

Magnitude and Frequency of Floods in the United States

Part 3-B. CUMBERLAND AND TENNESSEE RIVER BASINS

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ILLUSTRATIONS

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MAGNITUDE AND FREQUENCY OF FLOODS IN THE UNITED STATES

PART 3-B. CUMBERLAND AND TENNESSEE RIVER BASINS

By **PAUL R. SPEER** and **CHARLES R. GAMBLE**

ABSTRACT

This report presents a means of determining the probable magnitude and frequency of floods of any recurrence interval from 1.1 to 50 years, at most points on streams in the Cumberland and Tennessee River basins.

Curves were defined that show the relation between the drainage area and the mean annual flood in 5 hydrologic areas, and a composite frequency curve defines the relation of a flood of any recurrence interval from 1.1 to 50 years to the mean annual flood.

These two relationships are based upon gaging-station records having 10 or more years of record not materially affected by storage or diversion, and the results obtainable from them will represent the magnitude and frequency of natural floods within the range and recurrence intervals defined by the base data.

The report also contains a compilation of flood records at all sites in the area at which 5 or more consecutive years of record have been collected. As far as was possible at each location for which discharge has been determined, the tabulations include all floods above a selected base. Where only gage heights have been obtained or where the data did not warrant computation of peak discharges above a selected base, only annual peaks are shown.

The maximum known flood discharges for the streamflow stations and miscellaneous points except mainstem stations, together with areal floods of 10- and 50-year recurrence intervals, are plotted against the size of drainage basin for each hydrologic area to provide a convenient means of judging the frequency of the maximum known floods recorded for these points.

INTRODUCTION

PURPOSE AND SCOPE

This volume is one of a series of reports presenting (1) the results of the flood-frequency analysis that can be used to estimate the magnitude and frequency of floods for most sites on streams within the area, and (2) flood data that have been collected at gaging stations within the area.

The area covered by this report (fig. 1) includes the Cumberland and Tennessee River basins and is designated Part 3-B in the 1951-60

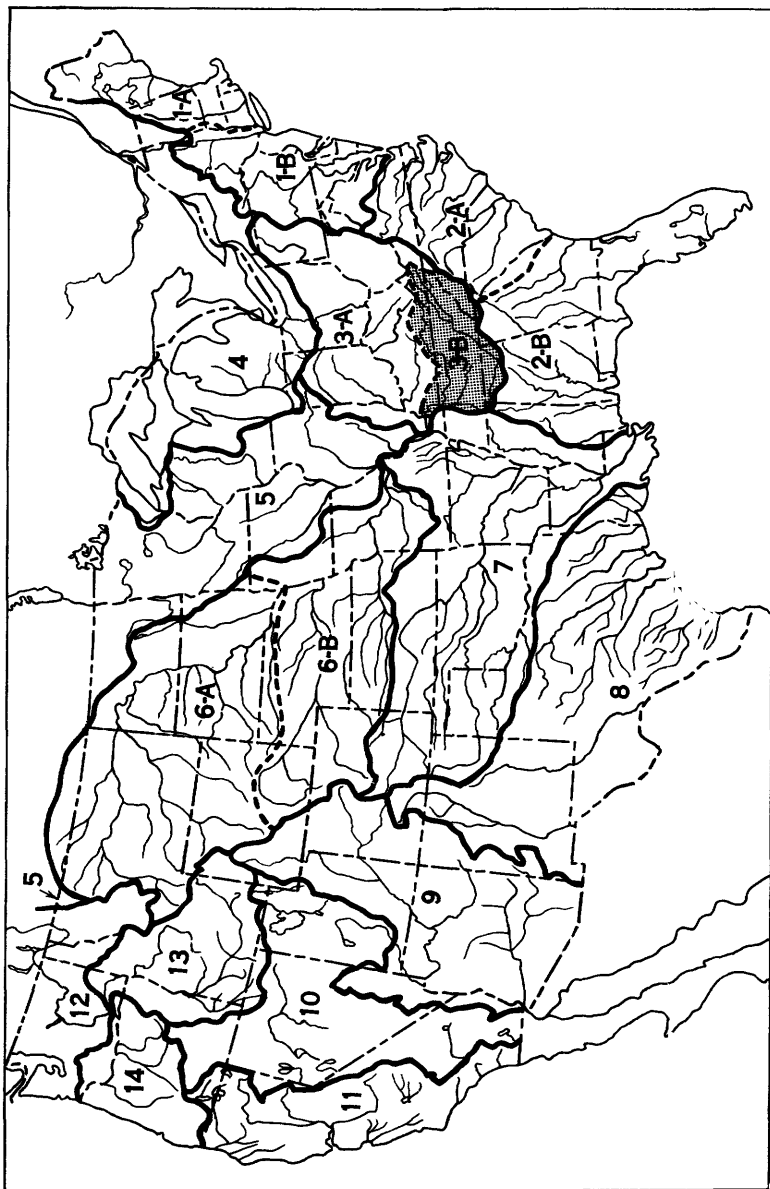


FIGURE 1.—Map of continuous United States showing area covered by this report (shaded).

series of annual reports entitled "Surface Water Supply of the United States," published by the U.S. Geological Survey.

The results present a method for determining the most probable flood magnitude for any recurrence interval between 1.1 and 50 years for any stream, gaged or ungaged, within the scope of the data and are based on a comprehensive study of all flood data available in the area. It should be borne in mind that the recurrence interval of a flood of given magnitude does not imply any regularity of recurrence. For example, two 50-year floods may occur as consecutive floods, or at intervals much longer than 50 years. The equations and curves presented apply to all natural unregulated streams within the designated areas and within the limits of probable accuracy as discussed later in the report (p. 22).

The second objective of the report is to compute and publish in a single volume the Part 3-B flood records at streamflow stations and selected stage stations where 5 or more consecutive years of record have been collected. Most of these records have been published previously in water-supply papers of the Geological Survey, reports of the Tennessee Valley Authority and the Army Corps of Engineers or publications of the U.S. Weather Bureau.

This report was prepared under the direction of Tate Dalrymple, chief, Floods Section, Washington, D.C. Technical guidance on analytical procedure and format were provided by A. Rice Green, hydraulic engineer of the Floods Section, within the general procedure (Dalrymple, 1960) followed by the Geological Survey in flood-frequency studies.

The flood records were compiled and prepared for publication by personnel in the district offices under supervision of district engineers, Surface Water Branch, as follows:

A. N. Cameron	Atlanta, Ga.
L. E. Carroon	University, Ala.
J. S. Cragwall	Chattanooga, Tenn.
J. W. Gambrell	Charlottesville, Va.
E. B. Rice	Raleigh, N.C.
F. F. Schrader	Louisville, Ky.

ACKNOWLEDGMENTS

Unless otherwise noted in the individual station descriptions, the station data were collected by the U.S. Geological Survey with the assistance of many other Federal and State agencies, municipalities, corporations, and private individuals, credit for which is given in the series of water-supply papers entitled "Surface-water supply of the United States."

APPLICATION OF THE METHOD

The method of computing the discharge of a flood of a selected frequency at a point on a stream is based upon two relations: (1) mean annual flood expressed as a function of size of drainage area, and (2) the ratio of flood discharges to the mean annual flood, related to the recurrence interval, in years.

MAGNITUDE OF FLOOD OF SELECTED FREQUENCY

In order to define the first of these relations, Part 3-B was divided into hydrologic areas as outlined on plate 1. The individual areas were determined by trial grouping of records with similar flood-frequency characteristics as indicated by the relation of the mean annual flood to the drainage area for stations in each of the areas. Relation curves for the five area groupings are shown in figure 2.

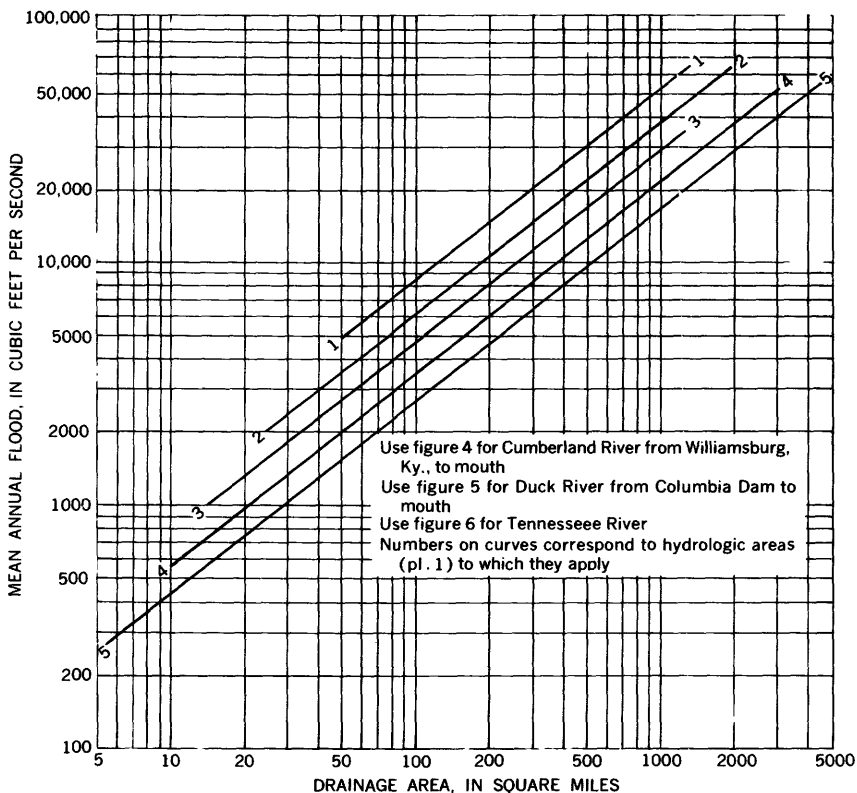


FIGURE 2.—Variation of mean annual flood with drainage area in hydrologic areas 1-5.

These hydrologic area curves do not apply to streams subject to regulation and diversions or to the mainstems of streams for which individual relations have been defined (p. 6).

The second basic relation used to compute the discharge of a flood of a selected frequency at a point on a stream is the regional flood-frequency curve shown in figure 3. The ratio of a flood of any

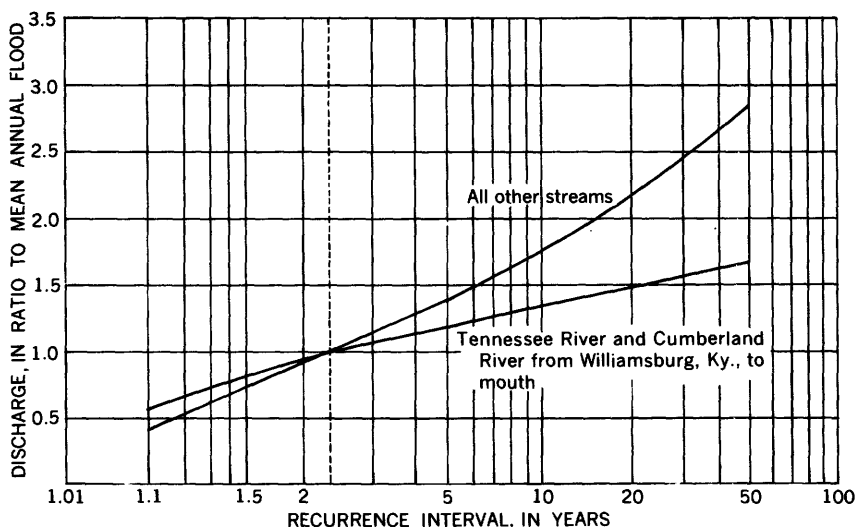


FIGURE 3.—Frequency of annual floods.

selected recurrence interval to the mean annual flood can be determined from this curve, and the product of that ratio and the discharge of the mean annual flood for the point on the stream will give the expected discharge for the selected recurrence interval.

To compute the discharge of a flood of a selected frequency at a point on a stream in Part 3-B:

1. Determine, first, if the point at which the information is to be computed is on one of the mainstems listed on page 6, and, if so, follow the procedure outlined for mainstem streams (p. 7-8).
2. If the point is not on one of the mainstems, determine the drainage area above the point for which the flood is to be computed.
3. From plate 1 obtain the number of the hydrologic area in which the point is located.
4. From figure 2 determine the discharge of the mean annual flood for the site from the appropriate hydrologic area curve.
5. From figure 3 determine the ratio to the mean annual flood for the flood of the selected recurrence interval.

6. Multiply the discharge of the mean annual flood (step 4) by the ratio (step 5) to obtain the discharge of the flood of the selected frequency.

Owing to sparsity of the basic data in some areas, extrapolation of the curves in figures 2 and 3 beyond the limits shown is not recommended.

ILLUSTRATIVE PROBLEM

It is proposed to build a bridge across the Little Sequatchie River at Sequatchie, Tenn., lat, $35^{\circ}07'47''$ N., long $85^{\circ}35'10''$ E., that will pass a flood of 25-year frequency. How much discharge should the opening be designed to pass?

Given: Recurrence interval = 25 years.

1. From examination of mainstem listings on this page, Little Sequatchie River is not a mainstem for which an exception is listed.
2. From the best maps available, the drainage area is measured and found to be 116 square miles.
3. From plate 1, the point is in hydrologic area 3.
4. From figure 2, curve 3, the discharge of the mean annual flood for 116 square miles is 5,350 cfs (cubic feet per second).
5. From figure 3, the ratio of a flood of 25-year frequency to the mean annual flood is 2.30 ("all other streams" curve).
6. Multiplying 5,350 cfs by 2.30, the flood of 25-year recurrence interval is 12,300 cfs, the discharge for which the opening should be designed to pass.

MAINSTEM STREAMS

Mainstems of streams may receive their flood runoff from more than one hydrologic area. Small tributaries usually crest earlier than longer tributaries and the mainstem. The mainstem crest is the maximum summation of the mainstem flow plus the flow of tributaries all attenuated by channel storage. Therefore, it is necessary to define individual relations for mainstems. These relations may be based upon drainage area or miles along the stream. In this report the mean annual flood is related to miles above the mouth for the following mainstems: Cumberland River from Williamsburg, Ky., to mouth (fig. 4), Duck River from Columbia Dam to mouth (fig. 5), and Tennessee River throughout (fig. 6).

These curves are based upon natural flow prior to regulation of these streams.

To determine the discharge of a flood of a selected frequency for a point on a mainstem listed in the exceptions on this page:

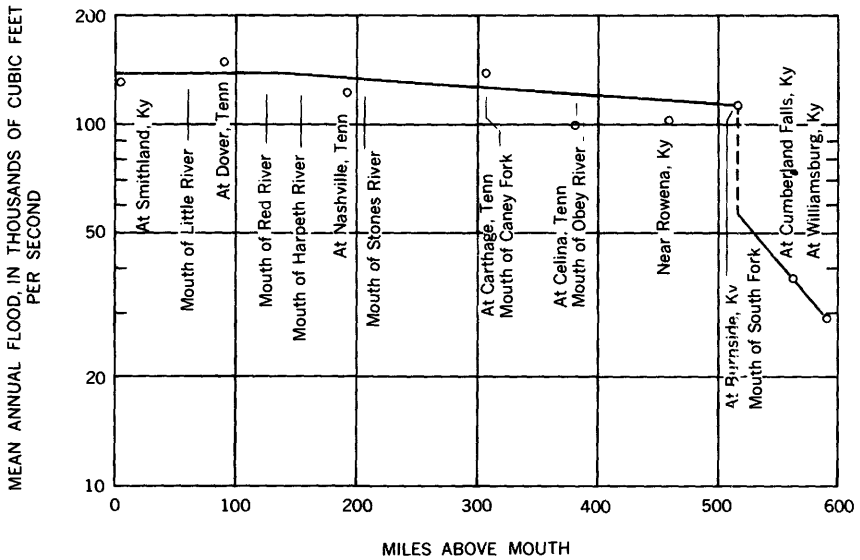


FIGURE 4.—Cumberland River, variation of mean annual flood with distance above mouth.

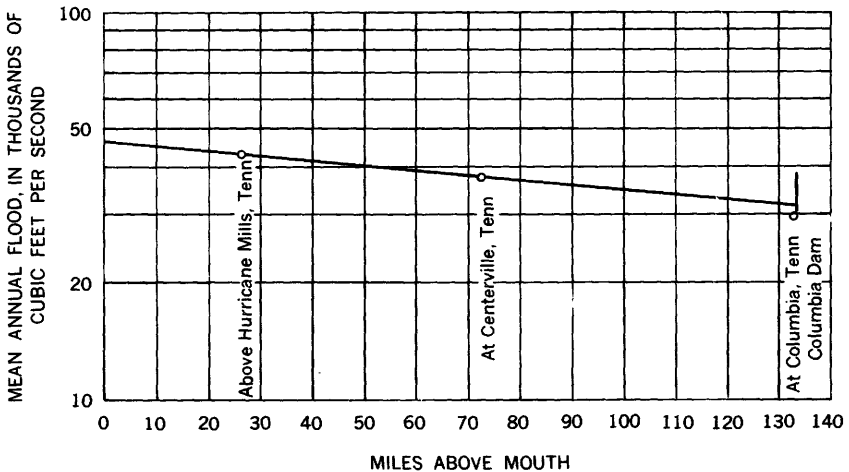


FIGURE 5.—Duck River, variation of mean annual flood with distance above mouth.

1. Determine the river mileage of the point above the mouth for the appropriate mainstem shown in figures 4–6.
2. From the appropriate one of figures 4–6, determine the discharge of the mean annual flood corresponding to the river mile.
3. From figure 3, determine the ratio of the flood of the selected recurrence interval to the mean annual flood.

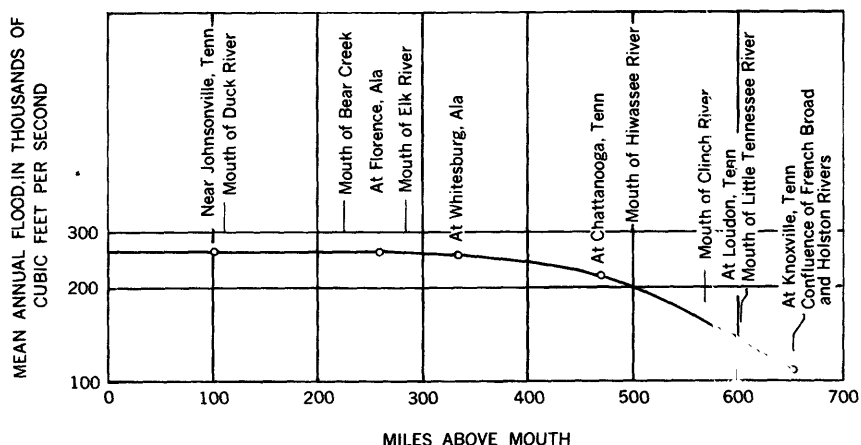


FIGURE 6.—Tennessee River, variation of mean annual flood with distance above mouth.

4. Multiply the discharge of the mean annual flood (step 2) by the ratio (step 3) to obtain the discharge of the flood of the selected frequency.

In figure 3 a separate frequency curve is applicable to the Cumberland River from Williamsburg, Ky., to the mouth and to the Tennessee River. The "all other streams" curve is applicable for the Duck River below Columbia Dam.

SITE FLOOD-FREQUENCY CURVE

A flood-frequency curve for a site, gaged or ungaged, covering any range of recurrence intervals between 1.1 and 50 years may be drawn by repeating steps 5 and 6 (steps 3 and 4 for mainstems) for various recurrence intervals. The resulting frequency curve may not define past occurrences at the site exactly, but it does furnish a more reliable guide to what might be expected to occur in the future than a frequency curve based only on records for that one site.

If the magnitude of a flood at the site on the stream is known, the approximate recurrence interval of the flood may be estimated from the site flood-frequency curve constructed as explained above.

MAXIMUM KNOWN FLOODS

A summary of maximum stages and discharges and other pertinent data for flood records in Part 3-B is contained in table 1. All available flood records for each station listed in the table are compiled later in this report. The stations are listed in downstream order corresponding to that used in the 1951-60 series of annual reports on surface water supply of the United States.

The station number is the permanent nationwide identification number assigned to the station and is used throughout this report. It also is the number shown on the map, plate 2, showing the approximate location of the station. In assigning the number no distinction is made between crest-stage partial-record stations, stage stations, and continuous-record stations. The period of known floods shows the period during which the peak is known to be the maximum and does not necessarily indicate that all annual floods or floods above a selected base are known for the period. The areal mean annual flood is computed from the appropriate curve in figure 2 corresponding to the number of the hydrologic area (pl. 1) in which the station is located. The letters MS in the hydrologic area column indicate that the station is on a mainstem. Maximum discharges are listed in cubic feet per second, cubic feet per second per square mile, and as a ratio to the areal mean annual flood. The maximum known stage is listed as a separate entry if a reasonably accurate discharge figure could not be computed for this stage.

Peak discharges for maximum known floods have been plotted against drainage area. Figures 7-11 show these plots (solid circles) in each hydrologic area with lines representing discharges for areal floods of 10- and 50-year recurrence intervals. The plots provide a convenient means of estimating the frequencies of maximum known

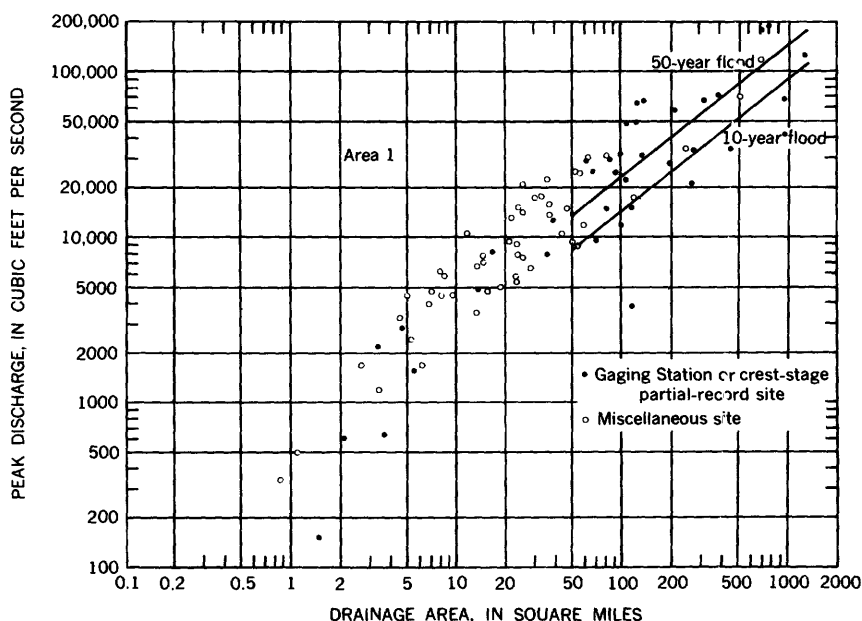


FIGURE 7.—Relation of maximum discharge to 10- and 50-year floods in area 1.

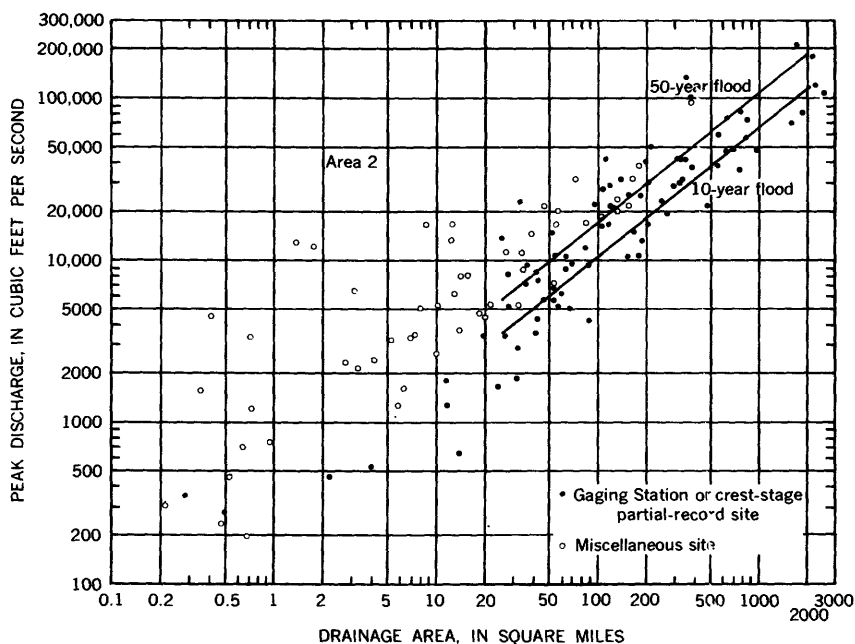


FIGURE 8.—Relation of maximum discharge to 10- and 50-year floods in area 2.

floods and the probable peak discharges that may be expected to occur anywhere within each given hydrologic area.

MISCELLANEOUS FLOOD DATA

In addition to records at gaging stations the discharge of major floods has been determined at other sites. Where other data are not available, information on isolated flood events may be useful in evaluating the flood potential of an ungaged area or in estimating the approximate frequency of a known major flood. A list of peak-flow determinations at miscellaneous sites and unusual floods at short-term gaging stations is shown in table 2. Only those floods having a recurrence interval of 10 years or higher as determined from figure 3 are listed. Most of these observations were made because of the occurrence of some outstanding flood event. The event may have been extremely local in scope or may have extended over a large area, encompassing many streams. As an aid in use of the data, the hydrologic area in which the miscellaneous site falls is shown in the last column of the table. These flood discharges have been plotted against the drainage areas as open circles in figures 7-11 to aid in judging their relative frequency of occurrence.

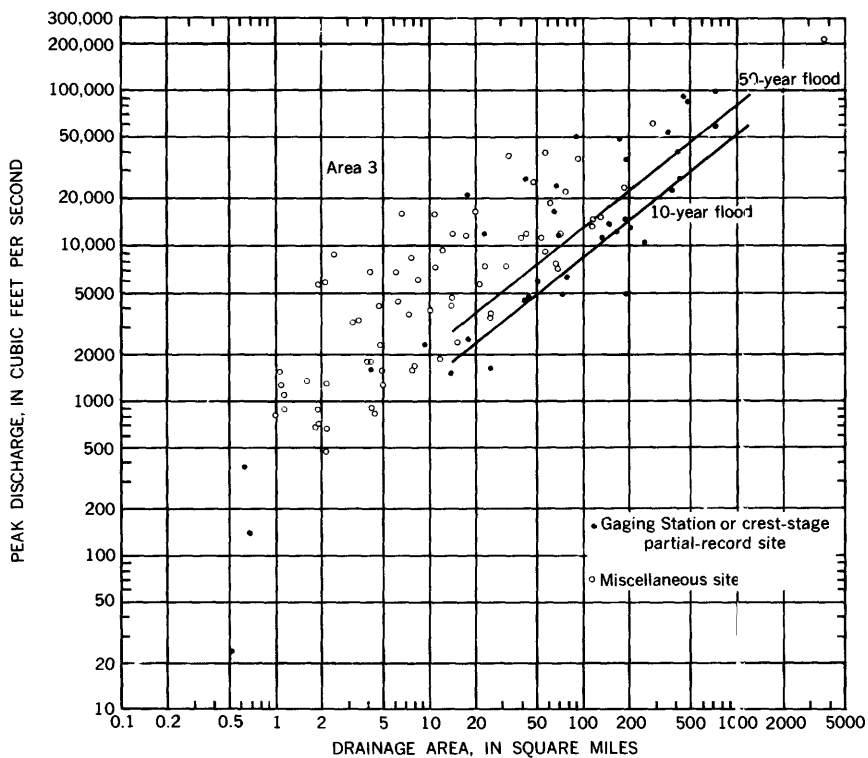


FIGURE 9.—Relation of maximum discharge to 10- and 50-year floods in area 3.

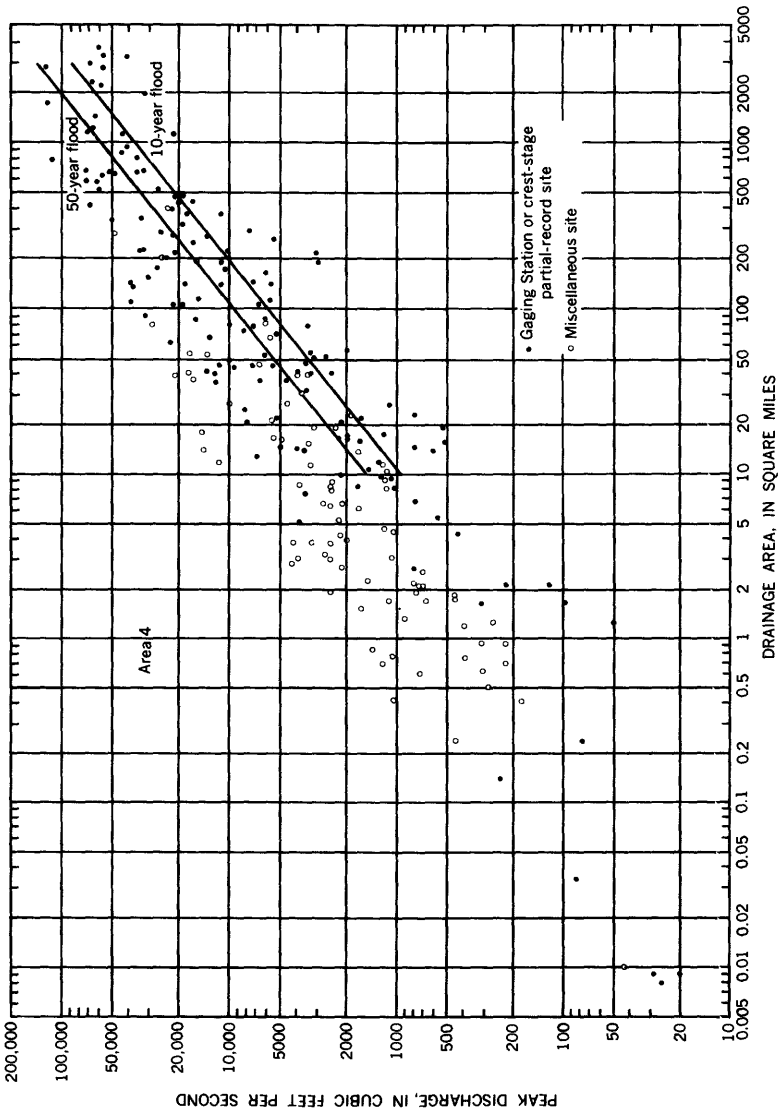


Figure 10.—Relation of maximum discharge to 10- and 50-year floods in area 4.

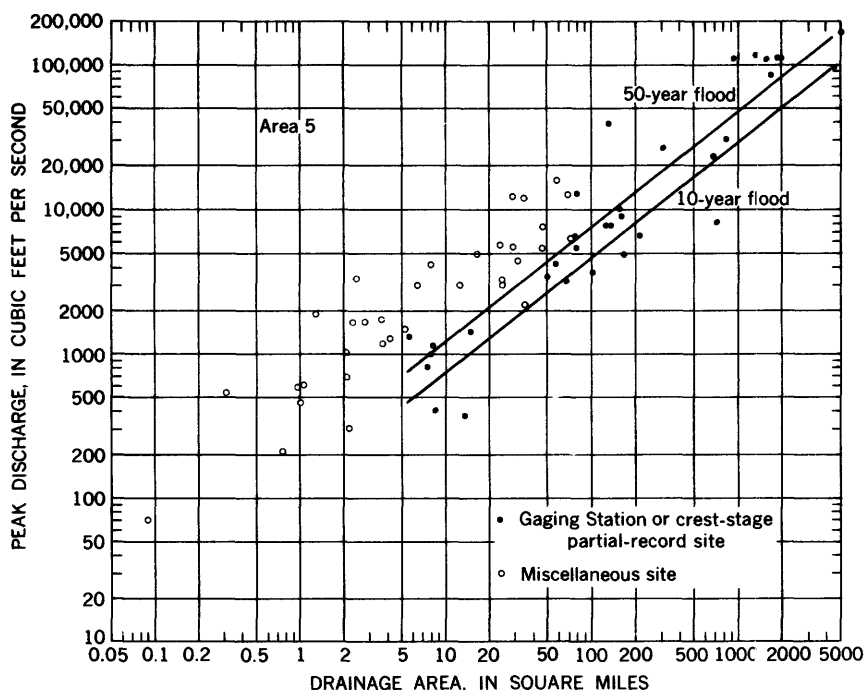


FIGURE 11.—Relation of maximum discharge to 10- and 50-year floods in area 5.

FLOOD-FREQUENCY ANALYSIS

Many factors can affect the magnitude and frequency of floods. They can be divided into two classes; physiographic and meteorologic. The physiographic factors include size of drainage area, channel storage, slope of streams, topography, stream density and pattern, orientation of the stream with the storm pattern, underlying geology, soil cover, and land use. The meteorologic factors include climate, storm direction and pattern, storm volumes, precipitation intensities, and snow accumulation. Some of these factors are simple and lend themselves to rational interpretation, but others are interdependent, nebulous, and difficult to evaluate. The following description of the area summarizes some of the less tangible of these factors that may aid engineering interpretation in application of the method.

DESCRIPTION OF THE AREA

The area covered by this report lies in five well-defined physiographic provinces (Fenneman, 1938): (1) A belt along the east side up to 70 miles in width and including the Unaka district lies in the rugged, mountainous Blue Ridge province; (2) northwest of the

Blue Ridge is the Valley and Ridge province, which reaches an extreme width of 60 miles in upper east Tennessee and southwest Virginia and extends to the southeast-facing edge of the Appalachian Plateaus on the west side of the Tennessee River above Chattanooga, Tenn., and the Clinch and Powell Rivers; (3) the Appalachian Plateaus province in this area includes parts of the Kanawha, Cumberland Plateau, and Cumberland Mountain areas; (4) the Interior Low Plateaus province which includes the Nashville Basin and a major part of the Highland Rim sections, is bounded on the east by the west-facing escarpment of the Cumberland Plateau which turns westward and becomes less distinct after crossing the Tennessee River in Alabama, and on the west by the northward-flowing reach of the Tennessee River; (5) the western tributaries of the northward-flowing Tennessee River lie in the Mississippi embayment of the Coastal Plain province.

The stream pattern of the headwaters and tributaries of the Watauga, Nolichucky, French Broad, Little Tennessee, and Hiwassee Rivers in the Blue Ridge is somewhat irregular but generally oriented toward the northwest. West of the Unaka district the pattern is rotated toward the southwest and follows the generally longitudinal drainage of the Valley and Ridge province. The Holston and Clinch River basins, the lower tributaries of the Little Tennessee and Hiwassee Rivers, and the Tennessee mainstem above Chattanooga follow this general pattern while the mainstems of the Little Tennessee and Hiwassee Rivers continue northwestward. In the Appalachian Plateaus the drainage of the upper Cumberland River is westward; that of the Emory River, tributary to the Tennessee, is toward the southeast; and that of the Sequatchie River and the Tennessee mainstem as far as Guntersville, Ala., is toward the southwest. Drainage in the Interior Low Plateaus province in Alabama is oriented generally in a north-south direction to the Tennessee mainstem, which flows west-northwest from Guntersville to about the Alabama-Mississippi State line, then turns due north, intercepts the westward drainage in Tennessee, and joins the Ohio River. The Cumberland River drainage in the Interior Low Plateaus in Tennessee and Kentucky is generally westward. The mainstem of the Cumberland turns north at Dover, Tenn., parallels the Tennessee mainstem, and enters the Ohio River 13 miles upstream from the mouth of the Tennessee River. In the narrow belt of Mississippi embayment, the drainage is eastward toward the Tennessee River.

Topography in the eastern part of Cumberland River basin is rugged. In the headwaters, altitudes between 2,500 and 3,000 feet are common with hills and divides exceeding 3,000 feet. The side

slopes are moderately steep. The streams fall rapidly in the Appalachians and flatten to more gentle slope in the lower relief of the Interior Low Plateau.

Topography in the Tennessee basin has the greatest range of any area of comparable size east of the Mississippi River. Headwaters of the Tennessee River basin rise in the most rugged area of eastern United States where summit altitudes reach over 6,000 feet. The streams fall very rapidly through the deep gorges of the Unakas and off the sides of the ridges in the Valley and Ridge province. In their westward progression, the slopes of the streams become more gentle as the topography flattens and reach their lowest slopes in the westernmost end of the basin. An outstanding feature of the Tennessee River is its 1,000-foot-deep gorge through the Cumberland Plateau, which imposes relatively high slopes in the tributary streams draining areas in the plateau in order to reach the Tennessee River level. A more detailed description of the area is given by Fenneman (1938).

The climate of the area is warm and humid. The average annual precipitation ranges from about 40 inches in Greene and Washington Counties in Tennessee to over 80 inches in the highest altitudes of the Unaka district. The principal source of precipitation in the area is the warm moist air masses that move northeastward from the Gulf of Mexico region. However, the atmospheric disturbances of high intensity that range the Atlantic coast sometimes spill over the Blue Ridge barrier into the Tennessee and Cumberland River basins.

CHARACTERISTICS OF FLOOD RUNOFF

Floods may occur in the area during any month, but they may be expected to occur most rarely in late summer and early fall. The streams commonly have one major flood period, which occurs during December to April and is caused by the winter and early spring precipitation.

Streamflow is generally well sustained throughout the year, and the average annual runoff is high. Some of the tributaries to the Tennessee River near the North Carolina-Tennessee line have the highest average annual runoff of streams in the eastern United States.

The pattern of the hydrologic areas (pl. 1), an index of the intensity of flood runoff, is irregular. The unit runoff is highest in the area numbered 1, and the intensities decrease in succeeding numbered areas to the lowest, which is numbered 5.

METHOD OF ANALYSIS

The statistical and hydrologic bases for methods used in this analysis are published in Water-Supply Paper 1543-A (Dalrymple, 1960). The method consists of:

1. Tabulating flood data for all gaging stations in the area having a record of 10 or more years and not materially affected by regulation or diversion.
2. Selecting the base periods to be used in the study and adjusting all flood records to the base periods.
3. Determining the order of magnitude of each flood beginning with the greatest flood as number 1.
4. Computing the recurrence interval in years for each annual flood using the formula, $T = \frac{n+1}{m}$, where T is recurrence interval in years, n is number of years of record, and m is magnitude of flood, the highest being 1.
5. Preparing flood-frequency curve or curves for each station.
6. Testing the flood data for homogeneity.
7. Computing the median flood ratios.
8. Plotting the median flood ratios and drawing a regional frequency curve.
9. Plotting the mean annual flood versus the drainage area and drawing a curve or curves to show the relations applicable for the hydrologic areas.
10. Determining the frequency relation for the main-stems of the large streams that traverse or receive their flow from more than one hydrologic area.

The relations that are defined by this method for a homogenous region and for the hydrologic areas within the region are assumed, within the limits of the data, to be applicable to all points on streams, gaged or ungaged, within the region.

FLOOD FREQUENCY AT A GAGING STATION

Flood data for a gaging station may be analyzed in two ways: (1) as an annual flood series and (2) as a partial-duration series, or floods above a base.

An annual flood is defined as the highest momentary peak discharge in the water year (October 1 to September 30). In an annual flood series, only the greatest flood in each water year is used. This type is a complete duration series and is susceptible to mathematical analysis by several methods of which Gumbel's (1945) method is an example. The annual flood series has the disadvantage that when several high

floods occur in the same water year, some floods higher than many annual floods are disregarded.

The partial-duration series overcomes the objection of not considering all high floods by listing all floods above a selected base discharge. The base selected is such that an average of 3 or 4 floods per year will exceed the base. Some water years may have no floods above the base. Thus the partial-duration series is discontinuous and is not susceptible to rigorous mathematical analysis. Another objection to the use of the partial-duration series is that the floods listed may not be fully independent events. Because one flood will at times set the stage for another, arbitrary rules must be formulated for selecting the peaks to be included. Furthermore, the resulting damage from several floods occurring within a relatively short period of time may not be much more than that from only a single flood.

There is an important distinction in meaning between the recurrence intervals of annual floods and the recurrence intervals of partial-duration series floods. In the annual flood series, the recurrence interval is the average interval of time within which a given flood will be equaled or exceeded once as an annual maximum. In the partial-duration series, the recurrence interval is the average interval between floods of a given size regardless of their relationship to the year or any other period of time. This distinction remains, even though for the large floods the recurrence intervals are almost the same on both scales. The two methods give virtually identical results for intervals greater than about 10 years. As most designs are for intervals greater than this, there is little practical difference in choice between types. The annual flood method has been used in the analysis for this report, but in the compilation of flood records, all floods above the base are listed if the data warrant.

From statistical principles, there is a definite relation between the values in the two series as shown in the following table by Langbein (1949):

<i>Recurrence intervals in years</i>	
<i>Annual flood series</i>	<i>Partial-duration series</i>
1.16-----	0.5
1.58-----	1.0
2.00-----	1.45
2.54-----	2.00
5.52-----	5.0
10.5-----	10.0
20.5-----	20.0
50.5-----	50.0
100.5-----	100.0

When it is desirable to know how often, on the average, a stream will exceed a certain discharge (as when designing a low fill across a valley on a secondary road so that the higher floods will overflow the road), the frequency curve based on the partial-duration series should be used. The simplest way to do this is to convert the curve based on the annual-flood series by use of the relation expressed in the above table and results will be entirely adequate.

RECORDS USED

The annual-flood data used in the analysis for this report were obtained from records of gage height and discharge that have been collected by the Geological Survey and other agencies.

Peak discharge records 10 or more years in length for 216 gaging stations in Part 3-B, not materially affected by regulation and diversion, were used in the analysis. In addition to these, 22 records for stations in Part 2-B, 23 records in Part 3-A, 8 records in Part 7 and the previously delineated areas in Part 2-A were used in order to obtain adequate coverage within Part 3-B and along its boundary. Records at 36 other stations in Part 3-B having 10 or more years of record were not used because the ratings were not defined, they lacked independence from other records of comparable length, they are on streams materially affected by regulation or diversion, or because the period of record was outside the base periods. Records on lakes, reservoirs, springs, and canals were not used. Where two or more stations have been operated on a stream and the drainage areas were within 25 percent of the smaller, it was considered that as two records they were not independent, and the records were combined by adjusting the record of one to that of the other on basis of drainage-area ratio. Of the 216 gaging-station records used, 39 were combined with the others to produce point data at 177 locations in Part 3-B. The analysis is based on annual floods at these 177 locations.

The flood records used in this analysis range from 10 years to 86 years in length. Many were relatively short. In order to reduce the task of estimating a large number of flood discharges for periods of no record, three base periods were selected, 1896-1959, 1921-59, and 1940-59. Where a station record was incomplete during a base period, computation figures for the missing annual events were estimated and order numbers computed for the known discharges. Depending upon the length of record at each station, recurrence intervals were computed and flood-frequency graphs plotted for one, two, or three base periods.

FITTING FREQUENCY GRAPHS

The frequency graphs were prepared on a special form (Powell, 1943) for analysis of flood frequencies by the theory of extreme values. Figure 12 is a flood-frequency plot for the record of French Broad River at Asheville, N.C. A smooth curve was fitted to the plotted points by eye, giving less weight to the extreme values because the true recurrence interval of these extreme points may not be known.

REGIONAL FLOOD FREQUENCY

Two basic relations are used in the regional flood-frequency analysis. One relates the mean annual flood to significant basin characteristics, and the other relates the discharge, in ratio to the mean annual flood, to the recurrence interval.

MEAN ANNUAL FLOOD

The basis for definition of the basic relations for determining the magnitude and frequency of floods in Part 3-B is the mean annual flood. The mean annual flood on a station frequency curve is the graphical mean determined by the intersection of the visually best-fitting frequency line with the line corresponding to the 2.33-year recurrence interval. This graphical mean is reasonably stable and is used as an indication of the flood potentiality of streams with similar physical characteristics. It gives greater weight to the floods of average magnitude and is not seriously influenced by the floods of extreme magnitude. In figure 12 the mean annual flood for the French Broad River at Asheville, N.C., is 16,000 cfs. The mean annual flood for each of the 177 point data used in the analysis for Part 3-B was computed and adjusted to the longest base period, 1896-1959, on basis of the average ratio determined from the mean annual floods computed for all three periods for the gaging stations where the records for all three base periods are available. The ratios found applicable to adjust the mean annual flood to the longest period in this study is 1.03 for the period 1940-59 and 1.08 for the period 1927-59.

In a homogeneous area, the most dominant factor readily obtainable to which the mean annual flood may be related is the drainage area. This factor has been used to define the relations in figure 2 and to delineate Part 3-B into the hydrologic areas shown on plate 1. Changes in flood-flow characteristics as expressed in the mean annual flood with respect to size of drainage area are believed to be gradual rather than sharply defined as might be inferred from the delineations of the hydrologic areas. To simplify the application of the method, the areas have been delineated as closely as the base data permitted.

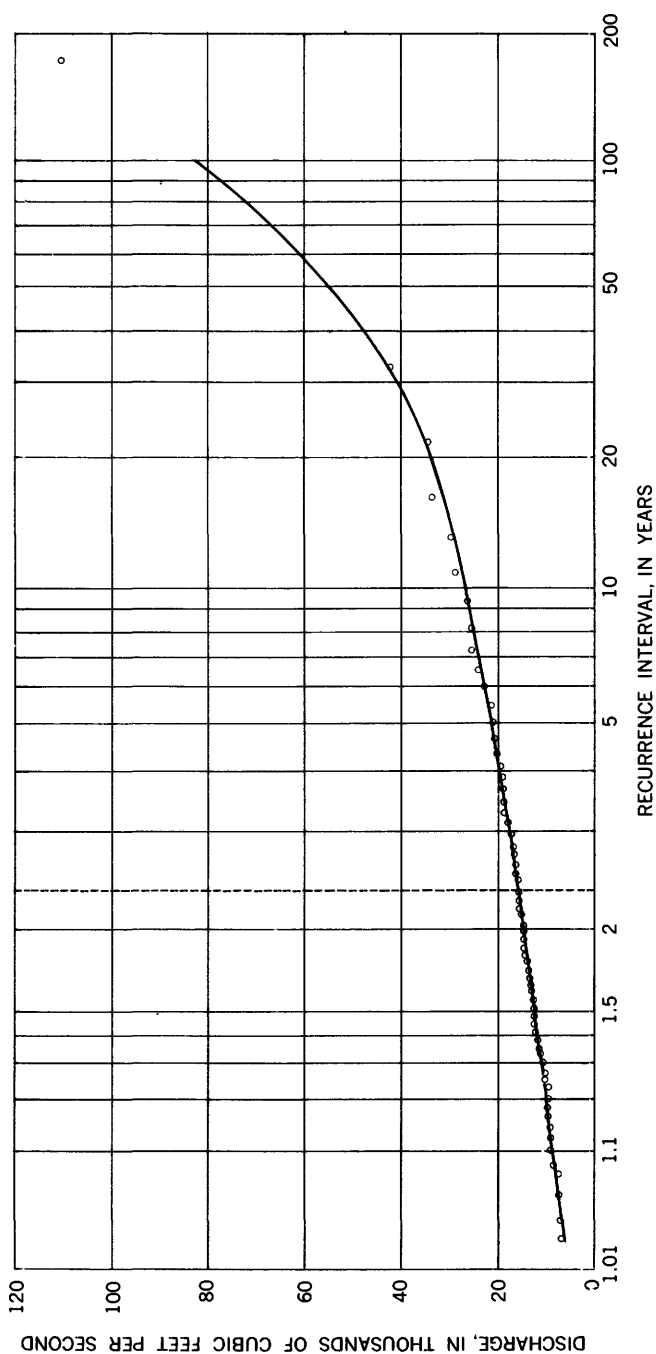


FIGURE 12.—Flood-frequency curve for French Broad River at Asheville, N.C.

FLOOD EQUATIONS

The formula used in this report to relate flood discharge to basin characteristics is:

$$Q = f(a, b, c, d, \dots), \quad (1)$$

in which the discharge, Q , is expressed as a function of basin characteristics, a, b, c, d , etc. Basin area is the most significant characteristic known for computation of flood discharge. Other physiographic and meteorologic factors are much less susceptible to rigorous analysis and are interdependent. Furthermore, any one or more of the other factors may vary quite widely within a drainage basin thus rendering an analysis of the factor less certain. Therefore, the relations of the discharge in this report are expressed principally as a function of the drainage area, and since the basic element of discharge used is the mean annual flood, $Q_{2.33}$, equation 1 can then be written,

$$Q_{2.33} = CA^x, \quad (2)$$

in which A is the drainage area in square miles, and C is an empirical coefficient expressing the effect of other factors.

The hydrologic area curves in figure 2 are expressions of this equation. To determine the equation for any of the curves, C is the figure for $Q_{2.33}$ at which the curve intercepts 1 on the drainage area scale, and the exponent x , is the slope of the curve. Thus, for curve 1 the equation becomes

$$Q_{2.33} = 218 (A)^{0.793},$$

or

$$\log Q_{2.33} = \log 218 + 0.793 (\log A).$$

Similarly, equations for curves 2-5 are as follows:

$$\text{Curve 2: } Q_{2.33} = 158 (A)^{0.793}$$

$$\text{Curve 3: } Q_{2.33} = 123 (A)^{0.793}$$

$$\text{Curve 4: } Q_{2.33} = 90 (A)^{0.793}$$

$$\text{Curve 5: } Q_{2.33} = 70 (A)^{0.793}.$$

COMPOSITE FREQUENCY CURVE

The flood-frequency graph for an individual station represents random samples of the relation of the past observed flood discharges for one particular time period to the frequency at which they occurred. The slope of this point relationship may differ from one station to another, and the extension of these curves to ascertain the discharges of floods at higher recurrence intervals may result in unreliable esti-

mates. If two or more point relationships are available, there is no basis for determining which point relationship may be the more nearly correct one to use on a stream or within an area. Furthermore, the need for flood-frequency data at ungaged sites cannot be met with point data.

To overcome these disadvantages, dimensionless flood-frequency relations were defined for each of the 177 locations used in the analysis for Part 3-B by computing the ratios of the discharge of floods to the mean annual flood at recurrence intervals of 1.1, 1.5, 5, 10, 20, and 50 years; and then the medians of these ratios were computed. These medians were used to define the composite, dimensionless, regional flood-frequency curves shown in figure 3.

HOMOGENEITY TEST

The station frequency curves are tested to ascertain if the whole area under study may be treated as a homogeneous region as represented by the composite frequency curve. This test involves determining whether differences in slopes of individual frequency curves between the 2.33- and 10-year recurrence intervals are greater than might occur by chance in random sampling. The test is based on 95 percent confidence limits, which statistically is about equal to two standard errors. Of the 177 point data used in the analysis for Part 3-B, 18 were located on the Cumberland River at and below Williamsburg, Ky., and on the Tennessee River. Some of these 18 point data showed lack of homogeneity with the others. Of the remaining 159 point data, more than 94 percent plotted within the limits of the homogeneity test, indicating that, excluding the Cumberland River at and below Williamsburg, Ky., and the Tennessee River, Part 3-B could be considered as one homogeneous region for all practical purposes. Therefore, one regional frequency curve was computed for the Cumberland River from Williamsburg, Ky., to the mouth and the Tennessee River, and another regional frequency curve was computed for all other streams.

LIMITS OF PROBABLE ACCURACY

A study was made in 1952 by Benson (*in* Dalrymple, 1960) of the maximum and minimum values of the 10-, 25-, 50-, and 100-year floods as determined graphically from records of various lengths, for 80, 95, and 100 percent of the time. In the study, 1,000 hypothetical annual floods distributed according to the theory of extreme values (Gumbel, 1945) were analyzed and the results compared with the known characteristics of the base curve to ascertain the probable range of accuracy within which the magnitude of a flood of a given recurrence

interval might be determined using flood records of various lengths. The following table based on Benson's study shows the length of record necessary to define floods of selected frequency within 10 percent and 25 percent of correct long-term (1,000-year) value.

Length of record, in years, required to define flood within indicated percentage of correct value 95 percent of time

Magnitude of flood, in years	Length of record, in years	
	Within 25 percent of correct value	Within 10 percent of correct value
2.33	12	40
10	18	90
25	31	105
50	39	110

This table shows that a minimum length of record of 12 years should be available at a station to determine the mean annual flood within 25 percent of the correct value 95 percent of the time. In using records down to 10 years in length in the analysis, the expected accuracy of the results may appear to be depreciated to some extent. However, note that the shortest records used were adjusted to the shortest base period, 1940-59 (20 years), by estimating figures for the missing annual events and then computing the recurrence intervals for the known discharges on the basis of the 20-year period. This should increase the effective length of the 10-year record by 50 percent or to 15 years. The observed mean annual flood computed on basis of the 10-year record is also adjusted by an empirical factor determined from the longest or 64-year period, 1896-1959, whereby the effective length of the shorter records is further increased.

Extrapolation of the regional frequency curve beyond the 50-year recurrence interval is not recommended. However, if the discharge of a flood of greater recurrence interval is desired, it may be estimated by extending the regional frequency curve but with attendant reduction in expected accuracy.

SUMMARY

The results of flood-frequency studies are of major importance to the engineering profession. This report provides as its first objective a method of estimating the magnitude and frequency of floods on all streams in Part 3-B, Cumberland and Tennessee River basins, not subject to significant regulation or diversion. For the second objective, complete flood records at gaging stations are compiled, and a summary of miscellaneous maximum discharges is

made. A summary table of the maximum stage and discharge at each gaging station provides information important in design considerations.

The method is dependent upon two relation curves—one of mean annual flood to size of drainage basin and another of dimensionless peak discharge to recurrence interval. The combination of these two curves provides a means of determining a frequency curve for any location, gaged or ungaged. Five hydrologic areas are defined on a map and have individual mean annual flood versus drainage area curves. Three mainstem rivers have mean annual flood versus distance above mouth curves. One dimensionless discharge-frequency curve representing the median position of all the station frequency curves was found by the homogeneity test to be applicable for all practical purposes to the whole region except for the Cumberland River from Williamsburg, Ky., to the mouth and for the Tennessee River, for which streams a separate dimensionless discharge-frequency curve was defined. The relations are valid for drainage areas within the limits shown on the mean annual flood versus drainage area curves and for recurrence intervals up to 50 years.

The method can be used to estimate the magnitude of a flood of selected frequency or to estimate the recurrence interval of a flood of known magnitude.

The analysis of the data follows that explained by Dalrymple (1960). Annual peak discharges recorded at 177 locations were used. Mean annual floods were derived graphically from individual station discharge-frequency curves adjusted to a common base period. The relations of mean annual flood to drainage area were defined graphically in the functional form:

$$Q_{2.33} = CA^x,$$

or

$$\log Q_{2.33} = \log C + x \log A.$$

The reliability of the method is discussed using a study by Benson (*in* Dalrymple, 1960).

FLOOD RECORDS AT GAGING STATIONS AND MISCELLANEOUS SITES

Peak stages and discharges for 397 streamflow and selected stage stations are tabulated and compiled in this section of the report. Most of these records are from stations operated by the Geological Survey in cooperation with other Federal agencies, the Tennessee Valley Authority, States, and municipalities. Some of the records have been collected by other agencies, and some have been furnished

by corporations and private individuals. If the data for any station are furnished by or compiled from reports or publications of another agency, proper credit to the agency is shown in the station description.

Immediately preceding the station data are tables 1 and 2, which contain pertinent information relative to maximum known floods at gaging stations and miscellaneous sites.

EXPLANATION OF THE DATA

The data presented for each station include a station description and a table of peak stages, or discharges, or both. The station description gives the location, drainage area, type of gage, how the stage-discharge relation is defined over the range of discharge published in the table, bankfull stage if known, historical data of a general or relative nature that cannot be included in the table, and a paragraph on general remarks concerning the data.

Each station is referred to by a number to the left of the title which corresponds to that shown on the general location map (pl. 2).

Bankfull stage is the gage height above which extensive overflow occurs on one or both banks in the vicinity of the gage. This stage is determined by field observation; minor flooding of unimportant low areas adjacent to the stream is not considered in arriving at bankfull stage. Another closely associated term is flood stage; it is defined as the stage at which flood damage begins. The latter term has been used by the U.S. Weather Bureau and is appropriately referenced for all stations for which that agency furnished the figure.

The stations are arranged in downstream order corresponding to that used in the annual reports on surface water supply of the U.S. Geological Survey beginning with the 1951 series, WSP 1206 for Part 3-B. In a downstream direction along the mainstem, all stations on a tributary entering above a mainstem station are listed before that station. If a tributary enters between two mainstem stations it is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries.

The "Remarks" paragraph states, among other items, the period for which only annual peaks are shown in the table, and if any part of the record is tabulated on the basis of the partial-duration series, or peaks above a base, the base discharge is given.

The table for most stations contains the list of peak stages and discharges above a base discharge. Peak discharges unless otherwise noted are the instantaneous peaks in cubic feet per second (cfs). They generally are computed directly from the peak gage heights by means of the stage-discharge relation. For stations controlled by

storage or where the data did not warrant computation of peaks above a base, particularly for earlier years, only annual floods are listed. In some instances, principally for older records or records obtained from other sources, data are not available for determining peak discharges, and only peak stages are shown. For a few stations, rate of change of stage was used as an additional factor in computing the discharge. In those instances, the peak discharge may not occur at the same time as the peak stage; however, the figures listed for both stage and discharge are the maximum for that particular flood, with appropriate footnotes indicating that peak stage and discharge were not concurrent.

No distinction is made between annual peaks and peaks for partial-duration series. If it is desired to use the tabulation for partial-duration studies, annual peaks below the base discharge must be deleted. A footnote marks years with incomplete records, which cannot be used in the partial-duration series.

The peaks are arranged by the water year, which ends September 30 and begins October 1 of the preceding calendar year. Dates on which the peaks occurred are calendar year dates. Thus, a peak that occurred on Nov. 15, 1941, would be listed in the 1942 water year.

The gage heights were generally obtained from water-stage recorder graphs or from graphs based on gage readings by an observer. A few of the gage heights are the maximum observed. Many of the gage heights shown for major floods outside the period of record were obtained by leveling to floodmarks pointed out by local residents, from flood profiles by other agencies, and from other sources.

Underlines in the tabular data have the following significance:

1. Line in "Water year" column means discontinuous record.
2. Line beginning at "Date" column and extending through "Discharge" column means change in site and datum with continuous record.
3. Line in only "Gage height" column means change in datum only.
4. Line in "Date" and "Discharge" columns means significant change in site but no change in datum.
5. No underlines are used if changes in site and datum have been adjusted to present conditions.

MAXIMUM FLOODS AT GAGING STATIONS

Table 1.--Maximum stages and discharges of streams in Part 3-B

No.	Stream and place of determination	Drainage area (sq mi.)	Period of known floods (water years)	Hydro-logic area	Areal Q _{2.33} (cfs)	Maximum stage and discharge			
						Date	Gage height (feet)	Discharge	
								Cfs	Cfs per sq mi
Cumberland River basin									
4005	Poor Fork at Cumberland, Ky.....	82.3	1927, 1940-60	2	5,200	Jan. 29, 1957	11.50	11,800	143
4010	Cumberland River near Harlan, Ky.....	374	1918, 1929, 1940-60	2	17,500	Jan. 8, 1946	22.81	37,900	101
4015	Yellow Creek bypass at Middlesboro, Ky.....	35.3	1941-60	2	2,680	Mar. 22, 1952	5.00	7,200	204
4020	Yellow Creek near Middlesboro, Ky.....	58.2	1929, 1939, 1941-60	2	4,000	Jan. 7, 1946	20.92	6,160	106
4030	Cumberland River near Pineville, Ky.....	809	1929, 1939-60	2	32,000	Jan. 8, 1946	49.31	57,900	71.6
4035	Cumberland River at Barbourville, Ky.....	960	1923-31, 1949-60	2	36,800	May 31, 1927	-	47,900	49.9
			1923-31, 1946, 1949-60			January 1946	42.8	-	-
4040	Cumberland River at Williamsburg, Ky.....	1,607	1951-60	MS	29,000	Jan. 31, 1957	33.78	49,700	30.9
4045	Cumberland River at Cumberland Falls, Ky.....	1,977	1918-60	MS	38,000	Jan. 10, 1946	34.2	-	-
			1916-31, 1923-60			Jan. 28, 1918	15.5	59,600	30.1
4050	Laurel River at Corbin, Ky.....	201	1911, 1913, 1922-24, 1943-60	2	10,600	Jan. 29, 1957	19.30	16,200	80.6
4060	Wood Creek near London, Ky.....	3.89	1954-60	2	-	Feb. 17, 1956	6.23	508	130
4065	Rockcastle River at Billows, Ky.....	604	1913, 1937-60	2	25,500	June 29, 1947	45.48	46,800	77.5
4070	Rockcastle River at Rockcastle Springs, Ky.....	745	1923-31	2	30,000	Mar. 24, 1929	31.5	36,400	48.9
4075	Buck Creek near Shopville, Ky.....	165	1953-60	2	9,000	Nov. 19, 1957	19.55	14,900	90.3
4080	New River near New River, Tenn.....	314	1923-34	1	20,900	Mar. 23, 1929	44.8	70,000	223
4082	Brimstone Creek near Robbins, Tenn.....	48.7	1955-60	1	4,700	Nov. 18, 1957	20.35	-	-
4085	New River at New River, Tenn.....	382	1879-1960	1	24,500	Mar. 23, 1929	41.2	74,700	196
4090	White Oak Creek at Sunbright, Tenn.....	13.5	1929-60	1	-	Mar. 23, 1929	17.45	4,900	363
4095	Clear Fork near Robbins, Tenn.....	272	1931-60	1	18,600	Feb. 3, 1939	18.5	34,000	125
			1929-60			Mar. 23, 1929	22.1	-	-
4096	Black Creek tributary near Robbins, Tenn.....	.25	1955-60	1	-	Mar. 21, 1955	3.40	-	-
4105	South Fork Cumberland River near Stearns, Ky.	954	1943-60	1	50,000	Feb. 13, 1948	38.50	69,600	73.0
			1929-60			March 52.9	69.0	-	-
4110	South Fork Cumberland River at Nevelsville, Ky.	1,271	1915-50	1	63,000	Mar. 23, 1929	69.0	130,000	102
4115	Cumberland River at Burnside, Ky.....	4,865	1884-1950	MS	113,000	Mar. 24, 1929	69.4	181,000	37.2
			1826-1950			March 72.4	72.4	-	-
4125	Pitman Creek at Somerset, Ky.....	31.3	1954-60	2	2,420	Aug. 4, 1959	8.74	2,850	91.1
4140	Cumberland River near Rowena, Ky.....	5,790	1940-60	MS	117,000	Jan. 9, 1946	64.82	162,000	28.0
			1826-1960			March 1929	69.5	-	-
4145	East Fork Obey River near Jamestown, Tenn....	al96	1943-60	1	14,400	Feb. 13, 1948	27.20	28,300	144
			1929-60			March 1929	30.7	-	-
4147	Puncheon Camp Creek at Allred, Tenn.....	15.5	1955-60	1	-	Mar. 21, 1955	11.38	-	-
4150	West Fork Obey River near Alpine, Tenn.....	al81	1929-60	1	-	Mar. 21, 1955	16.30	15,100	186
	a Surface drainage only; does not include noncontributing area.					Mar. 21, 1955	-	-	-

Table 1.--Maximum stages and discharges of streams in Part 3-B--Continued

No.	Stream and place of determination	Drainage area (sq mi)	Period of known floods (water years)	Hydro-logic area	Maximum stage and discharge				
					Date	Gage height (feet)	Discharge		Ratio to areal Q2.33
							Cfs	Cfs per sq mi	
Cumberland River basin--Continued									
4155	Obe River near Byrdstown, Tenn.....	452	1920-43	2	June 29, 1928, Mar. 23, 1929	35.9	35,000	77.4	1.73
4157	Big Eagle Creek near Livingston, Tenn.....	7.98	1955-60	1	Mar. 21, 1955	4.61	-	-	-
4180	Wolf River near Byrdstown, Tenn.....	105	1944-60	1	Jan. 29, 1957	10.84	22,600	215	2.60
4170	Obe River below Dale Hollow Dam, Tenn.....	935	1939-58	-	Feb. 4, 1939	-	41,400	44.3	.84
4175	Cumberland River at Celina, Tenn.....	7,320	1923-60	MS	Jan. 12, 1946	643.40	-	-	-
4177	Mathews Branch tributary near Livingston, Tenn.	.49	1793-1960	2	Dec. 29, 1926	57.25	145,000	19.8	1.19
4180	Roaring River near Hilham, Tenn.....	451.6	1955-60	2	March 1926	59.2	-	-	-
4185	Caney Fork at Clifty, Tenn.....	114	1932-60	2	February 1956	5.54	273	557	-
4190	Bee Creek at Herbert, Tenn.....	108	1929-37	2	Mar. 22, 1955	9.39	5,550	70.5	1.54
4195	Calkiller River at Sparta, Tenn.....	150	1931-49	1	Feb. 13, 1948	7.00	15,500	136	1.65
4200	Calkiller River below Sparta, Tenn.....	178	1945-1960	2	March 1929	17.5	-	-	-
4205	Barren Fork near Trousdale, Tenn.....	132	1929-60	2	Mar. 23, 1929	15.7	42,000	389	6.46
4206	Owen Branch near Centertown, Tenn.....	4.60	1929, 1933-41	2	Mar. 24, 1929	26.5	25,000	187	2.98
4207	Owen Branch near Trousdale, Tenn.....	9.42	1953, 1941-60	2	Mar. 21, 1955	7.0	2,860	622	3.08
4210	Collins River near McMinnville, Tenn.....	624	1929-60	1	Feb. 13, 1948	16.99	-	-	-
4212	Charles Creek near McMinnville, Tenn.....	32.0	1955-60	2	Mar. 21, 1955	11.9	75,300	121	2.90
4213	Sink tributary at McMinnville, Tenn.....	.47	1925-60	2	Mar. 23, 1929	39.1	23,100	722	9.31
4215	Collins River near Rowland, Tenn.....	740	1952, 1955-60	2	June 13, 1952	4.68	241	513	2.74
4225	Caney Fork near Rock Island, Tenn.....	1,640	1955-60	2	November 1957	32.6	82,200	111	-
4230	Falling Water River near Cookeville, Tenn.....	845.9	1854, 1902, 1916-25	2	1954	-	-	-	-
4235	Caney Fork near Silver Point, Tenn.....	2,100	1902-60	2	Mar. 23, 1929	c38.6	210,000	128	3.75
4245	Caney Fork below Center Hill Dam, near Lancaster, Tenn.	2,200	1902-56	-	June 29, 1928	24.1	5,830	123	1.71
4250	Cumberland River at Carthage, Tenn.....	10,700	1842-1948	2	Mar. 23, 1929	d60.2	178,000	84.8	2.62
4255	Spring Creek near Lebanon, Tenn.....	35.3	1945-58	-	Feb. 14, 1948	53.44	119,000	54.1	1.68
4257	Spencer Creek near Lebanon, Tenn.....	3.32	1842-58	MS	Mar. 23, 1929	61	-	-	-
4260	Drakes Creek above Hendersonville, Tenn.....	19.2	1793-1960	MS	Dec. 30, 1926	59.8	210,000	196	1.64
4265	Cumberland River below Old Hickory, Tenn.....	11,700	1955-60	1	Mar. 21, 1955	10.13	7,980	226	-
4270	Bradley Creek at Lascassas, Tenn.....	38	1955-60	1	Jan. 29, 1957	8.4	2,820	669	-
4275	East Fork Stones River near Lascassas, Tenn.	264	1955-60	MS	Nov. 18, 1957	10.56	3,370	175	-
4280	West Fork Stones River near Murfreesboro, Tenn.	4125	1951-58	1	Dec. 31, 1926	57.4	200,000	17.1	1.50
4290	Stones River near Smyrna, Tenn.....	552	1955-60	1	Mar. 21, 1955	10.66	12,800	337	-
4295	Stewart Creek near Smyrna, Tenn.....	462.1	1902-60	1	Mar. 23, 1929	34.07	21,300	60.7	1.17
4300	Stones River above Dydson, Tenn.....	834	1902-60	2	March 1902	25.0	50,000	400	5.00
4310	Mill Creek near Antioch, Tenn.....	64.0	1902-60	2	March 1902	43.4	60,000	109	2.54
				2	Mar. 21, 1955	17.61	8,700	125	2.07
				3	March 1902	59.6	73,000	221	2.21
					Mar. 21, 1955	19.73	17,000	266	5.12

			1893-1954 1793, 1809 1815-1960	MS	136,000	Jan. 1, 1927 1793	56.2 56.5	203,000	15.8	1.49
4315	Cumberland River at Nashville, Tenn.....	12,860								
4325	West Harpeth River at Leipers Fork, Tenn.....	66.9		3	3,450	June 17, 1960	15.23	25,000	374	7.25
4335	Harpeth River at Bellevue, Tenn.....	408		3	14,400	Feb. 13, 1948	24.54	40,000	98.0	2.78
4345	Harpeth River near Kingston Springs, Tenn.....	687		3	21,900	Jan. 7, 1946	32.20	60,000	87.5	2.74
4350	Cumberland River below Cheatham Dam, Tenn.....	14,200		MS	138,000	Jan. 1, 1927	51.7	205,000	14.4	1.49
4355	Red River near Adams, Tenn.....	a311		2	15,000	Jan. 25, 1937	53.5	-	135	2.80
4360	Sulphur Fork Red River near Adams, Tenn.....	185		2	10,000	Jan. 23, 1937	53.94	42,000	-	-
4365	Cumberland River at Clarksville, Tenn.....	16,000		MS	140,000	Mar. 22, 1952	22.75	13,200	71.4	1.32
4368	Musterground Creek near Erwin, Tenn.....	3.57		3	-	June 1934	25.1	290,000	18.1	2.07
4370	Cumberland River at Dover, Tenn.....	16,437		MS	140,000	Jan. 25, 1937	65.7	-	-	-
4375	South Fork Little River at Hopkinsville, Ky.....	a35.5		2	2,700	January 1957	2.71	280,000	17.0	2.00
4380	Little River near Cadiz, Ky.....	a150		3	6,550	Nov. 18, 1957	56.8	9,320	263	3.45
4385	Cumberland River at Smithland, Ky.....	17,913		MS	142,000	Feb. 14, 1951	21.00	14,200	94.7	2.17
						Feb. 18, 1950	51.1	203,000	11.2	1.42
						January to February 1937		-	-	-
Tennessee River basin										
4390	French Broad River at Rosman, N. C.....	67.9	1906-9 1936-60	2	4,500	Aug. 30, 1940	11.86	9,410	139	2.09
4395	French Broad River at Calvert, N. C.....	103	1908-59 1925-59 1916-59	2	6,300	July 1916 Aug. 15, 1928 July 12, 1948	13.9 13.0 13.5	16,100	156	2.56
4400	Cathays Creek near Brevard, N. C.....	11.7	1945-55	2	-	Mar. 15, 1952	4.35	1,260	108	-
4410	Davidson River near Brevard, N. C.....	40.4	1921-60 1865-1960	2	3,000	Aug. 15, 1928	11.8	8,400	208	2.80
4415	Little River near Penrose, N. C.....	41.4	1940-1942-55 1916-55	4	1,720	June 13, 1940	11.9	3,400	82.1	1.98
4420	Crab Creek near Penrose, N. C.....	10.9	1943-55	4	600	July 16, 1916	14.1	1,500	138	2.50
4430	French Broad River at Blantyre, N. C.....	296	1916-55	4	8,200	Mar. 11, 1952	7.57	26,500	89.5	3.23
4440	Boylston Creek near Horsehoe, N. C.....	14.8	1921-60	4	760	Aug. 16, 1928	22.9	-	54.4	1.06
4445	South Fork Mills River at The Pink Beds, N. C.....	9.99	1791-1960 1943-55 1927-49	4	557	July 16, 1916	27.1	805	222	3.99
4460	Mills River near Mills River, N. C.....	66.7	1876-1960	4	2,500	Aug. 30, 1940	13.62	13,400	201	5.36
4464.1	Laurel Branch near Easleyville, N. C.....	57	1955-60	4	-	June 28, 1957	20.54	-	-	-
4465	Clear Creek near Hendersonville, N. C.....	42.2	1946-50 1863-1955	4	1,730	Aug. 28, 1949	10.50	4,020	95.3	2.32
4470	Mud Creek at Naples, N. C.....	109	1876-1957	4	3,700	July 16, 1916	21.5	40,000	367	10.8
4475	Cane Creek at Fletcher, N. C.....	63.1	1876-1958	4	2,400	July 16, 1916	14.8	23,000	365	9.58
4480	French Broad River at Pent Creek, N. C.....	578	1955-60 1916-60	5	12,200	Aug. 15, 1940	12.30	23,600	34.9	1.93
4485	Hominy Creek at Candler, N. C.....	79.8	1916-60 1855-1960	5	2,230	July 15, 1916	27.3	13,100	164	5.87

a Surface drainage only; does not include noncontributing area.

b Backwater from Cumberland River.

c 40.6 ft, present datum.

d 58.6 ft, present datum.

Table L--Maximum stages and discharges of streams in Part 3-B--Continued

No.	Stream and place of determination	Drainage area (sq mi)	Period of known floods (water years)	Hydro-logic area	Areal Q _{2.33} (cfs)	Maximum stage and discharge			
						Date	Gage height (feet)	Discharge	
								Cfs	Cfs per sq mi
Tennessee River basin--Continued									
4490	North Fork Swannanoa River near Black Mountain, N. C.	23.8	1926-57	2	1,970	June 16, 1949	16,500	693	8.38
4495	Swannanoa River at Swannanoa, N. C.	62.1	1908, 1926-31	2	4,200	Aug. 16, 1928	10,400	167	2.48
4500	Beetree Creek near Swannanoa, N. C.	5.46	1927-60	5	270	Aug. 13, 1940	1,370	251	5.07
4510	Swannanoa River at Baltimore, N. C.	130	1791-1960	5	3,300	April 11, 1791	26	308	12.12
4515	French Broad River at Asheville, N. C.	945	1791-1960	5	16,000	July 16, 1916	23.1	110,000	6.87
4520	Sandymush Creek near Alexander, N. C.	79.5	1943-55	5	2,230	Feb. 10, 1946	9.65	5,490	69.1
4530	Ivy River near Marshall, N. C.	158	1940-55	5	3,850	Aug. 30, 1940	16.7	-	2.46
4535	French Broad River at Marshall, N. C.	1,332	1935-60	5	21,000	July 30, 1940	12.67	8,880	56.2
4538.8	Brush Creek at Walnut, N. C.	7.99	1791-1960	5	360	July 16, 1916	22.0	115,000	86.3
4540	Big Laurel Creek near Stackhouse, N. C.	126	1954-60	5	3,200	July 23, 1954	15.23	1,790	149
4545	French Broad River at Hot Springs, N. C.	1,557	1935-60	5	23,800	Jan. 31, 1957	8.15	7,100	61.1
4550	French Broad River near Newport, Tenn.	1,858	1791-1960	5	27,200	July 16, 1916	22	110,000	70.2
4555	West Fork Pigeon River above Lake Logan, near Hazelwood, N. C.	27.6	1867-1960	5	2,200	Mar. 7, 1867	24	110,000	59.2
4560	West Fork Pigeon River below Lake Logan, near Waynesville, N. C.	55.3	1955-60	2	3,800	Jan. 21, 1959	6.95	5,050	183
4565	East Fork Pigeon River near Canton, N. C.	51.5	1955-60	2	3,600	Apr. 15, 1956	7.80	5,180	1.36
4570	Pigeon River at Canton, N. C.	133	1810-1960	2	7,700	Apr. 4, 1957	7.78	6,640	129
4575	Allen Creek near Hazelwood, N. C.	14.4	1950-60	5	580	Aug. 30, 1940	20.75	31,600	238
4585	Pigeon River near Crabtree, N. C.	243	1940-60	2	12,300	Jan. 21, 1959	4.07	1,470	102
4590	Jonathan Creek near Cove Creek, N. C.	65.3	1922-30	5	1,900	Aug. 30, 1940	7.0	-	-
4595	Pigeon River near Hepco, N. C.	350	1931-60	5	16,600	Aug. 16, 1928	18.0	23,000	94.7
4600	Catalochee Creek near Catalochee, N. C.	49.2	1876-1960	2	16,600	Aug. 30, 1940	7.51	3,200	49.0
4605	Pigeon River near Mount Sterling, N. C.	460	1935-52	5	1,520	June 18, 1876	18	42,000	120
4610	Pigeon River at Hartford, Tenn.	547	1925-29	3	20,500	February 1902	7.01	3,390	68.9
4615	Pigeon River at Newport, Tenn.	666	1928-48	4	18,200	Aug. 16, 1928	11.85	21,500	46.7
4619.1	North Toe River at Newland, N. C.	9.24	1902-48	3	5,000	Aug. 30, 1940	12.79	38,600	70.6
4620	North Toe River at Altopass, N. C.	104	1867, 1876, 1896, 1893, 1901-30, 1932-40, 1943-60, 1958-60	3	21,200	February 1902	17.5	50,000	75.1
4635	South Toe River at Newdale, N. C.	60.8	1916, 1935-52	4	3,600	Sept. 30, 1959	20.27	22,200	213
4639.1	Phlips Creek near Burnsville, N. C.	1.61	1953-60	1	5,650	Aug. 13, 1940	19.5	24	-
4640	Cane Creek near Sioux, N. C.	157	1893, 1901, 1934-60	4	5,000	Aug. 13, 1940	17.8	31,800	203
						Aug. 13, 1940	17.8	318	197.5
						Aug. 13, 1940	17.8	31,800	203
									6.36

MAXIMUM FLOODS AT GAGING STATIONS

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4645	Nolichucky River at Poplar, N. C.....	608	1924-55 1901, 1916, 1926-55	4	14,500	Aug. 13, 1940 May 1901, July 1916, Jan. 21, 1959	19.7 21	74,500	123	5.14
4650	North Indian Creek near Unicoi, Tenn.....	15.9	1945-57, 1959-60	4	800	Jan. 21, 1959	4.30	536	33.7	.67
4655	Nolichucky River at Embreeville, Tenn.....	805	1901-60	4	18,200	May 1901	24	120,000	149	6.59
4658	Muddy Fork at Fairview, Tenn.....	9.86	1955-60	4	550	May 5, 1958	5.67	-	-	-
4655	Nolichucky River below Nolichucky Dam, Tenn..	1.184	1904-9, 1920-25, 1940, 1946-60 1901-60	4	24,600	Jan. 23, 1906, Aug. 14, 1940, May 1901	19.3	73,500	62.1	2.99
4670	Lick Creek at Mohawk, Tenn.....	220	1947-60	4	6,500	Jan. 31, 1950	16.24	10,700	48.6	1.65
4675	Nolichucky River near Morristown, Tenn.....	1,679	1751-1960	5	25,000	May 1901	26	85,000	50.6	3.40
4690	French Broad River below Douglas Dam, Tenn....	4,543	1919-60 1867-1960	-	55,000	Aug. 31, 1940 March 1967	20.93 40	95,600	21.0	1.74
4690.55	Millican Creek near Douglas Dam, Tenn.....	4.2	1943-48, 1950-60	3	-	Apr. 8, 1957	9.46	1,600	381	-
4691.3	Little Pigeon River near Sevierville, Tenn....	110	1954-60	3	5,100	Jan. 31, 1957	16.23	-	-	-
4691.6	East Fork Little Pigeon River near Sevier- ville, Tenn.	64.1	1954-60	3	3,350	Jan. 31, 1957	15.62	-	-	-
4692	Little Pigeon River above West Fork, at Sevierville, Tenn.	201	1954-60	3	8,300	Jan. 31, 1957	15.59	12,800	63.7	1.54
4695	West Fork Little Pigeon River near Pigeon Forge, Tenn.	76.2	1946-49, 1954-60	3	3,800	Jan. 31, 1957	10.98	6,400	84.0	1.68
4700	Little Pigeon River at Sevierville, Tenn.....	353	1867, 1975, 1986, 1913, 1917, 1920-60	3	12,900	Feb. 25, 1975	18	55,000	156	4.26
4705	French Broad River near Knoxville, Tenn.....	5,101	1867-1960	-	61,000	March 1967	55.0	180,000	31.4	2.62
4715	South Fork Holston River at Riverside, near Chilhowie, Va.	76.1	1907-9, 1921-31, 1942-60	5	2,150	June 11, 1907	-	6,500	85.4	3.02
4725	Beaverdam Creek at Damascus, Va.....	56.0	1948-60	5	1,700	Mar. 18, 1955, Jan. 29, 1957	5.75	4,200	75.0	2.47
4730	South Fork Holston River at Vestal, Va.....	301	1901, 1948-60	5	6,450	May 1967	6.5	-	-	-
4735	Middle Fork Holston River at Groseclose, Va..	7.99	1867, 1952-60	5	340	March 1967	20	26,500	88.0	4.11
4738	Staley Creek near Marion, Va.....	8.33	1948-60	5	373	July 6, 1953	7.42	813	110	2.39
4740	Middle Fork Holston River at Severnville Ford, Va.	132	1951-60 1942-60	5	3,300	Dec. 7, 1950 Jan. 29, 1957	4.3 10.75	410 7,680	49.2 58.2	1.10 2.33
4745	Middle Fork Holston River at Chilhowie, Va...	155	1907-9, 1921-31	5	3,800	June 12, 1923	11.4	10,000	64.5	2.63
4750	Middle Fork Holston River near Meadowview, Va.	211	1932-53	5	4,850	Feb. 18, 1944	9.80	6,850	31.5	1.37
4765	South Fork Holston River below South Holston Dam, Tenn.	703	1952-60	5	12,600	Feb. 12, 1957	40.45	8,270	11.8	.66
4770	South Fork Holston River at Bluff City, Tenn.	813	1867, 1896, 1901-53	5	14,200	March 1967	19.5	-	-	-
4775	Beaver Creek near Wallace, Va.....	13.7	1896, 1901-53	5	560	May 22, 1901	16.0	30,700	37.8	2.16
4789.1	Cove Creek at Sherwood, N. C.....	23.1	1946-60	3	1,480	July 13, 1948	5.9	383	28.0	.68
4790	Watauga River near Sugar Grove, N. C.....	90.8	1940, 1955-60	3	4,400	Aug. 13, 1940	29.6	12,000	520	8.11
4795	Watauga River at North Carolina-Tennessee State line.	152	1916, 1940-60 1940, 1943-55	3	6,600	Aug. 13, 1940	19.15	50,800	560	11.5
4800	Watauga River at Stump Knob, Tenn.....	171	1850-1945	3	7,300	Aug. 13, 1940	24.0	50,000	292	6.85
4805	Elk River near Banner Elk, N. C.....	17.8	1835-40	3	1,200	Aug. 13, 1940	16.9	21,900	1,230	18.2

Table 1.--Maximum stages and discharges of streams in Part 3-B--Continued

No.	Stream and place of determination	Drainage area (sq mi.)	Period of known floods (water years)	Hydro-logic area	Areal Q _{2.33} (cfs)	Maximum stage and discharge					Ratio to areal Q _{2.33}
						Date	Gage height (feet)	Discharge			
								Cfs	Cfs per sq mi.		
Tennessee River basin--Continued											
4805.4	Grassy Creek near Banner Elk, N. C.....	51	1955-60	3	-	Apr. 5, 1957	16.77	24	47.1	-	-
4810	Elk River near Elk Park, N. C.....	42.0	1935-55	3	2,390	Aug. 13, 1940	17.8	27,500	655	11.5	11.5
4820	Roan Creek near Neva, Tenn.....	102	1943-55, 1959-60	5	2,700	Jan. 22, 1959	6.24	3,710	36.4	1.37	1.37
4825	Roan Creek at Butler, Tenn.....	166	1935-48	5	4,000	Mar. 26, 1935	7.68	4,940	29.8	1.24	1.24
4830	Watauga River at Butler, Tenn.....	427	1850-1948	4	11,000	Aug. 13, 1940	25.40	71,500	167	6.50	6.50
4840	Watauga River below Wilbur Dam, Tenn.....	471	1904-5, 1948-60	-	11,800	Jan. 22, 1906	13.60	21,500	45.6	1.82	1.82
4855	Dee River at Elizabethton, Tenn.....	137	1867-1970	4	4,450	May 21, 1901	12.2	39,000	285	8.76	8.76
4860	Watauga River at Elizabethton, Tenn.....	692	1866-37, 1901-2, 1906, 1910-49, 1954-60	4	16,100	May 21, 1901	21	75,900	110	4.71	4.71
4875	South Fork Holston River at Kingsport, Tenn..	1,935	1862, 1907-8, 1921-60	5	28,200	May 1901	23	110,000	57	3.90	3.90
4880	North Fork Holston River near Saltville, Va..	222	1921-60	4	6,500	February 1862	15	22,000	99.1	3.38	3.38
4885	North Fork Holston River at Holston, Va.....	402	1952-60	4	10,400	Jan. 29, 1957	16.50	24,300	60.4	2.34	2.34
4895	North Fork Holston River at Mendota, Va.....	493	1921-31 1862-1875, 1906-58	4	12,200	Feb. 3, 1923	14.4	19,600	39.8	1.61	1.61
4898	Cove Creek near Shelleys, Va.....	17.3	1951-60	4	860	Apr. 16, 1956	6.65	1,260	72.8	1.47	1.47
4899	Big Moccasin Creek near Gate City, Va.....	79.6	1953-60	4	2,890	May 6, 1958	8.84	3,570	44.8	1.24	1.24
4900	North Fork Holston River near Gate City, Va..	672	1862, 1932-60	4	15,800	February 1862	22.5	54,000	80.4	3.42	3.42
4905	Holston River at Surgoinsville, Tenn.....	2,874	1941-60 1867-1960	4	50,000	Feb. 18, 1944	17.48	59,600	20.7	1.19	1.19
4910	Big Creek near Rogersville, Tenn.....	47.3	1942-60	4	1,900	March 1867	30.98	-	-	-	-
4912	Big Creek tributary near Rogersville, Tenn..	2.00	1955-60	4	-	Jan. 31, 1950	7.14	3,610	76.3	1.90	1.90
4915	Holston River near Rogersville, Tenn.....	3,035	1902-42 1867-1960	4	52,000	May 1958	7.52	70,900	23.4	1.36	1.36
4940	Holston River near Jefferson City, Tenn.....	3,429	1936-60	-	57,000	Mar. 10, 1867	38.4	-	-	-	-
4955	Holston River near Knoxville, Tenn.....	3,747	1931-60	-	61,000	Aug. 15, 1940	41.82	58,700	17.1	1.03	1.03
4960	First Creek at Mineral Springs Ave., at Knoxville, Tenn.	all.9	1791-1960 1948-60	4	640	Mar. 28, 1935	20.20	82,900	16.8	1.03	1.03
4965	First Creek at Fifth Ave., at Knoxville, Tenn.	all.6	1933-34, 1944, 1946-58	4	830	March 1867	41.0	1,310	110	2.05	2.05
4970	Tennessee River at Knoxville, Tenn.....	8,934	1867-1960	MS	108,000	Nov. 18, 1957	8.88	2,000	120	2.41	2.41
4975	Little River at Walland, Tenn.....	175	1928-31	2	9,500	September 1944	10.0	-	-	-	-
4980	Little River near Walland, Tenn.....	192	1875, 1896, 1920, 1932-52	2	10,200	Sept. 30, 1944	11.8	-	-	-	-
4985	Little River at Walland, Tenn.....	192	1875, 1896, 1920, 1932-52	2	10,200	June 29, 1928	11.9	-	-	-	-
4990	Little River at Walland, Tenn.....	192	1875, 1896, 1920, 1932-52	2	10,200	Mar. 8, 1867	45.0	290,000	32.5	2.69	2.69
4995	Little River at Walland, Tenn.....	192	1875, 1896, 1920, 1932-52	2	10,200	Mar. 23, 1929	11.0	10,600	60.6	1.12	1.12
4998	Little River near Walland, Tenn.....	192	1875, 1896, 1920, 1932-52	2	10,200	February 1875	23	40,000	208	3.92	3.92

MAXIMUM FLOODS AT GAGING STATIONS

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Station	Year	Discharge	Area	Volume	Velocity	Direction	Remarks
Little River near Maryville, Tenn.	1951-60	269	2	13,400	Feb. 1, 1957	72.9	1.45
Nails Creek near Knoxville, Tenn.	1951-60	140	2	4,550	Apr. 8, 1957	42.1	1.30
Little Tennessee River near Prentiss, N. C.	1951-60	140	4	4,550	June 16, 1949	12.85	1.30
Cullasaja River at Highlands, N. C.	1951-60	14.9	4	760	Oct. 30, 1940	342	6.71
Cullasaja River at Cullasaja, N. C.	1951-60	86.5	4	3,100	Aug. 30, 1940	191	5.32
Little Tennessee River at Franklin, N. C.	1951-60	295	4	8,200	June 4, 1909	26.9	0.97
Little Tennessee River at Iotla, N. C.	1951-60	323	4	8,800	Aug. 30, 1940	60.7	2.23
Little Tennessee River at Etna, N. C.	1951-60	374	4	9,900	Sept. 26, 1929	31.6	1.19
Little Tennessee River at Needmore, N. C.	1951-60	436	4	11,200	Oct. 16, 1949	46.3	1.80
Nantahala River near Rainbow Springs, N. C.	1951-60	51.9	4	2,040	June 16, 1949	121	3.09
Nantahala River at Nantahala, N. C.	1951-60	144	4	4,650	Feb. 10, 1946	52.1	1.62
Nantahala River at Almond, N. C.	1951-60	174	4	5,400	Mar. 4, 1917	85.2	2.04
Little Tennessee River at Judson, N. C.	1951-60	664	4	15,800	Feb. 28, 1902	77	3.23
Tuckasee River at Tuckasee, N. C.	1951-60	143	4	4,600	Aug. 30, 1940	285	8.87
Scott Creek above Sylva, N. C.	1951-60	50.7	4	2,020	Aug. 30, 1940	63.1	1.58
Scott Creek at Sylva, N. C.	1951-60	55.0	4	2,150	Aug. 30, 1940	81.1	1.56
Tuckasee River at Dillsboro, N. C.	1951-60	347	4	9,300	Aug. 30, 1940	152	5.66
Oconaluftee River at Cherokee, N. C.	1951-60	131	3	5,900	Jan. 7, 1946	85.5	1.90
Oconaluftee River at Birdtown, N. C.	1951-60	184	3	7,700	Mar. 27, 1913	81.5	1.95
Tuckasee River at Bryson City, N. C.	1951-60	655	4	15,400	Jan. 7, 1946	94.0	4.00
Jenkins Branch tributary at Bryson City, N. C.	1951-60	46	4	1,500	Aug. 30, 1940	15.96	1.56
Noland Creek near Bryson City, N. C.	1951-60	13.8	3	980	Aug. 30, 1940	111	1.56
Hazel Creek at Proctor, N. C.	1951-60	44.4	3	2,480	Mar. 29, 1951	110	1.96
Little Tennessee River at Fontana Dam, N. C.	1951-60	1,571	-	-	Aug. 30, 1940	45.3	-
Snowbird Creek near Robbinsville, N. C.	1951-60	42.0	2	3,070	Mar. 29, 1951	177	2.42
Little Tennessee River at Calderwood, Tenn.	1951-60	1,862	-	-	Mar. 4, 1917	44.0	-
Tellico River at Tellico Plains, Tenn.	1951-60	118	2	7,000	May	182	3.07
Little Tennessee River at McGhee, Tenn.	1951-60	2,443	-	-	Nov. 19, 1906	42.6	-

e Period of known floods, water years 1791, 1847, 1861-62, 1867, 1875, 1886, 1896-97, 1901-2, 1906, 1916, 1926-60.
f Estimated; from reports of Tennessee Valley Authority.

e Period of known floods, water years 1791, 1847, 1861-62
f Estimated; from reports of Tennessee Valley Authority.

MAXIMUM FLOODS AT GAGING STATIONS

5345	Buffalo Creek at Norris, Tenn.....	9.45	1948-50, 1955-60	4	-	Jan. 31, 1957	9.03	1,130	120	-
5355	Clinch River near Seaborn, Tenn.....	3,300	1937-60	-	56,000	Feb. 9, 1937	23.45	42,900	13.0	.77
5365	White Oak Creek at Oak Ridge National Laboratory, near Oak Ridge, Tenn. Laboratory, near Oak Ridge, Tenn.	2.08	1950-55	1	-	Aug. 2, 1950	4.31	616	296	-
5370	White Oak Creek below Oak Ridge National Laboratory, near Oak Ridge, Tenn.	3.62	1950-53, 1956-60	1	-	Aug. 30, 1950	-	6542	177	-
5375	Poplar Branch near Oliver Springs, Tenn.....	1.48	1956-60	1	-	July 11, 1960	5.37	-	105	-
5385	Rock Creek near Sunbright, Tenn.....	55.9	1954-60	1	5,300	Nov. 17, 1957	15.16	152	105	-
5385	Emory River near Warburg, Tenn.....	5.54	1955-60	1	-	Mar. 21, 1955	6.21	1,560	262	-
5385	Emory River near Warburg, Tenn.....	83.2	1857-1960	1	7,250	Mar. 21, 1955	32	30,000	381	4.14
5386	Obed River at Crossville, Tenn.....	12.0	1955-60	1	-	Mar. 21, 1955	8.78	-	282	-
5387	Little Obed River near Crossville, Tenn.....	4.71	1955-60	1	-	Mar. 21, 1955	8.00	-	261	-
5388	Obed River tributary near Crossville, Tenn.....	7.17	1955-60	1	-	Mar. 21, 1955	6.03	-	-	-
5390	Daddys Creek near Grassy Cove, Tenn.....	51.2	1926-30	2	3,600	Mar. 23, 1929	28.3	14,600	285	4.06
5390	Daddys Creek near Crab Orchard, Tenn.....	93.5	1929-1931-58	2	5,800	Mar. 23, 1929	30.7	22,000	235	3.79
5395	Emory River at Decmont, Tenn.....	704	1857-1929	2	39,700	Mar. 23, 1929	35.7	185,000	283	4.66
5400	Emory River at Oakdale, Tenn.....	764	1857-1960	1	42,000	Mar. 23, 1929	42.3	195,000	255	4.62
5405	Whites Creek near Glen Alice, Tenn.....	123	1929-1935-60	1	10,000	Mar. 23, 1929	27.1	66,000	537	6.60
5415	Whites Creek at Glen Alice, Tenn.....	135	1929-1931-34, 1958	1	10,600	Mar. 23, 1929	18.7	68,000	504	6.42
5420	Pinney Creek at Spring City, Tenn.....	98.3	1928-60	1	8,300	Nov. 18, 1957	18.00	32,200	328	3.88
5425	Ten Mile Creek near Decatur, Tenn.....	26.4	1954-56, 1958-60	2	2,120	Apr. 29, 1958	12.44	3,400	129	1.60
5432	Sewee Creek near Decatur, Tenn.....	117	1954-60	2	6,900	Sept. 16, 1957	13.75	-	-	-
5435	Tennessee River at Breedenton, Tenn.....	17,460	1935-60	MS	185,000	Jan. 7, 1946	23.97	205,000	248	4.20
5440	Richland Creek near Dayton, Tenn.....	50.2	1870-1960	4	4,850	Mar. 29, 1936	27.70	29,000	11.7	1.11
5445	Hiwassee River at Presley, Ga.....	45.5	1942-60	1	1,840	Feb. 27, 1903	-	14,000	279	2.89
5450	Shooting Creek near Hayesville, N. C.....	37.6	1923-1943-45, 1947-55	4	1,590	Mar. 11, 1952	15.24	5,700	185	3.10
5460	Hiwassee River below Chatuge Dam, near Hayesville, N. C.	190	1943-60	-	5,800	June 16, 1949	9.20	6,820	181	4.29
5470	Hiwassee River below Hayesville, N. C.....	252	1899-1960	-	7,200	Dec. 31, 1942	8.00	3,040	16.0	.52
5480	Hiwassee River below Murphy, N. C.....	406	1840-1867-1886, 1897-1960	-	10,500	Oct. 3, 1898	16.1	17,000	67.5	2.36
5485	Hyatt Creek at Marble, N. C.....	6.88	1955-60	4	-	Mar. 19, 1899	18.4	23,100	56.9	2.20
5498.1	Valley River at Tomolia, N. C.....	104	1898-1958	4	3,750	Jan. 31, 1957	17.86	20,000	192	5.56
5500	Notchly River near Blairsville, Ga.....	74.8	1942-60	4	2,600	September 1998	21.2	8,500	114	3.09
5505	Notchly River near Ivylog, Ga.....	191	1936-42	4	5,800	Mar. 11, 1952	16.78	11,500	60.2	1.98
5525	Notchly River at Nottely Dam, near Ivylog, Ga.	215	1942-60	-	6,400	July 22, 1938	12.25	3,130	14.6	.49
5535	Notchly River near Ranger, N. C.....	272	1901-6, 1915-17, 1919-45	4	7,700	May 23, 1955	6.54	14,109	51.8	1.83
5540	Hiwassee Creek at Hiwassee Dam, N. C.....	968	1935-43	-	21,000	Feb. 4, 1936	13.41	42,800	44.2	2.04
5550				-						
5552.1	Shoal Creek near Murphy, N. C.....	12.6	1955-60	4	660	Jan. 31, 1957	14.66	1,120	41.6	.92
5560	Turtletown Creek at Turtletown, Tenn.....	26.9	1934-60	4	2,200	June 13, 1952	6.50	1,250	19.8	.94
5565	Hiwassee River near McFarland, Tenn.....	1,136	1943-60	4	24,000	June 13, 1952	10.42	69,000	56.4	2.73
5570	Hiwassee River near Reliance, Tenn.....	1,223	1901-13, 1920-48	-	25,300	Nov. 19, 1906	16.5			

May have been exceeded by flood of Aug. 2, 1960.

Table 1.--Maximum stages and discharges of streams in Part 3-B--Continued

No.	Stream and place of determination	Drainage area (sq mi.)	Period of known floods (water years)	Hydro-logic area	Areal Q _{2.33} (cfs)	Maximum stage and discharge				
						Date	Gage height (feet)	Discharge		
								Cfs	Cfs per sq. mi.	
Tennessee River basin--Continued										
5580	Toccoa River near Dial, Ga.....	177	1840-1960	4	5,450	November 1906	18.5	28,000	158	5.14
5590	Toccoa River near Blue Ridge, Ga.....	233	1840-1960	-	6,800	Nov. 18, 1906	-	34,000	146	5.00
5595	Ocoee River at Copperhill, Tenn.....	352	1840-1960	-	9,400	Nov. 19, 1906	18.5	35,000	99.4	3.72
5600	Fightingtown Creek at McCaysville, Ga.....	70.9	1943-60	4	2,650	Mar. 29, 1951	11.92	5,420	76.4	2.06
5605	Davis Mill Creek at Copperhill, Tenn.....	5.16	1941, 1949-60	4	-	Oct. 6, 1949	6.02	3,950	767	-
5607	Copper Basin, area 6, near Ducktown, Tenn.....	.008	1941-51	4	-	Mar. 27, 1944	1.69	26	3,250	-
5608	Copper Basin, area 5, near Ducktown, Tenn.....	.24	1941-51	4	-	July 2, 1941	2.0	78	325	-
5610	North Potato Creek near Ducktown, Tenn.....	13.0	1935-60	4	690	Aug. 6, 1936	7.2	7,080	545	10.3
5612	Copper Basin, area 1-W, near Ducktown, Tenn.....	.008	1944-51	4	-	July 6, Oct. 6, 1949	1.71	26	3,250	-
5613	Copper Basin, area 1-E, near Ducktown, Tenn.....	.009	1944-51	4	-	June 12, 1944	1.87	29	3,220	-
5615	Ocoee River at McHarg, Tenn.....	447	1918-42	4	11,500	July 22, 1938	9.58	17,500	38.7	1.53
5618	Copper Basin, area 3, near Ducktown, Tenn.....	.009	1935-51	4	-	Sept. 2, 1939	2.312	20	2,220	-
5620	Brush Creek near Ducktown, Tenn.....	14.4	1934-42	4	740	July 19, 1938	7.24	3,700	257	5.00
5630	Ocoee River at Emf, Tenn.....	524	1840-1960	-	12,900	Nov. 19, 1906	-	62,000	118	4.81
5645	Ocoee River at Parksville, Tenn.....	595	1840-1960	-	14,500	Nov. 19, 1906	-	65,000	109	4.55
5650	Hivasssee River above Charleston, Tenn.....	2,001	1954-60	-	37,500	Feb. 1, 1957	24.26	32,700	16.3	.87
5650.4	Chestuee Creek above Englewood, Tenn.....	14.8	1944-57	4	760	Jan. 7, 1946	10.04	4,110	278	5.41
5650.8	Middle Creek below State Highway 59, near Englewood, Tenn.....	32.7	1944-60	4	1,420	Mar. 27, 1959	10.35	3,520	108	2.48
5651.2	Chestuee Creek at Zion Hill, Tenn.....	37.8	1944-60	4	1,600	Jan. 7, 1946	13.78	4,730	125	2.96
5651.6	Little Chestuee Creek below Wilson Station, Tenn.....	8.24	1948-57	4	-	Mar. 29, 1951	5.36	1,040	126	-
5652	Chestuee Creek at State Highway 30, near Athens, Tenn.....	78.1	1944-54	4	2,850	Jan. 8, 1946	12.38	7,570	97.0	2.66
5652.5	Chestuee Creek at Dentville, Tenn.....	114	1944-60	4	3,850	Jan. 8, 1946	17.01	5,930	52.0	1.54
5655	Oostanula Creek near Sanford, Tenn.....	57.0	1955-60	4	2,200	Nov. 18, 1957	8.77	2,020	35.4	.92
5660	Hivasssee River at Charleston, Tenn.....	2,298	1885-1939	-	41,700	Mar. 31, 1886	32.5	70,000	3.04	1.68
5661	South Mouse Creek tributary near Cleveland, Tenn.....	1.31	1955-60	4	-	Feb. 1, 1957	5.89	-	-	-
5662	Brymer Creek near McDonald, Tenn.....	9.68	1955-60	4	-	September 1957	6.34	-	-	-
5666	North Chickamauga Creek at Upper Mill, near Hixson, Tenn.....	99.5	1956, 1958-60	1	8,400	Nov. 17, 1957	5.60	1,290	133	-
5666.5	North Chickamauga Creek near Hixson, Tenn.....	114	1937-58, 1940-42	1	9,400	Dec. 28, 1942	18.10	12,000	120.6	1.43
5667	South Chickamauga Creek at Ringgold, Ga.....	161	1937-43	3	6,950	Apr. 9, 1938	-	3,890	34.1	.414
5670	South Chickamauga Creek below Georgia-Tennessee State line.....	249	1949-60	3	9,800	Dec. 29, 1942	22.81	-	-	-
5672	West Chickamauga Creek near Kensington, Ga.....	73.0	1951, 1953-57			Mar. 29, 1951	25.1	10,700	43.0	1.09
			1950-60			Jan. 17, 1954	18.78	-	-	-
			1953, 1955-60			Mar. 30, 1951	24.5	-	-	-
						Mar. 29, 1951	18.5	-	-	-
						Feb. 26, 1957	14.75	4,940	67.7	1.34

5675	South Chickamauga Creek near Chickamauga, Tenn.	428	1929-60	3	15,000	Mar. 30, 1951	20.73	27,600	64.5	1.84
5680	Tennessee River at Chattanooga, Tenn.	21,400	1826, 1847, 1867-60	MS	219,000	Mar. 11, 1867	57.9	459,000	21.4	2.10
5685	Chattanooga Creek near Flintstone, Ga.	50.6	1951-60	3	2,750	Mar. 29, 1951	12.90	6,140	121	2.23
5700	Tennessee River at Hales Bar, near Chattanooga, Tenn.	21,800	1917, 1930-60	MS	232,000	Mar. 8, 1917	38.5	320,000	14.7	1.38
5710	Sequatchie River near Whitwell, Tenn.	384	1867, 1917-60	3	13,800	Mar. 11, 1867	47.3	-	-	-
5716	Brown Spring Branch near Sequatchie, Tenn.	.67	1921-60	3	-	Nov. 19, 1957	16.71	22,600	58.9	1.64
5718	Battle Creek near Montegle, Tenn.	50.4	1867, 1921-60	3	-	March	19	-	-	-
5730	Short Creek near Albertville, Ala.	91.6	1955-60	2	-	November 1957	6.23	140	209	-
5735	Tennessee River at Guntersville, Ala.	24,340	1945-60	1	3,550	Nov. 18, 1957	9.09	125,000	273	3.21
5745	Paint Rock River near Woodville, Ala.	320	1917, 1931-38	MS	7,800	December 1942	21.2	350,000	14.4	1.40
5747	Big Huckleberry Creek near Belvidere, Tenn.	2.18	1867, 1905-12, 1917, 1924-38	2	250,000	Mar. 10, 1917	37.4	-	-	-
5750	Flint River near Chase, Ala.	342	1917, 1924-38	2	-	Mar. 13, or 14, 1867	48.0	-	-	-
5755	Tennessee River at Whitesburg, Ala.	25,610	1936-60	2	15,400	Dec. 28, 1942	-	31,300	97.8	2.03
5762.5	Limestone Creek at U.S. Highway 72, near Athens, Ala.	119	1955-60	2	-	Jan. 5, 1949	20.84	-	-	-
5765	Flint Creek near Falkville, Ala.	86.3	1929-60	2	16,200	November 1957	4.62	448	206	2.59
5770	West Flint Creek near Oakville, Ala.	87.6	1953-60	2	-	September 1929,	25.0	42,000	123	1.16
5771.1	West Flint Creek near Hartselle, Ala.	158	1941-58	2	252,000	Jan. 21, 1954	23.93	293,000	11.4	1.16
5780	Elk River near Telham, Tenn.	65.6	1925-60	MS	7,000	Feb. 2, 1957	29.5	-	-	-
5785	Bradley Creek near Prairie Plains, Tenn.	41.3	1867-1960	2	-	Mar. 15, 1867	29.5	-	-	-
5795	Elk River at Estill Springs, Tenn.	282	1940-60	2	252,000	Jan. 21, 1954	14.32	21,000	176	3.00
5798	Miller Creek near Cowan, Tenn.	4.30	1955-60	4	5,450	Mar. 21, 1955	14.6	9,200	107	1.69
5799	Boiling Fork Creek at Cowan, Tenn.	17.0	1953-60	2	5,500	Feb. 1, 1957	21.3	4,210	48.0	.77
5815	West Fork Mulberry Creek at Mulberry, Tenn.	41.2	1941-58	2	8,800	Jan. 5, 1949	17.98	10,300	65.2	1.17
5820	Elk River above Fayetteville, Tenn.	827	1951-58	2	4,350	Jan. 7, 1950	-	-	-	-
5822	Norris Creek tributary near Belleville, Tenn.	.034	1952-60	2	3,000	Feb. 1, 1957	12.02	4,950	75.5	1.14
5823	Norris Creek near Fayetteville, Tenn.	42.6	1952-60	2	7,900	Nov. 18, 1957	12.17	4,320	105	1.44
5825	Elk River near Fayetteville, Tenn.	897	1921-57, 1960	4	-	Mar. 23, 1929	20.2	22,900	81.2	2.90
5830	Bradshaw Creek at Frankewing, Tenn.	36.5	1842, 1921-57, 1960	4	-	Mar. 23, 1929	20.5	-	-	-
5832	Chicken Creek at McBurn, Tenn.	7.66	1954-60	4	850	June 25, 1959	7.05	440	102	-
5835	Weakley Creek near Bodenheim, Tenn.	24.4	1955-60	4	1,700	November 1957	8.21	2,000	118	2.35
5840	Richland Creek near Pulaski, Tenn.	366	1926-34	4	18,500	Dec. 18, 1959	8.22	2,000	118	2.35
5845	Elk River near Prospect, Tenn.	1,784	1842, 1926-34	4	1,550	Nov. 17, 1957	14.8	12,800	311	7.53
5855	Elk River near Rogersville, Ala.	2,239	1955-60	4	18,500	March	27.5	37,000	44.7	2.00
5855	Elk River near Rogersville, Ala.	2,239	1955-60	4	-	Dec. 3, 1955	5.81	85	2,500	-
5855	Elk River near Rogersville, Ala.	2,239	1955-60	4	-	Nov. 17, 1957	12.2	14,300	336	8.17
5855	Elk River near Rogersville, Ala.	2,239	1955-60	4	-	Mar. 23, 1929	28.2	45,600	50.8	2.30
5855	Elk River near Rogersville, Ala.	2,239	1955-60	4	-	March	28.5	-	-	-
5855	Elk River near Rogersville, Ala.	2,239	1955-60	4	-	Mar. 21, 1955	16.38	12,600	345	8.13
5855	Elk River near Rogersville, Ala.	2,239	1955-60	4	-	Mar. 21, 1955	6.66	3,660	478	6.75
5855	Elk River near Rogersville, Ala.	2,239	1955-60	4	-	Mar. 21, 1955	27.5	13,500	553	5.88
5855	Elk River near Rogersville, Ala.	2,239	1955-60	4	-	Mar. 21, 1955	40.9	100,000	273	2.77
5855	Elk River near Rogersville, Ala.	2,239	1955-60	4	-	Mar. 29, 1902	27.5	130,000	72.9	1.10
5855	Elk River near Rogersville, Ala.	2,239	1955-60	4	-	March	22.4	61,600	27.5	1.10

h From slope-area measurement by Tennessee Valley Authority.

Table 1.--Maximum stages and discharges of streams in Part 3-B--Continued

No.	Stream and place of determination	Drainage area (sq mi.)	Period of known floods (water years)	Hydro-logic area (cfs)	Maximum stage and discharge			
					Date	Gage height (feet)	Discharge	Ratio to areal Q _{2.33}
							Cfs	Cfs per sq mi.
Tennessee River basin--Continued								
5865	Big Nance Creek at Courtland, Ala.....	166	1936-40, 1946-60	3	7,100	22.6	12,300	74.1
5870	Big Nance Creek at Red Bank, Ala.....	188	1936-40	3	7,800	10.00	4,930	26.2
5872	Blowwater Creek tributary near Leoma, Tenn...	.49	1935-60	2	-	4.87	-	-
5873.5	Dry Branch tributary near Center Star, Ala...	.28	1941-45	2	2,150	29.05	350	1,250
5875	Shoal Creek above Little Shoal Creek, at Lawrenceburg, Tenn.	27.0	1955-60	2	2,150	17.27	8,120	301
5885	Shoal Creek at Iron City, Tenn.....	348	1926-60 1902, 1926-60	2	16,400	27.22	132,000	379
5892.5	Pond Creek near Wilson Dam, Ala. (Gage No. 1)	15.7	1949-60	2	-	30.2	-	-
5895.5	Tennessee River at Florence, Ala. (Gage No. 2)	21.9	1949-60	2	-	46.77	856	46.4
5895	Tennessee River at Florence, Ala.....	30.810	1867, 1872-1960	MS	260,000	(1)	(1)	-
5900	Cypress Creek near Florence, Ala.....	209	1935-55	2	11,000	32.5	444,000	14.4
5920	Bear Creek near Red Bay, Ala.....	263	1914-20, 1959-60	4	7,200	29.94	50,000	239
5925	Bear Creek at Bishop, Ala.....	667	1927-60	4	15,800	16.31	5,600	21.3
5929	Yellow Creek at Moser Bridge, near Doskile, Miss.	143	1938-59	4	4,670	22.0	37,000	55.5
5930.1	Chambers Creek opposite Kendrick, Miss. (Gage No. 2).	21.1	1942-59	4	1,010	11.84	19,000	133
5930.2	Sevenmile Creek near Kendrick, Miss.....	22.0	1940-44	4	1,040	9.70	17,300	382
5933	Snake Creek near Adamsville, Tenn.....	49.4	1940-59	2	3,500	5.32	10,000	28.6
5935	Tennessee River at Savannah, Tenn.....	33,140	1897-1960	MS	260,000	16.8	450,000	13.6
5940	Horse Creek near Savannah, Tenn.....	104	1930-34 1940-60	2	6,300	59.6	27,100	261
5940.4	Turkey Creek near Savannah, Tenn.....	53.7	1940-59	2	3,700	16.18	10,500	196
5940.58	White Oak Creek near Milledgeville, Tenn.....	46.1	1940-59	2	3,270	12.70	11,900	258
5941.2	Middleton Creek near Milledgeville, Tenn.....	45.5	1940-59	2	3,250	9.28	7,490	165
5941.6	Indian Creek near Cerro Gordo, Tenn.....	201	1940-59	2	10,600	11.16	30,000	149
5943	Cypress Creek tributary near Pope, Tenn.....	.75	1955-60	3	-	16.80	-	-
5944	Cypress Creek at Pope, Tenn.....	16.8	1955-60	3	1,150	4.03	-	-
5944.15	Beech River near Lexington, Tenn.....	15.9	1953-60	2	-	7.65	-	-
5944.25	Fine Tree Branch near Lexington, Tenn.....	6.87	1942-60	2	-	7.04	1,700	107
5944.3	Harmon Creek near Lexington, Tenn.....	115	1953-60	2	-	18.72	244	1740
5944.45	Beech River near Lexington, Tenn.....	20.2	1940-54	2	-	5.98	810	118
5944.5	Browns Creek near Chesterfield, Tenn.....	16.8	1953-60	2	6,800	11.15	16,000	139
5944.55	Cane Creek near Shady Hill, Tenn.....	16.8	1953-60	2	-	8.23	2,220	110
				2	-	12.80	2,300	137

MAXIMUM FLOODS AT GAGING STATIONS

Station	Discharge	Year	Location	Remarks
5944.6	22.2	1940-54	Cane Creek near Chesterfield, Tenn.	
5944.65	165	1955-60	Beech River near Darden, Tenn.	
5944.8	8.40	1953-60	Turkey Creek near Decaturville, Tenn.	
5960	107	1902-60	Duck River below Manchester, Tenn.	
5965	208	1921-31	Duck River at Normandy, Tenn.	
5967	66.3	1954-60	Garrison Fork at Fairfield, Tenn.	
5970	16.3	1954-60	Wartrace Creek at Bell Buckle, Tenn.	
5975	481	(j)	Duck River near Shelbyville, Tenn.	
5980	9.46	1955-60	Weakley Creek near Rover, Tenn.	
5982	24.9	1856-1960	Big Rock Creek at Lewisburg, Tenn.	
5990	43.1	1954-60	East Rock Creek at Farmington, Tenn.	
5992	.630	1902, 1954-60	Little Flat Creek tributary near Rally Hill, Tenn.	
5994	1,208	1947-1960	Duck River at Columbia, Tenn.	
5995	69.8	1954-60	Rutherford Creek near Carters Creek, Tenn.	
6000	17.5	1954-60	Big Bigger Creek at Sandy Hook, Tenn.	
6005	2,048	1847-1955	Duck River at Centerville, Tenn.	
6020	3.68	1955-60	Moss Spring Hollow near Centerville, Tenn.	
6021	193	1897, 1926-60	Piney Spring at Vernon, Tenn.	
6025	2,557	1847-1960	Duck River above Hurricane Mills, Tenn.	
6030	447	1897-1960	Buffalo River near Flat Woods, Tenn.	
6040	45.1	1955-60	Cane Creek at Farmers Exchange, Tenn.	
6042	707	1897-1960	Buffalo River near Lobelville, Tenn.	
6045	44.9	1840-60	Birdsong Creek near Holladay, Tenn.	
6048	38,520	1867, 1875-76, 1890, 1902-1944	Tennessee River near Johnsonville, Tenn.	
6050	17.4	1955-60	Trace Creek at Waverly, Tenn.	
6054	1.04	1955-1960	Deer Creek tributary near Waverly, Tenn.	
6057	205	1897-1960	Big Sandy River at Bruceton, Tenn.	
6065	379	1955-44	Big Sandy River at Big Sandy, Tenn.	
6070	39,730	1951-42	Tennessee River near Buchanan, Tenn.	
6075	40,200	1899-1960	Tennessee River near Paducah, Ky.	
6095	89.7	1952-60	East Fork Clarks River at Murray, Ky.	
6100	227	1939-60	East Fork Clarks River near Benton, Ky.	
6105				

1 Not known but maximum discharge of record may have occurred during large flood of this date when gage washed out.

J Periods of known floods (water years), 1888, 1890-91, 1894, 1897, 1902, 1905, 1909-13, 1915, 1917-22, 1924, 1927, 1929, 1933-60.

MISCELLANEOUS FLOOD DATA

Table 2.--Peak discharges at miscellaneous sites and unusual floods at short-term gaging stations

Stream and place of determination	Tributary to	Drainage area (sq mi)	Date	Maximum discharge		Hydro-logic area
				Cfs	Cfs per sq mi	
Allens Branch near Beta, N. C. g/.....	Scott Creek to Tuckasegee River	0.93	July 23, 1941	320	344	4
Allens Branch near Sylva, N. C. g/.....	do.....	.70	July 19, 1949	1,230	1,760	4
Alum Cave Creek above mouth, Tenn. g/.....	West Fork Little Pigeon River...	1.95	Sept. 1, 1951	5,800	2,970	3
Alum Cave Creek above mouth, Tenn. g/.....	do.....	2.10	Aug. 7, 1947	4,850	231	3
Bacon Creek at Philadelphia, Tenn. g/.....	Sweetwater Creek to Tennessee River.	5.80	Jan. 7, 1946	1,250	216	2
Bailey Branch at Hales Crossroads, Tenn. g/.....	Long Creek to Nolichucky River.	1.28	July 16, 1949	1,940	1,520	5
Barnes Hollow Branch, 0.5 mile above mouth, Tenn. g/...	Hurricane Creek to Tennessee River.	1.05	Apr. 9, 1942	1,560	1,490	3
Barren Fork at McMinnville, Tenn.	Collins River.....	242	Mar. 23, 1929	b35,000	145	1
Bartons Creek at Lebanon, Tenn.	Cumberland River.....	14.5	Aug. 2, 1939	7,150	493	1
Bartons Creek near Lebanon, Tenn. g/.....	do.....	46.5	Aug. 2, 1939	15,300	329	1
Bean (Beam) Creek near Crossville, Tenn.	Caney Fork.....	8	Mar. 23, 1929	64,500	562	1
Bear Creek above Quarter Creek, Ala.	Tennessee River.....	47.7	-	6,830	143	4
Bear Creek at Scott Bridge, Ala.	do.....	201	-	26,500	132	4
Bear Creek near Mooresville, Tenn. g/.....	Globe Creek to Fountain Creek to Duck River.	3.2	June 18, 1939	3,300	1,030	3
Beason Creek 1,000 ft above U.S. Highway 64, Tenn. g/...	Tennessee River.....	1.32	June 7, 1940	910	689	4
Beason Creek near Crump, Tenn. g/.....	do.....	2.83	June 7, 1940	4,290	1,520	4
Beason Creek tributary near Crump, Tenn. g/.....	Beason Creek to Tennessee River	.24	June 7, 1940	450	1,880	4
Beaver Creek at State line at Bristol, Tenn. g/.....	South Fork Holston River.....	34.7	July 2, 1929	2,180	62.8	5
Beaverdam Creek at dam, at Elk Mountain (formerly "at dam, at mouth, near Asheville"), N. C.	French Broad River.....	12.4	Aug. 30, 1940	3,100	250	5
Belfast Creek, 1 mile above mouth, Tenn. g/.....	East Rock Creek to Big Rock Creek to Duck River.	10.2	June 18, 1939	4,000	392	3
Big Biggy Creek near Mt. Pleasant, Tenn.	Duck River.....	25.8	Mar. 21, 1955	3,740	145	3
Big Branch near Sunburst (formerly "near Waynesville"), N. C. g/.....	Little East Fork Pigeon River to West Fork Pigeon River to Pigeon River.	.4	Aug. 30, 1940	4,500	11,300	2
Big Brush Creek near Dunlap, Tenn.	Sequitiche River.....	70	Mar. 23, 1929	b12,000	171	3
Big Creek at Burnett Siding (formerly "at Lake Logan, near Waynesville"), N. C. g/.....	West Fork Pigeon River to Pigeon River.	1.32	Aug. 30, 1940	12,900	9,700	2
Big Creek at La Follette, Tenn. g/.....	Clinch River.....	23.9	May 11, 1950	7,900	331	1
Big Creek at La Follette, Tenn. g/.....	do.....	23.5	Mar. 23, 1929	b8,000	340	1
Big Creek at Sunburst (formerly "at Lake Logan, near Waynesville"), N. C.	West Fork Pigeon River to Pigeon River.	1.69	Aug. 30, 1940	12,000	7,100	2
Big Creek near Altamont, Tenn.	Collins River.....	21	Mar. 23, 1929	b5,100	243	2
Big Creek near Darden, Tenn. g/.....	Beach River to Tennessee River.	10.6	Jan. 20, 1954	1,200	113	4
Big Flery Gizzard Creek near Jasper, Tenn.	Battle Creek to Tennessee River	52.1	March 1929	b7,200	138	2
Big Opasum Creek above mouth, Tenn. g/.....	Buffalo River to Duck River....	4.9	February 1948	2,380	486	3
Big Rock Creek above Lewisburg, Tenn. g/.....	Duck River.....	12.0	June 18, 1939	9,700	808	3
Big Rock Creek near Verona, Tenn. g/.....	do.....	48.4	June 18, 1939	26,400	545	3
Bitter Creek near Oakdale, Tenn.	Little Emory River to Emory River.	6.78	Mar. 23, 1929	b4,000	590	1
Black Oak Creek 1 mile southeast of Grove, Oak, Ala. g/	Town Creek to Tennessee River..	20.4	Dec. 28, 1942	5,700	279	3

Black Wolf Creek near Glenmary, Tenn.	23	Mar. 23, 1929	b9,200	400	1
Bone Camp Creek near Burville, Tenn.	23	Mar. 23, 1929	b5,520	240	1
Brasstown Creek at Brasstown, N. C.	83.1	May 31, 1939	6,380	76.8	3
Brush Creek at Dunlap, Tenn.	70	Mar. 23, 1929	12,000	172	3
Brush Creek at Johnson City, Tenn.	6.7	Aug. 9, 1938	2,200	328	4
Brush Creek at mile 6.4, Johnson City, Tenn.	9.38	Aug. 9, 1938	1,250	133	4
Brush Creek near mouth, Tenn.	13.9	February 1948	4,600	331	3
Brushy Fork at Vilas (formerly "Linville Creek near Sugar Grove"), N. C.	4.81	Aug. 13, 1940	4,200	873	3
Buck Branch, 0.5 mile above mouth, Tenn.	1.99	Aug. 1, 1941	2,570	1,298	4
Buffalo River above Forty-eight Creek, near Waynesboro, Tenn.	278	Feb. 13, 1948	63,000	227	3
Buffalo River above mouth of Little Buffalo River, Tenn.	128	February 1948	15,700	123	3
Buffalo River near Henryville, Tenn.	61.0	February 1948	19,000	311	3
Bull Creek at Petersburg, N. C.	16.4	June 17, 1944	5,000	305	5
Bull Creek at Sexton, N. C.	23.0	June 17, 1944	5,700	248	5
Camp Branch, 0.3 mile above mouth, Tenn.	3.82	Aug. 1, 1941	2,530	662	4
Camp Creek near Wilmot, N. C.	4.43	July 15, 1941	1,060	239	4
Cane Branch near Parkers Lake, Ky.	.67	Jan. 29, 1957	198	296	2
Cane Creek near Spencer, Tenn.	129	Mar. 23, 1929	b20,000	155	2
Cane River at dam, near Burnsville, N. C.	54.4	Aug. 13, 1940	18,000	331	4
Cane River at Eskota (formerly "above Falling Water Branch, near Pensacola"), N. C.	18.1	Aug. 13, 1940	15,000	829	4
Cane Branch at New Hope, Tenn.	1.55	June 7, 1940	1,870	1,077	4
Cane Branch near New Hope, Tenn.	.80	June 7, 1940	1,110	1,388	4
Cane Creek near Cosby, Tenn.	2.28	July 28, 1947	1,700	746	5
Cane Fork at Butts Bridge, Tenn.	375	Mar. 23, 1929	b94,000	251	2
Cane Fork at Cowarts (formerly "near East Laport"), N. C.	39.4	Aug. 30, 1940	21,700	551	4
Cane Fork near Crossville, Tenn.	25	Mar. 23, 1929	b14,300	572	1
Cane Fork near Tuckasegee (formerly "near East Laport"), N. C.	38.1	Aug. 30, 1940	17,000	446	4
Carter Branch at Manley Chapel, Tenn.	.88	Aug. 1, 1941	1,440	1,636	4
Cedar Creek, 1.4 miles above Little Bear Creek, Ala.	198	-	16,400	82.8	4
Cedar Creek, a quarter of a mile above Mud Creek, Ala.	30.4	-	3,800	125	4
Cedar Creek tributary at Green Hill, Tenn.	.86	Jan. 29, 1957	340	395	4
Chalk Creek near Waynesboro, Tenn.	4.88	Mar. 21, 1955	b1,600	328	3
Chicken Creek 1 mile above McBrum, Tenn.	3.08	July 7, 1941	3,980	1,292	4
Chicken Creek below McBrum, Tenn.	8.58	Mar. 21, 1955	3,960	462	4
Chimney Rock Hollow Branch (Mill Branch) near Duff, Tenn.	.63	June 18, 1940	700	1,111	2
Clear Fork near Burville, Tenn.	118	Mar. 23, 1929	b17,500	148	1
Cobb Creek at Cobb Bluff, N. C.	2.17	July 11, 1941	810	373	4

a Data from reports of Tennessee Valley Authority.

b Estimated.

Table 2.--Peak discharges at miscellaneous sites and unusual floods at short-term gaging stations--Continued

Stream and place of determination	Tributary to	Drainage area (sq mi)	Date	Maximum discharge		Hydro-logic area
				Cfs	Cfs per sq mi	
Coffey Branch, 0.7 mile above mouth, Tenn. <u>a</u> /.....	Richland Creek to Elk River.....	2.7	Apr. 4, 1941	2,300	852	2
Coleman Branch near Cove Creek, N. C. <u>a</u> /.....	Jonathans Creek to Pigeon River.....	.94	July 28, 1951	590	628	5
Coleman Branch near Ironduff, N. C. <u>a</u>/.....	.....do.....	.089	July 28, 1951	70	787	5
Coles Cove Branch at Coles Cove Church, N. C. <u>a</u> /.....	Fiat Creek to French Broad River.....	2.05	July 16, 1941	700	341	5
Collins River near Beersheba Springs, Tenn.	Carney Fork.....	158	June 1928	b31,700	201	2
Collins River near Tarlton, Tenn. ....	.....do.....	178	Mar. 25, 1929	b38,500	215	2
Coops Creek at Dunlap, Tenn. <u>a</u> /.....	Sequatchie River.....	7.66	Aug. 9, 1954	1,600	209	3
Copper Basin area 4 near Ducktown, Tenn. <u>a</u> /.....	Ocoee River.....	.01	May 20, 1942	44.1	4,410	5
Cotton Creek near Camden, Tenn. <u>a</u> /.....	Big Sandy River to Tennessee River.....	.43	June 29, 1942	1,070	2,488	4
Cove Creek at Caryville, Tenn. <u>a</u> /.....	Clinch River.....	36.7	Mar. 25, 1929	b14,000	381	1
Cove Creek at Mast (formerly "near Sugar Grove"), N. C. <u>a</u> /.....	Watauga River.....	17.7	Aug. 13, 1940	12,000	678	3
Cove Creek near Caryville, Tenn.	Clinch River.....	20.8	Mar. 25, 1929	b9,600	462	1
Cove Creek above Haire Branch, near Cedar Cove, Tenn. <u>a</u> /.....	Nolichucky River.....	5.18	Aug. 6, 1940	2,300	444	4
Cove Creek, 0.5 mile below Haire Branch, near Cedar Creek, Tenn. <u>a</u>/.....	.....do.....	6.48	Aug. 6, 1940	2,550	393	4
Cox Creek near Florence, Ala.	Cypress Creek to Tennessee River.....	15.3	Mar. 21, 1955	8,000	523	2
Crab Orchard Creek near Harriman, Tenn. <u>a</u> /.....	Emory River.....	18.7	May 22, 1938	5,100	273	1
Crab Orchard Creek near Vallye Crucis, N. C.	Clark Creek to Dutch Creek to Watauga River.....	2.09	Aug. 13, 1940	6,000	2,870	3
Crabtree Creek near Boonford (formerly "above Roaring Branch, near Estates"), N. C.	North Toe River to Nolichucky River.....	15.4	Aug. 13, 1940	3,400	221	4
Crawford Creek near Warne, N. C. <u>a</u> /.....	Braastown Creek to Hiwassee River.....	4.03	July 7, 1938	2,050	509	4
Crooked (Flat) Fork near Warburg, Tenn. <u>a</u> /.....	Emory River.....	50.2	Feb. 3, 1939	9,500	189	1
Crooked Fork near Warburg, Tenn. ....	.....do.....	28	Mar. 23, 1929	b6,600	236	1
Daddys Creek near Sutton Mill, Tenn.	Obed River to Emory River.....	38.5	Mar. 23, 1929	b14,400	374	2
Davis Creek above Chimney Rock Hollow Branch, Tenn. <u>a</u> /.....	Lick Creek to Hickory Creek to Clear Fork.....	6.15	June 18, 1940	1,710	278	1
Davis Creek near Glenmary, Tenn.	Wolf Creek to Whiteoak Creek to Clear Fork.....	7.0	Mar. 23, 1929	b4,900	700	1
Dee River at Roan Mountain, Tenn. <u>a</u> /.....	Watauga River.....	41.9	May 21, 1901	18,000	430	4
Drainage ditch just above mouth, at Red Bank, Tenn. <u>a</u> /.....	Stringers Branch to Tennessee River.....	1.09	May 15, 1946	510	468	1
Dry Fork tributary in Harris Hollow, Tenn.	Dry Fork to Cumberland River.....	.35	June 2, 1937	b1,580	4,510	2
Duck River at Ponton Dam (near Manchester), Tenn. <u>a</u> /.....	Tennessee River.....	55.2	March 1929	25,000	453	3
Duck River at Paint Rock Bridge, Tenn. <u>a</u>/.....	.....do.....	3,500	February 1948	220,000	62.9	3
Dunlap Creek below Bledsoe-Rhea County line, Tenn. <u>a</u> /.....	Soak Creek to Piney River to Tennessee River.....	4.48	Nov. 18, 1957	5,300	737	1
Dunlap Hollow Branch tributary near Tri-City Airport, Tenn. <u>a</u> /.....	South Fork Holston River.....	.30	June 13, 1954	550	1,830	5

	Aug. 13, 1940	9,200	3,800	3
Dutch Creek at Dutch Creek Falls (formerly "near Valle Crucis"), N. C.	2.42			
Dutch Creek near Dutch Creek Falls (formerly "at Valle Crucis"), N. C.	10.6	16,000	1,510	3
Eagle Creek near Clifton Junction, Tenn.	19.0	4,810	253	2
East Fork Bradshaw Creek, 1 mile above mouth, Tenn. <u>a</u>	12.1	11,800	975	4
East Fork Bull Creek near Petersburg, N. C. <u>a</u>	7.7	1,000	130	5
East Fork Globe Creek at McKenzie School, Tenn. <u>a</u>	6.6	16,300	2,470	3
East Fork Stones River at Walter Hill, Tenn.	-	10,000	-	1
East Fork Tuckasegee River near Tuckasegee, N. C.	80.3	30,000	374	4
East Prong Little River above Fish Camp, Tenn. <u>a</u>	13.5	3,600	267	2
East Prong Little River near Elkmont, Tenn. <u>a</u>	31.4	5,300	169	2
Elk Creek near Memory, N. C.	20.1	16,500	821	3
Emory River above Warburg, Tenn.	53	b25,500	481	1
Emory River at Montgomery, Tenn.	81	31,200	385	1
Emory River near Gobey, Tenn.	25	b21,200	848	1
Erin Branch, 0.4 mile above mouth, Tenn. <u>a</u>	7.45	3,680	494	3
Evans Branch near Maggie, N. C. <u>a</u>	2.11	310	147	5
Factory Creek at Westpoint, Tenn.	71.9	b31,400	437	2
Fall Creek at Buzzard Point, near Spring City, Tenn. <u>a</u>	21.3	13,300	624	1
Fall Creek at Ozone, Tenn.	5.0	b4,510	902	1
Falling Water River at Cockeville Dam, Tenn.	128	23,500	184	2
Fetzer Branch near Parksville, Tenn. <u>a</u>	42	180	429	4
Fie Creek near Maggie, N. C. <u>a</u>	2.06	1,010	490	5
Firescold Creek near Altamont, Tenn.	4	b2,400	600	2
Fish Camp Prong above mouth, Tenn. <u>a</u>	11.5	1,900	165	3
Flat Creek at Stocksville, N. C. <u>a</u>	6.42	3,000	467	5
Flat Creek below White Branch, near Alexander, N. C. <u>a</u>	24.5	3,300	135	5
Flat Creek near Middleburg, Tenn. <u>a</u>	13.8	3,080	126	4
Flat Creek near Stocksville, N. C. <u>a</u>	3.55	1,740	126	5
Flat Fork near Warburg, Tenn.	15.6	1,800	507	4
Forty-eight Creek near mouth, Tenn. <u>a</u>	53.0	b4,800	308	1
Fountain Creek near Culleoka, Tenn. <u>a</u>	10.7	11,300	213	3
Fountain Creek near Lewisburg, Tenn. <u>a</u>	78.4	7,300	682	3
Gannon Creek near Tri-City Airport, Tenn. <u>a</u>	7.9	22,800	291	5
Gass Creek near Greenville, Tenn. <u>a</u>	1.02	634	622	4
Gattis Creek near Crump, Tenn. <u>a</u>	61	750	318	4
Gin Creek, 0.6 mile above Collins Branch, Tenn. <u>a</u>	2.12	1,730	344	2
Goose Creek at Knoxville, Tenn. <u>a</u>	3.20	2,170	679	2
Gray Creek near Lewis Chapel, Tenn. <u>a</u>	3.39	1,200	354	1
Greasy Creek near Warburg, Tenn. <u>a</u>	13.5	6,900	511	1
Green River near mouth, Tenn. <u>a</u>	56.5	9,240	164	3

^a Data from reports of Tennessee Valley Authority.

^b Estimated.

Table 2.--Peak discharges at miscellaneous sites and unusual floods at short-term gaging stations--Continued

Stream and place of determination	Tributary to	Drainage area (sq mi.)	Date	Maximum discharge		Hydro-logic area
				Cfs	Cfs per sq mi.	
Green River near Waynesboro, Tenn. <u>a/</u>	Buffalo River.....	39.8	February 1948	11,400	286	3
Grounding Creek near Hartford, Tenn. <u>a/</u>	Pigeon River.....	3.71	July 28, 1947	1,200	323	5
Halve Branch near Cedar Creek, 0.5 mile above mouth, Tenn. <u>a/</u>	Cove Creek to Nolichucky River.....	.64	Aug. 6, 1940	310	484	4
Hailey Creek near Chesterfield, Tenn. <u>a/</u>	Beech River to Tennessee River.....	8.30	May 4, 1953	1,180	142	4
Harrell River at Franklin, Tenn.	Cumberland River.....	190	February 1948	b24,100	127	5
Hemphill Creek at Dellwood, N. C. <u>a/</u>	Jonathans Creek to Pigeon River.....	2.74	Sept. 1, 1951	1,710	624	3
Henson Creek near Dunlap, Tenn. <u>a/</u>	Sequatchie River.....	2.15	Aug. 9, 1954	660	307	3
Hickory Valley Branch near Sparta, Tenn. <u>a/</u>	Caney Fork.....	9.8	June 4, 1949	2,590	264	2
Hickory Valley Branch tributary No. 1 near Sparta, Tenn. <u>a/</u>	Hickory Valley Branch to Caney Fork.....	.71	June 4, 1949	1,130	1,676	2
Hickory Valley Branch tributary No. 2 near Sparta, Tenn. <u>a/</u>.....	.....do.....	.94	June 4, 1949	750	798	2
Hickory Valley Branch tributary No. 3 near Sparta, Tenn. <u>a/</u>.....	.....do.....	.70	June 4, 1949	430	614	2
Holcombe Branch at Beech Glen, N. C. <u>a/</u>	Little Ivy Creek to Ivy Creek to French Broad River.....	2.41	June 2, 1937	3,400	1,410	5
Holley Creek near Tusculum, Tenn. <u>a/</u>	Nolichucky River.....	6.2	June 28, 1947	1,715	277	4
Homing Creek near Hominy (formerly "below Candler"), N. C. <u>a/</u>	French Broad River.....	67.7	Aug. 30, 1940	12,800	189	5
Homing Creek near Luthers (formerly "above Candler"), N. C. <u>a/</u>.....	.....do.....	28.9	Aug. 30, 1940	12,400	429	5
Hurricane Creek near Lebanon, Tenn. <u>a/</u>	Spring Creek to Stones River to Cumberland River.....	26.4	Aug. 2, 1939	11,400	432	2
Kent Hollow near La Follette, Tenn. <u>a/</u>	Big Creek to Clinch River.....	2.66	May 11, 1950	1,700	639	1
Kephart Prong Oconaluftee River near Smokemont, N. C. <u>a/</u>	Oconaluftee River to Tuckasegee River.....	4.42	Aug. 7, 1947	940	190	3
Left Fork Chicken Creek at McBurg, 500 ft above mouth, Tenn. <u>a/</u>	Chicken Creek to Bradshaw Creek to Elk River.....	3.86	July 7, 1941	3,360	870	4
Left Fork Straight Creek at Cary, Ky.	Straight Creek to Cumberland River.....	33.9	June 28, 1947	8,600	254	2
Linville Creek near Sugar Grove, N. C.	Brushy Fork to Cove Creek to Watauga River.....	4.8	Aug. 13, 1940	4,200	875	3
Little Bear Creek, 1.69 miles above mouth, Ala.	Bear Creek to Tennessee River.....	39.5	March 1951	4,020	102	4
Little Bear Creek above Steel Branch, Ala.	Cedar Creek to Bear Creek to Tennessee River.....	19.5	March 1951	3,260	169	4
Little Bear Creek at Jordans Mill, Ala. ....	.....do.....	37.0	March 1951	5,370	37.3	4
Little Biggy Creek at Columbia, Tenn. <u>a/</u>	Duck River.....	43.2	Mar. 21, 1955	12,000	278	3
Little Bradshaw Creek, 1.5 miles above mouth, Tenn. <u>a/</u>	Bradshaw Creek to Elk River.....	4.3	Apr. 4, 1941	2,250	523	3
Little Brush Creek near Dunlap, Tenn.	Big Brush Creek to Sequatchie River.....	15.4	November 1957	b2,450	159	3
Little Chucky Creek near Rader, Tenn. <u>a/</u>	Nolichucky River.....	16.2	June 28, 1947	5,000	309	4
Little Duck River at Manchester, Tenn. <u>a/</u>	Duck River.....	36.4	March 1929	16,000	440	1
Little Sequatchie River at Sequatchie, Tenn.	Sequatchie River.....	116	March 1929	15,000	129	3
Long Branch at Johnsonville, N. C. <u>a/</u>	Hothouse Creek to Toccoa River.....	1.84	Oct. 6, 1949	460	250	4

Table 2.--Peak discharges at miscellaneous sites and unusual floods at short-term gaging stations--Continued

Stream and place of determination	Tributary to	Drainage area (sq mi.)	Date	Maximum discharge		Hydro-logic area
				Cfs	Cfs per sq mi.	
Right Fork North Fork Swannanoa River near Bullhead Mountain (formerly at Asheville water intake, near Black Mountain ^a), N. C. ^a / ₂	North Fork Swannanoa River to Swannanoa River to French Broad River.	5.11	Aug. 13, 1940	3,100	607	2
Road Prong 500 ft above mouth, Tenn. ^a / ₂	West Prong Pigeon River.....	3.50	June 16, 1949	4,500	881	3
Roaring Creek, 2.1 miles southeast of Green County, near Albany, Tenn. ^a / ₂	Lick Creek to Nolichucky River.	21.3	Sept. 1, 1951	3,400	971	4
Roaring Fork near Bale Chapel, Tenn. ^a / ₂	.....do.....	21.3	June 28, 1947	5,750	270	4
Robertson Fork near Lynnville, Tenn. ^a / ₂	Richland Creek to Elk River....	21.3	June 28, 1947	5,750	270	4
Rockhouse Creek near mouth, Tenn. ^a / ₂	Buffalo River to Duck River to Tennessee River.	14.0	June 8, 1939	6,100	488	2
Rocky Hollow Branch near Midway, Tenn. ^a / ₂	Erin Branch to Wells Creek to Cumberland River.	1.86	February 1948	4,200	300	3
Rocky River near Rock Island, Tenn.....	Caney Fork.....	100	Apr. 9, 1942	697	375	3
Rogers Branch near Dunlap, Tenn. ^a / ₂	Sequatchie River.....	1.89	Mar. 23, 1929	b19,000	190	2
Roseberry Creek tributary, Scottsboro, Ala. ^a / ₂	Roseberry Creek to Tennessee River.	.51	Aug. 9, 1954	900	476	3
Rush Fork tributary near Crabtree, N. C. ^a / ₂	Pigeon River.....	.21	July 22, 1941	455	892	2
Rushing Creek near Decaturville, Tenn. ^a / ₂	Beech River to Tennessee River.	17.0	May 8, 1949	300	1,430	2
Rutherford Creek No. 4 near Columbia, Tenn. ^a / ₂	Duck River.....	112	Mar. 21, 1955	2,000	118	4
Sandy Creek near Alloway, Tenn. ^a / ₂	Whites Creek to Tennessee River	11.4	Feb. 14, 1950	13,900	124	3
Sandy Creek near Volga (formerly "above Turkey Creek, near Marshall"), N. C.	French Broad River.....	45.5	Nov. 18, 1957	10,600	930	1
Scarnam Creek, 0.4 mile southeast of Double Bridges, Ala. ^a / ₂	Short Creek to Tennessee River.	58.7	Aug. 30, 1940	7,600	167	5
Second Creek near Elgin, Ala.....	Tennessee River.....	45.1	Feb. 10, 1946	5,490	121	1
Sequatchie River at Melvine, Tenn.....	.....do.....	25.0	Dec. 28, 1942	12,000	204	1
Sequatchie River tributary near Elm Hill School, Tenn. ^a / ₂	Sequatchie River to Tennessee River.	1.16	Mar. 21, 1955	21,500	477	2
Shoal Creek at Lawrenceburg, Tenn.....	Tennessee River.....	55.5	March 1929	b3,660	146	3
Simpson Branch, 2.4 miles west of Rogersville, Ala. ^a / ₂	First Creek to Tennessee River.	3.07	Aug. 9, 1954	1,100	948	3
Sinking Fork near Witt, Tenn. ^a / ₂	Long Creek to Nolichucky River.	3.02	Mar. 21, 1955	20,000	360	2
Soak Creek above Little Piney Creek, near Spring City, Tenn. ^a / ₂	Piney River to Tennessee River.	23.7	July 8, 1940	6,400	2,080	2
Soak Creek below Little Piney Creek near Spring City, Tenn. ^a / ₂	.....do.....	29.9	July 16, 1949	2,570	851	1
South Fork Cumberland River near Helenwood, Tenn.....	.....do.....	695	Nov. 18, 1957	16,500	696	1
South Fork Fountain Creek below Campbells Station, Tenn. ^a / ₂	Cumberland River.....	695	Nov. 18, 1957	17,800	595	1
South Fork Mills River near Sitton, N. C. ^a / ₂	Fountain Creek to Duck River...	8.4	Mar. 23, 1929	b114,000	164	1
South Hominy Creek above Candler (formerly "above Beaverdam, at Candler"), N. C. ^a / ₂	Millis River.....	40.0	June 16, 1939	6,100	726	3
South Hominy Creek near South Hominy (formerly "above Stony Fork, near Candler"), N. C. ^a / ₂	Hominy Creek to French Broad River.	29.2	Jan. 22, 1906	3,560	89.0	4
South Mouse Creek at Cleveland, Tenn. ^a / ₂	.....do.....	5.12	Aug. 30, 1940	5,500	188	5
South Mouse Creek near Cleveland, Tenn. ^a / ₂	Hwassee River.....	4.74	Aug. 9, 1954	1,200	253	4
South Mouse Creek near Cleveland, Tenn. ^a / ₂	.....do.....	8.2	Aug. 9, 1954	2,550	311	4

South Toe River above Louest Creek, near Busick, N. C.	32.8	Aug. 13, 1940	18,000	549	1
South Toe River at Celio, N. C.	43.4	Sept. 30, 1939	10,600	244	1
Spring Creek at Rot Springs, N. C.	71.5	Aug. 30, 1940	6,300	88.1	5
Spring Creek at Tusculum, Ala.	83.9	March	17,000	203	2
Stony Fork near Stony Fork (formerly "near mouth, near Candler"), N. C.	4.08	Aug. 30, 1940	1,500	319	5
Straight Creek near Jensen, Ky.	53.8	Jan. 29, 1937	16,700	310	2
Strangers Branch at Valdeau, Tenn.	5.29	May 15, 1946	2,460	465	1
Stubblefield Creek near Morristown, Tenn. $\frac{g}{/}$	1.25	July 16, 1949	270	216	4
Swan Creek near Good Springs, Ala.	152	Mar. 8, 1961	21,400	141	2
Sugar Creek below Wakefield Hollow, Tenn. $\frac{g}{/}$	2.7	Apr. 4, 1941	2,200	615	4
Sweetwater Creek at Sweetwater, Tenn. $\frac{g}{/}$	19.5	Jan. 7, 1946	4,400	228	2
Third Creek near mouth, at Knoxville, Tenn. $\frac{g}{/}$	16.7	July 10, 1939	5,590	355	4
Town (Sinking) Creek at Lebanon, Tenn. $\frac{g}{/}$	9.4	Aug. 2, 1939	4,500	479	1
Trace Creek above mouth, near Riverside, Tenn. $\frac{g}{/}$	23.0	February 1948	7,600	330	3
Trotter Hollow Branch, 0.4 mile above mouth, Tenn. $\frac{g}{/}$	1.00	Apr. 9, 1942	840	840	3
Tuckasegee River above Woods Branch, near Tuckasegee (formerly East Fork Tuckasegee River near Tuckasegee), N. C. $\frac{g}{/}$	80.3	Aug. 30, 1940	10,300	128	4
Turkey Creek at Fry, Tenn. $\frac{g}{/}$	.76	July 16, 1949	400	526	4
Turkey Creek at Louise Avenue Bridge, at Morristown, Tenn. $\frac{g}{/}$	1.70	July 16, 1949	680	400	4
Turkey Creek at Southern Railway, at Morristown, Tenn. $\frac{g}{/}$	1.76	July 16, 1949	460	261	4
Turkey Creek below West Fork, at Morristown, Tenn. $\frac{g}{/}$	3.13	July 16, 1949	1,100	351	4
Turkey Creek just above West Fork, at Morristown, Tenn. $\frac{g}{/}$	1.95	July 16, 1949	780	400	4
Turtletown Creek tributary at Farmer, Tenn. $\frac{g}{/}$	.93	June 13, 1952	230	247	4
Walker Camp Prong above Alum Cave Creek, Tenn. $\frac{g}{/}$	3.92	Sept. 1, 1951	1,800	459	3
Walker Camp Prong above Alum Cave Creek, Tenn. $\frac{g}{/}$	4.18	Aug. 7, 1947	920	220	3
Watauga River at Laurel Creek Falls, N. C.	93.5	Sept. 1, 1951	1,800	459	3
Watauga River near Foscoe (formerly "below Laurel Fork, near Valle Crucis"), N. C.	33.1	Aug. 13, 1940	37,000	396	3
Watauga River near Vilas (formerly "above Cove Creek, near Sugar Grove"), N. C.	55.1	Aug. 13, 1940	38,000	1,150	3
West Fork Bradshaw Creek, 1.4 miles above mouth, Tenn. $\frac{g}{/}$	3.3	Aug. 13, 1940	41,000	744	3
West Fork Bull Creek near Petersburg, N. C. $\frac{g}{/}$	7.7	Apr. 4, 1941	2,800	848	4
West Fork Cow Creek (Indian or Big Mountain Creek) near Oliver Springs, Tenn.	8.4	June 17, 1944	4,200	545	5
West Fork Little Pigeon River above Le Conte Creek, Tenn.	31.5	Mar. 25, 1929	6,100	726	1
West Fork Little Pigeon River to French Broad River.		Sept. 1, 1951	7,600	241	3

a Data from reports of Tennessee Valley Authority.

Table 2.--Peak discharges at miscellaneous sites and unusual floods at short-term gaging stations--Continued

Stream and place of determination	Tributary to	Drainage area (sq mi)	Date	Maximum discharge		Hydro-logic area
				Cfs	Cfs per sq mi	
West Fork Little Pigeon River above State Highway 71, Tenn.	Little Pigeon River to French Broad River.	65.0	Sept. 1, 1951	7,700	118	3
West Fork Little Pigeon River above Trout Branch, Tenn. ^a	.....do.....	6.47	Sept. 1, 1951	4,500	696	3
West Fork Little Pigeon River below Alum Cave Creek, Tenn. ^a	.....do.....	6.39	Sept. 1, 1951	7,000	1,095	3
West Fork Little Pigeon River below Chimneys Camp Ground, Tenn. ^a	.....do.....	14.6	Sept. 1, 1951	12,000	822	3
West Fork Little Pigeon River below State Highway 71, Tenn.	.....do.....	66.7	Sept. 1, 1951	7,260	109	3
West Fork Little Pigeon River below Trout Branch, Tenn. ^a	.....do.....	7.60	Sept. 1, 1951	8,500	1,120	3
West Fork Little Pigeon River below Trout Branch, Tenn. ^a	.....do.....	8.00	Aug. 7, 1947	1,715	214	3
West Fork Pigeon River near Balsam (formerly "at Spruce" near Waynesville), N. C. ^a	Pigeon River to French Broad River.	12.2	Aug. 30, 1940	16,500	1,350	2
West Fork Tuckasegee River at Thorpe Power House (formerly "at Glenville Power House, near Tuckasegee"), N. C. ^a	Tuckasegee River to Little Tennessee River.	53.1	Aug. 30, 1940	14,000	264	4
West Fork Tuckasegee River near Glenville Dam (formerly "above Glenville Dam, near Glenville"), N. C. ^a	.....do.....	26.8	Aug. 30, 1940	10,300	384	4
West Fork Turkey Creek at Houston Avenue Bridge, in Morristown, Tenn. ^a	Turkey Creek to Holston River	.71	July 16, 1949	230	324	4
West Fork Turkey Creek at mouth, at Morristown, Tenn. ^a	.....do.....	1.20	July 16, 1949	400	333	4
White Oak Creek near Burnsville, Tenn.	Clear Fork.	23	Mar. 23, 1929	65,750	250	1
White Creek at Bear Bridge, Tenn. ^a	Tennessee River.	35.1	Nov. 18, 1957	22,600	644	1
William Creek at Knoxville, Tenn. ^a	.....do.....	2.24	July 16, 1939	1,580	697	4
Winchester Springs Branch near mouth, Tenn. ^a	Elk River to Tennessee River.	1.7	July 16, 1938	1,150	676	4
Wolf Creek at Graper Springs, Tenn. ^a	Beck River to Tennessee River.	11.7	Jan. 20, 1954	1,260	108	4
Wolf Creek at Wolf Creek (formerly "near Tuckasegee"), N. C. ^a	Tuckasegee River to Little Tennessee River.	14.1	Aug. 30, 1940	14,500	1,030	4
Yellow Creek at Doskide, Miss.	Tennessee River.	143	Feb. 13, 1948	19,000	133	4

a Data from reports of Tennessee Valley Authority.

b Estimated.

4005. Poor Fork at Cumberland, Ky.

Location.--Lat 36°58'26", long 82°59'35", at left end downstream side of Second Street Bridge at Cumberland, Harlan County, 0.1 mile upstream from Cloverlick Creek and 0.5 mile downstream from Looney Creek.

Drainage area.--82.3 sq mi.

Gage.--Recording. Datum of gage is 1,415.15 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 3,500 cfs and extended above on basis of slope-area measurement at 11,800 cfs; subject to changes owing to channel shifting and dredging.

Bankfull stage.--7 ft.

Remarks.--Base for partial-duration series, 1,600 cfs. Only annual peaks are shown prior to 1941.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	January 1927	10.2	-	1951	Dec. 7, 1950	6.26	4,220
1940	Apr. 20, 1940	5.85	2,540		Jan. 15, 1951	4.42	1,850
1941	Mar. 11, 1941	4.23	1,180		Feb. 1, 1951	6.22	4,030
					Feb. 21, 1951	4.41	1,850
1942	Mar. 9, 1942	5.90	2,520	1952	Dec. 8, 1951	4.05	1,600
	Mar. 17, 1942	6.05	2,620		Dec. 15, 1951	5.28	2,530
	July 1, 1942	6.30	2,920		Dec. 21, 1951	4.23	1,720
	July 8, 1942	9.20	6,860		Jan. 22, 1952	4.69	2,060
	Aug. 19, 1942	5.20	1,810		Mar. 23, 1952	4.96	2,280
					Apr. 28, 1952	4.72	2,090
1943	Dec. 30, 1942	5.68	2,340	1953	Dec. 10, 1952	4.66	2,040
	Mar. 13, 1943	6.02	2,620		Feb. 21, 1953	5.40	2,900
	Mar. 19, 1943	5.38	2,070		May 19, 1953	5.63	3,200
	Apr. 19, 1943	7.40	4,220	1954	Jan. 16, 1954	5.19	2,650
1944	Feb. 17, 1944	7.91	4,890		Jan. 22, 1954	4.13	1,660
	Feb. 29, 1944	6.83	3,480	1955	Dec. 29, 1954	5.17	2,620
	Mar. 19, 1944	4.95	1,710		Feb. 6, 1955	4.52	1,990
1945	Jan. 1, 1945	4.86	1,640		Feb. 23, 1955	4.43	1,910
	Feb. 13, 1945	5.02	1,750		Feb. 28, 1955	4.95	2,390
	Feb. 17, 1945	6.20	2,820		Mar. 6, 1955	4.97	2,410
	June 17, 1945	5.81	2,430		Mar. 16, 1955	5.85	3,510
1946	Jan. 7, 1946	9.65	7,500		Mar. 22, 1955	5.74	3,360
	July 26, 1946	5.04	1,790	1956	Feb. 18, 1956	6.32	4,020
1947	Jan. 15, 1947	5.72	2,340		Mar. 8, 1956	5.62	3,180
	Jan. 20, 1947	6.03	2,620		Mar. 14, 1956	5.01	2,450
1948	Feb. 14, 1948	8.23	5,310		Apr. 15, 1956	7.24	5,140
	Mar. 16, 1948	5.95	2,620	1957	Jan. 29, 1957	11.50	11,800
1949	Jan. 5, 1949	4.48	1,950		Feb. 1, 1957	5.94	2,860
	Mar. 18, 1949	5.94	3,640		Feb. 10, 1957	5.10	1,810
	July 16, 1949	5.77	3,400	1958	Dec. 8, 1957	5.01	2,560
	Aug. 16, 1949	5.11	2,550		May 7, 1958	6.46	4,190
1950	Dec. 13, 1949	5.72	3,330		July 20, 1958	4.37	1,950
	Jan. 30, 1950	6.48	4,390	1959	Jan. 21, 1959	6.83	4,640
	Feb. 2, 1950	6.36	4,220		June 2, 1959	5.14	2,860
1951	Dec. 4, 1950	4.54	1,940	1960	Nov. 28, 1959	5.48	3,200

4010. Cumberland River near Harlan, Ky.

Location--Lat 36°50'48", long 83°21'21", on left bank 10 ft downstream from bridge on U.S. Highway 119 at Loyall, 1.6 miles upstream from Fourmile Branch, 2.0 miles downstream from confluence of Poor and Clover Forks, and 2 miles west of Harlan, Harlan County.

Drainage area--374 sq mi.

Gage--Nonrecording prior to Nov. 4, 1941; recording thereafter. Datum of gage is 1,140.10 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation--Defined by current-meter measurements below 23,000 cfs and extended above.

