Surface Water Supply of the United States 1958

Part 2–A. South Atlantic Slope Basins, James River to Savannah River

Prepared under the direction of J. V. B. WELLS, *Chief, Surface Water Branch*

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Prepared in cooperation with the States of Georgia, North Carolina, South Carolina, and Virginia, and with other agencies

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PREFACE

This report was prepared by the Geological Survey in cooperation with the States of Georgia, North Carolina, South Carolina, and Virginia, and with other agencies, by personnel of the Water Resources Division, L. B. Leopold, chief, under the general direction of J. V. B. Wells, chief, Surface Water Branch, and F. J. Flynn, chief, Basic Records Section.

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A. E. Johnson ..... Columbia, S. C.
E. B. Rice ..... Raleigh, N. C.
M. T. Thomson ..... Atlanta, Ga.
D. S. Wallace, succeeded by J. W. Gambrell ..... Charlottesville, Va.

CALENDAR FOR WATER YEAR 1958

OCTOBER 1957

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

NOVEMBER 1957

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

DECEMBER 1957

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

JANUARY 1958

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

FEBRUARY 1958

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

MARCH 1958

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

APRIL 1958

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

MAY 1958

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

JUNE 1958

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

JULY 1958

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

AUGUST 1958

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

SEPTEMBER 1958

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

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SCOPE OF WORK

This volume is one of a series of 18 reports presenting measurements of stage, discharge, and content of streams, lakes, and reservoirs in the United States during the water year ending September 30, 1958. Since 1888, when the United States Geological Survey first studied streamflow in relation to problems of irrigation, similar measurements have been made at more than 14,000 gaging stations in the 48 States and at many others in the Territories of Alaska and Hawaii. On September 30, 1958, the Geological Survey and cooperating organizations were maintaining 7,090 gaging stations, including those in Alaska and Hawaii. Partial-record stations for low flow or for flood flow have been operated at many other points. In addition discharge measurements are made at miscellaneous sites. The records for the water year October 1, 1957, to September 30, 1958, at gaging stations, partial-record stations, and miscellaneous sites in the South Atlantic slope basins, James River to Savannah River are given in this report.

COOPERATION

Many State, municipal, and private organizations have cooperated with the Geological Survey in this work by either furnishing or helping to collect data. Organizations that supplied data are acknowledged in station descriptions, and organizations that assisted in the collection of data through cooperative agreements with the Survey are:

Georgia: State Department of Mines, Mining and Geology, Garland Peyton, director, and State Highway Department, R. F. Chalker, chairman.

North Carolina: State Department of Conservation and Development, W. P. Saunders, director; city of Burlington, J. D. Mackintosh, Jr., city manager; and city of Greensboro, J. R. Townsend, city manager.

South Carolina: State Highway Department, C. R. McMillan, chief highway commissioner; State Public Service Authority, R. M. Jefferies, general manager; State Development Board, R. M. Cooper, director; State Water Pollution Control Authority, W. T. Linton, executive director; and city of Spartanburg, Taylor Blalock, chairman of commissioners of public works.

Virginia: State Department of Highways, J. A. Anderson, commissioner, succeeded by F. A. Davis, succeeded by S. D. May; city of Norfolk, R. W. Fitzgerald, superintendent, Division of Water Supply; city of Newport News, W. B. Harman, director, Department of Public Utilities; county of Chesterfield, M. W. Burnett, executive secretary; city of Charlottesville, J. E. Bowen, Jr., city manager; city of Portsmouth, X. D. Murden, superintendent, Water Department; and city of Roanoke, A. S. Owens, city manager.

Assistance in the form of funds or services was given by the Corps of Engineers, Department of the Army, in collecting records published herein for 112 gaging stations, of which 2 were in Georgia, 46 in North Carolina, 30 in South Carolina, and 34 in Virginia.

Assistance was also furnished by the Agricultural Research Service and Soil Conservation Service of the United States Department of Agriculture, the Atomic Energy Commission, and the Weather Bureau of the United States Department of Commerce.

The following organizations aided in collecting records:

North Carolina: State Highway Commission; State Stream Sanitation Committee; cities of Durham and Gastonia; Erwin Mills; Carolina Power & Light Co.; and Duke Power Co.

South Carolina: Greenwood County Electric Power Commission; South Carolina Electric & Gas Co.; and South Carolina Public Service Authority.

Virginia: Appalachian Electric Power Co.; Virginia Electric & Power Co.; and Camp Manufacturing Co.

DIVISION OF WORK

The stream gaging work was done by the Water Resources Division of the Geological Survey under the direction of personnel shown in the preface. The data for stations in the several States were collected and prepared for publication in the district offices listed below.

State	District office	Address
Georgia a/	Atlanta	805 Peachtree Street.
North Carolina	Raleigh	436 Federal Building.
South Carolina b/	Columbia	210 Creason Building.
Virginia	Charlottesville	Natural Resources Building, University of Virginia.

a/ Except Augusta Canal near Augusta and Savannah River at Augusta, at Burtons Ferry Bridge, near Millhaven, and near Clyo.
b/ Including Augusta Canal near Augusta, Ga., and Savannah River at Augusta, Ga., at Burtons Ferry Bridge, near Millhaven, Ga., and near Clyo, Ga.

Information of a more detailed nature than that published for most of the gaging stations given in this report is on file in the district offices listed above. All gaging-station records for North Carolina and Virginia have been analyzed by electronic computer to give: (1) the number of days in each year that the daily discharge was between selected limits (duration tables); and (2) the lowest mean discharge for periods of 7, 15, 30, 60, 120, and 183 consecutive days in each year. In addition, the records for North Carolina give the highest mean discharge for periods of 3, 7, 15, 30, and 120 consecutive days in each year. Provisional records of discharge, information on the availability of electronic computer results, and other unpublished data concerning the gaging-station records may generally be obtained from the district office.

DEFINITION OF TERMS AND ABBREVIATIONS

The terms of streamflow and other hydrologic data, as used in this report, are defined as follows:

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied herein only to those gaging stations where a continuous record of discharge is obtained.

Partial-record station is a particular site where limited streamflow data are collected systematically over a period of years for use in hydrologic analyses.

Cubic foot per second (cfs) is the rate of discharge of a stream whose channel is 1 square foot in cross-sectional area and whose average velocity is 1 foot per second.

Cubic feet per second per square mile (cfsm) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Runoff in inches (in.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Acre-foot (ac-ft) is the quantity of water required to cover an acre to the depth of 1 foot and is equivalent to 43,560 cubic feet.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.983471 acre-feet, or 646,317 gallons, and represents a runoff of 0.0372 inch from 1 square mile.

Stage-discharge relation is the relation between gage height and the amount of water flowing in a channel, expressed as volume per unit of time.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, a long reach of the channel, or an artificial structure.

Contents is the volume of water in a reservoir. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

The drainage area of a stream at a specific location is that area, measured in a horizontal plane, which is so enclosed by a topographic divide that direct surface runoff from precipitation normally would drain by gravity into the river above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBERS

Beginning with the series of reports for the water year ending September 30, 1951, the order of listing gaging-station records was changed. In this report, in a downstream direction along the main stem all stations on a tributary entering above a main-stem station are listed before that station. If a tributary enters between two main-stem stations, it is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. To indicate the rank of any tributary on which a gaging station is situated and the stream to which it is immediately tributary, each indention in the listing of gaging stations in the table of contents of this report represents one rank. This downstream order and system of indention show which gaging stations are on tributaries between any two stations on a main stem and the rank of the tributary on which each gaging station is situated.

The order of listing used before the publication of the 1951 report listed first all stations on the main stem from headwaters toward mouth, then all stations on the uppermost tributary to the main stem from the tributary's source to mouth, and then all stations from source to mouth of the uppermost tributary to the tributary.

As an added means of identification, each gaging station and partial-record station has been assigned a station number. The numbers have been assigned in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and regular gaging stations, so that the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete number for each station has eight digits, but the station number as shown in this report, just to the left of the station name, consists of only the essential digits of the complete number. For example, for a station with the complete number 2A-0125.00, the station number shown in this report is

125. The notation in the two places to the left of the hyphen is the part number; it is 2A for all stations in this report and is therefore omitted.

EXPLANATION OF DATA

The base data collected at gaging stations consist of records of stage and measurements of discharge. In addition, observations of factors affecting the stage-discharge relation, weather records, and other information are used to supplement base data in determining the daily flow. The records of stage are obtained either from direct readings on a non-recording gage or from a water-stage recorder that gives a continuous record of fluctuations. Measurements of discharge are made with a current meter by the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in Water-Supply Paper 888 and are also outlined in standard textbooks on the measurement of stream discharge.

Rating tables giving the discharge for any stage are prepared from stage-discharge relation curves defined by discharge measurements. If extensions to the rating curves are necessary to define the extremes of discharge, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs, and by other methods), velocity-area studies, and logarithmic plotting. The application of the daily mean gage height to those rating tables gives the daily mean discharge, from which the monthly and the yearly mean discharge are computed. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is essentially the shifting-control method.

At some gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in determining discharge. Information requisite for determining the slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage. If so, the rate of change in stage is used as a factor in the determination of discharge.

At most gaging stations in the northern part of the United States and at some in the mountainous regions of other parts the stage-discharge relation is affected by ice during the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and engineers, and comparable records of discharge for other stations in the same or nearby basins. If the stage-discharge relation is affected by ice, this information is given in a note to the table. No mention is made of occasional days of ice effect if the degree of accuracy of daily records is not changed.

The data herein presented generally comprise a description of the station, a skeleton rating table, and a table showing the daily discharge and monthly and yearly discharge of the stream. Records are published for the water year which begins on October 1 and ends on September 30. A calendar for the water year 1958 is shown on page IV for the purpose of finding the day of the week for any date.

The description of the station gives the location, drainage area, records available, type and history of gages, average discharge, extremes of discharge, general remarks, and notations of revisions of the previously published record. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "Location" for some stations, is that determined and used by the Corps of Engineers unless otherwise noted. Under "Records available" are given the periods for which there are published records generally equivalent to those at the present site. Under "Gage" are given the type of gage currently in use and the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of records available. Under "Average discharge" is given the average discharge for the number of years indicated. It is not given for stations having fewer than five complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. Under "Extremes" are given the maximum discharge and gage height; the minimum discharge if there is little or no regulation; the minimum daily discharge if there is extensive regulation (also the minimum discharge if useful); and the minimum gage height (unless it is of no importance). In the first paragraph, the data given are for the complete current water year unless otherwise specified. In the second paragraph, the data given are for the periods of record within the calendar year dates in the heading (not necessarily those for the complete years indicated by the heading dates). Reliable information concerning major floods that have occurred outside the period of record are given in the third or last paragraph under "Extremes." Unless otherwise qualified, the maximum discharge corresponds to the crest stage obtained by use of a water-stage recorder, a crest-stage indicator, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur at the same time as the maximum discharge, it is given separately. Information pertaining to the accuracy of the records and conditions which affect the natural flow at the gaging station is given under "Remarks."

Previously published records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual reports. In order to make it easier to find such revised records, a paragraph headed "Revisions (water years)" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 1933. If no daily, monthly, or annual figures of discharge are concerned in the revision, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic

feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches, resulting from a revision of the drainage area only, are usually not published in the annual series of reports.

Skeleton rating tables are generally published for all stations except those at which the daily discharge for the greater part of the open-water period was determined by the shifting-control method, the slope method, or other special methods involving an equivalent adjustment to the gage height of more than one-tenth foot. Skeleton rating tables are generally not published for stations on canals.

For stations equipped with water-stage recorders, except those on streams subject to sudden or rapid fluctuation, the daily table gives the discharge corresponding to the daily mean gage height. For stations subject to such fluctuation the daily mean gage height may not indicate the true daily mean discharge, which must be obtained by averaging the discharge for parts of the day or by using the discharge integrator, an instrument for obtaining the daily mean discharge from a continuous gage-height graph and containing, as an essential element, a curve representing the stage-discharge relation at the station. For stations equipped with nonrecording gages, the table of daily discharge gives the discharge corresponding to once-daily readings of the gage, or to the mean of twice-daily readings, or to the mean gage height determined from gage-height graphs based on gage readings. For periods of rapidly changing stage, the daily mean discharge is determined from gage-height graphs based on gage readings, the frequency of which is stated in the station description.

In the table of daily discharge, the figures for the maximum day and the minimum day for each month are underlined. If the figure is repeated, it is underlined only on the first day of its occurrence.

In the monthly summary below the daily table, the line headed "Total" gives the sum of the daily figures; it is the total cfs-days for the month. The line headed "Mean" gives the average flow in cubic feet per second during the month. Discharge for the month may be expressed in cubic feet per second per square mile (line headed "Cfsm"), or in inches (line headed "In."), or in acre-feet (line headed "Ac-ft"). Figures for cubic feet per second per square mile and runoff in inches are omitted if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches.

In the yearly summary below the monthly summary, the figures of maximum are the maximum daily discharges, not the momentary discharges when the water was at crest stage. Likewise, the minimums in this summary are the minimum daily discharges.

Peak discharges and the times of their occurrence and corresponding gage heights of most stations are listed below the table of daily and monthly discharge. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man.

Footnotes to the table of daily discharge indicate periods when discharge was computed or estimated by unusual or special methods during periods of no gage-height record and ice effect, or by other effects that reduce the degree of accuracy of the records. Days on

which discharge measurements were made are indicated by asterisk and footnote unless they were made at frequent regular intervals, in which instance the general frequency of discharge measurements is given under "Remarks" in the station description.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published each year for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

At many gaging stations water samples are collected from the streams for the purpose of making chemical analyses, computing dissolved solids, suspended sediment loads, and particle-size distribution, or measuring water temperatures. For most of these samples the results are published in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States" which is issued in four volumes. In this report under "Remarks" a reference is made to quality-of-water records collected at gaging stations on a regular basis and published in the quality-of-water reports. At many other gaging stations quality-of-water data are obtained at irregular intervals and published as "miscellaneous analyses" in quality-of-water reports; such records are not referred to in "Remarks" paragraph in this report. At many gaging stations water temperature is obtained also at the time a discharge measurement is made; such temperature readings are not reported in the quality-of-water annual reports.

Data collected at partial-record stations and at miscellaneous sites are given at the end of each report. Partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements at miscellaneous sites are given in a third table. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are given in special tables after the list of measurements at miscellaneous sites.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description states the degree of accuracy of the records. "Excellent" indicates that, in general, the error in the daily records is believed to be less than 5 percent; "good," less than 10 percent; "fair," less than 15 percent; and "poor," probably more than 15 percent. The records of monthly and yearly mean discharge and runoff are, in general, more nearly accurate than the daily records.

Discharge at some stations, as indicated by the monthly mean, may vary widely from natural runoff, owing to diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not

included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur when relatively large negative adjustments are made or when evaporation is large in comparison with the observed discharge.

Many gaging stations on streams in the irrigated areas of the United States are situated above most of the diversions from those streams, and therefore the discharge recorded does not actually show the water supply available at the stations for further development, because water must first be supplied to existing irrigation systems.

PUBLICATIONS

To facilitate publication of the annual series of reports, the area of the United States is divided into 14 parts whose boundaries coincide with certain natural drainage lines. Formerly, the results of streamflow measurements were published in 14 volumes, one for each of the 14 parts. Beginning with the reports for 1951, the records are published in 18 volumes, there being 2 volumes each for Parts 1, 2, 3, and 6. The boundaries of the various parts are indicated by the following list and the map in figure 1.

Part 1. North Atlantic slope basins, in two volumes:
- A, North Atlantic slope basins, Maine to Connecticut.
- B, North Atlantic slope basins, New York to York River.

2. South Atlantic slope and eastern Gulf of Mexico basins, in two volumes:
- A, South Atlantic slope basins, James River to Savannah River.
- B, South Atlantic slope and eastern Gulf of Mexico basins, Ogeechee River to Pearl River.

3. Ohio River basin, in two volumes:
- A, Ohio River basin except Cumberland and Tennessee River basins.
- B, Cumberland and Tennessee River basins.

4. St. Lawrence River basin.
5. Hudson Bay and upper Mississippi River basins.
6. Missouri River basin, in two volumes:
- A, Missouri River basin above Sioux City, Iowa.
- B, Missouri River basin below Sioux City, Iowa.

7. Lower Mississippi River basin.
8. Western Gulf of Mexico basins.
9. Colorado River basin.
10. The Great Basin.
11. Pacific slope basins in California.
12. Pacific slope basins in Washington and upper Columbia River basin.
13. Snake River basin.
14. Pacific slope basins in Oregon and lower Columbia River basin.

Water-supply papers and other publications of the Geological Survey containing data on the water resources of the United States may be purchased or consulted as follows:

1. Copies may be purchased from the Superintendent of Documents, Government Printing Office, Washington 25, D. C., who will, on application, furnish lists giving prices. A list of Geological Survey publications may also be obtained by applying to the Director, Geological Survey, Washington, D. C.

2. Sets of the reports may be consulted in the libraries of the principal cities in the United States.

3. Sets are available for consultation in the offices of the Water Resources Division of the Geological Survey. Addresses of the offices in the area covered by this report are given on page 2.

Early records of the flow of streams in the United States are published in the reports listed herein. In many of these reports records for years earlier than those indicated have been included for some streams.

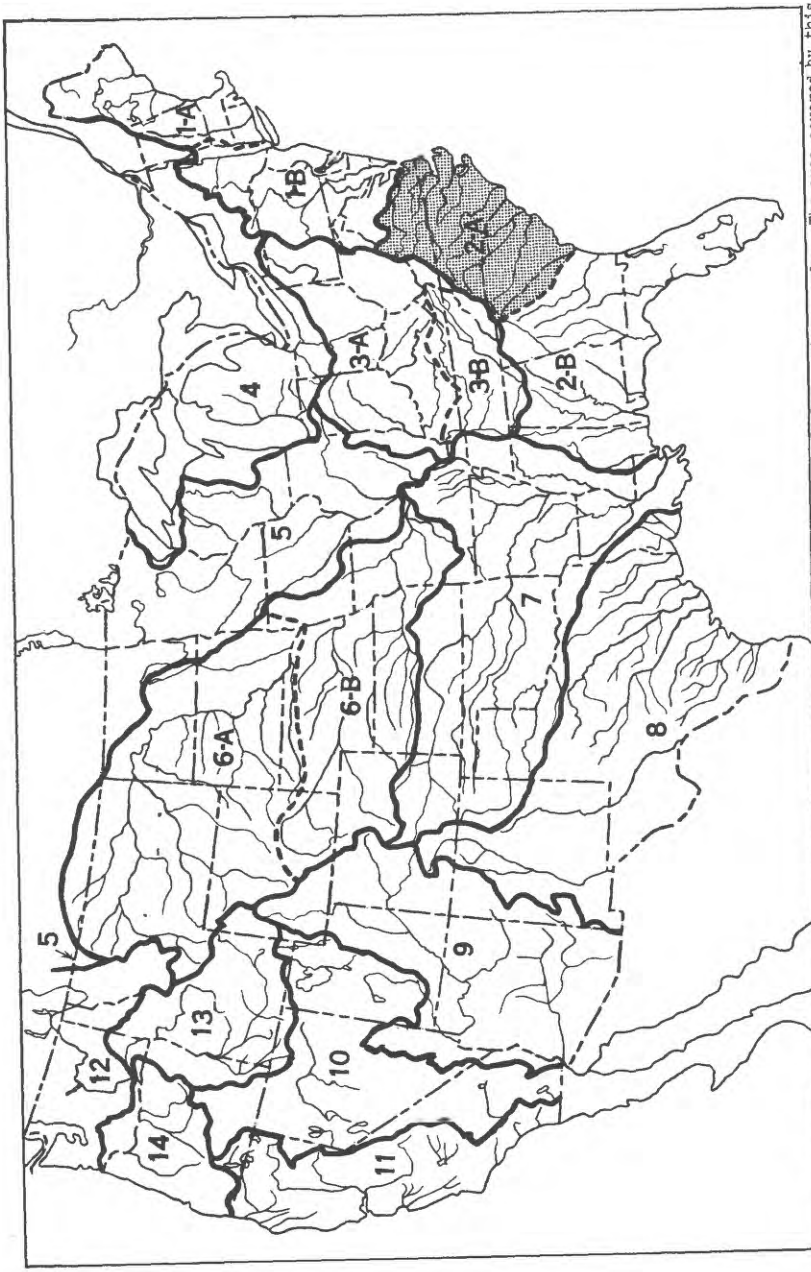

Figure 1.--Map of the United States showing areas covered by the 18 annual volumes on surface water supply. The area covered by this report is shaded.

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Streamflow data for the years 1884-1901, in reports of the Geological Survey

(A = Annual Report; B = Bulletin)

Report	Character of data	Year
10th A, pt. 2	Descriptive information only.	
11th A, pt. 2	Monthly discharge and descriptive information.....	1884 to September 1890.
12th A, pt. 2	....do.....	1884 to June 30, 1891.
13th A, pt. 3	....do.....	1884-92.
14th A, pt. 2	Monthly discharge.....	1888-93.
B 131.....	Descriptions, measurements, gage heights, and ratings.....	1893-94.
16th A, pt. 2	Descriptive information only.	
B 140.....	Descriptions, measurements, gage heights, ratings, and monthly discharge.	1895.
WSP 11.....	Gage heights.....	1896.
18th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge..	1895-96.
WSP 15.....	Descriptions, measurements, and gage heights of streams east of the Mississippi River, and Missouri River and tributaries above Kansas River.	1897.
WSP 16.....	Descriptions, measurements, and gage heights of streams west of the Mississippi River, except Missouri River and tributaries above Kansas River.	1897.
19th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge..	1897.
WSP 27.....	Measurements, ratings, and gage heights of streams east of the Mississippi River, and Missouri River and tributaries.	1898.
WSP 28.....	Measurements, ratings, and gage heights of streams west of the Mississippi River, except Missouri River and tributaries.	1898.
20th A, pt. 4	Monthly discharge.....	1898.
WSP 35 to 39.	Descriptions, measurements, gage heights, and ratings.....	1899.
21st A, pt. 4	Monthly discharge.....	1899.
WSP 47 to 52.	Descriptions, measurements, gage heights, and ratings.....	1900.
22d A, pt. 4.	Monthly discharge.....	1900.
WSP 65, 66....	Descriptions, measurements, gage heights, and ratings.....	1901.
WSP 75.....	Monthly discharge.....	1901.

Reports on surface-water supply containing records from 1899 to date for drainage basins in this report are listed below. The data for any particular gaging station will, in general, be found in the reports covering the years during which the station was maintained. Before 1951, records for the South Atlantic slope basins, James River to Savannah River, were included with those for the South Atlantic slope and eastern Gulf of Mexico basins.

Numbers of water-supply papers containing results of stream measurements in the South Atlantic slope basins, James River to Savannah River, 1899-1958

Year	WSP	Year	WSP	Year	WSP	Year	WSP	Year	WSP
1899	a35, 36	1912	322	1925	602	1937	822	1949	1142
1900	48	1913	352	1926	622	1938	852	1950	1172
1901	65, 75	1914	382	1927	642	1939	872	1951	1203
1902	a82, 83	1915	402	1928	662	1940	892	1952	1233
1903	a97, 98	1916	432	1929	682	1941	922	1953	1273
1904	b126, 127	1917	452	1930	697	1942	952	1954	1333
1905	b167, 168	1918	472	1931	712	1943	972	1955	1383
1906	b203, 204	1919-20	502	1932	727	1944	1002	1956	1433
1907-8	242	1921	522	1933	742	1945	1032	1957	1503
1909	262	1922	542	1934	757	1946	1052	1958	1553
1910	282	1923	562	1935	782	1947	1082		
1911	302	1924	582	1936	802	1948	1112		

a James River only.
b Susquehanna River to Yadkin River.

A compilation of records for the area covered by this report through September 1950 has been published as Water-Supply Paper 1303. That report contains a summary of monthly and annual discharges for all previously published records as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical.

The reports listed in the foregoing tables contain the customary records of discharge collected during the systematic operation of gaging stations. Detailed information on the stage and discharge of many streams during major floods has been included in special reports on these floods published by the Geological Survey. The more recent of these special reports also contain other pertinent hydrologic information and analyses and compilations of data relating to earlier notable floods. The following list gives the numbers and titles of these reports:

Report

WSP 96: Destructive floods in the United States in 1903.
WSP 771: Floods in the United States, magnitude and frequency.
WSP 800: The floods of March 1936, Part 3, Potomac, James, and upper Ohio Rivers.
WSP 846: Maximum discharges at stream-measurement stations through September 1938.

Special reports on floods published by the Geological Survey and other agencies--Continued

	Report
WSP 1066:	Floods of August 1940 in southeastern States.
WSP 1137-I:	Summary of floods in the United States during 1950.
WSP 1260-F:	Summary of floods in the United States during 1952.
Cir. 100:	Floods in Georgia, frequency and magnitude.

RECORDS OF DISCHARGE COLLECTED BY AGENCIES OTHER THAN THE GEOLOGICAL SURVEY

The table below contains a list of gaging stations for the area covered by this report, at which records of discharge were collected during the water year October 1957 to September 1958 by agencies other than the Geological Survey. Current records of these stations are not contained in publications of the Geological Survey. Prior to July 1, 1957, records now collected by the Virginia Department of Conservation and Development were collected through cooperative agreements with the Survey, or by agreements between other State agencies and the Survey.

Records of discharge collected by agencies other than the Geological Survey

Stream	Location	Period	Collected by
Appomattox River	At Mattoax, Va.	1900-1905, 1926-58	Department of Conservation and Development.
Back Creek	Near Mountain Grove, Va.	1951-58	Do.
Buffalo Creek	Near Hampden Sydney, Va.	1946-58	Do.
Buffalo River	Near Norwood, Va.	1940-58	Do.
Calfpasture River	Above Mill Creek at Goshen, Va.	1939-58	Do.
Craig Creek	At Parr, Va.	1925-58	Do.
Cub Creek	At Phenix, Va.	1946-58	Do.
Cypress Swamp	At Cypress Chapel, Va.	1953-58	Do.
Deep Creek	Near Mannboro, Va.	1946-58	Do.
Fine Creek	At Fine Creek Mills, Va.	1944-58	Do.
Fontaine Creek	Near Brink, Va.	1953-58	Do.
Georges Creek	Near Gretna, Va.	1949-58	Do.
Goose Creek	Near Huddleston, Va.	1930-58	Do.
Hardware River	Below Briery Run near Scottsville, Va.	1938-58	Do.
James River	At Holcombs Rock, Va.	1900-15a/, 1926-58	Do.
Do.	At Lick Run, Va.	1925-58	Do.
Do.	Near Richmond, Va.	1934-58	Do.
James River & Kanawha Canal	....do.	1936-58	Do.
Johns Creek	At Newcastle, Va.	1926-58	Do.
Kerrs Creek	Near Lexington, Va.	1927-58	Do.
Maury River	....do.	1925-58	Do.
Meherrin River	At Emporia, Va.	1951-58	Do.
North Mayo River	Near Spencer, Va.	1928-58	Do.
North Meherrin River	Near Keysville, Va.	1948-58	Do.
Do.	Near Lunenburg, Va.	1946-58	Do.
Nottoway River	Near Burkeville, Va.	1946-58	Do.
Do.	Near Rawlings, Va.	1950-58	Do.
Otter River	Near Bedford, Va.	1943-58	Do.
Pedlar River	At Pedlar Dam, Va.	1921-58	City of Lynchburg, Va.
Piney River	At Piney River, Va.	1949-58	Department of Conservation and Development.
Roanoke River	At Lafayette, Va.	1943-58	Do.
Rockfish River	Near Greenfield, Va.	1943-58	Do.
Sandy River	Near Danville, Va.	1929-58	Do.
Smith River	At Martinsville, Va.	1929-58	Do.
South River	Near Riverside, Va.	1949-58	Do.
Stony Creek	Near Dinwiddie, Va.	1946-58	Do.
Tye River	Near Lovingston, Va.	1938-58	Do.
Willis River	At Flanagan Mills, Va.	1926-58	Do.

a Gage heights or gage heights and discharge measurements only.

Note.--The Agricultural Research Service of the U. S. Department of Agriculture has collected records of runoff from four areas of 185 to 1,450 acres in Brunswick and Halifax Counties, Va., beginning in 1958. These records are in the files of the Agricultural Research Service.

HYDROLOGIC CONDITIONS

Streamflow was excessive in most of North and South Carolina during November to January and April to June. In May, the entire area covered by this report had excessive streamflow. Blackwater River at Zuni, Va., had record-high monthly mean discharge in May and June. Neuse River near Clayton, N. C., was record-high in May, while Lynches River at Effingham, S. C., equaled the previous high for May. A few small streams in southern North Carolina had flood peaks in November reported to be the highest in 25 years; others had peaks in August that were the highest in about 15 years. The only deficient streamflow during the year was in South Carolina in September.

Figure 2 on page 12, for which records of three long-term gaging stations were used, shows a comparison of the monthly and yearly mean discharge for the 1958 water year with the median discharge for the period 1921-45.

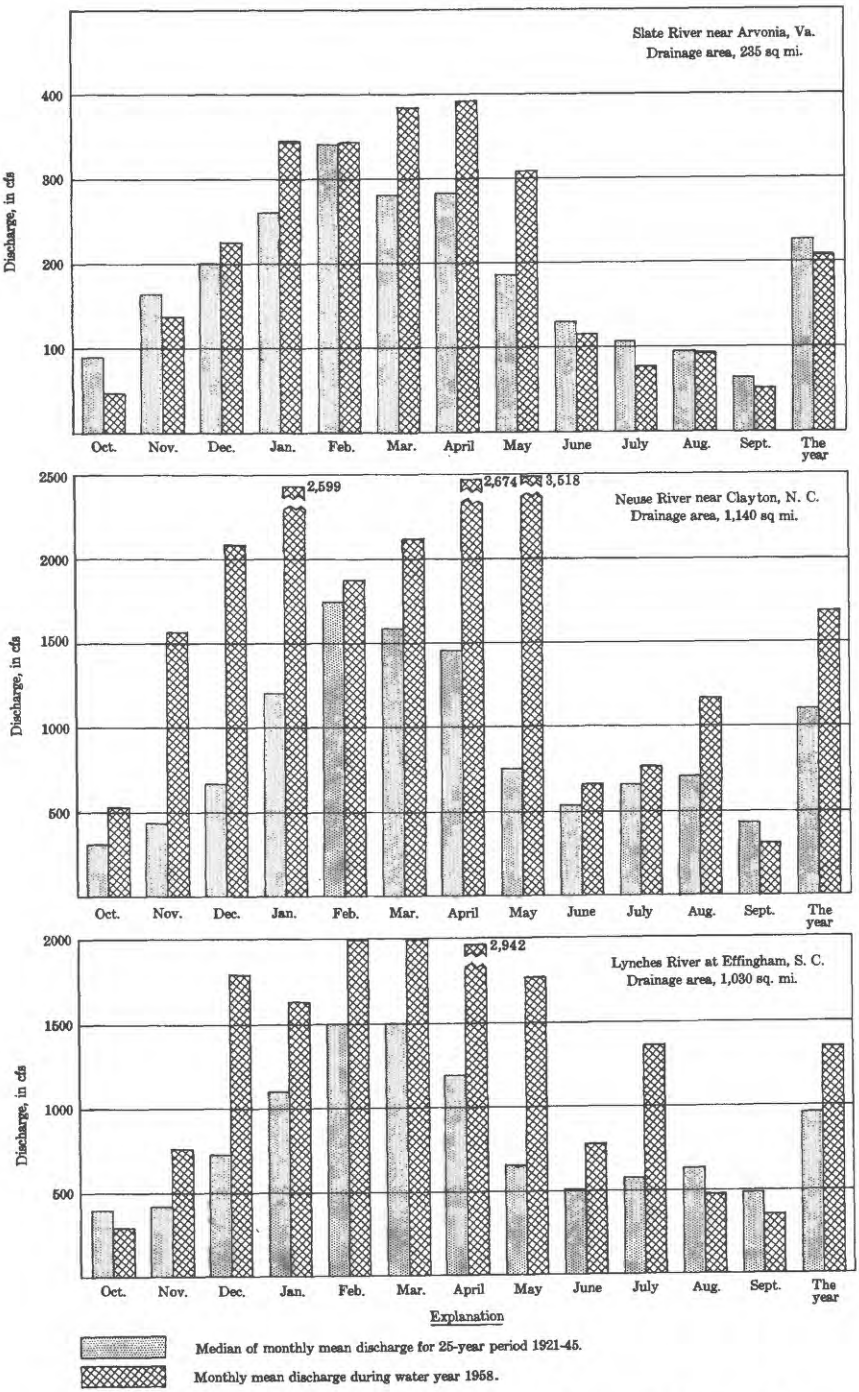

Figure 2. Comparison of discharge at three key gaging stations during 1958 water year with median discharge for 25-year period.

JAMES RIVER BASIN

125. Jackson River at Falling Spring, Va.

Location.--Lat 37°52'36", long 79°58'39", on right bank 20 ft upstream from Smith Bridge, 0.8 mile south of town of Falling Spring, Alleghany County, 1.6 miles downstream from Falling Springs Creek, and 5.5 miles north of Covington.

Drainage area.--409 sq mi.

Records available.--April 1925 to September 1958. Prior to October 1934, published as "at Barber."

Gage.--Water-stage recorder. Datum of gage is 1,333.49 ft above mean sea level (levels by Corps of Engineers). Prior to Oct. 26, 1934, chain gage at same site and datum.

Average discharge.--33 years, 483 cfs.

Extremes.--Maximum discharge during year, 6,080 cfs Dec. 26 (gage height, 9.46 ft); minimum, 105 cfs Sept. 20; minimum gage height, 3.17 ft Oct. 16, 17.
1925-58: Maximum discharge, 24,700 cfs Mar. 17, 1936 (gage height, 14.74 ft), from rating curve extended above 17,000 cfs on basis of records for other station in James River basin; minimum, 36 cfs Oct. 12, 1946; minimum daily, 58 cfs Sept. 28-30, Oct. 1, 3, 5, 1930.

Remarks.--Records excellent except those for periods of ice effect, which are good.

Revisions (water years).--WSP 952: 1927, 1928(M), 1929-30, 1932-40. WSP 1303: 1926(M), 1930-34(M).

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Sept. 7-21)

3.1	98	6.0	1,350
3.4	170	8.0	3,120
4.0	355	9.0	5,000
5.0	755		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	198	165	276	575	927	1,350	3,720	1,190	282	128	216	168
2	178	155	255	499	925	975	2,620	1,000	270	122	397	162
3	155	145	237	418	710	900	1,990	850	249	120	652	148
4	138	138	234	b350	*575	*850	1,710	825	228	120	1,120	142
5	128	132	228	b290	499	732	1,470	1,550	219	120	575	155
6	120	130	201	b280	511	665	1,910	4,100	210	145	386	178
7	135	125	327	*b265	1,350	665	3,380	2,430	204	168	299	150
8	273	138	2,770	b265	2,670	688	*2,430	2,380	192	172	258	138
9	225	218	*1,950	b215	1,430	665	1,710	1,790	190	228	276	132
10	190	261	1,230	b180	950	642	1,270	1,310	201	190	261	120
11	165	228	900	b215	778	688	1,160	1,190	198	172	*228	118
12	148	*198	665	b185	642	642	1,060	*1,270	190	178	219	118
13	130	185	523	b160	555	755	950	1,030	178	190	210	116
14	*122	182	456	824	464	688	875	875	249	*172	213	113
15	118	288	411	1,060	b400	598	825	778	261	165	261	*111
16	116	355	362	732	b350	535	800	688	*225	152	306	109
17	120	334	327	598	b315	503	755	620	201	148	279	111
18	140	299	299	511	b280	484	710	642	185	152	252	118
19	170	362	276	418	b270	470	642	555	182	150	228	109
20	165	598	282	376	b260	460	575	511	178	150	219	107
21	152	535	376	404	b260	495	535	467	172	145	216	162
22	140	432	492	1,530	b260	503	575	428	168	162	210	195
23	132	386	450	1,430	267	531	1,550	422	162	219	198	170
24	180	418	408	950	302	710	1,120	418	160	237	216	145
25	324	436	376	1,350	453	825	1,190	394	155	306	606	135
26	324	428	2,760	1,120	800	1,550	1,000	372	148	366	488	132
27	264	376	3,540	975	1,350	2,030	950	334	148	383	355	122
28	225	330	1,710	778	1,090	2,030	2,300	313	142	282	270	116
29	195	306	1,090	642	-	2,070	2,160	306	135	285	225	111
30	180	288	825	555	-------	2,380	1,590	282	130	273	201	111
31	175	-------	665	499	-------	4,020	-------	261	-------	234	180	------
Total	5,425	8,571	24,901	18,649	19,643	31,099	43,532	29,581	5,812	6,034	10,020	4,022
Mean	175	286	803	602	702	1,003	1,451	954	194	195	323	134
Cfsm	0.428	0.699	1.96	1.47	1.72	2.45	3.55	2.33	0.474	0.477	0.790	0.328
In.	0.49	0.78	2.26	1.70	1.79	2.82	3.96	2.69	0.53	0.55	0.91	0.37

Calendar year 1957: Max 7,920 Min 77 Mean 533 Cfsm 1.30 In. 17.71
Water year 1957-58: Max 4,100 Min 107 Mean 568 Cfsm 1.39 In. 18.85

Peak discharge (base, 4,000 cfs).--Dec. 26 (9:30 p.m.) 6,080 cfs (9.46 ft); Apr. 1 (2 a.m.) 4,780 cfs (8.89 ft); May 6 (5:30 a.m.) 5,480 cfs (9.20 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

130. Dunlap Creek near Covington, Va.

Location.--Lat 37°48'10", long 80°02'50", on right bank 20 ft downstream from bridge on U. S. Highway 60, 2.2 miles downstream from Ogle Creek, and 3.0 miles west of Covington, Alleghany County.

Drainage area.--166 sq mi.

Records available.--October 1928 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 1,294.21 ft above mean sea level (levels by Corps of Engineers). Prior to Dec. 8, 1949, chain gage at same site and datum.

Average discharge.--30 years, 161 cfs.

Extremes.--Maximum discharge during year, 5,570 cfs Mar. 31 (gage height, 8.56 ft); minimum recorded, 20 cfs about July 3 (gage height, 0.98 ft).
1928-58: Maximum discharge, 8,370 cfs Mar. 17, 1936 (gage height, 10.52 ft, from floodmarks), from rating curve extended above 4,500 cfs on basis of velocity-area studies and records for other stations in James River basin; minimum, 6.7 cfs Aug. 31, Sept. 2, 1957 (gage height, 0.79 ft).

Remarks.--Records good. Occasional diurnal fluctuation caused by dam above station.

Revisions (water years).--WSP 972: 1929-30, 1932-34, 1942. WSP 1303: 1929-35(M), 1937-38(M), 1941-48(M).

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 26				Dec. 27 to Sept. 30			
0.9	12	2.0	184	1.0	21	3.0	555
1.1	28	2.5	321	1.2	41	4.0	1,130
1.3	50	3.0	550	1.5	90	5.0	1,840
1.6	98	4.0	1,130	2.0	208	8.0	4,830
				2.5	355		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	206	49	104	195	412	570	1,780	425	68	a28	49	41
2	138	46	91	170	506	408	920	355	77	a25	514	39
3	104	46	84	141	380	334	595	320	68	a23	571	36
4	82	45	85	119	*293	*287	474	314	60	a23	1,130	33
5	70	43	85	b100	250	244	376	937	55	a23	290	30
6	60	42	78	b100	321	218	390	1,620	52	a30	172	29
7	54	40	137	*101	1,340	200	575	1,200	49	a40	116	28
8	50	52	1,030	99	1,390	190	*537	1,530	47	a40	92	27
9	45	172	740	b95	600	195	408	830	45	65	84	26
10	42	145	*460	b95	394	200	338	537	49	75	65	26
11	38	110	311	79	296	266	334	474	45	69	*55	25
12	36	*89	226	b65	237	269	334	*506	47	58	49	24
13	34	75	175	b62	200	314	317	433	42	63	48	24
14	32	75	154	368	177	287	290	341	58	*55	63	24
15	*30	116	134	461	b150	247	260	284	60	45	69	*23
16	30	116	118	352	b130	221	239	244	*63	39	88	21
17	32	118	106	278	b110	208	211	221	51	36	73	21
18	44	136	94	234	b105	208	190	205	45	41	57	21
19	48	209	89	187	b95	200	177	177	41	40	49	21
20	44	304	94	168	b90	211	165	163	39	47	44	22
21	39	237	170	172	b90	239	153	144	37	44	38	34
22	37	177	192	344	90	231	219	127	36	85	36	38
23	35	159	170	397	90	244	1,470	127	34	82	33	32
24	74	222	154	330	97	352	740	116	36	99	39	29
25	120	255	143	474	108	606	860	114	33	92	195	27
26	96	229	993	492	238	1,760	550	101	34	672	148	26
27	77	182	1,040	492	1,060	1,880	526	92	39	519	99	26
28	66	150	519	355	740	1,230	1,100	88	34	190	73	24
29	56	132	355	284	-	950	800	84	a30	112	60	23
30	51	120	266	242	-------	1,350	537	75	a28	77	52	23
31	50	-------	221	221	-------	3,920	-------	69	-------	58	47	-------
Total	1,920	3,891	8,618	7,272	9,989	18,039	15,865	12,253	1,402	2,895	4,498	823
Mean	61.9	130	278	235	357	582	529	395	46.7	93.4	145	27.4
Cfsm	0.373	0.783	1.67	1.42	2.15	3.51	3.19	2.38	0.281	0.563	0.873	0.165
In.	0.43	0.87	1.92	1.64	2.24	4.05	3.56	2.74	0.31	0.65	1.01	0.18

Calendar year 1957: Max 4,100 Min 13 Mean 203 Cfsm 1.22 In. 16.64
Water year 1957-58: Max 3,920 Min 21 Mean 240 Cfsm 1.45 In. 19.60

Peak discharge (base, 2,000 cfs).--Feb. 7 (11 p.m.) 2,380 cfs (5.61 ft); Mar. 27 (8:30 a.m.) 2,290 cfs (5.51 ft); Mar. 31 (5:30 a.m.) 5,570 cfs (8.56 ft); Apr. 23 (7 a.m.) 2,160 cfs (5.36 ft); May 6 (12:30 a.m.) 2,380 cfs (5.59 ft); July 26 (8:30 p.m.) 4,950 cfs (8.07 ft); Aug. 4 (12:30 a.m.) 2,650 cfs (5.93 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Jackson River at Falling Springs.
b Stage-discharge relation affected by ice.

160. Cowpasture River near Clifton Forge, Va.

Location.--Lat 37°47'30", long 79°45'35", on left bank 100 ft downstream from highway bridge, 2.5 miles upstream from confluence with Jackson River, and 4.0 miles southeast of Clifton Forge, Alleghany County.

Drainage area.--456 sq mi.

Records available.--March 1925 to September 1958. Records for May 1907 to August 1908, published in WSP 242, have been found to be unreliable and should not be used.

Gage.--Water-stage recorder. Datum of gage is 1,006.93 ft above mean sea level (levels by Corps of Engineers). March 1925 to October 1934, chain gage at site 100 ft upstream at present datum.

Average discharge.--33 years (1925-58), 518 cfs.

Extremes.--Maximum discharge during year, 5,850 cfs Apr. 1 (gage height, 7.68 ft); minimum, 93 cfs Sept. 29, 30 (gage height, 1.82 ft).
1925-58: Maximum discharge, 34,200 cfs Mar. 18, 1936 (gage height, 18.62 ft), from rating curve extended above 13,000 cfs on basis of records for other stations in James River basin; minimum, 38 cfs Sept. 2, 1932 (gage height, 1.70 ft).
Flood in March 1913 reached a stage of 20.8 ft, from floodmarks (discharge, about 45,000 cfs), from rating curve extended above 13,000 cfs on basis of records for other stations in James River basin.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair.

Revisions (water years).--WSP 952: 1925-41. See also Records available.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Nov. 12-14)

1.8	88	4.0	1,270
2.2	200	5.0	2,200
3.0	548	8.0	6,300

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	161	a170	337	590	1,120	1,510	4,950	1,310	276	125	147	150
2	197	a160	302	516	1,430	1,250	3,330	1,070	720	125	178	144
3	159	a150	281	430	955	*1,030	2,260	902	476	122	a170	133
4	138	147	272	363	*740	902	1,790	852	341	117	a700	125
5	125	138	265	315	596	775	1,560	1,300	289	112	a500	128
6	117	133	246	*b305	554	672	1,750	3,980	261	117	a350	128
7	112	a130	470	b300	938	627	*3,460	2,810	239	204	a300	125
8	584	a125	3,540	b300	2,380	596	2,260	2,440	221	184	a250	141
9	394	a200	2,560	b260	a1,500	584	1,560	1,790	214	247	a200	125
10	272	a350	*1,560	b250	a1,100	596	1,190	1,350	214	265	a180	115
11	210	*a250	1,110	b250	a800	761	1,150	1,150	224	187	150	110
12	168	210	817	b250	a700	845	1,230	1,110	210	184	*133	107
13	141	187	584	265	a600	1,110	1,150	*925	194	228	133	105
14	a130	184	506	504	a510	992	992	768	246	190	153	102
15	*a115	302	457	1,110	a420	895	859	672	261	*174	168	100
16	110	472	403	838	a350	a770	782	596	239	150	242	*98
17	115	426	359	672	a300	a700	713	532	*207	138	171	98
18	197	385	337	554	a300	a670	640	848	187	133	147	98
19	239	570	315	453	a270	a660	578	955	181	133	128	100
20	218	1,270	315	394	a250	a630	532	789	178	141	117	100
21	181	940	324	430	a250	a750	490	614	178	133	112	150
22	159	640	360	1,190	b240	a710	495	506	174	138	107	194
23	147	522	319	1,270	b280	a680	1,380	457	171	609	102	171
24	156	572	302	955	319	a780	1,690	448	171	527	107	130
25	239	602	294	1,690	430	a940	1,350	426	171	412	1,220	117
26	324	560	1,700	1,690	621	a1,740	1,110	394	162	302	910	110
27	276	481	4,110	1,390	1,600	a2,250	955	355	162	285	444	105
28	a235	426	1,840	1,070	1,740	a2,040	2,870	319	150	250	294	100
29	a205	385	1,230	817	-	a1,800	2,740	315	144	204	224	95
30	a185	363	902	686	-------	a2,400	1,790	294	133	200	190	93
31	a180	-------	692	614	-------	4,800	-------	272	-------	168	165	-------
Total	6,209	11,450	27,099	20,721	21,293	35,445	47,606	30,549	6,994	6,504	8,392	3,597
Mean	200	382	874	668	760	1,143	1,587	985	233	210	271	120
Cfsm	0.439	0.838	1.92	1.46	1.67	2.51	3.48	2.16	0.511	0.461	0.594	0.263
In.	0.51	0.94	2.21	1.68	1.74	2.89	3.88	2.49	0.57	0.53	0.68	0.29

Calendar year 1957: Max 8,830 Min 54 Mean 559 Cfsm 1.23 In. 16.63
Water year 1957-58: Max 4,950 Min 93 Mean 619 Cfsm 1.36 In. 18.41

Peak discharge (base, 5,000 cfs).--Dec. 27 (3:30 a.m.) 5,400 cfs (7.39 ft); Apr. 1 (5:30 a.m.) 5,850 cfs (7.68 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Dunlap Creek near Covington.
b Stage-discharge relation affected by ice.

185. Catawba Creek near Catawba, Va.

Location.--Lat 37°28'05", long 80°00'20", on right bank 80 ft above highway bridge, 1.0 mile downstream from Little Catawba Creek, 1.9 miles west of Haymakertown, and 8.2 miles northeast of Catawba, Roanoke County.

Drainage area.--34 sq mi, approximately.

Records available.--September 1943 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 1,299.96 ft above mean sea level, datum of 1929. Prior to Aug. 1, 1953, staff gage at site 80 ft downstream at same datum.

Average discharge.--15 years, 37.7 cfs (adjusted for pumpage since October 1952).

Extremes.--Maximum discharge during year, 2,180 cfs May 5 (gage height, 5.30 ft); minimum, 3.3 cfs Sept. 8-11, 17 (gage height, 1.45 ft).
1943-58: Maximum discharge, 5,670 cfs Mar. 1, 1954 (gage height, 6.58 ft), from rating curve extended above 620 cfs by logarithmic plotting; minimum, 2.2 cfs Sept. 7-11, 1944 (gage height, 0.54 ft), site and datum then in use.
Flood in August 1940 reached a stage of 13.26 ft, from information by observer.

Remarks.--Records fair. Lone Star Cement Co. pumps about 0.4 cfs below gage and returns it above the gage pool.

Revisions (water years).--WSP 1303: 1944-45(M).

Rating tables, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-17		Oct. 18 to May 17				May 18 to Sept. 30			
1.6	10	1.6	7.7	3.0	175	1.4	2.4	2.0	30
1.8	19	1.8	15	3.4	305	1.5	4.2	2.3	56
2.0	32	2.0	26	3.7	455	1.6	6.8	2.6	98
2.5	91	2.3	56	4.0	695	1.7	11		
		2.6	98	5.0	1,760				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	78	11	36	31	97	109	365	60	29	9.3	8.1	4.7
2	53	10	32	*27	84	85	203	77	26	8.9	12	4.5
3	40	9.7	*28	24	67	73	140	155	24	8.9	12	4.5
4	31	9.7	28	21	56	62	111	119	23	9.7	12	4.5
5	26	9.7	24	20	49	52	94	858	22	29	8.9	4.2
6	23	9.0	22	19	50	46	154	686	21	16	7.6	4.0
7	21	9.0	32	20	70	42	136	422	20	17	7.2	3.8
8	19	9.4	125	17	70	39	104	273	19	17	6.8	3.7
9	17	10	100	15	56	39	88	170	22	42	6.0	3.5
10	16	8.7	76	16	50	43	84	130	21	47	6.0	3.5
11	14	9.0	59	16	*44	*52	85	144	*18	25	5.5	3.5
12	14	*8.7	44	14	b35	56	80	117	18	19	5.8	3.7
13	13	8.7	37	16	b30	56	71	*98	16	17	36	3.7
14	12	12	33	168	b25	56	64	84	16	16	20	3.7
15	12	18	30	87	b21	55	60	74	21	13	33	3.7
16	*11	18	28	69	b19	51	56	66	18	11	18	3.7
17	20	15	24	52	b17	48	50	105	15	14	12	3.5
18	39	40	22	42	b18	49	45	95	14	20	9.3	4.0
19	21	141	21	34	b19	46	42	68	13	15	8.5	4.0
20	16	91	22	32	b20	57	39	60	14	12	*7.6	3.8
21	15	57	23	42	b21	70	37	51	13	11	7.2	11
22	13	40	20	62	b22	60	93	46	13	21	6.8	6.8
23	12	50	20	46	24	56	*237	44	12	*18	6.8	5.2
24	16	57	19	51	26	56	124	41	18	26	7.2	4.7
25	16	67	18	221	28	112	98	40	14	21	9.3	4.5
26	13	63	91	142	134	192	80	38	15	16	8.1	4.0
27	13	48	78	114	260	365	71	34	13	15	6.8	4.0
28	12	46	59	87	180	203	78	32	11	14	6.0	3.8
29	11	49	48	70	-	138	73	30	10	11	5.8	3.7
30	11	42	40	59	---------	196	64	28	9.7	9.3	5.2	4.0
31	11	--------	34	54	---------	417	--------	30	---------	8.5	5.5	--------
Total	639	976.6	1,273	1,688	1,592	2,981	3,026	4,275	518.7	537.6	317.0	129.9
Mean	20.6	32.6	41.1	54.5	56.9	96.2	101	138	17.3	17.3	10.2	4.33
(†)	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Adjusted for pumpage												
Mean	20.2	32.2	40.7	54.1	56.5	95.8	101	138	16.9	16.9	9.80	3.93
Cfsm	0.594	0.947	1.20	1.59	1.66	2.82	2.97	4.06	0.497	0.497	0.288	0.116
In.	0.68	1.06	1.38	1.83	1.73	3.25	3.31	4.68	0.55	0.57	0.33	0.13

	Observed			Adjusted			
Calendar year 1957:	Max 620	Min 5.8	Mean 43.9	Mean 43.5	Cfsm 1.28	In. 17.37	
Water year 1957-58:	Max 858	Min 3.5	Mean 49.2	Mean 48.8	Cfsm 1.44	In. 19.50	

Peak discharge (base, 600 cfs).--Mar. 31 (6 p.m.) 676 cfs (3.98 ft); May 5 (1:30 p.m.) 2,180 cfs (5.30 ft); July 9 (5:30 p.m.) 809 cfs (4.12 ft); Aug. 13 (2 p.m.) 714 cfs (4.02 ft).

* Discharge measurement made on this day.
† Pumpage, equivalent in cubic feet per second, by Lone Star Cement Co.
b Stage-discharge relation affected by ice.

195. James River at Buchanan, Va.

Location.--Lat 37°31'50", long 79°40'45", on left bank at Chesapeake & Ohio Railway station at Buchanan, Botetourt County, 300 ft upstream from bridge on U. S. Highway 11, 1,000 ft upstream from Purgatory Creek, 1½ miles downstream from Looney Creek, and at mile 301.2.

Drainage area.--2,084 sq mi.

Records available.--February 1898 to September 1958. Monthly discharge only for some periods, published in WSP 1303. Records for August 1895 to Feb. 11, 1898, published in WSP 11, 15, and 27, have been found to be in error and should not be used.

Gage.--Water-stage recorder. Datum of gage is 802.90 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Nov. 21, 1903, wire-weight gage and Nov. 21, 1903, to July 1, 1927, chain gage, at same site and datum.

Average discharge.--60 years, 2,498 cfs.

Extremes.--Maximum discharge during year, 29,500 cfs Mar. 31 (gage height, 14.42 ft); minimum, 410 cfs Sept. 30 (gage height, 1.94 ft).

1898-1958: Maximum discharge, about 105,000 cfs Mar. 27, 1913 (gage height, 31 ft, from floodmarks), from rating curve extended above 53,000 cfs by logarithmic plotting on basis of records for other stations in James River basin; minimum, 208 cfs Jan. 9, 1956 (gage height, 1.46 ft), result of freezeup; minimum daily, 259 cfs Sept. 11, 12, 19, 20, 1932.

Flood in November 1877 reached a stage of 34.9 ft, from floodmark (discharge, about 125,000 cfs).

Remarks.--Records good except those for periods of no gage-height record, which are fair.

Revisions (water years).--WSP 602: 1917-24. WSP 757: Drainage area. WSP 952: 1913(M). WSP 972: 1935-36. WSP 1303: 1898-1916, 1917-20(M), 1922(M), 1924(M). WSP 1383: 1927. See also Records available.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1)

1.9	390	6.0	5,400
2.3	630	10.0	15,300
3.0	1,140	14.0	28,100
4.0	2,200		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,330	938	1,960	2,940	4,500	7,000	23,600	6,220	1,370	600	800	763
2	2,870	910	1,730	2,580	6,600	6,000	15,900	5,220	1,900	580	1,500	714
3	2,080	861	1,570	2,260	6,000	5,000	11,600	4,860	1,840	560	2,500	630
4	1,620	819	1,520	1,900	4,500	4,300	8,800	5,040	1,520	540	7,000	604
5	1,320	784	1,470	1,570	3,500	3,820	7,360	6,880	1,320	540	4,000	584
6	1,140	749	1,420	1,420	3,500	3,330	6,880	19,100	1,230	540	2,500	584
7	1,000	714	1,420	*1,570	6,000	3,020	11,600	17,000	1,140	1,100	2,000	584
8	1,100	700	6,360	1,520	12,000	2,800	*11,000	15,000	1,060	1,000	1,500	558
9	1,370	833	12,300	1,320	8,000	2,720	7,840	11,600	1,020	1,150	1,300	539
10	1,140	1,470	*7,840	1,140	6,000	2,800	6,000	8,320	1,030	1,320	1,200	500
11	973	1,470	5,400	1,280	5,000	3,250	5,400	6,880	988	1,420	1,000	482
12	861	*1,280	4,160	1,230	4,000	3,650	5,400	6,660	1,020	1,370	*800	470
13	777	1,140	3,100	1,100	3,300	3,900	5,220	*6,220	938	1,180	760	464
14	714	1,100	2,580	2,830	2,900	4,160	4,500	4,860	1,100	1,100	800	452
15	*665	1,570	2,380	7,360	2,500	3,740	4,080	4,080	1,300	959	1,000	446
16	624	1,960	2,080	5,600	2,200	3,330	3,820	3,570	1,150	861	1,100	*435
17	651	2,020	1,840	4,240	1,800	3,020	3,490	3,170	*1,050	800	1,000	425
18	1,180	2,140	1,730	3,410	1,600	2,870	3,170	3,330	966	740	900	470
19	1,140	3,990	1,570	2,800	1,500	2,800	2,870	3,570	875	700	800	435
20	1,100	6,660	1,520	2,320	1,400	2,720	2,650	3,100	840	740	750	440
21	988	5,400	1,620	2,260	1,300	2,870	2,450	2,580	812	700	700	572
22	896	3,740	2,080	3,330	1,300	3,100	2,450	2,320	800	800	660	707
23	826	3,020	2,080	6,000	1,300	2,870	9,260	2,080	780	1,500	620	735
24	840	3,100	1,960	4,860	1,600	3,020	11,300	2,080	780	1,800	660	658
25	1,040	3,330	1,780	8,560	2,000	3,900	8,080	2,080	760	1,800	4,000	552
26	1,470	3,250	3,030	9,000	3,500	9,040	6,880	2,020	740	3,000	3,500	500
27	1,470	2,870	14,200	8,000	5,000	12,300	5,400	1,780	740	2,500	2,260	470
28	1,280	2,520	9,280	6,000	7,500	13,100	8,320	1,620	720	1,500	1,520	440
29	1,100	2,320	6,000	5,000	-	10,000	11,300	1,570	660	1,200	1,140	415
30	1,030	2,140	4,330	3,500	-------	10,500	8,320	1,470	620	1,100	973	415
31	980	-------	3,490	3,200	-------	25,600	-------	1,420	-------	900	854	-------
Total	38,575	63,798	113,800	110,100	110,300	170,530	224,940	165,700	31,069	34,600	50,097	16,043
Mean	1,244	2,127	3,671	3,552	3,939	5,501	7,498	5,345	1,036	1,116	1,616	535
Cfsm	0.597	1.02	1.76	1.70	1.89	2.64	3.60	2.56	0.497	0.536	0.775	0.257
In.	0.69	1.14	2.03	1.96	1.97	3.04	4.02	2.95	0.55	0.62	0.89	0.29

Calendar year 1957: Max 40,400 Min 267 Mean 2,774 Cfsm 1.33 In. 18.07
Water year 1957-58: Max 25,600 Min 415 Mean 3,095 Cfsm 1.49 In. 20.15

Peak discharge (base, 21,000 cfs).--Mar. 31 (5:30 p.m.) 29,500 cfs (14.42 ft); May 6 (5:30 p.m.) 22,300 cfs (12.30 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Jan. 26 to Mar. 4, June 14-17, June 22 to July 9, July 17 to Aug. 26; discharge estimated on basis of 2 discharge measurements and sum of records for upstream stations.

215. Maury River at Rockbridge Baths, Va.

Location.--Lat 37°54'26", long 79°25'20", on right bank at Rockbridge Baths, Rockbridge County, 700 ft upstream from highway bridge and 1 mile upstream from Hays Creek.

Drainage area.--329 sq mi.

Records available.--October 1928 to September 1958. Monthly discharge only for some periods, published in WSP 1303. Prior to October 1945, published as North River at Rockbridge Baths.

Gage.--Water-stage recorder. Datum of gage is 1,100.33 ft above mean sea level (levels by Corps of Engineers).

Average discharge.--30 years, 359 cfs.

Extremes.--Maximum discharge during year, 4,220 cfs Apr. 1 (gage height, 6.35 ft); minimum, 28 cfs Sept. 17.

1928-58: Maximum discharge, 33,000 cfs Mar. 17, 1936 (gage height, 13.07 ft), from rating curve extended above 16,000 cfs by logarithmic plotting; minimum, 9 cfs (revised) Nov. 28, 1930 (gage height, 0.76 ft), flow retarded by freezing.

Revisions.--The minimum discharge for the water year 1931 has been revised to 9 cfs Nov. 28, 1930 (gage height, 0.76 ft), superseding figure published in WSP 972.

Remarks.--Records good except those for periods of ice effect and those prior to Oct. 8, which are fair.

Revisions (water years).--WSP 972: 1929-40, 1941(M). WSP 1002: 1930(m).

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-7		Oct. 8 to Sept. 30			
1.2	38	1.1	28	3.0	770
1.3	51	1.3	55	4.0	1,480
1.5	91	1.6	120	5.0	2,370
		2.0	250	6.0	3,650

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	89	203	446	1,020	1,480	3,300	1,040	202	44	54	71
2	50	83	178	360	1,000	1,080	2,370	830	523	43	59	63
3	46	77	163	b270	*734	*865	1,720	694	299	38	65	55
4	42	71	160	b200	584	728	1,400	628	218	38	79	49
5	39	65	151	b165	490	616	1,180	954	182	38	69	48
6	38	61	135	*b170	490	534	1,440	2,000	154	38	61	46
7	74	57	319	b170	962	479	*2,200	1,920	132	61	54	54
8	226	59	2,670	b140	1,600	452	1,440	1,880	118	71	49	46
9	169	81	*1,680	b110	1,040	425	1,040	1,400	110	272	50	40
10	132	83	1,040	b120	b680	435	830	1,040	115	151	49	39
11	110	*83	740	b140	b560	534	970	865	98	105	*43	36
12	89	83	534	b100	b430	660	1,040	*716	89	157	40	35
13	79	83	405	b80	b360	900	900	589	81	112	44	34
14	*73	104	340	b450	b285	800	758	490	138	*91	46	34
15	63	308	294	672	b265	728	672	425	118	79	73	*32
16	61	326	250	578	b200	622	622	375	*108	63	95	30
17	61	278	226	468	b170	550	567	565	93	55	71	29
18	138	242	203	385	b165	534	501	2,070	81	61	57	43
19	157	582	192	282	b150	506	440	1,280	79	79	49	32
20	130	1,080	210	266	b150	496	395	865	77	61	46	29
21	110	677	230	326	b150	545	350	622	71	55	42	60
22	95	462	210	830	b160	512	345	474	67	89	40	77
23	85	375	203	830	b180	534	2,400	405	65	285	36	55
24	93	435	196	710	200	666	1,600	365	67	415	42	46
25	132	415	192	1,040	222	770	1,140	322	71	230	447	40
26	157	385	2,080	1,180	358	1,250	865	274	63	140	380	38
27	145	322	2,200	1,000	1,320	1,760	800	226	65	112	214	35
28	128	278	1,280	800	1,800	1,920	2,410	203	59	89	145	33
29	112	262	865	655	-	1,480	1,960	200	52	75	118	32
30	102	238	644	556	-------	1,560	1,360	163	48	67	95	30
31	98	-------	512	501	-------	3,180	-------	148	-------	59	83	-------
Total	3,090	7,744	18,705	14,000	15,725	27,601	37,015	24,028	3,643	3,273	2,795	1,291
Mean	99.7	258	603	452	562	890	1,234	775	121	106	90.2	43.0
Cfsm	0.303	0.784	1.83	1.37	1.71	2.71	3.75	2.36	0.368	0.322	0.274	0.131
In.	0.35	0.87	2.11	1.58	1.78	3.12	4.18	2.72	0.41	0.37	0.32	0.15

Calendar year 1957: Max 6,030 Min 15 Mean 373 Cfsm 1.13 In. 15.39
Water year 1957-58: Max 3,300 Min 29 Mean 435 Cfsm 1.32 In. 17.96

Peak discharge (base, 4,500 cfs).--No peak above base.

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

240. Maury River near Buena Vista, Va.

Location.--Lat 37°45'45", long 79°23'30", on right bank 0.5 mile downstream from South River and 2.8 miles northwest of Buena Vista, Rockbridge County.

Drainage area.--649 sq mi.

Records available.--October 1938 to September 1958. Monthly discharge only for some periods, published in WSP 1303. Prior to October 1945, published as North River near Buena Vista.

Gage.--Water-stage recorder. Datum of gage is 846.58 ft above mean sea level, datum of 1929.

Average discharge.--20 years, 657 cfs.

Extremes.--Maximum discharge during year, 6,010 cfs Apr. 1 (gage height, 8.80 ft); minimum, 101 cfs Oct. 7, Sept. 17 (gage height, 1.83 ft).

1938-58: Maximum discharge, 22,400 cfs Sept. 10, 1950 (gage height, 16.2 ft); minimum, 20 cfs Oct. 10, 1941 (gage height, 1.23 ft), occurred during filling of a small reservoir 2 miles upstream.

Flood of Mar. 18, 1936, reached a stage of about 22 ft, from information by local residents.

Remarks.--Records excellent except those for periods of ice effect, which are fair.

Revisions (water years).--WSP 952: 1940-41.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.8	95	4.0	1,000
2.1	164	6.0	2,600
2.5	289	9.0	6,310
3.0	472		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	143	167	432	702	1,440	2,510	5,140	1,820	440	181	196	181
2	138	159	383	604	1,620	1,900	3,760	1,550	838	173	199	164
3	124	151	348	506	*1,250	*1,550	2,790	1,320	628	167	227	154
4	115	143	334	b410	1,000	1,320	2,290	1,210	501	159	240	148
5	107	136	316	b360	840	1,100	1,990	1,810	448	159	227	138
6	105	129	289	*b360	810	968	2,200	3,420	413	161	196	151
7	103	124	402	b390	1,250	870	3,310	3,530	376	176	184	136
8	216	138	3,340	b330	2,290	810	2,380	3,420	351	205	176	136
9	266	184	2,600	b290	1,660	782	1,820	2,600	348	404	205	129
10	215	178	*1,620	b290	b1,100	782	1,510	2,030	376	472	176	122
11	181	164	1,180	337	b900	870	1,580	1,740	334	299	161	117
12	156	161	840	282	b720	1,040	1,620	1,510	340	351	*156	115
13	138	164	*652	259	b600	1,360	1,550	*1,250	306	340	181	115
14	*129	178	604	1,150	b520	1,320	1,320	1,070	383	282	193	113
15	122	402	518	1,280	b520	1,280	1,180	935	376	*253	248	111
16	115	476	460	1,040	b440	1,100	1,070	840	348	218	432	*107
17	120	432	421	840	b390	968	1,000	810	*303	208	276	105
18	227	394	387	702	b390	902	902	2,890	272	208	224	122
19	279	696	369	558	b360	870	810	1,990	263	234	193	124
20	237	1,510	376	510	b360	840	754	1,550	259	212	178	109
21	202	1,040	405	604	b360	870	702	1,140	250	193	164	170
22	176	702	394	1,320	b380	840	702	902	240	205	164	208
23	161	581	372	1,360	417	810	3,440	810	234	507	151	164
24	170	628	362	1,140	440	902	2,790	754	240	840	148	138
25	215	604	358	2,080	476	1,100	1,990	702	243	604	283	126
26	240	581	1,800	2,120	852	1,740	1,550	628	234	421	702	120
27	246	510	3,640	1,820	2,510	2,380	1,360	558	246	358	421	117
28	221	523	2,030	1,470	3,200	2,890	2,950	523	224	299	309	117
29	196	558	1,400	1,180	-	2,290	3,090	510	202	253	259	115
30	184	497	1,040	1,000	-------	2,510	2,380	464	193	227	224	111
31	178	-------	810	902	-------	5,560	-------	432	-------	208	202	-------
Total	5,425	12,310	28,482	26,196	27,095	45,034	59,930	44,718	10,209	8,977	7,295	3,983
Mean	175	410	919	845	968	1,453	1,998	1,443	340	290	235	133
Cfsm	0.270	0.632	1.42	1.30	1.49	2.24	3.08	2.22	0.524	0.447	0.362	0.205
In.	0.31	0.71	1.64	1.50	1.55	2.58	3.44	2.56	0.58	0.52	0.42	0.23

Calendar year 1957: Max 8,110 Min 62 Mean 592 Cfsm 0.912 In. 12.40
Water year 1957-58: Max 5,560 Min 103 Mean 766 Cfsm 1.18 In. 16.04

Peak discharge (base, 6,200 cfs).--No peak above base.

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

260. James River at Bent Creek, Va.

Location.--Lat 37°32', long 78°50', on left bank 100 ft downstream from highway bridge at town of Bent Creek, Appomattox County, 150 ft downstream from Bent Creek, 1 mile downstream from Gladstone, and at mile 222.9.

Drainage area.--3,671 sq mi.

Records available.--October 1924 to September 1958. Monthly discharge only for some periods, published in WSP 1303. Published as "at Bent Creek near Gladstone" prior to 1926.

Gage.--Water-stage recorder. Datum of gage is 381.39 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Sept. 13, 1930, chain gage at same site and datum.

Average discharge.--34 years, 4,137 cfs.

Extremes.--Maximum discharge during year, 41,200 cfs Apr. 1 (gage height, 13.39 ft); minimum, 680 cfs Sept. 13, 14, 16 (gage height, 2.75 ft); minimum daily, 704 cfs Sept. 16. 1924-58: Maximum discharge, 115,000 cfs Mar. 18, 1936 (gage height, 23.02 ft), from rating curve extended above 74,000 cfs on basis of velocity-area studies and records for other stations in James River basin; minimum, 222 cfs Oct. 13, 14, 1930 (gage height, 2.21 ft); minimum daily, 222 cfs Oct. 13, 1930.

Remarks.--Records good. Large diurnal fluctuation caused by powerplants above station.

Revisions (water years).--WSP 742: 1931(m). WSP 757: Drainage area. WSP 972: 1935-36. WSP 1066: 1940. WSP 1203: 1942.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Feb. 17, 18)

Oct. 1 to Aug. 15				Aug. 16 to Sept. 30			
2.9	970	9.0	20,000	2.7	620	4.0	3,020
3.5	2,070	13.0	39,000	3.0	1,010	6.0	8,850
5.0	5,800						

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,650	1,760	4,130	6,180	7,210	15,600	38,500	12,400	2,940	1,500	1,980	1,300
2	5,580	1,560	3,800	5,480	8,260	13,500	30,000	10,300	3,080	1,450	1,920	1,330
3	4,290	1,420	3,570	4,910	10,600	11,700	21,800	9,920	3,970	1,420	2,440	1,290
4	2,990	1,840	3,160	4,200	8,260	9,240	16,800	12,400	3,960	1,280	5,240	1,260
5	2,700	1,460	3,340	3,680	7,630	8,200	14,200	9,920	3,180	1,340	8,260	1,120
6	2,000	1,350	2,860	3,380	5,960	7,670	13,500	20,400	2,940	1,400	4,610	982
7	1,940	1,540	3,080	2,870	6,440	6,360	15,600	30,500	2,500	1,400	3,610	968
8	1,460	1,400	5,750	3,200	8,580	6,040	18,800	25,800	2,320	1,740	2,480	1,010
9	1,740	1,520	14,600	3,020	15,300	5,640	15,300	21,400	2,650	2,440	2,200	1,100
10	2,220	1,700	14,600	3,010	11,300	5,640	12,400	16,400	3,560	2,920	1,900	1,070
11	1,960	2,390	11,000	2,470	8,900	5,860	11,000	13,500	2,480	2,840	1,740	926
12	1,760	2,380	8,580	2,780	7,840	6,140	10,600	12,000	2,520	3,030	2,080	884
13	1,540	2,260	7,610	2,750	6,660	7,120	10,300	11,300	2,400	3,520	1,780	870
14	1,320	1,960	5,380	4,500	5,670	7,850	9,580	9,580	2,180	3,860	1,940	728
15	1,320	2,380	5,000	9,580	4,660	8,090	8,580	8,580	2,260	3,240	2,940	740
16	1,120	3,340	4,120	12,000	4,640	7,870	7,940	7,780	2,290	2,070	8,310	704
17	1,200	3,420	3,900	9,240	4,000	6,560	7,780	6,850	2,570	1,940	2,560	870
18	1,840	3,760	3,500	7,860	3,800	6,300	6,840	6,700	2,240	1,720	2,690	1,060
19	2,560	5,290	2,960	5,920	3,830	5,740	6,480	8,900	2,210	1,730	1,850	982
20	2,300	9,240	3,040	5,020	3,420	5,800	5,750	8,100	2,060	1,560	1,500	844
21	1,980	11,000	3,270	4,760	3,960	5,520	5,580	6,950	1,790	1,940	1,360	1,100
22	1,920	8,260	2,980	7,580	3,520	5,640	5,450	5,960	1,780	1,560	1,640	1,240
23	1,900	7,300	3,760	8,580	3,560	5,710	9,920	4,680	2,040	1,820	1,220	1,370
24	1,600	5,150	3,370	10,300	3,780	5,680	18,000	4,920	2,010	2,120	1,140	*1,430
25	1,620	6,780	3,460	13,100	3,740	7,290	15,600	4,810	1,720	3,380	1,540	1,280
26	1,650	5,760	4,770	16,000	4,220	9,920	13,500	4,720	2,080	3,070	3,040	1,150
27	2,630	5,380	11,000	14,200	12,000	17,200	11,700	4,300	2,240	4,190	5,260	982
28	2,420	5,420	18,000	12,400	16,400	20,400	11,300	3,480	1,900	4,760	3,760	926
29	2,580	5,260	12,400	10,300	-	18,400	16,400	3,620	2,280	3,190	2,660	1,060
30	*2,060	5,260	9,580	8,270	-------	15,400	*15,600	3,480	1,420	2,560	1,790	870
31	1,740	-------	8,200	*7,360	-------	*28,900	-------	3,260	-------	2,000	1,550	-------
Total	67,590	117,540	194,730	214,900	194,140	296,980	404,800	312,910	73,570	72,990	86,990	31,446
Mean	2,180	3,918	6,282	6,932	6,934	9,580	13,490	10,090	2,452	2,355	2,806	1,048
Cfsm	0.594	1.07	1.71	1.89	1.89	2.61	3.67	2.75	0.668	0.642	0.764	0.285
In.	0.68	1.19	1.97	2.18	1.97	3.01	4.10	3.17	0.75	0.74	0.88	0.32

Calendar year 1957: Max 50,800 Min 440 Mean 4,542 Cfsm 1.24 In. 16.80
Water year 1957-58: Max 38,500 Min 704 Mean 5,667 Cfsm 1.54 In. 20.96

Peak discharge (base, 26,500 cfs).--Apr. 1 (7 a.m.) 41,200 cfs (13.39 ft); May 7 (6 a.m.) 32,000 cfs (11.64 ft).

* Discharge measurement made on this day.

290. James River at Scottsville, Va.

Location.--Lat 37°47'50", long 78°29'30", on left bank 50 ft downstream from highway bridge at Scottsville, Albemarle County, 6.8 miles upstream from Hardware River, and at mile 184.6.
Drainage area.--4,571 sq mi.
Records available.--October 1924 to September 1958. Monthly discharge only for some periods, published in WSP 1303.
Gage.--Water-stage recorder. Datum of gage is 253.18 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Nov. 28, 1928, chain gage at same site and datum.
Average discharge.--34 years, 5,113 cfs.
Extremes.--Maximum discharge during year, 44,500 cfs Apr. 1 (gage height, 15.88 ft); minimum, 786 cfs Sept. 14 (gage height, 2.42 ft); minimum daily, 818 cfs Sept. 17.
1924-58: Maximum discharge, 133,000 cfs Sept. 19, 1944 (gage height, 26.0 ft); minimum, 302 cfs Oct. 1, 1930 (gage height, 1.46 ft); minimum daily, 307 cfs Oct. 15, 1930.
Data for some outstanding floods prior to the establishment of this station are given in the following table:

Date	Discharge (cfs)	Gage height (feet)	Remarks
October 1870.....	-	30.7	Gage height from information by local resident.
November 1877.....	a160,000	27.9	Do.
March 1913.....	121,000	25.16	From floodmarks.

a About.

Remarks.--Records good. Large diurnal fluctuation caused by powerplants above station.
Revisions (water years).--WSP 727: 1931(m). WSP 757: Drainage area. WSP 972: 1936(M), 1940(M).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

2.4	770	8.0	11,500
3.0	1,400	12.0	25,900
5.0	4,630	16.0	45,100

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,550	1,910	4,920	6,850	8,170	20,000	42,900	14,300	3,800	1,780	2,280	1,760
2	4,980	1,890	4,400	5,610	8,400	15,000	35,900	11,800	4,160	1,710	2,280	1,600
3	*4,470	1,670	3,760	5,380	10,400	12,400	25,900	10,600	3,970	1,620	2,280	1,560
4	3,540	1,560	3,660	4,540	9,350	10,100	19,600	12,700	4,520	1,520	4,960	1,460
5	2,760	1,900	3,500	4,180	7,940	8,870	15,700	10,900	4,200	1,380	5,560	1,520
6	2,680	1,530	3,460	3,650	7,060	8,170	14,600	16,700	3,530	1,520	6,640	1,280
7	1,980	1,440	3,270	3,260	6,850	7,280	16,000	33,600	3,300	1,630	3,840	1,160
8	2,000	1,860	4,940	3,400	7,280	6,640	20,000	31,400	2,860	1,690	*2,790	1,140
9	1,320	1,650	12,800	2,960	13,600	6,430	18,100	25,900	2,760	2,520	2,900	1,190
10	1,980	1,820	18,500	3,200	13,000	6,010	14,000	20,000	4,030	3,000	2,420	1,200
11	2,220	1,760	12,700	2,970	9,600	6,430	12,700	15,700	3,420	2,840	1,920	1,070
12	1,930	2,540	9,600	2,680	8,170	6,640	11,500	13,300	3,040	3,220	2,120	1,060
13	1,780	2,400	7,720	2,880	7,280	7,060	10,900	12,100	*3,060	3,800	2,140	1,010
14	1,430	2,220	6,010	4,350	*6,430	7,720	10,400	10,600	3,000	4,020	2,060	922
15	1,500	2,370	5,300	9,600	5,640	8,870	9,350	9,350	2,790	*3,890	2,240	850
16	1,330	3,000	4,660	12,400	5,180	8,400	8,630	*8,400	2,690	3,210	8,890	868
17	1,260	3,640	4,380	*10,400	4,980	7,720	8,170	7,940	2,760	2,240	4,180	818
18	1,550	3,800	3,920	8,170	3,820	6,850	*7,940	7,940	2,900	2,060	2,850	1,100
19	2,520	5,050	3,520	6,220	4,200	6,430	6,850	8,630	2,580	2,040	2,780	1,340
20	2,580	8,630	*3,540	5,810	4,040	6,430	6,640	8,870	2,600	1,920	2,080	1,080
21	2,400	10,600	3,980	5,550	3,880	6,220	6,010	7,940	2,480	1,780	1,640	1,190
22	1,990	*9,110	3,980	8,910	4,150	6,010	6,220	6,640	2,260	2,180	1,620	1,950
23	2,070	7,940	3,700	9,850	4,340	6,010	14,600	5,810	2,300	1,820	1,790	1,670
24	1,980	6,850	4,220	10,600	4,420	6,010	20,000	5,320	2,390	2,160	1,380	*1,640
25	1,940	6,010	3,980	14,000	4,420	6,430	19,600	5,340	2,460	2,970	2,040	1,680
26	1,890	6,430	5,010	20,400	4,660	9,600	14,600	6,010	2,100	3,370	3,020	1,400
27	1,990	5,810	9,350	17,400	12,500	16,700	12,700	5,230	2,740	4,580	4,800	1,210
28	2,660	5,410	20,700	15,600	21,500	24,300	11,200	4,520	2,610	4,260	4,110	1,070
29	2,490	5,810	14,600	11,200	-	21,900	15,700	4,270	2,200	4,520	3,280	1,120
30	2,700	5,470	10,400	9,350	-------	17,100	18,100	3,930	2,260	2,940	2,740	*1,140
31	2,050	-------	8,170	8,170	-------	27,600	-------	4,020	-------	2,620	1,960	-------
Total	70,520	121,880	212,650	237,540	211,260	321,330	454,510	349,760	89,770	80,810	95,590	38,058
Mean	2,275	4,063	6,860	7,663	7,545	10,370	15,150	11,280	2,992	2,607	3,084	1,269
Cfsm	0.498	0.889	1.50	1.68	1.65	2.27	3.31	2.47	0.655	0.570	0.675	0.278
In.	0.57	0.99	1.73	1.94	1.72	2.62	3.69	2.85	0.73	0.66	0.78	0.31

Calendar year 1957: Max 55,800 Min 558 Mean 5,325 Cfsm 1.16 In. 15.80
Water year 1957-58: Max 42,900 Min 818 Mean 6,257 Cfsm 1.37 In. 18.59

Peak discharge (base, 27,000 cfs).--Apr. 1 (3 p.m.) 44,500 cfs (15.88 ft); May 7 (3:30 p.m.) 36,400 cfs (14.42 ft).

* Discharge measurement made on this day.

305. Slate River near Arvonia, Va.

Location.--Lat 37°42'10", long 78°22'40", on left bank 100 ft upstream from Bumpers Bridge, 1.8 miles northwest of Arvonia, Buckingham County, 2.9 miles upstream from Hunts Creek, and 3.8 miles upstream from mouth.

Drainage area.--235 sq mi.

Records available.--April 1926 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 238.78 ft above mean sea level (levels by Corps of Engineers). Prior to Sept. 18, 1935, chain gage and Sept. 18, 1935, to Feb. 14, 1936, staff gage, at same site and datum.

Average discharge.--32 years, 224 cfs.

Extremes.--Maximum discharge during year, 2,440 cfs Feb. 27 (gage height, 8.60 ft); minimum, 33 cfs Sept. 12 (gage height, 2.17 ft).
1926-58: Maximum discharge, 13,600 cfs Sept. 6, 1935 (gage height, 22.18 ft, from floodmarks), from rating curve extended above 5,500 cfs on basis of velocity-area studies; minimum, 2 cfs Sept. 28 to Oct. 2, 1930.

Remarks.--Records good except those for periods of ice effect, which are poor.

Revisions (water years).--WSP 972: 1928-29, 1932, 1933-34(M), 1935.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.1	28	4.0	300
2.5	58	5.0	600
3.0	114	7.0	1,500
3.5	194	9.0	2,680

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	75	50	153	b120	412	470	890	282	125	*77	80	52
2	70	80	118	b110	565	318	455	278	128	74	77	50
3	60	85	101	b100	328	258	342	287	122	71	98	47
4	48	66	115	b90	238	224	287	278	118	68	162	47
5	44	56	167	b85	208	198	256	278	117	66	86	46
6	52	52	147	b80	202	185	426	837	110	65	66	44
7	52	50	172	b76	355	178	598	1,610	104	65	57	42
8	45	54	470	b74	652	167	340	770	100	66	53	40
9	43	100	670	b73	308	163	271	440	100	79	50	37
10	41	93	425	b72	206	194	265	318	144	115	48	35
11	40	65	236	b72	b180	305	810	308	131	90	45	34
12	38	57	165	b72	b160	232	485	269	144	95	60	34
13	37	55	117	b72	b150	204	338	232	135	124	80	35
14	37	56	127	938	b140	325	280	206	155	101	77	48
15	39	71	114	1,300	b130	425	254	190	125	84	72	38
16	41	76	104	530	b120	282	234	178	114	77	156	40
17	42	68	100	350	b115	226	218	172	103	65	85	44
18	48	70	94	238	b115	204	204	180	93	66	63	106
19	56	620	95	178	b115	226	200	169	88	70	53	84
20	52	642	146	147	b115	440	190	198	100	67	48	57
21	45	171	335	194	b115	312	189	181	131	62	47	71
22	44	114	202	1,050	b140	243	202	153	128	64	45	107
23	44	169	144	470	b175	204	1,090	145	128	77	42	68
24	47	296	127	278	365	189	582	148	120	95	120	53
25	57	165	118	1,600	365	329	338	155	118	106	542	50
26	59	156	696	1,050	360	1,100	267	436	108	78	239	47
27	52	122	711	425	*2,260	910	247	206	111	77	106	47
28	48	110	289	287	1,070	955	570	156	100	77	78	45
29	47	*204	210	224	-	470	565	*183	86	64	*67	43
30	*47	167	*163	194	--------	365	*345	147	80	57	60	*42
31	48	--------	139	*176	--------	*1,560	--------	132	--------	*53	55	--------
Total	1,498	4,140	6,970	10,725	9,664	11,861	11,738	9,522	3,466	2,395	2,917	1,533
Mean	48.3	138	225	346	345	383	391	307	116	77.3	94.1	51.1
Cfsm	0.206	0.587	0.957	1.47	1.47	1.63	1.66	1.31	0.494	0.329	0.400	0.217
In.	0.24	0.65	1.10	1.70	1.53	1.88	1.85	1.51	0.55	0.38	0.46	0.24

Calendar year 1957: Max 2,800 Min 15 Mean 165 Cfsm 0.702 In. 9.53
Water year 1957-58: Max 2,260 Min 34 Mean 209 Cfsm 0.889 In. 12.09

Peak discharge (base, 2,100 cfs).--Jan. 25 (6 p.m.) 2,200 cfs (8.18 ft); Feb. 27 (9 to 11 a.m.) 2,440 cfs (8.60 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

315. North Fork Moormans River near Whitehall, Va.

Location.--Lat 38°08'25", long 78°45'05", on left bank 0.5 mile upstream from confluence with South Fork, 0.8 mile upstream from city of Charlottesville dam, and 5.1 miles west of Whitehall, Albermarle County.

Drainage area.--11.4 sq mi.

Records available.--December 1951 to September 1958.

Gage.--Water-stage recorder. Concrete control since November 1952. Altitude of gage is 999 ft (by barometer).

Average discharge.--6 years (1952-58), 14.9 cfs.

Extremes.--Maximum discharge during year, 350 cfs Apr. 23 (gage height, 4.11 ft); minimum, 0.1 cfs Sept. 13, 14, 15, 16, 17.
1951-58: Maximum discharge, 2,400 cfs Aug. 18, 1955 (gage height, 7.94 ft); no flow Oct. 1-14, 1954.
Flood of Oct. 15, 1942, reached a stage of 11.7 ft, from floodmarks (discharge, 7,620 cfs, by slope-area measurement of peak flow).

Remarks.--Records good except those below 1.0 cfs and those for periods of ice effect, which are poor.

Revisions (water years).--WSP 1503: 1956(M).

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-6		Oct. 7 to Sept. 30			
1.35	0.3	1.2	0.2	2.0	12
1.4	.6	1.3	.4	2.2	22
1.6	1.8	1.4	1.0	2.5	48
1.8	4.0	1.6	3.0	3.0	120
2.0	9.5	1.8	6.5	4.0	325
2.4	29				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.9	2.5	17	17	36	98	124	66	7.2	1.4	2.4	0.6
2	.7	2.5	13	13	32	71	110	49	8.5	1.3	2.2	.5
3	.6	2.5	10	11	28	52	94	42	6.5	1.1	2.7	.4
4	*.4	2.4	9.9	9.3	22	38	88	36	6.1	1.0	3.8	.4
5	.4	2.4	8.2	8.2	19	31	84	50	5.5	1.0	2.4	.4
6	28	2.3	7.2	8.2	19	27	101	81	5.1	1.8	1.9	.4
7	23	2.3	12	b8.0	*27	*21	104	106	4.5	2.2	1.6	.4
8	5.7	3.5	44	7.8	36	19	81	106	4.5	2.3	1.6	.4
9	3.6	5.7	56	*7.2	38	19	60	81	4.4	7.2	1.5	.3
10	2.7	3.8	43	6.8	b30	18	48	58	4.9	4.0	1.2	.2
11	2.2	3.0	32	6.8	b26	20	44	43	4.0	2.6	1.2	.2
12	1.9	2.7	21	6.3	b20	24	37	34	4.0	2.2	1.4	.2
13	1.6	2.6	16	5.9	b16	27	34	26	3.8	2.0	2.1	.2
14	1.5	4.0	14	93	b15	28	31	20	5.5	2.6	1.8	.2
15	1.4	*9.3	11	101	b12	30	28	17	3.9	2.1	*1.7	.2
16	1.3	6.8	9.9	66	b10	26	25	15	3.8	*1.5	1.5	.2
17	1.5	5.9	9.0	42	b9	21	21	15	3.0	1.2	1.3	.2
18	3.0	5.5	*8.0	26	b8	20	19	19	2.7	1.7	1.0	1.1
19	2.4	17	8.5	21	b7.5	18	18	22	2.7	1.8	.8	*.7
20	2.0	22	12	17	b7.5	19	17	21	3.0	1.5	.8	.5
21	1.8	15	20	18	7.8	20	16	19	3.2	2.0	.7	3.3
22	1.7	11	18	28	8.8	18	26	16	3.0	1.7	.6	1.6
23	1.9	9.9	17	28	9.0	20	250	16	2.8	3.3	.7	.9
24	2.4	9.6	16	27	9.9	28	120	*14	*3.0	4.5	1.7	.5
25	2.6	9.0	14	70	11	36	78	14	2.6	4.7	4.0	.4
26	2.4	8.0	70	82	15	71	56	11	2.6	4.0	2.4	.4
27	2.3	7.2	91	66	77	124	52	9.6	2.8	4.9	1.7	.4
28	2.3	13	61	47	122	102	*112	9.0	2.2	3.6	1.2	.5
29	2.3	24	37	36	-	87	112	8.5	1.9	4.5	1.0	.4
30	2.4	21	25	29	-------	82	82	7.5	1.6	3.2	.8	.4
31	2.4	-------	19	25	-------	132	-------	6.8	-------	2.5	.7	-------
Total	109.3	236.4	749.7	937.5	678.5	1,347	2,072	1,038.4	119.3	81.4	50.4	16.5
Mean	3.53	7.88	24.2	30.2	24.2	43.5	69.1	33.5	3.98	2.63	1.63	0.55
Cfsm	0.310	0.691	2.12	2.65	2.12	3.82	6.06	2.94	0.349	0.231	0.143	0.048
In.	0.36	0.77	2.44	3.06	2.21	4.40	6.76	3.39	0.39	0.27	0.16	0.05

Calendar year 1957: Max 260 Min 0.05 Mean 13.8 Cfsm 1.21 In. 16.41
Water year 1957-58: Max 250 Min 0.2 Mean 20.4 Cfsm 1.79 In. 24.26

Peak discharge (base, 150 cfs).--Apr. 23 (5:30 a.m.) 350 cfs (4.11 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

325. South Fork Rivanna River near Earlysville, Va.

Location.--Lat 38°07'30", long 78°31'05", on left bank 0.3 mile upstream from Fishing Creek, 3.0 miles southwest of Earlysville, Albemarle County, and 8.7 miles upstream from confluence with North Fork.

Drainage area.--216 sq mi.

Records available.--December 1951 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 369 ft (by barometer).

Average discharge.--6 years (1952-58), 188 cfs.

Extremes.--Maximum discharge during year, 2,860 cfs Mar. 31 (gage height, 8.22 ft); minimum, 24 cfs Oct. 4-6; minimum gage height, 0.95 ft Oct. 6.
1951-58: Maximum discharge, 30,200 cfs Aug. 18, 1955 (gage height, 26.1 ft), from rating curve extended above 6,600 cfs on basis of contracted-opening measurement of peak flow; minimum observed, 2.2 cfs Sept. 18, 1954 (gage height, 0.71 ft).
Flood in October 1942 reached a stage of about 33 ft, from information by local resident.

Remarks.--Records good except those for periods of ice effect, which are fair. Some diurnal fluctuation, mostly at medium flow, caused by city of Charlottesville reservoir on Moormans River. Records of discharge do not include diversions for Charlottesville municipal water supply which averages about 6 cfs.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used July 29 to Sept. 21)

Oct. 1 to Mar. 31				Apr. 1 to Sept. 30			
0.9	21	3.0	380	1.1	26	2.5	240
1.3	47	4.0	700	1.5	60	4.0	700
1.6	80	7.0	2,120	1.9	114	6.0	1,620
2.0	142						

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	45	152	230	455	840	1,200	648	143	58	83	44
2	33	45	130	196	455	595	880	508	192	54	65	38
3	28	45	115	164	368	485	700	490	146	49	70	36
4	*25	43	116	b130	318	395	612	400	137	46	127	35
5	24	42	108	b110	278	342	560	525	132	45	83	35
6	136	41	94	b100	268	318	700	760	123	48	58	41
7	469	40	110	b95	*302	*288	700	1,030	112	60	49	39
8	168	48	342	b85	368	258	578	940	109	71	43	36
9	98	90	355	*b80	318	252	490	740	106	95	47	34
10	71	64	318	b80	b270	285	460	578	121	132	39	33
11	57	54	290	b80	b250	318	490	490	103	88	34	32
12	50	52	218	b80	b220	395	415	415	111	130	64	30
13	45	51	b180	b80	b200	395	370	356	114	114	59	31
14	43	59	b160	*1,040	b170	440	342	306	154	134	74	30
15	42	*168	137	*820	b160	470	329	277	114	94	*123	30
16	40	120	123	530	b150	410	311	252	114	*67	112	37
17	46	94	115	380	b140	355	290	259	94	54	66	39
18	100	89	104	305	b140	330	274	538	84	57	48	72
19	83	177	113	268	b130	330	262	542	91	61	39	*84
20	60	285	188	232	b130	342	247	370	92	53	36	45
21	53	182	390	240	b130	318	238	300	104	61	35	150
22	52	140	295	718	b130	295	274	264	101	62	42	106
23	50	139	*242	425	b130	270	1,270	247	90	94	39	65
24	52	164	205	368	b190	278	900	*240	*98	123	56	52
25	64	134	178	1,240	230	380	595	226	94	111	246	45
26	52	116	943	900	235	560	475	209	90	74	226	44
27	49	104	740	578	988	1,720	490	179	112	476	103	38
28	47	134	500	470	1,570	1,240	*1,080	168	80	470	72	91
29	46	252	380	380	-	820	940	166	71	298	61	52
30	45	189	318	342	-------	720	760	148	64	104	52	46
31	46	-------	262	298	-------	*2,120	-------	139	-------	72	46	- - -
Total	2,210	3,206	7,921	11,044	8,693	16,564	17,232	12,710	3,296	3,455	2,297	1,490
Mean	71.3	107	256	356	310	534	574	410	110	111	74.1	49.7
Cfsm	0.330	0.495	1.19	1.65	1.44	2.47	2.66	1.90	0.509	0.514	0.343	0.230
In.	0.38	0.55	1.37	1.90	1.50	2.85	2.97	2.19	0.57	0.59	0.40	0.26

Calendar year 1957: Max 1,870 Min 2.5 Mean 170 Cfsm 0.787 In. 10.68
Water year 1957-58: Max 2,120 Min 24 Mean 247 Cfsm 1.14 In. 15.53

Peak discharge (base, 2,000 cfs).--Jan. 14 (4 p.m.) 2,180 cfs (7.06 ft); Feb. 28 (4 a.m.) 2,300 cfs (7.27 ft); Mar. 27 (3 p.m.) 2,360 cfs (7.35 ft); Mar. 31 (9:30 a.m.) 2,860 cfs (8.22 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

340. Rivanna River at Palmyra, Va.

Location.--Lat 37°51'28", long 78°15'58", on left bank 10 ft upstream from highway bridge at Palmyra, Fluvanna County, 0.5 mile upstream from Cunningham Creek, and 15 miles upstream from mouth.

Drainage area.--675 sq mi.

Records available.--October 1933 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 210.39 ft above mean sea level, datum of 1929, Culpeper supplementary adjustment of 1943. Prior to Oct. 24, 1942, water-stage recorder at site 200 ft downstream at same datum. Oct. 24, 1942, to Dec. 18, 1947, wire-weight gage on upstream side of highway bridge 10 ft downstream at same datum.

Average discharge.--25 years, 702 cfs.

Extremes.--Maximum discharge during year, 7,670 cfs Mar. 31 (gage height, 13.91 ft); minimum, 85 cfs Oct. 6 (gage height, 2.85 ft).
1933-58: Maximum discharge, 78,000 cfs Oct. 16, 1942 (gage height, 36.5 ft at site then in use, 37.4 ft at present site); minimum, 11 cfs Sept. 14, 15, 1954 (gage height, 2.36 ft); minimum gage height, 1.53 ft Oct. 9, 1941, site then in use.

Remarks.--Records good except those for periods of ice effect, which are poor.

Revisions (water years).--WSP 802: 1936(M). WSP 852: 1937. WSP 892: 1934-35. WSP 1303: 1945-46(M). WSP 1503: 1956.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Mar. 31

2.8	75	4.5	1,100
3.0	115	5.0	1,800
3.3	210	6.0	2,600
3.6	370	12.0	6,250
4.0	650		

Apr. 1 to Sept. 30

3.0	95
3.3	185
3.6	320
4.0	620
4.5	1,100

Note.--Same as preceding table above 4.5 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	120	149	500	658	1,030	2,460	4,040	1,500	401	217	350	178
2	*122	182	400	570	1,520	1,800	2,600	1,300	647	201	315	160
3	109	186	358	479	1,090	1,360	2,100	1,150	506	182	285	150
4	97	161	352	b370	919	1,100	1,570	1,060	415	174	326	141
5	89	152	364	b290	811	946	1,400	1,000	394	164	332	141
6	528	146	328	b270	*766	*856	1,590	1,280	368	160	252	135
7	2,030	140	437	b260	892	784	2,180	3,020	338	171	209	135
8	674	143	1,080	b250	1,450	714	1,630	2,720	315	189	189	132
9	388	215	1,440	b250	1,050	674	1,350	1,950	310	243	178	123
10	265	260	1,110	*b250	820	748	1,160	1,500	394	401	168	120
11	210	202	865	b240	b730	937	1,460	1,220	380	315	154	118
12	178	182	690	b240	b650	1,100	1,250	1,090	356	368	154	112
13	152	170	*b470	b240	b570	1,100	1,070	940	350	436	381	110
14	146	*170	b470	1,900	b510	1,300	960	810	368	344	315	110
15	140	330	b465	*3,200	b430	1,920	890	728	374	401	441	110
16	138	437	418	1,860	b390	1,420	840	665	320	266	548	108
17	138	328	394	1,250	b350	1,110	782	638	300	209	401	118
18	168	290	364	982	b340	982	737	1,360	275	185	*275	*209
19	260	926	364	775	b340	946	701	1,990	310	189	213	205
20	198	955	521	634	b340	1,770	665	1,040	*310	189	182	178
21	164	650	1,480	666	b340	1,390	620	880	344	185	164	221
22	155	479	1,160	2,560	b340	1,090	683	710	490	205	160	408
23	149	458	847	1,800	b400	928	2,340	*656	368	201	209	248
24	158	602	690	1,200	b600	856	2,250	692	326	422	237	178
25	190	486	594	3,470	b800	982	1,740	665	310	*380	584	160
26	198	400	2,540	3,500	847	1,660	1,200	665	352	320	810	144
27	164	352	3,440	1,900	3,080	2,780	1,080	557	522	337	443	141
28	155	328	1,620	1,320	3,560	3,620	*2,130	498	350	1,450	305	202
29	152	650	1,110	1,070		2,320	2,320	490	270	1,630	248	221
30	149	626	883	946	-------	1,800	1,690	443	234	548	217	157
31	149	-------	739	847	-------	*5,850	-------	408	-------	332	193	-------
Total	7,933	10,755	26,493	34,247	24,965	47,303	45,028	33,625	10,997	11,014	9,238	4,873
Mean	256	358	855	1,105	892	1,526	1,501	1,085	367	355	298	162
Cfsm	0.379	0.530	1.27	1.64	1.32	2.26	2.22	1.61	0.544	0.526	0.441	0.240
In.	0.44	0.59	1.46	1.89	1.38	2.61	2.48	1.86	0.61	0.61	0.51	0.27

Calendar year 1957: Max 5,770 Min 25 Mean 508 Cfsm 0.753 In. 10.22
Water year 1957-58: Max 5,850 Min 89 Mean 730 Cfsm 1.08 In. 14.71

Peak discharge (base, 6,000 cfs).--Mar. 31 (5 p.m.) 7,670 cfs (13.91 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

350. James River at Cartersville, Va.

Location.--Lat 37°40', long 78°05', on left bank 200 ft downstream from highway bridge between Pemberton and Cartersville, Cumberland County, 2 miles downstream from Willis River, and at mile 152.4.

Drainage area.--6,242 sq mi.

Records available.--October 1898 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 161.57 ft above mean sea level (levels by Corps of Engineers). Prior to June 4, 1927, wire-weight or chain gage at same site and datum.

Average discharge.--60 years, 7,121 cfs.

Extremes.--Maximum discharge during year, 51,700 cfs Apr. 1 (gage height, 16.46 ft); minimum, 1,130 cfs Sept. 15 (gage height, 0.82 ft); minimum daily, 1,200 cfs Sept. 16, 17. 1898-1958: Maximum discharge, 180,000 cfs Sept. 20, 1944 (gage height, 29.6 ft, from floodmark in gage well); minimum, 320 cfs Sept. 22, 1932; minimum daily, 348 cfs Oct. 5, 1930; minimum gage height, 0.10 ft Oct. 2, 1941.

Remarks.--Records good. Large diurnal fluctuation caused by powerplants above station.

Revisions (water years).--WSP 582: Drainage area. WSP 972: 1936(M). WSP 1203: 1901-2(M), 1928(M). WSP 1303: 1902(M), 1924-25(M).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.8	1,100
2.0	3,080
5.0	9,000
10.0	24,100
17.0	54,200

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,480	2,320	7,000	9,250	10,800	28,200	50,200	19,700	4,820	2,400	3,250	2,320
2	3,160	2,480	5,800	7,410	13,000	21,700	45,900	15,900	5,400	2,230	2,910	2,040
3	*5,400	2,320	5,010	6,800	12,700	17,100	34,300	14,200	5,200	2,140	2,910	1,930
4	4,270	2,200	4,720	6,000	13,000	13,900	25,500	14,700	5,200	2,040	4,100	1,900
5	3,340	2,040	4,820	5,200	10,500	11,600	20,300	15,000	5,400	1,930	6,140	1,840
6	3,340	2,320	4,720	4,720	*9,750	*10,500	18,700	17,800	4,630	1,800	7,840	1,840
7	6,000	1,950	4,630	4,540	8,760	9,750	21,000	38,400	4,270	1,950	5,200	1,600
8	3,680	1,920	6,600	4,100	11,600	8,520	22,700	41,900	3,930	2,060	4,180	1,530
9	2,660	2,320	13,900	4,360	13,300	8,060	23,000	33,800	3,500	2,230	3,000	1,470
10	1,870	2,480	23,800	3,760	17,100	7,840	18,400	26,700	3,760	3,680	3,250	1,530
11	2,480	2,570	17,800	4,100	12,700	8,760	18,100	20,600	5,600	3,760	2,570	1,530
12	2,660	2,230	12,700	3,590	10,300	9,000	16,200	17,100	4,630	3,340	2,200	1,400
13	2,230	3,080	*9,500	3,420	9,250	9,000	14,700	15,300	4,100	4,180	2,740	1,420
14	2,090	*2,820	8,520	6,760	8,060	10,800	13,600	14,200	4,020	4,720	2,820	1,320
15	1,640	2,910	6,800	18,100	7,200	13,300	12,400	12,200	3,840	5,010	2,660	1,230
16	1,900	3,500	6,200	16,500	6,800	12,200	11,300	10,800	3,590	4,100	5,580	1,200
17	1,660	4,020	5,400	15,800	6,200	10,800	10,500	10,000	3,420	*3,250	8,800	1,200
18	1,710	4,360	5,010	11,600	5,800	9,250	10,000	10,500	3,340	2,570	*4,020	*1,340
19	2,080	6,200	4,630	9,750	5,010	8,760	9,000	11,600	3,590	2,480	3,340	1,720
20	3,160	11,300	4,820	7,000	5,200	11,600	8,520	12,700	*3,250	2,480	2,910	1,770
21	2,820	12,200	7,840	6,800	4,820	10,300	7,840	11,100	3,250	2,320	2,400	1,600
22	2,660	11,900	7,200	12,400	5,400	8,760	7,840	9,000	3,340	2,320	1,950	2,090
23	2,230	9,500	6,000	15,300	6,000	8,290	16,300	*7,840	3,160	2,570	1,950	2,570
24	2,480	9,750	5,600	13,600	6,600	8,060	*23,400	6,800	3,160	2,480	2,230	2,010
25	2,320	7,410	5,400	20,600	7,200	8,520	25,900	6,800	3,160	3,000	4,450	1,950
26	2,480	7,840	8,220	28,600	7,200	13,600	19,000	7,410	3,160	3,930	5,010	2,000
27	2,230	7,200	16,800	24,100	16,200	18,700	16,200	7,410	3,500	4,820	4,540	1,720
28	2,570	6,400	21,300	18,700	27,800	32,600	15,600	6,200	3,680	6,000	5,800	1,530
29	2,910	7,000	21,300	15,000	-	28,600	18,700	5,600	3,250	7,410	4,360	1,550
30	2,820	7,620	14,200	12,200	--------	22,700	23,400	5,400	3,080	5,010	3,500	1,630
31	2,910	--------	10,800	10,500	--------	31,400	--------	4,820	--------	3,420	3,000	--------
Total	86,240	152,160	287,040	330,360	278,050	432,170	578,500	451,480	118,230	101,630	119,610	50,780
Mean	2,782	5,072	9,259	10,660	9,930	13,940	19,280	14,560	3,941	3,278	3,858	1,693
Cfsm	0.446	0.813	1.48	1.71	1.59	2.23	3.09	2.33	0.631	0.525	0.618	0.271
In.	0.51	0.91	1.71	1.97	1.66	2.57	3.45	2.69	0.70	0.61	0.71	0.30

Calendar year 1957: Max 65,200 Min 600 Mean 6,596 Cfsm 1.06 In. 14.33
Water year 1957-58: Max 50,200 Min 1,200 Mean 8,182 Cfsm 1.31 In. 17.79

Peak discharge (base, 40,000 cfs).--Apr. 1 (7 to 8 p.m.) 51,700 cfs (16.46 ft); May 8 (1 a.m.) 44,100 cfs (14.92 ft).

* Discharge measurement made on this day.

380. Falling Creek near Chesterfield, Va.

Location.--Lat 37°26'37", long 77°31'21", on left upstream side of bridge on State Highway 651, 0.8 mile downstream from Licking Creek, 2.8 miles upstream from Pocoshock Creek, and 4.7 miles northwest of Chesterfield, Chesterfield County.

Drainage area.--32.8 sq mi.

Records available.--October 1955 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 130 ft (from topographic map).

Extremes.--Maximum discharge during year, 855 cfs Aug. 4 (gage height, 10.07 ft); minimum, 3.6 cfs Sept. 18, 20, 21.
1955-58: Maximum discharge, that of Aug. 4, 1958; minimum, 1.3 cfs Aug. 11-15, 1957.

Remarks.--Records good except those below 5 cfs and those for period of ice effect, which are fair.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.7	20	64	48	186	133	81	53	19	15	6.7	9.9
2	*7.0	76	44	42	208	83	61	56	17	13	9.8	8.5
3	5.8	48	37	35	113	67	52	78	16	11	12	7.6
4	5.0	32	88	32	80	56	46	62	16	10	*473	7.2
5	4.4	26	93	26	66	48	42	55	15	9.2	50	7.2
6	100	22	61	28	74	44	99	236	14	8.2	23	6.6
7	136	20	52	33	150	41	121	320	12	7.8	16	6.0
8	42	20	110	32	213	38	70	214	12	11	13	5.4
9	24	28	254	25	113	38	53	118	22	12	11	5.0
10	17	27	256	24	75	62	72	81	53	12	10	4.9
11	12	21	192	30	63	75	330	68	22	*9.5	9.0	*4.3
12	10	18	124	28	56	56	222	58	*83	11	11	4.0
13	9.3	16	85	22	*52	54	118	46	50	15	9.9	4.2
14	8.8	19	71	104	46	*125	88	38	58	27	11	4.2
15	8.6	23	63	121	46	86	74	*33	35	15	11	3.8
16	8.2	21	54	*78	b40	63	65	29	26	10	27	3.8
17	8.4	20	49	61	b35	52	*58	26	20	7.5	15	4.0
18	17	26	44	48	b35	46	51	23	18	7.5	11	4.2
19	27	32	*42	39	b35	113	48	26	26	7.3	9.0	3.7
20	19	28	175	33	b35	250	44	46	61	6.5	8.1	3.7
21	13	22	505	38	40	190	42	31	59	6.3	7.2	5.6
22	11	19	231	84	59	105	99	22	50	6.3	6.8	6.8
23	11	53	105	56	77	75	182	18	52	6.1	6.6	5.4
24	16	71	75	51	71	62	106	18	42	6.7	6.4	4.8
25	25	136	61	330	62	69	73	44	29	9.2	47	4.4
26	20	124	129	260	69	113	55	83	24	8.0	154	4.2
27	16	68	154	121	260	109	48	35	42	8.0	57	4.2
28	13	50	90	86	213	109	94	28	36	14	27	4.2
29	12	51	82	68	-	78	88	31	24	13	19	4.2
30	12	66	62	59	-------	64	65	25	18	8.0	14	4.0
31	12	-------	50	52	-------	75	-------	21	-------	6.3	11	-------
Total	637.2	1,205	3,502	2,094	2,572	2,579	2,647	2,022	971	317.4	1,102.5	156.0
Mean	20.6	40.2	113	67.5	91.9	83.2	88.2	65.2	32.4	10.2	35.6	5.20
Cfsm	0.628	1.23	3.45	2.06	2.80	2.54	2.69	1.99	0.988	0.311	1.09	0.159
In.	0.72	1.37	3.98	2.38	2.92	2.93	3.00	2.29	1.10	0.36	1.26	0.18

Calendar year 1957: Max 505 Min 1.3 Mean 41.2 Cfsm 1.26 In. 17.07
Water year 1957-58: Max 505 Min 3.7 Mean 54.3 Cfsm 1.66 In. 22.49

Peak discharge (base, 350 cfs).--Dec. 21 (3 a.m.) 635 cfs (8.98 ft); Jan. 25 (12 m.) 415 cfs (7.57 ft); Apr. 11 (5 a.m.) 376 cfs (7.31 ft); May 7 (11:30 a.m.) 352 cfs (7.08 ft); Aug. 4 (8 a.m.) 855 cfs (10.07 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

385. Falling Creek near Drewrys Bluff, Va.

Location.--Lat 37°27'40", long 77°28'00", on left bank 300 ft downstream from highway bridge, 600 ft downstream from Chesterfield County Reservoir, 2.4 miles northeast of town of Drewrys Bluff, Chesterfield County, 2.7 miles downstream from Pocoshock Creek, and 3.7 miles upstream from mouth.

Drainage area.--54 sq mi, approximately.

Records available.--September 1942 to September 1956, July 1957 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 60 ft (from topographic map). Prior to Oct. 1, 1952, water-stage recorder at site 300 ft upstream at datum 5.39 ft higher.

Average discharge.--15 years (1942-56, 1957-58), 55.0 cfs (unadjusted).

Extremes.--1957: Maximum discharge during period July to September, 172 cfs Aug. 19 (gage height, 3.51 ft); minimum, 0.4 cfs July 19, 22, Aug. 12, 13, 14.
1957-58: Maximum discharge during water year, 2,140 cfs Aug. 4 (gage height, 6.86 ft); minimum, 0.6 cfs July 7, 8, 9.
1942-56, 1957-58: Maximum discharge, 7,270 cfs July 18, 1945 (gage height, 10.1 ft, site and datum then in use); minimum, 0.12 cfs Aug. 13, 1953, Sept. 6, 7, 1954.

Remarks.--Records good except those below 10 cfs, which are fair. Chesterfield County diverts up to 1.5 cfs for water supply from reservoir 600 ft upstream from gage.

Revisions (water years).--WSP 1032: 1943-44(M). Revised figures of discharge, in cubic feet per second, for high-water periods in the water year 1955, superseding those published in WSP 1383, are given herewith:

1955	
Aug. 12	528
13	1,700
17	1,050
18	2,570
19	593
20	226
21	113
24	44

1955-Con.	
Sept. 19	146
20	637
21	232
22	111
23	74
24	61
25	80

Month	Cfs-days	Maximum	Minimum	Mean
August 1955	7,807.5	2,570	2.4	252
September	1,826.9	637	8.2	60.9
Water year 1954-55	-	2,570	.31	46.3
Calendar year 1955	-	2,570	.31	57.0

Revised peak discharge.--1954-55: Aug. 13 (3 a.m.) 3,100 cfs (8.22 ft).

385. Falling Creek near Drewrys Bluff, Va.--Continued

Rating tables, July 16, 1957, to Sept. 30, 1958 (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Feb. 16, 17, 1958)

July 16, 1957, to Apr. 11, 1958

1.7	0.4	2.6	23
1.8	.6	2.8	45
1.9	1.1	3.0	74
2.0	2.2	3.5	170
2.2	6.0	4.0	300
2.4	12		

Note.--Same as following table above 4.0 ft.

Apr. 12 to Sept. 30, 1958

1.8	0.6	2.3	10	4.0	300
1.9	1.1	2.4	16	4.5	560
2.0	2.3	2.6	34	5.0	910
2.1	4.0	3.0	84	6.0	1,560
2.2	6.5	3.4	155		

Discharge, in cubic feet per second, 1957

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1	-	0.6	8.2	9	-	0.6	39	17	*4.4	1.0	29	25	2.1	15	5.4
2	-	.5	4.8	10	-	.6	17	18	1.5	.8	43	26	.7	22	5.0
3	-	.5	4.4	11	-	.5	16	19	.6	75	20	27	.8	13	4.2
4	-	.6	*4.8	12	-	.6	11	20	.6	32	13	28	2.2	7.9	4.2
5	-	.8	4.0	13	-	.5	8.2	21	.6	13	11	29	5.2	6.2	5.2
6	-	.6	3.2	14	-	.6	7.4	22	.6	10	9.0	30	3.6	5.0	8.7
7	-	.6	3.1	15	-	*.8	5.6	23	.7	7.7	6.2	31	1.0	3.6	-
8	-	.6	7.2	16	3.6	.8	5.0	24	3.2	5.4	6.0				
Total													-	227.4	318.8
Mean													-	7.34	10.6

Peak discharge (base, 500 cfs).--No peak above base.

* Discharge measurement made on this day.
Note.--Result of discharge measurements: Oct. 10, 1956, 7.90 cfs; Dec. 18, 1956, 103 cfs.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	17	114	84	265	212	144	92	30	25	9.2	23
2	*12	106	72	76	291	144	110	92	28	20	10	19
3	9.3	68	59	64	182	120	95	122	23	18	12	a16
4	7.9	51	142	56	132	100	86	106	24	16	*1,170	a14
5	7.0	30	160	48	106	84	76	97	24	14	188	a12
6	204	24	106	48	122	76	159	398	21	10	63	a10
7	247	21	84	55	222	72	198	560	18	5.7	40	a8.8
8	84	20	168	56	288	65	128	291	17	.8	30	a7.7
9	37	27	454	46	178	64	97	183	14	12	22	6.5
10	23	27	415	41	126	100	101	135	19	28	19	5.3
11	15	20	285	49	104	134	525	116	100	*19	18	*6.2
12	14	19	190	49	93	100	304	105	*97	17	19	6.8
13	13	18	130	40	*88	88	187	68	114	29	19	5.3
14	11	19	106	145	72	*202	145	69	102	63	22	5.3
15	11	25	97	182	74	152	122	*63	76	38	22	5.6
16	11	22	82	*130	70	116	110	58	52	18	42	5.3
17	11	20	74	102	60	95	*100	52	36	12	39	5.3
18	16	25	66	82	59	81	90	47	30	6.5	24	5.0
19	29	35	*62	65	56	158	84	46	48	6.5	18	4.8
20	22	33	326	55	59	364	77	73	82	6.8	a16	4.8
21	15	*24	975	56	59	273	70	64	106	7.4	a15	8.0
22	13	20	360	130	84	178	118	46	86	14	a14	13
23	12	60	178	91	124	132	265	39	87	14	a13	10
24	16	106	134	82	112	110	169	39	74	12	a13	8.0
25	28	185	110	564	102	120	118	50	53	13	78	6.8
26	20	200	191	356	105	190	94	155	41	13	250	5.6
27	16	110	235	188	410	185	83	76	59	12	171	5.6
28	14	77	154	136	300	185	138	52	63	18	73	5.3
29	13	81	144	104	-	140	149	52	41	18	52	5.0
30	13	99	112	89	-------	116	116	41	31	13	36	4.8
31	13	-------	93	76	-------	130	-------	34	-------	9.6	29	-------
Total	968.2	1,589	5,878	3,345	3,943	4,286	4,258	3,421	1,596	509.3	2,546.2	248.8
Mean	31.2	53.0	190	108	141	138	142	110	53.2	16.4	82.1	8.29
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max - Min - Mean - Cfsm - In. -
Water year 1957-58: Max 1,170 Min 0.8 Mean 89.3 Cfsm - In. -

Peak discharge (base, 500 cfs).--Oct. 6 (9 p.m.) 644 cfs (4.62 ft); Dec. 9 (2 p.m.) 588 cfs (4.54 ft); Dec. 21 (1:30 a.m.) 1,300 cfs (5.62 ft); Jan. 25 (9 to 10 a.m.) 714 cfs (4.72 ft); Feb. 27 (6 a.m.) 525 cfs (4.45 ft); Apr. 11 (7 a.m.) 651 cfs (4.63 ft); May 6 (7 p.m.) 644 cfs (4.62 ft); Aug. 4 (7:30 a.m.) 2,140 cfs (6.86 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for station near Chesterfield.

395. Appomattox River at Farmville, Va.

Location.--Lat 37°18', long 78°23', on left bank 15 ft downstream from highway bridge, 1,000 ft north of town limits of Farmville, Prince Edward County, and 1¼ miles downstream from Buffalo Creek.

Drainage area.--306 sq mi.

Records available.--March 1926 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 281.93 ft above mean sea level, datum of 1929. Prior to Nov. 29, 1928, chain gage at same site and datum.

Average discharge.--32 years, 289 cfs.

Extremes.--Maximum discharge during year, 2,960 cfs Feb. 28 (gage height, 15.15 ft); minimum, 64 cfs Oct. 13, 14; minimum gage height, 3.78 ft Sept. 17.
1926-58: Maximum discharge, 21,000 cfs Aug. 15, 1940 (gage height, 23.60 ft), from rating curve extended above 12,000 cfs by logarithmic plotting; minimum, 3.8 cfs Sept. 25, 1941; minimum daily, 9 cfs Sept. 20, 1932.

Remarks.--Records good except those for period of ice effect, which are fair. Diurnal fluctuation at low flow caused by mills above station.

Revisions (water years).--WSP 972: 1927-37, 1938(M). WSP 1303: 1927(M).

Rating tables, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 25				Jan. 26 to Aug. 25				Aug. 26 to Sept. 30	
3.8	62	7.0	500	3.8	78	11.0	1,350	3.8	67
4.0	80	9.0	890	4.0	100	14.0	2,200	4.0	88
4.5	132	13.0	1,880	5.0	220	15.0	2,800	6.0	365
5.0	200			8.0	700			8.0	700

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	125	78	468	207	548	840	1,680	488	169	145	204	89
2	117	116	299	186	800	488	760	456	169	133	241	163
3	100	119	235	148	*520	*395	488	552	163	128	157	232
4	84	101	322	126	372	342	395	800	157	122	151	145
5	77	86	404	136	312	298	358	720	157	118	125	87
6	75	82	306	145	290	283	616	1,590	151	118	108	84
7	72	79	249	164	410	269	988	2,660	145	119	100	81
8	69	103	598	152	820	255	552	1,830	141	122	94	78
9	67	235	*1,300	136	504	248	395	*760	163	122	90	75
10	66	193	934	135	320	298	395	504	1,010	130	87	72
11	66	*118	500	141	290	365	1,030	440	434	124	*85	68
12	65	102	322	128	269	320	760	395	305	114	109	68
13	64	95	235	119	269	298	472	350	276	125	109	69
14	64	97	221	701	227	472	380	312	200	*131	109	69
15	*66	124	207	1,650	214	504	342	290	181	122	111	*68
16	66	122	186	890	169	380	328	269	188	111	138	68
17	69	111	176	554	b160	312	305	255	*169	103	138	68
18	78	248	164	366	b160	283	283	248	151	104	103	95
19	83	692	158	270	b170	328	269	269	151	145	89	98
20	77	1,180	242	214	b200	456	262	350	181	115	82	72
21	71	500	536	322	234	380	*248	276	234	102	81	90
22	70	270	389	1,210	290	312	262	241	220	109	80	123
23	71	411	263	846	410	269	853	220	269	112	81	96
24	76	608	214	420	488	255	820	214	227	106	100	79
25	86	944	200	1,330	488	413	488	220	188	110	612	77
26	84	1,330	*600	1,850	581	988	380	234	181	103	660	82
27	77	725	934	820	2,150	944	328	207	410	113	395	81
28	74	359	500	456	2,230	1,370	1,920	194	320	110	163	81
29	74	374	322	358	-	760	1,630	200	188	96	124	80
30	74	468	256	312	--------	488	760	188	157	88	106	78
31	75	--------	221	283	--------	1,190	--------	175	--------	90	95	--------
Total	2,382	10,070	11,961	14,775	13,895	14,803	18,747	15,907	7,055	3,590	4,927	2,716
Mean	76.8	336	386	477	496	478	625	513	235	116	159	90.5
Cfsm	0.251	1.10	1.26	1.56	1.62	1.56	2.04	1.68	0.768	0.379	0.520	0.296
In.	0.29	1.23	1.45	1.80	1.69	1.80	2.28	1.94	0.86	0.44	0.60	0.33

Calendar year 1957: Max 1,600 Min 22 Mean 226 Cfsm 0.739 In. 10.03
Water year 1957-58: Max 2,660 Min 64 Mean 331 Cfsm 1.08 In. 14.71

Peak discharge (base, 3,500 cfs).--No peak above base.

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

415. Appomattox River near Petersburg, Va.

Location.--Lat 37°13'33", long 77°32'20", on right bank 2.2 miles upstream from dam of Virginia Electric & Power Co., 4.2 miles downstream from Wipponock Creek, and 5.9 miles west of corporate limits of city of Petersburg, Dinwiddie County.

Drainage area.--1,335 sq mi.

Records available.--October 1926 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Altitude of gage is 118 ft (by barometer). Prior to Sept. 22, 1931, at site 0.8 mile downstream at different datum.

Average discharge.--32 years, 1,178 cfs.

Extremes.--Maximum discharge during year, 7,800 cfs May 8 (gage height, 9.70 ft); minimum, 252 cfs Sept. 14 (gage height, 2.69 ft).
1926-58: Maximum discharge, 28,000 cfs Aug. 20, 1940 (gage height, 18.15 ft); minimum, 19 cfs Sept. 21-27, 1932.

Remarks.--Records good.

Revisions (water years).--WSP 757: 1932-33, drainage area. WSP 802: 1936(M). WSP 972: 1932, 1934-35.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used June 16-20)

Oct. 1-7		Oct. 8 to Sept. 30			
3.0	410	2.7	256	6.0	3,200
3.5	700	3.0	385	8.0	5,500
4.0	1,100	3.5	685	10.0	8,250
5.0	2,100	4.0	1,100		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	410	405	2,320	1,380	2,210	6,280	3,310	3,970	760	722	420	490
2	528	984	2,210	1,280	3,860	5,630	3,640	2,980	722	615	457	435
3	552	1,380	1,630	1,140	3,970	4,900	3,640	2,320	700	563	776	395
4	500	1,280	1,830	976	3,200	3,970	2,700	2,380	685	514	1,480	380
5	435	908	2,540	768	*1,990	*1,730	1,730	2,320	671	479	1,580	502
6	778	685	2,600	b740	1,730	1,430	2,100	4,780	643	457	1,380	468
7	*1,830	576	1,990	b800	1,990	1,330	3,640	7,360	629	440	792	367
8	959	508	1,880	b900	3,530	1,280	3,860	7,650	602	435	474	326
9	550	608	4,080	b900	3,640	1,240	3,200	7,080	589	440	380	309
10	425	824	6,020	b780	2,980	1,430	2,100	6,280	891	468	357	296
11	362	866	6,280	b840	1,830	1,880	5,260	5,500	1,680	508	335	284
12	330	708	5,630	b890	1,530	1,880	6,280	4,300	2,040	496	318	272
13	300	*582	3,200	*b800	1,430	1,680	5,760	1,830	1,480	582	*502	260
14	284	538	1,630	1,480	1,330	2,430	3,970	1,480	1,130	657	514	256
15	284	576	1,430	3,640	1,240	2,870	2,160	1,280	925	608	468	256
16	288	816	1,280	4,420	1,180	2,540	1,780	1,180	760	508	576	264
17	296	882	1,180	4,300	1,040	1,880	1,630	1,080	671	*446	1,030	*260
18	326	840	1,080	3,750	b960	1,580	1,480	1,010	596	405	685	260
19	678	1,240	1,010	2,040	b940	1,830	1,380	1,010	*615	375	479	268
20	832	1,990	1,520	1,380	b1,020	3,420	1,280	1,240	760	362	380	272
21	556	2,380	6,150	1,240	b1,100	3,640	1,240	1,630	942	415	326	313
22	435	2,040	6,800	1,780	b1,250	2,600	1,530	*1,430	1,040	415	305	385
23	380	1,480	4,660	2,870	1,830	1,830	*3,200	1,060	1,280	357	300	425
24	367	2,260	2,210	2,980	2,160	1,530	3,860	925	1,380	367	272	395
25	425	3,530	1,630	4,740	2,320	1,530	3,420	908	1,110	462	782	362
26	490	5,140	1,990	6,150	2,210	2,760	2,160	4,190	824	415	4,300	318
27	457	5,380	3,750	6,280	4,540	3,860	1,680	2,100	1,140	362	5,140	288
28	420	4,660	4,190	5,380	6,020	4,300	1,730	1,280	1,780	500	4,420	280
29	390	3,640	3,860	4,540	-	4,080	3,200	1,040	1,480	576	1,410	276
30	367	2,040	2,320	2,480	-------	3,420	3,970	925	968	367	792	272
31	367	-------	1,630	1,530	-------	2,600	-------	832	-------	322	582	-------
Total	15,601	49,746	90,530	73,174	63,030	83,360	86,890	83,350	29,493	14,638	32,012	9,934
Mean	503	1,658	2,920	2,360	2,251	2,689	2,896	2,689	983	472	1,033	331
Cfsm	0.377	1.24	2.19	1.77	1.69	2.01	2.17	2.01	0.736	0.354	0.774	0.248
In.	0.43	1.38	2.52	2.04	1.76	2.32	2.42	2.32	0.82	0.41	0.89	0.28

Calendar year 1957: Max 6,800 Min 50 Mean 1,222 Cfsm 0.915 In. 12.42
Water year 1957-58: Max 7,650 Min 256 Mean 1,731 Cfsm 1.30 In. 17.59

Peak discharge (base, 5,000 cfs).--Nov. 27 (4 p.m.) 5,380 cfs (7.93 ft); Dec. 11 (12:30 p.m.) 6,410 cfs (8.68 ft); Dec. 22 (9 to 10 a.m.) 6,940 cfs (9.09 ft); Jan. 27 (8 a.m.) 6,280 cfs (8.65 ft); Mar. 1 (5 to 7 a.m.) 6,280 cfs (8.65 ft); Apr. 12 (10 to 11 p.m.) 6,280 cfs (8.61 ft); May 8 (3 to 4 a.m.) 7,800 cfs (9.70 ft); May 26 (12 m.) 5,380 cfs (7.90 ft); Aug. 27 (4 to 9 p.m.) 5,260 cfs (7.78 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

425. Chickahominy River near Providence Forge, Va.

Location.--Lat 37°26'10", long 77°03'40", on left bank at upstream side of highway bridge, 1.1 miles southwest of Providence Forge, New Kent County, and 1.7 miles downstream from Schiminoe Creek.
Drainage area.--249 sq mi.
Records available.--January 1942 to September 1958.
Gage.--Water-stage recorder. Datum of gage is 6.07 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.
Average discharge.--16 years, 263 cfs.
Extremes.--Maximum discharge during year, 1,820 cfs Dec. 25 (gage height, 9.12 ft); minimum, 35 cfs Sept. 21 (gage height, 2.62 ft).
1942-58: Maximum discharge, 7,710 cfs Aug. 15, 1955 (gage height, 11.67 ft); minimum, 3.4 cfs Aug. 1, 1954; minimum gage height, 1.56 ft Aug. 25, 26, 1943.
Revisions.--The minimum discharge for the water year 1956 has been revised to 22 cfs July 3, Sept. 23-25, superseding figure published in WSP 1433.
Remarks.--Records good except those for periods of ice effect or no gage-height record, which are poor.
Revisions.--Revised figures of discharge, in cubic feet per second, for the water year 1956, superseding those published in WSP 1433, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge
1956		1956-Con.		1956-Con.	
July 1	26	July 17	38	Sept.22	24
2	23	Sept.16	38	23	23
3	22	17	35	24	22
4	26	18	32	25	23
5	35	19	30	26	34
15	36	20	28		
16	30	21	25		

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
July 1956.....	7,111	955	22	229	0.920	1.06
September.....	2,221	142	22	74.0	.297	.33
Water year 1955-56.....	-	1,120	22	235	.944	12.81

Rating table, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.6	34	6.0	393	9.0	1,700
3.0	64	7.0	568	10.0	3,200
5.0	270	8.0	955		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	81	182	651	1,000	905	1,060	811	526	210	210	a70	651
2	*95	281	620	905	857	1,000	767	471	177	226	a70	455
3	96	328	568	767	811	1,060	686	455	162	220	a70	264
4	92	393	620	a620	811	1,060	592	488	152	152	a150	130
5	81	439	725	a500	811	1,000	526	506	137	103	a250	92
6	146	379	725	a430	955	857	546	620	129	84	a350	80
7	316	316	767	379	955	686	620	1,060	118	76	*a350	72
8	509	281	767	366	1,000	546	592	1,490	109	78	242	64
9	955	292	955	353	905	455	568	1,320	101	78	131	56
10	955	281	1,320	316	a850	439	526	1,180	112	102	74	49
11	1,490	259	1,590	292	a800	439	840	1,120	123	*a120	57	*43
12	1,400	232	1,490	316	a800	455	1,120	1,000	*152	a150	53	40
13	1,060	210	1,400	316	*b750	439	1,180	857	204	a180	69	39
14	767	193	1,400	340	b700	*455	1,060	686	254	a170	92	39
15	506	204	1,320	*408	b600	506	1,120	*526	270	a150	102	38
16	353	232	1,120	455	b500	546	1,060	423	242	a130	137	37
17	232	254	955	506	b450	568	*905	340	210	a110	127	38
18	226	254	767	546	b400	546	725	292	172	a95	106	36
19	264	242	*620	592	b350	620	568	276	188	a90	105	36
20	259	237	568	686	353	905	488	408	254	a80	100	36
21	226	232	725	725	353	1,060	423	353	328	a70	65	41
22	182	242	955	651	366	1,060	379	292	316	a60	68	68
23	162	264	1,180	546	379	1,060	506	259	316	a57	66	75
24	162	304	1,400	488	408	1,250	620	226	316	a70	78	63
25	193	366	1,820	546	423	1,250	725	226	304	a70	172	52
26	198	488	1,590	686	439	1,180	767	507	292	a80	450	43
27	198	526	1,400	905	568	1,060	686	955	340	a80	620	47
28	188	526	1,180	1,060	857	955	620	592	340	a80	a700	53
29	177	546	1,120	1,180	-	811	592	423	281	a70	a860	73
30	167	568	1,000	1,120	------	767	592	316	232	a70	955	93
31	162	-------	1,000	1,000	-------	767	-------	254	-------	a60	857	---- --
Total	11,898	9,551	32,318	19,000	18,356	24,862	21,210	18,447	6,541	3,371	7,596	2,903
Mean	384	318	1,043	613	656	802	707	595	218	109	245	96.8
Cfsm	1.54	1.28	4.19	2.46	2.63	3.22	2.84	2.39	0.876	0.438	0.984	0.389
In.	1.78	1.43	4.83	2.84	2.74	3.71	3.17	2.76	0.98	0.50	1.13	0.43

Calendar year 1957: Max 1,820 Min 12 Mean 356 Cfsm 1.43 In. 19.46
Water year 1957-58: Max 1,820 Min 36 Mean 482 Cfsm 1.94 In. 26.30

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Dragon Run near Churchview.
b Stage-discharge relation affected by ice.

430. Lake Drummond in Dismal Swamp, Va.

Location.--Lat 36°35'40", long 76°26'20", on left bank in outlet canal, in Norfolk County, 200 ft upstream from dam and gates, 0.5 mile downstream from Lake Drummond, 2.5 miles east of Nansemond County line, 3.1 miles north of North Carolina State line, and 20 miles southwest of Norfolk.

Records available.--May 1926 to September 1958.

Gage.--Staff gage read twice daily. Altitude of gage is 15 ft (from topographic map).

Extremes.--Maximum gage height during year, 6.16 ft May 12; minimum, 2.60 ft Oct. 1.
1926-58: Maximum gage height, 6.20 ft Feb. 9, 1957; minimum, -0.67 ft Nov. 3, 1952.

Revisions (water years).--WSP 1032: 1934-43.

Gage height, in feet, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.63	3.48	5.30	5.14	5.22	5.29	5.14	5.18	5.17	5.24	4.46	4.34
2	2.69	3.66	5.30	5.11	5.19	5.29	5.09	5.17	5.17	5.23	4.42	4.36
3	2.71	3.70	5.25	5.09	5.12	5.37	5.13	5.20	5.20	5.18	4.40	4.33
4	2.73	3.80	5.27	5.07	5.07	5.38	5.16	5.19	5.21	5.17	4.41	4.32
5	2.72	3.88	5.17	5.07	5.08	5.35	5.16	5.13	5.21	5.15	4.39	4.31
6	3.00	3.90	5.11	5.09	5.06	5.29	5.18	5.17	5.22	5.08	4.31	4.31
7	3.04	4.02	5.07	5.13	5.10	5.20	5.22	5.31	5.24	5.09	4.29	4.28
8	3.11	4.06	5.03	5.18	5.20	5.15	5.21	5.50	5.22	5.06	4.26	4.24
9	3.19	4.15	5.06	5.19	5.15	5.10	5.17	5.84	5.22	5.04	4.26	4.20
10	3.25	4.21	5.16	5.14	5.10	5.14	5.14	6.04	5.24	5.15	4.21	4.19
11	3.31	4.30	5.09	5.11	5.09	5.10	5.22	6.13	5.22	5.08	4.19	4.10
12	3.35	4.31	5.15	5.16	5.08	5.04	5.26	6.15	5.24	5.03	4.14	4.05
13	3.39	4.37	5.19	5.12	5.12	5.08	5.28	6.10	5.22	5.00	4.15	4.04
14	3.40	4.39	5.18	5.15	5.12	5.11	5.29	6.03	5.23	5.00	4.19	4.01
15	3.42	4.42	5.19	5.12	5.09	5.09	5.29	5.87	5.28	4.99	4.17	3.97
16	3.43	4.49	5.18	5.15	5.14	5.07	5.30	5.70	5.33	4.97	4.22	3.95
17	3.43	4.52	5.19	5.17	5.12	5.11	5.28	5.59	5.23	4.93	4.19	3.94
18	3.48	4.55	5.09	5.15	5.11	5.12	5.25	5.40	5.18	4.86	4.08	3.94
19	3.49	4.59	5.01	5.18	5.11	5.19	5.19	5.24	5.25	4.81	4.04	3.90
20	3.50	4.59	4.90	5.14	5.09	5.30	5.17	5.16	5.22	4.79	3.99	3.85
21	3.49	4.63	5.01	5.10	5.07	5.32	5.15	5.14	5.22	4.76	3.97	3.82
22	3.45	4.69	4.99	5.09	5.10	5.34	5.17	5.11	5.27	4.75	3.98	3.81
23	3.40	4.80	4.98	5.09	5.10	5.34	5.21	5.13	5.29	4.72	3.98	3.77
24	3.37	4.90	5.02	5.10	5.11	5.33	5.22	5.16	5.28	4.59	3.92	3.74
25	3.36	5.04	5.07	5.28	5.13	5.35	5.25	5.19	5.27	4.60	3.90	3.71
26	3.41	5.10	5.08	5.26	5.15	5.29	5.21	5.26	5.27	4.60	4.05	3.70
27	3.43	5.12	5.13	5.28	5.28	5.27	5.21	5.21	5.36	4.56	4.20	3.70
28	3.41	5.20	5.14	5.30	5.28	5.24	5.25	5.21	5.37	4.50	4.23	3.70
29	3.39	5.23	5.13	5.33	-	5.19	5.29	5.20	5.33	4.46	4.28	3.61
30	3.35	5.27	5.11	5.32	-------	5.16	5.23	5.18	5.29	4.40	4.33	3.55
31	3.35	-------	5.13	5.22	-------	5.14	-------	5.12	-------	4.45	4.34	-------

455. Nottoway River near Stony Creek, Va.

Location.--Lat 36°54'00", long 77°24'00", on left bank 15 ft downstream from bridge on U. S. Highway 301, 1.8 miles upstream from Island Swamp, 3.3 miles south of town of Stony Creek, Sussex County, and 4.4 miles upstream from Stony Creek.

Drainage area.--586 sq mi.

Records available.--October 1929 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 58.42 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Oct. 11, 1934, chain gage at same site and datum.

Average discharge.--29 years, 551 cfs.

Extremes.--Maximum discharge during year, 8,090 cfs May 7 (gage height, 17.73 ft); minimum, 95 cfs Sept. 21 (gage height, 2.60 ft).
1929-58: Maximum discharge, 25,200 cfs Aug. 17, 1940 (gage height, 23.66 ft), from rating curve extended above 13,000 cfs by logarithmic plotting on basis of records for stations on Appomattox River; minimum, 5 cfs Sept. 2, 5, 1932 (gage height, 0.62 ft).

Remarks.--Records good except those for periods of doubtful or no gage-height record, which are fair.

Revisions (water years).--WSP 802: 1935(M). WSP 972: 1931(M), 1932, 1934-35, 1939.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Feb. 16-18)

Oct. 1 to Nov. 24				Nov. 25 to Sept. 30			
2.9	116	6.0	800	2.6	95	11.0	2,450
3.5	210	8.0	1,350	3.0	163	14.0	3,860
4.0	310			5.0	601	16.0	5,790
				7.0	1,140	18.0	8,570

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	320	170	1,410	850	825	3,800	1,470	3,110	450	310	216	270
2	375	332	1,110	800	1,200	2,900	1,470	2,060	380	270	364	240
3	362	650	800	725	1,320	1,260	1,110	1,840	340	240	300	210
4	310	675	924	650	1,020	*1,020	930	1,740	320	222	544	188
5	260	412	1,650	589	*850	675	850	1,440	300	207	1,230	180
6	270	300	1,500	541	800	775	1,110	3,980	280	240	775	163
7	*400	260	1,020	589	930	750	2,120	7,470	260	250	353	158
8	300	226	960	650	1,780	725	2,020	7,620	250	250	260	145
9	220	238	2,290	650	1,920	700	1,260	6,920	300	214	210	136
10	170	310	3,920	565	1,290	900	990	3,920	350	236	186	121
11	150	290	*4,460	565	900	1,080	2,750	1,530	400	280	163	114
12	130	236	*5,850	613	825	960	3,920	1,230	500	260	147	111
13	120	*208	1,560	565	775	825	3,980	1,020	800	790	*250	105
14	110	204	1,020	*984	725	1,170	2,300	875	600	1,290	517	101
15	109	208	900	2,090	700	1,290	1,200	775	660	850	625	98
16	109	260	800	2,370	660	1,050	1,020	700	740	*433	725	*100
17	112	330	750	1,590	640	850	930	650	500	300	875	101
18	126	330	700	1,110	620	750	850	613	350	238	529	101
19	138	512	650	875	625	950	800	565	*320	216	320	101
20	244	1,110	799	725	675	2,120	750	625	310	201	240	105
21	214	875	3,600	675	650	2,120	725	775	376	186	197	103
22	168	575	4,880	850	675	1,440	*750	*750	505	178	178	121
23	146	525	4,300	1,050	800	1,050	1,530	700	775	190	163	240
24	148	1,110	1,680	900	900	875	2,090	650	650	174	156	207
25	175	1,680	1,020	2,220	875	875	1,660	700	493	593	224	154
26	244	3,020	1,170	3,460	850	2,300	930	1,020	398	665	1,220	128
27	230	3,020	*1,880	3,460	2,260	2,850	775	1,560	650	310	2,980	120
28	188	2,810	1,980	2,300	3,410	2,650	750	1,320	990	218	1,320	123
29	164	1,140	1,500	1,080	-	2,090	990	900	813	190	625	163
30	152	990	1,230	900	-------	1,410	2,280	650	398	165	445	120
31	152	-------	960	800	-------	1,170	-------	620	-------	150	331	-------
Total	6,316	23,006	55,273	35,791	29,500	43,580	44,310	58,228	14,258	10,316	16,668	4,327
Mean	204	767	1,783	1,155	1,054	1,406	1,477	1,878	475	333	538	144
Cfsm	0.348	1.31	3.04	1.97	1.80	2.40	2.52	3.20	0.811	0.568	0.918	0.246
In.	0.40	1.46	3.50	2.27	1.87	2.77	2.81	3.69	0.90	0.65	1.06	0.27

Calendar year 1957: Max 4,880 Min 15 Mean 723 Cfsm 1.23 In. 16.73
Water year 1957-58: Max 7,620 Min 98 Mean 936 Cfsm 1.60 In. 21.65

Peak discharge (base, 3,500 cfs).--Dec. 11 (9 to 10 p.m.) 4,560 cfs (14.88 ft); Dec. 22 (9 a.m.) 4,990 cfs (15.31 ft); Jan. 26 (8 to 9 a.m.) 3,520 cfs (13.39 ft); Mar. 1 (6 to 7 p.m.) 3,860 cfs (14.02 ft); Apr. 13 (10 to 11 a.m.) 3,980 cfs (14.24 ft); May 7 (7 to 9 p.m.) 8,090 cfs (17.73 ft).

* Discharge measurement made on this day.
Note.--Doubtful or no gage-height record Oct. 6-14, May 22 to June 19, Aug. 31 to Sept. 16; discharge estimated on basis of records for station near Sebrell.

470. Nottoway River near Sebrell, Va.

Location.--Lat 36°46'13", long 77°09'59", on right bank at upstream side of highway bridge, 1 mile downstream from Three Creek, 2.5 miles southwest of Sebrell, Southampton County, and 5.5 miles upstream from Assamoosick Swamp.

Drainage area.--1,451 sq mi.

Records available.--September 1941 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 5.94 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Aug. 23, 1950, wire-weight gage at same site and datum.

Average discharge.--17 years, 1,264 cfs.

Extremes.--Maximum discharge during year, 16,900 cfs May 10 (gage height, 21.80 ft); minimum, 159 cfs Sept. 20, 21 (gage height, 4.32 ft).
1941-58: Maximum discharge, 25,000 cfs July 22, 1945 (gage height, 24.5 ft); minimum observed, 12 cfs Oct. 23, 1941 (gage height, 3.30 ft).
Flood in August 1940 reached a stage of 29.7 ft, from floodmarks (discharge, 48,000 cfs, from rating curve extended above 25,000 cfs by logarithmic plotting).

Remarks.--Records fair.

Revisions (water years).--WSP 1333: 1942, 1944, 1948-49.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Feb. 16-20)

Oct. 1 to May 9				May 10 to Sept. 30			
4.4	230	13.0	3,150	4.3	155	7.0	860
5.0	354	16.0	5,580	5.0	310	9.0	1,530
6.0	604	18.0	8,600				
9.0	1,530	22.0	17,400				

Note.--Same as preceding table above 9.0 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	250	343	4,500	4,410	4,010	3,790	4,960	2,490	1,780	982	292	2,250
2	474	426	4,090	3,930	3,150	4,590	4,250	2,870	1,320	713	335	1,190
3	591	630	3,650	3,320	2,870	5,580	3,790	3,380	1,050	586	558	642
4	578	1,150	3,320	2,790	*2,870	*6,040	3,440	4,170	890	478	742	478
5	487	1,360	2,960	2,330	2,920	5,580	3,100	4,590	800	411	1,250	398
6	474	1,150	2,740	1,970	2,790	4,500	2,790	5,690	771	385	1,670	348
7	656	906	2,870	1,740	2,530	3,380	3,100	9,860	684	385	1,670	310
8	*966	708	3,050	1,710	2,530	2,610	3,790	13,200	614	385	920	285
9	1,150	604	3,150	1,740	2,790	2,210	4,330	15,500	572	411	518	254
10	1,060	565	3,380	1,710	3,050	2,090	4,680	16,700	684	398	372	232
11	820	578	3,790	1,600	3,380	2,250	5,060	15,200	771	385	305	217
12	565	*591	4,770	1,600	3,440	2,490	5,060	12,600	890	437	*261	202
13	414	539	6,160	1,630	3,050	2,610	5,160	9,230	982	614	237	190
14	332	487	7,100	*1,780	2,570	2,610	5,690	6,280	1,420	1,080	258	179
15	280	462	6,800	2,290	2,210	2,650	6,540	4,500	1,740	*1,850	545	175
16	260	462	5,690	2,870	2,030	2,870	6,540	3,200	1,600	2,170	920	*171
17	242	487	4,500	3,260	1,950	2,960	5,580	2,410	1,630	1,780	982	165
18	240	552	3,440	3,790	1,900	2,830	4,330	1,890	*1,490	1,050	1,190	165
19	260	591	2,700	4,170	1,850	2,570	3,320	1,600	1,150	670	830	165
20	290	682	2,210	3,860	1,800	2,870	2,700	1,390	950	518	545	161
21	378	1,250	2,290	3,100	1,780	3,510	2,290	*1,360	890	424	398	167
22	438	1,360	2,790	2,490	1,740	4,090	*1,970	1,490	982	360	310	175
23	378	1,090	3,320	2,250	1,810	4,500	1,970	1,460	1,390	330	268	171
24	321	1,060	4,860	2,330	1,930	4,680	2,370	1,220	1,710	328	243	232
25	300	1,600	6,540	2,570	2,090	4,250	2,790	1,120	1,630	360	273	283
26	332	2,170	7,100	2,960	2,130	3,860	3,050	1,320	1,250	614	1,220	235
27	438	2,530	6,280	3,510	2,450	3,930	3,150	1,930	1,150	920	2,570	196
28	487	2,870	5,260	4,250	3,050	4,330	2,830	2,570	1,360	586	3,320	175
29	438	3,320	4,770	5,260	-	5,080	2,330	3,010	1,710	398	3,930	165
30	390	4,090	4,770	5,690	-------	5,580	2,250	3,100	1,490	322	4,330	183
31	343	-------	4,770	5,060	-------	5,580	-------	2,530	-------	290	3,650	-------
Total	14,632	34,613	133,620	91,970	70,670	116,450	113,210	157,860	35,350	20,620	34,913	10,159
Mean	472	1,154	4,310	2,967	2,524	3,756	3,774	5,092	1,178	665	1,126	339
Cfsm	0.325	0.795	2.97	2.04	1.74	2.59	2.60	3.51	0.812	0.458	0.776	0.234
In.	0.37	0.89	3.42	2.35	1.81	2.99	2.90	4.05	0.91	0.53	0.89	0.26

Calendar year 1957: Max 9,230 Min 35 Mean 1,715 Cfsm 1.18 In. 16.05
Water year 1957-58: Max 16,700 Min 161 Mean 2,285 Cfsm 1.57 In. 21.37

* Discharge measurement made on this day.

475. Blackwater River near Dendron, Va.

Location.--Lat 37°01'30", long 76°52'30", on left bank 10 ft upstream from Walls Bridge, 1.2 miles downstream from Cypress Swamp, and 3.5 miles southeast of Dendron, Surry County.

Drainage area.--285 sq mi.

Records available.--October 1941 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 30.99 ft above mean sea level (Corps of Engineers bench mark).

Average discharge.--17 years, 282 cfs.

Extremes.--Maximum discharge during year, 3,300 cfs Aug. 5 (gage height, 7.49 ft); minimum, 15 cfs Sept. 30 (gage height, 1.44 ft).
1941-58: Maximum discharge, 4,710 cfs July 21, 1945 (gage height, 8.90 ft); no flow at times.
Flood in August 1940 reached a stage of 13.1 ft, from Corps of Engineers floodmarks (discharge, 10,000 cfs, from rating curve extended above 4,800 cfs by logarithmic plotting).

Remarks.--Records good except those for periods of no gage-height record, which are poor.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 9-12)

Oct. 1 to Apr. 12				Apr. 13 to Sept. 30			
2.5	52	4.0	500	1.4	14	3.5	315
3.0	90	5.0	1,150	2.0	32	4.0	590
3.5	248	7.0	2,850	2.5	55	6.0	2,030
				3.0	120	8.0	3,800

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	78	269	1,340	1,150	a760	908	1,080	480	a500	376	148	1,020
2	72	390	1,340	1,010	a740	975	975	480	a450	270	240	801
3	66	406	1,150	875	a700	1,010	842	474	a380	230	337	596
4	63	423	1,040	758	a650	1,040	738	458	a300	187	2,240	447
5	57	401	908	a640	*a620	*1,010	650	486	a250	132	3,120	305
6	72	396	908	a560	584	875	662	782	a200	95	2,350	175
7	119	445	940	a500	602	712	875	1,650	a160	76	1,500	114
8	*219	560	975	a450	668	572	1,120	2,760	a130	71	1,120	81
9	330	614	1,190	a400	712	484	1,010	2,590	a110	72	945	63
10	345	590	1,700	a380	745	456	908	2,430	a90	83	742	51
11	462	536	2,220	a360	726	440	1,150	2,190	a90	106	535	42
12	686	472	*2,220	a350	662	434	1,620	1,840	a200	130	359	37
13	732	*401	2,220	a380	650	418	1,650	1,420	a1,500	220	*207	33
14	632	340	2,130	a450	614	434	1,460	1,090	a1,500	255	157	30
15	506	295	1,830	*a530	596	456	1,310	801	a1,200	225	138	29
16	396	252	1,500	726	602	536	1,200	602	a1,000	*183	138	27
17	305	227	1,220	614	a540	596	1,120	480	a900	211	122	*27
18	227	210	975	644	a520	572	1,020	398	a820	240	102	24
19	167	206	778	706	a500	602	827	326	*a780	195	87	23
20	116	199	632	a640	a470	784	668	265	626	157	70	21
21	85	192	590	a600	a450	1,040	552	*207	562	135	64	24
22	74	181	662	a600	a420	1,190	480	172	590	114	55	31
23	67	223	842	a700	a400	1,150	*474	148	590	94	46	31
24	64	269	908	a900	a370	1,120	496	132	562	76	42	30
25	65	370	975	a1,100	a350	1,080	496	118	502	163	53	28
26	67	584	1,120	a1,100	350	1,220	508	300	425	398	648	25
27	83	842	1,220	a1,050	489	1,380	508	882	464	255	2,190	23
28	143	975	1,260	a960	726	1,460	513	1,050	579	120	2,430	20
29	174	1,190	1,260	a900	-	1,300	508	980	518	68	1,760	17
30	188	1,300	1,190	a850	-------	1,220	486	a710	486	48	1,350	16
31	192	-------	1,190	a800	-------	1,190	-------	a550	-------	47	1,160	-------
Total	6,852	13,758	38,433	21,683	16,216	26,664	25,906	27,251	16,464	5,032	24,455	4,191
Mean	221	459	1,240	699	579	860	864	879	549	162	789	140
Cfsm	0.775	1.61	4.35	2.45	2.03	3.02	3.03	3.08	1.93	0.568	2.77	0.491
In.	0.89	1.80	5.02	2.82	2.11	3.48	3.38	3.55	2.15	0.65	3.19	0.55

Calendar year 1957: Max 2,220 Min 0 Mean 447 Cfsm 1.57 In. 21.30
Water year 1957-58: Max 3,120 Min 16 Mean 622 Cfsm 2.18 In. 29.59

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for stations at Zuni and near Franklin.

480. Blackwater River at Zuni, Va.

Location.--Lat 36°52'05", long 76°50'07", on left bank at downstream side of bridge on U. S. Highway 460 at Zuni, Isle of Wight County, 1.6 miles downstream from Pope Swamp and 4.2 miles upstream from Antioch Swamp.

Drainage area.--448 sq mi.

Records available.--October 1942 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 8.56 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to July 18, 1957, staff gage at same site and datum.

Average discharge.--16 years, 440 cfs.

Extremes.--Maximum discharge during year, 4,240 cfs May 9 (gage height, 13.77 ft); minimum, 17 cfs Sept. 30 (gage height, 2.21 ft).
1942-58: Maximum discharge, 5,200 cfs July 25, 1945 (gage height, 15.05 ft); no flow Sept. 10-18, 1944, Sept. 28 to Oct. 31, 1954.
Flood in August 1940 reached a stage of 23.2 ft (discharge, 16,000 cfs, from rating curve extended above 5,100 cfs by logarithmic plotting).

Remarks.--Records good except those for periods of shifting control, which are fair.

Rating tables, water year 1957-58, except periods of shifting control (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 11, Apr. 14 to Aug. 29				Nov. 12 to Apr. 13, Aug. 30 to Sept. 30			
3.4	60	7.0	515	2.2	17	6.5	300
4.0	89	8.0	900	2.6	25	7.0	430
5.0	149	10.0	1,820	3.0	36	8.0	820
6.0	244	12.0	2,980	4.0	81	10.0	1,820
6.5	350	14.0	4,400	5.0	137	12.0	2,980
				6.0	210		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	e156	e156	1,420	1,570	1,220	1,570	1,820	720	1,030	e700	e179	1,720
2	e175	e252	1,570	1,470	1,170	1,670	1,720	700	860	e602	e244	1,370
3	e167	e312	1,620	1,420	1,120	1,620	1,570	720	780	e498	e280	1,120
4	e146	e365	1,570	1,270	*1,070	1,520	1,420	720	700	e410	e312	870
5	e123	e410	1,520	1,120	1,020	*1,420	1,240	700	620	e325	e850	685
6	e144	e445	1,370	970	970	1,370	1,140	1,160	515	e280	2,500	508
7	e244	e445	1,220	870	945	1,270	1,420	2,440	410	e219	2,920	375
8	*e252	e428	1,170	798	995	1,140	1,870	3,530	325	e160	2,500	270
9	e260	e445	1,320	730	1,020	995	1,920	4,090	260	e152	1,820	188
10	e270	e480	1,720	662	1,040	895	1,770	4,090	231	e146	1,340	146
11	e300	e550	2,200	600	1,040	820	1,770	3,670	197	e126	1,080	101
12	e350	*580	2,620	560	1,020	775	1,920	3,180	192	e132	*860	71
13	e395	580	2,740	560	970	730	2,080	2,680	260	e272	700	52
14	e498	542	2,620	600	895	752	2,140	2,140	924	e312	532	41
15	e640	490	2,500	*820	870	798	2,020	1,670	1,920	e290	365	34
16	660	445	2,260	995	870	798	1,820	1,340	1,920	*e300	260	*30
17	602	388	1,970	1,140	870	775	1,620	1,050	1,620	e312	208	27
18	532	338	1,720	1,140	820	775	1,440	840	*1,340	e280	179	25
19	428	312	1,480	1,040	798	845	1,300	680	1,210	e252	163	23
20	338	280	1,240	895	752	1,100	1,160	568	1,100	e252	146	22
21	270	250	1,100	920	730	1,320	1,050	*480	985	e244	120	21
22	225	232	995	920	730	1,520	920	395	900	e219	96	22
23	184	250	895	895	708	1,620	*860	325	900	e184	82	22
24	152	312	870	820	685	1,570	800	270	840	e149	66	23
25	135	388	970	945	640	1,520	740	238	780	e146	60	24
26	117	600	1,100	1,140	600	1,820	720	260	720	e132	243	23
27	99	775	1,320	1,320	730	2,320	680	325	740	e149	820	22
28	86	920	1,520	1,420	1,170	2,620	660	410	840	e244	1,870	21
29	82	1,070	1,620	1,420	-	2,620	720	880	880	e300	2,740	19
30	82	1,220	1,670	1,370	-------	2,360	740	1,300	600	e260	2,740	18
31	e99	-------	1,620	1,270	-------	2,020	-------	1,260	-------	e160	2,260	-------
Total	8,211	14,260	49,530	31,670	25,468	42,968	41,050	42,831	24,799	8,207	28,535	7,893
Mean	265	475	1,598	1,022	910	1,386	1,368	1,382	827	265	920	263
Cfsm	0.592	1.06	3.57	2.28	2.03	3.09	3.05	3.08	1.85	0.592	2.05	0.587
In.	0.68	1.18	4.12	2.63	2.11	3.56	3.40	3.55	2.06	0.68	2.36	0.65

Calendar year 1957: Max 2,860 Min 0.6 Mean 618 Cfsm 1.38 In. 18.73
Water year 1957-58: Max 4,090 Min 18 Mean 892 Cfsm 1.99 In. 26.98

* Discharge measurement made on this day.
e Shifting-control method used.

495. Blackwater River near Franklin, Va.

Location.--Lat 36°45'45", long 76°53'55", on right bank 0.4 mile south of town of Burdette, 0.5 mile upstream from Black Creek, 3.3 miles downstream from Corrowaugh Swamp, and 6 miles north of Franklin, Southampton County.

Drainage area.--613 sq mi.

Records available.--August 1944 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 1.56 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--14 years, 612 cfs (adjusted for diversion).

Extremes.--Maximum discharge during year, 5,450 cfs May 9 (gage height, 13.47 ft); minimum, 28 cfs Sept. 29 (gage height, 1.32 ft).
1944-58: Maximum discharge, that of May 9, 1958; minimum, 0.4 cfs Sept. 10, 11, 1944 (gage height, 0.36 ft).
Flood in August 1940 reached a stage of about 22 ft (discharge, 21,000 cfs, from rating curve extended above 5,300 cfs by logarithmic plotting).

Remarks.--Records good above 600 cfs and fair below. Diversion above station by city of Norfolk for municipal supply some years.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 13-17)

Oct. 1-17		Oct. 18 to Aug. 29				Aug. 30 to Sept. 30			
2.6	103	2.3	74	7.0	800	1.3	27	6.0	555
3.0	140	3.0	110	8.0	1,260	2.0	65	7.0	820
4.0	240	4.0	190	10.0	2,650	3.0	140	8.0	1,260
5.0	375	5.0	310	13.5	5,450	4.0	240	11.0	3,450
6.0	555	6.0	490			5.0	375		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	108	102	1,500	2,180	1,690	2,330	2,810	960	1,260	820	139	2,570
2	150	226	1,760	2,040	1,620	2,570	2,570	880	1,080	712	135	2,040
3	165	310	1,900	1,900	1,560	2,490	2,330	920	920	580	170	1,620
4	150	350	1,970	1,760	*1,500	*2,330	2,110	960	800	470	214	1,290
5	126	358	1,970	1,560	1,410	2,110	1,900	960	695	374	244	1,010
6	165	382	1,900	1,410	1,350	1,900	1,760	1,500	595	298	852	805
7	294	410	1,760	1,240	1,320	1,760	1,900	3,930	490	244	2,330	655
8	*328	420	1,620	1,110	1,410	1,620	2,250	5,210	400	185	2,890	525
9	282	460	1,690	1,040	1,470	1,500	2,730	5,370	326	151	2,650	399
10	252	480	2,180	985	1,470	1,410	2,730	5,210	280	156	2,110	288
11	246	502	2,810	900	1,470	1,320	2,730	4,890	244	132	1,620	190
12	264	*540	*3,130	860	1,410	1,210	2,890	4,490	226	119	*1,210	117
13	282	565	3,290	800	1,350	1,140	2,970	4,010	238	268	920	87
14	307	580	3,290	*900	1,290	1,140	3,050	3,450	280	382	695	71
15	359	565	3,210	1,160	1,210	1,180	2,890	2,810	841	*326	528	63
16	455	528	3,050	1,410	1,180	1,180	2,650	2,180	1,690	274	390	*57
17	505	490	2,810	1,560	1,180	1,160	2,410	1,690	1,900	256	286	51
18	502	440	2,490	1,620	1,110	1,110	2,110	1,320	*1,760	250	208	46
19	460	400	2,180	1,620	1,080	1,140	1,900	1,010	1,470	232	147	40
20	390	366	1,900	1,440	1,060	1,380	1,690	782	1,290	196	128	36
21	318	326	1,690	1,290	1,010	1,690	1,500	*625	1,140	185	113	40
22	262	292	1,500	1,240	985	1,970	*1,320	528	1,010	180	99	39
23	208	310	1,380	1,210	960	2,110	1,210	440	940	160	86	36
24	156	410	1,240	1,180	940	2,180	1,110	382	920	139	76	33
25	132	515	1,180	1,290	900	2,110	1,010	326	880	125	76	34
26	110	748	1,260	1,620	880	2,490	920	326	820	125	200	35
27	96	920	1,500	1,830	1,080	2,970	860	410	782	113	552	38
28	84	1,040	1,830	1,900	1,760	3,370	840	440	782	122	1,180	34
29	76	1,140	2,040	1,970	-	3,530	985	528	860	170	2,410	28
30	76	1,290	2,250	1,970	-------	3,370	1,040	840	900	208	3,050	32
31	79	-------	2,250	1,830	-------	3,130	-------	1,210	-------	190	2,970	-------
Total	7,387	15,465	64,530	44,825	35,655	60,900	59,175	58,587	25,819	8,142	28,678	12,309
Mean	238	516	2,082	1,446	1,273	1,965	1,972	1,890	861	263	925	410
(†)	+3.7	0	0	0	0	0	0	0	0	0	0	0
Adjusted for pumpage by city of Norfolk												
Mean	242	516	2,082	1,446	1,273	1,965	1,972	1,890	861	263	925	410
Cfsm	0.395	0.842	3.40	2.36	2.08	3.21	3.22	3.08	1.40	0.429	1.51	0.669
In.	0.46	0.94	3.92	2.72	2.17	3.70	3.59	3.55	1.56	0.49	1.74	0.75

	Observed						Adjusted					
Calendar year 1957:	Max	3,850	Min	2.0	Mean	832	Mean	834	Cfsm	1.36	In.	18.47
Water year 1957-58:	Max	5,370	Min	28	Mean	1,155	Mean	1,155	Cfsm	1.88	In.	25.59

* Discharge measurement made on this day.
† Pumpage, equivalent in cubic feet per second, by city of Norfolk.

5.5. Meherrin River near Lawrenceville, Va.

Location.--Lat 36°43'00", long 77°49'55", on right bank 50 ft upstream from Gholson Bridge, 0.6 mile upstream from Allen Creek, and 3 miles southeast of Lawrenceville, Brunswick County.

Drainage area.--553 sq mi.

Records available.--October 1928 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage--Water-stage recorder. Datum of gage is 136.56 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Nov. 17, 1931, chain gage at same site and datum.

Average discharge.--30 years, 499 cfs.

Extremes.--Maximum discharge during year, 9,890 cfs May 8 (gage height, 24.09 ft); minimum, 90 cfs Sept. 29, 30; minimum gage height, 2.10 ft Oct. 15-18.
1928-58: Maximum discharge, 38,000 cfs Aug. 17, 1940 (gage height, 42.0 ft, from floodmark), from rating curve extended above 13,000 cfs on basis of velocity-area studies and records for Nottoway River near Stony Creek; minimum, 4.2 cfs Oct. 7, 8, 1954 (gage height, 0.92 ft).

Remarks.--Records good.

Revisions (water years).--WSP 972: 1932(M), 1935.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Rate of change in stage used as a factor for most days above 650 cfs)

Oct. 1 to Dec. 20				Dec. 21 to Sept. 30			
2.1	91	8.0	1,490	2.1	80	12.0	3,000
2.5	143	12.0	3,000	2.5	132	17.0	5,250
3.0	225	17.0	5,250	3.0	212	22.0	8,100
4.0	432			4.0	416	24.0	9,800
				8.0	1,490		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	386	115	1,030	548	535	3,020	1,700	3,350	318	258	208	207
2	292	162	694	522	923	1,030	1,070	1,150	298	230	174	180
3	243	490	478	462	893	814	814	1,870	288	208	145	161
4	182	312	676	394	685	*710	710	1,440	278	194	2,240	150
5	143	204	2,020	329	548	610	635	1,070	258	186	799	146
6	132	163	942	361	522	548	1,140	5,110	249	208	318	142
7	124	146	620	*405	714	522	3,170	8,620	245	240	225	135
8	110	139	678	405	2,880	498	1,220	3,080	230	182	184	128
9	107	165	3,490	383	1,290	486	814	4,040	226	201	164	119
10	103	216	*5,250	340	762	685	762	1,160	383	241	152	115
11	98	183	*2,690	361	622	788	4,180	942	394	238	139	110
12	95	*149	1,050	340	572	685	5,580	840	278	212	*128	104
13	93	137	719	298	522	572	1,780	736	308	800	133	103
14	92	136	584	1,470	498	788	964	622	288	398	803	102
15	91	142	524	4,370	462	971	814	560	350	*510	498	*99
16	91	234	490	1,610	498	660	736	522	1,380	298	405	98
17	91	262	444	1,240	439	560	685	486	598	238	510	97
18	95	398	409	840	318	498	622	450	*340	207	268	96
19	108	1,980	386	635	450	635	585	428	268	191	194	96
20	128	1,270	707	522	474	2,350	548	*560	258	177	161	94
21	112	644	4,650	474	439	1,360	*522	660	298	174	145	98
22	104	375	2,990	736	462	866	598	522	428	201	133	136
23	98	409	897	1,080	710	685	2,540	416	535	180	128	216
24	97	1,810	660	660	788	585	2,050	416	416	155	522	142
25	125	1,470	572	3,150	660	725	910	560	350	268	556	114
26	157	4,440	823	5,210	660	3,080	685	635	352	240	2,930	104
27	150	3,250	2,850	1,840	3,990	2,730	585	685	1,860	172	1,590	98
28	124	769	1,120	866	5,760	3,940	610	462	904	152	548	105
29	112	620	920	685	-	1,600	1,570	486	428	143	383	94
30	110	769	788	598	-------	1,020	3,560	462	318	133	288	90
31	108	-------	610	548	-------	928	-------	361	-------	125	238	-------
Total	4,101	21,559	40,761	31,682	28,076	34,949	42,159	48,701	13,124	7,960	15,309	3,679
Mean	132	719	1,315	1,022	1,003	1,127	1,405	1,571	437	257	494	123
Cfsm	0.239	1.30	2.38	1.85	1.81	2.04	2.54	2.84	0.790	0.465	0.893	0.222
In.	0.28	1.45	2.74	2.13	1.88	2.35	2.83	3.27	0.88	0.54	1.03	0.25

Calendar year 1957: Max 5,960 Min 18 Mean 565 Cfsm 1.02 In. 13.88
Water year 1957-58: Max 9,080 Min 90 Mean 800 Cfsm 1.45 In. 19.63

Peak discharge (base, 4,500 cfs).--Nov. 27 (4 a.m.) 5,100 cfs (16.72 ft); Dec. 10 (7 to 8 p.m.) 5,500 cfs (17.53 ft); Dec. 21 (12 p.m.) 5,150 cfs (16.79 ft); Jan. 15 (4 to 5 p.m.) 4,700 cfs (15.87 ft); Jan. 26 (5 to 6 p.m.) 5,450 cfs (17.44 ft); Feb. 28 (7:30 p.m.) 5,950 cfs (18.40 ft); Apr. 12 (2 to 3 p.m.) 5,900 cfs (18.32 ft); May 1 (5 a.m.) 4,850 cfs (16.20 ft); May 8 (4 a.m.) 9,890 cfs (24.09 ft).

* Discharge measurement made on this day.

532. Potecasi Creek near Union, N. C.

Location.--Lat 36°22', long 77°02', on downstream side of county highway bridge, 2¾ miles north of Union, Hertford County, 3 miles downstream from Cutawhiskie Swamp, and 3½ miles upstream from Bells Branch.

Drainage area.--191 sq mi.

Records available.--March to September 1958.

Gage.--Wire-weight gage read once or twice daily. Altitude of gage is about mean sea level (by barometer).

Extremes.--Maximum discharge during period March to September, 4,050 cfs May 10 (gage height, 19.12 ft); minimum, 1.0 cfs Sept. 30.

Flood in 1929 reached a stage of 19.1 ft (discharge, 4,050 cfs), and flood in August 1940 reached a stage of 24.1 ft (discharge, 7,000 cfs, from rating curve extended above 4,000 cfs), from information furnished by North Carolina State Highway Commission.

Remarks.--Records good except those below 100 cfs, which are fair.

