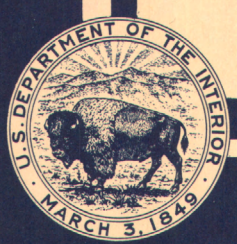
1971

Water Resources Data for North Carolina

Part 1. Surface Water Records



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the North Carolina Department of Water and Air Resources and with other State, municipal, and Federal agencies

CALENDAR FOR WATER YEAR 1971

OCTOBER 1970

S	M	T	W	T	F	S
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JANUARY 1971

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FEBRUARY 1971

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MARCH 1971

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MAY 1971

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JUNE 1971

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AUGUST 1971

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SEPTEMBER 1971

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1971

Water Resources Data for North Carolina

Part 1. Surface Water Records

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the North Carolina Department of Water and Air Resources and with other State, municipal, and Federal agencies

Prepared in cooperation with

North Carolina Department of Water and Air Resources
North Carolina State Highway Commission
Wake County
City of Asheville
City of Burlington
City of Charlotte
City of Durham
City of Greensboro
City of Lenoir
City of Morganton
City of Winston-Salem
Town of Waynesville
Corps of Engineers, U. S. Army
Tennessee Valley Authority
Soil Conservation Service, U. S. Department of Agriculture

Water resources records, 1971, for North Carolina are in the following reports of the U. S. Geological Survey:

1. Water Resources Data for North Carolina
   Part 1: Surface Water Records

2. Water Resources Data for North Carolina
   Part 2: Water Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U. S. Geological Survey
436 Century Station Post Office Building
300 Fayetteville Street
Raleigh, North Carolina 27602

1972

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WATER RESOURCES DATA FOR NORTH CAROLINA, 1971

PART 1. SURFACE-WATER RECORDS

INTRODUCTION

Surface-water records for the 1971 water year for North Carolina, including records of streamflow or reservoir storage at gaging stations, partial-record stations, and miscellaneous sites, are given in this report. The location of gaging stations where a continuous record of discharge is collected is shown in figures 1 and 2. The records were collected and computed by the Water Resources Division of the U. S. Geological Survey under the direction of R. C. Heath, district chief. These data represent that portion of the National Water Data System collected by the U. S. Geological Survey and cooperating State, municipal and Federal agencies in North Carolina.

Through September 30, 1960, the records of discharge and stage of streams and canals and contents and stage of lakes or reservoirs were published in an annual series of U. S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States."

Beginning with the 1961 water year, surface-water records have been released by the Geological Survey in annual reports on a State-boundary basis. Distribution of these reports is limited; they are designed primarily for rapid release of data shortly after the end of the water year to meet local needs. The discharge and reservoir storage records for 1961-65 also are published in a Geological Survey water-supply paper series entitled "Surface Water Supply of the United States 1961-65." There will be a similar series of water-supply papers for the water years 1966-70.

HYDROLOGIC CONDITIONS

Streamflow during the 1971 water year was near normal in the Blue Ridge, above normal in the western Piedmont and Coastal Plain, and below normal in the eastern Piedmont. Runoff at the three index stations, as compared with the normals, was as follows: French Broad River at Asheville, 97 percent; South Yadkin River near Mocksville, 106 percent; Neuse River near Clayton, 73 percent.

The 1971 water year began with streamflow below normal; however, rains during October and November 1970 caused all streams to return to normal conditions except those in the eastern Piedmont. Following the November rains, the flow of streams began to decline and the decline continued until February 1971, when heavy rains fell throughout the State. February was also the first month in 2½ years when the flow of all streams reached normal or above normal levels. The six-month period from March to August 1971 was characterized by near normal-flow conditions in all parts of the State except the eastern Piedmont, where flow reached deficient levels (in lower 25 percent of record) during July and August. Rains occurring during the passage of tropical storm Doria in late August caused minor flooding in the eastern part of the Coastal Plain. Streamflow throughout the State increased to normal conditions during September as a result of statewide rains.

Flash flooding of the Elkin River on September 19-20 washed out several highway bridges and caused damages in excess of $50,000 in the town of Elkin. Other areas which experienced flash flooding but with only minor damages were Transylvania, Henderson, and Guilford Counties in October 1970, and the cities of Charlotte and Asheville in June 1971.

On September 30, the last day of the 1971 water year, Hurricane Ginger reached land at Morehead City and moved erratically northwestward across the central Coastal Plain and northeastern Piedmont. During that 24-hour period, the following rainfalls were recorded: 9.2 inches at Cedar Island, 8.6 inches at Bayboro, 7.5 inches at New Bern, and 6.0 inches at Columbia. Crop damages alone were estimated to be about 50 million dollars, and although no human lives were lost, Ginger will undoubtedly be remembered as one of the costliest storms to hit eastern North Carolina. Flood crests produced by Hurricane Ginger will be discussed in next year's report since all occurred after the close of the water year.

As reflected by the index stations, accumulated runoff for the water year was near normal for all parts of the State except the eastern Piedmont. The Neuse River station, representing the eastern Piedmont, recorded an accumulated deficiency of 3.8 inches, which was 28 percent below normal.

COOPERATION

Cooperative agreements between the U. S. Geological Survey and organizations of the State of North Carolina for the systematic collection of streamflow records began in 1895 and continued through 1909. After a lapse of eight years, the State of North Carolina resumed cooperating in October 1918. Organizations that assisted in collecting data through cooperative agreements with the Survey are:

North Carolina Department of Water and Air Resources, George E. Pickett, director.
North Carolina State Highway Commission, G. H. Willoughby, Jr., highway administrator.
Wake County, Garland H. Jones, county manager.
City of Asheville, P. E. Horton, III, city manager.
City of Burlington, James D. Mackintosh, Jr., city manager.
City of Charlotte, John M. Belk, mayor.
City of Durham, I. Harding Hughes, Jr., city manager.
City of Greensboro, John G. Turner, city manager.
City of Lenoir, H. Lewis Price, city manager.
City of Morganton, Cyrus L. Brooks, city manager.
City of Winston-Salem, Joe H. Berrier, director of Public Works.
Town of Waynesville, Henry G. Clayton, Jr., mayor.

Assistance in the form of funds or services were given by the Corps of Engineers, U. S. Army, in collecting records published herein for 55 gaging stations.

Under a cooperative agreement covering the Tennessee River basin, the Tennessee Valley Authority furnished financial assistance for the operation of 20 gaging stations.

The Soil Conservation Service, U. S. Department of Agriculture furnished financial assistance in operation of 5 stations in North Carolina.

Assistance was also furnished by the National Weather Service, NOAA, U. S. Department of Commerce.

The following organizations aided in collecting records:

Cities of Danville, Va. and Raleigh; Town of Highlands; American Enka Corp.; Appalachian Power Co.; E. I. du Pont de Nemours & Co., Carolina Power & Light Co.; Champion Paper & Fibre Co.; Duke Power Co.; Federal Paper Board Co., Inc.; Olin Mathieson Chemical Corp.; The Mead Corp., Sulva Division; Virginia Electric and Power Co.; and Yadkin, Inc.

DEFINITION OF TERMS

Definition of terms related to streamflow and other hydrologic data, as used in this report, are as follows:

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or 325,851 gallons.

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, 1.9835 acre-feet, or 646,317 gallons, and represents a runoff of 0.0372 inch from 1 square mile.

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

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, an artificial structure, or a uniform cross section over a long reach of the channel.

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.

Cubic foot per second (cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second, and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

Discharge is the volume of water (or more broadly, total fluids), that passes a given point within a given period of time.

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

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage", although gage height is more appropriate when used with a reading on a gage.

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 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.

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.

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.

WRD is used as an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to previously published State annual basic-data reports.

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

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to seperate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

DOWNSTREAM ORDER AND STATION NUMBERS

Records are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of gaging stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each gaging station, partial-record station, and miscellaneous site has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations, miscellaneous sites, and continuous-record gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of all stations and sites. Gaps are left in the numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 02115850, includes the part number "02" and a 6-digit station number. In this report the complete number 02115850 appears just to the left of the station name. However, the density of miscellaneous sites, for which numbers are shown in this report, make it necessary in some cases to use ten digits in order to indicate the proper downstream order. In this report, the records are listed in downstream order by parts. All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

EXPLANATION OF SURFACE-WATER DATA

Collection and Computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams, and stage and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from a water-stage recorder that gives a continuous graph of the fluctuations (for digital recorders, a tape punched at 5-, 15-, 30-, or 60-minute intervals) or from direct readings on a nonrecording gage. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks on the measurement of stream discharge. (See also SELECTED REFERENCES.)

For a stream-gaging station 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), velocity-area studies, and logarithmic plotting. The application of the daily mean gage heights to the rating table 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 basically the shifting-control method.

At some stream-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 required 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; at these stations the rate of change in stage is used as a factor in determining discharge.

At some stream-gaging stations the stage-discharge relation is affected by ice in 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 hydrologist, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. Discharge over spillways is computed from a stage-discharge relation curve defined by discharge measurements. The application of the stage to the capacity table gives the contents, from which the monthly and yearly change in contents is computed.

During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment. If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoirs are necessary to define new stage-capacity curves.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage,adjoining good record, discharge

measurements, weather records, and comparisons with other station records from the same or nearby basins.

The data in this report generally comprise a description of the station and tabulations of basic data. For gaging stations on streams a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents is given. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the 1971 water year is shown on the reverse side of the front cover to facilitate finding the day of the week for any date.

The description of the gaging stations gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or contents, and general remarks. 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 or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD". The type of gage currently in use, 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 record are given under "GAGE". In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey, unless otherwise qualified. The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance.

The maximum discharge (or contents) and the maximum gage height, the minimum discharge if there is little or no regulation (or the minimum contents) and the minimum gage height if it is significant are given under "EXTREMES". The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). In the first paragraph headed "Current year": the data given are for the complete water year unless otherwise specified. In the second paragraph under "EXTREMES" headed "Period of record": the data given are for the period of record given in the PERIOD OF RECORD paragraph. Reliable information concerning major floods that occurred outside the period of record is given in the third or last paragraph under "EXTREMES". Unless otherwise qualified, the maximum discharge (or contents) corresponds to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, 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 or contents, it is given separately. Information pertaining to

the accuracy of the discharge records, to conditions that affect the natural flow at the gaging station, and availability of Water Quality records, is given under "REMARKS"; for reservoir stations most of this information and information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir are contained in one or two paragraphs.

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 or compilation 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 30, 1933. If no daily, monthly, or annual figures of discharge were revised, 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.

The daily tables for stream-gaging stations give the discharge corresponding to the daily mean gage height unless there are large or rapid changes in the discharge during a day. For days having large or rapid changes, discharge for the day is computed by averaging the mean discharge for several parts of a day. For digital recorders,the daily mean discharge is always the average of the discharges at each punched reading. For stations equipped with nonrecording gages, the daily discharge corresponds to once-daily readings of the gage or to the mean of twice-daily readings; but for periods of rapidly changing stage the discharge is determined from a gage-height graph based on gage readings.

The monthly summary is given below the daily table. For stream-gaging stations the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month.

Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM:), or in inches (line headed "IN."). Figures of cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average rainfall on the drainage basin is usually less than 20 inches.

In the yearly summary below the monthly summary, the figures following MAX are the maximum daily discharges for the calendar year and water years; likewise, those following MIN are the minimum daily discharges.

For reservoir stations the table gives the water-surface elevation (or gage-height) and contents on the last day of each month, usually at 2400, and the change in contents during the month. The yearly summary gives the change in contents for the calendar year and for the water year.

Peak discharges and their times of occurrence and corresponding gage heights for many stations are listed below the yearly summary. 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 can be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030 and 1:30 p.m. is 1330.

In a general footnote, introduced by the word "NOTE" certain periods are indicated for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The method used in computing discharge for various unusual conditions have been explained in preceding paragraphs. Footnotes to reservoir tables may be used to explain the basis of elevation and contents figures or for other special conditions.

Accuracy of Data

The accuracy of discharge 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 under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges is within 5 percent; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumptive use, regulation, evaporation, or other factors. For such stations, discharge in cubic feet per second per square mile and runoff in inches are not published unless satisfactory adjustments can be made for such effects. If the effects of regulation upon the monthly mean discharge are considered small or if figures of diversion are given (see REMARKS), the monthly and annual discharge summary data including cubic feet per second per square mile and runoff in inches are published with no adjustments made. 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 if adjustments or unadjusted losses (consumptive use, evaporation, seepage, etc.) are large in comparison with the observed discharge.

Publications

Each volume of the 1960 series of U. S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States" contains a listing of the numbers of all water-supply papers in which records of surface-water data were published for the area covered by the individual volumes. Each volume also contains a list of water-supply papers that give detailed information on major floods for the area. A new series of water-supply papers containing surface-water records for the 5-year period October 1, 1960, to September 30, 1965, also will include lists of annual and special reports published as water-supply papers.

Records through September 1950 for the area covered by this report have been compiled and published in Water-Supply Papers 1303 (2A), 1305 (3A), and 1306 (3B); records for October 1950 to September 1960 have been compiled and published in Water-Supply Papers 1723 (2A), 1725 (3A), and 1726 (3B). These reports contain summaries of monthly and annual discharge and monthend storage 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 yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office.

Other Data Available

Data collected at partial-record stations and at miscellaneous sites are given in three tables at the end of the surface-water records in this report. The first is a table of discharge measurements at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a table of discharge measurements at miscellaneous sites.

More detailed information than that published for most of the gaging stations, such as discharge measurements, gage-height records, and rating tables, is on file in the district office. Many gaging-station records in North Carolina through 1968 have been analyzed to give several statistical summaries: (1) the number of days in each year that the daily discharge was between selected limits (duration tables); (2) the lowest mean discharge for selected numbers of consecutive days in each year; and (3) the highest mean discharge for selected numbers of consecutive days in each year. Rainfall records are collected at several gaging stations for use in special studies, but are not routinely published. Reference is made to the rain gage under "REMARKS". These rainfall data are on file in the district office.

At or near some gaging stations, water-quality records also are collected. Data are obtained on the chemical quality of the stream water, on the water temperature, and on the sediment. These data are given in Part 2 of this report. Under the "REMARKS" paragraph of the gaging-station description, reference is made to water-quality records collected on a regular basis.

DISCHARGE RECORDS COLLECTED BY OTHER AGENCIES

Records of discharge not published by the Geological Survey were collected in North Carolina at 23 sites during the 1971 water year by the following agencies: Records at 17 sites were collected by the U.S. Department of Agriculture, Coweeta Hydrologic Laboratory; at 4 sites by the Tennessee Valley Authority; and at 3 sites by the U. S. Department of Agriculture, Forest Service. The office of Water Data

Coordination, Water Resources Division, U. S. Geological Survey, Washington, D. C. 20242, maintains an index of these sites. Information on records of specific sites can be obtained from that office upon request.

SELECTED REFERENCES

Carter, R. W., and Davidian, Jacob, 1968, General procedure for gaging streams: U.S. Geol. Survey Techniques Water-Resources Inv., book 3, Chap. A6, 13 p.

Corbett, D. M., and others, 1943, Stream-gaging procedure, a manual describing methods and practices of the Geological Survey: U.S. Geol. Survey Water-Supply Paper 888, 245 p.

Langbien, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29p.

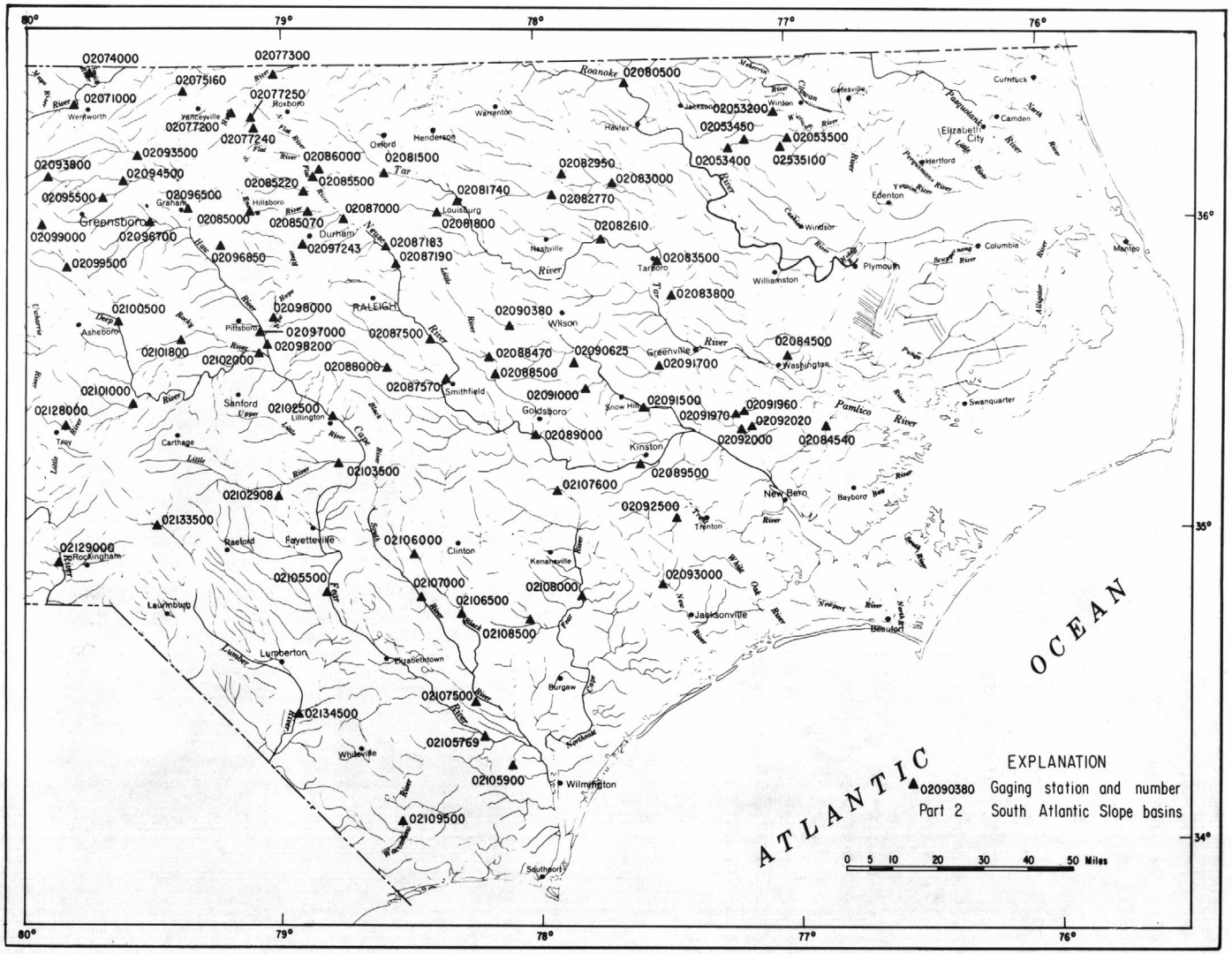

Figure 1. Map of eastern part of North Carolina showing location of gaging stations.

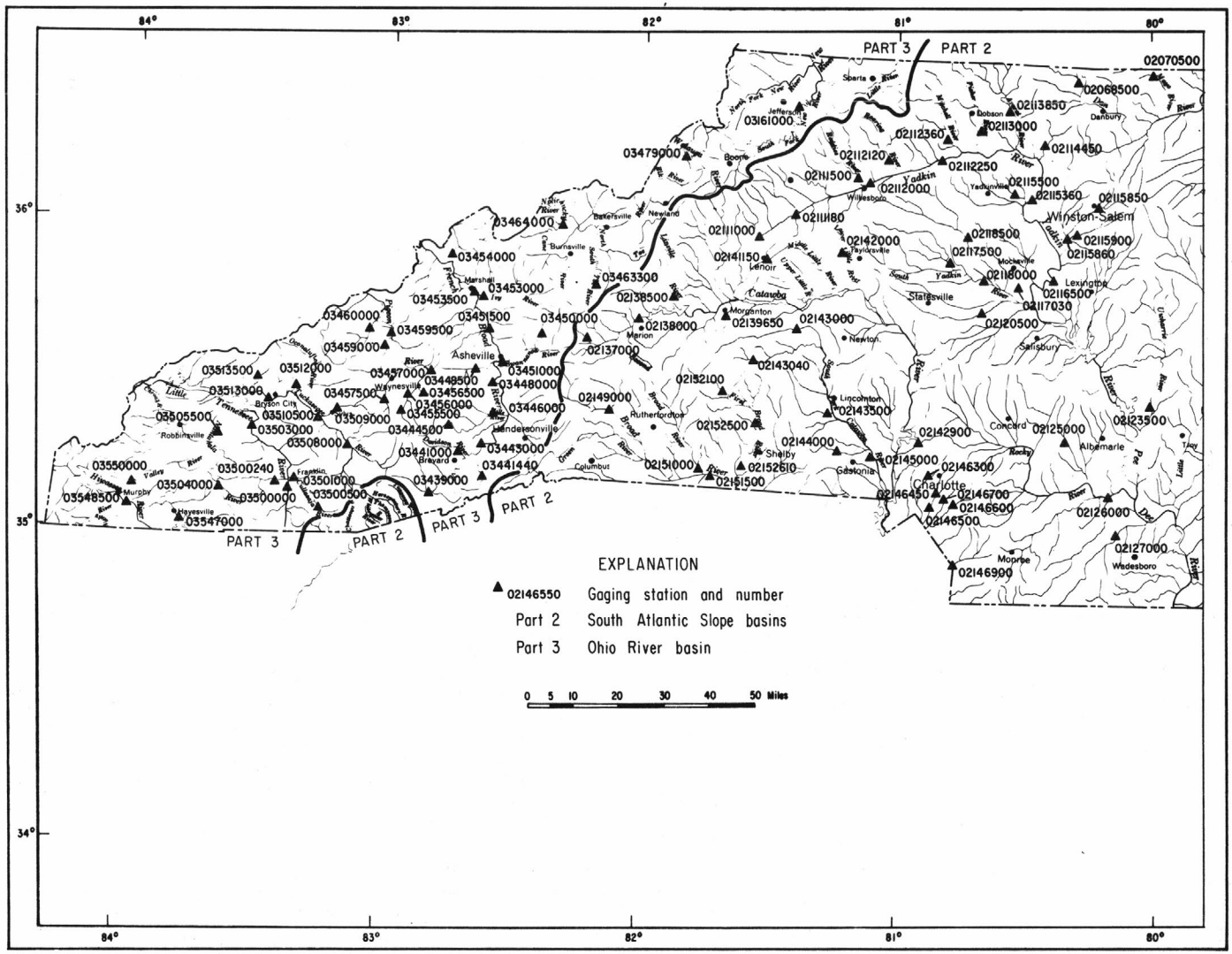

Figure 2. Map of western part of North Carolina showing location of gaging stations.

SOUTH ATLANTIC SLOPE BASINS

CHOWAN RIVER BASIN

02053200 Potecasi Creek near Union, N. C.

LOCATION.--Lat 36°22'14", long 77°01'36", Hertford County, on right bank at downstream side of bridge on Secondary Road 1168, 2.8 miles north of Union, 3 miles downstream from Cutawhiskie Swamp, and 3.5 miles upstream from Bells Branch.

DRAINAGE AREA.--191 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1953-57. March 1958 to current year.

GAGE.--Water-stage recorder. Altitude of gage is about mean sea level (by barometer). Prior to Dec. 1, 1958, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--13 years, 229 cfs (16.28 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,860 cfs Feb. 9 (gage height, 13.54 ft); minimum, 3.1 cfs Aug. 14, 17 (gage height, 1.50 ft).
Period of record: Maximum discharge, 4,050 cfs May 10, 1958 (gage height, 19.12 ft); minimum, 0.2 cfs July 1, 1959.
Flood in 1929 reached a stage of 19.1 ft (discharge, 4,050 cfs), and flood of 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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	17	21	79	311	350	430	50	249	23	4.9	22
2	6.3	19	20	75	260	450	420	50	301	24	4.9	16
3	6.1	20	20	68	227	800	426	56	326	24	4.7	12
4	5.8	19	19	64	237	900	450	48	317	19	4.5	9.3
5	5.4	19	19	211	616	1,010	401	44	266	14	4.6	7.9
6	5.3	18	18	847	935	963	485	39	203	11	4.9	6.9
7	5.2	17	18	1,090	997	963	1,020	36	146	13	4.9	6.1
8	5.2	16	18	1,330	1,430	908	1,130	47	111	13	4.4	5.9
9	5.0	15	17	1,440	1,830	771	700	57	86	9.8	4.0	5.7
10	5.0	15	17	1,320	1,780	593	450	50	65	9.7	3.6	5.9
11	5.0	40	18	1,110	1,610	434	300	42	49	18	3.4	6.3
12	5.2	66	18	899	1,380	323	250	35	38	14	3.4	13
13	5.2	53	18	688	1,240	250	200	45	35	12	3.4	79
14	5.0	42	18	512	1,480	204	150	84	32	9.1	3.1	46
15	5.2	37	17	398	1,360	175	100	107	45	7.8	3.3	24
16	12	34	24	352	1,160	163	90	130	150	6.8	3.3	15
17	16	31	80	315	1,020	150	80	223	160	6.3	3.4	11
18	13	30	100	264	840	130	72	292	143	5.7	6.4	8.6
19	9.6	30	75	223	660	120	70	324	118	5.7	8.6	7.4
20	8.8	31	61	200	450	130	68	319	116	8.1	6.2	6.4
21	8.6	32	71	170	330	150	66	281	117	8.9	4.9	6.0
22	12	31	104	145	600	120	64	225	104	7.3	4.1	6.6
23	59	30	134	143	1,100	110	60	160	86	6.5	6.7	11
24	65	28	152	200	1,200	95	56	113	72	6.1	13	15
25	33	25	152	243	1,100	90	56	82	62	5.6	12	12
26	22	24	135	274	850	150	54	63	57	5.7	30	8.9
27	16	23	124	269	500	220	54	48	52	5.9	263	7.3
28	14	22	115	257	400	300	52	43	44	5.8	600	6.4
29	12	22	105	243	------	400	52	101	33	5.9	439	5.8
30	12	21	90	205	------	500	50	215	27	5.0	126	54
31	12	------	78	225	------	450	------	225	------	4.6	36	------
TOTAL	406.7	827	1,876	13,859	25,903	12,372	7,856	3,634	3,610	321.3	1,624.6	447.4
MEAN	13.1	27.6	60.5	447	925	399	262	117	120	10.4	52.4	14.9
MAX	65	66	152	1,440	1,830	1,010	1,130	324	326	24	600	79
MIN	5.0	15	17	64	227	90	50	35	27	4.6	3.1	5.7
CFSM	.07	.14	.32	2.34	4.84	2.09	1.37	.61	.63	.05	.27	.08
IN.	.08	.16	.37	2.70	5.04	2.41	1.53	.71	.70	.06	.32	.09

CAL YR 1970 TOTAL 75,759.2 MEAN 208 MAX 1,640 MIN 3.8 CFSM 1.09 IN 14.76
WTR YR 1971 TOTAL 72,737.0 MEAN 199 MAX 1,830 MIN 3.1 CFSM 1.04 IN 14.17

02053400 Ahoskie Creek near Rich Square, N. C.

LOCATION.--Lat 36°14'52", long 77°14'12", Northampton County, on right bank 150 ft upstream from culvert on Secondary Road 1100, 1.8 miles downstream from Seaboard Coast Line Railroad bridge, and 3.5 miles southeast of Rich Square.

DRAINAGE AREA.--3.7 sq mi, approximately.

PERIOD OF RECORD.--June 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 57.62 ft above mean sea level (Soil Conservation Service bench mark).

AVERAGE DISCHARGE.--7 years, 2.90 cfs (10.64 inches per year).

EXTREMES.--Current year: Maximum discharge, 123 cfs Feb. 7 (gage height, 5.34 ft); minimum, 0.01 cfs Aug. 4, 5, 15, 16 (gage height, 1.97 ft).
Period of record: Maximum discharge, 294 cfs Oct. 5, 1964; maximum gage height, 8.61 ft Jan. 14, 1968; no flow for many days of most years.

REMARKS.--Records fair. Entire basin above station is canalized. Excavation was completed in July 1964. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.30	.03	.12	4.8	4.6	3.9	.07	.06	.02	.06	.05
2	.02	.15	.03	.08	2.8	3.9	3.0	.06	.03	.04	.02	.02
3	.02	.09	.03	.08	2.2	21	6.8	.08	.02	.05	.02	.02
4	.02	.07	.03	.09	8.6	32	5.2	.06	.02	.02	.02	.02
5	.02	.05	.03	12	25	18	3.3	.05	.07	.02	.08	.02
6	.02	.04	.03	11	22	13	35	.04	.02	.07	.04	.02
7	.02	.04	.03	7.2	32	9.8	31	.04	.02	.13	.02	.02
8	.03	.04	.03	5.7	56	6.3	20	.06	.02	.04	.02	.02
9	.03	.04	.03	6.5	30	4.6	13	.04	.03	.02	.02	.02
10	.03	.06	.03	7.2	18	3.3	8.2	.03	.03	.02	.02	.02
11	.03	.34	.03	8.2	13	3.0	5.2	.04	.03	.02	.02	.02
12	.03	.20	.03	6.3	10	2.4	3.5	.04	.04	.02	.02	.08
13	.03	.16	.03	5.0	30	2.2	2.4	.27	.04	.02	.02	.13
14	.03	.12	.03	4.0	25	1.8	1.8	.16	.04	.02	.02	.04
15	.03	.10	.03	4.8	16	2.3	1.2	.09	.04	.02	.02	.02
16	.10	.08	.13	5.4	12	5.2	.91	.63	.04	.02	.02	.02
17	.05	.06	.70	4.2	8.2	3.5	.70	.38	.04	.02	.05	.02
18	.04	.06	.16	3.3	5.8	2.2	.43	.16	.04	.02	.04	.02
19	.04	.06	.10	2.6	4.6	1.9	.34	.09	.04	.02	.05	.02
20	.04	.06	.09	1.8	3.5	2.2	.27	.07	.04	.02	.02	.02
21	.04	.06	.12	1.4	2.9	1.6	.22	.06	.03	.02	.02	.02
22	.12	.06	.22	1.5	10	1.3	.18	.05	.03	.02	.11	.02
23	2.4	.06	.49	3.5	33	1.1	.16	.05	.05	.02	.28	.02
24	.24	.04	.63	4.2	17	.78	.20	.03	.02	.02	.06	.02
25	.10	.03	.24	6.1	10	.56	.15	.03	.02	.02	.03	.02
26	.07	.03	.18	5.0	7.0	.63	.12	.03	.02	.02	2.5	.02
27	.06	.03	.13	3.2	7.4	2.1	.09	.03	.02	.04	5.5	.02
28	.06	.03	.10	2.2	5.8	5.9	.12	.04	.02	.09	2.4	.03
29	.05	.03	.09	1.8	------	8.2	.12	.10	.02	.03	.28	.03
30	.05	.03	.07	2.1	------	10	.09	.10	.02	.02	.10	2.4
31	.12	------	.07	5.7	------	6.1	------	.07	------	.02	.07	------
TOTAL	3.96	2.52	3.97	132.27	422.6	181.47	147.60	3.05	.96	.95	11.95	3.22
MEAN	.13	.084	.13	4.27	15.1	5.85	4.92	.098	.032	.031	.39	.11
MAX	2.4	.34	.70	12	56	32	35	.63	.07	.13	5.5	2.4
MIN	.02	.03	.03	.08	2.2	.56	.09	.03	.02	.02	.02	.02
CFSM	.04	.02	.04	1.15	4.08	1.58	1.33	.03	.009	.008	.11	.03
IN.	.04	.03	.04	1.33	4.25	1.82	1.48	.03	.009	.009	.12	.03

CAL YR 1970 TOTAL 1,351.77 MEAN 3.70 MAX 70 MIN .01 CFSM 1.00 IN 13.59
WTR YR 1971 TOTAL 914.52 MEAN 2.51 MAX 56 MIN .02 CFSM .68 IN 9.19

PEAK DISCHARGE (BASE, 70 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2- 7	2230	5.34	123				

02053450 Ahoskie Creek at Mintons Store, N. C.

LOCATION.--Lat 36°16'46", long 77°09'28", Hertford County, on right bank at downstream side of bridge on State Highway 305, 1.5 miles southeast of Mintons Store, and 3 miles upstream from Fort Branch.

DRAINAGE AREA.--24 sq mi, approximately.

PERIOD OF RECORD.--February 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 40.00 ft above mean sea level (Soil Conservation Service bench mark).

AVERAGE DISCHARGE.--7 years, 24.4 cfs (13.81 inches per year).

EXTREMES.--Current year: Maximum discharge, 581 cfs Feb. 8 (gage height, 10.92 ft); minimum, 0.39 cfs Aug. 11, 12; minimum gage height, 3.30 ft Oct. 15.
Period of record: Maximum discharge, 1,330 cfs Oct. 5, 1964; maximum gage height, 12.78 ft Jan. 14, 1968; minimum discharge, 0.39 cfs Aug. 11, 12, 1971.
No flow observed Aug. 16, 1961.

REMARKS.--Records good above 5.0 cfs and fair below. Entire basin above station is canalized. Excavation completed in February 1964. Recording rain gage located at gage.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	11	3.5	14	52	30	35	4.2	5.9	2.8	1.4	9.8
2	1.9	5.5	3.5	12	32	32	26	4.5	4.5	2.7	2.0	6.6
3	2.0	3.3	3.5	10	22	205	56	5.1	3.5	16	1.7	4.2
4	2.2	3.3	3.3	10	88	270	44	5.1	3.7	2.5	1.3	3.2
5	2.2	5.1	3.3	215	205	102	29	4.7	10	1.8	1.5	2.7
6	2.0	4.2	3.3	159	139	66	279	3.2	3.3	5.4	2.2	2.5
7	2.0	3.0	3.0	73	151	52	209	3.7	2.5	32	1.5	2.4
8	2.0	2.8	2.8	52	431	38	102	3.7	6.3	3.5	.91	2.2
9	2.0	2.8	2.8	64	201	28	64	3.3	4.2	2.3	.62	2.0
10	2.0	17	2.8	64	92	21	45	2.8	1.4	2.0	.51	1.7
11	1.9	56	2.8	67	64	19	31	2.5	1.3	1.8	.43	1.5
12	1.8	28	2.8	53	52	15	22	2.3	1.5	3.3	.47	6.9
13	1.6	20	2.8	42	272	12	17	8.0	2.2	2.0	.51	15
14	1.6	14	2.8	34	187	9.2	15	4.0	2.0	1.8	.51	6.6
15	1.5	11	2.8	45	92	16	12	2.3	2.0	1.5	.55	2.7
16	8.0	7.2	21	52	64	40	10	10	2.2	1.1	.55	1.5
17	2.5	4.5	49	40	49	27	8.8	6.3	2.2	1.0	4.9	1.1
18	1.8	4.0	25	32	40	17	8.0	3.0	2.0	.82	2.9	1.0
19	1.8	4.0	17	24	32	14	7.6	2.3	1.9	.66	2.7	.83
20	1.6	3.5	13	18	28	20	11	2.3	2.0	.83	1.2	.74
21	2.2	4.0	15	13	26	16	6.8	2.8	2.3	1.0	.62	.66
22	11	3.0	24	13	54	13	6.3	2.8	3.5	1.2	1.3	.66
23	74	3.3	40	33	253	11	6.3	2.8	8.0	1.2	27	.66
24	9.6	2.5	48	42	96	9.6	6.8	3.7	4.2	1.7	8.0	.66
25	3.3	2.5	32	60	63	8.8	5.9	4.2	3.7	2.0	1.8	.66
26	2.2	2.5	23	47	48	15	5.5	3.7	3.3	2.0	69	.66
27	2.3	2.8	17	33	48	32	5.1	4.5	3.5	2.4	134	.66
28	2.2	3.0	14	22	40	60	5.5	7.2	3.0	12	124	.66
29	2.2	3.5	11	16	------	76	4.7	24	3.0	2.7	52	.66
30	2.3	3.3	8.8	17	------	80	4.2	14	5.5	1.3	26	67
31	4.0	------	9.2	62	------	52	------	9.6	------	1.0	16	------
TOTAL	159.6	240.6	412.8	1,438	2,921	1,406.6	1,088.5	162.6	104.6	114.31	488.08	148.11
MEAN	5.15	8.02	13.3	46.4	104	45.4	36.3	5.25	3.49	3.69	15.7	4.94
MAX	74	56	49	215	431	270	279	24	10	32	134	67
MIN	1.5	2.5	2.8	10	22	8.8	4.2	2.3	1.3	.66	.43	.66
CFSM	.21	.33	.55	1.93	4.33	1.89	1.51	.22	.15	.15	.65	.21
IN.	.25	.37	.64	2.23	4.53	2.18	1.69	.25	.16	.18	.76	.23

CAL YR 1970 TOTAL 9,248.40 MEAN 25.3 MAX 508 MIN 1.4 CFSM 1.05 IN 14.34
WTR YR 1971 TOTAL 8,684.80 MEAN 23.8 MAX 431 MIN .43 CFSM .99 IN 13.46

PEAK DISCHARGE (BASE, 550 CFS, REVISED)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2- 8	0130	10.92	581				

02053500 Ahoskie Creek at Ahoskie, N. C.

LOCATION.--Lat 36°16'50", long 77°00'00", Hertford County, on right bank 10 ft downstream from bridge on State Highway 350, 0.5 mile upstream from Seaboard Coast Line Railroad bridge, and 0.8 mile southwest of Ahoskie.

DRAINAGE AREA.--57 sq mi, approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 17.46 ft above mean sea level (Soil Conservation Service bench mark). Prior to Jan. 4, 1963, at present site at datum 4.00 ft higher. Jan. 20, 1950, to May 24, 1951, nonrecording gage.

AVERAGE DISCHARGE.--21 years, 64.6 cfs (15.39 inches per year).

EXTREMES.--Current year: Maximum discharge, 848 cfs Feb. 13 (gage height, 8.14 ft); minimum, 4.1 cfs Aug. 12-18, 21, 22 (gage height, 0.99 ft).
Period of record: Maximum discharge, 2,580 cfs Oct. 5, 1964 (gage height, 10.72 ft); no flow at times during most years prior to canalization; minimum since canalization, 1.8 cfs June 17, 1967.
Flood of August 1940 reached a stage of 15.1 ft, present datum, from floodmark witnessed by local resident (discharge not determined).

REMARKS.--Records good. Entire basin above station canalized since July 1964. Excavation begun downstream in July 1962 and reached the station in December 1962.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	11	9.3	21	132	79	103	14	19	7.1	8.3	35
2	5.5	13	9.0	22	85	72	76	13	13	13	6.9	26
3	5.5	11	9.0	20	62	392	126	14	13	36	5.7	20
4	4.8	10	9.0	18	127	786	114	13	11	13	5.0	17
5	4.8	9.3	8.6	217	484	390	79	12	11	8.6	4.8	15
6	4.5	9.6	9.0	357	395	208	433	12	13	8.3	5.0	13
7	4.5	9.0	9.0	146	291	144	700	11	10	24	5.0	12
8	4.5	8.6	9.0	93	767	104	344	12	9.3	17	4.8	11
9	4.5	8.3	9.0	105	628	77	191	11	13	10	4.5	10
10	4.5	9.0	9.0	121	280	62	125	10	10	8.6	4.5	9.6
11	4.5	72	9.0	128	175	55	86	9.6	9.3	7.6	4.3	9.3
12	4.5	41	9.0	101	133	49	63	9.3	8.3	10	4.3	38
13	4.5	28	9.0	78	541	45	50	18	8.3	9.0	4.1	65
14	4.2	22	8.6	64	702	43	41	18	8.3	7.6	4.1	34
15	4.2	18	8.6	71	319	41	35	13	17	7.1	4.1	22
16	6.8	16	13	113	192	89	31	27	15	6.9	4.1	17
17	7.7	15	83	85	135	72	27	22	11	6.4	4.1	14
18	5.2	14	47	68	104	57	24	16	10	6.2	6.4	13
19	4.8	13	32	56	83	53	21	13	9.3	6.2	7.6	11
20	4.8	13	26	46	70	66	20	11	8.6	6.2	6.2	11
21	6.3	12	24	39	62	55	19	11	8.3	6.2	4.8	10
22	8.5	12	33	36	87	49	18	11	14	5.9	15	10
23	102	11	45	50	635	45	18	10	15	5.7	78	9.6
24	29	11	82	76	317	44	18	9.6	13	5.7	40	9.3
25	15	10	55	121	176	41	17	9.6	9.6	5.4	20	9.0
26	12	10	43	102	124	50	16	9.0	8.3	5.9	64	8.6
27	10	9.6	34	77	116	69	15	8.6	7.6	11	339	8.3
28	9.3	9.6	29	57	101	159	15	9.3	7.1	8.3	450	7.9
29	9.0	9.6	25	46	------	193	15	32	6.6	11	181	7.6
30	8.6	9.3	22	43	------	239	14	33	6.6	7.1	89	200
31	9.0	------	21	123	------	154	------	25	------	6.4	54	------
TOTAL	318.5	454.9	748.1	2,700	7,323	3,982	2,854	447.0	323.5	297.4	1,438.6	683.2
MEAN	10.3	15.2	24.1	87.1	262	128	95.1	14.4	10.8	9.59	46.4	22.8
MAX	102	72	83	357	767	786	700	33	19	36	450	200
MIN	4.2	8.3	8.6	18	62	41	14	8.6	6.6	5.4	4.1	7.6
CFSM	.18	.27	.42	1.53	4.60	2.25	1.67	.25	.19	.17	.81	.40
IN.	.21	.30	.49	1.76	4.78	2.60	1.86	.29	.21	.19	.94	.45

CAL YR 1970 TOTAL 23,870.4 MEAN 65.4 MAX 1,100 MIN 4.2 CFSM 1.15 IN 15.58
WTR YR 1971 TOTAL 21,570.2 MEAN 59.1 MAX 786 MIN 4.1 CFSM 1.04 IN 14.08

PEAK DISCHARGE (BASE, 720 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2- 8	1800	7.84	792	3- 4	0400	8.06	832
2-13	1800	8.14	848	4- 6	2300	7.85	794

02053510 Ahoskie Creek tributary at Poor Town, N. C.

LOCATION.--Lat 36°16'29", long 77°00'38", Hertford County, on left bank 12 ft upstream from culvert on Secondary Road 1105, 1 mile southeast of Poor Town, and 1 mile upstream from mouth.

DRAINAGE AREA.--2.6 sq mi, approximately.

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 30.86 ft above mean sea level (Soil Conservation Service bench mark).

AVERAGE DISCHARGE.--8 years, 1.78 cfs (9.30 inches per year).

EXTREMES.--Current year: Maximum discharge, 156 cfs Sept. 30 (gage height, 6.61 ft); minimum, 0.03 cfs Oct. 1 (gage height, 1.52 ft).
Period of record: Maximum discharge, 274 cfs May 30, 1966 (gage height, 9.10 ft); no flow for part of each day Oct. 6, 11, 12, 1966, Nov. 3, 1967, result of temporary diversion.
No flow observed Aug. 16, 1961.

REMARKS.--Records good. Entire channel above and below station canalized and improved in December 1962. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.18	.13	.18	3.0	1.6	1.9	.28	.39	.13	.34	.34
2	.16	.16	.13	.16	1.4	1.9	1.4	.28	.31	1.2	.24	.31
3	.13	.16	.11	.16	1.0	29	4.9	.28	.28	.57	.18	.28
4	.13	.16	.11	.16	8.0	19	2.4	.24	.24	.24	.18	.24
5	.13	.16	.11	3.0	16	5.6	1.6	.24	.28	.21	.18	.24
6	.13	.16	.11	3.0	7.0	3.2	18	.21	.21	.45	.18	.21
7	.13	.16	.11	1.3	14	2.7	11	.21	.21	.57	.18	.21
8	.13	.16	.13	.88	18	1.8	5.1	.24	.28	.28	.18	.18
9	.13	.16	.13	1.7	5.5	1.3	3.0	.21	.24	.18	.18	.16
10	.13	.24	.13	2.1	3.5	1.1	1.9	.21	.24	.18	.18	.13
11	.13	.24	.13	1.8	2.4	1.1	1.2	.18	.24	.18	.18	.13
12	.13	.21	.11	1.2	1.9	.95	1.0	.18	.24	.24	.18	2.1
13	.13	.18	.11	.82	37	.88	.88	1.2	.24	.18	.18	.85
14	.13	.18	.11	.69	11	.76	.64	.82	.24	.18	.18	.37
15	.16	.18	.11	1.6	4.5	1.5	.58	.44	1.1	.21	.18	.24
16	.24	.18	1.0	2.0	3.0	2.7	.53	3.1	.53	.24	.18	.21
17	.13	.19	.88	1.3	2.1	1.4	.53	1.3	.31	.21	.18	.21
18	.13	.24	.39	1.0	1.6	1.0	.48	.53	.24	.21	.57	.21
19	.13	.24	.28	.82	1.4	1.1	.48	.35	.18	.24	.21	.21
20	.13	.24	.28	.64	1.2	1.4	.48	.28	.18	.21	.16	.21
21	.28	.21	.35	.58	1.2	1.0	.48	.24	.18	.16	.16	.21
22	.64	.18	.35	.58	5.7	.82	.44	.24	.95	.16	5.1	.21
23	.69	.18	.82	1.1	19	.69	.44	.21	.88	.16	4.6	.21
24	.21	.16	.82	1.4	4.9	.64	.39	.21	.31	.13	1.1	.21
25	.18	.16	.48	2.8	2.8	.58	.35	.21	.18	.16	.41	.21
26	.16	.13	.35	1.9	2.0	.92	.35	.21	.16	.16	11	.21
27	.16	.13	.24	1.2	3.4	4.8	.31	.21	.11	.61	51	.21
28	.13	.16	.21	.82	2.3	6.4	.39	.24	.11	1.6	10	.21
29	.13	.18	.18	.69	------	8.6	.35	1.5	.11	.34	2.1	.21
30	.16	.16	.16	.88	------	6.4	.35	.76	.11	.24	.85	51
31	.16	------	.18	5.6	------	3.1	------	.69	------	.21	.53	------
TOTAL	5.65	5.42	8.74	42.06	184.8	113.94	61.85	15.50	9.28	10.04	91.07	59.93
MEAN	.18	.18	.28	1.36	6.60	3.68	2.06	.50	.31	.32	2.94	2.00
MAX	.69	.24	1.0	5.6	37	29	18	3.1	1.1	1.6	51	51
MIN	.11	.13	.11	.16	1.0	.58	.31	.18	.11	.13	.16	.13
CFSM	.07	.07	.11	.52	2.54	1.42	.79	.19	.12	.12	1.13	.77
IN.	.08	.08	.13	.60	2.64	1.63	.88	.22	.13	.14	1.30	.86

CAL YR 1970 TOTAL 598.24 MEAN 1.64 MAX 79 MIN .01 CFSM .63 IN 8.56
WTR YR 1971 TOTAL 608.28 MEAN 1.67 MAX 51 MIN .11 CFSM .64 IN 8.70

PEAK DISCHARGE (BASE, 120 CFS, REVISED)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8-27	1430	5.78	126	9-30	1900	6.61	156

02068500 Dan River near Francisco, N. C.

LOCATION.--Lat 36°30'53", long 80°18'11", Stokes County, on left bank 200 ft upstream from bridge on State Highway 704, 700 ft downstream from Georges Mill, 0.2 mile downstream from Elk Creek, 3 miles east of Francisco, and 7.9 miles downstream from Little Dan River.

DRAINAGE AREA.--124 sq mi.

PERIOD OF RECORD.--August 1924 to current year. 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, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--47 years, 183 cfs (20.05 inches per year) unadjusted.

EXTREMES.--Current year: Maximum discharge, 2,550 cfs Feb. 22 (gage height, 5.10 ft); minimum 47 cfs Oct. 7 (gage height, 1.07 ft); minimum daily, 53 cfs, Oct. 18.
Period of record: Maximum discharge, 12,400 cfs Oct. 19, 1937 (gage height, 12.45 ft); minimum, 7.1 cfs Sept. 8, 1932 (gage height, 0.43 ft); minimum daily, 28 cfs Aug. 17, 18, 1963, Sept. 12, 1966.
Flood in 1916 reached a stage of about 15 ft, from information by local residents (discharge, 16,000 cfs).

REMARKS.--Records good. Considerable diurnal fluctuation and regulation from mills and powerplants above station. Talbott and Townes reservoirs above Pinnacles Hydroelectric Plant in Virginia, 28 miles above station, were completed in 1938 (see p. 152).

REVISIONS (WATER YEARS).--WSP 892: Drainage area. WSP 1303: 1938-50 (monthly runoff). WSP 1433: 1925-26, 1928-29, 1931, 1942, 1948.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	415	113	149	145	239	167	163	231	180	189	122
2	74	342	106	167	196	236	213	142	242	151	181	114
3	71	326	89	146	176	342	205	135	237	112	188	118
4	66	266	96	166	153	367	174	203	217	118	176	80
5	64	256	103	410	180	307	168	183	185	98	177	68
6	64	191	127	280	210	270	247	183	201	85	102	66
7	60	178	116	203	247	225	293	213	170	98	99	132
8	84	168	141	164	356	210	221	230	200	166	98	133
9	124	165	148	170	346	217	165	188	153	161	91	109
10	94	183	147	146	235	196	165	134	157	204	151	103
11	82	200	105	141	213	208	137	195	139	110	167	85
12	68	194	110	151	170	181	133	252	219	98	179	87
13	91	183	99	155	445	190	133	825	188	82	89	107
14	82	183	83	180	466	188	173	420	187	78	88	71
15	89	183	114	182	334	193	188	347	198	110	85	65
16	84	178	147	164	259	213	194	593	180	75	78	90
17	122	155	169	155	222	195	176	366	154	87	79	93
18	53	126	137	126	191	189	152	280	140	97	84	140
19	65	126	116	159	165	226	128	284	126	110	103	106
20	69	135	118	161	173	209	183	266	137	123	119	177
21	133	150	180	167	189	201	209	234	142	93	135	285
22	137	145	241	121	692	162	222	192	230	92	103	257
23	122	122	219	132	729	173	201	169	168	93	114	222
24	91	150	202	142	442	192	196	171	184	99	116	170
25	78	153	165	151	400	175	137	197	202	150	93	92
26	72	140	120	134	361	181	129	190	194	173	96	92
27	91	108	161	123	266	184	174	154	158	160	123	132
28	118	124	116	171	242	175	250	204	142	141	85	144
29	97	140	144	176	------	167	194	278	189	209	78	79
30	486	109	164	132	------	160	130	366	156	464	69	87
31	881	------	160	118	------	170	------	309	------	226	72	------
TOTAL	3,878	5,494	4,256	5,142	8,203	6,541	5,457	8,066	5,426	4,243	3,606	3,626
MEAN	125	183	137	166	293	211	182	260	181	137	116	121
MAX	881	415	241	410	729	367	293	825	242	464	189	285
MIN	53	108	83	118	145	160	128	134	126	75	69	65
(†)	+20	-18	-1	-3	+14	-7	-1	+5	-5	+1	-2	+4

CAL YR 1970 TOTAL 61,797 MEAN 169 MAX 2,500 MIN 53 MEAN‡ 169 CFSM‡ 1.36 IN.‡ 18.51
WTR YR 1971 TOTAL 63,938 MEAN 175 MAX 881 MIN 53 MEAN‡ 175 CFSM‡ 1.41 IN.‡ 19.17

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-22	1830	5.10	2,550				

† Change in contents, equivalent in cubic feet per second, in Talbott and Townes Reservoirs furnished by city of Danville, Va.

‡ Adjusted for change in contents.

02070500 Mayo River near Price, N. C.

LOCATION.--Lat 36°32'02", long 79°59'31", Rockingham County, on right bank 300 ft downstream from Anglins Bridge on Secondary Road 1358, 0.5 mile downstream from confluence of North and South Mayo Rivers, 0.8 mile downstream from Virginia-North Carolina State line, and 4 miles west of Price.

DRAINAGE AREA.--260 sq mi.

PERIOD OF RECORD.--July 1929 to September 1971 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 689.95 ft above mean sea level. Prior to Oct. 29, 1929, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--42 years, 312 cfs (16.30 inches per year).

EXTREMES.--Current year: Maximum discharge, 9,900 cfs Oct. 31 (gage height, 8.75 ft); minimum, 99 cfs Oct. 10, 11 (gage height, 1.01 ft).
Period of record: Maximum discharge, 30,000 cfs Oct. 19, 1937 (gage height, 14.00 ft), from rating curve extended above 8,000 cfs; minimum, 32 cfs Oct. 8, 1954 (gage height, 0.55 ft).

REMARKS.--Records good. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1433: 1930-31(m), 1932, 1949(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	1,020	206	215	189	343	285	264	389	272	263	167
2	137	571	204	225	170	356	287	258	341	276	418	167
3	136	490	201	225	215	828	305	255	329	374	334	165
4	127	414	199	236	227	900	280	250	318	267	242	165
5	123	357	188	1,370	291	510	272	246	323	240	241	167
6	124	308	191	665	519	431	468	249	317	238	230	160
7	124	283	186	415	581	395	879	298	369	242	224	155
8	125	263	186	336	1,020	355	524	293	380	230	206	155
9	126	248	188	308	759	335	413	264	379	231	201	150
10	129	291	189	288	424	325	362	250	309	311	193	145
11	127	520	189	271	352	322	333	243	292	274	195	223
12	128	363	191	260	319	309	321	270	290	372	297	242
13	126	384	196	250	1,060	304	311	2,610	331	245	207	273
14	124	306	184	247	847	299	300	889	296	228	186	195
15	181	362	181	242	500	319	289	551	292	213	178	167
16	159	300	215	230	407	373	288	1,520	332	207	172	161
17	130	271	331	228	356	304	282	668	329	206	172	164
18	128	257	233	227	330	290	279	491	310	192	245	186
19	128	248	214	219	313	321	272	419	282	252	237	218
20	131	250	206	190	316	365	269	378	275	240	193	228
21	257	283	392	215	304	311	270	350	268	207	179	275
22	258	244	626	232	1,170	300	290	330	308	199	217	349
23	172	235	366	248	2,840	293	271	310	275	193	399	267
24	155	223	342	237	708	281	291	303	268	186	211	217
25	149	215	288	266	513	276	264	303	258	226	186	191
26	148	218	265	244	441	300	257	300	246	228	178	180
27	145	216	244	215	416	302	253	292	240	220	234	176
28	144	217	230	180	368	362	371	408	230	226	225	169
29	147	212	220	225	------	337	313	746	235	280	180	162
30	1,530	210	200	236	------	310	272	958	430	441	171	157
31	6,850	------	200	227	------	292	------	498	------	302	169	------
TOTAL	12,608	9,779	7,451	9,172	15,955	11,348	9,871	15,464	9,241	7,818	6,983	5,796
MEAN	407	326	240	296	570	366	329	499	308	252	225	193
MAX	6,850	1,020	626	1,370	2,840	900	879	2,610	430	441	418	349
MIN	123	210	181	180	170	276	253	243	230	186	169	145
CFSM	1.57	1.25	.92	1.14	2.19	1.41	1.27	1.92	1.18	.97	.87	.74
IN	1.80	1.40	1.07	1.31	2.28	1.62	1.41	2.21	1.32	1.12	1.00	.83

CAL YR 1970 TOTAL 106,873 MEAN 293 MAX 6,850 MIN 123 CFSM 1.13 IN 15.29
WTR YR 1971 TOTAL 121,486 MEAN 333 MAX 6,850 MIN 123 CFSM 1.28 IN 17.38

PEAK DISCHARGE (BASE, 3,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-31	0700	8.75	9,900	5-13	0930	5.76	4,020
2-23	0100	6.54	5,270				

02071000 Dan River near Wentworth, N. C.

LOCATION.--Lat 36°24'47", long 79°49'45", Rockingham County, on right bank 600 ft downstream from Settles Bridge on Secondary Road 2150, 3.5 miles northwest of Wentworth, 7.5 miles downstream from Mayo River, and 103.7 miles upstream from mouth.

DRAINAGE AREA.--1,050 sq mi, approximately.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for October 1939, published in WSP 1303.

GAGE.--Water-stage recorder. Datum of gage is 512.98 ft above mean sea level. Prior to Aug. 3, 1949, water-stage recorder at site 150 ft upstream at same datum.

AVERAGE DISCHARGE.--32 years, 1,155 cfs (14.93 inches per year).

EXTREMES.--Current year: Maximum discharge, 20,900 cfs Oct. 31 (gage height, 22.16 ft); minimum 192 cfs Oct. 9 (gage height, 1.19 ft); minimum daily, 254 cfs Oct. 8.
Period of record: 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 of 34.9 ft, from information by North Carolina State Highway Commission, and flood in 1937 reached a stage of 29.8 ft, from information by local resident.

REMARKS.--Records good. Diurnal fluctuation and regulation at low flow caused by mills and Talbott and Townes reservoirs. (See p. 152).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	350	11,600	660	802	833	1,490	1,190	1,010	1,540	1,050	1,090	521
2	320	2,530	664	833	540	1,550	1,160	1,020	1,290	891	1,110	570
3	319	1,980	639	850	890	4,550	1,320	987	1,220	956	1,680	559
4	321	1,620	631	938	916	5,690	1,210	940	1,170	927	1,080	571
5	301	1,350	606	6,150	1,070	2,760	1,130	992	1,160	773	1,130	539
6	347	1,150	598	3,880	2,530	2,070	1,570	974	1,090	734	908	511
7	290	973	623	2,060	2,880	1,820	4,040	1,030	1,200	771	791	491
8	254	880	610	1,530	6,750	1,590	2,550	1,130	1,000	741	740	539
9	278	822	651	1,310	4,210	1,440	1,860	1,100	1,450	769	691	544
10	348	842	651	1,220	2,300	1,380	1,550	978	1,060	1,460	658	501
11	335	1,800	688	1,100	1,680	1,340	1,390	873	1,040	1,130	748	569
12	327	1,330	635	1,020	1,500	1,300	1,270	974	926	1,190	1,650	1,120
13	320	1,330	668	987	2,620	1,230	1,210	9,990	1,170	913	1,080	1,080
14	316	1,110	635	947	4,090	1,230	1,160	6,270	1,040	746	735	794
15	472	1,680	569	956	2,310	1,220	1,140	2,630	967	689	650	541
16	664	1,320	714	956	1,820	1,440	1,120	9,080	1,130	684	639	475
17	470	1,030	1,170	846	1,530	1,290	1,110	3,990	1,210	634	601	511
18	389	917	1,000	872	1,400	1,180	1,080	2,330	1,050	611	735	482
19	339	813	824	802	1,280	1,210	1,030	1,800	963	622	834	793
20	322	777	767	701	1,210	1,550	965	1,600	894	770	712	693
21	403	838	881	683	1,210	1,350	1,040	1,470	882	713	653	752
22	811	803	1,720	903	1,480	1,280	1,200	1,310	1,050	612	657	1,060
23	612	758	1,390	881	10,600	1,180	1,140	1,180	1,190	593	1,300	1,070
24	459	705	1,340	916	3,800	1,130	1,160	1,100	1,150	602	889	810
25	410	684	1,190	1,160	2,430	1,110	1,090	1,080	927	698	684	684
26	393	688	1,030	1,100	1,890	1,150	953	1,120	889	737	610	546
27	383	692	864	930	1,910	1,220	926	1,050	880	785	623	527
28	385	660	850	701	1,640	1,390	1,310	1,190	807	853	979	555
29	418	680	776	758	------	1,430	1,610	2,460	759	856	642	570
30	1,900	701	718	987	------	1,440	1,190	2,800	1,250	2,010	561	475
31	15,200	------	859	982	------	1,250	------	1,960	------	1,520	530	------
TOTAL	28,456	43,063	25,621	38,761	67,319	51,260	40,674	66,418	32,354	27,040	26,390	19,453
MEAN	918	1,435	826	1,250	2,404	1,654	1,356	2,143	1,078	872	851	648
MAX	15,200	11,600	1,720	6,150	10,600	5,690	4,040	9,990	1,540	2,010	1,680	1,120
MIN	254	660	569	683	540	1,110	926	873	759	593	530	475
CFSM	.87	1.37	.79	1.19	2.29	1.58	1.29	2.04	1.03	.83	.81	.62
IN.	1.01	1.53	.91	1.37	2.39	1.82	1.44	2.35	1.15	.96	.93	.69

CAL YR 1970 TOTAL 411,239 MEAN 1,127 MAX 25,500 MIN 254 CFSM 1.07 IN 14.57
WTR YR 1971 TOTAL 466,809 MEAN 1,279 MAX 15,200 MIN 254 CFSM 1.22 IN 16.54

PEAK DISCHARGE (BASE, 12,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-31	2400	22.16	20,900	5-13	2130	18.28	13,700
2-23	1530	17.80	13,000				

02074000 Smith River at Eden, N. C.
(Formerly published as Smith River at Spray, N. C.)

LOCATION.--Lat 36°31'31", long 79°45'57", Rockingham County, on right bank at Eden, 0.3 mile downstream from bridge on State Highway 14, 0.8 mile upstream from bridge on Secondary Road 1714, 1.2 south of Virginia-North Carolina State line, 1.3 miles downstream from Stuart Creek, and 3.9 miles upstream from mouth.

DRAINAGE AREA.--538 sq mi.

PERIOD OF RECORD.--October 1939 to current year. Prior to October 1970 published as "at Spray".

GAGE.--Water-stage recorder. Datum of gage is 539.56 ft above mean sea level.

AVERAGE DISCHARGE.--32 years, 585 cfs (14.76 inches per year) adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 8,270 cfs Oct. 31 (gage height, 8.93 ft); minimum, 76 cfs Oct. 18 (gage height, 1.42 ft); minimum daily, 111 cfs Oct. 4.
Period of record: 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 1.5 miles downstream; minimum, 38 cfs Aug. 7, 1967; minimum daily, 46 cfs Aug. 14, 1967.

REMARKS.--Records good. Flow regulated since August 1950 by Philpott Reservoir 40 miles upstream (usable capacity, 6,325,000,000 cu ft). Some additional regulation by hydroelectric plant at Martinsville, Va. 18 miles upstream. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1433: 1946. WRD N. C. 1968: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	303	973	614	609	224	415	465	405	1,310	536	324	400
2	302	652	616	246	323	1,020	459	261	1,180	736	327	380
3	324	1,080	618	222	373	1,890	505	330	1,130	572	571	402
4	111	1,060	615	290	418	2,070	267	700	1,110	369	494	431
5	147	1,080	608	2,800	491	1,350	349	694	1,090	264	611	170
6	272	972	185	1,690	758	1,130	1,010	709	361	320	509	210
7	279	891	195	1,010	826	449	1,690	824	357	617	482	188
8	288	243	423	786	1,780	456	1,190	798	818	935	241	347
9	282	284	459	697	1,480	993	974	354	877	926	226	293
10	297	862	449	347	800	978	795	316	763	1,640	536	400
11	122	1,100	450	372	627	973	353	450	730	427	539	401
12	158	1,020	471	775	558	960	400	479	753	384	700	495
13	282	1,000	182	737	1,260	931	853	3,430	552	556	650	552
14	287	928	208	751	1,340	287	840	1,350	359	534	500	449
15	294	470	333	753	700	343	825	1,380	620	529	220	405
16	376	407	381	697	1,120	908	828	3,620	1,030	521	350	413
17	293	941	627	243	1,040	844	806	1,750	812	513	500	441
18	131	905	439	292	1,010	818	275	1,330	740	211	550	443
19	178	894	410	639	977	877	293	1,210	715	283	500	219
20	280	908	214	625	966	986	595	1,090	348	494	450	263
21	386	935	493	638	311	331	600	1,120	331	445	400	470
22	553	240	1,500	664	689	297	611	1,040	760	439	350	491
23	341	282	949	681	4,740	415	608	356	731	436	500	475
24	340	856	789	248	1,650	383	642	338	811	443	450	444
25	170	849	684	300	1,310	380	284	928	724	231	420	439
26	158	852	297	425	1,170	408	263	982	718	263	400	204
27	255	233	270	375	1,110	448	375	962	282	404	500	206
28	259	851	275	354	437	374	512	1,150	291	403	450	361
29	260	201	589	378	------	368	472	1,610	465	471	210	345
30	1,330	253	581	409	------	508	410	1,850	723	1,100	300	347
31	5,120	------	610	243	------	445	------	1,000	------	517	450	------
TOTAL	14,178	22,222	15,534	19,296	28,488	23,035	18,549	32,816	21,491	16,519	13,710	11,084
MEAN	457	741	501	622	1,017	743	618	1,059	716	533	442	369
MAX	5,120	1,100	1,500	2,800	4,740	2,070	1,690	3,620	1,310	1,640	700	552
MIN	111	201	182	222	224	287	263	261	282	211	210	170
(†)	+172	-115	-35	-11	+165	-39	-6	+46	-55	-6	-55	-18

CAL YR 1970 TOTAL 200,387 MEAN 549 MAX 5,120 MIN 91 MEAN‡ 545 CFSM‡ 1.01 IN.‡ 13.76
WTR YR 1971 TOTAL 236,922 MEAN 649 MAX 5,120 MIN 111 MEAN‡ 652 CFSM‡ 1.21 IN.‡ 16.46

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

‡ Adjusted for change in contents.

02075160 Moon Creek near Yanceyville, N. C.

LOCATION.--Lat 36°28'13", long 79°23'00", Caswell County, on right bank at downstream side of bridge on Secondary Road 1321, 0.5 mile downstream from East Prong, and 5.5 miles northwest of Yanceyville.

DRAINAGE AREA.--29.9 sq mi.

PERIOD OF RECORD.--Annual maximum, water years 1954-61. October 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 420 ft (by barometer). July 2, 1953, to Sept. 30, 1961, crest-stage gage at upstream side of bridge at datum 8.46 ft higher.

AVERAGE DISCHARGE.--10 years, 21.6 cfs (9.81 inches per year).

EXTREMES.--Current year: Maximum discharge, 641 cfs May 16 (gage height, 8.12 ft); minimum, 0.42 cfs Oct. 10; minimum gage height, 0.83 ft Oct. 5, 6, 7, 8, 9, 10.
Period of record: Maximum discharge, 3,050 cfs Oct. 15, 1954 (gage height, 20.70 ft, site and datum then in use); no flow for part of July 25, 1966 (result of temporary diversion); minimum unregulated, 0.18 cfs Oct. 3, 4, 1968.

REMARKS.--Records good. Occasional regulation by recreation lake upstream from station. Occasional diversion for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.61	20	5.2	10	16	21	25	11	29	12	9.3	4.2
2	.61	14	5.2	11	12	32	24	11	20	8.9	7.2	3.7
3	.55	12	5.4	12	11	207	41	14	16	9.3	5.8	3.4
4	.51	12	5.4	16	19	284	30	11	14	7.4	4.7	3.2
5	.51	11	5.3	73	36	84	22	9.2	12	5.3	3.6	3.2
6	.51	8.3	5.5	63	84	46	139	8.4	11	5.1	3.7	3.1
7	.47	6.9	5.1	34	140	35	218	10	9.3	6.4	3.9	2.8
8	.47	5.9	5.3	23	412	28	81	14	8.2	5.7	3.5	2.5
9	.47	5.4	5.8	23	272	24	46	10	8.5	4.6	2.8	2.2
10	.51	7.0	6.0	21	80	22	32	8.4	8.0	8.0	2.5	2.5
11	.61	19	6.4	20	48	21	25	7.3	7.9	8.1	5.1	7.0
12	.55	19	7.2	19	37	19	23	7.3	7.7	5.6	30	36
13	.55	26	7.0	17	76	18	21	157	10	4.6	15	31
14	.55	25	6.3	16	89	17	17	115	9.1	5.1	6.5	15
15	1.1	98	5.8	15	47	17	15	58	8.2	3.6	4.2	8.2
16	1.8	52	13	13	34	16	15	486	26	3.0	3.1	6.8
17	1.6	22	33	12	27	14	15	296	21	2.8	2.7	9.3
18	1.2	15	19	12	23	13	13	83	14	2.3	8.8	14
19	1.1	12	13	11	21	17	13	44	11	2.4	10	16
20	1.2	11	10	9.9	21	21	12	30	9.2	2.4	6.6	16
21	4.0	9.8	22	9.5	19	15	12	24	8.1	2.2	4.4	12
22	6.9	9.3	32	11	35	13	14	20	7.3	1.9	3.5	17
23	6.8	8.4	25	17	80	13	14	17	7.4	1.7	3.5	21
24	4.3	7.1	23	19	46	13	16	15	7.4	1.6	3.0	13
25	3.2	6.5	18	28	30	12	12	16	6.8	1.8	2.3	9.3
26	2.6	6.4	15	25	26	17	11	15	6.0	2.4	2.0	9.2
27	2.2	6.2	12	16	31	22	9.3	13	5.5	2.7	48	9.9
28	2.2	6.0	9.9	12	25	40	26	34	4.6	2.8	48	11
29	2.4	5.8	9.3	11	------	44	21	143	4.0	20	14	12
30	18	5.6	7.8	18	------	43	13	102	7.4	15	7.4	14
31	34	------	9.6	23	------	30	------	48	------	13	5.3	------
TOTAL	102.08	472.6	358.5	620.4	1,797	1,218	975.3	1,837.6	324.6	177.7	280.4	318.5
MEAN	3.29	15.8	11.6	20.0	64.2	39.3	32.5	59.3	10.8	5.73	9.05	10.6
MAX	34	98	33	73	412	284	218	486	29	20	48	36
MIN	.47	5.4	5.1	9.5	11	12	9.3	7.3	4.0	1.6	2.0	2.2
CFSM	.11	.53	.39	.67	2.15	1.31	1.09	1.98	.36	.19	.30	.35
IN.	.13	.59	.45	.77	2.24	1.52	1.21	2.29	.40	.22	.35	.40

CAL YR 1970 TOTAL 6,139.40 MEAN 16.8 MAX 279 MIN .47 CFSM .56 IN 7.64
WTR YR 1971 TOTAL 8,482.68 MEAN 23.2 MAX 486 MIN .47 CFSM .78 IN 10.55

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2- 8	0700	7.27	454	5-16	1400	8.12	641

02077200 Hyco Creek near Leasburg, N. C.

LOCATION.--Lat 36°24'07", long 79°12'13", Caswell County, on right bank 10 ft upstream from bridge on U.S. Highway 158, 1.5 miles upstream from Kilgore Creek, and 2.5 miles west of Leasburg.

DRAINAGE AREA.--44.0 sq mi.

PERIOD OF RECORD.--July 1964 to current year. Prior to October 1968 published as North Hyco Creek near Leasburg.

GAGE.--Water-stage recorder. Datum of gage is 400.08 ft (revised) above mean sea level.

AVERAGE DISCHARGE.--7 years, 33.3 cfs (10.28 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,960 cfs Aug. 28 (gage height, 35.16 ft); no flow Oct. 1-14.
Period of record: Maximum discharge, 2,480 cfs Mar. 13, 1968 (gage height, 35.92 ft); no flow at times, most years.

REMARKS.--Records good except those for periods of no gage-height record, which are fair. Water quality records for the current year are published in Part 2 of this report. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	24	8.7	45	30	55	50	18	48	3.3	3.3	14
2	0	14	8.1	40	25	70	45	16	33	4.8	2.8	12
3	0	10	7.6	42	22	433	50	16	23	2.4	2.0	10
4	0	8.7	7.8	68	26	664	90	15	18	1.9	1.7	9.0
5	0	7.8	8.4	144	78	200	55	14	15	1.6	25	8.5
6	0	6.2	7.8	102	220	110	242	13	14	1.6	20	9.5
7	0	4.6	7.6	61	244	80	338	13	11	2.1	11	7.5
8	0	3.6	7.0	47	833	70	138	17	8.1	2.2	4.8	6.5
9	0	2.7	7.0	46	887	60	74	14	7.7	1.9	3.0	5.5
10	0	3.2	7.3	49	170	50	57	11	6.6	4.2	2.8	4.2
11	0	22	7.6	63	92	48	47	9.7	5.8	18	2.8	5.1
12	0	60	7.6	64	72	43	42	9.0	5.4	8.4	2.2	39
13	0	126	7.6	52	272	40	38	112	6.6	4.6	2.2	29
14	0	181	7.3	44	351	38	34	108	7.1	3.5	2.2	15
15	.25	364	6.7	42	111	36	28	54	5.6	3.2	2.2	8.7
16	1.0	238	10	34	75	34	26	712	13	2.8	2.1	6.4
17	.60	60	47	31	60	31	24	440	16	2.1	2.0	5.8
18	.40	35	29	30	52	29	21	126	12	1.9	3.0	5.8
19	.25	26	21	26	48	35	19	65	8.7	1.7	9.3	9.0
20	.15	24	17	24	45	45	19	45	6.1	1.6	8.1	8.1
21	.12	20	26	23	42	35	18	34	5.1	1.6	3.5	5.8
22	.12	17	36	22	92	32	22	26	4.6	1.4	2.5	5.8
23	.17	15	36	24	140	30	19	21	4.2	1.2	7.0	11
24	.17	14	58	25	100	26	22	18	4.1	1.1	5.5	8.3
25	.17	12	40	50	70	19	18	16	3.9	1.1	4.5	6.4
26	.09	11	30	46	60	35	16	15	3.7	1.1	3.0	5.1
27	.02	11	25	38	80	45	15	13	3.5	1.4	17	5.6
28	.01	11	22	31	70	60	27	18	3.2	1.6	550	4.2
29	.01	10	19	30	------	90	30	261	2.5	1.9	150	3.9
30	1.4	9.3	18	31	------	80	20	182	2.4	3.2	30	3.7
31	21	------	21	34	------	70	------	77	------	4.2	20	------
TOTAL	25.93	1,351.1	569.1	1,408	4,367	2,693	1,644	2,508.7	307.9	93.6	905.5	277.4
MEAN	.84	45.0	18.4	45.4	156	86.9	54.8	80.9	10.3	3.02	29.2	9.25
MAX	21	364	58	144	887	664	338	712	48	18	550	38
MIN	0	2.7	6.7	22	22	19	15	9.0	2.4	1.1	1.7	3.7
CFSM	.02	1.02	.42	1.03	3.55	1.98	1.25	1.84	.23	.07	.66	.21
IN.	.02	1.14	.48	1.19	3.69	2.28	1.39	2.12	.26	.08	.77	.23

CAL YR 1970 TOTAL 10,088.70 MEAN 27.6 MAX 626 MIN 0 CFSM .63 IN 8.53
WTR YR 1971 TOTAL 16,151.23 MEAN 44.2 MAX 887 MIN 0 CFSM 1.00 IN 13.66

PEAK DISCHARGE (BASE, 900 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2- 9	0400	34.48	1,530	5-16	1800	33.79	1,140
3- 4	0200	33.27	928	8-28	Unknown	35.16	1,960

NOTE.--No gage-height record Mar. 5 to Apr. 6, Aug. 23 to Sept. 9.

02077240 Double Creek near Roseville, N. C.

LOCATION.--Lat 36°21'44", long 79°05'48", Person County, on left bank 75 ft downstream from Secondary Road 1166, 1.0 mile upstream from Mill Creek, and 3.0 miles northwest of Roseville.

DRAINAGE AREA.--7.47 sq mi.

PERIOD OF RECORD.--May 1964 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 450.39 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 4.49 cfs (8.16 inches per year).

EXTREMES.--Current year: Maximum discharge, 484 cfs Feb. 8 (gage height, 4.12 ft); minimum, 0.03 cfs Oct. 6, 7; minimum gage height, 1.27 ft Oct. 7.
Period of record: Maximum discharge, 732 cfs May 27, 1968 (gage height, 4.74 ft); minimum, 0.03 cfs Oct. 3, 4, 5, 7, 1968, Oct. 6, 7, 1970.

REMARKS.--Records good. Water quality records for the current year are published in Part 2 of this report. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.27	1.7	1.5	5.5	3.3	6.5	5.8	3.1	8.8	2.4	1.7	1.8
2	.21	1.6	1.5	5.3	2.9	9.9	6.6	3.0	6.3	2.9	1.1	1.6
3	.16	1.5	1.5	5.5	2.8	85	12	3.0	5.1	1.7	.86	1.5
4	.08	1.2	1.5	10	4.0	36	7.8	3.2	4.3	1.2	3.1	1.5
5	.06	.90	1.4	14	16	17	6.5	3.0	3.7	1.2	20	1.5
6	.03	.81	1.5	8.6	18	12	43	2.6	3.4	1.4	2.9	1.5
7	.04	.80	1.3	6.1	77	9.7	27	3.1	3.0	1.5	1.8	1.3
8	.06	.72	1.3	4.9	113	7.5	15	4.2	2.7	1.1	1.5	1.1
9	.11	.70	1.4	5.7	36	6.5	10	2.8	2.7	1.3	1.3	1.1
10	.16	1.9	1.5	6.0	16	6.2	8.0	2.5	2.5	5.0	1.1	.93
11	.21	13	1.5	7.4	11	6.1	6.8	2.3	2.4	1.6	1.0	1.1
12	.21	26	1.5	6.4	9.1	5.4	6.3	2.4	2.3	1.4	1.1	6.3
13	.27	36	1.5	5.2	34	5.1	5.8	18	2.7	1.4	.82	3.0
14	.21	10	1.3	4.6	20	4.7	5.3	7.2	2.3	1.2	.82	1.8
15	1.5	58	1.3	4.2	12	4.7	4.7	8.6	2.3	1.1	.80	1.5
16	1.3	11	4.8	3.7	8.9	4.4	4.6	84	4.0	1.0	.78	1.3
17	.56	6.4	7.0	3.6	7.2	3.9	4.3	17	2.8	.98	.93	1.3
18	.30	4.1	3.5	3.3	6.4	3.7	4.2	9.2	2.5	.66	7.7	2.8
19	.30	3.2	2.8	3.0	5.9	5.2	3.9	6.3	2.3	.89	2.4	1.8
20	.32	2.8	2.4	2.9	5.6	5.1	3.7	5.0	2.1	1.1	1.4	1.5
21	1.8	2.5	4.7	2.6	5.1	4.1	3.8	4.6	2.0	.77	1.1	1.5
22	1.1	2.2	5.5	2.8	12	3.9	3.9	4.3	1.8	.75	1.1	4.9
23	.67	2.2	7.0	3.5	15	3.8	3.8	3.5	1.9	.68	1.3	3.3
24	.50	1.7	7.3	3.8	9.0	3.5	3.9	3.3	1.8	.69	.89	2.3
25	.50	1.6	4.8	6.2	7.1	3.4	3.4	3.1	1.6	3.9	.80	1.6
26	.64	1.6	3.8	4.8	6.5	4.8	3.1	2.8	1.6	1.4	.78	1.5
27	.78	1.6	3.1	3.7	11	5.9	3.0	2.6	1.5	1.2	73	1.5
28	.77	1.6	2.8	3.3	7.5	9.3	5.6	39	1.4	.99	14	1.5
29	.80	1.6	2.5	3.0	------	12	3.9	72	1.3	1.2	5.5	1.5
30	3.7	1.6	2.3	3.5	------	9.1	3.4	33	1.3	1.3	3.2	1.6
31	3.9	------	2.7	3.9	------	6.7	------	15	------	1.6	2.2	------
TOTAL	21.52	200.53	88.5	157.0	482.3	311.1	229.1	373.7	84.4	45.51	156.98	57.43
MEAN	.69	6.68	2.85	5.06	17.2	10.0	7.64	12.1	2.81	1.47	5.06	1.91
MAX	3.9	58	7.3	14	113	85	43	84	8.8	5.0	73	6.3
MIN	.03	.70	1.3	2.6	2.8	3.4	3.0	2.3	1.3	.66	.78	.93
CFSM	.09	.89	.38	.68	2.30	1.34	1.02	1.62	.38	.20	.68	.26
IN.	.11	1.00	.44	.78	2.40	1.55	1.14	1.86	.42	.23	.78	.29

CAL YR 1970 TOTAL 1,259.70 MEAN 3.45 MAX 88 MIN .03 CFSM .46 IN 6.27
WTR YR 1971 TOTAL 2,208.07 MEAN 6.05 MAX 113 MIN .03 CFSM .81 IN 11.00

PEAK DISCHARGE (BASE, 170 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-12	2300	3.42	272	5-16	0245	3.28	235
11-15	0115	3.31	243	5-29	0045	3.14	202
2- 8	1515	4.12	484	8-27	1415	3.80	381
3- 3	0915	3.04	180				

02077250 South Hyco Creek near Roseville, N. C.

LOCATION.--Lat 36°23'12", long 79°06'22", Person County, on right bank at downstream side of bridge on U.S. Highway 158, 1.2 miles downstream from Double Creek, and 4.2 miles northwest of Roseville.

DRAINAGE AREA.--55 sq mi, approximately.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1964-66. October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 400.05 ft (revised) above mean sea level.

AVERAGE DISCHARGE.--5 years, 38.5 cfs (9.51 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,840 cfs Aug. 28 (gage height, 19.88 ft); no flow Oct. 9-14.
Period of record: Maximum discharge, 2,400 cfs May 27, 1968 (gage height, 21.05 ft); no flow Aug. 24 to Oct. 20, Oct. 22, 1968, Sept. 23, 24, Oct. 9-14, 1970.
No flow observed many days July and September 1966.

REMARKS.--Records excellent. Water quality records for the current year are published in Part 2 of this report. Recording rain gage located at station.

REVISIONS (WATER YEARS).--WRD N. C. 1968: 1967 (M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.93	28	13	40	36	55	49	26	67	3.9	6.3	17
2	.64	32	13	55	32	67	44	24	45	11	6.2	14
3	.49	24	12	65	30	651	89	23	34	7.5	3.3	12
4	.29	19	12	90	32	821	69	20	29	5.7	2.6	11
5	.16	13	11	178	69	207	54	19	24	3.9	171	9.8
6	.11	10	9.8	122	286	108	254	18	20	3.9	50	9.0
7	.06	9.0	9.4	69	269	82	434	19	17	5.7	17	7.8
8	.03	7.6	9.0	52	1,280	67	172	30	15	4.9	11	7.2
9	0	7.0	9.0	51	573	56	95	20	14	4.9	7.8	6.6
10	0	7.6	9.4	65	191	50	72	17	13	16	6.0	5.7
11	0	72	9.4	76	102	49	60	15	12	5.7	4.9	6.9
12	0	87	9.4	73	78	44	55	15	11	4.1	4.6	23
13	0	328	9.8	58	231	42	50	136	15	3.7	4.1	25
14	0	141	9.4	48	333	38	44	139	12	3.5	3.3	12
15	.70	750	9.0	44	113	36	40	63	11	3.1	2.7	7.8
16	2.2	202	18	36	80	36	38	1,020	24	2.9	2.5	7.2
17	1.5	74	67	34	63	32	36	400	22	2.6	3.5	5.7
18	.90	49	38	32	55	29	32	120	16	2.0	26	24
19	.50	38	29	29	49	34	29	68	12	2.2	27	23
20	.30	32	25	25	48	45	27	48	10	2.0	9.4	12
21	.20	30	30	26	45	34	26	41	9.8	2.0	6.0	9.4
22	.20	24	40	27	64	32	29	34	8.2	1.5	5.1	15
23	.25	22	60	30	194	29	28	28	8.2	1.3	11	24
24	.30	19	80	34	93	26	32	22	7.8	1.0	8.2	15
25	.20	17	55	58	67	24	26	20	6.9	6.6	4.9	11
26	.10	15	35	52	59	30	23	19	6.0	6.6	3.7	8.2
27	2.4	15	30	38	80	36	21	17	6.0	3.9	281	7.5
28	2.4	14	27	34	68	64	38	69	4.9	2.9	991	7.2
29	2.4	14	23	34	------	90	42	711	4.9	2.9	91	6.6
30	4.5	13	28	34	------	86	30	339	4.1	5.7	38	6.0
31	44	------	35	38	------	59	------	119	------	6.0	24	------
TOTAL	65.76	2,113.2	774.6	1,646	5,020	3,059	2,038	3,659	489.8	139.6	1,832.9	356.0
MEAN	2.12	70.4	25.0	53.1	179	98.7	67.9	118	16.3	4.50	59.1	11.9
MAX	44	750	80	178	1,280	821	434	1,020	67	16	991	25
MIN	0	7.0	9.0	25	30	24	21	15	4.1	1.0	2.5	5.7
CFSM	.04	1.28	.45	.97	3.25	1.79	1.23	2.15	.30	.08	1.07	.22
IN.	.04	1.43	.52	1.11	3.40	2.07	1.38	2.47	.33	.09	1.24	.24

CAL YR 1970 TOTAL 12,157.79 MEAN 33.3 MAX 984 MIN 0 CFSM .61 IN 8.22
WTR YR 1971 TOTAL 21,193.86 MEAN 58.1 MAX 1,280 MIN 0 CFSM 1.06 IN 14.33

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-13	1600	17.28	711	5-16	1400	19.28	1,560
11-15	1400	18.19	1,130	5-29	1300	17.76	942
2- 9	0200	19.62	1,710	8-28	0500	19.88	1,840
3- 3	2300	18.87	1,400				

02077300 Hyco River at McGehees Mill, N. C.

LOCATION.--Lat 36°31'02", long 79°01 42", Person County, on left bank 200 ft downstream from bridge on Secondary Road 1322, at McGehees Mill, and 1.7 miles downstream from dam.

DRAINAGE AREA.--191 sq mi.

PERIOD OF RECORD.--August 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 349.78 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 118 cfs (adjusted for storage) (8.39 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,390 cfs Feb. 9 (gage height, 15.11 ft); minimum, 3.6 cfs Aug. 11 (gage height, 2.38 ft); minimum daily, 6.8 cfs Oct. 10, 13, 14, 16, 17.
Period of record: Maximum discharge, 3,870 cfs Mar. 1, 1966, maximum gage height, 15.58 ft Mar. 13, 1968; minimum discharge, 1.1 cfs Oct. 9, 1964 (gage height, 2.01 ft); minimum daily, 1.3 cfs Sept. 30, 1964.
Flood in 1945 reached a stage of 24.8 ft, from information by local resident (discharge not determined).

REMARKS.--Records good. Flow regulated since September 1964 by Hyco Lake (see p. 152). Change in contents in Hyco Lake include diversions from lake by city of Roxboro for municipal water supply (emergency) at rate of 3.1 cfs during the periods, Oct. 1 to Nov. 16, Dec. 15 to Feb. 4, most of which is returned downstream from station. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	7.2	30	96	90	240	234	80	468	21	9.4	161
2	8.5	7.2	30	95	69	246	190	87	342	21	9.4	131
3	8.1	7.2	31	107	62	789	201	93	214	20	9.4	82
4	7.8	7.2	34	148	106	2,080	210	80	150	20	10	66
5	7.6	7.6	33	406	204	1,440	180	71	113	20	11	58
6	7.6	7.6	33	484	531	738	464	70	95	21	24	51
7	7.2	7.6	32	376	772	508	1,030	60	82	20	50	45
8	7.2	7.2	31	268	2,070	368	860	75	68	20	48	36
9	7.2	7.6	31	231	3,230	246	606	72	58	20	46	32
10	6.8	8.5	30	201	1,930	204	390	63	52	21	31	30
11	7.2	18	30	180	848	187	300	59	52	21	14	32
12	7.2	9.7	30	191	521	162	240	48	53	21	16	120
13	6.8	25	30	174	627	147	207	359	52	20	14	165
14	6.8	69	30	166	914	135	165	558	52	18	14	111
15	7.6	275	30	139	717	138	136	438	52	18	14	70
16	6.8	556	32	117	500	123	118	1,640	52	16	12	52
17	6.8	362	31	99	387	99	107	2,050	52	13	7.8	39
18	7.2	230	30	82	305	87	92	1,130	52	13	27	42
19	7.2	161	29	74	258	102	83	588	51	12	51	44
20	7.2	132	29	64	240	111	81	374	51	9.4	39	41
21	8.1	92	36	56	192	90	77	244	51	9.4	29	31
22	7.2	75	41	47	210	81	80	180	51	9.4	33	42
23	7.2	57	83	58	564	72	75	138	41	9.0	34	54
24	7.2	40	140	66	479	63	84	118	33	9.4	44	46
25	7.6	34	147	106	370	59	75	99	32	9.4	44	32
26	7.6	34	138	168	285	76	72	77	32	11	30	30
27	7.6	32	104	124	318	99	58	65	32	16	179	27
28	7.6	32	70	88	298	134	89	96	31	16	924	27
29	7.6	31	58	76	------	249	98	562	25	13	976	23
30	11	31	48	89	------	321	82	1,010	21	9.4	472	20
31	7.6	------	48	81	------	274	------	738	------	10	272	------
TOTAL	233.6	2,370.6	1,529	4,657	17,101	9,668	6,634	11,322	2,480	497.4	3,494.0	1,720
MEAN	7.54	79.0	49.3	150	611	312	223	365	82.7	15.7	113	57.3
MAX	11	556	147	484	3,230	2,080	1,030	2,050	468	21	976	165
MIN	6.8	7.2	29	47	62	59	58	48	21	9.0	7.8	20
(†)	-13	+64	+12	-1	+8	0	-10	+21	-42	-24	+51	-17

CAL YR 1970 TOTAL 33,821.4 MEAN 92.7 MAX 1,820 MIN 6.8 MEAN ‡ 93.7 CFSM ‡ .49 IN ‡ 6.65
WTR YR 1971 TOTAL 61,746.6 MEAN 169 MAX 3,230 MIN 6.8 MEAN ‡ 173 CFSM ‡ .91 IN ‡ 12.35

† Change in contents, equivalent in cubic feet per second in Hyco Lake.
‡ Adjusted for change in contents.

02080500 Roanoke River at Roanoke Rapids, N. C.

LOCATION.--Lat 36°28'04", long 77°37'18", Halifax County, on right bank 1.2 miles downstream from bridge on State Highway 48 at Roanoke Rapids, 2.5 miles upstream from Chockoyotte Creek, 2.8 miles downstream from Roanoke Rapids dam, and 133.6 miles upstream from mouth in Albemarle Sound.

DRAINAGE AREA.--8,410 sq mi, approximately.

PERIOD OF RECORD.--December 1911 to current year. 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 National Weather Service, NOAA, U.S. Department of Commerce.

GAGE.--Water-stage recorder. Datum of gage is 43.84 ft above mean sea level. Dec. 7, 1911, to Nov. 21, 1921, and Apr. 7, to Dec. 31, 1932, nonrecording 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.--59 years (1912-71) 7,871 cfs (adjusted for storage) (12.71 inches per year).

EXTREMES.--Current year: Maximum discharge, 19,800 cfs Jan. 27 (gage height, 8.60 ft); minimum, 760 cfs Nov. 23, (gage height, 1.75 ft); minimum daily, 818 cfs Nov. 15.

Period of record: 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 (discharge, 212,000 cfs), reached a stage about 2 ft lower at Old Gaston than flood in August 1940 which was 21.5 ft. Flood in August 1940 is the maximum known since at least 1771.

REMARKS.--Records excellent. Flow regulated since August 1950 by Philpott Reservoir on Smith River (usable capacity, 6,325,000,000 cu ft); since September 1950 by John H. Kerr Reservoir (usable capacity, 101,247,000,000 cu ft); since June 1955 by Roanoke Rapids Lake (see p. 152); since September 1962 by Leesville Lake, since October 1962 by Lake Gaston (see p. 152); and since September 1963 by Smith Mountain Lake.

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. WSP 1904: 1958, 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,960	1,230	8,230	1,440	11,400	9,950	3,190	5,860	19,500	8,640	1,670	3,080
2	1,770	6,590	11,100	6,090	11,600	13,200	1,900	5,940	19,600	2,050	7,040	7,080
3	1,800	7,940	9,250	7,000	13,100	14,400	1,860	6,010	19,500	2,010	12,400	10,500
4	1,930	7,910	7,140	7,590	13,500	19,600	1,870	6,040	19,400	1,920	10,300	4,390
5	1,910	5,640	4,360	5,810	4,200	18,900	1,840	6,040	19,500	1,810	10,600	6,880
6	1,890	4,690	2,590	6,970	2,950	12,100	8,610	6,200	19,500	1,770	5,290	6,190
7	1,890	1,350	8,460	6,750	10,500	12,700	3,040	6,090	19,400	1,820	7,700	7,870
8	1,910	971	5,590	9,210	13,500	19,400	3,690	5,960	19,300	7,370	1,900	7,710
9	2,000	5,940	4,220	5,480	19,400	19,200	1,890	5,960	19,400	7,140	9,680	6,840
10	1,870	11,600	6,920	8,200	15,700	15,600	1,900	6,120	19,500	3,500	8,330	7,180
11	1,860	10,300	11,300	11,100	19,200	19,500	1,910	6,040	18,800	1,890	6,320	7,300
12	1,970	10,500	2,900	11,600	13,100	15,800	1,900	5,990	6,250	1,960	1,860	2,280
13	2,000	4,730	2,920	11,100	10,400	1,620	7,450	8,170	9,810	1,750	1,760	9,770
14	3,480	908	3,690	5,070	9,630	5,540	9,560	13,900	12,700	1,810	1,860	14,100
15	3,060	818	5,610	10,600	12,000	13,600	9,950	12,400	12,300	1,900	1,820	15,000
16	2,070	8,520	9,490	2,510	13,000	2,820	11,000	7,470	15,300	2,330	1,850	14,700
17	2,050	8,460	6,620	908	14,800	12,000	7,500	15,500	4,820	3,620	2,110	14,100
18	1,830	7,420	10,600	10,800	11,300	13,200	4,550	15,800	10,000	1,830	2,900	9,430
19	1,800	8,610	5,320	11,400	10,200	12,700	9,070	19,400	7,620	3,510	5,850	7,570
20	1,790	6,330	2,360	8,370	3,110	3,110	10,100	19,500	8,190	1,870	7,760	10,300
21	1,820	4,430	11,100	6,650	1,630	1,030	11,200	19,500	14,600	1,900	2,460	3,630
22	1,960	1,070	6,620	5,280	2,180	5,350	10,900	19,500	13,600	1,940	1,830	2,110
23	2,100	3,150	10,600	4,340	5,640	8,670	11,300	19,500	8,850	1,780	1,870	7,030
24	1,970	6,540	8,050	6,620	11,600	13,200	7,910	19,500	11,900	1,810	1,810	6,020
25	1,980	8,580	1,340	6,040	9,950	13,600	2,070	19,500	14,200	1,790	2,880	1,840
26	2,100	1,130	5,160	5,590	12,900	12,000	4,710	19,500	11,800	6,100	8,620	1,960
27	2,170	5,890	2,690	12,300	12,400	9,420	5,890	19,500	10,100	3,780	6,710	6,480
28	2,150	4,180	6,670	7,530	3,170	1,840	8,460	19,400	13,000	1,910	1,990	9,240
29	1,970	1,100	6,730	4,600	------	11,600	5,790	15,600	4,800	1,930	2,010	7,690
30	1,970	4,360	5,420	2,750	------	10,300	5,910	15,000	8,800	1,920	8,430	9,000
31	1,930	------	7,940	8,260	------	8,140	------	19,500	------	1,700	12,000	------
TOTAL	62,960	160,887	200,990	217,968	292,060	350,090	176,920	390,390	412,040	86,960	159,610	227,270
MEAN	2,031	5,363	6,484	7,031	10,430	11,290	5,897	12,590	13,730	2,805	5,149	7,576
MAX	3,480	11,600	11,300	12,300	19,400	19,600	11,300	19,500	19,600	8,640	12,400	15,000
MIN	1,770	818	1,340	908	1,630	1,030	1,840	5,860	4,800	1,700	1,670	1,840
(†)	+72	+2,155	-2,168	+117	+7,359	-2,107	+2,220	+4,060	-6,800	+845	-154	-2,022

CAL YR 1970 TOTAL 1,856,937 MEAN 5,087 MAX 14,600 MIN 818 MEAN † 5,288 CFSM † .63 IN † 8.55
WTR YR 1971 TOTAL 2,738,145 MEAN 7,502 MAX 19,600 MIN 818 MEAN † 7,739 CFSM † .92 IN † 12.49

† Change in content, equivalent in cubic feet per second, in Leesville and Smith Mountain Lakes, furnished by Appalachian Power Co.; in Philpott and Kerr Reservoirs, furnished by Corps of Engineers; and Lake Gaston and Roanoke Rapids Lake, furnished by Virginia Electric and Power Co.

† Adjusted for change in contents.

02081500 Tar River near Tar River, N. C.

LOCATION.--Lat 36°11'41", long 78°35'00", Granville County, on right bank 90 ft upstream from bridge on State Highway 96, 1.2 miles upstream from Fishing Creek, 2.5 miles east of town of Tar River, and 8 miles south of Oxford.

DRAINAGE AREA.--167 sq mi.

PERIOD OF RECORD.--October 1939 to current year. 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 287.25 ft above mean sea level.

AVERAGE DISCHARGE.--32 years, 145 cfs (11.79 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,690 cfs Sept. 13 (gage height, 9.88 ft); minimum, 0.16 cfs Oct. 9-15, 16-19, (gage height, 1.14 ft).
Period of record: Maximum discharge, 13,100 cfs Aug. 18, 1955 (gage height, 18.07 ft); minimum, 0.02 cfs July 29, 30, 1966 (gage height, 1.09 ft).

REMARKS.--Records good. Town of Oxford diverts about 2.5 cfs for municipal water supply. Occasional intermittent diversion for irrigation.

REVISIONS (WATER YEARS).--WSP 972: 1940-41. WSP 1112: 1941 (calendar year figures). WSP 1273: 1941 (M). WSP 1723: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.46	3.6	4.5	71	108	110	147	52	237	7.1	14	12
2	.46	2.4	4.5	165	77	104	123	42	134	7.1	7.1	9.5
3	.37	1.8	4.3	144	56	935	144	40	97	7.5	291	6.5
4	.37	1.2	3.8	115	63	1,890	147	35	76	6.6	55	4.5
5	.29	.88	3.6	402	357	471	115	31	60	5.6	52	3.6
6	.29	.66	3.3	372	900	256	980	30	51	4.8	24	3.3
7	.22	2.0	3.1	154	650	189	2,000	28	42	4.6	12	3.0
8	.22	2.0	2.6	104	2,360	147	542	28	35	7.8	11	3.3
9	.16	1.4	2.2	97	1,800	118	285	27	31	7.0	6.9	7.5
10	.16	1.4	2.2	130	456	104	198	24	29	17	4.6	4.2
11	.16	2.6	2.2	184	240	106	144	22	27	9.1	3.2	3.6
12	.16	65	2.4	216	172	104	123	20	25	6.1	2.6	1,320
13	.16	622	2.9	140	369	92	110	84	60	6.0	1.9	1,870
14	.16	184	2.9	104	910	85	99	135	44	11	1.5	164
15	.16	97	2.6	85	320	104	87	73	33	18	1.3	74
16	.16	135	3.6	71	198	198	77	1,660	103	7.1	1.8	46
17	.16	69	59	59	144	125	71	1,060	110	4.1	109	32
18	.16	37	110	51	123	92	67	220	56	3.1	64	25
19	.16	25	58	44	108	84	60	120	37	2.8	80	47
20	.22	18	35	37	99	108	54	83	29	3.1	35	35
21	.37	15	30	31	94	106	52	61	24	1.9	18	25
22	.56	13	118	30	113	85	50	49	20	1.7	12	506
23	.77	12	135	41	248	73	47	41	17	2.3	115	455
24	.77	9.8	211	62	202	62	52	35	16	2.1	53	122
25	.66	8.5	140	133	123	51	51	32	15	1.9	22	67
26	.56	7.0	82	158	101	62	43	29	13	1.8	12	44
27	.46	5.9	55	106	115	92	37	26	12	6.2	9.1	33
28	.46	5.6	38	75	140	274	55	304	10	6.0	89	27
29	.46	4.9	30	53	------	718	104	2,370	8.9	4.0	71	22
30	.88	4.9	24	48	------	465	78	2,310	8.2	3.6	30	20
31	2.2	------	22	104	------	232	------	665	------	3.5	18	------
TOTAL	12.81	1,358.54	1,197.7	3,586	10,646	7,642	6,142	9,736	1,460.1	180.5	1,227.0	4,995.0
MEAN	.41	45.3	38.6	116	380	247	205	314	48.7	5.82	39.6	167
MAX	2.2	622	211	402	2,360	1,890	2,000	2,370	237	18	291	1,870
MIN	.16	.66	2.2	30	56	51	37	20	8.2	1.7	1.3	3.0
CFSM	.003	.27	.23	.69	2.28	1.48	1.23	1.88	.29	.03	.24	1.00
IN.	.002	.30	.27	.80	2.37	1.70	1.37	2.17	.33	.04	.27	1.11

CAL YR 1970 TOTAL 27,543.49 MEAN 75.5 MAX 2,160 MIN .16 CFSM .45 IN 6.14
WTR YR 1971 TOTAL 48,183.65 MEAN 132 MAX 2,370 MIN .16 CFSM .79 IN 10.73

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2- 8	1200	7.85	2,700	5-16	2130	7.70	2,590
3- 4	0530	7.35	2,340	5-29	2000	8.27	3,040
4- 7	0530	7.66	2,560	9-13	0200	9.88	3,690

02081740 Tar River at Louisburg, N. C.

LOCATION.--Lat 36°05'36", long 78°17'48", Franklin County, near center of span on downstream side of bridge on South Main Street (Secondary Road 1229), at Louisburg, and 0.5 mile upstream from Fox Creek.