Remarks--Base for partial-duration series, 8,200 cfs. Only annual peaks are shown prior to 1941.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1918	-	22	-	1951	Jan. 15, 1951	9.74	10,600
1929	-	20.0	-		Feb. 1, 1951	16.63	23,800
					Feb. 21, 1951	10.04	11,100
1940	Apr. 20, 1940	10.1	10,500	1952	Dec. 8, 1951	9.92	10,900
1941	July 4, 1941	8.30	8,140		Dec. 15, 1951	14.66	19,700
1942	Mar. 9, 1942	9.06	8,930		Dec. 21, 1951	9.95	10,900
	Mar. 17, 1942	10.44	11,000		Jan. 22, 1952	11.06	12,800
	July 1, 1942	9.33	9,340		Mar. 23, 1952	11.66	13,900
	July 9, 1942	8.90	8,690	1953	Dec. 10, 1952	9.12	9,540
1943	Dec. 30, 1942	11.74	13,800		Feb. 21, 1953	12.97	16,300
	Mar. 13, 1943	11.06	12,700		May 7, 1953	8.77	8,980
	Mar. 20, 1943	9.38	9,750		May 19, 1953	12.68	15,800
	Apr. 19, 1943	12.64	15,600	1954	Jan. 16, 1954	9.29	9,810
1944	Feb. 17, 1944	18.40	27,700	1955	Dec. 30, 1954	11.09	12,900
	Feb. 29, 1944	14.02	18,400		Feb. 7, 1955	9.50	10,200
	Mar. 19, 1944	9.98	11,000		Feb. 23, 1955	9.56	10,300
1945	Jan. 1, 1945	8.32	9,030		Mar. 1, 1955	8.52	8,580
	Feb. 13, 1945	9.51	10,200		Mar. 6, 1955	9.95	10,900
	Feb. 17, 1945	9.87	10,800		Mar. 16, 1955	12.14	14,800
1946	Jan. 8, 1946	22.81	37,900		Mar. 18, 1955	8.98	9,320
	Feb. 10, 1946	8.31	8,230		Mar. 22, 1955	14.41	19,200
1947	Jan. 15, 1947	12.63	15,600	1956	Feb. 6, 1956	9.33	9,880
	Jan. 20, 1947	13.23	16,800		Feb. 18, 1956	14.50	19,400
	June 28, 1947	15.02	20,400		Mar. 8, 1956	9.30	9,830
1948	Feb. 14, 1948	17.35	25,500		Mar. 14, 1956	10.72	12,200
	Mar. 16, 1948	8.66	8,870		Apr. 16, 1956	15.75	22,000
	Mar. 27, 1948	8.77	9,030		July 16, 1956	10.47	11,800
1949	Jan. 5, 1949	11.83	14,200	1957	Jan. 29, 1957	19.89	31,000
	Mar. 18, 1949	11.30	13,200		Feb. 2, 1957	8.90	9,190
	Apr. 28, 1949	8.45	8,470	1958	Dec. 7, 1957	13.33	17,100
1950	Dec. 13, 1949	11.38	13,400		Apr. 28, 1958	8.32	8,260
	Jan. 30, 1950	13.85	18,100		May 7, 1958	12.06	14,600
	Feb. 2, 1950	12.22	14,900	1959	Jan. 22, 1959	17.57	25,900
					June 2, 1959	10.55	11,900
1951	Dec. 7, 1950	10.80	12,400	1960	Nov. 28, 1959	11.65	13,900

4015. Yellow Creek bypass at Middlesboro, Ky.

Location.--Lat 36°37'52", long 83°43'45", at Middlesboro, Bell County, a third of a mile upstream from Fourmile River and a third of a mile downstream from Lick Fork.

Drainage area.--35.3 sq mi.

Gage.--Recording prior to Sept. 30, 1959; nonrecording and crest-stage gage thereafter.

Stage-discharge relation.--Defined by current-meter measurements below 2,000 cfs and extended above.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Apr. 4, 1941	3.24	2,700	1951	Feb. 1, 1951	4.77	6,580
1942	Mar. 17, 1942	3.62	3,440	1952	Mar. 22, 1952	5.00	7,200
1943	Apr. 19, 1943	3.09	2,420	1953	Feb. 21, 1953	2.42	1,610
1944	Feb. 17, 1944	3.73	4,030	1954	Jan. 16, 1954	2.50	1,730
1945	Jan. 1, 1945	2.25	1,370	1955	Mar. 22, 1955	4.71	6,420
1946	Jan. 7, 1946	4.31	5,420	1956	Feb. 28, 1956	3.11	2,810
1947	Jan. 20, 1947	3.05	2,700	1957	Jan. 28, 1957	3.58	3,720
1948	Feb. 19, 1948	3.71	3,990	1958	Dec. 7, 1957	2.53	1,780
1949	Jan. 5, 1949	3.30	3,170	1959	Jan. 21, 1959	3.97	4,570
1950	Jan. 30, 1950	3.67	3,910	1960	June 23, 1960	2.77	2,170

4020. Yellow Creek near Middlesboro, Ky.

Location.--Lat 36°39'02", long 83°42'04", on right bank on U.S. Highway 25E, 0.4 mile upstream from Low Ash Hollow, 3 miles north of Middlesboro, Bell County, and 6.0 miles upstream from Clear Fork.

Drainage area.--58.2 sq mi.

Gage.--Nonrecording prior to Jan. 7, 1941; recording thereafter. Datum of gage is 1,104.20 ft above mean sea level, Sandy Hook datum.

Stage-discharge relation.--Defined by current-meter measurements below 4,000 cfs and extended above; subject to changes owing to vegetation, clearing and dredging operations.

Remarks.--Base for partial-duration series, 1,800 cfs. Only annual peaks are shown for 1929 and 1939.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	March 1929	19.6	-	1948	Feb. 14, 1948	17.42	3,820
1939	Feb. 3, 1939	18.5	-	1948	Mar. 27, 1948	12.34	1,800
1941	Apr. 4, 1941	15.11	2,200	1949	Nov. 29, 1948	13.55	2,180
	July 4, 1941	12.75	1,930		Jan. 5, 1949	16.80	3,480
1942	Mar. 17, 1942	15.03	2,790	1950	Jan. 30, 1950	18.29	3,970
1943	Dec. 30, 1942	15.21	2,880		Feb. 2, 1950	14.77	2,430
	Mar. 13, 1943	13.02	2,090		Feb. 9, 1950	12.78	1,800
	Apr. 19, 1943	14.17	2,480	1951	Feb. 1, 1951	20.67	5,570
1944	Feb. 17, 1944	16.69	3,660		Feb. 21, 1951	13.97	2,150
	Feb. 29, 1944	14.30	2,520	1952	Dec. 8, 1951	17.70	3,620
	Mar. 19, 1944	12.18	1,850		Dec. 15, 1951	15.75	2,770
1945	Jan. 1, 1945	11.98	1,790		Dec. 21, 1951	13.88	2,120
1946	Jan. 7, 1946	20.92	6,160		Jan. 22, 1952	15.71	2,760
1947	Jan. 20, 1947	16.02	3,080		Mar. 11, 1952	15.42	2,660
	July 19, 1947	14.40	2,460		Mar. 22, 1952	19.71	4,900
				1953	Feb. 21, 1953	11.02	2,030
				1954	Jan. 16, 1954	11.93	2,390

CUMBERLAND RIVER BASIN

Peak stages and discharges of Yellow Creek near Middlesboro, Ky.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 21, 1954	10.89	1,980	1957	Apr. 5, 1957	12.00	2,420
1955	Dec. 29, 1954	14.24	3,110	1958	Nov. 18, 1957	12.88	2,770
	Mar. 6, 1955	11.77	2,060		Dec. 8, 1957	13.28	2,960
	Mar. 16, 1955	16.23	4,230		Dec. 20, 1957	10.37	1,830
	Mar. 18, 1955	13.30	2,680		May 7, 1958	12.05	2,440
	Mar. 22, 1955	17.44	4,950				
1956	Feb. 18, 1956	13.36	3,000	1959	Jan. 21, 1959	17.68	5,550
	Mar. 14, 1956	11.83	2,350	1960	Dec. 19, 1959	11.53	2,230
1957	Dec. 14, 1956	10.86	1,920		June 23, 1960	13.33	2,980
	Jan. 28, 1957	15.31	3,980		July 10, 1960	11.29	2,140

4030. Cumberland River near Pineville, Ky.

Location--Lat 36°48'48", long 83°45'58", on downstream side of bridge on U.S. Highway 25E, 0.5 mile south of Flat Lick, 2.4 miles downstream from Greasy Creek, 4.7 miles upstream from Stinking Creek, and 5.0 miles northwest of Pineville, Bell County.

Drainage area--809 sq mi.

Gage--Nonrecording prior to June 23, 1939; recording thereafter. Prior to Mar. 20, 1956, at site 200 ft upstream at same datum. Datum of gage is 955.45 ft above mean sea level, Sandy Hook datum. Since May 26, 1943, auxiliary nonrecording gage 1.9 miles upstream.

Stage-discharge relation--Defined by current-meter measurements below 36,000 cfs and extended above on basis of indirect measurements at 44.34, 47.3, 47.35, and 49.31 ft; subject to changes, owing to backwater from Stinking Creek and return of overbank flow.

Bankfull stage--40 ft.

Remarks--Base for partial-duration series, 16,000 cfs. Only annual peaks are shown prior to 1943. Maximum discharge frequently occurs at different time than maximum gage height.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	March 1929	47.3	51,000	1952	Dec. 8, 1951	32.70	19,900
1939	Feb. 3, 1939	44.34	41,600	1952	Dec. 15, 1951	37.79	25,800
	Apr. 20, 1940	28.80	18,900		Dec. 21, 1951	31.20	18,100
1941	July 5, 1941	28.20	18,200		Jan. 23, 1952	32.32	19,500
	Mar. 17, 1942	32.00	22,800		Mar. 23, 1952	40.27	29,700
1943	Dec. 30, 1942	38.0	30,500	1953	Feb. 22, 1953	31.95	18,000
	Mar. 14, 1943	31.25	21,900		May 20, 1953	34.45	21,700
	Mar. 20, 1943	29.87	17,500	1954	Jan. 16, 1954	32.16	19,500
	Apr. 20, 1943	33.61	24,800		Dec. 30, 1954	33.55	20,200
1944	Feb. 18, 1944	41.81	35,700		Feb. 7, 1955	28.44	16,000
	Feb. 29, 1944	38.06	25,800		Mar. 17, 1955	38.03	27,700
1945	Feb. 18, 1945	29.03	15,300	1955	Mar. 22, 1955	40.25	30,600
1946	Jan. 8, 1946	49.31	57,900		Feb. 18, 1956	40.98	30,600
					Mar. 14, 1956	33.21	19,900
1947	Jan. 16, 1947	33.02	21,700	1956	Apr. 16, 1956	37.68	20,800
	Jan. 21, 1947	35.84	23,200		Jan. 29, 1957	47.35	54,900
	June 28, 1947	42.48	36,100	1957	Feb. 2, 1957	33.40	18,200
1948	Feb. 14, 1948	42.53	36,000		Dec. 8, 1957	36.61	26,400
				1958	May 8, 1958	36.56	24,600
1949	Jan. 6, 1949	34.30	21,900				
	Mar. 18, 1949	31.87	18,400	1959	Jan. 22, 1959	41.91	36,000
1950	Dec. 13, 1949	31.06	16,700	1960	Nov. 28, 1959	30.53	18,900
	Jan. 31, 1950	41.35	31,500		July 11, 1960	29.31	18,100
1951	Feb. 1, 1951	46.02	41,200				

4035. Cumberland River at Barbourville, Ky.

Location.--Lat 36°51'45", long 83°53'13", near center of span on upstream side of bridge on State Highway 11, at Barbourville, Knox County, 0.4 mile upstream from Richland Creek.

Drainage area.--960 sq mi.

Gage.--Nonrecording. Prior to Oct. 1, 1931, at datum 1.0 ft higher. Datum of gage is 942.97 ft above mean sea level, datum of 1929. Gage heights given herein converted to present datum.

Stage-discharge relation.--Defined by current-meter measurements below 20,000 cfs for period 1923-31, and below 33,000 cfs for period 1949-57 and extended above; subject to changes owing to variable water-surface slope.

Bankfull stage.--33 ft.

Remarks.--Base for partial-duration series, 18,000 cfs. Only annual peaks are shown prior to 1949. Maximum discharge frequently occurs at different time than maximum gage height.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	Feb. 4, 1923	31.6	28,200	1952	Dec. 15, 1951	32.0	26,600
1924	Jan. 4, 1924	27.9	21,100		Dec. 21, 1951	28.0	20,800
1925	Dec. 9, 1924	31.2	27,400		Jan. 23, 1952	28.5	20,400
					Mar. 23, 1952	36.0	32,700
1926	May 16, 1926	27.9	21,100				
1927	May 31, 1927	-	47,900	1953	Feb. 22, 1953	27.48	19,300
	May 31, 1927	38.1	-		May 20, 1953	29.61	21,200
1928	June 30, 1928	25.0	18,200				
1929	Mar. 23, 1929	-	46,300	1954	Jan. 16, 1954	28.39	20,200
	Mar. 24, 1929	40.2	-				
1930	Nov. 18, 1929	25.0	18,500	1955	Dec. 30, 1954	29.60	22,000
					Mar. 16, 1955	32.57	27,200
1931	Apr. 23, 1931	29.0	23,100		Mar. 22, 1955	34.64	29,100
1946	January 1946	42.8	-	1956	Feb. 19, 1956	35.81	28,500
					Mar. 14, 1956	29.81	22,500
1949	Jan. 6, 1949	30.1	24,000		Apr. 16, 1956	32.24	22,700
	Jan. 22, 1949	24.8	18,800				
	Mar. 18, 1949	28.8	23,100	1957	Jan. 30, 1957	42.28	43,000
	Apr. 28, 1949	26.0	20,000				
1950	Dec. 14, 1949	27.20	20,100	1958	Dec. 8, 1957	31.52	24,000
	Feb. 2, 1950	37.34	34,000		May 8, 1958	33.45	25,300
1951	Feb. 2, 1951	40.25	45,900	1959	Jan. 22, 1959	35.5	30,300
	Feb. 22, 1951	29.10	22,000	1960	Nov. 28, 1959	27.1	17,900

4040. Cumberland River at Williamsburg, Ky.

Location.--Lat 36°44'38", long 84°09'30", on left bank 10 ft downstream from bridge on U.S. Highway 25W and State Highway 92 at Williamsburg, Whitley County, and 2.1 miles downstream from Clear Fork.

Drainage area.--1,607 sq mi.

Gage.--Nonrecording prior to July 2, 1951; recording thereafter. Datum of gage is 891.57 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Historical data.--Flood of Jan. 10, 1946, is highest stage since at least 1918.

Remarks.--Base for partial-duration series, 20,000 cfs. Only annual peaks are shown for 1929 and 1946.

CUMBERLAND RIVER BASIN

Peak stages and discharges of Cumberland River at Williamsburg, Ky.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Mar. 25, 1929	32.7	-	1955	Mar. 23, 1955	25.83	29,800
1946	Jan. 10, 1946	34.2	-	1956	Feb. 5, 1956	20.68	21,000
1951	Feb. 2, 1951	29.85	37,200	1956	Feb. 19, 1956	25.79	29,800
	Feb. 22, 1951	21.85	22,900		Mar. 15, 1956	21.60	22,500
1952	Dec. 9, 1951	22.20	23,400		Apr. 17, 1956	20.79	21,200
	Dec. 16, 1951	22.51	23,900	1957	Dec. 15, 1956	21.25	21,900
	Dec. 22, 1951	21.50	22,300		Jan. 31, 1957	33.78	49,700
	Jan. 23, 1952	21.96	23,000	1958	Nov. 20, 1957	24.76	27,900
	Mar. 24, 1952	24.91	28,100		Dec. 9, 1957	21.04	21,600
1953	May 20, 1953	19.25	18,800		Apr. 30, 1958	21.18	21,800
	Jan. 23, 1954	20.38	20,500		May 8, 1958	23.79	26,100
1955	Dec. 31, 1954	22.46	23,800	1959	Jan. 23, 1959	24.20	26,900
	Mar. 19, 1955	25.91	29,900	1960	Dec. 20, 1959	20.84	21,200

4045. Cumberland River at Cumberland Falls, Ky.

Location.--Lat 36°50'14", long 84°20'36", on left bank 700 ft downstream from bridge on State Highway 90 and 1,200 ft upstream from Cumberland Falls, Whitley County.

Drainage area.--1,977 sq mi.

Gage.--Nonrecording prior to Sept. 2, 1933; recording thereafter. Apr. 3, 1915, to Sept. 1, 1933, at site 500 ft downstream at same datum. Datum of gage is 825.49 ft above mean sea level, Sandy Hook datum. Gage heights given herein converted to present site.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 20,000 cfs. Only annual peaks are shown prior to 1933.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1916	Dec. 18, 1915	12.9	45,200	1935	Apr. 7, 1935	8.57	22,200
1917	Mar. 4, 1917	13.2	47,000	1936	Mar. 27, 1936	9.93	29,000
1918	Jan. 28, 1918	15.5	59,600		Apr. 6, 1936	10.26	31,000
1919	Jan. 2, 1919	11.4	37,200	1937	Jan. 2, 1937	11.27	36,300
1920	Jan. 23, 1920	12.6	43,500		Jan. 17, 1937	10.68	33,000
1921	Apr. 17, 1921	9.8	28,200		Jan. 25, 1937	10.82	33,700
1922	Feb. 21, 1922	11.7	38,600		Feb. 10, 1937	9.20	25,300
1923	Feb. 3, 1923	10.3	30,900		June 11, 1937	8.35	21,200
1924	Jan. 3, 1924	11.0	35,100	1938	Jan. 25, 1938	8.30	20,900
1925	Feb. 16, 1925	10.3	30,900		Feb. 3, 1939	14.15	52,300
1926	May 17, 1926	9.2	25,600	1939	Feb. 12, 1939	8.63	22,500
1927	Dec. 25, 1926	14.1	51,900		Feb. 15, 1939	8.85	23,600
1928	June 30, 1928	10.4	31,600		Feb. 28, 1939	8.20	20,400
1929	Mar. 23, 1929	14.9	56,100	1940	Apr. 21, 1940	8.37	21,400
1930	Nov. 18, 1929	8.8	23,600		July 6, 1941	9.60	27,300
1931	Apr. 23, 1931	9.5	26,800	1942	Mar. 18, 1942	8.51	21,700
	Dec. 29, 1932	8.8	23,600	1943	Dec. 30, 1942	12.58	44,100
	Feb. 21, 1933	-	-		Mar. 14, 1943	8.98	23,400
1934	Mar. 21, 1933	-	-		Mar. 20, 1943	9.53	25,900
	Feb. 26, 1934	8.64	22,600		Apr. 20, 1943	9.10	23,900
	Mar. 3, 1934	10.90	34,200	1944	Feb. 18, 1944	10.72	32,500
	Mar. 9, 1934	8.54	22,100		Feb. 29, 1944	10.77	33,000
	Mar. 20, 1934	8.27	20,800		Mar. 20, 1944	9.13	24,000
1935	Mar. 25, 1934	9.66	27,600		Apr. 12, 1944	8.80	22,500
	Mar. 13, 1935	10.70	33,100				
	Mar. 21, 1935	8.80	23,300				
	Mar. 28, 1935	11.2	35,800				
	Apr. 2, 1935	8.20	20,400				

Peak stages and discharges of Cumberland River at Cumberland Falls, Ky.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Jan. 1, 1945	8.82	22,500	1953	Jan. 10, 1953	8.31	20,200
	Feb. 18, 1945	8.70	22,000		Feb. 22, 1953	8.26	20,000
1946	Jan. 8, 1946	14.10	54,200		May 20, 1953	8.43	20,700
1947	Jan. 2, 1947	9.78	27,500	1954	Jan. 23, 1954	9.30	24,900
	Jan. 21, 1947	9.35	25,400	1955	Dec. 31, 1954	9.00	23,400
1948	Feb. 14, 1948	12.67	44,800		Mar. 19, 1955	11.96	40,000
					Mar. 22, 1955	12.21	41,600
1949	Nov. 30, 1948	8.48	21,000	1956	Feb. 4, 1956	9.35	25,200
	Jan. 6, 1949	10.07	28,900		Feb. 18, 1956	11.16	35,100
	Jan. 23, 1949	8.38	20,500		Mar. 15, 1956	9.02	23,500
	Mar. 19, 1949	8.70	22,000		Apr. 17, 1956	8.82	22,600
	Apr. 28, 1949	8.66	21,800	1957	Dec. 15, 1956	9.11	24,000
1950	Jan. 6, 1950	9.47	25,800		Jan. 29, 1957	14.55	57,400
	Feb. 2, 1950	13.50	50,100	1958	Nov. 19, 1957	10.92	33,700
	Feb. 10, 1950	8.43	20,700		Dec. 9, 1957	8.66	21,800
1951	Feb. 1, 1951	12.96	46,800		Apr. 25, 1958	8.83	22,600
	Feb. 21, 1951	9.55	26,200		Apr. 30, 1958	8.88	22,800
1952	Dec. 9, 1951	9.38	25,300		May 7, 1958	10.04	28,700
	Dec. 15, 1951	9.43	25,600	1959	Jan. 23, 1959	9.50	25,900
	Dec. 21, 1951	9.10	23,900		Dec. 20, 1959	8.67	21,800
	Jan. 23, 1952	9.07	23,800	1960	June 25, 1960	8.31	20,200
	Mar. 12, 1952	8.43	20,700				
	Mar. 22, 1952	11.48	37,000				

4050. Laurel River at Corbin, Ky.

Location.--Lat 36°58'09", long 84°07'38", on left bank 200 ft downstream from bridge on Stage Highway 312, three-quarters of a mile northwest of city limits of Corbin, Whitley County, and 1.0 mile downstream from Lyrn Camp Creek.

Drainage area.--201 sq mi.

Gage.--Nonrecording Oct. 2, 1922, to Sept. 30, 1924; recording since July 1942. Oct. 2, 1922, to Sept. 30, 1924, at site 200 ft upstream at datum 2.08 ft higher. Datum of present gage is 956.05 ft above mean sea level, Sandy Hook datum. Gage heights given herein converted to present datum.

Stage-discharge relation.--Defined by current-meter measurements below 9,000 cfs and extended on basis of contracted-opening measurement at 16,200 cfs.

Remarks.--Base for partial-duration series, 3,600 cfs. Only annual peaks are shown prior to 1943.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	-	a19	-	1945	Feb. 22, 1945	10.6C	4,770
1913	-	a19	-	1946	Jan. 8, 1946	17.94	14,400
1922	-	a19	-	1947	Jan. 2, 1947	11.67	6,000
1923	Feb. 3, 1923	13.0	7,150		June 29, 1947	12.96	8,030
1924	Jan. 3, 1924	13.3	7,420		July 6, 1947	12.97	7,880
1943	Dec. 30, 1942	12.39	6,980	1948	Feb. 14, 1948	15.70	11,500
	Mar. 20, 1943	11.60	6,000		Apr. 8, 1948	9.63	3,770
	Apr. 19, 1943	10.48	4,660	1949	Jan. 6, 1949	10.42	4,570
1944	Feb. 18, 1944	11.47	5,870		Mar. 16, 1949	9.82	3,950
	Feb. 29, 1944	10.76	5,000	1950	Jan. 6, 1950	12.23	6,880
	Mar. 20, 1944	10.19	4,330		Feb. 2, 1950	10.85	5,060
	Apr. 21, 1944	10.30	4,440		Sept. 2, 1950	10.40	4,550
1945	Jan. 1, 1945	10.58	4,770	1951	Feb. 1, 1951	14.38	9,800
	Feb. 17, 1945	9.57	3,710		Feb. 21, 1951	9.67	3,850

a From information by Corps of Engineers.

CUMBERLAND RIVER BASIN

Peak stages and discharges of Laurel River at Corbin, Ky.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Dec. 8, 1951	10.14	4,270	1956	Apr. 7, 1956	9.89	4,030
	Dec. 15, 1951	11.33	5,650		Apr. 16, 1956	10.24	4,370
	Mar. 23, 1952	14.40	9,830	1957	Dec. 14, 1956	12.13	6,880
	May 20, 1952	10.00	4,130		Jan. 23, 1957	9.41	3,820
1953	Jan. 8, 1953	9.29	3,560		Jan. 29, 1957	19.30	16,200
					Apr. 8, 1957	9.35	3,760
1954	Jan. 22, 1954	8.52	3,020	1958	Nov. 18, 1957	12.08	6,810
1955	Dec. 29, 1954	9.67	3,850		Feb. 1, 1958	9.35	3,760
	Mar. 1, 1955	10.44	4,590		Apr. 28, 1958	9.39	3,800
	Mar. 18, 1955	9.35	3,600		May 7, 1958	11.05	5,550
	Mar. 22, 1955	12.83	7,780	1959	Jan. 22, 1959	9.08	3,520
1956	Feb. 4, 1956	10.64	4,800		June 23, 1960	12.85	7,820
	Feb. 18, 1956	14.19	9,500				
	Mar. 14, 1956	10.60	4,760				

4060. Wood Creek near London, Ky.

Location.--Lat 37°09'40", long 84°06'43", on left bank 50 ft downstream from bridge on U.S. Highway 25, 0.2 mile upstream from Peacock Branch, 2.8 miles northwest of London, Laurel County, and about 12 miles upstream from mouth.

Drainage area.--3.89 sq mi.

Gage.--Recording. Datum of gage is 1,123.50 ft above mean sea level, unadjusted.

Stage-discharge relation.--Defined by current-meter measurements below 230 cfs and extended above.

Bankfull stage.--3.3 ft.

Remarks.--Base for partial-duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 20, 1954	2.93	87	1957	Jan. 22, 1957	4.78	277
					Jan. 23, 1957	4.97	306
1955	Feb. 6, 1955	3.45	130		Feb. 10, 1957	4.19	204
	Feb. 27, 1955	4.37	222	1958	Nov. 18, 1957	5.18	337
	Mar. 6, 1955	3.12	102		Jan. 31, 1958	3.11	109
	Mar. 21, 1955	5.28	352		Apr. 27, 1958	4.69	264
1956	Feb. 4, 1956	3.10	100		May 6, 1958	3.18	114
	Feb. 17, 1956	6.23	506		Aug. 1, 1958	3.49	139
	Mar. 14, 1956	4.69	264	1959	Jan. 21, 1959	3.22	118
	Apr. 6, 1956	3.48	133				
	Apr. 15, 1956	4.42	227	1960	June 17, 1960	3.32	126
	May 2, 1956	3.81	166		June 22, 1960	5.72	418
1957	Dec. 14, 1956	3.47	138		June 30, 1960	3.50	140
	Dec. 21, 1956	3.18	114				

4065. Rockcastle River at Billows, Ky.

Location.--Lat 37°10'16", long 84°17'46", on left bank 200 ft upstream from bridge on State Highway 80 at Billows, Rockcastle County, 1.0 mile downstream from Hawk Creek, 1.0 mile upstream from Pine Creek, and 13 miles west of London.

Drainage area.--604 sq mi.

Gage.--Nonrecording prior to Nov. 19, 1940; recording thereafter. Datum of gage is 802.90 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 10,000 cfs. Only annual peaks are shown prior to 1941.

Peak stages and discharges of Rockcastle River at Billows, Ky.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1913	January 1913	240.0	-	1951	Nov. 21, 1950	19.64	10,900
1937	Jan. 3, 1937	27.80	19,400	1951	Jan. 15, 1951	22.43	13,700
1938	Mar. 4, 1938	21.80	13,100	1951	Feb. 1, 1951	28.21	20,300
1939	Feb. 3, 1939	37.5	32,200	1951	Feb. 7, 1951	21.64	12,900
1940	Mar. 31, 1940	24.9	16,300	1952	Nov. 25, 1951	19.25	10,600
1941	July 19, 1941	24.57	16,000	1952	Dec. 9, 1951	26.93	18,700
1942	July 14, 1942	17.70	9,250	1952	Dec. 15, 1951	27.20	19,000
1943	Nov. 24, 1942	21.35	12,300	1952	Jan. 28, 1952	21.05	12,400
1943	Dec. 30, 1942	32.58	25,900	1952	Mar. 11, 1952	21.00	12,300
1943	Mar. 14, 1943	21.42	12,300	1952	Mar. 23, 1952	41.63	39,600
1943	Mar. 20, 1943	29.27	21,600	1953	Jan. 9, 1953	20.97	12,300
1943	Apr. 19, 1943	21.85	12,700	1954	Jan. 21, 1954	16.40	8,020
1944	Feb. 18, 1944	23.77	14,900	1955	Feb. 7, 1955	24.30	15,700
1944	Feb. 29, 1944	21.85	12,700	1955	Mar. 1, 1955	25.61	17,200
1944	Mar. 7, 1944	21.28	12,100	1955	Mar. 7, 1955	20.86	12,200
1944	Mar. 20, 1944	24.23	15,300	1955	Mar. 17, 1955	21.07	12,400
1944	Apr. 12, 1944	26.21	17,700	1955	Mar. 22, 1955	29.80	22,200
1945	Jan. 1, 1945	29.33	21,600	1956	Jan. 31, 1956	21.34	12,600
1945	Feb. 22, 1945	31.76	24,800	1956	Feb. 3, 1956	22.79	14,100
1945	Feb. 28, 1945	19.67	10,700	1956	Feb. 18, 1956	33.96	27,800
1945	Mar. 6, 1945	33.77	27,600	1956	Mar. 15, 1956	28.55	20,700
1946	Jan. 8, 1946	32.98	26,500	1956	Apr. 7, 1956	19.38	10,700
1947	Jan. 3, 1947	22.88	14,200	1956	Apr. 16, 1956	25.85	17,400
1947	Jan. 16, 1947	22.60	13,900	1957	Dec. 15, 1956	23.15	14,500
1947	Jan. 21, 1947	19.85	11,200	1957	Jan. 23, 1957	25.75	17,300
1947	June 29, 1947	45.48	46,800	1957	Jan. 30, 1957	31.90	25,000
1948	Feb. 14, 1948	39.18	35,700	1957	Feb. 10, 1957	21.97	13,300
1948	Mar. 27, 1948	19.57	10,900	1957	Apr. 9, 1957	19.16	10,500
1948	Apr. 13, 1948	28.04	20,000	1958	Nov. 19, 1957	27.27	19,100
1949	Jan. 6, 1949	25.94	17,500	1958	Dec. 8, 1957	23.08	14,400
1949	Feb. 15, 1949	26.80	18,600	1958	Dec. 21, 1957	20.99	12,300
1949	Mar. 18, 1949	20.48	18,200	1958	Apr. 28, 1958	25.49	17,000
1950	Dec. 13, 1949	20.12	11,400	1958	May 7, 1958	21.83	13,100
1950	Jan. 6, 1950	27.96	20,000	1959	Jan. 22, 1959	19.95	11,200
1950	Jan. 31, 1950	30.16	22,700	1959	Feb. 15, 1959	19.36	10,700
				1960	Feb. 11, 1960	18.75	10,100
				1960	June 24, 1960	34.10	28,000

a From information by Corps of Engineers.

4070. Rockcastle River at Rockcastle Springs, Ky.

Location.--Lat 37°00'35", long 84°18'55", at Rockcastle Springs, Laurel County, 3 miles downstream from Cane Creek and 5 miles upstream from mouth.

Drainage area.--745 sq mi.

Gage.--Nonrecording. Datum of gage is 689.18 ft above mean sea level.

Stage-discharge relation.--Defined by current-meter measurements below 25,000 cfs and extended above.

Bankfull stage.--18 ft.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	Feb. 3, 1923	26.5	27,300	1928	June 29, 1928	22.2	22,000
1924	Jan. 3, 1924	29.9	31,600	1929	Mar. 24, 1929	31.5	36,400
1925	Dec. 9, 1924	29.3	30,800	1930	May 19, 1930	12.45	9,680
1926	Jan. 22, 1926	23.4	23,400	1931	Mar. 29, 1931	14.15	11,900
1927	Dec. 22, 1926	25.5	26,100				

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4075. Buck Creek near Shopville, Ky.

Location.--Lat 37°12'38", long 84°27'52", on right bank on downstream side of bridge on State Highway 461, 0.2 mile downstream from Brushy Creek, 3.7 miles north of Shopville, Pulaski County, and 11.5 miles northeast of Somerset.

Drainage area.--165 sq mi.

Gage.--Nonrecording prior to Dec. 1, 1953; recording thereafter. Datum of gage is 835.35 ft above mean sea level, unadjusted.

Stage-discharge relation.--Defined by current-meter measurements below 6,700 cfs and extended above on basis of contracted-opening measurement at 14,900 cfs.

Remarks.--Base for partial-duration series, 3,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)	
1953	May 18, 1953	9.4	4,850	1957	Dec. 14, 1956	12.80	7,300	
	June 7, 1953	8.8	4,210		Jan. 23, 1957	11.87	6,380	
1954	Jan. 21, 1954	8.41	3,710		Jan. 29, 1957	15.19	9,710	
					Feb. 10, 1957	9.71	4,570	
1955	Apr. 4, 1957	12.26	6,760	1958	Nov. 19, 1957	19.55	14,900	
	Apr. 9, 1957	8.61	3,690		Dec. 8, 1957	11.44	6,000	
	Feb. 6, 1955	11.51	6,410		Dec. 20, 1957	11.25	5,820	
	Feb. 22, 1955	11.25	6,150		Feb. 1, 1958	8.80	3,840	
1956	Mar. 1, 1955	11.52	6,420	Apr. 28, 1958	10.58	5,260		
	Mar. 6, 1955	8.74	3,970	Aug. 24, 1958	9.98	4,780		
	Mar. 22, 1955	14.93	9,920	1959	Feb. 15, 1959	9.61	4,490	
	Jan. 30, 1956	13.22	8,120		1960	Feb. 10, 1960	10.08	4,860
	Feb. 2, 1956	12.05	6,950			June 23, 1960	18.51	13,600
	Feb. 18, 1956	15.72	10,800					
	Feb. 25, 1956	8.97	4,240					
	Mar. 14, 1956	13.15	8,050					
Apr. 6, 1956	8.75	3,980						
Apr. 15, 1956	10.17	5,150						
July 23, 1956	10.30	5,270						

4080. New River near New River, Tenn.

Location.--Lat 36°23'12", long 84°32'30", at highway bridge $1\frac{1}{2}$ miles east of town of New River, Scott County, and 2 miles upstream from mouth of Brimstone Creek.

Drainage area.--312 sq mi.

Gage.--Nonrecording. Datum of gage is 1,095.84 ft above mean sea level.

Stage-discharge relation.--Defined by current-meter measurements below 12,000 cfs and extended above on basis of slope-area measurement at 70,000 cfs.

Historical data.--Flood of Mar. 23, 1929, is highest known.

Remarks.--Peaks are maximum observed except for the years 1928 and 1929 when high-water marks were obtained. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	Mar. 7, 1923	21.0	15,600	1929	Mar. 23, 1929	44.8	70,000
1924	May 30, 1924	23.0	17,700	1930	Nov. 17, 1929	19.0	13,000
1925	Feb. 15, 1925	21.6	16,200	1931	Apr. 22, 1931	19.40	13,800
1926	Oct. 25, 1925	20.0	13,800				
	Dec. 25, 1926	25.0	19,000	1932	Feb. 3, 1932	28.4	24,100
1927	Dec. 25, 1926	25.0	19,000	1933	Dec. 28, 1932	19.6	14,000
1928	June 29-30, 1928	34.9	36,700	1934	Mar. 3, 1934	25.8	21,000

4082. Brimstone Creek near Robbins, Tenn.

Location.--Lat 36°20'43", long 84°32'22", at Walker Bridge on rural road S-2342-1, 3.0 miles east of Robbins, Scott County.

Drainage area.--48.7 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Not defined.

Remarks.--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Feb. 6, 1955	a13.96	-	1958	Nov. 18, 1957	20.35	-
1956	-	(b)	-	1959	Feb. 14, 1959	14.01	-
1957	Jan. 28, 1957	16.64	-	1960	Dec. 19, 1959	14.66	-

a Maximum recorded.

b Stage not determined but less than 12.05 ft.

4085. New River at New River, Tenn.

Location.--Lat 36°23'08", long 84°33'17", on left bank at town of New River, Scott County, 700 ft downstream from Phillips Creek, 1,000 ft downstream from bridge on U.S. Highway 27, 1.7 miles downstream from Brimstone Creek, and at mile 8.6.

Drainage area.--382 sq mi.

Gage.--Nonrecording prior to Aug. 17, 1934; recording thereafter. At site 1,200 ft upstream at datum 3.41 ft higher prior to Aug. 17, 1934. Datum of gage is 1,092.67 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 27,000 cfs and extended above by logarithmic plotting.

Bankfull stage.--20 ft (U.S. Weather Bureau).

Historical data.--Flood of Mar. 23, 1929, is highest known. The 1903 report of the U.S. Weather Bureau states that the flood of February 1903 was the highest in 25 years.

Remarks.--Base for partial-duration series, 16,000 cfs. Only annual maximum observed stages are shown prior to Aug. 17, 1934, from reports of U.S. Weather Bureau.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1903	February 1903	33	-	1926	Nov. 8, 1925	14.3	-
1909	Mar. 10, 1909	13.8	-	1927	Dec. 25, 1926	18.9	-
1910	Jan. 7, 1910	12.2	-	1928	June 30, 1928	31.2	-
				1929	Mar. 23, 1929	41.2	74,700
1911	Apr. 5, 1911	24.6	-	1930	Nov. 15, 1929	15.2	-
1912	Mar. 29, 1912	16.8	-	1931	Apr. 22, 1931	15.6	-
1913	Jan. 7, 1913	23.8	-	1932	Feb. 3, 1932	21.6	-
1914	Apr. 20, 1914	13.3	-	1933	Dec. 28, 1932	16.9	-
1915	July 20, 1915	14.8	-	1934	Mar. 3, 1934	20.8	-
1916	Dec. 18, 1915	20.2	-	1935	Mar. 12, 1935	21.39	22,100
1917	Mar. 3, 1917	19.8	-				
1918	Jan. 28, 1918	21.3	-	1936	Mar. 24, 1936	19.00	18,100
1919	Jan. 2, 1919	21.5	-		Apr. 6, 1936	21.48	22,200
1920	Apr. 2, 1920	18.4	-				
1921	Apr. 16, 1921	25.0	-	1937	Dec. 7, 1936	20.93	21,300
1922	June 14, 1922	28.0	-		Jan. 2, 1937	26.46	31,200
1923	Mar. 7, 1923	18.0	-		Jan. 15, 1937	18.85	17,800
1924	May 29, 1924	19.1	-		Jan. 25, 1937	22.34	23,700
1925	Jan. 11, 1925	9.0	-		Feb. 9, 1937	20.18	20,000
	Feb. 16, 1925	9.0	-	1938	Apr. 8, 1938	14.45	11,400

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Peak stages and discharges of New River at New River, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Feb. 3, 1939	33.58	44,300	1951	Feb. 1, 1951	31.49	40,200
	Feb. 28, 1939	17.97	16,400	1952	Dec. 8, 1951	22.70	22,900
1940	Mar. 30, 1940	17.22	15,200		Dec. 15, 1951	25.56	27,900
1941	Apr. 5, 1941	20.19	20,000		Dec. 21, 1951	20.28	18,700
	July 4, 1941	17.90	16,300		Mar. 11, 1952	22.00	21,600
1942	Mar. 17, 1942	19.42	17,800	1953	Feb. 21, 1953	21.74	21,200
1943	Dec. 29, 1942	21.93	22,000	1954	Jan. 16, 1954	21.50	20,800
1944	Feb. 18, 1944	21.56	20,900		Jan. 21, 1954	22.55	22,600
	Feb. 29, 1944	19.90	18,000	1955	Dec. 29, 1954	24.98	27,200
	Sept. 30, 1944	27.30	31,800		Mar. 18, 1955	19.51	17,100
1945	Feb. 17, 1945	18.20	15,400		Mar. 22, 1955	27.83	32,900
1946	Jan. 8, 1946	28.26	33,800	1956	Feb. 18, 1956	21.62	21,000
1947	Jan. 20, 1947	20.13	18,400		Mar. 14, 1956	18.68	16,000
1948	Feb. 13, 1948	28.17	33,500	1957	Dec. 14, 1956	20.15	18,500
1949	Nov. 28, 1948	22.16	21,900		Jan. 29, 1957	22.00	29,200
	Jan. 5, 1949	27.00	31,200	1958	Nov. 19, 1957	27.24	31,700
1950	Dec. 13, 1949	20.22	18,600		Dec. 7, 1957	21.04	20,000
	Jan. 6, 1950	21.15	20,200		Dec. 20, 1957	16.60	16,000
	Jan. 30, 1950	23.33	24,000	1959	Jan. 22, 1959	27.19	31,600
	May 12, 1950	20.07	18,300	1960	Dec. 19, 1959	22.85	23,100

4090. White Oak Creek at Sunbright, Tenn.

Location.--Lat 36°14'38", long 84°40'14", at bridge on U.S. Highway 27 in Sunbright, Morgan County.Drainage area.--13.5 sq mi.Gage.--Nonrecording June 21, 1932, to Sept. 30, 1933. Since May 26, 1954, crest-stage gage. Altitude of gage is 1,300 ft (from topographic map).Stage-discharge relation.--Defined by current-meter measurements below 160 cfs and extended above on basis of drainage area runoff relationship and by log-arithmetic plotting.Bankfull stage.--11 ft.Historical data.--Flood of Mar. 23, 1929, is highest known.Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Mar. 23, 1929	17.45	4,900	1956	February 1956	11.29	1,950
1933	Sept. 3, 1933	11.5	2,000	1957	December 1956	11.56	2,030
1955	Mar. 21, 1955	14.29	3,160	1958	Nov. 18, 1957	13.61	2,850
				1959	Feb. 14, 1959	9.80	1,480
				1960	Dec. 19, 1959	11.98	2,180

4095. Clear Fork near Robbins, Tenn.

Location--Lat 36°23'18", long 84°37'49", on right bank 300 ft downstream from Burnt Mill Bridge, 3.3 miles northwest of Robbins, Scott County, and at mile 3.7.

Drainage area--272 sq mi.

Gage--Nonrecording prior to Aug. 10, 1940; recording thereafter. At site 300 ft upstream at datum 1.00 ft higher prior to Aug. 10, 1940. Datum of gage is 1,081.46 ft above mean sea level, Sandy Hook datum.

Stage-discharge relation--Defined by current-meter measurements below 14,000 cfs and extended on basis of slope-area measurement at 34,000 cfs.

Historical data--Flood of Mar. 23, 1929, is highest known, from information by local residents.

Remarks--Peaks are from graphs based on gage readings prior to Aug. 10, 1940. Base for partial-duration series, 6,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Mar. 23, 1929	22.1	-	1947	Jan. 3, 1947	10.74	9,910
					Jan. 20, 1947	8.92	6,670
1931	Mar. 28, 1931	7.60	6,130	1948	Feb. 13, 1948	16.15	25,500
1932	Jan. 30, 1932	10.40	10,800	1949	Nov. 28, 1948	12.30	13,500
	Feb. 3, 1932	14.9	20,400		Dec. 25, 1948	9.65	7,900
1933	Dec. 28, 1932	8.28	7,090		Jan. 5, 1949	16.93	28,300
	Dec. 31, 1932	8.58	7,250		Jan. 22, 1949	9.67	8,100
	Feb. 15, 1933	8.22	6,970	1950	Dec. 13, 1949	9.10	7,130
	Feb. 20, 1933	8.50	7,110		Jan. 6, 1950	11.78	12,200
	Sept. 4, 1933	11.7	13,400		Jan. 30, 1950	13.00	15,300
1934	Jan. 7, 1934	10.3	10,700		Feb. 1, 1950	11.85	12,300
	Feb. 26, 1934	8.35	7,200		Feb. 9, 1950	9.08	7,100
	Mar. 3, 1934	12.3	14,600		May 7, 1950	9.84	8,390
	Mar. 20, 1934	9.00	8,300	1951	Feb. 1, 1951	15.27	22,500
1935	Mar. 12, 1935	10.10	10,400		Feb. 21, 1951	9.90	8,490
	Mar. 26, 1935	10.20	9,000	1952	Dec. 8, 1951	12.30	13,500
	Apr. 6, 1935	10.70	9,750		Dec. 15, 1951	12.83	14,900
1936	Mar. 26, 1936	11.20	11,400		Dec. 21, 1951	11.78	12,200
	Apr. 6, 1936	12.00	13,100		Jan. 22, 1952	10.98	10,500
1937	Dec. 7, 1936	11.90	12,900		Mar. 4, 1952	10.05	8,760
	Jan. 2, 1937	15.90	27,100		Mar. 11, 1952	10.62	9,840
	Jan. 15, 1937	10.54	9,570	1953	Feb. 21, 1953	9.17	7,250
	Jan. 25, 1937	10.30	9,680	1954	Jan. 16, 1954	9.72	8,180
	May 13, 1937	10.50	9,680		Jan. 21, 1954	12.45	13,900
1938	Apr. 8, 1938	7.25	4,870	1955	Dec. 29, 1954	12.09	12,900
1939	Feb. 3, 1939	18.5	34,000		Feb. 6, 1955	9.23	7,350
	Feb. 15, 1939	9.77	8,750		Mar. 18, 1955	10.79	10,200
	Feb. 28, 1939	10.35	9,770		Mar. 22, 1955	14.34	19,400
1940	Mar. 30, 1940	10.10	9,320	1956	Jan. 30, 1956	11.23	11,000
1941	Apr. 4, 1941	9.40	7,380		Feb. 4, 1956	9.60	7,980
	July 4, 1941	9.94	8,190		Feb. 18, 1956	12.44	13,800
	July 13, 1941	8.90	6,580		Mar. 3, 1956	8.78	6,610
1942	Mar. 17, 1942	9.00	6,740		Mar. 14, 1956	8.90	6,800
					Apr. 6, 1956	9.02	6,990
1943	Dec. 29, 1942	13.74	17,300	1957	Dec. 13, 1956	11.16	10,900
	Mar. 13, 1943	10.55	9,250		Jan. 28, 1957	12.90	15,000
	Mar. 20, 1943	9.47	7,540		Feb. 1, 1957	9.67	8,100
	Apr. 17, 1943	9.60	7,700	1958	Nov. 19, 1957	12.67	14,400
	Apr. 23, 1943	9.06	6,840		Dec. 7, 1957	8.97	6,910
1944	Feb. 17, 1944	13.78	17,500		Dec. 20, 1957	10.91	10,400
	Feb. 29, 1944	10.90	10,000		May 6, 1958	9.48	8,390
	Mar. 19, 1944	9.62	7,700	1959	Feb. 14, 1959	10.35	9,320
	Sept. 29, 1944	13.62	15,800		Mar. 27, 1959	9.45	7,720
1945	Jan. 1, 1945	9.50	7,650	1960	Dec. 19, 1959	12.54	14,100
	Feb. 17, 1945	9.58	7,480		May 7, 1960	11.40	11,400
1946	Jan. 7, 1946	14.32	19,300				

4096. Black Creek tributary near Robbins, Tenn.

Location--Lat 36°21'53", long 84°35'21", at culvert under U.S. Highway 27, 0.8 mile upstream from mouth and 1.5 miles north of Robbins, Scott County.

Drainage area--0.25 sq mi.

Gage--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation--Not defined.

Remarks--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	3.40	-	1958	Nov. 18, 1957	3.21	-
1956	February 1956	2.27	-	1959	Feb. 14, 1959	2.75	-
1957	April 1957	2.98	-	1960	December 1959	.82	-

4105. South Fork Cumberland River near Stearns, Ky.

Location--Lat 36°37'37", long 84°32'00", on right bank at mouth of Bear Creek, 1,400 ft upstream from Salt Branch and 5.5 miles southwest of Stearns, McCreary County. Records include flow of Bear Creek.

Drainage area--954 sq mi, includes that of Bear Creek.

Gage--Recording. Datum of gage is 764.81 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation--Defined by current-meter measurements.

Historical data--The flood of March 1929 is the maximum stage known, from information by local residents.

Remarks--Base for partial-duration series, 22,000 cfs. Only annual peak stage is shown for 1929.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	March 1929	52.9	-	1952	Dec. 8, 1951	30.02	43,300
					Dec. 15, 1951	30.86	45,500
1943	Dec. 29, 1942	32.4	53,900		Dec. 21, 1951	26.20	33,700
	Mar. 13, 1943	23.66	29,900		Jan. 22, 1952	24.82	30,400
	Mar. 20, 1943	20.69	23,200		Mar. 11, 1952	26.00	33,200
	Apr. 19, 1943	23.52	29,400				
1944	Feb. 18, 1944	31.97	52,600	1953	Feb. 21, 1953	24.31	29,200
	Feb. 29, 1944	25.80	35,000	1954	Jan. 16, 1954	22.3	24,800
	Mar. 20, 1944	22.15	26,400		Jan. 21, 1954	27.19	36,100
	Sept. 30, 1944	30.72	48,600				
1945	Jan. 1, 1945	23.27	28,900	1955	Dec. 29, 1954	31.14	46,300
	Feb. 18, 1945	23.27	28,900		Feb. 7, 1955	21.92	23,800
	Feb. 22, 1945	20.34	22,300		Mar. 18, 1955	25.21	31,300
					Mar. 22, 1955	33.90	54,300
1946	Jan. 8, 1946	37.90	67,800	1956	Jan. 30, 1956	26.50	34,400
1947	Jan. 3, 1947	24.50	31,800		Feb. 5, 1956	22.16	24,500
	Jan. 20, 1947	23.60	29,600		Feb. 18, 1956	29.62	42,200
					Mar. 14, 1956	23.31	27,000
1948	Feb. 13, 1948	38.50	69,600	1957	Dec. 14, 1956	25.28	31,500
					Jan. 29, 1957	36.25	61,500
1949	Nov. 29, 1948	29.50	43,600		Feb. 2, 1957	23.15	26,600
	Dec. 25, 1948	20.55	22,600				
	Jan. 5, 1949	36.20	62,600	1958	Nov. 18, 1957	28.95	40,500
	Jan. 22, 1949	22.35	26,200		Dec. 8, 1957	25.34	31,600
1950	Dec. 13, 1949	23.25	28,200		Dec. 20, 1957	24.40	29,400
	Jan. 6, 1950	30.16	45,300		May 6, 1958	21.58	23,200
	Jan. 30, 1950	31.80	49,800	1959	Jan. 22, 1959	28.58	39,600
	May 7, 1950	20.85	23,200		Feb. 14, 1959	24.65	30,000
	May 12, 1950	22.50	26,600				
1951	Feb. 1, 1951	37.30	64,700	1960	Dec. 19, 1959	28.92	40,400
	Feb. 21, 1951	23.00	26,300				

4110. South Fork Cumberland River at Nevelsville, Ky.

Location.--Lat 36°50'25", long 84°35'00", 0.5 mile west of Nevelsville, McCreary County, 0.7 mile downstream from Turkey Creek, and 1.8 miles downstream from Little South Fork.

Drainage area.--1,271 sq mi.

Gage.--Nonrecording prior to June 14, 1934; recording thereafter. Prior to Apr. 10, 1934, at site half a mile upstream at same datum. Datum of gage is 637.29 ft above mean sea level, Sandy Hook datum.

Remarks.--Gage site inundated in 1950 by Lake Cumberland. Base for partial-duration series, 28,000 cfs. Only observed annual peaks are shown prior to 1935 except for 1929.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1916	Nov. 15, 1915	a36.72	a48,400	1939	Feb. 3, 1939	55.95	95,600
1917	Mar. 3, 1917	a35.10	a45,200		Feb. 15, 1939	28.43	36,600
1918	Jan. 28, 1918	a51.4	a84,300		Mar. 1, 1939	27.95	35,600
1919	Jan. 2, 1919	a43.2	a67,900				
1920	Mar. 13, 1920	a35.80	a46,600	1940	Mar. 31, 1940	29.78	39,200
					Apr. 20, 1940	24.21	28,200
1921	Apr. 17, 1921	a35.05	a45,000				
1922	Mar. 10, 1922	a35.2	a45,400	1941	Apr. 5, 1941	28.10	33,500
1923	Mar. 7, 1923	a30.4	a36,300		July 5, 1941	37.7	55,000
1924	May 30, 1924	a35.7	a46,400				
1925	Feb. 16, 1925	a30.7	a36,900	1942	Mar. 18, 1942	24.82	27,300
1926	Aug. 25, 1926	a43.0	a67,500	1943	Dec. 30, 1942	45.50	68,200
1927	Dec. 26, 1926	a37.8	a50,600		Mar. 14, 1943	27.60	32,500
1928	June 30, 1928	a53.6	a88,700		Mar. 20, 1943	26.28	30,000
1929	Mar. 23, 1929	69.0	130,000		Apr. 20, 1943	27.35	32,100
1930	Nov. 18, 1929	a25.05	a27,200				
				1944	Feb. 18, 1944	41.35	58,800
1931	Apr. 23, 1931	a22.40	a23,100		Feb. 29, 1944	30.24	36,600
					Mar. 20, 1944	26.50	30,000
1933	Dec. 28, 1932	a25.15	a27,500		Sept. 30, 1944	34.60	45,200
1934	Mar. 3, 1934	a36.12	a46,000				
				1945	Jan. 1, 1945	27.70	32,100
1935	Mar. 13, 1935	32.44	44,600		Feb. 18, 1945	26.42	29,900
	Mar. 26, 1935	31.92	43,600				
	Apr. 6, 1935	25.68	31,000	1946	Jan. 8, 1946	54.6	88,200
1936	Mar. 27, 1936	28.45	36,500	1947	Jan. 3, 1947	31.72	39,400
	Apr. 6, 1936	35.75	51,800		Jan. 21, 1947	26.77	30,600
1937	Dec. 7, 1936	28.95	37,500	1948	Feb. 14, 1948	53.15	84,900
	Jan. 2, 1937	46.38	70,400				
	Jan. 15, 1937	29.50	38,600	1949	Nov. 29, 1948	35.57	47,100
	Jan. 18, 1937	27.50	34,600		Jan. 6, 1949	46.40	69,500
	Jan. 25, 1937	31.05	41,900		Jan. 22, 1949	25.41	28,200
	Feb. 9, 1937	27.05	33,700				
				1950	Jan. 6, 1950	-	b49,000
1938	Apr. 9, 1938	18.72	18,300		Jan. 31, 1950	38.08	52,200

a Maximum observed.

b About.

CUMBERLAND RIVER BASIN

4115. Cumberland River at Burnside, Ky.

Location.--Lat 36°59'21", long 84°36'35", at bridge on U.S. Highway 27 at Burnside, Pulaski County, 100 ft upstream from South Fork.

Drainage area.--4,865 sq mi, including that of South Fork.

Gage.--Nonrecording prior to Nov. 21, 1933; recording thereafter. Prior to Nov. 21, 1933, at bridge over South Fork at same datum. Datum of gage is 585.60 ft above mean sea level, Sandy Hook datum.

Stage-discharge relation.--Defined by current-meter measurements below 150,000 cfs and extended above.

Bankfull stage.--55 ft.

Historical data.--The flood of March 1826 is maximum stage known. Flood of Mar. 24, 1929, reached highest stage since 1884.

Remarks.--Gage site inundated by Lake Cumberland, in which storage began in August 1950. Gage heights for period 1885-1914 obtained from graphs drawn through once-daily readings in records of U.S. Weather Bureau. Datum of gage might be in error by plus or minus 0.7 ft; an error of this magnitude represents less than a 5 percent error in discharge. Discharge obtained from stage-discharge relation based on measurements made during the period 1926-50. Base for partial-duration series, 59,000 cfs. Only annual peaks are shown prior to 1934. Maximum discharge frequently occurs at different time than maximum gage height.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1826	March 1826	72.4	-	1923	Feb. 4, 1923	48.2	103,000
				1924	Jan. 3, 1924	54.2	127,000
1885	Jan. 17, 1885	51	117,000	1925	Dec. 9, 1924	46.0	96,100
1886	Mar. 31, 1886	63	158,000	1926	Jan. 22, 1926	37.8	73,000
1887	Feb. 24, 1887	56	133,000	1927	Dec. 26, 1926	59.3	145,000
1888	Mar. 27, 1888	32	61,200	1928	June 30, 1928	54.0	127,000
1889	Feb. 18, 1889	35	60,600	1929	Mar. 24, 1929	67.4	181,000
1890	Feb. 26, 1890	a61.8	a153,000	1930	Nov. 18, 1929	37.7	57,800
1891	Mar. 9, 1891	a57.2	a137,000	1931	Mar. 29, 1931	27.6	50,300
1892	Mar. 24, 1892	a43.7	a95,100	1932	Jan. 30, 1932	53.2	124,000
				1933	Feb. 21, 1933	41.0	81,100
1894	Feb. 5, 1894	a39.5	a82,500				
1895	Mar. 21, 1895	a34.0	a66,800	1934	Jan. 7, 1934	34.48	74,200
					Feb. 26, 1934	37.12	80,400
1896	Apr. 2, 1896	56	133,000		Mar. 4, 1934	50.7	122,000
1897	Apr. 5, 1897	59	144,000		Mar. 20, 1934	39.62	59,700
1898	Jan. 23, 1898	37	75,200		Mar. 25, 1934	33.02	65,400
1899	Mar. 5, 1899	60	147,000				
1900	Feb. 9, 1900	28	50,800	1935	Mar. 13, 1935	50.3	122,000
					Mar. 26, 1935	39.97	97,100
1901	Apr. 20, 1901	55	130,000		Apr. 1, 1935	31.20	61,100
1902	Mar. 29, 1902	64	161,000		Apr. 8, 1935	37.24	79,300
1903	Mar. 1, 1903	56	133,000				
1904	Mar. 27, 1904	33	64,000	1936	Mar. 27, 1936	35.67	77,100
1905	Mar. 10, 1905	40	84,000		Apr. 7, 1936	46.90	112,000
1906	Mar. 31, 1906	39	81,000	1937	Jan. 3, 1937	54.35	134,000
1907	Feb. 25, 1907	38	78,000		Jan. 16, 1937	39.40	85,500
1908	Feb. 16, 1908	27	48,200		Jan. 18, 1937	48.24	117,000
1909	Feb. 25, 1909	42	90,000		Jan. 25, 1937	45.00	107,000
1910	Jan. 7, 1910	43	93,000		Feb. 10, 1937	32.76	69,500
1911	May 1, 1911	51	117,000	1938	Jan. 23, 1938	25.49	43,200
1912	Apr. 3, 1912	61	150,000				
1913	Jan. 8, 1913	63	158,000	1939	Feb. 4, 1939	64.90	169,000
1914	Mar. 31, 1914	45	99,000		Feb. 15, 1939	39.30	89,600
1915	Feb. 2, 1915	37.4	76,300		Feb. 28, 1939	35.82	77,400
					Mar. 6, 1939	37.60	61,500
1916	Dec. 19, 1915	54.5	128,000				
1917	Jan. 5, 1917	51.36	115,000	1940	Mar. 31, 1940	35.83	78,600
1918	Jan. 29, 1918	69.5	176,000		Apr. 20, 1940	35.12	73,800
1919	Jan. 2, 1919	58.0	140,000				
1920	Jan. 24, 1920	50.2	107,000	1941	July 5, 1941	36.59	73,700
1921	Apr. 17, 1921	37.5	73,800	1942	Mar. 18, 1942	29.40	53,600
1922	Mar. 11, 1922	48.0	103,000				

a Maximum observed.

Peak stages and discharges of Cumberland River at Burnside, Ky.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Dec. 30, 1942	60.50	156,000	1947	Jan. 3, 1947	43.04	105,000
	Mar. 14, 1943	36.55	80,000		Jan. 16, 1947	32.95	68,400
	Mar. 20, 1943	44.7	105,000		Jan. 21, 1947	36.85	81,000
	Apr. 20, 1943	35.80	74,000	1948	Feb. 14, 1948	65.95	175,000
1944	Feb. 18, 1944	47.65	114,000	1949	Nov. 29, 1948	37.74	86,500
	Feb. 29, 1944	43.04	101,000		Jan. 6, 1949	51.49	131,000
	Mar. 20, 1944	37.54	84,900		Jan. 22, 1949	31.30	63,700
	Apr. 12, 1944	35.60	78,200		Mar. 19, 1949	33.22	69,200
1945	Jan. 1, 1945	42.42	94,300	1950	Dec. 14, 1949	29.90	59,300
	Feb. 18, 1945	34.48	69,700		Jan. 7, 1950	45.95	110,000
	Feb. 22, 1945	40.50	88,500		Jan. 31, 1950	50.24	120,000
	Mar. 6, 1945	31.10	60,000		Feb. 10, 1950	31.06	62,500
1946	Jan. 8, 1946	66.04	173,000				

4125. Pitman Creek at Somerset, Ky.

Location--Lat 37°07'01", long 84°35'31", on right bank 0.1 mile downstream from Dry Branch, 0.5 mile upstream from Caney Fork, and 1.9 miles northeast of Somerset, Pulaski County.

Drainage area--31.3 sq mi.

Gage--Recording. Datum of gage is 867.34 ft above mean sea level, datum of 1929.

Stage-discharge relation--Defined by current-meter measurements below 1,500 cfs and extended above.

Bankfull stage--6 ft.

Remarks--Base for partial-duration series, 850 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 20, 1954	5.04	1,240	1957	Dec. 14, 1956	6.08	1,660
1955	Feb. 6, 1955	6.02	1,630		Jan. 22, 1957	7.43	2,260
	Feb. 22, 1955	5.19	1,300		Jan. 29, 1957	6.78	1,970
	Feb. 27, 1955	6.07	1,650		Feb. 10, 1957	5.97	1,610
	Mar. 1, 1955	6.40	1,800		Apr. 4, 1957	5.51	1,420
	Mar. 21, 1955	7.58	2,430		Sept. 14, 1957	4.41	984
	May 24, 1955	7.46	2,380	1958	Nov. 19, 1957	5.59	1,460
1956	Jan. 30, 1956	6.40	1,800		Dec. 7, 1957	4.67	1,090
	Feb. 2, 1956	5.71	1,500		Dec. 20, 1957	4.94	1,200
	Feb. 18, 1956	7.19	2,260		Jan. 31, 1958	4.44	996
	Feb. 24, 1956	4.73	1,110		Apr. 27, 1958	4.75	1,120
	Mar. 7, 1956	5.18	1,290	1959	Feb. 14, 1959	4.43	992
	Mar. 14, 1956	6.45	1,820		Aug. 4, 1959	8.74	2,850
	Apr. 6, 1956	5.12	1,270	1960	Feb. 10, 1960	6.13	1,680
	Apr. 15, 1956	6.73	1,950		June 23, 1960	8.03	2,530
	July 23, 1956	4.44	996		June 30, 1960	4.26	924
	July 28, 1956	7.18	2,250				

4140. Cumberland River near Rowena, Ky.

Location.--Lat 36°53'02", long 85°08'22", on right bank 1.5 miles downstream from Wolf Creek Dam, 1.9 miles upstream from Blackfish Creek, 1.9 miles west of Rowena, Russell County, and at mile 459.4.

Drainage area.--5,790 sq mi.

Gage.--Nonrecording prior to Oct. 24, 1940; recording thereafter. Datum of gage is 540.81 ft above mean sea level, Sandy Hook datum.

Stage-discharge relation.--Defined by current-meter measurements; subject to change owing to variable water-surface slope.

Bankfull stage.--45 ft.

Historical data.--The flood of March 1826 is maximum stage known.

Remarks.--Flow regulated by Lake Cumberland since July 1950. Base for partial-duration series, 45,000 cfs. Only annual peaks are shown for 1951-60. Maximum discharge frequently occurs at different time than maximum gage height.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1826	March 1826	a69.5	-	1947	Feb. 1, 1947	32.65	49,100
1940	Apr. 1, 1940	40.5	67,200	1948	June 30, 1947	33.01	49,700
	Apr. 21, 1940	40.8	66,500		Feb. 15, 1948	63.78	156,000
1941	Apr. 6, 1941	33.45	51,600	1949	Mar. 18, 1948	31.34	46,000
	July 6, 1941	40.07	64,300		Mar. 28, 1948	33.14	49,300
1942	Mar. 18, 1942	32.78	49,900		Apr. 14, 1948	31.58	46,600
	Dec. 31, 1942	61.70	146,000	1950	Nov. 30, 1948	41.03	68,000
1943	Mar. 14, 1943	40.85	70,800		Jan. 7, 1949	52.10	100,000
	Mar. 21, 1943	48.63	88,500	1951	Jan. 23, 1949	36.11	56,400
1944	Apr. 20, 1943	39.37	69,500		Mar. 19, 1949	38.20	60,700
	Feb. 19, 1944	48.57	88,200	1952	Dec. 15, 1949	34.67	53,100
1945	Mar. 1, 1944	47.30	84,000		Jan. 7, 1950	54.80	111,000
	Mar. 8, 1944	34.57	53,400	1953	Jan. 15, 1950	37.94	59,500
1946	Mar. 21, 1944	42.07	70,200		Feb. 2, 1950	61.48	142,000
	Mar. 30, 1944	32.15	48,200	1954	Feb. 11, 1950	37.61	59,200
1947	Apr. 13, 1944	40.04	65,500		May 14, 1950	32.63	48,700
	Jan. 2, 1945	47.14	83,800	1955	Apr. 5, 1951	23.01	29,700
1948	Feb. 19, 1945	39.10	63,200		Jan. 9, 1952	28.50	39,800
	Feb. 23, 1945	46.01	80,300	1956	Apr. 13, 1953	19.04	22,900
1949	Mar. 1, 1945	33.85	51,800		May 8, 1954	18.50	22,000
	Mar. 7, 1945	35.98	56,700	1957	Apr. 8, 1955	25.42	34,700
1950	Jan. 9, 1946	64.82	162,000		Mar. 15, 1956	23.47	31,100
	Jan. 4, 1947	46.64	82,200	1958	Feb. 22, 1957	21.43	27,500
1951	Jan. 22, 1947	42.20	70,300		Apr. 28, 1958	21.12	26,900
				1959	Apr. 16, 17, 1959	20.20	25,300
					June 28, 1960	20.25	25,400

a From water-surface profile.

4145. East Fork Obey River near Jamestown, Tenn.

Location.--Lat 36°24'58", long 85°01'35", on right bank 200 ft upstream from bridge on State Highway 52, 0.5 mile upstream from Poplar Cove Creek, 5.3 miles west of Jamestown, Pentress County, and 12.8 miles upstream from confluence with West Fork.

Drainage area.--202 sq mi (includes 6 sq mi without surface drainage).

Gage.--Recording. Nonrecording at site 200 ft upstream at same datum Feb. 24 to Apr. 7, 1943. Datum of gage is 680.30 ft above mean sea level, Sandy Hook datum.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--Not subject to overflow.

Historical data.--Flood of March 1929 is highest known, from flood profile by Corps of Engineers.

Remarks.--Base for partial-duration series, 8,000 cfs.

Peak stages and discharges of East Fork Obey River near Jamestown, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	March 1929	30.7	-	1952	Dec. 14, 1951	20.89	19,300
1943	Dec. 29, 1942	-	(a)	1952	Dec. 20, 1951	13.61	9,350
	Mar. 13, 1943	12.94	8,800	1952	Mar. 11, 1952	14.47	10,500
	Apr. 23, 1943	13.26	9,230	1953	Feb. 21, 1953	14.26	10,200
1944	Feb. 17, 1944	22.00	20,800	1954	Jan. 16, 1954	14.35	10,300
	Sept. 29, 1944	19.30	16,600	1954	Jan. 21, 1954	16.66	13,400
1945	Feb. 22, 1945	13.06	8,440	1955	Dec. 29, 1954	14.48	10,200
1946	Jan. 7, 1946	22.60	21,000	1955	Feb. 6, 1955	13.48	9,030
	Jan. 15, 1947	12.73	8,060	1955	Mar. 18, 1955	15.62	11,500
1948	Feb. 13, 1948	27.20	28,300	1955	Mar. 21, 1955	24.83	26,900
1949	Jan. 5, 1949	25.75	26,600	1956	Jan. 30, 1956	16.24	12,300
1950	Jan. 6, 1950	14.01	9,870	1956	Feb. 4, 1956	12.57	8,070
	Jan. 30, 1950	16.83	13,700	1956	Feb. 18, 1956	17.70	14,300
	Feb. 1, 1950	15.21	11,400	1956	Apr. 6, 1956	13.54	9,090
	May 7, 1950	13.38	9,050	1957	Jan. 29, 1957	19.41	16,900
1951	Jan. 31, 1951	18.10	15,400	1958	Nov. 18, 1957	17.89	14,600
	Feb. 21, 1951	12.54	8,010	1958	May 6, 1958	13.59	9,110
1952	Dec. 8, 1951	20.95	19,400	1959	Feb. 14, 1959	13.27	8,750
				1960	Dec. 19, 1959	18.20	15,000

a Discharge not determined but greater than 9,230 cfs.

4147. Puncheon Camp Creek at Allred, Tenn.

Location.--Lat 36°19'35", long 85°11'10", at bridge on State Highway 85 at Allred, Overton County, 7.0 miles south of intersection of State Highways 85 and 52.

Drainage area.--15.5 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Not defined.

Remarks.--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	11.38	-	1958	Nov. 18, 1957	8.44	-
1956	February 1956	5.94	-	1959	Feb. 14, 1959	4.11	-
1957	Jan. 29, 1957	7.72	-	1960	Nov. 28, 1959	9.27	-

4150. West Fork Obey River near Alpine, Tenn.

Location.--Lat 36°23'49", long 85°10'28", on upstream end of left pier of bridge on State Highway 52, 0.3 mile upstream from Nettlecarrier Creek, 2.4 miles east of Alpine, Overton County, and 7.8 miles upstream from confluence with East Fork.

Drainage area.--115 sq mi (includes 34 sq mi without surface drainage).

Gage.--Recording. Datum of gage is 684.28 ft above mean sea level, datum of 1929 unadjusted.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--Not subject to overflow.

Historical data.--Flood of Mar. 21, 1955, is highest known. Flood in March 1929 reached a stage about 2 ft lower than that of Mar. 21, 1955.

Remarks.--Base for partial-duration series, 3,400 cfs.

CUMBERLAND RIVER BASIN

Peak stages and discharges of West Fork Obey River near Alpine, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Dec. 28, 1942	9.07	5,020	1952	Dec. 14, 1951	11.51	7,960
	Mar. 13, 1943	7.84	3,400		Dec. 20, 1951	7.35	3,470
	Apr. 23, 1943	8.60	4,440		Jan. 22, 1952	7.98	4,000
1944	Feb. 17, 1944	11.13	7,430	1953	Feb. 21, 1953	9.09	4,950
	Mar. 6, 1944	8.28	3,800		Jan. 16, 1954	8.29	4,270
	Sept. 29, 1944	9.17	5,140	1954	Jan. 20, 1954	8.45	4,400
1945	Jan. 1, 1945	9.12	5,020		Dec. 29, 1954	7.61	3,520
	Feb. 22, 1945	9.71	5,740	1955	Feb. 6, 1955	8.12	4,020
1946	Jan. 7, 1946	15.56	14,000		Feb. 22, 1955	7.85	3,750
	Jan. 15, 1947	7.70	3,450		Mar. 18, 1955	9.44	5,440
1948	Feb. 13, 1948	13.75	11,100		Mar. 21, 1955	16.30	15,100
	Jan. 5, 1949	10.90	6,670	1956	Jan. 29, 1956	8.84	4,780
1949	Mar. 18, 1949	7.68	3,570		Feb. 4, 1956	7.73	3,630
	June 28, 1949	10.42	6,190		Feb. 18, 1956	10.67	6,900
	May 7, 1950	8.74	4,650		Apr. 2, 1956	9.88	5,960
1950	Jan. 6, 1950	8.10	3,950		Apr. 6, 1956	8.06	3,930
	Jan. 31, 1950	9.45	5,250	1957	Jan. 29, 1957	12.65	9,510
	Feb. 1, 1950	9.45	5,250		Nov. 18, 1957	12.65	9,510
	May 7, 1950	8.74	4,650	1959	Jan. 21, 1959	7.63	3,490
	Jan. 31, 1951	9.67	5,440		Feb. 14, 1959	8.25	4,140
1951	Feb. 21, 1951	7.55	3,640	1960	Dec. 18, 1959	11.75	8,280
	Dec. 8, 1951	11.36	7,770				

4155. Obey River near Byrdstown, Tenn.
(Published as "near Boom" prior to 1926)

Location.--Lat 36°32'12", long 85°10'25", at bridge on State Highway 42, 1.8 miles upstream from Eagle Creek and 3.4 miles southwest of Byrdstown, Pickett County.

Drainage area.--452 sq mi.

Gage.--Nonrecording prior to Nov. 16, 1933; recording thereafter. At site a quarter of a mile downstream at same datum prior to May 9, 1933. Datum of gage is 577.08 ft above mean sea level, Sandy Hook datum.

Stage-discharge relation.--Defined by current-meter measurements below 14,000 cfs and extended on basis of slope-area measurement at 35,000 cfs. Rate of change in stage used as a factor in computing discharge.

Bankfull stage.--30 ft.

Remarks.--Prior to Nov. 16, 1933, peaks are from graphs based on gage readings. Base for partial-duration series, 7,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920	Nov. 27, 1919	16.4	10,400	1924	Jan. 3, 1924	24.94	18,400
	Dec. 14, 1919	16.7	10,600		Jan. 16, 1924	14.4	7,880
	Jan. 23, 1920	19.4	13,100		May 29, 1924	25.0	15,600
	Feb. 22, 1920	28.5	22,600	1925	Feb. 16, 1925	16.40	9,280
	Mar. 12, 1920	13.8	8,070		Nov. 13, 1925	14.5	7,950
	Apr. 2, 1920	27.8	21,700	1926	Jan. 22, 1926	16.92	9,630
1921	Apr. 17, 1921	11.54	6,690		Dec. 10, 1926	18.1	10,500
1922	Mar. 2, 1921	35.65	34,500	1927	Dec. 22, 1926	30.0	22,100
	Mar. 10, 1922	33.5	30,800		Dec. 29, 1926	23.0	14,000
	Mar. 15, 1922	13.4	7,750		Mar. 8, 1927	14.2	7,740
	Apr. 28, 1922	22.6	16,200	1928	Dec. 31, 1927	15.6	8,720
1923	Jan. 28, 1923	21.6	15,200		Apr. 22, 1928	15.9	8,930
	Feb. 3, 1923	18.2	12,000		June 4, 1928	14.4	7,880
	Mar. 7, 1923	19.0	12,800		June 29, 1928	35.9	35,000
	Mar. 12, 1923	19.0	12,800				

Peak stages and discharges of Obey River near Byrdstown, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Nov. 19, 1928	18.3	10,600	1936	Mar. 17, 1936	15.68	7,740
	Jan. 19, 1929	17.3	9,910		Mar. 26, 1936	27.02	16,900
	Jan. 25, 1929	20.7	12,300		Apr. 6, 1936	26.83	15,500
	Feb. 26, 1929	21.6	13,000	1937	Dec. 7, 1936	15.50	7,620
	Mar. 23, 1929	35.9	35,000		Jan. 2, 1937	33.68	28,800
	Apr. 29, 1929	16.8	9,560		Jan. 15, 1937	24.00	13,000
	May 7, 1929	16.1	9,070		Jan. 18, 1937	20.72	10,700
1930	Feb. 14, 1930	17.9	10,300		Jan. 20, 1937	17.04	8,250
	Mar. 19, 1930	18.8	11,000		Jan. 25, 1937	20.00	10,200
1931	Mar. 28, 1931	17.6	10,100		Feb. 9, 1937	24.10	13,100
1932	Jan. 30, 1932	30.4	22,900	1938	Jan. 22, 1938	10.45	4,380
	Feb. 4, 1932	28.8	20,100		Jan. 13, 1939	18.08	8,780
1933	Dec. 31, 1932	15.4	8,580	1939	Feb. 3, 1939	34.41	28,600
	Feb. 15, 1933	17.9	10,300		Feb. 15, 1939	23.76	12,600
	Feb. 20, 1933	18.1	10,500		Feb. 28, 1939	21.66	11,100
	Mar. 19, 1933	22.8	13,900	1940	Mar. 30, 1940	25.64	14,100
	Sept. 4, 1933	25.0	15,600		Apr. 5, 1941	23.27	12,200
1934	Jan. 7, 1934	16.60	9,420	1941	July 4, 1941	26.88	15,300
	Feb. 26, 1934	20.00	11,800		Mar. 17, 1942	14.28	5,730
	Mar. 3, 1934	28.10	19,000	1943	Dec. 29, 1942	31.26	21,300
	Mar. 20, 1934	23.55	14,500		Mar. 13, 1943	19.69	13,800
	Mar. 25, 1934	15.45	10,400		Mar. 20, 1943	19.95	14,100
1935	Feb. 26, 1935	14.88	9,900		Apr. 19, 1943	16.58	9,520
	Mar. 12, 1935	26.66	17,200		Apr. 24, 1943	19.45	13,400
	Mar. 26, 1935	21.92	11,600				
	Mar. 28, 1935	15.45	10,400				
	Apr. 6, 1935	22.72	12,100				

4157. Big Eagle Creek near Livingston, Tenn.

Location.--Lat 36°26'57", long 85°16'27", at bridge on county road, 0.8 mile north of intersection with State Highway 42 and 4.7 miles northeast of Livingston city limits, Overton County.

Drainage area.--7.98 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Not defined except at 962 cfs, from results of contracted-opening measurement.

Bankfull stage.--4 ft.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	4.61	-	1959	Feb. 14, 1959	3.50	-
1956	February 1956	4.15	-	1960	May 1960	4.08	-
1957	Jan. 29, 1957	4.48	962				
1958	Nov. 18, 1957	3.51	-				

4160. Wolf River near Byrdstown, Tenn.

Location.--Lat 36°33'40", long 85°04'20", on right bank a quarter of a mile upstream from bridge on county road, half a mile upstream from Widow Creek, 3 miles east of Byrdstown, Pickett County, and 5 miles upstream from Lick Creek.

Drainage area.--105 sq mi.

Gage.--Recording. Datum of gage is 707.54 ft above mean sea level, Sandy Hook datum.

Stage-discharge relation.--Defined by current-meter measurements below 7,300 cfs and extended on basis of velocity-area study.

Historical data.--Flood of March 1929 reached a stage about equal to that of Jan. 29, 1957, from information by local resident.

Remarks.--Base for partial-duration series, 3,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Feb. 17, 1944	8.42	10,900	1952	Mar. 22, 1952	6.99	5,880
	Mar. 6, 1944	6.90	5,170	1953	Feb. 21, 1953	6.29	4,200
1945	Jan. 1, 1945	7.45	7,040	1954	Jan. 21, 1954	6.44	4,530
	Feb. 22, 1945	8.38	10,900	1955	Feb. 6, 1955	6.14	3,740
1946	Jan. 7, 1946	8.94	13,300		Feb. 22, 1955	6.18	3,820
1947	Jan. 15, 1947	6.32	3,860		Mar. 18, 1955	6.44	4,400
1948	Feb. 13, 1948	8.25	10,200		Mar. 22, 1955	9.06	14,100
	Mar. 16, 1948	6.83	4,980	1956	Jan. 29, 1956	6.19	3,840
1949	Jan. 5, 1949	7.34	6,640		Feb. 4, 1956	6.35	4,190
	Jan. 31, 1950	6.57	4,840		Feb. 18, 1956	7.39	6,970
1950	June 10, 1950	7.45	7,150		Mar. 14, 1956	6.07	3,600
					Apr. 6, 1956	6.76	5,200
1951	Feb. 1, 1951	6.97	5,820	1957	Jan. 29, 1957	10.84	22,600
	Feb. 21, 1951	6.22	4,040	1958	Nov. 18, 1957	7.89	8,480
1952	Dec. 8, 1951	6.76	5,300	1959	Jan. 22, 1959	5.11	2,160
	Dec. 14, 1951	7.99	9,160	1960	Dec. 19, 1959	6.96	5,670
	Jan. 22, 1952	6.50	4,670		June 28, 1960	6.88	5,460

4170. Obey River below Dale Hollow Dam, Tenn.
(Published as "near Celina" prior to September 1943)

Location.--Lat 36°32'12", long 85°27'22", on right bank 1,200 ft downstream from Dale Hollow Dam, 3 miles east of Celina, Clay County, 7.1 miles upstream from mouth, and 24 miles downstream from Wolf River.

Drainage area.--935 sq mi.

Gage.--Nonrecording prior to Nov. 22, 1940; recording thereafter. At site 5.2 miles upstream prior to Sept. 30, 1942, at datum 12.46 ft higher. Datum of gage is 500.00 ft above mean sea level, Sandy Hook datum. Recording gage on Cumberland River near Celina is used as an auxiliary gage for this station.

Stage-discharge relation.--Defined by current-meter measurements below 20,000 cfs and extended above. Fall between auxiliary and reference gage used as a factor in computing discharge.

Remarks.--Flow completely regulated by Dale Hollow Reservoir since Aug. 30, 1943. Only annual peaks are shown. Peak gage heights frequently affected by backwater from Cumberland River and frequently occur at different time than peak discharge.

Peak stages and discharges of Obey River below Dale Hollow Dam, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Feb. 4, 1939	39.10	41,400	1949	Jan. 6, 1949	32.67	15,500
1940	Mar. 31, 1940	29.30	21,100	1950	Feb. 5, 1950	41.93	-
1941	July 5, 1941	30.10	23,400		Feb. 17, 1950	-	14,000
1942	Mar. 18, 1942	17.20	10,300	1951	Jan. 29, 1951	-	3,880
1944	Feb. 21, 1944	27.83	-		Apr. 3, 1951	15.08	-
	Sept. 1, 1944	-	6,040	1952	Mar. 24, 1952	26.61	4,050
1945	Jan. 4, 1945	28.27	-	1953	July 3, 1953	13.32	4,010
	Mar. 12, 1945	-	6,000	1954	Jan. 22, 1954	15.60	-
1946	Jan. 12, 1946	43.40	-		June 10, 1954	-	5,770
	Feb. 14, 1946	-	6,150	1955	Mar. 22, 1955	25.37	6,820
1947	Jan. 6, 1947	26.87	-	1956	Mar. 14, 1956	19.85	-
	Feb. 4, 1947	-	9,020		Aug. 13, 1956	-	6,210
1948	Feb. 18, 1948	41.33	-	1957	Jan. 29, 1957	25.20	-
	Feb. 26, 1948	-	7,900		Apr. 8, 1957	-	6,280
				1958	Apr. 28, 1958	18.82	6,060

a Maximum for period Jan. 25 to Sept. 30, 1939.

4175. Cumberland River at Celina, Tenn.

Location.--Lat 36°33'20", long 85°30'47", on right pier of bridge on State Highway 52 at Celina, Clay County, 600 ft downstream from Obey River and at mile 380.8.

Drainage area.--7,320 sq mi, approximately.

Gage.--Nonrecording prior to Nov. 20, 1930; recording thereafter. At datum 0.5 ft higher prior to Oct. 1, 1922. At site 400 ft downstream Oct. 1, 1922, to Nov. 20, 1930. Datum of gage is 488.97 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements. Rate of change in stage used as a factor in computing discharge.

Bankfull stage.--40 ft (U.S. Weather Bureau).

Historical data.--Flood of March 1826 is highest known since at least 1793, from Cumberland River profile by Corps of Engineers.

Remarks.--Flow regulated since July 1950 by Wolf Creek Reservoir and since August 1943 by Dale Hollow Reservoir. Only annual peak stages are shown prior to 1923, from reports of U.S. Weather Bureau. Base for partial-duration series, 57,000 cfs. Peak gage height frequently occurs at different time than peak discharge.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1826	March 1826	59.2	-	1921	Apr. 20, 1921	30.5	-
1890	Feb. 27, 1890	52	-	1922	Mar. 13, 1922	42.5	-
1904	Mar. 27, 1904	33.2	-	1923	Dec. 18, 1922	35.3	69,900
1905	Mar. 12, 1905	31.5	-		Jan. 24, 1923	32.4	63,000
1906	Apr. 2, 1906	34.0	-		Feb. 6, 1923	44.5	93,300
1907	Feb. 27, 1907	32.8	-		Mar. 9, 1923	35.3	70,700
1908	Apr. 4, 1908	25.0	-	1924	Jan. 6, 1924	46.53	100,000
1909	Feb. 27, 1909	36.9	-		Feb. 22, 1924	33.4	65,900
1910	Jan. 9, 1910	33.4	-		May 31, 1924	32.2	62,800
1911	May 4, 1911	40.5	-	1925	Dec. 11, 1924	37.90	76,400
1912	Apr. 6, 1912	47.0	-		Feb. 18, 1925	34.7	68,800
1913	Jan. 12, 1913	50.4	-	1926	Jan. 23, 1926	37.10	74,300
1914	Apr. 3, 1914	39.0	-		Aug. 27, 1926	31.9	61,900
1915	Feb. 4, 1915	34.4	-	1927	Dec. 29, 1926	57.25	145,000
1916	Dec. 21, 1915	44.2	-		Feb. 26, 1927	31.1	60,500
1917	Jan. 8, 1917	44.6	-		Mar. 10, 1927	31.8	61,600
1918	Feb. 1, 1918	55.2	-		May 31, 1927	31.2	60,300
1919	Jan. 5, 1919	47.4	-	1928	Nov. 19, 1927	30.2	58,300
1920	Jan. 26, 1920	48.3	-				

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Peak stages and discharges of Cumberland River at Celina, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Apr. 25, 1928	30.0	57,100	1942	Mar. 19, 1942	27.96	50,500
	June 6, 1928	32.3	63,000	1943	Jan. 2, 1943	52.02	120,000
	July 2, 1928	43.89	92,200		Mar. 22, 1943	42.20	84,900
1929	Nov. 22, 1928	33.9	66,800		Aug. 23, 1943	32.77	60,600
	Jan. 27, 1929	35.2	69,900	1944	Feb. 21, 1944	38.38	75,000
	Mar. 1, 1929	42.3	88,500		Mar. 3, 1944	38.34	74,100
	Mar. 8, 1929	35.0	69,600		Mar. 23, 1944	33.95	63,300
	Mar. 27, 1929	52.7	125,000		Apr. 15, 1944	32.30	59,500
	May 9, 1929	32.5	62,900	1945	Jan. 4, 1945	38.69	72,600
1930	Nov. 20, 1929	28.76	54,100		Feb. 25, 1945	37.52	69,300
1931	Mar. 30, 1931	28.72	56,600	1946	Jan. 12, 1946	54.09	134,000
1932	Dec. 15, 1931	29.9	59,800	1947	Jan. 5, 1947	37.37	69,600
	Feb. 4, 1932	47.34	107,000		Jan. 23, 1947	34.98	63,800
	Mar. 31, 1932	32.02	65,700	1948	Feb. 17, 1948	52.01	122,000
1933	Jan. 1, 1933	32.39	66,000	1949	Dec. 2, 1948	33.04	59,500
	Jan. 24, 1933	33.80	69,900		Jan. 8, 1949	41.65	80,100
	Feb. 21, 1933	40.03	86,600		Jan. 25, 1949	32.20	57,600
	Mar. 21, 1933	34.27	71,400		Mar. 21, 1949	32.60	58,500
	May 12, 1933	36.57	77,400	1950	Jan. 10, 1950	44.36	86,100
1934	Jan. 9, 1934	31.00	59,700		Feb. 5, 1950	52.46	124,000
	Mar. 6, 1934	42.07	86,800	1951	Apr. 3, 1951	22.36	36,600
	Mar. 27, 1934	37.10	74,200	1952	Mar. 22, 1952	36.25	70,900
1935	Jan. 22, 1935	36.19	71,800		Feb. 21, 1953	16.97	26,200
	Mar. 15, 1935	43.75	91,700	1954	Apr. 16, 1954	18.55	29,200
	Mar. 29, 1935	40.42	83,100	1955	Mar. 22, 1955	34.13	63,600
1936	Apr. 9, 1935	40.54	85,000	1956	Feb. 18, 1956	23.79	52,400
	Mar. 28, 1936	40.82	83,900	1957	Jan. 29, 1957	34.1	66,500
	Apr. 9, 1936	42.42	88,800	1958	Apr. 28, 1958	25.80	44,600
1937	Jan. 5, 1937	43.82	91,600	1959	Apr. 15, 1959	17.48	26,500
	Jan. 23, 1937	53.83	128,000	1960	June 28, 1960	24.25	43,400
1938	Mar. 6, 1938	30.35	55,000				
1939	Feb. 7, 1939	50.12	112,000				
	Feb. 17, 1939	37.70	72,200				
	Mar. 3, 1939	34.10	63,400				
	Mar. 8, 1939	32.32	59,200				
1940	Apr. 1, 1940	35.32	69,000				
	Apr. 23, 1940	35.02	67,400				
1941	July 6, 1941	34.20	66,100				

4177. Mathews Branch tributary near Livingston, Tenn.

Location--Lat 36°20'04", long 85°20'23", at culvert under State Highway 42, 2.0 miles south of intersection of State Highways 85 and 42 and 2.9 miles southwest of Livingston, Overton County.

Drainage area--0.49 sq mi.

Gage--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation--Defined by culvert computations.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	4.44	188	1958	Sept. 21, 1958	2.61	76
1956	February 1956	5.54	273	1959	June 1, 1959	1.91	42.5
1957	Jan. 29, 1957	3.05	99	1960	July 24, 1960	4.0	159

4180. Roaring River near Hilham, Tenn.

Location--Lat 36°20'27", long 85°25'35", on left bank 700 ft upstream from Cleek Branch, 800 ft downstream from old Crawford Mill site, 0.2 mile downstream from bridge on State Highway 136, 1.4 miles upstream from Flat Creek, 5.0 miles south of Hilham, Overton County, and 13 miles north of Cookeville.

Drainage area--78.7 sq mi (includes 27.1 sq mi without surface drainage).

Gage--Nonrecording prior to Sept. 23, 1940; recording thereafter. At site 800 ft upstream at different datum prior to July 25, 1933. At site 150 ft downstream at different datum July 25 to Nov. 7, 1933. Altitude of gage is 770 ft (by barometer).

Stage-discharge relation--Defined by current-meter measurements below 4,000 cfs and extended above.

Bankfull stage--Not subject to overflow.

Remarks--Peaks are from graphs based on gage readings prior to Sept. 23, 1940. Base for partial-duration series, 1,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Aug. 17, 1932	5.98	al,970	1944	Apr. 11, 1944	4.87	1,400
1933	Dec. 31, 1932	5.60	1,620		Sept. 29, 1944	5.55	1,910
	Feb. 15, 1933	5.50	1,570	1945	Jan. 1, 1945	7.16	3,360
	Feb. 20, 1933	6.64	2,610		Feb. 17, 1945	5.80	2,110
	Mar. 19, 1933	8.00	4,330		Feb. 22, 1945	7.62	3,760
	Sept. 4, 1933	6.80	2,790	1946	Nov. 21, 1945	4.55	1,220
1934	Feb. 26, 1934	5.60	2,170		Jan. 7, 1946	9.28	5,460
	Mar. 3, 1934	6.80	3,200		Feb. 27, 1946	5.23	1,650
	Mar. 19, 1934	5.40	2,010	1947	Jan. 2, 1947	5.45	1,830
1935	Feb. 26, 1935	4.30	1,250		Jan. 15, 1947	5.58	1,930
	Mar. 12, 1935	7.90	4,050	1948	Feb. 13, 1948	8.19	4,350
	Mar. 25, 1935	7.20	3,400	1949	Nov. 28, 1948	5.00	1,500
	Apr. 5, 1935	6.50	2,770		Dec. 16, 1948	4.85	1,400
	July 29, 1935	5.30	1,760		Dec. 25, 1948	5.28	1,700
1936	Mar. 16, 1936	5.60	2,000		Jan. 5, 1949	6.39	2,620
	Mar. 26, 1936	8.20	4,340		Mar. 18, 1949	5.12	1,580
	Apr. 6, 1936	8.20	4,340		June 28, 1949	8.63	4,790
1937	Jan. 2, 1937	8.8	4,920	1950	Jan. 6, 1950	6.32	2,560
	Jan. 15, 1937	7.30	3,490		Jan. 10, 1950	5.03	1,520
	Jan. 17, 1937	6.70	2,950		Jan. 16, 1950	4.97	1,480
	Jan. 28, 1937	6.70	2,950		Jan. 31, 1950	7.10	3,260
	Jan. 23, 1937	6.05	2,380		Feb. 9, 1950	4.77	1,340
	May 13, 1937	6.00	2,340		June 10, 1950	4.67	1,270
	June 10, 1937	6.50	2,770		June 22, 1950	5.80	2,110
1938	Aug. 11, 1938	3.80	835		July 23, 1950	5.15	1,600
1939	Jan. 13, 1939	5.00	1,540	1951	Feb. 1, 1951	7.32	3,480
	Feb. 3, 1939	9.00	5,120		Feb. 21, 1951	5.24	1,670
	Feb. 15, 1939	7.02	3,240	1952	Dec. 8, 1951	6.86	3,040
	Feb. 28, 1939	5.72	2,100		Dec. 15, 1951	7.59	3,750
	June 30, 1939	5.90	2,250		Dec. 21, 1951	4.76	1,330
1940	Mar. 30, 1940	6.20	2,500		Jan. 22, 1952	5.59	1,940
	Apr. 4, 1940	5.30	1,760		Jan. 27, 1952	5.20	1,640
	Apr. 19, 1940	4.62	1,290		Mar. 11, 1952	5.12	1,580
1941	Apr. 4, 1941	6.00	2,340	1953	Feb. 21, 1953	5.28	1,700
	July 4, 1941	6.58	2,860		Nar. 4, 1953	4.80	1,360
1942	Mar. 17, 1942	4.10	955		May 19, 1953	4.70	1,290
1943	Nov. 23, 1942	4.74	1,340	1954	Jan. 16, 1954	5.26	1,680
	Dec. 29, 1942	6.64	2,850		Jan. 21, 1954	5.61	1,960
	Mar. 13, 1943	5.65	1,990	1955	Dec. 29, 1954	5.79	2,100
	Mar. 20, 1943	6.78	2,990		Feb. 6, 1955	5.97	2,250
	Apr. 23, 1943	5.80	2,110		Feb. 22, 1955	5.96	2,240
1944	Feb. 17, 1944	7.46	3,660		Mar. 18, 1955	5.71	2,040
	Feb. 27, 1944	5.15	1,620		Mar. 22, 1955	9.39	5,550
	Feb. 29, 1944	4.93	1,440		Mar. 25, 1955	4.51	1,220
	Mar. 7, 1944	6.34	2,540	1956	Jan. 29, 1956	5.82	2,130
	Mar. 19, 1944	4.75	1,340		Feb. 4, 1956	5.70	2,030
	Mar. 29, 1944	4.60	1,250		Feb. 18, 1956	8.28	4,440

a Maximum for period June 23 to Sept. 30, 1932.

Peak stages and discharges of Roaring River near Hilham, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Mar. 14, 1956	5.23	1,660	1958	Apr. 28, 1958	4.57	1,270
	Apr. 2, 1956	7.24	3,400		May 5, 1958	5.53	1,890
	Apr. 6, 1956	6.52	2,740		Sept. 21, 1958	4.59	1,280
1957	Dec. 13, 1956	4.87	1,410	1959	Feb. 14, 1959	5.28	1,720
	Jan. 23, 1957	6.04	2,310		Dec. 19, 1959	6.30	2,540
	Jan. 29, 1957	8.67	4,830	1960	June 28, 1960	4.56	1,270
	Feb. 1, 1957	5.79	2,100		July 11, 1960	5.50	1,870
1958	Nov. 19, 1957	6.35	2,580		July 17, 1960	5.34	1,760
	Dec. 7, 1957	4.68	1,340		July 18, 1960	4.76	1,390

4185. Caney Fork at Clifty, Tenn.

Location.--Lat 35°53'29", long 85°13'03", in Cumberland County, 50 ft below county highway bridge, 200 ft upstream from Pilot Falls, 0.75 mile south of Clifty, White County, and 3 miles upstream from Clifty Creek.

Drainage area.--114 sq mi.

Gage.--Nonrecording prior to Apr. 12, 1933; recording thereafter. Altitude of gage is 1,510 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,200 cfs and extended on basis of slope-area and contracted-opening measurement at 15,500 cfs.

Bankfull stage.--4 ft.

Historical data.--Flood of March 1929 was about 10.5 ft higher than flood of Feb. 13, 1948, and the highest known since about 1842, from profiles by Corps of Engineers.

Remarks.--Base for partial-duration series, 3,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Feb. 14, 1931	2.42	2,110	1940	Mar. 30, 1940	3.70	4,650
1932	Dec. 14, 1931	3.95	5,400	1941	Apr. 4, 1941	4.14	4,890
	Feb. 3, 1932	3.90	5,250	1942	Mar 17, 1942	4.27	5,200
	Apr. 26, 1932	3.50	4,070		Dec. 28, 1942	5.50	9,050
1933	Feb. 14, 1933	3.85	5,100	1943	Dec. 28, 1943	5.50	9,050
1934	Jan. 7, 1934	4.50	7,260	1944	Feb. 9, 1944	4.23	5,080
	Feb. 26, 1934	3.60	4,360		Feb. 17, 1944	4.70	6,440
	Mar. 3, 1934	4.61	7,650		Feb. 29, 1944	4.20	5,000
	Mar. 24, 1934	4.29	6,560		Mar. 28, 1944	3.76	3,940
1935	Mar. 12, 1935	4.20	6,220		Sept. 29, 1944	5.25	8,180
	Apr. 6, 1935	4.02	5,560	1945	Dec. 29, 1944	3.87	4,120
1936	Jan. 9, 1936	3.54	4,190		Feb. 17, 1945	4.20	5,000
	Mar. 24, 1936	4.36	6,770		May 10, 1945	3.72	3,750
	Mar. 27, 1936	3.76	4,830	1946	Jan. 7, 1946	4.66	6,320
	Apr. 6, 1936	4.70	7,970		Jan. 2, 1947	3.70	3,700
1937	Dec. 6, 1936	4.75	8,150	1947	Jan. 20, 1947	3.90	4,190
	Jan. 2, 1937	5.10	9,410		Feb. 13, 1948	7.00	15,500
	Jan. 15, 1937	3.90	5,250	1948	Mar. 7, 1948	3.80	3,940
	Jan. 25, 1937	4.12	5,950		Nov. 28, 1948	4.69	6,410
1938	Apr. 8, 1938	3.22	3,270	1949	Dec. 25, 1948	3.96	4,350
	Feb. 3, 1939	5.30	10,200		Jan. 5, 1949	5.60	9,410
1939	Feb. 15, 1939	4.42	6,980		Jan. 22, 1949	4.17	4,920
	Feb. 28, 1939	4.22	6,290				

4190. Bee Creek at Herbert, Tenn.

Location.--Lat 35°45'46", long 85°15'10", 500 ft downstream from Glade Creek and 0.75 mile northwest of Herbert, Bledsoe County.

Drainage area.--108 sq mi.

Gage.--Recording. Datum of gage is 1,476.94 ft above mean sea level, Sandy Hook datum.

Stage-discharge relation.--Defined by current-meter measurements below 4,700 cfs and extended above.

Historical data.--Flood of Mar. 23, 1929, is highest known.

Remarks.--Base for partial-duration series, 3,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Mar. 23, 1929	a15.7	b42,000	1935	Mar. 12, 1935	8.38	6,240
1931	Mar. 28, 1931	4.37	1,840		Apr. 6, 1935	7.15	4,860
1932	Jan. 30, 1932	6.94	4,640	1936	Jan. 9, 1936	6.50	4,180
	Apr. 25, 1932	7.65	5,360		Feb. 4, 1936	5.50	3,120
1933	Oct. 16, 1932	5.74	3,380		Mar. 24, 1936	7.76	5,580
	Dec. 28, 1932	6.32	3,990		Mar. 27, 1936	7.38	5,120
	Feb. 14, 1933	8.57	6,480		Apr. 2, 1936	6.30	3,960
1934	Jan. 7, 1934	7.60	5,300		Apr. 6, 1936	7.75	5,520
	Mar. 3, 1934	9.25	7,120		July 3, 1936	5.54	3,150
	Mar. 24, 1934	8.20	5,920	1937	Dec. 6, 1936	8.40	6,240
1935	Feb. 26, 1935	6.00	3,650		Dec. 31, 1936	5.70	3,340
					Jan. 2, 1937	8.81	6,680
					Jan. 15, 1937	5.90	3,540
					Jan. 25, 1937	7.40	5,140

a From floodmarks.

b Estimated.

4195. Calfkiller River at Sparta, Tenn.

Location.--Lat 35°56'02", long 85°27'32", at Sparta Water Co.'s pumping station, at Sparta, White County, 1 mile upstream from Town Creek and 7 miles downstream from Cherry Creek.

Drainage area.--150 sq mi.

Gage.--Nonrecording. Altitude of gage is 850 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 7,000 cfs and extended above.

Remarks.--Peaks are from graphs based on gage readings. Base for partial-duration series, 3,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Mar. 24, 1929	26.5	a25,000	1936	Apr. 6, 1936	16.95	7,200
1933	Jan. 9, 1933	10.75	3,100	1937	Dec. 7, 1936	15.40	5,930
	Feb. 15, 1933	12.80	4,280		Jan. 2, 1937	21.90	11,100
	Feb. 20, 1933	13.32	4,600		Jan. 15, 1937	15.74	6,280
	Mar. 19, 1933	12.50	4,100		Jan. 18, 1937	11.62	3,580
1934	Jan. 7, 1934	12.50	4,100		Jan. 25, 1937	14.40	5,340
	Feb. 26, 1934	12.50	4,100		Feb. 9, 1937	11.00	3,240
	Mar. 3, 1934	17.30	7,420		May 13, 1937	11.60	3,570
	Mar. 20, 1934	12.64	4,310	1938	Apr. 8, 1938	10.03	2,750
	Mar. 25, 1934	14.10	5,130	1939	Jan. 13, 1939	11.82	3,730
1935	Feb. 26, 1935	11.50	3,520		Feb. 3, 1939	21.05	10,300
	Mar. 12, 1935	15.12	5,830		Feb. 15, 1939	16.50	6,710
	Apr. 6, 1935	15.00	5,760		Feb. 28, 1939	12.80	4,310
	Aug. 16, 1935	10.70	3,080	1940	Mar. 30, 1940	14.60	5,420
1936	Mar. 25, 1936	13.80	4,800	1941	Apr. 5, 1941	15.90	5,780
	Mar. 27, 1936	14.00	4,930				

a Estimated.

4200. Calfkiller River below Sparta, Tenn.

Location.--Lat 35°54'31", long 85°28'46", on right bank three-quarters of a mile downstream from abandoned hydroelectric powerplant of Tennessee Valley Authority, 1½ miles downstream from Town Creek, 1½ miles southwest of Sparta, White County, and 9 miles upstream from mouth.

Drainage area.--178 sq mi.

Gage.--Recording. Altitude of gage is 820 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 10,000 cfs and extended above.

Remarks.--Base for partial-duration series, 4,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Mar. 24, 1929	-	a25,000	1952	Dec. 15, 1951	17.54	8,580
1941	Apr. 5, 1941	12.80	5,920		Dec. 21, 1951	13.27	5,950
1942	Mar. 17, 1942	9.98	4,150		Jan. 22, 1952	13.10	5,860
1943	Dec. 28, 1942	16.06	7,760		Mar. 4, 1952	12.03	5,260
1944	Feb. 18, 1944	16.26	7,740	1953	Feb. 12, 1953	11.00	4,690
	Feb. 29, 1944	11.10	4,740		Feb. 21, 1953	11.66	5,050
	Sept. 30, 1944	20.58	10,700	1954	Jan. 16, 1954	14.74	6,800
1945	Feb. 17, 1945	10.80	b4,580		Jan. 21, 1954	17.94	8,860
1946	Jan. 8, 1946	17.44	8,480	1955	Dec. 29, 1954	12.87	5,730
1947	Jan. 2, 1947	11.1	4,740		Feb. 7, 1955	11.47	4,950
1948	Feb. 13, 1948	24.54	13,700		Mar. 18, 1955	12.66	5,610
1949	Nov. 29, 1948	10.67	4,510		Mar. 22, 1955	20.97	11,000
	Jan. 5, 1949	25.80	14,600	1956	Jan. 30, 1956	15.57	7,290
	Jan. 22, 1949	10.89	4,630		Feb. 5, 1956	11.85	5,180
1950	Jan. 6, 1950	13.10	5,860		Feb. 18, 1956	16.64	7,970
	Jan. 31, 1950	17.26	8,380	1957	Dec. 13, 1956	10.95	4,660
	Feb. 9, 1950	12.44	5,490		Jan. 29, 1957	16.95	8,170
1951	Feb. 1, 1951	18.07	8,950		Feb. 2, 1957	13.18	5,910
1952	Dec. 8, 1951	-	(c)	1958	Nov. 19, 1957	16.54	9,280
					Dec. 8, 1957	12.17	5,340
				1959	Jan. 21 or 22, 1959	9.62	3,930
				1960	Dec. 19, 1959	15.76	7,410

a Estimated.

b May have been higher Jan. 1, 1945, during period of no gage-height record.

c Discharge not determined but greater than 4,400 cfs.

4205. Barren Fork near Trousdale, Tenn.

Location.--Lat 35°39'55", long 85°53'00", on left bank 15 ft downstream from county highway bridge on Trousdale-McMinnville Pike, $3\frac{1}{2}$ miles east of Trousdale, Warren County, 4.5 miles downstream from Bullpen Creek, 6 miles west of McMinnville, and 6.2 miles upstream from Hickory Creek.

Drainage area.--132 sq mi.

Gage.--Nonrecording prior to May 27, 1940, recording May 27, 1940, to Sept. 30, 1957, and crest-stage gage thereafter. At site 200 ft downstream prior to May 27, 1940. Datum of gage is 925.61 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 9,300 cfs and extended on basis of slope-area and contracted-opening measurement at 32,000 cfs.

Bankfull stage.--7 ft.

Historical data.--Flood of February 1948 exceeded the floods of March 1929 and June 1928, but probably was exceeded by the flood of March 1902, from profiles by the Tennessee Electric Power Co.

Remarks.--Peaks from graphs based on gage readings prior to May 27, 1940, and from crest-stage gage since Sept. 30, 1957. Only annual peaks since Sept. 30, 1957. Base for partial-duration series, 3,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Mar. 23, 1929	16.0	a27,500	1944	Sept. 29, 1944	12.94	14,500
1932	Aug. 13, 1932	7.88	b4,160	1945	Jan. 1, 1945	10.50	7,990
1933	Oct. 16, 1932	9.70	6,800		Feb. 17, 1945	11.42	9,650
	Feb. 15, 1933	7.80	4,330		Feb. 22, 1945	10.82	8,530
	Feb. 20, 1933	8.42	5,050		May 10, 1945	8.58	4,720
	Mar. 19, 1933	8.10	4,670	1946	Nov. 21, 1945	8.63	4,720
	Mar. 31, 1933	7.10	3,560		Jan. 8, 1946	11.34	9,460
1934	Mar. 3, 1934	9.90	7,100		Feb. 10, 1946	7.65	3,400
	Mar. 24, 1934	10.40	7,900		June 14, 1946	7.67	3,400
	June 12, 1934	8.64	5,330	1947	Jan. 2, 1947	8.78	4,540
1935	Mar. 12, 1935	9.10	5,940	1948	Feb. 13, 1948	16.99	32,000
	Apr. 5, 1935	11.60	10,000		Mar. 7, 1948	7.64	3,240
	July 29, 1935	7.44	3,930		Mar. 16, 1948	8.72	4,460
1936	Mar. 24, 1936	7.80	3,400	1949	Nov. 28, 1948	7.65	3,250
	Apr. 6, 1936	11.78	10,800		Jan. 5, 1949	13.90	18,200
	July 3, 1936	8.90	4,710	1950	Jan. 6, 1950	9.03	4,900
1937	Jan. 2, 1937	13.30	15,800		Jan. 30, 1950	11.08	8,810
	Jan. 15, 1937	10.10	6,630		Feb. 7, 1950	8.20	3,820
	Jan. 18, 1937	7.64	3,240		Mar. 13, 1950	7.95	3,550
	Feb. 9, 1937	7.80	3,400	1951	Feb. 1, 1951	12.68	14,300
	May 13, 1937	9.30	5,300		Feb. 21, 1951	9.90	6,280
1938	Jan. 22, 1938	6.68	3,150		Apr. 22, 1951	7.89	3,490
1939	Feb. 3, 1939	11.50	9,920	1952	Dec. 8, 1951	12.18	11,900
	Feb. 15, 1939	12.0	11,400		Dec. 15, 1951	9.77	6,060
	Feb. 28, 1939	8.00	3,860		Dec. 21, 1951	9.90	6,280
	Aug. 3, 1939	9.20	5,700		Jan. 22, 1952	8.48	4,150
1940	Mar. 12, 1940	7.43	3,260		Jan. 27, 1952	9.74	6,010
1941	Apr. 4, 1941	6.32	2,150		Mar. 4, 1952	9.15	5,080
1942	Aug. 19, 1942	7.92	3,650		Mar. 11, 1952	9.54	5,680
1943	Dec. 28, 1942	10.80	8,530		June 13, 1952	9.48	5,590
	Feb. 4, 1943	7.95	3,800	1953	Feb. 12, 1953	9.34	5,360
1944	Feb. 9, 1944	8.30	4,250		Feb. 21, 1953	9.27	5,260
	Feb. 18, 1944	8.17	4,100	1954	Jan. 16, 1954	9.59	5,760
	Feb. 27, 1944	8.36	4,400		Jan. 21, 1954	11.16	9,020
	Feb. 29, 1944	7.85	3,580		Apr. 16, 1954	8.03	3,580
	Mar. 5, 1944	7.75	3,460	1955	Dec. 29, 1954	10.43	7,290
	Mar. 28, 1944	10.56	8,170		Feb. 22, 1955	9.28	5,270
					Mar. 21, 1955	16.55	29,900
					Apr. 6, 1955	8.44	4,030

a Estimated.

b Maximum for period June 27 to Sept. 30, 1932.

Peak stages and discharges of Barren Fork near Trousdale, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Jan. 30, 1956	10.99	8,580	1957	Jan. 31, 1957	10.52	7,480
	Feb. 4, 1956	9.60	5,780	1958	November 1957	11.50	9,920
	Feb. 18, 1956	9.50	5,620		Jan. 22, 1959	11.46	9,750
1957	Dec. 13, 1956	8.15	3,700		May 8, 1960	9.72	5,950
	Jan. 28, 1957	11.00	8,600				

4206. Owen Branch near Centertown, Tenn.

Location--Lat 35°42'30", long 85°53'05", at bridge on U.S. Highway 70S, 2.4 miles southeast of Centertown, Warren County.

Drainage area--4.60 sq mi.

Gage--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation--Not defined except at 2,860 cfs, from results of culvert and flow-over-road measurement.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	7.0	2,860	1958	November 1957	3.54	-
1956	Jan. 30, 1956	3.21	-	1959	Sept. 1, 1959	3.00	-
	January 1957	2.64	-	1960	May 7, 1960	3.48	-

4207. Owen Branch near Trousdale, Tenn.

Location--Lat 35°39'55", long 85°51'50", at bridge 0.2 mile upstream from mouth, 1.0 mile east of Barren Fork near Trousdale gaging station, and 4.3 miles east of Trousdale, Warren County.

Drainage area--9.42 sq mi.

Gage--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation--Not defined.

Remarks--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	11.9	-	1958	November 1957	6.11	-
1956	Jan. 30, 1956	5.86	-	1959	Sept. 1, 1959	3.84	-
	Feb. 19, 1957	7.70	-	1960	May 7, 1960	5.58	-

4210. Collins River near McMinnville, Tenn.

Location.--Lat 35°42'32", long 85°43'46", on left bank 10 ft downstream from bridge on U.S. Highway 70S, $1\frac{1}{4}$ miles downstream from Barren Fork, and $2\frac{1}{2}$ miles northeast of McMinnville, Warren County.

Drainage area.--624 sq mi.

Gage.--Nonrecording prior to Oct. 16, 1926; recording thereafter. Datum of gage is 825.78 ft above mean sea level, Sandy Hook datum.

Stage-discharge relation.--Defined by current-meter measurements below 32,000 cfs and extended on basis of slope-area measurement at 75,300 cfs. Rate of change in stage used as a factor in computing discharge.

Historical data.--A flood in 1854 is believed to have been approximately equal to that of Mar. 23, 1929, from information by local residents.

Remarks.--Supplementary peaks not adjusted for rate of change of stage prior to 1944 and are subject to slight error. Base for partial-duration series, 11,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1925	Apr. 28, 1925	13.8	all, 800	1939	Feb. 15, 1939	25.44	30,100
1926	June 23, 1926	14.6	14,100		Feb. 28, 1939	15.66	14,000
					Mar. 6, 1939	15.13	15,100
1927	Dec. 22, 1926	12.70	11,100	1940	Mar. 30, 1940	13.30	10,700
	Dec. 26, 1926	24.37	31,300				
	Dec. 29, 1926	21.83	26,700	1941	Apr. 5, 1941	15.12	12,500
	Feb. 24, 1927	13.67	12,600				
	Apr. 11, 1927	13.38	12,200	1942	Mar. 17, 1942	15.17	12,600
1928	Dec. 31, 1927	13.9	12,900	1943	Dec. 29, 1942	25.2	29,700
	Mar. 9, 1928	12.76	11,300		Feb. 5, 1943	14.47	11,700
	Mar. 16, 1928	14.45	13,800				
	Apr. 22, 1928	17.52	18,400	1944	Feb. 10, 1944	14.56	11,800
	June 14, 1928	13.00	11,600		Feb. 27, 1944	16.25	14,000
	June 29, 1928	32.4	50,100		Mar. 28, 1944	16.30	14,100
1929	Nov. 19, 1928	19.57	19,600		Mar. 29, 1944	22.90	24,800
	Jan. 25, 1929	19.95	20,100		Sept. 30, 1944	16.18	14,000
	Feb. 26, 1929	13.22	11,800	1945	Jan. 1, 1945	15.25	12,600
	Mar. 14, 1929	13.94	12,900		Feb. 18, 1945	22.15	23,600
	Mar. 23, 1929	39.1	75,300		Feb. 22, 1945	18.42	17,200
	Apr. 29, 1929	16.6	15,500	1946	Jan. 8, 1946	24.54	28,100
1930	Nov. 15, 1929	14.00	13,000		Jan. 12, 1946	14.30	11,400
	Feb. 14, 1930	13.85	12,800		Feb. 10, 1946	17.36	15,800
1931	Mar. 28, 1931	8.52	5,530		June 15, 1946	22.16	23,600
1932	Jan. 30, 1932	14.16	13,300	1947	Jan. 2, 1947	15.44	12,900
	Apr. 25, 1932	18.62	18,200		Jan. 20, 1947	14.82	12,100
1933	Feb. 15, 1933	19.63	19,600	1948	Feb. 13, 1948	35.09	59,400
	Feb. 20, 1933	14.27	13,400		Mar. 17, 1948	14.48	11,700
	Mar. 19, 1933	12.74	11,100	1949	Nov. 29, 1948	18.57	17,300
1934	Mar. 3, 1934	23.00	25,100		Dec. 25, 1948	14.73	12,000
	Mar. 25, 1934	23.45	25,900		Jan. 5, 1949	31.42	46,500
					Jan. 22, 1949	14.70	12,000
1935	Mar. 13, 1935	19.36	19,300	1950	Jan. 7, 1950	20.41	20,000
	Apr. 6, 1935	23.40	25,900		Jan. 20, 1950	15.92	13,600
1936	Mar. 25, 1936	16.98	16,000		Jan. 31, 1950	24.23	26,400
	Mar. 27, 1936	17.10	16,100		Feb. 10, 1950	16.16	13,900
	Apr. 6, 1936	19.07	18,900		Mar. 13, 1950	19.22	18,200
	July 3, 1936	13.94	11,700	1951	Feb. 1, 1951	27.29	33,200
1937	Dec. 7, 1936	16.35	15,400		Feb. 21, 1951	15.53	13,100
	Jan. 2, 1937	26.86	33,700		Mar. 29, 1951	16.04	13,800
	Jan. 15, 1937	17.59	16,700	1952	Dec. 8, 1951	19.38	18,500
	Jan. 25, 1937	16.78	16,200		Dec. 15, 1951	17.98	16,500
	Feb. 9, 1937	15.19	13,500		Dec. 21, 1951	17.75	16,200
1938	Apr. 9, 1938	11.97	9,000		Jan. 28, 1952	18.70	17,500
1939	Feb. 4, 1939	26.03	31,500		Mar. 11, 1952	17.14	15,300
					June 13, 1952	17.93	16,400

a Maximum for period Apr. 25 to Sept. 30, 1925.

Peak stages and discharges of Collins River near McMinnville, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Feb. 12, 1953	19.75	19,000	1956	Feb. 18, 1956	19.58	18,800
	Feb. 21, 1953	17.24	15,400		Apr. 16, 1956	15.02	12,400
1954	Jan. 16, 1954	18.07	16,600	1957	Dec. 13, 1956	16.64	14,600
	Jan. 22, 1954	24.68	27,300		Jan. 28, 1957	22.60	23,500
1955	Dec. 29, 1954	22.99	24,200		Feb. 1, 1957	26.93	32,200
	Feb. 22, 1955	17.18	15,400	1958	Nov. 19, 1957	27.20	33,000
	Mar. 22, 1955	31.72	47,500		Dec. 8, 1957	16.08	13,300
	Apr. 7, 1955	19.64	18,900		Dec. 20, 1957	14.88	12,200
1956	Dec. 5, 1955	14.36	11,500	1959	Jan. 22, 1959	14.49	11,700
	Jan. 30, 1956	20.70	20,400		Dec. 19, 1959	21.50	21,700
	Feb. 4, 1956	21.17	21,200	1960	Dec. 19, 1959	21.50	21,700

4212. Charles Creek near McMinnville, Tenn.

Location--Lat 35°43'00", long 85°46'05", at bridge on county road at Faulkner Springs, 2.7 miles north of McMinnville, Warren County.

Drainage area--32.0 sq mi.

Gage--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation--Not defined.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	June 13, 1952	-	23,100	1957	-	(a)	-
1955	Mar. 21, 1955	13.00	-	1958	November 1957	8.60	-
				1959	Sept. 1, 1959	8.61	-
				1960	Dec. 19, 1959	7.36	-
1956	Jan. 30, 1956	7.66	-				

a Stage not determined but less than 7.04 ft.

4213. Sink tributary at McMinnville, Tenn.
(Formerly published as "Bybee Branch")

Location--Lat 35°41'47", long 85°46'47", at culvert under State Highway 56, at northwest city limits of McMinnville, Warren County.

Drainage area--0.47 sq mi.

Gage--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation--Defined by culvert computations.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	4.20	200	1958	November 1957	4.68	241
1956	Jan. 30, 1956	2.98	108	1959	Sept. 1, 1959	3.04	112
				1960	Dec. 19, 1959	3.58	152
1957	December 1956	3.98	183				

4215. Collins River near Rowland, Tenn.

Location.--Lat 35°46'39", long 85°41'40", at Hennessee's bridge, 1 mile downstream from Mountain Creek, 2½ miles northwest of Rowland, Warren County, 5 miles southwest of Rock Island, and at mile 7.5.

Drainage area.--740 sq mi.

Gage.--Nonrecording. Datum of gage is 795.86 ft above mean sea level.

Stage-discharge relation.--Defined by current-meter measurements below 6,500 cfs and extended above.

Bankfull stage.--8 ft.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1854	-	32.6	a82,200	1920	Apr. 2, 1920	16.66	34,000
1902	-	27.2	a66,600	1921	Apr. 16, 1921	13.5	25,500
				1922	Mar. 2, 1922	15.62	31,200
1916	July 9, 1916	9.0	b14,000	1923	Aug. 14, 1923	10.92	18,500
1917	Mar. 4, 1917	14.1	28,900	1924	Jan. 3, 1924	10.85	18,300
1918	Jan. 28, 1918	12.17	23,200	1925	Jan. 12, 1925	5.84	c6,060
1919	Jan. 2, 1919	12.66	23,300				

a Estimated.

b Maximum for period Apr. 1 to Sept. 30, 1916.

c Maximum for period Oct. 1, 1924, to Jan. 16, 1925.

4225. Caney Fork near Rock Island, Tenn.

Location.--Lat 35°48'26", long 85°37'44", on right bank 180 ft downstream from powerhouse of Tennessee Valley Authority, half a mile downstream from dam at mouth of Collins River, 1 mile northwest of Rock Island, Warren County, 64 miles upstream from Center Hill Dam, and at mile 90.3.

Drainage area.--1,640 sq mi, approximately.

Gage.--Recording. At sites from half a mile upstream to 100 ft downstream from powerplant prior to Mar. 30, 1924. At present site Apr. 12, 1925, to Sept. 9, 1930, at datum 2.00 ft higher. Datum of gage is 650.09 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 110,000 cfs and extended above. Subject to occasional changes owing to backwater from Center Hill Reservoir.

Bankfull stage.--Not subject to overflow.

Historical data.--Flood of Mar. 23, 1929, is highest known. Flood of March 1902 was about 10 ft lower than that of Mar. 23, 1929, at a point 8 miles downstream, from profile by Corps of Engineers.

Remarks.--Flow regulated by Great Falls Lake since Dec. 8, 1916. Only annual peaks are shown prior to 1924. Base for partial-duration series, 35,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Apr. 2, 1912	13.20	a107,000	1923	Feb. 3, 1923	-	39,200
1913	Jan. 24, 1913	-	a87,000	1924	Jan. 3, 1924	-	31,700
1914	Feb. 1, 1914	8.00	a28,600				
1915	Dec. 25, 1914	10.82	a54,000	1925	Apr. 28, 1925	15.6	32,400
1916	Nov. 15, 1915	9.92	a49,800	1926	Aug. 21, 1926	13.3	31,300
1917	Mar. 4, 1917	-	57,200				
1918	Jan. 28, 1918	-	90,000	1927	Dec. 22, 1926	14.2	36,400
1919	Jan. 2, 1919	-	57,200		Dec. 25, 1926	20.5	78,900
1920	Apr. 2, 1920	-	70,000		Dec. 28, 1926	17.25	56,200
					Feb. 24, 1927	14.07	35,600
1921	Apr. 17, 1921	-	61,700				
1922	Mar. 2, 1922	-	64,000	1928	Apr. 22, 1928	14.92	40,700

a Maximum daily discharge.

CUMBERLAND RIVER BASIN

Peak stages and discharges of Caney Fork near Rock Island, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	June 29, 1928	19.5	71,900	1945	Feb. 17, 1945	20.10	49,100
1929	Nov. 19, 1928	17.8	60,000	1946	Jan. 8, 1946	22.30	64,000
	Jan. 25, 1929	15.77	46,200	1947	Jan. 2, 1947	18.20	38,100
	Mar. 23, 1929	38.6	210,000		Jan. 20, 1947	17.65	35,200
1930	Feb. 14, 1930	22.0	51,400		Feb. 13, 1948	28.10	115,000
1931	Mar. 29, 1931	15.6	20,600	1949	Nov. 28, 1948	20.20	49,800
1932	Jan. 30, 1932	18.3	35,500		Jan. 5, 1949	26.30	98,700
	Apr. 25, 1932	19.0	38,800		Jan. 22, 1949	18.45	39,500
1933	Feb. 15, 1933	21.0	56,700	1950	Jan. 6, 1950	20.55	52,100
	Feb. 20, 1933	17.3	35,800		Jan. 30, 1950	23.90	77,200
1934	Jan. 7, 1934	18.60	42,700		Feb. 10, 1950	30.68	-
	Mar. 3, 1934	22.60	66,800		Mar. 13, 1950	18.35	38,900
	Mar. 25, 1934	22.45	65,800	1951	Feb. 1, 1951	23.70	75,600
1935	Mar. 12, 1935	20.85	55,300		Feb. 21, 1951	18.20	38,100
	Apr. 6, 1935	21.30	57,900	1952	Dec. 15, 1951	20.6	52,400
	Mar. 24, 1936	19.35	46,700		Dec. 21, 1951	18.70	40,800
1936	Mar. 27, 1936	19.30	46,500		Mar. 11, 1952	18.80	41,400
	Apr. 6, 1936	20.83	55,000	1953	Feb. 12, 1953	19.60	46,100
	Dec. 7, 1936	19.80	49,300	1954	Jan. 16, 1954	20.80	53,700
1937	Jan. 2, 1937	24.9	80,000		Jan. 22, 1954	22.45	65,600
	Jan. 15, 1937	18.55	42,400	1955	Dec. 29, 1954	21.30	57,100
	Jan. 25, 1937	19.95	50,100		Feb. 7, 1955	17.60	35,000
	Feb. 9, 1937	17.30	35,700		Mar. 22, 1955	25.30	89,700
	Apr. 8, 1938	16.10	27,900		Apr. 6, 1955	17.80	36,000
1939	Feb. 3, 1939	25.56	87,900	1956	Jan. 30, 1956	20.90	54,400
	Feb. 14, 1939	23.41	72,000		Feb. 3, 1956	20.65	52,700
	Feb. 28, 1939	18.45	39,400		Feb. 18, 1956	20.15	49,500
1940	Mar. 30, 1940	17.53	34,400		Apr. 15, 1956	17.80	36,000
1941	Apr. 5, 1941	19.78	47,300	1957	Dec. 13, 1956	20.60	52,400
1942	Mar. 17, 1942	18.12	37,500		Jan. 28, 1957	21.20	56,400
	Dec. 29, 1942	24.10	76,900		Feb. 1, 1957	22.82	68,600
1944	Feb. 18, 1944	19.55	45,700	1958	Nov. 16, 1957	17.85	36,200
	Feb. 27, 1944	18.50	39,700		Nov. 19, 1957	23.70	75,600
	Mar. 29, 1944	21.10	55,700		Dec. 8, 1957	17.75	35,800
	Sept. 30, 1944	18.40	39,100	1959	Jan. 22, 1959	17.40	34,000
				1960	Dec. 19, 1959	21.35	57,400

b Result of backwater.

4230. Falling Water River near Cookeville, Tenn.

Location.--Lat 36°04'00", long 85°31'30", at Burgess Mill in White County, 1 mile upstream from Post Oak Creek and 5 miles south of Cookeville, Putnam County.

Drainage area.--67.0 sq mi, of which 21.1 sq mi does not contribute directly to surface runoff.

Gage.--Nonrecording. Datum of gage is 893.49 ft above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 4,000 cfs and extended above. Rate of change in stage used as a factor in computing discharge.

Historical data.--Flood of June 28, 1928, is highest known since about 1902.

Remarks.--Peaks are from graphs based on gage readings. Base for partial-duration series, 1,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	June 28, 1928	24.1	5,630	1945	Jan. 1, 1945	18.24	2,790
					Feb. 22, 1945	17.10	2,300
1929	Mar. 23, 1929	23.5	5,330	1946	Jan. 8, 1946	22.70	4,950
1933	Feb. 20, 1933	15.75	1,970	1947	Jan. 2, 1947	17.1	2,300
	Mar. 19, 1933	18.60	3,050				
	Sept. 4, 1933	19.70	3,540	1948	Feb. 13, 1948	23.0	5,100
1934	Mar. 3, 1934	20.28	3,780	1949	Jan. 5, 1949	22.24	4,720
	Mar. 20, 1934	15.80	1,990				
	Mar. 25, 1934	15.30	1,820	1950	Jan. 7, 1950	18.00	2,700
1935	Mar. 12, 1935	17.90	2,770		Jan. 30, 1950	20.30	3,750
	Apr. 6, 1935	17.95	2,810		Feb. 2, 1950	20.70	3,950
1936	Mar. 27, 1936	17.85	2,750		Feb. 9, 1950	16.60	2,090
	Apr. 6, 1936	18.4	2,970		May 7, 1950	16.90	2,210
1937	Jan. 2, 1937	21.5	4,380	1951	Feb. 1, 1951	20.90	4,050
	Jan. 15, 1937	18.40	2,970	1952	Dec. 8, 1951	20.1	3,650
	Jan. 18, 1937	15.50	1,880		Dec. 15, 1951	19.30	3,280
	Jan. 25, 1937	16.40	2,200		Dec. 21, 1951	16.30	1,970
	Feb. 9, 1937	16.10	2,100		Mar. 11, 1952	16.00	1,860
	May 13, 1937	17.90	2,770	1953	Feb. 21, 1953	15.9	1,820
1938	Aug. 2, 1938	14.08	1,500	1954	Jan. 16, 1954	17.90	2,660
1939	Feb. 3, 1939	23.10	5,130		Jan. 22, 1954	19.9	3,560
	Feb. 15, 1939	17.60	2,660	1955	Dec. 29, 1954	16.90	2,210
1940	Mar. 30, 1940	16.70	2,300		Feb. 7, 1955	16.60	2,090
1941	Apr. 4, 1941	17.10	2,460		Feb. 22, 1955	16.22	1,940
1942	Aug. 9, 1942	12.50	1,090		Mar. 22, 1955	23.65	5,420
1943	Dec. 28, 1942	19.50	3,460	1956	Jan. 30, 1956	18.30	2,840
1944	Feb. 18, 1944	20.88	4,050		Feb. 4, 1956	16.98	2,240
	Sept. 29, 1944	20.00	3,600		Feb. 18, 1956	18.7	3,020
					Mar. 4, 1956	17.00	2,250

4235. Caney Fork near Silver Point, Tenn.

Location.--Lat 36°02'30", long 85°49'00", at bridge on State Highway 56, 6 miles north of Smithville, DeKalb County, 7 miles southwest of Silver Point, Putnam County, 12 miles downstream from Falling Water River, 15 miles upstream from Center Hill Dam, 49 miles downstream from Great Falls Dam and at mile 41.6.

Drainage area.--2,100 sq mi, approximately.

Gage.--Nonrecording prior to July 28, 1926; recording thereafter. At site 3.3 miles upstream at Johnson's Ferry prior to Feb. 4, 1939, at datum 3.16 ft higher. Datum of gage is 496.44 ft above mean sea level, Sandy Hook datum.

Stage-discharge relation.--Defined by current-meter measurements below 117,000 cfs and extended on basis of slope-area measurement at 178,000 cfs. Rate of change of stage used as a factor in computing discharge.

Historical data.--Flood of Mar. 23, 1929, is highest known since about 1842, from profiles by Corps of Engineers.

Remarks.--Supplementary peaks not adjusted for rate of change of stage prior to 1944 and are subject to slight error. Base for partial-duration series, 34,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	Dec. 16, 1922	26.50	42,600	1935	Apr. 6, 1935	b33.12	63,700
	Feb. 4, 1923	a27.56	46,000	1936	Mar. 28, 1936	31.20	53,500
	Feb. 14, 1923	23.80	37,000		Apr. 7, 1936	a33.00	62,100
	Mar. 12, 1923	25.20	39,900	1937	Jan. 3, 1937	45.1	97,800
1924	Jan. 4, 1924	a29.15	50,900		Jan. 16, 1937	28.90	44,500
1925	Apr. 29, 1925	a25.19	44,900		Jan. 26, 1937	29.90	46,600
1926	Oct. 26, 1925	a19.54	29,500	1938	Apr. 9, 1938	a19.89	28,400
1927	Dec. 22, 1926	26.40	42,400	1939	Feb. 4, 1939	a43.20	95,900
	Dec. 26, 1926	a44.52	101,000		Feb. 15, 1939	38.10	74,200
	Dec. 29, 1926	32.90	57,800		Mar. 1, 1939	24.45	39,300
1928	Jan. 1, 1928	22.87	35,000		Mar. 7, 1939	23.45	37,300
	Apr. 23, 1928	28.48	47,000	1940	Mar. 31, 1940	a24.66	39,900
	June 30, 1928	39.1	76,700	1941	Apr. 5, 1941	b22.68	38,400
1929	Nov. 20, 1928	30.00	50,500	1942	Mar. 18, 1942	a23.71	37,700
	Jan. 26, 1929	30.28	51,200		Dec. 30, 1942	a44.34	88,900
	Feb. 27, 1929	23.97	37,300	1944	Feb. 18, 1944	28.30	45,900
	Mar. 23, 1929	60.2	178,000		Feb. 27, 1944	27.29	43,100
1930	Feb. 14, 1930	a25.30	42,300		Mar. 30, 1944	a33.72	57,000
1931	Mar. 29, 1931	14.8	19,200	1945	Jan. 2, 1945	24.10	36,800
1932	Jan. 31, 1932	26.00	41,600		Feb. 18, 1945	a30.75	50,900
	Feb. 4, 1932	24.50	38,400		Feb. 23, 1945	25.32	39,400
	Apr. 26, 1932	28.9	49,800	1946	Jan. 9, 1946	a39.00	72,300
1933	Feb. 15, 1933	33.4	61,200		Feb. 11, 1946	24.90	38,400
	Feb. 21, 1933	24.1	37,600	1947	Jan. 3, 1947	a28.12	42,200
1934	Mar. 4, 1934	38.2	75,600		Jan. 21, 1947	25.06	35,200
	Mar. 25, 1934	35.05	64,200	1948	Feb. 14, 1948	54.42	c123,000
1935	Mar. 13, 1935	32.05	55,600				

a Occurred at different time than peak discharge.

b Occurred following day.

c Maximum for period Oct. 1, 1947, to June 17, 1948.

4245. Caney Fork below Center Hill Dam, near Lancaster, Tenn.
(Published as "near Lancaster" prior to September 1950)

Location.--Lat 36°06'10", long 85°50'40", on left bank 1.1 miles downstream from Center Hill Dam, 2 miles south of Lancaster, Smith County, 4.7 miles upstream from Indian Creek, 10 miles north of Smithville, and at mile 25.5.

Drainage area.--2,200 sq mi, approximately.

Gage.--Recording. At site 7.7 miles downstream prior to Sept. 30, 1950, at datum 6.62 ft lower. Datum of gage is 469.00 ft above mean sea level, Sandy Hook datum (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements. Rate of change of stage used as a factor in computing discharge.

Historical data.--Flood of Mar. 23, 1929, reached a stage of about 61 ft at present site and is highest known since about 1842, from profiles by Corps of Engineers.

Remarks.--Flow regulated by Great Falls Lake and Center Hill Reservoir. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Feb. 19, 1945	34.40	44,200	1952	Dec. 15, 1951	23.0C	18,500
1946	Jan. 9, 1946	a43.51	65,800	1953	Feb. 21, 1953	a19.27	13,200
1947	Jan. 3, 1947	33.95	45,900	1954	Jan. 25, 1954	e29.6f	31,600
1948	Feb. 14, 1948	a53.44	119,000	1955	Mar. 29, 1955	a30.94	30,900
1949	Jan. 27, 1949	b20.22	c11,800	1956	Feb. 21, 1956	a31.27	31,100
1950	Feb. 16, 1950	d33.23	c38,400	1957	Feb. 4, 1957	31.27	30,400
1951	Feb. 7, 1951	28.27	25,900	1958	Nov. 20, 1957	25.47	22,000

a Occurred different time than peak discharge.

b Occurred Jan. 5, 1949.

c Maximum daily discharge.

d Occurred Feb. 12, 1950.

e Occurred Jan. 26, 1954.

4250. Cumberland River at Carthage, Tenn.

Location.--Lat 36°14'42", long 85°57'15", on left pier of Cordell Hull Bridge on State Highway 25, at Carthage, Smith County, 1 mile downstream from Caney Fork and at mile 308.8.

Drainage area.--10,700 sq mi, approximately.

Gage.--Nonrecording prior to July 17, 1936; recording thereafter. Prior to October 1922 in vicinity of present gage at approximately same datum. At site 1,000 ft downstream October 1922 to May 12, 1936, at same datum. Datum of gage is 437.67 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Since Oct. 1, 1957, auxiliary recording gage 15.8 miles downstream.

Stage-discharge relation.--Defined by current-meter measurements below 170,000 cfs and extended above. Fall between auxiliary gage and reference gage used as a factor in computing discharge.

Bankfull stage.--40 ft (U.S. Weather Bureau).

Historical data.--Flood of Dec. 30, 1926, is highest known since about 1793, from profiles by Corps of Engineers.

Remarks.--Flow regulated since July 1950 by Wolf Creek Reservoir, since August 1943 by Dale Hollow Reservoir and since November 1948 by Center Hill Reservoir. Only annual maximum stages are shown prior to 1923, from reports of U.S. Weather Bureau. Base for partial-duration series, 82,000 cfs.

Peak stages and discharges of Cumberland River at Carthage, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1885	Apr. 20, 21, 1885	a13.5	-		Feb. 4, 1932	d48.78	149,000
1886	Apr. 7, 1886	b53.9	-		Apr. 1, 1932	f30.20	e84,800
1887	Feb. 28, 1887	42.5	-	1933	Jan. 1, 1933	d33.35	e96,400
1888	Mar. 29, 1888	36.4	-		Feb. 21, 1933	d40.80	121,000
1889	Feb. 20, 1889	36.1	-		Mar. 21, 1933	f33.90	e97,500
1890	Mar. 5, 1890	c49.6	-		May 13, 1933	f33.63	e95,500
1891	Mar. 10, 1891	50.9	-	1934	Mar. 4, 1934	d44.10	134,000
1892	Apr. 24, 1892	37.7	-		May 26, 1934	d41.60	125,000
1893	Feb. 19, 1893	41.4	-	1935	Jan. 22, 1935	d31.16	87,900
1894	Feb. 6, 1894	34.6	-		Mar. 14, 1935	d42.04	127,000
1895	Mar. 23, 1895	29.3	-		Apr. 7, 1935	d40.84	124,000
1896	Apr. 4, 1896	44.8	-	1936	Jan. 10, 1936	d31.91	e89,900
1897	Mar. 16, 1897	45.7	-		Mar. 28, 1936	d44.20	132,000
1898	Jan. 25, 1898	33.8	-		Apr. 8, 1936	f40.46	122,000
1899	Feb. 8, 1899	41.4	-	1937	Jan. 4, 1937	f47.76	145,000
1900	Feb. 11, 1900	22.6	-		Jan. 26, 1937	f54.66	172,000
1901	Aug. 19, 1901	39.6	-		Feb. 11, 1937	f30.20	e82,100
1902	Mar. 31, 1902	50.0	-	1938	Jan. 25, 1938	d29.75	85,300
1903	Feb. 19, 1903	37.1	-	1939	Feb. 5, 1939	d48.10	148,000
1904	Mar. 28, 1904	33.9	-		Feb. 16, 1939	d44.40	126,000
1905	Mar. 13, 1905	28.3	-		Mar. 2, 1939	f33.30	e96,900
1906	Apr. 2, 1906	32.1	-		Mar. 8, 1939	f32.70	e92,700
1907	Mar. 4, 1907	35.7	-	1940	Apr. 1, 1940	f35.40	98,000
1908	Feb. 17, 1908	24.3	-	1941	Apr. 7, 1941	f29.45	78,000
1909	Feb. 26, 1909	40.4	-	1942	Mar. 19, 1942	f27.98	74,000
1910	Feb. 20, 1910	29.1	-	1943	Dec. 31, 1942	f49.97	153,000
1911	Apr. 8, 1911	38.1	-		Mar. 22, 1943	f38.24	95,500
1912	Apr. 4, 1912	48.5	-		Apr. 24, 1943	d34.18	86,800
1913	Jan. 13, 1913	48.4	-	1944	Feb. 23, 1944	f35.53	e89,700
1914	Apr. 4, 1914	34.7	-		Mar. 1, 1944	f37.31	99,400
1915	Feb. 3, 1915	34.3	-		Mar. 31, 1944	f34.88	e87,400
1916	Jan. 3, 1916	40.9	-	1945	Jan. 2, 1945	f39.85	103,000
1917	Mar. 6, 1917	47.0	-		Feb. 19, 1945	f34.75	87,500
1918	Feb. 2, 1918	52.5	-		Feb. 22, 1945	d40.90	110,000
1919	Jan. 4, 1919	46.3	-	1946	Jan. 13, 1946	d50.82	152,000
1920	Jan. 27, 1920	44.1	-	1947	Jan. 4, 1947	f35.83	e91,400
1921	Apr. 19, 1921	30.5	-		Jan. 21, 1947	d34.77	96,200
1922	Mar. 4, 1922	43.7	-	1948	Feb. 15, 1948	f53.97	176,000
1923	Dec. 18, 1922	d34.58	e99,700	1949	Jan. 9, 1949	f33.40	85,400
	Jan. 25, 1923	f30.30	86,500	1950	Jan. 11, 1950	g37.00	e93,900
	Feb. 5, 1923	f42.90	129,000		Feb. 7, 1950	f45.19	128,000
	Feb. 15, 1923	f29.90	86,600	1951	Feb. 1, 1951	f23.85	72,900
	Mar. 12, 1923	d36.50	e108,000	1952	Dec. 15, 1951	f33.36	87,100
1924	Jan. 5, 1924	f44.90	135,000	1953	Feb. 21, 1953	f22.20	50,900
1925	Dec. 12, 1924	f29.85	83,500	1954	Jan. 22, 1954	f25.06	61,400
	Feb. 18, 1925	d31.20	90,300	1955	Mar. 22, 1955	f37.73	103,000
1926	Jan. 24, 1926	32.40	93,900	1956	Feb. 18, 1956	33.32	91,800
1927	Dec. 30, 1926	f59.8	210,000	1957	Jan. 29, 1957	34.80	95,000
	Feb. 25, 1927	d29.45	82,900	1958	Apr. 29, 1958	f25.50	62,200
	Mar. 11, 1927	f32.75	93,100	1959	Apr. 15, 1959	d17.13	36,900
1928	Apr. 24, 1928	f34.28	e103,000	1960	Dec. 19, 1959	23.50	58,000
	June 6, 1928	d29.82	84,400				
	July 1, 1928	d45.17	139,000				
1929	Nov. 21, 1928	d30.47	e85,800				
	Jan. 27, 1929	f36.63	e109,000				
	Mar. 1, 1929	d39.15	116,000				
	Mar. 24, 1929	d55.85	187,000				
	May 8, 1929	f31.63	e90,500				
1930	Feb. 15, 1930	f28.86	84,700				
1931	Mar. 30, 1931	d26.40	73,300				
1932	Dec. 15, 1931	d31.10	e85,000				

a Maximum for period Feb. 10 to Apr. 30, 1885. b Maximum for period Dec. 1, 1885, to July 31, 1886. c May have been higher Mar. 1-4, 1890. d Occurred on following day. e Mean daily discharge. f Occurred at different time than peak discharge. g Occurred Jan. 13, 1950.

4255. Spring Creek near Lebanon, Tenn.

Location.--Lat 36°10'49", long 86°14'29", on downstream end of middle pier of bridge on Eastover Road, 0.6 mile downstream from Black Branch and 2.5 miles southeast of Lebanon, Wilson County.

Drainage area.--35.3 sq mi.

Gage.--Recording. Datum of gage is 556.32 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 4,200 cfs and extended on basis of slope-area measurement at 7,980 cfs.

Remarks.--Base for partial-duration series, 2,700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Dec. 29, 1954	6.83	2,990	1957	Jan. 29, 1957	7.50	3,860
	Feb. 6, 1955	6.40	2,710		June 5, 1957	6.74	3,180
	Feb. 21, 1955	6.97	3,080	1958	Nov. 17, 1957	7.75	4,120
	Mar. 18, 1955	7.60	3,560		Dec. 20, 1957	6.17	2,740
	Mar. 21, 1955	10.13	7,980		Apr. 6, 1958	7.03	3,430
1956	Apr. 6, 1955	6.95	3,070		Apr. 10, 1958	6.71	3,160
	Jan. 29, 1956	8.57	5,160		Apr. 27, 1958	8.06	4,480
	Feb. 4, 1956	7.07	3,460		Sept. 21, 1958	7.23	3,610
	Feb. 18, 1956	9.55	6,860	1959	Feb. 14, 1959	5.37	2,140
	Apr. 6, 1956	8.66	5,290		Nov. 27, 1959	6.47	2,970
1957	Dec. 12, 1956	6.30	2,840	1960	Dec. 28, 1959	7.88	4,270
	Dec. 14, 1956	8.25	4,720		June 17, 1960	8.48	5,020
	Dec. 21, 1956	7.47	3,830				
	Jan. 22, 1957	7.98	4,390				

4257. Spencer Creek near Lebanon, Tenn.

Location.--Lat 36°14'20", long 86°24'03", at bridge on county road, 100 ft north of junction of county road and U.S. Highway 70N and 6.5 miles west of square in Lebanon, Wilson County.

Drainage area.--3.32 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge.--Defined by slope-area measurements.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	July 1955	7.69	1,610	1958	Apr. 5, 1958	6.81	1,010
1956	February 1956	7.02	1,140	1959	Nov. 19, 1958	5.7?	540
	Jan. 29, 1957	8.4	2,220	1960	Feb. 5, 1960	7.0?	1,130

CUMBERLAND RIVER BASIN

4260. Drakes Creek above Hendersonville, Tenn.

Location.--Lat 36°22'14", long 86°37'00", on left downstream wingwall of abutment on Long Hollow Pike Bridge, at Shackle Island, 2 miles downstream from Hogan Branch and 4.5 miles north of Hendersonville, Sumner County.

Drainage area.--19.2 sq mi.

Gage.--Recording. Datum of gage is 503.06 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,130 cfs and extended above.

Bankfull stage.--5 ft.

Remarks.--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Feb. 21, 1955	5.68	1,180	1957	Jan. 29, 1957	8.83	2,480
	Mar. 21, 1955	9.70	2,910		Apr. 8, 1957	8.10	2,150
1956	Jan. 29, 1956	10.32	3,240	1958	Nov. 18, 1957	10.56	3,370
	Feb. 3, 1956	5.88	1,260		Dec. 20, 1957	5.24	1,020
	Feb. 18, 1956	5.87	1,250	1959	Feb. 14, 1959	5.00	935
	Apr. 3, 1956	6.15	1,360		Dec. 27, 1959	9.77	2,940
	Apr. 6, 1956	6.49	1,500				
1957	Jan. 22, 1957	9.69	2,900				

4265. Cumberland River below Old Hickory, Tenn.

(Published as "at dam 3, near Old Hickory," prior to July 1953)

Location.--Lat 36°15'39", long 86°40'30", on downstream end of left pier of bridge on State Highway 45, 1.5 miles west of Old Hickory, Davidson County, 2.1 miles east of Madison, 3.3 miles downstream from Mansker Creek, 4.1 miles downstream from Old Hickory Dam, and at mile 212.1.

Drainage area.--11,700 sq mi, approximately.

Gage.--Nonrecording prior to Nov. 16, 1933, and July 1, 1953, to Sept. 30, 1956; recording Nov. 16, 1933, to Sept. 30, 1942, Oct. 1, 1947, to June 30, 1953, and since Oct. 1, 1956. At site 6.1 miles upstream prior to Nov. 16, 1933, and July 1, 1953, to June 10, 1954; at site 6.2 miles upstream Nov. 16, 1933, to Sept. 30, 1942, and Oct. 1, 1947, to June 30, 1953; both gages at datum 10.67 ft higher. June 11, 1954, to Sept. 30, 1956, headwater and tailwater gages at Old Hickory Dam. Datum of gage is 380.00 ft above mean sea level, datum of 1929. Nonrecording auxiliary gage at Old Hickory Dam Oct. 1, 1956, to Mar. 31, 1957; recording thereafter.

Stage-discharge relation.--Defined by current-meter measurements below 172,000 cfs and extended above. Rate of change of stage and fall between auxiliary gage and reference gage used as factors in computing discharge.

Historical data.--Flood of Dec. 31, 1926, is highest known since about 1793, from profiles by Corps of Engineers.

Remarks.--Flow regulated by Lake Cumberland, Dale Hollow Reservoir, Great Falls Lake, and Center Hill Reservoir, and by Old Hickory Lake after June 1954. Several discharge measurements, dam 3 gage-height readings, auxiliary gage-height record, computed outflow from Old Hickory Reservoir, and discharge records June 11, 1954, to Sept. 30, 1956, furnished by Corps of Engineers. Base for partial-duration series, 71,000 cfs.

Peak stages and discharges of Cumberland River below Old Hickory, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Dec. 31, 1926	a57.4	200,000	1941	Apr. 8, 1941	d23.63	70,800
1932	Dec. 15, 1931	25.15	81,200	1942	Mar. 20, 1942	d23.02	68,700
	Dec. 25, 1931	24.38	78,800		Feb. 18, 1948	44.06	152,000
	Feb. 7, 1932	41.50	148,000	1949	Jan. 10, 1949	27.50	80,800
	Apr. 1, 1932	b26.20	c84,800		Jan. 27, 1949	b27.97	83,100
	Apr. 30, 1932	22.60	73,500		Feb. 20, 1949	d25.90	c76,400
1933	Jan. 2, 1933	28.80	92,500	1950	Jan. 14, 1950	35.64	107,000
	Jan. 26, 1933	24.80	80,100		Feb. 10, 1950	d41.33	135,000
	Feb. 21, 1933	d36.40	124,000	1951	Feb. 2, 1951	d27.88	83,000
	Mar. 22, 1933	29.55	94,900		Dec. 9, 1951	d30.29	c87,900
	May 15, 1933	28.15	90,500		Dec. 16, 1951	d31.88	94,300
1934	Jan. 11, 1934	22.38	72,800	1952	Jan. 29, 1952	25.17	74,300
	Mar. 8, 1934	d36.60	125,000		Mar. 23, 1952	28.50	83,600
	Mar. 28, 1934	b35.17	118,000	1953	Feb. 22, 1953	20.53	55,700
1935	Jan. 22, 1935	28.07	90,200		Jan. 22, 1954	b27.13	68,700
	Mar. 17, 1935	35.10	115,000	1954	Mar. 23, 1955	-	105,000
	Apr. 10, 1935	35.00	112,000		Jan. 30, 1956	-	c79,100
1936	Jan. 11, 1936	26.80	83,100	1956	Feb. 19, 1956	-	94,000
	Mar. 31, 1936	36.75	119,000		Jan. 23, 1957	-	c72,000
	Apr. 10, 1936	36.06	116,000	1957	Jan. 31, 1957	e40.37	99,200
	Jan. 7, 1937	39.00	129,000	1958	Nov. 18, 1957	32.46	85,200
1937	Jan. 29, 1937	47.40	173,000		Feb. 15, 1959	28.31	58,200
	Feb. 12, 1937	24.98	73,700	1959	Dec. 19, 1959	28.38	65,000
	Jan. 26, 1938	26.15	77,200				
1938	Jan. 26, 1938	26.15	77,200				
	Jan. 26, 1938	26.15	77,200				
1939	Feb. 11, 1939	d42.25	140,000				
	Mar. 5, 1939	29.47	86,300				
1940	Apr. 2, 1940	b30.00	88,400				
	Apr. 25, 1940	26.10	76,900				

a Present site and datum.

b Occurred on following day.

c Mean daily discharge.

d Occurred at different time than peak discharge.

e Occurred Jan. 30, 1957.

4270. Bradley Creek at Lascassas, Tenn.

Location.--Lat 35°55'39", long 86°17'25", on downstream end of county road bridge pier, near midstream, 900 ft south of Lascassas, Rutherford County, 0.4 mile downstream from Jarman Branch, 2.0 miles upstream from mouth, and 8.0 miles northeast of Murfreesboro.

Drainage area.--38 sq mi, approximately.

Gage.--Recording. Datum of gage is 548.24 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 4,700 cfs and extended on basis of slope-area measurement at 12,800 cfs.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 3,000 cfs.

Peak stages and discharges of Bradley Creek at Lascassas, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Dec. 28, 1954	6.76	3,720	1957	Jan. 22, 1957	7.61	4,950
	Feb. 22, 1955	6.92	3,900		Jan. 29, 1957	7.85	5,420
	Mar. 18, 1955	7.85	5,420		Apr. 8, 1957	6.31	3,260
	Mar. 21, 1955	10.66	12,800	1958	Nov. 18, 1957	7.95	5,640
	June 10, 1955	7.03	4,040		Sept. 21, 1958	8.00	5,750
1956	Nov. 14, 1955	6.75	3,700	1959	Mar. 11, 1959	6.06	3,060
	Dec. 4, 1955	7.83	5,380		Mar. 26, 1959	6.14	3,120
	Jan. 29, 1956	8.63	7,240		Aug. 5, 1959	8.96	8,090
	Feb. 4, 1956	7.69	5,100				
	Feb. 17, 1956	10.50	12,500	1960	Nov. 27, 1959	8.19	3,160
	Mar. 3, 1956	6.94	3,930		Dec. 28, 1959	8.96	3,950
	Apr. 6, 1956	7.45	4,660		Mar. 30, 1960	8.13	3,110
					June 17, 1960	7.5	4,750
1957	Dec. 12, 1956	7.83	5,380				
	Dec. 14, 1956	7.75	5,220				

4275. East Fork Stones River near Lascassas, Tenn.

Location.--Lat 35°55'07", long 86°20'01", at downstream end of right pier of highway bridge, 2.5 miles southwest of Lascassas, Rutherford County, 3.7 miles downstream from Bradley Creek, 6.0 miles northeast of Murfreesboro, and 15½ miles upstream from confluence with West Fork.

Drainage area.--264 sq mi.

Gage.--Recording. Datum of gage is 507.88 ft above mean sea level (levels by Corps of Engineers.)

Stage-discharge relation.--Defined by current-meter measurements below 18,100 cfs and extended above.

Remarks.--Base for partial-duration series, 7,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Feb. 21, 1951	22.10	all, 200	1954	Apr. 16, 1954	20.65	10,000
	Apr. 22, 1951	21.48	10,700				
1952	Nov. 14, 1951	18.42	8,240	1955	Dec. 29, 1954	22.56	11,500
	Nov. 16, 1951	19.53	9,120		Feb. 6, 1955	22.08	11,200
	Dec. 8, 1951	31.70	19,200		Feb. 22, 1955	25.23	13,700
	Dec. 15, 1951	23.41	12,200		Mar. 22, 1955	34.07	21,300
	Dec. 20, 1951	18.67	8,440	1956	Dec. 4, 1955	19.72	9,280
	Jan. 22, 1952	19.05	8,740		Jan. 30, 1956	27.06	15,300
	Jan. 27, 1952	19.70	9,260		Feb. 4, 1956	22.41	11,400
	Mar. 3, 1952	-	-		Feb. 18, 1956	29.34	17,200
1953					Apr. 6, 1956	17.72	7,680
	Jan. 10, 1953	17.95	7,860	1957	Dec. 13, 1956	27.12	15,300
	Feb. 12, 1953	20.83	10,200		Jan. 29, 1957	24.13	12,800
	Feb. 21, 1953	22.64	11,600		Feb. 1, 1957	22.42	11,400
	Mar. 3, 1953	21.68	10,800		Feb. 19, 1957	17.09	7,170
	Apr. 30, 1953	18.50	8,300	1958	Nov. 18, 1957	23.42	12,200
	May 19, 1953	19.71	9,270		Dec. 7, 1957	18.12	8,000
1954	Jan. 16, 1954	25.62	14,000		Sept. 21, 1958	20.61	9,990
	Jan. 21, 1954	29.80	17,600				
	Mar. 24, 1954	22.72	11,700				

a Maximum for period Feb. 10 to Sept. 30, 1951; may have been greater Feb. 1, 1951.

4280. West Fork Stones River near Murfreesboro, Tenn.

Location.--Lat 35°49'20", long 86°25'03", on downstream end of second pier from right abutment of bridge on State Highway 99, 0.8 mile downstream from Middle Fork and 2.2 miles southwest of Murfreesboro, Rutherford County.

Drainage area.--128 sq mi (includes 3 sq mi without surface drainage).

Gage.--Nonrecording prior to June 30, 1934; recording thereafter. Datum of gage is 567.02 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 13,000 cfs and extended on basis of contracted-opening measurements at 31,400 and 38,000 cfs.

Bankfull stage.--15 ft.

Historical data.--Flood of March 1902 is highest known, from reports of Tennessee Valley Authority.