Rating table, Mar. 12 to Sept. 30, 1958 (gage height, in feet, and discharge, in cubic feet per second)

1.5	0.8	5.0	146
1.6	1.4	6.0	233
1.8	3.4	8.0	490
2.0	6.5	12.0	1,320
2.5	18	16.0	2,650
3.0	35	19.0	4,000
4.0	81		

Discharge, in cubic feet per second, March to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	*760	*720	400	81	46	460
2						-	660	620	346	*68	23	334
3						-	550	900	372	56	13	*213
4						-	460	1,270	346	45	74	132
5						-	400	1,270	203	38	76	78
6						-	372	*1,480	128	31	48	54
7						-	505	*2,180	98	20	24	36
8						-	580	*3,170	84	15	14	25
9						-	565	*4,000	78	13	8.7	17
10						-	550	3,810	78	10	5.3	12
11						-	640	3,120	76	9.2	3.8	7.8
12						*359	740	2,330	59	9.7	2.5	5.8
13						346	740	1,680	45	7.8	2.0	4.8
14						322	760	*1,120	35	6.0	*8.9	3.7
15						346	740	700	28	4.1	15	2.8
16						346	660	415	29	3.3	216	2.3
17						322	550	248	23	2.8	445	1.9
18						310	460	161	18	20	334	1.8
19						334	359	125	14	15	190	*1.7
20						490	287	104	11	7.1	104	1.4
21						600	238	89	11	4.2	66	1.3
22						640	208	74	27	3.5	44	2.1
23						720	223	64	68	2.4	31	2.4
24						720	208	60	78	1.8	26	2.0
25						660	177	74	49	6.7	30	1.7
26						660	153	84	42	13	270	1.5
27						*700	142	122	101	9.2	680	1.4
28						760	178	208	198	9.7	660	1.3
29						880	445	310	190	20	640	1.1
30					-------	900	720	400	111	11	640	1.0
31		-------			-------	860	-------	*400	-------	*9.0	565	-------
Total						-	14,030	31,308	3,346	552.5	5,305.2	1,410.8
Mean						-	468	1,010	112	17.8	171	47.0
Cfsm						-	2.45	5.29	0.586	0.093	0.895	0.246
In.						-	2.73	6.10	0.65	0.11	1.03	0.27

Calendar year	: Max	Min	Mean	Cfsm	In.
Water year	: Max	Min	Mean	Cfsm	In.

* Discharge measurement made on this day.

535. Ahoskie Creek at Ahoskie, N. C.

Location.--Lat 36°17', long 77°00', on right bank 10 ft downstream from bridge on State Highway 350, half a mile upstream from Atlantic Coast Line Railroad bridge, and three-quarters of a mile southwest of Ahoskie, Hertford County.

Drainage area.--64.3 sq mi.

Records available.--January 1950 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 22 ft (by barometer). Prior to May 24, 1951, staff gage at same site and datum.

Average discharge.--8 years, 60.9 cfs.

Extremes.--Maximum discharge during year, 1,190 cfs May 8 (gage height, 7.91 ft); minimum, 0.1 cfs for several days in June, July, August, and September.
1950-58: Maximum discharge, 1,420 cfs Sept. 22, 1955 (gage height, 8.77 ft); no flow at times during most years.
Flood in August 1940 reached a stage of 11.1 ft, from floodmark witnessed by local resident (discharge not determined).

Remarks.--Records good except those below 30 cfs or those for periods of no gage-height record, which are poor.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Nov. 16 to Dec. 4)

3.9	0.1	5.0	25
4.0	.2	5.2	41
4.1	.5	5.5	80
4.2	1	5.9	160
4.3	2	6.3	278
4.4	3.5	6.7	440
4.6	7.5	7.0	595
4.8	15	8.0	1,250

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.5	22	245	223	160	*668	158	323	6	24	0.1	117
2	16	36	252	200	165	698	*143	371	9	*27	.1	80
3	11	24	236	168	178	505	136	674	28	23	3.5	52
4	11	22	211	143	208	335	130	606	15	16	24	35
5	12	24	a200	121	217	230	123	540	9	10	6	24
6	69	28	a170	102	197	173	148	480	6.5	5.5	a8	15
7	70	28	a140	107	178	136	181	740	4.5	3.5	a28	8.5
8	77	31	a135	123	173	111	226	*1,080	3.5	2	a35	4.5
9	72	56	a220	128	163	94	245	1,070	2.5	1.5	a40	2.5
10	55	43	a280	138	173	106	236	662	2	1.5	a30	1.5
11	41	39	418	155	*186	104	268	371	1.5	1.5	a20	.8
12	32	38	556	178	176	106	255	223	.8	.6	a13	.4
13	24	36	515	176	150	111	252	155	.5	.2	6	.2
14	18	36	391	226	126	117	239	113	.3	.2	a4.5	.1
15	13	33	289	268	109	115	203	86	.1	.1	a20	.1
16	9	28	220	315	98	106	170	68	.1	.1	a120	.1
17	7	28	178	327	88	98	141	55	.1	.1	a140	.1
18	6	26	148	278	70	91	121	44	.1	.1	132	.1
19	5.5	24	126	223	62	113	104	36	.1	.1	115	**.1
20	4	24	111	178	58	138	90	28	.1	.1	91	.1
21	3.5	22	109	148	57	165	78	24	.2	.1	68	.1
22	3	19	102	128	57	189	74	20	2.5	.1	48	.1
23	2.5	40	96	109	56	194	91	16	1.5	.1	31	.1
24	3.5	*46	91	104	56	170	88	13	.6	.7	24	.1
25	10	102	86	229	53	155	82	11	.2	1.5	34	.1
26	7.5	226	115	300	64	168	70	13	.7	.3	148	.1
27	6.5	268	130	404	148	181	60	13	19	.1	*278	.1
28	6	262	155	404	371	208	76	12	13	.1	371	.1
29	5.5	*208	208	315	-	214	168	16	9.5	.1	355	.1
30	5.5	223	220	233	-------	194	248	10	12	.1	255	.1
31	6.5	-------	223	181	-------	176	-------	7.5	-------	.1	173	-------
Total	622.0	2,042	6,576	6,332	3,797	6,169	4,604	7,880.5	148.9	120.4	2,621.2	343.1
Mean	20.1	68.1	212	204	136	199	153	254	4.96	3.88	84.6	11.4
Cfsm	0.313	1.06	3.30	3.17	2.12	3.09	2.38	3.95	0.077	0.060	1.32	0.177
In.	0.36	1.18	3.80	3.66	2.20	3.57	2.66	4.56	0.09	0.07	1.52	0.20

Calendar year 1957: Max 767 Min 0 Mean 75.2 Cfsm 1.17 In. 15.87
Water year 1957-58: Max 1,080 Min 0.1 Mean 113 Cfsm 1.76 In. 23.87

* Discharge measurement made on this day.
** Field estimate made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and appearance of recorder chart.

550. Roanoke River at Roanoke, Va.

Location.--Lat 37°15'30", long 79°56'20", on left bank 50 ft downstream from Walnut Street Bridge in Roanoke, Roanoke County, 3.2 miles upstream from Tinker Creek, and at mile 360.6.

Drainage area.--388 sq mi.

Records available.--February 1899 to September 1958. Monthly discharge only for some periods, published in WSP 1303. Records for July 1896 to January 1899 published in WSP 11, 15, 27 and 20th Annual Report, Part 4, have been found to be unreliable, due to doubtful gage-height record, and should not be used.

Gage.--Water-stage recorder. Datum of gage is 906.84 ft above mean sea level (levels by Corps of Engineers). Prior to June 7, 1937, wire-weight or chain gage on downstream side of highway bridge 50 ft upstream at same datum.

Average discharge.--59 years, 383 cfs.

Extremes.--Maximum discharge during year, 5,760 cfs May 6 (gage height, 7.21 ft); minimum, 67 cfs Sept. 17 (gage height, 0.65 ft); minimum daily, 70 cfs Sept. 12, 13, 16.
1899-1958: Maximum discharge, 26,400 cfs Aug. 14, 1940 (gage height, 18.25 ft), from rating curve extended above 15,000 cfs by logarithmic plotting on basis of slope-area measurement, and records for other stations in Roanoke River basin; practically no flow Dec. 23, 1909, when flow was retarded by freezing (gage height, 0.0 ft); minimum daily, 27 cfs Feb. 20, 1934.

Remarks.--Records good. Diurnal fluctuation at low flow caused by powerplant above station.

Revisions (water years).--WSP 972: 1928, 1930, 1933. WSP 1433: 1899-1904, 1914-17(M), 1918-24, 1925-34(M), 1935, 1936-40(M). See also Records available.

Rating table, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Dec. 27 to Jan. 14)

0.6	60	3.0	1,260
.9	110	5.0	3,070
1.3	210	7.0	5,450
1.7	380		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	820	150	447	413	599	1,340	2,940	658	321	135	124	90
2	592	142	*375	*370	794	960	1,880	690	303	130	126	85
3	418	140	321	303	664	794	1,380	1,220	281	126	130	82
4	316	135	303	281	560	684	1,060	1,060	261	124	186	80
5	265	132	273	245	495	612	960	2,560	257	126	160	80
6	234	128	238	245	483	540	1,220	5,160	238	145	122	79
7	207	124	269	269	580	489	1,480	3,370	228	145	108	77
8	178	140	1,240	253	768	453	1,100	2,600	220	150	100	77
9	162	155	1,260	201	658	430	890	1,840	217	131	98	74
10	145	152	855	201	*b540	424	800	1,480	238	312	94	73
11	140	135	664	238	b450	*430	800	1,520	*217	201	102	71
12	138	*126	560	207	b370	402	716	1,300	210	238	255	70
13	132	124	441	210	b330	413	651	*1,100	189	581	294	70
14	130	142	386	826	b300	435	618	925	180	1,140	742	71
15	124	155	330	820	b260	424	580	788	217	330	502	71
16	118	158	294	638	b230	402	554	710	238	228	265	70
17	186	160	273	521	b200	391	495	890	186	201	204	80
18	424	224	245	424	b200	396	441	855	170	189	168	82
19	308	644	238	345	b210	391	413	684	162	186	140	79
20	242	855	245	303	b220	413	386	644	180	168	*130	77
21	204	560	294	321	257	459	*365	599	186	160	120	116
22	183	402	265	435	265	465	598	560	165	155	114	122
23	170	435	242	418	261	430	1,970	534	165	*145	110	98
24	178	638	231	408	281	418	1,300	502	168	135	114	85
25	189	1,260	231	995	294	560	960	465	162	128	142	79
26	175	1,380	638	960	588	960	755	435	160	135	142	76
27	170	788	1,030	890	2,200	1,660	677	402	183	212	120	74
28	165	606	788	722	2,200	1,660	703	360	168	280	110	73
29	155	586	670	612	-	1,260	703	345	150	178	100	73
30	150	528	547	534	-------	1,480	664	326	142	145	96	71
31	148	-------	465	465	-------	*3,870	-------	321	-------	130	92	-------
Total	7,166	11,304	14,658	14,073	15,257	24,045	28,059	34,903	6,162	6,789	5,310	2,405
Mean	231	377	473	454	545	776	935	1,126	205	219	171	80.2
Cfsm	0.595	0.972	1.22	1.17	1.40	2.00	2.41	2.90	0.528	0.564	0.441	0.207
In.	0.69	1.08	1.41	1.35	1.46	2.31	2.69	3.34	0.59	0.65	0.51	0.23

Calendar year 1957: Max 4,520 Min 46 Mean 449 Cfsm 1.16 In. 15.72
Water year 1957-58: Max 5,160 Min 70 Mean 466 Cfsm 1.20 In. 16.31

Peak discharge (base, 4,000 cfs).--Mar. 31 (10 a.m.) 4,290 cfs (6.16 ft); May 6 (12:30 p.m.) 5,760 cfs (7.21 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

551. Tinker Creek near Daleville, Va.

Location.--Lat 37°25'03", long 79°56'08", on left bank 300 ft below footbridge, 1,100 ft below Norfolk and Western Railway bridge, a quarter of a mile below unnamed tributary, half a mile south of Glebe Mills, and 1.3 miles northwest of Daleville, Botetourt County.

Drainage area.--11.5 sq mi.

Records available.--April 1956 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 1,220 ft (from topographic map).

Extremes.--Maximum discharge during year, 455 cfs May 5 (gage height, 5.20 ft); minimum, 3.1 cfs Sept. 26, 27; minimum gage height, 1.35 ft Sept. 6.
1956-58: Maximum discharge, that of May 5, 1958; minimum, 1.3 cfs Aug. 10, 1956 (gage height, 1.14 ft).
Flood in 1940 reached a stage of 9.0 ft, from information by local resident.

Remarks.--Records good except those below 5 cfs, which are fair. Some pumpage for irrigation occurred during low flow.

Rating tables, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 26				Dec. 27 to Sept. 30			
1.3	2.3	1.8	20	1.3	1.6	2.0	28
1.4	4.4	2.0	31	1.4	3.8	2.5	68
1.5	7.4	2.2	46	1.5	6.6	3.0	117
1.6	11			1.6	10		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	5.3	13	12	24	30	69	20	16	6.0	4.1	4.6
2	11	4.7	12	*11	22	25	52	26	14	5.8	6.6	4.6
3	9.4	4.7	*11	9.7	18	22	41	32	13	5.5	6.9	4.6
4	8.3	4.7	12	9.3	16	19	36	27	13	5.5	6.3	4.6
5	7.4	4.4	10	9.0	16	18	33	111	13	5.8	4.9	4.4
6	6.8	4.4	9.8	9.0	17	17	48	72	13	5.8	4.4	4.4
7	6.8	4.1	18	9.0	20	16	35	88	12	6.9	4.4	4.4
8	6.2	5.6	31	8.3	17	15	30	66	12	9.0	4.1	4.4
9	6.2	5.0	25	8.0	15	16	27	48	17	34	3.8	4.4
10	7.1	4.4	22	8.0	14	18	29	46	12	18	3.6	4.4
11	5.6	4.1	20	8.3	*14	*18	30	41	*11	13	4.1	4.4
12	5.3	*4.4	15	8.0	14	17	26	35	11	11	3.6	4.4
13	5.0	4.7	14	9.3	13	17	24	*31	9.0	8.6	22	4.4
14	5.0	7.7	14	82	12	20	22	28	9.0	8.0	10	4.4
15	4.7	7.7	13	24	b10	19	21	27	16	6.9	7.6	4.9
16	*4.7	6.8	13	19	b8.5	18	20	26	9.7	6.6	6.6	4.4
17	12	6.5	12	15	b7.6	17	19	25	8.3	8.6	6.0	4.6
18	14	16	12	14	b8.0	18	18	35	8.6	8.0	5.2	4.9
19	6.8	45	12	12	b8.5	19	16	26	9.3	6.9	4.9	4.6
20	5.9	24	12	12	b9.0	20	16	25	9.3	6.3	*4.9	4.6
21	5.6	17	11	18	b9.4	20	16	24	8.3	6.3	5.2	6.3
22	5.6	14	10	18	10	17	32	23	7.3	12	5.2	3.8
23	5.3	21	9.8	15	12	16	*34	22	7.6	*9.3	5.5	3.4
24	8.3	18	9.8	22	12	16	26	22	25	11	5.8	3.6
25	6.5	18	9.8	86	13	39	26	20	14	8.0	6.9	3.4
26	5.9	15	32	41	60	45	21	18	14	6.6	5.8	3.4
27	5.9	13	16	31	71	84	22	16	11	6.3	5.5	3.4
28	5.6	17	15	26	45	46	26	16	7.3	6.0	5.5	3.4
29	5.6	16	14	22	-	37	22	15	6.3	9.0	5.2	3.4
30	5.9	15	12	20	-------	81	20	13	6.0	6.0	4.9	3.6
31	6.8	-------	12	19	-------	*117	-------	23	-------	4.6	4.6	-------
Total	220.2	338.2	452.2	614.9	516.0	897	857	1,047	343.0	271.3	184.1	128.1
Mean	7.10	11.3	14.6	19.8	18.4	28.9	28.6	33.8	11.4	8.75	5.94	4.27
Cfsm	0.617	0.983	1.27	1.72	1.60	2.51	2.49	2.94	0.991	0.761	0.517	0.371
In.	0.71	1.10	1.46	1.98	1.67	2.89	2.78	3.39	1.11	0.88	0.60	0.41

Calendar year 1957: Max 110 Min 2.2 Mean 12.9 Cfsm 1.12 In. 15.29
Water year 1957-58: Max 117 Min 3.4 Mean 16.1 Cfsm 1.40 In. 18.98

Peak discharge (base, 200 cfs).--Jan. 14 (6 a.m.) 275 cfs (4.10 ft); Feb. 26 (6 p.m.) 260 cfs (4.00 ft); May 5 (1:30 p.m.) 455 cfs (5.20 ft); May 7 (9 a.m.) 212 cfs (3.68 ft); June 24 (4 p.m.) 269 cfs (4.06 ft); July 9 (5 p.m.) 335 cfs (4.50 ft); Aug. 13 (4 p.m.) 311 cfs (4.34 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

560. Roanoke River at Niagara, Va.

Location.--Lat 37°15'18", long 79°52'18", on right bank 200 ft downstream from powerplant of Appalachian Electric Power Co. at Niagara, Roanoke County, 2 miles downstream from Tinker Creek, 2.1 miles southeast of Vinton, and at mile 355.3.

Drainage area.--511 sq mi.

Records available.--July 1926 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 820.15 ft above mean sea level (levels by Corps of Engineers).

Average discharge.--32 years, 523 cfs.

Extremes.--Maximum discharge during year, 7,490 cfs May 6 (gage height, 10.68 ft); minimum, 4.0 cfs Sept. 19, 20, 21, 22 (gage height, 0.40 ft); minimum daily, 103 cfs Sept. 7.

1926-58: Maximum discharge, 35,000 cfs Aug. 14, 1940 (gage height, 17.5 ft, from floodmark), from rating curve extended above 12,000 cfs by logarithmic plotting on basis of velocity-area study by Geological Survey, unit hydrograph and flood-routing studies by Corps of Engineers, and records for other stations in Roanoke River basin; minimum, 1.0 cfs Oct. 16, 20, 1956 (gage height, 0.45 ft); minimum daily, 8 cfs Oct. 9, 1954.

Remarks.--Records good except those below 150 cfs and those for periods of no gage-height record, which are fair. Flow regulated at dam and powerplant 200 ft above station.

Revisions (water years).--WSP 892: 1928(M), 1930(M), 1933(M), 1935-36(M), 1938(M). WSP 972: 1927(M), 1929(M), 1934(M), 1937(M). WSP 1303: 1928, 1930, 1933-38, 1940.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Feb. 13-16)

1.4	103	6.0	2,080
2.0	221	8.0	3,800
3.0	520	11.0	8,000
4.0	915		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,010	268	601	498	802	1,740	3,600	825	484	232	238	158
2	755	194	*562	*536	1,060	1,270	2,290	915	446	212	220	148
3	499	252	476	434	870	1,040	1,740	1,490	396	238	212	210
4	466	220	474	346	760	892	1,380	1,380	373	216	340	142
5	296	218	436	348	692	780	1,240	3,280	428	237	277	153
6	308	206	386	374	628	686	1,490	6,880	344	290	238	206
7	a270	198	408	378	746	644	1,800	4,520	352	284	208	103
8	a230	236	1,400	366	960	600	1,380	3,400	336	270	198	147
9	a210	212	1,550	292	825	576	1,140	2,290	379	422	198	195
10	a190	214	1,110	300	752	609	1,060	1,800	358	624	142	152
11	a180	238	870	309	*701	*622	1,080	1,870	*381	352	186	151
12	a175	*234	742	316	566	590	960	1,680	358	376	220	147
13	a170	192	560	324	500	578	a900	*1,380	311	533	584	150
14	a165	310	530	1,360	440	633	a820	1,160	292	1,470	945	140
15	a160	253	485	1,240	400	628	a760	1,010	428	437	796	144
16	a150	258	494	938	380	588	a720	915	362	392	414	140
17	445	222	382	780	332	559	a660	1,090	330	354	280	153
18	a500	310	430	633	a310	612	a600	1,060	297	290	322	198
19	a540	762	396	542	a320	588	a560	892	310	304	236	130
20	a350	986	402	540	a350	618	a520	825	356	302	*206	156
21	a270	728	433	516	a360	654	*a500	728	268	262	217	250
22	a240	469	366	691	377	664	a900	668	354	*243	222	208
23	a210	679	398	617	386	612	2,370	621	247	305	198	195
24	270	724	351	605	489	603	1,680	614	367	295	172	194
25	311	1,440	386	1,870	456	794	1,300	613	272	267	298	166
26	294	1,650	784	1,550	908	1,350	1,040	590	376	232	212	145
27	262	1,050	1,220	1,320	2,850	2,290	915	492	281	435	154	152
28	268	848	960	1,060	2,770	2,150	938	516	250	542	228	145
29	260	806	825	896	-	1,680	960	436	282	334	208	141
30	201	718	680	780	-------	2,170	892	478	295	250	174	153
31	270	----	566	715	-------	5,420	-------	430	--------	230	204	--------
Total	9,925	15,095	19,663	21,474	20,990	33,240	36,195	44,848	10,313	11,230	8,747	4,872
Mean	320	503	634	693	750	1,072	1,206	1,447	344	362	282	162
Cfsm	0.626	0.984	1.24	1.36	1.47	2.10	2.36	2.83	0.673	0.708	0.552	0.317
In.	0.72	1.10	1.43	1.57	1.53	2.42	2.63	3.26	0.75	0.82	0.64	0.35

Calendar year 1957: Max 5,730 Min 94 Mean 599 Cfsm 1.17 In. 15.91
Water year 1957-58: Max 6,880 Min 103 Mean 648 Cfsm 1.27 In. 17.22

Peak discharge (base, 7,000 cfs).--May 6 (11 a.m.) 7,490 cfs (10.68 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, records for Roanoke River at Roanoke and Lafayette.

570. Blackwater River near Union Hall, Va.

Location.--Lat 37°02'35", long 79°41'07", on left bank 100 ft upstream from highway bridge at Kemps Ford, 3 miles upstream from Gills Creek, and 3 miles north of Union Hall, Franklin County.

Drainage area.--208 sq mi.

Records available.--October 1924 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 693.13 ft above mean sea level. Prior to Nov. 22, 1929, chain gage at same site and datum.

Average discharge.--34 years, 227 cfs.

Extremes.--Maximum discharge during year, 1,760 cfs Feb. 27, May 7; maximum gage height, 5.02 ft May 7; minimum discharge, 68 cfs Sept. 29, 30 (gage height, 1.77 ft).
1924-58: Maximum discharge, 19,700 cfs Aug. 14, 1940 (gage height, 19.52 ft), from rating curve extended above 6,500 cfs by logarithmic plotting on basis of unit hydrograph and flood-routing studies by Corps of Engineers, and records for other stations in Roanoke River basin; minimum, 13 cfs Sept. 20, 1932 (gage height, 1.42 ft).

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair.

Revisions (water years).--WSP 892: 1930(M), 1933(M), 1938-39(M). WSP 1303: 1926-29(M).

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Mar. 27				Mar. 28 to Sept. 30			
1.9	115	3.5	930	1.7	57	2.4	270
2.0	150	4.5	1,480	1.8	73	3.0	595
2.5	380			2.0	118	4.5	1,460
				2.2	181		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	556	158	280	253	315	534	705	320	540	164	118	96
2	435	150	258	240	355	430	540	348	285	164	111	92
3	320	150	244	235	300	380	458	446	246	156	118	88
4	266	146	244	b220	276	345	397	380	232	153	167	88
5	a230	*143	230	b210	271	320	386	348	222	153	146	88
6	a190	140	217	b210	258	310	562	1,120	222	153	118	86
7	a170	140	222	b210	305	300	584	1,300	218	150	113	84
8	a170	146	435	b190	340	290	*424	815	214	146	113	81
9	a160	230	474	b190	266	290	364	578	222	146	108	77
10	a150	178	350	b190	280	305	364	485	265	164	106	75
11	a145	154	305	b190	*335	300	546	452	232	189	104	75
12	a145	150	266	b200	271	280	430	402	246	282	108	73
13	a140	146	b250	235	244	276	375	*358	227	280	181	71
14	a135	158	b240	751	230	310	336	320	214	300	146	73
15	a130	235	235	572	b210	335	320	310	295	170	138	73
16	*a130	212	230	375	b200	305	310	295	370	153	160	71
17	143	199	217	310	b185	285	290	290	*227	146	138	70
18	644	325	212	271	b175	*295	275	315	202	206	118	79
19	355	765	217	253	b175	305	265	446	193	156	*108	77
20	248	556	230	253	b175	325	256	408	232	140	104	73
21	212	350	271	*248	b200	315	251	290	232	132	104	94
22	199	285	248	345	b230	290	265	256	210	*170	106	113
23	182	418	222	276	b250	271	842	251	202	153	101	*88
24	182	452	217	253	271	262	463	260	206	160	111	79
25	190	765	212	1,120	258	305	386	285	214	143	167	77
26	174	650	534	902	589	391	336	305	197	132	170	77
27	174	440	528	523	1,320	880	320	260	256	146	126	75
28	166	380	360	424	848	650	441	251	193	170	113	71
29	158	370	315	355	-	485	430	260	178	153	108	70
30	158	315	280	315	-------	507	358	236	170	124	104	70
31	158	-------	262	290	-------	1,220	-------	227	-------	118	101	-------
Total	6,815	8,906	8,805	10,609	9,132	12,096	12,279	12,617	7,162	5,172	3,834	2,404
Mean	220	297	284	342	326	390	409	407	239	167	124	80.1
Cfsm	1.06	1.43	1.37	1.64	1.57	1.88	1.97	1.96	1.15	0.803	0.596	0.385
In.	1.22	1.60	1.58	1.89	1.64	2.17	2.20	2.26	1.28	0.93	0.69	0.44

Calendar year 1957: Max 2,360 Min 53 Mean 273 Cfsm 1.31 In. 17.83
Water year 1957-58: Max 1,320 Min 70 Mean 274 Cfsm 1.32 In. 17.90

Peak discharge (base, 2,000 cfs).--No peak above base.

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Pigg River near Toshes.
b Stage-discharge relation affected by ice.

575. Roanoke (Staunton) River near Toshes, Va.

Location.--Lat 37°02'03", long 79°31'18", on right bank 1¾ miles downstream from Witchers Creek, 3 miles upstream from Pigg River, 5 miles northwest of Toshes, Pittsylvania County, and at mile 313.1.

Drainage area.--1,020 sq mi.

Records available.--September 1925 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 588.99 ft above mean sea level (levels by Corps of Engineers). Prior to Oct. 14, 1929, staff gage at same site and datum.

Average discharge.--33 years, 1,011 cfs.

Extremes.--Maximum discharge during year, 11,600 cfs May 6 (gage height, 11.12 ft); minimum, 227 cfs Sept. 17 (gage height, 1.25 ft).
1925-58: Maximum discharge, 70,000 cfs Aug. 15, 1940 (gage height, 27.36 ft, from floodmark), from rating curve extended above 31,000 cfs by logarithmic plotting on basis of unit hydrograph and flood-routing studies by Corps of Engineers, and records for other stations in Roanoke River basin; minimum, 55 cfs Sept. 14, 1954.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Diurnal fluctuation at low flow caused by powerplant at Niagara.

Revisions (water years).--WSP 1032: 1933(M), 1938-39(M), 1940, 1944(M). WSP 1303: 1927-30(M).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.4	304	7.0	5,850
2.0	685	10.0	9,900
4.0	2,570		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,680	a470	1,270	1,140	1,520	3,620	6,210	1,720	1,300	590	504	422
2	1,920	a460	1,110	1,040	2,020	2,570	4,260	1,720	1,010	574	472	382
3	1,340	a460	1,060	900	1,870	2,120	3,200	2,470	977	556	498	362
4	964	a450	1,020	828	1,570	1,820	2,680	2,570	868	548	563	387
5	790	a440	966	791	1,430	1,620	2,420	2,780	896	533	644	361
6	700	a430	862	780	1,260	1,480	2,780	9,750	809	544	504	350
7	610	*a430	846	798	1,460	1,310	3,410	8,700	831	596	464	370
8	562	470	2,020	806	1,790	1,260	*2,780	6,090	776	658	456	326
9	545	658	3,200	712	1,730	1,210	2,320	4,260	764	722	438	327
10	530	589	2,320	624	1,400	1,270	2,070	3,300	840	1,050	416	344
11	490	516	1,820	740	*1,470	1,300	2,520	3,200	894	979	390	326
12	480	500	1,480	696	1,240	1,240	2,220	2,880	785	833	450	321
13	460	492	1,160	645	1,180	1,230	1,970	*2,570	768	1,140	625	318
14	468	490	1,130	2,450	1,030	1,320	1,770	2,170	706	2,120	905	321
15	460	670	1,050	3,300	1,040	1,440	1,670	1,920	874	1,210	3,000	321
16	448	661	978	2,170	1,100	1,310	1,620	1,770	1,030	834	1,390	319
17	460	608	*891	1,720	905	1,210	1,520	1,670	*832	667	792	316
18	a600	1,110	867	1,430	691	*1,200	1,360	2,300	722	794	610	358
19	a1,200	2,260	823	1,150	866	1,260	1,320	2,360	684	694	*529	410
20	a1,000	2,350	834	1,010	1,060	1,360	1,250	1,920	706	662	488	332
21	722	1,670	949	*1,070	954	1,380	1,160	1,620	838	598	468	398
22	675	1,230	946	1,580	998	1,380	1,270	1,400	724	*705	457	538
23	646	1,550	856	1,430	1,010	1,240	3,520	1,240	674	613	434	*353
24	602	1,840	813	1,290	1,060	1,210	3,200	1,310	818	590	462	380
25	639	3,200	798	4,120	1,040	1,380	2,470	1,360	790	610	660	375
26	658	3,720	1,670	4,480	1,770	2,320	2,070	1,310	719	544	732	353
27	602	2,420	2,680	2,880	6,330	5,030	1,820	1,200	840	574	556	347
28	a580	1,870	2,120	2,420	5,370	4,700	2,120	1,100	742	1,050	423	336
29	a540	1,820	1,720	1,970	-	3,410	2,120	1,070	666	781	512	315
30	a520	1,570	1,480	1,670	-------	3,200	1,870	1,030	611	582	448	320
31	a500	-------	1,200	1,520	-------	8,260	-------	926	-------	510	404	-------
Total	23,391	35,404	40,939	48,160	45,162	64,680	70,970	79,686	24,494	23,461	19,694	10,688
Mean	755	1,180	1,321	1,554	1,613	2,086	2,366	2,571	816	757	635	356
Cfsm	0.740	1.16	1.30	1.52	1.58	2.05	2.32	2.52	0.800	0.742	0.623	0.349
In.	0.85	1.29	1.50	1.75	1.64	2.36	2.59	2.90	0.89	0.86	0.72	0.39

Calendar year 1957: Max 9,900 Min 190 Mean 1,184 Cfsm 1.16 In. 15.76
Water year 1957-58: Max 9,750 Min 315 Mean 1,334 Cfsm 1.31 In. 17.74

Peak discharge (base, 7,500 cfs).--Mar. 27 (7 p.m.) 8,400 cfs (9.00 ft); Mar. 31 (11 a.m.) 9,600 cfs (9.83 ft); May 6 (11 a.m.) 11,600 cfs (11.12 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for station at Altavista.

585. Pigg River near Toshes, Va.

Location.--Lat 36°59'01", long 79°30'52", on right bank 0.5 mile downstream from Fryingpan Creek and 1.7 miles northwest of Toshes, Pittsylvania County.

Drainage area.--394 sq mi.

Records available.--August 1930 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 602.55 ft above mean sea level (levels by Corps of Engineers).

Average discharge.--28 years, 398 cfs.

Extremes.--Maximum discharge during year, 6,000 cfs Nov. 19 (gage height, 13.98 ft); minimum, 154 cfs Sept. 10 (gage height, 3.42 ft).
1930-58: Maximum discharge, 34,300 cfs Aug. 15, 1940 (gage height, 32.5 ft, from floodmark), from rating curve extended above 11,000 cfs by logarithmic plotting on basis of slope-area measurement at gage height 25.8 ft, and records for other stations in Roanoke River basin; minimum, 22 cfs Aug. 31, 1932 (gage height, 2.32 ft).

Remarks.--Records good except those for periods of ice effect, which are poor. Diurnal fluctuation at low flow caused by mill above station.

Revisions (water years).--WSP 972: 1931-32(M), 1933, 1934-35(M), 1936, 1937(M), 1938-40.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

3.5	170	9.0	2,680
4.0	300	12.0	4,580
6.0	1,150		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	858	240	482	352	570	970	1,530	745	490	342	232	220
2	590	230	414	335	768	700	902	790	462	328	222	208
3	418	218	386	318	570	590	745	1,020	438	318	258	201
4	338	213	434	291	486	530	678	835	438	304	318	204
5	282	230	422	279	442	482	655	1,180	406	297	300	201
6	261	206	356	b270	446	458	1,430	3,740	398	300	232	199
7	238	*206	352	b270	490	442	1,430	2,980	490	294	222	192
8	238	215	1,330	b260	570	426	948	1,880	398	285	230	188
9	228	282	1,130	b260	470	426	678	1,100	386	288	452	183
10	222	255	655	b260	410	462	700	880	466	332	240	170
11	210	220	510	b260	*426	446	1,200	812	474	328	215	194
12	208	225	422	b270	402	426	858	722	510	297	256	179
13	204	215	363	294	390	422	700	*700	462	346	267	179
14	201	220	360	1,190	360	510	610	610	390	378	267	179
15	204	258	356	1,240	b350	550	590	570	655	342	261	179
16	201	352	342	632	b320	490	590	550	1,200	300	300	174
17	*220	482	335	490	b300	450	550	550	*530	270	510	174
18	524	2,350	314	426	b300	*458	510	812	418	279	294	183
19	426	4,310	307	378	b300	510	490	902	374	285	*238	174
20	282	2,050	335	349	b350	530	482	902	490	276	215	181
21	255	722	390	*418	b350	510	470	632	458	270	222	225
22	213	530	346	812	b350	458	644	550	402	*378	232	270
23	220	1,100	300	590	b400	426	1,200	510	434	352	235	*215
24	252	1,020	314	490	490	406	745	490	426	321	298	197
25	304	2,450	318	2,080	462	530	590	530	454	540	858	197
26	270	1,730	965	1,830	1,120	790	530	590	430	342	550	188
27	267	812	992	925	3,160	1,240	530	510	722	300	314	185
28	258	745	570	700	1,830	1,430	1,870	490	454	285	285	183
29	243	768	470	570	-	858	1,380	655	370	270	249	179
30	228	590	414	510	-------	812	858	478	352	250	235	181
31	243	-------	366	470	-------	3,160	-------	442	-------	225	220	-------
Total	9,106	23,444	15,050	17,819	16,882	20,898	25,093	28,157	14,377	9,722	9,227	5,782
Mean	294	781	485	575	603	674	836	908	479	314	298	193
Cfsm	0.746	1.98	1.23	1.46	1.53	1.71	2.12	2.30	1.22	0.797	0.756	0.490
In.	0.86	2.21	1.42	1.68	1.59	1.97	2.36	2.65	1.36	0.92	0.87	0.55

Calendar year 1957: Max 8,570 Min 86 Mean 432 Cfsm 1.10 In. 14.87
Water year 1957-58: Max 4,310 Min 170 Mean 536 Cfsm 1.36 In. 18.44

Peak discharge (base, 4,000 cfs).--Nov. 19 (12 m.) 6,000 cfs (13.98 ft); Feb. 27 (2 to 3 a.m.) 4,380 cfs (11.73 ft); Mar. 31 (12 m.) 4,060 cfs (11.20 ft); May 6 (3 p.m.) 4,520 cfs (11.90 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

605. Roanoke (Staunton) River at Altavista, Va.

Location.--Lat 37°06'16", long 79°17'44", on right bank 12 ft upstream from highway bridge, a quarter of a mile south of Altavista, Campbell County, half a mile downstream from Sycamore Creek, 3½ miles upstream from Otter River, and at mile 286.5.

Drainage area.--1,802 sq mi.

Records available.--August 1930 to September 1958.

Gage.--Water-stage recorder and Telemark. Datum of gage is 503.10 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Feb. 22, 1951, at site 50 ft downstream at same datum.

Average discharge.--28 years, 1,941 cfs.

Extremes.--Maximum discharge during year, 22,000 cfs May 6 (gage height, 20.34 ft); minimum, 540 cfs Sept. 29, 30; minimum gage height, 3.24 ft Sept. 30.
1930-58: Maximum discharge, 105,000 cfs Aug. 15, 1940 (gage height, 40.08 ft, from floodmark), from rating curve extended above 52,000 cfs by logarithmic plotting on basis of unit hydrograph and flood-routing studies by Corps of Engineers, and records for other stations in Roanoke River basin; minimum, 94 cfs Jan. 31, 1934 (gage height, 1.66 ft).

Remarks.--Records good except those for periods of ice effect and no gage-height record, which are fair. Diurnal fluctuation at low flow caused by powerplant at Niagara, 69 miles above station.

Revisions (water years).--WSP 892: 1938(M). WSP 972: 1931-33.

Rating tables, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-18, Jan. 27 to Sept. 30				Oct. 19 to Jan. 26			
3.3	560	13.0	9,600	3.7	910	10.0	6,400
4.0	930	17.0	15,500	4.0	1,090	14.0	10,800
5.0	1,680	19.0	19,300	6.0	2,700		
9.0	5,400						

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,300	a1,000	2,880	2,160	2,850	6,700	12,300	3,480	2,180	1,210	1,000	810
2	3,660	a1,000	2,430	2,040	3,660	4,800	7,730	3,390	2,220	1,140	900	735
3	2,760	a1,000	2,250	1,800	3,390	3,840	5,800	4,200	1,950	1,100	965	685
4	2,130	a960	2,160	1,640	2,850	3,390	4,800	4,700	1,820	1,070	1,100	660
5	1,770	a960	2,160	1,480	2,580	3,030	4,300	4,700	1,770	1,040	1,210	660
6	1,480	a940	2,000	1,370	2,490	2,760	4,900	15,200	1,680	1,000	1,040	685
7	1,280	a940	1,800	1,680	2,580	2,580	*6,600	18,700	1,680	1,040	870	660
8	a1,200	*a1,000	3,750	1,560	3,210	2,400	5,100	12,800	1,640	1,210	840	635
9	a1,100	1,200	6,200	1,400	3,030	2,310	4,200	7,840	1,560	1,210	1,000	610
10	a1,050	1,370	4,500	1,230	2,490	2,400	3,750	6,000	1,680	1,440	870	585
11	a1,000	1,120	3,510	1,440	2,490	2,490	4,700	5,400	1,820	1,900	760	585
12	a960	1,030	2,880	1,480	2,400	2,400	4,400	*5,000	1,770	1,680	760	610
13	a940	1,030	2,430	1,340	2,220	2,260	3,750	4,500	1,720	1,860	1,000	610
14	a900	1,000	2,250	2,870	*a2,100	2,490	3,390	3,930	1,480	2,630	1,440	610
15	a860	1,160	2,250	7,200	a2,000	2,760	3,210	3,570	1,600	2,760	4,020	610
16	a840	1,440	2,000	4,230	a2,000	2,670	3,120	3,300	*2,850	1,720	3,030	610
17	a840	1,560	*1,880	3,330	a1,900	*2,400	2,940	3,120	2,040	1,360	1,860	610
18	*a1,300	3,690	1,800	2,790	a1,800	2,310	2,760	3,750	1,560	1,280	*1,400	610
19	3,510	7,150	1,720	2,340	b1,800	2,490	2,580	4,200	1,440	1,400	1,100	660
20	a2,300	8,170	1,760	*2,080	b2,000	2,580	2,490	4,110	1,520	1,240	965	710
21	a1,700	3,870	1,880	2,160	b2,100	2,580	2,310	3,300	1,720	1,240	900	710
22	a1,400	2,880	1,960	3,330	b2,100	2,490	2,310	2,850	1,640	1,210	870	*1,000
23	1,300	3,060	1,720	3,240	b2,200	2,400	5,000	2,580	1,480	1,400	870	870
24	1,300	4,320	1,640	2,700	2,220	2,220	6,000	2,490	1,640	1,210	840	760
25	1,400	5,590	1,680	6,710	2,180	2,400	4,400	2,580	1,950	*1,360	1,480	710
26	1,370	8,720	2,790	10,300	2,670	3,750	3,660	2,760	1,640	1,280	2,080	660
27	1,300	4,950	5,220	5,800	13,000	7,060	3,210	2,490	2,080	1,070	1,480	660
28	a1,200	3,780	3,960	4,400	10,300	11,200	4,800	2,260	1,820	1,470	1,140	660
29	a1,100	3,870	3,240	3,660	-	6,300	5,300	2,310	1,400	1,720	965	610
30	a1,100	3,330	2,790	3,120	--------	5,220	3,930	2,130	1,280	1,180	930	585
31	a1,000	--------	2,430	2,850	--------	14,700	--------	1,950	--------	965	840	--------
Total	49,350	82,090	81,920	93,730	86,610	119,380	133,740	149,590	52,630	43,395	38,525	20,175
Mean	1,592	2,736	2,643	3,024	3,093	3,851	4,458	4,825	1,754	1,400	1,243	672
Cfsm	0.883	1.52	1.47	1.68	1.72	2.14	2.47	2.68	0.973	0.777	0.690	0.373
In.	1.02	1.70	1.70	1.94	1.79	2.47	2.76	3.09	1.09	0.90	0.80	0.42

Calendar year 1957: Max 24,400 Min 364 Mean 2,302 Cfsm 1.28 In. 17.37
Water year 1957-58: Max 18,700 Min 585 Mean 2,606 Cfsm 1.45 In. 19.68

Peak discharge (base, 18,000).--Mar. 31 (7 p.m.) 19,700 cfs (19.22 ft); May 6 (10 p.m.) 22,000 cfs (20.34 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for station at Brookneal.
b Stage-discharge relation affected by ice.

615. Otter River near Evington, Va.

Location.--Lat 37°12'30", long 79°18'14", on right bank 10 ft upstream from highway bridge, 2 miles upstream from Flat Creek, and 2 miles southwest of Evington, Campbell County.

Drainage area.--325 sq mi.

Records available.--October 1936 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 544.02 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--22 years, 357 cfs.

Extremes.--Maximum discharge during year, 4,890 cfs Mar. 27 (gage height, 13.49 ft); minimum daily, 90 cfs Sept. 20.
1936-58: Maximum discharge, 27,500 cfs Oct. 19, 1937, Aug. 19, 1939 (gage height, 23.1 ft), from rating curve extended above 7,000 cfs by logarithmic plotting on basis of unit hydrograph and flood-routing studies by Corps of Engineers, and records for other stations in Roanoke River basin; minimum, 33 cfs Sept. 19, 1956 (gage height, 1.02 ft).

Remarks.--Records fair except those for periods of ice effect or no gage-height record, which are poor.

Revisions (water years).--WSP 852: 1937. WSP 892: 1938-39(M). WSP 972: 1937-39. WSP 1032: 1940.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.4	82	3.0	390
1.6	110	7.0	1,640
2.0	172	10.0	2,960
2.5	265		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	495	188	405	302	540	810	1,320	435	278	150	186	130
2	420	185	365	265	615	645	960	450	265	140	451	130
3	302	185	328	240	480	555	810	540	265	130	705	120
4	246	183	340	217	390	495	720	630	254	130	540	120
5	216	177	328	192	378	435	675	810	248	130	340	120
6	195	174	265	b180	378	405	960	2,020	236	160	263	150
7	180	169	278	b180	480	378	*960	2,600	227	180	229	130
8	178	*175	1,380	b175	615	365	750	1,480	216	220	214	120
9	167	227	960	178	420	352	660	990	216	600	197	110
10	169	177	690	b180	365	405	630	810	365	450	180	120
11	162	159	555	b190	420	465	780	780	234	300	169	110
12	156	154	435	195	352	390	645	*660	242	500	372	110
13	150	150	365	188	352	378	570	615	225	700	278	110
14	150	151	365	1,220	*b265	450	525	525	210	800	376	110
15	145	208	352	960	b230	525	495	480	464	350	352	110
16	137	195	302	660	b220	435	495	450	*300	270	465	110
17	156	214	278	495	b210	*390	450	420	250	250	242	110
18	*507	290	259	405	b210	378	435	480	200	300	*180	150
19	328	780	259	328	b210	390	405	705	190	220	160	100
20	250	780	290	*302	b210	420	390	570	180	190	140	90
21	219	495	302	390	b250	365	378	450	190	*180	350	220
22	204	390	250	990	b300	340	435	378	190	244	200	*180
23	193	555	233	630	b350	328	900	352	190	204	150	145
24	212	600	231	540	b400	315	615	435	400	214	140	132
25	252	930	225	2,260	450	525	570	480	250	328	500	128
26	212	750	840	1,400	781	930	480	495	500	206	600	125
27	214	510	840	840	2,060	2,460	465	352	300	273	250	131
28	202	570	495	660	1,230	1,930	585	328	200	810	180	132
29	195	705	405	504	-	1,020	510	315	170	265	170	116
30	195	510	352	495	-------	960	480	290	160	204	150	116
31	195	-------	315	435	-------	2,920	-------	278	-------	180	140	-------
Total	7,002	10,936	13,287	16,232	13,161	21,159	19,053	20,603	7,615	9,278	8,869	3,785
Mean	226	365	429	524	470	683	635	665	254	299	286	126
Cfsm	0.695	1.12	1.32	1.61	1.45	2.10	1.95	2.05	0.782	0.920	0.880	0.388
In.	0.80	1.25	1.52	1.86	1.51	2.42	2.18	2.36	0.87	1.06	1.01	0.43

Calendar year 1957: Max 2,920 Min 44 Mean 352 Cfsm 1.08 In. 14.73
Water year 1957-58: Max 2,920 Min 90 Mean 414 Cfsm 1.27 In. 17.27

Peak discharge (base, 4,000 cfs).--Mar 27 (10 p.m.) 4,890 cfs (13.49 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record June 16 to July 21, Aug. 18 to Sept. 22; discharge estimated on basis of records for station on Otter River near Bedford (furnished by Virginia Division of Water Resources).

625. Roanoke (Staunton) River at Brookneal, Va.

Location.--Lat 37°02'28", long 78°57'02", on left bank 1,600 ft upstream from highway bridge at Brookneal, Campbell County, 3 miles upstream from Falling River, and at mile 255.9.

Drainage area.--2,420 sq mi, approximately.

Records available.--April 1923 to September 1958.

Gage.--Water-stage recorder and Telemark. Datum of gage is 351.96 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Aug. 30, 1929, chain gage at site 1,800 ft downstream at same datum. Aug. 30, 1929, to Aug. 15, 1940, water-stage recorder at site 1,800 ft downstream at same datum (destroyed by flood). Aug. 16 to Oct. 1, 1940, staff gage at site 1,800 ft downstream at same datum. Oct. 2, 1940, to Sept. 30, 1941, chain gage at site 1,600 ft downstream at same datum.

Average discharge.--35 years, 2,470 cfs.

Extremes.--Maximum discharge during year, 26,000 cfs May 7 (gage height, 24.41 ft); minimum, 760 cfs Sept. 17 (gage height, 6.35 ft).

1923-58: Maximum discharge, 130,000 cfs Aug. 15, 1940 (gage height, 46.5 ft at present site, from gage-height relation curve), from rating curve extended above 54,000 cfs by logarithmic plotting on basis of slope-area measurement by Geological Survey, unit hydrograph and flood-routing studies by Corps of Engineers, and records for other stations in Roanoke River basin; minimum, 191 cfs Sept. 2, 1932.

Remarks.--Records good except those above 5,800 cfs, which are fair.

Revisions (water years).--WSP 622: Drainage area. WSP 892: 1928(M). WSP 972: 1928-34. WSP 1303: 1924-27(M), 1929(M), 1941(M).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

6.3	720	16.0	11,800
7.0	1,330	20.0	16,600
12.0	7,000	24.0	25,000

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,400	1,280	3,560	2,600	3,450	8,920	15,900	4,370	2,290	1,570	1,280	1,090
2	4,600	1,280	2,880	2,440	4,370	5,920	9,640	4,140	2,660	1,520	1,280	1,040
3	3,450	1,280	2,550	2,240	4,260	4,600	7,000	4,840	2,340	1,420	1,620	988
4	2,550	1,240	2,660	2,080	3,560	4,020	5,800	5,440	2,240	1,380	1,920	961
5	2,080	1,200	2,660	1,820	3,100	3,560	5,200	6,040	2,130	1,330	1,670	952
6	1,770	1,200	2,390	1,720	2,990	3,220	6,160	13,500	2,130	1,330	1,620	934
7	1,620	1,150	2,130	1,920	3,220	2,990	*8,320	23,200	2,020	1,380	1,330	934
8	1,470	1,200	4,140	1,970	4,020	2,770	6,520	17,900	2,020	1,520	1,240	880
9	1,420	1,330	8,320	1,720	3,800	2,770	5,200	10,100	1,920	1,620	1,200	864
10	*1,330	1,520	6,280	1,570	*3,220	2,880	4,720	7,240	2,020	1,820	1,330	832
11	1,280	1,380	4,480	1,620	2,990	3,100	5,800	6,160	2,180	2,130	1,110	816
12	1,200	1,240	3,560	1,870	2,990	2,990	5,680	*5,920	2,240	2,020	1,770	824
13	1,200	1,200	2,880	1,720	2,770	2,770	4,600	5,440	2,100	2,130	1,570	816
14	1,150	1,200	2,550	4,370	2,550	2,990	4,140	4,840	1,970	2,660	1,620	808
15	1,120	1,280	2,500	9,280	2,390	3,450	3,910	4,370	2,240	3,680	3,340	808
16	1,100	1,570	*2,390	6,040	2,390	3,340	3,680	4,020	3,220	2,180	4,140	808
17	1,100	1,670	2,240	4,370	2,130	2,990	3,560	3,800	2,880	1,770	2,390	792
18	1,280	*3,410	2,130	3,450	1,520	2,770	3,340	3,800	2,080	1,520	1,870	848
19	3,680	9,520	2,080	2,990	1,380	2,880	3,220	5,080	1,820	1,720	1,420	943
20	2,500	10,800	2,080	2,600	2,020	3,100	2,990	5,200	1,920	1,570	1,280	934
21	1,820	5,200	2,240	2,660	2,440	2,990	2,880	4,260	2,020	*1,470	1,200	934
22	1,570	3,450	2,290	4,600	2,660	2,880	3,100	3,560	2,340	1,520	*1,150	*1,200
23	1,470	3,450	2,180	4,600	3,220	2,770	5,680	3,100	2,020	1,720	1,240	1,280
24	1,420	5,200	1,970	3,680	3,340	2,660	7,480	2,990	1,920	1,520	1,200	1,080
25	1,470	6,880	1,970	7,480	2,990	2,770	5,320	3,220	2,550	1,620	2,770	961
26	1,570	10,500	2,550	12,600	3,450	4,600	4,480	3,340	2,180	1,820	2,770	907
27	1,470	6,520	6,160	7,840	13,500	7,600	3,910	3,100	2,990	1,520	1,920	880
28	1,470	4,600	5,080	5,440	13,600	14,900	6,520	2,770	2,390	1,920	1,470	907
29	1,380	5,080	3,910	4,370	-	8,920	7,240	2,660	1,870	2,290	1,240	864
30	1,330	4,260	3,220	3,800	-------	6,280	5,080	2,660	1,670	1,670	1,240	816
31	1,280	-------	2,880	3,340	-------	13,500	-------	2,390	-------	1,380	1,130	-------
Total	58,550	101,090	98,910	118,800	104,320	141,900	167,070	179,450	66,370	54,720	52,330	27,701
Mean	1,889	3,370	3,191	3,832	3,726	4,577	5,569	5,789	2,212	1,765	1,688	923
Cfsm	0.781	1.39	1.32	1.58	1.54	1.89	2.30	2.39	0.914	0.729	0.698	0.381
In.	0.90	1.55	1.52	1.82	1.60	2.18	2.57	2.76	1.02	0.84	0.80	0.43

Calendar year 1957: Max 26,800 Min 458 Mean 2,706 Cfsm 1.12 In. 15.17
Water year 1957-58: Max 23,200 Min 792 Mean 3,209 Cfsm 1.33 In. 17.99

Peak discharge (base, 21,000 cfs).--May 7 (6 a.m.) 26,000 cfs (24.41 ft).

* Discharge measurement made on this day.

630. East Fork Falling River near Appomattox, Va.

Location.--Lat 37°19'40", long 78°51'20", on right bank 130 ft downstream from bridge on State Highway 644 and 2.0 miles southwest of Appomattox, Appomattox County.

Drainage area.--5.1 sq mi, approximately, of which 3.5 sq mi is above flood-detention structure.

Records available.--June 1954 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 740 ft (from topographic map).

Extremes.--Maximum discharge during year, 122 cfs Nov. 19 (gage height, 2.77 ft); minimum daily, 1.6 cfs Oct. 21, Sept. 7-13, 15, 16.
1954-58: Maximum discharge, 338 cfs Aug. 17, 1955 (gage height, 5.24 ft), from rating curve extended above 60 cfs by logarithmic plotting; minimum, 0.1 cfs Sept. 16-20, 1956.
Flood in 1928 reached a stage of 8.0 ft, from information by local resident.

Remarks.--Records fair except those above 10 cfs, which are poor. Since August 1956 flow from 3.5 sq mi above station has been partly controlled by Soil Conservation Service flood-detention reservoir a quarter of a mile above station.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Feb. 15-19)

Oct. 1 to June 9				June 10 to Sept. 30			
1.2	0.9	1.5	8.0	1.1	0.8	1.6	12
1.25	1.4	1.7	18	1.2	1.8	1.8	24
1.3	2.1	2.0	39	1.3	3.0	2.0	39
1.4	4.5	2.2	56	1.4	5.2		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.8	2.1	4.8	3.9	10	7.2	12	4.8	3.1	2.8	2.7	a1.8
2	3.9	2.1	3.9	3.3	8.0	5.4	7.6	5.4	3.1	2.8	2.3	a1.8
3	3.6	2.1	3.6	3.1	*5.4	*5.1	6.0	16	2.9	2.7	2.5	a1.8
4	2.5	1.9	6.0	3.1	4.2	4.5	5.4	29	3.3	2.7	2.5	a1.8
5	2.3	1.8	5.1	2.9	3.9	4.2	5.4	11	3.6	2.5	2.3	a1.8
6	2.3	1.8	4.5	*2.9	4.5	4.2	17	34	4.5	2.7	2.2	a1.8
7	2.1	1.8	4.8	3.1	13	4.2	9.8	34	5.1	2.7	2.1	a1.6
8	2.1	5.4	18	3.1	9.4	3.9	6.0	12	6.4	2.8	2.1	a1.6
9	1.9	4.5	*14	2.9	4.8	4.2	5.1	6.8	20	3.0	2.2	a1.6
10	1.9	2.5	7.6	2.7	4.2	5.4	9.6	5.7	39	2.8	2.0	a1.6
11	1.8	*2.1	5.1	2.9	3.9	5.7	14	5.4	20	2.7	*1.8	a1.6
12	1.9	2.1	4.2	2.9	3.6	4.5	8.0	4.5	30	2.7	2.2	a1.6
13	1.8	2.1	3.6	2.9	3.6	5.1	6.0	3.9	a16	2.8	2.3	a1.6
14	1.8	2.7	3.6	36	3.3	7.2	5.7	3.3	a8.5	*2.5	2.5	a1.8
15	*1.8	3.1	3.6	9.8	3.0	6.0	5.1	3.3	a5.5	2.3	3.6	*1.6
16	1.8	2.5	3.6	12	3.0	4.8	5.1	3.1	a4.0	2.2	4.0	1.6
17	2.1	2.5	3.6	6.0	3.0	4.5	4.8	3.1	*a3.0	2.2	2.4	1.8
18	3.1	8.4	3.3	4.5	3.0	4.8	4.8	3.1	2.7	2.3	2.1	2.4
19	2.3	54	4.2	3.9	3.1	5.7	4.5	5.6	2.7	2.3	2.0	2.0
20	1.9	51	5.1	3.3	3.3	6.0	4.5	*5.4	6.1	2.2	1.8	1.8
21	1.6	6.8	6.0	11	3.6	4.8	*3.6	3.6	4.9	2.2	1.8	3.6
22	1.8	4.2	4.2	22	4.8	4.5	12	3.1	5.8	2.7	2.1	2.2
23	1.8	13	3.6	7.6	6.4	3.9	34	2.9	4.6	2.4	1.8	2.0
24	2.9	7.2	3.6	6.0	7.2	3.9	7.2	2.9	4.2	2.5	3.9	1.8
25	2.9	25	3.3	34	6.8	14	4.8	3.1	3.8	2.5	9.5	1.8
26	1.8	10	16	14	22	16	3.9	4.5	4.3	2.3	a5.0	1.8
27	1.9	5.7	8.0	7.6	49	37	4.2	3.1	4.6	2.5	a3.5	1.8
28	1.9	8.4	5.4	5.7	14	16	21	3.1	3.6	2.3	a2.5	1.8
29	1.8	8.0	4.5	4.8	-	9.4	8.4	3.3	3.2	2.4	a2.2	1.8
30	1.8	6.0	4.2	4.5	-------	8.9	5.4	3.1	3.0	2.2	a2.0	1.8
31	1.9	-------	3.9	4.5	-------	32	-------	2.9	-------	2.3	a1.9	-------
Total	69.8	250.8	174.9	236.9	214.0	253.0	250.9	235.0	231.5	78.0	83.8	55.4
Mean	2.25	8.36	5.64	7.64	7.64	8.16	8.36	7.58	7.72	2.52	2.70	1.85
Cfsm	0.439	1.63	1.10	1.49	1.49	1.59	1.63	1.48	1.50	0.491	0.526	0.361
In.	0.51	1.82	1.27	1.72	1.55	1.83	1.82	1.71	1.67	0.57	0.61	0.40

Calendar year 1957: Max 54 Min 0.6 Mean 4.02 Cfsm 0.784 In. 10.69
Water year 1957-58: Max 54 Min 1.6 Mean 5.85 Cfsm 1.14 In. 15.48

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for station at Spring Mills.

635. East Fork Falling River at Spring Mills, Va.

Location.--Lat 37°14'40", long 78°55'30", on right bank 300 ft downstream from bridge on State Highway 646 at Spring Mills, Appomattox County, 0.6 mile upstream from Burger Branch, and 5 miles upstream from confluence with North Fork.

Drainage area.--52.2 sq mi, of which 9.8 sq mi is above flood-detention structures.

Records available.--June 1954 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 470 ft (from topographic map).

Extremes.--Maximum discharge during year, 1,480 cfs Nov. 19 (gage height, 7.70 ft); minimum, 13 cfs Oct. 11-13, Sept. 16, 17; minimum gage height, 0.96 ft Aug. 10.
1954-58: Maximum discharge, 1,530 cfs Aug. 18, 1955 (gage height, 7.93 ft); minimum, 0.7 cfs July 2, 1956 (gage height, 0.52 ft).
Flood in 1940 reached a stage of 19.2 ft, from information by local resident.

Remarks.--Records good except those below 20 cfs, which are fair. Prior to 1958 regulation caused by gristmill 400 ft above station. Flow from 9.8 sq mi above station slightly regulated by three Soil Conservation Service flood-detention reservoirs (two completed in 1956, one in 1958).

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, dnd discharge, in cubic feet per second)
(*Shifting-control method* used Oct. 4 to Nov. 8)

0.9	12	2.0	152
1.2	29	3.0	364
1.5	59	4.0	590

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	16	49	36	92	90	150	82	39	28	26	16
2	29	17	44	33	82	69	110	82	39	28	24	15
3	22	16	41	31	*62	*60	84	116	37	27	27	15
4	17	16	57	b28	53	54	72	164	37	27	27	16
5	16	16	53	b28	48	49	67	124	35	26	23	16
6	15	16	48	*b27	48	48	182	364	35	25	21	16
7	15	16	49	32	117	47	120	298	33	27	18	16
8	15	26	156	31	102	45	81	162	33	27	18	15
9	14	35	*120	b27	62	47	67	120	68	27	18	15
10	14	25	79	b27	b46	57	108	102	95	28	17	15
11	13	*21	57	b27	b40	60	142	92	40	25	*22	15
12	13	21	45	b26	b37	52	92	79	59	25	57	15
13	13	21	38	b27	b28	53	72	66	39	28	28	15
14	14	23	37	364	b32	70	65	55	35	*29	30	15
15	*14	28	36	116	b22	66	62	52	40	27	54	*14
16	15	24	35	112	b23	54	59	48	36	25	52	14
17	16	24	33	66	b23	51	54	47	*32	24	25	16
18	21	56	32	51	b23	51	53	51	31	25	29	22
19	17	523	35	42	b28	59	52	74	30	25	43	16
20	16	154	39	41	b34	59	49	*69	53	22	30	16
21	16	59	45	82	b35	52	*45	52	41	22	18	32
22	16	42	35	214	51	48	100	45	41	30	21	21
23	16	104	33	73	66	46	349	44	39	25	18	17
24	19	70	33	60	73	45	120	47	37	25	24	16
25	20	239	32	326	70	127	88	47	35	25	68	16
26	17	104	112	156	223	168	72	79	40	22	28	15
27	17	57	73	84	353	353	67	47	43	26	22	15
28	16	88	53	65	152	180	232	43	33	22	19	16
29	16	82	44	53	-	128	130	41	31	24	18	15
30	17	60	39	49	-------	120	96	39	29	21	17	15
31	16	-------	37	47	-------	272	-------	37	-------	21	16	---------
Total	526	1,999	1,619	2,381	2,025	2,680	3,040	2,768	1,215	788	858	491
Mean	17.0	66.6	52.2	76.8	72.3	86.5	101	89.3	40.5	25.4	27.7	16.4
Cfsm	0.326	1.28	1.00	1.47	1.39	1.66	1.93	1.71	0.776	0.487	0.531	0.314
In.	0.38	1.43	1.15	1.70	1.45	1.91	2.15	1.97	0.87	0.56	0.61	0.35

Calendar year 1957: Max 523 Min 4.7 Mean 39.8 Cfsm 0.762 In. 10.36
Water year 1957-58: Max 523 Min 13 Mean 55.9 Cfsm 1.07 In. 14.53

Peak discharge (base, 600 cfs).--Nov. 19 (1 p.m.) 1,480 cfs (7.70 ft); Jan. 14 (2 p.m.) 662 cfs (4.31 ft); Feb. 26 (10:30 p.m.) 782 cfs (4.84 ft); Apr. 23 (5 a.m.) 662 cfs (4.32 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

640. Falling River near Naruna, Va.

Location.--Lat 37°07', long 78°58', on left bank at upstream side of highway bridge, 2 miles upstream from Little Falling River and 2½ miles northeast of Naruna, Campbell County.

Drainage area.--172 sq mi.

Records available.--July 1929 to January 1935, September 1941 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 412.32 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. July 12, 1929, to Jan. 15, 1935, chain gage at same site and datum.

Average discharge.--22 years (1929-34, 1941-58), 147 cfs.

Extremes.--Maximum discharge during year, 3,760 cfs Nov. 19 (gage height, 12.32 ft); minimum, 55 cfs Oct. 14, 16, 17, Nov. 6-8 (gage height, 2.80 ft).

1929-35, 1941-58: Maximum discharge, 15,800 cfs Sept. 18 or 19, 1944 (gage height, 23.9 ft, from floodmarks), from rating curve extended above 6,100 cfs on basis of slope-area measurements at gage heights 23.9 and 26.5 ft; minimum, 3 cfs Oct. 9, 1932 (gage height, 2.18 ft).

Flood in August 1940 reached a stage of 26.5 ft, from floodmarks (discharge, 22,000 cfs, by slope-area measurement).

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are poor. Prior to 1958, diurnal fluctuation caused by gristmill at Spring Mills.

Revisions (water years).--WSP 1333: 1930, 1931-34(M), 1935.

Rating table, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.8	55	4.0	358
3.0	85	7.0	1,430
3.5	203	9.0	2,260

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	121	59	181	a130	313	320	470	294	128	104	94	72
2	117	59	145	a120	320	244	329	316	132	100	80	69
3	85	59	142	a110	223	212	265	406	128	94	87	68
4	75	58	238	a100	181	186	226	400	125	91	a85	68
5	69	58	212	a90	168	170	229	416	125	89	a80	68
6	68	55	170	a85	170	162	622	1,430	121	87	a70	68
7	65	55	162	a85	361	155	*470	1,230	117	87	a65	68
8	65	66	588	a80	396	150	268	605	114	94	a65	66
9	62	106	571	a80	220	152	220	390	121	89	a60	63
10	61	66	313	a85	*b175	189	287	329	275	98	a60	63
11	59	59	215	a90	b170	220	503	a310	138	87	a60	63
12	58	59	158	a90	b140	178	304	*a265	212	85	a200	62
13	56	59	152	a100	b115	168	238	238	138	94	a100	62
14	55	62	a150	a1,350	b115	241	209	206	121	108	a100	62
15	*56	83	a140	503	b95	238	195	189	328	89	a170	62
16	55	71	a130	438	b90	a180	186	181	*162	82	a150	62
17	58	69	a120	262	b90	*a160	172	170	123	75	a100	61
18	80	*232	a120	192	b90	155	165	175	110	77	*a85	93
19	69	1,950	a120	152	b115	183	162	226	108	79	100	66
20	59	503	a150	140	b115	186	158	272	172	72	93	65
21	58	218	a180	262	b115	160	155	186	140	*71	72	125
22	56	145	a130	792	b140	145	350	162	226	102	77	*94
23	56	352	a120	304	241	132	1,270	155	165	80	71	71
24	62	288	a110	226	265	132	390	158	145	100	101	66
25	80	998	a110	1,260	262	313	288	168	150	94	379	65
26	65	454	368	622	771	571	232	206	192	80	160	63
27	62	232	281	326	1,510	1,310	226	160	383	150	100	63
28	61	294	183	238	554	656	1,190	145	145	82	85	62
29	58	329	155	192	-	368	503	140	121	77	82	58
30	59	244	132	175	-------	355	352	130	110	69	77	58
31	59	-------	a140	160	-------	1,150	-------	128	-------	84	74	-------
Total	2,069	7,342	6,086	8,839	7,520	9,141	10,634	9,786	4,775	2,770	3,182	2,056
Mean	66.7	245	196	285	269	295	354	316	159	89.4	103	68.5
Cfsm	0.388	1.42	1.14	1.66	1.56	1.72	2.06	1.84	0.924	0.520	0.599	0.398
In.	0.45	1.58	1.31	1.91	1.62	1.98	2.30	2.12	1.03	0.60	0.69	0.44

Calendar year 1957: Max 1,950 Min 20 Mean 143 Cfsm 0.831 In. 11.26
Water year 1957-58: Max 1,950 Min 55 Mean 203 Cfsm 1.18 In. 16.03

Peak discharge (base, 1,600 cfs).--Nov. 19 (6:30 p.m.) 3,760 cfs (12.32 ft); Nov. 25 (4:30 p.m.) 1,880 cfs (8.12 ft); Jan. 14 (5 to 6 p.m.) 2,180 cfs (8.75 ft); Jan. 25 (8 p.m.) 1,670 cfs (7.56 ft); Feb. 27 (1 a.m.) 3,010 cfs (10.74 ft); Mar. 27 (1:30 p.m.) 2,090 cfs (8.60 ft); Mar. 31 (8 a.m.) 1,800 cfs (7.87 ft); Apr. 23 (8 a.m.) 2,090 cfs (8.61 ft); Apr 28 (11 a.m.) 1,920 cfs (8.22 ft); May 7 (1 a.m.) 1,970 cfs (8.26 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Otter River near Evington and East Fork Falling River at Spring Mills.
b Stage-discharge relation affected by ice.

660. Roanoke (Staunton) River at Randolph, Va.

Location.--Lat 36°54'54", long 78°44'28", on right bank 14 ft downstream from bridge on State Highway 746, 2.8 miles northwest of Randolph, Charlotte County, 3.6 miles upstream from Roanoke Creek, and at mile 227.3.

Drainage area.--3,000 sq mi, approximately.

Records available.--August 1900 to September 1906, October 1927 to September 1930, October 1950 to September 1958. Monthly discharge only for some periods, published in WSP 1303. Prior to October 1902, published as Staunton River at Randolph.

Gage.--Water-stage recorder. Datum of gage is 307.53 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Aug. 27, 1900, to Oct. 13, 1902, wire-weight gage at site 3.2 miles downstream at different datum. Oct. 14, 1902, to Aug. 11, 1906, and Oct. 1, 1927, to Mar. 31, 1930, wire-weight or chain gage at site of original gage at datum 3.87 ft lower than present datum.

Average discharge.--17 years, 3,423 cfs.

Extremes.--Maximum discharge during year, 28,200 cfs May 8; maximum gage height, 24.72 ft May 8; minimum discharge, 1,050 cfs Sept. 18, 19 (gage height, 5.67 ft).
1900-1906, 1927-30, 1950-58: Maximum discharge (revised), 97,000 cfs Dec. 31, 1901 (gage height, 35.0 ft, from graph based on gage readings, at site and datum then in use); minimum, 256 cfs Sept. 16, 1954.
Flood of Aug. 16, 1940, reached a stage of 41.6 ft (discharge, 150,000 cfs), from information by Corps of Engineers.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair.

Revisions (water years).--WSP 1203: 1928-30. WSP 1303: 1901-6.

Rating table, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Rate of change in stage used as a factor for most days above 6,000 cfs)

5.6	1,020	17.0	10,800
7.0	1,960	21.0	17,800
9.0	4,050	25.0	29,100
13.0	7,200		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,570	1,470	5,160	3,610	4,730	12,000	21,800	5,800	2,950	1,960	1,640	1,400
2	5,800	1,500	4,450	3,390	5,800	7,140	13,700	5,400	3,060	1,890	1,610	1,330
3	4,640	1,470	3,830	3,060	5,720	6,080	7,860	5,870	3,170	1,820	1,680	1,260
4	3,390	1,440	3,720	2,730	5,000	5,320	6,780	6,290	2,840	1,750	2,120	1,200
5	2,510	1,400	4,250	2,300	a4,250	4,820	6,150	6,710	2,730	1,680	2,120	1,170
6	2,120	1,360	3,610	2,040	a3,800	a4,300	7,590	12,600	2,620	1,640	1,890	1,170
7	1,820	1,330	3,060	2,040	a4,800	a4,000	9,040	24,800	2,510	1,610	1,720	1,170
8	1,720	1,330	5,320	2,120	5,720	a3,800	7,560	27,300	2,400	1,750	1,500	1,170
9	1,610	1,640	9,600	2,120	5,320	a3,700	6,360	17,700	2,400	1,890	1,400	1,170
10	*1,540	1,720	7,930	1,960	a4,500	a3,700	5,800	8,500	2,400	1,960	1,470	1,140
11	1,470	1,750	6,290	1,820	a3,900	a3,800	*7,120	7,140	2,840	2,300	1,440	1,140
12	1,400	1,500	5,080	1,890	a3,650	a3,700	6,990	6,780	2,840	2,510	2,840	1,110
13	1,330	1,360	4,250	1,960	a3,500	a3,700	6,010	6,360	2,840	2,300	2,840	1,110
14	1,300	1,360	3,720	4,050	a3,400	a4,000	5,320	5,870	2,620	2,840	1,890	1,080
15	1,260	1,440	3,280	10,600	3,390	4,550	5,000	5,320	2,730	4,050	2,620	1,080
16	1,260	1,640	3,170	7,940	3,280	4,550	4,730	*5,000	4,050	3,390	5,480	1,080
17	1,230	1,960	2,950	6,150	b3,100	a4,000	4,550	4,640	4,150	2,300	4,250	1,080
18	1,300	3,830	2,730	4,910	b2,900	a3,600	a4,300	4,450	2,840	1,890	2,510	1,050
19	2,740	9,090	2,620	4,150	b2,800	a3,800	a3,900	5,240	2,300	1,890	1,960	1,050
20	3,940	*14,000	*2,620	3,610	b2,800	a4,300	a3,600	6,080	2,300	1,960	1,680	1,110
21	2,300	7,240	3,060	3,170	b2,800	a4,200	a3,700	5,560	2,510	1,750	*1,500	1,170
22	1,890	5,080	3,060	5,290	b2,700	a3,800	3,830	4,640	3,060	1,750	1,440	1,360
23	1,680	4,730	2,840	6,290	b2,700	a3,600	6,990	4,150	3,170	1,890	1,470	1,580
24	1,610	6,080	2,510	*5,160	b2,700	a3,500	8,070	3,830	2,510	*1,960	1,440	1,440
25	1,640	8,430	2,400	8,770	4,450	a3,500	6,640	3,830	3,060	1,890	2,920	1,260
26	1,820	12,800	2,730	16,000	a9,000	5,560	5,640	4,150	3,610	2,040	5,240	*1,170
27	1,720	8,280	5,720	10,500	15,200	8,000	5,000	4,150	4,250	2,040	3,610	1,140
28	1,640	6,150	6,500	6,800	19,900	16,600	7,430	3,720	3,830	1,890	2,120	1,170
29	1,610	6,010	5,320	5,870		11,300	8,900	3,390	2,730	2,620	1,750	1,170
30	1,500	5,720	4,640	5,080	-------	7,330	6,970	3,390	2,210	2,300	1,540	1,140
31	1,470	-------	4,640	4,550	-------	12,100	-------	3,170	-------	1,750	1,540	-------
Total	67,830	123,110	131,060	149,930	141,810	174,350	207,330	221,830	87,530	65,260	69,230	35,670
Mean	2,188	4,104	4,228	4,836	5,065	5,624	6,911	7,156	2,918	2,105	2,233	1,189
Cfsm	0.729	1.37	1.41	1.61	1.69	1.87	2.30	2.39	0.973	0.702	0.744	0.396
In.	0.84	1.53	1.63	1.86	1.76	2.16	2.57	2.76	1.09	0.81	0.86	0.44

Calendar year 1957: Max 26,100 Min 560 Mean 3,289 Cfsm 1.10 In. 14.91
Water year 1957-58: Max 27,300 Min 1,050 Mean 4,041 Cfsm 1.35 In. 18.31

Peak discharge (base, 20,000 cfs).--Apr. 1 (2 p.m.) 22,700 cfs (22.86 ft at 6 p.m.) May 8 (1 a.m.) 28,200 cfs (24.72 ft at 4 a.m.).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for station at Brookneal.
b Stage-discharge relation affected by ice.

665. Roanoke Creek at Saxe, Va.

Location.--Lat 36°55'49", long 78°39'56", on right bank at downstream side of highway bridge, 500 ft northwest of Saxe, Charlotte County, and 4 miles upstream from mouth.

Drainage area.--162 sq mi.

Records available.--August 1946 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 322.36 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to July 21, 1950, staff gage at same site and datum.

Average discharge.--12 years, 120 cfs.

Extremes.--Maximum discharge during year, 1,600 cfs May 7 (gage height, 9.78 ft); minimum, 17 cfs Sept. 16, 17, 19; minimum gage height, 1.77 ft Sept. 17.
1946-58: Maximum discharge, 4,710 cfs Aug. 18, 1955 (gage height, 13.58 ft); no flow for part of Sept. 18, 1954, from information by local observer.
Flood of Aug. 16, 1940, reached a stage of 25.7 ft (backwater from Roanoke River), from floodmark.

Remarks.--Records fair except those for periods of no gage-height record, which are poor.

Revisions (water years).--WSP 1333: 1949.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second) (Shifting-control method used Oct. 1 to Nov. 16, Dec. 3, 4, 14-20, Aug. 30 to Sept. 30)

1.6	15	7.0	400
2.0	27	8.0	680
3.0	69	9.0	1,110
5.0	202	10.0	1,740
6.0	281		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55	27	174	114	167	525	a250	273	54	59	25	32
2	60	39	160	108	336	281	a180	202	52	52	36	29
3	62	49	118	b90	362	178	a150	249	50	48	78	27
4	55	64	178	b75	225	142	a140	257	49	45	114	26
5	49	53	241	b65	160	122	a150	265	48	42	78	25
6	42	46	249	b60	142	108	a600	600	48	41	48	24
7	39	44	167	69	209	102	a300	1,410	47	42	38	23
8	40	54	265	b70	425	118	a200	1,060	45	50	33	22
9	32	66	645	b70	400	90	a160	500	44	46	33	21
10	*31	78	830	b65	207	108	a200	257	45	50	32	21
11	31	78	500	69	139	156	*a650	170	47	59	29	21
12	30	64	249	b65	122	153	615	146	53	51	29	20
13	29	58	153	b65	b95	136	325	125	59	47	45	20
14	29	49	111	358	*b80	181	192	105	57	47	57	19
15	27	56	99	740	b75	217	150	93	96	51	72	22
16	27	78	90	715	b75	178	132	*87	188	49	57	18
17	29	114	84	362	b75	139	122	78	142	43	58	17
18	33	211	64	273	b75	118	108	72	66	38	47	18
19	40	a450	53	170	b70	142	102	105	53	36	37	17
20	41	*a600	*80	136	b70	209	99	257	*62	35	31	18
21	38	500	233	132	b70	*217	93	315	150	34	*29	28
22	34	244	273	225	b75	160	115	178	188	35	27	33
23	33	249	209	306	160	125	297	93	202	35	26	35
24	36	362	142	249	217	108	425	81	233	*40	26	33
25	45	650	118	701	217	a125	257	96	142	47	74	*30
26	51	1,110	214	1,060	279	a400	142	87	122	38	181	27
27	45	788	450	555	1,010	a700	118	72	225	34	241	26
28	33	350	475	265	1,110	a400	294	64	306	32	102	25
29	29	209	241	167	-	a250	585	69	188	31	53	24
30	27	188	156	136	-------	a250	500	64	78	29	41	24
31	27	-------	125	122	-------	a350	-------	58	-------	26	35	-------
Total	1,179	6,928	7,146	7,657	6,647	6,488	7,651	7,488	3,139	1,312	1,812	725
Mean	38.0	231	231	247	237	209	255	242	105	42.3	58.5	24.2
Cfsm	0.235	1.43	1.43	1.52	1.46	1.29	1.57	1.49	0.648	0.261	0.361	0.149
In.	0.27	1.60	1.65	1.75	1.52	1.49	1.75	1.72	0.72	0.30	0.42	0.17

Calendar year 1957: Max 2,310 Min 2.9 Mean 131 Cfsm 0.809 In. 11.03
Water year 1957-58: Max 1,410 Min 17 Mean 159 Cfsm 0.981 In. 13.36

Peak discharge (base, 1,000 cfs).--Nov. 26 (7 p.m.) 1,170 cfs (9.14 ft); Jan. 26 (9 a.m.) 1,230 cfs (9.15 ft); Feb. 28 (1 to 2 a.m.) 1,350 cfs (9.44 ft); May 7 (4 p.m.) 1,600 cfs (9.78 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Falling River near Naruna.
b Stage-discharge relation affected by ice.

685. Dan River near Francisco, N. C.

Location.--Lat 36°30'54", long 80°18'12", on left bank 200 ft upstream from bridge on State Highway 704, an eighth of a mile downstream from Georges Mill, 3 miles east of Francisco, Stokes County, and 7.9 miles downstream from Little Dan River.

Drainage area.--124 sq mi.

Records available.--August 1924 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Altitude of gage is 830 ft (from topographic map). Prior to Nov. 15, 1929, chain gage at same site and datum.

Average discharge.--34 years, 186 cfs (unadjusted).

Extremes.--Maximum discharge during year, 3,250 cfs Nov. 19 (gage height, 5.75 ft); minimum, 62 cfs Sept. 29 (gage height, 1.20 ft); minimum daily, 68 cfs Sept. 29.
1924-58: Maximum discharge, 12,400 cfs Oct. 19, 1937 (gage height, 12.45 ft), from rating curve extended above 8,500 cfs; minimum, 7.1 cfs Sept. 8, 1932 (gage height, 0.43 ft); minimum daily, 30 cfs Sept. 18, 20, 1932.
Flood in 1916 reached a stage about 3 ft higher than that of Oct. 19, 1937.

Remarks.--Records good except those for period of ice effect, which are fair. Considerable diurnal fluctuation and regulation from mills and powerplants above station. Talbot and Townes Reservoirs above Pinnacles Hydroelectric Plant in Virginia, 28 miles above station and having a combined capacity of 416,000,000 cu ft, were completed in 1938.

Revisions (water years).--WSP 892: Drainage area. WSP 1433: 1925-26, 1928-29, 1931, 1942, 1948. WSP 1303: 1938-50 (monthly runoff).

Rating tables, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 19				Nov. 20 to Sept. 30			
1.5	118	3.0	750	1.2	62	2.5	421
2.0	250	4.0	1,490	1.5	107	3.0	720
2.5	462			2.0	223	4.0	1,490

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	233	190	273	259	308	213	395	394	280	170	154	106
2	205	190	267	237	278	209	321	390	380	*173	145	109
3	167	170	232	244	261	200	287	365	*260	183	208	121
4	164	148	247	241	257	187	283	349	252	181	145	106
5	168	161	227	245	259	173	268	527	249	168	127	107
6	164	168	217	257	254	173	564	1,190	243	178	127	106
7	141	163	278	239	286	169	355	754	237	171	126	97
8	155	200	790	226	268	164	324	571	228	175	157	82
9	141	204	396	246	247	167	301	479	281	215	139	92
10	130	190	338	234	*245	197	339	433	278	181	122	100
11	142	181	310	207	244	183	357	403	239	175	115	97
12	155	177	282	210	241	181	331	369	290	212	121	94
13	148	177	296	294	238	191	306	372	217	215	485	96
14	135	187	264	510	243	202	265	353	225	183	243	87
15	150	193	242	319	248	184	300	343	207	179	*140	76
16	157	197	241	288	234	187	315	340	193	207	137	93
17	313	201	237	269	b210	178	298	478	184	218	128	*97
18	352	437	228	247	b190	194	*278	378	185	232	116	112
19	*206	1,390	238	250	b180	197	262	321	181	221	112	94
20	204	461	280	242	b180	*185	234	332	208	195	108	95
21	171	318	287	280	b190	176	225	308	195	174	116	138
22	172	272	243	291	203	171	466	298	203	167	133	101
23	171	488	235	270	202	176	532	329	193	184	125	104
24	226	335	248	323	178	162	358	323	185	208	163	99
25	211	1,060	232	552	158	236	344	298	184	170	292	96
26	203	543	430	357	205	229	312	295	217	159	212	95
27	198	*378	331	300	331	238	310	283	261	180	174	101
28	176	350	296	290	275	233	1,020	301	178	174	148	91
29	178	306	*272	279	-	231	523	259	178	160	129	68
30	162	281	254	257	---------	268	430	253	171	153	120	89
31	195	--------	260	256	---------	806	--------	259	--------	160	112	--------
Total	5,693	9,716	8,971	8,719	6,613	6,660	10,903	12,347	6,782	5,721	4,879	2,949
Mean	184	324	289	281	236	215	363	398	226	185	157	98.3
(†)	+3.1	+24.0	-4.9	-13.4	+4.2	+20.8	+2.6	-13.2	-8.6	-15.3	+8.2	+1.5

	Observed			Adjusted		
Calendar year 1957:	Max 2,580	Min 88	Mean 231	Mean 232	Cfsm 1.87	In. 25.38
Water year 1957-58:	Max 1,390	Min 68	Mean 246	Mean 247	Cfsm 1.99	In. 27.01

Peak discharge (base, 2,000 cfs).--Nov. 19 (8 a.m.) 3,250 cfs (5.75 ft); May 6 (4 a.m.) 2,300 cfs (4.84 ft); Aug. 13 (8 p.m.) 2,150 cfs (4.70 ft).

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Talbot and Townes Reservoirs, furnished by city of Danville, Va.
b Stage-discharge relation affected by ice.

705. Mayo River near Price, N. C.

Location.--Lat 36°32'00", long 79°59'30", on right bank 300 ft downstream from Anglins Bridge, half a mile downstream from confluence of North and South Mayo Rivers, three-quarters of a mile downstream from Virginia-North Carolina State line, and 4 miles west of Price, Rockingham County.

Drainage area.--260 sq mi.

Records available.--July 1929 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 689.95 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Oct. 29, 1929, staff gage at same site and datum.

Average discharge.--29 years, 319 cfs.

Extremes.--Maximum discharge during year, 4,230 cfs Apr. 28 (gage height, 5.87 ft); minimum, 155 cfs Sept. 19, 20, 28-30.
1929-58: Maximum discharge, 30,000 cfs Oct. 19, 1937 (gage height, 14.00 ft), from rating curve extended above 8,000 cfs by logarithmic plotting; minimum, 32 cfs Oct. 8, 1954 (gage height, 0.55 ft).

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are poor. Slight infrequent diurnal fluctuation at low flow caused by small mills above station.

Revisions (water years).-- WSP 1433: 1930-31(m), 1932, 1949(M).

Rating table, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.3	155	3.0	1,010
1.6	248	4.0	1,850
2.0	420	5.0	2,980

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	515	260	430	332	564	558	836	642	401	272	308	210
2	420	250	401	316	500	455	*586	586	495	268	221	195
3	341	240	382	304	415	415	510	614	382	268	364	192
4	304	230	401	300	377	382	470	548	368	*256	418	192
5	272	210	359	280	363	359	450	693	363	248	256	189
6	252	200	346	308	359	350	1,250	1,660	372	264	229	186
7	237	200	368	312	386	341	732	1,420	346	252	218	180
8	233	230	1,480	312	420	332	542	1,030	332	256	210	178
9	221	300	738	268	354	332	480	732	354	308	225	170
10	210	260	536	296	337	346	612	642	552	320	198	170
11	207	220	455	304	341	328	712	597	391	272	*186	170
12	210	220	396	280	324	316	531	564	455	268	183	168
13	204	220	377	280	324	332	475	548	363	308	284	170
14	198	220	368	930	308	372	445	526	337	268	583	168
15	198	260	354	531	b300	359	440	485	337	248	308	165
16	200	240	350	415	b280	332	460	465	354	252	542	165
17	220	370	341	346	b270	320	420	511	312	272	624	162
18	700	700	328	337	b280	341	401	1,030	308	*320	280	175
19	340	2,800	328	316	b280	363	391	510	304	268	237	162
20	270	*1,200	341	308	b300	363	382	490	354	244	218	160
21	240	614	386	372	b310	350	372	*455	320	233	210	292
22	220	480	328	460	b320	328	483	420	324	252	252	237
23	220	1,020	320	368	332	316	2,180	461	346	233	256	186
24	320	702	312	563	328	312	690	515	328	341	260	180
25	320	2,190	308	1,230	316	475	553	450	312	252	845	178
26	260	1,160	641	696	623	500	485	440	300	221	402	175
27	260	678	510	520	1,330	460	455	396	406	214	296	170
28	250	608	415	450	930	430	2,350	401	312	248	256	165
29	*240	558	382	406	-	410	1,260	410	288	214	237	155
30	240	490	354	386	------	511	870	372	284	201	225	155
31	250	------	337	382	------	2,170	------	363	------	198	210	------
Total	8,572	17,330	13,372	12,908	11,571	13,558	20,823	18,976	10,700	8,039	9,541	5,420
Mean	277	578	431	416	413	437	694	612	357	259	308	181
Cfsm	1.07	2.22	1.66	1.60	1.59	1.68	2.67	2.35	1.37	0.996	1.18	0.696
In.	1.23	2.48	1.91	1.85	1.66	1.94	2.98	2.71	1.53	1.15	1.36	0.78

Calendar year 1957: Max 7,760 Min 90 Mean 371 Cfsm 1.43 In. 19.36
Water year 1957-58: Max 2,800 Min 155 Mean 413 Cfsm 1.59 In. 21.58

Peak discharge (base, 3,500 cfs).--Nov. 25 (3 p.m.) 3,780 cfs (5.57 ft); Apr. 28 (3:30 p.m.) 4,230 cfs (5.87 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Oct. 16 to Nov. 20; discharge estimated on basis of weather records and records for nearby stations.

710. Dan River near Wentworth, N. C.

Location.--Lat 36°25', long 79°50', on right bank 600 ft downstream from Settles Bridge, 3½ miles northwest of Wentworth, Rockingham County, and 7½ miles downstream from Mayo River.

Drainage area.--1,050 sq mi, approximately.

Records available.--October 1939 to September 1958. Prior to November 1939 monthly discharge only, published in WSP 1303.

Gage.--Water-stage recorder. Altitude of gage is 518 ft (by barometer). Prior to Aug. 3, 1949, at site 150 ft upstream at same datum.

Average discharge.--19 years, 1,160 cfs.

Extremes.--Maximum discharge during year, 18,200 cfs Nov. 20 (gage height, 20.90 ft); minimum, 304 cfs Sept. 21 (gage height, 1.98 ft); minimum daily, 376 cfs Sept. 30.
1939-58: Maximum discharge, 56,800 cfs Sept. 18, 1945 (gage height, 27.78 ft), from rating curve extended above 16,500 cfs on basis of slope-area measurement of peak flow at gage height 26.9 ft and runoff comparisons; minimum, 65 cfs Oct. 8, 1954 (gage height, 0.93 ft); minimum daily, 107 cfs Oct. 2, 1954.
Flood in 1908 reached a stage about 7 ft higher than that of Sept. 18, 1945, and flood in 1937 reached a stage of 29.8 ft, from information by local residents.

Remarks.--Records fair. Slight diurnal fluctuation and regulation at low flow caused by powerplants above station.

Rating table, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1-18, June 21 to July 8)

2.2	367
3.0	639
5.0	1,580
9.0	4,540
19.0	15,300

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,020	964	1,820	1,160	1,650	2,340	4,880	2,760	1,160	878	678	564
2	1,420	857	1,580	1,160	2,340	1,700	*2,360	2,550	2,380	836	658	546
3	1,120	810	1,460	1,010	1,700	1,460	1,940	2,760	1,520	*824	1,240	528
4	930	796	1,410	987	1,410	1,360	1,640	2,200	1,240	836	1,500	528
5	840	736	1,360	878	1,360	1,240	1,580	2,130	1,160	810	796	510
6	755	717	1,260	899	1,310	1,160	7,040	4,360	1,360	796	658	492
7	755	698	1,210	1,110	1,360	1,160	6,320	5,100	1,520	810	601	492
8	695	952	7,400	987	1,640	1,110	2,410	4,360	1,160	756	582	476
9	675	1,520	6,230	878	1,360	1,110	1,880	2,690	1,110	756	601	412
10	655	964	2,550	857	1,210	1,180	1,940	2,200	1,410	964	601	412
11	635	836	1,940	1,040	1,240	1,140	3,920	2,000	1,160	810	546	428
12	655	770	1,580	964	1,210	1,060	2,410	1,880	1,360	770	510	428
13	655	756	1,310	964	1,160	1,060	1,940	1,700	1,260	942	564	412
14	635	756	1,360	2,600	1,110	1,310	1,700	1,580	1,040	942	1,820	412
15	595	878	1,310	2,840	1,110	1,210	1,580	1,520	1,040	796	987	428
16	615	857	1,260	1,760	b1,000	1,140	1,700	1,460	1,060	836	1,630	397
17	635	878	1,210	1,410	b900	1,080	1,580	1,360	964	836	2,240	397
18	4,670	4,080	1,160	1,260	b840	1,080	1,460	4,740	920	*987	920	428
19	1,700	11,500	1,110	1,160	b840	1,260	1,360	1,940	920	1,960	756	428
20	1,240	14,700	1,160	1,110	b900	1,260	1,360	1,820	942	964	620	412
21	942	*2,710	1,360	1,140	1,060	1,180	1,310	1,640	987	964	582	444
22	770	1,880	1,210	1,580	1,210	1,110	1,460	1,410	1,310	836	528	838
23	770	5,500	1,110	1,470	1,260	1,060	7,170	1,520	1,140	770	678	528
24	810	4,770	1,080	1,380	1,260	1,060	2,760	2,130	1,040	756	620	460
25	1,140	7,620	1,080	6,780	1,160	1,720	2,130	1,520	987	810	2,510	460
26	899	10,900	1,940	3,820	1,600	2,620	1,940	1,460	920	678	1,780	444
27	942	3,150	2,630	2,270	6,400	1,940	1,640	1,310	1,110	658	964	412
28	899	2,580	1,700	1,760	4,520	1,640	10,400	1,310	1,110	678	796	412
29	*796	2,690	1,460	1,520	-	1,460	14,200	1,410	920	658	717	397
30	796	2,060	1,310	1,410	-------	1,460	4,360	1,240	878	601	620	376
31	796	-------	1,210	1,360	-------	7,800	-------	1,160	-------	564	582	-------
Total	31,460	88,885	55,770	49,524	44,120	48,470	98,370	67,220	35,088	26,082	28,885	13,901
Mean	1,015	2,963	1,799	1,598	1,576	1,564	3,279	2,168	1,170	841	932	463
Cfsm	0.967	2.82	1.71	1.52	1.50	1.49	3.12	2.06	1.11	0.801	0.888	0.441
In.	1.11	3.15	1.98	1.75	1.56	1.72	3.48	2.38	1.24	0.92	1.02	0.49

Calendar year 1957: Max 17,700 Min 304 Mean 1,452 Cfsm 1.38 In. 18.78
Water year 1957-58: Max 14,700 Min 376 Mean 1,610 Cfsm 1.53 In. 20.80

Peak discharge (base, 12,000 cfs).--Nov. 20 (7:30 a.m.) 18,200 cfs (20.90 ft); Nov. 26 (6 a.m.) 14,700 cfs (18.50 ft); Apr. 29 (4:30 a.m.) 17,500 cfs (20.53 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

720. Smith River near Philpott, Va.

Location.--Lat 36°47', long 80°02', on left bank 900 ft downstream from Philpott Dam, 3.1 miles west of Philpott, Henry County, and 10.9 miles upstream from Reed Creek.
Drainage area.--212 sq mi.
Records available.--August 1946 to September 1958.
Gage.--Water-stage recorder. Datum of gage is 804.27 ft above mean sea level (Corps of Engineers bench mark). Prior to Oct. 8, 1952, at site 1.9 miles downstream at different datum.
Average discharge.--12 years, 293 cfs (adjusted for storage).
Extremes.--Maximum discharge during year, 4,920 cfs Feb. 28 (gage height, 8.36 ft), caused by opening gates of Philpott Dam; minimum, 9.2 cfs May 19-23 (gage height, 1.86 ft); minimum daily, 34 cfs July 5, 6.
1946-58: Maximum discharge, 17,000 cfs June 29, 1949 (gage height, 20.3 ft, site and datum then in use), from rating curve extended above 9,700 cfs on basis of slope-area measurements at gage heights 18.2 and 20.3 ft; minimum, 4 cfs Aug. 12, 1953 (gage height, 1.50 ft); minimum daily, 34 cfs Jan. 19, 20, 1957, July 5, 6, 1958.
Revisions.--The figures of maximum discharge for some water years have been revised, as shown in the following table. They supersede figures published in the water-supply papers indicated.

WSP	Water year	Date	Discharge (cfs)	Gage height (feet)
1333	1953	Dec. 13, 1952	5,570	8.90
1383	1955	June 28, 1955	1,860	5.60
1433	1956	July 17, 1956	1,770	5.48

Remarks.--Records good except those for periods of no gage-height record, which are fair. Flow regulated since August 1950 by Philpott Reservoir (usable capacity, 145,200 acre-ft).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

2.1	30	3.4	430
2.3	60	4.0	700
2.6	125	5.0	1,360
2.9	215	6.0	2,230

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	673	292	a50	774	52	52	1,520	766	48	460	316	328
2	677	46	a800	776	51	52	1,330	758	440	458	45	322
3	673	46	a780	780	782	757	836	44	436	460	46	327
4	684	300	a790	51	772	748	849	46	430	466	317	320
5	45	295	a790	51	784	755	50	690	438	34	315	324
6	45	*a290	a790	464	783	748	842	926	437	34	312	50
7	672	a290	a50	468	778	760	1,290	1,360	48	308	319	50
8	672	a290	a50	463	50	51	885	1,360	48	311	314	328
9	678	a45	a740	462	50	51	834	1,360	386	308	46	326
10	675	a45	a760	471	418	520	835	1,360	390	310	46	322
11	689	a300	a770	51	*405	520	836	944	376	306	318	323
12	45	a300	a790	54	423	519	404	722	714	36	312	315
13	45	a300	a790	321	433	516	51	712	769	36	316	50
14	358	a300	a50	320	410	518	595	*924	51	314	316	50
15	359	a300	a50	772	50	50	1,080	886	51	318	312	324
16	363	a45	a800	776	51	50	826	725	654	312	46	334
17	377	a45	a800	780	314	406	834	51	a660	308	46	326
18	363	a400	*a800	51	315	414	848	48	a660	316	304	384
19	45	a600	786	51	314	*385	51	382	644	44	*314	314
20	45	a700	784	659	322	394	50	378	618	45	318	50
21	577	a700	52	670	324	393	406	384	48	316	320	50
22	573	a700	52	640	50	48	397	384	46	313	314	324
23	571	a45	323	647	50	48	974	393	313	*313	46	*325
24	577	a45	328	664	445	512	1,480	51	292	316	48	299
25	574	a1,000	52	51	447	511	1,240	48	292	a315	404	300
26	45	a1,300	309	51	444	760	50	709	293	45	374	311
27	45	a800	658	652	442	766	51	710	290	46	588	46
28	280	a800	51	772	470	764	735	700	46	322	588	46
29	283	a800	51	779	-	50	766	706	46	327	594	305
30	272	a50	767	762	---------	50	765	706	462	314	51	302
31	279	--------	765	768	--------	1,070	--------	48	--------	110	51	--------
Total	12,259	11,469	15,428	15,051	10,229	13,238	21,690	19,281	10,426	7,921	8,056	7,475
Mean	395	382	498	486	365	427	723	622	348	256	260	249
(†)	-101	+98	-65	-2	+77	+40	-52	-5	+13	-11	-61	-96
Adjusted for change in contents in Philpott Reservoir												
Mean	294	480	433	484	442	467	671	617	361	245	199	153
Cfsm	1.39	2.26	2.04	2.28	2.08	2.20	3.17	2.91	1.70	1.16	0.939	0.722
In.	1.60	2.52	2.35	2.63	2.17	2.54	3.54	3.36	1.90	1.34	1.08	0.81

	Observed			Adjusted		
Calendar year 1957:	Max 1,300	Min 34	Mean 239	Mean 332	Cfsm 1.57	In. 21.28
Water year 1957-58:	Max 1,520	Min 34	Mean 418	Mean 403	Cfsm 1.90	In. 25.84

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Philpott Reservoir, furnished by Corps of Engineers.
a No gage-height record; discharge estimated on basis of powerplant records.

725. Smith River at Bassett, Va.

Location.--Lat 36°46'15", long 80°00'00", on left bank 5 ft upstream from highway bridge at north edge of North Bassett, 1.0 mile northwest of Bassett, Henry County, 3.0 miles downstream from Town Creek, and 5.6 miles upstream from Reed Creek.

Drainage area.--253 sq mi.

Records available.--April 1939 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 753.09 ft above mean sea level (levels by Corps of Engineers).

Average discharge.--19 years, 345 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 5,200 cfs Nov. 19 (gage height, 6.41 ft); minimum, 60 cfs Jan. 5; minimum daily, 77 cfs Sept. 7, 13, 14, 20.
1939-58: Maximum discharge, 26,600 cfs Aug. 14, 1940 (gage height, 18.28 ft); minimum, 19 cfs July 19, 1956 (gage height, 1.25 ft); minimum daily, 54 cfs Jan. 20, 1957.
Maximum stage known, about 22.9 ft Oct. 19, 1937, from information by local residents (discharge, 38,200 cfs, from rating curve extended above 24,000 cfs on basis of backwater studies and records for station at Martinsville).

Remarks.--Records good except those below 100 cfs, which are fair. Flow regulated since August 1950 by Philpott Reservoir (usable capacity, 145,200 acre-ft).

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Feb. 9, 16, 18, 19)

Oct. 1-17, Nov. 20 to Jan. 14				Oct. 18 to Nov. 19, Jan. 15 to Sept. 30			
1.6	60	3.5	1,040	1.6	77	3.0	620
2.0	175	4.0	1,650	1.8	127	3.5	1,040
2.5	360	4.5	2,350	2.2	265	4.0	1,650
3.0	620			2.6	410		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	788	344	103	782	140	144	1,650	828	110	486	315	335
2	793	96	812	777	127	127	1,450	814	448	499	83	320
3	776	93	796	782	804	772	896	150	477	478	96	328
4	770	334	812	82	814	761	906	144	445	472	328	314
5	91	341	792	78	798	768	127	774	463	92	309	332
6	85	*322	806	460	808	764	1,010	1,160	450	88	306	79
7	740	329	103	472	820	776	1,500	1,640	107	321	326	77
8	743	358	189	457	121	104	*970	1,440	104	318	316	312
9	750	112	886	454	110	104	878	1,390	403	318	83	330
10	742	98	830	454	464	526	953	1,380	414	340	79	322
11	747	340	800	82	452	536	928	946	402	332	308	312
12	85	338	798	80	*448	520	472	832	786	94	305	314
13	78	334	798	306	453	536	130	*736	775	98	310	77
14	399	341	97	518	448	526	562	826	110	224	322	77
15	392	347	94	853	110	115	1,130	900	253	324	316	316
16	400	154	790	824	110	110	882	782	653	332	92	332
17	*410	134	802	811	372	438	867	144	652	327	92	312
18	503	650	*804	112	370	436	905	144	*620	326	312	394
19	107	1,640	804	101	370	*437	118	369	651	98	*318	312
20	98	894	803	676	358	440	118	368	662	92	326	77
21	628	824	95	715	343	436	442	358	127	325	318	96
22	627	805	88	*756	101	104	729	348	107	*352	330	325
23	629	203	315	693	101	101	1,030	360	342	326	85	323
24	654	148	327	722	473	506	1,570	121	356	324	130	*317
25	636	1,440	88	350	459	546	1,420	163	328	330	470	269
26	101	1,710	425	206	584	788	134	684	336	90	380	290
27	98	950	698	744	680	808	127	700	338	88	628	79
28	323	962	112	828	626	792	1,020	741	112	318	582	79
29	314	956	100	840	-	130	874	701	107	328	623	261
30	312	118	792	802	---------	157	814	693	487	317	88	287
31	323	---------	795	826	---------	1,280	---------	124	---------	122	85	---------
Total	14,140	15,715	16,554	16,643	11,864	14,588	24,612	20,760	11,625	8,579	8,661	7,598
Mean	456	524	534	537	424	471	820	670	388	277	279	253
(†)	-101	+98	-65	-2	+77	+40	-52	-5	+13	-11	-61	-96

Adjusted for change in contents in Philpott Reservoir

Mean	355	622	469	535	501	511	768	665	401	266	218	157
Cfsm	1.40	2.46	1.85	2.11	1.98	2.02	3.04	2.63	1.58	1.05	0.862	0.621
In.	1.61	2.74	2.13	2.43	2.06	2.33	3.39	3.03	1.76	1.21	0.99	0.69

	Observed			Adjusted		
Calendar year 1957:	Max 1,710	Min 54	Mean 299	Mean 392	Cfsm 1.55	In. 21.01
Water year 1957-58:	Max 1,710	Min 77	Mean 469	Mean 454	Cfsm 1.79	In. 24.37

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Philpott Reservoir; furnished by Corps of Engineers.

740. Smith River at Spray, N. C.

Location.--Lat 36°31'45", long 79°46'10", on right bank 0.9 mile south of Virginia-North Carolina State line, 1 mile downstream from Stuart Creek, and 1 mile north of Spray, Rockingham County.

Drainage area.--538 sq mi.

Records available.--October 1939 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 539.56 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--19 years, 615 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 9,800 cfs Nov. 19 (gage height, 9.68 ft); minimum, 71 cfs in September, date unknown (gage height, 1.44 ft); minimum daily, 150 cfs Sept. 14.
1939-58: Maximum discharge, 45,600 cfs Aug. 15, 1940 (gage height, 19.28 ft), from rating curve extended above 12,000 cfs on basis of computation of peak flow over dam 1½ miles downstream; minimum, 60 cfs Oct. 12, 1953; minimum daily, 66 cfs Sept. 10, 1944.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are poor. Flow regulated since August 1950 by Philpott Reservoir (usable capacity, 145,200 acre-ft). Some additional regulation by powerplant at Martinsville, Va.

Revisions (water years).--WSP 1433: 1946.

Rating tables, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 1				Apr. 2 to Sept. 30			
1.9	178	5.0	2,680	1.8	135	4.0	1,690
2.3	345	7.0	5,200	2.1	222	6.0	3,840
2.7	605	9.0	8,400	2.5	425	7.0	5,200
3.0	840			3.0	800		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	872	515	438	1,070	1,290	1,060	2,440	1,340	400	839	378	a310
2	1,060	524	530	1,050	802	524	2,000	1,350	565	825	514	a480
3	996	192	1,100	1,020	660	582	1,330	1,280	850	801	335	a480
4	938	288	1,140	889	1,160	1,090	1,250	637	835	826	469	a480
5	886	496	1,110	265	1,130	1,100	1,150	1,170	820	769	550	a480
6	206	494	1,070	368	1,130	1,090	1,780	3,980	819	320	522	a480
7	316	489	1,010	760	1,190	1,060	2,530	3,350	788	330	510	a160
8	878	552	1,790	718	1,090	982	1,330	2,400	363	602	584	a220
9	876	664	1,340	677	400	364	1,260	2,020	470	672	618	a470
10	853	221	1,340	702	452	438	1,360	1,920	850	690	198	a470
11	854	299	1,110	634	748	831	1,800	1,470	792	625	266	a470
12	830	500	1,120	256	712	810	1,390	1,430	943	596	*527	a470
13	188	498	1,080	352	720	847	798	1,190	1,210	361	607	a470
14	231	538	970	1,520	708	915	484	1,130	1,100	352	632	a150
15	530	584	326	1,320	566	830	1,130	1,300	417	608	843	a210
16	*515	564	488	1,270	391	400	1,380	1,290	866	590	615	a470
17	572	389	1,050	1,160	b550	422	1,190	1,060	1,140	608	a270	a470
18	959	2,320	1,070	1,000	b650	758	1,160	696	1,080	610	a350	a470
19	658	6,820	1,050	323	b650	791	1,020	538	1,080	646	497	a470
20	256	*2,630	1,060	414	b600	783	384	*926	1,180	286	484	a470
21	311	1,340	992	992	b550	748	446	851	1,100	308	480	a250
22	800	1,170	338	1,320	618	641	807	800	407	616	477	a300
23	791	1,840	378	1,130	369	347	1,760	778	512	580	514	468
24	853	1,120	570	1,090	496	418	1,960	749	762	602	200	450
25	931	3,050	535	2,580	768	1,110	1,870	474	945	594	1,560	452
26	823	3,390	779	1,410	1,260	1,250	1,120	788	747	550	1,180	438
27	265	1,480	1,080	818	3,000	1,330	408	1,170	854	255	644	429
28	296	1,500	1,000	1,170	1,710	1,300	3,440	1,170	700	304	800	174
29	512	1,500	402	1,180	-	1,170	2,160	1,240	368	526	794	225
30	509	1,210	504	1,140	--------	554	1,510	1,140	451	513	838	384
31	522	--------	1,080	1,120	--------	3,200	--------	1,080	--------	488	a220	--------
Total	20,087	37,177	27,850	29,718	24,370	27,745	42,647	40,717	23,414	17,292	17,476	11,720
Mean	648	1,239	898	959	870	895	1,422	1,313	780	558	564	391
(†)	-101	+98	-65	-2	+77	+40	-52	-5	+13	-11	-61	-96
Adjusted for change in contents in Philpott Reservoir												
Mean	547	1,337	833	957	947	935	1,370	1,308	793	547	503	295
Cfsm	1.02	2.49	1.55	1.78	1.76	1.74	2.55	2.43	1.47	1.02	0.935	0.548
In.	1.18	2.78	1.79	2.05	1.83	2.01	2.84	2.80	1.64	1.18	1.08	0.61

	Observed			Adjusted		
Calendar year 1957:	Max 7,520	Min 127	Mean 628	Mean 721	Cfsm 1.34	In. 18.23
Water year 1957-58:	Max 6,820	Min 150	Mean 877	Mean 862	Cfsm 1.60	In. 21.79

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Philpott Reservoir; furnished by Corps of Engineers.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage, and records for Smith River at Martinsville, Va.
b Stage-discharge relation affected by ice.

750. Dan River at Danville, Va.

Location.--Lat 36°35'15", long 79°22'55", on left bank 50 ft downstream from Southern Railway bridge in Danville, Pittsylvania County, 1,000 ft upstream from Fall Creek, and at mile 62.7.

Drainage area.--2,050 sq mi, approximately.

Records available.--August 1934 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 379.29 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--24 years, 2,349 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 27,000 cfs Apr. 29 (gage height, 12.02 ft); maximum gage height, 12.18 ft Nov. 20 (backwater from debris); minimum discharge, 442 cfs Sept. 29 (gage height, 2.50 ft); minimum daily, 610 cfs Sept. 15.
1934-58: Maximum discharge, 75,000 cfs Aug. 15, 1940 (gage height, 20.96 ft); minimum, 40 cfs Dec. 8, 1946 (gage height, 1.19 ft); minimum daily, 245 cfs Sept 14, 1954.

Remarks.--Records fair prior to Nov. 20, good thereafter. Diurnal fluctuation caused by cotton mills above station. Flow regulated since August 1950 by Philpott Reservoir on Smith River (usable capacity, 145,200 acre-ft).

Revisions (water years).--WSP 972: 1936.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Nov. 18, Aug. 26 to Sept. 30; indefinite stage-discharge relation Nov. 19, 20)

2.5	570	5.0	4,200
3.0	1,000	7.0	10,000
4.0	2,240	12.0	27,000

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,120	1,700	3,310	2,680	3,570	6,490	15,200	6,940	2,100	1,700	1,320	910
2	3,870	1,700	2,530	2,720	4,720	3,500	7,090	5,920	2,850	1,780	1,510	1,140
3	3,050	1,400	2,740	2,520	3,500	2,620	5,240	7,240	4,200	1,790	1,600	1,110
4	2,440	1,280	3,040	2,330	3,200	2,840	3,840	4,850	2,640	1,770	2,580	1,120
5	2,090	1,360	3,100	1,620	*2,940	2,840	3,610	3,960	2,390	1,560	2,260	1,130
6	1,460	1,410	2,780	1,500	2,820	2,700	8,750	8,760	2,340	1,460	1,580	1,100
7	1,140	*1,400	2,650	1,940	3,100	2,540	16,800	15,800	3,280	1,300	1,440	901
8	1,600	1,440	8,820	2,200	3,610	2,640	7,090	12,600	2,240	1,400	1,410	739
9	1,790	3,130	15,500	1,960	2,640	1,960	*4,460	8,140	1,860	1,490	1,680	964
10	1,730	2,390	6,790	1,740	2,080	1,910	4,080	6,200	2,270	1,630	1,400	991
11	1,700	1,440	4,590	1,940	2,260	2,120	7,840	5,500	2,680	1,840	1,050	982
12	1,620	1,520	3,580	1,700	*2,300	2,220	6,640	4,460	2,400	1,700	1,340	982
13	1,260	1,510	3,020	1,580	2,240	2,240	4,200	3,720	3,200	1,460	1,610	928
14	1,000	1,560	2,760	3,340	2,140	2,540	2,870	*3,400	2,540	1,790	1,940	820
15	1,140	1,730	2,240	7,540	2,060	2,700	2,950	3,300	1,800	1,660	3,520	610
16	1,270	1,770	1,890	4,720	1,860	2,040	3,960	3,730	2,000	1,540	2,250	892
17	1,250	1,600	2,540	3,550	1,740	1,880	3,700	5,240	2,230	1,720	3,600	928
18	3,220	5,350	2,550	3,120	1,560	2,020	3,340	5,770	2,140	2,270	2,730	1,010
19	6,840	16,500	2,470	2,100	1,750	*2,460	3,140	5,150	2,140	2,820	1,720	1,050
20	2,290	25,500	2,580	1,890	1,880	2,580	2,380	3,240	2,140	2,670	*1,520	1,030
21	1,280	14,500	2,730	2,400	2,040	2,480	2,030	3,350	2,400	1,580	1,400	973
22	1,740	4,590	2,300	*3,840	2,160	2,410	3,000	2,820	2,040	1,860	1,400	1,090
23	1,820	7,580	1,830	3,840	2,170	1,880	9,020	2,690	2,320	*1,750	1,440	1,410
24	1,880	11,900	1,700	3,500	2,140	1,810	8,450	3,380	2,020	1,680	1,360	*1,130
25	2,360	11,600	1,900	12,600	2,340	3,280	5,500	3,010	2,100	1,740	2,560	1,070
26	2,390	22,000	2,460	11,300	3,630	6,060	4,980	3,000	2,000	1,600	7,240	1,040
27	1,660	11,000	5,370	5,240	14,200	4,850	2,920	3,100	2,020	1,480	2,650	1,020
28	1,510	5,780	4,200	4,080	11,000	4,080	13,400	3,090	2,300	1,200	1,970	847
29	1,510	6,490	2,780	3,560	-	3,610	*25,900	3,480	1,640	1,460	1,800	634
30	1,510	4,980	2,240	3,090	--------	2,630	*16,100	3,180	1,480	1,430	1,670	874
31	1,550	--------	2,560	3,050	--------	9,970	--------	2,840	--------	1,350	1,170	--------
Total	64,090	176,110	109,550	109,190	91,650	96,100	208,480	157,860	69,760	52,480	62,720	29,425
Mean	2,067	5,870	3,534	3,522	3,273	3,100	6,949	5,092	2,325	1,693	2,023	981
(†)	-101	+98	-65	-2	+77	+40	-52	-5	+13	-11	-61	-96

Adjusted for change in contents in Philpott Reservoir

Mean	1,966	5,968	3,469	3,520	3,350	3,140	6,897	5,087	2,338	1,682	1,962	885
Cfsm	0.959	2.91	1.69	1.72	1.63	1.53	3.36	2.48	1.14	0.820	0.957	0.432
In.	1.11	3.25	1.95	1.98	1.70	1.76	3.75	2.86	1.27	0.95	1.10	0.48

	Observed			Adjusted		
Calendar year 1957:	Max 25,500	Min 530	Mean 2,752	Mean 2,845	Cfsm 1.39	In. 18.86
Water year 1957-58:	Max 25,900	Min 610	Mean 3,363	Mean 3,348	Cfsm 1.63	In. 22.16

Peak discharge (base, 22,000 cfs).--Nov. 20 (2:30 a.m.) discharge unknown (12.18 ft); Nov. 26 (3 p.m.) 24,100 cfs (11.25 ft); Apr. 29 (8 p.m.) 27,000 cfs (12.02 ft).

* Discharge measurement made on this day.

† Change in contents, equivalent in cubic feet per second, in Philpott Reservoir; furnished by Corps of Engineers.

755. Dan River at Paces, Va.

Location.--Lat 36°38'32", long 79°05'23", on right bank 12 ft downstream from highway bridge, 0.5 mile southeast of Paces, Halifax County, 0.5 mile upstream from Big Toby Creek, 2.7 miles upstream from Birch Creek, and at mile 36.0.

Drainage area.--2,550 sq mi, approximately.

Records available.--November 1950 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 317.37 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--7 years (1951-58), 2,479 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 25,300 cfs Apr. 30; maximum gage height, 22.24 ft Apr. 30; minimum discharge, 725 cfs Sept. 16, 30; minimum gage height, 2.94 ft Sept. 30; minimum daily discharge, 775 cfs Sept. 16, 30.
1950-58: Maximum discharge, 34,000 cfs Oct. 17, 1954 (gage height, 25.40 ft); minimum, 193 cfs Sept. 4, 1956 (gage height, 1.71 ft); minimum daily, 244 cfs Sept. 4, 1956.
Flood of Aug. 16, 1940, reached a stage of 32.3 ft, from levels to floodmark.

Remarks.--Records good. Diurnal fluctuation caused by cotton mills at Danville. Flow regulated since August 1950 by Philpott Reservoir on Smith River (usable capacity, 145,200 acre-ft). Records of suspended sediment loads for the water year 1958 are given in WSP 1571.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 2-19; rate of change in stage used as a factor for most days above 5,000 cfs)

3.0	750	17.0	14,300
5.0	1,790	22.0	24,500
12.0	7,400		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,480	1,670	4,760	3,000	3,640	8,650	15,600	12,800	2,680	1,450	1,350	1,200
2	4,200	1,910	3,560	2,920	5,000	5,000	9,540	6,290	2,250	1,730	1,350	1,100
3	3,400	1,790	3,240	2,760	4,520	3,720	5,880	7,620	4,120	1,670	1,500	1,350
4	2,680	1,500	3,720	2,530	3,560	3,160	4,680	5,960	3,320	1,670	2,090	1,250
5	2,320	1,450	3,960	2,320	3,560	3,480	4,280	4,600	2,600	1,610	2,530	1,250
6	2,110	1,550	3,560	1,670	3,400	3,320	7,430	7,220	2,460	1,670	1,790	1,250
7	1,350	1,500	3,240	1,790	3,720	3,160	15,400	16,500	2,600	1,350	1,450	1,220
8	1,350	1,500	5,670	2,320	4,680	3,080	11,100	15,000	3,240	1,300	1,350	975
9	*1,790	2,040	15,300	2,180	4,040	3,000	*5,400	9,270	1,910	1,500	1,400	900
10	1,730	2,760	10,100	1,970	2,840	2,390	4,840	6,120	2,040	1,610	1,500	1,120
11	1,730	1,790	5,560	1,970	2,530	2,460	8,280	5,400	2,600	1,730	1,200	1,080
12	1,670	1,500	4,520	2,110	*2,760	2,680	9,100	4,680	2,460	1,670	1,100	1,100
13	1,610	1,610	3,800	1,730	2,680	2,680	5,560	4,440	2,600	1,850	2,180	1,080
14	1,150	1,610	3,400	5,990	2,600	3,000	4,200	3,800	2,840	1,910	3,160	1,050
15	1,100	1,730	3,240	8,170	2,460	3,160	3,400	*3,640	2,320	1,790	3,240	900
16	1,300	1,790	2,600	6,470	2,460	3,000	4,120	3,640	1,910	1,670	2,460	775
17	1,300	1,910	2,390	4,360	2,110	2,250	4,360	3,640	2,110	1,610	2,680	1,100
18	1,400	2,600	3,080	3,720	1,850	2,250	3,960	4,360	2,180	1,790	3,240	1,080
19	5,090	*10,800	*2,840	3,160	1,790	2,920	3,720	6,470	*2,040	2,920	1,790	1,080
20	3,320	19,300	2,840	2,320	2,110	*3,640	3,240	3,720	2,110	2,760	*1,670	1,150
21	1,910	22,900	3,160	2,320	2,390	3,240	2,760	3,640	2,180	1,850	1,400	1,120
22	1,450	7,770	3,240	3,800	2,460	2,920	2,760	3,320	2,530	1,550	1,400	1,150
23	1,910	6,260	2,390	*4,360	3,080	2,680	5,970	2,920	2,320	*1,730	1,350	1,350
24	1,910	12,000	2,180	3,880	2,840	2,180	9,580	3,000	2,110	1,610	1,500	*1,350
25	2,110	12,400	2,040	11,500	2,760	2,920	5,800	3,640	2,250	1,500	1,550	1,200
26	2,390	19,100	2,760	14,800	3,480	6,470	5,160	3,080	2,040	1,670	5,320	1,120
27	2,180	21,900	4,440	8,480	12,300	6,040	4,120	3,080	1,970	1,450	3,640	1,150
28	1,670	8,590	4,760	4,760	15,000	5,000	7,210	3,160	2,110	1,670	2,250	1,120
29	1,610	6,560	3,720	4,200	-	4,440	19,800	3,480	2,040	1,400	2,040	900
30	1,670	5,720	2,920	3,880	---------	4,040	24,400	3,400	1,500	1,450	1,850	775
31	1,670	---------	2,390	3,480	---------	6,300	---------	2,920	---------	1,350	1,670	---------
Total	66,560	185,510	125,380	128,920	106,620	113,230	221,650	170,810	71,440	52,490	63,000	33,245
Mean	2,147	6,184	4,045	4,159	3,808	3,653	7,388	5,510	2,381	1,693	2,032	1,108
(†)	-101	+98	-65	-2	+77	+40	-52	-5	+13	-11	-61	-96
Adjusted for change in contents in Philpott Reservoir												
Mean	2,046	6,282	3,980	4,157	3,885	3,693	7,336	5,505	2,394	1,682	1,971	1,012
Cfsm	0.802	2.46	1.56	1.63	1.52	1.45	2.88	2.16	0.939	0.660	0.773	0.397
In.	0.92	2.74	1.80	1.88	1.58	1.67	3.21	2.49	1.05	0.76	0.89	0.44

	Observed			Adjusted		
Calendar year 1957:	Max 23,800	Min 400	Mean 3,111	Mean 3,204	Cfsm 1.26	In. 17.03
Water year 1957-58:	Max 24,400	Min 775	Mean 3,668	Mean 3,653	Cfsm 1.43	In. 19.43

Peak discharge (base, 22,000 cfs).--Nov. 21 (2 p.m.) 23,800 cfs (21.66 ft at 2 p.m.); Nov. 27 (9 a.m.) 23,500 cfs (21.45 ft at 12 m.); Apr. 30 (1 to 2 p.m.) 25,300 cfs (22.24 ft 4 to 5 p.m.).

* Discharge measurement made on this day.

† Change in contents, equivalent in cubic feet per second, in Philpott Reservoir; furnished by Corps of Engineers.

770. Banister River at Halifax, Va.

Location.--Lat 36°46'35", long 78°54'58", on left bank 10 ft downstream from bridge on U. S. Highway 360, 1,700 ft downstream from Terrible Creek, 1 mile northeast of Halifax, Halifax County, and 10 miles upstream from mouth.

Drainage area.--552 sq mi.

Records available.--September 1904 to December 1905, October 1928 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 318.54 ft above mean sea level (levels by Corps of Engineers). Sept. 28, 1904, to Dec. 31, 1905, chain gage at site 400 ft upstream at different datum. Dec. 9, 1928, to Sept. 20, 1950, water-stage recorder at site 400 ft upstream at present datum.

Average discharge.--31 years (1904-5, 1928-58), 523 cfs.

Extremes.--Maximum discharge during year, 7,330 cfs May 7; maximum gage height, 19.42 ft May 7; minimum daily discharge, 28 cfs Oct. 30, 31.
1904-5, 1928-58: Maximum discharge, 50,000 cfs Sept. 20, 1944 (gage height, 40.8 ft, from floodmarks), from rating curve extended above 11,000 cfs on basis of slope-area measurement of peak flow and velocity-area study; minimum, 6 cfs on many days in August and September 1932; minimum daily, 6 cfs Aug. 30, 1932.

Remarks.--Records good except those below 75 cfs, which are fair. Low and medium flow regulated by powerplant half a mile above station.

Revisions (water years).--WSP 892: 1929-30, 1932-35. WSP 972: 1938(M), 1940. WSP 1112: 1943(M).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Rate of change in stage used as a factor for most days above 1,100 cfs)

-0.3	28	2.0	262
0.0	43	4.0	660
.1	48	9.0	2,100
.3	59	16.0	5,000
.5	73	20.0	7,500
1.0	120		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	634	150	952	422	632	2,220	3,880	1,070	298	136	230	198
2	398	160	904	429	1,230	1,070	2,080	965	402	267	102	195
3	360	198	538	342	1,100	884	1,050	1,730	427	283	284	187
4	220	242	773	332	880	780	904	1,310	350	177	245	188
5	316	252	810	187	652	577	880	1,050	410	246	220	186
6	226	198	568	332	573	600	1,750	2,450	279	240	244	164
7	230	259	312	390	654	520	3,100	6,830	329	239	98	161
8	242	253	1,070	342	1,020	542	1,740	4,930	277	245	226	194
9	*212	566	2,980	295	928	537	928	2,220	534	408	201	106
10	214	610	2,040	330	796	738	*928	1,120	528	250	138	207
11	218	134	1,070	336	396	578	1,980	952	814	198	224	102
12	234	234	880	312	566	516	1,740	899	358	229	194	182
13	181	222	605	308	*508	542	1,000	768	480	406	619	118
14	184	317	451	1,610	454	706	880	712	330	260	266	175
15	162	311	471	3,480	486	880	880	*568	544	231	316	168
16	196	457	494	1,640	270	678	581	592	690	156	217	118
17	224	635	468	928	440	516	694	531	530	274	244	175
18	266	1,050	488	858	374	535	580	534	354	238	270	134
19	338	*3,350	304	472	511	632	482	605	*323	224	253	157
20	264	4,000	*570	440	414	*880	555	610	372	186	*134	143
21	213	3,140	484	598	624	686	508	651	384	266	194	365
22	198	1,260	434	928	466	650	550	523	370	240	184	144
23	259	1,000	460	*1,120	654	472	1,100	416	240	261	158	220
24	259	1,890	336	928	880	520	1,050	482	36	218	176	156
25	222	2,140	358	2,690	880	638	880	391	244	215	611	*184
26	268	4,420	564	3,730	986	1,100	590	482	402	282	1,240	151
27	230	2,770	952	2,050	3,800	1,470	520	463	490	247	936	408
28	269	1,220	880	1,000	4,370	1,900	1,180	487	364	222	440	35
29	42	1,120	647	864	-	1,100	3,890	887	236	196	194	54
30	28	1,100	482	704	-------	952	2,570	400	464	198	266	201
31	28	-------	429	618	-------	2,040	-------	432	-------	183	226	-------
Total	7,335	33,658	22,774	29,015	25,544	26,459	39,450	36,060	11,859	7,421	9,350	5,176
Mean	237	1,122	735	936	912	854	1,315	1,163	395	239	302	173
Cfsm	0.429	2.03	1.33	1.70	1.65	1.55	2.38	2.11	0.716	0.433	0.547	0.313
In.	0.49	2.26	1.53	1.96	1.72	1.79	2.66	2.43	0.80	0.50	0.63	0.35

Calendar year 1957: Max 4,910 Min 18 Mean 553 Cfsm 1.00 In. 13.60
Water year 1957-58: Max 6,830 Min 28 Mean 696 Cfsm 1.26 In. 17.12

Peak discharge (base, 5,000 cfs).--Feb. 27 (12 p.m.) 5,300 cfs (16.23 ft at 4 a.m. Feb. 28); May 7 (10 a.m.) 7,330 cfs (19.42 ft at 5 to 6 p.m.).

* Discharge measurement made on this day.

775. Hyco River near Denniston, Va.

Location.--Lat 36°35'16", long 78°53'56", on left bank 10 ft upstream from bridge on U. S. Highway 501, 0.8 mile upstream from Mayo Creek, 2 miles east of Denniston, Halifax County, and 8 miles south of South Boston.

Drainage area.--289 sq mi.

Records available.--October 1928 to September 1934, October 1950 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 315.24 ft above mean sea level. July 10, 1929, to Mar. 14, 1934, chain gage at same site and datum.

Average discharge.--14 years, 248 cfs.

Extremes.--Maximum gage height during year, 17.20 ft Nov. 27 (discharge not determined); minimum discharge, 8.0 cfs Sept. 30 (gage height, 4.38 ft).
1928-34, 1950-58: Maximum gage height, 21.88 ft Oct. 3, 1929, from graph based on gage readings (discharge not determined); minimum discharge, 0.004 cfs Sept. 14, 1932 (gage height, 3.58 ft), result of discharge measurement.
Floods in August 1928 and September 1945 reached stages of 26.4 and 25.6 ft, respectively, from levels to floodmarks.

Remarks.--Records good below 1,000 cfs and poor above. Some regulation at low flow by mill above station.

Revisions (water years).--WSP 1383: Drainage area, 1930. WSP 1503: 1930(M).

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	680	55	483	152	262	2,300	990	2,300	109	50	282	28
2	590	103	364	146	424	1,260	780	1,770	105	40	189	24
3	398	111	262	121	398	455	455	1,580	113	38	100	22
4	196	89	466	101	285	365	372	1,270	95	34	380	20
5	130	75	644	98	229	290	358	566	83	30	232	18
6	101	65	449	110	229	252	732	1,090	77	27	92	17
7	85	59	292	125	462	230	1,130	2,500	149	36	59	16
8	76	59	666	122	990	208	1,050	2,720	91	53	47	14
9	*64	87	1,430	109	775	192	*485	2,500	74	49	40	13
10	60	94	1,520	102	398	275	504	1,090	88	46	34	12
11	55	84	1,270	111	292	252	1,850	440	73	44	29	12
12	52	67	483	109	242	200	2,060	350	68	38	29	11
13	49	62	285	101	*216	185	2,060	365	58	97	140	10
14	46	62	236	1,580	184	275	768	410	52	166	470	10
15	45	90	216	2,720	174	268	410	*252	47	176	206	10
16	44	102	196	3,800	160	208	395	192	45	75	94	9.7
17	44	114	179	2,460	160	180	410	170	44	71	77	10
18	49	152	157	608	160	170	328	450	41	204	59	11
19	56	*339	*146	322	160	335	275	910	*37	76	48	10
20	52	699	152	248	160	690	238	425	38	58	*36	9.1
21	44	466	242	236	157	500	208	230	35	208	32	10
22	40	222	248	390	210	332	208	175	94	135	29	17
23	40	770	179	*432	322	260	440	145	230	71	27	15
24	44	1,250	152	338	347	215	395	130	105	*52	26	17
25	64	1,630	140	1,740	270	395	268	150	70	522	42	*14
26	70	3,440	233	2,060	*432	910	215	260	63	109	120	12
27	68	3,680	466	2,220	*1,740	910	180	485	155	49	94	11
28	59	3,080	308	1,030	*2,060	636	600	208	200	119	57	10
29	53	1,060	229	381	-	440	1,270	260	88	142	44	9.4
30	51	500	190	292	--------	372	*2,540	238	60	53	37	8.2
31	50	--------	162	255	--------	654	--------	135	--------	38	32	--------
Total	3,455	18,666	12,445	22,619	11,898	14,214	21,974	23,766	2,587	2,906	3,183	410.4
Mean	111	622	401	730	425	459	732	767	86.2	93.7	103	13.7
Cfsm	0.384	2.15	1.39	2.53	1.47	1.59	2.53	2.65	0.298	0.324	0.356	0.047
In.	0.44	2.40	1.60	2.92	1.53	1.83	2.82	3.06	0.33	0.37	0.41	0.05

Calendar year 1957: Max 5,880 Min 1.5 Mean 329 Cfsm 1.14 In. 15.44
Water year 1957-58: Max 3,800 Min 8.2 Mean 378 Cfsm 1.31 In. 17.76

Peak discharge (base, 2,500 cfs).--Nov. 27 (8 to 9 p.m.) discharge unknown (17.20 ft); Jan. 16 (1 to 3 p.m.) discharge unknown (17.18 ft); Mar. 1 (5 to 7 a.m.) discharge unknown (15.92 ft); Apr. 30 (6 to 7 p.m.) discharge unknown (16.46 ft); May 7 (5 to 7 p.m.) discharge unknown (16.25 ft).

* Discharge measurement made on this day.

795. Roanoke River at Buggs Island, Va.

Location.--Lat 36°36'06", long 78°17'56", on left bank 1,200 ft downstream from John H. Kerr Dam, 2.4 miles upstream from Allens Creek, 5.3 miles upstream from bridge on U. S. Highway 1, 6.7 miles southeast of Boydton, Mecklenburg County, and at mile 178.4.

Drainage area.--7,780 sq mi, approximately.

Records available.--November 1921 to August 1923 (gage heights only), April 1947 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 196.72 ft above mean sea level (Corps of Engineers bench mark). November 1921 to August 1923 at site 0.3 mile upstream at different datum. April 1947 to Sept. 30, 1952, at site 2,800 ft downstream at different datum.

Average discharge.--11 years, 7,727 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 40,400 cfs Dec. 13, Apr. 15, May 6 (gage height, 10.36 ft); minimum, 157 cfs Sept. 20 (gage height, 1.59 ft); minimum daily, 180 cfs Sept 21.

1947-58: Maximum discharge, 76,000 cfs Dec. 7, 1948 (gage height, 14.97 ft); minimum, 99 cfs July 3, Oct. 24, 1953 (gage height, 1.53 ft); minimum daily, 140 cfs Oct. 7, 1956.

Flood in August 1940 reached a stage of 33.9 ft, from levels by Corps of Engineers.

Remarks.--Records good except those for periods of no gage-height record, which are fair, and those below 1,000 cfs, which are poor. Flow regulated since August 1950 by Philpott Reservoir on Smith River (usable capacity, 145,200 acre-ft) and by John H. Kerr Reservoir (usable capacity, 2,324,300 acre-ft).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.6	160	3.5	2,870
1.8	250	4.0	4,350
2.0	385	5.0	8,250
2.5	970	7.0	18,400
3.0	1,820	9.0	30,000

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15,900	7,250	a21,000	10,100	3,550	5,400	19,800	23,400	4,630	13,600	7,420	1,830
2	15,100	868	a23,000	13,000	880	12,900	19,700	23,800	11,200	14,000	240	5,830
3	13,600	261	a17,000	10,700	18,300	23,500	19,200	18,500	9,060	13,600	210	7,710
4	14,800	7,340	a18,000	3,310	15,300	22,300	19,900	16,900	11,800	745	3,540	9,240
5	1,580	6,950	a15,000	432	17,500	20,000	15,400	20,100	10,200	3,100	4,930	9,400
6	205	6,520	a16,000	4,180	13,900	15,800	13,300	21,300	11,900	397	5,760	2,040
7	4,490	8,660	a3,000	4,360	14,800	15,900	21,700	9,100	5,940	6,360	5,240	192
8	4,360	8,890	a500	5,920	2,100	794	15,700	18,000	3,480	6,040	8,320	6,600
9	4,360	2,020	a17,000	6,060	1,340	422	17,700	26,000	9,880	3,820	200	3,840
10	4,120	816	a21,600	4,620	19,800	14,400	19,100	23,500	7,820	4,760	200	7,860
11	4,480	7,800	22,500	1,160	18,000	15,400	23,600	23,600	8,040	4,350	7,890	2,380
12	775	7,090	23,100	1,000	19,200	9,930	22,600	23,800	6,920	240	6,940	10,300
13	196	6,230	23,200	7,840	16,600	14,800	20,700	23,900	9,440	245	6,820	2,200
14	6,580	8,140	8,620	5,650	14,300	8,820	24,200	23,700	4,460	a3,500	7,420	503
15	5,610	5,780	3,180	19,000	1,240	268	23,100	24,300	1,220	a5,000	11,700	13,100
16	7,370	1,020	19,100	17,700	348	330	23,700	24,700	4,420	a12,000	210	11,000
17	7,700	210	16,800	12,400	15,600	6,570	23,300	22,200	8,180	a7,200	210	9,300
18	6,580	7,400	19,900	1,770	13,600	6,760	17,600	24,400	10,400	a8,000	7,880	6,380
19	531	7,430	14,400	609	13,500	5,900	8,080	24,700	8,650	2,920	6,260	3,530
20	200	8,390	15,300	17,800	10,900	1,860	1,500	25,100	6,940	220	8,680	314
21	6,980	6,940	4,040	18,000	7,630	3,130	18,000	22,500	240	8,460	9,610	180
22	6,230	7,000	1,320	18,500	680	1,920	18,600	19,600	245	10,400	8,830	5,890
23	8,450	3,040	20,400	17,100	340	331	16,700	18,100	7,220	8,620	200	5,660
24	8,000	366	19,400	15,300	5,210	9,660	20,100	13,900	8,300	6,740	200	4,640
25	6,840	18,500	2,740	11,800	2,830	11,900	19,600	5,620	11,800	4,870	6,440	5,320
26	1,140	19,800	20,400	14,200	7,340	14,600	17,300	16,800	11,700	210	6,590	9,160
27	205	a19,000	18,300	22,700	13,100	17,500	9,280	16,700	6,970	210	11,500	436
28	8,320	a10,000	690	19,600	18,900	20,300	14,900	18,600	3,220	8,120	14,700	184
29	7,140	a23,000	274	20,400	-	10,200	17,300	19,400	335	6,270	12,700	7,100
30	8,860	a18,000	17,100	16,800	--------	9,340	15,800	5,180	11,500	6,440	2,140	3,610
31	8,060	--------	15,400	17,100	--------	20,700	--------	7,580	--------	6,730	188	--------
Total	188,762	234,711	438,264	339,111	286,788	321,635	537,460	604,980	216,110	177,167	173,168	155,729
Mean	6,089	7,824	14,140	10,940	10,240	10,380	17,920	19,520	7,204	5,715	5,586	5,191
(†)	-2,020	+5,646	-3,566	+1,779	+1,174	+2,205	+1,012	-2,113	-1,259	-1,227	-733	-3,402

Adjusted for change in contents in Philpott and John H. Kerr Reservoirs

Mean	4,069	13,470	10,570	12,720	11,410	12,580	18,930	17,410	5,945	4,488	4,853	1,789
Cfsm	0.523	1.73	1.36	1.63	1.47	1.62	2.43	2.24	0.764	0.577	0.624	0.230
In.	0.60	1.93	1.57	1.88	1.53	1.87	2.71	2.58	0.85	0.67	0.72	0.26

	Observed			Adjusted		
Calendar year 1957:	Max 30,000	Min 144	Mean 7,552	Mean 7,940	Cfsm 1.02	In. 13.85
Water year 1957-58:	Max 26,000	Min 180	Mean 10,070	Mean 9,842	Cfsm 1.27	In. 17.17

† Change in contents, equivalent in cubic feet per second, in Philpott and John H. Kerr Reservoirs, furnished by Corps of Engineers.

a No gage-height record; discharge estimated on basis of powerhouse records.

805. Roanoke River at Roanoke Rapids, N. C.

Location.--Lat 36°28', long 77°38', on right bank 1¼ miles downstream from bridge on State Highway 48 at Roanoke Rapids, Halifax County, 2½ miles upstream from Chocyott Creek, and at mile 133.6.

Drainage area.--8,410 sq mi, approximately.

Records available.--December 1911 to September 1958. Prior to January 1933, published as "at Old Gaston." Records published for both sites February 1930 to December 1932. Gage-height records collected at site of auxiliary gage since November 1890 are contained in reports of U. S. Weather Bureau.

Gage.--Water-stage recorder at present site and datum since February 1930. Datum of gage is 43.84 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Dec. 7, 1911, to Nov. 21, 1921, and Apr. 7 to Dec. 31, 1932, chain gage and Nov. 21, 1921, to Apr. 7, 1932, water-stage recorder, both at site 9 miles upstream at different datum. Since Aug. 6, 1941, auxiliary water-stage recorder 3.6 miles downstream from base gage.

Average discharge.--46 years (1912-58), 8,264 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 60,700 cfs May 7 (gage height, 16.52 ft); minimum, 414 cfs Nov. 29 (gage height, 1.19 ft); minimum daily, 649 cfs Nov. 17.
1911-58: Maximum discharge, 261,000 cfs Aug. 18, 1940 (gage height, 39.0 ft, from floodmarks); minimum, about 250 cfs Dec. 16, 1955; minimum daily, 472 cfs Sept. 21, 1932.
Flood in November 1877 at Old Gaston reached a stage about 2 ft lower than flood in August 1940, which was 21.5 ft.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Flow regulated since August 1950 by Philpott Reservoir on Smith River (usable capacity, 145,200 acre-ft) and by John H. Kerr Reservoir (usable capacity, 2,324,300 acre-ft) and since June 1955 by Roanoke Rapids Reservoir (usable capacity, 79,600 acre-ft).

Revisions (water years).--WSP 712: 1930. WSP 822: 1936. WSP 1032: 1912, 1928(M), 1930(M), 1932-33(M). WSP 1433: 1912-23, 1925-28, 1930, 1932-33, 1935, 1937-39.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Fall between gages used as a factor May 6-8)

1.4	550	6.0	9,500
2.0	1,050	8.0	17,000
3.0	2,320	12.0	39,000
4.0	4,100		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11,500	8,360	19,500	15,000	11,700	19,500	19,000	19,400	5,580	10,300	8,190	1,900
2	12,900	2,340	19,500	14,900	2,940	15,100	19,000	19,000	12,100	12,400	2,250	5,960
3	17,400	1,670	20,800	15,100	12,500	16,300	19,000	24,400	11,700	15,000	2,180	8,870
4	15,200	7,570	19,500	4,420	19,500	19,500	19,000	21,000	12,400	5,100	3,530	8,590
5	4,800	7,140	19,500	1,620	16,400	19,500	19,000	21,000	11,200	4,400	7,640	8,690
6	1,630	6,830	19,500	3,880	19,500	19,500	19,000	32,600	11,300	2,040	3,860	2,550
7	4,140	8,180	10,000	4,660	15,400	19,100	19,000	33,900	6,840	6,320	5,960	1,480
8	4,800	8,900	834	6,190	5,150	5,260	19,500	21,800	5,620	6,320	5,930	6,070
9	3,470	5,880	12,400	4,520	2,130	2,050	19,500	23,000	8,560	3,610	2,040	3,960
10	4,170	815	19,500	6,270	14,200	13,200	19,500	22,500	7,600	4,730	1,970	7,710
11	5,180	6,150	19,500	2,010	19,500	13,800	19,500	23,500	10,000	4,580	7,300	4,180
12	1,630	7,040	20,500	1,330	*19,000	17,400	21,400	25,000	8,450	2,040	7,950	9,070
13	1,630	6,340	20,900	7,220	19,000	13,700	21,900	*26,300	9,980	2,110	6,710	2,940
14	5,040	8,770	20,800	11,200	15,000	13,000	21,900	24,000	5,750	3,660	8,690	1,850
15	5,120	8,140	17,800	17,500	4,810	1,470	22,300	24,500	5,620	6,520	8,070	9,410
16	7,730	1,550	17,800	19,000	1,720	713	22,300	24,000	4,090	9,890	8,470	9,940
17	7,740	649	18,700	19,000	12,400	5,550	22,300	24,500	8,260	9,290	2,110	10,100
18	8,210	6,940	18,800	3,760	15,700	5,800	22,200	26,000	10,100	7,420	8,120	8,070
19	1,740	7,210	18,400	880	14,400	10,600	21,400	24,500	8,760	3,930	6,750	4,720
20	1,630	9,100	18,000	12,900	11,800	4,940	18,300	23,500	7,600	2,040	8,770	2,160
21	4,840	7,600	11,000	19,000	8,340	5,000	18,100	25,500	2,110	9,670	9,090	1,500
22	6,560	8,600	13,500	19,000	2,220	1,140	18,700	22,500	1,970	11,500	7,690	6,150
23	8,630	4,790	16,500	19,000	705	753	18,700	19,500	6,030	7,970	2,040	6,200
24	9,890	2,640	17,000	15,100	3,820	7,770	19,000	19,500	7,060	7,320	6,340	5,000
25	8,440	13,900	17,200	15,600	3,890	11,600	19,200	9,760	11,900	6,410	9,290	5,770
26	1,620	19,000	16,800	18,400	9,920	18,700	19,200	15,200	12,400	2,040	9,510	8,470
27	1,630	19,300	18,000	19,000	11,800	19,500	18,400	19,000	10,900	2,040	14,200	7,180
28	7,630	19,500	7,700	19,000	19,500	19,500	18,000	17,600	3,710	7,910	14,600	1,600
29	6,920	14,100	10,000	19,500	-	19,000	18,900	18,000	4,140	6,320	14,600	3,750
30	8,580	19,500	12,500	19,000	-------	11,500	19,200	14,700	9,970	6,810	9,640	3,670
31	7,770	-------	16,700	19,500	-------	19,000	-------	7,420	-------	6,790	1,900	-------
Total	198,170	248,504	508,934	373,460	312,945	369,446	592,400	673,080	241,700	196,480	215,390	167,510
Mean	6,393	8,283	16,420	12,050	11,180	11,920	19,750	21,710	8,057	6,338	6,948	5,584
(†)	-1,182	+5,584	-3,703	+1,963	+1,335	+1,335	+1,086	-2,032	-1,330	-1,159	-689	-3,525

	Observed			Adjusted		
Calendar year 1957:	Max 31,600	Min 620	Mean 8,446	Mean 8,942 Cfsm 1.06 In. 14.39		
Water year 1957-58:	Max 33,900	Min 649	Mean 11,230	Mean 11,070 Cfsm 1.32 In. 17.92		

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Philpott and John H. Kerr Reservoirs (furnished by Corps of Engineers) and Roanoke Rapids Reservoir (furnished by Virginia Electric and Power Co.).
Note.--No gage-height record Dec. 12 to Jan. 3, Apr. 12 to May 1; discharge estimated on basis of unpublished records for Roanoke River near Scotland Neck.

815. Tar River near Tar River, N. C.

Location.--Lat 36°11'40", long 78°35'00" (revised), on right bank 90 ft upstream from bridge on State Highway 96, 1¼ miles upstream from Fishing Creek, 2½ miles east of town of Tar River, Granville County, and 8 miles south of Oxford.

Drainage area.--161 sq mi.

Records available.--October 1939 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder and concrete control with a sharp-crested weir notch. Datum of gage is 287.04 ft above mean sea level, datum of 1929.

Average discharge.--19 years, 154 cfs.

Extremes.--Maximum discharge during year, 4,790 cfs Apr. 6 (gage height, 11.29 ft); minimum, 2.6 cfs Oct. 24, 25.
1939-58: Maximum discharge, 13,100 cfs Aug. 18, 1955 (gage height, 18.07 ft); minimum, 0.07 cfs Oct. 14, 1954.

Remarks.--Records excellent except those for period of no gage-height record, which are fair. Town of Oxford diverts above 1.1 cfs for municipal water supply.

Revisions (water years). WSP 972: 1940-41. WSP 1112: 1941 (calendar year figures). WSP 1273: 1941(M).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.2	1.0	2.7	100
1.3	3.1	3.0	190
1.5	9.2	4.0	490
1.7	16	5.0	825
2.0	29	7.0	1,750
2.3	47	11.0	4,520
2.5	66		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	74	5.7	484	116	164	492	420	366	36	18	14	22
2	114	8.2	164	116	400	275	228	393	34	15	23	18
3	56	26	111	94	239	208	173	1,450	32	14	458	16
4	28	24	268	79	a180	168	155	410	29	13	1,410	14
5	18	18	416	63	a120	*136	194	308	26	12	127	13
6	13	14	161	56	a165	122	1,940	*3,760	26	22	59	12
7	11	12	108	74	a470	114	2,380	3,810	24	24	35	11
8	9.2	10	294	130	a980	105	368	1,170	24	18	26	9.9
9	7.3	23	1,400	92	314	111	236	384	23	23	22	9.2
10	6.3	18	782	72	190	275	278	253	744	25	18	7.9
11	5.7	12	275	74	152	197	2,620	344	108	*18	15	7
12	4.8	9.5	168	70	136	136	818	208	49	15	14	6.6
13	4.6	9.5	114	65	122	124	329	149	33	153	13	6.3
14	4.0	9.9	94	1,600	105	218	*232	114	27	523	45	6.0
15	3.7	9.9	86	*1,360	108	177	187	94	22	76	33	6.0
16	3.1	9.9	80	*362	164	127	236	84	22	36	1,050	*5.7
17	3.1	10	76	*242	98	105	218	77	20	31	197	5.4
18	3.1	12	67	164	96	98	155	72	18	31	72	5.1
19	3.4	16	63	122	82	365	130	65	16	25	39	4.8
20	3.1	43	106	*103	86	749	114	62	14	21	26	4.6
21	2.8	*61	763	105	96	296	100	60	16	36	*20	5.9
22	2.8	32	262	*515	152	190	103	53	105	40	18	7.3
23	2.8	204	146	269	239	142	290	*46	95	23	61	6.6
24	2.6	455	111	237	177	116	180	47	36	51	316	7.3
25	2.6	776	94	*2,450	136	514	116	46	25	205	184	7.6
26	4.0	1,860	551	979	345	1,350	94	49	23	56	478	7.0
27	4.3	327	524	316	2,450	555	82	51	183	31	207	6.0
28	4.6	164	214	211	1,610	337	344	88	71	187	80	4.6
29	*4.3	214	263	161	-	236	621	262	32	52	53	4.3
30	4.8	529	197	130	-------	184	1,060	66	22	24	35	4.3
31	5.1	---	133	119	-------	327	-------	45	-------	17	26	-------
Total	416.1	4,922.6	8,575	10,546	9,576	8,549	14,401	14,386	1,935	1,835	5,174	251.4
Mean	13.4	164	277	340	342	276	480	464	64.5	59.2	167	8.38
Cfsm	0.083	1.02	1.72	2.11	2.12	1.71	2.98	2.88	0.401	0.368	1.04	0.052
In.	0.10	1.14	1.98	2.44	2.21	1.97	3.33	3.32	0.45	0.42	1.20	0.06

Calendar year 1957: Max 5,240 Min 1.3 Mean 145 Cfsm 0.901 In. 12.20
Water year 1957-58: Max 3,810 Min 2.6 Mean 221 Cfsm 1.37 In. 18.62

Peak discharge (base, 2,000 cfs).--Nov. 26 (9 a.m.) 2,380 cfs (8.13 ft); Jan. 14 (10:30 p.m.) 2,720 cfs (8.62 ft); Jan. 25 (5:30 p.m.) 3,280 cfs (9.40 ft); Feb. 27 (1:30 p.m.) 3,070 cfs (9.12 ft); Apr. 6 (12 p.m.) 4,790 cfs (11.29 ft); Apr. 11 (3 p.m.) 3,560 cfs (9.85 ft); May 7 (1 a.m.) 4,610 cfs (11.07 ft); Aug. 4 (5 a.m.) 2,320 cfs (8.05 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for nearby stations.

818. Cedar Creek near Louisburg, N. C.

Location.--Lat 36°03'15", long 78°20'25", on downstream end of center pier of bridge on U. S. Highway 401, three-quarters of a mile downstream from Camping Creek, 3.7 miles southwest of Louisburg, Franklin County, and 5.5 miles upstream from mouth.

Drainage area.--47.8 sq mi.

Records available.--September 1956 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 205 ft (by barometer).

Extremes.--Maximum discharge during year, 2,240 cfs May 6 (gage height, 6.96 ft); minimum, 12 cfs Oct. 11-17, 20-23 (gage height, 1.70 ft).

1956-58: Maximum discharge, that of May 6, 1958; minimum, 4.2 cfs Aug. 13, 17, 18, 1957 (gage height, 1.45 ft).

Flood of Aug. 18, 1955, reached a stage of 6.78 ft (discharge, 2,100 cfs). Flood in 1935 reached a stage of about 14 ft, from information by North Carolina State Highway Commission.

Remarks.--Records good except those for period of no gage-height record, which are fair.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.7	12	3.0	207
1.8	18	4.0	580
2.0	38	5.0	1,050
2.5	100	7.0	2,240

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	17	129	57	69	128	83	86	37	24	25	41
2	48	25	63	55	110	83	68	81	37	21	23	35
3	*28	17	48	47	76	73	63	87	49	21	127	33
4	20	15	57	44	61	66	62	67	39	21	580	32
5	17	14	50	42	56	59	65	62	35	22	123	31
6	16	13	40	44	56	57	122	*906	38	26	55	29
7	15	13	36	51	78	55	250	1,600	38	24	41	28
8	14	15	47	63	153	53	99	502	36	27	34	27
9	13	29	186	47	97	59	76	158	32	224	31	25
10	13	17	290	45	71	69	76	103	33	182	28	26
11	12	14	128	45	63	56	153	86	30	47	25	25
12	12	13	81	42	59	53	99	83	33	45	24	25
13	12	14	60	40	55	56	77	71	31	113	28	27
14	12	14	54	*188	49	74	68	61	26	456	34	25
15	12	15	49	244	57	60	66	55	26	126	31	25
16	12	15	44	*97	81	54	80	53	29	66	47	24
17	12	16	41	73	a60	51	68	50	23	49	34	24
18	14	15	38	61	a54	53	61	47	22	42	28	23
19	13	26	38	53	a50	82	57	44	20	37	24	22
20	12	34	64	48	50	132	55	46	22	36	23	21
21	12	20	230	54	50	81	54	47	27	54	22	38
22	12	18	118	73	51	67	68	41	31	39	22	32
23	12	81	68	*55	50	57	96	38	28	32	30	25
24	14	*125	57	67	47	54	66	40	26	38	204	23
25	17	116	53	406	46	135	57	45	23	183	188	22
26	14	344	99	312	82	*540	50	61	33	73	390	21
27	13	124	121	102	296	*250	48	51	136	41	604	21
28	13	65	74	76	250	114	129	54	56	36	128	20
29	*13	56	81	63	-	86	*363	69	34	31	74	18
30	13	82	66	59	-------	73	*142	45	27	27	54	20
31	15	-------	56	54	-------	83	-------	40	-------	26	46	-------
Total	505	1,382	2,566	2,707	2,277	2,913	2,821	4,779	1,057	2,189	3,127	788
Mean	16.3	46.1	82.8	87.3	81.3	94.0	94.0	154	35.2	70.6	101	26.3
Cfsm	0.341	0.964	1.73	1.83	1.70	1.97	1.97	3.22	0.736	1.48	2.11	0.550
In.	0.39	1.08	2.00	2.11	1.77	2.27	2.19	3.72	0.82	1.70	2.43	0.61

Calendar year 1957: Max 602 Min 4.3 Mean 40.8 Cfsm 0.854 In. 11.59
Water year 1957-58: Max 1,600 Min 12 Mean 74.3 Cfsm 1.55 In. 21.09

Peak discharge (base, 450 cfs).--Jan. 25 (11:30 p.m.) 560 cfs (3.95 ft); Mar 26 (2 p.m.) 625 cfs (4.11 ft); May 6 (11 p.m.) 2,240 cfs (6.96 ft); July 9 (11:30 p.m.) 481 cfs (3.75 ft); July 14 (8 a.m.) 580 cfs (4.00 ft); Aug. 4 (2 a.m.) 715 cfs (4.29 ft); Aug. 27 (8:30 a.m.) 810 cfs (4.48 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for nearby stations.

820. Tar River near Nashville, N. C.

Location.--Lat 35°51'00", long 77°55'50", on left bank 15 ft downstream from Cockrell Bridge on State Highway 58, 5 miles upstream from Sapony Creek, 10 miles south of Nashville, Nash County, and at mile 93.8.

Drainage area.--701 sq mi.

Records available.--October 1928 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 110.96 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Feb. 28, 1935, chain and staff gages at same site and datum.

Average discharge.--30 years, 748 cfs.

Extremes.--Maximum discharge during year, 11,400 cfs May 10 (gage height, 17.28 ft); minimum, 69 cfs Oct. 15 (gage height, 2.13 ft).
1928-58: Maximum discharge, 16,900 cfs Dec. 3, 1934 (gage height, 20.8 ft); minimum, 7.0 cfs Sept. 7, 1954 (gage height, 1.51 ft); minimum daily, 11 cfs Sept. 20, 1932.

Remarks.--Records good. Considerable diurnal fluctuation and some regulation at low flow caused by small mills above station.

Revisions (water years).--WSP 822: Drainage area. WSP 1273: 1930.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 27				Jan. 28 to Sept. 30			
2.2	80	5.0	1,140	2.4	129	10.0	4,100
2.6	168	7.0	2,200	2.6	182	14.0	7,500
3.0	293	10.0	4,100	3.0	310	18.0	12,300
				7.0	2,200		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	495	119	1,440	880	860	4,100	1,290	2,640	525	292	211	426
2	675	168	2,030	*790	1,240	4,520	1,470	1,980	462	249	191	*358
3	*570	199	1,250	740	1,520	3,120	*1,160	1,290	470	*230	199	303
4	438	205	830	630	1,260	1,200	950	2,090	434	202	998	265
5	286	*202	810	550	975	998	885	2,750	394	199	2,310	249
6	208	179	1,100	454	835	860	1,090	3,210	382	188	2,130	233
7	163	160	790	589	975	795	1,880	6,050	540	214	590	214
8	152	150	610	855	1,750	725	3,120	8,000	590	237	358	202
9	130	242	1,470	790	2,470	725	4,170	10,200	454	350	275	191
10	124	223	2,990	650	2,180	815	4,280	11,200	362	950	230	174
11	113	236	3,890	610	1,240	975	1,820	10,200	982	835	217	171
12	104	220	3,630	610	*998	925	2,310	4,640	2,360	458	194	176
13	100	176	1,380	550	885	770	3,190	1,770	950	382	221	168
14	93	165	920	1,280	815	860	2,860	1,200	434	871	262	146
15	93	155	740	2,310	770	950	1,190	925	346	2,310	330	157
16	100	163	650	3,330	975	905	1,040	795	398	2,000	338	154
17	96	232	610	3,960	1,020	745	1,040	725	310	835	834	152
18	100	223	550	2,040	745	680	998	655	269	745	968	142
19	108	220	514	960	680	770	860	615	246	520	414	152
20	94	248	641	765	745	1,180	770	555	230	484	269	139
21	104	293	1,870	700	705	1,920	725	550	227	565	217	136
22	102	293	2,530	740	680	1,470	745	590	237	795	185	182
23	108	657	2,420	1,010	725	975	1,200	502	314	530	168	265
24	106	1,100	1,150	1,110	795	795	1,200	615	560	386	218	230
25	106	1,820	830	2,470	795	1,310	1,020	615	370	470	1,480	176
26	108	2,750	951	3,400	941	2,750	795	655	282	1,200	2,790	149
27	115	2,930	1,490	4,100	2,170	3,680	655	655	539	680	4,860	144
28	111	3,260	2,200	4,380	3,400	4,120	834	725	1,090	390	4,930	136
29	117	1,760	1,810	1,860	-	2,430	2,470	680	770	350	1,560	129
30	115	1,230	1,340	1,040	-------	1,380	*3,190	*1,480	442	390	795	*132
31	113	-------	1,110	905	-------	1,220	-------	990	-------	262	560	-------
Total	5,447	19,978	44,546	45,058	33,149	48,668	49,207	79,547	15,969	18,569	29,302	5,851
Mean	176	666	1,437	1,453	1,184	1,570	1,640	2,566	532	599	945	195
Cfsm	0.251	0.950	2.05	2.07	1.69	2.24	2.34	3.66	0.759	0.854	1.35	0.278
In.	0.29	1.06	2.36	2.39	1.76	2.58	2.61	4.22	0.85	0.99	1.55	0.31

Calendar year 1957: Max 7,600 Min 20 Mean 650 Cfsm 0.927 In. 12.60
Water year 1957-58: Max 11,200 Min 93 Mean 1,083 Cfsm 1.54 In. 20.97

Peak discharge (base, 4,000 cfs).--Dec. 12 (4:30 a.m.) 4,170 cfs (10.10 ft) Jan. 17 (6 p.m.) 4,100 cfs (9.95 ft); Jan. 28 (3 p.m.) 4,520 cfs (10.56 ft); Mar. 2 (10 p.m.) 4,590 cfs (10.73 ft); Mar. 28 (3 p.m.) 4,170 cfs (10.09 ft); Apr. 10 (8 a.m.) 4,660 cfs (10.77 ft); May 10 (1 p.m.) 11,400 cfs (17.28 ft); Aug. 28 (5 a.m.) 5,440 cfs (11.75 ft).

* Discharge measurement made on this day.

825. Sapony Creek near Nashville, N. C.

Location.--Lat 35°53'05", long 77°54'45", near center of span on downstream side of highway bridge, 1 mile upstream from mouth and 6½ miles southeast of Nashville, Nash County.

Drainage area.--64.8 sq mi.

Records available.--April 1950 to September 1958.

Gage.--Wire-weight gage and masonry control; gage read twice daily. Altitude of gage is 100 ft (from topographic map). Prior to July 14, 1953, staff gage at same site and datum.

Average discharge.--8 years, 63.6 cfs.

Extremes.--Maximum discharge observed during year, 1,820 cfs May 8 (gage height, 12.69 ft); minimum daily, 0.5 cfs Aug. 2.
1950-58: Maximum discharge, 2,200 cfs Jan. 24, 1954 (gage height, 14.34 ft, from floodmark); minimum, 0.02 cfs on several days in September 1954.

Remarks.--Records fair except those for periods of doubtful gage-height record and of backwater from Tar River, which are poor.

Rating tables, water year 1957-58, except periods of backwater from Tar River (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 15 to Nov. 10, Nov. 17-26, Dec. 9-11)

Oct. 1 to Dec. 11				Dec. 12 to Sept. 30			
1.3	3.8	4.0	125	1.0	0.2	3.0	62
1.6	11.6	6.0	310	1.1	.6	4.0	140
2.0	24	8.0	580	1.2	1.5	6.0	351
3.0	62			1.4	4.3	8.0	660
				1.7	10	12.0	1,590
				2.4	33		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	58	12	310	215	122	d588	149	364	24	8.0	0.6	24
2	73	21	343	176	d149	d490	158	245	18	5.4	d.5	*d14
3	78	24	321	131	*d158	302	149	119	27	*3.8	d1.0	9.2
4	84	22	249	113	d131	205	113	65	31	2.5	d35	7.6
5	62	*21	175	72	d122	113	113	d65	24	1.8	d25	6.3
6	30	16	150	75	d113	89	149	231	17	1.5	9.6	5.6
7	24	15	141	97	131	78	158	*813	15	1.5	5.7	4.7
8	19	13	141	d150	235	72	235	*1,570	19	1.3	2.3	*4.2
9	16	32	219	d200	245	82	c190	*c800	20	1.5	2.4	3.6
10	16	39	361	235	326	d140	c130	c460	14	2.0	1.3	2.7
11	15	d35	548	215	290	d130	176	c340	9.6	2.3	1.2	2.4
12	10	d25	571	122	176	113	215	*c170	8.0	2.2	1.0	2.2
13	7.9	d22	460	113	140	93	256	97	6.1	1.8	*1.1	2.2
14	6.3	d20	302	185	113	101	205	97	5.4	2.3	d1.1	2.0
15	6.0	d19	205	d300	105	131	140	86	4.3	3.1	d3.0	1.9
16	5.1	d18	140	d400	185	140	82	56	7.0	5.7	12	1.6
17	5.6	36	131	d225	d170	113	75	41	7.0	d4.7	9.4	*d1.3
18	5.6	53	113	d149	d130	d100	68	35	6.9	2.5	6.5	d1.2
19	5.3	73	122	d101	d110	d110	59	31	7.6	2.8	4.7	1.1
20	5.3	73	176	d93	d95	140	54	33	5.2	2.8	2.7	1.1
21	5.1	62	225	89	89	149	44	29	6.1	2.8	2.3	3.8
22	4.7	62	364	89	75	d120	41	27	6.5	4.7	d2.0	4.7
23	4.7	d90	490	101	75	d100	d50	25	7.6	3.4	d6.0	3.7
24	6.0	*d141	d278	131	72	d90	d70	24	9.0	*d1.5	19	3.4
25	7.9	*292	d185	256	68	176	158	25	7.2	d1.3	42	2.5
26	11	378	d200	404	102	245	105	35	7.0	2.3	159	2.2
27	9.9	441	d250	d507	248	*476	44	48	29	d2.0	*d453	1.6
28	7.4	*470	d200	d326	482	470	44	46	44	d1.5	505	1.4
29	5.6	332	290	d215	-	278	149	51	19	d1.2	d267	1.2
30	6.0	280	290	d185	-------	185	*298	*41	12	*1.0	131	*1.2
31	7.6	-------	267	113	-------	158	-------	37	-------	d.9	48	------ --
Total	608.0	3,137	8,217	5,783	4,437	5,777	3,877	6,106	423.5	82.1	1,760.4	124.6
Mean	19.6	105	265	187	158	186	129	197	14.1	2.65	56.8	4.15
Cfsm	0.302	1.62	4.09	2.89	2.44	2.87	1.99	3.04	0.218	0.041	0.877	0.064
In.	0.35	1.80	4.72	3.32	2.55	3.32	2.23	3.50	0.24	0.05	1.01	0.07

Calendar year 1957: Max 580 Min 0.1 Mean 78.4 Cfsm 1.21 In. 16.41
Water year 1957-58: Max 1,570 Min 0.5 Mean 111 Cfsm 1.71 In. 23.16

* Discharge measurement made on this day.
c Backwater from Tar River.
d Doubtful gage-height record; discharge estimated on basis of graphs based on gage readings, weather records, and records for nearby stations.

830. Fishing Creek near Enfield, N. C.

Location.--Lat 36°09', long 77°42', on right bank 15 ft downstream from bridge on U. S. Highway 301, 2,000 ft downstream from Atlantic Coast Line Railroad bridge, 2 miles southwest of Enfield, Halifax County, 4⅘ miles downstream from Rocky Creek, and at mile 27.7.

Drainage area.--521 sq mi.

Records available.--October 1923 to September 1958. Figures of discharge below 250 cfs Oct. 1, 1923, to July 3, 1924, below 350 cfs May 30, 1925, to May 31, 1926, below 150 cfs June 1 to Nov. 16, 1926, and below 100 cfs Nov. 17, 1926, to Sept. 30, 1928, published in WSP 622, 642, and 662 have been found subject to considerable error and should not be used. Gage-height records collected at site 2,000 ft upstream at different datum July 1, 1910, to Apr. 30, 1914, and at present site and datum since May 1, 1914, are contained in reports of U. S. Weather Bureau.

Gage.--Water-stage recorder. Datum of gage is 76.26 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Oct. 28, 1932, staff gage at same site and datum.

Average discharge.--35 years, 500 cfs.

Extremes.--Maximum discharge during year, 12,000 cfs May 9 (gage height, 17.00 ft); minimum, 48 cfs Oct. 16 (gage height, 0.41 ft).

1923-58: Maximum discharge, 12,600 cfs Dec. 2, 1934, Aug. 18, 1940; maximum gage height, 17.72 ft Aug. 18, 1940; minimum discharge, 10 cfs Oct. 19, 1933, Sept. 21, 1954.

The flood of Apr. 19, 1910, reached a stage of 20.1 ft, present datum (from floodmarks of Atlantic Coast Line Railroad Co.) at site 2,000 ft upstream. Flood of July 24, 1919, reached a stage of 19.6 ft (discharge, 20,300 cfs).

Remarks.--Records good. Slight diurnal fluctuation and some regulation at low flow caused by mills above station.

Revisions (water years).--WSP 872: 1935(M). WSP 1172: Drainage area. WSP 1333: 1928(M), 1932-33, 1935. See also Records available.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Rate of change in stage used as a factor Nov. 24, 25, 29, 30, Dec. 9, 13, 14, 15, 20, 21, 24-27, Jan. 14, 15, 17-19, 24, 25, 28-30, Feb. 1, 2, 7, 8, 16, 18, 26, 27, Mar. 2, 3, 4, 20, 22, 25, 26, 29-31, Apr. 6, 7, 9-11, 13, 22, 23, 25, 28, 29, May 1-4, 7, 11-13, 31, June 23, 27, July 10, 13, 14, 17, 18, 25, 27, Aug. 3, 4, 15, 16, 18, 25, 26, 30, 31)

Oct. 1 to Mar. 1				Mar. 2 to Sept. 30			
0.4	47	11.0	1,750	1.2	110	12.0	2,290
1.0	107	12.0	2,070	2.0	190	13.0	2,920
4.0	420	13.0	2,700	4.0	399	14.0	4,100
7.0	870	14.0	3,980	6.0	701	15.0	6,000
				10.0	1,670	17.0	12,000

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	102	85	711	620	602	3,220	*903	1,770	532	218	170	411
2	192	100	761	*561	1,190	2,790	839	1,060	399	*195	170	*325
3	197	187	575	533	1,070	1,670	682	1,300	366	175	194	280
4	172	237	444	468	814	949	579	2,280	355	175	550	255
5	132	*192	468	409	620	664	532	2,920	322	165	322	240
6	116	152	493	343	533	547	656	*3,180	290	165	255	225
7	109	127	398	409	593	502	1,660	*6,810	280	165	200	215
8	101	118	354	590	1,060	474	2,120	*10,400	300	170	170	*205
9	92	137	947	605	1,200	461	2,270	*11,600	290	190	150	190
10	80	177	1,840	480	950	563	1,570	8,970	280	254	135	180
11	75	202	2,400	456	680	739	1,760	4,230	355	411	130	170
12	71	172	2,790	468	575	646	1,910	1,800	411	347	115	165
13	61	142	2,230	444	519	532	1,740	*1,080	366	385	*115	160
14	62	127	1,240	951	493	595	1,250	799	333	918	120	155
15	59	124	664	1,740	468	779	819	612	250	1,100	228	155
16	53	124	493	1,910	672	664	664	502	220	1,200	451	155
17	56	122	444	1,680	778	517	629	461	210	1,250	612	150
18	62	132	398	1,150	528	461	563	423	205	679	420	150
19	61	137	376	720	432	503	502	399	190	355	270	145
20	59	142	474	533	493	1,120	474	377	180	270	205	140
21	69	167	1,700	480	444	1,510	435	377	175	255	170	135
22	70	232	2,010	493	444	1,120	442	448	180	300	150	155
23	65	232	2,160	561	444	739	1,180	399	317	311	145	205
24	69	428	1,500	554	456	547	1,370	355	517	245	210	195
25	64	*773	826	1,600	432	671	933	399	399	574	489	165
26	62	1,290	724	2,110	514	2,230	595	448	290	903	2,150	150
27	70	1,280	1,220	2,270	1,860	2,920	474	542	387	507	3,520	145
28	81	1,130	1,200	1,940	2,680	3,520	504	682	612	322	*5,440	140
29	76	707	1,150	1,200	-	2,970	1,800	860	399	245	6,180	150
30	70	537	1,070	716	-------	1,660	*2,030	*1,100	270	*210	2,920	150
31	71	-------	796	554	-------	1,020	-------	808	-------	185	845	-------
Total	2,679	9,712	32,856	27,548	21,544	37,303	31,885	67,391	9,680	12,844	27,201	5,661
Mean	86.4	324	1,060	889	769	1,203	1,063	2,174	323	414	877	189
Cfsm	0.166	0.622	2.03	1.71	1.48	2.31	2.04	4.17	0.620	0.795	1.68	0.363
In.	0.19	0.69	2.35	1.97	1.54	2.66	2.27	4.81	0.69	0.92	1.94	0.40

Calendar year 1957: Max 5,300 Min 25 Mean 440 Cfsm 0.845 In. 11.45
Water year 1957-58: Max 11,600 Min 53 Mean 784 Cfsm 1.50 In. 20.43

* Discharge measurement made on this day.

835. Tar River at Tarboro, N. C.

Location.--Lat 35°53'40", long 77°32'00", near right bank on downstream end of pier of bridge on U. S. Highway 64 in Tarboro, Edgecombe County, 6½ miles downstream from Fishing Creek and at mile 46.2.

Drainage area.--2,180 sq mi, approximately (revised).