DRAINAGE AREA.--430 sq mi, approximately.

PERIOD OF RECORD.--October 1963 to current year (medium and high water discharges only). Gage height records collected at this site since June 1, 1956 are contained in reports of the National Weather Service, NOAA, U.S. Department of Commerce.

GAGE.--Nonrecording gage. Datum of gage is 178.76 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 4,540 cfs Feb. 9 (gage height, 16.80 ft from graph based on gage readings); minimum gage height observed, 1.40 ft Oct. 7-16, 19-21.
Period of record: Maximum discharge, 5,240 cfs Feb. 19, 1970 (gage height, 18.00 from graph based on gage readings); minimum gage height observed, 1.30 ft several days in September 1967, August, September and October 1968.
Floods of December 1934, September 1945, and August 1955 reached stages of 26, 24, and 24 ft, respectively, from information by Corps of Engineers.

REMARKS.--Records fair.

COOPERATION.--Gage readings furnished by the National Weather Service, NOAA, U.S. Department of Commerce.

DISCHARGE, IN CUBIC FEET PER SECOND, AT 0700, WATER YEAR OCTOBER 1970 to SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		-	-	-	264	344	530	264	3,120	-	-	-
2		-	-	264	328	304	416	-	570	-	-	-
3		-	-	352	304	424	392	-	376	-	-	-
4		-	-	304	304	1,980	408	-	264	-	1,010	-
5		-	-	304	344	3,160	408	-	-	-	-	-
6		-	-	1,960	1,450	1,420	424	-	-	-	-	-
7		-	-	750	1,960	640	1,890	-	-	-	-	-
8		-	-	408	2,100	510	3,020	-	-	-	-	-
9		-	-	304	3,640	416	1,380	-	-	-	-	-
10		-	-	344	4,190	344	620	-	-	-	-	-
11		-	-	344	1,920	352	490	-	-	408	-	-
12		-	-	460	620	344	424	-	-	-	-	-
13		-	-	424	540	344	368	-	-	-	-	1,600
14		-	-	328	1,320	304	328	470	-	-	-	2,860
15		344	-	304	1,450	304	304	344	-	-	-	368
16		-	-	-	670	432	288	408	-	-	-	-
17		-	-	-	520	384	264	2,100	368	-	-	-
18		-	264	-	408	360	256	2,620	264	-	-	-
19		-	-	-	344	304	-	490	-	-	-	-
20		-	-	-	344	304	-	384	-	-	-	-
21		-	-	-	304	320	-	-	-	-	-	-
22		-	-	-	304	296	-	-	-	-	-	-
23		-	264	-	376	264	-	-	-	-	-	1,180
24		-	312	-	376	264	-	-	-	-	344	550
25		-	312	-	424	215	-	-	-	-	-	-
26		-	264	344	384	215	-	-	-	-	-	-
27		-	-	344	304	304	-	-	-	-	-	-
28		-	-	304	376	384	-	-	-	-	-	-
29		-	-	-	------	384	296	1,020	-	-	-	-
30		-	-	-	------	1,480	288	2,480	-	-	-	-
31		------	-	264	------	860	------	3,600	------	-	-	------
TOTAL	-	-	-	-	25,868	17,960	-	-	-	-	-	-
MEAN	-	-	-	-	924	579	-	-	-	-	-	-
MAX	-	-	-	-	4,190	3,160	-	-	-	-	-	-
MIN	-	-	-	-	264	215	-	-	-	-	-	-
CFSM	-	-	-	-	2.15	1.35	-	-	-	-	-	-
IN.	-	-	-	-	2.24	1.55	-	-	-	-	-	-

02081800 Cedar Creek near Louisburg, N. C.

LOCATION.--Lat 36°03'14", long 78°20'24", Franklin County, near center of span on downstream side of bridge on U.S. Highway 401, 0.8 mile downstream from Camping Creek, 3.7 miles southwest of Louisburg, and 5.5 miles upstream from mouth.

DRAINAGE AREA.--47.8 sq mi.

PERIOD OF RECORD.--Annual maximum, water years 1954-56 and occasional low-flow measurements, water years 1954-56. September 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 214.93 ft above mean sea level. May 28, 1953, to Aug. 31, 1956, crest-stage gage at upstream side of bridge at datum 6.39 ft higher.

AVERAGE DISCHARGE.--15 years, 48.0 cfs (13.64 inches per year).

EXTREMES.--Current year: Maximum discharge, 542 cfs Jan. 6 (gage height, 3.83 ft); minimum, 4.1 cfs Oct. 5, 6, 14, 15 (gage height, 1.45 ft).
Period of record: Maximum discharge, 2,240 cfs May 6, 1958 (gage height, 6.96 ft); minimum, 0.77 cfs Sept. 26, 1968 (gage height, 1.25 ft).
Flood in 1935 reached a stage of about 14 ft, from information by the North Carolina State Highway Commission.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	40	14	38	32	32	48	28	47	19	15	17
2	6.0	30	14	29	28	38	43	28	37	33	14	14
3	6.0	25	14	24	28	115	48	35	32	17	30	12
4	4.8	20	15	23	39	260	39	29	29	13	20	11
5	4.1	17	14	111	88	143	36	26	27	11	65	10
6	4.5	15	14	427	173	71	102	25	25	11	50	9.0
7	4.8	13	14	143	142	57	171	25	23	14	40	9.0
8	4.5	11	13	66	375	46	100	26	22	12	30	8.5
9	4.4	11	14	59	355	39	65	25	24	11	20	7.5
10	4.4	15	14	59	154	36	52	23	22	35	17	6.8
11	4.7	35	15	58	84	39	45	22	22	16	14	8.9
12	4.7	60	15	47	65	34	42	21	24	12	12	28
13	4.7	50	15	39	92	33	40	70	38	13	10	50
14	4.5	45	14	35	142	32	37	50	28	12	8.0	18
15	4.8	30	14	33	83	33	34	33	24	13	7.0	14
16	8.9	20	23	29	62	45	34	132	36	10	6.5	12
17	7.1	17	66	27	51	34	33	92	32	9.5	12	11
18	6.4	15	33	26	46	29	32	44	26	9.5	33	10
19	6.4	16	23	24	43	31	30	33	23	22	25	10
20	6.4	16	20	22	40	35	30	29	20	14	20	9.0
21	10	16	27	23	39	28	30	27	22	14	18	9.0
22	16	15	34	25	39	27	32	26	23	11	30	9.0
23	15	15	31	41	52	27	29	23	18	10	65	20
24	10	14	46	41	39	25	32	23	18	29	40	80
25	8.9	14	31	52	35	24	29	24	16	17	20	65
26	8.9	14	26	41	33	33	27	22	14	17	30	30
27	8.7	14	22	31	40	44	26	20	13	16	35	25
28	8.4	14	20	29	35	64	47	53	13	22	40	25
29	8.4	14	19	30	------	102	41	137	13	14	35	20
30	15	15	19	30	------	104	30	111	13	15	30	23
31	45	------	20	42	------	63	------	68	------	16	20	------
TOTAL	262.8	646	673	1,704	2,434	1,723	1,384	1,330	724	488.0	811.5	581.7
MEAN	8.48	21.5	21.7	55.0	86.9	55.6	46.1	42.9	24.1	15.7	26.2	19.4
MAX	45	60	66	427	375	260	171	137	47	35	65	80
MIN	4.1	11	13	22	28	24	26	20	13	9.5	6.5	6.8
CFSM	.18	.45	.45	1.15	1.82	1.16	.96	.90	.50	.33	.55	.41
IN.	.20	.50	.52	1.33	1.89	1.34	1.08	1.04	.56	.38	.63	.45

CAL YR 1970 TOTAL 14,441.1 MEAN 39.6 MAX 514 MIN 2.5 CFSM .83 IN 11.24
WTR YR 1971 TOTAL 12,762.0 MEAN 35.0 MAX 427 MIN 4.1 CFSM .73 IN 9.93

PEAK DISCHARGE (BASE, 450 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1- 6	0630	3.83	542	2- 8	1930	3.69	486

NOTE.--No gage-height record July 29 to Sept. 9

02082610 Tar River near Rocky Mount, N. C.

LOCATION.--Lat 35°58'38", long 77°45'35", Edgecombe County, near center of span on downstream side of bridge on Secondary Road 1250, 0.5 mile downstream from Compass Creek, and 3.2 miles northeast of Rocky Mount.

DRAINAGE AREA.--930 sq mi, approximately.

PERIOD OF RECORD.--November 1963 to current year (medimum and high water discharges only).

GAGE.--Nonrecording gage. Datum of gage is 48.97 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 5,170 cfs Feb. 11 (gage height, 15.20 ft, from graph based on gage readings); minimum gage height not determined.
Period of record: Maximum discharge, 12,800 cfs Oct. 6, 1964 (gage height, 24.0 ft, from graph based on gage readings); minimum gage height observed, 1.50 ft July 29, 1966.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		-	-	186	628	732	1,990	424	2,320	248	-	-
2		-	-	229	602	934	1,660	402	3,040	-	-	-
3		-	-	348	597	1,920	1,180	368	2,200	-	-	-
4		-	-	563	657	3,140	1,070	314	1,320	274	-	-
5		-	-	1,040	817	3,770	1,310	298	649	441	-	-
6		-	-	1,440	1,140	4,820	1,820	336	501	276	-	-
7		-	-	1,780	2,020	3,910	2,330	310	400	-	-	-
8		-	-	2,200	3,360	2,340	2,800	346	224	-	-	-
9		-	-	1,580	4,280	1,720	3,460	524	-	246	200	-
10		-	-	925	4,910	1,180	3,700	547	-	288	-	-
11		-	-	856	5,010	880	2,290	563	-	328	-	204
12		-	-	787	4,220	763	1,700	573	202	354	-	449
13		220	-	760	2,980	735	1,210	612	420	318	-	706
14		229	-	727	2,360	735	784	657	320	-	-	1,440
15		631	-	657	2,040	766	667	847	236	-	-	1,920
16		680	-	602	2,090	838	602	1,400	254	-	-	1,000
17		404	-	573	1,700	732	498	1,540	278	-	-	378
18		276	-	519	1,380	615	278	1,920	320	-	-	-
19		204	254	485	1,090	607	459	2,120	362	-	-	-
20		-	441	407	781	620	444	1,670	340	-	-	-
21		-	320	332	740	633	424	970	276	-	-	-
22		-	280	202	886	607	446	475	-	-	268	-
23		-	302	246	1,020	579	398	420	-	-	623	209
24		-	328	320	1,030	547	389	404	-	-	276	709
25		-	358	495	1,050	446	422	256	-	-	346	680
26		-	382	503	994	411	404	238	-	-	503	316
27		-	429	485	766	527	398	238	-	-	615	-
28		-	415	490	732	835	407	240	-	-	444	-
29		-	344	493	- - - -	1,190	424	300	-	-	300	-
30		-	222	545	------	1,700	420	760	288	-	254	206
31		------		484	------	2,040	------	1,890	------		229	------
TOTAL	-	-	-	21,259	49,880	41,272	34,384	21,962	-	-	-	-
MEAN	-	-	-	686	1,781	1,331	1,146	708	-	-	-	-
MAX	-	-	-	2,200	5,010	4,820	3,700	2,120	-	-	-	-
MIN	-	-	-	186	597	411	278	238	-	-	-	-
CFSM	-	-	-	.74	1.92	1.43	1.23	.76	-	-	-	-
IN.	-	-	-	.85	1.99	1.65	1.37	.88	-	-	-	-

GPO 904.961

02082770 Swift Creek at Hilliardston, N. C.

LOCATION.--Lat 36°06'42", long 77°55'16", Nash County, near left bank at downstream side of bridge on Secondary Road 1310, 0.7 mile northeast of Hilliardston, and 2.8 miles downstream from Gideon Swamp.

DRAINAGE AREA.--163 sq mi.

PERIOD OF RECORD.--July 1963 to current year.

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

AVERAGE DISCHARGE.--8 years, 117 cfs (9.75 inches per year).

EXTREMES.--Current year: Maximum discharge, 846 cfs Feb. 9 (gage height, 8.20 ft); minimum, 4.0 cfs Oct. 13-15 (gage height, 2.01 ft). Period of record: Maximum discharge, 2,030 cfs Oct. 6, 1964 (gage height, 11.89 ft); minimum, 0.60 cfs Sept. 25, 26, 1968. Flood in 1924 reached a stage of 14.5 ft (discharge not determined), from information by North Carolina State Highway Commission.

REMARKS.--Records good above 100 cfs and fair below except those for period of no gage-height record, which are poor. An average of about 4.0 cfs was diverted above station for Henderson municipal water supply. About 0.4 cfs of sewage effluent was discharged into the Tar River and about 1.6 cfs was diverted into the Roanoke River basin. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	45	27	46	104	99	182	114	466	49	35	29
2	6.4	50	28	62	92	96	143	108	436	47	35	22
3	6.1	45	28	69	81	286	153	109	246	55	32	18
4	6.1	35	27	66	88	733	150	111	158	55	36	16
5	6.1	25	24	227	295	489	127	106	132	44	41	14
6	6.1	20	24	361	437	339	457	101	119	34	58	11
7	5.4	15	24	426	384	273	669	98	109	30	47	10
8	5.4	13	22	230	745	184	478	98	101	32	38	12
9	5.4	20	24	124	772	148	358	98	93	32	32	12
10	4.7	30	24	113	583	127	264	96	90	32	25	11
11	4.7	45	22	119	576	118	197	94	83	78	24	10
12	4.7	50	24	118	426	114	169	93	80	95	20	14
13	4.7	65	25	102	275	109	154	116	81	80	16	46
14	4.0	50	27	89	310	104	141	173	80	57	15	111
15	4.0	40	25	82	261	100	130	152	80	44	18	127
16	4.7	35	30	78	230	104	124	316	78	36	14	76
17	4.7	30	51	74	178	145	119	302	86	32	11	47
18	6.8	28	75	69	141	139	116	242	90	28	18	35
19	9.9	25	76	66	124	113	113	247	78	29	26	28
20	7.5	23	66	62	115	103	111	163	70	28	41	24
21	8.3	22	54	58	110	102	111	127	63	39	33	30
22	12	22	54	57	106	96	109	117	57	39	41	29
23	14	24	63	66	124	92	109	111	88	35	57	28
24	19	25	75	88	123	86	111	106	104	28	29	64
25	20	23	76	104	118	83	113	104	70	25	52	79
26	18	21	68	103	110	86	109	103	57	22	57	54
27	12	20	57	89	103	100	104	99	49	29	41	39
28	10	21	49	79	102	157	109	111	42	30	39	32
29	15	23	45	69	------	322	127	283	57	36	57	29
30	20	25	42	66	------	341	125	707	66	41	57	28
31	35	------	40	89	------	248	------	519	------	36	39	------
TOTAL	299.0	915	1,296	3,451	7,113	5,636	5,482	5,324	3,409	1,277	1,084	1,085
MEAN	9.65	30.5	41.8	111	254	182	183	172	114	41.2	35.0	36.2
MAX	35	65	76	426	772	733	669	707	466	95	58	127
MIN	4.0	13	22	46	81	83	104	93	42	22	11	10
CFSM	.06	.19	.26	.68	1.56	1.12	1.12	1.06	.70	.25	.21	.22
IN.	.07	.21	.30	.79	1.62	1.29	1.25	1.22	.78	.29	.25	.25

CAL YR 1970 TOTAL 38,605.6 MEAN 106 MAX 1,250 MIN 4.0 CFSM .65 IN 8.81
WTR YR 1971 TOTAL 36,371.0 MEAN 99.6 MAX 772 MIN 4.0 CFSM .61 IN 8.30

PEAK DISCHARGE (BASE, 1,000 CFS).--No peak above base.

NOTE.--No gage-height record Oct. 25 to Dec. 1.

02082950 Little Fishing Creek near White Oak, N. C.

LOCATION.--Lat 36°11'08", long 77°52'34", Halifax County, on right bank 8 ft downstream from bridge on Secondary Road 1338, 1.1 miles west of White Oak, 1.8 miles upstream from Powells Creek, 4.3 miles upstream from mouth, and 12 miles west of Enfield.

DRAINAGE AREA.--175 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 116.44 ft above mean sea level. Since Feb. 14, 1962, auxiliary nonrecording gage 3.6 miles downstream.

AVERAGE DISCHARGE.--12 years, 148 cfs (11.48 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,780 cfs May 31; maximum gage height, 11.67 ft May 31; minimum discharge, 1.1 cfs Oct. 14; minimum gage height, 1.26 ft Oct. 9, 10, 11.
Period of record: Maximum discharge, 3,500 cfs Jan. 8, 1962 (gage height, 16.75 ft); minimum, 0.83 cfs Sept. 26, Oct. 2, 3, 1968. Flood in July 1959 reached a stage of 19.3 ft, from floodmarks (discharge not determined).

REMARKS.--Records good. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1723: 1960 (M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	33	18	38	118	104	188	86	1,340	56	28	26
2	5.1	33	18	62	87	101	153	80	397	48	25	24
3	4.6	23	17	61	71	346	177	86	175	83	22	22
4	4.1	16	17	52	97	807	179	88	126	54	19	20
5	3.4	12	17	377	461	621	142	80	105	40	96	19
6	3.1	10	17	883	660	339	502	73	91	34	194	18
7	2.6	9.3	17	371	619	202	922	69	79	33	79	18
8	2.4	8.7	16	157	1,040	162	832	68	69	34	46	18
9	2.1	8.4	16	108	1,230	133	407	73	72	32	35	17
10	1.8	8.8	17	115	885	115	251	71	80	30	28	16
11	1.6	15	17	139	383	113	194	62	67	102	24	19
12	1.4	37	18	132	215	111	167	56	60	66	21	41
13	1.3	49	19	107	270	104	153	103	101	44	19	129
14	1.2	43	20	89	451	101	142	264	98	37	18	87
15	1.3	31	19	80	398	98	128	155	76	32	17	46
16	1.5	25	21	75	242	268	119	521	70	28	15	32
17	1.7	20	44	69	173	203	115	656	77	25	16	25
18	1.5	18	67	64	146	135	111	363	72	24	28	22
19	1.7	17	50	61	132	112	106	146	64	158	43	20
20	2.4	16	35	54	124	121	101	103	59	91	41	20
21	3.2	17	30	50	120	117	100	85	53	51	28	21
22	4.6	18	42	58	114	103	100	79	124	39	37	20
23	9.5	18	74	67	141	97	96	72	311	32	193	185
24	11	17	69	83	144	92	101	65	123	28	137	241
25	8.1	17	62	98	117	87	100	63	80	26	56	76
26	6.5	16	49	100	103	93	91	61	63	24	32	46
27	4.7	16	38	84	105	117	84	56	52	32	41	35
28	3.7	16	31	67	112	220	92	100	46	28	84	30
29	3.0	17	28	58	------	470	115	518	45	32	79	27
30	3.9	17	25	66	------	463	101	1,310	59	27	45	28
31	9.5	------	27	84	------	289	------	1,680	------	32	32	------
TOTAL	117.1	602.2	955	3,909	8,758	6,444	6,069	7,292	4,234	1,402	1,578	1,348
MEAN	3.78	20.1	30.8	126	313	208	202	235	141	45.2	50.9	44.9
MAX	11	49	74	883	1,230	807	922	1,680	1,340	158	194	241
MIN	1.2	8.4	16	38	71	87	84	56	45	24	15	16
CFSM	.02	.11	.18	.72	1.79	1.19	1.15	1.34	.81	.26	.29	.26
IN.	.02	.13	.20	.83	1.86	1.37	1.29	1.55	.90	.30	.34	.29

CAL YR 1970 TOTAL 34,529.6 MEAN 94.6 MAX 1,640 MIN 1.2 CFSM .54 IN 7.34
WTR YR 1971 TOTAL 42,708.3 MEAN 117 MAX 1,680 MIN 1.2 CFSM .67 IN 9.08

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2- 9	1200	10.36	1,300	5-31	1600	11.67	1,780

02083000 Fishing Creek near Enfield, N. C.

LOCATION.--Lat 36°09'03", long 77°41'35", Edgecombe County, on right bank 15 ft downstream from bridge on U.S. Highway 301, 2,000 ft downstream from Seaboard Coast Line Railroad bridge, 2 miles southwest of Enfield, 4.8 miles downstream from Rocky Creek, and 40 miles upstream from mouth.

DRAINAGE AREA.--521 sq mi.

PERIOD OF RECORD.--October 1923 to current year. Figures of daily 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 are unreliable 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 National Weather Service, NOAA, U.S. Department of Commerce.

GAGE.--Water-stage recorder. Datum of gage is 76.26 ft above mean sea level. Prior to Oct. 28, 1932, nonrecording gage, at same site and datum.

AVERAGE DISCHARGE.--48 years, 482 cfs (12.56 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,120 cfs June 1 (gage height, 13.57 ft); minimum observed, 11 cfs Oct. 19 (gage height, -0.01 ft).

Period of record: Maximum discharge, 12,600 cfs Dec. 2, 1934, Aug. 18, 1940; maximum gage height, 17.72 ft Aug. 18, 1940; minimum daily discharge, 6.9 cfs Oct. 5, 1968.

The flood of Apr. 19, 1910 reached a stage of 20.1 ft, present datum (from floodmarks of Seaboard 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 except those computed from staff gage readings, which are fair. 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 PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	39	67	115	305	355	744	289	3,040	214	133	139
2	18	72	68	142	319	335	535	259	2,770	209	125	121
3	19	126	69	180	261	552	492	253	1,460	195	117	103
4	20	98	69	185	249	1,970	541	260	599	213	113	88
5	21	73	67	407	651	2,110	475	251	379	161	120	76
6	21	58	66	1,520	1,420	1,740	903	233	310	143	249	67
7	21	49	64	1,570	1,520	1,020	2,010	217	268	132	297	64
8	20	46	63	905	2,180	661	2,220	214	238	121	196	64
9	19	44	62	455	2,630	520	1,940	207	213	113	157	60
10	18	43	67	348	2,690	439	1,090	208	209	111	140	58
11	18	47	80	363	2,300	403	675	196	223	117	119	58
12	17	66	75	385	1,450	390	523	180	207	239	99	113
13	16	128	75	352	1,030	375	454	249	204	221	81	177
14	15	167	73	302	1,260	358	418	466	266	166	67	277
15	15	159	71	270	1,220	346	384	498	253	140	61	285
16	14	143	76	255	928	405	354	828	257	130	58	217
17	13	117	103	239	620	672	338	1,430	262	119	54	162
18	12	98	157	220	487	549	328	1,200	244	107	54	139
19	11	84	213	206	425	403	316	643	223	102	63	116
20	14	76	183	192	389	358	304	409	203	189	83	97
21	18	72	147	171	372	361	296	300	187	203	99	82
22	20	69	132	158	362	340	294	254	175	160	103	78
23	21	75	158	194	403	314	290	231	348	144	222	76
24	25	71	225	248	451	297	291	212	432	130	360	356
25	30	69	221	301	420	283	295	197	274	124	274	405
26	35	67	205	326	365	288	287	190	207	114	178	230
27	36	64	171	302	354	329	265	183	173	108	173	159
28	35	62	144	254	358	453	264	201	155	116	233	138
29	34	63	125	212	------	984	302	606	149	127	267	123
30	34	65	110	187	------	1,350	322	2,070	208	129	211	120
31	34	------	96	236	------	1,120	------	2,660	------	136	157	------
TOTAL	658	2,405	3,502	11,200	25,419	20,080	17,950	15,594	14,136	4,633	4,663	4,248
MEAN	21.2	80.2	113	361	908	648	598	503	471	149	150	142
MAX	36	167	225	1,570	2,690	2,110	2,220	2,660	3,040	239	360	405
MIN	11	39	62	115	249	283	264	180	149	102	54	58
CFSM	.04	.15	.22	.69	1.74	1.24	1.15	.97	.90	.29	.29	.27
IN.	.05	.17	.25	.80	1.81	1.43	1.28	1.11	1.01	.33	.33	.30

CAL YR 1970 TOTAL 108,496.7 MEAN 297 MAX 3,270 MIN 7.8 CFSM .57 IN 7.75
WTR YR 1971 TOTAL 124,488.0 MEAN 341 MAX 3,040 MIN 11 CFSM .65 IN 8.89

NOTE.--Discharge computed from staff gage readings Oct. 1-25.

02083500 Tar River at Tarboro, N. C.

LOCATION.--Lat 35°53'38", long 77°32'00", Edgecombe County, near right bank on downstream end of pier of bridge on U.S. Highway 64 in Tarboro, 6.5 miles downstream from Fishing Creek, and 49.2 miles upstream from Pamlico River at Washington.

DRAINAGE AREA.--2,140 sq mi, approximately.

PERIOD OF RECORD.--July 1896 to December 1900, October 1931 to current year. Gage-height records at various datums collected at same site since 1905 are contained in reports of National Weather Service, NOAA, U.S. Department of Commerce.

GAGE.--Water-stage recorder. Datum of gage is 10.37 ft above mean sea level. July 1896 to December 1900 nonrecording gage at Seaboard Coast Line Railroad bridge 600 ft downstream at different datum. Oct. 1, to Dec. 8, 1931, nonrecording gage at site 100 ft upstream at present datum.

AVERAGE DISCHARGE.--44 years, 2,207 cfs (14.01 inches per year).

EXTREMES.--Current year: Maximum discharge, 9,820 cfs Feb. 13 (gage height, 18.77 ft); minimum, 54 cfs Oct. 4, 16 (gage height, 0.90 ft).
Period of record: Maximum discharge, 37,200 cfs Aug. 20, 1940 (gage height, 31.77 ft); minimum, 36 cfs Oct. 17, 22, 1933, Oct. 6, 1968.
Flood of July 27, 1919, reached a stage of 34.0 ft, present datum, from floodmarks (discharge, 52,800 cfs).

REMARKS.--Records excellent except those computed from once daily observer readings, which are fair. Some diurnal fluctuation at low flow caused by mills above station. Town of Tarboro diverted 2.3 cfs for municipal water supply. Water quality records for current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1273: 1899-1900, 1933. WSP 1503: 1932.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	280	321	644	1,950	2,410	4,740	1,300	3,800	609	485	876
2	88	298	311	655	1,930	2,340	4,740	1,300	4,400	641	482	732
3	69	280	311	623	1,810	3,050	4,310	1,200	5,000	620	461	609
4	60	377	303	655	1,760	5,720	3,720	1,000	5,300	564	401	551
5	61	440	290	956	2,300	6,910	3,220	970	5,000	588	365	461
6	74	366	290	2,580	3,150	7,750	3,990	850	4,000	665	316	334
7	74	303	316	3,510	4,040	8,340	5,940	930	2,400	500	319	359
8	68	234	246	4,380	5,640	8,620	6,660	1,050	1,500	581	422	332
9	79	275	269	4,790	7,000	7,970	7,200	1,150	1,100	476	377	340
10	81	212	277	4,640	7,810	5,920	7,640	1,200	850	473	356	282
11	78	306	251	3,830	8,570	4,100	7,900	1,100	700	509	303	249
12	75	748	277	3,220	9,120	3,120	7,200	900	600	464	272	368
13	75	686	236	2,900	9,610	2,540	5,900	800	600	658	234	1,880
14	71	744	246	2,590	9,670	2,260	4,100	1,500	630	780	246	2,460
15	64	744	282	2,290	9,120	2,140	2,800	1,600	600	599	194	2,660
16	57	996	316	2,110	8,260	2,440	2,300	2,000	650	473	239	2,900
17	62	1,000	548	1,930	7,340	2,520	1,990	2,800	700	500	220	1,720
18	88	788	623	1,690	6,400	2,520	1,760	3,400	670	458	217	1,140
19	69	616	588	1,570	4,920	2,530	1,620	4,000	650	425	262	832
20	64	581	744	1,370	3,680	2,230	1,520	4,100	750	431	185	690
21	72	503	800	1,260	2,990	1,920	1,420	3,600	800	345	232	539
22	142	443	820	1,160	2,610	1,780	1,340	2,400	650	443	200	494
23	288	401	752	1,100	3,320	1,770	1,300	1,600	550	404	705	419
24	251	389	896	1,180	3,890	1,590	1,250	1,300	550	419	844	437
25	194	350	1,020	1,380	3,690	1,480	1,200	1,100	660	398	571	866
26	178	345	1,090	1,690	3,310	1,440	1,200	850	640	383	697	1,150
27	176	353	1,100	1,780	2,960	1,660	1,150	700	650	413	1,380	856
28	166	308	992	1,700	2,590	1,990	1,100	830	550	455	2,180	599
29	146	314	848	1,590	------	2,440	1,200	870	530	509	1,870	482
30	168	282	760	1,480	------	3,610	1,200	1,200	583	443	1,290	506
31	198	------	676	1,590	------	4,280	------	2,700	------	431	1,030	------
TOTAL	3,420	13,962	16,799	62,843	139,440	109,390	101,610	50,300	46,063	15,657	17,355	26,123
MEAN	110	465	542	2,027	4,980	3,529	3,387	1,623	1,535	505	560	871
MAX	288	1,000	1,100	4,790	9,670	8,620	7,900	4,100	5,300	780	2,180	2,900
MIN	57	212	236	623	1,760	1,440	1,100	700	530	345	185	249
CFSM	.05	.22	.25	.95	2.33	1.65	1.58	.76	.72	.24	.26	.41
IN.	.06	.24	.29	1.09	2.42	1.90	1.77	.87	.80	.27	.30	.45

CAL YR 1970 TOTAL 546,587 MEAN 1,497 MAX 8,780 MIN 52 CFSM .70 IN 9.50
WTR YR 1971 TOTAL 602,962 MEAN 1,652 MAX 9,670 MIN 57 CFSM .77 IN 10.48

NOTE.--Discharge computed from once daily observer readings Apr. 26 to June 30.

02083800 Conetoe Creek near Bethel, N. C.

LOCATION.--Lat 35°46'33", long 77°27'45", Pitt County, on right bank 5 ft downstream from bridge on Secondary Road 1409, 5.5 miles downstream from Crisp Creek, and 5.5 miles west of Bethel.

DRAINAGE AREA.--78.1 sq mi.

PERIOD OF RECORD.--December 1956 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 30 ft (from topographic map).

AVERAGE DISCHARGE.--14 years, (1957-71) 87.3 cfs (15.18 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,190 cfs Mar. 4 (gage height, 13.22 ft); minimum, 6.0 cfs Oct. 20 (gage height, 0.37 ft). Period of record: Maximum discharge, 2,580 cfs Aug. 23, 1967 (gage height, 15.74 ft); minimum daily, 1.3 cfs Nov. 6, 1968. Flood of 1955 reached a stage of 16.7 ft, from information by local resident (discharge not determined).

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	33	22	47	231	161	175	48	77	12	54	69
2	14	46	21	49	159	202	145	43	60	13	39	52
3	13	38	22	131	127	588	164	44	48	12	35	41
4	12	35	21	132	168	1,110	154	40	41	10	28	34
5	10	32	20	101	360	981	129	36	35	9.5	24	28
6	9.5	26	20	91	322	470	460	34	32	10	20	25
7	9.0	24	19	170	250	297	789	33	27	18	17	21
8	8.5	22	18	250	486	231	464	48	25	14	15	19
9	8.0	21	17	180	421	186	284	75	24	13	13	17
10	7.5	22	17	150	262	159	210	66	22	12	11	16
11	7.0	74	17	130	200	145	164	52	21	16	10	16
12	6.6	147	17	120	169	129	137	42	20	15	9.0	26
13	6.3	101	17	110	350	119	120	49	22	17	8.5	97
14	6.3	82	52	100	478	110	105	60	22	14	7.9	99
15	6.4	70	113	130	273	111	89	48	20	11	7.9	70
16	7.7	60	79	156	209	199	86	70	19	11	7.9	51
17	6.2	51	65	127	171	157	79	81	20	13	9.0	40
18	6.2	47	57	110	147	126	73	63	18	9.5	12	33
19	6.2	44	67	95	131	114	67	50	17	9.2	10	28
20	6.2	41	75	83	121	117	63	41	16	10	8.8	30
21	7.4	39	109	76	111	101	60	36	16	12	8.5	25
22	9.5	35	126	74	114	92	58	34	15	11	8.2	20
23	71	35	98	86	714	87	54	30	14	9.2	9.3	17
24	62	32	82	97	519	80	55	27	16	8.0	18	15
25	37	30	71	153	283	75	51	26	14	7.4	18	13
26	27	27	63	147	216	94	47	25	13	7.4	16	12
27	23	27	58	119	211	180	42	23	13	10	69	11
28	20	25	54	95	189	210	53	23	12	17	358	10
29	18	24	54	84	------	221	63	48	12	32	222	10
30	17	23	55	85	------	319	53	108	11	25	137	50
31	18	------	50	248	------	229	------	97	------	47	96	------
TOTAL	482.5	1,313	1,576	3,726	7,392	7,400	4,493	1,500	722	435.2	1,307.0	995
MEAN	15.6	43.8	50.8	120	264	239	150	48.4	24.1	14.0	42.2	33.2
MAX	71	147	126	250	714	1,110	789	108	77	47	358	99
MIN	6.2	21	17	47	111	75	42	23	11	7.4	7.9	10
CFSM	.20	.56	.65	1.54	3.38	3.06	1.92	.62	.31	.18	.54	.43
IN.	.23	.63	.75	1.77	3.52	3.52	2.14	.71	.34	.21	.62	.47

CAL YR 1970 TOTAL 28,531.3 MEAN 78.2 MAX 844 MIN 6.2 CFSM 1.00 IN 13.59
WTR YR 1971 TOTAL 31,341.7 MEAN 85.9 MAX 1,110 MIN 6.2 CFSM 1.10 IN 14.93

PEAK DISCHARGE (BASE, 470 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2- 8	0800	8.01	519	3- 4	2230	13.22	1,190
2-13	2400	8.90	600	4- 7	0530	11.30	846
2-23	1530	11.02	812				

02084500 Herring Run near Washington, N. C.

LOCATION.--Lat 35°34'03", long 77°01'09", Beaufort County, on left bank 10 ft downstream from bridge on Secondary Road 1506, 400 ft upstream from Pineywood Branch, 1.2 miles upstream from mouth, and 2.8 miles northeast of Washington.

DRAINAGE AREA.--About 15 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements in 1949. January 1950 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 2 ft (from topographic map). Prior to May 8, 1951, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--21 years, 10.5 cfs (9.51 inches per year).

EXTREMES.--Current year: Maximum discharge, 467 cfs Sept. 30, stage rising, peak occurred Oct. 1, 1971; maximum peak discharge, 327 cfs Mar. 3 (gage height, 12.33 ft); minimum, 0.69 cfs Oct. 15, 17, 18, 19, 20 (gage height, 5.09 ft).
Period of record: Maximum discharge, 620 cfs Sept. 13, 1964 (gage height, 14.85 ft from floodmark); minimum, 0.60 cfs July 5-8, 1964.
Flood in 1946 reached a stage of 17 ft, from information by local resident (discharge not determined).

REMARKS.--Records good. Runoff affected by ditches and canals above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.3	.84	1.9	25	16	5.0	2.6	3.3	1.6	9.2	23
2	1.0	1.6	.84	1.9	19	24	4.4	2.3	2.7	19	6.8	17
3	.96	1.6	.84	1.9	15	170	4.0	2.2	2.1	27	11	13
4	.90	1.3	.90	1.8	23	173	3.7	2.0	1.9	13	8.6	9.3
5	.90	1.1	1.5	2.0	33	73	3.3	1.8	1.8	7.1	4.8	7.4
6	.84	1.0	1.2	2.0	28	48	31	1.6	1.6	5.4	4.0	6.1
7	.84	.96	1.4	2.0	28	37	33	1.6	1.5	16	3.0	5.4
8	.84	.96	.79	2.0	44	30	24	1.8	1.4	20	2.3	6.5
9	.84	.90	.79	11	43	24	18	1.4	1.3	7.4	2.0	5.7
10	.84	.96	.79	19	29	20	12	1.3	1.2	5.2	1.6	5.3
11	.84	1.3	.79	14	23	17	8.6	1.2	1.1	4.3	1.4	4.7
12	.84	1.2	.79	8.6	20	14	7.2	1.2	1.1	3.6	1.3	4.9
13	.84	1.5	.79	6.4	87	9.8	6.3	21	4.8	3.1	1.1	9.1
14	.79	1.4	.74	5.2	62	7.6	5.5	18	4.6	2.5	1.1	7.6
15	.84	1.4	.79	9.6	40	6.5	4.7	9.0	3.5	2.1	1.1	6.0
16	.79	1.3	1.8	17	31	6.3	4.3	28	2.8	2.0	1.1	4.9
17	.69	1.2	2.6	12	26	6.0	4.0	22	2.3	1.6	1.2	4.2
18	.69	1.3	2.7	7.6	22	5.4	3.6	13	15	1.5	6.1	3.6
19	.69	1.3	2.6	6.0	18	5.0	3.2	7.7	12	1.3	5.3	3.2
20	.69	1.3	2.1	4.7	16	4.7	3.0	5.9	3.9	1.4	4.0	2.8
21	.96	1.1	2.4	4.1	13	4.2	2.7	8.6	2.8	3.0	3.0	2.3
22	.90	1.2	2.9	4.0	14	3.8	2.6	9.0	3.0	7.6	2.2	2.0
23	.84	1.0	4.0	4.3	45	3.5	2.4	6.2	4.1	6.0	2.1	1.8
24	.84	.96	5.0	5.2	32	3.2	2.4	5.0	4.6	4.8	1.8	1.6
25	.79	.96	4.7	19	25	2.9	2.2	4.2	3.1	12	1.6	1.5
26	.79	.96	4.0	19	20	3.2	2.0	3.6	2.3	8.6	1.5	1.4
27	.74	.96	3.4	15	20	5.4	1.8	2.9	2.8	6.6	68	1.3
28	.74	.90	2.8	9.2	18	6.2	2.9	2.4	2.0	5.4	76	1.3
29	.74	.90	2.3	6.8	------	6.0	3.3	3.3	1.6	14	73	1.2
30	.84	.90	2.0	7.3	------	6.7	3.0	3.9	1.3	14	48	131
31	.84	------	2.0	22	------	6.0	------	3.8	------	11	31	------
TOTAL	25.78	34.72	61.09	252.5	819	748.4	214.1	198.5	97.5	238.1	385.2	295.1
MEAN	.83	1.16	1.97	8.15	29.3	24.1	7.14	6.40	3.25	7.68	12.4	9.84
MAX	1.1	1.6	5.0	22	87	173	33	28	15	27	76	131
MIN	.69	.90	.74	1.8	13	2.9	1.8	1.2	1.1	1.3	1.1	1.2

CAL YR 1970 TOTAL 2,425.09 MEAN 6.64 MAX 165 MIN .69
WTR YR 1971 TOTAL 3,369.99 MEAN 9.23 MAX 173 MIN .69

PEAK DISCHARGE (BASE, 120 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-13	1430	9.78	149	8-27	1900	10.28	179
3- 3	2030	12.33	327	9-30	2400	13.77	467

02084540 Durham Creek at Edward, N. C.

LOCATION.--Lat 35°19'25", long 76°52'26", Beaufort County, on left bank 5 ft downstream from bridge on Secondary Road 1949, at Edward, and 6.8 miles upstream from mouth.

DRAINAGE AREA.--21 sq mi, approximately.

PERIOD OF RECORD.--Occasional low-flow measurements water years 1950-54, 1956-65. August 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.19 ft above mean sea level.

AVERAGE DISCHARGE.--6 years, 30.9 cfs (19.98 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,270 cfs Sept. 30, stage rising, peak occurred Oct. 1, 1971; maximum peak discharge, 947 cfs Mar. 4 (gage height, 9.47 ft); minimum, 1.0 cfs Oct. 16 (gage height, 4.03 ft).
Period of record: Maximum discharge, 1,270 cfs Sept. 30, 1971 (gage height, 11.47 ft); no flow at times many years.

REMARKS.--Records good. Water quality records for the current year are published in Part 2 of this report. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	8.5	6.3	15	141	95	24	10	20	16	216	131
2	11	12	5.9	16	137	122	22	8.9	17	20	161	85
3	11	12	5.8	15	111	284	20	9.3	14	25	101	54
4	10	12	5.6	14	99	608	18	9.3	12	21	88	37
5	8.9	10	5.1	15	111	445	17	8.3	9.5	18	136	28
6	7.5	10	4.7	17	115	293	68	7.1	7.5	17	111	21
7	6.3	9.7	4.6	16	106	208	195	5.9	6.3	19	69	17
8	4.9	8.9	4.3	15	138	159	198	5.2	4.9	20	44	16
9	4.0	8.1	4.0	31	165	116	149	4.4	3.9	17	29	22
10	3.3	8.1	4.0	72	146	91	103	3.9	3.2	17	21	24
11	2.8	10	3.9	78	114	75	70	3.4	2.6	21	15	23
12	2.3	12	3.7	75	90	62	50	3.0	2.5	21	81	27
13	1.8	13	3.7	64	148	52	38	2.8	3.6	23	48.5	78
14	1.5	13	3.6	52	304	43	31	2.6	4.0	20	6.9	76
15	1.2	28	3.3	63	256	37	25	2.5	4.3	15	45.9	56
16	1.7	30	5.2	130	197	46	22	17	6.7	11	6.5	41
17	3.9	20	27	140	144	44	19	21	5.6	7.5	15	30
18	4.6	18	25	125	105	37	18	17	4.3	5.2	81	23
19	4.2	17	19	99	86	31	15	13	3.8	4.0	208	18
20	3.3	15	17	76	69	27	14	9.1	2.9	5.1	215	14
21	3.9	14	15	59	58	23	12	11	2.1	8.9	172	12
22	8.1	13	14	49	50	21	12	20	1.6	9.5	122	9.9
23	10	12	18	44	64	19	11	20	14	9.1	89	8.5
24	10	11	32	42	80	17	10	18	20	9.3	52	7.5
25	9.9	10	27	67	78	15	9.7	16	14	23	35	6.3
26	8.3	9.1	22	99	68	17	8.5	14	15	31	26	5.4
27	7.1	8.5	18	102	76	22	7.5	11	18	24	113	4.6
28	6.3	7.9	15	87	89	22	9.9	9.3	20	22	520	3.9
29	5.9	7.3	13	70	------	22	14	16	20	27	435	3.4
30	5.4	6.9	12	57	------	28	12	21	18	58	296	224
31	5.9	------	12	85	------	27	------	22	------	172	200	------
TOTAL	186.0	375.0	359.7	1,889	3,345	3,108	1,222.6	342.0	281.3	716.6	3,608.8	1,106.5
MEAN	6.00	12.5	11.6	60.9	120	100	40.8	11.0	9.38	23.1	116	36.9
MAX	11	30	32	140	304	608	198	22	20	172	520	224
MIN	1.2	6.9	3.3	14	50	15	7.5	2.5	1.6	4.0	5.9	3.4
CFSM	.29	.60	.55	2.90	5.71	4.76	1.94	.52	.45	1.10	5.52	1.76
IN.	.33	.66	.64	3.35	5.93	5.51	2.17	.61	.50	1.27	6.39	1.96

CAL YR 1970 TOTAL 7,166.56 MEAN 19.6 MAX 295 MIN .01 CFSM .93 IN 12.70
WTR YR 1971 TOTAL 16,544.50 MEAN 45.3 MAX 608 MIN 1.2 CFSM 2.16 IN 29.31

02085000 Eno River at Hillsborough, N. C.

LOCATION.--Lat 36°04'18", long 79°06'14", Orange County, on right bank 800 ft downstream from bridge on State Highway 86, at Hillsborough, and 2 miles downstream from Sevenmile Creek.

DRAINAGE AREA.--66.5 sq mi.

PERIOD OF RECORD.--October 1927 to September 1971 (discontinued). Monthly discharge only for some periods, published in WSP 1303. Prior to October 1964, published as Eno River at Hillsboro.

GAGE.--Water-stage recorder and sharp-crested weir. Datum of gage is 487.44 ft above mean sea level. Prior to June 29, 1937, nonrecording gage at same site and datum with natural control.

AVERAGE DISCHARGE.--44 years, 61.8 cfs (12.62 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,620 cfs May 16 (gage height, 10.81 ft); minimum, 0.63 cfs Oct. 3, 4; minimum gage height, 1.05 ft Oct. 11, 12.
Period of record: Maximum discharge, 11,000 cfs Sept. 18, 1945 (gage height, 20.01 ft); minimum, 0.04 cfs Sept. 26, 1968.

REMARKS.--Records good. Diversions above station of 0.4 cfs by Orange-Alamance Water System, Inc. and 1.0 cfs for municipal supply for town of Hillsborough, part of which is returned below station as sewage. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1032: 1939 (M), 1944 (M). WSP 1203: 1930 (M). WSP 1333: 1928-29, 1932, 1933-34 (M), 1938 (M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	31	13	64	47	47	60	38	73	12	12	7.1
2	.95	26	12	71	31	68	56	34	53	12	11	6.4
3	.79	17	12	58	27	567	101	34	43	12	8.0	5.9
4	.69	13	12	69	43	403	71	32	37	11	7.2	5.1
5	.79	9.2	10	126	143	149	56	30	33	10	13	5.7
6	.84	7.4	11	94	222	104	270	29	29	11	11	6.4
7	.79	6.6	9.9	55	334	86	232	28	25	9.2	8.4	5.5
8	.95	5.9	9.6	42	841	66	130	29	22	12	7.1	4.9
9	1.5	5.5	9.2	52	446	57	90	29	22	10	6.4	4.7
10	.98	22	9.9	63	145	52	72	27	20	33	5.9	4.9
11	.82	152	11	75	95	56	60	24	19	12	6.9	5.7
12	.79	70	12	60	79	51	54	32	18	11	6.9	20
13	.98	302	12	45	275	47	49	335	20	9.6	6.2	17
14	.91	86	11	38	208	45	46	118	19	8.9	6.6	9.6
15	4.1	173	9.6	36	108	57	45	71	17	8.4	6.0	6.6
16	3.3	82	22	32	80	90	41	876	29	7.7	4.2	5.3
17	3.0	44	84	29	64	59	40	293	27	6.4	3.8	5.1
18	2.8	30	39	27	56	51	38	117	21	5.9	3.3	5.3
19	2.3	25	26	24	51	49	35	71	19	7.9	18	12
20	1.8	23	21	21	50	84	32	52	17	6.9	8.6	8.2
21	4.8	24	26	20	49	57	33	45	16	6.0	5.9	6.2
22	4.4	20	42	22	60	48	43	37	16	5.8	7.7	11
23	4.4	18	53	40	134	46	42	32	16	4.9	14	11
24	3.7	16	105	53	73	43	47	28	16	4.6	7.9	8.4
25	3.6	13	52	71	55	39	39	27	14	4.5	5.1	6.6
26	3.2	13	37	53	48	41	33	25	13	5.4	4.3	7.1
27	2.7	13	27	39	68	53	32	22	13	8.7	84	6.6
28	2.8	13	23	30	58	130	98	373	13	7.7	112	6.2
29	2.7	14	20	27	------	159	77	785	13	8.3	25	5.7
30	15	13	19	29	------	119	46	201	12	8.2	13	5.7
31	48	------	24	53	------	77	------	116	------	9.4	8.9	------
TOTAL	126.78	1,287.6	784.2	1,518	3,890	3,000	2,068	3,990	705	290.4	448.3	225.9
MEAN	4.09	42.9	25.3	49.0	139	96.8	68.9	129	23.5	9.37	14.5	7.53
MAX	48	302	105	126	841	567	270	876	73	33	112	20
MIN	.69	5.5	9.2	20	27	39	32	22	12	4.5	3.3	4.7
CFSM	.06	.65	.38	.74	2.09	1.46	1.04	1.94	.35	.14	.22	.11
IN.	.07	.72	.44	.85	2.18	1.68	1.16	2.23	.39	.16	.25	.13

CAL YR 1970 TOTAL 13,541.06 MEAN 37.1 MAX 938 MIN .69 CFSM .56 IN 7.57
WTR YR 1971 TOTAL 18,334.18 MEAN 50.2 MAX 876 MIN .69 CFSM .75 IN 10.26

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-16	0800	10.81	1,620				

02085070 Eno River near Durham, N. C.

LOCATION.--Lat 36°04'18", long 78°54'33", Durham County, on right bank 275 ft downstream from bridge on U.S. Highway 501, 0.2 mile downstream from Crooked Creek, and 5 miles north of Durham.

DRAINAGE AREA.--141 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water year 1955. August 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 270 ft (from topographic map). Prior to Nov. 19, 1966, at site 275 ft upstream at datum 2.35 ft higher. Nov. 20, 1966 to Sept. 30, 1967 water-stage recorder and crest-stage gage at present site at datum 0.94 ft higher.

AVERAGE DISCHARGE.--8 years, 101 cfs (9.73 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,460 cfs May 29 (gage height, 8.13 ft); minimum, 1.3 cfs Oct. 11, 12, 13 (gage height, 0.65 ft).
Period of record: Maximum discharge, 9,080 cfs Feb. 7, 1965 (gage height, 15.18 ft, site and datum then in use); minimum, 0.53 cfs Oct. 1, 5, 1968.

REMARKS.--Records good. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	66	33	74	82	82	123	70	162	31	61	23
2	2.6	51	32	115	59	92	107	65	111	34	45	20
3	3.1	47	32	91	51	1,020	142	60	84	29	42	17
4	3.4	36	32	80	70	824	140	53	75	25	22	16
5	3.0	31	31	252	212	329	107	51	63	22	21	15
6	2.3	29	30	227	464	218	629	50	56	34	21	14
7	2.0	25	30	113	495	173	586	48	50	48	23	43
8	1.8	24	29	79	1,320	135	307	47	64	31	20	20
9	1.6	22	29	80	885	109	210	45	104	25	14	14
10	1.4	32	29	102	300	98	159	45	53	60	10	13
11	1.3	161	29	113	182	100	122	43	42	38	9.2	14
12	1.3	150	31	111	140	97	109	44	41	27	15	771
13	1.4	434	32	80	411	88	100	351	57	23	19	206
14	1.9	186	33	66	494	84	91	272	57	38	12	72
15	2.2	174	32	61	232	115	84	122	43	42	8.5	44
16	2.2	157	48	55	160	187	79	1,470	74	29	7.5	32
17	2.0	76	123	48	124	121	74	648	73	23	8.6	26
18	3.4	56	91	46	93	96	70	285	57	19	48	25
19	3.6	48	59	44	95	95	67	168	46	17	61	24
20	3.0	42	50	40	89	131	63	114	39	20	35	27
21	12	40	52	38	88	106	61	91	34	23	23	28
22	8.8	39	67	38	90	89	78	83	30	16	33	49
23	11	36	86	48	189	82	76	71	30	13	57	40
24	11	33	179	78	137	74	74	64	31	12	35	32
25	9.7	31	104	98	97	70	73	60	29	9.7	23	26
26	4.0	29	66	98	83	74	62	56	25	8.5	16	22
27	2.5	28	52	68	92	91	59	52	23	8.4	48	19
28	2.1	28	41	56	103	217	124	465	27	8.5	356	18
29	4.2	30	37	50	------	344	191	1,600	118	11	95	16
30	29	33	34	54	------	284	96	480	38	18	47	17
31	55	------	37	72	------	177	------	257	------	68	31	------
TOTAL	195.0	2,174	1,590	2,575	6,837	5,802	4,263	7,330	1,736	811.1	1,266.8	1,703
MEAN	6.29	72.5	51.3	83.1	244	187	142	236	57.9	26.2	40.9	56.8
MAX	55	434	179	252	1,320	1,020	629	1,600	162	68	356	771
MIN	1.3	22	29	38	51	70	59	43	23	8.4	7.5	13
CFSM	.04	.51	.36	.59	1.73	1.33	1.01	1.67	.41	.19	.29	.40
IN.	.05	.57	.42	.68	1.80	1.53	1.12	1.93	.46	.21	.33	.45

CAL YR 1970 TOTAL 26,439.3 MEAN 72.4 MAX 1,960 MIN 1.3 CFSM .51 IN 6.98
WTR YR 1971 TOTAL 36,282.9 MEAN 99.4 MAX 1,600 MIN 1.3 CFSM .71 IN 9.57

PEAK DISCHARGE (BASE, 2,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-16	1030	8.02	2,390	5-29	0430	8.13	2,460

02085220 Little River near Orange Factory, N. C.

LOCATION.--Lat 36°08'20", long 78°54'24", Durham County, on right bank 125 ft upstream from bridge on U.S. Highway 501, 1 mile upstream from Mountain Creek, and 1.2 miles northwest of Orange Factory.

DRAINAGE AREA.--81.6 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1930, 1954-59, 1961. September 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 333.98 ft above mean sea level (levels by North Carolina State Highway Commission).

AVERAGE DISCHARGE.--10 years, 62.3 cfs (10.37 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,540 cfs Sept. 12 (gage height, 6.11 ft); minimum, 0.96 cfs Oct. 17 (gage height, 0.56 ft).
Period of record: Maximum discharge, 5,800 cfs July 10, 1970 (gage height, 9.70 ft) from rating curve extended above 2,600 cfs; minimum daily, 0.05 cfs Oct. 5, 6, 1968.
A field estimate of 0.03 cfs was made on Sept. 18, 19, 1954.

REMARKS.--Records good. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	23	15	69	57	60	79	47	72	15	13	16
2	3.4	18	14	86	39	68	72	44	55	17	12	14
3	2.7	17	14	65	32	696	99	43	47	16	18	12
4	2.2	12	14	60	38	545	86	39	36	15	13	12
5	1.8	9.2	13	145	122	169	72	36	30	13	11	12
6	1.7	8.4	13	108	265	114	442	34	29	15	19	12
7	1.7	7.4	13	59	379	94	361	32	28	18	12	11
8	1.5	7.0	12	46	1,050	79	177	32	34	17	9.8	11
9	1.5	6.6	12	51	567	69	118	30	62	14	8.5	9.8
10	1.3	11	12	70	166	65	93	28	30	17	7.4	9.4
11	1.2	102	13	86	104	68	81	27	27	15	7.2	11
12	1.3	59	13	69	85	65	75	24	28	13	7.3	840
13	1.2	791	13	51	322	61	72	165	41	13	6.8	133
14	1.1	99	13	43	307	59	70	84	30	13	6.4	46
15	1.1	132	12	40	129	63	66	41	28	13	6.0	32
16	1.1	79	17	37	93	84	65	1,130	50	12	5.8	28
17	1.0	43	74	33	77	68	64	204	43	11	16	22
18	2.5	33	44	32	70	59	62	84	30	10	28	22
19	2.1	28	29	29	65	61	61	47	27	10	30	24
20	2.1	25	24	27	63	94	60	38	24	9.6	13	24
21	3.4	25	26	29	61	70	59	32	24	9.1	9.9	20
22	5.6	23	46	26	62	61	67	31	21	8.8	9.4	31
23	6.6	21	48	35	155	58	63	28	21	8.0	25	38
24	4.1	19	85	53	85	55	65	27	20	7.6	14	31
25	3.2	17	51	68	66	53	59	27	19	8.1	10	26
26	2.6	16	38	57	60	59	54	27	18	13	9.2	25
27	2.2	16	30	43	68	66	51	25	19	10	336	26
28	1.9	15	26	35	69	174	82	548	17	9.0	630	24
29	1.8	15	23	34	------	246	86	1,260	16	8.5	49	20
30	3.8	15	24	32	------	172	55	206	15	13	27	22
31	28	------	24	62	------	100	------	112	------	12	20	------
TOTAL	99.9	1,692.6	805	1,680	4,656	3,755	2,916	4,532	941	383.7	1,389.7	1,564.2
MEAN	3.22	56.4	26.0	54.2	166	121	97.2	146	31.4	12.4	44.8	52.1
MAX	28	791	85	145	1,050	696	442	1,260	72	18	630	840
MIN	1.0	6.6	12	26	32	53	51	24	15	7.6	5.8	9.4
CFSM	.04	.69	.32	.66	2.03	1.48	1.19	1.79	.38	.15	.55	.64
IN.	.05	.77	.37	.77	2.12	1.71	1.33	2.07	.43	.17	.63	.71

CAL YR 1970 TOTAL 18,688.8 MEAN 51.2 MAX 1,340 MIN 1.0 CFSM .63 IN 8.52
WTR YR 1971 TOTAL 24,415.1 MEAN 66.9 MAX 1,260 MIN 1.0 CFSM .82 IN 11.13

PEAK DISCHARGE (BASE, 1,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-13	0400	4.96	1,730	8-27	2300	4.78	1,620
5-16	0630	5.06	1,790	9-12	1330	6.11	2,540
5-29	0230	5.55	2,140				

02085500 Flat River at Bahama, N. C.

LOCATION.--Lat 36°10'57", long 78°52'44", Durham County, on right bank 0.5 mile upstream from Lake Michie, 1.2 miles upstream from bridge on Secondary Road 1616, 1.2 miles north of Bahama, and 1.5 miles upstream from Dial Creek.

DRAINAGE AREA.--150 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 346.85 ft above mean sea level. Prior to Oct. 22, 1925, non-recording gage at same site at datum 0.58 ft lower.

AVERAGE DISCHARGE.--46 years, 137 cfs (12.40 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,380 cfs May 29 (gage height, 6.06 ft); minimum, 1.4 cfs Oct. 16, 17 (gage height, 0.86 ft).
Period of record: Maximum discharge, about 20,000 cfs July 26, 1938 (gage height, not determined), computed on basis of records for nearby stations; minimum, 0.23 cfs Sept. 26, 28, 29, Oct. 1, 1968.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Prior to December 1962, some diurnal fluctuation and infrequent regulation at low flow caused by small mill 5 miles upstream. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1333: 1926, 1928 (M), 1938, 1946.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	56	26	134	110	116	124	60	177	50	60	40
2	5.4	31	26	193	90	125	107	56	116	40	35	35
3	4.8	25	26	148	170	1,300	173	52	89	30	25	28
4	3.2	22	25	140	350	1,090	146	49	75	25	20	25
5	2.5	18	22	319	800	379	107	46	64	23	319	24
6	2.5	15	22	235	650	247	1,030	44	57	21	98	22
7	2.5	13	21	126	1,400	195	873	44	52	20	49	21
8	2.5	11	19	92	900	154	382	45	50	19	37	20
9	2.3	10	19	96	600	125	234	43	62	19	28	19
10	2.1	16	20	149	400	112	172	39	48	50	22	18
11	2.3	435	21	210	250	115	137	35	44	35	18	22
12	2.5	221	22	187	150	109	118	35	39	25	17	3,000
13	2.5	982	23	123	250	98	108	184	44	20	15	2,500
14	2.3	203	22	95	400	92	98	164	45	30	13	1,000
15	1.9	532	20	85	350	91	87	78	40	60	12	400
16	1.5	216	25	74	300	116	82	1,650	64	40	12	150
17	1.4	102	185	65	250	94	79	422	80	25	39	60
18	1.5	70	100	62	200	79	74	184	40	22	98	40
19	2.8	57	60	58	170	79	69	111	34	20	102	45
20	4.0	51	48	50	150	149	66	82	30	19	47	35
21	8.4	48	47	45	140	107	66	68	28	17	33	30
22	8.6	43	117	50	200	85	68	64	27	15	26	350
23	19	38	105	90	400	78	67	57	26	14	120	150
24	16	34	208	120	198	72	70	52	28	13	48	80
25	12	31	114	180	134	66	68	48	34	25	31	55
26	7.8	29	75	140	113	76	59	46	28	20	21	50
27	5.9	29	59	100	160	93	54	44	24	15	456	45
28	5.1	28	50	80	166	280	79	441	22	35	1,000	40
29	4.3	28	44	65	------	429	125	2,030	21	25	600	37
30	7.3	27	39	100	------	307	74	762	70	30	200	40
31	43	------	43	130	------	168	------	318	------	90	60	------
TOTAL	192.5	3,421	1,653	3,741	9,451	6,626	4,996	7,353	1,558	892	3,661	8,381
MEAN	6.21	114	53.3	121	338	214	167	237	51.9	28.8	118	279
MAX	43	982	208	319	1,400	1,300	1,030	2,030	177	90	1,000	3,000
MIN	1.4	10	19	45	90	66	54	35	21	13	12	18
CFSM	.04	.76	.36	.81	2.25	1.43	1.11	1.58	.35	.19	.79	1.86
IN.	.05	.85	.41	.93	2.34	1.64	1.24	1.82	.39	.22	.91	2.08

CAL YR 1970 TOTAL 33,716.5 MEAN 92.4 MAX 3,610 MIN 1.4 CFSM .62 IN 8.36
WTR YR 1971 TOTAL 51,925.5 MEAN 142 MAX 3,000 MIN 1.4 CFSM .95 IN 12.88

PEAK DISCHARGE (BASE, 4,500 CFS).--No peak above base.
NOTE.--No gage-height record Jan. 23 to Feb. 23, June 30 to Aug. 4, Aug. 29 to Sept. 30.

02086000 Dial Creek near Bahama, N. C.

LOCATION.--Lat 36°01'36", long 78°51'24", Durham County, on right bank 0.4 mile upstream from bridge on Secondary Road 1616 and Lake Michie, and 1.5 miles northeast of Bahama.

DRAINAGE AREA.--4.71 sq mi.

PERIOD OF RECORD.--October 1925 to September 1971 (discontinued). Prior to October 1929 published as "at Bahama".

GAGE.--Water-stage recorder and V-notch and sharp-crested weir. Datum of gage is 357.67 ft above mean sea level.

AVERAGE DISCHARGE.--46 years, 4.16 cfs (11.99 inches per year).

EXTREMES.--Current year: Maximum discharge, 153 cfs May 29 (gage height, 3.36 ft); no flow Oct. 1-20.
Period of record: Maximum gage height, 7.60 ft May 24, 1940 (discharge not determined but probably greater than 3,000 cfs); no flow at times in many years.

REMARKS.--Records excellent.

REVISIONS (WATER YEARS).--WSP 1233: 1926-40, 1941-42 (M), 1944-45, 1946-47 (M), 1948-50 (P). WSP 1333: 1931. WSP 1723: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.67	.57	3.4	2.9	2.4	4.2	2.1	5.5	1.0	.76	.24
2	0	.60	.58	3.0	3.4	3.9	4.0	2.1	3.6	1.3	.31	.20
3	0	.39	.56	2.4	1.9	32	4.8	2.2	2.8	1.1	1.0	.18
4	0	.36	.55	2.3	3.3	20	3.7	1.9	2.4	.83	.30	.16
5	0	.40	.49	11	10	8.8	3.4	1.8	2.0	.73	.28	.15
6	0	.36	.48	6.4	13	6.4	37	1.6	1.8	.53	.33	.14
7	0	.33	.47	3.8	29	5.3	19	1.7	1.6	.68	.30	.16
8	0	.30	.44	2.9	38	4.3	9.8	1.7	1.6	.50	.24	.11
9	0	.22	.46	3.8	17	3.7	6.8	1.5	1.8	.42	.18	.09
10	0	1.7	.50	4.3	7.9	3.6	5.4	1.4	1.4	1.6	.13	.08
11	0	10	.52	4.9	5.4	3.9	4.6	1.3	1.3	.57	.12	.23
12	0	4.9	.54	3.7	4.4	3.4	4.2	1.2	2.2	.44	.42	28
13	0	24	.55	2.9	12	3.2	3.9	3.7	2.7	.48	.27	4.8
14	0	3.8	.49	2.5	8.6	3.0	3.5	2.0	1.6	.41	.19	1.7
15	0	4.0	.46	2.2	5.3	3.4	3.2	2.1	1.5	.35	.17	.82
16	0	2.1	2.2	1.9	4.2	3.7	3.1	39	5.0	.31	.11	.57
17	0	1.4	5.0	1.8	3.5	2.9	3.0	8.2	2.5	.26	1.3	.51
18	0	1.1	1.8	1.7	3.2	2.5	2.8	4.6	1.9	.20	2.1	.53
19	0	.98	1.3	1.5	2.9	3.4	2.6	3.1	1.8	.18	.65	.55
20	0	.92	1.1	1.6	2.9	3.5	2.6	2.5	1.4	.23	.33	.46
21	.07	.94	1.8	1.9	2.6	2.7	2.6	2.4	1.2	.23	.23	.41
22	.20	.78	2.3	1.5	3.0	2.6	2.6	2.3	1.1	.20	.37	5.6
23	.12	.75	2.7	2.8	4.4	2.5	2.5	2.0	1.2	.16	2.3	2.0
24	.07	.64	3.3	2.6	2.8	2.3	2.9	1.8	1.0	.13	.42	1.1
25	.05	.57	2.0	3.7	2.5	2.2	2.3	1.6	.90	.22	.23	.70
26	.04	.57	1.6	2.7	2.4	3.1	2.1	1.4	.85	.26	.17	.57
27	.03	.58	1.3	2.1	3.3	4.2	2.0	1.2	.81	.27	3.2	.51
28	.02	.59	1.1	2.0	2.6	8.9	4.6	28	.75	.23	3.6	.44
29	.02	.59	.99	2.0	------	11	3.1	64	2.1	.20	.70	.41
30	.77	.59	.94	2.0	------	7.2	2.3	16	1.8	.28	.44	.48
31	2.6	------	1.3	4.6	------	5.1	------	8.5	------	.51	.31	------
TOTAL	3.99	65.13	38.39	95.9	202.4	175.1	158.6	214.9	58.11	14.81	21.46	51.90
MEAN	.13	2.17	1.24	3.09	7.23	5.65	5.29	6.93	1.94	.48	.69	1.73
MAX	2.6	24	5.0	11	38	32	37	64	5.5	1.6	3.6	28
MIN	0	.22	.44	1.5	1.9	2.2	2.0	1.2	.75	.13	.11	.08
CFSM	.03	.46	.26	.66	1.54	1.20	1.12	1.47	.41	.10	.15	.37
IN.	.03	.51	.30	.76	1.60	1.38	1.25	1.70	.46	.12	.17	.41

CAL YR 1970 TOTAL 1,009.24 MEAN 2.77 MAX 250 MIN 0 CFSM .59 IN 7.97
WTR YR 1971 TOTAL 1,100.69 MEAN 3.02 MAX 64 MIN 0 CFSM .64 IN 8.69

PEAK DISCHARGE (BASE, 160 CFS).--No peak above base.

02087000 Neuse River near Northside, N. C.

LOCATION.--Lat 36°02'54", long 78°44'50", Durham County, on right bank 25 ft upstream from Fish Dam Bridge on Secondary Road 1801, 1.5 miles downstream from Rocky Creek, 2.5 miles downstream from Seaboard Coast Line Railroad bridge, 2.5 miles south of Northside, 8.5 miles downstream from confluence of Eno and Flat Rivers, and 9.5 miles northeast of Durham.

DRAINAGE AREA.--526 sq mi.

PERIOD OF RECORD.--July 1927 to current year.

GAGE.--Water-stage recorder. Datum of gage is 225.91 ft above mean sea level. Prior to June 2, 1928, nonrecording gage at site 10 ft upstream at same datum. Mar. 25, 1949, to Sept. 28, 1950, auxiliary nonrecording gage, and Sept. 29, 1950, to Jan. 14, 1968, auxiliary water-stage recorder at bridge on U.S. Highway 15, 4 miles upstream. Mar. 5, 1968 to Oct. 7, 1969, auxiliary water stage recorder and since Oct. 7, 1969, nonrecording auxiliary gage on bridge on Secondary Road 1900, 3.7 miles downstream.

AVERAGE DISCHARGE.--44 years, 505 cfs (13.04 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,830 cfs Feb. 10 (gage height, 17.90 ft); minimum, 9.0 cfs Oct. 19 (gage height, 1.14 ft).
Period of record: 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. 30, 1932 (gage height, 0.87 ft).

REMARKS.--Records good. Slight diurnal fluctuation caused by water plants above station. Flow regulated by Lake Michie (see p. 152). An average of 23.3 cfs was diverted from Flat River, an upstream tributary, for Durham municipal water supply, and an average of 2.7 cfs from Knap of Reeds Creek, an upstream tributary for Butner municipal water supply. Sewage effluent from Durham (about 11.2 cfs) and Butner was returned to Neuse River 3 miles upstream from station, and the remainder, about 12.7 cfs was diverted into the Cape Fear River basin.

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). WSP 1703: 1948.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	196	84	247	400	363	494	277	1,410	108	414	158
2	17	141	85	443	350	350	387	231	578	138	145	101
3	19	103	84	459	300	1,260	423	212	382	98	179	126
4	15	90	84	368	500	3,370	497	230	281	71	122	110
5	11	64	80	1,170	1,000	3,650	393	186	248	57	117	97
6	13	51	66	1,510	2,500	1,700	1,080	178	220	62	82	94
7	19	43	66	667	2,200	752	2,830	204	191	166	127	84
8	19	35	76	376	2,980	556	2,420	170	208	101	103	133
9	22	30	79	352	4,420	424	1,090	166	339	72	85	122
10	22	38	86	428	4,120	360	704	191	248	108	117	103
11	18	262	51	485	2,140	363	546	155	175	107	126	120
12	16	455	35	529	888	353	455	170	166	74	123	1,630
13	19	1,020	34	412	700	321	419	324	238	59	105	4,410
14	21	1,070	31	305	2,070	291	375	804	196	57	100	2,860
15	25	587	34	253	1,410	294	332	425	168	115	80	783
16	50	888	47	217	650	580	295	2,040	220	72	102	240
17	20	402	280	182	527	472	284	3,740	290	54	62	168
18	14	234	278	175	435	338	256	2,550	227	46	177	178
19	11	179	153	160	374	283	260	851	178	42	184	150
20	16	126	120	150	345	357	243	411	150	53	142	164
21	53	109	131	145	329	411	248	308	136	61	84	162
22	107	110	186	140	322	314	295	259	134	62	57	212
23	45	108	220	240	592	267	256	222	174	48	330	267
24	31	102	448	350	755	241	270	192	147	41	195	220
25	29	92	507	640	457	210	259	183	92	43	168	191
26	25	84	301	500	352	221	233	179	73	37	110	135
27	24	72	203	350	333	332	212	182	63	62	230	123
28	25	76	157	280	414	592	340	388	57	59	1,170	134
29	23	70	137	210	------	1,220	493	2,790	500	52	1,020	141
30	41	78	116	170	------	1,300	395	4,510	186	68	309	128
31	284	------	109	500	------	764	------	3,620	------	173	199	------
TOTAL	1,073	6,915	4,368	12,413	31,863	22,309	16,784	26,348	7,675	2,366	6,564	13,544
MEAN	34.6	231	141	400	1,138	720	559	850	256	76.3	212	451
MAX	284	1,070	507	1,510	4,420	3,650	2,830	4,510	1,410	173	1,170	4,410
MIN	11	30	31	140	300	210	212	155	57	37	57	84
CFSM	.07	.44	.27	.76	2.16	1.37	1.06	1.62	.49	.15	.40	.86
IN.	.08	.49	.31	.88	2.25	1.58	1.19	1.86	.54	.17	.46	.96

CAL YR 1970 TOTAL 113,303 MEAN 310 MAX 5,020 MIN 11 CFSM .59 IN 8.01
WTR YR 1971 TOTAL 152,222 MEAN 417 MAX 4,510 MIN 11 CFSM .79 IN 10.77

PEAK DISCHARGE (BASE, 4,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-10	0200	17.90	4,830	9-13	1700	17.19	4,720
5-30	1800	17.30	4,800				

02087183 Neuse River near Falls, N. C.

LOCATION.--Lat 35°56'24", long 78°34'32", Wake County, on left bank, 0.3 mile downstream from bridge on Secondary Road 2000, 0.4 mile northeast of Falls, and 0.5 mile downstream from Honeycutt Creek.

DRAINAGE AREA.--770 sq mi.

PERIOD OF RECORD.--July 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 182.62 ft above mean sea level.

EXTREMES.--July to September 1970: Maximum discharge during period, 4,170 cfs July 13 (gage height, 13.74 ft); minimum, 9.0 cfs Sept. 17 (gage height, 1.65 ft).
Water year 1971: Maximum discharge, 5,420 cfs Feb. 11 (gage height, 16.11 ft); minimum, 7.2 cfs Oct. 12, 13 (gage height, 1.62 ft).

REMARKS.--Records good. Diversions for municipal water supply for cities of Durham and Butner (see sta 02087000). The city of Raleigh diverted an average of 20.1 cfs 1.2 miles upstream from station for municipal water supply, most of which is returned downstream as sewage effluent. Water quality records collected 0.3 mile upstream from station are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, JULY TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										81	175	29
2										83	138	27
3										84	99	32
4										110	100	29
5										200	60	63
6										131	52	61
7										82	54	41
8										77	82	31
9										68	131	21
10										112	138	29
11										1,620	249	29
12										3,410	495	26
13										4,090	311	23
14										2,410	170	20
15										354	149	16
16										202	128	13
17										171	110	12
18										144	116	21
19										121	93	20
20										114	167	20
21										123	103	23
22										156	81	16
23										170	109	15
24										178	178	18
25										183	112	18
26										158	64	19
27										174	63	20
28										143	59	48
29					------					155	50	57
30					------					130	43	51
31		------			------		------		------	156	35	------
TOTAL										15,390	3,914	848
MEAN										496	126	28.3
MAX										4,090	495	63
MIN										68	35	12
CFSM										.64	.16	.04
IN.										.74	.19	.04

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-13	1530	13.74	4,170				

02087183 Neuse River near Falls, N. C.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	475	105	290	487	621	1,000	335	4,000	161	160	166
2	19	288	114	511	473	536	700	275	2,200	138	250	125
3	15	180	115	701	342	1,500	620	252	600	135	120	100
4	13	132	115	580	343	3,870	700	251	400	101	165	120
5	15	104	111	2,200	1,390	4,500	700	225	300	76	251	104
6	22	77	124	3,800	2,760	4,660	870	200	270	75	137	93
7	11	66	93	2,510	3,330	3,280	2,800	200	230	143	93	94
8	8.5	56	68	978	4,430	1,280	4,000	220	200	154	126	86
9	11	51	78	704	4,970	862	3,530	200	250	104	97	113
10	13	54	80	853	5,240	662	1,640	180	300	103	83	127
11	15	196	110	953	5,300	600	957	190	210	112	109	106
12	13	550	87	919	4,270	590	723	160	187	104	120	402
13	8.3	625	81	793	1,790	580	609	350	220	79	107	3,030
14	9.5	1,670	67	578	2,270	530	537	460	240	72	87	3,940
15	76	961	59	438	3,010	500	461	772	197	66	83	3,060
16	110	969	74	372	1,830	600	389	1,740	180	88	65	560
17	53	880	265	307	1,050	900	348	3,410	200	75	90	216
18	29	390	382	265	791	650	326	3,920	265	56	104	166
19	19	252	307	250	663	530	302	2,770	218	49	194	170
20	14	198	213	226	581	460	289	774	195	37	166	134
21	19	169	188	206	541	550	284	427	160	45	122	136
22	42	164	229	203	508	560	354	316	147	60	78	164
23	107	161	297	233	698	450	337	267	153	56	144	220
24	58	138	636	291	1,200	400	308	229	172	58	253	232
25	41	135	840	570	1,020	380	302	214	137	67	167	182
26	36	120	587	718	661	360	268	200	93	56	139	164
27	31	113	330	628	558	400	250	200	85	54	131	120
28	30	103	254	426	560	700	412	250	88	50	527	106
29	25	106	206	314	------	1,400	634	1,000	227	70	1,870	116
30	46	100	176	270	------	2,300	527	3,000	414	65	663	128
31	438	------	167	298	------	1,800	------	3,800	------	80	234	------
TOTAL	1,374.3	9,483	6,558	22,385	51,066	37,011	25,177	26,787	12,538	2,589	6,935	14,480
MEAN	44.3	316	212	722	1,824	1,194	839	864	418	83.5	224	483
MAX	438	1,670	840	3,800	5,300	4,660	4,000	3,920	4,000	161	1,870	3,940
MIN	8.3	51	59	203	342	360	250	160	85	37	65	86
CFSM	.06	.41	.28	.94	2.37	1.55	1.09	1.12	.54	.11	.29	.63
IN.	.07	.46	.32	1.08	2.47	1.79	1.22	1.29	.61	.13	.34	.70

WTR YR 1971 TOTAL 216,383.3 MEAN 593 MAX 5,300 MIN 8.3 CFSM .77 IN 10.45

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-11	0400	16.11	5,420	6- 1	Unknown	Unknown	Unknown
3- 6	0400	14.85	4,720	9-14	1830	13.49	4,060
4- 8	1600	13.49	4,060				

02087190 Neuse River near Neuse, N. C.

LOCATION.--Lat 35°54'32", long 78°33'18", Wake County, near center of span on downstream side of bridge on U.S. Highway 1, 1 mile upstream from Smith Creek, and 1.2 miles northeast of Neuse.

DRAINAGE AREA.--790 sq mi.

PERIOD OF RECORD: October 1959 to September 1971 (discontinued). Prior to October 1969 medium and high water disharge only. Gage height records collected at this site since August 1911 are contained in reports of the National Weather Service, NOAA, U.S. Department of Commerce.

GAGE.--Nonrecording gage. Datum of gage is 178.9 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 5,300 cfs Feb. 11 (gage height, 16.00 ft from graph based on gage readings); minimum observed, 8.5 cfs Oct. 8, 15.
Period of record: Maximum discharge observed, 9,500 cfs Jan. 9, 1962 (gage height, 20.00 ft); minimum gage height observed, 1.62 ft Sept. 2, 1968.

REMARKS.--Records fair. Diversions for municipal water supply for cities of Durham and Butner (see sta 0208700). The city of Raleigh diverted an average of 20.1 cfs upstream from station for municipal water supply, most of which is returned downstream as sewage effluent.

COOPERATION.--Gage readings furnished by the National Weather Service, NOAA, U.S. Department of Commerce.

DISCHARGE, IN CUBIC FEET PER SECOND, AT 0800, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	445	83	238	433	595	1,060	431	4,070	174	160	167
2	16	284	75	452	468	502	738	324	2,650	143	359	100
3	16	166	114	600	386	825	612	291	618	136	132	79
4	12	115	112	550	300	3,460	678	250	431	78	132	97
5	16	106	108	700	630	4,150	710	274	324	59	408	89
6	18	78	114	3,400	2,310	4,500	645	210	280	62	124	71
7	10	50	62	2,810	2,700	3,760	2,660	192	236	109	97	83
8	8.5	47	58	1,040	3,990	1,240	3,560	224	204	177	108	56
9	10	41	58	662	4,690	825	3,660	190	220	103	96	97
10	12	40	68	750	5,060	638	1,770	174	342	83	90	94
11	14	172	115	822	5,290	562	912	194	238	75	78	100
12	13	397	70	825	4,970	562	695	163	181	89	66	133
13	9.7	493	61	774	2,020	560	588	346	230	72	60	2,130
14	9.1	1,460	60	588	1,670	502	538	456	276	57	65	3,290
15	8.5	891	64	520	2,700	461	468	655	204	75	68	3,600
16	163	588	47	405	2,010	514	424	1,110	177	62	60	1,630
17	50	888	210	339	1,020	864	388	2,700	194	51	46	264
18	33	386	390	291	765	662	364	3,400	270	51	122	176
19	22	282	368	282	650	490	326	3,520	230	108	172	176
20	18	194	222	238	570	438	324	1,100	200	126	138	143
21	17	149	190	190	535	518	317	474	154	30	130	127
22	26	143	206	214	504	525	366	154	130	53	57	174
23	120	130	315	240	588	420	359	298	128	50	75	181
24	65	103	525	264	1,050	381	346	242	163	60	320	220
25	41	96	722	420	936	355	342	228	130	62	163	181
26	35	86	565	658	625	346	317	206	109	49	126	170
27	31	85	331	618	545	386	268	190	55	55	87	115
28	26	93	282	230	523	622	304	187	93	37	206	104
29	23	90	226	153	------	1,240	525	825	59	66	1,730	89
30	33	86	198	291	------	2,300	608	2,900	525	57	795	112
31	190	------	167	293	------	1,930	------	3,640	------	75	262	------
TOTAL	1,095.8	8,184	6,186	19,857	47,938	35,133	24,872	25,548	13,121	2,484	6,532	14,048
MEAN	35.3	273	200	641	1,712	1,133	829	824	437	80.1	211	468
MAX	190	1,460	722	3,400	5,290	4,500	3,660	3,640	4,070	177	1,730	3,600
MIN	8.5	40	47	153	300	346	268	154	55	30	46	56
CFSM	.04	.35	.25	.81	2.17	1.43	1.05	1.04	.55	.10	.27	.59
IN.	.05	.39	.29	.94	2.26	1.65	1.17	1.20	.62	.12	.31	.66

CAL YR 1970 TOTAL 161,323.8 MEAN 442 MAX 5,610 MIN 8.5 CFSM .56 IN 7.60
WTR YR 1971 TOTAL 204,998.8 MEAN 562 MAX 5,290 MIN 8.5 CFSM .71 IN 9.65

02087500 Neuse River near Clayton, N. C.

LOCATION.--Lat 35°38'50", long 78°24'21", Johnston County, on left bank at downstream side of bridge on State Highway 42, 2.3 miles upstream from Mill Creek, and 3 miles east of Clayton.

DRAINAGE AREA.--1,140 sq mi, approximately.

PERIOD OF RECORD.--July 1927 to current year.

GAGE.--Water-stage recorder. Datum of gage is 128.41 ft above mean sea level. Prior to Mar. 18, 1942, at site 1,100 ft upstream at same datum.

AVERAGE DISCHARGE.--44 years, 1,170 cfs (13.94 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,620 cfs Mar. 4 (gage height, 10.49 ft); minimum, 73 cfs Oct. 12 (gage height, 0.86 ft).
Period of record: 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 good. Diversions for municipal water supply for cities of Durham and Butner (see sta 02087000). The city of Raleigh diverted from Swift Creek (see p. 153), a downstream tributary, an average of 6.2 cfs, and from the Neuse River upstream from station an average of 20.1 cfs, most of which is returned as sewage effluent upstream from station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 822: Drainage area. WSP 1032: 1930, 1935 (M). WSP 1333: 1935. WSP 1503: 1949.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	1,070	209	450	880	851	1,820	761	3,810	492	234	358
2	124	715	212	610	812	1,000	1,240	602	3,620	414	400	270
3	111	500	220	715	720	2,820	1,050	560	1,350	344	367	222
4	97	360	212	779	768	6,020	994	521	697	260	225	193
5	84	292	216	2,320	1,480	5,950	1,020	476	548	201	806	202
6	80	246	212	4,970	3,540	4,920	1,390	448	463	217	772	186
7	84	212	212	4,260	3,720	4,750	3,200	408	407	317	414	187
8	86	195	198	2,290	5,550	3,030	3,790	420	363	331	258	173
9	88	178	165	1,350	6,450	1,460	4,030	561	337	286	244	187
10	82	185	185	1,380	5,620	1,140	3,430	446	413	249	230	197
11	80	705	195	1,450	5,260	1,020	1,620	390	414	248	190	204
12	74	720	220	1,380	5,260	964	1,150	375	327	216	170	299
13	80	757	209	1,210	4,780	934	954	1,600	366	205	200	1,410
14	80	947	188	1,010	2,680	880	853	1,410	401	182	210	2,730
15	74	1,400	182	840	2,850	886	762	1,290	381	163	190	3,270
16	297	840	195	742	2,910	946	697	2,120	356	158	170	2,360
17	254	1,020	580	655	1,760	1,150	646	3,190	388	161	206	592
18	153	731	625	595	1,250	1,070	608	3,490	431	153	497	350
19	124	485	580	545	1,040	869	571	3,700	422	134	385	298
20	109	390	470	515	952	784	553	2,430	353	168	346	272
21	116	330	410	475	874	774	538	892	309	288	278	231
22	350	284	470	460	818	818	576	650	276	425	224	623
23	258	274	510	525	1,030	742	627	550	300	227	540	359
24	238	266	817	595	1,240	660	629	490	279	176	527	365
25	175	238	976	892	1,390	620	571	450	283	239	407	342
26	144	238	910	1,120	1,060	660	537	418	235	212	322	274
27	135	220	670	1,000	898	774	504	382	190	370	735	245
28	127	216	525	801	837	1,020	666	458	173	356	607	205
29	122	209	450	665	------	1,620	904	1,290	189	234	1,060	187
30	132	209	400	625	------	2,800	868	2,660	432	308	1,410	202
31	636	------	360	1,020	------	2,700	------	3,360	------	287	613	------
TOTAL	4,747	14,432	11,983	36,244	66,429	54,632	36,798	36,798	18,513	8,021	13,237	16,993
MEAN	153	481	387	1,169	2,372	1,762	1,227	1,187	617	259	427	566
MAX	636	1,400	976	4,970	6,450	6,020	4,030	3,700	3,810	492	1,410	3,270
MIN	74	178	165	450	720	620	504	375	173	134	170	173
CFSM	.13	.42	.34	1.03	2.08	1.55	1.08	1.04	.54	.23	.37	.50
IN.	.15	.47	.39	1.18	2.17	1.78	1.20	1.20	.60	.26	.43	.55

CAL YR 1970 TOTAL 249,877 MEAN 685 MAX 5,970 MIN 74 CFSM .60 IN 8.15
WTR YR 1971 TOTAL 318,827 MEAN 873 MAX 6,450 MIN 74 CFSM .77 IN 10.40

PEAK DISCHARGE (BASE, 7,100 CFS).--No peak above base.

02087570 Neuse River at Smithfield, N. C.

LOCATION.--Lat 35°30'46", long 78°21'00", Johnston County, near center of span on downstream side of bridge on U.S. Highway 70, at Smithfield, 2.1 miles upstream from Swift Creek, and 177.6 miles upstream from mouth.

DRAINAGE AREA.--1,200 sq mi, approximately.

PERIOD OF RECORD.--October 1959 to current year. Prior to October 1970 medium and high water discharges only. Gage height records at different datum collected at this site since July 1911 are contained in reports of the National Weather Service, NOAA, U.S. Department of Commerce.

GAGE.--Nonrecording gage. Datum of gage is 99.26 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 7,200 cfs Mar. 5 (gage height, 18.50 ft, from graph based on gage readings); minimum observed, 72 cfs Oct. 15 (gage height, 2.86 ft).
Period of record: Maximum discharge observed, 11,600 cfs Oct. 7, 1964 (gage height, 22.10 ft); minimum observed, 72 cfs Oct. 15, 1970; minimum gage height observed, 2.38 ft Sept. 26, 1968.
Flood in August 1908 reached a stage of 27.1 ft (discharge, 19,900 cfs); July 24, 1919, 26.8 ft (discharge, 19,400 cfs); Oct. 3, 1929, 26.4 ft (discharge, 18,700 cfs); Sept. 20, 1945, 25.9 ft (discharge, 17,900 cfs), from stage information furnished by National Weather Service and Corps of Engineers, and discharges determined from ratings developed since 1959.

REMARKS.--Records fair. Diversions for municipal water supply for cities of Durham and Butner (see sta 02087000). The city of Raleigh diverted from Swift Creek (see p. 153), a downstream tributary an average of 6.2 cfs, and from Neuse River upstream from station an average of 20.1 cfs, most of which is returned as sewage effluent upstream from station. The city of Smithfield diverted an average of 1.5 cfs 0.2 mile upstream from station for municipal water supply, most of which is returned downstream as sewage effluent.

COOPERATION.--Gage readings furnished by the National Weather Service, NOAA, U.S. Department of Commerce.

DISCHARGE, IN CUBIC FEET PER SECOND, AT 0800, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	1,250	259	432	1,280	1,050	2,920	1,040	3,440	722	362	521
2	150	1,030	257	562	1,100	1,210	2,000	831	3,800	456	277	379
3	119	672	265	739	960	2,120	1,400	694	3,260	473	528	299
4	111	487	282	864	933	5,460	1,220	703	1,940	367	333	255
5	104	367	263	861	1,380	6,930	1,200	610	748	286	255	233
6	81	308	257	3,810	2,900	6,980	1,420	580	596	235	1,140	245
7	81	261	249	5,010	4,080	6,550	2,730	526	534	429	658	225
8	82	233	257	4,550	5,030	6,040	3,940	506	475	494	379	219
9	81	213	227	2,980	6,470	3,970	4,250	521	441	461	275	207
10	82	191	217	2,290	7,150	2,230	4,430	655	434	427	263	251
11	80	398	229	2,090	6,820	1,450	3,340	506	528	310	227	231
12	75	945	225	1,980	6,480	1,250	1,820	482	293	420	207	243
13	78	816	255	1,650	5,820	1,180	1,260	485	403	310	231	708
14	78	852	227	1,420	5,620	1,130	1,100	1,810	482	259	245	2,250
15	72	1,520	221	1,140	4,040	1,060	1,010	1,790	480	221	205	2,910
16	114	1,220	205	1,030	3,800	1,290	909	1,620	432	205	190	3,250
17	429	900	408	882	3,260	1,260	843	2,590	465	191	199	1,280
18	217	1,080	759	780	2,060	1,420	789	3,520	456	209	284	511
19	154	692	706	700	1,480	1,170	750	3,820	511	186	596	403
20	121	783	613	666	1,280	1,030	697	3,940	463	215	362	348
21	113	748	468	602	1,190	957	692	2,180	456	229	362	329
22	297	369	501	583	1,080	951	678	906	357	678	299	286
23	379	353	514	616	1,870	981	771	725	343	367	275	531
24	297	338	753	810	1,810	967	804	624	362	251	700	389
25	237	317	1,100	993	1,840	792	736	567	353	199	583	434
26	186	293	1,080	1,430	1,620	786	686	536	329	195	386	381
27	154	288	906	1,820	1,200	1,000	647	492	282	239	446	319
28	145	275	638	1,450	1,110	1,100	644	456	229	570	843	286
29	131	267	536	580	------	1,430	1,140	714	237	567	596	249
30	136	259	470	485	------	2,690	1,100	1,910	223	360	1,680	245
31	203	------	417	1,320	------	3,380	------	2,880	------	372	1,050	------
TOTAL	4,751	17,725	13,764	45,125	83,663	69,714	45,926	39,219	22,452	10,903	14,436	18,417
MEAN	153	591	444	1,456	2,988	2,249	1,531	1,265	748	352	466	614
MAX	429	1,520	1,100	5,010	7,150	6,980	4,430	3,940	3,800	722	1,680	3,250
MIN	72	191	205	432	933	786	644	456	223	186	190	207
CFSM	.13	.49	.37	1.21	2.49	1.87	1.28	1.05	.62	.29	.39	.51
IN.	.15	.55	.43	1.40	2.59	2.16	1.42	1.22	.70	.34	.45	.57

WTR YR 1971 TOTAL 386,095 MEAN 1,058 MAX 7,150 MIN 72 CFSM .88 IN 11.97

02088000 Middle Creek near Clayton, N. C.

LOCATION.--Lat 35°34'12", long 78°35'30", Johnston County, on right bank 300 ft downstream from bridge on State Highway 50, 0.5 mile upstream from Buffalo Branch, 3.7 miles downstream from Wake-Johnston County line, and 9.5 miles southwest of Clayton.

DRAINAGE AREA.--80.7 sq mi.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for October 1939, published in WSP 1303.

GAGE.--Water-stage recorder. Datum of gage is 184.53 ft above mean sea level. Nov. 1-20, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--32 years, 92.2 cfs (15.52 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,730 cfs Mar. 4 (gage height, 9.91 ft); minimum, 2.3 cfs Oct. 5 (gage height, 0.56 ft). Period of record: Maximum discharge, 5,400 cfs Sept. 4, 1955 (gage height, 13.14 ft); no flow Oct. 11-13, 1954.

REMARKS.--Records good. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 952: 1940 (M), 1941. WSP 1233: 1943 (M), 1945, 1949.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	124	22	48	299	113	134	73	39	15	17	12
2	3.9	101	23	57	221	186	109	60	31	40	13	11
3	3.9	53	23	46	127	462	115	55	26	34	10	10
4	3.2	34	22	40	143	1,470	106	54	24	27	8.1	9.9
5	2.7	28	22	191	248	1,190	87	48	22	17	88	9.1
6	2.7	24	19	566	338	478	178	44	19	18	209	8.6
7	2.7	20	17	620	403	263	286	41	17	61	66	8.3
8	2.7	18	16	291	434	180	275	41	15	78	35	8.6
9	2.5	17	16	182	716	142	165	44	14	41	25	7.6
10	2.6	25	18	233	554	121	122	43	12	28	19	7.8
11	2.6	99	19	249	308	118	100	36	11	18	15	9.9
12	2.6	111	18	212	185	110	90	32	10	15	14	44
13	2.6	79	19	148	210	103	83	56	12	12	13	69
14	2.7	65	20	118	261	94	77	280	13	10	11	44
15	2.9	49	18	116	246	104	69	145	13	8.8	10	24
16	4.7	41	27	126	171	208	67	226	12	7.6	9.9	16
17	3.8	34	93	104	141	158	65	296	13	6.8	13	13
18	12	31	100	90	127	113	61	178	15	6.8	32	12
19	11	29	54	81	117	100	58	75	14	6.2	58	12
20	8.4	29	40	72	111	102	55	54	12	8.3	34	12
21	10	29	36	67	108	91	55	47	10	11	22	11
22	20	29	40	70	112	82	63	43	9.9	21	16	10
23	52	27	50	109	193	78	64	39	9.9	15	49	12
24	33	26	89	141	201	73	69	33	8.6	10	99	11
25	23	23	82	198	136	69	63	30	7.6	8.1	49	10
26	19	22	53	213	111	87	52	31	7.6	8.3	28	10
27	16	22	41	146	111	136	47	26	11	14	26	12
28	14	22	37	98	115	172	112	24	7.8	40	27	8.8
29	12	22	34	82	------	201	218	53	8.1	31	24	7.6
30	14	22	34	85	------	256	134	103	12	21	18	7.1
31	48	------	35	219	------	209	------	57	------	23	15	------
TOTAL	345.1	1,255	1,137	5,018	6,447	7,269	3,179	2,367	436.5	660.9	1,073.0	448.3
MEAN	11.1	41.8	36.7	162	230	234	106	76.4	14.6	21.3	34.6	14.9
MAX	52	124	100	620	716	1,470	286	296	39	78	209	69
MIN	2.5	17	16	40	108	69	47	24	7.6	6.2	8.1	7.1
CFSM	.14	.52	.45	2.01	2.85	2.90	1.31	.95	.18	.26	.43	.18
IN.	.16	.58	.52	2.31	2.97	3.35	1.47	1.09	.20	.30	.49	.21

CAL YR 1970 TOTAL 19,569.6 MEAN 53.6 MAX 422 MIN 1.9 CFSM .66 IN 9.02
WTR YR 1971 TOTAL 29,635.8 MEAN 81.2 MAX 1,470 MIN 2.5 CFSM 1.01 IN 13.66

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1- 6	2200	7.82	716	3- 4	1630	9.91	1,730
2- 9	1800	8.17	828				

02088470 Little River near Kenly, N. C.

LOCATION.--Lat 35°35'18", long 78°11'12", Johnston County, near left bank on downstream side of bridge on Secondary Road 1934, 0.7 mile downstream from Buffalo Creek, and 3.7 miles west of Kenly.

DRAINAGE AREA.--190 sq mi, approximately.

PERIOD OF RECORD.--July 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 140 ft (by barometer).

AVERAGE DISCHARGE.--7 years, 167 cfs (11.94 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,740 cfs Mar. 5 (gage height, 13.53 ft); minimum, 9.9 cfs Oct. 14; minimum gage height, 3.51 ft Oct. 14, 15, 17.
Period of Record: Maximum discharge, 5,030 cfs Oct. 6, 1964 (gage height, 16.30 ft); minimum, 0.18 cfs Oct. 4, 5, 6, 1968.

REMARKS.--Records good. Some diurnal fluctutation and some regulation during periods of low flow caused by mill 10 miles upstream. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	50	42	100	437	262	401	177	149	12	45	39
2	14	72	43	115	415	357	337	145	148	18	33	32
3	14	70	43	115	324	755	311	122	105	20	28	27
4	13	68	43	111	315	1,460	292	105	77	19	24	25
5	13	59	42	164	478	1,720	262	97	60	20	28	23
6	12	45	40	499	709	1,480	470	89	49	22	78	21
7	12	37	39	720	753	1,070	798	81	40	42	77	21
8	12	33	37	751	955	766	741	79	35	49	82	21
9	11	30	35	659	1,210	513	590	89	29	30	64	21
10	11	30	34	554	1,300	370	474	98	26	137	41	21
11	11	66	35	493	1,150	317	363	93	23	64	30	21
12	11	133	37	428	927	290	290	84	22	38	25	26
13	11	160	39	362	704	267	242	119	26	32	22	69
14	10	156	39	307	657	248	210	229	23	30	20	64
15	11	160	38	280	590	236	182	185	30	25	19	48
16	11	125	45	270	491	452	164	327	50	22	19	40
17	11	92	118	244	430	476	149	423	50	20	21	30
18	11	74	146	219	366	347	138	342	40	19	25	25
19	11	64	131	195	308	269	125	276	36	20	27	22
20	12	59	115	173	275	241	117	237	34	20	33	21
21	14	56	106	156	256	216	110	165	30	77	35	21
22	17	54	104	150	262	194	110	114	25	101	29	20
23	20	52	122	184	612	183	124	90	24	81	49	20
24	20	50	166	227	599	170	147	75	22	50	89	22
25	18	48	161	288	409	157	148	67	20	32	95	35
26	20	43	147	303	314	181	130	64	18	25	73	29
27	21	40	133	283	283	258	108	58	16	44	86	24
28	20	41	116	248	266	301	164	53	15	114	214	21
29	20	42	102	216	------	354	251	57	13	76	164	20
30	21	42	91	194	------	536	222	74	12	105	83	20
31	27	------	85	289	------	508	------	107	------	50	53	------
TOTAL	454	2,051	2,474	9,297	15,795	14,954	8,170	4,321	1,247	1,414	1,711	849
MEAN	14.6	68.4	79.8	300	564	482	272	139	41.6	45.6	55.2	28.3
MAX	27	160	166	751	1,300	1,720	798	423	149	137	214	69
MIN	10	30	34	100	256	157	108	53	12	12	19	20
CFSM	.08	.36	.42	1.58	2.97	2.54	1.43	.73	.22	.24	.29	.15
IN.	.09	.40	.48	1.82	3.09	2.93	1.60	.85	.24	.28	.33	.17

CAL YR 1970 TOTAL 46,065 MEAN 126 MAX 760 MIN 10 CFSM .66 IN 9.02
WTR YR 1971 TOTAL 62,737 MEAN 172 MAX 1,720 MIN 10 CFSM .91 IN 12.28

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-10	0800	12.55	1,320	3- 5	0930	13.53	1,740

02088500 Little River near Princeton, N. C.

LOCATION.--Lat 35°30'40", long 78°09'36", Johnston County, on left bank 600 ft downstream from bridge on Secondary Road 2320, 0.8 mile upstream from Little Creek, and 3 miles north of Princeton.

DRAINAGE AREA.--229 sq mi.

PERIOD OF RECORD.--February 1930 to current year. Monthly discharge only for some periods, published in WSP 1303.

GAGE.--Water-stage recorder. Datum of gage is 107.75 ft above mean sea level. Prior to Nov. 17, 1934, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--41 years, 251 cfs (14.88 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,330 cfs Mar. 5 (gage height, 11.25 ft); minimum, 11 cfs Oct. 13-15, 18-20 (gage height, 1.02 ft).
Period of record: Maximum discharge, 7,150 cfs Oct. 6, 1964 (gage height, 13.94 ft); minimum, 1.0 cfs several times in September and October 1932, Oct. 10, 11, 1968.
Flood of 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. Water quality records for the current year are published in Part 2 of this report. Slight diurnal fluctuation and occasional regulation for short periods, caused by mills above station.