Remarks.--Base for partial-duration series, 7,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1902	March 1902	25.0	a50,000	1948	Feb. 13, 1948	22.73	38,000
					Mar. 16, 1948	12.64	7,330
1933	Feb. 14, 1933	15.5	11,400				
	Feb. 20, 1933	15.00	10,800	1949	Nov. 28, 1948	13.52	8,850
	Mar. 19, 1933	14.70	10,400		Dec. 24, 1948	12.68	7,400
1934	Dec. 6, 1933	13.80	9,380		Jan. 3, 1949	12.68	7,400
	Mar. 3, 1934	13.50	9,050		June 15, 1949	12.48	7,100
	Mar. 19, 1934	12.90	8,390	1950	Jan. 5, 1950	13.68	9,130
	Mar. 24, 1934	16.90	15,600		Jan. 6, 1950	14.75	11,000
1935	Mar. 12, 1935	14.23	9,880		Jan. 10, 1950	-	(b)
	Apr. 5, 1935	15.60	11,500		Jan. 12 or 13	-	(b)
1936	Apr. 6, 1936	14.88	8,630		Jan. 16, 1950	-	(b)
					Jan. 30, 1950	15.4	12,200
1937	Nov. 4, 1936	13.35	8,550		Feb. 9, 1950	13.68	9,130
	Dec. 6, 1936	13.45	8,730	1951	Feb. 1, 1951	16.74	15,100
	Jan. 2, 1937	17.6	17,800		Feb. 21, 1951	15.72	12,800
	Jan. 15, 1937	14.38	10,400		Apr. 22, 1951	14.63	10,800
	Jan. 25, 1937	13.32	8,500		June 30, 1951	16.61	14,800
	Feb. 9, 1937	12.55	7,190	1952	Dec. 8, 1951	15.65	12,300
1938	Jan. 22, 1938	13.42	8,640		Dec. 15, 1951	15.00	10,800
1939	Jan. 13, 1939	13.48	8,780		Jan. 27, 1952	13.00	7,440
	Feb. 3, 1939	17.32	16,900		Mar. 3, 1952	14.29	9,460
	Feb. 15, 1939	16.40	14,200		Mar. 11, 1952	13.67	8,390
	Feb. 28, 1939	12.50	7,110	1953	Feb. 12, 1953	12.87	7,260
	Mar. 30, 1939	12.68	7,400		Feb. 21, 1953	14.35	9,560
1940	Mar. 12, 1940	12.78	7,600		Mar. 3, 1953	14.85	10,500
1941	July 4, 1941	13.56	8,990		May 19, 1953	13.37	7,990
1942	Mar. 17, 1942	12.01	6,220	1954	Jan. 16, 1954	13.30	7,880
1943	Dec. 28, 1942	14.10	8,020		Jan. 21, 1954	16.25	13,800
1944	Jan. 3, 1944	12.50	7,000		Apr. 16, 1954	14.72	10,200
	Feb. 9, 1944	14.17	10,100	1955	Dec. 29, 1954	14.18	9,290
	Feb. 17, 1944	14.52	10,800		Feb. 6, 1955	13.33	7,930
	Feb. 26, 1944	13.60	8,870		Feb. 22, 1955	13.95	8,920
	Mar. 6, 1944	16.08	15,000		Mar. 21, 1955	21.97	34,400
	Mar. 29, 1944	12.97	7,780	1956	Jan. 30, 1956	15.06	10,900
	Sept. 29, 1944	21.23	30,000		Feb. 4, 1956	14.5	9,600
1945	Jan. 1, 1945	14.39	10,400		Feb. 17 or 18	-	(b)
	Feb. 17, 1945	14.38	10,400	1957	Dec. 13, 1956	14.80	10,300
	Feb. 22, 1945	19.17	23,100		Jan. 29, 1957	14.05	8,700
	May 10, 1945	12.58	7,270		Feb. 1, 1957	13.72	8,040
1946	Nov. 21, 1945	15.24	11,800	1958	Nov. 18, 1957	15.25	11,300
	Jan. 7, 1946	17.74	18,100	1959	Mar. 27, 1959	13.53	7,700
1947	Jan. 2, 1947	-	-	1960	Dec. 28, 1959	12.98	6,880

a Estimated by Tennessee Valley Authority.

b Discharge not determined but greater than 7,000 cfs.

CUMBERLAND RIVER BASIN

4290. Stones River near Smyrna, Tenn.

Location.--Lat 35°59'59", long 86°27'35", on right bank 30 ft downstream from highway bridge at Jefferson Springs, 1.5 miles downstream from confluence of East and West Forks, 3.5 miles northeast of Smyrna, Rutherford County, 4.1 miles upstream from Falls Creek and at mile 37.2.

Drainage area.--552 sq mi.

Gage.--Nonrecording prior to Sept. 22, 1926; recording thereafter. Datum of gage is 459.76 ft above mean sea level, Sandy Hook datum.

Stage-discharge relation.--Defined by current-meter measurements below 26,000 cfs and extended on basis of slope-area measurement at 45,000 cfs, from data by Corps of Engineers. Rate of change of stage used as a factor in computing discharge.

Bankfull stage.--15 ft.

Historical data.--Flood of March 1902 is highest known, from Corps of Engineers.

Remarks.--Base for partial-duration series, 17,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1902	March 1902	43.4	a60,000	1939	Feb. 3, 1939	31.70	36,400
					Feb. 15, 1939	27.85	29,900
1926	Nov. 12, 1925	22.2	21,900	1940	Mar. 30, 1940	b17.90	16,500
1927	Dec. 21, 1926	20.12	20,500	1941	July 4, 1941	b16.98	16,900
	Dec. 25, 1926	26.31	27,900	1942	Mar. 17, 1942	b16.54	13,900
	Dec. 28, 1926	26.32	27,900	1943	Dec. 28, 1942	b24.50	24,700
	Apr. 10, 1927	17.78	17,600	1944	Feb. 9, 1944	22.75	22,000
1928	Dec. 21, 1927	18.28	18,200		Feb. 18, 1944	28.05	30,400
	June 14, 1928	21.38	21,700		Feb. 27, 1944	20.30	18,600
	June 25, 1928	20.80	21,000		Mar. 7, 1944	23.48	33,000
	June 29, 1928	30.00	33,900		Sept. 30, 1944	b35.77	44,100
1929	Jan. 25, 1929	18.40	18,500	1945	Dec. 29, 1944	19.15	17,100
	Feb. 25, 1929	17.45	17,200		Jan. 1, 1945	26.50	27,900
	Mar. 14, 1929	19.50	19,600		Feb. 17, 1945	23.04	22,500
	Mar. 23, 1929	36.5	45,000		Feb. 22, 1945	b33.56	40,200
1930	Feb. 13, 1930	20.7	20,200		May 10, 1945	22.08	21,000
1931	Mar. 28, 1931	16.25	15,500	1946	Nov. 22, 1945	23.05	22,600
1932	Dec. 14, 1931	28.06	28,400		Jan. 8, 1946	b35.97	44,500
	Dec. 22, 1931	17.86	17,100	1947	Jan. 2, 1947	b25.20	25,800
	Jan. 30, 1932	22.10	21,800	1948	Feb. 13, 1948	41.03	54,100
	Apr. 25, 1932	20.80	20,500		Mar. 7, 1948	20.42	17,000
1933	Oct. 17, 1932	19.70	20,700	1949	Nov. 29, 1948	22.83	19,400
	Dec. 31, 1932	21.90	23,600		Jan. 5, 1949	21.12	17,700
	Feb. 7, 1933	17.20	17,600	1950	Jan. 6, 1950	27.03	24,300
	Feb. 14, 1933	19.05	19,900		Jan. 31, 1950	28.15	26,100
	Feb. 20, 1933	25.20	27,900		Feb. 9, 1950	26.84	24,000
	Mar. 19, 1933	26.7	29,800	1951	Jan. 14, 1951	20.67	17,300
1934	Dec. 6, 1933	17.95	18,500		Feb. 1, 1951	29.66	29,000
	Mar. 3, 1934	24.22	26,600		Feb. 21, 1951	22.54	19,100
	Mar. 25, 1934	28.00	31,500		Apr. 22, 1951	22.42	19,000
1935	Mar. 12, 1935	27.70	31,100	1952	Dec. 8, 1951	32.56	35,000
	Apr. 6, 1935	26.60	27,900		Dec. 15, 1951	26.03	22,900
1936	Apr. 6, 1936	b25.54	26,500		Mar. 3, 1952	27.92	25,700
1937	Nov. 4, 1936	24.30	23,600		Mar. 10, 1952	20.74	17,300
	Dec. 7, 1936	22.04	21,100	1953	Feb. 12, 1953	21.28	17,900
	Jan. 2, 1937	b35.76	44,000		Feb. 21, 1953	24.05	20,700
	Jan. 15, 1937	23.40	22,600		Mar. 3, 1953	22.16	18,800
	Jan. 25, 1937	20.10	19,000		May 19, 1953	20.82	17,400
	May 13, 1937	20.65	19,600	1954	Jan. 16, 1954	25.25	22,000
1938	Jan. 22, 1938	18.90	17,500		Jan. 21, 1954	31.22	32,200
	Aug. 1, 1938	19.13	17,700				
1939	Jan. 13, 1939	22.58	21,900				

a Estimated.

b Occurred at different time than peak discharge.

Peak stages and discharges of Stones River near Smyrna, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Mar. 24, 1954	20.93	17,500	1957	Dec. 13, 1956	27.19	24,500
	Apr. 16, 1954	24.58	21,300		Jan. 22, 1957	20.7	17,300
1955	Dec. 29, 1954	24.86	21,600		Jan. 29, 1957	26.2	23,100
	Feb. 6, 1955	23.97	20,600		Feb. 2, 1957	25.22	22,000
	Feb. 22, 1955	27.90	25,700	1958	Nov. 18, 1957	24.87	21,600
	Mar. 22, 1955	37.14	46,300		Mar. 27, 1959	20.96	17,600
1956	Jan. 30, 1956	29.96	29,600	1960	Dec. 19, 1959	18.78	15,200
	Feb. 4, 1956	23.82	20,500				
	Feb. 18, 1956	31.90	33,600				

4295. Stewart Creek near Smyrna, Tenn.

Location.--Lat 35°59'54", long 86°30'18", on upstream end of right abutment of bridge on Fifteenth Avenue, 0.4 mile downstream from Harts Branch, 0.7 mile southwest of headquarters at Seward Air Force Base, 1.3 miles northeast of Smyrna, Rutherford County, and 5.3 miles upstream from mouth.

Drainage area.--69.7 sq mi (includes 7.6 sq mi without surface drainage).

Gage.--Recording, and since Oct. 1, 1958, crest-stage gage. Datum of gage is 490.00 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 4,300 cfs and extended on basis of contracted-opening measurement at 8,700 cfs.

Bankfull stage.--13 ft.

Historical data.--Flood of Feb. 13, 1948, reached about the same stage as that of Mar. 21, 1955.

Remarks.--Only annual peaks since Oct. 1, 1958, from crest-stage gage. Base for partial-duration series, 1,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Feb. 12, 1953	8.20	1,800	1956	Jan. 30, 1956	11.41	3,770
	Feb. 21, 1953	9.20	2,370		Feb. 4, 1956	9.10	2,380
	Mar. 3, 1953	8.27	1,840		Feb. 18, 1956	14.45	5,760
	Apr. 30, 1953	9.47	2,560		Apr. 6, 1956	10.96	3,500
	May 19, 1953	8.21	1,950	1957	Dec. 14, 1956	8.65	2,140
1954	Jan. 21, 1954	12.79	4,900		Jan. 22, 1957	11.28	3,690
	Feb. 20, 1954	-	(a)		Jan. 29, 1957	9.69	2,730
	Mar. 24, 1954	9.94	2,830		Feb. 1, 1954	8.37	2,020
	Apr. 16, 1954	8.42	2,040	1958	Nov. 17, 1957	9.18	2,430
1955	Dec. 29, 1954	-	2,000		Sept. 21, 1958	7.62	1,820
	Feb. 6, 1955	9.40	2,520	1959	Feb. 14, 1959	6.67	1,500
	Feb. 22, 1955	10.53	3,240		June 17, 1960	10.70	3,340
	Mar. 18, 1955	10.26	3,050				
	Mar. 21, 1955	17.61	8,700				
	Aug. 16, 1955	7.95	1,860				

a Discharge not known but greater than 1,800 cfs.

4300. Stones River above Donelson, Tenn.
(Published as "near Donelson" prior to Oct. 1, 1940)

Location.--Lat 36°04'23", long 86°33'30", on left bank 0.5 mile downstream from Hurricane Creek, 3.3 miles upstream from county highway bridge at Couchville, 8.8 miles southeast of Donelson, Davidson County, and at mile 17.7.

Drainage area.--834 sq mi.

Gage.--Nonrecording prior to September 1940; recording thereafter. At site 10.5 miles downstream prior to September 1940 at datum 18 ft lower. Datum of gage 400.00 ft above mean sea level, Sandy Hook datum. Nonrecording auxiliary gage, 3.3 miles downstream.

Stage-discharge relation.--Defined by current-meter measurements below 61,100 cfs and extended above. Rate of change of stage used as a factor in computing discharge.

Bankfull stage.--40 ft.

Historical data.--Flood of March 1902, is highest known, from profile by Corps of Engineers.

Remarks.--Base for partial-duration series, 16,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1902	March 1902	59.6	a73,000	1950	Feb. 10, 1950	45.47	24,000
1939	Feb. 3, 1939	b45.71	33,700	1951	Jan. 14, 1951	36.51	19,500
1940	Mar. 30, 1940	39.38	27,000		Jan. 29, 1951	34.69	17,700
	Apr. 19, 1940	33.61	17,200		Feb. 1, 1951	46.11	32,100
1941	Apr. 4, 1941	32.60	16,200		Feb. 21, 1951	36.80	19,800
	July 5, 1941	c38.13	21,900		Apr. 22, 1951	39.00	22,000
1942	Mar. 17, 1942	c31.46	15,200	1952	Nov. 16, 1951	33.78	16,800
1943	Dec. 28, 1942	b41.76	24,900		Dec. 9, 1951	49.57	40,300
	Mar. 13, 1943	36.20	19,200		Dec. 15, 1951	40.18	23,300
1944	Jan. 3, 1944	36.45	19,400		Dec. 21, 1951	34.87	17,900
	Feb. 9, 1944	39.18	22,400		Jan. 22, 1952	37.28	20,300
	Feb. 18, 1944	46.07	32,100		Jan. 28, 1952	36.03	19,000
	Feb. 27, 1944	37.98	21,100		Mar. 4, 1952	44.60	29,500
	Mar. 7, 1944	45.04	30,200	1953	Mar. 11, 1952	36.99	20,000
	Mar. 19, 1944	33.22	16,200		Feb. 12, 1953	37.68	20,700
	Mar. 29, 1944	37.65	20,600		Feb. 21, 1953	40.94	24,200
	Sept. 30, 1944	c50.12	42,600		Mar. 3, 1953	36.85	19,800
1945	Dec. 30, 1944	36.40	19,500		Apr. 30, 1953	33.18	16,200
	Jan. 1, 1945	45.55	31,200		May 19, 1953	37.12	20,100
	Feb. 18, 1945	39.60	22,800	1954	Jan. 16, 1954	42.40	26,200
	Feb. 22, 1945	49.78	41,700		Jan. 21, 1954	47.65	35,500
	Feb. 28, 1945	34.30	17,300		Mar. 24, 1954	38.35	21,400
	May 11, 1945	38.90	22,000		Apr. 17, 1954	42.37	26,100
1946	Nov. 22, 1945	39.04	22,200	1955	Dec. 29, 1954	42.48	26,300
	Jan. 8, 1946	c54.11	56,700		Feb. 7, 1955	41.54	25,000
	Mar. 7, 1946	36.12	19,200		Feb. 22, 1955	45.43	30,900
1947	Nov. 11, 1946	36.56	19,600		Mar. 18, 1955	33.91	16,900
	Jan. 2, 1947	c43.23	27,500		Mar. 22, 1955	52.98	49,900
1948	Feb. 14, 1948	58.46	68,700	1956	Jan. 30, 1956	47.83	35,900
	Mar. 7, 1948	37.40	20,600		Feb. 5, 1956	40.38	23,600
1949	Nov. 29, 1948	c40.56	23,900		Feb. 18, 1956	50.75	43,600
	Dec. 16, 1948	36.60	19,800		Apr. 6, 1956	35.02	18,000
	Dec. 25, 1948	35.53	18,600	1957	Dec. 14, 1956	42.90	26,900
	Jan. 5, 1949	39.75	22,900		Jan. 23, 1957	36.70	19,700
	Feb. 19, 1949	34.50	17,700		Jan. 30, 1957	44.18	28,800
	Mar. 27, 1949	32.95	16,100		Feb. 2, 1957	43.43	27,600
	June 16, 1949	38.53	21,600	1958	Nov. 18, 1957	40.93	24,200
1950	Jan. 6, 1950	46.40	32,800		Dec. 8, 1957	34.34	17,300
	Jan. 11, 1950	33.79	16,800		Sept. 21, 1958	35.42	18,400
	Jan. 13, 1950	36.45	18,000	1959	Feb. 14, 1959	36.01	19,000
	Jan. 31, 1950	c47.12	34,400		Mar. 27, 1959	35.21	18,200
	Feb. 7, 1950	36.86	20,000	1960	Dec. 19, 1959	34.87	17,900
					Dec. 28, 1959	33.90	16,900
					June 17, 1960	34.07	17,100

a Only annual maximum.
time than peak discharge.

b Occurred on following day.

c Occurred at different

4310. Mill Creek near Antioch, Tenn.

Location.--Lat 36°04'54", long 86°40'50", at downstream end of center bridge pier on Franklin-Limestone road, 900 ft upstream from Louisville & Nashville Railroad spur track bridge, 1.6 miles north of Antioch, Davidson County, 2.1 miles downstream from Whittemore Branch, and 4.0 miles southeast of Radnor.

Drainage area.--64.0 sq mi.

Gage.--Recording. Datum of gage is 472.93 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 12,900 cfs and extended above.

Bankfull stage.--12 ft.

Historical data.--Flood of Mar. 21, 1955, is highest known since at least 1920.

Remarks.--Base for partial-duration series, 3,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 15, 1954	11.45	4,020	1957	Jan. 29, 1957	13.42	5,570
	Jan. 20, 1954	14.52	6,820		Feb. 19, 1957	10.06	3,020
	Feb. 20, 1954	11.68	4,180		May 22, 1957	10.20	3,100
	Mar. 24, 1954	14.54	6,850		June 5, 1957	12.68	4,860
	Apr. 16, 1954	11.50	3,910	1958	Nov. 17, 1957	11.92	4,240
1955	Dec. 28, 1954	10.21	3,190		Dec. 20, 1957	12.97	5,120
	Feb. 6, 1955	10.52	3,390		Apr. 10, 1958	10.73	3,420
	Feb. 21, 1955	11.98	4,390		Apr. 27, 1958	10.74	3,420
	Mar. 6, 1955	10.45	3,250		Apr. 29, 1958	10.25	3,150
	Mar. 18, 1955	13.81	5,990		July 22, 1958	10.23	3,120
	Mar. 21, 1955	19.73	17,000	1959	July 1, 1959	9.83	2,880
1956	Jan. 29, 1956	14.20	6,440	1960	Oct. 8, 1959	11.14	3,700
	Feb. 4, 1956	11.58	3,870		Dec. 28, 1959	11.95	4,260
	Feb. 17, 1956	14.87	7,320		Feb. 5, 1960	10.43	3,240
	Mar. 14, 1956	10.09	3,030		Mar. 30, 1960	11.20	3,740
	Apr. 6, 1956	14.33	6,600		June 17, 1960	19.15	15,600
1957	Dec. 12, 1956	10.59	3,330		June 24, 1960	11.72	4,100
	Jan. 22, 1957	13.21	5,360		Sept. 17, 1960	10.44	3,240

4315. Cumberland River at Nashville, Tenn.

Location.--Lat 36°09'45", long 85°46'17", at Sparkman Street Bridge in Nashville, Davidson County, 2.7 miles upstream from lock and dam 1, 3.3 miles downstream from Mill Creek, and at mile 191.1.

Drainage area.--12,860 sq mi, approximately.

Gage.--Nonrecording prior to Apr. 20, 1940; recording thereafter. At site 400 ft downstream prior to Apr. 20, 1940, at same datum. Datum of gage is 368.17 above mean sea level, Sandy Hook datum. Nonrecording auxiliary gage 2.7 miles downstream since Nov. 1, 1931.

Stage-discharge relation.--Defined by current-meter measurements below 202,000 cfs and extended above. Rate of change of stage used as a factor in computing discharge.

Bankfull stage.--40 ft.

Historical data.--Annual peaks for years 1816-25 were less than 52.1 ft, from newspaper account.

Remarks.--Only annual maximum stages prior to 1893 and since Oct. 1, 1954, from reports of U.S. Weather Bureau. Flow regulated since July 1950 by Lake Cumberland, since August 1943 by Dale Hollow Reservoir, since November 1948 by Center Hill Reservoir, and since June 1954 by Old Hickory Lake. Base for partial-duration series, 85,000 cfs.

Peak stages and discharges of Cumberland River at Nashville, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1793	-	58.5	-	1888	Mar. 30, 1888	39.2	-
1809	Dec. 25, 1808	54	-	1889	Feb. 21, 1889	35.8	-
1815	Spring	51.5	-	1890	Mar. 6, 1890	50.7	-
1826	Mar. 11, 1826	52.1	-	1891	Mar. 14, 1891	49.3	-
1827	Feb. 11, 1827	41	-	1892	Apr. 26, 1892	38.8	-
1828	-	(a)	-	1893	Feb. 22, 1893	40.8	118,000
1829	-	(a)	-		June 2, 1893	32.4	87,600
1830	Mar. 22, 1830	42	-	1894	Feb. 9, 1894	42.0	122,000
1831	-	(a)	-	1895	Mar. 25, 1895	31.6	84,800
1832	Feb. 22, 1832	38	-	1896	Mar. 22, 1896	35.2	97,700
1833	June 24, 1833	38	-		Apr. 7, 1896	42.9	126,000
1834	Jan. 20, 1834	42.1	-	1897	Feb. 28, 1897	37.6	106,000
1836	Nov. 12, 1835	32	-		Mar. 20, 1897	49.25	148,000
1837	-	(b)	-		Apr. 10, 1897	42.3	123,000
1838	May 26, 1838	35	-	1898	Jan. 23, 1898	38.80	111,000
1839	Feb. 14, 1839	29	-	1899	Jan. 13, 1899	39.9	115,000
1840	May 4, 1840	40	-		Feb. 11, 1899	40.6	117,000
1841	Feb. 5, 1841	42	-		Mar. 11, 1899	39.1	112,000
1842	Feb. 10, 1842	48.0	-		Mar. 23, 1899	33.2	90,500
1843	Jan. 14, 1843	38	-		Apr. 4, 1899	37.6	106,000
1844	Feb. 9, 1844	38	-	1900	Feb. 13, 1900	26.2	65,300
1845	Mar. 13, 1845	40	-	1901	Dec. 1, 1900	33.4	91,200
1846	Mar. 8, 1846	42	-		Apr. 25, 1901	37.8	107,000
1847	Mar. 16, 1847	50.2	-		Aug. 21, 1901	39.8	114,000
1848	Dec. 19, 1847	54.9	-	1902	Feb. 3, 1902	41.0	119,000
1849	Jan. 22, 1849	46.5	-		Mar. 9, 1902	32.4	87,600
1850	Apr. 28, 29, 1850	53.1	-		Apr. 4, 1902	46.1	137,000
1851	Feb. 28, 1851	45	-	1903	Dec. 21, 1902	33.3	90,900
1852	Mar. 4, 1852	38	-		Feb. 21, 1903	37.6	106,000
1853	Jan. 1, 1853	44	-		Mar. 9, 1903	40.7	116,000
1854	Jan. 28, 1854	47.9	-		Apr. 13, 1903	34.2	94,100
1855	Mar. 21, 1855	38	-	1904	Mar. 27, 1904	37.6	106,000
1856	May 10, 1856	45	-	1905	Mar. 14, 1905	31.4	80,400
1858	Dec. 15, 1857	49.5	-	1906	Apr. 3, 1906	34.4	92,600
1859	Feb. 22, 1859	45.0	-	1907	Jan. 4, 1907	35.5	97,200
1860	Dec. 12, 1859	47.9	-		Mar. 3, 1907	38.9	112,000
1861	Jan. 20, 1861	39	-		Mar. 18, 1907	31.7	81,600
1862	February 1862	52.2	-	1908	Feb. 16, 1908	29.4	72,400
1863	Mar. 30, 1863	46.5	-	1909	Feb. 28, 1909	40.0	116,000
1865	Mar. 10, 1865	52.1	-		Mar. 14, 1909	33.9	90,500
1866	Dec. 30, 1865	42.5	-	1910	Feb. 22, 1910	35.0	95,100
1867	Mar. 13, 1867	51.2	-	1911	Jan. 6, 1911	34.2	91,800
1868	Apr. 17, Sept. 28-30 1868	41	-		Feb. 12, 1911	35.9	98,900
1869	Apr. 25, 1869	37	-		Apr. 10, 1911	38.6	110,000
1870	Jan. 19, 1870	42	-		May 6, 1911	33.7	89,700
1871	Mar. 1, 1871	35	-	1912	Jan. 1, 1912	41.6	123,000
1872	Apr. 16, 1872	40.3	-		Feb. 27, 1912	37.8	107,000
1873	Feb. 21, 1873	39.5	-		Mar. 19, 1912	37.9	107,000
1874	Apr. 17, 1874	49.6	-		Apr. 8, 1912	46.5	144,000
1875	Mar. 2, 1875	41.5	-		May 3, 1912	43.0	129,000
1876	Jan. 29, 1876	34.4	-	1913	Jan. 14, 1913	48.4	153,000
1877	Jan. 22, 1877	40.5	-		Jan. 28, 1913	39.6	110,000
1878	Apr. 26, 1878	27.3	-		Apr. 2, 1913	44.9	137,000
1879	Jan. 19, 1879	41.6	-	1914	Apr. 5, 1914	36.3	101,000
1880	Mar. 20, 1880	46.5	-	1915	Dec. 30, 1914	33.6	89,300
1881	Jan. 25, 1881	33.0	-		Feb. 6, 1915	33.0	108,000
1882	Jan. 22, 1882	55.3	-				
1883	Feb. 14, 1883	41.6	-				
1884	Mar. 15, 16, 1884	48.3	-				
1885	Jan. 21, 1885	37.8	-				
1886	Apr. 10, 11, 1886	49.3	-				
1887	Mar. 2, 1887	44.3	-				

a Stage not known but less than 42.1 ft.

b Stage not known but less than 40 ft.

Peak stages and discharges of Cumberland River at Nashville, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1916	Nov. 20, 1915	41.4	122,000	1934	Mar. 29, 1934	42.3	119,000
	Dec. 24, 1915	39.9	116,000				
	Jan. 5, 1916	42.4	127,000	1935	Jan. 21, 1935	c37.6	d100,000
1917	Jan. 1, 1917	33.2	87,700		Mar. 18, 1935	41.9	118,000
	Jan. 11, 1917	39.5	114,000		Apr. 10, 1935	42.3	119,000
	Jan. 26, 1917	32.8	86,000	1936	Mar. 31, 1936	43.6	125,000
	Feb. 24, 1917	33.0	86,800		Apr. 11, 1936	43.4	124,000
	Mar. 10, 1917	45.7	141,000	1937	Jan. 8, 1937	45.3	133,000
	Mar. 21, 1917	40.0	116,000		Jan. 26, 1937	53.9	186,000
1918	Feb. 5, 1918	49.8	159,000	1938	Jan. 26, 1938	34.2	85,700
	Apr. 12, 1918	34.6	93,400	1939	Feb. 11, 1939	48.8	153,000
1919	Jan. 7, 8, 1919	44.9	137,000		Mar. 6, 1939	37.5	98,900
	Mar. 9, 1919	33.5	88,900	1940	Apr. 3, 1940	37.3	98,100
1920	Nov. 30, 1919	37.8	107,000	1941	Apr. 8, 1941	e30.58	75,600
	Dec. 14, 1919	35.9	98,900				
	Jan. 30, 1920	44.1	134,000	1942	Mar. 22, 1942	e30.83	77,000
	Feb. 26, 1920	35.5	97,200	1943	Jan. 4, 1943	c45.81	137,000
	Mar. 16, 1920	35.8	98,500		Mar. 21, 1943	42.42	113,000
	Apr. 7, 1920	42.2	126,000		Apr. 26, 1943	34.62	89,100
1921	Feb. 14, 1921	32.9	86,400	1944	Feb. 29, 1944	c39.50	108,000
	Apr. 20, 1921	32.9	86,400		Apr. 1, 1944	35.48	90,700
1922	Mar. 16, 1922	45.1	128,000	1945	Jan. 2, 1945	43.10	114,000
1923	Dec. 20, 1922	35.9	94,700		Feb. 23, 1945	e44.68	124,000
	Feb. 9, 1923	43.5	122,000	1946	Jan. 12, 1946	f48.87	151,000
	Mar. 13, 1923	41.7	116,000	1947	Jan. 5, 1947	e37.49	d98,100
1924	Jan. 8, 1924	44.0	124,000		Jan. 21, 1947	g38.26	101,000
1925	Feb. 21, 1925	33.6	86,500	1948	Feb. 18, 1948	49.7	155,000
1926	Jan. 26, 1926	34.8	89,300	1949	Jan. 6, 1949	e35.98	d88,800
1927	Jan. 1, 1927	56.2	203,000		Jan. 27, 1949	c36.36	91,500
	Mar. 14, 1927	40.0	109,000		Feb. 20, 1949	e34.53	d85,500
1928	Apr. 26, 1928	35.7	92,500	1950	Jan. 14, 1950	43.5	116,000
	July 5, 1928	42.9	120,000		Feb. 10, 1950	e48.58	149,000
1929	Jan. 29, 1929	37.0	97,400	1951	Feb. 2, 1951	e36.90	92,800
	Mar. 6, 1929	41.0	113,000	1952	Dec. 9, 1951	c39.74	d98,500
	Mar. 30, 1929	51.0	160,000		Dec. 15, 1951	c40.30	102,000
	May 10, 1929	35.0	90,000		Mar. 23, 1952	e37.00	d91,300
1930	Feb. 17, 1930	32.0	79,200	1953	Mar. 4, 1953	29.73	71,300
1931	Apr. 2, 1931	30.4	73,400	1954	Jan. 22, 1954	c36.87	91,700
1932	Dec. 15, 1931	34.7	87,600		Mar. 23, 1955	46.45	-
	Feb. 8, 1932	48.20	149,000	1956	Feb. 19, 1956	42.6	-
	Apr. 2, 1932	34.3	86,100	1957	Jan. 30, 1957	41.6	-
1933	Jan. 1, 1933	37.0	96,800	1958	Apr. 30, 1958	31.1	-
	Feb. 21, 1933	45.0	132,000	1959	Feb. 15, 1959	30.7	-
	Mar. 21, 1933	38.0	101,000	1960	Dec. 19, 1959	30.3	-
	May 15, 1933	36.0	92,800				
1934	Mar. 9, 1934	43.7	126,000				

c Occurred following day.

d Daily mean discharge.

e Occurred at different time than peak discharge.

f Occurred Jan. 15, 1946.

g Occurred Jan. 23, 1947.

CUMBERLAND RIVER BASIN

4325. West Harpeth River near Leipers Fork, Tenn.

Location.--Lat 35°53'56", long 86°58'01", on downstream end of center pier of bridge on State Highway 96, 0.6 mile downstream from Murfrees Fork, 1.2 miles upstream from Leipers Fork, 1.8 miles east of town of Leipers Fork, Williamson County, and 5.8 miles west of Franklin.

Drainage area.--66.9 sq mi.

Gage.--Recording. Datum of gage is 634.10 ft above mean sea level, unadjusted (Tennessee Valley Authority bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 3,000 cfs and extended on basis of contracted-opening and flow-over-road measurement at 18,900 cfs.

Bankfull stage.--12 ft.

Remarks.--Base for partial-duration series, 1,900 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Feb. 6, 1955	11.17	1,970	1957	Jan. 29, 1957	12.42	2,990
	Feb. 22, 1955	12.40	2,950		May 19, 1957	12.35	2,880
	Mar. 21, 1955	14.8	18,900		May 22, 1957	12.00	2,500
	Apr. 6, 1955	-	(a)	1958	Nov. 17, 1957	12.81	3,940
	Apr. 23, 1955	-	(a)		Dec. 20, 1957	12.45	3,040
1956	May 29, 1955	11.21	2,010		Dec. 25, 1957	10.97	1,900
	Jan. 29, 1956	12.53	3,200	1959	Mar. 21, 1959	9.50	1,460
	Feb. 4, 1956	11.24	2,020		Dec. 28, 1959	12.57	3,280
	Feb. 17, 1956	14.44	14,800		June 17, 1960	15.23	25,000
	Apr. 6, 1956	12.50	3,130				
1957	Jan. 22, 1957	14.3	13,400				

a Discharge not determined but greater than 1,900 cfs.

4335. Harpeth River at Belleview, Tenn.

Location.--Lat 36°03'16", long 86°55'42", on right bank 45 ft upstream from bridge on State Highway 100, 0.1 mile downstream from Little Harpeth River, and 0.9 mile southeast of Belleview, Davidson County.

Drainage area.--408 sq mi.

Gage.--Nonrecording Apr. 11, 1920, to Oct. 31, 1929, and Jan. 1, 1932, to Sept. 30, 1933; recording thereafter. At site 2½ miles downstream prior to Oct. 1, 1933, at datum 7.85 ft lower. Datum of gage is 541.04 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 28,200 cfs and extended above.

Bankfull stage.--16 ft.

Historical data.--Flood of Feb. 13, 1948, is highest known since at least 1902.

Remarks.--Prior to Sept. 30, 1933, peaks are from graphs based on gage readings. Base for partial-duration series, 7,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920a/	Apr. 21, 1920	16.4	10,600	1922	Apr. 27, 1922	14.8	9,380
	Apr. 26, 1920	-	(b)	1923	Mar. 22, 1923	13.7	8,580
1921	Mar. 9, 1921	12.4	7,670	1924	Dec. 23, 1923	14.0	8,790
	Apr. 17, 1921	12.5	7,740		Jan. 4, 1924	17.1	11,300
1922	Mar. 2, 1922	17.0	11,200	1925	Apr. 10, 1925	13.3	8,300
	Mar. 10, 1922	18.8	13,400				
	Mar. 31, 1922	14.6	9,220				

a Not a complete year.

b Discharge not determined but greater than 7,500 cfs.

Peak stages and discharges of Harpeth River at Bellevue, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Jan. 22, 1926	11.8	7,250	1945	Feb. 17, 1945	13.17	7,660
1927	Dec. 21, 1926	20.2	15,800		Feb. 22, 1945	17.07	12,100
	Dec. 25, 1926	20.3	16,000		Feb. 28, 1945	14.87	9,110
	Dec. 29, 1926	16.2	10,500		May 10, 1945	13.74	8,060
	Mar. 13, 1927	21.7	18,800	1946	Jan. 8, 1946	19.81	19,300
	Apr. 11, 1927	20.6	16,600	1947	Jan. 3, 1947	13.02	7,520
1928	June 29, 1928	17.4	11,600		Jan. 15, 1947	15.55	9,740
1929	Feb. 26, 1929	14.7	9,300		May 22, 1947	13.77	8,120
	Mar. 23, 1929	22.3	20,200	1948	Feb. 13, 1948	24.34	40,000
1932a/	Jan. 30, 1932	17.6	11,800		Mar. 27, 1948	13.15	7,620
	Feb. 4, 1932	19.0	13,700	1949	Jan. 6, 1949	15.21	8,820
	Feb. 17, 1932	14.4	9,080		June 16, 1949	14.56	8,200
	Apr. 30, 1932	17.0	11,200	1950	Jan. 6, 1950	17.95	14,000
	Dec. 31, 1932	15.4	9,830		Jan. 11, 1950	15.63	9,840
1933	Feb. 15, 1933	15.7	10,100		Feb. 1, 1950	18.46	15,600
	Feb. 20, 1933	19.0	13,700		Feb. 10, 1950	17.00	11,600
	Mar. 20, 1933	18.5	13,000		Feb. 15, 1950	17.15	13,100
	May 6, 1933	17.6	11,800	1951	Jan. 14, 1951	14.00	7,730
	Jan. 7, 1934	13.70	7,940		Feb. 1, 1951	16.46	10,500
1934	Mar. 3, 1934	13.99	8,180	1952	Dec. 9, 1951	17.72	13,300
	Mar. 25, 1934	16.32	11,100		Dec. 15, 1951	17.63	13,100
	Jan. 21, 1935	13.78	8,000		Jan. 23, 1952	14.88	8,500
1935	Mar. 13, 1935	18.18	15,000		Mar. 4, 1952	16.98	11,500
	Apr. 6, 1935	18.08	14,600		Mar. 11, 1952	15.27	8,880
	Apr. 7, 1936	15.43	9,880		Mar. 22, 1952	16.28	10,200
1936	Jan. 3, 1937	19.30	17,300	1953	Feb. 12, 1953	13.49	7,540
	Jan. 18, 1937	17.26	13,000		Mar. 3, 1953	14.64	8,380
	Jan. 21, 1937	17.35	13,100		Apr. 30, 1953	14.64	8,380
	Jan. 23, 1937	16.28	11,200	1954	Jan. 16, 1954	13.70	7,690
	May 5, 1937	15.20	9,630		Jan. 21, 1954	18.21	14,700
1937	Jan. 22, 1938	15.55	10,200		Feb. 20, 1954	14.44	8,220
	Jan. 13, 1939	14.54	8,850		Apr. 17, 1954	15.14	8,840
	Feb. 3, 1939	13.84	8,020	1955	Feb. 7, 1955	13.77	7,740
	Feb. 15, 1939	15.59	10,200		Feb. 22, 1955	16.37	10,300
	Mar. 31, 1940	-	(b)		Mar. 22, 1955	22.18	28,900
1940	Apr. 19, 1940	15.46	9,780	1956	Jan. 30, 1956	16.51	10,600
	July 4, 1941	7.73	3,520		Feb. 18, 1956	20.15	20,500
1941	Apr. 9, 1942	8.56	4,360		Apr. 7, 1956	14.34	8,140
1942	Dec. 28, 1942	14.24	8,370	1957	Jan. 23, 1957	16.70	11,000
	Mar. 13, 1943	15.56	9,930		Jan. 29, 1957	17.04	11,700
1943	Feb. 18, 1944	17.78	13,700		Feb. 2, 1957	14.98	8,680
	Feb. 27, 1944	13.83	8,140	1958	Nov. 18, 1957	15.45	9,160
1944	Mar. 19, 1944	13.25	7,660		Dec. 20, 1957	14.54	8,300
	Sept. 2, 1944	13.34	7,740	1959	Feb. 14, 1959	11.59	6,210
	Jan. 1, 1945	17.43	12,700	1960	Dec. 28, 1959	14.26	8,080
1945					June 17, 1960	18.74	16,000

a Not a complete year.

b Discharge not determined but greater than 7,500 cfs.

CUMBERLAND RIVER BASIN

4345. Harpeth River near Kingston Springs, Tenn.

Location.--Lat 36°07'18", long 87°05'56", on right bank 400 ft upstream from bridge on U.S. Highway 70, 2 miles northeast of Kingston Springs, Cheatham County, 3 miles downstream from Turnbull Creek, and at mile 32.4.

Drainage area.--687 sq mi.

Gage.--Nonrecording prior to Jan. 23, 1939; recording thereafter. At site 150 ft downstream prior to Jan. 23, 1939, at same datum. Datum of gage is 448.04 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 41,000 cfs and extended above.

Bankfull stage.--16 ft.

Historical data.--Flood of Jan. 7, 1946, is highest known. Flood of March 1902 reached a stage about 3 ft lower than that of Jan. 7, 1946.

Remarks.--Prior to Jan. 23, 1939, peaks are from graphs based on gage readings. Base for partial-duration series, 10,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Jan. 22, 1926	16.6	15,500	1938	Jan. 22, 1938	15.98	13,700
1927	Dec. 21, 1926	24.0	26,500	1939	Jan. 13, 1939	15.22	12,700
	Dec. 23, 1926	18.4	18,100		Feb. 3, 1939	16.31	14,100
	Dec. 26, 1926	20.4	21,000		Feb. 15, 1939	17.93	16,400
	Dec. 28, 1926	17.3	16,500	1940	Mar. 30, 1940	19.10	18,000
	Mar. 8, 1927	14.4	12,900		Apr. 19, 1940	18.10	16,400
	Mar. 13, 1927	25.0	33,500				
	Apr. 10, 1927	21.1	22,200				
	Apr. 20, 1927	21.30	22,400	1941	July 5, 1941	8.30	4,880
1928	June 29, 1928	13.9	12,900	1942	Apr. 9, 1942	11.90	8,100
1929	Jan. 19, 1929	12.0	10,600	1943	Dec. 28, 1942	20.10	19,600
	Feb. 26, 1929	18.6	18,500		Mar. 13, 1943	16.79	14,400
	Mar. 23, 1929	19.8	20,000		Mar. 19, 1943	20.22	19,700
1930	Jan. 9, 1930	14.4	13,500	1944	Feb. 18, 1944	17.70	15,800
	Feb. 13, 1930	13.45	12,200		Mar. 19, 1944	18.10	16,400
	Mar. 18, 1930	16.0	15,400		Mar. 29, 1944	13.12	10,100
	May 18, 1930	17.9	17,700		Apr. 11, 1944	15.99	13,800
1931	Mar. 28, 1931	11.30	9,760	1945	Dec. 28, 1944	14.10	10,600
1932	Dec. 13, 1931	13.2	11,600		Jan. 1, 1945	27.01	39,900
	Jan. 23, 1932	15.0	14,000		Feb. 22, 1945	20.75	20,900
	Jan. 30, 1932	20.2	21,600		Feb. 28, 1945	16.54	15,800
	Feb. 3, 1932	25.3	34,500		May 10, 1945	18.62	17,000
	Feb. 17, 1932	14.5	13,300	1946	Jan. 7, 1946	32.20	60,000
	Apr. 30, 1932	19.7	20,800				
1933	Dec. 31, 1932	15.9	15,300	1947	Jan. 3, 1947	16.10	13,200
	Feb. 15, 1933	16.0	15,400		Jan. 15, 1947	21.72	23,300
	Feb. 20, 1933	24.8	32,900		May 21, 1947	14.28	10,900
	Mar. 19, 1933	18.6	19,200	1948	Jan. 1, 1948	17.38	15,100
	Mar. 31, 1933	16.0	15,400		Feb. 14, 1948	26.00	47,000
	May 5, 1933	20.4	21,800		Mar. 7, 1948	13.79	10,200
	May 10, 1933	13.0	11,300		Mar. 16, 1948	14.90	11,700
1934	Jan. 7, 1934	14.2	12,900	1949	Jan. 5, 1949	17.62	14,500
	Mar. 3, 1934	18.76	19,400		June 15, 1949	23.58	29,000
	Mar. 24, 1934	16.9	16,700	1950	Dec. 12, 1949	17.30	14,000
1935	Jan. 20, 1935	23.04	27,100		Jan. 5, 1950	22.23	24,900
	Mar. 12, 1935	19.9	19,200		Jan. 10, 1950	16.45	15,900
	Apr. 6, 1935	20.3	19,900		Feb. 1, 1950	23.96	30,100
					Feb. 9, 1950	24.30	31,300
					Feb. 14, 1950	20.73	21,000
1936	Mar. 16, 1936	13.00	10,100	1951	Jan. 4, 1951	17.05	14,600
	Mar. 24, 1936	15.00	12,400		Jan. 14, 1951	14.13	10,400
	Mar. 26, 1936	16.40	14,300		Feb. 1, 1951	17.27	14,900
	Apr. 9, 1936	17.80	16,200	1952	Dec. 8, 1951	22.16	25,300
1937	Jan. 4, 1937	18.53	17,200		Dec. 15, 1951	24.36	31,500
	Jan. 18, 1937	20.70	20,400		Mar. 3, 1952	21.58	23,900
	Jan. 20, 1937	24.40	31,600		Mar. 11, 1952	17.57	15,500
	May 2, 1937	15.80	13,400				
	May 5, 1937	14.00	11,200				

Peak stages and discharges of Harpeth River near Kingston Springs, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Mar. 23, 1952	19.04	18,500	1956	Feb. 18, 1956	23.24	25,600
1953	Jan. 24, 1953	14.64	11,000	1957	Jan. 23, 1957	19.83	17,700
	Feb. 12, 1953	13.77	10,000		Jan. 29, 1957	25.69	33,000
	Mar. 4, 1953	16.33	13,300		Feb. 1, 1957	15.13	11,600
	Apr. 30, 1953	16.30	13,200		May 19, 1957	14.59	10,900
	May 19, 1953	15.07	11,500		June 6, 1957	15.30	11,800
1954	Jan. 22, 1954	19.46	19,300	1958	Nov. 19, 1957	20.36	18,700
	Mar. 24, 1954	16.56	13,700		Dec. 20, 1957	16.15	12,800
1955	Feb. 22, 1955	18.60	15,800		May 11, 1958	18.85	16,200
	Mar. 22, 1955	27.99	41,500	1959	Feb. 15, 1959	13.18	9,430
	May 22, 1955	16.73	13,500		Dec. 28, 1959	14.62	10,900
1956	Jan. 30, 1956	21.61	21,400	1960	June 18, 1960	16.57	13,300
	Feb. 3, 1956	14.90	11,300				

4350. Cumberland River below Cheatham Dam, Tenn.

Location.--Lat 36°19'26", long 87°13'32", on downstream end of lock wall in lower pool at Cheatham Dam, 2.0 miles southwest of Neptune, Cheatham County, 3.0 miles upstream from Half Pone Creek, 9.7 miles west of Ashland City, and at mile 148.4.

Drainage area.--14,200 sq mi, approximately.

Gage.--Recording. Datum of gage is at mean sea level, datum of 1929; gage readings have been reduced to 350.00 ft above mean sea level. Auxiliary recording gage and nonrecording gage, 8.1 miles downstream.

Stage-discharge relation.--Defined by current-meter measurements below 150,000 cfs and extended above. Fall between auxiliary gage and reference gage used as a factor in computing discharge.

Bankfull stage.--40 ft.

Historical data.--Flood of Jan. 25, 1937, is maximum stage known.

Remarks.--Gage-height records for base gage, lock B staff-gage readings, and record of wicket manipulation furnished by Corps of Engineers. Flow regulated by Lake Cumberland, Dale Hollow Reservoir, Great Falls Lake, Center Hill Reservoir, Old Hickory Lake, and Cheatham Dam. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Jan. 1, 1927	a51.7	b205,000	1956	Feb. 20, 1956	d42.36	149,000
1937	Jan. 24, 1937	ac53.5	b200,000	1957	Jan. 30, 1957	c41.92	144,000
				1958	Nov. 19, 1957	c37.00	118,000
1955	Mar. 23, 1955	c45.93	176,000	1959	Feb. 15, 1959	30.25	103,000
				1960	Dec. 29, 1959	27.12	87,400

a From profiles by Corps of Engineers.

b Estimated.

c Occurred on following day.

d Occurred at different time than peak discharge.

CUMBERLAND RIVER BASIN

4355. Red River near Adams, Tenn.

Location.--Lat 36°35'19", long 87°05'21", on downstream end of right bank pier of bridge on U.S. Highway 41, 0.5 mile downstream from Elk Fork, 1.3 miles northwest of Adams, Robertson County, and at mile 33.0.

Drainage area.--706 sq mi (includes 395 sq mi without surface drainage).

Gage.--Nonrecording prior to Oct. 8, 1926; recording thereafter. At site half a mile downstream prior to Nov. 13, 1939, at same datum. Datum of gage is 398.34 ft above mean sea level, Sandy Hook datum (Corps of Engineers bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 25,000 cfs and extended above. Rate of change of stage used as a factor in computing discharge since 1949.

Bankfull stage.--16 ft.

Historical data.--Flood of Jan. 23, 1937, reached a stage of 37.5 ft at present site, from floodmarks. Flood of 1913 reached a stage about equal to that of Jan. 23, 1937, from profile by Corps of Engineers.

Remarks.--Prior to Oct. 8, 1926, peaks are from graph based on gage readings. Base for partial-duration series, 8,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1921	Mar. 25, 1921	12.0	6,950	1934	Mar. 3, 1934	15.16	9,300
1922	Mar. 10, 1922	18.9	12,100	1935	Jan. 21, 1935	23.87	20,800
1923	Jan. 22, 1923	19.3	12,400		Mar. 13, 1935	24.96	16,600
	Jan. 24, 1923	17.1	10,700		Apr. 1, 1935	18.23	11,600
	Jan. 31, 1923	13.7	8,190		Apr. 6, 1935	14.84	9,060
	Feb. 3, 1923	21.1	13,800	1936	Mar. 27, 1936	14.90	9,110
	Feb. 13, 1923	14.0	8,410		Apr. 10, 1936	14.67	8,490
	Mar. 7, 1923	14.0	8,410	1937	Jan. 3, 1937	13.68	8,200
	Mar. 12, 1923	15.4	9,450		Jan. 19, 1937	33.00	28,400
	Mar. 16, 1923	19.5	12,500		Jan. 23, 1937	35.94	42,000
	Mar. 24, 1923	15.6	9,600		May 3, 1937	15.98	9,510
	Aug. 13, 1923	15.3	9,380	1938	Aug. 1, 1938	27.47	13,100
	Aug. 18, 1923	15.7	9,680				
1924	Dec. 23, 1923	13.5	8,050	1939	Jan. 30, 1939	18.78	11,700
	Jan. 3, 1924	27.2	19,000		Feb. 4, 1939	23.26	15,500
	May 30, 1924	13.6	8,120		Feb. 10, 1939	14.52	8,410
1925	Dec. 8, 1924	30.2	22,400		Feb. 15, 1939	17.06	10,400
	Feb. 23, 1925	23.8	15,900		Mar. 5, 1939	19.02	11,900
1926	Jan. 22, 1926	23.9	16,000		Mar. 30, 1939	15.90	9,440
1927	Dec. 22, 1926	31.5	24,400	1940	Apr. 20, 1940	15.51	8,180
	Dec. 29, 1926	18.8	12,000	1941	July 4, 1941	11.20	5,170
	Jan. 22, 1927	20.55	13,300	1942	Apr. 10, 1942	22.90	14,000
	Mar. 14, 1927	25.80	17,600	1943	Dec. 28, 1942	19.40	11,500
	Mar. 21, 1927	20.67	13,400		Mar. 14, 1943	17.67	10,200
1928	June 5, 1928	20.34	13,000		Mar. 20, 1943	23.40	17,300
	June 14, 1928	13.88	8,340	1944	Feb. 29, 1944	21.90	13,500
	June 30, 1928	25.74	16,900		Apr. 12, 1944	15.20	8,200
1929	Feb. 26, 1929	24.90	16,300	1945	Jan. 1, 1945	25.20	16,300
	Apr. 29, 1929	16.28	10,100		Feb. 22, 1945	17.87	10,300
1930	Jan. 9, 1930	15.76	9,740	1946	Jan. 9, 1946	15.30	8,280
	May 19, 1930	14.25	8,620		Feb. 7, 1946	15.87	8,720
1931	Mar. 28, 1931	7.07	3,410		Mar. 27, 1946	17.04	9,600
1932	Dec. 14, 1931	18.0	11,300	1947	Jan. 3, 1947	16.10	8,680
	Jan. 24, 1932	22.26	14,400		Apr. 16, 1947	21.82	13,500
	Jan. 30, 1932	30.0	22,100	1948	Feb. 14, 1948	31.32	20,700
	May 1, 1932	24.70	16,100		Mar. 27, 1948	17.28	9,820
	July 5, 1932	13.66	8,200	1949	Nov. 19, 1948	17.49	9,190
1933	Jan. 22, 1933	19.18	12,200		Dec. 16, 1948	a23.90	16,000
	Feb. 20, 1933	19.33	12,300		Jan. 6, 1949	21.50	11,400
	Mar. 20, 1933	18.08	11,400				
	Apr. 1, 1933	13.56	8,120				

a Occurred at different time than peak discharge.

Peak stages and discharges of Red River near Adams, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Jan. 28, 1949	19.80	10,500	1953	May 18, 1953	17.65	9,560
	Feb. 16, 1949	23.46	13,900				
	Feb. 20, 1949	16.82	9,070	1954	Jan. 21, 1954	13.02	6,310
1950	Dec. 13, 1949	a30.55	20,600	1955	Feb. 22, 1955	20.85	12,000
	Jan. 3, 1950	19.78	11,200		Mar. 22, 1955	27.87	17,600
	Jan. 6, 1950	28.00	17,900	1956	Jan. 31, 1956	27.55	17,300
	Jan. 11, 1950	23.46	13,900		Feb. 3, 1956	19.24	10,900
	Jan. 16, 1950	16.60	8,900		Feb. 18, 1956	27.60	17,300
	Feb. 1, 1950	25.92	15,800	1957	Jan. 23, 1957	18.89	10,600
	Sept. 3, 1950	b24.20	14,600		Jan. 30, 1957	30.37	20,200
	Sept. 8, 1950	15.96	8,510		Feb. 2, 1957	17.12	9,380
1951	Jan. 4, 1951	20.50	11,500		Apr. 5, 1957	24.10	14,300
	Jan. 15, 1951	22.00	12,600		May 23, 1957	19.70	11,200
	Feb. 13, 1951	17.37	9,360	1958	Nov. 19, 1957	26.9	16,700
	Feb. 21, 1951	19.34	10,700		Dec. 8, 1957	17.59	9,710
1952	Dec. 4, 1951	21.25	12,100		Dec. 20, 1957	20.99	12,100
	Dec. 9, 1951	22.52	13,000	1959	Jan. 22, 1959	16.40	8,880
	Dec. 15, 1951	18.43	10,100		Feb. 15, 1959	16.56	8,990
	Dec. 26, 1951	17.45	9,420	1960	Dec. 28, 1959	13.06	6,540
	Mar. 11, 1952	19.78	11,000				
	Mar. 23, 1952	31.24	21,500				
1953	Mar. 4, 1953	18.89	10,400				

a Occurred at different time than peak discharge.

b Occurred Sept. 4, 1950.

4360. Sulphur Fork Red River near Adams, Tenn.

Location.--Lat 36°30'55", long 87°03'32", on left bank 600 ft downstream from highway bridge, 2.8 miles downstream from Millers Creek, 4.6 miles south of Adams, Robertson County, and 10.2 miles upstream from mouth.

Drainage area.--185 sq mi.

Gage.--Nonrecording prior to Nov. 25, 1940; recording thereafter. At site 600 ft upstream prior to Nov. 25, 1940. Datum of gage is 424.36 ft above mean sea level, Sandy Hook datum.

Stage-discharge relation.--Defined by current-meter measurements below 11,000 cfs and extended above.

Historical data.--Flood of January 1937 reached a stage about 2.5 ft lower than that of June 1934.

Remarks.--Prior to Nov. 25, 1940, peaks are from graph based on gage readings. Base for partial-duration series, 3,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1934	June 1934	a25.1	-	1943	Mar. 19, 1943	15.49	6,680
1939b/	Jan. 30, 1939	14.5	5,420	1944	May 14, 1943	12.40	4,440
	Feb. 3, 1939	16.30	6,790		Feb. 17, 1944	12.52	4,500
	Feb. 9, 1939	12.7	4,160	1945	Feb. 29, 1944	16.66	7,760
	Feb. 15, 1939	14.2	5,200		Mar. 19, 1944	12.38	4,620
	Mar. 5, 1939	15.7	6,320		Apr. 11, 1944	11.48	4,020
	Mar. 29, 1939	14.25	5,240	1946	Oct. 6, 1944	16.20	7,360
	Aug. 3, 1939	11.75	3,540		Jan. 1, 1945	17.66	8,560
1940	Mar. 30, 1940	12.25	3,830		Feb. 17, 1945	12.08	4,410
	Apr. 20, 1940	11.75	3,540		Feb. 22, 1945	12.90	4,970
1941	July 4, 1941	10.78	2,930		Feb. 27, 1945	11.06	3,760
1942	Apr. 9, 1942	13.73	4,840	1947	Jan. 8, 1946	12.1	4,410
1943	Dec. 28, 1942	13.12	4,920		Feb. 6, 1946	11.60	4,080
	Mar. 13, 1943	13.01	4,850		Mar. 26, 1946	13.34	5,250
					Jan. 2, 1947	11.90	4,280

a From floodmarks.

b Record started Jan. 20, 1939.

Peak stages and discharges of Sulphur Fork Red River near Adams, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	Jan. 15, 1947	12.90	4,970	1952	Mar. 22, 1952	22.75	13,200
	Apr. 16, 1947	15.72	6,990				
1948	Feb. 13, 1948	22.21	12,700	1953	Mar. 3, 1953	12.40	4,620
					May 17, 1953	11.79	4,200
1949	Nov. 19, 1948	13.95	5,700		May 19, 1953	14.68	6,220
	Dec. 16, 1948	15.26	6,640	1954	Jan. 21, 1954	10.96	3,660
	Dec. 25, 1948	12.55	4,720				
	Jan. 5, 1949	15.88	7,110	1955	Feb. 22, 1955	14.74	6,260
	Jan. 27, 1949	14.66	6,200		Mar. 18, 1955	11.35	3,900
	Feb. 19, 1949	10.93	3,640		Mar. 22, 1955	18.12	8,900
	Mar. 18, 1949	13.44	5,350		May 22, 1955	11.03	3,710
1950	Dec. 12, 1949	19.51	10,100	1956	Jan. 30, 1956	21.06	11,500
	Jan. 3, 1950	11.43	3,970		Feb. 3, 1956	12.50	4,690
	Jan. 6, 1950	18.16	8,930		Feb. 18, 1956	15.97	7,180
	Jan. 10, 1950	12.87	4,950		Apr. 6, 1956	12.09	4,400
	Jan. 16, 1950	10.73	3,520				
	Jan. 31, 1950	16.52	7,620	1957	Jan. 22, 1957	-	(c)
	Feb. 9, 1950	14.14	5,840		Jan. 29, 1957	22.62	13,100
	Feb. 14, 1950	15.05	6,430		Feb. 1, 1957	-	(c)
	May 7, 1950	12.30	4,550		Apr. 4, 1957	17.11	8,090
	Sept. 8, 1950	10.88	3,620		Apr. 8, 1957	10.64	3,460
1951	Jan. 4, 1951	12.01	4,350		May 22, 1957	12.69	4,820
	Feb. 7, 1951	10.81	3,570		Sept. 15, 1957	12.11	4,420
	Feb. 13, 1951	11.32	3,900	1958	Nov. 18, 1957	14.29	5,940
	Feb. 21, 1951	11.87	4,260		Dec. 7, 1957	11.12	3,770
1952	Dec. 4, 1951	13.33	5,270		Dec. 20, 1957	13.26	5,220
	Dec. 8, 1951	14.59	6,150	1959	Jan. 21, 1959	12.25	4,520
	Dec. 15, 1951	13.15	5,140		Feb. 15, 1959	12.78	4,890
	Dec. 25, 1951	12.80	4,900				
	Mar. 11, 1952	15.37	6,730	1960	Dec. 28, 1959	10.46	3,340

c Discharge not determined but greater than 3,400 cfs.

4365. Cumberland River at Clarksville, Tenn.

Location.--Lat 36°31'20", long 87°22'40", at Louisville & Nashville Railroad bridge at Clarksville, Montgomery County, 1½ miles upstream from Red River, 18.0 miles upstream from lock and dam C, and at mile 126.5.

Drainage area.--16,000 sq mi, approximately (includes that of Red River).

Gage.--Nonrecording. At site a quarter of a mile downstream prior to Feb. 1, 1931, at datum 0.09 ft lower. Datum of gage is 330.86 ft above mean sea level, datum of 1929. Auxiliary nonrecording gage 18 miles downstream.

Stage-discharge relation.--Defined by current-meter measurements. Rate of change of stage and fall between auxiliary gage and reference gage used as a factor in computing discharge.

Bankfull stage.--46 ft.

Remarks.--Flow regulated since August 1943 by Dale Hollow Reservoir, since November 1948 by Center Hill Reservoir, since July 1950 by Lake Cumberland, since June 1954 by Old Hickory Lake, and since November 1953 by Cheatham Dam. Gage-height record for base gage furnished by U.S. Weather Bureau and gage-height record for auxiliary gage furnished by Corps of Engineers. Only annual maximum stages are shown prior to 1923 and since 1944, from reports of U.S. Weather Bureau. Base for partial-duration series, 85,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1882	January 1882	60.6	-	1905	Mar. 16, 1905	39.2	-
1901	Aug. 24, 1901	43.9	-	1906	Apr. 1, 1906	38.8	-
1902	Apr. 5, 1902	50.6	-	1907	Mar. 4, 1907	45.3	-
1903	Mar. 11, 1903	49.6	-	1908	Feb. 20, 1908	34.7	-
1904	Mar. 28, 1904	44.0	-	1909	Feb. 26, 1909	45.6	-

Peak stages and discharges of Cumberland River at Clarksville, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1910	Feb. 23, 1910	40.0	-	1933	May 16, 1933	41.3	107,000
1911	Apr. 15, 1911	43.3	-	1934	Mar. 10, 1934	49.2	142,000
1912	Apr. 4, 1912	53.6	-		Mar. 30, 1934	46.9	130,000
1913	Jan. 8, 1913	56.0	-				
1914	Apr. 6, 1914	38.7	-	1935	Jan. 22, 1935	50.0	144,000
1915	Feb. 3, 1915	45.2	-		Mar. 20, 1935	47.2	130,000
					Apr. 8, 1935	50.5	147,000
1916	Jan. 8, 1916	49.2	-				
1917	Mar. 11, 1917	48.7	-	1936	Jan. 12, 1936	37.9	89,600
1918	Feb. 7, 1918	51.8	-		Apr. 2, 1936	48.2	130,000
1919	Mar. 18, 1919	50.4	-		Apr. 13, 1936	49.2	134,000
1920	Jan. 31, 1920	47.9	-				
1921	Feb. 12, 1921	37.0	-	1937	Jan. 11, 1937	49.7	137,000
1922	Mar. 11, 1922	51.3	-		Jan. 24, 1937	465.7	290,000
					Feb. 14, 1937	439.2	86,800
1923	Feb. 3, 1923	48.6	133,000		May 6, 1937	40.9	97,000
	Mar. 17, 1923	49.0	134,000	1938	Jan. 26, 1938	440.6	102,000
	Mar. 24, 1923	42.3	112,000		Mar. 11, 1938	436.7	86,000
1924	Jan. 12, 1924	448.4	132,000	1939	Jan. 14, 1939	436.0	486,400
1925	Feb. 23, 1925	43.1	114,000		Feb. 12, 1939	454.1	164,000
1926	Jan. 23, 1926	40.9	106,000		Mar. 6, 1939	46.2	4121,000
1927	Jan. 2, 1927	60.0	216,000	1940	Apr. 4, 1940	442.5	108,000
	Feb. 4, 1927	37.8	94,400		Apr. 25, 1940	38.7	92,900
	Feb. 28, 1927	35.3	85,100	1941	Apr. 9, 1941	33.0	74,200
	Mar. 15, 1927	51.1	154,000	1942	Apr. 9, 1942	434.9	87,100
	Apr. 15, 1927	41.0	106,000				
1928	Apr. 28, 1928	39.7	102,000	1943	Jan. 8, 1943	49.4	127,000
	June 7, 1928	39.8	102,000		Mar. 20, 1943	451.2	138,000
	July 1, 1928	48.0	136,000		Apr. 27, 1943	38.3	87,400
1929	Nov. 24, 1928	38.2	95,800	1944	Feb. 29, 1944	448.20	124,000
	Jan. 31, 1929	40.9	106,000		Apr. 2, 1944	41.0	96,000
	Mar. 7, 1929	48.2	137,000	1945	Mar. 1, 1945	51.1	-
	Apr. 1, 1929	54.4	175,000				
	May 10, 1929	40.5	104,000	1946	Jan. 13, 1946	54.1	-
1930	Feb. 18, 1930	35.8	87,000	1947	Jan. 24, 1947	45.8	-
1931	Apr. 2, 1931	34.1	80,700	1948	Feb. 16, 1948	55.8	-
1932	Dec. 16, 1931	38.9	98,400	1949	Jan. 29, 1949	45.8	-
	Dec. 26, 1931	37.9	94,700	1950	Feb. 15, 1950	56.3	-
	Jan. 24, 1932	37.2	92,100	1951	Feb. 3, 1951	42.0	-
	Feb. 7, 8, 10, 11, 1932	52.3	161,000	1952	Mar. 25, 1952	47.9	-
	Apr. 23, 1932	39.3	99,900	1953	Mar. 5, 1953	39.6	-
	May 1, 1932	42.4	111,000	1954	Jan. 24, 1954	41.1	-
1933	Jan. 24, 1933	41.5	108,000	1955	Mar. 24, 1955	54.9	-
	Jan. 30, 1933	39.9	102,000	1956	Feb. 20, 1956	51.3	-
	Feb. 22, 1933	50.6	151,000	1957	Jan. 31, 1957	51.7	-
	Mar. 22, 1933	44.0	118,000	1958	Apr. 30, 1958	37.3	-
				1959	Feb. 15, 16, 1959	38.5	-
				1960	Dec. 29, 1959	34.1	-

a Occurred Feb. 5, 1923.

b Occurred at different time than peak discharge.

c Occurred on following day.

d Maximum daily discharge.

e Occurred Feb. 16, 1939.

f Occurred Mar. 22, 1942.

4368. Musterground Creek near Erin, Tenn.

Location.--Lat 36°19'12", long 87°40'19", at bridge on State Highway 13,
0.1 mile northeast of intersection with State Highway 49 and 1.5 miles east
of Erin, Houston County.

Drainage area.--3.57 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Not defined.

Remarks.--Only annual peak stages are shown.

CUMBERLAND RIVER BASIN

Peak stages and discharges of Musterground Creek near Erin, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Feb. 22, 1955	2.15	-	1958	Nov. 14, 1957	2.49	-
1956	-	(a)	-	1959	-	(a)	-
1957	January 1957	2.71	-	1960	-	(b)	-

a Stage not determined but less than 1.11 ft.

b Peak stage did not reach bottom of gage.

4370. Cumberland River at Dover, Tenn.

Location.--Lat 36°29'26", long 87°50'20", on center pier of bridge on U.S. Highway 79 at Dover, Stewart County, 0.1 mile upstream from Dyers Creek, 0.8 mile upstream from lock and dam D, and at mile 88.8.

Drainage area.--16,437 sq mi, approximately, includes that of Dyers Creek.

Gage.--Nonrecording prior to Feb. 8, 1939, and during periods of crest-wicket manipulation at dam D (Feb. 8, 1939, to Sept. 30, 1951) at site 0.8 mile downstream at same datum; recording all other periods. Datum of gage is 324.25 ft above mean sea level, Sandy Hook datum (levels by Corps of Engineers). Nonrecording auxiliary gage, 19.7 miles upstream, below spillway at lock and dam C.

Stage-discharge relation.--Defined by current-meter measurements below 200,000 cfs and extended above. Fall between auxiliary gage and reference gage used as a factor in computing discharge.

Bankfull stage.--49 ft.

Historical data.--Flood of Jan. 25, 1937, is highest known.

Remarks.--Flow regulated since August 1943 by Dale Hollow Reservoir, since November 1948 by Center Hill Reservoir, since July 1950 by Lake Cumberland, since June 1954 by Old Hickory Lake, and since November 1953 by Cheatham Dam. Lock gage readings and records of wicket manipulation furnished by Corps of Engineers. Only annual maximum stages 1917 to 1922, from reports of U.S. Weather Bureau. Base for partial-duration series, 81,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1917	Mar. 14, 1917	53.1	-	1943	Apr. 28, 1943	30.10	94,300
1918	Feb. 9, 1918	55.2	-				
1919	Mar. 19, 1919	51.4	-	1944	Mar. 1, 1944	c29.56	129,000
1920	Feb. 1, 1920	50.9	-		Apr. 3, 1944	d23.64	101,000
					Apr. 17, 1944	c28.03	81,500
1921	Feb. 15, 1921	40.3	-				
1922	Mar. 13, 1922	53.3	-	1945	Jan. 4, 1945	c40.45	134,000
					Mar. 1, 1945	c42.48	144,000
1937	Jan. 25, 1937	56.8	a280,000		May 12, 1945	29.58	92,100
1938	Jan. 27, 1938	32.5	104,000	1946	Jan. 13, 1946	e45.22	168,000
	Mar. 11, 1938	29.28	90,800		Feb. 15, 1946	d34.70	103,000
1939	Jan. 15, 1939	27.06	b82,100	1947	Jan. 6, 7, 1947	d35.32	109,000
	Feb. 16, 1939	c45.88	171,000		Jan. 24, 1947	c26.35	112,000
	Mar. 7, 1939	b39.04	123,000	1948	Feb. 17, 1948	f45.60	177,000
1940	Apr. 4, 1940	c34.63	110,000		Mar. 8, 1948	27.82	81,000
	Apr. 26, 1940	d31.70	95,500		Apr. 1, 1948	c20.80	88,900
1941	Apr. 10, 1941	24.50	71,800	1949	Dec. 18, 1948	31.04	b93,700
1942	Mar. 22, 1942	c28.18	b81,800		Dec. 26, 1948	c28.55	b82,000
	Apr. 10, 1942	d27.98	83,600		Jan. 7, 1949	c35.40	b110,000
1943	Jan. 8, 1943	c41.19	133,000		Jan. 29, 1949	c38.16	120,000
	Mar. 21, 1943	c41.71	143,000		Feb. 21, 1949	d24.36	b104,000
					Mar. 29, 1949	d20.08	b87,100
					June 17, 1949	c20.77	b94,500

a Only annual peak, estimated.

b Maximum daily discharge.

c Occurred following day.

d Occurred at different time than peak discharge.

e Occurred Jan. 17, 1946.

f Occurred Feb. 21, 1948.

Peak stages and discharges of Cumberland River at Dover, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Dec. 14, 1949	d32.85	b100,000	1955	Feb. 24, 1955	33.41	108,000
	Jan. 17, 1950	d44.42	b152,000		Mar. 24, 1955	c44.93	169,000
	Feb. 15, 1950	c48.13	188,000	1956	Feb. 1, 1956	c40.07	b134,000
1951	Jan. 15, 1951	c33.31	b93,700		Feb. 21, 1956	d41.85	144,000
	Feb. 3, 1951	c35.4	101,000		Mar. 16, 1956	c31.82	93,800
	Feb. 9, 1951	d30.50	b87,600		Apr. 8, 1956	c30.74	b95,000
	Feb. 22, 1951	c35.00	b96,700	1957	Jan. 24, 1957	c31.73	b97,200
	Apr. 4, 1951	c29.15	b82,800		Feb. 2, 1957	c42.90	150,000
1952	Dec. 11, 1951	c37.82	b126,000		Feb. 21, 1957	d30.94	b90,800
	Dec. 17, 1951	c36.23	b122,000		Apr. 5, 1957	c28.13	b82,000
	Jan. 6, 1952	c31.08	b90,400	1958	Nov. 20, 1957	c38.77	126,000
	Jan. 29, 1952	c31.94	b95,100		Dec. 9, 1957	30.30	95,100
	Mar. 13, 1952	d35.42	b101,000		Dec. 21, 1957	c32.22	b97,400
	Mar. 24, 1952	c39.45	127,000		Apr. 30, 1958	c29.61	b90,500
1953	Mar. 5, 1953	c31.65	96,800	1959	Feb. 16, 1959	d30.81	96,400
	May 21, 1953	d29.85	b86,700	1960	Dec. 30, 1959	25.89	77,300
1954	Jan. 24, 1954	c32.29	102,000				
	Feb. 8, 1955	31.00	98,000				

b Maximum daily discharge.

c Occurred following day.

d Occurred at different time than peak discharge.

4375. South Fork Little River at Hopkinsville, Ky.

Location.--Lat 36°50'22", long 87°28'52", on right bank at downstream side of bridge on U.S. Highway 41A, 1 mile south of city limits of Hopkinsville, Christian County, and 6 miles upstream from North Fork.

Drainage area.--46.5 sq mi, of which about 11 sq mi does not contribute directly to surface runoff.

Gage.--Nonrecording Oct. 1 to Dec. 21, 1949, and Dec. 31, 1955, to Oct. 17, 1956; recording Dec. 22, 1949, to Dec. 30, 1955, and since Oct. 18, 1956. Datum of gage is 499.71 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Historical data.--The flood of January 1937 is maximum stage known prior to November 1957.

Remarks.--Base for partial-duration series, 1,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	January 1937	20.4	-	1953	Mar. 15, 1953	11.03	1,890
1950	Dec. 13, 1949	12.0	2,120	1954	May 17, 1953	13.55	2,490
	Jan. 3, 1950	10.39	1,750		Apr. 16, 1954	8.21	1,250
	Jan. 10, 1950	11.29	1,950	1955	Mar. 21, 1955	a14	a2,600
	Feb. 14, 1950	12.55	2,250		Jan. 29, 1957	10.11	1,680
	June 22, 1950	10.49	1,770		Apr. 4, 1957	13.43	2,460
					May 22, 1957	14.44	2,710
1951	Nov. 20, 1950	12.72	2,290	1958	Nov. 14, 1957	9.98	1,650
	Dec. 3, 1950	10.13	1,690		Nov. 18, 1957	21.51	9,320
	Jan. 4, 1951	12.75	2,300		Dec. 7, 1957	9.87	1,630
	Jan. 14, 1951	19.17	5,670		May 6, 1958	10.04	1,670
	Feb. 21, 1951	10.37	1,740	1959	Jan. 22, 1959	11.91	2,100
	Mar. 18, 1951	10.34	1,740				
1952	Nov. 24, 1951	10.15	1,690		June 28, 1960	7.05	1,010
	Dec. 4, 1951	11.10	1,910				
	Mar. 11, 1952	11.05	1,900				
	Mar. 22, 1952	17.57	4,070				
1953	Mar. 4, 1953	11.59	2,020				

a About.

4380. Little River near Cadiz, Ky.

Location.--Lat 36°46'40", long 87°43'18", on right bank at upstream side of highway bridge, 50 ft downstream from Casey Creek and 8 $\frac{1}{2}$ miles southeast of Cadiz, Trigg County.

Drainage area.--244 sq mi, of which about 94 sq mi does not contribute directly to surface runoff.

Gage.--Nonrecording prior to July 31, 1945; recording thereafter. Datum of gage is 391.45 ft above mean sea level, unadjusted.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--About 14 ft.

Remarks.--Base for partial-duration series, 3,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Apr. 18, 1940	12.7	3,880	1951	Dec. 4, 1950	13.94	4,620
1941	July 11, 1941	11.0	2,870		Jan. 4, 1951	14.46	5,050
1942	Apr. 10, 1942	16.8	7,300		Jan. 14, 1951	21.00	14,200
1943	Mar. 19, 1943	15.2	5,700		Feb. 21, 1951	13.60	4,420
1944	Feb. 29, 1944	13.3	4,250		Mar. 18, 1951	12.44	3,720
1945	Feb. 27, 1945	12.6	3,820	1952	Nov. 25, 1951	12.05	3,500
	Mar. 17, 1945	14.9	5,140		Dec. 5, 1951	13.07	4,100
	Mar. 20, 1945	12.6	3,820		Dec. 9, 1951	12.40	3,700
1946	Jan. 8, 1946	16.03	6,530		Dec. 21, 1951	12.97	4,040
	Feb. 7, 1946	13.63	4,440		Mar. 11, 1952	14.48	5,040
	Feb. 14, 1946	14.25	4,720		Mar. 22, 1952	18.02	8,810
	Mar. 26, 1946	14.03	4,600	1953	Mar. 3, 1953	17.20	7,740
1947	Jan. 3, 1947	12.74	3,850		May 17, 1953	17.68	8,330
1948	Mar. 17, 1948	13.30	4,180	1954	Apr. 17, 1954	11.11	3,020
	Mar. 27, 1948	14.69	5,020	1955	Feb. 6, 1955	13.11	4,130
	Apr. 13, 1948	12.32	3,650		Feb. 21, 1955	13.08	4,110
	June 20, 1948	13.72	4,420		Mar. 1, 1955	14.15	4,780
1949	Nov. 19, 1948	15.20	5,670		Mar. 21, 1955	16.08	6,580
	Dec. 16, 1948	17.36	8,820	1956	Jan. 30, 1956	17.40	7,980
	Jan. 28, 1949	12.33	3,660		Feb. 2, 1956	15.53	6,050
	Feb. 15, 1949	19.58	11,400		Feb. 18, 1956	16.11	6,610
	Mar. 27, 1949	15.44	5,920		Mar. 14, 1956	12.66	3,860
1950	Dec. 13, 1949	14.62	5,160	1957	Jan. 29, 1957	16.05	6,550
	Jan. 3, 1950	13.94	4,620		Apr. 5, 1957	14.11	4,750
	Jan. 10, 1950	14.45	5,020		May 23, 1957	18.97	10,200
	Jan. 13, 1950	12.68	3,870		July 29, 1957	20.38	13,000
	Jan. 27, 1950	13.14	4,140	1958	Nov. 14, 1957	14.32	4,920
	Feb. 1, 1950	14.36	4,950		Nov. 19, 1957	20.69	13,600
	Feb. 15, 1950	15.04	5,540		Dec. 7, 1957	13.60	4,790
	June 23, 1950	12.46	3,740		Dec. 20, 1957	13.57	4,770
	Aug. 31, 1950	13.05	4,090	1959	Jan. 21, 1959	15.28	5,970
	Sept. 3, 1950	15.68	6,180		July 24, 1959	15.12	5,850
1951	Nov. 21, 1950	13.61	4,430	1960	June 29, 1960	13.13	4,460

4385. Cumberland River at Smithland, Ky.

Location.--Lat 37°08'45", long 88°24'25", on downstream side of left center pier of bridge on U.S. Highway 60 at Smithland, Livingston County, 1 mile downstream from McCormick Creek and 2.8 miles upstream from mouth.

Drainage area.--18,080 sq mi, approximately.

Gage.--Nonrecording base gage prior to Aug. 4, 1945; recording thereafter. Datum of gage is 300.00 ft above mean sea level, Sandy Hook datum. Non-recording auxiliary gage prior to Nov. 20, 1944; recording auxiliary gage thereafter. Auxiliary gage at Eureka, 28.7 miles upstream prior to Oct. 1, 1944; auxiliary gage at Dycusburg, 16.8 miles upstream thereafter.

Stage-discharge relation.--Defined by current-meter measurements; subject to changes owing to variable water-surface slope and backwater from Ohio River.

Historical data.--The flood of January to February 1937 is maximum stage known.

Remarks.--Some regulation by navigation dams on Cumberland River and by Lake Cumberland since July 1950, Dale Hollow Reservoir since Aug. 30, 1943, Great Falls Lake since 1916, Center Hill Reservoir since Nov. 27, 1948, and Old Hickory Reservoir since June 1954. Maximum discharge frequently occurs at different time than maximum gage height. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	January to February 1937	51.1	-	1949	Jan. 31, 1949	36.67	110,000
				1950	Feb. 18, 1950	43.10	201,000
1939	Feb. 18, 1939	38.72	170,000	1951	Jan. 17, 1951	32.56	106,000
1940	Apr. 7, 1940	32.80	107,000	1952	Dec. 20, 21, 1951	33.42	122,000
				1953	Mar. 6, 1953	23.56	99,900
1941	Apr. 10, 1941	12.45	69,500	1954	Jan. 26, 1954	18.08	94,900
1942	Apr. 11, 1942	28.48	92,200	1955	Mar. 27, 28, 1955	37.23	159,000
1943	Mar. 22, 1943	37.02	134,000				
1944	Mar. 4, 5, 1944	30.60	129,000	1956	Feb. 23, 24, 1956	33.61	137,000
1945	Mar. 4, 1945	40.60	146,000	1957	Feb. 5, 6, 1957	34.08	144,000
				1958	Nov. 21, 1957	26.65	127,000
1946	Jan. 21, 22, 1946	34.89	169,000	1959	Feb. 16, 1959	28.51	91,600
1947	Jan. 9, 1947	28.58	110,000	1960	Dec. 30, 1959	24.71	77,900
1948	Feb. 23, 1948	35.03	166,000				

TENNESSEE RIVER BASIN

4390. French Broad River at Rosman, N. C.

Location.--Lat 35°08'32", long 82°49'28", on left bank at upstream side of bridge on U.S. Highway 178 at Rosman, Transylvania County, 1.0 mile upstream from East Fork and at mile 216.4.

Drainage area.--67.9 sq mi.

Gage.--Nonrecording prior to July 7, 1937; recording thereafter. At site 500 ft downstream at different datum prior to July 1, 1909. Datum of gage is 2,173.83 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined for 1908 and 1909 by current-meter measurements below 2,000 cfs and extended above by logarithmic plotting. Defined 1936-49 by current-meter measurements below 3,300 cfs, and by slope-area measurement at 9,300 cfs. Present rating defined by current-meter measurements below 4,300 cfs, and by slope-area measurement at 5,700 cfs.

Historical data.--The maximum stage known is that of July 1916.

Remarks.--Base for partial-duration series, 2,000 cfs.

TENNESSEE RIVER BASIN

Peak stages and discharges of French Broad River at Rosman, N. C.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1908	Feb. 15, 1908	9.0	a6,000	1948	Sept. 6, 1948	8.00	2,800
1909	June 4, 1909	7.5	b4,350	1949	Nov. 6, 1948	7.98	2,790
1916	July 1916	c13.9	-		Nov. 19, 1948	8.84	3,400
1928	August 1928	d12.5	-		Nov. 28, 1948	8.19	2,910
1936	Apr. 6, 1936	9.4	b4,280		Jan. 5, 1949	6.79	2,100
1937	Oct. 9, 1936	7.5	a2,560		June 16, 1949	9.49	4,080
1938	Oct. 19, 1937	10.15	5,400		July 12, 1949	8.45	3,100
	July 21, 1938	8.10	3,050	1950	July 18, 1949	8.53	3,150
1939	Jan. 30, 1939	8.50	3,370		Aug. 28, 1949	7.97	2,780
	Feb. 3, 1939	6.83	2,190		Oct. 7, 1949	6.58	2,060
	Feb. 15, 1939	6.49	2,020		Sept. 1, 1950	11.17	5,700
	Aug. 18, 1939	10.55	6,100		Sept. 8, 1950	7.19	2,370
1940	Apr. 19, 1940	8.62	3,460	1951	Dec. 7, 1950	10.23	4,500
	Aug. 13, 1940	11.80	9,040		Nov. 7, 1951	6.50	2,020
	Aug. 30, 1940	11.86	9,410		Dec. 4, 1951	7.00	2,270
1941	July 7, 1941	6.40	1,970		Mar. 11, 1952	11.15	5,660
1942	Dec. 4, 1941	6.85	2,100		Mar. 23, 1952	9.58	3,880
	Feb. 16, 1942	7.17	2,340	1953	Feb. 21, 1953	10.11	4,380
	Mar. 8, 1942	7.17	2,340	1954	Jan. 22, 1954	8.40	3,060
	May 20, 1942	10.38	5,740		Dec. 29, 1954	7.41	2,500
	Sept. 7, 1942	6.87	2,160		Feb. 6, 1955	7.07	2,310
	Sept. 27, 1942	6.84	2,100		Mar. 22, 1955	6.55	2,040
1943	Dec. 29, 1942	9.86	4,940		May 22, 1955	7.47	2,530
	Apr. 19, 1943	6.76	2,120	1956	Apr. 15, 1956	7.78	2,700
1944	Mar. 29, 1944	5.22	1,340	1957	Apr. 4, 1957	10.80	5,180
1945	Apr. 17, 1945	7.26	2,360	1958	Nov. 14, 1957	7.34	2,440
1946	Feb. 10, 1946	7.45	2,460		Nov. 19, 1957	7.55	2,550
1947	Jan. 20, 1947	7.80	2,730		Dec. 20, 1957	8.90	3,380
1948	Aug. 3, 1948	9.08	3,620	1959	Jan. 21, 1959	9.12	3,530
				1960	Oct. 9, 1959	8.10	2,880
					Feb. 5, 1960	6.75	2,110
					Aug. 12, 1960	7.05	2,280

a Annual peak only.

b Probably maximum for year.

c From floodmarks.

d Estimated by Tennessee Valley Authority.

4395. French Broad at Calvert, N. C.

Location.--Lat 35°08'55", long 82°47'59", at township bridge, 0.8 mile south-east of railroad station at Calvert, Transylvania County, 1.4 miles downstream from East Fork, and at mile 214.0.

Drainage area.--103 sq mi.

Gage.--Nonrecording prior to May 16, 1934; recording thereafter. Datum of gage is 2,154.63 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 3,600 cfs and extended above on basis of slope-area measurement at 12,300 cfs.

Historical data.--The maximum stage known is that of July 1916, from profile by Tennessee Valley Authority.

Remarks.--Base for partial-duration series, 2,500 cfs.

Peak stages and discharges of French Broad River at Calvert, N. C.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1916	July 1916	13.5	-	1942	Mar. 8, 1942	5.76	2,920
1925	Dec. 8, 1924	8.1	4,490		May 20, 1942	9.58	6,510
1926	Jan. 18, 1926	9.0	5,330		Sept. 7, 1942	6.29	3,220
1927	Nov. 9, 1926	4.0	1,940		Sept. 27, 1942	5.40	2,680
1928	Aug. 15, 1928	13.0	16,100	1943	Dec. 29, 1942	9.23	5,810
1929	Mar. 14, 1929	7.6	4,090		Jan. 19, 1943	5.17	2,560
	Sept. 26, 1929	8.6	4,730		Apr. 19, 1943	6.32	3,220
1930	Oct. 2, 1929	4.90	2,430	1944	Mar. 29, 1944	4.25	2,010
1931	Apr. 22, 1931	8.0	4,410	1945	Apr. 17, 1945	5.54	2,610
1932	Dec. 14, 1931	6.6	3,400	1946	Jan. 8, 1946	6.47	3,250
	Jan. 13, 1932	6.3	3,220		Feb. 10, 1946	7.16	3,750
1933	Oct. 17, 1932	11.6	11,200	1947	Jan. 20, 1947	7.05	3,600
	Oct. 31, 1932	8.6	4,910	1948	Aug. 3, 1948	7.67	4,120
	May 5, 1933	10.0	6,910		Sept. 6, 1948	7.05	3,640
1934	Mar. 3, 1934	5.5	2,760	1949	Nov. 3, 1948	5.75	2,760
	Sept. 29, 1934	6.1	3,100		Nov. 6, 1948	7.11	3,680
1935	Jan. 9, 1935	9.36	5,870		Nov. 19, 1948	7.38	3,680
1936	Nov. 13, 1935	7.67	4,170		Nov. 29, 1948	7.80	4,220
	Jan. 19, 1936	6.07	3,100		Jan. 5, 1949	6.08	2,990
	Feb. 4, 1936	6.06	3,100		Apr. 30, 1949	5.47	2,630
	Apr. 2, 1936	5.95	3,040		June 16, 1949	8.75	5,190
	Apr. 6, 1936	8.77	5,100	1950	July 12, 1949	8.39	4,780
1937	Oct. 9, 1936	7.29	3,880		July 19, 1949	7.30	3,620
	Oct. 16, 1936	5.46	2,760		Aug. 29, 1949	7.92	4,330
	Dec. 31, 1936	6.96	3,670		Oct. 7, 1949	6.15	3,030
1938	Oct. 19, 1937	9.18	5,580		Dec. 26, 1949	5.77	2,800
	July 21, 1938	7.46	4,020		Sept. 1, 1950	9.40	6,140
1939	Jan. 30, 1939	7.30	3,880	1951	Sept. 8, 1950	6.51	3,260
	Feb. 3, 1939	5.68	2,860		Oct. 20, 1950	5.75	2,790
	Feb. 15, 1939	5.08	2,500		Dec. 7, 1950	9.06	5,600
	Aug. 18, 1939	10.53	8,000	1952	Dec. 4, 1951	6.71	3,400
1940	Apr. 19, 1940	7.39	3,930		Dec. 21, 1951	5.55	2,680
	Aug. 13, 1940	11.66	12,300		Mar. 11, 1952	9.83	6,960
	Aug. 30, 1940	10.83	9,380		Mar. 23, 1952	8.18	4,570
1941	July 7, 1941	4.97	2,450	1953	Feb. 21, 1953	9.36	6,070
1942	Dec. 4, 1941	5.62	2,800		Mar. 23, 1953	5.76	2,800
	Feb. 16, 1942	6.36	3,280	1954	Jan. 22, 1954	8.60	5,010
				1955	Dec. 29, 1954	6.74	3,420
					Feb. 6, 1955	6.97	3,580
					Mar. 22, 1955	5.34	2,560
					May 22, 1955	6.03	2,960

4400. Catheys Creek near Brevard, N. C.

Location.--Lat 35°12'40", long 82°47'00", 1,200 ft downstream from Kuykendall Creek, 0.9 mile upstream from U.S. Highway 64, 2.1 miles upstream from mouth, and 3.2 miles southwest of Brevard, Transylvania County.

Drainage area.--11.7 sq mi. At sites used prior to Jan. 10, 1947, 12.1 sq mi.

Gage.--Recording. At site 0.9 mile downstream at datum 57.79 ft lower prior to Oct. 2, 1946. At site 0.8 mile downstream at datum 55.11 ft lower Oct. 2, 1946, to Jan. 9, 1947. Datum of gage is 2,230.42 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined for 1945 and 1946 by current-meter measurements below 180 cfs and extended above by logarithmic plotting; subject to shifts due to removal of rock from control. Defined by current-meter measurements below 300 cfs (for peaks 1947-51), by current-meter measurements below 500 cfs (for peaks since 1951), and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 250 cfs.

Peak stages and discharges of Catheys Creek near Brevard, N. C.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Apr. 17, 1945	1.92	207	1950	June 3, 1950	2.34	284
1946	Feb. 10, 1946	2.26	333		June 8, 1950	2.60	370
1947	Jan. 20, 1947	2.75	401		Aug. 31, 1950	3.57	794
1948	Oct. 28, 1947	2.55	325		Sept. 8, 1950	2.65	388
	Mar. 27, 1948	2.33	251	1951	Oct. 20, 1950	3.00	520
	July 27, 1948	2.33	251		Dec. 7, 1950	3.07	552
	Aug. 3, 1948	3.35	675		Aug. 14, 1951	3.46	735
	Sept. 6, 1948	2.82	433	1952	Nov. 7, 1951	2.08	269
1949	Nov. 6, 1948	2.54	329		Dec. 4, 1951	2.20	310
	Nov. 19, 1948	2.73	397		Dec. 21, 1951	2.05	260
	Jan. 5, 1949	2.35	273		Mar. 11, 1952	3.95	1,260
	June 16, 1949	3.60	810		Mar. 22, 1952	3.45	940
	July 12, 1949	4.35	1,250	1953	Feb. 21, 1953	3.02	720
	July 18, 1949	3.55	782	1954	Jan. 22, 1954	2.24	391
	Aug. 28, 1949	2.93	482		Feb. 21, 1954	1.98	301
1950	Oct. 7, 1949	2.60	370	1955	Dec. 29, 1954	2.22	383
	Feb. 14, 1950	2.23	252		Feb. 6, 1955	1.92	283
	Mar. 13, 1950	2.23	252		Mar. 22, 1955	1.97	298

4410. Davidson River near Brevard, N. C.

Location.--Lat 35°16'23", long 82°42'21", on right bank 150 ft upstream from State Highway 280, 2.0 miles upstream from mouth, 2.1 miles downstream from Avery Creek, and 3.3 miles northeast of Brevard, Transylvania County.

Drainage area.--40.4 sq mi.

Gage.--Nonrecording prior to May 17, 1934; recording thereafter. Datum of gage is 2,115.13 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 1,300 cfs and extended above by logarithmic plotting.

Historical data.--Studies by Tennessee Valley Authority indicate the flood of June 1876 is the highest known, probably since at least 1869.

Remarks.--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1876	June 1876	a11.9	-	1927	Nov. 15, 1926	5.7	2,150
1916	July 16, 1916	a10.3	-	1928	Oct. 12, 1927	5.2	1,820
1919	October 1918	a10.9	-		Dec. 5, 1927	4.4	1,340
					Aug. 15, 1928	11.8	8,400
1921	Dec. 14, 1920	7.7	3,780	1929	Oct. 23, 1928	4.1	1,170
	Dec. 22, 1920	4.7	1,510		Jan. 5, 1929	4.9	1,630
	Apr. 16, 1921	5.2	1,820		Mar. 14, 1929	7.0	3,160
1922	Dec. 17, 1921	5.0	1,690		June 26, 1929	4.9	1,630
	Jan. 21, 1922	4.2	1,220		Sept. 16, 1929	4.6	1,450
					Sept. 26, 1929	6.7	2,910
1923	May 15, 1923	4.2	1,220	1930	Oct. 21, 1929	4.9	1,630
	May 29, 1923	6.3	2,590	1931	Apr. 22, 1931	5.3	1,880
	Sept. 21, 1923	4.8	1,570	1932	Jan. 13, 1932	4.3	1,280
1924	Jan. 11, 1924	6.75	2,950	1933	Oct. 16, 1932	10.04	6,130
	Jan. 16, 1924	5.1	1,750		May 5, 1933	4.4	1,340
	Apr. 18, 1924	4.4	1,340		Sept. 5, 1933	4.1	1,170
1925	Dec. 8, 1924	4.5	1,390	1934	Mar. 3, 1934	4.0	1,070
1926	Nov. 12, 1925	4.7	1,510				
	Jan. 18, 1926	6.0	2,360				

a From information by Tennessee Valley Authority.

Peak stages and discharges of Davidson River near Brevard, N. C.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Nov. 4, 1934	4.34	1,080	1949	Nov. 28, 1948	5.07	2,300
	Jan. 8, 1935	8.80	3,700		Jan. 5, 1949	3.65	1,190
	Aug. 19, 1935	4.94	1,400		June 16, 1949	6.68	6,800
1936	Nov. 13, 1935	4.45	1,160	1950	July 12, 1949	4.32	1,670
	Jan. 19, 1936	4.80	1,340		July 18, 1949	4.10	1,500
	Feb. 4, 1936	5.06	1,480		Aug. 28, 1949	4.46	1,780
	Apr. 2, 1936	4.90	1,390		Oct. 31, 1949	3.58	1,150
	Apr. 6, 1936	7.02	2,780		Aug. 31, 1950	6.07	3,340
1937	Oct. 16, 1936	6.18	2,110	1951	Sept. 8, 1950	4.52	1,830
	Dec. 31, 1936	5.40	1,590		Oct. 20, 1950	5.31	2,540
	Jan. 3, 1937	4.85	1,280		Dec. 7, 1950	5.60	2,830
	July 29, 1937	5.55	1,710		Mar. 29, 1951	3.43	1,060
	Sept. 8, 1937	5.17	1,440	1952	Nov. 7, 1951	3.53	1,120
1938	Oct. 18, 1937	7.85	3,450		Dec. 4, 1951	3.87	1,340
	July 21, 1938	4.54	1,120		Dec. 21, 1951	3.65	1,190
1939	Jan. 30, 1939	6.10	2,630		Mar. 11, 1952	7.02	4,490
	Feb. 3, 1939	4.90	1,660		Mar. 23, 1952	6.43	3,760
	Feb. 15, 1939	4.98	1,730	1953	Jan. 9, 1953	3.41	1,050
	Feb. 28, 1939	3.87	1,010		Feb. 21, 1953	5.39	2,620
	Aug. 18, 1939	7.08	3,650		Mar. 23, 1953	3.57	1,140
1940	Apr. 19, 1940	5.51	2,220	1954	Jan. 22, 1954	4.61	1,900
	Aug. 13, 1940	9.20	6,100		Feb. 21, 1954	3.47	1,080
	Aug. 30, 1940	7.68	4,310	1955	Dec. 29, 1954	4.44	1,760
1941	July 19, 1941	2.87	701		Feb. 6, 1955	3.83	1,310
1942	Dec. 4, 1941	4.25	1,530		Mar. 22, 1955	3.69	1,210
	Mar. 8, 1942	4.46	1,690		May 22, 1955	3.38	1,030
	May 20, 1942	7.49	5,110	1956	Apr. 15, 1956	4.77	2,030
1943	Dec. 29, 1942	5.69	2,930		Oct. 22, 1956	3.60	1,160
	Jan. 18, 1943	3.35	1,010		Jan. 31, 1957	3.89	1,350
	Apr. 19, 1943	4.13	1,540		Feb. 26, 1957	3.86	1,330
	May 11, 1943	4.27	1,610		Apr. 2, 1957	4.11	1,510
1944	Mar. 29, 1944	3.17	870		Apr. 4, 1957	7.24	4,770
1945	Apr. 17, 1945	4.89	2,140	1958	Nov. 14, 1957	3.84	1,260
1946	Jan. 7, 1946	3.68	1,200		Nov. 19, 1957	4.30	1,540
	Feb. 10, 1946	4.34	1,670		Dec. 20, 1957	5.05	2,060
	Mar. 14, 1946	3.70	1,200	1959	Jan. 21, 1959	5.98	2,880
1947	Jan. 20, 1947	4.94	2,180		Apr. 12, 1959	3.43	1,040
	Apr. 11, 1947	3.84	1,290		May 21, 1959	4.13	1,440
1948	Nov. 2, 1947	3.47	1,050		Sept. 4, 1959	4.60	1,740
	Aug. 3, 1948	4.90	2,140		Sept. 7, 1959	4.70	1,810
	Sept. 6, 1948	5.70	2,930	1960	Oct. 9, 1959	5.14	2,130
1949	Nov. 3, 1948	3.70	1,220		Feb. 5, 1960	3.76	1,220
	Nov. 6, 1948	4.27	1,630		Feb. 10, 1960	3.44	1,040
	Nov. 19, 1948	4.25	1,610		Mar. 30, 1960	3.85	1,270
					Apr. 3, 1960	3.88	1,290
					Aug. 12, 1960	5.43	2,370

4415. Little River near Penrose, N. C.

Location.--Lat 35°13'23", long 82°38'07", 0.4 mile downstream from Cascade Lake Dam, 1.2 miles upstream from Hart Branch, 2.2 miles upstream from Crab Creek, and 3.3 miles south of Penrose, Transylvania County.

Drainage area.--41.4 sq mi.

Gage.--Recording. Datum of gage is 2,099.60 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements.

Historical data.--The highest flood known is that of July 16, 1916.

Remarks.--Some peaks may be affected by regulation by Cascade Lake (capacity, 500 cfs-days). Base for partial-duration series, 800 cfs.

Peak stages and discharges of Little River near Penrose, N. C.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1916	July 16, 1916	a14	-	1949	Nov. 28, 1948	7.05	1,820
1928	August 1928	a13.5	-		Apr. 13, 1949	4.65	1,020
1940	Aug. 13, 1940	b11	3,400		Apr. 30, 1949	6.09	1,490
1942	May 1942	b9	2,550		June 16, 1949	8.70	2,450
1943	Dec. 29, 1942	9.44	2,730		July 12, 1949	7.92	2,150
	Apr. 19, 1943	5.68	1,350		July 18, 1949	4.15	858
1944	Mar. 29, 1944	4.25	873		Aug. 28, 1949	6.72	1,700
1945	Sept. 17, 1945	3.48	650	1950	Oct. 7, 1949	5.06	1,150
1946	Jan. 7, 1946	6.30	1,560		Oct. 31, 1949	3.98	810
	Jan. 9, 1946	4.40	936		Dec. 26, 1949	4.98	1,120
	Feb. 10, 1946	5.90	1,420		Sept. 1, 1950	5.55	1,310
	Mar. 14, 1946	5.10	1,160	1951	Dec. 7, 1950	8.52	2,380
1947	Jan. 20, 1947	4.80	1,060	1952	Dec. 4, 1951	4.33	918
1948	Oct. 17, 1947	5.35	1,240		Dec. 21, 1951	5.60	1,320
	Oct. 28, 1947	4.06	830		Feb. 3, 1952	5.00	1,130
	Nov. 3, 1947	4.36	923		Mar. 11, 1952	10.72	3,280
	Aug. 4, 1948	4.27	895		Mar. 23, 1952	5.56	1,310
	Aug. 22, 1948	4.25	888	1953	Feb. 21, 1953	8.13	2,230
1949	Nov. 6, 1948	5.28	1,220		Mar. 23, 1953	6.09	1,490
	Nov. 19, 1948	5.14	1,170	1954	Jan. 22, 1954	8.37	2,320
					Feb. 21, 1954	5.56	1,310
				1955	Dec. 30, 1954	6.73	1,710
					Feb. 6, 1955	5.89	1,420
					Apr. 14, 1955	4.00	816

a About, from flood profiles by Tennessee Valley Authority.

b About, from information by Tennessee Valley Authority.

4420. Crab Creek near Penrose, N. C.

Location--Lat 35°14'02", long 82°36'39", 0.4 mile downstream from Henderson County line, 1.6 miles upstream from mouth, and 3 miles southeast of Penrose, Transylvania County.

Drainage area--10.9 sq mi.

Gage--Recording. Datum of gage is 2,107.43 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation--Defined by current-meter measurements below 450 cfs and extended above on basis of channel-conveyance study.

Historical data--The maximum stage known is that of July 1916.

Remarks--Base for partial-duration series, 300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1916	July 1916	a10.5	-	1949	July 18, 1949	5.69	578
1943	Dec. 29, 1942	5.12	453		Aug. 28, 1949	6.14	707
	Apr. 19, 1943	3.54	300		Sept. 7, 1949	4.37	363
	May 14, 1943	7.00	1,000	1950	May 27, 1950	3.75	318
1944	May 20, 1944	3.59	308		July 12, 1950	4.17	347
1945	July 3, 1945	3.78	321		Sept. 1, 1950	3.54	303
	July 14, 1945	3.92	329	1951	Oct. 20, 1950	5.85	620
	Aug. 17, 1945	4.68	396		Dec. 7, 1950	7.02	1,080
1946	Feb. 10, 1946	4.68	396	1952	Dec. 21, 1951	3.40	300
1947	Oct. 8, 1946	4.94	428		Feb. 3, 1952	3.90	338
1948	June 21, 1948	3.94	331		Mar. 3, 1952	4.12	355
	Aug. 3, 1948	4.43	369		Mar. 11, 1952	7.57	1,500
1949	Nov. 6, 1948	4.26	354		Aug. 9, 1952	4.68	401
	Nov. 19, 1948	4.18	348	1953	Feb. 21, 1953	4.08	351
	Nov. 28, 1948	5.12	457		June 7, 1953	5.55	523
	June 16, 1949	5.16	464		Sept. 5, 1953	3.47	306
	July 12, 1949	5.94	647	1954	Jan. 22, 1954	5.45	504
				1955	Feb. 6, 1955	4.18	359

a From flood profile by Tennessee Valley Authority.

4430. French Broad River at Blantyre, N. C.

Location.--Lat 35°17'56", long 82°37'27", on left bank at upstream side of highway bridge, 700 ft east of Blantyre railroad station, Transylvania County, 3.5 miles downstream from Little River, and at mile 183.7.

Drainage area.--296 sq mi.

Gage.--Nonrecording prior to July 5, 1930; recording thereafter. Datum of gage is 2,060.32 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 11,500 cfs and extended above by logarithmic plotting. Rate of change of stage used as a factor in computing discharge.

Historical data.--Studies by Tennessee Valley Authority indicate the maximum stage known, probably since at least 1791, is that of July 16, 1916.

Remarks.--Base for partial-duration series, 4,300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1875	February 1875	a17	-	1935	Jan. 10, 1935	18.29	8,040
1876	June 1876	a23	-	1936	Nov. 13, 1935	16.20	4,780
1880	Oct. 17, 1879	a19	-		Jan. 20, 1936	17.40	5,920
1893	Sept. 13, 1893	a18	-		Apr. 2, 1936	15.40	4,380
1899	Mar. 15, 1899	a17	-		Apr. 7, 1936	18.85	9,470
1901	May 21, 1901	a20	-	1937	Oct. 10, 1936	15.32	4,330
1902	Feb. 28, 1902	a19	-		Oct. 17, 1936	17.44	5,920
1905	July 1905	a21	-		Jan. 3, 1937	17.70	6,560
1906	Jan. 23, 1906	a22	-	1938	Oct. 20, 1937	18.83	9,470
1910	Aug. 31, 1910	a21	-	1939	Aug. 19, 1939	17.40	6,180
1916	July 16, 1916	b27.1	-	1940	Aug. 14, 1940	21.89	20,800
1919	Oct. 29, 1918	a20	-		Aug. 31, 1940	19.32	10,900
1921	Dec. 14, 1920	16.2	5,170	1941	July 7, 1941	13.50	3,580
	Feb. 11, 1921	15.0	4,750	1942	Mar. 9, 1942	15.92	4,620
1922	Mar. 28, 1922	15.15	4,840		May 21, 1942	19.86	12,800
1923	Mar. 17, 1923	15.90	5,170		Sept. 7, 1942	15.55	4,470
	May 30, 1923	15.95	5,220	1943	Dec. 30, 1942	20.21	13,800
1924	Jan. 11, 1924	14.7	4,310	1944	Mar. 30, 1944	15.85	4,220
	Jan. 17, 1924	15.1	4,470	1945	Feb. 22, 1945	c13.14	3,360
1925	Dec. 9, 1924	14.63	4,280	1946	Jan. 8, 1946	c18.50	8,720
1926	Jan. 19, 1926	16.50	5,100		Feb. 11, 1946	17.05	5,030
1927	Nov. 16, 1926	13.20	3,700	1947	Jan. 20, 1947	c17.24	5,400
1928	Aug. 16, 1928	22.9	26,500	1948	Aug. 5, 1948	c16.53	4,720
	Sept. 6, 1928	16.8	5,460	1949	Nov. 29, 1948	c17.96	6,550
1929	Mar. 14, 1929	19.2	10,600		May 1, 1949	c16.00	4,420
	Sept. 28, 1929	16.8	5,460		June 17, 1949	c17.94	6,580
1930	Oct. 2, 1929	16.70	5,420		July 13, 1949	c18.56	8,010
	Oct. 22, 1929	15.6	4,720		July 20, 1949	c16.20	4,550
1931	Apr. 22, 1931	13.90	3,960		Aug. 29, 1949	c16.74	4,970
1932	Dec. 14, 1931	14.47	4,280	1950	Sept. 9, 1950	c16.96	5,180
1933	Oct. 17, 1932	20.68	15,600	1951	Dec. 7, 1950	c18.20	6,880
	Nov. 1, 1932	15.25	4,520	1952	Dec. 21, 1951	16.53	4,710
1934	Mar. 5, 1934	17.32	6,110		Mar. 11, 1952	18.97	9,730
					Mar. 24, 1952	18.05	6,550
				1953	Feb. 22, 1953	c19.44	11,300
					Mar. 24, 1953	16.23	4,580
				1954	Jan. 23, 1954	c18.32	7,290
				1955	Dec. 30, 1954	c16.29	4,570

a From information by Tennessee Valley Authority.

b From floodmarks.

c Occurred at different time than peak discharge.

Peak stages and discharges of French Broad River at Blantyre, N. C.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Feb. 7, 1955	c16.30	4,550	1959	Aug. 13, 1959	15.45	3,900
1956	Apr. 16, 1956	c15.29	3,900	1960	Oct. 11, 1959	16.58	4,660
1957	Apr. 5, 1957	c19.75	12,800		Feb. 6, 1960	16.17	4,350
1958	Nov. 19, 1957	16.06	4,270				

4440. Boylston Creek near Horseshoe, N. C.

Location.--Lat 35°22'13", long 82°33'50", 100 ft upstream from county highway bridge, 1.7 miles upstream from mouth, and 2 miles north of Horseshoe, Henderson County.

Drainage area.--14.8 sq mi.

Gage.--Recording. Datum of gage is 2,069.39 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 250 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Dec. 29, 1942	3.50	380	1949	Aug. 28, 1949	3.41	348
	Jan. 19, 1943	3.38	362				
	June 28, 1943	3.28	344	1950	Oct. 30, 1949	3.09	301
1944	Mar. 20, 1944	3.02	292		Dec. 26, 1949	2.74	252
	Mar. 28, 1944	2.90	276		Mar. 13, 1950	3.08	299
1945	July 2, 1945	2.85	252		July 25, 1950	3.52	365
					Sept. 1, 1950	2.74	252
1946	Jan. 8, 1946	3.20	328	1951	Oct. 20, 1950	3.87	414
	Feb. 10, 1946	4.92	659		Dec. 7, 1950	5.67	805
					June 30, 1951	3.23	322
1947	Oct. 9, 1946	3.07	306	1952	Dec. 21, 1951	3.22	320
	Jan. 20, 1947	4.50	575		Jan. 9, 1952	3.35	340
1948	Nov. 3, 1947	2.96	288		Mar. 5, 1952	3.00	288
	Mar. 27, 1948	3.25	336		Mar. 11, 1952	3.65	383
					Mar. 23, 1952	5.42	693
1949	Nov. 6, 1948	2.85	270		Apr. 26, 1952	5.15	510
	Nov. 28, 1948	5.10	662	1953	Feb. 21, 1953	4.00	432
	Jan. 5, 1949	2.95	286				
	June 16, 1949	2.85	267	1954	Jan. 22, 1954	5.05	586
	July 12, 1949	4.94	564		Aug. 23, 1954	5.15	608
	July 18, 1949	3.70	390				
	July 22, 1949	2.78	257	1955	Feb. 6, 1955	3.70	390

4445. South Fork Mills River at The Pink Beds, N. C.

Location.--Lat 35°21'58", long 82°44'22", at The Pink Beds in Pisgah National Forest, 400 ft downstream from Thompson Creek and 9 miles north of Brevard, Transylvania County.

Drainage area.--9.99 sq mi.

Gage.--Recording. Datum of gage is 3,138.38 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 400 cfs and by combination contracted-opening and slope-area measurement at 1,850 cfs.

Remarks.--Base for partial-duration series, 340 cfs.

Peak stages and discharges of South Fork Mills River at The Pink Beds, N. C.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Nov. 15, 1926	4.42	317	1939	Feb. 3, 1939	4.84	451
1928	Oct. 12, 1927	4.79	431		Feb. 15, 1939	4.74	414
	June 12, 1928	4.65	386		Aug. 18, 1939	5.15	560
	Aug. 15, 1928	8.00	2,220	1940	Apr. 19, 1940	5.41	658
					Aug. 13, 1940	7.16	1,610
1929	Oct. 23, 1928	4.52	346		Aug. 30, 1940	6.34	1,110
	Mar. 13, 1929	5.49	700	1941	Aug. 4, 1941	4.47	330
	May 26, 1929	4.68	395				
	Sept. 26, 1929	4.65	386	1942	Dec. 4, 1941	4.74	434
1930	Oct. 2, 1929	4.75	418		Mar. 8, 1942	4.82	455
	Oct. 21, 1929	5.09	541		May 20, 1942	4.91	490
1931	Apr. 22, 1931	4.30	284		Sept. 27, 1942	4.58	364
				1943	Dec. 29, 1942	5.32	618
1932	July 16, 1932	5.18	579		Apr. 19, 1943	4.67	392
					May 11, 1943	4.54	351
1933	Oct. 17, 1932	5.70	787	1944	Mar. 19, 1944	4.40	309
	Apr. 16, 1933	4.74	414				
1934	Mar. 3, 1934	4.47	331	1945	Apr. 17, 1945	4.81	434
1935	Jan. 8, 1935	5.44	679	1946	Jan. 7, 1946	4.63	336
	Aug. 19, 1935	4.58	364		Feb. 10, 1946	4.72	361
1936					Mar. 14, 1946	4.83	395
	Jan. 19, 1936	4.59	367	1947	Jan. 20, 1947	5.00	504
	Feb. 4, 1936	4.64	382				
	Apr. 6, 1936	4.65	386	1948	Feb. 14, 1948	4.50	340
	Sept. 30, 1936	4.64	382		Mar. 27, 1948	4.52	346
1937					Sept. 6, 1948	5.40	658
	Oct. 9, 1936	4.75	418	1949	Nov. 3, 1948	4.54	352
	Oct. 16, 1936	5.82	833		Nov. 6, 1948	4.52	346
	Dec. 31, 1936	4.78	427		Nov. 28, 1948	5.00	504
	Jan. 3, 1937	4.73	411		June 16, 1949	7.42	1,850
1938	Oct. 18, 1937	5.37	638		Aug. 28, 1949	4.77	600
1939	Jan. 30, 1939	5.17	560				

4460. Mills River near Mills River, N. C.

Location.--Lat 35°23'56", long 82°35'46", on right bank 1.4 miles downstream from confluence of North and South Forks, 2.2 miles upstream from village of Mills River, Henderson County, and 4.2 miles northwest of Horseshoe.

Drainage area.--66.7 sq mi.

Gage.--Nonrecording Sept. 9, 1924, to Sept. 30, 1926, at site 500 ft upstream at datum 2.97 ft higher; recording thereafter. Datum of gage is 2,088.47 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined for 1925 and 1926 by current-meter measurements below 460 cfs and extended above on basis of shape of present ratings. Defined at present site by current-meter measurements below 5,500 cfs and by slope-area measurement at 13,400 cfs. Discharges shown for peaks prior to 1925 and for 1928 are estimated on basis of ratings developed during the period of record.

Historical data.--The greatest flood known since 1876 is probably that of Aug. 30, 1940.

Remarks.--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1876	June 1876	a12	6,800	1910	Aug. 31, 1910	a12	6,800
1901	May 1901	a11	5,100	1916	July 16, 1916	a12.5	8,400
1902	February 1902	a12	6,800	1919	October 1918	a10	4,400
1906	Jan. 22, 1906	a10	4,400	1925	Dec. 8, 1924	3.60	1,600

a Estimated by Tennessee Valley Authority; present site and datum.

Peak stages and discharges of Mills River near Mills River, N. C.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Nov. 12, 1925	3.05	1,090	1948	Feb. 14, 1948	3.95	1,070
	Jan. 18, 1926	5.7	2,670		Sept. 6, 1948	6.63	2,630
1928	Aug. 16, 1928	13.5	12,800	1949	Nov. 6, 1948	3.97	1,080
					Nov. 19, 1948	4.10	1,160
1935	Jan. 9, 1935	8.36	3,560		Nov. 28, 1948	6.37	2,460
	Aug. 19, 1935	3.82	1,010		Jan. 5, 1949	3.93	1,050
1936	Jan. 19, 1936	4.60	1,560		Apr. 13, 1949	4.05	1,130
	Feb. 4, 1936	4.02	1,140		June 16, 1949	11.22	5,330
	Apr. 2, 1936	3.95	1,000		Aug. 16, 1949	4.45	1,380
	Apr. 6, 1936	5.14	1,850		Aug. 28, 1949	6.15	2,340
	Sept. 30, 1936	4.04	1,180	1950	Oct. 31, 1949	3.99	1,080
1937	Oct. 8, 1936	4.28	1,240		Sept. 1, 1950	4.58	1,460
	Oct. 16, 1936	8.38	3,560		Sept. 8, 1950	4.43	1,370
	Dec. 31, 1936	4.75	1,540	1951	Oct. 20, 1950	5.40	1,930
	Jan. 3, 1937	4.96	1,670		Dec. 7, 1950	7.20	2,910
1938	Oct. 19, 1937	6.20	2,340	1952	Dec. 4, 1951	4.03	1,110
1939	Jan. 30, 1939	5.15	1,800		Dec. 21, 1951	4.24	1,250
	Feb. 3, 1939	4.20	1,220		Mar. 11, 1952	8.10	3,560
	Feb. 15, 1939	4.01	1,100		Mar. 23, 1952	6.84	2,720
	Feb. 28, 1939	3.87	1,000	1953	Feb. 21, 1953	6.63	2,610
	Aug. 18, 1939	6.77	2,600		Mar. 23, 1953	4.01	1,100
1940	Apr. 19, 1940	4.80	1,680	1954	Jan. 22, 1954	6.35	2,450
	Aug. 13, 1940	13.15	11,100		Feb. 21, 1954	3.95	1,060
	Aug. 30, 1940	13.62	13,400	1955	Dec. 30, 1954	4.77	1,520
1941	Aug. 4, 1941	3.70	900		Feb. 6, 1955	4.72	1,490
1942	Feb. 17, 1942	3.85	1,000	1956	Apr. 16, 1956	5.13	1,740
	Mar. 8, 1942	5.06	1,740				
	May 20, 1942	6.81	2,730	1957	Apr. 4, 1957	9.94	4,340
1943	Dec. 29, 1942	6.66	2,670		June 25, 1957	4.01	1,040
	Apr. 19, 1943	4.06	1,130	1958	Nov. 19, 1957	5.04	1,680
	June 28, 1943	4.04	1,130		Dec. 20, 1957	4.49	1,350
1944	Mar. 20, 1944	3.77	935	1959	Dec. 28, 1958	4.44	1,320
1945	Apr. 17, 1945	3.90	995		Jan. 22, 1959	5.08	1,710
1946	Jan. 8, 1946	4.63	1,490		Apr. 12, 1959	3.97	1,010
	Feb. 10, 1946	5.23	1,870	1960	Oct. 9, 1959	4.81	1,550
	Mar. 14, 1946	4.31	1,280		Feb. 5, 1960	4.18	1,160
1947	Jan. 20, 1947	6.08	2,310		Mar. 30, 1960	4.56	1,400
1948	Nov. 2, 1947	3.99	1,090		Apr. 3, 1960	4.37	1,280
					Aug. 13, 1960	4.85	1,570

a Estimated by Tennessee Valley Authority; present site and datum.

4464.1. Laurel Branch near Edneyville, N. C.

Location.--Lat 35°22'15", long 82°24'10", at culvert on U.S. Highway 64,
0.5 mile upstream from mouth and 4 miles southwest of Edneyville, Henderson
County.

Drainage area.--0.57 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Not defined.

Remarks.--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	July 24, 1955	19.78	-	1958	July 31, 1958	19.91	-
1956	July 6, 1956	20.30	-	1959	Sept. 30, 1959	20.35	-
1957	June 28, 1957	20.54	-	1960	Aug. 12, 1960	20.44	-

4465. Clear Creek near Hendersonville, N. C.

Location.--Lat 35°21'14", long 82°26'40", at county highway bridge, 0.6 mile upstream from Allen Branch, 1.0 mile downstream from Wolfpen Creek, 1.2 miles upstream from mouth, and 2.7 miles northeast of Hendersonville, Henderson County.

Drainage area.--42.2 sq mi.

Gage.--Recording. Datum of gage is 2,071.98 ft above mean sea level; datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 2,200 cfs and extended above on basis of velocity-area studies at 4,000 cfs.

Historical data.--Studies by Tennessee Valley Authority indicate the maximum stage known, at least since 1863, is that of July 16, 1916.

Remarks.--Base for partial-duration series, 700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1910	August 1910	a13	-	1949	Aug. 28, 1949	10.50	4,020
1916	July 16, 1916	a16	-	1950	Oct. 31, 1949	6.80	770
					Mar. 13, 1950	6.89	806
1928	August 1928	a13	-		Sept. 1, 1950	7.11	911
					Sept. 8, 1950	8.03	1,590
1940	Aug. 13, 1940	a12	-				
				1951	Dec. 7, 1950	8.76	2,240
1946	Jan. 7, 1946	6.36	704				
	Feb. 10, 1946	7.70	1,480	1952	Dec. 21, 1951	7.02	865
					Feb. 3, 1952	6.63	715
1947	Jan. 20, 1947	6.60	749		Mar. 11, 1952	8.87	2,340
					Mar. 23, 1952	7.60	1,230
1948	Feb. 12, 1948	6.67	729				
	Aug. 4, 1948	7.15	972	1953	Feb. 21, 1953	7.38	1,080
1949	Nov. 28, 1948	7.63	1,260	1954	Jan. 22, 1954	8.05	1,600
	May 11, 1949	7.09	875		Feb. 21, 1954	6.73	746
	June 17, 1949	6.84	769				
	July 12, 1949	7.96	1,530	1955	Feb. 6, 1955	6.18	627
	July 18, 1949	8.00	1,560				

a Estimated by Tennessee Valley Authority.

4470. Mud Creek at Naples, N. C.

Location.--Lat 35°22'52", long 82°29'54", at bridge on old highway from Asheville to Hendersonville, 100 ft downstream from Byers Creek, 0.8 mile south of Naples, Henderson County, and 2.2 miles upstream from mouth.

Drainage area.--109 sq mi.

Gage.--Recording. Datum of gage is 2,047.48 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--8 ft (Tennessee Valley Authority).

Historical data.--The greatest flood known since at least 1876 is that of July 16, 1916.

Remarks.--Base for partial-duration series, 1,500 cfs.

TENNESSEE RIVER BASIN

Peak stages and discharges of Mud Creek at Naples, N. C.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1876	June 1876	a15	-	1945	Sept. 18, 1945	8.65	1,440
1901	May 1901	a13	-	1946	Feb. 11, 1946	10.00	2,800
1902	December 1901	a12	-	1947	Jan. 21, 1947	9.23	1,930
	February 1902	a12	-	1948	Oct. 18, 1947	8.70	1,570
1906	January 1906	a10	-		Feb. 13, 1948	9.08	1,820
1910	August 1910	b15.5	-		Aug. 4, 1948	9.20	1,910
1916	July 16, 1916	b21.5	a40,000	1949	Nov. 29, 1948	10.38	3,390
1928	Aug. 16, 1928	b14.9	a17,000		July 13, 1949	9.58	2,270
1933	Oct. 16, 1932	b13.5	-		July 19, 1949	9.58	2,270
1936	Apr. 6, 1936	b9.0	-		Aug. 29, 1949	11.52	5,740
1939	Mar. 1, 1939	8.47	1,520	1950	Oct. 31, 1949	8.75	1,600
1940	Aug. 13, 1940	13.07	10,800		Mar. 14, 1950	8.90	1,690
	Aug. 30, 1940	10.99	4,800		Sept. 9, 1950	9.75	2,470
1941	Dec. 28, 1940	8.18	1,480	1951	Dec. 7, 1950	11.55	5,940
1942	Feb. 17, 1942	8.51	1,610	1952	Dec. 22, 1951	9.40	2,190
	Mar. 9, 1942	9.85	2,930		Mar. 4, 1952	8.83	1,670
	Mar. 20, 1942	12.63	8,880		Mar. 11, 1952	11.55	5,940
1943	Dec. 29, 1942	10.07	3,070		Mar. 23, 1952	9.71	2,560
	July 9, 1943	8.85	1,840	1954	Jan. 23, 1954	11.07	4,930
1944	Mar. 30, 1944	8.44	1,430		Feb. 21, 1954	9.38	2,170
				1955	Feb. 7, 1955	9.10	1,890
				1957	Apr. 5, 1957	b11.92	c6,770

a Estimated by Tennessee Valley Authority.

b From information by Tennessee Valley Authority.

c Annual peak only.

4475. Cane Creek at Fletcher, N. C.

Location.--Lat 35°26'08", long 82°29'23", at county highway bridge, 0.5 mile upstream from Hooper Creek, 0.5 mile northeast of Fletcher, Henderson County, and 0.8 mile downstream from county line.

Drainage area.--63.1 sq mi.

Gage.--Recording. Datum of gage is 2,072.22 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements. Discharges shown prior to 1940, unless otherwise noted, are estimated on basis of ratings developed during the period of record.

Historical data.--The greatest flood known since at least 1876 is that of July 16, 1916.

Remarks.--Base for partial-duration series, 800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1876	June 1876	a9	3,900	1916	July 16, 1916	b14.8	a23,000
1893	September 1893	a8	2,200	1923	Apr. 14, 1923	6.5	1,500
1901	May 1901	a7	1,700	1928	Aug. 16, 1928	c8.5	2,900
1902	December 1901	a7	1,700	1940	Aug. 30, 1940	b9.4	4,200
	February 1902	a7	1,700	1943	Dec. 29, 1942	5.79	1,250
1910	August 1910	a9	3,900		Jan. 19, 1943	7.97	2,200

a Estimated by Tennessee Valley Authority.

b From floodmarks and flood profiles by Tennessee Valley Authority.

c From floodmarks by Tennessee Valley Authority.

Peak stages and discharges of Cane Creek at Fletcher, N. C.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	July 8, 1943	4.11	825	1951	Dec. 7, 1950	8.0?	2,240
1944	Mar. 27, 1944	3.40	680	Mar. 7, 1951	4.25	935	
1945	Mar. 26, 1945	4.85	1,000	1952	Dec. 4, 1951	4.43	982
1946	Jan. 7, 1946	5.39	1,150	Dec. 21, 1951	5.25	1,200	
Feb. 10, 1946	8.20	2,410		Feb. 3, 1952	4.43	982	
1947	Oct. 8, 1946	4.14	844	Mar. 4, 1952	4.35	961	
Jan. 20, 1947	6.45	1,420		Mar. 11, 1952	6.9?	1,680	
1948	Oct. 17, 1947	4.33	913	Mar. 23, 1952	8.3?	2,530	
Feb. 12, 1948	5.36	1,160		Aug. 7, 1952	5.0?	1,130	
Mar. 27, 1948	6.12	1,360		1953	Jan. 10, 1953	5.85	1,360
Aug. 3, 1948	4.26	896		Feb. 21, 1953	6.77	1,620	
1949	Nov. 6, 1948	3.74	802	1954	Jan. 22, 1954	8.52	2,900
Nov. 28, 1948	7.22	1,750		Feb. 20, 1954	6.50	1,540	
Mar. 22, 1949	4.10	901		Apr. 8, 1954	7.74	2,030	
May 11, 1949	5.86	1,360		June 16, 1954	4.54	1,010	
June 16, 1949	5.84	1,360		1955	Feb. 6, 1955	3.87	836
July 12, 1949	5.92	1,380		Mar. 22, 1955	4.21	925	
July 18, 1949	7.15	1,730		July 28, 1955	4.12	901	
Aug. 16, 1949	8.00	2,220		1956	Apr. 16, 1956	7.88	2,130
Aug. 21, 1949	4.05	883		1957	Jan. 31, 1957	6.27	1,480
Aug. 28, 1949	8.45	2,770		Apr. 4, 1957	8.73	3,340	
1950	Oct. 30, 1949	6.35	1,500	June 5, 1957	7.26	1,720	
Jan. 19, 1950	4.57	1,020		1958	Nov. 19, 1957	4.78	943
Mar. 13, 1950	7.00	1,680		Nov. 25, 1957	5.30	1,080	
Sept. 1, 1950	3.75	805		Dec. 20, 1957	4.44	855	
Sept. 9, 1950	4.63	1,030		Apr. 28, 1958	6.55	1,610	
1951	Dec. 3, 1950	4.05	883				

4480. French Broad River at Bent Creek, N. C.

Location--Lat 35°30'07", long 82°35'35", on left bank 50 ft downstream from Bent Creek, 6.2 miles upstream from Hominy Creek, 6.7 miles south of Asheville, Buncombe County, and at mile 157.7.

Drainage area--676 sq mi.

Gage--Recording. Datum of gage is 1,995.91 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation--Defined by current-meter measurements below 19,500 cfs and extended above by logarithmic plotting.

Historical data--The maximum stage known is that of July 15, 1916.

Remarks--Base for partial-duration series, 6,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1916	July 15, 1916	a27.3	-	1937	Oct. 17, 1936	8.00	10,600
1929	August 1928	a16.1	-	Jan. 3, 1937	8.46	11,900	
				Jan. 20, 1937	6.55	8,250	
1935	Dec. 1, 1934	6.04	6,040	1938	Oct. 20, 1937	8.42	11,600
Jan. 9, 1935	8.68	12,300		July 24, 1938	6.40	6,940	
Mar. 13, 1935	6.30	6,620		1939	Jan. 30, 1939	6.40	6,940
1936	Nov. 13, 1935	7.30	8,740	Feb. 11, 1939	6.74	7,590	
Jan. 6, 1936	6.62	7,220		Feb. 15, 1939	6.42	6,940	
Jan. 19, 1936	8.93	12,800		Feb. 28, 1939	6.54	7,150	
Feb. 4, 1936	6.60	7,220		Aug. 18, 1939	6.55	8,250	
Mar. 28, 1936	6.73	7,590		1940	Aug. 14, 1940	12.60	23,600
Apr. 2, 1936	7.10	8,480		Aug. 30, 1940	11.08	18,900	
Apr. 7, 1936	9.00	13,200					
1937	Oct. 9, 1936	7.03	8,250	1941	Dec. 29, 1940	5.52	5,700

a From floodmarks.

TENNESSEE RIVER BASIN

Peak stages and discharges of French Broad River at Bent Creek, N. C.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Feb. 17, 1942	6.51	6,840	1951	Dec. 8, 1950	9.13	12,400
	Mar. 9, 1942	7.16	8,110	1952	Dec. 21, 1951	6.78	7,270
	May 21, 1942	11.85	19,600		Feb. 4, 1952	6.32	6,370
1943	Dec. 30, 1942	10.62	16,100		Mar. 5, 1952	6.17	6,080
	Jan. 19, 1943	7.38	8,530		Mar. 12, 1952	8.54	11,000
	Mar. 21, 1943	6.26	6,300		Mar. 23, 1952	8.50	10,900
1944	Mar. 20, 1944	6.40	6,500	Apr. 26, 1952	6.36	6,440	
	Mar. 30, 1944	6.78	7,300	1953	Feb. 22, 1953	8.98	12,000
1945	Sept. 17, 1945	6.34	6,200		Mar. 24, 1953	6.29	6,310
	1946	Jan. 9, 1946	8.44	10,700	1954	Jan. 23, 1954	9.16	12,400
Feb. 10, 1946		8.13	10,000	Feb. 21, 1954		6.63	6,970
Mar. 16, 1946		6.80	7,300	Apr. 8, 1954		6.28	6,290
1947	Jan. 20, 1947	7.88	9,540	1955	Feb. 6, 1955	6.54	6,790
1948	Nov. 3, 1947	6.42	6,560	1956	Apr. 16, 1956	7.23	8,160
	Feb. 14, 1948	6.73	7,170		Feb. 1, 1957	6.59	6,860
	Mar. 27, 1948	6.60	6,910	Apr. 5, 1957	11.47	18,600	
	Aug. 5, 1948	6.50	6,710	June 5, 1957	6.61	6,900	
1949	Nov. 6, 1948	6.25	6,240	1958	Nov. 19, 1957	6.65	6,970
	Nov. 29, 1948	8.18	10,200		Nov. 25, 1957	6.49	6,650
	Jan. 6, 1949	6.22	6,180		Apr. 29, 1958	6.87	7,410
	May 3, 1949	6.14	6,030	1959	Dec. 29, 1958	6.82	7,310
	June 17, 1949	7.42	8,570		Jan. 22, 1959	6.32	6,310
	July 14, 1949	7.55	8,840		Apr. 12, 1959	6.31	6,290
	July 18, 1949	7.33	8,380		Sept. 30, 1959	7.46	8,650
	Aug. 17, 1949	6.57	6,850		1960	Oct. 11, 1959	6.68	7,640
	Aug. 21, 1949	6.36	6,440	Feb. 5, 1960		7.08	7,850
	Aug. 29, 1949	7.96	9,710	Mar. 31, 1960		6.67	7,410
1950	Nov. 1, 1949	7.15	8,010	Apr. 5, 1960		7.07	7,830
	Mar. 13, 1950	7.01	7,730	Aug. 12, 1960		6.68	7,430
	Sept. 1, 1950	6.20	6,140				
	Sept. 9, 1950	7.25	8,220				
1951	Oct. 20, 1950	6.24	6,220				

4485. Hominy Creek at Candler, N. C.

Location.--Lat 35°32'28", long 82°40'35", on left bank 0.1 mile downstream from Pole Creek and 1.0 mile east of Candler, Buncombe County.

Drainage area.--79.8 sq mi.

Gage.--Recording. Datum of gage is 2,065.83 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 5,600 cfs and extended to 13,100 cfs by slope-conveyance study.

Historical data.--Studies by Tennessee Valley Authority indicate that the flood of Aug. 30, 1940, is the greatest in at least 100 years.

Remarks.--Base for partial-duration series, 900 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Aug. 30, 1940	a18.0	b13,100	1946	Jan. 8, 1946	3.49	935
1943	Dec. 29, 1942	3.83	1,130	1946	Feb. 10, 1946	5.47	2,160
	Apr. 19, 1943	3.48	935		Mar. 14, 1946	3.69	1,040
	June 28, 1943	4.51	1,520		Mar. 16, 1946	3.65	1,020
	July 9, 1943	3.68	1,040		July 22, 1946	5.18	1,970
1944	July 19, 1944	3.48	935	1947	Oct. 8, 1946	3.60	990
					Jan. 20, 1947	4.55	1,550
1945	Apr. 17, 1945	3.50	935	1948	Nov. 2, 1947	3.95	1,190

a From floodmarks.
b Annual peak only.

Peak stages and discharges of Hominy Creek at Candler, N. C.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Aug. 1, 1948	3.48	924	1954	Jan. 22, 1954	4.47	1,480
	Sept. 6, 1948	4.70	1,640		July 9, 1954	3.72	1,060
1949	Nov. 28, 1948	5.30	1,960		July 31, 1954	3.92	1,170
	June 16, 1949	13.25	6,800	1955	July 28, 1955	3.47	918
	Aug. 28, 1949	8.17	3,640		Apr. 15, 1956	3.50	935
				1957	Jan. 31, 1957	4.64	1,580
1950	Nov. 1, 1949	3.53	952		Apr. 4, 1957	9.45	4,410
	Jan. 19, 1950	4.10	1,270		Nov. 19, 1957	3.87	1,140
	Mar. 13, 1950	3.85	1,130	1958	Nov. 25, 1957	3.46	913
	Sept. 9, 1950	4.16	1,300		Dec. 20, 1957	3.77	1,080
					May 6, 1958	3.67	990
1951	Oct. 20, 1950	4.35	1,410		Dec. 28, 1958	5.10	1,850
	Dec. 7, 1950	6.90	2,890	1959	Jan. 21, 1959	4.87	1,710
1952	Dec. 4, 1951	3.48	924		Sept. 30, 1959	3.49	930
	Dec. 21, 1951	3.89	1,150	1960	Feb. 5, 1960	4.62	1,570
	Feb. 3, 1952	4.15	1,300				
	Mar. 11, 1952	4.80	1,670				
	Mar. 23, 1952	4.75	1,640				
1953	Feb. 21, 1953	4.07	1,250				

4490. North Fork Swannanoa River near Black Mountain, N. C.

Location--Lat 35°39'11", long 82°21'04", 0.1 mile downstream from Walker Branch, 0.4 mile downstream from emergency pumping plant of Asheville Water Department, 1.9 miles downstream from Sugar Fork, 3 miles northwest of town of Black Mountain, Buncombe County, and 3.4 miles downstream from Right Fork.

Drainage area--23.8 sq mi.

Gage--Nonrecording prior to Jan. 26, 1927; recording thereafter. Datum of gage is 2,428.03 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation--Defined by current-meter measurements below 2,600 cfs and by slope-area measurements at 12,900 cfs and 16,500 cfs.

Remarks--Base for partial-duration series, 1,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Jan. 18, 1926	4.6	1,830	1938	Oct. 19, 1937	4.16	1,210
1927	Nov. 15, 1926	5.47	2,760	1939	Jan. 30, 1939	4.50	1,620
1928	Nov. 17, 1927	4.59	1,580		Aug. 18, 1939	4.89	2,030
	Aug. 15, 1928	7.04	6,180	1940	Apr. 19, 1940	5.09	2,210
1929	Sept. 26, 1929	4.30	1,270		Aug. 13, 1940	8.55	12,900
					Aug. 30, 1940	7.72	8,640
1930	Oct. 21, 1929	6.02	3,640	1941	Dec. 28, 1940	4.00	1,000
1931	Apr. 4, 1931	3.83	884	1942	Sept. 27, 1942	4.35	1,320
1932	May 1, 1932	4.43	1,400	1943	Dec. 29, 1942	4.48	1,460
1933	Oct. 16, 1932	4.62	1,610	1944	Sept. 30, 1944	4.50	1,480
	Dec. 28, 1932	4.35	1,320		Oct. 20, 1944	3.63	758
1934	Mar. 3, 1934	4.42	1,390	1945	Jan. 7, 1946	4.15	1,120
	July 15, 1934	4.58	1,570	1946	Jan. 20, 1947	4.30	1,270
1935	Jan. 8, 1935	4.72	1,730		Oct. 17, 1947	6.20	4,030
1936	Nov. 12, 1935	4.37	1,400	1948	Nov. 2, 1947	4.45	1,580
	Feb. 4, 1936	4.37	1,340		Mar. 27, 1948	4.12	1,210
	Apr. 6, 1936	4.24	1,210		July 11, 1948	4.70	1,880
1937	Oct. 16, 1936	5.27	2,420		Sept. 6, 1948	5.00	2,350

a Probably maximum for year.

b Annual peak only.

Peak stages and discharges of North Fork Swannanoa River near
Black Mountain, N. C.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	June 16, 1949	9.10	16,500	1952	Mar. 23, 1952	4.53	1,510
	July 12, 1949	4.79	1,820	1953	Feb. 21, 1953	4.81	b1,840
	July 18, 1949	4.37	1,340				
	July 21, 1949	5.55	2,880	1954	Nov. 23, 1953	2.64	b249
	Aug. 28, 1949	6.40	4,500				
1950	Aug. 31, 1950	5.40	2,650	1955	Mar. 22, 1955	2.96	b398
1951	Dec. 7, 1950	4.55	1,540	1956	Apr. 16, 1956	3.22	b531
1952	Mar. 11, 1952	4.32	1,290	1957	Apr. 5, 1957	4.12	b1,110

b Annual peak only.

4495. Swannanoa River at Swannanoa, N. C.

Location.--Lat 35°36'11", long 82°23'42", 1,000 ft upstream from highway bridge at Swannanoa, Buncombe County, and 1.5 miles downstream from North Fork.Drainage area.--62.1 sq mi; 63.0 sq mi at site used 1907-9.Gage.--Nonrecording. At site 1,000 ft downstream at different datum prior to Jan. 6, 1926. At datum 1.0 ft higher Jan. 6, 1926, to Sept. 30, 1929. Datum of gage is 2,179.5 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.Stage-discharge relation.--Defined 1907-9 by current-meter measurements below 300 cfs and extended above. Defined 1926-31 by current-meter measurements below 1,200 cfs and extended to 10,400 cfs on basis of a velocity-area study.Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1908	Feb. 15, 1908	a7.8	4,360	1929	Sept. 26, 1929	5.9	3,440
1926	Jan. 18, 1926	4.5	2,080	1930	Oct. 22, 1929	6.7	3,220
1927	Nov. 15, 1926	4.7	2,260	1931	Apr. 4, 1931	5.2	1,830
1928	Aug. 16, 1928	10.93	10,400				

a Probably maximum for year.

4500. Beetree Creek near Swannanoa, N. C.

Location.--Lat 35°39'11", long 82°24'20", on left bank 1,000 ft upstream from Beetree Reservoir and 3.8 miles north of Swannanoa, Buncombe County.Drainage area.--5.46 sq mi.Gage.--Recording. Datum of gage is 2,728.39 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.Stage-discharge relation.--Defined by current-meter measurements below 240 cfs and extended on basis of flow-over-weir measurement at 1,370 cfs.Remarks.--Base for partial-duration series, 150 cfs.

Peak stages and discharges of Beetree Creek near Swannanoa, N. C.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Nov. 15, 1926	4.10	362	1945	Mar. 26, 1945	3.00	101
	Dec. 25, 1926	3.39	169				
1928	Aug. 15, 1928	5.40	830	1946	Feb. 10, 1946	3.28	141
1929	Mar. 14, 1929	3.36	158	1947	Jan. 20, 1947	3.82	253
	Sept. 26, 1929	3.50	192		July 11, 1948	3.40	158
1930	Oct. 2, 1929	3.84	284	1949	Nov. 28, 1948	3.46	170
	Oct. 21, 1929	4.15	379		Apr. 13, 1949	3.49	170
1931	Apr. 22, 1931	3.55	204		June 16, 1949	4.80	565
					June 21, 1949	4.50	454
1932	May 1, 1932	3.46	180		July 12, 1949	4.08	318
					July 18, 1949	3.43	158
1933	Dec. 28, 1932	3.70	242		July 21, 1949	3.95	282
					Aug. 28, 1949	4.37	409
1934	Mar. 3, 1934	3.56	204	1950	Sept. 1, 1950	3.40	152
1935	Jan. 8, 1935	3.55	204	1951	Dec. 7, 1950	3.89	265
1936	Nov. 13, 1935	3.55	191	1952	Mar. 11, 1952	3.80	242
	Feb. 4, 1936	3.52	184		Mar. 23, 1952	3.82	247
	Mar. 26, 1936	3.52	184	1953	Jan. 9, 1953	3.42	156
	Apr. 2, 1936	3.45	170		Feb. 21, 1953	4.50	454
	Apr. 6, 1936	3.68	220	1954	Jan. 22, 1954	3.92	273
1937	Oct. 16, 1936	3.66	216		Mar. 22, 1955	2.96	83
	Jan. 3, 1937	3.61	204	1956	Apr. 15, 1956	3.30	132
1938	Oct. 19, 1937	3.43	179	1957	Jan. 31, 1957	3.60	194
1939	Jan. 30, 1939	3.40	172		Apr. 4, 1957	3.96	284
	July 8, 1939	3.77	262	1958	Dec. 20, 1957	3.43	158
	Aug. 18, 1939	3.67	236		Jan. 21, 1959	3.43	158
1940	Aug. 13, 1940	6.20	1,370		May 20, 1959	3.60	194
	Aug. 30, 1940	5.85	1,160		June 1, 1959	3.47	166
1941	Dec. 27, 1940	3.73	232		Sept. 30, 1959	3.75	290
1942	Mar. 8, 1942	3.36	151	1960	Mar. 30, 1960	3.60	235
1943	Dec. 29, 1942	3.60	207				
1944	Sept. 30, 1944	3.69	220				

a May have been higher Jan. 7 during period of no gage-height record.

4510. Swannanoa River at Biltmore, N. C.

Location.--Lat 35°34'06", long 82°32'42", on left bank at Biltmore, Buncombe County, 100 ft downstream from Biltmore Avenue Bridge, 200 ft upstream from Southern Railway bridge, and 1.6 miles upstream from mouth.

Drainage area.--130 sq mi.

Gage.--Nonrecording prior to May 8, 1934; recording thereafter. Datum of gage is 1,976.58 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 8,400 cfs, by combination contracted-opening, slope-area, and flow-over-dam measurements at 10,600 cfs and by flow-over-dam measurement at 18,400 cfs. Extremely high floods are subject to backwater from the French Broad River.

Bankfull stage.--12 ft (Tennessee Valley Authority).

Historical data.--Studies by Tennessee Valley Authority indicate that the flood of April 1791 is the maximum known and that the flood of July 16, 1916, is the greatest since 1791.

Remarks.--Stages prior to 1916 listed herein are from floodmarks or were estimated by Tennessee Valley Authority and discharges are estimated by that agency. Base for partial-duration series, 1,800 cfs. Floods in recent years may be affected by reservoirs on Beetree Creek and on North Fork Swannanoa River.

TENNESSEE RIVER BASIN

Peak stages and discharges of Swannanoa River at Biltmore, N. C.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1791	April 1791	26	40,000	1939	Aug. 18, 1939	5.57	2,180
1796	August 1796	15	10,600	1940	Apr. 20, 1940	6.07	2,530
1810	-	15	10,600		Aug. 13, 1940	18.00	18,400
					Aug. 30, 1940	15.34	11,200
1845	May 1845	18	16,400	1941	Dec. 28, 1940	4.93	1,500
1850	August 1850	13	7,300	1942	Mar. 9, 1942	5.64	1,910
1852	August 1852	15	10,600	1943	Dec. 29, 1942	7.0	2,840
1875	February 1875	17	14,400	1944	Sept. 30, 1944	5.95	2,150
1876	June 17, 1876	15	10,600	1945	Sept. 17, 1945	4.59	1,340
1899	Mar. 19, 1899	14	8,800	1946	Jan. 8, 1946	6.93	2,690
1901	May 21, 1901	16	12,400		Feb. 10, 1946	7.12	2,810
1902	Dec. 30, 1901	15	10,600	1947	Jan. 20, 1947	6.84	2,650
1916	July 16, 1916	a20.7	b23,000	1948	Oct. 17, 1947	7.70	3,180
					Nov. 2, 1947	6.42	2,400
1921	Dec. 14, 1920	5.05	2,220		Feb. 12, 1948	5.95	2,120
	Feb. 10, 1921	4.8	2,030	1949	Nov. 28, 1948	5.65	1,940
1922	Jan. 21, 1922	4.0	1,500		June 16, 1949	14.65	9,930
1923	Jan. 1, 1923	4.9	2,100		July 12, 1949	6.45	2,420
	Mar. 16, 1923	5.8	2,780		July 18, 1949	5.95	2,120
	May 29, 1923	8.20	4,690		Aug. 28, 1949	12.56	6,760
1924	Jan. 11, 1924	6.0	2,930	1950	Sept. 1, 1950	7.50	3,180
	Jan. 16, 1924	6.2	3,090		Sept. 9, 1950	8.50	3,820
1925	Dec. 8, 1924	6.0	2,930	1951	Dec. 7, 1950	7.00	2,850
1926	Jan. 18, 1926	6.1	3,010	1952	Mar. 11, 1952	6.51	2,530
	July 4, 1926	4.6	1,880		Mar. 23, 1952	7.65	3,270
	July 30, 1926	5.5	2,560	1953	Feb. 21, 1953	8.10	3,560
1928	Aug. 16, 1928	c18.74	17,800	1954	Jan. 22, 1954	7.64	3,270
1935	Jan. 9, 1935	7.07	3,260	1955	Mar. 22, 1955	3.60	805
1936	Nov. 13, 1935	5.25	2,030	1956	Apr. 16, 1956	4.56	1,320
	Jan. 6, 1936	4.96	1,890	1957	Feb. 1, 1957	5.59	2,000
	Jan. 19, 1936	7.02	3,340		Apr. 5, 1957	10.80	5,340
	Feb. 4, 1936	5.27	2,100		June 4, 1957	5.80	2,130
	Mar. 26, 1936	6.95	3,340	1958	Apr. 28, 1958	5.20	1,770
	Apr. 2, 1936	5.67	2,380	1959	Sept. 30, 1959	8.40	3,760
	Apr. 6, 1936	6.43	2,900	1960	Mar. 30, 1960	5.39	1,880
1937	Oct. 16, 1936	8.65	4,380				
	Jan. 3, 1937	5.71	2,250				
1938	Oct. 19, 1937	4.95	1,780				
1939	Jan. 30, 1939	5.97	2,460				

a From flood profile by Tennessee Valley Authority.

b Estimated by Tennessee Valley Authority.

c From floodmarks.

4515. French Broad River at Asheville, N. C.

Location.--Lat 35°36'32", long 82°34'41", on right bank at downstream side of Pearson Bridge at Asheville, Buncombe County, 2.3 miles downstream from Southern Railway station, 3.2 miles downstream from Swannanoa River, and at mile 145.8.

Drainage area.--945 sq mi; 937 sq mi at site used 1903-22.

Gage.--Nonrecording prior to Apr. 9, 1930; recording thereafter. At different datum Sept. 17, 1895, to Dec. 31, 1901. At Smith Bridge $1\frac{1}{2}$ miles upstream at datum 11.52 ft higher Mar. 19, 1903, to Sept. 30, 1922. Present datum is 1,950.28 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 17,000 cfs for period 1895-1901; defined by current-meter measurements below 10,000 cfs and extended above by logarithmic plotting for period 1903-22; defined by current-meter measurements below 43,000 cfs and extended above by logarithmic plotting for present site.

Bankfull stage.--8 ft (Tennessee Valley Authority).

Historical data.--Studies by Tennessee Valley Authority indicate that the flood of July 16, 1916, is the greatest known since at least 1791, when a flood occurred that may have been of the same magnitude.

Remarks.--Peak stages and discharges prior to 1896 are estimated by Tennessee Valley Authority at present site and datum. Only annual peaks are shown prior to 1923. Base for partial-duration series, 9,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1796	August 1796	14	-	1920	Apr. 2, 1920	7.1	19,000
1810	-	13	-	1921	Dec. 14, 1920	5.0	12,000
1845	May 1845	14	-	1922	Mar. 28, 1922	4.2	9,920
1850	August 1850	13	-	1923	Mar. 17, 1923	5.2	9,540
1852	August 1852	15	-		May 30, 1923	6.5	13,300
1875	February 1875	9	-	1924	Jan. 16, 1924	5.35	9,600
1876	June 17, 1876	18	-	1925	Dec. 9, 1924	5.3	9,210
1880	Oct. 17, 1879	9	-	1926	Jan. 18, 1926	5.65	10,300
1892	June 1892	10	-	1927	Nov. 16, 1926	5.4	9,770
1893	Sept. 13, 1893	9	-	1928	Aug. 16, 1928	13.27	42,700
1896	July 8, 1896	10.3	21,600		Sept. 3, 1928	6.0	11,500
1897	Feb. 6, 1897	7.9	12,500		Sept. 6, 1928	5.6	10,900
1898	Aug. 4, 1898	8.7	13,900	1929	Feb. 28, 1929	5.5	10,000
1899	Mar. 15, 1899	12.0	26,600		Mar. 5, 1929	5.5	10,000
1900	Feb. 13, 1900	9.0	14,900		Mar. 14, 1929	7.12	15,100
1901	May 22, 1901	12.6	29,300		Sept. 27, 1929	6.0	11,500
1902	Feb. 28, 1902	all 6	33,900	1930	Oct. 2, 1929	7.06	15,100
1903	Mar. 23, 1903	7.0	19,000		Oct. 21, 1929	6.3	12,400
1904	Mar. 7, 1904	5.6	13,800	1931	Apr. 22, 1931	4.31	7,010
1905	July 12, 1905	8.0	23,000	1932	Jan. 2, 1932	4.24	6,780
1906	Jan. 23, 1906	8.4	25,800	1933	Oct. 18, 1932	7.33	15,800
1907	Oct. 3, 1906	6.2	15,800		Dec. 28, 1932	6.18	12,100
1908	Feb. 15, 1908	6.3	16,600	1934	Mar. 4, 1934	5.97	11,500
1909	June 4, 1909	7.1	19,200	1935	Jan. 9, 1935	7.65	16,900
1910	Aug. 31, 1910	10.3	30,300	1936	Nov. 13, 1935	5.45	9,790
1911	Apr. 5, 1911	5.8	14,900		Jan. 6, 1936	5.19	9,270
1912	Mar. 15, 1912	6.1	15,900		Jan. 19, 1936	7.50	16,500
1913	Mar. 14, 1913	7.7	21,200		Feb. 4, 1936	5.33	9,530
1914	Apr. 15, 1914	4.5	10,800		Mar. 26, 1936	5.70	10,600
1915	Oct. 16, 1914	7.3	19,900		Apr. 2, 1936	5.95	11,500
1916	July 16, 1916	b23.1	110,000		Apr. 6, 1936	7.14	15,100
1917	Mar. 24, 1917	5.5	13,800				
1918	Jan. 28, 1918	5.0	12,200				
1919	Dec. 23, 1918	9.0	25,600				

a From profile by Tennessee Valley Authority, present site and datum.

b From floodmarks, present site and datum.

Peak stages and discharges of French Broad River at Asheville, N. C.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Oct. 9, 1936	5.20	9,270	1949	June 17, 1949	9.00	20,100
	Oct. 16, 1936	8.20	19,200		July 12, 1949	6.05	10,700
	Jan. 3, 1937	7.18	15,400		July 18, 1949	6.09	10,800
	Jan. 19, 1937	5.50	10,000		Aug. 28, 1949	8.55	18,500
1938	Oct. 20, 1937	6.37	12,700	1950	Nov. 1, 1949	6.07	10,800
1939	Jan. 30, 1939	5.38	9,640		Mar. 13, 1950	6.11	10,900
	Feb. 11, 1939	5.37	9,640		Sept. 1, 1950	5.64	9,460
	Feb. 15, 1939	5.32	9,370		Sept. 9, 1950	6.93	13,000
	Aug. 18, 1939	6.07	11,700	1951	Dec. 7, 1950	8.03	16,400
1940	Apr. 20, 1940	5.35	9,640		Dec. 21, 1951	5.62	9,410
	Aug. 14, 1940	11.65	31,800		Mar. 11, 1952	7.06	13,400
	Aug. 30, 1940	12.15	34,800		Mar. 23, 1952	7.79	15,600
1941	Dec. 29, 1940	4.35	7,140	1953	Feb. 21, 1953	7.49	14,700
1942	Mar. 9, 1942	6.14	11,600	1954	Jan. 23, 1954	8.07	16,500
	May 21, 1942	8.93	20,900		Feb. 6, 1955	5.14	8,220
1943	Dec. 30, 1942	8.10	18,000	1956	Apr. 16, 1956	6.00	10,400
	Jan. 19, 1943	5.73	10,500	1957	Feb. 1, 1957	6.18	10,700
1944	Mar. 29, 1944	5.25	9,110		Apr. 5, 1957	10.30	24,200
1945	Sept. 17, 1945	4.94	7,490	1958	Apr. 28, 1958	5.69	9,050
1946	Jan. 8, 1946	7.27	14,500		Dec. 28, 1958	6.23	10,300
	Feb. 10, 1946	7.63	16,000	1959	Sept. 30, 1959	6.98	12,300
	Mar. 16, 1946	5.42	9,280	1960	Feb. 5, 1960	6.22	10,300
1947	Jan. 20, 1947	7.07	13,600		Apr. 5, 1960	5.86	9,450
	Feb. 12, 1948	5.60	9,540		Aug. 13, 1960	5.84	9,410
1948	Mar. 27, 1948	5.45	9,160				
1949	Nov. 28, 1948	7.20	14,000				

4520. Sandymush Creek near Alexander, N. C.

Location.--Lat 35°43'49", long 82°40'11", 0.7 mile downstream from Turkey Creek, 1.3 miles upstream from mouth, and 3.5 miles northwest of Alexander, Buncombe County.

Drainage area.--79.5 sq mi.

Gage.--Recording. Datum of gage is 1,732.53 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 2,200 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 1,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Aug. 30, 1940	a16.7		1949	Nov. 28, 1948	6.85	2,400
1943	Dec. 29, 1942	b6.0	c1,660		June 16, 1949	8.00	3,600
					Aug. 28, 1949	6.92	2,470
1944	Feb. 18, 1944	5.7	1,420	1950	Jan. 19, 1950	5.81	1,500
	July 20, 1944	7.75	3,320		Mar. 13, 1950	5.70	1,410
1945	Feb. 17, 1945	5.5	1,280	1951	Dec. 7, 1950	5.88	1,550
1946	Jan. 7, 1946	9.2	5,060	1952	Dec. 21, 1951	5.78	1,470
	Feb. 10, 1946	9.65	5,490		Mar. 23, 1952	5.91	1,580
	Mar. 16, 1946	5.44	1,240	1953	Feb. 21, 1953	6.55	2,120
1947	Jan. 20, 1947	6.72	2,280	1954	Jan. 22, 1954	7.70	3,270
	Aug. 25, 1947	5.52	1,280				
1948	Apr. 7, 1948	5.47	1,250	1955	Mar. 22, 1955	5.70	1,410

a From floodmarks.

b Probably maximum for year.

c Annual peak only.

4530. Ivy River near Marshall, N. C.

Location.--Lat 35°46'10", long 82°37'16", on right bank 0.2 mile downstream from highway bridge, 1.9 miles upstream from mouth, and 4.0 miles southeast of Marshall, Madison County.

Drainage area.--158 sq mi.

Gage.--Recording. Datum of gage is 1,700.41 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 5,400 cfs and by slope-area measurement at 8,880 cfs.

Historical data.--Studies by Tennessee Valley Authority indicate that the flood of July 1916 (stage and discharge unknown) probably exceeded any during period of record.