Records available.--July 1896 to December 1900, October 1931 to September 1958. Gage-height records at several different datums collected at same site since 1905 are contained in reports of U. S. Weather Bureau.

Gage.--Water-stage recorder. Datum of gage is 10.37 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. July 1896 to December 1900 chain gage at Atlantic Coast Line Railroad bridge 600 ft downstream at different datum. Oct. 1 to Dec. 8, 1931, chain gage at site 100 ft upstream at present datum.

Average discharge.--31 years, 2,262 cfs.

Extremes.--Maximum discharge during year, 26,900 cfs May 12 (gage height, 29.17 ft); minimum, 186 cfs Oct. 29 (gage height, 1.49 ft).
1896-1900, 1931-58: Maximum discharge, 37,200 cfs Aug. 20, 1940 (gage height, 31.77 ft); minimum, 36 cfs Oct. 17, 22, 1933 (gage height, 0.45 ft).
Maximum stage known, 34.0 ft July 27, 1919 (present datum), from floodmarks (discharge, 52,800 cfs, from rating curve extended above 38,000 cfs).

Remarks.--Records excellent except those below 500 cfs, which are good. Some diurnal fluctuation at low flow caused by mills above station. Town of Henderson diverts about 2 cfs out of the basin above station. Town of Tarboro diverted 1.2 cfs for municipal supply. Records of suspended sediment loads for the water year 1958 are given in WSP 1571.

Revisions (water years).--WSP 1172: Drainage area. WSP 1273: 1899-1900, 1933. WSP 1503: 1932.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Sept. 4-30; rate of change in stage used as a factor Nov. 24, 26, Dec. 10, 11, 16-19, 21, 22, Jan. 15, 20, 21, 25, 26, 31, Feb. 1, 12, 13, 28, Mar. 1, 5-8, 26, 27, Apr. 3-5, 16, 17, 29, 30, May 4, 7-10, 14-18, June 14, July 15, 16, Aug. 4, 8, 16, 25-28, Sept. 2-4)

1.6	210	16.0	8,050
2.0	314	21.0	13,100
3.0	636	26.0	20,700
7.0	2,380	30.0	28,700

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	548	334	6,110	6,380	5,750	8,080	8,530	6,720	2,980	1,420	990	10,400
2	830	386	5,720	5,580	4,740	9,030	7,830	7,260	2,230	1,120	750	7,930
3	1,200	430	*5,520	4,680	4,560	10,200	*6,450	7,130	2,130	1,070	742	5,180
4	1,200	495	5,120	3,900	4,930	11,100	5,190	5,870	2,000	910	2,500	2,490
5	1,120	548	4,140	3,300	4,860	9,740	3,990	5,520	1,820	770	2,920	1,460
6	910	565	3,540	2,810	4,320	7,800	3,780	5,910	1,550	673	3,480	1,160
7	810	548	3,480	2,540	3,900	5,440	4,560	8,230	1,330	618	3,540	950
8	673	495	3,080	3,250	4,500	3,980	5,320	11,700	1,330	565	1,880	910
9	673	495	2,980	3,900	5,650	3,480	6,110	17,300	1,380	636	1,380	790
10	530	618	5,150	3,900	6,380	3,300	6,850	22,900	1,380	565	1,070	673
11	462	654	7,260	3,660	6,720	3,420	7,760	25,200	1,250	1,130	850	636
12	403	636	8,450	3,360	5,680	3,600	8,050	*26,700	1,420	1,380	711	600
13	371	692	9,750	3,140	4,500	3,600	7,690	25,600	2,760	1,120	618	582
14	339	618	10,300	3,420	3,840	3,420	7,690	*20,700	2,010	950	*565	618
15	317	565	9,390	4,910	3,250	3,540	7,830	16,000	1,290	1,560	636	452
16	314	530	7,720	5,850	3,200	3,720	6,440	10,300	1,120	3,160	2,220	478
17	306	548	6,250	6,850	3,360	3,720	4,940	6,400	1,160	3,420	2,180	478
18	308	673	4,540	7,620	3,360	3,300	4,140	3,560	1,070	2,590	1,770	478
19	308	711	3,250	7,980	2,980	3,080	3,540	2,640	910	2,280	2,040	433
20	300	770	2,810	6,320	2,540	3,420	3,080	2,280	830	1,820	1,330	436
21	303	750	3,820	4,830	2,540	3,960	2,700	2,040	711	1,640	930	436
22	286	750	5,360	3,840	2,480	4,500	2,380	1,910	692	1,510	810	495
23	289	975	6,180	3,300	2,380	4,800	2,480	1,860	673	1,640	692	495
24	294	2,070	6,990	3,300	2,430	4,320	3,140	1,910	711	1,460	673	530
25	314	2,590	7,060	5,170	2,430	3,960	3,720	1,820	1,130	1,290	814	600
26	297	4,350	6,580	6,840	2,480	4,990	3,900	1,910	1,160	1,290	4,600	512
27	294	5,450	6,450	7,690	4,160	6,700	3,250	2,040	1,120	2,230	6,980	495
28	236	6,180	6,380	8,530	6,460	7,470	2,810	2,000	1,200	2,090	8,450	459
29	212	6,650	6,650	9,300	-	8,450	3,980	2,230	1,950	1,550	9,390	433
30	300	6,790	7,060	9,390	-------	9,300	5,920	2,280	1,820	1,290	10,800	*400
31	*345	-------	6,920	7,420	-------	9,120	-------	2,810	-------	1,200	11,200	-------
Total	15,092	47,866	184,010	162,960	114,380	174,540	154,050	260,730	43,117	44,947	87,511	41,989
Mean	487	1,596	5,936	5,257	4,085	5,630	5,135	8,411	1,437	1,450	2,823	1,400
Cfsm	0.223	0.732	2.72	2.41	1.87	2.58	2.36	3.86	0.659	0.665	1.29	0.642
In.	0.26	0.82	3.14	2.78	1.95	2.98	2.63	4.45	0.74	0.77	1.49	0.72

Calendar year 1957: Max 15,200 Min 122 Mean 2,206 Cfsm 1.01 In. 13.74
Water year 1957-58: Max 26,700 Min 212 Mean 3,647 Cfsm 1.67 In. 22.73

* Discharge measurement made on this day.

838. Conetoe Creek near Bethel, N. C.

Location.--Lat 35°46'32", long 77°27'46", on right bank 5 ft downstream from bridge on county road, 5½ miles downstream from Crisp Creek, and 5½ miles west of Bethel, Pitt County.

Drainage area.--78.1 sq mi.

Records available.--December 1956 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 30 ft (from topographic map).

Extremes.--Maximum discharge during year, 998 cfs Aug. 29 (gage height, 13.87 ft); minimum, 7.8 cfs Aug. 15.
1956-58: Maximum discharge, that of Aug. 29, 1958; minimum, 2.5 cfs Aug. 12, 14, 30, 1957.
Flood in 1955 reached a stage of 16.7 ft, from information by local resident (discharge not determined).

Remarks.--Records good except those for period of no gage-height record, which are poor.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Nov. 23-30, Feb. 9-26, Sept. 3-6)

0.6	5.4	9.0	487
1.0	17	11.0	635
1.5	34	14.0	1,010
2.0	55		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	127	31	272	173	120	*699	348	*218	68	16	8.4	160
2	144	46	189	170	163	613	*227	150	62	*15	8.0	111
3	75	39	147	144	147	324	173	117	87	14	13	*87
4	54	33	*156	120	120	218	138	93	62	14	138	64
5	44	29	156	99	99	173	117	72	47	13	42	54
6	120	25	120	87	99	144	194	136	40	14	23	46
7	60	23	105	136	158	126	419	564	34	13	17	41
8	44	22	99	446	288	111	264	626	30	14	14	36
9	36	58	236	353	257	108	179	581	27	24	12	32
10	30	48	*534	212	184	156	147	288	29	48	11	29
11	28	36	*626	184	156	138	328	184	26	18	10	26
12	26	31	*527	153	*141	*117	284	160	25	19	9.2	24
13	24	29	307	132	129	102	194	170	24	19	9.2	23
14	22	27	212	356	114	123	150	138	22	15	*9.7	23
15	20	28	184	466	108	111	123	87	21	23	16	22
16	19	26	156	326	138	93	114	61	20	80	606	21
17	18	32	138	242	114	81	102	51	18	26	706	20
18	22	39	120	184	87	75	87	45	18	28	*809	19
19	20	66	111	150	75	122	75	39	17	18	547	18
20	19	70	111	126	72	156	65	35	16	14	158	18
21	19	52	184	117	72	126	57	34	16	16	99	18
22	18	44	166	129	*72	102	52	30	18	13	72	27
23	18	170	129	114	72	84	58	28	17	11	58	20
24	20	*278	111	108	69	72	52	358	16	12	55	18
25	22	244	99	422	68	109	46	376	15	19	99	17
26	21	432	182	487	106	375	40	316	15	16	607	17
27	20	280	348	314	505	335	37	224	26	11	791	17
28	19	*179	236	212	688	242	42	156	28	10	942	24
29	18	179	301	166	-	184	246	194	22	9.4	970	18
30	18	225	288	141	-------	144	260	132	18	9.2	762	*16
31	*18	-------	206	123	-------	225	-------	*90	-------	*8.9	298	-------
Total	1,163	2,821	6,756	6,592	4,421	5,788	4,618	5,753	884	580.5	7,919.5	1,066
Mean	37.5	94.0	218	213	158	187	154	186	29.5	18.7	255	35.5
Cfsm	0.480	1.20	2.79	2.73	2.02	2.39	1.97	2.38	0.378	0.239	3.27	0.455
In.	0.55	1.34	3.22	3.14	2.11	2.76	2.20	2.74	0.42	0.28	3.77	0.51

Calendar year 1957: Max 626 Min 2.9 Mean 80.0 Cfsm 1.02 In. 13.91
Water year 1957-58: Max 970 Min 8.0 Mean 132 Cfsm 1.69 In. 23.04

Peak discharge (base, 470 cfs).--Dec. 11 (11 a.m.) 626 cfs (10.90 ft); Jan. 8 (3 p.m.) 473 cfs (8.77 ft); Jan. 15 (3:30 a.m.) 500 cfs (9.21 ft); Jan. 26 (2 a.m.) 527 cfs (9.61 ft); Mar. 1 (12 m. to 6 p.m.) 699 cfs (11.62 ft); May 8 (8 p.m.) 635 cfs (11.02 ft); Aug. 18 (11 a.m.) 822 cfs (12.63 ft); Aug. 29 (3 a.m.) 998 cfs (13.87 ft).

* Discharge measurement made on this day.
Note.--No gage-height record Oct. 5-30; discharge estimated on basis of recorded range in stage, weather records, and records for nearby stations.

845. Herring Run near Washington, N. C.

Location.--Lat 35°34'03", long 77°01'09", on left bank 10 ft downstream from bridge on county road, 1 mile upstream from bridge on U. S. Highway 264, 1½ miles upstream from mouth, and 2¾ miles northeast of Washington, Beaufort County.

Drainage area.--About 15 sq mi.

Records available.--January 1950 to September 1958.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 2 ft (from topographic map). Prior to May 8, 1951, staff gage at same site and datum.

Average discharge.--8 years, 7.52 cfs.

Extremes.--Maximum discharge during year, 95 cfs Feb. 26 (gage height, 9.45 ft); minimum, 0.8 cfs Sept. 19, 20 (gage height, 5.08 ft).
1950-58: Maximum discharge, 548 cfs Sept. 19, 1955 (gage height, 14.77 ft, from floodmark), from rating curve extended above 330 cfs by logarithmic plotting; minimum, 0.7 cfs at times in several years.
Flood in 1946 reached a stage of 17 ft, from information by local resident (discharge not determined).

Remarks.--Records fair except those for periods of fragmentary or doubtful gage-height record, which are poor. Natural runoff affected by ditches and canals above station.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.4	1.4	17	f14	*15	34	46	6.5	4.3	2.2	1.0	2.1
2	3.2	1.4	13	f13	14	29	34	6.2	4.1	1.7	1.0	1.7
3	2.0	1.8	9.9	f12	13	31	28	11	5.2	1.5	4.0	1.5
4	1.5	1.5	10	f10	12	28	25	11	5.7	1.3	9.3	1.4
5	2.2	1.4	9.7	f9.0	11	24	22	9.4	*5.0	1.2	2.2	1.3
6	24	1.2	8.0	f23	11	21	26	19	4.3	1.2	1.6	1.1
7	9.3	1.2	6.9	f60	13	19	29	*48	3.6	1.3	1.3	1.1
8	4.5	1.2	6.2	f36	18	17	24	35	3.1	1.4	1.2	1.1
9	2.8	1.1	30	f28	18	18	20	28	2.7	1.3	1.1	1.0
10	2.0	1.1	38	f23	16	22	18	22	2.3	1.5	1.1	1.0
11	1.6	1.0	29	f20	14	20	22	19	1.8	1.6	1.1	.9
12	1.4	1.1	23	f18	*13	18	21	15	1.7	1.3	1.1	.9
13	1.4	1.1	18	f17	12	*17	18	13	1.5	1.1	1.1	.9
14	1.3	1.0	16	f37	11	19	16	11	1.4	1.1	1.1	.9
15	1.3	1.0	15	f35	11	17	14	9.0	1.3	1.1	1.1	.9
16	1.3	1.1	13	f28	14	15	14	7.3	1.3	1.1	1.1	.9
17	1.3	1.1	12	f25	12	14	16	6.0	1.2	6.4	1.2	.9
18	1.4	2.1	f11	f22	11	13	14	5.0	1.1	1.9	1.2	.9
19	1.4	1.6	f9.9	f20	9.7	18	12	4.3	1.1	1.2	1.0	.8
20	1.4	1.6	f9.5	f18	9.2	21	11	3.9	1.1	1.1	.9	.8
21	1.2	1.5	f10	f17	*8.5	18	9.9	3.6	1.1	1.1	.9	8.3
22	1.2	1.4	f9.0	f16	8.3	16	*8.8	3.4	1.1	1.1	.9	11
23	1.1	16	f8.0	f15	7.8	14	8.6	2.8	1.1	*1.1	.9	5.0
24	1.1	15	f7.3	f14	7.5	12	7.7	2.4	1.1	5.8	5.7	1.7
25	1.1	*22	f6.6	f30	6.9	26	6.6	2.8	1.0	6.8	5.4	1.5
26	1.0	25	f17	f27	27	*36	5.7	6.4	1.1	1.4	15	1.4
27	1.0	16	f16	f22	60	31	5.2	7.6	11	1.3	9.6	1.3
28	1.0	11	f16	*20	49	27	5.0	8.4	5.3	1.2	*5.5	2.4
29	1.0	15	f19	18	-	23	6.1	9.3	3.6	1.2	3.9	d2.2
30	1.0	18	f17	17	-------	20	7.4	6.9	2.7	1.1	3.2	d2.0
31	1.1	-------	f15	16	-------	*45	-------	5.3	-------	1.1	2.6	-------
Total	82.5	166.9	446.0	680.0	432.9	683	501.0	348.5	82.9	55.7	88.3	56.9
Mean	2.66	5.56	14.4	21.9	15.5	22.0	16.7	11.2	2.76	1.80	2.85	1.90
Cfsm	-	-	-		-	-	-	-	-	-	-	-
In.	-	-	-		-	-	-	-	-	-	-	-

Calendar year 1957: Max 93 Min 0.7 Mean 8.78 Cfsm - In. -
Water year 1957-58: Max 60 Min 0.8 Mean 9.93 Cfsm - In. -

Peak discharge (base, 120 cfs).--No peak above base.

* Discharge measurement made on this day.
d Doubtful gage-height record; discharge estimated on basis of weather records and records for nearby stations.
f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

850. Eno River at Hillsboro, N. C.

Location.--Lat 36°04', long 79°06', on right bank 1,000 ft downstream from bridge on State Highway 86, at Hillsboro, Orange County, and 2 miles downstream from Sevenmile Creek.

Drainage area.--66.5 sq mi.

Records available.--October 1927 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder and sharp-crested weir. Datum of gage is 487.44 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to June 29, 1937, staff gage at same site and datum with natural control.

Average discharge.--31 years, 64.5 cfs.

Extremes.--Maximum discharge during year, 2,270 cfs Apr. 6 (gage height, 13.10 ft); minimum, 1.3 cfs Sept. 19.
1927-58: Maximum discharge, 11,000 cfs Sept. 18, 1945 (gage height, 20.01 ft), from rating curve extended above 6,000 cfs by logarithmic plotting; minimum, 0.1 cfs Sept. 5, 1953, Oct. 6-14, 1954.

Remarks.--Records good except those for period of no gage-height record, which are poor. Diversion of about 0.8 cfs for Hillsboro water supply is partly returned above station as sewage.

Revisions (water years).--WSP 1032: 1939(M), 1944(M). WSP 1203: 1930(M). WSP 1333: 1928-29, 1932, 1933-34(M), 1938(M).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.2	1.3	2.5	69
1.3	2.6	3.0	137
1.5	6.6	5.0	487
1.8	16.5	9.0	1,260
2.1	34		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	322	16	106	46	98	155	139	108	32	19	8.8	6.6
2	170	18	67	45	153	110	92	116	33	18	8.6	6.2
3	69	20	57	40	90	*92	81	256	32	17	9.4	5.7
4	45	17	145	38	71	80	77	110	30	16	11	5.1
5	35	16	97	33	64	70	93	86	27	17	11	4.8
6	29	15	64	a33	64	67	993	358	28	25	9.1	4.6
7	25	14	55	a44	167	64	321	790	29	26	8.0	4.4
8	21	14	224	a64	262	61	144	236	26	27	7.2	3.9
9	19	29	409	a43	112	70	105	134	27	32	6.4	3.5
10	18	21	*166	a40	87	102	280	100	37	23	6.2	3.1
11	17	16	101	a40	77	71	909	86	27	20	5.9	3.0
12	16	15	74	a38	70	62	203	80	27	18	*5.9	2.8
13	15	15	58	a35	66	62	130	73	25	79	6.8	2.8
14	15	16	55	*a1,200	60	84	104	62	21	119	12	3.1
15	14	22	53	*286	62	66	96	56	23	*36	10	*3.1
16	14	23	48	151	69	59	186	51	25	25	23	3.0
17	15	24	46	100	55	54	118	50	20	37	26	2.5
18	16	25	42	77	49	54	92	121	18	24	17	2.3
19	15	79	41	63	49	80	81	64	17	22	11	1.6
20	14	85	52	55	49	88	73	52	16	19	*8.6	1.7
21	13	38	123	*69	56	68	67	49	21	19	7.2	4.0
22	13	29	66	148	77	58	75	43	109	22	6.6	8.8
23	13	444	51	78	88	52	146	40	35	16	14	6.2
24	14	172	47	217	68	49	80	40	26	15	17	4.0
25	22	924	44	*939	60	204	69	40	22	15	16	3.7
26	18	434	66	201	314	222	62	49	44	14	28	3.1
27	17	125	73	127	614	134	57	*39	100	13	16	3.0
28	15	92	56	95	*345	98	360	43	32	12	12	3.7
29	14	92	64	79	-	86	242	80	25	11	10	3.1
30	*15	143	53	73	-------	79	201	42	21	10	8.8	2.6
31	16	-------	47	67	-------	159	-------	35	-------	9.4	7.4	-------
Total	1,074	2,993	2,650	4,564	3,396	2,760	5,676	3,489	955	775.4	354.9	116.0
Mean	34.6	99.8	85.5	147	121	89.0	189	113	31.8	25.0	11.4	3.87
Cfsm	0.520	1.50	1.29	2.21	1.82	1.34	2.84	1.70	0.478	0.376	0.171	0.058
In.	0.60	1.67	1.48	2.55	1.90	1.54	3.17	1.95	0.53	0.43	0.20	0.06

Calendar year 1957: Max 1,760 Min 1.0 Mean 67.5 Cfsm 1.02 In. 13.78
Water year 1957-58: Max 1,200 Min 1.6 Mean 78.9 Cfsm 1.19 In. 16.08

Peak discharge (base, 1,500 cfs).--Nov. 25 (6 p.m.) 1,710 cfs (11.18 ft); Jan. 14 (time unknown) 2,140 cfs (12.7 ft); Jan. 25 (4:30 a.m.) 1,660 cfs (11.03 ft); Apr. 6 (5 p.m.) 2,270 cfs (13.10 ft); Apr. 11 (3 a.m.) 2,050 cfs (12.36 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, characteristic shape of flood hydrographs at this station and records for nearby stations.

855. Flat River at Bahama, N. C.

Location.--Lat 36°11'00", long 78°52'45", on right bank half a mile upstream from Lake Michie, 1¼ miles upstream from highway bridge, 1¼ miles north of Bahama, Durham County, and 1½ miles upstream from Dial Creek.

Drainage area.--150 sq mi.

Records available.--July 1925 to September 1958.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 356 ft (from topographic map). Prior to Oct. 22, 1925, staff gage at same site at datum 0.58 ft lower.

Average discharge.--33 years, 142 cfs.

Extremes.--Maximum discharge during year, 5,400 cfs Apr. 11 (gage height, 7.44 ft); minimum, 5.3 cfs Sept. 20, 21 (gage height, 1.01 ft).
1925-58: Maximum discharge, about 20,000 cfs July 26, 1938 (gage height not determined), computed from records at nearby stations; minimum, 0.37 cfs Sept. 26, 27, 1932 (gage height, 0.23 ft).

Remarks.--Records good. Some diurnal fluctuation and infrequent regulation at low flow caused by small mill 5 miles above station.

Revisions (water years).--WSP 1333: 1926, 1928(M), 1938, 1946.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-16		Oct. 17 to Sept. 30			
1.0	4.8	1.0	4.9	2.0	145
1.2	11.4	1.1	8.5	2.5	341
1.4	25	1.2	13	3.0	580
1.6	53	1.3	19	4.0	1,220
2.0	153	1.5	38	5.0	2,100
2.5	341	1.7	68	6.0	3,300

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	172	11	208	86	145	372	355	223	47	33	35	23
2	204	22	102	86	267	242	196	280	54	28	41	19
3	67	54	81	72	171	189	155	632	58	24	73	17
4	41	31	330	63	124	155	142	238	47	22	401	15
5	30	24	283	58	105	127	185	357	44	20	72	14
6	25	17	124	56	108	115	1,800	1,570	42	18	42	13
7	25	14	92	66	288	110	674	2,020	41	30	35	13
8	21	13	339	83	560	100	292	556	38	46	32	12
9	19	21	*1,100	68	223	108	200	296	41	41	28	11
10	16	42	390	60	152	234	658	208	96	34	24	10
11	14	25	215	60	127	139	2,540	168	53	28	19	8.5
12	12	18	142	63	115	108	482	152	42	24	*18	7.8
13	11	17	105	56	102	102	292	124	38	92	18	7.4
14	10	15	92	2,600	92	161	215	105	35	186	18	7.1
15	9.9	19	90	657	95	124	185	95	33	58	30	7.1
16	9.6	35	83	328	105	98	*288	88	30	166	345	7.4
17	9.4	30	77	215	81	88	219	83	28	612	148	*7.4
18	9.0	29	72	152	77	86	161	141	27	83	51	7.1
19	8.5	72	68	115	75	292	142	108	25	50	36	*6.3
20	8.5	226	79	100	77	328	127	81	24	134	*31	5.6
21	8.1	68	254	114	90	175	110	75	23	202	26	6.3
22	8.1	44	139	359	148	127	110	68	31	70	21	6.0
23	7.8	499	98	175	227	102	189	61	60	47	18	6.7
24	8.1	339	83	286	148	90	130	60	41	36	99	8.5
25	7.4	1,990	77	2,780	115	501	102	60	36	46	90	8.1
26	9.0	969	166	482	738	660	90	95	36	36	159	7.4
27	14	238	227	283	1,950	395	81	68	328	108	66	7.1
28	13	148	130	200	885	246	213	65	65	152	42	7.8
29	12	145	142	155	-	182	382	79	44	48	34	9.0
30	*11	178	112	136	--------	152	652	61	37	35	31	8.5
31	11	--------	90	121	--------	340	--------	51	--------	31	27	--------
Total	831.4	5,353	5,590	10,135	7,390	6,248	11,367	8,268	1,544	2,540	2,110	294.1
Mean	26.8	178	180	327	264	202	379	267	51.5	81.9	68.1	9.80
Cfsm	0.179	1.19	1.20	2.18	1.76	1.35	2.53	1.78	0.343	0.546	0.454	0.065
In.	0.21	1.33	1.39	2.51	1.83	1.55	2.82	2.05	0.38	0.63	0.52	0.07

Calendar year 1957: Max 4,110 Min 2.8 Mean 130 Cfsm 0.867 In. 11.80
Water year 1957-58: Max 2,780 Min 5.6 Mean 169 Cfsm 1.13 In. 15.29

Peak discharge (base, 4,500 cfs).--Jan. 25 (6 a.m.) 4,750 cfs (7.02 ft); Apr. 11 (2 a.m.) 5,400 cfs (7.44 ft).

* Discharge measurement made on this day.

860. Dial Creek near Bahama, N. C.

Location.--Lat 36°10'35", long 78°51'20", on right bank three-eighths of a mile upstream from mouth and Lake Michie and 1½ miles northeast of Bahama, Durham County.

Drainage area.--4.9 sq mi, approximately.

Records available.--October 1925 to September 1958. Prior to October 1929, published as "at Bahama."

Gage.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 356 ft (from topographic map).

Average discharge.--33 years, 4.32 cfs.

Extremes.--Maximum discharge during year, 353 cfs Apr. 6 (gage height, 4.08 ft); minimum, 0.43 cfs Oct. 12 (gage height, 0.47 ft).
1925-58: Maximum gage height, 7.60 ft May 24, 1940 (discharge not determined); no flow at times in many years.

Remarks.--Records good except those for periods of ice effect and no gage-height record, which are fair.

Revisions (water years).--WSP 1233: 1926-40, 1941-42(M), 1944-45, 1946-47(M), 1948-50(P). WSP 1333: 1931.

Rating table, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.4	0.30	2.0	14
.6	.73	2.3	26
.8	1.38	2.6	50
1.0	2.42	3.1	109
1.3	4.75	3.5	180
1.6	8.0		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.78	0.87	7.8	3.87	6.9	11	7.8	6.5	2.06	1.02	1.02	1.70
2	2.99	2.07	4.66	3.47	6.6	7.5	6.0	21	2.63	.93	.96	1.42
3	1.42	1.18	3.63	2.94	4.93	6.6	5.6	20	2.06	.84	7.8	1.34
4	1.02	.90	8.9	2.80	4.12	5.5	5.6	9.0	2.00	.78	4.04	1.26
5	.87	.81	5.1	2.79	3.95	4.84	6.1	25	1.90	.78	1.82	1.22
6	.81	.73	3.71	2.73	4.12	4.66	127	121	1.80	.81	1.30	1.15
7	.70	.70	3.23	4.09	14	4.48	21	56	1.70	.87	1.15	1.08
8	.63	.75	12	4.42	13	4.21	10	17	1.65	1.43	1.02	.96
9	.58	.87	30	3.09	7.3	6.1	7.8	10	1.61	1.42	.93	.90
10	.56	.75	10	3.22	5.7	6.2	38	7.9	3.40	1.08	.87	.87
11	.48	.68	6.2	2.87	5.2	4.66	60	7.3	1.65	.96	.73	.84
12	.46	.68	4.39	2.60	4.75	4.30	14	6.5	1.62	1.09	*1.14	.81
13	.48	.70	3.47	3.15	4.30	4.93	9.2	5.2	1.46	4.68	1.17	.87
14	.48	.78	3.31	66	3.87	5.7	7.5	4.57	1.30	6.8	1.76	.81
15	.48	1.18	3.01	14	4.85	4.39	7.2	4.12	1.22	1.50	4.29	.75
16	.48	1.02	2.87	8.6	5.2	4.03	10	3.87	1.26	14	37	.73
17	.50	1.02	2.66	6.1	4.86	3.79	a7.5	3.63	1.08	31	45	.70
18	.63	.96	2.54	4.93	b3.6	4.03	a6.3	3.63	1.02	3.41	6.3	.63
19	.60	2.50	2.48	4.12	a3.5	8.4	a5.6	3.23	.93	2.18	3.42	.58
20	.46	2.04	7.0	3.79	3.71	7.9	a5.0	3.23	.93	16	2.24	.53
21	.44	1.30	10	7.6	4.61	5.7	a4.6	3.39	1.11	8.7	1.75	1.48
22	.44	1.11	4.93	14	5.7	4.75	7.0	3.01	2.19	3.85	1.46	1.20
23	.46	12	3.87	6.6	5.2	4.21	7.6	2.66	1.46	2.17	12	.87
24	.56	5.3	3.47	18	4.57	3.95	5.0	2.60	1.30	1.75	12	.78
25	.78	45	3.15	78	4.12	26	4.48	2.73	1.15	1.50	13	.75
26	.66	14	16	13	38	18	3.87	2.87	4.52	1.30	16	.70
27	.73	5.5	7.7	8.3	38	10	3.95	2.54	3.68	4.88	6.6	.74
28	.68	5.1	5.6	6.2	22	7.5	16	5.7	1.60	2.82	4.12	1.57
29	.58	4.78	6.0	5.3	-	6.2	12	3.86	1.26	1.46	3.08	.84
30	.58	17	4.30	4.84	-------	5.6	9.5	2.54	1.11	1.15	2.30	.73
31	.68	-------	3.71	4.48	-------	11	-------	2.24	-------	1.02	1.90	-------
Total	26.00	130.28	195.69	315.90	236.66	216.13	441.20	372.82	52.66	122.18	198.17	28.81
Mean	0.839	4.34	6.31	10.2	8.45	6.97	14.7	12.0	1.76	3.94	6.39	0.960
Cfsm	0.171	0.886	1.29	2.08	1.72	1.42	3.00	2.45	0.359	0.804	1.30	0.196
In.	0.20	0.99	1.49	2.40	1.80	1.64	3.35	2.83	0.40	0.93	1.50	0.22

Calendar year 1957: Max 106 Min 0 Mean 4.17 Cfsm 0.851 In. 11.57
Water year 1957-58: Max 127 Min 0.44 Mean 6.40 Cfsm 1.31 In. 17.75

Peak discharge (base, 160 cfs).--Jan. 25 (5:30 a.m.) 168 cfs (3.44 ft); Apr. 6 (3 p.m.) 353 cfs (4.08 ft); Apr. 11 (12:30 a.m.) 225 cfs (3.68 ft); May 6 (1 a.m.) 208 cfs (3.62 ft); July 17 (1 a.m.) 180 cfs (3.50 ft); Aug. 17 (6 a.m.) 247 cfs (3.76 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge computed on basis of recorded range in stage and records for nearby stations.
b Stage-discharge relation affected by ice.

865. Flat River at dam near Bahama, N. C.

Location.--Lat 36°08'55", long 78°49'43", on right bank 900 ft downstream from Durham municipal dam, 3 miles southeast of Bahama, Durham County, and 5 miles upstream from confluence with Eno River.

Drainage area.--171 sq mi.

Records available.--August 1927 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 255.05 ft above mean sea level (levels by Corps of Engineers). Prior to Nov. 19, 1927, at datum 1.30 ft higher.

Average discharge.--31 years, 155 cfs.

Extremes.--Maximum discharge during year, 5,200 cfs Apr. 11 (gage height, 11.38 ft); minimum, 2.8 cfs Oct. 13, 14, 15 (gage height, 0.71 ft).
1927-58: Maximum discharge, 19,700 cfs July 26, 1938 (gage height, 19.50 ft), from rating curve extended above 4,000 cfs on basis of computation of peak flow over Durham municipal dam at gage heights 13.1, 13.60, 14.60, 16.70, and 19.50 ft; no flow Sept. 3-14, 1938 (result of construction work upstream).

Remarks.--Records excellent above 10 cfs and good below. Considerable regulation since 1926 by Lake Michie (usable capacity, 12,610 acre-ft) above station. An average of 13.7 cfs was diverted above station for Durham municipal water supply. About 8.1 cfs was returned as sewage to Neuse River 3 miles upstream from Northside gage and the remainder, about 5.3 cfs, is diverted into the Cape Fear River basin.

Revisions (water years).--WSP 1333: 1928-30, 1932(M), 1934, 1935-39(M), 1944.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-29		Oct. 30 to Sept. 30			
0.7	2.5	0.7	3.4	2.0	139
.8	5.5	.8	6.4	3.0	380
.9	10	.9	10.5	5.0	1,120
1.1	23	1.1	23	9.0	3,150
1.4	54	1.4	52		
1.7	93				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	37	305	149	189	516	380	394	84	25	54	52
2	44	24	210	150	165	381	298	249	59	13	54	51
3	39	4.7	117	117	154	*321	307	654	50	45	56	13
4	43	4.4	154	49	152	226	236	376	71	32	218	28
5	46	4.7	249	50	214	197	172	295	84	13	153	44
6	46	4.4	304	49	206	196	1,780	*1,700	84	14	74	11
7	46	4.7	253	49	175	121	1,240	2,660	84	14	49	12
8	65	5.4	189	70	418	86	437	781	38	14	50	12
9	80	6.4	*898	84	350	42	297	417	12	24	66	12
10	33	74	596	82	269	48	366	283	12	*50	50	26
11	8.0	6.8	334	84	258	93	3,020	223	12	46	50	12
12	8.0	6.8	320	61	196	198	663	171	25	16	51	12
13	5.5	6.4	239	46	170	200	382	187	44	56	45	12
14	3.0	6.4	46	2,200	142	195	318	187	12	54	40	12
15	3.6	6.4	45	1,050	49	160	236	118	12	62	54	11
16	4.8	6.8	64	440	58	164	336	84	12	89	80	11
17	5.2	6.4	80	339	82	160	266	84	13	695	147	20
18	5.5	6.4	49	299	82	166	165	64	13	181	122	10
19	6.3	6.8	69	234	82	188	191	49	13	89	87	18
20	6.3	6.4	82	179	81	308	187	70	13	122	*87	10
21	5.9	43	182	*96	81	240	163	82	13	191	87	29
22	6.3	39	266	159	82	183	168	82	14	124	86	78
23	6.3	125	188	265	88	154	180	82	13	90	86	30
24	6.3	470	84	282	147	158	165	84	13	89	86	9.7
25	5.9	1,440	49	2,850	152	279	80	82	14	65	85	9.7
26	5.5	1,980	38	722	302	800	80	76	14	53	85	15
27	5.5	386	146	382	2,350	505	61	50	24	53	85	19
28	5.2	275	150	287	1,180	346	73	*51	51	52	80	10
29	5.2	242	145	256	-	281	383	70	49	53	85	10
30	*5.0	326	141	239	--------	256	572	84	47	53	85	10
31	5.0	--------	137	190	--------	260	--------	84	--------	56	78	--------
Total	572.3	5,561.3	6,129	11,509	7,874	7,428	13,202	9,873	997	2,533	2,515	609.4
Mean	18.5	185	198	371	281	240	440	318	33.2	81.7	81.1	20.3
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 5,410 Min 2.8 Mean 139 Cfsm - In. -
Water year 1957-58: Max 3,020 Min 3.0 Mean 189 Cfsm - In. -

* Discharge measurement made on this day.

870. Neuse River near Northside, N. C.

Location.--Lat 36°02'07", long 78°44'59", on right bank 25 ft upstream from Fish Dam Bridge, 1½ miles downstream from Rocky Creek, 2½ miles downstream from Seaboard Air Line Railroad bridge, 2½ miles south of Northside, Granville County, 8½ miles downstream from confluence of Eno and Flat Rivers, and 9½ miles northeast of Durham, Durham County.
Drainage area.--526 sq mi.
Records available.--July 1927 to September 1958.
Gage.--Water-stage recorder. Datum of gage is 226.32 ft above mean sea level (levels by Corps of Engineers). Prior to June 2, 1928, chain gage at site 10 ft upstream at same datum. Since Sept. 29, 1950, auxiliary water-stage recorder at bridge on U. S. Highway 15, 4 miles upstream. Mar. 25, 1949, to Sept. 28, 1950, auxiliary wire-weight gage at same site.
Average discharge.--31 years, 528 cfs.
Extremes.--Maximum discharge during year, 7,780 cfs May 8 (gage height, 20.84 ft); minimum daily, 30 cfs Sept. 15.
1927-58: Maximum discharge, 36,600 cfs Sept. 18, 1945; maximum gage height, 31.02 ft Sept. 18, 1945, from floodmark; minimum discharge, 3.1 cfs Sept. 20, 1932 (gage height, 0.87 ft).
Remarks.--Records good except those for periods of no gage-height record, which are fair. Moderate diurnal fluctuation caused by powerplant above station. Flow regulated by Durham municipal dam. For diversion, see records for Flat River at dam near Bahama, preceding page.
Revisions (water years).--WSP 822: Drainage area. WSP 1032: 1933(M), 1935-36, 1937(M), 1938-39, 1944(M). WSP 1333: 1928-31, 1933, 1934(M).

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Fall used as a factor Nov. 24, 25, 27-30, Dec. 1, 2, 5, 10-12, 22, 27, Jan. 16-18, 22, 23, 26-29, Feb. 2, 3, 9, 10, Mar. 1-3, 26-28, Apr. 1, 2, 8-10, 12-14, 17, 29, 30, May 1, 2, 4, 5, 8-11, July 14, 15, 18)

Oct. 1 to Aug. 26

1.5	39	8.0	1,290
2.0	113	15.0	3,590
3.0	246	18.0	5,260
5.0	593	20.0	6,900

Aug. 27 to Sept. 30

1.4	29
2.0	113

Note.--Same as preceding table above 2.0 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a900	80	2,180	460	624	3,870	1,140	1,220	210	122	94	114
2	a1,300	134	1,020	479	1,100	1,840	840	774	190	88	91	97
3	a560	121	593	424	819	1,010	714	1,650	170	86	103	83
4	a400	95	633	291	633	735	633	1,380	170	104	411	53
5	a220	90	957	238	555	*593	593	803	184	83	346	74
6	a180	*80	756	217	593	555	1,530	3,240	184	77	142	74
7	a150	71	633	284	696	517	4,770	*6,270	177	109	105	41
8	144	76	677	498	2,270	407	4,340	*6,180	170	103	88	37
9	163	109	2,380	407	1,600	382	1,830	3,620	114	154	101	40
10	150	134	*3,120	307	872	574	943	1,620	170	*150	100	37
11	99	141	1,590	323	714	517	2,960	927	170	177	80	52
12	86	88	874	291	653	517	4,820	673	126	116	84	37
13	76	83	673	246	536	517	2,900	574	146	254	121	35
14	71	77	407	2,160	517	673	1,250	517	128	1,340	154	33
15	70	83	339	*4,620	398	593	*778	451	99	591	110	30
16	70	95	315	*3,910	593	498	900	339	105	238	319	*33
17	71	109	323	*1,780	479	451	1,080	323	100	680	479	33
18	73	108	291	895	387	442	674	315	94	635	405	46
19	77	122	268	673	407	a600	593	373	87	261	184	31
20	70	339	323	536	382	a1,050	555	276	86	184	144	37
21	61	284	1,080	479	398	a760	498	299	88	396	*128	33
22	59	210	906	960	470	a560	479	276	160	382	126	86
23	54	885	613	937	555	a450	673	254	261	203	132	108
24	54	*2,340	442	842	555	*a424	633	254	142	164	385	50
25	63	1,940	323	*3,260	498	906	442	246	110	177	498	44
26	66	3,880	613	5,330	690	2,800	356	261	101	123	714	39
27	80	4,330	970	3,400	3,270	2,090	323	246	229	109	509	47
28	73	1,980	653	1,450	5,060	1,140	1,060	*203	285	110	231	47
29	*64	1,130	653	808	-	807	2,760	389	163	113	177	35
30	64	1,370	593	673	-------	673	1,890	323	127	101	151	35
31	68	-------	479	593	-------	714	-------	238	-------	95	134	-------
Total	5,636	20,584	25,677	37,771	26,324	27,665	42,957	34,514	4,546	7,525	6,846	1,541
Mean	182	686	828	1,218	940	892	1,432	1,113	152	243	221	51.4
Cfsm	0.346	1.30	1.57	2.32	1.79	1.70	2.72	2.12	0.289	0.462	0.420	0.098
In.	0.40	1.46	1.82	2.67	1.86	1.96	3.04	2.44	0.32	0.53	0.48	0.11

Calendar year 1957: Max 10,500 Min 16 Mean 521 Cfsm 0.990 In. 13.46
Water year 1957-58: Max 6,270 Min 30 Mean 662 Cfsm 1.26 In. 17.09

Peak discharge (base, 4,500 cfs).--Nov. 27 (5 a.m.) 5,190 cfs (17.88 ft); Jan. 15 (10 p.m.) 5,330 cfs (18.07 ft); Jan. 26 (1:30 p.m.) 5,850 cfs (18.84 ft); Feb. 28 (7 p.m.) 5,330 cfs (18.10 ft); Apr. 7 (10 p.m.) 5,850 cfs (18.80 ft); Apr. 12 (11 a.m.) 5,330 cfs (18.07 ft); May 8 (4:30 a.m.) 7,780 cfs (20.84 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for auxiliary gage.

875. Neuse River near Clayton, N. C.

Location.--Lat 35°39', long 78°25', on left bank 5 ft downstream from bridge on State Highway 42, 1.8 miles upstream from Mill Creek, and 3 miles east of Clayton, Johnston County.

Drainage area.--1,140 sq mi, approximately.

Records available.--July 1927 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 128.12 ft above mean sea level (levels by Corps of Engineers). Prior to Mar. 18, 1942, at site 1,100 ft upstream at same datum.

Average discharge.--31 years, 1,206 cfs.

Extremes.--Maximum discharge during year, 13,800 cfs May 8 (gage height, 16.40 ft); minimum, 202 cfs Oct. 24 (gage height, 1.38 ft).
1927-58: Maximum discharge, 22,900 cfs Sept. 19, 1945 (gage height, 22.12 ft); minimum, 44 cfs Sept. 15, 1932 (gage height, 0.28 ft, site then in use).
Flood of July 23, 1919, reached a stage of 21.15 ft, from floodmark at former site (discharge, 21,200 cfs).

Remarks.--Records excellent above 1,000 cfs and good below.

Revisions (water years).--WSP 822: Drainage area. WSP 1032: 1930, 1935(M). WSP 1333: 1935. WSP 1503: 1949.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.3	190	7.0	4,000
1.5	254	13.0	9,650
2.0	468	15.0	12,000
2.5	770	17.0	14,600
3.0	1,080		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*2,650	*247	4,510	1,280	1,380	5,590	1,920	5,490	740	*442	*317	570
2	2,790	301	*3,820	*1,250	1,750	5,680	2,080	3,400	666	392	309	486
3	2,290	305	2,800	1,180	*2,220	5,770	1,750	2,010	830	366	426	*420
4	*1,380	320	1,750	1,050	1,880	4,030	1,490	2,430	697	332	1,010	388
5	782	*309	1,680	890	1,420	1,730	1,420	2,570	570	317	1,520	366
6	576	268	1,750	758	1,250	1,380	1,520	4,370	558	442	1,170	328
7	480	244	1,520	860	1,520	1,220	3,430	11,100	1,080	366	624	309
8	*415	274	1,350	1,180	3,390	1,150	4,170	13,500	925	379	415	313
9	374	498	2,850	1,280	4,170	1,020	4,760	12,100	624	546	349	290
10	353	397	5,120	1,120	3,650	1,180	5,400	10,000	552	691	336	268
11	345	328	4,760	990	2,440	1,280	4,760	8,750	474	516	317	258
12	324	336	4,420	890	1,680	1,220	3,740	7,460	528	486	486	254
13	272	324	2,440	830	1,460	1,120	4,250	3,380	588	618	382	265
14	*247	283	1,550	2,580	1,250	1,320	4,850	1,680	463	1,500	353	268
15	241	276	1,180	5,400	1,220	1,490	4,180	1,350	612	2,870	431	251
16	234	286	990	4,940	1,520	1,320	2,070	1,150	1,630	1,750	516	247
17	231	397	890	5,220	1,580	1,120	1,880	990	860	860	468	241
18	251	420	860	5,310	1,220	1,020	1,950	890	528	906	752	241
19	254	522	806	3,410	1,050	1,080	1,520	812	442	1,150	788	234
20	234	960	925	1,550	1,050	1,460	1,250	860	402	846	504	231
21	228	*752	2,090	1,250	990	1,880	1,150	890	392	1,320	379	265
22	228	*733	2,500	1,320	990	1,620	1,150	770	397	1,020	336	436
23	221	1,790	2,080	1,680	1,080	1,250	1,490	721	410	990	317	320
24	218	4,510	1,520	1,880	1,150	1,050	1,490	2,060	558	636	1,250	290
25	279	4,340	1,150	4,660	1,120	1,500	1,350	2,530	510	890	1,590	298
26	244	6,980	1,380	6,330	1,250	4,340	1,050	1,120	415	794	6,550	276
27	224	7,010	2,290	5,490	3,450	4,850	860	1,620	925	552	7,810	251
28	221	5,220	2,220	5,590	5,220	4,590	1,340	1,050	960	420	3,370	234
29	231	5,310	2,150	5,590	-	3,310	5,420	1,650	764	388	1,460	221
30	231	5,030	1,880	3,220	--------	1,950	6,520	1,380	540	388	890	231
31	224	--------	1,520	1,580	--------	1,680	--------	960	--------	349	685	--------
Total	17,272	48,970	66,751	80,558	52,350	69,200	80,210	109,043	19,640	23,522	36,090	9,050
Mean	557	1,632	2,153	2,599	1,870	2,232	2,674	3,518	655	759	1,164	302
Cfsm	0.489	1.43	1.89	2.28	1.64	1.96	2.35	3.09	0.575	0.666	1.02	0.265
In.	0.56	1.60	2.18	2.63	1.71	2.26	2.62	3.56	0.64	0.77	1.18	0.30

Calendar year 1957: Max 9,050 Min 83 Mean 1,168 Cfsm 1.02 In. 13.93
Water year 1957-58: Max 13,500 Min 218 Mean 1,679 Cfsm 1.47 In. 20.01

Peak discharge (base, 7,100 cfs).--Nov. 27 (2 a.m.) 7,850 cfs (11.18 ft); May 8 (4 p.m.) 13,800 cfs (16.40 ft); Aug. 27 (6 a.m.) 8,350 cfs (11.67 ft).

* Discharge measurement made on this day.

880. Middle Creek near Clayton, N. C.

Location.--Lat 35°34'10", long 78°35'30", on right bank 300 ft downstream from bridge on State Highway 50, a quarter of a mile upstream from Buffalo Branch, 3¼ miles downstream from county line, and 9¼ miles southwest of Clayton, Johnston County.

Drainage area.--80.7 sq mi.

Records available.--October 1939 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Altitude of gage is 177 ft (by barometer).

Average discharge.--19 years, 91.1 cfs.

Extremes.--Maximum discharge during year, 3,720 cfs May 7 (gage height, 11.70 ft in gage well, 11.97 ft from outside gage); minimum, 9.5 cfs Aug. 12 (gage height, 1.02 ft).
1939-58: Maximum discharge, 5,400 cfs Sept. 4, 1955 (gage height, 13.14 ft in gage well); no flow Oct. 11-13, 1954.

Remarks.--Records good.

Revisions (water years).--WSP 952: 1940(M), 1941. WSP 1233: 1943(M), 1945, 1949.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 22 to Nov. 8, Jan. 29 to Feb. 3)

Oct. 1 to Jan. 28				Jan. 29 to Sept. 30			
1.7	31	5.0	293	1.0	8.0	7.0	670
2.0	45	6.0	435	1.3	16	8.0	960
3.0	105	7.0	640	1.9	43	9.0	1,400
4.0	185	8.0	910	3.0	115	10.0	2,050
				4.0	200	12.0	4,080
				5.0	315		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*628	*44	412	154	131	470	*176	*564	52	*30	*12	48
2	546	65	*477	*146	159	274	147	362	*47	26	13	*41
3	460	63	266	130	151	*172	123	210	64	23	16	*34
4	230	54	200	119	123	*151	115	205	66	21	93	31
5	108	*46	200	108	115	*131	115	139	49	20	38	30
6	91	42	162	102	123	127	226	640	44	28	25	28
7	78	38	138	148	224	*123	277	*3,380	86	31	19	25
8	67	56	150	240	403	115	186	1,520	60	62	16	22
9	59	195	320	190	544	127	115	579	48	36	14	20
10	54	138	451	130	400	181	133	318	42	41	12	18
11	50	85	435	119	200	155	329	186	37	34	11	16
12	47	67	246	112	168	127	226	190	32	27	*24	16
13	44	62	162	105	151	119	151	181	31	28	229	18
14	42	60	142	362	139	168	115	155	28	45	114	18
15	40	62	134	568	151	155	111	119	30	94	50	16
16	38	93	130	494	242	123	143	104	54	80	40	*15
17	39	172	122	238	205	107	143	100	41	45	33	14
18	60	176	116	154	131	104	119	93	32	32	27	13
19	59	185	112	130	127	127	100	82	26	26	22	12
20	47	210	142	122	127	135	90	80	23	26	18	11
21	38	210	263	122	123	119	85	96	22	96	16	17
22	35	142	275	167	123	100	90	86	23	48	14	24
23	33	369	176	146	127	93	151	74	25	32	13	21
24	36	741	134	161	123	86	119	100	26	27	13	15
25	68	826	122	444	115	226	96	107	24	99	30	13
26	59	*826	221	536	165	488	85	107	23	46	503	12
27	48	798	287	396	408	470	74	111	158	26	*930	11
28	40	440	215	190	564	282	104	93	94	23	442	11
29	36	252	293	151	-	163	301	93	56	18	115	9.8
30	35	274	300	139	-------	143	556	79	40	15	77	11
31	36	-------	190	131	-------	163	-------	62	-------	13	61	-------
Total	3,251	6,791	6,993	6,454	5,762	5,524	4,801	10,215	1,383	1,198	3,040	590.8
Mean	105	226	226	208	206	178	160	330	46.1	38.6	98.1	19.7
Cfsm	1.30	2.80	2.80	2.58	2.55	2.21	1.98	4.09	0.571	0.478	1.22	0.244
In.	1.50	3.13	3.22	2.97	2.66	2.55	2.21	4.17	0.64	0.55	1.40	0.27

Calendar year 1957: Max 1,390 Min 3.6 Mean 117 Cfsm 1.45 In. 19.66
Water year 1957-58: Max 3,380 Min 9.8 Mean 153 Cfsm 1.90 In. 25.81

Peak discharge (base, 600 cfs).--Oct. 2 (12:30 a.m.) 666 cfs (7.10 ft); Nov. 26 (12 p.m.) 910 cfs (8.05 ft); Jan. 15 (7 p.m.) 692 cfs (7.17 ft); May 1 (1 a.m.) 638 cfs (6.86 ft); May 7 (8:30 a.m.) 3,720 cfs (11.70 ft); Aug. 27 (12:30 p.m.) 1,030 cfs (8.24 ft).

* Discharge measurement made on this day.

885. Little River near Princeton, N. C.

Location.--Lat 35°30'40" (revised), long 78°09'30", on left bank 400 ft downstream from highway bridge, three-quarters of a mile upstream from Little Creek, and 3 miles north of Princeton, Johnston County.

Drainage area.--229 sq mi.

Records available.--February 1930 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Altitude of gage is 108 ft (by barometer). Prior to Nov. 17, 1934, staff gage at same site and datum.

Average discharge.--28 years, 242 cfs.

Extremes.--Maximum discharge during year, 3,980 cfs Aug. 29 (gage height, 12.22 ft); minimum, 23 cfs July 9.
1930-58: Maximum discharge, 4,770 cfs Jan. 24, 1954 (gage height, 12.79 ft); minimum, 1.0 cfs several times in September and October 1932 (gage height, 0.30 ft).
Flood in July 1919 reached a stage of 14.57 ft; September 1924, 14.90 ft; September 1928, 13.3 ft; October 1929, 13.47 ft; from information by local resident.

Remarks.--Records good except those below 500 cfs June 10 to Sept. 30 and those for periods of no gage-height record, which are fair. Slight diurnal fluctuation and occasionally some regulation for short periods caused by mills above station.

Revisions (water years).--WSP 822: Drainage area. WSP 1233: 1935(M).

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Dec. 3-10, June 19 to Aug. 4, Aug. 6-26)

Oct. 1 to Dec. 10		Dec. 11 to Sept. 30			
1.1	21	1.1	21	9.0	1,580
1.3	38	1.3	38	11.0	2,600
2.0	139	2.0	147	12.0	3,650
5.0	594	7.0	1,060	12.5	4,500
8.0	1,160				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a360	54	774	708	461	1,430	900	1,060	245	95	29	470
2	a385	a55	756	598	427	1,200	746	960	182	57	28	272
3	a380	a65	684	512	427	920	580	746	*157	40	30	193
4	a360	*73	612	444	444	708	478	512	124	33	367	132
5	a340	79	594	376	410	546	418	376	116	30	1,140	109
6	a270	73	519	325	384	444	608	428	116	32	712	106
7	a200	72	444	384	478	376	980	1,440	111	26	159	99
8	a130	74	414	727	970	342	822	*2,100	133	25	72	83
9	90	70	612	822	1,220	334	580	*2,770	122	34	42	85
10	74	109	1,000	634	1,100	427	478	3,140	100	99	31	69
11	63	160	1,220	512	*860	*444	634	2,260	70	51	27	51
12	54	142	1,220	444	689	402	727	1,090	58	45	26	54
13	45	116	1,100	393	563	359	670	598	43	149	30	58
14	*43	104	880	680	461	402	546	495	51	166	27	49
15	43	94	652	1,140	427	*427	461	393	53	154	27	42
16	44	88	529	1,160	529	a380	410	325	48	*214	177	*40
17	36	86	444	940	563	a340	402	245	104	350	170	39
18	48	118	384	765	440	a320	359	200	204	299	72	39
19	38	166	350	598	392	a380	325	168	147	254	92	39
20	34	192	386	478	368	a460	290	156	82	152	69	36
21	38	198	727	410	342	a400	245	149	48	414	40	44
22	39	184	940	402	316	a360	234	161	44	429	32	112
23	38	254	920	410	308	a300	359	156	39	158	30	100
24	26	*534	765	418	308	a280	*410	164	39	93	30	87
25	34	774	598	902	299	500	350	166	36	701	244	70
26	35	*865	563	*1,220	371	1,440	308	308	34	780	*711	58
27	40	1,000	727	1,310	981	*1,780	254	368	82	208	*1,080	56
28	36	1,040	803	1,200	1,460	1,370	227	272	299	77	1,930	45
29	42	1,000	822	960	-	1,020	579	254	222	51	*3,700	35
30	42	865	920	708	--------	803	1,000	368	133	37	3,070	35
31	40	--------	860	529	--------	822	--------	325	--------	30	1,540	--------
Total	3,447	8,704	22,219	21,109	15,998	19,716	15,380	22,153	3,242	5,283	15,734	2,707
Mean	111	290	717	681	571	636	513	715	108	170	508	90.2
Cfsm	0.485	1.27	3.13	2.97	2.49	2.78	2.24	3.12	0.472	0.742	2.22	0.394
In.	0.56	1.41	3.61	3.43	2.60	3.20	2.50	3.60	0.53	0.86	2.56	0.44

Calendar year 1957: Max 1,330 Min 5.9 Mean 246 Cfsm 1.07 In. 14.61
Water year 1957-58: Max 3,700 Min 25 Mean 427 Cfsm 1.86 In. 25.30

Peak discharge (base, 1,200 cfs).--Dec. 11 (12 p.m.) 1,250 cfs (7.90 ft); Jan. 15 (10 p.m.) 1,250 cfs (7.87 ft); Jan. 26 (5 p.m.) 1,340 cfs (8.17 ft); Feb. 9 (1 p.m.) 1,250 cfs (7.88 ft); Feb. 28 (7 p.m.) 1,490 cfs (8.73 ft); Mar. 27 (7 a.m.) 1,820 cfs (9.62 ft); May 10 (5 a.m.) 3,250 cfs (11.69 ft); Aug. 5 (8:30 p.m.) 1,280 cfs (7.95 ft); Aug. 29 (2 p.m.) 3,980 cfs (12.22 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage, and records for nearby stations.

890. Neuse River near Goldsboro, N. C.

Location (revised).--Lat 35°20'15", long 77°59'50", on left bank 5 ft downstream from highway bridge, 0.2 mile upstream from Stony Creek, 1.5 miles downstream from Atlantic Coast Line Railroad bridge, 3.2 miles south of Wayne County courthouse in Goldsboro, 4.3 miles downstream from Little River, and at mile 135.

Drainage area.--2,390 sq mi, approximately.

Records available.--February 1930 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 42.95 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to July 24, 1931, chain gage at railroad bridge 1.5 miles upstream at datum 2.00 ft higher. July 24, 1931, to Aug. 31, 1948, water-stage recorder at site 2.3 miles upstream at datum 1.71 ft higher than present datum.

Average discharge.--28 years, 2,432 cfs.

Extremes.--Maximum discharge during year, 16,500 cfs May 13 (gage height, 22.35 ft); minimum, 516 cfs Sept. 20, 21.
1930-58: Maximum discharge, 30,700 cfs Sept. 23, 1945; maximum gage height, 26.72 ft Sept. 23, 1945, site and datum then in use; minimum unregulated discharge, 85 cfs Sept. 14, 1932 (gage height, 1.03 ft, site and datum then in use); minimum, 80 cfs Dec. 3, 1951 (result of temporary closure of river channel upstream).
Maximum discharge known, 38,600 cfs Oct. 5, 1929 (gage height, 27.3 ft, at railroad bridge and present datum).

Remarks.--Records good.

Revisions (water years).--WSP 822: Drainage area. WSP 1333: 1931, 1935.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Rate of change in stage used as a factor Oct. 1, 2, 7, 8, Nov. 25, Dec. 8, 9, 18, 19, Jan. 4, 24, Feb. 4, 5, 16, 27, 28, Mar. 9, 10, 26, Apr. 5, 20-22, 29, 30, May 11, 12, 17-20, 25, June 17, 28, 29, July 15, 16, 18-21, 28, Aug. 4, 5, 8, 9, 25-27, Sept. 2-4)

Oct. 1 to Nov. 18, Sept. 2-30		Nov. 19 to Sept. 1			
3.0	465	3.7	704	15.0	6,950
6.0	1,640	5.0	1,200	20.0	12,200
10.0	3,800	9.0	3,000	22.5	16,800
14.0	8,350				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,860	599	9,250	5,730	8,700	6,310	8,810	5,100	2,900	1,600	794	7,750
2	3,440	634	10,100	5,660	8,600	7,110	*8,810	5,940	2,300	1,240	740	6,000
3	3,740	669	10,500	5,030	7,930	7,750	8,400	6,710	*1,880	1,040	722	2,940
4	3,950	*776	10,500	3,940	6,230	8,300	7,670	7,430	1,720	923	1,120	1,520
5	4,120	812	10,100	3,490	4,930	8,600	6,230	7,930	1,680	830	1,520	1,200
6	4,120	812	9,470	3,000	4,270	8,810	5,590	7,930	1,520	758	2,300	1,040
7	3,020	794	8,500	2,800	3,610	8,700	5,520	8,020	1,560	740	2,600	923
8	1,850	740	6,830	3,310	3,790	8,020	5,800	8,020	1,600	830	1,940	849
9	1,410	704	5,710	3,970	4,510	6,100	6,150	8,300	1,960	830	1,260	776
10	1,160	722	5,380	4,390	5,310	4,830	6,550	9,360	1,880	942	961	740
11	1,000	1,000	5,660	4,510	6,010	*3,790	7,030	12,100	1,560	1,160	812	686
12	886	1,080	6,230	4,150	6,630	3,610	7,430	14,700	1,320	1,200	740	634
13	812	980	6,790	3,550	6,950	3,550	7,670	*16,100	1,160	1,080	722	599
14	758	904	7,430	3,430	6,950	3,450	7,840	*16,100	1,120	1,080	830	599
15	686	868	7,930	4,090	6,390	3,370	8,020	*15,300	1,120	1,500	961	599
16	634	868	8,110	4,890	4,810	3,550	7,930	*13,400	1,240	2,220	1,040	582
17	599	942	7,590	5,590	4,210	3,490	7,670	11,100	1,590	2,700	1,080	565
18	599	1,160	5,410	6,310	3,970	3,200	7,430	8,130	1,840	2,480	1,120	548
19	582	1,520	3,560	6,870	3,790	3,000	6,950	4,360	1,480	1,660	1,000	532
20	599	1,800	3,050	*7,350	3,200	3,050	5,650	2,410	1,200	1,780	1,080	516
21	616	2,050	3,200	7,670	2,850	3,200	4,050	2,100	1,000	2,010	1,080	516
22	599	2,300	3,970	7,750	2,750	3,430	3,040	2,000	923	2,100	886	548
23	582	2,700	4,570	7,270	2,700	3,550	*2,900	1,920	886	2,300	776	669
24	582	3,150	5,030	5,650	2,650	3,200	3,000	1,760	886	1,920	849	794
25	599	4,360	5,310	5,310	2,650	2,950	3,250	2,280	886	1,720	1,060	722
26	565	5,100	5,310	5,520	2,750	3,890	3,150	3,000	961	1,760	2,720	652
27	616	*5,660	4,820	5,940	3,930	*4,750	2,800	3,550	1,200	2,100	3,860	634
28	652	6,150	4,630	6,550	5,610	5,800	2,450	3,730	1,370	1,690	4,510	616
29	634	6,950	5,100	7,270	-	6,790	2,940	3,550	2,040	1,200	5,030	565
30	599	7,930	5,450	7,930	-------	7,510	4,440	3,000	1,960	961	5,730	532
31	599	-------	5,660	8,500	-------	8,300	-------	3,100	-------	849	6,870	-------
Total	42,468	64,734	201,150	167,420	136,680	161,940	175,170	218,430	44,742	45,203	56,713	35,846
Mean	1,370	2,158	6,489	5,401	4,881	5,224	5,839	7,046	1,491	1,458	1,829	1,195
Cfsm	0.573	0.903	2.72	2.26	2.04	2.19	2.44	2.95	0.624	0.610	0.765	0.500
In.	0.66	1.01	3.13	2.61	2.13	2.52	2.73	3.40	0.70	0.70	0.88	0.56

Calendar year 1957: Max 10,600 Min 156 Mean 2,431 Cfsm 1.02 In. 13.82
Water year 1957-58: Max 16,100 Min 516 Mean 3,700 Cfsm 1.55 In. 21.03

* Discharge measurement made on this day.

895. Neuse River at Kinston, N. C.

Location.--Lat 35°15'30", long 77°35'10", on left bank at Kinston, Lenoir County, 600 ft downstream from bridge on State Highway 11 and at mile 90.

Drainage area.--2,690 sq mi, approximately.

Records available.--February 1930 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 10.90 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Nov. 25, 1934, chain gage at highway bridge 1 mile downstream at datum 0.80 ft lower.

Average discharge.--28 years, 2,783 cfs.

Extremes.--Maximum discharge during year, 15,800 cfs May 17 (gage height, 18.70 ft); minimum, 578 cfs Sept. 21 (gage height, 3.40 ft).
1930-58: Maximum discharge, 25,900 cfs Sept. 27, 1945; maximum gage height, 22.44 ft Sept. 27, 1945; minimum discharge, 124 cfs Sept. 26, 1932 (gage height, 1.29 ft, site and datum then in use).
Maximum stage known, 25.0 ft July 1919, present site and datum (discharge, about 39,000 cfs), from information by North Carolina State Highway Commission.

Remarks.--Records excellent except those for periods of once-daily gage readings, which are good.

Revisions (water years).--WSP 822: Drainage area. WSP 1333: 1931-32.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Rate of change in stage used as a factor Oct. 9, 10, Dec. 21, Mar. 12, Apr. 23, May 20-23, July 17, 20, 30, Aug. 10, 26-28, Sept. 5, 6)

3.4	578	14.0	7,390
4.0	826	16.0	10,100
6.0	1,730	18.8	16,100
10.0	4,000		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,280	718	7,390	6,240	7,970	5,240	7,850	3,860	3,670	2,280	1,040	5,320
2	2,400	804	7,970	6,420	8,470	6,160	8,740	4,490	3,550	1,980	976	5,900
3	3,120	826	8,880	6,420	8,880	6,940	9,320	5,240	3,240	1,590	934	6,420
4	3,610	826	9,620	6,330	9,020	7,610	9,470	5,990	2,600	1,310	1,170	6,330
5	3,860	912	10,400	5,990	8,740	7,970	9,320	6,620	*2,180	1,170	1,630	4,100
6	4,070	*912	10,600	5,400	7,970	8,470	8,880	7,270	2,030	1,040	1,780	2,120
7	4,210	934	10,600	4,630	6,940	8,880	8,090	8,340	1,980	1,020	2,280	1,400
8	4,070	912	10,400	4,350	5,990	9,020	7,390	9,020	1,980	976	2,600	1,120
9	2,950	869	9,940	4,350	5,240	9,170	6,720	9,170	1,930	998	2,450	1,020
10	1,980	826	9,320	4,630	5,000	8,880	6,620	9,020	2,180	1,040	1,630	955
11	1,540	826	8,600	4,920	5,240	8,090	6,830	9,020	2,180	1,080	1,260	869
12	1,260	1,020	7,970	5,160	5,650	6,320	7,160	9,320	1,930	1,210	1,020	826
13	1,120	1,170	7,610	5,240	6,160	5,650	7,500	*10,400	1,630	1,350	912	762
14	1,020	1,120	7,390	5,240	6,620	5,000	7,850	*12,100	1,450	1,260	890	718
15	934	1,080	7,500	5,080	7,050	4,700	8,090	14,100	1,400	1,210	955	697
16	869	1,040	7,850	5,080	7,390	4,490	8,340	*15,600	1,450	1,500	1,080	697
17	783	1,120	8,090	5,320	7,160	4,350	8,470	15,800	1,500	2,180	1,170	676
18	740	1,260	*8,340	5,650	6,420	4,280	8,470	15,100	1,630	2,600	1,170	656
19	718	1,590	g8,470	6,070	5,560	4,210	8,470	13,800	1,980	2,830	1,210	636
20	676	1,980	g7,500	6,420	5,000	4,070	8,210	10,800	1,780	2,140	1,120	597
21	676	2,180	g5,930	6,940	4,420	3,860	7,850	7,540	1,500	1,930	1,170	597
22	676	2,340	g5,240	7,500	3,930	3,860	7,160	4,890	1,260	2,340	1,170	616
23	697	2,780	g4,770	7,850	3,550	3,860	5,630	3,290	1,170	2,400	1,040	656
24	656	3,300	g4,920	8,090	3,360	4,000	4,770	2,720	1,120	2,500	912	697
25	676	3,860	g5,240	8,340	3,180	4,070	4,000	2,340	1,120	2,400	998	826
26	740	4,420	g5,730	7,850	3,240	4,070	3,800	2,550	1,080	2,130	1,460	804
27	697	5,160	g6,070	7,390	3,610	4,210	3,730	3,120	1,400	1,980	2,700	762
28	697	5,820	g6,240	g6,940	4,280	4,630	3,610	3,550	1,830	2,180	*3,530	848
29	718	6,330	g6,240	g6,830	-	5,320	3,420	3,930	1,830	2,130	3,930	804
30	718	6,830	g6,070	g7,050	-------	5,900	3,420	4,070	2,130	1,510	4,420	697
31	697	-------	6,160	g7,390	-------	6,830	-------	4,000	-------	1,210	4,770	-------
Total	49,858	63,765	237,050	191,110	166,040	180,110	209,180	237,060	56,710	53,474	53,377	49,126
Mean	1,608	2,126	7,647	6,165	5,930	5,810	6,973	7,647	1,890	1,725	1,722	1,638
Cfsm	0.598	0.790	2.84	2.29	2.20	2.16	2.59	2.84	0.703	0.641	0.640	0.609
In.	0.69	0.88	3.28	2.64	2.30	2.49	2.89	3.28	0.78	0.74	0.74	0.68

Calendar year 1957: Max 10,800 Min 235 Mean 2,692 Cfsm 1.00 In. 13.60
Water year 1957-58: Max 15,800 Min 597 Mean 4,238 Cfsm 1.58 In. 21.39

* Discharge measurement made on this day.
g Discharge computed from once-daily float-tape-gage readings of U. S. Weather Bureau.

910. Nahunta Swamp near Shine, N. C.

Location (revised).--Lat 35°29'20", long 77°48'20", on right bank 10 ft downstream from bridge on county highway, 2 miles upstream from Appletree Swamp, 3½ miles north of Shine, Greene County, and 8 miles northwest of Snow Hill.

Drainage area.--77.6 sq mi.

Records available.--July 1954 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 48 ft (estimated from description of bench mark in vicinity). Prior to Apr. 1, 1955, wire-weight gage at same site and datum.

Extremes.--Maximum discharge during year, 743 cfs Feb. 28 (gage height, 8.07 ft); maximum gage height, 8.18 ft Dec. 11; minimum discharge, 10 cfs Oct. 21-24.
1954-58: Maximum discharge, 2,050 cfs Sept. 20, 1955 (gage height, 12.37 ft); minimum, 1.0 cfs Oct. 7, 8, 1954 (gage height, 0.80 ft).

Remarks.--Records fair.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 20 to Dec. 17, Mar. 25-29, 31, Apr. 1-4, 6-14, 16, 17)

Oct. 1 to Dec. 17				Dec. 18 to Sept. 30			
1.3	8.6	4.0	164	1.2	13	3.0	112
1.5	14.5	6.0	382	1.4	20	5.0	301
2.0	34	8.0	685	2.0	47	8.0	726
3.0	85						

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	89	26	219	153	116	630	*466	398	30	18	13	39
2	174	36	130	153	124	394	324	312	34	16	13	32
3	64	27	92	132	116	237	217	198	*37	15	27	28
4	38	*22	99	116	104	184	166	136	33	14	368	26
5	30	20	92	104	97	148	148	104	28	14	85	25
6	28	18	75	97	100	132	315	126	27	14	42	22
7	24	18	67	192	144	124	510	*533	58	15	30	20
8	21	18	67	*378	294	116	385	495	40	14	26	19
9	19	31	179	252	312	130	246	385	30	21	26	17
10	17	29	417	176	232	180	184	221	26	86	21	16
11	16	23	585	148	*166	*144	460	132	23	44	18	16
12	14	21	301	128	140	124	361	104	21	28	17	16
13	14	21	189	116	128	120	227	100	21	24	38	18
14	13	22	150	302	112	*153	166	80	20	23	*35	16
15	12	28	134	301	120	132	144	68	21	26	22	16
16	12	34	122	222	162	112	162	61	36	37	130	15
17	12	50	118	171	128	100	162	57	26	*18	62	15
18	14	75	108	144	100	100	128	52	20	15	33	14
19	13	99	104	124	90	153	112	46	18	14	25	14
20	11	66	161	112	*90	158	97	44	17	56	18	13
21	10	48	274	108	90	128	87	55	17	269	16	19
22	10	40	200	132	90	108	88	44	20	48	14	51
23	10	182	148	116	90	94	124	38	23	28	35	27
24	14	*207	128	113	86	86	97	36	23	23	108	20
25	27	196	116	430	84	209	82	44	19	48	133	18
26	20	*315	239	*385	171	398	71	74	17	27	*534	18
27	14	175	277	279	529	*336	65	56	78	20	261	18
28	13	110	189	194	726	242	81	43	54	16	120	30
29	13	134	308	148	-	176	274	58	28	15	81	21
30	13	239	248	132	--------	144	404	41	21	14	57	18
31	14	--------	176	*120	--------	370	--------	34	--------	14	44	--------
Total	793	2,330	5,712	5,678	4,741	5,862	6,353	4,175	866	1,034	2,452	637
Mean	25.6	77.7	184	183	169	189	212	135	28.9	33.4	79.1	21.2
Cfsm	0.330	1.00	2.37	2.36	2.18	2.44	2.73	1.74	0.372	0.430	1.02	0.273
In.	0.38	1.12	2.74	2.72	2.27	2.81	3.04	2.00	0.42	0.50	1.18	0.31

Calendar year 1957: Max 585 Min 2.5 Mean 58.5 Cfsm 0.754 In. 10.24
Water year 1957-58: Max 726 Min 10 Mean 111 Cfsm 1.43 In. 19.49

Peak discharge (base, 390 cfs).--Dec. 11 (1:30 a.m.) 721 cfs (8.18 ft); Jan. 8 (3:30 a.m.) 438 cfs (6.07 ft); Jan. 25 (2 p.m.) 480 cfs (6.45 ft); Feb. 28 (8 a.m.) 743 cfs (8.07 ft); Mar. 26 (3:30 a.m.) 411 cfs (5.64 ft); Mar. 31 (9 p.m.) 585 cfs (6.82 ft); Apr. 6 (11 p.m.) 585 cfs (6.84 ft); Apr. 11 (12:30 p.m.) 495 cfs (6.22 ft); Apr. 30 (12:30 p.m.) 466 cfs (6.27 ft); May 7 (1 p.m.) 585 cfs (7.10 ft); July 21 (3:30 a.m.) 510 cfs (6.56 ft); Aug. 4 (6:30 a.m.) 510 cfs (6.62 ft); Aug. 26 (8 a.m.) 615 cfs (7.32 ft).

* Discharge measurement made on this day.

915. Contentnea Creek at Hookerton, N. C.

Location.--Lat 35°25'40", long 77°35'05", on right bank at Hookerton, Greene County, 0.3 mile upstream from bridge on State Highway 123 and 2½ miles upstream from Wheat Swamp Creek.

Drainage area.--729 sq mi.

Records available.--November 1928 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 16 ft (from topographic map). Prior to Nov. 26, 1934, staff gage at site 200 ft downstream at same datum.

Average discharge.--29 years (1929-58), 721 cfs.

Extremes.--Maximum discharge during year, 4,890 cfs May 13 (gage height, 13.96 ft); minimum, 92 cfs Oct. 24 (gage height, 2.83 ft).
1928-58: Maximum discharge, 11,100 cfs Oct. 6, 1929 (gage height, 18.90 ft); minimum, 15 cfs Oct. 28, 1933 (gage height, 1.22 ft).
Maximum stage known, 23.3 ft in September 1928, from floodmark. High water of autumn 1924 was at practically the same stage.

Remarks.--Records fair.

Revisions (water years).--WSP 1333: 1930-35. WSP 1383: Drainage area. WSP 1503: 1932, 1951.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Rate of change in stage used as a factor Oct. 6-8, Nov. 18, 19, 23-26, Feb. 26-28, Mar. 10, Apr. 21, 22, 30, May 1, 16-20, June 6, 17, 20, 21, 27, 28, July 2, 3, 21, 23, Aug. 4-6, 10, 11, 17, 24, 26, 27, Sept. 4-7)

Oct. 1-8		Oct. 9 to Sept. 30			
5.0	361	2.8	90	11.0	1,630
6.0	514	4.0	198	12.0	2,150
9.0	1,060	6.0	436	13.0	3,080
		9.0	985	14.0	4,890

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	816	128	2,030	2,150	2,450	2,290	*3,210	1,340	590	558	128	1,860
2	870	174	2,090	2,150	2,290	2,840	3,500	1,590	590	401	115	1,910
3	924	188	2,090	2,090	2,090	3,350	3,350	1,860	574	279	113	1,860
4	906	183	2,030	2,030	1,760	3,660	3,080	2,030	659	228	352	1,430
5	816	178	1,860	1,910	1,550	3,660	2,840	2,090	*659	188	741	767
6	656	164	1,710	1,710	1,350	3,500	2,540	2,090	500	169	677	367
7	498	160	1,630	1,590	1,200	3,210	2,290	2,220	436	164	574	258
8	371	156	1,510	1,590	1,200	2,730	2,220	2,150	394	156	558	223
9	288	156	1,470	1,630	1,320	2,220	2,220	2,220	422	156	556	198
10	250	164	1,550	1,670	1,550	1,720	2,290	2,540	465	164	331	174
11	218	164	1,860	1,760	*1,810	1,510	2,450	3,210	465	256	214	160
12	198	164	2,150	1,810	2,030	1,350	2,540	4,200	408	256	164	151
13	174	178	2,540	1,810	2,220	1,260	2,450	4,640	330	203	142	142
14	160	223	2,840	1,910	2,290	1,230	2,370	*4,410	272	183	*142	142
15	146	234	2,960	1,970	2,220	1,230	2,220	3,660	244	164	142	133
16	138	218	3,080	1,970	2,030	1,200	2,090	2,700	272	164	138	128
17	133	239	2,840	2,030	1,810	1,170	1,910	2,020	350	193	234	124
18	133	302	*2,540	2,030	1,630	1,110	1,760	1,430	480	*188	294	113
19	128	432	2,150	2,090	1,430	1,080	1,630	896	510	203	272	105
20	124	480	1,860	2,150	*1,290	1,080	1,430	616	414	218	218	100
21	112	450	1,670	2,090	1,170	1,080	1,170	542	302	342	169	102
22	106	408	1,590	2,030	1,060	1,110	978	495	256	510	142	138
23	96	475	1,590	1,810	1,030	1,140	*890	436	228	311	124	203
24	95	*798	1,630	1,630	935	1,140	790	394	218	244	256	213
25	115	1,020	1,670	1,590	850	1,140	751	381	208	208	330	193
26	128	1,350	1,760	*1,670	864	1,230	770	394	198	218	694	188
27	128	1,470	1,970	1,860	1,220	1,390	770	450	294	244	1,080	178
28	124	1,590	2,030	2,090	1,860	1,630	790	558	447	266	1,260	198
29	124	1,710	2,150	2,290	-	1,860	830	641	526	234	1,470	178
30	115	1,860	2,150	2,450	-------	2,220	1,040	695	590	183	1,590	160
31	108	-------	2,150	*2,540	-------	2,730	-------	641	-------	151	1,760	-------
Total	9,198	15,416	63,150	60,100	44,509	58,070	57,169	53,539	12,301	7,402	14,982	12,096
Mean	297	514	2,037	1,939	1,590	1,873	1,906	1,727	410	239	483	403
Cfsm	0.407	0.705	2.79	2.66	2.18	2.57	2.61	2.37	0.562	0.328	0.663	0.553
In.	0.47	0.79	3.22	3.07	2.27	2.96	2.92	2.73	0.63	0.38	0.76	0.62

Calendar year 1957: Max 3,080 Min 27 Mean 625 Cfsm 0.857 In. 11.63
Water year 1957-58: Max 4,640 Min 95 Mean 1,118 Cfsm 1.53 In. 20.82

* Discharge measurement made on this day.

917. Little Contentnea Creek near Farmville, N. C.

Location.--Lat 35°32'41", long 77°30'41", on right bank 5 ft downstream from bridge on U. S. Highway 264, 1½ miles upstream from Middle Swamp and 5½ miles southeast of Farmville, Pitt County.

Drainage area.--93.3 sq mi.

Records available.--October 1956 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 30 ft (from topographic map). Prior to Aug. 19, 1958, wire-weight gage at same site and datum.

Extremes.--Maximum discharge observed during year, 1,380 cfs Feb. 28 (gage height, 14.33 ft); minimum discharge, 4.0 cfs Sept. 20, 21 (gage height, 7.24 ft).
1956-58: Maximum discharge observed, that of Feb. 28, 1958; minimum discharge, 0.1 cfs Aug. 11, 1957 (gage height, 6.43 ft).
Floods in August and September 1955 reached stages of 18.9 and 18.5 ft, respectively.

Remarks.--Records fair except those for periods of doubtful gage-height record, which are poor.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

7.2	3.5	10.0	142
7.5	7.8	11.0	262
8.0	19	12.0	460
8.5	38	13.0	750
9.0	64	14.1	1,240

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	282	29	442	247	*137	1,140	668	327	14	12	11	49
2	310	33	365	207	132	790	575	232	13	7.6	7.1	32
3	365	37	286	190	123	575	d300	158	44	5.3	6.1	23
4	310	d25	232	158	113	d300	d100	107	54	4.5	407	18
5	232	d22	196	124	105	d240	d180	89	32	8.2	434	16
6	142	d20	174	111	98	d200	196	109	*20	38	220	13
7	91	d19	163	131	106	d180	262	512	16	14	88	12
8	72	d19	174	317	180	d160	376	665	14	10	37	9.8
9	48	d40	224	472	254	d170	236	510	12	8.2	22	8.6
10	39	35	560	d350	376	226	202	310	11	10	16	7.5
11	32	d30	910	d250	345	190	254	196	9.6	18	12	7.1
12	26	d27	*790	d200	247	158	278	123	8.2	46	16	6.6
13	20	d26	590	d180	180	*132	254	158	6.6	30	41	6.8
14	18	d25	392	d350	d150	*137	202	115	6.0	17	22	6.3
15	18	d35	254	522	d130	126	152	73	5.8	17	11	5.8
16	18	66	196	448	174	111	128	54	14	16	49	5.5
17	18	109	*168	336	152	105	114	49	36	14	60	5.3
18	17	142	147	247	137	97	103	32	26	15	48	5.1
19	15	174	132	142	116	d120	85	23	13	16	23	4.7
20	14	152	d150	99	89	d160	72	21	8.8	19	14	4.2
21	13	118	d200	93	85	d140	68	21	7.6	179	11	7.7
22	12	96	d180	89	86	d120	65	18	7.1	190	7.8	30
23	12	174	d160	84	79	101	*71	16	7.6	62	11	14
24	12	440	d150	82	74	113	61	15	7.3	38	20	11
25	d20	590	d140	109	74	208	56	26	6.1	32	37	9.8
26	d17	750	240	368	144	*455	50	35	5.4	25	328	7.8
27	d15	790	310	448	563	548	42	24	34	20	522	12
28	d14	810	345	*355	1,240	498	36	19	43	18	466	45
29	d14	770	365	254	-	d350	120	18	20	16	272	35
30	15	675	365	196	--------	d250	302	17	16	15	136	15
31	20	--------	302	152	--------	331	--------	16	--------	14	76	--------
Total	2,251	6,278	9,302	7,311	5,689	8,431	5,608	4,088	518.1	934.8	3,431.0	433.6
Mean	72.6	209	300	236	203	272	187	132	17.3	30.2	111	14.5
Cfsm	0.778	2.24	3.22	2.53	2.18	2.92	2.00	1.41	0.185	0.324	1.19	0.155
In.	0.90	2.50	3.71	2.91	2.27	3.36	2.24	1.63	0.21	0.37	1.37	0.17

Calendar year 1957: Max 910 Min 0.1 Mean 93.0 Cfsm 0.997 In. 13.53
Water year 1957-58: Max 1,240 Min 4.2 Mean 149 Cfsm 1.60 In. 21.64

* Discharge measurement made on this day.
d Doubtful gage-height record; discharge estimated on basis of weather records and records for nearby streams.

920. Swift Creek near Vanceboro, N. C.

Location.--Lat 35°20'42", long 77°11'44", on left bank at highway bridge, 2½ miles upstream from bridge on State Highway 118, 2½ miles downstream from Clayroot Swamp, and 3½ miles northwest of Vanceboro, Craven County.

Drainage area.--182 sq mi.

Records available.--January 1950 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 5 ft (from topographic map). Prior to Jan. 17, 1951, staff gage at same site and datum.

Average discharge.--8 years, 142 cfs.

Extremes.--Maximum discharge during year, 1,120 cfs Mar. 3 (gage height, 7.30 ft); maximum gage height, 7.51 ft Dec. 13; minimum discharge, 6.1 cfs Aug. 3 (gage height, 2.99 ft).

1950-58: Maximum discharge, 6,060 cfs Sept. 22, 1955 (gage height, 13.67 ft); no flow Aug. 8-29, Oct. 4 to Nov. 9, 1954.

Flood in 1909 reached a stage of 16 ft, and flood in 1928 reached a stage of 11.7 ft, from information by local resident.

Remarks.--Records fair except those for period of no gage-height record, which are poor. Records of chemical analyses and water temperatures for the water year 1958 are given in WSP 1571.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 25 to Nov. 19, Jan. 9-10)

Oct. 1 to Nov. 18, Jan. 11 to Sept. 30

3.0	6.2	4.5	100
3.2	9.6	5.0	210
3.6	19	6.0	540
3.9	31	7.0	970
4.2	55	7.5	1,220

Nov. 19 to Jan. 10

5.0	210
6.0	504
7.0	890
7.5	1,090

Note.--Same as preceding table above 5.0 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*560	50	1,010	575	302	1,040	*660	440	73	48	7.6	70
2	680	65	970	454	271	1,100	945	406	70	36	6.7	52
3	720	119	890	396	253	1,100	1,020	293	349	30	6.5	45
4	720	111	710	338	230	995	895	244	680	25	20	37
5	600	92	575	290	202	740	620	198	580	21	157	27
6	482	*80	487	248	188	520	448	198	437	19	75	22
7	560	70	399	260	185	388	420	*481	293	19	31	20
8	640	63	341	499	244	314	454	870	198	21	22	18
9	520	63	362	830	372	268	372	1,040	139	18	17	16
10	340	59	612	990	406	284	299	1,040	104	15	14	14
11	230	60	950	920	330	359	268	820	77	14	12	13
12	173	56	1,070	720	277	340	336	520	57	14	9.2	12
13	133	53	1,090	520	244	*293	318	305	51	16	8.2	11
14	110	51	1,090	500	216	284	256	210	42	44	*7.0	11
15	93	52	1,010	740	202	336	210	157	36	37	16	11
16	80	55	830	920	210	318	190	123	34	24	52	10
17	72	61	*575	995	247	268	185	98	49	20	52	10
18	69	86	405	845	221	224	178	80	35	31	52	9.8
19	69	200	338	620	185	216	159	66	28	48	42	9.6
20	69	386	309	444	157	238	143	56	24	25	26	9.6
21	62	405	321	352	*143	244	129	55	21	20	19	9.6
22	53	338	365	308	137	218	115	55	21	22	14	36
23	48	301	353	293	137	188	110	50	23	17	11	27
24	47	437	301	274	135	166	106	43	22	13	14	24
25	50	670	265	352	129	180	95	44	20	15	86	21
26	53	*870	279	620	150	358	85	75	19	16	146	20
27	61	970	437	780	395	600	75	121	38	15	343	38
28	55	990	650	780	800	640	69	92	181	12	448	90
29	50	*1,030	730	600	-	520	83	97	159	9.6	280	66
30	45	1,030	710	437	-------	412	238	146	75	12	190	54
31	43	-------	690	352	-------	392	-------	100	-------	9.4	110	-------
Total	7,487	8,873	19,124	17,252	6,968	13,543	9,481	8,523	3,935	686.0	2,294.2	811.6
Mean	242	296	617	557	249	437	316	275	131	22.1	74.0	27.1
Cfsm	1.33	1.63	3.39	3.06	1.37	2.40	1.74	1.51	0.720	0.121	0.407	0.149
In.	1.53	1.81	3.91	3.53	1.42	2.77	1.94	1.74	0.80	0.14	0.47	0.17

Calendar year 1957: Max 1,200 Min 1.0 Mean 186 Cfsm 1.02 In. 13.89
Water year 1957-58: Max 1,100 Min 6.5 Mean 271 Cfsm 1.49 In. 20.23

* Discharge measurement made on this day.

Note.--No gage-height record Aug. 29 to Sept. 30; discharge estimated on basis of recorded range in stage, weather records, and records for nearby stations.

925. Trent River near Trenton, N. C.

Location.--Lat 35°03'54", long 77°27'25", on left bank 50 ft downstream from Free Bridge, 800 ft downstream from Little Chinquapin Branch, 1½ miles southwest of Phillips Crossroads, and 6 miles west of Trenton, Jones County.

Drainage area.--168 sq mi.

Records available.--January 1951 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 18.75 ft above mean sea level (unadjusted). Prior to Mar. 21, 1951, wire-weight gage on bridge 50 ft upstream at same datum.

Average discharge.--7 years, 158 cfs.

Extremes.--Maximum discharge during year, 1,330 cfs June 5 (gage height, 12.45 ft); minimum, 6.6 cfs Aug. 24, 25 (gage height, 2.69 ft).
1951-58: Maximum discharge, 9,100 cfs Sept. 21, 1955 (gage height, 17.84 ft); minimum, 1.3 cfs Oct. 11-15, 1954.
Flood in 1928 reached a stage of 17.3 ft (discharge, 7,600 cfs), from information furnished by North Carolina State Highway Commission.

Remarks.--Records good. Records of chemical analyses and water temperatures for the water year 1958 are given in WSP 1571.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to May 9				May 10 to Sept. 30			
3.0	17	9.0	488	2.7	6.8	8.0	329
4.0	65	11.0	880	3.0	14	9.0	456
5.0	123	12.2	1,260	4.0	51	11.0	880
7.0	275			5.0	106	12.4	1,330

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*320	23	650	688	350	772	*597	81	91	362	26	351
2	350	35	650	614	301	797	*749	84	94	310	22	229
3	370	44	614	532	267	708	823	256	441	229	21	124
4	370	48	548	447	241	614	728	422	1,000	142	22	76
5	350	*44	488	390	217	517	614	380	1,330	82	26	56
6	310	40	411	320	201	434	488	310	1,120	64	29	42
7	258	38	350	323	201	370	411	590	743	64	25	33
8	179	36	292	474	217	301	350	940	524	70	20	27
9	132	38	322	*580	250	258	301	1,060	426	66	17	22
10	105	40	512	669	275	275	258	970	398	61	14	18
11	84	43	756	688	284	292	233	743	340	71	13	16
12	70	43	1,090	614	275	*292	217	560	259	74	11	14
13	61	40	1,260	517	250	284	201	385	187	59	*11	12
14	53	40	1,120	517	225	320	175	264	124	47	11	12
15	46	42	880	580	209	340	153	176	88	62	10	11
16	42	45	669	669	241	350	153	128	76	76	9.7	10
17	38	65	*532	749	267	330	194	97	76	67	9.5	10
18	36	87	434	708	258	301	225	79	75	54	9.1	9.3
19	37	123	360	614	225	292	217	65	70	44	8.7	8.9
20	34	160	301	502	201	310	194	55	61	36	8.3	8.5
21	32	171	284	411	186	320	164	52	51	29	7.8	8.1
22	30	179	284	350	175	310	138	53	46	24	7.4	13
23	26	226	284	301	164	284	126	49	54	21	7.0	26
24	25	340	284	275	157	241	*114	43	66	*20	6.8	26
25	24	*422	284	320	146	267	102	39	68	58	7.6	21
26	25	532	340	390	168	340	90	45	64	115	20	17
27	26	632	460	*474	422	411	81	53	111	112	128	37
28	24	650	548	564	614	447	73	52	251	79	*314	223
29	22	650	650	564	-	434	70	76	310	57	524	292
30	20	*650	708	502	--------	400	76	115	351	42	597	301
31	19	--------	728	422	--------	432	--------	106	--------	32	489	--------
Total	3,518	5,526	17,093	15,768	6,987	12,043	8,315	8,328	8,895	2,629	2,431.9	2,053.8
Mean	113	184	551	509	250	388	277	269	296	84.8	78.4	68.5
Cfsm	0.673	1.10	3.28	3.03	1.49	2.31	1.65	1.60	1.76	0.505	0.467	0.408
In.	0.78	1.22	3.78	3.49	1.55	2.67	1.84	1.84	1.97	0.58	0.54	0.45

Calendar year 1957: Max 1,260 Min 3.5 Mean 142 Cfsm 0.845 In. 11.46
Water year 1957-58: Max 1,330 Min 6.8 Mean 256 Cfsm 1.52 In. 20.71

* Discharge measurement made on this day.

930. New River near Gum Branch, N. C.

Location.--Lat 34°51'05", long 77°31'05", on right bank 5 ft downstream from highway bridge, half a mile downstream from Jenkins Swamp, 1⅔ miles southwest of Gum Branch, Onslow County, and 3¾ miles southeast of Richlands.

Drainage area.--74.5 sq mi.

Records available.--August 1949 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 3 ft above mean sea level (Corps of Engineers bench mark). Prior to Mar. 23, 1950, staff gage at same site and datum.

Average discharge.--9 years, 91.2 cfs.

Extremes.--Maximum discharge during year, 1,180 cfs May 8 (gage height, 11.65 ft); minimum, 7.5 cfs Sept. 20, 21 (gage height, 0.93 ft).
1949-58: Maximum discharge, 7,900 cfs Sept. 20, 1955 (gage height, 19.99 ft, from floodmark); minimum, 1.8 cfs Oct. 7, 1954 (gage height, 0.50 ft).
Flood in 1908 reached a stage of about 18 ft, from information by local resident.

Remarks.--Records good.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Sept. 30)

Oct. 1 to May 8				May 9 to Sept. 30	
1.3	13	5.0	217	0.9	7.0
1.6	22	7.0	410	1.3	16
2.4	56	10.0	860	1.8	33
3.0	87	12.0	1,280	2.4	56

Note.--Same as preceding table above 2.4 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	217	19	345	257	138	620	*878	66	38	87	40	26
2	214	39	315	210	135	413	828	62	41	61	35	38
3	141	35	230	203	129	285	546	86	211	49	35	32
4	87	26	172	175	116	249	330	302	501	40	37	23
5	57	*22	152	152	107	217	233	296	432	45	36	19
6	54	21	*132	132	101	182	203	189	251	123	29	16
7	51	19	116	177	110	158	217	586	305	95	26	14
8	40	19	107	380	129	142	203	1,160	335	68	23	13
9	33	38	169	*515	142	146	168	867	206	50	20	11
10	28	40	437	400	126	225	146	480	120	40	20	11
11	25	31	899	272	110	249	138	251	76	41	22	9.8
12	22	26	906	203	*101	*203	132	175	55	36	19	9.8
13	20	24	638	175	95	175	116	149	47	32	*20	10
14	18	24	374	278	98	189	104	120	40	43	27	10
15	17	27	249	443	104	196	98	95	33	129	21	9.8
16	16	40	203	460	161	168	128	78	29	110	17	9.6
17	16	102	189	335	175	142	217	66	26	60	14	9.2
18	18	135	161	241	132	132	233	58	23	121	14	8.7
19	22	132	146	196	110	168	182	51	21	106	13	8.2
20	18	116	138	168	101	203	138	46	20	60	12	7.8
21	16	98	155	152	95	189	113	60	21	46	12	7.8
22	15	74	175	155	92	155	98	68	40	36	11	37
23	14	107	158	152	90	126	92	52	110	29	11	62
24	14	192	135	138	84	110	*81	44	81	*62	11	27
25	17	*249	123	200	81	177	74	42	55	580	11	18
26	18	275	164	275	121	348	65	64	40	696	32	14
27	16	285	263	*266	378	410	61	78	196	344	*95	112
28	15	233	325	203	684	366	58	64	410	149	138	774
29	14	196	315	164	-	305	58	52	310	92	97	970
30	14	*256	366	149	--------	225	64	51	160	64	48	603
31	15	--------	345	146	--------	436	--------	45	--------	50	32	--------
Total	1,282	2,900	8,602	7,372	4,045	7,307	6,002	5,803	4,233	3,544	978	2,920.7
Mean	41.4	96.7	277	238	144	236	200	187	141	114	31.5	97.4
Cfsm	0.556	1.30	3.72	3.19	1.93	3.17	2.68	2.51	1.89	1.53	0.423	1.31
In.	0.64	1.45	4.29	3.68	2.02	3.65	3.00	2.90	2.11	1.77	0.49	1.46

Calendar year 1957: Max 906 Min 4.2 Mean 86.9 Cfsm 1.17 In. 15.82
Water year 1957-58: Max 1,160 Min 7.8 Mean 151 Cfsm 2.03 In. 27.46

Peak discharge (base, 800 cfs).--Dec. 11 (12 p.m.) 990 cfs (10.69 ft); Apr. 1 (6 p.m.) 932 cfs (10.45 ft); May 8 (11 a.m.) 1,180 cfs (11.65 ft); July 26 (1 a.m.) 828 cfs (9.75 ft); Sept. 29 (3:30 a.m.) 1,050 cfs (10.99 ft).

* Discharge measurement made on this day.

935. Haw River near Benaja, N. C.

Location.--Lat 36°15', long 79°34', on left bank 200 ft upstream from site of old High Rock Mill, 500 ft upstream from highway bridge, half a mile upstream from Rockingham-Guilford County line, 6 miles downstream from Troublesome Creek, and 6 miles east of Benaja, Rockingham County.

Drainage area.--168 sq mi.

Records available.--October 1928 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 629 ft (by barometer).

Average discharge.--30 years, 161 cfs.

Extremes.--Maximum discharge during year, 1,670 cfs Apr. 30 (gage height, 7.78 ft); minimum, 20 cfs Sept. 30.
1928-58: Maximum discharge, 12,300 cfs Sept. 25, 1947 (gage height, 19.22 ft, from high-water mark), from rating curve extended above 4,000 cfs on basis of slope-area measurement of peak flow; minimum, 0.6 cfs Oct. 7-9, 1954.
Flood in July 1916 reached a stage of about 17.5 ft, from floodmark on tree 500 ft below gage.

Remarks.--Records good except those for period of no gage-height record, which are poor.

Revisions (water years).--WSP 1383: 1933(M), 1941.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.0	16	3.0	320
1.2	27	5.0	810
1.5	54	8.0	1,730
2.0	121		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	276	80	320	115	167	543	423	939	99	61	42	46
2	238	79	223	110	182	435	423	543	128	54	42	42
3	163	79	172	105	182	320	364	411	152	*49	54	39
4	114	76	182	105	154	214	251	310	115	48	142	36
5	89	72	184	100	135	170	212	265	98	45	190	35
6	80	72	172	100	137	147	391	268	89	45	112	33
7	75	69	147	100	159	139	568	435	95	55	62	33
8	69	72	244	*105	178	135	618	483	98	58	49	30
9	62	84	353	96	163	132	507	411	92	56	42	27
10	59	84	387	96	135	146	411	331	137	59	39	26
11	56	78	364	100	127	146	459	234	118	54	34	25
12	56	72	240	99	121	132	399	188	95	49	40	24
13	64	72	170	93	121	131	364	163	87	65	182	25
14	61	74	150	194	115	147	278	142	79	92	121	26
15	56	95	140	223	116	147	214	126	71	78	98	26
16	55	91	130	249	121	134	232	118	70	61	132	25
17	58	91	125	196	106	121	240	116	64	52	310	25
18	75	99	120	152	108	124	210	317	59	54	353	25
19	92	168	120	124	126	161	174	288	56	61	144	23
20	86	246	115	114	123	174	156	331	54	78	80	22
21	72	278	115	124	127	159	144	232	53	69	62	27
22	66	246	140	190	142	139	179	154	95	61	54	43
23	64	347	130	196	167	127	268	124	146	50	48	40
24	70	387	120	243	170	121	299	214	149	43	50	*33
25	82	892	110	611	156	207	331	376	103	39	96	29
26	82	1,410	150	592	244	299	268	249	84	34	147	27
27	82	1,090	210	555	495	342	225	152	112	31	132	26
28	78	706	230	435	531	310	508	126	105	31	88	25
29	*72	555	220	310	-	244	1,160	159	79	29	66	22
30	70	447	150	212	-------	207	1,540	152	67	25	55	20
31	72	-------	130	170	-------	*338	-------	115	-------	23	50	-------
Total	2,694	8,211	5,763	6,214	4,808	6,291	11,816	8,472	2,849	1,609	3,116	885
Mean	86.9	274	186	200	172	203	394	273	95.0	51.9	101	29.5
Cfsm	0.517	1.63	1.11	1.19	1.02	1.21	2.35	1.62	0.565	0.309	0.601	0.176
In.	0.60	1.82	1.28	1.38	1.06	1.39	2.62	1.88	0.63	0.36	0.69	0.20

Calendar year 1957: Max 2,240 Min 13 Mean 162 Cfsm 0.964 In. 13.07
Water year 1957-58: Max 1,540 Min 20 Mean 172 Cfsm 1.02 In. 13.91

Peak discharge (base, 1,400 cfs).--Nov. 26 (8:30 a.m.) 1,500 cfs (7.32 ft); Apr. 30 (8:30 a.m.) 1,670 cfs (7.78 ft).

* Discharge measurement made on this day.
Note.--No gage-height record Dec. 12 to Jan. 8; discharge estimated on basis of weather records, recorded range in stage, and records for other streams in the basin.

938. Reedy Fork near Oak Ridge, N. C.

Location.--Lat 36°10', long 79°57', on left bank at downstream side of county road bridge, three-quarters of a mile downstream from Beaver Creek and 2 miles east of Oak Ridge, Guilford County.

Drainage area.--19.9 sq mi.

Records available.--October 1955 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 771.30 ft above mean sea level, datum of 1929, unadjusted. Prior to Dec. 13, 1955, wire-weight gage at same site and datum

Extremes.--Maximum discharge during year, 746 cfs Nov. 25 (gage height, 8.76 ft); minimum, 3.7 cfs Sept. 30 (gage height, 2.06 ft).
1955-58: Maximum discharge, 767 cfs Sept. 27, 1956 (gage height, 8.94 ft); minimum, 2.8 cfs July 29, 1956 (gage height, 1.68 ft).

Remarks.--Records fair except those for periods of ice effect or indefinite stage-discharge relation, which are poor.

Rating tables, water year 1957-58, except periods of ice effect or indefinite stage-discharge relation (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to July 7				July 8 to Sept. 30			
1.9	8.3	5.0	156	2.0	2.5	2.6	26
2.0	11	6.0	251	2.1	4.5	3.0	52
4.0	92	7.0	384	2.3	11	4.0	102

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	11	24	15	28	37	45	35	14	e9	6.4	9.9
2	20	11	20	13	26	30	29	44	21	*e10	5.6	8.2
3	16	9.6	18	12	20	27	*24	68	15	e9	35	7.5
4	14	9.9	24	12	18	24	22	34	13	e8.5	14	8.6
5	12	10	18	11	18	22	21	27	13	e8.5	9.6	8.2
6	10	9.9	16	11	20	20	169	44	13	e9	7.9	7.2
7	9.9	10	16	13	28	20	58	56	12	e10	7.9	7.2
8	9.6	12	82	11	24	19	35	44	12	8.6	7.5	7.5
9	9.4	12	48	11	20	22	31	30	14	10	6.4	6.1
10	8.3	9.9	28	11	18	20	49	24	18	9.9	5.8	6.9
11	8.3	9.9	24	10	18	18	62	22	12	8.2	6.9	6.7
12	9.9	9.1	19	10	17	16	37	21	15	8.2	*5.6	6.9
13	9.1	8.6	17	11	17	19	30	*19	12	13	11	5.6
14	8.8	9.9	17	40	16	20	27	18	11	19	14	5.6
15	*9.4	11	17	25	17	16	26	17	13	11	9.7	6.1
16	9.1	10	16	20	17	15	32	16	11	12	26	4.8
17	11	11	14	16	b13	*16	25	26	9.6	*26	58	5.8
18	16	14	13	14	b13	18	23	41	9.4	67	15	4.5
19	11	*49	14	13	b14	18	21	24	8.8	41	11	5.0
20	9.6	30	16	12	*b15	16	20	31	8.9	30	8.2	4.8
21	9.6	19	19	20	15	15	21	22	8.8	27	8.6	7.9
22	9.6	17	13	27	20	14	35	18	14	16	7.5	9.6
23	9.9	121	13	17	20	14	47	22	e18	12	25	*5.8
24	13	51	12	45	18	14	28	32	e12	11	14	5.6
25	12	361	13	*201	15	43	30	20	e12	9.6	52	5.8
26	10	*157	37	50	69	42	24	18	e12	9.2	30	5.8
27	10	46	25	35	130	30	24	16	e16	8.9	15	5.3
28	9.9	49	20	28	66	24	335	16	e13	8.9	11	4.8
29	9.6	38	17	25	-	23	106	16	e10	7.2	11	5.3
30	10	28	16	24	--------	24	48	14	e9	6.4	9.9	4.3
31	11	--------	15	22	--------	86	--------	13	--------	7.2	9.9	--------
Total	351.0	1,154.8	661	785	730	742	1,484	848	380.5	451.3	465.4	193.3
Mean	11.3	38.5	21.3	25.3	26.1	23.9	49.5	27.4	12.7	14.6	15.0	6.44
Cfsm	0.568	1.93	1.07	1.27	1.31	1.20	2.49	1.38	0.638	0.734	0.754	0.324
In.	0.66	2.16	1.24	1.47	1.36	1.39	2.77	1.58	0.71	0.84	0.87	0.36

Calendar year 1957: Max 417 Min 4.0 Mean 21.1 Cfsm 1.06 In. 14.43
Water year 1957-58: Max 361 Min 4.3 Mean 22.6 Cfsm 1.14 In. 15.41

Peak discharge (base, 350 cfs).--Nov. 25 (6 p.m.) 746 cfs (8.76 ft); Apr. 28 (6 p.m.) 646 cfs (8.35 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
e Stage-discharge relation indefinite; discharge estimated on basis of field notes, 1 discharge measurement, and appearance of chart.

940. Horsepen Creek at Battle Ground, N. C.

Location.--Lat 36°08'34", long 79°51'24", on right bank 10 ft downstream from highway bridge, 0.5 mile downstream from bridge on U. S. Highway 220, three-quarters of a mile north of Battle Ground, Guilford County, and 2 miles upstream from mouth.

Drainage area.--15.9 sq mi.

Records available.--October 1925 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder and Parshall flume. Datum of gage is 737.94 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Nov. 9, 1925, to July 31, 1931, water-stage recorder at site 1,000 ft upstream at datum 1.45 ft higher.

Average discharge.--33 years, 14.7 cfs.

Extremes.--Maximum discharge during year, 782 cfs Nov. 25 (gage height, 6.92 ft); minimum, 2.7 cfs Sept. 7, 8, 19, 28, 29 (gage height, 0.90 ft).
1925-58: Maximum discharge, 6,400 cfs Sept. 24, 1947 (gage height, 10.36 ft), from rating curve extended above 800 cfs on basis of contracted-opening measurement of peak flow; minimum, 0.4 cfs Oct. 7, 1954 (gage height, 0.59 ft).

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are poor.

Revisions (water years).--WSP 1383: 1926, 1927(M), 1929, 1937(m).

Rating table, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.8	2.0	4.0	80
1.0	4.4	5.0	125
1.5	13	5.5	165
2.0	24	6.0	230
3.0	47	6.5	410

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	5.2	27	11	22	25	30	26	a8	4.7	3.8	3.8
2	10	4.4	19	9.0	20	18	a19	36	a11	*4.0	3.6	3.4
3	6.4	4.3	14	8.4	14	15	*a16	45	a8	4.0	6.9	3.2
4	4.8	3.9	24	7.8	12	13	15	24	a7	3.9	7.3	3.2
5	4.1	4.0	14	8.0	12	11	15	18	a7	a4.5	5.3	3.1
6	4.0	3.8	12	7.3	13	11	110	29	a6.5	a5	4.6	3.1
7	3.8	3.9	12	*8.0	24	10	34	58	a7	a5	4.3	2.9
8	3.5	4.8	74	7.7	22	9.6	19	34	a6.5	a4.5	4.1	3.5
9	3.4	5.8	32	7.2	15	13	15	20	a8	a7	4.0	4.8
10	3.4	5.2	20	7.3	14	13	53	16	a11	5.4	3.8	4.8
11	3.4	5.0	16	6.5	13	11	66	14	a6.5	4.8	3.5	4.7
12	4.4	8.9	13	6.4	12	9.6	25	a12	a7.5	4.4	3.8	4.7
13	4.3	14	12	7.2	11	12	17	*a11	a6.5	15	*10	4.0
14	3.6	15	12	53	10	13	15	a10	a7	8.4	8.0	3.9
15	3.4	14	12	21	b12	10	15	a10	a10	7.3	5.2	3.6
16	3.5	10	12	15	b11	8.5	24	10	a7	25	7.8	3.5
17	3.8	6.4	11	11	b9	8.4	15	13	a5.5	24	19	3.1
18	6.2	6.5	11	9.4	b9	10	13	27	a5.5	23	7	2.9
19	3.8	44	11	8.2	b9	12	12	13	a5.5	11	4.7	3.8
20	3.4	13	17	8.0	10	11	11	12	5.6	7.8	4.3	3.9
21	3.2	7.5	18	22	11	9.2	11	11	5.3	7.5	3.9	4.6
22	3.2	6.9	11	30	14	8.4	34	9.6	8.5	6.5	3.8	3.9
23	3.4	114	11	14	14	8.0	45	9.0	8.4	5.2	5.1	*3.6
24	5.1	28	10	71	11	8.0	18	15	7.2	4.8	4.4	3.4
25	4.6	320	9.9	149	10	75	20	a12	6.5	4.7	31	3.2
26	4.0	105	50	34	89	36	15	a10	14	4.6	12	3.1
27	4.6	36	22	23	126	24	14	a9	12	4.4	6.7	3.1
28	4.0	53	15	18	44	17	142	a8	6.5	4.3	5.2	2.8
29	3.9	37	13	15	-	16	74	a8	5.3	4.1	4.6	2.8
30	*3.9	35	12	14	--------	24	40	a8	5.0	4.0	4.0	2.9
31	5.8	--------	11	13	--------	98	--------	a8	--------	3.8	4.0	--------
Total	144.9	924.5	557.9	630.4	593	567.7	952	545.6	225.3	232.6	205.7	107.3
Mean	4.67	30.8	18.0	20.3	21.2	18.3	31.7	17.6	7.51	7.50	6.64	3.58
Cfsm	0.294	1.94	1.13	1.28	1.33	1.15	1.99	1.11	0.472	0.472	0.418	0.225
In.	0.34	2.16	1.30	1.47	1.39	1.33	2.23	1.28	0.53	0.54	0.48	0.25

Calendar year 1957: Max 340 Min 1.8 Mean 14.7 Cfsm 0.925 In. 12.59
Water year 1957-58: Max 320 Min 2.8 Mean 15.6 Cfsm 0.981 In. 13.30

Peak discharge (base, 300 cfs).--Nov. 25 (4 p.m.) 782 cfs (6.92 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of 2 discharge measurements, weather records, recorded range in stage when available, and records for stations on nearby streams.
b Stage-discharge relation affected by ice.

945. Reedy Fork near Gibsonville, N. C.

Location.--Lat 36°11', long 79°37', on right bank a quarter of a mile downstream from Huffines Mill, 1¼ miles upstream from Buffalo Creek, and 6 miles northwest of Gibsonville, Guilford County.

Drainage area.--133 sq mi.

Records available.--September 1928 to September 1958.

Gage.--Water-stage recorder and rock-masonry control. Datum of gage is 626.88 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--30 years, 108 cfs.

Extremes.--Maximum discharge during year, 1,720 cfs Nov. 25 (gage height, 7.23 ft); minimum daily, 2.8 cfs Sept. 12.
1928-58: Maximum discharge, 11,600 cfs Sept. 25, 1947 (gage height, 20.77 ft); minimum daily, 0.4 cfs Oct. 14, 1954.
Flood in July 1916 reached a stage of 17.90 ft, from information by local resident (discharge, 8,640 cfs).

Remarks.--Records good except those for periods of no gage-height record, which are poor. Considerable diurnal fluctuation caused by powerplants above station. Flow partly regulated since 1923 by Lake Brandt (capacity, 113,256,000 cu ft) 14 miles above station and since 1943 by Richland Lake 12 miles above station. City of Greensboro diverted from Lake Brandt an average of 16.3 cfs for municipal supply and Cone Mills diverted from Richland Lake an average of 2.4 cfs during the water year.

Revisions (water years).--WSP 1303: 1929-40 (monthly and yearly runoff). WSP 1383: 1929-30, 1933(M), 1934, 1937(M), 1939-42(M), 1948.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.6	1.2	1.7	102
.7	3.0	2.0	160
.9	11	4.0	710
1.1	25	6.0	1,330
1.4	57		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	220	21	170	60	80	399	*268	447	47	30	7.6	19
2	190	21	110	56	90	214	297	214	50	26	6.7	16
3	60	21	95	52	90	174	242	217	61	*25	13	13
4	34	21	100	50	70	132	172	220	56	23	60	11
5	23	20	110	48	65	107	136	232	50	23	32	10
6	21	19	95	48	65	92	279	264	44	14	23	8.9
7	20	18	80	55	75	83	348	375	44	10	18	7.1
8	19	19	140	48	85	76	582	415	38	11	14	6.3
9	18	22	300	45	70	78	210	349	37	12	14	6.3
10	18	22	350	44	65	83	264	185	45	14	13	6.0
11	19	21	320	47	60	86	311	145	40	13	11	8.0
12	21	20	140	46	58	80	375	125	42	13	8.9	2.8
13	20	20	95	45	58	78	250	109	38	20	16	4.8
14	19	21	85	180	55	82	178	*94	35	28	28	6.3
15	21	26	80	180	56	83	114	77	30	23	28	4.8
16	20	25	75	160	58	76	136	71	29	36	103	5.2
17	*20	25	70	120	50	68	128	160	26	26	114	5.2
18	20	40	68	80	52	67	117	306	15	34	82	4.8
19	19	70	68	60	54	76	100	174	24	45	71	4.1
20	24	110	66	55	53	80	91	151	27	61	51	4.1
21	24	*120	68	60	52	76	80	121	26	67	35	6.0
22	21	109	80	100	71	65	91	102	31	55	20	7.1
23	18	246	70	90	78	57	128	236	21	43	17	7.1
24	19	195	60	200	82	53	172	242	22	33	15	*8.0
25	22	1,040	55	900	78	128	207	169	35	24	71	8.0
26	22	1,200	110	500	268	188	158	123	35	17	71	49
27	22	950	160	350	343	214	125	92	42	14	78	80
28	20	450	200	280	624	214	319	92	42	12	67	65
29	19	350	180	160	-	167	712	80	38	10	45	68
30	19	250	80	100	-------	136	954	63	33	9.3	31	19
31	20	-------	65	80	-------	256	-------	51	-------	9.3	23	-------
Total	1,052	5,492	3,745	4,299	2,905	3,768	7,544	5,701	1,103	780.6	1,187.2	470.9
Mean	33.9	183	121	139	104	122	251	184	36.8	25.2	38.3	15.7
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 1,840 Min 3.0 Mean 94.0 Cfsm - In. -
Water year 1957-58: Max 1,200 Min 2.8 Mean 104 Cfsm - In. -

Peak discharge (base, 1,800 cfs).--Nov. 25 (1 p.m.) 1,720 cfs (7.23 ft).

* Discharge measurement made on this day.
Note.--No gage-height record Oct. 1-17, Oct. 25 to Nov. 21, Nov. 26 to Jan. 8, Jan. 11 to Feb. 20; discharge estimated on basis of 2 discharge measurements, recorded range in stage, weather records, and records for other streams in basin.

950. South Buffalo Creek near Greensboro, N. C.

Location.--Lat 36°03'37", long 79°43'33", on left bank 5 ft downstream from bridge on McConnel Road, 3.8 miles east of post office in Greensboro, Guilford County, and 6 miles upstream from North Buffalo Creek.

Drainage area.--33.6 sq mi.

Records available.--August 1928 to September 1958 (discontinued). Prior to October 1952, published as Buffalo Creek near Greensboro.

Gage.--Water-stage recorder. Datum of gage is 696.2 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--30 years, 38.2 cfs.

Extremes.--Maximum discharge during year, 1,020 cfs Nov. 26 (gage height, 7.73 ft); minimum, 4.0 cfs Sept. 28.
1928-58: Maximum discharge, 10,000 cfs July 15, 1949 (gage height, 11.54 ft), from rating curve extended above 2,000 cfs on basis of contracted-opening measurement at gage heights 8.69, 10.64, and 11.54 ft; minimum, 0.2 cfs Oct. 2, 1930.

Remarks.--Records fair except those for periods of no gage-height record, which are poor. Sewage from Greensboro enters above station affecting low-water flow.

Revisions (water years).--WSP 972: 1928-30, 1932-33, 1934(M), 1935-37, 1939, 1940(M). WSP 1303: 1934, 1938, 1940-42, monthly and yearly runoff. WSP 1383: Drainage area, 1931, 1941(M).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Nov. 24-30)

2.8	4.0	5.0	103
3.0	7.8	5.5	152
3.3	18	6.0	235
3.6	32	6.5	393
4.0	49	7.0	632
4.5	70		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	92	24	58	25	61	69	142	a40	13	*a12	8.8	7.1
2	56	18	32	26	77	42	49	a70	19	11	7.6	7.4
3	25	16	26	22	38	37	38	a90	18	10	26	7.8
4	17	15	70	18	29	33	34	a45	15	9.7	40	7.8
5	13	17	54	15	28	29	40	a35	18	9.4	12	8.1
6	11	16	30	*16	30	29	158	a55	13	8.4	10	7.6
7	10	16	29	21	a90	28	193	a180	12	11	10	5.9
8	11	18	125	22	a50	26	49	a100	11	12	9.4	6.7
9	11	23	*213	17	a27	33	36	a50	25	31	7.8	7.6
10	11	15	79	16	a26	42	144	a30	59	42	6.3	7.6
11	11	13	43	18	a28	30	485	a27	18	14	6.3	7.4
12	20	15	30	16	a27	26	112	a27	19	12	7.8	7.1
13	11	15	24	21	a26	30	47	a23	14	14	12	7.1
14	*10	24	24	130	a25	40	38	a20	12	32	11	5.7
15	10	35	23	117	a29	28	41	a20	21	22	11	5.9
16	11	24	22	47	a25	22	101	a25	14	19	14	7.6
17	12	22	22	34	a24	22	a55	a80	12	90	24	7.8
18	124	21	21	26	a22	26	a35	a40	12	79	10	8.8
19	65	99	21	20	a23	39	a30	a30	12	32	9.1	a8
20	17	167	30	20	24	34	a28	21	a12	18	8.8	a9
21	14	42	80	40	31	28	a28	20	a60	20	8.8	a19
22	14	26	35	102	41	24	a90	18	338	31	8.1	a9
23	15	230	26	44	42	20	a120	17	a50	13	7.4	a7
24	36	*307	22	122	34	21	a50	47	a30	12	6.3	7.1
25	36	400	20	569	31	78	a55	208	a24	11	70	7.6
26	19	536	71	170	118	148	a40	388	a46	9.4	98	7.4
27	21	106	74	54	467	57	a45	74	a28	9.4	20	6.5
28	18	69	36	40	208	41	a270	30	a17	9.4	13	5.1
29	18	98	29	33	-	43	a140	25	a15	9.4	11	5.7
30	17	68	24	32	-------	37	a70	20	a13	8.8	9.4	7.4
31	22	-------	23	30	-------	153	-------	16	-------	8.8	7.6	-------
Total	778	2,495	1,416	1,883	1,681	1,315	2,763	1,871	970	630.7	511.5	229.8
Mean	25.1	83.2	45.7	60.7	60.0	42.4	92.1	60.4	32.3	20.3	16.5	7.66
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 1,550 Min 5.3 Mean 46.3 Cfsm - In. -
Water year 1957-58: Max 569 Min 5.1 Mean 45.3 Cfsm - In. -

Peak discharge (base, 650 cfs).--Nov. 26 (1 a.m.) 1,020 cfs (7.73 ft); Jan. 25 (11 a.m.) 740 cfs (7.20 ft); Apr. 11 (6:30 p.m.) 734 cfs (7.19 ft); May 25 (10 p.m.) 825 cfs (7.35 ft); June 21 (12 p.m.) 685 cfs (about 7.1 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of 1 discharge measurement, recorded range in stage when available, weather records, and records for North Buffalo Creek near Greensboro.

955. North Buffalo Creek near Greensboro, N. C.

Location.--Lat 36°07'13", long 79°42'30", on left bank 5 ft downstream from highway bridge, 4.2 miles upstream from mouth, and 5.8 miles northeast of post office in Greensboro, Guilford County.

Drainage area.--37.0 sq mi.

Records available.--August 1928 to September 1958.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 679 ft (from topographic map).

Average discharge.--30 years, 46.8 cfs.

Extremes.--Maximum discharge during year, 1,750 cfs Nov. 25 (gage height, 10.47 ft); minimum, 12 cfs Sept. 28 (gage height, 1.89 ft).
1928-58: Maximum discharge, 6,000 cfs Sept. 25, 1947 (gage height, 15.96 ft), from rating curve extended above 2,900 cfs on basis of contracted-opening measurement at gage heights 14.15 and 15.96 ft; minimum, 1.6 cfs Aug. 28, 1932.

Remarks.--Records good. Diurnal fluctuation at low flow caused by mills above station. Diversion into basin from Greensboro and Proximity Mills enters above station.

Revisions (water years).--WSP 1303: 1929, 1931-42, monthly and yearly runoff. WSP 1383: Drainage area, 1928(M), 1929, 1933-34(M), 1936(M), 1941(M), 1943(M), 1945(M).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.9	12	3.0	128
2.1	23	5.0	551
2.4	47	7.0	955
2.7	81		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	94	29	47	38	78	61	*82	74	22	27	18	20
2	55	23	41	33	54	45	58	111	37	*28	20	24
3	38	20	44	35	42	43	49	103	42	26	131	26
4	34	22	105	28	42	44	50	51	29	20	165	26
5	26	27	51	24	42	43	47	48	29	17	34	26
6	24	28	42	27	44	42	251	222	32	34	29	21
7	25	27	38	40	106	38	76	288	24	28	28	16
8	27	35	257	38	78	36	51	105	22	48	26	21
9	26	34	106	30	41	48	48	66	56	82	21	23
10	27	22	62	30	39	43	306	46	72	34	17	24
11	25	26	50	28	43	41	268	44	31	27	21	23
12	36	29	42	24	42	43	84	44	36	21	41	22
13	20	32	37	35	41	57	68	42	27	72	101	18
14	22	59	35	207	38	56	64	*38	22	64	34	16
15	26	41	31	69	34	34	71	40	21	40	30	22
16	26	34	33	54	38	29	104	37	23	50	50	26
17	*29	25	39	41	34	32	68	74	25	63	133	26
18	106	33	39	33	32	45	51	150	25	68	32	26
19	28	189	41	28	34	66	38	41	26	28	26	24
20	21	54	77	32	42	49	33	38	26	23	26	22
21	23	*38	65	89	46	42	37	36	19	28	26	54
22	28	36	33	98	45	35	104	34	555	36	25	25
23	29	466	31	49	42	35	122	46	47	29	21	26
24	*69	86	31	335	40	34	49	123	36	27	28	*27
25	38	944	26	472	41	211	71	376	32	26	395	24
26	28	169	132	81	400	101	44	143	75	35	77	23
27	34	67	58	58	318	61	51	45	46	32	39	21
28	26	130	40	51	110	47	345	41	27	18	32	16
29	28	75	33	50	-	48	317	36	23	18	31	20
30	29	97	34	47	-------	59	173	30	24	16	25	22
31	38	-------	40	42	-------	257	-------	24	-------	18	21	-------
Total	1,085	2,897	1,740	2,246	1,986	1,825	3,180	2,596	1,511	1,083	1,703	710
Mean	35.0	96.6	56.1	72.5	70.9	58.9	106	83.7	50.4	34.9	54.9	23.7
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 944 Min 13 Mean 61.3 Cfsm - In. -
Water year 1957-58: Max 944 Min 16 Mean 61.8 Cfsm - In. -

Peak discharge (base, 920 cfs).--Nov. 25 (3 p.m.) 1,750 cfs (10.47 ft); Jan. 25 (2:30 a.m.) 1,100 cfs (7.77 ft); Feb. 26 (9 p.m.) 1,060 cfs (7.64 ft); Apr. 10 (11 p.m.) 1,130 cfs (8.05 ft); May 25 (9 p.m.) 1,500 cfs (9.68 ft); June 22 (7:30 a.m.) 1,590 cfs (9.95 ft).

* Discharge measurement made on this day.

960. Stony Creek near Burlington, N. C.

Location.--Lat 36°11', long 79°25', on right bank a quarter of a mile upstream from highway bridge, half a mile upstream from Buttermilk Creek, 4½ miles upstream from mouth, and 6 miles north of Burlington, Alamance County.

Drainage area.--44.2 sq mi.

Records available.--July 1952 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 536.3 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--6 years, 36.8 cfs.

Extremes.--Maximum discharge during year, 2,410 cfs Nov. 25 (gage height, 12.08 ft); minimum, 0.24 cfs Sept. 30.
1952-58: Maximum gage height, 15.26 ft Oct. 16, 1954 (discharge not determined); no flow at times in most years.

Remarks.--Records good except those below 40 cfs, which are fair, and those for period of ice effect, which are poor.

Rating table, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Sept. 15-30)

0.6	0.34	1.7	24
.7	.68	2.0	44
.8	1.2	2.5	86
1.0	3.0	3.0	146
1.2	6.3	4.0	330
1.4	11	8.0	1,340

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	89	7.8	64	22	46	80	126	85	12	*3.8	0.73	1.8
2	78	8.5	40	21	72	53	61	74	13	3.1	.65	1.5
3	34	8.3	34	17	45	44	48	124	150	2.8	1.1	1.2
4	20	7.8	84	17	34	37	43	60	28	2.6	3.9	1.0
5	14	6.7	62	15	31	32	54	43	17	2.3	3.4	.89
6	11	6.1	39	14	31	29	303	182	13	2.2	1.9	.78
7	9.5	5.5	33	17	89	28	144	678	13	2.8	1.4	.73
8	8.1	6.3	224	18	151	26	57	156	11	2.7	1.1	.84
9	7.0	10	250	14	58	27	43	71	16	2.6	.99	.78
10	5.7	9.2	100	14	40	38	167	48	38	2.9	.84	.65
11	5.2	7.0	57	17	36	29	856	37	15	3.6	.78	.61
12	5.0	5.9	39	16	31	25	110	34	9.8	3.0	.78	.54
13	4.6	6.3	30	18	29	25	63	29	8.5	11	33	.48
14	5.0	7.4	28	692	25	40	47	22	7.2	28	*73	.41
15	4.4	17	27	199	26	30	39	19	6.3	9.0	9.0	.32
16	4.3	14	24	83	b24	24	61	17	6.7	5.9	68	.32
17	4.6	13	23	53	b20	22	45	27	6.1	3.6	19	.30
18	*7.0	17	20	40	b20	24	34	248	5.0	2.9	8.5	.37
19	9.2	183	21	31	*20	74	29	*46	4.4	2.7	5.4	.30
20	5.4	94	22	27	22	72	26	31	4.3	2.6	3.4	.28
21	4.4	39	39	32	25	45	23	26	4.3	2.2	2.5	.73
22	4.0	26	27	103	45	34	51	19	19	2.2	2.0	.89
23	4.1	451	22	49	68	28	129	16	13	2.1	1.8	.51
24	6.1	200	20	118	51	25	47	18	9.8	1.8	1.7	*.51
25	13	*1,080	19	1,100	40	99	41	38	7.4	1.4	15	.58
26	8.5	*658	54	136	241	108	34	92	9.0	1.1	27	.58
27	7.0	92	60	73	670	73	28	25	15	1.0	8.8	.54
28	8.8	72	37	51	165	51	303	46	8.5	.94	5.5	.37
29	7.0	79	30	40	-	43	253	46	5.5	.78	4.0	.28
30	6.3	74	25	36	-------	39	431	20	4.6	.58	2.9	.24
31	6.7	-------	22	32	-------	280	-------	15	-------	.61	2.2	-------
Total	406.9	3,211.8	1,576	3,115	2,155	1,584	3,696	2,392	480.4	114.81	310.27	19.33
Mean	13.1	107	50.8	100	77.0	51.1	123	77.2	16.0	3.70	10.0	0.644
Cfsm	0.296	2.42	1.15	2.26	1.74	1.16	2.78	1.75	0.362	0.084	0.226	0.015
In.	0.34	2.70	1.33	2.62	1.81	1.33	3.11	2.01	0.40	0.10	0.26	0.02

Calendar year 1957: Max 1,570 Min 0.11 Mean 45.6 Cfsm 1.03 In. 13.97
Water year 1957-58: Max 1,100 Min 0.24 Mean 52.2 Cfsm 1.18 In. 16.03

Peak discharge (base, 900 cfs).--Nov. 23 (8:30 p.m.) 930 cfs (6.37 ft); Nov. 25 (9 p.m.) 2,410 cfs (12.08 ft); Jan. 14 (3:30 p.m.) 1,080 cfs (6.97 ft); Jan. 25 (9 a.m.) 1,890 cfs (10.09 ft); Feb. 27 (3:30 a.m.) 1,370 cfs (8.13 ft); Apr. 11 (5:30 a.m.) 1,780 cfs (9.67 ft); May 7 (7:30 a.m.) 1,180 cfs (7.40 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

965. Haw River at Haw River, N. C.

Location.--Lat 36°05', long 79°22', on left bank at town of Haw River, Alamance County, 650 ft downstream from Southern Railway bridge and 3 miles downstream from Stony Creek.

Drainage area.--599 sq mi.

Records available.--October 1928 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 471.69 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--30 years, 577 cfs.

Extremes.--Maximum discharge during year, 11,300 cfs Nov. 25 (gage height, 19.97 ft); minimum, 23 cfs Sept. 21; minimum daily, 41 cfs Sept. 20.
1928-58: Maximum discharge, 37,000 cfs Sept. 18, 1945 (gage height, 31.10 ft, from floodmark), from rating curve extended above 26,000 cfs on basis of contracted-opening measurement of peak flow; minimum, 3 cfs Sept. 5, 1930 (gage height, 0.92 ft); minimum daily, 5 cfs Sept. 6, 1930.

Remarks.--Records good except those for period of no gage-height record, which are poor. Large diurnal fluctuation and some regulation for short periods at low flow caused by powerplants above station. City of Burlington diverted from Stony Creek an average of 6.5 cfs for municipal supply, about 3.9 cfs of which is returned above station as sewage, and 2.6 cfs is returned to Haw River below station. Records of chemical analyses for the water year 1958 are given in WSP 1571.

Revisions (water years).--WSP 757: 1929(M). WSP 782: 1934. WSP 822: Drainage area. WSP 1383: 1930, 1932(M), 1933(m), 1936, 1943, 1944(M), 1947(m).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.4	34	6.0	1,460
1.7	77	10.0	3,400
2.0	140	16.0	7,500
3.0	384		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,180	231	950	360	645	1,730	1,600	2,520	303	*169	74	103
2	1,050	236	650	350	915	1,180	1,260	1,570	320	162	60	105
3	656	233	550	340	678	880	1,020	1,540	1,140	125	91	87
4	412	171	860	320	556	678	792	1,100	412	167	457	83
5	286	169	650	300	474	556	740	880	306	138	358	74
6	250	155	550	300	442	474	2,350	1,770	246	162	278	75
7	185	164	500	350	783	442	2,070	3,950	290	127	174	68
8	164	176	1,200	380	1,310	427	1,790	2,250	290	147	122	62
9	185	214	3,000	320	792	442	1,220	1,540	216	169	97	59
10	167	288	2,400	296	573	507	1,520	1,010	514	226	95	60
11	147	228	1,200	310	458	458	5,130	758	356	207	144	70
12	155	155	700	326	427	384	1,990	639	280	167	87	87
13	195	167	520	325	412	358	1,300	686	231	278	257	56
14	162	183	480	3,380	384	507	915	507	216	565	401	47
15	147	256	450	1,720	371	490	705	*386	204	306	263	53
16	144	298	420	985	412	427	880	358	207	204	341	54
17	133	316	400	758	371	398	845	371	162	204	936	50
18	257	303	380	573	524	384	705	2,160	162	268	672	59
19	346	893	400	490	384	507	590	944	142	273	366	83
20	328	1,050	450	398	358	622	524	775	162	288	238	41
21	195	775	600	427	358	524	458	656	142	264	180	95
22	167	639	500	920	458	412	517	427	837	254	144	95
23	153	2,830	400	758	573	412	1,220	384	1,090	204	112	116
24	169	2,130	380	1,210	524	358	950	920	375	185	127	57
25	288	7,030	350	6,830	458	560	915	1,050	290	122	434	*68
26	214	*7,020	800	2,710	1,580	1,300	828	2,780	518	103	946	63
27	185	3,610	900	1,860	4,500	1,060	656	1,070	633	114	406	127
28	202	1,950	850	1,260	2,660	915	1,610	720	309	118	273	136
29	*178	1,600	750	828	-	758	3,060	955	238	103	199	118
30	174	1,300	500	639	-------	672	4,720	490	202	103	138	91
31	174	-------	400	540	-------	1,740	-------	358	-------	83	120	-------
Total	8,648	34,770	23,140	30,563	22,380	20,562	42,880	35,524	10,793	6,005	8,590	2,342
Mean	279	1,159	746	986	799	663	1,429	1,146	360	194	277	78.1
Cfsm	0.466	1.93	1.25	1.65	1.33	1.11	2.39	1.91	0.601	0.324	0.462	0.130
In.	0.54	2.16	1.44	1.90	1.39	1.28	2.66	2.21	0.67	0.37	0.53	0.15

Calendar year 1957: Max 11,000 Min 40 Mean 606 Cfsm 1.01 In. 13.74
Water year 1957-58: Max 7,030 Min 41 Mean 675 Cfsm 1.13 In. 15.30

Peak discharge (base, 6,000 cfs).--Nov. 25 (8:30 p.m.) 11,300 cfs (19.97 ft); Jan. 25 (7:30 a.m.) 8,670 cfs (17.26 ft); Apr. 11 (2 a.m.) 7,180 cfs (15.56 ft).

* Discharge measurement made on this day.
Note.--No gage-height record Nov. 30 to Jan. 9; discharge estimated on basis of weather records and records for other streams in the basin.

970. Haw River near Pittsboro, N. C.

Location.--Lat 35°42', long 79°05', on left bank 100 ft upstream from Robeson Creek, 2 miles downstream from bridge on U. S. Highway 64, and 5 miles east of Pittsboro, Chatham County.

Drainage area.--1,310 sq mi, approximately.

Records available.--October 1928 to September 1958. October 1928 monthly discharge only, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 180.06 ft above mean sea level (levels by Corps of Engineers). Prior to Oct. 15, 1929, staff gage at same site and datum.

Average discharge.--30 years, 1,237 cfs.

Extremes.--Maximum discharge during year, 22,400 cfs Nov. 26 (gage height, 15.89 ft); minimum, 21 cfs Sept. 29 (gage height, 1.52 ft); minimum daily, 26 cfs Sept. 20, 28.

1928-58: Maximum discharge, 79,000 cfs during night of Sept. 18, 1945 (gage height, 28.58 ft, from floodmark in gage shelter), from rating curve extended above 46,000 cfs and confirmed by current-meter measurements (discharge, 78,000 cfs) made at site 6 miles upstream; minimum, 3.1 cfs Sept. 13, 1954; minimum daily, 5.3 cfs Sept. 20, 1953.

Flood in August 1908 reached a stage of 32.1 ft, from floodmarks 1,000 ft upstream (discharge, 98,000 cfs). Flood of 1865 reached a stage about 1 ft lower than flood in 1908, from information by local residents. Flood in September 1928 reached a stage of 20.3 ft from floodmarks (discharge, 39,200 cfs).

Remarks.--Records good. Considerable diurnal fluctuation and some regulation for short periods at low flow caused by powerplants above station.

Revisions (water years).--WSP 822: Drainage area. WSP 1383: 1929(M), 1931, 1933-34, 1936(m), 1937 1941-44(m), 1946-47(m), 1948.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.5	19	3.0	580
1.7	39	4.0	1,370
2.0	86	6.0	3,500
2.3	169	10.0	9,320
2.6	318	15.0	19,700

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,810	346	3,690	940	1,320	4,250	3,910	5,260	680	373	123	163
2	4,580	335	2,100	895	2,290	2,740	2,470	3,380	721	348	252	352
3	2,520	379	1,500	875	1,900	2,050	2,050	5,330	1,040	247	175	247
4	1,280	404	1,600	744	1,420	*1,700	1,700	2,910	1,190	254	180	221
5	944	419	2,380	549	1,200	1,370	1,500	2,050	809	230	452	217
6	611	326	1,550	613	1,120	1,200	6,100	4,430	695	234	476	78
7	610	294	1,200	634	1,880	1,120	7,920	15,000	548	309	436	68
8	586	218	1,780	907	5,700	1,040	3,580	6,620	386	415	236	142
9	463	352	6,080	889	2,880	1,000	2,690	3,740	530	330	257	145
10	400	424	3,870	798	1,800	1,370	2,520	2,490	716	340	186	225
11	266	509	2,640	705	1,420	1,280	14,800	1,800	744	383	196	163
12	421	448	1,850	652	1,270	1,080	5,160	1,600	721	381	156	80
13	318	380	1,370	740	1,140	1,040	3,000	1,640	598	1,430	289	57
14	337	318	1,130	13,000	1,060	1,200	2,250	1,500	352	2,170	310	28
15	323	316	948	7,990	1,000	1,260	1,750	1,100	311	1,370	492	100
16	390	464	1,020	3,150	1,200	1,010	1,950	952	346	654	390	114
17	396	552	940	2,150	1,130	997	2,150	840	561	565	996	205
18	310	681	892	1,600	882	960	1,650	2,320	500	628	1,360	161
19	170	773	874	1,240	913	1,040	1,370	2,390	234	670	852	67
20	542	3,000	904	1,120	916	1,320	1,160	1,420	130	495	540	26
21	566	1,560	1,640	1,080	941	1,280	1,160	1,240	212	1,460	402	31
22	482	1,200	1,320	2,260	1,010	1,080	1,120	1,040	296	2,650	220	111
23	313	7,070	1,080	2,150	1,260	846	2,140	848	2,230	1,070	377	241
24	329	7,980	920	2,760	1,320	960	2,000	1,980	1,080	638	473	252
25	266	*10,300	848	18,000	1,160	2,710	1,650	3,140	692	472	326	208
26	578	*18,200	928	7,990	2,230	4,150	1,550	5,650	522	405	1,470	214
27	422	6,680	1,600	3,990	13,100	2,640	1,240	3,000	1,240	210	1,150	78
28	439	3,840	1,420	2,800	7,970	2,100	4,630	1,500	1,160	256	675	26
29	408	3,320	1,370	2,000	-	1,850	7,310	1,900	573	338	462	123
30	358	4,700	1,240	1,600	--------	1,550	8,400	1,370	418	271	363	243
31	343	--------	1,050	1,370	--------	2,220	--------	960	--------	181	233	--------
Total	24,781	75,788	51,734	86,191	61,432	50,413	100,880	89,400	20,226	19,777	14,505	4,386
Mean	799	2,526	1,669	2,780	2,194	1,626	3,363	2,884	674	638	468	146
Cfsm	0.610	1.93	1.27	2.12	1.67	1.24	2.57	2.20	0.515	0.487	0.357	0.111
In.	0.70	2.15	1.47	2.45	1.74	1.43	2.86	2.54	0.57	0.56	0.41	0.12

Calendar year 1957: Max 26,000 Min 65 Mean 1,394 Cfsm 1.06 In. 14.44
Water year 1957-58: Max 18,200 Min 26 Mean 1,643 Cfsm 1.25 In. 17.00

Peak discharge (base, 17,000 cfs).--Nov. 26 (3 a.m.) 22,400 cfs (15.89 ft); Jan. 14 (1 p.m.) 17,400 cfs (14.14 ft); Jan. 25 (11:30 a.m.) 20,800 cfs (15.35 ft); Apr. 11 (8 a.m.) 18,600 cfs (14.64 ft); May 7 (7 a.m.) 18,400 cfs (14.46 ft).

* Discharge measurement made on this day.

980. New Hope River near Pittsboro, N. C.

Location.--Lat 35°44', long 79°02', on right bank at downstream side of bridge on U. S. Highway 64, a quarter of a mile downstream from Whiteoak Creek and 8¾ miles east of Pittsboro, Chatham County.

Drainage area.--285 sq mi.

Records available.--January 1949 to September 1958.

Gage.--Water-stage recorder and concrete control since 1953. Datum of gage is 176.42 ft above mean sea level (Corps of Engineers bench mark). Prior to Mar. 18, 1950, staff gage at same site and datum.

Average discharge.--9 years, 255 cfs.

Extremes.--Maximum discharge during year, 5,970 cfs May 8 (gage height, 18.94 ft); minimum, 7.0 cfs several days in September.
1949-58: Maximum discharge, 7,900 cfs Mar. 5, 1952 (gage height, 19.74 ft); minimum, 2.0 cfs Sept. 4, 1953.
Flood in September 1945 reached a stage of 27.65 ft; 1929 flood, 25.3 ft; 1908 flood, 23.85 ft; from information by North Carolian State Highway Commission.

Remarks.--Records fair except those for periods of no gage-height record and indefinite stage-discharge relation, which are poor. City of Durham discharged an average of about 5.3 cfs sewage effluent into basin above station, diverted from Neuse River during water year 1958.

Rating tables, water year 1957-58, except periods of indefinite stage-discharge relation (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Aug. 7, Sept. 11-30				Aug. 8 to Sept. 10			
2.4	7.0	6.0	355	1.9	13	3.5	94
2.5	13	8.0	685	2.1	16	4.0	133
2.6	21	13.0	1,760	2.3	21	5.0	235
2.7	34	16.0	3,050	2.6	36	7.0	525
3.0	57	18.0	4,700	3.0	64		
3.5	82	19.0	6,160				
4.0	128						

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,240	31	1,530	326	300	2,300	647	2,700	85	30	17	25
2	1,340	38	1,380	294	411	2,060	557	1,960	67	24	16	20
3	1,440	51	1,380	258	472	1,460	426	1,530	64	19	15	16
4	1,140	58	1,240	210	411	758	320	1,030	62	19	15	14
5	537	53	835	164	326	383	270	498	54	17	19	*14
6	206	45	539	132	252	276	407	986	49	18	17	14
7	115	37	411	164	461	230	925	3,260	186	18	15	14
8	82	31	383	328	1,240	210	1,080	5,620	61	30	e15	e13
9	66	38	934	a397	1,340	205	1,240	*3,720	49	66	15	e11
10	59	65	1,260	a306	1,320	294	1,030	2,260	43	64	14	e9
11	49	65	1,320	a246	1,190	326	965	1,270	41	60	13	*7.6
12	41	58	1,440	205	640	282	1,080	575	48	41	17	7.6
13	38	45	1,140	180	369	230	a1,300	397	49	42	17	7.6
14	34	38	524	1,100	276	340	a1,320	326	47	128	*25	7.6
15	33	38	306	1,530	258	397	758	220	64	210	54	7.6
16	31	51	241	1,960	508	333	472	164	40	169	51	7.6
17	39	72	210	2,020	a600	252	441	139	37	88	33	7.0
18	47	123	185	1,440	a550	205	383	128	38	57	*28	7.6
19	53	205	169	717	a340	205	306	128	31	45	21	7.0
20	54	397	169	340	a250	270	241	114	28	43	17	7.0
21	50	383	431	264	215	313	200	113	25	45	15	8.2
22	43	230	647	*456	230	288	195	102	25	134	14	13
23	38	834	539	521	246	225	363	87	28	205	20	17
24	37	1,590	426	607	246	180	426	300	40	96	52	17
25	38	*1,800	294	1,570	236	516	333	611	41	54	82	12
26	43	2,870	297	2,080	349	1,400	252	725	34	54	*317	10
27	41	3,170	575	2,750	1,220	1,560	185	504	61	40	468	10
28	35	2,700	575	2,120	1,630	1,730	556	456	68	*31	186	8.8
29	34	1,960	647	1,300	-	1,440	1,760	*333	78	25	*88	8.2
30	34	1,590	611	580	-------	854	2,440	270	47	20	*48	12
31	*30	-------	441	348	-------	539	-------	144	-------	19	32	-------
Total	7,067	18,666	21,079	24,913	15,886	20,061	20,878	30,670	1,590	1,911	1,756	340.4
Mean	228	622	680	804	567	647	696	989	53.0	61.6	56.6	11.3
Cfsm	0.800	2.18	2.39	2.82	1.99	2.27	2.44	3.47	0.186	0.216	1.199	0.040
In.	0.92	2.44	2.75	3.25	2.07	2.62	2.72	4.00	0.21	0.25	0.23	0.04

Calendar year 1957: Max 3,840 Min 6.1 Mean 350 Cfsm 1.23 In. 16.69
Water year 1957-58: Max 5,620 Min 7.0 Mean 452 Cfsm 1.58 In. 21.50

Peak discharge (base, 2,500 cfs).--Nov. 27 (5 a.m.) 3,240 cfs (16.31 ft); Jan. 27 (10:30 a.m.) 2,810 cfs (15.62 ft); May 1 (2 a.m.) 2,930 cfs (15.75 ft); May 8 (7 a.m.) 5,970 cfs (18.94 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for Middle Creek near Clayton.
e Stage-discharge relation indefinite; discharge estimated on basis of weather records and records for Middle Creek near Clayton.

985. West Fork Deep River near High Point, N. C.

Location.--Lat 36°00'15", long 79°58'42", on left bank 2,300 ft upstream from highway bridge and High Point Lake, 2.3 miles west of Jamestown, and 2.5 miles northeast of High Point College, High Point, Guilford County.

Drainage area.--32.1 sq mi.

Records available.--June 1923 to September 1958 (discontinued). Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder and Parshall flume. Altitude of gage is 758 ft (from topographic map). June 14, 1923, to Sept. 30, 1926, staff gage at site 2,300 ft downstream at different datum.

Average discharge.--35 years, 31.9 cfs.

Extremes.--Maximum discharge during year, 1,600 cfs Nov. 25 (gage height, 11.70 ft); minimum, 3.9 cfs Sept. 29 (gage height, 2.55 ft).
1923-58: Maximum discharge, 8,450 cfs Sept. 24, 1947 (gage height, 19.92 ft, from floodmark), from rating curve extended above 2,000 cfs on basis of contracted-opening measurement of peak flow; minimum, 0.3 cfs Sept. 1, 1932.

Remarks.--Records good except those for periods of ice effect and no gage-height record, which are poor. Occasionally some slight diurnal fluctuation at low flow caused by gristmill 4 miles upstream.

Revisions (water years).--WSP 852: Drainage area. WSP 922: 1928-29(M), 1933(M), 1936(M). WSP 1383: 1924-25, 1930-31, 1947.

Rating table, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.5	3.1	5.0	160
2.6	4.9	7.0	352
3.0	16	9.0	634
3.5	35	10.0	850
4.0	61		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	9.9	33	20	39	46	70	44	11	8.0	6.9	7.7
2	18	8.8	26	17	34	34	35	96	14	*8.6	7.5	6.9
3	12	8.6	23	17	24	30	30	169	11	7.7	37	6.6
4	9.6	8.3	55	16	21	27	28	48	11	7.2	18	6.9
5	8.6	8.0	29	17	20	24	29	34	11	7.2	9.4	6.6
6	8.3	8.0	23	18	22	22	220	114	13	7.7	8.6	6.4
7	7.5	7.7	23	*16	62	21	62	144	13	8.8	7.7	6.2
8	7.2	11	219	16	55	20	35	67	11	7.7	7.5	5.5
9	6.9	12	72	15	28	27	29	39	12	12	6.6	5.3
10	6.9	8.6	40	12	25	22	128	31	16	10	6.4	5.5
11	6.6	8.3	30	12	22	21	105	27	11	8.6	6.6	5.3
12	9.4	8.3	22	12	20	20	42	25	13	7.2	*6.2	5.7
13	7.7	8.3	20	18	20	25	31	22	9.9	14	53	6.0
14	7.2	10	20	89	18	25	27	19	9.4	16	26	5.5
15	*6.9	11	20	39	20	21	29	18	12	10	12	5.3
16	6.9	12	19	28	b18	20	49	17	9.1	15	19	5.7
17	8.3	11	18	22	b16	19	29	20	8.6	33	18	5.1
18	68	12	17	19	b16	21	24	40	8.0	275	9.9	5.1
19	12	140	17	17	b16	22	23	19	8.0	29	8.6	4.9
20	9.1	32	27	17	b17	21	21	21	8.3	30	8.0	5.1
21	8.6	19	31	40	20	18	20	18	8.6	25	7.7	11
22	8.3	17	20	56	29	17	50	15	48	17	7.5	7.5
23	8.0	375	18	27	29	16	63	14	13	13	7.7	5.7
24	12	64	18	197	25	17	29	21	10	12	9.4	5.5
25	10	*827	17	*380	23	110	42	18	8.8	12	52	5.3
26	8.6	194	108	62	204	60	27	15	25	9.9	18	5.3
27	9.4	47	41	39	*270	35	37	14	20	9.4	11	4.9
28	8.3	88	29	30	97	32	376	15	10	9.1	9.6	4.2
29	8.0	56	24	26		31	164	13	8.6	8.3	8.8	4.2
30	8.0	54	21	25		40	79	12	8.0	7.7	8.3	4.9
31	11		19	23		180		12		7.2	8.0	
Total	354.3	2,084.8	1,099	1,342	1,210	1,044	1,933	1,181	380.3	653.3	430.9	175.8
Mean	11.4	69.5	35.5	43.3	43.2	33.7	64.4	38.1	12.7	21.1	13.9	5.86
Cfsm	0.355	2.17	1.11	1.35	1.35	1.05	2.01	1.19	0.396	0.657	0.433	0.183
In.	0.41	2.42	1.27	1.55	1.40	1.21	2.24	1.37	0.44	0.76	0.50	0.20

Calendar year 1957: Max 844 Min 3.2 Mean 34.2 Cfsm 1.07 In. 14.45
Water year 1957-58: Max 827 Min 4.2 Mean 32.6 Cfsm 1.02 In. 13.77

Peak discharge (base, 700 cfs).--Nov. 25 (1:30 p.m.) 1,600 cfs (11.70 ft); Jan. 25 (3:30 a.m.) 750 cfs (9.65 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Mar. 4 to Apr. 3; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage, and records for nearby streams.

990. East Fork Deep River near High Point, N. C.

Location.--Lat 36°02'15", long 79°56'46", on left bank 5 ft upstream from highway bridge, 3.3 miles upstream from High Point Dam, and 5.2 miles northeast of High Point College, High Point, Guilford County.

Drainage area.--14.7 sq mi.

Records available.--July 1928 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 764.02 ft above mean sea level, unadjusted. Intake pipe extended to downstream side of bridge since Mar. 1, 1934.

Average discharge.--30 years, 14.7 cfs.

Extremes.--Maximum discharge during year, 1,860 cfs Nov. 25 (gage height, 4.38 ft); minimum daily, 2.5 cfs Sept. 28, 29.
1928-58: Maximum discharge, 6,300 cfs Sept. 24, 1947 (gage height, 10.87 ft, from floodmark), from rating curve extended above 1,600 cfs on basis of contracted-opening measurement of peak flow using floodmarks at gage height 14.11 ft on upstream side of bridge and 10.87 ft on downstream side of bridge; minimum, 0.7 cfs Sept. 22, 1941 (result of temporary regulation); minimum unregulated, 1.1 cfs Oct. 7, 1954.

Remarks.--Records good except those for period of no gage-height record, which are poor. Occasional temporary regulation of unknown origin during low flow in some water years.

Revisions (water years).--WSP 1383: Drainage area, 1941.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.2	1.3	1.3	82
.3	2.8	1.6	154
.4	4.9	2.0	280
.6	11	2.5	470
.8	21	3.0	790
1.0	38		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	4.7	15	9.3	20	19	a25	20	6.5	4.9	4.1	3.8
2	8.6	4.5	11	8.3	16	15	a18	91	7.8	*4.7	4.3	3.6
3	6.8	4.3	10	7.6	10	13	*14	67	7.1	4.7	12	3.4
4	6.0	4.3	24	7.3	9.0	11	14	22	6.2	4.5	6.6	3.4
5	4.9	4.3	13	7.3	9.0	10	15	17	6.0	4.7	4.7	3.4
6	4.7	4.1	10	7.1	9.3	9.6	118	60	5.7	5.5	4.5	3.4
7	4.5	4.1	10	7.6	30	9.3	26	66	6.0	5.2	4.3	3.4
8	4.3	5.8	96	7.1	22	9.3	17	30	5.4	4.9	4.3	3.0
9	4.3	5.2	28	6.2	12	12	14	19	7.8	8.2	4.1	3.0
10	4.1	4.3	18	6.2	12	10	78	16	7.5	6.0	3.8	3.2
11	3.8	4.3	13	6.2	10	9.3	45	14	5.4	4.7	3.6	3.0
12	4.7	4.3	9.6	6.2	9.3	8.6	20	12	6.2	4.7	3.9	3.4
13	4.3	4.5	8.6	10	9.0	11	16	10	5.2	16	12	4.3
14	4.1	6.0	8.6	60	8.3	11	14	9.6	7.6	8.2	8.5	4.5
15	*4.1	5.4	8.3	20	9.6	9.0	16	9.3	7.8	7.1	5.3	4.5
16	4.3	5.7	8.3	16	8.6	8.6	27	9.0	5.7	44	13	3.8
17	4.7	5.2	7.9	10	7.3	8.3	16	12	5.2	21	11	3.2
18	19	5.7	7.6	8.6	7.3	9.6	13	17	4.7	40	5.2	3.2
19	5.4	62	7.6	7.6	7.6	10	12	10	4.7	13	4.5	3.0
20	4.5	12	14	7.3	8.3	9.6	10	9.6	4.9	10	4.3	3.4
21	4.3	8.3	14	26	9.6	8.6	10	8.6	4.9	7.3	4.1	5.4
22	4.3	8.0	9.3	28	13	a8.0	36	7.9	61	6.0	4.1	3.8
23	4.1	154	8.3	12	12	a7.6	36	7.6	8.3	5.4	4.8	*3.2
24	5.9	23	7.9	140	10	a7.6	16	12	6.5	6.0	5.1	3.2
25	4.9	632	7.6	118	9.3	a85	22	8.6	5.7	5.7	23	a3.1
26	4.5	47	56	26	122	a35	14	8.3	26	4.9	7.9	a3.1
27	4.5	20	20	18	96	a22	18	7.3	11	4.5	5.2	a2.9
28	4.3	48	14	13	34	a16	165	7.3	6.2	4.3	4.5	a2.5
29	4.1	24	11	11		a15	69	7.3	5.7	4.3	4.3	a2.5
30	4.1	26	9.6	10	--------	a25	33	7.1	5.4	4.1	4.3	a2.9
31	5.7	--------	9.0	10	--------	a110	--------	6.8	--------	4.1	4.1	--------
Total	170.8	1,151.0	495.2	637.9	540.5	553.0	947	609.3	264.1	278.6	195.4	102.5
Mean	5.51	38.4	16.0	20.6	19.3	17.8	31.6	19.7	8.80	8.99	6.30	3.42
Cfsm	0.375	2.61	1.09	1.40	1.31	1.21	2.15	1.34	0.599	0.612	0.429	0.233
In.	0.43	2.91	1.25	1.61	1.37	1.40	2.40	1.54	0.67	0.70	0.49	0.26

Calendar year 1957: Max 656 Min 1.9 Mean 17.3 Cfsm 1.18 In. 15.99
Water year 1957-58: Max 632 Min 2.5 Mean 15.3 Cfsm 1.11 In. 15.03

Peak discharge (base, 800 cfs).--Nov. 25 (10 a.m.) 1,860 cfs (4.38 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage when available, and records for nearby stations.

995. Deep River near Randleman, N. C.

Location.--Lat 35°54'10", long 79°51'15", on left bank 500 ft downstream from highway bridge, a quarter of a mile downstream from Coltrane's mill, half a mile south of Guilford County line, 4¾ miles upstream from Muddy Creek, and 7 miles north of Randleman, Randolph County.

Drainage area.--124 sq mi.

Records available.--October 1928 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 638.11 ft above mean sea level (levels by Corps of Engineers).

Average discharge.--30 years, 118 cfs.

Extremes.--Maximum discharge during year, 4,040 cfs Nov. 25 (gage height, 17.08 ft); minimum, 6.1 cfs May 17 (gage height, 1.68 ft); minimum daily, 8.5 cfs Sept. 25.
1928-58: Maximum discharge, 20,000 cfs Sept. 25, 1947 (gage height, 32.2 ft, from floodmark), from rating curve extended above 7,100 cfs on basis of contracted-opening measurement of peak flow at bridge 1½ miles upstream; minimum, 0.5 cfs Nov. 28, 1931 (gage height, 1.41 ft); minimum daily, 1.2 cfs Nov. 12, 1933.

Remarks.--Records good except those for period of no gage-height record, which are poor. Large diurnal fluctuation at low flow caused by Coltrane's mill. Flow slightly regulated by High Point Lake (capacity, 220,588,000 cu ft). City of High Point diverts about 8 cfs for municipal supply and discharges sewage effluent about two-thirds into Richland Creek above station and remainder into Rich Fork Creek in Pee Dee River basin.

Revisions (water years).--WSP 782: 1929-30. WSP 1383: 1934-35, 1941.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.7	6.7	3.0	139
1.9	15	6.0	785
2.1	29	12.0	2,360
2.5	66		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	81	22	193	81	181	239	380	265	40	24	19	14
2	58	22	154	82	198	171	285	353	64	*25	20	28
3	40	21	102	45	157	169	96	572	51	14	20	17
4	32	24	240	60	92	105	105	259	46	32	28	17
5	27	17	191	46	93	100	77	200	34	23	36	36
6	26	22	106	72	81	102	585	351	51	12	30	22
7	30	28	93	46	216	71	370	593	78	14	17	13
8	22	22	629	80	320	80	204	343	32	19	19	9.6
9	18	23	425	37	166	106	133	225	39	16	20	33
10	24	24	218	62	133	146	604	129	78	32	19	20
11	21	23	150	67	125	89	937	144	34	29	16	12
12	25	22	126	35	84	82	274	147	36	23	17	12
13	25	26	101	71	92	76	189	93	39	24	17	26
14	*18	45	55	353	71	108	175	98	54	46	26	12
15	21	38	77	247	87	72	127	79	34	35	37	19
16	22	52	109	162	86	74	245	57	33	39	41	31
17	20	44	61	96	91	79	173	68	33	142	35	17
18	69	71	66	91	62	87	123	276	34	409	35	17
19	42	476	72	76	57	83	102	122	31	134	28	21
20	31	177	101	90	81	86	94	87	32	58	25	9.6
21	37	50	134	112	54	77	121	81	35	64	20	64
22	23	43	94	282	89	50	212	46	49	67	26	41
23	19	1,100	80	159	103	61	398	64	44	31	58	*18
24	35	*397	72	640	111	81	201	143	34	28	79	17
25	36	2,210	65	1,540	90	226	191	474	30	29	309	8.5
26	a25	1,200	257	348	644	303	154	595	28	27	106	12
27	a26	244	213	220	1,030	189	158	110	66	22	46	16
28	a27	300	130	157	469	134	1,250	105	38	21	27	13
29	29	290	105	139	-	112	797	72	36	13	52	9.2
30	28	281	113	103	-------	121	612	65	20	24	23	14
31	24	-------	51	101	-------	652	-------	68	-------	18	17	-------
Total	961	7,314	4,583	5,700	5,063	4,131	9,372	6,284	1,253	1,491	1,268	598.9
Mean	31.0	244	148	184	181	133	312	203	41.8	48.1	40.9	20.0
Cfsm	0.250	1.97	1.19	1.48	1.46	1.07	2.52	1.64	0.337	0.388	0.330	0.161
In.	0.29	2.19	1.37	1.71	1.52	1.24	2.81	1.88	0.38	0.45	0.38	0.18

Calendar year 1957: Max 3,980 Min 8.9 Mean 129 Cfsm 1.04 In. 14.08
Water year 1957-58: Max 2,210 Min 8.5 Mean 132 Cfsm 1.06 In. 14.40

Peak discharge (base, 2,600 cfs).--Nov. 25 (6 p.m.) 4,040 cfs (17.08 ft); Jan. 25 (3:30 a.m.) 2,690 cfs (13.09 ft); Apr. 10 (12 p.m.) 2,750 cfs (13.26 ft); May 25 (12 p.m.) 2,600 cfs (12.78 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for nearby stations.

1005. Deep River at Ramseur, N. C.

Location.--Lat 35°44', long 79°30', on right bank 1,600 ft downstream from railroad station at Ramseur, Randolph County, and 1½ miles downstream from Sandy Creek.

Drainage area.--346 sq mi.

Records available.--November 1922 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 419.50 ft above mean sea level (levels by Corps of Engineers).

Average discharge.--35 years (1923-58), 342 cfs.

Extremes.--Maximum discharge during year, 9,780 cfs Jan. 25 (gage height, 15.50 ft); minimum, 10 cfs Nov. 6, Sept. 5, 18; minimum daily, 19 cfs Sept. 5.
1922-58: Maximum discharge, 43,000 cfs Sept. 18, 1945 (gage height, 34.04 ft, from floodmark), from rating curve extended above 18,000 cfs on basis of slope-area measurement of peak flow; minimum, 0.4 cfs May 27, Nov. 28, 29, 1941; minimum daily, 0.7 cfs Nov. 29, 1941.
Flood in August 1901 reached a stage of 28.75 ft, from floodmarks, about a quarter of a mile upstream (discharge, 30,000 cfs).

Remarks.--Records good except those below 100 cfs, and those for period of no gage-height record, which are fair. Large diurnal fluctuation caused by powerplants above station. Flow regulated by High Point Lake and small powerplant reservoirs. Town of Asheboro diverted an average of 1.4 cfs from Pee Dee River basin into this basin above station.

Revisions (water years).--WSP 822: Drainage area. WSP 1032: 1923-24, 1925(M), 1926, 1927-28(M), 1929, 1930(M), 1932-33, 1934(M), 1935, 1936-37(M), 1944(M). WSP 1383: 1923(m), 1925, 1927, 1930, 1936.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.5	16	2.0	408
.7	40	3.0	930
1.0	94	6.0	2,880
1.5	226	11.0	6,220

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,080	27	652	190	349	732	918	888	166	74	54	116
2	672	43	391	206	574	489	595	2,060	213	76	63	66
3	284	36	332	179	394	408	413	2,560	192	74	65	36
4	150	104	499	130	330	360	285	859	197	72	111	66
5	136	104	510	145	263	290	268	550	101	69	109	19
6	88	23	357	175	248	276	3,410	1,540	131	69	40	37
7	165	50	283	183	731	*276	1,650	2,730	177	117	76	56
8	129	40	1,040	221	1,870	232	611	1,220	159	91	148	93
9	63	36	1,360	a200	643	270	431	656	219	103	92	30
10	62	55	644	a180	420	383	1,220	486	117	71	54	30
11	57	129	442	a140	355	310	4,190	380	*131	98	96	60
12	48	103	337	a150	333	256	962	387	109	120	39	34
13	45	25	268	a200	271	233	570	351	*98	693	103	32
14	86	95	222	2,320	258	332	451	250	102	205	78	34
15	127	25	200	1,060	254	247	405	242	84	239	44	69
16	41	98	218	536	265	232	562	226	172	123	351	*32
17	37	180	232	364	236	230	489	186	104	724	415	31
18	39	202	202	270	218	228	352	936	101	602	233	26
19	79	805	160	244	197	260	299	385	36	601	101	*24
20	98	814	190	267	201	270	262	281	66	215	84	24
21	138	299	372	261	209	232	299	258	116	439	39	26
22	101	*168	262	812	236	212	414	217	112	505	53	100
23	60	3,590	216	466	304	151	1,150	182	185	241	644	179
24	56	1,770	197	2,130	286	204	524	800	125	84	290	32
25	66	4,480	186	6,190	248	601	580	760	113	202	745	50
26	57	4,370	363	1,210	1,780	906	482	2,780	48	121	730	34
27	80	819	560	638	3,750	513	338	540	332	128	266	36
28	126	570	321	476	1,640	395	2,730	314	166	251	183	37
29	98	782	268	346	-	355	2,390	404	82	71	66	36
30	*28	732	243	349	-------	331	2,620	245	117	110	93	66
31	113	-------	234	290	-------	1,150	-------	191	-------	43	88	-------
Total	4,409	20,574	11,761	20,528	16,863	11,364	29,870	23,864	4,071	6,631	5,553	1,511
Mean	142	686	379	662	602	367	996	770	136	214	179	50.4
Cfsm	0.410	1.98	1.10	1.91	1.74	1.06	2.88	2.23	0.393	0.618	0.517	0.146
In.	0.47	2.21	1.26	2.21	1.81	1.22	3.21	2.57	0.44	0.71	0.60	0.16

Calendar year 1957: Max 11,000 Min 16 Mean 353 Cfsm 1.02 In. 13.83
Water year 1957-58: Max 6,190 Min 19 Mean 430 Cfsm 1.24 In. 16.87

Peak discharge (base, 6,000 cfs).--Nov. 25 (8:30 p.m.) 8,580 cfs (13.98 ft); Jan. 25 (3 a.m.) 9,780 cfs (15.50 ft); Apr. 6 (1:30 p.m.) 7,300 cfs (12.40 ft); Apr. 11 (2 a.m.) 7,060 cfs (12.14 ft); May 2 (11 p.m.) 7,060 cfs (12.06 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, fragmentary gage-height record, and records for nearby stations.

1010. Bear Creek at Robbins, N. C.

Location.--Lat 35°26', long 79°36', on right bank 300 ft downstream from Cabin Creek and half a mile west of Robbins, Moore County.

Drainage area.--134 sq mi.

Records available.--November 1939 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 323.23 ft above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by North Carolina State Highway Commission).

Average discharge.--19 years, 148 cfs.

Extremes.--Maximum discharge during year, 6,300 cfs Apr. 6 (gage height, 13.8 ft, from graph based on temporary staff-gage readings 800 ft downstream); minimum, 6.0 cfs Sept. 19.

1939-58: Maximum discharge, 43,600 cfs July 20, 1956 (gage height, 34.57 ft, from floodmark), from rating curve extended above 7,000 cfs on basis of slope-area measurements of peak flow at gage heights 27.52 and 34.57 ft; no flow Oct. 2, 22-27, 1941 (result of storage of flow in gage pool after construction of new station control); minimum unregulated flow, 0.1 cfs Oct. 21, 22, 1941, Oct. 12-14, 1954.

Remarks.--Records fair except those for period of indefinite stage-discharge relation, which are poor. Prior to Mar. 6, diversion of about 0.5 cfs daily from gage pool for municipal supply for town of Robbins included in records; not included thereafter.

Revisions (water years).--WSP 1433: 1944-45, 1950(M), 1952, 1955(M).

Rating tables, water year 1957-58, except period of indefinite stage-discharge relation (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Feb. 26				Feb. 27 to Sept. 30			
8.6	22	10.0	467	0.3	5.5	2.0	295
8.8	43	10.5	765	.5	18	3.0	600
9.0	81	11.0	1,150	.7	35	5.0	1,400
9.5	244	13.0	3,250	1.0	72	9.0	3,480
				1.5	171		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	491	41	476	145	199	e400	244	322	65	30	17	20
2	318	42	260	161	225	e250	171	269	64	29	15	17
3	142	38	210	126	174	e180	160	244	90	27	22	16
4	102	37	233	113	155	e155	155	183	74	25	26	14
5	79	35	199	104	149	e145	195	164	62	26	21	13
6	70	33	161	102	165	139	3,210	905	57	26	17	12
7	59	32	152	196	751	139	607	*1,890	120	39	15	11
8	51	41	402	296	678	144	*269	440	74	475	13	9.4
9	46	86	442	158	280	241	207	256	62	340	12	8.2
10	43	46	272	126	221	300	950	207	54	88	11	7.7
11	39	33	210	129	199	162	*1,330	171	50	99	10	6.6
12	37	30	185	123	185	*144	350	183	244	58	30	6.6
13	37	29	152	192	174	183	232	171	74	171	74	6.6
14	35	32	149	*2,340	168	282	207	135	57	398	114	7.7
15	33	53	145	422	206	164	183	120	47	207	54	*6.6
16	*33	387	136	268	347	137	599	114	57	72	29	7.7
17	33	272	133	217	188	128	295	108	56	384	19	7.7
18	51	584	123	188	152	126	207	153	40	77	16	7.2
19	48	863	123	168	149	155	183	108	36	189	13	*6.0
20	32	292	176	155	142	135	162	99	34	65	12	6.6
21	27	161	470	361	139	118	148	137	34	50	10	7.2
22	26	126	185	493	139	110	244	93	35	88	9.9	18
23	26	2,820	152	229	142	102	282	86	38	46	13	18
24	27	*513	139	1,690	139	93	157	85	39	30	16	15
25	43	2,130	133	*2,190	136	998	148	86	35	29	213	12
26	39	696	158	369	920	*560	376	114	33	29	305	11
27	32	296	158	280	e1,200	282	195	93	183	24	77	10
28	30	296	142	229	e700	207	*3,250	90	59	23	42	9.4
29	27	325	272	202	-	*232	*1,680	116	42	*22	31	7.7
30	27	2,220	161	199	--------	195	745	83	32	19	26	7.7
31	31	--------	139	192	--------	351	--------	72	--------	17	22	--------
Total	2,114	12,589	6,448	12,163	8,422	6,957	17,141	7,297	1,947	3,202	1,304.9	313.6
Mean	68.2	420	208	392	301	224	571	235	64.9	103	42.1	10.5
Cfsm	0.509	3.13	1.55	2.93	2.25	1.67	4.26	1.75	0.484	0.769	0.314	0.078
In.	0.59	3.49	1.79	3.38	2.34	1.93	4.76	2.03	0.54	0.89	0.36	0.09

Calendar year 1957: Max 2,820 Min 3.3 Mean 150 Cfsm 1.12 In. 15.21
Water year 1957-58: Max 3,250 Min 6.0 Mean 219 Cfsm 1.63 In. 22.19

Peak discharge (base, 3,500 cfs).--Nov. 23 (12:30 p.m.) 4,920 cfs (14.33 ft); Nov. 25 (4 p.m.) 4,110 cfs (13.72 ft); Nov. 30 (2 p.m.) 4,110 cfs (13.66 ft); Jan. 14 (5 a.m.) 4,240 cfs (13.78 ft); Jan. 25 (1 a.m.) 5,060 cfs (14.45 ft); Apr. 6 (4 p.m.) 6,300 cfs (13.8 ft); Apr. 10 (11 p.m.) 3,880 cfs (9.7 ft); Apr. 28 (7 p.m.) 5,920 cfs (13.15 ft); May 7 (1 a.m.) 4,280 cfs (10.36 ft).