REVISIONS (WATER YEARS).--WSP 822: Drainage area. WSP 1233: 1935 (M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	54	48	107	505	354	589	210	144	19	88	51
2	17	83	49	123	557	494	472	180	171	19	64	39
3	17	83	48	129	456	1,020	445	150	133	18	55	32
4	17	77	49	120	417	1,970	423	130	93	18	38	29
5	16	70	47	154	613	2,310	360	110	70	18	32	26
6	15	56	46	468	853	2,140	646	100	58	21	62	23
7	13	46	45	715	983	1,690	1,100	93	48	29	92	22
8	13	40	43	792	1,160	1,120	1,080	85	40	85	96	22
9	13	37	42	792	1,410	729	833	90	34	42	89	21
10	13	35	41	736	1,550	528	616	97	30	133	59	21
11	12	77	41	672	1,490	441	500	103	26	276	39	21
12	12	150	42	603	1,250	396	400	90	25	351	30	26
13	11	214	43	507	963	354	330	105	30	61	26	65
14	11	201	44	423	833	321	290	251	29	39	23	92
15	11	198	44	378	777	301	250	241	27	32	23	67
16	14	169	53	377	661	433	220	414	43	26	23	52
17	13	118	159	335	566	611	200	597	62	23	25	41
18	11	90	200	287	496	474	180	523	51	22	28	31
19	11	76	179	247	423	368	170	375	42	30	28	26
20	11	68	142	212	365	311	160	308	38	39	28	23
21	17	64	124	182	330	272	140	227	35	114	34	22
22	23	60	117	168	370	239	130	151	32	259	33	21
23	23	59	141	212	1,060	217	160	112	31	156	30	21
24	24	56	201	291	1,070	200	180	89	28	90	73	21
25	24	54	210	415	760	179	170	77	23	53	120	21
26	23	51	184	468	520	209	160	73	22	40	96	33
27	23	47	157	424	427	360	150	66	22	34	83	29
28	23	47	134	347	385	426	220	61	21	179	195	24
29	22	48	111	286	------	494	300	61	21	398	264	21
30	24	49	98	248	------	702	260	71	20	241	140	22
31	34	------	91	291	------	727	------	99	------	139	75	------
TOTAL	529	2,477	2,973	11,509	21,250	20,390	11,134	5,339	1,449	3,004	2,091	965
MEAN	17.1	82.6	95.9	371	759	658	371	172	48.3	96.9	67.5	32.2
MAX	34	214	210	792	1,550	2,310	1,100	597	171	398	264	92
MIN	11	35	41	107	330	179	130	61	20	18	23	21
CFSM	.07	.36	.42	1.62	3.31	2.87	1.62	.75	.21	.42	.29	.14
IN.	.09	.40	.48	1.87	3.45	3.31	1.81	.87	.24	.49	.34	.16

CAL YR 1970 TOTAL 57,733.9 MEAN 158 MAX 982 MIN 9.9 CFSM .69 IN 9.38
WTR YR 1971 TOTAL 83,110.0 MEAN 228 MAX 2,310 MIN 11 CFSM 1.00 IN 13.50

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-10	1800	9.87	1,570	3- 5	0900	11.25	2,330

02089000 Neuse River near Goldsboro, N. C.

LOCATION.--Lat 35°20'14", long 77°59'51", Wayne County, on left bank at downstream side of bridge on Secondary Road 1915, 0.2 mile upstream from Stony Creek, 1.5 miles downstream from Seaboard Coast Line Railroad bridge, 3.2 miles south of Wayne County courthouse in Goldsboro, 4.3 miles downstream from Little River, and 135 miles upstream from mouth.

DRAINAGE AREA.--2,390 cfs mi, approximately.

PERIOD OF RECORD.--February 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is 42.95 ft above mean sea level. Prior to July 24, 1931, nonrecording 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.--41 years, 2,482 cfs (14.10 inches per year).

EXTREMES.--Current year: Maximum discharge, 12,400 cfs Mar. 10 (gage height, 20.44 ft); minimum, 126 cfs Oct. 13 (gage height, 2.35 ft).

Period of record: Maximum discharge, 30,700 cfs Sept. 23, 1945; maximum gage height, 26.72 ft Sept. 23, 1945, site and datum then in use; minimum discharge, 76 cfs Sept. 26, 1968.

Floods of June 1866 and July 1919, reached stages of about 29 and 28 ft, respectively, at site 2.3 miles upstream at present datum, from flood profiles of Corps of Engineers. Flood of Oct. 5, 1929, reached a stage of 27.3 ft at railroad bridge at present datum (discharge, 38,600 cfs).

REMARKS.--Records good. Diversions for municipal water supply for cities of Durham and Butner (see sta 02087000). Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 822: Drainage area. WSP 1333: 1931, 1935.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	525	493	591	1,130	2,820	4,750	4,930	3,070	2,580	394	1,370	1,520
2	616	1,030	702	1,110	3,130	4,230	5,190	3,040	3,000	519	1,140	1,000
3	361	1,460	619	1,190	3,320	5,560	5,360	2,630	3,170	842	914	641
4	298	1,330	563	1,350	3,250	7,790	5,080	2,130	3,350	606	814	557
5	298	1,100	613	1,490	3,300	8,410	3,930	1,850	2,880	560	763	435
6	160	895	612	1,730	3,740	9,400	4,450	1,600	1,490	439	588	338
7	153	753	593	2,770	4,660	10,400	5,280	1,360	1,020	616	850	296
8	182	620	573	3,500	5,560	11,400	6,020	1,240	846	749	1,090	376
9	212	592	562	4,000	6,480	12,200	6,580	1,180	782	854	926	474
10	262	606	539	4,400	7,200	12,300	6,880	1,100	711	918	606	423
11	160	620	509	4,900	7,870	11,800	6,930	1,110	525	854	529	359
12	185	810	523	5,420	8,630	10,700	6,850	999	630	1,030	483	376
13	143	1,520	574	5,480	9,510	8,570	6,640	1,120	753	1,190	423	407
14	190	1,810	512	5,130	10,300	6,260	5,700	1,220	634	942	350	439
15	156	1,880	488	4,560	10,700	4,080	3,930	2,160	634	627	347	1,620
16	146	2,060	640	3,870	10,600	3,500	2,700	2,760	651	532	445	2,310
17	138	2,250	962	3,230	10,300	3,410	2,350	3,020	623	442	543	2,590
18	187	1,770	1,150	2,750	9,770	3,530	2,060	3,550	623	400	602	2,370
19	361	1,810	1,710	2,470	8,970	3,560	1,840	3,910	641	314	609	1,090
20	271	1,350	1,770	2,200	7,570	3,280	1,690	4,110	683	362	806	651
21	316	1,110	1,600	1,980	5,990	2,810	1,560	4,280	634	445	874	451
22	382	1,010	1,390	1,800	4,290	2,520	1,600	4,240	578	455	763	496
23	416	912	1,400	1,690	4,630	2,350	1,630	3,620	606	690	676	464
24	539	808	1,540	1,900	5,540	2,230	1,620	1,900	571	752	496	557
25	556	765	1,790	2,540	6,440	2,040	1,670	1,370	588	602	648	539
26	429	736	2,050	3,130	7,040	2,080	1,620	1,180	585	458	858	529
27	475	701	2,120	3,560	7,070	2,470	1,530	1,030	634	388	958	416
28	464	696	1,890	3,670	6,070	2,940	1,700	902	585	506	822	376
29	367	689	1,700	3,370	------	3,300	2,030	874	477	602	954	352
30	271	605	1,360	2,880	------	3,900	2,670	1,070	407	1,350	1,040	567
31	528	------	1,210	2,750	------	4,510	------	1,910	------	1,480	1,430	------
TOTAL	9,747	32,791	32,855	91,950	184,750	176,280	112,020	65,535	31,891	20,918	23,717	23,029
MEAN	314	1,093	1,060	2,966	6,598	5,686	3,734	2,114	1,063	675	765	768
MAX	616	2,250	2,120	5,480	10,700	12,300	6,930	4,280	3,350	1,480	1,430	2,590
MIN	138	493	488	1,110	2,820	2,040	1,530	874	407	314	347	296
CFSM	.13	.46	.44	1.24	2.76	2.38	1.56	.88	.44	.28	.32	.32
IN.	.15	.51	.51	1.43	2.88	2.74	1.74	1.02	.50	.33	.37	.36

CAL YR 1970 TOTAL 588,176 MEAN 1,611 MAX 7,740 MIN 126 CFSM .67 IN 9.15
WTR YR 1971 TOTAL 805,483 MEAN 2,207 MAX 12,300 MIN 138 CFSM .92 IN 12.54

02089500 Neuse River at Kinston, N. C.

LOCATION.--Lat 35°15'29", long 77°35'09", Lenoir County, on left bank at Kinston, 600 ft downstream from bridge on State Highway 11, and 90 miles upstream from mouth.

DRAINAGE AREA.--2,690 sq mi, approximately.

PERIOD OF RECORD.--February 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is 10.90 ft above mean sea level. Prior to Nov. 25, 1934, nonrecording gage at highway bridge 1 mile downstream at datum 0.80 ft lower.

AVERAGE DISCHARGE.--41 years, 2,846 cfs (14.37 inches per year).

EXTREMES.--Current year: Maximum discharge, 13,000 cfs Mar. 13 (gage height, 17.63 ft); minimum, 253 cfs Oct. 14 (gage height, 2.41 ft).

Period of record: Maximum discharge, 26,000 cfs Oct. 13, 1964; maximum gage height, 22.86 ft Oct. 13, 1964, minimum discharge, 124 cfs Sept. 26, 1932 (gage height, 1.29 ft, site and datum then in use).

Flood in July 1919 reached a stage of 25.0 ft, present site and datum (discharge, about 39,000 cfs), from information by North Carolina State Highway Commission. Flood in October 1924 reached a stage of 24.7 ft, present site and datum (discharge, 36,000 cfs), from information by North Carolina State Highway Commission. Flood of Sept. 25-26, 1928, reached a stage of 24.2 ft, present site and datum (discharge, 34,000 cfs).

REMARKS.--Records good. Diversions for municipal water supply for cities of Durham and Butner (see Sta 02087000).

REVISIONS (WATER YEARS).--WSP 822: Drainage area. WSP 1333: 1931-32.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	548	759	811	1,550	4,140	7,460	4,320	2,660	1,760	580	1,550	1,480
2	615	875	751	1,450	4,050	7,390	4,770	3,000	2,280	561	1,580	1,670
3	716	1,050	826	1,380	3,970	7,370	5,200	3,230	2,700	675	1,410	1,370
4	555	1,480	821	1,410	4,050	8,220	5,560	3,190	2,940	972	1,170	993
5	433	1,540	738	1,520	4,160	9,170	5,770	2,830	3,110	821	987	807
6	415	1,390	752	1,640	4,270	9,300	5,980	2,350	3,180	722	921	715
7	342	1,190	768	1,830	4,430	9,510	5,950	2,000	2,320	680	784	603
8	271	1,020	751	2,620	4,740	10,000	6,110	1,730	1,360	897	828	553
9	280	864	738	3,080	5,310	10,700	6,390	1,540	1,060	1,030	1,080	570
10	295	777	723	3,610	5,950	11,500	6,670	1,440	946	999	1,050	654
11	349	852	704	4,110	6,480	12,400	6,940	1,350	872	1,110	830	672
12	289	1,000	676	4,560	7,000	12,900	7,130	1,310	732	1,080	670	703
13	286	1,140	655	5,000	7,830	13,000	7,250	1,300	764	1,140	625	939
14	265	1,520	687	5,380	8,670	12,500	7,260	1,460	856	1,260	574	926
15	280	1,880	682	5,820	9,350	11,300	7,140	1,560	804	1,160	511	728
16	285	1,990	652	5,990	10,100	9,070	6,790	2,210	753	855	535	1,340
17	286	2,100	878	5,800	10,700	7,010	5,530	2,750	773	708	718	2,030
18	271	2,250	1,240	5,230	11,000	5,530	4,160	3,070	763	627	995	2,420
19	262	2,090	1,360	4,490	11,100	4,930	3,160	3,330	757	552	1,090	2,480
20	373	1,950	1,670	3,790	10,800	4,520	2,660	3,620	756	506	954	1,660
21	433	1,720	1,880	3,210	10,200	4,280	2,260	4,100	779	524	968	1,060
22	471	1,410	1,830	2,760	9,380	3,940	2,060	4,430	766	588	1,060	883
23	583	1,260	1,690	2,460	8,450	3,480	1,990	4,450	844	596	997	697
24	653	1,160	1,710	2,310	7,460	3,090	2,020	4,370	975	690	920	648
25	643	1,060	1,800	2,580	6,860	2,850	2,010	3,520	826	825	773	634
26	739	997	1,910	3,040	6,670	2,710	1,990	2,110	758	768	779	658
27	646	952	2,100	3,420	6,860	2,760	1,970	1,520	747	722	1,030	641
28	594	919	2,230	3,780	7,200	2,980	1,980	1,310	762	688	1,330	578
29	622	887	2,160	4,040	------	3,240	2,220	1,410	729	699	1,360	504
30	562	871	1,940	4,150	------	3,560	2,390	1,270	649	720	1,300	655
31	534	------	1,700	4,220	------	3,920	------	1,270	------	1,250	1,300	------
TOTAL	13,861	38,953	37,833	106,230	201,180	220,590	135,630	75,690	37,321	25,005	30,679	30,276
MEAN	447	1,298	1,220	3,427	7,185	7,116	4,521	2,442	1,244	807	990	1,009
MAX	716	2,250	2,230	5,990	11,100	13,000	7,260	4,450	3,180	1,260	1,580	2,480
MIN	262	759	652	1,380	3,970	2,710	1,970	1,270	649	506	511	504
CFSM	.17	.48	.45	1.27	2.67	2.65	1.68	.91	.46	.30	.37	.38
IN.	.19	.54	.52	1.47	2.78	3.05	1.88	1.05	.52	.35	.42	.42

CAL YR 1970 TOTAL 709,429 MEAN 1,944 MAX 7,610 MIN 229 CFSM .72 IN 9.81
WTR YR 1971 TOTAL 953,248 MEAN 2,612 MAX 13,000 MIN 262 CFSM .97 IN 13.18

02090380 Contentnea Creek near Lucama, N. C.

LOCATION.--Lat 35°41'29", long 78°06'29", Wilson County, on right bank 250 ft upstream from bridge on State Highway 581, 1.0 mile upstream from Buckhorn Branch, and 6.5 miles northwest of Lucama.

DRAINAGE AREA.--156 sq mi.

PERIOD OF RECORD.--September 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 117.43 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--7 years, 141 cfs (12.27 inches per year).

EXTREMS.--Current year: Maximum discharge, 1,800 cfs Mar. 5 (gage height, 11.75 ft); minimum, 1.2 cfs Oct. 16, 17 (gage height, 1.54 ft).
Period of record: Maximum discharge, 5,860 cfs Oct. 6, 1964 (gage height, 16.28 ft); minimum, 0.40 cfs Oct. 7, 1968.

REMARKS.--Records excellent. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	33	23	59	429	209	444	138	71	11	26	16
2	5.0	49	23	70	504	251	284	106	58	13	23	13
3	4.4	45	23	66	334	536	236	93	45	14	18	11
4	4.0	34	23	59	213	1,270	262	80	37	12	15	10
5	3.6	26	23	100	319	1,770	237	72	33	9.2	16	9.5
6	3.3	22	23	452	503	1,460	388	65	29	9.6	28	9.0
7	3.1	19	23	898	695	860	683	60	26	26	30	8.8
8	2.9	17	23	749	872	483	838	78	23	18	23	7.6
9	2.8	16	22	545	1,200	321	723	103	36	13	19	7.0
10	2.8	15	22	294	1,230	236	518	132	39	244	14	6.5
11	2.8	33	22	288	914	214	309	119	26	46	11	6.6
12	2.8	91	23	302	590	207	219	78	17	33	9.2	27
13	2.8	101	24	269	391	187	183	116	18	22	7.8	40
14	2.7	79	24	198	380	168	160	298	17	17	6.8	33
15	2.2	59	24	168	418	164	143	320	19	14	6.0	26
16	1.8	45	28	172	385	403	131	358	19	13	5.5	20
17	2.2	37	74	155	298	557	123	467	18	11	7.4	16
18	3.6	31	110	130	227	331	116	475	18	9.3	14	13
19	4.1	29	88	116	191	200	108	290	17	8.9	23	12
20	4.7	28	70	96	171	182	101	122	16	9.0	13	11
21	5.5	27	61	89	163	166	97	89	14	58	12	9.8
22	7.2	26	63	89	174	143	104	76	12	66	11	9.0
23	11	26	79	110	380	131	125	64	11	71	36	8.5
24	10	25	105	149	425	123	126	57	12	49	44	8.5
25	8.9	24	109	211	370	110	128	53	12	27	43	10
26	12	30	89	250	263	122	108	50	11	19	27	10
27	16	29	74	237	199	197	90	46	10	18	33	9.3
28	14	25	64	179	207	277	128	41	8.7	28	83	8.1
29	12	23	56	123	------	350	249	49	8.2	42	67	7.0
30	12	23	53	106	------	468	219	63	11	42	38	7.6
31	17	------	52	245	------	525	------	75	------	28	27	------
TOTAL	192.8	1,067	1,520	6,974	12,445	12,621	7,580	4,233	691.9	1,001.0	736.7	390.8
MEAN	6.22	35.6	49.0	225	444	407	253	137	23.1	32.3	23.8	13.0
MAX	17	101	110	898	1,230	1,770	838	475	71	244	83	40
MIN	1.8	15	22	59	163	110	90	41	8.2	8.9	5.5	6.5
CFSM	.04	.23	.31	1.44	2.85	2.61	1.62	.88	.15	.21	.15	.08
IN.	.05	.25	.36	1.66	2.97	3.01	1.81	1.01	.16	.24	.18	.09

CAL YR 1970 TOTAL 35,844.1 MEAN 98.2 MAX 862 MIN 1.8 CFSM .63 IN 8.55
WTR YR 1971 TOTAL 49,453.2 MEAN 135 MAX 1,770 MIN 1.8 CFSM .87 IN 11.79

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-10	0100	10.21	1,300	3- 5	1130	11.75	1,800

02090625 Turner Swamp near Eureka, N. C.

LOCATION.--Lat 35°34'10", long 77°52'40", Wayne County, on right bank at downstream side of bridge on Secondary Road 1505, 2.0 miles north of Eureka, and 2.5 miles upstream from mouth.

DRAINAGE AREA.--2.2 sq mi, approximately.

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

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 90 ft (by barometer).

EXTREMES.--Current year: Maximum discharge, 90 cfs Mar. 3 (gage height, 3.85 ft); minimum, 0.38 cfs Oct. 7 (gage height, 0.91 ft). Period of record: Maximum discharge, 114 cfs June 18, 1969 (gage height, 4.12 ft) from rating curve extended above 56 cfs; minimum, 0.29 cfs Oct. 1, 2, 3, 1968 (gage height, 0.87 ft).

REMARKS.--Records good. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.52	1.9	.86	1.3	2.1	5.0	4.1	1.8	.94	.54	6.8	.57
2	.52	.86	.86	1.1	1.7	11	3.7	1.6	.86	.60	3.4	.56
3	.49	.73	.86	1.1	1.6	51	7.3	2.3	.83	.62	1.4	.54
4	.45	.64	.83	1.1	4.0	32	4.7	1.5	.80	.54	1.0	.52
5	.47	.62	.80	1.8	7.1	11	3.8	1.4	.76	.52	.90	.49
6	.47	.60	.83	1.4	5.2	7.6	30	1.3	.73	.98	.86	.49
7	.47	.60	.80	1.1	6.1	6.4	15	1.2	.70	2.0	.73	.49
8	.45	.60	.83	1.2	9.7	5.4	8.4	1.2	.70	.98	.67	.52
9	.45	.60	.83	2.6	6.4	4.6	6.1	1.1	.70	.64	.62	.52
10	.47	.62	.86	3.3	4.1	4.3	5.2	1.1	.70	.62	.60	.54
11	.47	3.0	.86	3.4	3.3	4.1	4.4	1.0	.67	2.2	.57	.80
12	.47	1.6	.86	2.4	3.0	3.7	4.0	.98	.70	8.6	.57	2.2
13	.47	1.1	.86	1.9	8.6	3.4	3.7	4.7	.83	1.2	.57	.90
14	.45	1.0	.83	1.7	6.1	3.2	3.2	1.7	.73	.76	.54	.62
15	.47	.95	.83	2.6	4.1	4.0	2.9	1.9	.76	.62	.54	.54
16	1.1	.94	3.8	2.2	3.4	4.7	2.8	5.0	.94	.60	.67	.54
17	.54	.92	2.7	1.8	2.9	3.4	2.6	2.1	.91	.64	2.0	.54
18	.49	.90	1.3	1.6	2.6	2.9	2.4	1.4	.80	.57	1.4	.57
19	.49	.90	1.1	1.4	2.5	2.9	2.2	1.2	.83	.83	.80	.54
20	.49	.86	1.1	1.4	2.5	2.7	2.2	1.1	.80	.80	.64	.52
21	.86	.86	1.1	1.3	2.4	2.4	2.1	1.1	.70	1.4	.57	.54
22	.73	.86	1.1	1.5	6.1	2.4	2.2	1.1	.67	.80	.57	.54
23	1.7	.86	2.2	2.1	24	2.2	2.4	.98	.80	.64	.73	.52
24	.70	.83	1.6	3.0	7.1	2.0	2.4	.98	.90	.60	.60	.49
25	.62	.83	1.2	4.3	5.2	2.0	1.9	.98	.70	7.3	.57	.49
26	.60	.86	1.1	3.1	4.3	5.7	1.7	.94	.62	11	.60	3.5
27	.54	.86	1.1	2.3	5.9	6.4	1.6	.86	.62	2.0	1.6	11
28	.52	.86	1.0	1.9	4.4	5.5	5.4	1.3	.57	12	.94	6.0
29	.54	.86	1.0	1.8	------	8.1	2.9	1.6	.57	5.7	.64	11
30	.86	.86	1.0	1.8	------	7.8	2.0	1.2	.57	1.8	.57	20
31	1.8	------	1.2	2.7	------	5.2	------	1.1	------	1.8	.57	------
TOTAL	19.67	28.48	36.20	62.2	146.4	223.0	143.3	47.72	22.41	69.90	33.24	67.09
MEAN	.63	.95	1.17	2.01	5.23	7.19	4.78	1.54	.75	2.25	1.07	2.24
MAX	1.8	3.0	3.8	4.3	24	51	30	5.0	.94	12	6.8	20
MIN	.45	.60	.80	1.1	1.6	2.0	1.6	.86	.57	.52	.54	.49
CFSM	.29	.43	.53	.91	2.38	3.27	2.17	.70	.34	1.02	.49	1.02
IN.	.33	.48	.61	1.05	2.48	3.77	2.42	.81	.38	1.18	.56	1.13

CAL YR 1970 TOTAL 562.71 MEAN 1.54 MAX 21 MIN .40 CFSM .70 IN 9.51
WTR YR 1971 TOTAL 899.61 MEAN 2.46 MAX 51 MIN .45 CFSM 1.12 IN 15.21

PEAK DISCHARGE (BASE, 25 CFS, REVISED)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-23	0225	3.22	47	7-25	2315	3.29	51
3- 3	2035	3.85	90	7-28	1800	3.26	49
4- 6	1215	3.35	54				

02091000 Nahunta Swamp near Shine, N. C.

LOCATION.--Lat 35°29'20", long 77°48'22", Greene County, on right bank 10 ft downstream from bridge on Secondary Road 1200, 2 miles upstream from Appletree Swamp, 3.5 miles north of Shine, and 8 miles northwest of Snow Hill.

DRAINAGE AREA.--77.6 sq mi.

PERIOD OF RECORD.--April 1954 to current year. Monthly discharges only for some periods, published in WSP 1723.

GAGE.--Water-stage recorder. Datum of gage is 50.74 ft above mean sea level. Prior to Apr. 1, 1955, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--17 years, 85.8 cfs (15.02 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,540 cfs Mar. 4 (gage height, 10.36 ft); minimum, 8.3 cfs July 1; minimum gage height, 1.61 ft Oct. 8, 9.
Period of record: Maximum discharge, 5,470 cfs Oct. 6, 1964 (gage height, 14.14 ft); minimum, 1.0 cfs Oct. 7, 8, 1954 (gage height, 0.80 ft).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	30	29	60	120	149	170	64	23	8.7	48	18
2	18	40	26	55	100	233	143	55	19	8.7	45	19
3	17	45	25	50	90	610	198	69	17	25	77	16
4	15	35	22	48	140	1,360	173	52	15	20	53	16
5	14	30	20	46	400	1,250	140	46	14	17	42	15
6	13	26	19	50	250	860	510	41	13	15	39	14
7	12	23	18	44	350	482	798	36	12	12	32	13
8	12	21	17	38	450	239	622	35	11	110	28	15
9	12	20	16	250	401	189	347	32	10	60	24	15
10	12	19	16	220	279	165	224	29	9.9	40	20	15
11	13	60	16	160	192	154	177	26	9.5	20	18	70
12	12	160	15	110	149	140	152	24	9.4	35	17	60
13	13	120	15	80	249	130	136	155	26	30	17	60
14	13	90	15	60	275	123	121	90	20	25	15	40
15	13	70	15	110	193	153	104	51	15	22	15	30
16	29	60	14	120	149	287	97	146	15	20	21	20
17	28	45	130	110	124	182	89	110	35	18	72	18
18	18	40	120	90	111	140	81	64	35	17	120	16
19	16	38	100	80	103	126	73	45	25	16	56	15
20	16	38	80	75	98	136	68	35	18	38	35	14
21	26	43	60	70	93	116	65	32	15	89	26	14
22	40	35	90	65	98	105	75	32	14	84	22	13
23	70	36	160	110	534	100	67	27	15	37	22	13
24	60	34	150	120	500	89	85	23	40	30	22	13
25	40	32	130	200	397	82	68	22	18	45	18	13
26	30	32	120	150	279	146	56	21	15	221	17	13
27	25	36	100	130	196	234	49	18	15	190	47	12
28	16	36	80	110	171	211	113	21	10	130	56	12
29	12	33	60	100	------	215	131	50	9.0	70	31	12
30	16	31	60	95	------	290	82	37	8.9	55	23	18
31	20	------	55	150	------	222	------	30	------	52	20	------
TOTAL	672	1,358	1,793	3,156	6,491	8,918	5,214	1,518	511.7	1,560.4	1,098	632
MEAN	21.7	45.3	57.8	102	232	288	174	49.0	17.1	50.3	35.4	21.1
MAX	70	160	160	250	534	1,360	798	155	40	221	120	70
MIN	12	19	14	38	90	82	49	18	8.9	8.7	15	12
CFSM	.28	.58	.74	1.31	2.99	3.71	2.24	.63	.22	.65	.46	.27
IN.	.32	.65	.86	1.51	3.11	4.28	2.50	.73	.25	.75	.53	.30

CAL YR 1970 TOTAL 22,010.3 MEAN 60.3 MAX 500 MIN 7.7 CFSM .78 IN 10.55
WTR YR 1971 TOTAL 32,922.1 MEAN 90.2 MAX 1,360 MIN 8.7 CFSM 1.16 IN 15.78

PEAK DISCHARGE (BASE, 580 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-23	1130	7.90	605	4- 7	1200	8.55	808
3- 4	1900	10.36	1,540				

NOTE.--No gage-height record Nov. 28 to Jan. 5, Jan. 8 to Feb. 8.

02091500 Contentnea Creek at Hookerton, N. C.

LOCATION.--Lat 35°25'38", long 77°35'09", Greene County, on right bank at Hookerton, 0.3 mile upstream from bridge on State Highway 123, and 2.5 miles upstream from Wheat Swamp Creek.

DRAINAGE AREA.--729 sq mi.

PERIOD OF RECORD.--November 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 14.85 ft (revised) above mean sea level (Corps of Engineers bench mark). Prior to Nov. 26, 1934, nonrecording gage at site 200 ft downstream at same datum.

AVERAGE DISCHARGE.--42 years (1929-71), 763 cfs (14.21 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,750 cfs Mar. 8 (gage height, 15.04 ft); minimum, 53 cfs Oct. 15, 16 (gage height, 2.82 ft).

Period of record: Maximum discharge, 17,200 cfs Oct. 7, 1964; maximum gage height, 22.11 ft Oct. 8, 1964; minimum discharge, 15 cfs Oct. 28, 1933 (gage height, 1.22 ft).

Flood of September 1928 reached a stage of 23.3 ft, from floodmark; high water of autumn 1924 was about 0.1 ft lower, from information by local resident.

REMARKS.--Records good. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1333: 1903-35. WSP 1383: Drainage area. WSP 1503: 1951. WSP 1723: 1932.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152	234	174	338	1,040	2,660	1,370	695	304	90	452	250
2	120	300	173	334	1,020	2,550	1,460	700	292	93	502	210
3	98	302	172	329	965	2,730	1,560	712	282	107	528	165
4	83	278	171	323	947	3,580	1,640	720	268	100	490	142
5	73	244	168	324	1,020	3,720	1,680	685	248	90	400	124
6	67	208	164	335	1,140	4,060	1,790	570	226	89	301	111
7	63	180	160	380	1,260	5,030	1,970	477	203	153	251	101
8	60	163	159	465	1,410	5,680	2,160	431	181	211	207	94
9	58	151	158	585	1,590	5,390	2,380	384	162	243	176	91
10	56	144	156	752	1,790	4,580	2,600	356	149	239	154	90
11	56	173	154	837	1,960	3,740	2,750	345	136	295	137	92
12	56	245	154	947	2,220	3,190	2,780	361	128	446	125	112
13	56	324	154	1,060	2,460	2,760	2,670	390	142	634	115	197
14	56	357	152	1,160	2,810	2,350	2,470	510	150	667	107	278
15	54	352	151	1,260	2,990	1,980	2,200	546	153	594	100	329
16	75	336	159	1,310	2,970	1,680	1,910	584	151	450	98	341
17	79	326	284	1,290	2,810	1,520	1,600	649	145	337	119	303
18	82	310	405	1,230	2,580	1,450	1,340	696	147	269	352	249
19	75	290	448	1,130	2,340	1,340	1,070	739	161	210	328	200
20	67	269	434	1,030	2,100	1,270	899	802	154	176	295	166
21	72	250	417	919	1,870	1,240	759	873	139	182	235	143
22	140	233	408	813	1,670	1,260	698	927	130	304	183	124
23	318	221	417	712	1,860	1,250	642	916	130	373	150	112
24	296	210	478	661	1,920	1,190	615	742	123	429	131	102
25	231	202	491	724	1,940	1,080	603	513	123	438	121	94
26	193	193	491	845	2,060	990	588	370	123	440	126	87
27	168	186	478	909	2,380	972	568	320	120	527	155	81
28	144	182	456	933	2,640	1,010	576	284	114	470	250	76
29	126	178	423	937	------	1,070	642	300	107	405	340	72
30	122	175	386	941	------	1,160	682	325	97	477	400	86
31	151	------	353	985	------	1,260	------	317	------	499	350	------
TOTAL	3,447	7,216	8,943	24,798	53,762	73,742	44,672	17,239	4,988	10,037	7,678	4,622
MEAN	111	241	288	800	1,920	2,379	1,489	556	166	324	248	154
MAX	318	357	491	1,310	2,990	5,680	2,780	927	304	667	528	341
MIN	54	144	151	323	947	972	568	284	97	89	98	72
CFSM	.15	.33	.40	1.10	2.63	3.26	2.04	.76	.23	.44	.34	.21
IN.	.18	.37	.46	1.27	2.74	3.76	2.28	.88	.25	.51	.39	.24

CAL YR 1970 TOTAL 186,415 MEAN 511 MAX 2,070 MIN 54 CFSM .70 IN 9.51
WTR YR 1971 TOTAL 261,144 MEAN 715 MAX 5,680 MIN 54 CFSM .98 IN 13.33

02091700 Little Contentnea Creek near Farmville, N. C.

LOCATION.--Lat 35°32'08", long 77°30'41", Pitt County, near center of span on downstream side of bridge on U.S. Highway 264, 1.5 miles upstream from Middle Swamp, and 5.5 miles southeast of Farmville.

DRAINAGE AREA.--93.3 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements water years 1952-54, 1956. October 1956 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 30 ft (from topographic map). Oct. 1, 1956, to Aug. 19, 1958, and June 23, 1964 to Aug. 24, 1965, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--15 years, 119 cfs (17.32 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,670 cfs Mar. 4 (gage height, 15.62 ft); minimum, 2.2 cfs Oct. 15; minimum gage height, 7.10 ft June 30, July 1, 19.
Period of record: Maximum discharge, 5,170 cfs Oct. 6, 1964 (gage height, 19.65 ft, from floodmarks), from rating curve extended above 1,500 cfs; minimum daily, 0.02 cfs Oct. 2, 3, 1968.
Flood in August and September 1955 reached stages of 18.9 ft and 18.5 ft, respectively.

REMARKS.--Records good. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	50	26	63	171	299	286	93	28	2.5	32	32
2	9.3	70	25	65	171	294	233	67	21	8.7	51	23
3	7.1	65	25	63	155	596	195	60	15	20	52	17
4	5.2	60	24	58	149	1,540	188	55	11	9.4	37	13
5	4.0	46	23	59	213	1,560	179	47	9.0	4.7	23	12
6	3.4	38	22	67	314	1,260	276	38	6.9	17	15	10
7	3.2	32	21	78	345	800	532	32	5.6	102	11	8.8
8	2.9	29	20	84	389	534	577	27	4.6	53	8.4	11
9	2.7	26	14	113	433	372	574	23	4.3	19	6.5	11
10	2.6	25	18	201	429	258	514	20	3.8	12	5.3	11
11	2.9	44	18	275	423	195	378	17	3.4	7.5	4.3	15
12	2.4	138	18	297	411	163	240	14	3.2	5.7	3.5	46
13	2.4	192	19	283	397	143	168	18	8.4	5.1	2.9	108
14	2.4	185	18	240	481	128	132	36	8.7	5.0	2.9	74
15	2.3	136	18	206	485	119	103	38	6.6	5.6	4.1	46
16	2.5	96	24	226	450	180	90	55	5.7	4.8	90	30
17	2.4	70	118	248	419	255	77	74	5.4	3.6	84	21
18	2.3	58	171	234	334	234	68	72	5.9	2.9	97	17
19	2.3	52	159	201	238	178	60	52	7.0	2.7	141	20
20	2.3	46	122	161	186	148	53	35	5.3	9.0	72	17
21	5.0	42	93	128	158	129	49	25	4.5	16	35	13
22	12	40	100	109	145	109	47	20	3.8	30	21	11
23	35	37	117	108	459	94	45	17	5.3	14	16	9.9
24	80	35	173	124	686	80	46	14	18	11	13	9.0
25	75	32	202	189	615	70	45	12	10	7.3	10	7.2
26	50	30	174	273	569	78	41	10	5.4	6.6	9.1	6.3
27	40	29	133	297	498	136	36	8.7	5.0	8.1	54	5.7
28	30	28	101	270	385	195	49	8.2	3.8	13	237	5.1
29	20	27	80	214	------	234	97	20	2.8	114	184	4.7
30	25	26	69	168	------	278	109	31	2.4	62	99	22
31	35	------	62	157	------	302	------	30	------	40	51	------
TOTAL	483.6	1,784	2,207	5,259	10,108	10,961	5,487	1,068.9	229.8	622.2	1,472.0	636.7
MEAN	15.6	59.5	71.2	170	361	354	183	34.5	7.66	20.1	47.5	21.2
MAX	80	192	202	297	686	1,560	577	93	28	114	237	108
MIN	2.3	25	14	58	145	70	36	8.2	2.4	2.5	2.9	4.7
CFSM	.17	.64	.76	1.82	3.87	3.79	1.96	.37	.08	.22	.51	.23
IN.	.19	.71	.88	2.10	4.03	4.37	2.19	.43	.09	.25	.59	.25

CAL YR 1970 TOTAL 34,649.6 MEAN 94.9 MAX 1,110 MIN 1.4 CFSM 1.02 IN 13.82
WTR YR 1971 TOTAL 40,319.2 MEAN 110 MAX 1,560 MIN 2.3 CFSM 1.18 IN 16.08

PEAK DISCHARGE (BASE, 660 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-24	0530	13.29	707	3- 4	1500	15.62	1,670

02091960 Creeping Swamp near Calico, N. C.

LOCATION.--Lat 35°25'42", long 77°11'12", Beaufort County, on left bank at downstream side of bridge on State Highway 102, 4.2 miles northeast of Calico, and 4.5 miles upstream from mouth.

DRAINAGE AREA.--9.8 sq mi, approximately.

PERIOD OF RECORD.--March to September 1971.

GAGE.--Water-stage recorder. Datum of gage is 27.98 ft above mean sea level (Soil Conservation Service bench mark).

EXTREMES.--Maximum discharge during period, 436 cfs Sept. 30, stage rising, peak occured Oct. 1, 1971, maximum peak discharge, 420 cfs Mar. 4 (gage height, 7.75 ft); no flow May 12, June 8-17, June 21 to July 1.

REMARKS.--Records good above 15 cfs and poor below.

DISCHARGE, IN CUBIC FEET PER SECOND, MARCH TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						17	5.5	.15	.15	0	38	35
2						23	4.0	.14	.12	7.4	59	21
3						123	3.2	.13	.09	105	45	12
4						364	1.9	.11	.07	74	25	6.3
5						184	1.2	.09	.05	36	19	2.8
6						100	19	.07	.03	17	10	.92
7						69	55	.06	.01	13	4.3	.28
8						51	51	.05	0	26	1.3	.20
9						37	37	.03	0	25	.25	.20
10						28	25	.02	0	18	.15	.21
11						22	18	.01	0	14	.11	.41
12						17	12	0	0	5.9	.08	4.3
13						14	8.5	.25	0	2.3	.06	23
14						11	5.5	.28	0	.61	.05	30
15						8.6	3.1	2.7	0	.23	.04	22
16						7.2	1.8	17	0	.16	.07	15
17						5.2	.89	29	0	.12	.08	8.8
18						3.4	.42	24	.02	.08	.17	5.1
19						2.5	.24	15	.04	.06	.13	3.1
20						2.6	.19	8.0	.01	.06	.13	1.3
21						1.7	.16	6.1	0	.11	.13	.55
22						.92	.15	8.1	0	1.9	.11	.27
23						.54	.13	9.5	0	5.4	.09	.21
24						.27	.13	4.9	0	2.5	.07	.17
25						.20	.10	2.0	0	.50	.05	.14
26						.76	.09	.50	0	.24	.04	.11
27						2.0	.08	.18	0	.24	5.7	.08
28						2.6	.15	.12	0	.76	99	.06
29					------	4.2	.17	.22	0	7.8	179	.05
30					------	6.5	.15	.19	0	28	110	65
31		------			------	6.8	------	.18	------	28	60	------
TOTAL						1,115.99	254.75	129.08	.59	420.37	657.11	258.56
MEAN						36.0	8.49	4.16	.020	13.6	21.2	8.62
MAX						364	55	29	.15	105	179	65
MIN						.20	.08	0	0	0	.04	.05
CFSM						3.67	.87	.42	.002	1.39	2.16	.88
IN.						4.24	.97	.49	.002	1.60	2.49	.98

PEAK DISCHARGE (BASE, 50 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 4	0630	7.75	420	8- 2	1215	6.21	63
4- 7	1000	6.17	59	8-29	0545	6.98	195
7- 3	0915	6.66	128				

02091970 Creeping Swamp near Vanceboro, N. C.

LOCATION.--Lat 35°23'30", long 77°13'46", Craven County, on left bank at downstream side of bridge on State Highway 43, 1.0 mile upstream from mouth, and 7.9 miles northwest of Vanceboro.

DRAINAGE AREA.--27 sq mi, approximately.

PERIOD OF RECORD.--March to September 1971.

GAGE.--Water-stage recorder. Datum of gage is 16.60 ft above mean sea level (Soil Conservation Service bench mark).

EXTREMES.--Maximum discharge during period, 835 cfs Mar. 4 (gage height, 6.47 ft); no flow June 26 to July 1.

REMARKS.--Records good above 10 cfs and poor below.

DISCHARGE, IN CUBIC FEET PER SECOND, MARCH TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						35	18	7.4	5.0	0	57	143
2						42	17	6.4	4.0	3.3	61	79
3						165	16	5.6	3.0	19	66	47
4						698	14	4.9	2.3	69	73	29
5						698	13	4.1	1.8	111	50	21
6						397	33	3.5	1.3	69	31	16
7						240	80	2.7	1.0	47	22	12
8						157	101	2.0	.80	58	16	9.3
9						107	97	1.6	.60	49	12	8.3
10						77	76	1.2	.45	43	8.0	8.8
11						59	54	.82	.35	37	5.3	12
12						47	38	.54	.25	25	3.4	31
13						37	28	6.4	.20	20	2.3	32
14						30	22	23	.15	15	1.7	38
15						25	18	39	.11	11	1.3	46
16						22	15	66	.09	7.6	1.5	41
17						20	14	93	.08	5.2	2.4	29
18						17	12	88	.10	3.5	8.6	21
19						15	10	68	.12	2.4	9.9	17
20						15	9.2	47	.05	1.9	9.2	14
21						13	8.1	34	.02	2.3	7.5	12
22						12	7.6	32	.01	3.7	5.4	9.5
23						11	6.9	31	.01	6.5	4.0	7.8
24						10	6.4	25	.02	8.1	2.9	6.4
25						9.0	5.6	21	.01	9.3	2.2	5.2
26						10	4.7	17	0	9.1	1.7	4.1
27						13	4.0	13	0	7.7	43	3.3
28						15	6.1	11	0	7.3	167	2.6
29					------	15	8.5	12	0	9.9	253	2.1
30					------	18	8.1	10	0	15	364	93
31		------			------	19	------	7.5	------	20	247	------
TOTAL						3,048.0	751.2	684.66	21.82	695.8	1,539.3	800.4
MEAN						98.3	25.0	22.1	.73	22.4	49.7	26.7
MAX						698	101	93	5.0	111	364	143
MIN						9.0	4.0	.54	0	0	1.3	2.1
CFSM						3.64	.93	.82	.03	.83	1.84	.99
IN.						4.20	1.03	.94	.03	.96	2.12	1.10

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 4	1900	6.47	835	7- 5	0100	3.93	124
4- 8	1545	3.94	104	8-30	0515	5.17	391

02092000 Swift Creek near Vanceboro, N. C.

LOCATION.--Lat 35°20'42", long 77°11'45", Craven County, on left bank at downstream side of bridge on Secondary Road 1478, 2.5 miles upstream from bridge on State Highway 118, 2.5 miles downstream from Clayroot Swamp, and 3.5 miles northwest of Vanceboro.

DRAINAGE AREA.--182 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 2.07 ft below mean sea level (Corps of Engineers bench mark). Prior to Jan. 17, 1951, nonrecording gage and Jan. 17, 1951, to Sept. 30, 1964, water-stage recorder at same site and datum 6.00 ft higher.

AVERAGE DISCHARGE.--21 years, 198 cfs (14.77 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,360 cfs Mar. 6 (gage height, 14.82 ft); minimum, 11 cfs Oct. 9-16; minimum gage height, 4.08 ft Oct. 15.
Period of record: Maximum discharge, 6,060 cfs Sept. 22, 1955 (gage height, 1967 ft, present datum); no flow Aug. 8-29, Oct. 4 to Nov. 9, 1954.
Flood in 1909 reached a stage of 22 ft, present datum, and flood in 1928 reached a stage of 17.7 ft, present datum, from information by local resident.

REMARKS.--Records good. During 1964, the channel was canalized from a point 12.2 miles upstream to a point 2.5 miles downstream from the gage.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	28	18	62	422	460	215	99	115	19	280	792
2	24	43	18	60	425	406	190	86	97	23	297	588
3	20	46	17	56	379	658	171	75	80	206	283	375
4	16	44	17	54	343	1,680	163	68	65	276	266	236
5	14	36	16	56	425	2,140	151	62	55	315	219	176
6	13	31	16	62	476	2,340	228	56	47	259	164	136
7	12	28	15	63	469	2,140	510	50	41	238	126	109
8	12	25	15	60	512	1,600	584	45	35	364	99	93
9	12	24	15	85	620	1,100	582	42	32	409	76	83
10	11	23	15	206	620	735	505	38	36	376	58	80
11	11	24	15	242	580	505	392	36	32	294	45	96
12	11	30	15	237	503	382	308	33	27	201	36	205
13	11	43	15	212	512	316	249	121	26	151	31	426
14	11	43	15	190	680	267	202	291	33	121	27	478
15	11	42	15	192	710	238	175	280	33	100	24	424
16	12	38	16	277	680	222	153	318	29	77	32	308
17	20	34	36	291	616	206	139	360	27	56	103	219
18	20	32	64	264	507	185	127	322	25	49	139	162
19	17	29	59	228	398	171	116	254	25	40	190	144
20	14	28	49	194	325	160	106	192	27	36	172	135
21	15	26	45	169	276	151	99	207	26	47	127	118
22	20	24	43	154	246	144	93	334	25	124	94	100
23	26	24	52	149	337	135	86	290	26	114	69	85
24	40	21	97	152	483	124	84	223	45	95	54	72
25	41	20	114	233	620	116	80	171	65	75	43	62
26	34	20	102	328	705	119	72	135	48	79	36	54
27	29	19	91	337	678	164	65	109	37	83	114	47
28	29	19	80	307	580	200	72	87	32	93	588	42
29	28	18	71	258	------	200	109	97	26	138	790	37
30	25	18	65	225	------	222	115	139	22	216	919	157
31	24	------	62	294	------	237	------	130	------	211	949	------
TOTAL	615	880	1,283	5,697	14,127	17,723	6,141	4,750	1,239	4,885	6,450	6,039
MEAN	19.8	29.3	41.4	184	505	572	205	153	41.3	158	208	201
MAX	41	46	114	337	710	2,340	584	360	115	409	949	792
MIN	11	18	15	54	246	116	65	33	22	19	24	37
CFSM	.11	.16	.23	1.01	2.77	3.14	1.13	.84	.23	.87	1.14	1.10
IN.	.13	.18	.26	1.16	2.89	3.62	1.26	.97	.25	1.00	1.32	1.23

CAL YR 1970 TOTAL 51,158.6 MEAN 140 MAX 1,800 MIN 9.8 CFSM .77 IN 10.46
WTR YR 1971 TOTAL 69,829.0 MEAN 191 MAX 2,340 MIN 11 CFSM 1.05 IN 14.27

02092020 Palmetto Swamp near Vanceboro, N. C.

LOCATION.--Lat 35°20'18", long 77°10'16", Craven County, on left bank at upstream side of bridge on State Highway 43, 1.3 miles upstream from mouth, and 2.5 miles northwest of Vanceboro.

DRAINAGE AREA.--24 sq mi, approximately.

PERIOD OF RECORD.--Annual maximum, water years 1953-70 and occasional low-flow measurements water years 1956-68, 1970. March to September 1971.

GAGE.--Water-stage recorder. Datum of gage is 2.46 ft above mean sea level (Soil Conservation Service bench mark). Dec. 3, 1952 to Feb. 28, 1971, crest-stage gage 40 ft upstream from bridge at datum 14.31 ft lower.

EXTREMES.--Current year: Maximum discharge, 760 cfs Mar. 4 (gage height, 7.00 ft); minimum during period March to September, 0.30 cfs July 2 (gage height, 2.60 ft).
Period of record: Maximum discharge, 3,700 cfs Sept. 20, 1955 (gage height, 26.14 ft), site and datum then in use; no flow at times during several years.

REMARKS.--Records good above 10 cfs and fair below.

DISCHARGE, IN CUBIC FEET PER SECOND, MARCH TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						41	27	9.6	15	.34	82	62
2						53	24	7.9	12	1.4	73	43
3						232	21	7.1	8.3	21	64	31
4						685	18	5.8	5.7	53	52	25
5						379	16	5.6	5.6	39	43	21
6						187	50	5.3	5.2	23	36	16
7						122	87	5.0	4.6	28	26	14
8						89	99	4.7	4.0	85	18	13
9						68	76	4.2	3.3	77	12	14
10						54	56	3.8	2.7	54	9.3	16
11						46	43	3.3	2.2	39	7.3	18
12						40	34	2.8	1.7	26	6.1	25
13						35	28	80	1.3	23	5.2	37
14						31	23	200	1.1	18	4.7	32
15						28	19	136	.95	12	4.4	27
16						29	17	142	.82	7.6	5.0	23
17						27	15	138	.70	5.6	7.1	19
18						24	13	100	.64	5.4	23	15
19						22	11	66	.58	5.0	34	12
20						20	9.4	44	.54	7.6	35	16
21						17	8.1	72	.50	15	27	19
22						16	7.6	115	.46	19	18	15
23						14	6.6	88	.44	17	12	12
24						13	6.4	58	.43	22	9.1	9.7
25						12	5.7	39	.43	17	7.5	8.5
26						14	5.6	27	.42	13	6.7	7.4
27						22	5.5	19	.41	11	97	6.4
28						23	8.3	13	.39	11	253	5.7
29					------	25	12	14	.38	17	211	5.1
30					------	30	11	16	.36	37	139	63
31		------			------	29	------	17	------	48	92	------
TOTAL						2,427	763.2	1,449.1	81.15	757.94	1,419.4	630.8
MEAN						78.3	25.4	46.7	2.71	24.4	45.8	21.0
MAX						685	99	200	15	85	253	63
MIN						12	5.5	2.8	.36	.34	4.4	5.1
CFSM						3.26	1.06	1.95	.11	1.02	1.91	.88
IN.						3.76	1.18	2.25	.13	1.17	2.20	.98

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 4	0815	7.00	760	5-14	1400	5.35	217
4- 8	0300	4.63	105	8-28	0015	6.29	298

02092500 Trent River near Trenton, N. C.

LOCATION.--Lat 35°03'54", long 77°27'24", Jones County, on left bank 50 ft downstream from Free Bridge on Secondary Road 1129, 800 ft downstream from Little Chinquapin Branch, 1.5 miles southwest of Phillips Crossroads, and 6 miles west of Trenton.

DRAINAGE AREA.--168 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 19.15 ft above mean sea level. Prior to Mar. 21, 1951, nonrecording gage on bridge 50 ft upstream at same datum.

AVERAGE DISCHARGE.--20 years, 194 cfs (15.68 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,690 cfs Mar. 5 (gage height, 13.40 ft from floodmarks); minimum, 4.8 cfs Oct. 15, 16 (gage height, 2.47 ft).
Period of record: 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 except those for periods of no gage-height record, which are fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	39	33	56	340	352	230	267	142	110	754	630
2	11	54	31	68	380	390	219	290	106	88	1,050	550
3	9.6	61	30	65	410	660	198	297	80	319	1,130	364
4	8.9	61	28	62	440	1,400	175	277	62	492	956	247
5	8.2	58	27	60	430	1,680	155	242	51	534	724	180
6	7.2	50	26	70	415	1,550	242	206	44	450	557	136
7	8.9	45	25	68	398	1,600	442	171	37	354	428	106
8	8.2	42	24	65	421	1,400	536	134	33	325	317	92
9	6.3	38	23	90	465	1,100	776	104	29	420	192	84
10	6.3	35	22	100	497	740	764	88	29	518	132	88
11	7.0	32	22	130	520	540	647	74	27	496	95	95
12	5.3	45	21	155	509	410	522	60	26	500	73	100
13	5.0	60	21	150	500	310	399	193	25	503	58	176
14	5.0	75	20	140	567	250	292	458	24	424	50	261
15	4.9	90	20	130	685	220	210	535	26	280	44	336
16	5.6	105	20	180	808	200	165	621	25	164	58	349
17	7.4	125	19	240	786	220	153	679	23	110	150	287
18	8.0	140	75	290	668	230	140	645	20	81	700	200
19	8.9	135	115	340	548	250	112	563	18	60	1,100	163
20	9.0	120	150	360	445	234	96	455	17	50	1,300	141
21	11	100	155	350	362	215	86	358	16	46	1,350	115
22	14	90	145	289	295	192	80	298	17	45	1,200	88
23	22	75	125	235	283	169	76	268	45	43	920	69
24	33	65	110	188	303	150	74	253	237	39	620	58
25	37	55	90	200	326	133	72	228	362	39	340	51
26	35	50	80	259	346	130	68	183	382	53	200	46
27	37	45	75	300	359	156	62	136	322	98	160	41
28	40	40	65	325	356	187	77	102	273	167	340	37
29	37	37	62	350	------	204	173	112	231	290	500	34
30	34	35	60	320	------	217	232	159	167	393	630	61
31	33	------	58	310	------	228	------	168	------	500	650	------
TOTAL	485.7	2,002	1,777	5,945	12,862	15,817	7,573	8,624	2,896	7,991	16,778	5,185
MEAN	15.7	66.7	57.3	192	459	510	252	278	96.5	258	541	173
MAX	40	140	155	360	808	1,680	776	679	382	534	1,350	630
MIN	4.9	32	19	56	283	130	62	60	16	39	44	34
CFSM	.09	.40	.34	1.14	2.73	3.04	1.50	1.65	.57	1.54	3.22	1.03
IN.	.11	.44	.39	1.32	2.85	3.50	1.68	1.91	.64	1.77	3.72	1.15

CAL YR 1970 TOTAL 40,018.3 MEAN 110 MAX 1,340 MIN 1.7 CFSM .65 IN 8.86
WTR YR 1971 TOTAL 87,935.7 MEAN 241 MAX 1,680 MIN 4.9 CFSM 1.43 IN 19.47

NOTE.--No gage height record Nov. 6 to Jan. 20, Mar. 5 to Mar. 18.

02093000 New River near Gum Branch, N. C.

LOCATION.--Lat 34°50'56", long 77°31'11", Onslow County, on left bank 8 ft downstream from bridge on Secondary Road 1314, 0.7 mile downstream from Jenkins Swamp, 1.8 miles southwest of Gum Branch, and 3.8 miles southeast of Richlands.

DRAINAGE AREA.--74.5 sq mi.

PERIOD OF RECORD.--August 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Aug. 19, 1949 to Mar. 22, 1950, non-recording gage and Mar. 23, 1950 to Mar. 25, 1969, water-stage recorder at site 0.2 mile upstream at datum 2.52 ft higher.

AVERAGE DISCHARGE.--22 years, 108 cfs (19.69 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,770 cfs Mar. 4 (gage height, 12.18 ft); minimum, 5.6 cfs Oct. 15 (gage height, 1.58 ft).
Period of record: Maximum discharge, 7,900 cfs Sept. 20, 1955 (gage height, 19.99 ft, from floodmark, site and datum then in use); minimum, 1.8 cfs Oct. 7, 1954.
Flood of 1908 reached a stage of about 18 ft, at former site and datum, from information by local resident.

REMARKS.--Records excellent except those for period of no gage-height record, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	99	26	35	183	259	104	149	66	36	1,550	157
2	10	89	25	36	164	456	92	115	50	34	1,090	114
3	9.4	64	24	34	141	844	86	126	40	143	577	90
4	7.2	47	24	33	136	1,690	79	112	34	156	378	80
5	6.6	31	22	38	161	1,050	74	95	31	106	295	68
6	6.3	26	21	40	172	400	378	78	27	77	350	58
7	6.0	24	21	38	167	250	538	66	24	101	283	60
8	6.0	22	20	37	266	160	450	59	21	89	190	78
9	6.6	20	20	60	268	140	310	55	20	68	142	65
10	6.9	21	20	90	218	120	220	48	20	100	107	100
11	6.9	31	21	45	177	110	160	42	22	201	86	83
12	6.6	39	21	40	151	100	134	38	21	151	72	115
13	7.2	34	20	37	386	95	116	280	19	106	66	206
14	8.4	29	20	35	464	90	102	446	18	80	59	142
15	8.1	123	19	50	360	85	90	261	19	59	53	92
16	8.2	94	25	80	250	110	82	298	23	44	63	67
17	6.9	73	137	150	200	140	76	258	21	35	354	54
18	6.6	54	94	180	170	120	70	189	20	29	857	48
19	6.2	49	78	220	145	107	64	131	45	24	691	53
20	6.2	45	70	170	133	104	60	95	44	26	343	49
21	26	40	65	110	121	95	57	87	25	54	238	45
22	46	36	56	104	115	88	55	109	24	59	165	48
23	47	35	52	104	179	85	52	96	108	47	120	44
24	29	32	47	102	168	79	61	78	301	39	97	39
25	21	29	44	237	146	74	54	63	150	119	80	34
26	19	28	42	268	128	124	46	54	101	482	73	30
27	16	28	40	235	244	166	41	43	121	340	484	28
28	16	27	38	185	218	148	233	37	77	620	682	26
29	23	27	36	152	------	131	301	117	57	1,220	469	24
30	31	26	34	134	------	134	211	115	43	953	350	108
31	61	------	33	162	------	119	------	86	------	1,320	229	------
TOTAL	482.3	1,322	1,215	3,241	5,631	7,673	4,396	3,826	1,592	6,918	10,593	2,205
MEAN	15.6	44.1	39.2	105	201	248	147	123	53.1	223	342	73.5
MAX	61	123	137	268	464	1,690	538	446	301	1,320	1,550	206
MIN	6.0	20	19	33	115	74	41	37	18	24	53	24
CFSM	.21	.59	.53	1.41	2.70	3.33	1.97	1.65	.71	2.99	4.59	.99
IN.	.24	.66	.61	1.62	2.81	3.83	2.20	1.91	.79	3.45	5.29	1.10

CAL YR 1970 TOTAL 23,452.6 MEAN 64.3 MAX 747 MIN 5.6 CFSM .86 IN 11.71
WTR YR 1971 TOTAL 49,094.3 MEAN 135 MAX 1,690 MIN 6.0 CFSM 1.81 IN 24.51

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 4	1200	12.18	1,770	8- 1	1430	11.56	1,590
5-13	1830	7.69	675	8-18	1830	8.83	901
7-26	0330	7.48	637	8-27	2200	8.19	773
7-29	0430	10.62	1,320				

NOTE.--No gage-height record Dec. 20 to Jan. 21.

02093500 Haw River near Benaja, N. C.

LOCATION.--Lat 36°14'56", long 79°34'01", Rockingham County, on left bank 200 ft upstream from site of old High Rock Mill, 300 ft upstream from bridge on Secondary Road 2620, 0.5 mile upstream from Rockingham-Guilford County line, 6 miles downstream from Troublesome Creek, and 6 miles east of Benaja.

DRAINAGE AREA.--168 sq mi.

PERIOD OF RECORD.--October 1928 to September 1971 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 629 ft (by barometer).

AVERAGE DISCHARGE.--43 years, 152 cfs (12.29 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,720 cfs May 16 (gage height, 6.93 ft); minimum, 9.9 cfs Oct. 8 (gage height, 0.96 ft).
Period of record: 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 measurements of peak flow; minimum, 0.6 cfs Oct. 7-9, 1954.
Flood of July 1916 reached a stage of about 17.5 ft, from floodmarks 500 ft downstream (discharge, 9,350 cfs).

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1383: 1933 (M), 1941.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	180	67	67	88	149	151	95	376	79	275	41
2	13	224	67	86	63	156	128	80	242	76	206	39
3	14	193	64	89	67	373	157	72	145	66	170	36
4	13	134	63	87	73	601	161	65	105	56	148	37
5	12	111	67	168	109	632	141	60	87	48	120	38
6	12	88	66	238	205	628	216	65	78	45	85	37
7	12	75	64	261	317	462	385	70	69	62	73	35
8	12	69	59	233	634	331	403	75	61	65	65	33
9	13	64	55	176	966	230	370	65	61	54	59	32
10	15	61	57	143	1,140	172	275	60	61	60	51	32
11	16	109	58	132	826	147	184	55	56	97	45	41
12	15	155	59	124	535	133	140	160	52	91	87	84
13	15	184	62	113	454	124	121	300	55	69	113	167
14	16	185	58	101	422	117	109	451	57	55	88	204
15	19	283	54	92	351	114	99	821	53	45	57	208
16	50	277	63	85	295	120	96	1,640	68	40	48	112
17	52	269	139	78	230	117	92	1,480	93	37	43	78
18	33	209	148	73	183	107	88	1,070	104	37	65	85
19	25	143	131	70	155	106	84	675	88	33	99	102
20	22	111	99	55	140	136	80	441	70	33	85	65
21	31	98	90	56	134	141	90	306	60	33	61	53
22	54	90	108	73	156	127	100	177	95	30	53	51
23	45	82	110	77	241	113	86	119	170	27	103	64
24	37	74	116	93	243	101	80	95	153	26	186	62
25	32	66	111	120	227	93	75	84	153	38	290	53
26	29	67	97	125	184	96	70	81	143	66	186	48
27	27	69	83	113	171	119	100	74	88	55	93	45
28	28	70	71	83	164	155	170	103	66	48	73	42
29	27	70	67	68	------	184	140	363	54	68	59	40
30	51	69	59	87	------	198	120	513	78	184	50	39
31	154	------	60	94	------	180	------	532	------	269	45	------
TOTAL	908	3,879	2,472	3,460	8,773	6,462	4,511	10,247	3,041	1,992	3,181	2,003
MEAN	29.3	129	79.7	112	313	208	150	331	101	64.3	103	66.8
MAX	154	283	148	261	1,140	632	403	1,640	376	269	290	208
MIN	12	61	54	55	63	93	70	55	52	26	43	32
CFSM	.17	.77	.47	.67	1.86	1.24	.89	1.97	.60	.38	.61	.40
IN.	.20	.86	.55	.77	1.94	1.43	1.00	2.27	.67	.44	.70	.44

CAL YR 1970 TOTAL 41,216 MEAN 113 MAX 1,020 MIN 11 CFSM .67 IN 9.13
WTR YR 1971 TOTAL 50,929 MEAN 140 MAX 1,640 MIN 12 CFSM .83 IN 11.28

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-10	0700	5.67	1,200	5-16	1630	6.93	1,720

02093800 Reedy Fork near Oak Ridge, N. C.

LOCATION.--Lat 36°10'24", long 79°57'15", Guilford County, on left bank at downstream side of bridge on Secondary Road 2128, 0.8 mile downstream from Beaver Creek, and 2 miles east of Oak Ridge.

DRAINAGE AREA.--19.9 sq mi.

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 771.30 ft above mean sea level. Prior to Dec. 13, 1955, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--16 years, 21.2 cfs (14.49 inches per year).

EXTREMES.--Current year: Maximum discharge, 729 cfs May 13 (gage height, 8.88 ft); minimum, 3.5 cfs Oct. 7, (gage height, 2.91 ft).
Period of record: Maximum discharge, 3,950 cfs Oct. 10, 1959 (gage height, 10.94 ft), from rating curve extended above 1,500 cfs on basis of contracted-opening measurement of peak flow; minimum, 1.5 cfs Sept. 24, 1968.

REMARKS.--Records good. Some diurnal fluctuation at low flow caused by mill upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	21	10	14	13	17	15	13	16	17	29	9.2
2	6.3	16	10	12	12	26	17	13	15	14	31	9.0
3	6.5	16	11	13	12	109	20	13	14	13	17	9.1
4	6.0	13	10	17	16	93	16	12	13	12	14	9.2
5	6.3	12	9.4	45	31	42	15	12	13	12	12	9.1
6	5.5	9.7	9.6	27	53	30	58	12	12	15	12	9.4
7	4.6	9.3	10	19	78	24	85	13	11	15	12	9.0
8	4.9	8.8	9.0	16	238	20	39	14	11	13	11	7.6
9	6.0	9.2	9.2	18	106	17	26	11	11	12	11	9.3
10	5.5	36	9.8	17	48	17	21	10	10	60	9.7	7.3
11	4.5	46	9.6	17	34	17	18	9.9	10	19	17	7.7
12	5.8	21	10	16	28	16	17	13	11	19	50	27
13	5.4	24	10	15	53	16	16	393	13	14	16	19
14	4.5	20	9.8	14	43	18	15	67	11	12	12	10
15	13	62	9.2	14	31	17	15	45	11	11	11	8.5
16	9.0	26	18	13	25	17	14	274	19	10	12	9.0
17	6.7	17	20	13	22	15	14	60	14	10	13	7.8
18	6.1	15	13	13	21	14	14	32	12	9.9	25	11
19	6.7	14	12	12	19	17	14	23	11	11	16	10
20	6.2	14	12	11	20	20	13	19	17	9.2	12	9.0
21	13	13	15	10	19	16	13	17	16	9.0	11	8.2
22	9.9	12	14	12	29	15	16	15	95	9.3	16	14
23	7.5	12	18	17	42	14	15	15	62	9.1	32	11
24	6.8	11	18	17	26	14	16	14	57	9.5	14	10
25	7.2	10	14	19	22	14	13	14	22	12	11	7.9
26	7.7	11	13	16	20	16	13	14	17	12	11	8.2
27	8.5	11	12	13	21	20	12	12	15	18	14	9.5
28	7.4	11	11	11	18	22	30	43	14	20	11	8.8
29	8.8	11	12	12	------	23	17	56	13	17	10	7.6
30	43	11	10	15	------	18	14	29	24	23	10	7.6
31	59	------	12	16	------	16	------	21	------	19	9.2	------
TOTAL	305.7	523.0	370.6	494	1,100	750	621	1,308.9	590	466.0	491.9	300.0
MEAN	9.86	17.4	12.0	15.9	39.3	24.2	20.7	42.2	19.7	15.0	15.9	10.0
MAX	59	62	20	45	238	109	85	393	95	60	50	27
MIN	4.5	8.8	9.0	10	12	14	12	9.9	10	9.0	9.2	7.3
CFSM	.50	.87	.60	.80	1.97	1.22	1.04	2.12	.99	.75	.80	.50
IN.	.57	.98	.69	.92	2.06	1.40	1.16	2.45	1.10	.87	.92	.56

CAL YR 1970 TOTAL 6,306.3 MEAN 17.3 MAX 448 MIN 3.7 CFSM .87 IN 11.79
WTR YR 1971 TOTAL 7,321.1 MEAN 20.1 MAX 393 MIN 4.5 CFSM 1.01 IN 13.69

PEAK DISCHARGE (BASE, 350 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2- 8	0400	7.43	359	5-16	1000	7.95	460
5-13	1200	8.88	729				

02094500 Reedy Fork near Gibsonville, N. C.

LOCATION.--Lat 36°10'31", long 79°36'57", Guilford County, on right bank 0.2 mile downstream from Huffines Mill on Secondary Road 2774, 1.2 miles upstream from Buffalo Creek, and 6 miles northwest of Gibsonville.

DRAINAGE AREA.--133 sq mi.

PERIOD OF RECORD.--September 1928 to current year.

GAGE.--Water-stage recorder and rock-masonry control. Datum of gage is 626.88 ft above mean sea level.

AVERAGE DISCHARGE.--43 years, 99.6 cfs (10.17 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,090 cfs Feb. 9 (gage height, 5.24 ft); minimum, 3.5 cfs Oct. 3, 4, 5, 6 (gage height, 0.72 ft); minimum daily, 3.5 cfs Oct. 3.
Period of record: 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. Flow partly regulated since 1923 by Lake Brandt 14 miles upstream (see p. 154), since 1957 by Lake Higgins on Brush Creek, a tributary to Lake Brandt, (see p. 153), since 1943 by Richland Lake 12 miles above station, and since 1968 by Lake Townsend 9 miles above station. City of Greensboro diverted from Lake Brandt an average of 20.6 cfs and an average of 11.8 cfs from Lake Townsend for municipal supply. Cone Mills diverted from Richland Lake an average of 2.5 cfs during the 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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	20	13	43	48	73	62	48	143	14	19	14
2	4.1	16	13	40	43	89	61	34	114	13	40	13
3	3.5	13	14	35	32	360	73	30	101	12	26	12
4	4.1	8.9	24	43	47	648	65	27	89	10	26	11
5	3.8	18	25	97	120	438	59	21	81	8.9	29	11
6	6.7	8.4	14	89	180	253	170	17	74	11	27	10
7	8.0	6.7	13	91	370	170	318	18	67	21	26	9.7
8	10	6.2	8.4	86	771	132	233	16	37	13	24	8.7
9	6.2	5.8	8.0	89	1,010	95	160	16	16	12	22	8.5
10	5.8	6.7	11	93	510	67	128	13	13	19	20	10
11	7.1	25	8.4	93	318	59	97	11	11	15	20	18
12	6.2	20	8.4	82	194	52	81	12	10	16	32	20
13	4.5	15	8.4	73	273	48	70	164	12	16	30	19
14	5.4	20	7.5	64	413	47	65	540	12	16	37	14
15	44	124	6.2	58	248	48	45	519	10	15	37	13
16	20	38	11	50	140	56	38	672	18	13	32	10
17	8.0	38	36	48	98	52	32	785	16	12	36	8.5
18	5.4	52	23	48	84	40	27	538	14	11	315	13
19	4.9	55	16	52	73	43	23	220	13	10	48	13
20	5.4	52	19	55	74	79	20	121	11	13	24	11
21	16	53	21	61	76	67	19	68	11	9.9	23	12
22	15	41	32	50	107	43	26	45	16	8.5	23	16
23	8.9	39	40	67	190	39	21	32	15	7.7	45	15
24	7.1	32	61	86	223	32	28	31	71	7.4	251	14
25	6.7	21	53	113	134	22	32	37	16	10	45	12
26	7.1	17	58	116	95	26	25	71	14	11	21	12
27	7.1	18	49	136	93	40	26	34	14	9.6	23	13
28	5.4	16	39	74	86	62	44	67	13	9.2	21	12
29	4.1	13	29	52	------	104	104	263	13	9.0	18	12
30	43	13	24	56	------	91	81	205	15	14	16	14
31	65	------	24	55	------	68	------	169	------	20	15	------
TOTAL	353.0	811.7	717.3	2,195	6,050	3,443	2,233	4,844	1,060	387.2	1,371	379.4
MEAN	11.4	27.1	23.1	70.8	216	111	74.4	156	35.3	12.5	44.2	12.6
MAX	65	124	61	136	1,010	648	318	785	143	21	315	20
MIN	3.5	5.8	6.2	35	32	22	19	11	10	7.4	15	8.5

CAL YR 1970 TOTAL 17,750.2 MEAN 48.6 MAX 991 MIN 3.4
WTR YR 1971 TOTAL 23,844.6 MEAN 65.3 MAX 1,010 MIN 3.5

02095500 North Buffalo Creek near Greensboro, N. C.

LOCATION.--Lat 36°07'13", long 79°42'30", Guilford County, on left bank 5 ft downstream from bridge on Secondary Road 2832, 4.2 miles upstream from mouth, and 5.8 miles northeast of post office in Greensboro.

DRAINAGE AREA.--37.0 sq mi.

PERIOD OF RECORD.--August 1928 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 678.02 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--43 years, 49.8 cfs (18.28 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,110 cfs Oct. 15 (gage height, 12.60 ft); minimum, 14 cfs Oct. 11; minimum gage height, 1.96 ft Sept. 6.
Period of record: Maximum discharge, 6,600 cfs June 16, 1969 (gage height, 16.63 ft), from rating curve extended above 2,900 cfs on basis of contracted-opening measurements at gage heights 14.15, 15.96, and 16.63 ft; minimum, 1.6 cfs Aug. 28, 1932.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Diurnal fluctuation at low flow caused by mills above station. Diversion into basin from Greensboro and Proximity Mills enter 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).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	50	29	50	40	38	42	34	37	33	47	27
2	26	35	30	45	42	121	75	31	37	32	44	27
3	23	33	28	40	45	555	71	33	34	30	29	27
4	20	40	26	80	60	172	39	33	34	22	32	26
5	22	50	30	100	80	69	39	31	31	23	49	22
6	23	40	28	70	110	55	350	41	29	169	30	33
7	23	35	27	46	200	51	130	44	30	52	30	32
8	21	33	26	40	400	44	67	49	30	33	27	28
9	22	31	25	96	250	41	51	31	30	31	25	28
10	21	45	25	63	180	41	40	32	30	132	27	27
11	18	50	26	56	130	42	35	31	30	27	45	49
12	22	40	28	44	100	39	34	35	34	28	163	68
13	23	35	27	40	80	37	38	485	40	28	33	37
14	22	100	25	38	65	66	37	76	29	28	30	29
15	1,070	250	45	37	55	42	36	153	28	27	26	28
16	148	140	65	34	50	40	36	487	48	28	28	27
17	37	80	75	32	47	36	37	73	35	28	41	26
18	26	50	65	33	44	35	33	48	33	23	138	30
19	28	40	55	32	44	92	34	43	29	25	36	24
20	33	39	50	33	45	52	35	40	54	28	31	26
21	89	35	50	33	40	35	37	38	32	26	27	31
22	37	31	55	35	223	35	40	34	63	27	65	65
23	31	31	65	65	101	36	50	33	154	31	91	30
24	30	31	60	69	55	35	41	32	43	73	32	28
25	30	31	50	59	47	36	32	33	33	78	30	26
26	28	29	45	50	45	74	34	32	32	28	28	24
27	28	27	40	40	61	82	38	32	29	27	36	25
28	29	26	35	35	40	60	145	276	29	57	28	25
29	30	26	33	52	------	93	44	215	29	42	24	26
30	100	31	32	45	------	53	38	60	33	120	24	27
31	75	------	35	42	------	42	------	45	------	62	27	------
TOTAL	2,160	1,514	1,235	1,534	2,679	2,249	1,758	2,660	1,159	1,398	1,323	928
MEAN	69.7	50.5	39.8	49.5	95.7	72.5	58.6	85.8	38.6	45.1	42.7	30.9
MAX	1,070	250	75	100	400	555	350	487	154	169	163	69
MIN	18	26	25	32	40	35	32	31	28	22	24	22

CAL YR 1970 TOTAL 163,149 MEAN 447 MAX 1,070 MIN 18
WTR YR 1971 TOTAL 20,597 MEAN 56.4 MAX 1,070 MIN 18

PEAK DISCHARGE (BASE, 920 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-15	1600	12.60	3,110	5-13	0900	8.27	1,180
11-15	Unknown	7.10	972	5-16	0430	7.84	1,100
3- 3	1200	7.40	1,020				

NOTE.--No gage-height record Dec. 2 to Jan. 6.

02096500 Haw River at Haw River, N. C.

LOCATION.--Lat 36°05'13", long 79°22'02", Alamance County, on left bank at town of Haw River, 650 ft downstream from Southern Railway bridge, 800 ft downstream from bridge on U.S. Highway 70 and State Highway 49, and 3 miles downstream from Stony Creek.

DRAINAGE AREA.--599 sq mi.

PERIOD OF RECORD.--October 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 471.69 ft above mean sea level.

AVERAGE DISCHARGE.--43 years, 553 cfs (12.54 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,390 cfs May 16 (gage height, 15.86 ft); minimum, 57 cfs Oct. 6 (gage height, 1.58 ft); minimum daily, 68 cfs Oct. 11.
Period of record: Maximum discharge, 37,000 cfs Sept. 18, 1945 (gage height, 31.10 ft, from floodmark); minimum, 3 cfs Sept. 5, 1930 (gage height, 0.92 ft); minimum daily, 5 cfs Sept. 6, 1930.

REMARKS.--Records excellent. Large diurnal fluctuation and some regulation for short periods at low flow caused by powerplants above station. City of Burlington diverted from two reservoirs on Stony Creek (see p. 154) an average of 9.7 cfs for municipal water supply, about half of which was returned above station as sewage, the remainder was returned below station. Water quality records for the current year are published in Part 2 of this report.

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).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	711	186	445	373	481	464	373	759	194	412	122
2	82	490	190	499	287	556	448	307	540	193	346	128
3	70	429	188	487	256	3,240	596	279	406	174	303	117
4	72	330	185	514	331	4,390	547	254	337	137	248	104
5	79	286	197	793	772	1,990	447	244	296	126	239	107
6	69	244	181	916	1,760	1,390	1,150	215	260	171	231	111
7	74	207	179	723	1,780	1,070	2,220	235	241	428	183	112
8	76	188	167	656	4,900	800	1,370	258	219	258	161	115
9	80	158	169	642	4,410	609	956	272	178	171	152	107
10	70	190	169	723	2,340	486	749	254	184	198	140	130
11	68	488	174	716	1,580	441	574	196	170	287	138	120
12	73	542	169	632	1,120	406	470	186	161	197	234	385
13	70	658	169	544	1,480	395	417	1,360	140	178	295	418
14	77	571	176	487	1,900	426	392	1,980	187	161	215	272
15	1,110	1,820	167	379	1,160	416	346	1,580	156	147	172	266
16	1,650	1,030	225	328	800	393	316	6,140	244	135	160	215
17	476	533	538	305	611	377	302	3,580	248	123	145	154
18	187	429	433	290	526	333	292	2,110	226	114	395	185
19	129	362	314	279	469	354	274	1,260	216	112	432	190
20	111	316	267	264	443	534	258	815	202	104	217	172
21	146	295	259	248	437	471	262	581	198	119	172	151
22	269	271	334	361	619	380	351	394	242	112	161	168
23	196	254	418	373	1,750	342	337	296	299	105	286	225
24	144	229	642	478	1,100	322	351	270	728	104	441	180
25	127	206	469	611	740	283	329	229	363	209	434	149
26	131	199	349	544	577	324	287	256	268	228	319	130
27	113	206	302	487	579	432	257	228	219	160	1,130	130
28	113	198	270	421	567	612	446	525	177	166	802	116
29	117	198	236	358	------	718	666	1,980	167	212	359	122
30	282	194	256	311	------	808	479	1,320	163	227	283	125
31	1,350	------	364	400	------	566	------	987	------	438	143	------
TOTAL	7,694	12,232	8,342	15,214	33,667	24,345	16,353	28,964	8,194	5,688	9,348	5,026
MEAN	248	408	269	491	1,202	785	545	934	273	183	302	168
MAX	1,650	1,820	642	916	4,900	4,390	2,220	6,140	759	438	1,130	418
MIN	68	158	167	248	256	283	257	186	140	104	138	104
CFSM	.41	.68	.45	.82	2.01	1.31	.91	1.56	.46	.31	.50	.28
IN.	.48	.76	.52	.94	2.09	1.51	1.02	1.80	.51	.35	.58	.31

CAL YR 1970 TOTAL 136,411 MEAN 374 MAX 3,750 MIN 66 CFSM .62 IN 8.47
WTR YR 1971 TOTAL 175,067 MEAN 480 MAX 6,140 MIN 68 CFSM .80 IN 10.87

PEAK DISCHARGE (BASE, 6,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2- 8	1700	14.24	6,480	5-16	1030	15.86	7,390

02096700 Alamance Creek near Elon College, N. C.

LOCATION.--Lat 36°02'21", long 79°31'45", Alamance County, on right bank at downstream side of bridge on Secondary Road 1149, 1.2 miles upstream from Beaver Creek, and 4.5 miles south of Elon College.

DRAINAGE AREA.--116 sq mi.

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 495 ft (by barometer). Aug. 21, 1957, to Nov. 14, 1957, nonrecording gage and Nov. 15, 1957, to Apr. 25, 1963, water-stage recorder at site 70 ft upstream at same datum.

AVERAGE DISCHARGE.--14 years, 102 cfs (11.94 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,350 cfs May 16 (gage height, 13.09 ft); minimum, 1.2 cfs Oct. 13, 14, minimum gage height, 1.90 ft Sept. 10.
Period of record: Maximum discharge, 6,250 cfs Jan. 6, 1962 (gage height, 23.06 ft); minimum, 0.27 cfs Sept. 19, 20, 1968. Flood in September 1945 reached a stage of 29.4 ft, from information by local resident (discharge not determined).

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	152	25	88	57	89	130	55	72	27	18	11
2	2.2	135	24	115	45	125	110	52	57	22	23	9.8
3	2.2	109	23	101	45	1,210	210	51	50	20	16	8.8
4	2.6	82	23	129	65	1,060	150	47	44	18	13	8.3
5	2.6	58	21	238	366	350	120	42	40	17	15	8.2
6	2.6	45	21	184	558	229	600	40	37	39	13	15
7	2.4	38	20	110	686	178	480	42	33	77	13	8.8
8	2.1	33	19	85	1,560	140	256	54	30	32	12	8.4
9	1.6	28	19	107	858	118	163	81	36	23	11	7.5
10	2.4	32	20	138	263	107	129	49	33	40	9.5	8.6
11	3.2	124	20	150	178	103	107	39	29	39	8.6	13
12	2.0	84	20	114	143	94	94	36	26	25	12	63
13	2.0	131	21	89	396	88	87	835	27	21	11	36
14	2.2	102	20	78	344	101	79	308	27	19	9.4	17
15	626	328	19	72	178	120	71	193	24	17	8.1	12
16	276	150	34	63	134	180	68	1,570	28	15	7.9	9.7
17	57	90	170	57	111	150	65	388	26	14	10	8.7
18	30	68	70	54	99	120	62	179	25	13	31	43
19	18	57	43	49	89	100	59	112	23	13	29	21
20	14	50	35	41	87	160	60	83	23	15	17	13
21	30	49	40	46	89	120	59	68	28	14	13	10
22	48	42	64	45	223	100	62	58	23	13	11	16
23	27	39	110	63	436	85	58	50	51	12	18	19
24	19	35	215	91	185	80	67	46	220	11	18	14
25	16	31	107	142	129	75	60	44	46	15	12	12
26	14	28	71	102	108	100	52	42	31	12	10	11
27	13	29	51	77	127	140	48	39	26	12	84	9.9
28	11	31	43	57	109	210	112	200	24	12	68	9.3
29	11	27	37	55	------	340	111	469	22	16	25	8.9
30	191	25	34	57	------	230	65	171	21	13	17	8.2
31	393	------	36	66	------	180	------	104	------	13	13	------
TOTAL	1,826.7	2,232	1,475	2,863	7,668	6,482	3,794	5,547	1,182	649	576.5	449.1
MEAN	58.9	74.4	47.6	92.4	274	209	126	179	39.4	20.9	18.6	15.0
MAX	626	328	215	238	1,560	1,210	600	1,570	220	77	84	63
MIN	1.6	25	19	41	45	75	48	36	21	11	7.9	7.5
CFSM	.51	.64	.41	.80	2.36	1.80	1.09	1.54	.34	.18	.16	.13
IN.	.59	.72	.47	.92	2.46	2.08	1.22	1.78	.38	.21	.18	.14

CAL YR 1970 TOTAL 26,531.7 MEAN 72.7 MAX 1,100 MIN 1.6 CFSM .63 IN 8.51
WTR YR 1971 TOTAL 34,744.3 MEAN 95.2 MAX 1,570 MIN 1.6 CFSM .82 IN 11.14

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-15	1530	12.09	2,050	3- 3	2230	12.29	2,110
2- 8	1845	12.23	2,090	5-16	0600	13.09	2,350

02096850 Cane Creek near Teer, N. C.

LOCATION.--Lat 35°56'34", long 79°14'46", Orange County, on left bank at downstream side of bridge on State Highway 54, 1.5 miles southwest of Teer, 2.5 miles upstream from mouth, and 10 miles west of Carrboro.

DRAINAGE AREA.--31.3 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 432.30 ft above mean sea level.

AVERAGE DISCHARGE.--12 years, 27.1 cfs (11.76 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,250 cfs May 16 (gage height, 10.99 ft); minimum, 0.12 cfs Oct. 4-6, 9, 10 (gage height, 3.67 ft).
Period of record: Maximum discharge, 3,640 cfs July 11, 1965 (gage height, 16.69 ft); minimum, 0.09 cfs Sept. 22, 23-26, 1968.

REMARKS.--Records good. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.26	11	2.9	24	12	16	24	14	26	8.0	9.3	4.0
2	.18	7.4	2.9	33	11	26	22	13	21	6.7	4.0	3.5
3	.26	5.7	2.7	23	10	406	40	13	17	6.1	2.7	3.1
4	.18	4.2	2.7	21	15	180	29	11	15	5.4	2.1	2.9
5	.12	4.0	2.6	54	100	63	23	10	14	5.0	5.2	3.3
6	.15	3.7	2.4	37	113	43	136	9.7	12	9.7	4.4	2.9
7	.15	3.5	2.3	21	225	33	91	9.7	10	13	3.3	3.1
8	.15	3.3	2.1	15	373	27	51	9.3	9.3	7.0	2.6	2.7
9	.13	2.9	2.1	17	143	23	35	9.0	9.0	5.4	2.1	2.1
10	.15	5.2	2.1	24	52	22	28	8.2	8.4	4.8	1.7	4.0
11	.18	80	2.1	27	35	23	24	7.7	8.0	4.4	21	8.7
12	.22	25	2.3	21	28	21	22	21	8.4	4.0	15	50
13	.22	39	2.4	16	174	19	20	235	9.3	4.2	5.2	25
14	.22	18	2.3	13	80	18	18	47	8.4	4.2	3.3	10
15	.22	16	2.1	12	40	23	16	28	7.4	4.0	2.4	6.3
16	.89	14	5.7	10	30	51	16	481	32	3.5	2.0	5.0
17	.95	12	26	9.3	25	27	15	146	16	3.1	2.4	4.4
18	.95	6.1	14	9.0	22	20	15	46	11	2.7	28	4.6
19	.95	4.8	8.0	8.0	20	23	14	28	9.3	2.4	10	4.4
20	1.1	3.8	6.3	7.4	19	33	13	22	18	2.6	5.4	4.0
21	.78	3.8	6.3	7.0	18	23	13	18	39	3.1	4.0	3.8
22	.50	3.5	9.0	6.5	18	20	14	16	46	2.9	3.1	7.0
23	.40	3.3	13	9.7	32	18	14	14	18	2.6	4.8	6.7
24	.35	3.1	29	14	22	16	14	13	12	2.1	4.0	5.2
25	.26	2.9	17	28	18	15	13	12	9.3	2.4	2.9	4.2
26	.31	2.9	11	21	16	18	12	12	8.0	2.6	2.3	3.7
27	.35	2.9	8.0	15	20	23	11	9.7	7.0	3.3	47	3.3
28	.40	2.9	6.7	13	19	56	34	220	8.7	2.9	31	3.1
29	.45	2.9	5.9	12	------	66	27	322	11	2.6	9.7	2.7
30	3.3	2.9	5.2	10	------	49	17	67	6.3	3.1	6.1	2.6
31	11	------	6.3	10	------	30	------	40	------	4.2	4.8	------
TOTAL	25.73	300.7	213.4	547.9	1,690	1,431	821	1,912.3	434.8	138.0	251.8	196.3
MEAN	.83	10.0	6.88	17.7	60.4	46.2	27.4	61.7	14.5	4.45	8.12	6.54
MAX	11	80	29	54	373	406	136	481	46	13	47	50
MIN	.12	2.9	2.1	6.5	10	15	11	7.7	6.3	2.1	1.7	2.1
CFSM	.03	.32	.22	.57	1.93	1.48	.88	1.97	.46	.14	.26	.21
IN.	.03	.36	.25	.65	2.01	1.70	.98	2.27	.52	.16	.30	.23

CAL YR 1970 TOTAL 5,548.06 MEAN 15.2 MAX 642 MIN .12 CFSM .49 IN 6.59
WTR YR 1971 TOTAL 7,962.93 MEAN 21.8 MAX 481 MIN .12 CFSM .70 IN 9.46

PEAK DISCHARGE (BASE, 900 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-16	0715	10.99	1,250				

02097000 Haw River near Pittsboro, N. C.

LOCATION.--Lat 35°42'07", long 79°05'12", Chatham County, on left bank 100 ft upstream from Robeson Creek, 1,000 ft downstream from bridge on Secondary Road 1943, 2 miles downstream from bridge on U.S. Highway 64, and 5 miles east of Pittsboro.

DRAINAGE AREA.--1,310 sq mi, approximately.

PERIOD OF RECORD.--October 1928 to current year. October 1928 monthly discharge only, published in WSP 1303.

GAGE.--Water-stage recorder. Datum of gage is 179.22 ft above mean sea level. Prior to Oct. 15, 1929, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--43 years, 1,199 cfs (12.43 inches per year).

EXTREMES.--Current year: Maximum discharge, 16,500 cfs Feb. 9 (gage height, 13.68 ft); minimum, 15 cfs Oct. 4, 11 (gage height, 1.42 ft); minimum daily 36 cfs Oct. 4.
Period of record: Maximum discharge, 79,000 cfs Sept. 18, 1945 (gage height, 28.58 ft, from floodmark in gage shelter); 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 in 1865 reached a stage about 1 ft lower than flood of 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 excellent. Considerable diurnal fluctuation and some regulation for short periods at low flow caused by powerplants above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 822: Drainage area. WSP 1383: 1929 (M), 1931, 1933-34, 1936 (m), 1937, 1941-44 (m), 1946-47 (m), 1948. WSP 1703: 1957.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154	2,020	362	954	866	1,140	1,250	861	1,640	316	1,340	382
2	128	1,240	344	1,370	716	1,210	1,070	701	1,260	384	717	304
3	67	994	338	1,250	569	8,140	1,350	636	979	287	551	256
4	36	818	338	1,160	643	12,500	1,590	569	790	309	473	173
5	188	618	255	4,850	1,740	5,240	1,210	523	661	267	692	218
6	100	505	314	2,980	4,750	3,040	1,950	494	581	240	476	216
7	91	404	374	1,780	4,320	2,340	5,280	472	535	386	337	304
8	95	362	290	1,380	12,000	1,830	3,460	461	471	862	304	216
9	78	392	280	1,360	12,800	1,470	2,250	558	460	457	341	224
10	42	290	280	1,670	5,290	1,220	1,710	593	413	340	228	212
11	37	1,360	280	1,760	3,120	1,120	1,390	523	378	426	240	131
12	180	1,740	212	1,560	2,320	1,040	1,170	441	295	537	361	616
13	98	1,530	290	1,270	3,530	951	1,040	2,310	349	367	313	1,190
14	87	1,750	362	1,080	5,320	1,020	949	4,650	393	314	385	694
15	89	2,660	280	960	2,960	992	853	2,600	359	253	386	514
16	3,090	3,220	350	784	1,960	1,430	764	11,800	349	290	378	408
17	1,650	1,470	994	691	1,550	1,280	702	8,860	541	148	542	381
18	603	1,010	1,350	653	1,310	973	682	4,250	500	207	1,740	203
19	398	826	802	609	1,150	853	661	2,550	399	280	1,100	341
20	228	698	60[illegible]	566	1,050	1,260	608	1,710	412	189	705	426
21	200	603	547	515	1,030	1,340	583	1,280	437	213	383	312
22	220	568	582	514	1,030	1,040	627	1,010	511	192	322	325
23	386	533	834	698	2,880	890	753	780	674	190	920	352
24	275	484	1,770	962	2,610	803	701	645	760	106	627	424
25	240	434	1,600	1,480	1,680	725	735	578	1,250	156	706	288
26	290	344	1,020	1,510	1,330	719	665	521	585	326	624	278
27	176	422	762	1,120	1,220	880	578	522	463	386	1,910	323
28	176	338	642	917	1,310	1,510	958	830	447	293	4,660	228
29	164	344	554	761	------	2,140	1,530	6,500	339	255	1,450	224
30	212	416	498	796	------	2,480	1,160	3,930	303	354	783	224
31	1,720	------	505	835	------	1,690	------	2,200	------	334	576	------
TOTAL	11,498	28,393	18,012	38,795	81,054	63,266	38,229	64,358	17,534	9,664	24,570	10,387
MEAN	371	946	581	1,251	2,895	2,041	1,274	2,076	584	312	793	346
MAX	3,090	3,220	1,770	4,850	12,800	12,500	5,280	11,800	1,640	862	4,660	1,190
MIN	36	290	212	514	569	719	578	441	295	106	228	131
CFSM	.28	.72	.44	.96	2.21	1.56	.97	1.58	.45	.24	.61	.26
IN.	.33	.81	.51	1.10	2.30	1.80	1.09	1.83	.50	.27	.70	.29

CAL YR 1970 TOTAL 301,817 MEAN 827 MAX 11,000 MIN 22 CFSM .63 IN 8.57
WTR YR 1971 TOTAL 405,760 MEAN 1,112 MAX 12,800 MIN 36 CFSM .85 IN 11.52

PEAK DISCHARGE (BASE, 17,000 CFS).--No peak above base.

02097243 Third Fork Creek at Durham, N. C.

LOCATION.--Lat 35°58'43", long 78°54'48", Durham County, on right bank 60 ft downstream from bridge on Forest Hills Boulevard, at Durham, 7 miles upstream from mouth.

DRAINAGE AREA.--1.67 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 292.78 ft above mean sea level (levels by city of Durham).

EXTREMES.--Current year: Maximum discharge, 1,610 cfs Sept. 12 (gage height, 5.33 ft) from rating curve extended as explained below; minimum daily, 0.07 cfs Nov. 9.
Period of record: Maximum discharge, 1,720 cfs Aug. 15, 1969 (gage height, 5.39 ft) from rating curve extended above 280 cfs on basis of slope-area measurement of peak flow; minimum daily, 0.07 cfs Oct. 7, 28, 1969, Nov. 9, 1970.

REMARKS.--Records good above 0.5 cfs and fair below. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	5.3	.48	.43	.48	.57	.66	.48	.66	2.3	.97	.36
2	.15	.27	.38	.53	.43	6.6	4.4	.43	.57	.70	1.8	.33
3	.10	.34	.34	.43	1.4	39	1.1	.38	.57	.62	1.2	.37
4	.11	.10	.30	.43	10	2.5	.84	.43	.48	.57	2.3	.40
5	.10	.18	.26	59	8.2	.89	.89	.30	.43	.48	5.4	.59
6	.18	.10	.35	2.2	1.4	.62	36	.37	.38	14	.49	.72
7	.20	.10	.38	1.5	26	.38	4.0	.38	.43	.53	.37	.29
8	.22	.09	.35	1.5	14	.24	1.6	.40	3.3	.27	.32	.31
9	.27	.07	.34	10	1.9	.15	1.1	.50	.57	.23	.31	.33
10	.27	16	.34	2.2	1.2	.89	.99	.38	.43	5.4	.29	5.1
11	.23	9.2	.34	1.6	.99	.46	.94	.29	.34	.23	6.9	1.5
12	.27	5.2	.31	1.3	1.1	.31	.89	.55	1.5	.19	1.1	256
13	.26	2.6	.30	1.1	6.0	.37	.89	29	.57	.25	.62	1.3
14	.22	.70	.25	1.1	1.4	.24	.75	.60	.34	28	.53	.74
15	9.5	3.8	.24	1.1	.84	6.6	.75	27	.30	.67	1.6	.55
16	.41	.48	22	.99	.80	.99	.80	38	4.9	.38	.84	.46
17	.28	.38	.74	.99	.70	.70	.66	2.0	.38	.22	10	.47
18	.23	.34	.48	.94	.66	.62	.62	1.1	.34	.20	20	1.1
19	.26	.34	.48	.89	.62	1.8	.53	.81	.30	.19	.89	.40
20	.20	.62	.53	.84	.66	.70	.53	.65	.27	.19	.75	.39
21	22	.43	1.7	.89	.62	.62	6.9	.59	.27	2.4	.66	2.4
22	.56	.30	.38	1.5	7.6	.53	1.8	.56	.30	.20	39	2.3
23	.35	.30	4.9	3.4	1.3	.53	1.4	.47	3.8	.19	2.1	.46
24	.31	.24	.43	3.8	.89	.43	.62	.65	.38	.60	.69	.42
25	.22	.34	.43	1.1	.75	.48	.43	.47	.30	.70	.60	.33
26	.24	.34	.43	.66	1.1	5.7	.43	.40	.27	4.1	.57	.31
27	.22	.34	.39	.53	1.1	6.1	.38	.38	.27	9.0	18	.33
28	.22	.34	.43	.48	.57	1.2	13	37	22	.77	.90	.32
29	.24	.70	.48	.48	------	11	.57	4.8	3.3	4.5	.52	.29
30	29	.62	.43	1.8	------	1.2	.48	.99	3.7	33	.43	6.3
31	9.0	------	5.8	.70	------	.75	------	.80	------	15	.38	------
TOTAL	76.01	50.16	44.99	104.41	92.71	93.17	84.95	151.16	51.65	126.08	120.53	285.17
MEAN	2.45	1.67	1.45	3.37	3.31	3.01	2.83	4.88	1.72	4.07	3.89	9.51
MAX	29	16	22	59	26	39	36	38	22	33	39	256
MIN	.10	.07	.24	.43	.43	.15	.38	.29	.27	.19	.29	.29
CFSM	1.47	1.00	.87	2.02	1.98	1.80	1.69	2.92	1.03	2.44	2.33	5.69
IN.	1.69	1.12	1.00	2.33	2.07	2.08	1.89	3.37	1.15	2.81	2.68	6.35

CAL YR 1970 TOTAL 627.49 MEAN 1.72 MAX 29 MIN .07 CFSM 1.03 IN 13.98
WTR YR 1971 TOTAL 1,280.99 MEAN 3.51 MAX 256 MIN .07 CFSM 2.10 IN 28.53

PEAK DISCHARGE (BASE, 480 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1- 5	0655	4.90	990	7-30	1810	4.87	960
5-13	0355	4.58	699	8-22	1855	4.55	675
5-15	2355	4.30	505	9-12	0650	5.33	1,610
7-14	1850	4.94	1,030				

02098000 New Hope River near Pittsboro, N. C.

LOCATION.--Lat 35°44'12", long 79°01'36", Chatham County, on right bank at downstream side of bridge on U.S. Highway 64, 0.2 mile downstream from Whiteoak Creek, and 8.8 miles east of Pittsboro.

DRAINAGE AREA.--285 sq mi.

PERIOD OF RECORD.--January 1949 to current year.

GAGE.--Water-stage recorder and concrete control since 1953. Datum of gage is 175.75 ft above mean sea level. Prior to Mar. 18, 1950, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--22 years, 266 cfs (12.67 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,150 cfs Feb. 10 (gage height, 15.82 ft); minimum, 10 cfs Oct. 15 (gage height, 2.43 ft).
Period of record: 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 Carolina State Highway Commission.

REMARKS.--Records good. City of Durham discharged an average of about 12.7 cfs sewage effluent into basin above station, diverted from Neuse River during the year. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	216	27	152	287	198	789	185	706	62	94	68
2	17	234	28	289	209	241	495	113	404	57	143	51
3	14	211	29	286	148	941	298	92	163	61	131	41
4	14	133	28	227	162	1,910	260	83	92	40	93	36
5	12	76	26	801	555	2,180	244	72	70	33	162	32
6	12	54	26	1,600	1,120	2,550	365	65	56	34	118	30
7	12	42	24	1,900	1,240	2,040	779	60	49	34	89	27
8	14	36	23	2,380	1,810	1,260	921	58	44	81	59	25
9	13	33	24	1,810	2,530	543	1,060	58	41	73	43	24
10	12	30	24	1,070	3,100	291	1,010	58	38	44	36	24
11	13	54	24	749	2,790	234	559	53	44	35	33	26
12	13	204	24	647	2,020	217	283	50	40	41	40	316
13	12	366	26	496	1,280	204	205	96	37	34	49	792
14	12	348	25	342	791	181	172	206	36	28	64	1,070
15	11	289	25	252	676	164	145	224	35	26	62	1,740
16	13	228	33	205	719	173	126	787	35	26	91	1,310
17	18	169	220	172	625	212	112	1,090	45	49	89	382
18	23	148	327	150	413	236	103	1,090	65	34	682	125
19	17	98	289	138	280	202	95	1,250	56	26	431	81
20	13	72	220	121	224	176	90	1,010	43	23	250	66
21	14	60	132	108	200	180	93	359	37	23	139	56
22	20	53	119	99	190	169	88	140	37	24	71	89
23	58	49	193	119	312	140	95	94	36	28	215	255
24	57	44	363	187	401	121	127	74	38	29	177	226
25	36	39	434	396	351	107	106	65	39	26	169	120
26	28	36	383	495	275	105	90	59	39	24	110	75
27	24	33	253	417	227	136	76	57	32	28	105	58
28	22	30	142	275	218	295	124	59	29	35	88	50
29	22	29	95	178	------	498	270	222	26	46	218	45
30	25	28	79	167	------	731	265	460	27	47	251	41
31	87	------	73	303	------	793	------	666	------	69	129	------
TOTAL	685	3,442	3,738	16,531	23,153	17,428	9,445	8,955	2,439	1,220	4,431	7,281
MEAN	22.1	115	121	533	827	562	315	289	81.3	39.4	143	243
MAX	87	366	434	2,380	3,100	2,550	1,060	1,250	706	81	682	1,740
MIN	11	28	23	99	148	105	76	50	26	23	33	24
CFSM	.08	.40	.42	1.87	2.90	1.97	1.11	1.01	.29	.14	.50	.85
IN.	.09	.45	.49	2.16	3.02	2.27	1.23	1.17	.32	.16	.58	.95

CAL YR 1970 TOTAL 69,462 MEAN 190 MAX 2,880 MIN 11 CFSM .67 IN 9.07
WTR YR 1971 TOTAL 98,748 MEAN 271 MAX 3,100 MIN 11 CFSM .95 IN 12.89

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1- 8	0500	14.51	2,500	3- 6	0700	14.75	2,620
2-10	1300	15.82	3,150	9-15	1300	12.60	1,820

02098200 Haw River near Haywood, N. C.

LOCATION.--Lat 35°38'50", long 79°03'54", Chatham County, on right bank 1.3 miles upstream from bridge on U.S. Highway 1, 2.1 miles north of Haywood, and 3.9 miles upstream from mouth.

