400				
1955	Apr. 15	13.79	27,500	1975	Mar. 15	23.75	63,100				
1956	Apr. 17	14.99	30,900	1976	Oct. 19	14.95	31,000				
1957	Apr. 7	13.24	25,900	1977	Oct. 10	31.51	123,000				
1958	Apr. 29	20.12	48,000	1978	Jan. 27	19.72	46,900				

[1]Standard deviation was adjusted according to Appendix 7 of Water Resources Council Bulletin 17-B to adjust the record at Broad River near Carlisle, S.C. (station no. 02156500) to the longer period of record at Broad River at Richtex, S.C. (station no. 02161500).

02157000 NORTH TYGER RIVER NEAR FAIRMONT, SC

LOCATION.--Lat 34°55'45'', long 82°02'40'', Spartanburg County, Hydrologic Unit 03050107, on left bank 80 ft downstream from Frey Creek, 2.2 mi north of Fairmont, and at mile 57.9.

DRAINAGE AREA.--44.4 mi^2.

PERIOD OF RECORD.--October 1950 to September 1988.

GAGE.--Water-stage recorders and concrete control. Datum of gage is 680 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,610 ft^3/s, May 26, 1959, gage height, 13.58 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,100 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
38 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	=	1,350
Q_5	=	2,160
Q_{10}	=	2,720
Q_{25}	=	3,450
Q_{50}	=	3,990
Q_{100}	=	4,540

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	3.118
Standard Deviation	=	0.254
Weighted Skew	=	-0.274

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1951	Dec. 7	8.38	1,510	1966	Mar. 4	9.72	1,930	1981	June 3	3.17	493
1952	Dec. 21	10.55	2,280	1967	Aug. 24	4.44	748	1982	Jan. 4	8.30	1,580
1953	Feb. 21	4.91	722	1968	June 10	6.92	1,240	1983	Mar. 27	3.51	562
1954	Jan. 22	7.15	1,170	1969	Apr. 19	9.99	2,000	1984	Feb. 14	6.80	1,220
1955	May 22	8.68	1,650	1970	Feb. 16	3.05	470	1985	Aug. 17	3.57	574
1956	Apr. 16	9.10	1,790	1971	Feb. 23	4.86	832	1986	Nov. 1	4.43	746
1957	Apr. 5	3.06	466	1972	June 21	9.89	1,970	1987	Mar. 1	9.09	1,770
1958	Nov. 19	8.18	1,480	1973	Sept. 14	10.35	2,100	1988	Jan. 20	2.69	397
1959	May 26	13.58	3,610	1974	Jan. 1	4.51	762				
1960	Sept. 7	9.13	1,790	1975	Mar. 13	10.10	2,030				
1961	Feb. 21	9.26	1,820	1976	Oct. 18	9.13	1,780				
1962	Dec. 12	8.08	1,410	1977	Oct. 9	11.30	2,420				
1963	Mar. 6	12.48	3,090	1978	Nov. 6	12.70	3,050				
1964	Apr. 8	8.57	1,640	1979	Feb. 26	6.21	1,100				
1965	Oct. 5	11.64	2,560	1980	May 24	6.53	1,170				

02157500 MIDDLE TYGER RIVER AT LYMAN, SC

LOCATION.--Lat 34°56'35'', long 82°08'00'', Spartanburg County, Hydrologic Unit 03050107, on left bank 200 ft upstream from bridge on State Highway 292 at Lyman, 600 ft downstream from Southern Railway bridge, and 0.8 mi northeast of Duncan.

DRAINAGE AREA.--68.3 mi^2, approximately.

PERIOD OF RECORD.--October 1937 to December 1967 and October 1970 to current year.

GAGE.--Digital water-stage recorder prior to December 1967, crest-stage gage thereafter. Datum of gage is 776.05 above National Geodetic Vertical Datum of 1929. Prior to February 16, 1965, graphic water-stage recorder at same site and datum.

REMARKS.--Records good. Flow regulated by reservoir 5.7 mi above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,800 ft^3/s, August 14, 1940, gage height, 16.16 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,850 ft^3/s and extended on basis of computation of peak flow over dam.

FLOOD-FREQUENCY DATA (ft^3/s)
42 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	=	2,520
Q_5	=	3,220
Q_{10}	=	3,640
Q_{25}	=	4,140
Q_{50}	=	4,490
Q_{100}	=	4,830

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	3.398
Standard Deviation	=	0.129
Weighted Skew	=	-0.158

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1939	Aug. 18	9.28	2,730	1954	Jan. 23	8.74	2,520	1972	June 21	10.64	3,140
1940	Aug. 14	16.16	4,800	1955	Feb. 7	5.96	1,440	1973	May 28	11.21	3,310
1941	July 18	4.89	945	1956	Apr. 16	7.67	2,160	1974	Jan. 1	7.56	1,970
1942	Feb. 17	9.71	2,860	1957	Apr. 6	6.58	1,710	1975	Mar. 15	10.15	3,000
1943	Jan. 28	8.34	2,380	1958	Apr. 29	7.20	1,960	1976	Oct. 18	7.30	1,870
1944	Mar. 20	7.64	2,120	1959	May 26	10.36	3,070	1977	Oct. 9	11.80	3,490
1945	July 16	8.08	2,310	1960	Mar. 31	7.89	2,240	1978	Nov. 6	13.48	3,990
1946	Jan. 7	12.39	3,670	1961	Aug. 25	7.82	2,240	1979	--	--	--
1947	Jan. 21	6.91	1,840	1962	Dec. 12	11.21	3,310	1980	May 20	8.27	2,260
1948	Aug. 5	11.16	3,310	1963	Mar. 6	12.56	3,730	1981	--	--	--
1949	Nov. 29	10.78	3,190	1964	Apr. 8	8.37	2,300	1982	Feb. 3	9.54	2,770
1950	Oct. 7	6.29	1,580	1965	Oct. 5	12.12	3,590	1983	--	--	--
1951	Dec. 8	6.53	1,660	1966	Mar. 5	9.53	2,760	1984	Feb. 14	9.36	2,690
1952	Mar. 23	10.42	3,070	1967	Aug. 24	7.88	2,110	1985	Aug. 17	10.54	3,110
1953	Feb. 21	6.92	1,840	1971	May 13	5.51	1,150	1986	--	--	--
								1987	Mar. 1	11.45	3,380
								1988	--	--	--

02158000 NORTH TYGER RIVER NEAR MOORE, SC

LOCATION.--Lat 34°48'10'', long 81°57'57'', Spartanburg County, Hydrologic Unit 03050107, on right bank at Ott Shoals, 2.0 upstream from Wards Creek, 2.6 mi southeast of Moore, and 5.3 mi upstream from confluence with South Tyger River.

DRAINAGE AREA.--162 mi^2.

PERIOD OF RECORD.--October 1933 to September 1978. Monthly discharge only for some periods, published in WSP 1303.

GAGE.--Digital water-stage recorder prior to January 4, 1968, crest-stage gage October 1970 to September 1978. Datum of gage is 564.79 ft above National Geodetic Vertical Datum of 1929. Prior to February 17, 1965, graphic water-stage recorder at same site and datum.

REMARKS.--Records good. Some regulation at low flow by powerplants above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,300 ft^3/s, August 14, 1940, gage height, 7.15 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,740 ft^3/s and extended by velocity-area studies.

FLOOD-FREQUENCY DATA (ft^3/s)
41 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	=	3,740
Q_5	=	5,960
Q_{10}	=	7,600
Q_{25}	=	9,830
Q_{50}	=	11,600
Q_{100}	=	13,400

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	3.571
Standard Deviation	=	0.243
Weighted Skew	=	-0.042

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1935	Aug. 25	3.43	2,010	1950	Oct. 7	6.01	8,120	1965	Oct. 5	5.31	5,930
1936	Apr. 7	6.15	8,640	1951	Dec. 8	3.28	1,950	1966	Mar. 5	4.17	3,450
1937	Oct. 16	5.68	7,160	1952	Mar. 24	4.89	5,030	1967	Aug. 25	3.47	1,880
1938	Oct. 20	5.54	6,680	1953	Feb. 22	3.43	2,160	1971	Oct. 30	3.23	1,580
1939	Aug. 19	3.52	2,240	1954	Jan. 23	4.19	3,510	1972	June 21	4.96	4,900
1940	Aug. 14	7.15	12,300	1955	May 23	3.34	2,020	1973	Sept.15	4.94	4,850
1941	July 17	2.53	1,080	1956	Apr. 16	3.81	2,750	1974	Jan. 1	3.50	1,950
1942	Feb. 18	4.23	3,610	1957	Apr. 7	2.92	1,460	1975	Mar. 15	5.08	5,240
1943	Jan. 29	4.48	4,130	1958	Nov. 19	3.80	2,750	1976	Oct. 18	3.95	2,700
1944	Mar. 21	3.89	2,930	1959	May 26	5.30	6,020	1977	Oct. 9	6.14	8,600
1945	Sept 18	4.00	3,120	1960	Feb. 6	3.93	3,020	1978	Nov. 6	5.34	6,020
1946	Jan. 8	5.21	5,760	1961	Feb. 21	4.78	4,800				
1947	Jan. 21	3.46	2,160	1962	Dec. 13	4.47	4,020				
1948	Aug. 6	4.27	3,610	1963	Mar. 6	5.54	6,720				
1949	Nov. 29	4.78	4,800	1964	Apr. 8	4.98	5,220				

02158500 SOUTH TYGER RIVER NEAR REIDVILLE, SC

LOCATION.--Lat 34°52'35'', long 82°05'10'', Spartanburg County, Hydrologic unit 03050107, on left bank 0.4 mi upstream from bridge on State Highway 296, 1.2 mi downstream from Berry Shoals, 1.8 mi northeast of Reidville, and 4 mi upstream from Bens Creek.

DRAINAGE AREA.--106 mi^2.

PERIOD OF RECORD.--April 1934 to September 1978.

GAGE.--Digital water-stage recorder prior to December 5, 1968, crest-stage gage October 1970 to September 1978. Datum of gage is 626.28 ft above National Geodetic Vertical Datum of 1929. Prior to August 4, 1964, graphic water-stage recorder at same site and datum.

REMARKS.--Records good. Some regulation at low and medium flow by powerplants above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,420 ft^3/s, October 7, 1949, gage height, 14.23 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,430 ft^3/s and graphically extended on logarthmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
41 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	=	2,450
Q_5	=	3,750
Q_{10}	=	4,690
Q_{25}	=	5,980
Q_{50}	=	6,990
Q_{100}	=	8,060

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	3.390
Standard Deviation	=	0.218
Weighted Skew	=	0.050

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1935	Aug. 24	11.05	4,150	1950	Oct. 7	14.23	6,420	1965	Oct. 5	9.29	3,520
1936	Apr. 6	13.66	6,080	1951	Dec. 7	4.88	1,320	1966	Sept.14	7.42	2,510
1937	Oct. 16	9.68	3,880	1952	Mar. 24	9.76	3,930	1967	Aug. 25	5.70	1,650
1938	Oct. 19	10.77	4,330	1953	Feb. 22	5.44	1,570	1971	Oct. 30	4.72	1,200
1939	Aug. 19	5.90	1,820	1954	Jan. 22	7.73	2,780	1972	Oct. 16	5.13	1,390
1940	Aug. 13	12.68	5,510	1955	May 23	6.59	2,190	1973	Sept.14	5.80	1,700
1941	July 19	4.17	982	1956	Apr. 16	6.82	2,300	1974	Jan. 1	5.55	1,580
1942	Feb. 18	7.41	2,610	1957	Apr. 6	4.28	1,020	1975	Mar. 15	9.48	3,640
1943	Jan. 28	7.86	2,880	1958	Nov. 19	6.35	2,080	1976	Oct. 18	8.62	3,140
1944	Mar. 20	5.82	1,770	1959	May 26	4.94	1,320	1977	Oct. 9	11.32	4,740
1945	Sept.18	5.19	1,450	1960	Mar. 31	6.08	1,870	1978	Nov. 6	7.88	2,740
1946	Jan. 7	9.52	3,760	1961	Feb. 21	7.97	2,840				
1947	Jan. 21	5.29	1,520	1962	Dec. 13	8.16	2,950				
1948	Aug. 5	5.06	1,420	1963	Mar. 6	11.00	4,490				
1949	Nov. 28	9.51	3,760	1964	Apr. 7	8.33	2,980				

02159000 SOUTH TYGER RIVER NEAR WOODRUFF, SC

LOCATION.--Lat 34°45'21'', long 81°56'19'', Spartanburg County, Hydrologic unit 03050107, on left bank at Chesnee Shoals, 0.5 mi upstream from confluence with North Tyger River and 5.8 mi east of Woodruff.

DRAINAGE AREA.--174 mi^2.

PERIOD OF RECORD.--October 1933 to September 1978. Monthly discharge only for some periods, published in WSP 1303.

GAGE.--Water-stage recorder prior to September 1971, crest-stage gage thereafter. Datum of gage is 508.35 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Some regulation at low and medium flow by powerplants above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,510 ft^3/s, April 6, 1936, gage height, 9.78 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,670 ft^3/s and extended by velocity-area studies.

FLOOD-FREQUENCY DATA (ft^3/s)
44 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	=	2,880
Q_5	=	4,740
Q_{10}	=	6,180
Q_{25}	=	8,210
Q_{50}	=	9,890
Q_{100}	=	11,700

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	3.463
Standard Deviation	=	0.254
Weighted Skew	=	0.072

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1935	Aug. 25	4.89	2,260	1950	Oct. 7	9.25	8,490	1965	Oct. 16	6.32	4,280
1936	Apr. 6	9.78	9,510	1951	Dec. 8	3.91	1,040	1966	Mar. 5	5.61	3,220
1937	Oct. 16	8.83	8,080	1952	Mar. 24	6.72	4,740	1967	Aug. 25	--	1,800
1938	Oct. 20	5.85	3,660	1953	Feb. 23	4.62	1,800	1968	June 9	4.98	2,310
1939	Feb. 28	4.82	1,960	1954	Jan. 23	5.40	2,930	1969	Apr. 16	5.13	2,520
1940	Aug. 14	8.18	6,960	1955	May 24	4.52	1,670	1970	Apr. 1	3.72	906
1941	Nov. 13	3.92	1,050	1956	Mar. 16	4.97	2,280	1971	Mar. 3	4.98	2,310
1942	June 10	5.33	2,910	1957	Apr. 7	3.80	950	1972	Oct. 17	5.12	2,510
1943	Jan. 28	5.90	3,540	1958	Nov. 19	5.20	2,640	1973	Sept.15	4.62	1,850
1944	Mar. 20	5.30	2,640	1959	May 25	5.10	2,500	1974	Jan. 1	4.52	1,720
1945	Sept.18	5.61	3,020	1960	Feb. 6	5.19	2,640	1975	Mar. 15	6.86	5,090
1946	Jan. 8	6.31	4,140	1961	Feb. 21	6.31	4,250	1976	Mar. 17	5.70	3,350
1947	Jan. 20	4.79	2,220	1962	Dec. 13	5.70	3,360	1977	Oct. 9	8.62	7,730
1948	Mar. 7	4.27	1,360	1963	Mar. 6	7.92	6,650	1978	Nov. 6	5.90	3,650
1949	Nov. 29	5.45	2,860	1964	Apr. 8	7.37	5,860				

02159500 TYGER RIVER NEAR WOODRUFF, SC

LOCATION.--Lat 34°45'15'', long 81°55'30'', Spartanburg County, Hydrologic Unit 03050107, on left bank at upstream side of Nesbitts bridge on State Highway 49, 0.5 mi downstream from confluence of North Tyger and South Tyger Rivers and 6.5 mi east of Woodruff.

DRAINAGE AREA.--351 mi^2.

PERIOD OF RECORD.--October 1929 to September 1956.

GAGE.--Water-stage recorder. Datum of gage is 489.44 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Some regulation at low and medium flow by powerplants above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,000 ft^3/s, (estimated) October 2, 1929, gage height, 19.1 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood on June 6, 1903, reached a stage of 20.4 ft, from floodmark set by local resident, at site 0.3 mi below gage; that in August 1928, 20.0 ft (present site); that in September 1929, 14.65 ft, from floodmarks (discharge, 19,600 ft^3/s).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 14,000 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
28 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	=	6,500
Q_5	=	11,800
Q_{10}	=	16,400
Q_{25}	=	23,700
Q_{50}	=	30,200
Q_{100}	=	37,800

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	3.826
Standard Deviation	=	0.298
Weighted Skew	=	0.267

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1903	June 6	20.40	--	1937	Oct. 16	11.48	14,700	1947	Jan. 21	5.49	4,290
1928	Aug. --	20.00	--	1938	Oct. 20	9.30	10,600	1948	Aug. 6	5.98	4,800
1929	Sept.--	14.65	19,600	1939	Aug. 18	5.46	3,830	1949	Nov. 29	8.88	8,740
1930	Oct. 2	19.10	28,000	1940	Aug. 14	13.27	19,200	1950	Oct. 7	12.72	17,200
1931	May 22	5.05	2,430	1941	Nov. 13	4.50	2,220	1951	Dec. 8	5.17	3,000
1932	Jan. 8	6.01	4,350	1942	Feb. 18	6.11	5,450	1952	Mar. 24	8.97	10,000
1933	Oct. 17	7.60	7,840	1943	Jan. 28	7.59	7,780	1953	Feb. 22	5.40	3,710
1934	Mar. 5	5.57	3,540	1944	Mar. 20	6.40	5,270	1954	Jan. 23	6.56	5,990
1935	Aug. 25	5.99	4,350	1945	Sept.18	7.39	6,580	1955	May 23	5.16	3,230
1936	Apr. 6	13.16	17,100	1946	Jan. 8	8.48	9,680	1956	Apr. 17	5.99	4,800

02159600 DUTCHMAN CREEK NEAR PAULINE, S.C.

LOCATION.--Lat 34°47'55", long 81°52'46", Spartanburg County, Hydrologic unit 03050107, on downstream side of bridge on county road 90, 75 feet downstream of Smith Creek and 2.2 mi southwest of Pauline.

DRAINAGE AREA.--8.97 mi^2

PERIOD OF RECORD.--1967 to 1969; 1974 to current year

GAGE.--Water-stage recorder from 1967 to 1969. Crest-stage gage from 1974 to current year.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,000 ft^3/s, Oct. 9, 1977, gage height 13.61 feet.

STAGE DISCHARGE RELATION.--Defined by current-meter measurements below 162 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft/s)
18 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	=	882
Q_5	=	1730
Q_{10}	=	2410
Q_{25}	=	3460
Q_{50}	=	4220
Q_{100}	=	5100

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	2.932
Standard Deviation	=	0.359
Station Skew	=	-0.221

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1967	July 7	6.91	983	1977	Oct. 9	13.61	4,000	1983	Feb. 15	7.80	1,240
1968	Jan. 10	5.69	642	1978	Jan. 26	5.61	622	1984	Aug. 17	7.60	1,180
1969	Apr. 16	8.73	1,590	1979	Apr. 13	7.78	1,230	1985	Nov. 30	7.75	1,225
1974	Jan. 1	6.15	762	1980	May 20	5.67	637	1986	Jan. 24	3.41	201
1975	Mar. 15	8.41	1,500	1981	Feb. 10	1.10	21	1987	Dec. 28	4.78	430
1976	Oct. 18	10.46	2,310	1982	Dec. 31	8.25	1,420	1988	Mar. 23	3.41	201

02160000 FAIRFOREST CREEK NEAR UNION, S.C.

LOCATION.--Lat 34°40'45'', long 81°41'25'', Union County, Hydrologic Unit 03050107, on right bank at downstream side of bridge on State Highway 49, 0.3 mi downstream from Buffalo Creek, 4.3 mi southwest of Union, and at mile 7.5.

DRAINAGE AREA.--183 mi^2.

PERIOD OF RECORD.--June 1940 to current year.

GAGE.--Water-stage recorder prior to September 1971. Crest-stage gage thereafter. Datum of gage is 393.91 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Discharge includes some water diverted from South Pacolet River Reservoir which is discharged into this stream after use.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,700 ft^3/s, Oct. 9, 1976, gage height 9.43 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,800 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
49 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 3,990
Q_5	= 5,880
Q_{10}	= 7,070
Q_{25}	= 8,470
Q_{50}	= 9,440
Q_{100}	= 10,400

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.585
Standard Deviation	= 0.216
Weighted Skew	= -0.446

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1940	Aug. 14	7.15	6,200	1960	Feb. 7	5.40	2,950	1980	Mar. 29	6.07	4,040
1941	July 17	6.80	5,500	1961	Feb. 22	6.53	4,960	1981	Oct. 1	4.90	2,050
1942	Feb. 17	5.91	3,720	1962	Apr. 12	5.78	3,520	1982	Jan. 4	5.57	3,050
1943	July 9	6.08	4,060	1963	Mar. 7	7.37	6,640	1983	Mar. 18	5.36	2,700
1944	Mar. 20	6.69	5,280	1964	Apr. 8	7.83	7,720	1984	Dec. 7	5.81	3,500
1945	Sept.18	6.94	5,780	1965	Oct. 16	7.53	6,980	1985	Aug. 17	6.50	4,900
1946	Jan. 8	5.25	2,720	1966	Mar. 4	5.69	3,380	1986	Nov. 1	6.81	5,520
1947	Jan. 20	5.75	3,480	1967	Aug. 24	6.42	4,740	1987	Mar. 1	7.22	6,340
1948	Mar. 7	5.07	2,460	1968	Jan. 11	5.60	3,250	1988	Jan. 22	4.05	1,135
1949	Nov. 29	7.61	7,180	1969	Sept. 4	6.85	5,600				
1950	Oct. 8	6.42	4,740	1970	Mar. 22	4.43	1,640				
1951	Oct. 20	3.90	1,200	1971	Mar. 3	6.33	4,560				
1952	Mar. 4	6.56	5,020	1972	June 22	6.04	3,980				
1953	May 2	5.52	3,130	1973	Apr. 1	7.46	6,820				
1954	Jan. 17	5.77	3,500	1974	Jan. 1	5.75	3,400				
1955	Feb. 6	5.13	2,540	1975	Mar. 15	6.94	5,780				
1956	Mar. 17	5.55	3,180	1976	Oct. 18	4.98	2,150				
1957	Apr. 9	3.77	1,010	1977	Oct. 9	9.43	11,700				
1958	Nov. 19	5.91	3,720	1978	Jan. 27	5.86	3,620				
1959	Sept.30	5.98	3,860	1979	Apr. 14	6.71	5,320				

02160105 TYGER RIVER NEAR DELTA, SC

LOCATION.--Lat 34°32'07'', long 81°32'54'', Union County, Hydrologic Unit 03050107, on right bank at downstream side of bridge on State Highway 72 and 121, 0.9 mi downstream from Seaboard Coast Line Railroad, 0.8 mi southeast of Delta, and at mile 9.0.

