TECHNIQUES FOR ESTIMATING MAGNITUDE AND FREQUENCY OF FLOODS IN RURAL BASINS OF GEORGIA

By Timothy C. Stamey and Glen W. Hess

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BRUCE BABBITT, Secretary

U.S. GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information
write to:

District Chief
U.S. Geological Survey
3039 Amwiler Road, Suite 130
Peachtree Business Center
Atlanta, GA 30360-2824

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Multiply	*By*	*To obtain*
	Length	
inch (in.)	25.4	millimeter
foot (ft)	0.3048	meter
mile (mi)	1.609	kilometer
	Gradient	
foot per mile (ft/mi)	0.1894	meter per kilometer
	Area	
square mile (mi^2)	2.59	square kilometer
	Volume	
acre-foot (acre-ft)	1.233×10^3	cubic meters
	Flow	
cubic foot per second (ft^3/s)	0.02832	cubic meter per second
	Velocity	
foot per second (ft/s)	0.3048	meter per second

ACRONYMS

GDOT	Georgia Department of Transportation
IACWD	Interagency Advisory Committee on Water Data
USGS	U.S. Geological Survey

VERTICAL DATUM

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.

TECHNIQUES FOR ESTIMATING

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ABSTRACT

Methods of estimating the magnitude of floods having recurrence intervals of 2-, 5-, 10-, 25-, 50-, 100-, 200-, and 500-years are described for rural streams in Georgia that are not affected by regulation, tidal fluctuations, or urban development. Flood-frequency discharge data also are presented for the 2- to 500-year recurrence intervals for 426 streamflow sites used in the regional analysis.

Annual peak-discharge data through September 30, 1990 were analyzed for 426 streamflow sites on rural streams in Georgia, and adjacent parts of Alabama, Florida, North Carolina, South Carolina, and Tennessee, having 10 or more years of record. Flood frequencies were computed by fitting the logarithms of the annual peak-discharge data to a Pearson Type III distribution curve. Peak-discharge data were used in multiple least-squares linear-regression analyses with basin and climatic variables to develop regional flood-frequency relations. Analyses indicate that the drainage areas of the basins are the most significant variables; therefore, drainage area is the only basin characteristics included in the regional regression relations. Four regions were delineated that have distinct flood-frequency-discharge characteristics for streams draining from 0.1 to 3,000 square miles, and flood-frequency relations were developed for each of these regions. The average standard error of prediction of the regional flood-frequency relations ranged from 26 to 38 percent for the 2- to 500-year recurrence-interval floods.

Individual relations of flood magnitude and frequency to drainage area are described for sites along the mainstems of the Ocmulgee, Oconee, Altamaha, and Flint Rivers. Flood-frequency relations are based on the log-Pearson Type III analysis of long-term peak-discharge records at gaged sites on the four rivers.

INTRODUCTION

Flood-magnitude and frequency data are needed for development along and near streams and rivers. The data are important in the design of bridges, culverts, embankments, dams, and levees, and serve as a basis for flood-plain regulation and establishment of flood-insurance rates.

The U.S. Geological Survey (USGS), in cooperation with the Georgia Department of Transportation (GDOT) and other State and local agencies, has conducted studies to develop and improve the estimates of the magnitude and frequency of floods on rural Georgia streams.

The principal cooperating agencies that help fund the collection of annual peak discharge and stage data, and other streamflow data in Georgia are

Georgia Department of Transportation
Highway Division
Georgia Department of Natural Resources
Environmental Protection Division
Georgia Geologic Survey
Tennessee Valley Authority
U.S. Army Corps of Engineers
Mobile District
Savannah District
U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service

The authors also acknowledge the assistance in the data-collection program by the Georgia Power Company.

This report is based on peak-discharge data through September 1990 collected by the USGS at 426 streamflow sites. The streamflow sites include 357 sites in Georgia (figs. 1-4), with the remaining 69 sites located near the Georgia border in adjacent parts of Alabama, Florida, North Carolina, South Carolina, and Tennessee (Appendix I and II).

Purpose and Scope

This report presents and illustrates methods of estimating the magnitude and frequency of floods having recurrence intervals of 2, 5, 10, 25, 50, 100, 200, and 500 years on rural Georgia streams. This report is based on flood-frequency analyses of annual peak-discharge data at streamflow monitoring sites through September 1990. This report includes (1) regional relations for estimating the magnitude and frequency of flood discharges on rural, ungaged, non-regulated streams; (2) method for estimating flood-frequency data at or near gaged sites on rural streams; and (3) flood-frequency data on mainstem streams with drainage basins located in more than one region.

Previous Studies

There are six previously published flood-frequency reports for Georgia streams. Bunch and Price (1962) used the index flood method that was described by Carter (1951) and Dalrymple (1960). Spear and Gamble (1964a, 1964b) and Barnes and Golden (1966) developed flood-frequency regression methods for several states, and used data abstracted from Bunch and Price (1962) for the Georgia portion of the their reports. Golden and Price (1976) described flood-frequency methods for streams having drainage areas of less than 20 mi^2, and used multiple regression methods to relate peak discharges for floods of selected recurrence intervals to drainage areas. Subsequently, Price (1978) prepared a flood-frequency report based on peak-discharge data for 262 sites in Georgia and 46 sites in adjacent states, and developed flood-frequency relations using multiple regression methods for streams having drainage from 0.1 to 1,000 mi^2. Inman (1983 and 1988) described methods for determining flood-frequency relations for urban streams in Metropolitan Atlanta and other Georgia cities.

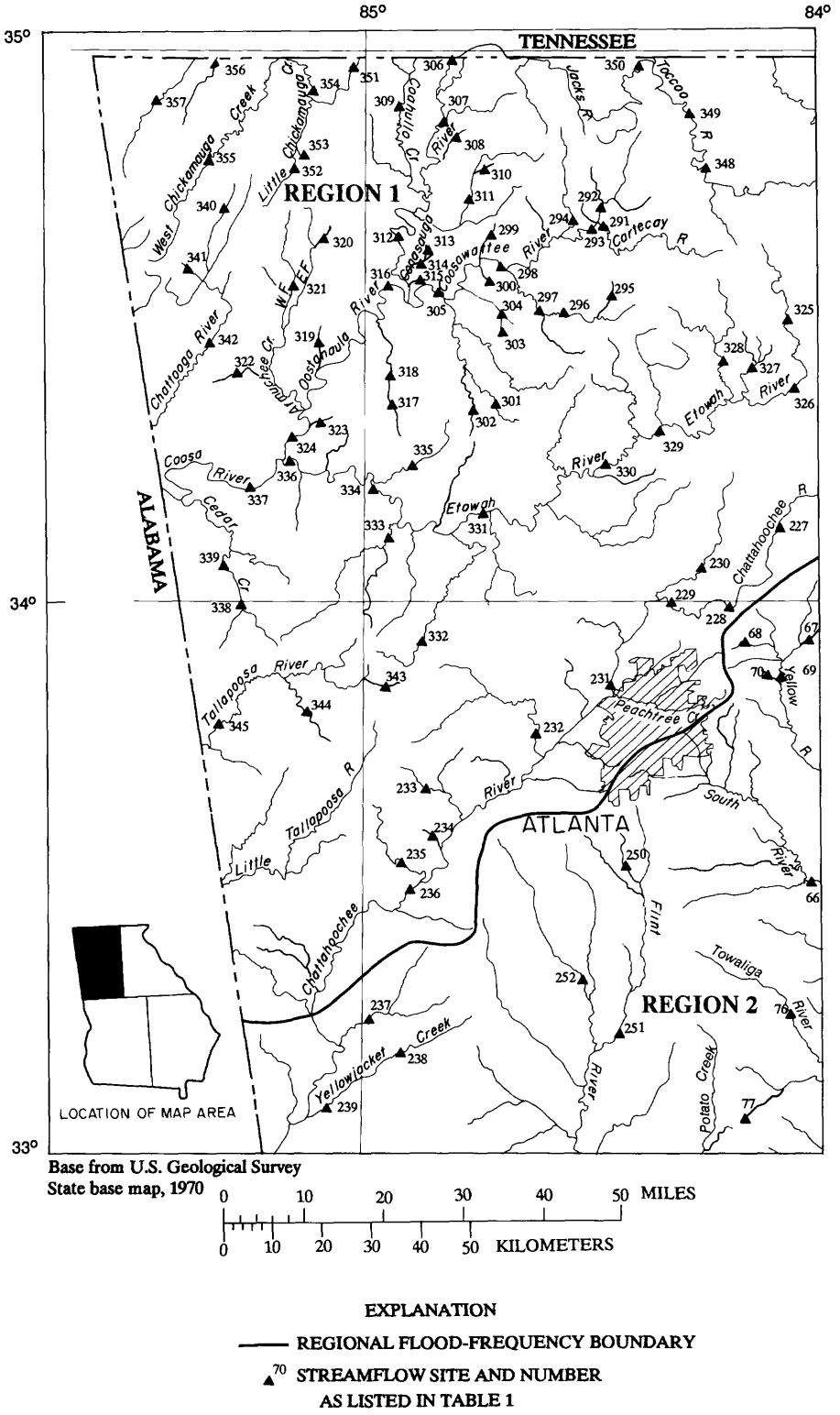

Figure 1.--Location of streamflow sites used in flood regionalization studies in northwestern Georgia.

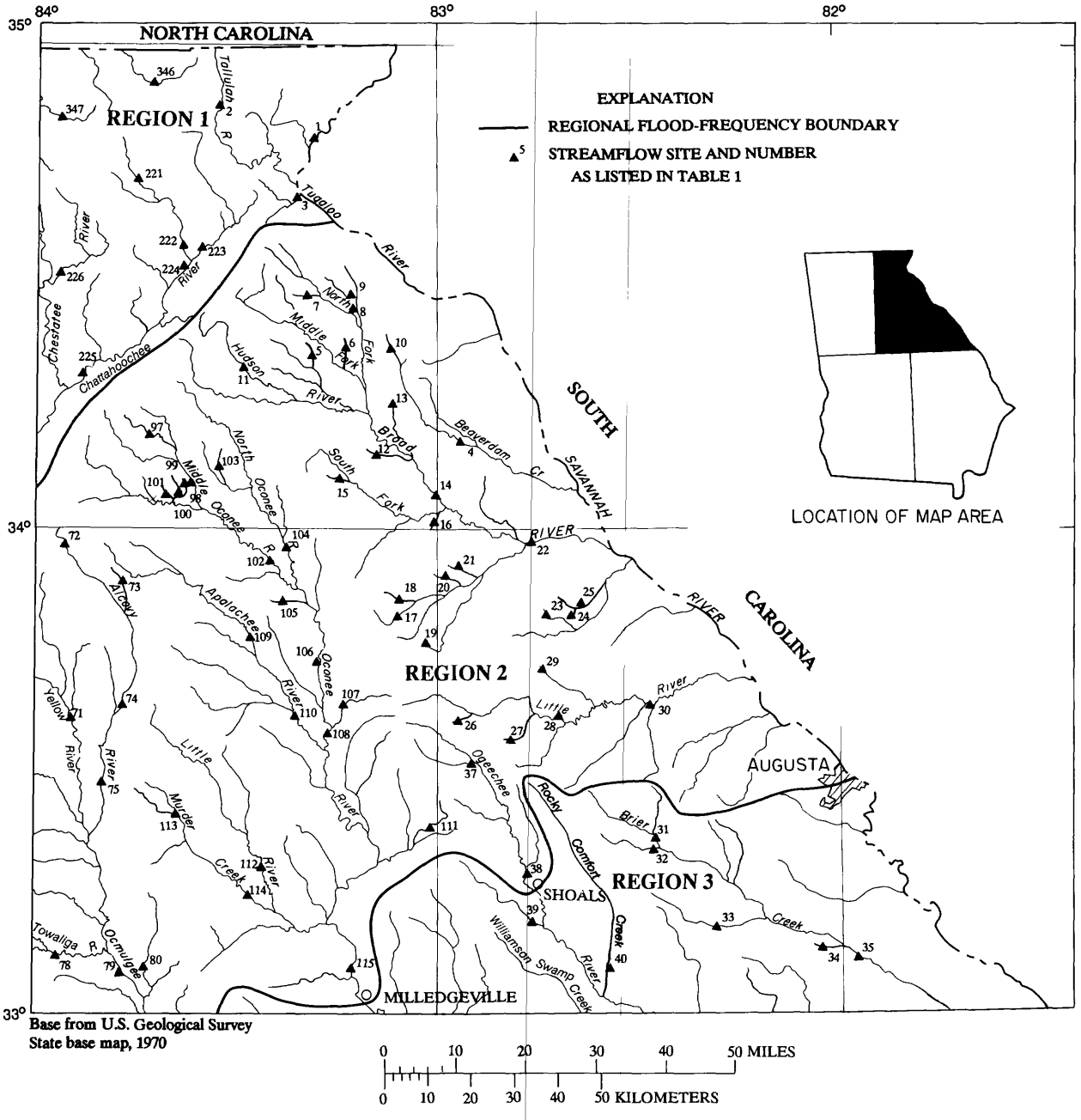

Figure 2.--Location of streamflow sites used in flood regionalization studies in northeastern Georgia.

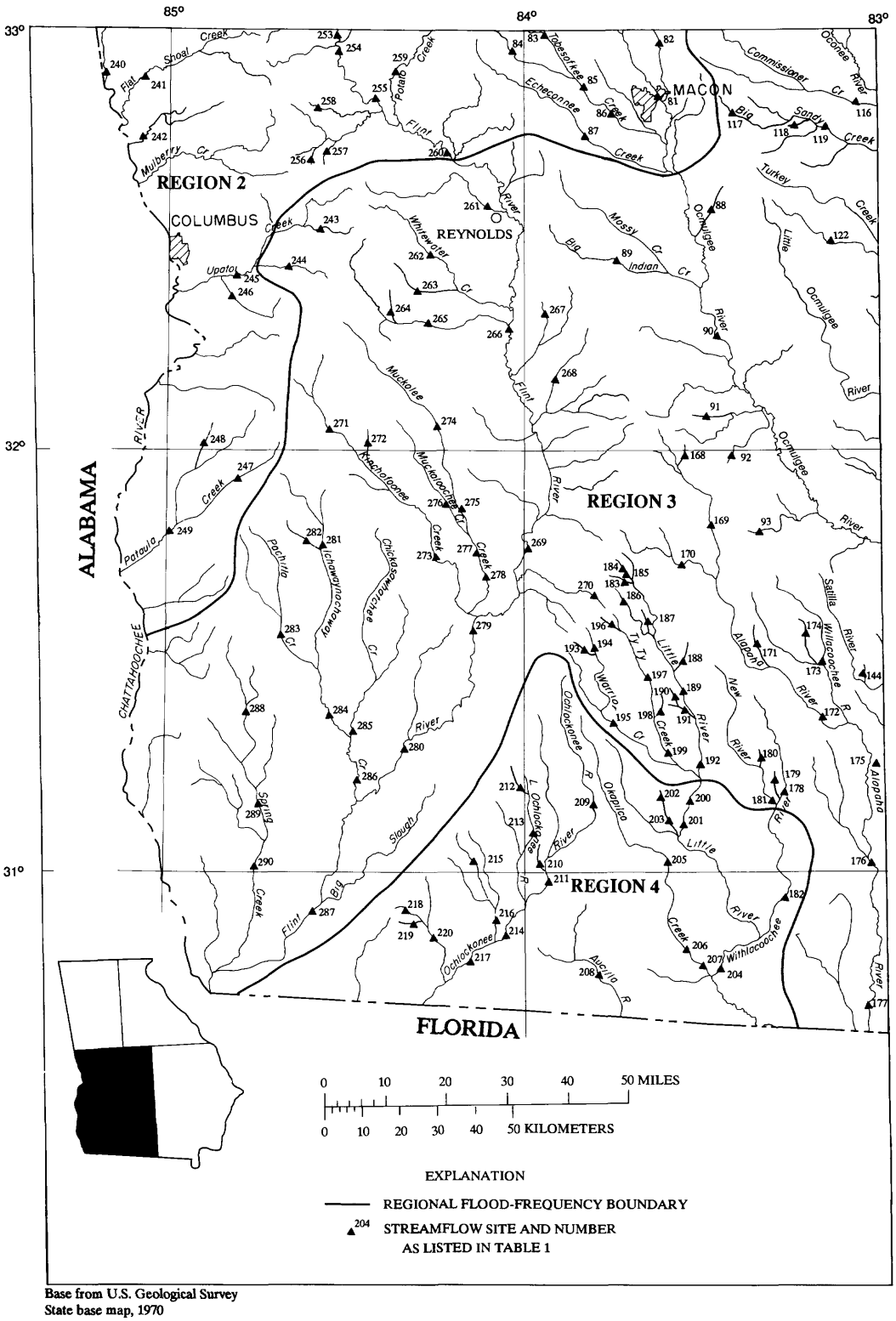

Figure 3.--Location of streamflow sites used in flood regionalization studies in southwestern Georgia.

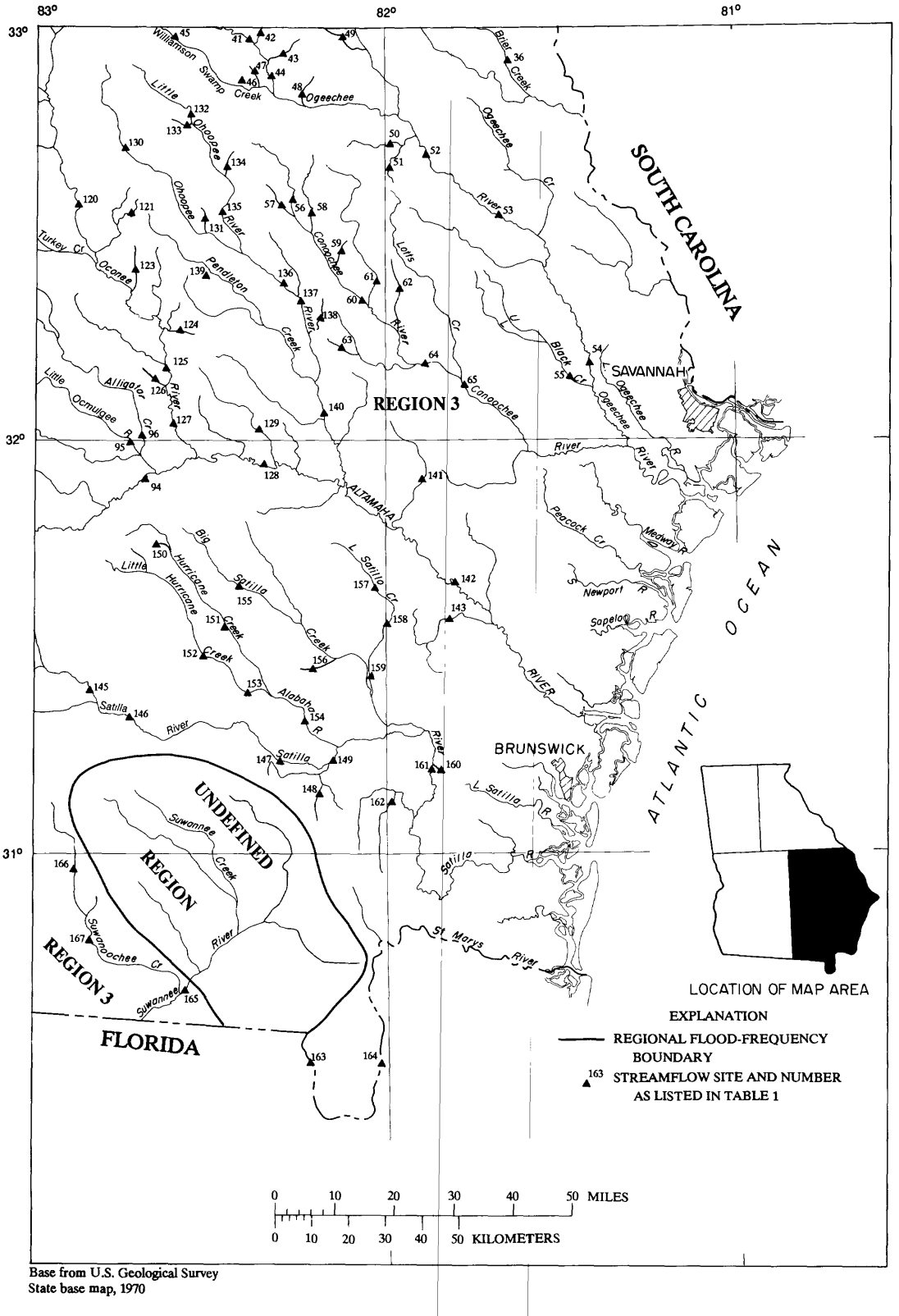

Figure 4.--Location of streamflow sites used in flood regionalization studies in southeastern Georgia.

CLIMATOLOGICAL FACTORS INFLUENCING FLOODS

The climatological factors that influence flooding in Georgia vary areally, seasonally, and annually. In winter, continental high-pressure systems periodically move frontal systems through the State, producing rain over large areas. These winter frontal storms usually last only a few days, but can cover several hundreds of square miles and produce large amounts of rainfall. In the summer, off-shore high-pressure systems frequently direct humid maritime air inland, aiding in the development of intense thunderstorms across the State. Although thunderstorms are most commonly associated with the spring and summer seasons, they may occur at anytime during the year and are frequently intense and affect only small areas. From late spring through fall, the State occasionally is affected by tropical storms and hurricanes. Rainfall associated with tropical storms and hurricanes are most frequent from June to November; rainfall may last for days and can cover several thousand square miles (Golden and Hess, 1991).

Since 1900, major floods have occurred in parts of Georgia in 1907, 1908, 1916, 1919, 1925, 1929, 1936, 1940, 1947, 1948, 1961, and 1990, but statewide flooding by a single storm system is rare. For example, flooding in the February 1990 flood was limited primarily to the northwestern part of the State, and flooding in March 1990 was limited to the west-central part of Georgia. The 1925 flood was an exception, when flooding was widespread throughout Georgia (U.S. Weather Bureau, 1925).

Record floods on small streams usually result from local intense rains and may have little affect on the large streams. The same storm may produce record flooding in one basin, and only moderate flooding in an adjacent basin. The differences in flooding in adjacent basins from the same storm may be the result of the variability of rainfall during and between storms, varying antecedent soil-moisture conditions, differences in soil characteristics of the basins, and other factors. For these reasons, dates of occurrence of maximum floods are variable across the State, and even within the same river basin.

METHOD OF STUDY

Peak-discharge data were analyzed at 426 rural streamflow sites in Georgia, and adjacent parts of Alabama, Florida, North Carolina, South Carolina, and Tennessee. Peak-discharge data were used in multiple least-squares linear regression analyses to develop regional flood-frequency relations. Regional flood-frequency relations were developed for four distinct regions for rural streams with drainage areas ranging from a minimum of 0.1 to a maximum of 3,000 square miles (mi^2). Of these 426 streamflow sites, 116 are in region 1, 108 are in region 2, 172 are in region 3, and 30 are in region 4 (figs. 1-4; Appendix I, II). The regional flood-frequency relations are based on annual peak-discharge data at 357 streamflow sites in Georgia, and 69 streamflow sites in surrounding states that have at least 10 years of annual maximum peak discharges. The methods developed for estimating the magnitude and frequency of floods do not apply to urban streams, tidally affected streams, or streams that are affected by regulation by manmade controls; except where regulation on larger rivers do not significantly affect annual peak discharges. Individual analyses are computed for the gaged sites on the mainstems of the Ocmulgee, Oconee, Altamaha, and Flint Rivers.