DRAINAGE AREA.--1,700 sq mi, approximately.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 155.00 ft above mean sea level (Corps of Engineers bench mark). Since June 22, 1966, auxiliary water-stage recorder 2.6 miles downstream.

AVERAGE DISCHARGE.--6 years, 1,122 cfs (8.96 inches per year).

EXTREMES.--Current year: Maximum discharge, 18,800 cfs Feb. 9, Mar. 4 maximum gage height, 19.27 Mar. 4; minimum daily discharge, 118 cfs Oct. 4.
Period of record: Maximum discharge, 21,900 cfs Mar. 13, 1968; maximum gage height, 20.76 ft (from floodmarks) Mar. 1, 1966; minimum daily discharge, 35 cfs Sept. 12, 1966.

REMARKS.--Records good except those for periods of no gage-height record or below 350 cfs, which are fair. Some regulation for short periods at low flow caused by powerplants above station. Water quality records collected 1.3 miles downstream from station for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	195	2,500	493	1,070	1,410	1,300	2,010	1,100	2,240	350	1,230	509
2	205	1,500	479	1,690	1,080	2,100	1,600	900	1,600	377	835	418
3	150	1,100	479	1,640	828	12,300	1,580	740	1,080	342	660	300
4	118	840	433	1,440	1,010	17,000	1,820	640	816	308	529	240
5	170	700	404	5,400	2,790	10,000	1,410	580	687	289	835	250
6	179	600	412	4,400	6,240	6,000	2,160	540	625	270	681	240
7	138	450	422	3,800	5,940	3,000	5,930	520	574	356	521	340
8	123	400	400	3,510	13,800	2,000	4,580	500	533	831	411	250
9	134	450	384	3,210	15,800	1,700	3,350	600	484	551	362	260
10	143	400	379	3,060	8,020	1,500	2,200	760	494	394	310	240
11	142	1,500	388	2,750	5,580	1,200	1,700	600	463	357	289	210
12	144	1,900	349	2,330	4,290	1,100	1,400	540	430	479	380	800
13	153	1,600	385	1,860	4,640	1,050	1,200	2,700	446	370	391	1,400
14	123	2,200	426	1,470	6,290	1,100	1,100	6,000	445	291	429	900
15	142	2,900	369	1,230	3,810	1,300	960	3,500	443	261	433	600
16	2,480	3,500	431	1,020	2,700	1,600	860	15,000	453	269	736	450
17	1,550	2,000	1,220	885	2,190	1,400	780	10,000	536	216	724	410
18	670	1,500	1,830	815	1,760	1,200	740	6,600	506	198	3,220	300
19	450	1,000	1,220	754	1,480	1,000	720	3,700	457	226	1,930	400
20	287	800	912	702	1,310	1,300	660	2,700	461	191	1,070	500
21	276	700	778	638	1,280	1,500	640	1,800	458	215	615	370
22	268	660	755	625	1,320	1,300	680	1,200	528	227	480	380
23	365	620	1,000	842	3,660	1,100	900	1,000	722	247	1,690	400
24	372	602	2,160	1,180	2,860	900	780	840	900	212	1,120	663
25	329	571	2,260	2,020	2,200	800	840	760	1,700	175	864	434
26	350	535	1,530	2,190	1,500	900	760	640	1,000	253	722	344
27	230	545	1,110	1,650	1,400	1,100	700	600	600	398	1,750	326
28	250	509	868	1,260	1,600	1,800	1,300	2,500	500	368	4,800	289
29	220	476	741	1,010	------	2,300	2,000	8,000	470	384	1,700	250
30	600	525	654	1,050	------	3,000	1,500	6,000	320	481	981	212
31	1,800	------	645	1,600	------	2,500	------	4,000	------	545	734	------
TOTAL	12,756	33,583	24,316	57,101	106,788	86,350	46,860	85,560	20,971	10,431	31,432	12,685
MEAN	411	1,119	784	1,842	3,814	2,785	1,562	2,760	699	336	1,014	423
MAX	2,480	3,500	2,260	5,400	15,800	17,000	5,930	15,000	2,240	831	4,800	1,400
MIN	118	400	349	625	828	800	640	500	320	175	289	210
CFSM	.24	.66	.46	1.08	2.24	1.64	.92	1.62	.41	.20	.60	.25
IN.	.28	.73	.53	1.25	2.34	1.89	1.03	1.87	.46	.23	.69	.28

CAL YR 1970 TOTAL 395,489 MEAN 1,084 MAX 11,600 MIN 78 CFSM .64 IN 8.65
WTR YR 1971 TOTAL 528,833 MEAN 1,449 MAX 17,000 MIN 118 CFSM .85 IN 11.57

PEAK DISCHARGE (BASE, 20,000 CFS).--No peak above base.

NOTE.--No gage-height record Feb. 25 to Mar. 30, Apr. 10 to May 27.

02099000 East Fork Deep River near High Point, N. C.

LOCATION.--Lat 36°02'15", long 79°56'46", Guilford County, on left bank 5 ft upstream from bridge on Secondary Road 1541, 3.3 miles upstream from High Point Dam, and 5.2 miles northeast of High Point College, High Point.

DRAINAGE AREA.--14.7 sq mi.

PERIOD OF RECORD.--July 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 764.02 ft above mean sea level. Intake pipe extended to downstream side of bridge since Mar. 1, 1934.

AVERAGE DISCHARGE.--43 years, 15.0 cfs (13.83 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,420 cfs Feb. 7 (gage height, 3.73 ft); minimum, 2.8 cfs Oct. 5, 6, 7 (gage height, 0.30 ft).
Period of record: 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; minimum, 0.7 cfs Sept. 22, 1941 (result of temporary regulation); minimum unregulated, 1.1 cfs Oct. 7, 1954, Sept. 26, 1968.

REMARKS.--Records good. Occasional temporary regulation of unknown origin during low flow in some water years. Since Apr. 19, 1968 recording rain gage located at station.

REVISIONS (WATER YEARS).--WSP 1383: Drainage area, 1941. WSP 1723: 1929(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	21	6.3	7.2	9.0	12	11	8.5	8.5	7.8	8.5	4.3
2	3.5	15	6.3	9.1	8.0	36	19	8.2	7.7	6.7	22	4.2
3	3.5	10	6.3	11	8.3	204	19	8.2	7.3	6.3	8.3	4.2
4	3.3	8.3	6.1	22	17	62	13	7.3	7.0	5.4	6.2	4.2
5	3.1	7.5	5.7	45	104	24	12	7.0	6.7	5.2	6.7	4.5
6	3.1	6.9	5.9	19	53	19	92	7.5	6.2	24	5.6	4.1
7	3.1	7.3	5.7	13	280	17	43	7.7	5.8	16	5.2	4.1
8	3.1	6.5	5.6	11	204	18	22	9.2	5.7	7.9	4.8	3.9
9	3.3	5.9	5.7	18	55	15	17	7.8	5.9	7.2	4.6	3.8
10	3.3	90	5.7	19	22	11	14	6.9	5.4	39	4.5	3.7
11	3.3	39	5.9	18	18	11	12	6.5	5.3	9.6	17	3.7
12	3.3	24	6.1	14	17	10	12	7.8	8.3	8.1	28	17
13	3.3	33	6.0	12	69	10	12	135	7.9	6.9	7.4	7.1
14	3.2	64	5.7	11	25	16	12	26	6.5	6.5	6.3	5.3
15	61	122	5.7	10	18	12	11	61	6.2	6.2	5.9	4.4
16	16	22	23	9.0	15	11	11	145	6.3	5.6	6.5	4.0
17	5.9	14	15	9.0	13	9.5	11	26	6.2	4.9	6.7	3.9
18	4.7	11	8.8	8.6	11	9.0	10	15	6.0	4.6	17	16
19	4.2	9.8	7.8	7.7	11	21	9.4	12	5.7	4.8	7.7	5.7
20	4.4	9.3	7.2	7.6	11	15	9.3	9.9	5.4	4.8	6.5	5.0
21	8.4	8.5	11	8.0	10	11	9.0	8.9	5.4	4.5	6.0	4.8
22	5.8	7.7	10	8.2	69	13	8.4	7.9	14	4.4	12	6.4
23	4.9	7.4	26	13	37	12	9.3	7.4	34	4.3	12	5.1
24	4.5	6.9	19	17	19	9.0	9.2	7.2	10	4.3	6.6	4.5
25	4.5	6.7	12	19	15	8.6	8.1	7.2	7.3	5.0	5.9	4.2
26	4.4	6.7	9.4	14	14	12	7.9	6.9	6.7	4.7	6.4	4.2
27	4.2	6.5	8.3	9.9	17	21	7.5	6.6	6.0	16	7.4	4.1
28	4.1	6.5	7.7	8.8	13	18	20	20	5.8	9.9	5.6	3.9
29	4.2	6.5	7.6	8.5	------	27	9.8	37	6.2	6.6	4.7	3.8
30	108	6.5	7.2	11	------	16	8.5	16	13	7.4	4.5	3.7
31	46	------	7.2	12	------	12	------	11	------	7.1	4.3	------
TOTAL	341.2	596.4	275.9	410.6	1,162.3	702.1	469.4	658.6	238.4	261.7	260.8	157.8
MEAN	11.0	19.9	8.90	13.2	41.5	22.6	15.6	21.2	7.95	8.44	8.41	5.26
MAX	108	122	26	45	280	204	92	145	34	39	28	17
MIN	3.1	5.9	5.6	7.2	8.0	8.6	7.5	6.5	5.3	4.3	4.3	3.7
CFSM	.75	1.35	.61	.90	2.82	1.54	1.06	1.44	.54	.57	.57	.36
IN.	.86	1.51	.70	1.04	2.94	1.78	1.19	1.67	.60	.66	.66	.40

CAL YR 1970 TOTAL 5,599.3 MEAN 15.3 MAX 587 MIN 2.9 CFSM 1.04 IN 14.17
WTR YR 1971 TOTAL 5,535.2 MEAN 15.2 MAX 280 MIN 3.1 CFSM 1.03 IN 14.01

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-7	1545	3.73	1,420				

02099500 Deep River near Randleman, N. C.

LOCATION.--Lat 35°54'06", long 79°51'05", Randolph County, on left bank 500 ft downstream from bridge on Secondary Road 1929, 0.2 mile downstream from Coltrane's mill, 0.5 mile south of Guilford County line, 4.8 miles upstream from Muddy Creek, and 7 miles north of Randleman.

DRAINAGE AREA.--124 sq mi.

PERIOD OF RECORD.--October 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 638.11 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--43 years, 118 cfs (12.89 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,910 cfs Feb. 7 (gage height, 13.84 ft);minimum, 5.8 cfs Apr. 25 (gage height, 1.67 ft); minimum daily, 12 cfs Oct. 5, 12.
Period of record: 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 1.5 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. No fluctuation caused by Coltrane's mill except Apr. 18, 25, May 8, 22. Some regulation by High Point municipal Lake (see p. 154). City of High Point diverted an average of 13.9 cfs for municipal water supply during water year. 9.9 cfs was discharged as sewage effluent into Richland Creek above station and 4.0 cfs into Rich Fork Creek in Pee Dee River basin.

REVISIONS (WATER YEARS).--WSP 782: 1929-30. WSP 1383: 1934-35, 1941. WSP 1723: 1929(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	180	42	83	58	116	103	65	54	39	43	21
2	16	145	39	81	48	203	109	50	44	30	49	20
3	16	95	36	77	49	1,090	209	43	39	26	30	20
4	13	74	35	86	105	625	126	41	36	22	30	19
5	12	62	32	197	476	288	101	36	31	20	190	17
6	14	54	30	161	490	225	512	33	26	137	46	14
7	15	42	30	109	917	195	427	42	23	144	34	16
8	15	37	29	84	1,490	163	257	57	26	52	26	18
9	15	36	29	145	628	139	194	77	26	38	23	17
10	15	113	29	139	310	128	166	46	23	238	24	17
11	14	304	28	134	252	125	142	40	22	71	33	23
12	12	116	28	107	226	114	130	35	21	104	80	57
13	15	189	27	106	493	128	115	1,210	27	46	31	42
14	15	115	28	93	324	180	105	421	19	36	24	20
15	152	600	27	84	236	151	84	327	21	31	21	18
16	55	199	73	69	203	132	82	1,370	23	28	19	17
17	24	136	137	62	177	99	77	415	22	25	24	17
18	16	111	61	59	158	78	71	288	22	21	93	19
19	14	93	47	54	139	152	68	221	21	23	39	17
20	18	90	43	45	138	168	64	105	19	28	28	15
21	37	81	60	41	125	104	62	78	18	21	24	20
22	32	69	66	45	362	91	79	60	80	21	46	32
23	28	66	146	115	404	87	62	54	467	20	145	24
24	24	55	202	116	206	73	76	50	163	24	46	21
25	20	47	102	159	164	65	57	49	59	74	32	19
26	20	46	78	112	146	91	51	45	41	24	28	16
27	23	46	62	80	162	118	48	42	33	25	46	15
28	21	44	55	56	132	165	235	147	38	29	30	18
29	19	41	49	55	------	234	138	282	99	23	23	17
30	233	41	48	59	------	188	92	118	54	63	21	17
31	391	------	54	75	------	128	------	74	------	68	23	------
TOTAL	1,330	3,327	1,752	2,888	8,618	5,843	4,042	5,921	1,597	1,551	1,351	623
MEAN	42.9	111	56.5	93.2	308	188	135	191	53.2	50.0	43.6	20.8
MAX	391	600	202	197	1,490	1,090	512	1,370	467	238	190	57
MIN	12	36	27	41	48	65	48	33	18	20	19	14
CFSM	.35	.90	.46	.75	2.48	1.52	1.09	1.54	.43	.40	.35	.17
IN.	.40	1.00	.53	.87	2.59	1.75	1.21	1.78	.48	.47	.41	.19

CAL YR 1970 TOTAL 35,923.9 MEAN 98.4 MAX 2,270 MIN 4.2 CFSM .79 IN 10.78
WTR YR 1971 TOTAL 38,843.0 MEAN 106 MAX 1,490 MIN 12 CFSM .85 IN 11.65

PEAK DISCHARGE (BASE, 2,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-7	2200	13.84	2,910	5-13	0930	12.91	2,630

02100500 Deep River at Ramseur, N. C.

LOCATION.--Lat 35°43'40", long 79°39'10", Randolph County, on right bank 0.2 mile downstream from Main Street bridge in Ramseur, 0.5 mile downstream from mill dam, and 1.5 miles downstream from Sandy Creek.

DRAINAGE AREA.--346 sq mi.

PERIOD OF RECORD.--November 1922 to current year.

GAGE.--Water-stage recorder. Datum of gage is 419.50 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--48 years, (1923-71) 338 cfs (13.27 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,600 cfs Feb. 8 (gage height, 12.78 ft); minimum, 30 cfs Oct. 13 (gage height, 0.71 ft). Period of record: 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, 0.2 mile upstream (discharge, 30,000 cfs).

REMARKS.--Records good. Large diurnal fluctuation caused by powerplants above station prior to Jan. 1, 1963, only slight fluctuation afterwards. Flow slightly regulated by High Point Municipal Lake (see p. 154) and small powerplant reservoirs. Town of Asheboro diverted an average of 4.0 cfs for water supply from Pee Dee River basin and discharged sewage into Deep River 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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	419	89	314	193	313	335	238	239	153	144	58
2	37	295	89	366	143	521	304	197	184	104	127	55
3	36	221	86	298	136	3,820	554	173	156	82	103	52
4	36	165	83	279	262	2,890	402	155	139	70	70	50
5	33	129	76	568	1,210	913	321	143	128	61	303	50
6	33	112	74	562	1,760	605	1,270	133	113	112	169	49
7	33	97	69	332	1,730	503	1,400	135	100	277	94	46
8	33	82	69	252	5,400	418	766	188	94	152	72	45
9	34	73	68	340	2,860	364	517	272	118	98	60	44
10	33	103	70	449	896	329	429	169	102	243	53	45
11	34	493	72	413	605	324	368	135	89	230	296	59
12	32	299	72	322	517	300	333	136	83	145	261	76
13	34	605	73	265	1,280	289	313	3,060	114	128	126	131
14	44	335	78	239	1,110	440	282	1,180	99	92	73	90
15	124	1,280	83	218	604	581	251	672	84	77	59	59
16	315	565	188	191	494	789	231	4,590	79	66	54	49
17	90	298	561	163	427	411	223	1,430	80	59	66	45
18	57	224	255	155	383	311	210	659	84	53	356	45
19	45	188	161	144	345	337	198	484	84	48	220	47
20	41	170	130	125	328	581	187	337	83	47	108	47
21	58	173	141	114	329	370	185	245	73	58	77	56
22	89	144	206	125	397	299	318	205	99	53	68	305
23	66	129	366	255	1,270	277	247	170	422	49	627	108
24	56	120	846	383	538	249	251	156	601	46	181	76
25	52	103	390	562	403	221	217	152	173	59	101	62
26	47	96	253	380	354	253	174	143	111	93	76	54
27	45	95	188	268	444	344	160	130	94	80	277	49
28	46	95	157	191	380	526	820	1,230	89	69	225	46
29	47	93	139	160	------	698	569	1,470	210	76	101	44
30	117	90	128	177	------	695	310	557	173	66	72	44
31	1,160	------	147	208	------	418	------	339	------	125	61	------
TOTAL	2,944	7,291	5,407	8,818	24,798	19,389	12,145	19,283	4,297	3,071	4,680	1,986
MEAN	95.0	243	174	284	886	625	405	622	143	99.1	151	66.2
MAX	1,160	1,280	846	568	5,400	3,820	1,400	4,590	601	277	627	305
MIN	32	73	68	114	136	221	160	130	73	46	53	44
CFSM	.27	.70	.50	.82	2.56	1.81	1.17	1.80	.41	.29	.44	.19
IN.	.32	.78	.58	.95	2.67	2.08	1.31	2.07	.46	.33	.50	.21

CAL YR 1970 TOTAL 92,705 MEAN 254 MAX 4,800 MIN 25 CFSM .73 IN 9.97
WTR YR 1971 TOTAL 114,139 MEAN 313 MAX 5,400 MIN 32 CFSM .90 IN 12.27

PEAK DISCHARGE (BASE, 6,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2- 8	1830	12.78	7,600	5-16	0800	11.15	6,340

02101000 Bear Creek at Robbins, N. C.

LOCATION.--Lat 35°26'11", long 79°35'09", Moore County, on right bank 0.2 mile west of post office in Robbins, 0.2 mile downstream from Cabin Creek, and 1.0 mile upstream from bridge on State Highway 705.

DRAINAGE AREA.--134 sq mi.

PERIOD OF RECORD.--October 1939 to September 1971 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 322.58 ft above mean sea level, (levels by North Carolina State Highway Commission). Prior to Mar. 6, 1958, water-stage recorder at site 800 ft upstream at datum 0.65 ft higher. Mar. 6, 1958, to Dec. 11, 1959, non-recording gage and crest-stage gage, at present site and datum.

AVERAGE DISCHARGE.--32 years, 144 cfs (14.59 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,140 cfs Jan. 5 (gage height, 12.25 ft); minimum, 2.6 cfs July 19, 20, 21 (gage height, 0.19 ft).

Period of record: Maximum discharge, 43,600 cfs July 20, 1956 (gage height, 34.57 ft, from floodmarks, site and datum then in use), from rating curve extended above 7,000 cfs on basis of slope-area measurements of peak flow at gage height, 27.52 and 34.57 ft at former site; no flow Oct. 2, 22-27, 1941 (result of storage of flow in gage pool after construction of new station control), Sept. 13-19, Sept. 21 to Oct. 14, 1968 (result of diversion for municipal water supply).

REMARKS.--Records good. Town of Robbins diverts and average of 0.7 cfs for municipal water supply.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	237	31	210	248	160	140	112	56	17	1,100	26
2	12	106	30	182	154	715	150	99	47	23	83	24
3	9.8	75	30	112	132	3,410	183	115	42	20	41	22
4	8.3	61	30	95	192	1,400	146	97	37	17	74	21
5	7.2	48	30	3,040	705	394	128	83	35	13	152	21
6	6.7	43	31	807	487	275	495	76	32	11	82	25
7	6.2	38	31	245	963	230	335	71	30	13	42	36
8	6.5	37	30	174	2,030	187	238	73	27	19	32	25
9	6.2	33	30	400	891	166	171	79	24	17	26	20
10	6.5	49	32	413	308	156	148	65	24	14	20	19
11	6.7	126	32	350	225	156	130	56	24	11	19	31
12	6.8	82	34	200	196	143	125	53	23	9.3	36	30
13	6.5	154	36	156	582	138	119	506	22	9.7	29	27
14	6.7	71	35	134	353	304	113	172	23	9.2	19	23
15	17	53	32	142	213	196	103	135	22	8.6	15	19
16	41	45	206	146	182	259	100	2,390	20	7.0	14	16
17	27	39	459	114	160	166	98	349	19	5.8	171	75
18	15	37	108	105	148	135	94	176	24	4.7	1,190	19
19	11	37	70	95	132	168	88	128	31	3.4	140	17
20	9.2	36	57	85	135	232	83	103	32	2.7	69	16
21	13	38	50	79	132	149	83	90	28	239	47	21
22	19	37	48	91	191	131	88	82	23	51	52	45
23	20	35	258	330	428	123	86	72	31	23	313	33
24	18	34	245	509	189	110	126	65	29	15	91	24
25	17	31	100	803	150	100	92	62	20	16	48	21
26	16	30	73	293	135	160	78	59	18	21	37	18
27	17	30	59	186	161	300	72	52	15	40	104	16
28	16	31	53	140	145	450	893	84	44	66	93	14
29	16	32	49	122	------	700	266	147	25	58	52	13
30	34	32	49	174	------	300	138	95	18	83	36	12
31	1,470	------	61	664	------	190	------	73	------	265	29	------
TOTAL	1,887.3	1,737	2,419	10,596	9,967	11,703	5,109	5,819	845	1,112.4	4,256	729
MEAN	60.9	57.9	78.0	342	356	378	170	188	28.2	35.9	137	24.3
MAX	1,470	237	459	3,040	2,030	3,410	893	2,390	56	265	1,190	75
MIN	6.2	30	30	79	132	100	72	52	15	2.7	14	12
CFSM	.45	.43	.58	2.55	2.66	2.82	1.27	1.40	.21	.27	1.02	.18
IN.	.52	.48	.67	2.94	2.77	3.25	1.42	1.62	.23	.31	1.18	.20

CAL YR 1970 TOTAL 36,672.1 MEAN 100 MAX 3,250 MIN 3.2 CFSM .75 IN 10.18
WTR YR 1971 TOTAL 56,179.7 MEAN 154 MAX 3,410 MIN 2.7 CFSM 1.15 IN 15.60

PEAK DISCHARGE (BASE, 3,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1- 5	1430	12.25	5,140	5-16	0530	11.02	4,460
3- 3	1430	12.05	5,030				

02101800 Tick Creek near Mount Vernon Springs, N. C.

LOCATION.--Lat 35°39'37", long 79°20'08", Chatham County, on right bank 200 ft upstream from bridge on U.S. Highway 421, 1.5 miles east of Mount Vernon Springs, and 4 miles upstream from mouth.

DRAINAGE AREA.--15.3 sq mi.

PERIOD OF RECORD.--June 1958 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 455 ft (by barometer).

AVERAGE DISCHARGE.--13 years, 14.1 cfs (12.51 inches per year).

EXTREMES.--Current year: Maximum discharge, 824 cfs Mar. 3 (gage height, 6.01 ft); minimum, 0.02 cfs several days in October; minimum gage height, 1.67 ft Oct. 9, 10.
Period of record: Maximum discharge, 2,920 cfs Aug. 30, 1964 (gage height, 9.21 ft); no flow at times most years.

REMARKS.--Records good. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	23	3.2	41	25	9.8	13	7.8	4.8	1.4	27	5.6
2	.09	10	3.2	27	15	60	12	6.6	4.0	2.1	4.2	4.8
3	.06	11	3.0	17	13	473	12	6.9	3.5	1.6	2.3	4.2
4	.04	7.2	3.3	15	70	109	9.3	5.6	3.0	.92	1.5	3.8
5	.03	5.0	3.0	350	156	37	8.5	5.2	2.7	.56	71	3.4
6	.03	4.0	3.2	150	71	28	39	5.0	2.4	1.8	10	3.0
7	.03	3.2	3.0	50	178	22	31	4.8	1.9	4.6	5.0	3.4
8	.02	2.7	3.0	18	240	16	22	6.9	1.8	1.7	3.5	2.7
9	.02	2.3	3.0	42	84	13	14	8.2	1.8	1.5	2.4	2.2
10	.02	44	3.2	40	34	12	11	5.0	1.6	.98	1.7	2.2
11	.02	193	3.3	34	27	13	9.3	4.0	1.5	.63	2.4	3.4
12	.03	31	3.2	22	23	11	8.5	3.6	1.4	.50	4.8	4.4
13	.03	37	3.2	15	100	10	8.2	39	1.6	.50	2.0	4.4
14	.03	15	2.9	13	42	23	7.2	15	1.6	.50	1.3	2.8
15	.26	18	2.7	12	25	16	6.6	10	1.4	.47	1.1	1.9
16	.88	11	40	9.8	20	17	6.6	198	1.6	.39	2.7	1.7
17	.28	7.8	41	8.8	16	11	6.2	29	2.4	.36	50	1.6
18	.39	6.6	12	8.2	13	9.3	5.9	13	2.6	.34	234	1.7
19	.34	5.6	8.2	7.2	12	16	5.6	8.2	2.7	.32	21	1.8
20	.34	5.4	6.6	6.2	12	17	5.4	6.2	2.4	.39	8.2	1.6
21	.39	5.4	7.8	5.9	11	11	5.4	5.6	2.9	1.4	5.2	1.7
22	.98	4.8	8.5	7.2	15	9.8	5.6	5.2	8.5	.75	5.0	1.7
23	.75	4.6	44	30	22	8.8	5.4	4.4	20	.42	275	1.8
24	.79	4.0	44	37	12	8.2	7.2	4.0	4.0	.26	25	1.7
25	.84	3.5	18	52	10	7.5	5.6	3.8	2.3	1.8	11	1.4
26	.79	3.5	11	27	9.3	12	5.9	3.5	1.9	1.1	37	1.3
27	.84	3.5	8.2	15	13	26	5.6	3.0	1.6	.98	200	1.2
28	.84	3.3	6.9	11	10	27	109	21	1.1	1.7	50	1.1
29	.84	3.3	6.2	9.8	------	55	27	28	1.2	7.8	18	.98
30	4.0	3.2	5.9	90	------	31	11	9.8	1.0	5.0	9.8	.92
31	90	------	17	65	------	18	------	6.9	------	5.2	7.2	------
TOTAL	104.11	481.9	331.7	1,236.1	1,278.3	1,137.4	430.0	483.2	91.2	47.97	1,099.3	74.40
MEAN	3.36	16.1	10.7	39.9	45.7	36.7	14.3	15.6	3.04	1.55	35.5	2.48
MAX	90	193	44	350	240	473	109	198	20	7.8	275	5.6
MIN	.02	2.3	2.7	5.9	9.3	7.5	5.4	3.0	1.0	.26	1.1	.92
CFSM	.22	1.05	.70	2.61	2.99	2.40	.93	1.02	.20	.10	2.32	.16
IN.	.25	1.17	.81	3.01	3.11	2.77	1.05	1.17	.22	.12	2.67	.18

CAL YR 1970 TOTAL 4,729.74 MEAN 13.0 MAX 328 MIN .01 CFSM .85 IN 11.50
WTR YR 1971 TOTAL 6,795.58 MEAN 18.6 MAX 473 MIN .02 CFSM 1.22 IN 16.52

PEAK DISCHARGE (BASE, 350 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-11	0030	5.56	644	5-16	0345	5.04	459
1- 5	Unknown	Unknown	Unknown	8-18	0115	5.51	624
2- 7	1845	5.21	518	8-23	0500	5.99	816
3- 3	1215	6.01	824				

02102000 Deep River at Moncure, N. C.

LOCATION.--Lat 35°37'41", long 79°06'48", Lee County, on right bank 1.0 mile upstream from Lockville Dam, 1.2 miles upstream from bridge on U.S. Highway 1, 1.5 miles northwest of Moncure, 2.2 miles downstream from Rocky River and 4.5 miles upstream from confluence with Haw River.

DRAINAGE AREA.--1,410 sq mi, approximately.

PERIOD OF RECORD.--July 1930 to current year. 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 185.06 ft above mean sea level.

AVERAGE DISCHARGE.--41 years, 1,414 cfs (13.62 inches per year).

EXTREMES.--Current year: Maximum discharge, 21,400 cfs Mar. 3 (gage height, 8.86 ft); minimum, 59 cfs Oct. 14, 15 (gage height, 0.92 ft).
Period of record: Maximum discharge, 80,300 cfs Sept. 18, 1945 (gage height, 17.20 ft); minimum, 5.5 cfs Oct. 10, 1954 (gage height, 0.35 ft).

REMARKS.--Records good. Diurnal fluctuation and some regulation at low flow caused by small powerplants above station. Water quality records collected 1.5 miles downstream from station for the current year are published in Part 2 of this report.

REVISIONS.--WSP 822: Drainage area. WSP 1082: (1930-46 not previously published).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	125	5,600	263	1,280	3,760	1,420	2,000	1,410	1,000	297	1,550	409
2	145	2,050	259	2,100	1,960	3,030	1,510	1,030	744	336	1,890	347
3	122	1,060	255	1,690	1,300	14,800	1,360	870	589	297	649	309
4	107	798	253	1,240	1,500	18,200	1,500	824	501	253	386	283
5	94	625	242	9,280	5,000	16,900	1,380	733	443	212	2,550	256
6	86	470	230	14,100	8,690	10,100	1,910	629	407	220	2,750	234
7	80	385	217	8,690	7,220	2,970	4,460	567	378	247	1,120	222
8	74	330	206	2,700	13,700	2,150	4,060	542	343	226	559	214
9	71	289	202	2,270	15,400	1,730	2,590	879	318	384	363	215
10	69	263	200	4,110	13,400	1,470	1,800	725	289	327	289	208
11	67	2,840	199	3,980	5,190	1,370	1,440	647	281	237	247	303
12	66	2,040	204	2,880	2,420	1,310	1,230	511	279	282	456	680
13	64	2,850	208	1,930	3,670	1,220	1,110	1,810	261	341	866	1,790
14	62	2,100	209	1,460	6,460	1,860	1,030	6,560	247	240	552	803
15	64	1,220	209	1,270	4,110	2,600	956	3,020	271	235	570	521
16	80	1,480	259	1,310	2,460	2,460	873	10,300	267	203	1,310	387
17	149	1,330	2,930	1,170	1,880	2,630	817	12,800	244	181	769	338
18	405	771	2,650	1,000	1,610	1,690	782	7,110	228	162	8,490	662
19	257	571	1,240	900	1,420	1,310	748	2,060	223	143	4,820	351
20	166	486	759	800	1,280	1,600	710	1,340	232	129	1,440	269
21	137	440	579	716	1,220	1,950	678	1,060	373	157	777	248
22	121	415	528	673	1,220	1,440	705	870	454	370	509	550
23	109	400	647	1,040	3,140	1,170	731	733	480	376	3,800	400
24	120	365	2,600	2,540	3,620	1,050	863	637	711	224	3,750	250
25	156	337	2,530	5,880	2,150	956	824	570	967	182	1,350	190
26	143	310	1,400	4,590	1,520	967	776	530	587	174	721	180
27	122	286	914	2,720	1,350	1,590	668	501	471	308	2,110	160
28	109	270	688	1,680	1,460	2,780	4,780	483	313	348	3,350	150
29	98	267	570	1,230	------	3,150	8,220	2,770	244	400	1,710	140
30	113	266	509	1,130	------	5,020	2,910	3,210	229	537	853	135
31	1,790	------	478	3,740	------	3,360	------	1,540	------	844	541	------
TOTAL	5,371	30,914	22,637	90,099	118,110	114,253	53,421	67,271	12,374	8,872	51,097	11,204
MEAN	173	1,030	730	2,906	4,218	3,686	1,781	2,170	412	286	1,648	373
MAX	1,790	5,600	2,930	14,100	15,400	18,200	8,220	12,800	1,000	844	8,490	1,790
MIN	62	263	199	673	1,220	956	668	483	223	129	247	135
CFSM	.12	.73	.52	2.06	2.99	2.61	1.26	1.54	.29	.20	1.17	.26
IN.	.14	.82	.60	2.38	3.12	3.01	1.41	1.77	.33	.23	1.35	.30

CAL YR 1970 TOTAL 396,028 MEAN 1,085 MAX 14,200 MIN 62 CFSM .77 IN 10.45
WTR YR 1971 TOTAL 585,623 MEAN 1,604 MAX 18,200 MIN 62 CFSM 1.14 IN 15.45

PEAK DISCHARGE (BASE, 15,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1- 5	1900	8.09	17,800	3- 3	2100	8.86	21,400
2- 9	0200	7.85	16,700				

02102500 Cape Fear River at Lillington, N. C.

LOCATION.--Lat 35°24'30", long 78°48'48", Harnett County, near right bank in downstream end of pier of downstream bridge on U.S. Highway 401, 1,800 ft downstream from Norfolk Southern Railway bridge, 0.5 mile north of Lillington, 1 mile downstream from Neal Creek, and at mile 178.

DRAINAGE AREA.--3,440 sq mi, approximately.

PERIOD OF RECORD.--December 1923 to current year.

GAGE.--Water-stage recorder. Datum of gage is 104.62 ft above mean sea level. Prior to Oct. 8, 1927, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--47 years (1924-71), 3,275 cfs (12.93 inches per year).

EXTREMES.--Current year: Maximum discharge, 41,300 cfs Mar. 4 (gage height, 16.66 ft); minimum, 131 cfs Oct. 13 (gage height, 0.52 ft).
Period of record: Maximum discharge not determined, Sept. 19, 1945 (gage height, 33.19 ft, from floodmark), maximum daily, 140,000 cfs Sept. 19, 1945; minimum discharge, 11 cfs Oct. 14, 15, 1954 (gage height, -0.17 ft).

REMARKS.--Records excellent. Diurnal fluctuation and slight regulation at low flow caused by powerplants above station. Fluctuation and regulation by Buckhorn Reservoir 13 miles above station ended in December 1962. Water quality records for the current year are published in Part 2 of this report.

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. WSP 1703: 1929.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	305	8,900	795	1,940	6,520	3,280	4,990	3,420	3,880	580	1,940	1,160
2	335	5,440	739	4,090	3,950	4,360	3,800	2,410	2,890	742	3,610	902
3	315	2,910	721	3,820	2,640	20,400	3,260	1,970	2,070	777	1,690	752
4	232	2,100	709	3,060	2,640	40,800	3,650	1,740	1,570	654	1,160	681
5	199	1,630	685	13,600	7,650	30,800	3,330	1,600	1,310	591	2,780	568
6	276	1,320	609	24,300	16,100	20,100	4,030	1,430	1,150	538	5,610	576
7	238	1,140	656	15,600	13,900	9,270	10,300	1,300	1,030	697	2,330	551
8	204	891	657	7,460	26,300	6,490	10,100	1,360	935	1,020	1,330	594
9	198	768	600	6,230	34,200	4,850	7,010	2,550	869	1,170	897	507
10	198	813	613	7,950	26,300	3,700	5,360	1,820	826	893	795	542
11	185	2,430	590	8,040	14,800	3,260	4,220	1,530	754	685	634	616
12	164	5,410	600	6,490	8,110	3,050	3,220	1,270	758	783	681	1,680
13	206	4,960	566	4,740	7,160	2,810	2,710	3,330	704	841	1,140	6,340
14	217	5,330	601	3,590	14,100	2,780	2,430	12,800	686	686	1,190	3,270
15	191	3,810	647	3,080	9,860	4,170	2,190	8,360	702	576	933	2,570
16	1,740	5,590	609	2,790	6,310	4,310	1,970	17,400	708	526	2,040	2,440
17	2,480	4,110	1,370	2,520	4,880	4,830	1,810	28,200	756	503	1,510	1,880
18	1,260	2,350	5,610	2,160	3,830	4,220	1,710	16,900	871	412	9,510	1,570
19	815	1,770	4,100	1,930	3,340	2,790	1,630	7,440	816	430	11,500	957
20	629	1,480	2,360	1,720	2,990	2,840	1,540	5,040	764	485	3,720	852
21	511	1,330	1,690	1,590	2,780	3,810	1,460	3,600	714	553	1,860	797
22	522	1,190	1,430	1,470	2,800	3,160	1,500	2,530	1,000	554	1,260	939
23	471	1,100	1,440	1,870	5,890	2,550	1,620	1,930	1,180	659	4,150	982
24	594	1,020	2,440	3,640	8,090	2,220	1,730	1,600	1,190	557	6,400	1,140
25	512	951	5,920	8,000	5,450	1,990	1,810	1,410	2,080	412	3,120	1,120
26	497	900	4,780	8,380	3,840	2,040	1,670	1,290	1,580	465	1,900	791
27	501	780	2,700	5,420	3,260	2,520	1,480	1,170	1,070	859	2,710	684
28	383	830	1,830	3,630	3,290	4,660	5,270	1,180	861	1,220	9,150	702
29	359	727	1,460	2,700	------	6,160	13,200	6,490	724	1,070	5,100	563
30	389	741	1,300	2,330	------	9,230	6,750	9,800	577	1,140	2,420	538
31	2,000	------	1,210	5,470	------	7,370	------	5,420	------	1,480	1,650	------
TOTAL	17,126	72,721	50,037	169,610	250,980	224,820	115,750	158,290	35,025	22,558	94,720	37,264
MEAN	552	2,424	1,614	5,471	8,964	7,252	3,858	5,106	1,168	728	3,055	1,242
MAX	2,480	8,900	5,920	24,300	34,200	40,800	13,200	28,200	3,880	1,480	11,500	6,340
MIN	164	727	566	1,470	2,640	1,990	1,460	1,170	577	412	634	507
CFSM	.16	.70	.47	1.59	2.61	2.11	1.12	1.48	.34	.21	.89	.36
IN.	.19	.79	.54	1.83	2.71	2.43	1.25	1.71	.38	.24	1.02	.40

CAL YR 1970 TOTAL 902,295 MEAN 2,472 MAX 32,000 MIN 164 CFSM .72 IN 9.76
WTR YR 1971 TOTAL 1,248,901 MEAN 3,422 MAX 40,800 MIN 164 CFSM .99 IN 13.51

PEAK DISCHARGE (BASE, 30,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2- 9	1500	15.52	36,100	5-17	0300	14.47	31,900
3- 4	0600	16.66	41,300				

02102908 Flat Creek near Inverness, N. C.

LOCATION.--Lat 35°10'54", long 79°10'40", Hoke County, Fort Bragg military reservation, on left bank 15 ft downstream from culvert on Manchester Road, 0.4 mile upstream from mouth, and 3.6 miles east of Inverness.

DRAINAGE AREA.--7.65 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 191.18 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 81 cfs Sept. 12 (gage height, 2.36 ft); minimum, 4.6 cfs July 18, 19; minimum gage height, 0.93 ft July 4, 5.
Period of record: Maximum discharge, 187 cfs July 6, 1968 (gage height, 3.63 ft) from rating curve extended above 90 cfs; minimum 2.4 cfs Feb. 12, 1969 (gage height, 0.85 ft) due to regulation from unknown source; minimum unregulated, 3.7 cfs many days in August, September and October 1968.

REMARKS.--Records good. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	27	6.2	11	16	12	13	12	7.7	6.6	11	9.3
2	5.9	13	6.5	9.0	11	25	12	12	7.4	6.6	9.2	8.9
3	5.9	9.9	6.2	8.1	11	48	14	12	6.8	6.3	8.3	8.6
4	5.7	8.7	6.2	8.1	15	48	12	11	6.8	6.0	7.7	8.7
5	5.7	8.7	6.0	33	26	19	12	12	6.6	6.0	23	8.2
6	5.7	8.1	6.2	19	17	16	29	11	6.6	11	18	8.0
7	5.9	7.5	6.0	11	20	15	20	11	6.3	24	11	7.9
8	6.0	7.3	6.2	10	34	14	15	11	6.3	12	9.1	8.2
9	6.0	7.3	6.2	23	20	14	13	11	6.6	8.0	8.0	8.0
10	5.7	7.8	6.2	20	14	14	12	10	6.8	7.1	7.5	13
11	5.5	12	6.2	14	13	14	11	9.1	7.1	9.5	7.1	15
12	5.7	8.7	6.2	11	12	13	11	8.5	7.1	39	8.0	38
13	5.7	7.8	6.2	11	20	12	11	19	6.2	18	7.6	38
14	5.7	7.3	6.0	9.9	16	21	10	12	6.8	10	6.8	14
15	5.7	7.3	6.0	20	12	16	10	11	6.2	7.5	6.9	11
16	11	7.0	14	15	12	16	10	30	7.1	6.8	8.9	10
17	7.5	7.0	23	11	11	13	10	15	9.2	6.4	26	10
18	6.5	6.8	8.7	10	11	12	10	11	9.5	5.8	27	10
19	6.2	7.0	7.5	9.9	11	13	10	11	8.2	16	12	9.9
20	6.2	7.0	7.3	9.4	11	14	10	10	7.7	33	9.5	9.1
21	13	6.8	7.0	9.3	11	12	10	12	12	11	8.0	11
22	8.4	6.5	7.3	10	20	11	10	12	13	9.0	7.8	19
23	7.0	6.8	11	12	35	11	13	10	13	7.6	26	12
24	6.5	6.5	9.0	17	15	11	16	11	8.5	7.2	12	10
25	11	6.5	7.3	26	12	11	12	11	9.2	7.1	8.7	9.5
26	11	6.8	7.0	17	12	21	11	9.2	7.4	8.5	10	8.9
27	7.3	6.8	6.8	12	13	22	11	8.8	6.8	44	31	8.7
28	6.5	6.5	6.8	11	12	17	35	8.8	6.8	18	19	8.6
29	6.2	6.5	6.8	10	------	26	23	11	6.3	14	11	8.3
30	11	6.5	7.0	11	------	26	13	10	6.6	32	9.7	9.2
31	55	------	7.8	29	------	15	------	8.5	------	15	9.2	------
TOTAL	267.3	249.4	236.8	437.7	443	552	409	361.9	232.6	419.0	385.0	359.0
MEAN	8.62	8.31	7.64	14.1	15.8	17.8	13.6	11.7	7.75	13.5	12.4	12.0
MAX	55	27	23	33	35	48	35	30	13	44	31	38
MIN	5.5	6.5	6.0	8.1	11	11	10	8.5	6.2	5.8	6.8	7.9
CFSM	1.13	1.09	1.00	1.84	2.07	2.33	1.78	1.53	1.01	1.76	1.62	1.57
IN.	1.30	1.21	1.15	2.13	2.15	2.68	1.99	1.76	1.13	2.04	1.87	1.75

CAL YR 1970 TOTAL 3,420.0 MEAN 9.37 MAX 84 MIN 4.5 CFSM 1.22 IN 16.63
WTR YR 1971 TOTAL 4,352.7 MEAN 11.9 MAX 55 MIN 5.5 CFSM 1.56 IN 21.17

PEAK DISCHARGE (BASE, 60 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-31	1645	2.21	71	7-27	1015	2.18	69
3- 3	2400	2.17	69	9-12	2115	2.36	81

02103500 Little River at Linden, N. C.

LOCATION.--Lat 35°15'46", long 78°46'35", Harnett County, on left bank 10 ft downstream from bridge on U.S. Highway 401, 1.6 miles west of Linden, 2 miles upstream from Stewart Creek, and 4.5 miles upstream from mouth.

DRAINAGE AREA.--460 sq mi.

PERIOD OF RECORD.--November 1928 to September 1971 (discontinued). 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. Prior to Aug. 27, 1934, nonrecording gage at same site and datum. Auxiliary water-stage recorder 2.2 miles downstream from base gage. June 18, 1948 to Sept. 30, 1965, auxiliary nonrecording gage at same site and datum read twice daily, or more frequently, during periods of backwater.

AVERAGE DISCHARGE.--42 year (1929-71) 557 cfs (16.44 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,540 cfs Mar. 5, maximum gage height, 14.42 ft Mar. 5; minimum discharge, 72 cfs Oct. 12 (gage height, 1.99 ft).
Period of record: 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 excellent. Some diurnal fluctuation during low flow caused by gravel washing operation upstream.

REVISION (WATER YEARS).--WSP 822: Drainage area. WSP 1383: 1930-33, 1937, 1945. WSP 1723: 1932 (M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	595	185	363	1,100	836	1,460	1,350	339	114	883	313
2	125	597	183	438	1,140	992	1,120	897	288	107	711	275
3	109	539	182	462	1,090	1,870	974	681	245	99	477	233
4	98	479	181	432	949	3,220	980	594	215	93	308	215
5	90	377	176	492	1,030	3,490	817	531	190	86	325	205
6	87	269	174	721	1,220	3,500	1,030	480	170	90	624	193
7	82	236	166	809	1,310	2,600	1,290	438	158	208	831	183
8	79	212	164	830	1,680	1,690	1,360	408	144	260	754	180
9	76	190	161	856	1,760	1,380	1,240	402	134	245	534	174
10	74	202	164	934	1,920	1,200	1,020	387	122	210	369	178
11	74	309	166	1,040	1,890	1,080	859	357	119	162	285	228
12	73	330	159	1,080	1,420	1,010	750	320	105	366	233	300
13	77	359	159	987	1,170	992	696	366	113	426	240	957
14	77	332	159	833	1,150	1,020	551	639	126	308	300	1,450
15	78	307	157	789	1,170	1,070	609	1,050	116	243	265	1,160
16	83	245	186	879	1,180	1,190	573	1,380	110	183	213	681
17	104	237	468	842	1,010	1,240	537	1,280	111	154	298	450
18	104	211	529	789	864	1,220	516	1,470	122	128	612	357
19	105	208	576	680	799	1,050	492	1,330	136	117	741	330
20	100	215	482	585	728	929	471	834	140	285	768	308
21	116	217	370	521	711	859	453	594	152	233	633	280
22	198	196	305	494	820	792	447	516	156	208	441	268
23	175	187	349	524	1,860	729	450	486	280	178	399	280
24	154	184	543	617	1,590	684	546	432	333	158	528	298
25	144	185	671	1,040	1,430	648	573	384	228	136	573	288
26	177	184	643	1,170	1,150	750	540	354	185	126	456	265
27	165	184	530	1,260	961	967	465	333	150	255	432	243
28	152	185	423	1,130	867	1,070	810	305	148	585	582	223
29	141	188	339	900	------	1,210	1,370	305	148	741	639	205
30	143	190	319	738	------	1,560	1,470	339	122	827	555	198
31	327	------	315	889	------	1,570	------	369	------	943	405	------
TOTAL	3,734	8,349	9,584	24,124	33,969	42,418	24,469	19,611	5,105	8,274	15,414	10,918
MEAN	120	278	309	778	1,213	1,368	816	633	170	267	497	364
MAX	327	597	671	1,260	1,920	3,500	1,470	1,470	339	943	883	1,450
MIN	73	184	157	363	711	648	447	305	105	86	213	174
CFSM	.26	.60	.67	1.69	2.64	2.97	1.77	1.38	.37	.58	1.08	.79
IN.	.30	.68	.78	1.95	2.75	3.43	1.98	1.59	.41	.67	1.25	.88

CAL YR 1970 TOTAL 139,700 MEAN 383 MAX 1,760 MIN 52 CFSM .83 IN 11.30
WTR YR 1971 TOTAL 205,969 MEAN 564 MAX 3,500 MIN 73 CFSM 1.23 IN 16.66

PEAK DISCHARGE (BASE, 2,100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 5	0800	14.42	3,540				

02105500 Cape Fear River at William O. Huske Lock near Tarheel, N. C.

LOCATION.--Lat 34°50'05", long 78°49'27", Bladen County, on right bank 100 ft upstream from William O. Huske Lock, 1 mile downstream from Cumberland-Bladen County line, 7 miles north of Tarheel, 9 miles upstream from Phillips Creek, and at mile 123.

DRAINAGE AREA.--4,810 sq mi, approximately.

PERIOD OF RECORD.--October 1937 to current year. Prior to October 1964, published as Cape Fear River at lock 3 near Tarheel, N. C.

GAGE.--Water-stage recorder and concrete lock and dam control. Datum of gage is 28.968 ft above mean sea level. Prior to Jan. 8, 1939, nonrecording gage on upper lock wall 100 ft downstream at same datum. Auxiliary water-stage recorder 1.8 miles downstream from base gage; prior to Jan. 14, 1943, auxiliary nonrecording 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.--34 years, 4,846 cfs (13.68 inches per year).

EXTREMES.--Current year: Maximum discharge, 39,400 cfs Mar. 5; maximum gage height, 24.76 ft Mar. 5 (from floodmarks); minimum discharge, 480 cfs Oct. 14 (gage height, 0.80 ft); minimum daily 489 cfs Oct. 14.
Period of record: Maximum discharge not determined; maximum gage height, 43.44 ft Sept. 22, 1945; maximum daily discharge, 112,000 cfs Sept. 21, 1945; minimum discharge, 170 cfs Sept. 20, 1954; minimum daily, 208 cfs Sept. 13, 1954.

REMARKS.--Records excellent except those computed from once daily observer readings, which are fair. Slight diurnal fluctuation and some regulation at short periods at low flow caused by powerplants above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,090	5,590	1,270	2,180	9,070	5,770	10,400	9,230	5,640	925	3,500	2,380
2	914	9,100	1,320	3,540	8,260	6,280	7,920	5,920	4,210	914	4,540	1,790
3	830	5,690	1,300	5,010	6,070	12,600	6,200	4,520	3,120	1,040	4,170	1,450
4	750	3,980	1,270	4,590	5,010	31,400	5,490	3,710	2,440	991	2,530	1,280
5	600	3,100	1,240	4,410	6,490	38,500	5,540	3,160	1,990	870	1,990	1,190
6	580	2,480	1,190	20,300	13,200	31,800	5,900	2,720	1,670	830	5,200	1,110
7	600	2,050	1,150	19,200	16,600	25,200	9,460	2,500	1,600	1,100	5,010	1,020
8	600	1,820	1,110	16,200	19,600	18,100	16,200	2,330	1,390	1,440	3,400	969
9	552	1,470	1,120	9,200	24,600	14,200	14,300	2,550	1,330	1,740	2,440	1,010
10	525	1,390	1,080	8,540	32,400	9,640	9,610	3,080	1,210	1,690	1,820	1,140
11	525	2,290	1,050	9,880	32,500	6,780	7,460	2,900	1,180	1,380	1,490	1,180
12	525	5,320	1,060	9,550	23,000	6,000	6,300	2,480	1,060	1,370	1,260	1,420
13	507	5,740	1,160	8,030	15,400	5,590	5,150	2,270	1,100	1,820	1,270	4,130
14	489	6,170	1,060	6,360	13,600	5,440	4,150	7,460	1,040	1,800	1,530	6,680
15	561	5,390	1,050	5,590	14,900	6,050	3,590	12,800	1,040	1,440	1,610	4,910
16	690	5,130	1,260	5,470	13,000	7,140	3,290	11,600	991	1,160	1,710	4,220
17	2,300	5,670	2,320	4,940	8,690	7,540	3,060	20,400	1,050	1,060	3,040	3,540
18	2,420	4,000	5,970	4,430	6,890	7,110	3,060	25,000	1,100	969	4,770	2,890
19	1,660	2,820	6,020	3,910	5,870	5,970	2,950	20,200	1,280	840	12,400	2,300
20	1,190	2,330	4,170	3,480	5,130	5,320	2,710	11,900	1,220	1,150	8,660	1,690
21	1,040	2,090	3,080	3,080	4,700	5,720	2,660	6,780	1,180	1,360	4,520	1,560
22	1,040	1,930	2,500	2,820	4,610	5,740	2,560	4,610	1,200	1,400	2,880	1,470
23	1,110	1,790	2,350	2,800	9,850	4,770	2,630	3,420	1,540	1,390	2,330	1,600
24	1,070	1,650	3,160	3,610	9,220	4,150	3,030	2,800	2,050	1,280	6,680	1,620
25	1,130	1,570	6,300	7,110	8,980	3,830	3,250	2,500	2,030	1,130	6,000	1,780
26	1,100	1,490	6,150	11,500	8,890	4,060	3,180	2,230	2,600	958	3,690	1,650
27	1,020	1,440	4,390	10,300	6,840	4,910	2,770	2,020	1,900	1,050	2,990	1,360
28	991	1,360	3,270	7,510	6,020	5,870	3,610	1,890	1,450	1,900	6,150	1,190
29	903	1,370	2,560	5,740	------	8,120	11,700	2,270	1,180	2,450	8,810	1,120
30	892	1,310	2,230	4,650	------	11,100	13,600	9,250	1,060	2,630	5,180	1,050
31	1,160	------	2,110	5,590	------	13,700	------	8,980	------	3,100	3,380	------
TOTAL	29,364	97,530	75,270	219,520	339,390	328,400	181,430	203,480	51,851	43,177	124,950	60,690
MEAN	947	3,251	2,428	7,081	12,120	10,590	6,048	6,564	1,728	1,393	4,031	2,023
MAX	2,420	9,100	6,300	20,300	32,500	38,500	16,200	25,000	5,640	3,100	12,400	6,680
MIN	489	1,310	1,050	2,180	4,610	3,830	2,560	1,890	991	830	1,260	969
CFSM	.20	.68	.50	1.47	2.52	2.20	1.26	1.36	.36	.29	.84	.42
IN.	.23	.75	.58	1.70	2.62	2.54	1.40	1.57	.40	.33	.97	.47

CAL YR 1970 TOTAL 1,292,972 MEAN 3,542 MAX 26,800 MIN 489 CFSM .74 IN 10.00
WTR YR 1971 TOTAL 1,755,061 MEAN 4,803 MAX 38,500 MIN 489 CFSM 1.00 IN 13.57

NOTE.--Discharge computed from nonrecording gage readings Mar. 4-8.

02105769 Cape Fear River at Lock 1 near Kelly, N. C.

LOCATION.--Lat 34°24'15", long 78°17'38", Bladen County, on right bank near upstream end of Lock No. 1, 1.3 miles upstream from Natmore Creek, 2.0 miles upstream from bridge on State Highway 141, 4.6 miles southeast of Kelly, and at mile 67.

DRAINAGE AREA.--5,220 sq mi.

PERIOD OF RECORD.--July 1969 to current year.

GAGE.--Water-stage recorder with concrete lock and dam control. Datum of gage is 2.90 ft below mean sea level (Corps of Engineers bench mark).

EXTREMES.--Current year: Maximum discharge, 52,900 cfs Mar. 8 (gage height, 23.34 ft); minimum, 567 cfs Oct. 14 (gage height, 14.63 ft). Period of record: Maximum discharge, 52,900 cfs Mar. 8, 1971 (gage height, 23.34 ft); minimum, 567 cfs Oct. 14, 1970 (gage height, 14.63 ft).

REMARKS.--Records good except those computed from once daily observer readings, which are fair. Slight diurnal fluctuation and some regulation for short periods at low flow caused by powerplants above station. The city of Wilmington diverted an average of 12.8 cfs for municipal water supply, most of which is returned as sewage below station. Water quality records collected 2.0 miles downstream from station for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,470	2,470	1,570	2,360	7,530	7,600	13,200	13,300	8,120	1,080	3,410	3,520
2	1,270	7,790	1,580	2,620	9,790	7,790	11,800	10,200	5,690	948	3,750	2,610
3	1,090	8,820	1,580	4,160	9,160	10,200	9,570	6,850	4,250	1,320	4,660	2,020
4	996	6,240	1,570	5,050	7,240	16,900	7,490	5,030	3,150	1,310	3,830	1,680
5	964	4,460	1,510	4,840	6,610	22,200	6,570	4,080	2,480	1,160	2,640	1,500
6	741	3,420	1,500	6,990	8,760	32,600	7,170	3,450	2,110	1,050	2,790	1,400
7	710	2,720	1,420	15,100	13,400	47,400	8,690	2,980	1,800	1,040	5,140	1,330
8	700	2,310	1,380	18,300	16,700	51,700	11,900	2,690	1,650	1,310	4,540	1,330
9	686	2,030	1,350	15,900	19,800	43,200	14,200	2,700	1,540	1,580	3,350	1,320
10	649	1,720	1,330	13,600	22,200	29,600	13,900	3,420	1,460	1,800	2,460	1,310
11	626	2,710	1,290	11,900	28,300	18,000	11,600	3,470	1,340	1,620	1,910	1,320
12	620	4,130	1,270	11,500	34,900	11,100	8,960	2,890	1,280	1,500	1,590	1,420
13	598	6,620	1,310	9,830	34,900	8,200	7,120	2,680	1,240	1,580	1,380	2,090
14	588	6,890	1,330	8,520	27,000	7,240	5,870	3,690	1,220	1,870	1,450	5,490
15	600	7,180	1,270	7,280	20,400	6,960	4,780	9,020	1,150	1,740	1,700	6,070
16	784	6,220	1,360	6,880	18,000	7,940	4,130	12,000	1,130	1,430	1,910	4,910
17	1,200	6,450	2,140	6,300	14,900	8,680	3,760	13,400	1,190	1,200	3,440	4,180
18	2,540	6,100	3,940	5,690	11,000	8,880	3,530	17,700	1,250	1,110	5,240	3,470
19	2,300	4,480	6,840	4,820	8,360	8,160	3,470	20,900	1,330	1,000	8,400	2,890
20	1,720	3,330	6,370	4,490	7,100	7,090	3,290	21,800	1,460	1,050	11,200	2,290
21	1,390	2,770	4,680	3,880	5,880	6,440	3,090	17,100	1,400	1,370	8,880	1,850
22	1,290	2,460	3,430	3,520	5,290	6,740	3,010	9,960	1,370	1,470	5,420	1,690
23	1,310	2,280	2,850	3,450	7,130	6,290	2,850	5,710	1,450	1,500	3,580	1,660
24	1,340	2,160	2,860	3,810	11,000	5,390	3,130	3,870	1,810	1,450	3,940	1,770
25	1,350	1,990	4,240	6,570	13,400	4,790	3,470	3,040	2,130	1,360	6,430	1,810
26	1,410	1,880	6,480	10,200	13,100	4,960	3,610	2,650	2,320	1,410	5,590	1,890
27	1,340	1,780	5,980	11,700	10,800	5,650	3,350	2,340	2,520	1,240	4,170	1,700
28	1,250	1,710	4,530	10,100	8,800	6,230	3,290	2,200	2,000	1,420	3,980	1,480
29	1,180	1,670	3,430	7,790	------	7,410	6,250	2,160	1,500	2,160	7,170	1,340
30	1,130	1,630	2,750	6,640	------	9,600	12,100	4,200	1,290	2,610	7,780	1,310
31	1,300	------	2,450	6,140	------	12,200	------	8,860	------	2,910	5,280	------
TOTAL	35,142	116,420	85,590	239,930	401,450	437,140	205,150	224,340	62,630	45,598	137,010	68,650
MEAN	1,134	3,881	2,761	7,740	14,340	14,100	6,838	7,237	2,088	1,471	4,420	2,288
MAX	2,540	8,820	6,840	18,300	34,900	51,700	14,200	21,800	8,120	2,910	11,200	6,070
MIN	588	1,630	1,270	2,360	5,290	4,790	2,850	2,160	1,130	948	1,380	1,310
CFSM	.22	.74	.53	1.48	2.75	2.70	1.31	1.39	.40	.28	.85	.44
IN.	.25	.83	.61	1.71	2.86	3.12	1.46	1.60	.45	.32	.98	.49

CAL YR 1970 TOTAL 1,466,172 MEAN 4,017 MAX 25,100 MIN 585 CFSM .77 IN 10.45
WTR YR 1971 TOTAL 2,059,050 MEAN 5,641 MAX 51,700 MIN 588 CFSM 1.08 IN 14.67

NOTE.--Discharge computed from nonrecording gage readings Jan. 5 to Feb. 11.

02105900 Hood Creek near Leland, N. C.

LOCATION.--Lat 34°16'43", long 78°07'34", Brunswick County, on right bank 150 ft downstream from bridge on U.S. Highway 74 and 76, 0.4 mile downstream from Pasture Pond Branch, 1 mile southeast of Maco, and 4.8 miles northwest of Leland.

DRAINAGE AREA.--21.6 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements water years 1950-56, and annual maximum, water years 1953-56. October 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 12.22 ft above mean sea level. Prior to Nov. 28, 1956, crest-gage at site 150 ft upstream at datum 9.60 ft lower. Nov. 29, 1956 to Apr. 24, 1969 water-stage recorder 150 ft upstream at datum 0.19 ft higher.

AVERAGE DISCHARGE.--15 years, 35.9 cfs (22.57 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,920 cfs Aug. 18 (gage height, 8.98 ft); minimum, 0.20 cfs June 16 (gage height, 1.07 ft).
Period of record: Maximum discharge, 2,050 cfs Sept. 20 1955 (gage height, 10.58 ft, present datum) from rating curve extended above 650 cfs; no flow Oct. 5, 1968.

REMARKS.--Records good except those below 2.0 cfs, which are fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	136	9.0	41	62	66	31	11	2.1	3.0	108	51
2	9.9	153	8.7	43	58	152	25	8.7	1.7	5.8	127	34
3	8.2	115	8.5	34	46	286	22	7.8	1.4	30	87	24
4	6.8	85	7.9	28	42	268	19	6.5	1.2	30	52	29
5	5.3	62	7.4	35	45	187	17	5.4	.82	14	29	29
6	4.3	48	6.8	49	54	125	64	4.3	.57	9.1	19	20
7	3.8	39	6.6	49	57	99	118	3.5	.40	8.7	13	15
8	3.4	32	6.3	43	76	84	93	3.1	.30	8.8	10	14
9	3.0	26	6.3	90	87	68	66	2.9	.30	18	8.0	23
10	2.9	24	6.6	166	73	54	46	2.7	.45	28	6.0	69
11	3.4	53	6.6	133	55	50	35	2.3	.35	19	4.5	79
12	3.8	76	6.3	104	44	47	28	2.1	.26	9.5	10	60
13	3.2	57	6.3	85	53	41	22	2.7	.23	6.7	40	75
14	2.9	42	5.8	68	72	39	18	2.8	.23	7.2	54	71
15	2.7	34	5.6	73	66	38	15	3.4	.23	5.0	25	43
16	2.9	29	31	99	52	35	13	25	1.4	3.5	41	26
17	2.7	25	101	102	42	32	11	27	9.4	2.7	302	18
18	2.5	21	112	80	36	27	9.8	11	8.5	1.5	1,320	15
19	2.1	19	74	63	31	23	8.7	6.7	5.8	.82	419	12
20	2.1	18	49	51	28	22	7.9	4.3	16	8.7	478	10
21	29	17	39	43	26	19	7.4	3.2	21	29	225	8.6
22	107	15	33	39	24	17	6.9	3.6	27	35	120	11
23	120	14	28	36	25	19	7.7	2.7	26	27	92	20
24	91	13	24	34	24	20	26	2.1	15	24	101	12
25	68	12	21	48	20	16	23	1.8	11	20	86	9.5
26	58	11	22	83	19	40	12	1.7	8.1	27	66	7.0
27	52	11	20	93	32	65	8.2	1.5	10	30	128	5.5
28	43	11	17	75	41	54	16	1.5	11	74	218	4.5
29	34	9.9	16	56	------	41	29	3.6	6.8	147	227	3.8
30	31	9.6	18	46	------	39	17	5.4	4.3	206	130	7.3
31	65	------	25	51	------	38	------	3.5	------	123	80	------
TOTAL	786.9	1,217.5	734.7	2,040	1,290	2,111	822.6	173.8	191.84	962.02	4,625.5	806.2
MEAN	25.4	40.6	23.7	65.8	46.1	68.1	27.4	5.61	6.39	31.0	149	26.9
MAX	120	153	112	166	87	286	118	27	27	206	1,320	79
MIN	2.1	9.6	5.6	28	19	16	6.9	1.5	.23	.82	4.5	3.8
CFSM	1.18	1.88	1.10	3.05	2.13	3.15	1.27	.26	.30	1.44	6.90	1.25
IN.	1.36	2.10	1.27	3.51	2.22	3.64	1.42	.30	.33	1.66	7.97	1.39

CAL YR 1970 TOTAL 12,900.25 MEAN 35.3 MAX 468 MIN .10 CFSM 1.63 IN 22.22
WTR YR 1971 TOTAL 15,762.06 MEAN 43.2 MAX 1,320 MIN .23 CFSM 2.00 IN 27.15

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 3	1200	6.06	302	8-18	0500	8.98	1,920

02106000 Little Coharie Creek near Roseboro, N. C.

LOCATION.--Lat 34°57'13", long 78°29'17", Sampson County, on downstream end of center pier of bridge on State Highway 24, 1.2 miles east of Roseboro, and 1.5 miles upstream from Bearskin Swamp.

DRAINAGE AREA.--96.4 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 80.52 ft above mean sea level (levels by Corps of Engineers). Prior to Jan. 12, 1951, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--21 years, 113 cfs (15.92 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,840 cfs Mar. 5 (gage height, 8.60 ft); minimum, 8.7 cfs Aug. 15 (gage height, 1.66 ft).
Period of record: Maximum discharge, 3,400 cfs Oct. 7, 1964 (gage height, 9.97 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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	166	113	57	76	348	375	310	282	55	11	72	35
2	161	131	56	77	313	420	304	271	40	14	89	31
3	132	140	55	76	323	690	287	230	31	19	57	28
4	71	123	54	74	360	1,310	255	180	26	23	38	26
5	49	98	52	77	360	1,730	219	139	23	14	31	25
6	39	77	50	78	357	1,300	274	112	20	10	37	22
7	33	66	48	77	366	774	348	92	18	28	31	20
8	30	59	46	76	600	560	339	79	15	122	26	20
9	28	55	45	99	645	460	371	75	38	117	22	23
10	24	59	46	119	720	402	368	68	45	185	18	25
11	25	141	46	123	665	366	324	60	37	284	17	32
12	24	157	47	129	540	318	281	53	25	147	12	57
13	23	165	47	143	480	287	240	62	22	47	9.9	123
14	23	175	45	140	452	271	204	72	20	39	9.3	117
15	23	184	44	160	402	261	172	72	18	30	9.0	131
16	31	177	70	170	393	281	146	130	15	24	48	150
17	32	156	156	190	378	261	129	139	16	20	265	131
18	28	129	163	210	339	231	116	136	17	17	353	63
19	25	106	164	220	297	214	103	127	17	17	396	50
20	24	91	165	210	263	201	95	97	15	36	356	44
21	30	83	160	210	234	181	90	68	13	114	318	37
22	59	77	144	200	219	162	89	58	11	85	234	33
23	65	73	113	200	417	148	92	50	13	48	132	31
24	56	70	92	210	504	136	124	43	20	32	87	29
25	49	67	82	220	612	124	110	39	25	28	71	26
26	56	64	76	240	620	159	104	35	23	68	59	24
27	55	62	72	260	512	214	94	32	17	54	61	22
28	48	61	69	253	417	219	160	29	17	62	64	21
29	41	61	68	273	------	248	243	43	18	46	80	20
30	42	59	69	263	------	328	279	65	12	42	57	37
31	75	------	70	305	------	324	------	69	------	45	43	------
TOTAL	1,567	3,079	2,471	5,158	12,136	12,955	6,270	3,007	682	1,828	3,102.2	1,433
MEAN	50.5	103	79.7	166	433	418	209	97.0	22.7	59.0	100	47.8
MAX	166	184	165	305	720	1,730	371	282	55	284	396	150
MIN	23	55	44	74	219	124	89	29	11	10	9.0	20
CFSM	.52	1.07	.83	1.72	4.49	4.34	2.17	1.01	.24	.61	1.04	.50
IN.	.60	1.19	.95	1.99	4.68	5.00	2.42	1.16	.26	.71	1.20	.55

CAL YR 1970 TOTAL 40,437.3 MEAN 111 MAX 655 MIN 1.6 CFSM 1.15 IN 15.60
WTR YR 1971 TOTAL 53,688.2 MEAN 147 MAX 1,730 MIN 9.0 CFSM 1.52 IN 20.72

02106500 Black River near Tomahawk, N. C.

LOCATION.--Lat 34°45'17", long 78°17'21", Sampson County, on left bank 30 ft upstream from bridge on State Highway 411, 0.2 mile downstream from Clear Run Swamp, and 3.8 miles northeast of Tomahawk.

DRAINAGE AREA.--680 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 24.61 ft above mean sea level. Oct. 1, 1951, to June 29, 1961, nonrecording gage on downstream side of bridge. June 30, 1961, to Sept. 30, 1964, water-stage recorder at present site at datum 25.00 ft lower.

AVERAGE DISCHARGE.--20 years, 762 cfs (15.22 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,280 cfs Mar. 7 (gage height, 19.48 ft); minimum, 89 cfs Oct. 15 (gage height, 1.67 ft).
Period of record: Maximum discharge, 11,200 cfs Oct. 9, 1964 (gage height, 21.14 ft); minimum, 8.5 cfs Oct. 13, 1954 (gage height, 0.59 ft, present site and datum).
Flood in 1928 reached a stage of 22.0 ft, present datum (discharge, 14,500 cfs) and floods in 1945 and 1948 reached a stage of 17.6 ft, present datum (discharge, 5,420 cfs), from information furnished by North Carolina State Highway Commission.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1723: 1955 (M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	380	564	322	500	1,530	2,270	1,600	1,760	419	266	1,100	1,190
2	366	768	314	522	1,720	2,420	1,620	1,850	362	224	940	896
3	358	784	309	500	1,900	2,630	1,630	1,890	311	449	830	607
4	344	708	305	476	2,040	3,210	1,620	1,790	273	758	890	485
5	273	628	297	466	2,120	4,210	1,600	1,630	248	436	760	417
6	192	542	283	488	2,120	6,040	1,770	1,460	225	267	870	360
7	158	460	270	490	2,060	7,180	2,120	1,220	213	243	780	324
8	130	396	259	466	2,060	6,770	2,430	944	198	245	520	347
9	117	353	252	522	2,120	5,860	2,730	788	184	550	350	366
10	109	331	251	736	2,230	4,940	2,960	696	240	600	250	354
11	102	610	249	862	2,410	4,060	2,950	605	329	800	190	476
12	97	1,050	249	860	2,650	3,320	2,740	537	252	900	150	613
13	94	1,150	247	818	2,840	2,750	2,450	546	213	850	125	874
14	92	1,100	246	784	2,900	2,330	2,160	828	198	760	110	1,070
15	91	999	244	840	2,830	2,050	1,870	926	195	404	90	1,130
16	134	889	259	1,120	2,660	1,900	1,680	1,010	186	273	260	1,100
17	167	792	580	1,310	2,420	1,820	1,480	1,170	192	224	1,420	950
18	158	728	937	1,400	2,200	1,810	1,290	1,230	197	194	2,420	722
19	129	678	963	1,430	1,980	1,780	1,100	1,130	221	192	3,200	561
20	115	614	937	1,370	1,780	1,700	968	980	221	175	3,720	468
21	122	546	895	1,270	1,610	1,570	888	862	189	175	3,760	447
22	204	488	840	1,140	1,490	1,430	850	1,130	168	304	3,420	398
23	295	444	788	1,040	1,420	1,300	818	1,230	152	430	2,920	614
24	360	412	732	983	1,400	1,170	868	880	156	375	2,380	533
25	335	384	636	1,040	1,400	1,070	934	603	273	260	1,910	379
26	326	364	540	1,230	1,470	1,050	890	487	298	375	1,420	309
27	321	353	486	1,360	1,720	1,250	812	419	314	880	1,140	270
28	278	346	452	1,420	2,030	1,400	910	362	424	1,080	1,290	245
29	244	337	446	1,420	------	1,470	1,340	352	375	1,820	1,300	225
30	221	329	460	1,380	------	1,510	1,590	430	333	2,300	1,250	225
31	293	------	480	1,390	------	1,560	------	457	------	1,750	1,260	------
TOTAL	6,605	18,147	14,528	29,633	57,110	83,830	48,668	30,202	7,559	18,559	41,025	16,955
MEAN	213	605	469	956	2,040	2,704	1,622	974	252	599	1,323	565
MAX	380	1,150	963	1,430	2,900	7,180	2,960	1,890	424	2,300	3,760	1,190
MIN	91	329	244	466	1,400	1,050	812	352	152	175	90	225
CFSM	.31	.89	.69	1.41	3.00	3.98	2.39	1.43	.37	.88	1.95	.83
IN.	.36	.99	.79	1.62	3.12	4.59	2.66	1.65	.41	1.02	2.24	.93

CAL YR 1970 TOTAL 240,764 MEAN 660 MAX 3,120 MIN 61 CFSM .97 IN 13.17
WTR YR 1971 TOTAL 372,821 MEAN 1,021 MAX 7,180 MIN 90 CFSM 1.50 IN 20.40

02107000 South River near Parkersburg, N. C.

LOCATION.--Lat 34°48'45", long 78°27'26", Bladen County, on right bank 5 ft downstream from bridge on Secondary Road 1503, 1.9 miles southwest of Parkersburg, and 2.1 miles upstream from Cypress Creek.

DRAINAGE AREA.--382 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 50.38 ft above mean sea level. Prior to Oct. 13, 1961, nonrecording gage at present site at datum 50.00 ft lower.

AVERAGE DISCHARGE.--20 years, 418 cfs (14.86 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,930 cfs Mar. 6 (gage height, 13.02 ft); minimum, 16 cfs July 19, 20 (gage height, 2.83 ft).
Period of record: Maximum discharge, 5,900 cfs Oct. 10, 1964 (gage height, 14.32 ft); minimum, 0.1 cfs Oct. 3-6, 11-14, 1954. Flood of 1918 or 1928 reached a stage of 15.88 ft, present datum, from highwater mark witnessed by local resident.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144	160	333	399	1,140	1,890	965	602	219	21	52	157
2	158	190	306	423	1,170	1,910	1,010	661	200	23	76	106
3	158	205	281	425	1,170	2,090	1,040	720	176	97	88	79
4	141	207	255	417	1,180	2,700	1,010	703	153	72	77	65
5	117	202	230	411	1,220	3,520	961	629	134	40	76	55
6	100	190	220	401	1,230	3,890	1,020	551	117	31	188	46
7	88	176	210	385	1,220	3,610	1,060	498	104	27	138	40
8	76	166	190	375	1,360	3,220	1,090	489	92	25	86	36
9	65	158	180	357	1,620	2,920	1,090	500	91	24	61	34
10	56	161	170	437	1,870	2,640	1,070	500	149	33	46	35
11	50	313	160	462	2,030	2,380	1,040	469	120	39	37	39
12	46	409	152	478	2,020	2,090	997	419	108	32	30	38
13	42	445	147	485	1,970	1,810	952	399	96	31	26	66
14	38	467	142	502	1,910	1,540	900	385	76	28	23	120
15	36	509	140	561	1,830	1,330	840	357	60	25	20	112
16	42	558	161	682	1,740	1,240	780	387	50	22	78	92
17	52	582	289	804	1,620	1,170	713	427	55	20	352	77
18	48	582	361	856	1,500	1,090	654	431	51	18	480	66
19	48	568	387	943	1,360	1,010	599	411	47	16	484	59
20	46	551	395	947	1,230	920	546	393	41	18	443	58
21	48	536	415	920	1,130	840	498	423	36	22	364	62
22	60	513	421	880	1,040	760	458	456	35	35	282	64
23	81	495	417	828	1,010	689	427	462	31	67	217	85
24	81	478	403	776	1,050	623	427	443	33	56	197	65
25	76	454	380	776	1,230	574	431	391	34	42	167	52
26	84	425	357	804	1,450	585	421	334	29	51	142	43
27	84	397	334	840	1,660	644	397	289	28	47	153	37
28	81	379	318	876	1,810	692	439	258	26	43	156	33
29	78	366	312	916	------	744	523	256	24	68	162	29
30	80	354	327	947	------	828	566	247	22	69	216	27
31	114	------	358	1,060	------	904	------	232	------	56	223	------
TOTAL	2,418	11,196	8,755	20,457	40,770	50,853	22,924	13,722	2,437	1,198	5,140	1,877
MEAN	78.0	373	282	660	1,456	1,640	764	443	81.2	38.6	166	62.6
MAX	158	582	421	1,060	2,030	3,890	1,090	720	219	97	484	157
MIN	36	158	140	375	1,010	574	397	232	22	16	20	27
CFSM	.20	.98	.74	1.73	3.81	4.29	2.00	1.16	.21	.10	.43	.16
IN.	.24	1.09	.85	1.99	3.97	4.95	2.23	1.34	.24	.12	.50	.18

CAL YR 1970 TOTAL 119,781.0 MEAN 328 MAX 1,090 MIN 4.0 CFSM .86 IN 11.66
WTR YR 1971 TOTAL 181,747.0 MEAN 498 MAX 3,890 MIN 16 CFSM 1.30 IN 17.70

02107500 Colly Creek near Kelly, N. C.

LOCATION.--Lat 34°27'48", long 78°15'26", Bladen County, on right bank 10 ft downstream from bridge on State Highway 53, 4 miles east of Kelly, and 6.8 miles upstream from mouth.

DRAINAGE AREA.--Indeterminate, see remarks paragraph.

PERIOD OF RECORD.--January 1950 to September 1971 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 15.27 ft above mean sea level (Corps of Engineers bench mark). Prior to Dec. 13, 1950, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--21 years, 113 cfs.

EXTREMES.--Current year: Maximum discharge, 1,100 cfs Aug. 18 (gage height, 6.68 ft); minimum, 9.5 cfs June 16 (gage height, 0.95 ft) result of temporary diversion; minimum unregulated, 9.9 cfs June 15 (gage height, 0.97 ft).
Period of record: Maximum discharge, 1,100 cfs Aug. 18, 1971; maximum gage height, 7.20 ft Sept. 22, 1955; 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. Flood runoff from Lyon Swamp and French's Creek diverted into Colly Creek upstream from gaging station by construction of a flood prevention channel during 1966 water year and a drainage area is not constant.

REVISIONS.--WSP 1723: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	119	121	95	218	307	232	131	76	23	157	225
2	37	127	114	96	209	363	221	125	66	23	197	193
3	37	129	107	95	206	465	218	118	56	36	212	167
4	36	128	101	92	208	638	213	112	47	30	193	143
5	35	126	95	99	219	645	209	105	39	40	180	121
6	34	123	88	98	226	628	276	98	33	74	189	105
7	33	119	81	94	229	661	338	91	29	94	184	91
8	31	115	76	92	246	773	374	89	24	88	175	92
9	29	113	71	121	259	851	386	91	21	77	157	78
10	28	114	67	136	267	816	384	88	19	78	140	80
11	26	126	63	138	262	720	363	82	17	79	128	86
12	23	142	60	137	255	615	342	77	15	74	118	77
13	22	153	57	135	274	524	330	91	14	64	108	69
14	21	159	54	131	274	456	320	97	12	49	101	60
15	19	182	51	172	272	407	304	100	11	36	98	50
16	21	192	58	197	263	377	285	103	13	28	150	43
17	23	213	84	203	254	345	264	101	23	22	273	39
18	22	244	83	215	246	315	241	95	22	17	1,010	36
19	20	257	79	218	238	290	220	88	19	14	801	33
20	19	255	78	218	233	271	201	81	17	13	698	31
21	26	244	76	212	229	255	186	78	19	16	570	32
22	41	233	75	208	227	241	172	80	23	18	484	31
23	45	219	75	206	235	232	162	83	22	15	473	31
24	43	200	75	211	238	221	165	86	20	13	473	29
25	46	186	75	244	230	211	156	86	18	12	428	29
26	55	173	77	267	222	240	143	84	18	12	381	32
27	64	160	80	255	290	252	130	79	25	13	399	36
28	72	148	83	239	299	250	131	80	26	17	391	37
29	77	137	86	227	------	249	136	92	26	37	353	35
30	81	128	90	213	------	247	135	95	26	68	310	39
31	102	------	93	219	------	241	------	87	------	104	263	------
TOTAL	1,207	4,964	2,473	5,283	6,828	13,106	7,237	2,893	796	1,284	9,774	2,150
MEAN	38.9	165	79.8	170	244	423	241	93.3	26.5	41.4	315	71.7
MAX	102	257	121	267	299	851	386	131	76	104	1,010	225
MIN	19	113	51	92	206	211	130	77	11	12	98	29

CAL YR 1970 TOTAL 41,886.97 MEAN 115 MAX 515 MIN 0
WTR YR 1971 TOTAL 57,995.00 MEAN 159 MAX 1,010 MIN 11

02107600 Northeast Cape Fear River near Seven Springs, N. C.

LOCATION.--Lat 35°10'20", long 77°55'56", Wayne County, on left bank at downstream side of bridge on Secondary Road 1948, at Wayne-Duplin County line, 4.5 miles upstream from Buck Marsh Branch, and 6 miles southwest of Seven Springs.

DRAINAGE AREA.--47.5 sq mi.

PERIOD OF RECORD.--July 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 89.93 ft above mean sea level.

AVERAGE DISCHARGE.--13 years, 62.0 cfs (17.73 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,380 cfs Mar. 4 (gage height, 8.55 ft); minimum, 7.0 cfs Aug. 14, 15 (gage height, 3.03 ft).
Period of record: Maximum discharge, 2,740 cfs Oct. 6, 1964 (gage height, 9.59 ft); minimum, 3.0 cfs Oct. 5, 1968 (gage height, 2.74 ft).

REMARKS.--Records good. The operation of small mills on tributaries above the station may cause slight diurnal fluctuation during periods of low flow.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	39	22	29	242	112	97	115	26	12	22	23
2	16	43	25	30	214	123	79	85	21	17	20	19
3	14	39	25	27	144	351	83	69	18	58	20	16
4	12	31	23	25	120	1,180	91	60	15	92	26	15
5	11	25	21	25	126	652	84	52	14	53	19	14
6	10	22	20	26	147	296	184	43	12	26	15	13
7	9.5	22	19	24	151	187	385	36	11	29	13	14
8	9.2	33	19	23	157	149	280	32	10	34	12	17
9	9.0	46	18	34	174	127	188	30	9.4	28	11	18
10	8.8	42	18	51	164	113	142	27	8.9	39	9.6	18
11	8.8	55	19	69	131	104	117	24	8.7	87	8.8	22
12	8.8	92	18	68	106	97	101	22	8.5	68	8.1	32
13	8.8	91	18	55	122	91	89	28	13	45	7.7	54
14	8.8	74	19	43	149	86	79	44	20	31	7.4	87
15	8.7	54	17	62	145	76	71	64	16	23	7.2	58
16	9.1	42	24	113	120	83	64	71	13	18	18	34
17	9.4	35	49	125	99	86	59	81	10	16	117	22
18	9.4	32	75	100	87	78	55	66	12	14	254	20
19	9.2	29	66	75	77	70	51	45	16	13	182	20
20	9.1	27	41	59	71	67	47	31	15	17	103	18
21	15	26	32	49	68	64	44	33	12	29	61	16
22	20	25	29	44	67	59	46	61	10	30	38	15
23	22	24	29	45	102	55	47	68	15	20	33	14
24	20	23	33	59	219	51	54	46	49	16	28	13
25	19	22	39	100	158	48	58	31	90	16	24	12
26	20	22	34	131	115	63	49	23	63	24	22	11
27	19	21	28	129	112	112	40	19	30	38	33	10
28	17	21	25	105	113	123	75	17	18	96	51	10
29	15	21	23	86	------	106	211	28	14	71	59	9.5
30	18	21	23	71	------	116	178	37	12	38	50	14
31	29	------	25	133	------	117	------	33	------	24	34	------
TOTAL	425.6	1,099	874	2,015	3,700	5,042	3,148	1,421	590.5	1,122	1,313.8	658.5
MEAN	13.7	36.6	28.2	65.0	132	163	105	45.8	19.7	36.2	42.4	22.0
MAX	29	92	75	133	242	1,180	385	115	90	96	254	87
MIN	8.7	21	17	23	67	48	40	17	8.5	12	7.2	9.5
CFSM	.29	.77	.59	1.37	2.78	3.43	2.21	.96	.41	.76	.89	.46
IN.	.33	.86	.68	1.58	2.90	3.95	2.47	1.11	.46	.88	1.03	.52

CAL YR 1970 TOTAL 16,699.0 MEAN 45.8 MAX 576 MIN 5.1 CFSM .96 IN 13.08
WTR YR 1971 TOTAL 21,409.4 MEAN 58.7 MAX 1,180 MIN 7.2 CFSM 1.24 IN 16.77

02108000 Northeast Cape Fear River near Chinquapin, N. C.

LOCATION.--Lat 34°49'45", long 77°49'57", Duplin County, on right bank 540 ft downstream from bridge on State Highway 41, 0.5 mile downstream from Muddy Creek, and 1.2 miles west of Chinquapin.

DRAINAGE AREA.--600 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 17.28 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--31 years, 706 cfs (15.98 inches per year).

EXTREMES.--Current year: Maximum discharge, 10,000 cfs Mar. 6 (gage height, 14.91 ft); minimum, 35 cfs Oct. 11-13 (gage height, 1.21 ft).
Period of record: Maximum discharge, 20,400 cfs July 6, 1962 (gage height, 20.16 ft); minimum, 5.3 cfs Oct. 10, 11, 1954.
Flood in 1908 reached a stage of 22.6 ft at 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 good except those for period of no gage-height record, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	307	176	294	1,250	1,540	1,040	1,670	350	176	1,750	1,200
2	73	407	173	309	1,430	1,810	1,010	1,690	303	145	1,500	1,000
3	64	422	169	304	1,550	2,350	950	1,710	256	169	1,000	590
4	57	383	164	294	1,650	3,990	892	1,750	220	237	700	436
5	51	333	159	393	1,690	7,470	831	1,680	193	274	450	336
6	46	292	155	546	1,700	9,760	1,130	1,380	172	339	300	277
7	43	255	152	640	1,670	9,510	1,820	951	157	426	200	240
8	40	224	151	647	1,680	7,650	2,350	681	143	498	160	225
9	38	200	149	604	1,720	5,420	2,710	550	132	556	120	231
10	36	208	149	738	1,750	3,850	2,860	471	161	553	100	254
11	36	318	147	1,160	1,760	2,830	2,770	409	209	635	80	280
12	35	411	144	1,390	1,760	2,100	2,480	360	159	567	70	333
13	46	469	143	1,420	1,860	1,660	2,050	549	123	536	60	535
14	85	484	264	1,340	2,160	1,340	1,590	1,060	109	453	55	942
15	72	483	388	1,120	2,370	1,120	1,190	1,210	105	346	50	1,320
16	60	475	433	900	2,280	1,080	928	1,260	101	273	150	1,390
17	53	452	421	1,000	2,100	1,080	782	1,320	96	213	700	1,220
18	53	416	415	1,100	1,810	1,030	682	1,220	94	161	2,500	907
19	52	371	411	1,200	1,480	980	607	1,050	104	124	7,000	634
20	53	328	396	1,150	1,210	927	551	921	138	102	8,000	490
21	67	297	366	1,000	1,030	867	509	788	142	94	8,200	396
22	129	271	339	650	920	793	480	744	127	89	7,000	332
23	188	248	322	807	1,050	722	459	697	115	100	5,000	305
24	211	229	302	733	1,220	663	469	615	202	99	4,000	289
25	208	216	281	835	1,290	611	468	579	348	106	3,000	276
26	194	206	262	1,050	1,240	672	447	532	429	560	1,800	258
27	169	198	252	1,200	1,270	857	426	440	472	900	1,200	232
28	153	191	265	1,240	1,350	921	613	347	465	1,300	1,000	205
29	141	185	287	1,200	------	931	1,140	323	364	1,650	1,100	181
30	134	180	289	1,100	------	976	1,520	378	253	1,750	1,200	184
31	182	------	287	1,080	------	1,030	------	388	------	1,800	1,250	------
TOTAL	2,857	9,459	8,011	27,444	44,250	76,540	35,754	27,723	6,242	15,231	59,695	15,498
MEAN	92.2	315	258	885	1,580	2,469	1,192	894	208	491	1,926	517
MAX	211	484	433	1,420	2,370	9,760	2,860	1,750	472	1,800	8,200	1,390
MIN	35	180	143	294	920	611	426	323	94	89	50	181
CFSM	.15	.53	.43	1.48	2.63	4.12	1.99	1.49	.35	.82	3.21	.86
IN.	.18	.59	.50	1.70	2.74	4.75	2.22	1.72	.39	.94	3.70	.96

CAL YR 1970 TOTAL 184,122 MEAN 504 MAX 3,950 MIN 20 CFSM .84 IN 11.42
WTR YR 1971 TOTAL 328,704 MEAN 901 MAX 9,760 MIN 35 CFSM 1.50 IN 20.38

NOTE.--No gage-height record July 26 to Sept. 2.

02108500 Rockfish Creek near Wallace, N. C.

LOCATION.--Lat 34°44'32", long 78°02'22", Duplin County, on right bank at downstream side of bridge on State Highway 41, 1.5 mile upstream from Doctors Creek, and 2.5 miles west of Wallace.

DRAINAGE AREA.--63.8 sq mi.

PERIOD OF RECORD.--July 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 29.36 ft above mean sea level. Prior to Oct. 1, 1958, nonrecording gage at site 1.0 mile downstream at different datum. Oct. 1, 1958, to June 1,1960 , nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--16 years, 95.4 cfs (20.31 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,940 cfs Aug. 18 (gage height, 12.98 ft); minimum, 4.0 cfs July 2; minimum gage height, 0.86 ft Oct. 11.
Period of record: Maximum discharge, 4,940 cfs Aug. 18, 1971 (gage height, 12.98 ft); minimum daily, 0.4 cfs July 27-30, 1955.
Flood in 1948 reached a stage of about 15.5 ft at former site and datum, from information by local resident (discharge, 2,800 cfs).
A discharge of 0.04 cfs was measured on Sept. 8, 1954.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	88	21	30	139	146	118	235	21	4.6	375	94
2	11	115	20	31	177	216	103	155	17	4.7	298	55
3	8.5	118	20	29	188	661	90	114	15	8.9	278	38
4	7.1	103	19	28	147	1,880	81	110	12	15	197	32
5	6.7	67	18	30	127	1,350	79	122	10	10	135	27
6	6.4	39	17	31	134	723	165	107	9.2	6.2	149	24
7	5.8	29	17	31	139	437	464	70	8.2	6.2	192	22
8	5.3	25	16	28	152	309	550	48	8.0	8.3	142	25
9	5.3	23	16	63	163	230	373	48	8.9	6.0	99	48
10	4.9	22	17	108	202	180	242	34	12	39	53	90
11	4.6	57	17	121	204	145	169	27	12	76	29	179
12	5.2	103	17	128	177	131	129	24	9.8	18	21	492
13	5.4	120	16	115	163	112	111	35	8.0	20	17	517
14	5.5	133	17	84	155	99	85	58	7.6	15	14	305
15	5.4	106	16	97	202	93	62	63	7.0	11	12	212
16	12	73	20	229	182	111	52	102	6.7	12	50	136
17	25	54	63	257	151	119	44	99	6.8	8.3	1,970	92
18	20	44	85	249	120	117	42	88	9.0	6.1	3,970	50
19	15	37	87	186	101	108	43	60	14	5.4	1,680	41
20	12	36	73	133	85	87	34	36	15	6.0	724	36
21	15	41	49	103	71	73	32	25	11	9.2	380	30
22	25	33	39	98	62	64	36	42	8.3	10	235	53
23	25	30	32	80	110	56	34	69	6.6	8.0	173	364
24	21	28	29	70	179	53	43	121	6.0	6.3	128	167
25	17	24	25	108	194	46	43	85	5.4	15	80	74
26	22	23	24	173	164	79	41	40	5.2	557	62	40
27	22	22	24	225	142	131	29	27	6.7	506	114	30
28	18	22	23	203	149	181	65	22	6.4	285	269	25
29	16	21	23	152	------	195	159	21	5.5	518	332	23
30	18	21	23	114	------	156	302	24	4.8	933	236	33
31	51	------	24	111	------	131	------	23	------	620	146	------
TOTAL	437.1	1,657	907	3,445	4,219	8,419	3,820	2,134	283.1	3,752.2	12,560	3,354
MEAN	14.1	55.2	29.3	111	151	272	127	68.8	9.44	121	405	112
MAX	51	133	87	257	204	1,880	550	235	21	931	3,970	517
MIN	4.6	21	16	28	62	46	29	21	4.8	4.6	12	22
CFSM	.22	.87	.46	1.74	2.37	4.26	1.99	1.08	.15	1.90	6.35	1.76
IN.	.25	.97	.53	2.01	2.46	4.91	2.23	1.24	.17	2.19	7.32	1.96

CAL YR 1970 TOTAL 24,489.4 MEAN 67.1 MAX 928 MIN 3.2 CFSM 1.05 IN 14.28
WTR YR 1971 TOTAL 44,987.4 MEAN 123 MAX 3,970 MIN 4.6 CFSM 1.93 IN 26.23

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 4	1100	11.13	2,020	7-30	0600	9.40	980
7-26	1800	9.12	882	8-18	0500	12.98	4,940

02109500 Waccamaw River at Freeland, N. C.

LOCATION.--Lat 34°05'43", long 78°32'56", Brunswick County, on left bank 150 ft downstream from New Britton Bridge on State Highway 130, 1 mile southwest of Freeland, 7 miles downstream from Juniper Creek, and 117 miles upstream from mouth in Winyah Bay.

DRAINAGE AREA.--706 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 15.52 ft above mean sea level. Prior to July 15, 1943, nonrecording gage 150 ft upstream at same datum. Auxiliary nonrecording gage 3.3 miles downstream from base gage Oct. 7, 1949, to July 14, 1952. Since July 15, 1952 auxiliary water-stage recorder at same site and datum.

AVERAGE DISCHARGE.--32 year, 685 cfs (13.18 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,930 cfs Mar. 8 (gage height, 15.74 ft); minimum, 52 cfs June 16 (gage height, 2.18 ft). Period of record: 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. Water quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1172: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	394	1,140	639	537	1,740	1,060	1,200	680	273	530	371	2,240
2	371	1,210	587	541	1,730	1,230	1,200	654	287	464	520	2,120
3	343	1,340	536	538	1,710	1,680	1,200	621	281	453	701	1,990
4	312	1,350	470	538	1,680	2,640	1,190	584	262	443	1,020	1,920
5	281	1,260	410	550	1,650	4,110	1,170	544	237	404	1,350	1,740
6	251	1,150	370	600	1,620	5,440	1,320	504	210	363	1,560	1,560
7	223	1,070	330	644	1,610	6,410	1,470	462	184	358	1,720	1,390
8	198	973	300	673	1,620	6,820	1,620	426	157	362	1,800	1,170
9	180	870	283	761	1,650	6,720	1,740	395	131	362	1,750	1,050
10	161	785	273	907	1,660	6,200	1,810	367	115	343	1,620	970
11	142	735	261	1,050	1,650	5,470	1,830	340	101	313	1,440	906
12	128	719	250	1,170	1,640	4,620	1,820	320	92	279	1,190	837
13	118	735	245	1,290	1,650	3,880	1,790	318	81	247	1,000	791
14	109	766	240	1,340	1,650	3,290	1,720	362	72	220	842	749
15	100	834	250	1,350	1,640	2,830	1,630	384	62	203	711	702
16	93	986	280	1,350	1,630	2,520	1,540	400	56	193	629	661
17	91	1,180	320	1,360	1,620	2,270	1,440	412	90	170	705	628
18	92	1,400	380	1,390	1,590	2,050	1,320	410	201	146	1,240	593
19	94	1,560	470	1,410	1,550	1,850	1,150	390	375	129	2,070	559
20	92	1,650	560	1,420	1,490	1,690	1,070	358	442	121	4,010	529
21	220	1,660	620	1,440	1,420	1,530	980	331	447	115	5,150	499
22	560	1,620	640	1,480	1,360	1,390	881	323	514	110	5,270	478
23	791	1,540	620	1,510	1,260	1,220	804	310	534	105	4,770	478
24	1,100	1,430	595	1,510	1,170	1,110	765	300	559	110	4,120	474
25	1,390	1,250	570	1,520	1,120	1,040	738	288	600	115	3,460	460
26	1,530	1,090	547	1,600	1,070	1,050	721	273	641	125	3,080	432
27	1,520	983	530	1,670	1,020	1,080	696	252	647	139	2,850	391
28	1,420	873	519	1,730	1,010	1,140	679	232	631	155	2,620	350
29	1,240	782	512	1,750	------	1,190	694	236	631	176	2,490	290
30	1,110	708	515	1,720	------	1,210	694	247	601	234	2,400	255
31	1,110	------	525	1,740	------	1,210	------	258	------	286	2,330	------
TOTAL	15,764	33,649	13,647	37,089	42,210	85,950	36,882	11,981	9,514	7,773	64,789	27,212
MEAN	509	1,122	440	1,196	1,508	2,773	1,229	386	317	251	2,090	907
MAX	1,530	1,660	640	1,750	1,740	6,820	1,830	680	647	530	5,270	2,240
MIN	91	708	240	537	1,010	1,040	679	232	56	105	371	255
CFSM	.72	1.59	.62	1.69	2.14	3.93	1.74	.55	.45	.36	2.96	1.28
IN.	.83	1.77	.72	1.95	2.22	4.53	1.94	.63	.50	.41	3.41	1.43

CAL YR 1970 TOTAL 259,126 MEAN 710 MAX 3,130 MIN 12 CFSM 1.01 IN 13.65
WTR YR 1971 TOTAL 386,460 MEAN 1,059 MAX 6,820 MIN 56 CFSM 1.50 IN 20.36

02111000 Yadkin River at Patterson, N. C.

LOCATION.--Lat 35°59'29", long 81°33'30", Caldwell County, on left bank 200 ft upstream from bridge on State Highway 268, 0.4 mile upstream from Warrior Creek, 0.5 mile south of Patterson, 2 miles downstream from Walnut Branch, and at mile 416.

DRAINAGE AREA.--29.0 sq mi.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1303.

GAGE.--Water-stage recorder. Datum of gage is 1,211.47 ft above mean sea level. Prior to Feb. 9, 1940 nonrecording gage at present site, at datum 1.00 ft higher. Prior to Oct. 20, 1970 at datum 1.00 ft higher.

AVERAGE DISCHARGE.--32 years, 47.0 cfs (22.01 inches per year).

EXTREMES.--Current year: Maximum discharge, 413 cfs May 13 (gage height, 3.11 ft); minimum, 19 cfs Sept. 1, 7, 10, 11 (gage height, 1.00 ft); minimum daily, 19 cfs Sept. 10.
Period of record: Maximum discharge, 16,200 cfs Aug. 13, 1940 (gage height, 12.70 ft, datum then in use), from rating curve extended above 1,400 cfs on basis of computation of peak flow over dam 1 mile upstream at gage heights 4.58, 6.60, 7.70, and 12.70 ft; minimum observed, 3.0 cfs May 15, 1940.

REMARKS.--Records good. Occasional slight regulation at low flow by paper mill and detention dam 1 mile upstream.