* Discharge measurement made on this day.
e Stage-discharge relation indefinite; discharge estimated on basis of gage heights, and records for stations on nearby streams.
Note.--Discharge for Mar. 6 to Sept. 30 computed from readings at temporary gage at site 800 ft downstream.

1020. Deep River at Moncure, N. C.

Location.--Lat 35°36', long 79°05', on right bank 1½ miles northwest of Moncure, Chatham County, 2½ miles downstream from Rocky River, and 4½ miles upstream from confluence with Haw River.

Drainage area.--1,410 sq mi, approximately.

Records available.--July 1930 to September 1958. Records for May 1898 to December 1899 published in 21st Annual Report, Part 4, and in Bulletins 34 and 39 of North Carolina Department of Conservation and Development have been found to be unreliable and should not be used.

Gage.--Water-stage recorder. Datum of gage is 185.88 ft above mean sea level (levels by Corps of Engineers).

Average discharge.--28 years, 1,426 cfs.

Extremes.--Maximum discharge during year, 20,600 cfs Nov. 25, Apr. 30; maximum gage height, 8.73 ft Apr. 30; minimum discharge, 56 cfs Sept. 18, 19 (gage height, 0.90 ft).
1930-58: Maximum discharge, 80,300 cfs Sept. 18, 1945 (gage height, 17.20 ft), from rating curve extended above 66,000 cfs; minimum, 5.5 cfs Oct. 10, 1954 (gage height, 0.35 ft).

Remarks.--Records good except those below 250 cfs, which are fair, and those for period of no gage-height record, which are poor. Diurnal fluctuation and some regulation at low flow caused by small powerplants above station.

Revisions (water years).--WSP 822: Drainage area. WSP 1082: 1930-46 (1943-46 not previously published). See also Records available.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.9	56	2.5	1,110
1.1	101	3.0	1,800
1.4	213	4.0	3,740
1.7	393	6.0	9,340
2.0	619	9.0	22,200

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a8,000	285	10,800	1,210	1,460	8,500	3,520	12,100	698	250	257	210
2	a5,700	267	4,400	1,180	1,700	3,220	2,800	4,540	611	326	182	101
3	a2,700	256	2,310	1,100	1,880	2,170	1,960	8,050	578	245	119	135
4	a2,000	235	1,880	980	1,500	1,780	1,640	6,560	603	128	99	190
5	1,400	200	2,010	810	1,260	1,530	1,400	2,800	562	107	153	157
6	910	168	1,850	763	1,180	1,320	4,880	4,860	530	294	164	128
7	735	351	1,420	850	3,190	1,230	12,800	16,500	493	262	161	135
8	595	298	1,700	1,900	11,200	1,170	9,330	14,400	456	186	195	91
9	516	328	6,460	1,880	7,540	1,190	2,760	7,300	470	701	161	79
10	500	304	5,590	1,210	3,120	2,140	2,100	2,700	523	1,080	96	77
11	449	380	*3,000	1,000	2,100	2,060	12,800	1,990	485	578	290	94
12	360	328	2,110	940	1,720	1,520	12,800	1,660	470	463	222	168
13	322	328	1,640	870	1,540	1,270	5,400	1,560	442	769	144	96
14	298	360	1,330	14,000	1,360	2,270	2,420	1,460	508	2,070	278	71
15	273	360	1,170	14,000	1,360	2,180	1,930	1,190	449	1,830	367	60
16	267	477	1,110	7,750	3,100	1,580	2,130	990	348	1,120	380	131
17	298	1,860	1,040	2,820	2,370	1,240	3,410	940	251	689	442	82
18	334	1,940	1,000	1,930	1,470	1,150	2,390	960	341	1,790	716	60
19	291	3,770	930	1,540	1,120	1,130	1,720	1,570	386	1,690	578	104
20	267	6,100	930	1,260	1,100	1,280	1,460	1,300	255	2,350	400	73
21	279	3,280	2,450	1,280	1,070	1,230	1,270	980	440	1,420	354	73
22	341	1,590	2,500	3,580	1,030	1,090	1,230	880	386	1,490	215	77
23	449	10,300	1,540	3,410	1,090	990	2,220	800	348	1,420	142	77
24	380	14,400	1,180	4,000	1,150	860	2,800	1,390	485	800	494	69
25	328	16,900	1,030	16,500	1,120	4,510	1,720	1,390	456	595	634	100
26	291	16,500	1,170	15,600	2,560	10,100	1,660	2,040	292	595	1,680	230
27	316	14,800	1,580	11,500	12,400	5,360	2,040	3,780	407	478	2,030	101
28	235	6,550	1,710	3,180	14,400	2,900	7,680	1,500	456	478	920	125
29	104	3,410	2,130	2,060	-	2,100	15,600	1,420	562	374	578	82
30	334	8,820	2,030	1,720	--------	2,010	18,200	1,230	456	360	421	62
31	334	--------	1,430	1,580	--------	2,080	--------	900	--------	367	367	--------
Total	29,606	115,145	71,430	122,403	86,090	73,160	144,070	109,740	13,747	25,305	13,239	3,238
Mean	955	3,838	2,304	3,948	3,075	2,360	4,802	3,540	458	816	427	108
Cfsm	0.677	2.72	1.63	2.80	2.18	1.67	3.41	2.51	0.325	0.579	0.303	0.077
In.	0.78	3.04	1.88	3.23	2.27	1.93	3.80	2.89	0.36	0.67	0.35	0.09

Calendar year 1957: Max 16,900 Min 72 Mean 1,753 Cfsm 1.24 In. 16.86
Water year 1957-58: Max 18,200 Min 60 Mean 2,211 Cfsm 1.57 In. 21.29

Peak discharge (base, 15,000 cfs).--Nov. 25 (10 p.m.) 20,600 cfs (8.72 ft); Jan. 14 (2 p.m.) 19,100 cfs (8.42 ft); Jan. 25 (9 a.m.) 18,700 cfs (8.34 ft); Feb. 28 (4 a.m.) 15,600 cfs (7.59 ft); Apr. 11 (8:30 a.m.) 15,200 cfs (7.53 ft); Apr. 30 (7 a.m.) 20,600 cfs (8.73 ft); May 7 (6 a.m.) 19,100 cfs (8.35 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage, and records for nearby stations.

1025. Cape Fear River at Lillington, N. C.

Location.--Lat 35°24', long 78°49', near right bank in downstream end of pier of bridge on U. S. Highway 401, 1,800 ft downstream from Norfolk Southern Railway bridge, 0.5 mile north of Lillington, Harnett County, and 1 mile downstream from Neill Creek.

Drainage area.--3,440 sq mi, approximately.

Records available.--December 1923 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 105.71 ft above mean sea level (levels by Corps of Engineers). Prior to Oct. 8, 1927, chain gage at same site and datum.

Average discharge.--34 years (1924-58), 3,316 cfs.

Extremes.--Maximum discharge during year, 46,500 cfs Nov. 26 (gage height, 17.80 ft); minimum, 88 cfs Sept. 29 (gage height, 0.51 ft).
1923-58: Maximum discharge uncertain, occurred Sept. 19, 1945 (gage height, 33.19 ft, from floodmark); minimum, 11 cfs Oct. 14, 15, 1954 (gage height, -0.17 ft).

Remarks.--Records good except those for periods of no gage-height record, which are poor. Large diurnal fluctuation and considerable regulation at low flow caused by powerplants above station.

Revisions (water years).--WSP 822: Drainage area. WSP 1002: 1930(M). WSP 1032: 1942(m). WSP 1303: 1944(M). WSP 1333: 1945. WSP 1383: 1924-29, 1936.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.5	86	3.0	1,900
.7	132	5.0	4,910
1.0	240	8.0	10,900
1.5	503	13.0	26,200
2.0	870	18.0	47,500

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17,000	960	20,300	3,140	3,520	19,300	8,450	30,000	1,960	924	846	888
2	13,500	870	11,100	3,000	4,240	9,890	7,070	12,000	1,390	732	394	440
3	7,500	697	6,350	2,720	4,900	7,070	5,500	18,000	1,390	532	373	441
4	5,500	782	5,450	2,580	4,000	5,270	4,500	14,000	2,060	689	559	446
5	3,600	728	6,170	2,160	3,200	4,000	4,000	6,500	1,840	265	392	405
6	2,440	790	5,090	1,660	3,000	3,360	10,000	11,000	1,080	273	736	397
7	1,660	751	3,760	1,780	6,000	3,070	24,000	32,000	1,550	920	874	258
8	1,450	830	3,600	3,440	23,000	2,860	17,000	33,600	1,170	327	489	254
9	1,200	1,290	13,100	4,000	15,000	2,860	10,000	19,600	1,130	1,140	485	252
10	1,100	1,060	14,200	3,000	7,500	3,840	7,500	9,460	1,140	1,540	353	250
11	1,000	1,150	8,370	2,510	5,500	4,570	22,000	6,530	1,440	1,390	333	382
12	900	1,100	6,350	2,230	4,400	3,600	28,000	4,910	1,270	898	457	299
13	750	1,000	4,910	2,160	3,500	3,140	12,000	4,240	1,190	1,140	520	245
14	850	978	3,840	20,800	3,200	4,080	9,000	3,920	1,190	4,240	530	214
15	900	1,040	3,000	32,000	3,100	4,740	6,000	3,140	723	4,080	688	178
16	850	1,520	2,720	16,200	5,500	3,600	5,500	2,580	918	2,860	1,200	120
17	800	2,940	2,720	8,170	4,500	3,000	7,000	2,370	933	1,780	837	176
18	950	3,760	2,440	6,170	3,500	2,860	5,200	2,050	854	1,660	1,880	300
19	900	5,360	2,300	4,570	2,800	2,650	4,000	4,560	838	2,580	1,960	219
20	900	10,400	2,440	3,440	2,600	3,070	3,500	3,440	475	3,040	1,410	124
21	900	7,730	4,200	3,000	2,580	3,290	3,100	2,720	572	2,720	617	195
22	915	4,240	5,630	5,360	2,580	2,860	2,900	2,440	554	3,680	815	160
23	942	14,000	3,920	7,250	2,720	2,580	5,500	2,160	1,860	3,530	266	170
24	960	31,800	3,140	6,060	3,000	2,300	5,800	2,090	2,120	2,120	890	322
25	1,040	25,000	2,720	32,500	2,860	5,820	4,800	4,240	1,390	1,400	1,280	458
26	888	44,600	2,860	34,200	3,620	20,600	4,000	6,150	1,100	1,000	2,980	*329
27	870	*32,500	4,240	21,400	23,600	12,200	3,700	8,970	1,260	1,070	5,360	548
28	960	18,000	4,400	10,400	29,000	7,790	8,000	4,460	2,300	776	2,830	286
29	888	9,940	4,910	6,710	-	6,170	24,000	3,440	1,410	414	1,750	*103
30	400	13,600	4,910	4,910	-------	5,270	35,000	3,600	1,140	853	1,030	154
31	1,050	-------	3,760	3,920	-------	4,910	-------	2,580	-------	409	496	-------
Total	73,563	239,416	172,900	261,440	182,920	170,620	297,020	266,750	38,247	48,982	33,630	9,013
Mean	2,373	7,981	5,577	8,434	6,533	5,504	9,901	8,605	1,275	1,580	1,085	300
Cfsm	0.690	2.32	1.62	2.45	1.90	1.60	2.88	2.50	0.371	0.459	0.315	0.087
In.	0.80	2.59	1.87	2.83	1.98	1.84	3.21	2.88	0.41	0.53	0.36	0.10

Calendar year 1957: Max 44,600 Min 128 Mean 3,960 Cfsm 1.15 In. 15.65
Water year 1957-58: Max 44,600 Min 103 Mean 4,916 Cfsm 1.43 In. 19.40

Peak discharge (base, 30,000 cfs).--Nov. 26 (3 p.m.) 46,500 cfs (17.80 ft); Jan. 15 (1:30 a.m.) 38,300 cfs (16.00 ft); Jan. 26 (12:30 a.m.) 41,800 cfs (16.80 ft); Feb. 28 (6 a.m.) 30,400 cfs (14.13 ft); Apr. 12 (time and discharge unknown); Apr. 30 (time and discharge unknown); May 7 (5:30 p.m.) 44,600 cfs (17.35 ft).

* Discharge measurement made on this day.
Note.--No gage-height record Oct. 1-4, 8-21, Feb. 4-20, Apr. 3 to May 7; discharge estimated on basis of recorded range in stage, weather records, and records for nearby stations.

1035. Little River at Linden, N. C.

Location.--Lat 35°16', long 78°47', on left bank 10 ft downstream from bridge on U. S. Highway 401, 1.6 miles west of Linden, Cumberland County, 2 miles upstream from Stewart Creek, and 4½ miles upstream from mouth.

Drainage area.--460 sq mi.

Records available.--November 1928 to September 1958. Prior to October 1950, published as Lower Little River at Linden.

Gage.--Water-stage recorder. Datum of gage is 73.10 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Aug. 27, 1934, chain gage at same site and datum. Since June 18, 1948, auxiliary wire-weight gage 2¢ miles downstream read twice or more often daily during periods of backwater.

Average discharge.--29 years (1929-58), 542 cfs.

Extremes.--Maximum discharge during year, 4,340 cfs Nov. 26 (gage height, 15.37 ft); maximum gage height, 15.81 ft Nov. 26 (backwater from Cape Fear River); minimum discharge, 69 cfs Sept. 12 (gage height, 2.08 ft).

1928-58: Maximum discharge, 13,500 cfs Sept. 18, 1945, occurred during period of backwater from Cape Fear River; maximum gage height, 41.47 ft Sept. 19 or 20, 1945 (from floodmark); minimum discharge, 26 cfs Oct. 14, 1940.

Flood of Sept. 21, 1928, reached a stage of 37.3 ft, from floodmark; maximum discharge, 13,000 cfs Sept. 20 or 21.

Remarks.--Records good except those for periods of backwater from Cape Fear River, which are poor.

Revisions (water years).--WSP 822: Drainage area. WSP 1383: 1930-33, 1937, 1945.

Rating tables, water year 1957-58, except periods of backwater from Cape Fear River (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to May 8				May 9 to Sept. 30			
3.2	285	8.0	2,050	2.2	84	3.5	339
3.5	367	14.0	4,430	2.5	127	4.0	505
4.0	520			3.0	213	10.0	2,830

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,780	396	2,170	978	978	c1,920	1,230	c2,190	750	236	114	173
2	2,560	442	1,930	883	959	1,700	1,230	1,780	542	*197	106	153
3	2,250	442	1,740	807	*921	1,310	1,150	1,310	469	173	108	132
4	1,660	396	1,580	750	864	1,040	940	1,080	391	163	128	126
5	1,120	361	1,430	693	807	921	883	921	357	153	195	120
6	845	333	1,310	656	788	845	1,110	1,180	299	155	248	114
7	712	316	1,230	750	940	807	1,310	*c2,500	535	175	191	115
8	603	306	1,150	1,040	1,420	768	1,540	*c3,040	598	173	150	106
9	536	396	1,460	1,040	1,580	788	1,540	c2,820	469	217	130	91
10	457	569	1,620	978	1,660	1,020	1,180	1,900	395	219	115	91
11	426	620	1,740	845	1,340	1,080	c1,640	1,280	302	215	106	91
12	411	552	1,660	731	1,080	1,080	c1,720	1,190	257	250	97	84
13	396	457	1,320	674	959	921	1,900	1,270	236	260	92	91
14	382	411	1,120	1,310	883	978	1,470	1,230	217	395	92	104
15	361	426	1,040	c1,900	883	1,040	1,130	978	211	327	94	92
16	350	651	959	c2,130	1,080	978	1,250	807	203	330	112	99
17	341	1,220	921	1,820	1,120	845	1,390	693	205	275	116	105
18	411	1,530	883	1,290	1,120	750	1,390	617	195	241	115	98
19	411	2,640	845	1,040	940	750	1,270	568	182	260	108	94
20	396	2,830	864	921	826	769	1,040	487	173	250	101	98
21	352	2,600	997	864	750	750	883	505	166	205	97	126
22	*324	2,130	1,040	940	750	674	826	505	188	243	91	121
23	303	2,300	1,040	997	731	620	959	487	294	232	119	111
24	301	c2,960	883	1,100	712	586	902	418	*283	187	253	108
25	382	c3,360	788	c1,960	693	769	826	395	275	361	216	105
26	504	c4,190	883	c2,200	769	1,360	731	469	215	201	718	98
27	488	*c3,750	1,040	c2,410	c1,340	1,740	731	731	345	160	655	94
28	426	c3,130	1,040	1,880	c1,790	1,780	769	791	487	*145	617	95
29	367	2,400	1,120	1,350	--	1,310	c1,460	1,260	388	158	469	94
30	344	2,260	*1,080	1,120	-------	1,040	c1,860	1,350	296	126	265	87
31	338	-------	1,080	1,040	-------	1,120	-------	1,090	-------	124	197	-------
Total	20,537	44,374	37,963	37,097	28,683	32,060	36,260	35,842	9,923	6,806	6,215	3,216
Mean	662	1,479	1,225	1,197	1,024	1,034	1,209	1,156	331	220	200	107
Cfsm	1.44	3.22	2.66	2.60	2.23	2.25	2.63	2.51	0.720	0.478	0.435	0.233
In.	1.66	3.59	3.07	3.00	2.32	2.59	2.93	2.90	0.80	0.55	0.50	0.26

Calendar year 1957: Max 4,190 Min 59 Mean 681 Cfsm 1.48 In. 20.07
Water year 1957-58: Max 4,190 Min 84 Mean 819 Cfsm 1.78 In. 24.17

Peak discharge (base, 2,100 cfs).--Oct. 2 (7 p.m.) 2,640 cfs (9.48 ft); Nov. 20 (3:30 a.m.) 2,870 cfs (10.11 ft); Nov. 26 (2:30 p.m.) 4,340 cfs (15.37 ft); Jan. 16 (6 a.m.) 2,170 cfs (8.30 ft); Jan. 27 (4 a.m.) 2,470 cfs (9.35 ft); May 1 (12 m.) 2,270 cfs (8.99 ft); May 8 (5 p.m.) 3,180 cfs (12.08 ft).

* Discharge measurement made on this day.
c Backwater from Cape Fear River.

1055. Cape Fear River at lock 3, near Tarheel, N. C.

Location.--Lat 34°50', long 78°48', on right bank 100 ft upstream from lock 3, 1 mile downstream from county line, 7 miles north of Tarheel, Bladen County, 9 miles upstream from Phillips Creek, and at mile 95.

Drainage area.--4,810 sq mi, approximately.

Records available.--October 1937 to September 1958.

Gage.--Water-stage recorder and concrete lock and dam control. Datum of gage is 28.935 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Jan. 8, 1939, staff gage on upper lock wall 100 ft downstream at same datum. Auxiliary water-stage recorder 1.8 miles downstream; prior to Jan. 14, 1943, auxiliary staff gage 400 ft downstream on lower end of lock wall; Jan. 14, 1943, to Sept. 30, 1953, auxiliary water-stage recorder at site 600 ft downstream.

Average discharge.--21 years, 4,835 cfs.

Extremes.--Maximum discharge during year, 43,800 cfs Nov. 27; maximum gage height, 25.85 ft Nov. 27; minimum discharge, 440 cfs Sept. 30 (gage height, 0.75 ft); minimum daily, 480 cfs Sept. 30.
1937-58: Maximum gage height, 43.44 ft Sept. 22, 1945 (discharge not determined); minimum discharge, 170 cfs Sept. 20, 1954; minimum daily, 208 cfs Sept. 13, 1954.

Remarks.--Records good except those computed using submergence as a factor, which are fair. Slight diurnal fluctuation and some regulation for short periods at low flow caused by powerplants above station.

Rating table, water year 1957-58, except periods computed using submergence as a factor (gage height, in feet, and discharge, in cubic feet per second)

0.8	480	3.0	3,460
1.0	670	4.0	5,690
2.0	1,830	6.0	11,500

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	k21,200	1,970	k23,600	6,460	6,730	k29,000	10,400	k33,800	4,840	2,420	1,100	1,340
2	k22,100	2,040	k23,600	5,820	6,330	k23,500	12,500	k27,300	3,560	1,900	1,170	1,500
3	*k20,800	1,760	k20,100	5,440	7,270	k16,200	9,850	k20,700	2,820	1,650	850	1,180
4	*k14,200	1,700	k11,600	5,080	7,000	k11,000	7,810	k20,000	2,660	1,320	914	1,040
5	k9,380	1,830	k10,300	4,720	5,940	8,240	7,000	k15,400	3,180	1,320	1,100	958
6	5,940	1,670	9,250	3,850	5,440	6,460	6,860	k10,900	2,660	1,060	1,200	810
7	4,390	1,640	7,810	4,080	5,690	5,690	k16,800	k24,400	2,340	980	1,440	740
8	3,460	1,540	6,730	5,820	k12,000	5,200	k23,600	k38,400	2,740	1,490	1,320	710
9	2,820	1,830	k9,400	7,270	k20,400	5,080	k18,700	k36,200	2,420	1,260	1,110	700
10	2,580	1,970	k17,800	6,730	k17,800	5,940	k12,500	k28,300	2,270	2,270	892	760
11	2,420	2,200	k16,600	5,690	k11,900	7,270	k14,100	k19,800	2,200	2,820	780	690
12	1,900	2,500	k13,000	4,960	k9,110	7,270	k26,800	k13,300	2,270	2,270	840	670
13	1,640	2,270	k10,800	4,280	7,270	6,070	k25,600	k9,400	2,040	1,970	914	770
14	1,760	2,040	8,090	k18,100	6,200	6,460	k17,400	7,540	2,040	2,840	969	660
15	1,900	1,970	6,730	k26,300	5,820	7,270	k11,600	6,730	1,760	6,070	958	552
16	1,760	2,270	5,690	k30,600	6,600	7,000	9,400	5,560	1,380	5,440	1,300	570
17	1,610	3,840	5,440	k20,900	8,370	5,940	9,250	4,720	1,530	3,650	1,570	660
18	1,700	6,330	5,080	k14,300	7,270	5,200	9,850	4,060	1,580	2,740	1,480	660
19	2,040	8,370	4,960	k10,600	5,940	5,080	8,370	4,390	1,570	2,900	2,420	640
20	1,830	k12,500	4,720	7,270	5,200	4,960	6,860	5,820	1,360	3,360	2,340	650
21	1,650	k14,500	5,440	5,940	5,080	5,440	5,940	4,840	1,070	3,850	1,700	570
22	1,760	k11,800	7,810	5,940	4,720	5,200	5,320	4,060	1,200	3,460	1,200	730
23	1,760	k11,200	7,540	9,250	4,500	4,720	5,820	3,750	1,480	4,720	1,260	830
24	1,760	k24,600	6,460	9,250	4,720	4,170	7,270	3,360	3,180	3,850	870	750
25	1,830	k31,200	5,440	k17,500	4,960	4,840	7,540	4,340	2,900	2,660	1,580	720
26	1,970	k36,000	5,560	k33,500	5,200	k15,100	6,200	6,070	2,270	2,120	3,240	969
27	1,830	*k42,100	6,730	k34,100	k12,600	k20,500	5,690	10,200	3,650	1,570	6,620	1,050
28	1,830	k36,200	7,810	k24,600	k26,900	k16,300	5,820	9,550	5,440	1,640	6,330	936
29	1,970	k26,000	7,810	k16,200	-	k12,200	k17,900	7,270	4,500	1,430	4,280	690
30	1,760	k21,600	8,370	k11,400	--------	k10,000	k29,500	7,000	2,990	1,160	2,900	480
31	1,390	--------	7,540	k8,500	--------	8,950	--------	6,200	--------	1,340	1,760	--------
Total	144,940	317,440	297,810	374,430	236,960	286,850	362,250	403,360	75,900	77,530	56,407	23,985
Mean	4,675	10,580	9,607	12,080	8,463	9,253	12,080	13,010	2,530	2,501	1,820	800
Cfsm	0.975	2.20	2.00	2.51	1.76	1.92	2.51	2.70	0.526	0.520	0.378	0.166
In.	1.12	2.45	2.30	2.90	1.83	2.22	2.80	3.12	0.59	0.60	0.44	0.19

Calendar year 1957: Max 42,100 Min 534 Mean 5,787 Cfsm 1.20 In. 16.33
Water year 1957-58: Max 42,100 Min 480 Mean 7,282 Cfsm 1.51 In. 20.56

* Discharge measurement made on this day.
k Computed by using submergence as a factor.

1059. Hood Creek near Leland, N. C.

Location.--Lat 34°16'42", long 78°07'32", on right bank at bridge on U. S. Highways 74 and 76, 0.4 mile downstream from Pasture Pond Branch, 1 mile southeast of Maco, and 4¾ miles northeast of Leland, Brunswick County.

Drainage area.--21.6 sq mi.

Records available.--November 1956 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 15 ft (from topographic map).

Extremes.--Maximum discharge during year, 1,260 cfs Sept. 28 (gage height, 9.18 ft); minimum, 0.2 cfs Aug. 24, 25.
1956-58: Maximum discharge, that of Sept. 28, 1958; minimum, 0.05 cfs several days in August and September 1957.
Flood of Sept. 20, 1955, reached a stage of 10.39 ft, from crest-stage indicator then in use (discharge, 2,050 cfs, from rating curve extended above 650 cfs).

Remarks.--Records fair.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Nov. 19 to Dec. 9, Apr. 3-6, Aug. 3-15, 26, 28-31, Sept. 1-8)

1.2	0.2	4.0	51
1.3	.6	4.5	76
1.5	1.8	5.0	111
1.8	4.0	6.0	222
2.1	6.6	7.0	425
2.5	12	8.0	730
3.0	21	9.0	1,150
3.5	34		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	245	7.8	42	59	45	164	188	15	10	23	*30	31
2	142	9.3	39	50	40	103	128	14	8.8	14	15	22
3	92	9.6	31	43	36	79	*89	12	6.3	10	35	16
4	68	9.2	25	38	*32	65	71	11	5.2	8.3	116	*13
5	51	8.1	21	34	29	55	76	9.2	4.5	9.8	111	9.4
6	38	7.5	19	31	26	47	134	17	3.6	8.4	68	7.2
7	30	6.9	16	42	25	42	310	50	4.8	6.8	40	5.9
8	23	6.7	15	90	26	39	188	58	6.4	11	24	4.7
9	18	6.9	40	96	27	41	115	40	5.9	12	18	3.7
10	14	6.6	106	70	25	54	86	25	4.5	6.8	19	2.8
11	12	6.3	164	56	23	*62	74	18	3.3	4.8	18	2.3
12	10	6.2	124	48	21	51	66	15	2.5	3.8	*12	2.3
13	8.8	6.1	82	42	21	54	55	17	2.4	3.1	8.6	2.5
14	8.1	6.2	64	90	21	79	46	15	2.7	2.3	7.4	2.2
15	7.3	6.6	54	164	24	79	40	11	2.2	2.0	5.2	2.2
16	6.7	6.9	47	119	35	60	*180	8.1	2.2	2.1	3.7	3.4
17	7.1	8.1	42	86	42	48	*462	6.4	2.4	2.1	2.8	3.3
18	10	11	39	66	34	46	245	5.5	2.1	5.2	2.4	2.4
19	13	14	37	55	27	60	152	4.6	1.5	15	1.9	1.7
20	12	14	40	48	24	70	103	*5.2	14	16	1.4	1.3
21	9.6	10	50	45	21	62	75	11	40	9.2	.8	1.0
22	8.2	8.8	56	54	20	49	61	18	104	11	.5	2.3
23	*7.5	8.9	49	60	19	41	52	12	215	8.8	.4	4.4
24	7.0	9.6	42	53	18	36	46	7.6	147	5.8	.3	3.4
25	7.8	*14	41	63	16	47	39	7.3	*96	7.6	.6	*2.3
26	8.4	20	51	72	31	89	32	15	60	9.4	273	1.8
27	8.2	24	68	61	140	86	26	30	50	6.6	330	230
28	7.6	20	68	50	230	*65	22	29	62	4.6	182	960
29	7.1	21	79	43	-	53	20	19	56	8.4	103	375
30	6.8	33	92	42	-------	44	17	12	38	38	66	195
31	7.0	-------	*73	45	-------	90	-------	9.2	-------	49	45	-------
Total	901.2	333.3	1,716	1,915	1,078	1,960	3,198	527.1	963.3	324.9	1,541.0	1,914.5
Mean	29.1	11.1	55.4	61.8	38.5	63.2	107	17.0	32.1	10.5	49.7	63.8
Cfsm	1.35	0.514	2.56	2.86	1.78	2.93	4.95	0.787	1.49	0.486	2.30	2.95
In.	1.55	0.57	2.95	3.30	1.86	3.37	5.51	0.91	1.66	0.56	2.65	3.30

Calendar year 1957: Max 509 Min 0.05 Mean 25.4 Cfsm 1.18 In. 15.96
Water year 1957-58: Max 960 Min 0.3 Mean 44.9 Cfsm 2.08 In. 28.19

Peak discharge (base, 300 cfs).--Apr. 7 (8 a.m.) 350 cfs (6.70 ft); Apr. 17 (4:30 a.m.) 560 cfs (7.52 ft); Aug. 26 (10 p.m.) 475 cfs (7.18 ft); Sept. 28 (5 a.m.) 1,260 cfs (9.18 ft).

* Discharge measurement made on this day.

1060. Little Coharie Creek near Roseboro, N. C.

Location.--Lat 34°57', long 78°29', on downstream end of center pier of bridge on State Highway 24, 1¼ miles east of Roseboro, Sampson County, and 1½ miles upstream from Bear-skin Swamp.

Drainage area.--96.4 sq mi.

Records available.--January 1950 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 81 ft (estimated from description of previously destroyed bench mark at site). Prior to Jan. 12, 1951, wire-weight gage at same site and datum.

Average discharge.--8 years, 92.6 cfs.

Extremes.--Maximum discharge during year, 570 cfs Jan. 17 (gage height, 7.14 ft); minimum, 5.8 cfs Sept. 20 (gage height, 1.83 ft).
1950-58: Maximum discharge, 1,860 cfs Sept. 6, 1955 (gage height, 9.00 ft); minimum, 0.1 cfs Sept. 13, 14, 27, Oct. 1-11, 1954.
Flood in 1924 reached a stage of 11.6 ft, from information furnished by North Carolina State Highway Commission.

Remarks.--Records good below 200 cfs and fair above except those for period of backwater from leaves, which are poor.

Rating tables, water year 1957-58, except period of backwater from leaves (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 30				May 1 to Sept. 30			
3.3	36	6.0	197	1.8	5.4	5.5	141
4.0	60	6.5	300	2.0	8.1	6.0	194
5.0	109	7.0	490	2.5	17	6.5	300
5.5	144	7.2	600	3.0	27	7.0	490
				4.0	58	7.1	540
				5.0	106		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	148	46	420	315	260	285	360	279	217	288	9.6	43
2	180	60	380	300	240	330	330	285	194	217	8.4	28
3	212	64	360	270	230	345	345	294	164	164	8.6	22
4	250	68	345	250	221	330	345	264	129	90	*14	18
5	250	70	315	240	*204	300	300	232	79	46	34	*15
6	230	70	285	221	191	260	270	230	62	38	52	13
7	204	64	260	230	204	230	260	342	128	39	66	11
8	174	56	250	285	230	212	230	372	154	40	56	10
9	140	56	285	285	230	204	212	510	99	44	25	8.8
10	126	54	345	270	230	212	221	470	56	52	17	7.8
11	100	53	330	315	230	204	230	351	45	56	13	7.3
12	77	53	380	300	240	197	230	291	39	46	*12	7.0
13	62	51	400	270	240	204	212	250	36	39	16	7.5
14	51	49	360	345	230	221	197	215	30	33	23	7.5
15	45	48	330	440	221	221	204	183	37	34	22	7.5
16	43	74	300	465	221	212	240	159	44	37	16	7.3
17	39	129	270	570	212	204	250	137	31	36	14	7.1
18	44	154	250	465	204	204	230	112	25	33	15	6.6
19	44	203	230	380	197	212	212	88	23	26	14	6.3
20	44	260	230	330	191	204	204	72	20	24	11	6.0
21	44	250	250	300	191	191	197	*88	19	23	8.8	6.8
22	40	250	260	285	185	180	185	78	23	21	7.8	11
23	38	330	240	260	180	174	180	72	42	19	7.4	12
24	*40	*400	250	250	174	168	163	62	50	16	9.6	11
25	63	380	270	300	163	191	148	58	45	16	13	9.0
26	58	490	300	330	168	230	144	97	35	22	64	7.8
27	54	515	330	315	204	230	148	122	86	25	92	8.6
28	53	515	315	345	260	240	144	146	154	19	100	13
29	46	515	345	345	-	270	192	256	266	15	109	9.3
30	40	490	345	315	-------	270	300	256	380	13	115	7.8
31	38	-------	330	285	-------	330	-------	219	-------	11	91	-------
Total	2,977	5,817	9,560	9,876	5,951	7,265	6,883	6,590	2,712	1,582	1,064.2	343.0
Mean	96.0	194	308	319	213	234	229	213	90.4	51.0	34.3	11.4
Cfsm	0.996	2.01	3.20	3.31	2.21	2.43	2.38	2.21	0.938	0.529	0.356	0.118
In.	1.15	2.24	3.69	3.81	2.30	2.80	2.66	2.54	1.05	0.61	0.41	0.13

Calendar year 1957: Max 540 Min 3.1 Mean 121 Cfsm 1.26 In. 17.04
Water year 1957-58: Max 570 Min 6.0 Mean 166 Cfsm 1.72 In. 23.39

* Discharge measurement made on this day.
Note.--Backwater from leaves Oct. 11 to Nov. 16.

1065. Black River near Tomahawk, N. C.

Location.--Lat 34°45', long 78°17', near center of span on downstream side of bridge on State Highway 411, a quarter of a mile downstream from Clear Run Swamp and 3½ miles northeast of Tomahawk, Sampson County.

Drainage area.--680 sq mi.

Records available.--October 1951 to September 1958.

Gage.--Wire-weight gage read twice daily. Datum of gage is 0.39 ft below mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--7 years, 599 cfs.

Extremes.--Maximum discharge during year, 2,870 cfs Dec. 1, 2 (gage height, 38.40 ft); minimum, 76 cfs Sept. 21 (gage height, 26.67 ft).
1951-58: Maximum discharge observed, 6,550 cfs Sept. 9, 1955 (gage height, 44.16 ft); minimum, 8.5 cfs Oct. 13, 1954 (gage height, 25.59 ft).
Flood in 1928 reached a stage of 47.0 ft (discharge, 9,000 cfs). Floods in 1945 and 1948 reached a stage of 42.6 ft, from information furnished by North Carolina State Highway Commission.

Remarks.--Records fair.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 15-29, June 6-28, Aug. 1-8)

26.6	68	33.0	1,200
27.0	116	37.0	2,340
28.0	246	39.0	3,150

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*990	218	2,870	*2,310	2,040	1,830	1,860	1,070	868	1,150	260	1,420
2	1,110	246	2,820	2,270	1,860	1,980	2,040	1,150	828	908	192	928
3	1,170	305	2,780	2,170	1,740	2,130	2,270	1,340	908	788	148	609
4	1,150	305	*2,620	2,040	1,590	2,170	2,380	1,520	1,070	768	*129	439
5	990	275	2,410	1,890	1,520	2,130	2,340	1,680	888	648	122	*337
6	788	275	2,200	1,710	1,420	2,040	2,170	1,710	668	514	135	260
7	688	260	1,980	1,620	1,390	1,950	2,070	1,860	552	386	166	205
8	648	246	1,800	1,680	1,490	1,830	1,890	2,100	708	369	232	179
9	628	246	1,770	1,830	1,590	1,650	1,770	2,310	748	305	205	154
10	590	246	1,830	*1,950	1,650	1,620	1,650	2,480	514	260	166	135
11	514	246	1,950	1,980	1,620	*1,650	1,540	2,620	476	246	141	122
12	439	232	2,130	1,980	1,570	1,620	1,440	2,620	403	232	*116	110
13	352	218	2,240	1,920	1,520	1,570	1,370	2,590	369	218	116	110
14	305	218	2,340	1,920	1,440	1,570	1,300	2,340	352	205	135	116
15	246	218	2,340	2,070	1,370	1,590	1,250	2,010	305	205	179	104
16	218	246	2,270	2,240	1,390	1,620	1,270	1,680	352	232	205	104
17	205	514	2,170	2,340	1,420	1,540	*1,420	1,340	321	290	218	98
18	218	908	2,010	2,410	1,390	1,490	1,520	1,070	260	305	205	92
19	232	1,050	1,860	2,380	1,340	1,440	1,490	868	232	275	166	86
20	218	1,130	1,710	2,270	1,250	1,470	1,490	688	218	246	141	80
21	192	1,170	1,650	2,100	1,200	1,440	1,440	*628	205	352	129	78
22	192	1,130	1,770	2,010	1,150	1,420	1,370	708	275	439	104	165
23	179	1,110	1,830	1,890	1,110	1,340	1,250	609	495	305	92	290
24	*179	*1,370	1,830	1,770	1,070	1,250	1,130	495	533	321	110	192
25	179	1,620	1,800	1,890	1,010	1,200	1,030	439	421	352	166	*141
26	232	1,920	1,770	2,100	1,010	1,270	949	495	*352	218	394	116
27	246	2,240	1,830	2,270	1,320	1,420	868	571	498	154	838	135
28	232	2,480	1,890	2,380	1,590	1,490	788	533	1,150	166	1,250	381
29	218	2,660	2,010	2,410	-	1,520	748	748	1,390	386	1,490	421
30	218	2,780	2,130	2,240	-------	1,540	888	1,030	1,370	439	1,590	275
31	218	-------	2,240	2,100	-------	1,620	-------	990	-------	321	1,590	-------
Total	13,984	26,082	64,850	64,140	40,060	50,400	44,991	42,292	17,729	12,003	11,130	7,882
Mean	451	869	2,092	2,069	1,431	1,626	1,500	1,364	591	387	359	263
Cfsm	0.663	1.28	3.08	3.04	2.10	2.39	2.21	2.01	0.869	0.569	0.528	0.387
In.	0.76	1.43	3.55	3.51	2.19	2.76	2.46	2.31	0.97	0.66	0.61	0.43

Calendar year 1957: Max 3,580 Min 32 Mean 708 Cfsm 1.04 In. 14.13
Water year 1957-58: Max 2,870 Min 78 Mean 1,084 Cfsm 1.59 In. 21.64

* Discharge measurement made on this day.

1070. South River near Parkersburg, N. C.

Location.--Lat 34°48', long 78°27', on downstream side of highway bridge near center of span, at Bladen-Sampson County line, 1.9 miles southwest of Parkersburg, Sampson County.

Drainage area.--382 sq mi.

Records available.--October 1951 to September 1958.

Gage.--Wire-weight gage read twice daily. Datum of gage is 0.38 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--7 years, 345 cfs.

Extremes.--Maximum discharge during year, 1,970 cfs May 10 (gage height, 61.37 ft); minimum, 14 cfs Sept. 21 (gage height, 52.76 ft).
1951-58: Maximum discharge, 5,000 cfs Aug. 24, 1955 (gage height, 64.20 ft); minimum, 0.1 cfs Oct. 3-6, 11-14, 1954.
Flood in 1918 or 1928 reached a stage of 65.88 ft, from high-water mark witnessed by local resident.

Remarks.--Records fair.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

52.8	15	57.0	289
53.0	21	58.0	444
53.5	38	59.0	680
54.0	60	60.0	1,040
55.0	115	61.0	1,630
56.0	187	61.4	1,970

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*163	75	1,550	*1,040	1,080	845	1,080	845	545	462	31	221
2	163	91	1,550	1,000	1,040	960	1,180	1,080	570	*680	29	171
3	187	103	1,550	1,000	1,000	1,040	1,300	1,240	570	680	27	128
4	203	103	*1,550	980	960	1,130	1,360	1,240	520	570	*24	97
5	221	103	1,480	920	920	1,130	1,300	1,180	444	409	21	*80
6	231	103	1,420	880	880	1,130	1,240	1,130	392	253	20	65
7	231	97	1,300	880	845	1,080	1,180	1,180	329	171	24	55
8	231	91	1,240	920	880	1,040	1,080	1,300	302	128	26	46
9	212	91	1,240	960	880	1,040	1,040	1,630	302	109	24	40
10	203	97	1,180	960	880	1,000	960	1,970	329	91	22	35
11	195	97	1,180	960	880	960	920	1,880	344	97	22	31
12	187	97	1,180	960	880	920	920	1,630	315	109	18	27
13	179	97	1,240	960	880	880	1,000	1,420	242	97	18	27
14	171	97	1,240	1,040	920	880	1,000	1,240	179	91	18	26
15	163	97	1,180	1,130	920	880	1,040	1,080	135	85	20	22
16	149	109	1,130	1,240	960	845	1,080	960	109	109	20	21
17	135	195	1,080	1,420	960	845	1,130	845	91	115	17	20
18	135	289	1,040	1,550	920	845	1,130	740	80	97	17	18
19	135	360	960	1,480	880	810	1,080	650	75	91	26	16
20	122	409	960	1,360	880	810	1,040	570	70	85	31	15
21	109	444	1,000	1,300	845	775	960	*520	62	85	31	15
22	103	462	960	1,180	810	740	920	500	80	75	26	24
23	91	570	920	1,130	775	710	880	462	122	62	21	40
24	*85	*680	880	1,080	740	650	810	409	115	53	27	*36
25	103	810	880	1,130	710	680	740	344	103	48	38	27
26	122	960	880	1,130	680	680	680	302	85	44	80	24
27	109	1,040	880	1,130	740	740	620	265	135	42	212	24
28	97	1,180	920	1,130	810	810	595	242	242	38	289	35
29	85	1,360	1,000	1,130	-	845	595	315	265	38	302	33
30	75	1,480	1,000	1,130	-------	920	680	409	302	38	289	26
31	75	-------	1,040	1,130	-------	1,000	-------	481	-------	35	277	-------
Total	4,670	11,787	35,610	34,220	24,555	27,620	29,540	28,059	7,454	5,087	2,047	1,445
Mean	151	393	1,149	1,104	877	891	985	905	248	164	66.0	48.2
Cfsm	0.395	1.03	3.01	2.89	2.30	2.33	2.58	2.37	0.649	0.429	0.173	0.126
In.	0.45	1.15	3.47	3.33	2.39	2.69	2.88	2.73	0.73	0.50	0.20	0.14

Calendar year 1957: Max 1,560 Min 5.4 Mean 386 Cfsm 1.01 In. 13.72
Water year 1957-58: Max 1,970 Min 15 Mean 581 Cfsm 1.52 In. 20.66

* Discharge measurement made on this day.

1075. Colly Creek near Kelly, N. C.

Location.--Lat 34°27'50", long 78°15'28", on right bank 10 ft downstream from bridge on State Highway 53, 4 miles east of Kelly, Bladen County, and 6¾ miles upstream from mouth.

Drainage area.--108 sq mi.

Records available.--January 1950 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 15.4 ft above mean sea level, unadjusted. Prior to Dec. 13, 1950, staff gage at same site and datum.

Average discharge.--8 years, 81.2 cfs.

Extremes.--Maximum discharge during year, 363 cfs Apr. 6 (gage height, 5.70 ft); minimum, 0.4 cfs Aug. 25 (gage height, 0.60 ft).
1950-58: Maximum discharge, 910 cfs Sept. 22, 1955 (gage height, 7.20 ft); no flow at times during several years.
Flood in 1908 reached a stage of 11.1 ft; September 1945, 10.2 ft, from information by local resident. Flood in 1928 reached a stage of 7.7 ft, from information by North Carolina State Highway Commission.

Remarks.--Records good.

Revisions.--WSP 1433: Drainage area.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.6	0.4	3.0	42
.7	.7	3.5	66
.8	1.2	4.0	101
1.2	4.2	4.5	150
1.6	8.7	5.0	216
2.0	15	5.7	363
2.5	25		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	3.5	79	273	339	253	316	144	58	144	22	14
2	46	4.7	73	284	339	253	316	139	52	150	19	10
3	37	5.1	61	273	328	253	328	129	48	156	18	8.0
4	30	5.1	60	273	316	244	328	124	46	161	17	*6.3
5	25	4.8	56	263	294	244	339	114	53	167	*13	5.3
6	21	4.5	53	253	284	234	351	123	60	167	11	4.1
7	18	4.1	55	273	273	234	351	167	67	167	8.6	3.3
8	14	4.4	65	294	273	234	339	167	65	161	7.2	2.7
9	12	9.0	103	284	263	244	328	167	66	150	5.6	2.2
10	9.5	8.2	139	284	253	263	305	186	66	139	4.8	2.0
11	8.0	7.4	167	273	234	273	294	193	62	134	3.9	1.9
12	6.7	7.4	186	263	225	263	284	193	55	124	3.3	1.9
13	5.5	7.2	193	253	216	263	273	208	47	119	3.4	1.9
14	4.7	7.3	193	284	216	263	253	234	38	109	2.9	1.9
15	4.1	9.0	193	305	216	263	244	225	31	95	2.5	2.1
16	3.7	13	186	305	216	253	284	216	26	86	2.0	2.2
17	3.9	18	186	305	216	244	305	200	22	70	1.8	2.2
18	6.6	30	180	305	208	244	294	186	19	64	2.0	2.0
19	6.2	51	173	294	200	253	284	173	16	60	1.8	1.9
20	5.5	52	180	294	200	244	263	161	16	55	1.4	1.8
21	4.9	47	186	284	193	244	253	156	14	54	1.1	1.7
22	4.4	41	186	294	193	234	234	144	34	50	.8	3.2
23	*3.9	43	186	294	186	225	225	129	78	42	.6	3.7
24	3.6	49	186	284	180	216	208	118	99	42	.6	3.3
25	4.0	*51	193	294	180	225	200	109	134	60	2.1	*2.9
26	3.7	58	208	305	186	234	186	105	*156	61	29	2.5
27	3.4	57	225	305	225	234	173	94	180	52	46	45
28	3.2	55	234	316	244	234	167	85	180	42	46	150
29	3.0	68	273	328	-	234	156	82	156	33	34	156
30	2.8	77	284	339	-------	234	150	73	144	28	24	139
31	2.8	-------	*284	339	-------	*273	-------	65	-------	25	18	-------
Total	361.1	801.7	5,026	9,017	6,696	7,606	8,031	4,609	2,088	2,967	353.4	585.0
Mean	11.6	26.7	162	291	239	245	268	149	69.6	95.7	11.4	19.5
Cfsm	0.107	0.247	1.50	2.69	2.21	2.27	2.48	1.38	0.644	0.886	0.106	0.181
In.	0.12	0.28	1.73	3.11	2.31	2.62	2.77	1.59	0.72	1.02	0.12	0.20

Calendar year 1957: Max 287 Min 0.4 Mean 70.1 Cfsm 0.649 In. 8.81
Water year 1957-58: Max 351 Min 0.6 Mean 132 Cfsm 1.22 In. 16.59

* Discharge measurement made on this day.

1080. Northeast Cape Fear River near Chinquapin, N. C.

Location.--Lat 34°49', long 77°50', on right bank 540 ft downstream from bridge on State Highway 41, half a mile downstream from Muddy Creek, and 1¼ miles west of Chinquapin, Duplin County.

Drainage area.--600 sq mi.

Records available.--July 1940 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 17.28 ft above mean sea level (levels by Corps of Engineers).

Average discharge.--18 years, 616 cfs.

Extremes.--Maximum discharge during year, 3,380 cfs May 9, 10 (gage height, 12.33 ft); minimum, 50 cfs Sept. 21.
1940-58: Maximum discharge, 15,200 cfs Sept. 22, 1955 (gage height, 17.97 ft); minimum, 5.3 cfs (corrected) Oct. 10, 11, 1954.
Flood in 1908 reached a stage of 22.6 ft old bridge site 1,000 ft upstream from gage. Flood in 1928 reached a stage 0.8 ft lower than that in 1908, from information by North Carolina State Highway Commission.

Remarks.--Records fair.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used June 9-27, Aug. 1-19, Aug. 26 to Sept. 3, Sept. 23-30)

1.5	46	10.0	2,000
2.0	104	12.0	3,140
4.0	425	13.0	4,070
7.0	1,040		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,140	157	2,850	2,180	1,620	1,930	2,140	461	553	1,110	253	871
2	1,390	205	2,850	2,040	1,430	2,090	*2,520	479	520	871	180	763
3	1,580	236	2,640	1,930	1,270	2,180	2,580	729	808	610	150	562
4	1,660	253	2,360	1,770	1,110	2,180	*2,410	1,170	743	380	139	380
5	1,620	*262	*2,040	1,580	986	2,090	2,130	1,430	705	270	139	270
6	1,490	253	1,770	1,390	917	1,930	1,850	1,520	705	228	154	198
7	1,250	236	1,580	1,300	917	1,660	1,700	2,020	783	212	170	160
8	986	220	1,430	1,580	1,040	1,390	1,490	2,710	705	228	186	132
9	724	212	1,430	1,850	1,110	1,190	1,300	3,300	572	212	212	110
10	553	205	1,740	1,960	1,160	1,220	1,110	3,300	398	184	198	97
11	443	198	2,220	1,930	1,140	1,250	986	2,990	253	172	150	85
12	355	198	2,710	1,850	*1,060	*1,250	894	2,520	186	166	134	79
13	296	190	2,990	1,740	986	1,190	848	2,090	*158	145	*120	75
14	244	186	2,920	1,850	940	1,250	803	1,700	148	164	109	76
15	212	182	2,640	2,220	917	1,330	763	1,270	130	213	98	75
16	190	201	*2,310	2,460	1,010	1,330	803	917	113	321	87	69
17	176	372	2,040	2,580	1,040	1,270	986	667	102	355	80	64
18	169	479	1,770	2,460	940	1,190	1,040	515	103	312	78	61
19	168	648	1,550	2,180	871	1,190	1,040	416	91	212	110	57
20	163	783	1,390	1,890	803	1,220	940	346	81	162	152	53
21	156	871	1,490	1,660	783	1,220	848	346	72	151	148	50
22	146	917	1,550	1,490	763	1,190	763	364	90	141	120	80
23	139	1,050	1,620	1,330	743	1,090	*705	346	152	145	98	103
24	135	1,360	1,620	1,220	705	986	649	312	198	173	99	124
25	132	1,660	1,550	1,430	667	986	591	287	198	443	120	*96
26	141	1,930	1,550	1,770	706	1,160	497	527	164	497	222	66
27	144	2,180	1,700	2,000	1,180	1,330	452	743	362	452	*516	117
28	144	2,360	1,850	2,090	1,620	1,430	416	705	883	355	749	677
29	142	2,460	2,000	2,040	-	1,430	389	591	1,140	304	894	1,110
30	142	2,640	2,180	1,930	-------	1,360	416	553	1,190	278	871	1,190
31	145	-------	2,220	1,770	-------	1,550	-------	572	-------	304	871	-------
Total	16,375	23,104	62,560	57,470	28,434	44,062	34,058	35,896	12,304	9,770	7,607	7,850
Mean	528	770	2,018	1,854	1,016	1,421	1,135	1,158	410	315	245	262
Cfsm	0.880	1.28	3.36	3.09	1.69	2.37	1.89	1.93	0.683	0.525	0.408	0.437
In.	1.01	1.43	3.88	3.56	1.76	2.73	2.11	2.22	0.76	0.61	0.47	0.49

Calendar year 1957: Max 2,990 Min 16 Mean 620 Cfsm 1.03 In. 14.03
Water year 1957-58: Max 3,300 Min 50 Mean 930 Cfsm 1.55 In. 21.03

* Discharge measurement made on this day.

1085. Rockfish Creek near Wallace, N. C.

Location.--Lat 34°43'45", long 78°02'45", on downstream side of highway bridge, 0.2 mile upstream from Doctor Creek and 2½ miles west of Wallace, Duplin County.

Drainage area.--65.2 sq mi.

Records available.--July 1955 to September 1958.

Gage.--Wire-weight gage read once daily. Sept. 28, 1955, to Jan. 19, 1956, staff gage at same site and datum.

Extremes.--Maximum discharge during year, 685 cfs Apr. 1 (gage height, 11.5 ft, from graph based on gage readings); minimum daily, 1.1 cfs Sept. 12.
1955-58: Maximum discharge, 2,800 cfs Sept. 20, 1955 (gage height, 15.5 ft, from graph based on gage readings); minimum daily, 0.4 cfs July 27-30, 1955.
Flood in 1948 reached about same stage as that of Sept. 20, 1955. These two floods were the highest in 20 years (from information by local resident).

Remarks.--Records fair except those above 100 cfs, which are poor.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1-5, Nov. 20 to Dec. 6, Dec. 9-18, Apr. 2-9, June 23 to July 2)

2.2	1.1	3.0	26
2.3	2.2	6.0	145
2.4	3.7	8.0	268
2.5	6.0	10.0	460
2.6	9.2	11.0	595

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*392	16	472	*260	107	382	*595	30	56	145	4.6	26
2	362	22	392	212	99	308	565	30	41	76	4.4	18
3	239	26	276	176	88	232	382	28	39	45	4.4	13
4	145	26	218	145	80	176	*239	25	56	32	4.2	*9.6
5	91	*25	*165	123	*72	145	165	25	64	26	*3.9	6.6
6	72	22	131	103	64	119	140	43	88	18	3.0	4.6
7	56	20	111	91	72	99	140	236	80	23	2.2	3.2
8	36	16	99	227	99	84	135	580	37	34	1.8	2.5
9	30	14	119	308	111	76	115	509	32	36	2.0	2.0
10	26	12	260	276	140	119	91	325	30	*26	3.2	1.6
11	23	12	496	218	131	*140	80	200	22	22	2.5	1.3
12	21	12	496	165	*115	145	72	123	17	28	1.6	1.1
13	18	11	403	135	95	131	60	103	18	22	2.5	1.2
14	17	11	316	188	84	140	52	99	14	14	3.0	3.2
15	14	13	225	362	80	145	49	91	21	16	3.7	4.2
16	13	18	*160	382	99	140	76	60	41	49	3.1	5.5
17	13	52	127	308	103	119	*119	39	41	52	2.8	4.6
18	18	68	107	232	99	99	127	30	30	56	3.7	4.2
19	21	99	95	182	88	107	107	22	22	34	11	3.6
20	21	145	111	131	72	123	88	*19	13	22	6.0	1.4
21	18	131	170	111	64	127	72	20	11	16	2.6	2.1
22	14	107	212	103	60	111	56	22	43	13	1.8	4.2
23	*12	107	194	95	56	76	49	23	103	11	1.4	5.5
24	9.6	*194	165	99	52	76	41	20	131	9.2	1.5	6.6
25	10	343	140	194	49	76	37	18	140	13	3.2	*7.9
26	10	403	150	372	60	131	34	25	*84	20	52	3.7
27	11	362	200	*382	155	155	30	28	103	13	123	13
28	12	308	268	292	325	*200	30	30	200	8.6	155	165
29	12	268	334	212	-	170	28	30	300	6.3	135	212
30	11	414	382	155	-------	135	28	49	239	5.3	88	165
31	11	-------	334	119	-------	212	-------	60	-------	4.6	52	-------
Total	1,758.6	3,277	7,328	6,358	2,719	4,498	3,802	2,942	2,116	896.0	689.1	702.4
Mean	56.7	109	236	205	97.1	145	127	94.9	70.5	28.9	22.2	23.4
Cfsm	0.870	1.67	3.62	3.14	1.49	2.22	1.95	1.46	1.08	0.443	0.340	0.359
In.	1.00	1.87	4.18	3.63	1.55	2.57	2.17	1.68	1.21	0.51	0.38	0.40

Calendar year 1957: Max 496 Min 0.5 Mean 74.0 Cfsm 1.13 In. 15.41
Water year 1957-58: Max 595 Min 1.1 Mean 102 Cfsm 1.56 In. 21.16

* Discharge measurement made on this day.

1095. Waccamaw River at Freeland, N. C.

Location.--Lat 34°05'43", long 78°32'56", on left bank 150 ft downstream from New Britton Bridge on State Highway 130, 1 mile southwest of Freeland, Brunswick County, and 7 miles downstream from Juniper Creek.

Drainage area.--626 sq mi.

Records available.--July 1939 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 15.52 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to July 15, 1943, staff gage at site 150 ft upstream at same datum. Since July 15, 1952, auxiliary water-stage recorder at site 3.3 miles downstream; Oct. 7, 1949, to July 14, 1952, auxiliary staff gage at same site.

Average discharge.--19 years, 609 cfs.

Extremes.--Maximum discharge during year, 3,170 cfs Apr. 20, 21 (gage height, 14.25 ft); minimum, 21 cfs Nov. 12.
1939-58: Maximum discharge, 10,200 cfs Sept. 25, 1955; maximum gage height, 16.63 ft Sept. 26, 1955; minimum discharge, 0.1 cfs Aug. 30, Sept. 9, 10, 28, Oct. 4-14, 1954.

Remarks.--Records good except those below 100 cfs, which are fair. Records of chemical analyses for the water year 1958 are contained in WSP 1571.

Revisions.--WSP 1172: Drainage area.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	501	38	144	970	2,540	1,160	1,410	1,630	577	2,170	*365	836
2	479	38	149	1,020	2,540	1,260	1,600	1,500	531	2,130	335	663
3	457	35	157	1,080	2,420	1,320	1,710	1,350	486	2,060	335	538
4	424	34	155	1,160	*2,260	1,360	1,820	1,210	466	1,920	356	*348
5	393	32	163	1,180	2,130	1,380	2,020	1,070	475	1,780	357	307
6	354	32	159	1,170	1,930	1,420	2,320	988	442	1,670	377	224
7	316	30	156	1,220	1,730	1,480	2,780	1,000	432	1,520	376	226
8	288	33	141	1,300	1,620	1,480	3,070	1,060	422	1,380	357	199
9	262	30	188	1,380	1,490	1,520	3,110	1,180	421	1,260	328	183
10	228	26	257	1,410	1,340	1,500	3,010	1,180	412	1,150	290	209
11	195	27	260	1,410	1,240	1,550	2,860	1,200	384	989	270	209
12	168	21	299	1,390	1,150	1,500	2,750	1,190	380	892	242	205
13	141	22	352	1,410	1,060	1,520	2,550	1,190	336	765	204	200
14	116	26	338	1,440	998	1,500	2,340	1,150	307	671	172	191
15	98	32	338	1,550	980	1,520	2,140	1,120	276	635	150	174
16	85	32	317	1,750	980	1,540	2,180	1,060	284	641	119	186
17	76	34	320	1,880	1,000	1,540	2,390	1,010	296	608	104	195
18	76	34	320	2,020	990	1,490	*2,780	970	287	546	94	177
19	76	38	312	2,060	990	1,470	3,040	920	263	571	83	142
20	70	34	333	2,060	980	1,490	3,170	808	236	583	74	128
21	65	33	432	2,150	960	1,540	3,170	790	238	595	64	106
22	60	36	473	2,130	949	1,490	3,140	756	232	552	61	125
23	*63	38	500	2,130	940	1,490	3,010	723	523	472	51	130
24	59	49	506	2,130	909	1,420	2,890	729	819	454	49	*105
25	57	*49	500	2,060	880	1,380	2,730	699	1,020	429	70	88
26	50	68	537	2,040	880	1,380	2,580	699	1,240	440	356	77
27	48	64	575	2,000	931	1,350	2,320	692	1,400	466	752	259
28	41	70	607	1,950	1,010	1,340	2,180	692	1,570	432	787	405
29	39	84	700	2,040	-	1,350	2,000	635	1,800	405	872	715
30	36	114	827	2,250	-------	1,320	1,800	608	2,050	461	862	990
31	35	-------	*950	2,470	-------	1,320	-------	595	-------	437	848	-------
Total	5,356	1,233	11,465	52,210	37,827	44,380	74,870	30,404	18,605	29,084	9,760	8,540
Mean	173	41.1	370	1,684	1,351	1,432	2,496	981	620	938	315	285
Cfsm	0.276	0.066	0.591	2.69	2.16	2.29	3.99	1.57	0.990	1.50	0.503	0.455
In.	0.32	0.07	0.68	3.10	2.25	2.64	4.45	1.81	1.11	1.73	0.58	0.51

Calendar year 1957: Max 2,060 Min 4.8 Mean 362 Cfsm 0.578 In. 7.85
Water year 1957-58: Max 3,170 Min 21 Mean 887 Cfsm 1.42 In. 19.25

* Discharge measurement made on this day.
Note.--No auxiliary gage record Oct. 1-23, Aug. 26-31; discharge computed using rate of change in stage as a factor.

1105. Waccamaw River near Longs, S. C.

Location.--Lat 33°54'45", long 78°42'55", near right bank on upstream side of bridge on State Highway 9, 500 ft downstream from Buck Creek and 2.1 miles southeast of Longs, Horry County.

Drainage area.--1,030 sq mi, approximately.

Records available.--March 1950 to September 1958.

Gage.--Wire-weight gage and crest-stage indicator; gage read twice daily. Datum of gage is 5.28 ft above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers).

Average discharge.--8 years, 839 cfs.

Extremes.--Maximum discharge during year, 7,540 cfs Apr. 18 (gage height, 12.46 ft); minimum, 47 cfs Nov. 14.
1950-58: Maximum discharge, 10,300 cfs Sept. 28-30, 1955; maximum gage height, 13.82 ft Sept. 29, 1955; minimum discharge, 1 cfs Oct. 14, 1954.

Remarks.--Records good.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used July 3 to Sept. 30)

1.1	44	8.0	1,000
1.5	68	9.0	1,430
2.0	104	9.5	1,900
3.0	196	10.0	2,600
5.0	453	11.0	4,320
7.0	786	12.4	7,300

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,380	72	315	1,780	3,960	1,900	2,920	3,600	928	2,760	824	1,580
2	*2,020	72	382	1,900	3,960	2,020	3,080	3,240	906	2,600	786	1,370
3	2,160	68	424	2,020	3,780	2,300	3,240	3,080	864	2,600	767	1,310
4	2,020	65	468	2,160	3,600	2,300	3,240	2,760	824	2,440	748	1,130
5	1,780	65	483	2,160	3,600	2,440	3,420	2,440	786	2,440	712	1,060
6	1,580	62	498	2,300	3,420	2,600	3,780	*2,300	748	2,300	676	975
7	1,430	59	528	*2,300	3,420	2,600	4,320	2,020	712	2,300	659	864
8	1,310	56	544	2,440	3,240	2,600	4,920	2,020	694	2,160	625	767
9	1,210	56	608	2,600	3,080	2,600	5,120	2,020	676	2,020	608	*642
10	1,100	53	730	2,600	2,920	2,600	5,120	1,900	642	1,900	576	513
11	975	50	864	2,600	*2,760	2,600	5,120	1,900	608	1,780	544	396
12	864	50	1,000	2,760	2,600	2,600	5,120	2,020	576	1,580	498	315
13	786	50	1,100	2,760	2,440	2,600	5,120	2,020	560	1,500	453	277
14	676	*47	1,170	3,080	2,300	2,760	4,920	2,020	544	1,370	396	229
15	560	50	1,170	3,420	2,160	2,760	4,920	2,020	513	1,310	341	207
16	453	50	1,210	3,600	2,020	2,760	5,740	1,900	498	1,210	289	196
17	354	59	1,210	3,780	2,020	2,760	*6,840	1,780	468	1,130	241	175
18	302	68	1,170	3,780	1,900	2,920	7,300	1,680	*453	1,060	207	175
19	265	72	1,170	3,780	1,780	2,920	7,300	1,580	438	1,100	175	155
20	229	72	1,170	3,780	1,680	2,920	6,840	1,430	468	1,100	146	155
21	196	68	1,210	3,780	1,680	2,920	6,620	1,370	544	1,100	128	146
22	175	68	1,260	3,960	1,580	2,760	6,400	1,310	767	1,130	112	165
23	155	68	1,260	3,960	1,580	2,760	6,400	1,210	1,020	1,210	96	165
24	137	72	1,310	3,960	1,500	2,600	5,960	1,170	1,310	1,260	89	165
25	120	78	1,370	3,960	1,500	*2,600	5,740	1,130	1,680	1,310	117	155
26	112	104	1,430	3,960	1,500	2,760	5,320	1,100	1,900	1,210	472	146
27	104	120	1,430	3,780	1,580	2,600	4,720	1,060	2,160	1,170	865	368
28	96	146	1,430	3,780	1,780	2,600	4,520	1,000	2,600	1,100	1,380	786
29	86	175	1,500	3,600	-	2,600	4,140	1,030	2,760	1,030	1,680	1,130
30	82	241	1,580	3,780	-------	2,600	3,960	1,000	2,760	950	1,900	1,970
31	78	-------	1,680	3,960	-------	2,760	-------	950	-------	884	1,780	-------
Total	22,795	2,336	31,674	98,080	69,340	81,120	152,160	56,060	30,407	49,014	18,890	17,687
Mean	735	77.9	1,022	3,164	2,476	2,617	5,072	1,808	1,014	1,581	609	590
Cfsm	0.714	0.076	0.992	3.07	2.40	2.54	4.92	1.76	0.984	1.53	0.591	0.573
In.	0.82	0.08	1.14	3.54	2.50	2.93	5.49	2.03	1.10	1.76	0.68	0.64

Calendar year 1957: Max 3,780 Min 21 Mean 684 Cfsm 0.664 In. 9.01
Water year 1957-58: Max 7,300 Min 47 Mean 1,725 Cfsm 1.67 In. 22.71

* Discharge measurement made on this day.

1110. Yadkin River at Patterson, N. C.

Location.--Lat 35°59'30", long 81°33'30", on left bank 200 ft upstream from bridge on State Highway 268, half a mile south of Patterson, Caldwell County, three-quarters of a mile upstream from Warrior Creek, and 2 miles downstream from Walnut Branch.

Drainage area.--28.8 sq mi.

Records available.--October 1939 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 1,212.47 ft above mean sea level, unadjusted. Prior to Feb. 9, 1940, staff gage at same site and datum.

Average discharge.--19 years, 44.6 cfs.

Extremes.--Maximum discharge during year, 571 cfs Nov. 19 (gage height, 2.60 ft); minimum, 9 cfs July 8, 17 (gage height, 0.07 ft); minimum daily, 21 cfs Sept. 28, 29.
1939-58: Maximum discharge, 16,200 cfs Aug. 13, 1940 (gage height, 12.70 ft), from rating curve extended above 1,300 cfs on basis of computation of peak flow over dam 1 mile upstream at gage heights 4.58, 7.70, and 12.70 ft; minimum observed, 3.0 cfs May 15, 1940.

Remarks.--Records good except those for periods of ice effect, which are fair. Occasional regulation for short periods since Feb. 25, 1958, by detention dam 1 mile upstream.

Revisions (water years).--WSP 1303: 1947-48(M). The figures of peak discharge for the water year 1948 have been revised as shown below, superseding those published in WSP 1112.

Revised peak discharge.--1947-48: Oct. 17 (time unknown) 1,040 cfs; July 12 (1 p.m.) 785 cfs (3.21 ft).

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.2	17	1.0	133
.3	25	1.5	242
.5	46	2.0	369
.7	75		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	112	35	64	59	105	103	162	103	95	40	36	32
2	*86	34	59	54	82	84	121	99	169	40	36	30
3	67	33	55	51	72	75	103	97	101	38	44	*29
4	56	32	54	49	65	67	101	88	82	38	39	30
5	49	32	50	b47	62	62	93	93	75	44	32	29
6	43	31	47	b46	62	59	161	158	73	43	31	28
7	38	30	55	46	70	58	135	308	67	82	52	27
8	36	45	129	44	64	62	111	199	62	51	45	26
9	33	46	95	b40	58	64	93	*146	75	64	34	25
10	32	37	75	b40	b56	64	105	119	73	55	31	25
11	30	35	65	43	54	61	107	103	69	52	28	25
12	34	33	56	39	52	56	93	97	82	72	40	25
13	31	33	*b52	56	51	*69	84	84	62	75	42	25
14	29	67	52	*156	49	62	79	75	56	62	47	24
15	28	*79	51	97	47	62	88	70	54	55	56	*23
16	28	65	49	75	b46	58	123	64	51	54	37	24
17	52	58	47	64	b44	55	103	107	50	34	39	26
18	59	72	46	58	b44	67	89	88	*47	46	34	26
19	44	329	45	54	b44	62	84	73	46	47	30	23
20	38	160	152	51	b44	61	77	72	56	45	*28	23
21	35	99	165	65	b44	59	72	64	50	43	27	37
22	34	80	105	69	46	56	98	58	56	*43	38	27
23	33	163	86	58	46	54	99	71	58	42	37	25
24	58	127	75	78	46	54	84	92	51	40	101	23
25	55	*270	70	129	47	70	97	75	47	39	129	23
26	49	207	113	101	134	75	84	79	56	37	77	23
27	46	135	91	89	179	79	80	64	49	37	56	22
28	42	107	82	79	146	*73	205	59	43	36	45	21
29	40	89	73	72	-	69	158	55	42	34	40	21
30	38	75	65	65	-------	87	123	51	42	33	36	22
31	37	-------	61	64	-------	296	-------	70	-------	35	34	-------
Total	1,392	2,638	2,284	2,038	1,859	2,283	3,212	2,981	1,939	1,456	1,381	769
Mean	44.9	87.9	73.7	65.7	66.4	73.6	107	96.2	64.6	47.0	44.5	25.6
Cfsm	1.56	3.05	2.56	2.28	2.31	2.56	3.72	3.34	2.24	1.63	1.55	0.889
In.	1.80	3.41	2.95	2.63	2.40	2.95	4.15	3.85	2.50	1.88	1.78	0.99

Calendar year 1957: Max 1,230 Min 12 Mean 58.6 Cfsm 2.03 In. 27.61
Water year 1957-58: Max 329 Min 21 Mean 66.4 Cfsm 2.31 In. 31.29

Peak discharge (base, 1,000 cfs).--No peak above base.

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

1115. Reddies River at North Wilkesboro, N. C.

Location.--Lat 36°10', long 81°10', on left bank 400 ft upstream from highway bridge, 1¼ miles northwest of North Wilkesboro, Wilkes County, 1¼ miles upstream from North Wilkesboro municipal dam, and 2 miles upstream from mouth.

Drainage area.--93.9 sq mi.

Records available.--October 1939 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 978.62 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--19 years, 135 cfs.

Extremes.--Maximum discharge during year, 1,730 cfs Mar. 31 (gage height, 5.64 ft); minimum, 62 cfs Sept. 29 (gage height, 0.97 ft).
1939-58: Maximum discharge, 27,000 cfs Aug. 14, 1940 (gage height, 22.02 ft), from rating curve extended above 2,100 cfs on basis of computation of peak flow over dam; minimum, 22 cfs Aug. 17, 1954 (gage height, 0.63 ft).

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are poor. Slight diurnal fluctuation at low flow during growing season.

Revisions (water years).--WSP 1433: 1944.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.9	54	3.0	525
1.0	66	4.0	925
1.5	142	4.5	1,150
2.0	237		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	385	114	191	186	290	*273	367	226	186	114	126	85
2	268	112	184	174	220	229	278	231	205	111	102	79
3	218	111	176	169	200	212	246	226	169	111	231	79
4	188	108	178	165	180	197	253	212	165	111	135	78
5	169	106	164	160	170	188	235	271	162	119	106	78
6	153	104	160	160	170	184	420	818	156	115	98	78
7	142	103	183	150	200	180	323	705	155	171	108	76
8	134	178	394	140	190	191	265	430	153	128	114	74
9	125	155	260	130	180	189	242	329	208	135	104	71
10	119	125	212	170	180	188	281	291	203	128	97	71
11	119	117	195	149	170	176	276	278	191	127	91	72
12	160	114	171	144	160	169	246	258	220	207	105	76
13	128	112	176	140	160	189	226	235	167	169	151	78
14	119	181	169	500	150	189	216	222	156	144	125	72
15	115	188	164	350	150	178	226	212	156	127	115	71
16	112	162	160	240	140	173	251	208	147	117	100	75
17	163	153	156	210	140	169	218	203	142	114	108	74
18	186	212	153	190	140	199	208	201	140	111	97	78
19	144	723	156	180	140	193	205	195	135	112	90	67
20	130	344	414	170	140	189	199	201	149	108	86	69
21	123	231	376	220	*150	182	195	189	139	108	94	109
22	119	201	242	240	160	173	251	182	142	109	114	84
23	117	418	210	190	155	167	244	180	156	104	120	74
24	164	294	199	220	153	167	214	189	*139	112	120	74
25	142	780	193	350	153	220	258	197	132	104	193	71
26	135	*460	337	290	381	231	224	208	132	97	146	70
27	134	299	268	250	602	220	220	182	134	124	114	69
28	125	255	233	220	414	203	348	178	122	118	102	64
29	119	229	212	210	-	193	283	171	119	100	*94	64
30	*117	210	*197	200	-------	255	*244	165	115	92	90	*66
31	117	-------	188	200	-------	946	-------	*164	-------	*134	86	-------
Total	4,689	6,899	6,671	6,467	5,638	6,812	7,662	7,957	4,695	3,781	3,562	2,246
Mean	151	230	215	209	201	220	255	257	156	122	115	74.9
Cfsm	1.61	2.45	2.29	2.23	2.14	2.34	2.72	2.74	1.66	1.30	1.22	0.798
In.	1.86	2.73	2.64	2.56	2.23	2.70	3.03	3.15	1.86	1.50	1.41	0.89

Calendar year 1957: Max 2,650 Min 55 Mean 169 Cfsm 1.80 In. 24.37
Water year 1957-58: Max 946 Min 64 Mean 184 Cfsm 1.96 In. 26.56

Peak discharge (base, 2,000 cfs).--No peak above base.

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Jan. 8-10, Feb. 16-22. No gage-height record Jan. 5-8, Jan. 15 to Feb. 18; discharge estimated on basis of weather records, recorded range in stage, and records for Yadkin River at Patterson and at Wilkesboro.

1120. Yadkin River at Wilkesboro, N. C.

Location.--Lat 36°09', long 81°09', on right bank 150 ft upstream from bridge on U. S. Highway 421 between North Wilkesboro and Wilkesboro, 150 ft downstream from Reddies River, and half a mile northeast of Wilkesboro, Wilkes County.
Drainage area.--493 sq mi. At site used 1903-9 and 1920-28, 513 sq mi.
Records available.--April 1903 to June 1909, October 1920 to September 1958. Prior to October 1928, published as "at North Wilkesboro."
Gage.--Water-stage recorder. Datum of gage is 942.35 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Apr. 10, 1903, to June 30, 1909, and Oct. 17, 1920, to Apr. 10, 1929, staff or chain gages at site 1¼ miles downstream at different datum. Apr. 11, 1929, to Jan. 9, 1930, chain gage at present site and datum. Datum used 1920-29 was about 1.2 ft lower than that used 1903-9.
Average discharge.--43 years (1903-8, 1920-58), 796 cfs.
Extremes.--Maximum discharge during year, 6,640 cfs Mar. 31 (gage height, 10.60 ft); minimum, 329 cfs Sept. 29 (gage height, 2.12 ft); minimum daily, 329 cfs Sept. 29.
1903-9, 1920-58: Maximum discharge, 160,000 cfs Aug. 14, 1940 (gage height, 37.6 ft, from floodmarks), from rating curve extended above 20,000 cfs on basis of slope-area measurement of peak flow; minimum, 99 cfs Sept. 28-30, 1954; minimum daily, 110 cfs Sept. 18, 19, 1956.
Flood in July 1916 reached a stage of 34.5 ft (present site and datum), from floodmark (discharge, 116,000 cfs, from rating curve extended above 20,000 cfs as explained above).
Remarks.--Records good except those for periods of ice effect, which are fair. Slight diurnal fluctuation at low flow caused by powerplant on Reddies River 1 mile above station.
Revisions (water years).--WSP 822: Drainage area. WSP 1433: 1903-9, 1922, 1925-26(M), 1930, 1932, 1934, 1946-48(M), drainage area.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to July 12		July 13 to Sept. 30			
2.0	276	2.0	306	5.0	2,170
2.5	550	2.5	561	7.0	3,650
3.0	870	3.0	870	9.0	5,250
		4.0	1,520		

Note.--Same as following table above 3.0 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,450	631	1,060	968	*1,390	*1,580	2,320	1,420	1,030	669	668	484
2	1,720	618	1,000	935	1,230	1,290	1,650	1,360	1,720	650	561	457
3	1,290	606	935	870	1,100	1,160	1,420	1,360	1,100	644	939	442
4	1,060	587	968	850	1,030	1,060	1,390	1,290	1,000	631	680	442
5	935	575	902	824	1,000	1,000	1,360	1,460	968	682	555	437
6	838	575	850	831	1,000	968	2,620	2,780	935	701	527	426
7	760	569	980	844	1,060	968	2,000	3,790	968	935	550	416
8	714	810	2,400	818	1,030	1,030	1,550	2,510	902	831	686	426
9	675	935	1,780	b700	935	1,000	1,360	1,840	1,000	812	644	401
10	644	720	1,320	b750	902	1,000	1,460	1,580	1,130	805	579	396
11	631	650	1,130	805	902	968	1,580	1,460	1,000	785	505	396
12	727	631	1,000	753	902	935	1,390	1,390	1,290	902	489	416
13	669	618	935	878	870	1,000	1,260	1,320	935	1,000	692	416
14	618	796	935	2,710	838	1,030	1,200	1,230	870	857	602	401
15	*600	1,200	902	1,780	902	968	1,230	1,160	864	748	656	386
16	587	935	870	1,320	870	935	1,650	1,130	831	717	573	416
17	774	870	857	1,130	b700	935	1,390	1,100	785	730	590	421
18	1,130	1,200	838	1,030	b700	1,060	1,260	1,200	772	650	567	442
19	818	3,900	831	935	b700	1,060	1,200	1,100	760	662	505	391
20	720	2,290	1,400	902	b800	1,030	1,130	1,160	824	644	494	386
21	675	1,420	2,420	1,030	b820	1,000	1,100	1,060	779	620	489	573
22	644	1,160	1,460	1,260	864	935	1,260	1,000	838	626	614	489
23	631	2,130	1,200	1,030	857	902	1,520	1,000	864	590	644	401
24	818	1,780	1,100	1,100	838	902	1,230	1,370	*792	650	662	381
25	857	3,810	1,030	2,190	838	1,160	1,490	1,310	746	620	1,130	367
26	772	2,970	1,620	1,650	1,720	1,290	1,320	1,520	812	573	838	357
27	772	1,780	1,460	1,420	3,450	1,260	1,260	1,130	870	585	662	352
28	708	1,460	1,260	1,260	2,490	1,200	3,790	1,060	727	579	585	338
29	675	1,290	1,160	1,160	-	1,100	2,170	1,030	701	550	*544	329
30	669	*1,200	*1,060	1,100	-------	1,290	*1,650	968	688	522	505	*334
31	*662	-------	1,000	1,060	-------	*4,950	-------	*935	-------	*567	494	-------
Total	26,243	38,716	36,663	34,893	30,738	36,966	47,210	44,023	27,501	21,537	19,229	12,319
Mean	847	1,291	1,183	1,126	1,098	1,192	1,574	1,420	917	695	620	411
Cfsm	1.72	2.62	2.40	2.28	2.23	2.42	3.19	2.88	1.86	1.41	1.26	0.834
In.	1.98	2.92	2.77	2.63	2.32	2.79	3.56	3.32	2.07	1.62	1.45	0.93

Calendar year 1957: Max 13,200 Min 230 Mean 948 Cfsm 1.92 In. 26.10
Water year 1957-58: Max 4,950 Min 329 Mean 1,030 Cfsm 2.09 In. 28.36

Peak discharge (base, 8,000 cfs).--No peak above base.

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

1130. Fisher River near Copeland, N. C.

Location.--Lat 36°20', long 80°40', on left bank 500 ft upstream from bridge on State Highway 268, 1 mile upstream from Cody Creek, and 2 miles northwest of Copeland, Surry County.

Drainage area.--121 sq mi.

Records available.--October 1931 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 913 ft (by barometer). Prior to Sept. 5, 1936, staff gage at same site and datum.

Average discharge.--27 years, 178 cfs.

Extremes.--Maximum discharge during year, 5,200 cfs Aug. 3 (gage height, 9.57 ft); minimum, 82 cfs Sept. 29 (gage height, 2.22 ft).
1931-58: Maximum discharge, 27,300 cfs Aug. 14, 1940 (gage height, 18.4 ft, from floodmarks), from rating curve extended above 5,800 cfs on basis of slope-area measurement of peak flow; minimum, 14 cfs Aug. 28, 1956.

Remarks.--Records good except those for periods of ice effect, which are fair.

Revisions (water years).--WSP 822: Drainage area. WSP 1303: 1933(M).

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.2	78	3.5	561
2.4	120	4.0	806
2.6	170	5.0	1,380
3.0	318	6.0	2,090

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	536	137	234	203	273	352	502	323	214	142	132	130
2	381	134	220	191	242	291	371	323	285	137	191	118
3	269	132	210	182	220	261	328	342	*220	134	1,370	116
4	220	130	207	179	203	242	300	309	214	132	370	116
5	194	125	191	b180	207	227	291	346	203	132	182	113
6	176	125	185	b180	210	220	653	*1,190	200	139	152	111
7	167	122	200	176	227	214	429	684	191	157	170	109
8	162	205	676	167	217	210	328	488	185	154	173	105
9	147	220	352	b150	191	210	273	395	207	182	142	98
10	142	154	265	b160	*194	214	433	361	250	162	130	98
11	137	142	234	b160	194	200	512	337	323	144	120	98
12	152	139	203	160	188	194	361	318	361	261	127	98
13	144	137	200	198	185	207	318	291	220	236	139	98
14	134	147	194	1,180	179	231	296	278	200	182	182	94
15	130	210	191	443	191	207	282	269	200	170	181	92
16	127	173	185	309	188	197	300	261	185	162	333	92
17	259	176	185	261	b160	191	269	269	173	147	210	*96
18	318	451	179	234	b160	217	254	371	170	191	144	118
19	185	1,060	179	217	b180	224	250	269	165	188	127	96
20	160	453	238	207	b200	214	238	278	185	157	120	96
21	147	304	358	234	210	*200	234	254	170	142	116	170
22	142	246	234	356	191	200	581	234	170	144	122	125
23	139	565	214	261	191	191	566	234	185	139	197	107
24	194	371	207	266	188	191	337	273	173	*134	280	105
25	182	1,240	200	692	185	286	347	269	162	130	1,080	98
26	165	581	478	385	494	337	296	282	*167	120	296	96
27	165	371	309	309	778	352	282	234	210	122	*200	92
28	154	332	257	265	576	282	844	254	157	127	167	86
29	*147	300	*234	250	-	261	436	250	149	120	152	84
30	142	265	217	234	------	347	366	220	144	111	139	86
31	144	------	207	227	------	1,410	------	214	------	107	134	------
Total	5,841	9,147	7,643	8,616	6,822	8,580	11,279	10,420	6,018	4,705	7,578	3,143
Mean	188	305	247	278	244	277	376	336	201	152	244	105
Cfsm	1.55	2.52	2.04	2.30	2.02	2.29	3.11	2.78	1.66	1.26	2.02	0.868
In.	1.80	2.81	2.35	2.65	2.10	2.64	3.47	3.20	1.85	1.45	2.33	0.97

Calendar year 1957: Max 3,080 Min 49 Mean 213 Cfsm 1.76 In. 23.93
Water year 1957-58: Max 1,410 Min 84 Mean 246 Cfsm 2.03 In. 27.62

Peak discharge (base, 2,200 cfs).--Nov. 25 (11 a.m.) 2,410 cfs (6.42 ft); Mar. 31 (6 a.m.) 2,410 cfs (6.38 ft); May 6 (3 a.m.) 2,250 cfs (6.24 ft); Aug. 3 (1 a.m.) 5,200 cfs (9.57 ft); Aug. 25 (12 m.) 3,210 cfs (7.44 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

1155. Forbush Creek near Yadkinville, N. C.

Location.--Lat 36°08', long 80°33', on left bank 900 ft upstream from highway bridge, three-quarters of a mile north of Forbush Church, 2⅝ miles upstream from Logan Creek, 3½ miles upstream from mouth, and 6 miles east of Yadkinville, Yadkin County.

Drainage area.--21.7 sq mi.

Records available.--April 1940 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Altitude of gage is 728 ft (by barometer).

Average discharge.--18 years, 21.5 cfs.

Extremes.--Maximum discharge during year, 2,060 cfs Aug. 3 (gage height, 11.08 ft); minimum, 7.4 cfs Sept. 19 (gage height, 0.64 ft); minimum daily, 7.8 cfs Sept. 28, 29.
1940-58: Maximum discharge, 2,450 cfs Sept. 30, 1944, from rating curve extended above 1,500 cfs on basis of velocity-area study and slope-area measurement of peak flow at gage height 10.38 ft; maximum gage height, that of Aug. 3, 1958; minimum daily discharge, 0.6 cfs Aug. 16, 17, Sept. 14-18, 1956.

Remarks.--Records good except those for periods of no gage-height record or indefinite stage-discharge relation, which are fair.

Rating tables, water year 1957-58, except periods of indefinite stage-discharge relation (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Jan. 5, 6, 9, 10, Feb. 17, 18; shifting-control method used Aug. 3)

Oct. 1 to June 24

0.7	8.6
.8	13
1.0	23
1.5	62

Note.--Same as following table above 1.5 ft.

June 25 to Sept. 30

0.6	6.0	3.0	227
.8	14	4.0	370
1.0	24	6.0	734
1.5	62	8.0	1,250
2.0	110		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	12	21	17	50	40	58	53	19	14	18	11
2	23	12	19	16	30	30	42	48	19	*13	19	10
3	17	11	18	16	24	26	35	44	18	13	*649	*10
4	14	11	18	16	21	23	32	36	18	12	41	10
5	13	11	16	15	21	21	30	35	17	13	25	10
6	12	11	16	15	21	21	339	50	84	15	21	9.6
7	11	11	24	15	23	20	60	66	59	13	18	9.6
8	11	14	244	14	21	20	38	44	25	*13	17	8.9
9	10	13	59	13	19	20	30	36	26	15	16	8.9
10	9.8	11	36	14	*20	19	46	34	22	14	16	8.9
11	9.4	11	26	14	18	18	50	33	22	13	15	8.9
12	10	11	21	14	17	18	35	32	86	13	15	9.2
13	9.8	11	19	29	17	20	29	30	28	13	17	9.2
14	9.4	11	19	105	16	20	26	29	24	14	18	8.9
15	9.0	12	17	44	19	18	30	29	e20	13	*39	8.9
16	9.4	11	17	31	18	17	47	30	e19	14	33	9.2
17	102	11	17	24	17	17	32	32	e18	15	17	*8.5
18	61	36	16	21	17	21	28	a30	e16	13	15	8.5
19	*22	619	16	19	18	21	26	a26	e15	14	14	8.2
20	16	58	22	18	17	20	24	a24	e18	13	13	8.2
21	14	32	21	24	18	*19	23	a22	e16	14	13	14
22	13	29	17	31	20	18	*301	a20	e20	18	13	10
23	13	166	16	23	21	17	116	a24	e19	14	14	9.6
24	16	53	16	84	19	18	52	38	e18	*14	16	9.2
25	14	349	16	207	18	57	74	a25	*16	13	20	9.2
26	13	76	64	48	92	48	44	*25	18	12	15	9.2
27	14	*39	32	34	147	36	44	21	17	12	14	8.9
28	13	35	24	26	74	28	*1,030	21	15	12	13	7.8
29	12	29	*21	24	-	25	148	20	14	11	12	7.8
30	12	25	19	22	-------	62	71	18	14	10	11	8.5
31	13	-------	18	21	-------	241	-------	19	-------	54	11	-------
Total	560.8	1,741	925	1,014	833	999	2,940	994	740	434	1,188	278.8
Mean	18.1	58.0	29.8	32.7	29.8	32.2	98.0	32.1	24.7	14.0	38.3	9.29
Cfsm	0.834	2.67	1.37	1.51	1.37	1.48	4.52	1.48	1.14	0.645	1.76	0.428
In.	0.96	2.98	1.59	1.74	1.43	1.71	5.04	1.70	1.27	0.74	2.04	0.48

Calendar year 1957: Max 694 Min 3.4 Mean 27.7 Cfsm 1.28 In. 17.33
Water year 1957-58: Max 1,030 Min 7.8 Mean 34.6 Cfsm 1.59 In. 21.68

Peak discharge (base, 570 cfs).--Oct. 17 (9 p.m.) 675 cfs (5.70 ft); Nov. 19 (10 a.m.) 1,460 cfs (8.73 ft); Nov. 25 (11 a.m.) 675 cfs (5.67 ft); Jan. 25 (12:30 a.m.) 656 cfs (5.61 ft); Mar. 31 (5 a.m.) 580 cfs (5.22 ft); Apr. 6 (9 a.m.) 980 cfs (6.99 ft); Apr. 22 (6 p.m.) 928 cfs (6.82 ft); Apr. 28 (10 a.m.) 1,980 cfs (10.16 ft); Aug. 3 (5 a.m.) 2,060 cfs (11.08 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, streamflow continuity, and records for Fisher River near Copeland.
e Stage-discharge relation indefinite; discharge estimated on basis of gage-height record, weather records, and records for Fisher River near Copeland.

1165. Yadkin River at Yadkin College, N. C.

Location.--Lat 35°51'24", long 80°23'10", near left bank on downstream end of pier of bridge on U. S. Highway 64, 1½ miles south of Yadkin College, Davidson County, and 6¼ miles downstream from Reedy Creek.

Drainage area.--2,280 sq mi, approximately.

Records available.--July 1928 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 638.65 ft above mean sea level (levels by Corps of Engineers). Prior to July 26, 1957, at site on left bank 80 ft downstream at same datum.

Average discharge.--30 years, 2,848 cfs.

Extremes.--Maximum discharge during year, 30,800 cfs Apr. 29 (gage height, 20.95 ft); minimum, 1,180 cfs Sept. 30 (gage height, 1.37 ft); minimum daily, 1,220 cfs Sept. 30.
1928-58: Maximum discharge, 80,200 cfs Aug. 15, 1940 (gage height, 38.75 ft); minimum observed, 177 cfs Oct. 12, 1954 (gage height, -0.42 ft); minimum daily, 330 cfs Oct. 9, 1954, Sept. 23, 1956.
Maximum stage known, 36.3 ft during July 1916, from floodmarks (discharge, 94,300 cfs).

Remarks.--Records good except those for periods of ice effect, which are poor. Diurnal fluctuation during low flow caused by small powerplant with little storage capacity 10 miles upstream from station. Records of chemical analyses, water temperatures, and suspended sediment loads for the water year 1958 are given in WSP 1571.

Revisions (water years).--WSP 822: Drainage area. WSP 852: 1935-37(m).

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.4	1,220	12.0	14,000
2.0	1,710	14.0	17,100
4.0	3,660	17.0	22,300
6.0	5,900	21.0	30,800
9.0	9,740		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14,100	2,260	4,390	3,460	4,280	8,180	17,300	6,620	3,260	2,310	1,980	1,890
2	7,660	2,160	3,860	3,260	4,830	5,420	*8,080	6,720	3,460	2,210	2,210	1,800
3	5,300	2,070	3,660	3,060	4,280	4,500	5,720	7,460	4,390	2,160	8,040	1,710
4	4,060	2,020	3,560	2,960	3,760	4,060	4,940	5,540	3,660	2,120	11,400	1,620
5	3,460	1,980	3,460	2,760	3,460	3,760	4,610	4,940	3,360	2,120	4,100	1,620
6	3,060	*1,940	3,160	b2,600	3,360	3,560	9,780	7,000	*3,260	2,160	2,760	1,580
7	2,760	1,890	3,060	b2,800	3,560	3,460	13,600	12,200	5,200	2,360	2,310	1,580
8	2,510	1,940	8,620	b2,700	4,060	3,360	7,140	11,600	3,660	2,410	2,310	*1,500
9	2,360	2,860	13,000	b2,600	3,660	3,360	5,420	8,050	3,160	2,510	2,360	1,500
10	2,210	3,160	6,750	b2,400	3,260	3,460	5,060	6,260	3,560	2,760	2,310	1,420
11	2,120	2,360	4,940	b2,400	3,160	3,360	7,400	5,540	3,860	2,560	2,120	1,420
12	2,120	2,120	4,170	b2,600	3,160	3,260	6,260	5,180	4,620	2,360	1,980	1,380
13	2,160	2,020	3,560	2,560	3,060	3,160	5,060	4,830	4,860	2,910	2,580	1,420
14	2,160	2,020	3,260	5,880	2,960	3,360	4,610	4,500	3,360	3,710	2,840	1,460
15	1,980	2,210	3,260	10,500	2,960	3,460	4,280	4,170	3,160	2,860	*3,460	1,420
16	1,980	2,860	3,160	6,280	3,060	3,260	4,830	4,060	2,960	2,560	4,580	1,380
17	1,940	2,760	3,060	4,720	b2,800	3,060	4,940	3,960	2,860	3,460	4,060	1,380
18	9,870	3,650	3,060	3,960	b2,200	3,060	4,500	5,900	2,760	2,660	2,760	1,420
19	4,920	14,100	2,960	3,560	b2,200	3,460	4,170	4,780	2,660	3,850	2,260	1,420
20	3,160	22,400	2,960	3,260	b2,800	3,560	3,960	4,500	2,660	3,060	2,020	1,420
21	2,660	9,300	3,860	3,260	b3,000	3,360	3,760	4,280	2,660	3,060	1,890	1,500
22	2,360	5,180	5,780	3,960	b3,100	3,260	4,210	3,860	3,190	2,660	1,840	2,070
23	2,260	9,110	4,060	4,610	3,160	3,060	12,400	3,660	2,960	2,360	2,120	1,940
24	2,260	11,300	3,660	4,260	3,060	2,960	7,400	4,170	2,860	2,210	2,560	1,540
25	2,760	13,100	3,460	11,200	2,960	3,630	6,400	4,280	2,660	2,260	4,120	1,460
26	2,760	23,000	4,920	9,740	3,480	5,180	6,230	4,760	2,560	2,160	6,060	1,420
27	2,560	12,000	7,140	6,260	9,880	4,940	5,060	4,720	2,760	2,120	3,660	1,380
28	2,460	6,880	5,180	5,060	12,600	4,610	14,500	3,860	3,060	2,160	2,660	1,380
29	2,260	6,140	4,390	4,390	-	4,060	29,000	3,860	2,560	2,510	2,310	1,260
30	2,210	5,060	3,960	4,060	-------	3,860	*14,400	3,560	2,360	1,980	2,120	1,220
31	2,210	-------	3,660	3,860	-------	11,900	-------	3,260	-------	1,840	1,980	-------
Total	106,650	179,850	137,980	134,980	108,110	126,940	235,020	168,080	98,360	78,430	99,760	45,510
Mean	3,440	5,995	4,451	4,354	3,861	4,095	7,834	5,422	3,279	2,530	3,218	1,517
Cfsm	1.51	2.63	1.95	1.91	1.69	1.80	3.44	2.38	1.44	1.11	1.41	0.665
In.	1.74	2.93	2.25	2.20	1.76	2.07	3.83	2.74	1.60	1.28	1.63	0.74

Calendar year 1957: Max 28,700 Min 812 Mean 3,587 Cfsm 1.57 In. 21.35
Water year 1957-58: Max 29,000 Min 1,220 Mean 4,163 Cfsm 1.83 In. 24.77

Peak discharge (base, 18,000 cfs).--Nov. 20 (7 a.m.) 24,400 cfs (18.14 ft); Nov. 26 (1 p.m.) 24,200 cfs (18.05 ft); Apr. 1 (6 a.m.) 19,700 cfs (15.62 ft); Apr. 29 (12 m.) 30,800 cfs (20.95 ft); Aug. 4 (1 a.m.) 18,500 cfs (14.90 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

1175. Rocky Creek at Turnersburg, N. C.

Location.--Lat 35°54', long 80°48', on right bank 1,000 ft downstream from bridge on U. S. Highway 21 at Turnersburg, Iredell County, 1 mile downstream from Mud Creek, and 1½ miles upstream from mouth.

Drainage area.--102 sq mi.

Records available.--April 1940 to September 1958. Monthly discharge only for some periods, published in WSP 1303. Prior to October 1956, published as Rocky River at Turnersburg.

Gage.--Water-stage recorder. Datum of gage is 724.10 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to June 19, 1950, at site 170 ft upstream at same datum.

Average discharge.--18 years, 108 cfs.

Extremes.--Maximum discharge during year, 4,520 cfs Apr. 28 (gage height, 11.47 ft); minimum, 42 cfs Sept. 20 (gage height, 1.58 ft); minimum daily, 46 cfs Sept. 19, 20.
1940-58: Maximum discharge, 6,080 cfs Jan. 22, 1954 (gage height, 13.70 ft), from rating curve extended above 3,400 cfs on basis of computation of peak flow over dam; minimum, 1 cfs Oct. 18, 1940, Oct. 26, 1941; minimum daily, 8.8 cfs Aug. 17, 18, 1956.
A stage of about 18 ft was reached by flood sometime during the years 1936-38, from information by local resident.

Remarks.--Records good except those for periods of ice effect, which are fair.

Revisions (water years).--WSP 1333: 1945(M). WSP 1503: Drainage area.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.6	44	3.5	542
1.8	68	4.0	776
2.0	102	6.0	1,770
2.5	203	9.0	3,270
3.0	348		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	234	74	158	131	219	236	364	328	160	100	89	64
2	182	73	147	124	178	192	*239	399	182	98	78	60
3	147	71	139	118	158	171	201	369	145	95	102	59
4	124	70	139	116	147	158	182	276	141	95	128	*58
5	109	68	130	*b100	139	147	180	253	139	100	82	58
6	98	67	122	b110	139	143	913	332	149	128	76	55
7	93	65	124	118	152	139	447	383	150	106	73	55
8	88	82	398	113	154	145	262	306	139	*98	73	52
9	84	95	334	106	137	143	213	253	139	106	78	50
10	78	74	220	b100	131	141	236	228	156	111	81	50
11	76	70	180	113	130	133	294	213	133	104	68	50
12	81	68	158	106	126	*128	226	206	130	104	67	52
13	81	68	147	120	126	130	196	189	124	106	85	56
14	76	71	139	315	122	137	180	180	120	120	113	53
15	74	79	135	223	126	126	176	171	120	109	141	51
16	73	79	131	173	128	124	250	167	122	98	102	54
17	86	78	126	152	b100	122	203	217	113	98	113	53
18	267	162	124	139	b90	130	185	255	111	97	79	50
19	133	1,410	122	131	b110	135	175	182	*109	93	70	46
20	107	553	136	126	*b130	130	162	239	122	89	65	46
21	97	223	167	139	b130	124	156	189	120	95	*64	78
22	88	176	137	178	133	122	414	169	251	107	62	84
23	84	654	128	154	135	116	475	169	141	91	60	62
24	95	350	124	188	130	116	256	216	126	89	71	58
25	100	1,060	128	530	124	167	273	178	116	91	143	55
26	86	726	220	279	237	187	220	220	126	84	97	54
27	88	294	203	213	471	178	228	178	137	79	81	52
28	82	228	169	180	374	162	2,950	160	115	79	74	50
29	*78	201	152	162	-	152	1,710	154	107	74	70	48
30	74	*180	139	154	-------	176	475	147	104	71	65	50
31	76	-------	133	148	-------	719	-------	141	-------	76	64	-------
Total	3,239	7,469	5,009	5,059	4,476	5,129	12,439	7,067	4,047	2,991	2,614	1,663
Mean	104	249	162	163	160	165	415	228	135	96.5	84.3	55.4
Cfsm	1.02	2.44	1.59	1.60	1.57	1.62	4.07	2.24	1.32	0.946	0.826	0.543
In.	1.18	2.72	1.83	1.84	1.63	1.87	4.54	2.58	1.48	1.09	0.95	0.61

Calendar year 1957: Max 2,930 Min 36 Mean 142 Cfsm 1.39 In. 18.93
Water year 1957-58: Max 2,950 Min 46 Mean 168 Cfsm 1.65 In. 22.32

Peak discharge (base, 2,000 cfs).--Nov. 19 (7 p.m.) 2,520 cfs (7.53 ft); Apr. 28 (5:30 p.m.) 4,520 cfs (11.47 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

1180. South Yadkin River near Mocksville, N. C.

Location.--Lat 35°51', long 80°40', on right bank at downstream side of highway bridge, 1 mile upstream from Little Creek, 4 miles downstream from Fifth Creek, 4½ miles upstream from Hunting Creek, and 6½ miles southwest of Mocksville, Davie County.

Drainage area.--313 sq mi.

Records available.--October 1938 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 660 ft (by barometer).

Average discharge.--20 years, 311 cfs.

Extremes.--Maximum discharge during year, 6,750 cfs Apr. 29 (gage height, 14.50 ft); minimum, 138 cfs Sept. 19, 20, 21 (gage height, 1.87 ft).
1938-58: Maximum discharge, 9,240 cfs Jan. 23, 1954 (gage height, 16.73 ft); minimum, 30 cfs Aug. 14, 16, 1956.
Maximum stage known, 22.6 ft Oct. 3, 1929, from floodmark established by local resident.

Remarks.--Records good except those for periods of ice effect, which are fair. Records of water temperatures and suspended sediment loads for the water year 1958 are given in WSP 1571.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 19				Nov. 20 to Sept. 30			
2.1	172	5.0	1,060	1.87	138	5.0	1,060
2.5	274	7.0	1,740	1.9	143	7.0	1,740
3.0	420	9.0	2,570	2.0	165	9.0	2,570
4.0	735			2.5	290	11.0	3,720
				3.0	435	14.0	6,250
				4.0	745		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	590	208	495	349	560	775	1,500	1,600	390	263	217	181
2	480	201	435	335	542	590	810	1,440	1,240	255	207	172
3	381	196	405	318	435	495	605	1,640	560	250	289	165
4	325	194	405	307	405	450	525	965	420	245	420	165
5	280	191	375	293	375	405	495	745	*390	247	258	163
6	255	189	349	b290	375	390	1,410	730	526	279	214	161
7	239	186	*340	315	444	375	1,970	1,030	558	301	224	156
8	224	211	840	298	510	375	1,190	965	390	258	242	152
9	214	299	1,130	276	405	390	668	745	390	271	274	147
10	206	234	730	b270	369	390	730	650	405	293	242	145
11	198	206	560	b290	358	366	900	590	366	268	210	143
12	201	196	465	282	352	349	715	560	338	258	195	145
13	208	196	405	320	340	349	590	525	326	268	217	152
14	198	196	375	825	332	369	525	480	312	301	274	154
15	189	211	369	745	332	349	495	465	315	293	304	147
16	186	218	355	525	355	332	*605	435	315	266	304	150
17	198	224	346	435	b300	326	605	435	298	*253	310	152
18	495	480	332	390	b280	335	525	745	290	247	250	158
19	390	2,290	326	355	b320	*363	480	495	282	245	217	142
20	274	2,900	338	338	b340	343	450	542	290	237	200	140
21	242	1,820	450	375	b360	332	435	542	304	230	*195	176
22	231	635	390	480	360	321	715	450	612	282	190	234
23	224	1,500	346	435	366	312	1,460	435	435	255	186	186
24	231	1,670	332	704	349	312	855	745	338	227	190	*167
25	255	1,970	335	1,460	340	435	775	542	310	237	325	161
26	231	2,620	605	1,070	566	525	715	525	290	230	282	158
27	224	2,180	620	668	1,160	480	635	510	358	220	230	154
28	221	840	480	542	1,230	435	2,190	420	315	260	207	147
29	211	685	435	465	-	405	*5,360	405	282	217	198	143
30	211	590	390	435	-------	432	*4,370	375	271	200	188	*143
31	*208	-------	360	405	-------	1,240	-------	363	-------	193	181	-------
Total	8,218	23,736	14,118	14,595	12,460	13,345	33,303	21,094	11,916	7,849	7,440	4,759
Mean	265	791	455	471	445	430	1,110	680	397	253	240	159
Cfsm	0.847	2.53	1.45	1.50	1.42	1.37	3.55	2.17	1.27	0.808	0.767	0.508
In.	0.98	2.82	1.68	1.73	1.48	1.59	3.96	2.51	1.42	0.93	0.88	0.57

Calendar year 1957: Max 5,360 Min 96 Mean 412 Cfsm 1.32 In. 17.89
Water year 1957-58: Max 5,360 Min 140 Mean 474 Cfsm 1.51 In. 20.55

Peak discharge (base, 2,700 cfs).--Nov. 20 (2 a.m.) 2,960 cfs (9.82 ft); Nov. 27 (1 a.m.) 2,710 cfs (9.32 ft); Apr. 29 (6 p.m.) 6,750 cfs (14.50 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

1185. Hunting Creek near Harmony, N. C.

Location.--Lat 36°00', long 80°44', on right bank at downstream side of highway bridge, three-quarters of a mile downstream from Kennedy Creek, 1 mile east of Houstonville, Iredell County, 2 miles downstream from U. S. Highway 21, and 3½ miles northeast of Harmony.

Drainage area.--153 sq mi.

Records available.--January 1951 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 731 ft (by barometer). Prior to Apr. 5, 1951, wire-weight gage on upstream side of bridge at same datum.

Average discharge.--7 years, 168 cfs.

Extremes.--Maximum discharge during year, 6,210 cfs Apr. 28 (gage height, 18.80 ft); minimum, 90 cfs Sept. 19, 20 (gage height, 1.51 ft).
1951-58: Maximum discharge, that of Apr. 28, 1958; minimum, 18 cfs Oct. 8, 1954.

Remarks.--Records fair. Diurnal fluctuation at low flow caused by mills above station.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Jan. 10, Feb. 17-19; shifting-control method used Oct. 1, 2, Mar. 31, Apr. 1-3)

Oct. 1 to Apr. 28				Apr. 29 to Sept. 30			
1.8	123	7.0	1,390	1.5	89	4.0	500
2.0	153	9.0	2,060	2.0	149	6.0	1,000
2.5	241	11.0	2,760	2.5	220	9.0	2,060
3.0	340	13.0	3,550	3.0	303		
4.0	545	15.0	4,400				
5.0	795	17.0	5,330				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	510	140	232	222	390	*410	670	585	268	189	139	124
2	*360	136	217	208	310	340	440	540	294	184	131	112
3	270	136	208	197	280	310	360	520	260	182	354	114
4	213	134	209	196	260	280	310	470	260	177	212	*111
5	184	131	192	194	250	260	300	480	252	183	146	114
6	165	*129	185	190	250	260	1,360	712	353	236	136	108
7	153	127	197	201	270	250	638	718	417	190	134	107
8	145	146	860	196	270	260	410	560	268	183	132	107
9	139	185	534	170	241	260	350	470	272	190	129	102
10	136	139	350	180	*233	260	404	430	330	198	156	100
11	130	130	290	190	235	237	539	410	*264	180	128	104
12	140	130	241	184	232	230	400	420	317	173	122	111
13	131	130	222	211	232	239	350	370	252	190	181	111
14	127	137	218	678	222	250	*320	350	236	198	166	106
15	126	162	217	440	239	222	320	340	236	172	266	102
16	126	148	211	330	237	213	*440	330	236	*158	176	108
17	221	147	208	280	170	208	370	423	220	172	169	104
18	448	317	202	250	150	241	340	448	220	154	149	101
19	*209	2,040	199	228	200	250	320	340	212	149	135	97
20	172	600	246	218	250	*228	300	432	228	146	132	98
21	153	340	310	258	250	211	290	350	212	146	132	178
22	145	260	239	360	241	197	728	321	268	165	126	145
23	140	891	222	290	250	187	777	321	228	139	137	117
24	170	495	218	363	241	185	440	321	220	170	164	114
25	168	1,520	215	891	232	305	712	312	205	144	258	107
26	147	*812	427	480	444	370	460	*609	220	131	169	108
27	162	410	370	370	855	350	420	350	260	199	*148	105
28	147	340	300	320	608	290	*4,850	312	212	135	136	100
29	142	300	*260	290	-	250	*1,850	294	198	131	131	100
30	140	270	241	270	-------	340	760	276	*190	122	128	102
31	148	-------	228	260	-------	*1,880	-------	*268	-------	125	124	-------
Total	5,767	10,982	8,468	9,115	8,042	9,773	20,228	13,082	7,608	5,211	4,946	3,317
Mean	186	366	273	294	287	315	674	422	254	168	160	111
Cfsm	1.22	2.39	1.78	1.92	1.88	2.06	4.41	2.76	1.66	1.10	1.05	0.725
In.	1.40	2.67	2.06	2.22	1.95	2.38	4.92	3.18	1.85	1.27	1.20	0.81

Calendar year 1957: Max 3,440 Min 74 Mean 233 Cfsm 1.52 In. 20.68
Water year 1957-58: Max 4,850 Min 97 Mean 292 Cfsm 1.91 In. 25.91

Peak discharge (base, 2,000 cfs).--Nov. 19 (12:30 p.m.) 3,470 cfs (12.82 ft); Nov. 25 (2 p.m.) 2,340 cfs (9.75 ft); Mar. 31 (8 a.m.) 2,520 cfs (9.67 ft); Apr. 6 (11 a.m.) 2,130 cfs (9.15 ft); Apr. 28 (5 p.m.) 6,210 cfs (18.80 ft).

* Discharge measurement made on this day.

1190. South Yadkin River at Cooleemee, N. C.

Location.--Lat 35°48', long 80°34', on left bank 150 ft downstream from tailrace of Erwin Cotton Mills at Cooleemee, Davie County, 550 ft upstream from bridge on State Highway 801, 2¼ miles downstream from Bear Creek, and 2½ miles upstream from Third Creek.

Drainage area.--569 sq mi.

Records available.--June 1928 to September 1958. Monthly discharge only for some periods, published in WSP 1303. Figures of discharge above 2,000 cfs are subject to error owing to absence of sufficient information to make corrections for backwater from tributary inflow and High Rock Lake.

Gage.--Water-stage recorder. Datum of gage is 624.57 ft above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers).

Average discharge.--30 years, 614 cfs.

Extremes.--Maximum discharge during year, 12,500 cfs Apr. 29 (gage height, 22.60 ft); minimum, 176 cfs Jan. 6 (gage height, 1.58 ft); minimum daily, 235 cfs Sept. 30.
1928-58: Maximum discharge 24,800 cfs Oct. 3, 1929 (gage height, 32.25 ft), from rating curve extended above 7,500 cfs on basis of computation of peak flow over dam half a mile upstream; minimum, 10 cfs Nov. 25, 1931 (gage height, 0.40 ft); minimum daily, 23 cfs Oct. 12, 19, 1941.
Flood of July 16, 1916, reached a stage of 27.2 ft, from floodmark in Erwin Cotton Mill.

Remarks.--Records fair except those above 1,500 cfs and those for periods of no gage-height record, which are poor. Large diurnal fluctuation and slight regulation during low and medium flow caused by Erwin Cotton Mill above station.

Revisions (water years).--WSP 822: Drainage area. WSP 1433: 1931. See also Records available.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.7	213	9.0	2,810
2.0	312	11.0	3,550
3.0	686	14.0	4,790
5.0	1,440	17.0	6,190
7.0	2,110	21.0	10,000

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,770	436	a950	666	*1,150	1,900	3,220	4,350	798	512	361	285
2	1,370	436	a800	647	1,150	1,220	2,290	2,770	2,090	482	372	309
3	962	319	a750	608	881	1,000	1,370	4,230	1,170	444	620	295
4	666	407	a750	550	784	881	1,080	2,180	842	444	1,040	292
5	*588	364	a700	550	744	803	1,040	1,540	784	444	512	288
6	531	393	a650	455	725	744	2,280	1,570	807	a500	400	288
7	489	354	*a650	588	838	725	3,740	2,180	1,490	a550	382	278
8	440	389	1,630	550	1,220	725	2,910	2,080	900	*485	433	271
9	440	569	2,450	493	822	744	1,440	1,600	853	455	433	262
10	393	474	1,800	455	725	784	1,400	1,370	1,000	550	414	258
11	389	425	1,110	550	686	706	2,140	1,220	822	474	393	258
12	364	378	960	512	666	*666	1,570	1,190	725	474	354	258
13	400	396	669	532	647	666	1,220	1,150	725	493	354	271
14	393	382	725	1,810	628	706	1,080	a1,000	647	550	531	278
15	375	389	706	1,780	628	666	1,000	a900	647	569	550	268
16	340	440	686	1,150	666	647	1,280	a850	647	485	647	262
17	375	418	666	881	550	555	1,260	a1,100	608	459	608	268
18	952	994	647	764	425	686	1,080	1,420	550	466	466	278
19	932	a4,400	608	686	493	*686	940	a1,100	550	448	396	262
20	569	a5,600	608	647	647	686	881	a1,000	588	463	364	245
21	489	a3,000	842	666	666	647	842	1,150	588	400	*354	288
22	448	a1,100	764	1,000	706	628	1,070	940	1,150	493	344	436
23	414	a2,500	666	920	706	608	2,700	862	896	478	336	354
24	440	a3,200	647	1,110	666	608	2,380	1,490	666	418	364	*302
25	493	a4,000	628	3,210	628	875	1,600	1,140	588	463	740	292
26	474	a5,000	1,320	2,740	1,120	1,220	1,870	1,140	588	440	588	278
27	455	a3,500	1,370	1,600	2,540	1,080	1,370	1,190	686	389	436	278
28	404	a1,500	1,000	1,150	2,670	960	3,600	940	647	463	386	268
29	400	a1,300	842	960	-	862	*9,080	862	531	422	364	248
30	*404	a1,100	764	862	-------	856	9,610	784	512	378	354	235
31	400	-------	686	822	-------	2,520	-------	764	-------	330	336	-------
Total	17,559	44,163	28,044	29,914	24,777	27,060	67,323	46,062	24,095	14,421	14,232	8,453
Mean	566	1,472	905	965	885	873	2,244	1,486	803	465	459	282
Cfsm	0.995	2.59	1.59	1.70	1.56	1.53	3.94	2.61	1.41	0.817	0.807	0.496
In.	1.15	2.89	1.83	1.96	1.62	1.77	4.40	3.01	1.57	0.94	0.93	0.55

Calendar year 1957: Max 7,480 Min 141 Mean 823 Cfsm 1.45 In. 19.63
Water year 1957-58: Max 9,610 Min 235 Mean 948 Cfsm 1.67 In. 22.62

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for stations on nearby streams.

1194. Third Creek subwatershed No. 7A (Third Creek) near Stony Point, N. C.

Location.--Lat 35°52'20", long 81°04'00", on left bank 200 ft upstream from dam on Third Creek, 900 ft upstream from highway bridge, 1¼ miles northwest of Stony Point, Alexander County, and 2⅛ miles upstream from Alexander-Iredell County line.
Drainage area.--4.84 sq mi.
Records available.--December 1955 to September 1958.
Gage.--Water-stage recorder and sharp-crested weir. Datum of gage is 976 ft above mean sea level (levels by Soil Conservation Service).
Extremes.--Maximum outflow during year, 66 cfs Apr. 28 (gage height, 14.09 ft); minimum, 2.2 cfs Sept. 19, 20. Maximum inflow, 540 cfs (average for 30-minute period) June 1, computed from outflow and change in reservoir contents, adjusted for rainfall on reservoir surface during time of peak inflow.
1955-58: Maximum outflow, 67 cfs Sept. 27, 1956, Sept. 17, 1957; maximum gage height, 14.42 ft Sept. 27, 1956; no flow May 10-15, 1956 (result of reservoir storage). Maximum inflow, that of June 1, 1958.
Remarks.--Records good except those for periods of no gage-height record or indefinite stage-discharge relation, which are poor. Records of daily discharge are outflow from reservoir, determined from stage-discharge relation for outlet structure. Peak inflow rates are determined for short intervals of time on basis of change in reservoir contents and outflow. Reservoir is formed by earth dam; dam completed and storage began in December 1955. Outlet structure is 3 x 3 x 9-foot concrete drop inlet connected to a 24-inch concrete outlet pipe. Top of drop inlet is at elevation 978 ft. A 2-foot sharp-crested rectangular weir is set in one side of the drop inlet with crest at elevation 977 ft. There is an emergency spillway at elevation 1,003 ft. Top of dam embankment is 1,010 ft. There is an 18-inch diameter cleanout gate at elevation 969.5 ft at bottom of drop inlet. Available capacity, 876 acre-ft between elevations 977 ft (crest of weir) and 1,003 ft (crest of spillway). Records of suspended sediment loads for the water year 1958 are given in WSP 1571.
The following table gives the relation between gage height and outflow (except periods Mar. 2 to Apr. 2, Aug. 16 to Sept. 19, when cleanout gate in dam was partly open), reservoir capacity, and water-surface area during the 1958 water year.

Gage height (feet)	Outflow (cfs)	Contents (acre-feet)	Surface area (acres)	Gage height (feet)	Outflow (cfs)	Contents (acre-feet)	Surface area (acres)
1.4	1.8	5.0	12.8	7.0	57	96.1	21.9
1.7	3.5	8.7	13.0	8.0	59	119	23.5
2.0	7.2	12.7	13.3	9.0	60	143	24.5
2.2	12	15.3	13.5	9.0	62	168	25.0
2.5	23	19.5	13.8	11.0	63	193	25.4
2.8	41	23.7	14.1	12.0	64	218	25.8
3.0	48	26.5	14.3	13.0	65	244	26.5
4.0	51	41.2	15.5	14.0	66	271	27.2
5.0	53	57.5	17.0	14.5	67	286	28.2
6.0	55	75.6	19.2				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	3.3	7.6	5.8	11	11	17	54	17	4.4	3.5	2.5
2	*8.6	3.3	6.8	5.3	8.6	10	11	22	*58	4.3	3.4	2.5
3	6.8	3.3	6.4	5.0	7.2	14	9.7	13	*36	4.3	3.4	2.5
4	5.5	3.2	6.6	4.7	6.4	e10	9.4	11	10	4.3	3.4	2.5
5	4.5	3.2	6.0	*4.7	6.3	e9	9.2	10	9.2	4.9	3.3	2.4
6	4.1	3.2	5.7	4.6	6.3	e9	48	14	8.6	6.3	*3.2	2.4
7	3.7	3.2	6.2	5.0	7.8	a9	40	17	8.0	5.6	3.2	2.4
8	3.5	3.6	26	4.9	8.0	a9	12	12	7.8	*4.9	3.6	2.3
9	3.4	4.2	15	4.5	6.3	a9	10	10	7.0	5.6	4.2	2.3
10	3.4	3.4	10	4.4	6.0	a9	13	9.4	6.8	*5.7	3.4	2.3
11	3.2	3.2	9.2	4.5	5.8	a3	13	9.4	6.0	4.9	3.1	2.3
12	3.4	3.2	7.2	4.4	5.6	a3	10	9.0	5.7	4.9	3.0	2.4
13	3.4	3.2	6.3	6.0	5.5	3.1	9.2	8.2	5.8	5.0	3.2	2.5
14	3.2	3.4	6.0	*15	5.3	3.2	8.6	7.4	5.3	6.2	3.8	2.3
15	3.2	*3.4	6.0	9.7	6.0	3.3	9.4	7.4	5.3	6.2	3.5	*2.4
16	3.2	3.7	5.8	8.2	5.8	4.5	*12	7.4	5.5	5.5	3.8	2.5
17	6.2	3.8	5.5	6.9	5.0	4.9	9.4	8.2	5.1	4.7	4.5	2.4
18	9.7	8.8	5.2	6.3	4.7	5.4	8.4	10	5.1	4.5	3.7	2.4
19	5.7	43	5.1	5.5	4.6	5.7	8.0	8.2	4.9	4.4	3.3	*2.2
20	4.5	17	6.4	5.3	5.3	5.4	7.4	14	5.5	4.1	3.2	2.2
21	4.0	9.4	7.4	7.4	5.6	5.4	7.0	9.4	5.3	4.0	3.0	4.1
22	3.7	8.0	5.8	9.2	6.0	5.2	13	8.0	8.4	5.1	2.8	3.7
23	3.6	43	5.3	7.2	6.2	5.1	*12	9.3	7.6	4.4	2.9	3.2
24	4.0	17	5.1	14	5.8	5.1	8.8	29	6.4	4.1	3.8	2.9
25	3.9	48	5.2	27	5.5	6.7	13	12	5.8	4.0	5.6	2.7
26	3.6	*55	12	13	16	7.5	11	11	5.5	3.8	4.4	2.6
27	3.6	22	9.2	10	30	6.9	12	9.4	5.8	3.4	3.7	2.6
28	3.4	12	8.2	8.8	18	*6.2	*63	8.6	5.3	3.4	3.3	2.4
29	3.3	10	7.4	7.8	-	5.9	*65	7.2	4.7	3.4	3.0	2.4
30	3.3	8.8	6.4	7.6	------	8.5	62	6.8	4.4	3.2	2.9	*2.4
31	3.4	------	6.0	7.4	------	44	------	6.6	------	3.2	2.7	------
Total	139.0	359.8	236.0	240.1	220.6	247.0	541.5	378.9	281.8	142.7	107.8	76.7
Mean	4.48	12.0	7.61	7.75	7.88	7.97	18.0	12.2	9.39	4.60	3.48	2.56
(†)	8.6	13.4	11.7	13.5	16.0	18.9	122	12.1	9.5	8.2	5.7	6.8
(‡)	13.0	13.3	13.2	13.4	13.5	13.8	23.6	13.3	13.1	13.0	12.8	12.8
(**)	2.55	7.20	3.05	3.95	2.15	2.70	8.55	5.05	3.45	2.40	2.85	1.10

Calendar year 1957: Max 65 Min 1.9 Mean 6.83
Water year 1957-58: Max 65 Min 2.2 Mean 8.14

* Discharge measurement made on this day. † Contents, in acre-feet, at end of month in reservoir No. 7A. ‡ Surface area, in acres, at end of month of reservoir No. 7A. ** Precipitation, in inches, during month at rain gage 800 ft west of reservoir. a No gage-height record; discharge estimated on basis of estimated inflow and gate leakage. e Stage-discharge relation indefinite; discharge estimated on basis of change in reservoir storage and estimated inflow.

1205. Third Creek at Cleveland, N. C.

Location.--Lat 35°45', long 80°41', on left bank 200 ft downstream from highway bridge, three-quarters of a mile north of Cleveland, Rowan County, and 7 miles upstream from Fourth Creek.
Drainage area.--87.4 sq mi.
Records available.--April 1940 to September 1958.
Gage.--Water-stage recorder. Datum of gage is 684.47 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to May 22, 1950, on right bank at site 200 ft upstream at same datum.
Average discharge.--18 years, 86.9 cfs.
Extremes.--Maximum discharge during year, 1,900 cfs Apr. 29 (gage height, 10.46 ft); minimum, 29 cfs Sept. 11, 15, 19, 20.
1940-58: Maximum discharge, 3,080 cfs about Sept. 19, 1945 (gage height, 15.76 ft, from floodmarks), from rating curve extended above 900 cfs by logarithmic plotting; minimum, 10 cfs Sept. 19, 20, Oct. 7, 1954, Sept. 18, 19, 21, 22, 1956 (gage height, 0.20 ft).
Maximum stage known, 22.5 ft, sometime in July 1916, from floodmark witnessed by local resident. Creek channel improved considerably by dredging since 1916.
Remarks.--Records good except those for periods of ice effect, which are fair, and those for period of no gage-height record, which are poor. Town of Statesville diverts about 1 cfs sewage effluent into basin above station. Six flood-detention reservoirs (combined capacity 2,710 acre-ft) in operation upstream at end of water year. Main stem creek banks cleared of vegetation from point 4 miles below gage to Third Creek Subwatershed No. 7A near Stony Point in the headwaters. Clearing began in 1955 and was completed in 1958.
Revisions (water years).--WSP 1112: 1944-46.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Aug. 4-7, Sept. 21-30)

Oct. 1 to May 2				May 3 to Sept. 30			
0.9	37	3.0	242	0.9	29	3.0	208
1.0	43	5.0	538	1.0	34	4.0	340
1.5	83	7.0	930	1.5	63	6.0	680
2.0	132	9.0	1,380	2.0	102		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	89	49	127	86	*201	182	242	294	81	58	49	39
2	80	47	112	79	142	147	162	825	408	56	48	36
3	67	46	104	76	117	132	137	*594	*184	56	62	35
4	59	46	108	72	105	120	127	a170	121	55	62	*35
5	53	46	94	b70	99	110	122	a150	101	59	53	34
6	51	45	88	b70	102	106	783	a240	154	64	*53	33
7	49	44	87	72	143	105	364	a300	154	61	61	32
8	46	84	332	70	197	108	206	a180	100	*63	69	31
9	44	72	237	b65	127	122	157	a150	90	84	52	31
10	44	49	154	b65	109	121	260	a140	88	75	51	31
11	43	45	127	65	104	105	288	a130	80	62	46	30
12	47	44	103	63	97	97	176	a120	*78	61	46	31
13	44	44	92	89	94	97	147	a110	75	83	53	32
14	42	47	89	372	88	97	132	a110	72	128	*59	31
15	41	50	89	184	93	89	132	a100	71	72	53	30
16	41	56	86	137	94	85	*173	a100	71	64	49	32
17	44	54	84	114	b75	84	137	a130	68	61	47	32
18	87	304	81	100	b65	95	122	a150	66	59	48	32
19	57	*1,130	79	90	80	*93	117	a110	64	61	44	30
20	50	1,140	88	88	*b75	88	110	a140	68	59	44	30
21	47	260	112	109	86	84	108	a110	64	60	*43	54
22	46	162	86	144	95	80	*320	a100	87	77	42	45
23	45	765	80	111	99	79	302	a100	72	59	43	36
24	51	338	78	260	92	79	168	434	67	55	50	*34
25	54	1,050	80	656	89	152	398	172	64	56	*101	34
26	49	975	225	234	300	152	350	158	66	53	62	33
27	49	298	150	168	464	132	269	111	71	52	49	33
28	47	218	118	137	312	113	1,350	99	63	52	43	31
29	46	173	*105	122	-	105	*1,280	91	61	52	41	31
30	*47	152	94	116	-------	118	465	86	*59	49	40	32
31	50	-------	88	109	-------	*477	-------	82	-------	*47	58	-------
Total	1,609	7,811	3,577	4,193	3,744	3,754	9,086	5,786	2,868	1,953	1,601	1,010
Mean	51.9	260	115	135	134	121	303	187	95.6	63.0	51.6	33.7
Cfsm	0.594	2.97	1.32	1.54	1.53	1.38	3.47	2.14	1.09	0.721	0.590	0.386
In.	0.68	3.32	1.52	1.78	1.59	1.60	3.87	2.46	1.22	0.83	0.68	0.43

Calendar year 1957: Max 1,900 Min 23 Mean 109 Cfsm 1.25 In. 16.97
Water year 1957-58: Max 1,350 Min 30 Mean 129 Cfsm 1.48 In. 19.98

Peak discharge (base, 1,050 cfs).--Nov. 20 (4 a.m.) 1,780 cfs (10.20 ft); Nov. 23 (12 m.) 1,150 cfs (8.03 ft); Nov. 26 (3 a.m.) 1,590 cfs (9.68 ft); Jan. 25 (2 a.m.) 1,100 cfs (7.80 ft); Apr. 6 (2 p.m.) 1,210 cfs (8.29 ft); Apr. 25 (9 p.m.) 1,080 cfs (7.68 ft); Apr. 29 (2 a.m.) 1,900 cfs (10.46 ft); May 2 (6 p.m.) 1,300 cfs (8.68 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for nearby stations.
b Stage-discharge relation affected by ice.

1225. Yadkin River at High Rock, N. C.

Location.--Lat 35°35'46", long 80°13'59", on right bank 0.3 mile downstream from High Rock Dam, 0.6 mile west of High Rock, Davidson County, 1¾ miles upstream from Lick Creek, and at mile 252.

Drainage area.--4,000 sq mi, approximately.

Records available.--January 1919 to November 1927, November 1941 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 558.68 ft above mean sea level, datum of 1929, and 590.00 ft above Carolina Aluminum Co. datum. January 1919 to November 1927 at datum 590.00 ft lower.

Average discharge.--24 years (1919-27, 1942-58), 4,585 cfs (adjusted for storage).

Extremes.--Maximum discharge during year, 54,000 cfs Apr. 29 (gage height, 13.26 ft); minimum, 22 cfs Sept. 29; minimum daily, 36 cfs Nov. 17.
1919-27, 1941-58: Maximum discharge, 85,000 cfs (estimated) July 21, 1919; minimum, 10 cfs Aug. 10, 1942, Nov. 20, 21, 1955, Aug. 12, Sept. 2, 1957; minimum daily, 11 cfs Nov. 20, 1955.
Maximum stage known, 22.1 ft (present datum) in July 1916, from floodmarks, from records by Tallassee Power Co.

Remarks.--Records good except those below 2,000 cfs, which are fair. Except for major floods, flow completely regulated by High Rock Lake since 1927 (usable capacity, 10,230,000,000 cu ft).

Revisions (water years).--WSP 1433: Drainage area. WSP 1503: 1919-24, 1925(M), 1926-27.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

2.0	28	4.0	1,710
2.1	38	4.5	2,730
2.2	50	5.0	4,130
2.4	86	6.0	7,780
2.7	189	8.0	17,800
3.0	390	10.0	29,700
3.5	940	12.0	43,800

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15,700	4,070	6,970	5,850	5,850	13,000	24,700	19,200	6,030	4,760	4,900	5,020
2	10,900	3,330	5,850	6,210	7,210	8,210	14,600	16,800	6,400	4,690	5,630	4,870
3	7,170	44	5,670	6,210	6,880	6,970	8,210	20,700	6,210	4,660	44	5,040
4	6,210	4,840	5,850	6,210	5,850	6,260	7,800	12,400	6,210	4,400	4,990	4,840
5	*5,490	3,260	5,490	6,210	5,850	6,030	6,780	8,200	*6,210	4,600	6,280	4,920
6	5,490	4,290	5,670	6,210	5,750	6,030	16,700	11,000	5,560	68	4,560	4,890
7	4,620	4,290	5,670	5,850	5,510	6,020	23,800	18,600	3,920	4,700	4,230	42
8	3,810	3,860	8,430	6,400	6,140	5,920	13,500	16,200	2,280	4,600	4,050	2,920
9	3,940	3,240	19,500	6,400	6,210	5,850	8,480	12,300	5,080	4,390	3,930	4,720
10	3,810	3,510	10,600	6,210	6,060	5,950	12,000	9,560	5,390	4,520	40	5,280
11	4,290	3,450	8,310	6,210	6,100	6,030	14,800	8,200	5,960	4,290	4,310	5,090
12	3,570	3,460	6,780	6,030	6,160	5,920	10,800	7,370	5,300	4,260	4,340	4,400
13	2,120	3,490	6,400	5,850	6,130	6,130	8,000	7,170	5,300	43	4,660	4,500
14	4,070	3,480	6,210	4,450	6,140	6,050	6,980	6,780	5,230	3,940	4,550	40
15	4,910	3,560	6,210	4,450	5,750	6,040	6,590	6,780	3,850	4,330	4,390	4,510
16	4,550	2,340	6,210	4,790	6,210	6,210	7,780	6,590	5,530	4,520	4,830	4,650
17	4,470	36	5,490	5,130	6,140	4,610	7,580	5,850	5,340	4,380	39	4,530
18	3,850	2,980	5,490	4,450	6,240	3,090	7,170	6,030	5,070	4,660	4,390	4,960
19	3,640	4,290	5,850	3,510	6,170	4,620	6,590	6,970	5,050	5,390	4,780	4,960
20	2,260	22,400	6,210	4,960	6,020	5,130	6,590	6,780	5,140	43	4,610	4,810
21	4,650	*24,600	6,030	4,450	5,810	4,620	6,780	6,780	4,350	4,600	4,790	*40
22	4,960	9,630	5,850	4,960	5,780	3,230	6,780	6,970	42	4,140	5,250	3,690
23	4,470	18,000	5,850	4,960	1,750	2,280	13,800	6,210	4,460	4,020	5,700	4,110
24	3,960	21,100	6,210	10,600	4,000	4,810	14,300	6,590	4,410	4,140	45	4,280
25	3,520	27,800	5,850	20,500	4,230	*5,400	10,600	8,680	5,150	3,850	4,170	4,120
26	4,120	35,400	6,210	18,400	4,790	5,170	12,800	8,590	4,480	4,220	4,170	4,160
27	3,870	28,100	6,030	9,960	4,980	4,630	9,010	6,970	4,440	44	4,820	2,840
28	4,970	13,200	6,590	7,620	18,300	5,490	25,600	6,590	5,040	3,970	4,720	39
29	4,500	10,000	6,210	6,590	-	6,210	42,400	6,970	126	4,140	4,780	3,370
30	5,130	10,000	6,210	5,850	--------	6,210	41,600	6,590	5,170	4,410	4,930	3,380
31	4,790	--------	6,210	5,850	--------	13,400	--------	6,210	--------	4,400	46	--------
Total	153,810	282,050	210,110	211,330	171,970	185,520	403,120	290,630	142,728	119,178	122,974	117,021
Mean	4,962	9,402	6,778	6,817	6,142	5,985	13,440	9,375	4,758	3,844	3,967	3,901
(†)	-554	+626	-149	+149	0	0	+27	-224	-119	-361	+45	-2,086

Adjusted for change in contents in High Rock Lake

Mean	4,408	10,028	6,629	6,966	6,142	5,985	13,470	9,151	4,639	3,483	4,012	1,815
Cfsm	1.10	2.51	1.66	1.74	1.54	1.50	3.37	2.29	1.16	0.871	1.00	0.454
In.	1.27	2.80	1.91	2.01	1.60	1.73	3.76	2.64	1.29	1.00	1.15	0.51

	Observed			Adjusted		
Calendar year 1957:	Max 36,200	Min 19	Mean 5,346	Mean 5,462	Cfsm 1.37	In. 18.53
Water year 1957-58:	Max 42,400	Min 36	Mean 6,604	Mean 6,384	Cfsm 1.60	In. 21.67

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in High Rock Lake; furnished by Carolina Aluminum Co.

1235. Uwharrie River near Eldorado, N. C.

Location.--Lat 35°25'30", long 80°01'00", on right bank 300 ft downstream from State Highway 109, 1 mile upstream from McLeans Creek, and 3 miles south of Eldorado, Montgomery County.

Drainage area.--347 sq mi.

Records available.--October 1938 to September 1958.

Gage.--Water-stage recorder and concrete control. Datum of gage is 303.66 ft above mean sea level, unadjusted.

Average discharge.--20 years, 318 cfs.

Extremes.--Maximum discharge and gage height unknown, probably occurred Jan. 25; minimum, 7.5 cfs Sept. 30 (gage height, 0.77 ft); minimum daily, 11 cfs Sept. 30.
1938-58: Maximum discharge, 23,300 cfs Sept. 18, 1945 (gage height, 26.22 ft, from floodmark), from rating curve extended above 13,000 cfs by logarithmic plotting; minimum, 0.5 cfs Sept. 21, Oct. 13, 14, 1941; minimum daily, 0.5 cfs Oct. 13, 1941.
Flood in August 1928 reached a stage of 22.2 ft, from floodmark established by local resident (discharge, 17,900 cfs).

Remarks.--Records good except those for periods of no gage-height record, which are poor. Marked diurnal fluctuation and some regulation for short periods at low flow caused by gristmill above station. Town of Asheboro diverted an average of 1.4 cfs during water year 1958 from the basin above station for water supply. Sewage is discharged into Deep River (Cape Fear River basin).

Revisions (water years).--WSP 892: 1939.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.9	11	2.5	343
1.1	21.5	3.0	555
1.3	41	5.0	1,720
1.6	91	11.0	6,200
2.0	187	14.0	9,000

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	226	31	850	132	370	838	810	1,510	170	68	61	50
2	565	34	443	184	400	528	494	1,310	180	64	58	44
3	203	35	315	163	380	416	376	3,410	185	54	73	40
4	107	35	295	147	300	350	326	1,710	175	58	95	35
5	77	37	394	122	290	298	318	728	160	56	120	34
6	53	31	278	143	400	272	2,730	932	160	61	71	31
7	48	35	235	160	1,800	263	3,520	2,540	350	58	59	30
8	41	33	522	187	2,200	253	865	1,460	160	99	52	26
9	36	28	1,510	180	1,000	266	537	782	130	120	50	27
10	33	56	703	170	550	358	1,030	560	110	187	47	25
11	29	56	438	160	450	298	3,910	452	110	120	41	22
12	29	44	312	150	360	260	1,740	350	175	86	39	*28
13	28	35	238	150	310	244	728	230	100	118	40	18
14	20	41	207	2,200	280	288	528	215	95	212	47	18
15	29	37	195	1,500	270	285	448	285	95	294	50	19
16	27	120	184	750	450	244	600	448	130	222	78	23
17	21	187	176	450	350	227	591	494	90	210	129	18
18	29	240	163	320	220	218	430	735	*78	843	120	18
19	50	772	160	290	200	230	362	536	75	1,290	73	18
20	50	1,070	168	270	200	253	322	298	71	380	48	19
21	40	272	426	280	190	235	292	260	70	1,090	41	27
22	34	168	340	550	209	209	408	241	118	411	35	16
23	28	2,510	235	450	230	193	1,270	207	142	232	35	74
24	35	2,660	198	3,000	232	184	610	616	107	160	222	42
25	39	2,840	182	9,000	215	481	438	1,060	89	195	118	35
26	61	4,710	221	1,500	595	920	635	2,500	80	152	708	27
27	56	1,110	468	600	3,430	560	478	750	244	111	229	24
28	44	506	322	400	1,990	407	3,760	220	190	122	116	18
29	39	650	266	350	-	358	3,710	300	101	*103	84	12
30	35	755	230	330	-------	347	3,770	210	82	84	68	11
31	34	-------	193	320	-------	485	-------	180	-------	68	56	-------
Total	2,146	19,138	10,867	24,658	17,871	10,768	36,036	25,529	4,022	7,328	3,063	829
Mean	69.2	638	351	795	638	347	1,201	824	134	236	98.8	27.6
Cfsm	0.199	1.84	1.01	2.29	1.84	1.00	3.46	2.37	0.386	0.680	0.285	0.080
In.	0.23	2.05	1.16	2.64	1.92	1.15	3.86	2.74	0.43	0.79	0.33	0.09

Calendar year 1957: Max 5,690 Min 7.0 Mean 293 Cfsm 0.844 In. 11.46
Water year 1957-58: Max 9,000 Min 11 Mean 445 Cfsm 1.28 In. 17.39

Peak discharge (base, 4,600 cfs).--Nov. 26 (1:30 p.m.) 4,990 cfs (9.62 ft); Jan. 25 (time and discharge unknown); Apr. 6 (2:30 p.m.) 4,990 cfs (9.63 ft); Apr. 28 (5 p.m.) 6,020 cfs (10.78 ft).

* Discharge measurement made on this day.
Note.--No gage-height record Jan. 9 to Feb. 20, May 26 to June 17; discharge estimated on basis of weather records, recorded range in stage when available, and records for Rocky River near Norwood.

1250. Big Bear Creek near Richfield, N. C.

Location.--Lat 35°20'05", long 80°20'10", 200 ft upstream from highway bridge, 300 ft downstream from Little Creek, and 10 miles southwest of Richfield, Stanly County.

Drainage area.--55.7 sq mi (revised).

Records available.--May 1954 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 426.62 ft above mean sea level, unadjusted.

Extremes.--Maximum discharge during year, 4,880 cfs Apr. 6 (gage height, 11.88 ft); minimum, 0.1 cfs Sept. 18-20, 25-30.
1954-58: Maximum discharge, 7,280 cfs June 8, 1957 (gage height, 13.70 ft), from rating curve extended above 2,500 cfs on basis of computation of peak flow over dam 1 mile downstream; no flow Sept. 12 to Oct. 14, 1954.

Remarks.--Records good except those below 3 cfs and those for July 22 to Sept. 30, which are fair, and those for period of no gage-height record, which are poor.

Revisions (water years).--WSP 1505: 1955, 1956(M).

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	55	4.1	135	27	a60	116	102	130	7.0	1.3	3.2	0.45
2	43	4.4	76	23	a48	75	65	104	9.4	1.1	2.6	*.45
3	19	4.4	58	19	a42	61	52	*116	8.1	1.0	20	.45
4	*9.8	4.4	61	18	a38	50	49	67	6.7	1.1	22	.45
5	6.1	4.4	43	15	a36	40	53	51	6.1	3.4	5.5	.4
6	4.1	4.4	34	14	a90	37	1,580	146	*80	3.9	3.4	.35
7	3.2	4.4	32	24	a200	34	262	440	180	5.0	2.2	.3
8	2.5	4.7	260	39	a100	36	124	219	24	3.6	1.8	.3
9	2.0	6.4	171	23	a70	93	79	104	14	3.9	1.5	.25
10	1.6	6.4	87	a20	a50	95	410	68	*9.0	4.7	1.4	.25
11	1.4	6.1	61	a18	a44	59	349	52	6.7	4.1	1.5	.25
12	1.2	6.4	40	a17	a36	47	149	48	5.8	2.5	2.2	.2
13	1.1	6.4	31	a17	a32	49	88	38	5.3	20	24	.2
14	1.0	6.7	31	a300	a30	61	65	28	4.4	24	*7.4	.2
15	.9	7.3	29	a200	a80	45	65	24	3.6	*47	26	.2
16	.9	141	26	a90	a50	37	449	21	3.2	12	5.9	*.15
17	1.5	56	24	a60	a40	32	152	22	2.8	7.0	3.2	.15
18	3.6	231	20	a44	*34	36	87	102	2.6	4.7	1.9	.1
19	1.8	*629	19	a36	27	39	64	34	2.3	4.1	1.4	.1
20	1.4	131	70	a34	25	34	51	25	2.1	35	1.0	.1
21	1.2	58	94	a90	24	29	42	23	2.0	143	*1.0	.4
22	1.2	42	49	a60	26	25	122	18	2.1	74	.9	.2
23	1.1	1,250	36	a50	27	22	133	14	4.7	15	.9	.15
24	2.1	207	a30	a1,000	26	21	63	13	3.2	57	5.2	.15
25	3.4	1,430	a28	a200	24	*188	103	35	2.5	43	8.2	.1
26	3.0	302	a80	a90	554	162	246	65	2.6	13	9.1	.1
27	2.8	124	a70	a60	481	88	112	21	3.4	29	2.6	.1
28	2.8	195	*50	a46	237	61	1,590	14	2.1	35	1.2	.1
29	3.0	170	42	a90		51	432	11	1.7	12	.7	.1
30	3.4	328	33	a60		44	280	8.5	1.6	6.3	.5	*.1
31	3.9		27	a46		166		7.7		4.2	.45	
Total	189.0	5,374.9	1,847	2,830	2,531	1,933	7,418	2,069.2	409.0	620.9	168.85	6.80
Mean	6.10	179	59.6	91.3	90.4	62.4	247	66.7	13.6	20.0	5.45	0.227
Cfsm	0.110	3.21	1.07	1.64	1.62	1.12	4.43	1.20	0.244	0.359	0.098	0.0041
In.	0.13	3.59	1.23	1.89	1.69	1.29	4.95	1.38	0.27	0.41	0.11	0.005

Calendar year 1957: Max 1,980 Min 0.1 Mean 62.6 Cfsm 1.12 In. 15.25
Water year 1957-58: Max 1,590 Min 0.1 Mean 69.6 Cfsm 1.25 In. 16.94

Peak discharge (base, 1,600 cfs).--Nov. 19 (11 a.m.) 1,690 cfs (7.67 ft); Nov. 23 (9 a.m.) 2,690 cfs (9.57 ft); Nov. 25 (12:30 p.m.) 3,240 cfs (10.26 ft); Jan. 24 (time unknown) 2,370 cfs (9.13 ft); Apr. 6 (9 a.m.) 4,880 cfs (11.88 ft); Apr. 28 (6 a.m.) 2,690 cfs (9.80 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage, and records for Little Sugar Creek near Charlotte.

1260. Rocky River near Norwood, N. C.

Location.--Lat 35°09'00", long 80°10'30", on left bank 1,000 ft downstream from Lanes Creek, 1½ miles upstream from highway bridge, and 6 miles southwest of Norwood, Stanly County.

Drainage area.--1,370 sq mi, approximately.

Records available.--October 1929 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 212.91 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Average discharge.--29 years, 1,236 cfs.

Extremes.--Maximum discharge during year, 31,900 cfs Jan. 25 (gage height, 21.28 ft); minimum, 67 cfs Sept. 10, 11 (gage height, 0.34 ft).
1929-58: Maximum discharge, 105,000 cfs Sept. 18, 1945 (gage height, 46.37 ft, from floodmark), from rating curve extended above 70,000 cfs by logarithmic plotting; minimum, 17 cfs Oct. 8, 1954 (gage height, 0.00 ft).
Flood in August 1908 reached a stage of 35 ft, from information by local residents.

Remarks.--Records good. Records of chemical analyses and water temperatures for the water year 1958 are given in WSP 1571.

Revisions (water years).--WSP 822: Drainage area. WSP 852: 1937. WSP 1052: 1936(M). WSP 1503: 1935, 1945.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.3	59	2.5	1,150
.6	127	3.0	1,690
1.0	248	8.0	7,900
1.5	456	14.0	17,300
2.0	760	20.0	29,000

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	477	90	6,080	684	1,070	3,580	2,820	4,060	280	143	166	135
2	1,290	95	2,130	658	1,140	2,000	1,620	2,380	270	122	146	114
3	756	97	1,350	577	972	1,460	1,150	2,440	284	114	262	104
4	384	95	1,170	505	802	1,190	1,000	1,940	300	112	524	97
5	255	84	*1,030	431	704	988	1,060	1,300	262	114	522	95
6	192	79	823	362	732	872	16,300	3,080	241	368	278	95
7	157	84	711	494	2,930	823	13,100	10,400	854	224	186	90
8	138	95	1,410	1,480	6,580	795	3,530	5,100	388	852	154	86
9	127	97	4,550	*984	3,060	1,320	1,700	2,440	315	2,320	132	75
10	120	100	2,520	613	1,690	3,880	3,800	1,520	259	795	127	67
11	127	104	1,490	560	1,300	1,940	14,400	1,170	228	481	112	*75
12	124	114	1,040	543	1,090	1,250	5,380	1,060	238	300	111	75
13	112	97	781	550	956	1,100	2,350	1,040	234	253	217	77
14	95	97	658	6,660	844	1,670	1,570	802	211	882	1,120	75
15	86	110	632	4,820	809	1,320	1,300	677	189	1,710	925	75
16	*79	956	589	2,420	1,350	956	8,530	589	168	914	416	75
17	88	1,220	554	1,460	1,070	816	6,440	543	151	454	258	69
18	97	2,660	521	1,090	673	781	2,550	2,030	*166	451	174	77
19	122	6,950	488	872	576	956	1,630	1,500	146	549	140	81
20	135	5,960	498	732	*637	988	1,300	788	140	552	127	77
21	114	2,250	1,810	767	607	837	1,050	664	140	2,820	122	75
22	86	844	1,360	1,800	589	711	1,330	571	323	2,360	112	77
23	77	14,700	830	1,470	632	619	3,260	478	585	1,040	107	273
24	84	11,900	658	7,800	632	571	1,880	411	319	462	178	190
25	97	11,600	595	28,000	607	4,860	1,230	413	217	1,590	582	122
26	132	15,700	789	12,400	3,640	6,250	1,850	2,380	189	1,010	1,440	102
27	138	7,010	2,480	3,390	13,800	2,840	1,690	1,210	432	404	745	95
28	107	2,710	1,340	2,040	9,510	1,850	11,500	601	592	445	354	88
29	86	3,810	1,100	1,460	-	1,350	16,800	451	314	*468	241	81
30	84	8,540	972	1,300	-------	1,120	12,400	371	195	270	183	73
31	86	-------	760	1,160	-------	1,820	-------	319	-------	198	157	-------
Total	6,052	98,248	41,719	88,082	59,002	51,513	144,520	52,728	8,630	22,777	10,318	2,890
Mean	195	3,275	1,346	2,841	2,107	1,662	4,817	1,701	288	735	333	96.3
Cfsm	0.142	2.39	0.982	2.07	1.54	1.21	3.52	1.24	0.210	0.536	0.243	0.070
In.	0.16	2.67	1.13	2.39	1.60	1.40	3.92	1.43	0.23	0.62	0.28	0.08

Calendar year 1957: Max 15,700 Min 34 Mean 1,119 Cfsm 0.817 In. 11.07
Water year 1957-58: Max 28,000 Min 67 Mean 1,607 Cfsm 1.17 In. 15.91

Peak discharge (base, 16,000 cfs).--Nov. 23 (5 p.m.) 23,400 cfs (17.21 ft); Nov. 25 (10:30 p.m.) 23,400 cfs (17.15 ft); Jan. 25 (7 a.m.) 31,900 cfs (21.28 ft); Apr. 6 (6:30 p.m.) 28,800 cfs (19.87 ft); Apr. 11 (3 a.m.) 17,200 cfs (13.91 ft); Apr. 28 (10 p.m.) 22,400 cfs (16.70 ft).

* Discharge measurement made on this day.

1270. Brown Creek near Polkton, N. C.

Location.--Lat 35°02'10", long 80°08'40", on left bank 100 ft downstream from site of Medley's mills, 400 ft downstream from bridge on State Highway 742, 3½ miles downstream from Little Brown Creek, and 4 miles northeast of Polkton, Anson County.

Drainage area.--110 sq mi.

Records available.--October 1937 to September 1958.

Gage.--Water-stage recorder and sharp-crested weir. Altitude of gage is 216 ft (by barometer).

Average discharge.--21 years, 80.1 cfs.

Extremes.--Maximum discharge during year, 2,220 cfs Jan. 26 (gage height, 11.10 ft); no flow Oct. 15, 16, Sept. 10-30.

1937-58: Maximum discharge, 17,300 cfs Sept. 18, 1945 (gage height, 17.68 ft, from floodmark), from rating curve extended above 3,000 cfs by logarithmic plotting; no flow for several days of most years.

Flood in August 1908 reached a stage of 16.4 ft, from floodmark witnessed by local resident (discharge, 12,500 cfs); July 1916, 15.7 ft (discharge, 10,400 cfs); September 1928, about 15 ft (discharge, 8,500 cfs).

Remarks.--Records good above 5 cfs and fair below except those for period of ice effect, which are poor.

Revisions (water years).--WSP 1503: 1938-39, 1940(M), 1941-42.

Rating table, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.8	0	2.0	36
.9	.42	3.0	151
1.0	1.14	6.0	409
1.1	2.0	8.0	680
1.3	4.2	9.0	920
1.5	7.2	10.0	1,320
1.7	14.2	11.0	2,120

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.6	0.04	409	74	87	860	131	552	6.5	8.8	1.06	0.69
2	2.0	.04	357	52	74	580	107	345	6.3	5.4	.76	.42
3	1.56	.04	338	41	60	300	75	175	6.3	3.3	.48	.31
4	.76	.04	154	32	49	115	60	113	5.4	2.5	.42	.21
5	.42	.04	*72	24	42	75	65	74	5.1	2.5	.31	.16
6	.31	.04	50	21	44	58	62	284	4.2	1.83	.26	.11
7	.28	.04	38	46	192	50	58	810	3.8	1.56	.21	.07
8	.21	.11	103	*b105	357	47	46	835	3.3	2.2	.16	.04
9	.21	.26	183	b85	367	151	36	700	5.9	20	.11	.01
10	.16	.26	171	b65	453	294	78	358	5.1	28	.11	*0
11	.11	.21	171	b55	356	277	367	96	3.3	45	.07	0
12	.04	.16	108	50	134	*294	302	128	2.9	42	.70	0
13	.04	.11	60	64	88	167	377	111	3.0	19	.42	0
14	.01	.36	43	*574	70	*206	197	81	2.0	14	.42	0
15	*0	.55	36	512	66	194	75	40	1.14	11	.26	0
16	0	18	32	525	118	171	383	27	.83	9.9	.16	0
17	.04	26	29	450	88	93	488	20	.76	7.2	.16	0
18	.42	168	25	194	62	75	610	34	.76	4.4	.11	0
19	.26	294	24	87	54	78	493	49	.62	20	.07	0
20	.16	245	26	60	41	80	172	49	.55	11	.07	0
21	.11	221	82	81	39	68	72	32	1.01	25	.07	0
22	.07	286	80	206	39	52	52	26	52	55	.04	0
23	.04	629	88	191	38	*41	55	20	92	18	.93	0
24	.07	765	62	494	37	35	52	14	85	9.1	.86	0
25	.11	*865	44	*1,740	35	*396	40	18	26	23	9.3	0
26	.11	1,010	44	*2,020	202	643	33	66	13	31	32	0
27	.11	680	46	*1,050	*626	680	27	40	29	16	5.7	0
28	.07	580	49	578	835	572	54	25	50	8.8	3.3	0
29	.04	362	101	244	-	288	438	15	42	4.8	2.2	0
30	.04	366	92	118	-------	*131	500	9.9	18	2.7	1.47	0
31	.04	-------	96	96	-------	137	-------	7.7	-------	1.74	.90	-------
Total	10.38	6,537.30	3,213	9,934	4,653	7,208	5,505	5,154.6	475.77	454.73	63.09	2.02
Mean	0.335	218	104	320	166	233	184	166	15.9	14.7	2.04	0.067
Cfsm	0.0030	1.98	0.945	2.91	1.51	2.12	1.67	1.51	0.145	0.134	0.019	0.00061
In.	0.004	2.21	1.09	3.36	1.57	2.44	1.86	1.74	0.16	0.15	0.02	0.0007

Calendar year 1957: Max 1,010 Min 0 Mean 68.3 Cfsm 0.621 In. 8.44
Water year 1957-58: Max 2,020 Min 0 Mean 118 Cfsm 1.07 In. 14.60

Peak discharge (base, 810 cfs).--Nov. 26 (4 a.m.) 1,170 cfs (9.70 ft); Jan. 26 (7:30 a.m.) 2,220 cfs (11.10 ft); Feb. 28 (11:30 p.m.) 950 cfs (9.09 ft); May 8 (4:30 p.m.) 890 cfs (8.87 ft).

* Discharge measurement or observation of no flow made on this day.
b Stage-discharge relation affected by ice.

1280. Little River near Star, N. C.

Location.--Lat 35°23', long 79°50', on left bank 12 ft downstream from highway bridge, a quarter of a mile upstream from Norfolk Southern Railway bridge, 0.3 mile downstream from West Fork Little River, and 3 miles west of Star, Montgomery County.

Drainage area.--97.6 sq mi.

Records available.--April 1954 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 409.00 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Extremes.--Maximum discharge during year, 4,440 cfs Apr. 28 (gage height, 10.28 ft); minimum, 4.4 cfs Sept. 19-21 (gage height, 0.99 ft).

1954-58: Maximum discharge, 10,400 cfs Oct. 15, 1954 (gage height, 16.46 ft), from rating curve extended above 6,500 cfs by logarithmic plotting; minimum, 0.3 cfs Oct. 6, 9-14, 1954.

Flood in September 1945 reached a stage of about 20 ft, from information by local resident.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are poor.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.9	3.0	2.5	206
1.0	4.6	3.0	340
1.1	7.5	4.0	670
1.4	22	6.0	1,550
1.7	51	8.0	2,720
2.0	96		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	150	23	277	68	104	204	204	268	61	27	29	13
2	172	21	126	67	115	136	126	340	63	25	28	12
3	54	21	96	60	96	115	109	374	66	24	32	11
4	32	21	98	58	86	106	106	182	59	23	31	10
5	24	21	102	b58	81	94	109	136	55	28	27	9.4
6	21	20	78	b65	115	91	1,680	540	56	33	26	9.0
7	19	20	70	76	a520	89	614	1,260	67	32	24	8.2
8	17	23	194	128	a910	89	194	414	56	164	22	7.5
9	16	30	276	*b93	206	111	138	201	54	86	21	6.6
10	16	25	145	b85	134	168	507	150	50	101	20	6.3
11	15	22	104	b75	117	107	*1,720	128	49	61	18	6.0
12	15	22	89	b70	107	93	286	128	76	50	20	5.8
13	15	22	74	78	98	94	180	134	47	129	23	5.8
14	15	24	70	a900	91	138	145	109	44	180	26	5.8
15	15	33	67	a260	102	106	132	106	44	118	24	*5.5
16	*15	115	67	143	152	89	338	106	59	58	19	5.5
17	16	157	64	111	b100	84	224	107	44	114	16	5.5
18	21	201	61	91	b92	82	145	168	*38	95	18	5.2
19	19	590	59	86	b88	89	126	104	36	417	17	4.6
20	20	261	70	82	b84	91	115	86	34	88	14	4.4
21	19	81	190	260	*b80	82	107	82	33	68	13	10
22	18	59	96	270	79	78	242	74	53	55	11	18
23	16	1,520	73	134	79	73	374	72	64	51	11	10
24	17	*398	66	870	79	73	154	73	44	40	12	8.2
25	25	1,560	64	2,380	78	457	126	88	38	242	30	8.2
26	32	1,000	72	326	400	396	192	438	36	55	41	8.6
27	26	190	104	175	988	177	148	115	47	40	33	9.0
28	22	121	82	132	566	128	2,360	79	43	36	21	8.2
29	20	150	102	109	-	*128	1,020	108	34	*34	18	6.9
30	20	981	78	106	-------	126	964	74	28	34	16	6.6
31	21	-------	68	98	-------	202	-------	64	-------	33	14	-------
Total	923	7,732	3,180	7,514	5,747	4,096	12,885	6,308	1,478	2,541	675	240.8
Mean	29.8	258	103	242	205	132	430	203	49.3	82.0	21.3	8.03
Cfsm	0.305	2.64	1.06	2.48	2.10	1.35	4.41	2.08	0.505	0.840	0.223	0.082
In.	0.35	2.95	1.21	2.86	2.19	1.56	4.91	2.40	0.56	0.97	0.26	0.09

Calendar year 1957: Max 1,560 Min 4.6 Mean 97.4 Cfsm 0.998 In. 13.52
Water year 1957-58: Max 2,380 Min 4.4 Mean 146 Cfsm 1.50 In. 20.31

Peak discharge (base, 2,000 cfs).--Nov. 23 (1 p.m.) 2,520 cfs (7.66 ft); Nov. 25 (9 p.m.) 3,190 cfs (8.69 ft); Nov. 30 (10 a.m.) 2,150 cfs (7.11 ft); Jan. 25 (4 a.m.) 4,040 cfs (9.76 ft); Apr. 6 (7 p.m.) 2,650 cfs (7.86 ft); Apr. 11 (1 a.m.) 3,260 cfs (8.84 ft); Apr. 28 (9 p.m.) 4,440 cfs (10.28 ft); May 7 (2 a.m.) 2,270 cfs (7.31 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for Bear Creek at Robbins.
b Stage-discharge relation affected by ice.

1290. Pee Dee River near Rockingham, N. C.

Location.--Lat 34°56'40", long 79°52'10", on left bank at bridge on U. S. Highway 74, 2.5 miles upstream from Falling Creek, 3.3 miles downstream from Blewett Falls hydroelectric plant, 6 miles west of Rockingham, Richmond County, and at mile 187.
Drainage area.--6,870 sq mi, approximately.
Records available.--August 1906 to January 1912, September 1927 to September 1958. Published as Yadkin River near Pee Dee, N. C., August 1906 to January 1912.
Gage.--Water-stage recorder. Datum of gage is 120.68 ft above mean sea level, datum of 1929 (levels by Corps of Engineers). August 1906 to January 1912 staff gage at site 4 miles upstream at different datum. September 1927 to Sept. 30, 1931, water-stage recorder at present site at datum 1.00 ft higher.
Average discharge.--36 years (1906-11, 1927-58), 7,767 cfs (unadjusted).
Extremes.--Maximum discharge during year, 74,700 cfs Apr. 30 (gage height, 13.10 ft); minimum, 170 cfs Sept. 29 (gage height, 0.65 ft); minimum daily, 584 cfs Sept. 28.
1906-12, 1927-58: Maximum discharge, 276,000 cfs Aug. 27, 1908 (gage height, 31.28 ft, present site and datum, from records of State Highway Commission), from rating curve extended above 194,000 cfs; minimum, 50 cfs Dec. 2, 3, 1951; minimum daily, 58 cfs Dec. 2, 1951, result of abnormally low shutdown of Blewett Falls hydroelectric plant to produce steady flow for current-meter measurements at this gaging station; minimum discharge from normal regulations, 96 cfs Oct. 25, 1943; minimum daily, 142 cfs Sept. 16, 1956.
Remarks.--Records good except those for period of no gage-height record, which are fair. Large diurnal fluctuation caused by powerplants above station. Flow largely regulated since 1928 by four reservoirs above station which have a combined usable capacity for normal operation of 24,259,016,000 cu ft. Records of chemical analyses and water temperatures for the water year 1958 are given in WSP 1571.
Revisions (water years).--WSP 822: Drainage area. WSP 1203: 1928-37. WSP 1303: 1928-42 (monthly and yearly runoff), 1943-46 (adjusted monthly runoff). WSP 1503: 1906-12, 1928-32(m).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.3	516	4.0	8,300
1.7	940	7.0	25,700
2.2	1,890	11.0	56,500
2.6	3,010	13.0	73,800
3.0	4,350		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,950	5,340	28,000	7,640	9,800	51,000	24,000	54,400	6,320	3,830	5,350	2,900
2	13,000	4,440	14,400	7,270	9,500	23,000	25,000	25,600	5,110	5,050	5,010	3,670
3	12,000	644	10,400	8,230	9,800	17,000	13,600	27,000	6,620	4,580	4,080	5,260
4	9,650	3,990	9,880	7,260	9,400	12,000	12,200	26,300	6,600	4,110	5,280	4,730
5	9,420	5,540	9,420	7,750	9,200	9,600	11,900	18,000	6,810	5,260	7,180	5,380
6	8,580	4,710	9,270	6,810	9,200	9,000	21,600	15,400	6,820	2,040	3,780	4,750
7	6,100	4,720	8,980	6,980	10,500	9,500	56,000	35,800	9,420	5,590	4,270	1,330
8	4,400	4,530	8,980	8,300	23,000	9,600	32,100	33,400	8,560	4,720	4,280	5,050
9	3,820	4,650	15,900	9,400	21,000	9,400	19,600	23,800	4,890	8,500	5,000	4,700
10	4,160	1,530	22,800	7,400	13,000	10,000	17,400	19,200	4,610	8,500	2,060	4,760
11	4,010	3,860	16,200	7,900	8,800	10,500	35,400	16,200	4,970	5,710	4,250	5,000
12	5,430	3,410	11,600	8,000	8,800	9,600	32,000	12,200	5,850	5,790	4,550	4,790
13	2,720	4,750	9,200	7,400	9,400	9,400	20,500	10,600	6,150	2,670	4,860	4,560
14	3,560	4,790	8,980	15,000	9,000	10,000	16,800	9,650	5,890	7,710	6,080	2,700
15	2,650	5,050	8,980	26,000	9,000	9,650	11,900	8,920	5,740	6,400	6,980	4,380
16	4,320	6,180	8,750	14,000	9,600	9,420	15,600	8,590	4,910	7,290	5,430	4,130
17	5,170	8,940	8,980	11,000	9,400	9,420	21,800	7,070	4,830	6,280	2,300	4,660
18	5,270	7,460	8,980	9,800	8,000	9,420	15,600	8,140	5,580	5,270	4,740	4,560
19	5,110	10,500	8,980	5,700	8,500	8,750	11,900	8,270	5,500	9,020	4,340	*4,570
20	2,210	21,600	8,080	6,300	7,500	7,860	10,400	9,420	5,960	5,880	4,360	4,130
21	4,290	33,000	8,080	6,800	7,800	6,040	9,200	9,420	5,490	5,440	4,020	2,410
22	3,960	21,200	8,750	9,600	7,400	6,120	6,740	8,240	2,690	8,760	4,490	4,660
23	4,810	29,200	8,980	9,600	5,000	4,740	9,420	7,430	4,610	7,100	5,030	4,810
24	6,060	51,000	8,980	11,500	5,800	5,870	18,700	7,640	5,220	5,710	3,610	4,200
25	6,960	40,100	8,080	49,000	7,900	9,520	17,400	7,860	5,370	5,550	3,680	4,180
26	4,970	65,000	5,740	43,000	8,500	19,200	16,800	13,900	5,070	6,180	7,250	4,320
27	3,070	55,800	4,930	29,000	26,000	13,300	17,400	14,500	4,830	4,780	7,860	6,830
28	4,120	29,800	7,750	19,000	37,000	10,800	23,600	9,650	5,410	4,700	5,580	584
29	4,120	21,100	9,430	14,000	-	9,650	71,400	9,420	3,000	4,950	6,600	3,220
30	5,020	22,900	8,120	12,000	--------	10,200	73,600	9,200	4,470	5,380	3,630	2,160
31	5,700	--------	9,200	10,000	--------	11,400	--------	9,200	--------	4,280	4,310	--------
Total	170,610	483,734	325,780	401,640	317,800	340,960	689,760	484,420	167,300	177,030	150,240	123,384
Mean	5,504	16,120	10,510	12,960	11,350	11,000	22,990	15,630	5,577	5,711	4,846	4,113
(†)	-499	+819	-392	+233	+291	-122	-229	-653	-51	-350	+41	-2,142

	Observed				Adjusted			
Calendar year 1957:	Max 65,000	Min 273	Mean 7,965		Mean 8,081	Cfsm 1.18	In. 16.02	
Water year 1957-58:	Max 73,800	Min 584	Mean 10,500		Mean 10,280	Cfsm 1.50	In. 20.36	

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in High Rock Lake and Badin Lake, furnished by Carolina Aluminum Co., and Lake Tillery and Blewett Falls Lake, furnished by Carolina Power and Light Co.
Note.--No gage-height record Jan. 8 to Mar. 14; discharge estimated on basis of weather records and powerplant records.

1305. Juniper Creek near Cheraw, S. C.

Location.--Lat 34°39', long 79°54', at left end of Eureka Lake Dam, 1½ miles upstream from mouth and 3½ miles south of Cheraw, Chesterfield County.

Drainage area.--64 sq mi, approximately.

Records available.--May 1940 to September 1958 (discontinued).

Gage.--Water-stage recorder and concrete spillway. Altitude of gage is 90 ft (from Corps of Engineers map).

Average discharge.--18 years, 72.5 cfs.

Extremes.--Maximum discharge during year, 712 cfs July 22 (gage height, 1.92 ft); minimum, 36 cfs June 20, 21.
1940-58: Maximum discharge, 3,910 cfs Sept. 18, 1945 (gage height, 5.71 ft), from rating curve extended above 810 cfs by logarithmic plotting and computation of peak flow over dam; no flow May 30, 1945, Oct. 10 to Nov. 7, 1956, and part of May 29, 1945, May 7, 1951, and Apr. 7, 8, 1955 (water below spillway crest and gates closed).

Remarks.--Records good except those for periods of no gage-height record, which are poor.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.3	33	1.0	235
.5	76	1.4	406
.7	131	1.9	666

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*166	50	224	105	114		153	266	66	144		
2	184	50	205	99	108		163	220	58	111		
3	163	48	177	a95	102		150	228	51	89		
4	137	46	157	a95	99		131	235	50	74		
5	114	45	137	a85	97		119	*216	49	70		a55
6	102	42	131	*a85	105		122	254	50	70		
7	81	41	119	89	128		125	243	81	73		
8	69	46	119	97	163		128	216	97	88		*43
9	60	49	131	102	184		119	198	92	144		43
10	54	46	150	108	*177		119	170	81	381		41
11	49	46	157	108	157		134	150	75	530		39
12	46	46	157	99	134	a140	150	180	67	369		41
13	44	*45	144	101	119		150	191	54	278		a42
14	43	48	125	163	114		137	163	45	266		a44
15	43	49	116	209	108		119	137	46	274		a50
16	42	63	114	224	111		137	116	49	258	a110	a65
17	42	79	108	188	114		177	102	*49	191		a65
18	43	148	102	150	108		209	97	48	157		a60
19	43	380	99	125			177	92	43	144		a50
20	43	484	99	114			144	86	39	128		a46
21	42	308	102	119			125	92	39	373		a50
22	41	213	102	131			116	97	148	644		a55
23	40	235	105	141			119	97	554	384		a50
24	46	308	114	163	a130		119	89	424	251		a48
25	54	342	111	231		*89	105	119	81	258		a46
26	60	303	108	266		119	114	76	174	194		43
27	62	251	108	235		150	102	74	174	184		45
28	60	216	105	184		163	105	74	228	*170		42
29	53	213	108	153	-	147	150	69	254	a150		41
30	50	228	108	131		122	255	70	205	a130		41
31	49		108	119		134		69		a120		
Total	2,125	4,468	3,950	4,314	3,542	4,249	4,187	4,448	3,648	6,644	3,410	1,475
Mean	68.5	149	127	139	126	137	140	143	122	214	110	49.2
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 484 Min 5.8 Mean 70.0 Cfsm 1.09 In. 14.84
Water year 1957-58: Max 644 Min 39 Mean 127 Cfsm 1.98 In. 26.96

Peak discharge (base, 250 cfs).--Nov. 20 (12:15 to 4 a.m.) 561 cfs (1.71 ft); Nov. 25 (12 m.) 351 cfs (1.28 ft); Jan. 26 (9 a.m. to 1 p.m.) 266 cfs (1.08 ft); about Feb 27 (time unknown) 266 cfs (1.08 ft); May 1 (1 a.m.) 295 cfs (1.15 ft); May 5 (1:15 p.m.) 278 cfs (1.11 ft); June 23 (4 to 6 p.m.) 610 cfs (1.77 ft); June 29 (12:30 to 1:30 p.m.) 258 cfs (1.03 ft); July 11 (3 to 5 a.m.) 578 cfs (1.71 ft); July 22 (8:30 a.m.) 712 cfs (1.92 ft); about Aug. 27 (time unknown) 334 cfs (1.22 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for Lynches River near Bishopville.