DRAINAGE AREA.--759 mi^2.

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 300 ft above National Geodetic Vertical Datum of 1929 (from topographic map).

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,300 ft^3/s, Oct. 11, 1976, gage height, 26.31 ft (from floodmarks).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 16,500 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
15 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 10,300
Q_5	= 15,600
Q_{10}	= 19,500
Q_{25}	= 24,700
Q_{50}	= 28,900
Q_{100}	= 33,200

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	4.015
Standard Deviation	=	0.214
Weighted Skew	=	0.058

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1974	Jan. 2	14.88	7,700	1979	Apr. 14	18.55	13,300	1984	May 8	16.24	9,630
1975	Mar. 15	20.36	16,700	1980	Mar. 29	18.39	13,000	1985	Aug. 19	16.35	9,790
1976	Mar. 17	15.69	8,900	1981	Oct. 1	13.55	6,190	1986	Nov. 22	17.62	11,700
1977	Oct. 11	26.31	30,300	1982	Feb. 5	14.71	7,520	1987	Mar. 2	20.25	16,300
1978	Jan. 27	17.74	11,900	1983	Mar. 18	14.69	7,540	1988	Jan. 21	11.00	3,680

02160500 ENOREE RIVER AT ENOREE, SC

LOCATION.--Lat 34°36'38", long 81°54'35", Spartanburg Courty, Hydrologic Unit 03050108, on left bank 60 ft upstream from bridge on State Highway 49, 0.6 mi upstream from Warrior Creek, 4.0 mi southeast of Enoree, and at mile 47.7.

DRAINAGE AREA.--307 mi^2.

PERIOD OF RECORD.--August 1929 to current year.

GAGE.--Water-stage prior to September 1976. Crest-stage gage thereafter. Datum of gage is 448.13 ft above National Geodetic Vertical Datum of 1929. Prior to November 20, 1929, nonrecording gage at same site and datum.

REMARKS.--Records good. Some regulation at low and medium flow by power plants above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,000 ft^3/s, Oct. 2, 1929, gage height 10.5 ft (from floodmark).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 20,200 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
59 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 6,230
Q_5	= 10,100
Q_{10}	= 13,100
Q_{25}	= 20,500
Q_{50}	= 24,100
Q_{100}	= 27,400

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	3.800
Standard Deviation	=	0.249
Weighted Skew	=	0.040

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1930	Oct. 2	10.50	30,000	1950	Oct. 8	6.93	13,000	1970	Mar. 22	3.61	2,080
1931	May 22	3.76	3,100	1951	Dec. 8	3.44	1,960	1971	Mar. 3	5.05	5,530
1932	Dec. 4	5.29	7,100	1952	Mar. 29	5.82	8,960	1972	June 21	5.91	8,740
1933	Oct. 17	6.04	9,500	1953	Feb. 22	4.29	4,110	1973	Sept.14	6.49	11,100
1934	June 5	4.58	5,400	1954	Jan. 17	5.00	6,120	1974	Jan. 2	4.48	4,060
1935	Aug. 25	5.70	8,430	1955	Feb. 7	4.23	4,010	1975	Mar. 14	6.40	10,700
1936	Apr. 7	7.86	17,200	1956	Mar. 17	4.86	5,670	1976	Oct. 19	4.69	4,540
1937	Oct. 16	7.14	13,800	1957	Mar. 1	3.53	2,350	1977	Oct. 9	7.09	13,700
1938	Oct. 20	5.86	8,960	1958	Nov. 19	5.12	6,430	1978	Jan. 27	5.22	6,130
1939	Aug. 18	4.35	4,270	1959	May 25	4.19	3,810	1979	Apr. 26	5.50	7,140
1940	Aug. 14	6.86	12,800	1960	Feb. 6	4.91	5,970	1980	Mar. 29	4.92	5,160
1941	July 10	3.68	2,690	1961	Feb. 22	5.70	8,600	1981	Oct. 1	3.80	2,780
1942	Feb. 17	4.82	5,520	1962	Dec. 13	5.52	7,740	1982	Jan. 5	5.62	7,600
1943	Jan. 29	5.52	7,740	1963	Mar. 7	6.76	12,600	1983	Mar. 18	4.19	3,420
1944	Mar. 20	5.43	7,570	1964	Apr. 8	6.95	13,200	1984	May 7	5.23	6,170
1945	Sept.18	5.11	6,430	1965	Oct. 16	5.57	7,980	1985	Feb. 4	4.09	3,210
1946	Jan. 7	5.85	8,960	1966	Mar. 5	5.30	7,070	1986	Nov. 22	4.06	3,150
1947	Jan. 20	4.96	5,970	1967	Feb. 18	3.99	3,250	1987	Mar. 1	7.04	13,500
1948	May 28	4.30	4,140	1968	June 8	4.50	4,650	1988	Jan. 22	3.58	2,170
1949	Nov. 29	6.18	10,200	1969	Jan. 21	5.17	5,940				

02160700 ENOREE RIVER AT WHITMIRE, SC

LOCATION.--Lat 34°30'33'', long 81°35'54'', Union County, Hydrologic Unit 03050108, on left bank, at upstream side of bridge on U.S. Highway 176, 0.4 mi downstream from Seaboard Coast Line Railroad, 0.5 mi northeast of Whitmire, and at mile 19.2.

DRAINAGE AREA.--444 mi^2.

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 300.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,700 ft^3/s, Oct. 10, 1976.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 11,000 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
15 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 5,450
Q_5	= 8,770
Q_{10}	= 11,400
Q_{25}	= 15,300
Q_{50}	= 18,600
Q_{100}	= 22,200

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.747
Standard Deviation	= 0.238
Weighted Skew	= 0.268

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1974	Jan. 3	24.11	3,980	1979	Apr. 15	26.45	6,790	1984	May 8	25.70	5,920
1975	Mar. 15	28.92	10,800	1980	Mar. 29	26.43	6,760	1985	Feb. 4	22.93	3,420
1976	Mar. 18	24.76	4,860	1981	Oct. 2	21.54	2,510	1986	Nov. 22	24.58	4,690
1977	Oct. 10	32.58	19,700	1982	Jan. 5	26.23	6,560	1987	Mar. 2	27.86	8,780
1978	Jan. 27	26.20	6,540	1983	Mar. 28	23.36	3,710	1988	Jan. 22	21.41	2,530

02161500 BROAD RIVER AT RICHTEX, SC

LOCATION.--Lat 34°11'05'', long 81°11'48'', Richland County, Hydrologic Unit 03050106, on right bank 0.8 mi west of Richtex, 1.2 mi upstream from Little River, 10.2 mi downstream from Parr Shoals Dam, and at mile 191.2.

DRAINAGE AREA.--4,850 mi^2, approximately.

PERIOD OF RECORD.--October 1925 to September 1983. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORDS.--WSP 757: 1930(M). WSP 972: Drainage area. WSP 1383: 1929(M), 1933.

GAGE.--Water-stage recorder. Datum of gage is 184.84 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Regulation at low and medium flow by powerplant above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 228,000 ft^3/s, Oct. 3, 1929, gage height, 30.7 ft (from floodmarks).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 82,800 ft^3/s and extended on basis of computation of peak flow over Parr Shoals Dam.

FLOOD-FREQUENCY DATA (ft^3/s)
58 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 59,000
Q_5	= 89,700
Q_{10}	= 115,000
Q_{25}	= 153,000
Q_{50}	= 187,000
Q_{100}	= 225,000

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 4.642
Standard Deviation	= 0.210
Station Skew	= 0.636

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1926	Jan. 20	12.01	40,300	1946	Jan. 9	13.86	59,200	1966	Mar. 6	14.79	65,300
1927	Feb. 25	9.14	28,400	1947	Jan. 21	13.72	57,800	1967	Aug. 25	16.09	74,500
1928	Aug. 17	30.10	222,000	1948	Feb. 14	12.40	49,400	1968	Jan. 12	11.90	46,200
1929	Sept.28	18.32	88,200	1949	Nov. 30	18.59	95,700	1969	Apr. 19	12.91	52,700
1930	Oct. 3	30.70	228,000	1950	Oct. 9	12.75	52,000	1970	Aug. 12	10.97	40,600
1931	Dec. 7	7.81	23,000	1951	Dec. 9	9.18	30,600	1971	Mar. 4	13.73	58,000
1932	Jan. 9	14.18	51,200	1952	Mar. 6	17.39	84,700	1972	June 23	14.18	61,600
1933	Oct. 18	19.72	101,000	1953	Feb. 23	11.15	42,000	1973	Feb. 4	16.04	74,100
1934	Mar. 29	10.48	34,400	1954	Jan. 24	14.68	64,700	1974	Apr. 6	12.11	47,500
1935	Oct. 12	17.86	84,600	1955	Apr. 15	11.36	43,200	1975	Mar. 16	18.52	94,900
1936	Apr. 8	24.96	157,000	1956	Mar. 18	11.24	42,000	1976	Oct. 20	10.03	35,200
1937	Oct. 18	16.12	72,400	1957	Apr. 7	9.35	31,800	1977	Oct. 11	23.67	146,000
1938	Oct. 21	13.53	55,800	1958	Nov. 21	13.35	55,900	1978	Jan. 27	14.79	64,500
1939	Mar. 2	13.12	53,400	1959	Dec. 30	9.31	31,200	1979	Feb. 26	15.80	72,300
1940	Aug. 16	21.08	120,000	1960	Oct. 1	--	55,900	1980	Mar. 30	14.74	64,200
1941	July 7	12.41	49,400	1961	Feb. 25	13.50	56,600	1981	Oct. 1	12.07	46,700
1942	Feb. 18	12.99	53,300	1962	Jan. 7	13.42	55,900	1982	Jan. 5	14.43	62,100
1943	Jan. 30	13.63	57,200	1963	Mar. 8	16.18	75,300	1983	Mar. 19	12.41	48,400
1944	Mar. 21	17.40	84,700	1964	Apr. 9	19.00	99,500				
1945	Sept.19	18.68	96,600	1965	Oct. 18	19.25	102,000				

02162010 CEDAR CREEK NEAR BLYTHEWOOD, SC

LOCATION.--Lat 34°11'44'', long 81°06'13'', Richland County, Hydrologic Unit 03050106, on right bank, at downstream side of bridge on State Road 59, 0.2 mi above Williams Branch, 8.0 mi southwest of Blythewood, and at mile 6.9.

DRAINAGE AREA.--48.9 mi^2.

PERIOD OF RECORD.--November 1966 to September 1983; February 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 240 ft above National Geodetic Vertical Datum of 1929 (from topographic map).

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,870 ft^3/s, July 4, 1968, gage height, 18.42 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,730 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
[1]21 YEARS OF RECORD
GRAPHICAL SOLUTION

Q_2	= 2,780
Q_5	= 3,930
Q_{10}	= 4,390
Q_{25}	= 4,750
Q_{50}	= 4,900
Q_{100}	= 5,150

STATISTICS (LOG UNITS)

Mean	= 3.430
[2]Standard Deviation	= 0.063
[2]Station Skew	= -1.410

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1967	Aug. 23	9.34	1,890	1977	Mar. 13	15.97	3,990	1987	Jan. 19	13.53	2,550
1968	July 4	18.42	4,870	1978	May 9	14.01	3,250	1988	Apr. 11	6.23	689
1969	Apr. 16	16.30	4,060	1979	Jan. 23	15.03	3,560				
1970	Mar. 22	11.29	2,300	1980	Mar. 29	13.76	3,110				
1971	Mar. 3	12.81	2,830	1981	Feb. 11	12.34	2,630				
1972	Jan. 11	8.55	1,460	1982	Jan. 1	14.17	3,260				
1973	Feb. 3	16.03	3,960	1983	Mar. 17	16.22	4,000				
1974	Apr. 5	9.14	1,640	1984	--	--	--				
1975	July 15	13.26	2,990	1985	June 30	5.28	436				
1976	Mar. 16	12.24	2,630	1986	Mar. 19	8.86	1,360				

[1]The frequency relation for this stream had a sharp break at about the 5-year recurrence interval because of a change in storage where flow breaks out of a deeply incised main channel. The logarithms of annual peak discharges for this station could not be fitted to a Pearson type III distribution; therefore, the flood frequency was determined graphically.

[2]Station skew computed using graphical frequency relation.

02162500 SALUDA RIVER NEAR GREENVILLE, SC

LOCATION.--Lat 34°50'32'', long 82°28'51'', Pickens County, Hydrologic Unit 03050109, on right bank 700 ft upstream from bridge on State Road 124, 1.6 mi donstream from Saluda Lake Dam, 2.4 mi upstream from Georges Creek, 4.6 mi west of City Hall in Greenville, and at mile 132.0.

DRAINAGE AREA.--295 mi^2.

PERIOD OF RECORD.--October 1941 to September 1978, October 1980 to current year. Monthly discharge only for some periods, published in WSP 1303.

GAGE.--Water-stage recorder until 1978, crest-stage gage thereafter. Elevation of gage is 797.48 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Some regulation at low and medium flow by powerplant at Saluda Lake. Capacity of reservoirs insufficient to affect monthly figures of runoff. About 41,688,041 gal per day or 64.5 ft^3/s diverted above station for City of Greenville water supply during water year. City of Greenville began diverting water from Saluda River (Table Rock Reservoir) in 1930; supplemented by North Saluda Reservoir in 1961.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,000 ft^3/s, Oct. 7, 1949, gage height, 19.38 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,540 ft^3/s and extended on basis of computation of peak flow over the dam at Saluda Lake.

FLOOD-FREQUENCY DATA (ft^3/s)
43 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 4,560
Q_5	= 6,490
Q_{10}	= 7,800
Q_{25}	= 9,480
Q_{50}	= 10,800
Q_{100}	= 12,000

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.658
Standard Deviation	= 0.184
Weighted Skew	= -0.035

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1942	Feb. 17	11.63	5,980	1957	Apr. 6	9.62	4,780	1972	June 21	9.86	5,380
1943	Dec. 30	11.01	5,620	1958	Apr. 29	6.65	2,970	1973	May 28	12.36	6,960
1944	Mar. 30	8.37	4,060	1959	June 1	7.65	3,580	1974	Jan. 1	7.56	3,830
1945	Mar. 27	6.26	2,740	1960	Mar. 31	7.56	3,520	1975	Mar. 14	13.78	7,540
1946	Jan. 8	14.48	7,720	1961	June 23	15.43	8,300	1976	May 30	8.01	4,160
1947	Jan. 20	7.42	3,460	1962	Dec. 12	12.04	6,220	1977	Mar. 30	11.38	6,310
1948	Aug. 5	6.87	3,140	1963	Mar. 6	10.43	5,260	1978	Jan. 26	9.15	4,950
1949	July 13	12.12	6,280	1964	Apr. 8	9.57	4,760	1981	Oct. 1	5.11	1,900
1950	Oct. 7	19.38	11,000	1965	Oct. 5	18.14	10,100	1984	Dec. 11	8.43	4,450
1951	Dec. 8	6.76	3,080	1966	Feb. 14	10.62	5,390	1985	Aug. 17	7.38	3,680
1952	Mar. 23	10.94	5,560	1967	Aug. 24	14.19	7,530	1986	Nov. 30	5.23	2,020
1953	Feb. 22	8.87	4,360	1968	Mar. 13	7.46	3,500	1987	Mar. 2	11.60	6,430
1954	Jan. 23	15.05	8,040	1969	Apr. 18	9.23	4,770	1988	Aug. 5	5.47	2,235
1955	Feb. 7	7.85	3,700	1970	Aug. 8	5.95	2,580				
1956	Apr. 16	7.38	3,460	1971	Oct. 30	5.54	2,290				

02163000 SALUDA RIVER NEAR PELZER, SC

LOCATION.--Lat 34°40'05'', long 82°27'55'', Anderson County, Hydrologic Unit 03051009, on right bank, 0.4 mi downstream from Hurricane Creek, 1.9 mi north of Pelzer, and at mile 114.2.

DRAINAGE AREA.--405 mi^2.

PERIOD OF RECORD.--December 1929 to 1978.

GAGE.--Crest-stage gage 1972-88. Elevation of gage is 727.75 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Some regulation at low and medium flow by powerplant above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft^3/s, Oct. 7, 1949, gage height, 10.53 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 11,300 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
57 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 6,380
Q_5	= 8,910
Q_{10}	= 10,500
Q_{25}	= 12,500
Q_{50}	= 13,900
Q_{100}	= 15,200

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.798
Standard Deviation	= 0.179
Weighted Skew	= -0.238

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
[1]1929	Sept. 27	5.80	6,460	1949	Nov. 29	7.37	8,270	1969	Apr. 18	7.86	8,960
1930	Oct. 2	6.88	9,400	1950	Oct. 7	10.53	13,600	1970	Aug. 9	4.00	2,850
1931	May 22	3.90	2,750	1951	Dec. 8	4.76	4,120	1971	Mar. 3	4.52	3,630
1932	Dec. 15	5.08	4,900	1952	Mar. 24	7.40	8,370	1972	June 21	6.24	6,280
1933	Oct. 17	6.39	7,990	1953	Feb. 22	5.82	5,720	1973	May. 29	6.16	6,160
1934	Mar. 5	5.80	6,460	1954	Jan. 24	7.89	9,220	1974	Apr. 5	5.10	4,500
1935	Jan. 10	5.54	5,760	1955	Feb. 7	5.28	4,920	1975	Mar. 15	7.72	8,720
1936	Apr. 7	10.26	13,300	1956	Apr. 16	5.88	5,880	1976	Jan. 28	5.62	5,290
1937	Jan. 3	8.00	9,390	1957	Apr. 6	5.75	5,720	1977	Mar. 30	7.80	8,860
1938	Oct. 19	8.54	10,200	1958	Apr. 29	5.25	4,760	1978	Jan. 26	--	--
1939	Aug. 20	6.24	6,360	1959	June 1	4.97	4,440	1979	Apr. 26	6.57	6,810
1940	Aug. 14	8.31	9,920	1960	Mar. 31	5.43	5,080	1980	Jan. 18	5.92	5,770
1941	July 9	3.76	2,540	1961	June 23	7.87	9,220	1981	Oct. 1	6.09	6,040
1942	Feb. 17	6.66	7,180	1962	Dec. 13	8.11	9,560	1982	Feb. 3	6.20	6,220
1943	Jan. 28	6.49	6,840	1963	Mar. 6	8.53	10,200	1983	--	--	--
1944	Mar. 20	5.78	5,720	1964	Apr. 8	8.60	10,200	1984	Dec. 12	5.60	5,260
1945	Mar. 27	4.57	3,720	1965	Oct. 6	9.63	12,000	1985	Aug. 17	5.03	4,400
1946	Jan. 7	8.63	10,400	1966	Mar. 4	6.62	6,890	1986	Nov. 30	3.85	2,640
1947	Jan. 20	5.75	5,720	1967	Aug. 25	7.46	8,280	1987	Mar. 1	7.50	8,350
1948	Aug. 6	4.28	3,340	1968	Dec. 12	5.32	4,830	1988	Jan. 20	4.26	3,240

[1]No record Oct 1 to Aug 31.

02163500 SALUDA RIVER NEAR WARE SHOALS, SC

LOCATION.--Lat 34°23'01'', long 82°13'12'', Greenwood County, Hydrologic Unit 03050109, on right bank 2.0 mi southeast of Ware Shoals, 2.5 mi downstream from Ware Shoals Dam, 5.0 mi upstream from Turkey Creek, and at mile 83.7.

DRAINAGE AREA.--581 mi^2.

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1303.

GAGE.--Water-stage recorder and data collection platform. Elevation of gage is 438.15 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Some regulation at low and medium flow by powerplants upstream. Capacity of reservoirs insufficient to affect monthly figures of runoff. About 41,517,000 gal per day or 64.2 ft^3/s diverted above station for City of Greenville water supply during water year. City of Greenville began diverting water from Saluda River (Table Rock Reservoir) in 1930; supplemented by North Saluda Reservoir in 1961.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,700 ft^3/s, Sept. 14, 1973, gage height, 22.85 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 13,800 ft^3/s and extended by indirect computation of peak flow over dam.

FLOOD-FREQUENCY DATA (ft^3/s)
50 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 9,180
Q_5	= 13,600
Q_{10}	= 16,440
Q_{25}	= 19,700
Q_{50}	= 22,000
Q_{100}	= 24,200

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.947
Standard Deviation	= 0.218
Weighted Skew	= -0.430

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1939	Aug. 18	14.29	10,500	1959	June 2	9.92	5,070	1979	Feb. 25	15.05	9,150
1940	Aug. 13	20.48	20,600	1960	Oct. 11	11.37	5,970	1980	Mar. 28	14.36	8,460
1941	July 7	9.27	5,010	1961	Feb. 22	17.91	12,600	1981	Oct. 1	6.02	2,660
1942	Mar. 21	13.87	8,300	1962	Dec. 13	18.52	13,600	1982	Jan. 4	15.38	9,510
1943	Jan. 18	18.18	15,300	1963	Mar. 6	21.12	17,600	1983	Apr. 10	9.24	4,390
1944	Mar. 20	16.45	11,700	1964	Apr. 8	20.63	16,700	1984	Dec. 6	14.81	8,910
1945	Sept.13	10.99	5,970	1965	Oct. 5	18.17	13,000	1985	Aug. 18	9.08	4,290
1946	Jan. 7	17.71	14,300	1966	Mar. 4	16.06	10,300	1986	Nov. 30	7.25	3,270
1947	Jan. 20	13.25	7,880	1967	Aug. 25	--	12,000	1987	Mar. 2	15.67	9,840
1948	July 16	10.48	5,410	1968	July 10	18.16	12,900	1988	Jan. 21	7.69	3,490
1949	Nov. 29	19.12	16,500	1969	Jan. 20	17.06	11,500				
1950	Oct. 8	18.45	14,900	1970	Mar. 22	7.04	2,840				
1951	Dec. 8	9.11	4,740	1971	Mar. 3	16.38	10,700				
1952	Mar. 24	19.20	14,100	1972	Jan. 10	15.96	10,200				
1953	Feb. 21	13.59	8,180	1973	Sept.14	22.85	20,700				
1954	Jan. 24	15.34	9,700	1974	Jan. 1	14.36	8,460				
1955	Feb. 7	12.38	7,090	1975	Sept.18	17.42	12,000				
1956	Sept.26	14.61	9,080	1976	Mar. 16	13.87	7,980				
1957	Apr. 7	11.27	5,830	1977	Oct. 9	16.47	10,800				
1958	Nov. 19	16.48	10,400	1978	Jan. 26	15.92	10,100				

02165000 REEDY RIVER NEAR WARE SHOALS, SC

LOCATION.--Lat 34°25'02'', long 82°09'10'', Laurens County, Hydrologic Unit 03050109, on downstream side of State Road S-30-36 bridge, 5.5 mi northeast of Ware Shoals, 6.0 mi downstream from Boyd Mill Dam, and at mile 8.7.