Remarks.--Base for partial-duration series, 2,700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Jan. 9, 1935	7.51	2,830	1947	Jan. 20, 1947	8.45	3,820
	Mar. 25, 1935	7.61	2,750				
1936	Jan. 19, 1936	10.45	5,600	1948	Feb. 12, 1948	7.73	3,100
	Feb. 4, 1936	7.86	3,140				
	Mar. 26, 1936	7.94	3,220	1949	June 16, 1949	8.00	3,370
	Apr. 2, 1936	10.12	5,270		Sept. 19, 1949	7.36	2,750
	Apr. 6, 1936	10.25	5,400	1950	Mar. 13, 1950	7.34	2,740
	Aug. 8, 1936	10.68	5,850				
1937	Jan. 3, 1937	7.85	3,140	1951	Dec. 7, 1950	6.92	2,360
	June 2, 1937	8.11	3,320				
	Sept. 8, 1937	10.23	5,350	1952	Mar. 23, 1952	6.96	2,390
1938	Mar. 10, 1938	8.06	3,360				
	July 23, 1938	7.65	2,910	1953	Feb. 21, 1953	10.11	5,630
1939	Feb. 15, 1939	7.26	2,670				
1940	Aug. 13, 1940	10.33	5,860	1954	Jan. 22, 1954	10.30	5,860
	Aug. 30, 1940	12.67	8,880		Mar. 26, 1954	7.42	2,810
1941	July 16, 1941	8.01	3,370		July 22, 1954	7.68	3,050
				1955	Mar. 19, 1955	6.90	2,340
1942	June 13, 1942	7.78	3,170				
	Sept. 9, 1942	7.72	3,090	1956	Apr. 16, 1956	8.00	3,370
1943	Dec. 29, 1942	8.34	3,670				
				1957	Jan. 31, 1957	10.85	6,480
1944	June 17, 1944	8.87	4,290		Apr. 5, 1957	12.55	8,680
				1958	Dec. 20, 1957	8.57	3,780
1945	Feb. 17, 1945	6.96	2,430				
				1959	Dec. 28, 1958	8.27	3,450
1946	Jan. 7, 1946	11.44	7,190		Jan. 22, 1959	7.96	3,130
	Feb. 10, 1946	10.40	5,980		Sept. 30, 1959	8.00	3,170
				1960	Feb. 5, 1960	6.77	1,990

4535. French Broad River at Marshall, N. C.

Location.--Lat 35°47'10", long 82°39'39", 0.7 mile above Hayes Run and 1.5 miles southeast of Marshall, Madison County.

Drainage area.--1,332 sq mi.

Gage.--Recording. Datum of gage is 1,646.79 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements.

Historical data.--Studies by Tennessee Valley Authority indicate that the flood of July 16, 1916, was the highest since at least 1791.

Remarks.--Base for partial-duration series, 10,000 cfs.

Peak stages and discharges of French Broad River at Marshall, N. C.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1916	July 16, 1916	a22.0	b115,000	1950	Sept. 9, 1950	6.10	13,700
1928	Aug. 16, 1928	-	b45,000	1951	Dec. 7, 1950	7.25	19,000
1940	Aug. 30, 1940	a16.6	b70,000	1952	Dec. 21, 1951	5.56	11,500
1943	Dec. 29, 1942	7.59	23,600	1952	Mar. 11, 1952	6.40	15,000
	Jan. 19, 1943	5.50	12,300		Mar. 23, 1952	7.92	22,400
	Jan. 28, 1943	5.05	10,200		Feb. 21, 1953	7.98	22,800
	Mar. 21, 1943	5.35	11,900	1954	Jan. 22, 1954	8.48	23,200
	June 29, 1943	5.99	14,600		Feb. 7, 1955	5.21	9,760
1944	Feb. 18, 1944	5.08	11,000	1955	Apr. 16, 1956	6.29	13,800
	Mar. 29, 1944	5.17	11,400	1957	Jan. 31, 1957	7.98	20,800
1945	Sept. 17, 1945	4.73	8,940		Apr. 5, 1957	10.48	33,100
	Jan. 7, 1946	9.18	29,600		June 5, 1957	5.92	12,400
1946	Feb. 10, 1946	8.92	28,000	1958	Nov. 19, 1957	5.43	10,500
	Mar. 16, 1946	5.57	12,800		Nov. 25, 1957	5.85	12,100
	Jan. 20, 1947	7.63	21,400		Dec. 20, 1957	5.73	11,600
1948	Feb. 12, 1948	5.66	12,400		Feb. 27, 1958	5.44	10,600
	Mar. 27, 1948	5.30	10,900		Apr. 29, 1958	5.72	11,600
1949	Nov. 28, 1948	6.90	17,600	1959	Dec. 28, 1958	7.35	18,000
	June 17, 1949	7.87	22,400		Jan. 22, 1959	5.68	11,100
	July 14, 1949	5.57	11,700		Sept. 30, 1959	6.66	15,100
	July 19, 1949	5.60	11,800	1960	Feb. 5, 1960	6.21	13,200
	Aug. 29, 1949	7.35	19,800		Mar. 31, 1960	5.57	10,700
1950	Nov. 1, 1949	6.23	14,500		Apr. 4, 1960	5.95	12,200
	Mar. 13, 1950	6.40	15,300		Aug. 13, 1960	5.62	10,900
	Sept. 1, 1950	5.17	10,000				

a From high-water marks and flood profiles by Tennessee Valley Authority.

b Estimated by Tennessee Valley Authority; annual peak only.

4538.8. Brush Creek at Walnut, N. C.

Location.--Lat 35°50'40", long 82°44'30", at bridge 0.7 mile southwest of Walnut, Madison County, and 0.8 mile upstream from mouth.

Drainage area.--7.99 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 1,730 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 80 cfs and by slope-area measurement at 1,190 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	July 23, 1954	15.23	1,190	1957	Apr. 5, 1957	13.70	680
1955	Aug. 15, 1955	13.09	510	1958	May 7, 1958	12.86	460
				1959	Jan. 21, 1959	14.04	790
1956	Apr. 16, 1956	12.17	320	1960	-	-	<285

4540. Big Laurel Creek near Stackhouse, N. C.

Location.--Lat 35°55'11", long 82°45'42", on left bank 50 ft west of State Highway 208, 0.2 mile downstream from Big Hurricane Creek, 0.6 mile upstream from Little Hurricane Creek, 2.8 miles north of Stackhouse, Madison County, and 4.2 miles upstream from mouth.

Drainage area.--126 sq mi.

Gage.--Recording. Datum of gage is 1,595.68 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 4,500 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Mar. 12, 1935	4.35	1,940	1948	July 15, 1948	4.52	1,880
	Mar. 20, 1935	4.20	1,770		Aug. 4, 1948	4.73	2,130
	Mar. 25, 1935	7.94	7,260	1949	Nov. 28, 1948	4.77	2,170
	July 5, 1935	6.74	5,090		July 17, 1949	5.52	3,140
1936	Jan. 19, 1936	6.78	5,070	1950	Jan. 19, 1950	5.10	2,520
	Feb. 4, 1936	4.94	2,590		Feb. 7, 1950	5.47	3,020
	Mar. 24, 1936	6.40	4,480		Mar. 13, 1950	5.10	2,520
	Apr. 2, 1936	5.80	3,650		May 15, 1950	4.38	1,680
1937	Apr. 6, 1936	6.40	4,480	1951	Dec. 7, 1950	5.03	2,490
	Oct. 16, 1936	4.10	1,660		Mar. 30, 1951	4.21	1,510
	Jan. 3, 1937	5.16	2,830	1952	Apr. 28, 1952	4.50	1,810
	Jan. 19, 1937	4.30	1,870	1953	Feb. 21, 1953	5.52	3,090
1938	Aug. 23, 1937	5.30	3,010		Jan. 16, 1954	5.03	2,490
	Mar. 3, 1938	4.53	2,140		Jan. 22, 1954	6.61	4,800
	Mar. 10, 1938	4.50	2,090		Mar. 26, 1954	4.75	2,090
1939	July 23, 1938	4.51	2,090	1955	Mar. 18, 1955	4.75	2,090
	Feb. 3, 1939	3.99	1,550		Mar. 22, 1955	4.23	1,530
1940	Feb. 15, 1939	4.34	1,920	1956	Feb. 17, 1956	4.22	1,520
	Aug. 7, 1940	3.99	1,550		Mar. 16, 1956	4.52	1,830
1941	Aug. 30, 1940	6.66	4,920		Apr. 16, 1956	6.35	4,380
	July 7, 1941	3.43	987	1957	Jan. 28, 1957	4.94	2,320
1942	Mar. 9, 1942	3.68	1,230		Jan. 31, 1957	8.15	7,700
	Dec. 29, 1942	7.07	5,530		Feb. 4, 1957	4.63	2,020
1943	Feb. 18, 1944	4.82	2,370		Feb. 9, 1957	5.20	2,650
	Mar. 29, 1944	4.05	1,520	1958	Apr. 4, 1957	7.35	6,120
1944	July 15, 1945	4.14	1,620		Dec. 20, 1957	4.23	1,530
	Aug. 5, 1945	4.43	1,950		Feb. 26, 1958	4.64	1,960
1945	Jan. 7, 1946	7.23	5,870		May 7, 1958	5.05	2,460
	Feb. 10, 1946	5.90	3,690	1959	Dec. 28, 1958	4.37	1,670
1946	Jan. 20, 1947	5.52	3,140		Jan. 22, 1959	6.14	4,020
	June 28, 1947	5.65	3,320		Mar. 27, 1959	4.65	1,980
1947	Feb. 6, 1948	4.29	1,630		Apr. 19, 1959	4.41	1,710
	Feb. 12, 1948	5.29	2,830	1960	Mar. 30, 1960	4.20	1,500
	Apr. 8, 1948	4.49	1,850		July 2, 1960	4.72	2,050

TENNESSEE RIVER BASIN

4545.-French Broad River at Hot Springs, N. C.

Location.--Lat 35°53'23", long 82°49'16", at Hot Springs, Madison County, 0.3 mile upstream from bridge on U.S. Highways 25 and 70, 0.7 mile upstream from Spring Creek, 3.1 miles downstream from Big Laurel Creek, and at mile 109.3.

Drainage area.--1,567 sq mi.

Gage.--Recording. Datum of gage is 1,311.55 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 27,000 cfs and extended above on basis of slope-area measurement at 75,900 cfs.

Bankfull stage.--8 ft (Tennessee Valley Authority).

Historical data.--Studies by Tennessee Valley Authority indicate that the greatest known flood since at least 1791 is that of July 16, 1916.

Remarks.--Stages listed herein prior to 1935 are estimated by Tennessee Valley Authority unless otherwise noted. Base for partial-duration series, 11,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1796	August 1796	12	-	1937	Jan. 19, 1937	5.78	17,600
1810	-	10	-		Sept. 8, 1937	5.26	12,200
1845	May 1845	12	-	1938	Oct. 20, 1937	5.41	13,200
1850	August 1850	11	-		Mar. 10, 1938	5.52	13,900
1852	August 1852	14	-		July 23, 1938	6.07	18,100
1867	March 1867	18	-	1939	Feb. 11, 1939	5.13	11,600
1876	June 17, 1876	17	-		Feb. 15, 1939	5.73	15,600
1892	June 1892	8	-	1940	Apr. 20, 1940	5.05	11,600
1893	Sept. 13, 1893	8	-		Aug. 14, 1940	9.07	37,100
1899	Mar. 15, 19, 1899	8	-		Aug. 30, 1940	16.1	75,900
1901	May 22, 1901	8	-	1941	July 16, 1941	5.28	12,600
1902	Feb. 28, 1902	19	-	1942	Mar. 9, 1942	5.89	17,300
1906	Jan. 23, 1906	8	-		May 21, 1942	6.74	22,900
1910	Aug. 31, 1910	9	-	1943	Dec. 29, 1942	7.88	31,000
1916	July 16, 1916	a22	b110,000		Jan. 19, 1943	5.34	13,600
1928	Aug. 16, 1928	12	-		Jan. 28, 1943	5.41	13,900
1935	Jan. 9, 1935	7.25	28,800		Mar. 21, 1943	5.43	14,200
	Mar. 13, 1935	5.65	16,900		June 29, 1943	5.48	14,600
	Mar. 26, 1935	5.90	18,800	1944	Feb. 18, 1944	5.47	14,200
	Apr. 22, 1935	4.91	11,500		Mar. 29, 1944	5.34	13,500
1936	Nov. 13, 1935	5.10	12,700	1945	Feb. 17, 1945	4.93	9,850
	Jan. 3, 1936	4.94	11,600	1946	Jan. 7, 1946	10.00	43,500
	Jan. 6, 1936	5.14	13,000		Feb. 10, 1946	9.20	38,900
	Jan. 19, 1936	8.75	38,600		Mar. 16, 1946	5.49	13,200
	Feb. 4, 1936	5.75	17,200	1947	Jan. 20, 1947	7.50	27,200
	Mar. 26, 1936	7.25	27,400		June 28, 1947	5.16	11,700
	Apr. 2, 1936	7.00	26,000	1948	Feb. 12, 1948	5.97	16,800
	Apr. 6, 1936	7.90	32,300		Aug. 4, 1948	5.10	11,300
	Sept. 30, 1936	4.85	11,000	1949	Nov. 28, 1948	6.42	20,500
1937	Oct. 9, 1936	5.2	13,400		Apr. 13, 1949	4.98	11,000
	Oct. 16, 1936	7.50	29,500		May 11, 1949	5.17	12,200
	Jan. 3, 1937	7.52	29,500		June 17, 1949	6.80	23,000
					July 14, 1949	5.32	13,200
					July 19, 1949	5.34	13,500
					Aug. 29, 1949	6.46	20,700

a From flood profile by Tennessee Valley Authority.

b Estimated by Tennessee Valley Authority.

4550. French Broad River near Newport, Tenn.

Location.--Lat 35°58'54", long 83°09'40", on left bank 15 ft downstream from bridge on State Highway 35 at Oldtown, 1 mile northeast of Newport city limits, Cocke County, 3.7 miles upstream from Pigeon River, and at mile 77.5.

Drainage area.--1,858 sq mi.

Gage.--Nonrecording prior to Sept. 14, 1926; recording thereafter. September 1900 to November 1901, at datum approximately 1.3 ft higher; November 1902 to December 1905, August to December 1907, at datum approximately 0.9 ft higher. Datum of gage is 1,011.61 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Stages given herein corrected to present datum.

Stage-discharge relation.--Defined by current-meter measurements below 76,000 cfs and extended above.

Bankfull stage.--8 ft.

Historical data.--Flood of Mar. 7, 1867, is highest known, from Tennessee Valley Authority.

Remarks.--Only annual peaks are shown prior to Sept. 14, 1926. Base for partial-duration series, 16,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1867	Mar. 7, 1867	a24	110,000	1936	Jan. 19, 1936	13.38	41,200
					Feb. 4, 1936	9.10	22,700
1901	May 21, 1901	13.3	65,000		Mar. 26, 1936	11.15	31,200
1902	Feb. 28, 1902	a23	101,000		Apr. 2, 1936	10.84	29,500
1903	Mar. 23, 1903	13.3	64,800		Apr. 6, 1936	12.30	36,100
1904	Mar. 8, 1904	5.4	b13,600				
1905	July 12, 1905	10.2	b44,600	1937	Oct. 16, 1936	10.78	29,500
					Jan. 3, 1937	11.43	32,100
1916	July 17, 1916	a22.5	97,000		Jan. 20, 1937	7.71	17,200
1921	Feb. 10, 1921	9.4	26,600	1938	Mar. 10, 1938	7.60	17,200
1922	Jan. 21, Feb. 15, 1922	6.91	17,000		July 23, 1938	9.18	23,000
1923	Mar. 17, 1923	7.21	18,200	1939	Feb. 15, 1939	8.48	20,400
1924	Jan. 17, 1924	5.9	14,500				
1925	Dec. 9, 1924	6.4	15,200	1940	Aug. 14, 1940	12.60	38,000
					Aug. 30, 1940	19.25	76,300
1926	Jan. 19, 1926	5.3	11,900				
				1941	July 17, 1941	6.37	12,600
1927	Feb. 23, 1927	7.52	19,300				
	Mar. 9, 1927	6.46	17,500	1942	Mar. 9, 1942	7.91	17,900
					May 21, 1942	9.38	23,600
1928	May 8, 1928	7.16	19,100				
	June 30, 1928	9.40	28,000	1943	Dec. 30, 1942	12.75	39,000
	Aug. 16, 1928	13.45	44,400				
	Sept. 3, 1928	7.43	19,900	1944	Feb. 19, 1944	7.95	18,200
	Sept. 6, 1928	7.19	19,100		Mar. 29, 1944	7.53	16,400
1929	Feb. 28, 1929	7.40	19,900	1945	Feb. 17, 1945	6.97	14,700
	Mar. 5, 1929	8.3	23,600				
	Mar. 14, 1929	8.16	23,200	1946	Jan. 8, 1946	15.39	53,100
	Mar. 23, 1929	6.92	17,900		Feb. 10, 1946	14.34	46,900
1930	Oct. 2, 1929	8.79	25,600	1947	Jan. 20, 1947	12.10	35,500
	Oct. 22, 1929	6.90	17,900		June 28, 1947	9.33	22,200
1931	Sept. 3, 1931	6.80	17,500	1948	Feb. 13, 1948	9.07	21,100
1932	Jan. 30, 1932	6.65	16,700	1949	Nov. 29, 1948	9.40	22,800
					June 17, 1949	10.30	26,600
1933	Oct. 18, 1932	7.18	18,200		July 17, 1949	8.08	18,500
	Dec. 28, 1932	9.12	22,700		Aug. 29, 1949	9.35	22,600
	Feb. 15, 1933	8.00	19,100				
				1950	Nov. 1, 1949	8.37	19,400
1934	Mar. 3, 1934	8.65	20,900		Jan. 19, 1950	7.91	17,900
					Feb. 7, 1950	8.48	19,700
1935	Jan. 9, 1935	9.48	24,200		Mar. 13, 1950	9.77	24,200
	Mar. 13, 1935	7.86	18,700				
	Mar. 26, 1935	9.14	22,700	1951	Dec. 7, 1950	9.76	24,100

a From reports by Tennessee Valley Authority.

b Maximum daily discharge.

Peak stages and discharges of French Broad River near Newport, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Mar. 11, 1952	8.08	18,500	1957	Feb. 1, 1957	14.35	46,500
	Mar. 23, 1952	10.23	26,300		Apr. 5, 1957	15.75	54,900
1953	Feb. 21, 1953	11.93	33,400	1958	Nov. 25, 1957	7.92	16,900
1954	Jan. 22, 1954	14.53	47,600	1959	Dec. 29, 1958	9.41	22,300
	Mar. 26, 1954	7.78	16,400		Jan. 22, 1959	8.90	20,300
1955	Mar. 22, 1955	6.87	13,700		Sept. 30, 1959	8.33	18,200
1956	Apr. 16, 1956	8.25	17,900	1960	Feb. 6, 1960	7.36	15,100

4555. West Fork Pigeon River above Lake Logan, near Hazelwood, N. C.

Location--Lat 35°23'46", long 82°56'17", on right bank at upstream side of county bridge, 600 ft upstream from Big Creek, 1.1 miles upstream from Lake Logan, and 6.7 miles southeast of Hazelwood, Haywood County.

Drainage area--27.6 sq mi.

Gage--Recording. Datum of gage is 2,976.00 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation--Defined by current-meter measurements below 2,000 cfs and extended above by logarithmic plotting.

Remarks--Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Dec. 29, 1954	4.22	1,610	1958	Nov. 19, 1957	4.65	2,010
	Feb. 6, 1955	4.51	1,870		Dec. 20, 1957	6.19	3,920
	Mar. 22, 1955	4.88	2,250		Feb. 27, 1958	4.45	1,820
	May 22, 1955	4.25	1,640		Apr. 27, 1958	4.85	2,220
1956	Apr. 15, 1956	6.62	4,550	1959	Jan. 21, 1959	6.95	5,050
1957	Oct. 22, 1956	4.31	1,690		May 21, 1959	5.46	2,930
	Jan. 31, 1957	5.56	3,060		Sept. 30, 1959	4.31	1,650
	Feb. 26, 1957	4.19	1,580	1960	Oct. 6, 1959	5.25	2,670
	Apr. 1, 1957	4.81	2,170		Oct. 9, 1959	6.16	3,870
	Apr. 4, 1957	5.92	3,540		Feb. 5, 1960	4.46	1,800
	June 5, 1957	5.05	2,440		Mar. 30, 1960	4.24	1,590
	June 28, 1957	4.93	2,300		Apr. 3, 1960	5.36	2,800
1958	Nov. 14, 1957	5.05	2,440		Aug. 12, 1960	4.93	2,290

4560. West Fork Pigeon River below Lake Logan, near Waynesville, N. C.

Location--Lat 35°26'38", long 82°54'46", on right bank at downstream side of county bridge at Riverside Church, 2.6 miles downstream from Little East Fork Pigeon River, 3.4 miles downstream from Lake Logan, 3.8 miles upstream from confluence with East Fork Pigeon River, and 5.3 miles southeast of Waynesville, Haywood County.

Drainage area--55.3 sq mi.

Gage--Recording. Datum of gage is 2,725.08 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation--Defined by current-meter measurements below 3,300 cfs and extended above by logarithmic plotting.

Remarks--Flow regulated by Lake Logan (capacity, 1,050 cfs-days). Only annual peaks are shown.

Peak stages and discharges of West Fork Pigeon River below Lake Logan, near
Waynesville, N. C.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Dec. 29, 1954	5.40	1,810	1958	Dec. 20, 1957	7.09	4,150
1956	Apr. 15, 1956	7.80	5,180	1959	Jan. 21, 1959	7.74	5,090
1957	Jan. 31, 1957	7.07	4,120	1960	Oct. 9, 1959	6.64	3,540

4565. East Fork Pigeon River near Canton, N. C.

Location.--Lat 35°27'42", long 82°52'12", on right bank 800 ft upstream from U.S. Highway 276, 0.3 mile downstream from Dix Creek, 1.7 miles upstream from confluence with West Fork Pigeon River, and 5.2 miles southwest of Canton, Haywood County.

Drainage area.--51.5 sq mi.

Gage.--Recording. Datum of gage is 2,674.34 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 3,600 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 1,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Dec. 29, 1954	4.07	1,250	1958	Nov. 19, 1957	5.17	2,470
	Feb. 6, 1955	4.90	1,970		Dec. 20, 1957	6.09	3,690
	Mar. 22, 1955	4.27	1,410		Feb. 27, 1958	3.87	1,230
1956	Apr. 15, 1956	6.10	3,640	1959	Jan. 21, 1959	6.88	4,920
1957	Oct. 22, 1956	4.92	2,080		May 21, 1959	4.84	2,100
	Jan. 31, 1957	5.21	2,400		Sept. 30, 1959	5.00	2,280
	Feb. 26, 1957	4.60	1,730	1960	Oct. 7, 1959	3.98	1,310
	Apr. 2, 1957	4.95	2,100		Oct. 9, 1959	5.88	3,390
	Apr. 4, 1957	7.78	6,640		Feb. 5, 1960	4.45	1,720
	June 28, 1957	4.45	1,640		Mar. 30, 1960	4.72	1,980
1958	Nov. 14, 1957	5.14	2,440		Apr. 3, 1960	5.79	3,270

4570. Pigeon River at Canton, N. C.

Location.--Lat 35°31'30", long 82°50'28", on left bank 100 ft upstream from small tributary, 0.5 mile upstream from U.S. Highways 19 and 23 at Canton, Haywood County, and at mile 64.1. Records include flow of small tributary.

Drainage area.--133 sq mi, includes that of small tributary below gage; 134 sq mi at site used May 25, 1907, to June 30, 1909.

Gage.--Nonrecording prior to Jan. 3, 1929; recording thereafter. At site 0.4 mile downstream at different datum prior to July 1, 1909. Datum of gage is 2,572.22 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 500 cfs and extended above by logarithmic plotting at site 0.4 mile downstream; defined by current-meter measurements at present site.

Bankfull stage.--12 ft (Tennessee Valley Authority).

Historical data.--Studies by Tennessee Valley Authority indicate that the greatest flood known, probably since at least 1810, is that of Aug. 30, 1940, and that the floods of 1810 and 1876 are the second and third highest respectively.

Remarks.--Some peaks probably affected by regulation by Lake Logan (capacity, 1,050 cfs-days). Peak stages and discharges prior to 1929, except those for 1908-9, are estimated by Tennessee Valley Authority at present site and datum. Only annual peaks are shown prior to 1929. Base for partial-duration series, 4,000 cfs.

TENNESSEE RIVER BASIN

Peak stages and discharges of Pigeon River at Canton, N. C.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1810	-	a20	29,800	1942	Feb. 17, 1942	6.98	5,080
1876	June 15, 1876	18.3	25,700		Mar. 9, 1942	6.75	4,820
1893	Sept. 12, 1893	17.8	24,700		May 20, 1942	7.00	5,080
1901	May 21, 1901	12.0	12,500	1943	Dec. 29, 1942	8.80	7,630
1902	Feb. 28, 1902	12.5	13,400		Jan. 18, 1943	6.21	4,060
1908	Feb. 15, 1908	10.0	6,600	1944	Feb. 18, 1944	5.25	2,950
1909	June 4, 1909	b7.5	3,430	1945	Apr. 17, 1945	8.83	7,630
1910	Aug. 31, 1910	12.0	12,500	1946	Jan. 7, 1946	6.83	4,820
1919	Oct. 25, 1918	13.0	14,300		Feb. 10, 1946	7.58	5,920
1928	Aug. 16, 1928	16.4	21,500		Mar. 14, 1946	6.87	4,950
1929	Jan. 5, 1929	6.60	4,560	1947	Jan. 20, 1947	8.90	7,780
	Mar. 14, 1929	8.60	7,450		Apr. 11, 1947	6.26	4,180
	Sept. 26, 1929	8.90	7,900	1948	Oct. 17, 1947	6.80	4,820
1930	Oct. 2, 1929	6.60	4,560		July 11, 1948	7.15	5,290
	Oct. 21, 1929	7.40	5,660		Sept. 6, 1948	6.94	5,000
1931	Apr. 22, 1931	7.73	6,100	1949	Nov. 6, 1948	7.33	5,540
1932	May 1, 1932	7.63	5,950		Nov. 19, 1948	6.65	4,620
1933	Oct. 17, 1932	9.30	8,530		Nov. 28, 1948	7.15	5,290
	Dec. 28, 1932	7.05	5,100		June 16, 1949	15.44	19,500
	Apr. 16, 1933	8.40	7,150		Aug. 28, 1949	10.20	9,790
1934	Feb. 26, 1934	6.47	4,430	1950	Sept. 1, 1950	9.26	8,320
	Mar. 3, 1934	7.10	5,240		Sept. 8, 1950	7.12	5,250
1935	Jan. 9, 1935	8.95	8,050	1951	Oct. 20, 1950	9.15	8,160
1936	Jan. 19, 1936	7.70	6,100		Dec. 7, 1950	9.82	9,180
	Feb. 4, 1936	8.08	6,700	1952	Dec. 21, 1951	7.82	6,230
	Apr. 2, 1936	6.50	4,430		Mar. 11, 1952	8.68	7,450
	Apr. 6, 1936	6.90	4,960		Mar. 23, 1952	8.47	7,140
	Sept. 30, 1936	7.21	5,380	1953	Feb. 21, 1953	8.62	7,360
1937	Oct. 16, 1936	9.01	8,050	1954	Jan. 22, 1954	7.16	5,300
	Jan. 3, 1937	7.31	5,520	1955	Feb. 6, 1955	6.07	3,900
1938	Oct. 19, 1937	8.03	6,550	1956	Apr. 16, 1956	9.10	7,300
1939	Nov. 5, 1938	7.64	5,950	1957	Jan. 31, 1957	8.62	6,600
	Jan. 30, 1939	9.45	8,690		Apr. 4, 1957	10.65	9,940
	Feb. 3, 1939	7.79	6,250	1958	Nov. 19, 1957	7.00	4,610
	Feb. 15, 1939	7.17	5,380		Dec. 20, 1957	9.05	7,220
	Aug. 18, 1939	7.77	6,250	1959	Jan. 21, 1959	10.21	9,150
1940	Apr. 19, 1940	10.50	10,300		May 21, 1959	6.72	4,300
	Aug. 13, 1940	18.00	25,100	1960	Oct. 9, 1959	8.26	6,110
	Aug. 30, 1940	20.75	31,600		Apr. 3, 1960	7.01	4,620
1941	Dec. 28, 1940	5.20	2,950				

a About.

b Probably maximum for year.

4575. Allen Creek near Hazelwood, N. C.

Location.--Lat 35°25'49", long 83°00'33", on left bank 180 ft downstream from Rocky Branch, 3.0 miles upstream from mouth, and 3.3 miles south of Hazelwood, Haywood County.

Drainage area.--14.4 sq mi.

Gage.--Recording. Datum of gage is 3,047.83 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 500 cfs and extended above by logarithmic plotting.

Historical data.--Maximum stage known, 7.0 ft Aug. 30, 1940, from information by local residents.

Remarks.--Base for partial-duration series, 400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Oct. 31, 1949	2.70	455	1955	Mar. 22, 1955	2.86	576
	Jan. 19, 1950	2.61	419	1956	Apr. 15, 1956	2.86	576
	Mar. 13, 1950	2.75	478				
1951	Dec. 7, 1950	2.53	400	1957	Jan. 23, 1957	2.55	405
1952	Dec. 20, 1951	3.37	909		Jan. 31, 1957	3.90	1,320
	Mar. 22, 1952	2.89	584		Apr. 4, 1957	2.95	630
					June 5, 1957	2.76	516
1953	Feb. 21, 1953	3.43	951	1958	Dec. 20, 1957	2.81	546
1954	Jan. 16, 1954	2.83	558	1959	Jan. 21, 1959	4.07	1,470
	Jan. 22, 1954	2.86	576	1960	Oct. 9, 1959	2.80	540
1955	Feb. 6, 1955	2.74	507				

4585. Pigeon River near Crabtree, N. C.

Location.--Lat 35°34'38", long 82°57'07", at bridge on State Highway 279, 0.4 mile upstream from Big Branch and 1.9 miles south of Crabtree, Haywood County.

Drainage area.--243 sq mi.

Gage.--Nonrecording.

Stage-discharge relation.--Defined by current-meter measurements below 4,700 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 4,300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	Jan. 21, 1922	7.2	6,250	1927	Dec. 28, 1926	6.5	5,130
	Mar. 2, 1922	6.0	4,480	1928	Nov. 17, 1927	6.2	4,740
	Mar. 27, 1922	5.9	4,350		Aug. 16, 1928	18.0	23,000
1923	Dec. 17, 1922	7.0	6,220		Sept. 3, 1928	5.9	4,350
					Sept. 5, 1928	6.1	4,610
1924	Jan. 11, 1924	9.0	8,670	1929	Feb. 28, 1929	6.7	5,400
	Jan. 16, 1924	6.4	5,000		Mar. 5, 1929	7.1	5,950
	July 6, 1924	8.5	7,940		Mar. 14, 1929	7.4	6,370
1925	Dec. 8, 1924	6.5	5,170		Mar. 23, 1929	6.6	5,260
1926	Jan. 18, 1926	6.9	5,400	1930	Oct. 2, 1929	6.6	5,260

4590. Jonathan Creek near Cove Creek, N. C.

Location.--Lat 35°37'22", long 83°00'26", on left bank 1,500 ft downstream from ford, 0.7 mile upstream from mouth, and 2 miles downstream from Cove Creek and village of Cove Creek, Haywood County.

Drainage area.--65.3 sq mi.

Gage.--Recording. Datum of gage is 2,383.89 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 2,270 cfs and extended above by logarithmic plotting.

Historical data.--Studies by Tennessee Valley Authority indicate that the flood of June 1876 (stage and discharge unknown) probably exceeded any flood during period of record.

Remarks.--Base for partial-duration series, 1,100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Apr. 4, 1931	4.43	1,160	1949	Nov. 6, 1948	4.82	1,350
1932	Jan. 30, 1932	4.72	1,300		Nov. 28, 1948	5.78	1,970
1933	Dec. 28, 1932	5.64	1,930		Jan. 5, 1949	5.02	1,470
	Feb. 7, 1933	4.68	1,300		June 16, 1949	5.24	1,610
1934	Feb. 26, 1934	4.36	1,090	1950	Oct. 30, 1949	4.78	1,330
	Mar. 3, 1934	5.10	1,600		Jan. 19, 1950	5.15	1,550
					Mar. 13, 1950	5.15	1,550
1935	Mar. 12, 1935	4.27	1,050	1951	Dec. 7, 1950	4.65	1,250
1936	Jan. 19, 1936	6.20	2,270		July 28, 1951	4.45	1,130
	Feb. 4, 1936	5.30	1,640		Sept. 1, 1951	4.99	1,450
	Mar. 26, 1936	4.66	1,260	1952	Dec. 21, 1951	5.63	1,860
	Apr. 2, 1936	4.55	1,200		Jan. 10, 1952	4.47	1,140
	Apr. 6, 1936	5.45	1,710		Mar. 11, 1952	4.60	1,220
1937	Oct. 9, 1936	4.51	1,180		Mar. 23, 1952	5.53	1,790
	Jan. 3, 1937	5.94	2,050	1953	Feb. 21, 1953	6.90	2,750
1938	Mar. 10, 1938	4.43	1,150	1954	Jan. 16, 1954	4.80	1,340
1939	Jan. 30, 1939	4.88	1,400		Jan. 22, 1954	6.03	2,140
	Feb. 3, 1939	6.02	2,120	1955	Feb. 6, 1955	5.29	1,640
	Feb. 15, 1939	4.97	1,430		Mar. 22, 1955	5.48	1,760
	Mar. 6, 1939	4.41	1,100		July 9, 1955	4.44	1,120
1940	Aug. 13, 1940	6.08	2,190	1956	Apr. 15, 1956	5.73	1,930
	Aug. 30, 1940	7.51	3,200		June 30, 1956	5.04	1,480
1941	July 16, 1941	3.92	830	1957	Jan. 23, 1957	4.62	1,230
1942	Feb. 16, 1942	4.77	1,310		Jan. 31, 1957	7.33	3,070
1943	Dec. 29, 1942	5.42	1,710		Feb. 5, 1957	4.47	1,100
	Feb. 6, 1943	4.65	1,250		Apr. 5, 1957	5.52	1,780
1944	Feb. 18, 1944	5.18	1,580		Apr. 8, 1957	4.66	1,220
	Mar. 19, 1944	4.46	1,130		Apr. 30, 1957	6.38	2,390
1945	Feb. 17, 1945	4.37	1,070		May 24, 1957	4.49	1,110
1946	Jan. 7, 1946	5.80	1,980	1958	Oct. 24, 1957	4.47	1,100
	Feb. 10, 1946	6.75	2,680		Nov. 19, 1957	5.07	1,480
	Mar. 8, 1946	4.55	1,190		Dec. 20, 1957	4.58	1,170
1947	Jan. 18, 1947	4.45	1,130		May 11, 1958	5.34	1,660
	Jan. 20, 1947	6.96	2,820	1959	Dec. 28, 1958	4.62	1,190
1948	Feb. 14, 1948	4.90	1,400		Jan. 21, 1959	7.51	3,200
					July 25, 1959	4.57	1,160
				1960	Aug. 12, 1960	4.48	1,110

4595. Pigeon River near Hepco, N. C.

Location.--Lat 35°38'07", long 82°59'22", on left bank 0.8 mile downstream from Jonathan Creek, 2.0 miles south of Hepco, Haywood County, 2.4 miles upstream from Fines Creek, and at mile 45.1.

Drainage area.--350 sq mi.

Gage.--Recording. Datum of gage is 2,335.95 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 12,000 cfs and by slope-area measurements at 29,700 cfs and 32,800 cfs.

Remarks.--Some peaks may be affected by regulation by Lake Junaluska on Richland Creek and by Lake Logan on West Fork Pigeon River (combined capacity, about 2,200 cfs-days). Base for partial-duration series, 6,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1876	June 1876	a18	a42,000	1940	Aug. 13, 1940	14.94	29,500
1902	February 1902	a18	a42,000		Aug. 30, 1940	15.82	32,700
1928	Nov. 17, 1927	7.52	7,520	1941	Aug. 4, 1941	5.42	3,660
	Mar. 30, 1928	7.17	6,880	1942	Feb. 17, 1942	7.30	7,090
	June 30, 1928	8.80	10,700		Mar. 9, 1942	7.00	6,470
	Aug. 16, 1928	12.63	21,900		May 20, 1942	6.78	6,070
	Sept. 5, 1928	7.06	6,670	1943	Dec. 29, 1942	9.22	11,800
1929	Feb. 28, 1929	7.35	7,300		Jan. 19, 1943	6.90	6,270
	Mar. 5, 1929	7.85	8,200	1944	Feb. 18, 1944	6.44	5,320
	Mar. 14, 1929	8.50	9,950	1945	Apr. 17, 1945	7.66	7,510
	Sept. 26, 1929	8.10	8,930	1946	Jan. 7, 1946	7.50	7,130
1930	Oct. 2, 1929	7.07	6,670		Feb. 10, 1946	10.20	13,600
	Oct. 21, 1929	7.00	6,470	1947	Jan. 20, 1947	9.75	12,400
1931	Apr. 4, 1931	6.95	6,470	1948	Feb. 14, 1948	6.86	5,940
	Apr. 22, 1931	7.70	7,970	1949	Nov. 28, 1948	8.70	9,790
1932	May 1, 1932	7.95	8,680		June 16, 1949	12.45	21,000
	Aug. 5, 1932	7.84	8,200		Aug. 28, 1949	8.70	9,790
1933	Oct. 17, 1932	9.20	11,800	1950	Mar. 13, 1950	7.55	7,260
	Dec. 28, 1932	9.85	13,800		Sept. 1, 1950	7.45	7,060
	Apr. 16, 1933	8.40	9,690	1951	Oct. 20, 1950	7.90	7,990
1934	Feb. 26, 1934	8.05	8,680		Dec. 7, 1950	9.02	10,600
	Mar. 3, 1934	9.88	13,800	1952	Dec. 21, 1951	8.42	9,140
1935	Jan. 9, 1935	9.00	11,300		Mar. 11, 1952	7.78	7,740
	Mar. 12, 1935	7.45	7,300		Mar. 23, 1952	9.10	10,800
1936	Nov. 13, 1935	7.27	7,090	1953	Feb. 21, 1953	9.55	12,000
	Jan. 2, 1936	7.58	7,300	1954	Jan. 22, 1954	8.55	9,440
	Jan. 6, 1936	7.03	6,470	1955	Feb. 6, 1955	7.25	6,660
	Jan. 19, 1936	9.72	13,200	1956	Apr. 16, 1956	9.62	12,200
	Feb. 4, 1936	9.08	11,500	1957	Jan. 31, 1957	10.48	14,700
	Mar. 26, 1936	7.66	7,970		Apr. 5, 1957	11.10	16,600
	Apr. 6, 1936	9.58	12,400	1958	Nov. 19, 1957	7.11	6,400
	Sept. 30, 1936	7.07	6,670		Dec. 20, 1957	8.36	9,000
1937	Oct. 16, 1936	9.22	11,600	1959	Jan. 22, 1959	10.27	14,100
	Jan. 3, 1937	8.95	11,300	1960	Oct. 9, 1959	6.92	6,040

a About; stage is from flood profiles by Tennessee Valley Authority, and is the maximum known.

TENNESSEE RIVER BASIN

4600. Cataloochee Creek near Cataloochee, N. C.

Location.--Lat 35°40'02", long 83°04'23", at bridge on State Highway 284, 500 ft upstream from Little Cataloochee Creek and 2 miles north of Cataloochee, Haywood County.

Drainage area.--49.2 sq mi.

Gage.--Recording. Datum of gage is 2,457.48 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,500 cfs and extended above by logarithmic plotting.

Historical data.--Studies by Tennessee Valley Authority indicate that the flood of June 1876 (stage and discharge unknown) probably exceeded any flood during period of record.

Remarks.--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Mar. 12, 1935	5.33	1,440	1945	Feb. 17, 1945	5.32	1,520
1936	Jan. 19, 1936	6.64	2,700	1946	Jan. 7, 1946	6.85	3,170
	Feb. 4, 1936	5.93	2,080		Feb. 10, 1946	6.30	2,460
	Mar. 26, 1936	5.65	1,810	1947	Jan. 15, 1947	4.80	1,140
	Apr. 2, 1936	4.75	1,100		Jan. 20, 1947	6.70	2,960
	Apr. 6, 1936	5.63	1,810				
1937	Jan. 3, 1937	6.08	2,220	1948	Feb. 14, 1948	5.15	1,400
1938	Mar. 10, 1938	4.64	1,040	1949	Nov. 28, 1948	5.51	1,690
1939	Feb. 3, 1939	5.77	1,900		Jan. 5, 1949	5.38	1,580
	Mar. 6, 1939	4.90	1,210		June 16, 1949	4.61	1,020
					July 20, 1949	4.81	1,150
1940	Aug. 13, 1940	5.12	1,360	1950	Oct. 30, 1949	4.85	1,180
	Aug. 30, 1940	7.01	3,390		Jan. 19, 1950	5.20	1,440
1941	July 16, 1941	3.62	457		Mar. 13, 1950	5.45	1,640
				1951	Dec. 7, 1950	4.73	1,090
1942	Feb. 16, 1942	4.77	1,120				
1943	Dec. 29, 1942	5.24	1,480	1952	Dec. 15, 1951	4.95	1,250
	Feb. 6, 1943	4.76	1,140		Dec. 21, 1951	6.00	2,140
					Mar. 11, 1952	4.60	1,010
1944	Feb. 17, 1944	6.46	2,640		Mar. 23, 1952	5.20	1,440

4605. Pigeon River near Mount Sterling, N. C.

Location.--Lat 35°43'25", long 83°01'42", 600 ft upstream from Hurricane Creek and 5 miles southeast of Mount Sterling, Haywood County.

Drainage area.--460 sq mi.

Gage.--Recording. Datum of gage is 1,879.5 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 2,800 cfs and extended by logarithmic plotting.

Remarks.--Base for partial-duration series, 8,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1925	Dec. 8, 1924	7.83	8,820	1928	June 30, 1928	8.00	9,300
1926	Jan. 18, 1926	7.86	9,060	1929	Aug. 16, 1928	11.85	21,500
					Mar. 5, 1929	8.14	9,640
1927	Nov. 15, 1926	7.55	8,350		Mar. 14, 1929	7.77	8,750

4610. Pigeon River at Hartford, Tenn.

Location.--Lat 35°48'52", long 83°08'42", 600 ft downstream from highway bridge at Hartford, Cocke County, and 4.5 miles downstream from Big Creek and North Carolina-Tennessee State line.

Drainage area.--547 sq mi.

Gage.--Nonrecording prior to July 17, 1928; recording thereafter. At site 600 ft upstream prior to July 17, 1928. Datum of gage is 1,245.74 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 30,200 cfs and extended above.

Bankfull stage.--Not subject to overflow except at extremely high stages.

Historical data.--The flood of February 1902 was about 4.7 ft higher than the flood of Aug. 30, 1940.

Remarks.--Peak flow partly regulated since 1930 by Lake Junaluska, Lake Logan, and Lake Walters. Only annual peaks are shown prior to 1929. Base for partial-duration series, 5,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Jan. 18, 1926	8.6	12,800	1937	Oct. 16, 1936	8.44	13,900
1927	Feb. 23, 1927	7.2	8,150		Jan. 3, 1937	8.99	17,400
1928	Aug. 16, 1928	10.2	23,100		Jan. 19, 1937	6.26	7,190
1929	Feb. 28, 1929	7.22	10,100	1938	Oct. 19, 1937	6.86	8,960
	Mar. 5, 1929	8.03	13,100		July 24, 1938	6.59	8,010
	Mar. 14, 1929	7.23	10,100	1939	Feb. 5, 1939	7.55	11,300
	Mar. 23, 1929	6.15	6,940		Feb. 11, 1939	6.45	7,660
	May 7, 1929	5.72	5,960		Feb. 15, 1939	8.05	13,100
1930	Oct. 2, 1929	5.78	6,040		Mar. 6, 1939	7.12	9,730
	May 19, 1930	6.63	7,810	1940	Aug. 13, 1940	12.10	34,100
1931	Apr. 4, 1931	7.24	10,000		Aug. 30, 1940	12.79	38,600
	Apr. 22, 1931	6.90	8,960	1941	July 17, 1941	4.89	4,220
1932	Jan. 13, 1932	5.55	5,600	1942	Feb. 17, 1942	6.90	8,500
	Jan. 30, 1932	8.14	13,500		May 22, 1942	5.70	5,780
	Feb. 12, 1932	7.85	12,500	1943	Dec. 29, 1942	9.34	18,400
	Mar. 31, 1932	6.34	7,390		Jan. 28, 1943	7.60	11,500
	May 1, 1932	7.04	9,440		Feb. 5, 1943	6.25	7,180
1933	Oct. 17, 1932	8.03	13,200		Mar. 21, 1943	5.80	6,000
	Dec. 14, 1932	7.00	9,300	1944	Feb. 18, 1944	6.89	9,120
	Dec. 28, 1932	9.06	17,900		Feb. 27, 1944	5.83	6,070
	Feb. 7, 1933	7.76	12,100		Mar. 20, 1944	6.54	8,020
	Feb. 15, 1933	7.27	10,300		Mar. 29, 1944	6.15	6,900
	May 10, 1933	6.90	8,960	1945	Feb. 17, 1945	5.41	5,160
1934	Mar. 3, 1934	8.24	13,900	1946	Jan. 7, 1946	10.75	26,200
1935	Mar. 12, 1935	5.02	4,470		Feb. 10, 1946	10.50	24,500
1936	Jan. 8, 1936	6.43	7,600	1947	Jan. 20, 1947	10.67	25,500
	Jan. 19, 1936	10.68	25,500	1948	Nov. 3, 1947	5.62	5,600
	Feb. 4, 1936	8.88	16,900		Feb. 12, 1948	7.35	10,600
	Mar. 26, 1936	9.57	20,000				
	Apr. 2, 1936	8.14	13,700				
	Apr. 6, 1936	10.07	22,400				

TENNESSEE RIVER BASIN

4615. Pigeon River at Newport, Tenn.
(Published as "near Newport" 1945-46)

Location--Lat 35°57'36", long 83°10'26", 100 ft upstream from bridge on U.S. Highway 70 at Newport, Cocke County, 0.6 mile downstream from Morell Branch, and at mile 6.8.

Drainage area--666 sq mi.

Gage--Nonrecording prior to May 1945; recording thereafter. At site 4.8 miles downstream at datum 37.85 ft lower May 1945 to July 1946. Datum of gage is 1,040.76 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Stages given herein corrected to present datum.

Stage-discharge relation--Defined by current-meter measurements below 20,000 cfs and extended on basis of logarithmic plotting.

Bankfull stage--6 ft (from Tennessee Valley Authority).

Remarks--Records prior to 1901, 1902, and 1930 to 1948 from reports by Tennessee Valley Authority. Peak flow partly regulated since 1930 by Lake Junaluska, Lake Logan, and Lake Walters. Only annual peaks are shown prior to 1949. Base for partial-duration series, 7,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1867	Mar. 7, 1867	21	48,000	1936	Jan. 19, 1936	13.9	24,300
1876	June 17, 1876	21	48,000	1937	Jan. 3, 1937	11.7	19,000
1886	March 1886	14	24,000	1938	July 24, 1938	7.0	9,000
1893	Aug. 28, 1893	15	27,000	1939	Feb. 15, 1939	10.4	16,000
	Sept. 14, 1893	15	27,000	1940	Aug. 30, 1940	17.3	36,000
1901	Aug. 6, 1901	8.9	a13,400	1943	Dec. 29, 1942	b10.7	20,000
1902	Feb. 28, 1902	21.4	50,000	1946	Jan. 8, 1946	b13.9	30,500
1903	Apr. 8, 1903	11.0	a17,400	1947	Jan. 20, 1947	b13.2	28,000
1904	Mar. 7, 1904	6.3	a8,470	1948	Feb. 14, 1948	b7.7	12,000
1905	July 12, 1905	7.6	a10,900	1949	Nov. 29, 1948	8.79	13,800
1908	Jan. 12, 1908	7.0	a9,800		June 17, 1949	11.85	21,100
1909	June 4, 1909	7.8	a11,300		Aug. 29, 1949	8.86	13,900
1910	Feb. 18, 1910	5.2	a6,180	1950	Oct. 31, 1949	7.79	11,500
1911	Apr. 6, 1911	6.4	a8,460		Feb. 7, 1950	6.54	8,940
1912	Mar. 29, 1912	9.0	a13,400		Mar. 13, 1950	7.90	11,800
1913	Mar. 27, 1913	13.3	21,800	1951	Dec. 7, 1950	9.45	15,200
1914	Mar. 12, Apr. 20, 1914	3.9	a3,790	1952	Dec. 21, 1951	9.22	15,900
1915	Dec. 25, 1914	9.5	14,500		Mar. 11, 1952	5.91	7,720
1916	Dec. 18, 1915	11.9	18,900		Mar. 23, 1952	9.50	16,600
1917	Mar. 4, 1917	14.4	26,100	1953	Feb. 21, 1953	10.03	18,100
1918	Jan. 29, 1918	12.0	19,100	1954	Jan. 22, 1954	11.62	22,900
1919	Dec. 22, 1918	10.0	15,000		Mar. 26, 1954	6.12	8,160
1920	Apr. 2, 1920	17.0	34,900	1955	July 9, 1955	5.19	6,300
1921	Dec. 14, 1920	9.0	a12,800	1956	Apr. 16, 1956	10.70	20,100
1922	Jan. 21, 1922	10.2	14,900	1957	Feb. 1, 1957	15.07	34,500
1923	Mar. 7, 1923	7.0	8,890		Feb. 4, 1957	6.11	8,140
1924	Jan. 11, 1924	6.5	7,990		Feb. 10, 1957	6.18	8,300
1925	Dec. 9, 1924	6.7	8,350		Apr. 5, 1957	11.97	24,100
1926	Jan. 18, 1926	8.4	12,600		June 5, 1957	6.35	8,670
1927	Feb. 23, 1927	8.4	11,600	1958	Nov. 19, 1957	7.27	10,900
1928	Aug. 16, 1928	12.4	20,700		Nov. 25, 1957	6.10	8,120
1929	Mar. 5, 1929	9.8	14,600	1959	Jan. 22, 1959	6.60	9,240
1930	Oct. 2, 1929	7.6	10,200		Sept. 30, 1959	6.25	8,450
1932	Jan. 30, 1932	8.7	12,700	1960	Apr. 4, 1960	5.96	7,820
1933	Dec. 28, 1932	12.0	19,700				
1934	Mar. 4, 1934	9.5	14,300				
1935	Mar. 12, 1935	6.5	8,100				

a Maximum daily discharge.

b Estimated.

4619.1. North Toe River at Newland, N. C.

Location.--Lat 36°05'01", long 81°55'45", at culvert on State Highway 194 at Newland, Avery County, and 100 ft downstream from Kentucky Creek.

Drainage area.--9.24 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Not defined.

Remarks.--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Apr. 14, 1955	20.08	-	1958	Nov. 19, 1957	17.87	-
1956	Apr. 16, 1956	19.18	-	1959	Sept. 30, 1959	20.27	-
1957	Apr. 4, 1957	19.80	-	1960	Mar. 30, 1960	19.42	-

4620. North Toe River at Altapass, N. C.

(Published as "above Spruce Pine" prior to Oct. 1, 1938)

Location.--Lat 35°53'59", long 82°01'50", 0.1 mile upstream from Rose Creek and 1 mile northwest of Altapass, Mitchell County.

Drainage area.--104 sq mi; 111 sq mi at site used prior to Oct. 1, 1938.

Gage.--Recording. At site 1.2 miles downstream at datum 13.90 ft lower prior to Oct. 1, 1938. Datum of gage is 2,542.91 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 2,300 cfs and extended above on basis of velocity-area study at site used 1934-38; defined by current-meter measurements below 5,000 cfs and extended above on basis of slope-area measurement at 22,200 cfs at site used 1939-58.

Historical data.--Maximum stage known, about 24 ft in July 1916, from flood profiles by Tennessee Valley Authority. Flood of May 1901 reached a stage of about 23 ft, from local residents' comparison with 1916 flood.

Remarks.--Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Nov. 30, 1934	7.33	2,120	1942	May 20, 1942	4.82	1,680
	Jan. 9, 1935	11.75	4,450		Sept. 6, 1942	4.82	1,680
	Mar. 26, 1935	8.28	2,610		Sept. 27, 1942	4.66	1,590
	Sept. 5, 1935	6.17	1,630	1943	Dec. 30, 1942	6.93	3,290
1936	Nov. 13, 1935	8.27	2,610	1944	Sept. 30, 1944	5.10	1,500
	Jan. 19, 1936	7.72	2,680	1945	Oct. 20, 1944	5.68	1,820
	Apr. 2, 1936	6.12	1,810		May 17, 1945	6.57	2,340
	Apr. 6, 1936	7.21	2,410		Sept. 18, 1945	8.20	3,450
1937	Oct. 16, 1936	7.80	2,360	1946	Jan. 8, 1946	7.51	2,940
	Jan. 3, 1937	6.55	2,080		Feb. 10, 1946	5.23	1,560
1938	Oct. 19, 1937	6.74	2,070	1947	Jan. 20, 1947	5.95	1,960
	July 21, 1938	7.49	2,430	1948	Nov. 3, 1947	6.98	2,590
1939	Nov. 5, 1938	5.46	2,090		Feb. 12, 1948	5.11	1,510
	Feb. 15, 1939	4.71	1,610	1949	Nov. 28, 1948	6.70	2,240
	June 2, 1939	5.32	1,970		June 16, 1949	6.91	2,360
	Aug. 18, 1939	6.18	2,530		July 18, 1949	5.96	1,850
1940	Apr. 20, 1940	6.35	2,860		Aug. 28, 1949	10.70	4,760
	Aug. 13, 1940	19.5	22,200	1950	Sept. 1, 1950	5.25	1,500
	Aug. 30, 1940	10.07	6,620		Sept. 9, 1950	5.42	1,580
1941	July 7, 1941	3.45	878	1951	Dec. 4, 1950	5.44	1,590
1942	Mar. 9, 1942	5.58	2,230				
	May 15, 1942	6.58	3,020				

TENNESSEE RIVER BASIN

Peak stages and discharges of North Toe River at Altapass, N. C.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Dec. 7, 1950	10.91	4,970	1955	Feb. 6, 1955	5.39	1,560
1952	Feb. 3, 1952	5.89	1,820		Apr. 14, 1955	11.60	5,710
	Mar. 11, 1952	5.84	1,790		Aug. 9, 1955	8.72	3,400
1953	Jan. 10, 1953	5.41	1,580	1956	Apr. 16, 1956	7.36	2,610
	Feb. 21, 1953	7.63	2,760	1957	Feb. 1, 1957	7.12	2,480
1954	Jan. 22, 1954	8.91	3,520		Apr. 5, 1957	11.45	5,340
	Feb. 21, 1954	5.33	1,540	1958	Dec. 20, 1957	a8.90	b2,790

a Probably maximum for year.

b Annual peak only.

4635. South Toe River at Newdale, N. C.

Location.--Lat 35°54'31", long 82°11'29", at bridge on U.S. Highway 19E at Newdale, Yancey County, 1.3 miles upstream from Little Crabtree Creek, 6.1 miles east of Burnsville, and at mile 6.9.

Drainage area.--60.8 sq mi.

Gage.--Recording. Datum of gage is 2,443.98 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 8,000 cfs, by slope-area measurement, by surface measurement, and by contracted-opening measurement at gage heights 12.48, 16.9, and 17.4 ft respectively.

Remarks.--Base for partial-duration series, 3,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1916	July 1916	14	20,300	1945	Sept. 18, 1945	6.75	4,300
1935	Jan. 9, 1935	9.98	11,700	1946	Jan. 7, 1946	6.23	3,670
1936	Sept. 30, 1936	5.70	4,250		Mar. 14, 1946	6.60	4,110
1937	Oct. 16, 1936	10.15	12,100	1947	Oct. 8, 1946	8.35	6,570
1938	Oct. 19, 1937	4.95	3,040	1948	Oct. 17, 1947	9.05	7,740
1939	Nov. 5, 1938	6.62	5,620		Nov. 2, 1947	7.85	5,800
	Aug. 18, 1939	7.14	6,480		July 11, 1948	6.54	4,040
1940	Apr. 19, 1940	9.67	10,600		Sept. 6, 1948	8.25	6,410
	Aug. 13, 1940	17.40	29,400	1949	Apr. 13, 1949	6.10	3,510
	Aug. 30, 1940	10.52	10,400		June 16, 1949	12.48	14,300
1941	July 14, 1941	5.98	3,380		Aug. 28, 1949	11.05	11,400
1942	Sept. 27, 1942	5.05	2,380	1950	Sept. 1, 1950	11.20	11,700
1943	Dec. 29, 1942	5.80	3,180		Sept. 9, 1950	8.38	6,620
1944	Sept. 30, 1944	5.60	2,960	1951	Dec. 7, 1950	8.14	6,240
				1952	Feb. 3, 1952	7.14	4,390
					Mar. 11, 1952	6.83	4,190

4639.1. Phipps Creek near Burnsville, N. C.

Location.--Lat 35°54'43", long 82°22'10", at culvert on U.S. Highway 19E, 0.4 mile upstream from mouth, and 3.9 miles west of Burnsville, Yancey County.

Drainage area.--1.61 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurement at 11 cfs and by theoretical culvert computations.

Remarks.--Peak stages below 16.35 ft were not recorded during 1955-56. Only annual peaks are shown.

Peak stages and discharges of Phipps Creek near Burnsville, N. C.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	-	(a)	< 65	1958	May 24, 1958	17.67	153
1956	-	(a)	< 65	1959	Sept. 5, 1959	17.23	120
1957	May 1, 1957	18.08	188	1960	July 2, 1960	20.0	318

a Peak stage did not reach bottom of gage.

4640. Cane River near Sioux, N. C.

Location.--Lat 36°00'52", long 82°19'40", on right bank on State Highway 26, 1.3 miles upstream from confluence with North Toe River and 1.5 miles east of Sioux, Yancey County.

Drainage area.--157 sq mi.

Gage.--Recording. Datum of gage is 2,045.24 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 12,000 cfs and by slope-area measurement at 23,800 cfs.

Remarks.--Base for partial-duration series, 2,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1893	August 1893	a16	25,000	1947	Oct. 9, 1946	10.6	8,320
1901	May 1901	a16	25,000		Jan. 20, 1947	8.55	5,220
1934	July 15, 1934	b12.10	c11,400	1948	Oct. 17, 1947	8.66	5,370
1935	Jan. 9, 1935	7.62	4,090		Nov. 2, 1947	8.45	5,100
	Mar. 12, 1935	6.90	3,370		Feb. 12, 1948	6.55	2,880
	Mar. 20, 1935	8.20	4,720		Sept. 6, 1948	6.56	2,890
	Mar. 25, 1935	9.14	5,710	1949	Nov. 28, 1948	6.55	2,880
1936	Nov. 13, 1935	6.32	2,910		May 11, 1949	7.11	3,470
	Jan. 19, 1936	8.55	5,340		June 16, 1949	15.65	23,800
	Feb. 4, 1936	6.88	3,530		Aug. 28, 1949	11.20	9,800
	Mar. 27, 1936	6.02	2,670	1950	Mar. 13, 1950	6.50	2,830
	Apr. 2, 1936	6.76	3,410		Sept. 1, 1950	8.20	4,770
	Apr. 6, 1936	7.75	4,400		Sept. 9, 1950	8.65	5,360
1937	Oct. 16, 1936	9.03	5,780	1951	Dec. 7, 1950	8.85	5,640
	Jan. 3, 1937	7.00	3,650	1952	Dec. 21, 1951	7.49	3,550
1938	July 23, 1938	6.01	2,650		Feb. 3, 1952	7.41	3,460
1939	Nov. 5, 1938	6.82	3,450		Mar. 11, 1952	6.44	2,480
	Jan. 30, 1939	6.75	3,350		Mar. 23, 1952	6.94	2,960
	Feb. 3, 1939	6.94	3,450	1953	Jan. 10, 1953	6.63	2,650
	Feb. 15, 1939	6.10	2,650		Feb. 21, 1953	10.18	7,490
1940	Apr. 20, 1940	6.40	2,920	1954	Jan. 22, 1954	9.74	6,660
	Aug. 13, 1940	17.8	31,800	1955	Feb. 6, 1955	6.59	2,610
	Aug. 30, 1940	10.84	8,780	1956	Apr. 16, 1956	8.80	5,200
1941	July 14, 1941	5.80	2,320	1957	Feb. 1, 1957	9.30	5,930
1942	Mar. 9, 1942	5.98	2,520		Apr. 5, 1957	10.90	9,030
1943	Dec. 30, 1942	6.30	2,820	1958	Dec. 20, 1957	7.52	3,580
1944	Sept. 30, 1944	6.52	3,020	1959	Dec. 29, 1958	8.60	4,920
1945	Sept. 18, 1945	6.22	2,670		Jan. 22, 1959	7.77	3,870
1946	Jan. 7, 1946	10.18	7,670		Sept. 30, 1959	14.15	18,400
	Feb. 10, 1946	7.73	4,150	1960	Mar. 30, 1960	6.30	2,350

a From information by Tennessee Valley Authority.

b Probably maximum for year.

c Annual peak only.

4645. Nolichucky River at Poplar, N. C.

Location.--Lat 36°04'29", long 82°20'41", at Poplar, Mitchell County, 3.9 miles downstream from confluence of North Toe and Cane Rivers, 6.1 miles upstream from North Carolina-Tennessee State line, and at mile 106.8.

Drainage area.--608 sq mi.

Gage.--Nonrecording prior to May 17, 1934; recording thereafter. At datum 1.0 ft higher prior to Oct. 1, 1927. Datum of gage is 1,971.96 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 9,000 cfs and extended on basis of a slope-area measurement at 74,500 cfs.

Historical data.--Floods of May 1901 and July 1916 reached a stage slightly over 21 ft, from floodmarks.

Remarks.--Base for partial-duration series, 9,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	July 30, 1926	5.7	9,770	1940	Apr. 19, 1940	10.18	19,800
1927	Nov. 16, 1926	6.55	12,300		Aug. 13, 1940	19.7	74,500
					Aug. 30, 1940	13.07	32,500
1928	Nov. 17, 1927	8.0	14,200	1941	July 17, 1941	5.68	6,440
	Aug. 16, 1928	14.7	41,400	1942	Mar. 9, 1942	6.82	9,100
1929	Mar. 5, 1929	7.6	13,100	1943	Dec. 30, 1942	9.09	15,900
	Mar. 14, 1929	7.5	12,800				
	Sept. 26, 1929	9.3	16,900	1944	Sept. 30, 1944	6.45	8,140
1930	Oct. 2, 1929	6.4	9,770	1945	Sept. 18, 1945	8.20	13,000
	Oct. 22, 1929	9.7	17,500				
1931	Apr. 4, 1931	7.2	9,810	1946	Jan. 8, 1946	10.80	22,200
1932	May 1, 1932	7.4	10,900		Feb. 10, 1946	7.92	12,100
1933	Oct. 17, 1932	8.4	13,600	1947	Oct. 9, 1946	7.75	11,700
	Dec. 28, 1932	6.8	10,800		Jan. 20, 1947	8.65	14,400
1934	Mar. 3, 1934	6.5	10,000	1948	Oct. 17, 1947	8.32	13,400
	July 15, 1934	10.95	23,500		Nov. 3, 1947	9.38	16,800
1935	Jan. 9, 1935	12.52	28,000	1949	Nov. 28, 1948	7.60	11,100
	Mar. 12, 1935	6.30	9,510		May 11, 1949	6.93	9,310
	Mar. 20, 1935	6.60	10,300		June 16, 1949	14.40	39,500
	Mar. 25, 1935	9.70	19,400		Aug. 28, 1949	12.95	31,800
1936	Nov. 13, 1935	6.90	11,100	1950	Sept. 1, 1950	10.98	22,900
	Jan. 19, 1936	9.55	18,400		Sept. 9, 1950	9.22	16,300
	Feb. 4, 1936	6.80	10,800	1951	Dec. 7, 1950	11.38	24,500
	Apr. 2, 1936	6.40	9,770	1952	Feb. 3, 1952	6.87	9,160
	Apr. 6, 1936	8.35	15,200		Mar. 11, 1952	7.08	9,700
1937	Oct. 16, 1936	11.80	26,400	1953	Feb. 21, 1953	9.90	18,700
	Jan. 3, 1937	7.65	11,400				
1938	Oct. 19, 1937	6.34	7,900	1954	Jan. 22, 1954	11.07	23,300
1939	Aug. 18, 1939	7.00	9,500	1955	Apr. 14, 1955	8.23	13,000

4650. North Indian Creek near Unicoi, Tenn.

Location.--Lat 36°10'35", long 82°17'36", on right bank 900 ft above Rocky Branch and 3.4 miles southeast of Unicoi.

Drainage area.--15.9 sq mi.

Gage.--Recording prior to Oct. 10, 1958; crest-stage gage thereafter. Datum of gage is 2,209.56 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 280 cfs and extended above.

Remarks.--Only annual peaks are shown subsequent to Sept. 30, 1957. Base for partial-duration series, 220 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Apr. 17, 1945	2.73	224	1951	June 22, 1951	3.12	282
1946	Jan. 7, 1946	3.40	342	1952	Apr. 28, 1952	2.65	196
	Feb. 10, 1946	3.22	310				
	Mar. 8, 1946	2.92	256				
1947	Jan. 20, 1947	3.06	277	1953	Feb. 21, 1953	3.55	358
	June 28, 1947	2.90	249		July 22, 1953	3.72	398
	Sept. 6, 1947	2.73	221	1954	Jan. 22, 1954	3.87	334
					July 22, 1954	4.08	486
1948	Apr. 8, 1948	2.70	216	1955	Mar. 19, 1955	3.13	266
1949	Nov. 28, 1948	2.73	221	1956	Feb. 17, 1956	3.11	261
	Mar. 18, 1949	2.81	234		Apr. 15, 1956	3.48	343
1950					July 16, 1956	3.31	305
	Feb. 7, 1950	2.88	230	1957	Jan. 29, 1957	3.78	468
	Feb. 9, 1950	3.03	263		Jan. 31, 1957	4.13	495
	May 11, 1950	3.10	278		Feb. 10, 1957	3.42	334
	June 25, 1950	2.87	230		Apr. 5, 1957	3.69	394
	Sept. 1, 1950	2.81	223		May 27, 1957	3.37	323
1951	Dec. 4, 1950	2.82	227	1959	Jan. 21, 1959	4.30	536
	Dec. 7, 1950	3.54	362				
	Mar. 30, 1951	2.86	234					1960	July 23, 1960	3.50	347

4655. Nolichucky River at Embreeville, Tenn.

Location.--Lat 36°10'35", long 82°27'27", 2,000 ft upstream from bridge on State Highway 81 at Embreeville, Washington County, 3 miles northwest of Erwin, 5.2 miles downstream from North Indian Creek, and at mile 89.0.

Drainage area.--805 sq mi.

Gage.--Nonrecording prior to October 1931; recording thereafter. At site 2,000 ft downstream at datum 6.33 ft lower prior to October 1931. Datum of gage is 1,519.30 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 48,000 cfs and extended on basis of slope-area measurement at 82,500 cfs.

Bankfull stage.--7 ft.

Historical data.--Flood of May 1901 is highest known. Flood of July 1916 reached a stage about equal to that of Aug. 13, 1940, at a point 9 miles upstream, from reports of the Tennessee Valley Authority.

Remarks.--Only annual peaks are shown prior to 1932. Base for partial-duration series, 9,500 cfs.

Peak stages and discharges of Nolichucky River at Embreeville, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1901	May 1901	a24	a120,000	1943	Dec. 30, 1942	8.56	25,700
1921	Aug. 3, 1921	11.5	25,900	1944	Feb. 18, 1944	6.02	13,000
1922	Jan. 21, 1922	8.98	16,200	1945	Oct. 20, 1944	5.65	11,300
1923	Mar. 16, 1923	8.90	15,800		Sept. 18, 1945	6.14	13,500
1924	Sept. 29, 1924	7.82	11,900	1946	Jan. 8, 1946	9.20	28,800
1925	Dec. 9, 1924	5.92	5,690		Feb. 10, 1946	7.06	18,100
1926	Jan. 18, 1926	7.6	11,200		Mar. 15, 1946	5.19	9,620
1927	Nov. 16, 1926	8.4	14,000	1947	Oct. 9, 1946	5.79	12,100
1928	Aug. 16, 1928	13.85	35,300		Jan. 20, 1947	7.65	21,300
1929	Mar. 5, 1929	8.34	13,800	1948	Oct. 17, 1947	5.94	12,700
1930	Oct. 22, 1929	10.55	22,300		Nov. 3, 1947	6.67	16,100
1931	Apr. 4, 1931	7.70	11,500		Feb. 12, 1948	5.53	11,000
1932	Feb. 3, 1932	5.60	11,400	1949	Nov. 28, 1948	6.11	13,500
	May 1, 1932	5.50	11,000		Apr. 13, 1949	5.25	9,820
1933	Oct. 17, 1932	6.23	13,900		May 11, 1949	5.68	11,600
	Dec. 28, 1932	5.90	12,600		June 16, 1949	10.71	36,900
	Feb. 15, 1933	5.71	11,800		Aug. 29, 1949	9.41	29,900
	Apr. 16, 1933	5.57	11,400	1950	Mar. 13, 1950	5.36	10,300
1934	Mar. 3, 1934	6.06	14,100		Sept. 1, 1950	7.70	21,100
	July 15, 1934	10.30	35,000		Sept. 9, 1950	6.60	15,800
1935	Jan. 8, 1935	10.28	34,600	1951	Dec. 7, 1950	8.96	27,500
	Mar. 12, 1935	5.78	12,500	1952	Dec. 21, 1951	5.67	11,600
	Mar. 20, 1935	7.08	18,500		Feb. 3, 1952	5.64	11,700
	Mar. 26, 1935	10.69	36,600		Mar. 11, 1952	5.70	11,900
1936	Oct. 13, 1935	5.27	10,300		Mar. 23, 1952	5.13	9,700
	Jan. 19, 1936	8.76	28,700	1953	Feb. 21, 1953	7.82	21,800
	Feb. 4, 1936	5.92	12,900	1954	Jan. 16, 1954	5.34	10,200
	Feb. 15, 1936	5.24	10,100		Jan. 22, 1954	9.20	28,800
	Mar. 24, 1936	6.17	14,300	1955	Feb. 6, 1955	5.62	11,400
	Mar. 28, 1936	5.38	10,800		Mar. 19, 1955	5.45	10,600
	Apr. 2, 1936	5.77	12,500		Apr. 14, 1955	6.32	14,500
	Apr. 6, 1936	7.46	20,700	1956	Apr. 16, 1956	7.73	21,200
	Sept. 30, 1936	5.17	9,940	1957	Feb. 1, 1957	8.72	25,600
1937	Oct. 16, 1936	8.80	28,700		Feb. 9, 1957	5.41	10,700
	Jan. 3, 1937	6.40	15,200		Apr. 5, 1957	11.00	38,000
	Jan. 19, 20, 1937	5.09	9,500	1958	Dec. 20, 1957	6.61	15,600
1938	July 23, 1938	5.53	11,100		May 7, 1958	5.85	12,400
1939	Nov. 5, 1938	5.33	10,400	1959	Dec. 29, 1958	6.66	15,800
	Jan. 30, 1939	5.34	10,400		Jan. 22, 1959	7.46	19,500
	Feb. 4, 1939	5.24	10,000		Sept. 30, 1959	9.20	28,100
	Feb. 15, 1939	5.40	10,600	1960	Feb. 5, 1960	5.50	10,800
	Aug. 18, 1939	5.60	11,500		Mar. 30, 1960	6.22	14,100
1940	Apr. 20, 1940	7.34	19,100				
	Aug. 13, 1940	18.57	82,500				
	Aug. 30, 1940	11.25	39,500				
1941	July 17, 1941	5.14	9,420				
1942	Mar. 9, 1942	5.92	12,600				

a From reports by Tennessee Valley Authority; present site and datum.

4658. Muddy Fork at Fairview, Tenn.

Location.--Lat 36°18'52", long 82°32'38", at bridge on State Highway 81, 0.7 mile west of Fairview, Washington County.

Drainage area.--9.86 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Not defined.

Remarks.--Only annual peak stages are shown.

Peak stages and discharges of Muddy Fork at Fairview, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 18, 1955	3.98	-	1958	May 5, 1958	5.67	-
1956	Apr. 16, 1956	5.30	-	1959	Mar. 27, 1959	3.67	-
1957	Apr. 18, 1957	4.11	-	1960	-	(a)	-

a Peak stage did not reach bottom of gage.

4665. Nolichucky River below Nolichucky Dam, Tenn.
(Published as "near Greenville" prior to October 1925)

Location.--Lat 36°03'59", long 82°52'18", 0.30 mile downstream from Nolichucky Dam, Greene County, 2.2 miles upstream from Cove Creek, 7.0 miles south of Greenville, and at mile 45.7.

Drainage area.--1,184 sq mi.

Gage.--Nonrecording prior to October 1925; recording thereafter. At site 8.4 miles upstream prior to October 1925 at different datums. Datum of gage is 1,173.46 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Discharge for 1906 from rating curve extended above 9,200 cfs. Defined by current-meter measurements below 30,000 cfs at present site.

Historical data.--Flood of May 1901 is highest known, from profiles by the Tennessee Valley Authority.

Remarks.--Only annual peaks are shown prior to October 1925. Base for partial-duration series, 11,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1901	May 1901	a38	-	1950	Jan. 31, 1950	9.55	13,300
1904	Mar. 7, 1904	5.2	10,600		Feb. 10, 1950	9.01	11,900
1905	July 12, 1905	8.60	20,600		Sept. 1, 1950	10.48	15,600
					Sept. 9, 1950	9.92	14,200
1906	Jan. 23, 1906	19.3	73,500	1951	Dec. 8, 1950	13.59	24,300
1907	Nov. 19, 1906	13.6	43,500	1952	Dec. 21, 1951	8.93	11,600
1908	Jan. 12, 1908	9.1	22,100	1953	Feb. 21, 1953	13.10	22,900
1920	Apr. 2, 1920	15.1	42,000	1954	Jan. 23, 1954	16.05	32,000
1921	Aug. 3, 1921	14.0	36,700	1955	Mar. 20, 1955	9.63	13,400
1922	Jan. 20, Feb. 15, 1922	7.95	14,200		Apr. 14, 1955	9.22	12,400
1923	Mar. 17, 1923	9.25	18,000	1956	Apr. 16, 1956	13.37	23,700
1924	Jan. 11, 1924	9.00	16,900	1957	Jan. 30, 1957	9.55	13,200
1925	Dec. 9, 1924	9.00	16,900		Feb. 1, 1957	16.23	32,600
1940	Aug. 14, 1940	-	b73,500		Feb. 10, 1957	10.73	16,300
1946	Jan. 8, 1946	15.37	29,900		Apr. 5, 1957	17.35	36,500
	Feb. 11, 1946	13.15	22,900	1958	Dec. 21, 1957	9.24	12,400
1947	Jan. 20, 1947	13.84	25,000		May 7, 1958	11.45	18,300
	June 28, 1947	11.88	19,100	1959	Dec. 29, 1958	9.90	14,100
1948	Nov. 3, 1947	9.56	12,800		Jan. 22, 1959	10.97	16,900
	Feb. 13, 1948	9.68	13,100		Sept. 30, 1959	11.95	19,700
1949	Nov. 29, 1948	9.60	12,900	1960	Mar. 31, 1960	9.74	13,700
	June 17, 1949	15.37	29,800				
	Aug. 29, 1949	13.45	24,000				

a Present site and datum, from Tennessee Valley Authority.

b Computation of flow over dam.

TENNESSEE RIVER BASIN

4670. Lick Creek at Mohawk, Tenn.

Location.--Lat 36°12'09", long 83°02'53", 0.25 mile east of Mohawk, Greene County, 0.6 mile upstream from Riley Creek, and 17.5 miles above mouth.

Drainage area.--220 sq mi.

Gage.--Recording. Datum of gage is 1,060.59 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 5,000 cfs prior to 1956 and since, below 8,000 cfs.

Bankfull stage.--11 ft.

Remarks.--Base for partial-duration series, 3,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	Jan. 16, 1947	14.56	5,500	1953	Mar. 5, 1953	13.46	3,260
	Jan. 20, 1947	15.35	7,580		May 24, 1953	14.45	5,240
	June 28, 1947	15.95	9,350	1954	Jan. 17, 1954	14.10	4,400
1948	Feb. 14, 1948	13.73	3,640		Jan. 23, 1954	14.33	4,890
1949	Nov. 29, 1948	15.43	7,800	1955	Mar. 19, 1955	14.32	4,860
	Apr. 28, 1949	14.04	4,290		Feb. 18, 1956	14.91	6,020
	July 16, 1949	15.73	7,330	1956	Apr. 16, 1956	15.88	8,104
1950	Jan. 31, 1950	16.24	10,700	1957	Jan. 29, 1957	15.83	8,030
	Feb. 10, 1950	14.12	5,070		Feb. 1, 1957	15.56	7,430
	Mar. 14, 1950	13.52	3,740		Feb. 10, 1957	13.89	3,980
	May 13, 1950	14.92	7,100	1958	Dec. 8, 1957	13.62	3,500
1951	Mar. 30, 1951	12.90	2,640		May 7, 1958	16.25	8,540
1952	Dec. 22, 1951	13.60	3,390	1959	Mar. 28, 1959	14.22	4,640
1953	Feb. 13, 1953	13.44	3,230		Nov. 29, 1959	14.16	4,520
	Feb. 22, 1953	13.48	3,300				

4675. Nolichucky River near Morristown, Tenn.

Location.--Lat 36°10'49", long 83°10'32", on right bank along Southern Railway, 0.6 mile above Susong Bridge and 7 miles southeast of Morristown.

Drainage area.--1,679 sq mi.

Gage.--Nonrecording prior to Nov. 6, 1925; recording Nov. 6, 1925, to Sept. 30, 1957; crest-stage gage since Oct. 1, 1958. At site $3\frac{1}{2}$ miles downstream prior to Nov. 6, 1925, at datum 10.34 ft lower. At site 150 ft upstream from old gage Nov. 6, 1925, to Sept. 30, 1942, at same datum as old gage. Datum of gage is 1,015.78 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 39,000 cfs and extended on basis of records for station at Embreeville and peak flow over Nolichucky Dam.

Historical data.--Flood of May 1901 is highest known since about 1791, from information by Tennessee Valley Authority.

Remarks.--Only annual peaks are shown prior to 1926 and since 1957. Base for partial-duration series, 13,000 cfs.

Peak stages and discharges of Nolichucky River near Morristown, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1901	May 1901	a26	a85,000	1939	Feb. 16, 1939	12.78	15,700
1921	July 21, 1921	15.37	24,000	1940	Apr. 20, 1940	13.30	16,700
1922	Jan. 22, 1922	15.1	21,500		Aug. 14, 1940	22.63	61,900
1923	Mar. 17, 1923	13.1	17,900		Aug. 31, 1940	19.73	40,900
1924	Mar. 6, 1924	13.5	18,300	1941	July 17, 1941	9.23	8,840
1925	Dec. 9, 1924	12.0	15,600	1942	Mar. 9, 1942	11.03	12,200
1926	Apr. 13, 1926	10.3	11,700	1943	Dec. 30, 1942	19.19	38,900
1927	Nov. 16, 1926	13.56	19,200		Feb. 5, 1943	11.75	16,100
	Dec. 26, 1926	10.89	13,200	1944	Feb. 18, 1944	14.34	22,000
	Dec. 29, 1926	11.50	14,100		Mar. 29, 1944	11.34	15,000
	Feb. 24, 1927	17.1	25,500	1945	Oct. 21, 1944	10.39	13,000
	Mar. 9, 1927	11.48	14,500		Feb. 18, 1945	11.85	16,100
	May 31, 1927	12.3	16,300	1946	Jan. 8, 1946	18.25	34,600
	June 3, 1927	13.62	19,300		Feb. 11, 1946	16.24	27,200
1928	May 20, 1928	11.60	13,400	1947	Jan. 21, 1947	17.93	33,800
	May 28, 1928	11.78	13,800		June 28, 1947	17.73	32,900
	June 30, 1928	14.42	18,700	1948	Feb. 14, 1948	13.30	19,600
	Aug. 16, 1928	18.9	34,900	1949	Nov. 29, 1948	13.20	19,400
	Sept. 6, 1928	11.64	13,400		June 17, 1949	16.43	28,000
1929	Feb. 28, 1929	11.5	13,200		July 17, 1949	12.57	17,900
	Mar. 6, 1929	13.82	17,500		Aug. 29, 1949	14.22	21,800
	Mar. 15, 1929	11.86	14,000	1950	Jan. 31, 1950	14.84	23,400
	Mar. 23, 1929	14.60	19,000		Feb. 9, 1950	12.63	18,100
1930	Oct. 2, 1929	11.5	13,200		Mar. 14, 1950	11.27	14,900
	Oct. 22, 1929	17.00	23,800		May 13, 1950	10.52	13,200
1931	Apr. 5, 1931	11.8	13,800		Sept. 2, 1950	11.20	14,800
1932	Jan. 31, 1932	11.68	13,600		Sept. 10, 1950	10.60	13,400
	Feb. 4, 1932	16.3	22,400	1951	Dec. 8, 1950	14.44	22,400
	May 2, 1932	11.53	13,200		Mar. 30, 1951	10.67	13,600
1933	Dec. 29, 1932	15.26	21,500	1952	Dec. 22, 1951	10.59	13,400
	Feb. 16, 1933	17.04	25,200	1953	Feb. 22, 1953	15.27	24,500
1934	Mar. 4, 1934	14.42	19,000	1954	Jan. 17, 1954	11.33	14,300
	July 16, 1934	16.14	22,800		Jan. 23, 1954	19.39	37,000
1935	Jan. 9, 1935	17.16	25,500	1955	Mar. 20, 1955	13.18	18,300
	Mar. 13, 1935	13.57	17,200		Mar. 22, 1955	11.18	14,000
	Mar. 21, 1935	17.11	25,200	1956	Feb. 19, 1956	12.15	16,300
	Mar. 26, 1935	22.00	56,600		Apr. 17, 1956	16.76	28,400
1936	Jan. 9, 1936	11.46	13,000	1957	Feb. 1, 1957	20.54	43,800
	Jan. 20, 1936	18.97	35,500		Feb. 11, 1957	13.95	20,600
	Feb. 5, 1936	14.56	19,600		Apr. 6, 1957	18.74	35,400
	Mar. 25, 1936	15.32	21,200		Apr. 8, 1957	11.35	14,600
	Mar. 28, 1936	16.15	23,300	1959	Sept. 30, 1959	12.95	18,200
	Apr. 3, 1936	13.21	16,500				
	Apr. 7, 1936	17.12	25,400				
1937	Oct. 17, 1936	16.04	22,800				
	Jan. 4, 1937	14.96	20,500				
	Jan. 20, 1937	12.80	15,700				
	Feb. 9, 1937	11.49	13,000				
1938	July 23, 1938	11.90	13,200				

a From reports by Tennessee Valley Authority.

4690. French Broad River below Douglas Dam, Tenn.
(Published as "at Dandridge" prior to Sept. 30, 1942)

Location.--Lat 35°57'06", long 83°33'05", 1.0 mile downstream from Douglas Dam, 1.7 miles upstream from Millican Creek, 5.8 miles north of Sevierville, Sevier County, and at mile 31.3.

Drainage area.--4,543 sq mi. At site used prior to October 1942, 4,446 sq mi.

Gage.--Nonrecording prior to June 19, 1931; recording thereafter. At site 13 miles upstream prior to Sept. 30, 1942; at datum 37.67 ft higher prior to Oct. 7, 1923; and at datum 37.63 ft higher Oct. 8, 1923, to Sept. 30, 1942. Datum of gage is 865.70 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 87,000 cfs prior to 1943. Defined by current-meter measurements below 35,000 cfs and extended on basis of slope-area measurement at 76,000 cfs since 1943.

Bankfull stage.--12 ft prior to 1943, from U.S. Weather Bureau.

Historical data.--The flood of March 1867 is the greatest known at site used prior to 1943. Flood of February 1875 reached practically the same stage as the flood of March 1867, from investigations of Tennessee Valley Authority.

Remarks.--Peak stages prior to 1919 from reports of U.S. Weather Bureau. Flow regulated by Douglas Lake since Feb. 19, 1943. Only annual peaks are shown prior to 1932 and since 1943. Base for partial-duration series, 32,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1867	March 1867	25.2	-	1935	Jan. 10, 1935	11.9	46,000
1901	May 21, 1901	22.0	-	Mar. 13, 1935	10.40	38,200	
				Mar. 21, 1935	9.38	33,500	
				Mar. 27, 1935	16.63	74,200	
1905	July 13, 1905	all.2	-	1936	Jan. 20, 1936	18.49	83,200
1906	Jan. 23, 1906	15.0	-		Feb. 4, 1936	12.68	49,000
1907	Dec. 29, 1906	a6.9	-		Mar. 27, 1936	15.15	62,600
1908	Jan. 12, 1908	a10.0	-		Apr. 6, 1936	16.38	69,800
1909	June 5, 1909	12.0	-	1937	Oct. 17, 1936	12.32	46,900
1910	Sept. 1, 1910	all.5	-		Jan. 3, 1937	15.28	63,200
1911	Jan. 4, Apr. 7, 1911	a7.9	-		Jan. 20, 1937	10.58	38,600
1912	Mar. 30, 1912	a9.2	-	1938	July 24, 1938	10.86	38,300
1913	Mar. 28, 1913	16.0	-		Feb. 16, 1939	11.83	42,500
1914	Apr. 16, 1914	a5.9	-	1940	Aug. 15, 1940	18.68	81,400
1915	Dec. 26, 1914	all.2	-		Aug. 31, 1940	20.93	95,600
1916	July 17, 1916	a21.0	-	1941	July 17, 1941	5.84	17,900
1917	Mar. 5, 1917	a16.0	-		May 22, 1942	9.37	31,800
1918	Jan. 29, 1918	a15.3	-	1942	Dec. 30, 1942	20.97	76,000
1919	Oct. 30, 1918	14.0	66,000		Apr. 3, 1944	11.75	28,500
1920	Apr. 2, 1920	18.7	93,600		Mar. 5, 1945	7.85	12,400
1921	Feb. 10, 1921	13.4	64,400	1946	Jan. 23, 1946	10.17	22,700
1922	Jan. 22, 1922	12.6	58,200	1947	Jan. 29, 1947	10.54	24,300
1923	Mar. 17, 1923	10.2	43,900	1948	Feb. 21, 1948	9.60	20,000
1924	Mar. 6, 1924	8.8	b37,300	1949	Dec. 31, 1948	10.27	23,000
1925	Dec. 9, 1924	9.9	b36,600	1950	Feb. 11, 1950	10.29	23,100
1926	Apr. 13, 1926	7.5	25,900	1951	Dec. 18, 1950	8.57	15,800
1927	Feb. 24, 1927	13.0	50,500		Dec. 24, 1951	10.19	22,700
1928	Aug. 17, 1928	17.2	69,400		Feb. 26, 1953	10.67	25,500
1929	Mar. 24, 1929	12.3	47,400	1954	Jan. 26, 1954	11.94	31,400
1930	Oct. 23, 1929	10.7	40,200	1955	Mar. 27, 1955	9.23	19,000
1931	Apr. 5, 1931	9.4	b34,300	1956	Mar. 23, 1956	8.95	17,600
1932	Jan. 30, 1932	10.2	37,900		Feb. 12, 1957	12.30	33,100
	Feb. 4, 1932	10.6	39,700		Dec. 26, 27, 1957	10.20	23,300
1933	Dec. 29, 1932	14.65	62,300	1958	Sept. 30, 1959	9.12	18,300
	Feb. 15, 1933	13.85	57,900	1960	Oct. 16, 1959	9.27	19,000
1934	Mar. 4, 1934	12.5	48,200				

a Maximum observed 8 a.m. reading, may not be highest for year.

b Maximum daily discharge.

4690.55. Millican Creek near Douglas Dam, Tenn.

Location.--Lat 35°55'43", long 83°32'27", on right bank about 900 ft upstream from State Highway 66, and 1,700 ft upstream from Little Millican Creek.

Drainage area.--4.2 sq mi.

Gage.--Recording. At site 1,200 ft downstream prior to July 31, 1948, at same datum. Datum of gage not determined.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Feb. 4, 1943	5.11	826	1952	Dec. 20, 1951	7.28	278
1944	Feb. 26, 1944	6.46	1,410	1953	June 21, 1953	88.98	b739
1945	Feb. 17, 1945	4.93	760	1954	Jan. 21, 1954	8.12	470
				1955	Mar. 12, 1955	8.36	535
1946	Jan. 7, 1946	5.34	912	1956	July 14, 1956	9.78	1,090
1947	Jan. 20, 1947	5.85	1,120	1957	Apr. 8, 1957	9.46	1,600
1948	Feb. 12, 1948	4.87	a740	1958	July 21, 1958	8.78	556
1950	Jan. 30, 1950	9.36	892	1959	Mar. 27, 1959	8.35	478
1951	Mar. 7, 1951	8.66	628	1960	Nov. 27, 1959	92.37	624

a Maximum for period Oct. 1, 1947, to July 31, 1948.

b Exceeded by flood of May 19, 1953, when gage washed out; gage height unknown.

4691.3. Little Pigeon River near Sevierville, Tenn.

Location.--Lat 35°51'38", long 83°30'13", at bridge on U.S. Highway 411, and $4\frac{1}{4}$ miles east of Sevierville.

Drainage area.--110 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 940 ft (from topographic map).

Stage-discharge relation.--Not defined.

Remarks.--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 21, 1954	11.19	-	1957	Jan. 31, 1957	16.23	-
1955	-	(a)	-	1958	-	(a)	-
				1959	Jan. 21, 1959	14.13	-
1956	Apr. 16, 1956	13.29	-	1960	Nov. 28, 1959	11.56	-

a Stage not determined but less than 11 ft.

4691.6. East Fork Little Pigeon River near Sevierville, Tenn.

Location.--Lat 35°51'55", long 83°29'17", at bridge on U.S. Highway 411 and 5.2 miles east of Sevierville.

Drainage area.--64.1 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 930 ft (from topographic map).

Stage-discharge relation.--Not defined.

Remarks.--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 21, 1954	11.83	-	1957	Jan. 31, 1957	15.62	-
1955	Feb. 23, 1955	9.20	-	1958	May 7, 1958	10.87	-
				1959	Mar. 27, 1959	11.01	-
1956	Apr. 16, 1956	13.44	-	1960	Nov. 28, 1959	11.05	-

TENNESSEE RIVER BASIN

4692. Little Pigeon River above West Fork, at Sevierville, Tenn.

Location.--Lat 35°52'12", long 83°34'04", at bridge just above West Fork on State Highway 66 in Sevierville, Sevier County.

Drainage area.--201 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Defined by three current-meter measurements below 11,700 cfs and extended above.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 21, 1954	11.88	8,680	1957	Jan. 31, 1957	15.59	12,800
1955	March 1955	-	(a)	1958	-	-	(a)
				1959	Jan. 21, 1959	13.07	10,000
1956	Apr. 16, 1956	13.76	10,800	1960	Nov. 28, 1959	12.85	9,800

a Discharge not determined but less than 7,800 cfs.

4695. West Fork Little Pigeon River near Pigeon Forge, Tenn.

Location.--Lat 35°48'21", long 83°34'28", at bridge on old State Highway 71, 1.6 miles northwest of Pigeon Forge.

Drainage area.--76.2 sq mi.

Gage.--Recording prior to July 7, 1949; crest-stage gage since Feb. 4, 1954. Datum of gage is 965.23 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 4,900 cfs and extended above.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	Mar. 8, 1946	6.76	2,380	1955	Mar. 18, 1955	8.17	3,480
1947	Jan. 20, 1947	10.30	5,640				
1948	Feb. 14, 1948	9.64	4,890	1956	Apr. 16, 1956	9.31	4,560
1949	Nov. 6, 1948	-	4,420	1957	Jan. 31, 1957	10.98	6,400
	June 16, 1949	9.53	-	1958	Dec. 20, 1957	8.45	3,750
				1959	Jan. 21, 1959	10.61	6,000
1954	Jan. 21, 1954	8.32	3,620	1960	Nov. 28, 1959	9.17	4,420

a Maximum for period Feb. 21 to Sept. 30, 1946.

4700. Little Pigeon River at Sevierville, Tenn.

Location.--Lat 35°52'34", long 83°34'36", on left bank at Eckel farmhouse, 0.5 mile downstream from city limits of Sevierville, Sevier County, and 0.5 mile downstream from West Fork Little Pigeon River.

Drainage area.--353 sq mi.

Gage.--Nonrecording prior to June 14, 1928; recording thereafter. Datum of gage is 881.44 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 20,000 cfs and extended above.

Bankfull stage.--8.5 ft.

Remarks.--Only annual peaks are shown prior to 1921, from reports by Tennessee Valley Authority. Base for partial-duration series, 7,000 cfs.

Peak stages and discharges of Little Pigeon River at Sevierville, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1867	Mar. 7, 1867	16.5	43,000	1941	July 7, 1941	5.41	3,910
1875	Feb. 25, 1875	18	55,000	1942	Mar. 9, 1942	8.26	7,590
1896	Apr. 1, 1896	16.8	46,000	1943	Dec. 29, 1942	12.82	19,400
1913	Mar. 14, 1913	14.1	24,000		July 31, 1943	8.15	7,460
1917	Mar. 5, 1917	14.5	27,000	1944	Feb. 18, 1944	10.08	9,950
1920	Apr. 2, 1920	16.0	37,000		Mar. 29, 1944	8.46	7,850
1921	Feb. 10, 1921	12.0	15,700		Sept. 30, 1944	7.94	7,070
	July 20, 1921	8.40	7,770	1945	Feb. 13, 1945	9.70	9,410
1922	Jan. 21, 1922	9.32	8,820		Feb. 17, 1945	10.57	10,800
	Feb. 15, 1922	8.51	7,880	1946	Jan. 8, 1946	12.20	16,600
	Mar. 10, 1922	9.10	8,590		Feb. 10, 1946	11.84	14,800
1923	Dec. 15, 1922	12.5	18,000	1947	Jan. 20, 1947	13.67	23,500
	Dec. 17, 1922	9.30	8,820	1948	Feb. 12, 1948	11.49	13,400
	Mar. 7, 1923	8.90	8,350	1949	Nov. 6, 1948	8.56	7,630
1924	Mar. 5, 1924	7.7	6,950		Nov. 28, 1948	10.69	10,900
1925	Dec. 8, 1924	11.6	13,900		Dec. 25, 1948	8.80	7,970
1926	Apr. 13, 1926	7.25	6,360		Jan. 5, 1949	9.85	9,450
1927	Feb. 23, 1927	10.44	10,200		June 16, 1949	10.00	9,650
	June 12, 1927	8.39	7,770		July 13, 1949	9.79	9,360
1928	June 29, 1928	15.4	32,000	1950	Oct. 31, 1949	12.59	17,300
	Sept. 2, 1928	8.55	8,000		Jan. 19, 1950	8.47	7,390
1929	Feb. 28, 1929	8.04	7,300		Feb. 7, 1950	9.45	8,730
	Mar. 23, 1929	13.45	22,200		Mar. 13, 1950	10.52	10,200
	May 7, 1929	9.15	8,700	1951	Dec. 7, 1950	9.89	9,350
1930	Mar. 19, 1930	6.32	5,310		Mar. 7, 1951	8.34	7,220
1931	Apr. 4, 1931	9.50	9,060		Mar. 29, 1951	13.23	20,400
1932	Jan. 30, 1932	11.0	11,600	1952	Dec. 21, 1951	9.65	9,010
	Feb. 12, 1932	8.15	7,360		Jan. 10, 1952	8.22	7,070
	May 1, 1932	9.80	9,370		Mar. 11, 1952	10.43	10,100
1933	Dec. 28, 1932	10.85	11,100	1953	Feb. 12, 1953	9.94	9,420
	Feb. 15, 1933	12.54	18,000		Feb. 21, 1953	11.70	13,300
1934	Feb. 26, 1934	8.87	8,200		May 19, 1953	9.27	8,480
	Mar. 3, 1934	10.5	10,400	1954	Jan. 16, 1954	11.73	14,500
1935	Jan. 22, 1935	8.27	7,480		Jan. 21, 1954	11.80	14,600
	Mar. 12, 1935	11.06	11,900	1955	Feb. 23, 1955	9.80	9,290
1936	Jan. 19, 1936	11.82	14,800		Mar. 18, 1955	9.15	8,240
	Feb. 4, 1936	12.84	19,400		Mar. 22, 1955	9.17	8,280
	Mar. 26, 1936	13.41	22,200	1956	Feb. 13, 1956	10.44	10,600
	Apr. 2, 1936	10.18	10,100		Apr. 16, 1956	13.25	20,400
	Apr. 6, 1936	12.46	18,000	1957	Jan. 28, 1957	9.20	7,740
1937	Jan. 3, 1937	9.07	8,630		Feb. 1, 1957	14.71	28,300
	Jan. 18, 1937	8.52	7,860		Apr. 5, 1957	8.42	7,230
	Feb. 9, 1937	9.25	8,760	1958	Nov. 18, 1957	10.46	9,660
1938	Mar. 10, 1938	8.07	7,330		Dec. 20, 1957	8.23	7,040
	Aug. 5, 1938	12.69	18,900		Apr. 25, 1958	8.94	7,940
1939	Feb. 3, 1939	8.47	7,850		May 7, 1958	9.35	8,550
	Feb. 15, 1939	9.45	9,020	1959	Jan. 22, 1959	12.65	19,000
1940	Aug. 14, 1940	9.17	8,760		Mar. 27, 1959	10.34	10,300
					Apr. 12, 1959	8.40	7,200
					June 25, 1959	9.22	8,350
					Sept. 30, 1959	10.72	11,300
				1960	Nov. 28, 1959	12.43	18,000
					Dec. 19, 1959	8.80	7,740

TENNESSEE RIVER BASIN

4705. French Broad River near Knoxville, Tenn.

Location--Lat 35°57'30", long 83°46'26", 45 ft upstream from Riverdale Ferry, 0.7 mile downstream from Johnson Hollow, 7.5 miles upstream from confluence with Holston River, and 8 miles east of Knoxville, Knox County.

Drainage area--5,101 sq mi.

Gage--Recording. At site 200 ft upstream prior to Oct. 1, 1957. Datum of gage is 800.00 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation--Defined by current-meter measurements below 33,000 cfs and extended above.

Historical data--Flood of 1867 is maximum stage known.

Remarks--Flow regulated by Douglas Lake. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1867	March 1867	a55.0	a160,000	1953	Feb. 21, 1953	b24.20	26,600
1946	Jan. 8, 1946	25.36	31,500	1954	Jan. 26, 1954	25.61	32,100
1947	Jan. 20, 1947	26.47	37,800	1955	Mar. 22, 1955	c24.31	26,400
1948	Feb. 13, 1948	23.60	22,700	1956	Feb. 18, 1956	23.22	22,000
1949	Dec. 25, 1948	25.42	31,800	1957	Feb. 1, 1957	28.82	47,500
1950	Feb. 7, 1950	26.42	38,600	1958	Dec. 27, 1957	23.80	25,400
1951	Mar. 29, 1951	24.43	28,300	1959	Sept. 30, 1959	23.80	25,400
1952	Dec. 23, 1951	23.66	24,700	1960	Dec. 19, 1959	23.75	25,200

a About, from investigations by Tennessee Valley Authority.

b Occurred Feb. 27, 1953.

c May have been higher Mar. 20, 1955, during period of no record.

4715. South Fork Holston River at Riverside, near Chilhowie, Va.
(Published as "near Chilhowie" prior to October 1924)

Location--Lat 36°45'37", long 81°37'53", on right bank 400 ft upstream from highway bridge at Riverside, Smyth County, 900 ft upstream from Spring Branch, 3.2 miles downstream from Redstone Branch, and 4 miles southeast of Chilhowie.

Drainage area--76.1 sq mi; 89.5 sq mi 1907-10.

Gage--Nonrecording June 10, 1907, to Dec. 31, 1909, at site 4½ miles downstream at different datum, and Nov. 1, 1920, to Nov. 14, 1931, at site 400 ft downstream at present datum. Recording since July 28, 1942. Datum of gage is 2,106.77 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation--Defined by current-meter measurements.

Bankfull stage--8 ft.

Remarks--Base for partial-duration series, 650 cfs. Only annual peaks are shown prior to October 1942.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1907a/	June 11, 1907	5.0	6,500	1930	Oct. 2, 1929	4.6	1,520
1908	Jan. 12, 1908	4.2	4,400	1931	Apr. 4, 1931	5.0	1,820
1909	Feb. 10, 1909	3.0	2,100	1942	Aug. 9, 1942	4.58	1,200
1921	Feb. 10, 1921	4.4	1,420	1943	Dec. 30, 1942	5.80	1,870
1922	Jan. 21, 1922	5.0	1,880	1943	Apr. 19, 1943	4.26	1,020
1923	June 12, 1923	9.0	6,000	1944	Feb. 18, 1944	6.62	2,380
1924	Sept. 30, 1924	5.0	1,880	1944	Feb. 23, 1944	3.64	749
1925	Dec. 9, 1924	3.7	960	1945	Oct. 20, 1944	3.65	749
1926	Feb. 14, 1926	4.5	1,450	1945	Jan. 1, 1945	3.64	749
1927	Feb. 23, 1927	5.7	2,430				
1928	Sept. 2, 1928	4.0	1,100				
1929	Mar. 5, 1929	5.0	1,820				

a Incomplete.

Peak stages and discharges of South Fork Holston River at Riverside,
near Chilhowie, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Feb. 17, 1945	5.07	1,460	1955	Feb. 6, 1955	5.38	1,540
	May 18, 1945	6.58	2,380		Mar. 1, 1955	5.02	1,300
1946	Jan. 8, 1946	5.84	1,870		Mar. 6, 1955	4.04	830
	Feb. 10, 1946	5.35	1,630		Mar. 16, 1955	6.15	2,070
	May 4, 1946	3.58	728		Mar. 18, 1955	6.88	2,580
1947	Jan. 20, 1947	5.84	1,870		Mar. 22, 1955	4.39	980
	Mar. 14, 1947	3.60	730		Apr. 14, 1955	5.76	1,800
	Aug. 4, 1947	6.99	2,660	1956	Apr. 16, 1956	6.20	2,070
1948	Feb. 14, 1948	5.87	1,930	1957	Jan. 10, 1957	3.63	671
	Apr. 8, 1948	3.73	792		Jan. 29, 1957	8.32	3,800
1949	Dec. 4, 1948	5.00	1,410		Feb. 10, 1957	5.45	1,630
	Mar. 18, 1949	3.94	880		Apr. 5, 1957	5.96	1,940
	Apr. 13, 1949	5.04	1,410		Apr. 8, 1957	6.71	2,460
	Aug. 29, 1949	3.92	857	1958	Nov. 19, 1957	4.37	1,040
1950	Nov. 1, 1949	3.74	714		Dec. 21, 1957	3.54	661
	Jan. 31, 1950	4.30	935		Feb. 7, 1958	4.03	865
	Feb. 2, 1950	4.97	1,270		May 7, 1958	4.06	880
1951	Dec. 7, 1950	7.84	3,270		Aug. 1, 1958	8.18	3,670
1952	Jan. 28, 1952	3.25	541	1959	Dec. 29, 1958	4.42	1,050
1953	Feb. 21, 1953	5.25	1,450		Jan. 22, 1959	5.10	1,420
	Mar. 4, 1953	3.97	790	1960	Feb. 5, 1960	4.33	1,020
1954	Jan. 22, 1954	6.53	2,280		Feb. 11, 1960	4.13	925
	Mar. 1, 1954	3.63	678		Mar. 30, 1960	6.20	2,100
					Apr. 5, 1960	3.90	805
					July 2, 1960	5.27	1,510

4725. Beaverdam Creek at Damascus, Va.

Location.--Lat 36°37'40", long 81°47'28", on right bank in pumphouse of American Cyanamid Co., at Damascus, Washington County, 0.65 mile upstream from mouth.

Drainage area.--56.0 sq mi.

Gage.--Recording. Datum of gage is 1,946.66 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 2,600 cfs and extended above by logarithmic plotting on basis of two indirect measurements at gage height 5.75 ft.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 600 cfs. Only annual peak shown for 1960.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1901	May 1901	a6.5	-	1951	Mar. 30, 1951	2.54	642
1948	Feb. 14, 1948	3.50	1,270	1952	Dec. 21, 1951	3.17	995
	May 30, 1948	2.70	715		Jan. 28, 1952	2.67	690
1949	Dec. 4, 1948	3.57	1,360	1953	Jan. 28, 1953	2.85	800
	Dec. 30, 1948	2.92	830		Feb. 21, 1953	3.80	1,590
	Mar. 18, 1949	3.47	1,270	1954	Jan. 16, 1954	4.05	1,870
	July 13, 1949	2.67	690		Jan. 22, 1954	4.60	2,880
	July 16, 1949	2.56	642		Apr. 1, 1954	2.77	742
1950	Nov. 1, 1949	2.52	620	1955	Feb. 6, 1955	3.73	1,470
	Jan. 19, 1950	2.95	862		Mar. 1, 1955	2.55	642
	Jan. 30, 1950	4.04	1,870		Mar. 6, 1955	3.27	1,070
	Feb. 2, 1950	3.77	1,590		Mar. 16, 1955	4.53	2,680
	Mar. 13, 1950	2.61	665		Mar. 18, 1955	5.75	4,200
1951	Dec. 7, 1950	2.65	690		Mar. 22, 1955	3.20	1,030

a About; from Tennessee Valley Authority Report No. O-5755.

Peak stages and discharges of Beaverdam Creek at Damascus, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Apr. 14, 1955	3.17	995	1958	Dec. 26, 1957	2.47	606
1956	Feb. 3, 1956	2.54	642		Jan. 25, 1958	2.54	638
	Feb. 18, 1956	3.85	1,530		Feb. 7, 1958	2.83	788
	Mar. 16, 1956	2.76	742		Feb. 26, 1958	2.84	794
	Apr. 16, 1956	5.14	3,350		Apr. 28, 1958	2.70	715
	July 14, 1956	3.03	928		May 7, 1958	2.80	770
1957	Jan. 29, 1957	5.75	4,200	1959	Dec. 29, 1958	2.73	742
	Feb. 10, 1957	4.16	2,060		Jan. 22, 1959	4.06	1,920
	Apr. 5, 1957	4.13	2,020		Mar. 27, 1959	3.12	960
	Apr. 8, 1957	3.91	1,730		Apr. 4, 1959	2.76	742
1958	Nov. 19, 1957	2.61	670		Apr. 12, 1959	2.95	862
	Dec. 8, 1957	3.24	1,060		Apr. 20, 1959	3.04	928
	Dec. 21, 1957	2.51	624	1960	Mar. 30, 1960	4.15	2,040

4730. South Fork Holston River at Vestal, Va.

Location--Lat 36°39'06", long 81°50'39", on right bank 500 ft upstream from bridge on U.S. Highway 58 at Vestal, Washington County, 0.7 mile downstream from Laurel Creek, 3.2 miles northwest of Damascus, and 4.9 miles upstream from Middle Fork Holston River.

Drainage area--301 sq mi.

Gage--Recording. Datum of gage is 1,792.30 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation--Defined by current-meter measurements below 10,000 cfs and extended above on basis of contracted-opening measurement of peak flow.

Bankfull stage--9 ft.

Remarks--Base for partial-duration series, 3,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1867	March 1867	a20	a26,500	1940	July 30, 1940	11.19	7,600
1932	Jan. 30, 1932	7.58	3,230		Aug. 14, 1940	13.25	10,600
	Feb. 3, 1932	10.58	6,760	1941	July 16, 1941	7.55	3,210
	Feb. 12, 1932	7.52	3,130	1942	May 22, 1942	8.09	3,730
	May 1, 1932	7.89	3,530		Aug. 9, 1942	10.37	6,500
1933	Dec. 28, 1932	9.31	5,110	1943	Dec. 30, 1942	11.15	7,600
	Feb. 8, 1933	8.90	4,630		Feb. 5, 1943	7.45	3,030
	Feb. 15, 1933	8.40	4,060	1944	Feb. 18, 1944	11.58	8,160
	May 10, 1933	9.63	5,470		Feb. 23, 1944	7.48	3,130
1934	Mar. 5, 1934	7.65	3,040		Mar. 20, 1944	7.52	3,130
1935	Jan. 9, 1935	8.90	4,600	1945	Oct. 20, 1944	7.50	3,130
	Jan. 23, 1935	8.52	4,150		Jan. 1, 1945	8.11	3,730
	Mar. 26, 1935	13.26	10,700		Feb. 17, 1945	9.58	5,470
	Apr. 1, 1935	7.70	3,280		May 18, 1945	9.02	4,750
1936	Nov. 13, 1935	7.63	3,200	1946	Jan. 8, 1946	11.10	7,460
	Jan. 19, 1936	9.05	4,750		Feb. 10, 1946	10.8	7,040
	Feb. 4, 1936	7.78	3,400	1947	Jan. 16, 1947	7.70	3,330
	Feb. 15, 1936	7.82	3,400		Jan. 20, 1947	12.1	8,900
	Mar. 24, 1936	10.30	6,370		Aug. 4, 1947	7.85	3,430
	Apr. 6, 1936	9.10	4,870	1948	Feb. 14, 1948	10.0	5,980
1937	Feb. 10, 1937	7.61	3,210		July 15, 1948	8.0	3,630
	Oct. 28, 1937	9.46	5,350	1949	Dec. 4, 1948	9.28	5,110
	July 21, 1938	10.60	6,760		Mar. 18, 1949	8.68	4,390
1938	July 23, 1938	8.80	4,510		July 13, 1949	8.06	3,730
1939	Mar. 6, 1939	9.48	5,470				

a From reports by Tennessee Valley Authority.

Peak stages and discharges of South Fork Holston River at Vestal, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Nov. 1, 1949	7.71	3,330	1955	Apr. 14, 1955	8.52	4,170
	Jan. 19, 1950	7.82	3,430	1956	Feb. 18, 1956	8.03	3,630
	Jan. 30, 1950	9.97	3,980		Apr. 16, 1956	12.50	9,500
	Feb. 2, 1950	10.18	6,240	1957	Jan. 29, 1957	15.35	15,100
	June 23, 1950	7.91	3,530		Feb. 10, 1957	10.10	6,340
1951	Dec. 7, 1950	10.08	6,110		Apr. 5, 1957	10.26	6,560
					Apr. 8, 1957	10.95	7,530
1952	Dec. 21, 1951	8.40	4,060	1958	Dec. 8, 1957	7.37	3,000
	Jan. 28, 1952	7.88	3,530		Feb. 8, 1958	7.68	3,320
1953	Feb. 21, 1953	9.62	5,470		May 7, 1958	8.07	3,710
	June 13, 1953	7.94	3,530		Aug. 2, 1958	9.8E	5,990
1954	Jan. 16, 1954	9.07	4,870		Aug. 3, 1958	9.6C	5,640
	Jan. 22, 1954	12.40	9,350	1959	Dec. 29, 1958	7.72	3,330
1955	Feb. 6, 1955	9.19	4,990		Jan. 22, 1959	9.37	5,360
	Mar. 1, 1955	8.44	4,060		Apr. 13, 1959	7.5E	3,230
	Mar. 6, 1955	8.28	3,950	1960	Mar. 30, 1960	10.2C	6,480
	Mar. 16, 1955	11.56	8,160		July 1, 1960	7.62	3,230
	Mar. 18, 1955	13.73	11,400				

4735. Middle Fork Holston River at Groseclose, Va.

Location--Lat 36°53'19", long 81°20'51", on left bank at downstream side of highway bridge in village of Groseclose, Smyth County, 0.2 mile upstream from Rocky Spring Branch, and 10 miles northeast of Marion.

Drainage area--7.39 sq mi.

Gage--Recording prior to Sept. 30, 1957; crest-stage gage thereafter. Datum of gage is 2,442.86 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation--Defined by current-meter measurements below 300 cfs and extended above on basis of slope-area measurement of peak flow.

Bankfull stage--9 ft.

Remarks--Base for partial-duration series, 90 cfs. Only annual peaks are shown after Sept. 30, 1957.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Feb. 13, 1948	4.34	217	1953	Mar. 24, 1953	3.2E	94
1949	Dec. 3, 1948	3.71	137		July 6, 1953	7.42	813
	June 17, 1949	3.37	104	1954	Jan. 22, 1954	4.00	171
	July 11, 1949	3.27	91		June 16, 1954	3.30	95
	July 13, 1949	4.07	171		July 21, 1954	4.06	178
	July 14, 1949	3.54	127	1955	Feb. 28, 1955	4.15	186
	July 15, 1949	3.58	132		Mar. 6, 1955	4.02	167
					Mar. 16, 1955	3.80	145
1950	Jan. 30, 1950	3.33	105		Mar. 18, 1955	4.50	234
	Feb. 1, 1950	3.28	99	1956	Apr. 16, 1956	3.9E	167
	Feb. 2, 1950	3.61	126		May 15, 1956	3.44	106
	July 26, 1950	6.18	520	1957	Jan. 29, 1957	5.00	309
	Aug. 16, 1950	3.42	117		Feb. 9, 1957	4.75	272
	Aug. 16, 1950	3.35	108		Apr. 4, 1957	3.80	145
1951	Dec. 7, 1950	4.30	210		Apr. 8, 1957	4.32	209
	Aug. 2, 1951	3.87	155		Apr. 24, 1957	3.67	131
	Aug. 7, 1951	4.12	184	1958	May 6, 1958	4.66	256
1952	Dec. 21, 1951	3.35	100		Apr. 12, 1959	(a)	-
	July 5, 1952	4.08	181		Mar. 30, 1960	4.71	264
1953	Feb. 21, 1953	3.34	99				
	Mar. 4, 1953	3.62	127				

a Peak stage not recorded.

4738. Staley Creek near Marion, Va.

Location.--Lat 36°49'25", long 81°28'25", at bridge on Route 688 just north of Route 16, 1,000 ft upstream from fish hatchery and 2 miles southeast of Marion, Smyth County.

Drainage area.--8.33 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 2,330 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 12 cfs and extended above by contracted-opening measurements at 150 and 360 cfs.

Bankfull stage.--4 ft.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Dec. 7, 1950	4.3	410	1956	Apr. 16, 1956	3.23	230
1952	-	-	a150	1957	Jan. 29, 1957	4.04	360
1953	July 6, 1953	2.95	190	1958	May 6, 1958	3.38	250
1954	-	-	a150	1959	Jan. 22, 1959	2.71	160
1955	Mar. 18, 1955	3.78	320	1960	Feb. 5, 1960	2.66	155

a Estimated.

4740. Middle Fork Holston River at Sevenmile Ford, Va.

Location.--Lat 36°48'26", long 81°37'20", on right bank at downstream side of bridge on U.S. Highway 11 at Sevenmile Fork, Smyth County, 0.3 mile upstream from Mead Creek and 3.3 miles downstream from Walker Creek.

Drainage area.--132 sq mi.

Gage.--Recording since July 17, 1942. Datum of gage is 1,960.00 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--7 ft.

Remarks.--Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Aug. 9, 1942	8.30	a4,290	1952	Jan. 28, 1952	5.14	1,540
	Aug. 13, 1942	6.48	2,690	1953	Feb. 21, 1953	6.14	2,220
1943	Dec. 30, 1942	7.77	3,840		Mar. 4, 1953	6.30	2,380
1944	Feb. 18, 1944	8.98	4,980		May 19, 1953	6.20	2,300
	Feb. 29, 1944	5.90	2,210		July 7, 1953	6.54	2,540
	Mar. 20, 1944	6.07	2,370	1954	Jan. 22, 1954	8.08	3,910
1945	Feb. 17, 1945	7.74	3,750	1955	Feb. 28, 1955	7.18	3,110
	May 18, 1945	7.15	3,300		Mar. 6, 1955	7.38	3,360
1946	Jan. 7, 1946	8.30	4,290		Mar. 16, 1955	7.93	4,040
	Feb. 10, 1946	6.68	2,850		Apr. 14, 1955	6.93	2,810
1947	Jan. 15, 1947	6.0	2,290	1956	Apr. 16, 1956	8.62	5,020
	Jan. 20, 1947	8.40	4,380	1957	Jan. 9, 1957	6.64	2,580
	Aug. 4, 1947	9.86	6,570		Jan. 29, 1957	10.75	7,680
1948	Feb. 14, 1948	7.33	3,390		Feb. 9, 1957	8.37	4,680
1949	Dec. 3, 1948	6.38	2,610		Apr. 5, 1957	7.14	3,040
	Mar. 18, 1949	5.67	2,010		Apr. 8, 1957	8.28	4,560
1950	Jan. 30, 1950	6.90	2,860	1958	May 6, 1958	5.67	1,820
	Feb. 2, 1950	7.28	3,190	1959	Jan. 22, 1959	6.37	2,370
	July 27, 1950	6.48	2,540		Apr. 12, 1959	6.65	2,540
1951	Dec. 7, 1950	7.44	3,280	1960	Mar. 30, 1960	6.30	2,290

a Believed to be maximum for water year.

4745. Middle Fork Holston River at Chilhowie, Va.

Location.--Lat 36°47'45", long 81°40'50", at highway bridge at Chilhowie, Smyth County.

Drainage area.--155 sq mi.

Gage.--Nonrecording. Altitude of gage is 1,930 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,800 cfs and extended above by logarithmic plotting.

Bankfull stage.--8 ft.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1907	June 13, 1907	11.0	9,300	1926	Feb. 15, 1926	5.0	2,140
1908	Apr. 1, 1908	6.2	3,000	1927	Dec. 25, 1926	11.0	9,300
1909	Apr. 30, 1909	7.4	4,100	1928	Dec. 16, 1927	5.2	2,280
				1929	June 26, 1929	7.5	4,200
1921	Feb. 10, 1921	6.0	2,620	1930	Oct. 2, 1929	7.0	3,700
1922	Jan. 21, 1922	7.5	4,200				
1923	June 12, 1923	11.4	10,000	1931	Apr. 4, 1931	7.5	4,200
1924	Sept. 30, 1924	7.5	3,930				
1925	Dec. 9, 1924	4.3	1,720				

4750. Middle Fork Holston River near Meadowview, Va.

Location.--Lat 36°42'47", long 81°49'08", on left bank 100 ft downstream from highway bridge on State Highway 80, 0.9 mile upstream from Cedar Creek, 4.1 miles southeast of Meadowview, Washington County, and 12.9 miles upstream from mouth.

Drainage area.--211 sq mi.

Gage.--Recording. Datum of gage is 1,820.22 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 4,700 cfs and extended above on basis of logarithmic plotting.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Jan. 30, 1932	5.69	2,230	1936	Apr. 6, 1936	7.53	4,060
	Feb. 3, 1932	8.40	5,010				
	Feb. 12, 1932	6.60	3,100	1937	Jan. 20, 1937	6.20	2,680
	May 1, 1932	5.66	2,180		Feb. 10, 1937	6.25	2,780
1933	Dec. 28, 1932	7.00	3,500	1938	Oct. 28, 1937	6.47	2,980
	Feb. 8, 1933	5.85	2,360		June 20, 1938	5.87	2,330
	Feb. 15, 1933	5.78	2,320		July 22, 1938	5.60	2,090
	Feb. 20, 1933	6.00	2,500				
	May 10, 1933	6.12	2,600	1939	Mar. 6, 1939	5.40	1,910
1934	Mar. 4, 1934	5.65	2,180	1940	Aug. 1, 1940	6.00	2,500
	Mar. 28, 1934	5.67	2,180		Aug. 14, 1940	8.00	4,570
	Aug. 24, 1934	6.55	3,100		Aug. 18, 1940	5.87	2,260
1935	Nov. 29, 1934	5.74	2,230	1941	July 6, 1941	4.83	1,520
	Jan. 9, 1935	6.15	2,680				
	Jan. 23, 1935	8.59	5,360	1942	May 21, 1942	5.52	2,050
	Mar. 24, 1935	5.69	2,180		Aug. 9, 1942	8.82	5,450
	Mar. 26, 1935	7.71	4,280		Aug. 13, 1942	6.16	2,700
	Apr. 1, 1935	6.92	3,400				
	May 25, 1935	5.71	2,180	1943	Dec. 30, 1942	8.29	4,900
					Feb. 5, 1943	5.92	2,410
1936	Jan. 9, 1936	5.83	2,330	1944	Feb. 18, 1944	9.80	6,650
	Jan. 19, 1936	6.52	2,980		Feb. 29, 1944	6.53	3,000
	Feb. 15, 1936	6.06	2,530				

Peak stages and discharges of Middle Fork Holston River near Meadowview, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Mar. 20, 1944	6.51	3,000	1949	Mar. 18, 1949	6.00	2,500
	Apr. 12, 1944	5.57	2,100				
1945	Jan. 1, 1945	5.60	2,140	1950	Jan. 19, 1950	5.84	2,360
	Feb. 18, 1945	8.13	4,680		Jan. 31, 1950	7.61	4,130
	May 18, 1945	7.42	3,910		Feb. 2, 1950	8.22	4,790
	May 30, 1945	5.53	2,100		Feb. 9, 1950	5.47	2,000
1946	Jan. 8, 1946	8.90	5,570		Mar. 28, 1950	5.52	2,050
	Feb. 11, 1946	7.30	3,800		May 15, 1950	5.85	2,360
					July 27, 1950	6.18	2,700
1947	Jan. 16, 1947	6.42	2,900	1951	Dec. 8, 1950	7.23	3,700
	Jan. 20, 1947	9.22	5,930	1952	Jan. 28, 1952	5.42	1,960
	Aug. 4, 1947	9.28	6,050				
1948	Feb. 14, 1948	7.7	4,240	1953	Feb. 21, 1953	6.44	2,900
	Apr. 8, 1948	5.76	2,280		Mar. 4, 1953	6.47	3,000
1949	Dec. 4, 1948	6.80	3,300		May 7, 1953	5.85	2,360
					May 19, 1953	6.35	2,900
					July 7, 1953	5.71	2,230

4765. South Fork Holston River below South Holston Dam, Tenn.

Location.--Lat 36°31'25", long 82°05'50", on right bank 1,900 ft downstream from South Holston Dam powerhouse, 1.0 mile upstream from bridge at Bristol waterworks, 1.0 mile upstream from Thomas Creek, 6.7 miles southeast of Bristol, Sullivan County, and at mile 49.4.

Drainage area.--703 sq mi.

Gage.--Recording. Datum of gage is 1,450.00 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Flow regulated by South Holston Lake. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Dec. 12, 1951	37.22	2,710	1957	Feb. 12, 1957	40.45	8,270
1953	Sept. 13, 1953	37.70	3,360	1958	Feb. 1, 1958	37.39	3,300
1954	Oct. 7, 1953	37.44	3,000	1959	Aug. 19, 1959	37.32	3,250
1955	Sept. 6, 1955	37.65	3,290	1960	Sept. 23, 1960	37.35	3,280
1956	Sept. 28, 1956	37.33	2,850				

4770. South Fork Holston River at Bluff City, Tenn.

Location.--Lat 36°28'38", long 82°15'47", 100 ft upstream from bridge on U.S. Highways 11E and 19 at Bluff City, Sullivan County, 600 ft downstream from Southern Railway bridge, 0.8 mile downstream from Indian Creek, and 4.8 miles upstream from Beaver Creek.

Drainage area.--813 sq mi.

Gage.--Nonrecording prior to Aug. 18, 1928; recording thereafter. At site 150 ft downstream prior to Aug. 18, 1928, at same datum. Datum of gage is 1,368.35 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 19,000 cfs and extended above.

Bankfull stage.--12 ft (from U.S. Weather Bureau).

Historical data.--Flood of March 1867 reached a stage about 3.5 ft higher than the flood of May 22, 1901, from profiles by Tennessee Valley Authority.

Remarks.--Flow regulated by South Holston Reservoir since Nov. 20, 1950. Only annual peaks are shown prior to 1929. Base for partial-duration series, 8,500 cfs.

Peak stages and discharges of South Fork Holston River at Bluff City, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1896	Apr. 11, 1896	a14.5	26,600	1933	May 11, 1933	7.66	8,830
1901	May 22, 1901	16.0	30,700	1934	Aug. 4, 1934	8.54	10,600
1902	Feb. 28, 1902	13.7	24,500	1935	Jan. 23, 1935	8.80	11,300
1903	Feb. 17, 1903	9.4	b14,000	Mar. 26, 1935	12.47	20,500	
1904	Mar. 24, 1904	5.7	b7,200	Apr. 2, 1935	7.82	9,080	
1905	July 13, 1905	6.2	b8,270	1936	Jan. 19, 1936	8.6C	10,800
1906	Jan. 23, 1906	11.6	19,100	Mar. 25, 1936	8.57	10,800	
1907	June 14, 1907	11.7	b21,400	Apr. 7, 1936	8.76	11,300	
1908	Jan. 12, 1908	11.0	17,700	1937	Feb. 10, 1937	7.61	8,400
1909	May 1, 1909	6.4	b8,720	1938	Oct. 28, 1937	8.53	10,400
1910	July 7, 1910	6.3	7,740	July 22, 1938	8.34	9,940	
1911	Mar. 8, 1911	7.8	b12,000	1939	Mar. 6, 1939	8.33	9,940
1912	Apr. 2, 1912	10.5	16,500	1940	July 30, 1940	10.84	16,000
1913	Mar. 27, 1913	10.9	17,500	Aug. 14, 1940	11.6C	18,200	
1914	Mar. 30, 1914	6.4	8,720	1941	July 6, 1941	4.97	3,870
1915	Feb. 2, 1915	6.6	8,280	1942	Aug. 9, 1942	9.36	12,500
1916	Dec. 18, 1915, Jan. 7, 1916	10.0	15,300	1943	Dec. 30, 1942	10.52	15,200
1917	Mar. 5, 1917	9.3	13,800	1944	Feb. 18, 1944	11.42	17,600
1918	Jan. 29, 1918	9.1	b13,300	1945	Feb. 18, 1945	9.40	12,500
1919	Oct. 26, 1918	7.7	b10,400	May 18, 1945	8.13	9,500	
1920	Apr. 2, 1920	8.2	11,400	1946	Jan. 8, 1946	10.60	15,500
1921	Feb. 11, 1921	7.56	b10,900	Feb. 11, 1946	10.06	14,200	
1922	Jan. 20, 1922	8.9	b14,100	1947	Jan. 16, 1947	7.81	8,840
1923	Feb. 3, 1923	11.3	18,400	Jan. 20, 1947	11.86	18,900	
1924	June 14, 1924	7.1	8,540	1948	Feb. 14, 1948	9.32	12,300
1925	Dec. 9, 1924	5.8	b6,310	1949	Dec. 4, 1948	8.30	9,940
1926	Feb. 15, 1926	6.8	b8,000	1950	Feb. 2, 1949	10.51	15,300
1927	Feb. 23, 1927	11.4	18,700	May 12, 1949	7.66	8,600	
1928	Dec. 16, 1927	5.9	6,470	1951	Mar. 30, 1951	5.09	4,220
1929	Feb. 28, 1929	7.9	9,310	1952	Jan. 28, 1952	4.92	3,980
	Mar. 6, 1929	8.39	10,400	1953	Feb. 21, 1953	5.26	4,240
	June 26, 1929	8.18	9,940				
	July 2, 1929	7.88	9,310				
1930	Oct. 2, 1929	6.60	6,650				
1931	Apr. 5, 1931	8.44	10,300				
1932	Feb. 4, 1932	10.00	15,300				
1933	Dec. 28, 1932	9.30	13,200				
	Feb. 8, 1933	7.60	8,620				
	Feb. 15, 1933	8.20	9,880				

a From reports of U.S. Weather Bureau.

b Maximum daily discharge.

4775. Beaver Creek near Wallace, Va.

Location.--Lat 36°38'25", long 82°06'42", on left bank 0.4 mile upstream from Clear Creek, 1.3 miles southwest of Wallace, Washington County, and 3.8 miles northeast of Bristol.

Drainage area.--13.7 sq mi.

Gage.--Recording October 1945 to Sept. 30, 1957; crest-stage gage thereafter. Datum of gage is 1,808.93 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 250 cfs and extended above by logarithmic plotting on basis of velocity-area studies. A large shift occurred in 1957.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 100 cfs. Only annual peaks are shown after Sept. 30, 1957.

TENNESSEE RIVER BASIN

Peak stages and discharges of Beaver Creek near Wallace, Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	Jan. 7, 1946	3.91	149	1951	July 19, 1951	4.38	200
	Jan. 11, 1946	3.34	102		Aug. 9, 1951	4.93	258
	Feb. 10, 1946	4.5	206	1952	Mar. 11, 1952	2.73	79
1947	Jan. 15, 1947	3.40	109		Mar. 4, 1953	4.04	170
	Jan. 20, 1947	4.85	246	1953	May 19, 1953	3.16	103
	Aug. 12, 1947	3.62	124	1954	Jan. 22, 1954	3.16	103
1948	Feb. 14, 1948	3.83	144		Mar. 1, 1955	4.44	205
	Apr. 6, 1948	3.60	124	1955	Mar. 6, 1955	3.89	158
	July 15, 1948	5.9	383		Mar. 16, 1955	4.11	174
1949	Dec. 3, 1948	3.55	120	1956	Mar. 18, 1955	4.58	220
	Mar. 18, 1949	4.22	176		Mar. 22, 1955	4.31	191
	July 11, 1949	3.93	154	1957	Mar. 26, 1955	3.18	106
	July 13, 1949	4.46	201		Apr. 15, 1956	4.27	186
	July 14, 1949	3.96	154	1957	Jan. 29, 1957	4.48	278
	Aug. 13, 1949	5.02	264		Feb. 7, 1957	4.37	264
1950	Jan. 30, 1950	4.70	230	1958	Apr. 8, 1957	4.55	286
	Feb. 1, 1950	4.26	186		June 23, 1957	3.09	127
	Feb. 2, 1950	4.57	215	1959	May 6, 1958	4.44	274
	Feb. 7, 1950	3.88	158		Mar. 27, 1959	2.83	104
	Feb. 9, 1950	4.70	230	1960	Nov. 24, 1959	1.70	19
1951	May 4, 1951	3.65	138				
	May 6, 1951	3.40	120				

4789.1. Cove Creek at Sherwood, N. C.

Location.--Lat 35°15'50", long 81°47'03", at bridge 0.3 mile downstream from Isaac Hollow and 0.5 mile southwest of Sherwood, Watauga County.

Drainage area.--23.1 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 2,680 ft (from topographic map).

Stage-discharge relation.--Not defined.

Remarks.--Only annual peak stages shown except for flood of August 1940 when a slope-area measurement by Tennessee Valley Authority was made three-quarters of a mile upstream, and for flood of Apr. 5, 1957, when a contracted-opening measurement was made.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Aug. 13, 1940	-	12,000	1957	Apr. 5, 1957	18.58	1,390
					May 6, 1958	16.03	-
1955	Apr. 14, 1955	18.24	-	1958	Dec. 28, 1958	18.25	-
					Feb. 5, 1960	17.28	-
1956	Apr. 16, 1956	17.95	-				

4790. Watauga River near Sugar Grove, N. C.

Location.--Lat 36°14'18", long 81°49'22", on right bank 300 ft downstream from Cove Creek, 2.3 miles southwest of Sugar Grove, Watauga County, and at mile 64.4.

Drainage area.--90.8 sq mi.

Gage.--Recording. Datum of gage is 2,607.84 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 2,100 cfs and extended above on basis of slope-area measurement at 50,800 cfs.

Remarks.--Base for partial-duration series, 2,000 cfs.

Peak stages and discharges of Watauga River near Sugar Grove, N. C.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1916	July 1916	22.1	28,000	1950	Sept. 1, 1950	7.26	2,880
1940	Aug. 13, 1940	29.6	50,800	1951	Sept. 9, 1950	7.70	3,290
	Aug. 30, 1940	14.66	12,400		Dec. 4, 1950	9.19	4,830
1941	Dec. 28, 1940	6.35	2,210	1952	Dec. 7, 1950	16.40	15,500
	July 7, 1941	7.28	3,020		Mar. 30, 1951	6.29	2,080
1942	Mar. 9, 1942	8.59	4,250	1953	Dec. 4, 1951	6.59	2,310
	Mar. 15, 1942	9.28	4,980		Feb. 3, 1952	7.72	3,310
	June 12, 1942	9.17	4,840		Mar. 11, 1952	8.47	4,060
	Sept. 6, 1942	11.00	6,900	1954	Jan. 10, 1953	6.52	2,260
1943	Dec. 29, 1942	9.72	5,420		Feb. 21, 1953	7.90	3,490
	Apr. 19, 1943	6.72	2,580		Mar. 23, 1953	6.82	2,500
	May 12, 1943	6.35	2,290	1955	Jan. 22, 1954	8.85	4,460
1944	Feb. 18, 1944	6.43	2,320		Feb. 21, 1954	9.11	4,740
	May 17, 1945	8.80	4,400		Mar. 1, 1954	6.67	2,380
1945	Sept. 17, 1945	11.10	7,020	1956	Dec. 30, 1954	6.42	2,180
	Jan. 7, 1946	7.96	3,590		Feb. 6, 1955	6.47	2,220
1946	Mar. 14, 1946	7.22	2,850		Apr. 14, 1955	11.72	7,820
	Mar. 23, 1946	6.51	2,250	1957	Apr. 16, 1956	8.29	3,880
	Jan. 20, 1947	5.95	1,840		Jan. 31, 1957	6.45	2,200
1947	Oct. 17, 1947	6.74	2,430		Apr. 2, 1957	8.20	3,790
	Nov. 3, 1947	8.32	3,910	1958	Apr. 4, 1957	12.90	9,490
	Aug. 3, 1948	6.43	2,180		June 5, 1957	6.37	2,140
	Sept. 6, 1948	8.22	3,810		Nov. 14, 1957	6.21	2,030
1949	Nov. 6, 1948	9.48	5,150	1959	Nov. 19, 1957	7.25	2,880
	Nov. 28, 1948	7.11	2,750		Dec. 20, 1957	11.30	7,270
	Apr. 13, 1949	7.82	3,410		Dec. 28, 1958	8.82	4,420
	June 17, 1949	7.92	3,510	1960	Jan. 22, 1959	9.03	4,650
	July 18, 1949	7.22	2,850		Sept. 30, 1959	10.60	6,420
	Aug. 28, 1949	11.14	7,070		Feb. 5, 1960	8.24	3,830
1950	Nov. 1, 1949	7.02	2,670		Mar. 30, 1960	8.75	4,340
					Apr. 4, 1960	6.94	2,600

a From floodmarks on barn a quarter of a mile upstream.

4795. Watauga River at North Carolina-Tennessee State line

Location.--Lat 36°17'25", long 81°55'33", 0.6 mile downstream from North Carolina-Tennessee State line, 1.9 miles downstream from Stone Mountain Branch, and 7½ miles southeast of Butler, Johnson County, Tenn.

Drainage area.--152 sq mi.

Gage.--Recording. Datum of gage is 2,060.57 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 3,500 cfs and extended above.

Bankfull stage.--Not subject to overflow.

Historical data.--Flood of Aug. 13, 1940, reached a stage about 12 ft higher than the flood of Dec. 7, 1950.

Remarks.--Base for partial-duration series, 2,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Dec. 29, 1942	5.19	6,600	1945	Sept. 18, 1945	5.32	6,900
	Apr. 19, 1943	3.79	2,860	1946	Jan. 8, 1946	4.64	5,000
1944	Feb. 18, 1944	4.17	3,680		Feb. 10, 1946	3.82	2,860
					Mar. 14, 1946	3.94	3,200
1945	Oct. 20, 1944	3.86	2,970	1947	Jan. 20, 1947	3.69	2,750
	May 17, 1945	4.58	4,860				

Peak stages and discharges of Watauga River at North Carolina-Tennessee
State line--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Nov. 3, 1947	4.44	4,500	1951	Dec. 7, 1950	7.15	14,700
	Apr. 8, 1948	3.97	3,370	1952	Feb. 3, 1952	4.45	4,560
	Sept. 6, 1948	2.77	2,930		Mar. 11, 1952	4.42	4,480
1949	Nov. 6, 1948	4.21	4,250	1953	Jan. 10, 1953	3.79	2,930
	Nov. 28, 1948	3.78	3,180		Feb. 21, 1953	4.43	4,510
	Apr. 13, 1949	3.94	3,560	1954	Jan. 22, 1954	4.94	5,990
	June 17, 1949	3.86	3,360		Feb. 21, 1954	4.45	4,560
	July 18, 1949	3.61	2,800		Mar. 1, 1954	3.77	2,880
	Aug. 28, 1949	4.99	6,430				
1950	Nov. 1, 1949	4.12	4,010	1955	Feb. 6, 1955	3.86	3,090
	Sept. 9, 1950	4.09	3,930		Mar. 16, 1955	3.98	3,360
1951	Dec. 4, 1950	4.48	4,710		Apr. 14, 1955	5.61	8,280

4800. Watauga River at Stump Knob, Tenn.

Location.--Lat 36°18'37", long 81°57'31", 200 ft downstream from Dugger Bridge, 0.25 mile upstream from former post office of Stump Knob, 2.75 miles upstream from Elk Creek, and 4.25 miles upstream from Butler, Johnson County.

Drainage area.--171 sq mi.

Gage.--Nonrecording Oct. 30, 1927, to Sept. 30, 1931, and Aug. 14, 1940, to Aug. 2, 1941; recording May 9, 1934, to Aug. 13, 1940, and Aug. 3, 1941, to Sept. 30, 1945. At site 1,700 ft downstream prior to Oct. 1, 1931, at datum 3.96 ft lower. At site 800 ft downstream May 9, 1934, to Aug. 2, 1941, at datum 3.52 ft lower. Datum of gage is 1,872.55 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 4,100 cfs and extended on basis of study of peak discharge at upstream stations.

Bankfull stage.--20 ft.

Historical data.--Flood of Aug. 13, 1940, is highest known since about the mid-1800's, from reports by Tennessee Valley Authority.

Remarks.--Only annual peaks are shown prior to 1935. Base for partial-duration series, 3,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1901	May 21, 1901	19.5	34,400	1938	July 23, 1938	6.44	4,170
1928	Nov. 17, 1927	9.2	10,700	1939	Nov. 5, 1939	7.22	5,800
1929	Mar. 14, 1929	5.50	4,950		Jan. 30, 1939	5.44	3,300
1930	Oct. 2, 1929	5.50	4,800		Aug. 18, 1939	7.34	5,960
1931	Apr. 22, 1931	3.90	2,570	1940	Apr. 19, 1940	8.14	7,280
1935	Nov. 23, 1934	6.95	5,490		Aug. 15, 1940	24.0	50,000
	Nov. 30, 1934	6.23	4,320		Aug. 30, 1940	10.35	10,900
	Jan. 9, 1935	12.44	16,100	1941	July 7, 1941	5.17	2,920
	Mar. 26, 1935	8.05	7,110				
	July 26, 1935	6.08	4,180	1942	Mar. 9, 1942	6.31	4,950
	Sept. 5, 1935	8.08	7,280		May 15, 1942	6.60	5,400
1936	Nov. 13, 1935	9.2	9,290		June 12, 1942	6.04	4,500
	Jan. 19, 1936	5.92	3,890		Sept. 6, 1942	7.48	6,800
	Mar. 24, 1936	5.80	3,750	1943	Dec. 30, 1942	7.70	7,120
	Apr. 4, 1936	6.50	4,740				
1937	Oct. 16, 1936	7.12	5,640	1944	Feb. 18, 1944	5.78	4,200
1938				1945	May 17, 1945	6.46	5,250
	Oct. 19, 1937	5.72	3,620		Sept. 18, 1945	8.20	7,920

a From floodmarks, site and datum used May 1934 to August 1941.

4805. Elk River near Banner Elk, N. C.
(Published as "Elk Creek")

Location.--Lat 36°09'55", long 81°54'25", 200 ft south of State Highway 194, 1.0 mile downstream from Whitehead Creek, and 1.9 miles west of Banner Elk, Avery County.

Drainage area.--17.8 sq mi.

Gage.--Recording. Altitude of gage is 3,340 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 500 cfs and extended above on basis of slope-area measurement at 21,900 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Jan. 9, 1935	7.34	2,860	1938	July 21, 1938	3.81	515
1936	Nov. 12, 1935	4.24	668	1939	Nov. 5, 1938	6.36	2,060
1937	Oct. 16, 1936	5.30	1,280	1940	Aug. 13, 1940	16.9	21,900

4805.4. Grassy Creek near Banner Elk, N. C.

Location.--Lat 36°10'20", long 81°54'42", at culvert on State Highway 194, 100 ft upstream from mouth, and 2.7 miles west of Banner Elk, Avery County.

Drainage area.--0.51 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Discharge defined by theoretical computations of flow through culvert.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Apr. 14, 1955	16.69	22	1958	May 7, 1958	16.36	15
				1959	Dec. 28, 1958	16.56	19
1956	Apr. 16, 1956	16.22	12	1960	Aug. 13, 1960	16.38	15
1957	Apr. 5, 1957	16.77	24				

4810. Elk River near Elk Park, N. C.
(Published as "Elk Creek" prior to Oct. 1, 1949)

Location.--Lat 36°11'01", long 81°57'45", 1.4 miles downstream from Little Elk Creek, 2.0 miles northeast of Elk Park, Avery County, and 3.1 miles upstream from North Carolina-Tennessee State line.

Drainage area.--42.0 sq mi.

Gage.--Recording. Altitude of gage is 2,810 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 900 cfs and extended above on basis of slope-area measurement at 27,500 cfs.

Historical data.--Surveys by Tennessee Valley Authority show that the floods of May 1901 and July 1916 were probably exceeded by the flood of Aug. 13, 1940.

Remarks.--Base for partial-duration series, 1,100 cfs.

TENNESSEE RIVER BASIN

Peak stages and discharges of Elk River near Elk Park, N. C.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Jan. 9, 1935	7.15	3,640	1945	May 17, 1945	5.05	1,220
	Mar. 26, 1935	5.75	2,140		Sept. 17, 1945	6.50	2,880
1936	Nov. 12, 1935	5.00	1,490	1946	Jan. 7, 1946	5.85	2,060
	Jan. 19, 1936	4.95	1,450				
	Mar. 24, 1936	4.80	1,340	1947	Jan. 20, 1947	5.05	1,220
	Apr. 6, 1936	5.20	1,650				
1937	Oct. 16, 1936	5.04	1,530	1948	Oct. 17, 1947	5.12	1,290
	Jan. 3, 1937	4.54	1,160		Nov. 2, 1947	7.08	3,630
1938	July 23, 1938	4.39	1,080	1949	Nov. 28, 1948	5.05	1,220
					June 16, 1949	5.44	1,580
1939	Nov. 5, 1938	6.00	2,370		Aug. 28, 1949	7.86	4,690
	Aug. 18, 1939	4.48	1,140	1950	Sept. 9, 1950	5.98	2,200
1940	Apr. 19, 1940	6.40	2,850				
	Aug. 13, 1940	17.8	27,500	1951	Dec. 4, 1950	5.43	1,570
1941	July 12, 1941	4.80	1,020		Dec. 7, 1950	8.29	5,320
1942	Mar. 8, 1942	5.05	1,220	1952	Dec. 21, 1951	5.34	1,480
	May 15, 1942	4.95	1,140		Feb. 3, 1952	5.80	1,980
	June 11, 1942	5.00	1,180	1953	Jan. 10, 1953	5.86	2,050
	Sept. 6, 1942	6.70	3,140		Feb. 21, 1953	5.87	2,060
1943	Dec. 29, 1942	5.69	1,880	1954	Jan. 22, 1954	6.28	2,560
1944	Feb. 18, 1944	4.95	1,140				
1945				1955	Feb. 6, 1955	5.88	2,080
	Oct. 20, 1944	5.20	1,360		Apr. 13, 1955	7.55	4,260

4820. Roan Creek near Neva, Tenn.

Location.--Lat 36°22'37", long 81°53'14", on right bank on Butler-Neva road, 1.7 miles southeast of Neva.

Drainage area.--102 sq mi.

Gage.--Recording June 11, 1942, to July 5, 1955; crest-stage gage since Oct. 1, 1958; datum of gages is 2,103.11 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 3,340 cfs and extended above.

Bankfull stage.--3 ft.

Remarks.--Only annual peaks are shown since Oct. 1, 1958. Base for partial-duration series, 1,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Dec. 30, 1942	5.26	2,690	1951	Dec. 7, 1950	5.44	2,870
1944	Feb. 18, 1944	5.28	2,720	1952	Dec. 21, 1951	4.67	1,830
1945	Feb. 17, 1945	4.62	1,760	1953	Feb. 21, 1953	4.77	1,530
	May 18, 1945	4.67	1,830		June 10, 1953	4.91	1,670
1946	Jan. 8, 1946	5.46	2,990	1954	Jan. 16, 1954	4.75	1,510
	Feb. 10, 1946	5.38	2,870		Jan. 22, 1954	6.35	3,340
1947	Jan. 20, 1947	5.62	3,230	1955	Feb. 6, 1955	4.95	1,710
1948					Mar. 16, 1955	5.78	2,880
	Apr. 8, 1948	4.81	2,020		Mar. 18, 1955	6.26	3,590
1949					Apr. 14, 1955	5.36	2,310
	Mar. 18, 1949	4.19	1,230	1959	Jan. 22, 1959	6.24	3,710
1950	Nov. 1, 1949	4.36	1,460		Mar. 30, 1960	5.49	2,480
	Feb. 2, 1950	4.35	1,440				

4825. Roan Creek at Butler, Tenn.

Location--Lat 36°20'22", long 81°59'36", half a mile northeast of Butler, Johnson County, and 0.7 mile upstream from mouth.

Drainage area--166 sq mi.

Gage--Recording. Datum of gage is 1,826.78 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation--Defined by current-meter measurements below 2,500 cfs and extended above.

Historical data--Floods of March and April 1934 and May 1901 may have been higher than the flood of Mar. 26, 1935.

Remarks--Base for partial-duration series, 1,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Jan. 9, 1935	4.59	2,160	1941	July 16, 1941	2.28	580
	Mar. 13, 1935	4.14	1,780	1942	Aug. 9, 1942	4.00	1,680
	Mar. 20, 1935	4.22	1,820				
	Mar. 26, 1935	7.68	4,940	1943	Dec. 30, 1942	5.26	2,760
	June 4, 1935	3.97	1,620				
	June 9, 1935	4.02	1,660	1944	Feb. 18, 1944	5.40	2,840
	July 26, 1935	3.97	1,620		Feb. 26, 1944	4.01	1,680
	Sept. 5, 1935	3.98	1,660		Mar. 20, 1944	4.36	1,960
1936	Jan. 19, 1936	5.25	2,670	1945	Jan. 1, 1945	4.27	1,880
	Feb. 4, 1936	4.45	2,020		Feb. 17, 1945	4.88	2,420
	Mar. 24, 1936	5.45	2,840		May 18, 1945	4.20	1,840
	Mar. 28, 1936	4.98	2,500	1946	Jan. 8, 1946	5.82	3,200
	Apr. 6, 1936	5.19	2,670		Feb. 10, 1946	5.90	3,290
1937	Jan. 3, 1937	4.17	1,780	1947	Jan. 16, 1947	3.91	1,620
	Jan. 19, 1937	4.17	1,780		Jan. 20, 1947	6.51	3,840
1938	Oct. 28, 1937	5.00	2,500	1948	Feb. 14, 1948	3.89	1,600
1939	Feb. 15, 1939	3.86	1,540				
1940	July 30, 1940	5.59	3,020		Apr. 8, 1948	4.76	2,300
	Aug. 14, 1940	10.09	3,920				

a Occurred Aug. 13, 1940, backwater from Watauga River.

4830. Watauga River at Butler, Tenn.

Location--Lat 36°19'59", long 82°00'16", at Butler, Johnson County, 1,000 ft downstream from highway bridge and 1,100 ft downstream from Roan Creek.

Drainage area--427 sq mi.

Gage--Nonrecording prior to Oct. 1, 1931; recording thereafter. At site 800 ft upstream Aug. 14, 1900, to Dec. 28, 1901, at unknown datum. At site 1,000 ft upstream Nov. 6, 1920, to Sept. 30, 1931, at datum 2.88 ft higher. Datum of gage is 1,809.38 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation--Defined by current-meter measurements below 14,000 cfs and extended on basis of contracted-opening measurement at 71,500 cfs.

Historical data--Flood of Aug. 13, 1940, is the highest known since about the mid-1800's.

Remarks--Only annual peaks are shown prior to 1932. Base for partial-duration series, 5,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1901	May 21, 1901	16.27	31,400	1925	Apr. 28, 1925	6.8	8,700
1921	Feb. 9, 1921	7.7	10,500	1926	Jan. 18, 1926	8.7	12,500
1922	Jan. 21, 1922	6.23	7,560	1927	Feb. 22, 1927	10.2	15,500
1923	Mar. 16, 1923	8.0	11,100	1928	Nov. 17, 1927	11.6	18,600
1924	Jan. 11, 1924	8.1	11,500	1929	Mar. 5, 1929	8.0	11,400

a Stage may have reached 23 ft present site and datum from reports by Tennessee Valley Authority.

b Maximum daily discharge.

Peak stages and discharges of Watauga River at Butler, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Oct. 2, 1929	7.00	9,350	1939	Nov. 5, 1938	7.00	8,320
1931	Apr. 22, 1931	5.40	6,150		Jan. 30, 1939	5.31	5,070
1932	Feb. 3, 1932	9.7	13,800		Feb. 15, 1939	5.90	6,200
	May 1, 1932	6.36	7,410		Aug. 18, 1939	6.45	7,150
1933	Oct. 17, 1932	6.66	7,980	1940	Apr. 18, 1940	7.60	9,520
	Dec. 28, 1932	6.08	6,860		July 30, 1940	6.65	7,660
	Feb. 8, 1933	6.10	6,860		Aug. 13, 1940	25.40	71,500
	Feb. 15, 1933	6.28	7,220		Aug. 30, 1940	9.78	14,000
	Apr. 16, 1933	6.35	7,410	1941	July 5, 1941	5.40	4,500
	July 3, 1933	6.94	8,360	1942	Mar. 9, 1942	6.85	7,740
	July 28, 1933	5.37	5,600		May 15, 1942	6.49	6,940
1934	Mar. 3, 1934	5.26	5,420		May 20, 1942	5.68	5,370
	Mar. 27, 1934	6.25	7,040		June 12, 1942	5.73	5,370
	Apr. 9, 1934	6.73	7,980		Sept. 6, 1942	7.56	9,210
1935	Nov. 23, 1934	5.88	6,200		Sept. 27, 1942	5.53	5,000
	Nov. 30, 1934	6.18	6,770	1943	Dec. 30, 1942	8.86	12,000
	Jan. 9, 1935	11.85	18,500	1944	Feb. 18, 1944	7.80	9,630
	Mar. 12, 1935	5.52	5,440	1945	Oct. 20, 1945	6.42	6,740
	Mar. 26, 1935	10.83	16,300		Jan. 1, 1945	5.68	5,370
	July 26, 1935	6.88	8,120		Feb. 17, 1945	5.77	5,560
	Sept. 5, 1935	7.04	8,320		May 18, 1945	7.22	8,370
1936	Nov. 13, 1935	8.40	11,100		Sept. 18, 1945	8.66	11,600
	Jan. 19, 1936	7.43	9,120	1946	Jan. 8, 1946	8.83	11,800
	Feb. 4, 1936	5.50	5,440		Feb. 10, 1946	7.43	8,790
	Mar. 24, 1936	7.51	9,320	1947	Jan. 20, 1947	8.06	10,200
	Mar. 27, 1936	5.64	5,630	1948	Nov. 3, 1948	7.87	9,780
	Apr. 6, 1936	7.85	9,920		Feb. 12, 1948	5.60	5,200
1937	Oct. 16, 1936	6.49	7,340		Apr. 8, 1948	7.17	8,510
	Jan. 3, 1937	6.08	6,580		Aug. 3, 1948	5.96	5,860
1938	Oct. 19, 1937	5.38	5,250				
	Oct. 28, 1937	6.04	6,390				
	July 23, 1938	7.03	8,320				

4840. Watauga River below Wilbur Dam, Tenn.

Location--Lat 36°20'39", long 82°07'46", 1,800 ft downstream from Wilbur Dam, 0.7 mile downstream from Big Laurel Branch, 2.7 miles downstream from Watauga Dam, 5 miles east of Elizabethton, Carter County, and 33.6 miles above mouth.

Drainage area--471 sq mi.

Gage--Nonrecording prior to Dec. 31, 1908; recording since Jan. 22, 1948. At site 2 miles downstream prior to Dec. 31, 1908, at different datum. Datum of gage is 1,550.00 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation--Defined by current-meter measurements below 2,500 cfs and extended above at former site. Defined by current-meter measurements below 7,800 cfs at present site.

Remarks--Flow regulated by Watauga Lake since Dec. 1, 1948. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Mar. 24, 1904	5.5	5,040	1952	Aug. 20, 21, 1952	35.47	3,010
1905	July 12, 1905	9.0	11,200	1953	July 13, 1953	35.48	3,020
1906	Jan. 22, 1906	13.60	21,500	1954	Sept. 22, 1954	35.43	2,960
1907	Sept. 23, 1907	7.95	9,340	1955	May 31, 1955	36.46	4,340
1908	Jan. 12, 1908	8.20	9,720	1956	Oct. 8, 1955	35.48	3,020
1948	Apr. 8, 1948	39.07	a8,210	1957	Mar. 6, 1957	35.48	3,020
1949	Nov. 28, 1948	36.87	4,920	1958	Feb. 18, 1958	35.53	3,090
1950	June 9, 1950	35.90	3,570	1959	Nov. 6, 1958	35.52	3,080
1951	Feb. 22, 1951	35.85	3,500	1960	Jan. 19, 1960	38.10	6,750

a Maximum for period Jan. 22 to Sept. 30, 1948.

4855. Doe River at Elizabethton, Tenn.
(Published as "at Valley Forge" prior to June 19, 1932)

Location.--Lat 36°20'40", long 82°12'37", on left bank 1,500 ft upstream from bridge on State Highway 91 at Elizabethton, Carter County, and 1 mile upstream from mouth.

Drainage area.--137 sq mi.

Gage.--Nonrecording prior to Feb. 1, 1934; recording thereafter. At site 3 miles upstream prior to Oct. 1, 1931, at datum 83.74 ft higher. Datum of gage is 1,524.73 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 3,800 cfs and extended on basis of slope-area measurement at 6,350 cfs.

Bankfull stage.--8 ft, from Tennessee Valley Authority.

Historical data.--Flood of May 1901 is highest known since about 1867, from reports by Tennessee Valley Authority.

