State
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Low Flow

SOUTH CAROLINA
WATER RESOURCES COMMISSION

Report No. 14

Low-Flow Characteristics Of Ungaged

Streams In The Piedmont

And Lower Coastal Plain Of South Carolina

By

William M. Bloxham

LOW-FLOW CHARACTERISTICS OF UNGAGED STREAMS

IN THE PIEDMONT

AND LOWER COASTAL PLAIN OF SOUTH CAROLINA

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Prepared by the

U.S. Geological Survey

in cooperation with

South Carolina Water Resources Commission

and the

South Carolina Department of Health and Environmental Control

1981

LETTER OF TRANSMITTAL

Honorable Richard W. Riley, Governor
  and Members of the General Assembly of the
  State of South Carolina

I have the honor of transmitting the report "Low-Flow Character-
istics of Ungaged Streams in the Piedmont and Lower Coastal Plain of
South Carolina" by William M. Bloxham, Hydrologist, U.S. Geological
Survey. The report is published as Report No. 14 of the South Carolina
Water Resources Commission.

Our water needs continue to increase in accordance with a growing
population and expanding industrial requirements. South Carolina has
an abundant supply of surface water to meet these requirements; how-
ever, the total quantity is subject to seasonal fluctuations. This
report contains much of the technical data needed to address low-flow
problems of streams in South Carolina. This data will be used to
balance water requirements with the available supply.

With proper planning and management, the future growth and pros-
perity of this State should not be restricted by water resource problems.
The Water Resources Commission will continue to pursue this goal with
your help and that of the State General Assembly.

Respectfully,

Clair P. Guess, Jr.
Executive Director

CONTENTS

ILLUSTRATIONS

TABLES

LOW-FLOW CHARACTERISTICS OF UNGAGED STREAMS

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ABSTRACT

Estimates of two low-flow characteristics were developed for 113 partial-record sites from a correlation of discharge measurements with gaging station records. Unit values for $7Q_2$ ranged from 0.72 to 0.01 cubic feet per second per square mile and for $7Q_{10}$ from 0.46 to 0 cubic feet per second per square mile. Accuracy of the partial-record estimates was assessed on the basis of reliability of the index station estimates, reliability of the base-flow relationships, and extent to which those relations had to be extrapolated.

Multiple regression was applied to regionalize low-flow estimates in the Piedmont. The most significant characteristics in the regression equations were drainage area, mean basin elevation, and flow at 95 percent duration. Standard error of estimate was 27 percent for $7Q_2$ and 34 percent for $7Q_{10}$. Satisfactory relationships were not derived for Lower Coastal Plain streams.

Field determinations of specific conductance, dissolved oxygen, and pH were examined for areal variation with no significant indications.

INTRODUCTION

Natural low flow is strongly influenced by basin and climatic factors and by aquifer transmissivity and storage characteristics. The net result is discharge that varies from one low-flow period to another and from one location to another. This is of primary concern where minimal discharge is a limiting factor in the utilization of streamflow. To best realize its full potential when the stream is at low flow, it is necessary to describe discharge in terms of magnitude and frequency of occurrence. In practical application, low-flow frequency data facilitates the design of industrial and domestic water supply systems, the classification and utilization of a stream's waste disposal potential, and planning and regulatory agencies in the

solution of problems relating to water use, water resources development, and studies of storage potential.

In previous reports, low-flow characteristics have been defined for Pickens and Spartanburg Counties (Johnson and others, 1968; and Bloxham and others, 1970), for the Inner Coastal Plain (Bloxham, 1976), evaluated at gaging stations (Armbruster, 1970), and revised and updated at gaging stations (Bloxham, 1979). Exclusion of coverage in much of the Piedmont and Lower Coastal Plain Provinces was evident from the data published in these reports. In order to supplement these data, there were two objectives of this report: (1) to present estimates of low flow characteristics at specific partial-record sites on relatively small ungaged streams in the Piedmont and Lower Coastal Plain (fig. 1) and (2) to develop a regional method for estimating low-flow characteristics without the necessity of discharge measurements. The second objective was met for the Piedmont but not for the Lower Coastal Plain.

This report is based on data collected in cooperative programs with the South Carolina Water Resources Commission and the South Carolina Department of Health and Environmental Control.

METRIC CONVERSION FACTORS

Analyses and compilations in this report are given in inch-pound units of measurements. Factors for converting inch-pound units to metric units are listed below.

Multiply	by	to obtain
inch (in)	25.4	millimeter (mm)
foot (ft)	0.3048	meter (m)
square mile (mi^2)	2.59	square kilometer (km^2)
cubic foot per second (ft^3/s)	0.02832	cubic meter per second (m^3/s)
cubic foot per second per square mile (ft^3/s)/mi^2	0.01093	cubic meter per second per square kilometer (m^3/s)/km^2

PIEDMONT AND LOWER COASTAL PLAIN PROVINCES

About 35 percent of the State lies in the Piedmont province. The land surface slopes from a general elevation[1] of about 1,000 feet at the Blue Ridge foothills to about 400 feet at the Fall Line. 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 feet per mile. The

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[1]Elevation is referenced to National Geodetic Vertical Datum of 1929 formerly called mean sea level. NVGD of 1929 is referred to as sea level in this report.
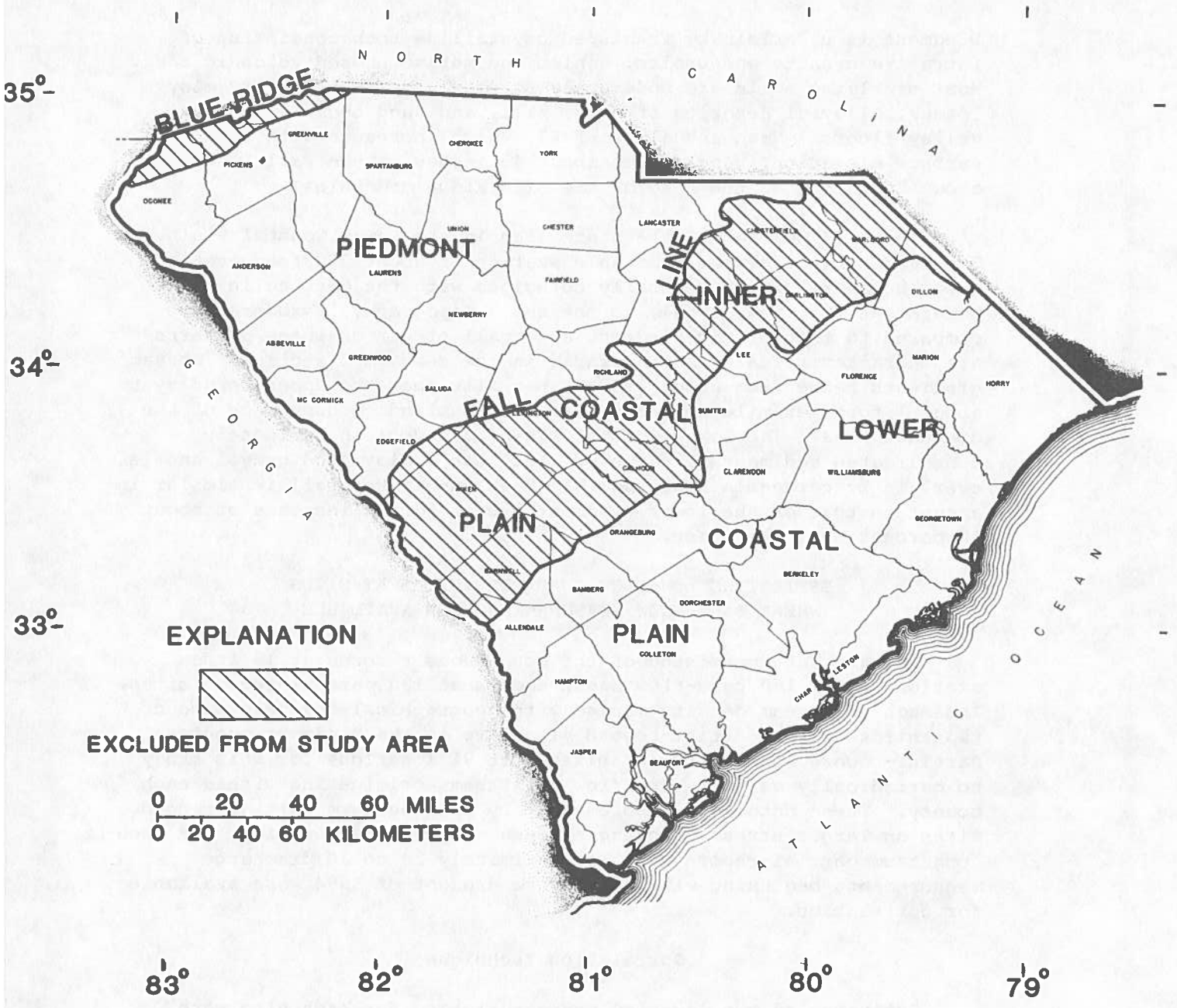
Figure 1.--Piedmont and Lower Coastal Plain Provinces.

3

Piedmont is underlain by fractured crystalline rock consisting of intrusive granite and gneiss, schist and metamorphosed volcanic rock. Most overlying soils are moderately to poorly permeable silty clay loams. Alluvial deposits of clay, silt, and sand occur along the valley floors. Mean annual rainfall, which increases with land surface elevation, ranges from about 45 inches at the Fall Line to about 70 inches at the base of the Blue Ridge mountains.

About 44 percent of the State lies in the Lower Coastal Plain. The land surface slopes from an elevation of about 200 feet at the upper boundary, which generally coincides with the Citronelle Escarpment (Doering, 1960), to the sea. Topography is moderate compared to that of the Piedmont and small stream drainage patterns are characteristically more erratic in the seaward direction. Stream gradients range from about 20 feet per mile near the upper boundary to about 1 foot per mile near the coast. Swamplands occupy much of the drainage area. The Lower Coastal Plain is underlain by loosely consolidated sedimentary rocks of silt, sand, clay, and gravel and is overlain by permeable sandy soils. Mean annual rainfall is similar in amount to that of the lower Piedmont except for an increase of about 10 percent near the coast.

ESTIMATING LOW-FLOW CHARACTERISTICS AT SITES WHERE BASE-FLOW MEASUREMENTS ARE AVAILABLE

Primary data consisted of the continuous records at 18 index stations and 1,150 base-flow measurements at 130 partial-record sites. Inasmuch as stream density varied with geographical coverage, about two-thirds of the partial-record sites are in the Piedmont province. Partial-record sites were established at 91 locations for this study to periodically measure base flow of streams originating within each county. These data were supplemented by 39 long term partial-record sites on larger streams flowing through many of the counties. At each long term partial-record site, approximately 20 to 30 discharge measurements beginning with the severe drought of 1954 were available for correlation.

Correlation Technique

Estimates of two low-flow characteristics for each site were determined for this report--the 7-day, 2-year ($7Q_2$) and the 7-day, 10-year ($7Q_{10}$) low-flow rates. Each low-flow characteristic was estimated by correlating base-flow measurements for the partial-record site with concurrent discharge for a nearby continuous-record index station (Riggs, 1972). Figure 2 shows a plot of base-flow measurements against concurrent daily discharge, the line of relation fitted to the points, and estimates of the low-flow characteristics at Big Creek by correlation with gaging station 02162010 for which a low-flow frequency curve is available.

4
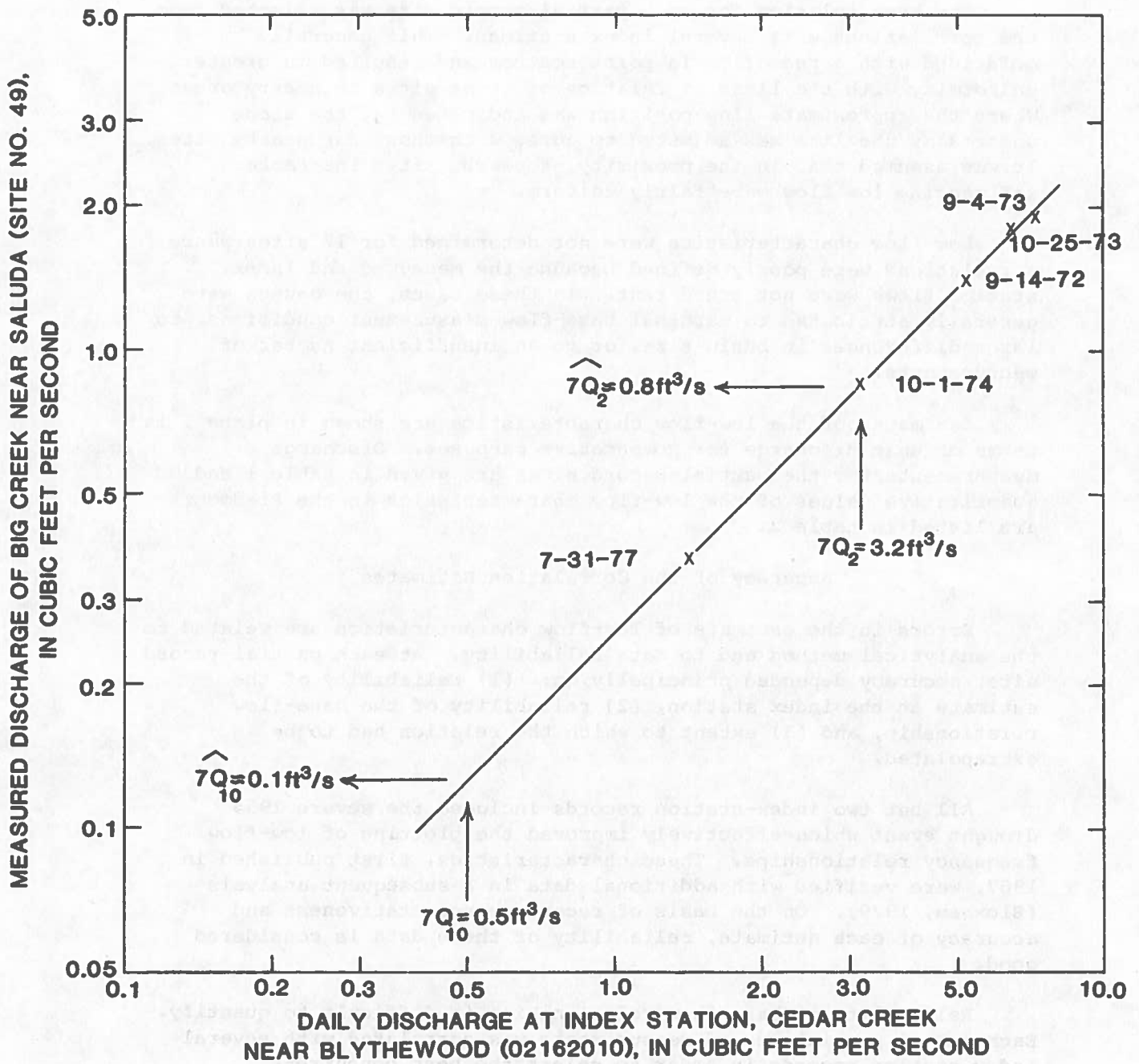
Figure 2.--Graphical Method of Estimating Low-Flow Characteristics
From Base-Flow Measurements.