Streamflow sites used in this study have reliable stage-discharge relations that have been developed and verified over a period of several years. Additional data, including location description, type of gage(s), description of the stage-discharge relation, historical data, annual peak discharge and stage, and other remarks are described in a report by Hess and Stamey (1992). This report supercedes previous reports by personnel of the USGS documenting rural flood-frequency computation methods for Georgia.

FLOOD-FREQUENCY DATA ANALYSIS

The relation of flood-peak magnitude to probability of exceedence (or recurrence interval) is referred to as the flood-frequency relation. Probability of exceedence is the probability that a flood will exceed a specific magnitude in any one year. Recurrence interval is the reciprocal of the probability of exceedence times 100, and is the average interval, in years, in which a given flood will be exceeded. For example, a flood having a probability of exceedence of .04 has a recurrence interval of 25 years. A flood having a recurrence interval of 25 years does not mean that for each 25-year period the flood will be exceeded, but that a flood will be exceeded on the average of every 25 years over a long period of time, such as a few hundred years. In fact, the flood may be exceeded in successive years or even twice in the same year, or may not be exceeded in some 25-year periods.

"Guidelines for Determining Flood-Flow Frequency, Bulletin 17B" (Interagency Advisory Committee on Water Data, 1982), contains procedures to promote a consistent approach to flood-frequency analysis. The procedures form the basis for the streamflow data-analysis methods incorporated in this report. The flood-frequency analysis presented in this report involved three steps as outlined below:

1. Pearson Type III distributions were fitted to logarithms of observed annual maximum peak discharges for each site;

2. the generalized skew and station skew coefficients were weighted on the basis of relative accuracy to form an estimate of skew for each basin; and

3. frequency distributions were adjusted for outliers and historic peaks.

Pearson Type III Analysis

A flood-frequency relation or frequency curve for a site where peak-discharge data are available can be defined by fitting the array of annual peak discharges to a theoretical distribution. Flood-frequency distributions were determined by using the Pearson Type III distribution as recommended by the Interagency Advisory Committee on Water Data (1982).

The USGS computer program J407, described by Kirby (1979), was used to fit the Pearson Type III distribution to the logarithms of the annual maximum discharges for each site. The J407 program includes features described by the Interagency Advisory Committee on Water Data (1982), but requires some judgement on the part of the user when providing data on historic peaks, specifying screening levels for outliers, using truncated or incomplete records, and interpreting the frequency curve. Flood discharges for recurrence intervals of 2, 5, 10, 25, 50, 100, 200, and 500 years are presented for 357 streamflow sites in Georgia in table 1, at the back of this report. Also listed are the drainage area, number of years of record, generalized skew, and standard deviation used in the Pearson Type III analyses.

Coefficient of Skewness

The accuracy of the station-skew coefficent, as an estimate of the true skew of the frequency distribution, is generally a function of the length of record. The station skew is a measure of the past history of annual floods, and may be unreliable when computed from less than 10 years of record. The skew coefficient determined from the station record is sensitive to extreme events; therefore, the longer the stream record, the more reliable the skew coefficient. The generalized skew coefficient is determined from Plate I in Bulletin 17B (Interagency Advisory Committee on Water Data (1982) and is based on all stations in a given area having at least 25 years of record. The generalized skew coefficient, when weighted with individual station-skew coefficients, will provide a better estimate of the individual station long-term population skew coefficient. An analysis of station skew coefficients was made to determine more accurate estimates of the generalized skew for sites with 25 or more years of record, but distinct geographic or topographic patterns differing from those described by the Interagency Advisory Committee on Water Data (1982, plate I) were not evident. Station-skew coefficients were weighted using generalized skew coefficients given by the Interagency Advisory Committee on Water Data (1982) for stations having drainage areas less than 3,000 mi^2, to improve the accuracy of the final estimated skew coefficients.

REGRESSION MODEL

Flood-frequency data computed for gaged sites can be transferred to ungaged sites using regional regression analyses. Regional flood-frequency relations were developed by using multiple linear-regression analysis to relate flood discharges for selected recurrence intervals (dependent variable) to selected climatic and basin characteristics (independent varibles). The accuracy of the defined relation (the standard error of estimate) and the measure of significance of each independent variable in the relation was obtained from the regression analysis.

Numerous studies, such as those by Golden and Price (1976) and Price (1978) have indicated that peak discharge is linearly related to several basin and climatic characteristics if the data are logarithmically transformed. Therefore, all peak-discharge and basin and climatic data in this report were transformed to logarithmic values. Peak discharges were related to the basin and climatic characteristics using linear least-squares procedures by step-forward and step-backward multiple regression analysis (P-Stat, Inc., 1989). For the step-backward multiple-regression analysis, a set of relations are developed by relating the dependent variable (peak discharges) to all available or candidate independent variables (basin and climatic charateristics), and then deleting the least-significant independent variable (as dictated by the student's t-test) by steps until only statistically significant independent variables remain. Step-forward multiple regression differs in that the analysis begins with the most significant single independent variable and at each step, independent variables are added to the model, in ascending order of significance, until remaining variables are not statistically significant. The results of the two types of regression analyses indicated that drainage area is the most significant variable for estimating flood discharge for Georgia streams.

The regression model has the form of

$$Q_n = a\,A^b\,B^c\,C^d\ldots \qquad (1)$$

where

Q_n is the flood discharge having a n-year recurrence interval;

A, B, C are the basin and climatological characteristics; and

a, b, c, d are the regression coefficients for the n-year recurrence intervals.

The logarithmic relation used in this study is of the form

$$\log Q_n = \log a + b\,(\log A) + c\,(\log B) + d\,(\log C) + \ldots. \qquad (2)$$

BASIN AND CLIMATIC CHARACTERISTICS

The basin and climatic characteristics used in this study are the same as those used in the flood-frequency analyses for streams in Georgia by Golden and Price (1976), and Price (1978). The 10-independent variables listed below were chosen, because the variables are the most likely to influence flood discharges. Only the drainage area variable was determined to be statistically significant; therefore, the remaining characteristics do not appear in the final regional flood-frequency relations.

Drainage area (A), in square miles, is the total contributing drainage area upstream from the streamflow site as planimetered from USGS topographic maps, county maps, or aerial photographs.

Main-channel length (L), in miles, is the length of the main channel between the streamflow site and the basin divide, as measured along the channel which drains the largest area of the basin above each junction.

Main-channel slope (S), in feet per mile, is the average slope between points 10 and 85 percent of the distance from the streamflow site to the basin divide.

Surface-storage area (St), is the surface area of lakes, ponds, and swamps expressed as percentage of the total drainage area.

Mean-basin elevation (E), in feet, is the mean elevation of the entire basin above sea level.

Forested area (F), in percent, is the area of forest expressed as a percentage of the total drainage area.

Soil-infiltration-capacity index (Si), in inches, is soil infiltration capacity estimated by the U.S. Soil Conservation Service from information on soil type, cover, and agricultural practices.

Lag-time index (T), is an index of basin lag time, defined by the term $L/S^{0.5}$, where L is main-channel length and S is main-channel slope, as previously defined.

Mean annual precipitation (P), in inches, is determined for each basin based on maps published by the U.S. Weather Bureau (now National Weather Service) (1959).

Precipitation intensity ($P_{24,2}$), in inches, the 24-hour, 2-year rainfall, determined for each basin based on maps published by the U.S. Weather Bureau (1958).

REGIONAL REGRESSION ANALYSIS

Initial least-squares multiple-regression analysis utilized data from 426 rural streamflow sites throughout Georgia, and parts of adjacent states. The step-forward and step-backward regression analyses methods indicated that drainage area is the most significant of the 10-independent variables, using the 95-percent confidence limit. Standard errors of estimate using the independent variables ranged from 64 to 67 percent for the 100-year flood estimate when using data for the entire State. The large errors of estimates are unacceptable; therefore, the residuals from the regression analysis were plotted on a State map, and covariance analyses were performed to determine if the residuals in some parts of the State were statistically different from zero, and used to check for geographic bias.

A geographic bias was detected and four regional flood-frequency boundaries were delineated (figs. 1-5) based on previous flood-frequency studies, geologic and soils maps, drainage-basin maps, and maps of plotted residuals. Region 1 includes all of the Valley and Ridge, Applachian Plateau, and Blue Ridge physiographic provinces, and part of the adjacent Piedmont physiographic province. Region 1 also includes the headwaters of the Savannah, Tennessee, Tallapoosa, and Mobile River basins; all of the Etowah River basin; and the Chattahoochee River basin upstream in the vicinity of Franklin, Ga. Region 2 includes most of the Piedmont Province, part of the Coastal Plain Province (including the upstream portion of the Flint River downstream to near Reynolds, Ga.), and the Ocmulgee River basin upstream from Macon, Ga. Region 2 also includes all of the Broad River basin, the Oconee River basin upstream of Milledgeville, Ga., and the part of the Ogeechee River basin upstream of Shoals, Ga.

Regions 3 and 4 are in the Coastal Plain physiographic province. The northern boundary of region 3 approximates the fall-line boundary between the Piedmont and Coastal Plain Provinces. Region 3 includes the basins of the Ocmulgee (downstream of Macon), Flint (downstream of Reynolds), Alapaha, Suwanee, Ogeechee (downstream of Shoals), Canoochee, Oconee (downstream of Milledgeville), Altamaha, and Satilla Rivers. Region 4 includes all of the Ocklockonee River basin and most of the Withlacoochee River basin. Flood-magnitude and -frequency relations were not determined for the basins draining the Okefenokee Swamp (undefined region on figures 4 and 5) (figs. 1-5).

Separate regression analyses were performed for each of the four regions. Standard errors were reduced by about 30 percent for the 100-year flood estimate as compared to the statewide regression relations. In each region, drainage area was found to be the most significant variable; the use of the other significant variables did not reduce the standard error by more than 2 percent for any of the four regions. The other variables were omitted from the final relations because of the added difficulty in accurately measuring the variables, and the minimal reduction in the standard error. Therefore, drainage area was the only variable retained in the final flood-frequency relation. Regional flood-frequency relations for rural streams in the four regions are summarized in table 2.

Table 2.--*Regional flood-frequency relations for rural streams in Georgia*

Flood discharge, Q_n, for n-year recurrence interval	Flood-frequency relations for indicated regions in the form $Qn = {}_aA^b$, where A is the drainage area, in square miles, and a and b are as presented below			
	1	2	3	4
Q_2	$207\ A^{.654}$	$182\ A^{.622}$	$76\ A^{.620}$	$142\ A^{.591}$
Q_5	$357\ A^{.632}$	$311\ A^{.616}$	$133\ A^{.620}$	$288\ A^{.589}$
Q_{10}	$482\ A^{.619}$	$411\ A^{.613}$	$176\ A^{.621}$	$410\ A^{.591}$
Q_{25}	$666\ A^{.605}$	$552\ A^{.610}$	$237\ A^{.623}$	$591\ A^{.595}$
Q_{50}	$827\ A^{.595}$	$669\ A^{.607}$	$287\ A^{.625}$	$748\ A^{.599}$
Q_{100}	$1,010\ A^{.584}$	$794\ A^{.605}$	$340\ A^{.627}$	$926\ A^{.602}$
Q_{200}	$1,220\ A^{.575}$	$931\ A^{.603}$	$396\ A^{.629}$	$1,120\ A^{.606}$
Q_{500}	$1,530\ A^{.563}$	$1,130\ A^{.601}$	$474\ A^{.632}$	$1,420\ A^{.611}$

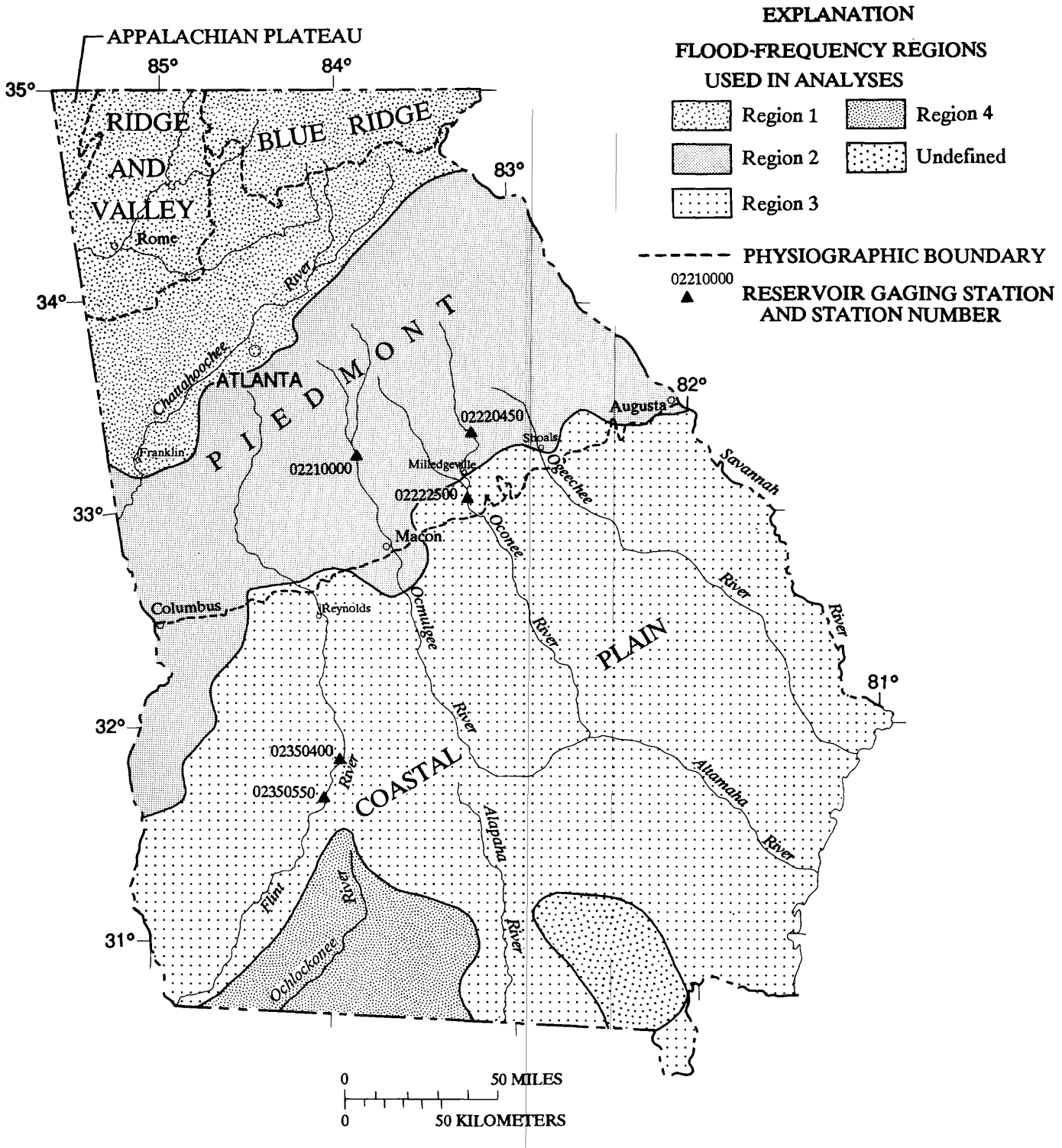

Figure 5.--Location of physiographic provinces, regional flood-frequency boundaries, and selected reservoir gaging stations.

Analyses of the data for the mainstem reaches of the Ocmulgee, Oconee, Altamaha, and Flint Rivers, that, in part, lie in regions 2 and 3, indicate that the flood-frequency relations for these streams do not conform to those for the other sites within the regions. Therefore, separate analyses were made for the sites on these rivers and are described later in this report in the section "Flood Frequency for Large Streams."

Additional peak-discharge data have been collected at most sites in the State since 1974 (ending date for previous statewide flood-frequency report prepared by Price (1978)). Additional data also has been collected at 20 crest-stage gage sites, primarily in the area of the inter-margin of the Coastal Plain in Georgia, during the same time period. The analyses of these additional data resulted in regional flood-frequency boundaries somewhat different from in the regional boundaries determined by Price (1978).

The 100-year flood-frequency relations for regions 1, 2, 3, and 4 are shown in figure 6. The flood-frequency relations for regions 1 and 4 converge at drainage areas greater than about 1,000 mi^2. The convergence can be partially explained by the small sample size (30) analyzed in region 4. As expected, region 3 indicates a much lower runoff per square mile than the other regions, because of the higher infiltration rates of the soils. Each region shows different runoff characteristics because of influences by types of forest cover, soil types, soil-infiltration characteristics, and location of the basins within the different physiographic provinces of the State (fig. 5).

Accuracy of the Regional Relations

The accuracy of a flood-frequency relation can be expressed as the average standard error of estimate. The standard error of estimate is a measure of the standard deviation of the residuals (assumed to be normally distributed) about the regression line. Estimates based on gaged records at specific sites are expected to be within one standard error of the regionalized value 67 percent of the time, and within two standard errors 95 percent of the time.

The accuracy of each flood-frequency relation also can be expressed as the standard error of prediction or as equivalent years of record. The standard error of prediction is defined as a measure of how accurately the regression equation will estimate the dependent variables at locations other than calibration sites. Hardison (1971) describes a method of converting the standard error of prediction to equivalent years of record. When converted to equivalent years of record, the standard error of prediction is expressed as the number of actual years of annual peak-discharge record necessary to provide an estimate of equal accuracy. For example, in region 1, the 100-year flood discharge can be estimated from the regression relations with the same degree of accuracy, on average, that could be obtained from 16 years of actual record. The accuracy of the regional flood-frequency relations in percent standard error of prediction, and equivalent years of record is summarized in table 3. The average standard errors of prediction of the regional flood-frequency relations for flood discharges with 2- to 500-year recurrence intervals are 31, 32, 38, and 26 percent for regions 1, 2, 3, and 4, respectively.

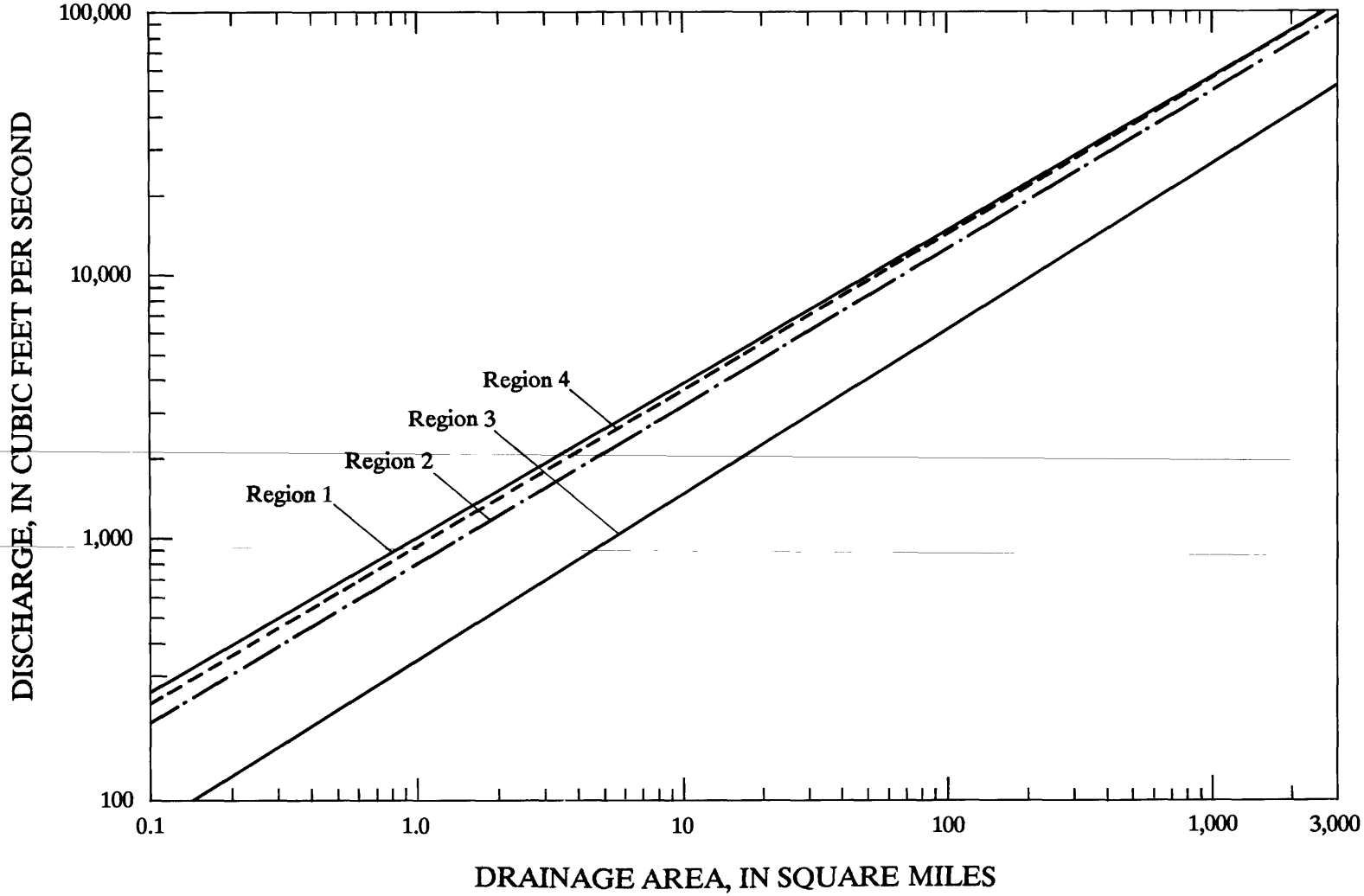

Figure 6.--Relation of 100-year flood discharge to drainage area in flood-frequency regions in Georgia.

Table 3.--*Accuracy of regional flood-frequency relations for rural streams in Georgia*

Region	Standard error of prediction, in percent, for indicated flood discharge for n-year recurrence interval (Q_n)							
	Q_2	Q_5	Q_{10}	Q_{25}	Q_{50}	Q_{100}	Q_{200}	Q_{500}
1	31	29	29	29	30	31	33	36
2	33	28	27	28	30	33	36	40
3	36	35	35	37	38	38	40	43
4	25	19	19	21	24	28	32	37
	Equivalent years of record required to provide an equally accurate estimate of flood discharge for n-year recrurrence interval (Q_n)							
1	3	4	5	12	14	16	17	18
2	4	7	10	14	16	17	19	21
3	3	6	10	15	18	19	19	20
4	8	27	37	43	40	37	35	32

Limitations

The following limitations apply to the use of the regional flood-frequency relations presented in this report:

° the relations are valid only for ungaged sites where the drainage area is between the minimum and maximum drainage area for the appropriate regions listed below

Region 1 - 0.17 to 730 mi^2;
Region 2 - 0.10 to 3,000 mi^2;
Region 3 - 0.14 to 3,000 mi^2;
Region 4 - 0.25 to 2,000 mi^2;

° the regional relations do not apply to the mainstems of the Ocmulgee, Oconee, Altamaha, and Flint Rivers lying in region 3. Station flood-frequency relations for these large rivers are presented in the section entitled "Flood Frequency for Large Streams").

° the relations are not valid for streams affected by regulation from dams or diversions, by substantial channelization;

° the relations are not valid for tidally affected streams;

° the relations are not valid for drainage areas in the Okefenokee Swamp where the magnitude and frequency relations are undefined;

° the relations are not valid for streams in urban areas unless the effects of urbanization are insignificant (for sites in urban areas, use methods described by Inman (1988));

° the relations are not valid for areas in southwest Georgia where large limestone sink holes or depressions can affect the flood-frequency relation.