DRAINAGE AREA.--236 mi^2.

PERIOD OF RECORD.--March 1939 to current year.

REVISED RECORDS.--WSP 892: 1939. WSP 922: Drainage area. WSP 1723: 1940, 1943, 1948-49, 1952(M). WSP 1904: 1940, 1943, 1946, 1949, 1952. WDR-SC-77-1: Drainage area. WDR-SC-78-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 453.86 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1977, at site 4.1 mi upstream at datum 26.76 ft higher.

REMARKS.--Records good. Some regulation at low and medium flow by powerplants above station. Capacity of reservoirs insufficient to affect monthly figures of runoff. Diversion into basin by City of Greenville above station 02163500.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,000 ft^3/s, Sept. 14, 1973, gage height, 15.40 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,650 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
49 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 4,290
Q_5	= 6,700
Q_{10}	= 8,400
Q_{25}	= 10,600
Q_{50}	= 12,200
Q_{100}	= 13,900

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.624
Standard Deviation	= 0.237
Weighted Skew	= -0.196

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1940	Aug. 14	13.32	9,410	1960	Oct. 11	5.76	3,620	1980	Mar. 29	12.23	4,210
1941	July 17	4.40	2,380	1961	Feb. 22	11.18	7,940	1981	Feb. 12	7.64	1,390
1942	Feb. 18	6.50	4,270	1962	Dec. 13	10.97	7,800	1982	Jan. 5	13.86	5,120
1943	Jan. 19	9.69	6,960	1963	Mar. 7	14.92	10,600	1983	Mar. 28	8.60	2,100
1944	Mar. 21	7.41	4,840	1964	Apr. 9	11.84	8,390	1984	Dec. 7	12.55	4,370
1945	Sept.17	4.64	2,580	1965	Oct. 6	7.54	5,320	1985	Feb. 2	8.84	2,280
1946	Jan. 8	10.44	7,380	1966	Mar. 5	6.94	4,830	1986	Nov. 30	7.56	1,560
1947	Jan. 21	5.48	3,470	1967	Jan. 9	4.45	2,370	1987	Mar. 2	13.96	5,080
1948	Mar. 8	4.74	2,680	1968	July 10	8.31	5,920	1988	Jan. 21	8.06	1,740
1949	Nov. 29	10.64	7,520	1969	Apr. 20	7.22	5,150				
1950	Oct. 8	7.56	5,370	1970	Mar. 23	3.58	1,600				
1951	Sept. 8	4.28	2,220	1971	Mar. 3	5.66	3,820				
1952	Mar. 5	8.60	6,120	1972	June 22	11.20	7,940				
1953	Feb. 22	5.31	3,200	1973	Sept.14	15.40	11,000				
1954	Jan. 17	7.12	4,960	1974	Jan. 2	5.63	3,790				
1955	Feb. 8	5.02	2,960	1975	Feb. 22	11.38	8,070				
1956	Sept.27	6.29	3,970	1976	Oct. 19	5.58	3,740				
1957	Apr. 6	3.87	1,830	1977	Dec. 9	9.67	6,870				
1958	Nov. 20	7.88	5,600	1978	Oct. 27	12.90	4,020				
1959	Sept. 9	4.15	2,130	1979	Apr. 14	13.71	4,950				

02165200 SOUTH RABON CREEK NEAR GRAY COURT, SC

LOCATION.--Lat 34°31'12'', long 82°09'26'', Laurens County, Hydrologic Unit 03050109, on left bank, 125 ft upstream from U.S. Highway 76, 2.5 mi upstream from North Rabon Creek and 7.0 mi southwest of Gray Court.

DRAINAGE AREA.--29.5 mi^2.

PERIOD OF RECORD.--January 1967 to September 1981.

GAGE.--Water-stage recorder. Datum of gage is 548.37 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,100 ft^3/s Sept. 14, 1973; gage height, 9.86 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,170 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
15 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	=	812
Q_5	=	1,540
Q_{10}	=	2,160
Q_{25}	=	3,110
Q_{50}	=	3,940
Q_{100}	=	4,870

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	2.912
Standard Deviation	=	0.330
Weighted Skew	=	0.038

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1967	July 8	1.91	353	1972	Jan. 11	4.31	1,240	1977	Oct. 9	4.60	1,490
1968	Jan. 10	3.41	803	1973	Sept.14	9.86	4,100	1978	Jan. 26	3.77	1,020
1969	Jan. 20	4.06	998	1974	Jan. 1	2.91	684	1979	Sept.30	1.93	282
1970	Mar. 22	2.04	379	1975	Mar. 14	5.17	1,660	1980	Apr. 15	3.49	874
1971	Mar. 3	4.19	1,190	1976	Mar. 16	3.30	780	1981	Oct. 1	1.70	219

02167000 SALUDA RIVER AT CHAPPELLS, SC

LOCATION.--Lat 34°10'40'', long 81°51'40'', Newberry County, Hydrologic Unit 03050109, on left bank on downstream side of bridge on State Highway 39 at Chappells, 6.7 mi downstream from dam at Lake Greenwood, 9.8 mi upstream from Little River, and at mile 52.3.

DRAINAGE AREA.--1,360 mi^2.

PERIOD OF RECORD.--October 1926 to current year. Monthly discharge only for some periods, published in WSP 1303. Gage-height records collected since 1905 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder and data collection platform. Datum of gage is 362.89 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1926 to Sept. 30, 1939, nonrecording or recording gage at site 300 ft downstream at datum 363.79 ft above mean sea level. Oct. 1, 1939 to Oct. 7, 1964, recording gage at present site and at datum 363.89 ft above mean sea level.

REMARKS.--Peaks are from graphs based on gage readings by the U.S. Weather Bureau prior to June 27, 1927. Peak discharges since May 1940 affected by storage in Lake Greenwood.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 63,700 ft^3/s, Oct. 2, 1929, gage height 32.5 ft, present datum.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Aug. 26, 1908 reached a stage of 36.7 ft (present site and datum), from reports of National Weather Service.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 27,000 ft^3/s and extended on basis of velocity-area studies.

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1888	Sept.--	30.60	--	1933	Oct. 19	21.28	19,200	1961	Feb. 26	20.71	17,400
1906	Dec. 22	18.60	--	1934	June 7	20.94	18,000	1962	Jan. 7	17.64	10,200
1907	Oct. 5	13.30	--	1935	Oct. 12	17.22	9,700	1963	Mar. 13	22.78	24,300
1908	Aug. 26	34.70	--	1936	Apr. 8	28.60	49,400	1964	Apr. 8	24.98	33,200
1909	June 5	20.50	--	1937	Jan. 5	22.03	21,400	1965	June 16	21.35	16,400
1910	Mar. 3	17.60	--	1938	Oct. 22	20.91	18,000	1966	Mar. 5	21.41	16,600
1911	Oct. 9	12.20	--	1939	Mar. 1	19.07	13,200	1967	Aug. 26	19.01	10,800
1912	Mar. 16	25.00	--	1940	Aug. 14	28.66	49,700	1968	Jan. 11	16.90	8,300
1913	Mar. 16	22.00	--	1941	July 17	14.96	7,400	1969	Apr. 19	24.32	26,200
1914	Dec. 31	16.70	--	1942	Mar. 22	22.82	24,300	1970	Mar. 22	13.02	5,510
1915	Jan. 8	16.50	--	1943	Jan. 29	22.21	22,100	1971	Mar. 4	22.51	19,800
1916	Feb. 4	20.30	--	1944	Mar. 21	24.84	32,300	1972	June 22	21.69	17,400
1917	Mar. 6	19.00	--	1945	Sept.18	13.52	6,080	1973	Apr. 2	22.75	20,600
1918	Aug. 4	17.00	--	1946	Jan. 8	22.30	22,500	1974	Apr. 5	14.74	6,800
1919	Oct. 28	22.60	--	1947	Jan. 21	15.68	8,100	1975	Mar. 15	24.84	28,300
1920	Dec. 12	19.50	--	1948	Apr. 1	19.52	14,200	1976	Mar. 17	19.03	10,800
1921	Feb. 11	22.50	--	1949	Nov. 29	24.59	31,400	1977	Oct. 9	26.47	35,200
1922	Feb. 17	20.00	--	1950	Mar. 7	12.46	5,310	1978	Jan. 27	15.48	7,740
1923	Mar. 18	18.80	--	1951	Apr. 3	12.39	5,430	1979	Feb. 26	21.74	17,500
1924	July 10	16.80	--	1952	Mar. 25	24.68	31,900	1980	Mar. 29	24.24	25,800
1925	Jan. 20	20.50	--	1953	Feb. 25	13.70	6,380	1981	Oct. 1	18.06	9,870
1926	Jan. 20	15.50	--	1954	Jan. 24	13.57	6,320	1982	Jan. 4	23.05	21,600
1927	Dec. 30	15.30	7,700	1955	Apr. 15	13.78	6,460	1983	Apr. 9	15.72	7,900
1928	Aug. 17	29.97	56,200	1956	Apr. 18	18.79	12,400	1984	Dec. 7	22.60	20,200
1929	Sept.28	30.90	60,700	1957	Apr. 5	12.48	5,590	1985	Feb. 7	--	6,000
1930	Oct. 2	31.50	63,700	1958	Nov. 20	19.14	13,200	1986	Dec. 1	14.66	7,140
1931	Apr. 1	12.49	5,310	1959	June 3	12.28	5,390	1987	Mar. 3	20.11	13,300
1932	Jan. 9	20.51	16,800	1960	Feb. 14	21.00	18,300	1988	Feb. 4	10.31	4,380

02167500 SALUDA RIVER NEAR SILVERSTREET

LOCATION.--Lat 34°11', long 81°44', Newberry County, Hydrologic Unit 03050109, on left bank 200 ft upstream from Higgins Perry Bridge on State Highway 19, 1 mi downstream from Little River, and 2.5 mi south of Silverstreet.

DRAINAGE AREA.--1,620 mi^2, approximately.

PERIOD OF RECORD.--October 1926 to June 1966 (discontinued). Monthly discharge only for some periods, published in WSP 1303.

GAGE.--Water-stage recorder. Datum of gage is 345.13 ft above mean sea level, unadjusted. Prior to Oct 15, 1929, staff gage at same site and datum. Since Mar 8, 1939, water-stage recorder for station on Lake Murray near Columbia has been used as an auxiliary gage for this station.

REMARKS.--Records fair. Flow regulated by Lake Greenwood.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 83,800 ft^3/s Oct. 3, 1929, gage height, 33.97 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 28,000 ft^3/s and extended on basis of discharge measurements made at Chappells near Chapin.

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1928	Aug. 18	30.60	60,400	1943	Jan. 30	21.66	20,100	1958	Nov. 21	--	15,400
1929	Sept.28	32.05	69,800	1944	Mar. 21	26.93	39,100	1959	Sept.30	--	6,860
1930	Oct. 3	33.97	83,800	1945	Apr. 27	15.46	9,130	1960	Feb. 14	22.54	21,100
1931	Apr. 2	12.87	6,180	1946	Jan. 9	--	22,800	1961	Feb. 26	22.30	20,600
1932	Jan. 10	21.12	18,600	1947	Jan. 21	18.12	13,000	1962	Jan. 7	20.39	15,800
1933	Sept. 8	21.52	19,600	1948	Apr. 2	20.40	14,600	1963	Mar. 14	24.12	26,300
1934	June 7	20.84	18,000	1949	Nov. 30	25.80	32,200	1964	Apr. 9	27.10	39,500
1935	Oct. 11	17.22	11,500	1950	Mar. 8	14.43	6,860	1965	June 17	22.15	20,200
1936	Apr. 8	31.89	63,000	1951	Apr. 4	14.07	6,970				
1937	Jan. 6	21.98	20,900	1952	Mar. 25	25.34	28,400				
1938	Oct. 23	19.73	15,800	1953	Feb. 25	14.20	6,860				
1939	Mar. 2	20.00	16,300	1954	Apr. 2	14.96	7,760				
1940	Aug. 15	30.29	58,300	1955	Apr. 15	16.88	10,400				
1941	July 18	15.08	8,610	1956	Apr. 18	18.62	13,200				
1942	Mar. 23	22.96	23,700	1957	Apr. 6	14.21	6,620				

02169000 SALUDA RIVER NEAR COLUMBIA, SC

LOCATION.--Lat 34°00'50'', long 81°05'17'', Richland County, Hydrologic Unit 03050109, on left bank 0.4 mi upstream from site of Old Saluda Mill, 1.6 mi upstream from confluence with Broad River and 3.3 mi west of State Capital in Columbia, and at mile 1.67.

DRAINAGE AREA.--2,520 mi^2.

PERIOD OF RECORD.--August 1925 to current year.

GAGE.--Water-stage recorder and data collection platform. Datum of gage is 149.46 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 1, 1929, at same site at datum 150.46 ft above mean sea level.

REMARKS.--Records good. Flow regulated by Lake Murray and Lake Greenwood.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 67,000 ft^3/s, Oct. 2, 1929, gage height, 15.22 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 36,000 ft^3/s and extended on basis of discharge measurements made at Wise Ferry Bridge near Chapin.

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1926	Mar. 31	7.75	23,300	1951	Aug. 10	6.29	10,300	1976	July 7	7.99	18,400
1927	July 20	5.62	12,300	1952	June 12	6.39	10,700	1977	Mar. 22	7.95	18,200
1928	Aug. 18	13.04	58,200	1953	Sept. 3	6.13	9,600	1978	Jan. 26	7.80	17,400
1929	Mar. 6	12.43	53,600	1954	Nov. 9	6.10	9,600	1979	Feb. 26	9.53	27,200
1930	Oct. 2	15.22	67,000	1955	Aug. 19	6.03	9,250	1980	Mar. 30	--	31,000
1931	Sept.11	5.86	9,590	1956	Aug. 15	5.65	8,080	1981	July 11	7.68	16,300
1932	Sept.13	6.12	10,300	1957	Sept. 3	6.07	10,300	1982	Jan. 4	8.30	19,600
1933	Feb. 20	9.04	24,500	1958	Jan. 24	6.77	13,100	1983	Apr. 8	8.54	21,000
1934	Nov. 2	6.44	11,500	1959	Sept.30	6.26	10,300	1984	Aug. 9	8.03	18,100
1935	Sept. 5	7.17	14,800	1960	Feb. 13	7.02	13,200	1985	Feb. 5	7.99	18,400
1936	Apr. 7	14.53	61,600	1961	Apr. 12	7.33	15,200	1986	Sept.26	7.75	17,100
1937	Apr. 9	8.74	23,000	1962	Mar. 13	6.83	13,100	1987	Aug. 26	7.69	16,700
1938	Nov. 15	6.28	11,600	1963	Mar. 13	6.83	13,100	1988	Oct. 29	7.21	14,200
1939	Sept. 8	6.04	9,950	1964	Apr. 10	11.25	38,800				
1940	Aug. 28	5.95	9,950	1965	June 16	13.32	53,200				
1941	Dec. 13	6.15	10,700	1966	Mar. 4	7.16	14,300				
1942	June 10	6.92	13,500	1967	Aug. 24	--	12,000				
1943	July 22	6.09	10,300	1968	Jan. 10	7.44	15,700				
1944	Mar. 24	9.15	25,700	1969	Apr. 19	10.82	35,700				
1945	Sept.17	6.13	10,300	1970	Aug. 31	6.48	11,400				
1946	Apr. 26	9.71	28,700	1971	Aug. 17	8.31	20,400				
1947	Dec. 7	6.13	10,300	1972	Jan. 11	7.93	18,200				
1948	Apr. 8	8.31	20,400	1973	Apr. 7	8.63	22,300				
1949	May 1	9.16	25,700	1974	Feb. 25	8.48	21,400				
1950	Nov. 22	6.38	10,700	1975	Feb. 19	8.22	19,800				

02169500 CONGAREE RIVER AT COLUMBIA, SC

LOCATION.--Lat 33°59'35'', long 81°03'00'', Lexington County, Hydrologic Unit 03050110, on right bank at Columbia, 1,000 ft downstream from Gervais Street Bridge, 1.4 mi downstream from confluence of Broad and Saluda Rivers, and at mile 174.8.

DRAINAGE AREA.--7,850 mi^2, approximately.

PERIOD OF RECORD.--October 1939 to current year. Gage-height records collected at site 1,000 ft upstream October 1891 to December 1933 and at present site since January 1934 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 113.02 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Lake Murray and Lake Greenwood on the Saluda River and to some extent, at low and medium flow, by powerplants on the Broad River.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 155,000 ft^3/s, Oct. 11, 1976, gage height, 29.74 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood since at least October 1891, discharge 364,000 ft^3/s, Aug. 27, 1908, gage height, 39.8 ft, present datum, at site 1,000 ft upstream, from records of National Weather Service.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 150,000 ft^3/s and extended logarithmically.

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1852	Sept.--	34.40	--	1926	Feb. 26	13.00	51,100	1961	Feb. 25	21.08	74,400
1892	Jan. 20	24.60	154,000	1927	Feb. 25	10.20	39,100	1962	Jan. 8	19.69	65,200
1893	Aug. 29	21.10	110,000	1928	Aug. 18	33.50	311,000	1963	Mar. 15	23.09	91,800
1894	Oct. 24	12.70	49,800	1929	Mar. 1	25.90	173,000	1964	Apr. 10	28.60	142,000
1895	Oct. 10	20.40	103,000	1930	Oct. 3	33.10	303,000	1965	Oct. 18	26.18	120,000
1896	Feb. 7	17.80	79,600	1931	Dec. 8	6.70	26,800	1966	Mar. 6	21.74	80,600
1897	Feb. 7	21.50	115,000	1932	Jan. 10	16.70	71,600	1967	Aug. 25	23.78	97,900
1898	Sept.25	10.20	39,100	1933	Oct. 19	21.50	115,000	1968	Jan. 12	18.81	61,200
1899	Feb. 8	21.70	117,000	1934	Mar. 29	12.70	33,400	1969	Apr. 19	23.37	94,200
1900	Apr. 22	22.00	120,000	1935	Oct. 12	23.30	92,300	1970	Aug. 12	15.44	45,200
1901	Apr. 3	23.00	132,000	1936	Apr. 8	33.34	231,000	1971	Mar. 4	21.55	79,100
1902	Mar. 2	22.00	120,000	1937	Oct. 19	20.56	70,900	1972	Jan. 12	19.26	63,900
1903	June 9	27.20	194,000	1938	Oct. 21	18.42	57,900	1973	Apr. 2	23.99	99,800
1904	Aug. 10	12.20	47,500	1939	Mar. 2	19.93	66,400	1974	Jan. 2	16.87	51,600
1905	Feb. 22	14.70	59,400	1940	Aug. 16	26.14	121,000	1975	Mar. 16	26.47	122,000
1906	Dec. 22	20.30	102,000	1941	July 18	17.19	52,000	1976	Mar. 17	16.16	48,400
1907	June 3	9.00	34,500	1942	Feb. 19	17.31	52,400	1977	Oct. 11	29.74	155,000
1908	Aug. 27	39.80	364,000	1943	Jan. 20	19.44	63,400	1978	Jan. 28	21.87	81,700
1909	June 5	22.00	120,000	1944	Mar. 21	24.57	105,000	1979	Feb. 26	23.46	94,500
1910	Mar. 3	13.80	54,900	1945	Sept.20	24.30	102,000	1980	Mar. 30	23.29	93,100
1911	Oct. 9	10.90	41,900	1946	Jan. 9	19.21	62,200	1981	Oct. 2	16.81	51,300
1912	Mar. 17	30.70	256,000	1947	Jan. 21	19.42	63,400	1982	Jan. 6	22.20	84,200
1913	Mar. 16	23.20	135,000	1948	Feb. 14	17.72	54,400	1983	Mar. 18	19.65	66,000
1914	Dec. 31	14.60	58,900	1949	Nov. 30	25.56	116,000	1984	Feb. 16	20.30	70,300
1915	Jan. 8	17.40	76,500	1950	Oct. 9	16.77	50,200	1985	Aug. 19	17.52	54,700
1916	July 17	31.50	272,000	1951	Dec. 9	12.27	32,000	1986	Nov. 23	18.37	58,900
1917	Mar. 6	17.80	79,600	1952	Mar. 6	23.20	91,400	1987	Mar. 3	26.67	123,000
1918	Jan. 31	12.20	47,500	1953	Feb. 23	15.28	43,500	1988	Jan. 23	9.78	24,700
1919	Oct. 28	20.70	106,000	1954	Jan. 25	19.66	65,200				
1920	Aug. 28	19.50	94,100	1955	Apr. 15	16.06	47,000				
1921	Feb. 11	24.30	149,000	1956	Apr. 18	15.22	43,100				
1922	Feb. 17	22.20	123,000	1957	Apr. 7	12.00	31,000				
1923	Mar. 18	17.70	78,800	1958	May 1	19.46	64,000				
1924	Jan. 18	15.60	64,600	1959	Sept.30	17.63	53,900				
1925	Jan. 20	23.50	139,000	1960	Oct. 1	19.68	65,200				

02169550 CONGAREE CREEK AT CAYCE, S.C.

LOCATION.--Lat 33°56'15'', long 81°04'40'', Lexington County, Hydrologic Unit 03050110, on left bank 20 ft downstream from bridge on U.S. Highway 21 at Cayce, 2.1 mi upstream from Sixmile Creek, and at mile 5.4.

DRAINAGE AREA.--122 mi^2.

PERIOD OF RECORD.--October 1959 to September 1980 (discontinued). Occasional low-flow measurements, water years 1925, 1944, 1949-59.

GAGE.--Water-stage recorder. Datum of gage is 128.98 ft National Geodetic Vertical Datum of 1929 (South Carolina Highway Department benchmark). Prior to Jan. 20, 1960, nonrecording gage at same site and datum.

REMARKS.--Records good. About 3.3 ft^3/s diverted by City of Cayce for municipal supply.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,840 ft^3/s, Oct. 1, 1959, gage height, 5.92 ft from floodmarks.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,560 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
21 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	=	856
Q_5	=	1,130
Q_{10}	=	1,320
Q_{25}	=	1,580
Q_{50}	=	1,770
Q_{100}	=	1,970

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	2.940
Standard Deviation	=	0.139
Weighted Skew	=	0.310

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1960	Oct. 1	5.92	1,840	1970	Aug. 12	4.55	800	1980	Mar. 29	4.29	650
1961	Aug. 5	4.81	1,050	1971	Mar. 4	5.09	1,140				
1962	Feb. 23	4.55	912	1972	Jan. 11	4.29	650				
1963	Jan. 21	4.14	660	1973	June 23	4.98	1,070				
1964	Aug. 30	4.84	1,090	1974	Jan. 2	4.19	565				
1965	Oct. 16	5.61	1,630	1975	July 15	4.77	932				
1966	Mar. 4	4.18	596	1976	July 6	4.58	818				
1967	Aug. 25	4.77	932	1977	Dec. 13	4.49	764				
1968	Jan. 11	4.18	596	1978	Jan. 26	4.27	640				
1969	Apr. 17	4.63	848	1979	Feb. 25	4.99	1,070				

02169630 BIG BEAVER CREEK NEAR ST. MATTHEWS, S.C.

LOCATION.--Lat 33°44'12'', long 80°57'30'', Calhoun County, Hydrologic Unit 03050110, on right downstream wingwall of bridge on U.S. Highway 21, 0.1 mi downstream from Rock Branch, 11.6 mi northwest of St. Matthews, and at mile 8.2.