The best relation for each partial-record site was selected from the correlations with several index stations. This generally coincided with a reduction in point scatter and resulted in greater uniformity with the lines of relation of those sites in nearby areas. Where the approximate line position was indicated but the slope uncertain, the line was adjusted to agree with those for nearby sites. It was assumed that in the proximity of nearby sites the factors influencing low flow were fairly uniform.

Low-flow characteristics were not determined for 17 sites where correlations were poorly defined because the measured and index station flows were not concurrent. In these cases, the causes were generally attributed to marginal base-flow-measurement conditions, to large differences in basin size, or to an insufficient number of measurements.

Estimates of the low-flow characteristics are shown in plate 1 in terms of unit discharge for comparative purposes. Discharge measurements for the partial-record sites are given in table 1 and quantitative values of the low-flow characteristics in the Piedmont are listed in table 2.

Accuracy of the Correlation Estimates

Errors in the estimate of low-flow characteristics are related to the analytical method and to data reliability. At each partial-record site, accuracy depended principally on: (1) reliability of the estimate at the index station, (2) reliability of the base-flow relationship, and (3) extent to which the relation had to be extrapolated.

All but two index-station records included the severe 1954 drought event which effectively improved the plotting of low-flow frequency relationships. These characteristics, first published in 1967, were verified with additional data in a subsequent analysis (Bloxham, 1979). On the basis of record representativeness and accuracy of each estimate, reliability of these data is considered good.

Reliability of base-flow relationships is difficult to quantify. Each set of partial-record measurements was correlated with several index-station records in order to select the best concurrent relationship. The major factors examined in the comparisons were data alignment with minimum scatter and the best defined range of concurrent discharge. Position and slope of the lines of relation were considered with reference to those of nearby streams. Random errors were probably minimized because of the multiple application of index-station records.

6

Extrapolation of the lines of relation varied from none to no
more than 1 log cycle (fig. 2 shows a typical example). Estimates of
$7Q_2$ and $7Q_{10}$ fell within the range of measured discharge at 15 of 26
long-term partial-record sites and the remainder required only minimal
extrapolation. Referral to the slope of the line of relation for a
long-term partial record site in establishing those for nearby
short-term partial-record sites may have been effective in reducing
extrapolation errors.

Variability of Low-Flow Characteristics

Considerable variability exists among the estimated low-flow
characteristics of each province. In the Piedmont, unit flow (plate
1) for $7Q_2$ varies from 0.72 $(ft^3/s)/mi^2$ to 0.01 $(ft^3/s)/mi^2$ and for
$7Q_{10}$ from 0.46 $(ft^3/s)/mi^2$ to zero. The widest range of variability
occurs among streams near the Fall Line (fig. 1). Smaller relative
differences between $7Q_2$ and $7Q_{10}$ occur as the unit values increase in
the northwesterly direction. This reflects the general change from
poorly sustained to well sustained streams at low flow and the
relation between low-flow variability and basin elevation.

The range in elevation, in the Lower Coastal Plain, which is less
than 200 feet, is too nominal to relate to variability. Unit flows
for $7Q_2$ ranged from 0.40 $(ft^3/s)/mi^2$ to approximately zero and for
$7Q_{10}$ from 0.15 $(ft^3/s)/mi^2$ to zero. Because of the widespread
occurrence of zero flow at $7Q_{10}$, variability is chiefly a distinction
between flowing and non-flowing streams. Most values of $7Q_{10}$ greater
than zero can be attributed to the following circumstances:

1. Flow in streams which originate outside the Lower Coastal Plain.
2. Low flow sustained by limestone aquifers.
3. Channel improvement (deepening) of swamp streams.

ESTIMATING LOW-FLOW CHARACTERISTICS AT UNGAGED SITES

Experience has shown that the logarithms of discharge are
linearly related to the logarithms of some basin characteristics as
well as to other streamflow characteristics. Graphic plots indicate
the general applicability of a linear regression model to explain the
relationship of these factors on a regional basis. This suggests a
means for estimating flow characteristics at ungaged sites and for
identifying the most effective indices that explain the variability of
low flows.

Regression Analyses

A multiple regression method was used to determine the
relationship between low-flow characteristics at the index stations
and those estimated by correlation at the partial-record sites with
several of the most significant basin factors effecting the discharge.

The exponential form of the equation is:

$$Q_T = aA^{b_1} B^{b_2} C^{b_3} \ldots \ldots N^{b_n} .$$

where:

Q_T is the 7-day low-flow characteristic of T-year recurrence interval;

a is the regression constant defined by the analyses;

A, B, C ... N are basin characteristics; and

b_1, b_2, b_3 ... b_n are regression coefficients defined by the analyses.

Five variables were tested in the regression: drainage area, stream length, mean basin elevation, percent forest cover and the flow rate at 95 percent duration. The regression equations were derived from successive inclusion and testing for significance of each variable. The most significant variables were retained in selection of the equations with the least standard error of estimate. The selected variables are statistically significant at the 5 percent level.

The preliminary analyses included all the variables for 10 index stations and 80 partial-record sites in the Piedmont and 8 index stations and 33 partial-record sites in the Lower Coastal Plain. An estimated $7Q_{10}$ of zero occurred at 8 Piedmont sites and 24 Lower Coastal Plain sites. Subsequent regression trials resulted in excessive errors of estimate which were not reduced until all zero values and all values from the Lower Coastal Plain sites were deleted from the analysis. Determinations of all $7Q_2$ values by regression produced a standard error of estimate which was reduced by 18 percent with the deletion of Lower Coastal Plain data. It was concluded that the two regions could not be related by the effectiveness of similar variables on low flow. A separate analysis for the Lower Coastal Plain failed to produce practical results chiefly because of the specialized conditions for low flow in that region (see "Variability of Low-Flow Characteristics").

The regression equations with standard errors (SE) of estimate derived for the Piedmont are given below.

$$7Q_2 = 0.17 A^{0.94} E^{-0.03} D_{95}^{0.89} \qquad SE = 27 \text{ percent}$$

$$7Q_{10} = 0.016 A^{0.87} E^{0.15} D_{95}^{1.32} \qquad SE = 34 \text{ percent}$$

8

where:

$7Q_2$, $7Q_{10}$ = discharge in cubic feet per second;

A = contributing drainage area in square miles;

E = mean basin elevation, in feet above sea level;

D_{95} = flow rate at 95 percent duration in inches per year.

Application of the equation requires determination of the variables as described in the following section.

Effective Regression Characteristics

The variables retained for the regression equation because of their significance were:

Drainage area (A) - the contributing area enclosed by the surface drainage divide. Drainage area in square miles was computed from U.S. Geological Survey topographic maps. For natural streams, the drainage basin reflects an integration of factors controlling the rate of flow.

Mean basin elevation (E) - elevation, in feet above sea level, was computed from topographic maps as the average of main-channel elevations at 10 percent and 85 percent of the distance upstream from the measurement site to the basin divide. Basin elevation is believed to be an index of the annual precipitation rate,[1] which increases with altitude, and of evapotranspiration loss.

Flow rate at 95 percent duration (D_{95}) - a generalized runoff map (fig. 3) in inches per year was devised for the Piedmont. Depending on site location in the upper and middle Piedmont, value selection was made from the nearest contour or interpolated to the midpoint of the two nearest contours relative to the site. The contour boundary determines the value within the closures indicated in the lower Piedmont. The flow rate at 95 percent duration reflects aquifer yield under definitive base flow conditions.

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[1]Precipitation rate was probably too generalized for the relatively small basins used in the regression to be statistically significant.

9
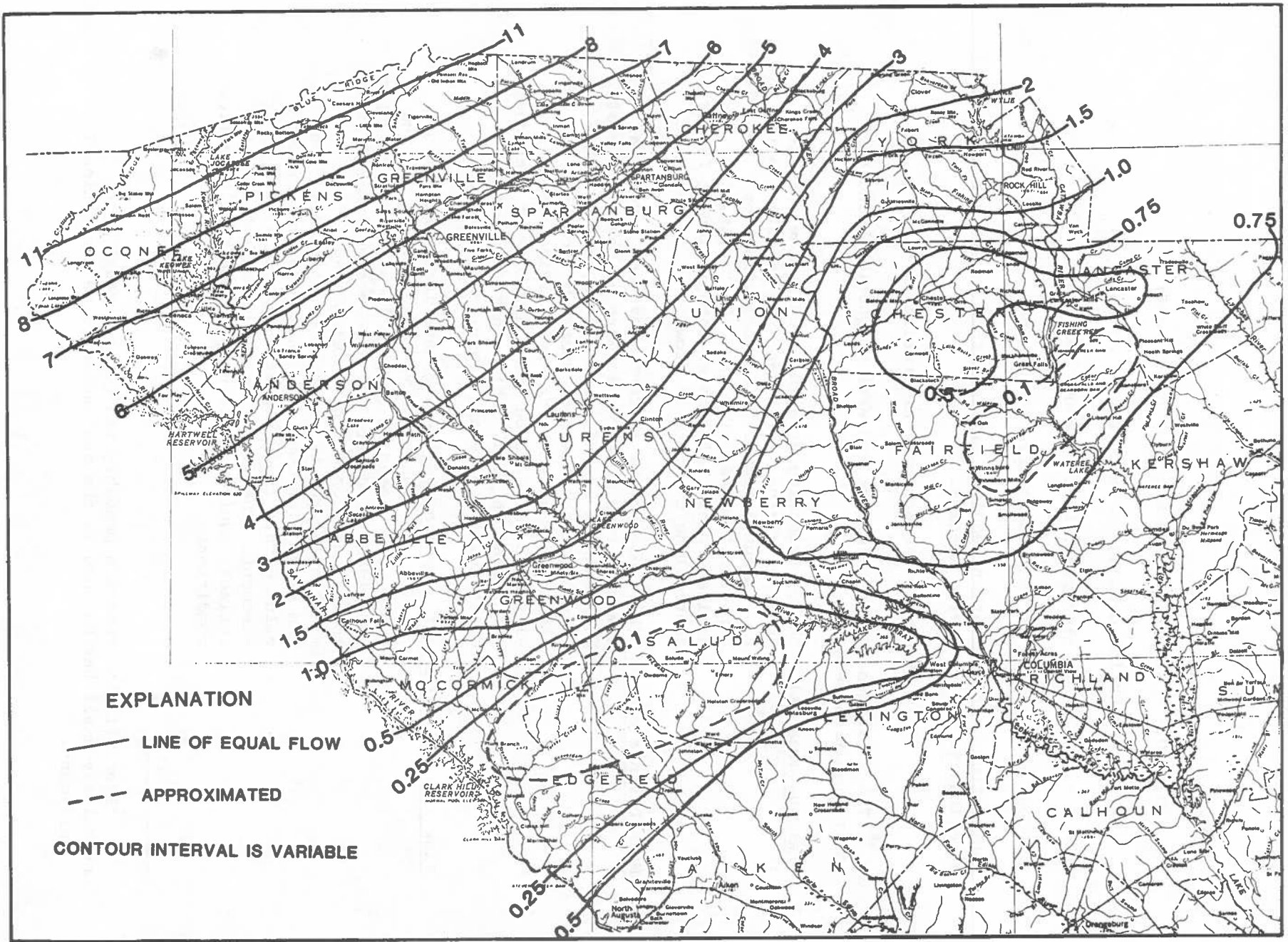
Figure 3.—Generalized Distribution of the Flow Rate, in inches per year, at 95 Percent Duration.