Remarks.--Only annual peaks are shown prior to Feb. 1, 1934. Base for partial-duration series, 1,700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1901	May 21, 1901	12.2	a39,000	1943	Dec. 30, 1942	6.40	6,520
1912	Mar. 15, 1912	4.6	2,520	1944	Feb. 18, 1944	4.87	3,680
1913	Mar. 14, 1913	6.0	4,200				
1914	Mar. 12, 1914	3.23	1,170	1945	Oct. 20, 1944	4.35	2,870
1915	Dec. 25, 1914	3.7	1,600		May 18, 1945	3.50	1,700
					Sept. 18, 1945	3.61	1,820
1916	July 18, 1916	5.05	3,000				
1921	July 20, 1921	5.86	4,080	1946	Jan. 8, 1946	5.22	4,290
1922	Jan. 21, 1922	3.89	1,780		Feb. 4, 1946	4.44	3,030
1923	Aug. 13, 1923	4.52	2,410	1947	Jan. 20, 1947	4.78	3,570
1924	June 13, 1924	6.7	5,040				
1925	Dec. 8, 1924	3.55	1,460	1948	Feb. 12, 1948	3.48	1,660
1926	Jan. 18, 1926	3.6	1,510	1949	Mar. 18, 1949	3.44	1,610
1927	May 30, 1927	6.4	4,680				
1928	Nov. 17, 1927	4.13	1,980	1950	Nov. 1, 1949	3.62	1,830
1929	Mar. 5, 1929	4.43	2,280		Feb. 9, 1950	3.70	1,930
1930	Oct. 2, 1929	4.36	2,310		May 12, 1950	5.12	4,150
					June 27, 1950	3.60	1,800
1931	Apr. 4, 1931	3.70	1,600				
1933	Feb. 14, 1933	4.40	3,000	1951	Dec. 4, 1950	3.76	2,010
1934	Mar. 3, 1934	3.41	1,700		Dec. 7, 1950	6.58	6,860
	Apr. 9, 1934	3.80	2,170	1952	Dec. 21, 1951	4.07	2,440
	July 15, 1934	4.98	3,940				
1935	Jan. 9, 1935	4.55	3,190	1953	Feb. 21, 1953	5.12	4,150
	Mar. 12, 1935	3.50	1,740				
	Mar. 20, 1935	3.55	1,800	1954	Jan. 22, 1954	5.73	5,150
	Mar. 26, 1935	6.42	6,520				
	July 26, 1935	5.80	5,380	1955	Feb. 6, 1955	4.49	2,740
1936	Nov. 13, 1935	3.56	1,800		Mar. 16, 1955	4.59	2,910
	Jan. 19, 1936	4.96	3,860		Mar. 19, 1955	4.17	2,270
	Feb. 4, 1936	3.83	2,180		Apr. 14, 1955	3.88	1,910
	Mar. 24, 1936	5.18	4,290				
	Apr. 6, 1936	4.70	3,430	1956	Feb. 17, 1956	4.50	2,760
1937	Jan. 3, 1937	3.72	1,980		Apr. 16, 1956	6.09	5,870
1938	Mar. 3, 1938	3.77	2,000	1957	Jan. 29, 1957	5.26	4,210
	July 23, 1938	3.89	2,200		Feb. 1, 1957	5.65	4,990
					Feb. 10, 1957	4.38	2,630
1939	Nov. 5, 1938	4.25	2,720		Apr. 5, 1957	6.25	6,190
	Feb. 3, 1939	3.57	1,760		Apr. 8, 1957	3.70	1,700
	Feb. 15, 1939	3.98	2,340	1958	Dec. 20, 1957	4.09	2,320
	June 3, 1939	3.85	2,140		Apr. 25, 1958	3.67	1,790
1940	July 16, 1940	4.00	2,340		May 7, 1958	3.81	1,950
	July 30, 1940	6.75	7,300		Aug. 1, 1958	4.93	3,740
	Aug. 13, 1940	5.48	4,830	1959	Dec. 28, 1958	4.13	2,380
	Aug. 30, 1940	3.53	1,760		Jan. 22, 1959	6.58	7,000
1941	July 16, 1941	3.04	1,240		Mar. 27, 1959	3.76	1,890
					Sept. 30, 1959	3.95	2,120
1942	Mar. 9, 1942	3.45	1,640	1960	Dec. 19, 1959	3.59	1,700
					Mar. 30, 1960	3.93	2,210

a From reports by Tennessee Valley Authority.

4860. Watauga River at Elizabethton, Tenn.

Location.--Lat 36°21'21", long 82°13'26", on left bank 25 ft upstream from bridge on U.S. Highway 19E at Elizabethton, Carter County, 0.6 mile downstream from Doe River, and at mile 25.9.

Drainage area.--692 sq mi.

Gage.--Nonrecording prior to Oct. 4, 1926; recording thereafter. Datum of gage is 1,486.23 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 29,000 cfs and extended on basis of contracted-opening measurement at 75,100 cfs.

Bankfull stage.--11 ft (from Tennessee Valley Authority).

Remarks.--Flow regulated by Watauga Lake since Dec. 1, 1948. Only annual peaks are shown prior to 1927. Base for partial-duration series 9,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1867	March 1867	18	a54,000	1934	Apr. 9, 1934	9.51	10,900
1875	February 1875	14	a29,000	1935	Jan. 9, 1935	12.32	22,500
1886	March 1886	19	a61,000		Mar. 26, 1935	12.97	25,700
1896	Apr. 1, 1896	16	a40,000		July 26, 1935	9.17	10,500
1897	February 1897	17	a47,000	1936	Nov. 13, 1935	10.25	13,800
1901	May 21, 1901	21	a75,900		Jan. 19, 1936	10.80	16,100
1902	Feb. 28, 1902	19	a61,000		Mar. 25, 1936	10.96	16,900
1906	January 1906	11	a16,000		Apr. 6, 1936	10.64	15,300
1910	July 8, 1910	b c 6.4	-	1937	Jan. 3, 1937	9.00	9,780
1911	Mar. 8, 1911	c8.1	-	1938	Oct. 28, 1937	9.11	10,100
1912	Apr. 2, 1912	c7.8	-		July 24, 1938	9.62	11,000
1913	Mar. 14, 1913	c10.4	-	1939	Feb. 15, 1939	8.92	9,500
1914	Mar. 12, 1914	c7.0	-	1940	Apr. 20, 1940	9.25	10,200
1915	Dec. 2, 1914	c9.5	-		Aug. 14, 1940	20.97	75,100
1916	July 16, 1916	15.6	a40,000		Aug. 30, 1940	11.38	17,300
1917	Mar. 5, 1917	c7.9	-	1941	July 5, 1941	6.72	4,540
1918	Jan. 28, 1918	11.1	a17,300	1942	Mar. 9, 1942	9.22	10,200
1919	Jan. 3, 1919	c7.8	-		May 20, 1942	9.00	9,620
1920	Apr. 1, 1920	c10.2	-		Sept. 6, 1942	9.02	9,620
1921	Feb. 10, 1921	c8.9	-	1943	Dec. 30, 1942	12.76	23,500
1922	Jan. 20, 1922	c8.9	-	1944	Feb. 18, 1944	11.35	17,200
1923	Jan. 28, 1923	c8.5	-	1945	May 18, 1945	9.68	11,000
1924	Mar. 17, 1923	c8.5	-		Sept. 18, 1945	10.60	14,100
1925	June 13, 1924	13.4	a30,000	1946	Jan. 8, 1946	11.94	19,400
	Apr. 29, 1925	c6.8	-		Feb. 10, 1946	11.00	15,600
	June 25, 1925	c6.8	-	1947	Jan. 20, 1947	11.71	18,500
1926	Jan. 18, 1926	c8.9	-	1948	Nov. 3, 1947	9.52	10,500
1927	Nov. 16, 1926	9.8	11,800		Apr. 8, 1948	9.86	11,600
	Feb. 23, 1927	11.1	16,100	1949	Nov. 29, 1948	7.73	6,020
	May 30, 1927	9.6	11,200	1954	Jan. 22, 1954	9.54	10,600
1928	Nov. 17, 1927	10.39	13,600	1955	Mar. 18, 1955	8.14	6,910
	Aug. 16, 1928	9.7	11,500	1956	Apr. 16, 1956	9.14	9,390
	Sept. 6, 1928	9.6	11,200	1957	Apr. 5, 1957	9.13	9,360
1929	Mar. 5, 1929	9.68	10,600	1958	Feb. 7, 1958	7.19	5,000
1930	Oct. 22, 1929	9.16	9,520	1959	Jan. 22, 1959	9.15	9,420
1931	Apr. 4, 1931	7.96	7,090	1960	Mar. 30, 1960	7.96	6,510
1932	Feb. 3, 1932	11.8	20,300				
	May 1, 1932	9.3	10,500				
1933	Dec. 28, 1932	9.25	10,200				
	Feb. 8, 1933	8.92	9,510				
	Feb. 15, 1933	9.67	11,500				

a From reports by Tennessee Valley Authority.

b Maximum observed for period Mar. 1 to Sept. 30, 1910.

c Maximum observed 8 a.m. readings from reports by U.S. Weather Bureau.

4875. South Fork Holston River at Kingsport, Tenn.

Location.--Lat 36°31'51", long 82°33'29", on left bank 1,000 ft downstream from new bridge on State Highway 81, 1½ miles upstream from Reedy Creek, and 3½ miles upstream from confluence with North Fork Holston River.

Drainage area.--1,935 sq mi.

Gage.--Recording since Sept. 18, 1925. At site 2 miles upstream prior to Dec. 2, 1953, at datum 8.47 ft higher. Datum of gage is 1,175.84 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 67,200 cfs and extended above.

Remarks.--Flow regulated by Watauga Lake since Dec. 1, 1948, South Holston Lake since Nov. 20, 1950, Boone Lake since Dec. 16, 1952, and Fort Patrick Henry Lake since Oct. 27, 1953. Peaks prior to 1926 from reports by Tennessee Valley Authority. Only annual peaks are shown prior to 1926 and since 1948. Base for partial-duration series, 17,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1791	March 1791	20	79,000	1935	Jan. 23, 1935	7.72	17,200
1847	March 1847	17	56,000		Mar. 21, 1935	7.86	17,900
					Mar. 26, 1935	15.18	45,200
1861	September 1861	16.5	53,000	1936	Jan. 19, 1936	10.99	28,400
1862	February 1862	18	63,000		Feb. 5, 1936	8.27	19,200
					Mar. 25, 1936	10.86	28,000
1867	March 1867	22.5	104,000		Mar. 28, 1936	9.75	24,100
					Apr. 7, 1936	10.73	27,300
1875	February 1875	20	79,000	1937	Feb. 10, 1937	7.80	17,200
1886	March 1886	20	79,000	1938	Oct. 28, 1937	8.98	19,700
1896	April 1896	18.5	67,000		July 24, 1938	8.28	17,000
1897	February 1897	18.5	67,000	1939	Feb. 16, 1939	8.00	16,800
1901	May 1901	23	110,000	1940	July 31, 1940	10.9	25,400
1902	February 1902	19	70,000		Aug. 14, 1940	18.80	68,800
1906	January 1906	16.5	53,000		Aug. 30, 1940	8.16	18,700
1916	July 1916	16.5	53,000	1941	July 6, 1941	4.68	8,380
1926	Jan. 18, 1926	7.3	17,000	1942	Aug. 10, 1942	8.28	19,000
1927	Nov. 16, 1926	8.40	20,900	1943	Dec. 30, 1942	13.78	39,600
	Dec. 10, 1926	7.51	17,700		Feb. 6, 1943	7.97	18,000
	Dec. 22, 1926	9.00	23,200	1944	Feb. 18, 1944	12.78	35,400
	Dec. 26, 1926	9.00	23,200	1945	Jan. 2, 1945	8.26	19,000
	Dec. 29, 1926	7.56	18,000		Feb. 18, 1945	9.81	24,100
	Feb. 20, 1927	7.85	18,900		May 18, 1945	8.43	19,400
	Feb. 24, 1927	13.87	43,200	1946	Jan. 8, 1946	13.10	36,600
	Apr. 22, 1927	9.25	24,000		Feb. 11, 1946	12.22	33,000
	May 30, 1927	11.74	33,400	1947	Jan. 20, 1947	13.88	39,700
1928	Sept. 6, 1928	8.2	20,200	1948	Feb. 14, 1948	9.74	22,700
1929	Mar. 6, 1929	9.0	23,100		Apr. 8, 1948	8.50	18,200
	May 30, 1929	7.30	17,000	1949	July 17, 1949	6.78	12,700
	June 26, 1929	7.38	17,400	1950	Jan. 31, 1950	10.35	24,400
1930	Oct. 3, 1929	6.56	14,700	1951	Dec. 7, 1950	5.90	10,400
1931	Apr. 5, 1931	8.42	21,000	1952	Dec. 21, 1951	5.21	8,810
1932	Feb. 4, 1932	12.60	35,200	1953	Sept. 4, 1953	4.63	7,040
	May 1, 1932	8.60	21,200	1954	Aug. 9, 1954	4.82	8,590
1933	Dec. 29, 1932	10.10	26,200	1955	Mar. 18, 1955	7.18	18,300
	Feb. 8, 1933	8.28	20,200	1956	Apr. 16, 1956	6.89	16,800
	Feb. 15, 1933	10.38	27,300	1957	Feb. 10, 1957	6.67	15,800
	May 11, 1933	7.30	17,000	1958	May 6, 1958	5.68	11,400
1934	Apr. 10, 1934	8.08	17,900	1959	Aug. 14, 1959	4.95	9,650
1935	Jan. 9, 1935	10.94	28,000	1960	Aug. 9, 1960	4.98	9,490

a Occurred Jan. 3, 1937.

4880. North Fork Holston River near Saltville, Va.
(Published as "at Saltville" 1907-9)

Location.--Lat 36°53'48", long 81°44'47", on right bank 0.5 mile upstream from Cedar Branch bridge, 1.5 miles northeast of Saltville, Smyth County, and 7.8 miles downstream from Laurel Creek.

Drainage area.--222 sq mi.

Gage.--Nonrecording prior to May 23, 1934; recording thereafter. June 11, 1907, to Nov. 12, 1908, at site 2.1 miles downstream at different datum. Nov. 2, 1920, to May 23, 1934, at site 0.5 mile downstream at datum 7.74 ft lower. Datum of gage is 1,703.53 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 7,200 cfs and extended above on basis of slope-area measurement of peak flow.

Bankfull stage.--7 ft.

Remarks.--Base for partial-duration series, 3,000 cfs. Only annual peaks are shown prior to Oct. 1, 1934.

Peak stages and discharges							
Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1862	February 1862	a15	a22,000	1945	May 18, 1945	6.46	5,370
1907	June 14, 1907	13.0	8,400	1946	Jan. 8, 1946	8.26	8,370
1908	Apr. 2, 1908	12.1	7,400		Feb. 11, 1946	5.81	4,380
1909	-	-	-				
1921	Dec. 15, 1920	9.27	4,480	1947	Jan. 15, 1947	7.17	6,500
1922	Mar. 15, 1922	8.9	4,160		Jan. 20, 1947	7.91	7,690
1923	Feb. 3, 1923	13.97	8,220		Aug. 4, 1947	7.76	7,520
1924	Sept. 30, 1924	11.0	5,840	1948	Feb. 14, 1948	8.0	7,860
1925	Jan. 11, 1925	9.0	4,310		Apr. 8, 1948	4.75	3,030
1926	Jan. 18, 1926	9.2	4,490	1949	Dec. 4, 1948	6.76	5,840
1927	Dec. 21, 1926	12.0	6,700				
1928	Dec. 16, 1927	7.0	2,640	1950	Jan. 31, 1950	6.97	6,160
1929	Feb. 27, 1929	8.1	3,520		Feb. 2, 1950	7.13	6,330
1930	Nov. 18, 1929	7.9	3,360		May 3, 1950	5.09	3,470
					May 13, 1950	4.87	3,150
1931	Apr. 4, 1931	10.10	5,440	1951	Dec. 4, 1950	4.75	3,030
1932	Jan. 30, 1932	9.4	4,750		Dec. 8, 1950	6.24	4,920
1933	Dec. 28, 1932	9.9	5,240				
1934	Mar. 3, 1934	8.7	4,120	1952	Jan. 23, 1952	4.91	3,210
1935	Nov. 30, 1934	4.43	3,100				
	Jan. 9, 1935	5.15	4,190	1953	Feb. 21, 1953	6.60	5,520
	Jan. 23, 1935	7.49	7,990		Mar. 4, 1953	5.42	3,860
	Mar. 26, 1935	5.63	4,810		May 19, 1953	6.68	5,680
	Apr. 1, 1935	5.93	5,290				
1936	Jan. 3, 1936	4.81	3,590	1954	Jan. 16, 1954	5.10	3,470
	Jan. 9, 1936	4.78	3,590		Jan. 22, 1954	7.19	6,500
	Jan. 19, 1936	5.85	5,130	1955	Feb. 7, 1955	5.72	4,250
	Feb. 15, 1936	4.60	3,310		Mar. 1, 1955	7.52	7,010
	Apr. 6, 1936	6.50	6,290		Mar. 7, 1955	8.64	8,880
1937	Jan. 20, 1937	5.46	4,650		Mar. 16, 1955	9.42	10,300
	Feb. 9, 1937	4.94	3,740		Mar. 18, 1955	7.71	7,350
1938	Oct. 19, 1937	4.65	3,280		Mar. 22, 1955	5.59	4,120
	Oct. 28, 1937	6.08	5,660		Apr. 14, 1955	6.80	5,520
	Mar. 3, 1938	5.40	4,450	1956	Apr. 16, 1956	9.05	9,560
	May 24, 1938	5.15	4,050				
	June 20, 1938	4.97	3,740	1957	Jan. 9, 1957	6.39	5,200
1939	Feb. 3, 1939	4.12	2,530		Jan. 29, 1957	13.20	16,500
1940	Aug. 14, 1940	6.23	5,840		Feb. 9, 1957	7.11	6,080
1941	July 6, 1941	5.58	4,790		Apr. 5, 1957	5.55	4,060
1942	June 20, 1942	6.73	6,740		Apr. 9, 1957	6.07	4,730
1943	Dec. 30, 1942	6.46	6,380	1958	Nov. 25, 1957	5.03	3,380
	Feb. 5, 1943	4.65	3,280		Dec. 8, 1957	4.92	3,240
1944	Feb. 18, 1944	10.75	13,100		Dec. 21, 1957	4.93	3,250
	Feb. 29, 1944	6.25	4,920		Dec. 26, 1957	5.07	3,430
					Mar. 31, 1958	6.28	5,000
					May 6, 1958	5.82	4,410
1945	Feb. 17, 1945	6.83	5,840	1959	Jan. 22, 1959	5.76	4,380
					Apr. 13, 1959	6.04	4,640
				1960	Nov. 24, 1959	5.09	3,470
					Mar. 31, 1960	5.74	4,250

a From report by Tennessee Valley Authority; present site and datum.

4885. North Fork Holston River at Holston, Va.

Location.--Lat 36°46'29", long 82°04'22", on left bank at downstream side of bridge on U.S. Highway 19, 100 ft downstream from Greendale Creek, 0.4 mile upstream from Garrett Creek, 0.5 mile east of Holston, Washington County, and 0.6 mile upstream from Little Moccasin Creek.

Drainage area.--402 sq mi.

Gage.--Recording. Datum of gage is 1,437.11 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 12,000 cfs and extended above on basis of slope-area measurement of peak flow.

Bankfull stage.--9 ft.

Remarks.--Base for partial-duration series, 4,000 cfs. Only annual peak shown for 1960.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Dec. 21, 1951	7.68	4,440	1957	Jan. 10, 1957	9.09	6,380
	Jan. 23, 1952	7.90	4,680		Jan. 29, 1957	16.50	24,300
	Jan. 28, 1952	7.43	4,080		Feb. 9, 1957	11.17	10,200
	Mar. 11, 1952	7.75	4,560		Apr. 5, 1957	9.02	6,280
1953	Feb. 21, 1953	10.12	7,440	1958	Apr. 9, 1957	9.34	6,760
	Mar. 4, 1953	8.32	5,160		Nov. 25, 1957	7.44	4,130
	May 19, 1953	10.61	8,090		Dec. 8, 1957	8.11	4,950
1954	Jan. 16, 1954	7.90	4,680	1959	Dec. 21, 1957	7.55	4,260
	Jan. 23, 1954	10.24	7,570		Dec. 26, 1957	8.01	4,810
1955	Feb. 7, 1955	9.39	6,850		Feb. 27, 1958	7.78	4,540
	Mar. 1, 1955	10.26	8,200		Mar. 31, 1958	9.16	6,490
	Mar. 7, 1955	11.48	10,100		May 6, 1958	10.56	9,410
	Mar. 17, 1955	12.15	11,400		May 11, 1958	7.69	5,100
	Mar. 18, 1955	10.89	9,160		Jan. 22, 1959	8.54	6,150
	Mar. 22, 1955	9.13	6,400		Mar. 27, 1959	7.43	4,720
1956	Apr. 14, 1955	8.79	5,950	1960	Apr. 13, 1959	9.11	6,940
	Apr. 16, 1956	12.93	12,800		Mar. 30, 1960	8.54	6,150

4895. North Fork Holston River at Mendota, Va.

Location.--Lat 36°42'00", long 82°19'10", on right bank at Barkers Mill, 0.6 mile southwest of Mendota, Washington County.

Drainage area.--493 sq mi.

Gage.--Nonrecording. Feb. 1, 1906, to Oct. 31, 1920, at present site at datum 0.6 ft higher. Nov. 1, 1920, to Dec. 31, 1931, at site 1 mile upstream at datum 0.9 ft lower. Datum of gage is 1,330.56 ft above mean sea level (levels by U.S. Weather Bureau).

Stage-discharge relation.--Defined below 16,000 cfs for the period 1921-31. Not defined at present site.

Bankfull stage.--8 ft.

Remarks.--Records for 1921-31 collected by U.S. Geological Survey. Gage-height record for other periods from publications of the U.S. Weather Bureau. Only annual peak stages are shown, which are crest stages unless otherwise indicated.

Peak stages and discharges of North Fork Holston River at Merdota, Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1862	February 1862	a20	-	1933	Dec. 28, 1932	11.0	-
1875	-	17	-	1934	Mar. 3, 1934	c10.0	-
				1935	Jan. 23, 1935	10.3	-
1906b/	July 30, 1906	c9.9	-	1936	Jan. 19, 1936	10.0	-
1907b/	June 14, 1907	c17.5	-	1937	Jan. 21, 1937	c8.3	-
1908b/	Apr. 2, 1908	c11.8	-		Feb. 9, 1937	c8.7	-
1909	May 1, 1909	c12.3	-	1938	Oct. 28, 1937	c9.3	-
1910	Jan. 22, 1910	c4.4	-	1939	Feb. 4, 1939	7.9	-
				1940	Aug. 14, 1940	15.0	-
1911	Mar. 8, 1911	c8.0	-				
1912	Apr. 3, 1912	c11.0	-	1941	Mar. 12, 1941	c6.4	-
1913	Mar. 27, 1913	c12.9	-	1942	Aug. 9, 1942	c8.4	-
1914	Mar. 31, 1914	c10.6	-	1943	Dec. 30, 1942	c10.6	-
1915	Feb. 2, 1915	c11.6	-	1944	Feb. 18, 1944	c13.1	-
				1945	Feb. 18, 1945	c10.2	-
1916	Aug. 16, 1916	c14.0	-				
1917	Mar. 5, 1917	c13.6	-	1946	Jan. 8, 1946	c12.4	-
1918	Jan. 29, 1918	14.0	-	1947	Jan. 15, 1947	c11.0	-
1919	Jan. 2, 1919	c10.0	-	1948	Feb. 14, 1948	11.2	-
1920	Dec. 14, 1919	c10.5	-	1949	Dec. 4, 1948	c9.6	-
				1950	Feb. 2, 1950	11.5	-
1921	Dec. 14, 1920	c9.95	9,640				
1922	Jan. 21, 1922	11.2	12,300	1951	Dec. 8, 1950	c6.1	-
1923	Feb. 3, 1923	c14.4	19,600	1952	Dec. 21, 1951	7.5	-
1924	Jan. 1, 1924	10.0	9,740	1953	May 20, 1953	c9.9	-
1925	Jan. 12, 1925	c9.4	8,580	1954	Jan. 23, 1954	c9.5	-
				1955	Mar. 17, 1955	11.9	-
1926	Feb. 16, 1926	8.6	7,170				
1927	Dec. 22, 1926	c13.6	17,800	1956	Apr. 16, 1956	12.1	-
1928	Dec. 16, 1927	7.2	5,000	1957	Jan. 30, 1957	17.4	-
1929	Feb. 28, 1929	c9.2	8,120	1958	May 6, 1958	11.05	-
1930	Feb. 5, 1930	c7.2	4,770	1959b/	Jan. 22, 1959	7.36	-
				1960	Mar. 31, 1960	7.75	-
1931	Apr. 5, 1931	11.4	12,700				
1932	Jan. 30, 1932	11.0	-				

a From reports by Tennessee Valley Authority; present datum.

b Incomplete.

c Observed.

4898. Cove Creek near Shelleys, Va.

Location.--Lat 36°39'13", long 82°21'16", at bridge on U.S. Highway 58, 2 miles north of Shelleys, about halfway between Bristol and Gate City, Scott County.

Drainage area.--17.3 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 1,370 ft above mean sea level (from topographic map).

Stage-discharge relation.--Defined by current-meter measurement below 800 cfs and extended above on basis of contracted-opening measurement at peak stage.

Bankfull stage.--4 ft.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Dec. 7, 1950	3.13	110	1956	Apr. 16, 1956	6.65	1,260
1952	Mar. 23, 1952	5.25	600	1957	Jan. 29, 1957	5.78	810
1953	May 19, 1953	6.03	920	1958	May 5, 1958	5.85	430
1954	Jan. 22, 1954	5.25	600	1959	Mar. 27, 1959	5.58	730
1955	Mar. 18, 1955	6.15	980	1960	Nov. 28, 1959	5.25	590

4899. Big Moccasin Creek near Gate City, Va.

Location.--Lat 36°38'47", long 82°33'12", on left bank at downstream side of bridge on State Highway 71, 0.2 mile downstream from Franklin Branch, 0.9 mile upstream from Pike Branch, 1.6 miles upstream from Little Moccasin Creek, and 1.6 miles east of Gate City, Scott County.

Drainage area.--79.6 sq mi.

Gage.--Recording. Datum of gage is 1,267.64 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 1,200 cfs. Only annual peak shown for 1960.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Feb. 21, 1953	6.60	2,000	1957	Jan. 29, 1957	8.36	3,340
	Mar. 4, 1953	5.47	1,460		Feb. 1, 1957	7.44	2,660
	May 19, 1953	7.67	2,550		Feb. 10, 1957	5.97	1,680
1954	Jan. 16, 1954	5.31	1,380		Apr. 9, 1957	5.58	1,450
	Jan. 22, 1954	5.98	1,700	1958	Dec. 8, 1957	5.90	1,640
1955	Feb. 7, 1955	6.07	1,820		Apr. 28, 1958	5.88	1,630
	Mar. 7, 1955	5.96	1,760		May 6, 1958	8.84	3,570
	Mar. 16, 1955	6.72	2,220	1959	Jan. 22, 1959	6.48	1,830
	Mar. 19, 1955	6.24	1,890		Mar. 27, 1959	5.45	1,280
	Mar. 22, 1955	6.31	1,960		Apr. 13, 1959	6.01	1,550
1956	Apr. 16, 1956	7.95	3,110	1960	Nov. 28, 1959	5.66	1,420

4900. North Fork Holston River near Gate City, Va.

Location.--Lat 36°36'31", long 82°34'05", on left bank 100 ft upstream from bridge on U.S. Highway 23, 1.6 miles downstream from Big Moccasin Creek, and 2.1 miles southeast of Gate City, Scott County.

Drainage area.--672 sq mi.

Gage.--Recording. Datum of gage is 1,197.56 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 6,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1862	February 1862	a22.5	a54,000	1936	Jan. 3, 1936	7.47	7,130
1932	Jan. 30, 1932	10.64	13,400		Jan. 10, 1936	8.05	8,110
	Feb. 4, 1932	10.25	12,600		Jan. 20, 1936	10.29	13,200
	Feb. 13, 1932	7.10	6,260		Feb. 5, 1936	8.07	8,510
	May 1, 1932	7.68	7,380		Feb. 15, 1936	7.40	6,940
1933	Dec. 29, 1932	10.24	12,600		Mar. 25, 1936	8.14	8,510
	Feb. 9, 1933	7.40	6,810		Mar. 28, 1936	8.07	8,510
	Feb. 16, 1933	8.17	8,350		Apr. 3, 1936	7.02	6,210
1934	Mar. 4, 1934	8.98	10,000		Apr. 7, 1936	9.94	12,300
	Mar. 9, 1934	7.27	6,620	1937	Jan. 3, 1937	7.84	7,710
	Mar. 24, 1934	7.57	7,190		Jan. 19, 1937	8.28	8,720
	Mar. 28, 1934	7.10	6,260		Jan. 21, 1937	8.02	8,110
1935	Jan. 9, 1935	8.33	8,600		Jan. 26, 1937	7.46	7,130
	Jan. 23, 1935	10.03	12,100		Feb. 10, 1937	9.28	10,900
	Mar. 13, 1935	7.88	7,600	1938	Oct. 29, 1937	8.56	9,190
	Mar. 26, 1935	10.65	13,400		Mar. 4, 1938	7.65	7,060
	Apr. 2, 1935	9.07	10,200		Apr. 23, 1938	7.10	6,140
					May 25, 1938	7.32	6,500
					July 21, 1938	9.04	10,100

a From report of Tennessee Valley Authority.

Peak stages and discharges of North Fork Holston River near Gate City, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Feb. 4, 1939	8.46	8,960	1951	Dec. 8, 1950	8.85	9,540
	Feb. 11, 1939	7.70	7,260	1952	Dec. 21, 1951	8.22	8,220
	Feb. 16, 1939	7.13	6,140		Jan. 23, 1952	7.75	7,340
1940	July 31, 1940	7.50	6,620		Jan. 29, 1952	7.79	7,340
	Aug. 14, 1940	14.75	23,700		Mar. 12, 1952	7.60	6,900
1941	Mar. 12, 1941	7.20	6,440	1953	Feb. 22, 1953	10.70	13,800
1942	Aug. 9, 1942	9.22	10,400		Mar. 4, 1953	9.00	10,700
					May 20, 1953	11.64	15,800
1943	Dec. 30, 1942	11.60	15,800	1954	Jan. 16, 1954	7.55	7,270
	Jan. 28, 1943	7.02	6,080		Jan. 23, 1954	9.77	11,900
	Feb. 5, 1943	8.60	9,160	1955	Feb. 7, 1955	9.07	10,400
	Mar. 14, 1943	7.16	6,260		Mar. 1, 1955	10.25	12,700
	Mar. 20, 1943	7.40	6,620		Mar. 7, 1955	11.06	14,700
1944	Feb. 18, 1944	14.44	22,700		Mar. 17, 1955	11.66	16,100
	Feb. 23, 1944	7.01	6,080		Mar. 19, 1955	11.22	14,900
	Mar. 1, 1944	9.73	11,500		Mar. 22, 1955	9.85	11,900
	Mar. 20, 1944	7.70	7,380		Apr. 15, 1955	7.65	7,270
	Mar. 29, 1944	7.30	6,620	1956	Feb. 18, 1956	7.53	7,060
	Apr. 13, 1944	7.09	6,260		Mar. 15, 1956	7.27	6,660
1945	Jan. 2, 1945	7.34	6,620		Apr. 16, 1956	14.10	22,000
	Feb. 18, 1945	10.16	12,600		May 4, 1956	7.40	6,860
	May 19, 1945	8.3	8,150	1957	Jan. 10, 1957	9.11	10,400
1946	Jan. 8, 1946	13.70	21,000		Jan. 30, 1957	16.73	28,700
	Feb. 11, 1946	10.12	12,400		Feb. 10, 1957	11.00	14,400
1947	Jan. 16, 1947	12.10	17,000		Apr. 6, 1957	8.54	9,240
	Jan. 21, 1947	11.74	16,100		Apr. 9, 1957	9.44	11,100
	Aug. 5, 1947	7.63	7,190	1958	Nov. 26, 1957	7.07	6,200
1948	Feb. 14, 1948	12.10	17,000		Dec. 8, 1957	8.58	9,330
	Apr. 8, 1948	7.20	6,440		Dec. 21, 1957	7.12	6,300
					Dec. 27, 1957	7.99	8,090
1949	Nov. 29, 1948	7.27	6,620		Feb. 27, 1958	8.02	8,150
	Dec. 4, 1948	9.84	11,700		Mar. 31, 1958	8.86	9,920
	Jan. 6, 1949	7.18	6,080		May 7, 1958	13.95	21,600
	Mar. 19, 1949	8.90	9,760	1959	Jan. 22, 1959	8.54	9,160
	July 15, 1949	8.69	9,320		Mar. 27, 1959	8.05	8,110
	July 17, 1949	8.07	8,000		Apr. 13, 1959	9.05	10,200
1950	Jan. 31, 1950	12.55	18,200	1960	Nov. 25, 1959	8.14	8,320
	Feb. 2, 1950	12.75	18,700		Mar. 31, 1960	7.92	7,900
	Feb. 10, 1950	8.25	8,220		Apr. 5, 1960	7.32	6,660
	May 13, 1950	7.79	7,340				
	May 15, 1950	8.42	8,660				

4905. Holston River at Surgoinsville, Tenn.

Location.--Lat 36°28'19", long 82°50'50", on right bank 1,500 ft upstream from Surgoinsville Creek and county bridge at Surgoinsville, Hawkins County, 9.8 miles upstream from Big Creek, and at mile 118.4. Records include flow of Surgoinsville Creek.

Drainage area.--2,874 sq mi, includes that of Surgoinsville Creek.

Gage.--Recording. Datum of gage is 1,088.46 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--12 ft.

Historical data.--Flood of March 1867 reached a stage about 13.5 ft higher than flood of Feb. 18, 1944, from reports by Tennessee Valley Authority.

Remarks.--Flow regulated by Watauga Lake since Dec. 1, 1948, South Holston Lake since Nov. 20, 1950, Boone Lake since Dec. 16, 1952, and Fort Patrick Henry Lake since Oct. 27, 1953. Only annual peaks are shown since 1948. Base for partial-duration series, 26,000 cfs.

Peak stages and discharges of Holston River at Surgoinsville, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	July 6, 1941	6.69	13,800	1948	Feb. 15, 1948	13.08	37,900
1942	Aug. 10, 1942	10.33	25,600	1949	July 14, 1949	9.53	23,000
1943	Dec. 30, 1942	17.07	57,500	1950	Jan. 31, 1950	14.91	46,500
1944	Feb. 18, 1944	17.48	59,600	1951	Mar. 31, 1951	7.19	15,400
1945	Feb. 18, 1945	12.59	35,700	1952	Dec. 21, 1951	7.91	17,900
1946	Jan. 8, 1946	17.40	59,000	1953	May 20, 1953	8.70	20,800
	Feb. 11, 1946	14.72	45,400	1954	Jan. 23, 1954	7.57	16,700
1947	Jan. 16, 1947	11.85	32,400	1955	Mar. 19, 1955	12.12	33,500
	Jan. 21, 1947	17.20	58,000	1956	Apr. 16, 1956	13.32	38,900
				1957	Jan. 30, 1957	14.32	45,100
				1958	May 7, 1958	13.47	41,100
				1959	Apr. 13, 1959	7.97	18,200
				1960	Apr. 1, 1960	7.27	15,700

4910. Big Creek near Rogersville, Tenn.

Location.--Lat 36°25'34", long 82°57'07", on left bank 300 ft upstream from county bridge, 2.0 miles upstream from mouth, and 3.0 miles northeast of Rogersville, Hawkins County.

Drainage area.--47.3 sq mi.

Gage.--Recording prior to June 30, 1949, and since Oct. 1, 1957; crest-stage gage Dec. 7, 1954, to Sept. 30, 1957. Datum of gage is 1,128.9 ft above mean sea level, from city of Rogersville construction plans for pumping station.

Stage-discharge relation.--Defined by current-meter measurements below 2,000 cfs and extended above.

Remarks.--Only annual peaks are shown June 30, 1949, to Oct. 1, 1957. Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	June 22, 1942	4.86	1,440	1949	Nov. 28, 1948	5.57	2,080
1943	Dec. 29, 1942	6.22	2,670		Jan. 5, 1949	5.45	1,980
	Mar. 20, 1943	5.18	1,750		Mar. 18, 1949	5.65	a2,160
	Apr. 19, 1943	5.26	1,840	1950	Jan. 31, 1950	7.14	-
1944	Feb. 17, 1944	6.06	2,570	1955	Mar. 19, 1955	6.83	3,280
	Mar. 19, 1944	5.61	2,110	1956	Apr. 16, 1956	6.06	2,530
	Mar. 27, 1944	5.02	1,570	1957	Jan. 31, 1957	6.73	3,180
1945	Feb. 13, 1945	5.41	1,930	1958	Dec. 8, 1957	5.19	1,740
	Feb. 17, 1945	5.80	2,290		Apr. 28, 1958	6.38	2,850
1946	Jan. 7, 1946	6.12	2,570		May 6, 1958	6.17	2,640
	Feb. 10, 1946	5.44	1,980	1959	Jan. 22, 1959	5.05	1,620
1947	Jan. 15, 1947	6.45	2,920		Apr. 12, 1959	5.19	1,740
	Jan. 20, 1947	6.59	3,060	1960	Nov. 28, 1959	5.09	1,650
1948	Feb. 14, 1948	6.18	2,650		July 10, 1960	5.90	2,380

a Maximum for period Oct. 1, 1948, to June 20, 1949.

4912. Big Creek tributary near Rogersville, Tenn.

Location.--Lat 36°25'30", long 82°57'17", at culvert under county road, 300 ft upstream from mouth and 2.8 miles northeast of Rogersville, Hawkins County.

Drainage area.--2.00 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Not defined.

Remarks.--Only annual peak stages are shown.

Peak stages and discharges of Big Creek tributary near Rogersville, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 19, 1955	5.72	-	1958	May 1958	7.52	-
1956	April 1956	5.73	-	1959	Sept. 30, 1959	6.93	-
1957	Feb. 1, 1957	6.46	-	1960	Nov. 27, 1959	3.72	-

4915. Holston River near Rogersville, Tenn.

Location.--Lat 36°22'13", long 82°59'58", 300 ft downstream from bridge on State Highways 66 and 70, 2,300 ft upstream from Southern Railway bridge, 0.5 mile downstream from Dodson Creek, 3 miles south of Rogersville, Hawkins County, and at mile 104.2.

Drainage area.--3,035 sq mi.

Gage.--Nonrecording prior to Oct. 1, 1926; recording thereafter. At site 2,300 ft downstream prior to Oct. 26, 1923, at datum 2.41 ft lower. At site 300 ft upstream Oct. 27, 1923, to May 15, 1934, at datum 0.03 ft lower. Datum of gage is 1,054.83 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 57,000 cfs and extended above.

Bankfull stage.--14 ft, fromer site and datum (from U.S. Weather Bureau).

Historical data.--Flood of Mar. 10, 1867, is maximum stage known.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1926. Pae for partial-duration series, 20,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1867	Mar. 10, 1867	a38.4	-	1927	Feb. 24, 1927	16.96	63,700
1902	Mar. 30, 1902	10.6	b33,800	Mar. 9, 1927	7.13	20,000	
1903	Feb. 17, 1903	17.0	59,400	Apr. 23, 1927	9.84	31,500	
1904	Mar. 24, 1904	7.0	19,400	May 30, 1927	15.94	58,900	
1905	Mar.11,July 13, 1905	6.3	16,600	June 4, 1927	8.24	24,400	
1906	Jan. 23, 1906	17.5	61,400	1928	Dec. 17, 1927	7.50	21,400
1907	June 15, 1907	14.0	47,400	June 29, 1927	7.55	21,600	
1908	Apr. 3, 1908	12.7	42,200	Sept. 3, 1927	7.58	21,800	
1909	May 1, 1909	10.3	32,600	Sept. 6, 1928	8.4	25,200	
1910	July 9, 1910	5.5	13,400	1929	Mar. 1, 1929	10.02	32,300
1911	Mar. 8, 1911	11.0	34,600	Mar. 6, 1929	10.92	36,200	
1912	Apr. 3, 1912	14.4	48,200	Mar. 24, 1929	10.06	32,500	
1913	Mar. 28, 1913	19.1	67,000	May 21, 1929	7.88	23,000	
1914	Mar. 31, 1914	9.5	28,600	May 31, 1929	8.36	25,000	
1915	Dec. 26, 1914	10.8	33,800	June 27, 1929	8.12	24,000	
1916	July 17, 1916	15.4	49,800	July 2, 1929	8.75	26,700	
1917	Mar. 5, 1917	17.1	56,300	1930	Oct. 22, 1929	6.82	18,700
1918	Jan. 29, 1918	20.0	70,900	1931	Apr. 5, 1931	10.30	33,600
1919	Jan. 3, 1919	12.2	38,900	1932	Jan. 31, 1932	10.2	33,100
1920	Apr. 3, 1920	15.0	50,400	Feb. 4, 1932	14.60	52,900	
1921	Feb. 11, 1921	12.2	38,900	Feb. 13, 1932	8.28	25,100	
1922	Jan. 22, 1922	13.3	43,400	May 2, 1932	9.34	29,200	
1923	Feb. 4, 1923	17.0	58,600	1933	Dec. 29, 1932	12.4	39,600
1924	June 14, 1924	10.86	35,400	Feb. 16, 1933	11.85	37,100	
1925	Dec. 9, 1924	8.55	25,000	1934	Mar. 4, 1934	10.2	29,900
1926	Jan. 19, 1926	8.03	22,900	Mar. 26, 1934	7.83	20,500	
1927	Nov. 17, 1926	8.23	24,500	Mar. 28, 1934	7.98	21,000	
	Dec. 10, 1926	9.01	27,800	Apr. 10, 1934	8.84	24,400	
	Dec. 23, 1926	13.56	48,200	1935	Jan. 10, 1935	10.74	32,700
	Dec. 26, 1926	11.44	38,700	Jan. 24, 1935	9.65	28,200	
	Dec. 29, 1926	9.40	29,500	Mar. 15, 1935	8.93	25,400	
	Feb. 20, 1927	9.02	27,800	Mar. 21, 1935	8.74	24,600	

a From reports by U.S. Weather Bureau.

b Maximum for period Mar. 10 to Sept. 30, 1902.

Peak stages and discharges of Holston River near Rogersville, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Mar. 27, 1935	18.43	67,200	1938	Oct. 29, 1937	9.78	28,800
	Apr. 2, 1935	9.10	26,000		July 24, 1938	9.38	27,200
1936	Jan. 10, 1936	8.24	22,700	1939	Feb. 4, 1939	8.00	21,800
	Jan. 20, 1936	13.37	44,200		Feb. 16, 1939	8.90	25,200
	Feb. 5, 1936	9.78	28,800		Mar. 7, 1939	8.85	25,000
	Feb. 16, 1936	8.76	24,700	1940	July 31, 1940	10.56	31,200
	Mar. 25, 1936	12.36	39,600		Aug. 15, 1940	17.76	59,000
	Mar. 28, 1936	11.66	36,600	1941	July 6, 1941	5.84	14,100
	Apr. 3, 1936	7.79	21,000		May 22, 1942	7.80	c21,000
	Apr. 7, 1936	12.98	42,300				
1937	Jan. 3, 1937	9.24	26,600				
	Jan. 19, 1937	8.82	24,900				
	Feb. 10, 1937	10.10	30,100				

c Maximum for period Oct. 1, 1941, to May 31, 1943.

4940. Holston River near Jefferson City, Tenn.

Location--Lat 36°10'03", long 83°30'10", on left bank 250 ft upstream from bridge on State Highway 92, 0.2 mile downstream from Cherokee Dam, 2.5 miles upstream from Mill Spring Creek, and 3 miles north of Jefferson City, Jefferson County.

Drainage area--3,429 sq mi.

Gage--Recording. At datum 20.02 ft higher prior to June 30, 1941. Datum of gage is 900.00 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation--Defined by current-meter measurements.

Bankfull stage--45 ft.

Remarks--Flow regulated by Cherokee Lake since Dec. 5, 1941, Watauga Lake since Dec. 1, 1948, South Holston Lake since Nov. 20, 1950, Boone Lake since Dec. 16, 1952, and Fort Patrick Henry Lake since Oct. 27, 1953. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Oct. 29, 1937	12.86	27,600	1950	Feb. 4, 1950	31.90	25,000
1939	Feb. 17, 1939	12.44	26,100	1951	Nov. 21, 1950	26.46	9,700
1940	Aug. 15, 1940	21.80	58,700	1952	Dec. 25, 1951	29.90	19,000
1941	Mar. 13, 1941	28.32	14,200	1953	Sept. 28, 1953	a28.03	12,700
1942	Aug. 10, 1942	31.22	22,500	1954	July 6, 1954	29.50	17,800
1943	Feb. 8, 1943	29.73	18,100	1955	Mar. 26, 1955	29.36	17,600
1944	Mar. 5, 1944	30.65	19,800	1956	Mar. 25, 1956	29.10	16,900
1945	Jan. 31, 1945	26.10	8,800	1957	Feb. 11, 1957	32.19	25,900
1946	Jan. 18, 1946	31.17	22,900	1958	Dec. 4, 1957	29.42	17,800
1947	Jan. 24, 1947	30.00	19,300	1959	Oct. 10, 1958	29.24	17,300
1948	Sept. 25, 1948	26.08	8,920	1960	Oct. 22, 1959	29.50	18,000
1949	Dec. 31, 1948	28.43	14,800				

a Occurred Feb. 26, 1953.

4955. Holston River near Knoxville, Tenn.
(Published as "at Strawberry Plains," 1930-45)

Location.--Lat 36°00'56", long 83°49'54", on left bank 300 ft upstream from bridge on U.S. Highway 70, 1.8 miles northeast of Knoxville city limits, Knox County, and 5.5 miles upstream from confluence with French Broad River.

Drainage area.--3,747 sq mi.

Gage.--Nonrecording prior to June 8, 1931; recording thereafter. At site 12 miles upstream at datum 22.55 ft higher prior to June 19, 1945. Datum of gage is 815.84 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 57,000 cfs and extended above.

Bankfull stage.--Not subject to overflow.

Historical data.--Flood of March 1867 exceeded all other known floods, including that in 1791, from reports of the Tennessee Valley Authority.

Remarks.--Flow regulated by Cherokee Lake since Dec. 5, 1941, Watauga Lake since Dec. 1, 1948, South Holston Lake since Nov. 20, 1950, Boone Lake since Dec. 16, 1952, and Fort Patrick Henry Lake since Oct. 27, 1953. Only annual peaks are shown prior to 1932 and since 1940. Base for partial-duration series, 22,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1867	March 1867	a41	-	1937	Jan. 19, 1937	10.23	28,900
1901	May 1901	a32	-		Jan. 26, 1937	8.80	23,900
					Feb. 11, 1937	10.99	31,900
1931	Apr. 6, 1931	11.1	31,400	1938	Oct. 30, 1937	9.55	26,600
1932	Jan. 31, 1932	10.80	32,000		July 25, 1938	9.29	25,500
	Feb. 5, 1932	16.60	56,300	1939	Feb. 5, 1939	8.45	22,600
	Feb. 13, 1932	8.95	25,400		Feb. 17, 1939	9.53	26,200
	May 2, 1932	9.42	26,800		Mar. 8, 1939	9.52	26,200
1933	Dec. 30, 1932	13.85	44,900	1940	Aug. 1, 1940	9.80	28,000
	Feb. 9, 1933	9.38	27,200		Aug. 16, 1940	18.62	57,100
	Feb. 16, 1933	13.15	42,400	1941	July 8, 1941	6.15	14,300
	Feb. 20, 1933	8.27	23,000	1942	Aug. 12, 1942	8.23	21,600
1934	Mar. 5, 1934	10.83	32,700	1943	Feb. 9, 1943	7.10	17,500
	Mar. 25, 1934	8.32	23,000	1944	Mar. 22, 1944	7.71	19,700
	Apr. 11, 1934	8.48	23,800	1945	Feb. 18, 1945	5.15	10,900
1935	Jan. 11, 1935	10.30	29,700	1946	Jan. 13, 1946	9.32	23,900
	Jan. 2, 1935	9.75	27,900		Jan. 25, 1947	8.64	21,200
	Mar. 14, 1935	9.61	27,200	1948	Feb. 13, 1948	8.65	21,200
	Mar. 22, 1935	9.18	25,700	1949	Jan. 5, 1949	7.50	16,700
	Mar. 28, 1935	20.20	62,900	1950	Feb. 9, 1950	10.80	30,300
	Apr. 3, 1935	10.20	29,300	1951	Feb. 1, 1951	-	b11,000
	Apr. 9, 1935	8.16	22,100	1952	Dec. 25, 1951	8.27	19,700
1936	Jan. 11, 1936	8.79	24,300	1953	Apr. 7, 1953	6.58	12,700
	Jan. 21, 1936	14.20	43,900	1954	July 13, 1954	7.47	16,600
	Feb. 6, 1936	10.35	29,700	1955	Mar. 27, 1955	7.87	17,800
	Feb. 16, 1936	9.22	25,300	1956	Sept. 16, 1956	7.29	15,600
	Mar. 26, 1936	14.27	44,200	1957	Feb. 1, 1957	10.82	29,700
	Apr. 4, 1936	8.40	22,400	1958	Dec. 5, 1957	7.88	17,800
	Apr. 8, 1936	14.29	44,200	1959	Oct. 11, 1958	7.63	16,800
1937	Jan. 4, 1937	9.85	27,500	1960	Dec. 19, 1959	8.45	19,900

a About; present site and datum, from reports by Tennessee Valley Authority.

b Maximum daily discharge.

4960. First Creek at Mineral Springs Avenue, at Knoxville, Tenn.

Location.--Lat 36°00'53", long 83°55'18", on right bank at Mineral Springs Avenue Bridge in Knoxville, Knox County, 0.3 mile downstream from Whites Creek, 4.1 miles upstream from gage at Fifth Avenue in Knoxville, and 5.9 miles upstream from mouth.

Drainage area.--15.7 sq mi, includes 3.8 sq mi without surface drainage.

Gage.--Recording. Datum of gage is 940.87 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 850 cfs and extended above.

Bankfull stage.--2.5 ft.

Remarks.--Base for partial-duration series, 300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	September 1944	all 0.0	-	1952	Dec. 21, 1951	6.19	422
1946	Jan. 7, 1946	6.95	670	1953	Dec. 10, 1952	6.03	339
1947	Jan. 20, 1947	7.20	775		Feb. 21, 1953	6.12	366
1948	Feb. 13, 1948	8.62	1,280	1954	Jan. 16, 1954	6.59	526
1949	Nov. 28, 1948	7.10	646		Jan. 21, 1954	6.78	593
	Jan. 5, 1949	7.30	718	1955	Mar. 22, 1955	5.92	306
	July 18, 1949	5.75	317	1956	Feb. 3, 1956	6.12	366
1950	Jan. 30, 1950	6.90	660		Apr. 15, 1956	6.92	643
	Feb. 2, 1950	6.17	550	1957	Jan. 28, 1957	5.92	306
	Feb. 9, 1950	6.14	489		Feb. 1, 1957	6.40	460
	May 10, 1950	5.67	324	1958	Nov. 18, 1957	8.88	1,310
	May 12, 1950	5.63	310	1959	Mar. 27, 1959	6.02	262
	July 26, 1950	5.73	346	1960	Nov. 28, 1959	6.25	348
	Aug. 3, 1950	5.96	426		Dec. 19, 1959	6.12	302
1951	Feb. 1, 1951	7.26	894				
	Mar. 29, 1951	6.00	440				

a From reports by Tennessee Valley Authority.

4965. First Creek at Fifth Avenue, at Knoxville, Tenn.
(Published as "at Knoxville" 1932-34)

Location.--Lat 35°58'40", long 83°54'51", on left bank at Fifth Avenue Bridge in Knoxville, Knox County, 1.8 miles upstream from mouth and 4.1 miles downstream from gage at Mineral Springs Avenue in Knoxville.

Drainage area.--21.1 sq mi, includes 4.5 sq mi without surface drainage.

Gage.--Nonrecording at site a quarter of a mile downstream at different datum prior to Apr. 9, 1945; recording thereafter. Datum of gage is 883.13 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 1,150 cfs and extended above.

Bankfull stage.--5 ft (from reports by Tennessee Valley Authority).

Remarks.--Only annual peaks are shown prior to 1946. Base for partial-duration series, 400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	June 29, 1928	all 1.9	-	1946	Jan. 8, 1946	6.80	611
1933	Feb. 14, 1933	8.6	770	1947	Jan. 20, 1947	7.46	776
1934	Mar. 2, 1934	6.80	b548	1948	Feb. 13, 1948	8.92	1,230
1944	Sept. 30, 1944	all 1.8	2,000				

a Present site and datum, from reports by Tennessee Valley Authority.

b Maximum for period Oct. 1, 1933, to Mar. 31, 1934.

Peak stages and discharges of First Creek at Fifth Avenue at Knoxville, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Nov. 28, 1948	7.25	845	1953	Feb. 21, 1953	6.20	495
	Jan. 5, 1949	7.32	863		Jan. 16, 1954	6.83	625
	July 18, 1949	5.75	438	1954	Jan. 21, 1954	7.03	673
1950	Jan. 30, 1950	7.22	737	1955	Mar. 22, 1955	5.33	336
	Feb. 2, 1950	6.30	579		Feb. 3, 1956	6.41	492
	Feb. 9, 1950	6.07	565	1956	Apr. 16, 1956	7.34	710
	June 21, 1950	5.31	406		Dec. 13, 1956	6.11	402
	July 26, 1950	6.42	642	1957	Feb. 1, 1957	6.97	618
	Aug. 3, 1950	6.07	565		Feb. 9, 1957	6.19	448
1951	Feb. 1, 1951	7.85	870	1958	Nov. 18, 1957	7.44	1,060
	Mar. 29, 1951	6.26	510				
1952	Dec. 21, 1951	5.62	468				

4970. Tennessee River at Knoxville, Tenn.

Location.--Lat 35°57'17", long 83°51'42", on left bank 0.7 mile downstream from confluence of French Broad and Holston Rivers, 3.5 miles upstream from First Creek, 3.6 miles upstream from Gay Street Bridge at Knoxville, Knox County, and at mile 651.4.

Drainage area.--8,934 sq mi, includes that of First Creek.

Gage.--Nonrecording prior to Aug. 9, 1925; recording thereafter. At various sites and datums prior to Nov. 1, 1899. Data shown herein prior to 1900 have been adjusted to site and datum used Aug. 9, 1925, to Aug. 31, 1943. At site 4.2 miles downstream at datum about 2.5 ft lower Nov. 1, 1899, to Dec. 31, 1908. At site 3.7 miles downstream Jan. 1, 1909, to Aug. 8, 1925. At datum about 0.6 ft higher Jan. 1, 1909, to November 1917, and at datum about 0.3 ft higher November 1917 to Aug. 8, 1925. At site 3.2 miles downstream at datum 0.30 ft higher Aug. 9, 1925, to Aug. 31, 1943. Datum of gage is 797.38 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Recording auxiliary gage 6.3 miles downstream since Sept. 1, 1943.

Stage-discharge relation.--Defined by current-meter measurements below 130,000 cfs and extended above. Fall between base gage and auxiliary gage used as a factor in computing discharge since Sept. 1, 1943.

Bankfull stage.--19 ft at site used Aug. 9, 1925, to Aug. 31, 1943 (from reports by Tennessee Valley Authority).

Historical data.--Flood of Mar. 8, 1867, is maximum stage known.

Remarks.--Peaks prior to 1900 from reports by Tennessee Valley Authority. Gage-height record 1900 to Aug. 9, 1925, from U.S. Weather Bureau. Flow regulated by increasing number of reservoirs beginning Dec. 5, 1941. Only annual peaks are shown prior to 1926 and since 1940. Base for partial-duration series, 51,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1867	Mar. 8, 1867	45.0	290,000	1893	Feb. 18, 1893	19.2	-
				1894	Feb. 5, 1894	16.1	-
				1895	Jan. 11, 1895	19.0	-
1875	Feb. 26, 1875	43.2	270,000	1896	Apr. 2, 1896	32.0	176,800
1876	June 18, 1876	23.3	114,800		Feb. 24, 1897	26.8	137,200
1883	Feb. 7, 1883	9.0	-	1898	Jan. 27, 1898	9.4	-
1884	Mar. 7, 1884	22.8	112,000	1899	Mar. 20, 1899	29.2	155,000
1885	Jan. 18, 1885	10.2	-	1900	Mar. 22, 1900	13.2	59,500
1886	Apr. 1, 1886	31.0	170,000	1901	May 23, 1901	34.8	188,000
1887	Feb. 4, 1887	14.8	-		Mar. 1, 1902	36.4	195,000
1888	Mar. 30, 1888	14.3	-	1903	Mar. 24, Apr. 9, 1903	24.6	128,000
1889	Feb. 19, 1889	16.4	-	1904	Mar. 25, 1904	12.6	56,500
1890	Feb. 28, 1890	24.4	121,500		July 13, 1905	12.0	53,500
1891	Feb. 11, 1891	22.8	112,000				
1892	Jan. 15, 1892	23.9	118,500				

Peak stages and discharges of Tennessee River at Knoxville, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1906	Jan. 24, 1906	22.4	115,000	1933	Feb. 16, 1933	19.12	99,300
1907	Nov. 20, 1906	23.0	115,000				
1908	Jan. 13, 1908	16.9	79,400	1934	Mar. 5, 1934	16.67	82,000
1909	June 5, 1909	13.9	74,900				
1910	Sept. 1, 1910	8.1	a41,700	1935	Jan. 11, 1935	14.04	64,100
					Mar. 14, 1935	14.40	66,200
1911	Mar. 9, 1911	14.4	77,900		Mar. 22, 1935	12.87	58,500
1912	Apr. 3, 1912	17.0	93,500		Mar. 27, 1935	23.70	120,000
1913	Mar. 28, 1913	21.5	120,000	1936	Jan. 9, 1936	13.45	61,000
1914	Apr. 1, 1914	8.5	a43,600		Jan. 20, 1936	23.06	116,000
1915	Dec. 26, 1914	17.2	94,700		Feb. 5, 1936	15.93	74,000
					Feb. 16, 1936	11.40	51,000
1916	July 18, 1916	29.9	171,000		Mar. 28, 1936	23.79	121,000
1917	Mar. 5, 1917	28.2	161,000		Apr. 3, 1936	15.68	72,900
1918	Jan. 29, 1918	24.2	137,000		Apr. 7, 1936	21.69	107,000
1919	Oct. 31, 1918	18.7	104,000	1937	Jan. 4, 1937	18.98	90,900
1920	Apr. 3, 1920	26.7	152,000		Jan. 20, 1937	14.70	67,700
					Jan. 26, 1937	12.09	54,500
1921	Feb. 11, 1921	17.8	98,600		Feb. 10, 1937	13.68	62,500
1922	Jan. 22, 1922	19.0	106,000	1938	July 24, 1938	14.06	64,600
1923	Feb. 5, 1923	16.8	92,600				
1924	Mar. 7, 1924	10.0	51,800	1939	Feb. 4, 1939	11.60	52,000
1925	Dec. 9, 1924	11.2	59,000		Feb. 12, 1939	12.22	55,000
					Feb. 16, 1939	14.63	67,200
1926	Apr. 13, 1926	10.3	49,700		Mar. 8, 1939	12.80	58,000
				1940	Aug. 16, 1940	23.90	118,000
1927	Dec. 24, 1926	12.60	62,800		Aug. 31, 1940	20.30	98,000
	Dec. 29, 1926	14.80	75,800				
	Feb. 25, 1927	19.90	106,000	1941	July 8, 1941	7.06	30,700
	Mar. 10, 1927	13.0	65,400		Aug. 12, 1942	b7.74	34,600
	Apr. 23, 1927	10.90	53,000		Dec. 31, 1942	17.10	82,700
	May 31, 1927	15.58	80,000		Apr. 3, 1944	c18.75	46,200
1928	June 30, 1928	18.8	99,800		Feb. 18, 1945	d17.75	31,800
	Aug. 18, 1928	16.50	86,000	1946	Jan. 8, 1946	18.16	51,600
	Sept. 4, 1928	12.60	62,900		Jan. 20, 1947	e16.87	48,200
	Sept. 7, 1928	12.35	61,800		Feb. 14, 1948	e16.77	41,000
1929	Mar. 1, 1929	15.02	81,000		Jan. 1, 1949	f18.00	39,400
	Mar. 7, 1929	15.22	32,200		Feb. 7, 1950	19.58	58,600
	Mar. 16, 1929	12.13	64,500	1951	Feb. 1, 1951	g17.07	32,100
	Mar. 24, 1929	17.20	93,600		Dec. 25, 1951	h17.27	42,700
	May 8, 1929	11.35	60,500		Feb. 26, 1953	j17.83	33,000
	May 20, 1929	12.15	65,100		Jan. 22, 1954	k18.04	45,300
1930	Oct. 23, 1929	10.63	52,900		Mar. 22, 1955	m17.62	40,800
1931	Apr. 6, 1931	15.20	75,700	1956	Apr. 16, 1956	c17.89	28,500
1932	Jan. 31, 1932	13.46	66,900		Feb. 19, 1957	n21.29	67,500
	Feb. 5, 1932	18.25	94,500		Dec. 27, 1957	p17.85	43,700
	Feb. 13, 1932	10.95	53,900		Oct. 8, 1958	q17.74	30,400
	May 3, 1932	11.94	58,600		Dec. 19, 1959	17.82	43,600
1933	Dec. 29, 1932	20.16	106,000	1960			
	Feb. 9, 1933	11.70	57,500				

a Maximum daily discharge. b Occurred May 22, 1942. c Occurred at different time than peak discharge. d Occurred May 14, 1945. e Occurred Apr. 25, 1948. f Occurred July 14, 1949. g Occurred Apr. 30, 1951. h Occurred May 19, 1952. j Occurred May 19, 1953. k Occurred Jan. 23, 1954. m Occurred July 12, 1955. n Occurred Feb. 2, 1957. p Occurred May 7, 1958. q Occurred Oct. 1, 1958.

4975. Little River at Walland, Tenn.

Location--Lat 35°43'25", long 83°49'05", half a mile above Walland, Blount County, three-quarters of a mile above dam of England, Walton & Co.'s tannery, and at mile 23.8.

Drainage area--175 sq mi.

Gage--Nonrecording. Datum of gage is 912.34 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation--Defined by current-meter measurements below 2,700 cfs and extended above.

Bankfull stage--10 ft.

Remarks--Only annual peaks are shown.

Peak stages and discharges of Little River at Walland, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Jan. 18, 1926	6.4	5,110	1930	Nov. 18, 1929	5.50	3,550
1927	Feb. 23, 1927	7.60	6,640				
1928	Sept. 1, 1928	6.0	4,050	1931	Apr. 4, 1931	7.65	6,180
1929	Mar. 23, 1929	11.00	10,600				

4980. Little River near Walland, Tenn.

Location.--Lat 35°45'48", long 83°51'00", 0.4 mile upstream from bridge on State Highway 73, 1.0 mile upstream from Ellejoy Creek, 3 miles downstream from Walland, Blount County, and at mile 20.7.

Drainage area.--192 sq mi.

Gage.--Recording. Datum of gage is 877.36 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 17,100 cfs and extended above.

Bankfull stage.--10 ft (Tennessee Valley Authority).

Remarks.--Base for partial-duration series, 3,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1875	February 1875	23	a40,000	1942	Mar. 9, 1942	5.58	4,080
1896	Apr. 1, 1896	18	a25,000		Mar. 17, 1942	5.34	3,680
1920	Apr. 2, 1920	15.6	a19,000	1943	Dec. 6, 1942	5.22	3,550
1932	Dec. 14, 1931	5.95	4,350		Dec. 29, 1942	11.43	13,000
	Jan. 30, 1932	9.7	10,200		Mar. 21, 1943	5.06	3,420
	Feb. 12, 1932	6.08	4,500		July 30, 1943	8.84	8,750
	May 1, 1932	7.53	6,750	1944	Feb. 18, 1944	8.86	8,900
1933	Dec. 28, 1932	8.52	8,260		Feb. 27, 1944	5.58	4,080
	Feb. 15, 1933	9.12	9,200		Mar. 19, 1944	6.02	4,640
1934	Feb. 26, 1934	6.2	4,880		Mar. 29, 1944	6.13	4,780
	Mar. 3, 1934	8.96	9,040		Sept. 30, 1944	5.27	3,680
	Mar. 24, 1934	5.77	4,320	1945	Feb. 13, 1945	8.18	7,850
1935	Jan. 22, 1935	5.20	3,510		Feb. 17, 1945	8.05	7,550
	Mar. 12, 1935	8.49	8,260	1946	Jan. 7, 1946	10.88	12,100
1936	Nov. 12, 1935	5.28	3,580		Feb. 10, 1946	8.72	8,600
	Jan. 8, 1936	6.11	4,690	1947	Jan. 15, 1947	6.28	5,030
	Jan. 19, 1936	8.43	8,110		Jan. 18, 1947	5.40	3,810
	Feb. 4, 1936	13.18	16,200		Jan. 20, 1947	13.92	17,500
	Mar. 24, 1936	9.06	9,200	1948	Feb. 14, 1948	9.07	9,160
	Mar. 27, 1936	9.01	9,040	1949	Nov. 28, 1948	8.90	8,900
	Apr. 2, 1936	8.00	7,510		Dec. 25, 1948	5.22	3,570
	Apr. 6, 1936	9.22	9,360		Jan. 5, 1949	10.24	11,000
1937	Jan. 3, 1937	7.37	6,610		June 16, 1949	5.43	3,850
	Jan. 13, 1937	5.52	3,850	1950	Oct. 31, 1949	11.01	12,300
	Jan. 15, 1937	5.23	3,450		Jan. 19, 1950	6.56	5,420
	Jan. 18, 1937	6.94	5,860		Feb. 7, 1950	5.31	3,690
	Feb. 9, 1937	5.78	4,270		Mar. 13, 1950	7.92	7,430
1938	Mar. 10, 1938	6.46	5,190	1951	Dec. 7, 1950	6.31	5,070
	Apr. 8, 1938	6.52	5,190		Mar. 29, 1951	14.88	17,600
	Aug. 5, 1938	8.74	8,560	1952	Nov. 1, 1951	5.17	3,460
1939	Feb. 3, 1939	5.70	4,060		Dec. 15, 1951	6.11	4,540
	Feb. 15, 1939	7.30	6,390		Dec. 21, 1951	8.77	8,000
1940	Aug. 30, 1940	4.86	2,900		Jan. 10, 1952	5.47	3,840
					Mar. 11, 1952	6.41	5,010
1941	July 7, 1941	4.20	2,140				

a Only annual peaks, from report by Tennessee Valley Authority.

4985. Little River near Maryville, Tenn.

Location--Lat 35°47'10", long 83°53'04", on right bank on downstream side of bridge on U.S. Highway 411, 0.8 mile downstream from Crooked Creek, 5.0 miles east of Maryville, Blount County, and at mile 17.3.

Drainage area--269 sq mi.

Gage--Recording. Datum of gage is 850.00 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation--Defined by current-meter measurements below 17,200 cfs and extended above.

Bankfull stage--15 ft.

Remarks--Only annual peaks are shown prior to 1952. Base for partial-duration series, 4,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1875	March 1875	31.0	-	1956	Feb. 3, 1956	17.35	10,800
					Feb. 6, 1956	13.00	5,300
1920	April 1920	24.0	-		Apr. 16, 1956	18.35	12,400
1951	Mar. 29, 1951	21.05	19,200	1957	Jan. 28, 1957	13.26	5,610
					Feb. 1, 1957	21.18	19,600
1952	Dec. 15, 1951	13.12	5,640		Apr. 5, 1957	13.34	5,710
	Dec. 21, 1951	16.30	9,460		Apr. 8, 1957	15.26	8,040
	Jan. 10, 1952	12.75	5,200				
	Mar. 11, 1952	13.16	5,690	1958	Nov. 18, 1957	16.80	10,000
					Nov. 25, 1957	13.04	5,350
1953	Feb. 12, 1953	15.15	8,080		Dec. 8, 1957	12.57	4,830
	Feb. 21, 1953	17.96	11,500		May 7, 1958	13.63	6,060
	May 19, 1953	14.19	6,930				
1954	Jan. 16, 1954	18.44	13,300	1959	Jan. 22, 1959	16.27	9,350
	Jan. 21, 1954	17.33	11,500		Mar. 27, 1959	16.15	9,200
					Apr. 12, 1959	12.86	5,150
1955	Feb. 6, 1955	13.74	6,440		June 25, 1959	12.82	5,100
	Feb. 23, 1955	14.69	7,770	1960	Nov. 28, 1959	17.87	11,600
	Mar. 18, 1955	12.56	5,010		Dec. 19, 1959	13.21	5,550
	Mar. 22, 1955	14.08	6,910				

4987. Nails Creek near Knoxville, Tenn.

Location--Lat 35°52'49", long 83°46'47", at culvert under State Highway 71, 0.8 mile southeast of Shooks Gap, Blount County, and 10½ miles southeast of Knoxville.

Drainage area--0.361 sq mi.

Gage--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation--Not defined.

Remarks--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Dec. 29, 1954	1.98	-	1958	July 1958	2.18	-
				1959	Jan. 21, 1959	2.10	-
1956	Feb. 17, 1956	2.30	-	1960	Nov. 27, 1959	1.85	-
1957	Apr. 8, 1957	2.94	-				

5000. Little Tennessee River near Prentiss, N. C.

Location.--Lat 35°08'57", long 83°22'46", on left bank 600 ft upstream from Owenby Branch, 0.5 mile upstream from Cartoogechaye Creek, 2 miles north of Prentiss, Macon County, and at mile 119.5.

Drainage area.--140 sq mi.

Gage.--Recording. Datum of gage is 2,008.39 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Auxiliary nonrecording gage at site 300 ft downstream Jan. 4, 1952, to Sept. 30, 1954; auxiliary recording gage 0.4 mile downstream since Oct. 1, 1954.

Stage-discharge relation.--Defined by current-meter measurements. Fall used as a factor in computing discharge since Jan. 4, 1952; prior to Jan. 4, 1952, some peaks may be as much as 10 percent in error.

Remarks.--Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1899	October 1898	a15	-	1952	Dec. 21, 1951	8.09	2,880
1945	Sept. 17, 1945	4.33	1,300		Mar. 11, 1952	10.54	5,190
1946	Jan. 7, 1946	8.77	3,600		Mar. 23, 1952	10.48	4,690
	Feb. 10, 1946	9.33	3,880	1953	Jan. 10, 1953	4.67	1,510
	Mar. 9, 1946	5.42	1,820		Feb. 21, 1953	9.64	4,060
	Mar. 15, 1946	5.39	1,820	1954	Jan. 16, 1954	7.34	2,840
	Mar. 29, 1946	6.98	2,610		Jan. 22, 1954	9.28	3,430
	May 4, 1946	4.73	1,510	1955	Dec. 30, 1954	5.82	2,010
1947	Jan. 20, 1947	9.20	3,250		Feb. 7, 1955	7.81	2,440
1948	Feb. 14, 1948	6.30	2,270		May 23, 1955	8.15	3,150
	Mar. 7, 1948	5.43	1,840	1956	Apr. 16, 1956	9.09	3,410
	Mar. 27, 1948	5.90	2,070	1957	Feb. 1, 1957	8.49	2,560
	Aug. 2, 1948	5.45	1,840		Apr. 5, 1957	9.76	3,750
1949	Nov. 20, 1948	5.00	1,680	1958	Nov. 19, 1957	6.45	2,310
	Nov. 29, 1948	9.41	3,760		Dec. 20, 1957	5.60	1,720
	Jan. 6, 1949	7.9	3,120		Apr. 29, 1958	5.12	1,700
	Apr. 30, 1949	4.77	1,550	1959	Jan. 22, 1959	7.51	2,520
	June 16, 1949	12.85	5,900		June 1, 1959	5.51	1,960
	Sept. 7, 1949	5.38	1,890	1960	Feb. 6, 1960	c4.79	1,600
1950	Oct. 31, 1949	5.09	1,730		Feb. 11, 1960	5.36	1,900
	Mar. 14, 1950	8.03	3,180		Mar. 31, 1960	5.36	1,840
	Sept. 1, 1950	6.26	2,330		Apr. 4, 1960	5.35	1,780
	Sept. 9, 1950	4.96	1,660		Aug. 12, 1960	d4.82	1,540
1951	Oct. 20, 1950	4.78	1,560				
	Dec. 7, 1950	b5.6	2,000				
1952	Dec. 15, 1951	4.97	1,660				

a About; from flood profile by Tennessee Valley Authority.

b Estimated.

c Occurred at different time than peak discharge.

d Occurred Aug. 13, 1960.

5005. Cullasaja River at Highlands, N. C.
(Published as "Cullasaja Creek" prior to Oct. 1, 1949)

Location.--Lat 35°04'14", long 83°13'57", on right bank 0.6 mile downstream from Highlands municipal dam, 1.0 mile downstream from Big Creek, and 2.3 miles northwest of Highlands, Macon County.

Drainage area.--14.9 sq mi. 14.4 sq mi at site used 1927-31.

Gage.--Recording. On crest of Highlands municipal dam 0.6 mile upstream at datum 230.22 ft higher prior to Aug. 29, 1931. Datum of gage is 3,373.63 ft above mean sea level.

Stage-discharge relation.--Defined by current-meter measurements below 800 cfs and by flow-over-dam measurements at 2,200 cfs and 5,100 cfs.

Historical data.--The maximum stage known is that of Aug. 30, 1940. Flood of 1916 reached a stage of 7 ft, estimated by Tennessee Valley Authority.

Remarks.--Base for partial-duration series, 550 cfs.

Peak stages and discharges, of Cullasaja River at Highlands, N. C.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Aug. 15, 1928	5.13	2,420	1946	Jan. 7, 1946	3.20	780
1929	Mar. 14, 1929	4.06	1,020		Jan. 9, 1946	2.90	605
	Sept. 25, 1929	4.15	1,120		Feb. 10, 1946	3.15	734
					Mar. 29, 1946	3.15	734
1930	Mar. 7, 1930	3.31	382	1947	Jan. 20, 1947	3.13	724
1931	Apr. 22, 1931	3.59	596	1948	Oct. 17, 1947	2.85	605
1932	Jan. 13, 1932	3.02	680		Feb. 14, 1948	2.83	593
	Mar. 22, 1932	2.75	568		July 11, 1948	3.86	1,250
	May 1, 1932	2.90	635		Sept. 5, 1948	4.10	1,420
1933	Oct. 16, 1932	2.95	658	1949	Nov. 3, 1948	2.80	575
	Dec. 28, 1932	2.78	590		Nov. 6, 1948	3.34	906
	Dec. 31, 1932	2.74	568		Nov. 19, 1948	2.95	665
	Apr. 16, 1933	3.10	730		Nov. 28, 1948	3.20	815
	May 5, 1933	2.98	680		Jan. 5, 1949	3.18	803
1934	Mar. 3, 1934	2.81	590		June 16, 1949	5.06	2,090
					Aug. 28, 1949	3.00	695
1935	Jan. 8, 1935	3.05	738	1950	Feb. 14, 1950	2.97	677
	Aug. 20, 1935	2.65	560		Mar. 13, 1950	3.11	761
					Sept. 7, 1950	2.93	653
1936	Nov. 12, 1935	2.78	625	1951	Oct. 20, 1950	3.10	751
	Jan. 19, 1936	2.64	560		Dec. 7, 1950	3.18	802
	Feb. 4, 1936	2.85	648	1952	Dec. 21, 1951	2.88	612
	Apr. 2, 1936	2.96	692		Mar. 11, 1952	4.40	1,630
	Apr. 6, 1936	3.20	810		Mar. 23, 1952	3.29	874
	Sept. 30, 1936	4.14	1,360				
1937	Oct. 8, 1936	2.68	580	1953	Feb. 21, 1953	3.91	1,290
	Dec. 31, 1936	2.95	692				
	Jan. 3, 1937	2.67	560	1954	Jan. 16, 1954	2.80	562
					Jan. 22, 1954	2.89	618
1938	Oct. 18, 1937	3.55	990	1955	Dec. 29, 1954	3.40	945
	July 21, 1938	2.92	608		Feb. 6, 1955	3.15	783
1939	Nov. 5, 1938	3.20	805		Mar. 22, 1955	3.04	713
	Jan. 30, 1939	3.15	768		Apr. 13, 1955	2.79	556
	Feb. 3, 1939	3.05	695		May 22, 1955	2.93	643
	Feb. 11, 1939	2.83	553	1956	Apr. 16, 1956	3.30	880
	Aug. 18, 1939	2.85	565				
1940	Apr. 19, 1940	3.35	838	1957	Jan. 31, 1957	2.80	562
	Aug. 13, 1940	5.92	2,400		Apr. 4, 1957	3.37	926
	Aug. 30, 1940	9.35	5,100		June 5, 1957	3.21	822
					June 28, 1957	2.87	605
1941	July 7, 1941	3.46	982	1958	Nov. 14, 1957	2.94	649
1942	Dec. 4, 1941	2.85	652		Nov. 19, 1957	3.27	860
	Feb. 16, 1942	3.00	735		Dec. 20, 1957	3.00	687
	Mar. 8, 1942	3.04	762		July 8, 1958	2.94	649
	May 21, 1942	2.68	559	1959	Jan. 21, 1959	3.60	1,080
	June 11, 1942	2.88	669		July 21, 1959	2.80	562
	Sept. 27, 1942	3.05	762				
1943	Dec. 29, 1942	3.85	1,200	1960	Oct. 9, 1959	3.82	1,230
	Jan. 19, 1943	2.79	549		Feb. 10, 1960	2.82	592
	Apr. 19, 1943	2.74	524		Mar. 30, 1960	3.24	856
1944	Mar. 29, 1944	2.57	442		Apr. 3, 1960	2.89	634
1945	Apr. 17, 1945	2.70	504				

5010. Cullasaja River at Cullasaja, N. C.
(Published as "Cullasaja Creek" prior to Oct. 1, 1949)

Location.--Lat 35°09'59", long 83°19'25", on right bank at Cullasaja, Macon County, 1.4 miles downstream from Ellijay Creek and 4.1 miles upstream from mouth.

Drainage area.--86.5 sq mi.

Gage.--Nonrecording prior to May 22, 1934; recording thereafter. Datum of gage is 2,023.37 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 8,100 cfs and extended above on basis of slope-area measurement at 16,500 cfs.

Historical data.--The maximum stage known is that of Aug. 30, 1940. A stage of 17.2 ft, from floodmarks, occurred in July 1916, but has been exceeded at other times, according to information by North Carolina State Highway Commission.

Remarks.--Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1908	Feb. 15, 1908	a6.0	b1,450	1941	July 7, 1941	8.78	2,420
1909	May 20, 1909	a8.2	b2,220	1942	Mar. 8, 1942	7.86	2,100
1922	Jan. 21, 1922	8.0	2,150	1943	Dec. 29, 1942	12.10	3,850
1923	Dec. 17, 1922	8.6	2,360		Jan. 18, 1943	8.04	2,160
	May 23, 1923	10.1	2,940	1944	Mar. 29, 1944	6.55	1,630
1924	Jan. 11, 1924	8.6	2,360	1945	Sept. 14, 1945	6.69	1,720
1925	Dec. 8, 1924	7.6	2,010	1946	Jan. 7, 1946	9.37	2,650
1926	Jan. 18, 1926	8.20	2,220		Feb. 10, 1946	10.00	2,900
1927	Dec. 25, 1926	6.00	1,450		Mar. 29, 1946	8.55	2,340
1928	Nov. 17, 1927	9.30	2,620	1947	Jan. 20, 1947	10.35	2,990
	Aug. 15, 1928	17.04	7,770	1948	Feb. 14, 1948	7.76	2,100
1929	Mar. 14, 1929	12.75	4,180		July 12, 1948	8.55	2,340
	Sept. 26, 1929	10.35	3,040		Sept. 6, 1948	8.58	2,350
1930	Nov. 3, 1929	7.30	1,900	1949	Nov. 6, 1948	9.63	2,750
1931	Apr. 22, 1931	7.4	1,940		Nov. 19, 1948	7.62	2,020
1932	Jan. 13, 1932	8.3	2,260		Nov. 28, 1948	10.20	2,980
	Apr. 30, 1932	8.80	2,430		Jan. 5, 1949	8.55	2,340
1933	Oct. 16, 1932	8.0	2,150		June 16, 1949	17.60	8,620
	Dec. 28, 1932	8.9	2,460	1950	Mar. 13, 1950	8.57	2,330
	Apr. 16, 1933	7.6	2,010	1951	Dec. 7, 1950	9.35	2,640
	May 5, 1933	9.2	2,580	1952	Dec. 21, 1951	8.08	2,160
1934	Mar. 3, 1934	8.5	2,320		Mar. 11, 1952	13.88	4,810
1935	Jan. 9, 1935	10.25	3,000		Mar. 23, 1952	10.44	3,080
1936	Jan. 19, 1936	8.18	2,210	1953	Feb. 21, 1953	12.40	4,000
	Feb. 4, 1936	9.40	2,660	1954	Jan. 22, 1954	9.78	2,810
	Apr. 2, 1936	9.87	2,850	1955	Feb. 6, 1955	9.04	2,520
	Apr. 6, 1936	11.15	3,380		May 22, 1955	11.33	3,460
	Sept. 30, 1936	13.40	4,520	1956	Apr. 15, 1956	10.80	3,220
1937	Dec. 31, 1936	7.78	2,070	1957	Jan. 31, 1957	8.83	2,430
1938	Oct. 19, 1937	10.47	3,090		Apr. 4, 1957	11.30	3,450
	July 23, 1938	9.97	2,890		June 5, 1957	8.40	2,270
1939	Jan. 30, 1939	8.50	2,320	1958	Nov. 14, 1957	7.72	2,030
	Feb. 15, 1939	7.80	2,080		Nov. 19, 1957	9.01	2,500
1940	Apr. 19, 1940	9.21	2,580	1959	Jan. 21, 1959	11.66	3,630
	Aug. 13, 1940	15.28	5,220	1960	Oct. 9, 1959	9.40	2,660
	Aug. 30, 1940	20.83	16,500				

a Maximum observed.

b Annual peak only.

5015. Little Tennessee River at Franklin, N. C.

Location.--Lat 35°11'10", long 83°22'20", at bridge on U.S. Highways 23 and 64, 0.5 mile northeast of Franklin, Macon County, and 0.8 mile downstream from Cullasaja River.

Drainage area.--295 sq mi.

Gage.--Nonrecording. At site 700 ft upstream prior to July 12, 1910. Datum of gage is 1,992.0 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 5,400 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 4,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1908	Jan. 12, 1908	7.4	5,350	1922	Jan. 21, 1922	9.83	7,780
	Feb. 15, 1908	9.7	7,650		Feb. 15, 1922	6.2	4,150
	Mar. 24, 1908	7.0	4,950		Mar. 27, 1922	6.3	4,250
	Apr. 25, 1908	7.2	5,150	1923	Dec. 17, 1922	7.6	5,550
1909	Dec. 7, 1908	6.9	4,850		May 22, 1923	6.5	4,450
	Mar. 14, 1909	6.8	4,750	1924	Jan. 11, 1924	7.25	5,200
	Mar. 25, 1909	6.7	4,650		Jan. 16, 1924	6.4	4,350
	May 1, 1909	6.3	4,250	1925	Dec. 8, 1924	6.55	4,500
	May 20, 1909	7.1	5,050		Jan. 18, 1925	6.3	4,250
	June 4, 1909	10.0	7,950				
1910	Dec. 12, 1909	a6.0	3,950				
1916	July 1916	b16.06	-				

a Probably maximum for year.

b From floodmarks; annual peak only.

5020. Little Tennessee River at Iotla, N. C.

Location.--Lat 35°13'59", long 83°23'32", 1,000 ft upstream from bridge on State Highway 28 at Iotla, Macon County, and 1,100 ft upstream from Iotla Creek.

Drainage area.--323 sq mi.

Gage.--Recording. Datum of gage is 1,958.62 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 7,400 cfs and extended above on basis of flow-over-dam measurement 2.6 miles upstream at 19,600 cfs.

Remarks.--Base for partial-duration series, 3,750 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1899	October 1898	a15	-	1933	Apr. 16, 1933	5.62	4,250
1929	Sept. 26, 1929	8.52	10,100		May 5, 1933	6.17	5,250
1930	Nov. 4, 1929	6.00	4,550	1934	Feb. 26, 1934	5.42	3,940
1931	Apr. 22, 1931	5.40	3,750		Mar. 4, 1934	6.80	6,320
1932	Dec. 14, 1931	5.72	4,410	1935	Jan. 9, 1935	5.96	4,970
	Mar. 31, 1932	5.55	3,940		Mar. 12, 1935	5.23	3,780
	May 1, 1932	6.50	5,420	1936	Nov. 13, 1935	5.34	3,920
1933	Oct. 17, 1932	5.92	4,740		Jan. 3, 1936	5.65	4,360
	Dec. 17, 1932	5.58	3,940		Jan. 6, 1936	5.38	4,060
	Dec. 25, 1932	6.55	5,590		Jan. 8, 1936	5.36	4,060
	Dec. 28, 1932	8.33	9,580		Jan. 19, 1936	7.36	7,330
	Dec. 31, 1932	5.95	4,910		Feb. 4, 1936	7.92	8,640
					Mar. 27, 1936	5.36	4,060
					Apr. 2, 1936	7.72	8,180

a From survey by Tennessee Valley Authority; annual peak only.

Peak stages and discharges of Little Tennessee River at Iotla, N. C.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Apr. 6, 1936	8.61	10,400	1941	July 7, 1941	5.65	4,300
	Apr. 10, 1936	5.31	3,920	1942	Feb. 17, 1942	5.96	4,940
	Sept. 30, 1936	8.84	10,900		Mar. 9, 1942	5.50	4,140
1937	Dec. 31, 1936	5.60	4,360		May 22, 1942	5.88	4,780
	Jan. 3, 1937	7.02	6,730	1943	Dec. 29, 1942	8.98	10,400
	Jan. 19, 1937	5.56	4,360		Jan. 19, 1943	-	3,800
1938	Oct. 19, 1937	6.20	5,300		Feb. 6, 1943	5.60	4,300
	July 24, 1938	7.35	7,530	1944	Mar. 21, 1943	5.25	3,760
					Apr. 19, 1943	5.34	3,840
1939	Jan. 30, 1939	5.44	4,060		Feb. 18, 1944	5.38	3,990
	Feb. 4, 1939	6.21	5,300	1945	Feb. 27, 1944	5.44	3,990
	Feb. 11, 1939	5.79	4,660		Mar. 20, 1944	5.45	3,990
	Feb. 15, 1939	6.82	6,350		Mar. 29, 1944	6.12	5,110
	Mar. 6, 1939	5.49	4,210	1949	Sept. 14, 1945	4.69	2,990
1940	Apr. 20, 1940	6.03	4,940		June 16, 1949	b13.0	c18,600
	Aug. 13, 1940	7.63	7,770				
	Aug. 30, 1940	b13.5	19,600				

b From floodmarks.

c Annual peak only.

5025. Little Tennessee River at Etna, N. C.

Location.--Lat 35°16'42", long 83°26'55", on State Highway 28 at Etna post office, Macon County, 0.3 mile downstream from Lakey Creek.

Drainage area.--374 sq mi.

Gage.--Nonrecording. Datum of gage is 1,917.72 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 7,200 cfs and extended above.

Remarks.--Base for partial-duration series, 4,700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Jan. 18, 1926	ab7.2	c6,130	1929	Mar. 5, 1929	7.7	6,580
1927	Dec. 28, 1926	b7.3	6,380	1930	Mar. 14, 1929	11.0	11,200
					Mar. 23, 1929	7.9	6,840
1928	Nov. 17, 1927	6.9	5,540		May 7, 1929	6.5	4,970
	Mar. 30, 1928	7.6	6,520		Sept. 26, 1929	11.3	11,800
	Aug. 16, 1928	b10.0	9,760		Nov. 4, 1929	a6.2	c4,710
1929	Feb. 28, 1929	7.4	6,170				

a Probably maximum for year.

b Maximum observed.

c Annual peak only.

5030. Little Tennessee River at Needmore, N. C.

Location.--Lat 35°20'11", long 83°31'39", on left bank 0.8 mile downstream from DeHart Creek, 0.8 mile north of Needmore, Swain County, 2.4 miles downstream from Brush Creek, 6.3 miles downstream from Tellico Creek, and at mile 92.9.

Drainage area.--436 sq mi.

Gage.--Recording. Datum of gage is 1,761.19 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 12,000 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 5,000 cfs.

Peak stages and discharges of Little Tennessee River at Needmore, N. C.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1899	October 1898	a13	-	1952	Mar. 11, 1952	7.96	10,500
1940	Aug. 30, 1940	a11.5	-		Mar. 23, 1952	8.33	11,500
1945	Feb. 17, 1945	4.88	3,760	1953	Feb. 21, 1953	8.33	11,500
1946	Jan. 7, 1946	7.95	10,600	1954	Jan. 16, 1954	7.02	8,170
	Feb. 10, 1946	8.61	12,200		Jan. 22, 1954	8.58	12,200
	Mar. 9, 1946	5.70	5,210	1955	Dec. 30, 1954	5.66	5,190
	Mar. 29, 1946	6.18	6,220		Feb. 7, 1955	7.30	8,840
1947	Jan. 20, 1947	8.34	11,500		Mar. 22, 1955	5.98	5,840
1948	Feb. 12, 1948	6.02	5,840		Apr. 6, 1955	6.49	6,940
	Mar. 27, 1948	5.70	5,210		May 23, 1955	6.90	7,880
1949	Nov. 29, 1948	8.18	11,100	1956	Apr. 16, 1956	7.35	8,960
	Jan. 6, 1949	7.01	8,220	1957	Feb. 1, 1957	8.36	11,500
	Jan. 16, 1949	11.10	20,200		Apr. 5, 1957	8.77	12,700
	Sept. 6, 1949	5.60	5,010	1958	Nov. 19, 1957	6.59	7,160
1950	Jan. 19, 1950	6.09	5,960		Dec. 21, 1957	6.00	5,880
	Mar. 13, 1950	7.40	9,040		Apr. 29, 1958	5.69	5,250
1951	Dec. 7, 1950	6.25	6,310	1959	Jan. 22, 1959	6.95	7,960
	Mar. 30, 1951	5.70	5,130	1960	Apr. 4, 1960	5.67	4,890
1952	Dec. 21, 1951	6.96	8,020				

a From flood profiles of Tennessee Valley Authority.

5040. Nantahala River near Rainbow Springs, N. C.

Location.--Lat 35°07'35", long 83°37'11", on right bank on Nantahala Forest Service road, 300 ft upstream from Roaring Fork, 0.2 mile downstream from Buck Creek, 5 miles downstream from town of Rainbow Springs, Macon County, and at mile 34.3.

Drainage area.--51.9 sq mi.

Gage.--Recording. Datum of gage is 3,072.97 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 3,000 cfs and extended above on basis of slope-area measurement at 6,300 cfs.

Remarks.--Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Aug. 13, 1940	a6.50	b3,430	1948	Feb. 12, 1948	4.55	1,960
1941	July 5, 1941	4.37	1,860		Feb. 14, 1948	4.35	1,820
1942	Feb. 16, 1942	4.04	1,620		Mar. 27, 1948	4.40	1,860
	May 20, 1942	4.09	1,650		Aug. 2, 1948	4.10	1,650
1943	Dec. 29, 1942	5.93	2,960	1949	Nov. 6, 1948	4.62	2,010
	Jan. 18, 1943	4.73	2,070		Nov. 28, 1948	-	cl,500
	July 5, 1943	3.89	1,520		Jan. 5, 1949	5.40	2,580
1944	Feb. 18, 1944	3.94	1,550		June 16, 1949	9.70	6,300
	Feb. 27, 1944	3.93	1,520	1950	Mar. 13, 1950	4.63	1,990
1945	Jan. 1, 1945	3.07	980	1951	Mar. 29, 1951	4.36	1,800
1946	Feb. 10, 1946	5.10	2,360	1952	Dec. 21, 1951	4.94	2,210
	Mar. 8, 1946	4.33	1,790		Mar. 11, 1952	5.66	2,760
	July 14, 1946	5.40	2,580		Mar. 23, 1952	5.43	2,570
1947	Jan. 20, 1947	5.52	2,670	1953	Feb. 21, 1953	5.92	2,970

a From recorded range in stage during fragmentary record prior to Oct. 1, 1940.

b Annual peak only.

c Daily mean discharge; estimated.

Peak stages and discharges of Nantahala River near Rainbow Springs, N. C.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 16, 1954	6.36	3,320	1957	Feb. 4, 1957	4.46	1,870
	Jan. 22, 1954	5.80	2,870		Apr. 5, 1957	5.30	2,470
1955	Feb. 6, 1955	4.71	2,050		June 28, 1957	4.66	2,010
	Mar. 22, 1955	4.84	2,140	1958	Dec. 20, 1957	4.92	2,190
	May 22, 1955	4.05	1,580		Jan. 21, 1959	5.58	2,690
1956	Apr. 15, 1956	4.88	2,170	1960	Apr. 3, 1960	3.79	1,400
1957	Jan. 31, 1957	8.15	4,860				

5055. Nantahala River at Nantahala, N. C.

Location.--Lat 35°17'55", long 83°39'22", on left bank on U.S. Highway 19, 1.0 mile northeast of Nantahala, Swain County, 2.3 miles downstream from Rowlin Creek, 2.8 miles downstream from Nantahala Dam powerhouse, and at mile 10.8.

Drainage area.--144 sq mi.

Gage.--Recording. Datum of gage is 1,894.68 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Flow regulated by Nantahala Lake (controlled storage, 63,300 cfs-days). Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	July 5, 1943	5.70	3,600	1952	Mar. 23, 1952	6.51	4,480
1944	Feb. 27, 1944	4.18	1,500	1953	Feb. 21, 1953	5.32	2,730
1945	Feb. 17, 1945	4.71	2,110	1954	Jan. 22, 1954	5.41	2,840
				1955	Feb. 6, 1955	4.58	1,830
1946	Feb. 10, 1946	8.15	7,510				
1947	Jan. 20, 1947	6.35	4,220	1956	Apr. 15, 1956	4.50	1,740
1948	Feb. 14, 1948	4.56	1,810	1957	Jan. 31, 1957	6.41	4,320
1949	Jan. 5, 1949	5.28	2,670	1958	Nov. 19, 1957	4.33	1,560
1950	Mar. 13, 1950	7.10	5,480	1959	Jan. 21, 1959	5.16	2,520
				1960	Nov. 28, 1959	3.82	1,110
1951	Mar. 29, 1951	5.10	2,440				

5065. Nantahala River at Almond, N. C.

Location.--Lat 35°22'32", long 83°33'59", at highway bridge at Almond, Swain County, 0.6 mile upstream from mouth.

Drainage area.--174 sq mi.

Gage.--Nonrecording at site 700 ft downstream at datum 2.34 ft lower prior to June 6, 1934; recording thereafter. Datum of gage is 1,596.53 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 3,400 cfs and extended above by logarithmic plotting at downstream site; defined by current-meter measurements below 6,000 cfs and extended above by logarithmic plotting for period June 6, 1934, to Sept. 30, 1943. Peaks for 1922, 1927, and 1933 affected by backwater from Little Tennessee River; there is a possibility that other peaks are also affected.

Historical data.--The flood of March 1917 reached a stage of 13 ft (present site and datum), from floodmark, from information by Tennessee Valley Authority.

Remarks.--Regulated since Jan. 30, 1942, by Nantahala Lake (controlled storage, 63,300 cfs-days). Base for partial-duration series, 4,000 cfs.

Peak stages and discharges of Nantahala River at Almond, N. C.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	Jan. 21, 1922	7.75	-	1932	Apr. 30, 1932	5.1	5,820
1923	Dec. 17, 1922	5.20	6,030	1933	Dec. 28, 1932	7.2	-
	Feb. 13, 1923	4.40	4,380	1934	Mar. 3, 1934	6.8	9,790
1924	Jan. 11, 1924	4.20	3,980	1935	Mar. 12, 1935	5.99	3,950
1925	Dec. 8, 1924	5.00	5,610	1936	Jan. 19, 1936	8.80	8,160
1926	Jan. 18, 1926	4.10	3,780		Feb. 4, 1936	10.20	11,000
1927	Dec. 28, 1926	4.85	-		Apr. 2, 1936	7.55	6,010
1928	Dec. 15, 1927	4.5	4,580		Apr. 6, 1936	8.27	7,200
	May 30, 1928	6.80	9,790	1937	Jan. 3, 1937	7.12	5,330
1929	Feb. 28, 1929	4.70	4,980	1938	July 23, 1938	6.57	4,630
	Mar. 5, 1929	4.55	4,680	1939	Feb. 3, 1939	6.65	4,380
	Mar. 14, 1929	4.60	4,760		Feb. 15, 1939	7.66	5,560
	Apr. 28, 1929	4.60	4,780	1940	Aug. 13, 1940	6.30	4,000
	Sept. 26, 1929	5.62	6,910	1941	July 5, 1941	4.48	2,230
1930	Nov. 3, 1929	4.14	3,780	1942	Feb. 16, 1942	4.39	a2,140
1931	Apr. 4, 1931	4.00	3,590	1943	Dec. 29, 1942	5.90	a3,580
1932	Dec. 14, 1931	4.5	4,580				
	Jan. 30, 1932	5.0	5,610				

a Annual peak only.

5070. Little Tennessee River at Judson, N. C.

Location.--Lat 35°24'30", long 83°33'26", 0.2 mile downstream from State Highway bridge at Judson, Swain County, and 0.2 mile upstream from Greasy Branch (formerly known as Sawyer Branch).

Drainage area.--664 sq mi; 666 sq mi at site used prior to Apr. 16, 1912.

Gage.--Nonrecording July 1, 1896, to Apr. 15, 1912 (change in datum July 1, 1905), at Southern Railway bridge 0.6 mile downstream at different datums. Recording Apr. 16, 1912, to Oct. 20, 1918, at described site and different datum. Nonrecording Dec. 15, 1918, to Jan. 4, 1934, at described site and datum; recording thereafter. Datum of gage is 1,521.76 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 22,000 cfs and extended above for period 1896-1905; defined by current-meter measurements below 3,000 cfs and shape of previous curve for period 1906-12; defined by current-meter measurements below 4,300 cfs for period 1913-18; defined by current-meter measurements below 15,000 cfs and extended above by logarithmic plotting for period 1919-44.

Remarks.--Regulated since Jan. 30, 1942, by Nantahala Lake (controlled storage, 63,300 cfs-days). Only annual peaks are shown prior to 1924. Base for partial-duration series, 7,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1897	Mar. 12, 1897	9.2	17,400	1907	Nov. 19, 1906	13.5	17,400
1898	Sept. 3, 1898	11.93	29,000	1908	Feb. 15, 1908	10.9	13,000
1899	Oct. 5, 1898	15.00	44,400	1909	June 6, 1909	9.8	11,100
1900	Feb. 13, 1900	11.35	26,400	1910	Jan. 7, Mar. 1 1910	6.7	5,930
1901	May 20, 1901	12.32	31,000	1911	Apr. 4, 1911	10.1	11,600
1902	Feb. 28, 1902	16.19	51,000	1912	Mar. 30, 1912	12.1	14,000
1903	Feb. 28, 1903	10.63	23,200	1913	Mar. 27, 1913	26.00	a14,300
1904	Mar. 7, 1904	6.25	6,900	1914	Apr. 15, 1914	20.40	a3,640
1905	Jan. 12, 1905	8.7	14,100	1915	Dec. 4, 1914	23.50	a9,690
1906	Sept. 30, 1906	12.00	14,800				

a Daily mean discharge.

TENNESSEE RIVER BASIN

Peak stages and discharges of Little Tennessee River at Judson, N. C.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1916	July 10, 1916	25.96	a15,000	1933	Feb. 8, 1933	22.3	7,660
1917	Mar. 4, 1917	b32	37,500		Feb. 15, 1933	22.5	7,980
1918	Jan. 28, 1918	24.35	a11,500		May 5, 1933	22.9	8,840
1919	Dec. 22, 1918	27.4	a19,600				
1920	Apr. 2, 1920	26.0	a15,900	1934	Feb. 26, 1934	23.2	8,960
					Mar. 3, 1934	26.58	17,500
1921	Dec. 14, 1920	24.7	a12,500				
1922	Jan. 21, 1922	26.1	a16,100	1935	Mar. 12, 1935	23.11	8,740
1923	Dec. 17, 1922	24.0	a10,800				
				1936	Jan. 3, 1936	22.74	8,300
1924	Jan. 11, 1924	22.7	7,900		Jan. 8, 1936	22.85	8,520
	Apr. 18, 1924	22.2	7,350		Jan. 19, 1936	26.61	18,700
	Sept. 20, 1924	22.3	7,560		Feb. 4, 1936	26.67	19,000
					Mar. 28, 1936	23.10	9,200
1925	Dec. 8, 1924	24.2	11,200		Apr. 2, 1936	26.50	15,200
					Apr. 6, 1936	26.35	18,000
1926	Jan. 18, 1926	23.6	10,400		Sept. 30, 1936	23.90	11,100
1927	Dec. 26, 1926	24.1	11,600	1937	Dec. 31, 1936	22.41	7,640
	Dec. 28, 1926	24.6	12,900		Jan. 3, 1937	24.85	13,500
	Mar. 8, 1927	22.5	7,980		Jan. 19, 1937	22.70	8,500
					Feb. 9, 1937	22.15	7,220
1928	Nov. 17, 1927	22.4	7,770				
	Dec. 16, 1927	23.1	9,280	1938	Oct. 19, 1937	22.52	7,860
	Mar. 30, 1928	25.8	16,300		July 24, 1938	24.42	12,500
	Aug. 16, 1928	25.1	14,500				
	Sept. 3, 1928	22.5	7,980	1939	Jan. 30, 1939	22.26	7,430
	Sept. 6, 1928	23.4	9,960		Feb. 3, 1939	23.90	11,100
					Feb. 11, 1939	22.74	8,500
1929	Feb. 28, 1929	23.5	10,200		Feb. 15, 1939	25.3	14,600
	Mar. 5, 1929	24.7	13,200				
	Mar. 14, 1929	25.2	14,600	1940	Apr. 20, 1940	22.52	7,860
	Mar. 23, 1929	23.5	10,200		Aug. 14, 1940	24.16	11,600
	May 7, 1929	22.36	7,510		Aug. 30, 1940	27.62	22,100
	Sept. 26, 1929	25.8	16,300				
				1941	July 7, 1941	21.75	6,400
1930	Nov. 4, 1929	22.2	7,350				
				1942	Feb. 16, 1942	22.70	8,400
1931	Apr. 22, 1931	21.0	6,740				
				1943	Dec. 29, 1942	25.23	14,600
1932	Dec. 14, 1931	23.2	8,960		Jan. 19, 1942	22.49	7,860
	Jan. 30, 1932	22.5	7,500		Feb. 6, 1943	22.34	7,430
	May 1, 1932	22.45	7,510		July 5, 1943	22.75	8,520
1933	Oct. 17, 1932	22.3	7,560	1944	Feb. 18, 1944	22.50	7,860
	Dec. 14, 1932	23.1	9,280		Feb. 27, 1944	22.98	8,970
	Dec. 17, 1932	23.1	9,280		Mar. 29, 1944	22.99	8,970
	Dec. 28, 1932	27.8	22,800				

a Daily mean discharge.

b From flood profile by Tennessee Valley Authority, present site and datum.

5080. Tuckasegee River at Tuckasegee, N. C.

Location--Lat 35°16'55", long 83°07'37", on right bank 0.9 mile north of Tuckasegee, Jackson County, 1.1 miles downstream from West Fork Tuckasegee River, and at mile 48.5.

Drainage area--143 sq mi.

Gage--Recording. Datum of gage is 2,125.16 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation--Defined by current-meter measurements below 7,000 cfs and by slope-area measurements at 13,700 cfs and 40,800 cfs.

Remarks--Flow regulated by Thorpe Lake since Feb. 12, 1941 (controlled storage, 33,600 cfs-days). Cedar Cliff Lake since Apr. 26, 1952 (controlled storage, 400 cfs-days), Bear Creek Lake since Oct. 9, 1953 (controlled storage, 2,290 cfs-days), and Tennessee Creek project lakes since Mar. 22, 1955 (controlled storage, 4,480 cfs-days). Base for partial-duration series, 3,700 cfs. Only annual peaks are shown subsequent to 1940.

Peak stages and discharges of Tuckasegee River at Tuckasegee, N. C.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1840	May 1840	a18	b23,100	1940	Aug. 30, 1940	21.1	40,800
1876	June 1876	a16	b17,100	1941	July 7, 1941	5.32	2,930
1928	August 1928	a14	b13,200	1942	May 21, 1942	6.27	3,820
1935	Jan. 9, 1935	6.92	3,980	1943	Dec. 29, 1942	7.94	5,450
1936	Jan. 19, 1936	6.7	4,150	1944	Mar. 29, 1944	4.20	1,920
	Feb. 4, 1936	6.55	4,000	1945	Apr. 17, 1945	5.75	3,340
	Apr. 2, 1936	7.50	4,950	1946	Feb. 10, 1946	8.08	5,670
	Apr. 6, 1936	8.10	5,560	1947	Jan. 20, 1947	6.49	4,000
	Sept. 30, 1936	8.83	6,330	1948	July 11, 1948	10.35	8,320
1937	Jan. 3, 1937	6.25	3,650	1949	June 16, 1949	10.17	7,950
1938	Oct. 18, 1937	7.03	4,450	1950	Mar. 13, 1950	6.93	4,350
1939	Nov. 5, 1938	7.35	4,850	1951	Dec. 7, 1950	8.62	6,130
	Jan. 30, 1939	6.82	4,280	1952	Mar. 11, 1952	6.30	3,720
	Feb. 3, 1939	6.40	3,850	1953	Feb. 21, 1953	7.83	5,260
	Feb. 15, 1939	6.81	4,270	1954	Jan. 22, 1954	4.14	1,820
1940	Apr. 19, 1940	9.61	7,420	1955	May 22, 1955	7.67	5,090
	Aug. 13, 1940	14.32	13,700	1956	Apr. 15, 1956	3.90	1,630
				1957	Apr. 4, 1957	9.90	7,630
				1958	Nov. 19, 1957	6.38	3,800
				1959	May 23, 1959	5.07	2,610
				1960	Apr. 4, 1960	4.75	2,300

a From survey by Tennessee Valley Authority.

b Annual peak only.

5090. Scott Creek above Sylva, N. C.

Location.--Lat 35°23'02", long 83°12'51", on right bank 800 ft down-stream from Allens Branch, 0.7 mile upstream from Cope Creek, and 0.8 mile upstream from Sylva, Jackson County.

Drainage area.--50.7 sq mi.

Gage.--Recording. Datum of gage is 2,056.42 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 1,800 cfs and extended above by logarithmic plotting.

Historical data.--The maximum stage known is that of Aug. 30, 1940.

Remarks.--Base for partial-duration series, 900 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Aug. 30, 1940	a8.6	b3,200	1949	July 19, 1949	5.97	1,750
1942	Feb. 16, 1942	4.90	1,210		Aug. 16, 1949	5.94	1,740
	June 5, 1942	4.60	1,060	1950	Oct. 30, 1949	4.28	901
	July 22, 1942	4.82	1,160		Jan. 19, 1950	5.20	1,360
1943	Dec. 29, 1942	4.75	1,140		Mar. 13, 1950	4.92	1,220
1944	Feb. 17, 1944	4.22	925	1951	Dec. 7, 1950	3.80	685
	May 29, 1944	4.98	1,260	1952	Dec. 20, 1951	5.32	1,420
1945	Feb. 17, 1945	4.25	958		Mar. 23, 1952	4.97	1,240
1946	Jan. 7, 1946	4.87	1,180	1953	Feb. 21, 1953	6.77	1,960
	Feb. 10, 1946	6.40	1,990	1954	Jan. 16, 1954	5.34	1,270
1947	Jan. 20, 1947	5.75	1,640		Jan. 22, 1954	5.54	1,360
1948	Mar. 27, 1948	4.06	802	1955	Feb. 6, 1955	4.76	1,010
1949	Nov. 28, 1948	5.65	1,580		Mar. 22, 1955	4.88	1,070
	Jan. 5, 1949	4.47	995	1956	Apr. 15, 1956	4.90	1,080
	June 16, 1949	5.05	1,280		July 2, 1956	5.25	1,230

a From floodmarks.

b Annual peak only.

Peak stages and discharges of Scott Creek above Sylva, N. C.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	Jan. 23, 1957	4.58	932	1958	July 8, 1958	5.36	1,260
	Jan. 31, 1957	7.39	2,320	1959	Jan. 21, 1959	6.60	1,870
	Feb. 5, 1957	4.77	991		Apr. 19, 1959	5.40	1,140
	Apr. 5, 1957	5.44	1,290		May 29, 1959	7.10	2,120
	May 17, 1957	5.25	1,210				
1958	Dec. 20, 1957	4.58	900	1960	Aug. 12, 1960	5.19	1,040

5095. Scott Creek at Sylva, N. C.

Location.--Lat 35°22'25", long 83°13'05", just downstream from Cope Creek (Formerly Gunter Creek) at Sylva, Jackson County.

Drainage area.--55.0 sq mi.

Gage.--Recording. Datum of gage 2,033.23 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 1,100 cfs and by slope-area measurement at 3,360 cfs.

Historical data.--Studies by Tennessee Valley Authority indicate flood of May 1840 (gage height and discharge unknown), probably exceeded any flood during period of record.

Remarks.--Base for partial-duration series, 900 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Feb. 27, 1929	3.47	1,220	1936	Jan. 19, 1936	4.50	1,450
	Mar. 5, 1929	3.14	1,080		Feb. 4, 1936	5.34	1,810
	Mar. 14, 1929	3.49	1,220		Mar. 26, 1936	5.85	2,040
	Mar. 23, 1929	3.04	1,040		Apr. 2, 1936	4.00	1,220
	Apr. 28, 1929	3.45	1,190		Apr. 6, 1936	4.95	1,680
	July 10, 1929	6.00	2,200		June 5, 1936	3.60	1,040
	July 17, 1929	5.58	2,020		Sept. 30, 1936	3.66	1,070
1930	Nov. 3, 1929	2.21	675	1937	Jan. 3, 1937	4.60	1,330
1931	Nov. 16, 1930	2.71	685	1938	July 23, 1938	4.13	1,130
1932	July 4, 1932	3.65	905	1939	Feb. 3, 1939	4.55	1,330
1933	Dec. 28, 1932	4.57	1,330		Feb. 15, 1939	4.02	1,060
1934	Mar. 3, 1934	4.61	1,330	1940	Aug. 13, 1940	4.96	1,510
	May 8, 1934	4.90	1,460		Aug. 30, 1940	8.61	3,360
	June 23, 1934	4.24	1,150	1941	July 7, 1941	3.07	480
	July 1, 1934	4.17	1,130				
1935	Mar. 12, 1935	2.99	765				

5105. Tuckasegee River at Dillsboro, N. C.

Location.--Lat 35°21'59", long 83°15'38", on left bank 0.4 mile downstream from Scott Creek, 0.5 mile downstream from U.S. Highway 23 at Dillsboro, Jackson County, and at mile 31.1.

Drainage area.--347 sq mi.

Gage.--Nonrecording prior to May 24, 1934, at site below Scott Creek 0.4 mile upstream at datum 7.27 ft higher; recording thereafter. Datum of gage is 1,950.15 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 8,400 cfs and extended above on basis of slope-area and flow-over-dam measurements at gage height 21.96 ft.

Remarks.--Flow partly regulated by Thorpe Lake since Feb. 12, 1941, by Cedar Cliff Lake since Apr. 26, 1952, by Bear Creek Lake since Oct. 9, 1953, and Tennessee Creek project lakes since Mar. 22, 1955 (combined controlled storage, 40,770 cfs-days). Base for partial-duration series, 4,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Aug. 15, 1928	11.2	14,000	1942	May 20, 1942	8.40	6,520
1929	Feb. 27, 1929	7.2	8,060	1943	Dec. 29, 1942	10.13	9,850
	Mar. 5, 1929	6.5	7,010		Jan. 19, 1943	8.25	6,180
	Mar. 14, 1929	8.6	10,200	1944	Feb. 27, 1944	6.90	4,200
	Mar. 23, 1929	6.6	7,220	1945	Apr. 17, 1945	7.32	4,780
	May 6, 1929	6.0	6,350	1946	Jan. 7, 1946	7.86	5,700
1930	Sept. 26, 1929	5.6	5,770		Feb. 10, 1946	10.90	11,700
	Nov. 3, 1929	3.9	3,360		Mar. 14, 1946	7.36	4,930
1931	Apr. 22, 1931	5.0	4,900		Mar. 29, 1946	7.60	5,230
1932	May 1, 1932	5.0	4,900	1947	Jan. 20, 1947	10.2	10,100
1933	Oct. 17, 1932	7.3	8,200	1948	Feb. 12, 1948	7.65	5,300
	Apr. 16, 1933	6.1	6,430		Mar. 27, 1948	7.32	4,810
	May 5, 1933	6.2	6,590		July 11, 1948	9.67	8,940
1934	Feb. 26, 1934	6.0	6,270	1949	Nov. 28, 1948	9.62	8,840
	Mar. 3, 1934	5.8	5,960		Jan. 5, 1949	7.72	5,410
1935	Jan. 9, 1935	8.03	5,410		June 16, 1949	11.80	13,900
1936	Nov. 13, 1935	7.30	4,680		Aug. 28, 1949	7.47	5,040
	Jan. 19, 1936	9.50	8,250	1950	Jan. 19, 1950	7.89	5,680
	Feb. 4, 1936	9.91	9,010		Mar. 13, 1950	9.23	8,060
	Mar. 27, 1936	7.36	4,820	1951	Dec. 7, 1950	9.45	8,500
	Apr. 2, 1936	9.60	8,440	1952	Dec. 21, 1951	7.80	5,540
	Apr. 6, 1936	10.27	9,800		Mar. 11, 1952	7.98	5,830
	Sept. 30, 1936	10.00	9,200		Mar. 23, 1952	8.90	7,420
	Jan. 3, 1937	9.02	7,140	1953	Feb. 21, 1953	9.67	8,940
1937	Jan. 19, 1937	7.30	4,600	1954	Jan. 16, 1954	7.14	4,540
	Oct. 19, 1937	7.98	5,560		Jan. 22, 1954	8.24	6,250
1938	July 23, 1938	8.48	6,300	1955	May 23, 1955	7.20	4,560
	Nov. 5, 1938	8.41	6,140	1956	Apr. 16, 1956	7.55	5,160
1939	Jan. 30, 1939	7.85	5,570	1957	Jan. 31, 1957	9.90	9,420
	Feb. 3, 1939	7.85	5,570		Apr. 5, 1957	11.54	13,200
	Feb. 11, 1939	7.10	4,580	1958	Nov. 19, 1957	7.56	5,170
	Feb. 15, 1939	9.04	7,380	1959	Jan. 21, 1959	7.63	5,280
	Aug. 18, 1939	7.67	5,420	1960	Apr. 4, 1960	6.30	3,410
	Apr. 19, 1940	9.97	9,630				
1940	Aug. 13, 1940	14.32	20,900				
	Aug. 30, 1940	21.96	52,600				
1941	July 7, 1941	7.13	4,480				
1942	Feb. 17, 1942	7.66	5,380				

5110. Oconaluftee River at Cherokee, N. C.

Location.--Lat 35°29'04", long 83°18'56", on State Highway 107, in Cherokee Indian Reservation, 0.6 mile north of Cherokee, Swain County, and 1.9 miles upstream from Soco Creek.

Drainage area.--131 sq mi.

Gage.--Nonrecording prior to May 18, 1934; recording thereafter. Datum of gage is 1,938.37 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 5,900 cfs, by slope-area measurement at 6,310 cfs, and extended above by logarithmic plotting.

Bankfull stage.--9 ft (Tennessee Valley Authority).

Remarks.--Base for partial-duration series, 3,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1867	March 1867	al3	-	1936	Jan. 19, 1936	8.50	5,820
					Feb. 4, 1936	9.10	6,820
1907	November 1906	al3	-		Mar. 26, 1936	8.26	5,500
					Apr. 2, 1936	8.50	5,820
1913	Mar. 27, 1913	al3	-		Apr. 6, 1936	10.25	8,760
1922	Jan. 21, 1922	9.5	7,500	1937	Dec. 6, 1936	7.17	3,790
	Mar. 2, 1922	7.9	4,860		Jan. 3, 1937	8.62	5,980
	Mar. 10, 1922	7.8	4,700		Jan. 18, 1937	7.00	3,510
1923	Dec. 17, 1922	7.4	4,030		Jan. 25, 1937	7.15	3,790
1924	Jan. 3, 1924	7.3	3,890	1938	July 23, 1938	6.21	2,460
	Feb. 20, 1924	7.2	3,750	1939	Jan. 30, 1939	8.26	5,500
1925	Dec. 8, 1924	8.65	6,000		Feb. 3, 1939	9.68	7,860
1926	Oct. 25, 1925	7.0	3,520		Feb. 15, 1939	7.26	4,040
	Jan. 18, 1926	7.2	3,870	1940	Aug. 30, 1940	8.84	6,310
1927	Dec. 25, 1926	7.8	4,430	1941	July 7, 1941	7.25	3,850
	Dec. 28, 1926	7.0	3,520	1942	Feb. 16, 1942	6.9	3,410
1928	June 29, 1928	7.5	4,180	1943	Dec. 29, 1942	9.20	6,990
	Aug. 16, 1928	7.5	4,180	1944	Feb. 18, 1944	8.31	5,500
	Sept. 3, 1928	7.9	4,780		Mar. 19, 1944	7.50	4,290
1929	Feb. 28, 1929	7.2	3,750		Sept. 30, 1944	7.68	4,580
	Mar. 5, 1929	8.6	5,920	1945	Feb. 13, 1945	7.25	3,870
1930	Mar. 19, 1930	6.1	2,330		Feb. 17, 1945	8.19	5,340
1931	Apr. 4, 1931	8.1	5,100	1946	Jan. 7, 1946	11.50	11,200
1932	Jan. 30, 1932	8.3	5,420		Feb. 10, 1946	8.46	5,820
1933	Dec. 28, 1932	9.0	6,600	1947	Jan. 15, 1947	7.52	4,210
	Feb. 14, 1933	7.6	4,330		Jan. 20, 1947	10.60	9,490
1934	Mar. 3, 1934	8.20	5,320	1948	Feb. 14, 1948	9.20	6,950
1935	Mar. 12, 1935	7.71	4,540	1949	Nov. 6, 1948	9.45	7,400
					Nov. 28, 1948	8.56	5,850
1936	Jan. 8, 1936	7.22	3,790		Jan. 5, 1949	9.30	7,130
					June 16, 1949	7.09	3,600

a From Tennessee Valley Authority report.

5120. Oconaluftee River at Birdtown, N. C.

Location.--Lat 35°27'42", long 83°21'13", on right bank 200 ft upstream from county bridge, 0.5 mile south of Birdtown, Swain County, 0.6 mile downstream from Adams Creek, 0.6 mile upstream from Goose Creek, 2.2 miles southwest of Cherokee, and at mile 3.1.

Drainage area.--184 sq mi.

Gage.--Nonrecording prior to Oct. 1, 1946; recording thereafter. Datum of gage is 1,843.30 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 8,300 cfs and extended above on basis of flow-over-dam measurement at 15,000 cfs.

Remarks.--Base for partial-duration series, 4,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	Jan. 7, 1946	12.00	15,000	1954	Jan. 22, 1954	7.50	7,890
	Feb. 10, 1946	7.80	8,060		Feb. 6, 1955	7.29	6,910
	Mar. 8, 1946	5.55	4,710	1955	Feb. 23, 1955	6.37	5,500
1949	Nov. 6, 1948	8.65	9,420		Mar. 22, 1955	7.92	7,920
	Nov. 28, 1948	7.85	8,140		July 9, 1955	9.43	10,500
	Jan. 5, 1949	8.35	8,940		July 28, 1955	6.02	4,980
	June 16, 1949	6.19	5,560	1956	Apr. 16, 1956	8.18	8,360
1950	Oct. 31, 1949	6.05	5,340		Jan. 23, 1957	7.60	7,410
	Jan. 19, 1950	6.80	6,470	1957	Jan. 31, 1957	10.10	11,600
	Mar. 13, 1950	6.40	5,870		Apr. 5, 1957	6.27	5,360
1951	Dec. 7, 1950	6.50	6,020	1958	Nov. 19, 1957	6.50	5,700
	Feb. 1, 1951	5.36	4,310		Dec. 20, 1957	6.00	4,950
	Mar. 29, 1951	8.25	8,780	1959	Jan. 21, 1959	10.69	12,600
1952	Nov. 1, 1951	5.46	4,460		Mar. 27, 1959	6.58	5,820
	Dec. 15, 1951	5.43	4,420		June 25, 1959	6.27	5,360
	Dec. 21, 1951	7.18	7,070		Nov. 28, 1959	7.30	6,930
	Mar. 11, 1952	6.77	6,420		Dec. 12, 1959	5.88	4,780
	Mar. 23, 1952	5.71	4,840	1960	Mar. 30, 1960	5.70	4,530
1953	Feb. 21, 1953	9.90	11,300		Apr. 3, 1960	6.55	6,380
1954	Jan. 16, 1954	7.95	7,970				

5130. Tuckasegee River at Bryson City, N. C.

Location.--Lat 35°25'40", long 83°26'50", on left bank 400 ft downstream from bridge on State Highway 288 at Bryson City, Swain County, 0.6 mile downstream from Deep Creek, and at mile 12.6.

Drainage area.--655 sq mi.

Gage.--Nonrecording Nov. 7, 1897, to Feb. 2, 1914, and May 18, 1920, to June 27, 1927, at site 400 ft upstream at same datum; recording Feb. 3, 1914, to May 17, 1920, at site 200 ft upstream at same datum; recording at present site since June 28, 1927. Datum of gage is 1,716.54 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 25,000 cfs and extended on basis of slope-area measurement at 61,600 cfs.

Bankfull stage.--9 ft (Tennessee Valley Authority).

Historical data.--The greatest flood known is that of May 1840.

Remarks.--Peak flows may be affected to some extent since Feb. 12, 1941, by reservoirs upstream (combined controlled storage, 40,770 cfs-days). Base for partial-duration series 9,000 cfs.

Peak stages and discharges of Tuckasegee River at Bryson City, N. C.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1840	May 1840	a20	-	1919	Dec. 22, 1918	8.6	19,600
1867	Mar. 6, 1867	a17	-	1920	Apr. 2, 1920	13.1	b41,100
1876	June 1876	a17	-	1921	Dec. 14, 1920	7.8	16,800
1898	Sept. 3, 1898	9.3	b22,200		Feb. 10, 1921	6.6	12,800
1899	Oct. 4, 1898	8.1	17,800	1922	Jan. 21, 1922	9.2	b21,800
	Feb. 4, 1899	9.2	21,800	1923	Dec. 17, 1922	7.0	14,100
	Feb. 26, 1899	8.4	18,900	1924	Jan. 11, 1924	5.9	10,700
	Mar. 15, 1899	9.6	23,400	1925	Dec. 8, 1924	6.5	12,500
	Mar. 19, 1899	11.6	32,500	1926	Jan. 18, 1926	6.8	13,500
1900	Dec. 12, 1899	6.7	13,100	1927	Dec. 26, 1926	6.0	11,000
	Feb. 13, 1900	8.0	17,500		Dec. 28, 1926	6.7	13,100
1901	Jan. 11, 1901	7.6	16,100		Feb. 23, 1927	5.5	9,550
	Mar. 26, 1901	7.1	14,400		Mar. 8, 1927	5.9	10,700
	Apr. 2, 1901	6.4	12,200	1928	Aug. 16, 1928	9.15	21,600
	May 21, 1901	11.5	32,000	1929	Feb. 28, 1929	5.75	10,400
	Aug. 6, 1901	7.3	15,100		Mar. 5, 1929	6.58	12,800
1902	Dec. 14, 1901	8.9	20,700		Mar. 14, 1929	6.90	13,800
	Dec. 29, 1901	11.0	29,400		Mar. 23, 1929	5.58	9,830
	Feb. 28, 1902	12.8	39,300	1930	Nov. 4, 1929	4.04	5,680
	Mar. 29, 1902	8.3	18,500	1931	Apr. 4, 1931	5.36	8,660
1903	Feb. 4, 1903	6.6	12,800	1932	Jan. 30, 1932	5.76	9,540
	Feb. 16, 1903	6.5	12,500		May 1, 1932	5.64	9,100
	Feb. 28, 1903	8.9	20,700	1933	Dec. 28, 1932	9.25	22,000
	Mar. 23, 1903	9.0	21,100		Feb. 15, 1933	5.51	9,550
	Apr. 8, 1903	7.2	14,800	1934	Mar. 3, 1934	8.13	17,900
1904	Jan. 22, 1904	5.4	9,080	1935	Mar. 12, 1935	5.63	10,300
1905	Jan. 12, 1905	6.8	13,500	1936	Jan. 2, 1936	5.38	9,730
	July 12, 1905	6.4	12,200		Jan. 8, 1936	5.55	10,300
1906	Dec. 3, 1905	5.9	10,700		Jan. 19, 1936	9.20	22,800
	Jan. 3, 1906	5.7	10,100		Feb. 4, 1936	8.65	20,500
	Jan. 22, 1906	7.2	14,800		Mar. 26, 1936	6.37	12,800
	Sept. 19, 1906	5.6	9,830		Apr. 2, 1936	6.90	14,400
	Sept. 30, 1906	8.0	17,500		Apr. 6, 1936	9.67	24,800
1907	Nov. 19, 1906	14.2	48,300		Sept. 30, 1936	5.52	10,000
1908	Feb. 15, 1908	8.0	17,500	1937	Jan. 3, 1937	8.10	18,600
	Apr. 25, 1908	6.0	11,000	1938	July 23, 1938	5.38	9,730
1909	Dec. 7, 1908	5.6	9,830	1939	Jan. 30, 1939	5.60	10,300
	Mar. 10, 1909	6.0	11,000		Feb. 3, 1939	7.68	17,200
	Apr. 30, 1909	7.0	14,100		Feb. 15, 1939	6.62	13,400
	June 4, 1909	7.9	17,100		Mar. 6, 1939	5.31	9,440
1910	Dec. 13, 1909	4.5	6,900	1940	Apr. 20, 1940	5.95	11,700
1911	Apr. 5, 1911	8.2	b18,200		Aug. 13, 1940	9.05	22,500
1912	Mar. 29, 1912	7.2	b14,800		Aug. 30, 1940	15.96	61,600
1913	Mar. 27, 1913	10.7	b28,000	1941	July 7, 1941	5.18	9,270
1914	Apr. 20, 1914	3.5	4,610	1942	Feb. 17, 1942	5.53	10,200
1915	Dec. 25, 1914	6.20	b11,600	1943	Dec. 29, 1942	8.78	21,700
1916	Dec. 18, 1915	9.85	24,400		Jan. 19, 1943	5.16	9,270
	Dec. 29, 1915	7.28	15,100		Feb. 6, 1943	5.24	9,270
	Feb. 2, 1916	5.71	10,100	1944	Feb. 18, 1944	8.98	15,000
	July 10, 1916	5.99	11,000		Feb. 27, 1944	5.26	9,140
1917	Mar. 4, 1917	12.8	39,000		Mar. 19, 1944	5.44	9,450
	Mar. 24, 1917	6.83	13,500	1945	Feb. 17, 1945	5.77	10,400
	Mar. 27, 1917	5.60	9,830	1946	Jan. 7, 1946	9.72	23,800
1918	Jan. 28, 1918	10.3	26,200				
	Jan. 30, 1918	6.11	11,300				
1919	Oct. 29, 1918	8.48	19,200				

a From studies by Tennessee Valley Authority.

b Annual peak only.

Peak stages and discharges of Tuckasegee River at Bryson City, N. C.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	Feb. 10, 1946	9.10	21,400	1953	Feb. 21, 1953	9.38	22,500
	Mar. 8, 1946	5.37	9,230				
1947	Jan. 20, 1947	10.65	27,600	1954	Jan. 16, 1954	7.18	14,700
					Jan. 22, 1954	8.35	18,700
1948	Feb. 14, 1948	6.70	13,100	1955	Dec. 29, 1954	5.40	9,270
					Feb. 6, 1955	6.71	13,200
1949	Nov. 6, 1948	6.05	11,100		Mar. 22, 1955	6.22	11,700
	Nov. 28, 1948	8.38	18,800		July 9, 1955	6.07	11,200
	Jan. 5, 1949	7.65	16,300				
	June 16, 1949	7.68	16,400	1956	Apr. 16, 1956	7.09	14,400
1950	Oct. 31, 1949	5.46	9,440	1957	Jan. 31, 1957	11.11	30,000
	Jan. 19, 1950	6.87	13,700		Apr. 5, 1957	8.70	20,000
	Mar. 13, 1950	7.57	16,000				
1951	Dec. 7, 1950	7.05	14,300	1958	Nov. 19, 1957	5.61	9,860
	Mar. 29, 1951	6.55	12,700	1959	Jan. 21, 1959	8.45	19,100
1952	Dec. 21, 1951	7.08	14,400	1960	Apr. 3, 1960	5.58	9,770
	Mar. 11, 1952	6.36	12,100				
	Mar. 23, 1952	6.73	13,200				

5134.1. Jenkins Branch tributary at Bryson City, N. C.

Location.--Lat 35°24'50", long 83°27'20", at culvert 500 ft upstream from mouth, 1.0 mile southwest of Bryson City, Swain County.

Drainage area.--0.46 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Not defined.

Remarks.--Peak stages below 19.0 ft were not recorded prior to 1958. Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	-	(a)	-	1958	Apr. 29, 1958	18.67	-
1956	-	(a)	-	1959	Jan. 21, 1959	18.95	-
1957	Jan. 31, 1957	19.35	-	1960	Mar. 3, 1960	18.78	-

a Peak stage did not reach bottom of gage.

5135. Noland Creek near Bryson City, N. C.

Location.--Lat 35°29'06", long 83°30'15", on right bank in Great Smoky Mountain National Park, 1.1 miles downstream from Mill Creek, 3.6 miles upstream from Fontana Lake, and 5 miles northwest of Bryson City, Swain County.

Drainage area.--13.8 sq mi.

Gage.--Recording. Altitude of gage is 2,280 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 550 cfs and extended above on basis of critical-depth measurement at 1,530 cfs.

Historical data.--Studies by Tennessee Valley Authority indicate floods of March 1867 and November 1906 (gage height and discharge unknown), probably exceeded any flood during period of record.

Remarks.--Base for partial-duration series, 600 cfs.

Peak stages and discharges of Noland Creek near Bryson City, N. C.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Feb. 4, 1936	4.05	782	1949	Jan. 5, 1949	4.00	840
	Apr. 6, 1936	4.44	1,060		June 16, 1949	4.14	938
1937	Jan. 3, 1937	3.68	649	1950	Oct. 30, 1949	3.80	715
1938	Apr. 8, 1938	3.28	447		Jan. 19, 1950	3.60	600
					Mar. 13, 1950	3.65	628
1939	Feb. 3, 1939	3.78	708		June 4, 1950	3.66	633
1940	Aug. 30, 1940	4.87	1,530	1951	Mar. 29, 1951	3.85	745
1941	July 7, 1941	3.95	810					1952	Dec. 20, 1951	3.89	769
1942	Aug. 3, 1942	4.00	840	1952	Mar. 11, 1952	4.13	931
					1953	Feb. 21, 1953	3.98	827
1943	Dec. 29, 1942	3.96	816	1954	Jan. 16, 1954	4.21	987
	July 30, 1943	4.32	1,050		Jan. 22, 1954	4.18	966
1944	Feb. 17, 1944	4.42	1,130	1955	Feb. 6, 1955	3.75	702
	Sept. 30, 1944	3.70	645		Mar. 22, 1955	3.94	814
1945	Feb. 17, 1945	3.83	724		July 9, 1955	4.50	1,210
				Aug. 23, 1945	3.86	744	1956	Apr. 15, 1956	3.59	614
1946	Jan. 7, 1946	4.54	1,260	1957	Jan. 23, 1957	4.52					1,230
	Feb. 10, 1946	3.84	739		Jan. 31, 1957	4.74	1,430
1947	Jan. 20, 1947	4.60	1,300	1958	Apr. 29, 1958	3.34	485
1948	Feb. 13, 1948	3.88	763	1959	Jan. 21, 1959	4.20	980
	Mar. 27, 1948	3.62	611		June 25, 1959	3.59	630
	July 13, 1948	4.17	959	1960	Nov. 27, 1959	3.70	685
1949	Nov. 6, 1948	3.77	697					Apr. 3, 1960	3.78	729
	Nov. 28, 1948	4.08	896				

5140. Hazel Creek at Proctor, N. C.

Location.--Lat 35°28'38", long 83°42'58", in Great Smoky Mountains National Park, 0.4 mile northeast of Proctor, Swain County, 1.3 miles downstream from Rowan Branch, and 1.4 miles upstream from Fontana Lake.

Drainage area.--44.4 sq mi.

Gage.--Recording. Datum of gage is 1,803.39 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 1,000 cfs and extended above by logarithmic plotting.

Remarks.--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)		
1943	Dec. 6, 1942	3.61	1,200	1947	Jan. 20, 1947	5.10	3,370		
	Dec. 29, 1942	4.50	2,380						
	July 5, 1943	4.42	2,230	1948	Feb. 14, 1948	3.99	1,660		
	July 30, 1943	4.61	2,540		Mar. 27, 1948	3.61	1,200		
1944	Feb. 17, 1944	5.40	3,880	1949	Nov. 28, 1948	3.74	1,200		
	Feb. 27, 1944	3.50	1,080		Jan. 5, 1949	3.86	1,340		
	Mar. 19, 1944	3.48	1,060		July 13, 1949	3.69	1,150		
	Mar. 29, 1944	3.48	1,060		1950	Oct. 31, 1949	5.70	4,500	
	Sept. 29, 1944	3.74	1,350	Jan. 19, 1950					3.92
1945	Feb. 13, 1945	3.66	1,260	Mar. 1, 1950					3.90
	Feb. 17, 1945	3.60	1,190	Mar. 13, 1950	3.84	1,310			
	July 26, 1945	3.82	1,440	June 4, 1950	3.78	1,250			
	1946	Jan. 8, 1946	4.05	1,740	1951	Mar. 29, 1951	5.86	4,870	
Feb. 10, 1946		4.00	1,670						
1947	Jan. 15, 1947	3.56	1,150	1952	Dec. 21, 1951	3.76	1,250		
					Mar. 11, 1952	3.65	1,140		

5150. Little Tennessee River at Fontana Dam, N. C.
(Published as "near Fontana" prior to 1945)

Location.--Lat 35°26'44", long 83°48'19", 0.4 mile downstream from Fontana Dam, Swain and Graham Counties, and 5.3 miles upstream from Twenty Mile Creek.

Drainage area.--1,571 sq mi.

Gage.--Recording. Aug. 16, 1938, to Sept. 30, 1944, at site 500 ft upstream at datum 5.09 ft higher; Oct. 1, 1944, to Feb. 12, 1945, at site 1,200 ft downstream at present datum; Feb. 13, 1945, to Sept. 24, 1946, discharge computed from powerplant records at Fontana Dam; Sept. 25, 1946, to June 30, 1955, at present site and datum. Datum of gage is 1,270.00 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 21,000 cfs and extended above on basis of computation of flow into Cheoah Lake below gage at 71,200 cfs, for the period prior to Nov. 15, 1942; defined by current-meter measurements below 26,000 cfs and extended above by logarithmic plotting for period Nov. 15, 1942, to Sept. 30, 1944. Determination of discharge based on powerplant records at Fontana Dam for period Oct. 1, 1944, to June 30, 1955.

Remarks.--Flow completely regulated by Fontana Lake since Nov. 7, 1944 (controlled storage, 583,500 cfs-days). Base for partial-duration series, 16,500 cfs. Only annual peaks are shown since 1945.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1840	May 1840	a21	-	1943	Feb. 6, 1943	10.02	20,700
1867	March 1867	a23	-		Mar. 22, 1943	9.30	16,900
1939	Jan. 30, 1939	8.83	20,000	1944	Feb. 18, 1944	11.77	31,600
	Feb. 3, 1939	10.65	34,200		Feb. 27, 1944	11.00	24,800
	Feb. 11, 1939	8.55	18,100		Mar. 20, 1944	10.04	19,400
	Feb. 15, 1939	11.02	37,000		Mar. 29, 1944	10.50	21,800
	Mar. 6, 1939	9.05	21,400	1945	June 16, 1945	-	b5,640
1940	Apr. 20, 1940	8.98	21,200	1946	Jan. 12, 1946	-	b17,700
	Aug. 14, 1940	11.09	35,900	1947	Jan. 26, 1947	11.70	19,600
	Aug. 30, 1940	15.94	71,200	1948	Oct. 6, 1947	c8.10	6,160
1941	July 7, 1941	8.27	16,500	1949	Jan. 8, 1949	10.97	16,500
1942	Feb. 17, 1942	8.81	20,200	1950	Feb. 7, 1950	12.00	21,200
	May 22, 1942	8.33	17,100	1951	Nov. 25, 1950	c8.20	6,460
1943	Dec. 30, 1942	15.81	60,000	1952	Dec. 28, 1951	11.10	17,100
	Jan. 19, 1943	9.60	18,400	1953	July 31, 1953	7.98	d5,600
				1954	Sept. 22, 1954	8.45	d8,100

a Datum used 1938-44; from profiles by Tennessee Valley Authority.

b Daily mean discharge.

c Occurred at different time than peak discharge.

d Occurred on many days.

5160. Snowbird Creek near Robbinsville, N. C.

Location.--Lat 35°18'40", long 83°51'35", 0.5 mile upstream from Hoover Branch, 3.1 miles west of Robbinsville, Graham County, and 4.6 miles downstream from Little Snowbird Creek.

Drainage area.--42.0 sq mi.

Gage.--Recording. Datum of gage is 1,953.57 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 2,200 cfs and extended above on basis of slope-area measurement at 7,430 cfs.

Remarks.--Base for partial-duration series, 1,700 cfs.

Peak stages and discharges of Snowbird Creek near Robbinsville, N. C.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Dec. 28, 1942	5.27	2,380	1949	Nov. 28, 1948	5.27	2,420
	July 26, 1943	4.58	1,840		Jan. 5, 1949	6.28	3,460
	July 30, 1943	5.64	2,770		June 28, 1949	4.95	2,140
1944	Sept. 29, 1944	5.32	2,430	1950	Oct. 31, 1949	5.42	2,560
1945	Feb. 13, 1945	4.40	1,690		Jan. 19, 1950	4.82	2,040
					Mar. 13, 1950	-	(a)
1946	Jan. 7, 1946	4.83	2,010	June 4, 1950	66.38	3,580	
	Feb. 10, 1946	5.13	2,250	1951	Mar. 29, 1951	8.96	7,430
1947	Jan. 20, 1947	6.44	3,650				
1948	Feb. 14, 1948	5.20	2,320	1952	Nov. 1, 1951	4.57	1,840
					Dec. 15, 1951	4.70	1,940
1949	Nov. 19, 1948	4.61	1,870		Dec. 21, 1951	4.88	2,080
					Mar. 11, 1952	5.56	2,690

a Unknown, but greater than base discharge.

b Maximum recorded, but may have been exceeded Mar. 13, 1950, during period of no gage-height record.

5180. Little Tennessee River at Calderwood, Tenn.

Location.--Lat 35°30'24", long 84°00'14", 250 ft downstream from Scona Lodge Ferry, two-thirds of a mile west of Calderwood, Blount County, 2½ miles downstream from Calderwood Dam, and at mile 41.1.

Drainage area.--1,862 sq mi.

Gage.--Nonrecording July 20, 1922, to Feb. 4, 1924; recording thereafter. At several sites within 1 mile of present site at datum 822.41 ft above mean sea level prior to Oct. 1, 1927. Datum of gage is 861.41 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 61,000 cfs and extended above.

Bankfull stage.--10 ft.

Remarks.--Records prior to Dec. 31, 1918, furnished by Aluminum Co. of America. Flow regulated by an increasing number of reservoirs beginning in 1918. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Mar. 29, 1912	46.60	a36,100	1936	Apr. 6, 1936	10.03	70,300
1913	Mar. 27, 1913	48.27	a47,000	1937	Jan. 3, 1937	7.66	42,700
1914	Apr. 20, 1914	30.62	a11,300	1938	Aug. 5, 1938	6.89	35,200
1915	Dec. 25, 1914	32.80	a25,000	1939	Feb. 15, 1939	7.11	36,700
1916	Dec. 18, 1915	35.00	a40,700	1940	Aug. 30, 1940	9.70	63,900
	Mar. 4, 1917	b50.75	82,000	1941	July 7, 1941	4.67	17,500
1918	Jan. 28, 1918	-	a32,400	1942	Feb. 17, 1942	4.93	18,800
1921	Feb. 10, 1921	48.95	36,700	1943	Dec. 30, 1942	8.77	53,700
				1944	Feb. 18, 1944	6.48	31,400
1923	Dec. 17, 1922	48.90	36,400	1945	June 19, 1945	2.89	7,870
1924	Jan. 11, 1924	44.4	22,600	1946	Jan. 11, 1946	6.18	28,900
1925	Dec. 9, 1924	45.5	30,300		Jan. 25, 1947	4.73	17,700
1926	Jan. 18, 1926	45.25	28,600		July 13, 1948	2.91	7,910
	Dec. 26, 1926	46.5	34,000	1949	July 23, 1949	4.38	15,500
1927	Aug. 16, 1928	7.2	35,100	1950	Feb. 7, 1950	4.91	18,900
1929	Mar. 5, 1929	7.0	33,600	1951	Dec. 7, 1950	4.20	14,500
1930	Nov. 17, 1929	4.8	18,000		Dec. 28, 1951	4.61	17,200
1931	Apr. 4, 1931	5.5	22,700	1953	Feb. 21, 1953	2.96	8,330
1932	Jan. 30, 1932	7.14	37,600	1954	Jan. 22, 1954	3.86	12,800
1933	Dec. 28, 1932	9.80	67,500	1955	Feb. 23, 1955	2.94	8,250
1934	Mar. 3, 1934	8.07	46,700	1956	June 11, 1956	3.71	12,000
1935	Mar. 12, 1935	6.88	35,200		Jan. 31, 1957	3.97	13,400

a Maximum daily discharge.

b Maximum observed before levee break; occurred at different time than peak discharge.

5185. Tellico River at Tellico Plains, Tenn.
(Published as "near Tellico Plains" 1928-30)

Location.--Lat 35°21'42", long 84°16'44", on right bank 200 ft upstream from bridge on Tellico Plains-Rafter road, 0.4 mile downstream from Laurel Creek, 0.8 mile east of Tellico Plains, Monroe County, and at mile 28.2.

Drainage area.--118 sq mi.

Gage.--Nonrecording prior to Oct. 1, 1930; recording thereafter. At site half a mile upstream at datum 8.29 ft higher Oct. 1, 1927, to Sept. 30, 1930. Datum of gage is 846.64 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 9,600 cfs and extended above.

Bankfull stage.--6 ft.

Remarks.--Only annual peaks are shown prior to 1932. Base for partial-duration series, 2,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1840	May 1840	15	21,500	1944	Feb. 27, 1944	7.62	3,890
1921	-	14	-		Mar. 19, 1944	6.78	3,170
					Mar. 28, 1944	8.45	4,760
1926	Jan. 18, 1926	6.48	2,610	1945	Feb. 13, 1945	8.77	5,340
1927	June 12, 1927	9.49	6,260		Feb. 17, 1945	8.72	5,190
1928	Sept. 2, 1928	7.7	5,950				
1929	Mar. 23, 1929	10.9	9,560	1946	Nov. 19, 1945	7.14	3,430
1930	Nov. 17, 1929	7.20	4,820		Jan. 7, 1946	10.04	7,640
					Feb. 10, 1946	9.59	6,760
1931	Apr. 22, 1931	7.48	3,790		Mar. 8, 1946	6.38	2,840
					May 16, 1946	6.92	3,260
1932	Dec. 14, 1931	8.72	5,090				
	Jan. 30, 1932	9.47	5,990	1947	Jan. 15, 1947	7.62	3,910
	Apr. 30, 1932	8.30	4,660		Jan. 20, 1947	11.56	11,300
1933	Dec. 12, 1932	6.70	3,170	1948	Feb. 12, 1948	9.59	6,440
	Dec. 14, 1932	7.26	3,690				
	Dec. 28, 1932	9.7	6,440	1949	Nov. 28, 1948	10.15	7,510
	Feb. 15, 1933	9.55	6,330		Jan. 5, 1949	10.92	9,480
1934	Feb. 26, 1934	6.44	3,030		June 28, 1949	6.65	2,810
	Mar. 3, 1934	8.90	5,560		July 12, 1949	8.21	4,170
	Mar. 24, 1934	7.48	4,070	1950	Oct. 30, 1949	11.43	10,900
	Aug. 14, 1934	7.48	4,070		Jan. 19, 1950	9.82	6,910
1935	Jan. 22, 1935	6.60	3,210		Mar. 13, 1950	9.38	6,040
	Feb. 14, 1935	6.80	3,390		June 5, 1950	9.73	6,720
	Mar. 12, 1935	8.55	5,230	1951	Mar. 29, 1951	12.82	15,100
	Apr. 6, 1935	6.33	2,950				
	Apr. 21, 1935	6.23	2,870	1952	Nov. 1, 1951	7.00	3,050
1936	Jan. 8, 1936	8.50	5,120		Dec. 21, 1951	8.85	5,090
	Jan. 18, 1936	8.36	5,010		Mar. 11, 1952	9.65	6,560
	Feb. 4, 1936	12.20	13,200	1953	Jan. 8, 1953	7.83	3,750
	Mar. 27, 1936	9.12	5,950		Feb. 21, 1953	11.24	10,400
	Apr. 2, 1936	8.07	4,720	1954	Jan. 16, 1954	9.79	6,850
	Apr. 6, 1936	10.16	7,500		Jan. 21, 1954	11.21	10,300
1937	Jan. 3, 1937	7.08	3,950		June 1, 1954	7.13	3,140
	Jan. 15, 1937	6.19	3,060	1955	Feb. 6, 1955	7.93	3,850
	Jan. 18, 1937	9.05	6,370		Feb. 23, 1955	8.51	4,560
	Jan. 25, 1937	6.21	3,060		Mar. 22, 1955	8.06	4,000
	Feb. 9, 1937	7.07	3,950		Apr. 6, 1955	9.35	5,960
1938	Mar. 10, 1938	6.25	2,680	1956	Oct. 7, 1955	7.23	3,220
	Apr. 8, 1938	9.60	6,760		Feb. 3, 1956	9.38	6,020
	June 20, 1938	7.38	3,700		Mar. 14, 1956	7.27	3,260
	July 3, 1938	6.38	2,840		Apr. 15, 1956	9.62	6,500
	Aug. 5, 1938	11.39	10,900				
1939	Feb. 15, 1939	8.25	4,510	1957	Jan. 31, 1957	13.60	17,500
1940	Apr. 19, 1940	6.00	2,540		Apr. 5, 1957	7.84	3,760
					June 24, 1957	9.22	5,720
1941	Mar. 4, 1941	3.76	1,130	1958	Nov. 10, 1957	9.22	5,720
1942	Mar. 17, 1942	7.19	3,520		Dec. 20, 1957	7.28	3,260
	Aug. 5, 1942	6.54	2,920		Feb. 6, 1958	7.04	3,080
1943	Dec. 29, 1942	9.71	6,980	1959	Jan. 21, 1959	10.40	8,180
	Mar. 21, 1943	6.99	3,340		Apr. 12, 1959	7.28	3,260
1944	Feb. 18, 1944	7.13	3,430	1960	Nov. 27, 1959	10.65	8,780

a Estimated, from reports by Tennessee Valley Authority.

TENNESSEE RIVER BASIN

5195. Little Tennessee River at McGhee, Tenn.

Location.--Lat 35°36'16", long 84°12'43", on right bank at mouth of Tellico River, 100 ft upstream from bridge on U.S. Highway 411, 0.3 mile upstream from Louisville & Nashville Railroad bridge, and 0.5 mile south of McGhee, Monroe County. Records include flow of Tellico River.

Drainage area.--2,443 sq mi, includes that of Tellico River.

Gage.--Nonrecording prior to Sept. 6, 1929; recording thereafter. At several sites within 0.4 mile of present site at various datums prior to Sept. 6, 1929. Stages given herein have been adjusted to present datum. Datum of gage is 760.18 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 66,000 cfs and extended above.

Bankfull stage.--25 ft.

Historical data.--The flood of March 1867 is maximum stage known.

Remarks.--Minor regulation of flow by an increasing number of reservoirs since 1918. Flow completely regulated by Fontana Lake since Nov. 7, 1944. Only annual peaks are shown prior to 1930 and since 1944. Base for partial-duration series, 25,000 cfs.

Peak stages and discharges

Water year	Date		Gage height (feet)	Discharge (cfs)	Water year	Date		Gage height (feet)	Discharge (cfs)						
1867	March	1867	a39.4	-	1936	Jan. 9, 1936	16.80	34,600							
1884	March	1884	a38.9	-	Jan. 19, 1936	23.55	60,300								
					Feb. 4, 1936	24.94	65,700								
					Mar. 27, 1936	21.06	50,100								
					Apr. 2, 1936	20.75	48,900								
1905	Feb. 9, 1905	15.1	37,600	Apr. 6, 1936	25.78	69,500									
1908	Jan. 22, 1906	16.9	42,600	1937	Jan. 3, 1937	20.55	48,100								
1907	Nov. 19, 1906	30.7	104,000		Jan. 19, 1937	15.38	30,600								
1908	Feb. 15, 1908	13.2	30,800		Feb. 10, 1937	15.05	29,500								
1909	June 4, 1909	21.2	58,000		1938	Apr. 8, 1938	14.95	29,500							
1910	June 5, 1910	12.7	29,200	July 24, 1938		14.09	27,200								
1911	Apr. 5, 1911	16.6	41,600	Aug. 5, 1938		18.78	41,300								
1912	Mar. 29, 1912	20.5	55,200	1939		Feb. 4, 1939	15.74	31,400							
1913	Mar. 27, 1913	22.2	62,100		Feb. 15, 1939	20.13	46,200								
1914	Apr. 19, 1914	9.1	18,100		Mar. 6, 1939	14.12	27,200								
1915	Dec. 26, 1914	21.3	58,400		1940	Aug. 14, 1940	15.08	29,800							
1916	Dec. 18, 1915	21.4	58,800	Aug. 30, 1940		21.56	52,100								
1917	Mar. 5, 1917	28.7	92,500	1941		July 7, 1941	10.43	17,500							
1918	Jan. 29, 1918	22.7	64,200			1942	Feb. 17, 1942	12.46	23,000						
1919	Oct. 30, 1918	23.7	68,700		1943		Dec. 30, 1942	24.25	62,800						
1920	Apr. 2, 1920	30.4	102,000				Feb. 6, 1943	14.09	27,200						
1921	Feb. 10, 1921	21.9	60,700	Mar. 21, 1943			13.85	26,400							
1922	Jan. 22, 1922	24.5	72,300	1944		Feb. 18, 1944	17.82	37,800							
1923	Dec. 18, 1922	17.5	44,300		Feb. 27, 1944	17.25	35,800								
1924	Apr. 18, 1924	15.9	39,100		Mar. 20, 1944	13.42	25,300								
1925	Dec. 9, 1924	16.9	42,300		Mar. 29, 1944	17.20	35,800								
1926	Jan. 19, 1926	12.35	22,900	1945	Feb. 13, 1945	10.43	17,500								
1927	Dec. 26, 1926	20.82	49,300		1946	Jan. 11, 1946	16.95	35,200							
1928	Sept. 3, 1928	17.95	38,500			Jan. 20, 1947	17.18	35,800							
1929	Mar. 23, 1929	18.45	40,800			Feb. 12, 1948	12.02	21,800							
1930	Nov. 18, 1929	13.25	25,800	Nov. 28, 1948		13.00	24,300								
1931	Apr. 5, 1931	14.63	30,300	1950	Mar. 13, 1950	15.32	31,000								
1932	Dec. 14, 1931	15.60	31,500	1947	Jan. 20, 1947	17.18	35,800								
								1948	Feb. 12, 1948	12.02	21,800				
												1949	Nov. 28, 1948	13.00	24,300
1951	Mar. 29, 1951	16.00	32,600												
				1952	Dec. 21, 1951	11.16	19,800								
								1953	Feb. 21, 1953	12.39	23,000				
												1954	Jan. 22, 1954	15.22	30,500
1955	Apr. 7, 1955	11.61	20,900												
				1956	Feb. 3, 1956	11.58	20,900								
								1957	Feb. 1, 1957	18.53	40,300				
												1958	Nov. 18, 1957	13.50	25,800
1959	Jan. 22, 1959	10.96	19,200												
				1960	Nov. 28, 1959	11.60	20,900								

a From reports by U.S. Weather Bureau.

5196. Island Creek at Vonore, Tenn.

Location.--Lat 35°35'38", long 84°14'58", at bridge on State Highway 72,
0.5 mile northwest of Vonore, Monroe County.

Drainage area.--11.2 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Defined by current-meter measurements below 406 cfs and extended above on basis of contracted-opening measurement at 1,810 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 21, 1954	9.44	1,100	1957	Jan. 31, 1957	9.04	795
1955	April 1955	8.34	383	1958	May 6, 1958	9.71	1,340
				1959	Mar. 27, 1959	10.19	1,810
1956	January 1956	9.20	900	1960	Aug. 11, 1960	8.05	275

5197. Bat Creek near Vonore, Tenn.

Location.--Lat 35°38'36", long 84°15'12", at bridge on State Highway 72,
2.5 miles upstream from mouth and 4.5 miles north of Vonore, Monroe County

Drainage area.--30.7 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 770 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,150 cfs and extended above on basis of contracted-opening measurement at 1,760 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 21, 1954	10.42	1,480	1957	Jan. 31, 1957	10.36	1,420
1955	-	-	(a)	1958	Nov. 17, 1957	10.76	1,820
				1959	Mar. 27, 1959	10.74	1,760
1956	Feb. 3, 1956	9.76	1,030	1960	Aug. 11, 1960	8.89	695

a Discharge not determined but less than 480 cfs.

5200. Tennessee River at Loudon, Tenn.

Location.--Lat 35°44'33", long 84°19'56", at bridge on U.S. Highway 11, at Loudon, Loudon County, 9 $\frac{1}{2}$ miles downstream from Little Tennessee River, 10 $\frac{1}{2}$ miles downstream from Fort Loudoun Dam, 61 miles upstream from Watts Bar Dam, and at mile 591.6.

Drainage area.--12,220 sq mi, approximately.

Gage.--Nonrecording prior to Aug. 1, 1929; recording thereafter. At site 1,600 ft downstream prior to Nov. 4, 1922. At datum 1.4 ft higher prior to June 27, 1907, and at datum 2.4 ft higher June 27, 1907, to Nov. 4, 1922. At site 5 $\frac{1}{2}$ miles downstream at datum 6.60 ft lower Nov. 4, 1922, to Oct. 1, 1929. Datum of gage is 726.29 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Auxiliary recording gage 8 $\frac{3}{4}$ miles upstream since Feb. 17, 1942.

Stage-discharge relation.--Defined by current-meter measurements below 151,000 cfs and extended above. Fall between base gage and auxiliary gage used as factor in computing discharge since Feb. 17, 1942.

Bankfull stage.--22 ft, from U.S. Weather Bureau.