DRAINAGE AREA.--10.0 mi^2.

PERIOD OF RECORD.--July 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 164.21 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,360 ft^3/s, July 29, 1971, gage height, 6.66 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 207 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
22 YEARS OF RECORD
[1]GRAPHICAL SOLUTION

Q_2	= 86
Q_5	= 165
Q_{10}	= 260
Q_{25}	= 425
Q_{50}	= 571
Q_{100}	= 745

STATISTICS (LOG UNITS)

Mean	= 1.958
[2]Standard Deviation	= 0.350
[2]Station Skew	= 0.469

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1967	Aug. 23	3.53	58	1977	June 20	3.33	54	1987	June 19	3.32	87
1968	June 9	--	240	1978	June 6	4.05	112	1988	June 26	3.15	77
1969	Apr. 16	3.88	97	1979	Sept. 5	4.73	272				
1970	Mar. 22	4.02	118	1980	Mar. 13	3.66	68				
1971	July 29	6.66	1,360	1981	Aug. 17	3.79	95				
1972	Aug. 24	3.97	101	1982	Dec. 31	3.59	63				
1973	Feb. 2	4.29	157	1983	Dec. 31	3.66	88				
1974	Aug. 6	3.71	73	1984	May 30	4.34	180				
1975	July 24	4.10	120	1985	Feb. 6	3.21	74				
1976	Jan. 27	3.33	52	1986	Nov. 22	3.57	98				

[1]The logarithms of annual peak discharges could not be fitted to a Pearson type III distribution because of storage in ponds ; therefore, a graphical solution was used that followed the systematic record at the lower end and the WRC weighted estimate at the upper end of the flood frequency curve.

[2]Station skew computed using graphical frequency relation.

02170000 SANTEE RIVER AT FERGUSON, SC

LOCATION.--Lat 33°26'15'', long 80°16'20'', at Ferguson, Orangeburg County, Hydrologic Unit 03050111, 4 miles downstream from Eutaw Creek, inundated by Lake Marion, since 1942.

DRAINAGE AREA.--14,600 mi^2.

PERIOD OF RECORD.--Sept. 21, 1907 to Nov. 22, 1921 (U.S. Weather Bureau), Nov. 23, 1921 to Sept. 30, 1941.

GAGE.--Non recording prior to Nov. 23, 1921, recording thereafter. Datum of gage is 42.30 ft National Geodetic Vertical Datum of 1929, supplementary adjustment of 1936.

REMARKS.--Gage heights prior to Nov. 23, 1921, furnished by the U.S. Weather Bureau. Peaks affected since August 1929 by storage in Lake Murray and to a lesser degree since 1904 by storage in reservoirs on Catawba, Wateree, and Broad Rivers.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 374,000 ft^3/s[3], July 21, 1916, gage height 24.74 ft.

STAGE-DISCHARGE RELATION--Defined by current-meter measurements below 260,000 ft^3/s and extended on basis of velocity-area studies.

FLOOD FREQUENCY DATA--Flow records at this site were affected by regulation and were not used in the regionalization analyses. Site is currently inundated by Lake Marion; therefore frequency data were not computed.

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1908	Aug. 31	23.70	344,000	1923	Mar. 23	15.20	89,000	1938	Oct. 27	13.54	38,000
1909	June 10	15.62	101,000	1924	Jan. 23	13.87	50,000	1939	Mar. 7	15.1	86,000
1910	Mar. 7	13.90	50,000	1925	Jan. 23	17.13	146,000	1940	Aug. 21	[2]14.07	[3]56,000
1911	Jan. 10	13.47	38,000	1926	Mar. 3	13.43	35,900	1941	July 23	[2]15.98	[3]48,000
1912	Mar. 20	19.44	215,000	1927	Mar. 2	13.30	32,500				
1913	Mar. 21	15.56	101,000	1928	Aug. 22	20.60	251,000				
1914	Jan. 6	14.02	53,000	1929	Mar. 10	17.55	160,000				
1915	Jan. 24	14.65	71,000	1930	Oct. 7	21.04	263,000				
1916	July 21	24.74	374,000	1931	Jan. 19	12.88	26,000				
1917	Mar. 10	14.70	74,000	1932	Jan. 15	13.95	53,000				
1918	Feb. 6	13.90	50,000	1933	Jan. 3	[1]14.08	56,000				
1919	July 27	17.12	146,000	1934	June 11	[1]13.80	47,000				
1920	Apr. 3	14.00	53,000	1935	Oct. 17	13.81	47,000				
1921	Feb. 15	17.47	158,000	1936	Apr. 11	20.42	245,000				
1922	Feb. 21	15.77	106,000	1937	Jan. 11	14.19	59,000				

[1]Occurred on June 12, 1934.

[2]Affected by backwater; occurred on July 25, 1941.

[3]Maximum daily discharge.

02171500 SANTEE RIVER NEAR PINEVILLE, S.C.

LOCATION.--Lat 33°27'15'', long 80°09'25'', Berkeley County, Hydrologic Unit 03050112, on right bank 2.4 mi downstream from Lake Marion Dam, 3.0 mi upstream from Dead River, 6.7 mi west of Pineville, and at mile 85.0.

DRAINAGE AREA.--14,700 mi^2, approximately.

PERIOD OF RECORD.--April 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 23.00 ft National Geodetic Vertical Datum of 1929 (levels by South Carolina Public Service Authority). Prior to Feb. 25, 1943, nonrecording gage at site 2.2 mi upstream of temporary water-stage recorder operated by Corps of Engineers, at site 200 ft upstream, at different datum.

REMARKS.--Records good. Flow completely regulated by Lake Marion. Water is diverted above station from Lake Marion through canal into Lake Moultrie for generation of power and for navigation, then discharged into Cooper River basin.

EXTREMES FOR PERIOD OF RECORD.-- Maximum discharge, 155,000 ft^3/s, Sept. 23, 1945, gage height, 31.1 ft (from floodmarks).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 9,830 ft^3/s and extended by computation of peak flow over spillway at Lake Marion.

FLOOD-FREQUENCY DATA--Frequency analysis not performed on Santee River near Pineville, SC, because regulation pattern has been altered since rediversion in 1986.

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1943	Mar. 27	23.23	32,300	1958	Nov. 30	25.85	59,700	1973	Apr. 7	25.24	50,100
1944	Mar. 24	29.52	122,000	1959	July 27	12.36	6,840	1974	Feb. 16	21.94	21,300
1945	Sept.23	31.10	155,000	1960	Feb. 18	26.57	69,300	1975	Mar. 19	27.91	91,700
1946	Jan. 9	25.50	55,800	1961	Mar. 3	24.68	46,500	1976	May. 8	6.49	2,340
1947	Feb. 8	30.04	132,000	1962	Mar. 17	24.03	36,100	1977	Oct. 14	26.01	60,200
1948	Feb. 17	26.35	73,800	1963	Mar. 18	25.43	52,200	1978	Jan. 31	24.74	43,900
1949	Dec. 4	28.56	114,000	1964	Apr. 13	27.07	77,200	1979	Mar. 2	27.74	85,000
1950	Aug. 29	--	782	1965	Oct. 22	27.41	88,100	1980	Mar. 30	26.58	67,900
1951	June 24	--	617	1966	Mar. 9	24.94	51,400	1981	Mar. 16	7.01	2,640
1952	Mar. 11	27.77	89,900	1967	Aug. 26	25.42	52,400	1982	Jan. 10	26.88	72,000
1953	Mar. 25	7.15	2,830	1968	Jan. 17	22.77	23,000	1983	Apr. 16	24.73	32,300
1954	Apr. 17	3.53	1,140	1969	Apr. 20	24.87	45,500	1984	Dec. 13	13.65	25,600
1955	Oct. 15	2.34	653	1970	Mar. 24	24.03	36,400	1985	Feb. 12	9.55	3,900
1956	Apr. 7	2.51	744	1971	Mar. 8	25.51	53,600	1986	Dec. 6	22.24	[1]16,600
1957	Apr. 6	3.12	989	1972	Jan. 21	21.64	19,800	1987	Mar. 6	---	[1]87,000
								1988	Oct. 3	---	[1]850

[1]Daily discharge from one-dimensional model.

02171560 SANTEE RIVER NEAR RUSSELLVILLE, SC

LOCATION.--Lat 33°29'38'', long 80°57'38'', Berkeley County, Hydrologic Unit 03050112, on downstream side of U.S. Highway 52 bridge, 5.2 mi northeast of Russellville, and at mile 63.7.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1978 to current year.

GAGE.--Water-stage recorder and data collection platform. Datum of gage is 10.59 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Discharge records for 1986-88 are computed by utilization of the One-Dimensional unsteady flow simulation model. Flow completely regulated by Lake Marion.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 133,000 ft^3/s, Mar. 3, 1979; gage height, 26.54 ft.

STAGE-DISCHARGE RELATION--Defined by discharge measurements below 105,000 ft^3/s and extended graphically on logarithmic plotting paper.

FLOOD-FREQUENCY DATA--Frequency analysis is not performed for this station because regulation pattern has been altered since rediversion in 1986.

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1979	Mar. 3	26.54	133,000	1984	May 14	[1]21.74	36,100				
1980	Apr. 1	24.45	70,400	1985	Feb. 13	[1]14.48	[2]2,430				
1981	Mar. 17	5.38	1,150	1986	Nov. 29	---	[2]10,800				
1982	Jan. 11	24.37	68,800	1987	Mar. 7	---	[2]5,800				
1983	Apr. 16	23.13	47,000	1988	Feb. 22	---	[2]1,900				

[1]September 6, backwater from rediversion

[2]Daily discharge from one-dimensional model

SANTEE RIVER BASIN
02171650 SANTEE RIVER BELOW ST. STEPHENS, SC

LOCATION.--Lat 33°24'05'', long 79°51'20'', Berkeley County, Hydrologic Unit 03050112, on right bank, on Tract 13P of Francis Marion National Forest, 3.9 mi east of St. Stephens, 600 ft downstream from Mattassee Lake, and at mile 52.0.

DRAINAGE AREA--14,900 mi^2, approximately.

PERIOD OF RECORD--October 1970 to September 1981.

GAGE--Water-stage recorder. Datum of gage is 0.23 ft; National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 98,900 ft^3 Mar 21, 22, 1975 gage height, 29.67 ft.

STAGE-DISCHARGE RELATION--Defined by current meter measurements below 83,700 ft^3/s and extended graphically on logarithmic plotting paper.

FLOOD-FREQUENCY DATA--Frequency analysis not performed for this station because regulation pattern has been altered since rediversion in 1986.

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1971	Mar. 10	25.77	66,200	1976	July 1	9.00	2,150	1981	Mar. 18	---	1,300
1972	Jan. 23	21.29	22,700	1977	Oct. 17	25.93	58,900				
1973	Apr. 9	25.32	61,800	1978	Feb. 3	24.96	50,600				
1974	Feb. 21	20.64	19,600	1979	Mar. 4	28.98	89,600				
1975	Mar. 21	29.67	98,900	1980	Apr. 4	27.52	73,400				

02171680 WEDBOO CREEK NEAR JAMESTOWN, S.C.

LOCATION.--Lat 33°19'50'', long 79°48'10'', Berkeley County, Hydrologic Unit 03050112, on right downstream wingwall of culvert on State Highway 45, 1.4 mi southeast of Alvin, 3.3 mi upstream from mouth, and 7.5 mi northwest of Jamestown.

DRAINAGE AREA.--17.4 mi^2.

PERIOD OF RECORD.--September 1966 to February 1972, February 1973 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 20 ft (from topographic map).

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, unknown, probably exceeded 1300 ft^3/s (possible backwater from swamp), Sept. 5, 1987, gage height, 7.59 ft; maximum gage-height, 9.49 ft, Mar. 10, 1987 (caused by backwater from Santee River).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 700 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
21 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	=	260
Q_5	=	535
Q_{10}	=	765
Q_{25}	=	1,100
Q_{50}	=	1,380
Q_{100}	=	1,690

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	2.399
Standard Deviation	=	0.386
Weighted Skew	=	-0.248

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1967	July 31	4.68	80	1977	Dec. 12	4.31	198	1987	Mar. 1	4.68	294
1968	Aug. 11	3.42	47	1978	May 9	4.45	232	1988	Sept.10	3.83	104
1969	Aug. 5	4.98	286	1979	Sept. 5	5.31	546				
1970	Mar. 22	4.25	159	1980	Apr. 14	5.19	490				
1971	Aug. 26	5.96	928	1981	Apr. 2	1.99	11				
1972	Feb. 3	4.97	408	1982	June 19	5.15	473				
1973	Apr. 10	5.86	856	1983	Mar. 25	5.84	840				
1974	Feb. 8	4.69	297	1984	May 4	4.16	161				
1975	Mar. 22	8.82	348	1985	Aug. 13	3.74	93				
1976	July 8	3.98	127	1986	Nov. 22	5.20	492				

02172500 SOUTH FORK EDISTO RIVER NEAR MONTMORENCI, S.C.

LOCATION.--Lat 33°34'35'', long 81°30'50'', Aiken County, Hydrologic Unit 03050204, near center of span on downstream side of bridge on State Highway 215, 0.4 mi upstream from Cedar Creek, 1 mi upstream from Shaw Creek, and 7.6 mi northeast of Montmorenci.

DRAINAGE AREA.--198 mi^2.

PERIOD OF RECORD.--October 1939 to September 1966; October 1971 to current year.

GAGE.--Water-stage recorder prior to September 1966. Crest-stage gage thereafter. Datum of gage is 250.18 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Oct. 29, 1954, wire-weight gage at same site and datum.

REMARKS.--Records good prior to June 30, 1966, and fair thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,010 ft^3/s, Aug. 31, 1964, gage height, 10.24 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,490 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
44 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 1,570
Q_5	= 2,350
Q_{10}	= 2,880
Q_{25}	= 3,580
Q_{50}	= 4,100
Q_{100}	= 4,640

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.193
Standard Deviation	= 0.210
Weighted Skew	= -0.101

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1940	Aug. 15	8.81	2,460	1955	Apr. 16	8.16	1,790	1975	July 17	9.03	2,700
1941	July 19	8.81	2,460	1956	Apr. 13	6.75	755	1976	June 29	7.92	1,550
1942	Mar. 10	7.88	1,650	1957	May 14	6.90	750	1977	Dec. 19	8.53	2,120
1943	Mar. 23	7.98	1,740	1958	Apr. 18	7.82	1,560	1978	Jan. 28	8.75	2,360
1944	Mar. 24	8.71	2,370	1959	May 10	8.33	1,990	1979	Feb. 24	8.45	2,040
1945	Apr. 27	6.97	898	1960	Oct. 1	9.57	3,120	1980	Mar. 13	8.18	1,780
1946	Apr. 19	6.73	898	1961	Feb. 26	9.15	2,690	1981	Feb. 18	6.78	738
1947	Oct. 10	7.47	1,320	1962	Feb. 24	8.83	2,540	1982	Jan. 6	7.98	1,600
1948	Mar. 9	7.62	1,400	1963	Jan. 22	7.46	1,160	1983	Apr. 11	9.36	3,210
1949	Aug. 30	8.52	2,180	1964	Aug. 31	10.24	5,010	1984	Feb. 29	7.50	1,190
1950	Sept. 9	6.86	685	1965	Dec. 28	8.85	2,470	1985	Feb. 7	8.28	1,870
1951	Apr. 5	6.71	615	1966	June 12	8.00	1,620	1986	Nov. 22	7.62	1,290
1952	Mar. 6	8.21	2,040	1972	Jan. 14	8.20	1,780	1987	Mar. 1	7.25	1,020
1953	May 8	7.62	1,400	1973	Feb. 2	7.73	1,380	1988	Sept. 9	6.79	744
1954	Dec. 15	7.07	858	1974	Jan. 3	7.13	948				

02173000 SOUTH FORK EDISTO RIVER NEAR DENMARK, S.C.

LOCATION.--Lat 33°23'35'', long 81°08'00'', Orangeburg County, Hydrologic Unit 03050204, on left bank at downstream side of bridge on U.S. Highway 321, 360 ft downstream from Seaboard Coast Line Railroad Bridge, 1.8 mi downstream from Little River, 4.8 mi north of Denmark, and at mile 136.6.

DRAINAGE AREA.--720 mi^2.

PERIOD OF RECORD.--August 1931 to current year.

GAGE.--Continuous water-stage recorder prior to September 1971; crest-stage gage 1972 to 1980; continuous recorder thereafter. Datum of gage is 155.68 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Oct. 27, 1931, nonrecording gage at same site and datum.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,500 ft^3/s, Apr. 11, 1936, gage height, 10.91 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood known since at least 1893, 11.7 ft in October 1929, on basis of information from State Highway Department (discharge 17,100 ft^3/s, by conveyance-slope study).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,020 ft^3/s and extended on the basis of velocity-area studies.

FLOOD-FREQUENCY DATA (ft^3/s)
56 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 2,540
Q_5	= 3,860
Q_{10}	= 4,920
Q_{25}	= 6,520
Q_{50}	= 7,920
Q_{100}	= 9,490

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.425
Standard Deviation	= 0.202
Weighted Skew	= 0.581

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1930	Oct. --	11.70	17,100	1951	Apr. 2	6.97	1,320	1971	Mar. 5	8.64	4,820
1932	Aug. 12	8.47	2,930	1952	Mar. 26	7.59	2,390	1972	Jan. 18	7.74	2,750
1933	Nov. 4	8.07	2,290	1953	Sept.29	7.56	2,600	1973	Feb. 3	8.01	3,270
1934	June 5	8.51	2,850	1954	Dec. 16	7.25	1,750	1974	Feb. 19	7.36	2,130
1935	Aug. 22	8.36	2,640	1955	Apr. 20	7.19	1,640	1975	July 19	8.08	3,420
1936	Apr. 11	10.91	13,500	1956	Feb. 8	6.91	1,350	1976	June 30	7.19	1,880
1937	Oct. 14	8.03	2,260	1957	Mar. 27	6.70	1,030	1977	Dec. 19	7.84	2,940
1938	Apr. 10	8.20	2,470	1958	Apr. 17	8.00	3,210	1978	Jan. 28	7.63	2,560
1939	Mar. 3	9.05	4,860	1959	May 14	7.70	2,810	1979	Feb. 24	8.03	3,310
1940	Aug. 19	7.92	2,060	1960	Apr. 6	8.75	5,150	1980	--	--	--
1941	July 22	7.91	2,060	1961	Apr. 17	8.22	3,780	1981	Feb. 18	6.98	1,560
1942	Dec. 26	8.06	2,840	1962	Feb. 27	7.80	3,110	1982	Jan. 6	7.41	2,200
1943	Mar. 24	7.62	2,080	1963	Jan. 22	7.67	2,710	1983	Apr. 13	7.80	2,870
1944	Mar. 25	8.24	3,220	1964	Sept. 2	9.41	7,350	1984	May 8	7.90	3,050
1945	Sept.19	8.32	3,310	1965	Oct. 20	8.18	3,610	1985	Feb. 8	7.68	2,850
1946	Jan. 1	7.40	1,740	1966	Mar. 5	8.28	3,820	1986	Nov. 23	6.84	2,000
1947	Aug. 15	--	2,040	1967	Aug. 28	7.91	3,070	1987	Jan. 24	7.73	2,650
1948	Feb. 14	8.38	4,010	1968	June 13	7.46	2,490	1988	Jan. 24	6.42	904
1949	Oct. 5	8.30	3,810	1969	Apr. 20	8.10	3,460				
1950	Mar. 9	6.89	1,210	1970	Apr. 1	7.58	2,480				

02173500 NORTH FORK EDISTO RIVER AT ORANGEBURG, S.C.

LOCATION.--Lat 33°29'00'', long 80°52'25'', Orangeburg County, Hydrologic Unit 03050203, on left bank under bridge on U.S. Highway 301 at Orangeburg, 0.5 mi upstream from Seaboard Coast Line Railroad bridge, 1.5 mi downstream from Caw Caw Swamp and at mile 22.1.

DRAINAGE AREA.--683 mi^2.

REVISED RECORDS.--WSP 1032: Drainage area.

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1303.

GAGE.--Water-stage recorder. Datum of gage is 149.02 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Feb. 23, 1939, nonrecording gage at same site and datum.

REMARKS.--Records good. About 7.4 ft^3/s, diverted by City of Orangeburg for municipal supply.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,500 ft^3/s, Sept. 18, 1945, gage height, 14.28 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood known since at least 1893, 14.7 ft in September 1928, discharge, 10,000 ft^3/s, from rating curve extended as described below, on basis of information from Department of Public Utilities, City of Orangeburg.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,230 ft^3/s and extended by velocity-area studies.

FLOOD-FREQUENCY DATA (ft^3/s)
51 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 2,590
Q_5	= 3,860
Q_{10}	= 4,820
Q_{25}	= 6,150
Q_{50}	= 7,240
Q_{100}	= 8,420

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.422
Standard Deviation	= 0.199
Weighted Skew	= 0.277

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1928	Sept.--	14.70	10,000	1955	Apr. 20	7.78	1,420	1972	Jan. 16	9.40	2,990
1939	Mar. 3	9.98	3,910	1956	Feb. 8	7.44	1,160	1973	June 13	10.01	3,730
1940	Aug. 19	8.59	2,340	1957	June 17	7.62	1,250	1974	Aug. 11	8.14	1,880
1941	June 29	11.00	5,210	1958	May 1	9.73	3,340	1975	July 21	8.94	2,530
1942	Dec. 26	8.96	2,670	1959	May 14	8.80	2,570	1976	July 1	9.19	2,760
1943	Mar. 24	8.20	1,930	1960	Apr. 6	10.36	4,240	1977	Dec. 17	9.02	2,600
1944	Mar. 25	8.90	2,620	1961	Apr. 17	9.61	3,340	1978	Jan. 26	9.22	2,790
1945	Sept.18	14.28	9,500	1962	Feb. 24	9.21	2,770	1979	Sept. 6	11.56	5,720
1946	Jan. 1	7.90	1,670	1963	Jan. 22	9.26	2,880	1980	Mar. 31	9.23	2,800
1947	Apr. 18	8.16	1,880	1964	Aug. 31	11.34	5,410	1981	Oct. 2	7.38	1,410
1948	Sept. 7	10.25	4,170	1965	Oct. 6	11.05	5,080	1982	Jan. 6	8.10	1,850
1949	Aug. 29	10.47	4,560	1966	Mar. 6	9.79	3,450	1983	Apr. 13	9.04	2,610
1950	Sept.10	8.03	1,800	1967	Aug. 29	9.00	2,570	1984	May 30	10.00	3,720
1951	Apr. 10	7.50	1,370	1968	June 12	8.65	2,240	1985	Feb. 8	8.78	2,380
1952	Mar. 25	8.54	2,410	1969	Apr. 21	8.60	2,200	1986	Nov. 23	8.23	1,940
1953	Sept.29	8.43	2,160	1970	Apr. 2	8.71	2,300	1987	Jan. 24	8.88	2,470
1954	Apr. 10	7.79	1,550	1971	Mar. 5	11.64	5,850	1988	Mar. 13	6.50	1,050

02174000 EDISTO RIVER NEAR BRANCHVILLE, S.C.

LOCATION.--Lat 33°10'35'', long 80°45'05'', Bamberg County, Hydrologic Unit 03050205, on right bank 400 ft downstream from bridge on U.S. Highway 21, 4.7 mi downstream from Brier Branch, 5.2 mi south of Branchville, and at mile 100.0.