Use of Flood-Frequency Relations

Regional flood-frequency relations can be used to estimate flood discharges at ungaged sites and improve estimates at gaged sites. The best method for estimating the discharge of a specific recurrence-interval flood at a gaged site is to weight the regional and station discharge estimates for the specified recurrence-interval flood using the number of years of station record and the accuracy of the regional flood-frequency relations, expressed in equivalent years of record (Interagency Advisory Committee on Water Data, 1982). The accuracy of the regional flood-frequency relations is the same as would be determined by gaging a stream for the number of equivalent years of record listed in table 3. Accuracy for the weighted estimate is the sum of the accuracy of each estimate in equivalent years of record, assuming the estimates are independent.

For ungaged sites, the regional peak-discharge estimate for a specific recurrence interval can be improved if the site is located near a gaged site on the same stream having at least 10 years of peak-discharge record. Discharges for ungaged sites are weighted according to the relative proximity of the ungaged site to the gaged site. Sites having less than 10 years of peak-discharge record are treated as ungaged sites.

Gaged sites

Flood-frequency estimates can be obtained at gaged sites by the use of the appropriate regional flood-frequency relations and the Pearson Type III frequency data. The recommended procedure is to compute the discharge for the desired recurrence interval as a weighted average of the value at the gaged site and the value obtained from the regional regression relation. The discharge is weighted determined on the basis of the length of record at the gaged site and the equivalent years of record for the estimated based on the regional flood-frequency relation (table 3). This procedure for estimating flood discharge for a given recurrence interval at gaged sites can be expressed in the following equation (Interagency Advisory Committee on Water Data, 1982):

$$\log (Q_g)_{(w)} = \frac{N (\log Q_g) + EY (\log Q_n)}{N + EY} \qquad (3)$$

where

$Q_{g(w)}$ is the weighted discharge for the selected recurrence interval, in cubic feet per second (ft^3/s);

N is the number of years of station record used to compute Q_g from table 1;

Q_g is the discharge for the selected recurrence interval, in ft^3/s, at the gaged site;

EY is the equivalent years of record for Q_n from table 3; and

Q_n is the regional flood-frequency regression discharge for the selected recurrence interval from table 2, in ft^3/s.

The accuracy of the weighted discharge estimate, $Q_{g(w)}$, in equivalent years of record, is equal to N + EY. Regional and station discharge estimates tend to be more independent when the area of the region has a radius of greater than 100 miles (mi), and the periods of record of the data used to develop the regional relations are longer than that of the station for which the weighted estimate will be determined (Interagency Advisory Committee on Water Data, 1982). The radii of all four flood-frequency regions in Georgia are greater than 100 mi^2, and the periods of record used to develop the regional relations are longer than the period of record for most stations. The weighting techniques assume that the regional and station flood-frequency estimates are independent.

The Pearson Type III flood-frequency data and weighted discharges for the 2-, 5-, 10-, 25-, 50-, 100-, 200-, and 500-year recurrence-interval floods for the Georgia streamflow sites used in this report are presented in table 1. The flood-frequency data were computed using all available records through the 1990 water year, and supercedes the values presented by Price (1978). Other information about these streamflow sites, including a brief description of the location, type of gage, gage datum (if known), drainage area, peak-stages and discharges, and explanatory remarks is presented in a report by Hess and Stamey (1993).

Ungaged sites

Flood discharges for a specific recurrence interval at an ungaged site on a stream can be estimated by locating the drainage area for the site in one of the hydrologic regions (figs. 1-4), and using the appropriate regional flood-frequency relation from table 2. The regional estimate can be improved if the site is located on the same stream as a gaged site having at least 10 years of record, and the drainage area of the ungaged site is within one-half to two times that at the gaged site. The weighted discharge, $Q_{g(w)}$, at the gaged site can be transfered to the ungaged site using the equation

$$Q_u = \left(\frac{Au}{Ag}\right)^b Q_{g(w)} \tag{4}$$

and then a weighted discharge value can be computed by the equation

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

where

Q_u is the flood discharge at the ungaged site, in ft^3/s;

A_u is the drainage area of the ungaged site, in mi^2;

A_g is the drainage area of the gaged site, in mi^2;

b is the exponent of the drainage area term of the regional flood-frequency relation for the applicable hydrologic region and recurrence interval, from table 2;

Q_n is the regional flood discharge for the selected recurrence interval at the ungaged site computed using the applicable regional relation from table 2, in ft^3/s;

$Q_{g(w)}$ is the weighted flood discharge at the gaged site, from table 1, in ft^3/s;

$Q_{u(w)}$ is the weighted flood discharge at the ungaged site, in ft^3/s; and

ΔA is the difference in drainage areas of the gaged station and the ungaged site, in mi^2.

The regional flood-frequency relations are used without adjustment where the drainage area at the ungaged site is not within one-half to two times the drainage area of the gaged site.

Sites draining more than one region

Methods for estimating the flood discharges for specific recurrence intervals for sites on large streams that drain more than one flood-frequency region differ from methods used for sites on smaller streams that fall within one region. The Ocmulgee, Oconee, Altamaha, Flint, Ogeechee, and Withlacoochee Rivers are the only streams in Georgia that drain more than one region (fig. 5). Flood discharges for selected recurrence interval for the sites on the Ogeechee and Withlacoochee Rivers were computed by assuming that the entire drainage basin of each stream was located in each of the regions that the streams flow through, and then weighting the discharge based on the percentage of the drainage area contained in each region (table 1). Flood discharges for selected recurrence intervals for sites on the Ocmulgee, Oconee, Altamaha, and Flint Rivers were based on log-Pearson Type III analysis of long-term peak-discharge records.

Note the maximum drainage-area size for streams listed in the "Limitations" section of this report. See "Numerical Application Examples", (example (2)) and "Flood-Frequency for Larger Streams" for further explanation.

Example application

Examples of regional relations applications for determining a selected recurrence interval discharge for an ungaged rural site in Georgia are presented in this section. For each of these examples, it is assumed that the user has:

(1) determined that the site is not significantly affected by regulation, urbanization, channel improvements, diversions, or tide;

(2) determined that the limitations of the regional flood-frequency relations described earlier are not exceeded (see "Limitations");

(3) determined the drainage area, A, in square miles;

(4) determined the region(s) (figs. 1-4), in which the drainage basin of the site is located; and

(5) selected the appropriate flood-frequency relation for the region from table 2.

Example (1)--basin entirely wihin one region

The 100-year flood discharge (Q_{100}) is needed for a site that has a drainage basin entirely within region 1 and has a drainage area of 82 mi^2. To compute the 100-year flood discharge, the drainage area is substituted in the regional flood-frequency relation for region 1 (table 2) as follows:

$$Q_{100} = 1{,}010A^{.584}$$
$$= 1{,}010(82)^{.584}$$
$$= 13{,}200\ ft^3/s.$$

Example (2)--basin in two regions

The 100-year flood discharge (Q_{100}) is needed for an ungaged site that has a drainage basin in two regions. The total drainage area of the site is 2,000 mi^2, with 1,200 mi^2 in region 2 and 800 mi^2 in region 3.

The Q_{100} is first computed by using the regional flood-frequency relation for region 2 (table 2). Assuming that the drainage basin is totally within region 2, and then the Q_{100} is computed assuming that the drainage basin is totally within region 3 by using the equation from region 3 (table 2).

Region 2

$$Q_{100} = 794A^{.605}$$
$$= 794(2{,}000)^{.605}$$
$$= 78{,}900\ ft^3/s$$

Region 3

$$Q_{100} = 340A^{.627}$$
$$= 340(2{,}000)^{.627}$$
$$= 39{,}900\ ft^3/s$$

The adjusted Q_{100} for the site is then calculated as a weighted average based on the percentage of the drainage area in each region as in the following equation

$$Q_{100}\ \text{adjusted} = Q_{100}\ \text{region 2}\ \left(\frac{1{,}200}{2{,}000}\right) + Q_{100}\ \text{region 3}\ \left(\frac{800}{2{,}000}\right) \quad (6)$$
$$= 78{,}900\ \left(\frac{1{,}200}{2{,}000}\right) + 39{,}900\ \left(\frac{800}{2{,}000}\right)$$
$$= 47{,}300 + 16{,}000$$
$$= 63{,}300\ ft^3/s.$$

Example (3)--ungaged site on same stream as gaged site

The 100-year flood discharge (Q_u) is needed for an ungaged site on the same stream as a gaged site in region 4 and the drainage area of the ungaged site is within one-half to two times that of the gaged site. The gaged site is station number 02318600, Okapiko Creek at Quitman, which has a drainage area of 101 mi^2 and a 100-year flood discharge of 14,600 ft^3/s (table 1). The drainage area of the ungaged site is 80 mi^2. The 100-year flood discharge at the ungaged site (Q_u) is computed by transferring the weighted 100-year discharge at the gaged site (14,600 ft^3/s) to the ungaged site using equations (4) and (5) (see section "Ungaged Sites"). The values for variables in these equations are:

A_u is 80 mi^2,
A_g is 101 mi^2,
ΔA is 21 mi^2,
Q_n is 13,000 ft^3/s (computed from equation in table 2),
$Q_{g(w)}$ is 14,600 ft^3/s (table 1), and

Equation (4) is solved for to transfer the 100-year flood discharge from the gaged site to the ungaged site as follows:

$$Q_u = \left(\frac{Au}{Ag}\right)^b Q_{g(w)}$$
$$= \left(\frac{80}{101}\right)^{.602} 14{,}600$$
$$= 12{,}700\ ft^3/s.$$

The weighted discharge for the ungaged site $Q_{u(w)}$ is then calculated from equation (5) as follows:

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

$$= \frac{2(21)}{101}\ 13{,}000 + \left(1 - \frac{2(21)}{101}\right) 12{,}700$$

$$= 5{,}410 + 7{,}420$$

$$= 12{,}830$$

$$= 12{,}800\ ft^3/s \text{ (rounded).}$$

Flood Frequency for Large Streams

Flood-frequency discharges for gaged sites along the mainstem of the Ocmulgee, Oconee, Altamaha, and Flint Rivers were not determined using the regional flood-frequency analysis because these sites were on streams that drained more than one region and the flood-frequency relations at such sites are not representative of the other sites used to develop the region relations. Individual relations of flood-discharges to drainage area were determined for selected flood-frequencies for sites on the Ocmulgee, Oconee, Altamaha, and Flint Rivers. These relations were based on log-Pearson Type III analysis of peak-discharge data at the gaged sites along these streams which lie within region 3, as described in Interagency Advisory Committee on Water Data (1982). The relations between flood discharges for specific recurrence interval floods and drainage area for these large streams are shown in figures 7-10.

Ocmulgee River

The Ocmulgee River begins at the confluence of the South and Alcovy Rivers, and flows southward to it confluence with the Oconee River to form the Altamaha River. The normal flow of the Ocmulgee River is regulated to some extent by the Lloyd Shoals Dam (station 02210000) (fig. 5). The Dam was constructed in 1910, has a drainage area of 1,400 mi^2, and maximum flood-storage capacity of approximately 20,000 acre-ft. The regulation from Lloyd Shoals Dam does not affect most annual peaks downstream from Macon (Price, 1978). The relation of flood discharge to drainage area for selected frequencies for the Ocmulgee River, which is in region 3, is based on the analysis of peak-discharge records from gaging stations 02213000, 02215000, and 02215500 is shown in figure 7. The slope of the flood-frequency discharge profiles varies somewhat because of changes in flood-plain storage between the three gaging stations downstream from Macon (fig. 7, table 1).

Oconee River

The Oconee River begins at the confluence of the Middle and North Oconee Rivers, and flows southward to the point where it joins the Ocmulgee River to form the Altamaha River. The Oconee River has two manmade reservoirs, Sinclair Reservoir (station 02222500) and Lake Oconee (station 02220450) (fig. 5) . Sinclair Reservoir was constructed in 1952, has a drainage area of 2,900 mi^2, and a maximum flood-storage capacity of approximately 215,000 acre-ft. Lake Oconee was constructed in 1979 and has a maximum flood-storage capacity of 367,000 acre-ft. Because of the limited storage capacities, Sinclair Reservoir and Lake Oconee do not affect annual peak discharges downstream from Milledgeville (Price, 1978). The relation of flood discharge to drainage area for selected recurrence interval floods on the Oconee River, which is in region 3, is based on analysis of annual peak-discharge records from gaging stations 02223000, 02223500, and 02224500, are shown in figure 8. The slope of the flood-frequency discharge profiles varies because of increases in flood-plain storage between the three gaging stations downstream from Milledgeville (fig. 8, table 1).

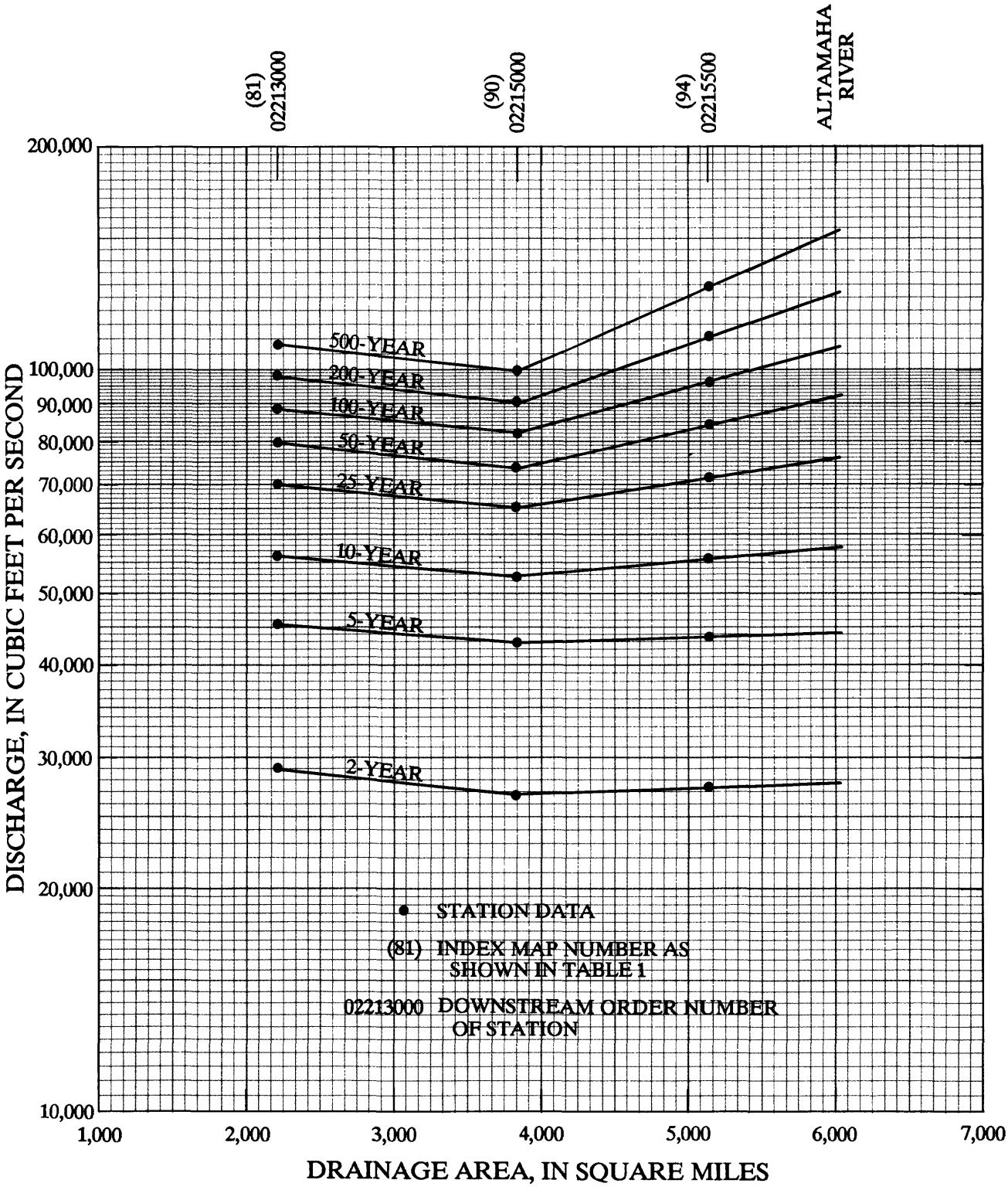

Figure 7.--Relation of flood discharge to drainage area for selected recurrence-interval floods in region 3 for the Ocmulgee River.

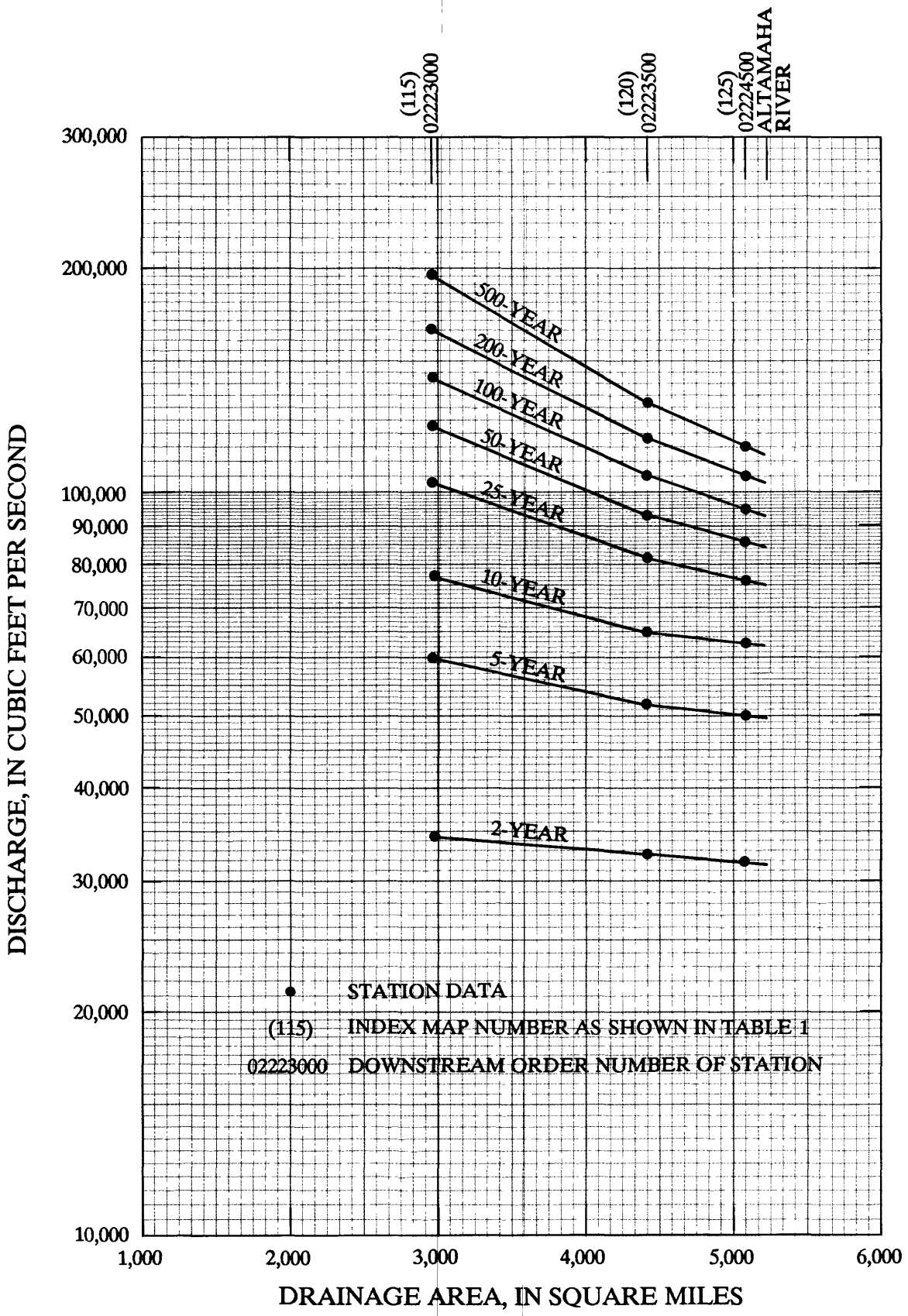

Figure 8.--Relation of flood discharge to drainage area for selected recurrence interval floods in region 3 for the Oconee River.

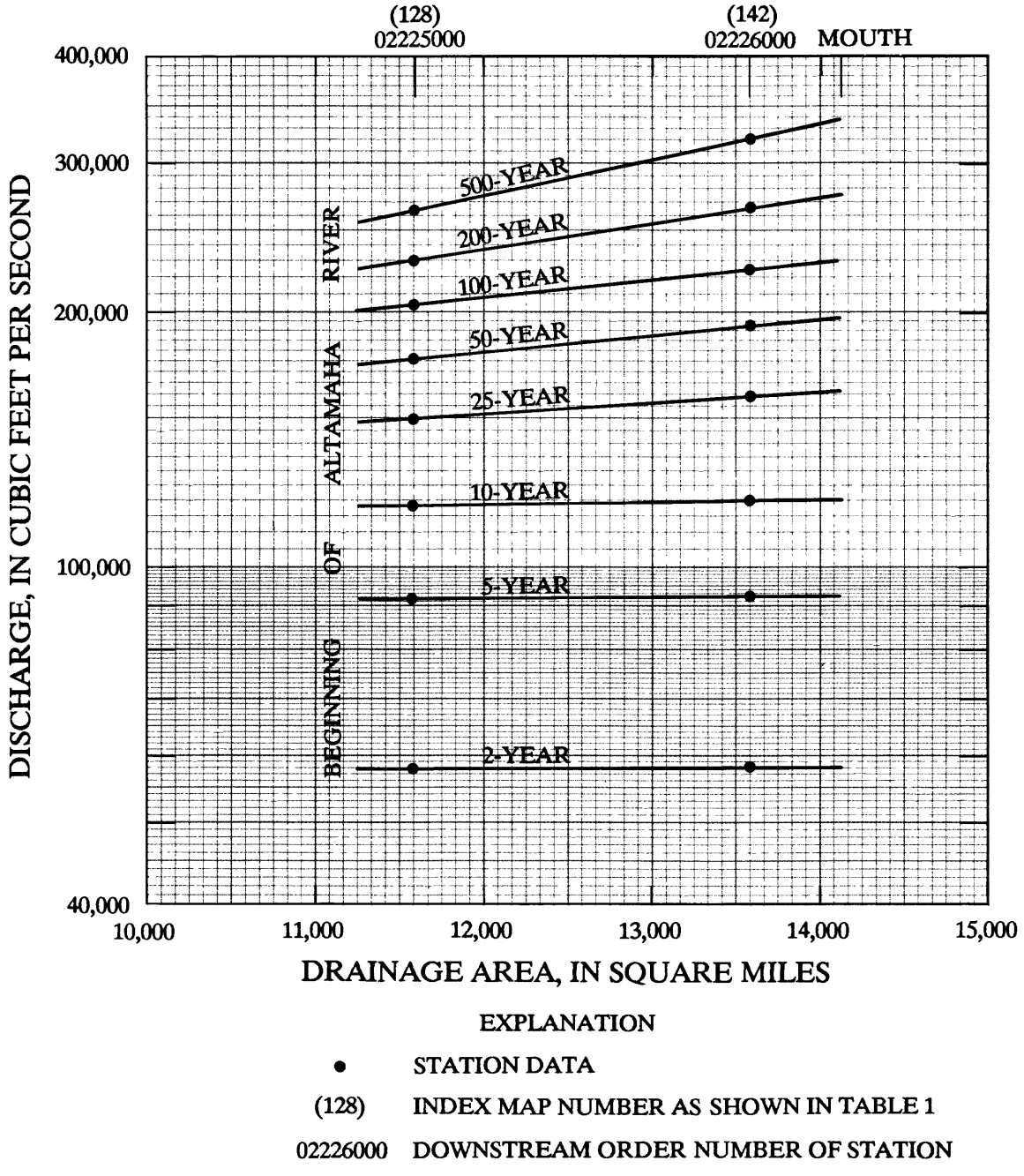

Figure 9.--Relation of flood discharge to drainage area for selected recurrence-interval floods in region 3 for the Altamaha River.