REVISIONS (WATER YEARS).--WSP 1303: 1940(m), 1947-48(M). WSP 1553: 1948(P). WSP 1723: Drainage area, 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	125	36	33	23	58	47	48	39	25	49	20
2	24	92	35	32	26	67	49	45	38	26	44	26
3	24	120	35	33	33	119	45	43	37	25	53	22
4	23	87	34	43	39	118	44	42	35	24	42	21
5	23	70	33	80	70	93	43	40	34	23	43	21
6	22	60	33	58	73	82	56	42	33	111	38	20
7	22	54	32	50	79	74	52	53	33	89	36	21
8	23	49	32	45	130	67	47	48	32	68	34	27
9	27	46	32	42	114	61	46	42	32	46	36	20
10	31	83	32	41	79	61	44	40	30	55	31	19
11	28	81	32	39	65	60	43	39	30	53	34	81
12	26	70	33	37	58	58	42	63	31	42	29	51
13	25	64	32	36	117	56	42	244	30	38	27	39
14	24	59	31	36	104	58	41	130	31	35	26	27
15	28	58	31	36	83	62	40	120	36	32	26	23
16	24	52	43	33	71	59	39	147	44	30	25	23
17	23	49	42	33	63	55	39	106	46	29	26	22
18	23	47	36	34	58	54	39	83	34	27	27	41
19	23	45	34	31	56	61	38	71	33	30	29	60
20	26	53	33	27	56	57	38	64	33	29	24	33
21	95	48	35	32	54	54	40	65	31	26	24	52
22	38	45	33	33	96	52	40	58	30	26	23	68
23	30	43	45	39	112	51	44	54	30	25	28	43
24	28	40	43	39	88	49	43	52	28	25	23	36
25	28	40	38	41	75	48	38	51	26	27	22	32
26	27	39	36	37	73	52	37	47	27	35	22	31
27	27	39	34	30	69	52	37	44	26	29	22	29
28	26	38	33	29	62	54	105	51	25	25	21	70
29	50	38	33	37	------	57	63	58	24	46	20	49
30	219	37	32	36	------	52	52	48	25	46	20	38
31	209	------	34	35	------	49	------	43	------	48	20	------
TOTAL	1,270	1,771	1,077	1,187	2,026	1,950	1,373	2,081	963	1,195	924	1,065
MEAN	41.0	59.0	34.7	38.3	72.4	62.9	45.8	67.1	32.1	38.5	29.8	35.5
MAX	219	125	45	80	130	119	105	244	46	111	53	81
MIN	22	37	31	27	23	48	37	39	24	23	20	19
CFSM	1.41	2.03	1.20	1.32	2.50	2.17	1.58	2.31	1.11	1.33	1.03	1.22
IN.	1.63	2.27	1.38	1.52	2.60	2.50	1.76	2.67	1.24	1.53	1.19	1.37

CAL YR 1970 TOTAL 20,128 MEAN 55.1 MAX 1,120 MIN 17 CFSM 1.90 IN 25.82
WTR YR 1971 TOTAL 16,882 MEAN 46.3 MAX 244 MIN 19 CFSM 1.60 IN 21.66

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-13	0100	3.11	413	7- 6	1630	3.09	407

02111180 Elk Creek at Elkville, N. C.

LOCATION.--Lat 36°04'16", long 81°24'13", Wilkes County, on left bank 700 ft upstream from bridge on State Highway 268, in community of Elkville, and 3,400 ft upstream from mouth.

DRAINAGE AREA.--50.9 sq mi.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,082.40 ft above mean sea level.

AVERAGE DISCHARGE.--6 years, 86.9 cfs (23.18 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,480 cfs July 10 (gage height, 3.49 ft); minimum, 31 cfs Jan. 20 (gage height, 0.97 ft), result of freezeup.
Period of record: Maximum discharge, 8,660 cfs June 15, 1969 (gage height, 8.33 ft), from rating curve extended above 2,400 cfs on basis of contracted-opening measurement at gage height 7.28 ft; minimum, 16 cfs Oct. 3, 1968 (gage height, 0.83 ft).
The flood of Aug. 13, 1940 reached a stage of about 22 ft (discharge, about 70,000 cfs, on basis of several contracted-opening and slope-area measurements). A discharge of 6.0 cfs was measured Sept. 19, 1956.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	347	64	59	45	104	86	82	71	46	101	41
2	40	246	64	57	50	116	85	76	67	50	87	45
3	40	295	62	58	64	201	80	71	66	52	129	43
4	40	207	60	58	67	239	77	67	73	43	126	40
5	39	149	59	143	119	185	75	66	64	40	151	40
6	38	121	62	116	158	158	96	73	62	143	105	38
7	38	104	60	95	166	144	93	84	62	142	100	35
8	38	93	59	81	302	128	85	77	60	148	90	56
9	50	86	59	76	297	117	81	70	57	75	86	42
10	58	136	59	72	196	115	79	66	55	323	70	36
11	60	153	59	67	143	114	75	62	56	381	77	159
12	54	129	59	65	120	107	74	94	59	168	68	99
13	46	115	58	64	249	105	74	543	54	129	60	71
14	45	101	56	62	245	105	72	303	57	88	56	56
15	49	99	55	62	174	105	70	212	64	73	53	50
16	43	88	72	57	140	105	70	271	60	66	53	46
17	42	83	77	57	122	100	69	192	67	61	53	48
18	44	78	67	57	112	95	68	149	59	56	55	68
19	44	76	62	53	108	110	66	125	59	59	54	119
20	46	88	58	50	120	105	66	124	62	62	51	79
21	201	83	60	55	117	100	67	124	60	53	49	106
22	94	78	62	57	213	95	68	100	59	53	45	223
23	70	75	73	69	300	90	72	92	57	50	73	126
24	61	69	78	66	209	85	70	85	55	49	52	95
25	60	68	70	75	168	85	65	83	51	55	46	79
26	58	69	65	69	150	90	63	78	50	89	46	72
27	55	68	63	54	131	90	62	71	49	66	49	67
28	52	68	62	54	113	95	183	88	47	57	44	149
29	85	67	59	70	------	100	115	111	44	93	42	105
30	820	65	59	69	------	95	90	91	44	138	42	80
31	704	------	59	74	------	90	------	81	------	123	42	------
TOTAL	3,155	3,504	1,941	2,121	4,398	3,573	2,396	3,811	1,750	3,031	2,155	2,313
MEAN	102	117	62.6	68.4	157	115	79.9	123	58.3	97.8	69.5	77.1
MAX	820	347	78	143	302	239	183	543	73	381	151	223
MIN	38	65	55	50	45	85	62	62	44	40	42	35
CFSM	2.00	2.30	1.23	1.34	3.08	2.26	1.57	2.42	1.15	1.92	1.37	1.51
IN.	2.31	2.56	1.42	1.55	3.21	2.61	1.75	2.79	1.28	2.22	1.57	1.69

CAL YR 1970 TOTAL 35,153 MEAN 96.3 MAX 2,100 MIN 23 CFSM 1.89 IN 25.69
WTR YR 1971 TOTAL 34,148 MEAN 93.6 MAX 820 MIN 35 CFSM 1.84 IN 24.96

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-30	1615	3.38	1,390	7-10	2130	3.49	1,480
5-13	0345	2.68	836				

02111500 Reddies River at North Wilkesboro, N. C.

LOCATION.--Lat 36°10'29", long 81°10'09", Wilkes County, on left bank 400 ft upstream from bridge on Secondary Road 1517, 1.2 miles northwest of North Wilkesboro, 1.4 miles upstream from North Wilkesboro municipal dam, and 2.3 miles upstream from mouth.

DRAINAGE AREA.--93.9 sq mi.

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

AVERAGE DISCHARGE.--32 years, 134 cfs (19.38 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,690 cfs Sept. 22 (gage height, 5.72 ft); minimum, 61 cfs Feb. 2 (gage height, 1.00 ft), result of freezeup.
Period of record: Maximum discharge, 27,000 cfs Aug. 14, 1940 (gage height, 22.02 ft), from rating curve extended above 2,200 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 period of no gage-height record, which are poor. Slight diurnal fluctuation at low flow during growing season.

REVISIONS (WATER YEARS).--WSP 1433: 1944.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	330	97	90	75	153	133	110	107	153	162	70
2	76	234	96	92	90	170	136	106	102	188	169	80
3	76	291	95	94	105	323	129	104	103	147	152	75
4	71	216	93	106	106	328	125	102	99	119	122	70
5	71	176	91	230	182	238	122	100	95	107	130	70
6	71	154	92	163	201	207	139	117	93	135	115	70
7	71	140	89	134	209	192	147	142	92	307	122	70
8	72	131	89	118	352	174	130	125	131	210	108	90
9	81	124	90	113	294	161	124	110	115	151	146	74
10	91	156	90	108	194	161	121	104	99	165	105	68
11	92	155	90	104	166	162	117	100	96	204	120	600
12	81	139	92	102	148	154	117	113	102	152	110	300
13	77	129	90	99	395	150	116	604	94	145	100	140
14	76	122	88	102	316	148	113	273	107	133	100	108
15	91	123	87	102	226	162	111	231	106	120	98	96
16	79	113	115	95	192	156	111	304	96	114	96	96
17	73	110	128	95	172	144	110	214	148	108	94	102
18	74	109	104	95	160	138	109	173	114	103	94	129
19	73	107	97	89	154	157	107	152	111	109	120	395
20	75	129	95	80	159	151	107	141	109	118	94	300
21	296	121	102	100	150	140	110	140	136	103	80	518
22	130	111	99	98	310	137	114	125	125	103	80	759
23	98	109	116	117	326	134	116	118	451	100	110	275
24	89	101	119	109	227	128	124	116	245	102	80	195
25	86	102	106	121	193	127	109	117	152	113	78	161
26	84	103	102	108	183	141	105	112	131	134	76	147
27	82	102	97	94	179	139	104	105	120	115	75	138
28	80	102	97	90	160	151	195	128	107	102	75	127
29	105	101	94	95	------	164	136	159	103	143	72	120
30	621	100	95	104	------	148	117	136	106	146	72	114
31	638	------	90	103	------	139	------	119	------	157	70	------
TOTAL	3,856	4,240	3,025	3,350	5,624	5,177	3,654	4,800	3,795	4,306	3,225	5,557
MEAN	124	141	97.6	108	201	167	122	155	127	139	104	185
MAX	638	330	128	230	395	328	195	604	451	307	169	759
MIN	71	100	87	80	75	127	104	100	92	100	70	68
CFSM	1.32	1.50	1.04	1.15	2.14	1.78	1.30	1.65	1.35	1.48	1.11	1.97
IN.	1.53	1.68	1.20	1.33	2.23	2.05	1.45	1.90	1.50	1.71	1.28	2.20

CAL YR 1970 TOTAL 51,856 MEAN 142 MAX 4,390 MIN 52 CFSM 1.51 IN 20.54
WTR YR 1971 TOTAL 50,609 MEAN 139 MAX 759 MIN 68 CFSM 1.48 IN 20.05

PEAK DISCHARGE (BASE, 2,000 cfs).--No peak above base.

NOTE.--No gage-height record Aug. 11 to Sept. 14.

02112000 Yadkin River at Wilkesboro, N. C.

LOCATION.--Lat 36°09'09", long 81°08'45", Wilkes County, on right bank 150 ft upstream from bridge on U. S. Highway 421A between North Wilkesboro and Wilkesboro, 150 ft downstream from Reddies River, 0.5 mile northeast of Wilkesboro, and 382 miles upstream from mouth of Pee Dee River in Winyah Bay.

DRAINAGE AREA.--493 sq mi.

PERIOD OF RECORD.--April 1903 to June 1909, October 1920 to current year. Prior to October 1928, published as "at North Wilkesboro"

GAGE.--Water-stage recorder. Datum of gage is 942.35 ft above mean sea level. Apr. 10, 1903 to June 30, 1909 and Oct. 17, 1920 to Apr. 10, 1929, nonrecording gage at site 1.2 miles downstream at different datum. Apr. 11, 1929 to Jan. 9, 1930, nonrecording gage at present site and datum. Datum used 1920-29 was about 1.2 ft lower than that used 1903-09.

AVERAGE DISCHARGE.--56 years (1903-8, 1920-71), 792 cfs (21.81 inches per year) adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 4,620 cfs Feb. 13 (gage height, 7.25 ft); minimum, 106 cfs Dec. 8, 9 (gage height, 1.36 ft); minimum daily, 114 cfs Dec. 8.
Period of record: 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, 86 cfs Dec. 4, 1965; 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 as explained above).

REMARKS.--Records good. Flow regulated by W. Kerr Scott Reservoir 5.5 miles upstream since 1962 (see p. 152). Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 822: Drainage area. WSP 1433: 1903-9, 1922, 1925-26(M), 1930, 1932, 1934, 1946-48(M), drainage area at former site.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	532	2,660	532	520	485	880	697	725	641	648	816	669
2	520	1,590	571	571	490	904	704	732	634	669	792	704
3	526	1,720	578	557	520	1,610	776	669	613	606	690	697
4	526	1,530	571	578	526	2,060	676	627	606	564	697	697
5	514	1,180	544	1,450	943	1,450	760	620	592	538	768	697
6	538	943	550	1,480	1,510	1,210	753	641	592	592	732	690
7	544	864	329	739	1,430	1,190	943	739	564	840	768	704
8	550	824	114	808	2,050	1,070	792	840	676	840	732	690
9	550	768	429	753	2,210	936	725	711	613	824	753	676
10	557	725	1,120	718	1,420	768	662	697	592	1,240	683	683
11	578	998	550	669	990	959	732	578	585	2,060	824	1,150
12	544	1,100	544	620	1,010	936	739	606	655	943	732	718
13	532	1,040	538	606	2,380	864	648	2,060	599	928	718	704
14	532	928	526	571	1,930	888	599	3,210	613	776	951	683
15	544	920	526	520	1,230	888	578	2,380	641	792	959	683
16	520	872	599	508	1,310	1,050	544	2,040	676	634	683	711
17	526	739	620	514	998	943	648	1,850	776	532	697	725
18	526	704	585	508	943	800	564	1,150	768	538	690	641
19	526	662	550	502	776	943	578	975	784	520	690	951
20	496	718	544	490	768	1,020	606	982	683	538	697	824
21	792	753	550	526	912	920	592	1,030	784	514	690	982
22	557	732	571	526	2,020	711	613	840	690	520	732	1,200
23	490	725	585	557	2,590	711	613	792	1,470	514	732	599
24	520	669	697	544	1,730	784	634	746	1,230	526	683	538
25	508	620	746	725	1,170	732	599	655	832	557	683	544
26	496	557	620	718	1,190	768	532	725	784	592	690	532
27	496	557	592	599	998	888	514	599	620	599	690	532
28	508	578	502	520	1,080	856	896	669	592	676	669	526
29	571	578	480	532	------	912	1,380	1,210	564	746	704	550
30	1,880	571	485	532	------	896	1,190	896	544	739	669	538
31	3,950	------	508	520	------	808	------	641	------	725	683	------
TOTAL	21,449	27,825	17,256	19,981	35,609	30,355	21,287	31,635	21,013	22,330	22,697	21,238
MEAN	692	928	557	645	1,272	979	710	1,020	700	720	732	708
MAX	3,950	2,660	1,120	1,480	2,590	2,060	1,380	3,210	1,470	2,060	959	1,200
MIN	490	557	114	490	485	711	514	578	544	514	669	526
(†)	+46	-17	0	0	0	0	+3	-3	-2	+2	-111	+135
MEAN‡	738	911	557	645	1,272	979	713	1,017	698	722	621	843
CFSM‡	1.50	1.85	1.13	1.31	2.58	1.99	1.45	2.06	1.42	1.46	1.26	1.71
IN‡	1.73	2.06	1.30	1.51	2.69	2.29	1.62	2.38	1.58	1.68	1.45	1.91

CAL YR 1970 TOTAL 305,172 MEAN 836 MAX 7,990 MIN 114 MEAN‡ 835 CFSM‡ 1.69 IN.‡ 22.98
WTR YR 1971 TOTAL 292,675 MEAN 802 MAX 3,950 MIN 114 MEAN‡ 806 CFSM‡ 1.63 IN.‡ 22.20

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

‡ Adjusted for change in W. Kerr Scott Reservoir.

02112120 Roaring River near Roaring River, N. C.

LOCATION.--Lat 36°14'59", long 81°02'41", Wilkes County, on left bank at downstream end of old bridge pier, 800 ft upstream from bridge on Secondary Road 1990, 3.8 miles northeast of village of Roaring River, and 4.1 miles upstream from mouth.

DRAINAGE AREA.--122 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements water years, 1925, 1947, 1949-56, 1963. April 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 964.85 ft above mean sea level. Prior to May 1, 1964, nonrecording gage on downstream side of bridge at same site and datum.

AVERAGE DISCHARGE.--7 years, 158 cfs (17.59 inches per year).

EXTREMES.--Current year: Maximum discharge, 13,200 cfs Sept. 21 (gage height, 17.32 ft); minimum, 60 cfs Jan. 20, Feb. 1 (gage height, 1.24 ft), result of freezeup.
Period of record: Maximum discharge, 13,200 cfs Sept. 21, 1971 (gage height, 17.32 ft), from rating curve extended as explained below; minimum, 53 cfs July 7, 8, 1964.
Flood of 1916 reached a stage of about 28 ft (estimated discharge, 37,000 cfs) and the flood of August 1940 about 24 ft (estimated discharge, 26,000 cfs), from stage information by local residents and rating curve extended above 2,400 cfs on basis of slope-area measurements at gage heights 10.83 ft, 14.40 ft, the Aug. 14, 1940 peak (discharge, 29,200 cfs, revised) at the Gordon Cotton Mill dam 2.4 miles downstream, and step-backwater profile study. A discharge of 24.2 cfs was measured Sept. 18, 1956.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	388	105	105	90	192	159	133	136	227	319	81
2	75	265	105	105	110	211	162	130	130	258	325	105
3	77	280	103	105	110	396	157	128	132	178	184	94
4	73	218	101	121	116	384	149	125	134	151	154	92
5	71	186	96	295	221	288	146	121	123	140	156	92
6	71	168	98	198	238	251	162	143	119	155	140	90
7	71	154	96	159	262	234	183	168	117	192	139	90
8	73	143	96	140	441	211	159	151	180	161	151	98
9	77	135	96	133	351	198	154	133	144	136	160	86
10	81	138	98	128	241	195	146	125	126	300	122	82
11	86	138	96	121	221	198	143	123	122	319	317	768
12	92	135	101	118	177	186	140	140	147	179	262	240
13	79	143	98	113	570	180	138	671	125	161	151	207
14	77	128	94	118	445	195	135	362	135	150	128	158
15	130	133	94	116	288	214	133	295	129	134	117	141
16	92	121	128	109	238	205	133	377	167	128	111	140
17	77	118	140	107	208	183	130	269	187	122	114	208
18	77	116	109	107	192	174	128	221	154	117	129	268
19	77	116	105	105	183	198	125	195	148	131	114	2,260
20	79	143	103	105	186	192	125	180	161	133	105	1,300
21	255	135	113	110	174	174	130	175	168	118	98	3,070
22	123	121	111	111	468	170	133	157	187	117	109	1,390
23	96	118	133	135	496	165	138	149	973	114	119	535
24	88	111	140	125	310	159	146	148	281	114	99	375
25	86	116	123	135	255	154	128	148	193	127	96	301
26	84	123	113	123	238	168	123	142	170	163	94	262
27	84	111	116	109	231	165	118	132	157	131	96	238
28	82	111	115	110	205	171	241	174	144	117	92	219
29	101	111	115	115	------	208	162	213	137	147	86	202
30	715	109	116	125	------	180	140	175	146	144	86	189
31	763	------	107	118	------	165	------	151	------	155	87	------
TOTAL	4,089	4,532	3,364	3,924	7,265	6,364	4,366	5,954	5,372	4,919	4,460	13,381
MEAN	132	151	109	127	259	205	146	192	179	159	144	446
MAX	763	388	140	295	570	396	241	671	973	319	325	3,070
MIN	71	109	94	105	90	154	118	121	117	114	86	81
CFSM	1.08	1.24	.89	1.04	2.12	1.68	1.20	1.57	1.47	1.30	1.18	3.66
IN.	1.25	1.38	1.03	1.20	2.22	1.94	1.33	1.82	1.64	1.50	1.36	4.08

CAL YR 1970 TOTAL 54,875 MEAN 150 MAX 4,340 MIN 56 CFSM 1.23 IN 16.73
WTR YR 1971 TOTAL 67,990 MEAN 186 MAX 3,070 MIN 71 CFSM 1.52 IN 20.73

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
6-23	0330	6.61	2,570	9-21	0130	17.32	13,200
9-11	1000	7.29	2,970	9-22	0330	6.37	2,440
9-19	0400	9.16	4,330				

02112250 Yadkin River at Elkin, N. C.

LOCATION.--Lat 36°14'40", long 80°50'42", Yadkin County, on right bank at downstream side of bridge on U. S. Highway 21 at Elkin, 0.3 mile downstream from Elkin River and 362 miles upstream from mouth of Pee Dee River in Winyah Bay.

DRAINAGE AREA.--854 sq mi.

PERIOD OF RECORD.--April 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 866.03 ft above mean sea level. Prior to Aug. 28, 1964, nonrecording gage on upstream side of bridge at same datum.

AVERAGE DISCHARGE.--7 years, 1,205 cfs (19.17 inches per year) adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 18,500 cfs Sept. 19 (gage height, 19.38 ft); minimum, 350 cfs Dec. 9 (gage height, 1.40 ft); minimum daily, 355 cfs Dec. 9.
Period of record: Maximum discharge, 24,700 cfs Aug. 10, 1970 (gage height, 23.52 ft); minimum, 338 cfs July 28, 29, 1966. Flood of July 1916 reached a stage of 36.0 ft, from information by North Carolina State Highway Commission. Flood of August 1940 reached a stage of 37.5 ft. A discharge of 172 cfs was measured on Sept. 19, 1956.

REMARKS.--Records good. Considerable regulation by W. Kerr Scott Reservoir. (See p. 152).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	648	4,230	770	764	800	1,400	1,140	1,110	1,020	935	1,270	861
2	644	2,050	770	767	800	1,360	1,110	1,080	1,010	1,280	1,550	896
3	634	2,030	785	800	795	2,270	1,210	1,060	979	1,070	1,180	902
4	633	1,980	780	814	809	3,150	1,080	980	961	936	1,000	882
5	610	1,540	736	1,800	1,160	2,450	1,120	971	920	884	1,070	884
6	607	1,290	760	2,070	2,070	1,700	1,190	989	917	894	1,010	885
7	632	1,160	707	1,210	2,110	1,710	1,310	1,180	871	1,110	1,030	879
8	638	1,110	394	1,090	3,240	1,550	1,280	1,240	1,030	1,310	998	926
9	652	1,070	355	1,040	3,260	1,420	1,150	1,100	1,110	1,150	1,080	860
10	653	981	1,100	997	2,340	1,260	1,100	1,060	940	1,370	942	844
11	675	1,110	941	947	1,390	1,300	1,060	959	897	2,940	1,100	2,790
12	686	1,260	761	900	1,430	1,420	1,130	1,000	1,020	1,610	1,710	1,580
13	640	1,290	758	874	3,240	1,260	1,060	3,680	923	1,240	1,070	1,240
14	628	1,150	733	863	4,270	1,310	1,000	4,220	927	1,190	1,030	1,050
15	751	1,110	726	806	2,020	1,300	978	3,650	947	1,100	1,330	984
16	742	1,090	828	756	1,900	1,510	964	3,210	949	1,040	960	975
17	632	975	1,000	748	1,550	1,400	961	2,850	1,170	884	944	1,050
18	620	931	864	744	1,410	1,200	976	1,810	1,060	847	1,020	1,190
19	620	885	802	728	1,320	1,360	941	1,500	1,160	839	955	10,700
20	620	920	790	641	1,170	1,340	944	1,400	1,050	899	943	3,550
21	1,270	1,020	804	700	1,260	1,450	992	1,420	1,090	828	923	7,940
22	901	942	814	809	3,080	1,160	1,000	1,320	1,380	822	938	4,490
23	654	929	854	824	5,560	1,110	1,000	1,180	3,920	811	1,130	2,110
24	663	886	935	833	2,770	1,160	1,030	1,190	2,970	797	938	1,610
25	644	805	1,020	905	1,830	1,140	1,000	1,090	1,380	887	909	1,390
26	635	799	875	995	1,790	1,160	932	1,080	1,290	955	900	1,270
27	621	777	828	859	1,510	1,250	991	1,050	1,060	949	923	1,200
28	623	795	782	810	1,540	1,260	1,360	1,090	991	929	881	1,130
29	655	802	722	820	------	1,370	1,520	1,470	941	958	884	1,100
30	2,960	803	682	827	------	1,310	1,840	1,590	893	1,150	872	1,070
31	5,200	------	758	798	------	1,270	------	1,100	------	1,040	870	------
TOTAL	27,789	36,710	24,434	28,539	56,424	45,310	33,269	48,629	35,776	33,654	32,360	57,238
MEAN	896	1,224	788	921	2,015	1,462	1,109	1,569	1,193	1,086	1,044	1,908
MAX	5,200	4,230	1,100	2,070	5,560	3,150	1,840	4,220	3,920	2,940	1,710	10,700
MIN	607	777	355	641	795	1,110	891	959	871	797	870	844
(†)	+46	-17	0	0	0	0	+3	-3	-2	+2	-111	+135
MEAN‡	942	1,207	788	921	2,015	1,462	1,112	1,566	1,191	1,088	933	2,043
CFSM‡	1.10	1.41	.92	1.08	2.36	1.71	1.30	1.83	1.39	1.27	1.09	2.39
IN.‡	1.27	1.57	1.06	1.24	2.46	1.97	1.45	2.11	1.55	1.46	1.26	2.67

CAL YR 1970 TOTAL 444,797 MEAN 1,219 MAX 21,500 MIN 355 MEAN‡ 1,218 CFSM‡ 1.43 IN.‡ 19.36
WTR YR 1971 TOTAL 460,132 MEAN 1,261 MAX 10,700 MIN 355 MEAN‡ 1,265 CFSM‡ 1.48 IN.‡ 20.11

† Change in contents, equivalent in cubic feet per second, in W. Kerr Scott Reservoir; furnished by Corps of Engineers.
‡ Adjusted for change in W. Kerr Scott Reservoir.

02112360 Mitchell River near State Road, N. C.

LOCATION.--Lat 36°18'58", long 80°48'36", Surry County, on right bank 18 ft upstream from bridge on Secondary Road 1001, 1.8 miles upstream from Grass Creek, and 3.3 miles east of State Road.

DRAINAGE AREA.--80.4 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1952-58, 1963. April 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 927.12 ft above mean sea level. Prior to Aug. 29, 1964, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--7 years, 109 cfs (18.39 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,200 cfs Sept. 21 (gage height, 12.07 ft); minimum, 43 cfs Feb. 2 (gage height, 1.90 ft), result of freezeup.
Period of record: Maximum discharge, 6,450 cfs Aug. 30, 1964 (gage height, 14.85 ft); minimum, 35 cfs Aug. 17, 19, 1967; minimum gage height, 1.73 ft July 28, 29, 1966.
Maximum stage known since at least 1900, about 18 ft in August 1940, from information by local resident (estimated discharge, 9,000 cfs). A discharge of 16.5 cfs was measured on Sept. 19, 1956.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	359	81	81	73	146	114	105	103	151	185	55
2	65	233	79	81	70	154	122	101	99	148	193	60
3	65	198	79	76	80	280	116	101	99	124	115	65
4	60	160	78	86	86	248	111	99	97	107	107	60
5	58	137	73	224	123	182	109	97	92	97	115	60
6	57	126	71	144	139	165	134	105	90	97	96	59
7	56	117	71	118	178	165	168	122	92	101	94	62
8	57	108	71	108	254	143	136	116	168	97	87	56
9	57	104	71	103	196	134	126	105	143	90	94	54
10	58	105	71	99	143	124	122	101	109	101	83	56
11	58	106	71	96	129	134	118	101	101	99	113	114
12	58	105	72	95	116	124	116	124	114	94	113	138
13	57	109	72	91	458	124	120	596	101	92	85	104
14	56	100	71	89	296	138	111	252	103	92	78	77
15	71	101	70	89	190	151	109	182	99	84	73	68
16	65	92	93	87	157	146	109	227	116	79	71	64
17	57	90	101	84	140	131	105	168	138	78	73	89
18	57	89	84	84	132	124	109	146	118	76	87	128
19	55	90	79	82	125	136	114	136	116	92	80	1,380
20	56	103	78	82	127	131	109	129	107	92	71	394
21	200	102	84	80	122	122	103	138	109	74	70	1,700
22	105	91	88	82	442	120	103	114	162	76	74	672
23	79	89	94	95	420	116	105	109	455	71	81	288
24	73	83	99	88	240	111	111	107	211	70	68	222
25	71	83	88	94	202	109	101	109	154	74	65	178
26	70	82	82	87	182	118	99	107	131	100	63	157
27	66	81	81	77	176	118	99	99	120	85	63	145
28	65	82	79	76	159	124	165	131	109	78	62	132
29	71	82	78	76	------	143	122	146	103	107	56	123
30	491	82	78	80	------	126	111	129	101	107	56	116
31	737	------	78	86	------	120	------	116	------	98	56	------
TOTAL	3,217	3,489	2,465	2,920	5,155	4,407	3,497	4,418	3,860	2,931	2,727	6,876
MEAN	104	116	79.5	94.2	184	142	117	143	129	94.5	88.0	229
MAX	737	359	101	224	458	280	168	596	455	151	193	1,700
MIN	55	81	70	76	70	109	99	97	90	70	56	54
CFSM	1.29	1.44	.99	1.17	2.29	1.77	1.46	1.78	1.60	1.18	1.09	2.85
IN.	1.49	1.61	1.14	1.35	2.39	2.04	1.62	2.04	1.79	1.36	1.26	3.18

CAL YR 1970 TOTAL 38,541 MEAN 106 MAX 3,260 MIN 44 CFSM 1.32 IN 17.83
WTR YR 1971 TOTAL 45,962 MEAN 126 MAX 1,700 MIN 54 CFSM 1.57 IN 21.27

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-22	1930	5.51	1,770	9-21	0330	12.07	5,200
9-19	0830	8.43	3,440				

02113000 Fisher River near Copeland, N. C.

LOCATION.--Lat 36°20'27", long 80°40'20", Surry County, on left bank 500 ft upstream from bridge on State Highway 268, 1 mile upstream from Cody Creek, and 2 miles northwest of Copeland.

DRAINAGE AREA.--121 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 913 ft (by barometer). Prior to Sept. 5, 1936, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--40 years, 176 cfs (19.70 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,570 cfs Sept. 21 (gage height, 9.10 ft); minimum, 56 cfs Oct. 5 (gage height, 2.10 ft). Period of record: Maximum discharge, 27,300 cfs Aug. 14, 1940 (gage height, 18.4 ft, from floodmarks), from rating curve extended above 6,200 cfs on basis of slope-area measurement of peak flow; minimum, 14 cfs Aug. 28, 1956

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 822: Drainage area. WSP 1303: 1933(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	515	103	110	94	187	145	135	147	140	165	66
2	66	303	101	110	100	198	146	131	137	158	222	67
3	66	265	99	104	110	463	146	129	135	143	129	75
4	62	210	98	116	111	422	137	124	136	121	114	71
5	58	177	93	403	175	269	134	122	126	112	116	70
6	59	158	95	228	254	236	176	129	120	113	108	68
7	59	147	92	166	277	219	333	181	116	137	107	110
8	60	137	92	146	505	196	213	181	235	117	98	75
9	62	130	93	137	365	184	181	151	208	105	93	67
10	64	129	94	131	210	178	167	137	335	107	89	63
11	67	136	94	125	192	181	156	129	155	106	156	133
12	65	132	95	120	164	171	153	144	165	104	285	184
13	62	159	96	117	905	168	152	1,080	145	100	110	162
14	62	132	91	115	607	202	145	432	139	99	95	99
15	75	134	89	115	319	194	140	293	132	93	88	84
16	76	121	117	109	251	199	139	431	157	89	84	79
17	63	117	473	106	217	169	137	259	196	86	86	119
18	62	114	120	105	199	158	136	211	151	82	108	187
19	62	112	109	102	186	170	131	188	151	127	95	1,050
20	64	132	105	101	185	174	129	174	209	122	85	545
21	228	154	126	110	177	155	133	231	202	95	80	1,620
22	144	126	143	110	839	150	143	164	164	92	97	925
23	96	120	141	122	852	147	136	151	254	87	122	377
24	84	111	152	121	345	142	146	148	206	84	86	269
25	82	109	132	128	264	139	130	148	158	93	79	210
26	78	111	123	116	234	153	125	143	143	131	77	185
27	76	107	115	101	228	151	122	131	134	111	109	169
28	75	108	115	100	201	163	224	178	123	95	79	154
29	82	108	100	110	------	189	169	274	117	117	71	143
30	788	106	119	116	------	169	142	211	140	128	68	134
31	1,100	------	112	111	------	152	------	171	------	132	67	------
TOTAL	4,113	4,620	3,435	4,011	8,566	6,048	4,666	6,711	4,936	3,426	3,368	7,560
MEAN	133	154	111	129	306	195	156	216	165	111	109	252
MAX	1,100	515	473	403	905	463	333	1,080	335	158	285	1,620
MIN	58	106	89	100	94	139	122	122	116	82	67	63
CFSM	1.10	1.27	.92	1.07	2.53	1.61	1.29	1.79	1.36	.92	.90	2.08
IN.	1.26	1.42	1.06	1.23	2.63	1.86	1.43	2.06	1.52	1.05	1.04	2.32

CAL YR 1970 TOTAL 54,341 MEAN 149 MAX 4,990 MIN 50 CFSM 1.23 IN 16.71
WTR YR 1971 TOTAL 61,460 MEAN 168 MAX 1,620 MIN 58 CFSM 1.39 IN 18.90

PEAK DISCHARGE (BASE, 2,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-22	2230	7.59	3,360	9-21	0400	9.10	4,570

02113850 Ararat River at Ararat, N. C.

LOCATION.--Lat 36°24'16", long 80°33'43", Surry County, on right bank at upstream side of bridge pier on Secondary Road 2019, at Ararat, and 300 ft downstream from Flat Shoal Creek.

DRAINAGE AREA.--231 sq mi.

PERIOD OF RECORD.--April 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 880.97 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 247 cfs (14.50 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,250 cfs Feb. 22 (gage height, 6.50 ft); minimum, 88 cfs Jan. 20 (gage height, 0.96 ft), result of freezeup; minimum daily, 95 cfs Oct. 7, 17.
Period of record: Maximum discharge, 8,720 cfs Feb. 13, 1966 (gage height, 13.56 ft); minimum, 20 cfs Aug. 17, 18, Oct. 7, 8, 1966 (gage height, 0.65 ft); minimum daily, 56 cfs, July 28, 1966.
Maximum stage known since at least 1904, 21.4 ft June 14, 1947 (result of failure of dams upstream, discharge about 31,000 cfs), from information by local residents.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	474	168	170	152	297	247	211	289	239	272	132
2	106	297	156	175	160	315	256	207	267	382	371	128
3	108	306	152	176	189	635	261	207	261	272	250	137
4	99	252	156	198	194	600	247	198	250	217	289	132
5	96	229	144	640	292	408	247	194	234	195	256	128
6	97	207	148	355	408	360	297	207	228	206	217	132
7	95	194	144	265	402	340	462	292	228	228	201	250
8	99	185	140	234	725	310	330	292	393	333	182	217
9	97	180	148	220	582	292	288	238	399	234	177	155
10	103	180	148	211	310	288	274	211	514	261	168	132
11	108	194	148	202	288	297	261	202	305	223	316	141
12	105	202	148	194	261	283	256	220	267	217	655	245
13	97	256	152	189	1,280	274	252	1,800	283	186	250	316
14	96	194	144	189	906	283	243	720	256	182	191	182
15	103	202	140	185	468	310	229	536	239	168	173	164
16	109	180	185	176	372	320	216	770	256	164	164	155
17	95	176	256	172	330	274	211	476	355	159	173	283
18	96	168	180	172	301	265	211	388	267	146	191	305
19	102	168	168	164	288	292	207	344	250	278	177	514
20	101	194	160	148	292	306	202	327	294	245	159	1,010
21	198	229	229	160	279	270	207	333	366	182	150	1,620
22	177	185	274	180	982	265	243	294	426	164	261	1,280
23	128	176	247	207	1,380	261	216	278	382	155	388	520
24	119	160	256	198	540	252	234	272	355	150	191	382
25	122	156	216	211	420	247	207	272	283	228	164	316
26	119	168	198	194	366	265	198	267	294	300	155	283
27	115	164	185	168	355	265	198	250	239	234	177	272
28	113	168	190	164	315	270	345	327	212	182	155	256
29	124	164	176	165	------	301	274	514	206	283	137	245
30	618	160	172	160	------	270	220	443	250	377	137	228
31	991	------	170	160	------	252	------	338	------	283	132	------
TOTAL	4,842	6,168	5,488	6,402	12,837	9,667	7,539	11,628	8,848	7,073	6,879	10,260
MEAN	156	206	177	207	458	312	251	375	295	228	222	342
MAX	991	474	274	640	1,380	635	462	1,800	514	382	655	1,620
MIN	95	156	140	148	152	247	198	194	206	146	132	128
CFSM	.68	.89	.77	.90	1.98	1.35	1.09	1.62	1.28	.99	.96	1.48
IN.	.78	.99	.88	1.03	2.07	1.56	1.21	1.87	1.42	1.14	1.11	1.65

CAL YR 1970 TOTAL 85,514 MEAN 234 MAX 5,540 MIN 91 CFSM 1.01 IN 13.77
WTR YR 1971 TOTAL 97,631 MEAN 267 MAX 1,800 MIN 95 CFSM 1.16 IN 15.72

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-22	2330	6.50	3,250	9-21	0400	6.42	3,190
5-13	0630	6.44	3,210				

02114450 Little Yadkin River at Dalton, N. C.

LOCATION.--36°17'56", long 80°24'53", Stokes County, on left bank 1,200 ft downstream from bridge on U. S. Highway 52, 1.0 mile southwest of Dalton, 1.3 miles downstream from Southern Railway bridge, and 2.0 miles downstream from Danbury Creek.

DRAINAGE AREA.--42.8 sq mi.

PERIOD OF RECORD.--August 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 813.7 ft above mean sea level (North Carolina State Highway Commission bench mark).

AVERAGE DISCHARGE.--11 years, 40.9 cfs (12.99 inches per year).

EXTREMES.--Current year: Maxmmum discharge, 3,800 cfs Oct. 30 (gage height, 10.44 ft); minimum,7.6 cfs Oct. 5 (gage height, 0.47 ft). Period of record: Maximum discharge, 7,740 cfs June 12, 1962 (gage height, 17.86 ft), from rating curve extended above 2,700 cfs on basis of slope-area measurement of peak flow; minimum, 1.4 cfs July 29, 1966.

REMARKS.--Records good.

REVISIONS.--WSP 2104: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	92	20	23	26	42	34	28	31	22	36	13
2	9.1	70	19	23	25	50	36	26	28	22	88	13
3	9.3	50	19	23	26	381	38	25	26	23	52	13
4	8.3	37	19	33	31	179	34	25	25	19	29	14
5	7.8	32	17	404	90	77	31	24	24	17	24	14
6	8.1	28	18	89	120	60	79	24	23	20	23	14
7	8.7	26	17	51	357	55	111	26	22	53	22	13
8	8.8	24	18	41	293	51	66	27	53	46	20	12
9	8.6	23	18	39	129	47	51	23	34	26	19	11
10	8.9	26	18	33	64	47	46	22	28	63	18	11
11	9.0	30	18	31	51	47	39	21	24	34	36	14
12	9.0	29	19	29	43	44	37	99	23	33	76	24
13	8.9	33	19	28	148	42	40	666	26	22	24	21
14	8.7	28	18	27	87	42	37	121	24	22	20	14
15	23	32	17	26	55	45	33	121	22	19	18	12
16	45	27	23	24	46	48	29	335	38	18	17	12
17	13	24	28	24	42	38	29	82	27	28	17	13
18	11	24	22	24	40	33	28	56	25	17	20	49
19	12	23	21	23	37	43	27	46	23	19	19	31
20	12	25	20	23	36	45	27	39	22	20	17	23
21	25	24	27	23	34	38	27	33	24	16	16	20
22	18	22	29	23	869	37	28	30	29	15	61	26
23	14	21	31	29	311	35	28	28	25	15	38	20
24	13	20	33	30	86	34	30	28	22	25	20	18
25	13	20	28	37	64	34	26	28	20	22	17	16
26	13	20	25	31	55	39	25	27	19	21	17	16
27	13	20	23	26	58	38	24	24	19	19	18	16
28	13	20	23	25	46	38	61	67	18	18	16	15
29	14	21	23	26	------	44	36	81	25	39	14	15
30	892	21	23	33	------	38	29	51	34	214	14	14
31	585	------	22	30	------	35	------	39	------	47	14	------
TOTAL	1,851.5	892	675	1,331	3,269	1,826	1,166	2,272	783	994	840	517
MEAN	59.7	29.7	21.8	42.9	117	58.9	38.9	73.3	26.1	32.1	27.1	17.2
MAX	892	92	33	404	869	381	111	666	53	214	88	49
MIN	7.8	20	17	23	25	33	24	21	18	15	14	11
CFSM	1.39	.69	.51	1.00	2.73	1.38	.91	1.71	.61	.75	.63	.40
IN.	1.61	.78	.59	1.16	2.84	1.59	1.01	1.97	.68	.86	.73	.45

CAL YR 1970 TOTAL 15,455.2 MEAN 42.3 MAX 2,140 MIN 7.6 CFSM .99 IN 13.43
WTR YR 1971 TOTAL 16,416.5 MEAN 45.0 MAX 892 MIN 7.8 CFSM 1.05 IN 14.27

PEAK DISCHARGE (BASE, 1,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-30	2300	10.44	3,800	5-13	0530	5.82	1,890
2-22	2100	10.38	3,770				

02115360 Yadkin River at Enon, N. C.

LOCATION.--Lat 36°07'55", long 80°26'39", Forsyth County, on left bank 100 ft upstream from bridge on Secondary Road 1605, 1.5 miles east of Enon, 4 miles upstream from Forbush Creek, and 324 miles upstream from mouth of Pee Dee River in Winyah Bay.

DRAINAGE AREA.--1,680 sq mi, approximately.

PERIOD OF RECORD.--July 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 701.71 ft above mean sea level, unadjusted. Prior to Nov. 6, 1968, nonrecording gage on downstream side of bridge at same site and datum.

AVERAGE DISCHARGE.--7 years, 2,112 cfs (17.08 inches per year) adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 25,300 cfs Sept. 21 (gage height, 19.11 ft); minimum, 948 cfs Dec. 10 (gage height, 2.88 ft); minimum daily, 969 cfs Dec. 9.
Period of record: Maximum discharge, 63,500 cfs Aug. 10, 1970 (gage height, 27.69 ft); minimum observed, 625 cfs Aug. 17, 1967; minimum gage height observed, 2.29 ft July 28, 1966.
Flood of Aug. 15, 1940 reached a stage of 737.5 ft msl (35.8 ft, gage datum), from information by Corps of Engineers.

REMARKS.--Records good. Some regulation by W. Kerr Scott Reservoir. (See p. 152).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,120	7,530	1,400	1,430	1,400	2,730	2,190	2,370	2,010	1,650	2,080	1,370
2	1,100	4,260	1,370	1,360	1,180	2,580	2,070	1,910	1,880	2,180	3,180	1,360
3	1,080	3,220	1,370	1,410	1,330	4,930	2,120	1,860	1,840	2,100	2,750	1,420
4	1,060	3,210	1,360	1,440	1,470	6,530	2,110	1,780	1,800	1,780	1,990	1,420
5	1,030	2,800	1,320	4,310	1,810	4,740	1,960	1,750	1,730	1,600	1,980	1,400
6	1,020	2,380	1,290	4,060	3,590	3,570	2,190	1,760	1,660	1,570	1,900	1,400
7	1,030	2,040	1,300	2,870	4,290	3,190	3,180	2,030	1,640	1,700	1,790	1,570
8	1,060	1,870	1,210	1,990	6,290	2,990	3,040	2,260	1,640	2,220	1,760	1,650
9	1,060	1,860	969	1,920	6,250	2,720	2,460	2,260	2,730	1,950	1,690	1,470
10	1,080	1,860	1,040	1,820	4,170	2,530	2,250	1,930	2,430	2,550	1,720	1,360
11	1,090	1,830	1,720	1,770	2,880	2,400	2,100	1,870	2,040	3,300	1,620	2,070
12	1,120	1,760	1,370	1,690	2,440	2,490	2,080	1,970	1,940	3,660	4,210	4,400
13	1,100	1,950	1,310	1,610	3,970	2,440	2,090	9,900	2,140	2,080	2,330	3,040
14	1,070	2,100	1,290	1,580	9,910	2,410	1,980	7,730	1,800	1,960	1,800	1,940
15	1,100	2,080	1,260	1,560	4,540	2,440	1,890	6,150	1,810	1,760	1,820	1,640
16	1,370	1,830	1,300	1,470	3,370	2,780	1,870	8,140	1,960	1,700	1,880	1,550
17	1,150	1,810	1,800	1,420	3,110	2,600	1,810	5,150	2,090	1,590	1,550	1,640
18	1,080	1,650	1,660	1,410	2,640	2,370	1,880	3,930	2,130	1,440	1,670	1,960
19	1,070	1,580	1,470	1,390	2,450	2,280	1,840	3,000	1,950	1,460	1,720	10,900
20	1,080	1,570	1,390	1,300	2,280	2,640	1,750	2,640	1,980	1,680	1,610	9,510
21	1,240	1,710	1,410	1,270	2,230	2,470	1,740	2,590	2,300	1,510	1,540	14,600
22	2,330	1,700	1,650	1,460	5,020	2,360	1,840	2,470	2,910	1,380	1,560	9,750
23	1,430	1,600	1,590	1,490	16,400	2,100	1,840	2,190	4,020	1,340	2,210	5,190
24	1,200	1,540	1,750	1,590	5,860	2,020	1,930	2,090	5,280	1,310	1,830	3,350
25	1,200	1,460	1,680	1,630	4,150	2,050	1,840	2,040	3,000	1,400	1,550	2,700
26	1,190	1,440	1,670	1,660	3,240	2,100	1,750	1,930	2,240	1,590	1,510	2,370
27	1,180	1,400	1,500	1,500	3,200	2,190	1,660	1,890	2,050	1,740	1,520	2,180
28	1,140	1,390	1,450	1,400	2,830	2,360	2,110	1,940	1,770	1,630	1,580	2,050
29	1,150	1,420	1,380	1,300	------	2,400	2,940	2,880	1,670	1,610	1,430	1,950
30	4,120	1,420	1,310	1,500	------	2,610	2,730	3,450	1,720	3,320	1,430	1,900
31	9,880	------	1,360	1,600	------	2,320	------	2,510	------	2,070	1,370	------
TOTAL	47,930	64,270	43,949	54,210	112,300	86,340	63,240	96,370	66,160	58,830	58,580	99,110
MEAN	1,546	2,142	1,418	1,749	4,011	2,785	2,108	3,109	2,205	1,898	1,890	3,304
MAX	9,880	7,530	1,800	4,310	16,400	6,530	3,180	9,900	5,280	3,660	4,210	14,600
MIN	1,020	1,390	969	1,270	1,180	2,020	1,660	1,750	1,640	1,310	1,370	1,360
(†)	+46	-17	0	0	0	0	+3	-3	-2	+2	-111	+135

CAL YR 1970 TOTAL 785,242 MEAN 2,151 MAX 40,900 MIN 765 MEAN‡ 2,150 CFSM‡ 1.28 IN.‡ 17.37
WTR YR 1971 TOTAL 851,289 MEAN 2,332 MAX 16,400 MIN 969 MEAN‡ 2,336 CFSM‡ 1.39 IN.‡ 18.88

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

‡ Adjusted for change in contents in W. Kerr Scott Reservoir.

02115500 Forbush Creek near Yadkinville, N. C.

LOCATION.--Lat 36°08'12", long 80°33'09", Yadkin County, on left bank 900 ft upstream from bridge on Secondary Road 1600, 0.8 mile north of Forbush Church, 2.8 miles upstream from Logan Creek, 3.5 miles upstream from mouth, and 6 miles east of Yadkinville.

DRAINAGE AREA.--21.7 sq mi.

PERIOD OF RECORD.--April 1940 to September 1971 (discontinued). Monthly discharge only for some periods, published in WSP 1303.

GAGE.--Water-stage recorder. Altitude of gage is 728 ft (by barometer).

AVERAGE DISCHARGE.--31 years, 22.8 cfs (14.26 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,570 cfs Feb. 22 (gage height, 9.24 ft); minimum, 6.4 cfs Oct. 4, 5, 6, 7, 13, 14 (gage height, 0.62 ft).
Period of record: Maximum discharge, 2,840 cfs Aug. 10, 1970 (gage height, 12.37 ft); minimum daily, 0.6 cfs Aug. 16, 17, Sept. 14-18, 1956.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	31	10	10	12	23	16	14	16	10	17	7.6
2	7.5	24	10	10	11	29	16	13	14	11	37	7.6
3	7.5	22	9.8	10	11	192	16	13	14	10	21	7.5
4	6.4	19	9.8	16	13	83	16	12	13	9.5	18	7.5
5	6.5	17	9.6	180	53	39	14	12	13	9.1	40	7.4
6	6.6	14	9.7	45	53	30	20	12	12	16	17	7.5
7	6.6	14	9.5	28	169	26	31	13	12	14	14	17
8	6.8	13	9.6	22	156	22	24	14	23	11	12	8.9
9	6.9	12	9.8	20	72	20	20	12	20	11	11	7.9
10	6.9	12	9.8	18	33	20	18	11	13	37	10	7.5
11	6.8	13	9.6	16	25	20	16	11	12	17	44	87
12	6.8	12	9.9	15	21	18	16	160	14	24	84	46
13	6.7	12	9.9	14	101	18	16	335	18	13	25	31
14	6.7	11	9.5	14	51	18	14	71	13	12	20	18
15	18	13	9.5	14	29	18	14	90	13	11	17	12
16	16	11	14	12	24	18	14	179	12	11	14	11
17	8.9	11	15	12	20	16	14	43	12	12	13	11
18	8.4	11	11	12	18	15	13	30	13	11	12	25
19	8.4	11	11	11	16	19	13	24	12	10	11	53
20	8.9	11	10	11	16	18	13	20	23	9.2	11	35
21	13	11	11	11	15	16	13	18	18	8.8	9.9	19
22	11	11	11	11	414	16	13	16	20	8.8	23	41
23	9.7	10	13	13	332	15	14	15	14	8.3	16	20
24	9.3	9.9	13	14	49	14	14	14	36	8.8	11	16
25	9.5	11	12	17	34	14	13	14	14	12	9.8	14
26	9.3	10	11	15	29	17	12	14	12	14	9.0	13
27	9.2	10	11	13	32	17	12	13	11	11	8.0	13
28	9.2	10	10	12	25	17	30	25	11	9.9	7.6	12
29	9.8	10	10	12	------	22	17	42	10	13	7.6	12
30	129	10	10	13	------	18	14	26	11	27	8.0	12
31	80	------	10	13	------	16	------	19	------	17	8.0	------
TOTAL	463.8	396.9	329.0	634	1,834	844	486	1,305	449	407.4	565.9	587.4
MEAN	15.0	13.2	10.6	20.5	65.5	27.2	16.2	42.1	15.0	13.1	18.3	19.6
MAX	129	31	15	180	414	192	31	335	36	37	84	87
MIN	6.4	9.9	9.5	10	11	14	12	11	10	8.3	7.6	7.4
CFSM	.69	.61	.49	.94	3.02	1.25	.75	1.94	.69	.60	.84	.90
IN.	.80	.68	.56	1.09	3.14	1.45	.83	2.24	.77	.70	.97	1.01

CAL YR 1970 TOTAL 7,937.1 MEAN 21.7 MAX 1,650 MIN 6.0 CFSM 1.00 IN 13.61
WTR YR 1971 TOTAL 8,302.4 MEAN 22.7 MAX 414 MIN 6.4 CFSM 1.05 IN 14.23

PEAK DISCHARGE (BASE, 570 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-22	2130	9.24	1,570	5-12	2230	7.33	1,030

02115850 Salem Creek at Winston-Salem, N. C.

LOCATION.--Lat 36°04'06", long 80°15'46", Forsyth County, at right bank on downstream side of bridge on Lockland Avenue, 1,000 ft downstream from Peters Creek, and 2.1 miles southwest of city hall, Winston-Salem.

DRAINAGE AREA.--51.3 sq mi.

PERIOD OF RECORD.--July 1964 to September 1971 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 725.38 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 42.2 cfs (11.16 inches per year).

EXTREMES.--Current year: Maximum discharge 3,520 cfs May 13 (gage height, 11.41 ft); minimum, 11 cfs Oct. 3; minimun daily, 13 cfs Oct. 3, 4, 6, 17, 18, 25; minimum gage height, 1.99 ft Oct. 4, 5, 17, 18, 24.
Period of record: Maximum discharge 5,590 cfs June 13, 1970 (gage height, 12.93 ft) from rating curve extended above 2,400 cfs on basis of slope-area measurement of peak flow; minimum, 3.5 cfs Jan. 29, 1966; minimum daily, 7.5 cfs Sept. 28, 1968.
A flood prior to 1953 reached a stage of about 17 ft, from information by North Carolina State Highway Commission.

REMARKS.--Records fair. Flow regulated by Salem Lake 4.5 miles upstream. The City of Winston-Salem diverted an average of 22.4 cfs from Salem Lake for water supply. Diurnal fluctuation at low flow caused by water filtration plant and industry. Creek channel improved by dredging in 1916, 1934-35, 1961, 1967. Recording rain gage located at station discontinued July 29, 1971.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	87	22	30	25	31	29	21	37	23	43	15
2	14	55	21	32	25	74	44	20	31	21	42	16
3	13	59	22	29	25	353	39	21	29	21	24	15
4	13	53	21	41	67	205	31	21	26	19	22	16
5	15	41	18	114	106	79	28	21	23	18	22	15
6	13	39	19	33	53	55	167	30	22	34	23	14
7	15	32	21	27	225	46	203	42	22	70	21	15
8	15	29	21	25	279	40	85	35	22	32	17	15
9	15	28	22	44	126	36	53	23	22	25	17	15
10	14	86	22	26	62	35	43	21	22	78	18	14
11	14	61	21	26	47	33	38	23	21	31	41	14
12	18	59	23	26	57	32	33	130	61	29	44	26
13	18	44	21	25	130	39	29	1,210	28	21	20	16
14	15	70	22	25	66	54	27	262	22	23	16	15
15	46	78	22	25	46	49	26	223	46	19	16	14
16	35	46	76	23	41	37	26	594	36	20	16	14
17	13	35	29	23	36	32	23	177	24	18	19	14
18	13	31	22	24	32	28	21	68	27	16	40	23
19	16	28	19	24	31	61	24	49	23	19	26	23
20	24	32	19	25	35	35	21	40	20	18	18	15
21	51	24	34	23	32	28	22	35	62	18	16	29
22	18	22	22	26	130	28	24	29	91	19	135	50
23	18	23	48	44	72	25	37	26	43	18	33	18
24	16	22	25	52	47	25	25	25	31	42	19	16
25	13	22	21	32	40	25	22	24	25	25	17	14
26	15	21	19	30	45	53	24	23	22	26	16	14
27	15	22	18	24	41	39	22	28	20	22	17	16
28	15	21	18	24	31	34	127	183	22	20	15	16
29	31	20	18	24	------	65	26	117	39	72	14	15
30	768	21	18	35	------	39	23	58	32	72	15	17
31	355	------	21	26	------	34	------	43	------	47	15	------
TOTAL	1,668	1,211	745	987	1,952	1,749	1,342	3,622	951	936	817	529
MEAN	53.8	40.4	24.0	31.8	69.7	56.4	44.7	117	31.7	30.2	26.4	17.6
MAX	768	87	76	114	279	353	203	1,210	91	78	135	50
MIN	13	20	18	23	25	25	21	20	20	16	14	14

CAL YR 1970 TOTAL 16,390 MEAN 44.9 MAX 1,510 MIN 13
WTR YR 1971 TOTAL 16,509 MEAN 45.2 MAX 1,210 MIN 13

02115860 Muddy Creek near Muddy Creek, N. C.

LOCATION.--Lat 36°00'01", long 80°20'25", Forsyth County, on right bank 100 ft upstream from bridge on Secondary Road 2995, 0.2 mile downstream from Salem Creek, and 1.8 miles east of community of Muddy Creek.

DRAINAGE AREA.--178 sq mi.

RECORDS AVAILABLE.--July 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 682.67 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 185 cfs (14.10 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,780 cfs May 13 (gage height, 17.20 ft); minimum 68 cfs Oct. 5 (gage height, 1.86 ft); minimum daily, 75 cfs Oct. 4.
Period of record: Maximum discharge, 9,790 cfs Aug. 10, 1970 (gage height, 18.93 ft); minimum, 21 cfs Oct. 6, 1968 (gage height, 1.26 ft); minimum daily, 35 cfs Oct. 6, 1968.
Flood of June 1957 reached a stage of about 23 ft, from information by local resident.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Records following peak stages above 14 ft are affected by backwater and are subject to error. Some regulation by Salem Lake and considerable diurnal fluctuation from sewage effluent and waste water. The City of Winston-Salem diverted an average of 22.4 cfs from Salem Lake in the basin and 23.2 cfs from the Yadkin River for water supply. An average of about 31.9 cfs sewage effluent was returned to Salem Creek 3.5 miles above the station. The creek channel was dredged in 1935-36 by the Work Projects Administration.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	820	103	117	117	170	170	146	181	130	149	103
2	90	378	100	123	130	300	188	136	167	121	230	104
3	85	303	100	128	130	1,510	200	150	158	110	221	104
4	75	243	100	137	140	1,180	155	145	155	99	139	100
5	82	208	100	1,130	450	450	154	143	142	96	210	104
6	88	182	98	358	600	346	477	159	130	121	137	94
7	87	168	96	211	1,300	298	677	172	133	203	127	117
8	89	152	95	174	1,600	264	341	226	133	164	110	108
9	87	141	95	196	600	247	240	152	138	110	112	104
10	82	232	95	168	350	234	200	139	132	326	111	101
11	80	294	95	150	300	227	175	142	128	131	116	97
12	87	215	95	142	260	220	165	252	163	198	253	113
13	91	214	95	135	700	212	167	4,500	240	121	125	128
14	88	180	95	132	350	256	159	1,400	134	117	109	106
15	175	409	95	131	300	221	151	815	133	109	101	101
16	141	203	208	123	260	215	152	3,000	220	106	104	100
17	93	169	182	117	240	173	142	863	155	100	110	99
18	89	150	125	121	220	165	132	387	142	91	152	117
19	89	145	114	121	200	235	137	295	135	97	134	128
20	95	145	108	114	180	218	141	252	221	101	115	113
21	171	139	132	116	180	167	143	229	155	97	105	106
22	134	124	126	121	850	167	154	200	450	97	368	222
23	108	121	167	160	880	164	167	175	184	96	369	129
24	97	121	155	158	320	156	160	174	159	98	129	116
25	88	120	117	200	215	151	130	174	134	159	116	105
26	94	120	111	160	187	212	132	170	124	106	112	97
27	98	115	107	132	170	200	133	159	114	111	111	104
28	98	110	108	120	170	198	458	576	116	109	104	106
29	98	105	109	122	------	289	204	489	121	226	95	104
30	1,650	105	107	128	------	221	164	268	280	397	100	101
31	3,410	------	111	135	------	187	------	205	------	239	104	------
TOTAL	7,931	6,131	3,544	5,580	11,399	9,253	6,168	16,293	4,977	4,386	4,578	3,331
MEAN	256	204	114	180	407	298	206	526	166	141	148	111
MAX	3,410	820	208	1,130	1,600	1,510	677	4,500	450	397	369	222
MIN	75	105	95	114	117	151	130	136	114	91	95	94

CAL YR 1970 TOTAL 81,877 MEAN 224 MAX 7,180 MIN 75
WTR YR 1971 TOTAL 83,571 MEAN 229 MAX 4,500 MIN 75

PEAK DISCHARGE (BASE, 2,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-31	0600	16.45	5,000	3- 3	1330	11.51	2,250
2- 8	Unknown	-	Unknown	5-13	0930	17.20	5,780
2-22	Unknown	a13.8	3,150	5-16	0400	14.99	3,840

a From floodmarks

NOTE.--No gage-height record Nov. 26 to Dec. 15, Feb. 2 to Mar. 2.

02115900 South Fork Muddy Creek near Clemmons, N. C.

LOCATION.--Lat 36°00'22", long 80°18'07", Forsyth County, on right bank 5 ft upstream from bridge on Secondary Road 2902, 1.9 miles downstream from Leak Creek and 4.2 miles southeast of Clemmons.

DRAINAGE AREA.--42.2 sq mi.

PERIOD OF RECORD.--July 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 684 ft (from topographic map).

AVERAGE DISCHARGE.--7 years, 37.4 cfs (12.05 inches per year)

EXTREMES.--Current year: Maximum discharge, 1,870 cfs May 13 (gage height, 14.27 ft); minimum, 10 cfs Oct. 4, 5, 7, 8; minimum gage height, 2.64 ft Oct. 4, 5.
Period of record: Maximum discharge, 2,980 cfs Aug. 10, 1970 (gage height, 16.30 ft); minimum, 3.8 cfs Oct. 3, 1968.
In the period 1930-64, three floods equalled or exceeded 15 ft. The highest was about 16.3 ft on Aug. 31, 1959 as a result of dam failure (from information by local resident).

REMARKS.--Records good. Creek channel improvement by dredging was done in 1915-16 by the county and in 1934-35 by Works Projects Administration.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	61	24	29	27	37	35	32	35	53	61	18
2	13	43	24	28	26	61	40	30	32	30	128	18
3	13	47	23	29	27	309	47	29	31	27	37	18
4	11	37	23	40	39	156	36	29	30	24	29	18
5	11	33	22	81	121	77	34	28	29	23	26	17
6	12	30	22	49	132	62	144	31	28	30	26	16
7	11	27	21	40	271	56	154	32	26	31	25	16
8	12	26	21	35	330	48	74	48	27	26	23	15
9	12	25	22	43	121	44	55	38	30	24	22	15
10	12	56	22	42	65	43	47	29	26	67	21	15
11	12	70	22	40	53	42	43	28	25	30	22	15
12	12	44	23	36	52	39	39	48	26	51	32	17
13	12	72	22	34	138	39	37	1,300	32	29	22	21
14	12	45	21	32	75	45	35	202	26	26	20	16
15	13	106	21	32	56	46	33	181	25	24	19	15
16	17	49	40	30	48	41	33	673	28	23	21	15
17	13	39	38	30	43	37	32	140	26	22	22	15
18	13	35	27	29	40	36	31	79	27	20	33	17
19	13	32	26	28	39	49	30	57	27	20	26	18
20	14	32	25	27	39	40	30	48	28	21	21	16
21	20	30	31	27	37	34	32	43	26	20	19	18
22	18	28	29	28	107	33	35	38	70	20	135	23
23	16	28	45	34	79	32	35	35	45	19	174	19
24	15	25	40	36	51	31	35	34	30	19	34	18
25	15	25	32	40	44	30	31	36	27	25	26	16
26	15	25	29	35	42	36	30	35	25	22	24	16
27	15	25	28	29	45	43	30	33	25	24	24	16
28	15	25	27	28	41	44	89	87	25	31	21	15
29	16	25	26	29	------	56	41	89	25	37	20	15
30	270	25	26	31	------	44	33	49	60	109	19	15
31	349	------	28	33	------	37	------	41	------	49	19	------
TOTAL	1,015	1,170	830	1,084	2,188	1,727	1,400	3,602	922	976	1,151	502
MEAN	32.7	39.0	26.8	35.0	78.1	55.7	46.7	116	30.7	31.5	37.1	16.7
MAX	349	106	45	81	330	309	154	1,300	70	109	174	23
MIN	11	25	21	27	26	30	30	28	25	19	19	15
CFSM	.77	.92	.64	.83	1.85	1.32	1.11	2.75	.73	.75	.88	.40
IN.	.89	1.03	.73	.96	1.93	1.52	1.23	3.18	.81	.86	1.01	.44

CAL YR 1970 TOTAL 15,640 MEAN 42.8 MAX 1,920 MIN 11 CFSM 1.01 IN 13.79
WTR YR 1971 TOTAL 16,567 MEAN 45.4 MAX 1,300 MIN 11 CFSM 1.08 IN 14.60

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-30	Unknown	9.88	766	5-16	0830	10.95	942
5-13	1000	14.27	1,870				

02116500 Yadkin River at Yadkin College, N. C.

LOCATION.--Lat 35°51'24", long 80°23'10", Davidson County, near left bank on downstream end of pier of bridge on U. S. Highway 64, 1.5 miles south of Yadkin College, 6.2 miles downstream from Reedy Creek, and 295 miles upstream from mouth of Pee Dee River in Winyah Bay.

DRAINAGE AREA.--2,280 sq mi, approximately.

PERIOD OF RECORD.--July 1928 to current year.

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.--43 years, 2,853 cfs (16.99 inches per year) unadjusted.

EXTREMES.--Current year: Maximum discharge, 22,000 cfs Feb. 23 (gage height, 17.24 ft); minimum, 1,150 cfs Oct. 1 (gage height, 1.17 ft); minimum daily, 1,270 cfs Oct. 6, 7, Dec. 10.
Period of record: Maximum discharge, 80,200 cfs Aug. 15, 1940 (gage height, 33.75 ft); minimum observed, 177 cfs Oct. 12, 1954 (gage height, -0.42 ft); minimum daily, 330 cfs Oct. 9, 1954, Sept. 23, 1956.
Flood of July 1916, reached a stage of 36.3 ft, from floodmarks (discharge, 94,300 cfs).

REMARKS.--Records good. Diurnal fluctuation during low flow caused by small hydroelectric plant with little storage capacity 10 miles upstream. Since August 1962, some regulation by W. Kerr Scott Reservoir. (See p. 152). Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 822: Drainage area. WSP 852: 1935-37(m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,420	14,600	1,740	1,820	1,880	3,150	2,540	2,960	2,680	2,160	2,470	1,570
2	1,420	6,990	1,730	1,890	1,580	3,160	2,400	2,240	2,380	2,120	3,220	1,610
3	1,420	4,130	1,720	1,810	1,660	6,280	2,500	2,130	2,300	2,570	3,720	1,640
4	1,380	3,810	1,720	1,900	1,970	10,400	2,470	2,050	2,230	2,240	2,590	1,700
5	1,320	3,480	1,730	5,660	2,530	6,510	2,270	1,980	2,170	1,980	2,850	1,700
6	1,270	2,860	1,640	6,100	4,790	4,790	2,530	1,960	2,100	1,910	2,520	1,650
7	1,270	2,500	1,630	4,060	5,700	3,710	3,700	2,050	2,020	2,080	2,260	1,690
8	1,290	2,290	1,630	2,790	11,700	3,450	3,710	2,470	1,980	2,260	2,170	1,980
9	1,300	2,150	1,410	2,490	9,710	3,130	3,050	2,570	2,560	2,480	2,050	1,830
10	1,330	2,090	1,270	2,380	6,110	2,920	2,650	2,220	2,660	2,920	2,050	1,670
11	1,340	2,340	1,690	2,240	4,260	2,770	2,450	2,060	2,710	2,890	1,970	1,630
12	1,340	2,230	1,970	2,110	3,060	2,710	2,330	2,030	2,200	4,310	3,850	5,120
13	1,350	2,490	1,700	2,030	3,760	2,820	2,350	16,000	2,670	2,940	3,650	3,840
14	1,310	2,510	1,660	1,970	10,600	2,810	2,270	17,000	2,230	2,300	2,260	2,750
15	1,370	2,770	1,620	1,970	7,140	2,800	2,150	8,160	2,180	2,230	2,050	2,140
16	1,560	2,380	1,680	1,900	4,180	2,930	2,090	15,000	2,330	2,010	2,230	1,900
17	1,650	2,170	2,070	1,820	3,620	2,980	2,070	9,170	2,350	1,980	1,990	1,830
18	1,390	2,050	2,220	1,800	3,150	2,730	2,050	5,500	2,550	1,840	1,960	2,140
19	1,340	1,970	1,910	1,770	2,870	2,570	2,060	3,940	2,340	1,700	2,140	3,690
20	1,340	1,930	1,810	1,700	2,760	2,960	1,990	3,340	2,490	1,830	1,980	14,300
21	1,480	2,020	1,770	1,580	2,590	2,770	1,990	3,070	2,830	1,900	1,880	9,540
22	2,310	2,150	1,910	1,790	2,930	2,740	2,070	3,030	3,370	1,740	1,820	14,600
23	2,090	1,980	2,070	1,950	17,300	2,450	2,110	2,780	3,220	1,700	2,900	7,980
24	1,610	1,900	2,190	1,990	13,100	2,330	2,160	2,530	6,090	1,660	2,480	4,090
25	1,530	1,840	2,160	2,170	5,590	2,310	2,160	2,500	4,780	1,850	1,950	3,170
26	1,480	1,800	2,100	2,130	4,120	2,390	2,030	2,420	2,820	1,870	1,820	2,740
27	1,440	1,800	1,950	2,070	3,950	2,520	1,950	2,340	2,560	2,130	1,790	2,490
28	1,450	1,760	1,840	1,870	3,400	2,650	2,520	2,580	2,240	2,060	1,860	2,350
29	1,420	1,770	1,790	1,740	------	2,820	3,180	3,500	2,080	1,940	1,780	2,240
30	3,400	1,780	1,660	1,870	------	3,020	2,790	3,920	2,190	3,340	1,670	2,160
31	16,800	------	1,730	2,010	------	2,700	------	3,470	------	3,160	1,660	------
TOTAL	62,420	86,540	55,720	71,380	146,010	104,280	72,590	136,970	79,310	70,100	71,590	107,740
MEAN	2,014	2,885	1,797	2,303	5,215	3,364	2,420	4,418	2,644	2,261	2,309	3,591
MAX	16,800	14,600	2,220	6,100	17,300	10,400	3,710	17,000	6,090	4,310	3,850	14,600
MIN	1,270	1,760	1,270	1,580	1,580	2,310	1,950	1,960	1,980	1,660	1,660	1,570
(†)	+46	-17	0	0	0	0	+3	-3	-2	+2	-111	+135

CAL YR 1970 TOTAL 970,216 MEAN 2,658 MAX 47,700 MIN 885 MEAN± 2,657 CFSM± 1.17 IN.± 15.79
WTR YR 1971 TOTAL 1,064,650 MEAN 2,917 MAX 17,300 MIN 1,270 MEAN± 2,921 CFSM± 1.28 IN.± 17.39

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

± Adjusted for change in W. Kerr Scott Reservoir.

02117030 Humpy Creek near Fork, N. C.

LOCATION.--Lat 35°51'17", long 80°26'24", Davie County, on left bank 9 ft upstream from culvert on Secondary Road 1813, 1.9 miles south of Fork, and 2.3 miles upstream from mouth.

DRAINAGE AREA.--1.05 sq mi.

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

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 695 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 111 cfs Oct. 30 (gage height, 4.01 ft), from rating curve extended as explained below; minimum, 0.16 cfs Oct. 4 (gage height, 0.42 ft).
Period of record: Maximum discharge, 111 cfs Oct. 30, 1970 (gage height, 4.01 ft), from rating curve extended above 65 cfs on basis of computation of peak flow through culvert; minimum daily, 0.12 cfs Oct. 1-6, 1968.
A discharge of 0.08 cfs was measured on Sept. 23, 1968.

REMARKS.--Records fair. Some diurnal fluctuation at low flow during growing season. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.23	1.4	.44	.60	.58	.79	.83	.74	.54	.55	.80	.36
2	.24	1.2	.43	.60	.60	1.4	.97	.68	.52	.48	.69	.38
3	.23	.93	.43	.64	.61	8.1	.87	.58	.50	.44	.51	.38
4	.20	.88	.46	.82	.89	3.0	.79	.61	.48	.40	.45	.42
5	.21	.74	.44	1.2	3.2	1.8	.76	.59	.46	.41	.44	.40
6	.21	.67	.44	.88	2.2	1.4	1.4	.70	.44	.71	.45	.34
7	.21	.67	.43	.74	11	1.2	1.3	.61	.43	.55	.43	.32
8	.21	.64	.45	1.2	5.0	.95	1.1	.57	.72	.45	.40	.32
9	.21	.60	.47	.93	2.3	.86	.92	.56	.55	.46	.38	.28
10	.21	1.0	.44	.84	1.8	.86	.83	.56	.48	.92	.36	.31
11	.21	.80	.44	.74	1.6	.82	.77	.52	.46	4.1	1.1	.34
12	.21	.74	.47	.67	1.1	.77	.76	.99	.62	1.9	11	.37
13	.21	.88	.44	.64	2.7	.79	.73	17	.54	.80	1.1	.35
14	.21	2.3	.42	.64	1.8	.84	.68	2.1	.49	.63	.67	.30
15	.24	1.3	.43	.62	1.3	.88	.67	8.7	.58	.54	.54	.28
16	.30	1.0	.99	.58	1.1	.78	.66	14	.58	.50	.52	.28
17	.23	.93	.71	.58	.96	.70	.63	2.1	.56	.44	.56	.30
18	.24	.88	.56	.56	.85	.67	.62	1.2	.86	.41	.76	.40
19	.24	.80	.52	.53	.81	1.0	.60	1.0	.66	.46	.54	.36
20	.30	.80	.50	.50	.84	.83	.60	.85	.57	.43	.48	.34
21	.40	.70	.56	.54	.80	.75	.62	.68	.53	.42	.44	.37
22	.30	.64	.54	.57	1.8	.72	.64	.53	.75	.40	.46	.50
23	.28	.60	.97	.86	1.5	.70	.79	.57	.81	.38	.44	.43
24	.28	.53	.84	.85	1.1	.67	.71	.59	.68	.42	.40	.37
25	.67	.53	.70	.81	.95	.68	.61	.57	.51	.44	.38	.34
26	.36	.50	.67	.76	.96	.82	.57	.54	.48	.45	.40	.34
27	.32	.50	.58	.68	1.0	1.1	.57	.53	.45	.45	.40	.33
28	.30	.48	.56	.66	.82	.97	2.6	.92	.42	.50	.38	.31
29	.48	.48	.56	.68	------	1.5	1.2	.94	.40	1.0	.38	.30
30	27	.46	.53	.71	------	1.1	.87	.75	.93	.74	.36	.31
31	3.0	------	.60	.64	------	.91	------	.61	------	.79	.36	------
TOTAL	37.94	24.58	17.02	22.27	50.17	38.36	25.67	61.89	17.00	21.57	26.58	10.43
MEAN	1.22	.82	.55	.72	1.79	1.24	.86	2.00	.57	.70	.86	.35
MAX	27	2.3	.99	1.2	11	8.1	2.6	17	.93	4.1	11	.50
MIN	.20	.46	.42	.50	.58	.67	.57	.52	.40	.38	.36	.28
CFSM	1.16	.78	.52	.69	1.70	1.18	.82	1.90	.54	.67	.82	.33
IN.	1.34	.87	.60	.79	1.78	1.36	.91	2.19	.60	.76	.94	.37

CAL YR 1970 TOTAL 299.90 MEAN .82 MAX 27 MIN .18 CFSM .78 IN 10.63
WTR YR 1971 TOTAL 353.48 MEAN .97 MAX 27 MIN .20 CFSM .92 IN 12.52

PEAK DISCHARGE (BASE, 20 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-30	1600	4.01	111	5-16	0115	2.35	64
2- 7	1520	2.03	44	7-11	1750	1.66	24
5-13	0230	2.22	55	8-12	0050	2.59	82

02117500 Rocky Creek at Turnersburg, N. C.

LOCATION.--Lat 35°54'52", long 80°48'12", Iredell County, on right bank 1,000 ft downstream from mill dam and bridge on U. S. Highway 21 at Turnersburg, 1 mile downstream from Mud Creek, and 1.3 miles upstream from mouth.

DRAINAGE AREA.--102 sq mi.

PERIOD OF RECORD.--April 1940 to September 1971 (discontinued). 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. April 1940 to June 18, 1950, at site 170 ft upstream at same datum.

AVERAGE DISCHARGE.--31 years, 112 cfs (14.86 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,430 cfs Feb. 23 (gage height, 11.30 ft); minimum, 29 cfs Feb. 2 (result of freezeup); minimum daily, 34 cfs Oct. 5; minimum gage height, 1.41 ft Oct. 1.
Period of record: Maximum discharge, 7,240 cfs Oct. 16, 1964 (gage height, 15.77 ft); minimum, 1.0 cfs Oct. 18, 1940, Oct. 26, 1941; minimum daily, 8.8 cfs Aug. 17, 18, 1956.

REMARKS.--Records good. Prior to July 11, 1971 occasional brief and slight diurnal fluctuation during low flow caused by mill above station. The mill burned down on July 11, 1971.

REVISIONS (WATER YEARS).--WSP 1333: 1945(M). WSP 1503: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	172	55	63	58	140	117	101	92	71	101	55
2	39	136	54	60	54	150	115	94	85	84	102	55
3	39	124	53	62	67	500	110	90	83	78	91	54
4	35	109	53	68	72	350	110	85	80	68	85	54
5	34	95	51	521	170	240	105	83	76	64	88	54
6	36	84	52	233	251	180	110	84	74	87	91	55
7	36	77	51	155	354	150	130	110	71	122	84	74
8	36	72	51	121	671	140	120	117	69	106	76	56
9	37	68	51	110	397	130	110	97	124	84	69	53
10	38	68	52	99	210	130	100	86	90	144	65	50
11	38	70	52	90	163	130	97	81	79	252	63	88
12	38	67	54	84	140	125	96	92	75	315	171	112
13	37	70	55	78	243	120	94	508	76	146	100	112
14	37	67	52	75	313	130	91	260	72	116	78	80
15	45	69	51	72	205	130	88	223	131	97	69	65
16	110	65	59	68	171	150	88	661	101	89	65	60
17	55	61	86	67	150	130	87	265	128	83	67	59
18	45	60	71	66	136	120	87	188	118	74	105	121
19	43	60	61	63	125	130	84	156	116	71	103	669
20	43	62	58	56	121	130	82	136	98	74	79	790
21	61	67	59	64	116	125	82	123	90	69	69	285
22	85	63	61	70	473	125	85	110	100	69	89	572
23	57	60	66	69	2,330	122	86	103	92	67	189	241
24	50	57	76	69	352	114	93	98	250	66	89	176
25	51	55	68	77	236	111	84	96	137	96	74	144
26	50	57	63	72	200	124	79	94	103	80	68	126
27	48	56	60	63	170	124	77	87	92	111	66	114
28	46	57	58	55	150	133	176	104	82	106	63	104
29	50	56	58	64	------	141	155	141	74	110	60	96
30	268	56	53	71	------	138	113	124	70	88	57	90
31	336	------	62	66	------	122	------	105	------	89	56	------
TOTAL	1,962	2,240	1,806	2,951	8,098	4,784	3,051	4,702	2,928	3,176	2,632	4,664
MEAN	63.3	74.7	58.3	95.2	289	154	102	152	97.6	102	84.9	155
MAX	336	172	86	521	2,330	500	176	661	250	315	189	790
MIN	34	55	51	55	54	111	77	81	69	64	56	50
CFSM	.62	.73	.57	.93	2.83	1.51	1.00	1.49	.96	1.00	.83	1.52
IN.	.72	.82	.66	1.08	2.95	1.74	1.11	1.71	1.07	1.16	.96	1.70

CAL YR 1970 TOTAL 32,048 MEAN 87.8 MAX 3,470 MIN 25 CFSM .86 IN 11.69
WTR YR 1971 TOTAL 42,994 MEAN 118 MAX 2,330 MIN 34 CFSM 1.16 IN 15.68

PEAK DISCHARGE (BASE, 1,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-23	0530	11.30	4,430				

02118000 South Yadkin River near Mocksville, N. C.

LOCATION.--Lat 35°50'39", long 80°39'38", Rowan County, on right bank at downstream side of bridge on Secondary Road 1972, 1 mile upstream from Little Creek, 4 miles downstream from Fifth Creek, 4.5 miles upstream from Hunting Creek, and 6.5 miles southwest of Mocksville.

DRAINAGE AREA.--313 sq mi.

PERIOD OF RECORD.--October 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 663.6 ft above mean sea level.

AVERAGE DISCHARGE.--33 years, 322 cfs (13.98 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,800 cfs Feb. 24 (gage height, 12.70 ft, from outside floodmark); minimum, 94 cfs Oct. 5, 6 (gage height, 1.72 ft).
Period of record: Maximum discharge, 11,800 cfs Oct. 17, 1964 (gage height, 18.23 ft); minimum, 30 cfs Aug. 14, 16, 1956. The flood of Oct. 3, 1929 reached a stage of 22.6 ft, from floodmark established by local resident (discharge, about 22,000 cfs).

REMARKS.--Records good except those for period of no gage-height record, which are poor. The city of Statesville at times diverts as much as 4.7 cfs for water supply. The Alexander County Water Corporation withdraws an average of 1.0 cfs for water supply.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	597	162	186	200	451	312	298	266	221	320	152
2	103	402	160	186	160	458	299	276	245	225	414	147
3	103	339	160	180	186	1,010	303	265	235	224	318	147
4	100	312	157	192	220	1,430	293	251	230	210	248	147
5	94	272	149	929	470	800	280	241	228	192	239	147
6	94	242	147	918	873	596	298	242	217	203	262	147
7	96	225	147	501	983	516	360	271	209	549	239	158
8	96	212	147	375	1,810	454	347	303	202	381	220	182
9	97	200	147	339	1,700	407	307	293	242	288	202	155
10	100	194	147	318	780	379	289	254	275	427	188	140
11	103	205	147	285	450	378	277	236	230	860	178	157
12	102	197	152	262	360	357	271	320	213	1,210	449	281
13	100	208	157	245	700	337	267	2,280	217	609	361	296
14	102	212	152	235	1,100	380	262	1,430	216	393	231	263
15	102	228	147	228	700	404	254	768	282	318	200	189
16	178	208	162	218	500	420	249	2,100	369	288	190	165
17	205	192	225	210	400	391	248	1,500	463	283	207	158
18	126	180	220	210	350	351	247	699	418	258	234	191
19	115	180	183	202	320	348	243	522	359	227	359	748
20	119	180	172	186	300	384	238	426	302	223	267	1,810
21	138	192	172	175	300	346	237	378	265	219	220	2,990
22	197	194	172	215	800	323	239	339	276	207	205	1,800
23	175	186	197	232	3,500	312	241	309	287	206	453	1,300
24	138	170	242	238	4,260	298	265	290	742	197	288	617
25	142	160	225	250	1,230	288	252	275	617	238	219	449
26	157	160	205	245	653	305	235	275	343	230	197	373
27	152	167	194	212	602	332	228	258	285	248	188	333
28	131	167	180	180	522	345	419	265	254	275	181	300
29	133	167	172	175	------	381	564	342	230	305	174	273
30	488	164	164	220	------	384	361	364	213	261	162	253
31	1,100	------	170	220	------	338	------	298	------	250	155	------
TOTAL	5,189	6,712	5,333	8,767	24,429	13,903	8,685	16,368	8,930	10,225	7,768	14,468
MEAN	167	224	172	283	872	448	290	528	298	330	251	482
MAX	1,100	597	242	929	4,260	1,430	564	2,280	742	1,210	453	2,990
MIN	94	160	147	175	160	288	228	236	202	192	155	140
CFSM	.53	.72	.55	.90	2.79	1.43	.93	1.69	.95	1.05	.80	1.54
IN.	.62	.80	.63	1.04	2.90	1.65	1.03	1.95	1.06	1.22	.92	1.72

CAL YR 1970 TOTAL 93,989 MEAN 258 MAX 6,960 MIN 80 CFSM .82 IN 11.17
WTR YR 1971 TOTAL 130,777 MEAN 358 MAX 4,260 MIN 94 CFSM 1.14 IN 15.54

PEAK DISCHARGE (BASE, 2,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-24	a0500	12.70	4,800	9-21	1130	10.35	3,220

a About

NOTE.--No gage-height record Feb. 9-24.

02118500 Hunting Creek near Harmony, N. C.

LOCATION.--Lat 36°00'01", long 80°44'45", Iredell County, on right bank at downstream side of bridge on Secondary Road 2115, 0.8 mile downstream from Kennedy Creek, 1 mile east of Houstonville, 2 miles downstream from U. S. Highway 21, and 3.5 miles northeast of Harmony.

DRAINAGE AREA.--153 sq mi.

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1723.

GAGE.--Water-stage recorder. Datum of gage is 734.78 ft above mean sea level, unadjusted. Prior to Apr. 5, 1951, nonrecording gage on upstream side of bridge at same datum.

AVERAGE DISCHARGE.--21 years, 186 cfs (16.55 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,070 cfs Feb. 23 (gage height, 16.39 ft); minimum, 51 cfs Feb. 2 (gage height, 0.50 ft), result of freezeup.
Period of record: Maximum discharge, 9,780 cfs Oct. 17, 1964 (gage height, 21.78 ft); minimum, 18 cfs Oct. 8, 1954.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	261	88	90	89	224	190	176	164	171	174	86
2	70	201	87	90	70	243	188	165	153	200	160	88
3	70	179	85	90	105	678	192	158	148	150	148	88
4	66	155	84	103	114	547	177	150	142	129	148	88
5	64	137	82	620	257	346	173	147	136	117	170	89
6	65	123	83	306	392	282	187	156	132	164	139	89
7	65	115	82	200	518	253	233	219	127	185	132	98
8	66	109	83	158	940	225	208	220	166	167	122	92
9	68	104	83	143	591	211	192	219	200	132	115	85
10	70	104	84	129	301	206	182	173	150	247	108	81
11	70	109	84	119	224	212	176	159	136	360	105	479
12	69	105	85	112	190	198	173	195	133	467	253	245
13	68	116	85	108	525	195	173	1,250	138	197	160	218
14	67	103	82	105	589	219	167	549	133	164	126	135
15	90	108	82	103	331	211	161	422	150	139	110	106
16	123	100	97	98	257	238	162	1,060	130	132	103	98
17	83	96	144	97	216	204	159	411	185	124	106	97
18	76	94	105	96	195	192	158	279	161	117	142	142
19	74	93	96	93	182	209	155	242	166	113	139	1,290
20	76	99	92	80	180	232	153	205	144	122	116	886
21	127	115	94	90	173	201	153	191	151	113	103	425
22	147	100	97	92	1,300	193	159	177	208	115	122	662
23	98	97	99	100	2,540	188	156	168	339	110	170	319
24	88	91	110	103	518	177	173	164	603	110	117	242
25	87	88	99	120	329	173	155	163	231	119	103	200
26	87	94	96	106	289	192	147	161	170	157	99	182
27	83	91	89	96	282	190	144	150	150	190	98	173
28	82	91	89	75	241	219	323	184	133	159	98	163
29	85	90	86	100	------	232	257	268	123	147	92	154
30	446	89	83	90	------	222	195	221	119	277	88	147
31	565	------	89	103	------	200	------	187	------	168	88	------
TOTAL	3,367	3,457	2,824	4,015	11,938	7,512	5,421	8,589	5,221	5,262	3,954	7,247
MEAN	109	115	91.1	130	426	242	181	277	174	170	128	242
MAX	565	261	144	620	2,540	678	323	1,250	603	467	253	1,290
MIN	64	88	82	75	70	173	144	147	119	110	88	81
CFSM	.71	.75	.60	.85	2.78	1.58	1.18	1.81	1.14	1.11	.84	1.58
IN.	.82	.84	.69	.98	2.90	1.83	1.32	2.09	1.27	1.28	.96	1.76

CAL YR 1970 TOTAL 52,519 MEAN 144 MAX 5,320 MIN 47 CFSM .94 IN 12.77
WTR YR 1971 TOTAL 68,807 MEAN 189 MAX 2,540 MIN 64 CFSM 1.24 IN 16.73

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-23	0330	16.39	5,070	9-19	1730	9.06	2,120

02120500 Third Creek at Cleveland, N. C.

LOCATION.--Lat 35°44'38", long 80°40'55", Rowan County, on left bank 200 ft downstream from bridge on Secondary Road 1957, 0.8 mile north of Cleveland, and 7 miles upstream from Fourth Creek.

DRAINAGE AREA.--87.4 sq mi.

PERIOD OF RECORD.--April 1940 to September 1971 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 684.47 ft above mean sea level. Prior to May 22, 1950, on right bank at site 200 ft upstream at same datum.

AVERAGE DISCHARGE.--31 years, 90.5 cfs (14.06 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,460 cfs May 13 (gage height, 10.31 ft); minimum, 28 cfs Oct. 5, 6 (gage height, 0.67 ft).
Period of record: Maximum discharge, 3,080 cfs about Sept. 19, 1945 (gage height, 15.76 ft, from floodmarks) from rating curve extended above 900 cfs; minimum, 10 cfs Sept. 19, 20, Oct. 7, 1954, Sept. 18, 19, 21, 22, 1956 (gage height, 0.20 ft).
Flood in July 1916, reached a stage of 22.5 ft, from floodmark witnessed by local resident. Creek channel improved considerably by dredging since 1916.

REMARKS.--Records good. Storm runoff at gage affected by eleven flood-detention reservoirs (combined capacity 7,278 acre-ft).

REVISIONS (WATER YEARS).--WSP 1112: 1944-46.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	104	47	56	52	94	77	70	66	85	66	39
2	32	78	47	55	52	114	77	67	63	63	129	39
3	32	73	46	54	51	377	77	64	61	56	83	40
4	30	69	47	56	62	323	72	62	60	52	62	39
5	29	65	44	170	181	177	70	61	63	50	129	40
6	29	58	44	143	243	136	86	61	58	53	84	38
7	30	56	44	90	390	118	100	73	56	78	67	40
8	30	54	45	75	666	103	86	66	54	62	59	47
9	32	53	47	81	380	93	79	67	56	54	55	41
10	32	53	47	78	189	89	74	60	57	91	52	38
11	31	56	46	70	133	90	71	58	56	67	51	50
12	30	53	47	66	114	84	70	130	54	57	116	58
13	30	53	47	63	216	84	69	1,320	54	58	69	67
14	30	53	44	61	234	91	67	354	52	53	56	47
15	43	64	44	61	154	88	65	302	58	56	51	42
16	47	54	55	58	124	89	66	1,110	59	97	48	40
17	40	51	66	57	108	81	65	303	152	60	53	40
18	34	52	54	56	97	75	65	180	78	52	67	63
19	34	60	49	54	91	83	64	134	71	48	80	178
20	34	51	48	52	89	86	63	113	63	50	68	209
21	49	51	49	52	86	76	63	100	59	47	56	155
22	48	49	49	54	169	73	68	89	94	47	52	320
23	40	49	68	61	420	72	67	82	70	46	55	270
24	37	47	93	64	338	68	73	78	125	46	50	154
25	47	45	66	69	217	67	64	76	80	65	47	130
26	52	47	58	64	153	79	61	74	63	57	45	106
27	42	47	54	57	124	84	60	68	59	72	46	76
28	40	47	52	54	104	87	144	80	55	54	44	67
29	41	47	51	54	------	102	102	85	52	53	42	63
30	246	47	50	56	------	93	77	78	52	109	40	60
31	204	------	53	56	------	81	------	72	------	71	39	------
TOTAL	1,507	1,686	1,601	2,097	5,237	3,357	2,242	5,537	2,000	1,909	1,961	2,596
MEAN	48.6	56.2	51.6	67.6	187	108	74.7	179	66.7	61.6	63.3	86.5
MAX	246	104	93	170	666	377	144	1,320	152	109	129	320
MIN	29	45	44	52	51	67	60	58	52	46	39	38

CAL YR 1970 TOTAL 27,064 MEAN 74.1 MAX 1,680 MIN 22
WTR YR 1971 TOTAL 31,730 MEAN 86.9 MAX 1,320 MIN 29

02123500 Uwharrie River near Eldorado, N. C.

LOCATION.--Lat 35°25'47", long 80°01'05", Montgomery County, on right bank 300 ft downstream from State Highway 109, 1 mile upstream from McLeans Creek, and 3 miles south of Eldorado.

DRAINAGE AREA.--347 sq mi.

PERIOD OF RECORD.--October 1938 to September 1971 (discontinued).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 303.66 ft above mean sea level.

AVERAGE DISCHARGE.--33 years, 324 cfs (12.66 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,300 cfs Mar. 3 (gage height, 12.21 ft); minimum, 12 cfs Oct. 14, 15 (gage height, 0.93 ft).
Period of record: Maximum discharge, 23,300 cfs Sept. 18, 1945 (gage height, 26.22 ft, from floodmark), 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. Town of Asheboro diverted an average of 4.0 cfs during water year from the basin above the station for water supply. Sewage is discharged into Deep River (Cape Fear River basin). At times flow may be affected by upstream pond storage or releases.

REVISIONS (WATER YEARS).--WSP 892: 1939.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	507	68	223	281	300	383	315	243	80	263	66
2	26	163	68	354	202	482	328	258	191	113	317	60
3	25	110	65	306	168	4,510	394	235	164	82	194	55
4	23	91	63	244	199	5,250	395	206	147	71	102	52
5	21	78	60	641	980	1,530	314	185	134	63	247	49
6	19	67	58	706	2,210	755	677	171	124	82	369	51
7	18	61	58	372	1,240	571	2,340	164	115	126	136	53
8	16	55	58	259	4,850	455	1,040	170	119	145	95	46
9	15	51	143	291	4,250	368	626	235	146	89	78	43
10	14	51	145	491	1,130	323	470	245	169	178	66	41
11	14	198	148	453	631	308	379	169	115	119	59	43
12	14	229	150	368	489	285	331	153	101	159	373	53
13	13	584	150	294	749	264	303	1,650	160	120	199	75
14	12	498	148	218	1,290	445	279	2,100	163	94	100	103
15	12	652	112	201	642	499	249	513	113	78	73	64
16	27	606	83	184	471	1,090	230	4,080	120	67	74	52
17	74	253	368	162	377	602	221	2,910	133	61	80	47
18	41	166	272	152	324	391	210	734	109	55	293	48
19	27	133	145	143	290	342	199	443	109	53	322	51
20	23	116	112	126	274	512	188	328	106	54	155	51
21	23	110	100	112	273	425	184	270	98	72	100	48
22	24	103	99	121	283	329	184	229	103	59	83	71
23	28	92	186	281	775	294	200	196	238	51	740	68
24	33	84	804	550	555	263	205	177	293	48	448	61
25	31	77	540	782	367	234	200	166	168	62	172	54
26	25	71	270	579	303	252	172	157	109	53	119	50
27	23	70	211	370	311	321	158	144	93	64	130	47
28	21	70	222	265	367	460	2,040	654	85	74	216	43
29	21	69	202	210	------	615	1,430	1,350	77	115	123	41
30	40	68	156	214	------	979	470	585	77	99	88	38
31	709	------	114	439	------	533	------	334	------	108	73	------
TOTAL	1,439	5,483	5,378	10,111	24,281	23,987	14,799	19,526	4,122	2,694	5,887	1,624
MEAN	46.4	183	173	326	867	774	493	630	137	86.9	190	54.1
MAX	709	652	804	782	4,850	5,250	2,340	4,080	293	178	740	103
MIN	12	51	58	112	168	234	158	144	77	48	59	38
CFSM	.13	.53	.50	.94	2.50	2.23	1.42	1.82	.39	.25	.55	.16
IN.	.15	.59	.58	1.08	2.60	2.57	1.59	2.09	.44	.29	.63	.17

CAL YR 1970 TOTAL 89,659.5 MEAN 246 MAX 5,300 MIN 6.5 CFSM .71 IN 9.61
WTR YR 1971 TOTAL 119,331.0 MEAN 327 MAX 5,250 MIN 12 CFSM .94 IN 12.79

PEAK DISCHARGE (BASE, 4,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-8	1830	12.03	7,130	5-16	2300	9.39	4,820
3-3	1300	12.21	7,300				

02125000 Big Bear Creek near Richfield, N. C.

LOCATION.--Lat 35°20'02", long 80°20'09", Stanly County, on left bank 300 ft downstream from Little Creek, 400 ft upstream from bridge on Secondary Road 1134, and 10 miles southwest of Richfield.

DRAINAGE AREA.--55.7 sq mi.

PERIOD OF RECORD.--May 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 426.62 ft above mean sea level, unadjusted.

AVERAGE DISCHARGE.--17 years, 54.4 cfs (13.27 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,880 cfs Mar. 3 (gage height, 11.08 ft); minimum daily, 0.20 cfs Oct. 11-14; minimum gage height, 0.75 ft Oct. 14.
Period of record: Maximum discharge, 11,100 cfs Aug. 22, 1967 (gage height, 15.95 ft); no flow at times 1954, 1961-64, 1966-69.
Flood of August 1921 reached a stage of about 19 ft, from information by North Carolina State Highway Commission.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WSP 1503: 1955, 1956(M). WSP 1553: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.60	96	8.2	71	50	46	55	15	11	8.7	29	7.0
2	.60	51	8.0	83	37	191	48	15	8.8	6.9	61	6.0
3	.56	33	7.8	62	34	2,140	56	16	7.9	6.3	19	5.0
4	.47	24	7.5	55	60	467	42	12	7.1	5.3	10	5.0
5	.36	20	7.0	477	331	174	36	10	6.5	5.0	9.1	5.3
6	.30	15	6.9	160	202	117	83	9.2	6.0	12	11	4.7
7	.28	12	6.6	88	631	88	140	8.5	5.4	15	7.7	4.5
8	.26	10	6.4	64	810	65	102	90	7.6	7.7	5.9	3.7
9	.24	8.9	6.3	178	279	53	65	64	13	5.6	4.0	3.5
10	.22	30	6.3	161	129	48	49	22	7.7	30	3.5	3.0
11	.20	56	6.3	100	93	47	39	14	6.1	12	3.2	3.0
12	.20	33	6.6	72	78	40	34	12	6.4	9.1	8.0	3.0
13	.20	24	6.4	56	194	37	30	467	33	7.3	15	4.0
14	.20	19	6.1	49	132	78	26	84	9.1	5.9	10	3.2
15	1.1	72	5.8	56	91	69	22	184	6.4	5.0	5.0	2.6
16	6.2	42	57	47	71	86	21	1,030	75	4.5	3.5	2.3
17	2.0	28	110	40	59	55	19	147	55	4.0	6.0	2.3
18	1.3	22	43	36	52	42	17	71	172	3.2	150	3.2
19	.91	19	28	31	46	48	15	45	74	3.2	50	2.8
20	1.0	17	22	25	47	51	14	32	39	7.7	15	2.5
21	1.6	17	18	23	46	39	14	25	40	5.3	11	2.3
22	1.5	14	17	39	84	34	14	20	44	4.0	8.0	6.6
23	1.1	13	258	138	116	31	15	16	80	3.0	800	6.6
24	.94	11	152	189	65	27	19	13	143	3.0	150	4.5
25	.92	9.9	71	246	51	24	14	12	34	3.5	30	3.2
26	.85	9.4	49	145	45	49	12	11	20	3.2	15	2.6
27	.84	9.1	36	81	52	81	11	9.3	15	20	13	2.1
28	.80	8.9	29	59	43	85	55	47	11	9.6	30	1.8
29	.86	8.7	25	51	------	193	38	31	8.3	10	15	1.4
30	41	8.5	22	72	------	135	20	19	7.7	39	11	1.2
31	797	------	29	86	------	76	------	14	------	44	8.0	------
TOTAL	864.61	741.4	1,068.2	3,040	3,928	4,716	1,125	2,565.0	960.0	309.0	1,516.9	108.9
MEAN	27.9	24.7	34.5	98.1	140	152	37.5	82.7	32.0	9.97	48.9	3.63
MAX	797	96	258	477	810	2,140	140	1,030	172	44	800	7.0
MIN	.20	8.5	5.8	23	34	24	11	8.5	5.4	3.0	3.2	1.2
CFSM	.50	.44	.62	1.76	2.51	2.73	.67	1.48	.57	.18	.88	.07
IN.	.58	.50	.71	2.03	2.62	3.15	.75	1.71	.64	.21	1.01	.07

CAL YR 1970 TOTAL 14,342.11 MEAN 39.3 MAX 797 MIN .20 CFSM .71 IN 9.58
WTR YR 1971 TOTAL 20,943.01 MEAN 57.4 MAX 2,140 MIN .20 CFSM 1.03 IN 13.99

PEAK DISCHARGE (BASE, 2,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-31	0630	8.08	2,550	5-16	0200	7.92	2,450
3- 3	0930	11.08	4,880				

02126000 Rocky River near Norwood, N. C.

LOCATION.--Lat 35°08'50", long 80°10'26", Stanly County, on left bank 1,000 ft downstream from Lanes Creek, 1.5 miles upstream from bridge on Secondary Road 1935, 6 miles southwest of Norwood, and 11.2 miles upstream from mouth.

DRAINAGE AREA.--1,370 sq mi, approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 212.91 ft above mean sea level, (levels by Corps of Engineers).