DRAINAGE AREA.--1,720 mi^2, approximately.

PERIOD OF RECORD.--October 1945 to current year. Monthly discharge only for some periods, published in WSP 1303.

GAGE.--Water-stage recorder. Datum of gage is 80.02 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to May 19, 1949, at datum 1.00 ft higher.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,600 ft^3/s, Sept. 3, 1964, gage height, 11.44 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood known since at least 1893, 13.5 ft, present datum, in September 1928, on basis of information from State Highway Department, discharge, 25,700 ft^3/s, by conveyance-slope study.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 13,800 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
44 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 5,890
Q_5	= 8,820
Q_{10}	= 10,900
Q_{25}	= 13,500
Q_{50}	= 15,600
Q_{100}	= 17,700

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.768
Standard Deviation	= 0.210
Weighted Skew	= -0.057

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1928	Sept.--	14.50	25,700	1960	Apr. 8	10.93	12,600	1975	July 22	8.88	6,060
1946	Jan. 4	8.75	4,100	1961	Apr. 19	9.97	9,190	1976	June 30	9.08	6,460
1947	Apr. 18	8.23	4,870	1962	Mar. 3	9.04	6,490	1977	Dec. 20	8.73	5,760
1948	Apr. 4	10.95	9,140	1963	Jan. 26	8.97	6,490	1978	Jan. 28	9.64	7,750
1949	Oct. 6	11.21	10,000	1964	Sept. 3	11.44	14,600	1979	Sept. 8	9.81	8,210
1950	Mar. 12	6.22	2,540	1965	Oct. 19	10.57	10,700	1980	Mar. 16	9.62	7,730
1951	Apr. 3	7.36	3,640	1966	Mar. 8	10.06	8,910	1981	Feb. 22	6.95	3,200
1952	Mar. 29	8.47	5,350	1967	Sept. 1	7.69	4,260	1982	Jan. 9	8.14	4,700
1953	Mar. 3	8.27	4,950	1968	June 16	8.10	4,240	1983	Apr. 16	8.91	6,120
1954	Oct. 3	6.79	3,030	1969	May 21	8.86	5,630	1984	May 9	10.02	8,770
1955	Apr. 24	6.43	2,690	1970	Apr. 3	9.17	6,380	1985	Feb. 11	8.61	5,350
1956	Feb. 11	--	3,030	1971	Mar. 8	10.68	11,100	1986	Nov. 24	8.82	5,730
1957	Mar. 31	5.63	2,200	1972	Feb. 6	9.09	6,480	1987	Mar. 4	8.90	5,900
1958	Apr. 19	--	8,050	1973	June 17	10.12	9,120	1988	Mar. 17	5.62	2,150
1959	Mar. 9	8.36	5,150	1974	Feb. 20	8.57	5,440				

02174250 COW CASTLE CREEK NEAR BOWMAN, S.C.

LOCATION.--Lat 33°22'43'', long 80°42'00'', Orangeburg County, Hydrologic Unit 03050206, at bridge on county road, 1.1 mi above Buck Branch and 3.2 mi northwest of Bowman.

DRAINAGE AREA.--23.4 mi^2.

PERIOD OF RECORD.--October 1970 to September 1980.

GAGE.--Water-stage recorder. Elevation of gage is 125 ft (from topographic map).

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,340 ft^3/s probably occurred Sept. 4 or 5, 1979, gage height, 7.37 ft from recorded range in stage..

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 830 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
10 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	=	436
Q_5	=	861
Q_{10}	=	1,260
Q_{25}	=	1,920
Q_{50}	=	2,540
Q_{100}	=	3,290

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	2.657
Standard Deviation	=	0.338
Weighted Skew	=	0.307

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1971	Mar. 4	6.36	466	1975	Feb. 20	5.76	267	1979	Sept. 4	7.37	2,340
1972	Feb. 4	5.64	188	1976	July 7	5.87	292	1980	Mar. 13	6.34	493
1973	June 12	6.83	1,290	1977	Mar. 22	5.92	306				
1974	Feb. 17	5.95	278	1978	Jan. 26	6.25	430				

02175000 EDISTO RIVER NEAR GIVHANS, S.C.

LOCATION.--Lat 33°01'40'', long 80°23'30'', Dorchester County, Hydrologic Unit 03050205, on left bank at downstream side of bridge on State Highway 61, 2.3 mi downstream from Four Hole Swamp, 2.8 mi west of Givhans, and at mile 59.9.

DRAINAGE AREA.--2,730 mi^2, approximately.

PERIOD OF RECORD.--January 1939 to current year.

REVISED RECORDS.--WSP 1032: Drainage area. WSP 1303: 1939 (monthly and yearly runoff).

GAGE.--Water-stage recorder. Datum of gage is 20.46 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. About 112 ft^3/s a day diverted above station for Charleston water supply during year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,500 ft^3/s, June 14, 1973, gage height, 15.84 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1904, 17.5 ft in February 1925, from investigation by Charleston Commissioners of Public Works, discharge, 24,900 ft^3/s.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 24,500 ft^3/s.

FLOOD-FREQUENCY DATA (ft^3/s)
52 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 10,100
Q_5	= 15,400
Q_{10}	= 18,800
Q_{25}	= 22,900
Q_{50}	= 25,900
Q_{100}	= 28,700

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	3.989
Standard Deviation	=	0.231
Weighted Skew	=	-0.397

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1904	Aug. --	17.00	--	1954	Jan. 6	7.91	3,610	1974	Feb. 22	12.56	9,800
1919	July 31	14.00	--	1955	Sept.16	8.81	4,540	1975	Feb. 26	12.52	9,690
1924	Sept.--	15.50	--	1956	Feb. 14	9.54	5,440	1976	July 8	12.63	9,980
1925	Feb. --	17.50	24,900	1957	May 21	7.89	3,610	1977	Dec. 19	12.06	8,610
1928	Sept.11	15.70	19,500	1958	Apr. 22	13.13	12,000	1978	Feb. 2	12.80	10,400
1939	Mar. 6	14.68	16,900	1959	Mar. 9	13.90	14,100	1979	Sept. 9	15.51	22,400
1940	Aug. 15	13.03	12,600	1960	Apr. 11	14.29	14,600	1980	Mar. 19	13.99	14,700
1941	July 5	12.64	10,800	1961	Apr. 20	14.05	14,100	1981	Feb. 26	7.61	3,030
1942	Dec. 30	13.48	13,100	1962	Mar. 6	12.41	10,200	1982	Jan. 9	11.46	7,490
1943	Mar. 30	11.32	8,010	1963	Jan. 29	11.80	8,060	1983	Mar. 22	13.84	14,000
1944	Mar. 30	13.44	13,100	1964	July 29	15.12	19,800	1984	May 12	13.92	14,300
1945	Sept.21	17.28	24,300	1965	Oct. 21	15.14	19,900	1985	Feb. 17	9.94	5,200
1946	Jan. 24	11.58	8,940	1966	Mar. 11	13.63	13,100	1986	Dec. 19	12.60	9,940
1947	Apr. 22	11.38	8,540	1967	Jan. 13	9.83	4,910	1987	Mar. 8	12.70	10,200
1948	Apr. 6	14.38	15,200	1968	June 20	10.07	5,250	1988	Sept.18	7.78	3,150
1949	Dec. 3	14.62	15,800	1969	May 26	12.93	10,800				
1950	Sep. 12	8.66	4,090	1970	Apr. 6	13.07	11,200				
1951	Apr. 9	9.21	4,790	1971	Mar. 11	13.90	14,200				
1952	Apr. 2	11.27	7,950	1972	Feb. 7	13.10	11,300				
1953	Mar. 7	12.26	10,400	1973	June 14	15.84	24,500				

02175450 SAVANNAH CREEK NEAR EHRHARDT, S.C.

LOCATION.--Lat 33°02'03'', long 81°03'11'', Colleton county, Hydrologic Unit 03050207, on upstream side of culvert on State Highway 641, 1.2 mi upstream from Salkehatchie River, and 6.0 mi north of Miley.

DRAINAGE AREA.--12.4 mi^2.

PERIOD OF RECORD.--December 1974 to current year.

GAGE.--Dual digital water-stage and rainfall recorders, September 1967 to October 1974. Partial record crest gage from December 1974 to current year.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 895 ft^3/s, March 13, 1980, gage height, 8.30 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 211 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
12 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	=	291
Q_5	=	445
Q_{10}	=	561
Q_{25}	=	724
Q_{50}	=	858
Q_{100}	=	1,000

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	2.472
Standard Deviation	=	0.213
Weighted Skew	=	0.221

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1977	June 20	6.53	324	1981	Oct. 1	5.86	230	1985	Feb. 7	5.29	160
1978	Jan. 25	6.69	347	1982	Jan. 5	5.38	170	1986	Dec. 14	7.12	400
1979	Apr. 26	6.80	362	1983	Feb. 17	5.89	236	1987	Mar. 1	6.58	333
1980	Mar. 13	8.30	895	1984	May 13	7.04	395	1988	Sept.12	5.33	164

02175500 SALKEHATCHIE RIVER NEAR MILEY, S.C.

LOCATION.--Lat 32°59'20'', long 81°03'10'', Hampton County, Hydrologic Unit 03050207, on right bank 90 ft downstream from bridge on U.S. Highway 601, 2.4 mi downstream from Savannah Creek, 3.1 mi upstream from Hampton and Branchville Railroad bridge, 3.1 mi northwest of Miley, and at mile 68.0.

DRAINAGE AREA.--341 mi^2.

PERIOD OF RECORD.--February 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 64.35 ft National Geodetic Vertical Datum of 1929. Dec. 6, 1957 to Jan. 22, 1971, nonrecording gage at same site and datum. Prior to Dec. 6, 1957, nonrecording gage at bridge 90 ft upstream at same datum.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,300 ft^3/s, Mar. 13, 1980, gage height, 5.44 ft

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,010 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
38 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 1,490
Q_5	= 2,120
Q_{10}	= 2,550
Q_{25}	= 3,080
Q_{50}	= 3,490
Q_{100}	= 3,890

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.172
Standard Deviation	= 0.183
Weighted Skew	= -0.059

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1951	Apr. 2	3.92	774	1966	Mar. 6	5.00	2,200	1981	Oct. 2	3.88	771
1952	Mar. 28	4.02	905	1967	Mar. 13	4.60	1,740	1982	Jan. 5	4.17	1,110
1953	Sept.30	4.04	950	1968	June 13	4.32	1,340	1983	Feb. 17	4.19	1,140
1954	May 15	3.87	860	1969	May 20	4.90	2,200	1984	May 9	4.90	2,200
1955	Apr. 15	4.02	950	1970	Apr. 2	4.57	1,700	1985	Feb. 9	4.07	985
1956	May 6	3.99	774	1971	Mar. 4	4.48	1,570	1986	Dec. 14	5.35	2,850
1957	Mar. 26	3.68	732	1972	Feb. 4	--	2,000	1987	Mar. 2	4.77	1,840
1958	Apr. 17	4.21	1,140	1973	June 20	4.93	2,240	1988	Sept.12	4.19	1,070
1959	Mar. 7	4.61	1,600	1974	Feb. 18	4.53	1,650				
1960	Apr. 6	4.94	1,880	1975	July 20	5.00	2,350				
1961	Apr. 17	4.48	1,390	1976	July 7	4.83	2,100				
1962	Mar. 15	4.33	1,200	1977	Mar. 24	4.34	1,480				
1963	Jan. 23	4.24	1,100	1978	Jan. 28	4.63	1,800				
1964	Sept. 2	4.99	2,340	1979	Sept. 6	5.34	3,050				
1965	Oct. 17	5.06	2,230	1980	Mar. 13	5.44	3,300				

02176000 COMBAHEE RIVER NEAR YEMASSEE, S.C.

LOCATION.--Lat 32°42'25'', long 80°49'35'', Hampton County, Hydrologic Unit 03050208, near left bank on downstream side of pile bent on bridge on U.S. Highway 17A, 0.2 mi upstream from Atlantic Coast Line Railroad bridge, 1.8 mi northeast of Yemassee, and 5 mi downstream from Black Creek.

DRAINAGE AREA.--1,100 mi^2.

PERIOD OF RECORD.--October 1952 to September 1966.

GAGE.--Recording prior to June 30, 1957; crest-stage gage thereafter. Datum of gage is at National Geodetic Vertical Datum of 1929.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,700 ft^3/s July 22, 1964, gage height 10.87 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,910 ft^3/s and extended on the basis of velocity-area studies.

FLOOD-FREQUENCY DATA (ft^3/s)
15 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 6,050
Q_5	= 9,230
Q_{10}	= 11,400
Q_{25}	= 14,100
Q_{50}	= 16,200
Q_{100}	= 18,200

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.744
Standard Deviation	= 0.225
Weighted Skew	= -0.223

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1952	Feb. 19	7.51	3,530	1957	June 6	6.71	2,150	1962	Mar. 17	8.50	5,630
1953	Mar. 8	7.32	3,110	1958	Apr. 19	9.22	7,930	1963	Jan. 25	8.39	5,410
1954	May 18	7.51	3,530	1959	Mar. 7	10.16	9,850	1964	July 22	10.87	11,700
1955	Apr. 18	8.18	5,330	1960	Nov. 2	10.80	11,400	1965	Oct. 16	10.62	10,900
1956	Feb. 10	7.96	4,680	1961	Apr. 20	9.22	7,350	1966	Mar. 8	9.29	7,600

02176500 COOSAWHATCHIE RIVER NEAR HAMPTON, SC

LOCATION.--Lat 32°50'10'', long 81°07'55'', Hampton County, Hydrologic Unit 03050208, near left bank on downstream side of bridge on U.S. Highway 601, 1.6 mi downstream from Black Creek, 2.5 mi southwest of Hampton, and at mile 33.6.

DRAINAGE AREA.--203 mi^2.

PERIOD OF RECORD.--February 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 50.30 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 26, 1954, nonrecording gage at same site and datum.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,160 ft^3/s, Sept. 2, 1969, gage height, 8.39 ft, from floodmarks.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,300 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
38 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 1,680
Q_5	= 2,720
Q_{10}	= 3,510
Q_{25}	= 4,620
Q_{50}	= 5,530
Q_{100}	= 6,500

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.229
Standard Deviation	= 0.246
Weighted Skew	= 0.067

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1951	Apr. 1	4.82	1,220	1966	Mar. 5	5.65	2,370	1981	Apr. 3	4.09	585
1952	Feb. 16	5.20	1,780	1967	Aug. 12	4.53	974	1982	July 18	4.55	989
1953	Mar. 24	5.78	2,750	1968	June 9	3.89	416	1983	Mar. 8	5.18	1,620
1954	May 16	5.45	2,360	1969	Sept. 2	8.39	8,160	1984	July 31	4.84	1,190
1955	Apr. 15	5.05	1,430	1970	Mar. 31	5.66	2,120	1985	Aug. 31	4.65	1,000
1956	Feb. 7	4.98	1,390	1971	Mar. 4	5.16	1,530	1986	Nov. 23	5.80	2,440
1957	May 31	4.26	649	1972	Feb. 4	5.23	1,660	1987	Mar. 2	5.50	2,030
1958	Apr. 16	5.07	1,400	1973	June 14	5.47	1,940	1988	Sept.10	4.85	1,200
1959	Mar. 6	5.87	2,950	1974	Feb. 9	5.11	1,520				
1960	Jan. 31	5.48	2,150	1975	July 19	5.61	2,150				
1961	Apr. 17	5.16	1,580	1976	July 7	5.29	1,760				
1962	Mar. 12	--	1,250	1977	Mar. 8	4.57	1,030				
1963	Jan. 29	5.61	2,190	1978	Jan. 27	5.03	1,460				
1964	Aug. 30	6.21	3,720	1979	Sept. 6	5.66	2,210				
1965	Oct. 16	6.27	3,880	1980	Mar. 14	7.09	4,800				

02184500 WHITEWATER RIVER AT JOCASSEE, S.C.

LOCATION.--Lat 34°58'19'', long 82°56'24'', Oconee County, Hydrologic Unit 03060101, on right bank at highway bridge at Jocassee, 0.8 mi upstream from confluence with Toxaway River.

DRAINAGE AREA.--47.3 mi^2.

PERIOD OF RECORD.--January 1951 to April 1968.

GAGE.--Water-stage recorder. Datum of gage is 777.79 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,900 ft^3/s, Oct. 4, 1964, gage height, 14.30 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,540 ft^3/s and extended on the basis of indirect computations of peak discharge using the width contraction method.

FLOOD-FREQUENCY DATA (ft^3/s)
16 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	=	3,120
Q_5	=	4,490
Q_{10}	=	5,510
Q_{25}	=	6,920
Q_{50}	=	8,060
Q_{100}	=	9,290

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	3.505
Standard Deviation	=	0.180
Weighted Skew	=	0.343

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1952	Mar. 11	11.17	5,280	1957	Apr. 4	6.31	2,710	1962	Dec. 12	7.00	3,100
1953	Feb. 21	6.53	2,820	1958	Dec. 20	--	2,410	1963	Mar. 6	5.78	2,370
1954	Jan. 22	6.38	2,730	1959	May 31	--	1,990	1964	Sept.29	12.48	5,990
1955	Feb. 6	--	2,260	1960	Oct. 9	--	2,340	1965	Oct. 4	14.30	6,900
1956	Apr. 15	5.10	1,950	1961	Feb. 25	6.65	2,890	1966	Oct. 1	11.20	5,350
								1967	June 4	9.76	4,630

02185000 KEOWEE RIVER NEAR JOCASSEE, S.C.

LOCATION.--Lat 34°57'21'', long 82°54'41'', Oconee County, Hydrologic Unit 03060101, on right bank 0.6 mi downstream from bridge on State Highway 11, 1.8 mi southeast of Jocassee, and 2.6 mi upstream from Eastatoe Creek.

DRAINAGE AREA.--148 mi^2.

PERIOD OF RECORD.--December 1949 to April 1968.

GAGE.--Water-stage recorder. Datum of gage is 737.43 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,000 ft^3/s, Oct. 4, 1964, gage height, 22.03 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 8,480 ft^3/s and extended on the basis of indirect computations of peak discharge using the slope-area method.

FLOOD-FREQUENCY DATA (ft^3/s)
18 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 9,500
Q_5	= 13,700
Q_{10}	= 16,700
Q_{25}	= 20,700
Q_{50}	= 24,000
Q_{100}	= 27,400

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.984
Standard Deviation	= 0.182
Weighted Skew	= 0.215

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1950	Sept. 1	11.46	11,800	1956	Apr. 16	6.74	5,780	1962	Dec. 12	10.45	10,400
1951	Dec. 7	8.29	7,700	1957	Apr. 4	9.03	8,540	1963	Mar. 6	--	6,620
1952	Mar. 11	16.23	16,200	1958	Dec. 20	7.08	6,260	1964	Sept.29	17.84	17,700
1953	Feb. 21	10.03	9,840	1959	Apr. 12	6.85	5,900	1965	Oct. 4	22.03	21,000
1954	Jan. 22	9.49	9,190	1960	Feb. 5	6.52	5,540	1966	Mar. 13	16.07	16,100
1955	Feb. 6	7.77	7,100	1961	Feb. 25	9.67	9,450	1967	June 4	14.12	14,100

02185200 LITTLE RIVER NEAR WALHALLA, S.C.

LOCATION.--Lat 34°50'11'', long 82°58'48'', Oconee County, Hydrologic Unit 03060101, at downstream side of bridge on State Road 24, 0.5 mi downstream from Oconee Creek, 3.5 mi south of Salem and 6.5 mi northeast of Walhalla.

DRAINAGE AREA.--72.0 mi^2.

PERIOD OF RECORD.--March 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 807.63 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.-- Maximum discharge, 12,800 ft^3/s, June 4, 1967, gage height, 12.29 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,060 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
21 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 3,640
Q_5	= 6,790
Q_{10}	= 9,370
Q_{25}	= 13,200
Q_{50}	= 16,400
Q_{100}	= 20,000

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.560
Standard Deviation	= 0.322
Weighted Skew	= -0.033

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1967	--	12.29	12,800	1977	Mar. 30	7.55	5,700	1987	Nov. 26	7.97	5,890
1968	--	6.29	4,400	1978	Jan. 25	6.66	4,450	1988	Jan. 20	4.08	1,660
1969	Aug. 22	5.42	3,340	1979	June 8	7.93	5,400				
1970	Nov. 1	3.38	1,260	1980	Nov. 2	7.22	4,750				
1971	Jan. 5	3.37	1,260	1981	Mar. 30	2.96	860				
1972	Dec. 7	5.73	3,300	1982	Feb. 3	6.31	3,750				
1973	May 28	11.39	12,300	1983	May 20	4.19	1,750				
1974	Dec. 26	4.56	2,050	1984	--	--	--				
1975	Mar. 14	6.45	4,160	1985	Aug. 17	5.90	3,400				
1976	May 29	10.30	10,100	1986	Nov. 1	6.43	3,980				

02185500 SENECA RIVER NEAR NEWRY, S.C.

LOCATION.--Lat 34°44'09'', long 82°52'19'', Oconee County, Hydrologic Unit 03060101, on left bank 800 ft downstream from Lawrence Bridge, 0.7 mi upstream from Sixmile Creek, and 2.2 mi east of Newry.

DRAINAGE AREA.--455 mi^2.

PERIOD OF RECORD.--October 1939 to June 1961. Prior to October 1960, published as Keowee River near Newry.