Altamaha River

The Altamaha River begins at the confluence of the Oconee and Ocmulgee Rivers, and flows southeastward into the Atlantic Ocean (fig. 5). The Altamaha River is not regulated, but the peak discharges are affected by large amounts of storage in the flood plain (Price, 1978). The relation of flood discharge to drainage area for selected recurrence interval floods for the Altamaha River, which is based on analysis of annual peak-discharge records from gaging stations 02225000 and 02226000, is shown in figure 9.

Flint River

The Flint River begins just south of Atlanta and flows southward to its confluence with the Chattahoochee River at the Georgia-Florida State Line to form the Apalachicola River. The Flint River has two reservoirs, Lake Blackshear (station 02350400) and Lake Worth (station 02350550) (fig. 5). Lake Blackshear and Lake Worth do not have sufficient storage to affect the flood peaks downstream (Price, 1978). The relation of flood discharge to drainage area for selected recurrence interval floods, which is based on analysis of annual peak-discharge records from gaging stations 02347500, 02349500, 02350500, 02352500, 02353000, and 02356000 is shown in figure 10.

SUMMARY

Peak-discharge data collected prior to September 1990 were analyzed for 426 streamflow sites on rural streams in Georgia, and adjacent parts of Alabama, Florida, North Carolina, South Carolina, and Tennessee with 10 or more years of record. Flood frequencies were computed using the Pearson Type III distribution with log transformation of annual peak discharges. Flood-frequency data were computed and weighted on the basis of the generalized and station skew coefficients. Flood-frequency data were also adjusted by using historic peaks, outliers, and truncated or incomplete records. Flood discharges having recurrence intervals of 2, 5, 10, 25, 50, 100, 200, and 500 years were tabulated for the 426 sites. Basin and climatic characteristics were used in a multiple least-squares linear-regression analyses to develop regional flood-frequency relations. Drainage area was determined to be the most significant variable in the analyses and was the only independent variable used in the development of regional flood-frequency relations. Inclusion of other significant independent variables at the 95-percent confidence limit reduced the standard error of estimate by about 2 percent and were not used in the final regional flood-frequency relations because of their additional computational complexities. Four regions having distinct peak-discharge characteristics were delineated based on previous flood-frequency studies, geologic and soils maps, drainage basin maps, and map plots of residuals from an initial regression analysis.

The regional flood-frequency relations developed are applicable to streams in Georgia that are not affected by tide or by regulation, urbanization, or channelization. These regional flood-frequency relations were developed for computing discharges for the 2-, 5-, 10-, 25-, 50-, 100-, 200-, and 500-year floods. Average standard errors of prediction of the regional flood-frequency relations for regions 1, 2, 3, and 4 for the 2- through 500-year floods are 31, 32, 38, and 26 percent, respectively. Flood-frequency discharges at gaged sites can be estimated using a weighted-average discharge based on regional and site estimates. For ungaged sites on the same stream as a gaged site, where the drainage area of the ungaged site is one-half to two times the drainage area of the gaged site, the flood-frequency discharges can be estimated by transferring the flood-frequency data at the gaged site to the ungaged site and weighting the flood-frequency discharge at the ungaged site with the regional flood-frequency data. Flood-frequency discharges for sites in more than one region can be computed by assuming that the drainage basin is located entirely within each region, and then weighting the flood-frequency discharge based on the percentage of the drainage area contained in each region, provided that the limitations described for the region are not exceeded.

On large streams, where the regional flood-frequency relations do not apply, flood discharges for the 2-, 5-, 10-, 25-, 50-, 100-, 200-, and 500-year recurrence interval floods can be estimated from individual relations between flood discharges and drainage areas developed for the Ocmulgee, Oconee, Altamaha, and Flint Rivers within region 3. These flood-frequency relations are based on the log-Pearson Type III analyses of peak-discharge records for gaging stations on the four rivers.

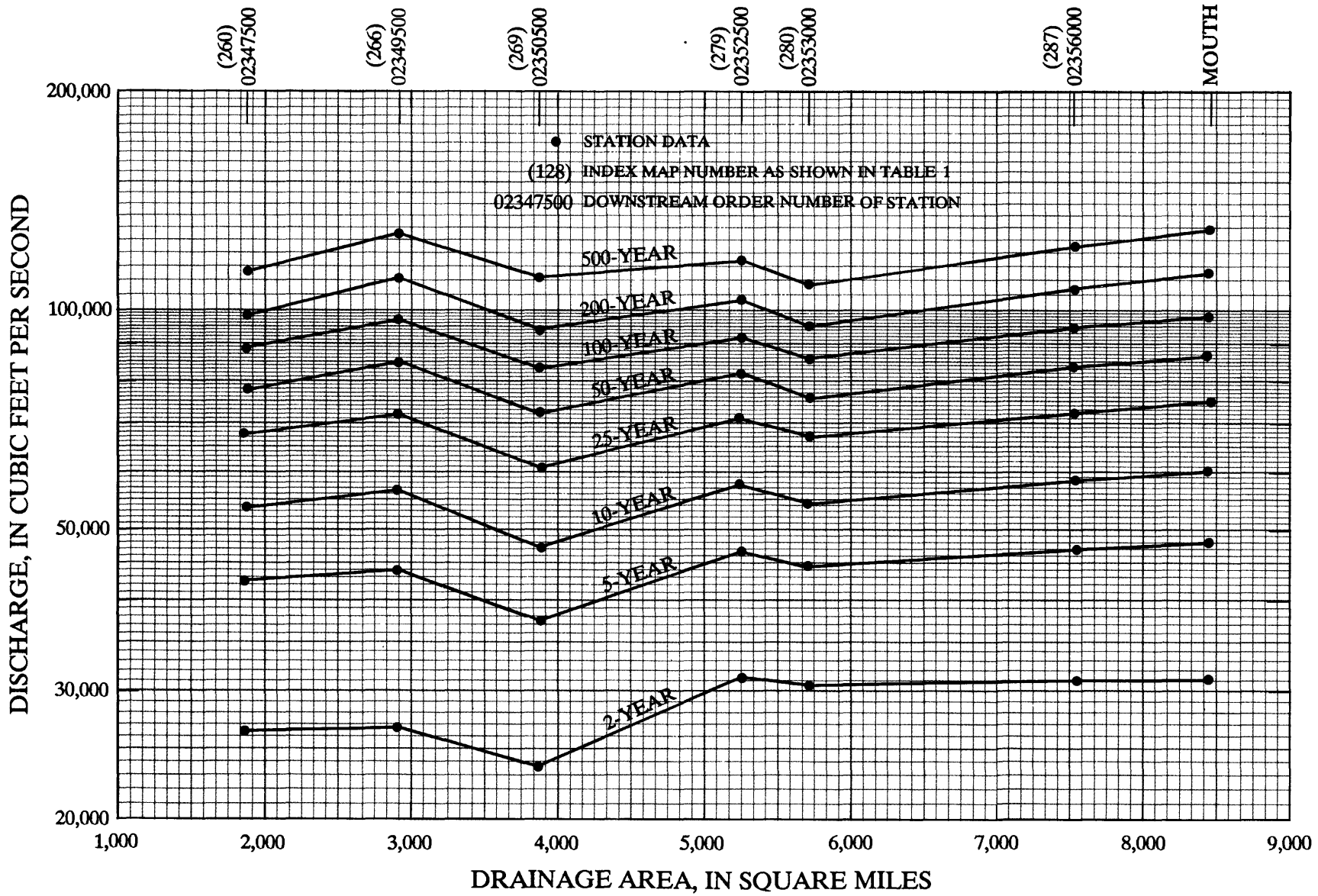

Figure 10.--Relation of flood discharge to drainage area for selected recurrence-interval floods in region 3 for the Flint River.

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GLOSSARY

Some of the technical terms used in this report are defined for convenience of the reader. See Dalrymple (1960) and Langbein and Iseri (1960) for additional information regarding flood-frequency analyses and associated hydrological terminology. Statistical terms are defined with respect to flood-analysis applications in this report.

Annual peak discharge: The highest peak discharge in a water year, in cubic feet per second.

Basin and climatic characteristics: Parameters that describe the physical and climatic factors of a drainage basin. Parameters include drainage area, channel length and slope, storage, soil-infiltration index, mean annual precipitation, and rainfall intensity.

Basin length (L): The length, in miles, along the main channel from the streamflow station to the basin divide.

Bias: Systematic error or tendency to either over or under estimate the true value.

Channel Slope (SL): The main channel slope, in feet per mile, measured between points which are 10 percent and 85 percent of the main channel length upstream from the study site.

Crest-stage gage: A device for recording only the elevation of the flood crest or peak of a stream.

Distribution: Function describing the relative frequency with which events of various magnitudes occur.

Equivalent years of record: Number of years of streamflow record that would be necessary to produce a flood frequency estimate with accuracy equal to that of the regression analysis.

Exceedence probability: Probability that a random event will exceed a specified magnitude in a given time period, usually one year, unless otherwise indicated. Recurrence interval is computed as the inverse of exceedence probability.

Flood: An overflow or inundation that comes from a river or other body of water, and causes or threatens damage. Any relatively high streamflow overtopping the natural or artificial banks in any reach of a stream.

Generalized skew coefficient: A skew coefficient of logarithms of annual maximum discharges derived by a procedure that integrates values obtained at many locations.

Lag time: Time, in hours, computed as the time from center-of-mass of rainfall excess to the center-of-mass of the corresponding runoff.

Mean: The value obtained by dividing the sum of a series of values by the number of values in the series.

Multiple correlation coefficient: A measure of the explanatory power of a regression involving two or more hydrologic variables.

Outlier: Data that departs significantly from the trend of the remaining data.

Rainfall intensity (RI_2): Rainfull intensity, in inches, for the 2-hour, 2-year occurrence, determined by U.S. Weather Bureau (1961).

Recurrence interval (return period): The average interval of time within which the given flood will be exceeded at least once.

Residual: The difference between a station value and a value predicted by a regression equation.

GLOSSARY--Continued

Skew coefficient: Relative measure of the asymmetry of a flood-frequency distribution.

Standard deviation: A measure of the amount of variation in a sample. The standard deviation is determined by taking the square root of the average squared deviation of the observations from the means.

Standard error of estimate: A measure of the reliability of a regression equation. The standard error is the standard deviation of the residuals about the regression equation.

Standard error of prediction: A measure of how accurately the regression equation will estimate the dependent variables at locations other than calibration sites.

Streamflow station: A gaging station where a record of discharge is obtained. Within the U.S. Geological Survey, the term is used only for stations where a continuous record of discharge is obtained.

Stream length: Distance, in miles, along main channel from the gaging station to the basin divide.

Student's "t" test: A standard statistical test frequently used to determine the significance of a deviation of an individual parameter from a specified value.

Water year: The 12-month period beginning October 1 and ending September 30, and designated by the calender year in which it ends.

Weighted means: A value obtained by multiplying each of a series of values by the assigned weight, and dividing by the sum of weights.

APPENDIX I.

ALPHABETICAL LISTING OF

STREAMFLOW SITES IN GEORGIA

ALPHABETICAL LISTING OF STREAMFLOW SITES IN GEORGIA

Streamflow sites in Georgia used in the regionalization study are listed in alphabetical order. This list is intended to aid the user in locating streamflow sites by name, and referencing the name with the USGS station number, and associated data listed in table 1.

Station number	Station name and location	Map number	Region number
02350520	Abrams Creek tributary near Doles	270	3
02227290	Alabaha River near Blackshear	154	3
02315650	Alapaha River tributary no. 2 near Pitts	168	3
02316260	Alapaha River tributary no. 4 near Willacoochee	175	3
02316390	Alapaha River at Lakeland	176	3
02315700	Alapaha River at Rebecca	169	3
02317500	Alapaha River at Statenville	177	3
02316000	Alapaha River near Alapaha	172	3
02208450	Alcovy River above Covington	74	2
02208050	Alcovy River near Lawrenceville	72	2
02209000	Alcovy River below Covington	75	2
02217000	Allen Creek at Talmo	97	2
02216100	Alligator Creek near Alamo	96	3
02226000	Altamaha River at Doctortown	142	3
02225000	Altamaha River near Baxley	128	3
02390000	Amicalola Creek near Dawsonville	328	1
02192420	Anderson Mill Creek tributary near Danburg	25	2
02192400	Anderson Mill Creek near Danburg	24	2
02219000	Apalachee River near Bostwick	109	2
02219500	Apalachee River near Buckhead	110	2
02317810	Arnold Creek tributary near Tifton	190	3
02317820	Arnold Creek near Tifton	191	3
02326200	Aucilla River near Boston	208	4
02387800	Bailey Creek near Villanow	320	1
02215280	Ball Creek tributary near Rochelle	93	3
02381900	Ball Creek near Talking Rock	296	1
02327550	Barnetts Creek near Meigs	215	4
02327700	Barnetts Creek near Thomasville	216	4
02387200	Beamer Creek near Spring Place	314	1
02189600	Bear Creek near Mize	7	2
02225850	Beards Creek near Glennville	141	3
02225330	Beaver Creek near Cobbtown	138	3
02208200	Beaverdam Creek tributary at Bold Springs	73	2
02188500	Beaverdam Creek at Dewy Rose	4	2
02335700	Big Creek near Alpharetta	230	1
02226580	Big Creek near Hoboken	148	3
02200900	Big Creek near Louisville	42	3
02214500	Big Indian Creek at Perry	89	3

ALPHABETICAL LISTING OF STREAMFLOW SITES IN GEORGIA--Continued

Station number	Station name and location	Map number	Region number
02223349	Big Sandy Creek tributary near Irwinton	118	3
02223360	Big Sandy Creek near Irwinton	119	3
02223300	Big Sandy Creek near Jeffersonville	117	3
02227400	Big Satilla Creek near Alma	155	3
02211459	Big Towaliga Creek near Barnesville	77	2
02202600	Black Creek near Blitchton	55	3
02343219	Bluff Springs Branch near Lumpkin	248	2
02201160	Boggy Gut Creek near Wadley	47	3
02198000	Brier Creek at Millhaven	36	3
02197520	Brier Creek near Thomson	31	3
02197830	Brier Creek near Waynesboro	35	3
02191300	Broad River above Carlton	14	2
02192000	Broad River near Bell	22	2
02191890	Brooks Creek near Lexington	17	2
02197600	Brushy Creek near Wrens	33	3
02349330	Buck Creek tributary near Tazewell	264	3
02349350	Buck Creek near Ellaville	265	3
02201350	Buckhead Creek near Waynesboro	49	3
02217250	Buffalo Creek tributary near Jefferson	99	2
02228050	Buffalo Creek at Hickox	162	3
02191930	Buffalo Creek near Lexington	19	2
02318020	Bull Creek tributary near Ellenton	203	4
02318015	Bull Creek near Norman Park	202	4
02344300	Camp Creek near Fayetteville	250	2
02202800	Canoochee Creek near Swainsboro	56	3
02203280	Canoochee River near Daisy	65	3
02203000	Canoochee River near Claxton	64	3
02202865	Canoochee River near Metter	60	3
02379500	Cartecay River near Ellijay	291	1
02397410	Cedar Creek at Cedartown	338	1
02397500	Cedar Creek near Cedartown	339	1
02215230	Cedar Creek near Pineview	91	3
02349030	Cedar Creek near Rupert	263	3
02336000	Chattahoochee River at Atlanta	231	1
02330450	Chattahoochee River at Helen	221	1
02339500	Chattahoochee River at West Point	240	2
02334500	Chattahoochee River near Buford	227	1
02331600	Chattahoochee River near Cornelia	224	1
02333000	Chattahoochee River near Gainesville	225	1
02331000	Chattahoochee River near Leaf	222	1
02335000	Chattahoochee River near Norcross	228	1
02335500	Chattahoochee River near Roswell	229	1
02338000	Chattahoochee River near Whitesburg	236	1
03568500	Chattanooga Creek near Flintstone	356	1

ALPHABETICAL LISTING OF STREAMFLOW SITES IN GEORGIA--Continued

Station number	Station name and location	Map number	Region number
02398000	Chattooga River at Summerville	342	1
02177000	Chattooga River near Clayton	1	1
02333500	Chestatee River near Dahlonega at Elmodel	226	1
02354500	Chickasawhatchee Creek near Plains	285	3
02350685	Choctahatchee Creek Tributary	272	3
02385000	Coahulla Creek near Varnell	309	1
02225100	Cobb Creek near Lyons	129	3
02346217	Coleoatchee Creek near Manchester	258	3
02223200	Commissioner Creek at Toomsboro	116	3
02387000	Conasauga River at Tilton	312	1
02384500	Conasauga River near Eton	307	1
02384000	Conasauga River near Tennga	306	1
02397000	Coosa River near Rome	337	1
02382500	Coosawattee River at Carters	298	1
02380500	Coosawattee River near Ellijay	293	1
02383500	Coosawattee River near Pine Chapel	305	1
02227422	Crooked Creek tributary near Bristol	156	3
02225240	Crooked Creek near Kite	134	3
02224400	Cypress Creek near Tarrytown	124	3
02202950	Cypress Flat Creek near Collins	63	3
02317775	Daniels Creek near Ashburn	186	3
02387300	Dead Mans Branch near Resaca	315	1
02315900	Deep Creek near Ashburn	170	3
02337400	Dog River near Douglasville	233	1
02190800	Double Branch at Bowersville	10	2
02191600	Double Branch near Danielsville	15	2
02388400	Dozier Creek near Shannon	323	1
02382800	Dry Creek at Oakman	300	1
02397750	Duck Creek above Lafayette	340	1
02214000	Echeconnee Creek near Macon	87	2
02380000	Ellijay River at Ellijay	292	1
02394000	Etowah River above Cartersville	331	1
02392000	Etowah River at Canton	330	1
02396000	Etowah River at Rome	336	1
02391000	Etowah River near Ball Ground	329	1
02388900	Etowah River near Dahlonega	325	1
02389000	Etowah River near Dawsonville	326	1
02395000	Etowah River near Kingston	334	1
02212600	Falling Creek near Juliette	80	2
02381600	Fausett Creek near Talking Rock	295	1
02202900	Fifteenmile Creek near Metter	61	3
03560000	Fightingtown Creek at McCaysville	350	1
02340250	Flat Shoal Creek near West Point	241	3
02352500	Flint River at Albany	279	3
02356000	Flint River at Bainbridge	287	3

ALPHABETICAL LISTING OF STREAMFLOW SITES IN GEORGIA--Continued

Station number	Station name and location	Map number	Region number
02349500	Flint River at Montezuma	266	3
02353000	Flint River at Newton	280	3
02350500	Flint River at Oakfield	269	3
02347500	Flint River near Culloden	260	2
02344500	Flint River near Griffin	251	2
02345000	Flint River near Molena	253	2
02346180	Flint River near Thomaston	255	2
02345500	Flint River near Woodbury	254	2
02215245	Folsom Creek tributary near Rochelle	92	3
02191750	Fork Creek at Carlton	16	2
02207000	Garner Creek near Snellville	70	2
02193400	Harden Creek near Sharon	27	2
02397830	Harrisburg Creek near Hawkins	341	1
02394950	Hills Creek near Taylorsville	333	1
03545000	Hiwassee River at Presley	346	1
02192300	Hog Fork Fishing Creek tributary near Tignall	23	2
02385800	Holly Creek near Chatsworth	311	1
02349695	Horsehead Creek at near Montezuma	267	3
02191200	Hudson River at Homer	11	2
02202810	Hughes Prong near Swainsboro	57	3
02225210	Hurricane Branch near Wrightsville	133	3
02337448	Hurricane Creek Tributary near Fairplay	234	1
02227000	Hurricane Creek near Alma	151	3
02353500	Ichawaynochaway Creek at Milford	284	3
02353100	Ichawaynochaway Creek near Graves	281	3
02355000	Ichawaynochaway Creek near Newton	286	3
02223700	Indian Branch tributary near Scott	121	3
02189020	Indian Creek near Carnesville	5	2
02315980	Jacks Creek near Ocilla	171	3
02341600	Juniper Creek near Geneva	243	2
02346210	Kimbrough Creek near Talbotton	257	2
02350600	Kinchafoonee Creek at Preston	271	3
02350900	Kinchafoonee Creek near Dawson	273	3
02317780	Lime Sink Creek near Sycamore	187	3
02344700	Line Creek near Senoia	252	2
02197550	Little Brier Creek near Thomson	32	3
02316220	Little Brushy Creek near Ocilla	174	3
03566687	Little Chickamauga Creek tributary near Ringgold	353	1
03566685	Little Chickamauga Creek near Ringgold	352	1
02317905	Little Creek near Omega	198	3
02317890	Little Creek near Sylvester	196	3
02226190	Little Creek near Willacoochee	144	3
02217660	Little Curry Creek near Jefferson	103	2
02227200	Little Hurricane Creek below Alma	153	3
02227100	Little Hurricane Creek near Alma	152	3

ALPHABETICAL LISTING OF STREAMFLOW SITES IN GEORGIA--Continued

Station number	Station name and location	Map number	Region number
02353200	Little Ichawaynochaway Creek near Shellman	282	3
02191970	Little Macks Creek near Lexington	21	2
02327415	Little Ochlockonee River near Moultrie	213	4
02216000	Little Ocmulgee River at Towns	95	3
02200100	Little Ogeechee River at Hamburg	39	3
02225250	Little Ohoopee River near Swainsboro	135	3
02225200	Little Ohoopee River near Wrightsville	132	3
02317800	Little River near Tifton	189	3
02318000	Little River near Adel	201	4
02317760	Little River near Ashburn	183	3
02411800	Little River near Buchanan	344	1
02220900	Little River near Eatonton	112	2
02317830	Little River near Lenox	192	3
02194000	Little River near Lincolnton	30	2
02317980	Little River near Sparks	200	4
02193500	Little River near Washington	28	2
02227470	Little Satilla Creek near Jesup	158	3
02227430	Little Satilla Creek at Odum	157	3
02227500	Little Satilla River near Offerman	159	3
02213400	Little Tobesofkee Creek near Forsyth	84	2
03568933	Lookout Creek near New England	357	1
02191960	Macks Creek near Lexington	20	2
02411735	McClendon Creek tributary near Dallas	343	1
02224200	Mercer Creek near Soperton	123	3
02217500	Middle Oconee River near Athens	102	2
02217200	Middle Oconee River near Jefferson	98	2
02317795	Mill Creek near Tifton	188	3
02191280	Mill Shoal Creek near Royston	13	2
02340500	Mountain Oak Creek near Hamilton	242	2
02381100	Mountaintown Creek tributary near Ellijay	294	1
02351890	Muckalee Creek near Leesburg	277	3
02351500	Muckalee Creek near Americus	274	3
02351900	Muckalee Creek near Leesburg	278	3
02351700	Muckalee Creek near Smithville	275	3
02351800	Muckaloochee Creek at Smithville	276	3
02217450	Mulberry River tributary near Jefferson	101	2
02217400	Mulberry River tributary near Winder	100	2
02225180	Mulepen Creek near Adrian	131	3
02221525	Murder Creek below Eatonton	114	2
02221000	Murder Creek near Monticello	113	2
02201110	Nails Creek near Bartow	46	3
02317730	New River tributary near Nashville	180	3
02338660	New River near Corinth	237	2
02317734	New River near Nashville	181	3
02317770	Newell Branch near Ashburn	185	3