Remarks.--Minor regulation by many reservoirs above station beginning in 1928. Major regulation since December 1941. Only annual peaks are shown prior to 1930 and since 1941. Only maximum observed stages are shown prior to 1923, from reports by U.S. Weather Bureau. Stages prior to 1923 may be converted to approximate stages at present gage by adding 2.7 ft. Base for partial-duration series, 73,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1867	Mar. 10, 1867	47.0	-	1928	July 1, 1928	19.2	111,000
1875	Feb. 27, 1875	40.0	-	1929	Mar. 24, 1929	21.5	126,000
1885	Jan. 17, 1885	a12.0	-	1930	Nov. 18, 1929	12.9	73,200
1886	Mar. 31, 1886	a32.2	-	1931	Apr. 7, 1931	15.55	93,500
1887	Feb. 27, 1887	a13.0	-	1932	Jan. 31, 1932	17.60	108,000
1888	Mar. 30, 1888	a15.9	-		Feb. 5, 1932	17.75	110,000
1889	Feb. 19, 1889	a18.6	-		Mar. 13, 1932	13.10	74,800
1890	Feb. 28, 1890	a25.0	-		May 1, 1932	12.87	73,200
1891	Feb. 11, 1891	a23.0	-	1933	Dec. 15, 1932	13.43	77,000
1892	Jan. 15, 1892	a26.0	-		Dec. 29, 1932	24.7	165,000
1893	Feb. 18, 1893	a18.6	-		Feb. 16, 1933	21.43	138,000
1894	Feb. 5, 1894	a16.9	-	1934	Mar. 5, 1934	19.72	125,000
1895	Jan. 11, 1895	a21.0	-		Mar. 26, 1934	13.48	77,800
1905	Jan. 13, 1905	12.8	-	1935	Jan. 11, 1935	13.50	77,800
1906	Jan. 25, 1906	17.0	-		Mar. 13, 1935	17.04	98,700
1907	Nov. 20, 1906	27.0	-		Mar. 28, 1935	19.88	119,000
1908	Jan. 14, Feb. 16 1908	13.0	-		Apr. 7, 1935	13.57	75,000
1909	May 3, 1909	16.8	-	1936	Jan. 10, 1936	17.30	101,000
1910	Mar. 2, 1910	7.0	-		Jan. 20, 1936	22.64	139,000
1911	Apr. 7, 1911	14.4	-		Feb. 5, 1936	20.50	127,000
1912	Mar. 30, 1912	15.6	-		Mar. 28, 1936	25.75	169,000
1913	Mar. 28, 1913	19.8	-		Apr. 3, 1936	19.79	114,000
1914	Apr. 21, 1914	8.0	-		Apr. 7, 1936	24.30	157,000
1915	Dec. 26, 1914	18.0	-	1937	Jan. 4, 1937	21.12	132,000
1916	July 19, 1916	21.5	-		Jan. 19, 1937	17.04	101,000
1917	Mar. 5, 1917	30.2	225,000		Jan. 26, 1937	14.75	84,200
1918	Jan. 31, 1918	23.5	-		Feb. 10, 1937	16.35	96,100
1919	Oct. 31, 1918	19.0	-	1938	July 25, 1938	15.23	85,500
1920	Apr. 3, 1920	27.5	-	1939	Feb. 4, 1939	14.19	78,100
1921	Feb. 11, 1921	17.9	-		Feb. 12, 1939	14.38	79,600
1922	Jan. 22, 1922	21.2	-		Feb. 16, 1939	18.70	112,000
1923	Dec. 18, 1922	18.5	106,000		Mar. 7, 1939	15.04	84,000
1924	Mar. 6, 1924	13.22	71,900	1940	Aug. 16, 1940	19.86	123,000
1925	Dec. 9, 1924	16.00	90,000		Sept. 1, 1940	18.66	113,000
1926	Apr. 14, 1926	12.85	69,500	1941	July 9, 1941	8.97	42,900
1927	Dec. 26, 1926	20.7	121,000				

a Maximum observed during period Dec. 1 to Mar. 31.

Peak stages and discharges of Tennessee River at Loudon, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	May 22, 1942	b20.09	52,800	1949	Nov. 29, 1948	e19.28	77,800
1943	Dec. 30, 1942	c23.32	134,000	1950	Feb. 8, 1950	g19.19	96,000
1944	Mar. 30, 1944	19.16	98,100				
1945	Feb. 18, 1945	d15.40	51,100	1951	Mar. 30, 1951	h17.32	60,400
				1952	Dec. 22, 1951	j16.68	61,700
1946	Jan. 8, 1946	e19.68	105,000	1953	Feb. 21, 1953	k18.70	56,400
1947	Jan. 20, 1947	-	f 72,000	1954	Jan. 16, 1954	m18.12	m81,000
1948	Feb. 14, 1948	e19.48	89,700	1955	Mar. 22, 1955	n17.10	51,100

b Occurred Mar. 9, 1942. c Occurred following day. d Occurred Oct. 1, 1944.
e Occurred different time than peak discharge. f Maximum daily discharge. g Occurred May 15, 1950. h Occurred Feb. 2, 1951. j Occurred May 29, 1952.
k Occurred May 4, 1953. m May have been higher Jan. 22 and 23 during period of no record. n Occurred Dec. 30, 1954.

5201. Sweetwater Creek near Loudon, Tenn.

Location--Lat 35°44'17", long 84°22'25", at bridge on State Highway 72, 2.0 miles west of Loudon.

Drainage area--62.2 sq mi.

Gage--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation--Not defined.

Remarks--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 21, 1954	8.79	-	1957	Jan. 31, 1957	9.96	-
1955	Dec. 29, 1954	6.35	-	1958	May 6, 1958	9.52	-
				1959	Apr. 19, 1959	8.10	-
1956	April 1956	6.85	-	1960	Aug. 11, 1960	6.69	-

5215. Clinch River at Richlands, Va.

Location--Lat 37°05'10", long 81°46'52", on right bank 1 mile southeast of Richlands, Tazewell County, 1.6 miles downstream from Middle Creek, and 2.2 miles upstream from Big Creek.

Drainage area--139 sq mi.

Gage--Nonrecording at site 1.1 miles downstream at datum 6.53 ft lower Jan. 28, 1945, to Aug. 5, 1950; recording thereafter. Datum of gage is 1,923.99 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation--Defined by current-meter measurements at site in use 1945-50. At present site, defined by current-meter measurements below 4,800 cfs and extended above on basis of contracted-opening measurement at 9,640 cfs.

Bankfull stage--11 ft (Tennessee Valley Authority).

Historical data--Tennessee Valley Authority Report No. 0-5923 contains accounts of other floods prior to 1944 in addition to the outstanding floods published herein.

Remarks--Base for partial-duration series, 1,300 cfs. Only annual peaks are shown prior to Oct. 1, 1950.

Peak stages and discharges of Clinch River at Richlands, Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1826	March 1826	-	-	1955	Mar. 1, 1955	12.51	4,700
1862	Feb. 22, 1862	-	-	1955	Mar. 6, 1955	12.49	4,700
1901	June 22, 1901	21.3	all 5,500	1955	Mar. 16, 1955	11.29	4,050
1944	Feb. 18, 1944	13.7	a5,500	1955	Mar. 18, 1955	8.90	2,860
1946	Jan. 8, 1946	10.1	3,860	1955	Mar. 22, 1955	7.33	2,140
1947	Jan. 15, 1947	10.60	4,130	1955	Apr. 14, 1955	5.69	1,430
1948	Feb. 14, 1948	10.1	3,860	1956	Feb. 18, 1956	6.67	1,860
1949	Dec. 4, 1948	10.5	4,080	1956	Mar. 8, 1956	6.03	1,550
1950	Feb. 2, 1950	11.3	4,520	1956	Mar. 14, 1956	5.37	1,310
1951	Dec. 4, 1950	6.46	1,800	1956	Apr. 16, 1956	10.54	3,650
1951	Dec. 8, 1950	7.84	2,500	1957	Jan. 9, 1957	6.81	1,910
1951	Mar. 18, 1951	6.04	1,570	1957	Jan. 29, 1957	19.3	9,640
1952	Jan. 22, 1952	8.35	2,630	1957	Feb. 10, 1957	8.36	2,610
1952	Jan. 28, 1952	6.65	1,820	1957	Apr. 9, 1957	5.92	1,520
1952	Mar. 11, 1952	8.03	2,450	1957	Sept. 30, 1957	6.00	1,550
1952	Mar. 23, 1952	5.52	1,350	1958	Dec. 8, 1957	7.25	2,110
1952	Apr. 28, 1952	7.44	2,180	1958	Dec. 21, 1957	7.10	2,040
1953	Dec. 11, 1952	5.62	1,390	1958	Dec. 26, 1957	5.58	1,580
1953	Feb. 21, 1953	8.74	2,760	1958	Jan. 25, 1958	5.43	1,320
1953	Mar. 4, 1953	5.84	1,470	1958	Feb. 7, 1958	5.55	1,370
1953	May 7, 1953	6.18	1,640	1958	Feb. 27, 1958	6.58	1,810
1953	May 19, 1953	13.23	5,080	1958	Mar. 31, 1958	7.91	2,410
1953	July 7, 1953	10.40	3,600	1958	May 6, 1958	10.70	3,750
1954	Jan. 16, 1954	5.73	1,430	1958	May 11, 1958	5.94	1,530
1954	Jan. 22, 1954	7.42	2,180	1958	Aug. 13, 1958	5.45	1,330
1954	Feb. 22, 1954	6.19	1,640	1958	Aug. 25, 1958	10.14	3,470
1954	July 22, 1954	6.51	1,780	1959	Dec. 29, 1958	5.84	1,470
1955	Feb. 7, 1955	8.58	2,720	1959	Jan. 22, 1959	7.75	2,360
1955	Feb. 27, 1955	10.00	3,400	1959	Mar. 27, 1959	7.73	2,320
				1959	Apr. 4, 1959	6.11	1,600
				1959	Apr. 12, 1959	7.73	2,320
				1960	Nov. 24, 1959	6.68	1,860
				1960	Nov. 28, 1959	5.51	1,330

a From reports by Tennessee Valley Authority, present site and datum.

5230. Cedar Creek near Lebanon, Va.

Location.--Lat 36°54'29", long 82°02'20", on right bank 800 ft upstream from Roaring Spring Creek, 1.3 miles downstream from Burgess Creek, 1.9 miles upstream from Little Cedar Creek, and 2.3 miles east of Lebanon, Russell County.

Drainage area.--51.5 sq mi.

Gage.--Recording. Datum of gage is 1,928.96 ft above mean sea level (Tennessee Valley Authority bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 2,300 cfs and extended above on basis of contracted-opening measurement at 2,740 cfs.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 700 cfs. Only annual peak shown for 1960.

Peak stages and discharges of Cedar Creek near Lebanon, Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Dec. 10, 1952	3.14	1,320	1956	May 3, 1956	2.82	838
	Jan. 28, 1953	2.92	978				
	Feb. 21, 1953	3.73	2,580	1957	Jan. 10, 1957	2.87	908
	Mar. 4, 1953	2.96	1,030		Jan. 29, 1957	44.48	2,740
	Mar. 6, 1953	2.87	908		Feb. 10, 1957	3.62	2,220
	May 19, 1953	4.20	2,600		Apr. 8, 1957	2.89	936
	June 13, 1953	3.01	1,110		June 23, 1957	3.16	1,360
	June 21, 1953	4.01	2,500				
1954	Jan. 15, 1954	3.10	1,250	1958	Nov. 25, 1957	2.80	750
	Jan. 22, 1954	3.47	1,980		Dec. 8, 1957	2.86	846
	Mar. 26, 1954	2.82	838		Dec. 21, 1957	3.28	1,590
1955	Feb. 6, 1955	3.51	2,070		Jan. 24, 1958	2.86	846
	Mar. 1, 1955	3.61	2,290		Feb. 27, 1958	3.06	1,180
	Mar. 6, 1955	3.84	2,410		Mar. 31, 1958	3.08	1,220
	Mar. 16, 1955	4.27	2,650		May 6, 1958	3.81	2,400
	Mar. 18, 1955	3.66	2,410		July 17, 1958	2.92	944
	Mar. 22, 1955	3.61	2,290		Aug. 3, 1958	3.13	1,300
	July 11, 1955	2.72	714		Aug. 13, 1958	3.42	1,870
1956	Jan. 30, 1956	2.83	852	1959	Jan. 22, 1959	3.65	2,250
	Feb. 18, 1956	2.98	1,060		Mar. 27, 1959	3.02	1,110
	Mar. 14, 1956	2.76	762		Apr. 12, 1959	2.98	1,050
	Apr. 16, 1956	4.02	2,510		June 27, 1959	3.18	1,390
				1960	Nov. 24, 1960	2.80	750

a In gage well; 4.7 ft outside gage height.

5232. Thompson Creek near Honaker, Va.

Location.--Lat 37°01'29", long 82°00'04", 1 mile northwest of Honaker, Russell County, and 8 miles upstream from mouth (experimental watershed).

Drainage area.--1.67 sq mi.

Gage.--Recording. Control consists of modified Albany weir. Altitude of gage is 1,880 ft (from topographic map).

Remarks.--Records collected by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Aug. 9, 1942	2.23	a45.8	1946	Jan. 7, 1946	2.18	41.8
1943	Dec. 30, 1942	2.13	a38.0	1947	Jan. 15, 1947	2.50	71.4
1944	Feb. 17, 1944	2.77	101	1948	Apr. 7, 1948	2.50	52.4
1945	Aug. 6, 1945	2.36	57.5				

a Peak estimated.

5233. Claypole Branch near Flatwoods, Va.

Location.--Lat 37°01'45", long 82°01'42", 2 miles upstream from Thompson Creek and 4.5 miles northwest of Honaker, Russell County.

Drainage area.--1.25 sq mi.

Gage.--Recording. Control consists of modified Albany weir. Altitude of gage is 2,020 ft (from topographic map).

Remarks.--Records collected by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Dec. 29, 1942	1.81	20.2	1946	June 12, 1946	1.94	26.4
1944	Feb. 17, 1944	2.28	50.3	1947	Jan. 15, 1947	2.01	30.3
1945	June 9, 1945	1.80	20.0	1948	Apr. 7, 1948	1.95	26.9

5234. Stillhouse Branch near Concord Church, Va.

Location.--Lat 36°59'49", long 82°01'45", 0.8 mile upstream from Thompson Creek and 1.5 miles east of Coulwood, Russell County.

Drainage area.--2.13 sq mi.

Gage.--Recording. Control consists of modified Albany weir. Altitude of gage is 1,770 ft (from topographic map).

Remarks.--Records collected by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Dec. 29, 1942	2.35	57	1946	Jan. 8, 1946	2.10	36
1944	Feb. 17, 1944	2.94	121	1947	Aug. 19, 1947	2.98	126
1945	May 29, 1945	2.36	58	1948	Apr. 7, 1948	2.33	55

5235. Thompson Creek near Coulwood, Va.

Location.--Lat 36°59'21", long 82°03'44", 2,500 ft downstream from Coulwood, Russell County, 4,500 ft upstream from Breezers Branch, and 3.3 miles upstream from mouth.

Drainage area.--14.0 sq mi.

Gage.--Recording. Datum of gage is 1,573.22 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 300 cfs.

Bankfull stage.--4 ft.

Remarks.--Base for partial-duration series, 250 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Aug. 9, 1942	4.15	376	1946	Jan. 8, 1946	3.46	276
1943	Dec. 1, 1942	3.29	262	1947	Jan. 15, 1947	4.07	359
	Dec. 29, 1942	4.18	384		Aug. 19, 1947	4.13	376
	Mar. 13, 1943	3.26	250	1948	Feb. 14, 1948	3.23	250
1944	Feb. 17, 1944	5.37	628		Apr. 7, 1948	3.37	262
	Feb. 29, 1944	3.75	329	1949	Dec. 3, 1948	4.06	359
1945	Feb. 17, 1945	3.75	315				

5236. Breezers Branch below Independence Church, Va.

Location.--Lat 36°59'13", long 82°04'45", 0.3 mile upstream from Thompson Creek and 1.3 miles southwest of Coulwood, Russell County.

Drainage area.--2.13 sq mi.

Gage.--Recording. Control consists of modified Albany weir. Altitude of gage is 1,590 ft (from topographic map).

Remarks.--Records collected by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Aug. 9, 1942	3.39	180	1946	June 12, 1946	3.09	140
1943	June 15, 1943	2.87	113	1947	Aug. 19, 1947	3.60	215
1944	Feb. 17, 1944	-	230	1948	Mar. 23, 1948	2.46	67
1945	Feb. 17, 1945	2.36	58				

5240. Clinch River at Cleveland, Va.

Location.--Lat 36°56'41", long 82°09'18", on right bank 500 ft upstream from highway bridge at Cleveland, Russell County, 0.5 mile downstream from Muddy Hollow, 2.3 miles downstream from Weaver Creek, and 4.4 miles downstream from Thompson Creek.

Drainage area.--528 sq mi.

Gage.--Nonrecording prior to Nov. 1, 1931, at site 500 ft downstream at datum 1.0 ft lower; recording thereafter. Datum of gage is 1,500.24 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 13,000 cfs and extended above on basis of contracted-opening measurement at 31,000 cfs.

Bankfull stage.--16 ft (Tennessee Valley Authority).

Remarks.--Base for partial-duration series, 5,000 cfs. Only annual peaks are shown prior to Oct. 1, 1931. Data prior to 1921 from report by Tennessee Valley Authority.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1862	February 1862	22.8	27,500	1937	Feb. 9, 1937	11.24	8,750
1902	Mar. 1, 1902	20.3	22,300	1938	Oct. 28, 1937	13.38	11,500
1907	June 14, 1907	20.3	22,300		Mar. 4, 1938	11.15	8,690
1918	Jan. 29, 1918	19.9	21,500		Mar. 6, 1938	8.30	5,340
1921	Jan. 15, 1921	9.8	6,860	1939	Feb. 3, 1939	12.58	10,500
1922	Mar. 10, 1922	12.0	9,640		Feb. 11, 1939	10.75	8,270
1923	June 13, 1923	17.2	16,400		Feb. 16, 1939	8.63	5,670
1924	Jan. 1, 1924	13.0	11,400	1940	Aug. 1, 1940	8.05	5,120
1925	Dec. 9, 1924	10.7	8,480		Aug. 14, 1940	20.60	22,500
1926	Feb. 15, 1926	11.0	8,340		Aug. 31, 1940	8.23	5,230
1927	Dec. 22, 1926	20.1	20,400	1941	Mar. 12, 1941	8.92	6,000
1928	Apr. 30, 1928	8.43	5,200	1942	June 21, 1942	8.28	5,340
1929	Mar. 6, 1929	11.4	8,860		Aug. 9, 1942	9.92	7,190
1930	Feb. 3, 1930	8.7	5,540	1943	Dec. 2, 1942	8.40	5,450
1931	Apr. 4, 1931	11.0	8,340		Dec. 30, 1942	12.01	9,710
1932	Jan. 30, 1932	14.38	11,700		Jan. 28, 1943	8.30	5,340
	Mar. 28, 1932	8.50	5,400		Mar. 14, 1943	9.92	7,190
1933	Dec. 28, 1932	11.82	8,830	1944	Feb. 18, 1944	17.95	18,200
	Feb. 15, 1933	9.25	6,150		Feb. 29, 1944	11.58	9,230
	May 22, 1933	8.08	5,000		Mar. 20, 1944	8.68	5,780
1934	Feb. 26, 1934	9.17	6,100	1945	Oct. 21, 1944	8.17	5,000
	Mar. 3, 1934	11.62	8,610		Jan. 2, 1945	8.32	5,100
	Mar. 9, 1934	8.69	5,600		Feb. 18, 1945	12.43	9,920
	Mar. 23, 1934	9.87	6,800	1946	Jan. 8, 1946	16.30	15,400
	Mar. 28, 1934	9.66	6,550		Feb. 11, 1946	10.32	7,310
1935	Jan. 9, 1935	9.63	6,500	1947	Jan. 2, 1947	8.18	5,000
	Jan. 17, 1935	8.20	5,100		Jan. 16, 1947	16.10	15,200
	Jan. 23, 1935	11.83	8,830		Jan. 21, 1947	11.10	8,270
	Feb. 26, 1935	8.74	5,600		Mar. 15, 1947	8.72	5,520
	Mar. 13, 1935	8.98	5,880	1948	Feb. 14, 1948	15.1	13,600
	Mar. 24, 1935	8.25	5,150		Mar. 17, 1948	8.7	5,520
	Mar. 28, 1935	10.65	7,565		Mar. 24, 1948	8.8	5,630
	Apr. 1, 1935	14.12	11,400		Apr. 8, 1948	11.1	8,270
1936	Jan. 3, 1936	9.15	6,290	1949	Dec. 4, 1948	12.26	9,360
	Jan. 19, 1936	12.48	10,400		Mar. 18, 1949	9.87	6,270
	Feb. 4, 1936	10.18	7,550	1950	Jan. 31, 1950	13.75	11,600
	Mar. 25, 1936	10.78	8,270		Feb. 2, 1950	16.53	15,600
	Mar. 28, 1936	8.10	5,120		May 13, 1950	9.36	5,720
	Apr. 2, 1936	9.28	6,470		May 15, 1950	8.79	5,130
	Apr. 6, 1936	12.17	9,970		Aug. 16, 1950	9.24	5,510
1937	Dec. 7, 1936	9.82	7,070	1951	Dec. 4, 1950	9.40	5,720
	Jan. 3, 1937	8.70	5,780		Dec. 8, 1950	9.74	6,050
	Jan. 15, 1937	9.03	6,110		Feb. 2, 1951	8.67	5,040
	Jan. 19, 1937	10.88	8,390				
	Jan. 25, 1937	10.43	7,790				

Peak stages and discharges of Clinch River at Cleveland, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Jan. 23, 1952	10.15	6,620	1956	Apr. 16, 1956	15.38	14,000
	Jan. 29, 1952	9.69	6,050	1957	Jan. 10, 1957	9.60	6,060
	Mar. 11, 1952	10.30	6,740		Jan. 30, 1957	24.40	31,000
	Apr. 28, 1952	8.84	5,130		Feb. 10, 1957	12.59	9,570
1953	Feb. 21, 1953	11.94	8,800		Feb. 20, 1957	8.62	5,020
	May 20, 1953	16.66	16,000		Apr. 9, 1957	8.95	5,350
	July 8, 1953	8.76	5,130	1958	Dec. 8, 1957	9.99	6,490
1954	Jan. 23, 1954	10.47	6,980		Dec. 21, 1957	8.75	5,120
					Feb. 27, 1958	8.79	5,170
1955	Feb. 7, 1955	12.36	9,500		Mar. 31, 1958	10.35	6,880
	Mar. 1, 1955	15.97	14,900		May 6, 1958	15.58	13,900
	Mar. 7, 1955	16.35	15,500	1959	Jan. 22, 1959	11.20	7,840
	Mar. 16, 1955	15.84	14,600		Mar. 27, 1959	9.60	6,060
	Mar. 18, 1955	12.45	9,500		Apr. 13, 1959	10.98	7,600
	Mar. 22, 1955	9.82	6,160	1960	Nov. 25, 1959	9.71	6,170
1956	Feb. 18, 1956	9.92	6,270		Nov. 28, 1959	9.67	6,170
	Mar. 8, 1956	8.78	5,130				

5245. Guest River at Coeburn, Va.

Location.--Lat 36°55'45", long 82°27'23", on right bank at downstream side of bridge on State Highway 72, 1.0 mile southeast of Coeburn, Wise County, 1.4 miles upstream from Jaybird Branch, 1.8 miles downstream from Pine Camp Creek, and 6 miles upstream from mouth.

Drainage area.--87.3 sq mi.

Gage.--Recording. Datum of gage is 1,925.00 ft above mean sea level (Interstate Railroad bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 3,500 cfs and extended above on basis of slope-area measurement at 6,360 cfs.

Remarks.--Base for partial-duration series, 1,500 cfs. Only annual peak shown for 1960.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Dec. 13, 1949	7.51	1,750	1955	Feb. 6, 1955	9.29	2,580
	Jan. 31, 1950	9.93	3,300		Mar. 1, 1955	9.30	2,580
	Feb. 2, 1950	9.17	2,760		Mar. 6, 1955	9.83	3,220
	May 13, 1950	6.98	1,570		Mar. 16, 1955	10.26	3,620
	May 15, 1950	8.67	2,250		Mar. 22, 1955	9.50	2,980
1951	Dec. 4, 1950	6.82	1,510	1956	Feb. 18, 1956	7.04	1,600
	Dec. 8, 1950	9.18	2,500		Mar. 8, 1956	7.00	1,600
	Feb. 1, 1951	7.30	1,670		Apr. 16, 1956	10.83	4,020
	Feb. 21, 1951	7.30	1,670	1957	Jan. 29, 1957	14.20	6,360
1952	Dec. 15, 1951	8.01	1,950	1958	Dec. 8, 1957	7.93	2,020
	Dec. 21, 1951	8.33	2,070		May 7, 1958	8.05	2,080
	Jan. 22, 1952	7.82	1,870		Aug. 25, 1958	7.69	1,900
	Mar. 11, 1952	7.31	1,670	1959	Jan. 22, 1959	8.89	2,560
	Mar. 23, 1952	9.02	2,400		Apr. 12, 1959	7.15	1,680
	Apr. 28, 1952	7.15	1,630	1960	Mar. 30, 1960	6.61	1,440
1953	Feb. 21, 1953	9.30	2,550				
	May 20, 1953	8.20	2,030				
1954	Jan. 16, 1954	6.83	1,510				

5250. Stony Creek at Fort Blackmore, Va.

Location.--Lat 36°46'30", long 82°34'50", on right bank at Fort Blackmore, Scott County, 2,000 ft upstream from mouth and 9.5 miles north of Gate City.

Drainage area.--41.4 sq mi.

Gage.--Recording prior to Oct. 1, 1952; crest-stage gage thereafter. Datum of gage is 1,270.17 ft above mean sea level (Interstate Railway bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 1,200 cfs and extended above on basis of logarithmic plotting.

Bankfull stage.--5 ft.

Remarks.--Base for partial-duration series, 1,000 cfs. Only annual peaks are shown after Sept. 30, 1952.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Oct. 31, 1949	4.35	1,170	1952	Jan. 22, 1952	4.78	1,430
	Dec. 13, 1949	4.75	1,400		Jan. 27, 1952	4.44	1,230
	Jan. 30, 1950	5.85	2,030		Mar. 11, 1952	4.05	1,010
	Feb. 2, 1950	5.38	1,790		Mar. 23, 1952	5.57	1,910
	Feb. 9, 1950	4.05	1,010	1953	February 1953	6.08	2,220
	May 15, 1950	5.85	2,030		-	-	al,000
1951	Dec. 4, 1950	4.08	1,040		1955	-	al,500
	Dec. 7, 1950	5.30	1,730	1956	Apr. 16, 1956	6.55	2,550
	Jan. 15, 1951	4.68	1,370		Jan. 29, 1957	6.12	2,220
	Feb. 1, 1951	4.17	1,060		May 6, 1958	6.40	2,410
	Feb. 21, 1951	4.39	1,200		Mar. 27, 1959	4.64	1,340
1952	Dec. 15, 1951	5.00	1,550		Nov. 28, 1959	5.60	1,910
	Dec. 21, 1951	5.26	1,730				

a Estimated.

5260. Copper Creek near Gate City, Va.

Location.--Lat 36°40'26", long 82°33'57", on right bank at upstream side of highway bridge, 0.2 mile upstream from Plank Camp Creek, 1.1 miles downstream from Obeys Creek, and 2.6 miles northeast of Gate City, Scott County.

Drainage area.--106 sq mi.

Gage.--Nonrecording prior to Aug. 29, 1953; recording thereafter. Altitude of gage is 1,290 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 3,200 cfs and extended above by logarithmic plotting.

Bankfull stage.--7 ft.

Remarks.--Base for partial-duration series, 1,200 cfs. Only annual peaks are shown prior to Oct. 1, 1953.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Feb. 14, 1948	10.1	3,310	1957	Jan. 30, 1957	9.9E	3,200
1949	Dec. 3, 1948	10.3	3,490		Feb. 10, 1957	8.6E	2,100
1950	Jan. 30, 1950	13.0	6,800		Apr. 9, 1957	7.5E	1,300
1951	Dec. 8, 1950	8.0	1,590	1958	Dec. 8, 1957	7.9E	1,560
	Jan. 28, 1952	8.46	1,980		Dec. 26, 1957	6.8E	1,210
	May 19, 1953	9.76	3,040		Apr. 28, 1958	7.9C	1,820
1954	Jan. 16, 1954	7.59	1,340		May 6, 1958	10.9E	4,100
1955	Feb. 7, 1955	8.45	1,900	1959	Jan. 22, 1959	9.40	2,720
	Mar. 7, 1955	8.41	1,900		Mar. 27, 1959	7.4E	1,580
	Mar. 16, 1955	9.50	2,780		Apr. 13, 1959	7.97	1,880
	Mar. 18, 1955	8.57	2,060	1960	Nov. 25, 1959	6.9E	1,220
	Mar. 22, 1955	8.87	2,300		Nov. 28, 1959	8.33	2,060
1956	Apr. 16, 1956	10.35	3,580				

5270. Clinch River at Speers Ferry, Va.

Location.--Lat 36°38'55", long 82°45'02", on right bank 100 ft downstream from highway bridge on U.S. Highway 58, 0.5 mile downstream from Copper Creek, 0.8 mile northwest of Speers Ferry, Scott County, and 1.8 miles downstream from Clinchport.

Drainage area.--1,126 sq mi.

Gage.--Nonrecording prior to Nov. 7, 1931; recording thereafter. At site 400 ft upstream at datum 1.5 ft higher prior to Nov. 23, 1926. Datum of gage is 1,196.52 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined since 1921 by current-meter measurements.

Bankfull stage.--20 ft.

Remarks.--Gage readings prior to October 1920 taken from publications of the U.S. Weather Bureau. Only annual peak stages are shown prior to 1932. Base for partial-duration series, 10,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1862	February 1862	a33	-	1934	Mar. 4, 1934	16.50	17,000
1896 ^b	Apr. 1, 1896	23.2	-	Mar. 9, 1934	12.16	14,400	
1897 ^b	Feb. 22, 1897	21.9	-	Mar. 24, 1934	16.30	16,700	
1898	Aug. 11, 1898	10.8	-	Mar. 28, 1934	11.97	11,200	
1899	Mar. 19, 1899	16.4	-	1935	Jan. 9, 1935	13.22	12,700
1900	Mar. 21, 1900	14.0	-	Jan. 24, 1935	12.77	12,200	
1901	May 22, 1901	19.8	-	Mar. 13, 1935	14.43	14,200	
1902	Feb. 28, 1902	26.6	-	Mar. 26, 1935	15.45	15,500	
1903	Feb. 17, 1903	17.4	-	Apr. 2, 1935	17.80	20,500	
1904	Apr. 29, 1904	5.3	-	1936	Jan. 4, 1936	10.95	10,100
1905	Jan. 13, 1905	9.4	-	Jan. 9, 1936	12.34	11,800	
1906	Jan. 24, 1906	8.0	-	Jan. 20, 1936	16.63	18,800	
1907	June 14, 1907	23.7	-	Feb. 5, 1936	15.60	16,800	
1908	Apr. 2, 1908	13.0	-	Mar. 25, 1936	16.12	17,800	
1909	May 1, 1909	12.0	-	Apr. 3, 1936	11.84	11,100	
1910	Feb. 18, 1910	6.8	-	Apr. 7, 1936	17.51	20,700	
1911	Feb. 9, 1911	13.5	-	1937	Dec. 7, 1936	14.59	15,100
1912	Apr. 3, 1912	18.3	-	Jan. 3, 1937	15.88	17,400	
1913	Mar. 28, 1913	18.2	-	Jan. 16, 1937	12.84	12,500	
1914	Mar. 31, 1914	12.0	-	Jan. 19, 1937	18.42	22,700	
1915	Feb. 2, 1915	10.2	-	Jan. 26, 1937	15.65	16,800	
1916	Dec. 17, 1915	14.5	-	Feb. 10, 1937	17.10	19,800	
1917	Mar. 5, 1917	23.0	-	1938	Oct. 29, 1937	13.78	13,900
1918	Jan. 29, 1918	24.5	-	Mar. 4, 1938	13.06	12,900	
1919	Jan. 3, 1919	15.0	-	July 21, 1938	13.20	13,100	
1920	Jan. 23, Mar. 13, 1920	14.0	-	Aug. 5, 1938	11.57	10,900	
1921	Dec. 14, 1920	9.35	10,500	1939	Feb. 4, 1939	19.54	23,900
1922	Mar. 10, 1922	14.7	19,200	Feb. 11, 1939	16.11	17,600	
1923	Feb. 3, 1923	24.35	37,200	Feb. 16, 1939	12.20	11,600	
1924	Jan. 1, 1924	15.2	20,400	1940	Aug. 15, 1940	20.98	25,100
1925	Dec. 9, 1924	18.0	25,400	1941	Mar. 12, 1941	10.29	8,240
1926	Feb. 15, 1926	11.75	14,700	1942	Aug. 6, 1942	13.23	12,100
1927	Dec. 22, 1926	24.70	35,000	Aug. 9, 1942	17.50	18,600	
1928	May 1, 1928	10.6	9,560	1943	Dec. 2, 1942	12.88	12,600
1929	Mar. 24, 1929	20.6	25,400	Dec. 30, 1942	17.89	20,700	
1930	Nov. 18, 1929	14.0	13,600	Jan. 29, 1943	11.85	11,100	
1931	Apr. 5, 1931	12.3	11,500	Mar. 14, 1943	13.39	13,300	
1932	Jan. 30, 1932	23.10	30,500	Mar. 20, 1943	11.64	10,800	
Feb. 4, 1932	15.84	16,000	Apr. 19, 1943	13.00	12,700		
Feb. 13, 1932	11.32	10,400	1944	Feb. 18, 1944	23.15	30,700	
1933	Dec. 29, 1932	17.30	18,000	Feb. 29, 1944	17.75	20,500	
Feb. 8, 1933	10.97	10,100	Mar. 20, 1944	15.02	15,700		
Feb. 16, 1933	12.52	11,800	Mar. 29, 1944	11.79	11,100		
Feb. 20, 1933	13.20	12,700	1945	Jan. 2, 1945	11.52	10,400	
Mar. 21, 1933	11.55	10,800	Feb. 13, 1945	11.39	10,200		
1934	Feb. 27, 1934	13.38	12,900	Feb. 18, 1945	15.86	16,600	

a From reports by Tennessee Valley Authority; present site and datum.

b Incomplete water year.

Peak stages and discharges of Clinch River at Speers Ferry, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	Jan. 8, 1946	23.5	31,000	1953	May 20, 1953	19.76	23,700
	Feb. 11, 1946	15.85	16,500				
1947	Jan. 3, 1947	12.74	12,000	1954	Jan. 16, 1954	11.90	10,100
	Jan. 16, 1947	22.40	29,400		Jan. 23, 1954	12.95	11,600
	Jan. 21, 1947	18.0	20,200	1955	Feb. 7, 1955	15.45	15,300
1948	Feb. 14, 1948	22.70	30,000		Mar. 2, 1955	18.67	21,400
	Mar. 24, 1948	12.05	11,000		Mar. 7, 1955	19.85	23,700
	Apr. 9, 1948	13.70	13,400		Mar. 17, 1955	20.67	25,600
1949	Nov. 29, 1948	12.20	10,500		Mar. 19, 1955	16.37	17,000
	Dec. 4, 1948	14.60	13,900		Mar. 22, 1955	15.59	15,600
	Jan. 6, 1949	13.88	12,800	1956	Feb. 7, 1956	12.19	10,500
	Mar. 19, 1949	14.00	13,000		Feb. 19, 1956	13.63	12,400
1950	Jan. 31, 1950	21.64	27,700		Mar. 15, 1956	12.57	11,000
	Feb. 2, 1950	23.10	31,100		Apr. 16, 1956	21.90	28,400
	May 13, 1950	14.03	13,000	1957	Jan. 11, 1957	12.18	10,400
	May 15, 1950	14.90	14,400		Jan. 30, 1957	28.92	45,300
1951	Dec. 5, 1950	12.40	10,700		Feb. 10, 1957	17.37	18,800
	Dec. 8, 1950	14.58	13,900		Apr. 9, 1957	11.86	10,000
	Feb. 2, 1951	12.76	11,300	1958	Dec. 8, 1957	14.39	13,600
1952	Dec. 15, 1951	12.98	11,600		Feb. 27, 1958	12.38	10,700
	Dec. 21, 1951	14.43	13,600		Apr. 28, 1958	12.36	10,700
	Jan. 23, 1952	14.93	14,400		May 7, 1958	23.95	33,100
	Jan. 29, 1952	13.38	12,000		Aug. 26, 1958	14.28	13,400
	Mar. 12, 1952	12.88	11,400	1959	Jan. 22, 1959	15.70	15,800
	Mar. 23, 1952	15.43	15,300		Mar. 28, 1959	12.53	10,900
1953	Feb. 22, 1953	16.80	17,700		Apr. 13, 1959	14.91	14,400
	Mar. 5, 1953	11.92	10,100	1960	Nov. 25, 1959	14.20	13,300
					Nov. 28, 1959	15.04	14,600

5275. North Fork Clinch River at Duffield, Va.

Location.--Lat 36°42'40", long 82°47'45", on right bank at upstream side of bridge on U.S. Highways 58 and 421, 0.2 mile downstream from Spurlock Branch, 0.5 mile south of Duffield, Scott County, and 1.6 miles upstream from Harris Branch.

Drainage area.--23.1 sq mi.

Gage.--Crest-stage gage prior to Sept. 23, 1952; recording thereafter. Datum of gage is 1,814.14 ft (corrected) above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--5 ft.

Remarks.--Base for partial-duration series, 500 cfs. Only annual peaks are shown prior to Oct. 1, 1952.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	December 1950	6.08	595	1956	Feb. 6, 1956	6.38	638
1952	Mar. 23, 1952	3.20	164		Feb. 18, 1956	5.62	515
					Apr. 15, 1956	7.40	800
1953	Feb. 21, 1953	7.32	782	1957	Jan. 28, 1957	7.34	789
	Mar. 4, 1953	5.55	520		Feb. 1, 1957	6.50	654
	May 19, 1953	7.00	734		Feb. 10, 1957	5.94	566
1954	Jan. 16, 1954	6.82	702		Apr. 5, 1957	5.75	538
1955	Feb. 6, 1955	6.14	590	1958	Dec. 7, 1957	6.88	716
	Feb. 23, 1955	6.18	606		Apr. 28, 1958	6.00	575
	Mar. 1, 1955	6.34	622		May 6, 1958	7.46	811
	Mar. 6, 1955	6.20	606	1959	Jan. 21, 1959	6.85	702
	Mar. 16, 1955	7.24	766				
	Mar. 18, 1955	6.59	670				
	Mar. 22, 1955	6.84	702				

5280. Clinch River above Tazewell, Tenn.

(Published as "near Lone Mountain" October 1918 to September 1927, and as "near Tazewell" August 1927 to December 1936)

Location.--Lat 36°25'30", long 83°23'54", on right bank 0.4 mile upstream from Grissom Island, 4.6 miles downstream from Big War Creek, 10 miles east of Tazewell, Claiborne County, and at mile 159.8.

Drainage area.--1,474 sq mi.

Gage.--Nonrecording prior to Aug. 8, 1927; recording thereafter. At site 23.3 miles downstream at datum 102.7 ft lower prior to Sept. 30, 1927. At site 8.0 miles downstream at datum 47.2 ft lower Oct. 1, 1927, to Sept. 30, 1935. Datum of gage 1,060.7 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 43,000 cfs and extended above.

Remarks.--Only annual peaks are shown prior to 1928. Base for partial-duration series, 14,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1862	February 1862	a24	b66,000	1938	Mar. 5, 1938	9.67	14,200
					July 23, 1938	10.43	15,900
1920	Jan. 24, 1920	15.80	c28,300	1939	Feb. 4, 1939	14.90	29,200
1921	Dec. 15, 1920	10.60	c12,900		Feb. 12, 1939	12.14	20,800
1922	Mar. 11, 1922	13.80	20,800	1940	Aug. 15, 1940	13.29	24,300
1923	Feb. 4, 1923	20.30	39,700	1941	Mar. 13, 1941	7.51	9,100
1924	Jan. 2, 1924	13.60	20,200	1942	Aug. 10, 1942	11.90	18,600
1925	Dec. 9, 1924	15.30	25,200	1943	Dec. 3, 1942	9.82	14,300
1926	Feb. 16, 1926	11.10	13,500		Dec. 31, 1942	13.74	25,500
1927	Dec. 23, 1926	19.95	38,800		Mar. 14, 1943	10.08	15,100
1928	June 30, 1928	9.0	16,200		Apr. 20, 1943	10.61	16,400
1929	Mar. 1, 1929	9.46	17,600	1944	Feb. 19, 1944	16.78	35,400
	Mar. 6, 1929	9.45	17,300		Mar. 1, 1944	13.52	24,900
	Mar. 24, 1929	13.02	28,000		Mar. 21, 1944	12.20	21,100
	May 3, 1929	8.54	14,800	1945	Feb. 18, 1945	11.55	19,200
	May 8, 1929	9.10	16,500	1946	Jan. 8, 1946	17.55	37,900
	May 20, 1929	10.14	19,300		Feb. 11, 1946	11.72	19,500
1930	Nov. 18, 1929	8.92	15,900	1947	Jan. 16, 1947	16.34	33,900
1931	Apr. 5, 1931	7.35	11,800		Jan. 21, 1947	13.53	25,000
1932	Jan. 31, 1932	14.90	37,800	1948	Feb. 15, 1948	16.65	34,900
	Feb. 4, 1932	11.00	23,200	1949	Nov. 29, 1948	10.20	15,300
1933	Dec. 29, 1932	11.07	23,500		Dec. 5, 1948	10.06	15,000
	Feb. 16, 1933	8.33	14,600		Jan. 6, 1949	11.11	17,800
	Feb. 21, 1933	9.49	18,200		Mar. 19, 1949	10.47	16,000
1934	Feb. 27, 1934	8.48	15,100	1950	Feb. 2, 1950	17.45	37,400
	Mar. 4, 1934	10.48	21,500		Feb. 10, 1950	9.99	14,800
	Mar. 24, 1934	10.84	22,500		May 13, 1950	10.94	17,300
1935	Mar. 13, 1935	9.80	19,200		May 15, 1950	12.10	20,700
	Mar. 27, 1935	10.43	21,200	1951	Dec. 8, 1950	10.16	15,200
	Apr. 2, 1935	10.79	22,500		Feb. 2, 1951	9.86	14,400
1936	Jan. 10, 1936	9.90	15,000	1952	Dec. 16, 1951	9.95	14,700
	Jan. 20, 1936	12.11	20,600		Dec. 22, 1951	11.03	17,600
	Feb. 5, 1936	11.76	19,700		Jan. 23, 1952	10.61	16,400
	Mar. 25, 1936	12.25	20,900		Jan. 28, 1952	10.25	15,400
	Mar. 28, 1936	11.76	19,700		Mar. 24, 1952	11.91	20,100
	Apr. 7, 1936	13.69	25,500	1953	Feb. 22, 1953	12.32	21,400
1937	Dec. 8, 1936	10.88	17,400		May 21, 1953	13.69	25,500
	Jan. 3, 1937	12.54	21,700				
	Jan. 19, 1937	13.99	26,500				
	Jan. 26, 1937	12.08	20,600				
	Feb. 10, 1937	12.97	23,200				

a Present site and datum.

b Estimated.

c Maximum daily discharge.

Peak stages and discharges of Clinch River above Tazewell, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 17, 1954	9.53	13,900	1957	Jan. 31, 1957	21.00	51,100
1955	Feb. 7, 1955	11.33	18,000	1958	Feb. 11, 1957	12.82	22,100
	Mar. 2, 1955	13.01	22,600		Dec. 8, 1957	11.49	18,400
	Mar. 8, 1955	13.71	24,700		Apr. 28, 1958	10.97	17,000
	Mar. 18, 1955	15.29	29,700		May 7, 1958	17.70	35,900
	Mar. 23, 1955	12.03	19,800	1959	Jan. 23, 1959	11.42	18,200
1956	Feb. 7, 1956	10.15	15,000		Apr. 14, 1959	10.72	16,400
	Feb. 20, 1956	10.22	15,200		1960	10.62	16,100
	Apr. 16, 1956	16.34	33,100				

5281. Big Sycamore Creek near Sneedville, Tenn.

Location.--Lat 36°30'05", long 83°23'20", on right bank 9 miles southwest from Hancock County Court House at Sneedville.

Drainage area.--5.51 sq mi.

Gage.--Recording. Datum of gage not determined.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	May 14, 1935	2.18	445	1941	July 5, 1941	1.34	92
1936	Apr. 6, 1936	2.12	410	1942	Aug. 5, 1942	1.84	261
				1943	Dec. 29, 1942	1.98	332
1937	Feb. 9, 1937	2.32	530	1944	Feb. 17, 1944	2.10	394
1938	Mar. 3, 1938	2.07	379	1945	Feb. 13, 1945	2.04	a362
1939	Feb. 3, 1939	2.40	583				
1940	Apr. 19, 1940	1.44	115				

a Maximum for period Oct. 1, 1944, to Apr. 30, 1945.

5283. Big Barren Creek near New Tazewell, Tenn.

Location.--Lat 36°22'56", long 83°42'40", on right bank 8.6 miles south of New Tazewell, Claiborne County.

Drainage area.--19.0 sq mi (not including sinks).

Gage.--Recording. Datum of gage is 1,039.24 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Mar. 25, 1935	1.82	550	1941	July 4, 1941	0.96	140
1936	Jan. 19, 1936	1.12	190	1942	July 8, 1942	1.33	278
1937	Feb. 9, 1937	1.76	515	1943	Dec. 30, 1942	1.54	387
1938	May 23, 1938	.91	126	1944	Mar. 19, 1944	1.54	387
1939	Feb. 3, 1939	1.81	546	1945	Feb. 17, 1945	1.10	a184
1940	Apr. 3, 1940	.93	131				

a Maximum for period Oct. 1, 1944, to Apr. 30, 1945.

5284. White Creek near Sharps Chapel, Tenn.

Location.--Lat 36°20'42", long 83°53'40", on right bank on the White Hollow experimental watershed area, Union County.

Drainage area.--2.68 sq mi.

Gage.--Recording and Albany-type weir. Prior to June 1948, rectangular weir. Datum of gage is 1,081.62 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Mar. 25, 1935	3.53	805	1948	Feb. 13, 1948	1.93	154
				1949	Jan. 5, 1949	3.59	139
1936	Mar. 24, 1936	1.80	126	1950	May 17, 1950	3.86	177
1937	Jan. 2, 1937	1.87	140				
1938	Apr. 8, 1938	1.32	50	1951	Feb. 1, 1951	4.36	257
1939	Feb. 3, 1939	2.32	265	1952	Dec. 14, 1951	3.57	137
1940	Apr. 20, 1940	1.15	28	1953	Feb. 21, 1953	3.37	113
				1954	Jan. 21, 1954	2.91	62
1941	July 8, 1941	1.40	60	1955	Mar. 22, 1955	3.76	162
1942	Mar. 17, 1942	1.12	24				
1943	Mar. 19, 1943	1.93	154	1956	Feb. 18, 1956	3.46	124
1944	Feb. 17, 1944	1.66	100	1957	Jan. 29, 1957	3.34	109
1945	Feb. 17, 1945	1.49	74	1958	Apr. 28, 1958	3.69	153
				1959	Jan. 21, 1959	2.86	40
1946	Jan. 8, 1946	1.96	162	1960	Dec. 19, 1959	2.54	31.9
1947	Jan. 20, 1947	1.96	161				

5295. Powell River at Big Stone Gap, Va.

Location.--Lat 36°52'08", long 82°46'32", on right bank 10 ft upstream from bridge on U.S. Highway 23 at Big Stone Gap, Wise County, 1 mile upstream from South Fork Powell River and 2.5 miles downstream from Pigeon Creek.

Drainage area.--112 sq mi.

Gage.--Nonrecording prior to Apr. 27, 1948; recording thereafter. Datum of gage is 1,459.07 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 3,000 cfs and extended above on basis of slope-area measurements at gage height 9.67 ft since 1948. Peaks for water years 1946 and 1948 may be large by as much as 30 percent.

Remarks.--Base for partial-duration series, 1,600 cfs. Only annual peaks shown prior to Oct. 1, 1948, and for 1960.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Feb. 13, 1945	6.00	4,900	1951	Dec. 4, 1950	4.46	2,280
					Dec. 7, 1950	6.27	4,800
1946	Jan. 7, 1946	9.8	16,500		Jan. 15, 1951	4.90	2,810
1947	Jan. 15, 1947	7.0	7,320		Feb. 1, 1951	5.48	3,850
					Feb. 21, 1951	5.15	3,220
1948	Feb. 13, 1948	9.34	14,500		July 25, 1951	4.10	1,900
1949	Nov. 29, 1948	3.86	1,720	1952	Dec. 15, 1951	6.97	5,920
	Jan. 5, 1949	5.68	4,300		Dec. 21, 1951	5.83	4,570
	Mar. 18, 1949	6.25	4,800		Jan. 22, 1952	5.60	4,050
	Aug. 15, 1949	4.16	2,060		Feb. 21, 1952	3.92	1,710
	Aug. 16, 1949	5.39	3,740		Mar. 25, 1952	5.73	4,360
1950	Oct. 31, 1949	3.78	1,610	1953	Dec. 10, 1952	3.97	1,720
	Dec. 13, 1949	5.75	4,400		Feb. 21, 1953	7.04	6,000
	Jan. 30, 1950	6.36	4,960		Mar. 4, 1953	3.91	1,670
	Feb. 2, 1950	6.11	4,560		May 7, 1953	4.10	1,890
	May 12, 1950	4.09	1,940		May 19, 1953	5.53	3,940
	May 15, 1950	4.63	2,610				

Peak stages and discharges of Powell River at Big Stone Gap, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 16, 1954	4.89	2,880	1956	Apr. 6, 1956	4.69	2,610
	Jan. 22, 1954	4.10	1,890		Apr. 15, 1956	7.95	7,800
1955	Feb. 6, 1955	5.88	4,670	1957	Jan. 29, 1957	9.67	11,000
	Feb. 23, 1955	4.21	2,000		Feb. 10, 1957	3.99	1,740
	Mar. 1, 1955	5.43	3,760	1958	Dec. 7, 1957	5.56	3,780
	Mar. 6, 1955	6.01	4,400		Dec. 20, 1957	3.84	1,690
	Mar. 16, 1955	6.62	5,360		Apr. 28, 1958	4.13	1,980
	Mar. 18, 1955	4.76	2,680		May 6, 1958	5.70	3,980
	Mar. 22, 1955	6.20	4,720		July 20, 1958	3.88	1,730
1956	Feb. 3, 1956	3.97	1,740	1959	Jan. 21, 1959	6.71	5,520
	Feb. 6, 1956	4.54	2,420		Apr. 12, 1959	4.08	1,950
	Feb. 18, 1956	5.88	4,260		June 2, 1959	3.88	1,750
	Feb. 25, 1956	5.02	3,000	1960	Mar. 30, 1960	5.98	4,400
	Mar. 8, 1956	5.04	3,070				
	Mar. 14, 1956	5.14	3,210				

5300. South Fork Powell River at Big Stone Gap, Va.

Location--Lat 36°51'54", long 82°46'16", at highway bridge in town of Big Stone Gap, Wise County, 1.6 miles upstream from Powell River, and 1.9 miles downstream from Butcher Creek.

Drainage area--40 sq mi (approximately).

Gage--Nonrecording prior to September 1947; crest-stage gage since 1951. Altitude of gage is 1,470 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 2,500 cfs and extended above.

Bankfull stage--6 ft.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Feb. 13, 1945	7.8	2,960	1954	-	-	a1,000
1946	Jan. 7, 1946	8.0	3,100	1955	-	-	a2,000
1947	Jan. 15, 1947	7.25	2,540	1956	Apr. 16, 1956	7.05	2,400
1951	Dec. 7, 1950	6.9	2,330	1957	Jan. 29, 1957	8.62	3,550
1952	-	-	a2,220	1958	May 6, 1958	6.10	1,840
1953	Feb. 21, 1953	6.65	2,140	1959	Mar. 27, 1959	4.84	1,130
				1960	Nov. 28, 1959	6.08	1,840

a Estimated.

5305. North Fork Powell River at Pennington Gap, Va.

Location--Lat 36°46'26", long 83°01'59", at highway bridge 0.8 mile north of town of Pennington Gap, Lee County, 1.3 miles downstream from Straight Creek, and 4.5 miles upstream from Powell River.

Drainage area--70 sq mi, approximately.

Gage--Nonrecording prior to Oct. 1, 1951; crest-stage gage thereafter. Altitude of gage is 1,365 ft above mean sea level (by barometer).

Stage-discharge relation--Defined by current-meter measurements below 2,300 cfs and extended above on basis of slope-area measurements at 4,500 and 9,700 cfs.

Bankfull stage--8 ft.

Remarks--Only annual peaks are shown.

Peak stages and discharges of North Fork Powell River at Pennington Gap, Va.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Feb. 13, 1945	7.6	3,760	1953	Jan. 22, 1953	8.20	4,150
1946	Jan. 7, 1946	12.1	9,700	1954	Jan. 16, 1954	6.00	3,000
1947	Jan. 15, 1947	7.9	3,940	1955	Mar. 16, 1955	7.45	3,800
1948	Feb. 14, 1948	9.5	5,400	1956	Apr. 16, 1956	8.12	4,100
1949	Jan. 5, 1949	7.7	3,820	1957	Jan. 29, 1957	8.70	4,430
1950	Dec. 13, 1949	10.0	6,100	1958	May 6, 1958	8.00	4,050
1951	Feb. 1, 1951	7.1	3,460	1959	Jan. 22, 1959	8.60	4,420
1952	Dec. 15, 1951	8.45	4,250	1960	Nov. 28, 1959	6.82	3,280

5310. Powell River near Pennington Gap, Va.
(Published as "near Pennington" prior to 1925)

Location.--Lat 36°44'04", long 82°59'56", at highway bridge 1,000 ft downstream from North Fork and 3 miles southeast of Pennington Gap, Lee County.

Drainage area.--290 sq mi.

Gage.--Nonrecording. Altitude of gage is 1,320 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,300 cfs and extended above on the basis of logarithmic plotting.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1921	Dec. 14, 1920	13.0	9,900	1927	Dec. 21, 1926	22.60	22,000
1922	Mar. 10, 1922	13.4	11,600	1928	June 29, 1928	17.38	15,200
1923	Feb. 3, 1923	18.5	18,000	1929	Mar. 23, 1929	27.66	28,900
1924	Feb. 20, 1924	10.74	8,310	1930	May 19, 1930	12.98	9,900
1925	Feb. 15, 1925	17.0	14,700	1931	Apr. 22, 1931	11.2	7,740
1926	Oct. 25, 1925	16.0	13,500				

5315. Powell River near Jonesville, Va.

Location.--Lat 36°39'43", long 83°05'42", on right bank 35 ft downstream from highway bridge, 2 miles southeast of Jonesville, Lee County, and 10 miles upstream from Wallen Creek.

Drainage area.--319 sq mi.

Gage.--Recording. Datum of gage is 1,259.08 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 20,000 cfs and extended above on the basis of logarithmic plotting.

Bankfull stage.--15 ft.

Remarks.--Base for partial-duration series, 5,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1918	January 1918	a33	-	1933	Feb. 20, 1933	14.77	8,030
1932	Jan. 30, 1932	25.64	22,900	1934	Mar. 19, 1933	13.34	6,980
	Feb. 3, 1932	18.20	10,800		Feb. 26, 1934	14.62	7,890
	Mar. 28, 1932	10.29	5,020		Mar. 3, 1934	17.93	10,500
1933	Dec. 28, 1932	16.43	9,230		Mar. 9, 1934	11.46	5,800
	Feb. 8, 1933	10.64	5,210		Mar. 24, 1934	16.78	9,550

a From report by Tennessee Valley Authority.

Peak stages and discharges of Powell River near Jonesville, Va.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Mar. 12, 1935	18.37	11,000	1949	Nov. 29, 1948	10.40	5,080
	Mar. 20, 1935	11.77	5,990		Jan. 6, 1949	17.07	9,800
	Mar. 26, 1935	13.94	7,400		Mar. 18, 1949	16.60	9,390
	Apr. 1, 1935	14.80	8,030		Aug. 17, 1949	11.95	6,120
1936	Jan. 9, 1936	10.94	5,400	1950	Dec. 13, 1949	16.13	8,940
	Feb. 4, 1936	16.28	9,150		Jan. 31, 1950	22.53	16,500
	Mar. 25, 1936	19.95	13,000		Feb. 2, 1950	18.46	10,600
	Mar. 28, 1936	11.65	5,860		Feb. 9, 1950	11.60	5,860
	Apr. 2, 1936	10.30	5,020		May 15, 1950	12.68	6,580
	Apr. 6, 1936	22.07	16,200	1951	Dec. 8, 1950	16.20	9,010
1937	Dec. 7, 1936	19.63	12,400		Jan. 15, 1951	12.70	6,580
	Jan. 2, 1937	18.00	10,600		Feb. 1, 1951	15.08	8,240
	Jan. 15, 1937	10.87	5,400		Feb. 21, 1951	13.41	7,050
	Jan. 18, 1937	19.37	12,200	1952	Dec. 15, 1951	20.74	14,000
	Jan. 25, 1937	20.39	13,500		Dec. 21, 1951	16.64	9,290
	Feb. 9, 1937	22.59	17,000		Jan. 22, 1952	16.26	9,080
1938	Mar. 3, 1938	11.32	5,660		Jan. 27, 1952	10.82	5,340
1939	Feb. 3, 1939	24.28	20,200		Mar. 23, 1952	16.80	9,430
	Feb. 11, 1939	15.90	8,840	1953	Feb. 21, 1953	19.45	11,400
1940	Apr. 20, 1940	14.02	7,470		Mar. 4, 1953	10.26	5,020
1941	July 13, 1941	8.72	4,010		May 20, 1953	15.44	8,450
1942	Mar. 9, 1942	11.35	5,730	1954	Jan. 16, 1954	14.27	7,680
	Mar. 17, 1942	13.03	6,770		Jan. 23, 1954	10.42	5,080
	Aug. 9, 1942	14.09	7,540	1955	Dec. 29, 1954	10.47	5,140
1943	Dec. 2, 1942	12.23	6,250		Feb. 7, 1955	17.57	9,990
	Dec. 30, 1942	16.45	9,310		Feb. 23, 1955	12.23	6,250
	Mar. 13, 1943	15.67	8,700		Feb. 28, 1955	11.55	5,860
	Mar. 20, 1943	12.23	6,250		Mar. 1, 1955	14.59	7,890
	Apr. 19, 1943	18.58	11,300		Mar. 7, 1955	15.84	8,730
1944	Feb. 18, 1944	25.64	22,900		Mar. 16, 1955	19.38	11,400
	Feb. 29, 1944	21.20	14,700		Mar. 18, 1955	12.33	6,320
	Mar. 20, 1944	13.88	7,400		Mar. 22, 1955	17.15	9,710
1945	Jan. 1, 1945	11.30	5,660	1956	Feb. 7, 1956	13.84	7,330
	Feb. 13, 1945	16.48	9,310		Feb. 18, 1956	14.99	8,170
	Feb. 17, 1945	14.86	8,100		Feb. 26, 1956	11.98	6,120
1946	Jan. 8, 1946	30.8	30,000		Mar. 8, 1956	11.67	5,920
	Feb. 11, 1946	12.7	6,580		Mar. 14, 1956	12.48	6,440
1947	Jan. 3, 1947	10.62	5,210		Apr. 7, 1956	10.45	5,080
	Jan. 16, 1947	20.65	13,800		Apr. 16, 1956	23.53	15,800
	Jan. 20, 1947	19.40	12,200	1957	Jan. 30, 1957	26.87	19,800
1948	Feb. 14, 1948	25.85	20,600		Feb. 10, 1957	11.85	6,020
	Mar. 17, 1948	11.0	5,470	1958	Dec. 8, 1957	18.64	10,700
	Mar. 27, 1948	12.7	6,580		Apr. 28, 1958	10.79	5,330
	Apr. 8, 1948	10.9	5,400		May 7, 1958	17.48	9,910
	Apr. 15, 1948	11.1	5,540	1959	Jan. 22, 1959	18.86	10,900
				1960	Nov. 28, 1959	16.47	9,220

5320. Powell River near Arthur, Tenn.

Location.--Lat 36°32'30", long 83°37'49", on left bank 500 ft upstream from bridge on U.S. Highway 25E, 2.3 miles east of Arthur, Claiborne County, and 2.4 miles downstream from Indian Creek.

Drainage area.--685 sq mi.

Gage.--Nonrecording prior to July 23, 1927; recording thereafter. Datum of gage is 1,045.84 ft above mean sea level (Tennessee River Survey datum).

Stage-discharge relation.--Defined by current-meter measurements below 23,000 cfs and extended above on basis of slope-area measurement at 33,070 cfs.

Bankfull stage.--15 ft, from U.S. Weather Bureau.

Historical data.--Flood of March 1826 is highest known.

Remarks.--Only annual peaks are shown prior to July 23, 1927. Observed annual peak stages (except that for 1826) prior to 1920 from reports by U.S. Weather Bureau. Base for partial-duration series, 9,000 cfs.

TENNESSEE RIVER BASIN

Peak stages and discharges of Powell River near Arthur, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1826	March 1826	a27.5	34,000	1938	Mar. 4, 1938	10.31	8,110
1867	March 1867	22.5	-	1939	Feb. 4, 1939	19.80	20,300
1905	Feb. 10, 1905	11.2	-		Feb. 12, 1939	13.50	11,800
1906	Jan. 5, 1906	5.8	-	1940	Apr. 21, 1940	11.79	9,760
1907	Nov. 20, 1906	20.5	-	1941	July 5, 1941	11.55	8,550
1908	Nov. 11, 1907	14.5	-	1942	Aug. 10, 1942	11.30	8,880
1909	Jan. 17, 1909	12.0	-	1943	Dec. 31, 1942	15.91	14,800
1910	Feb. 10, 1910	9.3	-		Mar. 14, 1943	12.56	10,700
1911	Feb. 9, 1911	16.5	-		Mar. 21, 1943	11.49	9,430
1912	Apr. 3, 1912	19.2	-		Apr. 20, 1943	14.00	12,400
1913	Mar. 28, 1913	20.4	-	1944	Feb. 19, 1944	20.23	20,900
1914	Mar. 31, 1914	15.2	-		Mar. 1, 1944	18.49	18,400
1915	Dec. 26, 1914	12.0	-		Mar. 21, 1944	14.43	12,900
1916	Dec. 30, 1915	17.5	-	1945	Feb. 14, 1945	13.45	11,700
1917	Mar. 4, 1917	22.5	-		Feb. 18, 1945	13.14	11,400
1918	Jan. 29, 1918	27.2	33,000	1946	Jan. 9, 1946	27.15	33,000
1919	Jan. 3, 1919	21.0	-		Feb. 12, 1946	11.85	9,760
1920	Jan. 24, 1920	16.5	b17,200	1947	Jan. 17, 1947	17.15	16,500
1921	Dec. 15, 1920	11.2	10,100		Jan. 21, 1947	17.07	16,300
1922	Mar. 11, 1922	14.6	13,800	1948	Feb. 15, 1948	21.45	22,900
1923	Feb. 4, 1923	18.7	20,300	1949	Jan. 7, 1949	14.76	13,100
1924	Jan. 2, 1924	11.9	10,800		Mar. 19, 1949	12.32	10,100
1925	Dec. 9, 1924	15.6	14,900	1950	Dec. 14, 1949	12.31	9,810
1926	Oct. 26, 1925	12.82	11,900		Feb. 1, 1950	22.18	23,300
1927	Dec. 23, 1926	20.37	22,700		Feb. 10, 1950	12.22	9,720
1928	June 30, 1928	16.1	16,600	1951	Dec. 9, 1950	11.53	9,030
1929	Nov. 20, 1928	17.20	18,200		Feb. 1, 1951	15.37	13,200
	Jan. 20, 1929	10.96	9,800		Feb. 22, 1951	12.10	9,600
	Jan. 26, 1929	11.20	10,100	1952	Dec. 16, 1951	16.31	15,200
	Feb. 27, 1929	13.18	12,700		Dec. 22, 1951	13.87	12,000
	Mar. 6, 1929	13.87	13,600		Jan. 23, 1952	14.04	12,200
	Mar. 24, 1929	23.8	27,800		Jan. 28, 1952	12.11	9,970
	May 3, 1929	10.48	9,200		Mar. 28, 1952	15.03	13,500
	May 8, 1929	11.80	10,800	1953	Feb. 22, 1953	15.44	13,300
	May 20, 1929	19.7	21,700		May 21, 1953	12.55	10,000
1930	Nov. 19, 1929	12.63	11,900	1954	Jan. 17, 1954	12.76	10,400
	May 20, 1930	10.35	9,080	1955	Feb. 8, 1955	13.94	11,700
1931	Apr. 23, 1931	9.70	8,240		Mar. 2, 1955	12.30	9,930
1932	Jan. 31, 1932	21.45	23,200		Mar. 8, 1955	13.45	11,200
	Feb. 4, 1932	17.22	17,400		Mar. 17, 1955	16.32	14,800
1933	Dec. 29, 1932	14.74	13,600		Mar. 23, 1955	15.24	13,300
	Feb. 21, 1933	13.93	12,600	1956	Feb. 8, 1956	12.71	10,400
	Mar. 20, 1933	12.99	11,500		Feb. 19, 1956	13.90	11,700
1934	Feb. 27, 1934	11.80	10,000		Apr. 17, 1956	18.96	18,500
	Mar. 4, 1934	15.48	14,700	1957	Jan. 30, 1957	22.07	23,500
	Mar. 24, 1934	14.74	13,600		Feb. 2, 1957	16.50	15,000
1935	Mar. 13, 1935	15.33	14,400	1958	Dec. 9, 1957	17.05	15,800
	Mar. 21, 1935	11.10	9,140		Apr. 29, 1958	12.33	9,960
	Mar. 27, 1935	13.98	12,700		May 8, 1958	16.41	14,900
	Apr. 2, 1935	13.12	11,600	1959	Jan. 23, 1959	15.16	13,200
1936	Feb. 5, 1936	12.56	10,900	1960	Dec. 29, 1959	13.05	10,800
	Mar. 26, 1936	16.32	14,900				
	Mar. 28, 1936	12.39	10,200				
	Apr. 7, 1936	18.80	18,500				
1937	Dec. 8, 1936	14.62	12,800				
	Jan. 3, 1937	16.88	15,800				
	Jan. 19, 1937	16.78	15,600				
	Jan. 26, 1937	17.35	16,500				
	Feb. 10, 1937	19.10	19,300				

a From reports by Tennessee Valley Authority.

b Maximum daily discharge.

5330, Clinch River below Norris Dam, Tenn.
(Published as "at Clinton" October 1903 to September 1927, and
"near Coal Creek" May 1927 to September 1937)

Location.--Lat 36°12'56", long 84°04'56", 0.5 mile upstream from Clear Creek,
1.0 mile downstream from Norris Dam, 1.5 miles north of Norris, Anderson
County, and at mile 78.8.

Drainage area.--2,913 sq mi.

Gage.--Nonrecording prior to Oct. 1, 1927; recording thereafter. At site
19.6 miles downstream at datum 42.49 ft lower prior to July 1, 1920. At site
19.8 miles downstream at datum 42.59 ft lower July 1, 1920, to Sept. 30,
1927. At site 2.9 miles downstream Oct. 1, 1927, to Sept. 30, 1936. At
datum 10.50 ft lower Oct. 1, 1927, to Sept. 30, 1935, and at datum 13.50 ft
lower Oct. 1, 1935, to Sept. 30, 1936. Datum of gage is 819.11 ft above mean
sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 62,000
cfs and extended above.

Bankfull stage.--25 ft (site and datum used prior to July 1, 1920).

Remarks.--Flow regulated by Norris Lake since 1936. Only annual peaks are shown
prior to 1928 and since 1936. Peaks from reports by Tennessee Valley Author-
ity and U.S. Weather Bureau prior to 1904. Base for partial-duration series,
21,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1826	Mar. 11, 1826	43.5	130,000	1924	Jan. 3, 1924	23.5	a38,000
1862	Feb. 24, 1862	41.3	117,000	1925	Dec. 10, 1924	24.6	40,800
1884	Mar. 8, 1884	28.0	-	1926	Jan. 24, 1926	18.6	a25,100
1885	Jan. 17, 1885	15.2	-	1927	Dec. 24, 1926	32.30	64,400
1886	Mar. 31, 1886	41.3	117,000	1928	June 30, 1928	23.9	46,400
1887	Feb. 26, 1887	22.7	-	1929	Nov. 19, 1928	19.45	35,300
1888	Jan. 18, 1888	16.5	-		Jan. 21, 1929	15.08	24,700
1889	Feb. 19, 1889	25.8	-		Jan. 26, 1929	15.97	26,900
1890	Feb. 28, 1890	35.5	84,400		Feb. 28, 1929	20.55	38,100
1891	Feb. 12, 1891	29.8	-		Mar. 7, 1929	19.32	55,000
1892	Jan. 16, 1892	26.5	-		Mar. 23, 1929	30.7	63,400
1893	Feb. 19, 1893	32.5	67,700		May 4, 1929	15.55	25,800
1894	Feb. 6, 1894	23.0	-		May 9, 1929	17.50	30,500
1895	Jan. 12, 1895	25.5	-		May 21, 1929	24.50	48,000
1896	Apr. 2, 1896	37.5	94,800	1930	Nov. 19, 1929	17.70	31,000
1897	Feb. 23, 1897	39.0	103,000	1931	Apr. 24, 1931	12.50	18,700
1898	Aug. 12, 1898	21.0	-	1932	Feb. 1, 1932	28.20	57,200
1899	Feb. 6, 1899	28.0	-		Feb. 5, 1932	23.50	45,400
1900	Mar. 22, 1900	20.5	-		Feb. 14, 1932	13.73	21,500
1901	Aug. 15, 1901	26.7	-		Mar. 30, 1932	13.52	21,000
1902	Mar. 2, 1902	32.5	67,700	1933	Dec. 30, 1932	21.65	40,700
1903	Feb. 18, 1903	26.0	-		Feb. 10, 1933	13.62	21,200
1904	Mar. 25, 1904	16.0	a20,000		Feb. 17, 1933	16.32	27,700
1905	Feb. 11, 1905	19.0	27,000		Feb. 22, 1933	19.90	36,400
1906	Jan. 25, 1906	13.0	a13,600		Mar. 21, 1933	17.80	31,200
1907	Nov. 21, 1906	31.0	a56,800	1934	Feb. 28, 1934	16.15	26,500
1908	Apr. 4, 1908	21.6	33,300		Mar. 5, 1934	21.55	40,500
1909	May 2, 1909	22.0	34,000		Mar. 10, 1934	14.34	22,300
1910	Feb. 20, 1910	15.3	a18,500		Mar. 25, 1934	22.49	43,000
1911	Feb. 10, 1911	26.0	44,300	1935	Mar. 14, 1935	20.26	36,500
1912	Apr. 4, 1912	31.5	62,200		Mar. 21, 1935	15.40	24,100
1913	Mar. 29, 1913	30.2	54,800		Mar. 26, 1935	23.92	46,600
1914	Apr. 1, 1914	23.1	a37,000		Apr. 3, 1935	19.90	35,500
1915	Feb. 4, 1915	18.3	a25,300		Apr. 9, 1935	14.92	23,000
1916	Dec. 19, 1915	29.7	a53,600	1936	Jan. 23, 1936	16.07	18,800
1917	Mar. 5, 1917	38.5	87,000	1937	Feb. 16, 1937	17.13	42,500
1918	Jan. 30, 1918	38.0	85,100	1938	Feb. 9, 1938	11.38	24,600
1919	Jan. 4, 1919	31.0	a56,800	1939	Mar. 10, 1939	9.08	18,000
1920	Jan. 25, 1920	29.0	a51,800	1940	Feb. 8, 1940	6.78	11,300
1921	Apr. 17, 1921	18.9	a26,800	1941	Oct. 8, 1940	6.67	11,000
1922	Mar. 12, 1922	24.3	a40,000				
1923	Feb. 5, 1923	32.7	61,000				

a Maximum daily discharge.

Peak stages and discharges of Clinch River below Norris Dam, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Aug. 22, 1942	6.90	11,600	1952	Dec. 23, 1951	11.42	26,600
1943	Jan. 7, 1943	11.23	24,400	1953	Feb. 24, 1953	6.94	12,500
1944	Mar. 29, 1944	8.30	15,700	1954	June 7, 1954	5.57	8,650
1945	Mar. 7, 1945	5.88	8,720	1955	Mar. 20, 1955	10.01	22,100
1946	Jan. 22, 1946	10.07	21,100	1956	Mar. 15, 1956	8.43	17,200
1947	Jan. 24, 1947	9.95	20,600	1957	Feb. 12, 1957	11.65	26,600
1948	June 14, 1948	5.74	8,370	1958	Dec. 26, 1957	9.40	20,100
1949	Jan. 11, 1949	9.59	20,700	1959	Aug. 11, 1959	5.63	8,530
1950	Feb. 20, 1950	12.20	29,100	1960	Apr. 19, 1960	5.84	9,160
1951	Apr. 9, 1951	5.86	9,280				

5340. Coal Creek at Lake City, Tenn.
(Published as "at Coal Creek" 1932-34)

Location.--Lat 36°13'14", long 84°09'27", at bridge on U.S. Highway 25W, at Lake City, Anderson County.

Drainage area.--24.5 sq mi.

Gage.--Nonrecording, and since May 25, 1954, crest-stage gage. Datum of gage is 842.91 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Remarks.--Major channel changes since June 1959. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Mar. 23, 1929	17.5	a8,400	1956	February 1956	7.48	1,030
				1957	Jan. 31, 1957	12.02	2,580
1933	Mar. 19, 1933	13.0	3,400	1958	Nov. 17, 1957	13.92	4,380
				1959	Jan. 21, 1959	12.28	2,760
1955	April 1955	12.43	2,880	1960	Dec. 18, 1959	3.7	(b)

a From reports by Tennessee Valley Authority.

b Discharge not determined.

5345. Buffalo Creek at Norris, Tenn.

Location.--Lat 36°11'05", long 84°03'34", at culvert under Norris Freeway (State Highway 71) 1.0 mile southeast of Norris, Anderson County.

Drainage area.--9.45 sq mi.

Gage.--Recording prior to May 26, 1954; crest-stage gage thereafter. Datum of gage is 901.71 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 600 cfs and extended above.

Bankfull stage.--6 ft.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Feb. 13, 1948	7.91	757	1956	Apr. 15, 1956	7.34	640
1949	Jan. 5, 1949	7.18	636	1957	Jan. 31, 1957	9.03	1,130
1950	Jan. 30, 1950	6.88	579	1958	Nov. 17, 1957	8.93	1,100
				1959	Jan. 21, 1959	5.98	370
1955	Dec. 29, 1954	7.59	700	1960	Dec. 18, 1959	6.09	385

5355. Clinch River near Scarboro, Tenn.
(Published as "near Wheat" prior to January 1941)

Location.--Lat 35°56'45", long 84°13'17", on right bank 0.6 mile downstream from Beaver Creek, 2½ miles south of Scarboro, Anderson County, 4½ miles downstream from Solway Bridge, and 17 miles west of Knoxville.

Drainage area.--3,300 sq mi.

Gage.--Recording. At site 24.5 miles downstream at datum 35.99 ft lower prior to Feb. 1, 1941. Datum of gage is 753.35 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 27,000 cfs and extended above.

Bankfull stage.--10.5 ft.

Remarks.--Flow regulated by Norris Lake. Base for partial-duration series, 10,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Dec. 7, 1936	11.26	14,600	1946	Feb. 9, 1946	9.76	16,500
	Jan. 3, 1937	15.57	23,900		Feb. 12, 1946	12.29	21,600
	Jan. 19, 1937	10.00	12,000		Feb. 16, 1946	11.74	20,500
	Jan. 25, 1937	10.86	13,800		Mar. 10, 1946	8.03	13,000
	Feb. 9, 1937	23.45	42,900	1947	Jan. 16, 1947	7.04	11,000
	Feb. 18, 1937	22.37	40,300		Jan. 20, 1947	11.68	20,300
	Mar. 2, 1937	12.42	16,900		Jan. 31, 1947	12.64	22,800
	Mar. 17, 1937	16.06	25,000	1948	Feb. 14, 1948	14.18	25,200
1938	Oct. 9, 1937	11.50	14,900		Mar. 24, 1948	7.02	10,900
	Oct. 20, 1937	9.11	10,200	1949	Nov. 29, 1948	8.69	14,200
	Oct. 26, 1937	9.05	10,100		Dec. 25, 1948	6.83	10,500
	Oct. 28, 1937	9.12	10,200		Jan. 6, 1949	13.25	23,700
	Nov. 11, 1937	11.44	14,800		Jan. 13, 1949	12.08	21,200
	Nov. 20, 1937	11.55	15,000		Jan. 23, 1949	7.23	11,300
	Nov. 26, 1937	10.79	13,500		Feb. 1, 1949	6.85	10,600
	Dec. 18, 1937	12.11	16,200	1950	Dec. 3, 1949	6.70	10,300
	Dec. 28, 1937	12.70	17,300		Dec. 6, 1949	8.15	13,100
	Feb. 10, 1938	15.76	23,900		Dec. 10, 1949	7.50	11,800
	Apr. 23, 1938	9.47	10,900		Dec. 13, 1949	7.95	12,700
	May 25, 1938	10.26	12,500		Dec. 19, 1949	10.35	17,800
	May 31, 1938	10.98	13,900		Dec. 25, 1949	10.62	18,100
	Aug. 5, 1938	9.42	10,800		Dec. 28, 1949	9.64	16,100
1939	Dec. 30, 1938	10.13	12,200		Jan. 7, 1950	7.95	12,700
	Feb. 3, 1939	a17.37	b16,300		Jan. 19, 1950	7.57	12,000
	Feb. 15, 1939	16.38	25,200		Jan. 31, 1950	13.44	24,100
	Feb. 28, 1939	14.15	20,500		Feb. 9, 1950	15.17	27,900
	Mar. 12, 13, 1939	c15.45	b18,400		Feb. 16, 1950	15.30	28,200
1940	Feb. 10, 1940	9.87	11,800	1951	Dec. 4, 1950	6.77	10,400
1941	Nov. 1, 1940	8.20	8,720		Dec. 8, 1950	7.58	12,000
1942	Aug. 23, 1942	7.32	10,900		Jan. 14, 1951	7.08	11,000
1943	Dec. 2, 1942	7.22	10,600		Feb. 2, 1951	14.61	26,700
	Dec. 29, 1942	9.75	15,400		Feb. 8, 1951	6.87	10,000
	Jan. 7, 1943	13.06	22,700		Feb. 21, 1951	8.02	12,900
	Feb. 5, 1943	11.55	19,000		Mar. 7, 1951	7.40	11,600
	Feb. 14, 1943	9.28	14,500		Mar. 13, 1951	7.20	11,200
1944	Mar. 29, 1944	12.26	20,500		Mar. 29, 1951	7.83	12,500
	Apr. 16, 1944	8.75	13,500	1952	Dec. 15, 1951	11.0 ^c	19,000
	Sept. 29, 1944	18.21	33,600		Dec. 24, 1951	14.8 ^c	27,300
					Jan. 23, 1952	7.84	12,500
1945	Jan. 2, 1945	6.73	10,400		Feb. 4, 1952	12.8 ^c	22,800
	Feb. 14, 1945	7.76	12,400		Mar. 4, 1952	6.87	10,600
	Feb. 18, 1945	8.08	13,100		Mar. 11, 1952	8.0 ^c	13,000
	Feb. 28, 1945	7.30	11,500		Mar. 23, 1952	6.72	10,300
	Mar. 4, 1945	7.30	11,500		Mar. 25, 1952	6.78	10,400
	Apr. 17, 1945	6.62	10,200	1953	Feb. 25, 1953	8.37	13,600
1946	Dec. 12, 1945	7.56	12,000		Mar. 4, 1953	8.71	14,200
	Dec. 19, 1945	8.71	14,400	1954	Jan. 22, 1954	7.17	11,300
	Dec. 28, 1945	8.78	14,500	1955	Dec. 30, 1954	7.84	12,700
	Jan. 8, 1946	13.20	23,500		Mar. 20, 1955	14.21	25,600
	Jan. 12, 1946	13.58	24,400		Mar. 27, 1955	9.31	15,600
	Jan. 16, 1946	12.32	21,700				
	Feb. 1, 1946	7.45	11,800				

a Affected by backwater; occurred Feb. 4, 1939.
fected by backwater; occurred Mar. 6, 1939.

b Daily mean discharge.

c Af-

TENNESSEE RIVER BASIN

Peak stages and discharges of Clinch River near Scarboro, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Mar. 16, 1956	11.91	20,800	1958	Nov. 18, 1957	10.82	18,600
	Apr. 4, 1956	7.95	12,900		Nov. 26, 1957	6.82	10,600
	Apr. 16, 1956	7.30	11,600		Dec. 8, 1957	10.60	18,200
1957	Jan. 29, 1957	8.09	13,200		Dec. 20, 1957	8.50	14,000
	Feb. 2, 1957	12.31	21,600	1959	Dec. 27, 1957	12.96	23,000
	Feb. 12, 1957	15.60	28,600		Jan. 22, 1959	6.20	9,390
	Mar. 8, 1957	6.55	10,100	1960	Dec. 19, 1959	8.61	14,000

5365. White Oak Creek at Oak Ridge National Laboratory, near Oak Ridge, Tenn.

Location.--Lat 35°55'34", long 84°18'49", on right bank 500 ft southeast of Oak Ridge National Laboratory, Roane County, 1.2 miles upstream from Melton Branch, and 6 miles south of Oak Ridge.

Drainage area.--2.08 sq mi.

Gage.--Recording. Datum of gage is 775.64 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Bankfull stage.--5 ft.

Remarks.--Base for partial-duration series, 170 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950a/	July 23, 1950	2.42	195	1952	Mar. 10, 1952	2.57	221
	July 26, 1950	3.07	320		July 1, 1952	3.39	391
	Aug. 2, 1950	4.31	616		Aug. 16, 1952	2.62	230
	Aug. 16, 1950	2.32	178	1953	Feb. 21, 1953	2.26	163
	Aug. 30, 1950	3.42	397		Jan. 15, 1954	2.39	192
1951	Nov. 20, 1950	2.43	197	1954	Jan. 20, 1954	2.53	216
	Feb. 1, 1951	3.03	312		Dec. 29, 1954	3.00	291
	Mar. 6, 1951	2.32	177	1955b/	Mar. 21, 1955	2.36	180
1952	Dec. 14, 1951	2.37	187				
	Dec. 20, 1951	2.32	178				

a For period June 1 to Sept. 30, 1950.

b For period Oct. 1, 1954, to July 15, 1955.

5370. White Oak Creek below Oak Ridge National Laboratory, near Oak Ridge, Tenn.

Location.--Lat 35°54'44", long 84°18'59", on right bank 0.1 mile upstream from Melton Branch, 1 mile south of Oak Ridge National Laboratory, Roane County, and 7 miles south of Oak Ridge.

Drainage area.--3.62 sq mi.

Gage.--Recording. Datum of gage is 750.37 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 230 cfs and extended above.

Bankfull stage.--3 ft.

Remarks.--Base for partial-duration series, 280 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950a/	July 26, 1950	-	(b)	1953	Feb. 21, 1953	4.17	d303
	Aug. 2, 1950	-	(b)		Apr. 4, 1956	4.70	321
	Aug. 30, 1950	5.18	c642	1956	Dec. 13, 1956	4.82	362
	Sept. 1, 1950	4.10	284		Sept. 16, 1957	5.20	511
1951	Feb. 1, 1951	5.05	594	1957	Nov. 16, 1957	5.20	511
	Mar. 6, 1951	4.31	343		Jan. 21, 1959	4.64	302
	Mar. 29, 1951	4.15	298	1959	Aug. 5, 1959	4.80	355
1952	Dec. 14, 1951	4.31	343		June 24, 1960	4.69	318
	Dec. 20, 1951	4.36	358	1960	July 11, 1960	5.37	587
	Mar. 10, 1952	4.61	437				
	July 1, 1952	4.19	308				

a For period June 1 to Sept. 30, 1950.

b Discharge not determined but greater than 280 cfs. c May have been exceeded by flood of Aug. 2, 1950. d Maximum for period Oct. 1, 1952, to July 10, 1953.

5375. Melton Branch near Oak Ridge, Tenn.

Location.--Lat 35°54'38", long 84°18'54", on right bank 0.1 mile upstream from mouth, 1 mile south of Oak Ridge National Laboratory, Roane County, and 7 miles south of Oak Ridge, Anderson County.

Drainage area.--1.48 sq mi.

Gage.--Recording. Datum of gage is 751.90 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 70 cfs and extended above.

Bankfull stage.--5 ft.

Remarks.--Base for partial-duration series, 86 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Feb. 3, 1956	4.09	98	1958	Dec. 7, 1957	3.97	90
	Apr. 4, 1956	4.11	98		Jan. 21, 1959	4.67	121
	Apr. 15, 1956	3.97	93	1959	Mar. 27, 1959	4.24	104
1957	Dec. 4, 1956	3.89	90		Dec. 18, 1959	3.87	86
	Feb. 1, 1957	3.83	87	1960	June 24, 1960	4.48	113
	Sept. 16, 1957	4.58	117		July 11, 1960	5.45	152
1958	Nov. 16, 1957	4.64	120				

5382. Poplar Creek near Oliver Springs, Tenn.

Location.--Lat 36°01'20", long 84°18'37", at bridge on State Highway 61, 2.5 miles southeast of Oliver Springs, and 4 miles upstream from Indian Creek.

Drainage area.--55.9 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 765 ft (from topographic map).

Stage-discharge relation.--Not defined.

Remarks.--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 1, 1954	12.11	-	1957	February 1957	12.63	-
1955	Mar. 21, 1955	14.76	-	1958	Nov. 17, 1957	15.16	-
				1959	Jan. 22, 1959	15.15	-
1956	Apr. 16, 1956	13.64	-	1960	Aug. 10, 1960	13.27	-

5383. Rock Creek near Sunbright, Tenn.

Location.--Lat 36°11'54", long 84°39'39", at bridge on U.S. Highway 27 at Pilot Mountain, 3.5 miles south of Sunbright, Morgan County.

Drainage area.--5.54 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Defined by current-meter measurements below 272 cfs and extended on basis of slope-conveyance measurements at 1,060 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Rock Creek near Sunbright, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	6.21	1,560	1958	Nov. 17, 1957	5.78	1,260
1956	Feb. 18, 1956	4.76	715	1959	Feb. 14, 1959	4.39	570
1957	Jan. 31, 1957	5.48	1,060	1960	Dec. 18, 1959	4.71	694

5385. Emory River near Wartburg, Tenn.

Location.--Lat 36°06'46", long 84°36'54", 50 ft downstream from highway bridge on Wartburg-Lancing road, 1.1 miles downstream from Rock Creek, 1½ miles northwest of Wartburg, Morgan County, 6.1 miles upstream from Obed River, and at mile 34.5.

Drainage area.--83.2 sq mi.

Gage.--Recording prior to Oct. 1, 1957; crest-stage gage thereafter. Datum of gage 1,003.06 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 7,700 cfs and extended above.

Bankfull stage.--17.5 ft.

Historical data.--Flood of March 1929 is highest known since about the middle of the nineteenth century, from reports by Tennessee Valley Authority and newspaper reports.

Remarks.--Only annual peaks are shown subsequent to Sept. 30, 1957. Base for partial-duration series, 3,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	March 1929	32	30,000	1949	Dec. 25, 1948	11.50	3,780
1935	Mar. 12, 1935	12.44	4,330		Jan. 5, 1949	18.79	9,020
	Apr. 6, 1935	12.47	4,380		Jan. 22, 1949	12.08	4,130
1936	Mar. 24, 1936	14.10	5,350	1950	Dec. 13, 1949	12.49	4,370
	Mar. 28, 1936	13.32	4,790		Jan. 6, 1950	15.04	6,060
	Apr. 6, 1936	15.02	6,000		Jan. 30, 1950	15.95	6,760
					Feb. 9, 1950	12.30	4,300
1937	Dec. 6, 1936	16.95	7,600		May 12, 1950	13.78	5,250
	Jan. 2, 1937	18.77	9,210	1951	Feb. 1, 1951	24.42	16,600
	Jan. 15, 1937	11.87	3,910		Feb. 21, 1951	11.37	3,750
	Jan. 25, 1937	14.43	5,560	1952	Dec. 8, 1951	-	-
1938	Apr. 8, 1938	9.75	2,810		Dec. 15, 1951	18.74	8,980
					Dec. 21, 1951	-	-
1939	Feb. 3, 1939	25.62	18,700		Mar. 11, 1952	13.22	4,880
	Feb. 15, 1939	13.60	5,070	1953	Feb. 21, 1953	11.41	3,780
	Feb. 28, 1939	13.67	5,140	1954	Jan. 16, 1954	15.47	6,410
1940	Mar. 30, 1940	11.72	3,900		Jan. 21, 1954	16.78	7,380
1941	Apr. 4, 1941	13.68	5,140	1955	Dec. 29, 1954	15.86	6,700
1942	Mar. 17, 1942	12.61	4,440		Mar. 18, 1955	11.88	4,050
1943	Dec. 29, 1942	15.74	6,560		Mar. 22, 1955	22.18	12,900
	Mar. 13, 1943	11.88	4,020	1956	Dec. 4, 1955	11.25	3,690
	Apr. 19, 1943	11.57	3,840		Jan. 30, 1956	12.01	4,130
1944	Feb. 17, 1944	13.30	4,680		Feb. 3, 1956	12.00	4,120
	Feb. 29, 1944	13.64	5,070		Feb. 18, 1956	14.22	5,540
	Sept. 29, 1944	24.10	16,000		Mar. 14, 1956	11.12	3,620
1945	Feb. 17, 1945	11.23	3,600		Apr. 16, 1956	11.36	3,750
				1957	Dec. 13, 1956	15.25	6,260
1946	Jan. 7, 1946	17.46	7,950		Jan. 28, 1957	21.42	11,900
1947	Jan. 20, 1947	12.16	4,180		Feb. 1, 1957	11.16	3,640
					Apr. 4, 1957	13.17	4,850
1948	Feb. 13, 1948	21.88	12,500	1958	Nov. 18, 1957	22.81	13,900
				1959	Jan. 21, 1959	16.00	6,800
				1960	Dec. 19, 1959	17.70	8,110
1949	Nov. 28, 1948	15.05	6,030				

5386. Obed River at Crossville, Tenn.

Location.--Lat 35°57'27", long 85°03'00", at bridge on U.S Highway 70S, 0.9 mile west of junction of U.S. Highways 70S and 70N, at northwest city limits of Crossville, Cumberland County.

Drainage area.--12.0 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Not defined.

Remarks.--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	8.78	-	1958	Nov. 18, 1957	7.61	-
1956	Jan. 30, 1956	7.22	-	1959	July 27, 1959	5.85	-
1957	December 1956	8.18	-	1960	Dec. 19, 1959	7.30	-

5387. Little Obed River near Crossville, Tenn.

Location.--Lat 35°58'31", long 85°02'06", at bridge on State Highway 28, 2.0 miles north of intersection of State Highway 28 and U.S. Highway 70 in Crossville, Cumberland County.

Drainage area.--4.71 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Not defined.

Remarks.--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	8.00	-	1958	Dec. 7, 1957	3.76	-
1956	Feb. 18, 1956	5.46	-	1959	Jan. 22, 1959	4.81	-
1957	December 1956	4.84	-	1960	Dec. 19, 1959	6.77	-

5388. Obed River tributary near Crossville, Tenn.

Location.--Lat 35°58'59", long 85°03'31", at culvert under U.S. Highway 70N at northwest city limits of Crossville, Cumberland County, 2.3 miles northwest of junction with U.S. Highway 70S.

Drainage area.--0.717 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Not defined.

Remarks.--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	6.03	-	1958	Nov. 18, 1957	4.65	-
1956	July 17, 1956	3.76	-	1959	Jan. 22, 1959	(a)	-
1957	January 1957	3.66	-	1960	Dec. 19, 1959	3.82	-

a Gage height not determined but less than 3.6 ft.

5390. Daddys Creek near Grassy Cove, Tenn.
(Published as "Daddy Creek" 1925-30, and as "near Crab Orchard" in 1926)

Location.--Lat 35°53'26", long 84°56'16", at bridge on State Highway 68, 3.6 miles northwest of Grassy Cove, Cumberland County, 5.6 miles upstream from Bird Creek, and at mile 27.0.

Drainage area.--51.2 sq mi.

Gage.--Nonrecording. Altitude of gage is 1,605 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 900 cfs and extended on basis of slope-area measurement at 14,600 cfs.

Bankfull stage.--12 ft.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Aug. 24, 1926	16.0	3,430	1929	Mar. 23, 1929	26.3	14,600
1927	Dec. 25, 1926	18.4	4,150	1930	Nov. 17, 1929	25.55	1,480
1928	Nov. 17, 1927	16.1	3,460				

5395. Daddys Creek near Crab Orchard, Tenn.
(Published as "Daddy Creek" prior to 1953)

Location.--Lat 35°55'33", long 84°54'47", on left bank 0.6 mile upstream from North Creek, 1.5 miles downstream from bridge on U.S. Highway 70, 1.5 miles downstream from Bird Creek, and 2 miles northwest of Crab Orchard, Cumberland County.

Drainage area.--93.5 sq mi.

Gage.--Nonrecording prior to May 17, 1934; recording thereafter. Datum of gage is 1,569.19 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 9,800 cfs and extended above.

Bankfull stage.--10 ft.

Remarks.--Only annual peaks are shown prior to 1935. Base for partial-duration series, 1,700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	March 1929	30	22,000	1938	Apr. 8, 1938	7.91	1,890
1931	Mar. 28, 1931	7.00	1,440	1939	Feb. 3, 1939	20.00	10,200
1932	Jan. 30, 1932	10.2	2,790		Feb. 13, 1939	13.86	5,610
1933	Feb. 14, 1933	13.75	6,120		Feb. 28, 1939	10.51	3,320
1934	Mar. 3, 1934	12.2	4,760		Mar. 6, 1939	7.57	1,720
1935	Feb. 26, 1935	7.90	1,850	1940	Feb. 10, 1940	6.9	1,400
	Mar. 12, 1935	11.45	4,120	1941	Apr. 4, 1941	10.40	3,260
	Apr. 6, 1935	9.38	2,690	1942	Mar. 17, 1942	9.61	2,710
1936	Nov. 12, 1935	7.92	1,850		Aug. 18, 1942	9.30	2,540
	Jan. 9, 1936	8.47	2,150		Aug. 23, 1942	9.28	2,540
	Feb. 4, 1936	8.02	1,900	1943	Dec. 29, 1942	15.37	6,380
	Mar. 24, 1936	11.02	3,800	1944	Feb. 17, 1944	11.63	3,870
	Apr. 2, 1936	8.30	2,050		Feb. 27, 1944	8.07	1,930
	Apr. 6, 1936	13.60	5,990		Mar. 7, 1944	7.63	1,700
1937	Dec. 6, 1936	12.18	4,510		Mar. 28, 1944	10.50	3,210
	Dec. 31, 1936	10.29	3,250	1945	Dec. 29, 1944	9.00	2,380
	Jan. 2, 1937	15.50	7,000		Jan. 1, 1944	8.04	1,880
	Jan. 15, 1937	8.96	2,470		Feb. 17, 1945	11.17	3,630
	Jan. 18, 1937	8.43	2,140				
	Jan. 25, 1937	10.56	3,430				
	Feb. 9, 1937	8.33	2,090				

Peak stages and discharges of Daddys Creek near Crab Orchard, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Feb. 22, 1945	7.65	1,700	1952	Jan. 22, 1952	8.48	2,120
	May 10, 1945	7.76	1,790		Mar. 3, 1952	9.01	2,390
1946	Jan. 7, 1946	12.34	4,320		Mar. 11, 1952	14.02	5,440
	Jan. 11, 1946	7.76	1,790	1953	Feb. 12, 1953	9.95	2,900
	Feb. 10, 1946	8.88	2,330		Feb. 21, 1953	11.15	3,600
1947	Jan. 2, 1947	8.36	2,060	1954	Jan. 16, 1954	13.36	5,010
	Jan. 20, 1947	10.44	3,170		Jan. 21, 1954	16.10	6,880
1948	Feb. 13, 1948	21.30	11,600		May 14, 1954	8.27	2,020
	Mar. 7, 1948	9.32	2,560	1955	Dec. 29, 1954	13.23	4,930
1949	Nov. 19, 1948	7.63	1,710		Feb. 6, 1955	9.42	2,610
	Nov. 28, 1948	13.87	5,350		Mar. 22, 1955	17.53	8,030
	Dec. 25, 1948	9.88	2,860	1956	Dec. 4, 1955	9.60	2,710
	Jan. 5, 1949	16.38	7,080		Jan. 30, 1956	11.11	3,580
	Jan. 22, 1949	9.08	2,420		Feb. 3, 1956	12.09	4,190
1950	Dec. 13, 1949	10.23	3,070		Feb. 18, 1956	12.69	4,580
	Jan. 6, 1950	12.98	4,770		Apr. 4, 1956	8.10	1,930
	Jan. 19, 1950	7.68	1,730		Apr. 15, 16, 1956	10.70	3,330
	Jan. 30, 1950	15.75	6,620	1957	Dec. 13, 1956	15.27	6,290
	Feb. 9, 1950	10.09	2,980		Jan. 28, 1957	10.44	3,170
	Mar. 13, 1950	8.30	2,030		Jan. 31 or Feb. 1, 1957	13.96	5,400
	Mar. 28, 1950	7.68	1,730		Feb. 7, 1957	7.91	1,840
	May 12, 1950	8.32	2,040		Apr. 4, 1957	7.89	1,830
1951	Dec. 7, 1950	8.09	1,920		May 22, 1957	8.23	2,000
	Jan. 15, 1951	7.93	1,850	1958	Nov. 18, 1957	15.82	6,670
	Feb. 1, 1951	14.81	5,970		Dec. 7, 1957	9.72	2,780
	Feb. 21, 1951	12.01	4,140		Dec. 20, 1957	10.34	3,120
1952	Mar. 29, 1951	9.38	2,590		Apr. 25, 1958	8.83	2,300
	Dec. 15, 1951	12.65	4,550		Apr. 28, 1958	9.32	2,560
	Dec. 21, 1951	10.59	3,260		May 6, 1958	8.62	2,190

5400. Emory River at Deermont, Tenn.

Location.--Lat 36°01'39", long 84°34'47", on county highway bridge at Deermont siding on Southern Railway, 0.4 mile upstream from Crab Orchard Creek, 2.0 miles downstream from Crooked Fork, 3.2 miles northwest of Oakdale, Morgan County, and at mile 21.8.

Drainage area.--704 sq mi.

Gage.--Nonrecording. Datum of gage is 791.7 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 9,500 cfs and extended on basis of discharge record at Oakdale.

Historical data.--Flood of Mar. 23, 1929, is highest known since about middle of the nineteenth century, from reports by Tennessee Valley Authority.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1921	Apr. 16, 1921	12.0	24,800	1926	Oct. 25, 1925	13.9	32,200
1922	Mar. 1, 1922	16.0	41,100	1927	Dec. 25, 1926	18.2	51,300
1923	Mar. 11, 1923	14.3	33,800				
1924	May 28, 1924	11.8	24,100	1929	Mar. 23, 1929	35.7	a185,000
1925	Feb. 15, 1925	12.0	24,800				

a Estimated.

5405. Emory River at Oakdale, Tenn.
(Published as "Emery" River prior to 1935, and "at Harriman"
prior to Oct. 1, 1929)

Location.--Lat 35°58'59", long 84°33'29", at Oakdale, Morgan County, 1,000 ft downstream from highway bridge and 1,100 ft downstream from Mud Lick Creek.

Drainage area.--764 sq mi.

Gage.--Nonrecording prior to Oct. 1, 1929; recording thereafter. At site 5.8 miles downstream at datum 45.60 ft lower prior to Oct. 1, 1929. All stages shown herein have been adjusted to present site and datum. Datum of gage is 763.38 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 85,000 cfs and extended above on basis of logarithmic plotting.

Bankfull stage.--12 ft.

Historical data.--Flood of Mar. 23, 1929, is the highest known since at least 1857, from reports by Tennessee Valley Authority.

Remarks.--Only annual peaks are shown prior to 1930. Base for partial-duration series, 19,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	June 29, 1928	24.2	63,800	1945	Jan. 1, 1945	14.20	19,300
1929	Mar. 23, 1929	42.3	195,000		Feb. 17, 1945	16.65	28,100
1930	Nov. 17, 1929	15.7	26,400	1946	Jan. 7, 1946	22.2	52,900
	Feb. 13, 1930	14.34	21,400		Feb. 10, 1946	14.38	19,900
1931	Mar. 28, 1931	11.20	12,700	1947	Jan. 3, 1947	14.18	19,200
1932	Dec. 14, 1931	14.74	22,800		Jan. 20, 1947	16.44	27,500
	Jan. 30, 1932	16.52	29,300	1948	Feb. 13, 1948	31.00	101,000
	Feb. 3, 1932	18.2	36,000	1949	Nov. 28, 1948	20.42	44,400
1933	Dec. 28, 1932	15.16	24,800		Dec. 25, 1948	15.63	24,300
	Feb. 15, 1933	14.40	22,100		Jan. 5, 1949	27.85	82,800
	Feb. 20, 1933	14.04	20,700		Jan. 22, 1949	15.63	24,300
1934	Jan. 7, 1934	17.65	33,600	1950	Dec. 13, 1949	15.50	23,800
	Feb. 26, 1934	15.68	19,400		Jan. 6, 1950	19.9	42,000
	Mar. 3, 1934	19.16	40,100		Jan. 30, 1950	22.25	53,200
	Mar. 24, 1934	15.46	25,600		Feb. 2, 1950	17.16	30,300
1935	Mar. 12, 1935	16.83	28,900		Feb. 9, 1950	16.26	26,800
	Apr. 6, 1935	17.72	32,700		May 12, 1950	16.20	26,600
1936	Mar. 24, 1936	17.60	31,900	1951	Feb. 1, 1951	26.90	77,500
	Apr. 6, 1936	20.66	45,100		Feb. 21, 1951	16.92	29,400
1937	Dec. 8, 1936	19.92	41,600		Mar. 29, 1951	14.42	20,200
	Dec. 31, 1936	14.66	21,000	1952	Dec. 8, 1951	15.79	25,000
	Jan. 2, 1937	25.46	67,700		Dec. 15, 1951	22.82	56,000
	Jan. 15, 1937	15.75	25,000		Dec. 21, 1951	19.49	40,200
	Jan. 25, 1937	18.02	33,500		Jan. 22, 1952	16.65	28,300
1938	Apr. 8, 1938	12.68	14,900		Mar. 4, 1952	16.25	26,800
1939	Feb. 3, 1939	30.9	100,000		Mar. 11, 1952	19.45	40,000
	Feb. 15, 1939	18.62	36,300	1953	Feb. 12, 1953	14.06	19,100
	Feb. 28, 1939	17.6	32,100		Feb. 21, 1953	16.32	27,000
1940	Mar. 30, 1940	14.50	20,300	1954	Jan. 16, 1954	18.88	37,500
1941	Apr. 4, 1941	17.26	30,900		Jan. 21, 1954	24.18	62,900
1942	Mar. 17, 1942	16.16	26,500	1955	Dec. 29, 1954	21.37	48,900
1943	Dec. 29, 1942	23.60	59,900		Feb. 6, 1955	14.70	21,100
	Mar. 13, 1943	14.50	20,300		Mar. 22, 1955	27.30	79,700
	Apr. 23, 1943	15.47	23,800	1956	Jan. 30, 1956	18.42	32,100
1944	Feb. 18, 1944	19.45	39,800		Feb. 3, 1956	18.07	30,700
	Feb. 29, 1944	16.76	28,900		Feb. 18, 1956	20.58	41,600
	Mar. 29, 1944	14.22	19,300		Apr. 4, 1956	14.48	19,000
	Sept. 29, 1944	23.30	58,400		Apr. 16, 1956	16.40	24,600
				1957	Dec. 13, 1956	20.69	42,100
					Jan. 28, 1957	22.86	43,300
					Feb. 2, 1957	18.15	31,000

Peak stages and discharges of Emory River at Oakdale, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	Apr. 4, 1957	14.96	20,300	1958	May 6, 1958	15.88	23,000
1958	Nov. 19, 1957	26.92	76,700	1959	Jan. 22, 1959	18.76	33,500
	Dec. 7, 1957	16.30	24,300		Dec. 19, 1959	23.40	56,300
	Dec. 20, 1957	17.51	28,600				

5415. Whites Creek near Glen Alice, Tenn.
(Published as "White Creek" prior to 1956)

Location.--Lat 35°47'49", long 84°45'37", 2,200 ft upstream from Southern Railway bridge and 1.2 miles southwest of Glen Alice, Roane County.

Drainage area.--123 sq mi.

Gage.--Recording prior to Oct. 1, 1955; crest-stage gage thereafter. Datum of gage is 758.62 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 14,400 cfs and extended above on basis of contracted-opening measurement at 51,000 cfs.

Remarks.--Only annual peaks are shown subsequent to 1955. Base for partial-duration series, 4,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Mar. 23, 1929	27.1	66,000	1948	Feb. 13, 1948	18.00	16,000
1935	Mar. 12, 1935	12.40	8,020	1949	Nov. 6, 1948	12.62	6,660
	Apr. 6, 1935	11.42	6,310		Nov. 19, 1948	12.07	5,980
1936	Jan. 9, 1936	11.74	6,410		Nov. 28, 1948	17.58	15,200
	Mar. 24, 1936	16.60	14,000		Jan. 5, 1949	19.45	19,000
	Mar. 27, 1936	11.84	6,540		July 18, 1949	11.28	5,090
	Apr. 2, 1936	11.58	6,280	1950	Dec. 13, 1949	12.76	6,840
	Apr. 6, 1936	12.17	7,100		Jan. 6, 1950	11.66	5,510
1937	Dec. 6, 1936	11.88	6,680		Jan. 30, 1950	17.05	14,000
	Jan. 2, 1937	17.6	15,600		Feb. 9, 1950	11.19	9,990
	Jan. 24, 1937	12.88	8,110	1951	Feb. 1, 1951	17.06	14,000
1938	Apr. 8, 1938	11.42	5,920		Feb. 21, 1951	12.10	5,940
					Mar. 29, 1951	12.53	6,440
1939	Feb. 3, 1939	17.24	15,000	1952	Dec. 14, 1951	16.24	12,300
	Feb. 15, 1939	11.87	6,620		Dec. 20, 1951	12.94	6,940
	Feb. 28, 1939	14.82	11,100		Mar. 10, 1952	18.35	16,700
1940	Feb. 10, 1940	8.12	2,410	1953	Feb. 12, 1953	11.57	5,370
1941	Apr. 4, 1941	14.13	9,970	1954	Feb. 21, 1953	14.02	8,460
1942	Mar. 17, 1942	10.59	4,650		Jan. 16, 1954	15.52	11,000
1943	Dec. 28, 1942	16.40	13,200	1955	Jan. 21, 1954	16.18	12,200
	Feb. 4, 1943	10.80	4,860		Dec. 29, 1954	17.40	14,700
1944	Feb. 17, 1944	13.66	8,390		Feb. 6, 1955	11.92	5,740
	Mar. 28, 1944	12.46	6,610		Mar. 22, 1955	18.63	17,300
	Sept. 29, 1944	13.61	8,220	1956	Mar. 14, 1956	15.40	11,000
1945	Feb. 17, 1945	11.77	5,780	1957	Jan. 28, 1957	13.67	8,000
				1958	Nov. 18, 1957	25.1	51,000
				1959	Jan. 22, 1959	16.58	13,300
1946	Jan. 7, 1946	16.18	12,900	1960	Dec. 19, 1959	11.64	5,440
1947	Jan. 20, 1947	13.44	7,960				

5420. Whites Creek at Glen Alice, Tenn.
(Published as "White Creek" prior to 1956)

Location.--Lat 35°47'40", long 84°44'51", 1,000 ft downstream from bridge on U.S. Highway 27, 0.5 mile downstream from Black Creek, and 0.8 mile southwest of Glen Alice, Roane County.

Drainage area.--135 sq mi.

Gage.--Nonrecording. Datum of gage is 753.76 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 2,800 cfs and extended on basis of contracted-opening measurement at 51,400 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Mar. 23, 1929	18.7	68,000	1935	Feb. 14, 1935	8.40	10,600
1931	Mar. 28, 1931	6.00	4,010	1934	Mar. 2, 1934	10.70	19,400
1932	Jan. 30, 1932	6.7	5,720	1958	Nov. 18, 1957	16.5	51,400

5425. Piney River at Spring City, Tenn.

Location.--Lat 35°41'59", long 84°51'17", at bridge on U.S. Highway 27, 0.5 mile northeast of Spring City.

Drainage area.--98.3 sq mi.

Gage.--Nonrecording at site 100 ft downstream at datum 6.32 ft higher prior to to May 24, 1954; crest-stage gage thereafter. Datum of gage is 749.65 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 5,700 cfs and extended on basis of contracted-opening measurement at 32,200 cfs.

Bankfull stage.--13 ft.

Historical data.--Flood of Nov. 18, 1957, is the highest known since at least 1929.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	June 4, 1928	6.0	7,290	1956	Feb. 18, 1956	14.04	11,100
1929	Mar. 23, 1929	8.25	16,500	1957	December 1956	15.17	15,800
1930	Mar. 7, 1930	5.5	5,740	1958	Nov. 18, 1957	18.00	32,200
1931	Mar. 28, 1931	4.6	3,250	1959	Jan. 22, 1959	13.68	9,700
1955	December 1954	13.75	10,000	1960	-	(c)	(c)

a Maximum for period October to April.

b Affected by storage above railroad fill.

c Peak stage did not reach bottom of gage; discharge less than 4,300 cfs.

5432. Ten Mile Creek near Decatur, Tenn.

Location.--Lat 35°37'05", long 84°41'30", at bridge on State Highway 68, 10.5 miles northeast of Decatur, Meigs County.

Drainage area.--26.4 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 740 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,830 cfs and extended to 3,400 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Ten Mile Creek near Decatur, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 21, 1954	11.41	2,500	1957	Sept. 16, 1957	13.75	-
1955	March 1955	10.05	1,530	1958	Apr. 29, 1958	12.44	3,400
				1959	Mar. 27, 1959	10.54	1,840
1956	February 1956	11.63	2,690	1960	Jan. 12, 1960	8.51	770

5435. Sewee Creek near Decatur, Tenn.

Location.--Lat 35°34'53", long 84°44'53", a third of a mile downstream from bridge on State Highway 58, half a mile downstream from Dry Fork, 5 miles north of Decatur, Meigs County, and at mile 5.7.

Drainage area.--117 sq mi.

Gage.--Recording. Datum of gage is 694.32 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 6,700 cfs and extended on basis of contracted-opening measurement at 29,000 cfs.

Bankfull stage.--11 ft.

Remarks.--Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Mar. 12, 1935	10.0	4,320	1944	Sept. 30, 1944	6.28	2,320
	Apr. 6, 1935	7.14	2,670				
	May 7, 1935	6.45	2,320	1945	Feb. 13, 1945	8.99	3,700
1936	Nov. 12, 1935	6.65	2,420		Feb. 17, 1945	8.18	3,270
	Jan. 9, 1936	9.23	3,810		Mar. 4, 1945	6.46	2,420
	Jan. 19, 1936	7.66	2,970	1946	Jan. 7, 1946	23.97	29,000
	Feb. 4, 1936	8.81	3,570		Jan. 11, 1946	7.90	3,120
	Mar. 24, 1936	14.23	8,330		Feb. 10, 1946	7.00	2,670
	Apr. 2, 1936	9.16	3,810				
	Apr. 6, 1936	11.80	5,720	1947	Jan. 15, 1947	6.84	2,590
	July 4, 1936	5.87	2,080		Jan. 18, 1947	6.65	2,500
					Jan. 20, 1947	11.93	5,780
1937	Jan. 2, 1937	12.45	6,290				
	Jan. 15, 1937	7.71	3,100	1948	Feb. 14, 1948	14.84	9,360
	Jan. 18, 1937	8.91	3,760		Mar. 27, 1948	5.69	2,020
	Jan. 25, 1937	11.07	5,150				
	Feb. 9, 1937	12.80	6,700	1949	Nov. 19, 1948	9.61	4,060
1938	Mar. 10, 1938	7.48	2,920		Nov. 28, 1948	14.74	9,200
	Mar. 20, 1938	5.69	2,010		Jan. 5, 1949	15.57	10,600
	Apr. 8, 1938	8.68	3,540		Jan. 22, 1949	6.99	2,680
	May 31, 1938	6.79	2,560		Mar. 31, 1949	5.80	2,070
	July 22, 1938	9.74	4,110		Apr. 28, 1949	5.93	2,140
	Aug. 2, 1938	7.02	2,660		July 18, 1949	13.76	7,810
1939	Jan. 30, 1939	6.00	2,180	1950	Oct. 31, 1949	6.70	2,520
	Feb. 3, 1939	12.21	6,080		Jan. 19, 1950	5.77	2,060
	Feb. 11, 1939	9.58	4,040		Jan. 31, 1950	7.76	3,050
	Feb. 15, 1939	7.65	2,970		Feb. 2, 1950	7.73	3,040
	Feb. 28, 1939	8.68	3,540		Feb. 9, 1950	6.04	2,190
	Mar. 6, 1939	13.90	7,960		Mar. 13, 1950	8.17	3,260
1940	Mar. 14, 1940	4.57	1,600	1951	Feb. 1, 1951	15.07	9,730
1941	July 5, 1941	5.53	1,970		Mar. 29, 1951	13.73	7,770
1942	Feb. 17, 1942	6.19	2,270	1952	Dec. 15, 1951	7.71	3,020
	Aug. 5, 1942	8.2	3,270		Dec. 21, 1951	8.48	3,420
1943	Dec. 2, 1942	6.17	2,270		Mar. 11, 1952	11.45	5,350
	Dec. 28, 1942	14.53	9,000		Mar. 23, 1952	6.09	2,220
	Feb. 4, 1943	7.78	3,070	1953	Feb. 12, 1953	9.69	4,100
	Apr. 19, 1943	6.10	2,220		Feb. 21, 1953	11.53	5,420
1944	Feb. 9, 1944	6.21	2,270	1954	Jan. 16, 1954	9.15	3,580
	Feb. 18, 1944	6.83	2,570		Jan. 21, 1954	12.58	6,380
	Feb. 27, 1944	8.12	3,220		Mar. 26, 1954	6.48	2,360
	Mar. 29, 1944	9.90	4,240	1955	Dec. 29, 1954	9.71	3,900
					Feb. 6, 1955	5.98	2,160

Peak stages and discharges of Sewee Creek near Decatur, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 22, 1955	8.39	3,220	1958	Nov. 18, 1957	13.82	7,650
	Apr. 6, 1955	7.23	2,700		Dec. 28, 1957	7.47	2,800
1956	Feb. 3, 1956	12.87	6,360		Apr. 25, 1958	7.85	3,010
	Feb. 17, 1956	5.96	2,010		Apr. 29, 1958	14.50	8,760
	Mar. 16, 1956	5.95	2,000	1959	Jan. 22, 1959	9.34	3,880
					Mar. 27, 1959	10.33	4,480
1957	Dec. 14, 1956	8.38	3,310		Apr. 20, 1959	6.26	2,160
	Jan. 28, 1957	8.83	3,560	1960	Dec. 19, 1959	6.97	2,520
	Feb. 1, 1957	13.22	6,790		Feb. 18, 1960	6.23	2,140
	Apr. 5, 1957	6.63	2,340				
	Apr. 8, 1957	9.75	4,130				
	Sept. 16, 1957	16.85	13,000				

5440. Tennessee River at Breedenton, Tenn.

Location.--Lat 35°32'47", long 84°48'02", at Breedenton, Meigs County, 1½ miles downstream from Sewee Creek, 2¼ miles north of Decatur, 48 miles upstream from Chickamauga Dam, and at mile 523.2.

Drainage area.--17,460 sq mi, approximately.

Gage.--Nonrecording prior to Apr. 23, 1934; recording thereafter. Discharge records discontinued Feb. 29, 1940, when station became affected by backwater from Chickamauga Dam. Datum of gage is 666.22 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Flow partly regulated by Norris Lake since June 1935. Base for partial-duration series, 87,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1934	Mar. 6, 1934	23.9	170,000	1937	Jan. 4, 1937	23.22	160,000
1935	Mar. 14, 1935	21.46	146,000		Jan. 20, 1937	19.95	129,000
	Mar. 28, 1935	23.3	164,000		Jan. 26, 1937	18.50	116,000
	Apr. 7, 1935	19.28	127,000		Feb. 10, 1937	20.30	132,000
1936	Jan. 10, 1936	21.60	145,000	1938	July 25, 1938	15.52	89,500
	Jan. 21, 1936	23.97	168,000				
	Feb. 6, 1936	21.46	143,000	1939	Feb. 4, 1939	21.42	140,000
	Mar. 29, 1936	27.70	205,000		Feb. 16, 1939	22.40	150,000
	Apr. 4, 1936	20.18	131,000		Mar. 1, 1939	16.10	94,300
	Apr. 8, 1936	25.60	184,000		Mar. 8, 1939	18.83	117,000

5445. Richland Creek near Dayton, Tenn.

(Published as "at Dayton" 1927-31)

Location.--Lat 35°30'17", long 85°01'20", 0.4 mile upstream from bridge on State Highway 30 and 1.0 mile northwest of Dayton, Rhea County.

Drainage area.--50.2 sq mi.

Gage.--Nonrecording prior to Oct. 1, 1931; recording June 1, 1934, to Sept. 30, 1955; crest-stage gage since Oct. 1, 1955. At site 1 mile downstream at datum 43.61 ft lower prior to Oct. 1, 1931. Datum of gage is 728.59 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 4,600 cfs and extended on basis of contracted-opening measurement at 11,000 cfs.

Bankfull stage.--5 ft (Tennessee Valley Authority).

Historical data.--Floods of 1903, 1916, and 1957 are the greatest known floods in the past 90 years, from reports by Tennessee Valley Authority.

Remarks.--Only annual peaks are shown prior to 1935 and subsequent to 1955. Base for partial-duration series, 1,300 cfs.

Peak stages and discharges of Richland Creek near Dayton, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1903	Feb. 27, 1903	-	a14,000	1945	Feb. 17, 1945	4.56	1,770
1916	July 9, 1916	-	a13,500		July 30, 1945	5.40	2,760
1928	June 4, 1928	6.50	4,540	1946	Dec. 4, 1945	4.48	1,720
1929	Mar. 23, 1929	8.0	7,060		Jan. 7, 1946	9.08	9,000
1930	Nov. 17, 1929	5.30	2,560		Jan. 11, 1946	4.13	1,470
1931	Mar. 28, 1931	4.50	1,450		Feb. 10, 1946	4.03	1,360
1935	Mar. 12, 1935	5.28	2,580	1947	Jan. 15, 1947	4.12	1,450
	Apr. 5, 1935	4.30	1,510		Jan. 20, 1947	5.23	2,590
1936	Jan. 9, 1936	5.28	2,580	1948	Feb. 13, 1948	8.15	7,100
	Feb. 4, 1936	4.53	1,760		Mar. 7, 1948	4.37	1,510
	Mar. 24, 1936	4.92	2,140	1949	Nov. 6, 1948	6.05	3,400
	Mar. 27, 1936	5.10	2,360		Nov. 19, 1948	5.57	2,730
	Apr. 6, 1936	4.76	1,980		Nov. 28, 1948	7.35	5,530
1937	Dec. 7, 1936	4.44	1,660		Jan. 5, 1949	8.15	7,100
	Jan. 2, 1937	7.27	5,100		July 18, 1949	5.25	2,360
	Jan. 15, 1937	4.34	1,560	1950	Oct. 17, 1949	6.29	3,760
	Jan. 18, 1937	4.31	1,510		Jan. 6, 1950	4.83	1,910
	Jan. 25, 1937	5.70	3,060		Jan. 30, 1950	5.40	2,530
	Feb. 9, 1937	6.70	4,300		Feb. 1, 1950	4.53	1,640
1938	Mar. 10, 1938	4.23	1,480		Mar. 13, 1950	4.58	1,680
	Apr. 8, 1938	5.06	2,330	1951	Dec. 7, 1950	4.86	1,940
	July 23, 1938	4.88	2,150		Feb. 1, 1951	5.90	3,170
1939	Feb. 3, 1939	6.30	4,010		Mar. 29, 1951	5.85	3,100
	Feb. 15, 1939	4.70	1,930	1952	Dec. 14, 1951	5.40	2,530
	Feb. 28, 1939	5.75	3,230		Dec. 20, 1951	4.68	1,770
	Mar. 6, 1939	4.45	1,670		Mar. 10, 1952	8.90	8,600
1940	Feb. 18, 1940	3.89	1,200	1953	Feb. 12, 1953	5.88	3,140
1941	Apr. 4, 1941	4.60	1,820		Feb. 21, 1953	5.90	3,170
	July 5, 1941	7.00	5,080	1954	Jan. 16, 1954	5.37	2,490
1942	Dec. 23, 1941	3.93	1,240		Jan. 21, 1954	7.26	5,370
1943	Dec. 28, 1942	8.80	8,400	1955	Dec. 29, 1954	6.98	4,880
	Feb. 5, 1943	4.27	1,480		Feb. 6, 1955	5.09	2,180
1944	Feb. 17, 1944	4.80	2,040		Mar. 22, 1955	5.74	2,950
	Feb. 27, 1944	4.05	1,320		Apr. 6, 1955	5.18	2,280
	Mar. 28, 1944	5.68	3,160	1956	Mar. 14, 1956	8.0	6,650
	June 9, 1944	5.40	2,760		December 1956	8.60	7,830
1945	Feb. 13, 1945	4.16	1,400	1957	Nov. 18, 1957	10.2	11,000
				1958	Jan. 21, 1959	7.16	5,150
				1959	Feb. 5, 1960	5.38	2,510
				1960			

a From reports by Tennessee Valley Authority.

5450. Hiwassee River at Presley, Ga.

Location.--Lat 34°54'17", long 83°43'01", on left bank 0.1 mile downstream from Cynth Creek, 0.5 mile southeast of Presley, Towns County, 1.4 miles upstream from Hightower Creek, and at mile 133.9.

Drainage area.--45.5 sq mi.

Gage.--Recording. Datum of gage is 1,932.69 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 3,000 cfs and extended on basis of slope-area and contracted-opening measurements at gage heights 12.80 and 15.24 ft, respectively.

Bankfull stage.--7 ft.

Remarks.--Base for partial-duration series, 800 cfs.

TENNESSEE RIVER BASIN

Peak stages and discharges of Hiwassee River at Presley, Ga.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Feb. 6, 1942	5.48	925	1951	Dec. 7, 1950	7.10	1,310
	Feb. 16, 1942	6.85	1,330		Mar. 29, 1951	7.02	1,290
	Mar. 8, 1942	6.40	1,200	1952	Dec. 21, 1951	6.31	1,080
	Sept. 27, 1942	6.22	1,140		Mar. 11, 1952	15.24	5,700
1943	Dec. 29, 1942	10.17	2,600		Mar. 23, 1952	9.43	2,140
	Jan. 18, 1943	5.20	835	1953	Jan. 9, 1953	7.75	1,520
	Apr. 19, 1943	6.26	1,170		Feb. 21, 1953	10.74	2,720
	July 11, 1943	6.82	1,330		July 22, 1953	6.75	1,210
	July 30, 1943	5.14	805	1954	Jan. 16, 1954	9.00	1,960
1944	Jan. 3, 1944	5.06	805		Jan. 22, 1954	8.12	1,640
	Feb. 27, 1944	5.10	805		June 1, 1954	6.73	1,200
	Mar. 19, 1944	5.52	925	1955	Feb. 6, 1955	6.78	1,220
	Mar. 29, 1944	6.30	1,170		Mar. 22, 1955	6.22	1,050
1945	Sept. 14, 1945	5.42	750		May 22, 1955	6.53	1,140
1946	Jan. 7, 1946	8.90	1,770	1956	Apr. 6, 1956	5.83	944
	Feb. 10, 1946	9.70	2,040		Apr. 15, 1956	8.82	1,900
	Mar. 8, 1946	7.20	1,240	1957	Feb. 1, 1957	5.69	1,080
	Mar. 14, 1946	5.56	802		Apr. 5, 1957	8.64	2,040
	Mar. 29, 1946	9.33	1,990	1958	Nov. 14, 1957	6.00	1,170
1947	Jan. 20, 1947	7.85	1,510		Nov. 19, 1957	5.56	1,040
1948	Feb. 14, 1948	6.22	1,020		Dec. 20, 1957	6.47	1,310
1949	Nov. 3, 1948	6.56	1,150		Apr. 28, 1958	5.11	903
	Nov. 6, 1948	6.10	1,020	1959	Jan. 21, 1959	9.42	2,340
	Nov. 19, 1948	5.38	823		May 20, 1959	4.88	834
	Nov. 28, 1948	8.13	1,640		May 31, 1959	10.82	3,020
	Jan. 5, 1949	8.48	1,760	1960	Feb. 5, 1960	5.00	870
	June 16, 1949	12.80	3,660		Feb. 10, 1960	5.19	927
	July 12, 1949	5.97	982		Apr. 3, 1960	5.36	978
1950	Mar. 13, 1950	10.44	2,540		Aug. 12, 1960	5.13	909
1951	Oct. 20, 1950	5.42	833				

5460. Shooting Creek near Hayesville, N. C.

Location.--Lat 35°01'29", long 83°42'27", 400 ft downstream from Hothouse Branch, half a mile upstream from Chatuge Lake, and 6.5 miles east of Hayesville, Clay County.

Drainage area.--37.6 sq mi; 38.9 sq mi at site used 1922-24.

Gage.--Nonrecording prior to Mar. 13, 1924, at site 0.7 mile downstream at datum 16.82 ft lower; recording thereafter. Datum of gage is 1,930.33 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 230 cfs and extended above by logarithmic plotting at site used 1922-24; defined by current-meter measurements below 1,300 cfs and extended above on basis of slope-area measurement at 6,820 cfs at site used since 1943.

Remarks.--Base for partial-duration series, 700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	Dec. 17, 1922	7.8	3,500	1947	Jan. 20, 1947	5.54	1,210
	Feb. 13, 1923	5.2	1,130	1948	Feb. 14, 1948	4.75	890
	Aug. 6, 1923	4.9	955		Mar. 27, 1948	5.25	1,090
1943	Dec. 29, 1942	5.70	1,280		Aug. 2, 1948	5.60	1,240
	Jan. 18, 1943	6.01	1,420	1949	Nov. 6, 1948	4.68	906
1944	Feb. 17, 1944	4.35	710		Nov. 28, 1948	5.18	1,140
	Feb. 27, 1944	4.77	871		Jan. 5, 1949	5.00	1,050
	May 28, 1944	4.75	871		June 16, 1949	9.20	6,820
					June 28, 1949	4.28	732
1945	May 17, 1945	4.53	790		July 7, 1949	4.98	1,040

Peak stages and discharges of Shooting Creek near Hayesville, N. C.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	July 12, 1949	4.91	1,010	1952	Mar. 23, 1952	5.34	1,210
	Sept. 6, 1949	4.44	798		June 5, 1952	4.37	768
1950	Jan. 19, 1950	4.65	892	1953	Feb. 21, 1953	5.20	1,140
	Mar. 13, 1950	5.70	1,390		Apr. 30, 1953	4.44	798
1951	Dec. 7, 1950	4.41	784	1954	Jan. 16, 1954	6.38	1,800
	Mar. 29, 1951	4.71	920		Jan. 22, 1954	6.27	1,720
	June 17, 1951	4.36	764	1955	Feb. 6, 1955	4.50	825
1952	Dec. 20, 1951	4.88	996		Mar. 22, 1955	5.20	1,140
	Mar. 11, 1952	5.18	1,130		May 22, 1955	5.82	1,450

5470. Hiwassee River below Chatuge Dam, near Hayesville, N. C.

Location--Lat 35°01'45", long 83°47'45", on left bank 0.4 mile upstream from Hyatt Mill Creek, 1.6 miles southeast of Hayesville, Clay County, 1.7 miles downstream from Chatuge Dam, and at mile 119.3.

Drainage area--190 sq mi.

Gage--Recording. Datum of gage is 1,789.90 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation--Defined by current-meter measurements.

Remarks--Flow completely regulated by Chatuge Lake since Feb. 12, 1942 (controlled storage, 115,600 cfs-days). Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Dec. 31, 1942	8.00	3,040	1952	Apr. 15, 1952	5.28	1,570
1944	Mar. 30, 1944	5.26	1,540	1953	Apr. 17, 1953	6.63	2,220
1945	Dec. 5, 1944	4.35	1,060	1954	June 25, 1954	5.47	1,670
				1955	Dec. 10, 1954	5.25	1,550
1946	Apr. 9, 1946	6.55	2,280	1956	June 25, 1956	5.17	1,480
1947	May 16, 1947	6.13	2,040		May 8, 1957	5.42	1,590
1948	June 3, 1948	6.59	2,310	1958	June 30, 1958	5.21	1,500
1949	Sept. 12, 1949	6.26	2,120	1959	Mar. 23, 1959	5.17	1,480
1950	Apr. 26, 1950	6.60	2,320	1960	May 11, 1960	5.63	1,570
1951							
	June 26, 1951	6.16	2,070				

5480. Hiwassee River below Hayesville, N. C.

Location--Lat 35°04'30", long 83°49'55", three-quarters of a mile downstream from Tusquitee Creek and 2¼ miles northwest of Hayesville, Clay County.

Drainage area--252 sq mi.

Gage--Recording. Datum of gage is 1,760.33 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation--Defined by current-meter measurements.

Historical data--The maximum stage known is that of Oct. 3, 1898.

Remarks--Flow considerably regulated since Feb. 12, 1942, by Chatuge Lake (controlled storage, 115,600 cfs-days). Base for partial-duration series, 4,200 cfs).

Peak stages and discharges of Hiwassee River below Hayesville, N. C.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1899	Oct. 3, 1898	a16.1	b17,000	1938	July 23, 1938	11.10	8,720
1935	Mar. 12, 1935	7.15	4,120	1939	Feb. 15, 1939	9.10	5,980
1936	Jan. 19, 1936	12.30	10,400	1940	Apr. 19, 1940	7.89	4,500
	Feb. 4, 1936	11.95	10,000		Aug. 13, 1940	7.97	4,610
	Apr. 2, 1936	12.42	10,600	1941	July 5, 1941	8.25	5,070
	Apr. 6, 1936	11.40	9,140		Feb. 6, 1942	5.36	b2,140
	Sept. 30, 1936	7.51	4,320	1943	Dec. 29, 1942	8.13	b4,960
1937	Jan. 3, 1937	8.92	5,850		Mar. 29, 1944	5.52	b2,240
	June 19, 1937	8.26	5,180	1945	Feb. 17, 1945	4.31	b1,330
1938	Oct. 18, 1937	7.77	4,630				
	Apr. 8, 1938	7.88	4,740				
	July 21, 1938	7.70	4,520				

a From floodmark, by local resident.

b Annual peak only.

5485. Hiwassee River above Murphy, N. C.
(Published as "at Murphy" prior to October 1939)

Location.--Lat 35°04'50", long 84°00'10", on right bank on U.S. Highway 64, 600 ft upstream from Will Scott Creek, 2.0 miles southeast of Murphy, Cherokee County, and at mile 99.2.

Drainage area.--406 sq mi; 421 sq mi at site used Oct. 20, 1897, to Sept. 30, 1939.

Gage.--Nonrecording prior to Nov. 9, 1926; recording thereafter. At site 2.8 miles downstream prior to May 1, 1940. At datum 30.40 ft lower prior to Jan. 31, 1921; 28.40 ft lower Jan. 31, 1921, to Nov. 8, 1926; 28.20 ft lower Nov. 9, 1926, to Apr. 30, 1940. Datum of gage is 1,538.23 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 5,000 cfs and extended above by logarithmic plotting at former site; defined by current-meter measurements below 10,000 cfs and extended above by logarithmic plotting at present site.

Bankfull stage.--10 ft, at site and datum used 1927-39 (Tennessee Valley Authority).

Historical data.--The maximum stage known is that of Mar. 19, 1899.

Remarks.--Flow regulated by Chatuge Lake (controlled storage, 115,600 cfs-days) since Feb. 26, 1942. Base for partial-duration series, 7,000 cfs. Only annual peaks are shown subsequent to 1941.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1840	-	a12.3	-	1900	Dec. 12, 1899	9.3	7,120
1867	March 1867	a13.3	-		Feb. 13, 1900	12.6	13,100
	March 1866	a13.8	-	1901	Jan. 11, 1901	10.2	8,740
1897	July 25, 1897	14.0	b15,200		Mar. 26, 1901	11.0	10,200
					Apr. 20, 1901	11.7	11,400
1898	Mar. 29, 1898	11.9	11,400		May 22, 1901	10.6	9,460
	Aug. 4, 1898	11.6	10,800		Aug. 23, 1901	12.7	13,200
	Aug. 11, 1898	11.0	9,750	1902	Dec. 29, 1901	14.4	16,300
	Sept. 3, 1898	17.6	22,000		Feb. 2, 1902	9.5	7,480
1899	Oct. 4, 1898	16.4	19,500		Feb. 28, 1902	14.15	15,900
	Oct. 18, 1898	9.6	7,230		Mar. 29, 1902	11.0	10,200
	Feb. 4, 1899	14.3	15,700	1903	Feb. 17, 1903	9.6	7,660
	Feb. 7, 1899	10.6	9,030		Feb. 28, 1903	12.0	12,000
	Feb. 27, 1899	9.9	7,770		Mar. 11, 1903	10.2	8,740
	Mar. 15, 1899	11.5	10,600		Mar. 23, 1903	11.9	11,800
	Mar. 19, 1899	18.4	23,100	1904	Mar. 7, 1904	b7.8	3,990

a From Tennessee Valley Authority report; site and datum in use 1927-39.

b Annual peak only.

Peak stages and discharges of Hiwassee River above Murphy, N. C.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1905	July 12, 1905	10.3	8,490	1929	Mar. 5, 1929	7.14	7,710
1906	Dec. 3, 1905	10.0	7,950	Mar. 14, 1929	7.80	9,100	
	Jan. 23, 1906	9.7	7,410	Mar. 23, 1929	7.10	7,710	
	Sept. 30, 1906	10.2	8,310	May 6, 1929	7.34	8,100	
				May 19, 1929	7.95	9,500	
1907	Nov. 19, 1906	15.8	18,400	Sept. 26, 1929	10.30	14,300	
	Sept. 23, 1907	11.5	10,400	1930	Nov. 3, 1929	6.90	7,330
1908	Feb. 15, 1908	10.6	8,730	1931	Apr. 4, 1931	7.51	8,500
	Mar. 24, 1908	10.2	8,010	Apr. 22, 1931	6.96	7,520	
1909	Dec. 7, 1908	10.2	7,610	1932	Dec. 14, 1931	8.26	10,100
	Mar. 13, 1909	13.0	12,600	Jan. 30, 1932	7.45	8,300	
	May 1, 1909	10.7	8,690	Mar. 31, 1932	7.23	7,900	
	May 22, 1909	10.1	7,610	1933	Dec. 12, 1932	7.30	8,080
	June 4, 1909	10.5	8,330	Dec. 14, 1932	7.00	7,480	
1910	May 8, 1910	10.5	8,330	Dec. 17, 1932	7.25	7,880	
1911	Apr. 5, 1911	11.0	9,230	Dec. 25, 1932	7.35	8,280	
1912	Mar. 29, 1912	11.7	10,500	Dec. 28, 1932	12.20	18,700	
1913	Mar. 14, 1913	14.0	14,400	1934	Feb. 26, 1934	6.85	7,120
1914	Apr. 20, 1914	9.5	6,350	Mar. 3, 1934	10.67	15,200	
1915	Dec. 26, 1914	11.5	9,950	1935	Mar. 12, 1935	7.17	7,880
1916	Dec. 18, 1915	12.6	11,900	1936	Jan. 19, 1936	11.42	16,300
	Dec. 29, 1915	12.8	12,300	Feb. 4, 1936	13.18	20,200	
	Feb. 2, 1916	9.9	7,070	Feb. 27, 1936	7.29	8,070	
	July 10, 1916	11.5	9,950	Apr. 2, 1936	12.75	19,400	
				Apr. 6, 1936	10.85	15,100	
1917	Feb. 20, 1917	10.7	8,510	1937	Jan. 3, 1937	9.17	11,800
	Mar. 4, 1917	15.0	16,200	June 19, 1937	6.90	7,280	
	Mar. 24, 1917	15.0	16,200	1938	Apr. 8, 1938	8.50	9,640
1919	Oct. 30, 1918	12.4	11,400	July 23, 1938	9.85	12,400	
	Dec. 22, 1918	15.1	16,000	1939	Feb. 15, 1939	8.84	10,100
1920	Dec. 9, 1919	11.0	9,000	1940	Aug. 13, 1940	7.88	5,940
	Apr. 2, 1920	14.6	15,100	1941	July 5, 1941	8.40	6,660
1921	Dec. 4, 1920	12.8	12,400	1942	Feb. 16, 1942	7.44	5,240
	Jan. 21, 1922	15.3	18,300	1943	Dec. 29, 1942	10.32	10,300
			1944	Feb. 27, 1944	7.93	6,120	
			1945	Feb. 17, 1945	7.10	4,920	
1922	Jan. 21, 1922	15.3	18,300	1946	Feb. 10, 1946	12.20	14,400
1923	Dec. 17, 1922	12.3	13,400	1947	Jan. 20, 1947	10.96	11,600
1924	Mar. 5, 1924	9.1	8,500	1948	Feb. 12, 1948	8.18	6,590
1925	Jan. 18, 1925	8.0	6,520	1949	Nov. 28, 1948	10.35	10,400
1926	Jan. 18, 1926	8.4	7,240	1950	Mar. 13, 1950	10.73	11,100
1927	Dec. 26, 1926	6.95	7,520	1951	Mar. 29, 1951	10.16	10,100
	Dec. 28, 1926	8.45	10,300	1952	Dec. 21, 1951	8.65	7,380
	Mar. 8, 1927	7.36	8,300	1953	Feb. 21, 1953	7.64	5,700
				1954	Jan. 16, 1954	12.08	14,100
1928	Dec. 15, 1927	7.67	8,900	1955	Feb. 6, 1955	9.14	8,230
	Mar. 30, 1928	11.72	17,400	1956	Apr. 15, 1956	9.52	8,920
	Sept. 5, 1928	7.28	8,100	1957	Jan. 31, 1957	12.56	15,300
				1958	Feb. 6, 1958	8.44	7,030
1929	Feb. 28, 1929	7.22	7,900	1959	June 2, 1959	7.59	5,620
				1960	Mar. 3, 1960	6.93	4,680

5498.1. Hyatt Creek at Marble, N. C.

Location.--Lat 35°11'22", long 83°55'14", at bridge 0.8 mile north of Marble, Cherokee County, and 1.2 miles upstream from mouth.

Drainage area.--6.88 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Not defined.

Remarks.--Peak stages below 17.2 ft were not recorded prior to 1957. Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	-	(a)	-	1958	May 8, 1958	17.03	-
1956	-	(a)	-	1959	May 31, 1959	16.86	-
1957	Jan. 31, 1957	17.86	-	1960	December 1959	16.84	-

a Peak stage did not reach bottom of gage.

5500. Valley River at Tomotla, N. C.

Location.--Lat 35°08'20", long 83°58'50", on right bank at highway bridge at Tomotla, Cherokee County, 0.2 mile upstream from Rogers Creek, 4.7 miles northeast of Murphy, and at mile 6.4.

Drainage area.--104 sq mi.

Gage.--Nonrecording prior to May 11, 1934; recording thereafter. Datum of gage is 1,556.46 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 5,800 cfs and extended above on basis of slope-conveyance measurement at 18,000 cfs.

Bankfull stage.--13 ft (Tennessee Valley Authority).

Historical data.--The maximum stage known is that of September 1898.

Remarks.--Base for partial-duration series, 1,700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1898	September 1898	a21.2	b20,000	1916	Dec. 18, 1915	10.2	3,650
1905	Jan. 12, 1905	8.1	2,700		Dec. 29, 1915	10.2	3,650
	Feb. 9, 1905	8.1	2,700		Feb. 2, 1916	7.7	2,440
	Feb. 20, 1905	7.9	2,610	1917	Mar. 4, 1917	15.9	b7,610
	July 12, 1905	9.6	3,430				
1906	Dec. 3, 1905	7.8	2,560	1919	Oct. 29, 1918	6.3	1,820
	Jan. 3, 1906	7.0	2,200		Dec. 22, 1918	11.0	4,050
	Jan. 23, 1906	6.3	1,890		Jan. 2, 1919	6.3	1,820
	July 14, 1906	8.0	2,660	1920	Dec. 10, 1919	7.3	2,260
					Jan. 24, 1920	8.7	3,000
1907	Oct. 6, 1906	6.3	1,890		Feb. 10, 1920	10.4	3,850
	Nov. 19, 1906	a20.5	18,000		Apr. 2, 1920	14.6	6,480
					Aug. 14, 1920	7.7	2,520
1908	Feb. 15, 1908	7.2	2,290	1921	Dec. 14, 1920	10.6	3,950
	Mar. 23, 1908	7.1	2,240		Feb. 10, 1921	10.0	3,650
1909	Dec. 7, 1908	6.8	2,110	1922	Dec. 25, 1921	6.3	1,900
	Feb. 10, 1909	7.1	2,240		Jan. 21, 1922	15.5	7,250
	Feb. 15, 1909	10.5	3,880		Feb. 15, 1922	6.2	1,850
	Mar. 14, 1909	8.6	2,940		Mar. 2, 1922	7.4	2,390
	May 22, 1909	6.6	2,020		Mar. 10, 1922	8.3	2,800
	June 4, 1909	6.4	1,930		May 4, 1922	6.3	1,900
1915	Dec. 25, 1914	11.0	4,000				

a From floodmark, by Tennessee Valley Authority.

b Annual peak only.

Peak stages and discharges of Valley River at Tomotla, N. C.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	Dec. 15, 1922	7.5	2,440	1941	July 16, 1941	4.52	915
	Dec. 17, 1922	10.35	3,820				
	Jan. 24, 1923	6.3	1,900	1942	Feb. 17, 1942	8.27	2,400
	Feb. 13, 1923	9.7	3,500				
	Apr. 13, 1923	6.1	1,800	1943	Dec. 6, 1942	7.06	1,890
1924	Jan. 3, 1924	6.6	2,030		Dec. 29, 1942	14.12	5,500
1925	Dec. 8, 1924	5.8	1,670		Jan. 19, 1943	8.10	2,310
1926	Jan. 18, 1926	6.8	2,120		Feb. 6, 1943	7.62	2,100
1927	Dec. 13, 1926	6.4	1,940		Mar. 21, 1943	6.86	1,810
	Dec. 25, 1926	8.5	2,900		July 5, 1943	10.40	3,340
	Mar. 8, 1927	7.9	2,620	1944	Feb. 27, 1944	11.49	3,900
1928	Dec. 16, 1927	10.6	3,950		Mar. 29, 1944	8.10	2,310
	Mar. 30, 1928	12.74	5,050	1945	Feb. 13, 1945	8.10	2,310
	Sept. 3, 1928	11.1	4,200		Feb. 17, 1945	9.38	2,870
1929	Feb. 28, 1929	7.2	2,300	1946	Jan. 8, 1946	10.10	3,200
	Mar. 5, 1929	7.0	2,210		Feb. 10, 1946	14.25	5,570
	Mar. 14, 1929	7.5	2,440	1947	Jan. 15, 1947	11.50	3,900
	Apr. 28, 1929	10.0	3,650		Jan. 20, 1947	14.90	6,130
	May 6, 1929	7.4	2,390	1948	Feb. 12, 1948	10.00	3,150
	May 19, 1929	7.8	2,570	1949	Nov. 28, 1948	14.65	5,920
	Sept. 26, 1929	8.8	3,050		Jan. 5, 1949	13.74	5,250
1930	Nov. 15, 1929	7.9	2,620		July 10, 1949	7.48	2,080
	Mar. 7, 1930	6.6	2,030	1950	Oct. 31, 1949	9.87	3,090
1931	Apr. 4, 1931	6.30	1,900		Jan. 19, 1950	14.05	5,460
1932	Dec. 14, 1931	7.6	2,480		Mar. 13, 1950	13.98	5,420
	Jan. 30, 1932	10.0	3,650		June 4, 1950	8.70	2,570
	Feb. 3, 1932	6.8	2,120	1951	Mar. 29, 1951	15.70	6,910
	Mar. 31, 1932	6.6	2,030	1952	Dec. 15, 1951	7.09	1,930
	May 1, 1932	6.5	1,980		Dec. 20, 1951	12.22	4,330
	July 5, 1932	6.7	2,080		Mar. 11, 1952	9.56	2,950
1933	Dec. 12, 1932	8.8	3,050		Mar. 23, 1952	7.08	1,920
	Dec. 14, 1932	8.9	3,100		June 15, 1952	7.71	2,170
	Dec. 17, 1932	6.4	1,940	1953	Jan. 10, 1953	6.82	1,820
	Dec. 28, 1932	15.06	6,850		Feb. 12, 1953	8.79	2,610
	Feb. 15, 1933	8.93	3,120		Feb. 21, 1953	11.35	3,820
1934	Mar. 3, 1934	13.01	5,200	1954	Jan. 16, 1954	15.25	6,450
1935	Mar. 12, 1935	8.50	2,900		Jan. 21, 1954	13.02	4,810
1936	Jan. 2, 1936	6.80	2,050		June 1, 1954	6.64	1,750
	Jan. 8, 1936	7.90	2,540	1955	Feb. 6, 1955	11.44	3,860
	Jan. 19, 1936	11.65	4,440		Feb. 23, 1955	8.58	2,520
	Feb. 4, 1936	16.35	8,100		Mar. 22, 1955	7.74	2,190
	Mar. 27, 1936	8.72	2,920		Apr. 6, 1955	7.50	2,090
	Apr. 2, 1936	12.26	4,810	1956	Feb. 3, 1956	9.08	2,740
	Apr. 6, 1936	12.12	4,720		Feb. 20, 1956	6.60	1,730
1937	Jan. 3, 1937	10.30	3,540		Mar. 14, 1956	7.13	1,940
	Feb. 9, 1937	7.28	2,180		Apr. 16, 1956	11.22	3,750
1938	Apr. 8, 1938	9.58	3,240	1957	Dec. 14, 1956	6.54	1,710
	July 23, 1938	6.52	1,850		Dec. 24, 1956	7.65	2,150
	Aug. 5, 1938	7.28	2,180		Jan. 31, 1957	16.70	8,320
1939	Feb. 15, 1939	10.36	3,330		Feb. 4, 1957	9.75	3,040
	Mar. 6, 1939	7.50	2,040		Apr. 5, 1957	11.10	3,690
1940	Apr. 19, 1940	6.02	1,440	1958	Nov. 18, 1957	7.12	1,940
					Dec. 20, 1957	6.93	1,860
					Feb. 6, 1958	9.63	2,980

5505. Nottely River near Blairsville, Ga.

Location.--Lat 34°50'28", long 83°56'10", on left bank 250 ft upstream from county road bridge, 0.1 mile downstream from Arkaqua Creek, 0.2 mile upstream from Akins Creek, 2.7 miles southeast of Blairsville, Union County, and at mile 44.3.

Drainage area.--74.8 sq mi.

Gage.--Recording. Datum of gage is 1,812.47 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 3,000 cfs and extended above on basis of contracted-opening measurements at 13.29 and 16.78 ft.

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942a/	Feb. 6, 1942	6.64	1,890	1952	Dec. 21, 1951	6.80	2,000
	Feb. 16, 1942	7.96	2,430		Mar. 11, 1952	16.78	8,500
1943					Mar. 23, 1952	10.16	3,550
	Dec. 29, 1942	8.85	2,860	1953	Jan. 9, 1953	7.38	2,200
	Jan. 18, 1943	7.06	2,050		Feb. 21, 1953	10.00	3,460
	May 11, 1943	5.65	1,540		July 22, 1953	6.75	1,980
1944	Mar. 29, 1944	6.10	1,840	1954	Jan. 16, 1954	11.05	4,080
	Mar. 28, 1944	5.67	1,540		Jan. 22, 1954	10.36	3,670
1945	Sept. 16, 1945	4.82	1,040		June 1, 1954	7.74	2,350
1946	Jan. 8, 1946	9.16	3,120	1955	Dec. 29, 1954	5.65	1,550
	Feb. 10, 1946	11.18	4,160		Feb. 6, 1955	8.25	2,570
	Mar. 8, 1946	7.00	2,030		Mar. 22, 1955	9.32	3,090
	Feb. 28, 1946	9.36	3,260		May 22, 1955	11.59	4,430
1947	Jan. 20, 1947	9.17	3,100	1956	Apr. 6, 1956	7.46	2,230
1948	Feb. 12, 1948	6.88	1,980		Apr. 15, 1956	11.75	4,530
1949	Nov. 6, 1948	6.11	1,700	1957	Jan. 31, 1957	8.51	2,680
	Nov. 28, 1948	8.60	2,740		Apr. 1, 1957	5.67	1,560
	Jan. 5, 1949	8.86	2,900		Apr. 5, 1957	10.30	3,630
	June 16, 1949	8.32	2,590	1958	Nov. 19, 1957	6.17	1,760
	July 12, 1949	6.35	1,790		Dec. 20, 1957	7.66	2,310
	July 18, 1949	5.65	1,540	1959	Jan. 21, 1959	10.66	3,850
1950	Mar. 13, 1950	11.43	4,320		May 31, 1959	10.00	3,460
1951	Dec. 7, 1950	5.57	1,510	1960	Feb. 10, 1960	7.15	2,120
	Mar. 29, 1951	7.27	2,140		Apr. 3, 1960	6.19	1,770

a Period January to September 1942.

5525. Nottely River near Ivylog, Ga.

Location.--Lat 34°55'32", long 84°03'39", just downstream from Ivylog Creek, 2.5 miles south of Ivylog, Union County.

Drainage area.--191 sq mi.

Gage.--Recording. Datum of gage is 1,680.47 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 6,500 cfs and extended above on basis of slope-area measurement at 11,500 cfs.

Bankfull stage.--10 ft.

Remarks.--Base for partial-duration series, 3,950 cfs. Only annual peaks are shown prior to 1938.

Peak stages and discharges of Nottely River near Ivylog, Ga.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Apr. 2, 1936	12.0	-	1939	Feb. 15, 1939	5.25	5,260
1937	Jan. 3, 1937	4.48	4,090	1940	Apr. 19, 1940	4.52	3,940
1938	Apr. 8, 1938	5.65	5,860	1941	July 5, 1941	6.12	6,410
	July 22, 1938	12.25	11,500				
1939	Feb. 3, 1939	4.82	4,650	1942	Oct. 27, 1941	3.27	al,830

a Maximum during period Oct. 1 to Jan. 30.

5535. Nottely River at Nottely Dam, near Ivylog, Ga.

Location.--Lat 34°57'55", long 84°05'25", on right bank 1,600 ft downstream from Rhodes Branch, 0.6 mile downstream from Nottely Dam, 0.6 mile upstream from Dooley Creek, 1.8 miles northwest of Ivylog, Union County, and at mile 20.4.

Drainage area.--215 sq mi.

Gage.--Recording. Datum of gage is 1,599.21 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 2,450 cfs and extended above.

Bankfull stage.--10 ft.

Remarks.--Flow completely regulated by Nottely Lake. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Sept. 28, 1942	5.79	2,420	1952	May 12, 1952	4.57	1,530
1943	Oct. 1, 1942	5.56	2,270	1953	Aug. 19, 1953	4.95	1,800
1944	May 25, 1944	6.34	2,830	1954	May 5, 1954	5.58	2,290
1945	Sept. 25, 1945	5.56	2,370	1955	May 23, 1955	6.54	3,130
1946	Feb. 11, 1946	5.86	2,580	1956	Aug. 14, 1956	4.91	1,800
1947	Apr. 18, 1947	4.98	1,810	1957	Mar. 29, 1957	5.28	2,070
1948	June 3, 1948	5.82	2,490	1958	Jan. 3, 1958	5.20	1,990
1949	Sept. 12, 1949	5.95	2,600	1959	Mar. 25, Apr. 30 1959	5.00	1,830
1950	Feb. 14, 1950	5.82	2,490				
1951	Jan. 8, 1951	5.58	2,290	1960	Feb. 4, 1960	5.05	1,870

5540. Nottely River near Ranger, N. C.

Location.--Lat 35°01'37", long 84°06'55", 200 ft upstream from bridge on U.S. Highway 64 and half a mile downstream from Ranger, Cherokee County.

Drainage area.--272 sq mi.

Gage.--Nonrecording prior to May 16, 1934; recording thereafter. At various sites within 200 ft downstream at datum 1.66 ft lower prior to Mar. 16, 1928. Datum of gage is 1,544.28 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Flow regulated by Nottely Lake (controlled storage, 92,800 cfs-days) since Jan. 24, 1942. Base for partial-duration series, 3,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1901	Aug. 23, 1901	16.7	a7,680	1929	Sept. 26, 1929	14.1	6,160
1902	Feb. 28, 1902	21.0	a14,100				
1903	Feb. 28, 1903	20.0	a12,300	1930	Nov. 16, 1929	8.0	2,660
1904	Mar. 7, 1904	9.0	a2,600		Mar. 7, 1930	8.0	2,660
1905	Jan. 12, 1905	14.8	a6,010				
1906	Dec. 3, 1905	b11.8	a4,060	1931	Apr. 4, 1931	11.1	4,330
					Apr. 21, 1931	11.1	4,330
1915	Nov. 30, 1914	12.4	4,420	1932	Dec. 14, 1931	12.6	5,160
	Dec. 4, 1914	13.4	5,060		Jan. 30, 1932	12.0	4,790
1916	Feb. 2, 1916	12.4	4,420		Mar. 22, 1932	11.3	4,370
	July 10, 1916	19.4	11,200		Apr. 1, 1932	12.0	4,790
1917	Mar. 1, 1917	17.4	a8,440		May 1, 1932	11.5	4,490
1919	Oct. 30, 1918	16.2	7,180	1933	Dec. 12, 1932	12.0	4,790
	Dec. 22, 1918	19.5	11,400		Dec. 17, 1932	12.0	4,790
1920	Dec. 9, 1919	13.7	5,260		Dec. 25, 1932	13.1	5,470
	Feb. 4, 1920	12.1	4,240		Dec. 28, 1932	15.7	7,160
	Apr. 2, 1920	20.0	12,300		May 5, 1933	11.2	4,310
	Apr. 4, 1920	15.0	6,170	1934	Feb. 26, 1934	11.6	4,550
1921	Dec. 14, 1920	16.0	7,000		Mar. 3, 1934	13.9	5,980
	Feb. 11, 1921	15.1	6,250	1935	Mar. 12, 1935	9.85	3,510
1922	Jan. 20, 1922	16.0	7,000	1936	Jan. 19, 1936	14.10	6,220
	Feb. 15, 1922	12.2	4,300		Feb. 4, 1936	18.20	10,700
	Mar. 10, 1922	14.4	5,730		Apr. 2, 1936	19.08	12,300
	May 4, 1922	14.2	5,590		Apr. 6, 1936	16.10	8,000
1923	Dec. 17, 1922	16.0	7,000	1937	Jan. 3, 1937	11.44	4,360
1924	Mar. 5, 1924	14.0	5,350	1938	Apr. 8, 1938	15.86	7,830
	Apr. 18, 1924	11.8	4,050		July 23, 1938	18.47	11,500
1925	Jan. 18, 1925	10.0	3,080	1939	Feb. 3, 1939	10.55	4,060
1926	Jan. 18, 1926	11.0	3,610		Feb. 15, 1939	11.80	4,820
1927	Dec. 28, 1926	13.0	4,800	1940	Apr. 14, 1940	10.01	3,560
1928	Mar. 30, 1928	14.6	6,320	1941	July 6, 1941	12.20	4,780
	July 27, 1928	11.3	4,340		July 17, 1941	11.47	4,340
	Aug. 15, 1928	11.8	4,620	1942	Feb. 16, 1942	7.54	2,170
1929	Feb. 28, 1929	12.0	4,870	1943	Dec. 28, 1942	8.91	2,870
	Mar. 13, 1929	12.1	4,930	1944	May 26, 1944	8.80	2,820
	May 6, 1929	12.8	5,350	1945	Sept. 25, 1945	7.70	2,340
	May 19, 1929	13.6	5,840				

a Annual peak only.

b Probably maximum for year.