AVERAGE DISCHARGE.--42 years, 1,277 cfs (12.66 inches per year).

EXTREMES.--Current year: Maximum discharge, 41,100 cfs Mar. 3 (gage height, 25.25 ft); minimum, 65 cfs Oct. 13, 14 (gage height, 0.33 ft).
Period of record: Maximum discharge, 105,000 cfs Sept. 18, 1945 (gage height, 46.37 ft, from floodmark); 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 (discharge, 67,600 cfs).

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 822: Drainage area. WSP 852: 1937. WSP 1052: 1936(M). WSP 1503: 1935, 1945.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	11,100	221	1,230	3,590	988	900	800	426	442	5,460	308
2	103	2,040	230	1,750	1,560	3,010	800	700	361	652	2,910	283
3	98	1,050	230	1,340	1,080	25,800	950	650	318	585	1,400	259
4	92	777	224	1,020	1,590	27,800	950	600	286	392	771	242
5	85	599	216	9,150	7,220	7,810	800	550	265	299	1,000	232
6	70	501	205	9,760	9,150	3,480	2,000	500	242	393	2,500	231
7	68	411	187	2,720	7,560	2,510	7,000	450	216	1,040	1,200	205
8	80	343	179	1,550	25,000	1,810	3,000	450	208	1,380	577	190
9	85	291	186	4,040	18,700	1,340	1,300	550	292	946	421	192
10	86	378	191	5,350	4,830	1,120	1,100	600	364	618	352	189
11	88	1,780	196	3,070	2,860	1,060	950	500	356	1,470	414	191
12	80	1,080	197	1,950	2,140	982	800	450	251	654	2,000	233
13	69	675	196	1,370	3,220	877	743	5,000	513	968	1,000	491
14	66	522	183	1,080	4,520	1,680	692	7,000	275	489	511	354
15	80	711	176	2,290	2,800	2,070	619	1,500	217	402	440	281
16	146	1,090	1,100	2,660	1,950	3,780	567	10,000	449	445	1,000	216
17	247	717	6,760	1,270	1,460	2,000	536	5,000	2,790	534	2,500	194
18	205	526	2,360	960	1,190	1,170	496	2,000	4,790	317	10,000	287
19	135	448	1,020	814	1,040	997	457	1,100	5,390	241	3,420	775
20	100	399	693	682	968	1,180	435	900	1,850	250	1,110	700
21	114	384	552	582	969	1,020	432	800	7,940	517	661	428
22	151	353	490	584	1,200	811	450	648	3,400	329	481	391
23	191	314	1,910	1,610	3,910	737	458	536	4,820	265	2,130	552
24	154	283	4,440	4,470	2,510	669	686	451	10,600	238	2,590	455
25	133	270	2,290	9,420	1,400	609	722	419	5,070	298	822	314
26	135	259	1,130	5,780	1,070	800	502	390	1,630	438	856	254
27	129	248	767	3,550	1,190	1,000	407	354	862	395	2,060	212
28	120	245	605	1,830	1,300	1,300	7,000	1,930	616	569	1,780	190
29	121	239	534	1,270	------	1,800	5,000	1,540	503	1,910	890	189
30	185	224	505	1,290	------	2,000	1,500	728	451	3,040	456	182
31	16,500	------	537	5,070	------	1,500	------	528	------	2,970	347	------
TOTAL	20,028	28,257	28,710	89,512	115,977	103,710	42,252	47,624	55,751	23,486	52,059	9,220
MEAN	646	942	926	2,887	4,142	3,345	1,408	1,536	1,858	758	1,679	307
MAX	16,500	11,100	6,760	9,760	25,000	27,800	7,000	10,000	10,600	3,040	10,000	775
MIN	66	224	176	582	968	609	407	354	208	238	347	182
CFSM	.47	.69	.68	2.11	3.02	2.44	1.03	1.12	1.36	.55	1.23	.22
IN.	.54	.77	.78	2.43	3.15	2.82	1.15	1.29	1.51	.64	1.41	.25

CAL YR 1970 TOTAL 324,638 MEAN 889 MAX 16,600 MIN 66 CFSM .65 IN 8.81
WTR YR 1971 TOTAL 616,586 MEAN 1,689 MAX 27,800 MIN 66 CFSM 1.23 IN 16.74

PEAK DISCHARGE (BASE, 16,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-31	1600	17.44	23,900	3- 3	2100	25.25	41,100
1- 5	2300	14.15	17,600	6-24	1000	14.38	18,100
2- 8	2200	20.36	29,800				

NOTE.--No gage-height record Mar. 26 to Apr. 12, Apr. 28 to May 21, Aug. 5-7, 12, 13, 16-18.

02127000 Brown Creek near Polkton, N. C.

LOCATION.--Lat 34°57'50", long 80°14'04", Anson County, on left bank 100 ft downstream from site of old Medley's mill, 400 ft downstream from bridge on State Highway 742, 3.5 miles downstream from Little Brown Creek, and 4 miles northeast of Polkton.

DRAINAGE AREA.--110 sq mi.

PERIOD OF RECORD.--October 1937 to September 1971 (discontinued).

GAGE.--Water-stage recorder and sharp-crested weir. Altitude of gage is 216 ft (by barometer).

AVERAGE DISCHARGE.--34 years, 89.5 cfs (11.05 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,220 cfs Mar. 4 (gage height, 11.81 ft); minimum, 0.04 cfs Oct. 17 (gage height, 0.82 ft).
Period of record: Maximum discharge, 17,300 cfs Sept. 18, 1945 (gage height, 17.68 ft, from floodmark), from rating curve extended above 3,000 cfs; no flow for several days of most years.
Flood in August 1908 reached a stage of 17.4 ft (discharge, 16,100 cfs); July 1916, 16.7 ft (discharge, 13,600 cfs); September 1928, about 16 ft (discharge, 11,300 cfs), from floodmarks witnessed by local residents.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1503: 1938-39, 1940(M), 1941-42.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	988	7.3	78	313	84	530	57	16	6.8	189	26
2	2.9	952	7.3	92	375	257	325	34	11	7.5	81	19
3	1.9	672	7.0	87	428	1,160	139	26	8.5	5.1	63	14
4	1.3	420	7.0	75	300	2,790	91	20	6.7	4.7	25	13
5	1.0	118	6.8	560	361	1,720	70	17	5.8	3.7	14	12
6	.80	48	6.6	883	454	910	223	14	4.8	19	9.7	10
7	.62	34	6.3	820	547	506	342	12	4.0	48	10	8.8
8	.49	25	6.0	660	1,380	255	317	38	3.3	71	9.4	7.6
9	.34	20	5.8	532	1,790	112	321	376	2.6	19	5.8	6.5
10	.28	17	5.8	494	1,220	79	187	205	2.2	9.0	5.6	6.0
11	.24	33	5.6	446	766	68	85	159	2.0	5.7	35	7.2
12	.16	37	5.8	458	480	59	62	319	1.9	4.1	52	17
13	.11	43	6.0	357	342	54	52	1,330	3.4	3.2	12	87
14	.16	34	6.0	169	331	101	45	2,110	2.8	3.6	6.9	28
15	.11	27	5.6	219	297	142	39	1,380	2.1	3.8	5.3	15
16	.07	22	68	266	275	221	34	1,420	3.3	2.2	34	9.5
17	.23	18	381	190	156	123	31	1,020	23	1.7	213	7.0
18	1.1	15	371	150	95	82	28	793	54	1.4	513	6.2
19	1.0	14	419	92	74	66	25	518	126	1.3	674	6.0
20	.80	12	431	62	65	74	22	201	214	2.2	810	5.2
21	.93	12	201	48	62	61	21	56	247	2.1	493	4.4
22	1.4	11	63	48	111	53	20	38	94	2.0	111	3.8
23	1.9	10	47	67	372	46	22	28	162	2.0	35	3.7
24	1.3	9.6	41	161	350	39	57	22	308	2.8	22	3.8
25	2.4	8.6	32	414	393	34	72	17	72	3.5	15	3.5
26	10	8.0	27	499	316	162	67	16	30	11	54	3.4
27	7.0	7.8	22	584	140	352	38	14	17	9.7	461	3.0
28	8.3	7.5	19	538	98	409	55	13	11	11	683	2.5
29	6.7	7.3	17	412	------	525	100	23	9.1	235	559	2.0
30	20	7.3	17	194	------	765	98	25	7.9	40	211	1.7
31	678	------	23	241	------	649	------	23	------	76	44	------
TOTAL	755.24	3,638.1	2,273.9	9,896	11,891	11,958	3,518	10,324	1,455.4	618.1	5,455.7	342.8
MEAN	24.4	121	73.4	319	425	386	117	333	48.5	19.9	176	11.4
MAX	678	988	431	883	1,790	2,790	530	2,110	308	235	810	87
MIN	.07	7.3	5.6	48	62	34	20	12	1.9	1.3	5.3	1.7
CFSM	.22	1.10	.67	2.90	3.86	3.51	1.06	3.03	.44	.18	1.60	.10
IN.	.26	1.23	.77	3.35	4.02	4.04	1.19	3.49	.49	.21	1.85	.12

CAL YR 1970 TOTAL 30,118.24 MEAN 82.5 MAX 988 MIN 0 CFSM .75 IN 10.19
WTR YR 1971 TOTAL 62,126.24 MEAN 170 MAX 2,790 MIN .07 CFSM 1.55 IN 21.01

PEAK DISCHARGE (BASE, 810 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	0230	9.59	1,080	3-30	0900	8.76	810
1-6	0530	9.19	937	5-14	1230	11.35	2,380
2-9	0600	10.87	1,910	8-20	0330	8.99	877
3-4	0630	11.81	3,220				

02128000 Little River near Star, N. C.

LOCATION.--Lat 35°23'11", long 79°49'56", Montgomery County, on left bank 9 ft downstream from bridge on Secondary Road 1340, 50 ft upstream from Black Rock Branch, 0.2 mile upstream from Norfolk Southern Railway bridge, 0.3 mile downstream from West Fork Little River, and 3 miles west of Star.

DRAINAGE AREA.--105 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1949-54. April 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 409.00 ft above mean sea level.

AVERAGE DISCHARGE.--17 years, 101 cfs (13.09 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,460 cfs Mar. 3 (gage height, 10.33 ft); minimum, 3.3 cfs Oct. 15; minimum gage height, 1.07 ft Oct. 9.
Period of record: Maximum discharge, 10,400 cfs Oct. 15, 1954 (gage height, 16.46 ft); minimum, 0.24 cfs Oct. 4, 5, 1968 (gage height, 0.68 ft), may be affected by upstream pond storage releases for water supply.
Flood in September 1945 reached a stage of about 20 ft, from information by local resident.

REMARKS.--Records good except those in October, which are fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	177	24	90	128	90	113	106	88	32	120	32
2	7.9	64	24	107	85	275	106	96	75	39	72	29
3	6.7	45	23	79	74	2,710	132	107	69	33	48	28
4	6.0	36	23	66	83	1,200	118	93	64	28	33	27
5	5.3	31	22	648	351	282	100	82	60	25	46	27
6	5.0	24	21	331	502	178	321	77	56	26	58	27
7	4.7	21	22	114	575	149	331	74	53	46	36	27
8	4.4	21	21	84	1,720	124	227	77	50	59	29	25
9	4.0	21	21	124	1,110	108	144	77	64	45	24	23
10	3.7	21	21	193	229	102	119	68	51	29	21	22
11	3.7	51	22	159	144	102	106	63	45	25	19	29
12	3.6	49	23	102	118	98	99	68	43	56	20	65
13	3.5	146	23	81	298	94	96	1,030	56	53	31	102
14	3.6	83	22	72	313	206	90	271	63	33	20	47
15	3.4	91	21	71	146	158	84	152	47	27	17	32
16	7.7	88	52	68	115	175	82	1,700	52	23	72	26
17	4.6	51	283	61	99	124	81	328	56	21	48	24
18	3.9	32	83	59	92	100	79	152	51	19	678	23
19	3.5	30	51	54	87	115	77	107	50	17	119	31
20	3.8	28	42	51	85	178	74	90	49	20	61	29
21	5.5	28	38	56	87	116	75	82	54	108	43	28
22	6.4	26	37	52	89	100	76	75	101	37	40	40
23	9.8	25	95	175	149	95	76	69	79	24	247	39
24	8.0	24	229	260	105	90	86	66	49	22	103	33
25	9.1	24	94	378	85	85	78	61	43	37	57	29
26	7.5	23	61	169	81	103	70	58	36	30	42	25
27	6.8	23	47	112	90	140	67	55	34	37	117	23
28	6.5	24	42	84	95	180	1,300	787	32	38	127	22
29	6.6	24	39	73	------	235	387	813	41	34	58	20
30	13	24	42	78	------	282	140	190	41	64	41	19
31	1,020	------	40	394	------	140	------	116	------	44	35	------
TOTAL	1,198.2	1,355	1,608	4,445	7,135	8,134	4,934	7,190	1,652	1,131	2,482	953
MEAN	38.7	45.2	51.9	143	255	262	164	232	55.1	36.5	80.1	31.8
MAX	1,020	177	283	648	1,720	2,710	1,300	1,700	101	108	678	102
MIN	3.4	21	21	51	74	85	67	55	32	17	17	19
CFSM	.37	.43	.49	1.36	2.43	2.50	1.56	2.21	.52	.35	.76	.30
IN.	.42	.48	.57	1.57	2.53	2.88	1.75	2.55	.59	.40	.88	.34

CAL YR 1970 TOTAL 29,314.3 MEAN 80.3 MAX 1,740 MIN 3.4 CFSM .76 IN 10.39
WTR YR 1971 TOTAL 42,217.2 MEAN 116 MAX 2,710 MIN 3.4 CFSM 1.10 IN 14.96

PEAK DISCHARGE (BASE, 2,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2- 8	2330	7.82	2,610	5-16	0930	8.07	2,770
3- 3	1830	10.33	4,460	5-28	2030	7.46	2,380
4-28	1900	8.30	2,920				

02129000 Pee Dee River near Rockingham, N. C.

LOCATION.--Lat 34°56'46", long 79°52'11", Richmond County, 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, and 192 miles upstream from mouth in Winyah Bay.

DRAINAGE AREA.--6,870 sq mi, approximately.

PERIOD OF RECORD.--August 1906 to January 1912, October 1927 to current year. 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 (levels by Corps of Engineers). August 1906 to January 1912 nonrecording gage at site 3.3 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.--49 years (1906-11, 1927-71), 7,702 cfs (15.22 inches per year) unadjusted.

EXTREMES.--Current year: Maximum discharge, 80,500 cfs Mar. 4 (gage height, 13.17 ft); minimum, 183 cfs Nov. 16 (gage height, 0.69 ft); minimum daily, 301 cfs Oct. 17.
Period of record: Maximum discharge, 276,000 cfs Aug. 27, 1908 (gage height, 31.28 ft, present site and datum, from records of State Highway Commission); 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, 120 cfs Oct. 8, 1961.

REMARKS.--Records good. Flow regulated since 1928 by Blewett Falls Lake and five other reservoirs upstream. (See p. 153). Water quality records for the current year are published in Part 2 of this report.

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).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,290	21,900	3,500	4,990	8,610	11,000	10,900	7,210	5,090	4,700	5,320	4,880
2	5,030	10,300	3,680	4,040	9,390	10,800	9,650	1,900	8,450	5,990	7,620	3,440
3	2,040	9,460	2,780	4,050	9,250	36,300	9,500	4,990	6,210	4,760	6,370	3,650
4	454	9,210	1,960	5,110	9,170	76,200	4,400	7,810	6,730	2,410	7,360	591
5	3,530	7,650	1,500	11,700	9,500	51,500	5,780	6,830	1,240	767	8,670	441
6	4,690	6,930	879	32,800	20,000	24,500	9,050	6,010	752	5,040	9,090	603
7	4,900	6,230	2,990	17,200	15,900	15,700	10,700	7,270	5,130	7,010	7,810	3,510
8	4,750	2,450	2,590	13,200	40,400	15,100	14,000	3,900	5,840	5,180	1,220	2,410
9	4,670	4,720	3,930	14,000	53,300	11,500	11,800	5,560	5,150	9,000	4,690	3,660
10	689	5,330	2,840	18,100	27,800	11,500	9,690	8,080	2,670	2,100	5,770	4,470
11	631	7,690	2,670	15,700	17,000	12,400	3,670	5,130	4,520	560	7,540	961
12	4,760	7,140	862	13,700	14,600	11,500	5,900	6,780	432	5,070	9,270	835
13	4,750	8,200	727	10,800	14,600	10,900	7,550	12,900	1,230	5,680	9,140	3,900
14	4,320	7,730	2,240	9,860	20,800	11,400	8,160	37,600	4,450	8,370	8,930	6,110
15	4,530	2,700	3,220	8,810	18,500	12,400	8,980	41,200	4,960	6,430	5,990	7,900
16	1,890	4,880	5,190	7,920	13,200	13,900	5,690	56,000	5,880	6,940	7,550	7,310
17	301	8,770	9,070	3,710	12,500	14,900	4,370	63,600	7,610	5,210	9,440	8,670
18	418	9,100	9,000	5,770	11,600	13,500	2,310	36,300	6,080	1,290	18,200	1,910
19	2,940	9,110	6,290	5,740	11,200	10,400	4,580	17,000	9,840	4,630	14,000	647
20	5,110	8,830	778	7,330	10,700	9,430	5,230	11,800	4,670	4,000	10,000	6,540
21	6,280	7,300	5,700	5,330	10,900	3,900	7,210	10,800	7,800	3,850	6,290	7,800
22	3,400	3,850	6,480	5,740	10,900	3,030	6,560	10,500	10,600	5,140	1,970	7,870
23	3,510	4,730	6,620	5,810	13,400	9,210	8,290	9,730	9,350	5,330	5,300	9,110
24	665	5,970	9,110	4,530	14,900	11,000	7,820	9,780	16,600	708	7,390	8,650
25	601	6,370	9,180	11,800	19,100	8,720	575	8,800	17,800	639	8,950	5,370
26	3,930	3,050	3,930	14,200	15,800	7,870	509	8,480	12,300	4,840	5,790	7,050
27	4,380	1,960	1,390	11,800	13,700	7,520	2,910	3,590	9,690	7,180	8,500	7,150
28	2,290	3,010	4,850	9,740	12,600	9,210	5,710	5,070	7,630	3,560	5,910	6,830
29	2,690	674	5,460	7,680	------	9,210	8,630	9,330	4,880	5,660	2,930	7,850
30	5,470	4,690	7,330	5,470	------	14,300	8,860	9,230	5,020	8,290	4,030	8,890
31	9,720	------	6,500	5,920	------	13,300	------	8,070	------	9,160	5,290	------
TOTAL	104,629	199,934	133,246	302,550	459,320	482,100	208,984	441,250	198,604	149,494	226,330	149,008
MEAN	3,375	6,664	4,298	9,760	16,400	15,550	6,966	14,230	6,620	4,822	7,301	4,967
MAX	9,720	21,900	9,180	32,800	53,300	76,200	14,000	63,600	17,800	9,160	18,200	9,110
MIN	301	674	727	3,710	8,610	3,030	509	1,900	432	560	1,220	441
(†)	+9	-240	+202	+117	+1,587	-970	+536	-136	-46	-44	-395	+488

CAL YR 1970 TOTAL 2,317,133 MEAN 6,348 MAX 69,500 MIN 301 MEAN‡ 6,305 CFSM‡ 0.92 IN‡ 12.46
WTR YR 1971 TOTAL 3,055,449 MEAN 8,371 MAX 76,200 MIN 301 MEAN‡ 8,458 CFSM‡ 1.23 IN‡ 16.71

† Change in contents, equivalent in cubic feet per second, in W. Kerr Scott Reservoir, furnished by Corps of Engineers; High Rock and Badin Lakes, furnished by Yadkin, Inc.; Tuckertown Reservoir, furnished by Duke Power Co.; and Lake Tillery and Blewett Falls Lake, furnished by Carolina Power and Light Co.

‡ Adjusted for change in contents.

02133500 Drowning Creek near Hoffman, N. C.

LOCATION.--Lat 35°03'38", long 79°29'39", Richmond County, on right bank 10 ft downstream from bridge on U.S. Highway 1, 0.8 mile downstream from Deep Creek, 1 mile upstream from Seaboard Coast Line Railroad bridge, and 4 miles northeast of Hoffman.

DRAINAGE AREA.--178 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 270 ft (from topographic map).

AVERAGE DISCHARGE.--32 years, 258 cfs (19.68 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,390 cfs Mar. 5 (gage height, 6.76 ft); minimum, 71 cfs Oct. 7, 8, 9, 15 (gage height, 2.18 ft).
Period of record: Maximum discharge, 10,900 cfs Sept. 18, 1945 (gage height, 10.29 ft); minimum, 22 cfs Oct. 5, 1968.

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

REVISIONS (WATER YEARS).--WSP 972: 1941 (M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	1,080	161	225	362	355	598	494	256	131	370	210
2	93	1,070	159	255	415	394	517	427	215	147	300	190
3	87	819	157	278	473	575	446	341	175	149	240	170
4	82	600	156	285	429	1,060	401	295	156	152	190	160
5	77	444	152	288	406	1,340	378	272	146	123	250	150
6	73	344	149	302	425	1,030	409	252	136	118	350	145
7	72	283	147	333	480	739	428	234	127	171	450	140
8	71	240	146	505	602	599	448	223	116	178	350	138
9	72	213	146	612	663	528	475	230	109	155	270	134
10	73	201	148	531	743	481	447	242	107	125	210	142
11	73	208	150	492	677	451	395	231	108	108	160	174
12	74	240	150	492	565	427	355	206	105	130	130	254
13	74	270	151	478	517	411	325	255	109	189	160	513
14	72	278	151	427	492	448	305	378	120	197	170	573
15	75	274	147	404	494	461	291	533	108	148	150	455
16	115	248	168	394	525	467	280	739	101	120	120	341
17	126	216	249	385	474	483	271	814	150	108	200	212
18	111	197	325	386	406	508	263	799	187	100	300	174
19	99	187	387	348	361	486	259	640	197	95	400	169
20	94	183	413	308	338	426	253	473	205	127	450	165
21	109	182	364	278	328	383	245	368	255	127	380	159
22	130	179	290	263	348	367	244	310	239	124	320	173
23	130	176	228	263	439	360	252	274	179	111	280	205
24	114	172	217	283	440	341	283	253	194	100	350	219
25	117	168	249	347	483	321	303	236	200	99	400	190
26	150	164	293	420	486	350	305	227	168	120	270	164
27	153	164	317	474	424	381	292	219	140	168	350	150
28	128	166	288	502	373	434	316	205	137	235	400	142
29	114	165	237	429	------	540	377	212	157	314	450	136
30	141	163	211	359	------	618	449	244	159	395	350	133
31	549	------	207	343	------	624	------	267	------	461	250	------
TOTAL	3,560	9,294	6,713	11,689	13,168	16,388	10,610	10,893	4,761	5,020	9,020	6,280
MEAN	115	310	217	377	470	529	354	351	159	162	291	209
MAX	549	1,080	413	612	743	1,340	598	814	256	461	450	573
MIN	71	163	146	225	328	321	244	205	101	95	120	133
CFSM	.65	1.74	1.22	2.12	2.64	2.97	1.99	1.97	.89	.91	1.63	1.17
IN.	.74	1.94	1.40	2.44	2.75	3.42	2.22	2.28	.99	1.05	1.89	1.31

CAL YR 1970 TOTAL 82,032 MEAN 225 MAX 1,080 MIN 53 CFSM 1.26 IN 17.14
WTR YR 1971 TOTAL 107,396 MEAN 294 MAX 1,340 MIN 71 CFSM 1.65 IN 22.44

PEAK DISCHARGE (BASE, 850 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11- 1	1700	6.59	1,220	3- 5	0530	6.76	1,390

NOTE.--No gage-height record Aug. 1 to Sept. 8.

02134500 Lumber River at Boardman, N. C.

LOCATION.--Lat 34°26'32", long 78°57'38", Robeson County, on right bank 50 ft downstream from bridge on U.S. Highway 74, 1 mile downstream from Seaboard Coast Line Railroad bridge at Boardman, 1.5 miles downstream from Big Swamp, and 40.5 miles upstream from mouth.

DRAINAGE AREA.--1,220 sq mi, approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 72.05 ft above mean sea level (levels by Corps of Engineers). Prior to Sept. 30, 1936, nonrecording gage at site 100 ft downstream at same datum. Sept. 30, 1936, to June 8, 1943, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--42 years, 1,304 cfs (14.51 inches per year).

EXTREMES.--Current year: Maximum discharge, 9,730 cfs Mar. 7 (gage height, 10.12 ft); minimum, 252 cfs Oct. 20 (gage height, 1.71 ft).
Period of record: Maximum discharge, 13,400 cfs Sept. 24, 1945 (gage height, 10.64 ft); minimum, 66 cfs Oct. 9, 1968.
Flood of August 1928 reached a stage of 11.8 ft, from floodmark witnessed by local resident (discharge, 25,000 cfs).
Flood of July 22, 1901, the highest during the period 1896-1913, reached a stage of 10.8 ft, from observations by Butters Lumber Co. (discharge, 14,800 cfs).

REMARKS.--Records excellent. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 892: Drainage area. WSP 1303: 1932 (M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	586	569	649	1,080	1,920	3,050	3,150	1,270	916	709	596	1,230
2	580	631	600	1,030	2,000	3,360	3,190	1,260	808	694	733	1,120
3	546	687	601	985	2,090	5,290	3,260	1,290	649	719	771	1,060
4	500	711	589	951	2,280	7,250	3,240	1,300	644	687	809	1,030
5	463	734	568	967	2,440	8,040	3,220	1,290	620	704	855	990
6	462	725	549	957	2,520	9,240	3,330	1,300	581	742	954	935
7	422	728	524	961	2,680	9,700	3,340	1,300	554	641	1,020	858
8	406	775	523	943	3,750	9,370	3,370	1,290	535	591	1,070	804
9	386	999	511	996	3,860	8,540	3,370	1,280	521	519	1,060	754
10	358	1,230	507	1,050	4,130	7,630	3,310	1,270	518	479	1,000	744
11	334	1,380	521	1,110	4,370	6,830	3,200	1,240	521	436	851	784
12	321	1,490	518	1,180	4,490	6,060	3,060	1,160	547	414	741	780
13	312	1,500	526	1,240	4,560	5,350	2,920	1,150	583	413	645	768
14	283	1,420	520	1,300	4,460	4,830	2,740	1,130	596	433	634	734
15	279	1,330	497	1,450	4,240	4,400	2,570	1,050	565	433	648	705
16	288	1,220	578	1,630	3,930	4,250	2,420	1,100	472	433	951	681
17	283	1,120	770	1,790	3,610	4,290	2,280	1,160	580	414	1,560	679
18	286	1,030	881	1,900	3,350	4,290	2,140	1,220	605	385	2,120	863
19	298	986	960	2,050	3,130	4,190	2,010	1,320	660	372	2,200	1,050
20	261	962	1,050	2,060	2,900	3,970	1,860	1,420	692	391	2,180	1,120
21	266	924	1,100	2,000	2,640	3,720	1,720	1,480	724	418	2,180	1,190
22	301	884	1,140	1,930	2,430	3,480	1,580	1,520	753	444	2,170	1,200
23	320	853	1,130	1,890	2,360	3,260	1,490	1,570	748	445	2,080	1,300
24	331	822	1,140	1,820	2,270	3,010	1,480	1,620	716	448	1,920	1,290
25	351	776	1,160	1,820	2,350	2,780	1,380	1,630	679	466	1,730	1,230
26	386	736	1,180	1,830	2,590	2,920	1,310	1,540	651	618	1,710	1,070
27	393	717	1,190	1,790	2,830	2,970	1,280	1,430	658	677	1,850	944
28	373	707	1,190	1,780	2,930	3,030	1,250	1,310	672	669	1,840	777
29	403	696	1,180	1,740	------	3,120	1,250	1,230	676	630	1,720	660
30	427	681	1,150	1,700	------	3,150	1,250	1,120	690	614	1,550	630
31	476	------	1,120	1,810	------	3,120	------	1,020	------	586	1,380	------
TOTAL	11,681	28,023	25,122	45,740	87,110	154,490	71,970	40,270	19,134	16,624	41,528	27,980
MEAN	377	934	810	1,475	3,111	4,984	2,399	1,299	638	536	1,340	933
MAX	586	1,500	1,190	2,060	4,560	9,700	3,370	1,630	916	742	2,200	1,300
MIN	261	569	497	943	1,920	2,780	1,250	1,020	472	372	596	630
CFSM	.31	.77	.66	1.21	2.55	4.09	1.97	1.06	.52	.44	1.10	.76
IN.	.36	.85	.77	1.39	2.66	4.71	2.19	1.23	.58	.51	1.27	.85

CAL YR 1970 TOTAL 395,517 MEAN 1,084 MAX 3,460 MIN 196 CFSM .89 IN 12.06
WTR YR 1971 TOTAL 569,672 MEAN 1,561 MAX 9,700 MIN 261 CFSM 1.28 IN 17.37

02137000 Mill Creek at Old Fort, N. C.

LOCATION.--Lat 35°37'59", long 82°11'14", McDowell County, on right bank at downstream side of bridge on Secondary Road 1119, 2,200 ft downstream from Jarrett Creek, 0.5 mile northwest of Old Fort, and 1 mile upstream from mouth.

DRAINAGE AREA.--20.7 sq mi.

PERIOD OF RECORD.--May to December 1907, (gage heights and discharge measurements only), August 1930 to July 1931, April 1960 to current year. Records of discharge for 1907, published in WSP 242, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 1,445.92 ft above mean sea level. May to September 1907, nonrecording gage at site 0.2 mile downstream at different datum. August 1930 to July 1931, nonrecording gage at present site at datum 1.00 ft lower.

AVERAGE DISCHARGE.--11 years (1960-71), 39.8 cfs (26.11 inches per year).

EXTREMES.--Current year: Maximum discharge, 684 cfs Oct. 30 (gage height, 4.78 ft); minimum, 9.8 cfs Sept. 10, 11 (gage height, 1.23 ft).
Period of record: Maximum discharge, 1,700 cfs Feb. 13, 1966 (gage height, 7.00 ft); minimum, 4.7 cfs Sept. 3, 4, 1930. Flood of Aug. 13, 1940 reached a stage of 11.1 ft, from floodmarks (discharge, 7,880 cfs). Flood in July 1916 reached a stage about 4 ft higher than that of Aug. 13, 1940, from information by local residents.
A discharge of 3.02 cfs was measured on Oct. 10, 1954.

REMARKS.--Records good. Some regulation at times during periods of low flow caused by reservoirs in the headwaters. Town of Old Fort diverted about 0.3 cfs for municipal water supply.

REVISIONS (WATER YEARS).--WSP 1503: 1931. See PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	135	30	28	38	53	42	29	27	40	26	13
2	13	120	30	28	38	69	45	29	27	43	27	14
3	13	111	28	28	35	132	40	28	28	35	33	13
4	12	89	28	42	44	119	39	28	33	28	32	13
5	11	71	28	70	85	91	39	27	29	26	26	13
6	11	60	28	52	83	81	58	29	33	27	28	12
7	12	54	27	45	79	72	53	30	41	43	31	12
8	12	49	27	41	107	64	48	31	32	41	27	12
9	34	45	26	39	93	58	45	28	29	30	28	11
10	62	89	26	37	77	57	43	27	37	28	59	11
11	60	78	26	35	62	54	41	27	33	27	62	20
12	50	69	27	34	56	51	40	30	30	24	43	20
13	33	66	25	33	87	52	39	56	28	23	26	14
14	31	61	24	32	73	53	37	45	28	22	26	12
15	28	58	24	31	64	58	36	55	30	21	24	11
16	24	52	33	29	57	55	35	67	28	20	28	20
17	22	49	29	29	53	50	34	51	27	19	26	15
18	21	46	26	28	49	49	33	43	30	18	25	33
19	20	44	25	27	48	50	33	39	30	23	23	25
20	41	47	25	28	49	48	32	36	30	21	21	21
21	98	43	27	25	47	45	32	34	28	19	19	22
22	50	42	25	27	82	45	31	32	33	19	19	22
23	39	40	58	44	83	43	38	30	31	18	21	21
24	34	37	51	43	68	44	34	30	27	21	18	22
25	32	35	41	47	60	47	31	29	25	23	17	22
26	29	35	36	42	65	46	30	27	24	22	16	20
27	28	35	33	37	62	44	30	26	37	19	16	23
28	27	34	31	37	56	45	36	34	38	18	15	22
29	126	33	30	34	------	49	30	42	29	24	14	19
30	421	32	29	42	------	45	29	33	30	23	14	17
31	190	------	30	43	------	43	------	30	------	29	14	------
TOTAL	1,597	1,759	933	1,137	1,800	1,812	1,133	1,082	912	794	804	525
MEAN	51.5	58.6	30.1	36.7	64.3	58.5	37.8	34.9	30.4	25.6	25.9	17.5
MAX	421	135	58	70	107	132	58	67	41	43	62	33
MIN	11	32	24	25	35	43	29	26	24	18	14	11
CFSM	2.49	2.83	1.45	1.77	3.11	2.83	1.83	1.69	1.47	1.24	1.25	.85
IN.	2.87	3.16	1.68	2.04	3.23	3.26	2.04	1.94	1.64	1.43	1.44	.94

CAL YR 1970 TOTAL 13,344.7 MEAN 36.6 MAX 421 MIN 9.8 CFSM 1.77 IN 23.98
WTR YR 1971 TOTAL 14,288.0 MEAN 39.1 MAX 421 MIN 11 CFSM 1.89 IN 25.68

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-30	1300	4.78	684				

02138000 Catawba River near Marion, N. C.

LOCATION.--Lat 35°42'26", long 82°02'00", McDowell County, on right bank 15 ft downstream from bridge on U. S. Highway 221, 0.2 mile downstream from Tom Creek, 2.2 miles northwest of Marion, and at mile 294. Records include flow of small tributary on right bank 250 ft downstream.

DRAINAGE AREA.--171 sq mi (including area of small downstream tributary).

PERIOD OF RECORD.--October 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,208 ft above mean sea level.

AVERAGE DISCHARGE.--30 years, 324 cfs (25.75 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,210 cfs Oct. 30 (gage height, 9.13 ft); minimum, 99 cfs Oct. 5, 6 (gage height, 1.04 ft); minimum daily, 102 cfs Oct. 5.
Period of record: Maximum discharge, 19,700 cfs Aug. 28, 1949 (gage height, 15.02 ft); from rating curve extended as explained below; minimum, 28 cfs Sept. 30, Oct. 1, 5, 1954 (gage height, 0.50 ft).
Flood of Aug. 13, 1940 reached stage of 19.34 ft (discharge, 71,400 cfs, from rating curve extended above 10,000 cfs on basis of contracted opening measurements at gage height 15.02 ft and 19.34 ft).

REMARKS.--Records good. Some diurnal fluctuation and regulation for short periods of low flow caused by Lake Tahoma hydroelectric plant above station. About 3.0 cfs is diverted by the town of Marion for water supply. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1032: 1942, 1943(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	1,110	257	207	243	386	307	202	242	332	376	147
2	134	860	261	200	252	458	317	214	216	390	349	151
3	111	780	256	237	257	929	269	265	221	327	560	152
4	105	616	234	334	297	895	296	240	223	227	452	121
5	102	503	191	653	490	650	290	227	187	187	812	119
6	109	442	193	436	538	531	430	222	188	227	1,370	126
7	120	403	209	370	566	484	425	241	220	245	507	149
8	107	364	257	327	921	450	368	233	216	330	377	163
9	252	340	231	262	767	406	335	245	230	234	326	152
10	328	744	224	273	520	394	276	233	262	194	430	142
11	349	649	219	288	437	383	303	216	231	208	534	130
12	411	512	183	266	399	364	305	256	186	209	357	182
13	273	492	190	264	673	330	286	613	192	216	294	163
14	259	434	205	264	576	358	278	438	215	190	221	161
15	248	419	205	248	472	424	281	474	226	171	229	131
16	201	397	299	201	421	405	277	693	229	156	246	118
17	148	370	291	211	392	355	235	463	216	129	249	119
18	143	353	247	235	372	359	270	375	211	132	239	219
19	152	337	190	230	358	371	278	324	182	167	233	231
20	247	356	199	214	331	326	267	293	202	185	210	202
21	1,210	321	235	224	292	294	264	299	218	158	160	234
22	490	296	241	226	630	333	260	230	191	164	170	209
23	341	291	435	248	676	324	300	249	224	150	229	202
24	300	278	369	268	503	309	254	275	225	175	200	201
25	280	273	298	322	437	304	259	253	189	215	179	174
26	243	289	300	302	451	337	268	238	150	247	163	173
27	227	282	274	257	448	310	254	223	169	205	155	181
28	228	227	255	277	405	304	315	251	235	158	131	212
29	743	233	256	263	------	341	282	319	177	224	131	187
30	3,970	260	251	227	------	329	250	271	258	251	149	183
31	1,700	------	248	250	------	311	------	266	------	283	148	------
TOTAL	13,664	13,231	7,703	8,584	13,124	12,754	8,799	9,341	6,331	6,686	10,186	5,034
MEAN	441	441	248	277	469	411	293	301	211	216	329	168
MAX	3,970	1,110	435	653	921	929	430	693	262	390	1,370	234
MIN	102	227	183	200	243	294	235	202	150	129	131	118
CFSM	2.58	2.58	1.45	1.62	2.74	2.40	1.71	1.76	1.23	1.26	1.92	.98
IN.	2.97	2.88	1.68	1.87	2.86	2.77	1.91	2.03	1.38	1.45	2.22	1.10

CAL YR 1970 TOTAL 110,799 MEAN 304 MAX 3,970 MIN 94 CFSM 1.78 IN 24.10
WTR YR 1971 TOTAL 115,437 MEAN 316 MAX 3,970 MIN 102 CFSM 1.85 IN 25.11

PEAK DISCHARGE (BASE, 3,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-30	1730	9.13	5,210	8-5	2400	7.07	3,660

02138500 Linville River near Nebo, N. C.
(Formerly published as Linville River at Branch)

LOCATION.--Lat 35°47'43", long 81°53'27", Burke County, in Pisgah National Forest, on right bank 280 ft upstream from bridge on State Highway 126, 0.2 mile downstream from Shooks Creek, 0.5 mile upstream from Lake James, 2.0 miles northeast of Longtown, and 6.0 miles northeast of Nebo. Prior to Oct. 1, 1970 at site 300 ft downstream.

DRAINAGE AREA.--67.2 sq mi.

PERIOD OF RECORD.--May 1907 to August 1908 (fragmentary). June 1922 to current year. Published as "at Fonta Flora" prior to 1908 and as "at Branch" 1923-70. Records for October to December 1908, "at Fonta Flora", published in WSP 242 have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 1,205.87 ft above mean sea level. May 1907 to August 1908 nonrecording gage about 1.2 miles downstream at different datum. June 1922 to Aug. 27, 1937, nonrecording gage, and Aug. 28, 1937 to Sept. 30, 1970, water-stage recorder at site 300 ft downstream at same datum.

AVERAGE DISCHARGE.--49 years (1922-71), 142 cfs (28.73 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,200 cfs Oct. 30 (gage height, 5.62 ft); minimum 35 cfs Oct. 6-8 (gage height, 2.14 ft) but may have been less during period of ice effect on Feb. 2.
Period of record: 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 of July 1916 reached a stage of about 11 ft (discharge, 34,600 cfs).

REMARKS.--Records good except those for winter periods, 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). WSP 1723: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	964	100	72	50	185	116	118	100	170	246	56
2	38	571	95	70	55	199	116	109	94	255	231	57
3	38	478	90	80	110	344	114	107	102	156	228	57
4	37	352	80	95	142	404	105	100	131	116	216	56
5	37	294	83	230	240	286	102	94	98	96	194	54
6	36	254	95	202	240	240	158	92	88	204	222	51
7	36	224	74	166	208	218	200	137	80	285	210	52
8	36	196	80	142	352	194	161	139	84	252	188	112
9	53	179	74	130	395	171	145	123	84	207	181	69
10	124	478	74	124	258	169	134	107	76	210	161	57
11	137	522	72	120	205	166	121	98	73	243	153	60
12	218	352	68	109	179	158	116	109	71	194	172	75
13	124	297	70	101	272	153	112	450	67	172	161	64
14	101	247	67	99	268	158	105	321	67	184	102	56
15	80	237	62	95	224	166	100	276	69	114	71	49
16	68	202	68	65	196	166	107	410	75	94	71	46
17	62	171	80	46	179	139	96	294	96	78	78	46
18	56	148	81	45	166	147	84	240	80	67	75	78
19	55	135	76	40	161	147	84	200	76	71	71	158
20	60	140	83	40	166	150	84	178	102	84	66	109
21	766	165	91	50	166	134	86	210	147	66	67	86
22	302	150	87	65	230	126	86	161	207	64	71	142
23	179	145	107	85	365	121	90	137	170	64	109	107
24	139	115	158	90	264	121	107	126	98	66	112	86
25	122	100	124	120	227	118	92	121	86	71	76	84
26	109	115	115	135	218	123	84	114	80	84	69	76
27	101	110	99	90	237	121	78	100	76	76	67	86
28	93	105	101	50	199	131	213	109	71	96	62	98
29	108	100	101	110	------	142	204	161	67	386	57	114
30	1,360	100	78	130	------	145	134	137	334	415	54	86
31	1,540	------	87	130	------	123	------	118	------	279	54	------
TOTAL	6,254	7,646	2,710	3,126	5,972	5,365	3,534	5,196	3,049	4,919	3,895	2,327
MEAN	202	255	87.4	101	213	173	118	168	102	159	126	77.6
MAX	1,540	964	158	230	395	404	213	450	334	415	246	158
MIN	36	100	62	40	50	118	78	92	67	64	54	46
CFSM	3.01	3.79	1.30	1.50	3.17	2.57	1.76	2.50	1.52	2.37	1.88	1.15
IN.	3.46	4.23	1.50	1.73	3.31	2.97	1.96	2.88	1.69	2.72	2.16	1.29

CAL YR 1970 TOTAL 58,659 MEAN 161 MAX 2,660 MIN 36 CFSM 2.40 IN 32.47
WTR YR 1971 TOTAL 53,993 MEAN 148 MAX 1,540 MIN 36 CFSM 2.20 IN 29.89

PEAK DISCHARGE (BASE, 1,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-30	1700	5.62	2,200				

02139650 East Prong near Morganton, N. C.

LOCATION.--Lat 35°44'29", long 81°39'39", Burke County, on right bank 55 ft downstream from bridge on Secondary Road 1704, 0.5 mile upstream from mouth, and 1.4 miles east of courthouse, Morganton.

DRAINAGE AREA.--8.94 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,032.77 ft above mean sea level (city of Morganton bench mark).

AVERAGE DISCHARGE.--5 years, 12.2 cfs (18.58 inches per year).

EXTREMES.--Current year: Maximum discharge, 344 cfs Feb. 22 (gage height, 6.90 ft, from outside floodmark); minimum, 5.6 cfs Oct. 1, 2, 3, 4, 5, 6, 7, Sept. 9; minimum gage height, 2.03 ft Sept. 16.
Period of record: Maximum discharge, 935 cfs Aug. 9, 1970 (gage height, 9.07 ft); minimum, 4.2 cfs Sept. 8, 1968.
Flood of Aug. 13, 1940 reached a stage of about 15 ft, from information by local resident.

REMARKS.--Records fair. Recording rain gage located at station.

REVISIONS (WATER YEARS).--WSP 2104: 1969(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	21	9.0	10	9.3	18	12	10	9.3	8.1	14	6.9
2	5.8	18	8.7	9.6	8.7	17	12	10	9.0	8.4	11	7.8
3	6.1	18	8.7	9.6	8.7	37	12	9.3	9.0	8.1	9.6	6.9
4	5.8	16	8.4	23	9.6	30	11	9.3	9.0	7.8	9.6	6.3
5	5.8	14	8.4	65	27	22	11	9.0	8.7	7.5	9.0	6.3
6	5.8	12	8.4	24	22	19	15	9.3	8.7	7.5	8.4	6.3
7	6.1	12	8.1	19	32	17	18	11	8.1	24	8.4	6.3
8	6.1	11	8.1	17	60	15	14	10	8.1	12	8.1	6.6
9	6.9	10	8.1	15	32	14	13	9.3	8.4	8.4	7.8	6.3
10	6.9	20	8.1	14	21	15	12	9.0	8.1	8.1	7.5	6.3
11	6.6	16	8.1	13	17	14	12	8.7	8.1	11	7.5	15
12	6.9	14	8.1	12	16	13	12	21	8.1	10	7.5	9.0
13	6.6	13	7.8	11	104	13	11	37	8.1	8.1	7.2	7.8
14	6.6	13	7.8	11	37	14	11	16	8.1	7.8	7.2	7.2
15	7.2	18	7.8	10	23	18	11	39	8.1	7.5	6.9	6.9
16	6.3	15	20	10	19	16	11	39	8.1	7.5	6.9	7.8
17	6.1	13	15	10	18	14	10	20	8.1	7.2	7.8	7.1
18	6.3	12	11	10	17	13	10	16	10	6.9	8.1	21
19	6.6	12	10	9.3	16	14	10	14	9.0	8.1	14	9.7
20	8.7	11	9.6	9.3	15	13	10	12	8.7	7.5	7.8	9.1
21	19	11	9.6	9.3	14	12	10	12	8.1	7.5	7.2	8.1
22	8.1	10	9.3	9.3	118	12	10	11	7.8	7.5	6.9	8.4
23	7.5	10	16	9.6	45	12	12	11	23	7.2	7.2	8.4
24	6.9	9.6	17	10	25	11	10	10	16	9.6	6.9	8.8
25	10	9.3	16	11	21	12	10	10	9.3	8.1	6.9	7.6
26	8.4	9.3	14	10	22	13	9.6	9.6	8.7	8.4	6.6	7.3
27	7.5	9.3	13	9.6	21	14	9.3	9.6	8.4	7.8	6.9	7.3
28	7.5	9.3	12	9.6	19	14	17	11	8.1	12	6.6	7.3
29	30	9.3	11	9.3	------	15	11	14	7.8	11	6.3	7.1
30	119	9.0	10	9.3	------	13	10	11	7.8	9.3	6.6	7.1
31	35	------	10	9.6	------	12	------	10	------	10	6.6	------
TOTAL	387.9	385.1	327.1	418.4	797.3	486	346.9	438.1	275.8	279.9	249.0	244.0
MEAN	12.5	12.8	10.6	13.5	28.5	15.7	11.6	14.1	9.19	9.03	8.03	8.13
MAX	119	21	20	65	118	37	18	39	23	24	14	21
MIN	5.8	9.0	7.8	9.3	8.7	11	9.3	8.7	7.8	6.9	6.3	6.3
CFSM	1.40	1.43	1.19	1.51	3.19	1.76	1.30	1.58	1.03	1.01	.90	.91
IN.	1.61	1.60	1.36	1.74	3.32	2.02	1.44	1.82	1.15	1.16	1.04	1.02

CAL YR 1970 TOTAL 4,616.4 MEAN 12.6 MAX 373 MIN 4.8 CFSM 1.41 IN 19.21
WTR YR 1971 TOTAL 4,635.5 MEAN 12.7 MAX 119 MIN 5.8 CFSM 1.42 IN 19.29

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-30	a0600	-	a250	2-22	a1500	6.90	344
2-13	a1400	-	a310	7- 7	1730	5.19	201

a About

02141150 Lower Creek at Mulberry Street at Lenoir, N. C.

LOCATION.--Lat 35°54'20", long 81°31'59", Caldwell County, on left bank at upstream side of bridge on Mulberry Street, 1,100 ft downstream from Zacks Fork Creek, and 0.8 mile southeast of courthouse, Lenoir.

DRAINAGE AREA.--31.8 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,071.45 ft above mean sea level.

AVERAGE DISCHARGE.--5 years, 32.7 cfs (13.96 inches per year).

EXTREMES.--Current year: Maximum discharge, 943 cfs Aug. 4 (gage height, 6.01 ft); minimum, 12 cfs July 23, 24; minimum daily, 15 cfs July 18, 21-23, Aug. 30 to Sept. 4, Sept. 6, 9, 10; minimum gage height, 0.77 ft Sept. 10.
Period of record: Maximum discharge, 3,430 cfs Aug. 10, 1970 (gage height, 11.03 ft in gage well, 11.50 ft, from outside gage); minimum, 5.8 cfs July 17, 1970; minimum daily, 7.7 cfs July 17, 20, 1970; minimum gage height, 0.55 ft Oct. 1, 1968, July 17, 1970.
The flood of Aug. 13, 1940 reached a stage of 1,087.0 ft above mean sea level (discharge 20,000 cfs) at mouth of Zacks Fork Creek 1,100 ft upstream.

REMARKS.--Records good. At times slight fluctuation and diversions by industrial and recreational development. About 0.4 cfs is diverted by City of Lenoir for water supply and wasted into Lower Creek. Since 1940 various creek channel improvements and changes related to highway and industrial development. A significant channel change occurred in 1969 as a result of construction. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	62	22	23	19	41	30	31	23	17	60	15
2	16	47	21	21	19	47	34	29	22	17	107	15
3	16	53	20	22	18	103	30	27	22	18	38	15
4	16	41	19	39	32	88	29	26	21	17	151	15
5	16	34	19	111	90	62	28	23	21	16	100	17
6	16	30	20	58	76	52	38	26	21	23	37	15
7	16	27	18	42	89	48	36	27	20	65	30	17
8	16	26	18	35	124	42	33	29	20	31	26	17
9	16	24	18	32	87	39	32	24	26	25	39	15
10	19	65	19	29	61	40	30	22	27	38	24	15
11	17	47	19	27	50	38	29	21	21	25	37	76
12	16	42	19	25	43	35	28	116	22	19	28	36
13	16	46	19	24	136	38	26	324	22	18	21	30
14	16	38	18	23	87	39	26	82	28	17	20	22
15	17	38	17	23	62	50	25	117	31	16	19	19
16	16	32	34	22	50	45	25	133	21	16	19	19
17	16	29	27	22	43	40	25	66	20	16	21	18
18	16	27	22	21	39	37	24	50	25	15	32	42
19	16	26	21	20	36	41	23	40	25	17	35	57
20	17	35	21	20	37	37	23	35	23	17	21	36
21	65	31	21	20	34	35	23	32	23	15	19	69
22	24	28	21	21	136	33	24	29	30	15	23	83
23	19	26	32	24	99	32	29	28	22	15	37	39
24	18	24	29	28	63	29	26	27	23	17	22	33
25	21	23	25	28	52	29	23	27	20	21	19	29
26	18	24	23	23	54	33	22	25	23	18	18	28
27	17	23	23	21	50	33	21	23	20	17	17	25
28	16	23	22	21	44	35	113	29	18	46	16	24
29	46	25	22	21	------	40	47	37	16	19	16	22
30	299	30	21	24	------	34	35	28	19	29	15	21
31	134	------	22	23	------	32	------	25	------	27	15	------
TOTAL	1,003	1,026	672	893	1,730	1,327	937	1,558	675	682	1,082	884
MEAN	32.4	34.2	21.7	28.8	61.8	42.8	31.2	50.3	22.5	22.0	34.9	29.5
MAX	299	65	34	111	136	103	113	324	31	65	151	83
MIN	16	23	17	20	18	29	21	21	16	15	15	15
CFSM	1.02	1.08	.68	.91	1.94	1.35	.98	1.58	.71	.69	1.10	.93
IN.	1.17	1.20	.79	1.04	2.02	1.55	1.10	1.82	.79	.80	1.27	1.03

CAL YR 1970 TOTAL 13,276.0 MEAN 36.4 MAX 2,210 MIN 7.7 CFSM 1.14 IN 15.53
WTR YR 1971 TOTAL 12,469.0 MEAN 34.2 MAX 324 MIN 15 CFSM 1.08 IN 14.59

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-30	1615	4.09	518	7-7	1615	4.59	618
2-22	1845	4.16	532	8-4	2100	6.01	943
5-13	0115	5.66	858				

02142900 Long Creek near Paw Creek, N. C.

LOCATION.--Lat 35°19'42", long 80°54'35", Mecklenburg County, on left bank at upstream side of bridge on Secondary Road 2042, 600 ft downstream from McIntyre Creek, 1.2 miles upstream from Cutter Branch, and 3.6 miles north of community of Paw Creek.

DRAINAGE AREA.--16.1 sq mi.

PERIOD OF RECORD.--June 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 648.7 ft above mean sea level.

AVERAGE DISCHARGE.--6 years, 13.2 cfs (11.17 inches per year).

EXTREMES.--Current year: Maximum discharge, 972 cfs Aug. 2 (gage height, 10.71 ft); minimum daily, 1.0 cfs Oct. 5; minimum gage height, 0.98 ft Oct. 5, 6, 9, 12.
Period of record: Maximum discharge, 1,350 cfs Aug. 23, 1967 (gage height, 10.38 ft); maximum gage height, 10.71 ft Aug. 2, 1971; minimum, 0.65 cfs July 28, 29, 1966; minimum gage height, 0.95 ft Aug. 28, 29, 30, 1969.

REMARKS.--Records good except those for period of indefinite stage-discharge relation or no gage-height record, which are poor.

REVISIONS.--The mean annual discharge for the water year 1966 has been corrected to 9.36 cfs and the discharge per square mile to 0.58 cfs, superseding figures published in WRD N. C. 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	5.9	2.9	10	15	12	14	6.8	5.0	9.6	9.1	5.4
2	1.4	3.6	2.9	11	12	51	13	6.4	4.7	5.7	305	5.0
3	1.2	2.9	2.9	8.9	23	307	13	6.4	4.4	4.7	54	4.7
4	1.1	3.4	2.7	8.9	35	99	11	5.7	4.1	4.1	18	4.7
5	1.0	3.2	2.9	26	72	31	10	5.7	4.1	4.4	13	4.7
6	1.1	2.9	3.2	16	35	23	25	5.4	3.8	13	11	4.1
7	1.2	2.7	2.9	8.0	310	19	69	5.7	3.5	10	9.6	4.1
8	1.2	2.7	2.9	6.4	161	15	28	60	3.3	6.1	8.2	3.8
9	1.2	2.5	2.7	21	44	13	19	129	3.5	4.7	6.8	3.8
10	1.2	3.6	2.5	19	24	12	14	16	3.8	13	6.4	3.5
11	1.4	4.2	2.5	12	18	13	12	11	3.8	9.1	7.7	4.1
12	1.2	2.9	2.5	9.4	16	12	12	9.6	3.8	80	21	6.1
13	1.1	3.0	2.5	7.3	91	11	11	332	4.1	12	7.2	11
14	1.2	3.4	2.5	6.0	35	17	9.6	39	4.7	7.7	5.7	4.1
15	1.7	19	2.5	7.3	25	16	9.1	183	3.8	12	6.4	3.8
16	2.9	4.9	32	5.9	19	16	8.6	381	8.2	19	6.4	3.5
17	1.4	3.6	19	5.6	15	12	8.6	37	19	7.2	17	3.5
18	1.4	3.4	7.3	5.2	13	11	8.6	20	13	5.4	39	28
19	1.5	3.2	5.2	4.5	12	14	7.7	13	9.1	5.0	11	95
20	2.2	3.9	4.5	4.5	14	13	7.7	10	5.7	5.4	6.8	19
21	5.2	2.9	4.2	5.9	14	11	7.7	8.6	5.0	4.7	5.7	11
22	2.0	2.7	3.8	5.9	50	10	7.7	7.7	16	4.7	6.4	19
23	1.8	2.7	67	23	33	9.6	10	6.8	14	4.1	18	11
24	1.8	2.7	27	30	19	8.6	11	6.4	172	4.4	6.4	8.2
25	2.7	2.7	12	32	15	8.6	8.2	6.1	14	13	5.4	6.8
26	2.2	2.9	7.3	21	14	18	7.2	5.7	7.7	8.6	5.0	6.1
27	1.9	3.2	5.6	13	14	25	6.8	5.0	5.4	28	68	5.4
28	2.0	2.9	4.5	11	12	25	18	5.4	5.0	7.7	13	5.0
29	2.7	3.2	4.2	15	------	51	10	6.1	4.4	6.8	7.7	4.7
30	98	2.9	3.9	26	------	26	7.2	6.4	7.2	8.2	6.1	4.7
31	31	------	5.9	21	------	17	------	5.7	------	7.7	5.4	------
TOTAL	179.3	113.7	254.4	406.7	1,160	926.8	404.7	1,352.6	366.1	336.0	716.4	303.8
MEAN	5.78	3.79	8.21	13.1	41.4	29.9	13.5	43.6	12.2	10.8	23.1	10.1
MAX	98	19	67	32	310	307	69	381	172	80	305	95
MIN	1.0	2.5	2.5	4.5	12	8.6	6.8	5.0	3.3	4.1	5.0	3.5
CFSM	.36	.24	.51	.81	2.57	1.86	.84	2.71	.76	.67	1.43	.63
IN.	.41	.26	.59	.94	2.68	2.14	.94	3.13	.85	.78	1.66	.70

CAL YR 1970 TOTAL 3,660.9 MEAN 10.0 MAX 161 MIN 1.0 CFSM .62 IN 8.46
WTR YR 1971 TOTAL 6,520.5 MEAN 17.9 MAX 381 MIN 1.0 CFSM 1.11 IN 15.07

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2- 7	a1900	9.38	836	5-16	0230	10.12	868
3- 3	1100	8.05	578	6-24	0600	7.85	554
5-13	0830	9.59	786	8- 2	1900	10.71	972

a About

NOTE.--Indefinite stage-discharge relation or no gage-height record Oct. 1 to Feb. 7.

02143000 Henry Fork near Henry River, N. C.

LOCATION.--Lat 35°41'06", long 81°24'03", Catawba County, on left bank 450 ft downstream from bridge on Secondary Road 1124, at site of Old Link Ford, 1.2 miles downstream from Burke-Catawba County line, and 2 miles southeast of village of Henry River.

DRAINAGE AREA.--80 sq mi, approximately.

PERIOD OF RECORD.--July 1925 to November 1931, December 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is 891.0 ft above mean sea level. July 1925 to November 1931, at site 450 ft upstream at same datum.

AVERAGE DISCHARGE.--35 years (1925-31, 1942-71), 126 cfs (21.40 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,440 cfs Feb. 22 (gage height, 6.43 ft); minimum, 6.0 cfs Oct. 3 (gage height, 0.58 ft); minimum daily, 7.1 cfs Oct. 3.
Period of record: 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). The flood of July 16, 1916 reached a stage of about 23 ft at former site (discharge, 20,700 cfs).

REMARKS.--Records good. Occasionally, diurnal fluctuation and some regulation caused by mill above station. An average of about 2.0 cfs was diverted for water supply by town of Morganton and wasted into Catawba River.

REVISIONS (WATER YEARS).--WSP 952: 1928, 1930.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	240	77	90	83	168	140	123	100	153	173	42
2	41	286	75	84	74	173	143	101	95	182	191	50
3	7.1	184	74	85	87	354	137	107	94	116	124	53
4	8.0	155	73	125	91	377	130	103	91	94	103	53
5	39	126	71	1,090	194	254	128	101	91	85	116	61
6	152	110	71	333	280	211	151	103	85	99	91	54
7	40	100	69	204	269	193	171	108	84	97	85	54
8	48	93	69	159	470	172	161	105	82	104	77	53
9	11	87	69	144	382	159	147	99	91	90	74	49
10	12	164	70	131	224	159	138	93	87	87	69	47
11	51	189	69	120	172	161	131	92	91	89	79	52
12	52	142	70	113	151	149	128	129	85	106	87	67
13	159	130	69	107	483	148	127	436	80	83	70	55
14	54	101	67	103	486	161	123	212	107	78	64	49
15	60	76	65	102	263	189	120	263	103	72	61	46
16	9.0	77	150	96	202	216	119	649	103	70	60	47
17	25	108	167	95	171	181	120	265	87	67	68	46
18	46	100	114	95	155	159	114	183	143	63	91	126
19	53	96	98	91	146	169	112	152	154	66	99	154
20	54	104	90	81	146	160	111	137	111	79	74	87
21	213	103	88	86	138	149	115	129	100	65	66	77
22	98	93	84	92	824	144	120	119	103	65	62	97
23	70	90	149	96	843	140	126	113	91	62	83	85
24	62	86	199	100	318	134	128	111	134	73	68	71
25	90	83	145	104	230	133	113	110	95	90	59	64
26	84	82	120	98	209	149	108	106	86	78	58	61
27	172	82	105	90	203	145	105	101	82	84	59	58
28	63	81	97	83	180	171	186	113	80	111	57	56
29	56	79	92	89	------	186	138	135	75	91	60	55
30	1,090	78	88	92	------	172	120	127	175	121	69	52
31	439	------	93	93	------	155	------	111	------	119	44	------
TOTAL	3,452.1	3,525	2,937	4,471	7,474	5,591	3,910	4,836	2,985	2,839	2,541	1,921
MEAN	111	118	94.7	144	267	180	130	156	99.5	91.6	82.0	64.0
MAX	1,090	286	199	1,090	843	377	186	649	175	182	191	154
MIN	7.1	76	65	81	74	133	105	92	75	62	44	42
CFSM	1.39	1.48	1.18	1.80	3.34	2.25	1.63	1.95	1.24	1.15	1.03	.80
IN.	1.61	1.64	1.37	2.08	3.48	2.60	1.82	2.25	1.39	1.32	1.18	.89

CAL YR 1970 TOTAL 46,718.1 MEAN 128 MAX 5,710 MIN 7.1 CFSM 1.60 IN 21.72
WTR YR 1971 TOTAL 46,482.1 MEAN 127 MAX 1,090 MIN 7.1 CFSM 1.59 IN 21.61

PEAK DISCHARGE (BASE, 2,800 CFS).--No peak above base.

02143040 Jacob Fork at Ramsey, N. C.

LOCATION.--Lat 35°35'26", long 81°34'02", Burke County, on left bank 16 ft downstream from bridge on Secondary Road 1924, 0.6 mile downstream from Queens Creek, and 0.6 mile north of Ramsey.

DRAINAGE AREA.--25.4 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1960-61. October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,103.00 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 47.0 cfs (25.11 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,100 cfs Jan. 5 (gage height, 6.92 ft); minimum, 16 cfs Oct. 4, 5 (gage height, 1.83 ft).
Period of record: Maximum discharge, 4,520 cfs Aug. 9, 1970 (gage height, 16.92 ft); minimum, 7.3 cfs July 28, 29, 1966 (gage height, 1.67 ft).
Flood of August 1940 reached a stage of about 39 ft, from information by local resident. Flood of July 1916 reached a stage of about 19 ft, from information by North Carolina State Highway Commission.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	122	26	38	38	65	59	40	33	42	88	20
2	19	104	25	36	41	67	61	40	32	49	66	21
3	18	110	25	36	38	153	55	39	32	35	47	21
4	17	76	25	92	41	135	52	38	32	30	37	20
5	16	55	25	465	103	91	51	37	31	28	34	32
6	17	44	25	121	129	78	65	38	31	34	32	25
7	17	37	25	79	117	72	78	38	30	32	30	21
8	18	34	25	64	178	66	75	37	30	36	29	20
9	20	32	25	59	132	63	64	35	30	31	27	19
10	21	59	26	53	85	64	58	34	37	40	26	19
11	21	70	25	49	69	63	53	34	34	42	26	21
12	20	53	26	46	63	59	52	68	34	32	31	21
13	19	54	24	44	245	61	51	252	30	29	25	19
14	19	46	24	43	159	67	50	87	31	27	23	18
15	42	51	23	42	95	83	48	157	32	26	22	17
16	24	44	51	40	77	96	47	254	34	25	22	17
17	21	40	51	40	67	75	46	98	32	24	26	18
18	20	36	37	40	61	64	45	69	79	22	34	50
19	19	35	32	39	57	69	44	58	59	25	40	46
20	22	40	31	38	59	65	44	53	41	26	33	32
21	93	38	30	41	56	60	45	46	35	23	27	35
22	36	35	36	38	354	57	44	41	35	23	49	74
23	28	34	120	48	236	55	52	39	41	22	43	45
24	25	32	110	48	110	53	47	38	36	22	29	34
25	36	31	70	52	83	52	42	39	32	26	26	30
26	32	29	55	50	78	58	41	37	30	44	25	27
27	29	29	46	44	74	58	40	35	29	40	25	25
28	27	28	42	45	67	72	51	40	27	27	23	25
29	77	28	40	42	------	91	43	46	28	42	22	23
30	478	28	38	44	------	79	41	40	44	60	21	22
31	213	------	40	44	------	66	------	36	------	68	20	------
TOTAL	1,483	1,454	1,203	1,960	2,912	2,257	1,544	1,943	1,061	1,032	1,008	817
MEAN	47.8	48.5	38.8	63.2	104	72.8	51.5	62.7	35.4	33.3	32.5	27.2
MAX	478	122	120	465	354	153	78	254	79	68	88	74
MIN	16	28	23	36	38	52	40	34	27	22	20	17
CFSM	1.88	1.91	1.53	2.49	4.09	2.87	2.03	2.47	1.39	1.31	1.28	1.07
IN.	2.17	2.13	1.76	2.87	4.26	3.31	2.26	2.85	1.55	1.51	1.48	1.20

CAL YR 1970 TOTAL 17,425 MEAN 47.7 MAX 1,600 MIN 12 CFSM 1.88 IN 25.52
WTR YR 1971 TOTAL 18,674 MEAN 51.2 MAX 478 MIN 16 CFSM 2.02 IN 27.35

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-30	1300	5.10	645	2-22	1900	6.62	1,020
1- 5	0130	6.92	1,100				

02143500 Indian Creek near Laboratory, N. C.

LOCATION.--Lat 35°25'20", long 81°15'52", Lincoln County, on left bank 250 ft upstream from remains of Rudisill Mill dam, 0.5 mile upstream from bridge on Secondary Road 1252, 1.5 miles upstream from mouth, 1.5 miles south of Laboratory, and 3.5 miles south of Lincolnton.

DRAINAGE AREA.--68.4 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 736 ft (by barometer).

AVERAGE DISCHARGE.--20 years, 87.7 cfs (17.41 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,370 cfs Sept. 22 (gage height, 4.53 ft); minimum, 21 cfs Oct. 4, 5; minimum gage height, 0.80 ft Sept. 15-17.
Period of record: Maximum discharge, 8,450 cfs (revised) Aug. 10, 1970 (gage height, 10.61 ft); minimum, 4.6 cfs Oct. 8, 1954. Peak discharge of flood in October 1929 was 9,920 cfs; flood in July 1916, 7,840 cfs; flood in August 1940, 6,000 cfs.
Discharge based on computations of peak flow over dam 1 mile downstream, using information by local resident.
REVISIONS.--The maximum discharge for the water year 1970 has been revised to 8,450 cfs Aug. 10, 1970 (gage height, 10.61 ft), superseding figure published in WRD NC 1970.

REMARKS.--Records good. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	61	40	59	63	93	93	59	51	38	88	27
2	25	51	40	56	59	132	90	56	47	71	85	28
3	25	56	40	54	59	504	87	59	54	42	60	27
4	23	47	40	59	71	265	79	54	47	36	49	27
5	22	44	38	319	291	168	79	54	45	35	53	40
6	23	40	40	155	256	135	111	51	42	47	47	49
7	25	38	38	101	410	118	196	54	42	47	47	42
8	25	36	38	84	914	104	111	61	40	36	42	44
9	25	38	36	87	429	95	93	56	42	35	40	34
10	23	95	38	81	176	95	87	51	42	61	39	31
11	25	115	36	73	135	98	81	49	44	40	37	36
12	25	68	40	66	115	87	81	118	42	35	45	34
13	25	59	40	63	248	90	79	614	40	33	36	34
14	23	51	38	61	229	118	76	148	40	31	34	31
15	36	63	36	63	145	179	71	391	40	36	33	27
16	33	54	66	59	118	142	71	658	45	71	34	25
17	27	47	71	59	104	108	68	179	49	42	39	27
18	27	45	49	56	95	95	66	128	61	37	45	65
19	27	45	44	54	90	104	66	101	63	39	49	463
20	27	49	44	49	93	98	68	84	111	44	40	187
21	47	49	44	51	93	87	66	76	51	37	36	134
22	38	45	44	56	288	81	63	68	42	37	34	1,150
23	31	45	242	79	674	79	79	63	38	36	49	225
24	28	42	179	81	187	76	79	61	81	36	37	113
25	30	42	98	84	138	76	66	61	45	54	31	88
26	33	42	76	76	125	98	61	59	40	51	31	73
27	31	42	66	68	118	108	59	54	35	60	31	67
28	31	40	61	63	101	118	84	61	33	45	30	60
29	38	42	59	66	------	152	66	66	33	47	28	56
30	161	40	54	66	------	128	56	63	36	65	27	53
31	95	------	56	76	------	104	------	59	------	76	27	------
TOTAL	1,079	1,531	1,831	2,424	5,824	3,935	2,432	3,716	1,421	1,400	1,303	3,297
MEAN	34.8	51.0	59.1	78.2	208	127	81.1	120	47.4	45.2	42.0	110
MAX	161	115	242	319	914	504	196	658	111	76	88	1,150
MIN	22	36	36	49	59	76	56	49	33	31	27	25
CFSM	.51	.75	.86	1.14	3.04	1.86	1.19	1.75	.69	.66	.61	1.61
IN.	.59	.83	1.00	1.32	3.17	2.14	1.32	2.02	.77	.76	.71	1.79

CAL YR 1970 TOTAL 29,695 MEAN 81.4 MAX 4,350 MIN 17 CFSM 1.19 IN 16.15
WTR YR 1971 TOTAL 30,193 MEAN 82.7 MAX 1,150 MIN 22 CFSM 1.21 IN 16.42

PEAK DISCHARGE (BASE, 1,500 CFS).--No peak above base.

02144000 Long Creek near Bessemer City, N. C.

LOCATION.--Lat 35°18'23", long 81°14'03", Gaston County, on right bank 700 ft upstream from bridge on Secondary Road 1456, 2 miles northeast of Bessemer City limits, and 8.2 miles upstream from mouth.

DRAINAGE AREA.--31.4 sq mi.

PERIOD OF RECORD.--October 1952 to current year. Monthly discharge only for some periods, published in WSP 1723.

GAGE.--Water-stage recorder. Datum of gage is 706.1 ft above mean sea level.

AVERAGE DISCHARGE.--19 years, 33.1 cfs (14.30 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,830 cfs Sept. 22 (gage height, 6.67 ft); minimum, 5.3 cfs Oct. 6, 11 (gage height, 1.08 ft); minimum daily, 5.5 cfs Oct. 11.
Period of record: Maximum discharge, 5,290 cfs Nov. 19, 1957 (gage height, 8.26 ft), from rating curve extended above 2,100 cfs on basis of contracted-opening measurement of peak flow; minimum, 0.4 cfs Oct. 7, 1954; minimum daily, 0.8 cfs Oct. 7, 1954. Flood in July 1916 reached a stage of 26 ft at site on left bank 1,500 ft upstream, from information by local resident.

REMARKS.--Records good. Bessemer City diverts out of basin for water supply causing diurnal fluctuation at low flow; an average of 2.2 cfs was diverted during the year.

REVISIONS (WATER YEARS).--WSP 1723: 1959-60(M). WSP 1904: 1959-60.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	17	11	21	22	31	32	22	18	227	188	12
2	7.0	14	11	21	19	60	33	21	16	79	143	12
3	7.2	13	11	22	19	254	32	22	17	29	67	11
4	6.4	12	11	22	30	100	29	20	16	21	41	11
5	6.1	12	12	50	172	56	29	19	14	17	43	11
6	5.9	12	10	33	85	46	53	19	14	47	32	10
7	6.4	12	10	24	266	41	119	19	13	26	28	10
8	8.1	11	9.8	23	255	36	56	23	13	19	32	11
9	7.7	11	10	31	89	32	43	19	15	17	23	10
10	5.9	25	11	28	51	32	37	18	28	45	21	9.4
11	5.5	20	11	25	43	34	34	17	18	28	20	18
12	5.9	13	11	22	37	31	32	30	15	87	33	13
13	6.1	12	10	21	79	30	31	237	13	28	21	12
14	6.1	12	9.8	19	55	38	29	53	13	23	19	10
15	7.0	15	9.6	20	45	40	28	297	13	49	18	9.4
16	8.3	12	34	18	39	39	27	438	15	42	17	9.2
17	7.0	12	25	18	35	32	28	70	25	21	18	9.7
18	6.8	12	14	19	33	29	25	47	37	17	21	32
19	6.6	12	13	15	31	35	25	36	24	17	18	108
20	7.9	12	13	15	34	32	25	31	28	18	19	117
21	14	11	12	16	34	29	25	28	18	15	15	71
22	10	11	12	17	153	28	24	25	20	15	16	980
23	8.7	11	61	34	85	28	34	23	15	14	17	83
24	8.7	11	34	38	49	26	31	22	14	15	15	46
25	9.0	11	23	39	41	26	25	22	13	30	14	36
26	9.4	11	18	32	37	40	24	21	12	37	13	29
27	9.2	11	16	25	40	50	23	19	12	51	13	26
28	9.0	11	14	24	34	49	33	20	11	24	12	23
29	11	11	14	23	------	53	25	21	11	40	12	21
30	57	11	14	23	------	42	22	21	54	30	12	19
31	41	------	18	27	------	36	------	20	------	32	12	------
TOTAL	321.7	381	493.2	765	1,912	1,435	1,013	1,700	545	1,160	973	1,779.7
MEAN	10.4	12.7	15.9	24.7	68.3	46.3	33.8	54.8	18.2	37.4	31.4	59.3
MAX	57	25	61	50	266	254	119	438	54	227	188	980
MIN	5.5	11	9.6	15	19	26	22	17	11	14	12	9.2
CFSM	.33	.40	.51	.79	2.18	1.47	1.08	1.75	.58	1.19	1.00	1.89
IN.	.38	.45	.58	.91	2.27	1.70	1.20	2.01	.65	1.37	1.15	2.11

CAL YR 1970 TOTAL 9,101.1 MEAN 24.9 MAX 215 MIN 5.5 CFSM .79 IN 10.78
WTR YR 1971 TOTAL 12,478.6 MEAN 34.2 MAX 980 MIN 5.5 CFSM 1.09 IN 14.78

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-15	2100	5.30	1,010	9-22	1100	6.67	1,830
7- 1	0100	5.23	970				

02145000 South Fork Catawba River at Lowell, N. C.

LOCATION.--Lat 35°17'08", long 81°06'04", Gaston County, on right bank 50 ft north of private mill road, 120 ft downstream from Housers Creek, 1.0 mile north of Lowell, 2.5 miles upstream from bridge on Interstate Highway 85, and 3.0 miles downstream from Long Creek.

DRAINAGE AREA.--630 sq mi.

PERIOD OF RECORD.--January 1942 to September 1970 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 603.10 ft above mean sea level.

AVERAGE DISCHARGE.--29 years, 796 cfs (17.17 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,410 cfs May 16 (gage height, 9.70 ft); minimum, 54 cfs Oct. 7 (gage height, 1.11 ft); minimum daily, 157 cfs Oct. 6.
Period of record: Maximum discharge, 24,800 cfs Aug. 11, 1970 (gage height, 17.38 ft); minimum, 25 cfs Sept. 27, Oct. 4, 1954 (gage height, 0.75 ft); minimum daily 31 cfs Oct. 8, 1954.
The flood of Aug. 15, 1940 reached a stage of 21.33 ft, from floodmarks (discharge, 34,000 cfs). Depth of flow over dam during the July 1916 flood at High Shoals 11 miles upstream was about 1 ft higher than that for August 1940, from information by local resident.

REMARKS.--Records good. 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 17.4 cfs from Long Creek and 11.9 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).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	258	1,850	412	552	555	910	833	674	572	987	815	299
2	336	990	400	550	507	1,040	784	619	530	844	1,530	249
3	269	856	397	529	488	2,390	769	591	511	615	1,170	311
4	234	742	398	539	558	2,430	730	546	489	547	713	240
5	227	658	386	1,590	1,400	1,660	702	542	492	495	615	275
6	157	575	387	2,270	1,870	1,250	827	526	468	633	567	304
7	207	529	391	1,900	2,200	1,080	1,220	529	425	572	529	349
8	337	496	365	996	4,220	945	982	589	427	501	489	400
9	199	462	353	886	3,050	880	856	652	460	438	434	334
10	235	489	365	824	1,780	839	793	563	499	1,060	417	319
11	204	820	362	737	1,170	839	738	523	495	634	410	294
12	209	753	369	678	975	819	713	845	467	974	543	374
13	231	621	368	641	1,320	788	695	3,950	469	659	464	401
14	236	586	360	611	1,940	879	678	2,190	433	512	412	363
15	387	607	354	595	1,740	914	647	1,710	473	497	371	266
16	514	545	459	591	1,190	1,060	637	5,270	580	785	337	281
17	373	505	627	564	988	923	641	2,420	551	490	365	235
18	273	477	600	548	881	840	630	1,390	569	420	412	344
19	255	461	509	534	815	822	622	1,030	578	386	452	1,970
20	292	473	465	518	819	872	613	858	667	405	481	1,940
21	340	492	463	501	811	796	602	761	562	405	417	927
22	478	482	440	513	1,170	740	611	698	904	386	390	4,020
23	488	455	974	621	3,470	725	653	645	598	360	521	2,280
24	398	437	1,310	685	3,370	704	731	620	623	364	472	961
25	357	428	960	748	2,310	682	661	612	524	459	389	732
26	425	429	745	675	1,200	782	594	605	494	507	345	613
27	407	426	640	606	1,140	872	575	570	470	795	347	536
28	365	419	595	561	1,010	933	694	570	412	571	339	486
29	382	422	550	542	------	1,010	842	648	385	578	331	449
30	1,150	419	530	548	------	1,050	675	660	426	536	295	423
31	2,160	------	530	603	------	910	------	638	------	678	298	------
TOTAL	12,383	17,904	16,064	23,256	42,947	31,384	21,748	33,044	15,553	18,093	15,670	20,975
MEAN	399	597	518	750	1,534	1,012	725	1,066	518	584	505	699
MAX	2,160	1,850	1,310	2,270	4,220	2,430	1,220	5,270	904	1,060	1,530	4,020
MIN	157	419	353	501	488	682	575	523	385	360	295	235
CFSM	.63	.95	.82	1.19	2.43	1.61	1.15	1.69	.82	.93	.80	1.11
IN.	.73	1.06	.95	1.37	2.54	1.85	1.28	1.95	.92	1.07	.93	1.24

CAL YR 1970 TOTAL 266,238 MEAN 729 MAX 21,700 MIN 157 CFSM 1.16 IN 15.72
WTR YR 1971 TOTAL 269,021 MEAN 737 MAX 5,270 MIN 157 CFSM 1.17 IN 15.89

PEAK DISCHARGE (BASE, 8,000 CFS).--No peak above base.

02146300 Irwin Creek near Charlotte, N. C.

LOCATION.--Lat 35°11'51", long 80°54'19", Mecklenburg County, on left bank at sewage-disposal plant of city of Charlotte, 2,200 ft upstream from Southern Railway bridge, 0.7 mile upstream from Taggart Creek, 4.2 miles southwest of city hall, Charlotte.

DRAINAGE AREA.--30.5 sq mi.

PERIOD OF RECORD.--May 1962 to current year. Prior to October 1963, published as Sugar (Irwin) Creek at Charlotte.

GAGE.--Water-stage recorder. Datum of gage is 591.53 ft above mean sea level (city of Charlotte bench mark).

AVERAGE DISCHARGE.--9 years, 36.8 cfs (16.37 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,450 cfs June 21 (gage height, 13.33 ft); minimum, 5.5 cfs Oct. 18, 19, 20 (gage height, 0.61 ft); minimum daily, 6.1 cfs Oct. 18.
Period of record: Maximum discharge, 3,450 cfs June 21, 1971 (gage height, 13.33 ft); minimum, 3.9 cfs Aug. 7, 8, 1966. Maximum stage known since at least 1927, about 17.3 ft Apr. 6, 1936, at site 400 ft downstream, from information by plant employee. Peak may have been affected by failure of Lakewood Dam 5 miles upstream. Flood of Jan. 6, 1962 reached a stage of 14.32 ft, from floodmarks (discharge 4,120 cfs). Flood of Apr. 11, 1962 reached a stage of 15.18 ft, from floodmarks (discharge, 4,740 cfs, on basis of slope-area measurement of peak flow).

REMARKS.--Records fair. Fluctuation at low flow caused by wash water, from city of Charlotte water filtration plants and industry, diverted into the basin from the Catawba River (city water supply). Creek channel improved by dredging in 1917 and maintained by Mecklenburg County Drainage Commission to present time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	23	11	25	18	48	24	15	15	98	70	18
2	6.9	19	11	18	16	170	28	14	14	128	73	17
3	6.7	17	11	15	19	710	20	15	14	23	24	15
4	7.1	23	11	16	119	125	18	14	14	18	20	16
5	8.2	13	11	201	265	55	26	15	13	55	40	14
6	8.1	12	10	37	65	41	99	19	13	73	30	14
7	8.0	12	11	23	608	34	192	16	13	32	20	14
8	8.4	11	11	25	200	30	52	45	13	21	19	14
9	7.6	12	11	84	71	27	32	105	14	18	17	15
10	6.8	38	11	29	40	32	24	31	18	235	15	16
11	7.9	14	11	25	34	27	21	29	14	34	17	62
12	7.5	12	10	19	31	22	19	37	13	56	19	201
13	8.2	12	9.8	19	151	31	20	1,000	17	23	16	51
14	8.2	58	10	16	50	31	18	87	16	28	15	19
15	18	63	11	33	34	41	17	308	14	86	15	17
16	9.5	16	234	15	28	28	18	547	36	64	15	15
17	6.7	14	44	14	25	21	16	129	55	22	135	16
18	6.1	13	21	15	21	18	16	70	243	16	95	231
19	6.6	13	15	14	20	43	16	46	31	30	26	182
20	69	17	13	14	26	21	34	37	111	17	18	49
21	33	11	15	14	46	17	17	33	416	16	15	31
22	9.3	11	14	58	199	17	17	28	275	15	58	26
23	8.8	12	135	77	66	18	69	24	78	15	250	22
24	7.5	11	30	137	35	17	22	19	211	15	29	20
25	46	12	16	74	27	19	16	17	36	70	22	17
26	9.5	11	14	58	26	118	16	17	23	23	22	16
27	7.8	10	14	27	27	49	16	16	19	26	248	16
28	8.0	10	14	20	18	36	98	24	16	22	30	17
29	24	10	15	18	------	131	21	21	16	103	22	15
30	450	11	17	51	------	46	17	17	81	65	18	16
31	84	------	53	28	------	30	------	15	------	23	18	------
TOTAL	911.0	521	824.8	1,219	2,285	2,053	1,019	2,810	1,862	1,470	1,431	1,192
MEAN	29.4	17.4	26.6	39.3	81.6	66.2	34.0	90.6	62.1	47.4	46.2	39.7
MAX	450	63	234	201	608	710	192	1,000	416	235	250	231
MIN	6.1	10	9.8	14	16	17	16	14	13	15	15	14
CFSM	.96	.57	.87	1.29	2.68	2.17	1.11	2.97	2.04	1.55	1.51	1.30
IN.	1.11	.64	1.01	1.49	2.79	2.50	1.24	3.43	2.27	1.79	1.75	1.45

CAL YR 1970 TOTAL 9,885.3 MEAN 27.1 MAX 450 MIN 6.1 CFSM .89 IN 12.06
WTR YR 1971 TOTAL 17,597.8 MEAN 48.2 MAX 1,000 MIN 6.1 CFSM 1.58 IN 21.46

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-30	1600	8.95	1,600	5-16	0030	9.25	1,700
2- 7	1515	10.81	2,270	6-21	2230	13.33	3,450
3- 3	0645	9.80	1,890	8-23	0030	8.41	1,440
5-13	a0400	13.08	3,300	9-11	2400	7.76	1,250

a About

02146450 Briar Creek at Sharon Road, Charlotte, N. C.

LOCATION.--Lat 35°10'47", long 80°49'46", Mecklenburg County, on right bank at upstream side of bridge on Sharon Road (Secondary Road 3600), 2.4 miles upstream from mouth, and 3.0 miles south of city hall, Charlotte.

DRAINAGE AREA.--18.5 sq mi.

PERIOD OF RECORD.--April 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 605.06 ft (city of Charlotte bench mark).

AVERAGE DISCHARGE.--9 years, 18.5 cfs (13.55 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,220 cfs May 13 (gage height, 11.79 ft); minimum, 0.70 cfs Oct. 4; minimum gage height, 1.27 ft Oct. 4, 8, 9, 10.
Period of record: Maximum discharge, 2,260 cfs Apr. 11, 1962 (gage height, 11.9 ft, from outside floodmarks); minimum, 0.70 cfs Oct. 4, 1970; minimum gage height, 1.27 ft Oct. 4, 8, 9, 10, 1970.
Flood of Jan. 6, 1962 reached a stage of 10.1 ft, from floodmarks (discharge 1,580 cfs).

REMARKS.--Records good. Creek channel improved by dredging in 1914 and maintained by the Mecklenburg County Drainage Commission to present time. The drainage basin is urban and has an impervious area of 10%.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	7.5	3.0	10	9.3	22	13	6.9	6.1	46	59	6.2
2	1.1	14	3.0	7.8	7.4	98	19	6.2	5.6	90	43	5.9
3	.95	16	2.9	6.0	8.6	610	14	6.3	5.6	11	13	5.6
4	.82	6.2	3.1	5.6	62	68	11	6.2	5.4	8.3	10	6.6
5	.85	4.1	2.5	70	134	26	16	5.9	5.1	10	18	6.0
6	1.0	3.2	2.6	11	26	18	77	6.9	4.8	53	8.8	4.8
7	1.1	2.8	2.7	6.9	343	16	131	7.1	4.8	14	12	5.6
8	1.0	2.6	2.6	11	102	13	24	108	20	11	7.7	4.9
9	1.0	2.5	2.7	39	32	12	16	58	35	7.7	6.9	4.8
10	.98	21	2.9	13	17	14	13	9.7	26	103	6.7	11
11	.95	6.3	2.9	9.0	13	14	11	7.3	6.8	12	24	12
12	1.1	3.4	2.7	6.7	12	11	11	70	5.4	19	18	106
13	1.0	2.9	2.6	6.0	77	16	11	868	10	9.2	7.2	37
14	1.3	3.5	2.7	5.5	22	19	11	31	7.0	12	6.3	7.2
15	13	20	2.4	15	15	29	11	271	5.2	46	6.1	5.9
16	6.0	3.6	124	5.9	12	15	12	289	14	43	6.4	5.5
17	1.2	3.2	14	5.3	11	11	10	29	28	9.6	71	6.3
18	1.1	3.1	5.8	5.0	9.8	9.8	8.5	18	84	7.1	46	106
19	1.3	2.9	4.4	4.6	9.4	25	8.9	14	14	16	11	72
20	41	7.4	4.1	4.5	16	12	11	11	25	8.4	7.8	20
21	19	3.7	3.7	4.9	23	9.6	9.4	9.8	93	6.9	6.7	99
22	2.4	2.7	3.5	36	169	9.3	8.6	8.4	497	6.6	9.2	22
23	1.8	2.7	69	42	36	8.9	59	7.6	68	6.1	29	11
24	1.5	2.5	10	77	17	8.2	11	7.4	134	10	7.2	8.7
25	24	2.6	5.7	35	13	9.2	7.4	7.2	19	27	6.2	7.1
26	2.9	2.5	4.4	27	13	72	6.9	7.1	12	11	6.5	6.5
27	1.9	2.9	4.0	11	16	30	6.4	6.5	9.4	25	99	6.5
28	1.8	2.7	3.8	8.3	10	20	102	19	8.3	35	8.7	6.4
29	5.7	2.7	5.1	7.0	------	77	10	7.7	7.5	129	6.5	7.0
30	152	3.0	7.2	38	------	22	7.5	7.4	18	151	6.5	8.0
31	79	------	24	21	------	15	------	6.6	------	36	6.2	------
TOTAL	369.85	164.2	334.0	555.0	1,235.5	1,340.0	667.6	1,924.2	1,184.0	979.9	580.6	621.5
MEAN	11.9	5.47	10.8	17.9	44.1	43.2	22.3	62.1	39.5	31.6	18.7	20.7
MAX	152	21	124	77	343	610	131	868	497	151	99	106
MIN	.82	2.5	2.4	4.5	7.4	8.2	6.4	5.9	4.8	6.1	6.1	4.8
CFSM	.64	.30	.58	.97	2.38	2.34	1.21	3.36	2.14	1.71	1.01	1.12
IN.	.74	.33	.67	1.12	2.48	2.69	1.34	3.87	2.38	1.97	1.17	1.25

CAL YR 1970 TOTAL 4,186.45 MEAN 11.5 MAX 212 MIN .82 CFSM .62 IN 8.42
WTR YR 1971 TOTAL 9,956.35 MEAN 27.3 MAX 868 MIN .82 CFSM 1.48 IN 20.02

PEAK DISCHARGE (BASE, 900 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2- 7	1515	8.91	1,220	5-16	0015	8.86	1,210
3- 3	0715	9.75	1,480	6-22	0200	9.18	1,300
5-13	0530	11.79	2,220	7-29	2300	8.41	1,080

02146500 Little Sugar Creek near Charlotte, N. C.

LOCATION.--Lat 35°09'13", long 80°51'18", Mecklenburg County, on right bank 10 ft upstream from bridge on Tyvola Road at sewage-disposal plant of city of Charlotte, 1,500 ft downstream from Briar Creek, and 4.8 miles south of city hall, Charlotte.

DRAINAGE AREA.--41.0 sq mi.

PERIOD OF RECORD.--July 1924 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 568.58 ft above mean sea level (city of Charlotte bench mark) Prior to Apr. 26, 1927, nonrecording gage and Apr. 26, 1927 to Sept. 30, 1958, water-stage recorder at site 1,000 ft upstream at datum 2.7 ft higher.

AVERAGE DISCHARGE.--47 years, 45.6 cfs (15.10 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,190 cfs May 13 (gage height, 14.53 ft); minimum, 2.3 cfs Oct. 4, 5 (gage height, 1.96 ft); minimum daily, 2.4 cfs Oct. 5.
Period of record: Maximum discharge, 8,370 cfs Apr. 6, 1936 (gage height, 16.2 ft, from floodmarks at site and datum then in use), from rating curve extended above 2,600 cfs on basis of slope-area and contracted-opening measurements of peak flow at gage heights 10.42, 11.47, 12.00, and 13.10 ft; minimum, 1.2 cfs Sept. 27, 1954.

REMARKS.--Records good. At times small amounts of cooling and wash water, diverted into the basin from Catawba River through city of Charlotte storm sewers. Since 1911 the creek channel has been dredged and improved. The drainage area is urban, within the city of Charlotte, and has an impervious area of 14.6%.

REVISIONS (WATER YEARS).--WSP 1052: 1939-44, WSP 1503: 1924-27(M), 1928-30, 1931(M), 1932-34. WSP 1723. Drainage area. WSP 1904: 1959-61.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	19	6.9	28	22	52	24	17	12	160	113	12
2	3.4	30	6.6	20	17	216	39	14	11	233	125	12
3	3.1	34	6.4	13	21	1,240	27	14	11	24	28	11
4	2.7	16	6.6	13	174	128	21	13	11	18	21	12
5	2.4	8.7	6.0	207	296	51	33	12	10	32	93	13
6	3.2	6.9	5.9	28	58	38	156	14	10	170	21	9.7
7	3.3	6.5	5.6	17	840	31	225	19	9.1	32	35	11
8	2.9	5.9	5.6	28	213	26	46	176	31	23	18	9.6
9	2.9	5.7	5.7	108	55	23	32	163	147	17	15	9.2
10	2.9	59	6.0	30	29	29	28	21	83	298	14	20
11	2.9	17	6.0	21	24	29	25	16	20	27	58	42
12	2.7	7.6	6.0	16	22	21	24	136	12	51	53	383
13	2.9	6.7	5.7	14	148	34	22	1,730	24	20	16	116
14	3.1	15	5.4	13	39	43	21	57	19	32	13	19
15	24	58	5.5	45	33	63	19	533	11	106	12	14
16	15	8.4	339	14	29	30	19	545	31	109	14	12
17	3.6	7.2	45	12	25	21	19	55	79	21	180	13
18	3.1	7.2	15	11	21	19	17	32	243	16	121	373
19	2.9	6.9	11	10	20	58	17	26	33	49	24	153
20	121	20	9.3	9.4	34	25	30	22	53	20	18	48
21	55	10	8.5	9.9	60	20	25	21	353	15	15	116
22	6.8	6.8	8.1	94	388	19	19	18	961	14	19	45
23	4.6	6.8	196	110	72	18	110	16	139	13	113	22
24	4.1	6.1	27	189	34	16	27	15	298	39	18	19
25	70	6.2	13	80	27	19	17	15	38	93	14	16
26	8.3	6.8	10	67	27	176	15	15	24	29	20	14
27	4.9	6.5	8.9	24	35	64	14	13	19	54	251	14
28	4.4	6.4	8.6	19	21	40	182	36	17	43	20	13
29	19	6.4	12	17	------	164	26	18	15	403	14	12
30	459	6.5	16	114	------	43	19	16	52	296	13	13
31	162	------	68	52	------	28	------	14	------	78	13	------
TOTAL	1,009.4	414.2	885.3	1,433.3	2,784	2,784	1,298	3,812	2,776.1	2,535	1,502	1,576.5
MEAN	32.6	13.8	28.6	46.2	99.4	89.8	43.3	123	92.5	81.8	48.5	52.6
MAX	459	59	339	207	840	1,240	225	1,730	961	403	251	383
MIN	2.4	5.7	5.4	9.4	17	16	14	12	9.1	13	12	9.2
CFSM	.80	.34	.70	1.13	2.42	2.19	1.06	3.00	2.26	2.00	1.18	1.28
IN.	.92	.38	.80	1.30	2.53	2.53	1.18	3.46	2.52	2.30	1.36	1.43

CAL YR 1970 TOTAL 10,559.9 MEAN 28.9 MAX 496 MIN 2.4 CFSM .70 IN 9.58
WTR YR 1971 TOTAL 22,809.8 MEAN 62.5 MAX 1,730 MIN 2.4 CFSM 1.52 IN 20.70

PEAK DISCHARGE (BASE, 2,100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2- 7	1415	10.86	3,170	5-16	0030	9.77	2,560
3- 3	0615	11.72	3,610	6-22	0100	11.22	3,350
5-13	0200	14.53	5,190	7-29	2230	11.20	3,340

02146600 McAlpine Creek at Sardis Road near Charlotte, N. C.

LOCATION.--35°08'13", long 80°46'06", Mecklenburg County, near left bank on downstream end of bridge pier at Sardis Road (Secondary Road 3356), 1.7 miles downstream from Irvins Creek, and 7 miles southeast of city hall, Charlotte.

DRAINAGE AREA.--38.3 sq mi.

PERIOD OF RECORD.--April 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 553.39 ft above mean sea level (city of Charlotte bench mark).

AVERAGE DISCHARGE.--9 years, 32.4 cfs (11.47 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,970 cfs Mar. 3 (gage height, 12.86 ft); minimum 0.90 cfs Oct. 4, 5, 7, 8, 9, 14; minimum gage height, 0.87 ft Oct. 14.
Period of record: Maximum discharge, 3,990 cfs Apr. 11, 1962 (gage height, 13.82 ft); minimum 0.60 cfs Sept. 26, Oct. 6, 1968.
Flood of Jan. 6, 1962 reached a stage of about 14.0 ft, from floodmarks (discharge 4,150 cfs).

REMARKS.--Records good. Diurnal fluctuation at low flow probably caused by two small sewage treatment plants diverting water into the basin from the Catawba River (city water supply). Creek channel improved by dredging in 1917 and maintained by the Mecklenburg County Drainage Commission to present time. This drainage basin is adjacent to the City of Charlotte. In 1962 it had an impervious area of 2.1%. The basin is undergoing continuing urbanization.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	15	4.6	24	36	24	28	17	12	30	160	7.4
2	1.7	9.8	4.5	23	23	142	29	15	9.1	74	103	7.2
3	1.6	11	4.5	18	20	1,400	28	14	8.5	18	32	7.4
4	1.4	5.9	4.6	17	85	217	23	12	7.9	13	22	6.9
5	1.4	4.9	4.2	293	335	81	22	11	7.5	12	33	7.9
6	1.4	4.4	4.2	54	107	51	92	11	6.9	49	19	6.8
7	1.3	4.2	4.1	24	628	38	198	10	6.6	17	18	6.6
8	1.4	4.3	4.3	20	400	28	67	39	6.7	14	16	6.1
9	1.4	4.0	4.3	74	129	25	38	130	9.2	9.7	12	6.0
10	1.3	9.3	4.3	50	57	24	29	25	15	150	11	11
11	1.3	9.1	7.9	30	36	26	24	17	9.0	21	13	18
12	1.4	5.5	5.7	20	29	23	22	23	7.3	19	15	71
13	1.3	4.9	4.5	16	121	25	21	588	8.8	14	10	52
14	1.3	5.3	4.3	14	60	71	19	83	8.6	14	8.5	13
15	1.7	15	4.1	41	40	65	17	298	6.7	84	8.6	9.1
16	3.2	7.1	133	21	30	52	17	553	7.0	90	8.6	7.8
17	2.3	5.5	42	16	26	29	16	84	15	20	106	8.1
18	1.6	5.0	14	14	23	23	15	41	100	13	126	75
19	1.7	5.7	9.7	12	22	29	15	28	27	35	28	89
20	9.6	6.1	8.3	11	23	27	14	22	75	19	18	23
21	13	5.7	7.7	10	32	21	19	17	76	12	14	20
22	3.8	4.8	7.5	36	121	20	17	14	772	10	11	21
23	2.6	5.0	154	96	82	19	44	13	84	8.8	15	14
24	2.3	4.6	31	199	37	17	30	13	677	8.4	11	12
25	9.6	4.3	16	135	29	18	19	12	55	9.2	9.1	11
26	4.5	4.3	12	95	27	71	16	11	29	11	8.6	9.3
27	2.9	4.3	12	34	35	93	15	10	21	10	43	8.6
28	2.4	4.4	11	23	26	69	114	16	17	23	12	8.0
29	2.5	4.5	10	19	------	168	32	15	12	211	9.3	8.0
30	71	4.8	10	82	------	71	20	13	48	457	8.1	7.8
31	86	------	20	114	------	37	------	12	------	177	7.6	------
TOTAL	240.8	188.7	568.3	1,625	2,619	3,004	1,060	2,567	2,144.8	1,653.1	916.4	559.0
MEAN	7.77	6.29	18.3	52.4	93.5	96.9	35.3	82.8	71.5	53.3	29.6	18.6
MAX	86	15	154	293	628	1,400	198	988	772	457	160	89
MIN	1.3	4.0	4.1	10	20	17	14	10	6.6	8.4	7.6	6.0
CFSM	.20	.16	.48	1.37	2.44	2.53	.92	2.16	1.87	1.39	.77	.49
IN.	.23	.18	.55	1.58	2.54	2.92	1.03	2.49	2.08	1.61	.89	.54

CAL YR 1970 TOTAL 6,777.9 MEAN 18.6 MAX 354 MIN 1.3 CFSM .49 IN 6.58
WTR YR 1971 TOTAL 17,146.1 MEAN 47.0 MAX 1,400 MIN 1.3 CFSM 1.23 IN 16.65

PEAK DISCHARGE (BASE, 1,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2- 7	1630	10.92	1,970	6-22	0345	12.01	2,500
3- 3	1015	12.86	2,970	6-24	0415	11.27	2,140
5-13	0615	12.14	2,570	7-29	2400	10.46	1,780
5-16	0115	10.11	1,640				

02146700 McMullen Creek at Sharon View Road near Charlotte, N. C.

LOCATION.--Lat 35°08'26", long 80°49'13", Mecklenburg County, on right bank 154 ft downstream from culvert at Sharon View Road (Secondary Road 3673), 3.3 miles south of Queens College, Charlotte, and 6.9 miles upstream from mouth. Prior to Oct. 13, 1970, at site 237 ft upstream.

DRAINAGE AREA.--6.98 sq mi.

PERIOD OF RECORD.--April 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 590.91 ft above mean sea level (city of Charlotte bench mark). Prior to Oct. 13, 1970, at site 237 ft upstream at datum 2.00 ft higher.