ALPHABETICAL LISTING OF STREAMFLOW SITES IN GEORGIA--Continued

Station number	Station name and location	Map number	Region number
02317765	Newell Branch near Worth	184	3
02217900	North Oconee River at Athens	104	2
02228500	North Prong St Marys River at Moniac	163	3
03550500	Nottely River near Blairsville	347	1
02341900	Ochillee Creek near Cussetta	246	2
02327350	Ochlockonee River tributary near Coolidge	210	4
02327355	Ochlockonee River near Coolidge	211	4
02327200	Ochlockonee River at Moultrie	209	4
02327810	Ochlockonee River near Cairo	217	4
02327500	Ochlockonee River near Thomasville	214	4
02215000	Ocmulgee River at Hawkinsville	90	3
02212500	Ocmulgee River at Juliette	79	2
02215500	Ocmulgee River at Lumber City	94	3
02213000	Ocmulgee River at Macon	81	2
02224800	Oconee River tributary no. 2 near Glenwood	127	3
02223500	Oconee River at Dublin	120	3
02223000	Oconee River at Milledgeville	115	2
02218500	Oconee River near Greensboro	108	2
02224500	Oconee River near Mount Vernon	125	3
02218300	Oconee River near Penfield	106	2
02200000	Ogeechee River at Jewell	38	2
02202150	Ogeechee River near Dover	53	3
02200950	Ogeechee River near Wadley	44	3
02202000	Ogeechee River at Scarboro	52	3
02202500	Ogeechee River near Eden	54	3
02200500	Ogeechee River near Louisville	41	3
02225320	Ohoopee River near Aline	137	3
02225300	Ohoopee River near Oak Park	136	3
02225500	Ohoopee River near Reidsville	140	3
02225150	Ohoopee River near Wrightsville	130	3
02318700	Okapilco Creek near Quitman	206	4
02318725	Okapilco Creek at Quitman	207	4
02318600	Okapilco Creek near Berlin	205	4
02387500	Oostanaula River at Resaca	316	1
02388500	Oostanaula River near Rome	324	1
02387560	Oothkalooga Creek tributary at Adairsville	317	1
02387570	Oothkalooga Creek at Adairsville	318	1
02353400	Pachitla Creek near Edison	283	3
02182000	Panther Creek near Toccoa	3	1
02343225	Pataula Creek near Georgetown	249	2
02343200	Pataula Creek near Lumpkin	247	2
02348300	Patsiliga Creek near Reynolds	261	3
02226100	Penholoway Creek near Jesup	143	3
02224650	Peterson Creek at Glenwood	126	3
02205500	Pew Creek near Lawrenceville	67	2

ALPHABETICAL LISTING OF STREAMFLOW SITES IN GEORGIA--Continued

Station number	Station name and location	Map number	Region number
02341723	Pine Knot Creek near Juniper	244	2
02382900	Pine Log Creek near Rydal	301	1
02384600	Pinhook Creek near Eton	308	1
02387100	Polecat Creek near Spring Place	313	1
02327860	Popple Branch near Whigham	218	4
02218100	Porters Creek at Watkinsville	105	2
02346500	Potato Creek near Thomaston	259	2
02394400	Pumpkinvine Creek below Dallas	332	1
02383220	Redbud Creek tributary near Ranger	304	1
02383200	Redbud Creek near Ranger	303	1
02202850	Reedy Branch near Metter	59	3
02225350	Reedy Creek tributary near Soperton	139	3
02202820	Reedy Creek near Twin City	58	3
02201800	Richardson Creek near Millen	50	3
02385700	Rock Creek near Chatsworth	310	1
02383000	Rock Creek near Fairmount	302	1
02200400	Rocky Comfort Creek near Grange	40	3
02387700	Rocky Creek at Curryville	319	1
02224000	Rocky Creek near Dudley	122	3
02193600	Rocky Creek near Washington	29	2
02327400	Sallys Branch tributary near Sale City	212	4
02227990	Satilla River tributary no. 2 at Atkinson	160	3
02228000	Satilla River at Atkinson	161	3
02226300	Satilla River near Pearson	146	3
02226200	Satilla River near Douglas	145	3
02226582	Satilla River near Hoboken	149	3
02226500	Satilla River near Waycross	147	3
02214280	Savage Creek near Bullard	88	3
02346193	Scott Creek near Talbotton	256	2
02191270	Scull Shoal Creek near Danielsville	12	2
02201830	Sculls Creek near Millen	51	3
02201250	Seals Creek tributary near Midville	48	3
02206000	Shetley Creek near Norcross	68	2
02389300	Shoal Creek near Dawsonville	327	1
02337500	Snake Creek near Whitesburg	235	1
02331500	Soque River near Demorest	223	1
03566700	South Chickamauga Creek at Ringgold	354	1
02199700	South Fork Ogeechee River near Crawfordville	37	2
02204500	South River near McDonough	66	2
02356640	Spring Creek at Colquitt	289	3
02356100	Spring Creek near Arlington	288	3
02357000	Spring Creek near Iron City	290	3
02200930	Spring Creek near Louisville	43	3
02231100	St Marys River near St. George	164	3
02189030	Stephens Creek tributary at Carnesville	6	2

ALPHABETICAL LISTING OF STREAMFLOW SITES IN GEORGIA--Continued

Station number	Station name and location	Map number	Region number
02193300	Stephens Creek near Crawfordville	26	2
02388200	Storey Mill Creek near Summerville	322	1
02382600	Sugar Creek near Chatsworth	299	1
03566660	Sugar Creek near Ringgold	351	1
02314500	Suwannee River at Fargo	165	3
02314700	Suwannoochee Creek near Thelma	167	3
02314600	Suwannoochee Creek at Dupont	166	3
02337000	Sweetwater Creek near Austell	232	1
02382200	Talking Rock Creek near Hinton	297	1
02411900	Tallapoosa River at Tallapoosa	345	1
02178400	Tallulah River near Clayton	2	1
02202910	Ten Mile Creek tributary at Pulaski	62	3
02328000	Tired Creek near Cairo	220	4
02213470	Tobesofkee Creek above Macon	85	2
02213350	Tobesofkee Creek below Forsyth	83	2
02213500	Tobesofkee Creek near Macon	86	2
03559000	Toccoa River near Blue Ridge	349	1
03558000	Toccoa River near Dial	348	1
02190200	Toms Creek tributary near Avalon	9	2
02190100	Toms Creek near Eastanollee	8	2
02211500	Towaliga River near Forsyth	78	2
02211300	Towaliga River near Jackson	76	2
02218450	Town Creek near Greensboro	107	2
02191910	Trouble Creek at Lexington	18	2
02349900	Turkey Creek at Byromville	268	3
02395120	Two Run Creek near Kingston	335	1
02317910	Ty Ty Creek tributary at Crosland	199	3
02317900	Ty Ty Creek at Ty Ty	197	3
02341800	Upatoi Creek near Columbus	245	2
02197810	Walnut Branch near Waynesboro	34	3
02213050	Walnut Creek near Gray	82	2
02317845	Warrior Creek tributary near Sylvester	194	3
02317870	Warrior Creek near Sumner	195	3
02317840	Warrior Creek near Sylvester	193	3
02388000	West Armuchee Creek near Subligna	321	1
03567200	West Chickamauga Creek near Kensington	355	1
02226700	Whitehead Creek near Denton	150	3
02349000	Whitewater Creek below Butler	262	3
02220550	Whitten Creek near Sparta	111	2
02316200	Willacoochee River near Ocilla	173	3
02201000	Williamson Swamp Creek at Davisboro	45	3
02317710	Withlacoochee River tributary near Nashville	179	3
02318500	Withlacoochee River near Quitman	204	4
023177483	Withlacoochee River near Bemiss	182	4
02317700	Withlacoochee River near Nashville	178	3

ALPHABETICAL LISTING OF STREAMFLOW SITES IN GEORGIA--Continued

Station number	Station name and location	Map number	Region number
02327900	Wolf Creek near Whigham	219	4
02207500	Yellow River near Covington	71	2
02206500	Yellow River near Snellville	69	2
02338775	Yellowjacket Creek at Hogansville	238	2
02339000	Yellowjacket Creek near LaGrange	239	2

APPENDIX II.

ALPHABETICAL LISTING
OF STREAMFLOW SITES OUTSIDE OF GEORGIA

ALPHABETICAL LISTING OF STREAMFLOW SITES OUTSIDE OF GEORGIA

Streamflow sites outside of Georgia used in the regionalization study are listed in alphabetical order. This list is intended to aid the user in indentifying streamflow sites by name; and referencing the name with the U.S. Geological Survey station number and region number of where the site was included.

Station number	Station name and location	Region number
02343275	Abbie Creek near Abbeville, Ala.	2
02343300	Abbie Creek near Haleburg, Ala.	2
02326500	Aucilla River near Lamont, Fla.	4
02343000	Barbour Creek near Eufaula, Ala.	2
03571800	Battle Creek near Monteagle, Tenn.	1
02246150	Big Davis Creek at Bayard, Fla.	3
02187900	Broadway Creek near Anderson, S.C.	2
02412050	Cane Creek near Heflin, Ala.	1
02326598	Caney Creek near Monticello, Fla.	4
03500240	Cartoogechaye Creek near Franklin, N.C.	1
02246832	Cedar Creek near Jacksonville, Fla.	3
02398300	Chattooga River near Gaylesville, Ala.	1
02359000	Chipola River near Altha, Fla.	3
02361000	Choctawatchee River near Newton, Ala.	4
02176000	Coosawhatchee River near Hampton, S.C.	3
03501000	Cullasaja River at Cullasaja, N.C.	1
03441000	Davidson River near Brevard, N.C.	1
03560500	Davis Mill Creek at Copperhill, Tenn.	1
02358600	Flat Creek near Chattahoochee, Fla.	4
03439000	French Broad River at Rosman, N.C.	1
03458500	Hiwassee River above Murphy, N.C.	1
02185000	Keowee River at Jocassee, S.C.	1
03441440	Little River above High Falls near Cedar Mountain, N.C.	1
02399200	Little River near Blue Pond, Ala.	1
02399000	Little River near Jamestown, Ala.	1
02192500	Little River near Mt. Carmel, S.C.	2
02329500	Little River near Quincy, Fla.	4
02185200	Little River near Wahalla, S.C.	1
02231250	Little St Marys River near Hilliard, Fla.	3
02229000	Middle Prong St Marys River at Taylor, Fla.	3
03446000	Mills River near Mills River, N.C.	1
02246900	Moultrie Creek near St. Augustine, Fla.	3
03554000	Nottely River near Ranger, N.C.	1
02329000	Ochlockonee River near Havana, Fla.	4
02246300	Ortega River at Jacksonville, Fla.	3
02340750	Osanippa Creek near Fairfax, Ala.	2
02246828	Pablo Creek at Jacksonville, Fla.	3
02342200	Phelps Creek near Opelika, Ala.	2
02231230	Pigeon Creek at Boulogne, Fla.	3
02329700	Rocky Comfort Creek near Quincy, Fla.	4

ALPHABETICAL LISTING OF STREAMFLOW SITES OUTSIDE OF GEORGIA--Continued

Station number	Station name and location	Region number
02188000	Rocky River near Calhoun Falls, S.C.	2
02187000	Seneca River near Anderson, S.C.	2
03546000	Shooting Creek near Hayesville, N.C.	1
03567500	South Chickamauga River near Chickamauga, Tenn.	1
02342933	South Fork Cowikee Creek near Batesville, Ala.	2
02230500	South Prong St Marys River at Glen St Marys, Fla.	3
02231000	St Marys River near Macclenny, Fla.	3
02324000	Steinhatchee River near Cross City, Fla.	3
02196000	Stevens Creek near Modoc, S.C.	2
02343700	Stevenson Creek near Headland, Ala.	2
02321700	Swift Creek near Lake Butler, Fla.	3
02414500	Tallapoosa River at Wadley, Ala.	1
02412000	Tallapoosa River near Heflin, Ala.	1
02412500	Tallapoosa River near Ofelia, Ala.	1
02330100	Telogia Creek near Bristol, Fla.	4
02400100	Terrapin Creek at Ellisville, Ala.	1
02400000	Terrapin Creek near Piedmont, Ala.	1
02246600	Trout River at Dinsmore, Fla.	3
02230000	Turkey Creek at Macclenny, Fla.	3
03556000	Turtletown Creek at Turtletown, Tenn.	1
02186000	Twelvemile Creek near Liberty, S.C.	2
02342500	Uchee Creek near Fort Mitchell, Ala.	2
02342150	Uchee Creek near Seale, Ala.	2
03550000	Valley River at Tomotla, N.C.	1
02339225	Wehadkee Creek below Rock Mills, Ala.	2
03455500	West Fork Pigeon River near Hazelwood, N.C.	1
02184500	Whitewater River near Jocassee, S.C.	1
02319000	Withlacoochee River near Pinetta, Fla.	4
03566420	Wolftever Creek near Ooltewah, Tenn.	1

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*

[no., number; mi^2, square miles; --, data used in analyses are prior to stream regulation, and are not shown.
Top line for each station entry is the log-Pearson Type III discharge;
bottom line is the weighted-average or best-estimate discharge;
= =, region 3 mainstem stream, use top line discharges]

Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
1	1	02177000	Chattooga River near Clayton	7,390	11,800	15,400	20,700	25,300	30,500	36,400	45,400	207	0.40	0.23	65
				7,360	11,700	15,200	20,000	24,200	28,800	34,000	41,700				
2	1	02178400	Tallulah River near Clayton	2,970	4,860	6,260	8,160	9,660	11,200	12,900	15,200	56.5	-.10	.26	26
				2,960	4,820	6,190	7,990	9,470	11,000	12,700	15,000				
3	1	02182000	Panther Creek near Toccoa	2,250	4,690	6,850	10,200	13,200	16,600	20,500	26,400	32.5	-.05	.38	51
				2,240	4,560	6,550	9,060	11,400	13,800	16,700	20,900				
4	2	02188500	Beaverdam Creek at Dewy Rose	1,370	2,290	3,020	4,100	5,010	6,030	7,150	8,820	35.8	.18	.26	35
				1,400	2,370	3,160	4,310	5,260	6,310	7,460	9,140				
5	2	02189020	Indian Creek near Carnesville	792	1,290	1,690	2,270	2,770	3,310	3,910	4,810	7.63	.22	.24	13
				754	1,210	1,570	2,070	2,500	2,960	3,450	4,180				
6	2	02189030	Stephens Creek tributary at Carnesville	110	160	193	233	262	289	316	351	0.39	-.32	.21	13
				107	164	208	270	320	371	428	509				
7	2	02189600	Bear Creek near Mize	411	781	1,100	1,590	2,020	2,520	3,080	3,940	3.62	.08	.33	13
				409	746	1,010	1,380	1,690	2,040	2,400	2,940				
8	2	02190100	Toms Creek near Eastanollee	499	872	1,190	1,690	2,130	2,640	3,230	4,160	3.79	.33	.28	13
				478	810	1,070	1,440	1,760	2,110	2,490	3,050				
9	2	02190200	Toms Creek tributary near Avalon	343	537	668	832	953	1,070	1,190	1,340	1.20	-.31	.24	14
				305	464	571	716	837	965	1,100	1,290				
10	2	02190800	Double Branch at Bowersville	184	304	391	506	595	687	781	909	0.50	-.21	.27	16
				168	268	338	432	511	596	684	811				
11	2	02191200	Hudson River at Homer	2,280	3,920	5,180	6,950	8,390	9,930	11,600	13,900	61.1	-.06	.28	29
				2,290	3,920	5,160	6,900	8,290	9,790	11,400	13,700				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

[no., number; mi^2, square miles; --, data used in analyses are prior to stream regulation, and are not shown.
Top line for each station entry is the log-Pearson Type III discharge;
bottom line is the weighted-average or best-estimate discharge;
= =, region 3 mainstem stream, use top line discharges]

Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
12	2	02191270	Scull Shoal Creek near Danielsville	664	1,270	1,560	2,020	2,430	3,000	3,670	4,660	8.75	-.15	.34	12
				673	1,240	1,560	2,050	2,470	2,970	3,530	4,340				
13	2	02191280	Mill Shoal Creek near Royston	111	174	214	261	294	324	354	390	0.32	-.35	.25	24
				107	169	211	266	309	353	400	465				
14	2	02191300	Broad River above Carlton	13,500	22,300	28,700	37,500	44,400	51,700	59,200	69,800	760	-.11	.26	92
				13,400	22,000	28,200	36,700	43,300	50,400	57,700	68,000				
15	2	02191600	Double Branch near Danielsville	444	847	1,190	1,700	2,140	2,640	3,200	4,030	4.77	.00	.33	13
				452	835	1,140	1,560	1,900	2,280	2,690	3,280				
16	2	02191750	Fork Creek at Carlton	837	1,290	1,610	2,050	2,380	2,730	3,100	3,600	16.0	-.04	.22	12
				879	1,430	1,870	2,510	3,010	3,540	4,130	4,970				
17	2	02191890	Brooks Creek near Lexington	1,050	2,020	2,780	3,840	4,680	5,570	6,500	7,790	12.3	-.31	.35	16
				1,010	1,830	2,410	3,170	3,790	4,460	5,150	6,130				
18	2	02191910	Trouble Creek at Lexington	251	334	454	554	663	781	954	1,250	2.70	.03	.28	18
				264	388	544	721	884	1,050	1,280	1,630				
19	2	02191930	Buffalo Creek near Lexington	471	810	1,080	1,490	1,830	2,210	2,620	3,250	5.60	.12	.28	27
				478	827	1,110	1,520	1,860	2,220	2,620	3,220				
20	2	02191960	Macks Creek near Lexington	198	363	503	718	907	1,120	1,360	1,740	3.45	.13	.31	17
				225	433	618	896	1,130	1,370	1,650	2,070				
21	2	02191970	Little Macks Creek near Lexington	179	332	454	627	768	920	1,080	1,310	1.77	-.17	.33	27
				187	352	485	676	830	993	1,170	1,430				
22	2	02192000	Broad River near Bell	22,200	33,100	40,600	50,500	58,100	65,800	73,600	84,400	1,430	-.07	.20	59
				21,800	32,400	39,800	49,700	57,400	65,500	73,800	85,600				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

[no., number; mi^2, square miles; --, data used in analyses are prior to stream regulation, and are not shown.
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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
23	2	02192300	Hog Fork Fishing Creek tributary near Tignall	43	72	92	117	136	154	173	197	0.09	-.40	.28	30
				42	71	92	120	142	164	189	222				
24	2	02192400	Anderson Mill Creek near Danburg	554	933	1,200	1,550	1,810	2,060	2,320	2,660	5.49	-.36	.29	12
				546	916	1,180	1,560	1,850	2,160	2,490	2,960				
25	2	02192420	Anderson Mill Creek tributary near Danburg	143	287	401	560	687	820	958	1,150	0.92	-.37	.38	12
				149	290	396	540	657	781	912	1,100				
26	2	02193300	Stephens Creek near Crawford	797	1,260	1,620	2,130	2,560	3,030	3,540	4,290	6.30	.22	.23	13
				737	1,150	1,460	1,890	2,260	2,670	3,100	3,730				
27	2	02193400	Harden Creek near Sharon	489	745	922	1,150	1,330	1,500	1,680	1,930	3.98	-.14	.22	12
				473	738	938	1,220	1,450	1,690	1,950	2,330				
28	2	02193500	Little River near Washington	6,610	11,000	13,900	17,600	20,200	22,600	25,000	28,100	291	-.50	.28	23
				6,550	10,800	13,700	17,600	20,500	23,400	26,500	30,900				
29	2	02193600	Rocky Creek near Washington	366	513	605	716	794	869	942	1,040	1.14	-.29	.18	12
				313	439	526	649	753	863	981	1,150				
30	2	02194000	Little River near Lincolnton	8,370	12,700	16,100	20,800	24,800	29,100	33,800	40,700	574	.29	.21	10
				8,670	13,800	18,000	24,000	28,800	33,900	39,500	47,700				
31	3	02197520	Brier Creek near Thomson	2,270	3,350	4,120	5,140	5,940	6,770	7,630	8,820	55.0	.05	.20	23
				2,040	2,870	3,370	4,090	4,720	5,450	6,260	7,350				
32	3	02197550	Little Brier Creek near Thomson	645	1,010	1,280	1,620	1,890	2,160	2,440	2,830	24.0	-.13	.24	16
				628	994	1,270	1,660	1,990	2,340	2,690	3,200				
33	3	02197600	Brushy Creek near Wrens	367	600	770	1,000	1,180	1,470	1,660	1,830	28.0	-.13	.26	32
				382	655	886	1,220	1,500	1,860	2,120	2,450				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

[no., number; mi^2, square miles; --, data used in analyses are prior to stream regulation, and are not shown.
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= =, region 3 mainstem stream, use top line discharges]

Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
34	3	02197810	Walnut Branch near Waynesboro	285	542	620	828	995	1,110	1,220	1,440	11.9	.25	.18	11
				298	567	708	979	1,200	1,400	1,600	1,930				
35	3	02197830	Brier Creek near Waynesboro	3,670	6,330	8,880	13,300	17,700	23,200	30,200	42,300	473	.39	.26	24
				3,650	6,270	8,630	12,400	15,700	19,800	24,600	32,200				
36	3	02198000	Brier Creek at Millhaven	3,290	5,870	8,220	12,100	15,800	20,200	25,700	34,600	646	.30	.28	55
				3,330	6,000	8,440	12,400	15,900	20,100	25,000	32,800				
37	2	02199700	South Fork Ogeechee River near Crawfordville	1,430	2,210	2,730	3,390	3,870	4,340	4,810	5,430	31.3	-.31	.24	20
				1,450	2,300	2,940	3,810	4,490	5,180	5,940	7,010				
38	2	02200000	Ogeechee River at Jewell	4,920	9,040	12,600	18,400	23,500	29,600	36,600	47,800	242	.27	.30	11
				5,080	9,080	12,300	16,800	20,500	24,700	29,100	35,700				
39	3	02200100	Little Ogeechee River at Hamburg	837	1,670	2,390	3,480	4,440	5,510	6,720	8,530	55.0	-.05	.36	26
				844	1,660	2,310	3,250	4,030	4,910	5,890	7,300				
40	3	02200400	Rocky Comfort Creek near Grange	1,550	2,550	3,300	4,320	5,140	5,990	6,890	8,140	188	-.09	.26	12
				1,620	2,810	3,820	5,270	6,480	7,720	9,010	10,900				
41	3	02200500	Ogeechee River near Louisville	8,530	14,700	18,900	24,100	27,900	31,500	35,100	39,600	800	-.51	.31	34
				8,360	14,100	18,000	23,000	26,800	30,800	34,800	40,300				
42	3	02200900	Big Creek near Louisville	680	1,160	1,520	2,030	2,850	3,880	4,350	5,010	95.8	-.08	.28	28
				723	1,300	1,820	2,590	3,540	4,610	5,270	6,240				
43	3	02200930	Spring Creek near Louisville	221	421	599	885	1,150	1,460	1,820	2,400	14.2	.25	.32	26
				234	461	673	1,000	1,280	1,590	1,930	2,460				
44	3	02200950	Ogeechee River near Wadley	9,710	14,500	18,300	23,800	28,400	33,500	39,200	47,800	990	.40	.19	24
				9,380	14,100	17,700	23,200	27,800	32,900	38,500	47,100				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
45	3	02201000	Williamson Swamp Creek at Davisboro	1,620 1,580	3,950 3,440	6,310 4,830	10,400 6,770	14,400 8,420	19,200 10,400	25,000 12,800	34,600 16,200	109	.01	.46	15
46	3	02201110	Nails Creek near Bartow	398 370	617 570	778 718	995 932	1,360 1,180	1,690 1,420	2,120 1,710	2,660 2,080	8.36	-.25	.29	11
47	3	02201160	Boggy Gut Creek near Wadley	432 382	1,030 752	1,570 964	2,410 1,240	3,130 1,480	3,940 1,760	4,820 2,100	6,120 2,530	7.05	-.32	.47	10
48	3	02201250	Seals Creek tributary near Midville	41 46	62 79	75 110	92 155	103 189	114 221	125 252	139 298	0.99	-.39	.23	12
49	3	02201350	Buckhead Creek near Waynesboro	1,160 1,140	2,340 2,200	3,440 3,060	5,250 4,300	6,150 5,010	7,000 5,800	8,430 6,900	9,370 7,940	64.0	.22	.35	23
50	3	02201800	Richardson Creek near Millen	630 646	1,140 1,180	1,550 1,630	2,170 2,290	2,700 2,840	3,290 3,430	3,940 4,070	4,920 5,010	43.0	.06	.30	22
51	3	02201830	Sculls Creek near Millen	197 195	322 325	457 449	698 638	727 724	955 894	1,180 1,070	1,410 1,280	4.38	-.20	.15	12
52	3	02202000	Ogeechee River at Scarboro	10,500 10,400	17,900 17,800	23,500 23,300	31,300 31,000	37,400 37,300	43,900 43,900	50,700 51,000	60,300 60,900	1,940	-.14	.28	57
53	3	02202150	Ogeechee River near Dover	10,400 10,400	19,200 19,000	26,600 26,000	37,800 36,200	47,400 44,800	58,100 54,400	70,100 65,000	88,100 80,500	2,150	.04	.32	44
54	3	02202500	Ogeechee River near Eden	11,700 11,600	19,600 19,600	25,600 25,700	34,100 34,300	40,900 41,500	48,300 49,100	56,200 57,300	67,400 69,200	2,650	-.02	.27	58
55	3	02202600	Black Creek near Blitchton	1,670 1,780	3,390 3,560	4,820 4,990	6,920 7,000	8,690 8,660	10,600 10,400	12,700 12,400	15,700 15,100	232	-.22	.37	11

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
56	3	02202800	Canoochee Creek near Swainsboro	754	1,180	1,490	1,920	2,250	2,600	2,970	3,490	46.0	-.01	.23	26
				760	1,220	1,590	2,140	2,580	3,030	3,510	4,200				
57	3	02202810	Hughes Prong near Swainsboro	158	240	306	404	490	588	699	869	5.05	.29	.20	12
				166	275	375	526	652	783	921	1,130				
58	3	02202820	Reedy Creek near Twin City	267	468	655	970	1,280	1,650	2,120	2,900	9.36	-.23	.27	11
				274	489	678	961	1,200	1,470	1,780	2,240				
59	3	02202850	Reedy Branch near Metter	180	232	264	302	329	355	380	412	3.41	-.14	.13	12
				176	248	310	403	480	553	625	730				
60	3	02202865	Canoochee River near Metter	2,070	3,110	3,800	4,680	5,320	5,960	6,600	7,440	202	-.24	.22	17
				2,060	3,220	4,130	5,450	6,530	7,620	8,710	10,300				
61	3	02202900	Fifteenmile Creek near Metter	1,590	2,590	3,350	4,400	5,260	6,160	7,130	8,510	147	.01	.25	21
				1,600	2,660	3,520	4,760	5,800	6,880	8,020	9,690				
62	3	02202910	Ten Mile Creek tributary at Pulaski	100	195	279	344	437	481	549	650	1.14	.17	.34	24
				97	183	249	307	378	427	492	584				
63	3	02202950	Cypress Flat Creek near Collins	120	197	256	339	407	480	559	674	1.39	.06	.25	11
				113	184	236	310	372	439	512	614				
64	3	02203000	Canoochee River near Claxton	4,040	6,600	8,680	11,800	14,400	17,400	20,700	25,800	555	.30	.24	54
				4,030	6,610	8,720	11,900	14,500	17,500	20,800	25,800				
65	3	02203280	Canoochee River near Daisy	5,130	7,610	9,430	11,900	13,900	16,000	18,200	21,400	833	.17	.20	39
				5,110	7,740	9,810	12,800	15,400	18,000	20,800	24,800				
66	2	02204500	South River near McDonough	9,810	16,500	21,800	29,400	35,700	42,700	50,300	61,500	456	.10	.26	33
				9,620	15,900	20,700	27,400	32,800	38,800	45,100	54,400				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
67	2	02205500	Pew Creek near Lawrenceville	301	550	735	985	1,180	1,380	1,580	1,850	2.23	-.35	.33	10
				300	533	702	934	1,120	1,320	1,530	1,840				
68	2	02206000	Shetley Creek near Norcross	159	327	484	745	991	1,290	1,640	2,210	0.98	.20	.36	11
				164	319	445	625	779	953	1,140	1,410				
69	2	02206500	Yellow River near Snellville	3,730	5,490	6,810	8,650	10,200	11,800	13,500	16,000	134	.29	.19	48
				3,740	5,590	7,040	9,120	10,800	12,600	14,600	17,500				
70	2	02207000	Garner Creek near Snellville	552	1,000	1,370	1,920	2,390	2,910	3,490	4,350	5.54	.04	.31	11
				545	956	1,270	1,710	2,080	2,480	2,910	3,530				
71	2	02207500	Yellow River near Covington	5,860	9,000	11,500	15,300	18,600	22,300	26,500	32,900	378	.36	.20	36
				5,990	9,440	12,300	16,600	20,300	24,200	28,700	35,400				
72	2	02208050	Alcovy River near Lawrenceville	803	1,070	1,250	1,490	1,680	1,870	2,070	2,350	9.97	.30	.14	10
				790	1,150	1,450	1,890	2,250	2,620	3,040	3,650				
73	2	02208200	Beaverdam Creek tributary at Bold Springs	138	216	271	343	399	455	512	591	1.03	-.15	.24	11
				149	250	333	452	547	645	756	914				
74	2	02208450	Alcovy River above Covington	2,580	4,290	6,240	7,870	9,220	10,700	12,300	14,600	185	.18	.23	18
				2,880	5,060	7,410	9,910	11,900	14,000	16,500	19,900				
75	2	02209000	Alcovy River below Covington	2,900	5,150	7,010	9,800	12,200	14,900	17,900	22,400	244	.12	.29	25
				3,170	5,840	8,160	11,600	14,400	17,500	20,900	25,900				
76	2	02211300	Towaliga River near Jackson	3,280	4,790	5,800	7,100	8,080	9,060	10,100	11,400	105	-.10	.20	24
				3,280	4,940	6,160	7,880	9,230	10,600	12,200	14,300				
77	2	02211459	Big Towaliga Creek near Barnesville	323	520	676	904	1,100	1,310	1,550	1,900	2.36	.26	.24	13
				320	522	684	918	1,110	1,320	1,560	1,900				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
78	2	02211500	Towaliga River near Forsyth	5,700	8,750	10,800	13,500	15,400	17,400	19,300	21,900	315	-.24	.23	25
				5,810	9,150	11,600	15,100	17,700	20,400	23,300	27,400				
79	2	02212500	Ocmulgee River at Juliette	25,800	38,200	47,500	60,500	71,100	82,600	95,000	113,000	1,960	.30	.19	21
				24,800	36,900	45,900	58,800	69,100	80,500	92,600	110,300				
80	2	02212600	Falling Creek near Juliette	2,820	4,820	6,320	8,380	10,000	11,700	13,500	16,000	72.2	-.15	.28	26
				2,790	4,710	6,130	8,060	9,600	11,200	13,000	15,500				
81	2	02213000	Ocmulgee River at Macon	28,500	45,200	56,200	69,600	79,200	88,300	97,200	108,400	2,240	-.45	.26	98
				28,200	44,500	55,200	68,500	78,200	87,700	97,300	109,800				
82	2	02213050	Walnut Creek near Gray	2,860	5,090	6,840	9,330	11,400	13,500	15,900	19,200	29.0	-.10	.30	29
				2,640	4,420	5,650	7,250	8,600	10,100	11,600	13,700				
83	2	02213350	Tobesofkee Creek below Forsyth	2,910	4,720	6.040	7,820	9,220	10,700	12,200	14,300	53.4	-.11	.25	25
				2,790	4,450	5,620	7,210	8,500	9,890	11,300	13,400				
84	2	02213400	Little Tobesofkee Creek near Forsyth	1,060	2,490	3,900	6,290	8,580	11,400	14,700	20,000	16.8	.02	.44	12
				1,060	2,400	3,880	5,890	8,300	10,500	12,700	18,400				
85	2	02213470	Tobesofkee Creek above Macon	4,350	6,990	8,770	11,000	12,600	14,200	15,800	17,800	156	-.38	.26	13
				4,320	6,980	8,900	11,500	13,500	15,600	17,900	21,100				
86	2	02213500	Tobesofkee Creek near Macon	3,460	5,860	7,660	10,200	12,100	14,200	16,400	19,500	182	-.12	.27	30
				3,580	6,170	8,180	11,100	13,300	15,600	18,200	21,900				
87	2	02214000	Echeconnee Creek near Macon	4,220	7,490	10,200	14,400	18,100	22,300	27,100	34,400	147	.21	.29	35
				4,200	7,360	9,860	13,500	16,600	20,100	23,900	29,400				
88	3	02214280	Savage Creek near Bullard	397	1,090	1,830	3,160	4,480	6,110	8,110	11,400	33.0	-.08	.52	12
				440	1,110	1,700	2,510	3,200	3,990	4,910	6,220				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
89	3	02214500	Big Indian Creek at Perry	934	1,830	2,580	3,690	4,630	5,680	6,820	8,500	108	-.11	.35	34
				964	1,910	2,710	3,890	4,870	5,930	7,070	8,730				
90	3	02215000	Ocmulgee River at Hawkinsville	26,600	42,400	52,700	65,000	73,600	81,800	89,600	99,400	3,800	-.52	.26	80
				= =	= =	= =	= =	= =	= =	= =	= =				
91	3	02215230	Cedar Creek near Pineview	286	541	755	1,080	1,360	1,670	2,020	2,550	7.80	.01	.33	11
				282	516	692	942	1,150	1,380	1,630	1,990				
92	3	02215245	Folsom Creek tributary near Rochelle	103	218	313	450	561	679	803	977	1.44	-.37	.41	27
				102	207	284	388	470	560	659	792				
93	3	02215280	Ball Creek tributary near Rochelle	214	385	517	701	850	1,010	1,170	1,400	2.45	-.19	.31	18
				199	339	429	551	653	770	895	1,070				
94	3	02215500	Ocmulgee River at Lumber City	27,100	43,600	55,600	71,800	84,500	97,600	111,300	130,200	5,180	-.11	.25	83
				= =	= =	= =	= =	= =	= =	= =	= =				
95	3	02216000	Little Ocmulgee River at Towns	2,470	4,060	5,350	7,260	8,890	10,700	12,800	15,900	351	.27	.25	39
				2,500	4,180	5,600	7,740	9,560	11,500	13,700	17,000				
96	3	02216100	Alligator Creek near Alamo	2,060	3,650	5,040	7,230	9,230	11,600	14,300	18,600	255	.36	.28	18
				2,140	3,850	5,290	7,390	9,180	11,200	13,300	16,500				
97	2	02217000	Allen Creek at Talmo	1,250	2,200	2,990	4,160	5,180	6,330	7,610	9,540	17.3	.14	.29	23
				1,220	2,100	2,780	3,740	4,550	5,450	6,400	7,810				
98	2	02217200	Middle Oconee River near Jefferson	4,820	6,960	8,370	10,100	11,400	12,700	13,900	15,600	128	-.20	.20	15
				4,560	6,700	8,240	10,400	12,100	13,800	15,700	18,500				
99	2	02217250	Buffalo Creek tributary near Jefferson	117	184	235	307	366	430	500	600	0.39	.17	.23	13
				113	180	233	309	372	440	516	625				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

[no., number; mi^2, square miles; --, data used in analyses are prior to stream regulation, and are not shown.
Top line for each station entry is the log-Pearson Type III discharge;
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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
100	2	02217400	Mulberry River tributary near Winder	417	609	759	976	1,160	1,360	1,590	1,930	2.68	.53	.18	26
				405	600	757	986	1,180	1,390	1,630	1,980				
101	2	02217450	Mulberry River tributary near Jefferson	191	244	282	333	372	414	458	519	0.72	.52	.12	10
				177	248	307	397	472	550	640	769				
102	2	02217500	Middle Oconee River near Athens	7,140	10,500	12,600	15,200	17,000	18,700	20,400	22,500	398	-.37	.21	56
				7,160	10,700	13,100	16,300	18,600	20,800	23,300	26,500				
103	2	02217660	Little Curry Creek near Jefferson	203	336	430	554	647	742	838	966	0.87	-.28	.27	13
				193	317	406	529	629	735	848	1,010				
104	2	02217900	North Oconee River at Athens	4,360	6,950	8,940	11,800	14,100	16,600	19,300	23,300	290	.15	.24	33
				4,530	7,440	9,800	13,300	16,000	19,000	22,200	27,000				
105	2	02218100	Porters Creek at Watkinsville	314	564	765	1,060	1,310	1,580	1,870	2,310	1.95	-.01	.30	12
				304	527	694	928	1,120	1,340	1,560	1,890				
106	2	02218300	Oconee River near Penfield	13,200	20,100	25,300	32,500	38,400	44,700	51,400	61,200	940	.20	.21	23
				13,100	20,300	25,900	33,800	40,100	46,900	54,200	64,900				
107	2	02218450	Town Creek near Greensboro	625	1,110	1,510	2,100	2,610	3,180	3,810	4,750	11.9	.08	.29	25
				652	1,170	1,610	2,240	2,760	3,320	3,950	4,860				
108	2	02218500	Oconee River near Greensboro	12,700	20,100	25,700	33,700	40,400	47,500	55,400	66,700	1,090	.18	.23	82
				12,800	20,300	26,100	34,500	41,400	48,700	56,800	68,400				
109	2	02219000	Apalachee River near Bostwick	4,400	6,870	8,640	11,000	12,800	14,700	16,700	19,400	176	-.07	.23	18
				4,420	7,040	9,030	11,800	14,000	16,300	18,800	22,400				
110	2	02219500	Apalachee River near Buckhead	8,190	13,800	17,900	23,600	28,100	32,800	37,800	44,600	436	-.14	.27	49
				8,170	13,700	17,800	23,300	27,800	32,400	37,400	44,300				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
111	2	02220550	Whitten Creek near Sparta	1,370	2,080	2,600	3,300	3,870	4,460	5,090	5,980	15.0	.10	.21	26
				1,310	1,980	2,470	3,150	3,710	4,310	4,950	5,880				
112	2	02220900	Little River near Eatonton	6,030	9,860	12,400	15,700	18,200	20,500	22,800	25,800	262	-.40	.27	22
				6,000	9,800	12,400	16,000	18,800	21,600	24,500	28,700				
113	2	02221000	Murder Creek near Monticello	1,290	2,110	2,690	3,470	4,070	4,680	5,310	6,160	24.0	-.21	.26	26
				1,290	2,130	2,740	3,590	4,270	4,960	5,720	6,780				
114	2	02221525	Murder Creek below Eatonton	3,830	6,450	8,360	10,900	12,800	14,800	16,800	19,400	190	-.27	.28	15
				4,010	6,870	9,070	12,100	14,400	16,900	19,500	23,200				
115	2	02223000	Oconee River at Milledgeville	34,600	59,800	78,400	103,700	123,400	143,900	165,000	194,100	2,950	-.23	.29	49
				33,900	57,300	73,800	95,700	112,700	130,900	149,200	175,000				
116	3	02223200	Commissioner Creek at Toomsboro	2,660	4,850	6,520	8,820	10,600	12,500	14,500	17,200	191	-.27	.32	29
				2,590	4,580	5,960	7,840	9,350	11,000	12,900	15,400				
117	3	02223300	Big Sandy Creek near Jeffersonville	372	747	1,080	1,610	2,080	2,630	3,260	4,240	31.0	.06	.36	13
				411	848	1,240	1,810	2,290	2,800	3,360	4,190				
118	3	02223349	Big Sandy Creek tributary near Irwinton	21	41	56	77	92	108	124	146	0.50	-.47	.38	14
				24	51	75	110	136	162	188	225				
119	3	02223360	Big Sandy Creek near Irwinton	2,200	3,290	4,030	4,970	5,670	6,370	7,070	8,010	177	-.18	.21	18
				2,150	3,290	4,150	5,400	6,430	7,490	8,560	10,100				
120	3	02223500	Oconee River at Dublin	32,500	51,900	65,000	81,500	93,700	105,700	117,600	133,100	4,400	-.34	.25	97
				= =	= =	= =	= =	= =	= =	= =	= =				
121	3	02223700	Indian Branch tributary near Scott	106	172	218	279	326	373	421	486	2.13	-.22	.26	11
				109	185	246	333	403	474	547	650				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
122	3	02224000	Rocky Creek near Dudley	1,310	2,640	3,820	5,050	6,280	8,150	10,300	12,500	62.9	-.01	.36	25
				1,270	2,430	3,310	4,220	5,100	6,340	7,770	9,340				
123	3	02224200	Mercer Creek near Soperton	664	918	1,090	1,310	1,470	1,640	1,800	2,030	16.1	.04	.17	11
				603	852	1,040	1,330	1,570	1,820	2,090	2,470				
124	3	02224400	Cypress Creek near Tarrytown	289	589	876	1,270	1,540	1,830	2,150	2,350	6.77	.33	.35	11
				279	529	718	958	1,140	1,350	1,580	1,820				
125	3	02224500	Oconee River near Mount Vernon	31,400	50,100	62,100	76,400	86,400	95,700	105,000	116,000	5,110	-.32	.27	52
				= =	= =	= =	= =	= =	= =	= =	= =				
126	3	02224650	Peterson Creek at Glenwood	236	317	371	441	494	547	601	674	5.16	.11	.15	10
				229	335	425	561	673	786	899	1,060				
127	3	02224800	Oconee River tributary No. 2 near Glenwood	73	122	159	211	252	296	343	409	1.38	-.06	.27	10
				77	135	184	255	311	370	430	516				
128	3	02225000	Altamaha River near Baxley	57,400	91,700	116,500	149,600	175,400	202,000	229,600	267,600	11,600	-.11	.24	32
				= =	= =	= =	= =	= =	= =	= =	= =				
129	3	02225100	Cobb Creek near Lyons	836	1,490	2,020	2,820	3,510	4,280	5,140	6,430	69.0	.10	.29	17
				865	1,570	2,170	3,040	3,780	4,560	5,420	6,670				
130	3	02225150	Ohoopee River near Wrightsville	1,150	2,070	2,760	3,710	4,470	5,260	6,080	7,220	55.0	-.24	.31	21
				1,120	1,950	2,530	3,340	4,000	4,720	5,500	6,580				
131	3	02225180	Mulepen Creek near Adrian	393	662	859	1,120	1,330	1,530	1,750	2,050	13.8	-.22	.28	10
				391	667	878	1,180	1,420	1,680	1,950	2,330				
132	3	02225200	Little Ohoopee River near Wrightsville	1,040	1,970	2,770	3,980	5,050	6,250	7,620	9,690	63.0	.06	.33	26
				1,030	1,920	2,630	3,640	4,510	5,470	6,570	8,150				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
133	3	02225210	Hurricane Branch near Wrightsville	173	342	484	700	886	1,090	1,320	1,670	3.53	-.08	.35	10
				171	321	431	585	712	853	1,010	1,230				
134	3	02225240	Crooked Creek near Kite	136	271	389	573	736	922	1,130	1,460	7.22	.02	.35	11
				156	324	478	700	883	1,070	1,280	1,580				
135	3	02225250	Little Ohoopee River near Swainsboro	3,210	5,680	7,800	11,100	14,000	17,400	21,300	27,400	216	.28	.28	15
				3,000	5,030	6,510	8,650	10,500	12,700	15,200	18,800				
136	3	02225300	Ohoopee River near Oak Park	4,710	8,240	11,200	15,600	19,500	23,900	28,900	36,400	620	.20	.28	23
				4,630	8,000	10,700	14,500	17,900	21,600	25,900	32,000				
137	3	02225320	Ohoopee River near Aline	5,570	8,850	11,200	14,500	17,100	19,800	22,600	26,600	698	-.04	.24	10
				5,280	8,400	10,700	14,200	17,200	20,300	23,700	28,600				
138	3	02225330	Beaver Creek near Cobbtown	227	420	566	765	923	1,090	1,250	1,490	9.58	-.31	.33	26
				234	440	604	834	1,020	1,210	1,400	1,680				
139	3	02225350	Reedy Creek tributary near Soperton	116	196	255	334	396	459	525	615	1.68	-.22	.28	25
				114	193	251	331	396	464	535	633				
140	3	02225500	Ohoopee River near Reidsville	7,540	12,700	16,600	22,000	26,400	31,100	36,200	43,300	1,110	-.03	.27	59
				7,450	12,400	16,100	21,300	25,600	30,200	35,300	42,400				
141	3	02225850	Beards Creek near Glennville	1,220	2,160	2,960	4,200	5,320	6,610	8,100	10,420	74.4	.30	.28	22
				1,200	2,110	2,830	3,890	4,800	5,840	7,020	8,750				
142	3	02226000	Altamaha River at Doctortown	58,100	93,500	120,900	160,100	192,700	228,200	267,000	323,700	13,600	.16	.24	66
				= =	= =	= =	= =	= =	= =	= =	= =				
143	3	02226100	Penholoway Creek near Jesup	2,070	3,050	3,710	4,550	5,170	5,800	6,430	7,280	210	-.15	.20	32
				2,070	3,140	3,960	5,130	6,080	7,030	7,970	9,340				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
144	3	02226190	Little Creek near Willacoochee	237	450	623	874	1,080	1,310	1,550	1,910	6.38	-.15	.34	23
				237	443	602	823	1,000	1,200	1,420	1,720				
145	3	02226200	Satilla River near Douglas	2,060	3,680	5,020	7,000	8,710	10,600	12,700	15,900	235	.09	.30	28
				2,080	3,720	5,070	7,040	8,710	10,500	12,500	15,500				
146	3	02226300	Satilla River near Pearson	3,480	6,700	9,420	13,500	17,100	21,100	25,500	32,200	355	-.01	.33	15
				3,380	6,190	8,240	11,100	13,600	16,400	19,600	24,100				
147	3	02226500	Satilla River near Waycross	7,710	14,100	18,800	25,000	29,900	34,800	39,700	46,400	1,200	-.37	.33	54
				7,620	13,700	18,000	23,700	28,300	33,200	38,200	45,100				
148	3	02226580	Big Creek near Hoboken	1,010	1,750	2,310	3,070	3,680	4,320	4,990	5,930	60.0	-.16	.29	22
				1,000	1,740	2,290	3,060	3,690	4,370	5,090	6,100				
149	3	02226582	Satilla River near Hoboken	11,600	17,700	22,500	29,800	36,100	43,200	51,200	63,300	1,350	.52	.20	10
				10,200	15,100	18,700	24,200	29,200	34,900	41,300	50,500				
150	3	02226700	Whitehead Creek near Denton	780	1,380	1,850	2,510	3,050	3,620	4,240	5,110	28.0	-.11	.30	10
				734	1,240	1,600	2,120	2,550	3,020	3,540	4,260				
151	3	02227000	Hurricane Creek near Alma	1,660	3,130	4,370	6,270	7,920	9,790	11,900	15,100	150	.05	.32	37
				1,660	3,110	4,280	6,000	7,450	9,090	10,900	13,600				
152	3	02227100	Little Hurricane Creek near Alma	550	1,500	2,570	4,200	5,770	7,200	9,180	11,000	61.0	-.10	.28	15
				604	1,550	2,440	3,590	4,560	5,520	6,720	8,050				
153	3	02227200	Little Hurricane Creek below Alma	1,380	2,840	3,990	5,620	6,920	8,270	9,670	11,600	111	-.39	.39	33
				1,380	2,780	3,810	5,230	6,360	7,580	8,880	10,700				
154	3	02227290	Alabaha River near Blackshear	4,170	7,800	10,900	15,800	20,100	25,000	30,600	39,200	414	.13	.31	23
				4,040	7,280	9,700	13,300	16,300	19,800	23,800	29,600				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
155	3	02227400	Big Satilla Creek near Alma	1,840	3,310	4,640	6,810	8,850	11,300	14,300	19,100	112	.49	.29	34
				1,800	3,170	4,290	5,990	7,500	9,290	11,500	14,700				
156	3	02227422	Crooked Creek tributary near Bristol	28	48	62	80	94	108	123	143	0.42	-.28	.28	15
				30	55	75	105	128	151	174	207				
157	3	02227430	Little Satilla Creek at Odum	815	1,780	2,550	3,620	4,450	5,300	6,170	7,310	49.0	-.45	.44	31
				817	1,730	2,400	3,280	3,970	4,720	5,510	6,560				
158	3	02227470	Little Satilla Creek near Jesup	762	1,940	3,010	4,640	6,020	7,530	9,140	11,400	83.0	-.45	.52	17
				813	1,970	2,900	4,180	5,210	6,340	7,560	9,240				
159	3	02227500	Little Satilla River near Offerman	4,870	8,950	12,400	17,500	22,000	27,000	32,600	41,000	646	.07	.31	40
				4,820	8,720	11,800	16,300	20,100	24,400	29,200	36,200				
160	3	02227990	Satilla River tributary No. 2 at Atkinson	34	63	85	118	144	172	203	246	0.38	-.16	.32	14
				35	65	89	123	151	179	210	252				
161	3	02228000	Satilla River at Atkinson	13,000	23,200	31,200	42,800	52,400	62,800	74,000	90,300	2,790	-.05	.30	60
				12,900	22,700	30,100	40,700	49,500	59,200	69,800	85,100				
162	3	02228050	Buffalo Creek at Hickox	1,230	2,330	3,250	4,610	5,760	7,040	8,460	10,600	62.0	-.05	.33	22
				1,200	2,180	2,910	3,920	4,770	5,730	6,820	8,360				
163	3	02228500	North Prong St Marys River at Moniac	1,470	2,770	3,850	5,450	6,810	8,330	9,990	12,500	160	-.04	.33	49
				1,480	2,800	3,890	5,480	6,820	8,290	9,890	12,300				
164	3	02231100	St Marys River near St. George	8,350	14,100	19,100	26,700	33,600	41,600	50,800	65,400	890	.42	.26	10
				7,460	11,900	15,100	19,900	24,100	29,000	34,700	42,800				
165	3	02314500	Suwannee River at Fargo	4,160	7,490	9,760	12,500	14,500	16,400	18,100	20,300	1,260	-.53	.34	57
				4,250	7,780	10,400	13,800	16,500	19,100	21,400	24,700				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
166	3	02314600	Suwannoochee Creek at Dupont	805	1,380	1,770	2,250	2,600	3,130	3,650	4,050	143	-.53	.30	27
				864	1,580	2,180	3,040	3,720	4,520	5,290	6,180				
167	3	02314700	Suwannoochee Creek near Thelma	1,120	1,840	2,390	3,160	3,780	4,650	5,660	6,690	232	.02	.25	25
				1,200	2,130	2,980	4,270	5,340	6,570	7,880	9,530				
168	3	02315650	Alapaha River tributary No. 2 near Pitts	49	68	80	96	108	120	131	147	0.14	-.02	.17	11
				41	56	65	79	92	106	120	140				
169	3	02315700	Alapaha River at Rebecca	1,450	2,380	3,040	3,900	4,550	5,200	5,870	6,760	112	-.27	.27	27
				1,450	2,400	3,110	4,100	4,900	5,720	6,570	7,760				
170	3	02315900	Deep Creek near Ashburn	1,730	2,940	3,850	5,100	6,090	7,120	8,210	9,730	137	-.15	.28	27
				1,720	2,920	3,820	5,090	6,140	7,250	8,430	10,100				
171	3	02315980	Jacks Creek near Ocilla	110	205	290	429	558	711	893	1,190	1.21	.33	.31	17
				105	188	251	343	421	513	619	772				
172	3	02316000	Alapaha River near Alapaha	3,810	6,630	8,640	11,300	13,300	15,200	17,200	19,900	663	-.37	.30	41
				3,840	6,730	8,880	11,900	14,200	16,600	19,000	22,500				
173	3	02316200	Willacoochee River near Ocilla	1,220	2,230	3,050	4,240	5,230	6,320	7,510	9,250	90.0	-.06	.31	30
				1,220	2,220	3,010	4,130	5,060	6,080	7,190	8,790				
174	3	02316220	Little Brushy Creek near Ocilla	75	139	191	267	330	400	476	587	1.65	-.07	.32	11
				80	152	213	298	367	440	517	627				
175	3	02316260	Alapaha River tributary No. 4 near Willacoochee	169	307	429	623	800	1,010	1,260	1,650	4.16	.35	.29	11
				172	312	427	595	736	892	1,070	1,320				
176	3	02316390	Alapaha River at Lakeland	6,740	10,300	12,600	15,300	17,300	19,200	21,100	23,400	1,080	-.40	.23	21
				6,610	10,300	12,900	16,500	19,600	22,600	25,700	30,100				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