Magnitude of the variables used in the final regression analyses are given in table 2. The distribution within selected class intervals are as follows:

Drainage area, A (mi^2)	Number of sites	Mean basin elev., E (ft above sea level)	Number of sites	95 percent flow duration, D_{95} (in/yr)	Number of sites
5-20	11	290-300	1	0.1-0.5	17
21-30	12	301-400	14	.6-1.0	23
31-40	11	401-500	24	1.1-2.0	13
41-50	16	501-600	14	2.1-3.0	3
51-60	7	601-700	8	3.1-4.0	9
61-80	6	701-800	11	4.1-5.0	6
81-100	8	801-1000	5	5.1-6.0	4
101-270	9	1001-1280	3	6.1-8.0	5

Limitations and Accuracy of the Regression Equations

The constant and coefficients of the regression equations were developed for unregulated Piedmont streams from the input variables shown in table 2. In application of the equations, a similar range of input values is also required because of the uncertainty of solutions based on extrapolated data. A precise relation between the range of variables used to develop the equations and the limits of reliably estimated discharge has not been determined. Discharge, from the empirical data given in table 2, ranged from about 0.001 to 1.0 $(ft^3/s)/mi^2$ but the closeness of those values to practical limits is unknown because of relatively few extreme data used in the regression analyses. This is particularly important at the lower extreme due to the occurrence of poorly sustained streamflow in the lower Piedmont. Reliance should not be placed on the equations to differentiate between very low discharge and zero flow. Such values must be determined by another means.

Each basin characteristic exerts a different generating effect on low flow. As input variables, the differences were collectively proportioned in the regression analyses and are expressed by the constants and coefficients of the equations. Standard error of the regression equations as developed from drainage area and mean basin elevation values taken from U.S. Geological Survey topographic maps (scale 1:24,000) and flow duration estimates from figure 3 are 27 percent for $7Q_2$ and 34 percent for $7Q_{10}$. These apply only to the data used in the regression analyses. The standard error of prediction is unknown.

SELECTION OF METHOD FOR ESTIMATING LOW-FLOW CHARACTERISTICS

Either method of estimating low-flow characteristics given in
this report has several advantages over the other. Evaluation and
choice depend on individual limitations and applicability of the
methods and circumstances relating to the actual problem.

Low-flow characteristics are preferably estimated by correlating
base-flow measurements with concurrent discharge at an index station.
By utilizing a more extensive sampling of low-flow events, such
estimates benefit from better reliability. Moreover, it is possible
from the slope and position of the line of relation to assess the
stream's variability and to identify unusual low-flow characteristics
as compared to those estimated elsewhere. The data arrayed in plate 1
were estimated prior to conversion to unit flow by this method.

Where time limitations are a factor, the regression equation
provides an alternative approach to estimating discharge. The user
must consider the adherence to a specific range of input variables and
more flexible accuracy requirements in exchange for a rapid means of
making the estimate. This method is applicable to most unregulated
Piedmont streams provided the proper range of input variables is
observed, but a major shortcoming of the equations is that zero flow
cannot be differentiated from very low discharge.

WATER QUALITY CHARACTERISTICS

A limited sampling of dissolved oxygen, specific conductance, pH,
and fecal coliform was made September 4-7, 1973, at 106 sites
(table 3). As a rule, only minor differences among sites were
indicated by these parameters. Major exceptions were the significant
departures not attributed to natural causes at about 10 percent of the
sites. Differences in the characteristics by province and departures
from central tendency are shown below.

Province	Dissolved oxygen (mg/L)		Specific conductance (μmho)		pH (units)	
	Mean	Stn. Dev.	Mean	Stn. Dev.	Median	Stn. Dev.
Piedmont	7.3	1.0	101	47	7.2	0.3
Lower Coastal Plain	5.4	1.8	93	47	6.7	0.7

The variation in these values are shown in more detail in
figure 4. For specific conductance, the departures for middle to
upper Piedmont streams indicate lower than average values at higher
elevations. This suggests a lower dissolved-solids concentration in
these streams in comparison with the other values. The positive trend
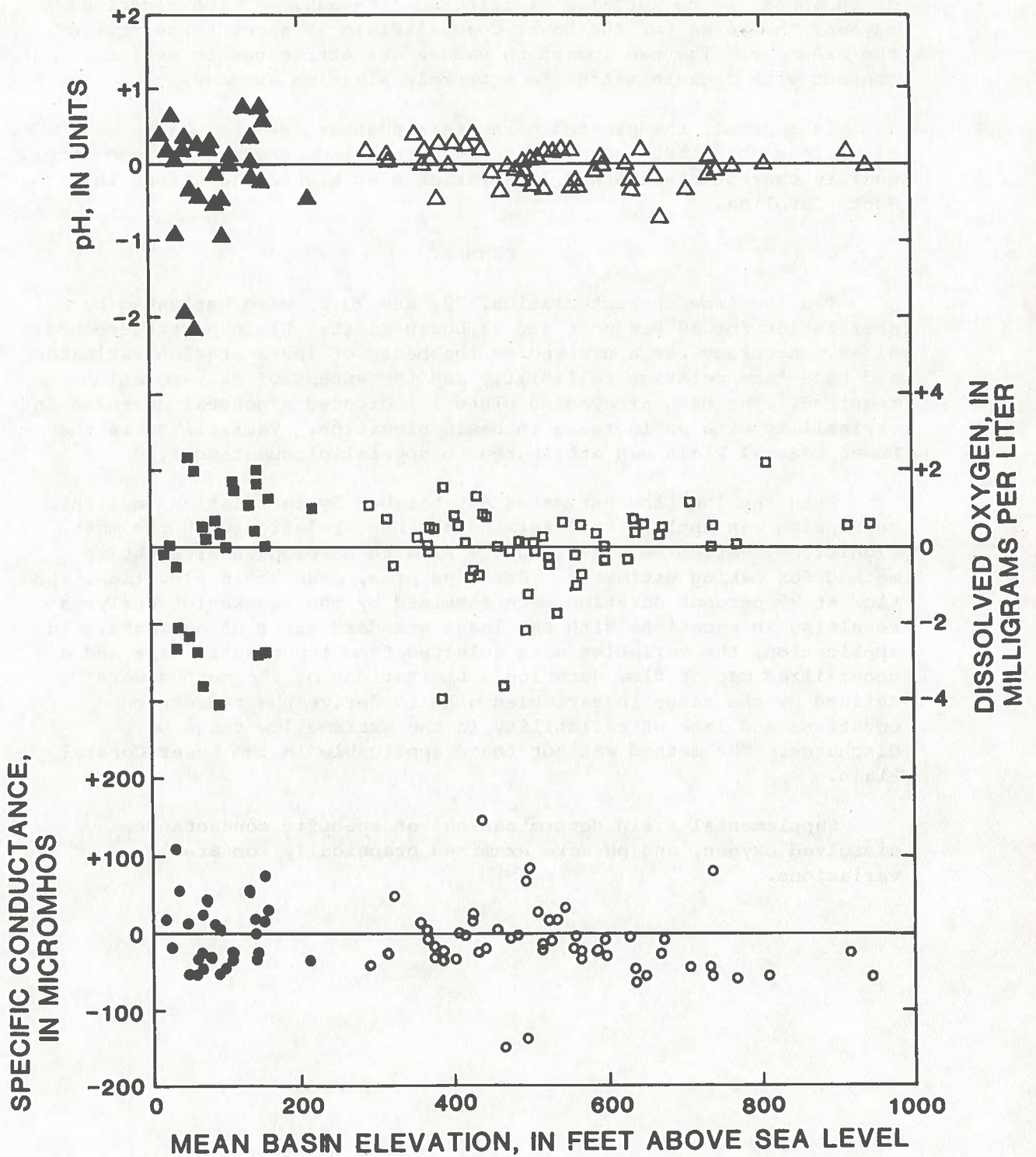
Figure 4.--Departures of Specific Conductance, Dissolved Oxygen, and pH from the Mean Value (September 4-7, 1973).

of dissolved oxygen values in the upper Piedmont may reflect the higher reaeration rate associated with turbulent streams. Departures of pH appear to be normally distributed although, as with dissolved oxygen, the range for the Lower Coastal Plain is about twice that of the Piedmont. The two lowest pH values are attributed to prolonged contact with organic matter in extremely sluggish streams.

In general, the plotted parameters scatter less for basin elevations above 500 feet than below. This indicates that these water-quality characteristics are less variable at higher elevations in South Carolina.

SUMMARY

Two low-flow characteristics, $7Q_2$ and $7Q_{10}$, were estimated by correlation for 80 Piedmont and 33 Lower Coastal Plain partial-record sites. Accuracy was appraised on the basis of index station estimates and base-flow relation reliability and the extent of extrapolation required. The data arrayed on plate 1 indicated a general decrease in variability with an increase in basin elevation. Variability in the Lower Coastal Plain was attributed to special circumstances.

With the low-flow estimates established by correlation, multiple regression was applied to determine the best relation with the most significant variables affecting low flow to develop an alternative method for making estimates. Drainage area, mean basin elevation, and flow at 95 percent duration were retained by the regression analyses resulting in equations with the least standard error of estimate. In application, the variables were selected from topographic maps and a generalized map of flow duration. Limitations of the method were defined by the range in variables used to derive the regression equations and lack of reliability in the extreme low range of discharge. The method was not found applicable in the Lower Coastal Plain.

Supplemental field determinations of specific conductance, dissolved oxygen, and pH were examined graphically for areal variations.

14

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16

SUPPLEMENTARY DATA.--Tables 1, 2, and 3

Table 1.--Discharge Measurements at Partial-Record Sites

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Waccamaw River Basin			
1	Simpson Creek	Lat 33°56'05", long 78°49'01", Horry County, at unpaved county rd, 2.0 mi upstream from Todd Swamp, and 1.8 mi NE of Red Bluff.	38.1	9-8-72	14.5
				9-6-73	7.96
				10-26-73	2.14
				10-20-77	7.70
				10-18-78	0.78
02110700	Crabtree Swamp	Lat 33°50'57", long 79°04'13", Horry County, at U.S. Hwy 501, at Conway, and 2.25 mi upstream from mouth.	14.0	6-28-50	0
				8-5-54	0
				9-8-72	0.60
				9-6-73	2.14
				10-26-73	0.23
				10-18-78	0.003
		PeeDee River Basin			
2	Rogers Creek	Lat 34°25'33", long 79°39'28", Marlboro County, at county rd 18, 2.2 mi W of Bristow, and approximately 4.0 mi upstream from mouth.	23.6	9-8-72	2.73
				9-6-73	4.55
				10-26-73	2.48
				7-27-77	1.03
				7-18-78	0
3	Middle Branch	Lat 34°08'50", long 79°37'02", Florence County, at county rd 13, 0.1 mi upstream from mouth, and 1.4 mi NE of Claussen.	7.48	9-11-72	0.31
				9-6-73	4.09
				10-26-73	0.15
				10-17-78	0
4	Flat Creek	Lat 34°38'14", long 80°26'10", Lancaster County, at county rd 123, 0.3 mi upstream from mouth, and 2.9 mi SW of Jefferson.	48.2	9-13-72	4.59
				9-6-73	5.22
				10-26-73	4.11
				10-2-74	6.54
				8-16-76	10.1
				7-20-77	4.35
02131300	Lynches River	Lat 34°37'50", long 80°25'15", Chesterfield County, at State Hwy 265, 1.0 mi downstream from Flat Creek, and 2.2 mi SW of Jefferson.	170	3-10-52	143
				4-17-52	67.6
				6-15-60	22.5
				10-27-60	24.4
				10-25-61	20.2
				4-25-62	33.8
				9-5-62	28.1
				5-16-63	29.8
				8-20-63	15.9
				10-29-63	21.4
				5-18-65	24.9
				9-26-68	4.42
				10-14-68	1.92
				5-8-69	49.3
				7-8-70	6.90

18

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		PeeDee River Basin -- Continued			
				7-14-70	7.48
				9-13-72	9.38
				9-6-73	13.3
				10-26-73	9.28
				10-2-74	17.3
				8-16-76	22.0
				7-20-77	9.98
02131455	Little Lynches River	Lat 34°33'04", long 80°32'48", Kershaw County, at State Hwy 157, 1.5 mi upstream from Neds Creek, and 2.0 mi E of Kershaw.	48.5	8-28-68	4.99
				9-27-68	1.36
				5-14-69	23.9
				5-20-70	20.0
				7-8-70	0.91
				7-14-70	1.04
5	Sparrow Swamp	Lat 34°07'22", long 79°57'20", Florence County, at U.S. Hwy 76, 0.25 mi downstream from SCL Railroad, and 1.1 mi SW of Timmonsville.	99.1	10-5-65	5.39
				9-16-66	3.03
				8-29-68	0
				9-25-68	0
				5-15-69	9.67
				7-16-70	0
				10-17-78	0
6	Deep Hole Swamp	Lat 34°05'15", long 79°59'19", Florence County, at rd 146, 1.2 mi downstream from SCL Railroad, and 2.2 mi E of Cartersville.	14.0	9-11-72	0
				9-5-73	0.52
				10-26-73	0
				10-17-78	0
02131870	Lake Swamp	Lat 34°08'33", long 79°55'04", Florence County, at U.S. Hwy 76, 0.25 mi downstream from SCL Railroad, and 1.4 mi NE of Timmonsville.	29.5	10-5-65	0.60
				8-29-68	0
				9-25-68	0
				10-31-69	1.09
				7-16-70	0
				10-17-78	0
02131990	Carter Creek	Lat 34°03'51", long 79°46'03", Florence County, at U.S. Hwy 301, at Effingham, and 0.8 mi upstream from mouth.	8.28	10-21-69	0
				9-11-72	0
				9-5-73	0.34
				5-19-77	0
				7-28-77	0
7	Unnamed Creek	Lat 33°57'54", long 79°43'04", Florence County, at county rd 46, 1.8 mi E of Coward, and 2.1 mi downstream from SCL Railroad	3.73	9-11-72	0.44
				9-5-73	0.33
				10-26-73	0.04