AVERAGE DISCHARGE.--9 years, 5.84 cfs (11.36 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,020 cfs May 13 (gage height, 9.21 ft); no flow Oct. 8, 27, 28 (result of upstream construction).
Period of record: Maximum discharge, 1,240 cfs Apr. 11, 1962 (gage height, 8.15 ft in gage well, 8.51 ft outside gage, site and datum then in use; no flow Aug. 31, Sept. 1, 2, 1962, Sept. 19-23, 1963, Sept. 3, 4, Oct. 17, 1966, Oct. 5, 1968, Oct. 8, 27, 28, 1970.
Flood of Jan. 6, 1962 reached a stage of 7.5 ft, former site and datum, from floodmarks (discharge, 1,040 cfs).

REMARKS.--Records fair. Occasional temporary and slight fluctuation during low flow from city of Charlotte sewage pump station and a small sewage treatment plant diverting water into the basin from Catawba River (city water supply). Creek channel improved by dredging in 1928. Some regulation at times in period October to December 1970 as a result of culvert construction 154 ft upstream. This drainage basin drains the eastern part of the City of Charlotte. In 1962 it had an impervious area of 6.3% and has increased somewhat since then.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	1.5	.37	4.0	4.0	3.6	2.9	1.5	.71	6.4	24	.61
2	.18	2.7	.46	2.5	2.3	38	4.7	1.8	.65	25	11	.61
3	.05	4.5	.48	1.6	2.3	277	3.3	2.0	.58	1.8	2.9	.52
4	.03	.60	.54	1.3	35	23	2.1	1.4	.53	1.1	1.9	.58
5	.03	.39	.22	39	74	6.9	3.0	1.1	.58	1.4	9.9	.51
6	.02	.32	.13	3.9	11	4.8	22	1.5	.57	18	2.0	.46
7	.01	.15	.24	1.7	164	3.8	40	1.3	.52	2.0	3.2	.59
8	0	.20	.22	3.0	55	3.0	6.9	4.7	.51	1.2	1.8	.47
9	.02	.32	.18	18	11	2.4	4.0	7.6	7.9	.86	1.1	.40
10	.01	5.5	.15	5.6	4.9	2.7	3.0	1.3	7.9	50	.96	6.3
11	.01	1.7	.17	2.6	3.4	3.1	2.4	.90	1.1	2.4	1.1	13
12	.01	.47	.17	1.7	3.0	2.0	2.0	23	.69	2.9	2.1	41
13	.09	.34	.20	1.3	33	1.6	1.9	255	.82	1.3	.85	12
14	.02	.29	.44	1.1	8.0	2.1	1.7	7.4	1.3	3.4	.69	1.5
15	.16	3.2	.20	8.8	5.3	9.0	2.1	99	.57	17	.63	.90
16	2.1	.51	46	2.2	3.7	3.0	2.0	82	.67	8.7	.74	.64
17	.14	.27	4.3	1.5	2.6	2.5	1.5	6.0	6.1	1.7	33	1.5
18	.08	.22	1.2	1.4	2.2	2.0	1.4	2.6	27	1.1	11	50
19	.02	.20	.73	.99	2.0	8.0	1.3	1.7	2.8	11	2.1	18
20	13	.78	.60	.83	3.4	2.6	1.7	1.4	23	2.1	1.4	7.0
21	6.2	1.1	.59	.77	8.5	1.8	5.7	1.1	7.3	.99	1.4	1.9
22	.64	.45	.52	16	56	1.7	2.2	.93	216	.84	1.4	2.5
23	.17	.36	42	22	11	1.6	17	.75	28	.72	1.8	1.4
24	.09	.21	2.9	46	4.7	1.5	3.9	.63	29	.84	1.6	1.2
25	4.4	.27	1.3	15	3.2	1.5	1.8	.74	4.1	2.3	.77	.90
26	.67	.22	.78	13	3.0	23	1.4	.64	2.0	2.2	.72	.79
27	0	.22	.69	3.6	5.1	16	1.4	.78	1.3	.78	23	.78
28	0	.23	.69	2.3	2.5	7.8	31	3.9	1.1	1.5	1.3	.72
29	.44	.28	.62	1.8	------	38	3.7	1.6	.87	127	.85	.59
30	42	.34	1.2	38	------	7.4	1.9	1.0	3.3	137	.66	.54
31	23	------	7.8	16	------	3.9	------	.92	------	14	.60	------
TOTAL	93.65	27.84	116.09	277.49	524.1	505.3	179.9	516.19	377.47	447.53	146.47	167.91
MEAN	3.02	.93	3.74	8.95	18.7	16.3	6.00	16.7	12.6	14.4	4.72	5.60
MAX	42	5.5	46	46	164	277	40	255	216	137	33	50
MIN	0	.15	.13	.77	2.0	1.5	1.3	.63	.51	.72	.60	.40
CFSM	.43	.13	.54	1.28	2.68	2.34	.86	2.39	1.81	2.06	.68	.80
IN.	.50	.15	.62	1.48	2.79	2.69	.96	2.75	2.01	2.39	.78	.89

CAL YR 1970 TOTAL 1,104.70 MEAN 3.03 MAX 70 MIN 0 CFSM .43 IN 5.89
WTR YR 1971 TOTAL 3,379.94 MEAN 9.26 MAX 277 MIN 0 CFSM 1.33 IN 18.01

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2- 7	1500	7.47	690	6-22	0330	8.62	909
3- 3	0630	8.43	872	7-29	2115	8.41	868
5-13	0415	9.21	1,020				

02146900 Twelve Mile Creek near Waxhaw, N. C.

LOCATION.--Lat 34°57'06", long 80°45'23", Union County, on left bank 90 ft upstream from bridge on State Highway 16, 680 ft downstream from West Fork Twelve Mile Creek, and 2.5 miles north of Waxhaw.

DRAINAGE AREA.--72.4 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1949-60, October 1960 to current year.

GAGE.--Water stage recorder. Datum of gage is 489.04 ft above mean sea level. Prior to Mar. 13, 1962, water-stage recorder at site 70 ft downstream at same datum.

AVERAGE DISCHARGE.--11 years, 62.2 cfs (11.66 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,980 cfs Mar. 3 (gage height, 14.96 ft); no flow Oct. 7-15.
Period of record: Maximum discharge, 4,350 cfs Oct. 16, 1964 (gage height 16.94 ft); no flow Oct. 6, 1968, Oct. 7-15, 1970.
Maximum stage known since at least 1900, 23.6 ft Sept. 7, 1949, from floodmarks. No flow observed on Oct. 6, 1954.

REMARKS.--Records good except those for periods of indefinite stage-discharge relation, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	62	3.1	31	83	49	65	27	20	13	404	6.8
2	.09	23	3.0	46	43	411	57	24	17	65	68	6.5
3	.07	14	3.0	30	34	1,980	64	28	14	19	28	6.0
4	.05	9.0	2.9	23	86	1,010	50	25	13	18	20	5.7
5	.03	6.4	2.8	275	545	158	45	21	12	17	16	14
6	.02	5.1	2.8	140	287	102	194	18	11	66	22	8.4
7	0	4.5	2.7	51	588	78	207	17	9.9	90	62	6.2
8	0	4.0	2.7	33	1,310	60	113	23	9.1	118	25	5.2
9	0	3.4	2.6	226	432	50	68	42	8.9	26	13	4.8
10	0	6.4	2.6	184	122	45	53	24	8.9	329	9.8	4.8
11	0	38	2.6	75	80	44	43	18	9.6	46	15	7.8
12	0	14	2.6	48	64	40	39	17	9.0	42	22	9.8
13	0	9.0	2.5	35	123	37	37	718	8.4	24	10	31
14	0	6.9	2.5	28	101	105	34	122	7.9	18	7.6	13
15	0	10	2.5	180	67	118	30	144	11	56	8.4	8.1
16	25	12	144	142	54	162	29	1,030	30	24	17	6.2
17	5.3	8.0	196	127	45	63	28	150	56	18	80	6.2
18	1.6	6.3	43	80	41	44	27	71	76	14	262	138
19	.86	5.7	24	30	37	45	25	46	46	14	47	69
20	2.0	5.1	17	23	38	59	24	36	19	16	25	25
21	13	4.7	14	18	42	41	24	30	41	16	18	14
22	4.8	4.6	13	19	75	35	24	25	494	14	13	11
23	1.8	4.5	19	96	99	33	53	22	83	12	12	9.4
24	.96	4.3	35	328	53	29	91	20	34	11	11	8.8
25	.66	3.8	23	436	40	28	40	19	28	10	9.1	7.9
26	.59	3.5	15	262	36	188	29	18	26	16	8.1	7.1
27	.53	3.4	12	96	118	350	24	16	21	24	15	6.6
28	.53	3.3	10	50	67	278	101	172	36	45	44	6.1
29	.53	3.2	9.5	39	------	378	67	94	14	28	18	5.5
30	20	3.1	9.7	40	------	206	34	35	12	25	9.5	4.8
31	1,410	------	12	223	------	92	------	26	------	146	7.6	------
TOTAL	1,488.53	291.2	637.1	3,414	4,710	6,318	1,719	3,078	1,185.7	1,380	1,327.1	463.7
MEAN	48.0	9.71	20.6	110	168	204	57.3	99.3	39.5	44.5	42.8	15.5
MAX	1,410	62	196	436	1,310	1,980	207	1,030	494	329	404	138
MIN	0	3.1	2.5	18	34	28	24	16	7.9	10	7.6	4.8
CFSM	.66	.13	.28	1.52	2.32	2.82	.79	1.37	.55	.61	.59	.21
IN.	.76	.15	.33	1.75	2.42	3.25	.88	1.58	.61	.71	.68	.24

CAL YR 1970 TOTAL 10,583.61 MEAN 29.0 MAX 1,410 MIN 0 CFSM .40 IN 5.44
WTR YR 1971 TOTAL 26,012.33 MEAN 71.3 MAX 1,980 MIN 0 CFSM .98 IN 13.37

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-31	1300	13.70	2,350	3-3	2000	14.96	2,980
2- 8	0430	12.38	1,720				

NOTE.--Stage-discharge relation indefinite Oct. 1-5, 22-29, Nov. 28 to Dec. 15. July 5 to Aug. 3.

02149000 Cove Creek near Lake Lure, N. C.

LOCATION.--Lat 35°25'24", long 82°06'42", Rutherford County, 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.

DRAINAGE AREA.--77.0 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1949-50. October 1950 to current year. Monthly discharge only for some periods, published in WSP 1723.

GAGE.--Water-stage recorder. Datum of gage is 815.4 ft above mean sea level. Prior to Dec. 20, 1954, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--21 years, 119 cfs (20.95 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,340 cfs Oct. 30 (gage height, 7.00 ft); minimum, 44 cfs Oct. 4, 5, 6, 7 (gage height, 2.01 ft).
Period of record: Maximum discharge, 7,050 cfs June 5, 1957 (gage height, 18.53 ft); minimum, 21 cfs Sept. 8, 9, 28, 30, Oct. 1-3, 5-7, 11-13, 1954.
Flood of 1916 reached a stage of about 23 ft, from records of North Carolina State Highway Commission.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	240	83	93	83	139	124	92	91	91	239	61
2	49	195	81	91	90	156	125	90	87	96	212	64
3	49	202	81	92	86	281	117	90	87	92	166	63
4	46	157	79	135	105	269	114	88	91	76	132	60
5	45	136	78	477	232	200	112	87	91	73	143	61
6	45	123	79	205	225	173	146	88	83	91	396	63
7	46	114	78	155	207	159	140	94	81	99	164	61
8	48	107	76	134	391	145	128	90	79	99	136	64
9	82	102	76	124	293	136	122	85	83	76	156	58
10	90	284	76	115	183	135	117	83	84	72	115	55
11	79	219	76	109	153	132	113	81	86	72	111	57
12	76	158	77	105	138	126	111	155	116	70	101	66
13	64	139	75	100	252	126	110	626	86	70	92	58
14	62	128	74	98	235	135	107	198	86	67	86	57
15	62	130	73	97	178	139	104	228	106	64	81	54
16	59	116	120	92	154	137	104	357	106	64	79	54
17	56	109	106	91	140	127	102	195	118	61	81	58
18	57	106	89	90	132	122	100	156	94	58	84	103
19	57	103	85	87	126	127	99	137	92	64	81	86
20	78	108	83	86	126	122	98	127	87	72	76	69
21	271	101	86	96	120	116	99	120	84	61	72	75
22	110	96	83	86	292	115	97	111	84	63	70	70
23	85	94	282	101	293	112	124	106	89	60	87	67
24	76	91	211	101	189	109	114	104	78	60	72	67
25	82	89	145	102	160	111	100	104	75	103	69	75
26	76	89	122	97	163	123	97	101	73	89	67	72
27	72	87	109	91	164	124	95	96	72	83	66	69
28	70	87	102	98	148	145	106	109	70	67	64	69
29	208	86	98	90	------	157	95	127	69	101	63	64
30	1,040	84	94	93	------	143	92	104	98	134	61	63
31	405	------	99	92	------	131	------	98	------	103	61	------
TOTAL	3,694	3,880	3,076	3,623	5,058	4,472	3,312	4,327	2,626	2,451	3,483	1,963
MEAN	119	129	99.2	117	181	144	110	140	87.5	79.1	112	65.4
MAX	1,040	284	282	477	391	281	146	626	118	134	396	103
MIN	45	84	73	86	83	109	92	81	69	58	61	54
CFSM	1.55	1.68	1.29	1.52	2.35	1.87	1.43	1.82	1.14	1.03	1.45	.85
IN.	1.78	1.87	1.49	1.75	2.44	2.16	1.60	2.09	1.27	1.18	1.68	.95

CAL YR 1970 TOTAL 40,918 MEAN 112 MAX 1,040 MIN 45 CFSM 1.45 IN 19.77
WTR YR 1971 TOTAL 41,965 MEAN 115 MAX 1,040 MIN 45 CFSM 1.49 IN 20.27

PEAK DISCHARGE (BASE, 900 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-30	1430	7.00	1,340	5-13	0300	6.36	1,150

02151000 Second Broad River at Cliffside, N. C.

LOCATION.--Lat 35°14'08", long 81°45'57", Rutherford County, on left bank 0.2 mile downstream from dam at Cliffside Mills, at Cliffside, and 1.3 miles upstream from mouth.

DRAINAGE AREA.--211 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 670.5 ft above mean sea level (levels by Soil Conservation Service).

AVERAGE DISCHARGE.--46 years, 303 cfs (19.26 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,060 cfs Feb. 22 (gage height, 5.29 ft); minimum, 15 cfs Nov. 8 (gage height, 0.67 ft); minimum daily, 89 cfs Oct. 7.
Period of record: Maximum discharge 15,000 cfs Aug. 14, 1940 (gage height, 17.93 ft); minimum, 4 cfs Sept. 27, 1935, Aug. 3, 1937, July 24, 1943; minimum daily, 6 cfs June 9, 1940.

REMARKS.--Records good. Considerable diurnal fluctuation and some low-flow regulation by mills above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 892: 1928(M), drainage area. WSP 1553: 1935-39(m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	619	210	240	226	393	362	234	227	193	343	136
2	100	419	156	231	153	417	344	227	204	236	514	146
3	100	402	210	231	206	768	340	246	233	232	318	161
4	100	380	163	244	223	960	308	205	213	183	239	140
5	100	267	193	1,500	627	675	308	243	194	176	285	142
6	96	267	149	855	884	542	337	188	201	225	519	187
7	89	249	201	520	848	471	362	255	206	216	355	167
8	120	210	156	401	1,300	417	324	225	198	253	256	137
9	133	182	178	358	1,170	380	304	209	200	225	229	186
10	115	280	167	342	642	365	291	239	202	141	189	139
11	104	508	197	293	480	371	284	207	214	159	199	193
12	143	355	163	268	404	337	280	254	183	172	382	254
13	123	310	167	248	560	328	280	1,800	193	165	268	220
14	123	271	182	235	1,050	375	269	1,230	205	162	169	152
15	136	300	149	241	637	431	261	703	194	241	183	104
16	153	290	262	228	507	501	262	1,660	243	92	155	179
17	130	258	391	205	427	412	252	811	252	145	196	142
18	115	249	258	233	383	367	256	540	240	158	166	134
19	110	240	218	179	348	371	256	426	215	118	208	380
20	146	240	201	228	341	358	248	367	205	176	227	270
21	258	244	218	166	329	323	257	326	221	169	141	183
22	258	222	193	219	1,200	317	254	289	168	154	156	360
23	186	244	430	211	2,050	305	282	274	218	154	380	275
24	153	182	858	238	838	298	354	265	165	161	207	226
25	115	227	483	255	589	295	271	256	221	159	199	153
26	182	171	365	231	500	347	257	255	142	218	152	182
27	123	222	310	218	509	349	248	233	165	210	163	197
28	156	186	271	186	429	404	261	250	183	151	134	152
29	140	182	249	216	------	460	268	269	166	266	154	181
30	1,310	206	244	206	------	488	247	283	180	359	175	158
31	1,400	------	240	205	------	411	------	270	------	320	147	------
TOTAL	6,617	8,382	7,832	9,631	17,860	13,236	8,627	13,239	6,051	5,989	7,408	5,636
MEAN	213	279	253	311	638	427	288	427	202	193	239	188
MAX	1,400	619	858	1,500	2,050	960	362	1,800	252	359	519	380
MIN	89	171	149	166	153	295	247	188	142	92	134	104
CFSM	1.01	1.32	1.20	1.47	3.02	2.02	1.36	2.02	.96	.91	1.13	.89
IN.	1.17	1.48	1.38	1.70	3.15	2.33	1.52	2.33	1.07	1.06	1.31	.99

CAL YR 1970 TOTAL 101,303 MEAN 278 MAX 9,400 MIN 75 CFSM 1.32 IN 17.86
WTR YR 1971 TOTAL 110,508 MEAN 303 MAX 2,050 MIN 89 CFSM 1.44 IN 19.48

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-22	1830	5.29	3,060				

02151500 Broad River near Boiling Springs, N. C.

LOCATION.--Lat 35°12'39", long 81°41'52", Cleveland County, on right bank 0.5 mile upstream from Sandy Run Creek and bridge on Secondary Road 1186, 3 miles downstream from Second Broad River, and 3.5 miles southwest of Boiling Springs.

DRAINAGE AREA.--864 sq mi.

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

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.--46 years, 1,433 cfs (22.52 inches per year).

EXTREMES.--Current year: Maximum discharge, 10,500 cfs Oct. 30 (gage height, 8.22 ft); minimum, 390 cfs Oct. 8 (gage height, 1.66 ft); minimum daily, 465 cfs Oct. 7.
Period of record: 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 fair prior to February and good thereafter. Considerable diurnal fluctuation and some regulation caused by powerplants above station.

REVISIONS (WATER YEARS).--WSP 892: 1928, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	527	3,620	1,000	1,270	822	1,330	1,550	1,280	1,150	863	1,370	663
2	519	2,520	1,220	1,070	1,000	2,100	1,800	849	1,070	916	2,910	806
3	470	2,360	1,090	1,010	1,070	3,430	1,480	940	1,100	1,030	2,040	863
4	494	2,170	981	1,510	1,390	3,730	1,190	1,130	987	780	1,600	703
5	528	2,030	915	4,370	2,070	2,280	1,100	1,160	936	660	1,830	667
6	472	1,260	770	2,540	2,420	2,070	1,840	995	968	872	2,390	791
7	465	1,180	751	2,090	2,540	1,950	2,030	1,070	996	998	1,770	700
8	504	860	1,010	1,840	3,870	1,720	1,720	1,170	1,230	1,260	1,240	715
9	607	992	970	1,660	3,720	1,930	1,450	1,060	976	1,110	1,300	897
10	661	1,930	937	1,230	2,550	1,710	1,280	904	1,020	837	1,470	752
11	715	2,310	893	1,080	1,900	1,640	1,240	1,180	1,070	807	1,160	760
12	810	1,570	926	1,150	1,690	1,450	1,070	1,140	941	964	1,370	864
13	742	1,380	1,000	1,180	2,070	1,500	1,190	6,310	918	1,060	1,470	736
14	810	1,500	760	1,190	3,100	1,430	1,360	4,060	866	774	963	771
15	643	1,580	770	1,120	2,550	1,510	1,420	2,910	1,190	937	689	619
16	742	1,130	830	1,070	2,060	2,030	1,360	4,940	1,270	695	738	727
17	589	1,120	1,320	1,050	1,930	2,100	1,230	3,030	1,410	810	1,110	700
18	546	1,130	1,130	938	1,790	1,690	1,250	2,460	1,370	556	1,080	792
19	512	1,070	1,070	1,150	1,610	1,590	1,080	2,110	1,030	618	857	1,400
20	546	1,080	820	1,360	1,350	1,840	1,230	1,480	809	1,010	1,120	1,070
21	830	871	733	1,030	1,320	1,590	1,260	1,570	866	832	893	1,010
22	1,700	926	799	1,040	3,560	1,300	1,160	1,200	1,210	855	752	1,960
23	1,400	760	1,150	1,060	6,100	1,440	1,390	1,220	1,040	737	1,250	1,170
24	1,070	948	2,390	1,040	3,020	1,420	1,770	1,040	1,150	789	1,050	906
25	688	1,070	1,800	996	2,380	1,420	1,320	1,510	858	637	1,080	823
26	661	1,140	1,310	1,260	2,080	1,430	1,010	1,670	833	816	1,160	1,040
27	715	1,000	1,210	1,050	2,090	1,580	1,300	1,240	650	1,010	795	823
28	643	1,020	1,040	1,280	1,820	1,530	1,270	1,090	748	877	647	795
29	554	670	1,080	1,230	------	1,640	1,230	1,220	1,080	1,050	603	944
30	4,620	790	1,060	1,100	------	2,200	1,300	1,390	941	1,180	575	891
31	5,820	------	1,190	880	------	2,160	------	1,220	------	1,440	774	------
TOTAL	30,603	41,987	32,925	41,844	63,872	56,740	40,880	54,548	30,683	27,780	38,056	26,358
MEAN	987	1,400	1,062	1,350	2,281	1,830	1,363	1,760	1,023	896	1,228	879
MAX	5,820	3,620	2,390	4,370	6,100	3,730	2,030	6,310	1,410	1,440	2,910	1,960
MIN	465	670	733	880	822	1,300	1,010	849	650	556	575	619
CFSM	1.14	1.62	1.23	1.56	2.64	2.12	1.58	2.04	1.18	1.04	1.42	1.02
IN.	1.32	1.81	1.42	1.80	2.75	2.44	1.76	2.35	1.32	1.20	1.64	1.13

CAL YR 1970 TOTAL 455,344 MEAN 1,248 MAX 17,200 MIN 452 CFSM 1.44 IN 19.61
WTR YR 1971 TOTAL 486,276 MEAN 1,332 MAX 6,310 MIN 465 CFSM 1.54 IN 20.94

PEAK DISCHARGE (BASE, 9,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-30	2300	8.22	10,500	2-23	0100	7.57	9,140

02152100 First Broad River near Casar, N. C.

LOCATION.--Lat 35°29'35", long 81°40'56", Cleveland County, on right bank 570 ft upstream from bridge on Secondary Road 1530, 0.5 mile upstream from No Business Creek, and 4.0 miles southwest of Casar.

DRAINAGE AREA.--59.5 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1949-56, March 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 890 ft (from topographic map).

AVERAGE DISCHARGE.--12 years, 88.9 cfs (20.29 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,400 cfs Jan. 5 (gage height, 6.19 ft); minimum, 33 cfs Oct. 4, 5; minimum gage height, 1.48 ft Sept. 16.
Period of record: Maximum discharge, 6,580 cfs Aug. 10, 1970 (gage height, 15.22 ft); minimum, 17 cfs July 20, 1970 (gage height, 0.97 ft).
Flood of 1916 and August 1940 reached a stage of about 25 ft, from information by local resident.
A discharge of 14.5 cfs was measured on Sept. 21, 1955.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	93	47	59	52	93	96	76	67	63	117	43
2	35	78	47	56	55	98	96	75	65	69	96	60
3	36	104	46	57	52	199	90	74	65	60	78	48
4	34	79	46	93	61	203	86	73	63	55	107	45
5	33	66	45	728	189	142	85	72	62	53	73	69
6	34	60	45	205	219	118	98	72	61	61	66	53
7	34	55	44	125	185	107	100	75	59	61	63	46
8	35	52	44	98	295	95	94	72	59	63	61	46
9	37	50	44	89	233	87	89	70	60	54	57	43
10	38	95	44	80	140	88	86	68	64	61	54	42
11	38	106	44	73	109	91	83	67	61	70	68	61
12	38	81	45	68	96	93	82	103	59	54	98	55
13	37	78	44	64	330	93	80	485	60	53	60	49
14	36	67	43	62	266	105	79	160	59	52	53	44
15	52	85	42	61	161	117	77	213	60	51	51	41
16	39	73	86	57	125	131	77	445	65	49	52	41
17	36	65	87	56	106	113	76	180	71	47	55	43
18	36	61	64	56	95	102	75	128	78	45	61	72
19	36	58	57	53	89	105	73	107	97	50	83	69
20	38	63	54	54	90	98	72	98	115	55	71	64
21	85	62	53	52	84	92	72	90	68	48	56	56
22	49	56	51	53	482	90	75	84	65	48	55	75
23	42	55	284	63	445	88	98	79	71	46	84	60
24	40	52	199	65	185	85	94	77	85	46	56	53
25	46	50	114	67	132	85	83	77	62	52	52	50
26	44	50	88	63	121	94	83	75	60	171	50	47
27	41	50	75	57	114	92	77	69	59	104	49	46
28	40	49	68	56	100	113	90	80	55	60	46	45
29	65	48	63	56	------	126	79	89	60	122	43	41
30	350	48	60	58	------	116	75	77	59	126	43	40
31	145	------	62	60	------	104	------	72	------	107	43	------
TOTAL	1,684	1,989	2,135	2,844	4,611	3,363	2,520	3,582	1,994	2,056	2,001	1,547
MEAN	54.3	66.3	68.9	91.7	165	108	84.0	116	66.5	66.3	64.5	51.6
MAX	350	106	284	728	482	203	100	485	115	171	117	75
MIN	33	48	42	52	52	85	72	67	55	45	43	40
CFSM	.91	1.11	1.16	1.54	2.77	1.82	1.41	1.95	1.12	1.11	1.08	.87
IN.	1.05	1.24	1.33	1.78	2.88	2.10	1.58	2.24	1.25	1.29	1.25	.97

CAL YR 1970 TOTAL 27,734 MEAN 76.0 MAX 2,510 MIN 18 CFSM 1.28 IN 17.34
WTR YR 1971 TOTAL 30,326 MEAN 83.1 MAX 728 MIN 33 CFSM 1.40 IN 18.96

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-5	0330	6.19	1,400	2-22	1930	6.16	1,380

02152500 First Broad River near Lawndale, N. C.

LOCATION.--Lat 35°22'53", long 81°32'50", Cleveland County, on right bank at village of Double Shoals, 0.4 mile upstream from Shoal Rock Creek, 500 ft downstream from bridge on Secondary Road 1809, and 2.5 miles southeast of Lawndale.

DRAINAGE AREA.--198 sq mi.

PERIOD OF RECORD.--February 1940 to September 1971 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 742.27 ft above mean sea level. Prior to Oct. 1, 1966, at site 1,400 ft downstream at datum 6.33 ft lower.

AVERAGE DISCHARGE.--31 years, 278 cfs (19.06 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,360 cfs Feb. 22 (gage height, 10.44 ft); minimum, 107 cfs Oct. 5-7 (gage height, 1.23 ft).
Period of record: Maximum discharge, 32,500 cfs Aug. 14, 1940 (gage height, 37.8 ft, former site and datum), from rating curve extended above 12,000 cfs on basis of runoff comparisons with nearby stations; minimum, 13 cfs Sept. 18, 1955, July 4, 1963; minimum daily, 17 cfs Aug. 11, 1956.
Flood of July 1916 reached a stage of 37.8 ft, (former site and datum) from floodmark by local resident.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Prior to July 22, 1964 considerable diurnal fluctuation and some regulation caused by Cleveland Mills Dam at Lawndale.

REVISIONS (WATER YEARS).--WSP 952: Drainage area. WSP 1142: 1945-46(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	366	147	203	203	372	315	228	220	200	315	136
2	115	268	147	192	203	387	296	224	210	220	474	142
3	115	268	144	189	199	814	288	220	252	230	268	161
4	113	248	144	196	217	766	272	206	217	210	244	144
5	107	213	139	1,900	673	556	264	203	213	190	224	161
6	107	196	139	820	849	469	292	203	213	200	199	196
7	107	185	133	510	1,010	423	341	206	206	200	192	150
8	111	178	130	387	1,290	377	305	206	199	200	192	144
9	113	175	133	341	909	336	288	196	206	190	175	136
10	118	310	136	305	566	326	280	185	210	190	164	130
11	118	387	136	276	443	341	268	178	210	200	164	128
12	118	272	139	260	387	315	264	217	210	220	596	168
13	115	260	139	244	903	310	264	1,020	200	190	256	142
14	113	228	133	232	962	355	256	520	200	170	192	130
15	185	236	130	228	586	397	252	535	200	160	175	122
16	164	220	164	217	474	433	256	1,280	210	150	161	122
17	125	199	276	210	402	377	256	612	220	140	164	118
18	120	192	203	206	356	336	252	405	250	140	189	220
19	120	185	178	203	331	336	252	336	290	140	268	361
20	122	189	168	199	331	331	240	296	350	154	264	217
21	213	196	164	213	310	296	240	272	300	133	185	240
22	185	175	161	203	1,760	288	244	252	250	130	164	494
23	142	171	571	228	2,450	284	252	240	220	130	228	264
24	128	164	745	244	778	272	300	232	250	130	189	200
25	130	157	428	256	550	272	252	228	280	189	161	180
26	139	157	315	236	474	315	236	232	220	171	154	160
27	128	157	260	220	464	300	232	217	210	305	150	150
28	125	157	232	210	402	361	260	224	200	182	147	140
29	133	154	217	217	------	428	256	256	200	185	142	135
30	772	150	206	220	------	402	232	248	200	300	136	130
31	678	------	203	228	------	346	------	228	------	264	133	------
TOTAL	5,194	6,413	6,560	9,793	18,482	11,921	8,005	10,105	6,816	5,813	6,665	5,321
MEAN	168	214	212	316	660	385	267	326	227	188	215	177
MAX	772	387	745	1,900	2,450	814	341	1,280	350	305	596	494
MIN	107	150	130	189	199	272	232	178	199	130	133	118
CFSM	.85	1.08	1.07	1.60	3.33	1.94	1.35	1.65	1.15	.95	1.09	.89
IN.	.98	1.20	1.23	1.84	3.47	2.24	1.50	1.90	1.28	1.09	1.25	1.00

CAL YR 1970 TOTAL 91,470 MEAN 251 MAX 11,000 MIN 65 CFSM 1.27 IN 17.19
WTR YR 1971 TOTAL 101,088 MEAN 277 MAX 2,450 MIN 107 CFSM 1.40 IN 18.99

PEAK DISCHARGE (BASE, 5,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-22	2000	10.44	5,360				

NOTE.--No gage-height record June 11 to July 19.

02152610 Sugar Branch near Boiling Springs, N. C.

LOCATION.--Lat 35°15'00", long 81°37'20", Cleveland County, on left downstream wingwall of culvert on State Highway 150, 0.5 mile upstream from mouth, and 2.8 miles east of Boiling Springs.

DRAINAGE AREA.--1.49 sq mi.

PERIOD OF RECORD.--Annual maximum, water years 1954-68, June 1968 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 696.83 ft above mean sea level. June 10, 1953 to May 31, 1968, crest-stage gage on left bank 31 ft upstream from culvert entrance at datum 16.37 ft higher.

EXTREMES.--Current year: Maximum discharge, 398 cfs Sept. 21 (gage height, 4.61 ft), from rating curve extended as explained below; minimum, 0.41 cfs Sept. 15, 16 (gage height, 1.07 ft).
Period of record: Maximum discharge, 902 cfs Nov. 17, 1957 (gage height, 25.19 ft at site and datum then in use) from rating curve extended above 120 cfs on basis of computation of peak flow through culvert; minimum, 0.19 cfs Sept. 7, 1968 (gage height, 0.95 ft).

REMARKS.--Records fair. Some diurnal fluctuation at low flow during growing season. Recording rain gage located at station.

REVISIONS (WATER YEARS).--WRD N. C. 1970: 1968(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.67	2.0	1.1	1.6	1.4	1.9	1.9	1.3	1.1	1.6	2.0	.70
2	.67	1.8	1.1	1.5	1.4	3.3	1.9	1.3	1.1	1.3	1.6	.93
3	.67	1.7	1.1	1.5	1.4	19	1.8	1.2	1.1	1.1	1.4	.72
4	.64	1.5	1.1	1.6	2.4	4.1	1.8	1.2	1.1	1.0	1.3	.71
5	.61	1.4	1.0	2.5	18	2.8	1.9	1.2	1.1	1.0	1.2	.73
6	.61	1.4	1.1	1.9	3.9	2.5	2.3	1.2	1.1	4.2	1.2	.68
7	.62	1.3	1.0	1.8	29	2.2	3.8	1.2	1.0	4.7	1.2	.68
8	.62	1.3	1.0	1.7	17	2.1	2.3	1.3	1.0	1.6	1.2	.66
9	.65	1.3	1.0	1.8	3.8	2.0	2.1	1.2	1.0	1.2	1.3	.63
10	.63	13	1.0	1.7	2.7	2.0	1.9	1.1	1.0	2.1	1.5	.61
11	.62	2.6	1.0	1.6	2.4	2.0	1.9	1.2	1.0	1.9	1.5	.63
12	.61	2.0	1.0	1.5	2.3	1.9	1.8	8.7	.97	1.6	1.2	.66
13	.59	1.7	1.0	1.5	6.7	2.0	1.8	10	.94	1.2	.96	.61
14	.61	2.1	1.0	1.5	3.2	1.9	1.7	2.3	.93	1.1	.91	.56
15	.76	2.3	.99	1.5	2.6	2.4	1.6	24	1.0	1.3	.88	.53
16	.81	1.6	2.3	1.4	2.2	2.0	1.6	5.1	1.1	1.1	.92	.55
17	.62	1.5	1.5	1.4	2.1	1.9	1.6	2.5	1.1	.97	1.0	.61
18	.63	1.5	1.3	1.4	2.0	1.8	1.5	2.0	1.4	.91	.94	2.2
19	.63	1.4	1.2	1.3	1.9	2.0	1.5	1.8	1.1	.97	1.2	1.4
20	.78	1.4	1.2	1.3	2.0	1.9	1.5	1.7	1.1	.94	1.0	1.1
21	.98	1.3	1.2	1.3	2.0	1.8	1.5	1.6	5.0	.91	.88	17
22	.72	1.3	1.2	1.4	6.1	1.8	1.4	1.6	5.6	1.2	.86	7.5
23	.68	1.2	4.4	1.8	2.8	1.7	1.9	1.5	1.4	1.5	1.1	2.4
24	.68	1.1	2.1	2.0	2.2	1.6	1.5	1.5	1.3	2.7	.82	1.3
25	.79	1.2	1.8	1.9	2.1	1.8	1.4	1.4	1.2	3.5	.79	1.2
26	.71	1.1	1.6	1.8	2.2	2.3	1.4	1.3	1.2	1.4	.79	1.1
27	.69	1.1	1.5	1.6	2.1	2.6	1.4	1.3	1.3	1.3	.78	1.0
28	.69	1.1	1.4	1.5	2.0	2.3	1.5	1.4	1.1	1.2	.74	.98
29	2.0	1.1	1.4	1.5	------	2.4	1.3	1.4	1.1	1.5	.70	.92
30	17	1.1	1.4	1.6	------	2.1	1.3	1.3	1.1	2.5	.68	.88
31	2.6	------	1.5	1.5	------	2.0	------	1.3	------	3.1	.69	------
TOTAL	40.59	56.4	42.49	49.9	129.9	84.1	52.8	87.1	41.54	52.60	33.24	50.18
MEAN	1.31	1.88	1.37	1.61	4.64	2.71	1.76	2.81	1.38	1.70	1.07	1.67
MAX	17	13	4.4	2.5	29	19	3.8	24	5.6	4.7	2.0	17
MIN	.59	1.1	.99	1.3	1.4	1.6	1.3	1.1	.93	.91	.68	.53
CFSM	.88	1.26	.92	1.08	3.11	1.82	1.18	1.89	.93	1.14	.72	1.12
IN.	1.01	1.41	1.06	1.25	3.24	2.10	1.32	2.17	1.04	1.31	.83	1.25

CAL YR 1970 TOTAL 718.44 MEAN 1.97 MAX 69 MIN .53 CFSM 1.32 IN 17.94
WTR YR 1971 TOTAL 720.84 MEAN 1.97 MAX 29 MIN .53 CFSM 1.32 IN 18.00

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
9-21	2245	4.61	398				

Lakes and Reservoirs in South Atlantic Slope basin

02067800; 02067820 TALBOTT AND TOWNES RESERVOIRS 1/.--On Dan River. The two reservoirs are operated as a unit for storage of water for Pinnacles hydroelectric plant. Talbott Dam (drainage area, 20.2 sq mi), lat 36°40'36", long 80°23'51", Patrick County, Va., 4.5 miles northeast of Kibler. Townes Dam (drainage area, 32.9 sq mi), lat 36°41'11", long 80°25'49", Patrick County, Va., 4 miles north of Kibler. Records available, February 1939 to December 1945 and January 1948 to September 1960 (combined month-end contents only published in WSP 1723), October 1960 to current year.

Total capacity of Talbott Reservoir, 350,000,000 cu ft and Townes Reservoir, 60,000,000 cu ft. Storage was started in Talbott Reservoir on Feb. 13, 1939, and in Townes Reservoir several months earlier. Records furnished by City of Danville, Va. (See sta 02068500)

02077280 Hyco Lake.--Lat 36°30'28", long 79°02'48", Person County, at outlet control structure 0.4 mile northwest of dam on Hyco River, 1.1 miles southwest of McGehees Mill and 8 miles northwest of Roxboro. Drainage area, 189 sq mi. Records available October 1964 to current year. Prior to October 1970 published as "Roxboro Steam-Electric Generating Plant Lake". Gage, water-stage recorder and tape gage. Prior to Feb. 11, 1965 staff gage at upstream end of outlet control structure. Datum of gage is 399.79 ft above mean sea level, unadjusted (levels by Carolina Power and Light Company).

Lake, used for cooling water at the Roxboro Steam-electric Generating Plant of Carolina Power and Light Co. first began to fill Sept. 19, 1964 and first reached spillway elevation (9.97 ft gage height) Mar. 19, 1965. Total capacity at top of spillway is 3,288,000,000 cu ft. Lake cannot be drawn below -0.03 ft (bottom of gated flume). (See sta 02077300).

02079964 LAKE GASTON.--Lat 36°30'04", long 77°48'43", Halifax County, at Gaston Dam on Roanoke River, 0.2 mile upstream from Black Gut Creek, and 2.7 miles northwest of Thelma. Drainage area, 8,339 sq mi. Records available, October 1962 to current year. Gage, water-stage recorder and staff gage. Datum of gage is at mean sea level.

Lake, used mainly for hydroelectric power development, was first filled Oct. 13-15, 1962, and has a total capacity of 22,434,000,000 cu ft. Usable capacity is 20,127,000,000 cu ft between elevations 165 ft and 203 ft (top of spillway gates) of which 2,788,000,000 cu ft between elevations 200 ft and 203 ft is reserved for flood control. Storage for power generation is 10,673,000,000 cu ft between elevations 185 ft and 200 ft. Records furnished by Virginia Electric and Power Co. (See sta 02080500)

02080100 ROANOKE RAPIDS LAKE.--Lat 36°29'10", long 77°39'31", Halifax County, at Roanoke Rapids Dam on Roanoke River, 1.5 miles upstream from bridge on State Highway 48, and 2.2 miles north of Roanoke Rapids. Drainage area, 8,395 sq mi. Records available, June 1955 to September 1960 (month-end contents only, published in WSP 1723), October 1960 to current year. Gage, water-stage recorder and staff gage. Datum of gage is at mean sea level.

Lake, used for hydroelectric power development, was put in operation June 25, 1955, and has a total capacity of 3,360,220,000 cu ft at normal highwater elevation of 132.0 ft and 3,515,290,000 cu ft at elevation 132.75 ft (top of gates). Records furnished by Virginia Electric and Power Co. (See sta 02080500)

02086490 LAKE MICHIE.--Lat 36°09'02", long 78°49'49", Durham County, at Durham municipal dam on Flat River, 3 miles southeast of Bahama, and 5 miles upstream from confluence with Eno River. Drainage area, 170 sq mi, approximately. Records available, October 1962 to current year. Gage, water-stage recorder and wire-weight gage at dam. Datum of gage is 0.47 ft below mean sea level.

Lake, used for municipal water supply, began filling in May 1926 and reached spillway elevation Dec. 26, 1926. Total capacity is 618,000,000 cu ft and usable capacity is 574,000,000 cu ft between elevations (gage datum) 300.0 ft and 341 ft (crest of spillway). (See sta 02087000)

02111391 W. KERR SCOTT RESERVOIR.--Lat 36°08'04", long 81°13'30", Wilkes County, at W. Kerr Scott Dam on Yadkin River, 0.1 mile upstream from Fish Trap Creek, 2.0 miles upstream from Millers Creek, and 4.0 miles west of Wilkesboro. Drainage area, 350 sq mi, approximately. Records available, August 1962 to current year. Gage, water-stage recorder and staff gage at dam. Datum of gage is at mean sea level.

Lake, used for flood control, low-flow augmentation and recreation. Some storage was affected during construction in July 1962, but gates were closed Aug. 22, 1962, and reservoir reached minimum pool elevation on Sept. 11, 1962. Total capacity is 6,664,680,000 cu ft of which 6,316,200,000 cu ft is controlled storage. Records furnished by Corps of Engineers. (See sta 02129000)

02122400 HIGH ROCK LAKE.--Lat 35°36'02", long 80°14'06", Davidson County, at High Rock Dam on Yadkin River, 0.8 mile northwest of High Rock, 2 miles upstream from Lick Creek, and 256 miles upstream from mouth of Pee Dee River in Winyah Bay. Drainage area, 4,000 sq mi, approximately. Records available, November 1927 to September 1960 (month-end contents only, published in WSP 1723), October 1960 to current year. Gage, water-stage recorder and staff gage at dam. Datum of gage is 30.9 ft below mean sea level.

Lake, used for hydroelectric power development, was first put in operation Nov. 7, 1927. Total capacity is 11,090,000,000 cu ft and usable capacity is 10,230,000,000 cu ft between elevations 625 ft and 655 ft gage datum (top of gates). Records furnished by Yadkin, Inc. (See sta 02129000)

02122699 TUCKERTOWN RESERVOIR.--Lat 35°29'03", long 80°10'30", Stanly County, at Tuckertown Dam on Yadkin River, 2.5 miles upstream from Garr Creek, 3.8 miles northeast of New London, and 250 miles upstream from mouth of Pee Dee River in Winyah Bay. Drainage area, 4,120 sq mi, approximately. Records available April 1962 to current year. Gage, remote water-stage recorder in powerhouse. Datum of gage is 30.9 ft below mean sea level.

Lake, used for hydroelectric power development, was first filled Apr. 6, 1962. Total capacity is 1,852,400,00 cu ft and usable capacity is 293,800,000 cu ft between elevations 593 ft and 596 ft gage datum. Records furnished by Yadkin, Inc. (See sta 02129000)

02122844 BADIN LAKE.--Lat 35°25'10", long 80°05'34", Stanly County, at Badin Dam on Yadkin River, 1.5 miles northeast of Badin, 2.5 miles upstream from Falls Dam, and 242 miles upstream from mouth of Pee Dee River in Winyah Bay. Drainage area, 4,180 sq mi, approximately. Records available, December 1917 to September 1960 (month-end contents only, published in WSP 1723), October 1960 to current year. Gage, water-stage recorder and staff gage at dam. Datum of gage is 30.9 ft below mean sea level.

Lake (generally known as Narrows Reservoir), used for hydroelectric power development, was first put in operation July 12, 1917. Total capacity is 10,497,960,000 cu ft and usable capacity is 6,202,584,000 cu ft between elevations 505.00 ft and 541.10 ft. Records furnished by Yadkin, Inc. (See sta 02129000)

02123736 LAKE TILLERY.--Lat 35°12'24", long 80°03'57", Stanly County, at Norwood Dam on Pee Dee River, 700 ft upstream from Norfolk Southern Railroad bridge, 3.5 miles southeast of Norwood, 5 miles upstream from Rocky River, and 224 miles upstream from mouth in Winyah Bay. Drainage area, 4,600 sq mi, approximately. Records available, February 1928 to September 1960 (month-end contents only, published in WSP 1723), October 1960 to current year. Gage, water-stage recorder and float-tape gage at dam. Datum of gage is 38.67 ft above mean sea level (levels by Carolina Power & Light Co.).

Lake, used for hydroelectric power development, was first put in operation during January 1928. Total capacity is 7,274,520,000 cu ft and usable capacity is 5,927,040,000 cu ft between elevations 200.5 ft and 239.5 ft gage datum (top of gates). Records furnished by Carolina Power & Light Co. (See sta 02129000)

1/ Included in this report because they materially affect runoff at Dan River near Francisco, N. C.

Lakes and Reservoirs in South Atlantic Slope basin--Continued

02128800 BLEWETT FALLS LAKE.--Lat 34°58'58", long 79°52'40", Richmond County, at Blewett Falls Dam on Pee Dee River, 1.2 miles upstream from Cartledge Creek, 6.5 miles northwest of Rockingham, and 195 miles upstream from mouth in Winyah Bay. Drainage area, 6,830 sq mi, approximately. Records available, December 1929 to September 1960 (month-end contents only, published in WSP 1723), October 1960 to current year. Gage, self-synchronous motor, dial indicator and staff gage at dam. Datum of gage is 39.08 ft above mean sea level (levels by Carolina Power & Light Co.).

Lake, used for hydroelectric power development, was first put in use during 1911. Total capacity is 4,225,320,000 cu ft and usable capacity is 1,850,000,000 cu ft between elevations 120.0 ft and 139.0 ft gage datum (top of 4-foot flashboards). Records furnished by Carolina Power & Light Co. (See sta 02129000)

02138519 LAKE JAMES.--Lat 35°44'36", long 81°50'22", Burke County, at Linville Dam at intake tower on Catawba River, 2.1 miles northeast of Bridgewater and 279 miles upstream from mouth of Wateree River. Drainage area, 380 sq mi, approximately. Records available, March 1920 to September 1960 (month-end contents only, published in WSP 1723), October 1960 to current year. Gage, float gage with self-synchronous motor to indicator in powerhouse. Staff gage st Catawba River Dam is also read when lake elevation drops below 1,160 ft (60 ft, gage datum) and lake becomes two separate reservoirs. Datum of gage is 1,100.00 ft above mean sea level (levels by Duke Power Co.).

Lake (generally known as Bridgewater Reservoir), used for hydroelectric power development, was first put in operation May 5, 1919. The total capacity at elevation 100.0 ft gage datum (crest of spillway) is 12,581,800,000 cu ft and usable capacity is 7,493,700,000 cu ft between elevations (gage datum) 65 ft and 100 ft. Records furnished by Duke Power Co.

02141490 RHODHISS LAKE.--Lat 35°46'54", long 81°26'42", Caldwell County, at Rhodhiss Dam on Catawba River, 0.8 mile west of Rhodhiss, 1.8 miles south of Granite Falls, and 243 miles upstream from mouth of Wateree River. Drainage area, 1,090 sq mi, approximately. Records available, September 1935 to September 1960 (month-end contents only, published in WSP 1723), October 1960 to current year. Gage, float gage, indicator and reference point at dam. Datum of gage is 895.1 ft above mean sea level (levels by Duke Power Co.).

Lake, used for hydroelectric power development, was first put in operation Feb. 18, 1925. Total capacity is 3,188,592,000 cu ft and usable capacity is 1,717,000,000 cu ft between elevations (gage datum) 85.0 ft and 100.0 ft (crest of spillway). Records furnished by Duke Power Co.

02141961 LAKE HICKORY.--Lat 35°49/28", long 81°11'28", Alexander County, at Oxford Dam on Catawba River, 2 miles upstream from Lower Little River, 7 miles south of Taylorsville, and 226 miles upstream from mouth of Wateree River. Drainage area, 1,310 sq mi, approximately. Records available, September 1935 to September 1960 (month-end contents only, published in WSP 1723), October 1960 to current year. Gage, float gage and indicator at dam. Datum of gage is 835.0 ft above mean sea level (levels by Duke Power Co.).

Lake (generally known as Oxford Reservoir) used for hydroelectric power development, was first put in operation Apr. 5, 1928. Total capacity is 5,552,985,000 cu ft. Sept. 30, 1935 to Sept. 30, 1957, the usable capacity considered as 2,277,970,200 cu ft between elevations (gage datum) 85.0 ft and 100.0 ft (top of flood gates). From Apr. 30, 1928, to Aug. 31, 1935, and Oct. 31, 1957, to Sept. 30, 1964, usable capacity considered as 3,378,400,000 cu ft between elevations 75.0 ft and 100.0 ft (top of flood gates) from Oct. 1, 1964, to present, usable capacity considered as 2,277,800,000 cu ft between elevations (gage datum) 85.0 ft and 100.0 ft (top of flood gates). Records furnished by Duke Power Co.

02142441 LOOKOUT SHOALS LAKE.--Lat 35°45'57", long 81°05'36", Catawba County, at Lookout Shoals Dam on Catawba River, 4 miles upstream from bridge on U. S. Highways 64 and 70, 4.2 miles north of Catawba, and 216 miles upstream from mouth of Wateree River. Drainage area, 1,450 sq mi, approximately. Records available, December 1915 to September 1960 (month-end contents only, published in WSP 1723), October 1960 to current year. Gage, float gage, indicator and staff gage at dam. Datum of gage is 738.1 ft above mean sea level (levels by Duke Power Co.).

Lake, used for hydroelectric power development, was first put in operation Dec. 2, 1915. Total capacity was originally, 1,355,190,000 cu ft. Capacity has been reduced by silting. Prior to October 1957 the usable capacity considered as 473,980,000 cu ft and October 1957 to Sept. 30, 1964, as 388,300,000 cu ft between elevations (gage datum) 90.0 ft and 100.0 ft (crest of spillway). From Oct. 1, 1964, to present, usable capacity considered as 208,200,000 cu ft between elevations (gage datum) 95.0 ft and 100.0 ft (crest of spillway). Flood of July 16, 1916, washed out an earth dike. Records furnished by Duke Power Co.

02142647 LAKE NORMAN.--Lat 35°26'05", long 80°57'28", Mecklenburg County, at Cowans Ford Dam on Catawba River, 0.8 mile upstream from Derr Creek, 7.8 miles southwest of Davidson, and 182 miles upstream from mouth of Wateree River. Drainage area, 1,790 sq mi, approximately. Records available, March 1962 to current year. Gage, flat gage with transmitter to dial meter in control room. Datum of gage is 660 ft above mean sea level (levels by Duke Power Co.).

Lake, used for hydroelectric power development began filling in March 1962. Total capacity is 47,586,200,000 cu ft and usable capacity is 26,910,400,000 cu ft between elevations (gage datum) 75.0 ft and 100 ft (top of flood gates). Records furnished by Duke Power Co.

02142676 MOUNTAIN ISLAND LAKE.--Lat 35°20'03", long 80°59'12", Gaston County, at Mountain Island Dam on Catawba River, 1.5 miles downstream from bridge on State Highway 16, 3 miles northeast of Mount Holly, and 167 miles upstream from mouth of Wateree River. Drainage area, 1,860 sq mi, approximately. Records available, December 1923 to September 1960 (month-end contents only, published in WSP 1723), October 1960 to current year. Gage, float gage, indicator and staff gage at dam. Datum of gage is 547.5 ft above mean sea level (levels by Duke Power Co.).

Lake, used for hydroelectric power development, was first put in operation Dec. 16, 1923. Total capacity is 2,495,988,000 cu ft. Prior to October 1964 usable capacity was considered 1,132,000,000 cu ft between elevations (gage datum) 90.0 ft and 100.0 ft (crest of spillway) October 1964 to present considered as 845,000,000 cu ft between elevations (gage datum), 93.0 ft and 100.0 ft (crest of spillway). Records furnished by Duke Power Co.

OTHER RESERVOIRS.--The following smaller reservoirs in the South Atlantic Slope basins are described below, but records of conetents are not published herein:

02087339 LAKE JOHNSON.--Lat 35°45'44", long 78°42'17", Wake County, part of Raleigh's municipal water supply, on Walnut Creek near Raleigh. Drainage area, 7.05 sq mi. Total capacity is 98,900,000 cu ft. Dam was completed in 1923 and spillway raised to its present elevation in 1951. (See sta 02087500)

02087344 LAKE RALEIGH.--Lat 35°45'56", long 78°40'38", Wake County, part of Raleigh's municipal water supply, on Walnut Creek near Raleigh. Drainage area, 12.3 sq mi. Total capacity is 13,400,000 cu ft. Dam completed in 1914 and raised to its present elevation in 1919. (See sta 02087500)

02087588 LAKE WHEELER.--Lat 35°41'30", long 78°41'31", Wake County, part of Raleigh's municipal water supply, on Swift Creek near Raleigh. Drainage area is 38 sq mi, approximately. Total capacity is 267,400,000 cu ft. Dam completed and storage began in 1956 (See sta 02087500)

02087701 LAKE BENSON.--Lat 35°39'44", long 78°36'42", Wake County, part of Raleigh's municipal water supply, on Swift Creek near Garner. Drainage area, 67 sq mi, approximately. Total capacity is 133,700,000 cu ft. Lake, formerly known as Rand's Mill, acquired by City of Raleigh in 1927 and spillway raised to its present elevation in 1954. (See sta 02087500)

02093981 LAKE HIGGINS.--Lat 36°10'11", long 79°52'49", Guilford County, part of Greensboro's municipal water supply, on Brush Creek near Greensboro. Drainage area, 12 sq mi, approximately. Total capacity is 107,000,000 cu ft. Reservoir first filled Mar. 1, 1957. (See sta 02094500)

Lakes and Reservoirs in South Atlantic Slope basin--Continued

02094117 LAKE BRANDT.--Lat 36°10'20", long 79°50'20", Guilford County, part of Greensboro's municipal water supply, on Reedy Fork and Horsepen Creek near Greensboro. Drainage area, 70.0 sq mi, approximately. Total capacity is 294,000,000 cu ft. Dam completed February 1923 and raised to present level 1959-60. Reservoir first filled at present level on Oct. 8, 1960. (See sta 02094500)

02094305 LAKE TOWNSEND.--Lat 36°11'25", long 79°43'57", Guilford County, part of Greensboro's municipal water supply, on Reedy Fork near Greensboro. Drainage area, 105 sq mi. Total capacity is 869,000,000 cu ft. Dam completed Oct. 18, 1968, and reservoir first filled Aug. 17, 1969. (See sta 02094500)

02096003 STONY CREEK RESERVOIR.--Lat 36°10'25", long 79°24'53", Alamance County, part of Burlington's municipal water supply, on Stony Creek near Burlington. Drainage area, 44 sq mi, approximately. Total capacity is 427,800,000 cu ft. Dam completed August 1960 and reservoir first filled Jan. 28, 1961. (See sta 02096500)

02096432 LAKE BURLINGTON.--Lat 36°07'37", long 79°24'20", Alamance County, part of Burlington's municipal water supply on Stony Creek near Burlington. Drainage area, 95.0 sq mi, approximately. Total capacity is 64,900,000 cu ft. Dam completed and reservoir filled in 1928. (See sta 02096500)

02099096 HIGH POINT MUNICIPAL LAKE.--Lat 35°59'43", long 79°56'42", Guilford County, High Point's municipal water supply, on Deep River near High Point. Drainage area, 61.4 sq mi. Total capacity is 220,588,000 cu ft. Dam completed in 1926 and reservoir first filled in 1927. (See sta 02099500)

02102178 BUCKHORN RESERVOIR.--Lat 35°31'35", long 78°59'22", Chatham County, on Cape Fear River near Corinth. Drainage area, 3,200 sq mi, approximately. Usable capacity is 69,700,000 cu ft. Completed and filled in 1908. Hydroelectric power operation stopped Dec. 31, 1962.

02121461 LEXINGTON-THOMASVILLE RESERVOIR.--Lat 35°51'54", long 80°11'41", Davidson County, Lexington and Thomasville's municipal water supply on Abbotts Creek near Lexington. Drainage area, 70.3 sq mi. Total capacity is 284,100,000 cu ft of which 281,400,000 cu ft is usable. Dam completed Aug. 8, 1957, and reservoir first filled Nov. 23, 1957.

02184122 LAKE TOXAWAY.--Lat 35°07'27", long 82°55'56", Transylvania County, recreation lake on Toxaway River at town of Lake Toxaway. Drainage area, 7.79 sq mi. Total surface area, about 640 acres. Lake reached spillway elevation September 1961

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1970 to SEPTEMBER 1971

Date	Elevation (feet)	Combined Contents (million cubic feet)	Change in contents (million cubic feet)	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Elevation (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Elevation (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)
	02067800 Talbott & Townes Reservoirs		02067820	02077280 Hyco Lake			02079964 Lake Gaston			02080100 Roanoke Rapids Lake		
Sept. 30		344.9	-	9.53	3,217	-	198.95	18,685	-	127.4	2,531	-
Oct. 31		399.6	+54.7	9.31	3,181	-36	199.28	18,975	+290	130.1	2,990	+459
Nov. 30		354.1	-45.5	10.34	3,346	+165	200.11	19,698	+723	131.9	3,338	+348
Dec. 31		350.1	-4.0	10.55	3,378	+32	199.90	19,514	+184	131.6	3,274	-64
CAL YR 1970		-	-15.6	-	-	+24	-	-	+461	-	-	-86
Jan. 31		342.5	-7.6	10.53	3,375	-3	199.66	19,306	-208	131.6	3,274	0
Feb. 28		377.4	+34.9	10.66	3,395	+20	199.92	19,532	+226	126.6	2,395	-879
Mar. 31		357.9	-19.5	10.65	3,394	-1	199.99	19,593	+61	130.9	3,142	+747
Apr. 30		354.1	-3.8	10.49	3,368	-26	200.38	19,933	+340	130.3	3,026	-116
May 31		367.0	+12.9	10.85	3,425	+57	199.69	19,332	-601	131.2	3,198	+172
June 30		354.1	-12.9	10.16	3,317	-108	199.89	19,505	+173	127.9	2,613	-585
July 31		356.6	+2.5	9.75	3,252	-65	199.96	19,567	+62	129.9	2,953	+340
Aug. 31		350.1	-6.5	10.62	3,389	+137	199.67	19,315	-252	129.7	2,916	-37
Sept. 30		359.2	+9.1	10.33	3,345	-44	199.75	19,384	+69	131.9	3,338	+422
WTR YR 1971		-	+14.3	-	-	+128	-	-	+699	-	-	+807

Date	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Elevation (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)
	02086490 Lake Michie			02111391 W. Kerr Scott Reservoir			02122400 High Rock Lake			02122699 Tuckertown Reservoir		
Sept. 30	336.43	524	-	1028.8	1,708	-	646.95	6,575	-	595.40	1,790	-
Oct. 31	333.89	479	-45	1030.5	1,830	+122	645.66	5,978	-597	595.55	1,806	+16
Nov. 30	340.28	608	+123	1030.0	1,786	-44	645.54	5,890	-88	595.38	1,788	-18
Dec. 31	341.18	622	+20	1030.0	1,786	0	646.32	6,250	+360	595.30	1,780	-8
CAL YR 1970	-	-	+1	-	-	-35	-	-	-1,898	-	-	-1
Jan. 31	341.20	623	+1	1030.0	1,786	0	647.07	6,624	+374	595.47	1,797	+17
Feb. 28	341.24	624	+1	1030.0	1,786	0	654.40	10,683	+4,059	595.46	1,796	-1
Mar. 31	341.30	625	+1	1030.0	1,786	0	649.00	7,565	-3,118	595.42	1,792	-4
Apr. 30	341.10	620	-5	1030.1	1,795	+9	651.70	9,038	+1,473	595.40	1,790	-2
May 31	341.38	627	+7	1030.0	1,786	-9	651.65	8,981	-57	595.45	1,795	+5
June 30	340.15	599	-28	1029.9	1,780	-6	652.31	9,396	+415	595.35	1,785	-10
July 31	339.51	586	-13	1030.0	1,786	+6	651.83	9,096	-300	595.46	1,796	+11
Aug. 31	340.74	612	+26	1025.1	1,488	-298	650.18	8,201	-895	595.44	1,794	-2
Sept. 30	339.99	596	-16	1030.6	1,838	+350	652.41	9,456	+1,255	595.38	1,788	-6
WTR YR 1971	-	-	+72	-	-	+130	-	-	+2,881	-	-	-2

Lakes and Reservoirs in South Atlantic Slope basin--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)
	02122844 Badin Lake			02123736 Lake Tillery			02128800 Blewett Falls Lake			02138519 Lake James		
Sept. 30	539.53	10,124	-	239.4	5,903	-	136.8	1,620	-	81.9	8,174	-
Oct. 31	539.55	10,147	+23	239.4	5,903	0	141.3	2,080	+460	91.1	10,245	+2,071
Nov. 30	539.62	10,147	0	239.3	5,881	-22	136.9	1,630	-450	96.6	11,647	+1,402
Dec. 31	540.00	10,241	+94	239.4	5,903	+22	137.6	1,703	+73	92.0	10,465	-1,182
CAL YR 1970	-	-	+327	-	-	+44	-	-	+203	-	-	-173
Jan. 31	539.77	10,194	-47	239.4	5,903	0	137.3	1,672	-31	89.2	9,792	-673
Feb. 28	540.30	10.311	+117	237.9	5,578	-325	137.2	1,661	-11	95.0	11,225	+1,433
Mar. 31	539.80	10,194	-117	239.2	5,859	+281	140.7	2,020	+359	92.9	10,688	-537
Apr. 30	540.51	10,357	+163	239.3	5,881	+22	138.0	1,745	-275	93.2	10,764	+76
May 31	540.19	10,287	-70	239.4	5,903	+22	135.5	1,490	+255	97.4	11,862	+1,098
June 30	539.17	10,054	-233	239.1	5,837	-66	135.7	1,510	+20	90.2	10,028	-1,834
July 31	539.29	10,077	+23	239.2	5,859	+22	136.9	1,630	+120	89.8	9,933	-95
Aug. 31	539.99	10,241	+164	239.4	5,903	+44	136.2	1,560	-70	92.7	10,638	+705
Sept. 30	539.26	10,077	-164	238.8	5,772	-131	135.8	1,520	-40	89.6	9,886	-752
WTR YR 1971	-	-	-47	-	-	-131	-	-	-100	-	-	+1,712

	02141490 Rhodhiss Lake			02141961 Lake Hickory			02142441 Lookout Shoals Lake			02142647 Lake Norman		
Sept. 30	95.9	1,137	-	95.5	1,510	-	96.7	67.5	-	89.2	33,990	-
Oct. 31	98.6	1,509	+372	99.0	2,101	+591	99.4	182	+114	91.2	36,270	+2,280
Nov. 30	97.8	1,395	-114	97.8	1,893	-208	98.2	130	-52	92.7	38,040	+1,770
Dec. 31	96.2	1,176	-219	96.7	1,708	-185	98.5	143	+13	94.8	40,630	+2,590
CAL YR 1970	-	-	-54	-	-	-67	-	-	-13	-	-	+1,370
Jan. 31	97.6	1,367	+191	96.0	1,592	-116	97.9	117	-26	93.5	39,020	-1,610
Feb. 28	98.5	1,494	+127	95.5	1,510	-82	96.4	55.3	-62	97.1	43,600	+4,580
Mar. 31	97.2	1,311	-183	96.1	1,608	+98	98.0	121	+66	98.1	44,960	+1,360
Apr. 30	96.4	1,203	-108	96.0	1,592	-16	98.7	151	+30	98.6	45,640	+680
May 31	97.1	1,298	+95	97.0	1,758	+166	99.0	164	+13	99.1	46,330	+690
June 30	95.0	1,022	-276	95.4	1,494	-264	97.9	117	-47	94.0	39,630	-6,700
July 31	97.4	1,339	+317	96.1	1,608	+114	98.3	138	+21	95.4	41,390	+1,760
Aug. 31	96.5	1,216	-123	96.6	1,691	+83	98.2	130	-8	96.5	42,820	+1,430
Sept. 30	96.0	1,150	-66	95.8	1,559	-132	98.1	126	-4	97.3	43,880	+1,060
WTR YR 1971	-	-	+13	-	-	+49	-	-	+58	-	-	+9,890

	02142676 Mountain Island Lake		
Sept. 30	95.5	272	-
Oct. 31	96.1	342	+70
Nov. 30	95.6	284	-58
Dec. 31	95.6	284	0
CAL YR 1970	-	-	+12
Jan. 31	95.9	318	+34
Feb. 28	95.8	307	-11
Mar. 31	95.8	307	0
Apr. 30	95.7	296	-11
May 31	95.7	296	0
June 30	97.0	450	+154
July 31	95.8	307	-143
Aug. 31	95.7	296	-11
Sept. 30	95.8	307	+11
WTR YR 1971	-	-	+35

KANAWHA RIVER BASIN

03161000 South Fork New River near Jefferson, N. C.

LOCATION.--Lat 36°23'40", long 81°24'27", Ashe County, on right bank 600 ft upstream from bridge on State Highways 16 and 88, 0.2 mile downstream from Bear Creek, and 4 miles southeast of Jefferson.

DRAINAGE AREA.--207 sq mi.

PERIOD OF RECORD.--October 1924 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 2,657.04 ft above mean sea level, unadjusted. Prior to Oct. 14, 1934, nonrecording gage on bridge 400 ft downstream at same datum. Oct. 14, 1934 to Mar. 25, 1935, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--47 years, 410 cfs (26.89 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,480 cfs Oct. 30 (gage height, 5.21 ft); minimum, 99 cfs Jan. 20 (gage height, 1.56 ft), result of freezeup; minimum daily, 177 cfs Jan. 20.
Period of record: Maximum discharge, 52,800 cfs Aug. 14, 1940 (gage height, 22.50 ft) from rating curve extended above 5,100 cfs on basis of slope-area measurement of peak flow; minimum, 52 cfs Dec. 24, 1943, result of freezeup; minimum daily 65 cfs Sept. 9, 1925.
Flood of July 15, 1916 reached a stage of 18.0 ft, from floodmarks, witnessed by local resident (discharge 35,200 cfs).

REMARKS.--Records good except those for winter periods, which are fair. Slight diurnal fluctuation at low flow in the growing season. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1275: 1925-26(M), 1928-30(M), 1931-32, 1933-35(M), 1941-42(m), 1944(m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	202	1,440	322	260	240	489	400	351	394	292	935	265
2	205	1,050	315	260	290	510	390	333	361	325	799	331
3	199	1,060	308	300	290	738	382	333	353	426	784	364
4	190	803	304	340	280	905	360	321	390	314	608	296
5	182	680	290	586	780	696	353	305	335	279	663	281
6	181	608	291	506	850	623	417	309	316	275	612	273
7	185	545	278	397	520	591	534	399	316	365	684	268
8	187	497	272	353	460	559	429	445	376	472	572	308
9	230	457	291	333	400	493	392	402	328	361	511	293
10	319	549	292	325	400	521	376	342	301	421	514	261
11	342	1,010	286	315	400	502	358	321	300	521	512	314
12	300	693	285	311	400	502	351	333	334	453	481	380
13	270	588	288	302	1,080	486	344	958	312	421	413	306
14	232	521	274	307	1,130	497	336	827	348	349	376	277
15	232	507	266	355	736	497	326	635	404	319	351	262
16	217	468	287	313	613	546	324	817	375	300	336	249
17	202	425	350	290	545	486	320	676	310	282	332	252
18	198	407	346	289	528	460	314	563	301	268	341	334
19	196	395	301	247	522	475	306	497	312	282	344	535
20	205	421	293	177	544	513	303	472	552	352	317	449
21	707	472	317	260	569	454	304	837	461	310	300	549
22	613	398	342	300	651	430	339	552	520	276	303	844
23	338	381	358	480	1,030	430	328	467	691	267	399	524
24	278	349	529	584	747	400	388	431	686	260	379	409
25	257	312	404	560	630	391	329	417	414	282	309	359
26	246	360	360	491	579	410	301	404	354	417	299	346
27	237	360	330	380	614	409	290	362	330	516	378	342
28	232	364	320	240	535	459	493	396	309	361	303	364
29	275	339	320	300	------	473	529	610	291	937	278	359
30	1,750	335	310	320	------	501	384	545	296	1,300	271	322
31	2,060	------	300	300	------	425	------	452	------	1,300	268	------
TOTAL	11,467	16,794	9,829	10,781	16,363	15,871	11,000	15,112	11,370	13,303	13,972	10,716
MEAN	370	560	317	348	584	512	367	487	379	429	451	357
MAX	2,060	1,440	529	586	1,130	905	534	958	691	1,300	935	844
MIN	181	312	266	177	240	391	290	305	291	260	268	249
CFSM	1.79	2.71	1.53	1.68	2.82	2.47	1.77	2.35	1.83	2.07	2.18	1.72
IN.	2.06	3.02	1.77	1.94	2.94	2.85	1.98	2.72	2.04	2.39	2.51	1.93

CAL YR 1970 TOTAL 155,261 MEAN 425 MAX 5,550 MIN 149 CFSM 2.05 IN 27.90
WTR YR 1971 TOTAL 156,578 MEAN 429 MAX 2,060 MIN 177 CFSM 2.07 IN 28.14

PEAK DISCHARGE (BASE, 2,600 CFS).--No peak above base.

03439000 French Broad River at Rosman, N. C.

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

DRAINAGE AREA.--67.9 sq mi.

PERIOD OF RECORD.--May 1907 to June 1909, October 1935 to current year. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 2,173.83 ft above mean sea level. Prior to June 30, 1909, nonrecording gage at site 500 ft downstream at different datum. Jan. 1, 1936, to July 6, 1937, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--37 years (1907-8, 1935-71), 233 cfs (46.60 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,940 cfs Oct. 11 (gage height, 10.61 ft); minimum, 68 cfs Oct. 5, 6, 7 (gage height, 1.79 ft).
Period of record: Maximum discharge, 13,500 cfs Oct. 4, 1964 (gage height, 14.95 ft); minimum, 23 cfs Jan. 3, 1940 (gage height, 1.51 ft), result of freezeup; minimum daily, 37 cfs Sept. 25-28, Oct. 5, 6, 25, 26, 1954.
Flood of July 1916 reached a stage of 13.9 ft, from floodmarks.

REMARKS.--Records good. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 823: Drainage area. WSP 1306: 1908(M). WSP 1910: 1936(M), 1938(M), 1939-40, 1942-43.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	533	181	159	190	301	266	166	149	158	278	135
2	78	455	177	154	190	337	278	163	145	179	251	185
3	75	420	173	155	193	483	254	160	142	144	657	132
4	71	358	169	356	264	428	242	156	145	120	471	122
5	70	323	166	511	457	365	235	153	139	117	519	122
6	70	296	163	305	327	338	292	152	131	201	455	125
7	71	276	159	258	318	332	272	154	128	186	338	120
8	72	260	157	237	367	300	250	178	150	194	325	115
9	185	248	157	226	321	283	239	153	142	198	283	109
10	388	402	154	212	281	284	228	146	147	196	263	107
11	1,790	304	153	202	264	277	220	143	133	164	249	134
12	364	277	168	192	254	271	215	182	128	148	232	148
13	252	261	155	186	385	275	209	455	123	139	209	111
14	256	281	148	187	297	277	202	289	121	127	196	107
15	234	300	145	198	276	348	197	338	141	118	185	103
16	197	262	274	179	260	306	194	361	117	116	177	102
17	177	248	216	176	249	278	189	273	116	109	177	171
18	165	239	183	172	241	264	186	239	176	104	171	408
19	156	231	172	162	234	331	182	217	197	146	177	199
20	349	299	168	150	255	292	180	205	150	152	161	155
21	416	257	170	160	245	272	181	193	135	115	150	155
22	290	242	162	168	677	262	180	182	180	111	147	170
23	244	232	250	355	481	252	266	174	162	106	147	147
24	219	217	232	317	370	241	220	170	133	131	137	151
25	227	210	199	293	324	249	193	167	123	182	135	184
26	201	208	184	257	387	253	184	157	116	167	130	153
27	188	203	174	225	373	255	179	152	113	143	127	146
28	180	195	168	220	324	291	185	188	114	123	122	143
29	636	190	168	203	------	377	171	211	111	157	120	132
30	1,460	186	163	226	------	319	168	179	157	178	118	124
31	727	------	171	238	------	284	------	160	------	441	120	------
TOTAL	9,885	8,413	5,479	7,039	8,804	9,425	6,457	6,216	4,164	4,870	7,227	4,415
MEAN	319	280	177	227	314	304	215	201	139	157	233	147
MAX	1,790	533	274	511	677	483	292	455	197	441	657	408
MIN	70	186	145	150	190	241	168	143	111	104	118	102
CFSM	4.70	4.12	2.61	3.34	4.62	4.48	3.17	2.96	2.05	2.31	3.43	2.16
IN.	5.42	4.61	3.00	3.86	4.82	5.16	3.54	3.41	2.28	2.67	3.96	2.42

CAL YR 1970 TOTAL 77,011 MEAN 211 MAX 1,790 MIN 70 CFSM 3.11 IN 42.19
WTR YR 1971 TOTAL 82,394 MEAN 226 MAX 1,790 MIN 70 CFSM 3.33 IN 45.14

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-11	0400	10.61	4,940	10-30	1200	6.57	2,010

03441000 Davidson River near Brevard, N. C.

LOCATION.--Lat 35°16'23", long 82°42'21", Transylvania County, on right bank 150 ft upstream from bridge on State Highway 280, 2.1 miles downstream from Avery Creek, 3.3 miles northeast of Brevard, and at mile 2.2 (revised).

DRAINAGE AREA.--40.4 sq mi.

PERIOD OF RECORD.--October 1920 to current year. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 2,115.13 ft above mean sea level (levels by Tennessee Valley Authority). Prior to May 17, 1934, nonrecording gage, at site 50 ft downstream at same datum.

AVERAGE DISCHARGE.--51 years, 127 cfs (42.69 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,680 cfs Oct. 11 (gage height, 5.90 ft); minimum, 36 cfs Oct. 5, 6, 7, Sept. 15, 16, 17 (gage height, 0.55 ft).
Period of record: Maximum discharge, 8,400 cfs Aug. 15, 1928 (gage height, 11.8 ft); minimum, 13 cfs Oct. 11, 1954 (gage height, 0.31 ft).
Studies by Tennessee Valley Authority indicate the flood of June 1876 is the highest known, since at least 1869.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 823: Drainage area. WSP 1336: 1921, 1922(M), 1923, 1924-25(M), 1926, 1927(M), 1929-32(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	364	91	84	111	175	138	86	79	106	94	52
2	41	288	89	82	100	197	154	85	76	98	97	53
3	40	249	87	83	95	351	134	84	78	78	206	48
4	38	210	94	195	172	291	126	82	76	67	164	45
5	37	196	83	279	294	234	122	80	71	63	153	44
6	37	167	81	169	202	210	168	81	67	113	146	46
7	37	154	79	140	191	203	144	82	66	100	115	48
8	38	142	78	127	225	178	131	89	84	90	116	47
9	87	133	77	122	193	166	124	79	81	85	111	41
10	235	239	76	114	168	165	118	75	71	96	112	39
11	861	178	76	109	152	157	113	75	72	81	104	62
12	200	158	86	103	144	151	109	98	68	86	92	60
13	135	145	77	99	221	154	107	255	67	92	82	43
14	138	158	73	100	169	151	103	164	65	75	75	40
15	121	174	72	101	155	173	101	207	73	67	71	38
16	101	146	128	91	144	156	99	223	62	64	67	37
17	90	136	106	90	135	143	96	160	60	60	68	59
18	83	129	90	88	129	135	94	132	113	57	66	168
19	78	123	94	83	125	172	92	115	114	70	67	71
20	192	155	83	80	138	148	94	113	85	66	59	54
21	281	133	89	80	131	136	92	103	74	57	56	49
22	174	124	81	85	443	132	92	94	92	55	55	51
23	137	119	194	265	287	126	155	90	91	54	57	46
24	119	112	159	208	215	120	118	87	75	56	52	58
25	122	110	122	197	197	124	102	85	68	86	51	99
26	106	105	106	155	236	129	97	80	64	76	50	59
27	99	103	98	129	222	133	93	77	62	65	49	59
28	93	100	92	133	191	156	101	121	60	59	47	58
29	324	97	91	113	------	208	91	123	59	63	46	50
30	1,030	94	87	131	------	170	88	95	78	73	45	46
31	502	------	91	134	------	149	------	95	------	115	45	------
TOTAL	5,613	4,731	2,910	3,959	5,175	5,293	3,396	3,405	2,250	2,373	2,618	1,662
MEAN	181	158	93.9	128	185	171	113	110	75.0	76.5	84.5	55.4
MAX	1,030	364	194	279	443	351	168	255	114	115	206	168
MIN	37	94	72	80	95	120	88	75	58	54	45	37
CFSM	4.48	3.91	2.32	3.17	4.58	4.23	2.80	2.72	1.86	1.89	2.09	1.37
IN.	5.17	4.36	2.68	3.65	4.77	4.87	3.13	3.14	2.07	2.19	2.41	1.53

CAL YR 1970 TOTAL 39,940 MEAN 109 MAX 1,030 MIN 36 CFSM 2.70 IN 36.78
WTR YR 1971 TOTAL 43,391 MEAN 119 MAX 1,030 MIN 37 CFSM 2.95 IN 39.95

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-11	0400	5.90	2,680	2-22	1215	3.47	1,060
10-30	1130	4.24	1,510				

03441440 Little River above High Falls, near Cedar Mountain, N. C.

LOCATION.--Lat 35°11'32", long 82°36'49", Transylvania County, on left bank 100 ft upstream from High Falls, 0.2 mile upstream from Grassy Creek, 1.0 mile downstream from Reasonover Creek, 3.8 miles northeast of Cedar Mountain, and at mile 7.8.

DRAINAGE AREA.--26.8 sq mi.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,513.27 ft above mean sea level (Tennessee Valley Authority bench mark).

AVERAGE DISCHARGE.--9 years, 102 cfs (51.69 inches per year) unadjusted.

EXTREMES.--Current year: Maximum discharge, 1,550 cfs Oct. 11 (gage height, 4.18 ft); minimum 13 cfs Oct. 7 (gage height, 1.23 ft). Period of record: Maximum discharge, 5,600 cfs Oct. 4, 1964 (gage height, 7.30 ft); minimum, 13 cfs Oct. 7, 1970 (gage height, 1.23 ft).

REMARKS.--Records good. E. I. du Pont de Nemours and Company plant 0.5 mile above gage diverted about 0.25 cfs for industrial use. Since 1969, 7.82 square miles of total drainage affected by occasional filling and/or draining of recreational lakes on tributaries upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	314	63	61	72	133	123	69	58	68	124	48
2	17	257	63	55	68	162	129	67	55	71	180	81
3	17	213	61	55	68	220	114	64	53	77	280	53
4	15	182	61	142	93	206	103	62	51	56	204	46
5	15	165	58	405	184	161	106	61	51	49	173	48
6	14	139	57	195	147	143	129	67	48	85	152	54
7	15	124	55	158	142	141	146	74	45	108	130	48
8	16	119	55	134	180	122	127	77	45	85	141	61
9	72	107	54	119	165	110	116	68	45	80	133	45
10	138	182	54	103	140	110	106	62	45	65	108	41
11	937	165	54	92	127	107	100	68	44	60	100	46
12	244	133	56	89	114	105	96	135	47	59	101	64
13	136	119	55	83	223	105	92	366	51	58	84	47
14	110	121	50	88	189	108	86	204	58	50	78	42
15	102	130	48	94	156	134	82	202	80	46	69	40
16	85	130	139	76	135	130	81	240	51	42	71	38
17	72	107	113	76	121	112	79	175	55	42	75	69
18	63	102	87	69	111	103	76	142	56	39	73	263
19	59	94	81	67	107	139	75	122	57	44	65	154
20	202	104	72	59	118	126	73	116	51	48	59	102
21	577	110	71	59	110	113	75	105	52	39	56	85
22	274	97	69	67	283	107	72	95	79	37	56	98
23	182	92	94	110	253	102	109	85	63	35	55	77
24	139	80	84	115	185	98	105	80	63	40	51	80
25	130	78	76	111	162	97	85	80	49	42	48	117
26	110	76	72	100	169	107	77	74	45	45	46	84
27	100	74	65	83	167	100	75	65	48	38	46	78
28	90	71	61	78	142	116	78	74	57	37	45	70
29	282	66	59	75	------	169	73	76	48	65	43	63
30	998	64	60	81	------	148	70	65	62	88	41	58
31	524	------	65	85	------	129	------	59	------	135	40	------
TOTAL	5,751	3,815	2,112	3,184	4,131	3,963	2,858	3,299	1,612	1,833	2,927	2,200
MEAN	186	127	68.1	103	148	128	95.3	106	53.7	59.1	94.4	73.3
MAX	998	314	139	405	283	220	146	366	80	135	280	263
MIN	14	64	48	55	68	97	70	59	44	35	40	38
CFSM	6.94	4.74	2.54	3.84	5.52	4.78	3.56	3.96	2.00	2.21	3.52	2.74
IN.	7.98	5.30	2.93	4.42	5.73	5.50	3.97	4.58	2.24	2.54	4.06	3.05

CAL YR 1970 TOTAL 32,750 MEAN 89.7 MAX 998 MIN 14 CFSM 3.35 IN 45.46
WTR YR 1971 TOTAL 37,685 MEAN 103 MAX 998 MIN 14 CFSM 3.84 IN 52.31

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-11	Unknown	4.18	1,550	10-30	1515	3.66	1,140

03443000 French Broad River at Blantyre, N. C.

LOCATION.--Lat 35°17'56", long 82°37'27", Transylvania County, on left bank 40 ft upstream from bridge on Secondary Road 1503, 700 ft east of railroad at Blantyre, 3.5 miles downstream from Little River, and at mile 183.7.

DRAINAGE AREA.--296 sq mi.

PERIOD OF RECORD.--October 1920 to current year. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 2,060.32 ft above mean sea level (levels by Tennessee Valley Authority). Prior to July 5, 1930, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--51 years, 954 cfs (43.77 inches per year).

EXTREMES.--Current year: Maximum discharge, 8,590 cfs Oct. 12 (gage height, 20.41 ft); minimum, 262 cfs Oct. 5 (gage height, 3.77 ft).
Period of record: Maximum discharge, 30,000 cfs Oct. 5, 1964 (gage height, 25.50 ft, from floodmarks); minimum, 119 cfs Oct. 11, 1954 (gage height, 2.36 ft).
Maximum stage since at least 1791, 27.1 ft July 16, 1916, from floodmarks (from studies by Tennessee Valley Authority).

REMARKS.--Records good. Considerable diurnal fluctuation at low flow caused by powerplant about 8 miles above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 923: 1921-23, 1929, 1933, 1935-36(M), 1938, 1940.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	333	3,970	785	796	930	1,340	1,180	735	728	730	1,550	481
2	318	2,390	758	758	863	1,430	1,200	719	701	835	1,320	580
3	318	2,060	745	754	814	2,010	1,170	705	681	832	1,910	552
4	281	1,710	735	981	951	2,200	1,080	688	632	690	2,020	471
5	270	1,500	714	2,840	1,730	1,770	1,050	677	624	625	1,560	457
6	287	1,350	706	1,950	1,730	1,570	1,230	698	586	678	1,600	469
7	283	1,250	692	1,350	1,410	1,530	1,380	762	568	1,010	1,260	448
8	281	1,170	684	1,160	1,700	1,380	1,200	795	599	805	1,190	425
9	388	1,100	680	1,070	1,700	1,280	1,120	723	661	773	1,200	367
10	915	1,580	679	1,010	1,350	1,250	1,060	656	667	830	1,030	408
11	4,300	1,560	673	951	1,240	1,250	1,010	638	615	830	1,000	502
12	7,150	1,290	700	916	1,150	1,220	986	720	603	724	1,070	677
13	3,120	1,190	716	889	1,650	1,190	966	1,940	593	683	882	524
14	1,360	1,160	697	879	1,700	1,250	941	1,660	612	606	808	445
15	1,170	1,320	727	914	1,370	1,330	913	1,370	708	565	766	418
16	1,020	1,170	970	874	1,250	1,520	900	1,960	658	540	737	404
17	917	1,080	1,170	843	1,170	1,260	828	1,460	615	539	744	483
18	858	1,030	900	831	1,110	1,160	808	1,200	608	500	735	1,230
19	813	1,010	838	805	1,070	1,300	857	1,060	795	542	688	1,170
20	1,060	1,110	811	726	1,130	1,380	862	1,030	661	660	615	756
21	2,820	1,200	824	706	1,130	1,210	845	1,010	637	546	581	667
22	1,940	1,040	802	732	1,960	1,150	823	897	719	492	560	726
23	1,400	1,000	998	1,160	2,670	1,110	989	850	772	475	573	663
24	1,170	956	1,120	1,260	1,810	1,060	1,190	827	719	484	537	620
25	1,110	919	888	1,350	1,500	1,040	935	811	646	617	514	777
26	1,030	909	821	1,150	1,530	1,130	881	783	548	781	498	650
27	954	899	773	1,030	1,770	1,100	823	751	525	606	487	579
28	908	886	740	945	1,470	1,250	834	786	523	551	482	652
29	1,480	871	732	928	------	1,520	813	966	528	599	470	634
30	4,160	856	753	932	------	1,520	811	768	610	726	448	594
31	4,810	------	799	1,040	------	1,280	------	737	------	1,440	442	------
TOTAL	47,224	39,536	24,630	32,530	39,858	41,990	29,685	29,382	19,142	21,314	28,277	17,829
MEAN	1,523	1,318	795	1,049	1,424	1,355	990	948	638	688	912	594
MAX	7,150	3,970	1,170	2,840	2,670	2,200	1,380	1,960	795	1,440	2,020	1,230
MIN	270	856	673	706	814	1,040	808	638	523	475	442	367
CFSM	5.15	4.45	2.69	3.54	4.81	4.58	3.34	3.20	2.16	2.32	3.08	2.01
IN.	5.93	4.97	3.10	4.09	5.01	5.28	3.73	3.69	2.41	2.68	3.55	2.24

CAL YR 1970 TOTAL 328,575 MEAN 900 MAX 7,150 MIN 270 CFSM 3.04 IN 41.29
WTR YR 1971 TOTAL 371,397 MEAN 1,018 MAX 7,150 MIN 270 CFSM 3.44 IN 46.68

PEAK DISCHARGE (BASE, 4,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-12	0515	20.41	8,590	10-31	1300	17.58	4,890

03444500 South Fork Mills River at The Pink Beds, N. C.

LOCATION.--Lat 35°21'58", long 82°44'22", Transylvania County, in Pisgah National Forest, on left bank at The Pink Beds, 400 ft downstream from Thompson Creek, 9 miles north of Brevard, and at mile 22.1.

DRAINAGE AREA.--9.99 sq mi.

PERIOD OF RECORD.--October 1925 to September 1949, June 1965 to current year. Occasional low-flow measurements, water years 1950, 1953-55, 1960, 1962-64. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 3,138.38 ft above mean sea level. Prior to Mar. 31, 1926, nonrecording gage at site 300 ft upstream at present datum.

AVERAGE DISCHARGE.--30 years, 31.2 cfs (42.41 inches per year).

EXTREMES.--Current year: Maximum discharge, 562 cfs Oct. 30 (gage height, 4.63 ft); minimum daily, 5.0 cfs Oct. 4-7; minimum gage height, 2.17 ft Oct. 8, Sept. 10, 15.
Period of record: Maximum discharge, 2,220 cfs Aug. 15, 1928 (gage height, 8.0 ft), from rating curve extended above 900 cfs on basis of slope-area and contracted-opening measurements at gage height 7.42 ft; minimum, 1.6 cfs Sept. 3, 1930.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Recording rain gage located at station.

REVISIONS.--WSP 823: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	110	26	22	26	45	40	23	26	18	21	12
2	7.0	91	25	22	26	50	40	22	25	18	22	14
3	6.0	77	24	22	26	80	35	21	25	17	59	12
4	5.0	64	23	71	40	75	35	20	23	15	65	11
5	5.0	57	23	85	70	65	40	20	21	15	52	11
6	5.0	51	22	52	48	60	45	23	29	42	43	11
7	5.0	46	21	43	45	60	39	22	24	28	34	11
8	8.0	43	21	39	57	55	36	24	23	23	32	9.9
9	27	40	21	36	48	50	34	20	21	20	30	9.2
10	110	69	20	33	53	50	32	20	21	19	42	9.4
11	143	50	20	32	39	45	31	19	21	17	35	16
12	45	48	24	29	38	45	29	26	20	17	28	12
13	32	44	20	28	67	45	28	82	20	16	24	11
14	33	52	19	30	50	45	27	55	19	14	22	9.1
15	27	53	19	29	44	50	26	63	22	14	20	8.7
16	23	46	35	26	41	45	25	69	18	13	19	8.5
17	21	42	31	25	38	40	24	51	17	12	20	17
18	19	40	25	24	37	40	24	43	50	12	19	42
19	18	38	23	21	36	45	24	38	42	26	19	19
20	67	49	22	20	41	40	26	41	31	17	16	14
21	99	41	23	20	38	40	24	37	26	14	15	12
22	53	38	21	24	157	35	23	33	28	13	14	10
23	41	36	56	58	95	35	45	30	24	13	16	12
24	35	32	43	53	67	35	32	29	21	15	14	16
25	36	32	35	46	57	35	27	27	19	22	13	14
26	31	31	30	40	66	40	25	25	18	18	12	12
27	28	30	28	34	62	35	24	24	21	15	12	10
28	27	29	25	37	50	40	30	41	19	13	11	10
29	117	28	25	31	------	50	24	41	17	18	11	10
30	379	27	24	32	------	45	24	33	21	17	11	10
31	159	------	24	31	------	40	------	29	------	23	11	------
TOTAL	1,619.0	1,434	798	1,095	1,462	1,460	918	1,051	712	554	762	383.8
MEAN	52.2	47.8	25.7	35.3	52.2	47.1	30.6	33.9	23.7	17.9	24.6	12.8
MAX	379	110	56	85	157	80	45	82	50	42	65	42
MIN	5.0	27	19	20	26	35	23	19	17	12	11	8.5
CFSM	5.23	4.78	2.57	3.53	5.23	4.71	3.06	3.39	2.37	1.79	2.46	1.28
IN.	6.03	5.34	2.97	4.08	5.44	5.44	3.42	3.91	2.65	2.06	2.84	1.43

CAL YR 1970 TOTAL 10,791.4 MEAN 29.6 MAX 379 MIN 5.0 CFSM 2.96 IN 40.18
WTR YR 1971 TOTAL 12,248.8 MEAN 33.6 MAX 379 MIN 5.0 CFSM 3.36 IN 45.61

PEAK DISCHARGE (BASE, 340 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-30	1015	4.63	562	2-22	1230	4.06	343

NOTE.--No gage-height record Feb. 28 to Apr. 4.

03446000 Mills River near Mills River, N. C.

LOCATION.--Lat 35°23'56", long 82°35'46", Henderson County, on right bank 1.5 miles downstream from confluence of North and South Forks, 1.8 miles northwest of Mills River, 4.2 miles northwest of Horseshoe, and at mile 4.6.

DRAINAGE AREA.--66.7 sq mi.

PERIOD OF RECORD.--September 1924 to September 1926, October 1933 to current year. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 2,088.47 ft above mean sea level (levels by Tennessee Valley Authority). Prior to Oct. 1, 1926, nonrecording gage at site 500 ft upstream at datum 2.97 ft higher.

AVERAGE DISCHARGE.--40 years, 162 cfs (32.98 inches per year) unadjusted.

EXTREMES.--Current year: Maximum discharge, 1,580 cfs Oct. 30 (gage height, 4.77 ft); minimum, 39 cfs Oct. 5 (gage height, 1.56 ft); minimum daily, 40 cfs Oct. 5-7.
Period of record: Maximum discharge, 13,400 cfs Aug. 30, 1940 (gage height, 13.62 ft), from rating curve extended above 6,200 cfs on basis of slope-area measurement of peak flow; minimum, 16 cfs Dec. 24, 1943 (gage height, 1.33 ft), result of freezeup; minimum daily, 18 cfs Sept. 30, 1954.
The greatest flood since 1876 is probably that of Aug. 30, 1940.

REMARKS.--Records good. City of Hendersonville diverted an average of 5.6 cfs from North Fork and Bradley Creek for municipal water supply.

REVISIONS (WATER YEARS).--WSP 823: Drainage area. WSP 923: 1935, 1937, 1939. WSP 1003: 1938, 1940-42. WSP 1143: 1940(P). WSP 1276: 1926.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	457	127	117	126	241	192	135	137	125	142	83
2	44	370	124	114	125	256	201	133	130	128	137	93
3	44	325	121	113	125	386	184	129	127	114	196	87
4	41	276	117	196	160	380	175	127	125	102	240	81
5	40	244	114	382	270	321	171	124	120	97	257	80
6	40	219	112	243	217	294	224	128	116	139	256	79
7	40	201	109	204	211	292	208	133	130	174	201	78
8	43	186	108	183	259	261	190	134	120	136	170	75
9	73	174	107	170	240	243	181	124	117	119	164	72
10	265	274	106	159	216	238	174	118	114	114	174	70
11	530	229	105	152	206	227	167	116	112	110	238	95
12	208	208	111	146	179	219	162	133	110	103	287	98
13	141	201	106	140	298	219	159	310	113	102	199	80
14	130	220	100	142	243	222	153	236	113	95	167	71
15	115	230	98	145	220	229	150	252	126	89	149	67
16	100	210	139	132	204	219	149	317	109	87	137	65
17	91	200	140	129	191	204	145	245	105	84	134	81
18	86	190	118	127	182	196	142	210	122	79	131	215
19	83	180	111	116	177	221	139	188	180	115	133	129
20	168	210	108	113	188	204	140	191	133	119	118	93
21	398	190	110	115	180	191	142	188	120	91	110	91
22	233	180	105	120	489	186	139	165	140	86	106	88
23	176	170	209	211	429	179	197	155	136	83	111	88
24	150	160	209	204	319	173	182	150	114	93	102	116
25	147	155	164	199	276	176	152	146	105	142	96	110
26	131	147	145	178	297	184	145	136	101	128	94	96
27	122	141	138	152	296	182	141	130	126	107	90	87
28	115	138	129	159	259	207	163	159	138	94	87	83
29	279	134	126	151	------	252	144	207	109	116	85	79
30	1,150	131	120	148	------	223	138	162	112	121	83	74
31	666	------	126	148	------	203	------	148	------	138	82	------
TOTAL	5,893	6,350	3,862	5,008	6,582	7,228	4,949	5,229	3,660	3,430	4,676	2,704
MEAN	190	212	125	162	235	233	165	169	122	111	151	90.1
MAX	1,150	457	209	382	489	386	224	317	180	174	287	215
MIN	40	131	98	113	125	173	138	116	101	79	82	65
CFSM	2.85	3.18	1.87	2.43	3.52	3.49	2.47	2.53	1.83	1.66	2.26	1.35
IN.	3.29	3.54	2.15	2.79	3.67	4.03	2.76	2.92	2.04	1.91	2.61	1.51

CAL YR 1970 TOTAL 50,593 MEAN 139 MAX 1,150 MIN 40 CFSM 2.08 IN 28.22
WTR YR 1971 TOTAL 59,571 MEAN 163 MAX 1,150 MIN 40 CFSM 2.44 IN 33.22

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-30	1430	4.77	1,580				

03448000 French Broad River at Bent Creek, N. C.

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

DRAINAGE AREA.--676 sq mi.

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 1,995.91 ft above mean sea level (levels by Tennessee Valley Authority).

AVERAGE DISCHARGE.--38 years, 1,633 cfs (32.80 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,340 cfs Oct. 13 (gage height, 6.36 ft); minimum, 395 cfs Oct. 5 (gage height, 2.40 ft). Period of record: Maximum discharge, 30,600 cfs Oct. 5, 1964 (gage height, 15.80 ft); minimum, 230 cfs Oct. 4, 5, 10, 11, 12, 1954 (gage height, 2.05 ft).

Maximum stage since at least 1791, 27.3 ft July 15, 1916 (from floodmarks and studies by Tennessee Valley Authority). Flood in August 1928 reached a stage of about 16.1 ft, from floodmarks.

REMARKS.--Records good. Some diurnal fluctuation at low flow caused by powerplant about 34 miles above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 823: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	516	6,100	1,220	1,230	1,420	2,100	1,850	1,220	1,170	1,100	2,400	793
2	505	5,270	1,150	1,150	1,280	2,200	1,820	1,180	1,130	1,290	2,650	916
3	495	3,410	1,130	1,140	1,290	3,390	1,820	1,150	1,100	1,210	2,900	979
4	475	2,620	1,110	1,390	1,320	3,530	1,690	1,150	1,100	1,120	3,200	839
5	415	2,220	1,080	4,110	2,420	2,840	1,640	1,060	1,070	974	3,000	796
6	425	1,980	1,070	3,650	2,770	2,480	1,870	1,050	1,050	1,020	2,380	798
7	435	1,790	1,040	2,280	2,240	2,380	2,130	1,160	1,080	1,460	1,960	789
8	445	1,670	1,030	1,850	2,920	2,140	1,920	1,200	1,050	1,440	1,660	791
9	515	1,610	1,020	1,680	2,970	1,940	1,750	1,160	1,070	1,100	1,640	719
10	953	2,060	1,020	1,610	2,200	1,950	1,650	1,030	1,100	1,100	1,510	671
11	2,870	2,500	1,010	1,540	1,930	1,890	1,620	992	1,080	1,200	1,930	800
12	4,210	1,960	1,020	1,460	1,770	1,820	1,590	1,080	1,080	1,120	1,740	976
13	6,070	1,780	1,060	1,400	2,610	1,870	1,580	2,410	1,100	1,020	1,460	996
14	3,730	1,690	1,010	1,370	2,870	1,880	1,500	2,690	1,100	910	1,350	780
15	1,550	1,930	1,020	1,400	2,230	2,200	1,400	2,020	1,300	840	1,300	709
16	1,400	1,760	1,200	1,370	1,990	2,120	1,400	2,930	1,140	780	1,400	680
17	1,200	1,640	1,700	1,300	1,800	1,870	1,320	2,340	1,210	780	1,430	725
18	1,110	1,600	1,390	1,270	1,680	1,770	1,300	1,830	1,030	780	1,270	1,500
19	1,040	1,560	1,240	1,230	1,630	2,030	1,250	1,800	1,160	880	1,230	2,040
20	1,160	1,590	1,180	1,120	1,660	1,940	1,310	1,580	1,270	1,080	1,210	1,310
21	2,980	1,740	1,170	1,120	1,670	1,760	1,310	1,620	1,060	980	1,090	1,100
22	2,990	1,600	1,160	1,130	3,060	1,700	1,320	1,430	1,280	820	987	1,360
23	1,890	1,520	1,710	1,480	4,050	1,660	1,450	1,340	1,180	780	1,050	1,120
24	1,520	1,440	2,060	1,880	2,950	1,640	1,880	1,300	1,150	860	992	1,040
25	1,440	1,360	1,580	1,980	2,360	1,630	1,580	1,300	1,030	980	922	1,290
26	1,370	1,370	1,380	1,750	2,440	1,720	1,320	1,200	954	1,320	877	1,180
27	1,240	1,340	1,260	1,590	2,730	1,730	1,300	1,150	902	1,100	852	1,000
28	1,170	1,320	1,200	1,450	2,310	1,990	1,320	1,220	968	940	838	1,010
29	1,530	1,290	1,150	1,430	------	2,300	1,260	1,600	893	1,050	825	996
30	5,290	1,270	1,160	1,410	------	2,400	1,240	1,400	915	1,500	795	944
31	6,220	------	1,190	1,520	------	2,060	------	1,200	------	1,700	790	------
TOTAL	57,159	60,990	37,720	50,290	62,570	64,930	46,390	45,792	32,722	33,234	47,638	29,645
MEAN	1,844	2,033	1,217	1,622	2,235	2,095	1,546	1,477	1,091	1,072	1,537	988
MAX	6,220	6,100	2,060	4,110	4,050	3,530	2,130	2,930	1,300	1,700	3,200	2,040
MIN	415	1,270	1,010	1,120	1,280	1,630	1,240	992	893	780	790	671
CFSM	2.73	3.01	1.80	2.40	3.31	3.10	2.29	2.18	1.61	1.59	2.27	1.46
IN.	3.15	3.36	2.08	2.77	3.44	3.57	2.55	2.52	1.80	1.83	2.62	1.63

CAL YR 1970 TOTAL 513,314 MEAN 1,406 MAX 6,220 MIN 415 CFSM 2.08 IN 28.25
WTR YR 1971 TOTAL 569,080 MEAN 1,559 MAX 6,220 MIN 415 CFSM 2.31 IN 31.32

PEAK DISCHARGE (BASE, 6,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-13	1230	6.36	6,340	10-31	1715	6.34	6,310

03448500 Hominy Creek at Candler, N. C.

LOCATION.--Lat 35°32'28", long 82°40'35", Buncombe County, on left bank 0.1 mile downstream from Pole Creek, 0.4 mile downstream from bridge on State Highway 112, 1.0 mile east of Candler, and at mile 10.3.