[no., number; mi^2, square miles; --, data used in analyses are prior to stream regulation, and are not shown.
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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
177	3	02317500	Alapaha River at Statenville	5,430	9,740	13,000	17,300	20,700	24,200	27,900	32,800	1,400	-.30	.31	63
				5,480	9,910	13,400	18,100	21,900	25,800	29,900	35,600				
178	3	02317700	Withlacoochee River near Nashville	1,850	3,420	4,590	6,170	7,400	8,640	9,920	11,600	132	-.37	.34	29
				1,820	3,290	4,330	5,730	6,860	8,060	9,350	11,100				
179	3	02317710	Withlacoochee River tributary near Nashville	68	142	206	300	380	467	562	698	0.86	-.25	.40	28
				68	138	192	267	328	395	469	570				
180	3	02317730	New River tributary near near Nashville	89	139	175	225	266	309	354	420	0.95	.09	.22	18
				86	136	173	227	271	319	368	440				
181	3	02317734	New River near Nashville	2,350	3,800	4,860	6,320	7,480	8,700	9,990	11,800	146	-.04	.24	18
				2,240	3,560	4,490	5,830	6,950	8,190	9,520	11,400				
182	4	023177483	Withlacoochee River near Bemiss	3,930	9,710	15,600	26,100	36,300	48,900	64,400	89,800	502	.03	.46	11
				4,560	10,800	16,000	24,300	32,100	41,200	51,900	69,300				
183	3	02317760	Little River near Ashburn	369	596	760	980	1,150	1,330	1,520	1,770	8.54	-.12	.25	11
				349	561	714	934	1,120	1,310	1,520	1,810				
184	3	02317765	Newell Branch near Worth	74	137	191	276	353	441	543	702	0.98	.20	.31	11
				74	135	182	250	308	371	441	540				
185	3	02317770	Newell Branch near Ashburn	268	377	443	519	571	620	666	723	6.48	-.44	.19	11
				262	392	496	646	769	890	1,010	1,180				
186	3	02317775	Daniels Creek near Ashburn	85	160	212	280	329	377	423	482	1.11	-.56	.36	23
				84	156	204	269	318	370	422	493				
187	3	02317780	Lime Sink Creek near Sycamore	86	154	204	270	320	371	422	489	0.68	-.40	.32	20
				82	140	179	230	271	316	363	426				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
188	3	02317795	Mill Creek near Tifton	352	730	1,050	1,530	1,940	2,390	2,880	3,590	6.21	-.21	.39	13
				326	609	790	1,040	1,240	1,480	1,750	2,120				
189	3	02317800	Little River near Tifton	1,480	2,590	3,430	4,570	5,480	6,430	7,420	8,800	145	-.20	.30	23
				1,500	2,650	3,560	4,830	5,880	6,980	8,120	9,770				
190	3	02317810	Arnold Creek tributary near Tifton	50	87	115	151	180	210	240	281	0.47	-.25	.30	26
				49	86	113	149	179	210	242	286				
191	3	02317820	Arnold Creek near Tifton	200	320	406	519	607	697	790	916	4.88	-.15	.25	10
				200	332	437	586	709	835	965	1,150				
192	3	02317830	Little River near Lenox	2,700	4,380	5,660	7,460	8,930	10,500	12,200	14,700	208	.07	.25	13
				2,570	4,130	5,290	6,980	8,420	9,990	11,700	14,200				
193	3	02317840	Warrior Creek near Sylvester	305	505	669	919	1,140	1,380	1,670	2,100	8.24	.36	.25	12
				300	500	661	898	1,100	1,320	1,560	1,910				
194	3	02317845	Warrior Creek tributary near Sylvester	168	246	300	371	424	479	535	611	1.64	-.05	.20	11
				151	220	269	342	403	469	538	634				
195	3	02317870	Warrior Creek near Sumner	2,270	3,460	4,240	5,170	5,830	6,470	7,090	7,870	109	-.41	.23	22
				2,140	3,210	3,900	4,840	5,620	6,460	7,310	8,470				
196	3	02317890	Little Creek near Sylvester	64	103	130	166	194	222	250	288	0.39	-.21	.25	11
				58	91	113	145	171	200	229	270				
197	3	02317900	Ty Ty Creek at Ty Ty	858	1,430	1,840	2,390	2,810	3,230	3,670	4,260	47.0	-.25	.28	30
				855	1,430	1,860	2,460	2,940	3,440	3,960	4,680				
198	3	02317905	Little Creek near Omega	382	614	771	966	1,110	1,250	1,380	1,560	4.22	-.40	.26	13
				333	502	598	735	853	986	1,120	1,320				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
199	3	02317910	Ty Ty Creek tributary at Crosland	188	290	360	449	516	582	649	738	2.07	-.23	.23	16
				175	265	325	410	481	556	636	745				
200	4	02317980	Little River near Sparks	6,910	11,600	15,300	21,000	25,900	31,400	37,700	47,100	555	.27	.26	23
				6,650	11,800	16,400	23,800	30,200	37,300	45,500	58,000				
201	4	02318000	Little River near Adel	5,480	10,100	13,900	19,400	24,200	29,400	35,100	43,600	577	-.01	.32	40
				5,580	10,900	15,600	22,600	28,600	35,100	42,500	53,500				
202	4	02318015	Bull Creek near Norman Park	127	275	403	595	758	937	1,130	1,420	1.36	-.25	.41	11
				143	323	469	684	866	1,070	1,290	1,630				
203	4	02318020	Bull Creek tributary near Ellenton	79	136	176	227	265	302	339	387	0.27	-.43	.30	17
				74	134	184	257	316	379	444	536				
204	4	02318500	Withlacoochee River near Quitman	9,590	21,400	32,400	50,300	66,800	86,200	108,700	144,000	1,480	-.03	.41	24
				9,840	21,300	31,300	47,200	62,000	79,200	99,400	131,500				
205	4	02318600	Okapilco Creek near Berlin	2,440	4,490	6,250	8,970	11,400	14,100	17,300	22,100	101	.17	.31	24
				2,370	4,420	6,260	9,120	11,700	14,600	17,900	23,100				
206	4	02318700	Okapilco Creek near Quitman	3,350	7,520	11,600	18,600	25,400	33,700	43,700	60,200	269	.13	.41	11
				3,560	7,700	11,300	16,900	22,200	28,300	35,500	47,100				
207	4	02318725	Okapilco Creek at Quitman	3,270	7,050	10,900	17,700	24,500	33,100	44,100	62,800	278	.36	.38	13
				3,510	7,630	11,300	17,000	22,400	28,800	36,400	48,900				
208	4	02326200	Aucilla River near Boston	1,170	2,810	4,330	6,730	8,870	11,300	14,000	18,100	81.0	-.25	.46	25
				1,320	3,300	5,000	7,550	9,780	12,300	15,200	19,600				
209	4	02327200	Ochlockonee River at Moultrie	1,310	3,310	4,500	6,620	8,930	9,500	11,300	14,300	96.0	.46	.28	29
				1,450	3,730	5,330	7,920	10,300	12,000	14,500	18,400				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
210	4	02327350	Ochlockonee River tributary near Coolidge	196	370	513	721	895	1,090	1,290	1,590	1.81	-.11	.33	26
				197	389	552	793	995	1,220	1,460	1,820				
211	4	02327355	Ochlockonee River near Coolidge	3,810	7,660	11,300	17,400	23,200	30,400	39,000	53,200	260	.30	.35	10
				3,800	7,630	11,000	16,400	21,400	27,100	33,900	44,800				
212	4	02327400	Sallys Branch tributary near Sale City	391	723	988	1,370	1,690	2,040	2,410	2,950	3.70	-.11	.32	10
				351	648	908	1,300	1,650	2,040	2,460	3,110				
213	4	02327415	Little Ochlockonee River near Moultrie	1,530	3,000	4,300	6,380	8,270	10,500	13,000	17,000	44.8	.14	.34	10
				1,440	2,780	3,960	5,800	7,480	9,410	11,600	15,100				
214	4	02327500	Ochlockonee River near Thomasville	5,900	12,600	19,100	30,200	41,100	54,500	70,900	98,200	550	.26	.38	43
				5,900	12,300	18,100	27,600	36,800	48,000	61,300	83,500				
215	4	02327550	Barnetts Creek near Meigs	789	1,600	2,290	3,340	4,230	5,230	6,330	7,960	15.0	-.13	.37	21
				764	1,500	2,120	3,080	3,930	4,900	5,980	7,630				
216	4	02327700	Barnetts Creek near Thomasville	2,080	6,270	9,500	14,900	20,000	25,000	30,400	41,300	104	-.12	.33	29
				2,110	5,310	7,600	11,300	14,900	18,900	23,300	31,200				
217	4	02327810	Ochlockonee River near Cairo	8,510	15,900	22,900	34,700	46,300	60,600	78,300	108,100	747	.56	.30	20
				8,080	14,900	21,300	31,600	41,500	53,300	67,300	90,400				
218	4	02327860	Popple Branch near Whigham	181	305	409	569	710	873	1,060	1,350	1.71	.37	.26	14
				186	361	515	744	936	1,150	1,390	1,760				
219	4	02327900	Wolf Creek near Whigham	1,130	2,020	2,740	3,770	4,620	5,550	6,560	8,020	19.0	-.06	.30	27
				1,050	1,820	2,500	3,540	4,460	5,490	6,620	8,320				
220	4	02328000	Tired Creek near Cairo	2,100	4,100	5,990	9,210	12,300	16,200	20,900	28,800	60.0	.43	.33	38
				2,000	3,700	5,260	7,810	10,300	13,300	16,900	22,800				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
221	1	02330450	Chattahoochee River at Helen	1,810	3,440	4,950	7,460	9,850	12,800	16,300	22,100	44.6	.41	.31	13
				1,920	3,550	4,980	7,050	8,800	10,700	12,900	16,200				
222	1	02331000	Chattahoochee River near Leaf	6,850	10,700	13,400	16,800	19,200	21,700	24,200	27,400	150	-.29	.24	51
				6,760	10,500	13,100	16,200	18,500	21,000	23,600	26,900				
223	1	02331500	Soque River near Demorest	5,600	8,880	11,300	14,700	17,500	20,400	23,500	28,000	156	.06	.24	36
				5,600	8,860	11,300	14,600	17,300	20,000	23,100	27,400				
224	1	02331600	Chattahoochee River near Cornelia	11,800	17,700	21,500	26,100	29,400	32,600	35,600	39,600	315	-.38	.22	51
				11,600	17,400	21,000	25,200	28,500	31,700	35,000	39,400				
225	1	02333000	Chattahoochee River near Gainesville	17,900	27,500	34,400	43,700	51,000	58,600	66,500	77,500	559	-.01	.22	18
				17,100	25,800	31,900	37,900	43,600	49,300	55,800	64,600				
226	1	02333500	Chestatee River near Dahlonega	6,490	10,600	13,700	17,900	21,300	24,800	28,500	33,600	153	-.08	.26	56
				6,440	10,500	13,400	17,100	20,200	23,400	26,800	31,600				
227	1	02334500	Chattahoochee River near Buford	--	--	--	--	--	--	--	--	1,060	--	--	52
228	1	02335000	Chattahoochee River near Norcross	--	--	--	--	--	--	--	--	1,170	--	--	54
229	1	02335500	Chattahoochee River near Roswell	--	--	--	--	--	--	--	--	1,230	--	--	36
230	1	02335700	Big Creek near Alpharetta	2,090	3,860	5,240	7,180	8,740	10,400	12,200	14,600	72.0	-.21	.32	30
				2,180	4,010	5,440	7,620	9,280	11,000	12,900	15,500				
231	1	02336000	Chattahoochee River at Atlanta	--	--	--	--	--	--	--	--	1,450	--	--	60
232	1	02337000	Sweetwater Creek near Austell	4,170	6,240	7,670	9,520	10,900	12,400	15,800	18,800	246	-.11	.21	56
				4,300	6,500	8,080	10,700	12,500	14,500	18,200	21,700				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
233	1	02337400	Dog River near Douglasville	3,270	5,670	7,420	9,740	11,500	13,400	15,200	17,700	43.0	-.31	.30	28
				3,180	5,400	6,980	8,620	10,100	11,600	13,300	15,600				
234	1	02337448	Hurricane Creek tributary near Fairplay	74	152	220	328	423	532	656	844	0.33	-.02	.37	14
				78	157	225	333	425	530	649	830				
235	1	02337500	Snake Creek near Whitesburg	3,200	4,620	5,520	6,620	7,410	8,170	8,910	9,860	37.0	-.30	.20	36
				3,110	4,490	5,380	6,440	7,320	8,220	9,160	10,400				
236	1	02338000	Chattahoochee River near Whitesburg	--	--	--	--	--	--	--	--	2,430	--	--	17
237	2	02338660	New River near Corinth	3,160	5,510	7,390	10,200	12,500	15,000	17,800	22,000	127	.06	.28	12
				3,290	5,740	7,660	10,400	12,600	14,900	17,500	21,200				
238	2	02338775	Yellowjacket Creek at Hogansville	1,620	3,360	5,010	7,810	10,500	13,700	17,700	24,100	42.5	.24	.36	10
				1,690	3,260	4,530	6,320	7,830	9,510	11,300	14,000				
239	2	02339000	Yellowjacket Creek near LaGrange	3,740	7,180	10,200	14,900	19,100	24,000	29,600	38,200	182	.12	.33	21
				3,870	7,300	10,100	14,200	17,600	21,400	25,400	31,400				
240	2	02339500	Chattahoochee River at West Point	--	--	--	--	--	--	--	--	3,550	--	--	79
241	2	02340250	Flat Shoal Creek near West Point	4,240	6,390	7,760	9,420	10,600	11,700	12,800	14,200	204	-.41	.23	13
				4,400	6,980	8,920	11,600	13,700	15,800	18,100	21,400				
242	2	02340500	Mountain Oak Creek near Hamilton	1,760	3,490	5,080	7,690	10,100	13,100	16,600	22,200	61.7	.25	.34	31
				1,820	3,570	5,100	7,410	9,400	11,700	14,300	18,100				
243	2	02341600	Juniper Creek near Geneva	722	1,230	1,660	2,360	2,990	3,730	4,610	6,000	47.4	.50	.26	28
				820	1,500	2,140	3,190	4,060	5,020	6,180	7,920				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
244	2	02341723	Pine Knot Creek near Juniper	325	616	883	1,320	1,740	2,240	2,850	3,840	33.1	.38	.31	12
				484	1,060	1,650	2,600	3,390	4,220	5,230	6,720				
245	2	02341800	Upatoi Creek near Columbus	6,390	10,800	14,600	20,600	26,200	32,800	40,700	53,300	342	.56	.25	22
				6,460	10,900	14,600	20,100	24,800	30,200	36,100	45,000				
246	2	02341900	Ochillee Creek near Cussetta	908	2,200	3,630	6,400	9,390	13,400	18,800	28,500	53.3	.41	.43	12
				1,130	2,640	4,080	6,310	8,240	10,500	13,000	16,700				
247	2	02343200	Pataula Creek near Lumpkin	1,470	3,280	5,090	8,260	11,400	15,300	20,100	28,100	70.0	.22	.40	31
				1,570	3,440	5,200	7,970	10,400	13,300	16,600	21,500				
248	2	02343219	Bluff Springs Branch near Lumpkin	147	257	352	503	640	800	988	1,290	2.98	.40	.27	14
				179	342	496	735	933	1,140	1,390	1,770				
249	2	02343225	Pataula Creek near Georgetown	3,450	7,020	10,700	17,500	24,500	33,800	45,800	67,400	295	.44	.34	30
				3,700	7,550	11,300	17,600	23,300	30,200	38,200	51,100				
250	2	02344300	Camp Creek near Fayetteville	1,110	1,600	1,950	2,420	2,800	3,200	3,620	4,220	17.2	.20	.18	13
				1,100	1,660	2,110	2,760	3,300	3,850	4,480	5,380				
251	2	02344500	Flint River near Griffin	4,740	7,580	9,470	11,800	13,500	15,100	16,600	18,700	272	-.43	.26	54
				4,810	7,810	9,920	12,700	14,800	16,800	18,900	21,900				
252	2	02344700	Line Creek near Senoia	2,900	4,580	5,880	7,730	9,270	11,000	12,800	15,500	101	.21	.23	26
				2,940	4,730	6,160	8,220	9,900	11,700	13,700	16,600				
253	2	02345000	Flint River near Molena	15,200	24,900	31,500	40,000	46,200	52,400	58,500	66,500	990	-.37	.27	42
				15,000	24,400	30,800	39,300	45,600	52,200	58,800	68,100				
254	2	02345500	Flint River near Woodbury	15,400	24,700	31,500	40,700	47,900	55,400	63,200	71,100	1,090	-.09	.25	28
				15,200	24,400	31,100	40,200	47,500	55,100	63,200	74,700				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
255	2	02346180	Flint River near Thomaston	17,600	27,200	33,900	42,600	49,200	55,900	62,700	71,900	1,220	-.17	.23	70
				17,500	27,000	33,700	42,500	49,300	56,400	63,700	74,900				
256	2	02346193	Scott Creek near Talbotton	685	1,110	1,420	1,850	2,200	2,560	2,950	3,500	3.36	-.01	.25	19
				620	963	1,200	1,520	1,790	2,080	2,390	2,830				
257	2	02346210	Kimbrough Creek near Talbotton	851	1,300	1.600	1,980	2,260	2,550	2,830	3,210	6.62	-.22	.22	19
				798	1,210	1,490	1,880	2,190	2,520	2,870	3,370				
258	2	02346217	Coleoatchee Creek near Manchester	275	616	931	1,440	1,900	2,430	3,040	3,970	2.82	-.09	.42	21
				285	609	877	1,260	1,590	1,950	2,330	2,890				
259	2	02346500	Potato Creek near Thomaston	3,750	5,950	7,490	9,500	11,000	12,600	14,100	16,200	186	-.22	.25	37
				3,830	6,210	7,980	10,400	12,300	14,300	16,300	19,300				
260	2	02347500	Flint River near Culloden	26,600	42,500	53,500	67,400	77,900	88,200	98,600	112,300	1,850	-.30	.25	72
				26,200	41,400	51,800	65,100	75,200	85,600	96,000	110,300				
261	3	02348300	Patsiliga Creek near Reynolds	1,430	2,280	2,880	3,670	4,280	4,900	5,530	6,390	139	-.19	.25	22
				1,450	2,390	3,130	4,200	5,080	5,970	6,870	8,170				
262	3	02349000	Whitewater Creek below Butler	535	828	1,060	1,400	1,690	2,010	2,370	2,910	93.4	.40	.21	35
				572	956	1,330	1,920	2,420	2,930	3,450	4,270				
263	3	02349030	Cedar Creek near Rupert	257	412	527	684	809	940	1,080	1,270	41.1	-.04	.25	12
				319	609	913	1,370	1,750	2,100	2,450	2,980				
264	3	02349330	Buck Creek tributary near Tazwell	38	62	81	107	129	152	178	214	0.40	.09	.25	14
				38	65	88	120	146	173	202	243				
265	3	02349350	Buck Creek near Ellaville	830	1,870	2,810	4,290	5,600	7,090	8,770	11,300	146	-.17	.43	12
				954	2,170	3,260	4,820	6,100	7,480	8,970	11,100				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
266	3	02349500	Flint River at Montezuma	27,000	44,200	56,500	72,700	85,000	97,500	110,200	127,400	2,900	-.24	.26	86
				= =	= =	= =	= =	= =	= =	= =	= =				
267	3	02349695	Horsehead Creek near Montezuma	85	145	187	240	279	318	356	406	0.72	-.43	.30	14
				80	132	167	214	252	293	336	393				
268	3	02349900	Turkey Creek at Byromville	964	1,910	2,700	3,830	4,780	5,810	6,910	8,500	45.0	-.22	.37	40
				952	1,840	2,510	3,420	4,180	5,020	5,950	7,240				
269	3	02350500	Flint River at Oakfield	23,800	37,500	47,500	61,100	71,700	82,800	94,500	110,800	3,860	-.04	.24	32
				= =	= =	= =	= =	= =	= =	= =	= =				
270	3	02350520	Abrams Creek tributary near Doles	283	396	475	582	665	752	844	972	3.77	.22	.17	11
				254	360	438	558	660	770	886	1,050				
271	3	02350600	Kinchafoonee Creek at Preston	2,440	4,560	6,360	9,100	11,500	14,200	17,300	22,000	197	.08	.32	36
				2,400	4,390	5,950	8,190	10,100	12,300	14,800	18,400				
272	3	02350685	Choctahatchee Creek tributary near Plains	34	75	110	163	208	256	309	385	0.32	-.30	.43	13
				34	71	99	136	165	198	233	282				
273	3	02350900	Kinchafoonee Creek near Dawson	3,470	6,110	8,300	11,600	14,400	17,600	21,200	26,700	527	.15	.29	26
				3,490	6,180	8,390	11,700	14,400	17,500	20,900	25,900				
274	3	02351500	Muckalee Creek near Americus	1,690	3,010	4,150	5,940	7,550	9,420	11,600	15,000	140	.31	.29	21
				1,680	2,970	4,030	5,600	6,940	8,470	10,200	12,800				
275	3	02351700	Muckalee Creek near Smithville	2,220	3,890	5,310	7,500	9,460	11,700	14,300	18,300	265	.29	.28	16
				2,250	3,980	5,430	7,580	9,420	11,400	13,700	17,100				
276	3	02351800	Muckaloochee Creek at Smithville	676	1,310	1,850	2,640	3,310	4,050	4,870	6,070	47.0	-.10	.35	29
				688	1,330	1,870	2,630	3,260	3,950	4,700	5,790				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
277	3	02351890	Muckalee Creek near Leesburg	2,940	4,820	6,260	8,300	9,970	11,800	13,700	16,600	362	.07	.25	11
				2,940	4,930	6,520	8,870	10,800	13,000	15,200	18,500				
278	3	02351900	Muckalee Creek near Leesburg	2,800	4,740	6,340	8,760	10,900	13,200	16,000	20,100	405	.28	.26	22
				2,840	4,890	6,630	9,240	11,500	13,900	16,600	20,600				
279	3	02352500	Flint River at Albany	31,400	46,800	57,300	71,000	81,300	91,700	102,300	116,700	5,310	-.11	.21	98
				= =	= =	= =	= =	= =	= =	= =	= =				
280	3	02353000	Flint River at Newton	30,500	44,800	54,600	67,000	76,400	85,900	95,500	108,400	5,740	-.11	.20	53
				= =	= =	= =	= =	= =	= =	= =	= =				
281	3	02353100	Ichawaynochaway Creek near Graves	1,740	2,650	3,270	4,060	4,650	5,230	5,830	6,610	118	.21	.22	22
				1,700	2,630	3,310	4,280	5,080	5,890	6,740	7,920				
282	3	02353200	Little Ichawaynochaway Creek near Shellman	577	1,040	1,450	2,100	2,700	3,390	4,210	5,520	52.0	.34	.29	12
				627	1,180	1,700	2,450	3,100	3,780	4,540	5,670				
283	3	02353400	Pachitla Creek near Edison	2,790	4,500	5,730	7,370	8,640	9,950	11,300	13,200	188	-.16	.25	33
				2,710	4,310	5,430	6,980	8,250	9,620	11,100	13,100				
284	3	02353500	Ichawaynochaway Creek at Milford	5,190	8,190	10,200	12,700	14,600	16,400	18,100	20,400	620	-.36	.25	55
				5,130	8,080	10,100	12,800	14,900	17,100	19,200	22,100				
285	3	02354500	Chickasawhatchee Creek at Elmodel	2,250	3,540	4,460	5,660	6,580	7,520	8,490	9,800	320	-.15	.24	39
				2,280	3,680	4,790	6,360	7,640	8,920	10,200	12,100				
286	3	02355000	Ichawaynochaway Creek near Newton	6,260	10,700	13,800	18,000	21,100	24,200	27,300	31,500	1,020	-.35	.29	10
				6,090	10,300	13,400	17,800	21,500	25,500	29,600	35,600				
287	3	02356000	Flint River at Bainbridge	30,900	46,900	58,100	72,600	83,700	94,900	106,400	122,000	7,570	-.12	.22	86
				= =	= =	= =	= =	= =	= =	= =	= =				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
288	3	02356100	Spring Creek near Arlington	1,260	2,440	3,400	4,790	5,960	7,230	8,600	9,570	49.0	-.17	.35	25
				1,210	2,220	2,910	3,850	4,630	5,540	6,550	7,510				
289	3	02356640	Spring Creek at Colquitt	2,860	4,230	5,150	6,330	7,200	8,080	8,960	10,100	281	-.15	.20	10
				2,770	4,290	5,480	7,260	8,740	10,300	11,900	14,100				
290	3	02357000	Spring Creek near Iron City	4,010	7,730	10,600	14,400	17,300	20,400	23,400	27,600	485	-.41	.36	49
				3,980	7,540	10,100	13,600	16,200	19,200	22,200	26,400				
291	1	02379500	Cartecay River near Ellijay	3,920	6,790	9,080	12,400	15,200	18,200	21,500	26,400	134	.04	.28	49
				3,980	6,870	9,160	12,500	15,200	18,000	21,200	25,800				
292	1	02380000	Ellijay River at Ellijay	3,940	6,670	8,780	11,800	14,200	16,800	19,700	23,800	87.7	-.01	.27	25
				3,930	6,580	8,590	11,200	13,300	15,500	18,100	21,700				
293	1	02380500	Coosawattee River near Ellijay	6,390	10,600	13,800	18,100	21,500	25,100	28,900	34,100	236	-.11	.26	49
				6,440	10,600	13,800	18,100	21,500	25,000	28,700	33,800				
294	1	02381100	Mountaintown Creek tributary near Ellijay	266	463	624	862	1,060	1,290	1,540	1,920	2.41	.12	.28	13
				282	496	675	983	1,220	1,500	1,800	2,240				
295	1	02381600	Fausett Creek near Talking Rock	716	1,400	2,000	2,970	3,850	4,880	6,090	7,980	9.99	.17	.34	25
				736	1,420	2,000	2,870	3,620	4,460	5,430	6,880				
296	1	02381900	Ball Creek near Talking Rock	422	751	998	1,330	1,600	1,870	2,160	2,550	3.50	-.26	.31	11
				431	760	1,010	1,380	1,680	2,000	2,360	2,880				
297	1	02382200	Talking Rock Creek near Hinton	4,440	7,870	10,800	15,500	19,700	24,600	30,300	39,200	119	.32	.28	26
				4,470	7,790	10,500	14,300	17,600	21,100	25,200	31,300				
298	1	02382500	Coosawattee River at Carters	--	--	--	--	--	--	--	--	521	--	--	29