1310. Pee Dee River at Peedee, S. C.

Location.--Lat 34°12'15", long 79°32'55", in pier of bridge on U. S. Highway 76 at Peedee, Marion County, 0.2 mile downstream from Atlantic Coast Line Railroad bridge, 8½ miles downstream from Black Creek, and at mile 102.8 upstream from Winyah Bay.

Drainage area.--8,830 sq mi, approximately.

Records available.--October 1938 to September 1958. Monthly discharge only for some periods, published in WSP 1303. Prior to October 1947, published as "near Mars Bluff." Gage-height records collected at practically same sites since 1923 are contained in reports of U. S. Weather Bureau.

Gage.--Water-stage recorder. Datum of gage is 24.73 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Oct. 1, 1947, at site 1.6 miles downstream at datum 1.27 ft lower.

Average discharge.--20 years, 8,693 cfs.

Extremes.--Maximum discharge during year, 52,600 cfs Dec. 1 (gage height, 24.58 ft); minimum, 2,340 cfs Sept. 30 (gage height, 3.61 ft).
1938-58: Maximum discharge, 220,000 cfs Sept. 22, 1945 (gage height, 33.30 ft, site and datum then in use), from rating curve extended above 48,000 cfs on basis of discharge measurement of 221,000 cfs at Cheraw; minimum, 700 cfs Sept. 29, 1954 (gage height, 0.60 ft, from graph based on gage readings).

Remarks.--Records good. Flow regulated by powerplants above station.

Revisions (water years).--WSP 1233: Drainage area. WSP 1303: 1939, 1941-51, monthly and yearly runoff.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

4.3	2,800	18.0	15,200
5.0	3,250	20.0	21,000
10.0	6,890	22.0	32,600
15.0	11,200	24.5	51,700

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,740	5,620	51,700	10,700	35,200	16,600	15,200	22,500	11,200	9,040	6,740	5,760
2	7,580	5,840	51,700	10,400	30,600	18,400	16,200	27,000	10,100	8,380	6,360	4,790
3	*9,670	5,620	49,000	9,940	25,200	22,000	17,500	33,800	8,700	7,580	6,220	4,360
4	11,600	4,790	44,700	9,670	20,600	25,200	19,200	42,300	8,300	7,190	6,140	5,240
5	11,500	2,990	39,300	9,400	17,200	25,800	20,000	48,100	8,300	6,660	5,460	5,390
6	11,000	3,940	33,200	9,130	15,800	23,000	19,600	48,100	8,300	6,520	6,890	5,460
7	10,300	4,360	26,400	8,780	14,700	19,200	18,800	45,500	8,540	6,290	6,440	5,390
8	8,860	4,940	21,000	*9,040	14,600	17,000	20,000	42,300	9,670	5,690	5,320	4,720
9	7,190	5,090	17,800	9,850	15,600	15,600	22,500	39,300	10,400	6,660	5,320	3,590
10	5,840	5,090	17,000	10,600	16,800	15,100	25,800	37,900	9,310	8,140	5,460	*4,860
11	5,160	4,640	17,800	10,500	17,800	14,700	28,800	37,200	7,980	9,850	5,160	5,090
12	5,090	3,590	18,400	10,100	17,200	14,600	30,600	36,500	6,890	9,940	4,010	5,240
13	5,160	4,150	18,800	9,760	16,000	14,400	31,200	34,500	6,960	9,490	4,860	5,240
14	5,460	4,290	17,800	10,000	15,100	14,100	31,900	31,200	7,120	8,620	5,320	5,090
15	4,080	*5,020	16,400	12,600	14,100	13,900	32,600	26,400	7,190	8,700	5,990	4,790
16	3,940	5,320	15,100	15,400	13,500	13,900	32,600	21,500	7,040	9,670	6,660	4,080
17	3,940	5,840	13,900	16,400	13,100	13,700	30,600	17,700	6,740	9,940	6,440	4,640
18	4,790	7,900	13,200	16,600	12,700	13,400	28,200	15,400	6,440	9,580	5,620	4,940
19	5,460	9,040	12,600	16,000	12,100	13,100	27,000	13,900	*6,360	8,780	4,360	5,160
20	5,840	11,400	12,100	14,200	11,400	12,800	25,200	13,100	6,440	9,490	4,940	5,160
21	4,860	14,100	11,400	12,800	10,900	12,200	23,000	12,600	6,590	10,000	5,020	5,320
22	3,870	16,200	11,100	12,000	10,500	11,100	19,600	12,500	7,190	9,580	5,320	4,430
23	4,430	17,500	10,900	12,500	10,100	10,200	16,800	12,000	8,460	10,900	5,240	3,940
24	4,720	18,800	11,000	13,000	9,490	9,400	15,600	11,100	9,670	11,300	5,320	4,940
25	5,320	22,000	10,900	13,700	8,380	8,460	15,800	10,400	10,100	10,500	5,540	5,020
26	6,890	25,200	10,700	16,400	8,950	*10,200	16,400	10,000	10,000	9,490	4,640	4,720
27	6,060	28,800	9,580	18,500	10,300	13,200	16,600	10,900	9,580	8,860	6,440	4,790
28	5,320	32,600	8,620	22,000	18,800	14,900	16,800	12,700	10,200	8,460	8,060	5,840
29	4,500	*37,900	8,780	27,600	-	15,200	17,500	12,800	10,900	6,960	7,980	5,160
30	4,570	46,300	10,000	33,200	--------	15,100	19,600	12,300	10,600	*6,890	7,580	2,800
31	4,860	--------	10,400	35,800	--------	15,100	--------	11,700	--------	6,890	6,590	--------
Total	195,600	368,870	621,280	446,570	436,720	471,560	671,200	763,200	255,270	266,040	181,440	145,950
Mean	6,310	12,300	20,040	14,410	15,600	15,210	22,370	24,620	8,509	8,582	5,853	4,865
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 51,700 Min 1,880 Mean 9,257 Cfsm - In. -
Water year 1957-58: Max 51,700 Min 2,800 Mean 13,220 Cfsm - In. -

* Discharge measurement made on this day.

1315. Lynches River near Bishopville, S. C.

Location.--Lat 34°15', long 80°13', near center of span on downstream side of bridge on U. S. Highway 15, 1 mile upstream from Seaboard Air Line Railroad bridge, 2.9 miles northeast of Bishopville, Lee County, and 3.3 miles downstream from Bells Branch.

Drainage area.--675 sq mi.

Records available.--May 1942 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 161 ft (by barometer). Prior to June 11, 1948, wire-weight gage at site 100 ft upstream at same datum. June 11, 1948, to Dec. 15, 1954, wire-weight gage at present site and datum.

Average discharge.--16 years, 691 cfs.

Extremes.--Maximum discharge during year, 7,260 cfs Jan. 27 (gage height, 15.41 ft); minimum, 202 cfs Oct. 14-19, 23.
1942-58: Maximum discharge, 29,400 cfs Sept. 19, 1945 (gage height, 22.35 ft, from floodmark), from rating curve extended above 12,000 cfs by velocity-area studies; minimum, 125 cfs Sept. 16, Oct. 8, 1954, Sept. 21, 1956.

Remarks.--Records good.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 26 to Nov. 23, Mar. 1 to May 3, June 25 to Aug. 30)

5.3	202	11.0	1,350
6.0	290	12.0	1,870
8.0	618	13.0	2,970
10.0	1,060	15.0	6,400

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	412	244	2,250	918	1,290	1,720	1,500	1,930	512	2,120	428	319
2	444	244	2,000	758	1,090	3,440	1,420	2,590	444	1,140	396	304
3	564	250	1,960	696	990	3,550	1,380	2,470	444	582	388	290
4	529	244	2,050	656	918	2,510	1,290	1,960	461	512	531	270
5	412	238	1,650	618	824	1,690	1,170	1,790	444	495	716	256
6	364	238	1,260	582	802	1,210	1,170	2,360	412	618	529	250
7	319	238	1,020	600	918	966	1,230	*2,360	412	758	428	244
8	283	238	870	*736	1,120	918	1,290	2,000	444	824	380	244
9	256	250	918	918	1,290	966	1,320	2,900	461	870	356	238
10	*238	312	1,090	1,040	1,550	1,090	1,230	3,660	428	1,020	342	*226
11	220	356	1,260	824	2,100	1,260	1,170	2,520	388	1,090	334	220
12	208	312	1,350	676	*1,970	1,460	1,200	1,770	349	1,040	312	220
13	208	297	1,170	656	1,470	1,720	1,350	1,330	326	1,060	297	232
14	202	276	870	870	1,090	1,600	1,600	1,140	334	1,200	297	263
15	202	*290	736	1,060	894	1,380	1,480	966	319	1,140	319	270
16	202	334	716	1,230	846	1,420	1,380	780	297	1,200	349	312
17	202	412	696	1,420	894	1,420	1,420	716	326	980	380	396
18	202	281	676	1,420	942	1,260	1,630	736	372	656	342	380
19	202	962	656	1,000	802	1,120	3,420	696	*326	564	312	326
20	214	1,290	636	736	716	1,170	3,320	656	304	636	297	319
21	220	3,720	676	716	716	1,290	2,160	696	290	824	283	290
22	214	5,050	870	824	696	1,200	1,400	824	574	870	270	270
23	202	3,780	1,020	990	696	1,040	1,170	846	1,040	918	303	276
24	208	2,470	918	1,170	696	918	1,090	676	1,280	870	396	276
25	220	2,150	736	1,290	676	990	1,090	582	1,820	696	372	263
26	270	3,690	696	1,380	736	*1,170	990	546	2,070	650	471	250
27	290	3,940	716	4,710	1,040	1,420	846	618	1,120	990	869	238
28	270	3,480	780	5,880	1,320	2,240	780	676	966	780	1,020	238
29	250	3,620	802	3,440	-	2,970	1,080	618	1,220	582	751	226
30	244	2,840	894	2,250	-------	2,310	1,460	618	1,750	*529	478	220
31	244	-------	1,020	1,610	-------	1,810	-------	582	-------	461	372	-------
Total	8,515	42,046	32,962	41,674	29,092	49,228	43,036	42,612	19,933	26,875	13,318	8,126
Mean	275	1,402	1,063	1,344	1,039	1,588	1,435	1,375	664	867	430	271
Cfsm	0.407	2.08	1.57	1.99	1.54	2.35	2.13	2.04	0.984	1.28	0.637	0.401
In.	0.47	2.32	1.81	2.29	1.60	2.71	2.38	2.35	1.10	1.48	0.73	0.45

Calendar year 1957: Max 5,050 Min 129 Mean 586 Cfsm 0.868 In. 11.79
Water year 1957-58: Max 5,880 Min 202 Mean 979 Cfsm 1.45 In. 19.69

Peak discharge (base, 3,000 cfs).--Nov. 21 (11:30 p.m.) 5,610 cfs (14.35 ft); Nov. 26 (9 p.m.) 4,520 cfs (14.03 ft); Jan. 27 (10:30 p.m.) 7,260 cfs (15.41 ft); Mar. 2 (10 p.m.) 3,860 cfs (13.41 ft); Mar. 29 (6 a.m.) 3,110 cfs (12.69 ft); Apr. 19 (7 p.m.) 3,940 cfs (13.43 ft); May 10 (2 a.m.) 4,020 cfs (13.70 ft).

* Discharge measurement made on this day.

1320. Lynches River at Effingham, S. C.

Location.--Lat 34°03'05", long 79°45'15", on left bank at downstream side of bridge on U. S. Highway 52, 75 ft upstream from Atlantic Coast Line Railroad bridge and 1 mile south of Effingham, Florence County.

Drainage area.--1,030 sq mi, approximately.

Records available.--August 1929 to September 1958. Gage-height records collected at same site since 1891 are contained in reports of U. S. Weather Bureau.

Gage.--Water-stage recorder. Datum of gage is 58.49 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Sept. 7, 1934, staff gage at same site and datum.

Average discharge.--29 years, 911 cfs.

Extremes.--Maximum discharge during year, 5,290 cfs Feb. 1 (gage height, 13.53 ft); minimum, 190 cfs Oct. 21.
1929-58: Maximum discharge, 25,000 cfs Sept. 22, 1945 (gage height, 21.21 ft), from rating curve extended above 17,000 cfs by logarithmic plotting; minimum, 94 cfs Oct. 10, 1954.

Remarks.--Records good. Records of water temperatures for the water year 1958 are given in WSP 1571.

Cooperation.--Gage-height record collected in cooperation with U. S. Weather Bureau.

Revisions.--WSP 952: Drainage area.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1-7, Nov. 25 to Dec. 13, Dec. 19 to Jan. 14, Jan. 25 to Feb. 3, Mar. 31 to Apr. 28, May 16 to June 29)

2.0	190	9.0	1,840
3.0	340	11.0	2,610
4.0	505	13.0	4,100
5.0	685	14.0	5,160
7.0	1,180		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*258	*242	3,660	1,060	5,160	1,840	*2,660	*1,840	g761	*2,080	1,000	722
2	302	235	3,750	*1,060	4,500	1,940	3,340	1,840	g741	1,840	844	*685
3	355	228	3,660	1,060	3,340	*2,020	3,750	1,880	g801	1,560	703	505
4	401	228	3,190	1,100	2,500	2,020	3,580	1,910	g722	1,460	613	385
5	434	235	2,720	1,120	2,160	2,020	3,500	2,050	g613	1,560	523	355
6	487	235	2,410	1,100	1,910	2,370	3,340	2,370	g577	1,700	469	325
7	523	235	2,190	1,100	1,770	2,910	3,340	2,560	g722	1,520	505	310
8	487	235	2,120	1,180	1,800	2,840	3,040	2,500	g741	1,560	595	295
9	417	235	2,190	1,180	1,800	2,500	2,720	2,410	g722	1,240	613	280
10	370	228	2,160	1,120	1,740	2,300	2,500	2,460	g685	g1,000	523	285
11	318	235	2,020	1,120	1,660	2,050	2,370	2,500	g649	g976	451	265
12	288	242	1,840	1,120	1,630	1,840	2,300	2,410	g595	1,000	417	258
13	265	288	1,630	1,160	1,660	1,740	2,260	2,850	g541	g1,160	385	250
14	235	310	1,460	1,560	1,740	1,770	2,260	3,260	469	g1,420	378	250
15	220	302	1,400	1,800	1,910	1,770	2,190	2,840	401	1,560	362	250
16	212	295	1,400	1,770	2,120	1,840	2,940	2,320	401	1,560	332	265
17	212	288	1,420	1,700	2,160	1,910	3,920	1,980	385	1,490	325	288
18	212	302	1,460	1,700	1,980	2,020	4,200	1,700	355	1,600	325	295
19	205	348	1,360	1,680	1,770	2,020	4,100	1,490	g348	1,910	355	325
20	198	370	1,220	1,660	1,560	1,980	3,750	1,300	g355	1,840	370	370
21	198	434	1,060	1,700	1,420	1,910	3,120	1,160	g378	1,660	325	370
22	198	523	921	1,840	1,340	1,840	2,780	1,060	g417	1,400	332	348
23	205	649	868	1,940	1,300	1,770	3,120	1,000	741	1,040	310	325
24	212	781	844	1,940	1,220	1,630	3,580	921	1,000	894	288	302
25	205	976	948	2,080	1,120	1,700	3,190	868	1,240	976	280	288
26	205	1,890	1,160	2,050	1,180	1,800	2,660	894	1,300	976	355	288
27	205	3,120	1,180	2,020	1,490	1,880	2,260	921	1,340	976	401	288
28	212	3,120	1,220	2,050	1,800	1,840	1,940	868	1,420	976	434	265
29	242	*2,840	1,280	2,050	-	1,800	1,740	*844	1,630	921	451	258
30	258	3,040	1,220	2,190	-------	1,770	1,800	g781	2,020	948	541	250
31	258	-------	1,120	*3,990	-------	2,120	-------	g761	-------	*976	631	-------
Total	8,797	22,689	55,081	50,180	55,740	61,760	88,250	54,548	23,070	41,779	14,436	9,925
Mean	284	756	1,777	1,619	1,991	1,992	2,942	1,760	769	1,348	466	331
Cfsm	0.276	0.734	1.73	1.57	1.93	1.93	2.86	1.71	0.747	1.31	0.452	0.321
In.	0.32	0.82	1.99	1.81	2.01	2.22	3.19	1.97	0.83	1.51	0.52	0.36

Calendar year 1957: Max 3,750 Min 130 Mean 671 Cfsm 0.651 In. 8.83
Water year 1957-58: Max 5,160 Min 198 Mean 1,332 Cfsm 1.29 In. 17.55

* Discharge measurement made on this day.
g Computed from partial record and once-daily staff-gage readings by U. S. Weather Bureau.

1325. Little Pee Dee River near Dillon, S. C.

Location.--Lat 34°24', long 79°20', near center of span on downstream side of bridge on State Highway 9, 1.1 miles east of Dillon, Dillon County, and 3 miles upstream from Maple Swamp.

Drainage area.--524 sq mi.

Records available.--March 1939 to September 1958.

Gage.--Wire-weight gage and crest-stage indicator; gage read twice daily. Datum of gage is 75.14 ft above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by South Carolina Highway Department).

Average discharge.--19 years, 501 cfs.

Extremes.--Maximum discharge during year, 3,090 cfs Dec. 1 (gage height, 10.32 ft); minimum, 119 cfs Sept. 11 (gage height, 4.62 ft).

1939-58: Maximum discharge, 9,810 cfs Sept. 20, 1945 (gage height, 14.64 ft), from rating curve extended above 2,800 cfs by velocity-area studies and logarithmic plotting; minimum, 24 cfs Sept. 17, 23, 1954.

Remarks.--Records good except those for periods of doubtful or no gage-height record, which are fair.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1-7, July 1 to Aug. 15, Sept. 6-30)

5.1	168	7.5	575
6.0	232	8.0	850
6.5	276	9.0	1,630
7.0	378	11.0	4,050

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	490	303	a3,090	985	1,630	1,280	1,820	1,820	a530	2,350	470	288
2	*552	303	2,960	985	a1,450	a1,820	2,020	1,720	490	2,350	432	276
3	530	303	2,710	1,060	1,280	1,720	1,920	1,540	450	2,020	a413	266
4	490	303	2,350	1,060	1,130	1,630	1,820	a1,360	396	1,920	378	266
5	470	303	2,130	a985	1,060	1,540	1,630	1,200	363	1,720	323	256
6	a432	288	2,020	a915	1,060	1,450	1,540	*1,280	348	a1,130	288	224
7	450	288	2,020	*985	1,130	1,360	1,450	1,450	348	785	266	a203
8	670	323	a1,920	985	1,200	1,200	1,450	2,130	a348	670	266	175
9	755	a323	a1,920	1,060	a1,200	a1,200	1,280	2,350	348	620	266	154
10	725	a323	a1,820	1,060	1,360	1,200	1,200	2,350	a378	575	a266	*126
11	598	303	a1,630	1,060	*1,450	1,280	1,130	a2,130	450	620	248	126
12	a490	303	a1,450	985	1,450	1,280	1,130	1,820	470	725	232	133
13	a450	*303	1,360	1,130	1,360	1,280	a1,130	1,630	a470	a915	232	140
14	432	288	1,360	1,280	1,360	1,360	1,130	1,630	a490	985	256	a140
15	396	303	a1,360	1,540	a1,280	1,360	1,130	1,630	a490	850	266	147
16	348	a363	1,360	1,720	a1,280	a1,360	1,280	1,450	490	1,060	248	154
17	323	a510	1,360	1,720	1,200	1,360	1,450	1,280	450	1,360	a232	133
18	323	698	1,360	a1,630	1,200	1,360	1,540	a1,130	*413	1,360	210	133
19	303	818	1,280	a1,540	1,130	1,280	1,540	985	323	1,280	203	140
20	a303	1,060	1,200	1,450	1,060	1,280	a1,450	985	288	a1,360	182	147
21	303	1,280	1,130	1,450	1,060	1,130	1,360	985	266	1,540	175	a147
22	288	1,630	a1,130	1,450	985	1,060	1,280	915	a332	2,240	175	147
23	288	1,720	1,060	1,450	a985	a985	1,200	785	701	2,470	175	161
24	288	a2,020	915	1,450	985	985	1,130	620	985	2,020	a168	168
25	288	2,590	915	1,540	850	*985	1,060	a620	1,130	1,630	168	182
26	288	2,710	915	a1,630	850	985	985	620	985	1,360	213	189
27	a288	2,830	915	1,820	985	1,130	915	620	985	a1,130	323	196
28	303	2,960	985	1,820	1,130	1,200	818	620	1,060	915	470	a217
29	303	2,960	985	1,720	-	1,200	915	670	a1,280	*785	378	224
30	303	2,960	985	1,720	--------	a1,200	1,360	620	1,630	670	a323	217
31	303	--------	1,060	1,630	--------	1,360	--------	575	--------	575	a288	--------
Total	12,773	31,669	47,655	41,815	33,100	39,820	40,063	39,520	17,687	39,990	8,533	5,475
Mean	412	1,056	1,537	1,349	1,182	1,285	1,335	1,275	590	1,290	275	182
Cfsm	0.786	2.02	2.93	2.57	2.26	2.45	2.55	2.43	1.13	2.46	0.525	0.347
In.	0.91	2.25	3.38	2.96	2.35	2.82	2.84	2.80	1.26	2.84	0.61	0.39

Calendar year 1957: Max 3,090 Min 100 Mean 550 Cfsm 1.05 In. 14.26
Water year 1957-58: Max 3,090 Min 126 Mean 981 Cfsm 1.87 In. 25.41

* Discharge measurement made on this day.
a Doubtful or no gage-height record; discharge estimated on basis of weather records and records for station at Galivants Ferry.

1335. Drowning Creek near Hoffman, N. C.

Location.--Lat 35°03'38", long 79°29'39", on right bank 10 ft downstream from bridge on U. S. Highway 1, three-quarters of a mile downstream from Deep Creek, 1 mile upstream from Seaboard Air Line Railroad bridge, and 4 miles northeast of Hoffman, Richmond County.

Drainage area.--178 sq mi.

Records available.--October 1939 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 270 ft (from topographic map).

Average discharge.--19 years, 255 cfs.

Extremes.--Maximum discharge during year, 1,110 cfs Nov. 25 (gage height, 6.73 ft); minimum daily, 76 cfs Sept. 27, 30.
1939-58: Maximum discharge, 10,900 cfs Sept. 18, 1945 (gage height, 10.29 ft), from rating curve extended above 5,600 cfs by logarithmic plotting, minimum, 28 cfs Aug. 4, 1940 (gage height, 1.32 ft).

Remarks.--Records fair.

Revisions (water years).--WSP 972: 1941(M).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

2.2	76	5.0	290
3.0	117	5.5	440
4.0	175	6.0	652
4.5	216	7.0	1,310

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	628	203	678	422	436	678	482	850	348	153	133	112
2	732	216	678	380	430	604	482	628	260	138	110	107
3	604	207	652	356	416	*518	444	547	226	130	112	100
4	514	187	560	342	402	448	405	506	226	126	163	97
5	433	175	514	322	391	416	388	478	245	126	221	94
6	356	168	*494	302	384	394	422	490	237	138	198	92
7	290	164	482	314	422	380	451	539	325	158	130	90
8	252	168	463	*353	539	374	451	910	312	168	112	87
9	226	208	490	398	652	388	518	850	416	195	104	*82
10	207	288	539	412	628	430	478	628	388	232	97	79
11	199	359	604	377	539	467	560	552	268	269	94	79
12	187	336	556	334	467	474	628	604	207	304	90	82
13	183	240	486	322	430	444	652	531	191	290	92	90
14	183	207	444	474	412	433	543	482	195	269	107	92
15	*179	221	416	652	412	448	467	433	164	307	128	87
16	175	286	402	760	430	455	482	384	158	356	158	90
17	175	408	388	652	436	419	518	350	*183	380	128	90
18	183	581	380	510	475	384	560	325	164	331	104	87
19	199	820	370	448	430	367	539	312	150	260	97	84
20	216	820	367	412	359	367	459	302	141	207	*94	82
21	199	732	370	408	359	364	412	304	138	183	92	84
22	172	604	398	433	359	353	394	314	161	161	90	94
23	168	652	433	470	356	334	398	295	221	150	87	94
24	175	760	433	535	356	317	416	260	226	133	134	84
25	221	*1,040	384	628	353	364	419	280	191	141	166	82
26	269	970	364	732	374	463	422	419	161	147	320	79
27	252	880	370	*760	470	582	416	440	245	128	374	76
28	207	820	388	604	604	604	440	374	380	*126	307	79
29	187	678	405	510	-	502	547	325	348	120	202	82
30	183	652	422	470	-------	*436	760	331	203	110	144	76
31	187	-------	440	448	-------	455	-------	380	-------	117	120	---------
Total	8,341	14,050	14,370	14,540	12,301	13,662	14,553	14,423	7,078	6,053	4,508	2,633
Mean	269	468	464	469	439	441	485	465	236	195	145	87.8
Cfsm	1.51	2.63	2.61	2.63	2.47	2.48	2.72	2.61	1.33	1.10	0.815	0.493
In.	1.74	2.94	3.00	3.04	2.57	2.85	3.04	3.01	1.48	1.26	0.94	0.55

Calendar year 1957: Max 1,190 Min 53 Mean 269 Cfsm 1.51 In. 20.51
Water year 1957-58: Max 1,040 Min 76 Mean 347 Cfsm 1.95 In. 26.42

Peak discharge (base, 850 cfs).--Nov. 20 (2 a.m.) 880 cfs (6.40 ft); Nov. 25 (6 p.m.) 1,110 cfs (6.73 ft); May 1 (2 a.m.) 910 cfs (6.45 ft); May 8 (7 p.m.) 1,040 cfs (6.67 ft).

* Discharge measurement made on this day.

1345. Lumber River at Boardman, N. C.

Location.--Lat 34°26', long 78°58', on right bank 15 ft downstream from bridge on U. S. Highway 74, 1 mile downstream from Atlantic Coast Line Railroad bridge at Boardman, Columbus County, and 1½ miles downstream from Big Swamp.

Drainage area.--1,220 sq mi, approximately.

Records available.--September 1929 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 72.05 ft above mean sea level, datum of 1929 (levels by Corps of Engineers). Prior to Sept. 30, 1936, staff gage at site 100 ft downstream at same datum. Sept. 30, 1936, to June 8, 1943, wire-weight gage at present site and datum.

Average discharge.--29 years, 1,231 cfs.

Extremes.--Maximum discharge during year, 6,230 cfs Dec. 3 (gage height, 9.01 ft); minimum, 275 cfs Sept. 19, 20 (gage height, 1.78 ft).
1929-58: Maximum discharge, 13,400 cfs Sept. 24, 1945 (gage height, 10.64 ft); minimum, 87 cfs Oct. 14, 1954 (gage height, -0.03 ft).
Maximum stage known, 11.8 ft August 1928, from floodmark witnessed by local resident (discharge, 25,000 cfs).

Remarks.--Records good.

Revisions (water years).--WSP 892: Drainage area. WSP 1303: 1932(M).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Rate of change in stage used as a factor Nov. 18, 20-23, 25, 26, May 1, June 22-25, July 29-31, Aug. 25-28, Sept. 7-10, 22, 27)

1.8	275	6.0	1,520
2.0	304	7.0	2,500
2.5	388	8.0	4,080
3.0	484	9.0	6,230
5.0	1,000		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,000	767	5,870	2,700	3,520	2,630	3,120	2,760	1,080	2,970	920	1,310
2	1,020	767	6,110	2,700	3,440	2,830	3,610	3,190	1,020	3,120	859	1,200
3	1,020	767	6,230	2,700	3,440	2,970	3,980	3,440	1,060	3,190	793	1,120
4	1,040	780	6,110	2,630	3,270	3,040	4,180	3,350	1,100	3,120	715	1,060
5	1,100	780	5,750	2,500	3,120	3,120	4,180	3,120	1,220	2,830	652	1,060
6	1,170	780	5,280	2,440	2,970	3,120	4,080	3,120	1,250	2,440	580	983
7	1,310	767	4,850	2,500	2,830	3,040	4,080	3,520	1,310	2,150	525	821
8	1,430	754	4,560	2,630	2,760	3,040	3,800	3,890	1,400	2,040	484	662
9	1,560	728	4,360	2,700	2,700	3,120	3,610	4,560	1,430	1,930	454	518
10	1,660	728	4,180	2,760	2,760	3,120	3,350	4,960	1,370	1,830	434	427
11	1,660	728	4,080	2,830	2,900	3,040	3,120	5,060	1,280	1,880	424	388
12	1,630	728	3,980	2,830	2,970	2,970	2,900	4,960	1,200	1,830	424	353
13	1,520	715	3,890	2,830	2,970	2,900	2,700	4,750	1,140	1,740	415	328
14	1,370	702	3,800	3,190	2,970	2,900	2,630	4,460	1,040	1,660	397	312
15	1,250	702	3,700	3,350	2,900	2,830	2,560	4,270	983	1,590	370	296
16	1,120	689	3,520	3,700	2,970	2,830	2,760	3,980	983	1,590	353	296
17	1,060	715	3,350	3,980	2,970	2,830	2,900	3,520	935	1,520	336	296
18	1,020	907	3,190	4,180	2,970	2,830	3,040	3,120	888	1,520	320	289
19	950	950	3,120	4,080	2,900	2,830	3,190	*2,830	873	1,660	320	282
20	888	1,170	3,040	3,980	2,830	2,830	3,190	2,560	859	1,740	353	275
21	845	1,390	2,970	3,800	2,700	2,700	3,190	2,440	793	1,980	379	282
22	*806	1,640	2,900	3,700	2,560	2,630	3,120	2,150	1,120	2,200	397	336
23	793	2,140	2,760	3,610	2,440	2,500	2,970	1,930	1,390	2,260	406	362
24	767	2,260	2,700	3,610	2,320	2,440	2,830	1,740	1,740	2,320	379	353
25	767	2,790	2,630	3,800	2,260	2,380	2,700	1,560	2,100	2,320	380	397
26	754	*3,550	2,700	3,800	2,320	2,380	2,500	1,460	2,560	2,150	682	454
27	754	4,080	2,630	3,890	2,440	2,440	2,320	*1,370	2,830	1,880	924	545
28	754	4,650	2,560	3,890	2,500	2,500	2,260	1,280	2,830	1,630	1,190	592
29	754	5,060	2,700	3,800	-	2,560	2,200	1,220	2,900	1,330	1,370	592
30	754	5,510	2,700	3,610	-------	2,630	2,260	1,200	2,970	1,140	1,490	592
31	754	-------	2,760	3,520	-------	2,830	-------	1,120	-------	*969	1,430	-------
Total	33,280	48,694	118,980	102,240	79,700	86,810	93,330	92,890	43,654	62,529	19,155	16,781
Mean	1,074	1,623	3,838	3,298	2,846	2,800	3,111	2,996	1,455	2,017	618	559
Cfsm	0.880	1.33	3.15	2.70	2.33	2.30	2.55	2.46	1.19	1.65	0.507	0.458
In.	1.01	1.48	3.63	3.12	2.43	2.65	2.85	2.83	1.33	1.91	0.58	0.51

Calendar year 1957: Max 6,230 Min 205 Mean 1,426 Cfsm 1.17 In. 15.87
Water year 1957-58: Max 6,230 Min 275 Mean 2,186 Cfsm 1.79 In. 24.33

* Discharge measurement made on this day.

1350. Little Pee Dee River at Galivants Ferry, S. C.

Location.--Lat 34°03'25", long 79°14'50", near left bank on downstream side of bridge on U. S. Highway 501, at Galivants Ferry, Horry County, 1.0 mile downstream from Lake Swamp.

Drainage area.--2,790 sq mi, approximately.

Records available.--October 1941 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Wire-weight gage and crest-stage indicator; gage read twice daily. Datum of gage is 23.95 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--17 years, 2,819 cfs.

Extremes.--Maximum discharge during year, 12,000 cfs Apr. 7, 8; maximum gage height, 10.00 ft Apr. 7; minimum discharge, 622 cfs Sept. 23, 24.
1941-58: Maximum discharge, 26,800 cfs Sept. 23, 1945 (gage height, 13.23 ft, from graph based on gage readings); minimum, 155 cfs Oct. 12, 13, 1954.
Maximum stage known, 16.0 ft in September 1928, from floodmark set by local resident.

Remarks.--Records good.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Sept. 5-30)

4.0	690	8.0	4,050
5.0	1,040	9.0	7,510
6.0	1,390	10.0	12,000
7.0	2,230		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,440	1,210	7,510	6,290	10,200	6,690	7,090	5,910	2,830	7,930	4,690	5,910
2	1,500	1,210	8,370	6,290	9,750	6,690	7,930	5,550	2,670	7,510	4,050	5,210
3	*1,570	1,180	9,270	5,910	9,270	7,090	8,810	5,550	2,370	7,510	3,590	4,590
4	1,640	1,180	10,200	5,910	8,810	7,090	9,730	5,550	2,230	7,510	2,830	4,310
5	1,720	1,180	10,600	5,910	8,370	7,510	10,600	5,910	2,110	7,510	2,370	3,590
6	1,800	1,180	11,100	5,910	7,510	7,930	11,600	6,690	2,110	7,510	1,990	3,010
7	1,890	1,180	11,100	5,910	7,510	8,370	12,000	7,510	2,110	7,510	1,720	2,510
8	1,890	1,180	11,100	5,910	7,510	7,930	12,000	7,930	2,110	7,090	1,440	2,110
9	1,990	1,180	11,100	5,910	7,090	7,930	11,600	7,930	2,230	6,690	1,320	*1,800
10	1,990	1,180	10,600	5,910	7,090	7,930	11,100	7,930	2,370	5,910	1,180	1,570
11	1,990	1,140	10,200	5,910	7,090	7,510	10,600	7,930	2,510	5,210	1,070	1,390
12	1,990	1,140	9,730	5,910	6,690	7,510	10,200	8,810	2,510	4,590	1,000	1,210
13	2,110	1,140	8,810	5,910	6,690	7,510	9,270	9,730	2,510	4,310	930	1,040
14	2,110	*1,140	8,370	7,090	6,690	7,090	8,810	10,200	2,510	3,810	895	895
15	2,230	1,140	8,370	7,510	6,690	7,090	8,370	10,200	2,670	3,590	860	792
16	2,230	1,140	7,930	8,370	7,090	7,090	8,370	9,730	2,830	3,590	826	758
17	2,230	1,140	7,930	8,810	7,090	7,090	8,810	9,270	2,830	3,590	826	758
18	2,230	1,140	7,930	9,270	7,090	7,090	*9,270	8,370	*2,670	3,590	826	758
19	2,230	1,180	7,510	9,270	6,690	7,090	9,730	7,930	2,370	3,810	792	724
20	1,990	1,210	7,510	9,730	6,690	7,090	10,200	7,510	2,370	4,050	758	690
21	1,890	1,240	7,090	10,200	6,690	7,090	10,200	7,090	2,230	4,050	724	656
22	1,800	1,320	6,690	10,200	6,290	7,090	9,730	6,290	3,230	4,310	724	656
23	1,640	1,500	6,690	9,730	6,290	6,690	9,270	5,910	4,890	4,590	690	622
24	1,500	1,800	6,290	9,730	6,290	6,690	8,810	5,550	6,690	5,210	724	622
25	1,390	2,230	5,910	9,730	5,910	6,690	8,370	4,890	7,090	5,910	758	656
26	1,350	2,830	5,910	9,730	5,910	6,690	7,930	4,590	7,510	7,090	1,300	690
27	1,320	3,390	5,910	9,730	6,290	6,690	7,510	4,050	7,510	8,370	2,440	758
28	1,280	4,050	5,910	10,200	6,690	6,290	6,690	4,050	7,930	7,930	3,590	826
29	1,210	4,890	5,910	10,600	-	6,290	6,290	3,590	8,370	7,510	4,590	860
30	1,210	6,290	5,910	10,600	-------	6,290	6,290	3,190	8,370	6,690	5,550	895
31	1,180	-------	5,910	10,200	-------	6,690	-------	3,010	-------	5,910	5,910	-------
Total	54,540	52,910	253,370	248,290	201,950	220,510	277,180	208,350	112,740	180,390	61,163	50,866
Mean	1,759	1,764	8,173	8,009	7,212	7,113	9,239	6,721	3,758	5,819	1,973	1,696
Cfsm	0.630	0.632	2.93	2.87	2.58	2.55	3.31	2.41	1.35	2.09	0.707	0.608
In.	0.73	0.71	3.38	3.31	2.69	2.94	3.69	2.78	1.51	2.41	0.82	0.68

Calendar year 1957: Max 11,100 Min 452 Mean 2,617 Cfsm 0.938 In. 12.73
Water year 1957-58: Max 12,000 Min 622 Mean 5,266 Cfsm 1.89 In. 25.65

* Discharge measurement made on this day.

1355. Black River near Gable, S. C.

Location.--Lat 33°54'00", long 80°09'55", near left bank on downstream side of McBride Crossing on U. S. Highway 378, 1 mile downstream from Church Branch and 6.3 miles northwest of Gable, Clarendon County.

Drainage area.--401 sq mi.

Records available.--June 1951 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 95 ft (from topographic map). Prior to Dec. 9, 1955, wire-weight gage at same site and datum.

Average discharge.--7 years, 270 cfs.

Extremes.--Maximum discharge during year, 3,780 cfs Apr. 17 (gage height, 5.16 ft); minimum, 9 cfs Sept. 11, 12.
1951-58: Maximum discharge, 4,150 cfs Sept. 3, 1952 (gage height, 5.22 ft, from graph based on gage readings); no flow July 10-17, Aug. 2 to Oct. 17, 1954, July 17, 18, 1956, Aug. 9-15, Sept. 6, 7, 1957.

Remarks.--Records good except those between 15 and 100 cfs, which are fair, and those below 15 cfs, which are poor.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Dec. 1)

Oct. 1 to Dec. 3				Dec. 4 to Sept. 30			
1.8	8	2.5	123	1.8	8	2.8	224
1.9	11	2.7	199	1.9	11	3.2	420
2.0	22	3.0	355	2.0	22	3.5	660
2.1	34	3.5	713	2.2	50	4.0	1,470
2.3	70			2.5	119	5.0	3,450

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	*54	546	432	708	1,220	*1,110	*1,340	201	*504	171	106
2	56	54	599	*420	660	1,330	1,520	1,650	182	398	174	*95
3	62	56	671	414	610	*1,130	1,540	1,430	201	329	174	80
4	72	54	650	404	552	900	1,430	1,110	201	267	185	65
5	84	54	610	392	512	756	1,380	966	201	237	193	52
6	89	52	560	376	496	684	1,490	1,130	182	208	185	41
7	80	48	528	409	536	630	1,610	1,060	150	193	164	31
8	68	48	528	450	620	620	1,490	840	144	189	158	22
9	60	48	560	468	620	620	*1,330	756	150	185	228	14
10	*54	48	544	488	630	620	1,160	720	164	193	171	10
11	50	48	520	496	640	610	1,060	732	160	171	147	9
12	45	48	512	480	630	610	1,020	696	141	171	171	25
13	39	50	504	480	620	630	1,130	720	128	225	197	32
14	34	56	496	600	580	630	1,000	672	116	392	178	28
15	30	64	488	684	544	620	870	560	111	514	144	32
16	26	68	462	870	528	620	2,020	462	116	1,130	128	56
17	22	80	432	885	504	580	*3,450	392	122	825	114	50
18	19	87	404	795	480	570	3,450	350	128	650	95	47
19	15	103	387	708	462	552	2,630	314	114	620	85	34
20	14	126	376	610	450	536	1,930	309	125	474	80	32
21	13	134	370	590	432	512	1,400	340	103	382	87	31
22	11	144	360	590	414	488	1,070	329	145	345	92	35
23	10	178	350	590	404	468	1,020	295	272	300	85	47
24	11	208	340	640	392	450	930	276	340	246	74	65
25	21	256	365	756	382	474	840	272	387	246	65	71
26	24	326	392	870	420	496	672	272	370	233	87	58
27	28	374	409	1,090	552	560	570	281	414	208	97	44
28	30	417	420	*1,040	756	672	504	290	496	185	97	36
29	33	483	438	900	-	744	544	*276	684	166	106	28
30	39	532	438	795	--------	744	841	250	650	166	100	25
31	47	--------	438	732	--------	948	--------	224	--------	166	103	--------
Total	1,236	4,298	14,697	19,454	15,134	21,024	41,011	19,314	6,898	10,518	4,135	1,301
Mean	39.9	143	474	628	540	678	1,367	623	230	339	133	43.4
Cfsm	0.100	0.357	1.18	1.57	1.35	1.69	3.41	1.55	0.574	0.845	0.332	0.108
In.	0.12	0.40	1.36	1.81	1.41	1.95	3.80	1.79	0.64	0.97	0.38	0.12

Calendar year 1957: Max 705 Min 0 Mean 176 Cfsm 0.439 In. 5.98
Water year 1957-58: Max 3,450 Min 9 Mean 436 Cfsm 1.09 In. 14.75

* Discharge measurement made on this day.

1360. Black River at Kingstree, S. C.

Location.--Lat 33°39'40", long 79°50'10", on left bank at downstream side of bridge on U. S. Highway 52 at Kingstree, Williamsburg County, 1.0 mile downstream from Kingstree Swamp Canal.

Drainage area.--1,260 sq mi, approximately.

Records available.--August 1929 to September 1958. Gage-height records collected at same site since 1893 are contained in reports of U. S. Weather Bureau.

Gage.--Water-stage recorder. Datum of gage is 25.66 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Nov. 7, 1934, tape gage at same site and datum.

Average discharge.--29 years, 750 cfs.

Extremes.--Maximum discharge during year, 11,800 cfs Apr. 19 (gage height, 13.54 ft); minimum, 23 cfs Nov. 5.
1929-58: Maximum discharge, 29,100 cfs Sept. 20, 1945 (gage height, 16.07 ft); minimum, 2 cfs Sept. 12-15, Oct. 7, 8, 1954.
Maximum stage known, 18.0 ft Sept. 21, 1928 (discharge, 41,600 cfs, from rating curve extended above 27,000 cfs).

Remarks.--Records good.

Cooperation.--Gage-height record collected in cooperation with U. S. Weather Bureau.

Revisions (water years).--WSP 1032: 1928(M), drainage area. WSP 1333: 1930(M), 1931, 1936.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Dec. 16, Dec. 19-22)

Oct. 1 to Dec. 22				Dec. 23 to Sept. 30			
0.8	21	5.0	435	2.2	101	9.0	1,560
1.0	29	6.0	618	3.0	165	10.0	2,520
1.5	54	7.0	850	4.0	263	11.0	3,830
2.0	87	8.0	1,170	5.0	391	12.0	5,740
3.0	175	8.4	1,360	6.0	553	13.0	9,240
4.0	288			7.0	762	13.5	11,500
				8.0	1,080		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	100	29	522	738	2,070	1,740	2,760	2,460	692	915	870	788
2	*101	28	598	750	2,070	2,180	3,270	2,400	629	965	828	619
3	102	27	704	762	1,970	2,700	*3,610	2,340	629	965	762	510
4	107	27	798	775	1,820	3,010	3,830	2,460	681	965	726	436
5	111	24	876	762	1,660	3,080	3,980	2,880	660	1,100	660	363
6	107	26	960	750	1,560	3,080	4,380	3,400	639	1,290	*580	298
7	103	29	1,020	762	1,530	3,010	4,730	3,470	629	1,420	510	252
8	93	31	1,060	*842	1,560	2,820	4,820	3,140	692	1,390	428	211
9	86	33	1,170	900	1,700	2,640	4,560	2,760	738	1,270	377	178
10	80	34	1,260	930	1,780	2,460	4,300	2,460	738	1,080	370	152
11	77	34	1,360	930	*1,740	2,290	4,140	2,340	649	885	391	128
12	76	34	1,360	930	*1,740	2,120	3,980	2,290	535	714	414	174
13	77	36	1,260	930	1,820	2,070	3,680	*2,180	414	619	428	226
14	87	*36	1,220	1,040	1,920	2,070	3,400	1,920	298	692	484	206
15	99	38	1,130	1,200	1,920	2,070	3,140	1,740	231	870	518	178
16	107	44	1,090	1,360	1,920	2,070	4,140	1,700	263	1,000	510	246
17	107	53	990	1,440	1,820	1,970	7,410	1,630	377	1,100	468	221
18	107	61	960	1,500	1,700	1,970	10,800	1,500	436	1,360	452	*165
19	98	67	932	1,560	1,600	1,970	11,500	1,390	356	1,660	452	132
20	89	72	904	1,600	1,500	1,920	10,600	1,290	323	1,740	414	116
21	79	82	850	1,630	1,390	1,870	*9,240	1,290	316	1,920	342	104
22	70	91	824	1,700	1,320	1,740	7,790	1,270	304	2,180	280	101
23	63	107	762	1,780	1,220	1,630	6,430	1,240	349	2,070	236	104
24	57	124	726	1,870	1,160	1,560	5,240	1,180	421	1,820	201	120
25	50	160	714	1,970	1,100	1,560	4,300	1,120	*468	1,700	183	124
26	46	206	692	2,120	1,120	1,600	3,610	1,020	492	1,470	354	120
27	41	234	660	2,180	1,220	1,700	3,140	948	544	1,270	649	124
28	37	282	649	2,070	1,440	1,780	2,820	885	639	1,120	1,260	124
29	34	342	670	2,020	-	1,820	2,580	856	726	982	1,470	112
30	32	418	692	2,070	-------	1,870	2,520	801	814	900	1,240	101
31	30	-------	714	2,070	-------	2,180	-------	750	-------	885	1,000	---------
Total	2,453	2,809	28,127	41,941	45,370	66,550	150,700	57,110	15,682	38,317	17,857	6,733
Mean	79.1	93.6	907	1,353	1,620	2,147	5,023	1,842	523	1,236	576	224
Cfsm	0.063	0.074	0.720	1.07	1.29	1.70	3.99	1.46	0.415	0.981	0.457	0.178
In.	0.07	0.08	0.83	1.23	1.34	1.96	4.45	1.68	0.46	1.13	0.53	0.20

Calendar year 1957: Max 1,590 Min 18 Mean 361 Cfsm 0.287 In. 3.88
Water year 1957-58: Max 11,500 Min 24 Mean 1,298 Cfsm 1.03 In. 13.96

* Discharge measurement made on this day.

1380. Catawba River near Marion, N. C.

Location.--Lat 35°42'20", long 82°02'10", on right bank 15 ft downstream from bridge on U. S. Highway 221, 0.2 mile downstream from Tom Creek, and 2.2 miles northwest of Marion, McDowell County. Records include flow of small tributary which enters above control.

Drainage area.--171 sq mi (including area of small tributary which enters above control).

Records available.--October 1941 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 1,208 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--17 years, 307 cfs.

Extremes.--Maximum discharge during year, 3,090 cfs Apr. 28 (gage height, 6.23 ft); minimum, 81 cfs Sept. 19, 29 (gage height, 0.95 ft).

1941-58: Maximum discharge, 19,700 cfs Aug. 28, 1949 (gage height, 15.02 ft), from rating curve extended above 10,000 cfs on basis of logarithmic plotting and contracted-opening measurements at gage heights 15.02 and 19.34 ft; minimum, 28 cfs Sept. 30, Oct. 1, 5, 1954 (gage height, 0.50 ft).

Maximum stage known, 19.34 ft Aug. 13, 1940 (discharge, 71,400 cfs, from rating curve extended above 10,000 cfs as explained above).

Remarks.--Records good except those for period of ice effect, which are fair. Considerable diurnal fluctuation and slight regulation for short periods at low flow caused by powerplant above station.

Revisions (water years).--WSP 1032: 1942, 1943(P).

Rating tables, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Feb. 26				Feb. 27 to Sept. 30			
1.4	177	3.0	865	0.9	72	2.0	395
1.7	269	4.0	1,510	1.0	90	3.0	870
2.0	377	5.0	2,220	1.2	129	4.0	1,510
2.5	600			1.5	207	5.0	2,220

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	865	220	404	370	600	610	925	815	411	210	157	125
2	*625	249	404	370	510	534	705	760	423	201	175	134
3	790	208	385	362	455	488	610	732	375	195	201	119
4	728	214	366	347	419	448	610	655	335	187	187	111
5	530	217	333	340	400	423	565	610	375	192	152	119
6	435	256	340	333	404	411	870	655	359	195	165	100
7	373	220	358	318	427	403	*705	870	331	210	219	98
8	329	261	625	272	411	462	610	680	300	248	195	101
9	315	278	525	286	385	488	552	610	307	331	184	121
10	304	197	447	304	370	504	680	565	351	292	160	109
11	266	217	415	304	362	466	680	547	307	285	136	90
12	246	233	373	256	355	*440	610	542	339	281	152	117
13	259	*249	*362	436	344	466	542	529	296	285	155	121
14	286	497	358	782	333	458	512	484	270	263	173	98
15	280	435	347	550	322	423	578	484	270	283	155	94
16	236	396	315	455	b260	403	980	458	259	298	143	105
17	319	351	269	385	b260	391	788	440	*255	217	147	*127
18	351	486	308	377	b260	453	655	462	248	224	165	107
19	276	1,250	336	358	b270	423	588	423	238	207	*138	83
20	262	782	1,240	347	b300	411	547	440	255	201	127	85
21	283	550	1,030	404	b300	395	512	427	245	210	145	178
22	262	464	675	407	297	383	610	391	288	*221	131	162
23	243	920	550	370	259	371	588	379	292	214	121	129
24	308	728	500	674	283	375	496	*415	270	204	209	100
25	276	1,580	473	928	318	496	610	717	214	190	231	105
26	276	1,130	755	675	853	462	538	610	252	198	227	119
27	290	782	600	575	1,130	588	542	471	263	198	152	90
28	262	625	525	500	842	565	2,070	427	234	190	131	88
29	280	550	468	*460	-	529	1,330	395	207	165	138	100
30	246	482	427	435	-------	611	1,010	375	192	178	115	111
31	199	-------	407	423	-------	1,600	-------	407	-------	165	113	-------
Total	11,000	15,027	14,920	13,403	11,729	15,480	21,618	16,775	8,761	6,938	4,999	3,346
Mean	355	501	481	432	419	499	721	541	292	224	161	112
Cfsm	2.08	2.93	2.81	2.53	2.45	2.92	4.22	3.16	1.71	1.31	0.942	0.655
In.	2.39	3.27	3.24	2.91	2.55	3.37	4.70	3.65	1.91	1.51	1.09	0.73

Calendar year 1957: Max 6,870 Min 86 Mean 413 Cfsm 2.42 In. 32.74
Water year 1957-58: Max 2,070 Min 83 Mean 395 Cfsm 2.31 In. 31.32

Peak discharge (base, 3,400 cfs).--No peak above base.

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

1385. Linville River at Branch, N. C.

Location.--Lat 35°47'50", long 81°53'20", on right bank 20 ft downstream from bridge on State Highway 126 at Branch, Burke County, and 0.2 mile upstream from Lake James.

Drainage area.--65 sq mi, approximately.

Records available.--May 1907 to August 1908 (fragmentary, published as "at Fonta Flora"), June 1922 to September 1958. Records for October to December 1908, "at Fonta Flora," published in WSP 242 have been found unreliable and should not be used.

Gage.--Water-stage recorder. Datum of gage is 1,205.87 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. May 1907 to August 1908 staff gage about 1.2 miles downstream at different datum. June 1922 to Aug. 12, 1937, staff gage at present site and datum.

Average discharge.--36 years (1922-58), 140 cfs.

Extremes.--Maximum discharge during year, 2,740 cfs Dec. 20 (gage height, 5.00 ft); minimum, 25 cfs Sept. 9-12, 19, 28-30.
1907-8, 1922-58: Maximum discharge, 39,500 cfs Aug. 13, 1940 (gage height, 11.4 ft), from rating curve extended above 6,400 cfs on basis of slope-area measurement of peak flow; minimum, 2 cfs Jan. 9, 1956 (result of freezeup); minimum daily, 8 cfs Sept. 7-9, 1925.
Flood in July 1916 reached a stage about 0.4 ft lower than that of Aug. 13, 1940.

Remarks.--Records good except those for periods of ice effect, which are fair.

Revisions (water years).--WSP 892: 1929, 1935, 1937. WSP 1503: 1923(M), 1924-28, 1930, 1932-33(M), 1938(M), 1939(P). See also Records available.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.4	19	2.2	160
1.5	27	2.5	275
1.7	49	3.0	550
1.9	82	3.5	985

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	536	97	211	188	311	370	480	306	122	52	47	36
2	*340	92	188	167	255	298	360	284	170	52	54	34
3	271	88	170	b130	203	263	311	280	133	50	64	32
4	251	86	170	b120	192	235	311	243	122	49	58	32
5	203	82	157	b110	*181	207	280	235	117	62	52	31
6	170	78	145	b120	219	192	395	288	109	68	47	30
7	148	77	148	b140	284	184	*370	536	104	109	49	29
8	130	97	385	b110	298	219	306	400	99	133	64	27
9	117	164	320	b100	b200	223	267	320	99	127	50	26
10	107	107	251	b100	b170	263	280	275	125	125	44	25
11	99	95	223	125	b160	227	370	251	104	117	41	25
12	109	90	190	101	b140	207	288	235	112	291	43	27
13	114	*88	*180	130	b130	*203	255	219	92	257	75	30
14	92	266	181	501	b110	207	231	188	86	145	82	30
15	86	412	167	316	b110	188	231	174	80	112	69	28
16	84	263	154	243	b110	174	*550	160	82	92	60	27
17	112	235	148	203	b130	164	380	151	*73	78	54	*27
18	195	330	142	181	*b160	170	306	145	69	73	56	27
19	136	932	136	148	151	167	267	136	68	68	49	32
20	117	536	980	167	151	157	235	133	69	71	*44	29
21	104	355	675	170	151	151	215	125	77	66	43	36
22	97	284	432	235	151	142	227	117	71	*61	52	64
23	92	543	325	184	148	139	302	120	66	64	58	43
24	160	450	275	203	142	139	231	*262	60	62	73	34
25	184	783	247	320	133	178	275	217	68	60	73	31
26	145	672	370	255	484	280	255	345	71	54	71	29
27	136	426	335	227	756	345	239	211	75	49	56	28
28	120	340	275	203	515	311	521	178	62	56	48	26
29	112	284	247	174	-	267	444	154	56	52	43	25
30	107	247	219	160	-------	267	355	136	54	52	41	25
31	101	-------	199	167	-------	800	-------	127	-------	48	38	-------
Total	4,775	8,599	8,445	5,698	6,127	7,337	9,537	6,951	2,735	2,755	1,678	925
Mean	154	287	272	184	219	237	318	224	91.2	88.9	54.1	30.8
Cfsm	2.37	4.42	4.18	2.83	3.37	3.65	4.89	3.45	1.40	1.37	0.832	0.474
In.	2.73	4.92	4.83	3.26	3.51	4.20	5.46	3.98	1.56	1.58	0.96	0.53

Calendar year 1957: Max 3,400 Min 27 Mean 219 Cfsm 3.37 In. 45.77
Water year 1957-58: Max 980 Min 25 Mean 180 Cfsm 2.77 In. 37.52

Peak discharge (base, 1,600 cfs).--Dec. 20 (8 p.m.) 2,740 cfs (5.00 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

1420. Lower Little River near All Healing Springs, N. C.

Location.--Lat 35°57', long 81°14', on left bank 0.3 mile downstream from Grassy Creek, 0.4 mile upstream from Lambert Creek, 2.2 miles northeast of All Healing Springs, and 4 miles northwest of Taylorsville, Alexander County.

Drainage area.--31.2 sq mi.

Records available.--October to December 1952 (monthly discharge only), January 1953 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 1,070 ft (by barometer).

Average discharge.--6 years, 28.9 cfs.

Extremes.--Maximum discharge during year, 2,550 cfs Apr. 28 (gage height, 13.94 ft); minimum, 14 cfs Sept. 18, 19, 20, 27, 28.
1952-58: Maximum discharge, that of Apr. 28, 1958; minimum, 2.9 cfs Sept. 20, 21, 1955.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Slight diurnal fluctuation during periods of low flow.

Rating tables, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 19		Nov. 19 to Sept. 30			
1.3	19	1.1	14	5.0	418
1.5	29	1.4	27	7.0	680
2.0	61	1.7	43	9.0	970
3.0	154	2.0	65	11.0	1,410
4.0	264	3.0	165		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	84	24	56	44	67	92	131	114	58	33	22	19
2	*63	23	53	42	59	74	89	*114	57	31	23	18
3	50	23	49	40	55	63	75	101	48	30	46	18
4	42	22	47	39	51	57	71	90	46	30	32	18
5	37	22	44	*37	51	54	66	89	45	32	26	17
6	a34	22	42	36	50	51	336	132	51	34	*25	17
7	a32	22	52	37	53	50	148	212	50	32	29	17
8	a30	33	179	36	49	54	95	129	45	32	28	16
9	a28	28	102	36	46	52	78	100	72	40	30	16
10	a26	25	75	35	46	49	88	85	60	37	39	16
11	a25	24	65	34	45	47	85	81	49	34	25	16
12	a28	23	54	34	44	46	74	75	44	36	24	18
13	a26	23	49	50	43	50	66	68	41	36	26	17
14	a25	26	47	*114	42	48	61	63	40	36	76	16
15	a24	*26	45	78	43	45	69	59	39	34	44	*17
16	a24	26	44	63	43	44	*100	58	38	*33	32	17
17	a30	26	43	56	b30	44	80	57	36	32	29	16
18	*a55	63	42	51	b30	50	71	56	*36	30	26	15
19	33	260	42	47	b30	47	65	56	36	31	24	14
20	30	102	59	45	b36	46	61	72	39	28	*23	15
21	28	65	59	52	*41	44	59	56	41	29	22	29
22	27	56	51	61	42	44	76	52	53	29	22	20
23	26	148	46	55	41	43	74	58	41	28	22	18
24	32	96	44	101	41	44	64	86	39	32	28	18
25	28	*360	44	184	40	59	88	88	36	28	33	17
26	27	173	77	101	156	61	74	*89	53	26	26	17
27	27	96	65	77	244	61	82	65	43	26	24	16
28	26	81	59	64	152	*55	*1,280	59	36	24	22	16
29	25	71	54	60	-	52	*249	54	34	24	21	16
30	25	64	49	57	-------	85	143	50	33	22	20	16
31	*25	-------	46	54	-------	*348	-------	49	-------	22	20	-------
Total	1,022	2,053	1,783	1,820	1,670	1,959	4,098	2,517	1,339	951	889	516
Mean	33.0	68.4	57.6	58.7	59.6	63.2	137	81.2	44.6	30.7	28.7	17.2
Cfsm	1.06	2.19	1.85	1.88	1.91	2.03	4.39	2.60	1.43	0.984	0.920	0.551
In.	1.22	2.45	2.13	2.17	1.99	2.34	4.88	3.00	1.60	1.13	1.06	0.61

Calendar year 1957: Max 583 Min 12 Mean 45.6 Cfsm 1.46 In. 19.82
Water year 1957-58: Max 1,280 Min 14 Mean 56.5 Cfsm 1.81 In. 24.58

Peak discharge (base, 550 cfs).--Nov. 25 (9 a.m.) 561 cfs (6.09 ft); Mar. 31 (5 a.m.) 561 cfs (6.11 ft); Apr. 6 (10 a.m.) 626 cfs (6.55 ft); Apr. 28 (10 a.m.) 2,550 cfs (13.94 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage, and records for Henry Fork near Henry River.
b Stage-discharge relation affected by ice.

1425. Catawba River at Catawba, N. C.

Location.--Lat 35°43', long 81°04', on right bank at downstream side of bridge on U. S. Highways 64 and 70, half a mile upstream from Lyle Creek, five-eighths of a mile upstream from Southern Railway bridge, and 1 mile northeast of Catawba, Catawba County. Records include flow of Lyle Creek.

Drainage area.--1,535 sq mi, includes that of Lyle Creek.

Records available.--July 1896 to December 1899; June 1900, April 1901 to April 1902 (gage heights only); July 1900 to March 1901 (monthly discharge only, published in WSP 1303); November 1934 to September 1958. Records of discharge for April to December 1901, published in WSP 65 and 75, have been found unreliable and should not be used.

Gage.--Water-stage recorder. Datum of gage is 746.49 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. July 1896 to December 1899, June 1900 to April 1902, wire-weight gage at bridge five-eighths of a mile downstream at different datum.

Average discharge.--26 years (1896-99, 1935-58), 2,289 cfs (unadjusted).

Extremes.--Maximum discharge during year, 20,200 cfs Apr. 28 (gage height, 13.75 ft); minimum, 89 cfs Sept. 15 (gage height, 2.12 ft); minimum daily, 98 cfs Sept. 14.
1896-1901, 1934-58: Maximum discharge, 177,000 cfs Aug. 14, 1940 (gage height, 36.8 ft, from floodmarks), from rating curve extended above 24,000 cfs on basis of computation by Duke Power Co. of peak flow over dam; minimum, 85 cfs Sept. 15, 1957; minimum daily, 89 cfs Sept. 15, 1957.
Maximum stage known, 44.1 ft July 16, 1916, affected by failure of earth dike at Lookout Shoals Dam, 4 miles above station, from information furnished by State Highway and Public Works Commission.

Remarks.--Records fair. Flow regulated by four lakes above station which have a combined usable capacity of 17,051,000,000 cu ft (revised). Flow regulated since 1915.

Revisions (water years).--WSP 892: 1936-38. WSP 952: Drainage area. WSP 1503: 1896-1900. See also Records available.

Rating table, water year 1957-58 (gage height, in feet, discharge, in cubic feet per second)

2.1	85	2.8	408	5.0	3,460
2.3	137	3.3	910	7.0	6,850
2.5	221	4.0	1,900	10	12,300

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,810	3,240	380	4,810	4,980	3,200	4,980	6,170	1,200	1,810	2,590	2,640
2	4,810	528	3,620	3,300	3,320	1,660	4,980	7,530	3,290	1,460	145	2,360
3	4,810	184	4,470	3,270	4,470	3,320	*4,980	6,340	3,780	1,180	107	1,690
4	4,810	2,930	4,470	3,350	4,470	3,580	4,980	4,450	3,940	156	2,200	2,410
5	2,620	*2,850	4,630	3,240	4,300	3,660	4,670	4,810	*3,950	662	1,900	1,500
6	306	2,900	3,280	3,220	3,720	4,060	4,590	4,980	3,860	434	2,150	122
7	2,760	3,080	1,920	3,280	3,980	4,010	4,410	5,850	3,110	2,790	2,100	113
8	3,000	3,100	1,290	3,180	4,670	3,130	4,110	6,850	1,140	3,120	1,970	2,070
9	2,980	614	3,580	4,300	3,370	1,490	4,110	6,000	3,100	3,100	350	1,570
10	3,080	357	4,810	4,470	3,740	3,110	4,660	5,320	3,450	3,020	107	1,630
11	3,090	2,700	4,810	4,160	3,460	2,430	3,770	4,810	3,450	2,940	1,780	1,860
12	1,070	2,680	4,490	3,790	3,660	2,860	2,520	4,640	3,240	1,690	1,360	2,000
13	482	2,740	4,810	3,390	3,760	2,720	3,230	4,810	3,030	122	2,570	376
14	2,650	2,390	3,780	4,640	3,680	1,660	4,640	4,810	942	2,790	2,860	98
15	2,960	2,570	626	4,470	2,640	520	4,980	4,810	261	3,150	2,760	2,210
16	2,950	*340	2,780	4,470	1,450	1,150	4,640	4,810	2,120	3,150	976	2,750
17	3,060	168	2,540	4,470	3,010	3,020	4,810	4,810	2,220	3,170	107	2,440
18	3,350	1,940	2,790	4,470	3,060	3,300	4,810	4,810	2,450	3,100	*2,830	2,360
19	652	4,650	2,340	3,520	4,350	3,380	4,810	4,470	2,890	1,660	2,840	1,140
20	463	4,470	3,180	3,480	3,460	3,120	3,720	3,730	1,620	248	2,700	402
21	2,910	4,220	4,690	4,470	3,280	2,650	3,830	3,550	171	2,890	2,500	166
22	3,140	4,220	3,110	4,470	3,390	1,130	4,980	4,100	145	3,230	2,500	699
23	3,270	5,320	3,060	3,570	1,320	512	4,810	3,970	2,270	2,450	388	2,410
24	3,230	2,290	3,170	4,810	2,770	2,900	4,810	4,710	2,400	2,000	594	2,570
25	3,350	8,170	3,340	3,740	2,150	3,320	5,150	2,800	2,910	2,600	2,860	1,290
26	2,770	9,620	4,180	486	3,530	3,040	4,980	3,150	2,920	446	3,620	1,540
27	734	4,980	3,580	3,080	3,800	3,430	4,580	4,810	2,950	113	2,400	175
28	3,050	4,810	4,810	4,810	4,300	3,190	11,400	4,810	786	2,870	2,310	100
29	3,240	4,810	2,820	4,810	-	3,110	9,270	4,000	142	3,140	2,240	1,360
30	3,000	3,260	3,660	4,810	---------	2,880	6,680	3,610	1,960	3,050	420	1,570
31	3,130	--------	4,810	4,810	--------	4,400	--------	3,030	--------	2,680	103	--------
Total	86,537	96,131	105,826	121,146	98,090	85,942	148,890	147,350	69,697	65,221	54,337	43,621
Mean	2,792	3,204	3,414	3,908	3,503	2,772	4,963	4,753	2,323	2,104	1,753	1,454
(†)	-737	+872	-165	-460	-168	+722	+949	-609	-51	-273	-191	-546

	Observed				Adjusted			
Calendar year 1957:	Max 26,300	Min 89	Mean 2,955		Mean 2,973	Cfsm 1.94	In. 26.33	
Water year 1957-58:	Max 11,400	Min 98	Mean 3,076		Mean 3,018	Cfsm 1.97	In. 26.74	

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Lake James, Rhodhiss Lake, Lake Hickory, and Lookout Shoals Lake; furnished by Duke Power Co.

1426. Mountain Creek near Terrell, N. C.

Location.--Lat 35°34',00", long 80°59'45", on left bank 500 ft upstream from highway bridge, a quarter of a mile downstream from Reed Creek, 1.7 miles southwest of Terrell, Catawba County, and 2½ miles upstream from mouth.

Drainage area.--42.4 sq mi.

Records available.--October 1957 to September 1958.

Gage.--Staff gage and crest-stage indicator; gage read once daily.

Extremes.--Maximum discharge during year, 3,130 cfs Nov. 19 (gage height, 13.18 ft, from floodmarks); minimum observed, 15 cfs Sept. 9-12, 19, 20.
The flood in August 1940 reached a stage about 8 ft higher than that of Nov. 19, 1957 (from information by local resident).

Remarks.--Records fair except those for periods of doubtful or no gage-height record, which are poor. Discharge measurements, in cubic feet per second, made prior to October 1957 are as follows:

Oct. 4, 1956..... 19.9	Jan. 27, 1957..... 25.4	July 9, 1957..... 19.1
Oct. 11..... 14.6	Apr. 26..... 32.4	July 25..... 15.2
Nov. 14..... 16.2	Apr. 27..... 32.8	July 29..... 14.1
Dec. 19..... 20.8	June 16..... 25.7	Aug. 28..... 10.0

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

2.6	15	4.5	320
2.8	24	5.0	470
3.0	37	6.0	750
3.3	70	8.0	1,290
3.6	115	10.0	1,900
4.0	191		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		21	49	39	a100	74	a110	104	a46	30	24	18
2		21	44	a38	60	61	a75	*1,080	a60	29	24	17
3		20	43	a38	49	49	*62	287	43	28	24	17
4		21	42	a38	43	46	57	113	42	28	24	*16
5	†24	20	40	*38	38	42	55	96	42	28	22	16
6		20	39	a36	39	40	572	a110	43	30	21	16
7		20	a40	*34	52	38	124	a120	43	29	21	16
8		a24	a600	a34	55	39	77	87	39	31	21	16
9		a28	a200	a32	40	a75	66	76	36	a50	21	15
10		24	60	a32	38	a65	a140	71	36	35	21	15
11		24	47	31	38	*52	a130	65	36	30	20	15
12		*24	42	a30	40	42	74	65	36	29	19	16
13		24	42	a90	40	41	65	61	36	31	22	18
14		a24	42	a190	39	39	60	60	34	32	33	17
15		a26	42	55	45	37	a70	58	35	30	23	16
16		a30	41	54	39	a36	*a90	55	36	29	21	18
17		a30	41	43	37	a34	*66	a75	35	28	20	16
18		a70	40	42	37	a55	57	a65	35	28	20	16
19		*1,660	40	40	37	a54	52	53	34	28	19	15
20		136	a44	*38	37	44	50	53	34	28	19	15
21		66	a55	38	39	43	46	53	35	71	19	a28
22		57	a42	a50	41	42	308	50	a70	54	18	21
23		a500	a40	42	40	41	*108	48	42	32	16	18
24		a120	a40	a170	39	39	69	a110	*40	30	20	18
25		a750	a38	*170	39	a140	a120	54	36	28	a36	18
26		182	a100	a70	a160	a80	a80	50	36	26	25	18
27		92	49	a55	a300	a50	388	47	38	a50	23	18
28		66	44	a48	*132	a45	1,480	45	35	a42	21	16
29		57	42	a46	-	a45	220	45	32	*32	20	16
30		54	a42	a44	-------	a70	132	44	31	26	19	17
31		-------	41	a42	-------	a360	-------	43	-------	24	19	---- --
Total	-	4,211	2,111	1,747	1,693	1,918	5,003	3,343	1,176	1,026	677	512
Mean	28	140	68.1	56.4	60.5	61.9	167	108	39.2	33.1	21.8	17.1
Cfsm	0.660	3.30	1.61	1.33	1.43	1.46	3.94	2.55	0.925	0.781	0.514	0.403
In.	0.76	3.69	1.85	1.53	1.48	1.68	4.39	2.93	1.03	0.90	0.59	0.45

Calendar year 1957: Max - Min - Mean - Cfsm - In. -
Water year 1957-58: Max 1,660 Min 15 Mean 66.5 Cfsm 1.57 In. 21.28

Peak discharge (base, 750 cfs).--Nov. 19 (8 a.m.) 3,130 cfs (13.18 ft); Nov. 23 (about 8 a.m.) about 1,000 cfs; Nov. 25 (time unknown) about 1,400 cfs; Dec. 8 (time and discharge unknown); Apr. 6 (9 a.m.) 1,260 cfs (7.86 ft); Apr. 28 (about 12 m.) 1,870 cfs (9.93 ft); May 2 (about 9 p.m.) 2,810 cfs (12.39 ft).

* Discharge measurement made on this day.
† Result of discharge measurement.
a Doubtful or no gage-height record; discharge estimated on basis of gage readings, weather records, streamflow continuity, and records for nearby streams.
Note.--Monthly discharge for October estimated on basis of records for nearby streams.

1430. Henry Fork near Henry River, N. C.

Location.--Lat 35°41', long 81°24', on left bank 450 ft downstream from highway bridge, at site of old Link Ford, 1½ miles downstream from Burke-Catawba County line, and 2 miles southeast of village of Henry River, Burke County.

Drainage area.--80 sq mi, approximately.

Records available.--July 1925 to November 1931, December 1941 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 890.99 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. July 1925 to November 1931 at site 450 ft upstream at same datum.

Average discharge.--22 years (1925-31, 1942-58), 123 cfs.

Extremes.--Maximum discharge during year, 3,560 cfs Apr. 6 (gage height, 8.47 ft); minimum, 6.2 cfs Aug. 16; minimum daily, 6.2 cfs Aug. 16.
1925-31, 1941-58: Maximum discharge, 15,300 cfs Oct. 2, 1929 (gage height, 18.40 ft, site then in use), from rating curve extended above 2,300 cfs on basis of computation of peak flow over dam at Henry River, at gage height 29.2 ft; minimum, 3 cfs Dec. 20, 1942; minimum daily, 4 cfs Nov. 15, Dec. 20, 1942.
Maximum stage known, 29.2 ft Aug. 13, 1940, at former site, from floodmarks (discharge, 31,300 cfs).

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Considerable diurnal fluctuation and some regulation caused by mill above station. An average of about 2.2 cfs was diverted for water supply by city of Morganton and Morganton State Hospital and discharged into Catawba River.

Revisions (water years).--WSP 952: 1928, 1930.

Rating tables, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 28				Apr. 28 to Sept. 30			
1.0	41	3.0	615	0.58	6.2	1.6	142
1.2	70	4.0	1,070	.6	7.0	2.0	255
1.6	141	5.0	1,520	.7	12	3.0	615
2.0	241	6.0	2,020	.8	19	4.0	1,070
				1.0	41	5.0	1,520
				1.2	70	6.0	2,020

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	478	94	163	145	227	281	396	330	177	103	58	62
2	293	51	154	137	208	224	277	560	214	101	70	56
3	197	81	145	133	190	200	238	450	177	100	168	148
4	156	98	145	129	170	182	230	354	166	98	112	72
5	131	94	135	123	*154	170	216	313	164	107	89	67
6	121	75	129	133	168	163	1,790	313	166	112	81	60
7	114	81	129	131	177	161	510	511	156	105	78	58
8	107	75	303	125	175	168	323	381	154	103	98	55
9	98	105	274	114	165	187	271	310	147	119	98	54
10	91	91	200	127	161	192	303	281	144	112	81	52
11	91	100	175	119	154	177	348	271	140	105	75	51
12	101	91	148	116	150	165	271	258	140	103	72	51
13	94	98	137	158	148	168	241	233	136	132	83	51
14	96	98	135	423	141	168	227	217	134	147	94	51
15	86	91	133	293	150	152	233	208	134	112	69	51
16	86	112	131	208	b140	152	341	208	*129	*103	6.2	51
17	108	129	127	175	b100	150	284	214	125	105	52	51
18	*180	738	*123	154	*b100	182	238	217	121	101	80	51
19	119	1,180	123	145	b110	177	224	199	121	116	67	*48
20	103	396	231	141	b130	168	210	199	123	107	66	62
21	101	219	303	176	141	161	208	190	121	123	64	119
22	91	175	197	256	143	152	238	174	140	116	61	78
23	91	402	165	205	148	148	268	177	136	98	56	a70
24	103	313	154	424	145	150	227	*385	125	101	137	a65
25	101	958	148	936	141	282	247	271	117	108	107	a60
26	88	550	284	381	568	310	250	354	117	93	86	a60
27	94	284	253	274	885	290	284	239	132	94	*78	a60
28	100	227	200	224	508	247	1,900	208	114	142	75	a55
29	98	205	177	200	-	210	615	*188	110	64	62	a55
30	86	185	159	187	--------	238	402	180	108	123	55	a55
31	93	--------	148	177	--------	*773	--------	177	--------	51	61	----- --
Total	3,896	7,396	5,428	6,669	5,797	6,548	11,810	8,570	4,188	3,304	2,439.2	1,879
Mean	126	247	175	215	207	211	394	276	140	107	78.7	62.6
Cfsm	1.58	3.09	2.19	2.69	2.59	2.64	4.92	3.45	1.75	1.34	0.984	0.782
In.	1.81	3.44	2.52	3.10	2.69	3.04	5.49	3.98	1.95	1.54	1.13	0.87

Calendar year 1957: Max 2,380 Min 10 Mean 165 Cfsm 2.06 In. 28.04
Water year 1957-58: Max 1,900 Min 6.2 Mean 186 Cfsm 2.32 In. 31.56

Peak discharge (base, 2,800 cfs).--Apr. 6 (9 a.m.) 3,560 cfs (8.47 ft); Apr. 28 (8 a.m.) 3,100 cfs (7.78 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for Lower Little River near All Healing Springs.
b Stage-discharge relation affected by ice.

1435. Indian Creek near Laboratory, N. C.

Location.--Lat 35°25'20", long 81°15'50", on left bank 250 ft upstream from remains of Rudisill Mill dam, half a mile upstream from highway bridge, 1½ miles upstream from mouth, 1½ miles south of Laboratory, Lincoln County, and 8½ miles south of Lincolnton.

Drainage area.--68.4 sq mi.

Records available.--August 1951 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 736 ft (by barometer).

Average discharge.--7 years, 78.1 cfs.

Extremes.--Maximum discharge during year, 3,750 cfs Nov. 19 (gage height, 7.35 ft); minimum, 34 cfs Sept. 28, 29 (gage height, 0.92 ft).
1951-58: Maximum discharge, 5,030 cfs Mar. 4, 1952 (gage height, 8.74 ft), from rating curve extended above 3,900 cfs on basis of computation of peak flow over dam; minimum, 4.6 cfs Oct. 8, 1954.

Remarks.--Records good except those for periods of doubtful or no gage-height record, which are poor.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 19				Nov. 20 to Sept. 30			
0.9	30	3.0	444	0.9	30	3.0	540
1.0	49	3.5	564	1.0	49	4.0	940
1.2	101	4.0	750	1.2	101	5.0	1,620
1.5	183	4.5	1,090	1.5	200	6.0	2,440
2.0	289	5.0	1,540	2.0	317		
2.5	362	6.0	2,440				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	227	49	101	79	219	165	242	168	93	54	a80	49
2	148	49	95	73	121	128	168	445	200	49	a75	45
3	112	49	90	71	104	111	*138	329	95	49	a120	45
4	98	47	90	68	95	101	132	148	90	49	a90	45
5	81	47	81	68	93	95	121	121	90	66	a75	45
6	73	45	79	68	95	93	922	132	93	66	a70	43
7	66	45	79	71	121	93	471	305	101	56	a65	43
8	61	100	198	68	142	104	155	a160	84	160	a70	41
9	56	86	145	66	104	152	121	a150	79	90	a65	40
10	54	56	115	68	98	121	197	a145	76	73	a60	40
11	51	54	98	*66	95	101	181	a140	71	132	a55	40
12	59	51	84	66	90	95	135	*138	81	99	a50	49
13	56	49	81	79	90	101	111	125	71	309	a90	45
14	51	54	81	*190	84	98	101	111	66	a220	a85	45
15	*49	56	81	115	93	93	132	111	61	a80	a75	45
16	49	122	81	98	87	90	*302	154	63	a75	a70	49
17	71	84	79	87	84	87	148	173	61	a70	a60	45
18	97	438	79	84	85	111	118	223	59	*214	a60	41
19	81	*2,250	79	79	85	98	104	128	59	187	a55	40
20	54	*840	105	79	87	90	101	125	61	114	a50	40
21	51	155	108	125	84	87	95	128	61	218	a45	98
22	51	138	84	148	*90	87	268	108	108	248	*45	56
23	51	830	81	108	90	87	155	98	73	90	49	47
24	61	258	79	373	87	87	101	151	*68	79	123	*43
25	59	998	81	538	87	214	138	111	63	79	152	41
26	51	786	183	194	376	158	138	108	63	71	81	41
27	51	194	115	142	592	138	447	95	68	111	66	40
28	49	161	95	115	302	115	2,120	90	61	93	61	34
29	49	138	90	104		104	1,020	87	56	a80	56	36
30	49	138	84	98	-------	225	456	87	54	a75	54	38
31	49	-------	81	95	-------	*662	-------	84	-------	a70	51	-------
Total	2,145	8,167	3,002	3,683	3,780	4,091	9,038	4,678	2,329	3,424	2,203	1,349
Mean	69.2	272	96.8	119	135	132	301	151	77.6	110	71.1	45.0
Cfsm	1.01	3.98	1.42	1.74	1.97	1.93	4.40	2.21	1.13	1.61	1.04	0.658
In.	1.17	4.44	1.63	2.00	2.06	2.22	4.91	2.54	1.27	1.86	1.20	0.73

Calendar year 1957: Max 2,250 Min 20 Mean 105 Cfsm 1.54 In. 20.90
Water year 1957-58: Max 2,250 Min 34 Mean 131 Cfsm 1.92 In. 26.03

Peak discharge (base, 1,500).--Nov. 19 (4 p.m.) 3,750 cfs (7.35 ft); Nov. 25 (12 p.m.) 1,860 cfs (5.30 ft); Apr. 28 (5 p.m.) 3,270 cfs (6.86 ft).

* Discharge measurement made on this day.
a Doubtful or no gage-height record; discharge estimated on basis of recorder graph, weather records, and records for Long Creek near Bessemer City.

1440. Long Creek near Bessemer City, N. C.

Location.--Lat 35°18'20", long 81°14'05", on right bank 700 ft upstream from highway bridge, 2 miles northeast of Bessemer City limits, Gaston County, and 8¼ miles upstream from mouth.

Drainage area.--31.4 sq mi.

Records available.--December 1952 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 706.1 ft above mean sea level, datum of 1929.

Average discharge.--5 years (1953-58), 28.2 cfs.

Extremes.--Maximum discharge during year, 5,290 cfs Nov. 19 (gage height, 8.26 ft), from rating curve extended above 1,100 cfs on basis of contracted-opening measurement of peak flow; minimum, 9.3 cfs Oct. 15, 16; minimum daily, 10 cfs Oct. 15, Nov. 3.
1952-58: Maximum discharge, that of Nov. 19, 1957; minimum, 0.4 cfs Oct. 7, 1954; minimum daily, 0.8 cfs Oct. 7, 1954.

Remarks.--Records good. Bessemer City diverts out of basin an average of 1.4 cfs for water supply, causing diurnal fluctuation at low flow.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 19		Nov. 19 to Sept. 30			
1.5	9.0	1.5	11	3.5	296
1.7	16	1.7	18	4.0	462
2.0	34	2.0	35	5.0	895
2.4	76	2.4	76	6.0	1,640
3.0	175	2.7	120	7.0	2,830
		3.0	175		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	53	11	45	25	82	54	74	81	36	*16	53	20
2	32	12	37	23	41	44	53	135	51	15	39	18
3	25	10	32	22	34	40	44	82	30	14	62	18
4	18	11	31	22	31	34	45	64	28	14	76	*17
5	15	12	27	20	30	33	43	55	28	18	30	17
6	14	11	25	21	38	32	572	84	29	17	25	17
7	13	11	26	23	47	32	90	102	43	15	23	17
8	13	13	95	21	41	33	60	69	28	194	25	16
9	11	15	52	19	34	53	49	54	26	67	24	15
10	11	12	39	19	32	44	93	50	24	33	21	14
11	11	11	33	*20	31	37	72	46	23	26	19	14
12	11	12	27	19	29	33	53	*44	22	24	18	15
13	12	12	26	37	28	35	47	41	22	101	92	15
14	11	14	26	*105	27	34	43	37	20	41	44	15
15	*10	14	26	47	30	30	57	37	20	43	29	15
16	11	123	25	36	28	28	231	46	20	26	24	17
17	33	35	24	31	24	28	72	57	19	28	23	14
18	31	140	23	27	23	45	57	113	18	*27	20	14
19	15	*1,800	23	25	25	37	49	45	17	26	19	13
20	13	90	35	25	25	33	44	43	16	121	18	13
21	13	43	32	46	28	31	42	41	18	299	17	70
22	12	35	25	42	*34	29	102	35	26	123	*16	24
23	12	391	24	32	34	28	64	34	20	39	84	17
24	14	77	24	189	29	28	47	32	20	29	167	*17
25	13	563	25	135	28	92	63	34	18	26	75	16
26	12	112	68	62	181	*56	47	36	25	24	38	15
27	12	55	37	47	247	48	181	31	22	62	31	14
28	12	49	32	38	92	41	1,320	29	18	54	26	13
29	12	*47	28	34	-	38	390	28	17	68	25	13
30	11	100	26	33	-------	67	148	26	16	*36	24	14
31	12	-------	25	32	-------	238	-------	26	-------	26	22	-------
Total	498	3,841	1,023	1,277	1,353	1,435	4,252	1,637	720	1,652	1,209	527
Mean	16.1	128	33.0	41.2	48.3	46.3	142	52.8	24.0	53.3	39.0	17.6
Cfsm	0.513	4.08	1.05	1.31	1.54	1.47	4.52	1.68	0.764	1.70	1.24	0.561
In.	0.59	4.55	1.21	1.51	1.60	1.70	5.04	1.94	0.85	1.96	1.43	0.62

Calendar year 1957: Max 1,800 Min 2.9 Mean 33.8 Cfsm 1.08 In. 14.63
Water year 1957-58: Max 1,800 Min 10 Mean 53.2 Cfsm 1.69 In. 23.00

Peak discharge (base, 650 cfs).--Nov. 19 (12 m.) 5,290 cfs (8.26 ft); Nov. 23 (6 a.m.) 745 cfs (4.72 ft); Nov. 25 (10 a.m.) 950 cfs (5.11 ft); Apr. 6 (2 p.m.) 1,070 cfs (5.30 ft); Apr. 28 (1 p.m.) 2,170 cfs (6.52 ft); July 21 (9 p.m.) 1,100 cfs (5.34 ft).

* Discharge measurement made on this day.

1450. South Fork Catawba River at Lowell, N. C.

Location.--Lat 35°17'09", long 81°06'04", on right bank 50 ft north of private mill road, 120 ft downstream from Housers Creek, 1 mile north of Lowell, Gaston County, and 3 miles downstream from Long Creek.

Drainage area.--630 sq mi.

Records available.--January 1942 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 603.10 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--16 years, 777 cfs.

Extremes.--Maximum discharge during year, 13,900 cfs Nov. 20 (gage height, 13.36 ft); minimum, 98 cfs Sept. 17 (gage height, 1.43 ft); minimum daily, 292 cfs Sept. 19.
1942-58: Maximum discharge, 22,000 cfs Sept. 19, 1945 (gage height, 16.98 ft); minimum, 25 cfs Sept. 27, Oct. 4, 1954 (gage height, 0.75 ft); minimum daily, 31 cfs Oct. 8, 1954.
Maximum stage known, 21.33 ft in August 1940, from floodmarks (discharge, 34,000 cfs).

Remarks.--Records good except those for period of no gage-height record, which are poor. Considerable diurnal fluctuation and slight regulation for short periods at low flow caused by powerplant above station. City of Gastonia diverted for water supply an average of 6.0 cfs from Long Creek and 2.3 cfs from South Fork Catawba River. A part of the diversion is returned to Long Creek as sewage. For diversion by town of Morganton see Henry Fork near Henry River, and by Bessemer City see Long Creek near Bessemer City.

Revisions (water years).--WSP 1002: 1943(m). WSP 1303: 1950(M).

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 20				Nov. 21 to Sept. 30	
2.5	349	7.0	3,240	2.0	222
3.0	522	9.0	5,380	2.5	365
4.0	1,040	11.0	8,800	3.0	550
5.0	1,700	12.0	10,900	4.0	1,040

Note.--Same as preceding table above 4.0 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a1,700	437	1,130	780	1,510	2,880	2,990	3,150	830	*530	498	416
2	a1,300	428	1,010	755	1,340	1,720	2,290	2,780	1,220	486	640	391
3	a1,000	448	930	730	1,100	1,280	1,520	4,240	1,010	466	730	352
4	a850	391	930	685	955	1,130	1,280	2,990	855	490	854	382
5	a650	417	855	685	905	1,010	1,250	1,980	830	498	662	385
6	a550	411	805	662	905	930	4,300	1,770	805	572	530	346
7	a500	398	780	640	980	955	4,830	2,140	880	595	463	336
8	a480	414	1,310	662	1,350	930	4,140	2,140	830	902	463	333
9	a460	700	1,630	662	1,130	1,100	2,070	1,840	805	1,010	595	294
10	a440	503	1,350	595	980	1,220	1,700	1,520	730	780	550	324
11	a440	466	1,070	*618	905	1,040	2,140	1,350	730	730	490	300
12	a440	434	930	640	880	955	1,740	*1,320	730	640	459	303
13	a440	434	830	722	830	930	1,420	1,220	685	966	681	342
14	a420	448	780	*1,600	805	955	1,250	1,130	640	1,470	618	346
15	a420	466	755	1,630	830	880	1,220	1,070	618	905	595	372
16	*411	865	780	1,250	855	830	2,430	1,070	640	702	502	330
17	424	736	702	980	780	830	1,770	1,320	618	618	433	345
18	772	2,110	702	880	640	905	1,490	1,980	618	924	398	349
19	768	8,540	702	780	780	980	1,280	1,220	595	1,680	388	292
20	542	10,200	702	755	830	930	1,190	1,070	595	949	424	351
21	522	3,510	1,070	839	805	880	1,130	1,100	572	1,600	378	559
22	484	1,690	1,100	1,220	*805	830	1,630	980	780	2,480	*382	702
23	438	3,760	880	1,160	855	805	2,070	930	755	1,010	385	452
24	466	2,880	805	1,840	855	805	1,380	1,040	662	730	650	*398
25	503	4,830	780	3,560	805	1,320	1,350	1,100	618	685	1,190	365
26	503	6,330	1,200	2,680	1,670	1,560	1,630	1,220	572	662	755	359
27	448	3,640	1,320	2,250	3,860	1,460	2,300	1,190	640	812	550	356
28	466	2,190	1,130	1,420	3,650	1,280	9,320	980	572	980	459	327
29	438	1,490	955	1,160		1,160	10,600	905	572	*730	391	333
30	437	1,460	880	1,040	-------	1,110	6,570	880	572	664	426	302
31	428	-------	805	980	-------	4,050	-------	830	-------	530	382	-------
Total	18,140	61,026	29,608	34,860	32,595	37,650	80,280	48,455	21,579	26,796	16,921	11,032
Mean	585	2,034	955	1,125	1,164	1,215	2,676	1,563	719	864	546	368
Cfsm	0.929	3.23	1.52	1.79	1.85	1.93	4.25	2.48	1.14	1.37	0.867	0.584
In.	1.07	3.60	1.75	2.06	1.92	2.22	4.74	2.86	1.27	1.58	1.00	0.65

Calendar year 1957: Max 10,200 Min 198 Mean 927 Cfsm 1.47 In. 19.97
Water year 1957-58: Max 10,600 Min 292 Mean 1,148 Cfsm 1.82 In. 24.72

Peak discharge (base, 8,000 cfs).--Nov. 20 (5 a.m.) 13,900 cfs (13.36 ft); Apr. 29 (1 a.m.) 13,000 cfs (13.05 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage, and records for stations on nearby streams.

1460. Catawba River near Rock Hill, S. C.

Location.--Lat 34°59', long 80°58', on right bank at downstream side of bridge on U. S. Highway 21, 3½ miles downstream from Catawba Dam, 5 miles northeast of Rock Hill, York County, and 7½ miles upstream from Sugar Creek.

Drainage area.--3,050 sq mi, approximately.

Records available.--September 1895 to September 1903, April 1942 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Altitude of gage is 492 ft (by barometer). Sept. 23, 1895, to July 31, 1903, chain gage at Southern Railway bridge, 2 miles downstream, at different datum.

Average discharge.--24 years, 4,586 cfs.

Extremes.--Maximum discharge during year, 50,000 cfs Apr. 28 (gage height, 15.82 ft); minimum, 269 cfs June 15 (gage height, 2.74 ft); minimum daily, 592 cfs June 29. 1895-1903, 1942-58: Maximum discharge, 151,000 cfs May 23, 1901 (gage height, 24.15 ft, site and datum then in use); minimum, 143 cfs Apr. 25, 1943 (gage height, 2.59 ft); minimum daily, 490 cfs Oct. 21, 1954.

Remarks.--Records good. Flow regulated by Catawba Lake (usable capacity, 6,542,000,000 cu ft) and by other powerplants above station.

Revisions (water years).--WSP 1303: 1895-1903. WSP 1333: 1942-43(m), 1953(m).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

3.0	534	5.0	4,670
3.5	1,210	8.0	15,300
4.0	2,120	13.0	36,600

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8,070	2,700	5,740	8,680	9,680	7,740	10,000	13,400	1,210	955	3,450	3,940
2	7,820	996	8,120	5,030	5,750	7,710	*10,800	13,000	6,440	2,070	778	3,330
3	7,760	1,070	8,790	3,470	8,130	8,970	8,140	14,200	6,560	2,180	603	2,240
4	5,930	3,630	9,150	3,350	10,400	9,330	8,890	11,900	6,340	931	2,460	2,770
5	808	2,900	7,410	4,080	9,150	9,690	5,880	9,330	6,260	944	4,000	2,030
6	1,560	2,790	5,170	5,780	5,580	9,690	8,820	9,330	*5,380	720	4,770	616
7	5,860	3,480	3,240	7,640	5,460	8,970	7,710	9,330	3,120	5,850	4,400	628
8	4,660	2,830	1,800	6,110	3,110	7,390	9,080	9,330	610	5,930	2,030	3,900
9	3,840	951	6,080	5,530	4,210	912	10,000	11,100	6,210	3,150	816	1,510
10	3,970	759	10,000	5,830	7,870	4,700	11,100	8,610	5,060	4,790	631	1,330
11	3,920	3,820	10,400	3,850	8,470	6,290	7,050	8,430	4,300	3,530	2,520	1,300
12	1,960	3,820	9,690	3,610	7,380	6,480	9,200	10,800	3,760	757	2,510	2,230
13	991	1,820	9,690	6,480	5,670	5,910	9,150	9,330	4,820	600	3,270	636
14	2,710	2,990	4,300	8,430	5,060	6,200	9,690	9,150	658	5,540	3,680	665
15	2,940	4,300	2,540	7,630	2,440	1,500	10,000	9,690	684	5,210	4,390	2,170
16	3,330	1,620	4,680	8,030	3,660	1,240	6,030	9,330	5,420	5,140	1,250	2,310
17	3,800	742	4,300	8,790	5,630	6,050	6,810	6,310	6,100	5,460	614	3,900
18	3,340	1,050	4,660	7,150	4,700	6,810	8,610	4,620	6,000	4,370	6,700	2,320
19	717	5,710	4,290	1,720	4,980	6,100	8,970	8,570	4,200	1,220	1,150	763
20	702	22,400	4,980	5,750	4,750	5,510	8,670	8,420	1,870	752	2,640	918
21	4,860	10,000	2,870	6,540	4,490	3,680	9,860	8,330	1,150	4,230	2,490	676
22	5,190	10,000	2,500	6,460	2,600	2,720	8,500	7,210	2,230	5,820	2,700	2,930
23	4,400	16,800	4,490	6,000	2,280	623	9,690	6,800	4,110	5,760	756	2,490
24	2,460	9,280	4,750	3,170	3,460	5,230	10,400	3,570	3,820	3,810	638	2,420
25	2,220	17,600	5,430	1,000	2,480	4,800	9,690	2,660	2,720	2,230	2,480	3,420
26	2,830	23,400	6,290	2,310	2,260	4,260	6,390	6,740	4,750	3,420	5,630	1,040
27	1,520	15,300	6,170	7,750	4,780	5,220	8,270	8,300	3,400	1,740	5,840	1,800
28	4,900	10,400	7,660	9,690	7,910	4,960	20,800	7,070	823	6,170	5,630	1,050
29	*4,900	7,860	3,710	11,500	-	3,140	34,600	6,250	592	6,210	4,840	1,870
30	4,850	8,670	6,090	11,500	-------	3,080	19,400	4,910	1,890	5,870	646	1,550
31	3,390	-------	8,970	11,500	-------	6,570	-------	3,840	-------	4,590	681	-------
Total	116,208	199,688	183,960	194,360	152,340	171,475	312,200	259,860	110,487	109,949	84,993	58,752
Mean	3,749	6,656	5,934	6,270	5,441	5,531	10,410	8,383	3,683	3,547	2,742	1,958
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 29,200 Min 535 Mean 4,693 Cfsm - In. -
Water year 1957-58: Max 34,600 Min 592 Mean 5,354 Cfsm - In. -

* Discharge measurement made on this day.

1465. Little Sugar Creek near Charlotte, N. C.

Location.--Lat 35°09'20", long 80°51'10", on right bank 50 ft downstream from tributary on right, 500 ft downstream from Briar Creek, 600 ft upstream from sewage-disposal plant of city of Charlotte, and 4.7 miles south of city hall in Charlotte, Mecklenburg County.

Drainage area.--40.5 sq mi (revised).

Records available.--July 1924 to September 1958.

Gage.--Water-stage recorder. Prior to June 4, 1958, concrete control. Datum of gage is 571.6 ft above mean sea level (city of Charlotte datum). Prior to Apr. 26, 1927, staff gage at same site and datum.

Average discharge.--34 years, 44.2 cfs.

Extremes.--Maximum discharge during year, 5,060 cfs Aug. 2 (gage height, 13.10 ft); minimum daily, 3.4 cfs Sept. 28.
1924-58: Maximum discharge, 8,370 cfs Apr. 6, 1936 (gage height, 16.2 ft, from floodmarks), from rating curve extended above 2,600 cfs on basis of slope-area measurements of peak flow at gage heights 10.42, 11.47, and 12.00 ft; minimum, 1.2 cfs Sept. 27, 1954.

Remarks.--Records fair except those for periods of doubtful or no gage-height record, which are poor. At present an unknown quantity of cooling and wash water, and prior to 1957 as much as 1.6 cfs of industrial sewage, diverted into the basin from Catawba River through city of Charlotte storm sewers. Records of chemical analyses for the water year 1958 are given in WSP 1571.

Revisions (water years).--WSP 1052: 1939-44. WSP 1503: 1924-27(M) 1928-30, 1931(M), 1932-34.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	251	8.4	41	22	50	45	44	a40	23	a9	10	9.0
2	22	8.9	29	19	29	35	33	a65	38	a8	*576	8.4
3	11	8.4	24	18	25	32	32	a67	13	*a8	101	8.1
4	*8.4	8.4	29	17	23	29	67	a35	a13	6.8	17	*8.7
5	7.6	12	21	17	23	26	45	a29	a12	66	15	7.8
6	6.6	16	19	17	66	26	1,040	a34	156	13	13	6.6
7	6.6	8.4	22	*35	156	26	81	a51	a32	9.4	9.4	5.6
8	6.2	18	156	23	114	28	46	a48	a22	55	9.4	5.4
9	6.2	11	46	17	42	165	36	a30	a19	24	9.7	5.9
10	6.6	7.6	31	16	34	46	648	a26	a16	16	7.4	6.3
11	7.1	7.1	25	17	33	34	154	a24	a14	13	8.4	6.1
12	6.6	7.6	21	16	31	30	60	a24	a12	7.4	160	24
13	6.2	8.0	20	240	30	46	40	a22	a11	56	151	6.8
14	5.8	11	20	189	27	34	35	a21	a11	29	*46	5.6
15	6.2	8.9	20	52	54	28	64	*a19	a18	*12	20	5.9
16	6.2	129	19	35	37	26	278	18	a12	15	13	*6.6
17	35	21	18	28	24	25	*62	634	a9	9.7	10	5.6
18	21	180	18	25	*22	57	44	594	a8	40	10	6.1
19	8.0	360	17	23	22	33	37	49	a8	16	9.4	5.2
20	6.6	34	67	22	22	*29	32	34	a18	306	9.0	5.9
21	6.2	*19	34	65	24	27	31	30	a28	119	8.4	27
22	6.6	42	22	36	23	24	91	24	a65	64	8.4	7.8
23	6.6	610	19	26	23	22	41	22	a18	15	7.1	6.6
24	53	52	19	1,130	22	25	30	20	a12	322	297	6.3
25	11	622	27	307	22	144	55	23	a10	85	162	5.9
26	7.6	91	174	63	338	55	29	21	a16	18	28	6.1
27	6.6	42	40	42	181	39	80	18	a12	13	17	5.4
28	6.6	100	29	32	78	31	a850	17	a10	14	13	3.4
29	8.0	61	24	33	-	35	a90	16	a10	31	14	3.9
30	8.0	182	22	31	-------	39	a50	13	a9	13	11	*8.1
31	8.9	-------	21	28	-------	125	-------	13	-------	11	9.0	-------
Total	570.0	2,694.7	1,094	2,641	1,575	1,366	4,225	2,081	655	1,424.3	1,779.6	230.1
Mean	18.4	89.8	35.3	85.2	56.2	44.1	141	67.1	21.8	45.9	57.4	7.67
Cfsm	0.454	2.22	0.872	2.10	1.39	1.09	3.48	1.66	0.538	1.13	1.42	0.189
In.	0.52	2.47	1.00	2.43	1.45	1.25	3.88	1.91	0.60	1.31	1.63	0.21

Calendar year 1957: Max 838 Min 2.0 Mean 40.1 Cfsm 0.990 In. 13.21
Water year 1957-58: Max 1,130 Min 3.4 Mean 55.7 Cfsm 1.38 In. 18.66

Peak discharge (base, 2,100 cfs).--Jan. 24 (2 p.m.) 3,450 cfs (10.84 ft); Apr. 6 (7:30 a.m.) 4,140 cfs (11.89 ft); Apr. 10 (5 p.m.) 2,990 cfs (10.03 ft); Apr. 28 (4 a.m.) 2,880 cfs (9.84 ft); May 17 (10:30 p.m.) 4,850 cfs (12.82 ft); July 20 (8 p.m.) 2,520 cfs (9.10 ft); Aug. 2 (9 p.m.) 5,060 cfs (13.10 ft).

* Discharge measurement made on this day.
a Doubtful or no gage-height record; discharge estimated on basis of recorder graph, weather records, and records for nearby stations.
Note.--Discharge below 40 cfs in the period July 4 to Sept. 30 computed from twice-daily wire-weight-gage readings at bridge 800 ft downstream.

1475. Rocky Creek at Great Falls, S. C.

Location.--Lat 34°34', long 80°55', on left bank 350 ft downstream from Turkey Branch, 1 mile west of Great Falls, Chester County, and 1.6 miles upstream from mouth.

Drainage area.--194 sq mi.

Records available.--February 1951 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 299 ft (by barometer).

Average discharge.--7 years, 146 cfs.

Extremes.--Maximum discharge during year, 5,600 cfs Jan. 25 (gage height, 7.93 ft); minimum, 12 cfs Sept. 29.
1951-58: Maximum discharge, 8,880 cfs Mar. 4, 1952 (gage height, 9.77 ft); minimum, 0.04 cfs Oct. 6-13, 1954.

Remarks.--Records good.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.8	9.0	2.4	254
1.0	18	3.0	477
1.2	32	4.0	1,080
1.5	63	5.0	1,930
1.9	128	7.3	4,710

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	231	18	725	92	145	375	192	308	40	29	35	43
2	343	18	275	90	124	245	160	879	42	26	50	34
3	120	18	192	80	107	194	138	736	40	24	153	*31
4	96	*18	170	73	97	163	162	296	36	35	60	26
5	65	18	136	64	94	138	194	200	36	98	39	24
6	43	18	109	64	142	128	172	585	*36	289	32	26
7	36	17	100	137	578	124	167	1,480	74	78	29	23
8	34	19	390	232	515	145	124	354	41	79	37	22
9	26	28	684	126	269	418	111	219	36	222	30	19
10	22	26	276	100	187	*518	301	167	39	230	28	19
11	20	21	182	95	158	247	1,150	136	34	119	23	18
12	18	19	128	84	141	187	363	128	30	248	39	19
13	17	18	104	136	126	308	221	113	27	76	172	21
14	17	22	99	1,280	113	377	172	95	25	81	233	20
15	16	26	94	524	134	224	203	84	24	*464	114	22
16	16	27	*86	263	254	170	1,600	76	27	111	44	26
17	17	55	83	182	144	147	691	71	25	67	35	23
18	18	2,540	77	143	106	268	304	205	26	78	29	21
19	18	3,260	74	118	108	360	221	103	23	130	25	20
20	16	1,840	97	107	105	230	177	83	21	67	22	19
21	14	247	320	143	95	177	*151	92	20	154	21	20
22	14	151	155	251	99	147	180	73	196	159	20	25
23	16	2,620	111	151	99	130	262	61	67	93	21	22
24	19	2,100	97	1,900	94	122	156	56	37	147	69	19
25	23	*1,500	97	4,690	92	732	128	58	30	458	730	17
26	22	1,850	220	796	858	672	111	86	25	111	651	16
27	18	365	293	*332	2,130	379	121	61	272	66	133	16
28	17	701	151	233	1,150	277	357	48	88	124	73	14
29	16	615	141	184	-	208	713	45	42	65	56	12
30	16	1,240	111	170	-------	180	774	43	33	50	47	13
31	18	-------	97	151	-------	190	-------	40	-------	40	45	-------
Total	1,382	19,415	5,874	12,991	8,264	8,180	9,776	6,981	1,492	4,018	3,093	650
Mean	44.6	647	189	419	295	264	326	225	49.7	130	99.8	21.7
Cfsm	0.230	3.34	0.974	2.16	1.52	1.36	1.68	1.16	0.256	0.670	0.514	0.112
In.	0.27	3.73	1.12	2.49	1.58	1.57	1.87	1.34	0.29	0.77	0.59	0.12

Calendar year 1957: Max 3,260 Min 0.08 Mean 152 Cfsm 0.784 In. 10.62
Water year 1957-58: Max 4,690 Min 12 Mean 225 Cfsm 1.16 In. 15.74

Peak discharge (base, 2,600 cfs).--Nov. 19 (8:45 a.m.) 4,430 cfs (7.08 ft); Nov. 24 (1:45 a.m.) 4,020 cfs (6.81 ft); Nov. 26 (5:15 a.m.) 2,900 cfs (5.91 ft); Jan. 25 (10 a.m.) 5,600 cfs (7.93 ft).

* Discharge measurement made on this day.

1480. Wateree River near Camden, S. C.

Location.--Lat 34°14'40", long 80°39'15", in pier of bridge on U. S. Highway 1, 1,500 ft downstream from Twentyfivemile Creek, 4,000 ft upstream from Seaboard Air Line Railroad bridge, 2.2 miles west of Camden, Kershaw County, and 7.4 miles downstream from Wateree Dam.

Drainage area.--5,070 sq mi, approximately.

Records available.--January to December 1903 (gage heights only), October 1904 to September 1910, October 1929 to September 1958. Monthly discharge only for some periods, published in WSP 1303. Gage-height records collected at site 1½ miles downstream 1891-1934, at site 830 ft upstream January 1935 to September 1942, and at present site since October 1942, are contained in reports of U. S. Weather Bureau.

Gage.--Water-stage recorder. Datum of gage is 119.36 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. January 1903 to September 1910 staff or chain gage at site 1½ miles downstream at different datum. Oct. 1, 1929, to Sept. 1, 1942, water-stage recorder at site 830 ft upstream at present datum.

Average discharge.--35 years (1904-10, 1929-58), 6,088 cfs.

Extremes.--Maximum discharge during year, 36,800 cfs Nov. 26 (gage height, 25.20 ft); minimum daily, 330 cfs Nov. 17.

1904-10, 1929-58: Maximum discharge, 366,000 cfs Aug. 26, 1908 (gage height, 39.7 ft, site and datum then in use, from records of U. S. Weather Bureau), from rating curve extended above 122,000 cfs as described in following paragraph; minimum daily, 170 cfs June 3, 1941.

Maximum stage known, 40.4 ft July 18, 1916, at site 1½ miles downstream, from records of U. S. Weather Bureau (discharge, 400,000 cfs, from rating curve extended above 122,000 cfs on basis of computation by Duke Power Co., of peak flow of 382,000 cfs over dam at Rocky Creek Reservoir).

Remarks.--Records fair. Flow regulated since 1919 by powerplant at Wateree Reservoir (capacity, 7,626,000,000 cu ft) and by other powerplants above station.

Cooperation.--Gage-height record collected in cooperation with U. S. Weather Bureau.

Revisions (water years).--WSP 802: 1930. WSP 952: Drainage area. WSP 1082: 1934(m). WSP 1433: 1905-10.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12,000	4,080	18,200	9,440	15,900	13,400	12,600	30,000	3,600	5,190	6,710	491
2	10,900	1,330	17,200	8,170	11,100	9,480	12,500	23,400	5,860	4,010	1,390	4,570
3	10,900	460	16,600	8,560	9,890	12,200	10,800	21,800	7,320	1,360	731	5,280
4	8,200	3,710	16,300	8,670	12,200	13,000	9,880	19,200	7,060	518	5,780	4,740
5	3,250	3,710	13,100	7,820	12,300	13,100	10,200	19,500	6,530	551	7,070	2,690
6	490	3,130	10,600	7,580	9,530	13,200	8,610	17,900	6,140	674	5,630	805
7	4,740	2,990	9,660	6,980	9,260	13,100	8,620	18,500	5,110	4,530	3,670	423
8	5,320	2,680	5,890	7,430	10,500	12,400	12,600	17,800	2,780	6,130	3,260	3,200
9	4,290	976	7,470	8,070	7,480	6,180	*13,400	17,100	5,440	7,290	1,310	1,640
10	4,680	792	12,200	8,370	7,040	7,050	15,100	16,400	5,610	7,620	366	2,630
11	4,340	3,000	12,400	8,290	9,990	8,750	16,400	14,900	3,640	7,550	2,560	2,860
12	2,190	3,710	12,400	5,680	10,100	8,120	16,600	16,700	6,090	2,680	2,470	3,480
13	740	5,180	12,400	6,920	9,880	8,940	13,700	15,400	5,030	608	3,190	872
14	2,740	3,760	12,200	10,100	7,120	9,160	13,900	12,800	1,580	6,160	4,150	361
15	3,500	4,060	7,650	12,200	7,070	7,980	13,600	12,400	640	7,600	5,280	2,280
16	3,330	1,200	6,440	12,300	6,110	5,220	16,000	12,300	4,900	7,740	5,260	3,480
17	3,820	330	6,070	12,300	5,950	6,790	17,900	12,200	6,990	7,510	1,640	3,700
18	3,100	9,170	6,450	12,000	6,930	8,930	17,600	8,330	7,080	7,500	4,370	3,030
19	1,400	16,800	4,760	4,260	7,060	9,130	16,800	7,980	5,680	2,960	5,490	1,170
20	545	16,800	6,650	6,460	7,030	8,700	10,300	10,400	5,400	*618	5,230	550
21	4,000	18,000	5,750	8,830	7,800	8,090	11,000	10,800	1,970	5,880	4,250	1,440
22	5,000	17,600	4,190	8,550	7,860	7,810	12,200	9,040	714	7,660	3,390	2,730
23	5,270	18,500	5,950	8,710	3,470	3,480	12,500	8,300	5,660	6,670	1,600	2,520
24	5,560	26,500	6,900	10,700	3,720	5,800	12,600	8,520	7,480	6,840	570	1,840
25	6,390	27,200	7,530	17,800	3,270	8,190	12,500	3,000	6,060	8,130	4,900	2,310
26	3,620	33,200	8,020	17,600	6,810	8,590	12,300	5,860	6,040	7,840	9,660	4,340
27	954	*32,900	7,780	17,000	14,000	9,040	9,060	9,220	7,290	4,870	12,200	4,990
28	4,640	25,100	8,450	16,600	15,500	8,590	13,700	8,500	4,290	6,020	8,160	606
29	5,260	21,100	7,870	16,300	-	8,710	17,500	7,210	702	7,450	8,070	1,560
30	5,660	19,300	7,980	16,300	-------	6,710	27,800	6,940	4,400	7,780	4,230	2,460
31	5,130	-------	9,440	16,000	-------	8,150	-------	6,780	-------	7,480	600	-------
Total	141,959	327,268	294,500	325,990	244,870	277,990	408,270	409,180	147,086	165,419	133,187	73,048
Mean	4,579	10,910	9,500	10,520	8,745	8,967	13,610	13,200	4,903	5,336	4,296	2,435
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 33,200 Min 230 Mean 6,450 Cfsm - In. -
Water year 1957-58: Max 33,200 Min 330 Mean 8,079 Cfsm - In. -

* Discharge measurement made on this day.

1485. Broad River near Chimney Rock, N. C.

Location.--Lat 35°25'35", long 82°10'45", 1,000 ft downstream from Lake Lure Dam, 1.5 miles downstream from Buffalo Creek, and 3 miles east of Chimney Rock, Rutherford County.

Drainage area.--97 sq mi, approximately. At site used 1907-9, 100 sq mi, approximately.

Records available.--May 1907 to June 1909 (fragmentary, published as "at Uree"), March 1927 to September 1958 (discontinued). Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Altitude of gage is 860 ft (from topographic map). May 17, 1907, to June 30, 1909, staff gage at site 1 1/8 miles downstream at different datum.

Average discharge.--31 years (1927-58), 169 cfs.

Extremes.--Maximum discharge during year, 710 cfs Apr. 28, 29 (gage height, 2.45 ft); minimum, 2.7 cfs Jan. 18-20 (gage height, 0.49 ft); minimum daily, 2.7 cfs Jan. 19.
1907-9, 1927-58: Maximum discharge, 26,000 cfs Aug. 15, 1928 (gage height, 16.8 ft), from rating curve extended above 4,200 cfs on basis of computation of peak flow over Lake Lure Dam at gage heights 12.2 and 16.8 ft; minimum, 0.7 cfs Sept. 13, 1928 (gage height, 0.26 ft); minimum daily, 0.8 cfs Sept. 13, 14, 24, 26, 1928.

Remarks.--Records good except those for period of no gage-height record, which are poor. Large diurnal fluctuation and complete regulation at low flow caused by powerplant above station.

Revisions (water years).--WSP 892: 1927-28(M), 1929-30, 1933, 1935-39(M). WSP 1503: 1928, 1939.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.49	2.7	1.1	64
.5	2.9	1.3	115
.6	5.9	1.5	183
.7	10	2.0	420
.8	18	2.5	750
.9	30		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	475	144	4.4	390	157	315	481	587	4.4	172	5.9	154
2	470	138	270	464	3.8	315	481	587	228	129	7.3	150
3	464	3.5	310	464	234	315	475	555	320	8.2	8.2	149
4	*427	144	305	426	320	315	475	475	320	165	236	4.1
5	239	144	235	238	320	315	436	436	280	145	269	4.4
6	9.6	144	151	165	320	315	257	320	172	186	114	4.4
7	152	80	40	169	315	310	423	232	125	158	13	5.0
8	150	84	3.8	245	159	164	470	470	5.9	236	6.4	145
9	149	82	153	470	3.8	14	430	470	*92	325	6.8	158
10	147	5.9	228	369	227	224	315	340	134	304	7.3	149
11	147	146	320	165	246	310	320	8.2	177	235	66	5.0
12	71	166	320	169	187	*310	241	343	320	9.6	151	3.8
13	8.7	*428	320	200	256	310	5.6	481	320	10	154	3.8
14	147	470	163	305	310	310	346	436	238	130	153	4.1
15	147	390	3.8	305	153	237	512	320	6.8	176	145	150
16	147	128	298	305	5.0	3.8	535	320	150	154	5.6	151
17	151	5.0	426	232	228	218	499	170	246	172	5.6	151
18	146	147	*228	84	a320	310	499	5.3	276	172	149	3.8
19	146	225	118	2.7	a320	276	454	228	172	129	*148	3.8
20	7.7	315	165	2.9	a320	172	320	320	125	9.1	155	4.1
21	146	315	165	13	a320	172	320	320	8.2	81	148	4.4
22	146	315	165	3.2	a150	102	320	234	8.2	212	4.1	155
23	146	315	222	3.5	a5	5.0	320	320	156	320	4.1	154
24	148	315	315	82	228	123	320	166	280	252	4.7	164
25	145	412	315	315	315	172	290	6.4	176	151	156	5.6
26	144	495	315	315	310	206	320	231	176	5.3	150	5.6
27	4.4	464	315	315	315	310	315	*475	131	5.6	152	5.3
28	144	464	230	310	315	310	524	436	8.2	142	149	5.9
29	144	458	4.4	310	-	234	674	280	8.2	150	3.5	154
30	144	240	241	310	--------	202	587	212	122	145	3.8	146
31	144	--------	320	310	--------	475	--------	128	--------	149	4.1	--------
Total	5,256.4	7,182.4	6,669.4	7,457.3	6,362.6	7,369.8	11,964.6	9,911.9	4,785.9	4,637.8	2,585.4	2,203.1
Mean	170	239	215	241	227	238	399	320	160	150	83.4	73.4
Cfsm	1.75	2.46	2.22	2.48	2.34	2.45	4.11	3.30	1.65	1.55	0.860	0.757
In.	2.02	2.75	2.56	2.86	2.44	2.83	4.59	3.80	1.83	1.78	0.99	0.84

Calendar year 1957: Max 2,530 Min 3.5 Mean 191 Cfsm 1.97 In. 26.74
Water year 1957-58: Max 674 Min 2.7 Mean 209 Cfsm 2.15 In. 29.29

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of regulation pattern.

1490. Cove Creek near Lake Lure, N. C.

Location.--Lat 35°25'30", long 82°06'35", on left bank 40 ft upstream from bridge on U. S. Highways 64 and 74, 1 mile upstream from mouth, and 5 miles east of town of Lake Lure, Rutherford County, N. C.

Drainage area.--77.0 sq mi.

Records available.--January 1951 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 815.4 ft above mean sea level, datum of 1929. Prior to Dec. 20, 1954, wire-weight gage at same site and datum.

Average discharge.--7 years, 99.5 cfs.

Extremes.--Maximum discharge during year, 1,270 cfs Apr. 6 (gage height, 7.05 ft); minimum, 54 cfs Sept. 11 (gage height, 2.14 ft).

1951-58: Maximum discharge, 7,050 cfs June 5, 1957 (gage height, 18.53 ft), from rating curve extended above 4,100 cfs by logarithmic plotting; minimum, 21 cfs Sept. 8, 9, 28, 30, Oct. 1-3, 5-7, 11-13, 1954.

Flood in 1916 reached a stage of about 23 ft, from records of State Highway and Public Works Commission.

Remarks.--Records good except those for periods of ice effect, which are fair.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.1	49	4.0	446
2.3	78	5.0	705
2.6	136	6.0	970
3.0	220		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	239	82	149	144	207	237	294	283	155	106	100	70
2	184	80	142	134	180	199	237	338	170	102	96	65
3	258	78	136	130	168	182	210	283	159	100	100	65
4	*235	78	134	126	159	170	210	254	149	100	94	65
5	172	76	123	123	157	159	199	235	149	115	87	65
6	142	75	119	126	161	157	709	254	144	106	87	62
7	123	75	126	126	168	155	327	305	138	100	104	61
8	109	130	216	119	153	172	254	254	138	136	94	61
9	102	109	182	b100	144	188	*222	230	157	144	85	59
10	94	91	161	b120	142	188	283	216	*144	175	87	58
11	91	85	146	115	140	174	283	207	142	170	82	58
12	102	83	132	111	138	*165	241	203	161	163	82	65
13	91	*82	132	171	136	170	216	195	134	203	87	64
14	85	168	126	294	130	161	203	186	128	186	87	61
15	82	163	121	210	144	151	247	182	130	153	85	61
16	82	172	119	176	134	149	338	178	123	165	83	65
17	125	168	117	157	126	146	262	182	119	132	80	*62
18	121	247	*113	144	*136	168	233	182	117	121	78	70
19	98	506	115	136	b130	155	216	172	115	117	*73	59
20	91	272	440	132	b130	149	203	174	119	109	70	59
21	87	193	323	174	b130	146	195	168	121	128	70	91
22	85	168	214	182	136	140	235	163	157	130	72	73
23	83	305	182	161	136	136	218	161	136	109	73	68
24	109	239	170	413	132	140	197	165	136	109	115	65
25	92	622	161	548	130	201	218	197	119	113	126	64
26	89	386	252	283	303	188	199	186	123	102	113	62
27	87	247	212	230	453	207	201	*168	126	102	87	61
28	85	205	188	199	327	195	634	159	113	100	78	58
29	83	182	170	*186	-	180	398	153	111	100	75	57
30	83	168	157	174	-------	214	305	149	107	94	72	61
31	83	-------	146	170	-------	555	-------	151	-------	111	72	-------
Total	3,592	5,535	5,224	5,612	4,730	5,697	8,187	6,333	4,040	3,903	2,694	1,915
Mean	116	184	169	181	169	184	273	204	135	126	86.9	63.8
Cfsm	1.51	2.39	2.19	2.35	2.19	2.39	3.55	2.65	1.75	1.64	1.13	0.829
In.	1.73	2.67	2.52	2.71	2.28	2.75	3.95	3.06	1.95	1.88	1.30	0.92

Calendar year 1957: Max 3,110 Min 46 Mean 144 Cfsm 1.87 In. 25.32
Water year 1957-58: Max 709 Min 57 Mean 157 Cfsm 2.04 In. 27.72

Peak discharge (base, 700 cfs).--Nov. 19 (10 a.m.) 810 cfs (5.42 ft); Nov. 25 (10 a.m.) 890 cfs (5.67 ft); Dec. 20 (5 p.m.) 945 cfs (5.94 ft); Jan. 24 (11 p.m.) 1,120 cfs (6.48 ft); Mar. 31 (6 a.m.) 810 cfs (5.40 ft); Apr. 6 (6 a.m.) 1,270 cfs (7.05 ft); Apr. 28 (10 a.m.) 945 cfs (5.87 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

1510. Second Broad River at Cliffside, N. C.

Location.--Lat 35°14', long 81°46', on left bank a quarter of a mile downstream from dam at Cliffside Mills, at Cliffside, Rutherford County, and 1½ miles upstream from mouth.

Drainage area.--211 sq mi.

Records available.--June 1925 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 670 ft (by barometer).

Average discharge.--33 years, 286 cfs.

Extremes.--Maximum discharge during year, 4,000 cfs Apr. 7 (gage height, 6.34 ft); minimum, 13 cfs Oct. 20 (gage height, 0.63 ft); minimum daily, 91 cfs Sept. 14.
1925-58: Maximum discharge, 15,000 cfs Aug. 14, 1940 (gage height, 17.93 ft), from rating curve extended above 9,100 cfs on basis of computation of peak flow over Cliffside Mills dam; minimum (revised), 4 cfs Sept. 27, 1935, Aug. 3, 1937, July 24, 1943; minimum daily, 6 cfs June 9, 1940.
Revisions.--The figures of minimum discharge for some water years have been revised, as shown in the following table. They supersede figures published in the water-supply papers indicated.

WSP	Water year	Date	Discharge (cfs)	Gage height (feet)
782	1935	Sept. 27, 1935	4	0.41
802	1936	Oct. 6, 1935	6	.46
822	1937	Aug. 3, 1937	4	.40
852	1938	Aug. 26, 1938	7	.50
872	1939	Sept. 30, 1939	7	.50

Remarks.--Records good. Considerable diurnal fluctuation and some regulation caused by mills above station. Records of chemical analyses and water temperatures for the water year 1958 are given in WSP 1571.

Revisions (water years).--WSP 892: 1928(M), drainage area.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.1	81	2.5	735
1.3	137	3.0	1,110
1.5	208	4.0	1,930
2.0	445	6.0	3,730

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	890	178	325	310	572	709	1,070	756	345	221	197	116
2	599	161	355	330	430	544	670	1,170	533	237	229	197
3	456	164	320	295	456	484	544	1,360	395	229	282	147
4	*467	197	345	233	330	420	555	798	375	225	242	154
5	390	154	272	264	360	405	489	652	345	242	221	161
6	290	178	305	277	385	368	1,950	634	315	282	182	154
7	320	168	264	264	370	383	2,950	1,230	315	295	197	110
8	250	190	498	272	493	370	854	928	310	277	225	168
9	242	320	565	272	415	410	652	676	335	305	201	154
10	212	154	456	250	390	506	599	489	305	315	190	137
11	208	212	395	229	440	335	690	533	*282	335	229	137
12	246	*171	295	216	315	400	572	533	264	242	197	154
13	186	178	340	335	305	390	472	494	286	310	264	154
14	229	190	264	635	325	365	472	430	286	390	254	91
15	186	250	300	577	300	405	484	430	225	300	237	164
16	201	340	330	484	330	282	833	435	330	359	186	161
17	304	315	*259	370	325	385	670	415	259	366	178	147
18	504	1,150	282	310	229	345	550	430	259	295	*225	161
19	420	2,350	254	315	272	405	496	410	264	375	178	164
20	134	1,710	345	345	345	365	449	435	268	190	161	134
21	264	670	577	355	300	355	435	405	237	451	175	290
22	246	500	440	544	282	295	500	385	310	471	151	276
23	197	1,090	380	395	315	305	646	365	345	310	200	171
24	190	840	315	908	360	340	445	385	310	242	131	164
25	201	1,580	330	2,290	264	484	500	385	259	310	1,360	164
26	190	2,010	572	1,150	598	533	463	*500	277	237	315	164
27	193	798	533	658	1,550	500	482	380	272	237	250	154
28	204	560	430	533	1,470	467	2,910	355	282	282	197	97
29	182	528	380	*467	-	435	2,720	325	204	225	182	178
30	182	450	375	375	-------	456	1,110	365	237	*208	201	168
31	186	-------	350	410	-------	1,270	-------	295	-------	201	230	-------
Total	8,969	17,756	11,451	14,668	12,526	13,716	26,232	17,383	9,029	8,964	7,667	4,791
Mean	289	592	369	473	447	442	874	561	301	289	247	160
Cfsm	1.37	2.81	1.75	2.24	2.12	2.09	4.14	2.66	1.43	1.37	1.17	0.758
In.	1.58	3.13	2.02	2.59	2.21	2.42	4.62	3.06	1.59	1.58	1.35	0.84

Calendar year 1957: Max 4,440 Min 50 Mean 332 Cfsm 1.57 In. 21.38
Water year 1957-58: Max 2,950 Min 91 Mean 420 Cfsm 1.99 In. 26.99

Peak discharge (base, 3,000 cfs).--Apr. 7 (1 a.m.) 4,000 cfs (6.34 ft); Apr. 28 (7 p.m.) 3,730 cfs (6.00 ft).

* Discharge measurement made on this day.

1515. Broad River near Boiling Springs, N. C.

Location.--Lat 35°12'35", long 81°41'50", on right bank half a mile upstream from Sandy Run Creek, 3 miles downstream from Second Broad River, and 3½ miles southwest of Boiling Springs, Cleveland County.

Drainage area.--864 sq mi.

Records available.--June 1925 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 639.92 ft above mean sea level (Duke Power Co. bench mark). Prior to July 20, 1934, at site 500 ft upstream at datum 1 ft higher.

Average discharge.--33 years, 1,384 cfs.

Extremes.--Maximum discharge during year, 15,400 cfs Nov. 19 (gage height, 10.37 ft); minimum, 450 cfs Sept. 28 (gage height 1.73 ft); minimum daily, 483 cfs Sept. 14.
1925-58: Maximum discharge, 73,300 cfs Aug. 16, 1928 (gage height, 24.3 ft, former site, present datum); minimum, 40 cfs Oct. 17, 1954 (gage height, 1.02 ft); minimum daily, 105 cfs Oct. 10, 1954.

Remarks.--Records good. Considerable diurnal fluctuation and some regulation caused by powerplants above station. Records of chemical analyses and water temperatures for the water year 1958 are given in WSP 1571.

Revisions (water years).--WSP 892: 1928, drainage area.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 19				Nov. 20 to Sept. 30			
2.0	705	6.0	6,240	1.7	425	5.0	4,750
2.5	1,310	8.0	9,800	2.0	690	6.0	6,240
3.0	1,990	9.0	12,000	2.5	1,250	8.0	9,800
5.0	4,790			3.0	1,900	9.0	12,000

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,810	1,050	1,840	1,640	2,650	3,010	4,200	3,950	1,640	1,050	1,140	561
2	2,970	1,050	1,420	1,610	1,900	2,240	3,300	5,050	1,520	1,260	954	750
3	*2,410	804	1,640	1,900	1,770	2,040	2,650	4,750	1,840	1,200	1,020	822
4	2,620	705	1,970	1,630	1,970	1,970	2,380	3,370	*2,040	897	811	790
5	2,410	1,160	1,700	1,560	1,840	2,110	2,510	3,230	1,970	1,080	1,380	730
6	2,040	978	1,540	1,550	2,110	2,040	8,480	3,370	1,770	1,350	1,230	710
7	1,300	930	1,380	1,420	1,900	1,970	7,780	4,600	1,550	1,350	1,090	526
8	1,310	1,060	1,760	1,290	2,240	2,110	3,880	3,660	1,190	1,300	998	570
9	1,240	1,280	2,110	1,420	1,770	1,900	3,300	3,370	1,090	1,640	908	811
10	1,130	930	1,900	1,700	1,350	1,500	3,160	3,160	1,430	1,640	740	760
11	1,140	760	1,640	1,480	1,840	2,160	3,590	2,210	1,560	1,900	740	790
12	1,240	1,160	1,510	1,380	1,900	2,240	2,800	1,970	1,540	1,550	987	710
13	1,040	1,030	1,910	1,200	*1,540	1,970	2,180	2,800	1,590	1,610	1,110	710
14	793	1,440	1,640	2,380	1,550	2,040	2,110	2,510	1,590	1,480	1,160	483
15	1,090	1,770	1,350	2,580	1,840	1,770	2,720	2,240	1,300	1,770	1,120	552
16	1,060	2,380	1,010	2,110	1,700	1,630	4,170	2,180	1,190	1,640	1,060	844
17	1,500	2,000	*1,590	1,770	1,250	1,170	3,520	2,040	1,300	1,900	681	833
18	2,220	3,490	1,600	1,640	1,440	1,900	2,800	2,240	1,420	1,700	*690	822
19	1,480	10,100	1,520	1,420	1,770	2,110	2,650	2,040	1,460	1,900	958	690
20	1,150	5,490	1,520	1,350	1,770	1,900	2,440	2,310	1,350	1,060	931	643
21	1,000	3,230	2,800	1,470	1,700	1,840	2,310	2,240	1,200	1,230	991	930
22	1,170	2,650	2,240	2,110	1,370	1,520	2,580	1,900	1,110	2,110	885	854
23	1,080	4,360	1,700	1,630	1,020	1,200	2,940	1,770	1,070	1,700	827	844
24	1,060	3,300	1,980	3,400	1,030	1,070	2,380	2,110	1,420	1,610	634	854
25	1,220	5,210	1,840	7,210	1,350	1,900	2,380	1,590	1,480	1,480	4,530	844
26	1,170	5,940	2,430	4,020	2,480	2,240	2,040	1,770	1,590	1,320	1,900	780
27	1,120	3,660	2,510	3,010	5,490	2,380	2,160	2,040	1,430	854	1,370	700
28	954	2,800	2,110	*2,650	4,900	2,380	11,600	1,970	1,370	865	1,090	561
29	1,100	2,650	1,700	2,240	-	1,970	9,840	1,970	844	1,210	987	561
30	1,120	2,240	1,540	2,040	-------	1,900	4,980	1,900	833	1,210	1,080	816
31	1,030	-------	1,700	1,970	-------	4,570	-------	1,610	-------	1,200	739	-------
Total	45,977	75,607	55,100	64,780	55,440	62,750	113,850	81,920	42,687	44,066	34,741	21,851
Mean	1,483	2,520	1,777	2,090	1,980	2,024	3,795	2,643	1,423	1,421	1,121	728
Cfsm	1.72	2.92	2.06	2.42	2.29	2.34	4.39	3.06	1.65	1.64	1.30	0.843
In.	1.98	3.25	2.37	2.79	2.39	2.70	4.90	3.53	1.84	1.90	1.50	0.94

Calendar year 1957: Max 14,300 Min 354 Mean 1,597 Cfsm 1.85 In. 25.08
Water year 1957-58: Max 11,600 Min 483 Mean 1,914 Cfsm 2.22 In. 30.09

Peak discharge (base, 9,000 cfs).--Nov. 19 (8 a.m.) 15,400 cfs (10.37 ft); Apr. 6 (10 p.m.) 12,200 cfs (9.06 ft); Apr. 28 (4 p.m.) 15,100 cfs (10.32 ft).

* Discharge measurement made on this day.

1525. First Broad River near Lawndale, N. C.

Location.--Lat 35°22'50", long 81°32'40", on left bank 0.2 mile upstream from Shoal Rock Creek, 0.4 mile downstream from highway bridge at Double Shoals, and 2½ miles southeast of Lawndale, Cleveland County.

Drainage area.--198 sq mi.

Records available.--February 1940 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 735.94 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--18 years, 260 cfs.

Extremes.--Maximum discharge during year, 6,320 cfs Apr. 28 (gage height, 15.15 ft); minimum, 35 cfs July 20; minimum daily, 84 cfs Sept. 28.

1940-58: Maximum discharge, 32,500 cfs Aug. 14, 1940 (gage height, 37.8 ft), from rating curve extended above 12,000 cfs on basis of records for nearby streams; minimum, 13 cfs Sept. 18, 1955; minimum daily, 17 cfs Aug. 11, 1956.

Flood in July 1916 reached a stage of 37.8 ft, from floodmark established by local resident.

Remarks.--Records good except those above 3,000 cfs, which are fair. Considerable diurnal fluctuation and slight regulation at low flow caused by powerplants and mills above station.

Revisions (water years).--WSP 952: Drainage area. WSP 1142: 1945-46(M).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.7	65	4.0	1,220
2.0	141	6.0	2,040
2.5	365	8.0	2,870
3.0	650	12.0	4,650

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	602	155	400	290	512	620	860	710	324	201	240	155
2	442	155	325	290	395	476	578	1,630	450	197	242	158
3	*365	158	300	270	360	410	500	1,150	330	205	382	152
4	300	158	300	242	340	395	470	770	310	201	316	*158
5	227	148	280	218	340	370	432	632	315	214	189	152
6	201	155	280	242	340	355	3,160	650	315	227	197	141
7	193	155	251	246	411	345	1,460	1,280	325	210	197	110
8	189	214	545	246	494	345	758	770	290	242	218	129
9	180	205	566	242	380	400	578	602	285	280	372	138
10	166	180	405	232	365	395	668	524	275	270	169	135
11	166	155	355	277	350	*380	614	478	275	275	162	138
12	169	*158	315	214	330	370	506	448	280	232	180	166
13	162	162	290	265	325	360	476	432	*242	325	210	131
14	155	162	251	548	320	350	420	405	227	385	265	109
15	158	193	265	448	290	295	492	390	227	270	205	129
16	162	295	265	375	300	315	813	375	260	242	197	135
17	205	290	256	340	265	315	614	385	242	270	141	*141
18	509	1,600	246	270	237	355	518	401	227	242	*155	138
19	265	3,450	246	285	335	345	464	360	227	300	184	141
20	214	1,140	355	265	335	345	437	370	242	243	176	132
21	189	686	512	315	310	330	410	375	227	632	169	394
22	189	482	355	442	280	265	530	350	375	335	166	166
23	176	1,370	315	380	270	300	*590	340	280	265	155	158
24	197	800	300	979	290	310	454	340	285	251	251	148
25	205	2,540	290	2,160	285	432	542	340	251	246	810	138
26	169	1,450	512	860	730	410	482	*470	232	218	232	152
27	162	770	426	572	1,600	420	673	350	242	193	210	141
28	172	512	390	*448	1,030	400	*4,350	330	214	193	184	84
29	162	459	315	400	-	375	*1,730	325	184	*218	184	118
30	158	380	325	375	-------	465	835	300	205	201	166	132
31	162	-------	290	370	-------	1,390	-------	290	-------	205	148	-------
Total	6,971	18,737	10,526	13,056	11,799	12,638	25,414	16,570	8,123	7,988	7,072	4,419
Mean	225	625	340	421	421	408	847	535	271	258	228	147
Cfsm	1.14	3.16	1.72	2.13	2.13	2.06	4.28	2.70	1.37	1.30	1.15	0.742
In.	1.31	3.52	1.98	2.45	2.22	2.37	4.77	3.11	1.53	1.50	1.33	0.83

Calendar year 1957: Max 4,760 Min 68 Mean 322 Cfsm 1.63 In. 22.10
Water year 1957-58: Max 4,350 Min 84 Mean 393 Cfsm 1.98 In. 26.92

Peak discharge (base, 5,000 cfs).--Nov. 19 (5 a.m.) 5,350 cfs (13.47 ft); Apr. 28 (10 a.m.) 6,320 cfs (15.15 ft).

* Discharge measurement made on this day.

1535. Broad River near Gaffney, S. C.

Location.--Lat 35°05'20", long 81°34'20", on right bank at downstream side of bridge on U. S. Highway 29A, 0.3 mile upstream from Cherokee Creek, 4.4 miles downstream from Gaston Shoals Dam, and 4.5 miles east of Gaffney, Cherokee County.

Drainage area.--1,490 sq mi, approximately.

Records available.--July 1896 to December 1899 (gage heights and discharge measurements only), October 1938 to September 1958. Monthly discharge only for some periods, published in WSP 1303. Discharges for July 12, 1896, to Dec. 31, 1899, published in the 18th, 19th, and 21st Annual Reports, Part 4, have been found to be unreliable and should not be used.

Gage.--Water-stage recorder. Datum of gage is 539.10 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. July 12, 1896, to Dec. 31, 1899, chain or staff gages at sites 1.1 miles upstream at different datum.

Average discharge.--20 years (1938-58), 2,308 cfs.

Extremes.--Maximum discharge during year, 37,900 cfs Apr. 28 (gage height, 12.72 ft); minimum, 436 cfs July 3; minimum daily, 900 cfs Sept. 7.
1938-58: Maximum discharge, 119,000 cfs Aug. 14, 1940 (gage height, 19.78 ft); by computation of flow over Gaston Shoals Dam; minimum, 140 cfs Oct. 24, 1954; minimum daily, 224 cfs Oct. 24, 1954.

Remarks.--Records good except those for periods of doubtful or no gage-height record, which are fair. Some regulation at medium and low flow by powerplants above stations. Capacity of reservoirs insufficient to affect monthly figures of runoff.

Revisions.--WSP 972: Drainage area. See also Records available.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Nov. 21 to Jan. 24, Apr. 30 to July 28)

3.3	893	8.0	12,800
3.5	1,120	10.0	21,400
4.0	1,890	11.0	26,600
6.0	6,400		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,400	1,560	3,200	2,670	4,880	6,120	8,560	7,000	2,870	1,260	1,900	1,210
2	5,370	1,540	2,600	2,470	4,060	4,640	6,010	8,000	3,900	1,840	2,520	1,260
3	4,180	1,340	2,600	2,870	3,080	3,950	5,120	9,500	3,510	1,770	1,950	1,420
4	3,840	1,210	3,000	2,530	3,290	3,510	4,300	7,000	3,080	1,340	3,070	1,350
5	3,620	1,500	2,800	2,450	3,290	3,620	4,300	5,500	*3,180	1,480	2,200	*1,260
6	3,080	*1,440	2,400	2,390	3,510	3,290	14,000	5,000	2,980	1,900	2,020	1,000
7	2,080	1,430	2,200	2,270	3,510	3,510	16,400	7,500	2,770	2,060	1,840	900
8	1,890	1,530	3,000	2,100	4,060	3,620	7,060	7,500	2,180	3,110	1,660	1,000
9	1,910	2,230	3,800	2,080	3,620	3,510	5,750	6,000	1,980	3,620	1,850	1,300
10	1,610	1,710	3,400	2,550	2,670	*3,080	5,360	5,500	2,190	2,770	1,540	1,300
11	1,620	1,370	2,800	2,370	2,980	3,510	6,270	4,800	2,510	2,670	1,290	1,200
12	1,760	1,520	2,600	2,140	3,180	3,730	5,000	3,600	2,290	2,770	1,480	1,300
13	1,650	1,540	2,800	1,890	2,870	3,510	4,180	3,600	2,450	2,070	1,950	1,300
14	1,340	1,890	2,800	3,780	2,670	3,400	3,620	4,200	2,330	3,400	2,510	1,200
15	1,430	2,290	2,400	4,300	2,870	3,290	4,180	3,800	2,100	2,980	2,020	1,100
16	1,590	4,270	1,800	3,620	2,980	2,870	7,520	3,200	1,970	*2,610	1,730	1,200
17	1,880	3,730	2,200	2,980	2,510	2,330	6,270	3,400	1,950	2,770	1,320	1,300
18	3,520	6,840	*2,600	2,770	2,100	3,080	5,000	3,800	2,140	2,530	1,210	1,300
19	2,530	24,500	2,400	2,330	2,870	3,620	4,600	3,600	2,180	3,530	1,430	1,200
20	1,840	16,000	2,200	2,230	3,080	3,400	4,200	3,600	2,080	1,910	1,500	1,200
21	1,640	6,000	4,200	2,350	2,980	3,290	*4,000	3,600	1,870	2,960	1,550	1,600
22	1,640	4,800	3,600	3,510	2,770	2,980	4,400	3,400	1,800	5,490	1,420	1,900
23	1,710	9,500	2,800	3,080	2,080	2,370	5,500	2,800	1,890	2,870	1,270	1,300
24	1,570	8,500	3,000	5,040	2,080	2,140	4,200	3,000	2,020	2,770	1,590	1,400
25	1,750	10,000	2,800	15,100	2,310	3,480	4,200	3,000	2,270	2,430	7,210	1,300
26	1,790	15,000	3,840	8,440	4,290	3,950	4,000	3,000	2,270	2,180	4,370	1,400
27	1,690	7,000	4,410	*5,490	10,300	4,060	4,000	3,000	2,210	1,520	2,670	1,300
28	1,480	5,000	3,620	4,640	10,700	4,060	24,000	3,200	2,000	1,710	2,080	1,000
29	1,540	4,400	2,980	4,060	-	3,730	26,000	3,200	1,470	3,190	1,780	1,200
30	1,650	4,200	2,630	3,510	-------	3,510	11,000	2,800	1,290	2,190	1,710	1,200
31	1,540	-------	2,670	3,290	-------	10,100	-------	2,800	-------	1,950	1,500	---------
Total	71,140	153,840	90,150	111,300	101,590	115,240	219,000	139,900	69,730	77,650	64,140	37,900
Mean	2,295	5,128	2,908	3,590	3,628	3,717	7,300	4,513	2,324	2,505	2,069	1,263
Cfsm	1.54	3.44	1.95	2.41	2.43	2.49	4.90	3.03	1.56	1.68	1.39	0.848
In.	1.78	3.84	2.25	2.78	2.53	2.87	5.47	3.49	1.74	1.94	1.60	0.95

Calendar year 1957: Max 24,500 Min 381 Mean 2,640 Cfsm 1.77 In. 24.07
Water year 1957-58: Max 26,000 Min 900 Mean 3,429 Cfsm 2.30 In. 31.24

Peak discharge (base, 16,000 cfs).--Nov. 19 (7:45 p.m.) 31,000 cfs (11.71 ft); Nov. 26 (2:30 a.m.) 18,600 cfs (9.50 ft); Jan. 25 (11 a.m.) 16,800 cfs (8.97 ft); Apr. 7 (12:45 a.m.) 22,900 cfs (10.26 ft); Apr. 28 (8:45 p.m.) 37,900 cfs (12.72 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Sept. 6-30; discharge estimated on basis of weather records and powerplant records. Doubtful gage-height record Nov. 20 to Dec. 25, Apr. 18 to May 31; discharge computed from partly reconstructed gage-height graph.

1545. North Pacolet River at Fingerville, S. C.

Location.--Lat 35°07', long 81°59', on right bank at McMillin Mill, about 400 ft downstream from Obed Creek and 1 mile south of Fingerville, Spartanburg County.

Drainage area.--116 sq mi.

Records available.--October 1929 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 715.56 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Nov. 24, 1933, at site about 400 ft downstream at datum 5.60 ft higher.

Average discharge.--29 years, 199 cfs.

Extremes.--Maximum discharge during year, 3,480 cfs Apr. 29 (gage height, 12.25 ft); minimum, 83 cfs Sept. 20; minimum daily, 94 cfs Sept. 28, 29.
1929-58: Maximum discharge, 12,500 cfs Aug. 14, 1940 (gage height, 27.13 ft), from rating curve extended above 3,300 cfs on basis of computation of peak flow over dam 2 miles above station; minimum, 9 cfs Oct. 6, 1954; minimum daily, 28 cfs Oct. 6, 7, 1954.

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

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Nov. 18-27, Apr. 24 to May 17)

3.2	80	7.0	1,330
3.5	134	9.0	2,130
4.0	265	11.0	3,030

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	510	128	223	198	377	402	720	528	217	138	138	136
2	352	126	212	188	298	307	430	545	240	134	145	120
3	286	124	203	180	256	265	342	632	223	130	152	118
4	324	120	201	175	234	243	332	458	*214	128	154	*118
5	262	118	188	168	228	228	314	377	214	161	134	118
6	214	*116	183	168	234	223	772	388	206	193	130	112
7	190	114	183	173	277	226	1,570	562	223	170	128	112
8	166	148	292	168	282	226	580	510	203	220	126	109
9	154	188	259	154	237	254	416	398	196	212	124	105
10	145	138	223	158	231	276	416	363	188	183	116	103
11	138	126	203	158	226	237	458	338	180	170	114	103
12	183	122	183	156	220	*226	380	328	178	161	112	109
13	168	120	173	184	214	234	332	318	175	154	118	110
14	143	139	175	370	209	240	310	293	168	212	126	105
15	136	185	178	259	214	220	380	276	166	178	120	107
16	134	323	173	217	220	214	738	268	166	162	130	116
17	263	332	*168	198	196	212	632	259	158	*246	124	107
18	312	475	166	185	196	258	433	282	156	196	116	103
19	196	1,170	163	178	201	259	370	272	154	231	107	100
20	168	1,040	239	175	201	234	342	268	156	170	105	98
21	154	436	430	233	201	223	313	265	156	282	101	220
22	145	318	276	328	209	214	412	250	190	286	100	154
23	141	598	226	243	212	212	*458	243	180	206	109	122
24	166	430	209	466	201	212	321	237	168	183	158	116
25	178	668	206	678	198	349	279	240	156	178	854	107
26	149	895	384	632	338	318	246	253	152	161	986	105
27	143	475	307	349	632	356	286	234	166	156	250	100
28	138	346	250	282	650	318	1,230	228	154	165	185	94
29	132	290	228	*253	-	282	*2,630	220	145	154	158	94
30	130	256	214	240	-------	307	870	214	141	145	143	96
31	130	-------	203	228	-------	650	-------	212	-------	138	138	-------
Total	6,050	10,064	6,921	7,942	7,392	8,425	17,312	10,259	5,389	5,603	5,701	3,417
Mean	195	335	223	256	264	272	577	331	180	181	184	114
Cfsm	1.68	2.89	1.92	2.21	2.28	2.34	4.97	2.85	1.55	1.56	1.59	0.983
In.	1.94	3.22	2.21	2.55	2.37	2.70	5.54	3.29	1.73	1.80	1.83	1.10

Calendar year 1957: Max 1,960 Min 49 Mean 197 Cfsm 1.70 In. 23.02
Water year 1957-58: Max 2,630 Min 94 Mean 259 Cfsm 2.23 In. 30.28

Peak discharge (base, 1,600 cfs).--Nov. 19 (8:15 a.m.) 1,690 cfs (7.80 ft); Apr. 7 (7 a.m.) 2,130 cfs (8.95 ft); Apr. 29 (6:30 a.m.) 3,480 cfs (12.25 ft); Aug. 26 (3:45 a.m.) 1,610 cfs (7.70 ft).

* Discharge measurement made on this day.

1550. South Pacolet River Reservoir near Fingerville, S. C.

Location.--Lat 35°07', long 81°59', on downstream side of right pier of highway bridge, 1 mile upstream from dam and 1¾ miles south of Fingerville, Spartanburg County.

Drainage area.--92 sq mi, approximately.

Records available.--March 1930 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 761.18 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Extremes.--Maximum gage height during year, 18.03 ft Nov. 19; minimum, 11.55 ft Jan. 21. 1930-58: Maximum gage height, that of Nov. 19, 1957; minimum, 2.76 ft Oct. 8, 1930.

Remarks.--Reservoir is formed by concrete dam completed in 1926. Capacity, 1,104,000,000 gal between gage heights 0.0 ft (limit of drawdown) and 17.0 ft (top of new gates completed in August 1956). Dead storage is about 350,000,000 gal. Figures given herein represent usable contents. Spillway crest is at gage height 12.0 ft. City of Spartanburg diverted about 9,942,000 gal per day (15.4 cfs) from reservoir for municipal supply during water year 1958. Surplus water is used for generation of power.

Revisions (water years).--WSP 1383: 1933, 1947-48.

Capacity table, water year 1957-58 (gage height, in feet, and usable contents, in millions of gallons)
(Prepared by engineers for the Board of Water Commissioners, city of Spartanburg, S. C., in 1929, from contour survey)

10	465
15	879
17.6	1,181

Mean gage height, in feet, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17.05	g15.81	16.42	16.01	16.78	17.03	17.12	16.36	16.37	14.43	14.45	12.75
2	16.91	g15.84	16.51	15.96	17.10	17.28	16.49	16.47	16.31	14.50	14.51	12.90
3	16.90	g15.94	16.28	15.71	17.10	17.11	17.03	16.58	16.09	14.55	14.62	13.00
4	16.87	g16.08	16.12	15.46	17.00	16.83	17.12	16.60	15.43	14.59	14.69	13.07
5	16.80	16.07	15.94	15.24	16.89	16.77	16.92	16.18	14.78	14.64	14.68	13.12
6	16.61	16.04	15.71	14.98	16.80	16.71	17.09	15.87	14.43	14.68	14.67	13.19
7	16.59	15.99	15.51	14.62	16.89	16.66	17.44	16.12	14.38	14.73	14.63	13.28
8	16.30	16.01	15.67	14.21	17.10	16.64	17.03	16.55	14.37	14.70	14.58	13.31
9	15.96	16.32	16.17	13.79	17.16	16.74	17.20	16.27	14.37	14.76	14.51	13.32
10	15.80	16.50	16.40	13.38	17.07	16.83	17.13	15.70	14.22	14.32	14.50	13.59
11	15.76	16.48	16.45	12.90	16.51	16.59	17.20	15.84	13.98	13.96	14.55	13.89
12	15.75	16.38	16.37	12.59	15.87	16.49	17.16	15.76	14.14	13.52	14.57	13.91
13	16.01	16.27	16.18	12.53	15.45	16.36	17.21	15.10	14.29	13.43	14.57	13.92
14	16.18	16.17	15.97	12.76	15.29	16.28	17.06	15.23	14.34	13.53	14.62	14.07
15	16.13	16.03	15.94	13.11	15.17	16.15	16.72	14.87	14.44	13.66	15.01	14.09
16	15.97	16.28	15.90	13.12	15.16	16.02	16.89	14.39	14.61	13.91	14.97	14.11
17	16.00	17.06	15.60	12.91	15.18	15.88	16.75	14.28	14.76	14.09	14.64	14.16
18	16.46	17.20	15.40	12.64	15.08	15.76	15.77	14.28	14.89	14.32	14.42	14.17
19	17.17	17.18	15.09	12.34	14.68	15.89	15.78	14.39	15.01	14.38	14.48	14.12
20	17.21	17.03	14.86	11.97	14.24	15.93	16.00	14.40	15.16	14.61	14.42	14.09
21	17.07	16.22	15.12	11.62	13.83	15.82	16.22	14.45	15.29	14.86	14.41	14.40
22	16.73	16.45	15.79	11.68	13.49	15.74	16.18	14.46	15.29	15.23	14.37	14.67
23	g16.40	16.86	16.10	11.84	13.47	15.70	16.65	14.75	15.21	14.54	14.29	14.62
24	g16.04	17.50	16.17	12.27	13.41	15.63	16.22	15.29	15.03	14.00	14.17	14.25
25	g15.78	16.95	16.24	15.12	13.10	15.68	15.87	15.78	14.74	13.60	14.22	14.00
26	g15.58	17.00	16.56	17.63	12.95	16.10	15.60	16.27	14.29	13.56	15.26	13.86
27	g15.53	17.38	17.11	17.23	13.49	16.50	15.87	16.58	14.02	13.76	15.37	13.82
28	g15.48	17.17	16.98	16.95	15.34	16.89	16.55	16.72	14.09	13.87	14.95	13.84
29	g15.47	16.91	16.80	16.60	-	17.12	16.71	16.77	14.25	14.03	13.96	13.86
30	g15.48	16.56	16.83	16.62	-------	17.22	16.62	16.63	14.33	14.22	13.07	13.82
31	g15.63	-------	16.22	16.63	-------	17.10	-------	16.44	-------	14.42	12.69	-------
(†)	956	1,024	991	1,064	1,046	1,137	1,052	1,026	817	827	664	764
(‡)	-9.4	+3.5	-1.6	+3.6	-1.0	+4.5	-4.4	-1.3	-10.8	+0.5	-8.1	+5.2

Calendar year 1957..... ‡ +0.3
Water year 1957-58..... ‡ -1.6

† Contents, in millions of gallons, at 12 p.m. on last day of month.
‡ Change in contents, equivalent in cubic feet per second.
g Computed from recording-gage record at powerhouse.

1555. Pacolet River near Fingerville, S. C.

Location.--Lat 35°07', long 81°58', on right bank 100 ft upstream from highway bridge, a quarter of a mile downstream from confluence of North Pacolet and South Pacolet Rivers, and 2½ miles southeast of Fingerville, Spartanburg County.

Drainage area.--212 sq mi.

Records available.--October 1929 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 706.33 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--29 years, 327 cfs.

Extremes.--Maximum discharge during year, 5,450 cfs Apr. 29 (gage height, 8.20 ft); minimum daily, 109 cfs Sept. 10.
1929-58: Maximum discharge, 22,800 cfs Aug. 14, 1940 (gage height, 22.43 ft), from rating curve extended above 9,600 cfs by velocity-area studies; minimum daily, 32 cfs Oct. 6, 7, 1954.
Maximum stage known, 46 ft in June 1903, from floodmark (discharge not determined).

Remarks.--Records good except those for period of no gage-height record, which are fair. Some regulation by South Pacolet River Reservoir (see preceding page). Some diurnal fluctuation caused by mill on North Pacolet River. About 9,942,000 gal per day (15.4 cfs) diverted above station for city of Spartanburg water supply during the water year 1958.

Revisions (water years).--WSP 1303: 1930-39 (monthly and yearly runoff).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.4	90	2.0	697
.5	111	4.0	2,040
1.0	248	6.0	3,470
1.5	446	7.0	4,300

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,070	189	344	320	564	680	1,520	1,180	347	198	200	186
2	750	186	340	316	455	526	761	953	409	195	202	181
3	583	175	360	320	446	516	511	1,080	423	186	213	178
4	508	178	332	298	398	455	580	842	*493	192	248	*167
5	537	*189	324	294	381	394	585	863	*389	269	208	167
6	348	186	313	305	394	385	1,200	650	344	298	210	162
7	338	186	302	316	420	389	2,460	847	332	283	189	162
8	320	213	372	309	451	389	1,110	822	332	353	189	154
9	279	257	398	290	402	379	708	814	297	433	186	135
10	235	229	364	298	454	511	697	642	328	394	167	109
11	216	216	344	299	474	*424	784	497	271	335	164	125
12	258	213	320	262	469	381	664	704	240	329	159	152
13	252	207	328	282	377	394	511	545	248	267	178	152
14	229	230	298	516	364	415	585	514	242	322	183	139
15	232	302	290	420	360	377	657	545	232	276	172	165
16	226	462	305	368	356	360	1,150	497	226	242	238	164
17	355	516	299	336	330	377	1,370	455	216	*328	235	154
18	443	3,170	*309	313	322	424	867	442	216	294	175	152
19	377	2,650	305	302	363	420	632	428	210	332	164	149
20	302	2,320	375	316	368	402	483	415	207	283	154	144
21	305	875	553	369	385	381	516	433	234	375	152	264
22	298	516	385	474	368	356	*602	369	270	630	154	288
23	294	831	344	385	344	340	753	307	309	549	182	a280
24	312	813	316	688	356	368	780	290	302	381	239	a240
25	298	1,360	305	1,140	364	508	565	302	290	304	1,050	a200
26	262	1,410	488	1,280	550	492	526	321	287	232	1,620	a190
27	238	987	512	765	972	526	469	335	258	222	626	a160
28	198	600	497	*565	940	469	2,080	332	222	224	446	a140
29	195	530	336	464	-	437	*4,270	357	216	207	415	a150
30	192	497	401	406	-------	509	2,110	352	201	192	303	a150
31	189	-------	392	398	-------	1,180	-------	352	-------	192	227	---------
Total	10,639	20,693	11,151	13,414	12,427	14,164	30,506	17,485	8,591	9,317	9,248	5,159
Mean	343	690	360	433	444	457	1,017	564	286	301	298	172
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 3,310 Min 73 Mean 336 Cfsm - In. -
Water year 1957-58: Max 4,270 Min 109 Mean 446 Cfsm - In. -

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, records for Pacolet River near Clifton, North Pacolet River at Fingerville, and records of powerplant operation on South Pacolet River.

1560. Pacolet River near Clifton, S. C.

Location.--Lat 34°58'10", long 81°48'05", on left bank 1.2 miles downstream from dam at Clifton Mill 2, 1.3 miles southeast of Clifton, Spartanburg County, 2.7 miles upstream from Lawson Fork, and 2.7 miles northeast of Glendale.

Drainage area.--320 sq mi.

Records available.--October 1939 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Altitude of gage is 540 ft (from topographic map).

Average discharge.--19 years, 457 cfs.

Extremes.--Maximum discharge during year, 12,600 cfs Nov. 19 (gage height, 12.06 ft), from rating curve extended above 4,400 cfs as explained below; minimum daily, 141 cfs Sept. 28.

1939-58: Maximum discharge, 26,800 cfs Aug. 14, 1940 (gage height, 21.19 ft), from rating curve extended above 4,400 cfs on basis of computation of peak flow over dam at Clifton Mill 2; minimum daily, 17 cfs Oct. 19, 1941.

Remarks.--Records fair. Some regulation at low and medium flow by powerplants above station and South Pacolet River Reservoir (see p. 169). City of Spartanburg diverts water above station from South Pacolet River Reservoir for municipal supply.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.1	128	4.0	2,560
1.3	205	6.0	4,690
1.5	306	8.0	7,100
2.0	706		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,570	282	654	502	917	952	1,690	1,690	459	263	316	362
2	1,140	287	586	487	690	739	1,200	1,510	690	276	350	296
3	856	231	583	478	691	750	785	1,300	630	270	332	295
4	794	282	556	476	584	671	776	1,160	*638	242	370	*274
5	715	*276	524	428	548	570	802	1,110	568	362	344	272
6	542	282	497	488	584	555	2,440	997	524	406	324	274
7	491	279	498	478	618	574	2,480	1,280	444	444	316	224
8	458	350	598	478	610	515	1,600	1,150	438	632	295	281
9	429	410	692	453	605	588	961	1,050	463	684	321	240
10	358	337	589	444	574	724	980	996	438	704	282	215
11	318	340	565	478	644	*662	1,060	702	415	480	280	195
12	360	312	508	373	618	574	926	847	325	498	293	256
13	378	314	494	483	540	592	686	812	344	672	352	259
14	364	314	487	768	492	593	803	697	338	586	332	201
15	331	406	436	688	492	524	904	750	318	454	282	309
16	338	811	490	574	494	500	1,890	718	360	*428	322	303
17	441	716	*464	541	488	556	1,560	618	314	492	236	255
18	688	1,380	478	482	449	618	1,240	627	305	482	330	250
19	508	6,770	470	452	544	618	864	644	300	706	264	243
20	440	2,610	591	508	512	583	701	618	307	438	255	243
21	438	1,410	792	544	521	549	741	618	298	695	232	359
22	417	812	662	732	530	502	*900	570	350	1,080	221	466
23	390	2,050	568	627	458	460	988	514	422	838	250	374
24	424	1,200	504	1,530	512	534	1,020	418	466	583	451	352
25	422	2,140	482	2,300	496	697	785	433	391	512	1,100	312
26	370	1,740	860	1,560	909	724	749	502	446	369	1,690	288
27	316	1,440	776	1,140	1,600	724	783	489	372	364	972	324
28	347	926	730	*792	1,330	680	*4,770	470	350	404	644	141
29	289	838	602	722	-	624	5,860	476	278	369	574	246
30	277	820	574	598	-------	661	3,010	492	330	342	451	225
31	292	-------	646	588	-------	1,960	-------	470	-------	290	389	-------
Total	15,501	30,365	17,956	21,192	18,050	20,573	43,954	24,728	12,321	15,365	13,170	8,334
Mean	500	1,012	579	684	645	664	1,465	798	411	496	425	278
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 6,770 Min 94 Mean 499 Cfsm - In. -
Water year 1957-58: Max 6,770 Min 141 Mean 662 Cfsm - In. -

* Discharge measurement made on this day.

1565. Broad River near Carlisle, S. C.

Location.--Lat 34°36', long 81°25', on right bank at downstream side of bridge on State Highway 72, 2 miles upstream from Sandy River, 2 miles downstream from Seaboard Air Line Railroad bridge, 2½ miles east of Carlisle, Union County, and 5 miles downstream from Neals Shoals Dam.

Drainage area.--2,790 sq mi, approximately.

Records available.--October 1938 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 290.70 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--20 years, 3,682 cfs.

Extremes.--Maximum discharge during year 48,000 cfs Apr. 29 (gage height, 20.12 ft); minimum, 109 cfs Sept. 27; minimum daily, 938 cfs Sept. 13.
1938-58: Maximum discharge, 103,000 cfs Aug. 15, 1940 (gage height, 29.41 ft), from rating curve extended above 52,000 cfs on basis of computation of peak flow over Neals Shoals Dam; minimum, 37 cfs Aug. 29, 1955; minimum daily, 44 cfs Sept. 2, 1956.

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

Revisions (water years).--WSP 892: 1939(m), drainage area.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 29 to July 22, Aug. 27 to Sept. 30)

2.4	900	9.0	14,800
3.0	1,630	14.0	28,100
5.0	5,220	19.0	43,100

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9,100	2,390	6,730	3,540	4,810	11,800	15,100	18,400	3,740	2,380	2,400	1,940
2	9,850	1,960	5,220	3,830	6,510	7,190	10,600	13,100	4,310	2,230	2,660	1,610
3	7,190	1,300	*4,410	3,540	5,430	5,850	7,650	16,600	5,010	3,360	2,820	1,470
4	5,430	2,110	4,210	3,830	4,510	5,320	6,290	12,800	4,810	2,540	3,360	1,700
5	4,610	2,160	4,310	3,090	4,310	4,910	5,850	8,850	4,410	2,550	3,450	2,380
6	3,880	1,690	4,120	3,540	4,510	4,610	13,100	8,610	4,310	2,400	3,000	1,550
7	4,210	2,200	3,160	3,450	5,220	4,510	28,700	10,600	3,920	2,970	3,000	960
8	2,570	2,400	4,040	3,360	5,640	4,510	13,300	13,100	3,830	3,680	1,890	1,360
9	2,910	2,050	6,730	2,910	5,220	4,410	9,350	9,350	3,740	5,560	2,480	1,610
10	2,660	2,040	6,070	3,000	4,810	5,320	7,890	7,890	3,360	5,640	1,790	1,480
11	2,820	2,320	4,910	3,450	3,920	4,810	10,600	7,190	3,210	4,410	2,430	1,630
12	1,520	2,480	4,020	2,670	4,020	4,710	8,850	6,290	3,640	3,830	2,480	2,170
13	2,210	1,740	3,740	3,430	3,920	4,910	6,510	5,640	3,360	3,200	1,780	938
14	2,400	2,480	3,740	5,210	3,830	4,710	5,850	6,070	3,000	5,320	*2,970	982
15	2,030	3,090	3,180	6,730	3,830	4,610	5,640	5,640	2,910	4,710	3,450	1,450
16	1,800	3,090	3,920	*5,640	3,830	3,920	12,600	5,220	3,360	4,120	2,480	1,630
17	2,400	4,090	3,450	4,810	4,310	4,020	14,600	5,010	3,360	3,830	1,760	1,640
18	3,000	13,400	3,090	4,120	3,540	3,830	9,600	6,200	2,790	3,830	2,190	2,130
19	4,120	24,000	3,450	3,180	2,740	4,610	7,190	6,510	3,090	4,120	2,110	1,920
20	2,670	38,300	3,450	3,710	*3,740	4,810	6,290	5,220	3,640	4,810	1,890	1,350
21	2,820	21,000	3,920	3,540	3,920	4,510	5,850	*5,120	2,740	4,120	2,230	1,260
22	2,400	8,370	4,910	4,210	3,920	4,310	5,640	5,120	2,660	12,800	2,230	2,440
23	2,300	16,200	4,610	5,010	3,450	3,290	8,130	4,710	3,080	8,080	1,760	2,450
24	2,660	20,500	3,920	7,460	3,270	3,250	7,420	4,120	3,360	4,810	1,500	*1,590
25	2,570	14,800	4,020	20,000	3,180	4,710	5,850	3,640	2,720	4,710	3,710	1,940
26	2,400	23,600	5,010	19,700	5,690	5,640	5,640	4,410	3,450	3,740	8,280	2,240
27	1,980	15,600	6,070	10,100	15,400	5,850	5,370	4,310	3,450	2,620	5,220	1,260
28	2,520	8,850	5,640	6,960	19,200	5,430	13,700	4,310	3,740	2,330	3,740	1,330
29	2,100	6,960	4,610	5,850	-	5,320	40,200	4,310	2,330	3,180	2,710	1,290
30	1,890	8,370	4,410	5,430	-------	4,610	38,600	4,210	2,910	3,450	2,140	1,140
31	2,480	-------	3,740	4,710	-------	8,480	-------	4,210	-------	2,740	1,900	-------
Total	103,500	259,540	136,810	170,010	146,680	158,770	341,960	226,760	104,240	128,070	85,810	48,840
Mean	3,339	8,651	4,413	5,484	5,239	5,122	11,400	7,315	3,475	4,131	2,768	1,628
Cfsm	1.20	3.10	1.58	1.97	1.88	1.84	4.09	2.62	1.16	1.48	0.992	0.584
In.	1.38	3.46	1.82	2.27	1.96	2.12	4.56	3.02	1.29	1.71	1.14	0.65

Calendar year 1957: Max 38,300 Min 228 Mean 3,930 Cfsm 1.41 In. 19.12
Water year 1957-58: Max 40,200 Min 938 Mean 5,236 Cfsm 1.88 In. 25.38

Peak discharge (base, 25,000 cfs).--Nov. 20 (2:30 p.m.) 40,100 cfs (18.06 ft); Nov. 26 (5:15 p.m.) 25,300 cfs (13.01 ft); Apr. 7 (4:45 p.m.) 31,500 cfs (15.15 ft); Apr. 29 (11:15 p.m.) 48,000 cfs (20.12 ft).

* Discharge measurement made on this day.

1570. North Tyger River near Fairmont, S. C.

Location.--Lat 34°55'45", long 82°02'40", on left bank 80 ft downstream from Frey Creek and 2.2 miles north of Fairmont, Spartanburg County.

Drainage area.--44 sq mi, approximately.

Records available.--October 1950 to September 1958.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 680 ft (from topographic map).

Average discharge.--8 years, 52.8 cfs.

Extremes.--Maximum discharge during year, 1,480 cfs Nov. 19 (gage height, 8.18 ft); minimum, 23 cfs Sept. 21; minimum daily, 24 cfs Sept. 20.
1950-58: Maximum discharge, 2,280 cfs Mar. 4, 1952 (gage height, 10.56 ft); minimum, 6.0 cfs Sept. 19, 20, 1954; minimum daily, 7.0 cfs Sept. 19, 1954.

Remarks.--Records good except those for period of no gage-height record, which are fair.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Nov. 23 to Feb. 1, Apr. 28 to Aug. 14)

0.7	22	3.0	418
.9	33	4.0	619
1.2	54	6.0	829
1.5	89	7.0	1,080
2.0	172		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	131	32	72	55	131	86	153	135	51	35	45	32
2	117	32	66	52	76	75	102	364	62	34	51	28
3	71	31	62	51	65	69	88	223	55	34	54	31
4	58	31	62	50	58	63	86	120	52	34	a50	31
5	47	31	*56	48	57	60	79	106	52	71	a46	29
6	42	31	55	48	66	59	371	108	48	57	a44	29
7	40	30	55	52	86	60	171	126	48	45	a42	29
8	37	40	102	49	71	62	103	100	49	82	a40	28
9	34	44	76	47	61	74	88	92	47	62	a38	27
10	33	34	65	47	57	68	115	86	45	51	a36	28
11	32	30	61	48	55	61	115	84	43	52	a36	28
12	44	29	55	48	53	57	90	81	42	50	a40	29
13	40	28	53	57	53	61	80	76	41	59	*56	29
14	35	28	55	86	51	60	75	72	39	52	76	28
15	34	32	54	*61	53	59	*128	70	42	48	45	28
16	33	58	53	55	54	52	357	68	45	45	41	29
17	65	56	52	52	49	52	134	66	41	44	39	28
18	73	108	51	50	55	80	104	69	40	82	38	26
19	47	1,030	50	48	52	70	93	64	39	72	36	26
20	40	313	82	49	*52	62	86	*72	40	150	35	24
21	37	92	81	77	52	58	82	68	40	223	34	43
22	*37	74	60	72	54	55	124	61	45	272	32	37
23	36	387	55	59	53	53	99	58	44	75	38	*32
24	37	146	53	249	51	53	84	57	41	82	70	31
25	36	266	53	430	49	98	80	58	*40	60	126	30
26	34	194	128	121	134	76	76	57	45	52	52	28
27	34	103	82	92	210	89	133	54	45	59	42	27
28	33	88	69	77	127	71	563	52	40	51	39	26
29	33	90	62	71	-	64	607	52	38	73	37	26
30	33	98	57	68	------	89	308	49	37	50	34	25
31	33	---	56	66	-------	346	-------	49	-------	48	32	---- -
Total	1,436	3,586	1,993	2,435	1,985	2,342	4,774	2,797	1,336	2,204	1,424	872
Mean	46.3	120	64.3	78.5	70.9	75.5	159	90.2	44.5	71.1	45.9	29.1
Cfsm	1.05	2.73	1.46	1.78	1.61	1.72	3.61	2.05	1.01	1.62	1.04	0.661
In.	1.21	3.05	1.68	2.05	1.68	1.98	4.03	2.36	1.13	1.87	1.20	0.74

Calendar year 1957: Max 1,030 Min 11 Mean 51.5 Cfsm 1.17 In. 15.91
Water year 1957-58: Max 1,030 Min 24 Mean 74.5 Cfsm 1.69 In. 22.98

Peak discharge (base, 700 cfs).--Nov. 19 (4 p.m.) 1,480 cfs (8.18 ft); Apr. 28 (5:15 p.m.) 742 cfs (5.15 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for North Tyger River near Moore and Middle Tyger River at Lyman.