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		PeeDee River Basin -- Continued			
02132600	Buck Swamp	Lat 34°18'23", long 79°20'19", Dillon County, at county rd 46, 1.2 mi S of Floydale, and 9.0 mi upstream from mouth.	100	7-14-60	40.3
				10-31-60	36.0
				10-31-60	0
				5-8-62	3.18
				7-17-63	0
				8-27-63	0
				10-29-63	0
				8-27-68	0
				9-8-72	0
				9-6-73	0
				10-18-78	0
02135050	Reedy Creek	Lat 34°04'51", long 79°18'50", Marion County, at U.S. Hwy 501, 1.0 mi upstream from SCL Railroad, and 1.1 mi S of Rains.	36.0	9-7-72	0
				9-6-73	0
				10-18-78	0
8	Rocky Bluff Swamp	Lat 34°02'23", long 80°21'41", Sumter County, at county rd 290, 0.6 mi upstream from SCL Railroad, and 4.1 mi NE of Dalzell.	7.81	9-5-72	9.43
				9-4-73	1.58
				10-23-73	0
				10-17-78	0
02135600	Pocotaligo River	Lat 33°48'15", long 80°17'25", Sumter County, at county rd 32, 0.3 mi downstream from Briar Branch, and 8.7 mi S of Sumter.	185	7-25-60	46.6
				11-8-60	49.3
				5-22-61	173
				8-14-62	71.9
				10-30-62	30.9
				4-17-63	114
				11-21-63	60.5
				9-29-64	124
				11-18-64	221
				9-25-68	9.55
				7-16-70	23.1
				9-5-72	73.8
				9-4-73	69.0
				10-23-73	41.0
9	Kingstree Swamp Canal	Lat 33°47'47", long 79°49'19", Williamsburg County, at county rd 28, 0.8 mi downstream from Smith's Bay Canal, and 2.5 mi NW of Cades.	29.2	9-6-72	0.26
				9-7-73	4.27
				10-25-73	0
				10-20-77	0.65
				10-17-78	0

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		PeeDee River Basin -- Continued			
02136100	Black Mingo Creek	Lat 33°40'02", long 79°30'32", Williamsburg County, at SCL Railroad, 0.5 mi upstream from county rd 121, 0.7 mi upstream from Headless Creek, and 1.0 mi NE of Nesmith.	130	9-27-46	8.56
				5-26-59	16.4
				4-27-60	22.9
				11-7-60	2.54
				9-26-61	22.9
				9-6-62	13.9
				5-17-63	0
				8-21-63	0
				10-30-63	0
				5-19-65	2.98
				10-3-68	0
				9-6-72	54.3
				9-5-73	16.4
				10-17-78	0
		Santee River Basin			
02145650	Beaverdam Creek	Lat 35°06'50", long 81°07'45", York County, at county rd 114, 0.4 mi downstream from Camp Run, and 5.6 mi E of Clover.	17.0	6-1-55	5.65
				11-2-55	4.65
				5-4-59	13.2
				5-23-60	13.5
				9-21-61	5.73
				10-31-61	4.54
				5-16-62	12.2
				11-15-62	10.1
				4-18-63	15.1
				10-16-63	14.1
				5-28-64	14.1
				11-18-64	14.4
				9-13-72	5.74
				10-24-73	6.37
				10-1-74	6.30
				8-17-76	5.27
				7-19-77	4.28
10	Allison Creek	Lat 35°03'48", Long 81°09'04", York County, at county rd 54, 100 ft downstream from Rock Branch, and 5.4 mi SE of Clover.	35.7	6-1-55	9.23
				11-2-55	6.03
				9-13-72	10.0
				10-24-73	8.49
				10-1-74	14.6
				8-17-76	10.6
				7-19-77	7.64

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Santee River Basin -- Continued			
11	Waxhaw Creek	Lat 34°48'46", long 80°51'37", Lancaster County, at county rd 29, 0.4 mi upstream from Southern Railroad, and 3.2 mi SE of Van Wyck.	50.1	3-27-50	25.5
				9-12-72	3.71
				9-6-73	2.82
				10-25-73	3.77
				10-1-74	4.12
				8-17-76	5.01
				7-19-77	3.70
12	Cane Creek	Lat 34°43'52", long 80°48'41", Lancaster County, at State Hwy 9, 0.1 mi downstream from Camp Creek, and 2.6 mi NW of Lancaster.	78.1	9-12-72	5.78
				9-6-73	3.82
				10-25-73	4.33
				10-1-74	3.16
				8-17-76	5.14
				7-19-77	2.26
13	Fishing Creek	Lat 33°53'33", long 81°05'10", York County, at county rd 101, 0.9 mi upstream from Southern Railroad, and 4.1 mi SW of Rock Hill.	48.4	9-13-72	8.04
				9-4-73	8.97
				10-24-73	11.3
				8-18-76	7.93
14	South Fork Creek	Lat 34°47'27", long 81°05'32", Chester County, at county rd 496, 2.2 mi upstream from SCL Railroad, and 2.6 mi NE of Lewis.	54.3	9-12-72	2.22
				9-5-73	3.46
				10-25-73	3.67
				10-2-74	3.77
				8-17-76	2.37
				7-19-77	1.88
15	Tinkers Creek	Lat 34°44'25", long 80°57'08", Chester County, at county rd 599, 1.9 mi upstream from mouth, and 2.8 mi SW of Landsford.	24.5	9-12-72	5.27
				9-5-73	6.18
				10-25-73	3.53
				10-2-74	4.35
				8-17-76	3.17
				7-19-77	2.86
02147400	Fishing Creek	Lat 34°41'30", long 80°56'25", Chester County, at State Hwy 9, 2.3 mi W of Ft. Lawn, and 2.8 mi downstream from Tinkers Creek.	270	1-16-50	145
				5-2-50	105
				10-15-51	21.2
				4-21-52	104
				9-16-54	3.85
				9-4-57	6.74
				5-22-58	144
				9-26-58	28.0
				5-4-59	106
				5-6-60	135
				4-26-61	165
				9-20-61	34.9
				10-31-61	31.5
				5-15-62	32.4
				11-14-62	27.1

22

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Santee River Basin -- Continued			
				4-17-63	55.7
				10-15-63	37.9
				5-27-64	49.2
				11-18-64	37.5
				9-12-72	33.7
				9-5-73	43.4
				10-25-73	45.0
				10-2-74	48.5
				8-17-76	32.0
				7-19-77	24.1
16	Camp Creek	Lat 34°35'55", long 80°50'58", Lancaster County, at county rd 20, 2.3 mi upstream from mouth, and 3.7 mi NE of Great Falls.	38.1	9-4-53	0
				9-13-72	1.31
				9-5-73	0.52
				10-25-73	0.97
				10-1-74	0.24
				8-17-76	3.11
				7-19-77	0.08
17	Little Rocky Creek	Lat 34°35'23", long 80°58'27", Chester County, at county rd 53, 2.4 mi upstream from mouth, and 3.0 mi W of Beckhamville.	53.4	9-12-72	8.46
				9-5-73	11.0
				10-25-73	12.4
				10-2-74	5.78
				8-17-76	5.82
				7-19-77	3.10
18	Big Wateree Creek	Lat 34°28'05", long 80°53'50", Fairfield County, at U.S. Hwy 21, 0.7 mi upstream from Wateree Lake, and 6.9 mi SW of Great Falls.	58.1	9-12-72	1.70
				9-4-73	2.86
				10-25-73	4.29
				9-30-74	0.92
				8-18-76	5.61
				7-18-77	0.11
19	Beaver Creek	Lat 34°28'50", long 80°44'24", Kershaw County, at unnumbered county rd, 0.7 mi upstream from Bell Branch, and 3.9 mi NE of Liberty Hill.	29.4	9-13-72	5.34
				9-5-73	11.8
				10-26-73	7.23
				10-1-74	4.46
				7-19-77	7.01
02147820	Sawneys Creek	Lat 34°19'30", long 80°43'22", Kershaw County, at county rd 37, 2.9 mi upstream from mouth, and 8.7 mi NW of Camden.	54.3	10-30-69	5.48
				7-16-70	4.80
				9-13-72	3.78
				9-4-73	8.08
				10-26-73	3.76
				10-1-74	3.88
				8-16-76	8.83
				7-19-77	2.89

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Santee River Basin -- Continued			
02153480	Buffalo Creek	Lat 35°07'40", long 81°32'43", Cherokee County, at State Hwy 5, 1.5 mi upstream from mouth, and 2.0 mi W of Blacksburg.	176	10-29-46	122
				2-15-49	190
				11-28-49	153
				5-11-50	126
				11-16-50	96.9
				5-8-51	126
				10-15-51	50.6
				11-2-51	164
				1-8-52	131
				4-22-52	164
				6-23-52	96.1
				10-15-52	91.1
				11-17-52	94.2
				12-15-52	97.8
				1-15-53	186
				2-17-53	312
				3-13-53	255
				4-16-53	171
				5-15-53	125
				6-12-53	206
				7-16-53	70.2
				8-14-53	43.3
				9-16-53	50.8
				10-14-53	64.1
				3-26-54	435
				8-18-54	20.3
				9-16-54	14.7
				10-4-54	14.3
				6-1-55	87.8
				11-3-55	59.5
				5-15-56	122
				12-6-56	79.3
				5-22-57	116
				9-4-57	36.0
				5-22-58	216
				5-11-59	179
				5-24-60	176
				11-15-60	118
				9-30-61	124
				11-1-61	101
				5-16-62	84.0
				11-15-62	94.5
				4-18-63	81.5
				10-16-63	180
				5-28-64	90.6
				11-19-64	139
				9-14-72	78.3
				8-17-76	76.9

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Santee River Basin -- Continued			
20	Cherokee Creek	Lat 35°06'22", long 81°36'46", Cherokee County, at State Hwy 18, 0.2 mi upstream from waterworks, and 3.1 mi NE of Gaffney.	15.9	10-29-46	9.82
				11-29-46	18.2
				10-19-54	1.69
				11-3-55	5.15
				12-5-56	9.44
				4-11-57	20.3
				9-6-57	3.84
02153600	Kings Creek	Lat 35°04'27", long 81°26'56", Cherokee County, at State Hwy 5, at Kings Creek, and 0.3 mi upstream from Manning Branch.	47.6	10-29-46	29.7
				5-16-49	59.4
				11-28-49	48.2
				5-2-50	38.4
				11-16-50	18.0
				5-8-51	33.8
				10-15-51	12.1
				4-22-52	40.1
				10-14-53	10.5
				9-8-54	2.26
				10-4-54	2.28
				11-2-55	6.90
				12-6-56	12.4
				5-23-57	19.9
				9-4-57	2.51
				5-22-58	49.3
				5-4-59	45.2
				9-14-59	16.9
				5-5-60	51.2
				11-15-60	25.9
				9-20-61	19.6
				10-31-61	15.1
				5-16-62	24.9
				11-15-62	12.4
				5-18-63	32.6
				10-16-63	13.5
				5-28-64	25.4
				11-19-64	25.7
				9-14-72	159
				9-5-73	47.7
				10-25-73	22.8
				10-1-74	19.2
				8-17-76	19.4
				7-19-77	10.6

25

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Santee River Basin -- Continued			
02153700	Thicketty Creek	Lat 35°03'46", long 81°42'53", Cherokee County, at county rd 42, 1.1 mi upstream from Irene Creek, and 4.0 mi W of Gaffney.	25.0	7-14-58	32.0
				8-1-58	26.1
				8-8-58	23.1
				9-14-59	17.8
				5-24-60	26.8
				9-21-61	13.3
				11-1-61	16.1
				5-9-62	32.2
				10-15-62	15.9
				4-22-63	24.1
				10-10-63	11.2
				5-7-68	33.6
				9-14-72	16.0
				9-5-73	15.7
				10-25-73	13.9
				10-1-74	17.2
				8-17-76	17.0
				7-19-77	10.4
02153705	Thicketty Creek	Lat 35°01'22", long 81°42'57", Cherokee County, at U.S. Hwy 29, 2.0 mi upstream from Little Thicketty Creek, and 4.9 mi SW of Gaffney.	39.0	5-18-49	43.2
				11-29-49	50.2
				11-16-50	21.2
				10-15-51	12.9
				10-14-53	21.0
				9-14-54	5.51
				10-19-54	6.77
				11-3-55	14.2
				12-3-56	21.5
				9-6-57	16.0
				5-23-58	58.4
				5-5-59	45.3
				5-24-60	44.3
				9-21-61	23.1
				11-1-61	22.4
				5-9-62	51.9
				10-15-62	23.1
				4-22-63	38.0
				10-10-63	18.8
				5-18-64	49.8
21	Gilkey Creek	Lat 34°57'53", long 81°33'28", Cherokee County, at county rd 231, 20 ft downstream from Rocky Branch, and 1.5 mi SW of Wilkinsville.	20.4	9-14-72	3.20
				9-5-73	4.51
				10-25-73	5.08
				10-1-74	3.59
				8-17-76	4.98
				7-19-77	3.32

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Santee River Basin -- Continued			
02153800	Bullock Creek	Lat 34°57'13", long 81°22'58", York County, at State Hwy 211, 0.4 mi downstream from Thompson Branch, and 2.5 mi W of Sharon.	84.0	10-29-46	93.8
				5-16-47	26.7
				11-7-47	75.9
				2-15-49	75.5
				11-28-49	44.8
				2-9-50	82.9
				3-27-50	66.7
				5-2-50	50.4
				11-16-50	20.2
				2-6-51	39.9
				5-8-51	30.3
				10-15-51	9.55
				4-22-52	43.0
				10-15-52	12.5
				4-16-53	49.8
				6-12-53	40.5
				10-2-53	10.5
				3-17-54	74.3
				6-24-54	16.0
				9-8-54	0
				11-2-55	6.61
				12-4-56	17.5
				5-23-57	29.8
				9-4-57	0
				5-6-60	57.3
				11-15-60	30.6
				9-20-61	20.3
				10-31-61	13.2
				5-16-62	36.5
				11-15-62	23.5
				4-18-63	41.8
				10-16-63	21.5
				5-28-64	31.0
				11-19-64	38.4
				9-13-72	14.7
				10-24-73	28.0
				10-1-74	23.7
				8-17-76	20.9
				7-19-77	10.8
22	Turkey Creek	Lat 34°46'35", long 81°25'57", Chester County, at State Hwy 9, 1.7 mi SE of Lockhart, and 1.8 mi upstream from mouth.	142	9-14-54	0
				9-6-57	0
				9-13-72	24.0
				10-26-73	33.2
				10-2-74	30.3
				8-18-76	24.0
				7-20-77	23.9