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
299	1	02382600	Sugar Creek near Chatsworth	643	926	1,110	1,340	1,500	1,660	1,820	2,020	7.30	-.25	.20	10
				668	1,010	1,270	1,760	2,110	2,500	2,900	3,470				
300	1	02382800	Dry Creek at Oakman	397	633	810	1,060	1,250	1,460	1,690	2,010	3.06	.05	.24	11
				403	656	855	1,180	1,440	1,730	2,050	2,510				
301	1	02382900	Pine Log Creek near Rydal	745	1,410	2,020	3,020	3,950	5,070	6,400	8,560	12.8	.33	.32	14
				797	1,490	2,100	3,060	3,860	4,740	5,760	7,280				
302	1	02383000	Rock Creek near Fairmount	420	724	1,010	1,310	1,600	1,920	2,260	2,760	6.17	.03	.28	25
				442	769	1,080	1,500	1,860	2,260	2,690	3,310				
303	1	02383200	Redbud Creek near Ranger	327	547	714	949	1,140	1,340	1,560	1,870	1.97	-.02	.27	13
				326	547	719	974	1,190	1,430	1,690	2,080				
304	1	02383220	Redbud Creek tributary near Ranger	91	168	240	365	486	637	824	1,140	0.56	.46	.30	12
				99	185	265	413	537	683	853	1,120				
305	1	02383500	Coosawattee River near Pine Chapel	--	--	--	--	--	--	--	--	831	--	--	37
306	1	02384000	Conasauga River near Tennga	9,700	13,000	15,000	17,300	18,900	20,300	21,700	23,400	108	-.37	.16	39
				9,170	12,300	14,100	15,700	17,300	18,800	20,500	22,700				
307	1	02384500	Conasauga River near Eton	8,640	14,100	18,300	24,200	29,100	34,400	40,100	48,400	252	.08	.25	33
				8,560	13,800	17,800	22,700	26,800	31,200	36,000	42,900				
308	1	02384600	Pinhook Creek near Eton	367	563	704	894	1,040	1,200	1,360	1,590	4.28	.01	.22	27
				381	597	763	1,070	1,290	1,540	1,800	2,170				
309	1	02385000	Coahulla Creek near Varnell	3,460	5,650	7,270	9,480	11,200	13,100	15,000	17,700	86.7	-.08	.25	16
				3,520	5,720	7,350	9,660	11,500	13,400	15,400	18,300				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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310	1	02385700	Rock Creek near Chatsworth	281	440	576	789	982	1,210	1,480	1,900	3.46	.09	.21	10
				315	518	701	1,080	1,370	1,690	2,050	2,590				
311	1	02385800	Holly Creek near Chatsworth	3,180	5,390	7,290	10,200	12,900	16,000	19,600	25,300	64.0	.43	.26	30
				3,180	5,340	7,140	9,600	11,800	14,200	17,000	21,300				
312	1	02387000	Conasauga River at Tilton	14,100	20,700	25,100	30,600	34,700	37,800	42,800	48,200	687	-.18	.20	54
				14,100	20,800	25,300	31,300	35,800	39,500	44,900	51,000				
313	1	02387100	Polecat Creek near Spring Place	293	465	602	804	975	1,170	1,380	1,700	1.22	.33	.23	14
				282	450	586	779	952	1,150	1,370	1,710				
314	1	02387200	Beamer Creek near Spring Place	350	519	644	817	957	1,110	1,270	1,500	1.29	.23	.20	13
				327	493	620	797	959	1,140	1,350	1,650				
315	1	02387300	Dead Mans Branch near Resaca	80	127	160	204	237	271	305	352	0.17	-.19	.25	24
				78	125	160	211	254	303	355	430				
316	1	02387500	Oostanaula River at Resaca	--	--	--	--	--	--	--	--	1,602	--	--	83
317	1	02387560	Oothkalooga Creek tributary at Adairsville	340	547	723	998	1,250	1,540	1,880	2,420	3.56	.15	.23	10
				367	609	820	1,220	1,530	1,870	2,270	2,850				
318	1	02387570	Oothkalooga Creek at Adairsville	1,120	1,750	2,280	3,090	3,800	4,630	5,590	7,080	21.7	.35	.21	11
				1,200	1,920	2,540	3,660	4,510	5,450	6,500	8,020				
319	1	02387700	Rocky Creek at Curryville	884	1,380	1,780	2,380	2,910	3,500	4,180	5,220	9.41	.13	.22	10
				886	1,400	1,830	2,490	3,040	3,640	4,330	5,340				
320	1	02387800	Bailey Creek near Villanow	533	850	1,140	1,400	1,700	2,110	2,560	3,050	3.82	.28	.34	10
				524	845	1,130	1,450	1,780	2,170	2,610	3,180				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
321	1	02388000	West Armuchee Creek near	3,620	6,260	8,560	11,200	13,500	16,400	20,900	28,100	36.4	.22	.23	21
			Subligna	3,400	5,690	7,550	8,850	10,400	12,200	14,800	18,700				
322	1	02388200	Storey Mill Creek near	765	1,190	1,510	1,960	2,310	2,690	3,100	3,670	6.02	.09	.23	22
			Summerville	752	1,180	1,500	1,960	2,350	2,770	3,240	3,900				
323	1	02388400	Dozier Creek near Shannon	398	675	895	1,210	1,480	1,780	2,100	2,580	3.00	.10	.27	11
				403	685	912	1,250	1,540	1,860	2,220	2,740				
324	1	02388500	Oostanaula River near Rome	--	--	--	--	--	--	--	--	2,115	--	--	79
325	1	02388900	Etowah River near Dahlonega	2,660	4,450	5,920	8,110	10,000	12,200	14,600	18,200	69.7	.28	.26	29
				2720	4,540	6,020	8,270	10,100	12,100	14,400	17,600				
326	1	02389000	Etowah River near Dawsonville	3,340	4,570	5,340	6,260	6,910	7,530	8,840	9,910	107	-.26	.17	40
				3,400	4,740	5,640	7,170	8,190	9,250	10,900	12,600				
327	1	02389300	Shoal Creek near Dawsonville	2,110	3,370	4,260	5,440	6,350	7,280	8,230	9,530	21.7	-.17	.25	18
				2,020	3,190	4,010	4,940	5,800	6,700	7,690	9,080				
328	1	02390000	Amicalola Creek near	4,120	5,560	6,420	7,400	8,080	8,710	9,300	10,000	89.0	-.38	.16	14
			Dawsonville	4,080	5,670	6,750	8,530	9,830	11,200	12,600	14,400				
329	1	02391000	Etowah River near	11,000	15,200	18,200	22,100	25,200	28,300	31,600	36,100	477	.17	.17	11
			Ball Ground	11,100	15,800	19,300	24,900	29,000	33,200	37,700	43,800				
330	1	02392000	Etowah River at Canton	11,700	18,300	23,100	29,800	35,200	40,900	46,900	55,600	613	.07	.23	99
				11,800	18,400	23,200	30,100	35,500	41,200	47,200	55,800				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

[no., number; mi^2, square miles; --, data used in analyses are prior to stream regulation, and are not shown.
Top line for each station entry is the log-Pearson Type III discharge;
bottom line is the weighted-average or best-estimate discharge;
= =, region 3 mainstem stream, use top line discharges]

Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
331	1	02394000	Etowah River above Cartersville	--	--	--	--	--	--	--	--	1,119	--	--	12
332	1	02394400	Pumpkinvine Creek below Dallas	2,350 2,360	3,770 3,780	4,790 4,810	6,150 6,240	7,200 7,360	8,280 8,540	9,390 9,800	10,900 11,500	42.8	-.15	.25	30
333	1	02394950	Hills Creek near Taylorsville	1,590 1,600	2,890 2,860	3,970 3,870	5,560 5,180	6,920 6,310	8,430 7,520	10,100 8,890	12,600 10,900	25.0	.03	.31	18
334	1	02395000	Etowah River near Kingston	--	--	--	--	--	--	--	--	1,634	--	--	16
335	1	02395120	Two Run Creek near Kingston	1,100 1,270	2,160 2,430	3,040 3,390	4,370 4,970	5,510 6,140	6,760 7,380	8,150 8,750	10,200 10,700	33.1	-.10	.35	10
336	1	02396000	Etowah River at Rome	--	--	--	--	--	--	--	--	1,819	--	--	29
337	1	02397000	Coosa River near Rome	--	--	--	--	--	--	--	--	4,040	--	--	55
338	1	02397410	Cedar Creek at Cedartown	3,820 3,740	6,430 6,200	8,510 8,100	11,500 10,300	14,100 12,400	16,900 14,500	20,000 16,900	24,500 20,400	66.9	.12	.26	22
339	1	02397500	Cedar Creek near Cedartown	5,220 5,170	7,820 7,750	9,590 9,520	11,900 11,900	13,600 13,700	15,300 15,600	17,100 17,600	19,500 20,400	115	-.13	.21	34
340	1	02397750	Duck Creek above Lafayette	790 769	1,120 1,130	1,350 1,400	1,680 1,850	1,950 2,220	2,230 2,630	2,530 3,070	2,960 3,720	6.34	.36	.17	12

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

[no., number; mi^2, square miles; --, data used in analyses are prior to stream regulation, and are not shown.
Top line for each station entry is the log-Pearson Type III discharge;
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= =, region 3 mainstem stream, use top line discharges]

Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
341	1	02397830	Harrisburg Creek near Hawkins	1,580	3,070	4,380	6,410	8,220	10,310	12,690	16,360	13.3	.08	.34	11
				1,470	2,680	3,620	4,450	5,380	6,370	7,560	9,280				
342	1	02398000	Chattooga River at Summerville	8,610	13,900	17,800	23,200	27,400	31,700	36,300	42,700	192	-.07	.25	53
				8,480	13,600	17,300	21,700	25,300	29,100	33,200	38,900				
343	1	02411735	McClendon Creek tributary near Dallas	264	421	543	720	867	1,030	1,200	1,460	0.88	.21	.23	14
				249	398	515	670	815	979	1,160	1,440				
344	1	02411800	Little River near Buchanan	1,610	2,600	3,330	4,310	5,080	5,890	6,730	7,900	20.2	-.08	.25	27
				1,600	2,570	3,290	4,240	5,030	5,870	6,780	8,060				
345	1	02411900	Tallapoosa River at Tallapoosa	6,140	9,770	12,600	16,800	20,400	24,400	28,700	35,200	236	.29	.23	31
				6,240	9,930	12,800	17,200	20,700	24,500	28,500	34,400				
346	1	03545000	Hiwassee River at Presley	1,930	3,080	3,920	5,040	5,930	6,840	7,800	9,130	45.5	-.08	.24	49
				1.960	3,140	4,020	5,330	6,340	7,390	8,510	10,100				
347	1	03550500	Nottely River near Blairsville	3,350	5,160	6,480	8,250	9,640	11,100	12,600	14,700	74.8	.00	.22	48
				3,360	5,180	6,520	8,410	9,880	11,400	13,100	15,400				
348	1	03558000	Toccoa River near Dial	4,540	7,080	8,920	11,400	13,400	15,400	17,500	20,500	177	-.03	.23	78
				4,590	7,180	9,070	11,900	14,000	16,200	18,500	21,800				
349	1	03559000	Toccoa River near Blue Ridge	--	--	--	--	--	--	--	--	233	--	--	19
350	1	03560000	Fightingtown Creek at McCaysville	2,430	3,730	4,790	6,400	7,810	9,410	11,200	14,100	70.9	.49	.21	31
				2,500	3,880	5,020	6,990	8,550	10,300	12,200	15,100				

Table 1.--*Flood-frequency discharge data for rural streams in Georgia*--Continued

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Map no.	Region no.	Station number	Station name	Flood discharge data for indicated recurrence interval in years, (cubic feet per second) 2	5	10	25	50	100	200	500	Drainage area (mi^2)	Generalized skew (log units)	Standard deviation (log units)	Years of record
351	1	03566660	Sugar Creek near Ringgold	575	949	1,260	1,750	2,170	2,670	3,240	4,120	4.44	.44	.24	11
				569	940	1,240	1,690	2,080	2,510	3,010	3,750				
352	1	03566685	Little Chickamauga Creek near Ringgold	1,910	3,490	4,820	6,860	8,640	10,700	13,000	16,500	35.5	.14	.30	12
				1,950	3,470	4,690	6,290	7,660	9,140	10,800	13,200				
353	1	03566687	Little Chickamauga Creek tributary Ringgold	365	663	931	1,370	1,780	2,270	2,860	3,810	3.36	.44	.29	11
				383	689	958	1,380	1,740	2,140	2,600	3,300				
354	1	03566700	South Chickamauga Creek at at Ringgold	9,090	13,600	17,000	21,700	25,500	29,500	33,900	40,100	169	.21	.20	18
				8,550	12,600	15,600	18,600	21,600	24,700	28,300	33,200				
355	1	03567200	West Chickamauga Creek near Kensington	4,100	6,580	8,550	11,400	13,900	16,600	19,700	24,200	73.0	.28	.24	27
				4,030	6,410	8,260	10,600	12,700	14,900	17,400	21,100				
356	1	03568500	Chattanooga Creek near Flintstone	2,890	4,330	5,380	6,810	7,950	9,150	10,400	12,200	50.6	.13	.20	24
				2,870	4,320	5,400	6,920	8,160	9,480	10,900	12,900				
357	1	03568933	Lookout Creek near New England	6,750	11,800	16,000	22,300	27,800	34,000	41,000	51,500	149	.18	.28	11
				6,450	10,800	14100	17,300	20,600	23,900	27,800	33,400				