GAGE.--Water-stage recorder. Datum of gage is 625.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good prior to Apr. 22, 1961 fair thereafter. Some regulation at low flow by powerplant above station. Stage-discharge relation affected by backwater from construction of Hartwell Reservoir subsequent to Apr. 21.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,200 ft^3/s, Aug. 13, 1940; maximum gage height, 24.60 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 19,300 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
22 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 16,600
Q_5	= 20,100
Q_{10}	= 22,200
Q_{25}	= 24,500
Q_{50}	= 26,000
Q_{100}	= 27,500

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 4.215
Standard Deviation	= 0.105
Weighted Skew	= -0.247

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1940	Aug. 13	24.60	25,200	1950	Oct. 7	22.69	21,100	1960	Mar. 30	15.92	13,300
1941	July 7	13.27	10,400	1951	Dec. 7	15.97	13,000	1961	June 22	20.94	20,200
1942	Feb. 17	20.28	18,900	1952	Mar. 11	23.16	22,000				
1943	Dec. 29	--	17,100	1953	Feb. 21	18.89	16,300				
1944	Mar. 20	17.01	14,900	1954	Jan. 22	--	19,700				
1945	Feb. 22	8.25	5,530	1955	Feb. 6	--	17,500				
1946	Jan. 7	21.32	20,300	1956	Apr. 16	17.32	14,900				
1947	Jan. 20	16.26	13,900	1957	Apr. 5	20.32	18,300				
1948	Aug. 4	19.09	17,500	1958	Nov. 19	13.72	10,800				
1949	Nov. 29	20.54	19,000	1959	Apr. 12	17.01	14,400				

02186000 TWELVEMILE CREEK NEAR LIBERTY, S.C.

LOCATION.--Lat 34°48'05'', long 82°44'55'', Pickens County, Hydrologic Unit 03060101, on left bank 40 ft downstream from State highway bridge, 0.8 mi downstream from Rices Creek, and 3.4 mi west of Liberty.

DRAINAGE.--106 mi^2.

PERIOD OF RECORD.--July 1954 to September 1964.

GAGE.--Water-stage recorder. Datum of gage is 822.18 ft National Geodetic Vertical Datum of 1929 (levels by Soil Conservation Service).

REMARKS.--Records good except those for periods of no gage-height record, which are fair. Storm runoff at gage affected by several small flood-detention reservoirs on tributary streams.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,360 ft^3/s, Dec. 12, 1961, gage height, 12.23 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,020 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
10 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 3,180
Q_5	= 4,080
Q_{10}	= 4,680
Q_{25}	= 5,460
Q_{50}	= 6,050
Q_{100}	= 6,640

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.507
Standard Deviation	= 0.125
Weighted Skew	= 0.272

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1955	Feb. 7	9.60	2,880	1959	June 1	9.30	2,710	1963	Mar. 6	11.38	4,680
1956	Apr. 16	9.37	2,760	1960	Mar. 31	8.71	2,490	1964	Jan. 25	9.59	3,300
1957	Apr. 5	9.80	2,930	1961	June 22	10.81	4,040				
1958	July 9	6.56	1,380	1962	Dec. 12	12.23	5,360				

02187000 SENECA RIVER NEAR ANDERSON, S.C.

LOCATION.--Lat 34°29'10'', long 82°49'45'', Anderson County, Hydrologic Unit 03060101, long 82°49'45'', on right bank, 0.25 mi downstream from bridge on State Highway 80, 1.9 mi downstream from Deep Creek, 4.2 mi upstream from confluence with Tugaloo River, and 10 mi west of Anderson.

DRAINAGE AREA.--1026 mi^2.

PERIOD OF RECORD.--June 1928 to January 1960. Monthly discharge only for some periods published in WSP 1303.

GAGE.--Water-stage recorder. Elevation of gage is 520 ft (from Corps of Engineers profile). May 28, 1928, to January 23, 1929, staff gage and January 24, 1929, to October 12, 1933, water-stage recorder, at site 15 ft downstream at same datum.

REMARKS.--Records good. Some regulation at low flow by powerplants above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 81,100 ft^3/s, Aug. 17, 1928, gage height, 25.75 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--At least 90,200 ft^3/s, Feb. 15, 1960, gage height 25.72 ft, from current-meter measurement.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 18,000 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
32 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 23,100
Q_5	= 35,700
Q_{10}	= 45,000
Q_{25}	= 58,000
Q_{50}	= 68,400
Q_{100}	= 79,500

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 4.368
Standard Deviation	= 0.221
Weighted Skew	= 0.113

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1928	Aug. 17	25.75	81,100	1939	Aug. 19	15.68	33,300	1950	Oct. 8	13.51	24,300
1929	Mar. 5	14.72	25,900	1940	Aug. 14	18.30	45,600	1951	Oct. 21	10.31	13,900
1930	Oct. 2	13.90	23,100	1941	July 7	10.13	13,300	1952	Mar. 12	15.37	32,000
1931	Nov. 17	8.20	7,800	1942	Feb. 17	15.25	31,100	1953	Feb. 22	13.21	23,200
1932	Dec. 15	12.14	17,500	1943	Dec. 30	12.54	20,800	1954	Jan. 23	13.26	23,600
1933	Oct. 18	17.73	37,600	1944	Mar. 20	13.05	22,600	1955	Feb. 7	11.74	18,400
1934	Mar. 5	12.16	19,800	1945	Mar. 27	8.30	8,850	1956	Apr. 17	11.69	18,000
1935	Jan. 10	12.24	19,800	1946	Jan. 7	17.26	40,600	1957	Apr. 6	12.89	22,200
1936	Apr. 7	19.04	49,200	1947	Jan. 21	11.76	18,400	1958	Nov. 20	9.88	12,800
1937	Oct. 1	20.07	55,200	1948	Aug. 5	10.84	15,300	1959	Apr. 13	11.00	15,300
1938	Oct. 20	14.42	27,900	1949	Nov. 29	15.11	30,700				

02187500 SAVANNAH RIVER NEAR IVA, SC

LOCATION.--Lat 34°15'20", Anderson County, Hydrologic Unit 03060103, on left bank at downstream side of bridge on State Highway 184, 0.5 mi upstream from Little Generostee Creek, 5.8 mi southwest of Iva, and at mile 296.5.

DRAINAGE AREA.--2,231 mi^2.

PERIOD OF RECORD.--October 1949 to September 1981. Monthly discharge only for some periods, published in WSP 1303.

GAGE.--Water-stage recorder. Datum of gage is 432.26 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records good. Flow regulated by powerplants above station, by Burton and Mathis Reservoirs, and by Hartwell Lake. Currently in backwater from Richard B. Russell Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 54,400 ft^3/s, Mar. 12,1952, gage height, 12.74 ft.

STAGE-DISCHARGE RELATION.--Defined by current meter measurements below 52,300 ft^3 and graphically extended on logarithmic plotting paper.

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1950	Oct. 10	---	27,500	1960	Apr. 6	6.16	12,300	1970	July 29	8.51	28,600
1951	Oct. 21	8.98	27,200	1961	Mar. 7	5.79	10,400	1971	Mar. 3	8.96	31,300
1952	Mar. 12	12.74	54,400	1962	Dec. 18	7.89	21,200	1972	Jan. 7	8.43	31,000
1953	Feb. 22	10.44	36,800	1963	Apr. 30	7.86	21,400	1973	Dec. 15	8.57	32,000
1954	Jan. 16	11.28	44,200	1964	Apr. 8	11.25	44,300	1974	Aug. 9	8.01	28,100
1955	Feb. 7	10.04	34,000	1965	Oct. 5	8.87	29,500	1975	Mar. 13	8.82	33,700
1956	Apr. 16	9.65	31,200	1966	Mar. 4	9.79	35,000	1976	Mar. 31	8.23	29,600
1957	Apr. 6	10.08	34,800	1967	June 6	8.88	30,800	1977	Mar. 30	8.12	28,800
1958	Nov. 19	9.67	32,000	1968	Jan. 12	8.58	29,000	1978	Jan. 25	8.47	31,300
1959	Apr. 13	8.22	22,000	1969	May 2	8.44	28,100	1979	Apr. 13	8.73	33,300
								1980	Mar. 28	8.36	30,500
								1981	July 24	7.99	27,800

02187900 BROADWAY CREEK NEAR ANDERSON, S.C.

LOCATION.--Lat 34°30'09'', long 82°35'00'', Anderson County, Hydrologic Unit 03060103, at bridge on State Highway 48, 0.1 mi downstream from Cupboard Creek, and 3.8 mi east of Anderson.

DRAINAGE AREA.--26.4 mi^2.

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Partial record crest gage, Elevation of gage is 660 ft (from topographic maps).

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,700 ft^3/s, March 30, 1977, gage height, 11.80 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,600 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
10 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 954
Q_5	= 1,500
Q_{10}	= 1,890
Q_{25}	= 2,390
Q_{50}	= 2,770
Q_{100}	= 3,150

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 2,970
Standard Deviation	= 0.244
Weighted Skew	= -0.226

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1977	Mar. 30	11.80	1,700	1982	Jan. 4	10.30	1,400	1987	Mar. 1	9.42	1,220
1978	Jan. 25	10.18	1,380	1984	Feb. 14	9.82	1,300	1988	Apr. 12	4.36	361
1979	Apr. 13	11.16	1,570	1985	Feb. 6	5.80	560				
1981	Feb. 10	5.53	520	1986	Nov. 1	5.98	587				

02188000 ROCKY RIVER NEAR CALHOUN FALLS, S.C.

LOCATION.--Lat 34°08', long 82°38', Abbeville County, Hydrologic Unit 03060103, on right bank, 2,000 ft upstream from Swanigan Mill bridge on county road, 3.2 mi northwest of Calhoun Falls, and 3.8 mi upstream from mouth.

DRAINAGE AREA.--267 mi^2.

PERIOD OF RECORD.--February 1950 to September 1966, crest-stage 1971-82.

GAGE.--Digital water-stage recorder. Datum of gage is 403.04 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Aug. 13, 1964, graphic water-stage recorder at same site and datum.

REMARKS.--Records good. Flow regulated by Lake Secession (usable capacity, about 17,420,000,000 cubic feet). City of Abbeville diverts a small amount of water during year for municipal supply.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,900 ft^3/s, Mar. 26, 1964, gage height, 12.79 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 8,450 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
27 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 4,570
Q_5	= 7,500
Q_{10}	= 9,580
Q_{25}	= 12,300
Q_{50}	= 14,400
Q_{100}	= 16,500

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.649
Standard Deviation	= 0.265
Weighted Skew	= -0.241

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1951	Dec. 7	3.44	1,240	1961	Feb. 25	6.81	4,360	1975	Mar. 13	11.57	9,380
1952	Mar. 25	9.44	9,450	1962	Feb. 22	5.42	2,960	1976	Mar. 17	6.08	3,380
1953	Mar. 23	4.54	2,240	1963	Mar. 13	7.68	5,330	1977	Oct. 9	7.50	4,800
1954	Jan. 23	5.09	2,880	1964	Mar. 26	12.79	10,900	1978	Oct. 26	6.84	4,140
1955	Feb. 6	4.92	2,700	1965	Oct. 6	12.51	10,600	1979	Apr. 13	11.40	9,180
1956	Sept.27	6.22	4,110	1966	Mar. 5	9.57	7,030	1980	--	--	--
1957	Apr. 5	3.60	1,260	1971	Mar. 3	10.65	8,280	1981	Oct. 1	9.24	6,660
1958	Nov. 20	7.45	5,000	1972	Jan. 11	7.21	4,510	1982	Jan. 4	9.56	2,020
1959	Sept. 7	6.23	3,860	1973	Apr. 1	5.86	3,160				
1960	Feb. 14	5.87	3,560	1974	Jan. 9	11.20	8,940				

02189000 SAVANNAH RIVER NEAR CALHOUN FALLS, SC

LOCATION.--Lat 34°04'15", Abbeville County, Hydrologic Unit 03060103, on left bank 150 ft upstream from bridge on State Highway 72, 1.0 mi downstream from Seaboard Coast Line Railroad bridge, 1.5 mi downstream from Rocky River, 3.0 mi southwest of Calhoun Falls, and at mile 279.7.

DRAINAGE AREA.--2,876 mi^2.

PERIOD OF RECORD.--August 1896 to August 1898, March 1899 to December 1900, January to December 1903, March 1930 to July 1932, April 1938 to 1979. Published as "at Calhoun Falls" 1897-99. Records for January 1901 to December 1902, published in WSP 65, 75, and 83 have been found unreliable, and should not be used. Gage-height records collected at original site 1.0 mi upstream during 1899-1928 and at present site since 1928 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 363.53 ft National Geodetic Vertical Datum of 1929. Prior to July 1, 1928, nonrecording gage at railroad bridge 1.0 mi kupstream at altitude 369.0 ft.

REMARKS.--Records good. Flow regulated by powerplants above station, by Burton and Mathis Reservoirs, and by Hartwell Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 96,500 ft^3/s, Aug. 13, 1940, gage height, 11.52 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Aug. 25, 1908 reached a stage og 28.2 ft at original site and datum, from records of National Weather Service, discharge, 144,000 ft^3/s, from rating curve extended above 14,000 ft^3/s.

STAGE-DISCHARGE RELATIONS.--Defined by current meter measurements below 50,000 ft^3/s. Extended above 50,000 ft^3/s by velocity-area studies.

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1897	Apr. 5	---	57,400	1927	Dec. 29	---	27,800	1955	Feb. 7	6.89	40,200
1900	Feb. 14	---	76,500	1928	Aug. 17	---	130,000	1956	Sept.26	7.02	40,200
1901	Sept.18	---	66,500	1929	Sept.27	---	85,400	1957	Apr. 6	6.79	38,100
1902	Feb. 28	---	76,100	1930	Oct. 2	---	105,000	1958	Nov. 19	6.76	38,100
1903	June 7	---	57,800	1931	Apr. 23	4.22	15,800	1959	June 2	6.41	32,800
1904	Aug. 9	---	33,900	1932	Dec. 4	7.10	41,400	1960	Feb. 13	5.03	19,600
1905	July 2	---	47,400	1933	Oct. 17	11.60	97,600	1961	Mar. 8	4.79	17,400
1906	Mar. 20	---	42,200	1934	June 5	7.00	39,400	1962	Dec. 19	5.62	26,000
1907	Oct. 4	---	33,900	1935	Jan. 10	6.00	29,400	1963	Apr. 30	6.12	30,900
1908	Aug. 25	---	114,000	1936	Apr. 7	11.50	96,200	1964	Apr. 8	8.08	60,000
1909	June 4	---	43,900	1937	Oct. 1	9.00	63,000	1965	Oct. 6	6.91	44,800
1910	Mar. 1	---	45,200	1938	Oct. 20	8.20	53,100	1966	Mar. 4	7.50	52,500
1911	Jan. 4	---	23,500	1939	Aug. 19	7.88	49,600	1967	June 5	6.76	39,900
1912	Mar. 16	---	75,700	1940	Aug. 13	11.52	96,500	1968	Jan. 10	6.17	33,200
1913	Mar. 15	---	48,300	1941	July 7	6.70	36,300	1969	Jan. 20	7.04	43,400
1914	Dec. 30	---	22,200	1942	Feb. 18	7.73	47,200	1970	July 29	5.89	32,000
1915	July 1	---	38,300	1943	Jan. 18	8.21	53,100	1971	Mar. 4	6.97	45,600
1916	Dec. 30	---	44,800	1944	Mar. 20	7.91	49,500	1972	Jan. 10	6.20	35,700
1917	Mar. 25	---	40,000	1945	Apr. 25	6.40	33,300	1973	Dec. 16	6.80	43,400
1918	Aug. 3	---	26,100	1946	Jan. 8	9.41	68,400	1974	Apr. 5	5.84	31,400
1919	Dec. 23	---	59,100	1947	Jan. 20	7.47	44,800	1975	Mar. 14	7.32	47,100
1920	Dec. 10	---	63,100	1948	Mar. 7	6.11	29,800	1976	Mar. 16	6.72	39,400
1921	Feb. 9	---	51,800	1949	Nov. 29	8.94	61,800	1977	Mar. 30	6.35	35,200
1922	Mar. 11	---	34,800	1950	Oct. 8	5.98	29,400	1978	Jan. 26	7.16	45,000
1923	Dec. 19	---	35,700	1951	Oct. 21	5.98	28,800	1979	Apr. 13	7.78	52,900
1924	Sept.21	---	40,000	1952	Mar. 24	8.65	58,000	1980	Mar. 28	10.30	91,400
1925	Jan. 19	---	31,700	1953	Feb. 22	6.94	38,400				
1926	Jan. 19	---	28,300	1954	Jan. 17	7.44	44,600				

02192500 LITTLE RIVER NEAR MOUNT CARMEL, S.C.

LOCATION.--Lat 34°04'13'', long 82°30'02'', McCormick County, on right bank 480 ft downstream from Island Ford bridge, 2.8 mi upstream from Calhoun Creek, and 4.5 mi north of Mount Carmel.

DRAINAGE AREA.--217 mi^2.

PERIOD OF RECORD.--December 1939 to 1970, crest-stage gage 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 353.97 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for periods of no gage-height record, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,800 ft^3/s, Aug. 14, 1940, gage height, 29.60 ft, (from high-water mark), from rating curve extended above 13,000 ft^3/s; minimum, 0.7 ft^3/s, Oct. 9, 1954.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 13,600 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
46 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 4,730
Q_5	= 7,470
Q_{10}	= 9,490
Q_{25}	= 12,200
Q_{50}	= 14,400
Q_{100}	= 16,700

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 3.674
Standard Deviation	= 0.237
Weighted Skew	= -0.017

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1940	Aug. 14	29.60	20,800	1960	Jan. 31	15.60	4,300	1980	--	--	--
1941	July 17	22.23	9,020	1961	Mar. 9	14.92	3,970	1981	Oct. 1	12.50	2,700
1942	Mar. 22	19.18	6,400	1962	Feb. 23	15.86	4,580	1982	Jan. 4	15.68	4,740
1943	Jan. 19	20.37	7,310	1963	Apr. 30	15.84	4,410	1983	--	--	--
1944	Mar. 20	20.90	8,020	1964	Mar. 27	23.11	10,000	1984	Jan. 11	15.50	4,240
1945	Apr. 26	16.88	5,020	1965	Mar. 25	19.76	6,800	1985	Feb. 6	12.51	2,710
1946	Dec. 25	13.00	3,210	1966	Mar. 5	18.96	6,230	1986	--	--	--
1947	Jan. 20	17.35	5,300	1967	Aug. 25	11.79	2,390	1987	Mar. 1	16.89	5,010
1948	Nov. 11	12.81	3,130	1968	Jan. 11	16.70	4,900	1988	Jan. 20	4.48	390
1949	Nov. 29	22.55	9,350	1969	Jan. 21	19.61	6,690				
1950	July 25	8.74	1,760	1970	Mar. 22	10.63	1,950				
1951	Apr. 2	7.55	1,440	1971	Mar. 3	22.64	9,500				
1952	Mar. 4	19.47	6,610	1972	Jan. 11	18.99	6,260				
1953	May 1	12.68	2,970	1973	Apr. 1	23.60	10,600				
1954	Jan. 17	13.93	3,490	1974	Jan. 10	14.62	3,760				
1955	Feb. 7	15.64	4,310	1975	Mar. 13	22.86	9,750				
1956	Mar. 17	14.34	3,450	1976	Mar. 17	17.58	5,390				
1957	Apr. 5	9.23	1,900	1977	Oct. 9	13.01	2,960				
1958	Nov. 19	18.20	5,760	1978	Oct. 26	16.51	4,800				
1959	Sept. 7	17.57	5,400	1979	Apr. 13	18.25	5,790				

02195000 SAVANNAH RIVER NEAR CLARKS HILL, SC

LOCATION.--Lat 33°38'40", long 82°12'05", McCormick County, Hydrologic Unit 03060107, on right bank 1.2 miles downstream of Thurmond Dam, 2.4 miles southwest of Clarks Hill, 2.5 miles upstream from Kiokee Creek, and at mile 221.1 upstream from Savannah, Ga.

DRAINAGE AREA.--6,150 mi^2 (approximately).

PERIOD OF RECORD.--May 1940 to June 1954.

GAGE.--Water stage recorder. Datum of gage is 182.69 ft, National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Auxiliary water-stage recorder 6.3 miles downstream.

REMARKS.--Records fair. Prior to December 1951 some regulation by Burton and Mathis Reservoirs and powerplants above station. From 1951 flow completely regulated by Thurmond Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 196,000 ft^3/s, Aug. 14, 1940, gage height, 29.34 ft.

STAGE-DISCHARGE RELATION.--Defined by discharge measurements throughout entire range of flows.

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
[1]1940	Aug. 14	29.34	196,000	1945	Apr. 26	15.72	61,200	1950	Oct. 9	11.61	36,800
1941	July 8	14.12	54,900	1946	Jan. 8	22.11	110,000	[2]1951	Oct. 22	14.54	48,700
1942	Mar. 23	20.77	99,300	1947	Jan. 21	19.99	87,000	[2]1952	Mar. 7	11.56	35,400
1943	Jan. 20	22.16	111,000	1948	Feb. 10	16.61	63,600	[3]1953	May 7	10.52	30,000
1944	Mar. 21	22.31	111,000	1949	Nov. 30	26.35	154,000	[3]1954	Mar. 30	10.67	30,000

[1] Period May to September
[2] March 25, 1952
[3] Period October to June

02196000 STEVENS CREEK NEAR MODOC, S.C.

LOCATION.--Lat 33°43'45'', long 82°10'55'', Edgefield County, Hydrologic Unit 03060107, on left bank at bridge on State Highway 23, 1.4 mi east of Modoc, and 3.2 mi downstream from Turkey Creek.

DRAINAGE AREA.--545 mi^2, approximately.

PERIOD OF RECORD.--November 1929 to September 1931, February 1940 to September 1978, November 1983 to current year. Monthly discharge only for some periods, published in WSP 1303.