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Santee River Basin -- Continued			
23	Big Browns Creek	Lat 34°43'28", long 81°29'10", Union County, at county rd 86, 0.5 mi upstream from mouth, and 7.6 mi E of Union.	43.4	9-12-72	24.4
				9-6-73	16.9
				10-26-73	22.5
				10-2-74	20.1
				8-16-76	14.9
				7-20-77	17.2
24	Brushy Fork Creek	Lat 34°38'55", long 81°22'15", Chester County, at county rd 25, 1.0 mi upstream from mouth, and 2.0 mi NE of Leeds.	19.6	9-13-72	5.82
				9-4-73	2.07
				10-24-73	6.10
				9-30-74	4.86
				8-18-76	3.93
				7-20-77	4.17
02156600	Sandy River	Lat 34°36'50", long 81°22'14", Chester County, at State Hwy 72, 0.4 mi upstream from Little Sandy River, and 2.0 mi SE of Leeds.	104	12-16-49	339
				2-9-50	54.5
				3-31-50	68.6
				5-4-50	82.3
				11-15-50	19.7
				10-16-51	6.54
				12-3-51	15.2
				1-9-52	35.8
				6-11-53	12.2
				10-13-53	4.64
				9-7-54	0
				11-8-55	7.68
				10-11-56	6.23
				6-12-57	49.6
				9-4-57	0.03
				9-19-59	20.8
				5-5-60	39.2
				9-26-60	11.2
				11-15-60	26.4
				9-13-61	12.2
				10-13-61	7.63
				5-15-62	24.6
				11-14-62	22.5
				4-17-63	28.2
				10-15-63	8.74
				5-27-64	10.5
				11-18-64	14.5
				9-12-72	21.0
				9-4-73	19.8
				10-24-73	24.6
				10-10-74	15.9
				8-18-76	16.1
				7-20-77	12.0
25	South Tyger River	Lat 34°58'40", long 82°14'40", Greenville County, at State Hwy 14, 0.8 mi downstream from Clear Creek, and 2.8 mi N of Greer.	59.8	11-18-53	36.7
				10-5-54	9.69
				10-20-54	15.4
				11-16-54	37.1
				1-7-55	50.2

28

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Santee River Basin -- Continued			
26	Tinker Creek	Lat 34°35'09", long 81°34'52", Union County, at county rd 278, 0.5 mi upstream from mouth, and 4.2 mi SW of Santuc.	28.2	11-19-51	4.65
				9-12-72	10.3
				9-6-73	7.68
				10-2-74	5.76
				8-16-76	4.77
				7-20-77	6.04
27	Cane Creek	Lat 34°30'23", long 81°26'51", Union County, at county rd 359, 0.8 mi upstream from mouth, and 6.0 mi S of Carlisle.	24.7	11-15-66	5.55
				9-12-72	0.58
				9-6-73	4.26
				10-26-73	8.61
				9-30-74	3.28
				8-16-76	4.35
				7-20-77	1.90
02160200	Enoree River	Lat 34°55'25", long 82°17'40", Greenville County, at county rd 38, at Taylors, and 0.6 mi downstream from Mountain Creek.	49.0	10-3-51	34.0
				3-26-54	177
				4-6-54	87.2
				10-19-54	10.8
				9-5-57	45.5
				9-19-59	60.1
				5-5-60	92.8
				9-26-60	42.1
				11-16-60	48.5
				8-17-61	49.7
				10-13-61	35.1
				5-9-62	82.1
				10-15-62	39.7
				4-23-63	54.7
				9-27-63	19.8
				10-10-63	27.7
				5-7-65	90.0
				9-12-72	40.1
				9-4-73	38.2
				8-17-76	40.4
				7-20-77	24.5
28	Mountain Creek	Lat 34°55'25", long 82°18'35", Greenville County, at county rd 279, at Taylors, and 0.6 mi upstream from mouth.	10.9	3-26-54	25.1
				4-6-54	19.6
				4-19-54	14.3
				10-19-54	2.26
29	Durbin Creek	Lat 34°42'17", long 82°05'20", Laurens County, at county rd 67, 0.8 mi downstream from Little Durbin Creek, and 7.5 mi E of Fountain Inn.	30.1	9-13-72	18.6
				9-4-73	17.3
				9-30-74	15.6
				8-17-76	18.4
				9-25-76	16.1
				7-20-77	12.5

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Santee River Basin -- Continued			
02160520	Warrior Creek	Lat 34°36'56", long 81°58'33", Laurens County, at U.S. Hwy 221, at Landford, and 0.2 mi downstream from SCL Railroad.	23.0	1-13-53	36.6
				6-2-53	9.75
				10-13-53	6.34
				6-23-54	7.79
				8-25-54	1.62
				9-15-54	0.36
				10-4-54	0.37
				5-19-57	12.2
				9-4-57	0.56
				5-5-60	25.2
				9-26-60	10.1
				9-13-61	9.82
				10-13-61	8.04
				6-12-62	16.7
				10-15-62	7.10
				4-22-62	15.7
				10-10-63	9.18
				5-18-64	21.0
				5-7-65	29.4
				9-11-72	5.90
				9-4-73	8.50
				9-30-74	10.4
				8-18-76	11.0
				9-25-76	8.96
				7-21-77	4.12
30	Duncan Creek	Lat 34°32'42", long 81°53'57", Laurens County, at county rd 53, 0.1 mi upstream from Long Branch, and 5.1 mi SE of Clinton.	17.8	9-11-72	2.25
				9-4-73	6.88
				10-26-73	7.38
				9-30-74	5.61
				8-18-76	3.07
				9-25-76	3.15
				7-21-77	4.18
31	Indian Creek	Lat 34°25'04", long 81°33'35", Newberry County, at unnumbered county rd, 0.6 mi upstream from Hunting Creek and 6.4 mi SE of Whitmire.	88.8	9-15-54	0
				9-4-57	0
				9-12-72	13.4
				10-10-74	14.8
				8-16-76	10.8
				7-8-77	7.95
				7-20-77	4.67
32	Beaver Creek	Lat 34°27'24", long 81°23'41", Fairfield County, at county rd 99, 0.7 mi downstream from McClures Creek, and 2.7 mi N of Blair.	41.0	9-11-72	4.87
				9-4-73	3.30
				10-24-73	4.80
				9-30-74	3.04
				8-18-76	6.71
				7-18-77	3.02

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Santee River Basin -- Continued			
33	Hellers Creek	Lat 34°20'05", long 81°24'07", Newberry County, at county rd 97, 0.8 mi downstream from Branch Creek, and 4.9 mi NE of Pomaria.	34.1	9-11-72	8.27
				9-7-73	6.40
				10-23-73	7.82
				9-30-74	7.77
				8-19-76	6.94
				7-19-77	3.75
34	Cannons Creek	Lat 34°16'32", long 81°27'53", Newberry County, at county rd 299, 1.3 mi downstream from Kerr Creek, and 2.8 mi W of Pomaria.	43.8	9-11-72	9.10
				9-7-73	12.4
				10-23-73	12.8
				9-30-74	11.7
				8-19-76	8.07
				7-19-77	6.47
02161800	Little River	Lat 34°24'40", long 81°14'20", Fairfield County, at State Hwy 34, 0.6 mi downstream from Lick Creek, and 5.2 mi NE of Monticello.	100	3-23-60	93.6
				9-6-60	12.6
				11-17-60	14.7
				9-13-61	5.35
				10-12-61	3.77
				5-15-62	9.00
				11-14-62	8.19
				4-17-63	14.7
				10-15-63	11.4
				5-27-64	9.95
				11-18-64	17.5
				9-11-72	15.6
				9-4-73	14.3
				10-24-73	17.6
				9-30-74	10.5
				8-18-76	15.5
				7-18-77	7.25
35	Mill Creek	Lat 34°19'10", long 81°14'40", Fairfield County, at county rd 48, 0.6 mi upstream from mouth, and 4.2 mi NE of Jenkinsville.	19.9	9-11-72	3.12
				9-4-73	3.62
				10-24-73	3.09
				9-30-74	2.74
				8-18-76	2.08
				7-18-77	2.50
36	Little River	Lat 34°11'42", long 81°10'08", Fairfield County, at State Hwy 215, 1.25 mi NE of Richtex, and 1.5 mi upstream from mouth.	237	9-14-54	1.72
				9-4-57	3.19
37	Hollingshead Creek	Lat 34°09'16", long 81°11'17", Richland County at county rd 939, 0.8 mi upstream from Hope Creek, and 1.9 mi S of Richtex.	11.2	7-20-77	0
				10-30-78	0

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Santee River Basin -- Continued			
02162020	Little Cedar Creek	Lat 34°11'21", long 81°06'52", Richland County, at county rd 1682, 300 ft upstream from mouth, and 3.9 mi E of Richtex.	33.7	8-18-59	9.66
				12-17-50	18.9
				3-23-60	37.3
				9-6-60	17.5
				11-17-60	9.99
				9-13-61	4.95
				10-12-61	3.09
				5-15-62	16.7
				11-14-62	13.8
				4-17-63	22.2
				10-15-63	14.3
				5-27-64	17.5
				11-18-64	19.7
				9-11-72	7.38
				9-4-73	7.60
				10-24-73	7.33
				9-30-74	6.41
				8-18-76	5.92
				7-18-77	4.08
38	North Saluda River	Lat 35°01'00", long 82°29'45", Greenville County, at U.S. Hwy 276, at Marietta, and 0.2 mi downstream from Greenville and Northern Railroad.	66.4	10-28-46	78.3
				10-25-48	64.2
				10-6-54	24.1
				9-5-57	45.7
39	Grove Creek	Lat 34°38'29", long 82°25'26", Greenville County, at county rd 159, 1.8 mi E of Pelzer, and 3.0 mi upstream from mouth.	25.5	9-13-72	17.8
				9-4-73	17.1
				10-26-73	20.1
				8-17-76	17.3
				7-20-77	9.90
40	Broad Mouth Creek	Lat 34°28'04", long 82°21'49", Anderson County, at U.S. Hwy 76, 2.3 mi NE of Honea Path, and 3.3 mi upstream from mouth.	27.7	8-5-52	10.0
				9-9-52	9.14
				9-12-72	11.2
				9-5-73	14.6
				10-26-73	16.1
				9-30-74	16.1
				7-19-77	8.92
41	Turkey Creek	Lat 34°20'31", long 82°11'26", Greenwood County, at county rd 96, 0.6 mi upstream from mouth, and 5.3 mi SE of Ware Shoals.	45.1	9-13-72	12.5
				9-5-73	17.3
				9-30-74	15.5
				8-16-76	27.9
				7-19-77	12.6

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Santee River Basin -- Continued			
42	Huff Creek	Lat 34°38'40", long 82°19'16", Greenville County, at State Hwy 418, 0.2 mi downstream from Baker Creek, and 2.4 mi N of Fork Shoals.	26.9	9-13-72	19.4
				9-4-73	18.2
				10-26-73	19.4
				9-30-74	23.9
				8-17-76	25.8
				7-20-77	10.7
02165300	Rabon Creek	Lat 34°28'27", long 82°08'37", Laurens County, at State Hwy 252, 2.8 mi upstream from Dirty Creek, and 7.5 mi W of Laurens.	88.3	10-7-54	4.23
				11-7-55	26.7
				9-20-56	7.04
				9-4-57	5.44
				5-18-59	56.8
				12-9-59	65.6
				5-5-60	97.3
				11-16-60	56.3
				6-7-61	68.4
				10-24-61	42.1
				5-7-62	93.6
				10-17-62	38.0
				4-22-63	80.1
				10-24-63	44.9
				5-19-64	105
				5-19-65	97.5
				9-11-72	39.1
				9-6-73	43.7
				10-2-74	37.9
				8-18-76	43.2
				9-25-76	38.9
				7-21-77	28.6
43	Coronaca Creek	Lat 34°12'59", long 82°04'09", Greenwood County, at county rd 100, 0.5 mi upstream from Wilson Creek, and 3.9 mi NE of Ninety-Six.	41.4	12-10-58	6.19
				9-13-72	5.55
				9-5-73	8.97
				10-25-73	9.30
				10-1-74	7.41
				8-18-76	6.96
				7-20-77	9.60
02166900	Wilson Creek	Lat 34°10'23", long 81°57'24", Greenwood County, at State Hwy 34, 1.5 mi upstream from mouth, and 4.0 mi E of Ninety-Six.	76.0	5-13-40	19.4
				5-10-50	24.3
				6-14-50	19.9
				1-9-51	37.5
				5-9-51	23.0
				1-17-52	25.4
				6-3-53	12.1
				9-18-53	4.71
				10-14-53	7.31
				4-21-54	29.1
				6-8-54	12.1