1575. Middle Tyger River at Lyman, S. C.

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

Drainage area.--68.3 sq mi.

Records available.--October 1937 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder and masonry control. Datum of gage is 776.05 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--21 years, 94.2 cfs.

Extremes.--Maximum discharge during year, 1,960 cfs Apr. 29 (gage height, 7.20 ft); minimum, 13 cfs Sept. 19, 26; minimum daily, 38 cfs Nov. 5.
1937-58: Maximum discharge, 4,800 cfs Aug. 14, 1940 (gage height, 16.16 ft), from rating curve extended above 2,900 cfs on basis of computation of peak flow over dam; minimum, 1 cfs Sept. 25, 1940, Oct. 3, 1954, Aug. 30, 1956; minimum daily, 5 cfs Sept. 24, 1955.

Remarks.--Records good. Flow regulated by reservoir 3 miles above station.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-8, Aug. 27 to Sept. 30				Oct. 9 to Aug. 26			
1.5	39	2.5	192	1.3	35	3.0	310
1.7	61	3.0	300	1.5	50	4.0	620
2.0	102			1.7	70	6.0	1,440
				2.0	111	7.0	1,880
				2.5	198		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	176	63	121	102	165	185	417	249	90	62	86	66
2	174	46	102	99	156	149	186	439	104	60	81	60
3	138	41	96	93	129	132	152	464	106	59	81	56
4	120	41	102	90	116	122	154	228	98	57	82	56
5	115	38	*96	89	104	99	156	187	95	86	77	54
6	94	44	92	88	114	95	405	194	92	116	72	53
7	117	46	92	92	149	110	531	238	89	100	70	51
8	245	51	135	90	151	114	187	212	85	193	69	50
9	376	56	161	82	129	125	146	179	82	202	68	47
10	404	54	141	82	119	136	183	168	80	121	67	46
11	249	48	127	85	116	117	198	159	77	102	66	46
12	93	47	105	85	110	110	152	146	76	108	66	50
13	105	47	96	93	108	113	139	130	68	93	*99	50
14	93	48	96	142	102	117	130	134	64	121	208	48
15	90	51	98	*136	108	105	*149	130	70	113	120	48
16	95	57	93	113	116	98	412	127	76	108	85	47
17	98	71	92	99	99	98	357	127	68	114	75	49
18	135	86	89	93	97	128	202	125	69	117	67	47
19	200	716	89	89	93	139	161	121	69	172	67	46
20	158	946	114	90	*96	119	144	*117	71	180	64	44
21	*132	130	185	113	98	108	139	119	71	672	64	77
22	110	85	146	146	102	100	152	104	75	593	60	*94
23	93	294	117	121	104	98	218	98	75	207	64	69
24	81	331	108	239	99	100	175	104	75	132	98	59
25	71	288	106	682	95	149	149	105	*72	127	367	58
26	68	520	173	387	151	188	141	110	71	100	600	49
27	67	212	183	165	364	164	156	104	74	109	125	49
28	64	165	139	147	335	154	761	100	74	113	98	46
29	64	149	121	134	-	127	1,800	100	68	108	81	44
30	64	144	110	127	-------	148	803	93	64	137	75	43
31	63	-------	104	122	-------	491	-------	85	-------	100	69	-------
Total	4,152	4,915	3,629	4,315	3,725	4,198	9,055	4,996	2,348	4,680	3,371	1,602
Mean	134	164	117	139	133	135	302	161	78.3	151	109	53.4
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 1,230 Min 26 Mean 97.1 Cfsm - In. -
Water year 1957-58: Max 1,800 Min 38 Mean 140 Cfsm - In. -

Peak discharge (base, 1,000 cfs).--Nov. 20 (5:30 a.m.) 1,440 cfs (5.96 ft); Apr. 29 (8:30 a.m.) 1,960 cfs (7.20 ft); July 21 (10:15 p.m.) 1,400 cfs (5.90 ft).

* Discharge measurement made on this day.

1580. North Tyger River near Moore, S. C.

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

Drainage area.--162 sq mi.

Records available.--October 1933 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder and concrete control. Datum of gage is 564.79 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--25 years, 220 cfs.

Extremes.--Maximum discharge during year, 2,750 cfs Nov. 19, Apr. 30; maximum gage height, 3.80 ft Nov. 19; minimum discharge, 74 cfs July 3, Sept. 8; minimum daily, 74 cfs July 3.
1933-58: Maximum discharge, 12,300 cfs Aug. 14, 1940 (gage height, 7.15 ft), from rating curve extended above 7,800 cfs by velocity-area studies; minimum, 13 cfs Dec. 29, 1935; minimum daily, 16 cfs Oct. 3, 1954.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Some regulation at low flow by powerplants above station.

Revisions (water years).--WSP 1333: 1936(m), 1940(m).

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to July 23				July 24 to Sept. 30	
0.9	53	2.0	604	1.0	71
1.1	104	3.0	1,580	1.2	129
1.4	218	3.7	2,570	1.5	256
1.8	447			1.9	521

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	477	159	326	171	399	566	975	1,130	148	235	191	144
2	460	90	277	214	320	350	680	724	224	79	123	138
3	332	87	308	245	293	309	400	1,090	271	74	238	166
4	309	84	*263	158	266	304	368	812	194	110	211	87
5	237	87	177	139	261	288	350	547	259	133	191	147
6	140	87	217	205	256	197	542	500	152	198	a170	135
7	193	109	191	197	275	237	993	579	209	223	a160	79
8	242	164	226	156	311	282	727	555	181	332	a150	110
9	340	129	320	173	231	211	400	462	190	470	a150	155
10	414	93	304	202	256	309	387	407	232	355	a150	81
11	427	84	282	124	271	282	447	374	146	221	a150	81
12	262	126	271	148	255	246	368	374	172	203	a150	152
13	151	143	176	197	171	271	304	368	184	231	*175	108
14	185	96	170	326	261	230	*304	344	151	267	312	81
15	213	101	167	*231	218	283	370	282	125	247	267	96
16	107	126	214	271	172	171	861	326	172	283	183	162
17	222	179	247	209	218	206	956	280	178	226	155	84
18	214	425	183	175	252	321	643	266	133	238	144	96
19	252	1,610	166	134	*156	267	427	*304	182	368	136	157
20	242	2,130	187	190	239	300	320	354	131	355	136	81
21	*223	1,060	a300	271	155	227	320	257	179	637	133	91
22	233	394	a200	212	256	258	369	297	117	1,050	133	*168
23	129	677	a240	288	164	172	447	236	174	1,010	126	198
24	211	920	a240	480	214	235	393	*273	*206	405	227	87
25	107	750	a200	1,170	236	352	350	167	120	465	423	154
26	121	865	a380	1,080	312	294	326	229	166	262	505	84
27	107	759	a340	604	621	380	307	277	240	213	466	84
28	144	417	a280	350	794	320	991	226	124	232	260	106
29	159	356	a280	320	-	264	2,480	186	114	222	156	104
30	93	486	237	304	-------	268	2,160	252	215	248	177	145
31	132	-------	237	203	-------	670	-------	225	-------	142	100	-------
Total	7,078	12,793	7,606	9,147	7,833	9,070	18,965	12,703	5,289	9,734	6,248	3,561
Mean	228	426	245	295	280	293	632	410	176	314	202	119
Cfsm	1.41	2.63	1.51	1.82	1.73	1.81	3.90	2.53	1.09	1.94	1.25	0.735
In.	1.63	2.93	1.74	2.10	1.80	2.09	4.35	2.92	1.22	2.24	1.44	0.82

Calendar year 1957: Max 2,130 Min 42 Mean 202 Cfsm 1.25 In. 16.94
Water year 1957-58: Max 2,480 Min 74 Mean 301 Cfsm 1.86 In. 25.28

Peak discharge (base, 1,800 cfs).--Nov. 19 (10:45 p.m.) 2,750 cfs (3.80 ft); Apr. 30 (12:30 a.m.) 2,750 cfs (3.76 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for other stations in same drainage basin.

1585. South Tyger River near Reidville, S. C.

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

Drainage area.--106 sq mi.

Records available.--April 1934 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 626.28 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--24 years, 151 cfs.

Extremes.--Maximum discharge during year, 2,080 cfs Nov. 19 (gage height, 6.35 ft); minimum, 12 cfs Sept. 17, 18 (gage height, 0.77 ft); minimum daily, 18 cfs Nov. 9, 10, Mar. 8.
1934-58: Maximum discharge, 6,420 cfs Oct. 7, 1949 (gage height, 14.23 ft); minimum, 3.7 cfs July 20, 1957; minimum daily, 5.5 cfs June 6, 1941.

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

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.8	14	2.0	202
1.0	30	3.0	497
1.2	53	4.0	890
1.5	97	5.0	1,350

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	281	58	245	127	38	22	653	522	62	77	108	22
2	319	20	344	234	112	24	398	723	200	28	76	192
3	88	20	335	227	347	309	358	666	186	26	28	195
4	218	52	*317	25	343	322	328	417	322	26	131	290
5	40	43	320	24	340	297	127	407	247	54	177	185
6	51	176	132	191	328	294	347	367	203	121	83	27
7	144	171	92	314	195	203	689	446	25	276	60	26
8	275	74	86	275	78	18	430	406	23	297	22	105
9	206	18	212	93	29	41	373	355	204	254	39	229
10	210	18	272	91	321	308	389	131	269	220	48	93
11	58	53	162	20	352	352	358	243	217	147	168	62
12	26	177	117	20	338	279	121	357	82	87	75	87
13	26	219	212	187	154	132	77	382	22	134	244	24
14	62	83	91	334	178	256	*274	373	54	368	132	23
15	129	50	20	246	83	96	401	245	67	349	108	158
16	291	37	173	117	21	24	605	156	215	325	31	74
17	128	51	301	20	213	143	446	125	113	306	30	20
18	61	242	195	53	296	192	361	79	221	319	143	20
19	32	1,160	218	53	*93	306	126	*348	182	105	111	199
20	224	690	245	230	198	121	114	367	149	32	175	26
21	313	555	101	314	226	152	331	370	21	307	104	26
22	*276	382	21	297	119	80	388	300	20	684	98	118
23	257	379	29	91	20	28	392	185	123	366	32	*84
24	263	207	89	167	141	183	305	126	*272	141	66	134
25	251	472	164	410	171	367	219	43	163	302	256	101
26	86	514	319	378	233	352	110	212	124	104	102	129
27	23	532	313	404	439	208	106	157	233	25	144	24
28	58	171	324	376	300	185	840	296	26	239	261	23
29	160	261	100	361	-	100	1,350	223	25	334	161	99
30	307	247	210	343	-------	57	987	113	167	209	23	57
31	89	-------	234	234	-------	714	-------	115	-------	148	22	-------
Total	4,952	7,132	5,993	6,256	5,706	6,165	12,003	9,255	4,237	6,410	3,258	2,852
Mean	160	238	193	202	204	199	400	299	141	207	105	95.1
Cfsm	1.51	2.25	1.82	1.91	1.92	1.88	3.77	2.82	1.33	1.95	0.991	0.897
In.	1.74	2.51	2.10	2.20	2.00	2.17	4.21	3.25	1.48	2.25	1.14	1.00

Calendar year 1957: Max 1,160 Min 6.9 Mean 145 Cfsm 1.37 In. 18.55
Water year 1957-58: Max 1,350 Min 18 Mean 203 Cfsm 1.92 In. 26.05

Peak discharge (base, 1,400 cfs).--Nov. 19 (12 m.) 2,080 cfs (6.35 ft); Apr. 29 (6:45 p.m.) 1,450 cfs (5.22 ft).

* Discharge measurement made on this day.

1590. South Tyger River near Woodruff, S. C.

Location.--Lat 34°45'21", long 81°56'19", on left bank at Chesnee Shoals, 0.5 mile upstream from confluence with North Tyger River and 5¾ miles east of Woodruff, Spartanburg County.

Drainage area.--174 sq mi.

Records available.--October 1933 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder and concrete control. Datum of gage is 508.35 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--25 years, 222 cfs.

Extremes.--Maximum discharge during year, 2,640 cfs Nov. 19 (gage height, 5.20 ft); minimum, 45 cfs Sept. 19 (gage height, 1.70 ft); minimum daily, 52 cfs Sept. 18.
1933-58: Maximum discharge, 9,510 cfs Apr. 6, 1936 (gage height, 9.78 ft), from rating curve extended above 7,700 cfs by velocity-area studies; minimum, 11 cfs Sept. 23, 1955 (gage height, 1.37 ft); minimum daily, 12 cfs Sept. 23, 1955.

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

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.7	45	3.0	431
1.9	75	3.5	721
2.1	111	4.0	1,120
2.5	221	5.0	2,350

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	374	96	356	324	230	272	958	1,020	109	154	164	64
2	465	87	393	153	156	136	693	708	187	105	187	90
3	274	61	418	320	311	231	503	917	241	67	115	247
4	202	63	*418	186	421	421	477	706	359	67	109	242
5	181	86	389	90	412	383	363	541	373	82	192	288
6	90	89	330	110	426	383	519	535	207	137	175	125
7	143	215	156	370	381	364	674	661	223	213	121	64
8	186	191	211	360	269	194	714	586	87	399	97	57
9	290	97	243	199	118	143	503	519	121	561	69	172
10	222	62	314	137	236	265	508	376	255	502	85	188
11	172	63	317	138	431	467	546	264	348	297	108	108
12	91	114	197	82	417	421	369	397	143	247	*162	90
13	72	245	218	110	323	267	162	477	117	138	172	110
14	69	198	285	421	178	309	*249	456	70	588	290	58
15	96	105	100	366	286	328	521	414	102	487	141	87
16	243	85	111	217	107	118	1,300	212	163	431	135	150
17	239	87	335	160	121	133	841	316	185	410	77	98
18	184	500	288	92	*367	286	564	141	175	397	89	52
19	104	1,910	266	118	246	426	388	*288	258	332	155	83
20	149	1,570	325	157	185	271	191	456	249	227	161	185
21	*285	793	303	383	285	214	326	451	118	414	174	67
22	291	548	103	393	336	277	508	426	70	705	130	*84
23	289	964	92	233	109	120	524	232	73	674	123	133
24	286	517	105	548	128	135	446	315	*248	297	89	116
25	300	674	206	1,130	212	468	311	107	268	388	312	157
26	246	735	358	540	453	487	343	184	134	330	222	130
27	73	661	441	535	743	433	178	208	272	103	149	141
28	68	472	366	487	625	244	934	297	174	133	257	56
29	124	252	280	451	-	327	1,800	376	73	378	239	56
30	268	600	196	431	--------	133	1,670	170	107	332	161	116
31	248	--------	261	374	--------	572	--------	248	--------	200	67	--------
Total	6,324	12,140	8,381	9,615	8,512	9,228	18,083	13,004	5,509	9,795	4,727	3,614
Mean	204	405	270	310	304	298	603	419	184	316	152	120
Cfsm	1.17	2.33	1.55	1.78	1.75	1.71	3.47	2.41	1.06	1.82	0.874	0.690
In.	1.35	2.60	1.79	2.05	1.82	1.97	3.87	2.78	1.18	2.10	1.01	0.77

Calendar year 1957: Max 1,910 Min 21 Mean 204 Cfsm 1.17 In. 15.97
Water year 1957-58: Max 1,910 Min 52 Mean 298 Cfsm 1.71 In. 23.29

Peak discharge (base, 1,800 cfs).--Nov. 19 (4:30 p.m.) 2,640 cfs (5.20 ft); Apr. 29 (3:45 p.m.) 1,930 cfs (4.68 ft).

* Discharge measurement made on this day.

1600. Fairforest Creek near Union, S. C.

Location.--Lat 34°41', long 81°41', on right bank at downstream side of bridge on State Highway 49 (revised), 0.3 mile downstream from Buffalo Creek and 4.3 miles southwest of Union, Union County.

Drainage area.--183 sq mi.

Records available.--June 1940 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 393.91 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--18 years, 192 cfs.

Extremes.--Maximum discharge during year, 4,430 cfs Nov. 19 (gage height, 5.91 ft); minimum, 42 cfs Sept. 29, 30 (gage height, 2.16 ft).
1940-58: Maximum discharge, 8,690 cfs Nov. 29, 1948 (gage height, 7.61 ft), from rating curve extended above 4,300 cfs by velocity-area studies and logarithmic plotting; minimum, 4.5 cfs Oct. 8, 1954 (gage height, 1.65 ft).

Remarks.--Records good. Discharge includes some water diverted from South Pacolet River Reservoir (see p. 169) which is discharged into this stream after use.

Revisions (water years).--WSP 1383: 1947.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1		Oct. 2 to Sept. 30			
3.0	458	2.1	36	3.5	765
3.1	528	2.2	52	4.0	1,190
		2.4	103	4.5	1,790
		2.6	185	5.0	2,610
		3.0	421	6.0	4,650

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	481	61	545	136	190	658	676	870	118	72	91	67
2	473	61	345	129	243	342	490	764	125	70	86	63
3	433	61	*227	118	206	254	326	654	180	65	104	59
4	249	59	195	110	162	211	295	648	140	65	140	56
5	206	59	167	103	149	185	278	376	125	72	94	56
6	140	59	144	103	195	176	2,640	488	118	110	83	56
7	107	59	140	114	326	180	1,960	1,000	110	118	77	56
8	94	63	368	114	314	185	690	674	107	129	74	54
9	80	88	447	94	227	288	357	428	103	345	72	50
10	74	88	383	94	180	338	475	320	97	374	70	50
11	67	70	249	103	167	283	552	272	94	202	65	47
12	65	67	176	97	158	216	415	254	94	125	63	50
13	72	67	140	122	154	232	295	227	91	134	63	54
14	72	70	136	*361	140	260	249	195	86	227	*148	54
15	63	74	133	370	149	211	392	185	80	220	196	50
16	63	83	125	224	172	180	*1,530	172	83	133	108	61
17	65	105	122	167	132	167	1,420	162	83	107	86	61
18	82	1,170	122	140	138	308	617	186	80	100	86	52
19	97	2,800	118	125	126	351	363	226	74	124	77	52
20	72	3,570	128	118	152	278	289	190	106	196	70	50
21	65	1,680	201	172	140	216	243	*190	97	586	67	50
22	63	422	190	249	140	180	278	172	88	614	65	67
23	*63	1,250	140	195	144	167	415	154	103	512	61	63
24	70	1,270	125	662	140	158	399	144	88	250	66	*56
25	77	1,270	133	1,060	136	444	260	146	*80	211	148	54
26	70	928	292	1,300	573	466	221	154	74	176	266	52
27	65	699	307	580	1,310	376	273	136	109	220	145	49
28	63	408	252	314	1,290	307	481	129	118	291	94	47
29	61	320	180	237	-	244	1,650	129	88	133	83	46
30	63	579	154	211	-------	253	2,300	122	74	114	74	42
31	63	-------	136	190	-------	673	-------	118	-------	107	70	-------
Total	3,778	17,560	6,520	8,112	7,553	8,787	20,829	9,885	3,013	6,202	2,992	1,624
Mean	122	585	210	262	270	283	694	319	100	200	96.5	54.1
Cfsm	0.667	3.20	1.15	1.43	1.48	1.55	3.79	1.74	0.546	1.09	0.527	0.296
In.	0.77	3.57	1.33	1.65	1.54	1.79	4.23	2.01	0.61	1.26	0.61	0.33

Calendar year 1957: Max 3,570 Min 17 Mean 172 Cfsm 0.940 In. 12.77
Water year 1957-58: Max 3,570 Min 42 Mean 265 Cfsm 1.45 In. 19.70

Peak discharge (base, 2,500 cfs).--Nov. 19 (9:45 p.m.) 4,430 cfs (5.91 ft); Apr. 6 (7:30 a.m.) 3,770 cfs (5.61 ft); Apr. 30 (5:30 a.m.) 2,970 cfs (5.22 ft).

* Discharge measurement made on this day.

1605. Enoree River near Enoree, S. C.

Location.--Lat 34°36', long 81°54', on left bank at upstream side of bridge on State Highway 49, three-quarters of a mile upstream from Warrior Creek and 4 miles southeast of Enoree, Spartanburg County.

Drainage area.--307 sq mi.

Records available.--August 1929 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 448.07 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Nov. 20, 1929, staff gage at same site and datum.

Average discharge.--29 years, 401 cfs.

Extremes.--Maximum discharge during year, 6,430 cfs Nov. 19 (gage height, 5.12 ft); minimum, 64 cfs Sept. 28; minimum daily, 77 cfs Sept. 28.
1929-58: Maximum discharge, 30,000 cfs Oct. 2, 1929 (gage height, 10.5 ft, from floodmark), from rating curve extended above 17,000 cfs by logarithmic plotting; minimum. 8 cfs Oct. 5, 1941; minimum daily, 20 cfs Oct. 2-4, 7, 1954.

Remarks.--Records good except those for period of no gage-height record, which are fair. Some regulation at low and medium flow by powerplants above station.

Revisions (water years).--WSP 802: 1930(M). WSP 892: 1929-30, 1931(M), 1932-33, 1935. WSP 1112: 1934(M). WSP 1383: 1935-36(m), 1941(m), 1951-52(m).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.8	66	3.0	1,200
1.9	97	3.5	2,120
2.0	144	4.0	3,320
2.2	275	5.0	6,120
2.6	655		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	738	212	736	373	504	884	1,760	1,690	427	254	240	194
2	712	205	545	364	589	633	1,110	1,360	432	254	304	200
3	455	189	*485	339	475	545	739	1,630	505	261	268	174
4	391	199	455	331	436	485	644	1,470	510	261	a320	168
5	373	199	418	323	391	455	622	905	427	288	a240	168
6	307	199	391	323	455	427	2,870	952	418	306	a220	168
7	268	199	373	331	644	465	1,720	1,410	400	364	a220	168
8	230	212	520	331	644	465	912	1,240	400	612	a200	168
9	214	240	633	315	535	556	679	879	400	2,310	a200	150
10	187	283	535	299	475	633	691	715	382	950	a200	150
11	205	247	475	307	445	525	814	655	277	465	a190	156
12	199	226	409	307	418	485	667	633	391	418	a180	156
13	238	212	373	315	409	508	589	589	304	391	a180	187
14	261	212	355	*475	409	525	556	567	339	888	*428	181
15	205	233	355	475	400	465	*704	535	279	600	247	181
16	205	247	355	400	418	436	3,110	515	339	432	240	199
17	227	305	339	270	391	427	2,250	495	364	331	213	187
18	315	1,650	339	339	345	556	1,000	515	284	354	230	174
19	428	4,360	331	323	360	644	739	495	293	282	193	168
20	390	4,870	347	315	*355	567	633	*495	291	367	199	130
21	262	1,560	515	400	382	505	589	505	328	692	212	168
22	*243	644	465	436	373	455	556	485	279	1,090	193	201
23	220	1,820	391	436	382	445	715	455	316	788	185	*199
24	227	1,930	373	1,050	373	436	655	455	303	455	212	187
25	230	1,620	364	3,070	373	712	567	445	*278	495	388	174
26	226	1,580	555	1,830	666	679	525	445	318	391	423	168
27	220	930	679	868	1,500	739	611	436	316	355	312	220
28	199	655	515	611	1,470	644	1,100	427	307	323	228	77
29	205	593	445	515	-	578	2,500	418	283	297	208	157
30	212	1,340	418	485	--------	545	3,120	409	268	286	218	156
31	205	--------	382	445	--------	1,200	--------	368	--------	256	187	--------
Total	8,997	27,381	13,871	17,001	14,617	17,624	33,747	22,793	10,458	15,776	7,478	5,134
Mean	290	913	447	548	522	569	1,125	735	349	509	241	171
Cfsm	0.945	2.97	1.46	1.79	1.70	1.85	3.66	2.39	1.14	1.66	0.785	0.557
In.	1.09	3.31	1.68	2.06	1.77	2.13	4.08	2.76	1.27	1.91	0.90	0.62

Calendar year 1957: Max 4,870 Min 47 Mean 360 Cfsm 1.17 In. 15.89
Water year 1957-58: Max 4,870 Min 77 Mean 534 Cfsm 1.74 In. 23.58

Peak discharge (base, 3,500 cfs).--Nov. 19 (12 p.m.) 6,430 cfs (5.12 ft); Jan. 25 (11 a.m.) 3,580 cfs (4.08 ft); Apr. 6 (9 a.m.) 4,240 cfs (4.33 ft); Apr. 16 (4:45 p.m.) 3,710 cfs (4.13 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for Fairforest Creek near Union.

1615. Broad River at Richtex, S. C.

Location.--Lat 34°11'05", long 81°11'48", on right bank 0.8 mile west of Richtex, Fairfield County, 1.2 miles upstream from Little River, and 11 miles downstream from Parr Shoals Dam.

Drainage area.--4,850 sq mi, approximately.

Records available.--October 1925 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 184.84 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--33 years, 5,825 cfs.

Extremes.--Maximum discharge during year, 55,900 cfs Nov. 21 (gage height, 13.35 ft); minimum daily, 721 cfs Nov. 3.
1925-58: Maximum discharge, 228,000 cfs Oct. 3, 1929 (gage height, 30.7 ft, from floodmarks), on basis of computation of flow over Parr Shoals Dam; minimum daily, 149 cfs Oct. 13, 1935, Sept. 2, 1957, from rating curve extended below 320 cfs.

Remarks.--Records good except those for period of no gage-height record, which are fair. Some regulation at low and medium flow by powerplants above station. Capacity of reservoirs insufficient to affect monthly figures of runoff.

Revisions (water years).--WSP 757: 1930(M). WSP 972: Drainage area. WSP 1383: 1929(M), 1933.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.7	664	3.0	5,650
1.0	1,040	6.0	16,000
1.5	1,870	10.0	35,000
2.0	2,940	13.0	53,300

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9,910	3,540	14,100	a5,500	7,250	24,800	17,400	38,600	4,730	3,100	4,100	2,450
2	14,500	3,300	10,800	a5,500	7,860	14,500	18,000	*26,600	5,530	3,010	2,500	3,540
3	12,200	721	8,020	a5,500	8,680	10,000	14,100	28,600	5,670	3,360	3,970	2,450
4	9,360	3,030	7,250	a5,000	*7,250	8,340	11,500	25,600	6,410	3,460	4,890	2,440
5	7,400	2,710	6,810	a5,000	6,660	7,700	10,400	17,600	6,010	3,400	4,490	2,840
6	6,230	2,620	6,380	4,940	6,960	7,250	10,800	13,700	5,720	2,950	4,650	2,720
7	5,800	2,260	6,080	5,090	8,340	7,100	28,300	16,400	5,070	4,340	3,820	1,960
8	5,150	3,090	6,230	5,200	9,700	7,100	35,300	19,300	5,100	4,100	3,810	2,420
9	3,710	3,320	10,200	5,370	8,680	7,860	18,600	16,800	5,310	5,950	2,560	2,170
10	3,970	1,580	11,500	4,490	7,860	9,700	11,800	12,200	4,390	10,000	2,590	2,100
11	4,000	3,600	*9,360	4,490	6,380	9,020	15,300	10,800	3,950	9,020	3,010	2,170
12	3,880	3,100	7,250	4,670	6,380	8,020	15,300	9,360	*4,340	6,140	3,540	2,860
13	1,130	2,520	6,230	4,370	6,380	7,860	11,500	8,340	4,630	5,140	2,800	2,000
14	4,350	3,090	5,800	6,720	6,080	8,680	9,360	8,020	3,930	5,480	3,150	1,390
15	2,740	3,490	5,610	10,400	6,230	8,020	8,340	8,020	3,200	8,680	4,460	2,730
16	2,630	4,190	5,150	9,360	6,520	7,250	21,300	7,550	3,720	6,810	4,600	2,310
17	2,880	3,210	5,540	7,860	5,800	6,380	28,000	7,100	4,060	6,080	3,050	2,400
18	3,220	18,000	5,210	6,660	6,080	6,960	24,200	6,810	4,150	5,800	3,370	2,680
19	4,060	32,800	4,900	5,500	5,140	7,100	16,800	8,340	3,450	5,410	2,800	2,840
20	4,440	48,800	5,280	4,910	4,460	*8,020	10,800	7,550	4,480	6,810	2,830	1,560
21	4,130	50,700	5,800	5,910	6,080	7,700	9,020	7,250	4,220	7,000	2,640	2,200
22	3,720	28,500	6,960	6,380	6,080	7,100	8,680	6,960	3,070	10,600	3,080	3,240
23	3,300	24,800	6,810	6,810	5,200	6,260	10,400	6,810	3,980	15,300	2,530	3,530
24	3,340	34,500	6,230	12,200	5,260	5,080	11,800	5,880	4,230	*10,000	1,880	2,900
25	3,660	31,800	5,530	29,600	4,800	6,710	10,000	4,960	4,090	8,020	4,820	2,220
26	3,380	34,500	6,520	34,500	6,390	10,800	8,340	5,790	3,810	7,000	7,490	3,090
27	2,370	32,700	9,020	23,800	18,800	11,100	8,020	5,740	4,570	5,450	9,020	2,160
28	3,620	18,600	9,700	14,900	28,600	10,000	9,940	5,680	4,550	4,380	6,810	1,870
29	3,010	13,000	8,020	10,000	-	8,680	33,800	5,660	3,950	4,200	5,190	2,550
30	*2,750	12,200	6,810	8,680	-------	8,020	53,300	5,730	3,870	4,820	3,230	2,110
31	2,720	-------	a6,500	7,860	-------	8,020	-------	5,320	-------	5,100	3,100	-------
Total	147,560	430,271	225,600	277,170	219,900	271,130	500,400	363,070	134,190	190,910	120,580	73,900
Mean	4,760	14,340	7,277	8,941	7,854	8,746	16,680	11,710	4,473	6,158	3,890	2,463
Cfsm	0.981	2.96	1.50	1.84	1.62	1.80	3.44	2.41	0.922	1.27	0.802	0.508
In.	1.13	3.30	1.73	2.12	1.69	2.08	3.84	2.78	1.03	1.46	0.92	0.57

Calendar year 1957: Max 50,700 Min 149 Mean 5,863 Cfsm 1.21 In. 16.43
Water year 1957-58: Max 53,300 Min 721 Mean 8,095 Cfsm 1.67 In. 22.65

Peak discharge (base, 35,000 cfs).--Nov. 21 (5 a.m.) 55,900 cfs (13.35 ft); Nov. 27 (2 a.m.) 37,200 cfs (10.43 ft); Jan. 26 (9 a.m.) 35,600 cfs (10.12 ft); Apr. 8 (7:30 a.m.) 38,400 cfs (10.58 ft); Apr. 30 (1:30 p.m.) 55,200 cfs (13.30 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of tailrace records at Parr Shoals powerplant.

1625. Saluda River near Greenville, S. C.

Location (revised).--Lat 34°50'32", long 82°28'51", on right bank 700 ft upstream from bridge on U. S. Highway 123 alternate, 1.5 miles downstream from Saluda Lake Dam, 2.6 miles upstream from Georges Creek, and 4.6 miles west of city hall in Greenville, Greenville County.

Drainage area.--293 sq mi.

Records available.--October 1941 to September 1958. Monthly discharge only for some periods, published in WSP 1303. Prior to October 1948, published as "near West Greenville."

Gage.--Water-stage recorder. Altitude of gage is 810 ft (from topographic map).

Average discharge.--17 years, 582 cfs.

Extremes.--Maximum discharge during year, 2,970 cfs Apr. 29 (gage height, 6.65 ft); minimum, 48 cfs May 17 (gage height, 1.84 ft); minimum daily, 177 cfs Sept. 26.
1941-58: Maximum discharge, 11,000 cfs Oct. 7, 1949 (gage height, 19.38 ft), from rating curve extended above 7,500 cfs on basis of computation of peak flow over dam at Saluda Lake; minimum, 28 cfs Feb. 1, 1956 (gage height, 1.65 ft); minimum daily, 70 cfs Oct. 16, 1954.

Remarks.--Records good. Some regulation at low and medium flow by powerplant at Saluda Lake. Capacity of reservoir insufficient to affect monthly figures of runoff. Runoff during year also affected by filling of new city of Greenville municipal reservoir on North Saluda River. About 17,628,000 gal per day (27.3 cfs) diverted above station for city of Greenville water supply during water year. Sewage effluent discharged into Reedy River below station near Greenville.

Revisions (water years).--WSP 1383: 1944(m), 1946-49(m), 1954.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

2.5	172	4.0	1,020
2.7	246	5.0	1,810
3.0	397	6.0	2,570
3.5	674		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	806	375	758	722	876	1,300	1,890	1,730	503	397	424	236
2	755	413	864	726	950	1,060	1,450	1,850	890	376	408	256
3	724	429	762	690	915	985	1,200	2,010	834	329	413	319
4	800	390	698	669	827	876	1,090	1,770	698	324	434	319
5	936	364	778	649	763	851	834	1,610	613	397	476	319
6	808	399	690	603	790	803	1,420	1,450	737	810	471	319
7	718	360	650	596	955	800	*2,050	1,670	680	670	476	319
8	637	510	795	625	1,240	800	1,690	1,640	614	933	466	303
9	479	413	1,330	568	1,060	735	1,280	1,410	626	1,570	461	214
10	564	523	*825	545	971	964	1,160	1,140	638	1,370	439	254
11	490	450	872	596	872	855	1,260	1,180	523	960	408	314
12	554	401	805	539	835	810	1,040	1,330	523	750	376	329
13	690	401	723	616	753	786	1,020	1,230	530	757	*413	324
14	569	427	637	*800	794	805	1,250	1,150	632	718	482	303
15	475	741	667	1,200	760	802	1,030	1,010	632	829	434	208
16	468	836	665	679	632	638	1,240	1,030	450	737	418	219
17	473	979	659	729	844	834	1,350	675	695	530	418	253
18	1,140	1,230	643	701	674	764	1,000	844	587	735	397	293
19	979	1,820	620	487	632	891	1,050	994	438	572	387	298
20	653	2,130	677	716	706	853	950	*881	366	466	366	303
21	*550	1,650	1,220	676	686	782	985	857	408	833	350	319
22	549	1,330	1,210	1,120	719	777	1,140	887	476	898	329	397
23	520	826	984	1,010	476	560	1,250	838	518	825	371	*376
24	508	1,120	847	827	756	800	920	800	*483	674	371	324
25	641	1,360	801	1,850	664	802	864	670	434	632	750	244
26	581	1,730	890	1,450	962	918	904	878	434	569	799	177
27	461	1,410	1,120	1,410	1,540	953	854	739	468	525	718	293
28	524	932	935	875	1,810	1,210	1,510	771	450	650	501	319
29	479	985	868	801	-	747	2,570	658	450	568	361	208
30	465	914	872	835	--------	904	2,200	705	402	461	345	221
31	416	--------	721	793	--------	1,930	--------	749	--------	445	345	--------
Total	19,412	25,848	25,586	25,103	24,462	27,595	38,451	35,156	16,932	21,310	13,807	8,580
Mean	626	862	825	810	874	890	1,282	1,134	564	687	445	286
Cfsm	2.14	2.94	2.82	2.76	2.98	3.04	4.38	3.87	1.92	2.34	1.52	0.976
In.	2.47	3.28	3.25	3.18	3.10	3.50	4.89	4.46	2.14	2.70	1.75	1.09

Calendar year 1957: Max 4,180 Min 127 Mean 617 Cfsm 2.11 In. 28.62
Water year 1957-58: Max 2,570 Min 177 Mean 773 Cfsm 2.64 In. 35.81

Peak discharge (base, 2,800 cfs).--Apr. 29 (9 a.m.) 2,970 cfs (6.65 ft).

* Discharge measurement made on this day.

1630. Saluda River near Pelzer, S. C.

Location (revised).--Lat 34°40'05", long 82°27'55", on right bank 0.4 mile downstream from Hurricane Creek and 1.9 miles north of Pelzer, Anderson County.

Drainage area.--405 sq mi.

Records available.--September 1929 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 727.75 ft above mean sea level, unadjusted. Prior to Sept. 25, 1929, staff gage at same site and datum.

Average discharge.--29 years, 759 cfs.

Extremes.--Maximum discharge during year, 4,760 cfs Apr. 29 (gage height, 5.25 ft); minimum, 58 cfs Aug. 29 (gage height, 0.98 ft); minimum daily, 194 cfs Sept. 30.
1929-58: Maximum discharge, 13,600 cfs Oct. 7, 1949 (gage height, 10.53 ft); minimum, 2 cfs Sept. 2, 1956 (gage height, 0.53 ft); minimum daily, 57 cfs Oct. 17, 1954.

Remarks.--Records good. Some regulation at low and medium flow by powerplants above station. Capacity of reservoirs insufficient to affect monthly figures of runoff. For diversion by city of Greenville see station near Greenville.

Revisions.--WSP 872: Drainage area.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.3	162	3.0	1,480
1.5	250	4.0	2,860
2.0	546	5.0	4,440
2.5	960		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	934	407	852	804	1,060	1,870	2,780	2,480	668	440	471	384
2	865	404	1,070	846	1,070	1,260	1,960	2,540	1,340	554	463	258
3	826	479	883	778	1,130	1,250	1,490	2,970	1,210	334	471	390
4	982	482	837	746	928	1,040	1,320	2,410	912	401	521	374
5	1,100	416	830	738	886	986	1,240	2,050	790	471	512	384
6	928	444	802	709	984	959	1,500	1,860	916	750	518	393
7	818	432	736	688	1,180	964	2,640	2,250	834	960	535	338
8	700	520	960	698	1,380	952	*2,260	2,150	749	1,060	525	369
9	550	570	1,320	663	1,210	872	1,620	1,830	782	1,600	486	360
10	593	550	1,230	620	1,250	1,200	1,440	1,570	749	1,660	505	242
11	575	494	*983	652	1,010	1,050	1,480	1,360	765	1,320	516	354
12	585	486	899	626	942	972	1,410	1,520	558	882	428	401
13	784	428	822	710	918	944	1,140	1,420	644	887	*524	392
14	645	502	728	*868	874	962	1,350	1,370	622	942	574	366
15	546	664	772	1,160	882	918	1,260	1,240	833	843	563	364
16	522	896	770	1,020	742	736	1,730	1,220	606	987	447	222
17	561	987	744	818	958	980	1,720	1,210	587	718	464	341
18	828	1,210	727	767	800	1,010	1,420	862	891	642	471	318
19	1,320	3,270	702	615	*780	1,080	1,270	1,240	531	786	426	355
20	710	2,940	800	795	776	1,030	1,060	*1,060	474	539	453	376
21	652	2,190	1,110	820	778	934	1,260	1,030	438	822	398	394
22	*604	1,590	1,420	1,000	816	899	1,200	1,090	561	1,010	378	420
23	572	1,680	1,210	1,180	659	685	1,600	999	639	1,050	386	*461
24	562	1,500	943	1,460	829	984	1,470	927	571	774	439	384
25	616	1,710	888	2,620	784	1,020	990	754	*529	776	700	360
26	630	2,190	1,130	2,020	1,080	1,130	1,070	1,080	525	606	977	232
27	543	1,850	1,310	1,660	2,200	1,200	1,020	888	564	594	774	318
28	558	1,290	1,040	1,330	2,560	1,250	1,750	856	516	699	698	343
29	556	1,200	998	916	-	1,180	4,040	808	532	716	417	354
30	492	1,190	1,050	969	-------	1,060	3,800	819	544	524	370	194
31	544	-------	830	923	-------	2,990	-------	813	-------	518	395	-------
Total	21,701	32,971	29,396	30,219	29,466	34,367	50,290	44,676	20,880	24,865	15,805	10,441
Mean	700	1,099	948	975	1,052	1,109	1,676	1,441	696	802	510	348
Cfsm	1.73	2.71	2.34	2.41	2.60	2.74	4.14	3.56	1.72	1.98	1.26	0.859
In.	1.99	3.02	2.70	2.78	2.71	3.16	4.62	4.10	1.92	2.28	1.45	0.96

Calendar year 1957: Max 5,240 Min 151 Mean 738 Cfsm 1.82 In. 24.72
Water year 1957-58: Max 4,040 Min 194 Mean 945 Cfsm 2.33 In. 31.69

Peak discharge (base, 3,000 cfs).--Nov. 19 (1 p.m.) 3,720 cfs (4.55 ft); Mar. 31 (6 p.m.) 3,560 cfs (4.47 ft); Apr. 29 (6:30 p.m.) 4,760 cfs (5.25 ft); May 2 (8:30 p.m.) 3,320 cfs (4.29 ft).

* Discharge measurement made on this day.

1635. Saluda River near Ware Shoals, S. C.

Location.--Lat 34°23', long 82°14', on right bank 2 miles southeast of Ware Shoals, Greenwood County, 2½ miles downstream from Ware Shoals Dam, and 5 miles upstream from Turkey Creek.

Drainage area.--569 sq mi.

Records available.--October 1938 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Altitude of gage is 448 ft (by barometer).

Average discharge.--20 years, 936 cfs.

Extremes.--Maximum discharge during year, 10,400 cfs Nov. 19 (gage height, 16.48 ft); minimum, 10 cfs Aug. 7; minimum daily, 170 cfs Nov. 3.
1938-58: Maximum discharge, 20,600 cfs Aug. 13, 1940 (gage height, 20.48 ft), from rating curve extended above 6,300 cfs on basis of computation of peak flow over dam; minimum, 3 cfs Sept. 18, 1939; minimum daily, 11 cfs Oct. 12, 19, 1941.

Remarks.--Records good. Some regulation at low and medium flow by powerplants above station. Capacity of reservoirs insufficient to affect monthly figures of runoff. For diversion by city of Greenville see station near Greenville.

Revisions (water years).--WSP 892: 1939. WSP 1433: 1940-41, 1943-45.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,200	603	1,580	817	1,240	2,820	3,900	3,480	667	874	624	512
2	1,200	503	1,270	916	1,420	2,020	2,880	3,360	1,070	274	509	732
3	1,140	170	1,220	1,040	1,300	1,750	2,140	3,360	1,690	542	443	242
4	1,130	468	885	962	1,530	1,640	1,700	3,180	1,640	463	459	398
5	1,060	603	819	646	1,100	1,480	1,420	2,820	1,100	451	459	270
6	1,320	561	701	980	1,200	1,120	2,810	2,520	939	551	603	610
7	1,100	561	404	988	1,700	1,100	2,820	2,760	1,030	993	662	305
8	933	269	1,170	603	1,640	1,240	*2,760	3,000	688	1,140	477	479
9	975	692	1,480	839	1,640	1,320	2,190	2,640	1,100	1,700	578	462
10	558	574	1,580	864	1,750	1,370	1,800	2,190	1,000	2,140	322	295
11	392	527	*1,480	561	1,640	1,480	1,700	2,020	944	1,860	578	290
12	657	603	1,320	582	1,580	1,420	1,530	2,020	710	1,640	481	554
13	646	582	975	952	1,140	1,320	1,420	2,020	861	1,050	664	732
14	1,210	461	885	1,070	1,120	1,200	1,370	1,800	600	1,280	*1,170	298
15	764	389	653	*885	1,070	1,200	1,580	1,640	685	1,430	611	320
16	622	757	774	1,420	1,120	1,100	*3,720	1,480	1,110	875	206	309
17	609	984	1,120	1,240	1,180	1,140	2,410	1,190	686	1,410	294	327
18	688	5,980	831	607	1,100	1,420	2,080	1,230	681	669	690	635
19	1,230	7,530	603	768	*1,070	1,580	1,580	*1,070	1,090	933	552	298
20	1,480	4,670	926	1,020	732	1,320	1,420	1,580	576	707	316	313
21	864	2,940	1,240	843	916	1,170	1,420	1,480	472	724	657	412
22	*765	2,140	1,370	1,070	1,020	1,020	1,370	1,070	442	1,290	380	771
23	356	3,060	1,580	1,270	1,020	1,070	1,580	1,270	955	1,230	277	*503
24	855	2,190	1,530	2,300	742	957	1,860	1,130	688	1,200	311	378
25	692	2,640	1,170	4,030	1,100	1,580	1,580	831	*710	1,010	958	624
26	421	2,700	1,480	3,300	1,580	1,530	1,170	1,100	710	790	1,030	288
27	603	2,460	1,580	2,520	3,000	1,580	1,120	1,370	654	378	1,080	280
28	652	1,800	1,580	2,140	3,720	1,530	1,410	1,040	732	1,210	1,060	273
29	624	1,480	1,480	1,700	-	1,530	3,120	752	294	685	762	420
30	603	2,520	1,120	1,420	-------	1,530	4,940	1,120	650	667	302	512
31	561	-------	1,480	1,140	-------	2,360	-------	966	-------	646	277	-------
Total	25,910	51,417	36,286	39,493	39,370	44,897	62,800	57,489	25,174	30,812	17,792	12,842
Mean	836	1,714	1,171	1,274	1,406	1,448	2,093	1,854	839	994	574	428
Cfsm	1.47	3.01	2.06	2.24	2.47	2.54	3.68	3.26	1.47	1.75	1.01	0.752
In.	1.70	3.36	2.38	2.58	2.57	2.93	4.11	3.76	1.64	2.02	1.16	0.84

Calendar year 1957: Max 7,530 Min 170 Mean 926 Cfsm 1.63 In. 22.12
Water year 1957-58: Max 7,530 Min 170 Mean 1,217 Cfsm 2.14 In. 29.05

Peak discharge (base, 4,000 cfs).--Nov. 19 (2:15 p.m.) 10,400 cfs (16.48 ft); Jan. 25 (7 a.m.) 4,360 cfs (8.81 ft); Feb. 27 (6:45 p.m.) 4,030 cfs (8.25 ft); Apr. 1 (6 a.m.) 4,160 cfs (8.82 ft); Apr. 6 (1:45 p.m.) 4,480 cfs (9.87 ft); Apr. 16 (12:15 p.m.) 4,480 cfs (9.95 ft); Apr. 30 (6:15 a.m.) 5,200 cfs (10.71 ft).

* Discharge measurement made on this day.

1640. Reedy River near Greenville, S. C.

Location (revised).--Lat 34°48'00", long 82°21'55", on right bank 440 ft upstream from State Highway bridge, 0.5 mile upstream from Brushy Creek, 2.5 miles upstream from dam at Conestee, and 3.9 miles southeast of city hall in Greenville, Greenville County.

Drainage area.--48.6 sq mi.

Records available.--October 1941 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Altitude of gage is 800 ft (from topographic map).

Average discharge.--17 years, 77.3 cfs.

Extremes.--Maximum discharge during year, 1,880 cfs Nov. 19 (gage height, 5.20 ft); minimum, 21 cfs Sept. 20.
1941-58: Maximum discharge, 3,590 cfs Oct. 7, 1949 (gage height, 7.88 ft), from rating curve extended above 2,000 cfs by velocity-area studies; minimum, 7 cfs Aug. 17, 1953, Aug. 16, Oct. 4, 1954.

Remarks.--Records good.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.7	22	2.0	426
.9	61	3.0	845
1.2	142	4.0	1,300
1.5	242		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	142	35	78	63	176	144	288	214	74	44	48	38
2	96	35	68	59	107	107	147	1,060	184	38	46	35
3	94	35	71	57	90	96	112	520	135	40	44	26
4	135	40	78	59	85	93	109	202	88	42	42	26
5	90	44	68	55	75	78	98	169	71	132	40	31
6	71	36	63	53	184	89	316	238	66	71	38	33
7	59	33	69	55	164	88	*202	285	63	95	40	29
8	59	88	184	53	136	88	134	191	61	427	38	33
9	50	68	127	48	107	127	101	145	63	160	40	31
10	48	59	*104	48	96	101	128	130	63	119	38	27
11	46	42	80	53	96	96	107	124	53	98	35	30
12	120	38	68	50	83	80	96	115	55	75	172	37
13	83	38	66	87	75	93	83	107	50	85	*73	26
14	63	50	66	*93	73	88	83	101	48	66	63	27
15	57	42	68	75	80	78	217	93	46	63	44	34
16	46	98	61	61	80	71	426	88	59	57	44	36
17	89	84	61	55	*75	81	214	88	57	58	40	31
18	73	168	57	55	75	148	130	83	48	61	36	27
19	63	1,020	57	53	71	109	104	*85	48	50	35	22
20	48	370	155	48	73	90	96	88	48	144	33	22
21	*48	142	104	113	75	80	88	83	44	185	31	113
22	50	119	93	90	75	75	193	78	48	264	31	53
23	44	422	68	73	75	78	145	75	55	148	56	42
24	50	192	61	451	75	101	118	73	*55	102	204	*35
25	48	313	63	450	75	143	96	71	53	75	138	33
26	42	244	223	210	287	159	90	83	52	61	102	31
27	40	145	112	133	417	130	150	83	50	82	58	29
28	42	112	93	112	257	115	842	71	58	57	44	26
29	44	112	75	96	-	98	997	66	46	53	36	31
30	38	100	68	88	-------	282	512	59	50	50	35	31
31	35	-------	66	100	-------	583	-------	59	-------	48	33	-------
Total	2,013	4,324	2,675	3,096	3,337	3,789	6,422	4,927	1,891	3,050	1,757	1,025
Mean	64.9	144	86.3	99.9	119	122	214	159	63.0	98.4	56.7	34.2
Cfsm	1.34	2.96	1.78	2.06	2.45	2.51	4.40	3.27	1.30	2.02	1.17	0.704
In.	1.54	3.30	2.05	2.38	2.55	2.89	4.91	3.77	1.45	2.33	1.35	0.79

Calendar year 1957: Max 1,020 Min 11 Mean 77.4 Cfsm 1.59 In. 21.62
Water year 1957-58: Max 1,060 Min 22 Mean 105 Cfsm 2.16 In. 29.31

Peak discharge (base, 1,000 cfs).--Nov. 19 (6 a.m.) 1,880 cfs (5.20 ft); Jan. 24 (8 p.m.) 1,000 cfs (3.35 ft); Apr. 28 (3 p.m.) 1,340 cfs (4.10 ft); May 2 (10:15 a.m.) 1,680 cfs (4.82 ft); July 8 (2:45 a.m.) 1,300 cfs (4.07 ft); July 21 (11 p.m.) 1,020 cfs (3.42 ft); Aug. 12 (7:15 p.m.) 1,020 cfs (3.43 ft).

* Discharge measurement made on this day.

1650. Reedy River near Ware Shoals, S. C.

Location.--Lat 34°27', long 82°12', on left bank 1¾ miles downstream from dam at Boyd's mill, 4.5 miles northeast of Ware Shoals, Greenwood County, and 10.5 miles upstream from Redburn Creek.

Drainage area.--228 sq mi.

Records available.--March 1939 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 489 ft (by barometer).

Average discharge.--19 years, 287 cfs.

Extremes.--Maximum discharge during year, 5,020 cfs Nov. 20 (gage height, 7.88 ft); minimum, 10 cfs Dec. 24 (gage height, 0.67 ft); minimum daily, 12 cfs Jan. 4.
1939-58: Maximum discharge, 7,750 cfs Aug. 14, 1940 (gage height, 13.32 ft), by computation of peak flow over dam at Boyd's mill; minimum, 6 cfs Nov. 11, 1948 (gage height, 0.54 ft); minimum daily, 9 cfs July 1, Aug. 23, 1956.

Remarks.--Records good. Some regulation at low and medium flow by powerplants above station. Capacity of reservoirs insufficient to affect monthly figures of runoff. For diversion into basin by city of Greenville see Saluda River near Greenville (p. 181).

Revisions (water years).--WSP 892: 1939. WSP 922: Drainage area.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1, 2		Oct. 3 to Sept. 30			
2.0	240	0.7	12	2.2	332
2.4	448	.8	18	2.5	516
		1.0	31	3.0	960
		1.2	52	4.0	1,980
		1.6	120	5.0	2,960
		1.9	202	7.0	4,430

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	245	131	928	324	262	1,020	1,460	1,520	244	270	188	19
2	436	54	516	356	431	592	1,040	1,200	262	148	192	149
3	516	16	374	167	482	509	634	1,310	366	19	111	186
4	332	100	396	12	329	496	530	1,310	496	49	133	186
5	270	147	320	16	257	385	524	747	390	236	189	112
6	203	150	245	326	307	262	1,640	638	270	274	186	18
7	279	153	253	284	475	356	1,430	822	260	270	189	108
8	213	150	362	199	584	398	819	1,020	270	274	192	176
9	192	153	554	196	509	389	*577	738	270	644	111	176
10	192	206	516	244	496	559	531	592	236	553	15	150
11	161	194	*475	266	273	516	617	512	199	496	125	124
12	147	147	358	225	262	496	554	502	199	328	182	131
13	57	147	257	189	414	489	470	496	195	266	230	124
14	198	150	253	232	332	434	312	489	195	266	*449	50
15	274	156	253	*411	266	316	488	330	196	426	395	127
16	181	153	253	287	266	496	1,820	266	236	381	266	179
17	150	212	253	195	*362	336	1,930	422	240	270	266	182
18	147	2,260	253	81	310	289	1,040	334	240	270	208	185
19	147	2,800	253	182	186	554	658	*270	236	92	192	71
20	179	3,880	257	256	236	516	518	430	232	284	186	17
21	195	1,620	350	266	241	502	509	332	229	274	72	132
22	*195	674	468	373	232	381	502	270	229	368	15	172
23	195	1,020	240	341	346	270	516	430	137	496	19	*182
24	195	1,680	122	690	331	274	584	388	*18	496	124	189
25	202	1,380	420	1,930	262	494	516	266	190	322	186	150
26	199	1,300	328	1,730	383	631	509	266	266	262	434	99
27	77	970	515	832	1,490	650	502	270	209	266	328	17
28	144	609	539	546	1,630	642	502	270	22	266	226	20
29	198	496	489	502	-	516	1,160	270	243	212	192	203
30	199	780	373	489	-------	502	2,030	270	274	195	186	208
31	156	-------	262	336	-------	706	-------	270	-------	195	81	-------
Total	6,474	21,888	11,435	12,483	11,954	14,976	24,922	17,250	7,049	9,168	5,868	3,842
Mean	209	730	369	403	427	483	831	556	235	296	189	128
Cfsm	0.917	3.20	1.62	1.77	1.87	2.12	3.64	2.44	1.03	1.30	0.829	0.561
In.	1.06	3.57	1.87	2.04	1.95	2.44	4.06	2.81	1.15	1.50	0.96	0.63

Calendar year 1957: Max 3,880 Min 11 Mean 307 Cfsm 1.35 In. 18.30
Water year 1957-58: Max 3,880 Min 12 Mean 404 Cfsm 1.77 In. 24.04

Peak discharge (base, 2,200 cfs).--Nov. 20 (7 a.m.) 5,020 cfs (7.88 ft); Apr. 6 (3:30 p.m.) 2,530 cfs (4.53 ft); Apr. 17 (4:15 a.m.) 2,280 cfs (4.28 ft); Apr. 30 (4:45 p.m.) 2,230 cfs (4.23 ft).

* Discharge measurement made on this day.

1665. Lake Greenwood near Chappells, S. C.

Location.--Lat 34°10', long 81°54', at left upstream end of dam on Saluda River, 0.7 mile upstream from Wilson Creek and 2.4 miles west of Chappells, Newberry County.

Drainage area.--1,150 sq mi, approximately.

Records available.--May 1940 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 400.00 ft above mean sea level, datum of 1929 (levels by Dan T. Duncan Engineering Co.); gage readings have been reduced to elevations above mean sea level. Prior to June 11, 1940, staff gage at same site and datum.

Extremes.--Maximum elevation during year, 441.51 ft Nov. 25; minimum, 434.70 ft Jan. 23. 1940-58: Maximum elevation, 442.02 ft Mar. 5, 1952; minimum elevation since normal reservoir level was first reached, 424.42 ft Oct. 16, 1947.

Remarks.--Lake is formed by earth dam; storage began in May 1940; dam completed in 1940. Usable capacity, about 7,640,000,000 cu ft between elevations 420.0 ft (limit of drawdown) and 440.0 ft (normal operating level) above mean sea level. Dead storage is about 3,500,000,000 cu ft. Figures given herein represent usable contents. Elevation of spillway crest is 415.0 ft and elevation of top of 1½-foot flashboards on top of spillway gates is 441.5 ft above mean sea level. Water is used for generation of power.

Revisions (water years).--WSP 972: Drainage area. WSP 1383: 1942.

Capacity table, water year 1957-58 (elevation, in feet, and usable contents, in billions of cubic feet)

434.0	4.94
438.0	6.72
442.0	8.56

Mean elevation, in feet, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37.40	36.82	40.91	36.49	38.21	37.52	39.60	39.94	38.88	37.18	g38.00	37.42
2	37.52	36.81	40.70	36.30	38.02	37.84	39.84	40.26	38.80	37.19	37.91	37.43
3	37.71	36.77	40.29	36.23	37.69	37.94	39.81	40.80	38.83	37.12	37.81	37.41
4	37.92	36.73	39.90	36.17	37.38	37.88	39.71	41.24	38.91	37.11	37.61	37.38
5	38.04	36.69	39.39	36.08	37.07	37.72	39.68	41.38	38.97	37.21	37.46	37.33
6	38.00	36.66	38.91	36.03	36.81	37.51	39.72	41.36	38.90	37.32	37.34	37.27
7	37.92	36.63	38.42	35.93	36.79	37.28	40.36	41.39	38.87	37.35	37.28	37.19
8	37.81	36.61	38.44	35.72	37.02	37.21	40.56	41.35	38.89	37.32	g37.21	37.06
9	37.76	36.54	38.54	35.49	37.26	37.42	40.50	41.24	38.77	37.53	g37.21	37.07
10	37.63	36.52	38.33	35.29	37.33	37.59	40.33	41.04	38.65	37.86	g37.14	37.06
11	37.53	36.50	38.12	35.17	37.38	37.84	40.22	40.95	38.56	38.09	g36.91	37.02
12	37.43	36.49	37.84	35.13	37.39	38.11	40.09	41.00	38.46	38.29	36.86	37.08
13	37.39	36.47	37.53	35.09	37.39	38.39	39.98	40.74	38.37	38.47	37.00	37.10
14	37.40	36.45	37.46	35.03	37.39	38.72	39.85	40.39	38.27	38.60	37.22	37.06
15	37.42	36.43	37.41	34.95	37.39	38.91	39.58	40.00	38.14	38.70	37.42	36.92
16	37.43	36.44	37.26	34.94	37.38	39.10	40.12	39.58	37.98	38.73	37.42	36.81
17	37.40	36.49	37.12	34.98	37.25	39.09	40.71	39.36	37.87	38.78	37.40	36.71
18	37.34	37.86	37.09	34.97	36.83	39.00	40.81	39.45	37.77	38.80	37.30	36.64
19	37.17	40.02	37.00	34.89	36.39	39.09	40.69	39.52	37.74	g38.82	37.31	36.55
20	37.23	40.90	36.92	34.97	35.97	39.39	40.69	39.24	37.70	g38.74	37.30	36.42
21	37.30	41.03	36.99	34.88	35.59	39.58	40.66	39.23	37.69	g38.56	37.30	36.37
22	37.30	40.98	36.99	34.81	35.46	39.58	40.40	39.11	37.67	g38.52	37.29	36.38
23	37.24	40.92	37.07	34.73	35.39	39.52	40.11	38.96	37.50	g38.50	37.17	36.34
24	37.21	41.08	37.10	35.00	35.19	39.48	39.87	38.97	37.47	g38.51	37.07	36.24
25	37.25	41.39	37.06	36.11	35.00	39.32	39.59	38.99	37.37	g38.50	37.02	36.20
26	37.13	41.47	37.03	37.26	35.09	39.18	39.30	38.89	37.31	g38.45	37.14	36.12
27	37.08	41.45	36.99	37.73	35.60	39.03	39.16	38.77	37.32	g38.30	37.29	36.01
28	36.95	41.30	37.05	37.91	36.68	39.09	39.17	38.81	37.34	g38.19	37.40	35.88
29	36.88	41.09	36.87	38.06	-	39.27	39.20	38.78	37.20	g38.20	37.51	35.72
30	36.80	41.00	36.70	38.12	-------	39.31	39.54	38.70	37.14	g38.12	37.49	35.65
31	36.81	-------	36.60	38.19	-------	39.35	-------	38.80	-------	g38.01	37.48	-------
(†)	6.19	8.07	6.06	6.84	6.36	7.34	7.55	7.12	6.34	6.72	6.47	5.68
(‡)	-93	+725	-750	+291	-198	+366	+81	-161	-301	+142	-93	-305

Calendar year 1957..... ‡ +33
Water year 1957-58..... ‡ -24

† Contents, in billions of cubic feet, at 12 p.m. on last day of month.
‡ Change in contents, equivalent in cubic feet per second.
g Computed from 4 gage readings daily at powerhouse.
Note.--Add 400 ft to obtain elevation above mean sea level.

1670. Saluda River at Chappells, S. C.

Location.--Lat 34°11', long 81°52', on left bank at downstream side of bridge on State Highway 39 at Chappells, Newberry County, 7 miles downstream from dam at Lake Greenwood and 8¼ miles upstream from Little River.

Drainage area.--1,350 sq mi, approximately.

Records available.--October 1926 to September 1958. Monthly discharge only for some periods, published in WSP 1303. Gage-height records collected at practically same site since 1905 are contained in reports of U. S. Weather Bureau.

Gage.--Water-stage recorder. Datum of gage is 363.89 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Oct. 1, 1939, at site 300 ft downstream at datum 0.10 ft lower.

Average discharge.--32 years, 1,878 cfs.

Extremes.--Maximum discharge during year, 13,200 cfs Nov. 20 (gage height, 19.14 ft); minimum, 48 cfs July 6; minimum daily, 146 cfs July 5.

1926-58: Maximum discharge, 63,700 cfs Oct. 2, 1929 (gage height, 31.5 ft), from rating curve extended above 27,000 cfs on basis of velocity-area studies; minimum, 8 cfs Oct. 29, 1939; minimum daily, 8 cfs Oct. 29, 1939, caused by contruction work above station.

Maximum stage known, 35.7 ft Aug. 26, 1908 (present datum) from reports of U. S. Weather Bureau.

Remarks.--Records good. Flow regulated by Lake Greenwood (see preceding page).

Revisions (water years).--WSP 972: Drainage area. WSP 1303: 1942-45 (monthly and yearly runoff).

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1		Oct. 2 to Sept. 30			
7.7	2,960	0.6	144	5.0	1,640
7.8	3,010	1.0	228	9.0	3,540
		1.5	360	14.0	6,620
		2.0	510	18.0	10,800
		3.0	856	19.0	12,900

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,980	838	4,290	2,500	2,700	2,170	3,800	4,620	1,160	860	802	542
2	1,330	1,080	4,350	2,310	3,230	1,820	4,080	4,620	2,050	846	1,560	590
3	1,160	638	4,520	2,000	3,690	2,930	4,020	4,080	1,600	920	1,590	659
4	1,200	692	4,460	1,560	3,640	3,040	4,080	2,540	1,640	491	1,720	676
5	1,610	1,130	4,350	1,480	3,440	3,190	3,480	4,300	1,740	146	1,420	659
6	1,910	932	4,180	1,960	3,390	3,120	2,860	4,690	1,870	448	1,350	913
7	2,070	1,010	3,740	2,300	3,880	3,140	3,740	5,280	1,330	1,440	1,360	972
8	1,690	1,010	2,420	2,440	1,790	1,990	*3,920	4,910	1,160	1,760	730	979
9	1,730	1,460	4,080	2,160	1,830	2,800	4,080	4,620	2,390	2,000	1,080	550
10	1,510	909	4,400	2,450	2,270	2,900	4,400	4,400	2,000	2,040	1,230	515
11	1,320	814	4,020	1,430	2,270	1,520	4,790	2,650	1,790	1,530	1,700	510
12	1,300	1,010	3,640	1,450	2,180	1,320	3,890	3,390	1,730	1,110	*1,360	524
13	950	1,010	2,960	*2,020	2,000	1,360	2,800	4,520	1,480	680	951	1,080
14	801	1,050	1,910	2,360	1,650	1,520	3,830	4,520	1,480	1,420	1,320	875
15	1,180	913	1,930	2,230	2,400	1,200	4,710	4,520	1,720	1,780	802	974
16	1,120	1,280	2,590	2,030	1,960	1,260	10,100	4,400	2,190	1,430	1,130	1,100
17	1,230	1,020	2,130	1,760	2,970	2,610	8,450	2,310	1,520	1,440	1,070	1,120
18	1,800	1,770	1,930	1,400	*3,860	3,240	5,480	1,610	1,360	1,050	1,360	1,170
19	1,760	5,550	1,850	1,230	3,640	1,760	4,100	2,740	1,400	1,640	784	1,090
20	872	11,500	1,810	1,630	3,440	1,320	2,390	*2,430	1,270	1,980	748	914
21	1,210	9,350	1,860	2,230	2,940	1,330	3,520	2,500	806	2,400	802	888
22	1,120	5,200	2,090	2,340	2,180	2,260	4,460	2,550	1,250	1,870	766	*838
23	*1,160	8,800	1,810	2,200	1,910	1,720	4,790	2,340	1,640	1,860	959	1,080
24	1,080	7,480	2,060	3,470	2,890	2,490	4,520	1,660	1,180	1,840	1,070	1,070
25	1,330	7,550	2,180	3,480	2,110	4,240	4,400	1,600	*1,260	1,780	1,270	1,080
26	1,590	*8,420	3,420	2,560	2,540	3,930	3,740	2,690	1,500	1,790	694	1,070
27	1,010	6,150	2,410	3,290	3,090	3,890	2,270	1,960	1,400	1,750	625	1,230
28	1,400	4,850	2,960	2,400	1,590	2,010	3,550	1,500	876	1,790	625	708
29	1,490	4,250	2,920	2,140	-	2,130	4,910	1,680	1,350	1,480	608	1,010
30	1,080	4,850	2,990	2,100	-------	2,260	4,910	1,580	999	1,460	712	991
31	853	-------	2,380	1,640	-------	3,580	-------	690	-------	1,470	708	-------
Total	42,846	102,516	92,640	66,550	75,480	74,050	130,070	97,900	45,141	44,501	32,906	26,377
Mean	1,382	3,417	2,988	2,147	2,696	2,389	4,336	3,158	1,505	1,436	1,061	879
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 11,500 Min 122 Mean 1,678 Cfsm - In. -
Water year 1957-58: Max 11,500 Min 146 Mean 2,277 Cfsm - In. -

* Discharge measurement made on this day.

1675. Saluda River near Silverstreet, S. C.

Location.--Lat 34°11', long 81°44', on left bank 200 ft upstream from Higgins Ferry Bridge on State Highway 19, 1 mile downstream from Little River, and 2½ miles south of Silverstreet, Newberry County.

Drainage area.--1,620 sq mi, approximately.

Records available.--October 1926 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

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

Average discharge.--32 years, 2,143 cfs.

Extremes.--Maximum discharge during year, 15,400 cfs Nov. 21; maximum gage height, 19.91 ft Apr. 17; minimum daily discharge, 588 cfs Sept. 10.
1926-58: Maximum discharge, 83,800 cfs Oct. 3, 1929 (gage height, 33.97 ft), from rating curve extended above 19,000 cfs on basis of discharge measurements made at Chappells and near Chapin; minimum daily, 49 cfs July 4, 1940.

Remarks.--Records good except those for periods of backwater from Lake Murray, which are fair. Flow regulated by Lake Greenwood (see p. 186). City of Newberry diverts up to about 3 cfs above station for municipal supply.

Revisions (water years).--WSP 972: Drainage area. WSP 1303: 1942-45 (monthly and yearly runoff).

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,930	962	4,870	2,910	2,620	2,450	4,730	5,650	1,110	951	971	754
2	2,110	1,020	4,520	2,630	3,280	2,500	4,730	5,530	2,070	951	1,500	680
3	1,490	1,020	4,590	2,320	4,000	3,460	4,520	6,700	1,670	1,050	1,720	767
4	1,310	736	4,520	1,960	3,940	3,220	4,940	5,250	1,680	766	2,080	768
5	1,570	1,170	4,520	1,840	3,640	3,460	4,070	4,450	1,700	632	1,600	766
6	2,010	1,080	4,200	1,620	3,700	3,400	3,900	5,000	1,830	662	1,570	976
7	2,270	1,080	4,000	2,630	4,870	3,340	*3,660	6,380	1,740	1,520	1,530	890
8	1,850	1,080	2,920	2,860	2,740	2,910	4,510	6,380	1,250	1,860	911	1,240
9	1,740	1,390	4,520	2,400	1,960	3,320	4,480	5,530	2,250	2,260	1,200	657
10	1,650	1,080	5,010	2,680	2,450	3,880	4,790	4,960	1,950	2,380	1,160	588
11	1,320	1,060	4,400	1,960	2,500	2,180	5,660	3,520	1,750	1,910	2,030	613
12	1,240	1,080	4,070	1,660	2,400	1,610	4,650	3,190	1,700	1,370	*1,690	630
13	1,040	1,080	3,520	1,760	2,230	1,610	3,610	5,000	1,500	998	1,130	1,100
14	963	1,130	2,180	2,800	2,010	2,040	3,650	5,000	1,350	1,500	1,560	934
15	1,140	1,080	1,880	*2,740	2,300	1,650	4,840	4,870	1,570	2,030	1,110	1,140
16	978	1,200	2,860	2,400	2,450	1,300	10,300	4,800	2,240	1,760	1,300	1,180
17	1,150	1,210	2,390	2,060	2,860	2,390	*14,100	3,150	1,710	1,580	1,080	1,200
18	1,520	1,480	2,210	1,740	*4,070	3,630	10,300	1,560	1,410	1,300	1,560	1,280
19	2,120	7,660	2,040	1,660	3,940	2,990	5,660	2,740	1,410	1,530	914	1,240
20	1,040	12,700	2,050	1,390	3,760	1,670	3,130	2,690	1,350	1,970	914	1,100
21	1,040	14,600	2,180	2,400	3,340	1,420	3,420	*2,730	933	2,990	902	901
22	1,300	9,810	2,500	2,680	2,450	2,260	4,720	2,580	1,180	2,440	888	*1,060
23	*1,170	7,760	2,100	2,500	2,120	2,120	5,330	2,520	*1,790	2,320	1,120	1,160
24	1,170	11,100	2,150	3,940	2,860	2,370	5,170	1,810	1,210	2,060	1,050	1,170
25	1,180	9,140	2,500	6,030	2,450	4,360	4,820	1,610	1,340	1,990	1,500	1,140
26	1,660	*10,300	3,360	3,940	2,920	4,590	4,280	2,630	1,920	1,970	902	1,160
27	1,200	8,910	3,520	4,140	4,330	4,660	2,940	2,190	1,940	1,930	796	1,260
28	1,580	5,780	2,930	2,920	3,100	3,060	3,420	1,490	1,040	2,250	700	801
29	1,350	4,400	3,640	2,450	-	2,150	5,610	1,630	1,530	1,650	750	1,130
30	1,440	5,080	3,460	2,400	-------	2,600	6,660	1,870	1,190	1,640	887	1,120
31	1,080	-------	2,680	2,060	-------	3,760	-------	940	-------	1,610	702	-------
Total	46,611	127,178	102,290	79,480	85,290	86,360	156,600	114,350	47,313	51,830	37,727	29,405
Mean	1,504	4,239	3,300	2,564	3,046	2,786	5,220	3,689	1,577	1,672	1,217	980
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 14,600 Min 362 Mean 1,872 Cfsm - In. -
Water year 1957-58: Max 14,600 Min 588 Mean 2,642 Cfsm - In. -

* Discharge measurement made on this day.
Note.--Backwater from Lake Murray Oct. 2-18, 20, 21, Dec. 14, 15, 17-20, 23-25, Dec. 31 to Jan. 6, Jan. 12, Mar. 11-17, 20-24, 28-30, Apr. 5-15, Apr. 18 to Sept. 30.

1685. Lake Murray near Columbia, S. C.

Location.--Lat 34°03'05", long 81°13'15", in intake tower 500 ft upstream from dam on Saluda River and 10 miles upstream from confluence of Saluda and Broad Rivers at Columbia, Richland County.

Drainage area.--2,420 sq mi, approximately.

Records available.--August 1929 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 0.64 ft below mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Oct. 31, 1930, staff gage at same site and datum.

Extremes.--Maximum gage height during year, 357.93 ft Apr. 22; minimum, 344.63 ft Nov. 18. 1929-58: Maximum gage height, 361.51 ft Apr. 10, 1936; minimum gage height since generation of power was started, 320.96 ft Dec. 23, 1941.

Remarks.--Lake is formed by earth dam; storage began Aug. 31, 1929; dam completed in 1930. Usable capacity, 70,300,000,000 cu ft between gage heights 300.0 ft (limit of drawdown) and 360.0 ft (maximum normal lake level). Dead storage, 21,800,000,000 cu ft. Figures given herein represent usable contents. Gage height of one spillway crest (completed in 1946), 330 ft with top of gates 362 ft; gage height of other spillway crest 340 ft with top of gates 365 ft. Water is used for generation of power.

Revisions.--WSP 972: Drainage area.

Capacity table, water year 1957-58 (gage height, in feet, and usable contents, in billions of cubic feet)
(Prepared in 1941 by Lexington Water Power Co. from topographic map, contour survey, and study of change in reservoir elevation due to inflow)

340.0	35.44
345.0	42.64
350.0	50.77
355.0	59.94
360.0	70.30

Mean gage height, in feet, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50.87	47.15	50.07	50.57	48.73	49.29	50.63	57.71	56.54	54.94	55.11	53.31
2	50.93	47.00	50.25	50.55	48.74	49.45	50.82	57.71	56.50	54.87	54.98	53.23
3	50.87	46.94	50.22	50.38	48.76	49.53	51.97	57.71	56.41	54.79	54.98	53.11
4	50.81	46.89	50.21	50.27	48.61	49.56	52.22	57.72	56.25	54.77	54.98	52.99
5	50.80	46.65	50.10	50.25	48.47	49.54	52.61	57.71	56.11	54.77	54.88	52.87
6	50.82	46.42	50.04	50.12	48.48	49.52	52.98	57.71	55.95	54.78	54.76	52.78
7	50.84	46.16	50.07	g49.99	48.87	49.52	53.34	57.72	55.80	54.78	54.65	52.77
8	50.71	g45.92	50.27	g49.87	49.12	49.66	53.44	57.73	55.86	54.77	54.52	52.74
9	50.54	g45.83	50.48	g49.69	49.23	49.92	53.56	57.73	55.91	54.82	54.42	52.60
10	50.36	g45.79	50.50	g49.53	49.26	50.13	53.72	57.73	55.81	54.90	54.44	52.46
11	50.20	g45.70	50.49	g49.41	49.20	50.20	53.96	57.79	55.66	54.90	54.44	52.31
12	50.00	g45.46	50.38	g49.31	49.17	50.21	54.17	57.81	55.50	54.97	54.41	52.19
13	50.00	g45.22	50.26	g49.18	49.10	50.24	54.42	57.73	55.42	55.04	54.34	52.16
14	49.92	g45.01	50.16	g49.10	49.02	50.33	54.54	57.64	55.31	55.15	54.23	52.09
15	49.89	44.86	50.16	g48.95	49.03	50.36	54.74	57.52	55.25	55.25	54.17	52.08
16	49.45	44.74	50.19	g48.76	49.10	50.42	55.80	57.39	55.18	55.23	54.07	51.96
17	49.24	44.75	50.10	48.57	49.06	50.48	56.58	57.32	55.11	55.23	54.08	51.81
18	49.04	44.79	49.92	48.39	48.89	50.52	57.04	57.32	55.06	55.14	54.08	51.64
19	48.93	44.84	49.77	48.30	48.78	50.64	57.34	57.24	54.97	55.16	53.98	51.51
20	48.96	45.14	49.61	48.19	48.62	50.62	57.53	57.15	54.88	55.42	53.82	51.44
21	48.90	45.48	49.67	47.98	48.52	50.59	57.61	57.15	54.79	55.48	53.67	51.46
22	48.72	45.84	49.76	47.86	48.52	50.54	57.69	57.13	54.88	55.46	53.51	51.46
23	48.53	46.34	49.82	47.65	48.57	50.59	57.69	57.06	54.95	55.42	53.41	51.34
24	48.37	46.93	49.91	47.87	48.59	50.61	57.66	57.04	54.91	55.36	53.46	51.25
25	48.24	47.71	50.06	48.72	48.47	50.66	57.62	57.04	54.86	55.37	53.58	51.19
26	48.12	48.35	50.26	49.16	48.56	50.78	57.59	57.03	54.81	55.38	53.60	51.10
27	48.12	48.75	50.39	49.31	48.88	50.95	57.60	56.97	54.94	55.46	53.53	51.03
28	48.03	49.12	50.48	49.23	49.18	51.05	57.55	56.88	54.95	55.49	53.45	51.03
29	47.80	49.44	50.69	49.07	-	51.14	57.65	56.70	54.97	55.42	53.37	51.04
30	47.60	49.77	50.75	48.89	-------	51.30	57.72	56.57	54.99	55.32	53.31	51.02
31	47.36	-------	50.60	48.73	-------	51.45	-------	56.54	-------	55.23	53.31	-------
(†)	46.15	50.75	51.66	48.50	49.46	53.45	65.38	63.00	59.92	60.23	56.72	52.41
(‡)	-2,240	+1,775	+340	-1,180	+397	+1,490	+4,603	-889	-1,188	+116	-1,510	-1,683

Calendar year 1957..... ‡ +292
Water year 1957-58..... ‡ +8

† Contents, in billions of cubic feet, at 12 p.m. on last day of month.
‡ Change in contents, equivalent in cubic feet per second.
g Computed from 4 gage readings daily at powerhouse.
Note.--Add 300 ft to obtain gage heights.

1690. Saluda River near Columbia, S. C.

Location.--Lat 34°00'50", long 81°05'17", on left bank 0.4 mile upstream from site of old Saluda mill, 1.6 miles upstream from confluence with Broad River, and 3.3 miles west of State Capitol in Columbia, Richland County.

Drainage area.--2,510 sq mi, approximately.

Records available.--August 1925 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 149.46 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Sept. 1, 1929, at datum 1.00 ft higher.

Average discharge.--33 years, 2,727 cfs.

Extremes.--Maximum discharge during year, 13,100 cfs Jan. 24 (gage height, 6.77 ft); minimum, 158 cfs Oct. 21; minimum daily, 195 cfs Aug. 17.
1925-58: Maximum discharge, 67,000 cfs Oct. 2, 1929 (gage height, 15.22 ft), from rating curve extended above 26,000 cfs on basis of discharge measurements made at Wise Ferry Bridge near Chapin; minimum, 11 cfs July 13, 1930; minimum daily, 12 cfs July 13, 1930, caused by construction work above station.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Flow regulated by Lake Murray (see preceding page) and Lake Greenwood (see p. 186).

Revisions (water years) WSP 972: Drainage area. WSP 1303: 1929-39 (monthly and yearly runoff).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.4	184	3.0	1,700
1.7	320	4.0	3,680
2.0	540	6.0	9,950
2.5	1,030		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,060	4,730	560	1,970	3,580	600	2,230	8,410	317	2,800	4,000	1,240
2	3,820	2,260	5,040	5,400	2,540	352	2,530	7,370	5,470	1,800	2,700	3,210
3	4,390	930	6,080	6,200	6,170	2,980	2,270	8,260	5,360	2,600	449	2,990
4	4,440	4,870	6,420	2,370	6,700	3,680	2,080	6,410	5,040	300	4,130	3,380
5	1,870	5,500	6,840	2,250	6,410	4,400	628	7,080	5,420	300	3,840	3,420
6	492	5,580	4,920	6,040	6,000	4,000	969	7,290	5,450	300	3,820	1,040
7	4,490	5,110	3,580	6,820	5,240	3,800	2,370	7,690	1,380	3,200	*4,170	258
8	5,200	4,630	692	6,740	1,400	900	3,020	6,780	332	3,400	4,180	3,900
9	5,500	2,500	5,150	6,610	770	400	2,550	5,620	5,700	3,800	729	3,580
10	5,510	532	5,940	5,530	4,500	3,200	2,310	4,360	5,920	2,800	198	3,960
11	5,200	4,860	6,010	4,800	4,120	3,200	1,710	3,330	5,440	2,400	4,510	3,880
12	2,550	5,430	6,450	2,930	4,360	2,800	484	6,620	4,210	360	4,420	3,800
13	450	5,410	6,160	6,410	4,330	3,000	265	7,930	4,070	300	4,290	1,800
14	5,030	4,920	3,870	6,910	3,210	2,800	1,880	7,820	3,120	2,400	3,900	700
15	5,760	5,030	564	6,910	3,710	1,000	2,560	7,930	1,030	2,800	4,230	3,600
16	5,720	1,810	4,360	7,090	2,220	400	5,670	7,900	4,200	3,400	625	4,200
17	5,580	353	5,560	6,870	6,290	3,000	5,980	4,680	2,800	3,600	195	5,000
18	5,080	4,970	5,870	4,190	6,600	3,600	2,430	2,170	2,800	3,800	3,550	4,140
19	1,640	5,650	6,250	2,170	6,840	3,600	662	5,610	3,800	800	3,890	2,930
20	224	5,800	4,450	*6,160	6,610	3,390	383	4,890	3,800	300	4,170	1,300
21	4,590	6,290	801	6,870	4,830	3,180	3,710	4,150	1,600	2,800	4,340	302
22	5,050	5,350	286	6,740	2,720	2,040	4,530	4,160	280	3,600	4,450	3,890
23	5,190	3,690	958	6,600	714	614	6,820	4,100	2,000	5,000	829	3,370
24	4,850	962	318	7,560	5,340	4,740	6,930	2,390	2,000	2,810	249	2,790
25	4,680	5,280	260	2,780	5,230	5,020	6,560	1,040	2,400	2,290	3,750	3,050
26	1,580	4,820	1,240	917	4,760	5,130	4,670	4,330	2,800	531	3,110	2,710
27	514	4,210	2,620	5,980	3,970	5,080	4,400	4,350	2,000	292	2,530	881
28	4,960	701	928	5,670	2,870	2,670	5,730	4,890	280	3,450	2,300	258
29	5,420	1,950	459	6,490	-	641	7,000	5,030	240	3,850	2,680	1,580
30	5,480	1,580	5,870	6,540	-------	304	8,760	4,100	1,400	3,870	1,050	2,340
31	*5,380	-------	6,160	5,970	-------	2,690	-------	892	-------	3,830	244	-------
Total	124,680	115,708	114,666	166,487	122,034	83,211	102,091	167,582	90,259	73,783	87,528	79,479
Mean	4,022	3,857	3,699	5,371	4,358	2,684	3,403	5,406	3,009	2,380	2,823	2,649
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 6,840 Min 161 Mean 2,040 Cfsm - In. -
Water year 1957-58: Max 8,760 Min 195 Mean 3,637 Cfsm - In. -

* Discharge measurement made on this day.
Note.--No gage-height record Mar. 5-19, June 16 to July 23, Sept. 12-17; discharge estimated on basis of recorded range in stage, weather records, and tailrace records at Lake Murray powerplant.

1695. Congaree River at Columbia, S. C.

Location.--Lat 33°59'35", long 81°03'00", on right bank at Columbia, Richland County, 1,000 ft downstream from Gervais Street Bridge and 1.4 miles downstream from confluence of Broad and Saluda Rivers.

Drainage area.--7,850 sq mi, approximately.

Records available.--October 1939 to September 1958. Gage-height records collected at site 1,000 ft upstream October 1891 to December 1933 and at present site since January 1934 are contained in reports of U. S. Weather Bureau.

Gage.--Water-stage recorder. Datum of gage is 113.02 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--19 years, 8,027 cfs.

Extremes.--Maximum and minimum discharges for the water years 1940-58 are contained in the following table:

Water year	Maximum			Minimum		
	Date	Discharge (cfs)	Gage height (feet)	Date	Discharge (cfs)	Gage height (feet)
1940	Aug. 16, 1940	121,000	26.14	Nov. 26, 1939	596	0.98
1941	July 18, 1941	52,000	17.19	Oct. 28, 1940	608	1.03
1942	Feb. 19, 1942	52,400	17.31	Jan. 19, 1942	588	.94
1943	Jan. 20, 1943	63,400	19.44	Oct. 5, 1942	634	1.13
1944	Mar. 21, 1944	105,000	24.57	Sept.11, 1944	792	1.52
1945	Sept.20, 1945	102,000	24.30	Nov. 19, 1944	631	1.12
1946	Jan. 9, 1946	62,200	19.21	Sept.30, 1946	686	1.29
1947	Jan. 21, 1947	63,400	19.42	July 14, 1947	698	1.32
1948	Feb. 14, 1948	54,400	17.72	Aug.22, Sept.6, 1948	702	1.33
1949	Nov. 30, 1948	116,000	25.56	Aug. 15, 1949	680	1.27
1950	Oct. 9, 1949	50,200	16.77	Aug. 7, 1950	706	1.34
1951	Dec. 9, 1950	32,000	12.27	June 25, 1951	683	1.28
1952	Mar. 6, 1952	91,400	23.20	Oct. 29, 1951	680	1.27
1953	Feb. 23, 1953	43,500	15.28	Oct. 27, 1952	683	1.28
1954	Jan. 25, 1954	65,200	19.66	July 11, 1954	625	1.10
1955	Apr. 15, 1955	47,000	16.06	Oct. 20, 1954	628	1.11
1956	Apr. 18, 1956	43,100	15.22	Dec. 19, 1955, Jan.16,1956	655	1.20
1957	Apr. 7, 1957	31,000	12.00	Dec. 10, 1956	706	1.34
1958	May 1, 1958	64,000	19.46	Oct. 14, 1957	745	1.43

1939-58: Maximum discharge, 121,000 cfs Aug. 16, 1940 (gage height, 26.14 ft); minimum, 588 cfs Jan. 19, 1942 (gage height, 0.94 ft).

Maximum flood known occurred Aug. 27, 1908, discharge 364,000 cfs (gage height, 39.8 ft, present datum, at site 1,000 ft upstream, from records of U. S. Weather Bureau) by conveyance-slope study.

Remarks.--Records good except those below 800 cfs and those for periods of no gage-height record, which are fair. Flow regulated by Lake Murray (see p. 189) and Lake Greenwood (see p. 186) on Saluda River and to some extent, at low and medium flow, by powerplants on Broad River.

Cooperation.--Gage-height record collected in cooperation with U. S. Weather Bureau.

Discharge, in cubic feet per second, water year October 1939 to September 1940

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,580	5,950	3,340	2,870	3,780	3,890	4,340	3,860	4,200	1,210	3,060	13,000
2	4,000	6,240	2,780	4,620	3,790	4,650	5,880	4,240	2,550	1,920	2,510	8,760
3	7,120	6,130	1,530	4,710	3,610	2,410	5,420	4,590	2,640	2,570	1,980	6,800
4	7,040	3,330	2,330	4,570	2,980	4,370	6,090	4,230	4,120	1,930	850	7,720
5	6,660	1,830	3,120	4,570	3,230	7,280	5,140	1,920	3,450	2,090	2,120	8,150
6	6,450	5,230	3,300	3,440	4,590	6,220	3,820	3,340	2,810	1,480	2,830	6,890
7	3,170	6,320	3,280	2,750	6,480	5,550	3,500	4,160	3,160	1,320	3,410	4,890
8	1,930	6,150	3,210	3,980	10,000	5,100	5,360	5,900	2,840	1,740	3,230	1,800
9	4,010	6,420	2,230	4,360	6,440	4,870	8,030	6,810	2,090	3,090	3,230	5,030
10	6,480	6,350	1,260	5,030	5,800	3,240	5,350	5,860	2,490	2,730	2,240	7,540
11	6,560	2,910	2,840	5,230	5,250	3,580	4,690	4,650	4,740	1,690	1,200	6,980
12	6,260	1,560	3,860	5,010	10,300	4,680	5,900	1,970	3,530	1,990	2,640	7,760
13	6,030	5,100	4,310	4,080	7,100	4,040	5,890	3,410	4,500	2,840	3,630	8,300
14	3,580	5,980	4,190	3,570	4,620	5,950	4,250	4,290	4,640	1,360	15,600	3,800
15	1,220	6,650	4,470	12,100	4,130	13,200	3,620	4,970	3,130	2,310	51,300	1,820
16	3,970	6,260	2,540	14,500	4,120	13,900	4,830	4,810	2,000	2,740	*107,000	5,270
17	6,390	6,380	2,460	10,400	4,030	8,410	5,030	4,740	3,120	2,890	*63,400	6,210
18	6,110	3,080	4,370	7,100	4,820	6,350	5,310	3,050	6,960	5,000	19,300	6,390
19	a6,500	2,190	4,460	5,100	12,400	6,580	4,970	1,860	6,720	7,960	8,430	6,240
20	a6,500	5,620	4,250	4,700	*20,700	5,230	4,870	2,670	4,440	7,260	7,470	6,650
21	a3,800	6,910	3,500	2,010	16,200	4,900	4,070	3,690	4,020	2,700	6,970	4,630
22	a1,800	6,140	3,930	2,610	12,100	4,480	4,480	4,720	2,770	1,970	6,510	1,900
23	a4,200	4,000	3,820	3,960	8,800	4,500	*4,900	4,440	1,980	3,390	5,450	3,080
24	a6,500	4,490	2,930	5,230	7,100	2,780	4,620	4,730	2,610	2,840	4,290	3,570
25	a7,000	2,940	2,140	4,690	3,800	3,960	4,230	3,690	3,510	2,920	3,640	5,560
26	a7,000	1,410	3,620	4,100	4,570	4,580	5,330	2,750	3,110	2,830	4,650	4,740
27	a6,500	2,910	4,490	2,790	5,080	4,510	3,900	2,900	2,960	2,880	9,100	4,330
28	a4,000	4,440	4,710	2,400	4,650	4,640	2,600	3,460	2,390	1,070	10,100	3,390
29	a1,200	4,390	5,600	2,010	4,140	5,400	3,640	3,990	2,930	2,990	6,780	1,400
30	4,860	4,380	5,010	2,560	-------	5,400	4,780	4,130	1,210	3,570	7,060	2,890
31	6,400	-------	2,280	3,290	-------	3,580	-------	6,620	-------	3,650	10,100	-------
Total	154,820	141,690	106,160	148,340	194,600	168,210	144,840	126,650	101,620	86,930	380,080	165,290
Mean	4,994	4,723	3,425	4,785	6,710	5,426	4,828	4,085	3,387	2,804	12,260	5,510
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Water year 1939-40: Max 107,000 Min 850 Mean 5,244 Cfsm - In. -

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for Broad River at Richtex and Saluda River near Columbia.

1695. Congaree River at Columbia, S. C.--Continued

Discharge, in cubic feet per second, water year October 1940 to September 1941

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,980	7,200	3,400	12,200	3,610	4,490	6,220	3,330	1,770	6,810	6,160	3,330
2	4,130	4,940	7,000	13,300	2,360	3,240	5,360	3,660	3,560	6,260	4,480	5,680
3	4,450	3,280	8,860	13,100	3,580	4,140	5,450	2,850	4,690	5,990	4,350	5,650
4	5,150	7,500	9,200	9,710	3,710	5,160	4,330	3,260	3,810	4,230	5,510	6,950
5	3,150	5,500	9,850	6,370	4,250	4,350	8,530	2,160	2,910	3,850	9,490	11,400
6	1,180	4,000	9,440	6,530	4,410	5,090	11,300	2,880	3,340	13,300	11,000	5,980
7	3,320	3,600	7,250	7,360	4,020	5,780	11,200	4,120	2,640	46,800	9,460	2,670
8	3,870	3,600	3,690	5,770	3,630	7,490	7,470	3,430	1,430	43,600	8,170	3,390
9	4,550	2,600	6,380	4,910	2,820	10,200	6,200	2,880	3,860	*41,700	6,950	4,230
10	4,270	2,800	8,000	5,180	4,030	10,200	6,450	2,660	5,020	20,200	3,860	5,090
11	4,060	3,400	10,100	5,090	3,500	7,620	5,740	2,620	4,690	14,500	5,090	4,430
12	2,730	5,000	10,900	2,720	4,360	5,550	4,730	2,180	5,990	16,900	7,550	4,150
13	1,370	8,000	10,300	3,250	4,390	4,830	3,910	3,170	9,270	13,400	7,540	3,800
14	3,500	22,000	8,370	5,580	4,050	5,430	2,850	3,520	6,330	17,500	5,760	1,200
15	5,790	22,000	4,270	5,210	5,090	4,880	5,730	3,910	4,790	16,600	6,080	3,600
16	5,570	14,000	8,150	4,670	3,400	4,890	5,250	4,090	4,530	24,600	3,540	6,500
17	5,580	5,500	9,860	4,190	3,300	2,620	4,750	4,970	6,420	40,800	2,500	7,500
18	5,650	5,500	13,300	4,080	4,600	3,940	4,740	2,590	4,220	50,200	4,200	7,500
19	3,830	5,500	11,900	2,860	4,040	4,040	4,290	3,840	4,570	34,400	4,730	7,000
20	1,450	6,500	12,700	3,310	4,200	3,260	3,540	5,090	4,790	13,200	5,450	4,600
21	4,110	5,500	5,880	3,830	4,400	4,580	3,090	5,600	3,020	14,200	7,800	2,600
22	4,770	5,000	3,750	3,870	3,460	3,710	4,320	5,240	1,830	14,500	8,040	4,000
23	4,680	4,600	6,000	3,800	2,450	3,370	*3,970	5,450	3,040	10,600	5,080	5,500
24	4,880	2,600	5,290	3,760	5,760	2,500	3,980	4,040	5,960	9,800	3,650	6,500
25	*5,350	4,400	3,510	3,560	6,180	4,730	4,430	2,000	6,400	5,710	4,040	6,500
26	3,170	6,000	8,060	2,830	6,270	6,050	5,810	3,380	8,640	4,730	6,170	6,000
27	1,010	6,500	14,600	3,210	7,590	5,250	4,300	3,680	8,940	4,130	9,580	5,500
28	3,660	5,000	13,800	4,370	6,650	5,190	2,940	4,190	6,990	3,160	7,980	4,000
29	5,500	8,500	5,940	4,050	-	6,330	3,650	4,370	5,230	5,220	6,230	4,760
30	5,500	6,500	10,600	3,260	-------	7,370	3,470	4,150	4,640	4,850	4,940	4,780
31	5,260	-------	13,600	3,570	-------	6,200	-------	3,020	-------	6,820	2,710	-------
Total	125,450	197,020	263,950	165,500	120,110	162,480	158,000	112,330	143,320	518,560	188,090	154,790
Mean	4,047	6,567	8,515	5,339	4,290	5,241	5,267	3,624	4,777	16,730	6,067	5,160
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1940: Max 107,000 Min 850 Mean 5,746 Cfsm - In. -
Water year 1940-41: Max 50,200 Min 1,010 Mean 6,328 Cfsm - In. -

* Discharge measurement made on this day.
Note.--No gage-height record Oct. 29, 30, Nov. 4 to Dec. 2, Sept. 13-28; discharge estimated on basis of weather records and records for Broad River at Richtex and Saluda River near Columbia.

Discharge, in cubic feet per second, water year October 1941 to September 1942

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,310	8,070	5,090	5,270	4,200	5,620	10,100	4,800	3,460	8,540	5,850	5,720
2	5,580	2,410	7,620	4,500	a3,800	7,160	9,340	4,660	5,680	11,500	3,380	6,430
3	5,700	5,180	8,680	5,300	a5,000	22,300	9,310	4,010	5,110	11,500	6,610	5,180
4	4,220	7,250	9,670	6,750	a4,600	24,100	9,220	3,390	4,230	6,560	8,550	6,880
5	1,800	*7,380	8,070	5,980	a4,200	13,600	5,680	4,770	3,800	2,770	8,550	6,290
6	3,720	7,870	7,840	5,880	a4,400	11,000	6,710	5,110	4,080	4,480	5,200	3,690
7	5,330	10,500	5,350	4,620	8,540	10,600	9,580	4,830	3,040	6,260	4,660	4,120
8	4,780	7,880	6,340	4,410	11,000	10,800	8,980	4,050	4,380	7,040	5,600	21,100
9	5,460	2,420	8,060	4,510	9,000	31,100	10,700	4,480	7,130	8,040	3,370	15,400
10	5,330	7,440	7,600	4,040	7,910	38,300	18,400	2,530	12,900	7,870	3,130	9,910
11	a4,000	6,950	8,580	3,540	5,800	27,300	13,500	3,260	12,900	8,470	4,670	7,450
12	a1,600	6,850	9,260	2,940	5,990	15,400	7,480	5,680	15,100	2,460	5,970	8,370
13	a3,800	7,500	6,660	3,810	5,760	11,000	6,900	5,890	12,100	6,460	7,800	5,370
14	3,540	7,610	3,340	3,630	5,010	9,800	10,200	5,010	12,300	8,490	7,580	2,940
15	4,560	6,400	4,220	3,310	4,220	8,440	10,100	5,560	10,300	9,400	5,020	4,670
16	4,910	1,940	6,080	3,180	3,870	11,100	10,200	6,520	10,600	9,220	4,180	5,100
17	4,740	5,120	6,060	3,520	13,400	12,700	9,800	5,740	11,900	7,650	5,750	5,300
18	2,260	5,810	7,450	2,890	43,300	13,000	9,420	10,200	11,400	5,920	11,500	*6,290
19	1,040	7,180	4,350	2,480	46,800	10,000	5,380	7,340	11,800	3,010	24,400	6,280
20	3,280	5,500	4,730	3,870	*28,100	7,800	5,040	4,700	8,530	5,230	16,900	2,730
21	4,560	7,610	3,210	4,450	15,400	12,200	4,650	7,190	3,260	7,880	14,500	3,450
22	4,770	4,770	4,350	5,440	8,770	30,400	5,090	11,400	4,620	7,530	13,400	4,220
23	4,730	2,730	5,160	4,550	6,390	28,200	5,150	16,600	4,130	8,840	6,980	3,990
24	6,680	6,640	15,600	3,830	7,400	19,300	5,430	13,100	3,770	11,300	5,730	3,980
25	5,900	8,130	19,000	3,290	8,400	11,100	6,440	8,000	3,200	10,700	6,020	3,630
26	1,370	8,850	14,000	3,650	9,000	9,510	3,670	7,100	4,280	8,160	a6,500	3,540
27	5,800	8,120	15,800	3,710	8,600	9,190	3,720	6,080	3,800	7,970	a6,500	3,190
28	7,040	8,420	9,910	4,540	7,620	12,800	5,240	6,920	3,200	9,570	a7,500	3,080
29	9,610	5,110	6,050	3,730	-	15,100	5,080	5,470	3,700	12,700	a8,500	4,790
30	8,130	2,370	6,500	3,960	-------	11,800	3,680	5,390	6,970	10,800	a3,800	5,710
31	8,150	-------	4,450	4,160	-------	12,600	-------	3,880	-------	9,610	5,180	-------
Total	147,680	190,060	239,080	129,740	296,480	473,320	235,190	193,460	211,670	245,930	233,280	178,800
Mean	4,764	6,335	7,712	4,185	10,590	15,270	7,840	6,241	7,056	7,933	7,525	5,960
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1941: Max 50,200 Min 1,040 Mean 6,301 Cfsm - In. -
Water year 1941-42: Max 46,800 Min 1,040 Mean 7,602 Cfsm - In. -

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for Broad River at Richtex and Saluda River near Columbia.

1695. Congaree River at Columbia, S. C.--Continued

Discharge, in cubic feet per second, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,900	3,710	5,140	27,200	18,700	4,980	9,680	8,900	9,070	24,100	6,470	5,430
2	4,350	4,000	5,060	14,800	11,800	7,520	9,210	5,610	8,540	23,800	4,770	5,160
3	3,930	5,440	7,140	9,570	10,700	7,860	8,650	5,920	9,380	24,700	5,700	6,080
4	2,690	6,260	8,380	7,470	8,730	6,340	5,510	7,180	10,900	16,600	7,260	5,640
5	4,250	5,500	8,690	8,680	10,100	7,070	5,180	6,400	9,510	9,500	7,960	4,150
6	4,940	5,660	5,330	8,490	17,500	12,700	7,880	6,620	4,860	8,470	7,590	5,740
7	6,080	7,540	3,920	8,840	26,200	17,800	8,080	6,820	7,150	11,300	6,440	5,020
8	5,980	3,800	8,970	9,330	22,000	14,100	8,530	7,740	9,120	11,400	3,460	6,620
9	5,720	5,640	10,200	6,550	14,500	9,880	8,840	5,450	11,600	12,400	4,360	6,800
10	4,490	6,300	10,200	5,050	12,800	7,020	9,460	6,000	8,260	21,700	5,120	8,050
11	1,910	5,930	9,370	6,290	12,600	6,060	5,360	7,740	13,300	32,800	6,680	6,600
12	4,370	5,370	8,430	*8,140	12,100	6,220	7,710	8,620	10,500	25,000	8,410	3,480
13	4,980	4,820	4,890	8,800	10,600	6,920	9,930	7,810	7,010	19,800	7,890	5,680
14	5,460	5,900	6,980	7,830	6,780	5,860	9,400	8,160	7,030	23,200	15,200	5,180
15	5,460	2,520	6,990	7,210	7,970	5,010	8,870	8,630	6,300	19,200	10,000	5,900
16	5,510	3,790	6,610	4,940	11,100	7,840	9,210	5,400	6,440	14,000	9,280	6,260
17	4,550	5,480	6,390	4,250	11,100	9,280	8,580	5,590	6,970	11,600	8,480	6,330
18	2,440	5,800	6,840	7,930	10,700	9,540	5,180	7,520	6,420	5,460	7,470	4,170
19	4,450	5,970	7,500	*49,800	11,300	14,500	6,640	7,270	5,380	10,300	7,180	3,350
20	5,050	5,950	3,590	60,400	9,520	14,100	22,300	7,810	4,190	13,100	7,230	5,810
21	6,680	6,890	3,840	46,400	5,260	18,400	30,000	6,890	4,990	12,300	5,820	7,950
22	6,860	3,080	7,770	*28,200	6,130	35,200	19,600	7,020	4,930	12,000	4,210	8,810
23	6,120	5,290	6,180	13,800	7,580	37,500	14,400	6,250	4,140	12,600	5,990	9,440
24	5,370	9,560	4,220	9,000	7,180	25,600	12,400	10,700	5,860	11,200	6,720	8,730
25	2,280	10,100	3,730	6,670	5,980	15,100	10,700	11,600	6,280	5,040	6,420	5,670
26	3,220	4,660	3,020	7,550	6,860	12,900	10,300	12,800	7,040	9,250	6,740	3,700
27	8,030	3,040	1,960	8,370	8,130	12,500	11,400	10,900	4,570	12,800	6,410	5,740
28	8,720	3,740	4,770	16,600	4,150	8,400	11,200	13,100	4,500	14,800	6,080	5,710
29	6,120	2,370	7,860	42,300	-	11,400	9,940	13,100	6,130	14,200	6,240	6,060
30	5,800	3,350	18,000	55,400	-------	13,700	10,400	5,990	15,600	13,300	5,050	6,460
31	6,420	-------	34,800	38,100	-------	11,900	-------	7,730	-------	11,900	5,290	-------
Total	156,130	157,460	236,770	541,760	308,070	383,200	314,540	247,270	225,790	467,820	211,920	181,720
Mean	5,036	5,249	7,638	17,480	11,000	12,360	10,480	7,976	7,526	15,090	6,836	6,057
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1942: Max 46,800 Min 1,910 Mean 7,529 Cfsm - In. -
Water year 1942-43: Max 60,400 Min 1,910 Mean 9,404 Cfsm - In. -

* Discharge measurement made on this day.

Discharge, in cubic feet per second, water year October 1943 to September 1944

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,560	4,650	5,350	5,310	4,580	*15,400	46,300	13,600	9,750	6,040	8,820	6,140
2	5,640	6,040	5,470	4,240	5,840	11,800	22,300	11,800	9,000	4,330	6,560	4,680
3	2,960	5,740	5,520	6,180	5,500	10,300	17,800	11,400	7,250	3,840	13,200	2,020
4	5,050	5,830	4,290	23,200	5,480	9,030	16,900	10,700	5,270	4,250	9,920	2,240
5	5,050	5,100	2,970	*21,700	4,020	6,750	15,400	12,200	9,260	5,630	5,910	5,320
6	5,890	4,440	4,790	13,700	3,220	6,720	15,200	11,900	15,200	5,310	3,520	5,920
7	5,850	2,480	4,910	9,560	3,830	14,000	13,800	11,300	11,300	5,820	6,650	5,800
8	5,540	4,620	5,050	8,970	5,660	21,100	13,000	12,900	9,940	4,440	*13,900	5,910
9	5,840	6,700	3,410	5,700	5,920	17,500	7,460	12,100	10,500	3,830	11,300	4,460
10	2,400	9,280	3,370	6,640	12,300	12,800	7,720	11,000	8,120	6,920	8,500	1,430
11	5,310	9,530	4,300	5,960	15,100	10,700	11,800	11,000	5,830	6,690	6,640	4,380
12	5,420	7,890	3,340	5,550	13,900	10,700	16,300	9,780	9,590	6,990	5,380	4,960
13	5,450	4,580	5,110	6,260	13,000	12,400	34,500	8,790	9,940	6,320	3,770	5,160
14	5,900	3,180	6,680	7,400	12,000	13,000	26,700	8,190	8,900	6,140	6,380	4,370
15	5,880	4,070	6,910	9,070	24,100	10,200	18,400	7,420	9,760	4,500	5,550	5,200
16	4,560	5,660	5,850	12,700	24,700	9,350	22,000	11,200	11,800	5,100	6,260	3,490
17	2,870	6,180	6,060	11,300	19,000	9,360	25,600	9,510	12,700	5,390	6,080	1,450
18	5,060	5,930	4,430	10,200	17,800	7,680	19,600	9,320	6,700	4,840	6,520	4,510
19	5,620	5,720	2,260	8,870	22,600	10,000	16,300	9,110	7,160	5,740	4,950	5,420
20	5,490	5,200	3,860	6,950	19,900	65,400	15,400	11,300	7,980	4,950	3,000	7,280
21	5,340	2,960	4,050	6,230	15,400	97,000	14,200	7,050	7,580	4,680	5,900	6,640
22	5,720	4,150	5,020	5,360	13,600	*69,000	13,500	8,320	9,250	5,100	5,640	7,970
23	4,880	4,770	3,910	3,370	11,800	54,900	10,100	12,700	8,570	4,420	6,070	6,060
24	2,700	5,660	2,680	3,470	13,800	53,900	31,700	12,400	5,840	4,700	5,920	2,950
25	4,500	4,380	2,150	5,160	12,400	43,500	30,600	10,800	3,380	5,600	5,660	4,600
26	6,810	5,900	5,410	7,000	10,700	28,000	21,700	11,100	5,060	5,500	4,740	5,880
27	6,800	4,100	14,900	4,360	13,500	18,000	23,200	15,700	6,910	5,700	2,040	5,860
28	6,480	3,190	13,700	4,130	*22,000	17,500	29,600	9,640	6,690	5,390	3,650	5,820
29	6,070	3,870	9,800	3,560	21,700	18,700	25,900	8,370	7,510	2,970	5,250	5,680
30	5,730	5,270	7,760	3,340	-------	35,100	16,900	10,900	8,860	3,540	5,680	4,000
31	3,820	-------	6,100	3,360	-------	*47,000	-------	10,300	-------	6,930	6,480	-------
Total	160,990	157,070	169,410	236,800	373,350	766,790	599,880	329,800	255,580	161,400	199,840	145,600
Mean	5,193	5,236	5,465	7,639	12,870	24,740	20,000	10,640	8,519	5,206	6,446	4,853
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1943: Max 60,400 Min 2,150 Mean 9,232 Cfsm - In. -
Water year 1943-44: Max 97,000 Min 1,430 Mean 9,717 Cfsm - In. -

* Discharge measurement made on this day.

1695. Congaree River at Columbia, S. C.--Continued

Discharge, in cubic feet per second, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9,960	6,500	10,200	3,120	6,770	15,100	6,000	7,280	3,660	1,850	8,630	3,440
2	15,000	6,280	6,170	4,960	7,260	15,100	4,830	6,900	3,980	2,910	6,520	1,810
3	10,700	6,620	4,830	7,300	5,960	9,890	6,400	6,080	2,140	4,040	5,480	2,090
4	9,080	5,180	2,970	6,220	2,880	7,620	7,660	5,710	3,020	2,720	4,400	4,760
5	6,400	2,400	4,260	4,720	5,900	7,670	6,360	5,170	4,470	2,780	3,970	4,970
6	5,080	4,900	3,980	4,630	8,790	11,200	6,400	3,820	5,440	4,240	8,160	4,850
7	5,400	5,100	4,480	3,990	8,380	8,800	5,170	3,200	5,410	5,200	9,360	5,830
8	2,380	6,630	4,310	5,210	8,490	8,200	3,580	4,120	6,170	3,080	7,800	4,500
9	a4,800	7,170	5,480	7,620	8,020	7,110	3,270	4,560	4,900	4,720	7,800	2,900
10	a6,000	7,210	4,300	7,100	6,760	6,920	5,540	4,080	2,740	7,130	6,750	4,760
11	a6,500	5,000	4,300	6,400	3,770	5,300	5,000	4,540	6,440	7,320	4,190	6,450
12	a7,000	*2,620	6,510	4,920	6,510	4,430	4,780	3,720	5,450	7,370	2,180	6,500
13	6,880	5,320	8,000	4,870	7,960	5,460	4,320	4,210	4,810	6,930	4,540	7,740
14	4,250	5,800	7,630	4,460	*23,600	5,570	4,260	3,260	5,620	5,380	6,000	14,200
15	2,120	6,260	6,940	5,010	22,700	6,220	2,900	5,660	5,500	5,460	3,870	26,500
16	4,920	6,260	5,430	5,120	16,600	6,060	3,360	4,900	4,280	15,600	3,080	28,000
17	5,520	6,380	3,740	5,580	11,000	5,490	4,880	4,130	2,120	17,500	8,260	62,100
18	6,360	5,510	3,080	5,470	10,200	4,600	4,540	5,100	3,740	15,100	8,810	87,800
19	5,580	2,580	4,660	6,020	15,100	3,300	7,800	4,960	4,540	12,200	5,800	95,000
20	7,340	5,460	5,120	11,300	13,800	6,670	8,680	4,240	3,040	8,970	5,050	90,200
21	9,680	6,840	4,290	10,100	11,000	7,300	7,050	3,060	3,190	6,240	6,400	*38,400
22	16,000	7,380	4,070	7,570	10,600	8,720	4,200	3,940	3,990	5,260	7,200	13,600
23	11,300	4,280	4,700	6,290	15,100	8,690	4,330	3,560	3,160	7,010	7,120	9,690
24	9,820	6,400	2,410	5,570	17,500	6,400	6,580	3,540	1,970	8,380	6,110	9,820
25	8,400	5,260	2,200	5,340	14,300	4,760	8,640	3,680	4,310	8,190	6,470	8,090
26	6,820	2,540	2,840	4,860	10,000	5,520	*20,800	3,230	5,220	7,700	5,800	8,260
27	7,140	5,690	4,400	4,760	9,400	7,780	18,400	3,620	6,240	7,820	5,380	7,300
28	5,310	4,700	4,440	3,270	10,800	13,600	12,800	5,100	6,520	5,140	6,430	6,890
29	3,200	9,920	5,580	4,860	-	12,800	7,260	5,470	6,810	4,480	6,650	5,580
30	5,120	11,100	4,380	6,260	-------	9,850	6,050	3,990	3,800	5,500	6,500	5,540
31	5,370	-------	2,860	5,850	-------	8,190	-------	3,590	-------	7,080	5,170	-------
Total	219,430	173,290	148,560	178,750	299,150	244,320	201,840	138,420	132,680	213,300	189,880	577,570
Mean	7,078	5,776	4,792	5,766	10,680	7,881	6,728	4,465	4,423	6,881	6,125	19,250
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1944: Max 97,000 Min 1,430 Mean 9,864 Cfsm - In. -
Water year 1944-45: Max 95,000 Min 1,810 Mean 7,444 Cfsm - In. -

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for Broad River at Richtex and Saluda River near Columbia.

Discharge, in cubic feet per second, water year October 1945 to September 1946

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,390	5,890	5,040	27,700	9,660	8,400	12,500	12,800	6,110	5,520	13,400	3,450
2	7,870	6,110	3,430	19,900	11,000	7,450	12,300	12,300	4,970	5,900	15,600	3,640
3	6,990	3,720	4,500	13,900	9,460	6,060	12,000	11,600	7,880	8,180	9,540	7,850
4	6,800	3,300	5,990	11,600	9,910	6,840	12,300	13,700	8,800	8,160	5,700	7,510
5	8,230	4,900	9,500	9,670	10,900	8,110	11,100	17,900	9,160	8,320	8,880	7,410
6	5,410	6,880	23,800	8,950	10,300	7,520	9,520	21,100	*9,690	6,480	10,800	7,600
7	3,240	5,910	*22,600	14,600	9,660	7,960	6,230	20,000	9,090	4,960	9,400	4,920
8	6,240	6,570	14,500	*38,200	9,810	7,170	7,660	15,800	6,090	9,280	9,090	2,920
9	6,440	6,500	9,390	57,400	11,100	6,210	10,700	13,700	4,440	10,500	9,860	6,530
10	5,480	3,580	7,710	*48,000	17,800	6,080	11,400	13,000	6,920	10,900	7,170	7,220
11	5,620	2,240	9,450	32,600	33,600	6,560	10,300	9,340	8,930	10,200	4,050	8,250
12	5,350	3,600	9,670	18,100	53,900	7,580	9,640	6,420	8,910	10,900	6,770	6,890
13	3,930	3,940	8,800	12,400	42,100	7,610	8,150	8,860	8,860	7,040	8,520	9,240
14	2,760	4,300	8,700	15,000	26,200	7,850	5,550	11,000	8,980	3,750	8,690	4,090
15	4,600	3,600	7,750	13,400	15,700	7,740	7,780	12,100	6,080	8,510	8,860	2,350
16	5,140	3,400	8,400	18,400	11,500	10,600	10,100	14,100	4,280	11,800	7,790	6,400
17	5,880	3,540	9,560	22,300	9,780	13,200	12,400	12,800	8,360	11,300	5,000	8,620
18	5,730	2,610	9,710	22,900	9,600	25,900	14,900	10,300	10,100	10,600	2,720	8,580
19	5,140	2,460	10,600	18,700	11,800	29,500	11,400	7,190	9,600	10,100	5,870	9,000
20	4,020	3,790	10,200	13,100	14,100	23,200	9,120	10,100	7,720	7,610	7,660	9,210
21	3,180	4,760	10,600	13,500	15,700	15,000	8,120	12,900	7,790	5,520	7,370	4,090
22	4,020	3,910	6,380	15,100	14,200	15,100	7,300	11,700	5,830	6,340	7,050	3,490
23	4,970	5,780	4,900	13,100	11,200	13,300	10,200	11,200	3,880	8,680	15,600	7,120
24	4,820	5,800	4,970	12,200	8,860	7,960	9,980	11,700	7,470	11,000	10,900	10,400
25	6,020	4,390	9,740	11,000	10,600	11,800	10,600	10,100	9,480	8,860	9,780	12,400
26	5,720	3,180	31,600	8,220	10,700	12,000	28,800	6,210	8,440	8,290	14,500	10,200
27	4,620	5,060	44,800	5,900	11,100	11,200	17,200	8,880	8,960	6,020	10,300	9,230
28	3,300	5,020	34,500	7,680	10,700	11,000	10,600	10,400	9,060	4,440	9,210	5,020
29	4,170	4,560	28,300	9,850	-	14,700	8,600	11,100	6,130	6,510	8,120	3,250
30	5,900	5,400	36,300	9,820	-------	15,100	9,240	9,460	4,150	8,710	7,360	4,540
31	5,200	-------	35,600	9,560	-------	13,300	-------	9,030	-------	8,620	5,450	-------
Total	162,180	134,700	446,990	550,950	430,940	352,000	325,690	366,790	226,160	253,000	271,010	201,420
Mean	5,232	4,490	14,420	17,770	15,390	11,350	10,860	11,830	7,539	8,161	8,742	6,714
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1945: Max 95,000 Min 1,810 Mean 7,999 Cfsm - In. -
Water year 1945-46: Max 57,400 Min 2,240 Mean 10,200 Cfsm - In. -

* Discharge measurement made on this day.

1695. Congaree River at Columbia, S. C.--Continued

Discharge, in cubic feet per second, water year October 1946 to September 1947

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,150	7,460	4,880	6,180	7,220	5,780	6,400	5,020	4,060	4,850	6,850	2,320
2	6,470	6,420	6,940	7,960	6,130	4,730	11,600	4,970	3,610	3,660	4,270	5,850
3	6,250	4,380	8,240	7,600	7,880	5,600	10,900	4,170	4,790	3,890	2,500	5,640
4	6,720	5,230	8,580	13,700	8,340	7,450	10,400	3,720	5,270	2,100	5,300	6,500
5	2,930	8,000	8,900	12,400	9,290	6,490	8,330	3,150	4,550	2,510	7,190	6,560
6	2,450	7,250	9,280	9,350	9,120	7,810	6,400	5,170	4,660	2,740	6,620	3,790
7	5,520	7,390	10,900	9,890	8,380	9,030	4,750	5,870	3,420	3,660	6,620	2,140
8	7,960	7,810	4,590	8,250	6,440	21,000	5,550	5,940	3,560	5,780	5,960	5,440
9	*16,400	4,090	7,540	7,470	4,920	31,700	7,530	6,270	5,400	5,360	6,600	5,740
10	26,500	3,840	9,150	6,770	6,680	24,100	7,280	3,530	6,080	6,090	3,740	6,160
11	22,600	5,410	8,420	5,670	9,020	14,200	5,960	3,710	6,050	5,520	5,720	6,280
12	13,900	6,670	9,180	4,830	8,860	9,540	7,100	3,540	6,180	4,830	7,720	6,160
13	8,320	6,720	8,830	7,390	7,720	8,730	5,130	4,840	5,340	2,620	7,040	4,210
14	11,100	6,680	7,980	18,600	8,120	10,800	7,460	4,980	3,340	4,320	7,140	2,220
15	11,200	6,180	4,560	22,300	5,820	14,800	11,500	5,940	4,020	6,320	7,260	5,190
16	10,000	4,320	7,480	15,100	4,200	13,500	14,500	5,200	20,800	6,600	4,720	6,340
17	9,400	4,460	7,970	15,500	5,020	10,100	12,400	3,450	15,100	8,240	2,020	6,080
18	8,900	5,910	7,790	19,000	6,340	8,800	12,200	2,900	9,340	9,800	9,140	6,720
19	8,290	10,700	7,600	17,300	6,350	8,880	10,200	3,550	6,920	7,270	7,930	6,330
20	3,670	11,400	7,360	*33,800	6,660	9,340	7,980	5,200	7,360	5,700	7,060	3,860
21	3,310	9,680	6,280	*56,300	7,070	9,140	6,300	4,020	5,880	9,890	7,000	1,880
22	5,190	8,580	5,380	*58,200	9,200	7,620	7,670	4,410	5,250	9,710	6,600	5,910
23	5,790	6,010	4,430	*37,900	7,140	6,050	6,210	4,630	4,360	6,440	4,900	6,260
24	4,730	4,680	4,580	*22,600	6,800	5,070	5,880	3,840	5,940	6,840	2,980	7,970
25	5,090	6,670	4,380	12,200	9,280	6,580	5,700	4,060	5,040	6,770	4,880	8,670
26	5,620	8,840	3,540	9,540	7,990	6,220	5,550	4,290	6,190	4,880	6,640	11,400
27	5,470	8,560	4,600	9,380	7,340	6,050	4,330	7,270	6,360	2,240	9,260	5,740
28	6,530	7,140	3,810	10,700	7,280	6,770	3,210	5,580	4,280	6,200	a8,500	2,540
29	7,230	9,080	3,980	9,720	-	7,280	4,990	4,770	3,480	8,700	7,280	5,620
30	7,500	6,150	6,700	9,920	-------	6,260	6,290	3,930	2,890	6,730	3,260	6,170
31	7,880	-------	8,130	9,720	-------	5,550	-------	4,720	-------	7,040	2,220	-------
Total	260,070	205,710	211,980	495,240	204,610	304,970	229,700	142,640	179,520	177,300	184,920	165,690
Mean	8,389	6,857	6,838	15,980	7,308	9,838	7,657	4,601	5,984	5,719	5,965	5,523
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1946: Max 57,400 Min 2,350 Mean 10,020 Cfsm - In. -
Water year 1946-47: Max 58,200 Min 1,880 Mean 7,568 Cfsm - In. -

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for Broad River at Richtex and Saluda River near Columbia.

Discharge, in cubic feet per second, water year October 1947 to September 1948

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,210	11,500	8,840	8,690	21,400	9,110	31,100	7,250	13,900	7,560	4,300	7,130
2	6,980	8,160	11,800	11,000	17,200	12,000	48,400	5,260	10,400	6,580	6,600	6,400
3	7,690	18,800	11,200	10,600	15,200	13,100	34,800	6,480	11,100	4,340	6,200	*6,340
4	4,470	35,600	10,700	7,520	13,700	13,400	22,900	7,230	10,100	2,370	11,600	4,160
5	1,840	26,100	11,700	10,100	12,500	13,900	15,700	7,800	8,420	1,840	27,700	3,370
6	5,780	14,800	11,000	11,800	11,600	10,600	15,100	7,730	5,850	4,100	22,900	4,510
7	6,760	12,200	6,540	10,200	13,200	24,200	16,000	7,710	7,220	4,300	14,900	25,000
8	7,690	14,500	8,750	10,900	17,100	41,500	24,200	8,390	8,220	3,360	11,700	17,600
9	9,000	16,300	11,700	10,000	29,900	37,900	25,600	6,320	7,460	3,120	10,000	11,800
10	15,200	13,200	12,600	7,340	29,200	30,300	18,800	6,460	7,220	1,920	11,300	10,200
11	12,700	17,100	13,400	5,400	22,900	22,600	17,700	7,530	7,360	2,840	10,600	6,080
12	9,890	28,900	14,600	8,660	19,900	17,900	17,700	7,370	6,330	3,720	10,300	4,160
13	8,230	28,900	14,100	12,500	33,200	12,500	18,000	7,660	4,600	5,100	11,000	7,160
14	8,760	22,300	9,360	21,700	48,800	9,540	16,000	11,600	5,160	6,690	10,100	7,680
15	8,390	16,300	9,460	21,700	48,400	10,800	16,600	8,460	7,690	6,780	3,780	7,040
16	8,120	22,300	13,500	15,500	36,000	13,500	14,700	5,800	6,910	6,360	6,050	6,740
17	6,580	22,000	14,200	10,700	24,700	19,000	11,000	7,400	6,520	6,540	6,560	6,430
18	4,480	17,100	13,500	7,020	17,500	22,800	7,540	8,800	5,850	8,320	7,030	3,860
19	5,270	14,700	12,800	9,260	15,100	20,500	8,620	7,530	4,410	7,630	7,550	2,620
20	8,100	13,300	9,220	12,000	14,400	13,500	10,300	*6,700	2,900	7,360	7,780	5,800
21	9,120	11,300	10,500	13,200	11,100	9,680	10,800	6,680	4,560	6,100	5,300	7,370
22	8,260	11,100	14,100	12,000	10,500	12,600	11,500	5,300	7,620	7,660	2,810	8,160
23	8,320	7,780	12,900	12,200	13,500	15,000	10,500	3,960	7,400	6,900	8,550	6,350
24	8,500	10,400	7,950	9,740	13,800	20,000	7,360	5,870	7,140	4,300	10,900	7,140
25	18,400	14,000	7,510	6,280	12,000	19,300	5,510	7,880	6,920	2,380	9,360	5,960
26	21,100	13,800	10,400	9,700	11,800	16,400	8,020	9,940	4,990	6,180	9,540	2,800
27	14,100	10,300	11,600	12,400	11,500	12,700	11,300	9,980	2,860	8,040	9,580	7,250
28	10,600	12,400	8,480	13,700	9,230	12,800	11,100	7,500	5,300	7,640	6,080	8,620
29	10,500	12,400	8,560	17,100	7,760	18,200	10,200	7,260	8,480	7,280	2,580	9,030
30	*19,300	7,360	10,300	16,700	-------	16,300	8,480	14,900	7,880	7,350	6,140	10,100
31	15,000	-------	9,160	21,400	-------	15,400	-------	18,100	-------	5,320	7,160	-------
Total	295,340	484,900	340,430	367,010	563,090	536,830	485,530	246,850	210,770	169,980	285,950	226,860
Mean	9,527	16,160	10,980	11,840	19,420	17,320	16,180	7,963	7,026	5,483	9,224	7,562
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1947: Max 58,200 Min 1,840 Mean 8,782 Cfsm - In. -
Water year 1947-48: Max 48,800 Min 1,840 Mean 11,510 Cfsm - In. -

* Discharge measurement made on this day.

1695. Congaree River at Columbia, S. C.--Continued

Discharge, in cubic feet per second, water year October 1948 to September 1949

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9,420	6,460	*85,900	28,900	16,600	17,500	10,800	40,300	8,070	5,730	10,200	32,800
2	6,960	6,930	*43,000	15,700	17,800	14,500	11,100	33,800	8,200	3,930	15,100	25,000
3	3,240	6,740	*25,900	14,100	15,900	13,000	8,810	27,400	7,520	4,250	13,900	17,200
4	6,020	7,320	21,400	14,200	13,600	10,400	10,100	30,600	8,100	5,300	13,300	12,000
5	8,520	6,360	20,500	13,200	12,700	8,140	11,900	21,400	4,720	5,780	11,200	12,800
6	7,740	8,160	18,100	25,200	8,950	8,040	a13,000	15,700	8,980	5,580	7,250	13,700
7	6,640	7,200	17,800	41,500	12,200	10,400	a14,000	12,900	11,700	5,980	a7,000	14,700
8	6,200	7,020	18,100	31,000	14,300	10,700	12,400	8,660	10,700	6,530	7,810	27,300
9	4,100	7,070	16,900	18,700	19,500	10,000	9,440	11,200	9,680	5,640	8,000	23,300
10	3,060	6,460	15,400	13,600	24,700	10,700	7,120	13,900	9,670	8,940	7,420	16,000
11	5,530	5,500	11,900	14,300	26,800	10,600	10,000	15,100	8,230	8,530	5,860	9,900
12	7,460	4,660	9,630	13,800	19,900	9,600	11,100	15,400	4,460	11,600	7,810	11,800
13	7,240	4,750	12,400	13,700	11,800	8,090	16,600	13,000	6,400	11,200	4,470	14,100
14	7,520	4,120	14,400	12,400	13,700	10,200	20,800	10,300	8,760	9,400	2,860	12,800
15	7,380	5,020	15,100	9,640	13,800	12,100	18,700	7,200	6,920	11,200	5,280	13,100
16	4,260	6,060	14,200	6,000	13,500	11,900	13,900	10,300	5,680	8,540	7,580	12,700
17	2,670	5,850	13,400	8,930	15,600	11,000	10,700	10,600	*6,930	14,500	17,200	9,710
18	6,240	7,870	10,200	11,700	19,700	11,100	10,400	10,400	9,000	19,900	20,800	5,940
19	6,940	7,420	7,580	11,800	16,200	9,000	11,500	10,100	10,200	20,800	19,000	11,400
20	8,080	6,220	11,700	11,400	25,900	7,450	11,400	8,600	8,340	16,000	12,900	11,800
21	6,700	5,880	14,100	11,500	35,200	9,790	9,960	6,300	7,620	13,900	8,220	11,500
22	7,200	8,000	11,300	9,170	29,600	11,600	10,900	4,760	6,200	12,400	23,400	12,300
23	5,420	11,600	8,480	6,820	23,500	11,300	9,350	8,660	5,930	9,660	33,100	11,600
24	3,330	17,500	6,820	9,140	17,500	10,600	7,100	10,000	6,560	8,200	25,300	8,260
25	6,760	18,400	5,630	11,600	15,100	12,700	9,480	9,580	6,760	9,000	17,500	3,690
26	7,820	15,700	10,400	10,200	10,400	13,600	10,800	9,000	4,660	9,020	14,100	8,710
27	8,880	15,400	13,400	11,300	9,980	11,100	10,100	7,440	5,410	7,770	11,700	11,800
28	7,680	28,700	13,000	10,600	20,500	12,300	10,500	5,180	5,650	6,740	27,500	10,900
29	7,700	*72,900	12,000	8,580	-	13,000	14,000	3,260	5,200	6,380	*66,200	11,300
30	4,960	*107,000	23,900	6,160	-------	12,000	19,600	6,990	5,580	5,020	82,000	11,100
31	2,300	-------	37,900	9,660	-------	11,600	-------	10,200	-------	5,720	64,300	-------
Total	193,970	428,270	560,440	434,500	494,930	344,010	355,560	408,230	221,830	283,140	578,260	409,210
Mean	6,257	14,280	18,080	14,020	17,680	11,100	11,850	13,170	7,394	9,134	18,650	13,640
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1948: Max 107,000 Min 1,840 Mean 11,680 Cfsm - In. -
Water year 1948-49: Max 107,000 Min 2,300 Mean 12,910 Cfsm - In. -

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for Broad River at Richtex and Saluda River near Columbia.

Discharge, in cubic feet per second, water year October 1949 to September 1950

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11,000	27,000	10,600	6,060	a8,000	7,740	8,920	4,340	6,440	a5,500	8,100	8,580
2	6,140	28,300	9,660	8,300	8,100	7,700	6,740	6,500	6,540	a5,500	7,820	7,050
3	9,520	28,300	6,930	10,100	8,130	9,760	6,540	7,940	5,880	a5,500	7,160	5,180
4	12,300	22,900	7,360	9,460	6,140	8,500	8,280	10,000	4,880	a2,800	7,490	5,720
5	11,400	16,500	8,020	9,200	6,020	7,020	8,800	8,200	6,930	a6,000	4,500	8,650
6	10,600	9,850	9,480	8,960	7,160	7,700	10,600	6,660	10,900	a7,500	2,710	9,200
7	10,200	12,400	9,710	6,200	8,980	11,100	10,200	5,240	8,480	10,600	4,920	9,600
8	26,300	13,000	8,830	4,990	8,810	14,500	9,270	4,660	7,980	7,920	7,000	11,500
9	47,000	12,600	9,260	6,800	8,780	13,000	6,840	7,090	6,840	6,100	7,220	10,700
10	40,300	13,000	7,080	8,920	8,340	9,800	5,900	7,140	5,500	5,150	6,620	12,700
11	27,600	12,100	5,440	8,460	8,280	7,720	7,870	6,350	4,640	7,520	7,490	15,200
12	16,400	10,800	8,200	8,380	7,460	5,440	9,400	7,060	5,450	6,550	7,100	12,000
13	12,500	7,520	8,630	10,300	8,260	6,060	10,100	4,680	7,280	7,060	3,560	10,100
14	11,800	10,500	8,890	8,580	9,100	7,830	9,870	4,020	5,250	8,260	6,140	9,120
15	10,000	12,600	10,900	5,580	9,170	12,100	8,580	3,990	5,100	8,250	6,830	8,740
16	6,140	12,600	11,300	7,500	8,980	11,500	5,220	8,120	5,900	7,620	7,920	7,920
17	10,100	12,100	9,720	9,520	8,560	9,200	7,160	7,180	5,480	10,100	7,900	4,810
18	11,800	12,700	6,340	10,500	7,380	8,000	8,100	6,560	4,240	9,300	8,180	6,290
19	11,100	8,680	6,860	11,200	6,390	6,920	7,760	5,040	5,060	6,480	7,540	8,130
20	12,100	5,910	8,040	12,000	8,450	6,280	6,920	5,420	6,600	5,580	3,830	7,770
21	10,900	9,780	7,320	13,000	9,090	9,100	6,720	3,020	5,650	6,680	7,320	8,420
22	9,400	11,800	6,560	9,740	8,580	12,400	7,080	4,460	5,420	4,920	9,670	7,060
23	5,540	10,400	5,820	10,100	7,780	11,700	4,450	6,150	6,480	3,540	*8,860	5,480
24	9,030	9,580	6,240	9,740	7,710	9,310	4,250	6,160	3,850	4,590	7,760	3,560
25	10,200	10,500	5,180	8,970	6,830	7,930	7,720	4,620	2,430	5,420	8,460	5,670
26	10,400	7,480	4,200	8,800	7,020	6,520	8,030	5,120	6,160	5,960	6,660	7,800
27	10,500	6,920	5,620	8,880	6,700	5,880	6,840	4,390	7,420	6,300	4,640	7,540
28	10,200	9,980	6,790	a8,500	7,880	7,820	6,660	3,590	7,220	6,200	6,660	6,140
29	9,100	11,500	8,290	a8,500	-	9,580	5,530	6,380	6,780	5,780	9,610	6,710
30	6,060	11,900	8,860	a9,000	-------	10,800	4,160	8,310	a7,000	4,620	9,800	3,420
31	12,100	-------	8,480	a9,500	-------	9,160	-------	7,290	-------	5,780	8,620	-------
Total	417,730	389,200	244,610	275,740	222,080	278,070	224,510	185,680	183,780	199,080	218,090	240,760
Mean	13,480	12,970	7,891	8,895	7,931	8,970	7,484	5,990	6,126	6,422	7,035	8,025
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1949: Max 82,000 Min 2,860 Mean 12,550 Cfsm - In. -
Water year 1949-50: Max 47,000 Min 2,430 Mean 8,437 Cfsm - In. -

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for Broad River at Richtex and Saluda River near Columbia.

1695. Congaree River at Columbia, S. C.--Continued

Discharge, in cubic feet per second, water year October 1950 to September 1951

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,060	6,280	8,380	4,890	6,450	5,000	12,700	8,410	6,380	2,510	6,440	2,460
2	4,930	5,560	6,000	8,080	6,920	5,370	11,300	6,860	3,670	2,940	5,440	1,670
3	6,910	5,650	3,120	8,440	7,180	4,560	17,200	7,920	2,940	5,230	4,900	1,620
4	6,720	5,580	5,770	7,380	5,640	3,760	15,700	6,680	a6,000	3,830	3,200	6,460
5	6,640	3,490	6,320	7,920	5,900	3,820	12,500	7,010	a7,500	3,140	2,970	7,380
6	6,480	5,210	6,030	8,420	6,240	5,990	9,500	4,760	a7,000	2,540	5,150	6,980
7	3,380	6,230	5,990	4,520	6,710	7,570	7,620	4,540	a5,500	2,000	7,980	5,860
8	2,500	5,650	10,800	8,240	9,660	10,600	12,000	6,370	a5,000	1,660	7,940	4,500
9	5,140	5,170	27,700	11,200	12,600	13,900	14,800	5,800	3,070	5,060	7,040	4,710
10	7,420	4,980	22,900	10,200	11,000	10,200	12,600	4,900	3,450	5,610	7,040	6,260
11	6,890	5,780	13,900	10,100	8,080	7,800	9,710	5,290	3,160	5,290	2,880	6,520
12	6,580	3,490	10,100	10,300	6,000	6,100	8,480	4,140	5,370	5,950	2,450	5,810
13	6,720	4,670	8,840	5,520	6,950	8,440	7,670	3,130	4,000	4,730	7,380	7,120
14	3,330	6,860	8,380	3,980	5,520	14,200	6,750	3,480	4,800	3,270	8,180	5,720
15	2,380	6,100	8,180	4,500	5,890	15,100	5,110	5,120	7,110	1,720	8,760	3,660
16	5,380	4,650	5,380	5,840	7,600	11,300	5,020	4,160	5,480	4,700	10,400	5,100
17	6,500	5,720	4,400	6,300	6,440	8,000	6,610	3,910	3,620	7,430	9,460	5,130
18	7,330	4,440	5,800	5,520	4,560	7,100	6,120	4,500	4,660	6,480	5,840	4,720
19	6,260	3,480	7,960	5,360	5,190	6,310	6,900	4,190	7,540	5,460	1,980	4,230
20	6,120	4,380	7,170	5,320	6,560	9,640	5,970	2,590	6,860	5,300	6,220	4,360
21	a11,000	6,380	6,580	3,890	5,230	8,640	5,660	4,720	7,220	4,060	8,400	4,060
22	a17,000	7,140	5,920	5,470	6,110	7,900	4,570	6,620	5,780	2,260	8,200	2,980
23	a12,000	3,360	4,510	7,230	6,540	7,860	5,360	6,020	4,840	5,700	6,800	4,020
24	a10,000	4,680	2,620	7,500	5,320	5,830	8,000	4,500	2,280	6,380	4,300	6,690
25	a8,000	7,180	2,800	6,980	3,900	4,980	7,620	4,180	3,830	6,670	2,400	7,630
26	a7,000	5,020	3,500	6,180	4,250	4,170	6,010	2,820	6,800	7,140	1,480	5,560
27	7,280	7,380	6,130	5,740	5,660	5,940	5,450	2,320	6,550	7,080	3,820	6,040
28	5,860	8,370	8,520	3,860	5,000	6,530	5,580	3,960	6,160	4,040	5,820	7,590
29	3,710	8,710	6,540	4,530	-	6,390	4,480	5,900	7,320	2,380	6,620	6,380
30	6,100	8,340	5,580	7,660	-------	8,170	7,220	5,660	3,900	5,470	6,400	2,800
31	5,880	-------	5,280	8,080	-------	12,600	-------	5,730	-------	6,720	5,200	-------
Total	204,500	169,930	241,100	209,150	183,100	243,770	254,210	156,190	157,790	142,750	181,090	154,020
Mean	6,597	5,664	7,777	6,747	6,539	7,864	8,474	5,038	5,260	4,605	5,842	5,134
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1950: Max 27,700 Min 2,380 Mean 7,242 Cfsm - In. -
Water year 1950-51: Max 27,700 Min 1,480 Mean 6,295 Cfsm - In. -

a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for Broad River at Richtex and Saluda River near Columbia.

Discharge, in cubic feet per second, water year October 1951 to September 1952

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,090	4,510	3,290	6,130	9,770	10,600	12,000	10,400	4,060	3,520	7,560	8,950
2	3,880	4,160	1,680	4,890	7,620	11,800	14,000	9,600	6,700	3,550	4,290	13,100
3	4,000	5,520	3,720	5,060	9,960	11,800	14,000	6,570	8,300	3,420	7,480	8,650
4	4,280	3,270	5,220	5,650	20,200	42,100	11,200	5,440	7,270	2,840	10,100	7,460
5	4,450	4,440	6,220	4,870	30,300	75,700	11,400	6,940	7,460	2,880	9,520	7,760
6	2,960	5,790	9,000	3,550	25,800	86,500	9,220	9,870	7,860	1,300	8,220	4,480
7	3,040	4,690	9,760	5,290	15,500	48,300	9,880	9,470	5,120	3,630	8,390	2,460
8	4,520	4,960	7,580	6,940	11,000	24,500	10,200	10,200	3,080	6,720	14,900	5,740
9	5,200	4,360	4,740	5,400	9,000	12,600	8,830	9,150	7,150	8,780	13,900	6,920
10	5,340	3,420	4,720	3,920	6,900	10,700	9,180	6,360	7,620	7,010	10,500	7,000
11	4,120	2,340	6,020	5,280	6,060	15,900	9,520	4,470	9,080	7,280	7,780	6,980
12	3,740	4,210	4,810	8,650	6,720	36,500	7,820	6,400	9,760	3,920	7,960	*7,440
13	2,160	4,720	4,960	7,820	5,900	49,800	5,810	8,120	7,540	2,030	8,150	5,500
14	a1,500	4,970	5,360	*5,820	6,140	34,200	7,560	8,800	4,060	6,460	7,810	2,390
15	a3,800	5,730	3,820	6,760	7,140	19,000	9,460	9,910	2,580	6,920	6,680	7,260
16	a5,000	4,980	2,780	4,850	7,890	11,800	10,200	9,500	7,610	7,920	4,620	8,350
17	a4,400	3,660	5,220	5,600	9,440	11,400	9,540	5,360	9,160	8,200	2,900	8,120
18	a4,600	1,860	8,220	5,370	11,400	10,500	8,620	3,770	9,140	8,440	7,300	8,610
19	5,120	4,120	7,590	4,660	8,860	11,300	6,650	6,260	9,580	4,190	9,260	9,150
20	2,080	6,450	11,100	3,170	7,550	15,800	5,840	8,430	7,400	1,880	9,940	6,530
21	1,610	6,300	18,700	5,450	6,500	17,600	7,000	10,100	4,960	7,420	12,600	3,120
22	3,920	2,840	36,900	7,610	6,360	13,800	8,170	9,000	3,540	9,300	10,600	6,500
23	4,380	5,240	47,500	6,460	5,420	14,600	9,080	9,410	7,180	8,680	4,840	7,980
24	4,820	4,380	34,500	6,600	4,200	29,200	10,400	5,710	7,950	8,360	6,840	8,060
25	3,060	1,660	22,000	6,100	6,040	61,200	8,540	4,830	8,400	8,750	10,900	7,410
26	2,970	4,940	11,500	5,000	8,540	76,500	9,780	8,380	8,500	4,030	6,610	7,460
27	2,310	7,090	13,100	4,420	11,200	50,600	a15,000	9,920	7,990	2,000	6,270	5,700
28	1,840	7,900	12,000	3,940	11,700	27,300	a15,000	9,040	4,880	6,420	6,600	2,150
29	2,940	6,470	8,910	10,800	12,500	15,400	a13,000	9,080	4,920	7,980	8,900	5,740
30	4,830	5,000	7,220	15,100	-------	11,700	11,100	6,760	3,420	7,380	8,450	6,920
31	4,040	-------	5,880	13,000	-------	12,800	-------	5,020	-------	8,240	6,900	-------
Total	114,000	139,980	334,000	194,160	295,610	881,300	298,000	242,270	202,050	179,450	256,770	203,890
Mean	3,677	4,666	10,770	6,263	10,190	28,430	9,933	7,815	6,735	5,789	8,283	6,796
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1951: Max 47,500 Min 1,480 Mean 6,219 Cfsm - In. -
Water year 1951-52: Max 86,500 Min 1,300 Mean 9,130 Cfsm - In. -

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for Broad River at Richtex and Saluda River near Columbia.

1695. Congaree River at Columbia, S. C.--Continued

Discharge, in cubic feet per second, water year October 1952 to September 1953

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,540	3,980	5,740	10,200	5,040	8,200	5,720	8,700	5,640	4,850	2,740	7,100
2	7,140	2,200	7,620	12,200	5,020	7,100	6,050	10,000	4,900	4,650	1,740	6,850
3	6,560	5,180	7,680	8,820	6,210	10,000	6,220	16,500	4,730	4,180	6,200	7,020
4	3,700	6,620	8,460	5,960	5,460	12,800	6,050	18,700	6,350	3,840	6,240	7,200
5	2,040	6,860	8,000	6,390	5,780	14,500	5,700	15,100	6,880	5,130	6,500	2,890
6	5,620	7,200	4,980	5,880	5,470	13,000	4,740	13,300	4,410	4,820	6,660	5,740
7	6,860	6,410	2,740	5,300	4,720	10,200	6,960	16,300	3,280	5,020	5,930	11,600
8	6,960	4,090	6,900	5,320	7,760	8,200	6,080	19,900	5,740	4,220	2,640	9,440
9	6,980	1,820	7,180	5,510	10,600	6,500	6,460	13,900	9,080	4,360	2,040	6,100
10	6,450	5,200	7,700	14,400	8,820	7,170	6,600	8,800	10,200	4,300	5,030	5,840
11	4,920	6,080	7,900	20,500	6,830	7,200	5,900	6,560	10,600	2,700	6,100	5,560
12	2,740	6,320	7,520	16,900	8,020	12,000	5,260	7,100	9,140	1,780	5,160	3,490
13	5,450	6,440	6,060	11,700	10,600	13,300	8,010	5,400	8,540	3,490	5,200	1,780
14	6,820	6,410	4,260	9,220	9,000	11,000	8,600	6,420	6,080	4,310	5,800	4,870
15	7,280	4,160	6,350	6,780	14,200	9,000	7,300	6,830	4,030	3,940	2,680	5,660
16	6,520	2,060	7,800	5,900	24,400	10,800	6,260	5,300	4,960	4,280	1,780	*6,800
17	6,550	5,800	7,260	5,280	20,800	10,200	6,410	3,610	5,460	4,340	5,310	6,840
18	4,090	6,920	6,790	4,140	13,200	8,400	5,130	5,880	5,300	2,520	4,920	6,590
19	1,890	6,960	6,410	4,700	9,600	7,800	4,030	6,180	4,550	1,890	5,780	3,530
20	5,540	7,340	4,420	6,180	8,060	6,750	6,560	6,440	3,790	4,320	4,130	1,460
21	7,200	7,000	3,110	5,660	15,500	5,940	7,780	5,880	2,150	6,460	4,060	6,010
22	6,640	6,980	a6,000	7,140	35,200	5,800	6,500	7,260	3,190	6,450	3,220	7,880
23	6,180	3,110	a7,000	9,800	41,900	7,460	6,770	6,180	5,330	5,150	1,720	6,680
24	7,380	6,580	3,890	12,400	31,200	25,400	6,000	4,140	5,060	5,860	4,330	6,140
25	5,220	7,200	a2,400	20,500	21,100	35,900	4,900	5,540	4,090	3,370	5,540	4,270
26	2,590	7,800	a2,400	16,300	14,500	23,500	3,790	6,290	4,210	1,920	5,800	3,320
27	5,390	3,080	a2,600	11,400	12,000	13,000	4,870	6,820	3,460	5,440	6,040	8,000
28	6,660	6,360	a2,200	9,590	9,600	10,200	6,040	5,810	1,700	6,160	6,570	7,360
29	6,820	5,160	4,800	8,290	-	9,200	5,830	6,080	2,740	5,920	3,600	8,720
30	7,160	3,150	7,150	6,780	-------	7,800	6,700	3,780	5,190	6,700	1,380	7,060
31	5,870	-------	7,080	5,880	-------	7,620	-------	4,650	-------	5,730	5,700	-------
Total	178,760	164,470	180,400	285,020	370,590	345,940	183,220	263,350	160,780	138,100	140,540	181,800
Mean	5,766	5,482	5,819	9,194	13,240	11,160	6,107	8,495	5,359	4,455	4,534	6,060
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1952: Max 86,500 Min 1,300 Mean 8,954 Cfsm - In. -
Water year 1952-53: Max 41,900 Min 1,380 Mean 7,104 Cfsm - In. -

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for Broad River at Richtex and Saluda River near Columbia.

Discharge, in cubic feet per second, water year October 1953 to September 1954

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,820	2,300	6,980	4,630	6,670	10,200	24,400	5,160	5,180	3,140	1,960	3,240
2	6,960	5,460	5,120	4,640	6,980	12,600	34,800	4,200	3,880	2,840	2,720	3,020
3	3,570	4,760	3,880	3,720	5,550	10,500	24,500	5,230	4,240	1,780	3,010	3,090
4	2,430	5,370	4,340	5,180	5,830	8,000	14,000	5,200	3,760	2,220	3,590	2,040
5	5,900	6,480	3,780	6,460	5,430	6,570	9,200	4,740	a3,000	1,860	3,540	1,520
6	6,700	4,780	4,140	6,060	5,080	5,780	8,000	5,420	a1,800	2,090	3,800	1,610
7	6,660	2,280	6,440	5,460	4,720	5,720	6,920	5,010	a5,000	2,360	3,220	4,460
8	6,420	1,760	9,150	4,620	4,950	5,450	8,040	4,100	a5,500	2,220	1,590	5,100
9	5,480	6,020	6,620	3,370	5,370	5,510	7,700	3,770	a5,500	1,940	4,120	5,220
10	2,280	6,380	5,460	3,250	4,700	4,690	7,340	4,000	a4,800	1,520	4,120	4,270
11	1,740	5,900	5,680	6,800	4,340	4,720	6,580	4,860	a4,200	a2,000	4,080	3,120
12	4,280	5,910	6,540	8,190	4,480	5,200	6,960	4,320	3,200	a3,200	*3,280	1,160
13	4,620	4,420	16,000	7,760	4,280	4,850	6,500	4,280	1,900	a3,400	3,730	2,360
14	4,900	3,300	25,900	6,460	4,140	4,890	6,100	3,920	4,960	2,660	2,540	3,020
15	4,700	2,080	23,800	6,010	3,910	13,200	5,820	4,920	4,750	2,700	1,640	3,130
16	4,140	5,500	16,900	8,800	5,040	13,200	6,420	4,820	4,430	6,040	4,040	3,630
17	3,010	6,400	11,200	37,400	4,010	8,900	6,580	5,520	3,270	10,400	4,420	3,520
18	2,300	6,840	8,860	*41,900	5,240	7,820	5,720	5,700	3,270	5,140	3,840	1,430
19	5,740	6,440	5,720	28,200	4,740	6,500	4,940	4,320	4,460	3,160	4,430	1,220
20	5,740	6,200	5,280	16,600	4,600	8,990	5,850	3,550	3,940	4,140	4,760	3,490
21	6,280	4,250	4,100	9,600	4,180	14,800	5,170	5,100	3,280	a4,000	3,440	5,560
22	5,280	1,660	4,720	17,600	15,900	11,700	5,320	5,600	4,900	a4,000	2,120	5,140
23	5,220	6,520	4,850	43,400	17,800	9,140	5,240	4,770	4,220	3,280	3,550	3,760
24	2,900	7,370	5,780	58,400	10,800	7,420	4,920	3,360	4,160	4,200	3,940	2,450
25	1,580	7,040	5,050	59,300	8,600	10,600	3,920	4,000	3,280	2,460	3,640	1,140
26	6,280	3,660	3,930	31,300	7,080	12,700	4,230	3,860	2,970	2,680	4,420	845
27	6,400	4,200	4,220	16,000	5,200	11,000	6,970	3,790	3,360	2,760	4,840	2,520
28	6,120	4,380	3,740	11,300	5,560	12,000	5,960	3,460	3,950	3,220	3,300	2,800
29	6,430	2,620	5,550	10,400	-	16,900	4,750	3,180	3,840	2,420	2,770	3,150
30	3,600	5,320	5,420	7,620	------	14,500	5,780	2,600	4,060	3,190	3,770	3,560
31	2,660	-------	4,900	5,960	-------	11,500	-------	3,810	-------	2,500	3,700	-------
Total	148,120	145,800	234,030	486,390	175,180	285,550	258,630	136,570	119,060	99,520	107,720	90,575
Mean	4,778	4,853	7,549	15,690	6,256	9,211	8,621	4,405	3,969	3,210	3,475	3,019
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1953: Max 41,900 Min 1,380 Mean 7,115 Cfsm - In. -
Water year 1953-54: Max 59,300 Min 845 Mean 6,266 Cfsm - In. -

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for Broad River at Richtex and Saluda River near Columbia.

1695. Congaree River at Columbia, S. C.--Continued

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,720	2,260	4,500	4,520	3,820	4,230	2,880	2,100	3,200	4,540	6,700	3,090
2	1,500	2,240	4,180	4,700	3,570	3,880	3,200	2,940	3,810	2,180	7,860	4,560
3	1,120	2,650	3,960	3,480	3,960	3,980	2,220	3,270	3,860	2,400	8,100	3,040
4	4,600	2,720	2,940	4,320	4,240	3,630	3,960	3,100	3,610	1,700	7,310	2,780
5	5,250	2,640	2,100	3,490	3,520	3,820	4,870	2,840	2,040	3,150	8,200	3,020
6	4,700	2,140	3,880	3,260	3,460	2,610	3,590	2,900	5,170	3,120	3,900	2,400
7	3,380	1,230	5,640	2,960	22,200	3,660	4,300	3,240	3,920	3,520	2,290	2,810
8	2,770	2,550	5,480	2,920	37,100	4,420	12,200	1,400	2,970	3,720	7,040	3,130
9	975	2,210	5,260	2,480	31,600	3,840	9,480	2,560	2,760	2,380	8,420	2,480
10	730	2,100	4,440	3,590	*19,900	3,950	6,840	4,210	3,930	2,160	8,780	3,150
11	2,360	2,600	2,910	5,040	11,400	3,280	4,840	4,700	3,580	4,320	6,160	1,660
12	2,800	2,440	2,840	5,300	10,200	3,000	6,280	3,720	2,430	6,440	4,840	1,530
13	2,760	1,710	3,900	5,290	8,600	3,000	6,720	3,580	4,630	10,600	2,870	2,030
14	2,620	1,420	5,040	5,730	6,400	4,060	20,200	3,380	4,830	14,200	1,820	1,340
15	1,760	2,260	3,810	3,350	6,020	6,300	*40,700	5,000	3,560	*12,900	5,290	1,840
16	1,220	2,480	3,480	2,830	5,240	5,800	39,100	8,050	3,600	8,910	6,860	2,220
17	666	3,480	3,480	4,310	4,860	5,100	19,200	7,580	3,780	4,960	7,490	1,870
18	662	2,980	3,520	4,990	4,660	4,070	10,800	5,950	2,960	7,000	5,320	1,360
19	736	2,800	2,870	5,860	3,500	4,200	8,800	5,440	1,880	7,440	8,540	1,260
20	683	2,360	2,690	6,800	3,780	3,600	6,990	5,770	3,250	7,180	5,610	1,220
21	1,020	1,840	3,090	7,310	3,330	4,940	5,880	3,480	6,300	9,360	2,630	1,530
22	1,860	2,230	3,480	5,180	4,860	4,370	5,480	4,500	6,310	10,800	3,090	1,490
23	1,280	3,220	2,450	4,420	5,460	4,380	5,160	14,600	6,540	7,370	3,180	1,520
24	785	3,710	1,960	5,100	5,940	5,160	3,480	19,900	5,340	3,870	3,510	2,340
25	2,080	2,620	1,720	6,800	5,660	*5,060	4,020	15,700	4,060	5,990	1,760	1,340
26	1,910	3,120	1,220	6,400	3,920	4,780	5,650	12,300	2,520	*6,740	1,890	1,700
27	1,610	2,330	2,000	6,000	3,760	3,180	5,420	9,260	4,500	6,240	2,350	2,120
28	1,640	2,100	2,980	5,300	4,610	3,900	4,120	6,780	5,100	6,890	1,620	2,970
29	1,410	2,240	2,250	3,700	-	3,760	4,420	4,240	5,280	5,420	2,230	2,230
30	1,200	3,180	2,270	4,100	-------	3,160	3,740	3,530	5,940	3,540	3,500	2,070
31	1,030	-------	2,780	4,060	-------	3,360	-------	3,580	-------	2,400	2,520	-------
Total	60,817	73,840	102,900	143,570	235,570	126,280	264,340	179,580	121,660	181,040	151,480	66,100
Mean	1,962	2,461	3,319	4,631	8,413	4,074	8,811	5,793	4,055	5,840	4,886	2,203
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1954: Max 59,300 Min 662 Mean 5,471 Cfsm - In. -
Water year 1954-55: Max 40,700 Min 662 Mean 4,677 Cfsm - In. -

* Discharge measurement made on this day.

Discharge, in cubic feet per second, water year October 1955 to September 1956

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,580	1,180	1,660	1,860	3,120	8,260	4,520	5,150	3,150	1,320	2,960	2,180
2	6,460	1,100	2,000	2,540	2,320	7,110	4,090	a8,000	3,140	1,690	3,580	850
3	7,540	1,800	1,720	2,580	3,500	6,270	3,780	a8,500	3,890	3,010	3,500	835
4	6,740	1,650	1,750	2,480	5,600	6,260	4,580	12,200	3,700	1,550	1,860	2,980
5	6,360	2,120	1,700	2,160	8,940	5,840	3,830	16,400	3,440	2,030	1,000	3,820
6	5,420	1,660	2,020	1,710	17,200	5,300	4,010	a15,000	2,810	2,820	4,070	2,840
7	4,860	4,730	1,940	2,110	25,900	5,000	5,400	a11,000	2,720	2,780	3,840	3,800
8	4,710	5,300	2,020	1,550	*31,700	4,640	7,100	10,800	2,870	1,580	3,350	2,560
9	1,680	5,480	1,880	3,820	24,100	4,260	7,620	11,300	2,820	2,760	3,780	2,360
10	1,780	5,520	1,920	4,230	15,700	4,260	6,690	8,820	1,390	3,190	4,310	2,480
11	2,540	4,680	1,720	4,000	9,500	3,300	22,500	6,470	3,620	3,980	2,400	2,450
12	2,920	3,280	2,020	3,710	9,000	4,820	38,300	5,120	2,890	3,780	950	1,820
13	2,680	1,780	1,440	3,060	7,450	4,680	35,200	3,490	2,580	3,040	3,980	a3,000
14	2,060	3,420	1,760	2,170	7,620	4,210	24,000	6,460	3,000	1,520	3,830	4,240
15	1,960	4,540	1,640	2,030	6,050	4,400	12,700	8,320	2,800	1,220	3,290	2,820
16	1,920	4,910	1,840	3,420	5,700	10,100	16,000	4,380	2,890	2,340	3,510	1,120
17	1,040	4,030	2,430	4,120	6,040	33,900	35,500	4,490	1,860	3,800	3,700	3,540
18	1,540	3,930	1,430	3,140	6,900	40,700	38,400	3,360	2,400	3,280	2,140	3,560
19	1,760	2,900	1,480	2,990	11,000	28,000	24,700	a4,000	1,700	3,600	1,040	3,230
20	1,560	1,840	2,220	3,000	12,200	17,200	15,100	a2,000	2,180	3,950	3,840	3,080
21	1,280	2,380	2,940	2,560	18,700	9,490	9,600	a3,200	2,220	2,640	3,750	2,160
22	1,870	1,880	2,220	2,140	18,100	8,130	7,800	3,870	3,000	1,900	2,290	1,240
23	1,180	2,120	2,220	3,500	13,600	6,350	7,160	3,820	3,300	3,420	2,890	1,080
24	1,190	1,700	2,840	4,000	9,330	5,150	5,500	3,340	1,660	3,540	2,910	1,980
25	1,390	2,760	1,280	4,550	7,350	4,690	5,400	2,910	2,200	2,780	1,520	2,920
26	1,530	2,480	890	3,910	6,220	4,740	5,130	3,280	1,330	2,700	770	5,310
27	1,540	2,060	2,140	3,970	8,990	4,980	5,670	1,690	1,620	2,570	3,050	15,100
28	990	2,400	2,750	2,880	9,680	5,320	4,700	2,900	2,000	2,530	3,380	22,600
29	1,770	2,120	1,980	1,760	10,600	5,840	4,030	3,870	2,030	1,470	3,080	15,700
30	1,570	2,000	2,060	3,040	-------	7,390	4,820	2,320	3,140	1,440	3,440	8,500
31	990	-------	2,420	2,980	-------	6,790	-------	3,500	-------	1,350	3,950	-------
Total	83,390	87,730	60,310	91,970	320,110	277,190	373,810	190,560	77,730	79,580	91,960	130,155
Mean	2,690	2,924	1,945	2,967	11,040	8,942	12,460	6,147	2,591	2,567	2,966	4,338
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1955: Max 40,700 Min 890 Mean 4,660 Cfsm - In. -
Water year 1955-56: Max 40,700 Min 770 Mean 5,094 Cfsm - In. -

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for Broad River at Richtex and Saluda River near Columbia.

1695. Congaree River at Columbia, S. C.--Continued

Discharge, in cubic feet per second, water year October 1956 to September 1957

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,410	3,490	3,360	4,420	8,000	*8,720	5,280	3,860	16,000	5,390	4,750	1,660
2	4,820	3,360	2,280	3,620	20,000	17,800	5,660	3,400	8,780	4,410	4,600	1,660
3	4,920	2,620	4,820	3,330	24,400	15,100	5,660	4,340	5,140	3,650	3,480	5,610
4	4,200	1,330	6,210	4,200	16,600	11,000	7,120	5,190	4,040	2,370	1,800	6,800
5	3,760	2,980	5,760	3,700	12,400	9,400	8,600	4,500	4,980	5,820	4,370	5,040
6	2,080	3,700	5,320	2,750	9,800	9,120	18,100	4,950	9,160	3,630	2,300	4,980
7	1,800	3,600	5,180	3,980	9,000	7,320	29,600	3,280	17,800	1,790	1,480	2,820
8	4,800	3,350	3,720	3,320	8,400	7,280	23,500	3,360	13,800	5,750	2,560	1,740
9	3,440	3,510	1,960	3,200	7,620	7,280	15,700	3,460	10,600	5,230	3,400	6,000
10	3,450	3,180	5,160	4,270	6,750	6,220	15,400	3,520	9,200	6,060	3,020	6,780
11	3,120	1,720	5,640	5,060	6,200	6,160	12,000	8,330	10,600	5,760	1,500	7,950
12	3,440	3,040	5,640	4,650	6,760	5,820	9,000	13,600	9,560	5,340	4,290	8,880
13	2,440	3,760	5,260	3,550	5,840	4,940	7,970	10,600	8,960	5,380	2,820	8,060
14	825	3,940	*4,760	6,170	4,950	5,240	6,400	6,580	7,100	2,620	2,590	5,290
15	2,670	3,280	2,860	7,050	4,940	6,670	5,700	5,140	5,560	4,100	4,740	1,590
16	3,440	3,450	2,510	3,980	4,800	6,400	6,120	4,780	3,350	3,540	6,220	5,300
17	3,660	3,540	4,760	3,700	2,930	4,860	5,490	5,200	6,300	3,220	6,060	4,900
18	3,240	2,130	5,350	3,880	4,690	4,780	5,200	4,960	6,600	3,240	3,380	7,370
19	2,980	5,440	3,770	2,840	4,600	5,900	5,860	2,760	5,640	3,980	4,430	15,200
20	2,820	7,220	3,600	1,930	5,040	5,470	5,700	4,880	4,710	4,180	6,880	13,300
21	1,900	5,320	3,600	3,620	6,880	6,220	5,700	4,230	5,720	2,200	a6,000	9,490
22	2,860	3,840	3,100	3,280	6,260	7,340	5,100	4,680	4,020	4,040	a8,000	5,940
23	3,610	4,240	3,690	2,800	5,420	8,600	5,500	4,440	1,940	5,000	6,440	7,870
24	4,380	4,340	5,420	4,600	3,880	8,600	5,600	3,990	4,020	5,120	3,240	6,840
25	3,740	2,320	10,300	6,420	5,200	12,600	5,440	5,550	3,540	4,120	1,350	7,290
26	3,260	4,420	12,600	5,960	4,840	16,900	5,270	5,230	3,640	3,980	5,740	6,670
27	2,980	5,200	11,100	5,880	6,140	13,900	4,680	5,280	5,350	2,820	6,000	6,250
28	1,650	6,720	8,670	6,230	6,580	10,200	3,400	4,470	6,020	1,740	4,280	5,410
29	2,800	*5,580	6,150	7,010	-	8,200	4,400	3,680	5,080	3,790	3,760	3,670
30	3,560	4,960	4,420	5,760	-------	6,400	4,700	6,120	3,120	4,200	5,940	6,820
31	3,740	-------	5,840	7,820	-------	5,700	-------	19,900	-------	4,090	3,690	-------
Total	100,795	115,580	162,790	138,980	218,920	260,140	253,850	174,260	210,330	126,560	129,110	187,180
Mean	3,251	3,853	5,251	4,483	7,819	8,392	8,462	5,621	7,011	4,083	4,165	6,239
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1956: Max 40,700 Min 770 Mean 5,498 Cfsm - In. -
Water year 1956-57: Max 29,600 Min 825 Mean 5,895 Cfsm - In. -

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for Broad River at Richtex and Saluda River near Columbia.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11,900	7,630	16,000	7,820	11,300	29,000	17,200	53,000	5,140	6,340	8,080	3,520
2	17,200	5,260	16,300	10,500	10,800	17,800	21,100	36,300	9,760	4,520	5,360	6,220
3	16,900	2,720	14,000	11,900	13,900	13,600	17,200	37,100	10,500	5,740	4,260	5,100
4	13,900	6,780	13,100	7,560	14,300	12,600	14,500	34,800	11,100	4,320	8,120	5,400
5	9,980	8,020	13,500	7,610	13,000	12,200	12,700	26,800	10,900	3,360	8,180	5,610
6	7,140	8,060	11,000	10,100	15,100	11,600	13,100	21,100	10,400	3,790	8,150	3,840
7	9,510	7,260	9,880	11,700	14,700	10,800	25,700	24,700	7,190	7,440	7,960	1,860
8	10,400	6,990	7,620	12,000	13,000	8,800	*37,900	25,900	5,400	8,200	7,400	6,000
9	9,100	5,500	13,900	12,000	11,000	9,400	25,600	23,500	9,800	a9,500	3,560	5,320
10	9,180	2,580	17,800	10,300	12,400	13,800	15,400	17,500	10,300	a13,000	2,380	5,730
11	8,900	7,640	15,800	9,160	11,500	13,200	16,000	14,300	9,160	a13,200	7,120	5,940
12	6,250	8,260	a14,000	7,860	10,900	11,400	16,900	16,600	8,340	7,800	7,400	4,860
13	2,420	7,750	12,000	10,400	10,800	11,700	12,800	16,400	8,280	6,520	7,120	3,110
14	8,320	7,060	9,590	13,000	9,520	12,200	11,600	15,500	7,000	9,330	6,330	2,100
15	8,340	7,920	6,280	17,100	9,600	10,000	11,400	15,600	4,080	12,800	8,060	5,760
16	8,160	5,680	9,450	16,900	9,830	8,600	27,800	14,800	7,760	11,600	5,540	6,020
17	7,620	3,700	10,800	15,000	a12,000	9,580	35,600	11,800	6,360	10,400	2,900	*7,080
18	8,200	16,500	10,800	11,500	a13,000	11,200	30,000	8,850	6,540	9,640	6,340	6,380
19	5,580	37,900	11,000	8,000	a12,000	11,000	20,500	13,000	7,300	9,240	6,600	5,260
20	4,800	52,400	9,700	10,900	a11,000	11,700	12,800	12,400	7,590	8,340	6,640	a3,000
21	7,870	*59,400	6,660	12,200	9,960	11,300	12,900	11,300	6,630	10,500	6,590	a2,600
22	8,430	39,800	7,450	13,200	8,810	9,680	13,000	11,000	3,330	12,400	7,060	a7,000
23	8,310	30,300	7,850	13,200	6,210	7,340	16,000	11,000	6,020	19,300	3,080	a7,000
24	7,960	36,700	a7,000	20,400	10,100	10,000	18,100	8,420	6,070	13,700	2,310	a6,000
25	7,890	41,100	a6,000	34,500	9,960	11,600	16,600	6,440	6,500	10,800	7,280	a5,500
26	4,940	40,300	a8,000	38,300	11,600	15,300	13,300	9,020	6,140	8,160	10,200	5,400
27	2,920	41,100	11,000	33,100	21,600	16,900	12,300	9,940	6,960	5,900	12,700	2,600
28	8,230	24,700	11,100	23,500	32,000	13,900	14,100	10,400	5,020	7,640	9,510	2,230
29	8,030	16,900	9,800	17,700	-	10,600	34,100	10,200	4,220	7,970	7,700	4,230
30	8,180	14,500	12,400	15,600	-------	9,200	*58,400	9,470	4,540	8,080	4,680	3,880
31	7,860	-------	12,500	14,100	-------	11,200	-------	6,270	-------	8,820	3,120	-------
Total	264,420	560,410	342,280	457,200	347,690	377,200	604,600	543,410	218,330	278,350	201,730	144,550
Mean	8,530	18,680	11,040	14,750	12,420	12,170	20,150	17,530	7,278	8,979	6,507	4,818
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 59,400 Min 1,350 Mean 7,853 Cfsm - In. -
Water year 1957-58: Max 59,400 Min 1,860 Mean 11,890 Cfsm - In. -

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for Broad River at Richtex and Saluda River near Columbia.

1705. Lakes Marion-Moultrie diversion canal near Pineville, S. C.

Location.--Lat 33°23'15", long 80°08'25", on right bank 0.6 mile upstream from bridge on State Highway 45 and 7.0 miles southwest of Pineville, Berkeley County.

Records available.--October 1943 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 60.0 ft above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by South Carolina Public Service Authority). Auxiliary water-stage recorder 3.9 miles downstream from base gage.

Average discharge.--15 years, 13,330 cfs.

Extremes.--1943-58: Maximum daily discharge, 40,200 cfs Mar. 10, 1952; maximum daily reverse flow, 12,100 cfs Feb. 9, 1947.