GAGE.--Water-stage recorder. Datum of gage is 197.34 ft National Geodetic Vertical Datum of 1929 (levels by Southeastern Power Administration). October 15, 1929, to Sept. 30, 1931, nonrecording gage at site 1,100 ft upstream at different datum.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,100 ft^3/s, Aug. 14, 1940, gage height, 41.08 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 26,200 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
45 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 12,600
Q_5	= 18,900
Q_{10}	= 23,100
Q_{25}	= 28,400
Q_{50}	= 32,300
Q_{100}	= 36,200

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	=	4.091
Standard Deviation	=	0.217
Weighted Skew	=	-0.234

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1931	Apr. 1	--	5,550	1954	Jan. 16	14.47	4,110	1969	Apr. 16	34.25	22,700
1940	Aug. 14	41.08	35,100	1955	Apr. 15	24.75	11,300	1970	Mar. 22	24.66	10,800
1941	June 25	--	6,000	1956	Apr. 12	22.74	9,430	1971	Mar. 3	32.47	20,100
1942	Mar. 22	29.64	16,800	1957	May 5	20.32	7,330	1972	Jan. 12	27.07	13,200
1943	Jan. 19	--	18,700	1958	Apr. 16	28.87	15,900	1973	Apr. 1	27.92	14,100
1944	Mar. 21	35.88	26,200	1959	Mar. 6	20.60	7,600	1974	Apr. 5	27.28	13,400
1945	Apr. 25	20.10	7,220	1960	Jan. 31	29.07	16,100	1975	Mar. 3	30.16	16,900
1946	Dec. 26	25.27	11,800	1961	Feb. 25	31.26	19,000	1976	Mar. 17	25.97	12,100
1947	Mar. 8	24.41	11,000	1962	Jan. 7	32.57	20,900	1977	Oct. 9	30.87	17,800
1948	Feb. 10	27.36	14,200	1963	Mar. 13	23.44	10,100	1978	May 9	25.94	12,000
1949	Nov. 29	30.27	17,700	1964	Aug. 31	38.89	30,900	1984	Jan. 11	24.18	10,300
1950	Mar. 7	14.50	4,060	1965	Dec. 27	32.90	20,700	1985	Feb. 6	26.31	12,400
1951	Apr. 3	19.66	6,760	1966	Mar. 5	27.13	13,200	1986	Oct. 4	21.41	7,950
1952	Mar. 5	30.59	18,200	1967	May 23	20.28	7,020	1987	Jan. 23	24.25	10,400
1953	Feb. 15	21.51	8,360	1968	Jan. 11	28.15	14,400	1988	Sept. 9	15.93	4,760

02197000 SAVANNAH RIVER AT AUGUSTA, GA

LOCATION.--Lat 33°22'25'', long 81°56'35'', Richmond County, Hydrologic Unit 03060106, at New Savannah Bluff lock and dam, 0.2 mi upstream from Butler Creek, 12.0 mi downstream from Augusta, and at mile 187.4.

DRAINAGE AREA.--7,508 mi^2, including that of Butler Creek.

PERIOD OF RECORD.--October 1883 to December 1891, January 1896 to December 1906, January 1925 to current year. Monthly discharges only for some periods, published in WSP 1303. Gage-height records collected at site of Fifth street gage from 1875 to 1952 and at New Savannah Bluff lock and dam sites since 1937 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 96.58 ft, National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Oct. 1, 1883 to Dec. 31, 1891, Jan. 1, 1896, to Dec. 31, 1906, Jan. 1, 1925, to Sept. 30, 1932, nonrecording gage at Fifth Street Bridge at datum 102.06 ft NGVD (levels by Southeastern Engineering Co.). Oct. 1, 1932 to Sept. 30, 1936, recording gage at Thirteenth Street bridge at datum 104.56 ft NGVD (levels by Corps of Engineers). Oct. 1, 1936, to Nov. 10, 1948, recording gage at site 0.2 mi downstream from present site and at present datum.

REMARKS.--Records good, Flow regulated by Hartwell Lake, by Thurmond Lake, by Richard B. Russell Lake, and by other powerplants above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 350,000 ft^3/s, Oct. 3, 1929; maximum gage height, 46.3 ft, Sept. 27, 1929 (at site and datum then in use); minimum discharge, 648 ft^3/s, Sept. 24, 1939, from rating curve extended below 1,400 ft^3/s; minimum daily, 1,040 ft^3/s, Oct. 2, 1927.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 17, 1796, reached a stage of about 40 feet (at site and datum of Fifth Street gage), marked by local residents; discharge approximately 360,000 ft^3/s, by slope conveyance study. Little information exists and the data are considered approximate. Data furnished by the U.S. Army Corps of Engineers.

STAGE-DISCHARGE RELATION.--Peak discharges prior to 1912, excluding the 1796 flood, were determined using a stage-discharge rating established by discharge measurements made during the 1890's and early 1900's. The stage-discharge relation is defined by direct measurement.

FLOOD-FREQUENCY DATA.--The flood-frequency relation for this station was computed by routing pre-regulation hydrographs through the existing system of reservoirs using the methodology described by Sanders and others (1990). Interested individuals should consult this reference for further frequency information at this site.

02197000 SAVANNAH RIVER AT AUGUSTA, GA, Continued

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)
[1]1796	Jan. 17	40.00*	360,000*
1840	May 28	37.80	270,000*
[2]1852	Aug. 29	37.40	250,000*
[2]1864	Jan. 1	34.9	185,000*
1865	Jan. 11	36.90	240,000*
1876	Dec. 30	28.60	86,400
1877	Apr. 14	31.40	119,000
1878	Nov. 23	23.50	51,500
1879	Aug. 3	22.00	44,000
1880	Dec. 16	30.10	102,000
1881	Mar. 18	32.20	130,000
1882	Sept.12	29.30	93,300
1883	Jan. 22	30.80	111,000
1884	Apr. 16	28.00	81,000
1885	Jan. 26	27.50	77,000
1886	May 21	32.50	135,000
1887	July 31	34.50	173,000
1888	Sept.11	38.70	303,000
1889	Feb. 19	33.30	149,000
1890	Feb. 27	22.90	48,500
1891	Mar. 10	35.50	197,000
1892	Jan. 20	32.80	140,000
1893	Feb. 14	25.00	60,000
1894	Aug. 7	24.00	54,000
1895	Jan. 11	30.40	106,000
1896	July 10	30.50	107,000
1897	Apr. 6	29.30	93,300
1898	Sept. 2	31.30	117,000
1899	Feb. 8	31.00	113,000
1900	Feb. 15	32.70	138,000
1901	Apr. 4	31.80	124,000
1902	Mar. 1	34.60	175,000
1903	Feb. 9	33.20	147,000
1904	Aug. 10	25.50	63,000
1905	Feb. 14	25.80	64,800
1906	Jan. 5	29.60	96,600
1907	Oct. 5	23.60	52,000
1908	Aug. 27	38.80	307,000
1909	June 5	28.70	87,300
1910	Mar. 2	26.40	69,800
1911	Apr. 14	19.10	32,800
1912	Mar. 17	36.80	234,000
1913	Mar. 16	35.10	156,000
1914	Dec. 31	24.30	48,000
1915	Jan. 20	28.20	61,000
1916	Feb. 3	31.00	82,400
1917	Mar. 6	29.20	68,000
1918	Jan. 30	25.50	45,500
1919	Dec. 24	35.00	128,000
1920	Dec. 11	35.40	133,000
1921	Feb. 11	35.10	129,000
1922	Feb. 16	32.00	92,000
1923	Feb. 28	28.00	59,700
1924	Sept.22	28.00	59,700
1925	Jan. 20	36.50	150,000
1926	Jan. 20	27.30	55,300
1927	Dec. 30	24.00	39,000
1928	Aug. 17	40.40	226,000
1929	Sept.27	46.30	343,000
1930	Oct. 2	45.10	350,000
1931	Nov. 17	19.90	26,100
1932	Jan. 9	30.40	93,800
1933	Oct. 18	30.30	92,600
1934	Mar. 5	28.50	73,200
1935	Mar. 14	27.40	63,700
1936	Apr. 8	41.20	258,000
1937	Jan. 4	30.10	91,400
1938	Oct. 21	30.10	91,400
1939	Mar. 2	24.10	90,900
1940	Aug. 15	29.40	239,000
1941	July 8	22.89	53,300
1942	Mar 23	24.56	105,000
1943	Jan 20	25.10	117,000
1944	Mar 22	25.53	128,000
1945	Apr 27	23.16	64,000
1946	Jan 9	24.43	97,200
1947	Jan 22	23.97	86,000
1948	Feb 10	23.90	83,200
1949	Nov 30	26.61	154,000
1950	Oct 9	20.10	32,500
[3]1951	Oct. 22	22.32	46,300
1952	Mar. 6	21.53	39,300
1953	May 8	20.80	35,200
1954	Mar. 30	17.39	25,500
1955	Apr. 15	16.77	23,900
1956	Apr. 12	14.70	18,600
1957	May 7	14.08	18,000
1958	Apr. 18	22.91	66,300
1959	June 8	18.65	28,500
1960	Feb. 14	20.58	34,900
[4]1961	Apr. 2	20.56	34,800
1962	Jan. 9	20.09	32,500
1963	Mar. 23	19.52	31,300
1964	Apr. 9	24.16	87,100
1965	Dec. 27	20.62	34,600
1966	Mar. 6	21.50	39,300
1967	Aug. 25	18.10	26,500
1968	Jan. 12	20.94	35,900
1969	Apr. 21	22.24	45,600
1970	Apr. 1	17.68	25,200
1971	Mar. 5	23.30	63,900
1972	Jan. 20	20.36	33,700
1973	Apr. 8	21.63	40,200
1974	Feb. 23	20.13	32,900
1975	Mar. 25	22.24	45,600
1976	June 5	20.27	33,300
1977	Apr. 7	20.50	34,200
1978	Jan. 26	21.98	43,100
1979	Feb. 27	21.13	37,300
1980	Mar. 31	22.33	47,200
1981	Feb. 12	14.70	17,700
[5]1982	Jan. 2	19.39	30,700
[5]1983	Apr. 10	23.21	66,100
1984	May 5	20.35	34,000
1985	Feb. 7	17.89	25,700
1986	Oct. 3	15.74	21,000
1987	Mar. 6	18.98	29,200
1988	Feb. 5	10.61	13,600

[1] Flood of January 17, 1796, reached a stage of about 40 feet (at site and datum of Fifth Street gage), marked by local residents; discharge approximately 360,000 ft^3/s, by slope conveyance study. Little information exists and the data are considered approximate. Data furnished by the U.S. Army Corps of Engineers.

[2] U.S. House of Representatives Document No. 64.

[3] Filling of Thurmond Lake begain In December 1951.

[4] Filling of Hartwell Lake began in February 1961.

[5] Filling of Russell Lake began in October 1984.

*Estimated values.

02197300 UPPER THREE RUNS NEAR NEW ELLENTON, SC

LOCATION.--Lat 33°23'05'', long 81°37'00'', Aiken County, Hydrologic Unit 03060106, on downstream side of bridge on U.S. Highway 278, 0.4 mi upstream from Johnson Fork Creek, and 4.6 mi southeast of New Ellenton.

DRAINAGE AREA.--87.0 mi^2.

PERIOD OF RECORD.--June 1966 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 175 ft, National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 472 ft^3/s, June 13, 1973, gage height, 8.37 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 388 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
22 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 347
Q_5	= 402
Q_{10}	= 434
Q_{25}	= 469
Q_{50}	= 493
Q_{100}	= 516

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 2.539
Standard Deviation	= 0.078
Weighted Skew	= -0.120

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1967	Aug. 24	--	320	1977	Mar. 22	7.07	304	1987	Mar. 1	7.60	370
1968	June 9	6.07	237	1978	Jan. 25	7.38	344	1988	Sept. 9	6.86	278
1969	Sept.19	6.91	301	1979	Apr. 26	7.36	341				
1970	Mar. 30	6.83	303	1980	Mar. 13	7.77	400				
1971	Aug. 17	8.00	420	1981	Feb. 11	7.10	308				
1972	Aug. 17	7.52	372	1982	Jan. 1	7.57	364				
1973	June 13	8.37	472	1983	Mar. 6	7.32	331				
1974	Feb. 7	6.60	260	1984	May 4	8.13	466				
1975	July 15	7.34	341	1985	Feb. 6	7.75	400				
1976	May 29	7.96	429	1986	Nov. 22	7.50	360				

02197310 UPPER THREE RUNS ABOVE ROAD C AT SAVANNAH RIVER PLANT, SC

LOCATION.--Lat 33°17'08'', long 81°41'40'', Aiken County, Hydrologic Unit 03060106, on right bank, 100 ft upstream of SRP Road C, 2.0 mi east of SRP Road 2, at Savannah River Plant, 6 mi southeast of New Ellenton.

DRAINAGE AREA.--176 mi^2.

PERIOD OF RECORD.--June 1974 to current year.

GAGE.--Data collection Platform. Elevation of gage is 125 ft above National Geodetic Vertical Datum of 1929 (from topographic map).

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 962 ft^3/s, Feb. 6, 1985, gage height, 6.25 ft.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 736 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
14 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 692
Q_5	= 822
Q_{10}	= 897
Q_{25}	= 984
Q_{50}	= 1,040
Q_{100}	= 1,100

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 2.838
Standard Deviation	= 0.090
Weighted Skew	= -0.108

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1975	July 16	5.74	586	1980	Mar. 13	6.10	880	1985	Feb. 6	6.25	962
1976	May 29	6.47	732	1981	June 8	5.42	582	1986	June 11	5.96	802
1977	Mar. 23	5.51	540	1982	Jan. 1	5.73	696	1987	Mar. 1	6.12	891
1978	Jan. 26	6.04	646	1983	Mar. 7	5.59	641	1988	Sept.10	4.98	460
1979	Feb. 25	6.21	680	1984	May 5	6.08	840				

02197315 UPPER THREE RUNS AT ROAD A AT SAVANNAH RIVER PLANT, S.C.

LOCATION.--Lat 33°14'20", long 81°44'42", Aiken County, Hydrologic Unit 03060106, near right bank, on downstream side of bridge at SRP Road A, 2.0 mi south of SRP Road 2, at Savannah River Plant.

DRAINAGE AREA.--203 mi^2.

PERIOD OF RECORD.--June 1974 to January 1978, October 1978 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 90 ft above National Geodetic Vertical Datum of 1929 (from topographic map).

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,230 ft^3/s, May 29, 1976, gage height, 6.76 ft.

STAGE DISCHARGE RELATION--Defined by current-meter measurements below 809 ft^3/s and graphically extended on logarithmic plotting paper.

FLOOD-FREQUENCY DATA (ft^3/s)
13 YEARS OF RECORD
LOG-PEARSON TYPE III

Q_2	= 804
Q_5	= 961
Q_{10}	= 1,060
Q_{25}	= 1,170
Q_{50}	= 1,250
Q_{100}	= 1,330

LOG-PEARSON TYPE III STATISTICS (LOG UNITS)

Mean	= 2.906
Standard Deviation	= 0.091
Weighted Skew	= 0.064

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1975	July 16	5.74	626	1980	Mar. 14	6.23	951	1985	Feb. 7	6.09	893
1976	May 29	6.76	1,230	1981	Feb. 12	5.33	620	1986	Nov. 23	5.80	780
1977	Mar. 23	5.62	717	1982	Jan. 2	5.83	793	1987	Mar. 1	6.03	869
[1]1978	------	----	----	1983	Apr. 11	6.36	1010	1988	Sept.11	4.49	428
1979	Feb. 25	6.33	730	1984	May 5	6.01	861				

[1]No record for period of Jan 10, 1978 to Oct 26, 1978 because gage was removed for construction of new bridge.

02197500 SAVANNAH RIVER AT BURTONS FERRY BRIDGE, NEAR MILLHAVEN, GA

LOCATION.--Lat 32°56'20", long 81°30'10", Screven County (GA) - Allendale County (SC, Goergia-South Carolina State line, Hydrologic Unit 03060106, on right bank 500 ft downstream from U.S. Highway 301 bridge, 2.0 mi downstream from Rocky Creek, 9.0 mi east of Millhaven, and at mile 118.7 (revised).

DRAINAGE AREA.--8,650 mi^2, approximately.

PERIOD OF RECORD.--October 1939 to September 1970, October 1982 to current year.

GAGE.--Water-stage recorder and data collection platform. Datum of gage is 52.42 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Thurmond Lake and affected by regulation of Hartwell Lake and Richard B. Russell Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum dischrge, 141,000 ft^3/s, Aug 18, 1940, gage height, 27.0 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in October 1929 reached a stage of 30.8 ft from information by Corps of Engineers, discharge, 220,000 ft^3/s, from rating curve extended graphically above 141,000 ft^3/s on logarithmic plotting paper.

STAGE-DISCHARGE RELATION.--Defined by current meter measurements up to 141,000 ft^3/s, which is maximum for period of record.

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1930	Oct.	30.80	220,000	1952	Mar. 29	18.26	38,500	1965	Apr. 4	17.66	32,800
1940	Aug. 18	27.00	141,000	1953	May 13	17.52	31,800	1966	Mar. 9	18.05	37,100
1941	July 13	18.20	38,400	1954	Apr. 6	14.40	17,600	1967	June 17	15.47	22,000
1942	Mar. 26	22.00	73,000	1955	Apr. 18	[1]13.21	15,000	1968	Jan. 16	16.64	26,800
1943	Jan. 23	22.60	80,900	1956	Mar. 19	[1]11.95	13,700	1969	Apr. 25	18.31	37,200
1944	Mar. 26	23.40	89,300	1957	May 11	12.27	13,900	1970	Apr. 4	14.14	18,200
1945	May 1	18.80	42,900	1958	Apr. 22	18.94	41,400	1983	Apr. 15	---	60,000
1946	Jan. 12	21.60	68,600	1959	June 13	16.59	27,400	1984	May 12	17.83	33,900
1947	Jan. 25	21.53	67,500	1960	Feb. 17	18.28	37,100	1985	Feb. 10	14.69	19,700
1948	Feb. 14	21.10	61,000	1961	Apr. 25	17.60	32,400	1986	Nov. 25	12.71	15,200
1949	Dec. 3	24.91	108,000	1962	Jan. 15	16.75	27,400	1987	Mar. 10	16.79	27,600
1950	Oct. 14	14.87	18,500	1963	Mar. 27	17.22	29,200	1988	Oct 2	10.80	11,900
1951	Oct. 27	16.53	25,700	1964	Apr. 15	22.10	71,700				

[2]Peak gage height occurred April 14.

02198500 SAVANNAH RIVER NEAR CLYO, GA

LOCATION.--Lat 32°31'30'', long 81°15'45'', Effingham County (GA) - Jasper County (SC), Hydrologic Unit 03060109, at Georgia-South Carolina State line, on downstream side of center pier of drawspan of bridge on Seaboard Coast Line Railroad, 3.0 mi north of Clyo, and at mile 60.9.

DRAINAGE AREA.--9,850 mi^2, approximately.

PERIOD OF RECORD.--October 1929 to September 1933, October 1937 to current year. Monthly discharge only for some periods, published in WSP 1303. Gage-height records collected at same site 1921-43 by National Weather Service (unpublished prior to 1933).

GAGE.--Water-stage recorder. Datum of gage is 13.39 ft National Geodetic Vertical Datum of 1929. Prior to Jan. 31, 1933, nonrecording gage at same site and at datum 4.00 ft higher. Jan. 31, 1933, to June 12, 1945, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Hartwell Lake, by Thurmond Lake, Richard B. Russell Lake and by other powerplants above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 270,000 ft^3/s, Oct. 6, 1929, gage height, 29.7 ft, present datum (from information by Corps of Engineers).

STAGE-DISCHARGE RELATION.--Defined by current meter measurements below 119,000 ft^3/s and graphically extended on logarithmic plotting paper.

Peak Stages and Discharges

Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)	Water year	Date	Gage height (ft)	Discharge (ft^3/s)
1925	Jan. 24	23.90	134,000	1947	Jan. 28	19.40	63,200	1969	Apr. 29	16.74	39,700
1926	Jan. 28	15.40	31,400	1948	Feb. 17	19.66	71,000	1970	Apr. 7	13.31	21,000
1927	Mar. 6	13.40	30,600	1949	Dec. 6	22.17	104,000	1971	Mar. 6	18.11	54,500
1928	Aug. 23	22.30	106,000	1950	Oct. 19	12.21	16,000	1972	Jan. 26	16.30	36,400
1929	Mar. 11	23.60	128,000	1951	Nov. 1	13.38	22,600	1973	Apr. 15	17.29	44,500
1930	Oct. 6	29.70	270,000	1952	Apr. 2	16.80	41,300	1974	Mar. 1	15.78	33,000
1931	Nov. 28	12.77	18,200	1953	May 17	15.80	35,800	1975	Mar. 24,30	17.83	50,600
1932	Jan. 15	19.18	59,600	1954	Apr. 12	12.49	18,800	1976	June 14,15	15.87	33,500
1933	Jan. 4	19.20	59,600	1955	Apr. 23	11.35	15,500	1977	Dec. 22	15.85	33,400
1934	June 15	17.20	43,800	1956	Mar. 22	10.47	14,100	1978	Feb. 3	16.81	38,700
1935	Mar. 22	15.20	29,100	1957	May 15	11.15	15,000	1979	Apr. 27	16.34	36,600
1936	Apr. 13	26.00	176,000	1958	Apr. 25	17.41	45,500	1980	Apr. 2	18.40	58,600
1937	Jan. 11	19.40	65,800	1959	June 18	14.36	26,000	1981	Feb. 16	10.39	13,600
1938	Apr. 16	17.80	48,400	1960	Feb. 19	17.35	40,900	1982	Jan. 11	12.89	19,500
1939	Mar. 8	20.40	70,100	1961	Apr. 25	16.20	34,900	1983	Apr. 17	18.40	58,600
1940	Aug. 22	23.60	128,000	1962	Jan. 19	[1]14.98	28,200	1984	May 14	16.48	37,700
1941	July 17	16.30	36,500	1963	Mar. 31	15.27	29,200	1985	Feb. 15	12.89	19,500
1942	Mar. 29	20.00	73,000	1964	Apr. 18	20.22	83,800	1986	Nov. 28	11.50	15,800
1943	Jan. 27	20.00	73,000	1965	Apr. 6	16.52	38,000	1987	Mar. 13	15.57	29,700
1944	Mar. 29	21.60	95,200	1966	Mar. 11	17.10	42,800	1988	Oct. 4	8.93	11,400
1945	May 5	16.00	34,400	1967	June 22	13.67	22,500				
1946	Jan. 16	19.50	64,400	1968	Jan. 21	14.84	28,000				

[1]Occurred at different time than peak discharge.