33

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Santee River Basin -- Continued			
				9-7-54	0.65
				9-15-54	0.16
				11-14-55	6.89
				9-13-56	3.11
				4-15-57	28.1
				9-4-57	1.27
				5-21-58	38.0
				1-26-59	30.8
				12-9-59	25.3
				5-5-60	32.4
				11-15-60	11.0
				6-6-61	32.9
				10-23-61	8.95
				5-7-62	30.5
				10-17-62	11.6
				4-22-63	27.2
				10-24-63	12.4
				5-19-64	38.5
				5-20-65	33.6
				9-13-72	14.1
				9-6-73	18.0
				10-25-73	20.2
				10-1-74	19.4
				8-18-76	16.2
				7-20-77	16.4
44	Henleys Creek	Lat 34°03'20", long 82°01'30", Greenwood County, at State Hwy 248, 0.4 mi upstream from Tolbert Branch, and 2.5 mi S of Ninety-Six.	22.0	10-27-48	4.63
				12-2-49	4.98
				1-9-51	12.6
				5-9-51	5.75
				10-4-51	2.17
				1-17-52	6.73
				9-12-54	0
45	Little River	Lat 34°25'33", long 81°58'04", Laurens County, at county rd 102, 0.3 mi downstream from Burnt Mill Creek, and 4.4 mi N of Mountville.	58.6	9-11-72	14.4
				9-4-73	19.1
				10-26-73	19.7
				10-2-74	14.5
				8-18-76	16.5
				9-25-76	18.7
				7-21-77	9.76
46	Mudlick Creek	Lat 34°13'42", long 81°49'14", Newberry County, at county rd 48, 1.0 mi upstream from mouth, and 4.3 mi NE of Chappells.	50.6	9-13-72	7.04
				9-6-73	9.94
				10-25-73	12.0
				9-30-74	10.2
				8-18-76	7.42
				7-19-77	7.03

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Santee River Basin -- Continued			
02167450	Little River	Lat 34°12'34", long 81°45'48", Newberry County, at State Hwy 34, 1.25 mi upstream from Southern Railroad, and 3.0 mi W of Silverstreet.	230	5-14-53	118
				6-3-53	51.0
				10-9-53	37.6
				10-14-53	36.7
				4-21-54	105
				5-20-54	70.8
				6-11-54	42.7
				9-7-54	7.01
				4-20-55	155
				6-20-55	96.6
				11-14-55	34.8
				6-21-56	26.8
				9-13-56	10.8
				4-15-57	94.1
				9-4-57	5.55
				5-21-58	189
				5-18-59	55.8
				12-9-59	91.0
				5-5-60	124
				11-16-60	56.8
				6-6-61	77.8
				10-23-61	37.6
				5-7-62	99.3
				10-17-62	41.4
				4-22-63	93.5
				10-24-63	43.2
				5-19-64	114
				5-20-65	117
				9-13-72	45.8
				9-6-73	51.0
				10-25-73	61.7
				9-30-74	56.0
				8-16-76	51.5
				7-19-77	41.7
47	Bush River	Lat 34°15'53', long 81°39'48", Newberry County, at county rd 58, 0.25 mi upstream from Southern Railroad, and 3.0 mi W. of Newberry.	68.0	11-30-49	29.0
				9-7-54	1.23
				10-7-54	1.87
				11-7-55	6.10
				9-20-56	2.56
02167700	Red Bank Creek	Lat 33°59'06", long 81°47'08", Saluda County, at county rd 107, 1.3 mi SW of Saluda, and 2.0 mi upstream from Mine Creek.	41.1	11-29-45	1.65
				5-11-53	8.68
				5-26-53	2.17
				12-10-59	6.93
				5-17-60	5.98
				11-16-60	0.24
				6-8-61	2.62
				10-23-61	0.002

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Santee River Basin -- Continued			
				5-7-62	4.77
				10-17-62	0.17
				4-22-63	5.23
				10-24-63	0.59
				5-19-64	4.75
				5-20-65	4.18
				9-14-72	1.71
				9-4-73	1.87
				10-25-73	1.15
				10-1-74	0.15
				8-16-76	15.1
				7-21-77	0.57
48	Little Saluda River	Lat 34°00'29", long 81°44'30", Saluda County, at U.S. Hwy 378, at Saluda, and 1.75 mi upstream from Burnets Creek.	90.0	8-9-50	4.22
				10-14-53	0.58
				9-7-54	0.12
				9-4-57	0.38
49	Big Creek	Lat 34°04'25", long 81°41'54", Saluda County, at State Hwy 194, 2.1 mi downstream from Persimmon Creek, and 6.2 mi NE of Saluda.	52.7	9-14-72	1.40
				9-4-73	1.91
				10-25-73	1.80
				10-1-74	0.83
				8-16-76	7.20
				7-21-77	0.36
50	Clouds Creek	Lat 34°00'22", long 81°33'47", Saluda County, at county rd 424, 0.3 mi downstream from West Creek, and 7.0 mi N of Batesburg.	88.2	9-15-54	0
				9-25-68	0
				9-14-72	5.21
				9-4-73	7.62
				10-25-73	5.80
				10-1-74	5.98
				8-16-76	13.3
				7-8-77	3.78
				7-21-77	0.55
51	Little Hollow Creek	Lat 34°00'48", long 81°24'11", Lexington County, at U.S. Hwy 378, 1.2 mi upstream from mouth, and 6.2 mi N of Gilbert.	5.41	10-30-78	0
52	Fourteen Mile Creek	Lat 34°00'34", long 81°12'09", Lexington County, at county rd 28, 2.1 mi NE of Lexington, and 2.6 mi upstream from Twelvemile Creek.	10.3	7-18-77	0
				10-30-78	0
53	Jacks Creek	Lat 33°35'35", long 80°23'33", Clarendon County, at county rd 76, 0.8 mi upstream from Lake Marion, and 2.5 mi SW of Summerton.	16.2	9-6-72	11.6
				9-4-73	10.6
				10-25-73	4.27
				7-26-77	4.69

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Cooper River Basin			
54	Wadboo Swamp	Lat 33°18'55", long 79°54'24", Berkeley County, at county rd 127, 0.6 mi upstream from Gravel Swamp, and 2.9 mi NE of Bonneau.	7.57	9-7-72 9-5-73 10-17-78	0 0 0
		Ashley River Basin			
55	Cypress Swamp	Lat 33°05'55", long 80°14'03", Berkeley County, at Interstate Hwy 26. 1.0 mi downstream from Felder Branch, and 2.9 mi N of Jedburg.	130	11-9-72 10-17-78	0 0
		Edisto River Basin			
02174150	Indian Field Swamp	Lat 33°10'05", long 80°29'55", Dorchester County, at U.S. Hwy 78, 0.2 mi upstream from Southern Railroad, and 4.6 mi E of St. George.	61.0	6-15-60 11-3-60 3-3-61 10-19-61 5-13-63 8-14-63 5-20-64 5-19-65 9-13-72 9-6-73 10-17-78	0 0.54 32.7 0.14 0 0 2.86 0 0 0 0
56	Polk Swamp	Lat 33°12'49", long 80°38'39", Dorchester County, at county rd 16, at Reevesville, and 1.1 mi upstream from Southern Railroad.	13.1	9-13-72 9-6-73 10-25-73 7-26-77 10-17-78	0 1.36 0 0 0
57	Goodbys Swamp	Lat 33°26'40", long 80°37'08", Orangeburg County, at U.S. Hwy 176, 0.9 mi upstream from mouth, and 6.2 mi SW of Elloree.	18.3	9-13-72 9-6-73 10-25-73 7-26-77	1.73 7.79 3.04 1.41
58	Buck Branch	Lat 33°21'40", long 80°41'49", Orangeburg County, at U.S. Hwy 178, at Bowman, and 0.6 mi upstream from Cow Castle Creek.	13.1	9-13-72 9-6-73 7-27-77	0.79 1.65 0.46
02174480	Four Hole Swamp	Lat 33°08'30", Long 80°20'55", Dorchester County, at U.S. Hwy 78, 0.2 mi downstream from Walnut Branch and 2.9 mi E of Dorchester.	560	7-8-59 6-15-60 11-3-60 3-30-61 10-19-61 10-17-62 5-13-63 5-20-64	0.86 1.98 6.47 440 2.80 224 2.80 308

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Edisto River Basin -- Continued			
				5-19-65	15.8
				12-8-65	21.3
				9-13-72	70.7
				9-6-73	137
				10-25-73	4.90
				10-17-78	2.46
		Ashepoo River Basin			
02175100	Ireland Creek	Lat 32°54'34", long 80°40'05", Colleton County, at U.S. Hwy 15, at Walterboro, and 1.6 mi upstream from mouth.	34.2	1-24-50	6.22
				6-15-53	48.8
				7-21-53	1.52
				9-21-59	42.0
				4-25-60	23.8
				11-3-60	21.7
				9-27-61	10.1
				10-19-61	4.91
				10-17-62	9.30
				8-14-63	2.36
				5-20-64	5.33
				5-19-65	3.36
				9-13-72	6.43
				9-5-73	5.76
				7-26-77	2.28
		Combahee River Basin			
59	Jackson Creek	Lat 33°01'44", long 81°17'23", Allendale County, at U.S. Hwy 301, 0.1 mi downstream from Log Branch, and 1.7 mi NE of Allendale.	15.4	9-12-72	1.59
				9-4-73	3.97
				10-18-78	1.43
60	Colston Branch	Lat 33°09'38", long 81°04'23", Bamberg County, at county rd 23, 1.2 mi upstream from Indian Camp Branch, and 5.7 mi NW of Ehrhardt.	10.8	9-12-72	0.04
				9-5-73	1.04
				10-18-78	0.11
02175700	Little Salkehatchie River	Lat 33°04'20", long 80°54'50", Colleton County, at State Hwy 217, 0.5 mi upstream from Hampton and Branchville Railroad, and 2.3 mi E of Lodge.	220	6-2-60	31.2
				9-28-61	46.8
				10-17-61	23.4
				5-17-62	90.3
				10-16-62	44.4
				4-19-63	43.6
				10-17-63	16.1
				5-19-65	31.2
				9-26-68	10.1
				5-8-69	35.3
				10-28-69	31.8
				7-17-70	21.4
				9-13-72	15.9
				9-5-73	24.0

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Combahee River Basin -- Continued			
61	Oldfield Swamp	Lat 32°58'19", long 80°51'21", Colleton County, at U.S. Hwy 21, 1.1 mi upstream from mouth, and 3.3 mi SW of Ruffin.	9.53	9-12-72	0
				9-5-73	0
				7-26-77	0
				10-18-78	0
62	Indian Creek	Lat 32°54'33", long 80°51'25", Colleton County, at U.S. Hwy 21, 0.8 mi upstream from mouth, and 7.0 mi SW of Ruffin.	14.9	9-12-72	0
				9-5-73	0
				7-26-77	0
				10-18-78	0
		Broad River Basin			
63	Black Creek	Lat 32°46'11", long 81°14'28", Hampton County, at U.S. Hwy 321, at Estill, and 1.1 mi upstream from Filly Branch.	9.34	9-12-72	0.16
				9-4-73	0.32
				7-26-77	0
64	Cypress Creek	Lat 32°41'05", long 81°04'40", Jasper County, at county rd 219, 1.5 mi downstream from Penn Creek, and 3.4 mi W of Grays.	50.6	9-12-72	0
				9-4-73	0
				10-18-78	0
		New River Basin			
65	Great Swamp	Lat 32°27'58", long 81°00'31", Jasper County, at county rd 29, 1.9 mi SW of Ridgeland, and 2.5 mi upstream from Broad Water.	60.1	9-12-72	0
				9-4-73	0
				10-18-78	0
		Savannah River Basin			
02183490	Chauga River	Lat 34°39'50", long 83°09'40", Oconee County, at U.S. Hwy 76, 3.9 mi upstream from Toxaway Creek, and 3.75 mi W of Westminster.	85.0	10-8-54	28.8
				3-16-55	99.2
				5-25-55	173
				11-3-55	52.4
				5-29-56	90.1
				9-19-56	39.7
				5-23-57	119
				9-4-57	51.2
				4-24-58	197
				5-14-59	112
				12-10-59	106
				4-26-60	192
				12-27-60	110
				3-16-61	159
				9-19-61	146
				10-25-61	81.9
				5-8-62	185

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Savannah River Basin -- Continued			
				5-14-63	176
				6-6-63	122
				10-23-63	99.0
				5-27-64	244
				5-18-65	210
66	Cane Creek	Lat 34°44'31", long 82°59'39", Oconee County, at county rd 134, 2.6 mi downstream from Little Cane Creek, and 3.0 mi SE of West Union.	33.6	6-13-50	67.8
				10-4-51	24.2
				5-21-52	56.4
				11-5-53	25.8
				8-3-54	19.9
				9-17-54	13.3
				11-3-55	17.1
				9-18-56	17.5
				5-23-57	42.9
				9-5-57	13.7
				9-29-59	11.0
				4-26-60	71.6
02186600	Conneross Creek	Lat 34°40'31", long 83°01'56", Oconee County, at county rd 13, at Richland, and 0.1 mi downstream from Southern Railroad.	40.6	10-26-48	36.2
				12-1-49	70.5
				5-12-50	53.2
				11-16-50	50.2
				5-17-51	48.8
				10-11-51	27.1
				5-22-52	57.5
				9-1-54	20.2
				11-3-55	20.9
				4-4-56	50.2
				5-29-56	42.6
				9-19-56	18.7
				5-23-57	46.9
				9-5-57	19.1
				4-24-58	92.0
				5-14-59	54.4
				12-10-59	47.3
				4-26-60	82.1
				12-28-60	47.4
				3-16-61	82.7
				9-19-61	69.2
				10-25-61	38.2
				5-8-62	97.7
				5-14-63	80.2
				6-6-63	53.6
				10-23-63	38.4
				5-27-64	95.2
				5-18-65	75.8
				9-12-72	34.1
				9-5-73	47.4
				7-20-77	33.5