Remarks.--Records good except those for period of fragmentary gage-height record, which are fair, and those for periods of very low fall between gages, which are poor. Canal diverts water from Lake Marion to Lake Moultrie for generation of power and for navigation. Water is discharged from powerplant and navigation lock into West Branch Cooper River.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	e4,380	11,300	26,200	19,600	29,500	21,800	24,100	22,700	20,200	9,000	16,000	10,600
2	e6,280	8,610	27,700	19,000	27,700	24,800	23,700	20,600	20,000	11,000	16,000	7,970
3	9,530	7,770	27,900	19,000	27,200	27,200	24,100	22,000	17,800	11,000	14,000	8,490
4	*10,100	e7,060	28,300	18,200	26,600	28,900	*24,700	23,900	17,800	9,500	13,000	9,260
5	10,500	e7,010	24,800	19,500	27,000	30,000	26,100	26,300	18,400	6,500	12,000	9,880
6	10,500	9,390	25,900	20,000	27,700	30,400	26,600	27,600	18,400	3,600	13,000	11,500
7	9,560	10,000	26,400	20,700	28,700	30,000	28,100	29,500	16,800	4,800	13,000	9,810
8	7,560	10,600	27,200	21,100	28,700	30,300	27,600	28,700	16,800	7,000	*14,200	9,810
9	7,620	11,700	26,500	*20,600	27,200	30,000	27,600	28,100	15,800	11,000	13,100	8,500
10	e6,710	8,490	26,100	20,600	26,800	29,100	28,100	27,400	16,700	12,000	11,400	11,200
11	e6,760	7,850	26,400	19,500	25,400	28,300	30,500	27,200	17,400	13,000	10,200	11,100
12	e5,780	9,120	25,300	18,800	24,300	28,100	30,400	27,000	18,200	13,000	8,550	10,700
13	e4,670	*9,810	24,200	18,800	*23,500	28,100	28,700	25,600	17,300	13,000	11,200	10,100
14	e3,430	11,300	25,600	19,000	21,900	28,900	26,800	*24,700	17,900	14,000	11,600	9,490
15	e3,430	10,900	25,600	19,000	22,600	27,600	24,700	25,300	17,200	14,000	12,800	10,500
16	e4,740	11,400	25,100	19,000	24,200	27,400	27,000	24,900	14,300	16,000	12,700	10,700
17	e7,010	9,260	25,100	19,700	23,500	26,400	25,500	23,800	11,900	16,000	11,600	11,700
18	8,340	7,910	24,500	20,900	21,200	25,500	25,100	22,100	11,700	17,000	9,950	12,500
19	e6,350	11,600	24,500	21,000	19,900	25,700	25,400	21,400	11,700	18,000	10,500	*12,500
20	e4,410	15,600	23,900	21,000	19,200	25,700	26,600	21,400	11,900	17,000	11,500	11,400
21	7,460	17,000	23,700	21,200	18,500	25,500	28,700	20,700	11,900	16,000	11,400	11,400
22	8,400	20,000	22,600	22,400	19,200	24,100	30,000	20,000	12,100	16,000	10,400	10,200
23	9,460	23,500	21,900	22,300	18,500	23,100	28,900	20,600	10,800	16,000	11,400	9,460
24	10,800	27,800	21,200	22,700	18,500	22,000	29,400	21,300	9,600	17,000	10,900	9,950
25	10,800	31,300	20,500	23,800	17,800	22,100	28,900	21,300	*9,000	18,000	11,300	7,060
26	10,800	31,400	19,900	23,400	17,900	21,400	28,300	22,500	13,000	18,000	8,570	e5,340
27	9,530	30,700	19,100	24,500	18,700	22,100	28,300	21,300	13,000	17,000	9,740	e5,340
28	8,460	29,800	19,000	25,500	21,900	21,400	28,300	20,400	11,000	16,000	10,400	e133
29	7,410	29,800	19,600	27,000	-	22,400	27,900	20,300	11,000	16,000	12,700	e332
30	10,700	30,000	19,000	28,500	-------	22,900	26,100	19,600	10,000	16,000	12,800	e1,160
31	11,300	-------	19,000	27,900	-------	24,600	-------	20,200	-------	16,000	11,700	-------
Total	242,780	467,980	742,700	664,200	653,800	805,800	816,200	728,400	439,600	418,400	367,610	268,085
Mean	7,832	15,600	23,960	21,430	23,350	25,990	27,210	23,500	14,650	13,500	11,860	8,936
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 31,400 Min 3,060 Mean 12,420 Cfsm - In. -
Water year 1957-58: Max 31,400 Min 133 Mean 18,120 Cfsm - In. -

* Discharge measurement made on this day.
e Very low fall between gages.
Note.--Fragmentary gage-height record June 25 to Aug. 7; discharge computed on basis of fall between Lake Marion near Pineville and Lake Moultrie near Pinopolis.

1710. Lake Marion near Pineville, S. C.

Location.--Lat 33°27'00", long 80°09'50", at right upstream end of spillway, 2.8 miles upstream from old Santee Canal, 5.4 miles upstream from Dead River, and 8 miles west of Pineville, Berkeley County.

Drainage area.--14,700 sq mi, approximately.

Records available.--January 1942 to September 1958. Prior to October 1942, published as Santee Reservoir near Pineville.

Gage.--Water-stage recorder. Datum of gage is at mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Harza Engineering Co.). Prior to May 6, 1942, staff gage at same site and datum.

Extremes.--Maximum elevation during year, 76.97 ft Feb. 1; minimum, 72.56 ft Sept. 30. 1942-58: Maximum elevation, 77.12 ft Mar. 11, 1952; minimum, 61.36 ft Oct. 17, 1951.

Remarks.--Lake is formed by earth dam. Storage began in November 1941; dam completed in 1941. Usable capacity, 39,640,000,000 cu ft between elevations 60.0 ft (limit of drawdown) and 75.0 ft (maximum normal lake elevation). Dead storage, about 15,250,000,000 cu ft. Figures given herein represent usable contents. Elevation of spillway crest, 63.0 ft; top of spillway gates, 76.8 ft. Some water used for generation of power. Major portion of water is diverted from Lake Marion through canal to Lake Moultrie (see preceding page) for generation of power and for navigation.

Capacity table, water year 1957-58 (elevation, in feet, and usable contents, in billions of cubic feet)
(Prepared from volume curve drawn by Harza Engineering Co.)

72.0	27.75
75.0	39.64
77.0	48.88

Elevation, in feet, at 12 p.m., water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	72.64	74.92	76.57	75.27	76.71	76.02	75.66	75.35	76.03	75.12	75.37	74.84
2	72.83	74.95	76.71	75.22	76.51	76.12	75.68	75.06	75.91	75.11	75.36	74.72
3	73.07	74.97	76.71	75.21	76.48	76.37	75.68	75.19	75.77	75.07	75.31	74.67
4	73.30	74.90	76.44	75.19	76.43	76.52	75.86	75.47	75.75	75.05	75.16	74.64
5	73.57	74.84	76.37	75.18	76.49	76.61	75.95	75.81	75.73	75.04	75.09	74.63
6	73.80	74.82	76.49	75.18	76.57	76.67	76.17	76.22	75.66	75.03	75.08	74.57
7	73.96	74.80	76.52	75.20	76.64	76.66	76.23	76.29	75.74	75.02	75.07	74.52
8	74.09	74.85	76.60	75.20	76.51	76.65	76.19	76.36	75.72	75.02	75.11	74.36
9	74.21	74.76	76.55	75.14	76.39	76.64	76.20	76.45	75.66	75.03	75.09	74.23
10	74.32	74.63	76.48	75.13	76.22	76.52	76.42	76.48	75.58	75.08	75.02	74.15
11	74.42	74.56	76.48	75.13	76.12	76.49	76.67	76.56	75.56	75.12	74.86	74.01
12	74.54	74.48	76.21	75.10	76.09	76.40	76.62	76.58	75.48	75.28	74.85	73.98
13	74.60	74.47	76.30	75.22	76.12	76.43	76.50	76.50	75.42	75.40	74.80	73.88
14	74.62	74.48	76.29	75.20	76.08	76.33	76.38	76.55	75.33	75.40	74.74	73.78
15	74.69	74.48	76.31	75.22	76.22	76.22	76.44	76.67	75.26	75.41	74.68	73.71
16	74.76	74.62	76.28	75.26	76.13	76.11	76.48	76.64	75.11	75.43	74.66	73.60
17	74.83	74.63	76.20	75.39	76.00	76.01	76.30	76.56	75.05	75.42	74.70	73.51
18	74.92	74.59	76.12	75.42	75.87	75.90	76.21	76.50	75.06	75.47	74.67	73.40
19	74.98	74.74	76.04	75.51	75.83	75.82	76.20	76.48	75.05	75.48	74.60	73.29
20	75.01	74.75	76.00	75.56	75.84	75.79	76.30	76.52	75.21	75.49	74.56	73.17
21	74.98	74.81	75.89	75.70	75.90	75.68	76.52	76.50	75.21	75.42	74.54	73.16
22	74.93	74.92	75.77	75.63	75.90	75.53	76.61	76.45	75.27	75.34	74.52	72.93
23	74.92	75.38	75.65	75.61	75.90	75.49	76.55	76.46	75.23	75.35	74.49	72.77
24	75.01	76.01	75.53	75.81	75.89	75.41	76.54	76.45	75.20	75.39	74.41	72.73
25	75.00	76.51	75.44	75.70	75.84	75.44	76.45	76.46	75.22	75.40	74.37	72.70
26	75.06	76.59	75.31	75.78	75.92	75.40	76.41	76.39	75.22	75.40	74.36	72.66
27	75.07	76.53	75.20	75.98	76.00	75.40	76.36	76.30	75.20	75.49	74.52	72.68
28	74.97	76.60	75.24	76.13	76.02	75.42	76.38	76.30	75.22	75.50	74.65	72.63
29	74.92	76.63	75.20	76.49	-	75.41	76.24	76.16	75.22	75.43	74.74	72.62
30	74.92	76.59	75.20	76.61	-------	75.52	75.85	76.13	75.19	75.40	74.82	72.60
31	74.93	-------	75.20	76.62	-------	75.68	-------	76.09	-------	75.34	74.87	-------
(†)	39.34	46.93	40.54	47.07	44.22	42.69	43.45	44.55	40.49	41.17	39.09	29.97
(‡)	+3,525	+2,928	-2,386	+2,436	-1,178	-571	+293	+411	-1,566	+254	-777	-3,518

Calendar year 1957..... ‡ +709
Water year 1957-58..... ‡ +2

† Contents, in billions of cubic feet, at end of month.
‡ Change in contents, equivalent in cubic feet per second.

1715. Santee River near Pineville, S. C.

Location.--Lat 33°27'15", long 80°09'25", on right bank 2.4 miles downstream from Lake Marion Dam, 3.0 miles upstream from Dead River, and 6.7 miles west of Pineville, Berkeley County.

Drainage area.--14,700 sq mi, approximately.

Records available.--April 1942 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 23.00 ft above mean sea level (levels by South Carolina Public Service Authority). Prior to Feb. 25, 1943, staff gage at site 2.2 miles upstream or temporary water-stage recorder operated by Corps of Engineers, at site 200 ft upstream, at different datum.

Average discharge.--16 years, 2,024 cfs.

Extremes.--Maximum discharge during year, 59,700 cfs Nov. 30 (gage height, 25.85 ft); minimum daily, 354 cfs Nov. 2.
1942-58: Maximum discharge, 155,000 cfs Sept. 23, 1945 (gage height, 31.1 ft, from floodmarks), from rating curve extended above 13,000 cfs by computation of flow over spillway at Lake Marion and by logarithmic plotting; minimum daily, 9 cfs Feb. 23, 1947 (caused by repair work at spillway).

Remarks.--Records good. Flow completely regulated by Lake Marion (see preceding page). Water is diverted above station from Lake Marion through canal (see p. 202) into Lake Moultrie (see following page) for generation of power and for navigation, then discharged into Cooper River basin.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Nov. 26, May 24 to July 20)

Oct. 1 to Nov. 29

2.5	341	18.0	12,600
3.0	510	20.0	16,200
4.0	875	22.0	24,200
6.0	1,730	24.0	39,300
9.0	3,580	26.0	62,300
13.0	6,930		

Nov. 30 to Sept. 30

1.9	406	9.0	3,900
2.5	617	15.0	8,980
3.5	989	18.0	12,600
5.0	1,620		

Note.--Same as preceding table above 18 ft.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	510	545	39,100	528	16,000	851	726	37,400	800	708	635	563
2	*510	354	22,000	563	16,800	708	708	38,300	726	689	563	563
3	510	510	20,600	528	12,600	726	708	38,300	528	653	545	581
4	510	510	27,800	528	4,470	744	726	35,600	510	545	617	581
5	421	510	23,200	528	1,480	726	708	32,300	492	545	617	581
6	492	528	10,100	510	913	726	782	29,300	492	563	617	563
7	492	528	8,060	545	1,830	708	1,380	26,000	475	599	*599	563
8	492	492	6,940	*545	7,480	782	1,040	24,200	475	563	599	563
9	492	528	6,660	528	6,940	936	726	19,700	475	581	545	563
10	492	528	7,020	510	6,660	1,080	726	18,900	475	581	545	563
11	492	528	*8,020	510	6,400	782	1,080	18,900	492	563	617	563
12	510	510	7,650	510	*4,310	744	6,730	18,900	475	510	617	563
13	510	492	1,780	528	1,090	744	11,800	18,900	475	528	617	563
14	492	*492	1,070	545	913	1,840	12,200	15,800	475	581	617	563
15	492	510	875	528	1,370	1,160	12,300	8,870	510	599	599	563
16	510	545	837	545	3,370	948	13,900	9,110	510	599	545	545
17	510	528	763	545	2,760	782	17,800	12,300	475	581	545	563
18	510	528	563	563	2,010	726	18,100	12,600	475	599	599	*563
19	510	563	528	528	1,110	763	18,500	10,800	475	510	617	563
20	492	671	563	528	617	963	17,800	7,120	528	545	689	563
21	492	635	617	528	545	1,380	13,800	6,760	475	617	689	563
22	475	617	545	776	563	857	13,600	6,580	458	599	689	563
23	475	617	545	563	528	528	11,500	5,360	458	599	689	563
24	475	598	545	581	510	528	7,680	1,220	458	617	689	563
25	475	3,090	545	1,320	510	528	6,940	989	475	617	689	563
26	510	16,600	640	782	528	528	6,580	932	*653	528	671	581
27	528	20,900	581	854	545	528	6,490	875	635	528	599	617
28	545	30,800	474	964	863	528	6,150	894	410	617	599	599
29	510	34,700	528	2,200	-	492	9,350	875	458	635	581	599
30	510	49,000	528	8,840	-------	510	20,400	818	708	635	563	599
31	510	-------	528	12,200	-------	635	-------	818	-------	617	563	-------
Total	15,454	167,957	200,205	40,251	103,715	24,481	240,930	459,421	15,526	18,251	18,965	17,106
Mean	499	5,599	6,458	1,298	3,704	790	8,031	14,820	518	589	612	570
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 49,000 Min 354 Mean 1,428 Cfsm - In. -
Water year 1957-58: Max 49,000 Min 354 Mean 3,623 Cfsm - In. -

* Discharge measurement made on this day.

1720. Lake Moultrie near Pinopolis, S. C.

Location.--Lat 33°14'40", long 79°59'30", at powerplant 0.7 mile upstream from Atlantic Coast Line Railroad bridge and 2.8 miles northeast of Pinopolis, Berkeley County.

Records available.--January 1942 to September 1958. Prior to October 1942, published as Pinopolis Reservoir near Pinopolis.

Gage.--Water-stage recorder. Datum of gage is at mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Harza Engineering Co.). Prior to May 16, 1942, staff gage at same site and datum.

Extremes.--Maximum elevation during year, 75.89 ft May 21, 22; minimum, 72.51 ft Sept. 24. 1942-58: Maximum elevation, 76.18 ft Feb. 24, 1946 (caused by high wind); minimum, 58.52 ft Dec. 21, 1951.

Remarks.--Lake is formed by earth dikes and dam, with concrete navigation lock; dikes and dam completed in 1941. Storage began in November 1941. Water is diverted through canal (see p. 201) from Lake Marion (see p. 202) and discharged through tailrace canal into West Branch Cooper River. Usable capacity, 28,314,000,000 cu ft between elevations 60.0 ft (normal limit of drawdown) and 75.0 ft (maximum normal elevation). Dead storage, about 19,600,000,000 cu ft. Figures given herein represent usable contents. Water is used for generation of power and for navigation.

Capacity table, water year 1957-58 (elevation, in feet, and usable contents, in billions of cubic feet)
(Prepared from volume curve drawn by Harza Engineering Co.)

72.0	20.91
74.0	25.74
76.0	30.97

Elevation, in feet, at 12 p.m., water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	72.72	74.87	75.21	74.69	75.35	75.07	74.63	74.58	75.39	75.05	74.88	74.77
2	72.81	74.94	75.24	74.65	75.37	74.96	74.56	74.26	75.31	74.98	74.95	74.71
3	72.95	74.97	75.27	74.58	75.28	74.92	74.59	74.16	75.32	74.90	74.98	74.62
4	73.20	74.93	75.41	74.54	75.14	74.91	74.60	74.16	75.29	74.99	74.97	74.57
5	73.48	74.82	75.27	74.49	75.05	74.91	74.53	74.30	75.19	75.09	74.88	74.48
6	73.71	74.75	75.22	74.47	75.02	74.94	74.69	74.58	75.20	75.12	74.81	74.47
7	73.95	74.68	75.22	74.49	75.06	74.96	74.78	74.76	75.27	75.00	74.79	74.45
8	74.10	74.65	75.35	74.45	75.06	74.99	74.67	74.85	75.36	74.89	74.80	74.33
9	74.19	74.75	75.40	74.37	74.96	75.07	74.65	75.02	75.21	74.82	74.87	74.13
10	74.36	74.70	75.37	74.37	74.96	75.06	74.70	75.13	75.10	74.84	74.90	73.97
11	74.49	74.55	75.50	74.48	74.98	75.02	74.85	75.31	74.99	74.89	74.78	73.87
12	74.60	74.42	75.25	74.51	75.08	74.97	74.95	75.43	74.91	75.07	74.69	73.87
13	74.70	74.33	75.13	74.57	75.21	74.96	75.11	75.50	74.83	75.18	74.60	73.79
14	74.76	74.32	75.11	74.58	75.28	74.98	75.16	75.53	74.77	75.13	74.50	73.68
15	74.75	74.36	75.18	74.59	75.41	74.90	75.32	75.59	74.89	75.08	74.47	73.59
16	74.79	74.57	75.17	74.67	75.41	74.76	75.44	75.68	74.88	74.98	74.47	73.41
17	74.87	74.70	75.12	74.68	75.33	74.76	75.26	75.72	74.93	74.90	74.66	73.17
18	75.00	74.56	75.09	74.65	75.39	74.77	75.10	75.75	74.88	74.93	74.55	73.06
19	75.12	74.51	75.01	74.68	75.38	74.68	74.97	75.76	74.88	74.88	74.47	72.99
20	75.13	74.31	74.99	74.74	75.38	74.67	74.89	75.82	74.99	75.03	74.37	72.92
21	74.98	74.09	74.98	74.79	75.38	74.66	74.81	75.89	75.07	75.04	74.39	72.89
22	74.88	73.98	74.97	74.75	75.43	74.57	74.94	75.82	75.19	74.95	74.35	72.70
23	74.86	73.91	74.87	74.66	75.44	74.53	74.93	75.79	75.22	74.84	74.27	72.57
24	74.90	74.01	74.82	74.69	75.49	74.55	74.95	75.72	75.13	74.83	74.29	72.56
25	74.96	74.30	74.79	74.67	75.47	74.60	74.95	75.74	74.99	74.81	74.31	72.61
26	75.01	74.50	74.74	74.76	75.53	74.59	74.86	75.71	74.96	74.86	74.34	72.75
27	75.07	74.67	74.61	74.82	75.39	74.59	74.86	75.65	75.05	75.04	74.44	72.79
28	74.97	74.83	74.62	74.85	75.19	74.50	74.89	75.61	75.09	75.04	74.47	72.73
29	74.84	74.97	74.61	74.90	-	74.40	74.84	75.58	75.12	75.01	74.47	72.62
30	74.79	75.33	74.60	74.99	-------	74.43	74.80	75.54	75.13	74.96	74.54	72.57
31	74.80	-------	74.56	75.08	-------	74.55	-------	75.44	-------	74.89	74.72	-------
(†)	27.80	29.19	27.18	28.53	28.82	27.16	27.80	29.48	28.66	28.03	27.59	22.25
(‡)	+1,975	+536	-750	+504	+120	-620	+247	+627	-316	-235	-164	-2,060

Calendar year 1957..... ‡ +419
Water year 1957-58..... ‡ -8

† Contents, in billions of cubic feet, at end of month.
‡ Change in contents, equivalent in cubic feet per second.

1725. South Fork Edisto River near Montmorenci, S. C.

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

Drainage area.--198 sq mi.

Records available.--October 1939 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 250.18 ft above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers). Prior to Oct. 29, 1954, wire-weight gage at same site and datum.

Average discharge.--19 years, 220 cfs.

Extremes.--Maximum discharge during year, 1,560 cfs Apr. 18 (gage height, 7.82 ft); minimum, 84 cfs about Aug. 24 (gage height, 2.13 ft).
1939-58: Maximum discharge, 2,460 cfs Aug. 15, 1940, July 19, 1941 (gage height, 8.81 ft, from graph based on gage readings); minimum, 37 cfs July 4, Sept. 26, 1954 (gage height, 1.00 ft).

Remarks.--Records good except those for periods of no gage-height record, which are fair.

Revisions (water years).--WSP 952: 1941. WSP 1032: Drainage area.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 9 to Nov. 20, Nov. 26)

Oct. 1 to Nov. 26				Nov. 27 to Sept. 30			
2.3	85	6.0	334	2.1	82	6.0	372
4.0	153	6.5	502	4.0	166	6.4	520
5.0	204	7.0	820	5.0	226	7.0	935
5.5	249			5.5	281	7.5	1,320

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	161	105	615	303	329	720	414	430	151	156	114	110
2	181	105	615	274	329	525	495	430	148	128	112	100
3	186	103	520	256	329	393	430	398	148	120	110	100
4	201	101	398	240	339	339	385	414	161	118	108	100
5	224	101	329	235	303	311	360	357	176	128	104	98
6	224	99	303	*230	288	295	467	311	174	141	100	98
7	224	99	288	235	311	288	580	303	166	146	96	94
8	204	99	295	250	474	303	767	325	161	140	94	92
9	159	101	303	274	755	330	665	360	164	190	92	90
10	123	109	349	320	*550	385	442	317	161	300	92	86
11	107	119	414	288	398	414	398	274	148	240	90	86
12	97	*115	372	250	349	398	360	250	138	220	90	92
13	93	109	339	235	320	360	360	250	128	240	92	110
14	89	109	295	240	311	339	349	245	120	240	96	126
15	87	129	268	256	303	339	347	250	116	240	100	*120
16	87	149	245	310	311	360	557	235	*116	200	100	145
17	93	174	240	303	320	320	1,070	214	122	180	100	176
18	101	195	235	268	360	303	1,320	198	124	170	95	158
19	111	208	226	245	329	295	772	189	120	160	95	131
20	121	233	230	230	295	311	510	195	118	190	90	118
21	113	316	245	226	274	320	414	218	116	281	90	128
22	99	436	256	235	268	295	414	257	124	200	85	161
23	95	372	288	240	262	281	414	295	141	160	85	195
24	99	324	288	301	262	262	414	248	158	150	90	194
25	117	425	274	408	256	268	430	218	158	150	140	154
26	133	585	274	966	293	295	369	211	138	150	220	124
27	147	669	303	1,050	370	390	329	192	134	140	240	116
28	137	702	339	611	604	398	311	192	165	*138	180	110
29	117	522	329	430	-	450	349	184	236	144	140	104
30	109	470	295	372	-------	398	398	168	240	144	120	102
31	107	-------	295	339	-------	398	-------	158	-------	124	110	-------
Total	4,146	7,383	10,065	10,420	9,892	11,083	14,890	8,286	4,470	5,428	3,470	3,618
Mean	134	246	325	336	353	358	496	267	149	175	112	121
Cfsm	0.677	1.24	1.64	1.70	1.78	1.81	2.51	1.35	0.753	0.884	0.566	0.611
In.	0.78	1.38	1.89	1.96	1.85	2.09	2.80	1.56	0.84	1.02	0.65	0.68

Calendar year 1957: Max 702 Min 48 Mean 167 Cfsm 0.843 In. 11.50
Water year 1957-58: Max 1,320 Min 85 Mean 255 Cfsm 1.29 In. 17.50

Peak discharge (base, 900 cfs).--Jan. 26 (9:30 p.m.) 1,360 cfs (7.53 ft); Apr. 18 (12:30 a.m.) 1,560 cfs (7.82 ft).

* Discharge measurement made on this day.
Note.--No gage-height record July 8-20, 22-27, Aug. 15 to Sept. 4; discharge estimated on basis of recorded range in stage and weather records.

1730. South Fork Edisto River near Denmark, S. C.

Location.--Lat 33°23'35", long 81°08'00", on left bank at downstream side of bridge on U. S. Highway 321, 200 ft downstream from Seaboard Air Line Railroad bridge, 1.8 miles downstream from Little River, and 4.8 miles north of Denmark, Bamberg County.

Drainage area.--720 sq mi, approximately.

Records available.--August 1931 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 155.68 ft above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers). Prior to Oct. 27, 1931, chain gage at same site and datum.

Average discharge.--27 years, 727 cfs.

Extremes.--Maximum discharge during year, 3,210 cfs Apr. 17 (gage height, 8.00 ft); minimum, 220 cfs Aug. 24, Sept. 11.
1931-58: Maximum discharge, 13,500 cfs Apr. 11, 1936 (gage height, 10.91 ft), from rating curve extended above 4,800 cfs on basis of velocity-area studies and logarithmic plotting; minimum, 146 cfs Aug. 12, 1956.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Records of water temperatures for the water year 1958 are given in WSP 1571.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-11		Oct. 12 to Sept. 30			
5.0	396	3.8	220	6.5	790
5.5	464	4.5	305	7.0	1,360
6.1	644	5.0	375	8.0	3,210
		6.0	554		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a400	390	1,570	882	1,500	1,600	1,570	1,900	541	*405	353	405
2	a400	390	1,570	882	1,380	1,550	1,690	1,690	517	390	339	405
3	a420	375	1,460	864	*1,230	1,460	*1,620	1,590	496	405	332	375
4	a440	368	1,350	815	1,100	1,380	1,500	1,520	470	413	339	318
5	a480	360	1,260	776	1,000	1,380	1,420	1,540	445	405	*332	286
6	a500	346	1,240	749	970	1,350	1,440	1,360	429	413	318	273
7	*549	339	1,220	815	1,050	1,270	1,410	1,270	429	453	298	261
8	565	339	1,200	911	1,190	1,290	1,320	1,200	462	445	279	249
9	602	339	1,200	931	1,220	1,360	1,180	1,100	470	445	267	237
10	623	346	1,220	882	1,190	1,380	1,180	960	462	437	267	231
11	584	346	1,180	856	1,120	1,330	1,290	931	445	470	255	220
12	541	346	1,100	798	1,100	1,220	1,440	1,220	429	517	261	255
13	528	346	1,000	783	1,220	1,180	1,420	1,290	405	554	261	273
14	506	360	960	*806	1,290	1,180	1,270	1,180	382	585	261	267
15	470	382	931	831	1,270	1,200	1,330	*1,000	360	570	255	273
16	405	433	950	831	1,220	1,200	2,610	872	360	528	249	312
17	353	541	950	806	1,120	1,120	3,110	770	353	528	255	*325
18	339	*604	901	776	1,040	1,080	*2,810	700	346	570	279	332
19	339	622	864	a750	970	1,070	2,320	644	339	644	273	332
20	332	722	806	a700	921	1,050	2,040	644	332	622	261	332
21	332	742	798	a700	892	1,020	2,150	706	339	644	249	332
22	332	*742	783	a750	872	970	2,320	736	339	694	237	325
23	332	856	742	a800	882	921	2,120	722	346	700	226	318
24	339	970	736	a900	872	872	1,810	716	360	644	226	318
25	346	1,040	798	a1,000	864	901	1,520	678	375	554	338	325
26	353	1,140	864	a1,200	941	993	1,290	644	375	496	429	332
27	360	1,360	872	a1,200	1,230	1,030	1,150	667	413	470	437	332
28	368	1,440	882	*1,220	1,520	1,020	1,100	667	453	462	429	339
29	375	1,550	950	1,220	-	982	1,350	667	445	437	421	318
30	382	1,590	960	1,360	-------	982	2,080	622	429	398	405	279
31	390	-------	911	1,540	-------	1,200	-------	585	-------	368	405	-------
Total	13,285	19,724	32,228	28,334	31,174	36,541	50,860	30,791	12,346	15,666	9,536	9,179
Mean	429	657	1,040	914	1,113	1,179	1,695	993	412	505	308	306
Cfsm	0.596	0.912	1.44	1.27	1.55	1.64	2.35	1.38	0.572	0.701	0.428	0.425
In.	0.69	1.02	1.66	1.46	1.61	1.89	2.62	1.59	0.64	0.81	0.49	0.47

Calendar year 1957: Max 1,590 Min 167 Mean 528 Cfsm 0.733 In. 9.95
Water year 1957-58: Max 3,110 Min 220 Mean 794 Cfsm 1.10 In. 14.95

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for North Fork Edisto River at Orangeburg and Edisto River near Branchville.

1735. North Fork Edisto River at Orangeburg, S. C.

Location.--Lat 33°29'00", long 80°52'25", on left bank under bridge on U. S. Highway 301 at Orangeburg, Orangeburg County, 0.5 mile upstream from Atlantic Coast Line Railroad bridge and 1½ miles downstream from Caw Caw Swamp.

Drainage area.--683 sq mi.

Records available.--October 1938 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 149.02 ft above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers). Prior to Feb. 23, 1939, wire-weight gage at same site and datum.

Average discharge.--20 years, 682 cfs.

Extremes.--Maximum discharge during year, 3,340 cfs May 1 (gage height, 9.73 ft); minimum, 305 cfs Sept. 11.
1938-58: Maximum discharge, 9,500 cfs Sept. 18, 1945 (gage height, 14.28 ft), from rating curve extended above 3,900 cfs on basis of velocity-area studies and logarithmic plotting; minimum, 190 cfs Sept. 13, 14, 1954.

Remarks.--Records good.

Revisions.--WSP 1032: Drainage area.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Jan. 26-30)

Oct. 1 to Jan. 30		Jan. 31 to Sept. 30			
3.8	320	3.4	316	7.0	1,060
4.0	340	4.0	384	8.0	1,700
5.0	462	5.0	514	9.0	2,570
6.0	664	6.0	709	9.5	3,100
7.0	974				
7.7	1,310				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	390	356	1,250	854	1,250	1,410	1,380	3,100	619	*562	408	529
2	390	356	1,250	838	1,140	1,380	*1,440	2,290	580	514	408	545
3	402	351	1,190	806	1,040	1,220	1,410	1,740	562	485	432	545
4	454	346	1,120	776	970	1,140	1,340	1,480	545	485	471	514
5	494	340	1,050	746	890	1,110	1,250	1,340	514	514	*514	471
6	529	340	1,010	718	872	1,110	1,280	1,380	499	545	499	420
7	*520	335	974	776	930	1,080	1,280	1,520	485	545	458	372
8	502	335	974	854	1,040	1,080	1,220	1,480	499	580	420	349
9	486	335	974	904	1,110	1,110	1,160	1,340	514	580	408	338
10	478	340	1,010	870	*1,110	1,140	1,220	1,160	529	545	408	327
11	462	335	1,010	822	1,060	1,110	1,280	1,060	514	562	396	316
12	454	335	1,010	776	1,010	1,060	1,340	990	514	529	360	316
13	447	335	974	746	990	1,010	1,310	1,040	499	529	349	338
14	440	346	921	*776	1,060	990	1,190	1,080	499	562	360	349
15	414	356	870	791	1,060	1,010	1,200	*1,040	485	580	360	372
16	378	466	822	806	1,010	1,010	2,070	930	471	580	338	396
17	356	568	806	776	970	1,010	*2,470	820	458	562	338	*420
18	335	*602	791	732	910	990	2,380	734	432	545	360	432
19	325	626	761	690	855	970	2,060	685	408	545	396	420
20	320	602	746	664	820	950	1,780	685	420	562	471	420
21	320	626	718	664	790	930	1,740	709	514	580	445	420
22	320	664	690	677	790	890	1,860	760	676	619	384	432
23	320	746	690	704	760	855	1,700	790	820	580	360	420
24	330	791	690	746	760	820	1,520	760	734	514	360	408
25	335	921	746	887	760	838	1,340	709	640	485	408	384
26	340	992	791	1,070	857	890	1,220	685	619	458	485	384
27	340	1,070	838	1,120	1,100	970	1,110	709	580	432	562	372
28	335	1,160	854	1,090	1,340	990	1,060	760	562	445	619	360
29	335	1,220	870	1,070	-	970	1,350	734	580	458	599	360
30	340	1,280	887	1,070	-------	950	2,620	685	580	458	545	338
31	351	-------	887	1,250	-------	1,190	-------	662	-------	432	514	-------
Total	12,242	17,475	28,174	26,069	27,254	32,183	45,580	33,857	16,351	16,372	13,435	12,067
Mean	395	582	909	841	973	1,038	1,519	1,092	545	528	433	402
Cfsm	0.578	0.852	1.33	1.23	1.42	1.52	2.22	1.60	0.798	0.773	0.634	0.589
In.	0.67	0.95	1.53	1.42	1.48	1.75	2.48	1.84	0.89	0.89	0.73	0.66

Calendar year 1957: Max 1,280 Min 208 Mean 525 Cfsm 0.769 In. 10.43
Water year 1957-58: Max 3,100 Min 316 Mean 770 Cfsm 1.13 In. 15.29

* Discharge measurement made on this day.

1740. Edisto River near Branchville, S. C.

Location.--Lat 33°10'35", long 80°48'05", on right bank 400 ft downstream from bridge on U. S. Highway 21, 4.7 miles downstream from Brier Branch, and 5.2 miles south of Branchville, Orangeburg County.

Drainage area.--1,720 sq mi, approximately.

Records available.--October 1945 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 80.02 ft above mean sea level (levels by Corps of Engineers). Prior to May 19, 1949, at datum 1.00 ft higher.

Average discharge.--13 years, 1,656 cfs.

Extremes.--Maximum discharge during year, 8,050 cfs Apr. 19, 20; maximum gage height, 9.30 ft Apr. 19; minimum discharge, 643 cfs Sept. 14.
1945-58: Maximum discharge, 10,000 cfs Oct. 6, 1948 (gage height, 10.21 ft, present datum); minimum, 323 cfs Aug. 14, 1956.

Remarks.--Records good except those for periods of no gage-height record, which are fair.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Feb. 4 to May 6)

0.8	657	6.0	2,420
1.0	713	7.0	3,220
2.0	998	8.0	4,430
4.0	1,590	9.6	8,050

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	741	741	2,360	2,110	2,620	3,030	3,530	3,870	1,590	1,060	950	1,030
2	769	769	2,550	2,110	2,690	3,420	*3,750	4,430	1,560	1,060	900	998
3	*825	769	2,770	2,110	2,850	3,870	3,990	5,350	1,500	1,060	900	969
4	853	769	2,850	2,070	3,030	3,870	4,430	5,790	1,440	1,030	900	969
5	940	769	2,770	1,990	3,030	3,750	4,770	5,150	1,350	1,060	*900	969
6	969	769	2,690	1,950	2,850	3,530	4,950	4,430	1,290	1,060	882	940
7	998	741	2,620	1,950	2,690	3,420	5,150	3,990	1,230	1,060	882	882
8	998	741	2,550	1,950	2,620	3,320	4,950	3,870	1,170	1,060	882	825
9	1,030	713	2,480	1,990	2,550	3,420	4,430	3,750	1,140	1,100	882	741
10	1,030	713	2,550	*2,030	*2,620	3,640	4,130	3,640	1,110	1,100	825	699
11	1,030	713	2,550	2,110	2,600	3,640	3,870	3,420	1,110	1,100	797	657
12	1,030	713	2,550	2,200	2,800	3,640	3,640	3,220	1,080	1,110	769	671
13	1,060	713	2,550	2,150	2,600	3,640	3,530	3,030	1,080	1,100	741	657
14	1,030	713	2,550	2,110	2,600	3,530	3,420	2,850	1,060	1,100	741	657
15	1,030	*741	2,420	2,070	2,600	3,420	3,750	*2,770	1,030	1,200	713	671
16	1,030	769	2,360	2,030	2,600	3,220	5,150	2,770	998	1,200	699	671
17	998	797	2,250	1,990	2,600	3,030	6,010	2,690	969	1,300	685	*699
18	969	853	2,150	1,950	2,600	2,940	7,250	2,480	969	1,300	685	713
19	882	969	2,070	1,950	2,400	2,940	8,050	2,300	940	1,300	685	741
20	825	1,080	2,030	1,910	2,400	2,940	8,050	2,150	911	1,300	699	769
21	769	1,170	1,990	1,910	2,400	2,940	7,250	2,070	882	1,300	713	769
22	741	1,260	1,950	1,870	2,200	2,850	6,250	1,950	853	1,300	741	797
23	713	1,350	1,910	1,800	2,200	2,690	5,570	1,870	911	1,400	741	797
24	713	1,410	1,870	1,800	2,000	2,620	5,350	1,840	*969	1,400	713	797
25	713	1,470	1,840	1,840	2,000	2,550	5,350	1,840	1,060	1,400	699	769
26	713	1,560	1,800	1,950	2,000	2,550	4,950	1,840	1,140	1,350	713	769
27	741	1,660	1,840	2,070	2,200	2,550	4,430	1,800	1,170	1,300	769	741
28	741	1,800	1,910	2,300	2,550	2,620	3,870	1,730	1,140	1,300	882	741
29	741	1,950	1,990	2,550	-	2,690	3,750	1,700	1,110	1,200	940	713
30	741	2,150	2,030	2,620	-------	2,690	3,750	1,660	1,080	1,100	998	713
31	741	-------	2,070	2,620	-------	3,120	-------	1,620	-------	1,100	1,030	-------
Total	27,104	31,335	70,870	64,060	70,900	98,080	147,320	91,870	33,842	36,810	25,056	23,534
Mean	874	1,044	2,286	2,066	2,532	3,164	4,911	2,964	1,128	1,187	808	784
Cfsm	0.508	0.607	1.33	1.20	1.47	1.84	2.86	1.72	0.656	0.690	0.470	0.456
In.	0.59	0.68	1.53	1.38	1.53	2.12	3.19	1.98	0.73	0.80	0.54	0.51

Calendar year 1957: Max 2,850 Min 402 Mean 1,169 Cfsm 0.680 In. 9.23
Water year 1957-58: Max 8,050 Min 657 Mean 1,975 Cfsm 1.15 In. 15.58

* Discharge measurement made on this day.
Note.--No gage-height record Feb. 11-26, July 9-11, 13-25, July 27 to Aug. 5; discharge estimated on basis of recorded range in stage, weather records, and records for other stations in same drainage basin.

1750. Edisto River near Givhans, S. C.

Location.--Lat 33°01'40", long 80°23'30", on left bank at downstream side of bridge on State Highway 61, 2.3 miles downstream from Four Hole Swamp and 2.8 miles west of Givhans, Dorchester County.

Drainage area.--2,730 sq mi, approximately.

Records available.--January 1939 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 20.46 ft above mean sea level (levels by Corps of Engineers).

Average discharge.--19 years, 2,283 cfs.

Extremes.--Maximum discharge during year, 12,000 cfs Apr. 22, 23; maximum gage height, 13.13 ft Apr. 22; minimum discharge, 564 cfs Sept. 15 (gage height, 1.53 ft).
1939-58: Maximum discharge, 24,300 cfs Sept. 21, 1945 (gage height, 17.28 ft), from rating curve extended above 14,000 cfs by logarithmic plotting; minimum, 290 cfs Aug. 16, 1956 (gage height, 0.51 ft).
Maximum stage known since at least 1904, 17.5 ft in February 1925, from investigation by Charleston Commissioners of Public Works (discharge, 24,900 cfs).

Remarks.--Records good. About 55,382,000 gallons a day (85.7 cfs) diverted above station for Charleston water supply during year.

Revisions (water years).--WSP 1032: Drainage area. WSP 1303: 1939 (monthly and yearly runoff).

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Feb. 1				Feb. 2 to Sept. 30			
1.6	574	5.0	1,880	1.6	578	7.0	3,080
2.0	690	7.0	2,940	2.0	701	9.0	4,750
3.0	1,020	9.0	4,780	3.0	1,060	11.0	7,490
				5.0	1,960	13.1	12,000

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	660	616	2,130	2,540	4,090	3,960	7,010	6,130	1,960	1,180	1,060	1,140
2	720	616	2,330	2,600	4,230	4,230	8,370	5,990	1,860	1,100	975	1,060
3	*766	630	2,540	2,600	4,230	4,430	*8,570	5,850	1,820	1,180	1,100	1,020
4	814	630	2,700	2,600	4,140	4,640	8,570	5,850	1,760	1,180	1,260	958
5	846	630	2,880	2,600	4,140	4,860	8,370	5,850	1,660	1,180	1,350	905
6	878	630	3,070	2,600	4,140	5,090	8,570	6,270	1,530	1,260	*1,260	888
7	910	630	3,210	2,650	4,140	5,330	8,770	6,710	1,400	1,350	1,060	852
8	945	616	3,210	2,700	4,050	5,590	8,970	6,860	1,300	1,400	975	800
9	945	616	3,280	2,820	3,960	5,720	9,170	6,710	1,220	1,350	905	734
10	945	602	3,360	*2,880	3,870	5,720	9,170	6,270	1,140	1,300	870	668
11	945	602	3,360	2,880	*3,710	5,590	9,170	5,720	1,100	1,260	835	608
12	945	588	3,360	2,880	3,630	5,460	8,770	5,460	1,060	1,220	784	593
13	945	588	3,280	2,880	3,550	5,460	8,010	5,090	1,020	1,260	734	623
14	945	602	3,280	3,000	3,550	5,460	7,490	*4,750	995	1,220	701	593
15	945	*602	3,210	3,210	3,630	5,460	6,860	4,430	975	1,180	668	578
16	910	630	3,210	3,440	3,710	5,330	7,330	4,050	940	1,140	638	734
17	910	660	3,140	3,520	3,710	5,210	8,970	3,790	922	1,180	623	835
18	878	690	3,070	3,520	3,710	5,090	10,500	3,550	905	1,260	653	*784
19	878	720	3,000	3,440	3,710	4,860	11,000	3,480	888	1,400	638	718
20	814	766	2,940	3,360	3,710	4,640	11,200	3,340	870	1,530	608	684
21	750	846	2,820	3,360	3,630	4,530	11,500	3,270	958	1,660	593	668
22	690	945	2,760	3,360	3,550	4,330	12,000	3,200	1,180	1,660	593	668
23	660	1,050	2,700	3,360	3,480	4,140	12,000	3,080	1,140	1,620	608	684
24	645	1,120	2,600	3,360	3,340	3,960	11,000	2,840	*1,140	1,620	623	684
25	630	1,200	2,600	3,440	3,200	3,960	10,000	2,660	1,140	1,580	653	668
26	616	1,320	2,480	3,610	3,140	4,050	8,770	2,500	1,140	1,580	638	668
27	616	1,420	2,480	3,790	3,270	4,230	8,010	2,380	1,220	1,530	668	653
28	616	1,500	2,430	3,890	3,630	4,330	7,330	2,280	1,350	1,480	870	638
29	616	1,640	2,380	3,890	-	4,330	6,860	2,280	1,400	1,480	1,140	623
30	616	1,880	2,430	3,890	-------	4,430	6,410	2,160	1,300	1,350	1,300	608
31	616	-------	2,480	3,990	-------	5,330	-------	2,060	-------	1,140	1,260	-------
Total	24,615	25,585	88,720	98,660	104,850	149,750	268,720	134,860	37,293	41,830	26,643	22,337
Mean	794	853	2,862	3,183	3,745	4,831	8,957	4,350	1,243	1,349	859	745
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 3,520 Min 352 Mean 1,412 Cfsm - In. -
Water year 1957-58: Max 12,000 Min 578 Mean 2,805 Cfsm - In. -

* Discharge measurement made on this day.

1755. Salkehatchie River near Miley, S. C.

Location.--Lat 32°59'20", long 81°03'10", near right bank at downstream side of bridge on U. S. Highway 601, 2.6 miles downstream from Savannah Creek, 3.1 miles upstream from Hampton and Branchville Railroad bridge, and 3.1 miles northwest of Miley, Hampton County.

Drainage area.--341 sq mi.

Records available.--February 1951 to September 1958.

Gage.--Staff gage read twice daily. Datum of gage is 64.35 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--7 years, 237 cfs.

Extremes.--Maximum discharge during year, 1,140 cfs Apr. 17 (gage height, 4.21 ft); minimum, 45 cfs Sept. 11.
1951-58: Maximum discharge, that of Apr. 17, 1958; minimum, 17 cfs Sept. 13, 1954.

Remarks.--Records good.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Mar. 2, June 23-28)

1.3	42	3.0	262
1.5	54	3.4	422
2.0	98	4.0	860
2.5	163	4.3	1,140

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	225	179	732	372	511	732	774	479	156	134	78	109
2	*262	179	691	*350	511	774	817	479	148	128	78	88
3	329	171	578	350	450	732	774	479	134	121	109	74
4	397	171	511	329	422	691	732	479	128	141	128	69
5	479	171	450	311	397	652	774	450	128	179	128	65
6	479	179	422	311	372	614	817	479	121	226	115	61
7	450	179	422	329	372	614	817	479	115	354	104	58
8	479	179	422	372	372	578	774	397	115	372	93	54
9	511	179	479	397	372	614	817	372	109	238	88	51
10	511	179	479	397	372	614	817	311	104	179	78	48
11	479	179	422	397	372	614	774	278	104	179	83	45
12	422	179	422	422	372	578	691	311	98	188	88	48
13	350	179	422	422	397	578	578	329	98	188	78	51
14	234	188	450	479	422	614	543	329	93	205	78	51
15	171	214	479	479	422	614	620	311	83	225	69	58
16	156	236	479	450	422	614	998	311	78	262	65	69
17	156	262	422	397	422	578	1,140	311	78	372	61	74
18	179	278	397	329	397	511	1,100	293	83	245	65	78
19	188	293	350	311	372	479	998	293	83	179	74	69
20	188	329	329	311	372	450	905	262	109	163	69	65
21	188	329	311	311	350	422	817	249	141	171	65	69
22	179	350	293	329	350	397	732	236	134	163	61	98
23	179	397	293	329	329	397	652	225	163	128	58	134
24	179	479	278	350	311	372	578	225	179	104	61	134
25	171	543	278	397	293	397	479	225	163	104	75	121
26	163	578	293	422	360	422	422	249	148	104	138	98
27	163	652	311	450	543	422	372	*249	*156	98	156	83
28	171	652	329	479	652	422	350	214	171	*98	148	69
29	179	691	372	511	-	450	397	188	156	98	148	61
30	*179	691	397	511	-------	479	479	179	141	104	141	58
31	179	-------	372	511	-------	614	-------	171	-------	93	128	-------
Total	8,575	9,465	12,885	12,115	11,309	17,039	21,538	9,842	3,717	5,543	2,908	2,210
Mean	277	316	416	391	404	550	718	317	124	179	93.8	73.7
Cfsm	0.812	0.927	1.22	1.15	1.18	1.61	2.11	0.930	0.364	0.525	0.275	0.216
In.	0.94	1.03	1.41	1.33	1.23	1.86	2.35	1.07	0.41	0.61	0.32	0.24

Calendar year 1957: Max 732 Min 38 Mean 248 Cfsm 0.727 In. 9.87
Water year 1957-58: Max 1,140 Min 45 Mean 321 Cfsm 0.941 In. 12.80

* Discharge measurement made on this day.

1765. Coosawhatchie River near Hampton, S. C.

Location.--Lat 32°50'10", long 81°07'55", near left bank on downstream side of bridge on U. S. Highway 601, 1.6 miles downstream from Black Creek and 2.5 miles southwest of Hampton, Hampton County.

Drainage area.--203 sq mi.

Records available.--February 1951 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 50.30 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Oct. 26, 1954, wire-weight gage at same site and datum.

Average discharge.--7 years, 123 cfs.

Extremes.--Maximum discharge during year, 1,400 cfs Apr. 16 (gage height, 5.07 ft); minimum, 0.1 cfs Sept. 11-14.
1951-58: Maximum discharge, 2,750 cfs Mar. 24, 1953 (gage height, 5.78 ft, from graph based on gage readings), from rating curve extended above 1,400 cfs by velocity-area studies; no flow Aug. 31, Sept. 1, 1951, for many days during summer and fall months of 1954, Aug. 12-30, 1956, and Sept. 5, 6, 1957.

Remarks.--Records fair except those below 10 cfs, which are poor.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 9 to Nov. 30)

Oct. 1 to Feb. 25		Feb. 26 to Sept. 30			
2.9	54	1.5	0	2.5	16
3.1	88	1.6	.2	2.6	23
3.3	134	1.7	.6	2.8	41
3.4	163	1.8	1.0	3.1	88
3.7	273	1.9	1.5	3.3	134
4.0	433	2.0	2.0	3.6	243
4.5	829	2.1	2.8	4.0	475
		2.2	4.5	4.5	875
		2.3	7.2	5.0	1,350
		2.4	11		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	25	718	185	220	785	938	423	13	24	21	4.3
2	65	25	456	173	209	660	708	392	11	10	12	2.4
3	121	25	332	160	199	*510	598	304	27	6.7	9.9	1.8
4	286	23	283	151	185	410	510	230	38	35	17	1.4
5	459	22	239	134	182	349	496	182	39	106	39	1.2
6	343	20	209	126	173	304	531	164	29	178	34	1.0
7	244	20	185	169	173	304	644	164	23	311	20	.8
8	195	19	179	297	179	464	605	164	41	677	13	.6
9	143	18	209	364	202	652	496	149	31	401	8.9	.4
10	105	18	273	326	192	692	468	116	19	260	3.7	.2
11	81	19	316	287	179	620	503	98	9.0	294	2.4	.1
12	60	19	287	248	166	531	482	119	4.2	214	1.8	.1
13	48	20	248	224	163	462	423	171	2.3	182	1.7	.1
14	38	27	220	235	157	442	367	186	2.6	320	1.4	.1
15	32	37	199	256	166	430	483	140	3.6	349	1.2	.5
16	27	62	182	248	182	398	1,270	94	3.1	332	1.4	1.7
17	28	90	173	220	199	355	1,350	68	3.3	219	1.4	7.9
18	31	124	163	199	189	321	*1,080	53	3.6	148	1.2	12
19	36	146	157	179	173	310	803	42	4.6	105	1.2	7.8
20	40	124	151	163	163	304	628	55	6.7	79	1.2	3.3
21	38	119	148	166	151	293	510	96	5.8	62	1.1	2.4
22	35	*107	146	192	146	278	442	155	4.2	70	.9	3.6
23	32	101	143	220	137	248	410	125	24	63	.6	3.5
24	29	114	137	239	134	226	380	76	58	44	.4	2.6
25	29	137	134	332	129	239	327	57	70	41	.7	1.9
26	28	146	137	398	201	299	278	56	39	45	4.1	2.1
27	32	151	134	392	541	332	239	62	54	37	*17	2.7
28	31	148	140	348	821	321	*209	54	166	30	28	.9
29	29	194	160	*302	-	299	222	40	154	65	23	.5
30	*27	468	176	265	-------	288	293	28	78	*65	14	.2
31	26	-------	185	239	-------	*739	-------	19	-------	38	7.6	-------
Total	2,788	2,568	6,821	7,437	5,911	12,865	16,693	4,082	967.0	4,810.7	290.8	68.1
Mean	89.9	85.6	220	240	211	415	556	132	32.2	155	9.38	2.27
Cfsm	0.443	0.422	1.08	1.18	1.04	2.04	2.74	0.650	0.159	0.764	0.046	0.011
In.	0.51	0.47	1.24	1.36	1.08	2.35	3.06	0.75	0.18	0.88	0.05	0.01

Calendar year 1957: Max 718 Min 0 Mean 91.8 Cfsm 0.452 In. 6.13
Water year 1957-58: Max 1,350 Min 0.1 Mean 179 Cfsm 0.882 In. 11.94

* Discharge measurement made on this day.

1770. Chattooga River near Clayton, Ga.

Location.--Lat 34°49', long 83°18', on left bank 150 ft downstream from new bridge on U. S. Highway 76, 2¾ miles upstream from Stekoa Creek, 7 miles southeast of Clayton, Rabun County, 9 miles downstream from War Woman Creek, and 9 miles upstream from confluence with Tallulah River.

Drainage area.--207 sq mi.

Records available.--May 1907 to June 1908, October 1939 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 1,165.6 ft above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by State Highway Department of Georgia). May 1907 to June 1908 staff gage at site 400 ft upstream at different datum.

Average discharge.--19 years (1939-58), 592 cfs.

Extremes.--Maximum discharge during year, 5,620 cfs Nov. 19 (gage height, 5.20 ft); minimum, 225 cfs Sept. 29, 30.

1907-8, 1939-58: Maximum discharge, 29,000 cfs Aug. 30, 1940 (gage height, 13.8 ft), from rating curve extended above 4,700 cfs on basis of slope-area measurements at gage heights 9.9 and 13.8 ft; minimum, 88 cfs Oct. 8, 12, 13, 1954.

Remarks.--Records good.

Revisions (water years).--WSP 1383: 1940-41, drainage area.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.1	196	3.0	1,900
1.4	338	4.0	3,410
2.0	760	5.0	5,220
2.5	1,260		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*386	*404	760	859	960	960	*1,150	*1,480	760	380	*502	335
2	368	392	*736	*814	796	859	1,000	2,110	*769	362	509	*317
3	736	380	712	787	*736	*796	931	1,630	672	350	579	306
4	1,340	368	760	778	696	752	922	1,430	648	356	523	306
5	868	356	688	752	696	720	868	1,300	648	600	467	296
6	640	344	656	744	1,120	720	1,530	1,430	624	696	586	290
7	530	338	720	752	1,380	712	1,220	1,760	593	544	551	285
8	460	417	1,300	728	1,110	720	1,040	1,400	586	2,620	488	280
9	417	495	1,020	688	940	805	950	1,270	572	1,970	454	266
10	386	392	868	688	859	805	1,040	1,190	558	1,330	448	266
11	362	368	787	680	814	720	1,110	1,250	551	1,560	441	262
12	460	356	720	656	778	696	960	1,310	544	1,510	454	276
13	410	350	680	736	744	736	904	1,180	523	1,120	509	285
14	362	1,450	680	1,050	720	720	859	1,070	502	1,040	572	266
15	338	1,170	656	814	744	680	1,000	1,020	495	922	523	262
16	333	1,080	632	736	704	656	1,380	980	495	850	488	280
17	624	990	616	688	616	648	1,050	931	474	744	467	266
18	752	1,630	600	664	664	814	950	913	467	672	435	262
19	530	3,660	624	640	712	805	904	886	454	632	410	238
20	460	1,830	2,370	624	648	736	868	895	481	586	398	238
21	423	1,300	1,900	980	624	696	850	868	454	624	386	435
22	398	1,100	1,230	1,140	632	672	960	823	454	796	374	404
23	386	1,260	1,030	850	632	648	1,010	796	488	648	368	290
24	877	1,060	980	1,070	616	680	886	769	454	680	398	271
25	752	1,380	931	1,300	608	990	859	787	423	805	593	262
26	600	1,310	1,360	990	1,000	913	814	805	435	640	495	252
27	544	1,060	1,140	877	1,600	1,050	814	744	558	616	502	243
28	495	950	1,010	805	1,270	1,140	2,040	720	454	586	441	234
29	460	886	950	760	-	1,040	2,110	696	417	572	392	230
30	441	832	895	728	-------	1,010	1,700	672	398	523	368	230
31	429	-------	859	728	-------	1,480	-------	672	-------	523	350	-------
Total	16,567	27,908	28,870	25,106	23,419	25,379	32,679	33,787	15,951	25,857	14,471	8,431
Mean	534	930	931	810	836	819	1,089	1,090	532	834	467	281
Cfsm	2.58	4.49	4.50	3.91	4.04	3.96	5.26	5.27	2.57	4.03	2.26	1.36
In.	2.97	5.01	5.19	4.51	4.21	4.56	5.87	6.08	2.87	4.65	2.61	1.52

Calendar year 1957: Max 4,280 Min 160 Mean 682 Cfsm 3.29 In. 44.73
Water year 1957-58: Max 3,660 Min 230 Mean 763 Cfsm 3.69 In. 50.05

Peak discharge (base, 3,400 cfs).--Nov. 19 (9 a.m.) 5,620 cfs (5.20 ft); Dec. 20 (5 p.m.) 5,220 cfs (5.00 ft); July 8 (6 p.m.) 4,100 cfs (4.42 ft).

* Discharge measurement made on this day.

1820. Panther Creek near Toccoa, Ga.

Location.--Lat 34°41', long 83°21', on left bank at Yonah Dam settlement, a quarter of a mile upstream from mouth and 7 miles north of Toccoa, Stephens County.

Drainage area.--32.5 sq mi.

Records available.--October 1942 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 673.53 ft above mean sea level, datum of 1929 (levels by Georgia Power Co.).

Average discharge.--16 years, 68.8 cfs (adjusted for diversion).

Extremes.--Maximum discharge during year, 592 cfs Nov. 19 (gage height, 3.65 ft); minimum, 22 cfs Nov. 7.
1942-58: Maximum discharge, 15,100 cfs June 16, 1949 (gage height, 18.0 ft, from floodmark), from rating curve extended above 800 cfs on basis of slope-area measurements of peak flow; minimum, 10 cfs Sept. 30, 1954, Sept. 23, 24, 1955.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Diversion at point 2.0 miles above station for water supply by city of Toccoa as shown in monthly table.

Revisions.--WSP 1433: Drainage area.

Rating table, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.6	23
1.8	45
2.0	77
2.3	140
2.9	330

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48	30	62	68	115	109	131	117	77	52	77	a41
2	50	25	60	63	86	98	119	119	92	51	75	a41
3	135	24	60	62	79	90	113	111	75	51	70	40
4	113	25	62	60	*75	86	115	106	74	51	62	40
5	68	26	57	58	74	83	106	104	72	62	56	*40
6	52	24	54	58	113	83	140	138	70	68	54	40
7	45	23	62	60	152	85	117	*122	68	62	52	40
8	*39	39	128	58	113	86	111	111	68	313	54	39
9	35	38	94	57	96	109	106	106	67	138	54	38
10	34	33	77	56	90	98	122	104	63	98	56	37
11	33	31	68	56	85	90	117	111	63	102	52	35
12	56	31	63	56	81	86	109	117	63	88	62	40
13	41	30	62	74	79	100	104	106	60	94	77	37
14	37	79	60	81	75	96	100	98	58	128	65	33
15	34	*62	60	70	81	88	140	94	67	117	57	33
16	33	74	58	65	75	86	179	92	63	90	57	34
17	65	79	56	62	b70	88	131	90	58	77	68	33
18	54	200	54	60	b70	117	119	86	57	70	56	32
19	44	313	60	58	b70	106	115	86	*67	67	50	29
20	39	117	217	57	70	96	109	88	74	63	46	34
21	38	83	131	90	70	92	106	86	60	63	45	62
22	35	72	94	81	70	86	119	83	62	*62	44	48
23	34	102	*81	72	70	85	109	81	67	62	43	40
24	39	83	75	133	68	*96	106	79	58	72	63	39
25	35	179	74	128	68	128	100	81	57	68	86	37
26	34	122	96	96	172	126	98	79	63	60	57	35
27	34	88	81	86	224	179	98	77	67	62	54	35
28	33	79	77	77	140	200	131	75	60	60	a51	33
29	33	74	74	75	-	146	140	74	54	56	a48	33
30	32	70	70	72	---	138	126	74	52	52	a45	33
31	32	---	68	75	---	158	---	77	---	77	a43	---
Total	1,434	2,255	2,395	2,224	2,631	3,314	3,536	2,972	1,956	2,536	1,779	1,131
Mean	46.3	75.2	77.3	71.7	94.0	107	118	95.9	65.2	81.8	57.4	37.7
(†)	0.4	0.9	0	0	0	0	0	0	0	0	0	1.2

Adjusted for diversion by city of Toccoa

Mean	46.7	76.1	77.3	71.7	94.0	107	118	95.9	65.2	81.8	57.4	38.9
Cfsm	1.44	2.34	2.38	2.21	2.89	3.29	3.63	2.95	2.01	2.52	1.77	1.20
In.	1.66	2.61	2.74	2.55	3.01	3.79	4.05	3.40	2.24	2.90	2.04	1.34

	Observed			Adjusted		
Calendar year 1957:	Max 449	Min 15	Mean 59.1	Mean 59.7	Cfsm 1.84	In. 24.93
Water year 1957-58:	Max 313	Min 23	Mean 77.2	Mean 77.4	Cfsm 2.38	In. 32.33

Peak discharge (base, 900 cfs).--No peak above base.

* Discharge measurement made on this day.
† Diversion, in cubic feet per second, by city of Toccoa; furnished by city of Toccoa.
a No gage-height record; discharge estimated on basis of recorded range in stage.
b Stage-discharge relation affected by ice.

1840. Tugaloo River near Hartwell, Ga.

Location.--Lat 34°29', long 82°55', on right bank three-quarters of a mile upstream from Beaverdam Creek, 5 miles upstream from confluence with Seneca River, and 10 miles north of Hartwell, Hart County.

Drainage area.--909 sq mi.

Records available.--April 1925 to September 1927, February 1940 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Altitude of gage is 570 ft (by barometer). April 1925 to September 1927 at datum about 1 ft higher.

Average discharge.--20 years (1925-27, 1940-58), 1,935 cfs (unadjusted).

Extremes.--Maximum discharge during year, 10,300 cfs Nov. 19 (gage height, 6.9 ft); minimum daily, 394 cfs Sept. 29.
1925-27, 1940-58: Maximum discharge, 28,600 cfs Aug. 31, 1940 (gage height, 10.8 ft); minimum daily, 188 cfs Oct. 18, 1954.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Flow regulated by powerplants above station and by Burton and Mathis Reservoirs on Tallulah River. Burton Reservoir, completed in 1920, and Mathis Reservoir, completed in 1914, have combined usable capacity of 129,000 acre-ft and regulate the flow from 150 sq mi of Tallulah River basin.

Revisions (water years).--WSP 1142: 1926. WSP 1383: Drainage area.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

2.0	370	4.0	2,630
2.5	652	5.0	4,740
3.0	1,180	7.0	10,600

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,360	1,860	1,940	2,790	2,620	4,370	3,990	4,780	760	a1,700	2,070	1,080
2	1,520	1,120	980	2,720	1,290	3,590	3,200	4,710	1,780	a1,800	1,770	682
3	1,930	443	2,680	2,780	1,740	1,430	*3,190	5,050	2,520	a1,700	1,280	1,240
4	4,610	516	2,360	2,660	3,000	2,500	3,270	3,900	2,230	1,020	755	1,360
5	3,790	1,870	2,510	2,420	2,710	3,170	3,240	3,320	2,200	532	1,140	1,550
6	2,880	2,610	2,100	*917	2,290	2,930	3,190	5,050	2,720	1,290	1,640	2,220
7	670	2,410	2,550	2,200	5,660	2,640	2,660	4,320	1,770	1,430	1,550	458
8	1,220	2,560	2,570	2,240	4,240	3,620	3,900	4,650	812	4,210	1,650	416
9	1,800	1,170	2,900	1,840	1,080	2,340	3,580	4,600	1,390	7,800	1,610	1,090
10	2,000	630	3,160	2,320	1,540	1,740	3,630	3,830	2,640	5,630	1,540	*1,120
11	1,480	606	3,070	2,370	*3,160	2,270	3,860	3,540	2,160	5,260	1,690	2,220
12	1,900	1,780	3,140	598	3,320	2,900	3,700	2,440	1,740	4,750	1,630	2,090
13	672	2,100	2,570	923	2,670	2,950	2,650	3,340	1,990	4,260	948	1,000
14	848	1,600	1,630	3,920	2,720	2,240	1,740	*3,540	1,660	4,220	1,390	442
15	1,800	3,170	676	2,720	2,150	2,920	3,440	3,290	602	4,150	1,920	412
16	2,230	2,730	1,330	2,170	827	894	7,210	3,480	877	3,660	2,300	1,150
17	2,160	2,640	2,750	1,760	1,210	1,520	4,580	3,820	1,820	2,460	1,500	1,620
18	2,350	3,600	2,700	1,620	2,770	4,030	4,180	2,160	1,970	2,070	2,280	1,960
19	2,170	9,580	2,730	652	2,500	3,270	3,540	1,190	2,060	2,200	972	1,140
20	556	6,750	3,770	1,490	2,290	2,820	1,610	3,000	*2,200	1,040	715	1,560
21	506	*4,650	6,280	3,140	2,120	2,470	1,450	3,380	a1,500	1,250	1,770	472
22	1,510	3,390	3,230	2,360	2,380	2,300	3,420	3,200	a600	2,000	1,820	689
23	2,250	4,520	2,070	2,800	818	880	3,310	2,190	a600	2,620	1,720	1,730
24	2,400	3,710	3,000	3,590	1,130	1,450	3,030	1,740	a1,800	2,530	1,840	1,480
25	1,920	4,060	3,060	5,470	2,470	4,500	3,160	2,010	a1,700	2,640	1,440	1,540
26	1,680	5,150	3,500	2,780	4,710	3,850	3,110	1,340	a2,300	2,660	1,010	1,900
27	646	4,000	3,470	1,740	7,070	3,530	2,340	a2,700	a2,100	950	3,240	1,920
28	1,080	3,280	3,220	2,900	5,580	4,210	1,610	a2,600	a1,600	2,200	2,280	448
29	1,900	2,700	2,830	2,220	-	3,670	6,740	a2,500	a550	1,740	1,970	394
30	2,250	4,000	1,710	2,250	-------	2,410	4,570	a3,000	a550	1,400	2,070	1,080
31	2,520	-------	2,900	2,480	-------	3,450	-------	a3,300	-------	1,760	2,080	-------
Total	57,608	89,205	83,386	72,840	76,065	86,864	103,100	101,970	49,201	82,932	51,590	36,463
Mean	1,858	2,974	2,690	2,350	2,717	2,802	3,437	3,289	1,640	2,675	1,664	1,215
(†)	-146	+57	-73	+76	+176	+70	+163	-8	-7	-18	-89	-239
Adjusted for change in contents in Burton and Mathis Reservoirs												
Mean	1,712	3,031	2,617	2,426	2,893	2,872	3,600	3,281	1,633	2,657	1,575	976
Cfsm	1.88	3.33	2.88	2.67	3.18	3.16	3.96	3.61	1.80	2.92	1.73	1.07
In.	2.17	3.72	3.32	3.08	3.31	3.64	4.42	4.16	2.01	3.37	1.99	1.19

	Observed			Adjusted		
Calendar year 1957:	Max 14,000	Min 248	Mean 2,025	Mean 2,042	Cfsm 2.25	In. 30.63
Water year 1957-58:	Max 9,580	Min 394	Mean 2,442	Mean 2,437	Cfsm 2.68	In. 36.38

Peak discharge (base, 10,000 cfs).--Nov. 19 (11 p.m.) 10,300 cfs (6.9 ft).

* Discharge measurement made on this day.
† Change in contents, equivalent in cubic feet per second, in Burton and Mathis Reservoirs, furnished by Georgia Power Co.
a No gage-height record; discharge estimated on basis of power output at Yonah Dam.

1845. Whitewater River at Jocassee, S. C.

Location.--Lat 34°58', long 82°56', on right bank at highway bridge at Jocassee, Oconee County, 0.6 mile upstream from confluence with Toxaway River.

Drainage area.--47.3 sq mi.

Records available.--January 1951 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 777.79 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--7 years, 163 cfs.

Extremes.--Maximum discharge during year, 2,610 cfs Dec. 20 (gage height, 5.80 ft), from rating curve extended above 1,600 cfs on basis of velocity-area studies; minimum, 62 cfs Sept. 29, 30 (gage height, 1.99 ft).
1951-58: Maximum discharge, 7,120 cfs Mar. 11, 1952 (gage height, 11.17 ft), from rating curve extended above 1,600 cfs on basis of velocity-area studies; minimum, 22 cfs Dec. 17, 1955; minimum gage height, 1.40 ft Oct. 20, 1951.

Remarks.--Records good except those for period of no gage-height record, which are fair.

Rating table, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.0	64	3.5	710
2.3	128	4.0	1,080
2.6	221	4.5	1,500
3.0	405		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*148	123	221	229	301	272	356	356	200	82	128	101
2	142	118	214	211	232	244	298	647	217	80	137	92
3	602	116	207	204	211	221	272	449	162	77	165	92
4	572	113	218	194	201	211	276	378	159	74	128	90
5	291	108	194	190	201	201	255	336	153	180	125	84
6	214	106	187	187	298	197	609	539	153	156	148	80
7	178	103	227	187	366	197	383	654	145	156	136	78
8	156	172	384	178	276	197	321	444	136	916	123	73
9	139	136	268	*175	244	246	293	388	131	505	147	71
10	131	118	232	178	229	218	399	350	126	446	142	69
11	123	113	214	162	218	201	361	366	120	544	128	66
12	154	110	194	159	211	190	312	350	120	a320	128	68
13	128	*108	190	334	204	204	280	340	116	a240	156	71
14	118	850	187	354	197	197	268	302	113	a220	*171	68
15	113	348	181	248	201	187	*334	285	110	a240	162	66
16	108	360	178	218	b181	181	340	268	106	a220	145	73
17	275	294	172	204	b178	181	293	255	103	a180	128	*75
18	184	447	165	190	b178	232	268	248	99	168	116	73
19	148	1,140	181	181	b175	214	259	236	99	153	106	66
20	134	496	1,030	178	b172	201	248	232	101	182	103	69
21	123	361	485	410	b168	187	240	221	95	239	97	178
22	118	316	345	321	168	178	271	*211	99	243	95	97
23	116	388	293	251	165	175	244	204	108	194	92	82
24	430	307	272	448	162	203	229	201	*95	233	108	77
25	221	469	272	421	*156	310	221	221	90	214	166	73
26	184	372	442	312	*457	263	214	201	122	181	139	71
27	168	307	312	272	546	307	225	187	108	168	245	68
28	153	280	280	248	350	366	725	181	95	156	139	64
29	142	255	259	236	-	293	550	172	88	148	120	64
30	139	244	240	221	-------	343	410	165	82	139	113	64
31	131	-------	229	227	-------	533	-------	174	-------	131	106	-------
Total	5,983	8,776	8,473	7,528	6,646	7,350	9,754	9,561	3,651	7,185	4,142	2,363
Mean	193	293	273	243	237	237	325	308	122	232	134	78.8
Cfsm	4.08	6.19	5.77	5.14	5.01	5.01	6.87	6.51	2.58	4.90	2.83	1.67
In.	4.70	6.91	6.65	5.93	5.22	5.78	7.66	7.50	2.88	5.65	3.26	1.86

Calendar year 1957: Max 1,680 Min 39 Mean 202 Cfsm 4.27 In. 58.03
Water year 1957-58: Max 1,140 Min 64 Mean 223 Cfsm 4.71 In. 64.00

Peak discharge (base, 2,000 cfs).--Dec. 20 (12:45 p.m.) 2,610 cfs (5.80 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for Keowee River near Jocassee.
b Stage-discharge relation affected by ice.

1850. Keowee River near Jocassee, S. C.

Location.--Lat 34°57', long 82°55', on right bank 390 ft upstream from Chapmans Bridge on State Highway 11 (renumbered), 1½ miles southeast of Jocassee, Oconee County, and 2½ miles upstream from Eastatoe Creek.

Drainage area.--148 sq mi.

Records available.--December 1949 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 737.43 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--8 years (1950-58), 446 cfs.

Extremes.--Maximum discharge during year, 6,260 cfs Dec. 20 (gage height, 7.08 ft); minimum, 190 cfs Sept. 29, 30 (gage height, 1.36 ft).
1949-58: Maximum discharge, 18,400 cfs Mar. 11, 1952 (gage height, 16.23 ft), from rating curve extended above 8,500 cfs on basis of velocity-area studies and logarithmic plotting; minimum, 57 cfs Oct. 7, 1954.

Remarks.--Records good.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-3, June 3 to Sept. 30				Oct. 4 to June 2			
1.30	166	2.50	980	1.50	275	3.00	1,580
1.70	362	3.00	1,500	2.00	600	5.00	3,900
2.00	565	4.00	2,810	2.50	1,040		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*445	366	656	664	951	828	1,040	1,080	846	252	375	283
2	400	360	632	616	714	740	874	1,780	788	243	362	262
3	1,230	348	608	578	640	672	783	1,310	522	238	439	257
4	1,660	330	656	555	592	624	801	1,100	479	238	362	257
5	906	324	578	532	600	585	740	978	466	506	333	247
6	656	319	548	525	850	578	1,780	1,280	473	528	387	238
7	532	308	656	525	1,080	570	1,120	2,030	445	527	388	238
8	455	523	1,190	497	874	578	922	1,310	419	2,760	350	229
9	416	444	855	*b490	731	714	837	1,120	406	1,490	386	224
10	378	360	722	b483	672	648	1,130	998	381	1,440	400	220
11	354	336	656	462	640	585	1,030	1,030	375	1,390	345	215
12	450	330	578	448	608	562	884	1,020	375	1,100	381	229
13	372	*319	b570	799	578	616	810	978	350	819	712	234
14	342	2,250	548	1,240	548	578	756	864	333	727	*588	220
15	319	1,170	532	765	578	532	*874	810	333	719	515	220
16	319	1,120	511	656	b532	511	1,060	765	339	632	532	234
17	806	945	497	600	b511	511	864	722	310	543	425	*229
18	606	1,460	476	555	b504	680	783	688	304	493	381	220
19	455	3,450	511	525	b497	616	740	656	299	452	345	198
20	403	1,520	2,860	511	b497	578	706	664	321	527	321	198
21	366	1,120	1,580	1,170	b490	540	680	632	304	804	310	518
22	354	950	1,040	1,060	483	518	748	*585	304	867	304	297
23	342	1,190	874	783	483	504	706	570	339	610	299	238
24	1,200	960	819	1,250	462	565	648	548	*299	704	350	229
25	702	1,400	792	1,370	*462	940	624	734	278	674	520	211
26	562	1,210	1,340	988	*1,330	792	600	664	354	543	382	206
27	504	969	978	846	1,700	922	632	578	356	522	574	202
28	448	864	855	756	664	960	2,240	540	294	473	381	194
29	422	792	765	697	~	819	1,750	511	268	445	333	190
30	403	731	706	664	------	939	1,290	483	257	400	310	190
31	390	------	664	653	------	1,590	------	584	------	387	294	------
Total	17,197	26,768	25,253	22,263	19,271	21,395	28,452	27,612	11,617	22,053	12,384	7,127
Mean	555	892	815	718	688	690	948	891	387	711	399	238
Cfsm	3.75	6.03	5.51	4.85	4.65	4.66	6.41	6.02	2.61	4.80	2.70	1.61
In.	4.32	6.73	6.35	5.59	4.84	5.37	7.15	6.94	2.91	5.53	3.11	1.80

Calendar year 1957: Max 5,680 Min 110 Mean 570 Cfsm 3.85 In. 52.30
Water year 1957-58: Max 3,450 Min 190 Mean 661 Cfsm 4.47 In. 60.64

Peak discharge (base, 4,000 cfs).--Nov. 14 (12 m.) 4,530 cfs (5.63 ft); Nov. 19 (5:45 a.m.) 5,660 cfs (6.57 ft); Dec. 20 (1:30 p.m.) 6,260 cfs (7.08 ft); July 8 (2:45 p.m.) 4,000 cfs (5.11 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

1855. Keowee River near Newry, S. C.

Location.--Lat 34°44'09", long 82°52'19", on left bank 800 ft downstream from Lawrence Bridge, 0.7 mile upstream from Sixmile Creek, and 2¼ miles east of Newry, Oconee County.

Drainage.--455 sq mi.

Records available.--October 1939 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 625.00 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--19 years, 1,131 cfs.

Extremes.--Maximum discharge during year, 10,800 cfs Nov. 19; maximum gage height, 13.72 ft Nov. 19; minimum discharge, 298 cfs Sept. 15; minimum daily, 402 cfs Sept. 15, 30. 1939-58: Maximum discharge, 25,200 cfs Aug. 13, 1940; maximum gage height, 24.60 ft Aug. 13, 1940; minimum discharge, 120 cfs Oct. 8, 1954; minimum daily, 152 cfs Oct. 8, 14, 1954.

Remarks.--Records good. Some regulation at low flow by powerplant above station.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,010	782	1,590	1,380	2,180	2,270	2,860	2,360	1,420	542	868	622
2	884	748	1,500	1,250	1,760	1,890	2,140	4,170	2,340	518	782	581
3	*1,720	706	1,420	1,160	1,550	1,630	1,890	3,290	1,420	488	952	526
4	4,480	706	1,500	1,120	1,380	1,460	1,840	2,610	1,290	466	910	542
5	2,700	664	1,380	1,080	1,340	1,340	1,680	2,270	1,210	800	714	526
6	1,720	647	1,340	1,070	1,970	1,290	4,010	2,610	1,210	1,160	782	511
7	1,340	630	1,340	1,080	2,860	1,290	2,780	4,290	1,210	978	808	495
8	1,120	808	2,860	*1,050	2,360	1,290	2,100	2,950	1,120	5,110	825	473
9	986	1,210	2,360	952	1,840	1,590	1,840	2,440	1,080	4,120	723	444
10	868	791	1,890	970	1,680	1,630	1,970	2,270	1,010	3,200	893	437
11	800	732	1,680	970	1,550	1,380	2,180	2,180	961	2,520	723	429
12	1,120	680	1,460	944	1,460	1,250	1,800	2,270	952	2,610	757	458
13	970	*664	1,380	1,050	1,380	1,340	1,630	2,180	876	2,180	1,500	622
14	808	2,510	1,380	2,860	1,290	1,380	1,500	1,890	842	2,180	1,290	444
15	740	2,780	1,340	1,840	1,340	1,210	1,680	1,760	825	1,930	*1,010	402
16	706	2,180	1,290	1,550	1,340	1,120	*2,700	1,680	859	1,970	1,160	526
17	1,250	2,140	1,290	1,380	1,120	1,120	1,930	1,590	757	1,500	1,020	*526
18	1,680	3,380	1,210	1,290	1,080	1,590	1,680	1,500	740	1,290	876	503
19	1,120	7,380	1,210	1,160	1,210	1,550	1,500	1,500	732	1,160	757	444
20	952	3,850	3,800	1,160	*1,210	1,340	1,420	1,460	859	1,060	706	444
21	859	2,520	3,960	1,760	1,160	1,210	1,340	1,420	859	1,680	672	876
22	800	2,100	2,360	2,610	1,160	1,120	1,380	1,340	655	1,970	614	927
23	766	2,700	1,930	1,800	1,160	1,080	1,460	*1,290	791	1,380	614	581
24	1,630	2,360	1,720	2,610	1,120	1,080	1,250	1,210	*714	1,340	714	511
25	1,460	3,800	1,630	4,140	1,120	1,800	1,210	1,380	647	1,630	1,550	488
26	1,160	3,290	2,440	2,520	3,650	1,680	1,120	1,590	630	1,210	1,210	458
27	970	2,440	2,140	2,100	5,370	2,140	1,160	1,250	970	1,160	1,160	451
28	927	2,100	1,760	1,800	3,540	2,270	3,750	1,210	723	1,080	927	409
29	876	1,890	1,630	1,630	-	2,020	3,800	1,120	622	1,060	774	409
30	816	1,760	1,460	1,550	------	2,180	2,860	1,080	565	918	672	402
31	808	------	1,380	1,460	------	4,800	------	1,050	------	850	647	---
Total	38,046	58,948	55,630	49,296	50,180	50,340	60,460	61,210	28,889	50,060	27,610	15,467
Mean	1,227	1,965	1,795	1,590	1,792	1,624	2,015	1,975	963	1,615	891	516
Cfsm	2.70	4.32	3.95	3.49	3.94	3.57	4.43	4.34	2.12	3.55	1.96	1.13
In.	3.11	4.82	4.55	4.02	4.10	4.12	4.94	5.00	2.36	4.09	2.26	1.26

Calendar year 1957: Max 15,900 Min 202 Mean 1,302 Cfsm 2.86 In. 38.83
Water year 1957-58: Max 7,380 Min 402 Mean 1,496 Cfsm 3.29 In. 44.63

Peak discharge (base, 10,000 cfs).--Nov. 19 (1 p.m.) 10,800 cfs (13.72 ft at 1:45 p.m.).

* Discharge measurement made on this day.

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1860. Twelvemile Creek near Liberty, S. C.

Location.--Lat 34°48', long 82°45', on left bank 40 ft downstream from State highway bridge, three-quarters of a mile downstream from Rice Creek, and 3¼ miles west of Liberty, Pickens County.

Drainage area.--106 sq mi.

Records available.--July 1954 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 822.185 ft above mean sea level (levels by Soil Conservation Service).

Extremes.--Maximum discharge during year, 1,380 cfs July 9 (gage height, 6.56 ft); minimum, 69 cfs Nov. 7 (gage height, 2.27 ft).
1954-58: Maximum discharge, 2,930 cfs Apr. 5, 1957 (gage height, 9.80 ft); minimum, 30 cfs Sept. 23, 1955 (gage height, 1.79 ft).

Remarks.--Records good.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Feb. 28 to Apr. 27)

2.1	58
2.5	124
3.0	243
4.0	493
6.0	1,140

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	137	74	178	166	343	330	456	356	213	122	147	113
2	*128	74	168	152	248	278	330	743	768	118	143	107
3	192	74	161	145	213	250	*283	534	356	116	145	103
4	485	74	178	139	196	223	273	380	258	118	143	102
5	368	74	150	132	188	210	248	330	230	188	134	100
6	216	72	145	132	343	213	774	524	213	258	134	98
7	159	71	154	141	558	213	431	771	206	193	141	95
8	126	128	424	134	393	213	318	456	198	1,000	152	90
9	107	124	316	126	290	288	283	380	193	771	139	86
10	98	85	240	*126	253	260	316	343	183	343	139	86
11	90	77	203	132	230	226	303	330	176	283	143	89
12	180	77	173	132	210	208	263	318	176	256	152	156
13	130	77	156	167	200	240	248	356	166	283	389	111
14	103	*140	154	330	186	218	233	298	156	318	356	100
15	91	150	152	230	203	200	298	280	159	343	*198	98
16	90	281	145	200	193	190	498	276	161	248	168	*107
17	182	220	143	186	166	188	330	306	154	210	163	102
18	172	368	137	176	166	308	288	266	152	193	152	102
19	126	1,010	141	166	163	263	263	256	147	188	137	96
20	107	450	340	163	*166	228	246	263	173	166	130	102
21	98	276	343	276	173	213	233	258	152	183	122	154
22	93	218	236	313	178	193	352	243	156	395	120	145
23	90	418	200	246	178	186	330	*230	156	258	118	120
24	98	298	186	573	173	188	253	228	147	216	127	116
25	90	762	176	687	163	280	236	230	*137	213	356	111
26	82	494	368	380	598	266	223	236	139	178	193	107
27	80	318	270	296	1,000	330	236	226	150	173	154	103
28	75	268	228	253	492	303	634	223	145	226	137	100
29	74	233	200	230	-	270	605	216	130	170	128	96
30	75	210	183	216	-------	462	443	208	124	159	120	98
31	75	-------	168	206	-------	992	-------	206	-------	150	118	----- --
Total	4,217	7,193	6,416	6,951	7,863	8,430	10,227	10,270	5,874	8,036	5,098	3,193
Mean	136	240	207	224	281	272	341	331	196	259	164	106
Cfsm	1.28	2.26	1.95	2.11	2.65	2.57	3.22	3.12	1.85	2.44	1.55	1.00
In.	1.48	2.52	2.25	2.43	2.76	2.96	3.59	3.60	2.06	2.81	1.79	1.12

Calendar year 1957: Max 2,530 Min 39 Mean 167 Cfsm 1.58 In. 21.41
Water year 1957-58: Max 1,010 Min 71 Mean 230 Cfsm 2.17 In. 29.37

Peak discharge (base, 1,400 cfs).--No peak above base.

* Discharge measurement made on this day.

1870. Seneca River near Anderson, S. C.

Location.--Lat 34°29'10", long 82°49'45", on right bank 0.25 mile downstream from bridge on State Highway 80, 1.9 miles downstream from Deep Creek, 4.2 miles upstream from confluence with Tugaloo River, and 10 miles west of Anderson, Anderson County.

Drainage area.--1,026 sq mi.

Records available.--June 1928 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Altitude of gage is 520 ft (from Corps of Engineers profile). May 28, 1928, to Jan. 23, 1929, staff gage and Jan. 24, 1929, to Oct. 12, 1933, water-stage recorder, 15 ft downstream at same datum.

Average discharge.--30 years, 2,006 cfs.

Extremes.--Maximum discharge during year, 12,800 cfs Nov. 20 (gage height, 9.88 ft); minimum, 269 cfs Sept. 28; minimum daily, 749 cfs Sept. 29.
1928-58: Maximum discharge, 81,100 cfs Aug. 17, 18, 1928 (gage height, 25.73 ft, from graph based on gage readings), from rating curve extended above 18,000 cfs by logarithmic plotting; minimum, 105 cfs Sept. 17, 1939; minimum daily, 170 cfs Sept. 20, 1931.

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

Revisions (water years).--WSP 757: Drainage area. WSP 1433: 1932, 1933-36(m), 1942.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 1 to June 1)

3.2	699	5.0	2,870
3.5	980	7.0	6,170
4.0	1,540	10.0	13,000

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,780	1,110	2,580	2,100	3,020	4,610	6,970	4,440	1,960	1,590	1,490	1,150
2	*1,720	1,150	2,240	2,040	3,240	3,480	*4,120	4,740	3,290	1,190	1,540	1,080
3	1,700	993	2,170	1,980	2,720	3,100	3,240	6,160	3,100	1,160	1,410	1,030
4	6,360	988	2,170	1,910	2,440	2,870	3,020	4,280	2,370	1,110	1,550	1,010
5	6,880	1,040	2,100	1,670	2,300	2,650	2,940	3,800	2,240	756	1,340	970
6	3,260	943	1,910	1,720	2,600	2,510	4,720	4,120	2,170	1,860	1,260	1,040
7	2,240	966	1,980	1,720	4,440	2,650	5,720	6,360	2,170	1,970	1,520	887
8	1,720	1,060	3,410	*1,780	4,610	2,650	3,720	5,430	2,040	3,630	1,500	886
9	1,500	1,850	4,280	1,630	3,320	2,830	3,170	4,120	1,910	7,340	1,430	897
10	1,330	1,220	3,020	1,530	2,940	3,320	3,020	3,720	1,980	4,780	1,260	854
11	1,230	1,160	2,510	1,650	2,650	2,870	3,640	3,480	1,850	3,480	1,300	850
12	1,840	*1,070	2,240	1,490	2,510	2,580	3,100	3,640	1,780	3,720	1,330	902
13	1,910	1,040	1,980	1,640	2,370	2,650	2,720	3,480	1,720	3,170	2,830	1,100
14	1,480	1,170	2,040	3,490	2,240	2,870	2,720	3,100	1,720	4,120	3,400	924
15	1,230	4,160	1,820	3,170	2,300	2,650	2,890	2,870	1,530	3,560	2,100	788
16	1,180	2,370	1,850	2,370	2,210	2,340	5,460	2,720	1,780	3,100	1,850	923
17	1,240	3,040	1,780	2,100	2,040	2,300	4,120	3,020	1,580	2,580	1,550	946
18	2,440	4,360	1,720	2,040	1,780	2,800	3,240	2,800	1,510	2,100	1,590	*902
19	1,850	11,100	1,720	1,700	1,850	3,320	2,940	2,510	1,490	1,980	1,360	865
20	1,370	10,000	2,230	1,720	2,040	2,870	2,650	2,510	1,720	1,760	1,240	898
21	1,260	4,780	6,700	1,980	1,910	2,580	2,650	*2,510	1,780	2,050	1,220	907
22	1,190	3,400	3,640	3,640	2,040	2,510	2,800	2,300	1,480	3,020	1,160	1,540
23	1,150	5,120	2,870	2,870	1,920	2,240	3,480	2,240	*1,440	2,580	1,220	1,130
24	1,210	4,780	2,510	3,900	1,980	2,240	2,800	2,170	1,540	2,170	1,040	964
25	2,230	6,060	2,370	7,970	1,910	3,020	2,510	2,110	1,370	2,580	2,680	940
26	1,640	7,280	3,170	5,170	3,810	3,400	2,370	2,440	1,310	2,240	2,390	890
27	1,240	4,440	3,720	3,640	*10,000	3,880	2,430	2,170	1,560	1,730	1,790	924
28	1,230	3,320	2,940	3,100	8,440	3,960	3,780	2,100	1,660	1,840	1,640	776
29	1,190	3,100	2,450	2,800	-	3,880	7,760	1,980	1,240	1,750	1,330	749
30	1,160	3,100	2,370	2,580	-------	3,520	6,360	1,910	1,390	1,600	1,310	821
31	1,130	-------	2,170	2,440	-------	8,320	-------	1,910	-------	*1,450	1,040	-------
Total	58,890	96,170	80,660	79,540	85,630	97,470	111,060	101,140	54,680	77,966	49,670	28,543
Mean	1,900	3,206	2,602	2,566	3,058	3,144	3,702	3,263	1,823	2,515	1,602	951
Cfsm	1.85	3.12	2.54	2.50	2.98	3.06	3.61	3.18	1.78	2.45	1.56	0.927
In.	2.13	3.48	2.93	2.88	3.10	3.53	4.03	3.67	1.99	2.82	1.80	1.03

Calendar year 1957: Max 19,800 Min 320 Mean 2,078 Cfsm 2.03 In. 27.47
Water year 1957-58: Max 11,100 Min 749 Mean 2,524 Cfsm 2.46 In. 33.39

Peak discharge (base, 13,000 cfs).--No peak above base.

* Discharge measurement made on this day.

1875. Savannah River near Iva, S. C.

Location.--Lat 34°15', long 82°45', on left bank at downstream side of bridge on State Highway 184, half a mile upstream from Little Generostee Creek, 5.8 miles southwest of Iva, Anderson County, and at mile 281.5 upstream from Savannah, Ga.

Drainage area.--2,231 sq mi.

Records available.--October 1949 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 432.255 ft above mean sea level (levels by Corps of Engineers).

Average discharge.--9 years, 3,986 cfs.

Extremes.--Maximum discharge during year, 32,000 cfs Nov. 19 (gage height, 9.67 ft); minimum, 1,070 cfs Nov. 3; minimum daily, 1,300 cfs Sept. 29.
1949-58: Maximum discharge, 54,400 cfs Mar. 12, 1952 (gage height, 12.74 ft); minimum, 477 cfs Oct. 12, 1954; minimum daily, 540 cfs Oct. 12, 1954.

Remarks.--Records good. Some regulation by Burton and Mathis Reservoirs (see p. 214, for monthly change in contents) and powerplants above station.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 5 to Nov. 18, Feb. 9 to June 2)

2.6	1,280	5.0	7,850
3.0	1,910	6.0	12,000
3.5	2,970	7.0	16,600
4.0	4,350	9.0	27,600

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,320	3,190	6,170	5,460	6,050	10,200	12,400	9,450	2,920	2,810	3,600	2,060
2	3,450	2,340	3,770	5,340	5,290	8,020	*8,460	9,250	4,090	3,440	3,460	1,870
3	*3,840	1,680	5,470	5,290	4,200	4,500	7,340	11,400	6,710	3,210	3,020	2,440
4	9,010	1,440	4,980	5,160	5,750	5,600	6,820	8,850	5,100	2,690	2,530	2,810
5	12,200	2,250	5,160	4,970	5,540	5,840	6,980	7,780	4,580	2,120	3,300	2,870
6	7,080	3,440	4,650	3,000	4,950	5,910	9,100	8,830	5,200	2,280	2,990	2,750
7	3,200	3,180	4,990	*4,460	9,630	5,070	9,490	10,700	4,380	3,770	3,060	2,040
8	2,730	4,070	5,830	4,500	10,200	6,530	8,310	10,500	3,150	4,790	3,270	1,580
9	3,280	2,790	7,850	4,020	4,910	6,120	7,790	9,050	3,240	14,700	3,180	1,890
10	3,280	2,120	7,000	4,140	4,050	4,970	7,160	8,180	4,980	11,200	3,440	1,970
11	2,950	1,730	6,260	4,930	6,020	5,440	8,010	7,480	4,480	9,250	2,600	3,000
12	3,320	*2,610	5,960	2,660	6,130	5,800	7,580	6,000	3,890	8,450	2,710	3,250
13	2,920	2,960	5,190	2,620	5,350	5,950	6,550	7,360	3,960	8,250	4,150	2,580
14	2,140	2,980	4,500	6,930	5,090	5,570	4,350	6,980	3,640	8,250	6,370	2,040
15	3,130	6,190	3,020	6,920	5,130	6,300	6,960	6,510	2,500	8,710	5,110	1,610
16	3,230	5,460	3,180	5,450	3,440	3,590	14,600	6,290	2,350	6,950	3,870	1,860
17	3,300	5,940	4,900	4,560	3,100	3,410	10,300	7,380	3,430	6,000	3,770	2,600
18	4,230	12,700	5,000	4,350	4,750	6,950	8,370	6,540	3,750	4,490	2,720	*3,090
19	4,250	25,900	4,940	2,960	*4,780	7,130	7,690	4,200	3,610	4,210	3,020	2,350
20	2,160	19,000	5,400	3,180	4,670	6,090	5,300	5,540	4,130	3,770	3,380	2,370
21	1,750	10,700	12,300	5,470	4,070	5,540	4,350	*5,870	3,770	3,000	3,170	1,710
22	2,340	7,650	8,980	6,200	5,050	5,450	6,610	5,780	2,760	4,650	3,040	1,870
23	3,180	11,400	4,970	6,470	3,070	3,480	7,390	4,860	*2,300	5,680	3,160	2,860
24	3,500	9,850	6,130	8,620	2,900	3,360	6,520	4,500	3,120	5,200	2,330	2,530
25	3,950	11,100	6,030	15,200	4,500	7,660	6,280	4,220	3,440	5,560	4,110	2,390
26	3,280	13,800	7,000	9,630	7,320	7,990	5,950	3,630	3,700	5,410	5,690	2,760
27	2,080	9,450	7,670	5,460	17,100	7,830	5,600	4,840	3,910	3,420	4,780	2,720
28	1,840	7,850	7,180	6,830	15,300	8,310	4,460	4,670	3,630	3,990	3,900	1,680
29	3,190	6,750	6,160	5,390	-	8,340	13,000	4,540	2,600	4,040	3,980	1,300
30	3,130	9,250	4,050	5,420	-------	6,580	11,300	4,430	2,200	*3,440	3,230	1,560
31	3,420	-------	5,890	5,220	-------	10,800	-------	4,930	-------	3,290	2,210	-------
Total	115,680	209,770	180,580	170,810	168,340	194,330	235,020	210,540	111,520	167,020	109,150	68,410
Mean	3,732	6,992	5,825	5,510	6,012	6,269	7,834	6,792	3,717	5,388	3,521	2,280
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 30,800 Min 760 Mean 4,361 Cfsm 1.95 In. 26.50
Water year 1957-58: Max 25,900 Min 1,300 Mean 5,318 Cfsm 2.38 In. 32.34

Peak discharge (base, 22,000 cfs).--Nov. 19 (12 m.) 32,000 cfs (9.67 ft); July 9 (12:30 p.m.) 25,200 cfs (8.62 ft).

* Discharge measurement made on this day.

1880. Rocky River near Calhoun Falls, S. C.

Location.--Lat 34°08', long 82°38', on right bank 2,000 ft upstream from Swanigan Mill bridge on county road, 3¼ miles northwest of Calhoun Falls, Abbeville County, and 3¾ miles upstream from mouth.

Drainage area.--267 sq mi.

Records available.--February 1950 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 403.04 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--8 years, 238 cfs.

Extremes.--Maximum discharge during year, 5,000 cfs Nov. 20 (gage height, 7.45 ft); minimum daily, 55 cfs Oct. 28.
1950-58: Maximum discharge, 9,450 cfs Mar. 25, 1952 (gage height, 9.44 ft), from rating curve extended above 3,300 cfs by velocity-area studies and logarithmic plotting; minimum daily, 9 cfs Sept. 21, 22, 1954.

Remarks.--Records fair. Flow regulated by Lake Secession (usable capacity, about 1,742,000,000 cu ft). City of Abbeville diverted a small amount of water during year for municipal supply.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	189	108	1,100	434	408	504	488	604	234	152	167	106
2	135	99	612	433	245	404	468	664	264	a180	164	158
3	141	63	493	432	208	416	460	622	284	a180	110	158
4	*234	64	484	425	388	447	518	524	284	a160	103	163
5	125	108	475	195	388	449	526	499	286	a160	164	162
6	71	106	466	142	509	446	1,050	598	168	a130	164	158
7	64	109	468	194	508	458	849	*646	142	a150	170	104
8	104	105	650	200	429	472	778	586	128	180	173	102
9	105	94	539	188	358	772	628	580	141	218	163	162
10	102	61	488	*190	370	563	640	575	212	a200	106	156
11	103	56	468	190	388	512	634	442	189	a160	108	162
12	90	101	462	110	380	485	604	474	189	182	172	173
13	65	102	466	148	*386	628	552	536	190	118	512	167
14	61	109	461	234	384	657	490	531	139	135	376	102
15	105	*109	429	236	396	585	988	522	99	218	180	100
16	102	99	452	231	346	430	3,060	526	101	189	152	166
17	114	65	456	224	361	446	1,500	483	158	187	102	168
18	145	1,270	450	225	381	544	798	315	148	199	133	*170
19	142	2,230	450	123	388	519	714	304	*126	188	170	162
20	88	*4,460	492	158	389	494	633	316	126	122	168	162
21	60	2,380	495	245	390	478	542	316	122	126	168	110
22	120	824	460	240	387	470	664	310	102	202	164	111
23	117	2,510	460	232	343	377	670	304	120	184	162	166
24	112	1,310	448	971	361	406	634	305	190	200	110	167
25	109	*2,220	367	878	390	672	616	234	188	186	105	170
26	100	*696	346	428	378	548	610	247	176	170	170	168
27	65	554	404	392	1,130	*544	550	276	164	121	170	160
28	55	662	448	416	636	502	494	288	166	136	164	108
29	108	514	218	408	-	480	622	286	a120	170	163	104
30	111	1,070	238	404	-------	400	610	289	a130	170	164	176
31	108	-------	438	400	-------	480	-------	288	-------	*174	107	-------
Total	3,350	22,258	14,683	9,726	11,625	15,588	22,390	13,490	5,086	5,247	5,204	4,401
Mean	108	742	474	314	415	503	746	435	170	169	168	147
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 4,460 Min 18 Mean 279 Cfsm - In. -
Water year 1957-58: Max 4,460 Min 55 Mean 365 Cfsm - In. -

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records of powerplant operation at Lake Secession.
Note.--Stage-discharge relation affected by operation of gate May 11 to Aug. 12, Aug. 15 to Sept. 30; discharge computed on basis of partly assumed gate openings.

1885. South Beaverdam Creek at Dewy Rose, Ga.

Location.--Lat 34°11', long 82°57', on left bank 50 ft upstream from highway bridge, 1 mile northeast of Dewy Rose, Elbert County, and 3 miles upstream from confluence with North Beaverdam Creek.

Drainage area.--35.8 sq mi.

Records available.--October 1942 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 581.07 ft above mean sea level, datum of 1929. Prior to Nov. 20, 1952, staff gage at same site and datum.

Average discharge.--16 years, 48.5 cfs.

Extremes.--Maximum discharge during year, 1,540 cfs Nov. 19 (gage height, 10.84 ft), from rating curve extended above 900 cfs on basis of slope-area measurements of peak flow; minimum, 12 cfs Nov. 7, 12, 13.
1942-58: Maximum discharge, 2,600 cfs Jan. 18, 1943 (gage height, 13.4 ft, from graph based on gage readings); minimum, 0.80 cfs Sept. 22, 1954.
Floods of Aug. 25, 1852, and Aug. 25, 1908, reached a stage of about 23.6 ft, from information by local residents. Flood of Aug. 15, 1928, reached a stage of 17.8 ft, from floodmark.

Remarks.--Records good.

Revisions.--WSP 1383: Drainage area.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Jan. 15 to Apr. 6, June 11 to July 31)

Oct. 1 to Nov. 18		Nov. 19 to Feb. 26		Feb. 27 to Sept. 30			
2.9	9.2	2.9	28	1.8	10	4.0	180
3.1	18	3.4	60	2.1	23	6.0	470
4.0	76	4.0	116	2.5	49	8.0	860
5.0	180	5.0	240	3.0	84		
6.0	325	7.0	590				
		9.0	1,050				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	15	124	43	58	105	123	60	36	23	26	16
2	31	14	82	41	50	83	89	124	43	22	24	16
3	*70	14	68	40	46	74	80	80	41	22	25	15
4	*141	14	64	38	43	66	117	68	38	24	24	15
5	144	13	56	37	43	61	92	71	36	24	22	15
6	61	13	*51	36	70	60	328	102	34	78	21	15
7	43	13	49	38	113	66	188	94	32	46	20	15
8	34	14	118	37	72	74	102	75	33	38	21	14
9	30	18	100	34	61	123	87	67	32	53	20	13
10	27	13	71	32	55	112	99	63	57	46	19	13
11	25	13	59	33	*52	81	101	60	46	46	23	13
12	24	12	50	32	49	74	86	60	38	38	42	15
13	23	12	46	35	48	100	78	107	33	49	63	18
14	22	16	46	63	44	101	74	73	31	70	90	16
15	20	22	45	43	48	78	*137	60	30	53	42	15
16	20	16	43	39	49	71	*720	55	30	38	31	16
17	25	15	42	36	47	67	*289	52	28	32	28	16
18	25	308	40	34	45	110	130	50	28	30	25	*15
19	20	*1,050	39	33	43	92	98	48	27	29	23	14
20	18	576	62	32	42	77	85	52	27	27	22	14
21	18	*92	83	41	42	70	78	57	27	66	22	17
22	18	68	52	43	42	64	86	50	28	42	21	25
23	18	*248	47	36	42	62	87	47	30	42	20	18
24	20	173	45	144	40	64	74	44	27	*38	20	16
25	20	*289	44	419	39	170	69	42	25	58	30	16
26	18	*467	83	116	156	*125	66	41	*26	36	24	16
27	18	108	62	72	374	140	65	38	47	32	*20	15
28	16	77	51	58	238	98	68	37	31	30	18	14
29	16	79	47	54	-	81	*87	37	26	28	18	14
30	16	324	45	51	-------	80	65	36	25	27	17	14
31	16	-------	*43	48	-------	209	-------	36	-------	25	17	-------
Total	1,024	4,104	1,857	1,836	2,051	2,838	3,828	1,886	990	1,212	838	464
Mean	33.0	137	59.9	59.2	73.2	91.5	128	60.8	33.0	39.1	27.0	15.5
Cfsm	0.922	3.83	1.67	1.65	2.04	2.56	3.58	1.70	0.922	1.09	0.754	0.433
In.	1.06	4.27	1.92	1.90	2.12	2.95	3.99	1.96	1.03	1.26	0.87	0.48

Calendar year 1957: Max 1,050 Min 5.1 Mean 45.3 Cfsm 1.27 In. 17.15
Water year 1957-58: Max 1,050 Min 12 Mean 62.8 Cfsm 1.75 In. 23.81

Peak discharge (base, 700 cfs).--Nov. 19 (10 p.m.) 1,540 cfs (10.84 ft); Nov. 26 (4 a.m.) 810 cfs (8.00 ft); Apr. 16 (4 p.m.) 893 cfs (8.15 ft).

* Discharge measurement made on this day.

1890. Savannah River near Calhoun Falls, S. C.

Location.--Lat 34°04', long 82°38', on left bank 150 ft upstream from bridge on State Highway 72, 1 mile downstream from Seaboard Air Line Railroad bridge, 1½ miles downstream from Rocky River, 3 miles southwest of Calhoun Falls, Abbeville County, and at mile 264.7 upstream from Savannah, Ga.

Drainage area.--2,876 sq mi.

Records available.--August 1896 to August 1898, March 1899 to December 1900, January to December 1903, March 1930 to July 1932, April 1938 to September 1958. Published as "at Calhoun Falls," 1897-99. Records for January 1901 to December 1902, published in WSP 65, 75, and 83 have been found unreliable, and should not be used. Gage-height records collected at original site 1 mile upstream during 1899-1928 and at present site since 1928 are contained in reports of U. S. Weather Bureau.

Gage.--Water-stage recorder. Datum of gage is 363.53 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to March 1930, chain gage at railroad bridge 1 mile upstream at different datum.

Average discharge.--23 years (1896-97, 1899-1900, 1930-31, 1938-58), 4,887 cfs.

Extremes.--Maximum discharge during year, 38,100 cfs Nov. 19 (gage height, 6.76 ft); minimum, 1,520 cfs Sept. 30; minimum daily, 1,630 cfs Sept. 29.

1896-1900, 1903, 1930-32, 1938-58: Maximum discharge, 96,500 cfs Aug. 13, 1940 (gage height, 11.52 ft), from rating curve extended above 50,000 cfs on basis of velocity-area studies and logarithmic plotting; minimum, 492 cfs Sept. 21, 1954; minimum daily, 636 cfs Oct. 12, 1954.

Maximum stage known, 28.2 ft Aug. 25, 1908, original site and datum, from records of U. S. Weather Bureau.

Remarks.--Records good except those for period of no gage-height record, which are fair. Some regulation by Burton and Mathis Reservoirs (see p. 214 for monthly change in contents) and powerplants above station.

Revisions (water years).--WSP 1433: 1899, 1900, 1932, 1940(m), 1942(m), 1946. See also Records available.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 26				Jan. 27 to Sept. 30			
1.4	1,900	4.0	13,000	1.2	1,480	4.0	12,300
2.0	3,490	5.0	20,500	1.5	2,090	5.0	19,500
3.0	7,550	6.0	29,900	2.0	3,470	6.0	28,800
				3.0	7,160		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,300	3,780	8,330	6,120	6,160	11,400	14,000	10,000	4,280	2,770	3,870	2,280
2	3,920	3,080	5,120	5,960	5,950	8,590	9,500	10,000	4,500	3,670	3,960	2,140
3	*4,040	2,320	5,710	5,880	4,600	5,720	8,040	12,300	7,450	3,570	3,470	2,380
4	9,500	1,920	5,670	5,700	6,030	6,090	7,810	9,750	5,540	3,260	2,960	2,990
5	14,000	2,420	5,800	5,310	5,930	6,390	7,810	8,750	5,180	2,650	3,270	3,140
6	9,000	3,940	5,230	3,780	6,020	6,400	10,500	9,070	5,540	2,220	3,510	3,200
7	4,600	3,840	5,540	4,480	9,500	5,840	11,700	11,400	5,000	4,130	3,380	2,780
8	3,200	4,600	6,700	4,860	10,600	7,150	9,500	*11,400	3,860	4,380	3,670	1,830
9	3,600	3,340	9,010	*4,280	6,210	8,070	8,750	9,750	3,730	13,500	3,570	1,910
10	3,800	2,980	7,800	4,460	5,000	6,650	8,270	9,250	5,370	11,500	3,640	2,310
11	3,600	2,390	7,020	5,240	6,260	6,500	8,750	8,270	5,150	9,500	3,420	2,890
12	3,800	2,940	6,590	3,340	*6,400	6,490	8,500	6,950	4,490	8,270	2,920	3,690
13	3,400	3,540	5,950	2,900	6,020	7,110	7,580	8,270	4,350	8,040	4,730	3,220
14	2,800	*3,440	5,190	6,220	5,820	6,960	5,540	7,810	4,210	7,810	6,950	2,480
15	3,400	5,660	3,920	7,720	5,800	7,060	9,020	7,580	3,250	9,100	5,930	1,870
16	3,600	6,420	3,590	6,000	4,470	4,970	22,400	7,160	2,810	6,950	4,450	1,890
17	3,800	6,180	5,340	4,980	4,060	4,430	14,400	8,070	3,410	6,320	4,390	*2,710
18	4,600	13,600	5,600	4,780	5,260	7,290	9,750	7,240	*4,060	5,000	3,350	3,260
19	4,800	29,700	5,480	3,490	5,340	7,940	8,750	5,540	3,980	4,100	3,050	3,050
20	3,200	27,000	5,960	3,260	5,350	6,960	6,740	6,140	4,300	4,230	3,750	2,640
21	2,200	13,500	11,900	5,720	4,860	6,370	5,540	6,740	4,160	3,380	3,620	2,560
22	2,440	8,380	10,400	6,380	5,700	6,040	7,380	6,660	3,510	4,390	3,470	2,020
23	3,650	15,400	5,980	7,060	4,060	4,720	8,270	5,930	2,670	5,540	3,540	3,090
24	4,040	12,100	6,650	10,500	3,830	4,300	7,580	5,360	3,120	5,540	3,150	3,160
25	4,340	13,800	6,500	19,200	4,850	8,510	7,160	5,180	3,730	5,740	3,240	2,870
26	3,950	15,700	7,140	11,600	7,650	9,240	6,950	4,750	3,900	5,540	5,930	3,180
27	2,900	10,900	8,500	6,510	20,700	*8,750	6,530	5,720	4,330	4,360	5,000	3,240
28	2,290	9,050	7,880	7,180	18,800	9,000	5,360	5,540	4,000	3,850	4,300	2,660
29	3,440	6,880	6,710	6,010	-	9,000	12,600	5,540	3,240	4,390	4,130	1,630
30	3,580	10,500	4,790	5,770	-------	7,160	13,300	5,360	2,430	*3,870	3,830	1,640
31	4,010	-------	6,450	5,850	-------	10,300	-------	5,760	-------	3,570	2,880	-------
Total	133,800	249,300	202,450	190,540	191,230	221,400	277,980	237,240	125,530	171,140	121,330	78,710
Mean	4,316	8,310	6,531	6,146	6,830	7,142	9,266	7,653	4,184	5,521	3,914	2,624
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 35,000 Min 959 Mean 4,956 Cfsm 1.72 In. 23.38
Water year 1957-58: Max 29,700 Min 1,630 Mean 6,029 Cfsm 2.10 In. 28.45

Peak discharge (base, 25,000 cfs).--Nov. 19 (4 p.m.) 38,100 cfs (6.76 ft); Apr. 16 (12:15 p.m.) 25,800 cfs (5.71 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Oct. 4-21; discharge estimated on basis of recorded range in stage, weather records, and records for station near Iva.

1891. North Fork Broad River subwatershed No. 2 (Denmans Creek) near Toccoa, Ga.

Location.--Lat 34°33', long 83°22', at edge of pool near right end of earthfill dam, 0.5 mile upstream from mouth and 3 miles west of Toccoa, Stephens County.

Drainage area.--0.96 sq mi.

Records available.--April 1956 to September 1958.

Gage.--Water-stage recorder and V-notch sharp-crested weir on concrete drop inlet. Datum of gage is 846.26 ft above mean sea level, datum of 1929 (levels by Soil Conservation Service).

Extremes.--Maximum outflow during year, 27 cfs Feb. 26 (gage height, 6.52 ft); minimum, 0.36 cfs Oct. 11 (gage height, 5.58 ft).
1956-58: Maximum outflow, 35 cfs Apr. 5, 1957 (gage height, 6.79 ft); minimum, 0.15 cfs Sept. 21, 22, 1956 (gage height, 5.45 ft).

Remarks.--Records good except those for periods of no gage-height record or backwater from debris, which are fair. Records of daily discharge are outflow from reservoir, determined from stage-discharge relation for outlet structure. Reservoir is formed by earth dam; dam completed and storage began in April 1956. Outlet structure is a 3-foot square concrete drop inlet connected to a 20-inch concrete outlet pipe. A 120° V-notch sharp-crested weir is set on side of drop inlet, with notch at gage height 5.20 ft. Top of drop inlet is at gage height 5.87 ft, emergency spillway at gage height 25.9 ft. There is an 18-inch diameter cleanout gate at the bottom of drop inlet at gage height -2.60 ft. Reservoir capacity at top of drop inlet, 18.7 acre-ft. Capacity at emergency spillway level, 200 acre-ft. In addition, about 0.8 sq mi of drainage area above station is partly controlled by abandoned railroad embankment which in effect acts as a flood-detention dam.

The following table gives the relation between gage height and outflow (except periods of backwater from debris), reservoir capacity, and water-surface area during the 1958 water year.

Gage height (feet)	Outflow (cfs)	Contents (acre-feet)	Surface area (acres)	Gage height (feet)	Outflow (cfs)	Contents (acre-feet)	Surface area (acres)
5.5	0.23	17.2	4.00	6.0	4.7	19.2	4.10
5.6	.47	17.6	4.02	6.1	7.6	19.6	4.14
5.7	.92	18.0	4.04	6.2	11	20.0	4.18
5.8	1.6	18.4	4.06	6.4	20	20.8	4.26
5.9	2.7	18.8	4.08	6.6	33	21.6	4.34

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.54	0.44	0.92	0.92	1.8	2.5	2.4	2.1	1.4	0.75	0.70	0.60
2	.58	.41	.75	.86	1.3	2.1	2.1	2.0	1.8	.71	.70	.58
3	2.0	.41	.75	.86	1.2	1.8	2.0	1.9	1.4	.71	.70	.56
4	1.0	.41	.80	.86	1.1	1.6	2.1	2.2	1.3	.71	.66	.54
5	.63	.38	*1.0	.80	*1.0	1.5	1.9	2.9	*1.2	.92	.66	.54
6	.44	.38	.80	*.83	1.9	1.4	2.7	6.9	1.2	1.2	.64	.54
7	.41	.38	.86	.75	2.7	1.6	2.2	3.5	1.2	1.0	.90	.54
8	.41	.83	3.1	.71	2.0	1.7	2.0	*2.6	1.2	2.0	.80	.50
9	*.88	.71	2.0	.67	1.6	2.7	1.9	2.4	1.2	2.0	.63	.50
10	.44	.50	1.4	.67	1.4	2.4	2.2	2.2	1.1	1.2	1.0	.50
11	.36	.44	1.1	.67	1.3	2.0	2.1	2.2	1.1	1.1	.70	.50
12	.86	.41	.92	.67	1.2	1.8	1.9	2.4	1.1	1.1	*.80	.80
13	.58	.41	.80	1.2	1.2	2.5	1.8	2.1	1.0	.98	3.0	.80
14	.47	1.4	.80	1.4	1.1	2.2	1.7	2.0	.98	1.9	1.5	.63
15	.41	1.2	.80	1.0	1.3	1.9	4.1	1.8	.98	1.5	1.0	.63
16	.41	1.5	.75	.92	1.2	1.8	5.1	1.8	.98	*1.1	.86	.63
17	1.2	2.0	.71	.80	1.0	1.7	2.9	1.7	.92	.92	.76	.58
18	1.0	4.1	.71	.80	1.0	2.9	2.5	1.6	.92	.86	.70	.54
19	.67	6.6	.75	.75	1.0	2.4	2.2	1.6	.92	.80	.66	.50
20	.54	2.4	4.4	.75	1.1	2.0	2.2	1.8	1.0	.98	.63	.50
21	.50	1.8	2.5	1.6	1.2	1.8	2.1	1.7	.92	1.6	.60	1.0
22	.54	1.8	1.6	1.4	1.1	1.6	2.4	1.8	.98	1.5	.58	.92
23	.54	4.1	1.3	1.2	1.0	1.5	2.1	1.5	.98	1.0	.58	.63
24	.54	2.1	1.2	4.7	1.0	1.8	2.0	1.4	1.0	1.3	2.5	.58
25	.54	7.6	1.1	3.5	.98	2.4	1.9	1.4	.92	1.0	2.0	.54
26	.50	3.1	1.9	2.2	8.3	2.7	1.8	1.4	.98	.86	1.0	.50
27	.50	2.0	1.4	1.7	8.3	*3.1	1.9	1.4	1.0	.80	.90	.50
28	.47	1.7	1.2	1.4	3.5	2.7	2.2	1.4	.86	.80	.90	.47
29	.47	1.6	1.1	1.2	------	2.4	2.7	1.4	.80	.76	.76	.44
30	.54	1.4	.98	1.2	------	2.5	2.2	1.3	.75	.72	.70	.47
31	*.58	------	.92	1.2	------	2.7	------	1.4	------	.70	.65	------
Total	19.55	52.51	39.32	37.99	52.78	65.7	69.3	63.8	32.09	33.48	29.07	17.56
Mean	0.631	1.75	1.27	1.23	1.88	2.12	2.31	2.06	1.07	1.08	0.938	0.585
(†)	17.6	18.5	18.2	18.6	18.8	18.8	18.7	18.3	17.8	17.7	17.9	17.7
(‡)	4.02	4.07	4.05	4.07	4.08	4.08	4.08	4.06	4.03	4.03	4.03	4.02
(**)	4.0	7.3	3.8	2.6	5.0	5.0	5.6	-	-	6.7	4.2	2.2

Calendar year 1957: Max 15 Min 0.24 Mean 1.13
Water year 1957-58: Max 8.3 Min 0.36 Mean 1.41

* Discharge measurement made on this day.
† Contents, in acre-feet, at end of month in reservoir No. 2.
‡ Surface area, in acres, at end of month of reservoir No. 2.
** Precipitation, in inches, during month at rain gage at reservoir.
Note. Backwater from debris on control Oct. 1-8, Nov. 11 to Dec. 4. No gage-height record July 21 to Aug. 11, Aug. 13 to Sept. 3; discharge estimated on bases of recorded range in stage, 1 discharge measurement, and records for North Fork Broad River near Toccoa.

1895. North Fork Broad River near Toccoa, Ga.

Location.--Lat 34°31', long 83°19', on right bank 150 ft upstream from bridge on State Highway 106, 1 mile downstream from Carnes Creek, and 5 miles south of Toccoa, Stephens County.

Drainage area.--19.3 sq mi.

Records available.--May 1954 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 750.41 ft above mean sea level (levels by U. S. Soil Conservation Service).

Extremes.--Maximum discharge during year, 570 cfs Feb. 26 (gage height, 5.90 ft); minimum, 10 cfs June 25.
1954-58: Maximum discharge, 1,060 cfs Feb. 6, 1955 (gage height, 8.33 ft); minimum, 4.6 cfs Sept. 2, 3, 21, 1956.

Remarks.--Records good. Storm runoff at gage affected during short periods by two small flood-detention reservoirs (combined capacity, 470 acre-ft) Oct. 1 to June 20; three reservoirs (combined capacity, 1,770 acre-ft) June 21 to Sept. 30.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Feb. 19-25)

1.7	12	2.5	86
1.8	16	3.0	178
2.0	26	3.5	280
2.2	44		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	14	21	20	33	45	40	33	22	14	21	17
2	16	14	20	19	25	34	36	31	32	14	21	16
3	*45	14	20	19	23	32	34	30	24	14	21	16
4	38	14	21	18	22	29	35	29	*23	15	21	16
5	23	14	18	18	22	*27	33	32	23	21	20	16
6	18	14	18	18	37	25	50	*134	22	24	19	15
7	16	15	20	18	45	27	36	56	22	*22	25	15
8	14	21	59	*18	36	27	33	44	22	49	23	14
9	13	18	34	17	32	48	32	39	22	28	17	14
10	12	16	28	17	29	33	39	36	21	23	30	14
11	12	14	24	17	28	29	34	34	20	24	20	14
12	25	*12	21	17	25	28	30	38	20	22	37	20
13	15	12	20	23	25	39	27	32	18	21	88	18
14	14	20	20	27	24	33	26	29	20	74	35	15
15	13	17	19	21	25	30	139	28	19	38	25	16
16	13	17	*18	20	24	28	99	27	17	27	22	16
17	28	19	18	19	22	28	56	26	18	23	21	16
18	21	51	18	18	22	49	42	25	17	21	19	15
19	17	120	18	18	*19	36	38	26	18	20	18	14
20	15	35	103	18	20	32	33	27	19	21	18	15
21	14	25	48	30	21	29	33	25	13	42	17	31
22	14	25	33	28	21	28	38	24	14	42	17	19
23	*14	70	27	24	21	26	33	24	13	26	17	16
24	14	34	24	115	21	30	31	23	12	38	72	15
25	14	191	23	59	20	44	30	23	12	28	50	15
26	14	51	42	39	239	54	29	22	16	24	25	15
27	14	34	28	31	216	*56	29	22	18	24	22	14
28	14	30	26	28	*70	54	42	22	16	23	20	14
29	14	28	24	25	-	42	46	22	15	21	19	14
30	14	25	22	24	-------	46	34	21	14	20	18	15
31	13	-------	21	23	-------	59	-------	23	-------	*20	18	-------
Total	538	984	856	806	1,167	1,127	1,237	1,007	562	823	816	480
Mean	17.4	32.8	27.6	26.0	41.7	36.4	41.2	32.5	18.7	26.5	26.3	16.0
Cfsm	0.902	1.70	1.43	1.35	2.16	1.89	2.13	1.68	0.969	1.37	1.36	0.829
In.	1.04	1.90	1.65	1.56	2.25	2.18	2.38	1.94	1.08	1.58	1.57	0.92

Calendar year 1957: Max 416 Min 6.4 Mean 22.8 Cfsm 1.18 In. 16.07
Water year 1957-58: Max 239 Min 12 Mean 28.5 Cfsm 1.48 In. 20.05

* Discharge measurement made on this day.

1896. North Fork Broad River subwatershed No. 6 (Bear Creek) near Mize, Ga.

Location.--Lat 34°29', long 83°19', at edge of pool, 255 ft upstream from left end of earthfill dam on Bear Creek, 1 mile upstream from mouth, and 2 miles east of Mize, Stephens County.

Drainage area.--3.62 sq mi.

Records available.--December 1956 to September 1958.

Gage.--Water-stage recorder and V-notch sharp-crested weir on concrete drop inlet. Datum of gage is 743.13 ft above mean sea level, datum of 1929 (levels by Soil Conservation Service).

Extremes.--Maximum outflow during year, 36 cfs Feb. 27 (gage height, 10.07 ft); minimum, 2.1 cfs Nov. 7, 8 (gage height, 7.83 ft). Maximum inflow, 316 cfs (average for 15-minute interval) July 14, computed from outflow and change in reservoir contents; negligible rainfall occurred on reservoir surface during time of peak inflow.
1956-58: Maximum outflow, 38 cfs Apr. 5, 1957 (gage height, 12.1 ft); mimumum, 0.88 cfs Aug. 14, 1957 (gage height, 7.64 ft). Maximum inflow, that of July 14, 1958.

Remarks.--Records good except those for period of no gage-height record, which are fair. Records of daily discharge are outflow from reservoir, determined from stage-discharge relation for outlet structure. Reservoir is formed by earth dam; dam completed and storage began in November 1956. Outlet structure is a 3-foot square concrete drop inlet connected to a 20-inch concrete outlet pipe. Two 120° V-notch sharp-crested weirs are set on opposite sides of the drop inlet, with notches at gage height 7.33 ft. Top of drop inlet is at gage height 8.00 ft; emergency spillway at gage height 21.0 ft. There is an 18-inch diameter cleanout gate at bottom of drop inlet at gage height 0.50 ft. Reservoir capacity at top of drop inlet, 118 acre-ft. Capacity at emergency spillway level, 920 acre-ft.

The following table gives the relation between gage height and outflow, reservoir capacity, and water-surface area during the 1958 water year.

Gage height (feet)	Outflow (cfs)	Contents (acre-feet)	Surface area (acres)	Gage height (feet)	Outflow (cfs)	Contents (acre-feet)	Surface area (acres)
7.8	1.8	112	26.6	8.3	13	126	27.6
7.9	2.8	115	26.8	8.6	31	135	28.2
8.0	4.3	118	27.0	9.0	34	146	29.0
8.1	6.4	121	27.2	11.0	37	215	42.0

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.6	2.2	4.5	3.7	5.1	11	6.7	6.4	4.3	2.3	3.2	3.1
2	4.0	2.5	4.2	3.6	4.2	6.4	6.0	6.0	6.0	2.2	2.1	2.8
3	8.7	2.4	4.0	3.4	3.8	5.6	5.6	5.8	4.7	2.4	3.1	2.8
4	9.7	2.3	4.2	a3.4	3.7	4.9	6.0	5.6	4.3	2.8	2.8	2.7
5	5.8	2.2	3.8	a3.4	3.7	4.7	5.6	6.2	*4.0	3.2	2.7	2.7
6	4.3	2.2	3.7	a3.2	5.6	4.7	7.8	12	3.8	4.0	2.6	2.6
7	3.6	2.1	3.8	a3.2	7.3	5.4	6.4	*10	3.7	4.2	2.5	2.6
8	*3.1	2.1	11	*3.2	5.8	5.6	5.6	7.0	3.6	10	2.4	2.5
9	2.7	3.6	7.6	3.1	4.9	9.0	5.4	6.4	3.7	7.8	2.4	2.4
10	2.6	2.8	5.6	3.1	4.5	7.6	6.2	6.0	3.7	5.6	2.5	2.4
11	2.4	2.5	4.7	3.1	4.3	6.0	6.2	6.0	3.6	5.1	2.8	2.4
12	6.0	2.4	4.0	3.0	4.2	5.4	5.6	6.0	3.4	5.1	*2.8	3.4
13	5.1	2.3	3.8	4.0	4.0	7.0	5.1	5.6	3.1	5.8	6.4	3.8
14	4.0	3.1	3.8	5.4	3.8	6.4	4.9	5.4	3.0	10	5.8	3.2
15	3.1	3.4	3.8	4.5	4.9	5.6	14	5.1	3.0	34	4.5	3.1
16	2.8	3.1	3.7	4.3	4.5	5.1	34	4.9	3.0	*12	3.8	3.2
17	3.6	3.6	3.7	3.7	3.7	5.4	13	4.7	2.8	6.0	3.6	3.1
18	3.6	14	3.6	3.4	*3.4	8.7	7.8	4.7	2.8	4.7	3.4	2.8
19	3.1	32	3.7	3.2	3.6	7.0	6.4	4.5	2.7	4.3	3.1	2.7
20	2.7	10	9.2	3.2	3.7	6.0	5.8	4.9	2.7	4.0	3.1	2.6
21	2.5	6.0	8.1	4.7	3.7	5.4	5.6	4.9	2.7	4.7	3.0	4.0
22	2.4	5.4	5.8	4.7	3.8	5.1	7.0	4.5	2.6	7.0	2.8	4.7
23	2.4	14	4.9	4.0	4.0	4.9	6.4	4.3	2.6	5.6	2.7	3.8
24	2.5	8.1	4.5	15	3.8	5.6	5.8	4.2	2.6	20	a7.2	3.4
25	2.4	31	4.3	15	3.8	7.8	5.6	4.0	2.5	8.1	a32	3.1
26	2.4	22	6.4	7.3	25	8.7	5.4	4.0	2.5	5.6	9.3	2.8
27	2.3	7.8	5.4	5.6	35	9.7	5.4	4.0	2.7	5.1	5.4	2.8
28	2.2	6.0	4.7	4.7	31	7.6	7.8	4.0	2.6	4.5	4.3	2.6
29	2.2	*6.0	4.3	4.5	-	6.4	9.7	4.2	2.5	4.0	3.8	2.5
30	2.2	5.4	4.0	4.3	------	6.7	7.0	3.8	2.4	3.7	3.6	2.5
31	*2.2	------	3.8	4.3	------	*8.7	------	4.2	------	3.4	3.4	------
Total	110.2	213.5	152.6	145.2	198.8	204.3	229.8	169.3	97.6	207.2	144.1	89.1
Mean	3.55	7.12	4.92	4.68	7.10	6.59	7.66	5.46	3.25	6.68	4.65	2.97
(†)	113	119	117	119	129	122	121	117	113	116	115	115
($)	26.7	27.0	26.9	27.1	27.8	27.3	27.2	27.0	26.7	26.9	26.8	26.8
(**)	3.92	6.90	3.61	3.77	4.85	5.55	5.98	2.72	1.04	9.28	5.00	2.59

Calendar year 1957: Max 37 Min 0.88 Mean 4.29
Water year 1957-58: Max 35 Min 2.1 Mean 5.37

* Discharge measurements made on this day.
† Contents, in acre-feet, at end of month in reservoir No. 6.
$ Surface area, in acres, at end of month of reservoir No. 6.
** Precipitation, in inches, during month at rain gage 1.5 miles upstream from dam.
a No gage-height record; discharge estimated on basis of recorded range in stage, floodmark, and records for nearby station.

1900. North Fork Broad River near Lavonia, Ga.

Location.--Lat 34°27', long 83°14', on right bank at bridge on county road 2.1 miles upstream from Toms Creek and 7.8 miles west of Lavonia, Franklin County.

Drainage area.--42.0 sq mi.

Records available.--May 1954 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 680.36 ft above mean sea level, datum of 1929 (levels by U. S. Soil Conservation Service).

Extremes.--Maximum discharge during year, 570 cfs Apr. 15, Aug. 24 (gage height, 9.37 ft); minimum, 24 cfs June 25, 26.
1954-58: Maximum discharge, 1,500 cfs Feb. 7, 1955 (gage height, 11.80 ft); minimum, 7.2 cfs Sept. 22-24, 1955.
Flood in 1933 reached a stage of 17.5 ft, and flood in 1950 reached a stage of 15.5 ft, from information by local residents.

Remarks.--Records good. Storm runoff at gage affected by four small flood-detention reservoirs (combined capacity of reservoirs, 1,600 acre-ft) Oct. 1 to Jan. 5; five reservoirs (combined capacity, 2,720 acre-ft) Jan. 6 to June 20; and six reservoirs (combined capacity, 4,020 acre-ft) June 21 to Sept. 30.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

5.8	20	7.0	142
6.0	34	8.0	294
6.5	82	9.0	490

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	29	57	47	68	126	93	71	46	26	40	36
2	40	29	53	45	52	94	80	68	68	*27	39	35
3	158	28	51	44	46	80	74	65	49	29	40	33
4	132	28	53	40	46	68	78	63	*46	32	39	32
5	69	28	46	40	46	*62	69	66	46	46	36	31
6	51	27	45	41	74	62	106	179	45	62	33	29
7	*41	27	48	43	94	65	80	131	44	43	33	30
8	36	43	138	39	70	69	70	*95	44	116	46	28
9	33	40	89	*36	59	117	66	83	42	74	33	28
10	31	30	67	39	55	88	82	77	42	54	35	29
11	30	28	58	40	51	71	77	72	40	53	46	28
12	62	28	49	38	49	65	67	77	40	52	52	39
13	39	28	47	50	47	92	62	70	36	75	166	40
14	35	41	47	71	45	81	61	64	38	86	84	35
15	38	42	46	54	51	66	203	62	36	146	55	35
16	33	38	*46	47	48	60	319	58	35	68	46	36
17	48	46	45	45	44	60	141	57	33	49	43	33
18	46	130	42	43	46	113	102	55	33	44	40	31
19	36	265	44	39	*45	86	89	55	33	40	37	30
20	32	110	141	39	46	70	82	59	34	41	36	31
21	31	70	110	65	47	63	76	56	29	57	34	49
22	30	62	75	57	47	59	99	51	30	100	33	51
23	30	172	60	49	46	57	83	49	30	58	32	39
24	31	96	56	167	46	63	72	49	28	141	102	35
25	31	343	54	164	46	98	68	49	26	72	242	31
26	31	166	104	100	*305	106	66	47	29	56	76	31
27	30	104	68	74	*435	*119	66	45	35	53	55	31
28	30	82	60	60	209	110	95	46	32	48	47	31
29	30	76	56	56	-	87	108	46	30	45	43	30
30	30	68	51	52	-------	93	81	44	28	41	40	30
31	30	-------	48	51	-------	130	-------	46	-------	*40	38	-------
Total	1,364	2,304	1,954	1,775	2,263	2,580	2,815	2,055	1,127	1,874	1,721	1,007
Mean	44.0	76.8	63.0	57.3	80.8	83.2	93.8	66.3	37.6	60.5	55.5	33.6
Cfsm	1.05	1.83	1.50	1.36	1.92	1.98	2.23	1.58	0.895	1.44	1.32	0.800
In.	1.21	2.04	1.73	1.57	2.00	2.28	2.49	1.82	1.00	1.66	1.52	0.89

Calendar year 1957: Max 798 Min 11 Mean 50.1 Cfsm 1.19 In. 16.18
Water year 1957-58: Max 435 Min 26 Mean 62.6 Cfsm 1.49 In. 20.21

* Discharge measurement made on this day.

1901. North Fork Broad River subwatershed No. 11 (Toms Creek) near Eastanollee, Ga.

Location.--Lat 34°29', long 83°15', at edge of pool, about 750 ft upstream from left end of earthfill dam, 2 miles south of Eastanollee, Stephens County, and 4 miles upstream from mouth.

Drainage area.--3.79 sq mi.

Records available.--October 1956 to September 1958.

Gage.--Water-stage recorder and V-notch sharp-crested weir on concrete drop inlet. Datum of gage is 730.60 ft above mean sea level, datum of 1929 (levels by Soil Conservation Service).

Extremes.--Maximum outflow during year, 30 cfs Aug. 25 (gage height, 11.66 ft, from floodmark); minimum, 2.2 cfs July 2, 3 (gage height, 8.84 ft). Maximum inflow, 360 cfs (average for 15-minute interval) Aug. 24, computed from outflow and change in reservoir contents; negligible rainfall occurred on reservoir surface during time of peak inflow.

1956-58: Maximum outflow, that of Aug. 25, 1958; maximum gage height, 13.30 ft Apr. 5, 1957 (backwater from debris); minimum, 0.95 cfs Sept. 7, 1957 (gage height, 8.67 ft). Maximum inflow, that of Aug. 24, 1958.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Records of daily discharge are outflow from reservoir, determined from stage-discharge relation for outlet structure. Reservoir is formed by earth dam; dam completed and storage began in August 1956. Outlet structure is a 3-foot square concrete drop inlet connected to a 20-inch concrete outlet pipe. Two 120° V-notch sharp-crested weirs are set on opposite sides of the drop inlet, with notches at gage height 8.33 ft. Top of drop inlet is at gage height 9.00 ft; emergency spillway at gage height 21.2 ft. There is an 18-inch diameter cleanout gate at bottom of drop inlet at gage height 2.50 ft. Reservoir capacity at top of drop inlet, 115 acre-ft. Capacity at emergency spillway level, 860 acre-ft.

The following table gives the relation between gage height and outflow, reservoir capacity, and water-surface area during the 1958 water year.

Gage height (feet)	Outflow (cfs)	Contents (acre-feet)	Surface area (acres)	Gage height (feet)	Outflow (cfs)	Contents (acre-feet)	Surface area (acres)
8.8	1.8	110	29.6	9.3	15	124	30.6
8.9	2.9	112	29.8	9.5	27	130	31.0
9.0	4.6	115	30.0	10.0	28	146	32.0
9.2	10	121	30.4	12.0	30	221	46.0

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.0	2.6	4.6	4.4	5.6	7.6	7.6	6.1	4.2	2.4	3.4	3.3
2	5.2	2.6	4.4	4.2	4.8	5.8	6.4	5.8	5.6	2.3	3.3	3.0
3	13	2.6	4.4	*4.0	4.4	5.4	5.8	5.6	4.6	2.3	3.4	2.9
4	24	2.6	4.6	3.8	4.2	5.0	6.4	5.4	*4.4	2.6	3.3	2.9
5	7.6	2.6	4.2	3.8	4.2	4.8	5.8	5.6	4.2	3.2	3.2	2.9
6	5.0	*2.6	4.0	3.8	6.1	5.0	7.6	9.4	4.0	5.6	*2.9	2.8
7	4.2	2.6	4.4	4.2	7.6	5.4	6.1	9.4	3.8	4.8	2.9	2.8
8	*3.4	4.0	10	4.0	5.8	5.8	5.4	7.0	3.8	12	2.8	2.6
9	3.2	3.5	7.3	3.6	5.0	8.5	5.4	6.1	4.0	8.8	2.8	2.5
10	3.0	3.0	5.6	3.6	4.8	7.0	6.7	5.6	4.4	5.4	2.6	2.5
11	2.9	2.6	5.0	3.8	4.6	5.8	6.4	5.6	4.0	4.8	2.9	2.5
12	9.4	2.6	4.2	3.8	4.4	5.4	5.4	5.6	3.6	4.6	3.0	3.4
13	5.6	2.6	4.2	5.2	4.4	7.0	5.2	*5.2	3.3	12	7.6	4.2
14	4.2	4.0	4.4	7.0	4.2	6.4	5.0	5.0	3.3	13	6.7	3.4
15	3.6	3.5	4.4	5.2	5.2	5.4	14	4.8	3.2	7.3	4.6	3.2
16	3.4	3.2	4.2	4.6	5.0	5.2	26	4.6	3.3	*5.2	3.8	3.3
17	4.8	3.5	4.2	4.2	4.0	5.4	10	4.6	3.0	4.4	3.4	3.2
18	5.2	10	3.8	4.0	*3.8	8.5	7.3	4.6	3.0	4.0	3.2	3.0
19	4.2	30	4.2	3.8	3.8	7.0	6.4	4.6	2.9	3.6	2.9	2.8
20	3.4	15	8.2	3.8	4.2	5.8	5.8	5.2	3.0	4.6	2.9	3.0
21	3.2	6.0	7.6	5.6	4.6	5.4	5.8	5.0	2.9	8.2	2.8	3.6
22	3.2	5.4	5.4	5.2	4.6	5.2	8.2	4.6	2.9	9.4	2.6	4.5
23	3.2	16	4.8	4.6	4.4	5.0	7.3	4.4	2.9	6.1	2.6	3.8
24	3.2	10	4.8	12	4.2	5.4	6.1	4.2	2.8	12	8.7	3.4
25	3.0	30	4.8	12	4.2	7.6	5.6	4.2	2.6	7.6	30	3.2
26	2.9	25	7.9	7.0	18	7.9	5.4	4.2	2.8	5.4	28	3.0
27	2.9	8.0	5.8	5.6	28	8.8	5.6	4.0	3.0	4.8	7.6	2.9
28	2.8	6.5	5.2	5.0	18	8.8	9.4	4.0	2.8	4.2	4.8	2.6
29	2.6	*5.8	4.8	4.8	-	7.3	8.8	4.2	2.6	4.0	4.0	2.5
30	2.8	5.4	4.6	4.6	------	7.9	6.7	3.8	2.5	3.6	3.6	2.6
31	2.6	------	4.4	4.6	------	*10	------	4.0	------	3.4	3.4	------
Total	153.7	223.8	160.4	155.8	182.1	201.5	223.6	162.4	103.4	181.6	169.7	92.3
Mean	4.96	7.46	5.17	5.03	6.50	6.50	7.45	5.24	3.45	5.86	5.47	3.08
(†)	112	115	114	117	120	120	117	114	111	113	113	112
(‡)	29.8	30.0	30.0	30.1	30.3	30.3	30.1	29.9	29.7	29.9	29.9	29.8
(**)	5.16	6.93	3.82	3.33	4.25	5.36	5.48	0.61	1.16	8.09	5.80	2.12

Calendar year 1957: Max 30 Min 0.95 Mean 4.44
Water year 1957-58: Max 30 Min 2.3 Mean 5.51

* Discharge measurement made on this day.
† Contents, in acre-feet, at end of month in reservoir No. 11.
‡ Surface area, in acres, at end of month of reservoir No. 11.
** Precipitation, in inches, during month at rain gage 1.5 miles upstream from dam.
Note.--No gage-height record Oct. 1, Nov. 1-28, Aug. 25, Sept. 18-22; discharge estimated on basis of recorded range in stage, floodmark, 1 discharge measurement, and records for Toms Creek near Martin.

1902. North Fork Broad River subwatershed No. 14 near Avalon, Ga.

Location.--Lat 34°30', long 83°13', at upstream edge of crown in earth-fill dam on unnamed tributary to Toms Creek, 0.8 mile upstream from mouth and 1.6 miles southwest of Avalon, Stephens County.
Drainage area.--1.20 sq mi.
Records available.--November 1954 to September 1958.
Gage.--Water-stage recorder and V-notch sharp-crested weir on concrete drop inlet. Datum of gage is 735.33 ft above mean sea level, datum of 1929 (levels by Soil Conservation Service).
Extremes.--Maximum outflow during year, 28 cfs Aug. 24 (gage height, 8.55 ft); minimum, 0.81 cfs Sept. 27-30 (gage height, 5.46 ft). Maximum inflow, 350 cfs (average for 5-minute interval) Aug. 24, computed from outflow and change in reservoir contents; no rainfall occurred on reservoir surface during time of peak inflow.
1954-58: Maximum outflow, 67 cfs Feb. 6, 1955 (gage height, 7.56 ft); no flow Dec. 24-28, 1954, Nov. 22-26, 1955, caused by closing of reservoir drain valve. Maximum inflow, 628 cfs (average for 15-minute interval) July 5, 1956, computed from outflow and change in reservoir contents; negligible rainfall occurred on reservoir surface during time of peak inflow.
Remarks.--Records good except those above 12 cfs Oct. 1 to Mar. 19 and those for period of no gage-height record, which are fair. Records of daily discharge are outflow from reservoir, determined from stage-discharge relation for outlet structure. Reservoir is formed by earth dam; dam completed and storage began in October 1954. Outlet structure is a 3-foot square concrete drop inlet connected to a 30-inch concrete outlet pipe. An 18-inch orifice installed at the upstream end of the outlet pipe Nov. 21, 1955. A 120° V-notch sharp-crested weir is set on one side of the drop inlet, with notch at gage height 5.00 ft. Top of drop inlet is at gage height 5.75 ft; emergency spillway at gage height 22.2 ft. There is a 24-inch diameter cleanout gate at bottom of drop inlet at gage height -2.75 ft. Reservoir capacity at top of drop inlet, 26.5 acre-ft. Capacity at emergency spillway level, 270 acre-ft. Records of suspended sediment loads for water year 1958 are given in WSP 1571.
The following table gives the relation between gage height and outflow, reservoir capacity, and water-surface area during the 1958 water year.

Gage height (feet)	Outflow (cfs)		Contents (acre-feet)	Surface area (acres)	Gage height (feet)	Outflow (cfs)		Contents (acre-feet	Surface area (acres)
	Oct. 1 to Mar. 19	Mar. 20 to Sept. 30				Oct. 1 to Mar. 19	Mar. 20 to Sept. 30		
5.4	0.59	0.59	24.4	6.12	5.9	6.6	6.6	27.4	6.52
5.5	.98	.98	25.0	6.20	6.0	12	12	28.0	6.6
5.6	1.6	1.6	25.6	6.28	6.5	13	25	31.5	7.05
5.7	2.4	2.4	26.2	6.36	7.0	14	26	35.0	7.50
5.8	3.8	3.8	26.8	6.44	8.0	14	27	43.0	8.40

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8	1.0	1.8	1.4	2.0	3.1	3.6	2.3	1.6	0.98	1.1	1.1
2	1.6	1.0	1.8	1.3	1.7	2.6	3.0	2.2	2.1	.93	1.1	1.0
3	5.4	1.0	1.6	*1.3	1.6	2.2	2.7	2.1	1.7	1.0	1.1	1.0
4	6.6	1.0	1.6	1.2	1.6	2.0	2.8	2.1	*1.6	1.1	1.1	.98
5	2.8	1.0	1.6	1.2	*1.6	*1.9	2.5	2.2	1.6	5.0	1.0	.98
6	1.9	.98	1.5	1.2	2.2	2.0	3.2	2.8	1.5	3.0	.98	.93
7	*1.5	.98	1.6	1.2	2.7	2.0	2.6	3.0	1.5	1.6	1.0	.93
8	1.2	1.5	4.1	1.2	2.1	2.0	2.4	2.4	1.5	2.3	1.0	.93
9	1.1	1.3	*2.6	1.2	1.8	3.1	2.3	2.2	1.5	2.0	.98	.89
10	1.1	1.1	1.8	1.2	1.8	2.7	2.7	2.1	1.5	1.7	.98	.85
11	1.0	1.0	1.6	1.2	1.7	2.3	2.5	2.1	1.4	1.6	.98	.85
12	3.4	1.0	1.5	1.2	1.7	2.1	2.1	2.1	1.4	1.6	*1.3	1.1
13	1.7	1.0	1.4	1.4	1.6	2.8	2.0	*2.0	1.3	1.4	3.2	1.1
14	1.3	1.3	1.4	1.9	1.6	2.5	2.0	1.8	1.2	1.5	1.6	1.0
15	1.2	1.2	1.4	1.6	1.8	2.1	8.4	1.8	1.2	1.6	1.2	.98
16	1.1	1.2	1.4	1.4	1.6	1.9	7.8	1.8	1.2	*1.3	1.1	.98
17	1.5	1.4	1.4	1.4	1.5	2.0	3.6	1.8	1.2	1.2	1.1	.93
18	1.5	3.8	1.4	1.3	1.4	3.1	3.1	1.8	1.2	1.1	1.0	.89
19	1.2	11	1.4	1.3	1.4	2.6	2.8	1.8	1.2	1.1	.98	.89
20	1.1	3.0	2.4	1.3	1.5	2.6	2.5	1.8	1.2	1.1	.98	.89
21	1.1	2.1	2.1	1.8	1.5	2.3	2.4	1.8	1.2	1.6	.93	1.2
22	1.1	2.0	1.8	1.6	1.5	2.1	2.8	1.7	1.1	2.6	.93	1.2
23	1.1	5.8	1.6	1.5	1.5	2.1	2.4	1.6	1.1	2.2	.93	1.0
24	1.1	3.0	1.6	5.0	1.5	2.2	2.3	1.6	1.1	3.4	7.5	.93
25	1.0	13	1.6	4.0	1.4	2.8	2.3	1.6	1.0	1.9	10	.89
26	1.0	8.3	3.0	2.8	9.6	3.2	2.2	1.6	1.1	1.5	1.9	.89
27	1.0	2.8	2.0	2.3	14	3.6	2.2	1.5	1.1	1.4	1.4	.85
28	.98	2.4	1.8	2.0	10	4.9	3.1	1.6	1.1	1.3	1.2	.81
29	.98	2.3	1.6	1.8	-	3.6	2.7	1.6	1.0	1.2	1.2	.81
30	.98	2.1	1.6	1.8	------	4.8	2.4	1.5	.98	1.1	1.1	.85
31	*1.0	------	1.5	1.8	------	*6.2	------	1.5	------	1.2	1.1	------
Total	51.34	80.56	55.5	52.8	75.9	85.4	89.4	59.8	39.38	52.51	51.97	28.63
Mean	1.66	2.69	1.79	1.70	2.71	2.75	2.98	1.93	1.31	1.69	1.68	0.954
(†)	25.1	26.0	25.6	26.1	26.8	26.8	26.1	25.5	24.9	25.2	25.1	24.9
(‡)	6.21	6.34	6.28	6.34	6.44	6.44	6.35	6.27	6.19	6.22	6.22	6.19
(**)	4.19	6.90	3.55	3.65	4.59	5.98	5.27	1.77	1.52	8.02	5.23	1.39

Calendar year 1957: Max 22 Min 0.38 Mean 1.53
Water year 1957-58: Max 14 Min 0.81 Mean 1.98

* Discharge measurement made on this day.
† Contents, in acre-feet, at end of month in reservoir No. 14.
‡ Surface area, in acres, at end of month of reservoir No. 14.
** Precipitation, in inches, during month at rain gage 1.4 miles upstream from the dam.
Note.--No gage-height record Nov. 30 to Dec. 15; discharge estimated on basis of recorded range in stage, 1 discharge measurement, and records for Toms Creek near Eastanollee.

1905. Toms Creek near Martin, Ga.

Location.--Lat 34°28', long 83°13', on left bank 30 ft downstream from highway bridge on county road, 1.2 miles upstream from mouth, and 3 miles southwest of Martin, Stephens County.

Drainage area.--10.3 sq mi.

Records available.--June 1954 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 681.66 ft above mean sea level (levels by U. S. Soil Conservation Service).

Extremes.--Maximum discharge during year, 278 cfs Aug. 24 (gage height, 8.03 ft); minimum, 6.0 cfs Sept. 9.

1954-58: Maximum discharge, 726 cfs Mar. 16, 1956 (gage height, 8.41 ft); minimum, 1.2 cfs Aug. 14, Sept. 2, 1956, caused by storage in small flood-detention reservoir upstream.

Remarks.--Records good. Storm runoff at gage affected by four flood-detention reservoirs (combined capacity, 1,350 acre-ft).

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Feb. 17, 18)

Oct. 1 to Nov. 25				Nov. 26 to Apr. 15		Apr. 16 to Sept. 30	
5.2	5.0	6.0	33	5.4	6.6	5.5	5.0
5.3	8.0	6.6	62	6.0	25	6.0	20
5.5	15	7.2	115	6.7	49	6.7	49
				7.3	86	7.4	96

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	8.0	9.8	11	18	23	25	15	12	7.2	9.3	7.8
2	15	8.0	9.5	11	13	20	*22	15	19	7.0	9.0	7.4
3	59	7.7	9.8	*11	12	19	20	14	12	7.4	9.0	7.4
4	*56	7.7	11	11	12	*17	22	13	*11	7.0	8.8	7.4
5	21	*7.4	8.8	11	*12	15	20	14	10	24	8.4	7.4
6	14	7.4	8.5	11	24	16	26	26	9.9	26	8.4	7.0
7	11	7.1	10	13	24	18	20	26	9.9	11	8.2	7.4
8	9.0	15	34	12	19	19	19	18	9.6	27	8.0	7.0
9	*8.7	12	20	11	16	30	19	*16	10	*20	7.4	6.6
10	8.0	9.4	15	11	16	22	23	16	11	11	7.4	6.8
11	8.0	8.7	13	12	15	19	22	16	10	11	7.8	7.0
12	34	8.7	10	11	15	18	19	16	9.6	9.6	9.6	9.3
13	19	8.7	10	19	15	26	18	14	9.3	16	29	8.4
14	14	15	11	22	14	22	18	13	9.3	24	18	7.6
15	11	13	11	16	18	19	56	12	9.0	17	10	7.8
16	9.4	11	*11	14	16	18	*66	12	8.8	11	9.3	7.6
17	12	47	11	13	14	19	29	12	8.6	9.0	9.0	7.8
18	15	46	11	12	13	31	*21	11	8.4	8.4	8.2	7.2
19	13	93	11	11	13	24	18	12	8.2	8.0	8.2	6.8
20	11	28	26	11	14	20	18	14	8.2	10	7.8	6.8
21	9.8	18	22	18	14	19	16	12	8.0	26	7.6	7.2
22	9.0	18	16	*14	15	18	24	11	8.0	30	7.4	11
23	*8.7	55	14	12	15	17	20	11	8.0	18	7.4	8.2
24	8.7	28	14	41	14	20	17	11	7.4	38	39	7.8
25	8.7	108	14	32	14	*25	16	11	7.6	20	*91	7.6
26	8.4	35	22	21	66	28	15	11	7.8	14	38	7.4
27	8.4	17	19	17	*83	28	17	10	*8.2	12	14	7.4
28	8.0	14	16	15	*43	33	29	10	7.8	11	9.3	7.2
29	8.0	14	14	14	-	25	22	10	7.4	*11	8.4	6.8
30	7.7	13	13	14	-------	30	17	10	7.2	10	8.0	7.0
31	8.0	-------	*12	14	-------	37	-------	10	-------	10	8.0	-------
Total	459.5	688.8	437.4	466	577	695	694	422	281.2	471.6	438.9	226.1
Mean	14.8	23.0	14.1	15.0	20.6	22.4	23.1	13.6	9.37	15.2	14.2	7.54
Cfsm	1.44	2.23	1.37	1.46	2.00	2.17	2.24	1.32	0.910	1.48	1.38	0.732
In.	1.66	2.49	1.58	1.68	2.08	2.50	2.50	1.52	1.02	1.71	1.59	0.82

Calendar year 1957: Max 175 Min 2.2 Mean 13.8 Cfsm 1.34 In. 18.14
Water year 1957-58: Max 108 Min 6.6 Mean 16.0 Cfsm 1.55 In. 21.15

* Discharge measurement made on this day.

1910. North Fork Broad River near Carnesville, Ga.

Location.--Lat 34°19', long 83°11', at bridge on State Highway 51, 1 mile downstream from Unawatti Creek, 3 miles upstream from confluence with Middle Fork Broad River, and 4¼ miles southeast of Carnesville, Franklin County.

Drainage area.--119 sq mi.

Records available.--October 1942 to December 1944, April 1954 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 600.33 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Oct. 1, 1942, to Dec. 31, 1944, wire-weight gage at same site and datum.

Average discharge.--6 years, 144 cfs.

Extremes.--Maximum discharge during year, 1,950 cfs Nov. 19 (gage height, 5.85 ft); minimum, 56 cfs Sept. 12.
1942-44, 1954-58: Maximum discharge, 4,700 cfs Jan. 18, 1943 (gage height, 7.6 ft, from graph based on gage readings); minimum, 16 cfs Oct. 5, 1954.

Remarks.--Records good. Storm runoff at gage affected for short period by eight small flood-detention reservoirs (combined capacity, 2,950 acre-ft) Oct. 1 to Jan. 5, nine reservoirs (combined capacity, 4,070 acre-ft) Jan. 6 to June 20, and ten reservoirs (combined capacity, 5,370 acre-ft) June 21 to Sept. 30.

Revisions (water years).--WSP 1383: 1943-44.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

2.2	50	4.0	590
2.5	100	5.0	1,170
3.0	230	6.0	2,060

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	145	75	180	132	182	430	335	192	125	66	88	80
2	148	75	160	130	155	260	254	192	152	*63	84	73
3	248	75	150	130	140	203	*224	182	172	63	84	70
4	510	73	152	128	130	182	242	178	135	72	80	68
5	358	73	138	122	130	168	218	175	125	84	78	66
6	190	72	*130	120	192	168	335	263	115	323	75	66
7	*135	72	130	122	299	175	269	308	110	182	73	65
8	110	98	305	122	230	188	218	251	110	188	77	65
9	94	120	290	112	182	260	200	206	118	266	73	60
10	88	86	206	*108	165	269	230	190	160	192	68	59
11	82	77	172	112	158	224	236	182	130	155	80	58
12	100	75	148	110	148	*185	200	182	110	155	72	68
13	120	75	138	132	142	245	185	178	100	128	344	92
14	92	94	138	236	135	245	178	*165	94	175	317	75
15	88	105	135	172	155	200	480	160	90	203	165	70
16	82	102	130	142	160	178	1,170	152	90	175	112	73
17	100	180	125	130	138	170	658	148	84	128	98	72
18	120	518	120	122	130	296	338	142	84	108	88	66
19	96	1,210	122	118	130	266	280	142	82	96	78	65
20	90	554	209	115	135	215	227	162	82	112	75	63
21	88	260	275	160	*140	190	209	155	84	125	73	88
22	84	180	200	172	140	178	215	142	75	188	72	125
23	*78	506	162	142	142	170	230	135	75	200	68	86
24	77	354	150	410	138	180	200	130	72	254	77	78
25	77	720	140	498	135	290	188	128	70	284	422	75
26	75	638	257	338	383	290	182	125	72	175	450	70
27	77	362	206	233	705	335	180	120	80	140	185	68
28	75	224	172	185	780	329	200	122	75	128	125	65
29	75	263	160	162	-	275	233	125	72	112	102	63
30	75	263	142	152	-------	275	215	115	70	*96	90	63
31	75	-------	135	145	-------	526	-------	112	-------	90	82	-------
Total	3,852	7,579	5,277	5,212	5,799	7,565	8,509	5,159	3,013	4,706	3,953	2,155
Mean	124	253	170	168	207	244	284	166	100	152	128	71.8
Cfsm	1.04	2.13	1.43	1.41	1.74	2.05	2.39	1.39	0.840	1.28	1.08	0.603
In.	1.20	2.38	1.65	1.63	1.81	2.36	2.67	1.60	0.94	1.48	1.24	0.67

Calendar year 1957: Max 1,460 Min 22 Mean 134 Cfsm 1.13 In. 15.27
Water year 1957-58: Max 1,210 Min 58 Mean 172 Cfsm 1.45 In. 19.63

Peak discharge (base, 1,500 cfs).--Nov. 19 (3 a.m.) 1,950 cfs (5.85 ft); Apr. 15 (12 p.m.) 1,600 cfs (5.50 ft).

* Discharge measurement made on this day.

1920. Broad River near Bell, Ga.

Location.--Lat 33°58', long 82°46', at downstream side of main channel pier of bridge on State Highway 17, half a mile downstream from Long Creek, 1 mile south of Bell's Crossroads, and 12 miles southeast of Elberton, Elbert County.

Drainage area.--1,430 sq mi, approximately.

Records available.--October 1926 to September 1932, August 1937 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 357.16 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to October 1928, staff gage at railroad bridge about 1 mile downstream at datum 1.12 ft lower. October 1928 to July 1932 staff gage and August 1937 to January 1939 wire-weight gage, at present site and datum.

Average discharge.--27 years, 1,658 cfs.

Extremes.--Maximum discharge during year, 15,200 cfs Apr. 17 (gage height, 18.3 ft); minimum, 419 cfs Sept. 10, 11.
1926-32, 1937-58: Maximum discharge, 79,400 cfs Oct. 2, 1929 (gage height, 34.8 ft), from rating curve extended above 27,000 cfs on basis of slope-conveyance studies; minimum, 108 cfs Oct. 8, 1954.

Remarks.--Records good except those for period of no gage-height record, which are fair.

Revisions (water years).--WSP 1172: 1928-30. WSP 1383: Drainage area.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1, 2, May 1-13, May 27 to Aug. 13, Aug. 16 to Sept. 30)

3.2	405	10.0	5,180
4.0	720	14.0	9,300
6.0	1,820	18.0	14,700

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	795	560	3,250	1,310	1,820	5,950	3,640	2,060	1,070	680	770	540
2	1,070	560	2,220	1,280	1,900	3,100	2,780	2,140	1,220	660	745	508
3	2,460	560	1,760	1,200	1,580	2,460	2,380	1,980	1,460	660	770	484
4	8,090	560	1,640	1,140	1,430	2,060	2,780	1,820	1,310	680	720	472
5	9,300	560	1,580	1,120	1,340	1,820	3,400	1,760	1,200	700	700	468
6	4,510	560	1,400	1,070	2,860	*1,700	3,560	2,220	1,120	820	660	464
7	1,900	540	1,310	1,120	7,150	1,620	4,240	3,100	1,040	1,460	620	456
8	1,280	560	2,460	1,170	6,850	2,780	2,860	2,620	1,040	1,040	600	448
9	1,020	620	4,150	1,100	3,560	5,180	2,300	2,060	1,040	1,700	600	430
10	870	720	3,400	1,040	2,220	5,750	2,380	1,820	1,070	2,140	600	422
11	795	660	*2,460	1,020	1,820	3,640	2,860	1,760	1,120	1,820	580	419
12	720	600	1,820	1,040	1,700	2,620	2,460	1,820	1,020	1,370	820	422
13	700	600	1,520	1,040	1,580	3,100	2,140	2,220	945	1,140	970	500
14	720	600	1,430	1,490	1,460	4,420	1,900	a1,820	870	1,140	*2,460	600
15	660	745	1,400	1,820	1,520	3,250	*3,250	a1,580	845	1,580	1,900	540
16	640	820	1,340	1,460	1,820	2,460	*12,500	a1,520	845	1,580	1,100	508
17	640	770	1,280	1,280	1,640	2,140	14,200	a1,460	845	1,170	870	508
18	700	2,140	1,220	1,200	1,310	2,620	7,050	a1,430	820	970	770	504
19	720	6,350	1,200	1,120	1,310	3,560	3,480	a1,370	820	870	680	*476
20	660	9,660	1,370	1,100	1,310	2,780	2,860	a1,340	795	795	640	464
21	620	4,150	2,860	*1,140	1,310	2,300	2,540	a1,310	795	945	620	484
22	600	2,060	2,780	1,520	1,340	1,980	2,540	a1,310	995	895	600	600
23	580	6,950	1,820	1,460	1,340	1,820	3,020	a1,280	920	1,140	580	770
24	600	9,300	1,580	3,940	1,340	1,820	2,620	a1,250	820	1,140	560	620
25	600	8,310	1,460	9,780	1,280	5,080	2,220	a1,220	*770	1,700	600	540
26	600	10,500	1,760	7,050	2,780	5,180	1,980	a1,200	720	1,640	1,280	512
27	580	7,050	2,460	3,480	7,980	5,270	1,900	*1,220	870	1,100	600	500
28	580	3,180	1,820	2,380	9,420	4,800	1,980	1,170	870	1,040	745	480
29	*560	2,380	1,580	1,900	-	3,890	2,380	1,120	770	945	620	460
30	560	3,980	1,460	1,760	-------	3,100	2,300	1,120	720	945	580	448
31	560	-------	1,340	1,640	-------	3,480	-------	1,070	-------	795	540	-------
Total	44,690	86,605	59,130	60,170	72,970	101,930	106,500	51,170	28,745	35,260	24,900	15,047
Mean	1,442	2,887	1,907	1,941	2,606	3,288	3,552	1,651	958	1,137	803	502
Cfsm	1.01	2.02	1.33	1.36	1.82	2.30	2.48	1.15	0.670	0.795	0.562	0.351
In.	1.16	2.25	1.53	1.57	1.90	2.65	2.77	1.33	0.75	0.92	0.65	0.39

Calendar year 1957: Max 11,300 Min 165 Mean 1,412 Cfsm 0.987 In. 13.39
Water year 1957-58: Max 14,200 Min 419 Mean 1,883 Cfsm 1.32 In. 17.87

Peak discharge (base, 14,000 cfs).--Apr. 17 (6 a.m.) 15,200 cfs (18.3 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded graph and 1 staff-gage reading.

1925. Little River near Mount Carmel, S. C.

Location.--Lat 34°04', long 82°30', on right bank 480 ft downstream from Island Ford Bridge, 2.8 miles upstream from Calhoun Creek, and 4.5 miles north of Mount Carmel, McCormick County.

Drainage area.--217 sq mi.

Records available.--December 1939 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 353.97 ft above mean sea level, datum of 1929, supplementary adjustment of 1936.

Average discharge.--18 years (1940-58), 198 cfs.

Extremes.--Maximum discharge during year, 5,760 cfs Nov. 19 (gage height, 18.20 ft); minimum, 20 cfs Sept. 7, 8.
1939-58: Maximum discharge, 20,800 cfs Aug. 14, 1940 (gage height, 29.60 ft, from high-water mark), from rating curve extended above 13,000 cfs by logarithmic plotting; minimum, 0.7 cfs Oct. 9, 1954.

Remarks.--Records good except those for period of no gage-height record, which are fair.

Revisions (water years).--WSP 1433: 1948.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	76	40	479	149	a280	584	396	205	85	44	44	35
2	128	40	304	145	a500	331	295	328	91	41	43	33
3	102	40	252	133	a380	270	252	650	96	40	41	29
4	165	40	236	126	a240	227	304	301	89	56	39	27
5	166	40	211	118	a190	208	349	227	88	76	38	27
6	82	40	190	118	a400	197	304	227	83	61	35	34
7	57	39	181	123	a1,100	219	899	304	79	72	34	24
8	48	41	660	*129	a420	304	643	*244	79	69	35	25
9	42	49	642	118	a280	1,110	286	200	80	305	35	26
10	40	53	373	112	a220	762	294	181	76	208	35	25
11	38	44	270	115	a220	386	406	210	77	112	33	26
12	36	41	219	115	*195	286	295	434	69	94	39	45
13	35	41	184	121	182	385	244	227	66	99	125	97
14	40	*44	177	211	174	521	219	177	64	118	392	52
15	38	49	168	195	184	349	795	158	60	133	162	41
16	36	60	161	152	236	270	3,060	147	57	131	83	37
17	37	62	153	136	189	236	2,410	141	56	80	73	*37
18	40	265	149	128	157	354	712	136	*55	68	89	34
19	52	3,720	144	118	163	406	406	131	54	61	59	29
20	41	4,170	185	115	168	295	331	131	52	56	52	27
21	38	1,070	304	145	158	244	278	141	50	54	47	27
22	*37	322	211	211	157	227	333	131	55	50	45	31
23	38	1,980	168	163	158	208	396	120	59	49	44	36
24	39	1,780	155	1,400	157	204	278	115	57	52	42	31
25	40	2,040	150	2,600	150	599	236	110	53	82	50	29
26	41	1,690	308	1,550	893	*499	211	107	54	65	48	26
27	39	671	304	453	1,520	543	198	101	69	57	47	25
28	38	340	206	313	1,390	387	219	97	56	73	44	24
29	38	295	179	a260	-	304	252	96	48	54	39	21
30	39	453	160	a200	-------	270	227	91	45	46	36	22
31	40	-------	149	a220	-------	349	-------	86	-------	*44	35	-------
Total	1,726	19,559	7,632	10,192	10,461	11,534	15,528	5,954	2,002	2,550	1,963	982
Mean	55.7	652	246	329	374	372	518	192	66.7	82.3	63.3	32.7
Cfsm	0.257	3.00	1.13	1.52	1.72	1.71	2.39	0.885	0.307	0.379	0.292	0.151
In.	0.30	3.35	1.30	1.75	1.79	1.97	2.67	1.02	0.34	0.44	0.34	0.17

Calendar year 1957: Max 4,170 Min 2.9 Mean 173 Cfsm 0.797 In. 10.81
Water year 1957-58: Max 4,170 Min 21 Mean 247 Cfsm 1.14 In. 15.44

Peak discharge (base, 2,500 cfs).--Nov. 19 (5:45 p.m.) 5,760 cfs (18.20 ft); Nov. 25 (12:30 p.m.) 2,640 cfs (11.47 ft); Jan. 25 (1 a.m.) 3,050 cfs (12.65 ft); Apr. 16 (10:30 a.m.) 3,370 cfs (13.36 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, observer's inspections, and weather records.

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1935. Little River near Washington, Ga.

Location.--Lat 33°36'40", long 82°44'40", near left bank on downstream side of highway bridge pier, 700 ft downstream from Reedy Creek, 4 miles downstream from Georgia Railroad bridge, 6 miles upstream from Williams Creek, and 9 miles south of Washington, Wilkes County.

Drainage area.--291 sq mi.

Records available.--October 1949 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 360 ft (by barometer).

Average discharge.--9 years, 206 cfs.

Extremes.--Maximum discharge during year, 9,220 cfs Apr. 17 (gage height, 24.4 ft); minimum, 8.9 cfs Sept. 30.
1949-58: Maximum discharge, 13,100 cfs Mar. 4, 1952 (gage height, 27.6 ft); minimum, 0.32 cfs Oct. 12-16, 1954.

Remarks.--Records good except those for periods of doubtful or no gage-height record, which are fair.

Revisions.--WSP 1383: Drainage area.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 22 to Nov. 18, Feb. 10 to Apr. 17)

2.0	8.0	7.0	670
2.2	14	12.0	1,760
2.7	44	17.0	3,480
3.2	98	20.0	5,440
4.0	202	23.0	8,000

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	300	60	1,790	220	560	860	357	286	94	45	51	16
2	396	57	1,000	270	484	412	307	259	208	40	56	15
3	600	54	412	220	335	321	276	255	219	39	60	14
4	1,200	53	342	200	283	279	746	226	134	54	57	13
5	1,500	52	299	180	262	248	1,020	208	114	59	50	13
6	560	50	260	171	1,020	231	1,060	199	104	64	45	13
7	250	49	340	202	4,700	*342	644	209	93	258	41	12
8	160	60	1,060	219	4,470	900	372	201	92	106	*40	12
9	120	89	1,280	185	1,840	1,280	321	181	94	321	40	12
10	90	79	860	170	560	1,370	436	168	106	*283	37	11
11	70	64	*670	171	404	708	492	156	81	212	36	11
12	60	56	390	168	342	396	364	194	73	124	35	11
13	56	54	300	179	300	610	293	173	68	99	34	13
14	54	77	270	517	271	794	259	153	63	144	34	15
15	52	142	250	357	300	508	708	141	62	396	36	15
16	52	123	230	264	460	350	7,460	132	71	258	34	17
17	64	106	220	223	335	300	*5,760	124	64	130	31	16
18	64	104	220	199	245	364	1,840	118	62	94	30	14
19	60	1,130	220	185	234	436	585	111	60	85	28	*13
20	56	1,490	250	177	245	335	444	137	57	68	26	12
21	54	1,040	530	219	227	282	380	219	57	68	25	12
22	55	357	400	*278	222	251	396	163	54	81	24	16
23	56	1,410	300	230	222	230	508	130	56	58	23	15
24	62	2,250	270	1,200	213	223	380	118	57	52	22	16
25	71	2,250	260	3,440	206	585	314	114	54	237	22	14
26	64	3,100	420	2,620	534	1,020	286	110	50	222	24	12
27	57	1,630	550	1,040	1,320	1,510	269	104	63	182	24	12
28	52	551	350	460	1,460	1,150	286	*104	61	171	22	11
29	50	428	280	364	-	662	484	116	52	89	20	9.5
30	*52	1,240	240	350	-------	460	372	104	48	65	18	9.2
31	57	-------	220	314	-------	420	-------	94	-------	56	17	-------
Total	6,394	18,205	14,483	14,992	22,054	17,837	27,419	5,007	2,471	4,160	1,042	394.7
Mean	206	607	467	484	788	575	914	162	82.4	134	33.6	13.2
Cfsm	0.708	2.09	1.60	1.66	2.71	1.98	3.14	0.557	0.283	0.460	0.115	0.045
In.	0.82	2.33	1.84	1.91	2.82	2.28	3.50	0.64	0.32	0.53	0.13	0.05

Calendar year 1957: Max 3,100 Min 9.0 Mean 276 Cfsm 0.948 In. 12.85
Water year 1957-58: Max 7,460 Min 9.2 Mean 368 Cfsm 1.26 In. 17.17

Peak discharge (base, 3,000 cfs).--Nov. 26 (8 a.m.) 3,390 cfs (16.8 ft); Jan. 25 (3 p.m.) 3,960 cfs (17.9 ft); Feb. 7 (6 p.m.) 5,760 cfs (20.4 ft); Apr. 17 (5 p.m.) 9,220 cfs (24.4 ft).