5550. Hiwassee River at Hiwassee Dam, N. C.
(Published as "near Vests" prior to 1936)

Location.--Lat 35°08'44", long 84°11'09", 3,500 ft downstream from Hiwassee Lake and village of Hiwassee Dam, Cherokee County, and 3.2 miles upstream from Shoal Creek.

Drainage area.--968 sq mi.

Gage.--Nonrecording prior to Dec. 15, 1934; recording thereafter. Datum of gage is 1,263.40 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Flow completely regulated by Hiwassee Lake (controlled storage, 183,800 cfs-days) since Jan. 14, 1940. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Mar. 12, 1935	8.58	14,900	1940	June 14, 1940	6.87	8,200
1936	Feb. 4, 1936	13.41	42,800	1941	Nov. 9, 12, 1940	5.72	4,610
1937	Jan. 3, 1937	9.88	22,400	1942	Jan. 26, 1942	5.72	4,610
1938	Apr. 8, 1938	10.60	26,200	1943	Jan. 7, 1943	7.30	9,920
1939	Feb. 15, 1939	9.72	21,200				

5552.1. Shoal Creek near Murphy, N. C.

Location.--Lat 35°06'48", long 84°14'06", at bridge on State Highway 294, 50 ft downstream from Thompson Branch, and 11 miles west of Murphy, Cherokee County.

Drainage area.--12.6 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Not determined.

Remarks.--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	-	(a)	-	1958	Apr. 28, 1958	14.53	-
1956	Apr. 16, 1956	14.31	-	1959	May 31, 1959	13.90	-
1957	Jan. 31, 1957	14.66	-	1960	Jan. 6, 1960	14.39	-

a Peak stage did not reach bottom of gage.

5560. Turtletown Creek at Turtletown, Tenn.

Location.--Lat 35°07'57", long 84°20'37", on left bank half a mile north of Turtletown, Polk County, three-quarters of a mile downstream from Nigger Creek, and 6 miles upstream from mouth.

Drainage area.--26.9 sq mi.

Gage.--Recording. Datum of gage is 1,490.61 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 890 cfs and extended above. Rate of change of stage used as a factor in computing discharge.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1934	June 6, 1934	4.68	545	1947	Nov. 11, 1946	2.92	320
	July 11, 1934	2.82	314		Jan. 15, 1947	4.43	481
1935					Jan. 20, 1947	6.18	1,000
	Oct. 6, 1934	2.82	314	1948	Feb. 12, 1948	4.75	533
	Feb. 14, 1935	2.94	326		Mar. 23, 1948	2.81	307
	Mar. 12, 1935	4.34	434	1949	Nov. 19, 1948	3.44	377
1936	Jan. 8, 1936	4.08	463		Nov. 28, 1948	5.93	905
	Jan. 19, 1936	3.93	437		Jan. 5, 1949	5.03	592
	Feb. 4, 1936	5.98	924		Mar. 31, 1949	3.72	405
	Mar. 27, 1936	3.66	413		Sept. 6, 1949	4.33	473
	Apr. 2, 1936	5.62	788	1950	Oct. 30, 1949	6.07	959
	Apr. 6, 1936	5.94	909		Jan. 19, 1950	4.62	513
	Apr. 9, 1936	3.10	345		Mar. 13, 1950	5.99	928
1937	Jan. 3, 1937	3.62	422	1951	Mar. 29, 1951	5.01	936
	Jan. 18, 1937	2.74	306	1952	Dec. 21, 1951	4.92	567
	Aug. 25, 1937	2.73	306		Jan. 10, 1952	2.77	302
1938					Jan. 22, 1952	3.47	380
	Apr. 8, 1938	4.73	545		Mar. 11, 1952	5.48	734
	July 19, 1938	4.43	503		Mar. 22, 1952	3.30	363
	July 21, 1938	4.00	450		June 13, 1952	6.50	1,120
1939	July 23, 1938	3.86	432	1953	Jan. 10, 1953	3.10	342
	Feb. 14, 1939	4.15	476		Feb. 21, 1953	4.70	525
	Feb. 28, 1939	2.79	314		Apr. 30, 1953	3.36	369
	Mar. 6, 1939	3.12	345		July 21, 1953	3.94	428
1940	Jan. 14, 1940	2.16	177	1954	Jan. 16, 1954	5.61	784
1941	Aug. 25, 1941	2.70	299		Jan. 22, 1954	5.07	602
	Feb. 17, 1942	2.88	326	1955	Feb. 6, 1955	5.27	659
	May 20, 1942	5.45	397		Feb. 23, 1955	3.51	384
1942	July 9, 1942	3.43	377	1956	Feb. 3, 1956	3.69	399
					Apr. 16, 1956	4.23	461
	Dec. 6, 1942	2.90	326	1957	Feb. 1, 1957	5.83	867
	Dec. 29, 1942	4.47	517		Feb. 4, 1957	3.02	307
1943	Mar. 21, 1943	3.15	355		Apr. 4, 5, 1957	4.07	443
	July 3, 1943	2.95	336	1958	Nov. 18, 1957	3.89	423
1944	Feb. 27, 1944	4.74	545		Feb. 6, 1958	4.25	463
	Mar. 7, 1944	3.34	366		Apr. 29, 1958	4.35	476
	Mar. 19, 1944	3.43	377		July 8, 1958	3.35	354
	Mar. 29, 1944	4.76	559	1959	Jan. 22, 1959	4.62	513
	Aug. 17, 1944	3.29	366		Nov. 24, 1959	3.14	325
1945	Feb. 13, 1945	4.38	479		Nov. 28, 1959	5.12	615
	Feb. 17, 1945	3.90	415	1960	Mar. 3, 1960	3.61	388
	Apr. 28, 1945	3.26	354				
1946	Jan. 8, 1946	4.52	494				
	Feb. 10, 1946	5.56	765				
	May 16, 1946	3.65	382				
	June 14, 1946	3.50	372				
	July 3, 1946	4.48	494				

a Maximum for period May 10 to Sept. 30, 1934.

b Occurred at different time than peak discharge.

5565. Hiwassee River near McFarland, Tenn.

Location.--Lat 35°10'48", long 84°26'36", on left bank a quarter of a mile downstream from Smith Creek, 0.4 mile downstream from Apalachia powerhouse of Tennessee Valley Authority, 2.8 miles west of McFarland, Polk County, and at mile 53.2.

Drainage area.--1,136 sq mi.

Gage.--Recording. Datum of gage is 830.56 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 15,000 cfs and extended above.

Bankfull stage.--Not subject to overflow.

Remarks.--Flow regulated by Chatuge, Nottely, and Hiwassee Lakes for period of record and by Apalachia Lake since February 1943. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Feb. 5, 1943	6.96	9,960	1952	June 13, 1952	10.42	22,500
1944	Apr. 27, 1944	8.63	15,100	1953	Feb. 21, 1953	6.27	8,610
1945	Feb. 17, 1945	5.51	5,980	1954	Jan. 21, 1954	7.04	10,900
				1955	Feb. 23, 1955	5.58	6,620
1946	Feb. 11, 1946	8.65	15,500				
1947	Jan. 20, 1947	7.70	12,200	1956	Feb. 3, 1956	5.67	6,880
1948	Feb. 12, 1948	6.57	8,780	1957	Jan. 31, 1957	7.31	11,700
1949	Nov. 28, 1948	7.07	10,200	1958	Dec. 26, 1957	6.51	9,330
1950	Dec. 23, 1949	7.85	12,700	1959	Jan. 22, 1959	5.01	5,120
				1960	Nov. 28, 1959	6.01	7,830
1951	Mar. 29, 1951	7.29	10,900				

5570. Hiwassee River near Reliance, Tenn.
(Published as "at Reliance" prior to 1927)

Location.--Lat 35°13'20", long 84°31'34", on State Highway 40, half a mile downstream from Spring Creek, 2.9 miles downstream from Reliance, Polk County, 8.6 miles downstream from Apalachia powerhouse of Tennessee Valley Authority, and at mile 45.0.

Drainage area.--1,223 sq mi.

Gage.--Nonrecording prior to Oct. 1, 1926; recording thereafter. At site 3.2 miles upstream at unknown datum prior to Nov. 10, 1921. At site 2.9 miles upstream at datum about 27.0 ft higher Nov. 10, 1921, to Sept. 30, 1926. Datum of gage is 718.34 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 25,000 cfs and extended on basis of logarithmic plotting.

Bankfull stage.--Not subject to overflow.

Remarks.--Flow regulated by Hiwassee Lake since Apr. 13, 1939, by Nottely Lake since Jan. 24, 1942, by Chatuge Lake since Feb. 12, 1942, and by Apalachia Lake since Feb. 14, 1943. Only annual peaks are shown prior to 1927 and since 1939. Base for partial-duration series, 17,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1901	May 22, 1901	9.9	a37,500	1909	Mar. 14, 1909	10.0	a36,500
1902	Feb. 28, 1902	10.0	a38,000	1910	May 9, 1910	5.0	13,600
1903	Feb. 28, 1903	10.0	36,500				
1904	Mar. 23, 1904	4.7	12,300	1911	Dec. 6, 1910	6.4	a18,500
1905	Feb. 9, 1905	7.2	a22,700	1912	Mar. 29, 1912	9.3	a33,000
				1913	Mar. 27, 1913	8.6	a29,500
1906	Jan. 23, 1906	7.3	23,500				
1907	Nov. 19, 1906	16.5	69,000	1920	Apr. 2, 1920	13.9	56,000
1908	Mar. 24, 1908	7.7	a24,400	1921	Feb. 10, 1921	9.8	36,000

a Maximum daily discharge.

Peak stages and discharges of Hiwassee River near Reliance, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	Jan. 20, 1922	11.56	40,500	1933	Dec. 28, 1932	22.0	40,600
1923	Dec. 17, 1922	9.0	28,000		Feb. 15, 1933	13.52	19,000
1924	Apr. 18, 1924	6.8	18,300				
1925	Dec. 9, 1924	5.55	13,200	1934	Mar. 4, 1934	17.91	30,000
1926	Jan. 18, 1926	6.35	16,600	1935	Mar. 13, 1935	14.23	20,700
1927	Dec. 25, 1926	14.46	21,000	1936	Jan. 8, 1936	13.66	19,600
	Dec. 28, 1926	15.11	22,400		Jan. 19, 1936	18.47	32,700
	Mar. 8, 1927	13.00	17,400		Feb. 4, 1936	23.01	45,300
1928	Dec. 16, 1927	14.9	22,000		Mar. 28, 1936	15.00	23,100
	Mar. 30, 1928	18.23	30,000		Apr. 2, 1936	21.40	40,800
	Sept. 3, 1928	15.96	24,600		Apr. 6, 1936	19.88	36,600
1929	Feb. 28, 1929	13.11	18,100	1937	Jan. 3, 1937	16.16	26,300
	Mar. 5, 1929	12.90	17,600	1938	Apr. 8, 1938	19.69	36,000
	Mar. 15, 1929	13.26	18,600		July 21, 1938	13.98	19,500
	Mar. 24, 1929	13.20	18,300		July 24, 1938	16.02	25,800
	May 7, 1929	14.30	21,200	1939	Feb. 15, 1939	16.18	25,500
	May 19, 1929	14.90	22,700		June 13, 1940	18.03	4,200
	Sept. 26, 1929	15.62	24,600	1940			
1930	Nov. 15, 1929	13.30	18,600	1941	July 4, 1941	7.22	5,100
1931	Apr. 5, 1931	12.90	17,600	1942	July 9, 1942	7.62	5,740
1932	Dec. 14, 1931	14.62	22,000	1943	Dec. 29, 1942	11.78	14,100
	Jan. 30, 1932	14.63	22,000	1944	Mar. 28, 1944	12.49	15,800
	May 1, 1932	12.82	17,300	1945	Feb. 13, 1945	10.23	11,000
1933	Dec. 12, 1932	13.51	19,000	1946	Feb. 10, 1946	14.30	20,300
	Dec. 14, 1932	13.61	19,200	1947	Jan. 20, 1947	14.96	22,100
				1948	Feb. 12, 1948	12.64	16,300

b Occurred Jan. 31, 1940, from ice jam.

5580. Toccoa River near Dial, Ga.

Location.--Lat 34°47'24", long 84°14'24", on right bank 1.4 miles upstream from Shallowford Bridge, 1.8 miles upstream from Stanley Creek, and 2.5 miles northwest of Dial, Fannin County.

Drainage area.--177 sq mi.

Gage.--Nonrecording Oct. 1, 1927, to Nov. 16, 1928; recording prior to Oct. 1, 1927, and subsequent to Nov. 16, 1928. Datum of gage is 1,782.08 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 5,000 cfs and extended on basis of slope-area measurement at 10,800 cfs.

Bankfull stage.--8 ft.

Historical data.--Flood in 1898 reached a stage about 2.8 ft higher than that of Mar. 11, 1952. Flood of November 1906 is highest known since about 1840, from reports by Tennessee Valley Authority.

Remarks.--Only annual peaks are shown prior to 1924. Base for partial-duration series, 2,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1907	November 1906	18.5	a28,000	1920	Apr. 2, 1920	7.20	5,560
1913	Mar. 14, 1913	b6.6	b5,140	1921	Feb. 10, 1921	9.25	8,220
1914	Apr. 14, 1914	b3.05	b1,260		Jan. 21, 1922	8.00	6,600
1915	Dec. 4, 25, 1914	b4.6	b2,680	1923	Dec. 17, 1922	5.5	3,160
1916	July 9, 1916	10.0	9,200	1924	Mar. 5, 1924	6.00	3,660
1917	Mar. 4, 1917	b6.47	b4,700		Apr. 18, 1924	5.40	3,060
1918	Jan. 28, 1918	b3.85	b1,880	1925	Dec. 31, 1924	4.45	2,450
1919	Dec. 22, 1918	b7.60	b6,080				

a From reports by Tennessee Valley Authority.

b Maximum daily stage and discharge.

Peak stages and discharges of Toccoa River near Dial, Ga.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Jan. 18, 1926	4.42	2,400	1943	Dec. 29, 1942	6.97	4,810
1927	Nov. 9, 1926	5.03	2,700		Jan. 18, 1943	5.07	2,740
	Nov. 15, 1926	5.06	2,790		Mar. 21, 1943	5.00	2,650
	Dec. 26, 1926	4.98	2,700	1944	Feb. 27, 1944	5.43	3,040
	Dec. 28, 1926	5.40	3,060		Mar. 19, 1944	5.36	3,040
1928	Mar. 30, 1928	4.05	1,980		Mar. 29, 1944	5.24	2,840
1929	Feb. 28, 1929	5.38	3,060	1945	Sept. 16, 1945	3.80	1,610
	Mar. 5, 1929	4.88	2,620	1946	Jan. 8, 1946	7.30	5,170
	Mar. 13, 1929	6.41	4,100		Feb. 10, 1946	9.13	7,490
	Mar. 23, 1929	6.10	3,770		Mar. 8, 1946	4.90	2,560
	Apr. 28, 1929	5.06	2,790		Mar. 14, 1946	5.10	2,740
	Mar. 6, 1929	5.76	3,460		Mar. 16, 1946	4.89	2,560
	June 27, 1929	5.05	2,740		Mar. 29, 1946	6.33	3,990
	Sept. 25, 1929	7.03	4,810		May 16, 1946	6.63	4,330
					May 26, 1946	5.18	2,840
1930	Nov. 15, 1929	5.60	3,260		June 26, 1946	4.98	2,650
	Mar. 7, 1930	5.60	3,260	1947	Jan. 20, 1947	8.08	6,160
1931	Apr. 4, 1931	4.57	2,400	1948	Feb. 12, 1948	6.33	4,020
1932	Dec. 14, 1931	8.05	6,060		Mar. 7, 1948	4.73	2,410
	Jan. 13, 1932	4.57	2,400	1949	Nov. 28, 1948	7.40	5,290
	Jan. 30, 1932	5.08	3,020		Jan. 5, 1949	7.15	4,990
	Mar. 21, 1932	6.25	3,880		Aug. 17, 1949	8.13	6,230
	Mar. 31, 1932	6.00	4,160	1950	Oct. 30, 1949	5.48	3,120
	Apr. 30, 1932	6.08	4,300		Mar. 13, 1950	8.25	6,380
1933	Dec. 12, 1932	5.46	3,510	1951	Mar. 29, 1951	9.04	7,410
	Dec. 17, 1932	5.02	2,960		Dec. 21, 1951	6.11	3,780
	Dec. 25, 1932	5.98	4,160	1952	Mar. 11, 1952	11.20	10,800
	Dec. 28, 1932	8.10	6,190		Mar. 23, 1952	7.19	5,040
	Dec. 31, 1932	5.34	2,940	1953	Dec. 10, 1952	4.79	2,460
	Feb. 7, 1933	4.98	2,900		Jan. 10, 1953	5.08	2,720
	May 5, 1933	7.03	4,810		Feb. 21, 1953	7.03	4,850
1934	Feb. 25, 1934	4.82	2,670	1954	Jan. 16, 1954	9.35	7,840
	Mar. 3, 1934	7.05	4,810		Jan. 22, 1954	6.90	4,690
1935	Mar. 12, 1935	4.05	1,900	1955	Feb. 6, 1955	6.58	4,310
1936	Jan. 19, 1936	6.91	4,690		Mar. 22, 1955	7.30	5,170
	Feb. 4, 1936	8.30	6,450		May 22, 1955	6.59	4,320
	Apr. 2, 1936	9.60	8,140	1956	Apr. 6, 1956	5.27	2,910
	Apr. 6, 1936	7.30	5,170		Apr. 16, 1956	6.87	4,650
1937	Jan. 3, 1937	5.66	3,340	1957	Feb. 1, 1957	6.97	4,770
1938	Oct. 18, 1937	5.21	2,840		Apr. 5, 1957	7.56	5,490
	Apr. 8, 1938	8.28	6,450		Apr. 24, 1957	4.91	2,570
	July 22, 1938	7.66	5,670	1958	Nov. 19, 1957	5.35	2,990
1939	Feb. 3, 1939	5.60	3,240		Dec. 20, 1957	5.55	3,190
	Feb. 15, 1939	5.34	2,940	1959	Jan. 21, 1959	5.88	3,530
	Feb. 28, 1939	5.12	2,740				
1940	Apr. 19, 1940	5.25	2,840	1960	Feb. 10, 1960	5.12	2,760
	Aug. 13, 1940	5.34	2,940		July 27, 1960	5.46	3,100
1941	July 5, 1941	6.59	4,330				
1942	Feb. 17, 1942	6.22	3,860				
	Mar. 8, 1942	5.18	2,740				

5590. Toccoa River near Blue Ridge, Ga.
(Published as "near Morganton" 1899-1903, 1913-30)

Location.--Lat 34°53'14", long 84°17'07", on left bank three-eighths of a mile downstream from Blue Ridge Dam of Tennessee Valley Authority, 2½ miles west of Morganton, and 2½ miles northeast of Blue Ridge, Fannin County.

Drainage area.--233 sq mi.

Gage.--Nonrecording at site 1.1 miles upstream prior to 1914; recording thereafter. At site 150 ft downstream from previous gage, 1914 to Apr. 17, 1926. At datum 5.60 ft higher prior to Apr. 18, 1926. At site 800 ft upstream from present gage at datum 0.44 ft higher Apr. 18, 1926, to Apr. 1, 1931. Datum of gage is 1,538.77 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 5,000 cfs and extended above.

Bankfull stage.--10 ft.

Historical data.--The flood of Nov. 18, 1906, is the largest known since about 1840, from reports by Tennessee Valley Authority.

Remarks.--Flow completely regulated since Dec. 6, 1930, by Blue Ridge Lake. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1901	Aug. 22, 1901	14.0	a15,500	1936	Apr. 6, 1936	8.04	3,900
1902	Dec. 14, 1901	12.0	a12,300	1937	Apr. 29, 1937	5.50	2,100
				1938	July 23, 1938	9.31	4,880
1907	Nov. 18, 1906	-	b34,000	1939	Mar. 4, 1939	5.04	1,700
				1940	Sept. 26, 1940	5.16	1,820
1914	Apr. 14, 1914	5.40	2,330	1941	Oct. 12, 1940	5.09	1,760
1915	Dec. 4, 1914	6.22	a2,990	1942	Sept. 1, 1942	5.40	1,940
1916	July 9, 1916	13.0	13,900	1943	Jan. 18, 1943	5.69	2,140
1917	Mar. 4, 1917	10.2	a9,410	1944	May 25, 1944	5.37	2,020
1918	Jan. 28, 1918	5.3	a2,220	1945	Oct. 2, 1944	5.07	1,800
1919	Dec. 22, 1918	8.3	a6,370				
1920	Apr. 2, 1920	11.90	a12,100	1946	Feb. 12, 1946	9.41	5,160
				1947	June 17, 1947	5.12	1,840
1921	Feb. 10, 1921	11.70	11,800	1948	Apr. 20, 1948	5.04	1,830
1922	Jan. 21, 1922	10.4	9,730	1949	Sept. 6, 1949	5.35	2,030
1923	Dec. 17, 1922	8.6	6,850	1950	Mar. 13, 1950	11.40	8,140
1924	Mar. 5, 1924	8.3	6,370				
1925	Dec. 31, 1924	5.0	1,930	1951	June 13, 1951	5.34	2,030
				1952	Mar. 23, 1952	8.65	4,520
1926	Jan. 18, 1926	6.2	3,070	1953	May 25, 1953	5.29	1,970
1927	Dec. 28, 1926	8.46	4,570	1954	June 4, 1954	5.14	1,900
1928	Mar. 30, 1928	8.81	4,380	1955	July 20, 1955	5.10	1,870
1929	May 7, 1929	9.71	5,060				
1930	Nov. 15, 1929	7.40	3,330	1956	June 25, 1956	5.25	1,970
				1957	Apr. 24, 1957	5.32	2,010
1931	June 18, 1931	5.4	2,080	1958	May 12, 1958	5.14	1,900
1932	July 5, 1932	6.3	2,600	1959	Oct. 3, 1958	4.89	1,730
1933	Dec. 28, 1932	7.40	3,400	1960	May 26, 1960	5.14	1,900
1934	June 26, 1934	5.14	1,810				
1935	Oct. 22, 1934,	4.72	1,600				
	May 20, 1935						

a Maximum daily discharge.

b About.

5595. Ocoee River at Copperhill, Tenn.

Location.--Lat 34°59'29", long 84°22'36", on right bank 0.2 mile upstream from Fightingtown Creek and 0.4 mile downstream from Copperhill, Polk County.

Drainage area.--352 sq mi.

Gage.--Nonrecording prior to Oct. 31, 1942; recording thereafter. At site 0.4 mile upstream at datum 0.72 ft higher Mar. 21, 1903, to Dec. 31, 1913. At site one-eighth mile downstream at datum 0.58 ft lower Nov. 23, 1914, to Aug. 27, 1925. Datum of gage is 1,445.28 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 8,000 cfs and extended above.

Bankfull stage.--8 ft (from Tennessee Valley Authority).

Historical data.--Flood of Nov. 19, 1906, is highest known since about 1840, from reports by Tennessee Valley Authority.

Remarks.--Flow regulated by Blue Ridge Lake since Dec. 6, 1930. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1886	March 1886	12	a18,000	1936	Feb. 4, Apr. 6, 1936	8.5	a9,000
1898	September 1898	16	a30,000	1938	July 23, 1938	9.0	a10,000
1899	Mar. 19, 1899	9	a10,000				
1904	Mar. 23, 1904	3.6	b2,330	1943	Jan. 18, 1943	5.54	4,570
1905	Jan. 12, 1905	6.4	b5,710	1944	Mar. 29, 1944	4.46	2,720
				1945	Feb. 17, 1945	4.20	2,580
1906	Jan. 23, 1906	6.9	6,580	1946	Feb. 10, 1946	9.00	12,100
1907	Nov. 19, 1906	18.5	c35,000	1947	Jan. 20, 1947	7.03	6,620
1908	Feb. 15, 1908	7.1	6,950	1948	Feb. 12, 1948	4.40	2,810
1909	Mar. 13, 1909	12.5	c15,000	1949	Nov. 28, 1948	7.23	7,200
1910	May 21, 1910	4.8	3,510	1950	Mar. 13, 1950	7.94	10,800
1912	Mar. 29, 1912	7.7	b8,100	1951	Mar. 29, 1951	9.83	10,500
1913	Mar. 14, 1913	8.0	b8,700	1952	Mar. 23, 1952	6.05	6,120
1916	July 10, 1916	10	a12,500	1953	July 22, 1953	3.97	2,420
1917	Mar. 4, 1917	9.5	a11,500	1954	Jan. 16, 1954	6.36	6,100
				1955	Feb. 6, 1955	5.61	4,900
1920	Apr. 2, 1920	11.1	a15,500	1956	Apr. 16, 1956	6.19	6,080
1921	Dec. 14, 1920	d6.58	-	1957	Feb. 1, 1957	6.28	5,480
1922	Jan. 21, 1922	7.9	-	1958	Apr. 29, 1958	6.49	6,550
1923	Dec. 17, 1922	6.0	-	1959	Aug. 19, 1959	4.63	3,260
1924	Mar. 5, 1924	5.8	-	1960	July 10, 1960	4.73	3,460
1925	Dec. 8, 1924	4.2	-				
1928	Mar. 30, 1928	8	a8,500				

a From reports by Tennessee Valley Authority; adjusted for present site and datum.
 b Maximum daily discharge. c Estimated by Tennessee Valley Authority. d Maximum daily stage.

5600. Fightingtown Creek at McCaysville, Ga.

Location.--Lat 34°58'53", long 84°23'12", on right bank 0.2 mile upstream from county highway bridge, 0.9 mile upstream from mouth, and 0.9 mile west of McCaysville, Fannin County.

Drainage area.--70.9 sq mi.

Gage.--Recording. Datum of gage is 1,449.75 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--10 ft (from Tennessee Valley Authority).

Remarks.--Base for partial-duration series, 1,200 cfs.

TENNESSEE RIVER BASIN

Peak stages and discharges of Fightingtown Creek at McCaysville, Ga.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Dec. 29, 1942	6.24	1,590	1952	Dec. 15, 1951	5.98	1,610
	Jan. 18, 1943	5.67	1,410		Dec. 21, 1951	6.65	1,860
1944	Mar. 19, 1944	5.61	1,230	1952	Jan. 22, 1952	5.00	1,270
	Mar. 29, 1944	7.04	1,890		Mar. 11, 1952	7.75	2,380
1945	Feb. 13, 1945	6.28	1,630	1952	Mar. 21, 1952	6.31	1,730
	Feb. 17, 1945	5.53	1,340	1953	Feb. 21, 1953	6.86	1,940
1946	Jan. 8, 1946	7.95	2,750		Jan. 16, 1954	9.25	3,380
	Feb. 10, 1946	11.25	5,180		Jan. 22, 1954	6.64	1,860
	June 14, 1946	8.63	3,170	1955	Feb. 5, 1955	8.12	2,600
	July 13, 1946	6.38	1,760		Mar. 22, 1955	5.16	1,330
1947	Jan. 15, 1947	7.14	2,190	1956	Apr. 16, 1956	8.93	3,150
	Jan. 20, 1947	11.32	5,280		Feb. 1, 1957	9.85	3,800
1948	Feb. 12, 1948	6.28	1,690	1957	Feb. 4, 1957	5.71	1,520
	Mar. 7, 1948	5.16	1,210		Apr. 5, 1957	5.37	1,400
1949	Nov. 19, 1948	5.87	1,510	1957	July 1, 1957	4.87	1,220
	Nov. 28, 1948	11.17	5,140		Nov. 18, 1957	6.55	1,820
	Jan. 5, 1949	9.02	3,270		Feb. 6, 1958	5.08	1,300
	Sept. 6, 1949	5.02	1,220		Apr. 28, 1958	8.27	2,690
1950	Oct. 6, 1949	6.14	1,640	1959	Jan. 21, 1959	5.72	1,520
	Oct. 30, 1949	8.56	2,900		Nov. 5, 1959	5.02	1,280
	Mar. 13, 1950	7.94	2,490	1960	Nov. 28, 1959	5.18	1,330
1951	Mar. 29, 1951	11.92	5,420		Mar. 3, 1960	5.13	1,320
	Sept. 22, 1951	6.52	1,780				

5605. Davis Mill Creek at Copperhill, Tenn.
(Published as "Mill Creek" 1940-41)

Location.--Lat 34°59'43", long 84°22'56", on right bank 0.4 mile northwest of Louisville & Nashville Railroad station, 0.8 mile from post office at Copperhill, Polk County, and 0.1 mile upstream from mouth.

Drainage area.--5.16 sq mi.

Gage.--Recording gage and sharp-crested weir at site 145 ft upstream at datum 1.58 ft higher prior to Sept. 30, 1941; recording gage and concrete San Dimas flume and dam since Dec. 9, 1948. Datum of gage is 1,451.06 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 150 cfs and extended on basis of critical-depth measurement at 3,950 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Flow includes an unknown amount of diversion from other drainage basins through the sulphuric acid plant of the Tennessee Copper Co. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	July 16, 1941	2.80	355	1954	Aug. 21, 1954	4.23	1,360
1949	July 1, 1949	5.09	2,570	1955	July 20, 1955	4.56	1,940
1950	Oct. 6, 1949	6.02	3,950	1956	July 4, 1956	4.45	1,670
1951	June 9, 1951	4.24	1,380	1957	July 15, 1957	4.45	1,670
1952	Aug. 18, 1952	5.28	2,840	1958	Apr. 29, 1958	4.77	2,120
1953	Feb. 21, 1953	4.61	1,890	1959	Aug. 31, 1959	3.85	830
				1960	June 3, 1960	4.25	1,390

a Maximum for period Dec. 9, 1948, to Sept. 30, 1949.

5607. Copper Basin, area 6, near Ducktown, Tenn.

Location.--Lat 35°02'22", long 84°21'24", on right bank of Potato Creek tributary, 1.5 miles east of Ducktown, Polk County.

Drainage area.--0.008 sq mi.

Gage.--Recording and V-notch weir, Parshall flume or San Dimas flume. Datum of gage is 1,721.8 ft (approximate) above mean sea level.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	July 16, 1941	1.33	19	1947	Aug. 8, 1947	0.86	11
1942	May 20, 1942	1.61	24	1948	July 14, 1948	.57	6.4
1943	Jan. 18, 1943	1.30	18	1949	July 1, 1949	1.12	15
1944	Mar. 27, 1944	1.69	26	1950	Oct. 6, 1949	1.12	15
1945	Aug. 22, 1945	1.21	17				
1946	June 25, 1946	.82	10	1951	May 1, 1951	1.14	a16

a Maximum for period Oct. 1, 1950, to July 15, 1951.

5608. Copper Basin, area 5, near Ducktown, Tenn.

Location.--Lat 35°02'19", long 84°21'39", on left bank of Burra Creek near Isabella Mine, 1.3 miles east of Ducktown, Polk County.

Drainage area.--0.24 sq mi.

Gage.--Recording. Datum of gage is 1,698.2 ft (approximate) above mean sea level.

Remarks.--Station operated and records published by Tennessee Valley Authority. Station operated by U.S. Forest Service prior to July 24, 1940. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	July 2, 1941	a2.0	78	1947	Aug. 8, 1947	1.44	53
1942	July 8, 1942	1.20	42	1948	June 27, 1948	1.72	65
1943	Aug. 12, 1943	1.00	34	1949	July 1, 1949	1.50	55
1944	Mar. 27, 1944	1.33	48	1950	Oct. 6, 1949	1.43	52
1945	June 19, 1945	.94	32				
1946	Sept. 10, 1946	1.13	39	1951	May 1, 1951	1.18	b41

a Estimated or partly estimated.

b Maximum for period Oct. 1, 1950, to July 15, 1951.

5610. North Potato Creek near Ducktown, Tenn.
(Published as "Potato Creek" prior to Oct. 1, 1950)

Location.--Lat 35°00'54", long 84°22'58", on right bank 50 ft upstream from bridge on State Highway 40, 1½ miles south of Ducktown, Polk County, and 2 miles upstream from mouth.

Drainage area.--13.0 sq mi.

Gage.--Recording gage and wooden weir prior to Oct. 8, 1935; recording gage and Parshall flume Oct. 8, 1935, to Aug. 25, 1948; and recording gage and concrete San Dimas flume since Aug. 26, 1948. Datum of gage is 1,492.51 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 1,300 cfs and extended above for period prior to Aug. 26, 1948; below 700 cfs and extended on basis of flow-over-dam measurement at 4,600 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Flow includes an unknown amount of diversion from Brush Creek and from Ocoee River. This diversion was small prior to June 1941. Only annual peaks are shown.

TENNESSEE RIVER BASIN

Peak stages and discharges of North Potato Creek near Ducktown, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Aug. 14, 1935	3.26	1,120	1948	June 8, 1948	3.67	763
1936	Apr. 6, 1936	7.2	7,080	1949	Apr. 28, 1949	6.04	1,740
1937	Aug. 25, 1937	5.35	2,940	1950	Oct. 6, 1949	7.86	4,600
1938	July 19, 1938	6.48	5,440	1951	May 1, 1951	5.29	1,120
1939	Feb. 15, 1939	4.97	2,180	1952	June 16, 1952	6.78	2,650
1940	Aug. 29, 1940	4.98	2,200	1953	July 18, 1953	5.55	1,310
1941	July 16, 1941	4.27	1,390	1954	June 1, 1954	5.57	1,330
1942	May 20, 1942	5.70	3,970	1955	July 23, 1955	5.61	1,360
1943	July 10, 1943	5.26	3,080	1956	Sept. 23, 1956	5.21	1,070
1944	Mar. 27, 1944	5.99	4,550	1957	July 15, 1957	5.35	1,160
1945	Aug. 22, 1945	5.72	3,950	1958	Apr. 29, 1958	5.60	1,350
1946	July 2, 1946	4.69	2,000	1959	July 1, 1959	6.30	2,010
1947	Jan. 20, 1947	4.02	876	1960	June 8, 1960	5.78	1,500

5612. Copper Basin, area 1-W, near Ducktown, Tenn.

Location.--Lat 35°01'37", long 84°23'17", on left bank of Potato Creek tributary, 0.6 mile southwest of Ducktown, Polk County.

Drainage area.--0.008 sq mi.

Gage.--Recording and San Dimas flume. Datum of gage not determined.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Aug. 17, 1944	1.27	18	1948	Apr. 13, 1948	1.26	17
1945	July 25, 1945	1.14	15	1949	July 6, 1949	1.71	26
1946	July 3, 1946	1.30	18	1950	Oct. 6, 1949	1.71	26
1947	Aug. 13, 1947	1.48	22	1951	Aug. 7, 1951	1.12	15

5613. Copper Basin, area 1-E, near Ducktown, Tenn.

Location.--Lat 35°01'37", long 84°23'17", on left bank of Potato Creek tributary, 0.6 mile southwest of Ducktown, Polk County.

Drainage area.--0.009 sq mi.

Gage.--Recording and San Dimas flume. Datum of gage not determined.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	June 12, 1944	1.87	29	1948	July 11, 1948	0.75	9.0
1945	Aug. 22, 1945	.42	4.3	1949	July 6, 1949	1.45	21
1946	July 3, 1946	.91	12	1950	Oct. 6, 1949	1.38	20
1947	Aug. 13, 1947	1.07	14	1951	May 1, 1951	.50	5.3

5615. Ocoee River at McHarg, Tenn.

Location.--Lat 35°00'25", long 84°21'46", 0.6 mile downstream from highway bridge, 1 mile downstream from McHarg railroad siding, Polk County, 1 mile downstream from North Potato Creek, 3 miles downstream from Copperhill, and at mile 34.6.

Drainage area.--447 sq mi.

Gage.--Nonrecording at site 0.6 mile upstream at datum 2.84 ft higher prior to Oct. 10, 1931; recording thereafter. Datum of gage is 1,427.16 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 11,000 cfs and extended above.

Bankfull stage.--10 ft.

Remarks.--Flow regulated by Blue Ridge Lake since Dec. 6, 1930. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1918	Jan. 28, 1918	7.1	8,790	1931	Apr. 4, 1931	5.3	5,150
1919	Dec. 22, 1918	9.65	13,500	1932	June 20, 1932	6.0	8,080
1920	Apr. 2, 1920	11.0	16,200	1933	Dec. 28, 1932	7.2C	11,000
				1934	Mar. 3, 1934	4.7C	5,380
1921	Dec. 14, 1920	10.55	15,400	1935	Aug. 14, 1935	3.7E	3,820
1922	Jan. 21, 1922	11.4	17,000				
1923	Dec. 17, 1922	6.48	7,700	1936	Feb. 4, 1936	8.9F	15,800
1924	Mar. 5, 1924	7.6	9,740	1937	Aug. 25, 1937	4.6C	4,970
1925	Dec. 8, 1924	5.7	6,260	1938	July 22, 1938	9.5E	17,300
				1939	Feb. 15, 1939	4.04	4,070
1926	Jan. 18, 1926	6.8	8,240	1940	Aug. 29, 1940	3.8E	3,750
1927	Dec. 28, 1926	7.1	8,790				
1928	Mar. 30, 1928	11.0	16,200	1941	July 16, 1941	3.6C	3,370
1929	May 6, 1929	9.20	12,800	1942	May 20, 1942	5.2F	5,930
1930	Mar. 7, 1930	5.88	6,620				

5618. Copper Basin, area 3, near Ducktown, Tenn.

Location.--Lat 35°01'58", long 84°25'19", on left bank of Ocoee River tributary above Brush Creek at bridge on U.S. Highway 64, 2.1 miles west of Ducktown, Polk County.

Drainage area.--0.009 sq mi.

Gage.--Recording. Datum of gage is 1,528.2 ft (approximately) above mean sea level.

Remarks.--Station operated and records published by Tennessee Valley Authority. Station operated by U.S. Forest Service prior to August 1940. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	July 1, 1935	1.580	a7.8	1944	May 29, 1944	1.720	9.6
				1945	July 13, 1945	.59A	.70
1936	Aug. 10, 1936	1.542	7.3				
1937	Aug. 9, 1937	1.848	11	1946	July 3, 1946	.378	.23
1938	July 19, 1938	1.354	5.3	1947	Jan. 20, 1947	.419	.29
1939	Sept. 2, 1939	2.312	b20	1948	July 28, 1948	.331	.16
1940	June 12, 1940	1.235	4.2	1949	July 20, 1949	.87F	1.8
				1950	Oct. 6, 1949	.520	.50
1941	July 11, 1941	1.305	4.9				
1942	May 20, 1942	1.185	3.8	1951	Mar. 29, 1951	.32S	c.16
1943	Aug. 12, 1943	1.740	9.9				

a Maximum for period Feb. 13 to Sept. 30, 1935.

b Estimated.

c Maximum for period Oct. 1, 1950, to June 30, 1951.

5620. Brush Creek near Ducktown, Tenn.

Location.--Lat 35°02'12", long 84°26'09", 100 ft downstream from bridge on U.S. Highway 64, three-quarters of a mile upstream from mouth, and 3 miles west of Ducktown, Polk County.

Drainage area.--14.4 sq mi.

Gage.--Recording. Datum of gage is 1,421.37 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 710 cfs and extended above.

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 550 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1934	June 2, 1934	5.42	a2,350	1938	Apr. 8, 1938	3.68	1,300
	June 6, 1934	6.48	3,050		Apr. 17, 1938	2.53	574
	July 11, 1934	2.86	766		May 23, 1938	2.53	574
	July 28, 1934	3.15	943		June 26, 1938	2.69	669
	Aug. 24, 1934	2.50	554		July 19, 1938	7.24	3,700
	Sept. 4, 1934	3.10	912		July 21, 1938	4.00	1,520
1935	Mar. 12, 1935	2.80	796	1939	July 23, 1938	3.30	1,040
	Apr. 3, 1935	2.88	858		Nov. 19, 1938	2.58	603
	June 21, 1935	2.95	889		Feb. 15, 1939	3.16	948
	July 3, 1935	3.11	982		Mar. 6, 1939	2.65	645
	Aug. 14, 1935	2.48	602	1940	June 8, 1940	2.33	460
1936	Jan. 8, 1936	2.85	827	1941	July 1, 1941	4.12	1,580
	Jan. 19, 1936	2.45	585		July 22, 1941	3.94	1,480
	Feb. 4, 1936	5.84	2,720		Aug. 19, 1941	2.51	563
	Apr. 1, 1936	4.48	1,870	1942	May 20, 1942	3.45	995
	Apr. 6, 1936	4.98	2,190		June 4, 1942	2.77	552
1937	Oct. 8, 1936	3.07	951		July 9, 1942	3.88	1,310
	Aug. 10, 1937	4.45	1,810		July 30, 1942	3.20	825
	Aug. 25, 1937	3.00	920				

a Maximum for period May 10 to Sept. 30, 1934.

5630. Ocoee River at Emf, Tenn.

Location.--Lat 35°05'48", long 84°32'07", on left bank 700 ft downstream from Tennessee Valley Authority powerplant, three-quarters of a mile upstream from former village of Emf, Polk County, and 2 miles downstream from Goforth Creek.

Drainage area.--524 sq mi.

Gage.--Recording. At site 200 ft upstream prior to June 19, 1924, and at site 100 ft upstream June 19, 1924, to Mar. 10, 1936. All gages at same datum. Datum of gage is 837.88 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 17,000 cfs and extended above.

Bankfull stage.--Not subject to overflow.

Historical data.--Flood of Nov. 19, 1906, is highest known since about 1840, from reports by Tennessee Valley Authority.

Remarks.--Gage-height record furnished by Tennessee Electric Power Co. prior to 1925. Flow regulated by Blue Ridge Lake since Dec. 6, 1930, and by Ocoee No. 3 Lake since Aug. 15, 1942. Only annual peaks are shown.

Peak stages and discharges of Ocoee River at Emf, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1907	Nov. 19, 1906	-	a62,000	1936	Apr. 6, 1936	11.95	22,600
1913	Mar. 27, 1913	11.4	b20,200	1937	Aug. 10, 1937	7.22	6,200
1914	Apr. 14, 1914	5.77	c3,920	1938	Apr. 8, 1938	10.07	15,400
1915	Dec. 25, 1914	8.12	c9,140	1939	Feb. 15, 1939	7.43	6,720
				1940	Aug. 29, 1940	6.11	3,680
1916	July 10, 1916	13.7	29,400	1941	July 16, 1941	6.03	3,590
1917	Mar. 4, 1917	12.66	c25,400	1942	May 20, 1942	7.70	7,520
1918	Jan. 30, 1918	7.5	c7,570	1943	Dec. 29, 1942	7.73	7,520
1919	Dec. 22, 1918	10.4	16,400	1944	Mar. 28, 1944	9.13	11,800
1920	Apr. 2, 1920	12.4	24,200	1945	Feb. 13, 1945	8.65	10,200
1921	Feb. 10, 1921	10.75	17,900	1946	Feb. 10, 1946	10.80	17,900
1922	Jan. 21, 1922	12.5	24,600	1947	Jan. 20, 1947	10.57	17,100
1923	Dec. 17, 1922	10.0	15,000	1948	Feb. 12, 1948	8.90	11,200
1924	Apr. 18, 1924	9.4	12,900	1949	Nov. 28, 1948	11.18	19,400
1925	Dec. 8, 1924	9.1	11,800	1950	Mar. 13, 1950	10.60	17,200
1926	Jan. 18, 1926	7.9	8,080	1951	Mar. 29, 1951	11.30	19,800
1927	Dec. 28, 1926	8.38	9,540	1952	Mar. 11, 1952	9.85	14,500
1928	Mar. 30, 1928	10.3	16,100	1953	Feb. 21, 1953	8.03	8,140
1929	May 6, 1929	9.75	14,300	1954	Jan. 16, 1954	9.98	14,900
1930	Nov. 14, 1929	7.75	7,800	1955	Feb. 6, 1955	9.60	13,600
1931	Apr. 4, 1931	7.35	6,590	1956	Apr. 16, 1956	9.34	12,600
1932	Apr. 30, 1932	9.75	14,300	1957	Feb. 1, 1957	9.50	13,200
1933	Dec. 28, 1932	9.71	13,900	1958	Apr. 28, 1958	11.10	19,100
1934	June 6, 1934	8.5	9,860	1959	Jan. 21, 1959	8.76	10,500
1935	Mar. 12, 1935	7.87	8,080	1960	Nov. 28, 1959	9.90	14,600

a From reports by Tennessee Valley Authority. b Maximum daily discharge for period Jan. 1 to Sept. 30, 1913.

c Maximum daily discharge.

5645. Ocoee River at Parksville, Tenn.

Location.--Lat 35°05'48", long 84°39'15", on right bank 0.4 mile downstream from dam and Ocoee No. 1 powerplant of Tennessee Valley Authority at Parksville, Polk County, and at mile 11.5.

Drainage area.--595 sq mi.

Gage.--Recording. Datum of gage is 716.96 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 15,000 cfs and extended above.

Bankfull stage.--Not subject to overflow.

Historical data.--Flood of Nov. 19, 1906, is highest known since about 1840, from reports by Tennessee Valley Authority.

Remarks.--Gage-height record furnished by Tennessee Electric Power Co. prior to 1925. Flow regulated by Parksville Lake since Dec. 15, 1911, by Blue Ridge Lake since Dec. 6, 1930, and by Ocoee No. 3 Lake since Aug. 15, 1942. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1907	Nov. 19, 1906	-	a65,000	1925	Jan. 19, 1925	7.25	4,220
1911	Jan. 3, 1911	-	b8,000	1926	Apr. 14, 1926	9.2	6,760
1912	Mar. 29, 1912	-	c16,500	1927	Dec. 28, 1926	12.6	11,500
1913	Mar. 14, 1913	-	c14,800	1928	Mar. 30, Sept. 3, 1928	15.1	15,000
1914	June 10, 1914	6.8	c3,620				
1915	Dec. 5, 1914	11.2	c9,800	1929	May 7, 1929	12.95	12,100
				1930	Nov. 15, 1929	10.52	8,600
1916	Dec. 29, 1915, July 10, 1916	15.75	17,000	1931	Apr. 4, 1931	9.33	6,920
				1932	Jan. 30, 1932	11.7	10,300
1921	Apr. 15, 1921	10.00	d7,750	1933	Dec. 28, 1932	15.3	15,000
1922	Jan. 20, 1922	-	11,900	1934	Mar. 25, 1934	8.20	5,370
1923	May 16, 1923	9.4	6,510	1935	Oct. 6, 1934	8.23	5,370
1924	Apr. 18, 1924	12.7	11,300				

a From reports by Tennessee Valley Authority. b Maximum daily discharge for period Jan. 1 to Sept. 30, 1911.

c Maximum daily discharge.

d Maximum daily discharge for period Mar. 22 to Sept. 30, 1921.

TENNESSEE RIVER BASIN

Peak stages and discharges of Ocoee River at Parksville, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Apr. 6, 1936	18.32	19,000	1949	Nov. 28, 1948	16.03	15,800
1937	Jan. 4, 1937	7.94	4,960	1950	Mar. 13, 1950	17.08	17,300
1938	July 24, 1938	15.09	14,500				
1939	Feb. 15, 1939	8.11	5,170	1951	Mar. 29, 1951	20.22	21,700
1940	Dec. 11, 1939	6.79	3,550	1952	Mar. 24, 1952	9.71	7,280
				1953	Feb. 25, 1953	6.43	3,140
1941	Nov. 20, 1940	6.82	3,550	1954	Jan. 22, 1954	12.13	10,500
1942	July 9, 1942	8.70	5,950	1955	Feb. 8, 1955	6.40	3,160
1943	Dec. 29, 1942	12.05	10,300				
1944	Mar. 29, 1944	12.49	11,000	1956	Apr. 16, 1956	11.02	9,130
1945	Feb. 21, 1945	5.80	2,410	1957	Feb. 1, 1957	15.04	14,400
				1958	Apr. 28, 1958	14.35	13,500
1946	Feb. 10, 1946	18.18	18,800	1959	Apr. 20, 1959	7.87	5,030
1947	Jan. 20, 1947	16.41	16,400	1960	Aug. 13, 1960	7.50	4,550
1948	Feb. 15, 1948	7.68	4,670				

5650. Hiwassee River above Charleston, Tenn.

Location.--Lat 35°12'33", long 84°39'31", on right bank 0.2 mile downstream from Ocoee River, a third of a mile upstream from Louisville & Nashville Railroad bridge, 2½ miles north of Benton, Polk County, 15.2 miles upstream from Charleston, and at mile 34.2.

Drainage area.--2,001 sq mi.

Gage.--Recording. Datum of gage is 682.86 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Recording auxiliary gage 1.8 miles downstream.

Stage-discharge relation.--Defined by current-meter measurements below 30,600 cfs and extended above. Fall between base gage and auxiliary gage used as a factor in computing discharge.

Bankfull stage.--18 ft.

Remarks.--Flow regulated by seven reservoirs. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 22, 1954	20.55	25,800	1957	Feb. 1, 1957	a24.26	32,700
1955	Apr. 7, 1955	11.84	12,700	1958	Apr. 29, 1958	b15.18	18,000
				1959	Apr. 20, 1959	11.47	11,900
1956	Apr. 16, 1956	14.26	15,800	1960	Mar. 3, 1960	13.16	14,200

a Occurred at different time than peak discharge.

b Occurred Apr. 30, 1958.

5650.4. Chestuee Creek above Englewood, Tenn.

Location.--Lat 35°26'24", long 84°26'51", on left bank 20 ft downstream from highway bridge, 2.5 miles above Englewood, and 2.7 miles upstream from Little Chestuee Creek, McMinn County.

Drainage area.--14.8 sq mi.

Gage.--Recording. Datum of gage is 835.53 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Feb. 17, 1944	6.96	a714	1951	Mar. 29, 1951	8.56	1,370
1945	Feb. 17, 1945	6.62	565	1952	Jan. 9, 1952	7.39	743
				1953	May 19, 1953	7.58	770
1946	Jan. 7, 1946	10.04	4,110	1954	Jan. 21, 1954	8.68	1,150
1947	Jan. 20, 1947	8.43	2,200	1955	Apr. 6, 1955	8.20	1,030
1948	Feb. 14, 1948	7.63	916				
1949	Nov. 28, 1948	8.56	1,820	1956	Apr. 15, 1956	8.40	1,400
1950	Mar. 13, 1950	7.52	875	1957	Jan. 21, 1957	8.55	1,520

a Maximum for period Jan. 1 to Sept. 30, 1944.

5650.8. Middle Creek below State Highway 39, near Englewood, Tenn.

Location.--Lat 35°25'16", long 84°31'16", on left bank 0.5 mile downstream from State Highway 39 bridge, 1.6 miles upstream from Chestuee Creek, and 1.8 miles west of Englewood, McMinn County.

Drainage area.--32.7 sq mi.

Gage.--Recording. At site half a mile upstream at same datum prior to Oct. 12, 1944. Datum of gage is 775.67 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Feb. 17, 1944	7.41	al,440	1952	Jan. 10, 1952	6.35	784
1945	Feb. 17, 1945	5.08	520	1953	May 19, 1953	6.62	948
				1954	Jan. 22, 1954	7.43	1,360
1946	Jan. 7, 1946	10.07	3,250	1955	Apr. 6, 1955	7.08	1,200
1947	Jan. 20, 1947	9.57	2,850				
1948	Feb. 14, 1948	7.00	1,140	1956	Apr. 15, 1956	7.08	1,150
1949	Nov. 28, 1948	8.04	1,720	1957	Jan. 31, 1957	7.68	1,510
1950	Mar. 13, 1950	7.05	1,160	1958	Nov. 18, 1957	8.96	2,370
				1959	Mar. 27, 1959	10.35	3,520
1951	Mar. 29, 1951	9.01	2,390	1960	Nov. 28, 1959	6.15	690

a Maximum for period Jan. 1 to Sept. 30, 1944.

5651.2. Chestuee Creek at Zion Hill, Tenn.

Location.--Lat 35°24'05", long 84°31'22", on left bank 2,000 ft downstream from highway bridge, 2.1 miles upstream from Middle Creek, and 2½ miles southwest of Englewood, McMinn County.

Drainage area.--37.8 sq mi.

Gage.--Recording. Datum of gage is 778.49 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Feb. 18, 1944	9.54	al,660	1952	Jan. 10, 1952	9.46	1,600
1945	Feb. 17, 1945	8.18	1,040	1953	Feb. 21, 1953	8.77	1,080
				1954	Jan. 21, 1954	11.26	2,210
1946	Jan. 7, 1946	13.78	4,730	1955	Apr. 6, 1955	10.58	1,810
1947	Jan. 20, 1947	12.20	3,290				
1948	Feb. 12, 1948	10.10	1,920	1956	Apr. 16, 1956	10.82	1,930
1949	Nov. 28, 1948	11.65	2,970	1957	Jan. 31, 1957	11.11	2,110
1950	Mar. 13, 1950	10.40	2,060	1958	Nov. 18, 1957	12.23	2,840
				1959	Mar. 27, 1959	12.87	3,290
1951	Mar. 29, 1951	12.12	3,230	1960	Nov. 28, 1959	7.99	862

a Maximum for period Jan. 1 to Sept. 30, 1944.

5651.6. Little Chestuee Creek below Wilson Station, Tenn.

Location.--Lat 35°25'37", long 84°26'45", on right bank downstream from bridge on road from Englewood to Wilson Station, 2.4 miles east of Englewood, McMinn County, and at mile 2.3.

Drainage area.--8.24 sq mi.

Gage.--Recording. Datum of gage is 871.39 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

TENNESSEE RIVER BASIN

Peak stages and discharges of Little Chestuee Creek below Wilson Station, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Feb. 13, 1948	4.27	a609	1953	Feb. 21, 1953	4.01	518
1949	Mar. 28, 1948	5.42	1,000	1954	Jan. 15, 1954	4.97	886
1950	Mar. 12, 1950	4.42	671	1955	Apr. 6, 1955	4.44	736
1951	Mar. 29, 1951	5.36	1,040	1956	Apr. 15, 1956	4.92	1,010
1952	Mar. 11, 1952	3.93	490	1957	Jan. 31, 1957	4.14	706

a Maximum for period Dec. 1, 1947, to Sept. 30, 1948.

5652. Chestuee Creek at State Highway 30, near Athens, Tenn.

Location.--Lat 35°23'39", long 84°33'25", on left bank immediately downstream from State Highway 30 bridge, 0.8 mile downstream from Wilkins Springs Branch and 4 miles southeast of Athens.

Drainage area.--78.1 sq mi.

Gage.--Recording. Datum of gage is 759.86 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Feb. 18, 1944	8.73	a2,120	1950	Mar. 13, 1950	9.33	2,920
1945	Feb. 17, 1945	7.77	1,460	1951	Mar. 29, 1951	11.30	5,110
1946	Jan. 8, 1946	12.38	7,570	1952	Jan. 10, 1952	8.84	2,490
1947	Jan. 20, 1947	11.53	5,400	1953	Feb. 21, 1953	8.16	1,860
1948	Feb. 12, 1948	9.30	2,880	1954	Jan. 21, 1954	10.01	3,630
1949	Nov. 28, 1948	10.70	4,270				

a Maximum for period Jan. 1 to Sept. 30, 1944.

5652.5. Chestuee Creek at Dentville, Tenn.

Location.--Lat 35°16'58", long 84°36'32", on left bank immediately downstream from highway bridge at Dentville, 1.2 miles downstream from Big Foot Branch, and at mile 18.1, McMinn County.

Drainage area.--114 sq mi.

Gage.--Recording. Datum of gage is 723.02 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Feb. 18, 1944	12.21	a2,180	1952	Jan. 11, 1952	12.45	1,850
1945	Feb. 18, 1945	11.08	1,610	1953	Feb. 22, 1953	11.74	1,730
1946	Jan. 8, 1946	17.01	5,930	1954	Jan. 22, 1954	14.95	4,250
1947	Jan. 21, 1947	16.33	5,060	1955	Apr. 7, 1955	13.56	3,150
1948	Feb. 14, 1948	14.43	3,230	1956	Feb. 4, 1956	13.03	2,720
1949	Nov. 29, 1948	15.31	3,920	1957	Feb. 1, 1957	15.88	5,330
1950	Mar. 14, 1950	14.17	3,230	1958	Nov. 18, 1957	14.69	4,140
1951	Mar. 20, 1951	16.60	5,330	1959	Mar. 28, 1959	13.88	3,400
				1960	Mar. 4, 1960	10.45	1,352

a Maximum for period Jan. 6 to Sept. 30, 1944.

5655. Oostanaula Creek near Sanford, Tenn.

Location.--Lat 35°19'39", long 84°42'19", on right bank 20 ft downstream from highway bridge, 1.3 miles southeast of Sanford, 3.5 miles northeast of Calhoun, McMinn County, and 5.7 miles above mouth.

Drainage area.--57.0 sq mi.

Gage.--Recording. Datum of gage is 716.51 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Dec. 30, 1954	5.13	449	1957	Apr. 9, 1957	6.64	916
	Mar. 23, 1955	5.13	449	1958	Nov. 18, 1957	8.77	2,020
	Apr. 7, 1955	7.41	1,260		Nov. 26, 1957	5.15	472
1956	Feb. 4, 1956	6.65	920		Apr. 30, 1958	6.29	792
	Feb. 17 or 18, 1956	-	(a)		May 7, 1958	5.15	472
	Apr. 16, 1956	6.66	924	1959	Mar. 27, 1959	8.35	1,770
1957	Feb. 1, 1957	8.59	1,910	1960	Mar. 4, 1960	5.13	482

a Discharge not determined but greater than 400 cfs.

5660. Hiwassee River at Charleston, Tenn.

Location.--Lat 35°17'16", long 84°45'07", at Epperson packing plant, 250 ft downstream from old highway bridge, 250 ft upstream from Southern Railway bridge, 1,700 ft upstream from new bridge on U.S. Highway 11 at Charleston, Bradley County, and at mile 18.9.

Drainage area.--2,298 sq mi.

Gage.--Nonrecording prior to July 18, 1925; recording thereafter. At site 250 ft downstream at datum 1.5 ft higher prior to Sept. 6, 1926. Datum of gage is 665.56 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Nonrecording auxiliary gages at several sites and datums.

Stage-discharge relation.--Defined by current-meter measurements. Fall between base gage and auxiliary gage used as a factor in computing discharge.

Bankfull stage.--22 ft (from reports by U.S. Weather Bureau).

Remarks.--Peaks prior to 1899, and 1904-19 from reports by U.S. Weather Bureau. Flow regulated by Parkville Lake since Dec. 15, 1911, by Blue Ridge Lake since Dec. 6, 1930, and by Hiwassee Lake since Apr. 13, 1939. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1885	Jan. 17, 1885	a15.8	-	1900	Feb. 14, 1900	18.6	d31,100
1886	Mar. 31, 1886	32.5	70,000	1901	May 22, 1901	23.8	d35,200
1887	Feb. 21, 1887	a11.7	-	1902	Dec. 30, 1901	25.2	d46,200
1888	Mar. 30, 1888	a20.2	-	1903	Mar. 1, 1903	23.5	d34,700
1889	Feb. 17, 1889	a20.2	-	1904	Mar. 24, 1904	12.7	-
1890	Feb. 28, 1890	a26.0	-	1905	Feb. 21, 1905	18.0	-
1891	Mar. 9, 1891	a24.5	-	1906	July 15, 1906	14.9	-
1892	Jan. 15, 1892	a26.7	-	1907	Nov. 20, 1906	30.0	-
1893	Feb. 18, 1893	a16.0	-	1908	Feb. 16, 1908	15.6	-
1894	Feb. 5, 1894	a9.4	-	1909	Mar. 14, 1909	22.4	-
1895	Jan. 11, 1895	a21.6	-	1910	May 9, 1910	13.0	-
1896	Apr. 4, 1896	b15.8	-	1911	Jan. 3, 1911	17.8	-
1897	Mar. 13, 1897	a23.0	-	1912	Mar. 30, 1912	22.5	-
1898	Jan. 26, 1898	c12.7	-	1913	Mar. 15, 1913	22.6	-
1899	Mar. 20, 1899	27.6	d45,900	1914	Apr. 16, 1914	8.2	-

a Maximum observed for period Dec. 1 to Mar. 31.

b Maximum observed for period Dec. 1 to Apr. 7.

c Maximum observed for period Nov. 1 to Apr. 30.

d Maximum daily discharge.

Peak stages and discharges of Hiwassee River at Charleston, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1915	Dec. 26, 1914	21.0	-	1927	Dec. 29, 1926	24.4	32,700
				1928	Sept. 3, 1928	22.0	35,600
1916	Dec. 30, 1915	21.7	-	1929	Mar. 24, 1929	22.6	37,800
1917	Mar. 5, 1917	28.3	-	1930	Nov. 15, 1929	21.2	33,600
1918	Jan. 31, 1918	21.5	-				
1919	Dec. 23, 1918	22.5	-	1931	Apr. 5, 1931	15.95	20,500
1920	Apr. 3, 1920	30.5	453,500	1932	Jan. 31, 1932	22.1	36,300
				1933	Dec. 29, 1932	28.58	55,800
1921	Feb. 11, 1921	24.2	440,200	1934	Mar. 4, 1934	23.5	32,000
1922	Jan. 22, 1922	26.7	43,900	1935	Mar. 13, 1935	e19.52	25,600
1923	Dec. 18, 1922	18.4	429,500				
1924	Apr. 19, 1924	20.6	33,700	1936	Feb. 5, 1936	e27.19	53,400
1925	Dec. 9, 1924	11.26	16,500	1937	Jan. 3, 1937	f22.31	31,000
				1938	Apr. 9, 1938	23.82	36,300
1926	Jan. 19, 1926	12.9	19,400	1939	Feb. 16, 1939	e22.94	34,800

d Maximum daily discharge.

e Occurred at different time than peak discharge.

f Occurred Jan. 4, 1939.

5661. South Mouse Creek tributary near Cleveland, Tenn.

Location.--Lat 35°12'32", long 84°50'15", at bridge on old location of U.S. Highway 11, 4.2 miles northeast of intersection with U.S. Highway 64 in Cleveland, Bradley County.

Drainage area.--1.31 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Not defined.

Remarks.--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	December 1954	5.01	-	1958	Nov. 17, 1957	5.07	-
				1959	July 12, 1959	5.38	-
1956	April 1956	5.70	-	1960	Mar. 3, 1960	3.88	-
1957	Feb. 1, 1957	5.89	-				

5662. Brymer Creek near McDonald, Tenn.

Location.--Lat 35°07'20", long 84°57'00", at bridge on U.S. Highways 11 and 64, 1.9 miles east of McDonald, Bradley County.

Drainage area.--9.68 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Not defined.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	December 1954	6.02	-	1958	Nov. 17, 1957	5.60	1,290
1956	February 1956	5.10	780	1959	Jan. 21, 1959	5.42	1,100
1957	September 1957	6.34	-	1960	Mar. 3, 1960	5.21	880

5666. North Chickamauga Creek at Upper Mill, near Hixson, Tenn.

Location.--Lat 35°10'24", long 85°13'40", at bridge on road between U.S. Highway 27 and Middle Valley Pike, 2 miles downstream from Pitts Branch, and 2.5 miles southeast of Falling Water, Hamilton County.

Drainage area.--99.5 sq mi.

Gage.--Recording. Datum of gage is 648.34 ft above mean sea level, datum of 1929.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Apr. 8, 1938	14.13	4,000	1941	Dec. 29, 1940	9.77	1,910
1939	Feb. 3, 1939	14.62	3,870	1942	Jan. 2, 1942	12.78	3,370
1940	Feb. 18, 1940	12.61	2,880	1943	Dec. 28, 1942	18.10	12,000

5666.5. North Chickamauga Creek near Hixson, Tenn.

Location.--Lat 35°08'46", long 85°13'37", at bridge on Hixson Pike, three-quarters of a mile east of Hixson, Hamilton County.

Drainage area.--114 sq mi.

Gage.--Nonrecording. Datum of gage is 635.92 ft above mean sea level, datum of 1929.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Jan. 18, 1937	17.96	2,100	1941	Dec. 29, 1940	11.80	1,380
1938	Apr. 9, 1938	16.30	3,890	1942	Jan. 2, 1942	12.74	1,870
1939	Feb. 17, 1939	19.48	-	1943	Dec. 29, 1942	22.81	-
1940	Feb. 19, 1940	14.18	3,110				

a Estimated; maximum for period Jan. 15 to Sept. 30, 1937.

5667. South Chickamauga Creek at Ringgold, Ga.

Location.--Lat 34°55', long 85°08', at State Highway 3 at Ringgold, Catoosa County.

Drainage area.--161 sq mi.

Gage.--Crest-stage gage. Prior to Sept. 2, 1955, at site 150 ft downstream.

Stage-discharge relation.--Not defined.

Remarks.--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Nov. 29, 1948	24.3	-	1955	May 16, 1955	12.6	-
1950	Sept. 7, 1950	20.5	-				
				1956	February 1956	10.6	-
1951	Mar. 29, 1951	25.1	-	1957	Feb. 1, 1957	16.2	-
1952	Mar. 10, 1952	18.3	-	1958	Nov. 18, 1957	15.8	-
1953	Feb. 24, 1953	13.8	-	1959	Apr. 19, 1959	13.4	-
1954	Jan. 16, 1954	17.8	-	1960	Mar. 3, 1960	14.4	-

5670. South Chickamauga Creek below Georgia-Tennessee State line

Location.--Lat 34°59'52", long 85°10'36", on right bank 1,200 ft downstream from Mackey Branch, 1.0 mile downstream from Georgia-Tennessee State line, and 16.3 miles upstream from mouth.

Drainage area.--249 sq mi.

Gage.--Recording. Datum of gage is 659.11 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 8,500 cfs and extended above on basis of velocity-area study.

Bankfull stage.--10.1 ft.

Remarks.--Base for partial-duration series, 4,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Mar. 30, 1951	24.5	-	1955	Feb. 7, 1955	15.33	5,740
1953	Jan. 10, 1953	13.89	4,590	1955	Mar. 22, 1955	14.88	5,300
	Feb. 21, 1953	16.72	8,130		May 16, 1955	14.24	4,750
1954	Jan. 17, 1954	18.78	10,700	1956	Feb. 4, 1956	14.57	5,020
	Jan. 23, 1954	17.61	8,720		Apr. 16, 1956	13.23	4,000
1955	Dec. 29, 1954	13.38	4,100	1957	Feb. 1, 1957	18.77	10,000
					Apr. 5, 1957	15.35	5,760

a From profile based on high-water marks; annual peak only.

5672. West Chickamauga Creek near Kensington, Ga.

Location.--Lat 34°48', long 85°21', at State Highway 2, 2½ miles northeast of Kensington, Walker County.

Drainage area.--73.0 sq mi.

Gage.--Crest-stage gage.

Stage-discharge relation.--Defined by current-meter measurements below 4,200 cfs and extended above.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Sept. 7, 1950	15.7	-	1956	Feb. 20, 1956	12.09	2,460
1951	Mar. 29, 1951	18.5	-	1957	Feb. 26, 1957	14.75	4,940
1952	Mar. 11, 1952	16.65	-	1958	Nov. 18, 1957	14.74	4,810
1953	Feb. 21, 1953	13.29	3,350	1959	Apr. 20, 1959	13.09	3,180
1954	Jan. 16, 1954	15.61	-	1960	Mar. 3, 1960	12.08	2,460
1955	Feb. 6, 1955	13.44	3,440				

5675. South Chickamauga Creek near Chickamauga, Tenn.
(Published as "Chickamauga Creek" prior to October 1937)

Location.--Lat 35°00'50", long 85°12'27", on right bank a third of a mile upstream from bridge on U.S. Highway 11, 1½ miles south of Chickamauga, Hamilton County, 6 miles east of Chattanooga, and 12 miles upstream from mouth.

Drainage area.--428 sq mi.

Gage.--Nonrecording prior to Oct. 7, 1930; recording thereafter. Datum of gage is 651.12 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 24,600 cfs and extended above. Relation affected by backwater from high stages on Tennessee River.

Bankfull stage.--10 ft (from Tennessee Valley Authority).

Remarks.--Only annual peaks are shown prior to Oct. 30, 1930. Base for partial-duration series, 5,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Mar. 15, 1929	15.95	15,400	1945	Feb. 18, 1945	13.67	9,140
1930	Nov. 15, 1929	15.90	15,100	1946	Jan. 8, 1946	18.33	17,000
1931	Nov. 17, 1930	11.25	4,810		Jan. 12, 1946	13.77	8,800
1932	Dec. 15, 1931	11.98	5,880		Feb. 11, 1946	17.65	18,400
	Jan. 30, 1932	14.8	12,100		May 17, 1946	14.85	11,000
1933	Nov. 27, 1932	12.27	6,430	1947	Jan. 16, 1947	15.18	11,900
	Dec. 13, 1932	13.40	8,380		Jan. 19, 1947	14.39	10,100
	Dec. 29, 1932	15.43	13,500		Jan. 21, 1947	18.35	18,100
1934	Mar. 4, 1934	15.95	13,500	1948	Feb. 13, 1948	19.19	20,300
	Mar. 24, 1934	11.88	5,940	1949	Nov. 29, 1948	19.83	24,900
1935	Feb. 15, 1935	13.25	7,670		Jan. 6, 1949	18.90	22,200
	Mar. 13, 1935	14.90	11,000		Jan. 23, 1949	12.03	5,870
	Apr. 22, 1935	13.82	8,690		Apr. 1, 1949	13.17	7,840
1936	Jan. 9, 1936	15.48	12,600	1950	Oct. 31, 1949	14.04	9,600
	Jan. 19, 1936	15.72	13,100		Jan. 7, 1950	12.37	6,420
	Feb. 5, 1936	18.47	20,000		Mar. 14, 1950	16.65	16,000
	Apr. 3, 1936	18.30	19,600		July 27, 1950	12.20	6,140
	Apr. 7, 1936	14.20	9,600		Sept. 2, 1950	13.75	9,000
					Sept. 8, 1950	17.61	18,600
1937	Jan. 3, 1937	15.30	11,200	1951	Mar. 30, 1951	20.73	27,600
	Jan. 19, 1937	12.91	7,420	1952	Dec. 22, 1951	14.46	10,500
	Jan. 26, 1937	11.90	5,900		Mar. 12, 1952	16.59	15,800
	Feb. 10, 1937	12.19	6,330		Mar. 22, 1952	13.34	8,170
	Apr. 30, 1937	13.20	7,930	1953	Jan. 11, 1953	12.74	7,050
1938	Apr. 9, 1938	17.36	18,400		Feb. 22, 1953	14.60	10,800
1939	Feb. 7, 1939	11.70	5,660	1954	Jan. 17, 1954	16.24	14,900
	Feb. 16, 1939	14.07	9,540		Jan. 23, 1954	15.87	13,900
	Mar. 1, 1939	15.14	11,800	1955	Dec. 30, 1954	12.23	5,970
1940	Feb. 19, 1940	12.18	6,200		Feb. 7, 1955	14.20	9,050
	Mar. 14, 1940	11.76	5,600		Mar. 22, 1955	13.11	7,120
1941	Dec. 29, 1940	11.00	4,720		May 16, 1955	11.85	5,560
1942	Mar. 22, 1942	11.48	5,400	1956	Feb. 4, 1956	14.31	9,290
1943	Dec. 29, 1942	18.65	21,400		Apr. 16, 1956	12.14	5,870
	Mar. 17, 1943	12.02	6,280	1957	Feb. 2, 1957	16.68	14,200
	Mar. 22, 1943	13.04	7,860		Apr. 5, 1957	13.66	8,010
	Apr. 20, 1943	13.13	8,030	1958	Nov. 19, 1957	15.90	13,600
1944	Feb. 10, 1944	12.04	6,050		Apr. 29, 1958	13.89	8,430
	Feb. 27, 1944	14.68	11,200	1959	Apr. 20, 1959	13.02	6,980
	Mar. 20, 1944	11.96	6,050	1960	Mar. 3, 1960	15.42	13,400
	Mar. 30, 1944	15.58	12,300				
1945	Feb. 14, 1945	14.87	11,600				

a Occurred Jan. 9, 1946.

5680. Tennessee River at Chattanooga, Tenn.

Location.--Lat 35°05'12", long 85°16'43", on right bank at Rivermont Golf and Country Club, half a mile downstream from South Chickamauga Creek, 3 miles downstream from Chickamauga Dam, 3½ miles upstream from Walnut Street Bridge in Chattanooga, Hamilton County, and at mile 467.6.

Drainage area.--21,400 sq mi, approximately.

Gage.--Nonrecording prior to June 16, 1926; recording thereafter. At several sites prior to Feb. 1, 1939. Peaks shown herein prior to Feb. 1, 1939, have been adjusted for site 3½ miles downstream from present gage and at same datum. Datum of gage is 621.12 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Auxiliary gages at several sites for parts of periods since Feb. 23, 1915. Present recording auxiliary gage at site 2¼ miles downstream.

Stage-discharge.--Defined by current-meter measurements below 20,000 cfs and extended above. Fall between base gage and auxiliary gage used as a factor in computing discharge.

Bankfull stage.--30 ft.

Historical data.--Flood of 1867 is maximum stage known.

Remarks.--Station affected by backwater from Hales Bar Dam since Oct. 13, 1913. Flow regulated by increasing number of reservoirs since 1936. Gage-height record during some early periods from U.S. Weather Bureau. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1826	March 1826	a41.5	-	1907	Nov. 22, 1906	33.4	222,000
				1908	Feb. 17, 1908	24.8	163,000
1847	March 1847	a42.4	-	1909	June 6, 1909	25.3	163,000
				1910	Feb.19,20, 1910	14.0	86,600
1867	Mar. 11, 1867	a57.9	a459,000	1911	Apr. 8, 1911	30.0	198,000
1874	May 1, 1874	29.6	195,000	1912	Mar. 31, 1912	31.3	190,000
1875	Mar. 1, 1875	54.0	410,000	1913	Mar. 30, 1913	33.3	222,000
				1914	Apr. 3, 1914	21.4	105,000
1876	Dec. 31, 1875	34.2	227,000	1915	Dec. 28, 1914	33.1	185,000
1877	Apr. 11, 1877	28.8	190,000				
1878	Feb. 25, 1878	19.3	125,000	1916	Dec. 20, 1915	34.4	197,000
1879	Jan. 15, 1879	38.0	252,000	1917	Mar. 7, 1917	47.7	341,000
1880	Mar. 18, 1880	38.4	254,000	1918	Feb. 2, 1918	42.45	270,000
				1919	Jan. 5, 1919	32.3	189,000
1881	Dec. 3, 1880	26.5	174,000	1920	Apr. 5, 1920	43.6	275,000
1882	Jan. 19, 1882	40.4	275,000				
1883	Jan. 23, 1883	38.6	261,000	1921	Feb. 13, 1921	34.5	213,000
1884	Mar. 10, 1884	42.8	285,000	1922	Jan. 23, 1922	35.8	229,000
1885	Jan. 18, 1885	26.5	174,000	1923	Feb. 7, 1923	32.2	188,000
				1924	Jan. 5, 1924	26.9	143,000
1886	Apr. 3, 1886	52.5	391,000	1925	Dec. 11, 1924	b24.4	138,000
1887	Feb. 28, 1887	27.5	181,000				
1888	Mar. 31, 1888	27.1	178,000	1926	Apr. 16, 1926	20.6	92,900
1889	Feb. 18, 1889	30.0	198,000	1927	Dec. 29, 1926	38.4	249,000
1890	Mar. 2, 1890	42.5	283,000	1928	July 2, 1928	30.8	184,000
				1929	Mar. 26, 1929	38.5	248,000
1891	Mar. 11, 1891	38.9	259,000	1930	Nov. 19, 1929	28.95	180,000
1892	Jan. 17, 1892	37.9	252,000				
1893	Feb. 20, 1893	33.4	221,000	1931	Apr. 8, 1931	c23.3	125,000
1894	Feb. 6, 1894	25.5	167,000	1932	Feb. 1, 1932	a30.4	192,000
1895	Jan. 12, 1895	32.1	212,000	1933	Jan. 1, 1933	e37.6	241,000
				1934	Mar. 6, 1934	e34.1	215,000
1896	Apr. 5, 1896	40.5	269,000	1935	Mar. 15, 1935	c29.5	175,000
1897	Mar. 14, 1897	38.1	257,000				
1898	Sept. 5, 1898	25.5	167,000	1936	Mar. 29, 1936	c37.08	234,000
1899	Mar. 22, 1899	40.1	273,000	1937	Jan. 4, 1937	c32.96	204,000
1900	Feb. 15, 1900	24.3	159,000	1938	Apr. 10, 1938	c25.32	136,000
				1939	Feb. 17, 1939	c33.45	193,000
1901	May 25, 1901	33.2	221,000	1940	Sept. 2, 1940	d21.07	89,400
1902	Jan. 2, 1902	40.8	271,000				
1903	Apr. 11, 1903	31.8	210,000	1941	July 18, 1941	d16.69	58,200
1904	Mar. 25, 1904	22.1	144,000	1942	Mar. 22, 1942	18.86	72,500
1905	Feb. 11, 1905	22.4	146,000	1943	Dec. 30, 1942	c37.67	235,000
				1944	Mar. 30, 1944	33.52	201,000
1906	Jan. 26, 1906	21.4	140,000	1945	Feb. 18, 1945	d25.22	115,000

a From reports by Tennessee Valley Authority.

b Occurred Jan. 14, 1925.

c From reports by U.S. Weather Bureau.

d Occurred at different time than peak discharge.

Peak stages and discharges of Tennessee River at Chattanooga, Tenn--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	Jan. 9, 1946	d37.50	225,000	1954	Jan. 22, 1954	d31.70	185,000
1947	Jan. 20, 1947	d33.54	186,000	1955	Mar. 23, 1955	d24.22	118,000
1948	Feb. 14, 1948	d35.78	225,000				
1949	Jan. 6, 1949	d31.46	179,000	1956	Feb. 4, 1956	d29.25	187,000
1950	Feb. 2, 1950	d30.40	192,000	1957	Feb. 2, 1957	d34.22	208,000
				1958	Nov. 19, 1957	e31.61	189,000
1951	Mar. 30, 1951	d27.45	140,000	1959	Jan. 23, 1959	23.06	110,000
1952	Dec. 22, 1951	d25.84	135,000	1960	Dec. 20, 1959	22.96	108,000
1953	Feb. 22, 1953	d23.08	107,000				

d Occurred at different time than peak discharge.

e Occurred on following day.

5685. Chattanooga Creek near Flintstone, Ga.

Location.--Lat 34°58'20", long 85°19'40", on right bank 0.8 mile south of Georgia-Tennessee State line and 2.3 miles northeast of Flintstone, Walker County.

Drainage area.--50.6 sq mi.

Gage.--Recording. Datum of gage is 649.18 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 5,100 cfs and extended above.

Bankfull stage.--7.5 ft (from Tennessee Valley Authority).

Remarks.--Base for partial-duration series, 800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Feb. 2, 1951	-	(a)	1955	Apr. 13, 1955	8.28	1,160
	Mar. 29, 1951	12.90	6,140		May 23, 1955	8.13	1,050
1952	Dec. 15, 1951	8.26	1,070	1956	Feb. 2, 1956	9.56	2,130
	Dec. 21, 1951	9.27	2,420		Apr. 7, 1956	7.90	900
	Jan. 10, 1952	8.48	1,270		Apr. 16, 1956	8.62	1,420
	Jan. 22, 1952	8.32	1,120				
	Mar. 11, 1952	10.72	3,610	1957	Feb. 1, 1957	10.43	2,600
	Mar. 22, 1952	8.39	1,550		Feb. 26, 1957	8.13	875
					Apr. 4, 1957	9.65	1,940
1953	Jan. 10, 1953	8.80	1,880				
	Feb. 21, 1953	9.36	2,360	1958	Nov. 14, 1957	8.90	1,700
	Mar. 4, 1953	7.71	1,010		Nov. 18, 1957	9.08	1,830
					Dec. 20, 1957	7.74	894
1954	Jan. 16, 1954	9.90	2,820		Apr. 29, 1958	10.04	2,590
	Jan. 22, 1954	9.78	2,720				
1955	Dec. 29, 1954	9.14	1,800	1959	Jan. 22, 1959	9.68	2,300
	Feb. 6, 1955	10.44	2,850				
	Mar. 22, 1955	9.26	1,900	1960	Feb. 18, 1960	8.06	952
	Apr. 6, 1955	8.16	1,070		Mar. 3, 1960	9.00	1,680

a Discharge not determined but greater than 800 cfs.

5700. Tennessee River at Hales Bar, near Chattanooga, Tenn.

Location.--Lat 35°01'43", long 85°32'48", in center pier of bridge on U.S. Highways 41, 64, and 72, 1.4 miles downstream from Hales Bar Dam, 5½ miles south-east of Jasper, Marion County, 7 miles upstream from Sequatchie River, 34.5 miles downstream from Chattanooga, and at mile 429.7.

Drainage area.--21,800 sq mi, approximately.

Gage.--Nonrecording prior to July 1, 1930; recording thereafter. At site 1.4 miles upstream at datum 0.35 ft higher prior to Feb. 13, 1932. Datum of gage is 588.51 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Recording auxiliary gage since Jan. 27, 1939, 22 miles downstream.

Stage-discharge relation.--Defined by current-meter measurements below 225,000 cfs and extended above. Fall between base gage and auxiliary gage used as a factor in computing discharge.

Bankfull stage.--32 ft (U.S. Weather Bureau).

Remarks.--Flow regulated by an increasing number of reservoirs since 1936. Peak stages prior to 1930 from reports by U.S. Weather Bureau. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1867	Mar. 11, 1867	47.3	-	1938	Apr. 10, 1938	21.60	136,000
1917	Mar. 8, 1917	38.5	320,000	1939	Feb. 17, 1939	26.78	189,000
1918	Feb. 2, 1918	35.3	-	1940	Sept. 2, 1940	15.47	87,400
1919	Jan. 6, 1919	27.2	-	1941	July 18, 1941	12.59	57,000
1920	Apr. 6, 1920	36.1	-	1942	Mar. 22, 1942	15.06	77,500
1921	Feb. 13, 1921	29.2	-	1943	Dec. 30, 1942	29.22	231,000
1922	Jan. 24, 1922	30.2	-	1944	Mar. 30, 1944	26.64	193,000
1923	Feb. 7, 1923	27.3	-	1945	Feb. 19, 1945	20.20	124,000
1924	Jan. 5, 1924	23.4	-	1946	Jan. 9, 1946	29.97	231,000
1925	Jan. 14, 1925	20.4	-	1947	Jan. 20, 1947	27.16	191,000
1926	Apr. 16, 1926	17.2	-	1948	Feb. 14, 1948	29.08	216,000
1927	Dec. 29, 1926	34.0	-	1949	Jan. 6, 1949	27.71	194,000
1928	July 2, 1928	25.6	-	1950	Feb. 2, 1950	25.74	180,000
1929	Mar. 26, 1929	33.0	-	1951	Mar. 30, 1951	23.89	155,000
1930	Nov. 19, 1929	25.3	172,000	1952	Mar. 12, 1952	22.02	141,000
1931	Apr. 8, 1931	20.0	125,000	1953	Feb. 22, 1953	19.66	120,000
1932	Feb. 3, 1932	26.8	192,000	1954	Jan. 23, 1954	27.53	199,000
1933	Jan. 1, 1933	31.2	241,000	1955	Mar. 23, 1955	20.48	122,000
1934	Mar. 6, 1934	28.90	215,000	1956	Feb. 4, 1956	24.57	168,000
1935	Mar. 15, 1935	25.2	175,000	1957	Feb. 2, 1957	29.55	217,000
1936	Mar. 30, 1936	31.2	241,000	1958	Nov. 19, 1957	27.71	195,000
1937	Jan. 5, 1937	28.39	209,000	1959	Jan. 22, 1959	19.04	116,000
				1960	Dec. 20, 1959	18.78	114,000

5710. Sequatchie River near Whitwell, Tenn.

Location.--Lat 35°12'22", long 85°29'48", on right bank 15 ft downstream from highway bridge, 1½ miles east of Whitwell, Marion County, 3 miles upstream from bridge on State Highway 27, and 4½ miles downstream from Griffith Creek.

Drainage area.--384 sq mi.

Gage.--Nonrecording prior to Oct. 1, 1930; recording thereafter. At datum 0.03 ft higher prior to Sept. 18, 1927. Datum of gage is 632.73 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 17,700 cfs and extended above.

Bankfull stage.--12.5 ft.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1930. Base for partial-duration series, 5,500 cfs.

Peak stages and discharges of Sequatchie River near Whitwell, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1867	March 1867	al9	-	1944	Mar. 29, 1944	14.97	13,500
1921	Feb. 11, 1921	15.1	12,100	1945	Feb. 18, 1945	13.67	6,440
1922	Mar. 2, 1922	15.8	16,300	1946	Jan. 8, 1946	16.23	19,000
1923	Dec. 16, 1922	13.6	7,100		Feb. 11, 1946	13.78	6,680
1924	May 1, 1924	13.5	6,850	1947	Jan. 20, 1947	14.55	9,230
1925	Apr. 28, 1925	13.4	6,630	1948	Feb. 14, 1948	16.22	19,100
1926	Nov. 13, 1925	13.1	6,130	1949	Nov. 29, 1948	15.60	15,000
1927	Dec. 26, 1926	15.3	13,200		Jan. 5, 1949	16.55	21,400
1928	June 30, 1928	15.3	13,200	1950	Jan. 7, 1950	14.44	8,750
1929	Mar. 24, 1929	16.0	19,000		Jan. 19, 1950	14.46	8,830
1930	Nov. 15, 1929	14.4	9,300		Feb. 2, 1950	14.41	8,620
1931	Mar. 29, 1931	11.39	4,020		Mar. 13, 1950	14.38	8,500
1932	Jan. 31, 1932	13.8	7,640	1951	Feb. 1, 1951	15.20	12,600
1933	Dec. 29, 1932	13.68	7,020		Mar. 29, 1951	15.14	12,300
	Feb. 15, 1933	14.95	12,300	1952	Dec. 15, 1951	14.21	7,880
1934	Jan. 8, 1934	14.24	8,520		Dec. 21, 1951	13.83	6,760
	Mar. 3, 1934	15.65	16,100		Mar. 11, 1952	15.34	13,400
	Mar. 25, 1934	14.52	9,740		Mar. 23, 1952	13.94	7,050
1935	Mar. 13, 1935	14.60	10,200	1953	Feb. 12, 1953	14.74	10,100
	Apr. 6, 1935	14.46	9,740		Feb. 21, 1953	14.09	7,490
1936	Jan. 9, 1936	14.10	7,100	1954	Jan. 17, 1954	13.87	6,860
	Feb. 5, 1936	13.82	6,380		Jan. 21, 1954	15.53	14,600
	Mar. 25, 1936	14.35	9,330	1955	Dec. 30, 1954	13.59	6,200
	Mar. 28, 1936	14.82	12,600		Feb. 7, 1955	13.65	6,330
	Apr. 3, 1936	13.72	7,380		Mar. 22, 1955	14.58	9,370
	Apr. 7, 1936	13.49	6,600		Apr. 7, 1955	14.44	8,750
1937	Jan. 3, 1937	15.55	16,000	1956	Feb. 3, 1956	15.52	14,500
	Jan. 16, 1937	13.37	5,620		Feb. 19, 1956	13.41	5,860
	Jan. 25, 1937	14.70	9,330		Mar. 17, 1956	13.63	6,290
	Feb. 9, 1937	14.27	7,690	1957	Dec. 14, 1956	15.54	14,600
1938	Apr. 9, 1938	13.73	6,400		Feb. 1, 1957	16.00	17,600
1939	Feb. 4, 1939	15.44	15,200		Apr. 9, 1957	14.22	7,910
	Feb. 16, 1939	14.15	7,950	1958	Nov. 19, 1957	16.71	22,600
	Mar. 1, 1939	14.10	7,580		Dec. 8, 1957	13.33	5,710
1940	Feb. 19, 1940	11.91	3,940		Dec. 21, 1957	13.24	5,560
1941	Apr. 5, 1941	13.66	6,400		Apr. 30, 1958	14.13	7,620
1942	Feb. 7, 1942	11.99	4,300	1959	Jan. 22, 1959	14.53	9,140
1943	Dec. 28, 1942	16.29	19,600	1960	Dec. 19, 1959	14.10	7,520
	Feb. 6, 1943	13.55	6,380				
1944	Feb. 28, 1944	13.18	6,020				

a About, from Tennessee Valley Authority.

5716. Brown Spring Branch near Sequatchie, Tenn.

Location.--Lat 35°08'55", long 85°33'28", at culvert under State Highway 27, 2.1 miles northeast of bridge over Little Sequatchie River and 3.1 miles northeast of Sequatchie, Marion County.

Drainage area.--0.67 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Defined by current-meter measurements below 65 cfs and extended above.

Remarks.--Only annual peaks are shown.

TENNESSEE RIVER BASIN

Peak stages and discharges of Brown Spring Branch near Sequatchie, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	May 29, 1955	5.65	113	1958	November 1957	6.23	140
1956	Feb. 2, 1956	5.81	120	1959	Mar. 27, 1959	4.84	-
1957	Jan. 31, 1957	4.98	86	1960	Dec. 18, 1959	3.89	48.4

a Affected by backwater.

5718. Battle Creek near Monteagle, Tenn.

Location.--Lat 35°08'03", long 85°46'15", at bridge on U.S. Highways 41 and 64, 9.2 miles southeast of Monteagle, Grundy County.

Drainage area.--50.4 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Not defined.

Remarks.--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 22, 1955	7.15	-	1958	Nov. 18, 1957	9.09	-
				1959	Jan. 22, 1959	7.33	-
1956	Feb. 3, 1956	8.29	-	1960	Dec. 18, 1959	7.59	-
1957	Feb. 1, 1957	7.74	-				

5730. Short Creek near Albertville, Ala.

Location.--Lat 34°18'05", long 86°10'53", in NE $\frac{1}{4}$ sec.35, T.8 S., R.4 E., on left bank 325 ft downstream from county highway bridge, 800 ft downstream from Turkey Creek, 3 miles northeast of Albertville, and 4.4 miles upstream from Scarham Creek.

Drainage area.--91.6 sq mi.

Gage.--Recording prior to Sept. 30, 1953; crest-stage gage thereafter. Datum of gage is 865.80 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 14,500 cfs and extended above on basis of slope-area measurement at 25,000 cfs.

Bankfull stage.--10 ft.

Remarks.--City of Albertville diverts water for municipal supply $3\frac{1}{2}$ miles above station. Base for partial-duration series, 3,000 cfs. Only annual peaks are shown subsequent to Oct. 1, 1953.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	December 1942	21.2	25,000	1951	Mar. 29, 1951	15.55	13,200
1946	Jan. 8, 1946	9.89	4,890	1952	Dec. 21, 1951	10.14	4,800
	Feb. 10, 1946	12.77	8,620		Dec. 26, 1951	9.23	3,940
					Mar. 11, 1952	9.99	4,650
1947	Nov. 11, 1946	9.44	4,390	1953	Jan. 10, 1953	8.30	3,010
	Jan. 15, 1947	11.70	7,110		May 19, 1953	9.26	3,920
	Jan. 20, 1947	11.28	6,560		June 16, 1953	10.23	4,890
1948	Feb. 14, 1948	11.65	7,110	1954	Jan. 16, 1954	7.9	2,700
	Mar. 23, 1948	8.37	3,300	1955	Feb. 6, 1955	8.97	3,660
1949	Nov. 19, 1948	10.47	5,560	1956	Apr. 16, 1956	10.11	4,760
	Nov. 28, 1948	14.85	12,000	1957	June 9, 1957	11.65	6,430
	Jan. 5, 1949	16.37	14,800	1958	Nov. 14, 1957	9.10	3,760
	Mar. 31, 1949	8.15	3,100	1959	-	-	(c)
1950	Mar. 13, 1950	12.64	7,890	1960	-	-	(c)

a From floodmark, by Tennessee Valley Authority.

b From slope-area measurement

by Tennessee Valley Authority.

c Annual peak not determined; less than 2,770 cfs.

5735. Tennessee River at Guntersville, Ala.

Location.--Lat 34°22'23", long 86°17'22", in NE $\frac{1}{4}$ sec.2, T.8 S., R.3 E., at bridge on U.S. Highway 431, at mouth of Big Spring Creek in Guntersville, 9.0 miles upstream from Guntersville Dam, and at mile 358.0.

Drainage area.--24,340 sq mi, approximately.

Gage.--Nonrecording prior to May 15, 1930; recording thereafter. Datum of gage is 546.31 ft above mean sea level, datum of 1929. Recording auxiliary gage 8.3 miles downstream.

Stage-discharge relation.--Defined by current-meter measurements below 240,000 cfs and extended above. Fall between base gage and auxiliary gage used as a factor in computing discharge.

Bankfull stage.--25 ft.

Remarks.--Peak stages from reports of U.S. Weather Bureau prior to 1931. Records for period 1913 to 1923 considered unreliable in 1930 by U.S. Weather Bureau and are not shown herein. Flow partly regulated by Norris Lake after February 1936. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1867	Mar. 13, 1867	48.0	-	1926	Jan. 23, 1926	20.0	-
				1927	Dec. 31, 1926	38.3	-
1905	Feb. 12, 1905	25.3	-	1928	July 4, 1928	27.0	-
				1929	Mar. 28, 1929	34.8	-
1906	Jan. 27, 1906	22.3	-	1930	Nov. 18, 1929	31.0	-
1907	Nov. 24, 1906	29.8	-				
1908	Feb. 19, 1908	27.1	-	1931	Apr. 9, 1931	22.54	136,000
1909	Mar. 14, 1909	30.4	-	1932	Feb. 4, 1932	30.8	201,000
1910	May 27, 1910	18.4	-	1933	Jan. 3, 1933	34.45	244,000
				1934	Mar. 8, 1934	32.7	226,000
1911	Apr. 10, 1911	34.0	-	1935	Mar. 17, 1935	28.8	186,000
1912	Apr. 2, 1912	30.8	-				
				1936	Apr. 2, 1936	35.53	260,000
1917	Mar. 10, 1917	37.4	350,000	1937	Jan. 6, 1937	31.94	210,000
				1938	Apr. 11, 1938	29.81	144,000
1924	Apr. 21, 1924	26.5	-				
1925	Jan. 15, 1925	23.4	-				

5745. Paint Rock River near Woodville, Ala.

Location.--Lat 34°37'27", long 86°18'23", in NW $\frac{1}{4}$ sec.10, T.5 S., R.3 E., on left bank 20 ft downstream from bridge on U.S. Highway 72, 1,000 ft downstream from Southern Railway bridge, 2 miles west of Woodville, 4.1 miles upstream from Little Paint Creek, and at mile 26.6.

Drainage area.--320 sq mi.

Gage.--Nonrecording prior to Jan. 16, 1938; recording thereafter. Datum of gage is 570.95 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 27,000 cfs and extended above. Rate of change of stage used as a factor in computing discharge.

Bankfull stage.--12 ft.

Remarks.--Base for partial-duration series, 6,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Jan. 10, 1936	17.08	7,940	1937	Feb. 10, 1937	17.05	7,660
	Feb. 4, 1936	19.24	19,600		May 4, 1937	16.70	6,900
	Mar. 26, 1936	17.35	8,940				
	Apr. 3, 1936	17.10	7,940	1938	Apr. 9, 1938	18.01	11,300
	Apr. 7, 1936	17.67	10,100				
	July 5, 1936	17.50	9,300	1939	Feb. 4, 1939	20.35	29,200
					Feb. 15, 1939	18.30	12,900
1937	Dec. 8, 1936	16.3	6,060		Mar. 1, 1939	18.75	16,400
	Jan. 3, 1937	18.85	16,400				
	Jan. 26, 1937	17.4	8,940	1940	Feb. 19, 1940	16.88	7,920

Peak stages and discharges of Paint Rock River near Woodville, Ala.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Mar. 8, 1941	16.40	6,260	1952	Dec. 16, 1951	17.64	8,540
1942	Mar. 22, 1942	a15.14	4,570		Dec. 22, 1951	17.23	7,240
1943	Dec. 28, 1942	a20.50	31,300		Mar. 11, 1952	18.87	15,300
1944	Feb. 10, 1944	17.35	8,320		Mar. 23, 1952	18.02	10,100
	Feb. 19, 1944	16.50	6,160	1953	Feb. 13, 1953	17.10	6,900
	Feb. 27, 1944	17.67	9,580		Feb. 22, 1953	17.48	7,990
	Mar. 29, 1944	18.56	14,600	1954	Jan. 16, 1954	19.81	22,800
1945	Feb. 14, 1945	17.94	11,000		Jan. 22, 1954	19.78	22,500
	Feb. 18, 1945	18.33	13,200	1955	Dec. 30, 1954	17.88	9,470
	Mar. 5, 1945	16.60	6,360		Feb. 7, 1955	17.58	8,330
1946	Jan. 9, 1946	18.81	16,400		Feb. 23, 1955	17.12	6,950
	Feb. 10, 1946	18.64	14,900		Mar. 22, 1955	17.92	9,640
1947	Nov. 12, 1946	16.97	7,110		May 30, 1955	16.94	6,500
	Jan. 21, 1946	17.55	9,120	1956	Feb. 4, 1956	19.90	23,600
1948	Feb. 13, 1948	19.91	23,600		Apr. 16, 1956	18.50	12,700
	Apr. 15, 1948	17.08	6,690		May 8, 1956	17.58	8,330
1949	Nov. 29, 1948	19.40	15,700	1957	Dec. 14, 1956	17.59	8,360
	Jan. 5, 1949	20.84	28,700		Feb. 1, 1957	20.16	25,900
	Jan. 23, 1949	16.89	6,330	1958	Nov. 19, 1957	19.80	22,700
1950	Jan. 7, 1950	19.39	19,400		Dec. 9, 1957	16.82	6,240
	Feb. 3, 1950	17.06	6,800		Dec. 21, 1957	16.83	6,260
	Mar. 13, 1950	18.97	16,100		Feb. 7, 1958	16.83	6,260
1951	Feb. 2, 1951	19.56	20,700	1959	Jan. 22, 1959	18.67	13,900
	Mar. 29, 1951	a20.32	27,500	1960	Dec. 20, 1959	18.42	12,200
					Mar. 5, 1960	17.87	9,420

a Occurred at different time than peak discharge.

5747. Big Huckleberry Creek near Belvidere, Tenn.

Location.--Lat 35°04'00", long 86°21'29", at culvert under U.S. Highway 64, 1.3 miles southeast of intersection of U.S. Highway 64 and State Highway 121, and 11 miles southwest of Belvidere, Lincoln County.

Drainage area.--2.18 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Defined by current-meter measurements below 81 cfs and extended above.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	3.95	276	1958	November 1957	4.62	448
1956	Feb. 3, 1956	4.02	294	1959	Jan. 21, 1959	2.83	86
1957	Jan. 31, 1957	3.74	232	1960	Dec. 18, 1959	3.76	236

5750. Flint River near Chase, Ala.

Location.--Lat 34°49'08", long 86°28'52", in SW¹/₄ sec.36, T.2 S., R.1 E., on left bank 250 ft downstream from Nashville, Chattanooga & St. Louis Railway bridge, a quarter of a mile downstream from highway bridge, a third of a mile downstream from Brier Fork, and 5 miles northeast of Chase.

Drainage area.--342 sq mi.

Gage.--Nonrecording prior to May 18, 1934; recording thereafter. Prior to May 18, 1934, at railway bridge 250 ft upstream. Datum of gage is 640.37 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 28,000 cfs and extended above.

Remarks.--Base for partial-duration series, 5,000 cfs.

Peak stages and discharges of Flint River near Chase, Ala.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	September 1929	25.0	42,000	1947	Jan. 3, 1947	9.30	5,440
1931	Apr. 4, 1931	6.20	4,120		Jan. 18, 1947	10.17	6,280
1932	Aug. 18, 1932	10.10	7,540		Jan. 20, 1947	11.43	7,950
1933	Oct. 16, 1932	11.30	9,460	1948	Feb. 13, 1948	17.76	19,800
	Nov. 26, 1932	7.50	5,000		Mar. 17, 1948	9.90	6,200
	Dec. 12, 1932	8.00	5,550		Mar. 31, 1948	8.70	5,060
	Feb. 15, 1933	10.00	7,860		Apr. 9, 1948	8.67	5,030
	Feb. 20, 1933	10.20	8,100	1949	Nov. 28, 1948	15.38	13,600
	Apr. 1, 1933	8.50	6,100		Dec. 16, 1948	13.43	9,700
	May 10, 1933	15.0	14,200		Jan. 5, 1949	23.61	37,700
1934	Mar. 2, 1934	17.30	20,300		Jan. 22, 1949	11.70	7,740
1935	Mar. 5, 1935	9.01	6,030		Feb. 19, 1949	10.19	6,280
	Mar. 12, 1935	14.90	14,500		Mar. 31, 1949	11.12	7,130
	Apr. 6, 1935	8.38	5,490		Apr. 29, 1949	10.53	6,580
1936	Jan. 9, 1936	10.54	7,730		June 15, 1949	15.46	13,400
	Feb. 4, 1936	12.85	10,900	1950	Jan. 6, 1950	15.35	13,200
	Mar. 24, 1936	12.42	10,300		Jan. 30, 1950	13.43	9,700
	Mar. 27, 1936	10.55	7,660		Feb. 2, 1950	10.08	6,080
	Apr. 2, 1936	9.13	6,130		Feb. 7, 1950	11.69	7,720
	Apr. 6, 1936	14.68	13,800		Feb. 9, 1950	9.00	5,050
	Apr. 9, 1936	8.13	5,220		Mar. 13, 1950	14.68	11,600
	July 4, 1936	18.13	22,000	1951	Feb. 1, 1951	21.98	32,300
	July 21, 1936	10.28	7,490		Mar. 29, 1951	19.30	24,700
1937	Dec. 7, 1936	11.20	8,120		June 30, 1951	9.67	5,690
	Jan. 2, 1937	14.48	13,000	1952	Dec. 8, 1951	12.72	8,840
	Jan. 15, 1937	9.98	6,650		Dec. 15, 1951	11.20	7,210
	Jan. 20, 1937	8.67	5,760		Dec. 21, 1951	12.40	8,490
	Jan. 25, 1937	10.73	7,490		Jan. 10, 1952	12.08	8,140
	Feb. 9, 1937	10.44	7,610		Mar. 11, 1952	12.81	8,950
1938	Apr. 8, 1938	10.01	7,030		Mar. 22, 1952	10.31	6,310
	Apr. 21, 1938	9.13	5,940	1953	Feb. 12, 1953	12.75	8,860
	July 21, 1938	10.52	7,680		Feb. 21, 1953	13.75	10,200
1939	Feb. 3, 1939	17.75	21,400		Mar. 4, 1953	11.25	7,260
	Feb. 15, 1939	15.70	16,900		July 22, 1953	9.15	5,190
	Feb. 28, 1939	13.58	12,600	1954	Jan. 16, 1954	13.06	9,250
	Mar. 6, 1939	11.39	8,960		Jan. 21, 1954	25.00	42,000
1940	Mar. 14, 1940	7.44	3,870	1955	Dec. 29, 1954	15.50	13,600
1941	Jan. 2, 1941	7.33	3,780		Feb. 6, 1955	9.27	5,310
1942	Feb. 17, 1942	7.72	4,150		Feb. 22, 1955	10.50	6,500
1943	Dec. 28, 1942	14.18	12,800		Mar. 22, 1955	17.78	20,200
1944	Feb. 10, 1944	8.73	5,150		May 29, 1955	16.85	17,400
	Feb. 17, 1944	10.04	6,560	1956	Feb. 3, 1956	16.0	14,900
	Feb. 27, 1944	10.00	6,560		Feb. 18, 1956	10.5	6,500
	Mar. 7, 1944	8.67	5,150		Apr. 4, 1956	11.4	7,420
	Mar. 29, 1944	16.79	18,300		Apr. 16, 1956	14.3	11,000
1945	Feb. 13, 1945	9.40	5,890	1957	Dec. 13, 1956	12.2	8,270
	Feb. 17, 1945	15.14	14,500		Jan. 29, 1957	9.9	5,900
	Feb. 22, 1945	11.79	8,900		Feb. 1, 1957	19.7	25,900
	Mar. 4, 1945	11.38	8,340		Apr. 10, 1957	9.3	5,340
1946	Jan. 8, 1946	17.56	20,000	1958	Nov. 19, 1957	16.8	17,200
	Jan. 12, 1946	10.64	7,280		Nov. 25, 1957	9.0	5,050
	Feb. 10, 1946	13.12	10,900		Apr. 29, 1958	10.1	6,100
	Feb. 14, 1946	9.14	5,560		Sept. 21, 1958	9.1	5,140
	Mar. 29, 1946	10.12	6,680	1959	Jan. 22, 1959	9.0	5,050
					July 18, 1959	9.6	5,620
				1960	Dec. 19, 1959	17.2	18,400
					Mar. 3, 1960	13.1	9,300

5755. Tennessee River at Whitesburg, Ala.
(Published as "at Decatur" prior to 1937)

Location.--Lat 34°34'27", long 86°32'42", in NE $\frac{1}{4}$ sec.30, T.5 S., R.1 E., on right bank at Whitesburg, a quarter of a mile upstream from Aldridge Creek, a third of a mile upstream from Clement C. Clay Bridge on State Highway 38, 5 $\frac{1}{2}$ miles downstream from Flint River, 11 miles south of Huntsville, 15 $\frac{1}{2}$ miles downstream from Guntersville Dam, 58 $\frac{1}{2}$ miles upstream from Wheeler Dam, and at mile 333.3.

Drainage area.--25,610 sq mi, approximately.

Gage.--Nonrecording prior to Dec. 3, 1926; recording thereafter. At site 28.3 miles downstream at datum 14.70 ft lower prior to Sept. 30, 1936. Datum of gage is 549.00 ft above mean sea level, datum of 1929. Recording auxiliary gage 28.3 miles downstream since Mar. 4, 1937.

Stage-discharge relation.--Defined by current-meter measurements. Fall between base gage and auxiliary gage used as a factor in computing discharge since 1937.

Bankfull stage.--20 ft at site used prior to 1937 (from U.S. Weather Bureau).

Historical data.--The flood of March 1867 is the maximum stage known.

Remarks.--Peak stages from reports by U. S. Weather Bureau prior to 1925. Flow regulated by increasing number of reservoirs since 1936. Only annual peaks are shown prior to 1925 and since 1936. Base for partial-duration series, 124,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1867	Mar. 15, 1867	a29.5	-	1924	Mar.9,Apr.22, 1924	17.1	-
1875	March 1875	26.7	-	1925	Jan. 16, 1925	15.6	134,000
1876	Jan. 3, 1876	19.7	-	1926	Jan. 24, 1926	14.0	114,000
1877	Apr. 13, 1877	18.3	-	1927	Dec. 16, 1926	15.64	130,000
1878	Feb. 26, 1878	13.3	-		Jan. 1, 1927	23.2	283,000
1879	Jan. 19, 1879	20.5	-		Mar. 1, 1927	18.14	170,000
1880	Mar.19-22, 1880	21.7	-		Mar. 14, 1927	18.4	175,000
1881	Dec. 5, 1880	17.3	-	1928	Apr. 25, 1928	18.1	170,000
1882	Jan. 23, 1882	23.8	-		June 7, 1928	15.95	137,000
1883	Jan. 27, 1883	20.2	-		July 4, 1928	17.40	158,000
1884	Mar. 15, 1884	23.2	-	1929	Jan. 28, 1929	17.18	155,000
1885	Jan. 21, 1885	19.3	-		Mar. 6, 1929	19.40	193,000
1886	Apr. 8, 1886	26.9	-		Mar. 18, 1929	18.91	184,000
1887	Mar. 2, 1887	19.0	-		Mar. 30, 1929	21.3	231,000
1888	Mar. 30, 1888	19.6	-		May 11, 1929	18.13	170,000
1889	Feb. 22, 1889	20.0	-		May 25, 1929	17.60	162,000
1890	Mar. 6, 1890	23.0	-	1930	Nov. 19, 1929	20.32	210,000
1891	Mar. 15, 1891	22.3	-		Mar. 10, 1930	15.50	130,000
1892	Apr. 12, 1892	21.7	-	1931	Apr. 9, 1931	15.25	127,000
1893	Feb. 23, 1893	20.8	-	1932	Dec. 18, 1931	15.06	129,000
1897	March 1897	24.8	-		Feb. 5, 1932	19.97	208,000
1909	June 8, 1909	b17.8	-		Feb. 18, 1932	17.24	161,000
1910	Feb.22, May 27, 1910	13.0	-		Apr. 3, 1932	15.00	128,000
1911	Apr. 11, 1911	21.6	-	1933	Dec. 17, 1932	17.65	172,000
1912	Apr. 3, 1912	19.8	-		Jan. 4, 1933	21.14	236,000
1913	Apr. 3, 1913	19.4	-		Feb. 21, 1933	19.95	215,000
1914	Apr. 4, 1914	13.9	-		Mar. 24, 1933	16.20	149,000
1915	Dec. 31, 1914	19.2	-	1934	Mar.8,9, 1934	20.5	224,000
1916	July 14, 1916	19.3	-		Mar.29,30, 1934	18.52	187,000
1917	Mar. 12, 1917	23.7	-	1935	Mar. 17, 1935	18.63	186,000
1918	Feb. -6, 1918	22.0	-		Apr. 1, 1935	17.12	160,000
1919	Jan. 8, 1919	18.8	-		Apr. 10, 1935	17.66	168,000
1920	Apr. 9, 1920	23.1	-	1936	Jan. 13, 1936	19.38	194,000
1921	Feb. 15, 1921	19.4	-		Jan. 25, 1936	18.58	177,000
1922	Jan. 27, 1922	20.0	-				
1923	Feb. 10, 1923	19.0	-				

a Gage height, 31.4 ft, present site and datum, from profiles by Corps of Engineers.
b Maximum for period Apr. 19 to Sept. 30, 1909.

Peak stages and discharges of Tennessee River at Whitesburg, Ala.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Feb. 9, 1936	19.02	185,000	1948	Feb. 15, 1948	c23.0C	269,000
	Apr. 3, 1936	22.72	282,000	1949	Jan. 6, 1949	e22.9C	272,000
				1950	Mar. 15, 1950	e19.3F	213,000
1938	Apr. 11, 1938	c15.37	153,000	1951	Mar. 30, 1951	c21.4F	249,000
1939	Feb. 18, 1939	20.26	228,000	1952	Mar. 13, 1952	16.2F	180,000
1940	Feb. 20, 1940	d9.67	89,900	1953	Feb. 24, 1953	14.81	157,000
1941	Apr. 8, 1941	9.40	67,200	1954	Jan.25,24,1954	c21.9F	258,000
1942	Mar. 22, 1942	11.77	111,000	1955	Mar. 24, 1955	c16.6F	173,000
1943	Dec. 31, 1942	e21.63	249,000	1956	Feb. 6, 1956	c19.8C	230,000
1944	Mar.30,31,1944	c20.50	225,000	1957	Feb. 2, 1957	23.9F	293,000
1945	Feb. 20, 1945	14.24	149,000	1958	Nov. 20, 1957	22.5F	268,000
1946	Jan. 9, 1946	f23.07	277,000	1959	Jan.22,23,1959	c12.27	130,000
1947	Jan. 22, 1947	c21.04	243,000	1960	Dec. 21, 1959	23.9F	136,000

c Occurred different time than peak discharge. d Occurred Apr. 24, 1940.
e Occurred following day. f Occurred Jan. 12, 1946.

5762.5. Limestone Creek at U.S. Highway 72, near Athens, Ala.

Location.--Lat 34°45'06", long 86°49'24", in Limestone County, at bridge on U.S. Highway 72, 14.7 miles west of courthouse in Huntsville and 10.1 miles southwest of courthouse in Athens.

Drainage area.--119 sq mi.

Gage.--Recording. Datum of gage is 626.34 ft above mean sea level, datum of 1929.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	July 8, 1940	8.00	3,800	1951	Feb. 1, 1951	13.16	14,800
1941	Jan. 2, 1941	5.80	1,890	1952	Dec. 8, 1951	10.15	6,620
1942	Feb. 17, 1942	7.20	3,040	1953	Feb. 21, 1953	9.70	6,010
1943	Dec. 28, 1942	7.90	3,700	1954	Jan. 21, 1954	14.32	21,000
1944	Mar. 29, 1944	11.50	7,720	1955	Feb. 22, 1955	10.19	6,680
1945	Feb. 17, 1945	10.10	5,900	1956	Feb. 3, 1956	9.23	5,390
1946	Jan. 8, 1946	11.67	7,940	1957	Feb. 1, 1957	11.60	9,670
1947	Jan. 20, 1947	7.90	3,140	1958	Nov. 18, 1957	10.91	7,970
1948	Feb. 13, 1948	11.45	8,140	1959	July 18, 1959	8.92	4,509
1949	Jan. 5, 1949	12.89	13,300	1960	Dec. 19, 1959	10.9F	8,080
1950	Jan. 6, 1950	11.14	7,520				

5765. Flint Creek near Falkville, Ala.

Location.--Lat 34°22'23", long 86°56'01", in SW $\frac{1}{4}$ sec.2, T.8 S., R.4 W., near left bank on downstream side of highway bridge, 1.2 miles downstream from Robinson Creek, 1.5 miles west of Falkville, and 2.8 miles upstream from Cedar Creek.

Drainage area.--86.3 sq mi.

Gage.--Recording. Altitude of gage is 580 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,800 cfs and extended above.

Bankfull stage.--10 ft.

Remarks.--Base for partial-duration series, 2,000 cfs.

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Peak stages and discharges of Flint Creek near Falkville, Ala.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Feb. 21, 1953	12.2	3,160	1957	Feb. 1, 1957	13.3	5,300
1954	Jan. 16, 1954	14.0	7,200	1958	Apr. 4, 1957	11.6	2,080
	Jan. 22, 1954	13.6	6,050		Nov. 14, 1957	11.7	2,250
1955	Dec. 29, 1954	12.25	3,260	1959	Nov. 19, 1957	14.2	7,800
	Feb. 6, 1955	12.15	3,060		Apr. 29, 1958	13.1	4,900
	Mar. 21, 1955	14.60	9,200		Jan. 22, 1959	13.80	6,600
1956	Feb. 4, 1956	11.8	a2,410	1960	Mar. 3, 1960	13.54	5,920

a Other peaks above base probable, but not determined, during period of no gage-height record Feb. 16 to May 16, 1956.

5770. West Flint Creek near Oakville, Ala.
(Published as "West Fork Flint Creek" 1952-61)

Location.--Lat 34°28'35", long 87°08'30", in SW $\frac{1}{4}$ sec.35, T.6 S., R.6 W., on left bank at upstream side of bridge on county road, 0.9 mile east of Five Points, 0.9 mile upstream from Shoal Creek, 1 $\frac{1}{4}$ miles downstream from McDaniel Branch, and 2 $\frac{1}{4}$ miles northeast of Oakville.

Drainage area.--87.6 sq mi.

Gage.--Recording prior to Sept. 30, 1957; crest-stage gage thereafter. Datum of gage is 576.59 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 3,300 cfs and extended above.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 2,000 cfs. Only annual peaks are shown subsequent to Oct. 1, 1957.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Feb. 21, 1953	16.0	2,100	1956	Feb. 4, 1956	18.9	3,160
1954	Jan. 22, 1954	19.75	3,540	1957	Feb. 1, 1957	21.3	4,210
				1958	Nov. 18, 1957	19.8	3,540
1955	Dec. 29, 1954	18.20	2,650	1959	-	-	(a)
	Mar. 22, 1955	20.28	3,760	1960	Mar. 3, 1960	18.0	2,800

a Annual peak not determined; less than 1,430 cfs.

5771.1. West Flint Creek near Hartselle, Ala.

Location.--Lat 34°29'38", long 87°01'34", on bridge pier on right bank on Decatur-Danville road, 7.5 miles southwest of Decatur, and 6 miles northwest of Hartselle, Morgan County.

Drainage area.--158 sq mi.

Gage.--Recording. Datum of gage is 553.67 ft above mean sea level, datum of 1929.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Mar. 8, 1941	11.85	1,460	1951	Mar. 29, 1951	17.78	9,550
1942	Mar. 18, 1942	13.01	1,620	1952	Mar. 11, 1952	14.20	3,080
1943	Dec. 29, 1942	14.21	2,320	1953	Feb. 21, 1953	14.44	3,300
1944	Mar. 29, 1944	16.56	a5,870	1954	Jan. 22, 1954	15.81	4,950
1945	Feb. 13, 1945	14.92	2,970	1955	Mar. 22, 1955	15.74	4,830
1946	Jan. 8, 1946	17.55	8,660	1956	Feb. 4, 1956	15.54	4,530
1947	Jan. 20, 1947	14.71	2,760	1957	Feb. 1, 1957	16.49	6,190
1948	Feb. 13, 1948	17.02	7,060	1958	Nov. 18, 1957	16.35	5,910
1949	Jan. 5, 1949	17.98	10,300				
1950	Jan. 7, 1950	17.98	10,300				

a Affected by backwater; discharge unadjusted.

5780. Elk River near Pelham, Tenn.

Location.--Lat 35°17'48", long 85°52'12", on right bank at downstream side of bridge on U.S. Highway 41, 1.1 miles southeast of Pelham, Grundy County, and 1.8 miles upstream from Caldwell Creek.

Drainage area.--65.6 sq mi.

Gage.--Recording. Datum of gage is 981.62 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 4,400 cfs and extended above.

Remarks.--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Dec. 15, 1951	10.30	2,310	1956	Feb. 3, 1956	11.30	3,810
	Dec. 21, 1951	9.72	1,630		Feb. 18, 1956	10.07	2,010
	Jan. 28, 1952	9.57	1,480		Mar. 16, 1956	9.11	1,100
	Mar. 11, 1952	10.27	2,270		Apr. 16, 1956	9.12	1,110
	Mar. 22, 1952	9.49	1,400	1957	Dec. 13, 1956	10.63	2,640
1953	Feb. 12, 1953	10.93	3,130		Jan. 28, 1957	10.83	2,940
	Feb. 21, 1953	10.03	1,960		Feb. 1, 1957	12.02	4,950
	Mar. 4, 1953	9.42	1,240		Apr. 5, 1957	8.95	1,000
	May 2, 1953	10.17	2,140		Apr. 8, 1957	11.71	4,400
1954	Jan. 16, 1954	10.90	3,090	1958	Nov. 19, 1957	11.90	4,730
	Jan. 21, 1954	12.00	4,520		Dec. 8, 1957	10.06	1,910
1955	Dec. 29, 1954	11.43	3,780		Dec. 20, 1957	9.83	1,660
	Feb. 7, 1955	9.80	1,670		Feb. 7, 1958	9.04	1,040
	Feb. 22, 1955	10.04	1,970		Apr. 25, 1958	10.01	1,850
	Mar. 22, 1955	11.35	3,680		Apr. 29, 1958	9.69	1,520
	Apr. 6, 1955	11.25	3,540	1959	Jan. 22, 1959	10.37	2,290
	Apr. 24, 1955	10.74	2,880		Mar. 27, 1959	9.78	1,610
1956	Dec. 4, 1955	10.09	2,040	1960	Dec. 19, 1959	11.54	4,110
	Jan. 30, 1956	9.15	1,120		Mar. 3, 1960	9.60	1,430

5785. Bradley Creek near Prairie Plains, Tenn.

Location.--Lat 35°21'21", long 85°58'45", on left bank 165 ft downstream from highway bridge, 1.1 miles northwest of Prairie Plains, Coffee County, and 3.6 miles upstream from mouth.

Drainage area.--41.3 sq mi.

Gage.--Recording prior to Dec. 1, 1959; crest-stage gage thereafter. Datum of gage is 968.13 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 2,100 cfs and extended on basis of slope-conveyance study.

Remarks.--Base for partial-duration series, 600 cfs. Only annual peak shown for 1960.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Dec. 8, 1951	7.95	1,100	1954	Jan. 21, 1954	9.79	2,070
	Dec. 15, 1951	8.58	1,300		Dec. 29, 1954	10.75	2,860
	Dec. 21, 1951	9.80	2,080	1955	Feb. 6, 1955	6.68	772
	Jan. 10, 1952	6.05	690		Feb. 22, 1955	8.46	1,310
	Jan. 27, 1952	11.68	3,780		Mar. 22, 1955	11.95	4,050
	Mar. 11, 1952	8.53	1,360		Apr. 6, 1955	11.79	3,890
1953	Feb. 12, 1953	9.32	1,640		June 11, 1955	7.74	1,070
	Feb. 21, 1953	9.25	1,620		June 26, 1955	5.83	622
	Mar. 4, 1953	7.10	945	1956	Dec. 4, 1955	7.07	838
	Mar. 15, 1953	5.84	648		Jan. 30, 1956	7.10	845
	Apr. 30, 1953	6.06	692		Feb. 3, 1956	9.88	1,850
					Feb. 18, 1956	11.19	3,070
1954	Jan. 16, 1954	7.39	1,030				

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Peak stages and discharges of Bradley Creek near Prairie Plains, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Apr. 4, 1956	9.06	1,500	1958	Jan. 24, 1958	5.85	626
	Apr. 16, 1956	7.39	927		Apr. 29, 1958	5.77	612
1957	Dec. 13, 1956	8.29	1,220		July 12, 1958	10.83	2,640
	Jan. 28, 1957	10.20	2,050		July 25, 1958	7.37	961
	Jan. 31, 1957	11.58	3,550	1959	Jan. 22, 1959	6.33	682
1958	Nov. 18, 1957	12.17	4,320		Apr. 19, 1959	6.40	700
	Dec. 7, 1957	7.42	976	1960	Dec. 19, 1959	10.94	2,770
	Dec. 20, 1957	7.58	1,020				

5795. Elk River at Estill Springs, Tenn.

Location.--Lat 35°15'30", long 86°07'17", on old bridge pier, 250 ft upstream from bridge on U.S. Highway 41A, 400 ft downstream from Nashville, Chattanooga & St. Louis Railway bridge, three-quarters of a mile southeast of Estill Springs, Franklin County, 1.0 mile upstream from Taylor Creek and 1.4 miles upstream from Rock Creek.

Drainage area.--282 sq mi.

Gage.--Nonrecording at site 100 ft downstream prior to Oct. 1, 1926; recording thereafter. Datum of gage is 859.10 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 18,000 cfs and extended above.

Historical data.--Flood of 1842 reached a stage about 0.3 ft higher than the flood of Mar. 23, 1929, from reports by Tennessee Valley Authority.

Remarks.--Flow regulated by Woods Reservoir since May 1, 1952. Only annual peaks are shown prior to 1927 and since 1954. Base for partial-duration series, 2,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1921	Feb. 10, 1921	10.0	6,000	1931	Mar. 29, 1931	4.06	1,360
1922	Mar. 2, 1922	14.5	12,400		Dec. 15, 1931	5.89	2,640
1923	Feb. 4, 1923	9.2	5,320	1932	Jan. 27, 1932	5.94	2,640
1924	Feb. 27, 1924	7.7	4,120		Jan. 30, 1932	7.18	3,800
1925	Apr. 28, 1925	5.6	2,490		Feb. 3, 1932	6.68	3,330
1926	Nov. 9, 1925	5.7	2,510		Feb. 17, 1932	6.57	3,240
					Feb. 22, 1932	6.13	2,800
1927	Dec. 14, 1926	6.48	3,160		Apr. 26, 1932	7.50	4,100
	Dec. 26, 1926	16.4	14,800		May 1, 1932	6.20	2,880
	Dec. 29, 1926	12.1	9,230		July 6, 1932	6.32	2,970
	Jan. 30, 1927	6.08	2,830		Dec. 28, 1932	6.32	2,970
	Feb. 18, 1927	6.15	2,910		Feb. 15, 1933	11.84	8,960
	Feb. 24, 1927	7.50	4,030		Feb. 20, 1933	7.58	4,200
	Mar. 9, 1927	7.84	4,300		Mar. 20, 1933	6.78	3,420
	Mar. 14, 1927	6.24	2,910		May 8, 1933	6.93	3,510
	Apr. 1, 1927	7.29	3,850		May 10, 1933	7.10	3,700
	Apr. 12, 1927	-	27,000	1934	Mar. 3, 1934	14.0	11,500
					Mar. 25, 1934	12.0	8,400
1928	Dec. 31, 1927	7.34	3,850	1935	Feb. 27, 1935	6.62	3,180
	Mar. 9, 1928	6.85	3,410		Mar. 13, 1935	10.33	6,240
	Mar. 17, 1928	8.55	5,090		Apr. 6, 1935	9.56	5,580
	Apr. 23, 1928	11.2	8,060	1936	Jan. 10, 1936	7.22	3,660
	May 1, 1928	5.94	2,670		Feb. 5, 1936	6.56	3,180
	June 14, 1928	6.70	3,320		Mar. 25, 1936	9.20	5,260
1929	Nov. 20, 1928	8.40	4,890		Mar. 28, 1936	9.02	5,100
	Jan. 25, 1929	10.6	7,320		Apr. 2, 1936	6.80	3,340
	Feb. 28, 1929	7.1	3,670		Apr. 7, 1936	6.50	4,700
	Mar. 5, 1929	5.94	2,670		July 4, 1936	6.18	2,880
	Mar. 14, 1929	8.24	4,690	1937	Dec. 7, 1936	6.42	3,020
	Mar. 23, 1929	20.2	22,900		Jan. 3, 1937	11.0	7,050
	Apr. 29, 1929	7.18	3,760		Jan. 15, 1937	7.90	4,220
	May 9, 1929	6.70	3,320		Jan. 20, 1937	6.60	3,180
1930	Nov. 16, 1929	8.30	4,930				
	Feb. 14, 1930	6.80	3,420				
	Mar. 7, 1930	7.30	3,900				

a Daily mean discharge.

Peak stages and discharges of Elk River at Estill Springs, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Jan. 25, 1937	8.70	4,860	1947	Jan. 15, 1947	6.60	3,070
	Feb. 9, 1937	6.68	3,260		Jan. 20, 1947	9.45	5,800
	May 3, 1937	6.40	3,020	1948	Feb. 13, 1948	16.55	16,400
1938	Mar. 10, 1938	6.12	2,680		Mar. 7, 1948	6.48	2,730
	Apr. 9, 1938	6.66	3,160		Mar. 17, 1948	6.52	3,130
	Apr. 23, 1938	8.13	4,280		Apr. 8, 1948	7.36	3,520
	May 9, 1938	6.36	2,920	1949	Nov. 29, 1948	10.00	6,300
	June 20, 1938	6.00	2,600		Dec. 17, 1948	6.67	3,080
1939	Feb. 4, 1939	15.15	13,500		Dec. 25, 1948	6.66	2,890
	Feb. 15, 1939	12.40	8,990		Jan. 6, 1949	17.70	18,500
	Mar. 1, 1939	8.18	4,360		Jan. 22, 1949	7.70	3,850
	Mar. 6, 1939	8.30	4,440		Feb. 20, 1949	6.70	2,930
1940	Mar. 14, 1940	6.53	3,000	1950	Jan. 7, 1950	11.28	7,940
	Mar. 31, 1940	6.50	3,000		Jan. 11, 1950	6.83	3,050
1941	Apr. 5, 1941	7.07	3,480		Jan. 14, 1950	6.38	2,650
1942	Mar. 17, 1942	5.92	2,520		Jan. 20, 1950	13.25	10,800
1943	Dec. 6, 1942	6.28	2,840		Jan. 31, 1950	10.85	7,320
	Dec. 29, 1942	15.20	14,400		Feb. 7, 1950	6.49	2,740
	Feb. 6, 1943	6.98	3,400		Feb. 10, 1950	6.88	3,090
1944	Feb. 10, 1944	6.78	3,070		Mar. 14, 1950	10.84	7,340
	Feb. 18, 1944	6.35	2,750		Sept. 9, 1950	6.90	3,110
	Feb. 27, 1944	7.47	3,690	1951	Feb. 2, 1951	14.25	12,400
	Mar. 7, 1944	6.35	2,750		Mar. 30, 1951	10.15	6,480
	Mar. 29, 1944	11.90	8,440	1952	Dec. 16, 1951	6.60	2,840
1945	Apr. 12, 1944	7.38	3,600		Dec. 22, 1951	6.76	2,980
	Feb. 13, 1945	6.26	2,670		Jan. 27, 1952	6.47	2,730
	Feb. 18, 1945	9.32	5,310	1953	Feb. 12, 1953	9.80	5,180
	Feb. 23, 1945	8.24	4,320		Feb. 21, 1953	8.14	3,810
	Mar. 5, 1945	7.83	3,960		May 1, 1953	8.75	4,300
1946	May 13, 1945	11.84	8,280	1954	Jan. 16, 1954	7.75	3,520
	Dec. 5, 1945	6.77	3,070		Jan. 22, 1954	13.57	9,310
	Jan. 8, 1946	15.60	15,200	1955	Mar. 21, 1955	12.10	7,520
	Jan. 12, 1946	7.98	4,140		Feb. 4, 1956	10.00	5,480
	Feb. 11, 1946	9.64	5,580	1957	Feb. 1, 1957	16.50	12,500
	Feb. 14, 1946	6.34	2,670		Dec. 19, 1959	9.83	5,330
	June 2, 1946	6.68	2,990				
1947	Jan. 2, 1947	8.23	4,350				

5798. Miller Creek near Cowan, Tenn.

Location.--Lat 35°10'17", long 85°59'00", at bridge on U.S. Highway 64, 1.8 miles east of Cowan, Franklin County.Drainage area.--4.30 sq mi.Gage.--Crest-stage gage. Datum of gage not determined.Stage-discharge relation.--Defined by current-meter measurements below 172 cfs and extended above.Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	December 1954	6.74	395	1958	November 1957	6.97	430
1956	Feb. 3, 1956	6.70	389	1959	June 25, 1959	7.05	440
1957	Jan. 31, 1957	6.73	392	1960	Dec. 28, 1959	6.76	398

5799. Boiling Fork Creek at Cowan, Tenn.

Location.--Lat 35°09'45", long 86°00'20", at bridge on county road, 1,200 ft southeast of intersection of county road with U.S. Highway 64, in Cowan, Franklin County.

Drainage area.--17.0 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Defined by current-meter measurements below 1,410 cfs and extended above.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	December 1954	6.89	1,390	1958	November 1957	8.21	2,000
1956	Feb. 3, 1956	8.02	1,900	1959	June 25, 1959	7.05	1,460
1957	Jan. 31, 1957	7.79	1,790	1960	Dec. 18, 1959	8.22	2,000

5815. West Fork Mulberry Creek at Mulberry, Tenn.

Location.--Lat 35°12'34", long 86°27'46", near right bank on downstream side of old bridge, 1,000 ft downstream from State Highway 50, 0.2 mile southwest of Mulberry, Lincoln County, and 1.7 miles upstream from confluence with East Fork.

Drainage area.--41.2 sq mi.

Gage.--Recording. Datum of gage is 687.72 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 5,600 cfs and extended on basis of contracted-opening measurement at 12,800 cfs.

Remarks.--Base for partial-duration series, 3,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 15, 1954	11.40	4,260	1957	Jan. 28, 1957	10.93	3,750
	Jan. 20, 1954	11.66	4,670		Jan. 31, 1957	11.55	4,540
	Apr. 16, 1954	12.57	6,400		Apr. 21, 1957	11.47	4,420
					Sept. 15, 1957	11.71	4,780
1955	Dec. 29, 1954	11.90	5,080	1958	Nov. 17, 1957	14.8	12,800
	Mar. 21, 1955	13.15	7,790		Dec. 20, 1957	11.82	4,950
	Apr. 6, 1955	12.17	5,670		Sept. 21, 1958	12.00	5,270
1956	Dec. 4, 1955	13.25	8,140	1959	June 1, 1959	11.77	4,870
	Jan. 29, 1956	11.04	3,770				
	Feb. 4, 1956	11.70	4,730	1960	Dec. 18, 1959	11.36	4,280
	Feb. 18, 1956	11.28	4,080		Dec. 28, 1959	12.52	6,290
	Apr. 4, 1956	12.55	6,360		Mar. 2, 1960	11.28	4,170
1957	Dec. 13, 1956	-	(b)		May 7, 1960	11.42	4,360

a Maximum for period Dec. 17, 1953, to Sept. 30, 1954.

b Discharge not determined; greater than 3,500 cfs.

5820. Elk River above Fayetteville, Tenn.

Location.--Lat 35°08'04", long 86°32'23", on right bank 100 ft downstream from highway bridge, 1½ miles southeast of Fayetteville, Lincoln County, 4 miles upstream from Norris Creek, and at mile 93.9.

Drainage area.--827 sq mi.

Gage.--Recording. Datum of gage is 650.58 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 32,500 cfs and extended above.

Bankfull stage.--18 ft (from reports by Tennessee Valley Authority).

Remarks.--Flow partly regulated by Woods Reservoir since May 1, 1952. Only annual peaks are shown prior to 1935, from reports by Tennessee Valley Authority. Base for partial-duration series, 8,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1842	March 1842	27.5	37,000	1947	Jan. 20, 1947	19.24	14,300
1882	Jan. 21, 1882	24	-	1948	Feb. 14, 1948	25.08	29,200
1897	Mar. 19, 1897	24	-		Apr. 9, 1948	17.06	10,400
1920	Mar. 12, 1920	21	-	1949	Nov. 29, 1948	18.25	12,200
1927	Dec. 28, 1926	23.8	-		Dec. 16, 1948	14.42	8,010
1929	Mar. 23, 1929	27.2	36,000		Jan. 5, 1949	27.14	35,500
1933	Feb. 15, 1933	20	-		Jan. 23, 1949	16.83	10,100
1934	Mar. 3, 1934	22	-		June 16, 1949	15.37	8,690
1935	Mar. 14, 1935	17.93	13,900	1950	Jan. 7, 1950	20.70	16,800
	Apr. 7, 1935	15.94	11,200		Jan. 21, 1950	19.82	14,700
1936	Jan. 9, 1936	14.77	10,200		Feb. 1, 1950	20.30	15,800
	Mar. 27, 1936	17.10	12,700		Mar. 14, 1950	19.85	14,800
	Apr. 7, 1936	16.48	11,700	1951	Feb. 1, 1951	24.13	26,400
	July 4, 1936	21.24	20,200		Mar. 30, 1951	20.08	15,300
1937	Jan. 2, 1937	21.31	19,600	1952	Dec. 8, 1951	18.91	13,000
	Jan. 15, 1937	15.84	11,200		Dec. 15, 1951	16.31	9,150
	Jan. 20, 1937	15.04	10,400		Dec. 21, 1951	18.25	11,900
	Jan. 26, 1937	15.41	10,800		Jan. 10, 1952	15.20	8,640
	Feb. 9, 1937	14.39	9,860		Jan. 27, 1952	18.26	11,900
1938	Apr. 23, 1938	14.73	9,300		Mar. 11, 1952	15.90	9,130
1939	Feb. 4, 1939	21.72	20,900		Mar. 22, 1952	16.65	9,850
	Feb. 15, 1939	22.00	21,700	1953	Jan. 21, 1953	15.65	8,960
	Mar. 1, 1939	15.72	10,400		Feb. 12, 1953	17.98	11,500
	Mar. 6, 1939	15.93	10,700		Feb. 21, 1953	17.02	9,820
	Mar. 27, 1939	13.58	8,240		Mar. 4, 1953	14.53	8,040
1940	Mar. 14, 1940	13.00	7,800	1954	Jan. 16, 1954	16.18	9,150
1941	Apr. 6, 1941	10.40	5,930		Jan. 22, 1954	24.89	28,700
1942	Mar. 17, 1942	13.18	7,960	1955	Dec. 29, 1954	20.25	15,700
1943	Dec. 30, 1942	21.42	19,000		Feb. 22, 1955	16.08	9,680
1944	Feb. 9, 1944	15.86	9,740		Mar. 22, 1955	23.65	25,000
	Feb. 28, 1944	15.32	9,100		Apr. 8, 1955	17.83	11,400
	Mar. 29, 1944	22.79	22,700	1956	Dec. 4, 1955	18.70	12,400
1945	Feb. 18, 1945	17.20	11,200		Feb. 4, 1956	21.45	18,700
	Feb. 22, 1945	18.75	13,300		Feb. 19, 1956	19.60	14,300
	Mar. 5, 1945	15.38	9,200	1957	Dec. 14, 1956	17.92	12,000
	May 15, 1945	16.84	10,800		Feb. 2, 1957	26.54	33,700
1946	Jan. 9, 1946	23.22	24,000		Apr. 8, 1957	15.08	9,130
	Feb. 10, 1946	19.72	15,100	1958	Nov. 18, 1957	25.17	29,500
1947	Jan. 3, 1947	17.39	11,700		Dec. 9, 1957	13.98	8,140
					Apr. 26, 1958	15.24	9,280
					Sept. 21, 1958	15.48	9,510
				1959	Jan. 22, 1959	12.71	7,130
				1960	Dec. 20, 1959	19.48	14,000
					Dec. 28, 1959	14.69	8,770
					Mar. 4, 1960	16.15	10,200

5822. Norris Creek tributary near Belleville, Tenn.

Location.--Lat 35°13'55", long 86°33'50", at culvert under U.S. Highway 231, 0.4 mile north of first crossing of Norris Creek from Fayetteville, 3.1 miles south of Belleville, and 5.4 miles north of junction with U.S. Highway 64 in Fayetteville, Lincoln County.

Drainage area.--0.034 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Defined by culvert computations.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	5.77	75	1958	November 1957	5.16	40
1956	Dec. 3, 1955	5.81	85	1959	Apr. 20, 1959	4.02	33.5
1957	Apr. 4, 1957	4.30	36	1960	Dec. 28, 1959	4.83	38.2

5823. Norris Creek near Fayetteville, Tenn.

Location.--Lat 35°09'53", long 86°32'43", at bridge on State Highway 50, 2.0 miles northeast of Fayetteville, Lincoln County.

Drainage area.--42.6 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 665 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,360 cfs and extended on basis of contracted-opening measurement at 14,300 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	January 1954	10.29	9,000	1957	Apr. 4, 1957	8.92	6,200
1955	Mar. 22, 1955	10.61	9,800	1958	Nov. 17, 1957	12.2	14,300
				1959	Apr. 19, 1959	8.70	5,820
1956	Dec. 4, 1955	10.95	10,600	1960	Dec. 28, 1959	9.29	6,860

5825. Elk River near Fayetteville, Tenn.

Location.--Lat 35°08'10", long 86°35'15", at old dam and powerhouse of Tennessee Electric Power Co., 2 miles southwest of Fayetteville, Lincoln County, and at mile 88.4.

Drainage area.--897 sq mi.

Gage.--Nonrecording prior to Nov. 4, 1925; recording thereafter. Datum of gage is 637.67 ft above mean sea level, Tennessee River Survey datum of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 27,500 cfs and extended above.

Historical data.--Flood of March 1842 reached a stage about 0.3 ft higher than the flood of Mar. 23, 1929, from reports by Tennessee Valley Authority.

Remarks.--Base for partial-duration series, 9,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Aug. 19, 1926	14.3	9,220	1927	Apr. 12, 1927	14.76	9,680
1927	Dec. 28, 1926	25.8	34,900	1928	Dec. 31, 1927	16.80	12,100
	Feb. 23, 1927	14.70	9,580		Mar. 9, 1928	18.58	14,900
	Mar. 9, 1927	16.35	11,500		Apr. 24, 1928	20.35	18,400

Peak stages and discharges of Elk River near Fayetteville, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	June 14, 1928	15.98	11,000	1932	Jan. 30, 1932	17.6	13,300
1929	Oct. 18, 1928	20.38	18,400		Feb. 2, 1932	14.73	9,370
	Nov. 19, 1928	19.20	16,000		Feb. 17, 1932	16.10	11,100
	Jan. 25, 1929	22.12	22,400	1933	Oct. 17, 1932	19.97	17,600
	Feb. 27, 1929	14.78	9,680		Feb. 15, 1933	23.08	25,300
	Mar. 14, 1929	21.53	20,900		Feb. 20, 1933	17.56	13,300
	Mar. 23, 1929	28.2	45,600		Mar. 19, 1933	16.22	11,200
	May 7, 1929	14.53	9,400		May 8, 1933	19.25	16,000
	May 9, 1929	18.56	14,900		May 11, 1933	22.20	22,700
	Sept. 14, 1929	14.71	9,580	1934	Jan. 7, 1934	15.08	9,820
1930	Nov. 3, 1929	17.0	12,300		Mar. 3, 1934	24.32	29,200
	Nov. 15, 1929	17.4	12,900		Mar. 24, 1934	21.28	20,400
	Mar. 7, 1930	18.85	15,300				
1931	Mar. 28, 1931	10.3	5,400				

5830. Bradshaw Creek at Frankewing, Tenn.

Location.--Lat 35°11'31", long 86°50'43", on downstream side of second pier from right abutment of bridge on U.S. Highway 64, 0.4 mile east of Frankewing, 2.2 miles downstream from Little Bradshaw Creek, and 10.5 miles east of Pulaski, Giles County.

Drainage area.--36.5 sq mi.

Gage.--Recording. Datum of gage is 655.61 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 7,200 cfs and extended on basis of contracted-opening measurement at 12,600 cfs.

Remarks.--Base for partial-duration series, 2,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Dec. 29, 1954	11.88	6,210	1957	Dec. 13, 1956	11.66	3,370
	Feb. 6, 1955	9.20	2,580		Jan. 28, 1957	11.05	2,920
	Feb. 21, 1955	10.42	4,170		Jan. 31, 1957	12.08	3,730
	Mar. 21, 1955	16.38	12,600	1958	Nov. 18, 1957	11.82	3,500
	Apr. 6, 1955	12.60	7,220		Dec. 20, 1957	11.71	3,410
1956	Dec. 3, 1955	12.65	7,290	1959	Mar. 26, 1959	11.33	3,110
	Jan. 29, 1956	11.65	5,890				
	Feb. 4, 1956	12.03	6,420	1960	Dec. 18, 1959	10.55	2,600
	Feb. 17, 1956	10.50	4,280		Dec. 28, 1959	13.05	4,790
	July 1, 1956	11.25	4,080		Mar. 2, 1960	11.52	3,260
	July 9, 1956	9.60	2,570				

5832. Chicken Creek at McBurn, Tenn.

Location.--Lat 35°11'03", long 86°48'47", at bridge on county highway R7374 in McBurn, Lincoln County.

Drainage area.--7.66 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Defined by current-meter measurements below 227 cfs and extended on basis of slope-area measurement at 3,660 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	6.66	3,660	1958	November 1957	6.60	3,590
1956	Dec. 4, 1955	6.64	3,640	1959	Aug. 1, 1959	5.60	2,200
	May 22, 1957	5.22	1,780	1960	Oct. 8, 1959	5.98	2,660

5835. Weakley Creek near Bodenham, Tenn.

Location.--Lat 35°15'08", long 87°10'08", on right downstream bank at wingwall of highway bridge, 1.6 miles northwest of Bodenham, 4.9 miles upstream from mouth, and 8.7 miles northwest of Pulaski, Giles County.

Drainage area.--24.4 sq mi.

Gage.--Recording. Datum of gage is 688.62 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 670 cfs and extended above.

Bankfull stage.--5.5 ft.

Historical data.--Flood of Mar. 21, 1955, had a peak discharge of 13,500 cfs at site 2.3 miles upstream (drainage area, 20.4 sq mi), from slope-area measurement.

Remarks.--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Jan. 29, 1956	7.18	1,720	1957	May 27, 1957	6.35	1,040
	Feb. 4, 1956	6.64	1,230		June 10, 1957	6.62	1,220
	Feb. 17, 1956	6.58	1,190	1958	Nov. 17, 1957	7.68	2,440
	June 20, 1956	7.06	1,590				
1957	Dec. 12, 1956	6.47	1,110	1959	Mar. 26, 1959	5.68	739
	Jan. 28, 1957	6.56	1,170				
	Jan. 31, 1957	6.91	1,440	1960	Dec. 28, 1959	5.46	675

5840. Richland Creek near Pulaski, Tenn.

Location.--Lat 35°12'51", long 87°06'05", on right bank 1,200 ft upstream from bridge on U.S. Highway 64, 1 mile downstream from Weakley Creek, and 4 miles west of Pulaski, Giles County.

Drainage area.--366 sq mi.

Gage.--Recording. Datum of gage is 642.54 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 32,000 cfs and extended on basis of contracted-opening measurement at 75,000 cfs.

Bankfull stage.--16 ft (from report by Tennessee Valley Authority).

Historical data.--Flood of Mar. 29, 1902, is highest known since at least 1842, from report by Tennessee Valley Authority.

Remarks.--Only annual peaks are shown prior to 1935, from reports by Tennessee Valley Authority. Base for partial-duration series, 6,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1842	February 1942	21	-	1937	Jan. 2, 1937	20.08	25,400
1856	May 1856	23	-		Jan. 15, 1937	14.70	6,750
					Jan. 18, 1937	13.78	6,020
1897	March 1897	21	-		Jan. 23, 1937	14.13	6,240
					May 4, 1937	18.88	19,200
1902	Mar. 29, 1902	27.5	100,000	1938	Jan. 23, 1938	14.77	6,850
1929	March 1929	21	-		1939	Jan. 14, 1939	16.48	10,200
1935	Mar. 12, 1935 Apr. 6, 1935	17.22 15.70	12,700 7,970	Feb. 3, 1939		19.43	21,900
				Feb. 15, 1939		19.10	20,400
1936	Apr. 6, 1936 July 21, 1936	18.2 15.30	16,700 7,410	Feb. 28, 1939		15.86	8,600
				Mar. 6, 1939		14.10	6,150
				Mar. 30, 1939		14.87	6,990
				June 19, 1939		17.44	13,500
1937	Dec. 7, 1936	15.98	8,600	1940	Apr. 19, 1940	16.35	9,950

Peak stages and discharges of Richland Creek near Pulaski, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Apr. 4, 1941	14.19	6,240	1951	Feb. 21, 1951	16.78	9,700
1942	Jan. 1, 1942	11.64	4,460		Mar. 29, 1951	16.32	8,910
1943	May 11, 1943	14.03	6,060	1952	Dec. 9, 1951	15.65	7,840
1944	Feb. 9, 1944	17.66	14,800		Dec. 15, 1951	15.73	7,970
	Feb. 27, 1944	16.55	10,900		Dec. 21, 1951	14.29	6,050
	Mar. 7, 1944	15.80	8,600		Jan. 23, 1952	15.94	8,300
	Mar. 29, 1944	18.42	17,200		Jan. 27, 1952	20.52	23,000
	Apr. 11, 1944	14.92	6,860		Mar. 4, 1952	15.62	7,790
1945	Jan. 1, 1945	16.10	9,350		Mar. 11, 1952	17.51	11,200
	Feb. 18, 1945	17.90	15,400		Mar. 23, 1952	15.35	7,400
	Feb. 22, 1945	22.53	33,600	1953	Feb. 12, 1953	19.03	15,700
1946	Nov. 21, 1945	14.35	6,200		Feb. 21, 1953	17.85	12,000
	Jan. 8, 1946	21.10	28,000		Mar. 4, 1953	14.97	6,780
	Jan. 12, 1946	14.33	6,080		Mar. 14, 1953	15.37	7,450
	Feb. 7, 1946	15.44	7,720		Apr. 30, 1953	16.18	8,690
	Feb. 10, 1946	15.92	8,850	1954	Jan. 22, 1954	16.34	8,940
	Mar. 7, 1946	14.47	6,320		Apr. 17, 1954	14.93	6,880
1947	Jan. 2, 1947	17.44	13,800	1955	Feb. 22, 1955	18.35	13,500
1948	Feb. 13, 1948	24.58	42,600		Mar. 21, 1955	27.49	75,000
	Mar. 7, 1948	14.34	6,110		Apr. 6, 1955	17.97	16,000
	Apr. 8, 1948	15.90	8,240	1956	Jan. 30, 1956	16.95	11,800
1949	Nov. 29, 1948	18.62	14,300		Feb. 4, 1956	16.75	11,000
	Jan. 5, 1949	17.51	11,200		Feb. 18, 1956	17.05	12,200
	Mar. 27, 1949	16.57	9,330	1957	Dec. 13, 1956	16.46	9,860
1950	Jan. 6, 1950	19.29	16,400		Jan. 28, 1957	18.27	17,600
	Jan. 13, 1950	16.36	8,980		Jan. 31, 1957	19.38	22,400
	Jan. 19, 1950	17.33	10,800	1958	Nov. 18, 1957	18.82	19,500
	Jan. 30, 1950	18.12	12,800		Dec. 8, 1957	14.45	6,250
	Feb. 14, 1950	20.64	21,600		Apr. 25, 1958	14.27	6,070
	Mar. 13, 1950	15.73	7,970	1959	Mar. 27, 1959	15.78	8,080
1951	Nov. 21, 1950	15.49	7,590	1960	Dec. 19, 1959	14.22	6,030
	Feb. 1, 1951	20.85	22,400		Dec. 28, 1959	14.97	6,860
					Mar. 3, 1960	15.32	7,350

5845. Elk River near Prospect, Tenn.

(Published as "near Elkmont, Ala." 1904-8, 1919-34)

Location.--Lat 35°01'39", long 86°56'52", on right bank 50 ft upstream from highway bridge, 1.1 miles downstream from Richland Creek, 3.2 miles east of Prospect, Giles County, 5.4 miles upstream from Ford Creek, 7.9 miles upstream from Tennessee-Alabama State line, and at mile 41.5.

Drainage area.--1,784 sq mi.

Gage.--Nonrecording prior to March 1934; recording thereafter. At site $11\frac{3}{4}$ miles downstream at datum 13.52 ft lower prior to March 1934. Datum of gage is 563.29 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 63,000 cfs and extended on basis of contracted-opening measurement at 104,000 cfs.

Bankfull stage.--26 ft.

Historical data.--Flood of March 1897 may have equaled the flood of March 1902, from reports by Tennessee Valley Authority.

Remarks.--Flow partly regulated by Woods Reservoir since May 1, 1952. Only annual peaks are shown prior to 1934. Base for partial-duration series, 17,000 cfs.

TENNESSEE RIVER BASIN

Peak stages and discharges of Elk River near Prospect, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1902	March 1902	40.9	a130,000	1946	Nov. 22, 1945	19.78	17,900
1905	Feb. 9, 1905	18.2	b22,100	1946	Jan. 9, 1946	33.20	46,600
1906	Jan. 22, 1906	19.7	24,400	1946	Feb. 7, 1946	21.18	19,800
1907	Mar. 2, 1907	18.7	22,800	1946	Feb. 11, 1946	27.82	30,800
1919	Mar. 18, 1919	21.9	c29,700	1946	Feb. 14, 1946	23.00	22,300
1920	Mar. 13, 1920	26.5	49,500	1947	Jan. 3, 1947	27.97	31,200
1921	Apr. 17, 1921	25.0	41,500	1947	Jan. 21, 1947	25.26	25,700
1922	Mar. 12, 1922	25.0	41,500	1948	Feb. 14, 1948	33.17	100,000
1923	Feb. 14, 1923	22.0	30,000	1948	Mar. 8, 1948	21.66	19,700
1924	Jan. 4, 1924	23.5	35,000	1948	Apr. 10, 1948	22.58	20,800
1925	Jan. 11, 1925	11.0	12,400	1949	Nov. 30, 1948	25.84	27,200
1926	Nov. 13, 1925	15.6	18,700	1949	Dec. 17, 1948	19.85	18,100
1927	Dec. 28, 1926	28.2	61,100	1949	Jan. 6, 1949	34.00	58,700
1928	Apr. 23, 1928	21.0	26,100	1949	Jan. 23, 1949	23.74	22,300
1929	Mar. 24, 1929	30.53	81,500	1949	Feb. 20, 1949	19.48	17,100
1930	Mar. 8, 1930	20.1	24,800	1949	Mar. 28, 1949	21.02	18,900
1931	Mar. 29, 1931	13.4	15,700	1950	Jan. 7, 1950	32.32	47,300
1932	Jan. 31, 1932	20.6	26,300	1950	Jan. 14, 1950	25.26	24,500
1933	Feb. 17, 1933	-	31,900	1950	Jan. 21, 1950	27.35	28,200
1934	Mar. 4, 1934	31.12	42,100	1950	Feb. 1, 1950	29.82	35,700
1934	Mar. 25, 1934	28.37	35,000	1950	Feb. 7, 1950	20.35	18,100
1935	Mar. 14, 1935	25.87	28,200	1950	Feb. 10, 1950	22.86	21,100
1935	Apr. 7, 1935	22.82	22,000	1950	Feb. 15, 1950	27.62	28,800
1936	Jan. 9, 1936	21.40	20,000	1950	Mar. 14, 1950	27.16	27,900
1936	Mar. 28, 1936	23.34	22,800	1951	Feb. 2, 1951	33.66	56,200
1936	Apr. 7, 1936	26.65	29,900	1951	Feb. 22, 1951	20.48	18,300
1936	July 6, 1936	21.60	20,300	1951	Mar. 20, 1951	27.52	28,600
1937	Nov. 4, 1936	20.97	19,600	1952	Dec. 10, 1951	24.65	24,600
1937	Dec. 8, 1936	22.72	22,300	1952	Dec. 16, 1951	23.47	23,000
1937	Jan. 3, 1937	31.85	43,200	1952	Dec. 22, 1951	23.92	23,600
1937	Jan. 16, 1937	24.42	23,300	1952	Jan. 28, 1952	30.32	37,700
1937	Jan. 25, 1937	22.58	21,100	1952	Mar. 12, 1952	25.62	26,000
1937	Feb. 10, 1937	22.28	20,800	1952	Mar. 23, 1952	22.93	22,200
1937	May 6, 1937	22.86	21,500	1953	Feb. 13, 1953	28.67	32,000
1938	Apr. 22, 1938	18.36	16,100	1953	Feb. 22, 1953	27.10	28,400
1939	Jan. 14, 1939	22.04	20,900	1953	Mar. 5, 1953	21.12	19,700
1939	Feb. 4, 1939	30.32	37,700	1954	Jan. 17, 1954	19.66	17,800
1939	Feb. 16, 1939	31.74	41,900	1954	Jan. 23, 1954	31.63	43,600
1939	Mar. 1, 1939	23.65	23,100	1954	Apr. 17, 1954	22.88	22,100
1939	Mar. 7, 1939	22.14	21,000	1955	Dec. 30, 1954	25.44	25,700
1939	Mar. 30, 31, 1939	22.20	21,200	1955	Feb. 7, 1955	20.18	18,400
1940	Apr. 20, 1940	19.59	17,700	1955	Feb. 23, 1955	27.93	30,100
1941	Apr. 5, 1941	18.46	16,200	1955	Mar. 22, 1955	38.98	104,000
1942	Mar. 18, 1942	19.00	16,900	1955	Apr. 7, 1955	26.34	27,000
1943	Dec. 29, 1942	22.10	21,000	1956	Dec. 4, 1955	23.80	23,400
1943	Jan. 1, 1943	22.10	21,000	1956	Jan. 31, 1956	22.07	21,000
1944	Feb. 10, 1944	26.24	27,400	1956	Feb. 5, 1956	30.05	36,600
1944	Feb. 18, 1944	19.10	17,000	1956	Feb. 19, 1956	27.21	28,600
1944	Feb. 28, 1944	25.50	26,100	1957	Dec. 15, 1956	25.36	25,600
1944	Mar. 8, 1944	19.67	17,800	1957	Feb. 2, 1957	34.85	65,600
1944	Mar. 30, 1944	32.21	43,400	1958	Nov. 19, 1957	33.25	53,200
1945	Jan. 2, 1945	23.34	22,700	1958	Dec. 8, 1957	20.22	18,500
1945	Feb. 14, 1945	19.67	17,800	1958	Dec. 21, 1957	19.13	17,100
1945	Feb. 19, 1945	26.94	28,800	1958	Apr. 26, 1958	19.75	17,900
1945	Feb. 22, 1945	33.01	46,000	1959	Apr. 19, 1959	19.38	17,400
1945	Mar. 5, 1945	22.12	21,000	1960	Dec. 20, 1959	23.81	23,400
				1960	Dec. 28, 1959	21.63	20,400
				1960	Mar. 4, 1960	23.42	22,900

a From reports by Tennessee Valley Authority.

b Maximum daily discharge.

c Maximum for period Jan. 20 to Sept. 30, 1919.