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Savannah River Basin -- Continued			
67	Three and Twenty Creek	Lat 34°40'47", long 82°39'06", Anderson County, at county rd 73, 0.5 mi upstream from Double Branch, and 7.7 mi NE of Pendleton.	34.5	9-13-72 9-5-73 8-17-76 7-20-77	14.2 25.4 23.0 14.0
68	Six and Twenty Creek	Lat 34°34'10", long 82°41'15", Anderson County, at U.S. Hwy 178, 0.4 mi downstream from Town Creek, and 4.8 mi NW of Anderson.	42.7	10-31-46 10-6-47 10-12-54	34.1 13.5 5.93
02187300	Big Generostee Creek	Lat 34°20'30", long 82°47'40", Anderson County, 300 ft upstream from mouth, 2.0 mi downstream from Weems Creek, and 6.25 mi SW of Starr.	83.0	5-31-51 10-5-51 5-28-52 11-5-53 9-1-54 11-2-55 9-18-56 5-24-57 9-4-57 4-24-58 5-8-59 12-10-59 4-27-60 12-27-60 3-15-61 9-18-61 10-24-61 4-26-62 10-26-62 5-14-63 6-3-63 10-23-63 5-26-64 5-19-65 9-13-72 9-5-73 10-1-74 7-19-77	40.8 26.1 62.3 31.9 17.9 25.3 15.6 51.5 23.9 150 50.6 60.0 98.9 48.8 108 55.9 41.9 195 44.1 110 66.8 56.7 120 92.1 37.8 65.3 40.8 36.7
69	Rocky River	Lat 34°31'39", long 82°36'31", Anderson County, at county rd 281, 2.2 mi downstream from Beaverdam Creek, and 2.7 mi NE of Anderson.	32.8	10-31-46 10-6-47 10-27-48 10-2-49 10-7-54	25.5 12.9 29.0 34.1 4.35

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Savannah River Basin -- Continued			
02187900	Broadway Creek	Lat 34°30'10", long 82°35'00", Anderson County, at county rd 246, 0.1 mi upstream from Cupboard Creek, and 3.8 mi E of Anderson.	26.4	10-27-48	12.5
				10-7-54	3.12
				9-24-59	12.5
				12-11-59	22.4
				9-2-60	13.1
				12-28-60	15.0
				9-18-61	12.4
				10-25-61	11.2
				5-8-62	27.0
				11-13-62	15.6
				5-15-63	25.5
				11-13-63	11.0
				5-26-64	26.3
				5-19-65	25.8
				9-14-66	37.6
70	Wilson Creek	Lat 34°19'45", long 82°38'27", Anderson County, at State Hwy 413, 1.8 mi upstream from Jordan Creek, and 2.0 mi NE of Iva.	18.7	9-13-72	9.33
				9-5-73	12.0
				10-1-74	10.1
				7-19-77	9.18
71	Little River	Lat 34°20'27", long 82°27'39", Abbeville County, at county rd 24, 3.7 mi upstream from Hogskin Creek, and 4.2 mi W of Due West.	41.1	9-14-72	21.6
				9-5-73	18.9
				10-1-74	17.3
				7-19-77	10.5
72	McKenly Creek	Lat 34°06'20", long 82°31'52", Abbeville County, at State Hwy 72, 0.4 mi downstream from SCL Railroad, and 3.6 mi NE of Calhoun Falls.	33.6	9-12-72	3.48
				9-5-73	5.13
				10-24-73	5.71
				10-2-74	3.11
				8-17-76	5.45
				7-20-77	2.41
73	Calhoun Creek	Lat 34°06'48", long 82°28'40", Abbeville County, at State Hwy 72, 0.7 mi downstream from Jim Knox Branch, and 6.0 mi SW of Abbeville.	31.7	9-23-54	0.01
				10-12-54	0
				9-12-72	5.39
				9-5-73	6.10
				10-24-73	6.86
				10-2-74	2.21
				8-17-76	5.85
				7-20-77	2.54

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Savannah River Basin -- Continued			
02192700	Long Cane Creek	Lat 34°11'05", long 82°18'15", Abbeville County, at State Hwy 72, 3.4 mi upstream from McCord Creek, and 4.3 mi E of Abbeville.	68.6	11-2-48	25.2
				12-20-49	34.7
				1-17-51	38.8
				5-27-52	34.9
				3-26-53	77.4
				4-21-53	33.0
				8-6-54	4.45
				9-10-54	3.61
				9-23-54	1.74
				10-21-54	2.34
				11-23-55	11.2
				11-9-56	14.7
				4-26-57	29.8
				9-4-57	2.18
				12-10-59	28.5
				5-5-60	41.5
				11-15-60	16.4
				6-6-61	30.2
				10-23-61	10.8
				5-7-62	37.6
				10-17-62	15.1
				4-22-63	33.5
				10-24-63	15.4
				5-19-64	42.4
				5-19-65	43.0
				9-12-72	15.0
				9-6-73	17.0
				10-24-73	19.5
				10-2-74	11.6
				8-18-76	16.4
				7-20-77	10.6
74	Hard Labor Creek	Lat 34°02'56", long 82°12'42", Greenwood County, at unnumbered county rd, 0.2 mi downstream from Beaverdam Branch, and 1.8 mi E of Bradley.	46.8	9-13-72	3.10
				9-6-73	5.38
				10-24-73	5.79
				10-2-74	5.06
				8-18-76	6.40
				7-20-77	3.63
02195630	Cuffytown Creek	Lat 33°54'29", long 82°12'08", McCormick County, at county rd 42, 1.5 mi upstream from mouth, and 5.25 mi E of McCormick.	101	5-27-60	13.2
				6-15-61	10.5
				9-27-61	4.01
				10-26-61	1.42
				5-1-62	33.3
				10-30-62	0.30
				5-15-63	13.9
				10-22-63	4.20
				5-26-64	15.9
				5-19-65	17.7

43

Table 1.--Discharge Measurements at Partial-Record Sites--Continued

Site number	Stream	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
		Savannah River Basin -- Continued			
				9-12-72	2.75
				9-5-73	3.30
				10-24-73	6.63
				10-2-74	5.17
				8-17-76	8.42
				7-21-77	1.34
75	Turkey Creek	Lat 33°51'33", long 82°03'57", Edgefield County, at county rd 51, 0.3 mi downstream from Crooked Run, and 9.4 mi NW of Edgefield.	179	9-12-72	3.67
				9-5-73	4.80
				10-24-73	2.33
				10-2-74	2.71
				8-17-76	14.1
				7-21-77	0.72
02196300	Horn Creek	Lat 33°39'05", long 82°04'25", Edgefield County, at county rd 143, 1.1 mi upstream from mouth, and 3.8 mi S of Colliers.	76.0	5-19-59	10.5
				7-9-59	4.80
				3-28-60	75.8
				5-27-60	32.0
				6-15-61	17.2
				9-27-61	7.17
				10-26-61	7.48
				5-1-62	48.0
				10-30-62	8.01
				5-8-63	26.6
				10-22-63	6.91
				5-21-64	33.6
				5-18-65	35.8
				8-27-68	33.4
				9-25-68	4.89
				5-13-69	21.9
				10-30-69	3.73
				7-16-70	2.42
				9-12-72	9.60
				9-5-73	19.3
				10-24-73	16.4
				10-2-74	8.92
				8-17-76	15.7
				7-21-77	9.97
76	Brier Creek	Lat 32°57'32", long 81°27'48", Allendale County, at county rd 102, 2.1 mi downstream from Stony Creek, and 6.5 mi SW of Allendale.	15.2	9-12-72	0.26
				9-4-73	2.34
				7-26-77	0.05

Table 2.--Low-flow Estimates and Significant Basin Characteristics for Piedmont Streams

Site number	Stream	$7Q_2$ (ft^3/s)		$7Q_{10}$ (ft^3/s)		Drainage area (mi^2)	Mean basin elev. (ft above sea level)	Flow rate at 95% duration (in/yr)
		Correl. of base flow meas.	Regress. equation	Correl. of base flow meas.	Regress. equation			
4	Flat Creek	4.3	4.2	0.8	0.8	48.2	387	0.75
02131300	Lynches River	9.6	13.6	1.8	2.4	170	432	.75
02131455	Little Lynches River	3.5	4.2	0	--	48.5	426	.75
02145650	Beaverdam Creek	3.2	3.7	1.1	1.2	17.0	669	2.00
10	Allison Creek	6.5	7.4	1.6	2.4	35.7	671	2.00
11	Waxhaw Creek	3.3	5.6	.8	1.2	50.1	537	1.00
12	Cane Creek	3.0	4.6	.5	.7	78.1	493	.50
13	Fishing Creek	6.0	6.6	1.0	1.6	48.4	595	1.25
14	South Fork Creek	2.0	3.3	.4	.5	54.3	533	.50
15	Tinkers Creek	2.8	2.2	.4	.4	24.5	514	.75
02147400	Fishing Creek	24.0	27.2	6.7	5.3	270	509	1.00
16	Camp Creek	.4	.6	0	--	38.1	473	.10
17	Little Rocky Creek	3.8	3.2	.4	.5	53.4	405	.50
18	Big Wateree Creek	1.0	.8	0	--	58.1	321	.10
19	Beaver Creek	4.0	2.6	.6	.5	29.4	400	.75
02147820	Sawneys Creek	3.0	4.7	.5	.8	54.3	293	.75
02153480	Buffalo Creek	45.0	71.5	18.0	24.0	176	712	4.50
20	Cherokee Creek	4.5	6.4	2.0	3.0	15.9	758	4.00
02153600	Kings Creek	10.6	16.1	4.0	6.4	47.6	656	3.50
02153700	Thicketty Creek	9.3	9.9	4.7	4.4	25.0	735	4.00
02153705	Thicketty Creek	16.0	13.3	8.3	5.4	39.0	662	3.50
21	Gilkey Creek	3.5	6.3	1.7	2.4	20.4	735	4.00
02153800	Bullock Creek	12.5	11.1	1.5	2.6	84.0	584	1.25
22	Turkey Creek	21.0	11.5	1.0	2.1	142	541	.75
23	Big Browns Creek	11.5	9.0	4.5	2.6	43.4	440	2.00
24	Brushy Fork Creek	2.4	1.8	.3	.4	19.6	434	.75
02156600	Sandy River	8.5	6.0	.6	.9	104	424	.50
25	South Tyger River	40.0	36.8	20.0	20.4	59.8	914	7.00
26	Tinker Creek	4.6	4.7	1.8	1.2	28.2	414	1.50
27	Cane Creek	2.1	2.2	.4	.4	27.4	368	.75
02160200	Enoree River	24.5	26.3	15.0	14.0	49.0	942	6.00
28	Mountain Creek	5.7	6.4	3.4	4.0	10.9	1273	6.00
29	Durbin Creek	11.0	11.7	6.2	5.2	30.1	734	4.00
02160520	Warrior Creek	5.0	7.2	1.6	2.7	23.0	598	3.00
30	Duncan Creek	2.9	3.9	1.0	1.3	17.8	566	2.00
31	Indian Creek	6.2	5.2	.6	1.3	88.8	425	.50
32	Beaver Creek	3.0	3.6	1.0	.7	41.0	354	.75
33	Hellers Creek	4.2	3.0	.3	.6	34.1	366	.75
34	Cannons Creek	6.3	3.8	1.0	.7	43.8	372	.75
02161800	Little River	7.0	8.3	1.5	1.5	100	382	.75
35	Mill Creek	1.8	1.8	.4	.4	19.9	376	.75
36	Little River	--	--	3.0	3.0	237	301	.75
37	Hollingshead Creek	--	--	0	--	11.2	500	.50
02162020	Little Cedar Creek	3.6	3.0	.6	.6	33.7	315	.75
38	North Saluda River	48.0	45.2	30.0	28.0	66.4	1268	8.00
39	Grove Creek	11.0	12.3	6.1	6.0	25.5	735	5.00
40	Broad Mouth Creek	12.4	10.9	6.5	4.8	27.7	702	4.00
41	Turkey Creek	9.5	11.4	2.6	3.8	45.1	565	2.50

45

Table 2.--Low-flow Estimates and Significant Basin Characteristics for Piedmont Streams--Continued

Site number	Stream	$7Q_2$ (ft³/s)		$7Q_{10}$ (ft³/s)		Drainage area (mi²)	Mean basin elev. (ft above sea level)	Flow rate at 95% duration (in/yr)
		Correl. of base flow meas.	Regress. equation	Correl. of base flow meas.	Regress. equation			
42	Huff Creek	11.0	11.7	6.3	5.5	26.9	767	4.50
02165300	Rabon Creek	26.0	25.0	7.3	8.8	88.3	634	3.00
43	Coronaca Creek	6.6	6.7	2.1	1.8	41.4	521	1.50
02166900	Wilson Creek	8.0	11.8	2.0	3.0	76.0	469	1.50
44	Henleys Creek	2.5	2.6	.4	.6	22.0	487	1.00
45	Little River	9.1	9.3	3.8	2.4	58.6	559	1.50
46	Mudlick Creek	6.8	5.6	1.7	1.2	50.6	458	1.00
02167450	Little River	34.0	33.5	8.0	7.9	230	485	1.50
47	Bush River	10.0	10.7	3.5	2.7	68.0	495	1.50
02167700	Red Bank Creek	.4	.6	0	--	41.1	452	.10
48	Little Saluda River	.8	1.3	.2	.1	90.0	450	.10
49	Big Creek	.8	.8	.1	.1	52.7	422	.10
50	Clouds Creek	3.5	1.2	0	--	88.2	470	.10
51	Little Hollow Creek	--	--	0	--	5.41	452	.25
52	Fourteen Mile Creek	--	--	0	--	10.3	348	.25
02183490	Chauga River	63.0	57.0	39.0	34.3	85.0	1169	8.00
66	Cane Creek	21.0	21.4	13.0	12.2	33.6	857	7.00
02186600	Conneross Creek	25.0	25.6	16.0	14.6	40.6	914	7.00
67	Three and Twenty Creek	18.0	17.7	9.7	9.0	34.5	808	5.50
68	Six and Twenty Creek	17.5	21.7	10.5	10.7	42.7	727	5.50
02187300	Big Generostee Creek	35.0	33.8	16.0	14.3	83.0	627	4.50
69	Rocky River	15.0	14.1	8.2	6.5	32.8	728	4.50
02187900	Broadway Creek	12.0	12.7	6.4	6.2	26.4	717	5.00
70	Wilson Creek	8.5	7.5	4.0	3.4	18.7	649	4.00
71	Little River	15.0	14.0	5.0	5.6	41.1	633	3.50
72	McKenly Creek	4.0	3.8	.8	.9	33.6	493	1.00
73	Calhoun Creek	3.8	3.6	.5	.8	31.7	503	1.00
02192700	Long Cane Creek	10.0	10.7	3.3	2.8	68.6	509	1.50
74	Hard Labor Creek	4.5	5.2	2.0	1.2	46.8	497	1.00
02195630	Cuffytown Creek	1.3	1.4	.2	.1	101	440	.10
75	Turkey Creek	2.1	2.4	.2	.2	179	374	.10
02196300	Horn Creek	2.0	2.4	.2	.3	76.0	304	.25