* Discharge measurement made on this day.
Note.--Doubtful or no gage-height record Oct. 3-21, Dec. 6 to Jan. 5; discharge estimated on basis of 1 discharge measurement, recorded graph, and records for Broad River near Bell.

1945. Clark Hill Reservoir near Clarks Hill, S. C.

Location.--Lat 33°39'40", long 82°12'00", in left spillway elevator tower of dam on Savannah River, 1.6 miles west of Clarks Hill, McCormick County, 3.7 miles upstream from Kiokee Creek, and at mile 222.3 upstream from Savannah, Ga.

Drainage area.--6,150 sq mi, approximately.

Records available.--October 1951 to September 1952 (elevations and contents at end of month), October 1952 to September 1958.

Gage.--Water-stage recorder. Datum of gage is at mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers). Prior to Oct. 1, 1952, staff gage at same site and datum.

Extremes.--Maximum elevation during year, 332.08 ft Apr. 17; minimum, 320.45 ft Nov. 15.
1952-58: Maximum elevation, 333.20 ft May 7, 1953; minimum, 296.48 ft Feb. 1, 1956.

Remarks.--Lake is formed by concrete dam with earth dam at each end; dam completed in 1952. Storage began in December 1951. Usable capacity, 75,360,000,000 cu ft between elevations 305.0 ft (normal limit of drawdown) and 335.0 ft (top of spillway gates). Dead storage below 305.0 ft, 50,960,000,000 cu ft. Figures given herein represent usable contents. Elevation of spillway crest, 300.0 ft. Water is used for flood control, generation of power, and navigation.

Capacity table, water year 1957-58 (elevation, in feet, and usable contents, in billions of cubic feet)
(Computed from table prepared by Corps of Engineers)

320.0	30.06
325.0	43.12
330.0	58.37
335.0	75.36

Elevation, in feet, at 12 p.m., water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20.51	21.38	28.94	28.17	28.37	29.99	30.90	30.47	30.08	28.60	28.91	26.54
2	20.92	21.34	28.83	27.94	28.52	30.31	30.62	30.26	30.07	28.48	28.90	26.38
3	21.15	21.41	28.67	27.70	28.41	30.31	30.30	30.55	30.09	28.34	28.98	26.24
4	21.73	21.24	28.53	27.64	28.25	30.24	30.27	30.62	30.05	28.32	28.78	26.12
5	22.44	21.12	28.29	27.69	28.12	30.15	30.40	30.70	30.00	28.30	28.62	25.99
6	22.87	21.01	28.09	27.40	28.60	30.12	30.90	30.62	29.95	28.38	28.45	25.92
7	22.87	20.90	28.21	27.16	29.24	30.14	30.75	30.55	29.97	28.35	28.29	25.98
8	22.78	20.91	28.65	26.88	29.60	30.30	30.47	30.44	30.07	28.45	28.11	25.84
9	22.71	20.86	28.83	26.55	29.88	30.86	30.17	30.22	29.93	28.89	28.08	25.65
10	22.63	20.93	28.80	26.23	29.65	30.86	30.02	30.22	29.84	29.32	28.15	25.51
11	22.52	20.79	28.72	26.25	29.40	30.71	30.02	30.23	29.78	29.54	28.09	25.39
12	22.50	20.64	28.52	26.28	29.10	30.48	30.23	30.14	29.70	29.70	27.87	25.34
13	22.60	20.53	28.37	26.15	28.78	30.37	30.47	30.10	29.60	30.02	27.75	25.30
14	22.51	20.51	28.38	26.05	28.41	30.22	30.38	30.05	29.60	30.10	27.74	25.32
15	22.39	20.50	28.49	26.04	28.58	30.26	30.90	29.96	29.70	30.06	27.69	25.24
16	22.30	20.61	28.32	25.92	28.67	30.37	31.81	29.87	29.56	29.86	27.73	25.10
17	22.28	20.80	28.16	25.79	28.47	30.12	32.07	30.00	29.45	29.72	27.83	25.00
18	22.23	21.09	28.00	25.84	28.28	30.02	31.91	30.14	29.36	29.46	27.68	24.92
19	22.24	22.48	27.87	25.91	28.09	29.87	31.63	30.13	29.26	29.45	27.52	24.80
20	22.32	23.71	27.87	25.72	27.92	29.71	31.21	30.16	29.19	29.55	27.38	24.73
21	22.17	24.22	28.14	25.70	27.73	29.55	30.75	30.12	29.17	29.45	27.24	24.80
22	22.05	24.45	28.46	25.67	27.77	29.65	30.54	30.01	29.31	29.37	27.10	24.68
23	21.93	25.46	28.41	25.64	27.87	29.80	30.46	29.91	29.20	29.32	27.08	24.59
24	21.93	26.32	28.37	26.46	27.78	29.71	30.41	29.97	29.09	29.31	27.14	24.52
25	21.86	27.23	28.37	27.47	27.70	29.86	30.31	30.12	28.97	29.30	27.03	24.42
26	21.85	27.83	28.43	28.20	28.08	30.13	30.42	30.06	28.96	29.37	26.99	24.35
27	21.89	28.07	28.48	28.30	28.93	30.31	30.62	30.00	28.90	29.52	26.86	24.30
28	21.73	28.17	28.52	28.27	29.58	30.42	30.66	30.01	28.90	29.42	26.74	24.30
29	21.62	28.20	28.61	28.23	-	30.57	30.80	29.92	28.95	29.32	26.60	24.14
30	21.55	28.64	28.41	28.13	------	30.86	30.69	29.89	28.78	29.18	26.59	23.99
31	21.46	------	28.24	28.10	------	30.92	------	29.95	------	29.05	26.65	------
(†)	33.87	54.22	53.00	52.58	57.09	61.50	60.72	58.22	54.65	55.47	48.16	40.48
(‡)	+974	+7,851	-455	-157	+1,864	+1,647	-301	-933	-1,377	+306	-2,729	-2,963

Calendar year 1957..... ‡ +1,124
Water year 1957-58..... ‡ +292

† Contents, in billions of cubic feet, at end of month.
‡ Change in contents, equivalent in cubic feet per second.
Note.--Add 300 ft to obtain elevation above mean sea level.

1960. Stevens Creek near Modoc, S. C.

Location.--Lat 33°43'45", long 82°10'55", on left bank at bridge on State Highway 23, 1.4 miles east of Modoc, McCormick County, and 3.2 miles downstream from Turkey Creek.

Drainage area.--545 sq mi.

Records available.--November 1929 to September 1931, February 1940 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 197.34 ft above mean sea level, datum of 1929, supplementary adjustment of 1935 (levels by Southeastern Power Administration). Oct. 15, 1929, to Sept. 30, 1931, staff gage 1,100 ft upstream at different datum.

Average discharge.--19 years (1930-31, 1940-58), 251 cfs.

Extremes.--Maximum discharge during year, 15,900 cfs Apr. 16; maximum gage height, 28.87 ft Apr. 17 minimum discharge, 2.5 cfs Sept. 11, 12, 30.
1929-31, 1940-58: Maximum discharge, 35,100 cfs Aug. 14, 1940; maximum gage height, 41.08 ft Aug. 14, 1940, no flow Sept. 14, 15, Sept. 24 to Nov. 16, Nov. 22, 1954.
Revisions.--The maximum discharge for the water year 1954 has been revised to 4,110 cfs Jan. 16, 1954, and maximum gage height to 14.47 ft Jan. 16, 1954, superseding figures and date published in WSP 1330.

Remarks.--Records good except those computed from once-daily radio-transmitter signals, which are fair. Slight diurnal fluctuation during low flow caused by small mills above station.

Revisions.--WSP 1038: Drainage area.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 5 to Nov. 24, Feb. 7-27; rate of change in stage used as a factor Oct. 1-3, Nov. 19, 20, 23-26, 30, Dec. 1, 8-10, Jan 24-26, Feb. 6-8, 26-28, Mar. 9, 10, 25, 27, Apr. 4-7, 15-18, Apr. 29 to May 2, July 9, 10, 14, 15)

0.4	2.5	2.0	275
.6	10	8.0	1,900
.8	23	16.0	4,600
1.0	45	20.0	7,010
1.2	76	27.0	13,600
1.5	144		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,050	25	1,520	214	666	923	734	739	55	38	38	15
2	1,790	22	586	217	680	545	572	1,240	59	29	27	21
3	1,660	20	370	196	410	450	396	572	69	24	45	14
4	1,110	22	299	175	321	370	1,890	383	68	82	57	7.6
5	572	25	262	157	283	324	1,510	294	68	133	38	6.4
6	256	28	227	*152	3,660	291	3,240	*251	61	73	44	5.3
7	154	25	201	180	9,190	342	2,200	291	52	66	18	5.0
8	101	21	1,810	424	2,590	761	734	302	52	84	14	4.2
9	76	21	2,050	283	950	2,140	491	230	52	2,190	13	3.9
10	61	34	2,120	206	*640	1,850	478	188	45	1,160	13	2.8
11	52	42	815	183	518	842	1,250	167	46	424	35	2.5
12	44	*34	450	173	450	532	707	160	41	324	201	3.2
13	39	32	307	165	396	984	437	180	35	259	74	3.9
14	41	26	259	396	370	1,300	348	152	31	1,290	49	2.8
15	34	39	235	437	383	707	1,740	134	28	1,260	98	*3.2
16	34	61	214	291	707	478	13,300	119	*28	g329	63	3.6
17	29	52	204	232	504	383	10,500	110	24	g183	41	3.2
18	34	46	188	193	345	518	1,650	103	26	g149	32	3.2
19	30	1,540	175	173	302	815	707	96	20	g105	25	3.6
20	31	781	180	160	291	532	545	92	20	g1,210	20	3.6
21	32	256	410	204	278	396	437	117	17	g485	15	4.2
22	33	154	332	572	270	332	464	152	32	g173	14	7.1
23	31	3,200	230	370	270	294	896	117	256	g129	15	13
24	29	2,120	196	4,060	262	*270	558	92	100	g105	11	12
25	29	5,200	206	7,190	248	808	370	84	56	g356	14	7.6
26	29	4,540	869	1,900	2,670	896	299	80	39	g136	33	5.0
27	31	1,140	923	815	4,460	1,800	270	78	87	g96	35	8.4
28	36	666	450	545	2,520	1,060	351	73	180	*g74	22	3.6
29	33	788	332	424	-	599	2,360	66	77	58	17	3.2
30	32	2,380	280	383	-------	450	1,220	61	49	43	14	2.8
31	24	-------	232	348	-------	518	-------	59	-------	37	12	-------
Total	9,537	23,340	16,932	21,418	34,634	22,510	50,654	6,782	1,773	11,104	1,147	184.9
Mean	308	778	546	691	1,237	726	1,688	219	59.1	358	37.0	6.16
Cfsm	0.565	1.43	1.00	1.27	2.27	1.33	3.10	0.402	0.108	0.657	0.068	0.011
In.	0.65	1.60	1.15	1.46	2.36	1.53	3.46	0.46	0.12	0.76	0.08	0.01

Calendar year 1957: Max 5,650 Min 2.1 Mean 352 Cfsm 0.646 In. 8.77
Water year 1957-58: Max 13,300 Min 2.5 Mean 548 Cfsm 1.01 In. 13.64

Peak discharge (base, 6,000 cfs).--Nov. 25 (11:30 p.m.) 8,450 cfs (21.64 ft at 1 a.m. Nov. 26); Jan. 25 (5:30 a.m.) 9,520 cfs (22.78 ft at 7 a.m.); Feb. 7 (8 a.m.) 11,000 cfs (24.23 ft at 9:30 a.m.); Apr. 16 (11:45 p.m.) 15,900 cfs (28.87 ft at 1:30 a.m. Apr. 17).

* Discharge measurement made on this day.
g Computed from once-daily radio-transmitter signals.

1970. Savannah River at Augusta, Ga.

Location.--Lat 33°22'25", long 81°56'35", at New Savannah Bluff lock and dam, 0.2 mile upstream from Butler Creek, 12 miles downstream from Augusta, Richmond County, and at mile 188.2 upstream from Savannah.

Drainage area.--7,508 sq mi, including that of Butler Creek.

Records available.--October 1883 to December 1891, January 1896 to December 1906, January 1925 to September 1958. Monthly discharge only for some periods, published in WSP 1303. Gage-height records collected at site of Fifth Street gage since 1875 and at New Savannah Bluff lock and dam sites since 1937 are contained in reports of U. S. Weather Bureau.

Gage.--Water-stage recorder. Datum of gage is 97.00 ft above mean sea level (Corps of Engineers bench mark). Oct. 1, 1883, to Dec. 31, 1891, Jan. 1, 1896, to Dec. 31, 1906, Jan. 1, 1925, to Sept. 30, 1932, staff gage or water-stage recorder at Fifth Street Bridge at datum 102.06 ft above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Southeastern Engineering Co.). Oct. 1, 1932, to Sept. 30, 1936, water-stage recorder at Thirteenth Street Bridge at datum 104.56 ft above mean sea level (levels by Corps of Engineers). Oct. 1, 1936, to Nov. 10, 1948, water-stage recorder at site 0.2 mile downstream from present site at present datum.

Average discharge.--51 years, 10,180 cfs.

Extremes.--Maximum discharge during year, 66,300 cfs Apr. 18 (gage height, 22.91 ft); minimum, 4,440 cfs June 23; minimum daily, 5,000 cfs June 23.

1883-91, 1896-1906, 1925-58: Maximum discharge, 350,000 cfs Oct. 3, 1929; maximum gage height, 46.3 ft Sept. 27, 1929 (at site and datum then in use); minimum discharge, 648 cfs Sept. 24, 1939, from rating curve extended below 1,400 cfs; minimum daily, 1,040 cfs Oct. 2, 1927.

Maximum flood known occurred in 1796, discharge, 360,000 cfs (gage height, 40 ft, marked by local residents, at site and datum of Fifth Street gage) by conveyance-slope study.

Remarks.--Records good. Flow regulated by Clark Hill Reservoir (see p. 235 for monthly change in contents), Stevens Creek powerplant, and New Savannah Bluff lock and dam above station.

Revisions (water years).--WSP 1433: 1888, 1896-99, 1902-3, 1906-7, 1932.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*9,510	6,730	13,200	14,800	10,600	17,100	18,300	24,700	5,460	6,730	9,510	5,640
2	13,000	5,840	12,400	14,000	6,230	8,470	26,400	26,100	5,550	8,690	6,330	5,740
3	14,200	5,360	14,800	16,700	7,120	9,790	26,700	19,400	7,700	8,470	6,030	5,930
4	14,000	5,460	16,900	15,500	12,400	11,900	25,800	9,150	8,030	7,150	6,700	6,930
5	11,000	5,740	16,500	9,840	12,400	13,000	20,400	9,570	8,140	5,550	9,630	6,430
6	6,830	5,930	16,200	10,400	13,800	14,000	12,500	17,100	7,700	5,460	9,990	5,740
7	6,240	6,830	13,600	*15,700	19,000	13,800	24,200	17,600	5,740	5,460	9,990	5,740
8	8,140	7,110	8,080	18,600	23,300	12,300	29,800	18,800	5,550	6,030	9,390	5,840
9	8,030	6,030	10,800	18,400	16,400	10,100	28,200	*20,400	5,460	8,360	6,630	5,740
10	8,030	5,260	21,100	17,200	11,900	14,000	27,900	19,200	7,810	10,200	5,840	6,130
11	7,370	5,460	20,400	14,700	*18,800	22,800	20,500	13,800	8,910	6,790	6,530	7,040
12	6,030	5,840	18,800	7,280	20,600	21,100	15,600	12,800	8,470	6,430	8,910	7,150
13	5,360	*5,930	16,500	7,920	21,800	22,600	8,030	13,600	7,810	5,640	*10,500	5,740
14	5,840	6,830	13,500	11,000	22,000	25,000	8,490	12,600	5,930	7,250	11,000	5,740
15	6,930	7,480	7,540	12,500	19,500	20,100	14,200	12,500	5,640	12,000	9,870	5,740
16	5,740	6,030	9,090	12,900	10,500	13,900	34,600	12,000	5,550	17,200	6,440	*5,740
17	6,230	5,460	11,900	12,600	9,240	12,300	57,100	12,100	*6,130	17,200	5,170	5,740
18	7,260	5,550	13,300	9,990	13,500	16,900	57,100	8,550	g6,500	16,900	6,880	5,740
19	5,740	8,800	15,500	5,550	13,900	19,700	34,800	6,530	g7,500	13,400	8,360	5,640
20	5,460	11,500	12,800	7,280	13,500	20,400	30,500	6,730	g7,500	6,330	8,910	5,740
21	5,840	7,540	10,200	10,400	12,400	20,400	30,100	7,480	g6,000	6,730	8,030	5,640
22	5,840	7,700	6,930	10,800	12,500	15,100	29,800	11,000	g5,500	9,750	7,700	5,640
23	5,740	11,900	9,710	10,800	8,480	7,600	21,300	11,400	g5,000	9,750	6,590	5,640
24	6,830	12,300	11,100	11,400	6,030	6,950	18,000	10,100	6,230	9,150	5,840	5,640
25	6,730	12,900	12,000	16,200	8,360	*12,400	19,000	6,530	7,590	8,470	5,930	5,640
26	6,030	g24,400	12,000	18,800	11,100	16,700	15,100	5,930	7,480	6,330	8,690	5,740
27	5,260	23,600	12,100	12,200	16,700	16,700	8,280	6,330	7,040	6,130	9,510	5,550
28	6,530	19,700	14,800	13,300	20,800	17,200	8,130	8,140	5,640	6,230	9,030	5,740
29	6,930	15,200	11,400	13,500	-	15,700	12,000	8,470	5,360	*8,760	7,180	5,640
30	5,550	14,900	9,870	13,000	-------	10,600	22,900	5,840	5,360	10,400	6,130	5,640
31	5,550	-------	13,900	13,000	-------	10,100	-------	5,460	-------	9,750	5,640	-------
Total	227,770	279,310	406,920	396,260	392,860	468,710	705,730	379,910	198,280	272,690	242,880	176,380
Mean	7,347	9,310	13,130	12,780	14,030	15,120	23,520	12,260	6,609	8,796	7,835	5,879
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 24,400 Min 5,170 Mean 7,646 Cfsm - In. -
Water year 1957-58: Max 57,100 Min 5,000 Mean 11,360 Cfsm - In. -

* Discharge measurement made on this day.
g Computed from several staff-gage readings daily at lock.

1975. Savannah River at Burtons Ferry Bridge, near Millhaven, Ga.

Location.--Lat 32°56'20", long 81°30'10", on downstream side of left pier of drawspan of bridge on U. S. Highway 301, 2 miles downstream from Rocky Creek, 9 miles east of Millhaven, Screven County, and at mile 114.5 upstream from Savannah.

Drainage area.--8,650 sq mi, approximately.

Records available.--October 1939 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 52.42 ft above mean sea level, datum of 1929, supplementary adjustment of 1936 (levels by Corps of Engineers).

Average discharge.--19 years, 9,858 cfs.

Extremes.--Maximum discharge during year, 41,400 cfs Apr. 22 (gage height, 18.94 ft); minimum daily, 5,500 cfs Sept. 30.
1939-58: Maximum discharge, 141,000 cfs Aug. 18, 1940 (gage height, 27.0 ft); minimum daily, 2,120 cfs Sept. 9, 1951.
Flood in October 1929 reached a stage of 30.8 ft, from information by Corps of Engineers.

Remarks.--Records good. Considerable regulation by Clark Hill Reservoir (see p. 235 for monthly change in contents), Stevens Creek powerplant, and New Savannah Bluff lock and dam above station. Records of water temperatures for the water year 1958 are published in WSP 1571.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Nov. 22, Dec. 3-11, Dec. 14 to Jan. 14)

Oct. 1 to Apr. 22, July 19 to Sept. 30				Apr. 23 to July 18			
5.3	5,500	14.0	16,600	6.2	6,280	16.0	23,000
6.0	6,160	16.0	23,000	10.0	9,940	19.0	42,200
10.0	10,400	19.0	42,200	14.0	16,100		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,540	6,350	17,600	12,600	15,600	14,600	16,200	16,100	7,100	6,280	9,480	6,060
2	*8,380	6,940	18,100	*13,400	15,200	15,600	15,800	15,900	6,730	6,730	9,370	5,970
3	11,100	7,040	17,400	13,700	13,200	*16,400	15,800	16,300	6,730	8,140	8,160	5,880
4	12,500	6,440	*16,600	14,100	10,800	16,200	16,600	17,600	7,570	8,710	6,940	5,880
5	14,100	6,350	16,000	14,600	11,400	15,400	17,600	19,600	8,420	8,620	6,740	6,260
6	15,200	6,540	15,800	14,400	12,200	14,800	19,600	20,000	8,710	7,860	8,270	6,540
7	14,600	6,540	15,800	13,600	12,900	14,600	22,100	18,200	8,620	7,380	9,370	5,880
8	11,800	6,940	15,800	13,700	13,600	15,000	23,600	17,300	7,760	7,190	9,700	5,680
9	10,500	7,640	15,400	14,600	14,600	15,400	22,600	16,800	7,000	7,100	9,590	5,680
10	9,920	7,240	14,100	15,200	15,600	15,200	22,100	16,600	6,820	8,140	8,380	5,680
11	9,700	6,350	14,100	15,800	16,600	15,000	22,600	17,300	7,660	9,610	6,940	5,780
12	9,040	6,160	14,800	16,600	17,100	15,000	25,200	18,200	8,710	9,200	6,740	6,440
13	8,050	6,350	15,400	16,400	17,600	15,600	26,800	18,800	9,000	8,140	7,940	6,840
14	7,140	6,540	16,600	14,400	17,800	16,400	26,200	18,200	8,800	7,380	9,480	6,350
15	6,840	7,240	17,600	13,200	18,400	17,600	23,000	17,000	7,570	7,570	10,100	5,780
16	7,340	8,160	17,400	12,900	19,200	19,000	20,200	16,100	6,820	9,610	10,000	5,780
17	7,040	7,940	15,200	13,200	20,200	20,500	19,000	15,300	6,730	11,500	8,600	5,780
18	6,740	7,140	13,900	13,200	19,800	21,200	18,600	14,300	7,000	12,700	6,640	5,880
19	7,740	6,940	13,600	12,900	18,600	20,500	20,200	12,800	7,570	13,900	6,440	5,880
20	7,340	8,380	13,700	10,700	17,400	19,600	29,800	10,200	7,950	14,400	8,050	5,680
21	6,640	11,000	14,100	9,040	16,400	18,600	39,900	9,000	8,330	13,900	8,710	5,680
22	6,740	10,400	13,600	10,400	16,000	18,400	40,600	9,100	7,660	11,000	8,710	5,780
23	7,040	9,040	11,300	11,300	15,400	18,600	37,800	10,000	6,820	9,920	8,050	5,780
24	6,840	10,400	10,400	11,800	14,200	18,400	35,000	11,000	6,280	9,920	7,540	5,780
25	7,440	11,700	11,300	12,500	11,600	16,600	33,000	11,000	6,730	9,700	6,640	5,680
26	7,640	12,400	12,000	13,200	10,600	15,000	30,400	*9,400	*7,660	9,040	6,440	5,680
27	7,240	13,200	12,400	14,100	12,100	14,600	27,400	8,040	8,040	7,740	*7,540	5,680
28	6,350	14,100	12,500	*14,800	13,600	15,000	24,000	7,570	7,950	6,740	8,930	5,590
29	*6,540	15,200	13,100	15,400	-	15,400	20,400	8,420	7,380	*6,540	9,040	5,590
30	7,540	16,400	13,200	15,800	-------	16,000	17,300	8,900	6,640	7,340	8,160	5,500
31	6,840	-------	12,400	15,800	-------	*16,400	-------	8,240	-------	9,040	6,840	-------
Total	268,460	263,060	451,200	423,340	427,700	516,600	729,400	433,270	226,760	281,040	253,530	176,440
Mean	8,660	8,769	14,550	13,660	15,280	16,660	24,310	13,980	7,559	9,066	8,178	5,881
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 18,100 Min 5,590 Mean 8,312 Cfsm - In. -
Water year 1957-58: Max 40,600 Min 5,500 Mean 12,190 Cfsm - In. -

* Discharge measurement made on this day.

1980. Brier Creek at Millhaven, Ga.

Location.--Lat 32°56'00", long 81°39'05", near right bank on downstream side of pier of highway bridge at Millhaven, Screven County, 8½ miles upstream from Beaver Dam Creek.

Drainage area.--646 sq mi.

Records available.--October 1936 to September 1958. Monthly discharge only for some periods, published in WSP 1303.

Gage.--Water-stage recorder. Datum of gage is 95.88 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to June 7, 1950, staff gage at site 200 ft downstream at same datum. June 7, 1950, to Apr. 30, 1951, wire-weight gage at present site and datum.

Average discharge.--22 years, 626 cfs.

Extremes.--Maximum discharge during year, 4,440 cfs Apr. 21 (gage height, 11.2 ft); minimum, 146 cfs Sept. 9-13.
1936-58: Maximum discharge, 25,400 cfs Aug. 16, 1940 (gage height, 17.4 ft, from graph based on gage readings); minimum daily, 64 cfs Sept. 5-11, 1954.
Maximum stage known, 25.1 ft in September or October 1929, from information by Georgia State Highway Department.

Remarks.--Records good. Slight diurnal fluctuation at low flow caused by gristmills above station.

Revisions (water years).--WSP 1383: Drainage area. WSP 1503: 1956.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 12-27, July 20 to Aug. 13, Sept. 18-30)

1.0	132	8.0	1,870
3.0	342	10.0	3,220
4.0	491	12.0	5,600
6.0	997		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	306	440	1,760	873	1,560	1,250	1,250	1,420	409	294	261	203
2	330	456	1,760	873	1,290	1,290	1,290	1,210	409	300	244	193
3	381	473	1,600	873	1,100	1,420	1,340	1,030	395	300	239	178
4	528	456	1,380	845	1,030	2,160	1,250	997	409	306	244	173
5	1,120	440	1,380	817	965	2,160	1,210	965	409	342	228	164
6	2,160	409	1,870	762	903	1,700	1,250	903	395	355	*208	159
7	2,040	395	1,760	789	933	1,460	1,340	903	409	440	203	159
8	1,920	381	1,510	933	1,060	1,460	1,340	817	424	456	203	150
9	*2,040	381	1,340	873	1,140	1,460	1,340	736	424	*473	203	146
10	2,040	368	1,210	845	1,100	1,510	*1,290	685	409	509	198	146
11	1,660	368	1,210	845	1,060	1,510	1,420	736	381	569	198	146
12	1,290	368	1,180	817	1,030	1,560	1,600	903	342	661	188	146
13	997	368	1,140	789	1,460	1,600	1,660	789	318	736	183	146
14	845	381	1,180	845	1,560	1,760	1,380	710	294	762	193	150
15	736	424	1,460	933	1,340	1,820	1,250	637	300	1,030	193	154
16	614	473	1,460	933	1,180	1,660	1,460	591	342	1,290	198	164
17	548	528	*1,340	845	1,030	1,420	1,560	548	381	1,180	218	173
18	528	548	1,210	789	933	1,250	1,920	528	440	1,060	234	198
19	509	614	1,060	736	903	1,210	1,820	528	491	933	234	*198
20	491	762	965	710	873	1,210	2,890	548	456	845	234	188
21	491	845	903	736	845	1,180	4,200	614	409	789	223	198
22	473	873	873	789	873	1,100	2,760	548	395	637	203	208
23	456	997	873	*789	965	1,030	1,920	*528	395	509	193	234
24	440	1,100	845	845	933	965	1,510	509	395	395	183	239
25	456	1,100	873	1,030	845	997	1,290	491	395	342	203	234
26	473	1,340	873	1,030	903	1,060	1,210	528	395	306	228	223
27	473	1,460	873	1,140	*1,060	1,030	1,140	528	368	306	239	234
28	473	1,420	903	1,340	1,210	1,030	1,210	473	342	306	234	223
29	456	1,560	965	1,420	-	997	1,760	440	318	381	213	203
30	440	1,820	933	1,560	-------	997	1,660	409	300	318	208	193
31	424	-------	873	1,760	-------	1,140	-------	395	-------	283	203	-------
Total	26,138	21,548	37,562	29,164	30,084	42,396	48,520	21,647	11,549	17,413	6,634	5,523
Mean	843	718	1,212	941	1,074	1,368	1,617	698	385	562	214	184
Cfsm	1.30	1.11	1.88	1.46	1.66	2.12	2.50	1.08	0.596	0.870	0.331	0.285
In.	1.50	1.24	2.17	1.68	1.73	2.44	2.79	1.24	0.66	1.00	0.38	0.32

Calendar year 1957: Max 2,160 Min 111 Mean 560 Cfsm 0.867 In. 11.77
Water year 1957-58: Max 4,200 Min 146 Mean 817 Cfsm 1.26 In. 17.15

Peak discharge (base, 2,000 cfs).--Oct. 6 (10 a.m.) 2,220 cfs (8.6 ft); Mar. 4 (10 p.m.) 2,340 cfs (8.8 ft); Apr. 21 (6 a.m.) 4,440 cfs (11.2 ft).

* Discharge measurement made on this day.

1985. Savannah River near Clyo, Ga.

Location.--Lat 32°31'30", long 81°15'45", on downstream side of center pier of drawspan of bridge on Seaboard Air Line Railroad, 3 miles north of Clyo, Effingham County, and at mile 50.1 upstream from Savannah.

Drainage area.--9,850 sq mi, approximately.

Records available.--October 1929 to September 1933, October 1937 to September 1958. Monthly discharge only for some periods, published in WSP 1303. Gage-height records collected at same site 1921-43 by U. S. Weather Bureau (unpublished prior to 1933).

Gage.--Water-stage recorder. Datum of gage is 13.41 ft above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Jan. 31, 1933, staff gage at same site at datum 4.00 ft higher. Jan. 31, 1933, to June 12, 1945, staff gage at same site and datum.

Average discharge.--25 years, 11,170 cfs.

Extremes.--Maximum discharge during year, 45,500 cfs Apr. 25 (gage height, 17.41 ft); minimum daily, 5,960 cfs Sept. 29, 30.
1929-33, 1937-58: Maximum discharge, 270,000 cfs Oct. 6, 1929 (gage height, 29.7 ft, present datum, from information by Corps of Engineers), from rating curve extended above 120,000 cfs by logarithmic plotting; minimum daily, 1,950 cfs Sept. 27, 1931.

Remarks.--Records good. Considerable regulation by Clark Hill Reservoir (see p. 235 for monthly change in contents), Stevens Creek powerplant, and New Savannah Bluff lock and dam above station.

Revisions (water years).--WSP 1112: 1940.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,710	7,490	15,200	13,900	16,800	16,200	*18,400	28,500	9,100	7,820	8,620	8,040
2	7,380	7,060	16,000	14,100	17,700	16,000	18,400	25,500	8,380	7,270	9,220	6,960
3	*8,500	7,060	*16,800	*14,100	18,000	15,800	18,400	23,100	7,600	7,270	9,480	6,560
4	10,600	7,270	17,700	14,100	18,400	*16,000	18,800	21,300	7,270	8,260	9,220	6,460
5	12,200	7,060	18,800	14,300	18,400	16,500	19,200	20,000	7,600	9,340	8,150	6,360
6	13,500	6,760	20,000	14,500	17,700	17,100	19,200	19,200	8,150	10,000	7,380	6,460
7	14,500	6,760	20,400	15,000	17,100	18,400	20,000	18,800	8,740	10,000	7,820	6,760
8	15,200	6,860	20,400	15,200	16,000	19,200	20,400	19,200	9,340	9,760	8,620	6,460
9	16,000	7,060	20,000	15,500	15,500	19,600	21,300	20,000	9,220	8,860	9,480	6,160
10	16,500	7,600	19,600	15,500	15,500	19,600	23,100	20,000	8,380	8,500	9,760	6,060
11	16,500	7,600	19,200	15,500	15,500	19,200	25,000	20,000	7,820	8,740	9,340	6,060
12	15,500	7,060	19,200	16,000	15,800	19,200	26,000	19,600	8,040	9,620	8,380	6,160
13	14,300	6,660	18,400	16,000	16,200	19,200	26,500	18,800	8,740	10,200	7,600	6,460
14	12,700	6,560	18,000	16,500	17,100	18,800	26,500	18,800	9,220	10,200	7,820	6,860
15	10,900	6,760	17,700	16,800	18,000	18,800	28,000	18,800	9,620	9,220	8,740	6,760
16	9,220	7,270	17,400	17,700	18,800	18,800	30,200	19,200	9,220	8,860	9,760	6,460
17	8,620	8,040	17,400	17,700	20,000	18,800	30,800	19,600	8,260	9,620	10,200	6,260
18	8,260	8,260	17,700	17,100	20,800	19,600	30,200	18,400	7,820	10,600	10,000	6,160
19	7,820	8,040	18,000	16,800	21,800	20,400	28,500	17,700	7,710	11,400	8,620	6,160
20	8,040	7,380	18,000	16,200	22,600	21,800	26,500	17,400	8,150	12,000	7,490	6,160
21	8,150	7,930	17,700	16,200	23,100	22,600	25,000	16,500	8,500	12,700	7,930	6,160
22	7,600	9,340	17,100	15,500	23,100	23,600	25,500	15,500	9,220	13,300	8,740	6,060
23	7,380	10,500	16,500	14,500	22,200	23,600	31,400	13,900	9,220	13,700	8,980	6,160
24	7,380	10,600	16,000	13,900	21,300	22,600	41,500	12,500	8,620	13,700	8,860	6,160
25	7,380	10,900	15,500	13,700	20,400	22,600	45,500	12,000	7,930	12,700	8,500	6,160
26	7,600	11,500	14,800	13,900	19,200	22,200	42,300	*11,900	7,820	11,900	7,820	6,060
27	7,930	12,200	14,100	14,300	18,400	21,800	40,000	11,700	*8,380	11,100	7,270	6,060
28	7,820	12,700	13,700	*14,800	17,400	20,800	36,500	10,900	8,860	9,620	*7,600	6,060
29	*7,270	13,500	13,500	15,200	-	19,600	33,800	9,620	9,100	*8,150	8,500	5,960
30	6,960	14,500	13,500	15,800	-------	18,800	30,800	9,100	8,740	7,270	9,100	5,960
31	7,490	----	13,700	16,200	-------	18,400	-------	9,220	---------	7,600	8,980	-------
Total	316,910	258,280	532,000	476,500	522,800	605,600	827,700	536,740	254,770	309,280	267,980	190,580
Mean	10,220	8,609	17,160	15,370	18,670	19,540	27,590	17,310	8,492	9,977	8,645	6,353
Cfsm	-	-	-	-	-	-	-	-	-	-	-	-
In.	-	-	-	-	-	-	-	-	-	-	-	-

Calendar year 1957: Max 20,400 Min 5,760 Mean 9,293 Cfsm - In. -
Water year 1957-58: Max 45,500 Min 5,960 Mean 13,970 Cfsm - In. -

* Discharge measurement made on this day.

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations and the second a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1958

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Pasquotank River basin				
438.5	Pasquotank River tributary near Elizabeth City, N. C.	Lat 36°22'20", long 76°17'40", at culvert on U. S. Highway 17, 2.0 miles above mouth and 6.3 miles northwest of Elizabeth City, Pasquotank, County.	a1.8	1957-58	4-19-58 8-14-58	36.0 .10
		Chowan River basin				
531.1	Potecasi Creek at Potecasi, N. C.	Lat 36°22', long 77°14', at bridge on State Highway 35, $\frac{3}{4}$ mile north of Potecasi, Northampton County, and $2\frac{3}{4}$ miles above Urahaw Swamp.	53.2	1949-52, 1954, 1957-58	4-19-58	87.4
533.8	Cole Creek near Gatesville, N. C.	Lat 36°26'30", long 76°46'30", at bridge on U. S. Highway 158, 3 miles northwest of Gatesville, Gates County, and 5.4 miles above Sarem Creek.	30.9	1953, 1955, 1956-58	4-19-58 8-14-58	15.6 .13
535.8	Duke Swamp near Sunbury, N. C.	Lat 36°28'10", long 76°38'10", at highway bridge $1\frac{1}{2}$ miles below Middle Swamp and $2\frac{1}{2}$ miles northwest of Sunbury, Gates County.	36.2	1951-58	4-19-58 8-14-58	27.1 0
		Roanoke River basin				
690.5	Belews Creek near Pine Hall, N. C.	Lat 36°19', long 80°02', at highway bridge, $\frac{1}{2}$ mile above mouth and $1\frac{1}{2}$ miles east of Pine Hall, Stokes County.	79.3	1954-58	3-23-54 9- 5-58	63.8 30.4
694.1	Big Beaver Island Creek near Madison, N. C.	Lat 36°23', long 79°59', at U. S. Highway 311, $\frac{3}{4}$ mile above mouth and 1 mile southwest of Madison, Rockingham County.	23.7	1954-58	3-22-58 9- 5-58	26.6 6.80
707.2	Hogan Creek near Madison, N. C.	Lat 36°23', long 79°55', at highway bridge, $\frac{1}{2}$ mile above mouth and $3\frac{1}{2}$ miles east of Madison, Rockingham County.	23.0	1954, 1956-58	3-22-58 9- 5-58	19.8 8.24
743.6	Wolf Island Creek near Pelham, N. C.	Lat 36°31'55", long 79°30'05", at bridge on State Highway 700, $\frac{1}{2}$ mile above mouth and $2\frac{1}{2}$ miles northwest of Pelham, Caswell County.	68.7	1953-54, 1956-58	3-22-58 9- 5-58	57.4 13.6
750.9	Hogans Creek near Providence, N. C.	Lat 36°30'55", long 79°22'55", at Highway bridge, 1 mile northwest of Providence, $3\frac{1}{2}$ miles above mouth and 8 miles northwest of Yanceyville, Caswell County.	96.1	1954, 1956-58	3-22-58 9- 6-58	91.1 17.0
751.7	Moon Creek near Providence, N. C.	Lat 36°29', long 79°22', at highway bridge, 1 mile southeast of Providence and 2 miles below East Prong Moon Creek, Caswell County.	37.8	1954, 1956-58	3-22-58 9- 6-58	39.9 7.34
752.2	Country Line Creek at Yanceyville, N. C.	Lat 36°23', long 79°20', at highway bridge, 1 mile south of Yanceyville, Caswell County, and $1\frac{1}{2}$ miles above South Country Line Creek.	47.8	1954, 1956-58	9- 6-58	7.45

a About.

Discharge measurements made at low-flow partial-record stations during water year 1958--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Roanoke River basin--Continued				
752.4	South Country Line Creek near Yanceyville, N. C.	Lat 36°22', long 79°17', at highway bridge, 1⅛ miles below Penson Creek and 4¼ miles southeast of Yanceyville, Caswell County.	34.8	1949-54, 1956-58	3-22-58 9- 4-58	23.6 .47
752.7	Country Line Creek near Semora, N. C.	Lat 36°30', long 79°13', at highway bridge, at Yarbro, 3 miles west of Semora, Caswell County, and 4½ miles above mouth.	123	1954, 1956-58	3-22-58 9- 4-58	119 12.3
772.4	North Hyco Creek near Roxboro, N. C.	Lat 36°28', long 79°07', at bridge on State Highway 57, 1 mile above South Hyco Creek and 9 miles northwest of Roxboro, Person County.	78.0	1949-54, 1956-58	3-22-58 9- 4-58 9-15-58	78.2 2.00 .36
772.6	South Hyco Creek near Concord, N. C.	Lat 36°28', long 79°06', at bridge on State Highway 57, 1 mile above mouth and 2.0 miles northwest of Concord, Person County.	76.6	1953-54, 1956-58	3-22-58 9- 4-58 9-15-58	89.2 5.38 2.46
774.1	Mayo (formerly published as "Maho") Creek near Woodsdale, N. C.	Lat 36°31'50", long 78°52'40", at highway bridge, 0.1 mile above unnamed tributary, 4 miles downstream from Spoonwater Creek, and 5¼ miles northeast of Woodsdale, Person County.	51.2	1956-58	3-22-58 9- 4-58 9-15-58	45.8 6.61 3.44
782	Aarons Creek near Oak Hill, N. C.	Lat 36°32'15", long 78°44'30", at highway bridge, ¼ mile above Southern Ry. bridge and 6½ miles north of Oak Hill, Granville County.	27.6	1956-58	3-23-58 8-13-58	24.4 .57
791	Little Grassy Creek near Stovall, N. C.	Lat 36°28'30", long 78°36'15", at highway bridge, 1¼ miles above mouth and 2½ miles northwest of Stovall, Granville County.	22.9	1956-58	3-23-58 8-13-58	19.8 .86
797	Smith Creek near Norlina, N. C.	Lat 36°32', long 78°14', at highway bridge, 0.2 mile below Ellington Creek and 6 miles northwest of Norlina, Warren County.	30.7	1954-58	4-19-58 8-13-58	31.1 14.3
797.5	Sixpound Creek near Oakville, N. C.	Lat 36°31'48", long 78°04'22", at highway bridge, 1½ miles above mouth and 2½ miles northeast of Oakville, Warren County.	11.6	1954-58	4-19-58 9-13-58	13.4 6.36
798	Stonehouse Creek near Littleton, N. C.	Lat 36°29', long 77°57', at highway, 3¼ miles above mouth and 4¼ miles northwest of Littleton, Warren County.	15.8	1956-58	4-19-58 9-13-58	10.6 4.03
810.8	Ready Branch near Williamston, N. C.	Lat 35°47'20", long 77°03'35", at U. S. Highway 17 below Dog Branch, 4½ miles south of Williamston, Martin County.	15.5	1949-54, 1957-58	4-20-58 8-15-58	14.7 4.94
811.3	Roquist Creek near Windsor, N. C.	Lat 35°56', long 76°57', just below end of secondary road, 0.9 mile downstream from U. S. Highway 17, 0.15 mile downstream from Mill Swamp, and 3.5 miles southwest of Windsor, Bertie County.	60.1	1949-51, 1953-58	4-20-58	79.9
		Pamlico River basin				
*812.1	Shelton Creek near Oxford, N. C.	Lat 36°18'50", long 78°43'20", at U. S. Highway 158, 1 mile east of Berea, 1⅞ miles above mouth, and 7½ miles west of Oxford, Granville County.	22.6	1949-54, 1956-58	3-21-58 7- 6-58 9- 6-58 9-16-58	33.4 1.84 .66 .41
817.2	Tabbs Creek near Kittrell, N. C.	Lat 36°11', long 78°27', at highway bridge, 1½ miles above mouth and 2¾ miles south of Kittrell, Vance County.	69.8	1949-54, 1956-58	4-19-58 5-17-58 9- 6-58 9-15-58	63.9 53.8 16.1 9.41
818.8	Crooked Creek near Bunn, N. C.	Lat 35°56', long 78°15', at bridge on State Highway 39, ½ mile above Norris Creek and 2½ miles south of Bunn, Franklin County.	30.6	1954-58	4-20-58 9- 5-58	47.2 16.0
818.9	Cypress Creek near Bunn, N. C.	Lat 35°56', long 78°11', at highway, ¼ mile above mouth and 4 miles southeast of Bunn, Franklin County.	30.2	1954, 1956-58	4-20-58 8- 3-58 9- 5-58	41.6 9.39 17.2
827.1	Sandy Creek near Alert, N. C.	Lat 36°13', long 78°14', at highway bridge, 1½ miles above Devil's Cradle Creek and 1½ miles south of Alert, Franklin County.	53.7	1954-58	4-19-58 9- 5-58	41.8 21.9
827.9	Swift Creek near Red Oak, N. C.	Lat 36°04', long 77°52', at highway bridge, 3 miles below Sandy Creek and 3 miles northeast of Red Oak, Nash County.	180	1949-54, 1958	7- 5-58 9- 4-58 9-13-58	68.3 93.0 47.8

* Also a crest-stage station.

Discharge measurements made at low-flow partial-record stations during water year 1958--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Pamlico River basin--Continued				
*828.3	Fishing Creek near Warrenton, N. C.	Lat 36°23', long 78°11', at highway bridge ½ mile below Phoebes Creek and 2 miles southwest of Warrenton, Warren County.	44.7	1949-56, 1958	6-21-58 8- 9-58 9-13-58	27.3 20.3 17.9
829.1	Shocco Creek near Elberon, N. C.	Lat 36°18', long 78°13', at highway bridge, 1½ miles south of Elberon, Warren County, and 1½ miles upstream from Buffalo Branch.	17.7	1954-58	4-19-58 6-20-58 8- 9-58 9-12-58	20.0 10.9 9.86 4.44
836.4	Town Creek near Pinetops, N. C.	Lat 35°48'00", long 77°35'20", at U. S. Highway 258, ¼ mile below Bynum Mill Creek and 2¾ miles east of Pinetops, Edgecombe County.	192	1949-54, 1957-58	6-18-58 6-25-58 9-20-58	31.6 15.8 7.65
842.1	Grindle Creek near Pactolus, N. C.	Lat 35°39'20", long 77°16'15", at highway bridge, 1.7 miles above Hunting Run and 3½ miles northwest of Pactolus, Pitt County.	54.7	1953-54, 1956-58	5-22-58 6-19-58 7- 5-58 7-12-58 9- 6-58	17.6 6.47 5.93 10.3 29.5
845.4	Durham Creek at Edward, N. C.	Lat 35°19', long 76°52', at State Highway 33, at Edward, Beaufort County, 6¾ miles above mouth.	20.9	1950-54, 1956-58	6-20-58 7-20-58 9-13-58	2.84 .69 .002
		Neuse River basin				
852.2	Little River near Orange Factory, N. C.	Lat 36°08'20", long 78°54'20", at bridge on U. S. Highway 501, 1 mile above Mountain Creek, 1½ miles northwest of Orange Factory, Durham County.	81.6	1930, 1933, 1954-58	3-21-58 8-13-58 9-16-58	87.1 4.85 3.79
870.6	Beaverdam Creek near Creedmoor, N. C.	Lat 36°03'20", long 78°40'40", at highway bridge, 2½ miles above mouth and 4½ miles south of Creedmoor, Granville County.	44.1	1954-55, 1957-58	4-19-58 8-12-58 9-15-58	41.2 3.57 1.23
870.8	New Light Creek near Purnell, N. C.	Lat 36°00'50", long 78°37'40", at highway bridge, 1.5 miles above mouth and 4.2 miles west of Purnell, Wake County.	19.3	1954-58	4-19-58 9- 9-58 9-15-58	20.2 9.90 8.19
871.2	Upper Barton Creek near Bayleaf, N. C.	Lat 35°58'20", long 78°39'20", at highway bridge, 1 mile above mouth and 2 miles northwest of Bayleaf, Wake County.	12.2	1951, 1954-58	4-19-58 8-12-58 9-15-58	12.0 3.49 3.72
871.6	Lower Barton Creek near Bayleaf, N. C.	Lat 35°58'00", long 78°38'05", at highway bridge, 1 mile above mouth and 1 mile north of Bayleaf, Wake County.	13.2	1951-54, 1958	10-10-57 4-19-58 8-12-58 9-15-58	5.10 13.3 5.51 5.02
871.8	Horse Creek near Wake Forest, N. C.	Lat 35°58'10", long 78°35'30", at bridge on State Highway 98, 1 mile above mouth and 4½ miles west of Wake Forest, Wake County.	21.0	1949-55, 1958	9-15-58	9.91
872.2	Peeples Creek near Wake Crossroads, N. C.	Lat 35°51'50", long 78°30'55", at highway bridge, ¾ mile above Hodges Creek 1¼ miles south of Wake Crossroads, Wake County.	9.86	1954-58	4-19-58 8-12-58 9-16-58	13.6 3.05 4.56
872.7	Crabtree Creek at U. S. Highway 70 near Raleigh, N. C.	Lat 35°50'15", long 78°40'25", at bridge on U. S. Highway 70, 1½ miles above Mina Creek and 4½ miles northwest of Raleigh, Wake County.	97.8	1932, 1941, 1947, 1949-56	9-16-58	10.6
872.9	Mine Creek near Millbrook, N. C.	Lat 35°51'20", long 78°39'45", at highway bridge, 1¼ miles above mouth and 3¼ miles west of Millbrook, Wake County.	8.75	1951-54, 1958	9-16-58	4.62
873.3	Big Branch near Millbrook, N. C.	Lat 35°49'20, long 78°37'45", 0.3 mile above mouth and 3 miles north of Raleigh, Wake County.	3.90	1951-54, 1958	9-17-58	2.43
873.6	Big Branch near Garner, N. C.	Lat 35°44'30", long 78°34'05", at highway bridge, 1 mile above mouth and 3 miles northeast of Garner, Wake County.	12.1	1953-58	4-19-58 8-12-58 9-16-58	15.7 6.36 6.50
874.1	Poplar Creek near Knightdale, N. C.	Lat 35°44', long 78°29', at highway bridge, ½ mile above mouth, 2 miles west of Shotwell, and 4 miles south of Knightdale, Wake County.	8.67	1954-58	4-19-58 8-12-58 9-16-58	10.9 2.91 5.10
880.3	Middle Creek near Smithfield, N. C.	Lat 35°30', long 78°24', at bridge on State Highway 210, 1½ miles above mouth, 2 miles below Steep Hill Branch, and 3 miles west of Smithfield, Johnston County.	124	1949-55 1958	9-17-58	22.7

* Also a crest-stage station.

Discharge measurements made at low-flow partial-record stations during water year 1958--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Neuse River basin--Continued				
880.9	Black Creek near Four Oaks, N. C.	Lat 35°28'10", long 78°27'25", at highway bridge, 2¼ miles northwest of Four Oaks, Johnston County, and 5 miles above mouth.	79.0	1949-55, 1958	10-10-57 4-20-58 8-12-58 9-17-58	14.0 159 .63 1.30
882.4	Hannah Creek near Blackman, N. C.	Lat 35°23'45", long 78°25'55", at highway bridge, 0.1 mile above Rock Branch and 2.1 miles north of Blackman, Johnston County.	33.6	1957-58	3- 8-58 6-20-58 8-12-58 9-15-58	57.0 .48 0 0
883.1	Buck Swamp near Dudley, N. C.	Lat 35°16', long 78°05', at highway bridge, 1½ miles above mouth and 2½ miles west of Dudley, Wayne County.	17.0	1949-58	4-18-58 8-12-58 9-15-58	27.6 1.36 4.33
890.2	Stony Creek at Goldsboro, N. C.	Lat 35°22'30", long 77°57'45", at bridge on U. S. Highway 70A, 2 miles east of Goldsboro, Wayne County, and 5½ miles above mouth.	21.0	1949-55, 1957-58	9-16-58	5.47
891.2	Walnut Creek near Best, N. C.	Lat 35°18'55", long 77°53'00", at highway bridge, 2.7 miles southwest of Best, Wayne County, and 4½ miles above mouth.	9.14	1955-58	3- 8-58 8-12-58 9-15-58	18.7 4.21 1.73
892.4	Bear Creek near La Grange, N. C.	Lat 35°18'50", long 77°48'55", at bridge on U. S. Highway 70, 1½ miles northwest of La Grange, Lenoir County, and 6½ miles above mouth.	52.2	1954-58	4-18-58 8-12-58	75.5 15.0
900.4	Moccasin Creek near Zebulon, N. C.	Lat 35°49', long 78°15', at bridge on U. S. Highway 264, 3¼ miles northwest of Middlesex, Nash County, and 9 miles above Turkey Creek.	28.2	1950-54, 1957-58	6-19-58 9-16-58	8.79 3.90
903.9	Contentnea Creek near Kenly, N. C.	Lat 35°41'10", long 78°05'40", at highway bridge, 500 ft below Buckhorn Branch and 6.8 miles north of Kenly, Wilson County.	166	1957-58	10-10-57 3- 8-58 6-19-58	26.6 205 58.2
905.8	Black Creek near Black Creek, N. C.	Lat 35°38'15", long 77°58'10", at highway bridge below unnamed tributary, 2.3 miles west of Black Creek, Wilson County, and 2.5 miles above Great Swamp.	30.9	1955-58	9-16-58 6-19-58 9-15-58	22.2 2.45 .23
907.2	Toisnot Swamp near New Hope, N. C.	Lat 35°49'20", long 77°59'50", at highway bridge, ¼ mile below Little Swamp, 3 miles northwest of New Hope and 7½ miles northeast of Bailey, Nash County.	29.6	1954, 1957-58	6-20-58 9- 4-58 9-17-58	11.7 10.5 6.48
908.2	Toisnot Swamp near Stantonsburg, N. C.	Lat 35°36'05", long 77°47'55", at highway, 1.3 miles above mouth, 1½ miles east of Stantonsburg, and 4 miles south-southwest of Saratoga, Wilson County.	112	1932, 1955-58	3- 8-58 6-20-58 8- 9-58 9-15-58	118 26.7 15.8 8.97
918.2	Core Creek near Fort Barnwell, N. C.	Lat 35°15'10", long 77°17'10", at bridge on State Highway 55, 3¾ miles southeast of Fort Barnwell, Craven County, and about 7 miles above mouth.	59.2	1949-58	8-12-58	1.65
*920.2	Palmetto Swamp near Vanceboro, N. C.	Lat 35°20'15", long 77°10'15", at bridge on State Highway 43, 1.3 miles above mouth and 2.5 miles northwest of Vanceboro, Craven County.	24.2	1956-58	7- 6-58	0
925.9	Upper Broad Creek near Olympia, N. C.	Lat 35°10'35", long 76°57'55", at highway bridge, 8.7 miles above mouth and 3 miles north of Olympia, Pamlico County.	22.0	1950-54, 1957-58	8- 9-58	0
		White Oak River basin				
*927.2	White Oak River at Belgrade, N. C.	Lat 34°53'30", long 77°14'00", at bridge on U. S. Highway 17 at Jones-Onslow County line, 1.1 miles upstream from Mirey Branch and 0.8 mile north of Belgrade, Onslow County.	53.3	1941, 1946, 1950-54, 1956-58	7- 6-58 8-13-58	65.2 13.9
		New River basin				
931.3	Southwest Creek near Jacksonville, N. C.	Lat 34°43'10", long 77°31'20", at highway bridge, 1 mile below Harris Creek and 6 miles southwest of Jacksonville, Onslow County.	35.2	1941, 1953-54, 1956-58	7- 6-58 8-13-58	19.7 5.04
931.7	Northeast Creek near Kellum, N. C.	Lat 34°46'20", long 77°21'40", at highway bridge, 1.6 miles below Wolf Swamp and 2.1 miles south of Kellum, Onslow County.	28.3	1941, 1953-54, 1956-58	7- 6-58	26.4

* Also a crest-stage station.

Discharge measurements made at low-flow partial-record stations during water year 1958--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Cape Fear River basin				
932.6	Haw River at U. S. Highway 220 near Summerfield, N. C.	Lat 36°14', long 79°55', at bridge on U. S. Highway 220, 2¼ miles north of Summerfield, Guilford County, and 2½ miles below Rocky Branch.	20.2	1951-58	3-22-58 9- 5-58	16.3 5.20
949.8	South Buffalo Creek at Willow Rd., at Greensboro, N. C.	Lat 36°02'43", long 79°45'43", at bridge on Willow Road, 2½ miles southeast of intersection of U. S. Highways 70 and 220 in Greensboro, Guilford County, and 6½ miles above mouth.	29.6	1954, 1956, 1958	3-22-58 9- 7-58	16.2 1.94
966.1	Little Alamance Creek near Whitsett, N. C.	Lat 36°03'15", long 79°38'14", at highway bridge, 2½ miles above Rock Creek and 4½ miles west of Whitsett, Guilford County.	38.4	1950-58	3-23-58 9- 7-58	31.5 2.42
967.8	South Prong Stinking Creek near Bellemont, N. C.	Lat 35°59', long 79°30', at highway bridge 1.4 miles above mouth and 4 miles southwest of Bellemont, Alamance County.	33.3	1956-58	3-23-58 9- 6-58	21.6 4.12
968.6	Cane Creek near Carrboro, N. C.	Lat 35°56', long 79°15', at highway bridge, 1 mile above mouth, 3 miles southwest of Teer, and 10 miles west of Carrboro, Orange County.	34.3	1954-58	3-23-58 9- 9-58 9-15-58	26.2 2.83 3.20
972.2	New Hope Creek at U. S. Highways 15 and 501, near Durham, N. C.	Lat 35°57'35", long 78°58'55", at bridge on U. S. Highways 15 and 501, 1 mile below Sandy Creek and 2½ miles southwest of Durham, Durham County.	36.4	1932, 1954-58	3-21-58 9- 9-58 9-15-58	32.6 .53 .30
972.4	New Hope Creek near Durham, N. C.	Lat 35°55'00", long 78°58'15", at bridge on State Highway 54, 1 mile above Third Fork Creek and 5½ miles southwest of Durham, Durham County.	57.1	1949-55, 1958	9-15-58	1.74
994.8	Richland Creek near Archdale, N. C.	Lat 35°56'28", long 79°55'56", at highway bridge, 2.3 miles above mouth, 3 miles northeast of Archdale, and 4 miles southeast of railroad station in High Point, Guilford County.	12.7	1954-58	10-15-57 3-22-58 9- 7-58	3.65 6.32 2.10
1001.8	Polecat Creek near Climax, N. C.	Lat 35°53', long 79°46', at highway bridge, ¼ mile below unnamed tributary, 2 miles east of Level Cross, and 4 miles southwest of Climax, Guilford County.	28.4	1954-58	9- 7-58	1.60
1007.1	Brush Creek near Coleridge, N. C.	Lat 35°36', long 79°35', at bridge on State Highways 22 and 902, 1.4 miles above mouth and 3 miles southeast of Coleridge, Randolph County.	66.9	1954-58	3-22-58 9- 7-58	48.5 3.88
1007.3	Fork Creek near Coleridge, N. C.	Lat 35°32', long 79°39', at highway bridge, 3 miles above mouth and 8 miles south of Coleridge, Randolph County.	36.5	1954-58	3-22-58 9- 7-58	23.5 2.59
1018.2	Tick Creek near Bonlee, N. C.	Lat 35°41', long 79°22', at highway bridge, 1⅓ miles above mouth, 3⅔ miles northeast of Bonlee, and 3⅔ miles east of Mount Vernon Springs, Chatham County.	19.3	1954, 1956-58	3-22-58	10.5
*1018.9	Bear Creek near Goldston, N. C.	Lat 35°38', long 79°18', at highway bridge, 3 miles northeast of Goldston, Chatham County.	43.2	1949-58	3-22-58 8-14-58	15.1 5.46
1024.8	Neal Creek near Lillington, N. C.	Lat 35°26', long 78°49', at bridge on U. S. Highway 401, ½ mile above mouth and 2 miles north of Lillington, Harnett County.	37.6	1954-58	3-21-58 8-13-58 9-15-58	50.9 14.4 5.19
1035.2	Stewarts Creek at Linden, N. C.	Lat 35°16'09", long 78°45'21", at highway bridge, 0.4 mile above mouth and 1 mile north of Linden, Cumberland County.	10.1	1955, 1957-58	5-17-58 8-13-58	4.42 .05
*1056.3	Turnbull Creek near Elizabethtown, N. C.	Lat 34°41'30", long 78°35'00", at highway bridge, 1⅝ miles above Jones Lake Outlet, 4½ miles northeast of Elizabethtown, Bladen County, and 6 miles above mouth.	65.2	1949-58	5-24-58 9- 5-58	33.5 10.1
1056.9	Hammond Creek near Lisbon, N. C.	Lat 34°34', long 78°33', at highway bridge, 2½ miles above Whites Creek, 4 miles north of Lisbon, and 5 miles southeast of Elizabethtown, Bladen County.	17.1	1955, 1957-58	5-24-58 9- 5-58	1.39 .76
1057.9	Livingston Creek near Acme, N. C.	Lat 34°18'55", long 78°14'20", at bridge on U. S. Highways 74 and 76, 1½ miles southwest of Delco and 1⅝ miles west of Acme, Columbus County.	113	1950-58	7- 5-58 9- 4-58	49.5 48.9

* Also a crest-stage station.

Discharge measurements made at low-flow partial-record stations during water year 1958--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Cape Fear River basin--Continued				
1063.6	Six Runs Creek near Clinton, N. C.	Lat 34°49', long 78°14', at bridge on State Highway 24, 1/8 mile above Atlantic Coastline RR., ½ mile below Turkey Creek, and 5 miles east of Clinton, Sampson County.	110	1949-54, 1956-58	5-17-58 9- 4-58	53.8 37.1
1067.6	Mingo Swamp near Dunn, N. C.	Lat 35°16', long 78°35', at bridge on U. S. Highway 421, 1 mile below Stony Run and 2.7 miles southeast of Dunn, Harnett County.	50.2	1955, 1957-58	5-17-58 9- 4-58	37.5 2.58
1075.6	Moores Creek near Atkinson, N. C.	Lat 34°33'25", long 78°07'25", at highway bridge, 2½ miles below White Oak Branch and 3 miles northeast of Atkinson, Pender County.	51.9	1949-52, 1956-58	9- 4-58	5.00
1088.3	Allen Creek near Southport, N. C.	Lat 34°02'45", long 78°02'10", below Bouncing Log Spring run, 8¾ miles northeast of Southport, Brunswick County.	9.97	1956-58	7- 5-58 9- 5-58	9.18 3.98
		Lockwoods Folly River basin				
1089.1	Finch Gut Creek near Bolivia, N. C.	Lat 34°02'50", long 78°10'45", at bridge on U. S. Highway 17, 1¼ miles above mouth and 2 miles southwest of Bolivia, Brunswick County.	20.3	1950-54, 1956-58	7- 5-58 9- 5-58	8.12 1.12
		Pee Dee River basin				
1110.9	Yadkin River near Patterson, N. C.	Lat 36°01', long 81°30', just below mouth of Buffalo Creek, ½ mile below bridge on State Highway 268 and 4 miles northeast of Patterson, Caldwell County.	72.4	1954-58	6-30-58 9- 2-58	97.5 74.8
1112.6	Stony Fork Creek near Ferguson, N. C.	Lat 36°07', long 81°21', at highway bridge, 1 mile above mouth and 1½ miles north of Ferguson, Wilkes County.	35.1	1954-58	4-21-58 9- 3-58	102 31.7
1113.2	North Prong Lewis Fork at Champion, N. C.	Lat 36°09', long 81°18', at highway bridge, ¼ mile above South Prong and 1 mile east of Champion, Wilkes County.	33.6	1954-58	4-21-58 9- 3-58	81.2 31.8
1113.7	South Prong Lewis Fork at Champion, N. C.	Lat 36°09', long 81°18', at highway bridge, ¼ mile above North Prong and 0.6 mile east of Champion, Wilkes County.	31.2	1954-58	4-21-58 9- 3-58	100 34.7
1120.4	Mulberry Creek near North Wilkesboro, N. C.	Lat 36°12', long 81°07', at bridge on State Highway 268, 1.1 miles above mouth and 1¼ miles east of city limits of North Wilkesboro, Wilkes County.	43.0	1952-58	4-21-58	77.8
1121.7	Bugaboo Creek at Rhonda, N. C.	Lat 36°13', long 80°57', at bridge on State Highway 268, ¼ mile above mouth, 1 mile west of Rhonda, and 2½ miles east of Roaring River, Wilkes County.	17.8	1954-58	4-21-58 9- 3-58	27.7 15.5
1123.6	Mitchell River near State road, N. C.	Lat 36°19', long 80°49', at bridge on Guyer Fork Rd., 2 miles above Grass Creek and 3¼ miles east of State road, Surry County.	80.4	1952-58	4-22-58	172
1136.2	Ararat River at Mount Airy, N. C.	Lat 36°30', long 80°36', at bridge on State Highway 103, at Mount Airy, Surry County, 2.3 miles above Lovels Creek.	66.6	1925, 1927, 1952-58	7- 2-58	73.6
1138.9	Toms Creek at Pilot Mountain, N. C.	Lat 36°24', long 80°29', at bridge on U. S. Highway 52, 1¼ miles below Chinquapin Creek and 1.4 miles northwest of Pilot Mountain, Surry County.	29.9	1952-58	7- 2-58	22.8
1145	Little Yadkin River near Donnaha, N. C.	Lat 36°15'40", long 80°26'35", at highway bridge, 1.2 miles above mouth and 1.3 miles northwest of Donnaha, Forsyth County.	59.7	1940‡, 1955-58	4-21-58 9- 3-58	58.3 24.3
1155.9	North Deep Creek near Yadkinville, N. C.	Lat 36°08', long 80°37', at bridge on U. S. Highway 421, 1½ miles east of Yadkinville, Yadkin County, and 1¾ miles below Town Branch.	34.8	1954, 1956-58	4-22-58 9- 3-58	43.5 21.1
1156.4	Deep Creek at Shacktown, N. C.	Lat 36°06', long 80°35', at highway bridge, ¾ mile south of Shacktown, Yadkin County, and 1.0 mile above Harman Creek.	65.9	1952-58	4-22-58	90.2
1159.1	South Fork Muddy Creek near Winston-Salem, N. C.	Lat 36°00'40", long 80°16'20, at bridge on State Highway 150, 3 miles above mouth and 5 miles south of Winston-Salem, Forsyth County.	38.5	1955-58	4-21-58 9- 3-58	34.8 17.0

‡ Operated as a continuous-record gaging station.

Discharge measurements made at low-flow partial-record stations during water year 1958--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Pee Dee River basin--Continued				
1172.2	South Yadkin River near Statesville, N. C.	Lat 35°53', long 80°57', at bridge on State Highway 115, 3 miles upstream from Rocky Creek and 7 miles north of Statesville, Iredell County.	77.0	1955-58	4-21-58 9- 3-58	126 39.7
1177.1	Fifth Creek near Statesville, N. C.	Lat 35°51', long 80°44', at highway bridge, 0.8 mile west of Coolspring, 2 miles above mouth, and 9.0 miles northeast of Statesville, Iredell County.	27.0	1953-58	4-21-58	28.5
1189.1	Boar Creek at Mocksville, N. C.	Lat 35°52', long 80°35', at highway bridge, 1½ miles southwest of Mocksville, Davie County, and 4.5 miles above mouth.	23.3	1952-58	4-21-58	20.8
1214.1	Second Creek near Liberty, N. C.	Lat 35°34', long 80°22', at highway bridge, 2.1 miles southwest of Liberty, Rowan County, and 4⅘ miles above Reedy Creek.	32.6	1955-58	9- 2-58	4.15
1214.8	Rich Fork near Holly Grove, N. C.	Lat 35°51'15", long 80°10'57", at highway bridge, 1⅗ miles above Hamby Creek, 2⅘ miles north of Holly Grove, and 4½ miles northeast of Lexington, Davidson County.	47.3	1948, 1952-58	4-21-58 9- 2-58	38.8 8.63
1225.3	Lick Creek at Healing Springs, N. C.	Lat 35°36'55", long 80°10'31", at highway bridge, 0.1 mile east of Healing Springs, Davidson County, and 3 miles above mouth.	26.5	1955-58	6-18-58 9- 2-58	.93 .54
1231.2	Uwharrie River near Asheboro, N. C.	Lat 35°48', long 80°00', at highway bridge, 3 miles above Little Uwharrie River and 12 miles northwest of Asheboro, Randolph County.	31.9	1949-53, 1957-58	3-22-58 9- 9-58	19.0 2.49
1240.8	Clarke Creek near Harrisburg, N. C.	Lat 35°24'50", long 80°45'08", at highway bridge, 3.0 miles above mouth and 8½ miles northwest of Harrisburg, Cabarrus County.	21.8	1952-58	6-18-58 9- 2-58	3.24 2.27
1241.1	Rocky River near Roberta Mill, N. C.	Lat 35°21'33", long 80°40'31", at bridge on U. S. Highway 29, 2⅘ miles west of Roberta Mill, 3.6 miles above Mallard Creek, and 6⅗ miles southwest of Concord, Cabarrus County.	87.9	1952-58	6-18-58	18.3
1241.3	Mallard Creek at Harrisburg, N. C.	Lat 35°20'01", long 80°40'06", at highway bridge, ¼ mile above mouth and 1.3 miles northwest of Harrisburg, Cabarrus County.	41.2	1955-58	6-18-58 9- 2-58	8.98 8.32
1242.3	Coddle Creek near Concord, N. C.	Lat 35°24'29", long 80°40'29", at highway bridge below Afton Run, 2½ miles below State Highway 73, and 5 miles west of Concord, Cabarrus County.	56.6	1949-58	6-18-58	18.4
1243.2	Reedy Creek at Rocky River, N. C.	Lat 35°18'10", long 81°35'40", at highway bridge, 0.3 mile southeast of Rocky River, Cabarrus County, 0.4 mile above Caldwell Creek.	30.8	1955-58	6-18-58 9- 2-58	5.53 5.16
1253.1	Richardson Creek near Wingate, N. C.	Lat 35°02', long 80°28', at highway bridge, ½ mile above Stuarts Creek and 3½ miles north of Wingate, Union County.	98.2	1953-54, 1956-58	3-22-58 9- 9-58	31.5 1.57
1289.6	Cartledge Creek near Rockingham, N. C.	Lat 34°58'35", long 79°51'30", at highway bridge, ½ mile above mouth, 1½ miles southeast of Blewett Falls Dam, and 5½ miles northwest of Rockingham, Richmond County.	31.4	1949-54, 1957-58	3-23-58 9- 9-58	31.6 .22
1292.4	Falling Creek near Rockingham, N. C.	Lat 34°56'28", long 79°42'15", at highway bridge, 4 miles east of Rockingham, Richmond County, and 5 miles above mouth.	6.50	1939, 1950-54, 1956-58	3-23-58 9- 9-58	9.31 4.52
1294.7	South Fork Jones Creek at Highway 52, near Morven, N. C.	Lat 34°53'28", long 80°01'02", at bridge on U. S. Highway 52, 1½ miles above mouth and 2 miles north of Morven, Anson County.	33.7	1950-54, 1956-58	7- 4-58 9- 9-58	20.3 .62
1295.7	Marks Creek near Osborne, N. C.	Lat 34°50', long 79°48', at highway, 3½ miles northwest of Osborne, Richmond County, and 9 miles above mouth.	29.2	1953-54, 1956-58	7- 4-58 9-10-58	22.6 21.3
1304.9	Thompson Creek near Cheraw, S. C.	Lat 34°40', long 79°56', at bridge on county road, ¼ mile below Seaboard Air Line RR. bridge and 4 miles southwest of Cheraw.	226	1948, 1950-58	5-20-58	97.3

Discharge measurements made at low-flow partial-record stations during water year 1958--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Pee Dee River basin--Continued				
1306	Cedar Creek at Society Hill, S. C.	Lat 34°31', long 79°51', at bridge on U. S. Highway 52, at Society Hill.	55	1949-58	5-21-58	79.3
1309	Big Black Creek near McBee, S. C.	Lat 34°31', long 80°11', at bridge on U. S. Highway 1, $\frac{1}{4}$ mile above Little Alligator Creek and 5$\frac{1}{2}$ miles northeast of McBee.	108	1956-58	5-20-58 9-26-58	151 70.9
1314.4	Lynches River near Bethune, S. C.	Lat 34°26', long 80°19', at bridge on U. S. Highway 1, 1.9 miles northeast of Bethune and 2$\frac{1}{2}$ miles downstream from Cedar Creek.	380	1953-58	5-20-58	151
1314.8	Little Lynches River near Bethune, S. C.	Lat 34°24', long 80°23', at bridge on U. S. Highway 1, 2$\frac{1}{2}$ miles southwest of Bethune and 3 miles above Bell Branch.	163	1951-58	5-20-58 9-26-58	123 73.0
1322.6	Gum Swamp Creek near Laurinburg, N. C.	Lat 34°51'12", long 79°31'28", at highway bridge, 2 miles northwest of Sneeds Grove and 3$\frac{1}{2}$ miles north of Laurel Hill, Scotland County.	42.4	1949-54, 1956-58	7- 4-58 9-10-58	47.5 36.7
1329.1	Drowning Creek at Jackson Springs, N. C.	Lat 35°11'15", long 79°38'55", at bridge on State Highway 73, 2 miles southwest of center of Jackson Springs, Moore County, and 3 miles above Jackson Creek.	30.5	1949-54, 1957-58	7- 4-58 9-11-58	20.7 13.5
1336.4	Limber River near Pembroke, N. C.	Lat 34°42', long 79°15', at highway bridge, $\frac{1}{2}$ mile below Gum Swamp and 3$\frac{1}{2}$ miles west of Pembroke, Robeson County.	421	1949-54, 1957-58	7- 5-58 9-10-58	514 194
1340.8	Raft Swamp near Lumberton, N. C.	Lat 34°43', long 79°05', at bridge on State Highway 211, 1$\frac{3}{4}$ miles above Richland Swamp and 6 miles northwest of Lumberton, Robeson County.	107	1949-54, 1957-58	9-10-58	6.88
1344.8	Big Swamp near Tarheel, N. C.	Lat 35°41'18", long 78°50'07", at highway bridge, $\frac{1}{2}$ mile south of Robeson-Bladen County line, 2$\frac{1}{2}$ miles above Goodman Swamp and 2$\frac{1}{2}$ miles southwest of Tarheel, Bladen County.	225	1949-54, 1957-58	5-24-58 9- 5-58 9-10-58	201 60.2 19.5
		Santee River basin				
1380.7	Armstrong Creek at Sevier, N. C.	Lat 35°38', long 82°01', 0.2 mile above mouth and 1 mile southwest of Sevier, McDowell County.	29.7	1956-58	7- 2-58 9- 3-58	38.4 20.8
1382.2	North Muddy Creek near Nebo, N. C.	Lat 35°40', long 81°55', at highway bridge, 1.2 miles below Caleb Branch, 3 miles southeast of Nebo, and 4$\frac{1}{4}$ miles southwest of Bridgewater, Burke County.	42.9	1956-58	7- 2-58 9- 3-58	50.5 32.6
1382.7	South Muddy Creek near Bridgewater, N. C.	Lat 35°39', long 81°51', 0.7 mile below Long Branch, 3.2 miles above mouth, and 4 miles south of Bridgewater, Burke County.	36.7	1957-58	7- 2-58 9- 3-58	49.0 33.9
1384.1	Mill Timber Creek at Crossnore, N. C.	Lat 36°01', long 81°55', at Crossnore, Avery County, $\frac{1}{4}$ mile above mouth.	3.84	1956-58	7-17-58	3.64
1393.9	Warrior Fork near Morganton, N. C.	Lat 35°47'49", long 81°43'08", at highway bridge, 2$\frac{1}{4}$ miles above mouth, 2$\frac{1}{2}$ miles east of Gold, and 4 miles northwest of Morganton, Burk County.	81.9	1954-58	4-22-58 9- 2-58	187 65.6
1405	Wilson Creek at Adako, N. C.	Lat 35°53'55", long 81°42'58", at highway bridge, below Brown Mountain Beach, $\frac{1}{4}$ mile west of Adako, Caldwell County, and 1$\frac{1}{2}$ miles above mouth.	69.7	1921-22‡, 1954-58	6-30-58 9- 2-58	72.6 64.7
1415.6	Drowning Creek near Hildebran, N. C.	Lat 35°45', long 81°25', at highway bridge, 1.1 miles above mouth and 3.1 miles northeast of Hildebran, Burke County.	14.7	1957-58	4-22-58 9- 2-58	30.0 12.3
1419.2	Middle Little River near Taylorsville, N. C.	Lat 35°50', long 81°17', at highway bridge, 1$\frac{3}{4}$ miles above mouth and 6.3 miles southwest of Taylorsville, Alexander County.	46.3	1955-58	6-30-58 9- 2-58	66.0 41.8
1423.8	Glade Creek at Millersville, N. C.	Lat 35°51', long 81°11', 0.1 mile above mouth and $\frac{1}{4}$ mile east of Millersville, Alexander County.	12.6	1956-58	6-20-58 9- 2-58	15.6 8.63
1426.4	Davidson Creek near Cornelius, N. C.	Lat 35°29'22", long 80°56'04", at bridge on State Highway 73, 0.7 mile above mouth and 4$\frac{1}{2}$ miles west of Cornelius, Mecklenburg County.	37.6	1949-58	4-21-58	28.6

‡ Operated as a continuous-record gaging station.

Discharge measurements made at low-flow partial-record stations during water year 1958--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Santee River basin--Continued				
1427.2	Dutchmans Creek near Stanley, N. C.	Lat 35°22'00", long 81°01'55", at highway bridge, 1.2 miles below Killian and Leepers Creeks and 3 miles east of Stanley, Gaston County.	112	1949-58	9- 3-58	36.4
1431.8	Maiden Creek at Maiden, N. C.	Lat 35°35', long 81°12', at bridge on U. S. Highway 321, ¼ mile above Pinch Gut Creek and 0.8 mile north of Maiden, Catawba County.	14.3	1956-58	4-21-58 9- 3-58	24.4 8.51
1469	Twelvemile Creek near Waxhaw, N. C.	Lat 34°57', long 80°45', at bridge on State Highway 16, 0.1 mile below West Fork and 2½ miles north of Waxhaw, Union County.	72.4	1949-58	9- 4-58	5.50
1474	Fishing Creek near Fort Lawn, S. C.	Lat 34°41'30", long 80°56"25", at bridge on State Highway 9, 2.3 miles west of Fort Lawn and 2.8 miles below Tinkers Creek.	270	1957-58	5-22-58 9-26-58	144 28.0
1500.4	White Oak Creek near Collinsville, N. C.	Lat 35°16', long 82°03', at highway bridge, 4⅔ miles northeast of Collinsville, Polk County.	37.1	1955-58	4-21-58 9- 4-58	94.5 41.0
1502.6	Floyd's Creek near Cliffside, N. C.	Lat 35°13', long 81°51', at highway bridge, 1.3 miles above mouth and 2 miles southeast of Harris, Rutherford County.	27.6	1950, 1955-58	4-21-58 9- 4-58	53.1 23.0
1534.8	Buffalo Creek near Blacksburg, S. C.	Lat 35°08', long 81°33', at bridge on State Highway 5, 1½ miles above mouth and 2 miles west of Blacksburg.	176	1947, 1949-58	5-22-58	216
1536	Kings Creek at Kings Creek, S. C.	Lat 35°04', long 81°27', at bridge on State Highway 5 at Kings Creek, 3½ miles below Jumping Branch.	47.6	1947, 1949-52, 1954-58	5-22-58	49.3
1537	Thicketty Creek near Gaffney, S. C.	Lat 35°03', long 81°43', 300 ft above bridge on State road, 1 mile above Beaver Dam Creek, and 4 miles west of Gaffney.	25	1958	7-14-58 8- 1-58 8- 8-58	32.0 26.1 23.1
1537.05	Thicketty Creek at Thicketty, S. C.	Lat 35°01', long 81°43', at bridge on U. S. Highway 29A, at Thicketty, 2 miles above Livingston Creek.	39	1949-52, 1954-58	5-23-58	58.4
1669	Wilson Creek near Ninety Six, S. C.	Lat 34°10', long 81°57', at bridge on State Highway 34, 1½ miles above mouth and 4 miles east of Ninety Six.	76	1950-54, 1956-58	5-21-58	38.0
1674.5	Little River near Silverstreet, S. C.	Lat 34°13', long 81°46', at bridge on State Highway 34, 1.25 miles above Southern Ry. bridge and 3 miles west of Silverstreet.	230	1953-58	5-21-58	189
1695.5	Congaree Creek at Cayce, S. C.	Lat 34°56'15", long 81°04'40", at bridge on U. S. Highway 21, at Cayce, 2 miles above Sixmile Creek.	136	1925, 1944, 1949-58	6-10-58	141
		Edisto River basin				
1725.2	Shaw Creek near Eureka, S. C.	Lat 33°39'30", long 81°43'05", at bridge on State road, 0.3 mile above Southern Ry. bridge and 3.7 miles southeast of Eureka.	50	1946, 1949-54, 1956-58	6-11-58	27.1
1733	North Fork Edisto River near North, S. C.	Lat 33°35'25", long 81°06'20", at bridge on U. S. Highway 321, 0.9 mile below Big Beaver Creek and 1¾ miles south of North.	396	1950-58	6- 5-58	325
		Savannah River basin				
1834.9	Chauga River near Westminster, S. C.	Lat 34°39'50", long 83°09'40", at bridge on State road, 3.9 miles above Toxaway Creek and 3⅘ miles west of Westminster.	85	1955-58	4-24-58	197
1866	Conneross Creek at Richland, S. C.	Lat 34°41', long 83°02', at bridge on U. S. Highway 76, at Richland, 1¼ miles above Richland Creek.	40.6	1949-52, 1954, 1956-58	4-24-58	92.0
1873	Big Generostee Creek near Starr, S. C.	Lat 34°20'30", long 82°47'40", 300 ft above mouth and 6¼ miles southwest of Starr.	83	1951-52, 1954, 1956-58	4-24-58	150

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined. The maximum discharge for each year since the crest-stage gage was established is given. The peak discharge for some years may have been published in a previous report as a measurement of discharge. Figures given herein supersede all previous figures of peak discharge for the floods listed.

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		James River basin					
156	Cowpasture River near Headwaters, Va.	Lat 38°19'30", long 79°26'14", at bridge on U. S. Highway 250, 1.2 miles west of Headwaters.	11.3	1949-58	6-19-49	6.5	5,650
					9-12-50	4.2	340
					12- 7-50	5.0	740
					3-11-52	4.84	620
					2-21-53	5.0	740
					3- 1-54	5.07	810
					10-15-54	5.19	900
					3-14-56	3.64	200
					4- 5-57	4.13	320
					12-26-57	2.97	110
168	Meadow Creek near Newcastle, Va.	Lat 37°27'56", long 80°12'14", 6 miles southwest of Newcastle.	3.74	1950-57	7- -50	3.35	220
					3-31-51	3.53	260
					1952	3.64	210
					3-24-53	3.58	200
					3- 1-54	3.18	107
					1955	(a)	<60
					1956	(a)	<60
					4- 5-57	3.37	150
170	Meadow Creek at Newcastle, Va.	Lat 37°29'35", long 80°06'35", at Newcastle.	13.8	1930-52‡, 1953-57	3-24-53	3.4	95
					3- 1-54	4.0	227
					3- 1-55	4.18	295
					1956	-	-
					4- 5-57	4.0	227
194	Looney Mill Creek near Buchanan, Va.	Lat 37°29'48", long 79°45'28", 5 miles southwest of Buchanan.	29.6	1950-58	9-10-50	10.76	7,100
					12- 7-50	7.6	2,650
					9- 1-52	7.2	2,300
					3-24-53	6.8	2,000
					1954	(a)	<1,200
					10-15-54	10.82	7,200
					1956	(a)	<1,200
					9-14-57	6.29	1,700
					5- 5-58	6.25	1,650
202	Calfpasture River near West Augusta, Va.	Lat 38°16'24", long 79°18'02", 1.5 miles east of West Augusta.	12.8	1949-58	6-17-49	6.6	4,800
					1950	(a)	<90
					12- 7-50	4.0	1,180
					3-11-52	1.98	210
					2-21-53	2.34	300
					3- 1-54	4.74	1,840
					8-19-55	2.83	480
					3-14-56	1.35	94
					4- 5-57	3.15	640
					12-26-57	1.79	170
233	St. Marys River near Steeles Tavern, Va.	Lat 37°55'50", long 79°09'55", 3 miles east of Steeles Tavern.	15.7	1951-58	12- 4-50	5.1	1,500
					3-11-52	3.9	790
					12- -52	2.91	370
					3- 1-54	4.54	1,150
					8-18-55	6.52	2,770
					9- -56	2.81	340
					4- 5-57	3.77	720
					12-26-57	3.82	750
287	Cove Creek near Covesville, Va.	Lat 37°52'06", long 78°43'32", at bridge, 1.5 miles southwest of Covesville.	4.0	1944, 1950-58	9-19-44	9.1	2,000
					5-31-50	6.2	820
					6-10-51	5.6	640
					8-31-52	5.89	730
					3-25-53	4.1	305
					3- 1-54	(a)	<100
					8-18-55	6.52	900
					7-10-56	4.51	380
					4- 5-57	3.66	230
					7-27-58	4.99	490
292	North Fork Hardware River at Red Hill, Va.	Lat 37°58'03", long 78°37'04", 0.5 mile west of Red Hill.	11.0	1950-58	9-11-50	8.89	510
					10- -50	(a)	<80
					3-11-52	7.77	390
					3-25-53	6.75	300
					3- 1-54	6.47	280
					8-18-55	8.84	500
					7-20-56	7.76	390

a Peak stage did not reach bottom of gage.
‡ Operated as a continuous-record gaging station.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		James River basin--Continued					
292	North Fork Hardware River at Red Hill, Va.	Lat 37°58'03", long 78°37'04", 0.5 mile west of Red Hill.	11.0	1950-58	4- 7-57	6.45	270
					7-27-58	4.45	145
294	South Branch of North Fork Hardware River near North Garden, Va.	Lat 37°57'21", long 78°39'35", 1.5 miles northwest of North Garden.	6.59	1949-58	8-15-49	8.8	1,870
					9-11-50	8.76	1,870
					1951	6.57	730
					8-31-52	5.68	490
					3-15-53	5.48	445
					3- 1-54	3.22	105
					8-18-55	7.50	1,100
					7-20-56	7.25	1,000
					4- 5-57	5.15	370
					7-27-58	7.58	1,140
327	Schenks Branch at Charlottesville, Va.	Lat 38°02'30", long 78°28'30", at Rugby Ave. in McIntire Park, Charlottesville.	1.34	1950-58	9-13-50	6.7	692
					12- 4-50	4.1	175
					8-31-52	4.41	220
					5-20-53	6.0	510
					3- 1-54	-	-
					8-18-55	6.47	400
					7-20-56	8.60	650
					9-17-57	4.75	210
					7-27-58	6.45	400
342	Willis River at Curdsville, Va.	Lat 37°25'44", long 78°27'35", 1 mile north of Curdsville.	42.3	1950-58	9-10-50	5.06	(†)
					3-20-51	4.9	(†)
					12-23-51	7.1	(†)
					11-20-52	7.45	(†)
					5-22-54	6.28	(†)
					8-18-55	9.67	(†)
					2- 7-56	6.15	(†)
					4-11-57	5.63	(†)
					5- 8-58	6.02	(†)
343	Little Willis River at Curdsville, Va.	Lat 37°24'38", long 78°27'35", 0.5 mile south of Curdsville.	7.07	1951-58	3-20-51	5.42	420
					12-23-51	5.50	430
					11-20-52	5.69	450
					5-22-54	5.54	430
					8-18-55	6.26	563
					2- 7-56	3.64	150
					4-11-57	5.3	390
					5- 8-58	4.7	305
378	Falling Creek near Midlothian, Va.	Lat 37°27'15", long 77°35'20", 4 miles southeast of Midlothian.	18.1	1951-58	3-20-51	(a)	<130
					3-24-52	5.93	500
					11-21-52	4.67	315
					5-21-54	4.63	310
					8-18-55	7.50	812
					10- 1-55	3.96	235
					2-26-57	5.44	420
					8- 4-58	5.21	385
388	North Branch Appomattox River near Appomattox, Va.	Lat 37°22'55", long 78°47'24", 3 miles northeast of Appomattox.	5.79	1955-58	8-17-55	5.42	535
					4-15-56	4.21	240
					4- 5-57	4.55	310
					11-19-57	5.47	545
405	Flat Creek near Amelia, Va.	Lat 37°23', long 78°03', at bridge on State Highway 681, 6 miles northwest of Amelia.	73	1947‡, 1954-58	5-21-54	7.96	1,800
					8-18-55	9.13	3,200
					10-15-55	8.33	2,180
					4-10-57	6.15	670
					8-26-58	8.47	2,280
422	Glebe Creek tributary near Charl Charles City, Va.	Lat 37°22'05", long 77°04'15", 2 miles north of Charles City.	.7	1948, 1951-58	5-26-48	4.64	555
					6- 5-51	2.8	56
					6-30-52	2.58	47
					11-22-52	2.14	28
					1-28-54	1.76	12
					8-13-55	4.20	286
					7-29-56	2.18	29
					12-16-56	2.08	25
					5-25-58	2.68	52
427	Collins Run near Providence Forge, Va.	Lat 37°23'59", long 77°02'54", 2.5 miles south of Providence Forge.	2.84	1948, 1951-58	5-26-48	7.4	1,630
					12- 5-50	3.54	82
					1-28-52	4.37	160
					11-22-52	4.18	135
					1-28-54	3.48	78
					8-13-55	7.03	1,350
					7-29-56	3.74	96
					8-19-57	4.47	170
					5-25-58	4.90	255
		Dismal Swamp basin					
435.5	Folly Swamp near Sunbury, N. C.	Lat 36°29'20", long 76°34'30", at culvert on State Highway 32, 1.5 miles above Dismal Swamp and 4.0 miles north of Sunbury, Gates County.	3.43	1953-58	8-14-53	23.48	180
					1- -54	23.44	175
					9-20-55	24.69	340
					5- 6-56	23.45	178
					2- 6-57	23.36	195
					5- 7-58	23.52	180

† Discharge not determined.
‡ Operated as a continuous-record gaging station.
a Peak stage did not reach bottom of gage.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Chowan River basin					
484	Seacock Creek near Ivor, Va.	Lat 36°55'28", long 76°55'48", 2 miles northwest of Ivor.	27.4	1950-58	9-12-50	4.50	170
					6- -51	3.98	95
					1-29-52	4.86	240
					11-21-52	4.59	180
					5-23-54	4.81	220
					8-24-55	4.64	195
					2- 9-56	4.38	145
					2- 4-57	4.9	240
					5- 6-58	6.33	700
497	Cypress Swamp near Burdette, Va.	Lat 36°44'29", long 76°56'18", 3 miles southwest of Burdette.	8.55	1950-58	9-12-50	5.30	330
					3- -51	5.25	320
					1-29-52	5.20	310
					2- -53	3.61	100
					1- -54	5.52	370
					4-26-55	5.36	340
					2- 9-56	5.05	280
					2- 4-57	4.74	230
					5- 6-58	6.17	520
517	Rocky Run at Lawrenceville, Va.	Lat 36°46'15", long 77°50'30", 0.8 mile northeast of Lawrenceville.	6.16	1954-58	4-16-54	5.63	(†)
					8-18-55	4.87	(†)
					10- -55	3.28	(†)
					10-28-56	6.25	(†)
					5- 7-58	6.20	(†)
531.1	Wildcat Swamp near Jackson, N. C.	Lat 36°26', long 77°22', at culvert on U. S. Highway 158, 8½ miles above mouth and 4.1 miles northeast of Jackson, Northampton County.	.7	1953-58	3- 2-53	22.04	12
					5-24-54	24.44	81
					9-20-55	22.48	24
					5- 6-56	23.27	51
					2- 5-57	24.61	84
					5- 7-58	25.97	278
532.3	Cutawhiskie Creek near Woodland, N. C.	Lat 36°18', long 77°12', at bridge on State Highway 35, 6½ miles above Chapel Branch, and 2.3 miles south of Woodland, Northampton County.	11.8	1953-58	2- -53	20.54	86
					1-26-54	21.76	380
					9- 5-55	22.61	700
					3-16-56	21.38	260
					2- 4-57	21.34	220
					5- 7-58	21.94	434
535.3	Chinkapin Swamp near Colerain, N. C.	Lat 36°12', long 76°47', at culvert on State Highway 350, 0.8 mile above Peele Branch, and 1.0 mile west of Colerain, Bertie County.	8.89	1953-58	6-15-53	20.91	170
					1- -54	21.38	270
					9-20-55	23.17	770
					5- 6-56	20.79	133
					2- -57	20.51	105
					5- 7-58	21.42	280
		Roanoke River basin					
613	Nininger Creek near Bedford, Va.	Lat 37°16'26", long 79°29'31", 4 miles south of Bedford.	4.77	1949-58	3-23-49	7.7	2,200
					5-31-50	3.73	600
					2- 7-51	4.17	760
					8- -52	3.44	520
					2- -53	3.58	560
					1954	(a)	<170
					10-15-54	5.1	1,140
					1956	4.05	720
					5- -57	5.95	1,450
					3-27-58	3.06	400
686.1	Vade Mecum Creek tributary near Moores Springs, N. C.	Lat 36°24', long 80°19', at culvert on State Highway 66, 2 miles above mouth and 2.5 miles west of Moores Springs, Stokes County.	b1	1954-58	1954	(a)	<45
					4-14-55	20.28	166
					1956	(a)	<45
					4- 4-57	20.22	163
					11-25-57	18.71	78
686.6	Little Snow Creek near Lawsonville, N. C.	Lat 36°28', long 80°10', at bridge on secondary road, ¾ mile above mouth and 3½ miles southeast of Lawsonville, Stokes County.	5.42	1954-58	7- -54	20.46	610
					7- -55	22.01	810
					4-15-56	19.42	445
					4- 5-57	20.69	626
					5- -58	19.93	520
690.3	Belews Creek near Kernersville, N. C.	Lat 36°12', long 80°04', at bridge on U. S. Highway 158, 4.7 miles above East Belews Creek, and 10 miles north of Kernersville, Forsyth County.	14.9	1954-58	1- -54	22.71	760
					10-15-54	23.98	1,760
					9- -56	22.76	780
					2- -57	22.61	700
					4-28-58	22.50	630
708.1	Jacobs Creek near Wentworth, N. C.	Lat 36°20', long 79°50', at bridge on secondary road, 3½ miles above mouth, and 7.3 miles southwest of Wentworth, Rockingham County.	12	1954-58	1- -54	23.80	700
					10-15-54	28.94	5,290
					9- -56	21.87	c380
					6- -57	24.47	820
					3-25-58	25.39	1,050
710	Nicholas Creek near Ferrum, Va.	Lat 36°52', long 80°03', at bridge on State Highway 605, 5 miles northeast of Henry.	14	1949-58	6-28-49	13.4	11,800
					1950	(a)	(†)
					1951	(a)	(†)
					9- 1-52	9.55	(†)
					2- -53	8.49	(†)
					1- -54	3.74	(†)
					3- 6-55	7.41	(†)
					4- -56	6.10	(†)
					4- -57	6.97	(†)
					11- -57	5.22	(†)

† Discharge not determined.
a Peak stage did not reach bottom of gage.
b About.
c Estimated.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Roanoke River basin--Continued					
714.1	Matrimony Creek near Leaksville, N. C.	Lat 36°31'45", long 79°50'10", at bridge on secondary road, 0.5 mile above Little Matrimony Creek, 6.0 miles above mouth and 5 miles northwest of Leaksville, Rockingham County.	12.0	1958	5-28-58	15.36	(†)
751.6	Moon Creek near Yanceyville, N. C.	Lat 36°28', long 79°23', at bridge on secondary road, ½ mile below East Prong Moon Creek and 5½ miles northwest of Yanceyville, Caswell County.	29.9	1954-58	1- -54	15.59	400
					10-15-54	20.70	3,050
					10- 1-55	19.83	2,380
					2- -57	17.52	1,030
					8-13-58	19.14	1,880
752.3	South Country Line Creek near Hightowers, N. C.	Lat 36°19', long 79°18', at bridge on secondary road 1½ miles above Penson Creek and 3⅔ miles west of Hightowers, Caswell County.	7.13	1954-58	4- -54	16.91	430
					7-12-55	22.12	2,360
					5- -56	20.07	1,050
					2- 1-57	17.42	(†)
					11-25-57	15.76	(†)
759	Lawsons Creek at Turbeville, Va.	Lat 36°36'41, long 79°01'28", 1 mile southeast of Turbeville.	8.7	1951-58	4-10-51	9.20	780
					6- -52	9.03	750
					11-21-52	6.6	360
					1-22-54	7.92	580
					10-15-54	10.81	1,050
					10- 3-55	8.25	630
					9-17-57	12.98	1,450
					8-13-58	9.18	780
772.1	Cobbs Creek tributary near Leasburg, N. C. d/	Lat 36°23', long 79°10', at culvert on secondary road, 1½ miles above mouth and 1.3 miles south of Leasburg, Caswell County.	b1	1954-58	7-16-54	19.40	44
					8-18-55	20.04	68
					1956	18.9	28
					3- -57	20.55	88
					7- -58	19.18	37
773.1	Storys Creek near Roxboro, N. C.	Lat 36°24', long 79°01', at culvert on State Highway 57, 1½ miles above Water Works Lake, and 2.3 miles west of Roxboro, Person County.	2.04	1954-58	7-15-54	19.52	180
					9-30-55	20.95	350
					7-20-56	19.28	155
					8-25-57	18.10	65
					4-29-58	20.53	299
796	Jolly Holly Branch at Boydton, Va.	Lat 36°40'38", long 78°23'13", 0.5 mile north of Boydton.	3.60	1954-58	1954	6.2	(†)
					8-13-55	5.62	(†)
					6- 2-56	6.24	(†)
					2- 1-57	3.67	(†)
					5- 6-58	4.20	(†)
810.6	Smithwick Creek tributary near Williamston, N. C.	Lat 35°43'45", long 77°04'40", at culvert on U. S. Highway 17, ¼ mile above mouth and 9.5 miles south of Williamston, Martin County.	.9	1953-58	3- -53	20.70	10
					7- -54	21.68	49
					9-20-55	23.86	250
					9-26-56	23.56	210
					10- -56	21.25	29
					8-26-58	21.67	48
811.1	White Oak Swamp near Windsor, N. C.	Lat 36°04', long 76°59', at bridge on U. S. Highway 13, ¾ mile above mouth, and 6.0 miles north of Windsor, Bertie County.	17.1	1953-58	4-13-53	15.82	96
					1-26-54	18.14	610
					9-20-55	20.68	1,450
					5- 6-56	18.14	610
					1957	16.97	320
					8-26-58	17.40	420
		Pamlico River basin					
*812.1	Shelton Creek near Oxford, N. C.	See previous table.	22.6	1954-58	7-15-54	18.22	(†)
					8-17-55	21.39	(†)
					3-16-56	17.11	(†)
					2- -57	18.90	(†)
					4- -58	18.09	(†)
817.1	Long Creek at Kittrell, N. C.	Lat 36°14', long 78°27', at bridge on secondary road, 2½ miles above mouth and 0.7 mile west of Kittrell, Vance County.	3.26	1954-58	6-16-54	18.00	600
					8-17-55	19.27	980
					7-20-56	19.45	1,050
					2- -57	16.67	362
					7- -58	16.92	400
825.4	Wildcat Branch near Mapleville, N. C. e/	Lat 36°04', long 78°09', at culvert on secondary road, 1¾ miles above mouth, 5 miles east of Mapleville, Franklin County.	.35	1953-58	7- -53	25.00	175
					5- -54	23.23	100
					7-13-55	22.11	70
					3-16-56	13.9	17
					9-19-57	20.84	34
					5- 7-58	23.32	103
826.3	Harts Mill Run near Tarboro, N. C.	Lat 35°56'00", long 77°36'40", at bridge on U. S. Highway 64, 1½ miles above mouth and 6.2 miles west of Tarboro, Edgecombe County.	9.08	1953-58	6-23-53	21.11	260
					1-22-54	21.15	275
					9- 3-55	21.94	460
					9-26-56	20.18	116
					6- 9-57	21.17	275
					8-25-58	20.78	(†)
*828.3	Fishing Creek near Warrenton, N. C.	See previous table.	44.7	1954-58	1- -54	23.17	c5,300
					2- -55	21.80	c3,900
					5- 6-56	17.77	1,170
					1-30-57	18.33	1,440
					5- 7-58	19.71	2,240

* Also a low-flow partial-record station.
† Discharge not determined.
b About.
c Estimated.
d Formerly published as Hyco Creek tributary.
e Formerly published as Big Peachtree Creek tributary.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Pamlico River basin--Continued					
830.9	Beaverdam Swamp near Heathsville, N. C.	Lat 36°17', long 77°42', at culvert on State Highway 561, 3.5 miles northeast of Heathsville, Halifax County, and 6 miles above Marsh Swamp.	9.44	1953-58	4-13-53	18.61	50
					1-26-54	20.23	355
					9-19-55	19.79	240
					3-16-56	20.34	390
					1957	19.00	95
					5- 6-58	23.14	1,520
834.1	Deep Creek near Scotland Neck, N. C.	Lat 36°10', long 77°28', at culvert on State Highway 125, 4½ miles above Canal Creek, and 3 miles west of Scotland Neck, Halifax County.	11.7	1953-58	8- -53	17.12	82
					1- -54	18.67	(†)
					9- 5-55	19.25	(†)
					3-16-56	18.05	360
					2- -57	18.66	(†)
					5- 7-58	18.49	540
842.4	Collie Swamp near Everetts, N. C.	Lat 35°49'30", long 77°12'05", at bridge on U. S. Highway 64, 1.6 miles west of Everetts, Martin County, and 4.8 miles above mouth.	29.0	1953-58	5- 1-53	19.32	310
					1-23-54	20.54	630
					9-20-55	23.02	1,900
					3-16-56	19.37	315
					4- -57	19.29	300
					8-12-58	21.98	1,150
845.2	Upper Goose Creek near Yeatsville, N. C.	Lat 35°31'25", long 76°53'23", at culvert on U. S. Highway 264, 5 miles above mouth and 8.5 miles west of Yeatsville, Beaufort County.	b2	1953-58	9-27-53	19.51	29
					1-24-54	19.86	40
					9-20-55	24.00	300
					9-26-56	21.89	136
					12- -56	20.37	58
					1- 8-58	19.34	30
845.7	Acre Swamp near Pinetown, N. C.	Lat 35°35'02", long 76°50'23", at bridge on State Highway 32, 1 mile above mouth and about 2½ miles southeast of Pinetown, Beaufort County.	(††)	1953-58	8-14-53	19.66	225
					1-25-54	19.73	248
					9-21-55	24.46	2,950
					7-10-56	19.60	220
					2- -57	20.02	350
					1- -58	21.35	880
		Neuse River basin					
850.2	Stony Creek tributary near Hillsboro, N. C.	Lat 36°03', long 79°02', at culvert 40 ft south of U. S. Highway 70, 0.65 mile east of junction with U. S. Highway 70A, 1 mile above mouth, and 4.2 miles southeast of Hillsboro, Orange County.	b1	1953-58	3- -53	23.6	230
					1-22-54	19.66	41
					4-14-55	21.95	144
					3-16-56	20.10	57
					1-31-57	20.44	72
					4- -58	21.55	123
851.9	North Fork Little River tributary near Rougemont, N. C.	Lat 36°12', long 79°01', at culvert on State Highway 57, 1½ miles above mouth, and 6 miles west of Rougemont, Orange County.	1.43	1954-58	3- -54	20.77	74
					9-30-55	21.61	122
					8-13-56	21.97	158
					6- 5-57	22.36	207
					1- -58	21.67	125
870.3	Lick Creek near Durham, N. C.	Lat 35°58'50", long 78°44'20", at culvert on State Highway 98, 0.2 mile below Rocky Branch, 1.8 miles west of Durham-Wake County line, and about 8 miles east of Durham, Durham County.	13.6	1954-58	1-24-54	20.74	930
					8-17-55	21.14	1,040
					3-16-56	20.56	870
					2- -57	19.37	535
					5- -58	19.55	640
871.4	Lower Barton Creek tributary near Raleigh, N. C.	Lat 35°54'45", long 78°40'55", at culvert on State Highway 50, 1.6 miles above mouth and 7 miles north of Raleigh, Wake County.	.63	1954-58	1-22-54	20.35	55
					9- 3-55	22.02	165
					6- 2-56	21.14	104
					5-11-57	23.08	248
					5- -58	20.77	79
872.4	Stirrup Iron Creek tributary near Nelson, N. C.	Lat 35°53'10", long 78°49'40", at culvert on secondary road, ½ mile above mouth, 1½ miles east of Nelson, Durham County, and 2.7 miles west of Raleigh-Durham airport.	.25	1952, 1954-58	8-31-52	50.5	172
					1- -54	46.35	37
					8- -55	47.13	59
					3-16-56	46.39	38
					9-29-57	46.88	51
					5- -58	49.03	132
875.8	Swift Creek near Apex, N. C.	Lat 35°43', long 78°45', at bridge on secondary road, 2¾ miles below Williams Creek, 6.1 miles northeast of Holly Springs, and 6.1 miles east of Apex, Wake County.	19.5	1954-58	1-22-54	22.78	1,870
					8-18-55	23.66	2,750
					6- 2-56	23.11	2,160
					5-11-57	24.02	3,150
					5- 7-58	22.77	1,850
879.1	Middle Creek near Holly Springs, N. C.	Lat 35°39', long 78°48', at culvert on secondary road, 1 mile above Oxford Lake and 1.8 miles northeast of Holly Springs, Wake County.	8.23	1954-58	2-21-54	24.71	1,000
					9- 3-55	24.81	1,070
					9-26-56	24.81	1,070
					6- 9-57	24.28	800
					5- 6-58	23.76	600
881.4	Stone Creek near Newton Grove, N. C.	Lat 35°20', long 78°22', at bridge on U. S. Highway 701 in Johnston County, 1 mile above mouth and 6.6 miles north of Newton Grove.	27.9	1953-58	6-13-53	20.12	265
					2- -54	20.85	475
					8-17-55	22.50	1,150
					9-26-56	20.24	298
					3-10-57	20.46	353
					5- 7-58	20.50	365
882.1	Hannah Creek near Benson, N. C.	Lat 35°24', long 78°31', at culvert on U. S. Highway 301, about 2 miles northeast of Benson, Johnston County, and 3 miles above Stony Fork.	2.59	1953-58	6- -53	21.68	190
					1-22-54	20.52	92
					8-12-55	20.69	105
					9-26-56	21.63	190
					11-22-56	21.30	141
					2-27-58	20.36	83

† Discharge not determined. †† Indeterminate. a About.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Neuse River basin--Continued					
884.2	Long Creek near Selma, N. C.	Lat 35°38', long 78°15', at culvert on State Highway 39, 2¼ miles above mouth and 7 miles northeast of Selma, Johnston County.	6.87	1953-58	3-12-53	22.65	1,100
					1- -54	22.86	1,650
					8- -55	22.34	600
					3-16-56	22.57	900
					6- 9-57	22.78	1,400
					8-26-58	22.25	520
905.6	Lee Swamp tributary near Lucama, N. C.	Lat 35°38'20", long 78°01'40", at culvert on U. S. Highway 301, ½ mile above mouth and 1.1 miles southwest of Lucama, Wilson County.	2.52	1953-58	6-22-53	21.09	44
					1-22-54	23.10	236
					9-19-55	23.49	320
					3-16-56	21.86	90
					2-28-57	21.94	98
					5- 7-58	22.98	(†)
907.8	White Oak Swamp tributary near Wilson, N. C.	Lat 35°42'25", long 77°47'10", at culvert on secondary road, 0.3 mile west of Holdens Cross Roads, 1½ miles above mouth, and 7 miles east of Wilson city limits, Wilson County.	2.60	1953-58	5- 7-53	21.00	92
					1- -54	21.82	270
					9- 4-55	22.38	500
					9-26-56	20.67	58
					11-22-56	20.58	51
					11-23-57	20.76	66
909.6	Nahunta Swamp near Pikeville, N. C.	Lat 35°30'40", long 77°59'00", at bridge on U. S. Highway 117, 1.0 mile north of Pikeville, Wayne County.	18.6	1953-58	7- -53	17.10	370
					1- -54	17.96	600
					9-19-55	19.42	420
					8-21-56	16.98	246
					6- 9-57	16.57	136
					5- 7-58	18.00	280
914.3	Shepherd Run near Snow Hill, N. C.	Lat 35°26'05", long 77°38'40", at culvert on U. S. Highway 258, 1 mile above mouth and 2.0 miles south of Snow Hill, Greene County.	1.47	1953-58	4- -53	17.71	(†)
					1954	20.0	(†)
					9-19-55	20.81	(†)
					1956	20.0	(†)
					1957	20.0	(†)
					11- 1-57	19.35	(†)
918.1	Halfmoon Creek near Fort Barnwell, N. C.	Lat 35°18'00", long 77°21'15", at bridge on State Highway 55, 1.5 miles northwest of Fort Barnwell, Craven County, and 2.3 miles above mouth.	4.87	1953-58	9- -53	19.00	257
					1- -54	18.37	175
					9-19-55	21.67	1,600
					5- 7-56	18.29	166
					1957	(a)	<140
					9- -58	17.18	(†)
*920.2	Palmetto Swamp near Vanceboro, N. C.	See previous table.	24.2	1953-58	9- -53	22.05	1,030
					3- -54	19.76	175
					9-20-55	26.14	3,700
					5- 7-56	19.10	(†)
					11-22-56	20.74	500
					5- 6-58	19.97	250
921.2	Batchelders Creek near New Bern, N. C.	Lat 35°09'00", long 77°10'20", at bridge on U. S. Highway 70, 2.1 miles below Rollover Creek, 0.8 mile west of Clark, and 6.7 miles northwest of New Bern, Craven County.	33.6	1953-58	5- -53	14.96	520
					1- -54	14.79	480
					9-20-55	23.58	c7,000
					5- 7-56	14.78	475
					11-22-56	15.70	710
					9- -58	16.86	1,080
922.9	Tuckahoe Swamp tributary near Comfort, N. C.	Lat 35°00', long 77°36', at culvert on State Highway 41, 1½ miles above mouth and 5.4 miles west of Comfort, Jones County.	3.35	1953-58	9- -53	21.78	132
					12- -53	21.60	110
					9-19-55	f25.50	630
					5- 7-56	21.75	129
					6- 6-57	21.32	82
					6- 3-58	22.33	220
925.2	Vine Swamp near Kinston, N. C.	Lat 35°09', long 77°33', at bridge on State Highway 12, 9 miles above mouth, 1.4 miles northwest of Lenoir-Jones County line, and 7 miles south of Kinston, Lenoir County.	5.64	1953-58	9- -53	21.52	217
					1- -54	20.39	90
					9-19-55	23.71	840
					5- 7-56	20.73	98
					3- 8-57	20.38	66
					1-25-58	20.74	99
926.2	Upper Broad tributary near Grantsboro, N. C.	Lat 35°08', long 76°56', at bridge on State Highway 55, 1 mile above mouth and 5.5 miles west of Grantsboro, Pamlico County.	3.31	1953-58	8-14-53	20.14	110
					12- -53	19.67	57
					9-20-55	g22.99	800
					5- 7-56	19.55	48
					10- -56	20.66	215
					9-20-58	20.14	110
		White Oak River basin					
*927.2	White Oak River at Belgrade, N. C.	See previous table.	53.3	1953-58	6- -53	11.72	250
					12- -53	10.61	124
					9-20-55	23.49	8,900
					10- -55	12.79	385
					6- 6-57	13.04	420
					5- 7-58	12.80	390

* Also a low-flow partial-record station.
† Discharge not determined.
a Peak stage did not reach bottom of gage.
c Estimated.
f Stage-discharge relation affected by backwater from Trent River.
g Backwater from high winds up Pamlico Sound.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Queens Creek basin					
927.8	Bell Swamp near Hubert, N. C. h/	Lat 34°42'04", long 77°14'01", at culvert on State Highway 172, 2 miles above mouth and 1.8 miles southwest of Hubert, Onslow County.	4.95	1953-58	8-12-53	20.94	175
					5-14-54	19.60	51
					9-20-55	25.70	1,320
					3-29-56	19.67	55
					8- -57	20.42	120
					9-29-58	22.11	350
		New River basin					
930.4	Southwest Creek tributary near Jacksonville, N. C.	Lat 34°47'20", long 77°33'10", at culvert on secondary road, ½ mile above mouth, 2.3 miles south of Catharine Lake, and about 10 miles west of Jacksonville, Onslow County.	b1	1953-58	1953	(a)	<10
					12- -53	19.53	c30
					9-19-55	22.50	282
					1956	(a)	<10
					5-28-57	21.90	226
					9-28-58	21.69	205
930.7	Southwest Creek near Jacksonville, N. C.	Lat 34°44'00", long 77°32'00", at bridge on State Highway 53, ½ mile above Harris Creek, and 4.5 miles southwest of Jacksonville, Onslow County.	26.9	1953-58	6- -53	16.46	197
					12- -53	16.95	245
					9-20-55	26.9	5,500
					5- 7-56	17.70	340
					6- 6-57	20.81	1,150
					9-29-58	19.79	790
		Cape Fear River basin					
932.9	Haw River near Summerfield, N. C.	Lat 36°14', long 79°52', at bridge on secondary road, 3.5 miles northeast of Summerfield, Guilford County, and 6 miles above Mears Fork Creek.	26.3	1954-58	1-23-54	22.32	335
					10-15-54	24.20	1,310
					9- -56	22.14	300
					2-28-57	22.66	420
					4-28-58	22.82	470
963.6	Mines Creek near Burlington, N. C. i/	Lat 36°10', long 79°25', at bridge on secondary road, 1.3 miles above mouth and 4 miles north of Burlington, Alamance County.	3.14	1954-58	1954	<15.0	(†)
					10-15-54	17.04	(†)
					1956	<15.0	(†)
					1957	<15.0	(†)
					4- -58	15.35	(†)
966.6	Rock Creek near Whitsett, N. C.	Lat 36°04', long 79°36', at culvert on U. S. Highway 70A, ¾ mile above mouth and 1.9 miles west of Whitsett, Guilford County.	14.4	1954-58	3- -54	16.46	(†)
					10-15-54	24.04	5,860
					9-26-56	14.71	(†)
					3-14-57	17.38	(†)
					4-11-58	16.82	(†)
967.4	Gun Branch near Alamance, N. C. j/	Lat 36°04', long 79°29', at bridge on State Highway 62, 1.1 miles north of Alamance, Alamance County, and 1½ miles above mouth.	5.02	1954-58	3- -54	16.90	195
					10-15-54	19.15	1,590
					3-16-56	16.26	80
					9- -56	16.26	80
					1-31-57	17.64	445
					11-25-57	17.49	380
970.1	Robeson Creek near Pittsboro, N. C.	Lat 35°43', long 79°13', at culvert on abandoned highway, 500 ft north of U. S. Highway 64 and 1.8 miles west of courthouse at Pittsboro, Chatham County.	1.13	1954-58	1- -54	22.69	125
					10-15-54	24.60	400
					3-16-56	22.76	130
					12- -56	24.00	283
					11-30-57	22.76	130
979.1	White Oak Creek near Wilsonville, N. C.	Lat 35°45', long 79°01', at bridge on secondary road, 1.0 mile above mouth, 1.0 mile north of Wilsonville, and 1½ miles northeast of Seaforth, Chatham County.	23.6	1954-58	2- 7-54	24.00	1,620
					9- 3-55	23.15	960
					3-16-56	23.05	900
					4- -57	22.76	750
					5- 6-58	23.81	1,460
1010.3	Falls Creek near Bennett, N. C.	Lat 35°33', long 79°30', at culvert on State Highway 902, 2.5 miles southeast of Bennett, Chatham County, and 6 miles above mouth.	3.01	1954-58	4- -54	21.75	395
					10-15-54	25.79	1,410
					3-16-56	21.79	398
					12- -56	21.44	348
					5- 6-58	21.74	394
1014.8	Sugar Creek near Tramway, N. C.	Lat 35°25', long 79°15', at culvert on secondary road, 1¼ miles above mouth and 2.1 miles southwest of Tramway, Lee County.	.85	1954-58	2-21-54	27.3	327
					3- 3-55	30.7	400
					7-19-56	24.71	250
					8-24-57	25.4	270
					4- -58	22.42	170
*1018.9	Bear Creek near Goldston, N. C.	See previous table.	43.2	1952-58	8-31-52	30.60	c10,000
					7- -53	19.07	1,950
					1- -54	21.91	2,650
					10-15-54	24.20	3,400
					3-16-56	21.58	2,580
					6- 7-57	20.66	2,380
					5- 7-58	19.8	2,150
1029.1	Dunhams Creek tributary near Carthage, N. C.	Lat 35°19', long 79°23', at culvert on secondary road, ½ mile above mouth and 3½ miles southeast of Carthage, Moore County.	2.19	1954-58	2-21-54	22.45	206
					9- 7-55	21.34	98
					3-16-56	20.65	51
					6- 5-57	22.12	170
					5- 6-58	21.50	111

* Also a low-flow partial-record station.
† Discharge not determined.
a Peak stage did not reach bottom of gage.
b About.
c Estimated.
h Formerly published as Queen Creek tributary.
i Formerly published as Jordan Creek tributary.
j Formerly published as Gum Branch.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Cape Fear River basin--Continued					
1029.3	Crane Creek near Vass, N. C.	Lat 35°17', long 79°16', at bridge on U. S. Highway 1, ½ mile above mouth and 2 miles northeast of Vass, Moore County.	32.4	1954-58	2-21-54	23.99	1,600
					9- 2-55	24.37	1,800
					3-16-56	21.62	740
					10- -56	21.79	800
					11-26-57	21.59	720
1033.9	Anderson Creek tributary near Lillington, N. C.	Lat 35°15'25", long 78°55'40", at culvert on State Highway 210, 2½ miles above mouth and 11.3 miles southwest of Lillington, Harnett County.	7.2	1953-58	11- -52	21.28	92
					12- -53	21.85	132
					8-17-55	21.81	130
					3-16-56	21.01	76
					3- -57	21.18	86
					5- 7-58	21.41	101
1040.8	Reese Creek near Fayetteville, N. C.	Lat 35°04'49", long 48°47'45", at bridge on old U. S. Highway 301, 3.2 miles above mouth and 4.3 miles northeast of city limits of Fatetteville, Cumberland County.	8.05	1953-58	4- -53	15.45	63
					1954	(a)	<100
					9-20-55	22.56	c420
					1956	(a)	<100
					3- -57	19.79	230
					5- 7-58	16.92	105
1055.7	Browns Creek near Elizabethtown, N. C.	Lat 34°36'30", long 78°36'55", at bridge on U. S. Highway 701, 1.5 miles south of Elizabethtown, Bladen County, and 3½ miles above mouth.	14.2	1953-58	3- -53	16.86	32
					1954	(a)	<165
					9-20-55	20.93	2,000
					1956	(a)	<165
					6- 9-57	18.50	165
					7-21-58	18.25	128
*1056.3	Turnbull Creek near Elizabethtown, N. C.	See previous table.	64.9	1949, 1953-58	1949	27.59	3,500
					3- -53	18.91	215
					1954	(a)	<220
					8-25-55	25.38	1,760
					5- 7-56	19.87	280
					6- 7-57	20.31	310
					1- -58	19.98	286
1061.8	Stewarts Creek tributary near Warsaw, N. C.	Lat 34°57', long 78°04', at culvert on U. S. Highway 117, ½ mile above mouth and 3.0 miles southeast of Warsaw, Duplin County.	b1	1953-58	1953	(a)	<10
					1954	(a)	<10
					9-19-55	23.57	117
					5- 7-56	21.33	31
					6- 9-57	21.67	40
					5- -58	21.76	42
1062.4	Turkey Creek near Turkey, N. C.	Lat 35°00', long 78°11', at bridge on secondary road, 1 mile north of Turkey, Sampson County, and 2¾ miles above mouth.	15.7	1953-58	3- 4-53	19.28	50
					1954	(a)	<50
					9-19-55	22.60	1,190
					5- 7-56	21.36	470
					6- 8-57	20.88	290
					5- 7-58	20.70	236
1069.1	Big Swamp near Roseboro, N. C.	Lat 34°59', long 78°34', at bridge on State Highway 24, ½ mile above Atlantic Coast Line RR., 4.0 miles northwest of Roseboro, and 5 miles above mouth.	32.3	1953-58	11- -52	19.04	280
					12- -52	19.04	280
					1- -54	19.43	330
					8-18-55	20.48	600
					1956	(a)	<250
					6- 9-57	20.75	730
					5- -58	20.09	470
1075.9	Northeast Cape Fear River tributary near Mount Olive, N. C.	Lat 35°11'05", long 77°57'35", at culvert on State Highway 55, 1.4 miles above mouth and 5.9 miles east of city limits of Mount Olive, Wayne County.	.8	1953-58	1953	(a)	<4
					8-17-54	19.20	8.4
					9-19-55	21.63	95
					3-16-56	18.76	(†)
					9-30-57	19.30	12
					5- 7-58	19.30	12
1076.2	Mathews Creek near Pink Hill, N. C.	Lat 35°05'50", long 77°49'10", at bridge on State Highway 111, 1 mile above mouth and 5½ miles northwest of Pink Hill, Duplin County.	9.29	1953-58	6- -53	19.90	105
					1- -54	19.30	48
					9-19-55	21.96	809
					5- 7-56	19.52	65
					9-30-57	19.51	64
					5- 6-58	19.51	64
					6-28-58	19.51	64
1079.8	Limestone Creek near Beulaville, N. C.	Lat 34°55'40", long 77°48'10", at bridge on State Highway 24, 1.5 miles west of Beulaville, Duplin County, and 2½ miles above mouth.	49.7	1953-58	9- -53	21.34	430
					3- -54	21.72	600
					9-20-55	24.50	3,300
					5- 7-56	21.22	350
					9-30-57	20.66	250
					5- -58	21.46	470
1086.1	Pike Creek near Burgaw, N. C.	Lat 34°30'00", long 77°54'10", at culvert on U. S. Highway 117, 4.2 miles south of Burgaw, Pender County, and 4.4 miles above mouth.	.55	1953-58	11- -52	20.81	26
					12- -53	21.15	35
					9-20-55	22.85	506
					5- 7-56	20.14	16
					6- 9-57	20.86	27
					9-27-58	22.97	700

* Also a low-flow partial record station.
† Discharge not determined.
a Peak stage did not reach bottom of gage.
b About.
c Estimated.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Cape Fear River basin--Continued					
1086.3	Turkey Creek near Castle Hayne, N. C.	Lat 34°23'50", long 77°54'50", in Pender County, at bridge on State Highway 40, 3.3 miles above mouth and 5 miles north of Castle Hayne.	10.2	1953-58	9-27-53 12- -53 9-20-55 3-27-56 5- 7-56 6- 6-57 9-28-58	22.05 21.69 26.00 21.44 21.44 21.51 24.07	174 125 c4,000 102 102 110 1,080
		Waccamaw River basin					
1089.6	Buckhead Branch near Bolton, N. C. k/	Lat 34°20'50", long 78°26'20", at culvert on State Highway 211, 1 mile above mouth and 2.7 miles northwest of Bolton, Columbus County.	21.1	1953-58	4- -53 3- -54 9-20-55 3-16-56 7- 2-57 4-17-58	20.14 19.68 23.19 20.54 20.55 20.70	156 73 (†) 290 293 365
1096.4	Wet Ash Swamp near Ash, N. C.	Lat 34°02'15", long 78°30'15", at bridge on State Highway 130, 0.6 mile above Flat Branch and 2.2 miles southeast of Ash, Brunswick County.	19.7	1953-58	3- -53 1954 8-17-55 5- 7-56 9-25-57 9-28-58	19.74 (a) 21.89 19.48 19.16 20.36	255 <100 1,270 185 114 470
1100.2	Mill Branch near Tabor City, N. C.	Lat 34°11', long 78°48', at culvert on U. S. Highway 701, 2½ miles above mouth and 4.8 miles northeast of Tabor City, Columbus County.	3.85	1953-58	3- -53 1954 9- -55 3-16-56 6- 9-57 1-25-58	20.61 (a) 21.48 20.90 21.56 22.03	74 <14 185 102 200 315
		Pee Dee River basin					
1113.4	South Prong Lewis Fork Creek near North Wilkesboro, N. C.	Lat 36°11', long 81°22', at culvert on U. S. Highway 421, 10 miles above mouth and 15.0 miles west of North Wilkesboro, Wilkes County.	15	1955-58	4-14-55 1956 4- 5-57 4-28-58	13.25 <11.4 12.01 11.51	(†) (†) (†) (†)
1124.1	Fisher River near Bottom, N. C.	Lat 36°27', long 80°46', at bridge on secondary road, 5 miles above Little Fisher River and 3 miles south of Bottom, Surry County.	44.7	1954-58	5- -54 1955 7- -56 4- 5-57 8- -58	15.78 (a) 13.73 14.30 12.72	2,000 <1,390 1,550 1,690 1,320
1140	Ararat River near Pilot Mountain, N. C.	Lat 36°22', long 80°32', at Duke Power Co.'s powerhouse and dam, on secondary road, 1¼ miles above Pilot Creek, and 4.6 miles southwest of Pilot Mountain, Surry County.	287	1938, 1940, 1947, 1953-58	10- -37 8-14-40 6-14-47 3-24-53 1- -54 4-14-55 9- -56 9-30-57 11-18-57	105.1 104.3 106.5 101.2 100.60 101.29 101.29 102.57 100.44	29,000 23,900 40,000 8,240 6,150 8,500 8,500 14,100 5,600
1155.2	Logan Creek near Smithtown, N. C.	Lat 36°13', long 80°34', at culvert on State Highway 67, 1 mile south of Smithtown, Yadkin County, and 9.5 miles above Spillman Creek.	1.08	1954-58	1- -54 4-14-55 4-16-56 6-22-57 8- 3-58	20.98 20.79 20.96 23.08 21.83	245 220 243 496 349
1155.4	South Deep Creek near Yadkinville, N. C.	Lat 36°08', long 80°46', at bridge on secondary road, 3 miles north of Hamptonville and 6.7 miles west of Yadkinville, Yadkin County.	19.5	1954-58	1- -54 4- -55 9-27-56 7-16-57 4-28-58	22.68 21.57 21.96 23.19 23.29	1,870 680 1,000 2,750 2,920
1158.4	Fishers Branch near Kernersville, N. C. l/	Lat 36°06', long 80°06', at culvert on State Highway 150, 2 miles above mouth and 2.1 miles southwest of Kernersville, Forsyth County.	b2	1954-58	5- -54 10-15-54 9- -56 1- -57 4- -58	17.90 20.24 19.13 19.17 19.12	(†) (†) (†) (†) (†)
1174.1	McClelland Creek near Statesville, N. C. m/	Lat 35°57', long 80°57', at culvert on State Highway 115, 0.7 mile above mouth, 2 miles south of New Hope, and 12 miles north of Statesville, Iredell County.	1.6	1954-58	1- -54 6-11-55 9-27-56 9-18-57 4- -58	18.16 17.81 17.81 20.10 18.06	262 226 226 435 250
1208.2	Deal Branch near Salisbury, N. C.	Lat 35°45', long 80°30', at culvert on U. S. Highway 601, 3¼ miles above mouth and 3.7 miles north of Salisbury city limits, Rowan County.	3.88	1954-58	1-22-54 10-15-54 7- -56 2- -57 11- -57	19.02 20.75 20.85 21.08 25.1	270 690 720 790 1,980

† Discharge not determined.
a Peak stage did not reach bottom of gage.
b About.
c Estimated.
k Formerly published as Friar Swamp tributary.
l Formerly published as Salem Creek.
m Formerly published as Patterson Creek tributary.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Pee Dee River basin--Continued					
1221.8	Flat Swamp Creek near Lexington, N. C.	Lat 35°44'05", long 80°06'35", at culvert on old U. S. Highway 64, 1.6 miles above Rocky Meadow Branch and 10 miles southeast of Lexington, Davidson County.	4.24	1954-58	3- -54 4-14-55 3-16-56 4- 5-57 4- -58	23.95 24.73 23.52 24.91 23.28	600 925 470 1,020 396
1225.6	Cabin Creek near Jackson Hill, N. C.	Lat 35°34'57", long 80°09'12", at culvert on State Highway 8, 0.6 mile north of Jackson Hill, Davidson County, and 4 miles above mouth.	10.8	1954-58	1-22-54 2- 7-55 10- 1-55 4- -57 11-25-57	21.60 22.50 22.79 22.03 21.59	780 910 960 842 778
1226.1	Beaverdam Creek near Denton, N. C.	Lat 35°32', long 80°05', at culvert on State Highway 109, 3¼ miles above Yadkin River reservoir and 7.4 miles south of Denton, Davidson County.	4.46	1954-58	1-22-54 4-14-55 10- 1-55 6- 9-57 4- -58	20.17 20.96 22.00 20.03 20.23	264 380 548 246 274
1240.6	North Prong Clark Creek near Huntersville, N. C.	Lat 35°25'13", long 80°47'54", at bridge on secondary road, 1.0 mile above South Prong and 3 miles east of Huntersville, Mecklenburg County.	3.61	1954-58	7- -54 8- -55 3-16-56 2- -57 11-19-57	21.26 18.11 16.80 16.28 18.22	(†) (†) (†) (†) (†)
1242.1	Mallard Creek near Charlotte, N. C.	Lat 35°19'05", long 80°44'15", at bridge on U. S. Highway 29, above Toby Creek, 3.3 miles southwest of Cabarrus-Mecklenburg County line and 6 miles northeast of Charlotte, Mecklenburg County.	b21	1954-58	7- -54 4-14-55 3-16-56 2-28-57 4- -58	21.82 22.58 21.37 20.60 21.40	2,100 3,060 1,600 1,170 1,650
1254.1	Chinkapin Creek near Monroe, N. C.	Lat 35°03', long 80°30', at bridge on secondary road, 2½ miles above Stewards Creek and 5 miles northeast of Monroe, Union County.	8.49	1954-58	7- -54 2- -55 5- -56 6- 5-57 4- 6-58	23.38 22.86 23.48 21.55 21.75	(†) (†) (†) (†) (†)
1273.9	Palmetto Branch at Ansonville, N. C. n/	Lat 35°06'03", long 80°07'11", at culvert on secondary road, 0.2 mile west of Ansonville city limits, Anson County, and 3½ miles above mouth.	b1	1953-58	8- 3-53 2- -54 10-15-54 4-24-56 1957 7- 8-58	22.09 22.09 21.09 23.24 (a) 23.92	196 196 138 261 <40 296
1280.4	Cheek Creek near Pekin, N. C.	Lat 35°12'37", long 79°50'49", at bridge on State Highway 731, 1.4 miles east of Pekin, Montgomery County, and 5 miles above mouth.	14.6	1954-58	1- -54 4-14-55 7-19-56 5-11-57 5- 6-58	20.03 20.08 24.20 17.60 19.91	970 986 6,230 c250 910
1294.4	South Fork Jones Creek near Morven, N. C.	Lat 34°51', long 80°06', at bridge on State Highway 742, 3.5 miles north of the South Carolina-North Carolina State line, 5.3 miles west of Morven, Anson County, and 9¾ miles above mouth.	17.3	1954-58	1- -54 4-14-55 3-16-56 5-11-57 1-25-58	16.23 16.50 16.25 18.13 16.72	495 600 500 1,630 695
1295.3	Little Creek near Pee Dee, N. C.	Lat 34°55'06", long 79°54'42", at culvert on State Highway 85, 2.8 miles southwest of Pee Dee, Anson County.	b1	1954-58	1954 8- -55 1956 1957 1958	<19.0 18.63 <18.2 <18.2 <18.2	(†) (†) (†) (†) (†)
1321.2	Bridge Creek tributary at Johns, N. C.	Lat 34°43', long 79°27', at culvert on U. S. Highway 501, 0.2 mile northwest of Johns, Scotland County, and 1 mile above mouth.	6.72	1953-58	12- -52 1954 1955 1956 1957 7- -58	20.60 (a) 20.38 (a) (a) 19.66	230 <80 190 <80 <80 137
1335.9	Beaverdam Creek near Aberdeen, N. C. o/	Lat 35°00'22", long 79°26'48", at culvert on U. S. Highway 501, 1.0 mile above mouth and 8 miles south of Aberdeen, Scotland County.	4.66	1953-58	12- -52 6-10-54 10-15-54 1956 8-20-57 12- 4-57	21.02 19.68 21.15 21.37 20.80 20.35	142 18 165 136 62 27
1339.6	Big Raft Swamp near Red Springs, N. C.	Lat 34°52', long 79°10', at bridge on secondary road, 0.9 mile above Robeson-Hoke County line, 2.6 miles below Hodgins Pond, and 3.5 miles northeast of Red Springs, Hoke County.	39.8	1953-58	5- -53 4- -54 9- 4-55 1956 6- 9-57 6- -58	20.22 19.78 20.29 (a) 20.80 20.02	620 370 660 <190 (†) 500
1343.8	Tenmile Swamp near Lumberton, N. C.	Lat 34°43'35", long 78°59'30", at culvert on U. S. Highway 301, 0.9 mile above Companys Mill Pond and 7.7 miles north of Lumberton, Robeson County.	16.1	1953-58	7- -53 1954 9- 3-55 1956 1957 5- 7-58	20.41 (a) 20.67 (a) (a) 20.54	250 <23 c470 <23 <23 c350

† Discharge not determined.
a Peak stage did not reach bottom of gage.
b About.
c Estimated.
n Formerly published as Cabbage Branch.
o Formerly published as Lumber River tributary.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Santee River basin					
1381.8	Caleb Branch tributary near Marion, N. C.	Lat 35°39', long 81°55', at culvert on State Highway 26, 0.9 mile above mouth and 4.8 miles southeast of city limits of Marion, McDowell County.	b1	1955-58	4-14-55 1956 6- 4-57 1958	19.36 (a) 20.75 (a)	49 <27 147 <27
1409.8	Carroll Creek near Collettsville, N. C. p/	Lat 35°53'21", long 81°44'18", at bridge in Burke County, on secondary road, 0.9 mile above mouth and 5.0 miles southwest of Collettsville.	2.76	1955-58	4-14-55 4-15-56 6- 5-57 8-12-58	18.87 18.69 21.12 20.96	110 98 397 355
1418.9	Duck Creek near Taylorsville, N. C.	Lat 35°54', long 81°18', at bridge on State Highway 127, 1 mile above mouth and 8 miles west of Taylorsville, Alexander County.	18.6	1954-58	1- -54 4-14-55 4-16-56 5- 4-57 4-28-58	15.83 15.18 14.48 15.08 16.43	c1,120 880 600 835 c1,350
1425.1	Hagan Creek near Catawba, N. C.	Lat 35°40', long 81°08', at culvert on State Highway 10, 1½ miles above McLin Creek and 4.5 miles southwest of Catawba, Catawba County.	7.80	1954-58	1- -54 4-14-55 9-26-56 6-26-57 11-20-57	20.67 18.42 18.74 24.26 25.00	760 366 448 1,840 2,060
1433.1	South Fork Catawba River tributary near Lincolnton, N. C.	Lat 35°27'45", long 81°13'20", at culvert on secondary road, 2 miles east of Lincolnton, Lincoln County, and 2.6 miles above mouth.	b1	1954-58	2- -54 4-14-55 5- -56 2- 1-57 11-19-57	21.42 21.26 22.48 20.87 22.20	145 115 565 70 396
1468.9	East Fork Twelve Mile Creek near Waxhaw, N. C.	Lat 34°58', long 80°43', at bridge on secondary road, 3.0 miles above mouth and 3.4 miles northeast of Waxhaw, Union County.	42.3	1954-58	7- -54 2- -55 3- -56 4- 4-57 1-24-58	23.37 23.18 22.99 22.38 21.76	1,800 1,750 1,690 1,500 1,320
1504.2	Camp Creek near Rutherfordton, N. C.	Lat 35°28', long 81°54', at bridge on secondary road, 1.1 miles above Little Camp Creek and 7 miles northeast of Rutherfordton, Rutherford County.	13.1	1955-58	2- -55 4-15-56 6- 4-57 4- 6-58	14.40 15.45 20.25 17.77	(†) (†) (†) (†)
1524.2	Big Knob Creek near Fallston, N. C.	Lat 35°29'35", long 81°32'25", at bridge on secondary road, 2.5 miles above mouth and 5 miles north of Fallston, Cleveland County.	16.3	1953-58	8- -53 1954 4-14-55 4-16-56 6- 5-57 4-16-58	9.84 (a) 7.90 8.49 10.06 9.48	1,200 <1,000 405 590 1,320 1,000
1526.1	Sugar Branch near Boiling Springs, N. C.	Lat 35°15'00", long 81°37'15", at culvert on State Highway 150, ¼ mile above mouth and 2.7 miles east of Boiling Springs, Cleveland County.	1.42	1954-58	1- -54 7- -55 10- -55 9-17-57 11-17-57	22.44 24.80 23.85 22.30 25.19	420 820 640 398 902
		Combahee River basin					
1760	Combahee River near Yemassee, S. C.	Lat 32°42'25", long 80°49'35", at bridge on U. S. Highway 15, 0.2 mile upstream from Atlantic Coast Line RR. bridge and 1.8 miles northeast of Yemassee.	1,100	1952-57‡, 1957-58	6- 6-57 4-19-58	6.71 9.22	2,150 7,930
		Savannah River basin					
*1975.5	Little Brier Creek near Thomson, Ga.	Lat 33°20', long 82°27', McDuffie and Warren Counties, at State Highway 17, 2 miles south of Happy Hollow.	24	1952-58	9- -52 9-27-53 1-16-54 4- -55 3-16-56 6- -57 4-16-58	5.85 7.77 7.02 7.85 7.65 7.22 8.34	51 495 210 550 445 272 820

* Also a low-flow partial-record station.
† Discharge not determined.
‡ Operated as a continuous-record gaging station.
a Peak stage did not reach bottom of gage.
b About.
c Estimated.
p Formerly published as Cold Spring Creek near Morganton.

Measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table. Those that are measurements of base flow are designated by an asterisk (*); measurements of peak flow by a dagger (†).

Discharge measurements made at miscellaneous sites during water year 1958

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
James River basin, Va.						
Chickahominy River.	James River..	Lat 37°41'38", long 77°29'29", at Chickahominy Mill on State Highway 626, 2.9 miles upstream from U. S. Highway 1 and 3.7 miles south of Ashland.	56	1957	8-13-57 3-11-58	3,800 122
Brook Run....	Chickahominy River.	Lat 37°37'02", long 77°26'33", on U. S. Highway 301, 1.7 miles north of city limits, Richmond.	36		5- 8-58	115
Roanoke River basin						
Cascade Creek	Dan River....	Lat 36°31'55", long 79°39'00", above Mountain Run, 0.9 mile above mouth and 3.0 miles northeast of Draper, Rockingham County, N. C.	27.4		5-20-58	*25.1
Mountain Run.	Cascade Creek	Lat 36°32'00", long 79°38'50", 0.1 mile above mouth and 3.0 miles northeast of Draper, Rockingham County, N. C.	7.34		5-20-58	*6.5
Pamlico River basin, N. C.						
Tar River....	Pamlico River	Lat 36°20'00", long 78°46'10", at bridge on U. S. Highway 158, 0.9 mile above Cub Creek and 1¾ miles west-northwest of Berea, Granville County.	25.7	1932	6-15-58 7-12-58 9- 6-58	*1.08 *.68 *.40
North Fork Tar River.	Tar River....	Lat 36°18'00", long 78°42'00", at highway bridge, ¾ mile above mouth and 7 miles west of Oxford, Granville County.	21.3	1954	6-19-58	*1.46
Fishing Creek	....do.....	Lat 36°17'50", long 78°35'10", above sewage treatment plant, 1 mile south of Oxford, Granville County, and 2.4 miles above Hachers Run.	3.13		6-14-58 7-11-58	*.57 *.36
Do.....	....do.....	Lat 36°16'30", long 78°35'30", at highway bridge, 0.8 mile above Hachers Run and 2½ miles south of Oxford, Granville County.	6.37	1954	5-10-58 6-15-58	*all.0 *2.10
Do.....	....do.....	Lat 36°15'40", long 78°35'10", at bridge on State Highway 96, ½ mile above mouth and 3½ miles south of Oxford, Granville County.	12.6		6-14-58	*4.50
Jordan Creek.	Coon Creek...	Lat 36°19'30", long 78°34'50", at Southern Ry. bridge, 1.2 miles north of Oxford, Granville County, and 1.5 miles above mouth.	7.58		6-15-58 7-12-58	*1.85 *1.39
Coon Creek...	Fishing Creek	Lat 36°18'20", long 78°33'40", at highway bridge, 1.7 miles east of Oxford, Granville County, and 4½ miles above mouth.	20.8		5-18-58 7-12-58 8- 1-58	*11.3 *3.72 *8.05
Do.....	Tar River....	Lat 36°16'00", long 78°34'00", at highway bridge, 1 mile west of Dickerson, 1½ miles above mouth, and 3 miles south of Oxford, Granville County.	24.9		5-18-58 8-30-58	*13.6 *5.55
Long Creek...	Tabbs Creek..	Lat 36°12', long 78°28', at highway bridge, 0.9 mile above mouth and 1.8 miles southwest of Kittrell, Vance County.	5.22		5-17-58 6- 6-58 7-12-58 8-30-58 9-19-58	*9.83 *6.44 *9.47 *6.51 *2.19
Fox Creek....	Tar River....	Lat 36°06', long 78°17', at bridge on State Highway 56, ½ mile above mouth and ½ mile east of Louisburg, Franklin County.	9.79	1954	5-18-58 6-14-58	*8.94 *3.85
Cedar Creek..	....do.....	Lat 36°05', long 78°27', at highway bridge, 1½ miles above Brandy Creek, and 1½ miles south of Franklinton, Franklin County.	11.7	1954-55	5-17-58 6-15-58 8- 8-58	*29.0 *16.8 *20.3
Sapony Creek.	....do.....	Lat 35°55'30", long 78°02'50", at highway bridge, 3.9 miles southeast of Spring Hope, Nash County, and 14.4 miles above mouth.	12.2		6-13-58 8-19-58 9- 5-58 9-26-58	*.18 *0 *.21 *0

* Base flow.
a Average of 2 discharge measurements.

Discharge measurements made at miscellaneous sites during water year 1958--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Pamlico River basin, N. C.--Continued				
Stony Creek..	Tar River....	Lat 35°57'55", long 77°50'50", at highway bridge, 2.2 miles above mouth and 3.3 miles northwest of Rocky Mount, Nash County.	112		6- 5-58 8- 1-58 9- 4-58 9-26-58	*56.7 *19.4 *39.5 *19.4
Compass Creek Tributary.	Compass Creek	Lat 36°00', long 77°47', above sewer in right of way of Atlantic Coast Line RR., 4.2 miles north-northeast of Rocky Mount, Nash County, and 1.8 miles above mouth.	.92		6-14-58	*.02
Compass Creek	Tar River....	Lat 35°53'30", long 77°46'45", at bridge on State Highway 95, 0.9 mile above mouth and 2.5 miles north-northeast of Rocky Mount, Edgecombe County.	7.24		6-14-58 7- 4-58 8- 2-58 9-20-58	*.19 *.17 *.06 *.03
Beech Branch.	....do.....	Lat 36°02', long 77°45', at highway bridge, 0.6 mile south-southwest of Battleboro, Edgecombe County, and 7.5 miles above mouth.	1.98		6-21-58 8- 2-58 9-20-58	*.17 *.14 *.13
Do.....	....do.....	Lat 36°01', long 77°44', at highway bridge, 6.5 miles northeast of Rocky Mount, Edgecombe County, and 5.5 miles above mouth.	10.3		6-21-58 8- 2-58 9-20-58	*.09 *.08 *.10
Sandy Creek..	Swift Creek..	Lat 36°10', long 78°08', at highway bridge, 1.7 miles southeast of Centerville, Franklin County, and 5.0 miles above Deer Branch.	84.8		8-10-58 9- 5-58	*37.0 *45.5
Swift Creek..	Tar River....	Lat 35°58', long 77°35', at highway bridge, 1½ miles above mouth and 1½ miles south of Legett, Edgecombe County.	266	1954	6-22-58 7- 7-58 8- 2-58 9-24-58	*85.9 *79.5 *137 *55.8
Whiteoak Swamp.	Swift Creek..	Lat 36°05', long 77°39', at highway bridge, 0.7 mile northeast of Gethesmane, Edgecombe County, and 7.4 miles above mouth.	5.97		6-21-58 7-16-58 8- 2-58 8- 8-58	*0 *0 *0 *.05
Fishing Creek	Tar River....	Lat 36°23', long 78°10', at bridge on U. S. Highway 401, 1⅝ miles south of Warrenton, Warren County, and 3 miles above Possumquarter Creek.	50.4		6-21-58 7-19-58 9-13-58	*30.1 *39.7 *20.6
Possumquarter Creek.	Fishing Creek	Lat 36°24', long 78°08', off State Highway 58, 0.9 mile southeast of Warrenton, Warren County, and 3½ miles above mouth.	1.45		6-21-58 9-13-58	*.78 *.49
Fishing Creek	Tar River....	Lat 36°20', long 78°08', at highway bridge, 1.9 miles north of Parktown, Warren County, and 0.6 mile below mouth of Possumquarter Creek.	74.4		9-13-58	*32.5
Do.....	....do.....	Lat 36°12', long 78°01', at State Highway 561, 4 miles southwest of Essex, Halifax County, and ¾ mile below Shocco Creek.	205		6-21-58 8- 9-58 9-14-58	*95.0 *82.9 *75.1
Butterwood Creek.	Bear Swamp...	Lat 36°24', long 77°53', at highway bridge, 2¾ miles south of Littleton, Halifax County, and 6.2 miles above mouth.	2.46		8- 9-58 8-19-58	*.94 *1.06
Little Fishing Creek.	Fishing Creek	Lat 36°15', long 77°53', at highway bridge, 2.7 miles east-southeast of Hollister, Halifax County, and 1.5 miles below Bear Swamp.	163		6-14-58 8- 9-58 8-30-58 9- 4-58 9-14-58	*53.2 *31.9 *183 *75.1 *38.7
Jacket Swamp.	Beech Swamp..	Lat 36°12', long 77°40', at highway, 1.1 miles north of Enfield, Halifax County, and 1½ miles above Marsh Swamp.	34.7		9- 4-58 9-26-58	*3.80 *0
Beech Swamp..	Fishing Creek	Lat 36°09', long 77°34', at highway bridge, 6.3 miles east-southeast of Enfield, Halifax County, and 6 miles above mouth.	141		9- 4-58	*82.2
Canal Creek..	Deep Creek...	Lat 36°08', long 77°26', at highway bridge, ½ mile west of Scotland Neck, Halifax County, and 2 miles above mouth.	1.34	1954	9- 5-58 9-21-58 9-27-58	*.46 *1.92 *.38
Town Creek...	Tar River....	Lat 35°49'05", long 77°51'35", at bridge on U. S. Highway 301, 0.8 mile north of Elm City, Wilson County, and 23 miles above mouth.	5.21		8- 5-58 9-20-58	*.44 *0

* Base flow.

Discharge measurements made at miscellaneous sites during water year 1958--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Pamlico River basin, N. C.--Continued						
Town Creek...	Tar River....	Lat 35°49'20", long 77°39'35", at State Highway 43, ¾ mile upstream from Cokey Swamp and 2½ miles northwest of Pinetops, Edgecombe County.	91.8	1954	7- 5-58 9-20-58	*4.40 *2.15
Cokey Swamp..	Town Creek...	Lat 35°50'05", long 77°39'10", at highway bridge, ¾ mile above mouth and 3¾ miles north of Pinetops, Edgecombe County.	64.5		6-17-58 9-27-58	*.91 *2.56
Tar River....	Pamlico River	Lat 35°47'35", long 77°33'05", at highway bridge just below mouth of Town Creek, 0.4 mile northeast of Old Sparta, Edgecombe County.	2,419	1955	5-14-58	†22,200
Conetoe Creek	Tar River....	Lat 35°42'55", long 77°28'40", at highway bridge, 1½ miles above mouth and 2½ miles northeast of Falkland, Pitt County.	99.1	1954-55	6-17-58 9- 5-58	*29.5 *97.8
Tar River....	Pamlico River	Lat 35°37'05", long 77°22'30", at highway bridge, 1 mile downstream from Schoolhouse Branch, on northern edge of Greenville, Pitt County.	2,620	1935-36‡, 1940	5-14-58	†27,900
Parker Creek.	Tar River....	Lat 35°37'20" long 77°21'10", at highway bridge, 1.5 miles northeast of Greenville, Pitt County, and 1.0 mile above mouth.	7.25		6-17-58 7-12-58 7-20-58 8-16-58 9- 6-58	*8.04 *3.38 *5.27 *18.1 *5.46
Green Mill Run.	....do.....	Lat 35°36'15", long 77°20'50", at bridge on U. S. Highway 244A, 1.7 miles east of Greenville, Pitt County, and 1.1 miles above mouth.	13.8		6-19-58 7-12-58 8- 6-58	*2.74 *2.02 *3.18
Beaverdam Swamp.	Broad Creek..	Lat 35°34'26", long 76°55'53", at bridge on Slatestone Rd., 1.3 miles northeast of Alligoods, Beaufort County, and 4.6 miles above mouth.	1.8		6-19-58	*0
Flat Swamp...	Tranters Creek.	Lat 35°46'55", long 77°15'25", at highway bridge, 0.9 mile above mouth and 2.4 miles northeast of Oakley, Pitt County.	21.3		6-19-58 8- 6-58 9-13-58	*1.67 *3.88 *2.29
Grindle Creek	Tar River....	Lat 35°47'45", long 77°22'25", at bridge on State Highway 11, 0.5 mile below unnamed tributary canal, 0.6 mile south of Bethel, Pitt County, and 23.8 miles above mouth.	11.0		6-19-58 8- 8-58 8-20-58	*.96 *.72 *11.9
Tar River....	Pamlico River	Lat 35°34'35", long 77°10'45", at highway bridge, just below mouth of Chicod Creek, 1.1 miles northeast of Grimesland, Pitt County.	2,740		5-15-58	†23,700
Neuse River basin, N. C.						
Eno River tributary.	Eno River....	Lat 36°08', long 79°10', at highway bridge, 1 mile above mouth and 2 miles southsoutheast of Cedar Grove, Orange County.	11.4		9-15-58	*1.08
Eno River....	Neuse River..	Lat 36°06', long 79°09', at ford ½ mile above McGowan Creek and 4½ miles southeast of Cedar Grove, Orange County.	33.0	1954-55	9-15-58	*2.47
Sevenmile Creek.	Eno River....	Lat 36°04', long 79°08', ¼ mile upstream from mouth, at Hillsboro, Orange County.	16.7	1954	9-15-58	*.24
Crooked Creek	Neuse River..	Lat 36°04'38", long 78°55'04", at highway bridge, 0.6 mile above mouth and 5.4 miles northwest of Durham, Durham County.	4.56		9-15-58	*.002
Eno River....	....do.....	Lat 36°04'20", long 78°51'50", at highway bridge, 1.3 miles above Little River, 1½ miles northeast of Weaver, and 3 miles northeast of Braggtown, Durham County.	148	1954-55	9-16-58	*4.93
South Fork Little River.	Little River.	Lat 36°09', long 79°01', at highway bridge, 3 miles above Durham County line and 8 miles northeast of Hillsboro, Orange County.	22.4		9-16-58	*1.76

* Base flow.
† Peak flow.
‡ Operated as a continuous-record gaging station.

Discharge measurements made at miscellaneous sites during water year 1958--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Neuse River basin, N. C.--Continued						
South Fork Little River tributary.	South Fork Little River.	Lat 36°08', long 79°05', at highway bridge, 1.3 miles above mouth, 2 miles southeast of Schley, and 5½ miles northeast of Hillsboro, Orange County.	9.36	1954	9-16-58	*.11
South Fork Little River.	Little River.	Lat 36°09'00", long 78°56'50", at highway bridge, 0.4 mile above mouth and 4.3 miles northwest of Orange Factory, Durham County.	40.3	1954	9-16-58	*2.07
North Fork Little River.	....do.....	Lat 36°11', long 79°02', at highway bridge, 4 miles above Durham County line and 9 miles northeast of Hillsboro, Orange County.	12.4		9-16-58	*.58
Do.....	....do.....	Lat 36°10'50", long 78°58'31", at bridge on Guess Rd., 1.8 miles above Buffalo Creek and 5.3 miles northeast of Schley, Orange County.	20.4		9-16-58	*1.03
Buffalo Creek	North Fork...	Lat 36°11'10", long 78°57'00", at highway bridge, 1.0 mile above mouth and 2.8 miles southwest of Roguemont, Durham County.	5.47		9-16-58	*.07
Mountain Creek.	Little River.	Lat 36°08'40", long 78°53'30", at highway bridge, 0.7 mile above mouth and 1.5 miles northwest of Orange Factory, Durham County.	8.43		9-16-58	*.25
Little River.	Eno River....	Lat 36°05'00", long 78°51'20", at highway bridge, 1.5 miles above mouth, 2.5 miles northeast of Weaver, and 4 miles northeast of Braggtown, Durham County.	105	1954	9-15-58	*4.33
South Flat River.	Neuse River..	Lat 36°16'09", long 79°02'39", at bridge on State highway 157, at Hurdle Mills, 8.8 miles southwest of Roxboro, Person County.	17.2		9-15-58	*.90
Aldridge Creek.	South Flat River.	Lat 36°16', long 79°00', at highway bridge, ¼ mile above mouth and 2½ miles east of Hurdle Mills, Person County.	8.11		9-16-58	*.35
South Flat River.	Flat River...	Lat 36°15'20", long 78°57'50", at highway bridge, 2 miles southwest of Timberlake (Helena), Orange County, and 2.7 miles above confluence with North Flat River.	51.0		9-16-58	*2.04
North Flat River.	....do.....	Lat 36°19'20", long 78°59'30", 1½ miles above U. S. Highway 501, 4¼ miles above Norfolk and Western Ry., and 5 miles south of Roxboro, Person County.	13.4		9-16-58	*.71
Do.....	....do.....	Lat 36°17'20", long 78°56'40", at highway bridge, 0.1 mile below Chappels Creek, ½ mile northeast of Timberlake (Helena), and 8 miles south-southeast of Roxboro, Person County.	32.3		9-16-58	*1.89
Deep Creek...	....do.....	Lat 36°19'50", long 78°53'20", at highway bridge, 4¾ miles above Rock Fork Branch and 6.7 miles southeast of Roxboro, Person County.	11.5		9-16-58	*.08
Do.....	....do.....	Lat 36°14'24", long 78°53'20", at highway bridge, 0.7 mile above mouth and 3.6 miles southwest of Moriah, Person County.	31.9		9-16-58	*.49
Rocky Creek..	....do.....	Lat 36°10'30", long 78°49'22", 0.6 mile upstream from mouth, 1 mile northeast of mouth of Dry Creek, and 1.1 miles west of Durham-Granville County line.	2.7	1926-31‡	9-17-58	*.04
Knap of Reeds Creek.	Neuse River..	Lat 36°09'20", long 78°46'30", above Camp Butner, 0.6 mile above Picture Creek, 3 miles west of Lyons, and 5 miles northwest of Creedmoor, Granville County.	29.5	1954-55	9-16-58	*2.69
Ellerbe Creek	....do.....	Lat 36°01'20", long 78°56'30", 2.0 miles south of Crystal Lake, 2½ miles northwest of Durham, Durham County, 11.9 miles above mouth, and 1 mile east of intersection of U. S. Highways 70 and 70A, on northwest side of Durham.	2.53		9-15-58	*.006

* Base flow.
‡ Operated as a continuous-record gaging station.

Discharge measurements made at miscellaneous sites during water year 1958--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Neuse River basin, N. C.--Continued						
Little Lick Creek.	Neuse River..	Lat 36°01'00", long 78°45'40", at highway bridge, 1⅝ miles above mouth and 2.3 miles south of Redwood, Durham County.	19.2	1954	9-16-58	*0
Ledge Creek..	....do.....	Lat 36°08'10", long 78°42'20", 1.1 miles above dam and 1.8 miles northwest of Creedmoor, Granville County.	6.84		9-17-58	*0
Ledge Creek tributary.	Ledge Creek..	Lat 36°09'30", long 78°41'30", at highway bridge southwest of Hester, Granville County, 2.3 miles above mouth.	7.26		9-16-58	*0
Ledge Creek tributary No. 2.	....do.....	Lat 36°04'30", long 78°43'20", at highway bridge, 1.0 mile above mouth and 1.6 miles southeast of Northside, Granville County.	3.87		9-17-58	*0
Lick Creek b/	Neuse River..	Lat 35°58'50", long 78°44'20", at culvert on State Highway 98, 1.8 miles west of Durham-Wake County line and about 7.2 miles east of intersection with U. S. Highway 70 east of Durham, Durham County.	13.6		9-16-58	*.03
Beaverdam Creek.	....do.....	Lat 36°05'30", long 78°38'20, at highway bridge, 2.0 miles above Robertson Creek and 3.4 miles southeast of Creedmoor, Granville County.	12.7		9-16-58	*0
Robertson Creek.	Beaverdam Creek.	Lat 36°07'20", long 78°39'40", at State Highway 56, 1½ miles east of Creedmoor, Granville County, and 3.6 miles above mouth.	9.38	1954	9-15-58	*.002
Smith Creek..	....do.....	Lat 36°04'20, long 78°38'20", 2.0 miles above mouth and 2.3 miles west of Grissom, Granville County.	9.29		9-17-58	*1.36
Little Beaverdam Creek.	....do.....	Lat 36°02'30", long 78°40'20", at highway bridge 0.3 mile above mouth and 7.0 miles west of Purnell, Wake County.	3.75	1955	9-15-58	*0
Horse Creek..	Neuse River..	Lat 35°58'45", long 78°33'40", at highway bridge, 0.5 mile above Mud Branch and 2.8 miles east of Wake Forest, Wake County.	11.8		9-15-58	*6.19
Honeycutt Creek.	....do.....	Lat 35°56'20", long 78°35'20", at highway bridge, 0.3 mile west of Falls, Wake County, and 0.3 mile above mouth.	8.54	1955	9-16-58	*2.99
Austin Creek.	Smith Creek..	Lat 35°58', long 78°29', at highway bridge, 0.2 mile above mouth and 1¾ miles southeast of Wake Forest, Wake County.	4.64		9-15-58	*1.72
Stirrup Iron Creek.	Crabtree Creek.	Lat 35°52'55", long 78°50'10", at highway bridge, 0.8 miles east of Nelson, Durham County, and 3 miles above Brier Creek.	7.59		9-15-58	*0
Swift Creek b/.	Neuse River..	Lat 35°43', long 78°45', at highway bridge, 2¾ miles below Williams Creek and 5.6 miles east of Apex, Wake County.	19.5		9-17-58	*.75
Little Creek.	Swift Creek..	Lat 35°34', long 78°27', at highway bridge, 1½ miles above mouth and 5 miles west of Wilson Mills, Johnston County.	17.9	1954	9-16-58	*2.80
Middle Creek.	....do.....	Lat 35°39', long 78°45', at highway bridge, 4.3 miles above Terrible Creek and 2.9 miles northwest of Banks, Wake County.	29.3		9-17-58	*3.32
Black Creek..	Neuse River..	Lat 35°28', long 78°33', at bridge on State Highway 50, 0.8 mile above Pole Branch and 7 miles west of Four Oaks, Johnston County.	60.9		9-15-58	*2.18
Moccasin Swamp.	....do.....	Lat 35°24', long 78°10', at highway bridge, 3.3 miles above mouth and 5 miles south of Princeton, Johnston County.	c28.7		9-15-58	c0
Mill Creek...	....do.....	Lat 35°18'50", long 78°21'10", at highway bridge, ¾ mile northeast of Overshot, Johnston County, 2 miles above Stone Creek, and 10 miles southeast of Four Oaks.	47.8		9-15-58	*4.62

* Base flow.
b A site of crest-stage station.
c Includes that of Raccoon Swamp at bridge 1 mile above mouth.

Discharge measurements made at miscellaneous sites during water year 1958--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Neuse River basin, N. C--Continued						
Stony Fork...	Hannah Creek.	Lat 35°25'10", long 78°29'20", at bridge on U. S. Highway 301, 0.3 mile below Atlantic Coast Line RR., bridge, 1.0 mile above mouth and 4 miles southwest of Four Oaks, Johnston County.	7.9		9-15-58	*.02
Juniper Swamp tributary.	Juniper Swamp	Lat 35°25'40", long 78°24'20", at bridge on State Highway 96, 1 mile above mouth and 1¾ miles southeast of Four Oaks, Johnston County.	1.35		9-15-58	*0
Mill Creek...	Neuse River..	Lat 35°21', long 78°11', at highway bridge, ¾ mile above mouth, 2½ miles east of Cox Mill, and 6 miles east of Bentonville, Johnston County.	187	1954	9-16-58	*17.8
Thoroughfare Swamp.	....do.....	Lat 35°15', long 78°07', at highway bridge, 1¾ miles above Buck Swamp and 4.3 miles west of Dudley, Wayne County.	29.0	1954	9-15-58	*0
Beaverdam Creek.	Thoroughfare Swamp.	Lat 35°17', long 78°07', at bridge on State Highway 102, 1 mile above mouth and 2½ miles east of Grantham, Wayne County.	37.7		9-15-58	*0
Do.....	Neuse River..	Lat 35°23', long 78°06', at highway bridge, 0.2 mile above mouth and 2¼ miles southwest of Rosewood, Wayne County.	16.7	1954	9-16-58	*.20
Little River.	....do.....	Lat 35°44', long 78°17', at bridge on State Highway 231, 1.5 miles west of Emit, Johnston County, and 5 miles above Cat Tail Creek.	79.6		9-16-58	*36.8
Do.....	....do.....	Lat 35°36'00", long 78°11'50", at highway bridge, 0.6 mile above Buffalo Creek and 1.5 miles northeast of Beulahtown, Johnston County.	129		9-17-58	*22.3
Buffalo Creek	Little River.	Lat 35°46', long 78°23', at highway bridge, 1 mile below Norfolk Southern RR., and 1 mile southwest of Wendell, Wake County.	15.9	1955	9-17-58	*1.06
Do.....	....do.....	Lat 35°40', long 78°20', at highway bridge, 6.8 miles east of Clayton, Johnston County, and 10.3 miles above mouth.	39.0		9-16-58	*3.76
Little Buffalo Creek.	....do.....	Lat 35°26'20", long 78°09'40", at highway bridge, 1.0 mile northeast of Beulahtown, Johnston County, and 2.0 miles above mouth.	19.8		9-17-58	*0
Spring Branch	....do.....	Lat 35°30'30", long 78°08'30", at highway bridge, 0.3 mile southeast of Raynes Cross-roads, Johnston County, and 1.5 miles above mouth.	10.9		9-17-58	*0
Little River tributary.	Neuse River..	Lat 35°27, long 78°02', at highway bridge, 0.7 mile above mouth and 4 miles southwest of Pikeville, Wayne County.	6.11		9-16-58	*.18
Little Creek.	Moccasin Creek.	Lat 35°49', long 78°16', at site of old gaging station at bridge on State Highway 39, 0.7 mile above mouth and 2.7 miles southeast of Zebulon, Wake County.	5.47	1924-26‡	9-17-58	*.76
Moccasin Creek.	Neuse River..	Lat 35°52', long 78°17', at bridge on State Highway 64, on Wake-Franklin County line, 1.5 miles southwest of Pilot, Franklin County.	13.9		9-15-58	*2.62
Do.....	....do.....	Lat 35°43'50", long 78°11'20", at highway bridge, 2 miles above Turkey Creek and 2.4 miles southwest of Connor, Wilson County.	52.6		9-16-58	*11.4
Turkey Creek.	Moccasin Creek.	Lat 35°46'15", long 78°09'40", at highway bridge, 0.3 mile below Southern RR., 1.3 miles above Haw Branch, and 2.5 miles west of Bailey, Nash County.	51.9	1954	9-17-58	*3.25

* Base flow.
‡ Operated as a continuous-record gaging station.

Discharge measurements made at miscellaneous sites during water year 1958--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Neuse River basin, N. C.--Continued						
Turkey Creek.	Contentnea Creek.	Lat 35°43'40", long 78°10'20", at highway bridge, 1.2 miles above mouth and 1.5 miles southwest of Connor, Wilson County.	74.4		9-16-58	*5.26
Marsh Swamp..	....do.....	Lat 35°42'12", long 78°03'55", at highway bridge, ¼ mile north of Rock Ridge, Wilson County, and 0.6 mile above mouth.	9.56	1954	9-16-58	*.61
Bloomery Swamp.	Contentnea Creek.	Lat 35°43'15", long 77°58'15", at bridge on State Highway 42, ½ mile above mouth and 3.7 miles west of Wilson Wilson County.	24.5	1954	9-16-58	*.59
Great Swamp..	Black Creek..	Lat 35°36'30", long 77°57'00", at highway bridge, 0.9 mile above mouth and 2.2 miles southwest of Black Creek, Wilson County.	38.6		9-15-58	*.03
Aycock Swamp.	....do.....	Lat 35°35'40, long 77°53'10", at highway bridge, 0.7 mile above mouth and 3½ miles west of Stantonsburg, Wilson County.	10.8		9-15-58	*.43
Toisnot Swamp	Contentnea Creek.	Lat 35°51'20", long 78°05'10", at highway bridge, 0.7 mile south of Stanhope, Nash County, and 3.1 miles above Whiteoak Swamp.	6.92		9-17-58	*1.40
Beaverdam Creek.	Toisnot Swamp	Lat 35°47'40", long 78°04'00", at highway bridge, 2½ miles above mouth and 3¼ miles southeast of Glover, Nash County.	1.68		9-17-58	*.76
Toisnot Swamp	Contentnea Creek.	Lat 35°41'50", long 77°51'15", at bridge on U. S. Highway 264, 1.3 miles below Buck Branch and 3.7 miles southeast of Wilson, Wilson County.	63.6	1932	9-15-58	*6.88
Whiteoak Swamp.	Toisnot Swamp	Lat 35°41'00". long 77°48'30", at bridge on Plank Rd., 1.9 miles above mouth and 2.9 miles northwest of Saratoga, Wilson County.	24.9		9-15-58	*0
Waccamaw River basin						
Waccamaw River.	Atlantic Ocean.	Lat 33°49'35", long 79°02'45", 0.6 mile below lower Atlantic Coast Line RR. bridge at Conway, S.C.	-		9-23-58	450
Pee Dee River basin						
Pee Dee River	Atlantic Ocean.	Lat 34°32', long 79°50', at bridge on U. S. Highway 15, ¼ mile below Cedar Creek and 1¾ miles northeast of Society Hill, S. C.	7,980	1950-57	5-21-58 6-17-58	10,400 5,780
Black Creek..	Pee Dee River	Lat 34°23'15", long 80°03'50", at bridge on State road at Hartsville, 0.1 mile below Seaboard Air Line RR. bridge, S. C.	-	1957	4- 8-58 6- 5-58	409 275
Do.....	....do.....	Lat 34°23', long 79°54', at bridge on county road, ¼ mile above U. S. Highway 52 and 1¼ miles southwest of Dovesville, S. C.	-	1957	4- 8-58 6- 5-58	560 325
Do.....	....do.....	Lat 34°16', long 79°47', at bridge on State road, 2¾ miles above High Hill Creek and 5 miles southeast of Darlington, S. C.	-	1957	4- 9-58 6- 5-58	818 570
Santee River basin						
Wateree River	Santee River.	Lat 33°56'50", long 80°37'40", at bridge on U. S. Highway 76, 400 ft below Colonels Creek and 6.1 miles northeast of Eastover, S. C.	5,540	1951-57	10-16-57 12-10-57 12-27-57 1-15-58 2-20-58 3-17-58 5-19-58 6- 9-58 6-25-58 7-14-58 8-12-58 9- 9-58	3,590 9,860 7,990 10,400 7,170 5,290 8,600 3,230 7,610 2,190 2,830 2,980
Beaver Dam Creek.	Thicketty Creek.	Lat 35°03', long 81°42', at bridge on county road, ¼ mile above mouth and 3¼ miles southwest of Gaffney, S. C.	-	1952,1956	7- 8-58 8- 1-58 8- 8-58	8.29 *6.75 *6.97

* Base flow.

Discharge measurements made at miscellaneous sites during water year 1958--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Santee River basin--Continued						
Little River.	Santee River.	Lat 33°29', long 80°11', just below Lake Marion Dam and 9½ miles northwest of Pineville, S. C.	-	1944-57	11-13-57	26.2
					4- 7-58	44.0
					6-26-58	37.1
					8- 7-58	32.4
Broad River basin						
Sanders Branch.	Coosawhatchie River.	Lat 32°51'35", long 81°06'00", at culvert on State Highway 28 at Hampton, 2.4 miles above House Fork, S. C.	-		3-18-58	11.3
					3-25-58	20.5
					3-31-58	134
Do.....	....do.....	Lat 32°49'40", long 81°05'30", at bridge on State road at Varnville, 0.1 mile above House Fork, S. C.	-		3-18-58	10.9
					3-25-58	24.1
					3-31-58	229
Savannah River basin						
Rice Creek...	Twelvemile Creek.	Lat 34°52', long 82°38', at Soil Conservation Service Dam 12, 4½ miles east of Pickens, S. C.	0.72	1955-57	12-19-57	0.99
					3-19-58	1.54
					6-12-58	.90
					9- 9-58	.37
Do.....	....do.....	Lat 34°50', long 82°41', at Soil Conservation Service Dam 16, 3 miles south of Pickens, S. C.	8.4	1956-57	12-17-57	10.0
					3-19-58	18.5
					6-12-58	12.4
					7-15-58	16.0
					9- 9-58	6.81
Do.....	....do.....	Lat 34°49', long 82°44', at bridge on county road, 1.1 miles above mouth and 3 miles northwest of Liberty, S. C.	-	1954-57	12-19-57	20.1
					3-20-58	30.0
					6-13-58	22.4
					9-16-58	13.7
Golden Creek.	....do.....	Lat 34°48', long 82°44', at bridge on State road, 2 miles northwest of Liberty, S. C., and 2½ miles above mouth.	-	1953-57	12-17-57	14.1
					3-20-58	21.9
					6-13-58	15.4
					9-16-58	8.48
Dicks Creek..	Middle Fork Broad River	Lat 34°34', long 83°25', at State Highway 13, ½ mile north of Ayersville, Ga.	0.5		9-29-58	*.47

* Base flow.

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