5855. Elk River near Rogersville, Ala.

Location.--Lat 34°48'11", long 87°13'56", in sec.12, T.3 S., R.7 W., at bridge on U.S. Highway 72, 4 miles east of Rogersville, and at mile 4.8.

Drainage area.--2,239 sq mi.

Gage.--Nonrecording. Datum of gage is 518.31 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 29,000 cfs and extended above.

Bankfull stage.--15 ft.

Remarks.--Peaks are from graphs based on gage readings. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Apr. 24, 1928	13.6	30,000	1932	Jan. 30, 1932	12.8	27,200
1929	Mar. 25, 1929	22.4	61,600	1933	Feb. 17, 1933	16.1	39,000
1930	Mar. 8, 1930	13.5	29,600	1934	Mar. 5, 1934	18.0	45,800
1931	Mar. 28, 1931	10.2	19,000	1935	Mar. 14, 1935	12.9	30,700

5865. Big Nance Creek at Courtland, Ala.

Location.--Lat 34°40'12", long 87°19'02", in SW $\frac{1}{4}$ sec. 30, T.4 S., R.7 W., near right bank on downstream side of pier of bridge on State Highway 20, at Courtland, 12 $\frac{1}{2}$ miles upstream from mouth.

Drainage area.--166 sq mi.

Gage.--Nonrecording prior to Sept. 30, 1940; recording thereafter. Datum of gage is 537.60 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 11,500 cfs.

Bankfull stage.--15 ft.

Remarks.--Peaks are from graphs based on gage readings prior to Sept. 30, 1940. Base for partial-duration series, 3,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Apr. 3, 1936	19.8	6,980	1950	Sept. 1, 1950	15.88	3,870
1937	Jan. 3, 1937	16.1	3,790	1951	Feb. 1, 1951	22.45	11,300
1938	Mar. 11, 1938	15.3	3,520		Mar. 29, 1951	22.06	10,500
1939	Feb. 4, 1939	19.0	6,200		July 3, 1951	17.38	4,600
	Feb. 16, 1939	19.8	6,980	1952	Dec. 9, 1951	20.92	8,140
					Dec. 21, 1951	17.31	4,160
1940	July 10, 1940	17.0	4,550	1953	Feb. 22, 1953	17.99	4,520
1946	Jan. 8, 1946	20.6	7,780	1954	Jan. 23, 1954	20.49	7,620
	Feb. 10, 1946	21.0	8,180				
	Feb. 28, 1946	15.4	3,830	1955	Dec. 30, 1954	18.79	5,450
1947	Jan. 2, 1947	15.70	3,960		Feb. 23, 1955	17.70	4,680
					Mar. 22, 1955	20.27	7,160
1948	Feb. 13, 1948	21.50	9,060	1956	Feb. 5, 1956	16.3	4,000
	Mar. 17, 1948	18.82	5,880		Apr. 7, 1956	16.5	4,080
	Mar. 23, 1948	17.56	4,960	1957	Feb. 1, 1957	21.5	9,330
1949	Jan. 5, 1949	22.25	10,800				
	Jan. 23, 1949	17.20	4,440	1958	Nov. 18, 1957	a19.52	6,190
1950	Jan. 7, 1950	22.60	12,300	1959	Apr. 19, 1959	b12.02	2,400
	Feb. 15, 1950	19.78	6,300				
	Mar. 14, 1950	20.56	7,290	1960	Mar. 3, 1960	a18.94	5,610
	May 15, 1950	19.38	5,860				

a Occurred on following day.

b Occurred at different time than peak discharge.

5870. Big Nance Creek at Red Bank, Ala.

Location.--Lat 34°45'58", long 87°22'18", in NE $\frac{1}{4}$ sec.28, T.3 S., R.8 W., on right bank 40 ft downstream from highway bridge at Red Bank, $2\frac{1}{4}$ miles south of Wheeler Dam on Tennessee River, and $2\frac{3}{4}$ miles upstream from mouth.

Drainage area.--188 sq mi.

Gage.--Nonrecording. Altitude of gage is 515 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 3,270 cfs and extended above.

Bankfull stage.--6 ft.

Historical data.--Maximum stage known, 11.2 ft (date unknown).

Remarks.--Peaks are from graphs based on gage readings. Base for partial-duration series, 3,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Apr. 3, 1936	10.0	4,930	1938	Mar. 11, 1938	8.10	3,280
1937	Jan. 3, 1937	9.2	4,290	1939	Feb. 4, 1939	8.90	3,820
	Jan. 16, 1937	8.3	3,620		Feb. 16, 1939	9.80	4,500
	Jan. 26, 1937	8.4	3,690				
	Feb. 10, 1937	8.3	3,620	1940	July 10, 1940	8.38	3,480

5872. Bluewater Creek tributary near Leoma, Tenn.

Location.--Lat 35°08'29", long 87°22'05", at culvert under U.S. Highway 43, 1.8 miles southwest of Leoma, Lawrence County.

Drainage area.--0.49 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Not defined.

Remarks.--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	4.87	-	1958	November 1957	2.52	-
				1959	Mar. 27, 1959	2.42	-
1956	Jan. 29, 1956	2.45	-	1960	Dec. 18, 1959	2.62	-
1957	Dec. 13, 1956	2.68	-				

5873.5. Dry Branch tributary near Center Star, Ala.

Location.--Lat 34°49'55", long 87°25'07", on left bank in southeast Lauderdale County.

Drainage area.--0.28 sq mi.

Gage.--Recording. Datum of gage not determined.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	July 2, 1941	28.98	322	1944	Mar. 29, 1944	23.37	143
1942	Feb. 6, 1942	27.88	66	1945	Feb. 21, 1945	23.46	161
1943	Aug. 11, 1943	29.05	350				

5875. Shoal Creek above Little Shoal Creek, at Lawrenceburg, Tenn.

Location.--Lat 35°14'02", long 87°20'00", at bridge on U.S. Highway 43, a quarter of a mile upstream from former gaging station and 0.5 mile south of intersection of U.S. Highways 43 and 64 in Lawrenceburg, Lawrence County.

Drainage area.--27.0 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Not defined except at 8,120 cfs by slope-area measurement.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	17.27	8,120	1958	November 1957	9.20	-
1956	Jan. 29, 1956	9.98	-	1959	Sept. 10, 1959	5.89	-
1957	Feb. 1, 1957	8.42	-	1960	Dec. 28, 1959	7.42	-

5885. Shoal Creek at Iron City, Tenn.

Location.--Lat 35°01'27", long 87°34'44", on downstream side near center of bridge on county road, 400 ft downstream from Holly Creek, 1,350 ft upstream from Louisville & Nashville Railroad bridge, 1,350 ft northeast of post office at Iron City, Lawrence County, and 21.8 miles upstream from mouth.

Drainage area.--348 sq mi.

Gage.--Nonrecording prior to Oct. 1, 1933; recording thereafter. At site 1,350 ft downstream at datum 0.88 ft lower prior to Feb. 25, 1931. At site 825 ft downstream Feb. 25, 1931, to Sept. 30, 1933, and at site 750 ft downstream Oct. 1, 1933, to Sept. 30, 1957, both gages at datum 0.66 ft higher. Datum of gage is 534.25 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 32,000 cfs and extended on basis of contracted-opening measurement at 61,000 cfs and slope-area measurement at 132,000 cfs.

Historical data.--Flood of March 1902 reached a stage about 3 ft higher than the flood of Mar. 21, 1955, from information by local residents.

Remarks.--Only annual peaks are shown prior to 1934. Base for partial-duration series, 6,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Nov. 12, 1925	14.7	18,700	1939	Nov. 19, 1938	9.1	6,010
1927	Mar. 13, 1927	23.4	65,000		Jan. 5, 1939	9.8	6,780
1928	Mar. 9, 1928	15.4	20,900		Jan. 13, 1939	12.6	11,900
1929	Mar. 23, 1929	18.0	29,200		Feb. 3, 1939	11.5	9,090
1930	Mar. 7, 1930	12.4	11,800		Feb. 15, 1939	14.91	17,500
					Feb. 26, 1939	9.41	6,330
1931	Feb. 25, 1931	10.26	7,120		Feb. 28, 1939	9.82	6,780
1932	July 7, 1932	14.5	18,100		Mar. 30, 1939	10.27	7,410
1933	Oct. 17, 1932	16.8	25,400				
1934	Mar. 3, 1934	12.90	13,100	1940	Apr. 19, 1940	16.60	22,000
1935	Mar. 12, 1935	14.9	20,800	1941	July 12, 1941	8.52	5,420
	Apr. 6, 1935	9.92	6,820	1942	Feb. 24, 1942	5.85	3,170
1936	Apr. 6, 1936	15.40	20,900	1943	Dec. 28, 1942	12.08	10,800
1937	Dec. 7, 1936	11.35	9,250	1944	Feb. 9, 1944	16.08	19,300
	Dec. 31, 1936	9.36	6,270		Feb. 27, 1944	10.10	7,070
	Jan. 2, 1937	16.08	23,100		Mar. 7, 1944	9.83	6,730
	Jan. 18, 1937	10.60	7,680		Mar. 27, 1944	14.72	15,500
	Jan. 20, 1937	9.35	6,220		Apr. 12, 1944	9.1	6,010
	Jan. 23, 1937	10.20	7,140		May 5, 1944	10.03	6,950
	May 4, 1937	17.92	28,900				
1938	Jan. 23, 1938	10.79	7,990	1945	Dec. 28, 1944	9.90	6,830
					Jan. 1, 1945	16.63	20,700

Peak stages and discharges of Shoal Creek at Iron City, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Feb. 18, 1945	13.33	12,200	1952	Dec. 15, 1951	11.76	9,290
	Feb. 22, 1945	17.73	23,900		Jan. 23, 1952	9.90	6,580
	Feb. 28, 1945	10.13	7,070		Jan. 27, 1952	12.38	10,400
	Mar. 4, 1945	10.60	7,680		Mar. 11, 1952	13.48	12,600
	Apr. 29, 1945	9.40	6,260		Mar. 23, 1952	11.34	8,590
1946	Nov. 22, 1945	14.56	15,300	1953	Feb. 12, 1953	16.55	20,600
	Jan. 8, 1946	15.90	18,700		Feb. 21, 1953	15.83	13,400
	Feb. 6, 1946	11.70	9,240		Mar. 4, 1953	11.16	8,310
	Feb. 10, 1946	11.68	9,240		Apr. 30, 1953	13.74	13,200
1947	Apr. 16, 1947	9.21	5,810	1954	Jan. 16, 1954	9.52	6,120
1948	Feb. 13, 1948	22.86	61,000		Jan. 22, 1954	12.12	9,940
	Apr. 8, 1948	14.28	14,500		Feb. 20, 1954	12.35	10,400
1949	Nov. 28, 1948	13.69	13,100	1955	Feb. 22, 1955	14.62	15,400
	Dec. 16, 1948	9.44	6,080		Mar. 21, 1955	27.22	132,000
	Jan. 4, 1949	13.35	12,500		Apr. 6, 1955	11.15	8,290
	Mar. 27, 1949	15.28	17,100		May 22, 1955	11.58	8,990
1950	Jan. 6, 1950	14.30	14,600	1956	Jan. 30, 1956	13.69	13,100
	Jan. 13, 1950	10.14	6,870		Feb. 4, 1956	14.23	14,400
	Jan. 19, 1950	11.00	8,050		Feb. 18, 1956	15.40	17,400
	Jan. 31, 1950	11.65	9,100	1957	Dec. 13, 1956	10.23	6,780
	Feb. 14, 1950	19.25	32,500		Jan. 28, 1957	13.48	12,600
	Mar. 13, 1950	11.85	9,450		Jan. 31, 1957	16.02	19,100
	Sept. 1, 1950	10.03	6,700				
1951	Nov. 21, 1950	9.56	6,170	1958	Nov. 18, 1957	17.82	21,000
	Jan. 4, 1951	13.44	12,500	1959	Apr. 19, 1959	10.96	6,000
	Feb. 1, 1951	18.25	27,200	1960	Dec. 19, 1959	14.58	11,400
	Feb. 21, 1951	14.84	15,900		Dec. 28, 1959	13.98	10,100
	Mar. 29, 1951	13.38	12,400		Mar. 3, 1960	12.27	7,570
1952	Dec. 8, 1951	14.25	14,400				

5892.5. Pond Creek near Wilson Dam, Ala. (gage No. 1)

Location--Lat 34°45'29", long 87°36'07", on left bank 6 ft downstream from bridge on Muscle Shoals Highway, 1.9 miles east of intersection with Wilson Dam Highway, and 200 ft downstream from Reynolds Metal Plant outlet ditch.

Drainage area--13.7 sq mi.

Gage--Recording.

Remarks--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	July 17, 1949	45.30	187	1955	Mar. 21, 1955	46.77	636
1950	Feb. 14, 1950	45.86	308	1956	Apr. 4, 1956	46.20	385
1951	Mar. 28, 1951	46.16	410	1957	Feb. 1, 1957	46.48	368
1952	Mar. 10, 1952	45.67	261	1958	July 21, 1958	46.20	276
1953	Feb. 12, 1953	45.41	256	1959	Mar. 26, 1959	45.07	96
1954	Jan. 22, 1954	45.88	335	1960	Mar. 2, 1960	45.75	206

5892.6. Pond Creek near Wilson Dam, Ala. (gage No. 2)

Location.--Lat 34°47'14", long 87°38'35", on left bank 1,000 ft upstream from mouth, Colbert County.

Drainage area.--21.9 sq mi.

Gage.--Recording. Datum of gage is 408.66 ft above mean sea level, datum of 1929.

Remarks.--Flow supplemented by waste discharge from chemical plant. Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Jan. 5, 1949	20.25	350	1955	Mar. 21, 1955	(c)	(c)
1950	Feb. 14, 1950	19.47	386	1956	Apr. 3, 1956	19.63	864
1951	Mar. 29, 1951	19.28	600	1957	Feb. 2, 1957	21.00	722
1952	Mar. 11, 1952	18.81	395	1958	May 10, 1958	19.92	408
1953	Feb. 20, 1953	18.97	522	1959	Aug. 1, 1959	19.35	268
1954	Nov. 19, 1953	19.55	bl,000	1960	Mar. 2, 1960	19.56	320

a Backwater from Tennessee River; discharge estimated. b Result of break in drainage ditch. c Maximum discharge of record may have occurred during the large flood on this date when the gage washed out.

5895. Tennessee River at Florence, Ala.

Location.--Lat 34°47'13", long 87°40'12", in SW $\frac{1}{4}$ sec.14, T.3 S., R.11 W., on right bank of old lock and dam 1 canal at lower end of Patten Island, 137 ft upstream from Southern Railway bridge, 700 ft upstream from O'Neal Bridge on U.S. Highway 72, 1 mile south of Florence, 1.7 miles upstream from Cypress Creek, 2.7 miles downstream from Wilson Dam, and at mile 256.7.

Drainage area.--30,810 sq mi, approximately.

Gage.--Nonrecording prior to Apr. 1, 1926; recording thereafter. At site 137 ft downstream prior to Apr. 1, 1926. At site 400 ft upstream Apr. 1, 1926, to Mar. 11, 1958. Datum of gage is 401.12 ft above mean sea level, datum of 1929. Recording auxiliary gage $15\frac{1}{4}$ miles downstream since Oct. 1, 1938.

Stage-discharge relation.--Defined by current-meter measurements below 390,000 cfs and extended above. Fall between base gage and auxiliary gage used as a factor in computing discharge.

Bankfull stage.--18 ft.

Remarks.--Gage-height record prior to Apr. 1, 1926, from U.S. Weather Bureau gages. Flow partly regulated by Wilson Lake since 1924, and increasing regulation by increasing number of reservoirs since 1936. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1867	-	31.1	421,000	1887	Feb. 28, 1887	17.5	-
1872	Apr. 14, 1872	all.50	-	1888	Mar. 29, 1888	20.8	-
1873	Feb. 22, 1873	22.90	-	1889	Feb. 20, 1889	19.8	-
1874	Apr. 17, 1874	26.00	-	1890	Mar. 3, 1890	23.5	-
1875	Mar. 8, 1875	29.38	-	1891	Mar. 15, 1891	22.2	-
1876	Jan. 4, 1876	19.78	-	1892	Apr. 8, 1892	24.0	-
1877	Apr. 10, 1877	19.35	-	1893	Feb. 18-20, 1893	20.8	-
1878	Apr. 26, 1878	13.55	-	1894	Feb. 9, 1894	17.4	-
1879	Jan. 20, 1879	21.45	-	1895	Jan. 17, 1895	17.4	b213,000
1880	Mar. 18, 1880	24.50	-	1896	Apr. 9, 1896	19.9	b254,000
1881	Dec. 6, 1880	18.10	-	1897	Mar. 19, 1897	32.5	444,000
1882	Jan. 22, 1882	29.60	-	1898	Jan. 27-29, 1898	13.8	b157,000
1883	Jan. 28, 1883	23.30	-	1899	Mar. 20, 1899	25.1	b325,000
1884	Mar. 18, 1884	25.20	-	1900	Apr. 20, 1900	19.2	b243,000
1885	Jan. 20, 1885	17.80	-	1901	Aug. 22, 1901	18.9	b238,000
1886	Apr. 8, 1886	28.10	-	1902	Mar. 8, 1902	20.9	b273,000
				1903	Mar. 6, 1903	18.8	b236,000

a Maximum for period Jan. 1 to Sept. 30, 1872.

b Maximum daily discharge.

Peak stages and discharges of Tennessee River at Florence, Ala.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Mar. 27, 1904	17.2	b210,000	1932	Feb. 4, 1932	19.70	244,000
1905	Feb. 12, 1905	16.7	b201,000	1933	Feb. 20, 1933	21.2	272,000
1906	Jan. 28, 1906	13.7	b155,000	1934	Mar. 5, 1934	21.20	266,000
1907	Nov. 25, 1906	16.7	b201,000	1935	Mar. 16, 1935	17.9	208,000
1908	Feb. 19, 1908	17.0	b206,000	1936	Apr. 6, 1936	24.35	313,000
1909	Mar. 15, 1909	19.6	b250,000	1937	Jan. 4, 1937	20.26	247,000
1910	Feb. 22, 1910	11.7	b127,000	1938	Apr. 12, 1938	21.12	185,000
1911	Apr. 10, 1911	22.0	b293,000	1939	Feb. 17, 1939	24.98	286,000
1912	Apr. 3, 1912	19.6	b250,000	1940	Apr. 21, 1940	c17.98	118,000
1913	Mar. 21, 1913	18.5	b231,000	1941	Apr. 5, 1941	d17.09	108,000
1914	Apr. 4, 1914	12.2	b127,000	1942	Mar. 22, 1942	e18.13	138,000
1915	Dec. 31, 1914	19.2	251,000	1943	Jan. 2, 1943	23.22	274,000
1916	July 12, 1916	20.5	252,000	1944	Mar. 30, 1944	25.55	304,000
1917	Mar. 12, 1917	24.7	319,000	1945	Feb. 22, 1945	21.48	262,000
1918	Feb. 6, 1918	22.0	276,000	1946	Jan. 11, 1946	25.10	355,000
1919	Mar. 9, 1919	19.5	236,000	1947	Jan. 20, 1947	23.65	341,000
1920	Apr. 10, 1920	23.5	300,000	1948	Feb. 13, 1948	28.02	395,000
1921	Feb. 13, 1921	18.7	223,000	1949	Jan. 8, 1949	25.82	344,000
1922	Mar. 11, 1922	21.5	268,000	1950	Feb. 14, 1950	22.53	288,000
1923	Feb. 11, 1923	18.2	b215,000	1951	Mar. 29, 1951	24.10	303,000
1924	Jan. 6, 1924	17.0	196,000	1952	Dec. 23, 1951	f19.59	232,000
1925	Jan. 16, 1925	13.5	145,000	1953	Feb. 23, 1953	g18.24	202,000
1926	Jan. 23, 1926	13.5	143,000	1954	Jan. 23, 1954	e23.31	311,000
1927	Dec. 29, 1926	26.50	344,000	1955	Mar. 22, 1955	25.73	326,000
1928	Apr. 24, 1928	18.4	217,000	1956	Feb. 5, 1956	22.32	288,000
1929	Mar. 25, 1929	22.90	293,000	1957	Feb. 4, 1957	26.20	367,000
1930	Nov. 19, 1929	20.0	248,000	1958	Nov. 19, 1957	g25.00	337,000
1931	Apr. 10, 1931	12.95	146,000	1959	Jan. 22, 1959	g15.85	162,000
				1960	Mar. 3, 1960	f17.28	153,000

b Maximum daily discharge. c Occurred Apr. 19, 1940. d Occurred July 14, 1941. e Occurred at different time than peak discharge. f Occurred Dec. 27, 1951. g Occurred following day. h Occurred Nov. 19, 1953.

5900. Cypress Creek near Florence, Ala.

Location--Lat 34°48'27", long 87°42'02", in NE $\frac{1}{4}$ sec.9, T.3 S., R.11 W., on left bank 100 ft downstream from bridge on State Highway 2, 2 miles west of Florence, 4 miles downstream from Cox Creek, and 4 miles upstream from mouth.

Drainage area--209 sq mi.

Gage--Recording. Datum of gage is 423.78 ft above mean sea level, datum of 1929.

Stage-discharge relation--Defined by current-meter measurements below 20,000 cfs and extended above; subject to backwater effects from Tennessee River. Discharge for flood of Mar. 21, 1955, based on contracted-opening measurement at 50,000 cfs.

Bankfull stage--8 ft.

Remarks--Base for partial-duration series, 3,000 cfs. Only annual peak shown for 1955.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1934	June 4, 1934	5.33	a4,170	1937	Oct. 8, 1936	5.96	4,600
1935	Feb. 10, 1935	3.90	3,050		Oct. 16, 1936	4.58	3,310
	Feb. 26, 1935	5.37	4,270		Dec. 7, 1936	6.93	5,490
	Mar. 5, 1935	4.18	3,130		Jan. 2, 1937	10.47	9,850
	Mar. 13, 1935	9.43	8,270		Jan. 18, 1937	5.32	3,940
1936	Nov. 11, 1935	4.38	3,110		Jan. 20, 1937	6.18	4,790
	Feb. 4, 1936	5.98	4,470		Jan. 23, 1937	6.55	5,190
	Mar. 24, 1936	5.00	3,620		Feb. 9, 1937	4.97	3,670
	Mar. 27, 1936	5.98	4,470		May 2, 1937	5.12	3,760
	Apr. 6, 1936	7.95	6,170		May 4, 1937	16.60	20,600
	Apr. 9, 1936	5.58	4,130	1938	Sept. 5, 1937	4.80	3,080
					Mar. 10, 1938	5.04	3,310

a Maximum during period May 29 to Sept. 30.

Peak stages and discharges of Cypress Creek near Florence, Ala.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Apr. 8, 1938	5.24	3,490	1947	Apr. 16, 1947	6.18	4,400
	Apr. 18, 1938	4.80	3,130				
	July 31, 1938	5.62	3,860	1948	Feb. 13, 1948	bl7.40	18,800
	Aug. 29, 1938	6.51	4,760		Mar. 6, 1948	4.80	3,130
1939	Jan. 13, 1939	6.10	4,340	1949	Nov. 28, 1948	8.37	6,370
	Feb. 3, 1939	7.00	5,310		Jan. 3, 1949	11.20	9,840
	Feb. 15, 1939	11.73	11,700		Jan. 22, 1949	4.70	3,040
	Feb. 26, 1939	5.31	3,580		Mar. 27, 1949	13.17	12,700
	Feb. 28, 1939	5.83	4,050		May 21, 1949	4.72	3,060
	Mar. 5, 1939	6.02	4,240		June 22, 1949	5.00	3,300
	Mar. 11, 1939	6.24	4,440		July 13, 1949	7.62	5,620
	Mar. 30, 1939	6.62	4,870				
	May 25, 1939	5.12	3,400	1950	Jan. 6, 1950	9.27	7,360
	June 1, 1939	4.70	3,040		Jan. 12, 1950	8.05	6,000
	June 9, 1939	4.79	3,130		Jan. 19, 1950	5.31	3,560
	June 28, 1939	7.43	5,780		Jan. 30, 1950	7.93	5,930
	Aug. 7, 1939	4.76	3,130		Feb. 2, 1950	5.85	4,020
1940	Apr. 19, 1940	12.97	14,000		Feb. 7, 1950	5.70	3,890
1941	July 4, 1941	3.79	2,280		Feb. 14, 1950	13.36	13,600
1942	Mar. 17, 1942	4.53	2,880		Mar. 13, 1950	9.16	7,630
1943	Dec. 28, 1942	8.00	6,630		Aug. 29, 1950	4.47	3,090
	Apr. 12, 1943	5.11	3,760		Aug. 31, 1950	8.83	7,260
1944	Feb. 9, 1944	9.48	8,440	1951	Dec. 7, 1950	4.72	3,320
	Feb. 26, 1944	6.43	4,990		Jan. 4, 1951	8.88	7,320
	Mar. 6, 1944	4.27	3,040		Feb. 1, 1951	15.26	17,200
	Mar. 28, 1944	11.06	10,800		Feb. 7, 1951	4.75	3,340
	Apr. 11, 1944	4.97	3,310		Feb. 19, 1951	5.68	4,180
1945	Dec. 28, 1944	4.70	3,040		Mar. 28, 1951	19.20	25,100
	Jan. 1, 1945	10.88	10,200		Apr. 22, 1951	5.10	3,660
	Jan. 7, 1945	4.91	3,220	1952	Dec. 8, 1951	4.74	3,340
	Feb. 17, 1945	8.00	6,210		Dec. 15, 1951	8.07	6,440
	Feb. 22, 1945	12.90	13,600		Dec. 21, 1951	6.18	4,630
	Mar. 4, 1945	6.92	5,080		Dec. 26, 1951	5.59	4,100
	Apr. 2, 1945	6.68	4,880		Jan. 10, 1952	5.95	4,420
1946	Nov. 19, 1945	7.00	5,180		Jan. 22, 1952	5.71	4,210
	Nov. 22, 1945	13.45	14,500		Jan. 27, 1952	10.35	9,190
	Jan. 8, 1946	10.30	10,200		Mar. 3, 1952	5.12	3,680
	Jan. 12, 1946	6.80	4,980		Mar. 11, 1952	6.97	5,370
	Feb. 6, 1946	7.63	5,780		Mar. 22, 1952	5.70	4,200
	Feb. 9, 1946	10.64	9,750	1953	Feb. 12, 1953	12.17	11,900
	Feb. 27, 1946	6.2	4,410		Feb. 21, 1953	9.17	7,620
	Mar. 7, 1946	5.2	3,490		Mar. 4, 1953	7.41	5,510
1947	Jan. 1, 1947	4.67	3,020		Mar. 15, 1953	10.47	9,360
					Mar. 23, 1953	5.94	4,200
					Apr. 6, 1953	5.36	3,740
					Apr. 30, 1953	8.35	6,570
				1955	Mar. 24, 1955	29.94	50,000

b Backwater from Tennessee River.

5920. Bear Creek near Red Bay, Ala.

Location.--Lat 34°26'39", long 88°06'55", in NE $\frac{1}{4}$ sec.21, T.7 S., R.15 W., near left abutment on downstream side of bridge on State Highway 24, 0.6 mile downstream from Norman Branch, 1.7 miles upstream from Mud Creek, and 1.8 miles east of Red Bay.

Drainage area.--263 sq mi.

Gage.--Nonrecording prior to Oct. 27, 1959; recording thereafter. Prior to May 31, 1920, at site 0.7 mile upstream at various datums. Altitude of gage is 510 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 3,000 cfs and extended above for records through 1920; thereafter, defined by current-meter measurements below 3,500 cfs and extended above.

Bankfull stage.--12 ft.

Remarks.--Peaks are from graphs based on gage readings prior to Oct. 27, 1959. Base for partial-duration series, 4,000 cfs. Only annual peaks shown prior to Sept. 30, 1919.

Peak stages and discharges of Bear Creek near Red Bay, Ala.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	Mar. 31, 1914	13.1	4,110	1920	Apr. 2, 1920	15.0	4,660
1915	Feb. 1, 1915	13.6	4,360	1959	Apr. 20, 1959	14.8	2,950
1916	July 9, 1916	14.86	4,610	1960	Dec. 30, 1959	15.6	4,180
1917	Apr. 5, 1917	14.3	4,560		Mar. 4, 1960	16.31	5,600
1918	Apr. 9, 1918	13.3	3,810				
1919	Mar. 9, 1919	14.2	4,260				

a Maximum observed during period Oct. 1 to May 31.

5925. Bear Creek at Bishop, Ala.

Location.--Lat 34°39'21", long 88°07'21", in SE $\frac{1}{4}$ sec.5, T.5 S., R.15 W., on left bank 20 ft upstream from highway bridge, half a mile downstream from Cedar Creek, three-quarters of a mile southwest of Bishop, and at mile 27.3.

Drainage area.--667 sq mi.

Gage.--Nonrecording prior to May 28, 1934; recording thereafter. At datum 5.00 ft lower prior to May 29, 1934. All gage heights shown therein have been adjusted to present datum. Datum of gage is 419.91 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 28,000 cfs and extended above.

Bankfull stage.--10 ft.

Remarks.--Only annual peaks are shown prior to 1935. Base for partial-duration series, 7,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Dec. 26, 1926	22.0	32,000	1940	Apr. 19, 1940	14.59	9,280
1928	Apr. 24, 1928	17.2	a15,800	1941	July 5, 1941	13.34	7,070
1929	Mar. 24, 1929	21.6	b30,500	1942	Mar. 17, 1942	16.30	13,300
1930	Mar. 7, 1930	15.5	11,400	1943	Dec. 29, 1942	14.08	7,950
1931	Apr. 1, 1931	12.40	6,100	1944	Feb. 27, 1944	15.81	12,000
1932	Dec. 14, 1931	17.4	c16,400		Mar. 20, 1944	13.58	7,520
1934	June 7, 1934	17.63	17,000		Mar. 29, 1944	20.18	25,400
1935	Jan. 2, 1935	15.00	11,000		Apr. 12, 1944	13.98	8,170
	Mar. 7, 1935	15.23	11,400	1945	Feb. 18, 1945	15.57	11,500
	Mar. 13, 1935	14.89	10,800		Feb. 22, 1945	18.27	19,000
1936	Nov. 12, 1935	13.27	7,780		Mar. 5, 1945	15.19	10,600
	Feb. 4, 1936	15.24	11,000	1946	Jan. 8, 1946	19.38	22,000
	Feb. 6, 1936	14.37	8,920		Feb. 10, 1946	18.93	20,300
	Mar. 17, 1936	14.28	8,700		Mar. 18, 1946	14.20	7,820
	Mar. 28, 1936	14.79	9,880	1947	Jan. 2, 1947	17.30	15,200
	Apr. 4, 1936	15.66	12,400		Jan. 21, 1947	15.32	9,940
	Apr. 6, 1936	16.86	16,100		Apr. 12, 1947	14.40	8,160
	June 9, 1936	13.78	7,740		Apr. 14, 1947	14.15	7,740
1937	Jan. 2, 1937	15.69	12,400	1948	Feb. 9, 1948	14.50	8,340
	Jan. 21, 1937	14.22	8,500		Feb. 14, 1948	21.44	29,600
	Jan. 23, 1937	13.67	7,580		Mar. 17, 1948	18.10	17,700
	Feb. 10, 1937	13.78	7,740	1949	Nov. 29, 1948	16.10	11,800
1938	Mar. 12, 1938	14.70	9,480		Jan. 6, 1949	20.48	26,700
	Apr. 18, 1938	14.34	8,700		Jan. 23, 1949	16.47	12,800
1939	Jan. 14, 1939	14.16	8,520		Mar. 28, 1949	15.47	10,300
	Feb. 4, 1939	16.97	15,200	1950	Jan. 8, 1950	20.06	25,000
	Feb. 15, 1939	17.72	17,700		Jan. 13, 1950	14.14	7,720
	Mar. 1, 1939	14.89	9,900		Feb. 15, 1950	17.98	17,400
	Mar. 30, 1939	14.54	9,080		Mar. 14, 1950	17.29	15,200
	May 25, 1939	14.01	8,170				
1940	Mar. 13, 1940	13.58	7,520				

a Maximum for period Oct. 1, 1927, to Jan. 24, 1928.

b Maximum for period Feb. 10 to Sept. 30, 1929.

c Maximum for period Oct. 1, 1931, to Mar. 31, 1932.

Peak stages and discharges of Bear Creek at Bishop, Ala.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	May 15, 1950	15.10	9,500	1955	Feb. 23, 1955	17.13	15,200
	Sept. 1, 1950	15.70	10,800		Mar. 22, 1955	21.98	37,000
1951	Feb. 1, 1951	18.77	18,600	1956	Feb. 5, 1956	15.81	11,100
	Mar. 29, 1951	19.73	27,200		Apr. 4, 1956	14.82	8,940
1952	Dec. 11, 1951	14.58	8,130		Apr. 7, 1956	15.43	10,200
	Dec. 21, 1951	16.07	11,500		Apr. 16, 1956	15.30	9,920
	Dec. 26, 1951	15.41	9,760		May 1, 1956	14.12	7,690
	Mar. 11, 1952	14.81	8,540	1957	Dec. 14, 1956	15.33	9,990
1953	Feb. 12, 1953	15.29	9,900		Feb. 2, 1957	20.22	28,900
	Feb. 21, 1953	16.83	14,100	1958	Nov. 19, 1957	18.08	19,100
	Apr. 30, 1953	16.44	12,900		Feb. 14, 1959	12.78	5,980
1954	Jan. 23, 1954	17.23	15,500	1960	Dec. 19, 1959	16.74	13,000
	Feb. 20, 1954	14.06	7,600		Mar. 3, 1960	10.03	11,700
1955	Jan. 1, 1955	15.05	9,400				

5928. Yellow Creek at Moser Bridge, near Doskie, Miss.

Location.--Lat 34°54'02", long 88°17'35", on downstream side of right bank pier of Moser Bridge, 0.4 mile south of Doskie, Tishomingo County.

Drainage area.--143 sq mi.

Gage.--Nonrecording prior to Dec. 8, 1937; recording thereafter. Datum of gage is 422.78 ft above mean sea level, datum of 1929.

Historical data.--Flood of Mar. 28, 1902, reached an elevation 0.2 ft higher than the flood of Feb. 13, 1948, at Burnsville, 4 miles upstream.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Aug. 30, 1938	6.82	2,740	1949	Nov. 19, 1948	8.25	6,200
1939	Feb. 15, 1939	7.42	4,220	1950	Sept. 3, 1950	8.33	5,950
1940	Apr. 19, 1940	8.08	6,020	1951	Mar. 29, 1951	9.65	10,640
1941	Nov. 12, 1940	6.39	1,770	1952	Dec. 15, 1951	7.46	3,070
1942	Feb. 24, 1942	6.55	1,850	1953	Feb. 12, 1953	8.37	6,090
1943	Dec. 28, 1942	7.44	4,230	1954	Jan. 22, 1954	7.18	2,280
1944	Mar. 29, 1944	7.91	5,550	1955	Mar. 22, 1955	11.66	18,400
1945	Jan. 1, 1945	8.03	5,880	1956	Feb. 4, 1956	8.21	4,700
1946	Nov. 22, 1945	8.90	8,280	1957	Feb. 1, 1957	8.64	5,980
1947	Jan. 3, 1947	6.84	2,110	1958	Nov. 14, 1957	8.60	5,850
1948	Feb. 13, 1948	11.84	19,000	1959	Jan. 22, 1959	7.06	1,725

5930.1. Chambers Creek opposite Kendrick, Miss.

Location.--Lat 34°58'36", long 88°23'04", on left bank 0.5 mile north of Kendrick, Alcorn County, and 8,500 ft upstream from Sevenmile Creek.

Drainage area.--21.1 sq mi; 22.1 sq mi prior to May 9, 1942.

Gage.--Recording. At site 0.9 mile downstream at datum 3.00 ft lower prior to May 9, 1942. Datum of gage is 403.00 ft above mean sea level, datum of 1929.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges of Chambers Creek opposite Kendrick, Miss.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Mar. 13, 1940	5.65	652	1950	Sept. 2, 1950	9.05	5,660
1941	Jan. 2, 1941	5.63	615	1951	Jan. 3, 1951	8.29	2,850
1942	Apr. 9, 1942	6.48	4,520	1952	Dec. 15, 1951	7.53	1,150
1943	Dec. 27, 1942	8.86	4,780	1953	Feb. 11, 1953	7.90	1,780
1944	Mar. 27, 1944	7.86	1,770	1954	Feb. 20, 1954	7.37	994
1945	Jan. 1, 1945	8.80	4,550	1955	Mar. 21, 1955	8.87	4,970
1946	Jan. 7, 1946	9.70	8,060	1956	Jan. 30, 1956	8.32	2,940
1947	Nov. 17, 1946	7.75	1,220	1957	Apr. 4, 1957	8.15	2,420
1948	Feb. 13, 1948	8.70	4,205	1958	Nov. 14, 1957	8.29	2,850
1949	Nov. 19, 1948	9.44	7,050	1959	Jan. 22, 1959	6.20	409

5930.2. Sevenmile Creek near Kendrick, Miss.

Location.--Lat 34°58'25", long 88°21'33", on right bank end of timber bridge, 1,800 ft upstream from confluence with Chambers Creek and 1.3 miles east of Kendrick.

Drainage area.--22.0 sq mi.

Gage.--Recording. Datum of gage is 401.00 ft above mean sea level, datum of 1929.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Apr. 18, 1940	4.96	714	1942	Apr. 9, 1942	5.27	1,550
1941	Jan. 2, 1941	4.98	732	1943	Dec. 28, 1942	5.32	1,730
				1944	Dec. 28, 1943	4.89	476

5933. Snake Creek near Adamsville, Tenn.

Location.--Lat 35°13'11", long 88°25'36", on left bank at bridge on U.S. Highway 64, 1.7 miles downstream from Little Snake Creek and 2.3 miles southwest of Adamsville, McNairy County.

Drainage area.--49.4 sq mi.

Gage.--Recording. Datum of gage is 386.00 ft above mean sea level, datum of 1929.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Feb. 18, 1940	13.92	2,730	1950	Feb. 13, 1950	15.46	4,110
1941	Jan. 2, 1941	8.12	1,020	1951	Jan. 13, 1951	15.81	4,810
1942	Apr. 9, 1942	15.47	4,130	1952	Mar. 2, 1952	15.40	4,030
1943	Dec. 27, 1942	15.84	4,870	1953	Feb. 11, 1953	15.38	4,000
1944	Feb. 9, 1944	15.25	3,830	1954	Feb. 16, 1954	16.23	5,830
1945	Dec. 31, 1944	15.70	4,580	1955	Mar. 21, 1955	16.00	5,200
1946	Jan. 8, 1946	16.08	5,370	1956	Apr. 6, 1956	15.30	3,890
1947	Apr. 11, 1947	15.40	4,030	1957	Apr. 4, 1957	16.80	10,000
1948	Feb. 13, 1948	16.80	10,000	1958	Nov. 14, 1957	15.63	4,100
1949	Nov. 19, 1948	16.06	5,330	1959	Jan. 21, 1959	14.15	2,860

5935. Tennessee River at Savannah, Tenn.

Location.--Lat 35°13'29", long 88°15'36", on left bank pier of bridge on U.S. Highway 64, at Savannah, Hardin County, 16.8 miles downstream from Pickwick Landing Dam, and at mile 189.9.

Drainage area.--33,140 sq mi, approximately.

Gage.--Nonrecording prior to Sept. 5, 1930; recording thereafter. At datum 41.61 ft higher prior to Apr. 7, 1945. Datum of gage is 300.00 ft above mean sea level, datum of 1929. Nonrecording auxiliary gage Apr. 5, 1937, to Jan. 31, 1939; recording thereafter.

Stage-discharge relation.--Defined by current-meter measurements below 320,000 cfs and extended above. Fall between base gage and auxiliary gage used as a factor in computing discharge.

Bankfull stage.--81 ft, present datum.

Historical data.--Flood of Mar. 21, 1897, is maximum stage known.

Remarks.--Peak stages prior to 1931 from reports by U.S. Weather Bureau. Flow partly regulated by Wilson Lake since 1924 and regulation by increasing number of reservoirs since 1936. Only annual peaks are shown. Peak stage frequently occurs at different time than peak discharge.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1897	Mar. 21, 1897	59.6	450,000	1941	Apr. 7, 1941	16.83	81,500
1922	Mar. 16, 1922	43.5	-	1942	Mar. 23, 1942	23.53	117,000
1923	Feb. 12, 1923	37.6	-	1943	Jan. 3, 1943	42.10	265,000
1924	Jan. 7, 1924	35.4	-	1944	Apr. 1, 1944	44.43	302,000
1925	Jan. 17, 1925	26.6	-	1945	Feb. 23, 1945	80.85	231,000
1926	Jan. 24, 1926	26.8	-	1946	Jan. 13, 1946	91.61	370,000
1927	Jan. 2, 1927	51.1	349,000	1947	Jan. 20, 1947	83.73	279,000
1928	Apr. 26, 1928	36.5	-	1948	Feb. 16, 1948	92.29	396,000
1929	Mar. 27, 1929	44.3	-	1949	Jan. 8, 1949	86.68	310,000
1930	Mar. 10, 1930	31.5	-	1950	Feb. 14, 1950	83.99	260,000
1931	Apr. 10, 1931	25.4	132,000	1951	Mar. 30, 1951	85.44	301,000
1932	Feb. 8, 1932	40.0	228,000	1952	Dec. 27, 1951	79.51	229,000
1933	Feb. 23, 1933	41.75	246,000	1953	Feb. 25, 1953	76.55	200,000
1934	Mar. 8, 1934	40.85	239,000	1954	Jan. 26, 1954	85.55	291,000
1935	Mar. 17, 1935	36.10	202,000	1955	Mar. 22, 1955	85.58	321,000
1936	Apr. 10, 1936	47.44	314,000	1956	Feb. 5, 1956	83.23	282,000
1937	Jan. 27, 1937	42.26	234,000	1957	Feb. 6, 1957	92.42	403,000
1938	Apr. 11, 1938	30.10	166,000	1958	Nov. 21, 1957	86.44	316,000
1939	Feb. 17, 1939	43.93	299,000	1959	Jan. 24, 1959	69.49	141,000
1940	Mar. 16, 1940	22.39	111,000	1960	Mar. 5, 1960	72.77	168,000

5940. Horse Creek near Savannah, Tenn.

Location.--Lat 35°10'37", long 88°12'34", on right bank at bridge on county road, 1.2 miles northeast of Maddox and 4 miles southeast of Savannah, Hardin County.

Drainage area.--104 sq mi; 114 sq mi at site used 1930-34.

Gage.--Nonrecording at site 4.4 miles downstream at different datum (altitude, 385 ft, from topographic map) prior to Nov. 7, 1939; recording thereafter. Datum of gage is 400.00 ft above mean sea level, datum of 1929.

Remarks.--Station operated and records published by Tennessee Valley Authority subsequent to 1939. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	Mar. 7, 1930	9.94	3,050	1934	Mar. 3, 1934	8.04	2,210
1931	Aug. 8, 1931	4.86	1,000	1940	Apr. 19, 1940	10.48	a3,050
1932	Jan. 30, 1932	13.5	4,670	1941	Nov. 11, 1940	6.53	1,100
1933	Mar. 19, 1933	12.8	4,360				

a Maximum for period Nov. 7, 1939, to Sept. 30, 1940.

TENNESSEE RIVER BASIN

Peak stages and discharges of Horse Creek near Savannah, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Apr. 9, 1942	7.88	1,550	1952	Dec. 8, 1951	12.41	6,230
1943	Dec. 28, 1942	12.23	5,700	1953	Feb. 12, 1953	13.46	10,200
1944	Feb. 9, 1944	11.88	4,920	1954	Jan. 22, 1954	8.68	1,630
1945	Dec. 31, 1944	14.10	13,700	1955	Mar. 21, 1955	16.18	27,100
1946	Nov. 21, 1945	13.21	9,040	1956	Feb. 4, 1956	12.14	4,420
1947	Jan. 3, 1947	10.17	2,810	1957	Feb. 1, 1957	12.58	6,330
1948	Feb. 13, 1948	14.70	17,200	1958	Nov. 14, 1957	13.69	11,400
1949	Nov. 19, 1948	11.80	4,180	1959	Jan. 21, 1959	7.28	1,180
1950	Feb. 14, 1950	12.41	5,740	1960	Mar. 3, 1960	8.99	1,830
1951	Jan. 3, 1951	13.21	9,040				

5940.4. Turkey Creek near Savannah, Tenn.

Location.--Lat 35°13'45", long 88°11'38", on left bank at bridge on U.S. Highway 64, 3.2 miles east of Savannah, Hardin County.

Drainage area.--53.7 sq mi.

Gage.--Recording. Datum of gage is 378.00 ft above mean sea level, datum of 1929.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Apr. 19, 1940	9.65	1,690	1950	Jan. 5, 1950	11.05	3,930
1941	Dec. 16, 1940	7.21	600	1951	Jan. 3, 1951	11.35	4,760
1942	Apr. 9, 1942	10.06	2,180	1952	Jan. 27, 1952	9.50	1,580
1943	Dec. 27, 1942	11.50	5,310	1953	Feb. 12, 1953	10.05	2,170
1944	Feb. 9, 1944	10.95	3,700	1954	Feb. 20, 1954	9.50	1,540
1945	Dec. 31, 1944	11.77	6,440	1955	Mar. 21, 1955	12.70	10,500
1946	Jan. 7, 1946	12.70	10,500	1956	Feb. 3, 1956	9.60	1,330
1947	Jan. 2, 1947	9.97	2,060	1957	Feb. 1, 1957	-	3,270
1948	Feb. 13, 1948	12.25	8,550	1958	July 12, 1958	11.63	5,820
1949	Nov. 19, 1948	10.38	2,660	1959	Jan. 21, 1959	9.49	1,210

5940.58. White Oak Creek near Milledgeville, Tenn.

Location.--Lat 35°22'26", long 88°22'54", on left bank 1 mile west of Milledgeville, McNairy County.

Drainage area.--46.1 sq mi.

Gage.--Recording. Datum of gage is 385.00 ft above mean sea level, datum of 1929.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Feb. 18, 1940	6.75	2,120	1950	Jan. 5, 1950	7.75	3,720
1941	Nov. 11, 1940	5.94	874	1951	Jan. 3, 1951	8.04	5,240
1942	Mar. 13, 1942	7.29	3,790	1952	Mar. 3, 1952	7.87	4,320
1943	Dec. 27, 1942	7.43	4,260	1953	May 17, 1953	8.21	6,220
1944	Feb. 9, 1944	7.10	3,140	1954	Feb. 16, 1954	8.24	6,390
1945	Dec. 31, 1944	7.20	2,670	1955	Mar. 21, 1955	8.42	7,250
1946	Jan. 8, 1946	8.80	9,800	1956	Apr. 6, 1956	8.14	5,150
1947	Apr. 11, 1947	7.54	4,140	1957	Apr. 4, 1957	9.28	11,900
1948	Feb. 13, 1948	8.42	8,090	1958	Nov. 14, 1957	8.55	8,360
1949	Nov. 19, 1948	7.92	4,590	1959	Jan. 21, 1959	8.00	4,280

a Maximum for period Dec. 1, 1939, to Sept. 30, 1940.

5941.2. Middleton Creek near Milledgeville, Tenn.

Location.--Lat 35°24'59", long 88°21'40", on right bank 1,600 ft downstream from Little Hurricane Creek and 3.2 miles north of Milledgeville, Hardin County.

Drainage area.--45.5 sq mi.

Gage.--Recording. Datum of gage is 387.00 ft above mean sea level, datum of 1929.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Feb. 18, 1940	9.68	a2,290	1950	Jan. 10, 1950	10.06	3,520
1941	Nov. 11, 1940	6.91	799	1951	Jan. 3, 1951	10.21	4,570
1942	Apr. 9, 1942	9.95	3,720	1952	Mar. 3, 1952	10.36	5,540
1943	Dec. 27, 1942	9.91	3,510	1953	May 4, 1953	10.49	6,380
1944	Feb. 17, 1944	9.76	2,730	1954	Jan. 15, 1954	10.55	6,780
1945	Dec. 31, 1944	9.90	3,450	1955	Mar. 21, 1955	10.34	3,150
1946	Jan. 8, 1946	9.78	2,850	1956	Feb. 17, 1956	10.30	3,030
1947	Apr. 11, 1947	9.84	3,150	1957	Apr. 4, 1957	11.16	7,490
1948	Feb. 12, 1948	10.50	6,540	1958	Nov. 14, 1957	10.55	3,910
1949	Nov. 19, 1948	10.34	5,770	1959	Jan. 21, 1959	10.15	2,360

a Maximum for period Nov. 29, 1939, to Sept. 30, 1940.

5941.6. Indian Creek near Cerro Gordo, Tenn.

Location.--Lat 35°18'25", long 88°07'31", on left bank at Upper Bridge, 1,800 ft downstream from Smith Fork and 3½ miles east of Cerro Gordo, Hardin County.

Drainage area.--201 sq mi.

Gage.--Recording. Datum of gage is 391.00 ft above mean sea level, datum of 1929.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Apr. 19, 1940	14.24	a12,200	1950	Jan. 6, 1950	14.38	12,900
1941	Nov. 11, 1940	7.38	2,030	1951	Jan. 4, 1951	14.95	14,900
1942	Apr. 10, 1942	8.54	2,600	1952	Dec. 8, 1951	15.05	15,600
1943	Dec. 28, 1942	14.79	15,050	1953	Feb. 12, 1953	14.34	11,100
1944	Feb. 29, 1944	14.53	13,650	1954	Feb. 20, 1954	10.55	3,400
1945	Jan. 1, 1945	15.35	16,300	1955	Mar. 21, 1955	16.74	29,400
1946	Jan. 7, 1946	14.80	15,100	1956	Feb. 4, 1956	13.59	9,030
1947	Jan. 2, 1947	12.32	4,850	1957	Jan. 31, 1957	13.93	10,650
1948	Feb. 13, 1948	16.80	30,000	1958	Nov. 18, 1957	14.94	14,800
1949	Mar. 27, 1949	13.53	8,740	1959	Jan. 22, 1959	11.20	3,870

a Maximum for period Dec. 5, 1939, to Sept. 30, 1940.

5943. Cypress Creek tributary near Pope, Tenn.

Location.--Lat 35°37'10", long 87°57'20", at culvert under State Highways 20 and 100, in Craig Hollow, 2.0 miles east of Pope, Perry County.

Drainage area.--0.75 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Not defined.

Remarks.--Only annual peak stages are shown.

Peak stages and discharges of Cypress Creek tributary near Pope, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	3.16	-	1958	Nov. 17, 1957	1.88	-
1956	Feb. 17, 1956	2.26	-	1959	Feb. 14, 1959	(a)	-
1957	Apr. 4, 1957	4.03	-	1960	-	(b)	-

a Gage height not determined; less than 1.5 ft.

b Peak stage did not reach bottom of gage.

5944. Cypress Creek at Pope, Tenn.

Location.--Lat 35°36'55", long 87°59'23", at bridge on county highway R7029, 0.2 mile south of intersection of County Highway R7029 and State Highways 20 and 100 in Pope, Perry County.

Drainage area.--16.8 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Not defined except at 2,340 cfs by contracted-opening measurement.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	6.78	2,340	1958	Nov. 12, 1957	3.79	-
1956	Feb. 17, 1956	5.66	-	1959	Feb. 14, 1959	3.47	-
1957	Apr. 4, 1957	7.65	-	1960	Mar. 8, 1960	1.34	-

5944.15. Beech River near Lexington, Tenn.

Location.--Lat 35°39'34", long 86°25'01", on left bank downstream from U.S. Highway 20, and 1.5 miles west of Court House Square at Lexington.

Drainage area.--15.9 sq mi.

Gage.--Recording. Datum of gage is 428.83 ft above mean sea level, datum of 1929.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	May 4, 1953	5.21	874	1957	Apr. 4, 1957	6.17	1,280
1954	Jan. 20, 1954	6.43	1,280	1958	Nov. 14, 1957	5.85	1,080
1955	Mar. 21, 1955	5.50	840	1959	July 22, 1959	5.95	1,160
1956	Jan. 29, 1956	7.04	1,700	1960	Dec. 12, 1959	4.54	499

a Maximum for period Jan. 1 to Sept. 30, 1953.

5944.25. Pine Tree Branch near Lexington, Tenn.

Location.--Lat 35°39'49", long 88°20'53", on left bank of the silt basin at the Pine Tree Branch experimental watershed, 800 ft upstream from Harmon Creek and 2½ miles east of Lexington.

Drainage area.--0.14 sq mi.

Gage.--Recording. Datum of gage is 435.17 ft above mean sea level, datum of 1929.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges of Pine Tree Branch near Lexington, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Apr. 9, 1942	18.18	144	1952	Mar. 22, 1952	18.01	98
1943	Oct. 30, 1942	18.24	128	1953	May 4, 1953	17.40	22
1944	Aug. 26, 1944	18.72	244	1954	Jan. 20, 1954	17.84	60
1945	June 6, 1945	18.04	102	1955	Apr. 23, 1955	17.42	23
1946	Nov. 2, 1945	18.15	137	1956	Jan. 29, 1956	17.44	25
1947	Jan. 15, 1947	17.81	56	1957	Apr. 4, 1957	17.80	54
1948	Mar. 1, 1948	17.38	21	1958	Nov. 13, 1957	17.15	11
1949	May 22, 1949	17.79	58	1959	July 21, 1959	17.24	14
1950	July 5, 1950	17.66	41	1960	Nov. 26, 1959	16.46	.625
1951	July 10, 1951	17.30	17				

5944.3. Harmon Creek near Lexington, Tenn.

Location.--Lat 35°38'16", long 88°21'15", on left bank at bridge on U.S. Highway 20, 2 miles east of Lexington.

Drainage area.--6.87 sq mi.

Gage.--Recording. Datum of gage is 410.70 ft above mean sea level, datum of 1929.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	May 4, 1953	5.64	a808	1957	Jan. 22, 1957	5.98	810
1954	Jan. 20, 1954	5.62	784	1958	Nov. 14, 1957,	5.68	438
1955	Apr. 23, 1955	5.60	500		Sept. 20, 1958		
				1959	Feb. 14, 1959	5.84	622
1956	Jan. 29, 1956	5.85	680	1960	Mar. 9, 1960	5.16	200

a Maximum for period Jan. 14 to Sept. 30, 1953.

5944.45. Beech River near Chesterfield, Tenn.

Location.--Lat 35°37'26", long 88°16'22", on right bank 1 mile south of Chesterfield, Henderson County, and 1.4 miles upstream from Cane Creek.

Drainage area.--115 sq mi.

Gage.--Recording. Datum of gage is 371.00 ft above mean sea level, datum of 1929.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Feb. 18, 1940	9.86	a3,540	1947	Jan. 2, 1947	10.13	4,230
				1948	Feb. 13, 1948	10.90	12,040
1941	Jan. 24, 1941	8.34	809	1949	Nov. 19, 1948	10.80	11,100
1942	Apr. 9, 1942	10.21	6,900	1950	Jan. 10, 1950	10.55	8,320
1943	Dec. 28, 1942	10.00	4,850				
1944	Feb. 17, 1944	9.85	3,450	1951	Jan. 3, 1951	10.25	4,780
1945	Dec. 31, 1944	9.97	2,520	1952	Dec. 14, 1951	10.33	6,330
				1953	May 4, 1953	10.33	5,760
1946	Jan. 8, 1946	11.15	16,000	1954	Jan. 20, 1954	10.40	6,600

a Maximum for period Jan. 19 to Sept. 30, 1940.

5944.5. Browns Creek near Chesterfield, Tenn.

Location.--Lat 35°38'22", long 88°14'52", on right bank downstream from bridge on State Highway 20, 1.1 miles east of Chesterfield.

Drainage area.--20.2 sq mi.

Gage.--Recording. Datum of gage is 380.04 ft above mean sea level, datum of 1929.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	May 4, 1953	7.65	al,570	1957	Apr. 4, 1957	7.85	1,810
1954	Jan. 20, 1954	7.47	1,280	1958	Nov. 14, 1957	7.41	1,340
1955	Mar. 21, 1955	7.50	1,540	1959	Feb. 14, 1959	7.43	1,050
				1960	Mar. 9, 1960	6.86	581

a Maximum for period Jan. 17 to Sept. 30, 1953.

5944.55. Cane Creek near Shady Hill, Tenn.

Location.--Lat 35°34'34", long 88°17'23", 1.6 miles downstream from bridge on Scotts Hill-Shady Hill road, 1.7 miles northwest of Shady Hill, and 4.8 miles northwest of Scotts Hill, Henderson County.

Drainage area.--16.8 sq mi.

Gage.--Recording. Datum of gage is 388.61 ft above mean sea level, datum of 1929.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	May 4, 1953	12.18	al,850	1957	Apr. 4, 1957	12.80	2,300
1954	Jan. 20, 1954	12.06	1,760	1958	Nov. 14, 1957	12.54	1,950
1955	Mar. 21, 1955	12.04	1,770	1959	Feb. 14, 1959	12.62	2,060
				1960	Oct. 8, 1959	12.37	1,770
1956	Feb. 17, 1956	12.20	1,600				

a Maximum for period Jan. 21 to Sept. 30, 1953.

5944.6. Cane Creek near Chesterfield, Tenn.

Location.--Lat 35°36'49", long 88°16'23", on left bank at highway bridge on road from Chesterfield to Middleburg, 1.4 miles upstream from Beech River and 1.8 miles south of Chesterfield, Henderson County.

Drainage area.--22.2 sq mi.

Gage.--Recording. Datum of gage is 373.00 ft above mean sea level, datum of 1929.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Feb. 18, 1940	8.01	a894	1948	Feb. 13, 1948	8.98	3,830
1941	Nov. 11, 1940	7.23	462	1949	Nov. 19, 1948	9.25	1,240
1942	Apr. 9, 1942	8.23	691	1950	Jan. 10, 1950	9.12	944
1943	Dec. 27, 1942	8.42	1,040	1951	Jan. 3, 1951	9.14	988
1944	Feb. 9, 1944	8.37	783	1952	Feb. 13, 1952	9.12	944
1945	Dec. 31, 1944	8.76	2,290	1953	May 19, 1953	9.29	1,070
1946	Jan. 8, 1946	9.13	5,330	1954	Jan. 15, 1954	9.38	1,150
1947	Jan. 2, Apr. 11, 1947	8.36	624				

a Maximum for period Jan. 18 to Sept. 30, 1940.

5944.65. Beech River near Darden, Tenn.

Location.--Lat 35°37'03", long 88°12'42", on right bank downstream from Darden Road, and 1.3 miles south of U.S. Highway 20 intersection at Darden.

Drainage area.--165 sq mi.

Gage.--Recording. Datum of gage is 365.00 ft above mean sea level, datum of 1929.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 22, 1955	9.38	6,340	1958	Nov. 15, 1957	6.98	3,270
1956	Feb. 18, 1956	9.40	6,050	1959	Feb. 15, 1959	8.48	5,950
1957	Apr. 4, 1957	8.30	5,500	1960	Dec. 12, 1959	6.49	41,300

a Maximum during period Oct. 1, 1959, to Jan. 31, 1960.

5944.8. Turkey Creek near Decaturville, Tenn.

Location.--Lat 35°34'30", long 88°08'20", on right bank 1.2 miles southeast of Camp Ground Church, and 1.3 miles west of Decaturville.

Drainage area.--8.40 sq mi.

Gage.--Recording. At datum 2.00 ft higher prior to Sept. 1, 1958. Datum of gage is 376.81 ft above mean sea level, datum of 1929.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	May 17, 1953	6.15	6660	1957	Apr. 4, 1957	6.17	1,760
1954	Jan. 20, 1954	6.08	1,650	1958	Nov. 14, 1957	6.29	1,390
1955	Mar. 21, 1955	6.05	1,600	1959	Feb. 14, 1959	8.20	1,250
1956	Apr. 6, 1956	5.61	779	1960	Oct. 8, 1959	5.22	313

a Affected by backwater from drift.

b Maximum for period Jan. 28 to Sept. 30, 1953.

5960. Duck River below Manchester, Tenn.

Location.--Lat 35°28'15", long 86°07'18", on right bank 50 ft downstream from Powers Bridge, 2 miles southwest of Manchester, Coffee County, 3¼ miles downstream from Little Duck River, and 7 miles upstream from Crumpton Creek.

Drainage area.--107 sq mi.

Gage.--Recording. Datum of gage is 878.23 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 12,000 cfs and extended on basis of slope-area measurement at 30,000 cfs.

Bankfull stage.--10 ft.

Historical data.--Flood of March 1929 is maximum stage known. Flood in March 1902 reached about the same stage as the flood of March 1929.

Remarks.--Base for partial-duration series, 2,500 cfs.

TENNESSEE RIVER BASIN

Peak stages and discharges of Duck River below Manchester, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	March 1929	a23.2	50,000	1949	Jan. 5, 1949	17.76	24,600
1935	Mar. 12, 1935	10.25	5,770		Jan. 22, 1949	7.75	3,320
	Apr. 6, 1935	13.30	10,600	1950	Jan. 6, 1950	9.61	4,850
1936	Mar. 25, 1936	7.21	2,640		Jan. 12, 1950	7.18	2,930
	Mar. 27, 1936	7.36	2,780		Jan. 19, 1950	8.00	3,500
	Apr. 6, 1936	9.47	4,840		Jan. 30, 1950	12.43	8,200
1937	Jan. 2, 1937	14.65	12,900		Feb. 9, 1950	7.80	3,360
	Jan. 15, 1937	9.54	4,840		Mar. 13, 1950	9.78	5,000
	Jan. 25, 1937	7.52	2,850	1951	Feb. 1, 1951	15.28	15,000
	Feb. 9, 1937	9.57	4,970		Feb. 21, 1951	7.30	2,760
1938	Apr. 8, 1938	6.39	2,140		Mar. 29, 1951	8.18	3,440
1939	Feb. 3, 1939	12.87	8,900		Apr. 22, 1951	7.56	2,960
	Feb. 15, 1939	12.36	7,950	1952	Dec. 8, 1951	12.04	6,850
	Feb. 28, 1939	7.91	3,080		Dec. 15, 1951	8.72	3,880
	Mar. 6, 1939	8.35	3,440		Dec. 21, 1951	9.85	4,780
	Mar. 27, 1939	7.52	2,810		Jan. 27, 1952	12.35	7,260
	June 18, 1939	8.01	3,150		Mar. 11, 1952	9.94	4,850
1940	Mar. 12, 1940	8.10	3,220	1953	Feb. 12, 1953	11.70	6,470
1941	Apr. 4, 1941	9.55	4,400		Feb. 21, 1953	9.90	4,620
1942	Mar. 17, 1942	7.86	3,080	1954	Jan. 16, 1954	8.56	3,500
1943	Dec. 28, 1942	12.44	7,950		Jan. 21, 1954	11.73	6,500
	Feb. 4, 1943	7.35	2,740		Apr. 17, 1954	7.57	2,820
	Sept. 3, 1943	7.00	2,500	1955	Dec. 29, 1954	11.94	6,730
1944	Feb. 9, 1944	8.39	3,440		Feb. 22, 1955	9.35	4,150
	Feb. 27, 1944	9.08	3,980		Mar. 22, 1955	17.87	25,100
	Mar. 29, 1944	11.37	6,350		Apr. 6, 1955	12.08	6,900
1945	Dec. 29, 1944	7.50	2,810	1956	Jan. 30, 1956	11.96	6,760
	Jan. 1, 1945	8.54	3,520		Feb. 3, 1956	10.25	4,950
	Feb. 17, 1945	11.97	7,250		Feb. 18, 1956	9.73	4,470
	Feb. 22, 1945	10.80	5,600		Apr. 4, 1956	7.38	2,710
1946	Jan. 8, 1946	12.17	7,600		Apr. 16, 1956	9.27	4,080
	Feb. 6, 1946	7.20	2,620	1957	Jan. 28, 1957	12.65	7,740
	Feb. 10, 1946	8.19	3,290		Jan. 31, 1957	12.46	7,430
1947	Jan. 2, 1947	7.91	3,090	1958	Nov. 18, 1957	13.08	8,580
1948	Feb. 13, 1948	18.93	30,000		Dec. 7, 1957	8.41	3,390
	Mar. 16, 1948	8.44	3,470		Dec. 20, 1957	7.90	3,040
1949	Dec. 25, 1948	7.67	2,920	1959	Jan. 22, 1959	5.70	1,720
				1960	Dec. 19, 1959	10.07	4,770
					Mar. 3, 1960	7.36	2,700
					May 7, 1960	9.35	4,150

a High-water mark by Tennessee Valley Authority.

5965. Duck River at Normandy, Tenn.

Location.--Lat 35°27'26", long 86°15'25", at county highway bridge half a mile north of Normandy, Bedford County, 3.3 miles upstream from Nashville, Chattanooga & St. Louis Railway bridge, and 7.5 miles upstream from Garrison Fork.

Drainage area.--208 sq mi.

Gage.--Nonrecording. Datum of gage is 785.65 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 4,530 cfs and extended on basis of logarithmic plotting and comparison with other stations.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Duck River at Normandy, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1921	Apr. 16, 1921	9.2	6,000	1927	Dec. 25, 1926	14.0	22,400
1922	Mar. 2, 1922	13.5	19,500	1928	June 29, 1928	13.0	17,000
1923	July 23, 1923	10.0	7,600	1929	Mar. 23, 1929	18.1	60,000
1924	Jan. 3, 1924	8.4	5,120	1930	Nov. 2, 1929	8.00	4,020
1925	Apr. 28, 1925	8.3	5,010	1931	Mar. 28, 1931	4.4C	1,120
1926	June 22, 1926	5.6	2,070				

a Maximum for period Dec. 10, 1920, to Sept. 30, 1921.

5970. Garrison Fork at Fairfield, Tenn.

Location.--Lat 35°33'59", long 86°17'00", near left bank on downstream side of center pier of highway bridge, 0.1 mile east of Fairfield, 0.6 mile downstream from Noah Fork, and 4.5 miles northeast of Wartrace, Bedford County.

Drainage area.--66.3 sq mi.

Gage.--Recording prior to Dec. 17, 1958; crest-stage gage thereafter. Datum of gage is 800.85 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 3,800 cfs and extended on basis of contracted-opening measurement at 13,000 cfs and slope-area measurement at 25,300 cfs.

Bankfull stage.--8 ft.

Remarks.--Only annual peaks are shown subsequent to 1958. Base for partial-duration series, 3,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 15, 1954	13.05	4,110	1956	Feb. 18, 1956	13.27	4,240
	Jan. 20, 1954	14.92	5,540				
	Apr. 16, 1954	11.63	3,490	1957	Dec. 13, 1956	15.53	6,170
1955	Dec. 29, 1954	12.92	4,040		Jan. 28, 1957	15.64	6,300
	Feb. 22, 1955	10.88	3,220		Jan. 31, 1957	13.8C	4,600
	Mar. 21, 1955	23.13	25,300		Sept. 15, 1957	12.84	4,000
	Apr. 6, 1955	11.60	3,710	1958	Nov. 17, 1957	16.2C	7,060
	May 29, 1955	10.68	3,340		Dec. 21, 1957	11.27	3,340
1956	Nov. 13, 1955	10.46	3,250		July 12, 1958	12.4C	3,800
	Jan. 29, 1956	15.27	5,890	1959	Mar. 26, 1959	12.61	3,900
	Feb. 3, 1956	12.71	3,940	1960	July 17, 1960	18.55	13,000

5975. Wartrace Creek at Bell Buckle, Tenn.

Location.--Lat 35°35'16", long 86°20'22", on downstream right bank wingwall of bridge on State Highway 82, 0.2 mile downstream from Kelly Creek, 0.9 mile east of Bell Buckle, Bedford County, 4.0 miles northeast of Fairfield, and 7.7 miles upstream from mouth.

Drainage area.--16.3 sq mi.

Gage.--Recording. Datum of gage is 822.74 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,200 cfs and extended on basis of contracted-opening measurement at 8,240 cfs.

Bankfull stage.--8 ft.

Remarks.--Base for partial-duration series, 2,000 cfs.

Peak stages and discharges of Wartrace Creek at Bell Buckle, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 15, 1954	7.90	2,000	1957	Jan. 22, 1957	8.24	2,120
	Jan. 20, 1954	9.08	3,610		Jan. 27, 1957	8.85	3,100
	Apr. 16, 1954	8.91	3,340		Sept. 15, 1957	8.27	2,160
1955	Dec. 29, 1954	8.30	2,480	1958	Nov. 17, 1957	10.00	5,340
	Mar. 21, 1955	11.25	8,240				
1956	Jan. 29, 1956	8.83	3,220	1959	Feb. 14, 1959	8.43	2,400
	Feb. 3, 1956	8.08	2,210		Mar. 26, 1959	9.34	4,010
	Feb. 17, 1956	8.25	2,130	1960	Dec. 28, 1959	9.25	3,840
1957	Dec. 12, 1956	9.45	4,220		May 7, 1960	8.87	3,140

5980. Duck River near Shelbyville, Tenn.

Location.--Lat 35°28'49", long 86°29'57", on right bank 150 ft downstream from Sims Bridge, 2.1 miles upstream from Sugar Creek, 2.2 miles west of Shelbyville, Bedford County, 2.9 miles downstream from Flat Creek, and at mile 216.2.

Drainage area.--481 sq mi.

Gage.--Recording since Apr. 27, 1934. Datum of gage is 685.51 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Stage-discharge relation.--Defined by current-meter measurements below 27,000 cfs and extended on basis of slope-area measurement at 62,900 cfs.

Bankfull stage.--20 ft (from report by Tennessee Valley Authority).

Remarks.--Only annual peaks are shown prior to 1935, from report by Tennessee Valley Authority. Base for partial-duration series, 8,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1888	Mar. 28, 1888	21	-	1936	Mar. 25, 1936	13.38	8,440
1890	Mar. 1, 1890	21	-		Mar. 27, 1936	13.16	8,220
					Apr. 6, 1936	19.06	15,000
1891	Mar. 8, 1891	24	-		July 3, 1936	13.11	8,110
					July 17, 1936	15.20	10,400
1894	Feb. 5, 1894	20	-	1937	Nov. 4, 1936	14.0	9,100
1897	Mar. 20, 1897	24	-		Dec. 6, 1936	18.90	14,800
					Jan. 3, 1937	23.25	24,200
1902	Mar. 29, 1902	40	87,000		Jan. 15, 1937	19.10	15,000
					Jan. 20, 1937	13.72	8,770
1905	May 24, 1905	22	-		Jan. 25, 1937	15.68	11,000
					Feb. 9, 1937	17.03	12,500
1909	Feb. 24, 1909	24	-		May 13, 1937	13.26	8,330
				1938	Jan. 22, 1938	13.33	7,910
1912	Apr. 30, 1912	24	-		1939	Jan. 13, 1939	14.36	8,900
1913	Mar. 28, 1913	21	-	Feb. 3, 1939		23.25	18,300
1915	Feb. 3, 1915	21	-	Feb. 15, 1939		23.08	22,400
				Feb. 28, 1939		14.37	8,900
1917	Mar. 5, 1917	21	-	Mar. 30, 1939		14.44	8,900
1918	Jan. 24, 1918	20	-	June 18, 1939	18.94	13,400	
1919	Jan. 2, 1919	22	-	1940	Mar. 12, 1940	13.00	7,500
1920	Apr. 2, 1920	28	-		1941	Apr. 4, 1941	14.30	8,740
1921	Apr. 18, 1921	22	-	1942		Mar. 17, 1942	13.25	7,680
1922	Mar. 3, 1922	23	-		1943	Dec. 29, 1942	20.48	15,200
1924	Jan. 4, 1924	20	-	Feb. 4, 1943		14.74	9,100
				1929	Mar. 23, 1929	37.6	70,000	1944	Feb. 9, 1944	17.58	12,200
1933	Feb. 16, 1933	20	-		Feb. 27, 1944	18.20	12,800
				1934	Mar. 26, 1934	24.5	-
Mar. 29, 1944	24.14	20,000					
1935	Mar. 12, 1935	17.09	12,600	1945	Sept. 30, 1944	16.05	10,400
					Apr. 6, 1935	21.37	17,900	Dec. 29, 1944	15.03	9,100

Peak stages and discharges of Duck River near Shelbyville, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Jan. 1, 1945	18.52	12,800	1952	Dec. 8, 1951	22.67	16,300
	Feb. 13, 1945	13.66	7,930		Dec. 15, 1951	16.74	10,200
	Feb. 18, 1945	21.78	16,600		Dec. 21, 1951	18.45	11,700
	Feb. 22, 1945	22.88	17,900		Jan. 28, 1952	23.65	17,600
	May 13, 1945	17.05	11,100		Mar. 11, 1952	18.55	11,800
1946	Nov. 22, 1945	18.68	13,000	1953	Feb. 12, 1953	21.31	14,700
	Dec. 4, 1945	13.78	8,020		Feb. 21, 1953	18.51	11,800
	Jan. 8, 1946	24.59	20,000	1954	Jan. 16, 1954	18.28	10,500
	Jan. 11, 1946	13.81	8,020		Jan. 22, 1954	23.81	17,700
	Feb. 6, 1946	15.44	9,500	1955	Dec. 29, 1954	21.92	14,900
	Feb. 10, 1946	17.16	11,300		Feb. 22, 1955	18.60	11,300
1947	Jan. 2, 1947	20.30	14,800		Mar. 22, 1955	32.84	37,900
	Jan. 20, 1947	14.38	8,490		Apr. 7, 1955	21.50	14,400
1948	Feb. 13, 1948	36.40	62,900	1956	Dec. 4, 1955	15.40	8,460
	Mar. 7, 1948	14.47	8,370		Jan. 20, 1956	22.32	15,400
	Mar. 17, 1948	15.39	9,330		Feb. 4, 1956	21.58	14,500
1949	Nov. 29, 1948	20.10	13,200		Feb. 18, 1956	19.03	11,700
	Jan. 6, 1949	30.80	34,400	1957	Dec. 13, 1956	21.47	14,300
	Jan. 22, 1949	15.12	8,120		Jan. 28, 1957	24.21	18,300
	June 16, 1949	15.40	8,400		Feb. 1, 1957	27.04	23,500
1950	Jan. 7, 1950	22.73	16,300		Sept. 16, 1957	15.60	8,640
	Jan. 13, 1950	16.96	9,960	1958	Nov. 19, 1957	27.02	23,400
	Jan. 19, 1950	19.58	12,500		Dec. 7, 1957	14.93	8,040
	Jan. 31, 1950	23.71	17,700		Dec. 20, 1957	15.38	8,440
	Feb. 9, 1950	17.69	11,900	1959	May 27, 1959	14.33	7,500
	Mar. 13, 1950	19.25	13,600		Dec. 19 or 20, 1959	16.80	9,720
	July 27, 1950	15.80	9,780		Dec. 28, 1959	14.89	8,000
	Sept. 8, 1950	14.40	8,300	1960	Mar. 3, 1960	15.90	8,910
					May 7, 1960	15.27	8,340
1951	Nov. 20, 1950	16.04	10,000				
	Feb. 1, 1951	28.56	27,100				
	Feb. 21, 1951	17.25	11,400				
	Mar. 29, 1951	15.52	9,470				
	Apr. 22, 1951	15.12	9,030				

5982. Weakley Creek near Rover, Tenn.

Location--Lat 35°38'05", long 86°33'03", at culvert under county road 3.7 miles southeast of intersection of county road with U.S. Highway 41A at Rover, Bedford County.

Drainage area--9.46 sq mi.

Gage--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation--Defined by current-meter measurements below 607 cfs and extended on basis of contracted-opening study.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	6.15	2,330	1958	Nov. 17, 1957	4.80	600
1956	Jan. 30, 1956	5.02	700	1959	July 22, 1959	5.68	1,480
1957	Feb. 1, 1957	5.01	695	1960	Dec. 18, 1959	4.51	504

5990. Big Rock Creek at Lewisburg, Tenn.

Location.--Lat 35°26'56", long 86°47'09", on downstream side of center pier of bridge on State Highway 50, 800 ft east of Marshall County courthouse in Lewisburg and at mile 17.9.

Drainage area.--24.9 sq mi.

Gage.--Recording. Datum of gage is 705.01 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,400 cfs and extended on basis of contracted-opening measurement at 16,700 cfs.

Bankfull stage.--8 ft (from report by Tennessee Valley Authority).

Historical data.--Flood of Mar. 21, 1955, is highest known since about 1856, from report by Tennessee Valley Authority.

Remarks.--Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1902	Mar. 28, 1902	16.7	13,900	1957	Dec. 12, 1956	11.37	4,180
1939	June 18, 1939	17.6	16,300		Jan. 28, 1957	10.59	3,190
1945	Feb. 22, 1945	15.5	11,000		Jan. 31, 1957	9.77	2,470
					Apr. 4, 1957	8.29	1,670
					Sept. 15, 1957	9.67	2,400
					Sept. 22, 1957	9.67	2,400
1954	Jan. 20, 1954	9.46	2,260				
	Feb. 16, 1954	9.00	1,980	1958	Nov. 17, 1957	12.04	5,220
	Apr. 16, 1954	8.85	1,900		Dec. 7, 1957	8.00	1,570
1955	Dec. 29, 1954	9.68	2,410		Dec. 20, 1957	9.76	2,480
	Feb. 21, 1955	9.78	2,480		Sept. 20, 1958	8.92	1,930
	Mar. 21, 1955	17.62	16,700	1959	Mar. 26, 1959	10.20	2,820
	Apr. 6, 1955	10.87	3,500		May 12, 1959	8.95	1,950
	May 29, 1955	8.30	1,620		June 12, 1959	8.58	1,700
1956	Jan. 29, 1956	10.30	2,910	1960	Dec. 18, 1959	8.13	1,610
	Feb. 4, 1956	9.50	2,280		Dec. 27, 1959	8.97	2,630
	Feb. 17, 1956	9.05	2,010		Mar. 2, 1960	8.54	2,310

a Only annual peak, from report by Tennessee Valley Authority.

5992. East Rock Creek at Farmington, Tenn.

Location.--Lat 35°30'05", long 86°42'50", at bridge on State Highway 64, 0.2 mile west of Farmington, Marshall County.

Drainage area.--43.1 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 680 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,010 cfs and extended above.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1902	March 1902	22	-	1957	Dec. 14, 1956	13.43	4,750
1954	January 1954	10.84	3,000	1958	November 1957	10.82	3,000
1955	Mar. 21, 1955	11.68	3,530	1959	Mar. 26, 1959	9.93	2,480
				1960	Dec. 18, 1959	10.22	2,650
1956	Jan. 30, 1956	10.69	2,910				

5994. Little Flat Creek tributary near Rally Hill, Tenn.

Location.--Lat 35°41'15", long 86°49'46", at culvert under U.S. Highway 431 and State Highway 106, 1.5 miles north of crossing of Flat Creek in Rally Hill, Maury County.

Drainage area.--0.630 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Defined by computation of flow through culvert.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	5.98	372	1958	March 1958	3.56	150
1956	Feb. 3, 1956	5.20	293	1959	Mar. 26, 1959	2.09	51
1957	Dec. 13, 1956	4.68	246	1960	July 6, 1960	3.44	140

5995. Duck River at Columbia, Tenn.

Location.--Lat 35°37'05", long 87°01'56", on right bank 4 ft downstream from bridge on former U.S. Highway 31, 2 blocks north of public square at Columbia, Maury County, 0.7 mile downstream from Columbia hydroelectric plant, 2.4 miles upstream from Rutherford Creek, and at mile 132.8.

Drainage area.--1,208 sq mi.

Gage.--Nonrecording prior to Jan. 9, 1925; recording thereafter. At present site prior to Oct. 1, 1933, at datum 2.37 ft higher. Gage heights shown herein prior to 1905 have been adjusted to present datum. Datum of gage is 535.52 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 60,100 cfs and extended above.

Bankfull stage.--32 ft (from reports by Tennessee Valley Authority).

Historical data.--Flood of Feb. 14, 1948, is highest known since about 1847.

Remarks.--Only annual peaks are shown prior to 1926. Base for partial-duration series, 16,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1874	April 1874	44	a42,000	1923	Dec. 17, 1922	22.0	18,700
1887	Feb. 25, 1887	b28.4	-	1924	Jan. 4, 1924	30.0	25,900
1888	Mar. 28, 1888	a32.4	-	1925	Feb. 16, 1925	15.9	13,200
1889	Feb. 18, 1889	b23.5	-	1926	Nov. 13, 1925	21.25	18,000
1890	Mar. 1, 1890	a32.0	-		Aug. 25, 1926	20.25	17,100
1891	Mar. 9, 1891	a36.3	-	1927	Dec. 22, 1926	20.40	17,300
1892	Apr. 8, 1892	b27.4	-		Dec. 26, 1926	35.42	35,900
1893	Feb. 18, 1893	b29.9	-		Mar. 13, 1927	27.6	24,900
1894	Feb. 5, 1894	b30.7	-		Apr. 12, 1927	33.8	35,500
1895	Mar. 21, 1895	b20.9	-	1928	Jan. 1, 1928	20.4	17,300
1897	Mar. 20, 1897	a35.8	-		Mar. 10, 1928	22.75	19,600
1902	Mar. 29, 1902	48.0	50,700		Apr. 22, 1928	-	c18,000
1905	May 24, 1905	30.2	26,400		June 14, 1928	20.55	17,400
1906	Jan. 23, 1906	27.8	24,200	1929	Jan. 26, 1929	21.1	17,900
1907	Mar. 2, 1907	21.0	18,100		Feb. 26, 1929	24.0	20,800
1908	Feb. 11, 1908	16.8	14,300		Mar. 15, 1929	27.0	24,200
1921	Apr. 18, 1921	30.6	26,500	1930	Mar. 25, 1929	40.7	43,800
1922	Mar. 3, 1922	32.05	27,800	1931	Feb. 14, 1930	21.3	18,100
					Mar. 29, 1931	19.25	16,200

a From reports by Tennessee Valley Authority.

b Maximum 8 a.m. reading, from reports by U.S. Weather Bureau.

c Maximum daily discharge.

TENNESSEE RIVER BASIN

Peak stages and discharges of Duck River at Columbia, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Dec. 15, 1931	24.54	21,400	1947	Jan. 3, 1947	32.22	25,200
	Jan. 30, 1932	26.2	23,200				
1933	Oct. 17, 1932	21.85	18,600	1948	Feb. 14, 1948	51.75	61,100
	Jan. 1, 1933	21.12	17,900		Mar. 7, 1948	24.68	17,400
	Feb. 16, 1933	28.85	25,700	1949	Nov. 30, 1948	31.02	23,700
	Feb. 21, 1933	26.65	23,300		Dec. 26, 1948	23.23	16,100
	Mar. 20, 1933	26.37	23,100		Jan. 8, 1949	35.77	29,800
	Apr. 1, 1933	19.37	16,400	1950	Jan. 7, 1950	37.88	30,100
	May 10, 1933	27.98	24,800		Jan. 14, 1950	28.12	21,000
1934	Mar. 4, 1934	31.96	25,800		Jan. 20, 1950	27.65	20,600
	Mar. 26, 1934	35.96	30,600		Feb. 2, 1950	39.46	35,100
1935	Mar. 13, 1935	29.23	22,900		Feb. 10, 1950	29.77	23,100
	Apr. 7, 1935	30.45	24,100		Feb. 14, 1950	31.06	22,000
1936	Apr. 7, 1936	30.08	23,600		Mar. 14, 1950	26.68	20,700
1937	Nov. 5, 1936	27.60	21,100	1951	Feb. 3, 1951	36.51	30,800
	Dec. 8, 1936	28.25	21,700		Feb. 22, 1951	27.08	20,300
	Jan. 2, 1937	39.1	34,900		Mar. 30, 1951	23.18	16,500
	Jan. 16, 1937	28.34	21,800		Apr. 23, 1951	23.33	16,600
	Jan. 21, 1937	24.15	17,800	1952	Dec. 9, 1951	34.82	26,000
	Jan. 24, 1937	23.63	17,200		Dec. 15, 1951	27.42	18,900
	Jan. 26, 1937	24.83	18,400		Dec. 22, 1951	24.20	16,200
	Feb. 10, 1937	23.72	17,300		Jan. 23, 1952	25.00	16,900
	May 5, 1937	25.99	19,500		Jan. 29, 1952	33.46	24,500
	May 14, 1937	26.86	20,400		Mar. 4, 1952	27.33	18,900
1938	Jan. 22, 1938	28.73	20,400		Mar. 12, 1952	27.32	18,900
1939	Jan. 14, 1939	27.29	18,700	1953	Feb. 13, 1953	30.53	21,700
	Feb. 5, 1939	35.48	30,900		Feb. 22, 1953	29.98	21,200
	Feb. 17, 1939	34.50	29,200		Mar. 4, 1953	25.66	17,000
	June 20, 1939	29.94	21,900	1954	Jan. 17, 1954	25.74	17,100
1940	Mar. 31, 1940	24.55	16,800		Jan. 22, 1954	36.43	28,200
	Apr. 19, 1940	25.92	18,200		Apr. 17, 1954	25.00	16,400
1941	Apr. 5, 1941	21.14	13,700	1955	Dec. 30, 1954	29.81	22,500
1942	Mar. 18, 1942	18.98	12,000		Feb. 7, 1955	23.77	17,100
1943	Dec. 29, 1942	26.07	18,700		Feb. 23, 1955	33.08	25,800
1944	Feb. 10, 1944	27.30	19,600		Mar. 23, 1955	44.78	46,500
	Feb. 18, 1944	25.82	18,200		Apr. 7, 1955	27.43	20,400
	Feb. 27, 1944	28.40	20,700	1956	Jan. 31, 1956	31.53	24,100
	Mar. 7, 1944	25.90	18,300		Feb. 6, 1956	33.36	26,200
	Mar. 30, 1944	35.05	29,600		Feb. 18, 1956	34.54	27,800
	Sept. 30, 1944	31.05	23,800	1957	Dec. 15, 1956	33.62	26,200
1945	Jan. 1, 1945	33.41	26,700		Feb. 2, 1957	40.48	34,200
	Feb. 19, 1945	30.05	22,500	1958	Nov. 20, 1957	33.48	26,100
	Feb. 23, 1945	37.02	31,400		Dec. 8, 1957	23.21	16,600
	Feb. 28, 1945	23.86	16,700	1959	Feb. 15, 1959	25.21	18,400
1946	Nov. 23, 1945	26.98	19,400		Mar. 28, 1959	24.24	17,500
	Jan. 9, 1946	40.50	36,300	1960	Dec. 20, 1959	22.71	16,100
	Feb. 11, 1946	27.20	19,600		Mar. 4, 1960	23.98	17,300

6000. Rutherford Creek near Carters Creek, Tenn.

Location--Lat 35°40'23", long 86°58'42", on right bank at upstream side of county road bridge, 1 mile downstream from Double Branch, 3.2 miles south of town of Carters Creek, Maury County, 3.5 miles upstream from Carters Creek, and 5.1 miles northeast of Columbia.

Drainage area--68.8 sq mi.

Gage--Recording, and since Jan. 1, 1959, crest-stage gage. Altitude of gage is 590 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 4,000 cfs and extended above on basis of slope-area measurement at 11,800 cfs.

Remarks--Only annual peaks are shown since 1958. Base for partial-duration series, 1,800 cfs.

Peak stages and discharges of Rutherford Creek near Carters Creek, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 16, 1954	13.35	2,930	1957	Dec. 13, 1956	15.89	4,730
	Jan. 21, 1954	20.92	7,740		Dec. 14, 1956	11.02	2,160
	Feb. 16, 1954	12.03	2,450		Jan. 22, 1957	15.45	4,440
	Feb. 20, 1954	13.18	2,860		Jan. 29, 1957	15.40	4,410
1955	Apr. 16, 1954	13.89	3,160	1958	Feb. 1, 1957	11.54	2,340
	Feb. 6, 1955	11.26	1,970		Apr. 8, 1957	13.76	3,410
	Feb. 22, 1955	14.87	3,600		May 19, 1957	11.78	2,430
	Mar. 22, 1955	24.38	11,800		May 22, 1957	14.01	3,550
	Apr. 6, 1955	10.37	1,910		Nov. 17, 1957	10.99	2,150
1956	Apr. 23, 1955	11.6	2,300		Dec. 20, 1957	10.16	1,890
	Jan. 29, 1956	14.45	3,420		Sept. 21, 1958	11.41	2,290
	Feb. 4, 1956	14.14	3,270	1959	Feb. 14, 1959	11.09	2,180
	Feb. 17, 1956	20.15	7,480		June 17, 1960	17.00	5,550
	Mar. 14, 1956	10.62	1,980				
	Apr. 6, 1956	15.66	4,070				

6005. Big Bigby Creek at Sandy Hook, Tenn.

Location.--Lat 35°29'19", long 87°13'59", on right bank 45 ft west of Louisville & Nashville Railroad track, 0.2 mile downstream from bridge on U.S. Highway 43, 0.4 mile northeast of Sandy Hook, Maury County, 0.5 mile upstream from Dry Creek, and 3.5 miles southwest of Mount Pleasant.

Drainage area.--17.5 sq mi.

Gage.--Recording. Datum of gage is 670.59 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 830 cfs and extended above.

Remarks.--Base for partial-duration series, 600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 20, 1954	8.56	1,520	1957	Jan. 29, 1957	5.46	826
	Feb. 20, 1954	6.65	960		Jan. 31, 1957	5.84	959
	Apr. 16, 1954	6.48	917		Apr. 8, 1957	5.16	722
1955	Feb. 22, 1955	6.58	942		May 19, 1957	5.97	1,000
	Mar. 21, 1955	11.22	2,550		May 22, 1957	6.98	1,390
	Apr. 6, 1955	7.79	1,270		May 26, 1957	5.82	952
	May 22, 1955	5.33	648		June 9, 1957	6.75	1,300
				1958	Nov. 17, 1957	6.66	1,260
1956	Feb. 4, 1956	6.32	877		Dec. 20, 1957	5.15	719
	Feb. 17, 1956	8.91	1,630	1959	Feb. 14, 1959	4.13	419
	Apr. 6, 1956	6.79	995		Dec. 27, 1959	6.06	1,040
1957	Dec. 12, 1956	6.88	1,350				
	Jan. 27, 1957	6.51	1,200				

6020. Duck River at Centerville, Tenn.

Location.--Lat 35°47'16", long 87°27'56". 0.4 mile downstream from bridge on State Highways 48 and 100, 0.4 mile downstream from Defeated Creek, 0.6 mile north of Centerville, Hickman County, 1.3 miles upstream from Nashville, Chattanooga & St. Louis Railway bridge, 4 miles downstream from Swan Creek, and at mile 72.1.

Drainage area.--2,048 sq mi.

Gage.--Nonrecording prior to Oct. 4, 1929; recording thereafter. At site 75 ft upstream Mar. 2, 1920, to July 1, 1925, at datum 1.00 ft higher. At site 75 ft upstream July 2, 1925, to Oct. 3, 1929, at present datum. Datum of gage is 450.74 ft above mean sea level, datum of 1929 (levels by Tennessee Valley Authority).

Stage-discharge relation.--Defined by current-meter measurements below 73,000 cfs and extended above.

Bankfull stage.--22 ft (from reports by Tennessee Valley Authority).

Historical data.--Flood of Feb. 14, 1948, is highest known since about 1847.

Remarks.--Only annual peaks are shown prior to 1930. Base for partial-duration series, 20,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1892	Apr. 7, 1892	a29	a54,000	1937	Dec. 9, 1936	17.32	20,800
1897	Mar. 19, 1897	a27	a46,000		Jan. 3, 1937	28.30	43,900
					Jan. 18, 1937	23.60	34,400
1902	Mar. 29, 1902	a32.9	a73,000		Jan. 20, 1937	24.00	35,600
					Jan. 24, 1937	21.32	29,300
1920	Apr. 2, 1920	28.0	51,700		May 5, 1937	20.30	27,500
					May 14, 1937	20.14	27,200
1921	Apr. 18, 1921	20.6	b32,000	1938	Jan. 23, 1938	22.15	32,900
1922	Mar. 11, 1922	22.9	36,000				
1923	Feb. 5, 1923	17.0	25,900	1939	Jan. 14, 1939	19.18	25,600
1924	Jan. 4, 1924	21.9	34,300		Feb. 6, 1939	22.59	33,900
1925	Feb. 17, 1925	10.22	14,300		Feb. 18, 1939	22.18	32,900
					Mar. 2, 1939	16.53	20,500
1926	Nov. 14, 1925	14.6	20,000		Apr. 1, 1939	16.33	20,100
1927	Dec. 27, 1926	26.0	41,800		June 21, 1939	18.37	24,000
1928	Apr. 23, 1928	16.8	23,800	1940	Mar. 14, 1940	17.99	23,200
1929	Mar. 27, 1929	27.30	45,400		Mar. 31, 1940	19.53	26,300
					Apr. 19, 1940	22.06	32,600
1930	Feb. 15, 1930	16.76	23,800	1941	Apr. 6, 1941	13.46	15,600
	Mar. 9, 1930	14.68	20,200	1942	Mar. 18, 1942	12.77	14,500
1931	Mar. 29, 1931	14.58	20,000	1943	Dec. 28, 1942	19.01	24,000
1932	Dec. 14, 1931	19.04	27,200		Dec. 30, 1942	18.34	22,500
	Dec. 25, 1931	17.10	23,800		Mar. 14, 1943	19.10	24,200
	Jan. 30, 1932	23.15	35,100	1944	Feb. 11, 1944	18.70	23,300
	Feb. 3, 1932	16.63	22,900		Feb. 18, 1944	21.97	32,100
	Feb. 17, 1932	18.50	25,900		Feb. 29, 1944	21.20	29,900
	Apr. 20, 1932	16.37	22,500		Mar. 8, 1944	17.11	20,100
1933	Oct. 18, 1932	16.37	21,800		Mar. 30, 1944	23.81	37,100
	Jan. 1, 1933	20.80	29,500	1945	Oct. 1, 1944	20.70	28,500
	Feb. 16, 1933	22.34	32,200		Jan. 1, 1945	27.07	46,400
	Feb. 20, 1933	23.85	34,900		Feb. 20, 1945	20.58	28,200
	Mar. 20, 1933	22.80	33,100		Feb. 23, 1945	24.40	38,800
	Apr. 1, 1933	17.17	23,200		Mar. 1, 1945	20.28	27,300
	May 5, 1933	23.34	34,000	1946	Nov. 24, 1945	17.95	21,800
	May 8, 1933	17.55	23,900		Jan. 8, 1946	28.58	50,600
	May 12, 1933	23.54	34,400		Feb. 12, 1946	20.34	27,300
1934	Jan. 7, 1934	15.58	20,500	1947	Jan. 4, 1947	22.30	32,900
	Mar. 5, 1934	21.02	29,900		Jan. 21, 1947	17.63	21,100
	Mar. 25, 1934	24.40	36,000	1948	Feb. 14, 1948	37.58	97,700
1935	Mar. 13, 1935	22.80	33,800		Mar. 8, 1948	18.24	22,300
	Apr. 7, 1935	22.20	32,700				
1936	Apr. 7, 1936	20.80	27,500				
1937	Nov. 6, 1936	16.95	20,300				

a At present site and datum, from reports by Tennessee Valley Authority.

b Maximum daily discharge.

Peak stages and discharges of Duck River at Centerville, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Dec. 1, 1948	21.19	27,100	1952	Dec. 15, 1951	22.59	31,200
	Jan. 6, 1949	23.84	33,500		Dec. 23, 1951	17.23	20,900
	Mar. 28, 1949	19.80	24,500		Jan. 23, 1952	19.23	24,200
	June 16, 1949	18.04	21,500		Jan. 30, 1952	22.59	31,200
1950					Mar. 4, 1952	22.03	30,200
	Jan. 8, 1950	25.97	41,400	1953	Mar. 13, 1952	19.59	24,900
	Jan. 15, 1950	21.43	28,700		Feb. 14, 1953	21.19	28,100
	Jan. 20, 1950	20.41	26,500		Feb. 23, 1953	20.62	26,900
	Feb. 2, 1950	27.65	48,400		Mar. 5, 1953	20.73	27,200
	Feb. 11, 1950	21.47	28,800		May 1, 1953	20.18	26,100
	Feb. 15, 1950	24.80	37,400		May 20, 1953	16.98	20,500
1951	Mar. 15, 1950	19.74	25,200	1954	Jan. 18, 1954	17.50	21,300
	Jan. 4, 1951	16.82	20,200		Jan. 23, 1954	24.87	37,600
	Jan. 14, 1951	17.97	22,100		Feb. 21, 1954	17.68	21,600
	Jan. 30, 1951	16.66	20,000		Apr. 18, 1954	18.18	22,400
	Feb. 2, 1951	24.0	35,000	1955	Jan. 1, 1955	18.68	23,600
	Feb. 8, 1951	17.36	21,000		Feb. 24, 1955	22.43	31,100
	Feb. 22, 1951	19.58	24,900		Mar. 22, 1955	32.05	68,800
	Mar. 30, 1951	17.34	21,000		Apr. 8, 1955	18.52	23,700
1952	Apr. 23, 1951	17.28	20,900				
	Dec. 10, 1951	24.80	37,400				

6021. Moss Spring Hollow near Centerville, Tenn.

Location--Lat 35°45'44", long 87°27'47", at bridge on State Highways 48 and 100, 1.2 miles south of Centerville, Hickman County.

Drainage area--3.68 sq mi.

Gage--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation--Not defined.

Remarks--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	5.83	-	1958	-	(a)	-
1956	Feb. 17, 1956	3.67	-	1959	-	(a)	-
1957	December 1956	2.09	-	1960	-	(b)	-

a Gage height not determined but less than 2.0 ft.

b Peak stage did not reach bottom of gage.

6025. Piney River at Vernon, Tenn.

Location.--Lat 35°52'17", long 87°30'00", on left bank 350 ft upstream from county highway bridge, 400 ft upstream from Pretty Creek, 0.2 mile northwest of Vernon, Hickman County, 2.2 miles downstream from Mill Creek, 6.6 miles north of Centerville, and 8.4 miles upstream from mouth.

Drainage area.--193 sq mi.

Gage.--Nonrecording prior to May 11, 1934; recording thereafter. At site half a mile downstream Feb. 9, 1931, to May 10, 1934, at datum 2.77 ft lower. Datum of gage is 464.89 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 28,400 cfs and extended above.

Remarks.--Only annual peaks are shown prior to 1935. Base for partial-duration series, 4,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1897	March 1897	al7.5	a37,000	1947	Jan. 2, 1947	8.58	4,810
1926	Jan. 21, 22, 1926	8.5	6,320		Jan. 15, 1947	13.15	13,700
1927	Dec. 21, 1926	16.5	32,500	1948	Feb. 13, 1948	15.90	21,600
1928	June 5, 1928	6.5	3,480		Mar. 16, 1948	10.98	8,680
1929	Feb. 26, 1929	9.85	9,040	1949	Nov. 19, 1948	8.37	4,500
1930	May 18, 1930	12.00	15,400		Jan. 5, 1949	11.12	8,960
1931	Mar. 1, 1931	4.6	1,390		Jan. 27, 1949	8.73	4,480
1932	Feb. 3, 1932	16.6	29,600		June 16, 1949	9.66	5,760
1933	May 5, 1933	11.2	9,280	1950	Dec. 12, 1949	11.08	8,260
1934	Mar. 2, 1934	13.70	16,400		Jan. 5, 1950	12.88	12,600
1935	Jan. 20, 1935	15.54	28,400		Jan. 10, 1950	11.38	8,880
	Mar. 12, 1935	10.47	10,900		Jan. 31, 1950	12.26	11,000
	Apr. 5, 1935	11.46	13,800		Feb. 9, 1950	12.31	11,100
1936	Mar. 26, 1936	10.19	10,100		Feb. 14, 1950	11.63	9,430
	Apr. 9, 1936	9.52	8,340	1951	Jan. 3, 1951	10.85	7,800
1937	Jan. 2, 1937	8.42	6,140	1952	Dec. 8, 1951	9.93	6,190
	Jan. 17, 1937	11.66	12,600		Dec. 14, 1951	14.82	18,000
	Jan. 20, 1937	12.53	15,000		Mar. 3, 1952	11.97	10,200
	Jan. 23, 1937	10.98	10,800		Mar. 11, 1952	10.59	7,320
	Apr. 24, 1937	8.11	4,990		Mar. 22, 1952	9.27	5,180
	May 2, 1937	10.24	8,850	1953	Mar. 4, 1953	9.48	5,490
1938	Jan. 21, 1938	8.84	6,040		Apr. 30, 1953	9.88	6,110
	July 31, 1938	11.28	11,500		May 18, 1953	9.63	5,720
1939	Feb. 3, 1939	9.56	7,550	1954	Jan. 20, 1954	12.47	11,500
	Feb. 15, 1939	9.11	6,580	1955	Feb. 22, 1955	9.02	5,180
1940	Mar. 30, 1940	9.12	6,580		Mar. 21, 1955	15.52	18,600
	Apr. 19, 1940	8.46	5,550		Apr. 23, 1955	8.62	4,860
1941	July 4, 1941	3.58	1,160		May 22, 1955	9.24	5,350
1942	Apr. 9, 1942	9.28	6,960	1956	Jan. 29, 1956	13.78	15,000
1943	Dec. 28, 1942	11.06	11,000		Feb. 3, 1956	8.79	5,550
	Mar. 13, 1943	8.88	5,410		Feb. 18, 1956	11.48	9,760
	Mar. 19, 1943	13.00	14,800		Apr. 6, 1956	7.88	4,540
1944	Feb. 17, 1944	9.85	6,810	1957	Jan. 23, 1957	11.67	10,100
	Mar. 19, 1944	9.65	6,440		Jan. 29, 1957	13.39	14,000
	Apr. 11, 1944	8.75	5,120		Apr. 4, 1957	12.88	12,700
	Apr. 23, 1944	8.83	5,120	1958	Nov. 14, 1957	8.42	5,100
1945	Dec. 31, 1944	14.02	16,000		Nov. 18, 1957	9.52	6,480
	Feb. 22, 1945	9.08	5,580		May 11, 1958	11.57	9,940
	May 10, 1945	9.54	6,260	1959	Jan. 21, 1959	6.59	3,410
1946	Jan. 8, 1946	14.93	18,200	1960	Dec. 28, 1959	5.16	2,420
	Mar. 26, 1946	8.04	4,120				

a From reports by Tennessee Valley Authority.

6030. Duck River above Hurricane Mills, Tenn.
(Published as "near Hurricane Mills" prior to October 1951)

Location.--Lat 35°55'48", long 87°44'25", on left bank 0.4 mile downstream from Tumbling Creek, 1.3 miles upstream from bridge on State Highway 13, 3.6 miles southeast of Hurricane Mills, Humphreys County, and at mile 26.0.

Drainage area.--2,557 sq mi.

Gage.--Nonrecording prior to Feb. 21, 1934; recording thereafter. At site 5.6 miles downstream prior to Oct. 1, 1951, at datum 8.80 ft lower. Datum of gage is 370.53 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--18 ft.

Historical data.--Flood of Feb. 14, 1948, is highest known since about 1847.

Remarks.--Only annual peaks are shown prior to 1934. Base for partial-duration series, 20,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Jan. 22, 1926	14.54	20,400	1945	Mar. 1, 1945	17.90	27,800
1927	Mar. 14, 1927	24.95	65,000		Mar. 6, 1945	15.02	20,500
1928	Apr. 24, 1928	15.58	23,200				
1929	Mar. 25, 1929	22.10	45,200	1946	Nov. 24, 1945	15.32	21,200
1930	Feb. 15, 1930	15.77	23,700		Jan. 9, 1946	26.60	80,000
					Feb. 9, 1946	15.06	20,700
1931	Mar. 30, 1931	13.42	18,600		Feb. 13, 1946	17.90	27,800
1932	Feb. 1, 1932	20.59	39,600				
1933	Feb. 21, May 13, 1933	21.20	43,600	1947	Jan. 5, 1947	18.85	29,600
					Jan. 22, 1947	15.87	21,800
1934	Mar. 26, 1934	21.62	45,800	1948	Feb. 14, 1948	30.70	122,000
	Mar. 6, 1934	18.52	31,800		Mar. 9, 1948	15.91	21,900
1935	Jan. 20, 1935	22.13	48,600	1949	Dec. 1, 1948	18.08	27,200
	Mar. 14, 1935	20.08	38,200		Jan. 7, 1949	20.72	37,100
	Apr. 8, 1935	20.38	36,700		Jan. 24, 1949	15.16	20,400
1936	Mar. 27, 1936	18.88	30,800		Mar. 29, 1949	17.18	24,800
	Apr. 10, 1936	19.92	34,600		June 16, 1949	-	24,600
1937	Dec. 10, 1936	15.42	20,400	1950	Jan. 11, 1950	22.20	46,200
	Jan. 4, 1937	23.05	48,500		Jan. 16, 1950	18.72	29,200
	Jan. 18, 1937	22.50	46,200		Jan. 21, 1950	17.68	26,200
	May 3, 1937	17.57	26,500		Feb. 2, 1950	23.56	57,000
	May 7, 1937	18.57	29,800		Feb. 12, 1950	18.32	28,000
	May 15, 1937	17.89	27,400		Feb. 16, 1950	21.26	40,100
1938	Jan. 25, 1938	20.6	37,600		Mar. 15, 1950	17.39	25,400
1939	Jan. 15, 1939	17.65	26,500	1951	Jan. 5, 1951	16.07	23,600
	Feb. 7, 1939	20.06	35,400		Jan. 15, 1951	16.54	24,600
	Feb. 18, 1939	19.76	34,200		Feb. 4, 1951	20.4	35,800
	Mar. 2, 1939	15.62	21,100		Feb. 9, 1951	16.02	23,400
	Apr. 1, 1939	15.40	20,700		Feb. 23, 1951	17.15	25,900
	June 21, 1939	15.87	21,800		Mar. 31, 1951	15.62	22,600
1940	Mar. 15, 1940	17.05	25,300		Apr. 24, 1951	15.55	22,500
	Apr. 1, 1940	18.18	28,600	1952	Dec. 11, 1951	21.87	41,700
	Apr. 21, 1940	20.11	35,400		Dec. 16, 1951	20.23	34,700
1941	Apr. 7, 1941	12.21	14,800		Dec. 23, 1951	15.91	22,400
1942	Mar. 19, Apr. 11, 1942	12.08	14,600		Jan. 24, 1952	17.20	25,500
1943	Dec. 29, 1942	18.00	28,100		Jan. 31, 1952	19.72	32,900
	Mar. 14, 1943	17.70	27,200		Mar. 5, 1952	20.22	34,700
1944	Feb. 12, 1944	16.50	24,200		Mar. 13, 1952	17.87	27,300
	Feb. 19, 1944	19.14	31,900		Mar. 24, 1952	15.31	21,100
	Mar. 1, 1944	18.70	30,200	1953	Feb. 14, 1953	18.65	29,600
	Mar. 9, 1944	15.00	21,000		Feb. 24, 1953	18.10	28,000
	Apr. 1, 1944	20.55	37,600		Mar. 5, 1953	18.75	30,000
1945	Oct. 2, 1944	16.88	25,100		May 2, 1953	17.90	27,400
	Jan. 2, 1945	23.34	51,000		May 20, 1953	16.33	23,400
	Feb. 21, 1945	18.10	28,400	1954	Jan. 18, 1954	15.35	21,300
	Feb. 24, 1945	20.90	38,600		Jan. 23, 1954	21.57	40,200
					Feb. 21, 1954	15.60	21,700
					Apr. 19, 1954	15.80	22,200
				1955	Jan. 1, 1955	15.87	22,600
					Feb. 25, 1955	19.42	32,800
					Mar. 23, 1955	26.35	76,900

TENNESSEE RIVER BASIN

Peak stages and discharges of Duck River above Hurricane Mills, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Apr. 9, 1955	16.90	25,400	1957	Apr. 4, 1957	15.20	21,000
1956	Feb. 7, 1956	20.50	36,500	1958	Nov. 20, 1957	20.78	37,600
	Feb. 20, 1956	22.75	47,500		Dec. 10, 1957	15.56	21,900
	Apr. 7, 1956	16.04	23,100		May 11, 1958	16.18	23,500
1957	Dec. 17, 1956	18.10	28,800	1959	Feb. 16, 1959	17.38	26,800
	Jan. 23, 1957	17.60	27,400				
	Feb. 3, 1957	23.83	54,800		Mar. 5, 1960	14.90	20,300

6040. Buffalo River near Flat Woods, Tenn.

Location.--Lat 35°29'45", long 87°49'58", on right bank 0.5 mile downstream from Little Opossum Creek and bridge on State Highway 13, 1.3 miles north of Flat Woods, Perry County, 3.9 miles upstream from Sinking Creek, and at mile 58.7.

Drainage area.--447 sq mi.

Gage.--Nonrecording prior to May 27, 1934; recording thereafter. Datum of gage is 513.58 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 50,000 cfs and extended above on basis of slope-area and contracted-opening measurements at gage height 32.0 ft and rainfall-runoff study.

Historical data.--Flood of Feb. 13, 1948, is highest known since about 1897, from reports by Tennessee Valley Authority.

Remarks.--Only annual peaks are shown prior to 1935. Base for partial-duration series, 4,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1921	Apr. 16, 1921	15.60	14,300	1939	Feb. 16, 1939	12.80	7,590
1922	Mar. 10, 1922	21.0	22,400		Feb. 27, 1939	10.20	5,160
1923	Aug. 15, 1923	16.4	15,500	1940	Mar. 13, 1940	10.19	5,050
1924	Jan. 3, 1924	17.9	17,800		Mar. 31, 1940	10.67	5,500
1925	May 11, 1925	10.80	7,590		Apr. 19, 1940	20.55	17,600
1926	June 4, 1926	8.1	4,550				
1927	Mar. 13, 1927	29.30	52,200	1941	Dec. 29, 1940	5.85	2,000
1928	Apr. 22, 1928	11.8	8,920				
1929	Mar. 23, 1929	20.18	21,200	1942	Apr. 10, 1942	9.12	4,100
1930	Mar. 8, 1930	12.0	9,200				
1931	Aug. 7, 1931	8.00	4,430		Dec. 28, 1942	19.52	16,000
	Jan. 30, 1932	19.5	20,200		Feb. 5, 1943	9.69	4,690
1932	Oct. 17, 1932	21.8	22,300		Mar. 13, 1943	12.20	6,970
1933	Mar. 25, 1934	18.3	17,000	1944	Jan. 3, 1944	11.48	6,270
1935	Jan. 22, 1935	9.06	4,890		Feb. 9, 1944	15.84	11,000
	Feb. 10, 1935	9.97	5,790		Feb. 18, 1944	13.16	7,970
	Mar. 13, 1935	17.33	15,700		Feb. 21, 1944	9.66	4,600
	Apr. 6, 1935	13.84	10,400		Feb. 23, 1944	13.05	7,770
1936	Mar. 25, 1936	13.01	8,300		Feb. 27, 1944	13.45	8,170
	Apr. 6, 1936	16.20	12,100		Feb. 29, 1944	10.30	5,140
	Apr. 10, 1936	12.86	8,190		Mar. 29, 1944	17.25	12,900
					Apr. 12, 1944	9.70	4,600
1937	Dec. 10, 1936	10.06	5,310		May 6, 1944	11.39	6,170
	Jan. 2, 1937	24.36	24,000		Sept. 1, 1944	13.98	8,830
	Jan. 15, 1937	9.80	5,040		Sept. 30, 1944	13.78	8,610
	Jan. 18, 1937	14.58	10,100	1945	Dec. 28, 1944	14.25	9,050
	Jan. 21, 1937	15.52	11,200		Jan. 1, 1945	23.79	22,900
	Jan. 24, 1937	13.80	9,180		Feb. 18, 1945	12.92	7,670
	May 3, 1937	11.98	7,200		Feb. 22, 1945	19.22	15,600
	May 5, 1937	13.70	9,070		Feb. 28, 1945	13.60	8,390
					Mar. 4, 1945	11.90	6,670
					Apr. 29, 1945	13.20	7,970
1938	Jan. 22, 1938	18.8	15,000	1946	Nov. 22, 1945	15.60	10,800
	Jan. 25, 1938	11.96	6,790		Dec. 26, 1945	10.30	5,140
1939	Jan. 5, 1939	9.70	4,760		Jan. 8, 1946	23.52	22,000
	Feb. 4, 1939	12.00	6,790		Feb. 7, 1946	10.07	4,960

Peak stages and discharges of Buffalo River near Flat Woods, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	Feb. 1, 1946	12.43	7,170	1953	Jan. 24, 1953	9.68	4,580
	Mar. 8, 1946	10.39	5,230		Feb. 12, 1953	17.52	13,400
1947	Jan. 3, 1947	13.39	8,160		Feb. 21, 1953	14.56	9,330
	Apr. 17, 1947	10.84	5,630		Mar. 4, 1953	14.22	8,910
	May 22, 1947	9.79	4,680		Mar. 23, 1953	10.49	5,210
	May 25, 1947	9.82	4,710		Apr. 30, 1953	16.20	11,600
1948	Feb. 13, 1948	32.00	90,000	1954	Jan. 16, 1954	11.55	6,140
	Apr. 9, 1948	18.30	14,500		Jan. 21, 1954	18.87	15,300
1949	Nov. 19, 1948	14.20	9,050		Feb. 21, 1954	11.53	6,130
	Nov. 29, 1948	15.1	10,100		Apr. 17, 1954	9.75	4,620
	Dec. 17, 1948	16.38	11,800	1955	Feb. 22, 1955	16.79	12,000
	Jan. 5-6, 1949	17.12	12,900		Mar. 22, 1955	30.45	66,300
	Mar. 28, 1949	15.82	11,100		Apr. 7, 1955	15.42	10,300
1950	Jan. 6, 1950	18.87	15,300		May 23, 1955	11.98	6,530
	Jan. 11, 1950	10.00	4,870	1956	Jan. 31, 1956	10.90	5,560
	Jan. 14, 1950	11.68	6,450		Feb. 5, 1956	15.28	10,100
	Jan. 17, 1950	9.90	4,780		Feb. 19, 1956	18.07	13,800
	Jan. 20, 1950	14.92	9,900		Apr. 7, 1956	10.36	5,090
	Feb. 1, 1950	15.24	10,300	1957	Dec. 14, 1956	16.68	11,900
	Feb. 10, 1950	12.13	6,900		Jan. 30, 1957	15.36	10,200
	Feb. 15, 1950	21.23	19,000		Feb. 1, 1957	20.38	17,200
	Mar. 13, 1950	12.74	7,510		May 27, 1957	11.69	6,270
1951	Jan. 4, 1951	19.50	16,200	1958	Nov. 15, 1957	12.23	6,760
	Jan. 14, 1951	13.00	7,770		Nov. 19, 1957	19.70	16,100
	Feb. 1, 1951	19.7	16,600		Dec. 8, 1957	10.24	4,990
	Feb. 8, 1951	-	(a)		May 11, 1958	11.18	5,810
	Feb. 20, 1951	12.6	7,370	1959	Jan. 22, 1959	12.85	7,350
	Mar. 20, 1951	-	(a)		Feb. 15, 1959	12.47	6,970
	Mar. 29, 1951	-	(a)	1960	Dec. 19, 1959	9.65	4,520
1952	Dec. 9, 1951	22.22	20,600		Dec. 29, 1959	10.22	4,980
	Dec. 15, 1951	15.59	10,800		Mar. 31, 1960	10.46	5,190
	Jan. 23, 1952	12.70	7,470		Apr. 4, 1960	15.82	10,800
	Jan. 28, 1952	19.29	15,900				
	Mar. 4, 1952	14.77	9,720				
	Mar. 11, 1952	13.16	7,930				

a Discharge not determined but greater than 4,500 cfs.

6042. Cane Creek at Farmers Exchange, Tenn.

Location.--Lat 35°38'53", long 87°39'39", at bridge on county highway, 0.5 mile north of Farmers Exchange, Hickman County.

Drainage area.--45.1 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Not defined.

Remarks.--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	9.20	-	1958	November 1957	5.81	-
1956	April 1956	8.25	-	1959	Feb. 14, 1959	5.32	-
1957	May 22, 1957	7.58	-	1960	Mar. 8, 1960	6.70	-

6045. Buffalo River near Lobelville, Tenn.

Location.--Lat 35°48'46", long 87°47'51", on right bank 30 ft upstream from Standing Rock Bridge, 1.4 miles downstream from State Highway 13, 3 miles north of Lobelville, Perry County, 13 miles downstream from Cane Creek, and at mile 17.7.

Drainage area.--707 sq mi.

Gage.--Nonrecording prior to May 31, 1934; recording thereafter. At site 40 ft downstream prior to May 31, 1934. Datum of gage is 403.15 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 40,000 cfs and extended above on basis of slope-area measurement at 100,000 cfs.

Bankfull stage.--12 ft.

Historical data.--Flood of Feb. 14, 1948, is highest known since about 1897.

Remarks.--Only annual peaks are shown prior to 1935. Base for partial-duration series, 5,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Apr. 23, 1928	13.5	12,400	1945	Jan. 2, 1945	16.57	30,200
1929	Mar. 24, 1929	16.3	28,100		Jan. 9, 1945	9.79	5,320
1930	Jan. 9, 1930	13.6	12,800		Feb. 19, 1945	11.80	7,700
					Feb. 23, 1945	14.40	16,500
1931	Feb. 26, 1931	8.7	4,860		Mar. 1, 1945	12.57	9,100
1932	July 8, 1932	15.4	22,400		Mar. 6, 1945	11.50	7,280
1933	Apr. 2, 1933	16.2	27,400		Apr. 30, 1945	11.74	7,560
1934	Mar. 26, 1934	15.1	20,600				
				1946	Nov. 24, 1945	12.67	9,380
1935	Jan. 21, 1935	13.96	14,500		Dec. 27, 1945	10.42	5,960
	Feb. 11, 1935	9.59	5,510		Jan. 8, 1946	18.20	42,000
	Mar. 14, 1935	13.76	13,600		Feb. 8, 1946	10.00	5,520
	Apr. 10, 1935	12.98	10,400		Feb. 12, 1946	12.10	8,130
					Mar. 9, 1946	10.24	5,740
1936	Mar. 18, 1936	9.40	4,760				
	Mar. 26, 1936	12.40	8,650	1947	Jan. 4, 1947	12.34	8,540
	Apr. 8, 1936	13.38	12,000		Apr. 12, 1947	10.12	5,650
	Apr. 11, 1936	12.45	8,650		Apr. 18, 1947	10.10	5,630
					May 22, 1947	9.77	5,290
1937	Jan. 3, 1937	16.83	31,600				
	Jan. 18, 1937	14.00	14,500	1948	Jan. 1, 1948	10.85	6,500
	Jan. 21, 1937	14.68	18,200		Feb. 14, 1948	23.76	100,000
	May 3, 1937	12.31	8,460		Apr. 10, 1948	13.67	11,800
	May 6, 1937	12.38	8,650				
1938	Jan. 24, 1938	14.73	18,200	1949	Nov. 21, 1948	11.68	7,530
	Apr. 1, 1938	10.18	5,720		Nov. 30, 1948	12.82	9,520
					Dec. 18, 1948	13.59	11,600
1939	Jan. 15, 1939	11.96	7,980		Jan. 7, 1949	13.80	12,400
	Feb. 5, 1939	12.02	7,980		Mar. 29, 1949	13.13	10,300
	Feb. 17, 1939	12.40	8,650				
	Feb. 28, 1939	10.40	5,960	1950	Jan. 7, 1950	15.05	18,400
					Jan. 11, 1950	12.54	8,930
1940	Mar. 14, 1940	11.09	6,880		Jan. 15, 1950	12.32	8,530
	Apr. 1, 1940	10.66	6,440		Jan. 21, 1950	12.98	9,900
	Apr. 20, 1940	14.91	19,400		Feb. 1, 1950	14.79	16,800
					Feb. 11, 1950	10.96	6,630
1941	Dec. 30, 1940	5.92	2,440		Feb. 16, 1950	15.28	19,800
					Mar. 14, 1950	12.31	8,510
1942	Apr. 11, 1942	9.74	5,220				
				1951	Jan. 5, 1951	14.65	16,100
1943	Dec. 29, 1942	14.94	19,400		Jan. 15, 1951	12.52	8,890
	Feb. 6, 1943	9.76	5,320		Feb. 3, 1951	15.15	19,000
	Mar. 13, 1943	13.01	10,400		Feb. 9, 1951	11.92	7,880
					Feb. 21, 1951	12.28	8,460
1944	Jan. 5, 1944	10.68	6,320		Mar. 21, 1951	9.99	5,510
	Feb. 11, 1944	13.36	12,000		Mar. 30, 1951	11.90	7,850
	Feb. 18, 1944	13.22	11,200		Apr. 24, 1951	9.73	5,260
	Feb. 25, 1944	11.80	7,700				
	Feb. 28, 1944	12.60	9,100	1952	Dec. 10, 1951	15.42	20,600
	Mar. 31, 1944	14.11	15,000		Dec. 15, 1951	13.45	11,200
	Apr. 13, 1944	10.20	5,740		Jan. 24, 1952	11.63	7,460
	May 7, 1944	11.00	6,680		Jan. 29, 1952	14.70	16,400
	Sept. 3, 1944	11.42	7,160		Mar. 5, 1952	13.29	10,700
					Mar. 12, 1952	12.24	8,390
1945	Oct. 1, 1944	10.50	6,080		Mar. 23, 1952	10.98	6,660
	Dec. 30, 1944	13.24	11,200	1953	Feb. 14, 1953	14.10	13,400

Peak stages and discharges of Buffalo River near Lobelville, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Feb. 23, 1953	12.59	9,030	1957	Dec. 15, 1956	12.97	9,710
	Mar. 5, 1953	13.23	10,600		Jan. 23, 1957	13.20	10,500
	Mar. 25, 1953	10.54	5,970		Jan. 30, 1957	14.44	14,900
	May 2, 1953	13.41	11,000		Feb. 2, 1957	15.64	21,100
	May 18, 1953	11.19	6,790		Apr. 4, 1957	12.81	9,490
1954	Jan. 16, 1954	-	(a)	1958	May 28, 1957	10.82	6,300
	Jan. 22, 1954	14.85	17,200		June 6, 1957	12.75	9,360
	Feb. 22, 1954	11.10	6,660		Nov. 16, 1957	10.74	6,210
					Nov. 20, 1957	15.44	20,000
1955	Feb. 24, 1955	13.74	12,000	1959	Dec. 9, 1957	10.34	5,680
	Mar. 23, 1955	20.43	58,000		May 12, 1958	13.07	10,100
	Apr. 8, 1955	13.02	10,000		Jan. 24, 1959	11.55	7,740
	May 24, 1955	10.38	5,790	1960	Feb. 16, 1959	12.03	8,440
					Apr. 1, 1960	9.53	5,270
1956	Jan. 30, 1956	10.81	6,290		Apr. 5, 1960	12.81	9,810
	Feb. 6, 1956	13.35	10,900				
	Feb. 20, 1956	14.23	13,900				
	Apr. 8, 1956	10.21	5,600				

a Discharge not determined but greater than 5,200 cfs.

6048. Birdsong Creek near Holladay, Tenn.

Location.--Lat 35°53'56", long 88°07'37", on left bank half a mile downstream from Wolf Creek, and 2 miles northeast of Holladay, Benton County.

Drainage area.--44.9 sq mi.

Gage.--Recording. Datum of gage is 380 ft above mean sea level, datum of 1929.

Remarks.--Station operated and records published by Tennessee Valley Authority. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Mar. 12, 1940	all.70	2,260	1951	Jan. 3, 1951	12.62	3,890
1941	July 30, 1941	5.77	261	1952	Dec. 14, 1951	13.00	5,900
1942	Apr. 9, 1942	12.97	7,370	1953	May 4, 1953	12.54	3,560
1943	Mar. 19, 1943	12.34	4,680	1954	Jan. 20, 1954	12.57	3,680
1944	Feb. 17, 1944	12.85	6,870	1955	Mar. 21, 1955	12.40	2,840
1945	Dec. 31, 1944	12.65	6,030	1956	Jan. 29, 1956	13.53	9,600
1946	Jan. 8, 1946	13.24	8,630	1957	Jan. 29, 1957	12.77	4,120
1947	Apr. 16, 1947	12.59	5,780	1958	Nov. 14, 1957	12.71	3,840
1948	Mar. 16, 1948	13.43	9,520	1959	Feb. 14, 1959	12.02	1,930
1949	Nov. 19, 1948	12.85	6,870	1960	Dec. 12, 1959	11.19	1,080
1950	Dec. 12, 1949	13.40	9,380				

a Estimated; maximum for period Jan. 20 to Sept. 30, 1940.

6050. Tennessee River near Johnsonville, Tenn.
(Published as "at Johnsonville" prior to 1932)

Location.--Lat 36°01'02", long 87°59'59", at Hickman-Lockhart Memorial Bridge on U.S. Highway 70, 4 miles upstream from Johnsonville, Humphreys County, 6 miles southeast of Camden, 10 miles downstream from Duck River, and at mile 100.5.

Drainage area.--38,520 sq mi, approximately.

Gage.--Nonrecording prior to Oct. 21, 1926; recording thereafter. At site 4 miles downstream prior to Oct. 1, 1931. At datum 1.14 ft higher prior to Oct. 21, 1926, and at datum 0.88 ft higher Oct. 21, 1926, to Sept. 30, 1931. Datum of gage is 319.61 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 396,000 cfs and extended above. Relation affected by backwater during periods of high stages on Ohio River.

Bankfull stage.--31 ft (from U.S. Weather Bureau).

Remarks.--Gage-height record prior to Oct. 21, 1926, furnished by U.S. Weather Bureau. Slight regulation since 1924 by Wilson Lake and regulation since 1936 by increasing number of reservoirs. Only annual peaks are shown.

Peak stages and discharges of Tennessee River near Johnsonville, Tenn.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1867	-	44.8	-	1910	Feb. 23, 1910	21.3	169,000
1875	Mar. 7, 1875	45.3	-	1911	Apr. 17, 1911	36.1	c302,000
1876	Jan. 6, 1876	29.0	-	1912	Apr. 6, 1912	35.4	-
1880	Mar.22,23, 1880	37.7	-	1913	Mar. 29, 1913	33.3	-
1882	Jan.31. Feb. 2, 1882	43.8	-	1914	Apr.5,6, 1914	19.8	c156,000
1883	Feb.2,3, 1883	29.0	-	1915	Feb. 6, 1915	30.0	c248,000
1884	Feb.28,29, 1884	44.3	-	1916	Jan. 5, 1916	d32.5	c263,000
1885	Jan. 23, 1885	30.0	-	1917	Mar. 18, 1917	38.9	-
1886	Apr.15,16, 1886	42.1	-	1918	Feb. 10, 1918	30.6	c253,000
1887	Feb. 28, 1887	31.4	-	1919	Mar. 19, 1919	35.3	c295,000
1888	Apr. 1, 1888	33.3	-	1920	Apr. 14, 1920	35.9	c301,000
1889	Feb. 26, 1889	29.3	-	1921	Feb. 14, 1921	29.5	243,000
1890	Mar.8,9, 1890	37.7	-	1922	Mar. 15, 1922	36.4	c305,000
1891	Feb.23,24, 1891	a38.2	302,000	1923	Mar. 26, 1923	31.1	c258,000
1892	Jan. 26, 1892	b35.8	c239,000	1924	Jan. 7, 1924	29.7	245,000
1893	Feb.25,26, 1893	33.6	c280,000	1925	Feb. 24, 1925	21.1	c160,000
1894	Feb.13,14, 1894	31.1	c258,000	1926	Jan. 25, 1926	21.9	c168,000
1895	Jan. 19, 1895	25.5	c207,000	1927	Jan.2-4, 1927	40.5	342,000
1896	Apr. 12, 1896	28.3	c232,000	1928	Apr. 27, 1928	28.1	223,000
1897	Mar. 24, 1897	48.0	460,000	1929	Mar. 29, 1929	36.44	302,000
1898	Jan. 24, 1898	29.1	-	1930	Nov.23,24, 1929	28.0	222,000
1899	Mar. 31, 1899	39.7	-	1931	Apr. 3, 1931	19.2	145,000
1900	June 30, 1900	29.5	c243,000	1932	Feb. 7, 1932	34.9	264,000
1901	Aug. 26, 1901	27.6	c226,000	1933	Feb. 24, 1933	36.45	278,000
1902	Apr. 23, 1902	35.6	c298,000	1934	Mar. 10, 1934	33.68	253,000
1903	Mar. 11, 1903	33.7	-	1935	Apr. 10, 1935	31.72	230,000
1904	Mar. 30, 1904	28.1	-	1936	Apr. 10, 1936	e41.61	339,000
1905	Feb.14,15, 1905	24.0	c194,000	1937	Jan. 23, 1937	e42.51	318,000
1906	Jan. 26, 1906	22.2	c177,000	1938	Apr. 13, 1938	25.49	172,000
1907	Mar. 5, 1907	25.4	c206,000	1939	Feb. 20, 1939	f38.49	293,000
1908	Feb. 22, 1908	27.1	-	1940	Apr. 21, 1940	g24.15	162,000
1909	Feb. 28, 1909	33.0	275,000	1941	Apr. 8, 1941	f15.46	94,800
				1942	Mar. 23, 1942	21.83	137,000
				1943	Jan. 5, 1943	g34.30	256,000
				1944	Apr. 3, 1944	g38.50	283,000

a Occurred Mar. 12, 1891.

b Occurred Apr. 14, 15, 1892.

c Maximum daily discharge.

d Occurred Jan. 8, 1916.

e Occurred two days later.

f Occurred

at different time than peak discharge.

g Occurred following day.

6054. Trace Creek at Waverly, Tenn.

Location.--Lat 36°04'58", long 87°46'32", at bridge on U.S. Highway 70, on east side of Waverly, Humphreys County.

Drainage area.--17.4 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Not defined.

Remarks.--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	5.27	-	1958	Nov. 17, 1957	7.07	-
1956	Jan. 29, 1956	7.43	-	1959	-	(a)	-
1957	Jan. 29, 1957	5.94	-	1960	-	(b)	-

a Gage height not determined but less than 5.0 ft.

b Peak stage did not reach bottom of gage.

6057. Deer Creek tributary near Waverly, Tenn.

Location.--Lat 36°10'20", long 87°44'40", at culvert under State Highway 13 in Smith Hollow, 8.0 miles northeast of Waverly, Humphreys County.

Drainage area.--1.04 sq mi.

Gage.--Crest-stage gage. Datum of gage not determined.

Stage-discharge relation.--Not defined.

Remarks.--Only annual peak stages are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Mar. 21, 1955	2.02	-	1958	Nov. 17, 1957	1.59	-
				1959	Feb. 14, 1959	1.88	-
1957	Jan. 23, 1957	3.30	-	1960	June 29, 1960	2.08	-

6065. Big Sandy River at Bruceton, Tenn.

Location.--Lat 36°02'19", long 88°13'42", on downstream end of right abutment of county bridge, 700 ft downstream from bridge on U.S. Highway 70, 0.6 mile upstream from Cherry Creek, and 0.9 mile east of Bruceton, Carroll County.

Drainage area.--205 sq mi.

Gage.--Nonrecording prior to Mar. 1, 1940; recording thereafter. Datum of gage is 380.76 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 9,200 cfs and extended above.

Historical data.--The flood of March 1897 is maximum stage known.

Remarks.--Only annual peaks are shown prior to 1940. Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1897	March 1897	18	a25,000	1946	Nov. 4, 1945	13.62	7,100
					Jan. 9, 1946	14.92	12,000
1919	March 1919	17	a21,000		Mar. 26, 1946	13.36	6,420
1927	December 1926	16.5	18,500	1947	Dec. 29, 1946	11.56	2,150
					Jan. 4, 1947	12.53	3,980
1930	Jan. 9, 1930	13.98	9,100	1948	Feb. 14, 1948	13.25	5,940
					Mar. 17, 1948	13.31	6,130
1931	Mar. 27, 1931	11.20	2,060				
1932	Jan. 13, 1932	13.60	7,820	1949	Nov. 5, 1948	12.45	3,780
1933	Mar. 21, 1933	11.95	3,220		Nov. 20, 1948	12.83	4,740
1934	Dec. 18, 1933	12.94	5,580		Jan. 27, 1949	12.32	3,450
1935	Jan. 21, 1935	16.16	17,000				
1936	July 4, 1936	13.28	6,740	1950	Dec. 13, 1949	14.37	9,880
1937	Jan. 21, 1937	14.86	13,800		Jan. 7, 1950	-	(b)
1938	Jan. 23, 1938	12.67	4,270		Jan. 11, 1950	-	(b)
1939	Feb. 4, 1939	13.23	5,940		Feb. 1, 1950	13.85	7,980
					Feb. 15, 1950	12.12	3,080
1940	Mar. 19, 1940	10.91	1,680		Mar. 14, 1950	11.55	2,200
					Aug. 25, 1950	11.91	2,700
1941	Aug. 2, 1941	10.00	1,200		Sept. 3, 1950	12.88	4,870
1942	Apr. 10, 1942	14.52	10,100	1951	Jan. 4, 1951	13.01	5,230
1943	Mar. 20, 1943	12.45	3,780		Jan. 14, 1951	12.36	3,570
					Feb. 7, 1951	11.38	2,020
1944	Feb. 18, 1944	13.07	5,340		Apr. 23, 1951	12.30	3,440
	Mar. 20, 1944	17.39	3,660	1952	Nov. 16, 1951	11.78	2,160
	Apr. 11, 1944	11.88	2,680		Dec. 16, 1951	12.70	4,260
1945	Jan. 2, 1945	13.13	5,630	1953	May 5, 1953	11.60	2,090
	June 9, 1945	12.74	4,530		May 19, 1953	12.95	5,000

a From reports by Tennessee Valley Authority.

b Discharge not determined but greater than 2,000 cfs.

TENNESSEE RIVER BASIN

Peak stages and discharges of Big Sandy River at Bruceton, Tenn.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 22, 1954	12.32	3,320	1957	Apr. 6, 1957	12.00	2,700
1955	Mar. 22, 1955	13.11	5,480	1958	Nov. 8, 1957	11.70	2,200
1956	Jan. 30, 1956	14.85	11,800		Nov. 16, 1957	12.33	3,350
	Feb. 18, 1956	12.37	3,430		Nov. 20, 1957	12.25	3,180
1957	Jan. 24, 1957	12.01	2,720	1959	Feb. 16, 1959	11.83	2,400
	Jan. 30, 1957	13.00	5,150	1960	Dec. 12, 1959	10.94	1,460

6070. Big Sandy River at Big Sandy, Tenn.

Location.--Lat 36°13'50", long 86°06'16", on left bank of drainage canal, 700 ft upstream from bridges on State Highway 69 and Louisville & Nashville Railroad, and 1 mile west of Big Sandy, Benton County.

Drainage area.--379 sq mi.

Gage.--Nonrecording prior to Feb. 14, 1938; recording thereafter. Datum of gage is 342.85 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 12,300 cfs and extended above.

Remarks.--Only annual peaks are shown prior to 1939. Base for partial-duration series, 1,900 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1935	Mar. 12, 1935	14.85	3,660	1942	Jan. 1, 1942	12.44	2,160
1936	Mar. 28, 1936	15.60	4,760		Feb. 6, 1942	12.19	2,060
1937	Jan. 24, 1937	19.90	18,400		Feb. 16, 1942	13.90	2,740
1938	Jan. 25, 1938	15.70	4,940		Feb. 24, 1942	12.34	2,100
					Mar. 13, 1942	13.32	2,460
1939	Jan. 30, 1939	13.50	2,650		Mar. 17, 1942	13.95	2,740
	Feb. 5, 1939	16.46	6,610		Apr. 10, 1942	18.3	12,400
	Feb. 9, 1939	12.72	2,340	1943	Dec. 28, 1942	14.21	2,940
	Feb. 15, 1939	13.10	2,480		Mar. 13, 1943	13.63	2,580
	Feb. 20, 1939	12.05	2,140		Mar. 19, 1943	16.33	6,360
	Feb. 28, 1939	12.62	2,310		May 24, 1943	12.44	2,130
	Mar. 5, 1939	14.11	3,010				
	Mar. 30, 1939	14.79	3,660	1944	Feb. 9, 1944	11.21	1,940
	Apr. 6, 1939	13.12	2,480		Feb. 17, 1944	12.80	2,520
	Apr. 11, 1939	11.04	1,900		Feb. 21, 1944	15.01	4,000
1940	Mar. 3, 1940	11.83	1,910		Feb. 29, 1944	13.70	2,960
	Mar. 30, 1940	12.65	2,100		Mar. 22, 1944	14.39	3,430
	Apr. 19, 1940	13.41	2,370		Apr. 12, 1944	14.60	3,600
					Apr. 23, 1944	12.93	2,560
1941	Aug. 27, 1941	9.39	1,430		Apr. 27, 1944	12.53	2,400
					May 5, 1944	11.45	2,000

a Maximum for period Feb. 12 to Sept. 30, 1935.

6075. Tennessee River near Buchanan, Tenn.
(Published as "at Aurora Landing, Ky." 1930-31, and as "at Shannon Dam site, near Murray, Ky." 1932-35)

Location.--Lat 36°26'38", long 88°03'43", at bridge on State Highway 76, three-quarters of a mile downstream from Big Sandy River, 8 miles east of Buchanan, Henry County, and at mile 66.3.

Drainage area.--39,730 sq mi, approximately; at site used July 1930 to September 1931, 40,010 sq mi, approximately; at site used October 1931 to September 1935, 39,780 sq mi, approximately.

Gage.--Nonrecording prior to May 15, 1936; recording thereafter. At site 22½ miles downstream prior to Oct. 1, 1931, at datum about 1.4 ft lower. At site 7½ miles downstream Oct. 1, 1931, to Sept. 30, 1935, at datum 3.34 ft higher. Datum of gage is 303.00 ft above mean sea level, datum of 1929. Auxiliary gages at different locations.

Stage-discharge relation.--Defined by current-meter measurements. Fall between base gage and auxiliary gage used as a factor in computing discharge.

Remarks.--Flow regulated by increasing number of reservoirs since 1936. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Apr. 11, 12, 1931	22.0	142,000	1937	Jan. 24, 1937	f51.49	334,000
1932	Feb. 5, 7, 10, 1932	a35.8	b264,000	1938	Apr. 13, 1938	f30.94	166,000
1933	Feb. 23, 24, 1933	c34.2	235,000	1939	Feb. 20, 1939	f44.76	298,000
1934	Mar. 10, 1934	d32.1	262,000	1940	Apr. 22, 1940	-	b160,000
1935	Mar. 19, 1935	e32.7	234,000	1941	Apr. 8, 1941	g19.40	100,000
1936	Apr. 13, 1936	47.10	335,000	1942	Mar. 23, 1942	f28.89	128,000

a Occurred Feb. 12, 1931. b Maximum daily discharge. c Occurred Feb. 25, 1932. d Occurred Mar. 12, 13, 1933. e Occurred Mar. 21, 1935. f Occurred following day. g Occurred different time than peak discharge.

6095. Tennessee River near Paducah, Ky.

Location.--Lat 37°01'11", long 88°16'50", on left bank at Gilbertsville, Marshall County, 3,500 ft downstream from Kentucky Dam, 2.3 miles upstream from Shadie Creek, 16 miles east of Paducah, McCracken County, and at mile 21.6.

Drainage area.--40,200 sq mi, approximately (at Gilbertsville).

Gage.--Recording. At site 16.3 miles downstream prior to Sept. 30, 1942; at datum 3.65 ft higher prior to July 30, 1940. At site 500 ft upstream at present datum Oct. 1, 1942, to Jan. 1, 1946. Gage heights shown herein adjusted to present datum. Datum of gage is 286.35 ft above mean sea level, datum of 1929. Recording auxiliary gage 500 ft upstream prior to Oct. 1, 1942, and 16.3 miles downstream since Oct. 1, 1942.

Stage-discharge relation.--Defined by current-meter measurements. Fall between base gage and auxiliary gage used as a factor in computing discharge.

Historical data.--The discharge of flood of 1948 is maximum since 1839.

Remarks.--Affected by backwater from Ohio River. Flow regulated by increasing number of reservoirs since 1936. Only annual peaks are shown. Maximum gage height and maximum discharge usually occur at different times.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Feb. 2, 1937	61.4	-	1949	Jan. 7, 1949	48.6F	353,000
1939	Feb. 22, 1939	49.73	294,000	1950	Feb. 3, 1950	55.8E	408,000
1940	Mar. 16, 1940	38.44	155,000	1951	Apr. 3, 1951	45.2C	307,000
1941	Apr. 9, 1941	20.67	95,200	1952	Mar. 13, 1952	46.03	258,000
1942	Mar. 21, 1942	38.35	127,000	1953	Feb. 13, 1953	37.62	254,000
1943	Jan. 6, 7, 1943	46.81	250,000	1954	Jan. 26, 28, 1954	40.50	344,000
1944	Apr. 6, 1944	45.68	303,000	1955	Mar. 22, 1955	50.04	302,000
1945	Feb. 22, 1945	52.02	279,000	1956	Feb. 5, 1956	45.41	322,000
1946	Jan. 12, 1946	51.20	419,000	1957	Feb. 5, 1957	51.20	407,000
1947	Jan. 21, 1947	43.53	318,000	1958	Nov. 30, 1957	43.03	336,000
1948	Feb. 17, 1948	52.41	500,000	1959	Jan. 24, 1959	38.2E	172,000
				1960	Mar. 8, 1960	36.11	194,000

6100. East Fork Clarks River at Murray, Ky.

Location.--Lat 36°35'34", long 88°18'00", on downstream side of left pier of Nashville, Chattanooga & St. Louis Railway bridge, 0.1 mile downstream from bridge on State Highway 121, 1 mile south of Murray, Calloway County, and 1½ miles upstream from Clayton Creek.

Drainage area.--89.7 sq mi.

Gage.--Recording. Datum of gage is 459.88 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Base for partial-duration series, 3,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Nov. 24, 1951	10.65	3,220	1956	Feb. 2, 1956	11.04	4,210
	Dec. 21, 1951	10.99	3,830		Feb. 18, 1956	12.60	7,900
	Dec. 25, 1951	10.95	3,750		Mar. 14, 1956	10.52	3,310
	Mar. 11, 1952	12.15	6,650	1957	Jan. 23, 1957	10.56	3,380
	Mar. 22, 1952	15.2	32,300		Jan. 29, 1957	11.71	4,720
1953	Mar. 4, 1953	10.63	3,490		Apr. 4, 1957	11.20	3,480
	Mar. 15, 1953	11.06	4,250		May 23, 1957	12.48	7,220
	Mar. 18, 1953	10.88	3,920		June 10, 1957	11.15	3,380
	May 17, 1953	12.62	7,960	1958	Nov. 14, 1957	11.50	4,200
1954	Jan. 20, 1954	9.78	2,260		Nov. 18, 1957	15.20	32,300
					Dec. 7, 1957	11.51	4,220
1955	Mar. 21, 1955	10.92	4,000	1959	Dec. 20, 1957	11.48	4,150
	Apr. 22, 1955	10.91	3,980		June 11, 1959	11.45	4,080
	Apr. 24, 1955	10.38	3,090	1960	Jan. 14, 1960	10.30	2,280
1956	Jan. 30, 1956	11.44	4,980				

6105. East Fork Clarks River near Benton, Ky.

Location.--Lat 36°52'24", long 88°20'48", on downstream side of right pier of bridge on U. S. Highway 641 and State Highway 58, 1 mile north of Benton, Marshall County, and 6.8 miles upstream from Middle Fork Creek.

Drainage area.--227 sq mi.

Gage.--Nonrecording prior to Sept. 10, 1951; recording thereafter. Datum of gage is 344.53 ft above mean sea level, datum of 1929 (Tennessee Valley Authority bench mark).

Stage-discharge relation.--Defined by current-meter measurements below 17,000 cfs.

Bankfull stage.--About 12 ft.

Historical data.--The flood of 1937 is maximum stage known.

Remarks.--Base for partial-duration series, 4,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	February 1937	17.8	-	1944	Mar. 1, 1944	13.1	4,790
1939	Jan. 31, 1939	13.2	5,140	1945	May 5, 1944	14.5	9,420
	Feb. 10, 1939	13.0	4,440		Mar. 19, 1945	13.0	4,440
	Apr. 7, 1939	13.1	4,790	1946	Mar. 21, 1945	13.0	4,440
	Apr. 17, 1939	14.1	8,060		Apr. 3, 1945	13.6	6,410
1940	Feb. 19, 1940	13.1	4,760	1947	Jan. 10, 1946	13.9	7,400
1941	Jan. 24, 1941	10.35	892		Feb. 7, 1946	13.6	6,540
					Feb. 14, 1946	13.4	5,840
1942	Apr. 10, 1942	14.0	7,730		Mar. 27, 1946	13.3	5,490
1943	Dec. 29, 1942	13.0	4,440	1948	Jan. 4, 1947	14.0	7,730
	Mar. 20, 1943	13.6	6,410		Feb. 15, 1948	13.15	5,100

Peak stages and discharges of East Fork Clarks River near Benton, Ky.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Mar. 17, 1948	13.5	6,180	1953	Mar. 16, 1953	13.42	4,810
	Mar. 27, 1948	13.2	5,100		Mar. 19, 1953	13.37	4,660
1949	Nov. 21, 1948	13.0	4,430		May 17 or 18, 1953	a15.0	a12,000
	Dec. 16, 1948	14.52	9,490	1954	Mar. 26, 1954	12.45	2,350
	Jan. 27, 1949	13.0	4,430	1955	Mar. 22, 1955	13.90	7,300
	Feb. 15, 1949	14.9	12,600		Apr. 24, 1955	13.82	6,980
	Mar. 28, 1949	13.22	5,160	1956	Jan. 30 or 31, 1956	(b)	a7,000
	Apr. 14, 1949	13.22	5,160		Feb. 3, 1956	13.94	7,460
1950	Dec. 13, 1949	14.20	8,400		Feb. 18, 1956	15.04	13,400
	Jan. 4, 1950	14.3	8,740	1957	Jan. 30, 1957	13.63	6,320
	Jan. 11, 1950	13.95	7,560		Feb. 27, 1957	(b)	(b)
	Jan. 28, 1950	13.2	5,090		Apr. 5, 1957	13.16	4,640
	Feb. 1, 1950	13.7	6,740		May 24, 1957	14.80	12,800
	Feb. 14, 1950	13.55	6,240	1958	Nov. 15, 1957	13.82	6,600
1951	Sept. 2, 1950	14.0	7,730		Nov. 19, 1957	17.10	36,000
	Jan. 5, 1951	13.34	5,630		Dec. 8, 1957	13.48	5,330
	Jan. 15, 1951	16.10	22,400		Dec. 20, 1957	13.87	6,850
1952	Mar. 19, 1951	13.24	5,280		Mar. 25, 1958	13.31	4,740
	Nov. 26, 1951	13.42	5,910	1959	Jan. 21, 1959	13.17	4,310
	Dec. 22, 1951	13.15	4,960	1960	Jan. 16, 1960	12.60	2,850
	Dec. 27, 1951	13.02	4,510				
	Mar. 11, 1952	14.79	11,800				
1953	Mar. 22, 1952	16.68	27,600				
	Mar. 4, 1953	13.95	6,550				

a About.

b Unknown.

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xii, 340 p. maps (2 fold. in pocket) diagrs., tables. 24 cm. (U.S. Geological Survey. Water-supply paper 1676) Bibliography: p.332-333.

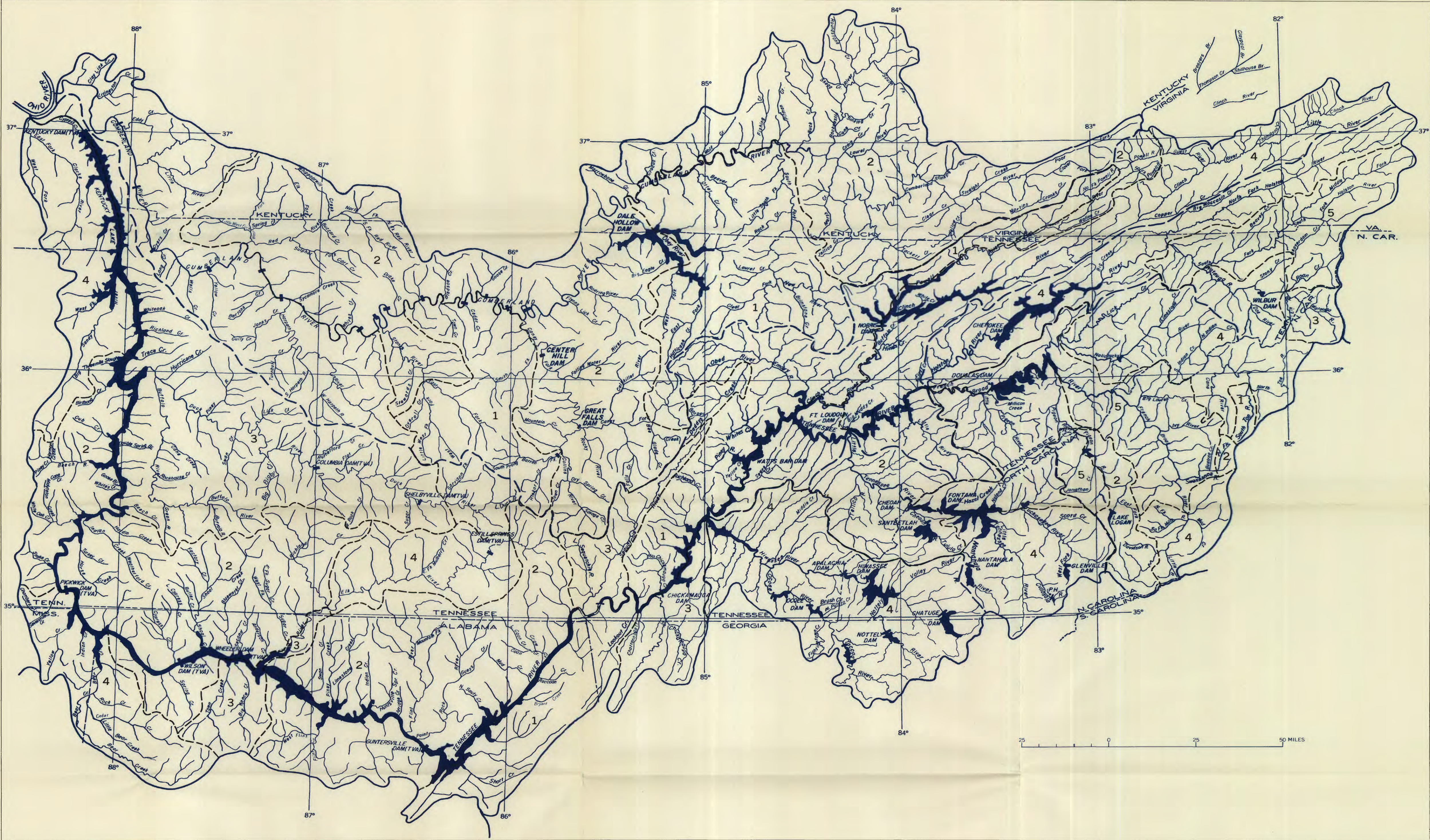
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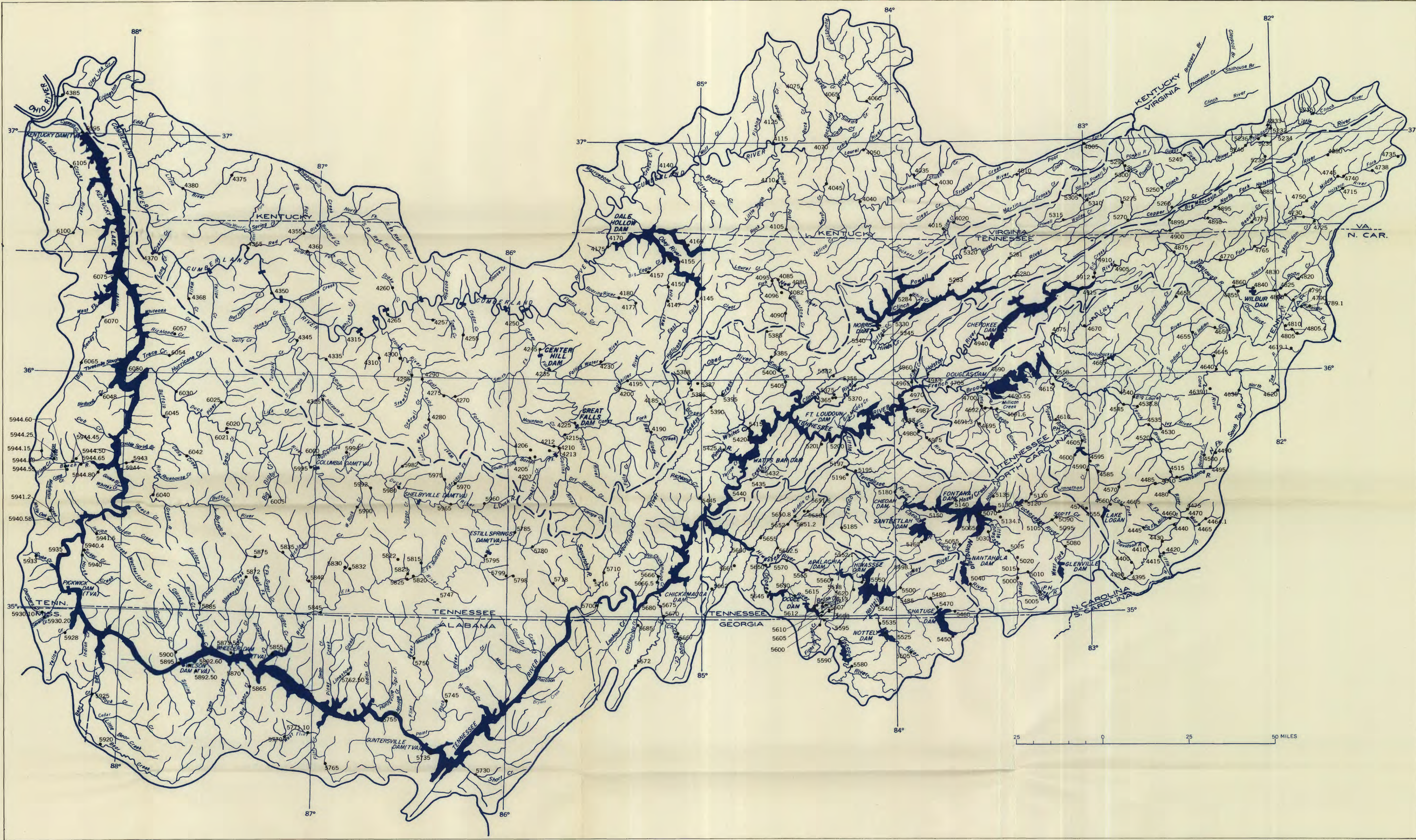
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MAP OF CUMBERLAND AND TENNESSEE RIVER BASINS SHOWING HYDROLOGIC AREAS

SCALE 1:1 000 000

25 0 25 50 75 100 MILES

25 0 25 50 75 100 KILOMETERS



Base from U.S. Weather Bureau Map

MAP OF CUMBERLAND AND TENNESSEE RIVER BASINS SHOWING LOCATION OF GAGING STATIONS FOR WHICH RECORDS ARE TABULATED IN THIS REPORT