Table 3.--Field Determinations of Chemical Properties at Partial-Record Sites

Site number	Stream	Date	Temperature (°C)	Dissolved oxygen (mg/L)	Specific conductance (µmho)	pH (units)	Fecal coliform (colonies/100mL)
1	Simpson Creek	9-6-73	25.0	7.7	105	7.1	410
02110700	Crabtree Swamp	9-6-73	24.0	5.2	110	7.1	—
2	Rogers Creek	9-6-73	24.0	5.7	42	6.2	75
3	Middle Branch	9-6-73	21.5	7.4	60	6.4	190
4	Flat Creek	9-6-73	21.5	8.9	65	7.5	20
02131300	Lynches River	9-6-73	23.5	8.6	80	7.6	20
6	Deep Hole Swamp	9-5-73	24.0	2.6	93	6.6	120
02131990	Carter Creek	9-5-73	23.0	1.2	100	6.6	58
7	Unnamed Creek	9-5-73	22.5	1.8	118	7.0	30
02132600	Buck Swamp	9-6-73	23.0	5.4	50	5.8	240
02135050	Reedy Creek	9-6-73	24.0	5.9	66	6.3	180
8	Rocky Bluff Swamp	9-4-73	22.0	6.4	54	6.3	160
02135600	Pocotaligo River	9-4-73	24.5	2.6	105	6.5	15
9	Kingstree Sw. Canal	9-7-73	24.0	5.8	60	6.9	—
02136100	Black Mingo Creek	9-5-73	23.5	5.4	76	6.9	—
02145650	Beaverdam Creek	9-4-73	23.0	8.1	75	7.4	250
10	Allison Creek	9-4-73	22.5	7.4	94	7.5	460
11	Waxhaw Creek	9-6-73	20.5	7.6	130	7.6	190
12	Cane Creek	9-6-73	22.5	5.1	240	7.0	—
13	Fishing Creek	9-4-73	23.0	7.2	97	7.5	300
14	South Fork Creek	9-5-73	24.0	5.6	120	7.4	410
15	Tinkers Creek	9-5-73	23.5	7.5	80	7.3	130
02147400	Fishing Creek	9-5-73	22.0	7.2	130	7.3	120
16	Camp Creek	9-5-73	22.0	7.2	95	7.2	310
17	Little Rocky Creek	9-5-73	20.5	7.8	100	7.5	190
18	Big Wateree Creek	9-4-73	21.0	6.8	150	7.3	230
19	Beaver Creek	9-5-73	22.0	8.1	67	7.2	130
02147820	Sawneys Creek	9-4-73	23.5	8.4	60	7.4	47
02153480	Buffalo Creek	9-4-73	25.0	7.1	110	7.2	660
02153600	Kings Creek	9-5-73	25.0	8.8	155	6.6	140
02153700	Thicketty Creek	9-5-73	20.5	7.3	185	7.1	1,300
21	Gilkey Creek	9-5-73	22.0	7.2	82	7.4	70
02153800	Bullock Creek	9-5-73	22.0	7.6	80	7.1	40
22	Turkey Creek	9-5-73	22.0	7.9	135	7.4	—
23	Big Browns Creek	9-6-73	22.5	7.7	82	7.4	1,300
24	Brushy Fork Creek	9-4-73	21.0	6.6	250	7.5	900
02156600	Sandy River	9-4-73	22.0	6.5	125	7.5	250
26	Tinker Creek	9-6-73	22.5	7.9	96	7.5	480
27	Cane Creek	9-6-73	22.5	7.8	103	7.4	160
02160200	Enoree River	9-4-73	21.0	7.9	44	7.2	330
29	Durbin Creek	9-4-73	23.0	7.3	56	7.3	640
02160520	Warrior Creek	9-4-73	24.0	7.3	73	7.3	930
30	Duncan Creek	9-4-73	26.5	6.6	75	6.9	43
31	Indian Creek	9-5-73	23.0	6.6	120	7.5	220
32	Beaver Creek	9-4-73	23.5	7.6	115	7.7	320
33	Hellers Creek	9-7-73	22.5	7.3	93	7.2	2,800
34	Cannons Creek	9-7-73	21.5	7.8	82	7.4	1,400
02161800	Little River	9-4-73	24.0	3.3	78	6.8	—
35	Mill Creek	9-4-73	22.0	7.8	70	7.3	80
02162020	Little Cedar Creek	9-4-73	20.5	8.1	75	7.3	220
39	Grove Creek	9-4-73	21.0	7.9	50	7.1	320
40	Broad Mouth Creek	9-5-73	21.5	8.5	56	6.9	560

47

Site number	Stream	Date	Temperature (°C)	Dissolved oxygen (mg/L)	Specific conductance (μmho)	pH (units)	Fecal coliform (colonies/100mL)
41	Turkey Creek	9-5-73	21.0	7.9	66	7.0	430
42	Huff Creek	9-4-73	23.0	7.4	42	7.2	110
02165300	Rabon Creek	9-6-73	21.0	8.0	57	6.9	1,200
43	Coronaca Creek	9-5-73	24.0	7.0	92	6.9	---
02166900	Wilson Creek	9-6-73	24.0	3.5	250	6.9	---
45	Little River	9-4-73	21.5	6.3	98	6.9	8,700
46	Mudlick Creek	9-6-73	22.0	7.3	102	7.1	---
02167450	Little River	9-6-73	24.0	7.5	98	7.1	---
47	Bush River	9-4-73	24.0	6.8	120	7.4	---
53	Jacks Creek	9-4-73	23.0	7.1	58	6.7	130
54	Wadboo Swamp	9-5-73	23.0	4.9	205	7.4	---
02174150	Indian Field Swamp	9-6-73	24.0	5.6	140	7.0	240
56	Polk Swamp	9-6-73	24.5	6.9	67	6.8	760
57	Goodbys Swamps	9-6-73	23.5	5.8	110	6.8	240
58	Buck Branch	9-6-73	23.0	5.4	170	7.5	10,000
02174480	Four Hole Swamp	9-6-73	25.0	6.1	100	7.0	25
02175100	Ireland Creek	9-5-73	24.5	7.5	105	6.9	810
59	Jackson Creek	9-4-73	23.0	6.7	125	7.3	220
60	Colston Branch	9-5-73	23.0	7.1	58	6.8	340
02175700	Little Salkehatchie River	9-5-73	24.0	6.5	150	7.5	---
61	Oldfield Swamp	9-5-73	23.5	2.7	40	4.6	1,600
62	Indian Creek	9-5-73	23.5	3.1	40	4.8	320
63	Black Creek	9-4-73	23.5	7.0	57	6.3	330
64	Cypress Creek	9-4-73	23.0	3.3	46	5.8	1,300
65	Great Swamp	9-4-73	25.5	2.8	150	6.8	500
02186600	Conneross Creek	9-5-73	23.0	7.9	75	7.4	190
67	Three and Twenty Creek	9-5-73	23.0	7.4	46	7.1	240
02187300	Big Generostee Creek	9-5-73	23.5	8.4	98	7.4	120
70	Wilson Creek	9-5-73	24.0	7.5	46	6.9	730
71	Little River	9-5-73	21.0	7.8	48	6.5	---
72	McKenly Creek	9-5-73	22.0	6.9	170	7.2	---
73	Calhoun Creek	9-5-73	21.5	7.7	85	7.1	---
02192700	Long Cane Creek	9-6-73	22.0	7.7	83	7.0	---
74	Hard Labor Creek	9-6-73	23.5	6.1	190	7.2	---
02195630	Cuffytown Creek	9-5-73	23.5	7.0	140	7.2	---
76	Briar Creek	9-4-73	23.0	7.5	67	7.1	400
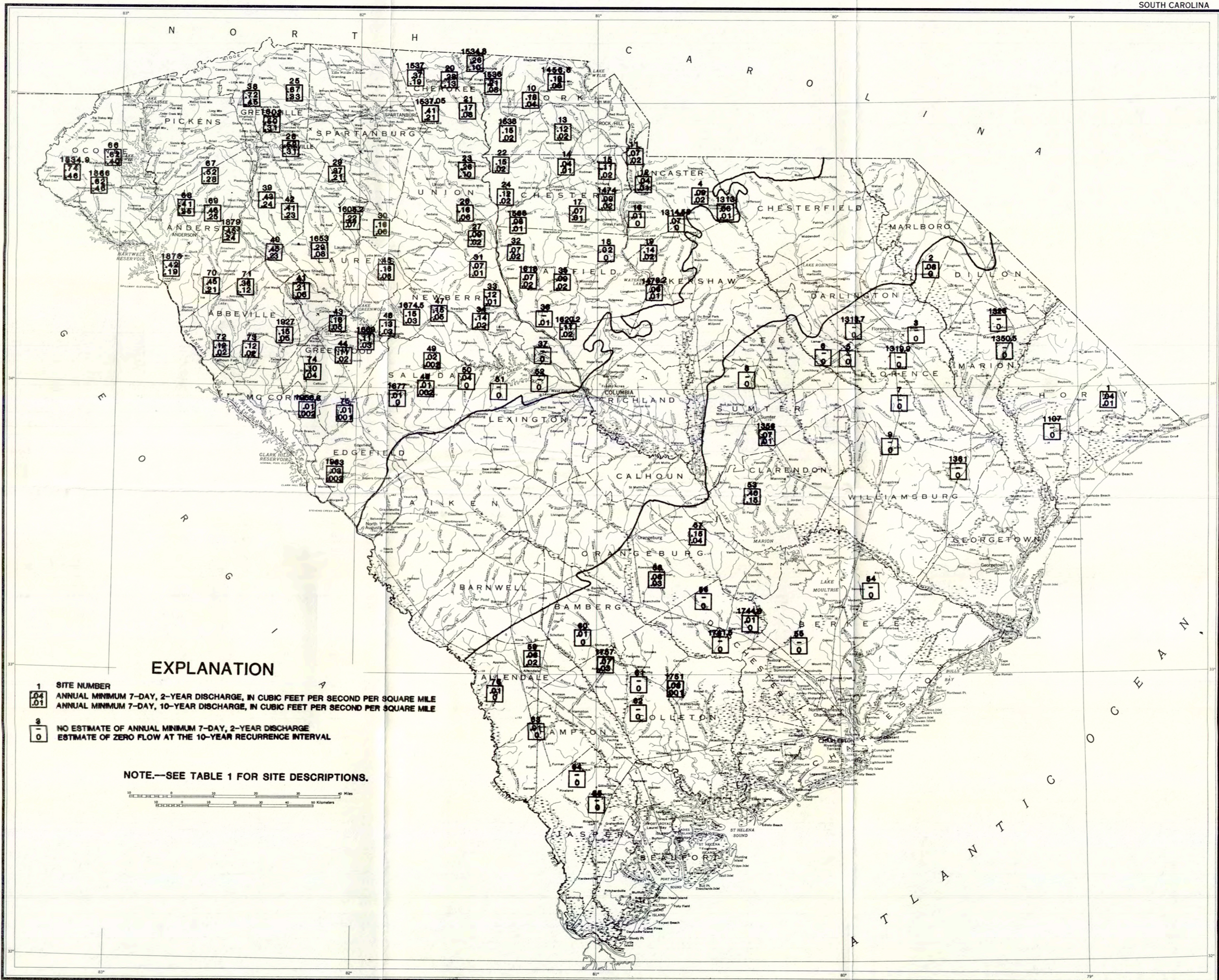
EXPLANATION

1   SITE NUMBER

.04   ANNUAL MINIMUM 7-DAY, 2-YEAR DISCHARGE, IN CUBIC FEET PER SECOND PER SQUARE MILE
.01   ANNUAL MINIMUM 7-DAY, 10-YEAR DISCHARGE, IN CUBIC FEET PER SECOND PER SQUARE MILE

9   NO ESTIMATE OF ANNUAL MINIMUM 7-DAY, 2-YEAR DISCHARGE
0   ESTIMATE OF ZERO FLOW AT THE 10-YEAR RECURRENCE INTERVAL

NOTE.—SEE TABLE 1 FOR SITE DESCRIPTIONS.

STATE BASE MAP FROM U.S. GEOLOGICAL SURVEY, 1:1,000,000
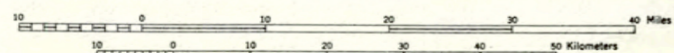
Plate 1. Low-Flow Characteristics at Partial-Record Sites in the Piedmont and Lower Coastal Plain