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Lower Coastal Plain						
1	Waccamaw River at Longs, S.C. (02110500)	38	1,110	5,510	8,560	10,600	13,500	15,500	17,800
2	Catfish Canal at Sellers, S.C. (02131150)	22	27.4	291	505	675	913	1,110	1,330
3	Carter Creek near Effingham, S.C. (02131990)	18	8.28	211	375	502	687	835	1,000
4	Two Mile Branch near Lake City, S.C. (02132100)	13	19.0	266	489	675	958	1,200	1,480

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Lower Coastal Plain						
5	Black River near Gable, S.C. (02135500)	31	401	2,720	4,580	5,820	7,590	8,810	10,200
6	Black River near Kingstree, S.C. (02136000)	61	1,252	5,640	10,300	15,200	29,500	45,300	66,500
7	Wedboo Creek near Jamestown, S.C. (02171680)	21	17.4	274	558	788	1,130	1,400	1,710
8	Cow Castle Creek near Bowman, S.C. (02174250)	10	23.4	427	822	1,150	1,690	2,140	2,680

Table 1.--Weighted flood discharge for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Lower Coastal Plain						
9	Savannah Creek near Enrhardt, S.C. (02175450)	12	12.4	286	467	606	814	973	1,170
10	Combahee River near Yemassee, S.C. (02176000)	15	1,100	5,650	8,800	10,800	14,000	16,100	18,700
11	Coosawatchie River near Hampton, S.C. (02176500)	38	203	1,670	2,740	3,530	4,710	5,620	6,660
12	Buckhead Creek near Waynesboro, Ga. (02201350)	21	64.0	1,150	2,260	3,210	4,660	6,060	7,710

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Lower Coastal Plain						
13	Richardson Creek near Millen, Ga. (02201800)	21	43.0	664	1,210	1,640	2,260	2,810	3,410
14	Hooker Branch Tributary near Millen, Ga. (02201830)	24	4.38	163	222	263	311	348	386
15	Mill Creek near Statesboro, Ga. (02202300)	12	39.0	724	1,070	1,300	1,600	1,820	2,040
16	Canoochee Creek near Swainboro, Ga. (02202800)	26	55.0	772	1,250	1,600	2,100	2,490	2,910

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Lower Coastal Plain						
17	Reedy Creek near Twin City, Ga. (02202820)	10	8.99	272	420	539	707	843	990
18	Reedy Branch near Metter, Ga. (02202850)	10	3.41	186	265	321	394	447	499
19	Fifteen Mile Creek near Metter, Ga. (02202900)	21	147	1,600	2,550	3,240	4,150	4,900	5,680
20	Ten Mile Creek near Pulaski, Ga. (02202910)	24	1.14	97	181	252	359	453	561

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Lower Coastal Plain						
21	Canoochee River near Claxton, Ga. (02203000)	51	555	4,020	6,610	8,680	11,700	14,400	17,400
22	Lotts Creek near Statesboro, Ga. (02203150)	10	2.37	143	272	371	507	622	743
23	Peacock Creek at McIntosh, Ga. (02203559)	11	33.0	478	838	1,120	1,490	1,780	2,100
24	Reese Creek near Fayetteville, N.C. (02104080)	17	9.96	189	384	560	864	1,150	1,530

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Lower Coastal Plain						
25	Browns Creek near Elizabeth-town, N.C. (02105570)	18	11.3	163	440	729	1,280	1,830	2,500
26	Turnbull Creek near Elizabeth-town, N.C. (02105630)	19	60.1	529	1,140	1,730	2,750	3,720	4,890
27	Hood Creek near Leland, N.C. (02105900)	21	19.7	598	1,060	1,440	2,010	2,500	3,060
28	Little Coharie Creek near Roseboro, N.C. (02106000)	35	92.8	915	1,610	2,220	3,200	4,070	5,120

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Lower Coastal Plain						
29	Turkey Creek near Turkey, N.C. (02106240)	18	14.8	405	753	1,050	1,520	1,930	2,410
30	Stewarts Creek Tributary near Warsaw, N.C. (02106410)	16	0.64	56	103	146	221	293	390
31	Black River near Tomahawk, N.C. (02106500)	33	676	3,720	5,920	7,740	10,600	13,000	15,800
32	Big Swamp near Roseboro, N.C. (02106910)	20	31.9	544	1,100	1,640	2,600	3,490	4,540
33	South River near Parkersburg, N.C. (02107000)	33	379	2,100	3,290	4,230	5,660	6,930	8,440

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Lower Coastal Plain						
34	Colly Creek near Kelly, N.C. (02107500)	24	108	564	972	1,300	1,850	2,370	3,040
35	Rockfish Creek near Wallace, N.C. (02108500)	27	69.3	1,430	2,370	2,470	4,340	5,320	6,420
36	Turkey Creek near Castle Hayne, N.C. (02108630)	19	10.5	309	677	1,040	1,680	2,270	2,970
37	Buckhead Branch near Bolton, N.C. (02108960)	19	14.7	405	704	964	1,380	1,750	2,190

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Lower Coastal Plain						
38	Waccamaw River at Freeland, N.C. (02109500)	45	680	4,000	6,180	7,770	9,960	11,700	13,700
39	Wet Ash Swamp near Ash, N.C. (02109640)	18	16.2	417	785	1,100	1,600	2,040	2,570
40	Mill Branch near Tabor City, N.C. (02110020)	18	3.52	151	317	471	732	964	1,250
			Upper Coastal Plain						
41	Juniper Creek near Cheraw, S.C. (02130500)	18	64.0	399	704	974	1,430	1,900	2,430

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Upper Coastal Plain						
42	Black Creek near McBee, S.C. (02130900)	29	108	733	1,080	1,300	1,600	1,840	2,070
43	Little Pee Dee River near Dillon, S.C. (02132500)	49	524	2,500	3,900	4,960	6,440	7,700	8,960
44	Scape Ore Swamp near Bishopville, S.C. (02135300)	20	96.0	687	1,040	1,310	1,660	1,960	2,240
45	Colonel Creek near Leesburg, S.C. (02148300)	14	40.2	304	518	692	942	1,162	1,385

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Upper Coastal Plain						
46	Congaree Creek near Cayce, S.C. (02169550)	21	122	860	1,200	1,450	1,800	2,100	2,370
47	Big Beaver Creek near St. Matthews, S.C. (02169630)	22	10.1	94	180	272	417	538	671
48	South Fork Edisto River near Montmorenci, S.C. (02172500)	44	198	1,540	2,290	2,820	3,500	4,060	4,590
49	South Fork Edisto River near Denmark, S.C. (02173000)	56	720	2,600	3,980	5,100	6,750	8,220	9,750

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Upper Coastal Plain						
50	North Fork Edisto River at Orange-burg, S.C. (02173500)	51	683	2,640	3,970	4,990	6,420	7,630	8,820
51	Edisto River near Branch-ville, S.C. (02174000)	44	1,720	5,920	8,900	11,000	13,800	16,100	18,200
52	Salkahatchie River near Miley, S.C. (02175500)	38	341	1,530	2,240	2,740	3,410	3,960	4,460
53	McBean Creek near McBean, Ga. (02197190)	27	41.4	329	557	741	1,000	1,220	1,470

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Upper Coastal Plain						
54	Brushy Creek near Wrens, Ga. (02197600)	31	28.0	402	625	793	1,010	1,200	1,400
55	Brier Creek near Waynesboro, Ga. (02197830)	20	473	3,640	5,900	7,920	11,000	14,200	18,000
56	Big Creek near Louisville, Ga. (02200900)	26	95.8	696	1,200	1,580	2,090	2,520	2,970
57	Ogeechee River Tributary near Louisville, Ga. (02200930)	25	14.2	235	436	608	859	1,090	1,360

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Upper Coastal Plain						
58	Flat Creek near Inverness, N.C. (02102908)	16	7.63	136	221	290	393	482	582
59	South Prong Anderson Creek near Lillington, N.C. (02103390)	19	7.57	123	207	272	373	465	562
60	Little River near Linden, N.C. (02103500)	44	459	3,390	5,270	6,850	9,400	11,600	14,100
61	Rockfish Creek near Hope Mills, N.C. (02104500)	16	292	2,020	3,430	4,600	6,520	8,150	10,000

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Upper Coastal Plain						
62	Bridge Creek Tributary at Johns, N.C. (02132230)	18	6.05	110	188	258	366	459	566
63	Drowning Creek near Hoffman, N.C. (02133500)	45	178	1,320	2,460	3,530	5,490	7,340	9,670
64	Beaverdam Creek near Aberdeen, N.C. (02133590)	18	4.42	81	130	161	210	254	293
65	Tenmile Swamp near Lumberton, N.C. (02134380)	18	16.6	231	365	459	596	716	844

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Upper Coastal Plain						
66	Lumber River at Boardman, N.C. (02134500)	55	1,228	4,200	7,300	9,900	14,100	17,500	21,600
			Piedmont						
67	Fork Creek near Jefferson, S.C. (02131309)	12	24.3	649	1,170	1,620	2,210	2,690	3,180
68	Rocky Creek at Great Falls, S.C. (02147500)	32	194	6,610	9,760	11,900	14,800	17,300	20,000
69	Scabber Branch near Great Falls, S.C. (02147600)	10	4.55	1,050	1,480	1,610	1,830	2,020	2,250

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Piedmont						
70	North Pacolet River at Fingerville, S.C. (02154500)	58	116	3,010	4,940	6,330	8,130	9,560	11,000
71	North Tyger River near Fairmont, S.C. (02157000)	38	44.4	1,360	2,180	2,770	3,530	4,130	4,740
72	Middle Tyger River at Lyman, S.C. (02157500)	42	68.3	2,510	3,220	3,690	4,310	4,820	5,340
73	North Tyger River near Moore, S.C. (02158000)	41	162	3,730	5,920	7,490	9,520	11,200	12,900

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Piedmont						
74	South Tyger River near Reidville, S.C. (02158500)	41	106	2,460	3,780	4,780	6,100	7,190	8,320
75	South Tyger River near Woodruff, S.C. (02159000)	44	174	2,910	4,810	6,320	8,370	10,100	11,800
76	Tyger River near Woodruff, S.C. (02159500)	28	351	6,480	11,500	15,200	20,200	24,400	28,900
77	Fairforest Creek near Union, S.C. (02160000)	49	183	3,990	5,890	7,120	8,610	9,780	10,900
78	Tyger River Delta, S.C. (02160105)	15	759	10,300	15,400	19,200	23,800	27,800	31,900

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Piedmont						
79	Enoree River near Enoree, S.C. (02160500)	59	307	6,220	10,000	12,700	16,300	19,300	22,400
80	Enoree River near Whitmire, S.C. (02160700)	15	444	5,570	9,070	12,000	15,700	18,800	22,100
81	Cedar Creek near Blythewood, S.C. (02162010)	21	48.9	2,700	3,690	4,050	4,470	4,840	5,310
82	Saluda River near Greenville, S.C. (02162500)	43	295	4,580	6,590	8,080	10,000	11,600	13,200
83	Saluda River near Pelzer, S.C. (02163000)	57	405	6,380	8,960	10,700	12,900	14,700	16,400

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Piedmont						
84	Saluda River near Ware Shoals, S.C. (02163500)	50	581	9,160	13,500	16,300	19,600	22,100	24,700
85	Reedy River near Ware Shoals, S.C. (02165000)	49	236	4,300	6,720	8,440	10,600	12,400	14,100
86	South Rabon Creek near Gray Court, S.C. (02165200)	15	29.9	832	1,600	2,220	3,040	3,700	4,390
87	Twelvemile Creek near Liberty, S.C. (02186000)	10	106	3,120	4,100	4,930	6,030	7,020	8,040
88	Broadway Creek near Anderson, S.C. (02187900)	10	26.4	968	1,560	1,990	2,550	3,020	3,480

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Piedmont						
89	Rocky River near Calhoun Falls, S.C. (02188000)	27	267	4,590	7,500	9,570	12,100	14,200	16,300
90	Little River near Mt. Carmel, S.C. (02192500)	46	217	4,720	7,400	9,320	11,800	13,800	15,900
91	Stevens Creek near Modoc, S.C. (02196000)	45	545	12,400	18,200	21,700	25,800	29,100	32,500
92	South Beaverdam Creek at Dewy Rose, Ga. (02188500)	35	35.8	1,390	2,350	3,130	4,240	5,190	6,180
93	Indian Creek near Carnesville, Ga. (02189020)	13	7.63	738	1,130	1,440	1,850	2,200	2,550

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Piedmont						
94	Stephens Creek Tributary at Carnesville, Ga. (02189030)	13	0.39	110	169	213	274	322	373
95	Bear Creek near Mize, Ga. (02189600)	13	3.62	398	717	973	1,330	1,640	1,960
96	Toms Creek near Eastanollee, Ga. (02190100)	13	3.79	486	833	1,110	1,520	1,870	2,240
97	Toms Creek Tributary near Avalon, Ga. (02190200)	14	1.20	317	489	605	763	890	1,020

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Piedmont						
98	Double Branch at Bowersville, Ga. (02190800)	16	0.50	174	283	359	466	551	642
99	North Fork Broad River near Carnesville, Ga. (02191000)	15	119	3,600	6,070	8,030	10,700	13,000	15,200
100	Hudson River at Homer, Ga. (02191200)	29	61.1	2,280	3,910	5,160	6,860	8,280	9,680
101	Scull Shoal Creek near Danielsville, Ga. (02191270)	12	8.75	633	1,170	1,580	2,140	2,610	3,070
102	Mill Shoal Creek near Royston, Ga. (02191280)	25	0.32	110	174	217	273	315	358

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Piedmont						
103	Broad River above Carlton, Ga. (02191300)	89	760	13,200	22,000	28,500	37,300	44,600	52,000
104	Double Branch near Danielsville, Ga. (02191600)	13	4.77	451	827	1,130	1,540	1,890	2,250
105	Fork Creek at Carlton, Ga. (02191750)	12	13.8	857	1,370	1,780	2,320	2,770	3,220
106	Brooks Creek near Lexington, Ga. (02191890)	12	12.3	1,010	1,840	2,440	3,230	3,890	4,520
107	Trouble Creek at Lexington, Ga. (02191910)	17	2.70	166	307	431	610	758	918

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Piedmont						
108	Buffalo Creek near Lexington, Ga. (02191930)	25	5.79	476	834	1,120	1,550	910	2,290
109	Macks Creek near Lexington, Ga. (02191960)	17	3.45	221	423	604	870	1,100	1,340
110	Little Macks Creek Tributary near Lexington, Ga. (02191970)	27	1.77	188	352	485	675	829	994
111	Broad River near Bell, Ga. (02192000)	59	1,430	21,700	31,800	38,700	47,300	54,200	60,500

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Piedmont						
112	Hog Fork Fishing Creek Tributary near Tignall, Ga. (02192300)	31	0.10	43	74	96	125	148	171
113	Anderson Mill Creek near Danburg, Ga. (02192400)	12	5.49	552	929	1,210	1,580	1,870	2,160
114	Anderson Mill Creek Tributary near Danburg, Ga. (02192420)	12	0.92	151	297	410	565	690	821
115	Stephens Creek near Crawford-ville, Ga. (02193300)	12	6.30	750	1,180	1,500	1,960	2,350	2,740

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Piedmont						
116	Harden Creek near Sharon, Ga. (02193400)	12	3.98	480	750	953	1,230	1,460	1,680
117	Little River near Washington, Ga. (02193500)	22	291	6,390	10,600	13,700	17,400	20,400	23,100
118	Rocky Creek near Washington, Ga. (02193600)	12	1.14	328	464	556	686	790	897
119	North Prong Creek near Huntersville, N.C. (02124060)	20	3.63	537	1,010	1,380	1,990	2,460	3,000

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Piedmont						
120	Mallard Creek near Charlotte, N.C. (02124130)	18	20.6	1,600	2,350	2,900	3,690	4,360	5,120
121	Big Bear near Richfield, N.C. (02125000)	30	55.6	4,680	7,000	8,330	10,300	11,600	13,000
122	Chinkapin Creek near Monroe, N.C. (02125410)	18	8.40	1,320	2,150	2,610	3,360	3,850	4,390
123	Rocky River near Norwood, N.C. (02126000)	55	1,372	32,700	46,300	54,700	65,500	73,400	81,300
124	Brown Creek near Polkton, N.C. (02127000)	36	110	2,190	4,150	6,060	9,180	12,100	15,700

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Piedmont						
125	Palmetto Branch near Ansonville, N.C. (02127390)	17	0.86	174	274	348	459	550	651
126	Little River near Star, N.C. (02128000)	30	106	4,030	5,680	6,900	8,560	9,980	11,500
127	Cheek Creek near Pekin, N.C. (02128260)	18	15.5	978	1,700	2,330	3,340	4,230	5,260
128	South Fork Jones Creek near Morven, N.C. (02129440)	18	16.2	854	1,240	1,590	2,050	2,480	2,980

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Piedmont						
129	Hagan Creek near Catawba, N.C. (02142480)	15	8.46	812	1,370	1,780	2,460	2,990	3,600
130	Henry Fork near Henry River, N.C. (02143000)	48	83.2	4,920	8,460	11,200	15,700	19,500	23,600
131	Jacob Fork at Ramsey, N.C. (02143040)	23	25.7	2,190	3,480	4,350	5,710	6,760	7,900
132	Indian Creek near Laboratory, N.C. (02143500)	33	69.2	2,220	3,810	5,190	7,260	9,080	11,100
133	Long Creek near Bessemer City, N.C. (02144000)	31	31.8	1,500	2,530	3,440	4,860	6,130	7,610

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Piedmont						
134	South Fork Catawba River at Lowell, N.C. (02145000)	30	628	10,100	15,300	19,600	25,700	31,000	36,800
135	East Fork Twelve Mile Creek near Waxhaw, N.C. (02146890)	18	42.3	2,280	3,170	3,850	4,830	5,720	6,720
136	Twelve Mile Creek near Waxhaw, N.C. (02146900)	24	76.5	3,070	4,570	5,660	7,110	8,340	9,680
137	Cove Creek near Lake Lure, N.C. (02149000)	33	79.0	3,060	4,680	5,800	7,290	8,490	9,770
138	Camp Creek near Rutherfordton, N.C. (02150420)	17	12.2	638	1,000	1,320	1,710	2,080	2,500

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Piedmont						
139	Broad River near Boiling Springs, N.C. (02151500)	58	875	16,800	25,900	32,800	42,400	50,400	59,100
140	First Broad River near Casar, N.C. (02152100)	25	60.5	2,990	4,750	6,010	7,800	9,200	10,700
141	Big Knob Creek near Fallston, N.C. (02152420)	18	15.8	1,050	1,660	2,150	2,890	3,530	4,250
142	First Broad River near Lawndale, N.C. (02152500)	39	200	6,710	9,640	11,800	15,00	17,600	20,500

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Piedmont						
143	Sugar Branch near Boiling Springs, N.C. (02152610)	31	1.42	373	595	744	953	1,100	1,270
			Blue Ridge						
144	Whitewater River at Jocassee, S.C. (02184500)	16	48.5	2,960	4,300	5,280	6,740	8,090	9,380
145	Keowee River near Jocasee, S.C. (02185000)	18	148	8,750	12,400	14,700	18,000	21,200	24,000

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Blue Ridge						
146	Little River near Walhalla, S.C. (02185200)	21	72.0	3,560	6,410	8,470	11,400	14,100	16,700
147	Seneca River near Newry, S.C. (02185500)	22	455	16,100	20,200	22,900	26,500	29,800	32,300
148	Chattooga River near Clayton, Ga. (02177000)	50	207	7,320	11,700	15,000	20,100	24,300	28,800
149	Chattooga River near Tallulah Falls, Ga. (02178000)	13	256	9,040	14,200	17,700	22,900	27,400	30,900

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Blue Ridge						
150	Tallulah River near Clayton, Ga. (02178400)	24	56.5	2,800	4,560	5,820	7,550	8,930	10,300
151	Little Panther Creek near Tallulah Falls, Ga. (02181800)	19	2.50	139	291	433	642	830	1,040
152	Panther Creek near Toccoa, Ga. (02182000)	50	32.5	2,230	4,510	6,370	9,220	11,600	14,200
153	Chattahoochee River near Leaf, Ga. (02331000)	49	150	6,860	10,600	13,100	16,300	18,800	21,100

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Blue Ridge						
154	Soque River near Demorest, Ga. (02331500)	26	156	5,640	8,980	11,400	14,800	17,500	20,300
155	Chattahoochee River near Corneila, Ga. (02331600)	49	315	11,600	17,400	21,100	25,800	29,300	32,400
156	Hiwassee River at Presley, Ga. (03545000)	42	45.5	1,990	3,200	4,090	5,270	6,210	7,150
157	French Broad River at Rosman, N.C. (03439000)	51	67.9	4,050	5,980	7,320	9,170	10,700	12,200

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Blue Ridge						
158	French Broad River at Calvert, N.C. (03439500)	31	103	4,590	7,060	8,840	11,500	13,600	15,900
159	Catheys Creek near Brevard, N.C. (03440000)	11	11.4	615	1,060	1,440	2,000	2,500	3,100
160	Davidson River near Brevard, N.C. (03441000)	64	40.4	2,750	4,220	5,220	6,580	7,610	8,700
161	Little River above High Falls near Cedar Mountain N.C. (03441440)	22	26.8	1,650	2,660	3,390	4,430	5,270	6,180

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Blue Ridge						
162	Crab Creek near Penrose, N.C. (03442000)	13	10.9	564	965	1,360	1,950	2,500	3,140
163	French Broad River at Blantyre, N.C. (03443000)	64	296	7,010	11,200	14,600	19,900	24,400	29,600
164	South Fork Mills River at The Pink Beds, N.C. (03444500)	31	9.99	644	1,110	1,520	2,160	2,740	3,420
165	Mills River near Mill River, N.C. (03446000)	52	66.7	2,540	4,030	5,240	7,000	8,510	10,200

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Blue Ridge						
166	Laurel Branch near Edneyville, N.C. (03446410)	12	0.57	82	117	150	188	234	288
167	Cedar Creek near Henderson-ville, N.C. (03446500)	10	42.2	1,560	2,730	3,790	5,370	6,760	8,320
168	French Broad River at Bent Creek, N.C. (03448000)	50	676	11,100	15,800	19,600	24,600	28,900	33,600
169	Hominy Creek at Candler, N.C. (03448500)	35	79.8	2,020	3,620	5,130	7,550	9,820	12,500

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Blue Ridge						
170	North Fork Swannanoa River near Black Mountain, N.C. (03449000)	27	24.0	1,780	3,420	4,890	7,500	9,710	12,400
171	Beetree Creek near Swannonoa, N.C. (03450000)	51	5.46	246	420	585	842	1,090	1,390
172	Swannonoa River near Biltmore, N.C. (03451000)	55	130	3,000	5,230	7,340	11,800	14,100	17,900
173	French Broad River at Asheville, N.C. (03451500)	89	945	15,000	22,200	27,900	35,800	42,500	49,900

Table 1.--Weighted flood discharges for selected recurrence intervals for rural streamflow stations used in the regionalization study--Continued

Map index number	Station name and number	Period of record (years)	Drainage area (square miles)	Flood discharge, in cubic feet per second, for indicated recurrence interval, in years					
				2	5	10	25	50	100
			Blue Ridge						
174	Cullasaja River at Highlands, N.C. (03500500)	44	14.9	997	1,620	2,130	2,930	3,630	4,420

CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
inch (in.)	2.54	centimeter
foot (ft)	0.3048	meter
mile (mi)	1.609	kilometer
square mile (mi^2)	2.590	square kilometer
cubic foot per second (ft^3/s)	0.02832	cubic meter per second
foot per mile (ft/mi)	0.1894	meter per kilometer
acre-foot	1,233.	cubic meter

Sea level: In this report, "sea level" refers to the National Geodetic Vertical Datum of 1929--a geodetic datum derived from a general adjustment of the first-order level nets of the United States and Canada, formerly called Sea Level Datum of 1929.