DRAINAGE AREA.--79.8 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 2,065.83 ft above mean sea level (levels by Tennessee Valley Authority).

AVERAGE DISCHARGE.--29 years, 91.1 cfs (15.50 inches per year).

EXTREMES.--Current year: Maximum discharge, 764 cfs July 1 (gage height, 3.19 ft); minimum, 29 cfs Oct. 4, 5, 6, 7 (gage height, 1.01 ft).
Period of record: Maximum discharge, 6,800 cfs June 16, 1949 (gage height, 13.25 ft); minimum, 13 cfs Sept. 2, 1953 (gage height, 0.80 ft).
Flood of Aug. 30, 1940, reached a stage of 18.0 ft, from floodmarks (discharge, 13,100 cfs by conveyance method). Maximum stage since at least 1840, that of Aug. 30, 1940, from studies by Tennessee Valley Authority.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Numerous small diversions for irrigation above station.

REVISIONS.--WSP 1113: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	181	61	62	85	137	108	80	75	220	79	51
2	35	145	60	60	80	144	109	79	72	171	92	54
3	34	133	58	60	78	188	101	78	72	110	127	51
4	32	114	56	150	95	175	97	75	70	89	125	49
5	32	101	56	280	137	159	95	74	68	78	174	49
6	32	90	56	170	109	152	162	83	66	97	130	49
7	32	84	54	130	129	149	136	80	72	127	115	48
8	33	78	54	100	157	136	123	88	68	122	96	49
9	72	74	54	90	139	127	116	75	65	93	88	46
10	114	135	54	85	136	126	109	71	64	93	85	45
11	135	101	54	85	121	119	105	70	62	85	89	55
12	79	101	56	80	109	115	102	81	62	91	131	55
13	61	101	53	75	275	119	99	138	64	78	90	49
14	65	94	51	75	169	117	95	104	64	70	80	45
15	56	96	51	80	145	124	93	136	70	67	75	43
16	50	88	74	70	132	113	91	147	62	64	70	43
17	46	82	63	70	123	107	89	118	60	61	69	58
18	45	80	56	65	117	103	87	104	66	59	68	103
19	43	76	54	60	112	114	85	94	140	120	65	62
20	92	98	54	60	115	107	85	114	110	93	61	51
21	176	82	56	60	117	101	86	106	100	72	59	51
22	103	78	53	62	325	100	84	92	124	67	65	51
23	80	74	254	160	245	97	129	86	99	62	81	48
24	72	69	170	150	189	93	100	84	81	64	60	48
25	76	84	118	140	162	95	88	82	73	81	57	47
26	65	69	98	120	183	102	86	75	69	78	55	47
27	61	67	92	110	162	106	83	72	111	72	54	46
28	58	65	80	100	146	108	99	92	98	78	53	44
29	109	63	65	90	------	142	83	105	75	78	51	43
30	340	63	62	100	------	120	81	93	143	85	50	42
31	209	------	65	100	------	113	------	81	------	99	49	------
TOTAL	2,473	2,766	2,242	3,099	4,092	3,808	3,006	2,857	2,425	2,824	2,543	1,522
MEAN	79.8	92.2	72.3	100	146	123	100	92.2	80.8	91.1	82.0	50.7
MAX	340	181	254	280	325	188	162	147	143	220	174	103
MIN	32	63	51	60	78	93	81	70	60	59	49	42
CFSM	1.00	1.16	.91	1.25	1.83	1.54	1.25	1.16	1.01	1.14	1.03	.64
IN.	1.15	1.29	1.05	1.44	1.91	1.78	1.40	1.33	1.13	1.32	1.19	.71

CAL YR 1970 TOTAL 30,478 MEAN 83.5 MAX 364 MIN 30 CFSM 1.05 IN 14.21
WTR YR 1971 TOTAL 33,657 MEAN 92.2 MAX 340 MIN 32 CFSM 1.16 IN 15.59

PEAK DISCHARGE (BASE, 900 CFS).--No peak above base.

NOTE.--No gage-height record Dec. 31 to Feb. 4.

03450000 Beetree Creek near Swannanoa, N. C.

LOCATION.--Lat 35°39'11", long 82°24'20", Buncombe County, on left bank 0.5 mile downstream from Wolfe Branch, 0.8 mile upstream from Beetree Reservoir dam, 3.8 miles north of Swannanoa, and 4.8 miles above mouth.

DRAINAGE AREA.--5.46 sq mi.

PERIOD OF RECORD.--February 1926 to current year.

GAGE.--Water-stage recorder and sharp-crested weir set in masonry control. Datum of gage is 2,728.39 ft above mean sea level.

AVERAGE DISCHARGE.--45 years, 10.4 cfs (25.87 inches per year).

EXTREMES.--Current year: Maximum discharge, 68 cfs July 7 (gage height, 2.91 ft); minimum daily, 1.4 cfs Oct. 6.
Period of record: Maximum discharge, 1,370 cfs Aug. 13, 1940 (gage height, 6.20 ft), from rating curve extended above 240 cfs on basis of computation of peak flow over weir; minimum, 0.3 cfs Sept. 29, 30, Oct. 1, 1954 (gage height, 0.26 ft).

REMARKS.--Records good. Recording rain gage located at station.

REVISIONS (WATER YEARS).--WSP 823: Drainage area. WSP 893: 1928, 1936-37(M). WSP 953: 1929(M). WSP 1276: 1932.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	15	5.0	6.5	15	17	12	7.7	11	6.0	11	2.6
2	1.5	11	4.7	6.7	12	20	13	7.7	10	5.9	12	3.0
3	1.5	12	4.6	6.7	11	27	12	7.5	9.6	5.5	21	2.7
4	1.5	11	4.3	11	16	26	11	7.2	9.0	4.9	26	2.4
5	1.5	10	4.1	26	29	24	11	7.0	8.4	4.7	19	2.4
6	1.4	9.6	4.0	19	23	22	15	7.5	7.7	5.5	17	2.4
7	1.5	9.7	3.9	14	26	20	15	7.5	7.2	12	15	2.6
8	2.0	8.8	4.0	12	33	17	15	8.2	6.9	15	12	2.6
9	2.0	8.0	3.7	11	28	16	15	7.4	6.6	12	11	2.1
10	6.0	15	3.7	9.8	22	15	14	6.7	6.6	14	13	2.4
11	6.6	13	3.7	9.7	19	14	13	6.7	6.1	13	16	3.3
12	3.2	12	3.7	9.1	17	14	12	9.0	5.9	11	13	3.1
13	2.4	11	3.5	8.6	23	15	11	24	5.9	9.4	11	2.3
14	2.3	10	3.2	8.7	19	15	11	27	6.3	8.2	9.3	2.1
15	2.2	11	3.2	8.3	17	16	10	24	9.6	7.4	8.2	1.9
16	1.9	9.8	3.9	7.5	16	16	9.7	28	10	6.7	7.4	1.8
17	1.8	9.1	4.1	7.4	16	15	9.2	21	8.0	6.0	7.1	2.8
18	1.7	8.5	3.6	7.0	16	14	8.9	18	7.2	5.3	6.6	7.6
19	1.6	8.0	3.5	5.9	16	14	8.5	15	12	8.7	5.9	4.9
20	2.3	9.5	3.5	6.0	17	13	8.3	14	12	7.4	5.3	3.9
21	3.4	8.8	3.9	6.5	16	13	8.3	12	11	5.9	4.9	4.8
22	2.7	8.2	3.6	6.8	32	13	8.0	11	10	5.4	4.7	4.3
23	2.4	7.6	23	15	33	12	9.9	10	9.9	4.9	5.5	4.2
24	2.3	6.4	19	15	26	11	9.0	10	8.4	5.4	4.3	4.5
25	2.4	5.9	13	16	21	11	8.2	9.7	7.6	6.4	3.9	3.6
26	2.3	5.9	10	15	24	11	7.9	8.8	6.9	6.8	3.7	4.0
27	2.2	5.9	8.8	12	22	12	7.8	8.2	6.4	5.8	3.4	3.6
28	3.0	5.6	7.9	12	19	12	9.5	11	5.9	5.0	3.1	3.4
29	7.0	5.5	7.7	10	------	15	8.2	14	7.6	8.1	2.9	3.2
30	25	5.2	7.1	14	------	13	8.0	14	6.6	8.9	2.8	2.8
31	20	------	7.1	13	------	13	------	12	------	12	2.6	------
TOTAL	119.1	277.0	189.0	336.2	584	486	319.4	381.8	246.3	243.2	288.6	97.3
MEAN	3.84	9.23	6.10	10.8	20.9	15.7	10.6	12.3	8.21	7.85	9.31	3.24
MAX	25	15	23	26	33	27	15	28	12	15	26	7.6
MIN	1.4	5.2	3.2	5.9	11	11	7.8	6.7	5.9	4.7	2.6	1.8
CFSM	.70	1.69	1.12	1.98	3.83	2.88	1.94	2.25	1.50	1.44	1.71	.59
IN.	.81	1.89	1.29	2.29	3.98	3.31	2.18	2.60	1.68	1.66	1.97	.66

CAL YR 1970 TOTAL 2,751.5 MEAN 7.54 MAX 33 MIN 1.3 CFSM 1.38 IN 18.75
WTR YR 1971 TOTAL 3,567.9 MEAN 9.78 MAX 33 MIN 1.4 CFSM 1.79 IN 24.31

PEAK DISCHARGE (BASE, 150 CFS).--No peak above base.

03451000 Swannanoa River at Biltmore, N. C.

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

DRAINAGE AREA.--130 sq mi.

PERIOD OF RECORD.--October 1920 to September 1926, May 1934 to current year. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,976.58 ft above mean sea level (levels by Tennessee Valley Authority). Dec. 1, 1920, to Sept. 30, 1926, nonrecording gage at site 100 ft upstream at same datum.

AVERAGE DISCHARGE.--44 years (1920-26, 1933-71), 155 cfs (unadjusted).

EXTREMES.--Current year: Maximum discharge, 2,160 cfs June 19 (gage height, 5.98 ft); minimum daily, 23 cfs Oct. 5; minimum gage height, 1.25 ft Oct. 5.

Period of record: Maximum discharge, 18,400 cfs Aug. 13, 1940 (gage height, 19.00 ft), from rating curve extended above 8,400 cfs on basis of computation of peak flow over dam 3.6 miles above station; minimum, 1.1 cfs Oct. 9, 14, 15, 1941; minimum daily, 1.2 cfs Oct. 14, 1941.

Maximum stage observed, 26 ft (discharge, 40,000 cfs) in April 1791, from studies by Tennessee Valley Authority. Flood of July 1916 reached a stage of 20.7 ft (discharge, 23,000 cfs), from flood profile by Tennessee Valley Authority. Flood of Aug. 16, 1928, reached a stage of 18.74 ft, from floodmarks (discharge, 17,800 cfs). High stages are subject to backwater from French Broad River.

REMARKS.--Records good. Considerable regulation by Lake Craig 3.6 miles above station from 1925 to 1950 (reservoir silted). No diversion from Beetree Reservoir above station by city of Asheville for water supply since June 1963. City of Asheville diverted an average of 29.9 cfs for water supply from Burnett Lake on North Fork Swannanoa River 20 miles above station (see p. 199); an average of 24.0 cfs was discharged as sewage effluent into the French Broad River below station. Textile mills, the town of Black Mountain, and recreational camps diverted about 6 cfs above station, of which about half was discharged into the French Broad River below station. Complete record of diversions and return water not available. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 803: 1921 (M), 1923 (M), 1925 (M). WSP 823: Drainage area. WSP 1306: 1921 (M), 1924 (M), 1926 (M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	174	71	90	165	273	179	104	106	114	111	39
2	30	137	67	83	150	337	176	99	97	73	116	59
3	35	140	71	83	140	532	174	94	99	75	140	46
4	29	116	61	134	200	540	160	90	101	65	168	46
5	23	119	61	254	350	448	143	86	86	59	225	43
6	29	119	61	234	190	384	260	92	79	67	185	41
7	27	119	55	190	320	348	276	99	81	188	182	41
8	27	109	54	158	380	305	238	126	81	157	151	57
9	41	97	54	140	320	279	215	97	77	86	119	39
10	62	197	55	125	289	250	209	92	81	109	104	43
11	82	200	55	120	244	222	191	99	99	111	182	57
12	54	185	67	100	215	191	176	111	79	81	165	59
13	42	197	59	95	400	209	162	276	81	86	124	41
14	36	162	52	90	292	254	157	334	75	65	109	39
15	41	171	54	100	241	270	134	360	129	57	90	35
16	36	140	71	85	212	279	126	416	121	55	77	30
17	38	140	65	80	200	244	126	314	83	57	69	48
18	36	119	57	77	188	222	119	250	77	52	73	111
19	33	109	59	71	174	218	106	203	252	83	63	83
20	44	119	59	59	185	197	104	171	132	83	55	52
21	90	116	59	73	188	185	104	154	94	59	52	69
22	60	106	55	75	388	171	104	134	88	55	57	73
23	56	97	302	140	456	165	162	119	121	54	73	55
24	51	86	206	165	340	154	148	109	86	97	55	83
25	51	75	140	188	314	151	116	106	77	99	48	59
26	44	79	114	182	360	174	99	92	71	92	46	55
27	42	75	99	140	356	168	99	81	73	65	45	48
28	44	75	88	126	308	182	132	126	109	60	46	71
29	117	73	86	121	------	231	111	179	77	92	43	50
30	432	71	83	143	------	203	99	148	88	111	38	45
31	244	------	86	182	------	185	------	126	------	132	46	------
TOTAL	2,006	3,722	2,526	3,903	7,565	7,971	4,605	4,887	2,900	2,639	3,057	1,617
MEAN	64.7	124	81.5	126	270	257	154	158	96.7	85.1	98.6	53.9
MAX	432	200	302	254	456	540	276	416	252	188	225	111
MIN	23	71	52	59	140	151	99	81	71	52	38	30

CAL YR 1970 TOTAL 35,583 MEAN 97.5 MAX 456 MIN 23
WTR YR 1971 TOTAL 47,398 MEAN 130 MAX 540 MIN 23

03451500 French Broad River at Asheville, N. C.

LOCATION.--Lat 35°36'32", long 82°34'41", Buncombe County, on right bank 27 ft upstream (revised) from Pearson Bridge at Asheville, 2.3 miles downstream from Southern Railway station, 3.2 miles downstream from Swannanoa River, and at mile 145.8.

DRAINAGE AREA.--945 sq mi.

PERIOD OF RECORD.--October 1895 to current year. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 1,950.28 ft above mean sea level. Sept. 17, 1895, to Dec. 31, 1901, nonrecording gage at present site at different datum. Mar. 19, 1903, to July 15, 1916, and Jan. 1, 1917, to Sept. 30, 1922, nonrecording gage at Smith Bridge 1.5 miles upstream at datum 11.52 ft higher. Oct. 1, 1922, to Aug. 9, 1930, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--76 years, 2,053 cfs (29.50 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,090 cfs Oct. 30 (gage height, 5.12 ft); minimum daily, 596 cfs Oct. 5, 6.
Period of record: Maximum discharge, 110,000 cfs July 16, 1916 (gage height, 23.1 ft, present site and datum, from floodmarks), from rating curve extended above 43,000 cfs; minimum, 239 cfs at times in August and September 1925 (gage height, 0.16 ft).
Maximum stage observed since at least 1791, that of July 16, 1916, and flood of June 17, 1876, reached a stage of 18 ft, from studies by Tennessee Valley Authority.

REMARKS.--Records good except those for part of the months of June and July, which are fair. Many small diversions from tributaries above station for water supply. Diversions by city of Asheville and others from upstream tributaries in the Swannanoa River basin totaled about 36 cfs (see sta 03451000) of which 24.0 cfs was discharged as sewage effluent 4 miles below station. Slight diurnal fluctuation and occasional slight regulation at low flow caused by powerplant 46 miles upstream and small reservoirs above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 823: Drainage area. WSP 1306: 1895-1909, 1901(M), 1914-15(M), 1917(M), 1920-22(M), 1927(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	650	6,650	1,350	1,350	1,650	2,560	2,160	1,440	1,380	1,380	2,740	845
2	635	5,720	1,290	1,320	1,490	2,610	2,100	1,370	1,330	1,580	2,900	922
3	635	3,910	1,250	1,320	1,510	3,660	2,120	1,350	1,290	1,400	3,480	1,020
4	620	2,920	1,230	1,490	1,560	4,380	1,950	1,330	1,280	1,300	3,780	911
5	596	2,480	1,200	4,270	2,740	3,620	1,960	1,290	1,220	1,180	3,480	856
6	596	2,240	1,180	4,230	3,390	3,100	2,180	1,290	1,200	1,200	2,950	867
7	615	2,040	1,150	2,740	2,740	2,880	2,550	1,390	1,250	1,580	2,580	856
8	615	1,910	1,140	2,210	3,480	2,680	2,310	1,460	1,220	1,920	2,090	889
9	681	1,790	1,140	1,980	3,670	2,450	2,100	1,440	1,270	1,390	2,000	812
10	1,020	2,240	1,140	1,860	2,790	2,320	2,000	1,290	1,300	1,370	1,830	779
11	2,750	2,920	1,130	1,730	2,420	2,310	1,890	1,250	1,290	1,510	1,830	878
12	4,130	2,360	1,140	1,630	2,200	2,200	1,820	1,320	1,280	1,370	2,550	1,050
13	6,210	2,180	1,170	1,560	3,280	2,160	1,770	2,710	1,280	1,250	1,850	1,090
14	4,340	2,000	1,130	1,530	3,530	2,290	1,720	3,370	1,300	1,130	1,560	900
15	3,700	2,240	1,130	1,560	2,740	2,320	1,660	2,610	1,500	1,030	1,410	812
16	1,400	2,070	1,250	1,520	2,420	2,660	1,620	3,600	1,700	999	1,650	779
17	1,220	1,990	1,550	1,450	2,210	2,390	1,590	3,040	1,500	966	1,510	834
18	1,140	1,760	1,550	1,420	2,090	2,160	1,520	2,390	1,450	955	1,370	1,530
19	1,080	1,700	1,350	1,370	1,980	2,150	1,490	2,060	1,500	1,060	1,280	2,400
20	1,170	1,740	1,300	1,240	2,000	2,370	1,510	1,880	1,700	1,380	1,230	1,530
21	3,000	1,980	1,300	1,240	2,060	2,160	1,520	1,920	1,450	1,140	1,110	1,250
22	3,310	1,770	1,290	1,300	3,300	2,030	1,510	1,700	1,510	999	1,050	1,460
23	2,210	1,650	2,230	1,720	5,080	1,970	1,720	1,590	1,520	966	1,170	1,240
24	1,740	1,560	2,660	2,280	3,960	1,860	2,310	1,520	1,360	1,050	1,030	1,150
25	1,570	1,480	1,920	2,420	2,970	1,820	1,830	1,490	1,250	1,210	977	1,320
26	1,490	1,490	1,600	2,160	2,820	1,970	1,620	1,440	1,150	1,660	944	1,290
27	1,370	1,460	1,450	1,950	3,310	2,000	1,520	1,380	1,100	1,370	922	1,080
28	1,310	1,440	1,390	1,660	2,870	2,260	1,590	1,460	1,200	1,170	900	1,050
29	1,570	1,410	1,330	1,630	------	2,600	1,580	1,880	1,110	1,260	889	1,050
30	5,830	1,380	1,330	1,650	------	2,740	1,460	1,700	1,100	1,950	867	966
31	6,940	------	1,350	1,300	------	2,390	------	1,460	------	1,940	845	------
TOTAL	62,140	68,380	42,910	57,520	76,260	77,070	54,580	55,420	39,990	40,665	54,774	32,416
MEAN	2,005	2,279	1,384	1,855	2,724	2,486	1,819	1,788	1,333	1,312	1,767	1,081
MAX	6,940	6,650	2,660	4,270	5,080	4,380	2,550	3,600	1,700	1,950	3,780	2,400
MIN	596	1,380	1,130	1,240	1,490	1,820	1,460	1,250	1,100	955	845	779
CFSM	2.12	2.41	1.46	1.96	2.88	2.63	1.92	1.89	1.41	1.39	1.87	1.14
IN.	2.45	2.69	1.69	2.26	3.00	3.03	2.15	2.18	1.57	1.60	2.16	1.28

CAL YR 1970 TOTAL 587,863 MEAN 1,611 MAX 6,940 MIN 533 CFSM 1.70 IN 23.14
WTR YR 1971 TOTAL 662,125 MEAN 1,814 MAX 6,940 MIN 596 CFSM 1.92 IN 26.06

PEAK DISCHARGE (BASE, 9,000 CFS).--No peak above base.

03453000 Ivy River near Marshall, N. C.

LOCATION.--Lat 35°46'10", long 82°37'16", Madison County, on right bank 0.2 mile downstream from bridge on Secondary Road 1586, 1.9 miles upstream from mouth, and 4.0 miles southeast of Marshall.

DRAINAGE AREA.--158 sq mi.

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 1,700.41 ft above mean sea level (levels by Tennessee Valley Authority).

AVERAGE DISCHARGE.--38 years, 150 cfs (12.89 inches per year).

EXTREMES.--Current year: Maximum discharge, 985 cfs Feb. 22 (gage height, 5.15 ft); minimum, 17 cfs Nov. 25, result of freezeup; minimum gage height, 1.65 ft Oct. 7.
Period of record: Maximum discharge, 14,400 cfs Mar. 26, 1965 (gage height, 14.52 ft); minimum, 3 cfs Jan. 20, 1940, result of freezeup; minimum gage height, 1.51 ft Aug. 30, Sept. 2, 1953; minimum daily discharge, 8.5 cfs Sept. 2, 18, 1953.
Flood in June 1876 reached a stage of 16.0 ft, from studies by Tennessee Valley Authority (discharge, 14,000 cfs). An outstanding but lesser flood occurred in July 1916 (stage and discharge unknown).

REMARKS.--Records good. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 803: 1934(M), 1935. WSP 1910: 1936(P), 1937(M), 1940(M), 1946(M), 1957(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	95	43	58	73	234	177	141	93	68	364	42
2	23	71	41	55	75	279	174	125	85	64	393	43
3	23	82	39	64	80	468	156	118	82	67	238	42
4	21	67	38	71	176	564	138	107	74	52	340	39
5	20	67	35	178	346	415	126	96	70	46	234	38
6	20	64	36	137	297	347	171	110	64	109	419	39
7	20	61	33	110	288	322	228	241	66	98	444	62
8	20	58	36	93	427	275	226	213	113	102	282	71
9	21	54	36	84	401	235	221	185	80	66	206	44
10	26	130	34	76	276	217	206	161	88	60	307	39
11	76	131	33	71	226	200	184	140	69	89	203	36
12	54	92	34	65	199	182	167	131	61	96	155	83
13	38	103	35	61	311	180	153	306	65	167	121	49
14	32	80	32	62	302	266	141	313	86	89	101	45
15	31	79	30	72	263	268	126	296	105	71	89	39
16	30	70	34	59	249	272	117	388	103	61	80	36
17	27	62	41	57	234	230	109	320	91	52	76	49
18	27	58	37	56	224	199	103	260	183	46	72	95
19	27	54	34	47	216	191	97	212	149	174	67	85
20	31	71	35	35	247	181	92	180	129	208	62	59
21	37	87	43	45	216	161	92	157	143	108	57	66
22	38	68	42	70	462	158	97	134	114	89	92	53
23	33	62	239	243	491	147	123	118	142	71	203	48
24	32	47	303	262	345	131	130	107	95	93	97	54
25	33	45	156	320	267	128	99	105	80	92	70	47
26	32	45	105	217	323	137	92	94	68	225	61	54
27	31	45	84	130	361	130	89	83	66	220	56	54
28	31	48	77	100	283	144	216	116	58	122	51	49
29	63	46	71	110	------	220	183	137	54	105	47	44
30	362	46	65	117	------	218	159	130	52	164	45	40
31	152	------	60	137	------	198	------	111	------	322	43	------
TOTAL	1,434	2,088	1,961	3,262	7,658	7,297	4,392	5,335	2,728	3,396	5,075	1,544
MEAN	46.3	69.6	63.3	105	274	235	146	172	90.9	110	164	51.5
MAX	362	131	303	320	491	564	228	388	183	322	444	95
MIN	20	45	30	35	73	128	89	83	52	46	43	36
CFSM	.29	.44	.40	.66	1.73	1.49	.92	1.09	.58	.70	1.04	.33
IN.	.34	.49	.46	.77	1.80	1.72	1.03	1.26	.64	.80	1.19	.36

CAL YR 1970 TOTAL 34,562 MEAN 94.7 MAX 1,080 MIN 17 CFSM .60 IN 8.14
WTR YR 1971 TOTAL 46,170 MEAN 126 MAX 564 MIN 20 CFSM .80 IN 10.87

PEAK DISCHARGE (BASE, 2,700 CFS).--No peak above base.

03453500 French Broad River at Marshall, N. C.

LOCATION.--Lat 35°47'10", long 82°39'39", Madison County, on right bank 0.7 mile upstream from Hayes Creek, 1.0 mile downstream from Ivy River, 1.5 miles southeast of Marshall, and at mile 126.7.

DRAINAGE AREA.--1,332 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,646.79 ft above mean sea level (levels by Tennessee Valley Authority).

AVERAGE DISCHARGE.--29 years, 2,358 cfs (24.04 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,470 cfs Oct. 30 (gage height, 4.56 ft); minimum discharge, 627 cfs Oct. 6 (gage height, 0.93 ft); minimum daily, 641 cfs Oct. 6.
Period of record: Maximum discharge, 40,400 cfs Mar. 26, 1965 (gage height, 11.54 ft); minimum, 193 cfs Sept. 13, 14, 1954 (gage height, 0.36 ft); minimum daily, 292 cfs Sept. 27, 28, 1954.
Maximum stage observed since at least 1791, 22.0 ft July 16, 1916 (discharge, 115,000 cfs), and flood of Aug. 30, 1940, reached a stage of 16.6 ft (discharge, 70,000 cfs), from high-water marks, flood profiles, and studies by Tennessee Valley Authority.

REMARKS.--Records good. Small diversions from tributaries for water supply. Slight diurnal fluctuation and occasional slight regulation at low flow caused by small reservoirs above station. Prior to July 1963, some regulation by Weaverville plant of Carolina Power and Light Company 15 miles upstream.

REVISIONS (WATER YEARS).--WSP 1436: 1954(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	761	6,930	1,590	1,660	2,030	3,220	2,710	1,830	1,700	1,650	3,460	1,040
2	744	6,170	1,510	1,590	1,910	3,270	2,590	1,740	1,640	1,990	3,700	1,070
3	724	4,510	1,470	1,570	1,880	4,430	2,600	1,710	1,590	1,760	3,670	1,250
4	710	3,310	1,440	1,640	1,950	5,650	2,420	1,690	1,570	1,620	4,490	1,180
5	673	2,790	1,400	4,230	3,050	4,690	2,290	1,620	1,500	1,430	4,110	1,060
6	641	2,510	1,370	4,890	4,160	4,000	2,660	1,620	1,430	1,430	3,840	1,040
7	663	2,310	1,340	3,340	3,490	3,700	3,280	1,860	1,410	1,810	3,510	1,100
8	671	2,150	1,330	2,620	4,260	3,410	3,010	1,920	1,530	2,390	2,690	1,150
9	698	2,030	1,320	2,330	4,740	3,070	2,730	1,880	1,480	1,720	2,500	1,040
10	942	2,420	1,330	2,180	3,530	2,900	2,560	1,720	1,560	1,620	2,560	956
11	2,400	3,350	1,320	2,050	3,020	2,840	2,410	1,620	1,500	1,860	2,300	991
12	4,290	2,710	1,330	1,940	2,740	2,710	2,300	1,590	1,470	1,740	2,860	1,290
13	6,010	2,510	1,340	1,860	3,950	2,650	2,230	2,970	1,440	1,700	2,310	1,320
14	5,280	2,260	1,330	1,820	4,520	2,900	2,170	4,070	1,510	1,500	1,960	1,190
15	2,210	2,450	1,290	1,870	3,540	2,880	2,080	3,280	1,690	1,330	1,800	1,010
16	1,790	2,380	1,370	1,810	3,110	3,250	2,030	4,200	2,090	1,240	1,850	957
17	1,560	2,170	1,940	1,720	2,830	3,000	1,980	3,880	1,850	1,200	1,970	1,000
18	1,420	2,030	1,880	1,690	2,680	2,690	1,890	3,060	1,710	1,150	1,710	1,400
19	1,350	1,950	1,610	1,630	2,530	2,620	1,860	2,600	1,790	1,430	1,650	2,710
20	1,350	1,980	1,530	1,530	2,540	2,840	1,870	2,350	2,110	1,860	1,620	1,960
21	2,780	2,240	1,510	1,550	2,580	2,670	1,870	2,350	1,740	1,520	1,480	1,540
22	3,800	2,080	1,510	1,570	4,000	2,490	1,870	2,130	1,790	1,300	1,400	1,620
23	2,670	1,920	2,670	2,050	6,250	2,410	2,030	1,960	1,910	1,190	1,660	1,560
24	2,070	1,820	3,590	2,830	4,990	2,290	2,710	1,870	1,700	1,180	1,480	1,460
25	1,870	1,700	2,480	3,150	3,770	2,240	2,290	1,850	1,560	1,490	1,280	1,490
26	1,780	1,740	2,010	2,790	3,630	2,370	1,990	1,780	1,430	1,950	1,210	1,600
27	1,650	1,700	1,790	2,310	4,190	2,420	1,900	1,690	1,320	1,900	1,170	1,430
28	1,550	1,670	1,700	2,030	3,690	2,660	2,060	1,760	1,490	1,490	1,130	1,320
29	1,620	1,650	1,620	2,010	------	3,110	2,050	2,190	1,370	1,500	1,100	1,330
30	5,780	1,620	1,590	2,080	------	3,410	1,900	2,150	1,350	2,290	1,080	1,280
31	7,200	------	1,600	2,310	------	3,010	------	1,830	------	2,550	1,050	------
TOTAL	67,657	77,060	51,110	68,650	95,560	95,800	68,340	68,770	48,230	50,790	68,600	39,344
MEAN	2,182	2,569	1,649	2,215	3,413	3,090	2,278	2,218	1,608	1,638	2,213	1,311
MAX	7,200	6,930	3,590	4,890	6,250	5,650	3,280	4,200	2,110	2,550	4,490	2,710
MIN	641	1,620	1,290	1,530	1,880	2,240	1,860	1,590	1,320	1,150	1,050	956
CFSM	1.64	1.93	1.24	1.66	2.56	2.32	1.71	1.67	1.21	1.23	1.66	.98
IN.	1.89	2.15	1.43	1.92	2.67	2.68	1.91	1.92	1.35	1.42	1.92	1.10

CAL YR 1970 TOTAL 714,515 MEAN 1,958 MAX 7,200 MIN 641 CFSM 1.47 IN 19.95
WTR YR 1971 TOTAL 799,911 MEAN 2,192 MAX 7,200 MIN 641 CFSM 1.65 IN 22.34

PEAK DISCHARGE (BASE, 10,000 CFS).--No peak above base.

03454000 Big Laurel Creek near Stackhouse, N. C.

LOCATION.--Lat 35°55'11", long 82°45'42", Madison County, on left bank 50 ft west of State Highway 208, 0.2 mile downstream from Big Hurricane Creek, 0.6 mile upstream from Little Hurricane Creek, 2.8 miles north of Stackhouse, and 4.3 miles (revised) upstream from mouth.

DRAINAGE AREA.--126 sq mi.

PERIOD OF RECORD.--October 1933 to September 1971 (discontinued). Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 1,595.68 ft above mean sea level (levels by Tennessee Valley Authority).

AVERAGE DISCHARGE.--38 years, 183 cfs (19.72 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,510 cfs Jan. 23 (gage height, 5.11 ft); minimum, 23 cfs Dec. 7 (gage height, 1.06 ft), result of freezeup.
Period of record: Maximum discharge, 10,900 cfs Mar. 26, 1965 (gage height, 9.94 ft, from floodmark); minimum, 11 cfs Jan. 6, 1942 (gage height, 0.92 ft), result of freezeup; minimum daily, 19 cfs Sept. 2, 16-18, 1953.

REMARKS.--Records good.

REVISIONS.--WSP 823: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	59	44	70	102	298	245	235	108	86	788	86
2	34	49	43	68	100	324	232	205	106	127	625	86
3	33	57	41	81	100	626	200	187	103	132	471	84
4	31	54	40	103	273	799	179	166	101	93	387	79
5	30	63	38	200	622	544	166	153	94	83	498	76
6	30	69	39	170	516	450	252	162	90	207	599	75
7	29	69	34	134	439	491	400	286	92	160	376	106
8	30	61	41	111	541	438	427	352	109	115	274	102
9	30	54	41	99	448	350	435	324	94	97	216	78
10	31	114	39	89	337	316	361	260	98	101	190	74
11	35	103	39	83	269	288	282	220	103	141	183	71
12	32	81	48	76	239	272	238	204	84	163	200	81
13	30	88	57	71	308	293	213	310	95	172	150	78
14	29	70	44	97	304	386	192	294	110	114	133	75
15	30	64	41	119	266	450	173	302	144	97	123	67
16	30	59	47	101	256	477	162	369	133	87	115	64
17	29	54	61	97	250	387	153	330	134	79	108	96
18	29	52	56	93	240	304	143	273	176	72	106	124
19	29	50	52	74	230	279	136	228	148	249	102	84
20	35	67	56	70	320	248	130	200	146	532	96	75
21	41	71	84	90	240	216	140	180	153	253	92	117
22	37	57	88	135	477	207	149	160	145	185	100	81
23	33	54	542	1,330	455	201	173	148	182	137	614	75
24	32	42	435	824	356	180	172	140	139	151	259	100
25	35	40	216	830	281	176	145	158	114	167	168	75
26	33	45	141	447	374	182	138	134	101	375	137	96
27	33	51	112	269	452	179	134	120	102	509	120	89
28	32	49	100	200	365	192	536	135	89	305	109	76
29	54	47	86	176	------	352	424	141	82	271	99	71
30	122	46	77	167	------	375	297	133	81	406	94	67
31	70	------	74	169	------	297	------	123	------	1,240	89	------
TOTAL	1,144	1,839	2,856	6,643	9,160	10,577	7,027	6,632	3,456	6,906	7,621	2,508
MEAN	36.9	61.3	92.1	214	327	341	234	214	115	223	246	83.6
MAX	122	114	542	1,330	622	799	536	369	182	1,240	788	124
MIN	29	40	34	68	100	176	130	120	81	72	89	64
CFSM	.29	.49	.73	1.70	2.60	2.71	1.86	1.70	.91	1.77	1.95	.66
IN.	.34	.54	.84	1.96	2.70	3.12	2.07	1.96	1.02	2.04	2.25	.74

CAL YR 1970 TOTAL 45,228 MEAN 124 MAX 1,470 MIN 29 CFSM .98 IN 13.35
WTR YR 1971 TOTAL 66,369 MEAN 182 MAX 1,330 MIN 29 CFSM 1.44 IN 19.59

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-23	0915	5.11	2,510	8-5	2145	4.20	1,500

03455500 West Fork Pigeon River above Lake Logan, near Hazelwood, N. C.

LOCATION.--Lat 35°23'46", long 82°56'17", Haywood County, on right bank at upstream side of bridge on Secondary Road 1216, 600 ft upstream from Big Creek, 1.1 miles upstream from Lake Logan, 6.7 miles southeast of Hazelwood, and at mile 9.3.

DRAINAGE AREA.--27.6 sq mi.

PERIOD OF RECORD.--February 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,976.00 ft above mean sea level (Tennessee Valley Authority bench mark).

AVERAGE DISCHARGE.--17 years, 98.9 cfs (48.66 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,080 cfs Feb. 22, July 6 (gage height, 4.85 ft); minimum, 18 cfs Oct. 4, 5-7 (gage height, 1.13 ft).
Period of record: Maximum discharge, 9,740 cfs Feb. 13, 1966 (gage height, 9.5 ft, from floodmarks); minimum, 9.4 cfs Sept. 29, 30, 1954.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	147	55	63	110	143	106	63	56	50	102	36
2	20	139	50	71	100	190	174	62	54	57	129	48
3	20	132	50	60	110	318	119	60	54	50	251	37
4	19	103	50	315	190	195	107	57	54	42	140	34
5	18	92	45	273	380	167	102	55	49	40	132	33
6	18	84	45	126	210	160	161	65	46	288	114	35
7	18	78	45	105	210	168	126	62	88	116	99	46
8	22	72	45	95	240	137	118	79	106	135	89	41
9	212	68	45	95	180	128	115	60	65	101	84	32
10	274	223	45	80	150	123	107	56	60	109	78	30
11	435	107	45	80	140	118	99	54	56	86	83	43
12	82	100	80	75	134	117	94	89	52	99	84	49
13	63	95	50	70	181	143	90	285	49	109	70	33
14	117	98	45	80	134	133	86	126	46	77	63	30
15	100	103	45	85	122	230	82	172	72	69	60	28
16	68	82	75	70	114	147	79	153	51	64	57	27
17	58	77	80	60	116	125	76	111	59	58	58	61
18	53	74	60	50	114	116	73	97	217	54	56	203
19	49	72	50	50	122	136	71	88	137	131	52	57
20	174	123	50	50	169	116	70	82	89	94	48	43
21	164	85	60	60	154	109	71	77	77	70	45	42
22	86	77	50	100	580	106	78	71	86	65	46	51
23	72	72	300	520	218	102	149	68	77	61	56	39
24	70	64	190	340	172	94	93	67	63	74	45	36
25	107	60	120	220	154	92	78	72	58	90	42	38
26	72	60	95	170	241	94	73	61	54	108	40	35
27	65	60	90	140	190	97	71	57	51	87	39	33
28	60	60	75	130	156	111	82	76	49	71	38	32
29	348	60	73	120	------	197	68	78	46	75	36	31
30	496	60	68	150	------	124	65	73	56	84	36	29
31	169	------	67	170	------	109	------	62	------	104	35	------
TOTAL	3,550	2,727	2,243	4,073	5,091	4,345	2,883	2,638	2,077	2,718	2,307	1,312
MEAN	115	90.9	72.4	131	182	140	96.1	85.1	69.2	87.7	74.4	43.7
MAX	496	223	300	520	580	318	174	285	217	288	251	203
MIN	18	60	45	50	100	92	65	54	46	40	35	27
CFSM	4.17	3.29	2.62	4.75	6.59	5.07	3.48	3.08	2.51	3.18	2.70	1.58
IN.	4.78	3.68	3.02	5.49	6.86	5.86	3.89	3.56	2.80	3.66	3.11	1.77

CAL YR 1970 TOTAL 30,573 MEAN 83.8 MAX 637 MIN 18 CFSM 3.04 IN 41.21
WTR YR 1971 TOTAL 35,964 MEAN 98.5 MAX 580 MIN 18 CFSM 3.57 IN 48.47

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-22	1015	4.85	2,080	7-6	1600	4.85	2,080

NOTE.--No gage-height record Nov. 25 to Dec. 28, Jan. 8 to Feb. 11.

03456000 West Fork Pigeon River below Lake Logan, near Waynesville, N. C.

LOCATION.--Lat 35°26'38", long 82°54'46", Haywood County, on right bank at downstream side of bridge on Secondary Road 1111 at Riverside Church, 2.6 miles downstream from Little East Fork Pigeon River, 3.4 miles downstream from Lake Logan, 3.8 miles upstream from confluence with East Fork Pigeon River, and 5.3 miles southeast of Waynesville.

DRAINAGE AREA.--55.3 sq mi.

PERIOD OF RECORD.--March 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,725.08 ft above mean sea level (Tennessee Valley Authority bench mark).

AVERAGE DISCHARGE.--17 years, 155 cfs (38.06 inches per year) adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 2,120 cfs Feb. 22 (gage height, 5.36 ft, from floodmark in well); minimum, 36 cfs Oct. 6, 7, 8 (gage height, 0.54 ft).
Period of record: Maximum discharge, 8,930 cfs Feb. 13, 1966 (gage height, 9.62 ft), from rating curve extended above 3,300 cfs; minimum, 7.6 cfs Sept. 7, 1954, minimum gage height, 0.10 ft Oct. 22, 23, 1963.

REMARKS.--Records good. Considerable regulation at times caused by Lake Logan (see p. 199).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	226	85	104	182	251	192	117	108	99	141	60
2	40	192	81	100	175	298	266	114	105	98	194	68
3	39	202	80	100	185	436	208	111	105	99	315	65
4	38	155	74	353	349	321	189	107	105	82	212	59
5	37	138	73	429	529	288	179	106	96	78	202	59
6	37	128	70	219	312	278	266	120	94	323	177	58
7	37	118	67	182	313	290	226	120	123	180	156	76
8	37	111	68	167	358	249	208	140	179	191	140	79
9	117	104	68	169	284	231	204	115	121	150	134	59
10	315	287	68	148	250	229	192	107	108	156	134	56
11	505	165	69	144	241	213	178	104	105	136	132	57
12	123	147	113	134	224	209	169	116	97	146	140	84
13	93	146	83	127	298	229	163	388	94	185	116	60
14	143	137	70	147	220	229	155	213	90	127	106	55
15	133	155	68	149	212	295	148	251	123	114	101	53
16	96	125	113	122	202	242	143	270	100	106	97	52
17	82	118	112	120	203	218	138	204	105	99	96	69
18	75	113	87	116	200	203	134	180	298	92	95	258
19	71	112	83	98	213	244	130	165	256	219	88	99
20	191	178	83	95	282	213	128	156	171	169	82	72
21	250	135	95	108	256	199	127	146	146	123	77	69
22	134	121	84	147	691	193	134	137	148	113	75	75
23	111	114	461	785	409	182	220	131	139	107	93	65
24	102	95	279	451	321	170	165	129	119	118	76	60
25	152	90	183	375	285	171	137	132	110	135	71	61
26	109	90	147	310	375	170	130	119	103	159	68	57
27	98	90	134	230	316	170	127	112	98	137	66	55
28	91	90	124	219	270	192	146	128	94	116	64	53
29	353	92	120	203	------	302	124	154	90	118	62	52
30	672	88	113	250	------	225	120	128	102	130	61	51
31	253	------	113	270	------	201	------	116	------	157	60	------
TOTAL	4,575	4,062	3,468	6,571	8,155	7,341	5,046	4,636	3,732	4,262	3,631	2,096
MEAN	148	135	112	212	291	237	168	150	124	137	117	69.9
MAX	672	287	461	785	691	436	266	388	298	323	315	258
MIN	37	88	67	95	175	170	120	104	90	78	60	51
(†)	+45	-7	+1	+4	+2	-2	-4	-1	0	+3	-10	-2
MEAN‡	149	135	112	212	291	237	168	150	124	138	117	69.8
CFSM‡	2.69	2.44	2.03	3.83	5.26	4.29	3.04	2.71	2.24	2.50	2.12	1.26
IN.‡	3.11	2.73	2.33	4.42	5.49	4.94	3.39	3.12	2.51	2.87	2.44	1.41

CAL YR 1970 TOTAL 45,765 MEAN 125 MAX 741 MIN 37 MEAN‡ 125 CFSM‡ 2.26 IN.‡ 30.77
WTR YR 1971 TOTAL 57,575 MEAN 158 MAX 785 MIN 37 MEAN‡ 158 CFSM‡ 2.86 IN.‡ 38.74

† Change in contents, in cfs-days, in Lake Logan.
‡ Adjusted for change in lake contents.

03456500 East Fork Pigeon River near Canton, N. C.

LOCATION.--Lat 35°27'42", long 82°52'12", Haywood County, on right bank 800 ft upstream from U. S. Highway 276, 0.3 mile downstream from Dix Creek, 1.7 miles upstream from confluence with West Fork Pigeon River, and 5.2 miles southwest of Canton.

DRAINAGE AREA.--51.5 sq mi.

PERIOD OF RECORD.--March 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,674.34 ft above mean sea level (Tennessee Valley Authority bench mark).

AVERAGE DISCHARGE.--17 years, 136 cfs (35.86 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,700 cfs Oct. 30, Feb. 22 (gage height, 4.46 ft); minimum, 36 cfs Oct. 4, 5, 6, 7 (gage height, 1.20 ft).
Period of record: Maximum discharge, 12,100 cfs Feb. 13, 1966 (gage height, 10.13 ft), from rating curve extended above 4,600 cfs; minimum, 12 cfs Jan. 9, 1956, result of freezeup; minimum gage height, 0.81 ft Dec. 15, 1958, result of freezeup.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	496	104	99	120	220	157	101	100	88	90	53
2	42	393	101	97	115	234	177	98	96	86	102	56
3	40	342	98	95	120	347	155	96	93	80	188	54
4	38	285	95	214	169	290	144	93	90	72	171	51
5	37	246	92	369	309	257	138	91	86	69	153	49
6	37	214	90	213	205	241	197	97	89	146	148	52
7	37	192	87	180	201	250	178	100	96	140	128	59
8	38	175	86	163	240	213	166	106	112	135	122	54
9	166	161	84	154	211	197	160	94	92	107	110	48
10	392	298	83	139	190	189	150	89	87	109	116	46
11	638	212	82	132	178	178	142	87	83	101	121	50
12	217	201	95	124	168	170	136	94	81	96	109	57
13	156	191	85	119	253	172	130	283	85	112	97	52
14	181	188	79	124	193	170	124	182	82	90	90	47
15	153	201	77	124	183	211	120	216	97	83	86	44
16	130	174	107	111	174	178	116	255	84	79	86	43
17	117	163	110	109	171	164	112	196	82	75	84	64
18	109	154	94	106	166	156	109	171	169	71	82	193
19	101	146	91	97	165	184	105	153	187	152	77	84
20	227	191	90	99	200	166	111	145	138	122	72	63
21	401	163	90	100	185	155	106	134	117	93	68	58
22	244	151	86	104	703	151	105	123	108	87	66	60
23	194	144	244	291	471	145	153	117	108	82	73	56
24	171	134	204	230	348	137	130	112	96	83	65	54
25	187	130	155	219	290	136	113	110	89	91	62	53
26	155	125	134	192	314	138	109	102	85	94	60	52
27	142	121	127	150	282	137	105	98	82	83	58	50
28	132	116	115	145	241	147	124	109	81	76	57	50
29	377	112	111	140	------	223	107	139	76	79	55	48
30	1,140	108	105	150	------	183	103	122	85	83	54	47
31	610	------	106	161	------	167	------	108	------	92	53	------
TOTAL	6,651	5,927	3,307	4,750	6,565	5,906	3,982	4,021	2,956	2,956	2,903	1,747
MEAN	215	198	107	153	234	191	133	130	98.5	95.4	93.6	58.2
MAX	1,140	496	244	369	703	347	197	283	187	152	188	193
MIN	37	108	77	95	115	136	103	87	76	69	53	43
CFSM	4.17	3.84	2.08	2.97	4.54	3.71	2.58	2.52	1.91	1.85	1.82	1.13
IN.	4.80	4.28	2.39	3.43	4.74	4.27	2.88	2.90	2.14	2.14	2.10	1.26

CAL YR 1970 TOTAL 46,840 MEAN 128 MAX 1,140 MIN 37 CFSM 2.49 IN 33.83
WTR YR 1971 TOTAL 51,671 MEAN 142 MAX 1,140 MIN 37 CFSM 2.76 IN 37.32

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-11	0500	4.27	1,540	2-22	1215	4.46	1,700
10-30	1145	4.46	1,700				

03457000 Pigeon River at Canton, N. C.

LOCATION.--Lat 35°31'30", long 82°50'28", Haywood County, on left bank 100 ft upstream from small tributary, 200 ft downstream from Pigeon Street Bridge, 0.5 mile upstream from U. S. Highway 19 and 23 at Canton, and at mile 64.1. Records include flow of small tributary.

DRAINAGE AREA.--133 sq mi, includes that of small tributary below gage.

PERIOD OF RECORD.--May 1907 to June 1909, October 1928 to current year. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 2,572.22 ft above mean sea level (levels by Tennessee Valley Authority). Prior to June 1909, nonrecording gage at bridge 0.4 mile downstream at different datum. Dec. 6, 1928, to Jan. 3, 1929, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--44 years (1907-8, 1928-71), 313 cfs (31.96 inches per year) unadjusted.

EXTREMES.--Current year: Maximum discharge, 3,870 cfs Feb. 22 (gage height, 6.47 ft); minimum, 79 cfs Oct. 6, 7 (gage height, 0.77 ft); minimum daily, 81 cfs Oct. 7.
Period of record: Maximum discharge, 31,600 cfs Aug. 30, 1940 (gage height, 20.75 ft, from floodmarks in gage well); minimum 15 cfs Jan. 8, 1956 (gage height, 0.04 ft), result of freezeup; minimum daily, 27 cfs Sept. 7, 1954.
Flood of about 1810 is believed to have been approximately equal to that of Aug. 30, 1940, and flood of June 15, 1876, reached a stage of 18.3 ft (discharge, 25,700 cfs), from studies by Tennessee Valley Authority.

REMARKS.--Records good. Occasional diurnal fluctuation and considerable regulation at low flow caused by Lake Logan on West Fork Pigeon River 12 miles upstream (see p. 199). Town of Canton diverted above station an average of 0.94 cfs for municipal water supply. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 823: Drainage area. WSP 853: 1929-37(M). WSP 1306: 1908(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	798	215	228	359	552	414	262	252	234	276	142
2	92	626	204	217	350	609	502	256	240	218	345	150
3	89	605	200	219	343	886	432	249	236	220	535	153
4	84	490	189	444	544	744	394	240	234	185	451	138
5	82	433	183	1,040	974	631	374	235	220	175	429	134
6	82	392	178	508	610	594	531	248	212	436	423	137
7	81	356	168	421	602	646	485	278	227	418	358	152
8	83	328	169	380	698	545	439	295	377	369	325	179
9	240	306	168	370	588	504	430	254	267	312	304	135
10	748	619	166	331	510	491	405	235	228	304	311	127
11	1,240	439	164	317	486	460	380	229	224	295	396	129
12	409	393	219	295	449	444	363	239	210	280	367	165
13	296	394	197	281	676	452	348	723	212	353	281	144
14	351	360	164	299	490	484	331	491	205	262	253	126
15	333	410	156	323	469	594	320	507	263	235	238	118
16	263	341	217	266	447	510	309	642	230	221	232	116
17	230	321	264	260	438	444	299	479	215	208	225	140
18	211	304	203	250	433	421	290	424	403	194	227	484
19	196	293	191	220	434	491	282	383	593	400	212	243
20	366	408	191	208	548	452	288	358	374	382	198	167
21	751	352	202	220	495	414	281	337	312	264	187	154
22	436	314	188	256	1,650	406	287	311	300	241	182	157
23	352	296	738	1,190	1,090	388	417	296	291	226	209	148
24	310	258	606	777	786	362	381	287	252	233	184	137
25	384	255	396	714	667	360	305	289	231	251	170	135
26	307	250	324	587	778	370	289	267	219	309	162	132
27	277	250	296	453	721	357	281	251	209	270	158	125
28	255	240	271	426	597	397	324	275	207	230	153	122
29	570	230	261	399	------	610	283	355	196	225	149	119
30	2,120	222	246	434	------	494	269	307	209	250	145	116
31	979	------	247	521	------	437	------	272	------	301	142	------
TOTAL	12,311	11,283	7,581	12,854	17,232	15,549	10,733	10,274	7,848	8,501	8,227	4,624
MEAN	397	376	245	415	615	502	358	331	262	274	265	154
MAX	2,120	798	738	1,190	1,650	886	531	723	593	436	535	484
MIN	81	222	156	208	343	357	269	229	196	175	142	116
(†)	+71.2	+19.4	+29.7	+32.1	+28.8	+23.7	+23.5	+28.1	+31.1	+37.6	+23.3	+26.4
MEAN‡	399	377	246	416	616	502	359	332	263	275	266	155
CFSM‡	3.00	2.83	1.85	3.13	4.63	3.77	2.70	2.50	1.98	2.07	2.00	1.17
IN.‡	3.46	3.16	2.13	3.60	4.83	4.35	3.01	2.88	2.20	2.39	2.31	1.30

CAL YR 1970 TOTAL 104,668 MEAN 287 MAX 2,120 MIN 81 MEAN‡ 288 CFSM‡ 2.17 IN.‡ 29.36
WTR YR 1971 TOTAL 127,017 MEAN 348 MAX 2,120 MIN 81 MEAN‡ 349 CFSM‡ 2.62 IN.‡ 35.62

PEAK DISCHARGE (BASE, 4,000 CFS).--No peak above base.

† Diversion by city of Canton, and change in contents in Lake Logan, equivalent in cfs-days. Records of diversion furnished by city of Canton.
‡ Adjusted for diversion and change in lake contents.

03457500 Allen Creek near Hazelwood, N. C.

LOCATION.--Lat 35°25'49", long 83°00'33", Haywood County, on left bank on Secondary Road 1147, 180 ft downstream from Rocky Branch, 3.0 miles upstream from mouth, and 3.3 miles south of Hazelwood.

DRAINAGE AREA.--14.4 sq mi.

PERIOD OF RECORD.--August 1949 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3,047.83 ft above mean sea level (Tennessee Valley Authority bench mark).

AVERAGE DISCHARGE.--22 years, 34.9 cfs (unadjusted).

EXTREMES.--Current year: Maximum discharge, 492 cfs July 19 (gage height, 2.74 ft); minimum, 1.4 cfs Oct. 6 (gage height, 0.76 ft); minimum daily, 2.0 cfs Oct. 6.
Period of record: Maximum discharge, 1,470 cfs Jan. 21, 1959; maximum gage height, 4.13 ft Mar. 26, 1965; minimum discharge, 1.0 cfs Sept. 9, 1954 (gage height, 0.75 ft); minimum daily, 2.0 cfs Oct. 6, 1970.
Flood of Aug. 30, 1940 reached a stage of 7.0 ft (discharge, about 6,000 cfs), from studies by the Tennessee Valley Authority.

REMARKS.--Records good. Considerable diurnal fluctuation at low flow caused by intermittent operation of filter plant 0.3 mile upstream since Aug. 29, 1954. Town of Waynesville diverts about 7 cfs for water supply at diversion dam 0.4 mile upstream. Sewage is discharged into Pigeon River.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	18	9.4	15	43	56	48	29	23	17	47	13
2	3.6	18	6.7	16	44	68	70	27	21	20	45	14
3	4.5	17	5.8	16	44	94	52	27	22	16	58	14
4	2.9	13	4.6	61	80	71	49	25	20	16	45	12
5	3.0	11	4.1	69	102	63	46	24	18	16	53	13
6	2.0	11	5.8	40	69	64	61	32	20	49	45	13
7	2.6	9.8	6.6	31	79	69	52	29	28	29	40	22
8	3.3	10	5.6	29	86	58	50	36	35	20	35	13
9	8.0	8.4	5.4	30	70	54	46	30	25	22	33	12
10	17	55	5.9	25	61	52	44	26	22	36	28	10
11	34	26	5.4	23	57	50	44	25	20	28	30	23
12	9.5	23	9.3	21	52	47	42	34	18	38	30	20
13	7.4	21	6.6	21	62	52	42	63	18	39	25	12
14	8.8	20	4.9	35	49	54	38	43	18	26	23	13
15	11	16	4.4	31	47	67	37	57	26	20	21	9.8
16	8.0	13	4.3	23	43	53	35	54	20	20	22	11
17	7.3	13	5.0	23	45	49	35	43	30	17	20	23
18	5.8	12	4.6	22	42	45	33	39	45	17	19	30
19	6.2	12	4.3	20	47	61	32	35	30	94	18	17
20	9.4	27	5.1	20	64	50	32	33	28	53	17	13
21	12	23	8.4	20	63	45	33	32	26	35	17	16
22	8.1	16	5.9	39	127	45	33	30	38	32	16	12
23	6.7	12	120	175	79	42	54	28	28	26	19	13
24	6.9	10	61	102	67	41	38	29	22	28	15	10
25	15	10	37	86	59	40	35	29	21	38	14	13
26	7.9	9.8	29	72	79	41	32	24	20	46	14	9.8
27	7.3	10	24	54	68	42	32	23	18	36	14	12
28	6.8	9.4	21	47	60	47	35	29	19	29	15	9.1
29	41	10	19	44	------	79	29	27	16	40	12	9.0
30	43	8.6	17	53	------	53	28	28	19	42	12	11
31	20	------	19	55	------	49	------	25	------	51	13	------
TOTAL	333.3	473.0	475.1	1,318	1,788	1,701	1,237	1,015	714	996	815	419.7
MEAN	10.8	15.8	15.3	42.5	63.9	54.9	41.2	32.7	23.8	32.1	26.3	14.0
MAX	43	55	120	175	127	94	70	63	45	94	58	30
MIN	2.0	8.4	4.1	15	42	40	28	23	16	16	12	9.0

CAL YR 1970 TOTAL 7,709.4 MEAN 21.1 MAX 120 MIN 2.0
WTR YR 1971 TOTAL 11,285.1 MEAN 30.9 MAX 175 MIN 2.0

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
7-19	1330	2.74	492				

03459000 Jonathan Creek near Cove Creek, N. C.

LOCATION.--Lat 35°37'22", long 83°00'26", Haywood County, on left bank on Secondary Road 1338, 1,500 ft downstream from ford, 0.7 mile upstream from mouth, and 2 miles downstream from Cove Creek and village of Cove Creek.

DRAINAGE AREA.--65.3 sq mi.

PERIOD OF RECORD.--October 1929 to current year. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 2,383.89 ft above mean sea level (levels by Tennessee Valley Authority).

AVERAGE DISCHARGE.--42 years, 128 cfs (26.62 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,400 cfs Aug. 5 (gage height, 4.72 ft); minimum, 25 cfs Oct. 7 (gage height, 0.71 ft).
Period of record: Maximum discharge, 3,860 cfs Mar. 26, 1965 (gage height, 8.30 ft); minimum, 18 cfs Jan. 2, 1940 (gage height, 0.54 ft), result of freezeup; minimum daily, 23 cfs Sept. 17, 18, 23, 1953.
Flood of June 1876 (stage and discharge unknown) probably exceeded any flood during period of record, from studies by Tennessee Valley Authority.

REMARKS.--Records good. Slight diurnal fluctuation at low flow caused by small gristmill above station prior to October 1959.
Water quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 823: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	70	50	90	200	238	180	105	87	108	172	78
2	32	60	49	85	181	256	226	105	85	99	198	81
3	31	63	48	83	179	374	188	100	83	85	194	75
4	28	55	46	216	246	301	174	100	83	75	225	72
5	27	55	45	287	544	267	168	100	80	73	418	71
6	27	53	45	177	325	262	250	123	76	123	281	76
7	27	51	43	146	340	321	240	118	76	129	246	103
8	29	49	44	132	390	262	230	156	83	141	217	91
9	31	47	44	132	320	240	210	119	78	104	200	71
10	40	133	45	117	274	235	200	111	78	151	182	66
11	64	78	45	113	250	219	190	108	79	118	231	81
12	41	66	100	106	230	209	180	114	75	156	212	73
13	35	62	65	100	260	232	170	193	75	199	167	69
14	34	59	55	153	213	229	160	142	72	133	152	64
15	37	57	52	140	205	229	150	172	139	119	141	61
16	35	54	84	116	199	205	145	177	100	109	133	60
17	31	52	74	112	198	191	140	150	125	99	127	85
18	31	51	62	108	193	181	135	137	147	92	123	121
19	30	51	58	96	194	228	130	128	140	257	116	75
20	47	127	60	90	265	196	130	125	115	185	110	65
21	56	77	77	99	233	183	140	118	159	136	104	67
22	44	65	64	134	517	177	130	110	198	136	112	74
23	38	61	603	557	359	170	180	107	133	118	139	75
24	37	54	321	391	290	160	140	104	114	122	102	69
25	42	57	196	344	258	161	125	114	103	136	94	65
26	37	57	151	281	358	165	120	100	94	168	90	62
27	36	56	130	222	293	174	120	94	88	152	87	67
28	34	54	113	199	257	176	130	114	84	128	83	66
29	154	53	108	181	------	263	115	107	87	175	80	59
30	160	51	98	280	------	208	110	102	92	153	78	57
31	82	------	97	269	------	191	------	93	------	199	76	------
TOTAL	1,410	1,878	3,072	5,556	7,771	6,903	4,906	3,746	3,028	4,178	4,890	2,199
MEAN	45.5	62.6	99.1	179	278	223	164	121	101	135	158	73.3
MAX	160	133	603	557	544	374	250	193	198	257	418	121
MIN	27	47	43	83	179	160	110	93	72	73	76	57
CFSM	.70	.96	1.52	2.74	4.26	3.42	2.51	1.85	1.55	2.07	2.42	1.12
IN.	.80	1.07	1.75	3.17	4.43	3.93	2.79	2.13	1.72	2.38	2.79	1.25

CAL YR 1970 TOTAL 36,182 MEAN 99.1 MAX 610 MIN 27 CFSM 1.52 IN 20.61
WTR YR 1971 TOTAL 49,537 MEAN 136 MAX 603 MIN 27 CFSM 2.08 IN 28.22

PEAK DISCHARGE (BASE, 1,100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-5	0715	4.32	1,150	8-5	0030	4.72	1,400

03459500 Pigeon River near Hepco, N. C.

LOCATION.--Lat 35°38'07", long 82°59'22", Haywood County, on left bank 95 ft east of Interstate Highway 40, 0.8 mile downstream from Jonathan Creek, 2.0 miles south of Hepco, 2.4 miles upstream from Fines Creek, and at mile 45.1.

DRAINAGE AREA.--350 sq mi.

PERIOD OF RECORD.--July 1927 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,335.95 ft above mean sea level (levels by Tennessee Valley Authority).

AVERAGE DISCHARGE.--44 years, 658 cfs (25.53 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,560 cfs Feb. 22 (gage height, 6.79 ft); minimum, 154 cfs Oct. 5, 6, 7, 8 (gage height, 1.16 ft).
Period of record: Maximum discharge, 32,700 cfs Aug. 30, 1940 (gage height, 15.82 ft, from floodmark in gage house), from rating curve extended above 12,000 cfs on basis of slope-area measurements at gage heights 14.94 and 15.82 ft; minimum 81 cfs Sept. 30, 1941; minimum gage height, 0.81 ft Sept. 8, 1954.
Floods of June 1876 and February 1902 reached a stage of about 18 ft, from flood profiles by Tennessee Valley Authority (discharge, about 42,000 cfs).

REMARKS.--Records good. Considerable regulation by Lake Junaluska on Richland Creek and Lake Logan on West Fork Pigeon River for periods of low flow (combined capacity of reservoirs, about 2,000 cfs-days). (See p. 199).

REVISIONS (WATER YEARS).--WSP 823: Drainage area. WSP 893: 1928-31, 1932(M), 1933-36, 1937-39(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	186	1,050	346	442	836	1,190	903	438	452	462	669	278
2	177	825	334	413	725	1,270	1,050	426	433	470	797	297
3	174	798	324	410	750	1,310	960	424	429	421	918	297
4	165	652	315	625	1,080	1,650	850	410	425	373	987	275
5	156	572	299	1,870	2,180	1,380	807	398	411	350	1,450	268
6	155	521	299	988	1,450	1,300	1,160	437	392	491	937	278
7	154	482	287	776	1,450	1,500	1,110	473	395	988	828	373
8	156	450	284	684	1,710	1,240	966	648	526	617	684	450
9	180	425	287	660	1,460	1,120	913	559	472	568	646	297
10	761	888	279	596	1,190	1,090	858	497	413	625	673	264
11	1,490	722	279	561	1,110	1,020	806	477	413	570	768	275
12	589	560	385	522	1,010	972	853	486	394	605	1,120	364
13	415	565	399	491	1,380	1,020	923	1,110	405	737	600	308
14	402	502	310	569	1,090	1,110	882	923	401	535	525	271
15	458	545	287	647	1,030	1,110	844	844	546	469	490	254
16	378	485	344	523	1,000	1,110	812	1,200	506	441	463	237
17	332	456	450	492	993	934	749	881	455	415	445	289
18	310	440	366	479	987	875	528	772	664	389	445	673
19	291	427	338	442	966	1,050	579	698	1,060	886	423	495
20	314	638	336	375	1,240	971	675	667	673	984	396	327
21	958	605	375	421	1,110	876	660	630	604	559	373	304
22	595	484	351	502	2,860	857	578	567	706	518	373	300
23	475	451	1,820	2,390	2,260	817	757	536	564	469	472	308
24	425	412	1,570	1,700	1,620	767	823	518	491	458	382	285
25	493	380	856	1,680	1,370	758	619	530	450	508	339	268
26	443	402	665	1,320	1,630	812	584	498	424	642	323	264
27	395	388	567	1,000	1,600	792	567	462	409	609	311	264
28	369	382	514	875	1,300	880	631	544	398	494	304	261
29	589	369	489	813	------	1,310	579	595	385	536	293	247
30	2,590	357	465	999	------	1,120	530	541	390	556	285	237
31	1,370	------	454	1,220	------	968	------	492	------	725	278	------
TOTAL	15,945	16,233	14,674	25,485	37,387	33,679	23,556	18,681	14,686	17,470	17,997	9,308
MEAN	514	541	473	822	1,335	1,086	785	603	490	564	581	310
MAX	2,590	1,050	1,820	2,390	2,860	1,810	1,160	1,200	1,060	988	1,450	673
MIN	154	357	279	375	725	758	528	398	385	350	278	237

CAL YR 1970 TOTAL 194,964 MEAN 534 MAX 2,660 MIN 154
WTR YR 1971 TOTAL 245,101 MEAN 672 MAX 2,860 MIN 154

PEAK DISCHARGE (BASE, 6,000 CFS).--No peak above base.

03460000 Cataloochee Creek near Cataloochee, N. C.

(Hydrologic bench-mark station)

LOCATION.--Lat 35°40'02", long 83°04'23", Haywood County, in Great Smoky Mountains National Park, on left bank 20 ft downstream from bridge on State Highway 284, 500 ft upstream from Little Cataloochee Creek, 2 miles north of Cataloochee, and 3.7 miles upstream from mouth.

DRAINAGE AREA.--49.2 sq mi.

PERIOD OF RECORD.--October 1933 to September 1952, October 1962 to current year. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,456.88 ft above mean sea level (levels by Tennessee Valley Authority).

AVERAGE DISCHARGE.--28 years, 106 cfs (29.26 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,130 cfs Feb. 5 (gage height, 4.81 ft); minimum, 23 cfs several days in October (gage height, 2.04 ft).
Period of record: Maximum discharge, 5,080 cfs Mar. 6, 1963 (gage height, 8.08 ft); minimum, 9 cfs Jan. 2, 1940, Dec. 17, 24, 1943 (gage height, 1.87 ft), result of freezeup.

REMARKS.--Records good. Water quality records for the current year are published in Part 2 of this report. Records for Class A evaporation station 2.4 miles upstream published in reports of National Weather Service, NOAA, U. S. Department of Commerce.

REVISIONS.--WSP 823: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	39	32	64	190	192	147	80	64	90	294	66
2	26	35	31	65	180	195	171	78	64	86	355	66
3	26	38	30	59	150	277	150	77	66	78	317	61
4	25	33	29	170	180	251	140	75	75	71	290	59
5	24	33	28	251	582	226	135	73	67	68	425	59
6	24	33	29	156	372	219	187	86	60	104	347	64
7	24	32	27	126	317	288	170	80	69	93	281	72
8	25	31	29	111	322	247	160	99	70	97	231	63
9	25	30	28	103	270	217	152	79	66	82	198	56
10	27	74	28	91	220	202	143	75	68	124	173	53
11	32	47	28	86	217	182	135	73	68	113	163	54
12	26	42	95	79	189	168	129	75	61	130	148	53
13	24	42	54	74	195	178	123	134	64	163	131	53
14	24	38	43	95	150	178	117	107	60	120	119	50
15	25	37	40	88	147	189	112	117	128	107	111	48
16	24	35	57	77	135	174	108	120	99	97	104	47
17	23	34	55	76	131	163	104	111	145	89	99	62
18	23	35	47	74	127	153	101	105	267	83	95	85
19	23	34	45	65	128	177	97	98	219	207	92	55
20	30	73	44	60	180	155	95	97	162	201	87	50
21	36	48	60	60	160	146	97	91	136	143	82	52
22	27	42	51	85	304	140	92	85	143	140	92	51
23	25	39	435	359	286	136	130	82	123	121	159	52
24	25	35	277	312	232	129	103	79	109	113	91	66
25	26	35	166	328	199	127	94	84	99	120	82	51
26	25	35	122	257	244	125	90	74	92	146	77	48
27	25	37	105	190	231	123	87	71	86	143	74	49
28	24	35	89	160	209	127	92	84	81	124	70	48
29	74	35	82	145	------	192	84	78	85	195	67	45
30	88	33	74	248	------	168	82	75	95	191	66	44
31	47	------	72	266	------	157	------	69	------	325	64	------
TOTAL	929	1,169	2,332	4,380	6,247	5,601	3,627	2,711	2,991	3,964	4,984	1,682
MEAN	30.0	39.0	75.2	141	223	181	121	87.5	99.7	128	161	56.1
MAX	88	74	435	359	582	288	187	134	267	325	425	85
MIN	23	30	27	59	127	123	82	69	60	68	64	44
CFSM	.61	.79	1.53	2.87	4.53	3.68	2.46	1.78	2.03	2.60	3.27	1.14
IN.	.70	.88	1.76	3.31	4.72	4.23	2.74	2.05	2.26	3.00	3.77	1.27

CAL YR 1970 TOTAL 28,128 MEAN 77.1 MAX 655 MIN 23 CFSM 1.57 IN 21.27
WTR YR 1971 TOTAL 40,617 MEAN 111 MAX 582 MIN 23 CFSM 2.26 IN 30.71

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-5	0715	4.81	1,130				

03463300 South Toe River near Celo, N. C.

LOCATION.--Lat 35°49'52", long 82°11'04", Yancey County, on right bank 800 ft upstream from bridge on Secondary Road 1168, 0.3 mile downstream from Whiteoak Creek, 1.9 miles southeast of Celo, and at mile 20.1.

DRAINAGE AREA.--43.4 sq mi.

PERIOD OF RECORD.--July 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,658 ft above mean sea level.

AVERAGE DISCHARGE.--14 years, 137 cfs (42.87 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,970 cfs Oct. 30 (gage height, 5.13 ft); minimum 25 cfs Oct. 4, 5, 6, 7 (gage height, 0.59 ft).
Period of record: Maximum discharge, 10,600 cfs Sept. 30, 1959 (gage height, 8.64 ft), from rating curve extended above 4,500 cfs on basis of slope-area measurement of peak flow; minimum, 14 cfs Dec. 26, 1958, result of freezeup.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1910: 1958-59.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	708	110	110	145	183	122	91	99	101	101	46
2	31	712	107	120	140	240	146	89	91	96	112	44
3	30	522	103	100	134	414	128	86	91	96	134	44
4	27	397	98	120	271	318	118	81	91	77	152	42
5	26	329	97	240	481	255	115	79	84	68	163	40
6	26	287	92	180	272	232	248	94	81	77	253	40
7	26	258	88	152	237	222	183	118	84	79	258	57
8	27	231	87	136	302	195	156	131	79	77	144	51
9	283	210	85	128	255	182	148	101	77	66	118	40
10	885	494	84	119	234	172	144	91	89	68	156	37
11	1,010	336	83	115	210	162	131	86	79	79	159	141
12	423	286	86	108	180	155	128	94	72	70	115	106
13	238	271	82	103	307	166	122	314	72	70	101	59
14	214	250	77	107	232	193	115	209	74	61	89	51
15	175	275	75	105	198	227	106	214	96	55	79	44
16	144	224	96	93	180	190	101	274	79	53	86	40
17	124	204	100	89	170	163	99	187	74	50	112	50
18	112	189	84	87	165	149	96	152	94	46	106	214
19	102	176	83	79	166	164	96	134	115	89	86	144
20	283	211	86	80	212	149	94	144	128	89	74	91
21	749	184	101	80	180	139	91	131	109	59	68	86
22	296	167	90	91	513	135	94	112	91	55	66	86
23	223	155	317	267	316	132	104	104	94	51	89	74
24	187	142	225	216	238	122	109	99	79	53	68	72
25	168	140	150	248	211	119	91	96	72	57	61	66
26	150	140	130	188	244	120	86	89	72	66	57	68
27	138	129	140	150	237	119	84	84	66	68	55	66
28	127	124	140	170	199	127	178	106	61	53	51	63
29	895	121	110	179	------	169	109	187	68	96	50	57
30	1,960	115	100	180	------	138	99	134	152	118	48	51
31	991	------	85	181	------	126	------	112	------	125	46	------
TOTAL	10,102	7,987	3,391	4,321	6,629	5,577	3,641	4,023	2,613	2,268	3,257	2,070
MEAN	326	266	109	139	237	180	121	130	87.1	73.2	105	69.0
MAX	1,960	712	317	267	513	414	248	314	152	125	258	214
MIN	26	115	75	79	134	119	84	79	61	46	46	37
CFSM	7.51	6.13	2.51	3.20	5.46	4.15	2.79	3.00	2.01	1.69	2.42	1.59
IN.	8.66	6.85	2.91	3.70	5.68	4.78	3.12	3.45	2.24	1.94	2.79	1.77

CAL YR 1970 TOTAL 50,906 MEAN 139 MAX 1,960 MIN 24 CFSM 3.20 IN 43.63
WTR YR 1971 TOTAL 55,879 MEAN 153 MAX 1,960 MIN 26 CFSM 3.53 IN 47.90

PEAK DISCHARGE (BASE, 2,800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-11	0130	4.80	3,570	10-30	1215	5.13	3,970

03464000 Cane River near Sioux, N. C.

LOCATION.--Lat 36°00'52", long 82°19'40", Yancey County, on right bank on Secondary Road 1417, 1.3 miles upstream from confluence with North Toe River, and 2.0 miles east of Sioux.

DRAINAGE AREA.--157 sq mi.

PERIOD OF RECORD.--October 1933 to September 1971 (discontinued). Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 2,045.24 ft above mean sea level (levels by Tennessee Valley Authority).

AVERAGE DISCHARGE.--38 years, 246 cfs (21.28 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,470 cfs Feb. 22 (gage height, 5.22 ft); minimum, 43 cfs Oct. 7 (gage height, 2.01 ft).
Period of record: Maximum discharge, 31,800 cfs Aug. 13, 1940 (gage height, 17.8 ft), from rating curve extended above 12,000 cfs on basis of slope-area measurement at gage height 15.65 ft; minimum, 18 cfs Jan. 6, 1940 (gage height, 1.14 ft), result of freezeup; minimum daily, 27 cfs Sept. 14, 1953.
Maximum stage since at least 1893, that of Aug. 13, 1940. Studies by Tennessee Valley Authority indicate the floods of August 1893 and May 1901 reached a stage of 16 ft (discharge, 25,000 cfs).

REMARKS.--Records good. Prior to October 1955, considerable regulation by Burnsville powerplant 21 miles above station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 893: 1934(M). WSP 1143: 1940(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	408	95	125	160	366	253	274	189	232	465	114
2	49	300	91	115	160	430	259	247	176	361	551	115
3	48	279	88	120	180	744	252	234	171	304	425	113
4	46	209	84	136	434	805	222	214	172	197	616	109
5	46	187	80	380	882	589	210	198	159	165	480	106
6	45	170	80	269	592	498	352	205	147	262	629	106
7	44	156	76	203	511	498	450	467	148	243	703	131
8	45	143	78	176	665	430	390	390	175	181	460	140
9	46	134	76	165	640	370	365	345	153	164	357	109
10	237	271	76	151	460	362	341	293	139	228	329	99
11	620	331	76	142	395	342	309	262	136	302	314	136
12	247	221	86	133	338	330	290	252	126	271	277	246
13	165	235	86	125	462	330	281	533	134	246	230	134
14	120	193	75	131	430	430	271	481	159	183	202	114
15	111	191	72	145	374	452	240	444	280	160	183	103
16	100	171	79	123	342	475	224	586	194	145	172	98
17	90	149	96	114	322	390	210	469	207	132	175	128
18	84	138	87	113	322	334	200	390	225	121	183	188
19	79	130	78	101	314	359	194	336	199	198	167	227
20	87	165	81	87	378	330	186	298	380	409	152	151
21	363	198	109	90	362	300	191	306	345	211	142	159
22	205	147	107	125	724	294	217	259	247	176	164	133
23	135	135	438	586	725	284	234	235	309	154	515	133
24	114	110	607	483	493	253	257	219	226	155	248	137
25	106	85	298	630	406	241	202	216	190	169	178	119
26	98	115	210	421	493	247	184	195	175	273	156	128
27	91	109	170	290	525	235	179	177	163	305	144	128
28	85	108	165	240	414	241	525	216	151	208	136	120
29	128	102	145	250	------	312	401	255	165	193	127	108
30	1,060	100	140	233	------	309	311	241	190	259	123	102
31	481	------	125	275	------	272	------	223	------	568	118	------
TOTAL	5,226	5,390	4,154	6,677	12,503	11,851	8,200	9,460	5,830	7,175	9,121	3,934
MEAN	169	180	134	215	447	382	273	305	194	231	294	131
MAX	1,060	408	607	630	882	805	525	586	380	568	703	246
MIN	44	85	72	87	160	235	179	177	126	121	118	98
CFSM	1.08	1.15	.85	1.37	2.85	2.43	1.74	1.94	1.24	1.47	1.87	.83
IN.	1.24	1.28	.98	1.58	2.96	2.81	1.94	2.24	1.38	1.70	2.16	.93

CAL YR 1970 TOTAL 68,399 MEAN 187 MAX 1,420 MIN 44 CFSM 1.19 IN 16.21
WTR YR 1971 TOTAL 89,521 MEAN 245 MAX 1,060 MIN 44 CFSM 1.56 IN 21.21

PEAK DISCHARGE (BASE, 2,600 CFS).--No peak above base.

03479000 Watauga River near Sugar Grove, N. C.

LOCATION.--Lat 36°14'18", long 81°49'22", Watauga County, on right bank 250 ft upstream from bridge on Secondary Road 1121, 300 ft downstream from Cove Creek, 2.3 miles southwest of Sugar Grove, and at mile 64.4.

DRAINAGE AREA.--90.8 sq mi.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 2,607.84 ft above mean sea level.

AVERAGE DISCHARGE.--32 years, 164 cfs (24.53 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,940 cfs Oct. 30, May 20 (gage height, 6.21 ft); minimum, 32 cfs Oct. 4, 5, 6, 8 (gage height, 1.43 ft).

Period of record: Maximum discharge, 50,800 cfs Aug. 13, 1940 (gage height, 29.6 ft, from profile based on floodmarks), from rating curve extended above 4,900 cfs on basis of slope-area measurement of peak flow; minimum, 6.5 cfs Jan. 1, 1954 (gage height, 1.13 ft), result of freezeup; minimum daily, 13 cfs Sept. 19, 30, 1954.

Flood of July 1916 reached a stage of 22.1 ft, from floodmarks on barn a quarter of a mile above station as witnessed by local resident (discharge, 28,000 cfs, from rating curve extended above 4,900 cfs on basis of slope-area measurement at gage height 29.6 ft).

REMARKS.--Records good. Slight diurnal fluctuation at low flow caused by small mills above station. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	656	91	136	270	223	163	162	170	98	467	65
2	36	429	88	144	250	250	162	151	153	180	326	137
3	37	355	85	127	250	380	149	145	142	128	304	102
4	33	279	82	137	397	431	138	130	134	97	472	78
5	33	249	77	253	475	350	132	121	123	86	654	71
6	33	225	77	196	393	320	197	124	116	124	355	68
7	33	198	74	158	360	303	209	187	172	159	287	71
8	33	172	80	137	646	272	189	197	155	135	230	75
9	65	154	74	130	623	250	176	164	127	109	195	65
10	132	570	76	119	454	227	162	150	114	278	179	60
11	140	526	73	114	314	222	150	139	105	337	188	66
12	134	337	77	108	269	216	142	141	99	272	163	73
13	77	274	74	102	705	223	136	596	103	196	138	64
14	61	227	68	124	651	274	130	395	113	153	124	61
15	55	213	66	122	414	299	123	348	182	130	114	55
16	47	178	83	106	342	301	118	444	117	113	107	54
17	44	158	104	103	337	263	114	357	102	100	104	58
18	42	147	85	102	367	231	110	291	99	91	111	104
19	42	137	80	100	378	252	106	244	234	124	102	151
20	45	155	81	95	405	231	103	479	326	128	92	97
21	430	143	99	95	344	203	116	702	213	95	87	100
22	169	128	96	149	502	190	121	345	236	87	88	118
23	115	121	228	486	577	187	133	262	169	79	173	89
24	95	113	243	365	403	166	134	222	145	89	105	78
25	85	110	171	375	324	157	109	203	126	91	88	72
26	78	110	147	293	306	162	102	174	119	313	81	77
27	72	105	162	229	285	160	100	152	108	268	80	72
28	66	102	159	322	245	167	345	194	97	160	74	78
29	134	99	127	295	------	277	239	246	89	406	70	71
30	1,280	96	113	239	------	208	187	233	84	365	68	64
31	1,190	------	96	265	------	176	------	196	------	849	67	------
TOTAL	4,873	6,766	3,236	5,726	11,286	7,571	4,495	7,894	4,272	5,840	5,693	2,394
MEAN	157	226	104	185	403	244	150	255	142	188	184	79.8
MAX	1,280	656	243	486	705	431	345	702	326	849	654	151
MIN	33	96	66	95	245	157	100	121	84	79	67	54
CFSM	1.73	2.49	1.15	2.04	4.44	2.69	1.65	2.81	1.56	2.07	2.03	.88
IN.	2.00	2.77	1.33	2.35	4.62	3.10	1.84	3.23	1.75	2.39	2.33	.98

CAL YR 1970 TOTAL 59,384 MEAN 163 MAX 1,560 MIN 30 CFSM 1.80 IN 24.33
WTR YR 1971 TOTAL 70,046 MEAN 192 MAX 1,280 MIN 33 CFSM 2.11 IN 28.70

PEAK DISCHARGE (BASE, 2,000 CFS).--No peak above base.

03500000 Little Tennessee River near Prentiss, N. C.

LOCATION.--Lat 35°08'57", long 83°22'46", Macon County, on left bank 600 ft upstream from Owenby Branch, 0.5 mile upstream from Cartoogechaye Creek, 2 miles north of Prentiss, and at mile 119.5.

DRAINAGE AREA.--140 sq mi.

PERIOD OF RECORD.--October 1943 to current year. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 2,008.39 ft above mean sea level (levels by Tennessee Valley Authority). Since Oct. 1, 1954, auxiliary water-stage recorder 0.5 mile downstream from base gage at same datum.

AVERAGE DISCHARGE.--28 years, 376 cfs (36.47 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,510 cfs Feb. 22; maximum gage height, 4.42 ft Feb. 22; minimum discharge, 99 cfs Oct. 5, 6, 7 (gage height, 1.51 ft).
Period of record: Maximum discharge, 12,200 cfs Oct. 4, 1964; maximum gage height, 17.30 ft Oct. 4, 1964; minimum discharge, 65 cfs Oct. 16, 17, 1954 (gage height, 1.21 ft).
Flood in October 1898 reached a stage of about 15 ft, from profiles by Tennessee Valley Authority.

REMARKS.--Records good. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1236: 1949(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	481	208	228	426	631	567	342	266	426	631	255
2	106	410	202	219	392	702	586	333	263	342	507	217
3	107	398	202	219	391	809	540	324	259	366	830	196
4	103	346	196	341	647	791	508	314	256	288	845	187
5	100	312	191	929	1,180	684	487	308	251	270	623	185
6	99	288	188	529	885	640	575	305	242	386	512	224
7	101	270	180	421	779	679	603	302	232	366	456	190
8	103	257	180	377	860	601	543	377	254	316	421	196
9	137	241	177	362	763	564	509	324	326	278	458	178
10	238	520	176	342	636	562	484	299	313	270	499	173
11	252	414	176	320	584	552	461	290	244	284	408	170
12	167	346	242	303	548	534	445	309	281	274	379	186
13	139	316	229	289	760	527	432	696	281	386	340	173
14	155	302	193	293	673	540	417	572	264	267	323	164
15	225	312	184	383	608	656	405	536	238	246	303	158
16	170	278	268	328	584	663	393	690	228	236	292	157
17	143	260	305	307	554	577	385	540	225	222	280	183
18	136	254	244	292	534	536	378	468	390	211	273	516
19	130	247	226	272	513	611	370	426	354	449	260	306
20	351	358	217	251	561	568	364	402	334	457	249	227
21	496	338	223	266	544	525	372	378	278	310	241	205
22	302	295	215	299	1,050	502	374	354	281	264	235	189
23	236	274	319	987	1,100	485	450	338	274	240	240	182
24	211	250	409	888	774	460	475	330	238	341	222	175
25	245	244	316	886	669	458	389	323	222	300	214	219
26	208	238	277	729	790	509	367	309	216	346	208	201
27	190	234	255	583	830	511	354	292	222	339	203	184
28	180	228	240	508	691	602	410	310	323	293	196	176
29	308	222	235	459	------	833	377	310	342	283	191	170
30	1,080	216	232	461	------	737	353	313	459	305	186	164
31	665	------	236	512	------	621	------	283	------	575	183	------
TOTAL	7,191	9,149	7,141	13,583	19,326	18,670	13,373	11,697	8,356	9,936	11,208	6,106
MEAN	232	305	230	438	690	602	446	377	279	321	362	204
MAX	1,080	520	409	987	1,180	833	603	696	459	575	845	516
MIN	99	216	176	219	391	458	353	283	216	211	183	157
CFSM	1.66	2.18	1.64	3.13	4.93	4.30	3.19	2.69	1.99	2.29	2.59	1.46
IN.	1.91	2.43	1.90	3.61	5.14	4.96	3.55	3.11	2.22	2.64	2.98	1.62

CAL YR 1970 TOTAL 109,667 MEAN 300 MAX 1,360 MIN 99 CFSM 2.14 IN 29.14
WTR YR 1971 TOTAL 135,736 MEAN 372 MAX 1,180 MIN 99 CFSM 2.66 IN 36.07

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-22	2200	4.42	1,510				

03500240 Cartoogechaye Creek near Franklin, N. C.

LOCATION.--Lat 35°09'31", long 83°23'39", Macon County, on downstream side of center pier of bridge on Secondary Road 1152, 0.1 mile downstream from unnamed creek, 1.8 miles south of Franklin, and 1.9 miles upstream from mouth.

DRAINAGE AREA.--57.1 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1944, 1947, 1953-55, 1960. June 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,017.18 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 139 cfs (33.06 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,290 cfs Jan. 23 (gage height, 7.20 ft); minimum, 40 cfs Oct. 5, 6, 7 (gage height, 1.24 ft).
Period of record: Maximum discharge, 4,720 cfs Oct. 4, 1964 (gage height, 12.96 ft); minimum, 33 cfs Sept. 14, 1962, Aug. 30, 31, 1968.
Flood in June 1949 reached a stage of 15.6 ft, from studies by Tennessee Valley Authority (discharge about 7,000 cfs).
A discharge of 30.8 cfs was measured on Oct. 16, 1954.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	155	69	87	217	240	211	114	88	105	195	81
2	43	128	66	83	191	269	231	112	91	127	211	80
3	43	113	65	83	189	279	201	110	86	113	263	77
4	43	100	64	170	298	250	188	107	94	93	258	72
5	43	94	62	270	630	227	179	104	90	88	220	72
6	41	87	62	179	408	220	237	107	81	145	194	79
7	42	82	60	147	365	278	217	107	81	137	210	72
8	43	77	58	134	363	234	198	143	87	113	171	70
9	54	72	56	131	311	214	187	110	96	99	157	67
10	167	168	56	119	262	215	175	104	104	110	171	66
11	118	117	58	115	234	203	166	102	92	103	160	68
12	68	105	139	107	220	193	161	110	84	106	143	74
13	56	99	100	101	302	197	155	267	88	138	131	66
14	57	93	81	113	237	195	147	188	80	100	136	63
15	67	87	74	149	222	200	143	207	75	92	120	60
16	54	80	115	125	210	187	139	226	73	88	115	61
17	51	76	104	118	198	176	136	184	82	82	113	82
18	50	82	90	112	189	168	132	159	100	79	110	171
19	50	74	84	103	181	249	129	143	174	361	105	91
20	198	135	83	102	212	213	128	133	187	258	102	75
21	163	104	87	101	210	195	133	124	120	154	98	92
22	103	92	78	148	455	185	132	116	117	120	97	73
23	82	86	194	852	385	176	186	111	108	106	109	69
24	72	81	213	585	285	166	157	108	96	159	94	66
25	77	85	154	493	242	171	138	111	90	148	91	68
26	66	80	126	345	361	184	131	102	86	187	88	65
27	61	75	110	260	324	198	126	93	86	241	86	65
28	58	75	100	220	270	219	132	106	100	180	82	64
29	260	70	97	196	------	346	121	105	93	197	80	65
30	336	70	91	239	------	288	118	100	123	189	79	60
31	184	------	94	272	------	237	------	93	------	225	79	------
TOTAL	2,794	2,842	2,890	6,259	7,971	6,772	4,834	4,006	2,952	4,443	4,267	2,234
MEAN	90.1	94.7	93.2	202	285	218	161	129	98.4	143	138	74.5
MAX	336	168	213	852	630	346	237	267	187	361	263	171
MIN	41	70	56	83	181	166	118	93	73	79	79	60
CFSM	1.58	1.66	1.63	3.54	4.99	3.82	2.82	2.26	1.72	2.50	2.42	1.30
IN.	1.82	1.85	1.88	4.08	5.19	4.41	3.15	2.61	1.92	2.89	2.78	1.46

CAL YR 1970 TOTAL 40,196 MEAN 110 MAX 924 MIN 41 CFSM 1.93 IN 26.19
WTR YR 1971 TOTAL 52,264 MEAN 143 MAX 852 MIN 41 CFSM 2.50 IN 34.05

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-23	0930	7.20	1,290				

03500500 Cullasaja River at Highlands, N. C.

LOCATION.--Lat 35°04'14", long 83°13'57", Macon County, in Pisgah National Forest, on right bank 0.6 mile downstream from Sequoyah Lake Dam, 1.0 mile downstream from Big Creek, 2.3 miles northwest of Highlands, and at mile 17.8.

DRAINAGE AREA.--14.9 sq mi.

PERIOD OF RECORD.--December 1927 to September 1971 (discontinued). Prior to October 1949, published as Cullasaja Creek at Highlands. Except for figures of momentary maximum discharge, records prior to Aug. 29, 1931, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 3,373.63 ft above mean sea level. Prior to Aug. 29, 1931, water-stage recorder on crest of Sequoyah Lake Dam 0.6 mile upstream at datum 230.22 ft higher.

AVERAGE DISCHARGE.--40 years (1931-71), 59.8 cfs (54.50 inches per year) unadjusted.

EXTREMES.--Current year: Maximum discharge, 575 cfs Feb. 22 (gage height, 2.75 ft); minimum, 10 cfs Oct. 5, 6, 7 (gage height, 0.66 ft); minimum daily, 11 cfs Oct. 4-7.
Period of record: Maximum discharge, 5,100 cfs Aug. 30, 1940 (gage height, 9.35 ft), from rating curve extended above 1,800 cfs on basis of computation of peak flow over dam at gage heights 7.34 ft and 9.35 ft; minimum, 0.2 cfs Oct. 13, 14, 1947, Sept. 26-28, Oct. 14-17, 26-28, 1963; minimum daily, 0.2 cfs Oct. 13, 1947, Sept. 27, Oct. 15, 16, 27, 1963.
Flood of Aug. 30, 1940 is largest since at least 1916. Flood of July 1916 reached a stage of 7 ft, estimated by Tennessee Valley Authority.

REMARKS.--Records good. Occasional diurnal fluctuation and considerable regulation at low flow caused by Sequoyah Lake (see p. 199).

REVISIONS (WATER YEARS).--WSP 728: 1931. WSP 823: Drainage area. WSP 1206: 1950(m). WSP 1910: 1938 (M), 1939 (P), 1940, 1941 (M), 1943, 1946 (P), 1947 (M), 1948-49, 1952-53, 1955-56 (M), 1957 (P), 1958-60 (M). See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	111	39	37	57	86	70	30	29	49	108	26
2	12	105	38	34	55	110	83	29	29	33	126	34
3	12	102	36	34	61	138	70	28	31	29	149	25
4	11	83	34	135	98	112	64	29	31	26	157	22
5	11	74	33	198	177	94	59	28	27	25	179	22
6	11	66	33	89	103	89	78	28	23	60	149	25
7	11	60	31	73	109	96	74	28	22	55	102	21
8	12	54	30	67	130	81	65	50	22	38	86	19
9	39	50	30	64	100	74	58	32	23	51	75	19
10	108	150	30	57	84	76	55	28	36	56	70	18
11	103	86	30	54	78	71	52	28	36	38	65	19
12	48	75	40	51	75	71	49	36	33	34	57	20
13	36	66	33	48	120	78	48	167	24	35	53	17
14	43	73	28	50	83	81	45	82	24	27	51	16
15	51	80	28	69	76	101	44	94	21	25	47	14
16	34	64	84	51	71	85	43	101	19	23	45	14
17	28	58	58	47	70	74	41	69	22	21	44	27
18	26	50	43	45	69	69	40	59	36	20	41	102
19	24	48	39	41	68	95	39	53	34	57	38	36
20	115	83	38	38	86	80	38	48	30	54	36	24
21	119	65	38	39	79	71	38	45	26	30	34	21
22	68	58	35	47	289	69	41	41	55	26	33	19
23	52	54	83	155	153	64	65	39	29	24	31	19
24	48	49	84	124	111	58	51	38	29	83	29	17
25	63	46	56	101	97	62	40	39	23	56	27	18
26	55	46	47	85	126	65	38	35	18	58	26	17
27	55	46	43	69	116	57	37	33	42	50	25	17
28	39	43	40	63	93	63	40	39	51	39	24	17
29	182	42	41	60	------	105	36	43	36	39	23	16
30	329	41	39	71	------	86	34	38	54	49	22	15
31	157	------	42	80	------	73	------	31	------	150	22	------
TOTAL	1,915	2,028	1,303	2,176	2,834	2,534	1,535	1,468	915	1,360	1,974	696
MEAN	61.8	67.6	42.0	70.2	101	81.7	51.2	47.4	30.5	43.9	63.7	23.2
MAX	329	150	84	198	289	138	83	167	55	150	179	102
MIN	11	41	28	34	55	57	34	28	18	20	22	14
(†)	+8.1	-5.8	0	+1.2	+2.3	-1.2	-3.5	0	+4.6	+4.6	-9.2	-1.2
MEAN‡	62.0	67.4	42.0	70.2	101	81.7	51.0	47.4	30.7	44.0	63.4	23.2
CFSM‡	4.16	4.52	2.82	4.71	6.80	5.48	3.42	3.18	2.06	2.95	4.26	1.56
IN.‡	4.80	5.05	3.25	5.43	7.08	6.32	3.82	3.66	2.30	3.41	4.90	1.73

CAL YR 1970 TOTAL 17,628 MEAN 48.3 MAX 329 MIN 10 MEAN‡ 48.3 CFSM‡ 3.24 IN.‡ 43.97
WTR YR 1971 TOTAL 20,738 MEAN 56.8 MAX 329 MIN 11 MEAN‡ 56.8 CFSM‡ 3.81 IN.‡ 51.75

PEAK DISCHARGE (BASE, 550 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-22	1345	2.75	575				

† Change in contents, in cfs-days, in Sequoyah Lake.
‡ Adjusted for change in lake contents.

03501000 Cullasaja River at Cullasaja, N. C.

LOCATION.--Lat 35°09'59", long 83°19'25", Macon County, on right bank at Cullasaja, 150 ft upstream from bridge on U. S. Highway 64, 1.4 miles downstream from Ellijay Creek, and at mile 4.2 (revised).

DRAINAGE AREA.--86.5 sq mi.

PERIOD OF RECORD.--June 1907 to December 1909, October 1920 to September 1971 (discontinued). Monthly discharge only for some periods, published in WSP 1306. Prior to October 1949, published as Cullasaja Creek at Cullasaja.

GAGE.--Water-stage recorder. Datum of gage is 2,023.37 ft above mean sea level (levels by Tennessee Valley Authority). Prior to May 23, 1934, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--53 years, 223 cfs (35.01 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,360 cfs Feb. 22 (gage height, 7.16 ft); minimum 60 cfs Oct. 6 (gage height, 1.92 ft).
Period of record: Maximum discharge, 16,900 cfs Oct. 4, 1964 (gage height, 21.45 ft, from floodmarks), from rating curve extended above 8,100 cfs on basis of slope-area measurements at gage heights 20.83 ft and 21.45 ft; minimum, 19 cfs Sept. 18-22, 1925, Jan. 2, 1940.
Maximum stage observed, that of Oct. 4, 1964. A stage of 17.2 ft, from floodmarks, occurred in July 1916, but has been exceeded at other times, according to information by State Highway Commission.

REMARKS.--Records good. Slight regulation at low flow by Sequoyah Lake 14 miles upstream (see p. 199) and prior to 1965 by mill on Buck Creek 5 miles upstream from station. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 823: Drainage area. WSP 1143: 1907-10, 1921-31, 1932(M), 1933-38, 1939(M), 1940-43, 1944(M), 1946, 1947(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	310	139	146	250	385	319	174	155	270	337	107
2	67	281	135	139	256	441	342	171	153	190	359	122
3	66	296	132	140	234	502	305	168	150	160	538	109
4	63	241	127	285	335	455	282	166	155	145	486	100
5	62	219	123	619	621	395	268	162	142	135	454	97
6	61	200	122	330	442	374	350	162	137	330	450	110
7	61	185	118	270	459	388	337	161	138	300	345	113
8	65	173	118	246	534	343	309	230	152	205	294	108
9	108	163	117	234	447	320	287	176	146	280	255	93
10	221	406	116	216	386	317	271	161	202	300	240	89
11	319	276	115	205	340	303	257	158	171	205	221	90
12	145	239	140	193	321	295	247	169	182	190	202	100
13	117	214	128	185	451	306	238	480	150	200	188	85
14	129	211	115	195	361	314	227	327	145	150	179	80
15	153	229	111	249	330	376	220	348	139	132	170	80
16	120	196	198	205	315	345	214	421	130	128	163	80
17	103	194	195	192	306	305	208	314	140	120	161	170
18	97	172	151	194	301	287	202	271	194	115	152	290
19	93	166	141	173	292	358	196	245	185	304	145	160
20	250	243	138	170	331	326	194	231	160	305	140	120
21	328	214	137	180	325	296	197	215	145	173	136	100
22	206	190	131	180	798	287	203	201	300	146	134	95
23	165	179	243	485	619	274	280	191	155	132	145	95
24	149	165	282	473	466	257	260	185	155	226	127	80
25	177	176	205	437	403	264	213	189	135	190	121	90
26	152	159	179	357	526	278	202	174	105	231	118	80
27	152	156	174	293	519	274	194	166	230	209	115	80
28	132	152	156	292	425	307	201	190	280	173	110	80
29	361	147	157	253	------	481	186	200	200	166	107	75
30	756	143	151	277	------	404	180	188	290	179	104	75
31	428	------	156	302	------	344	------	166	------	361	103	------
TOTAL	5,374	6,285	4,650	8,095	11,393	10,601	7,389	6,760	5,121	6,350	6,799	3,153
MEAN	173	210	150	261	407	342	246	218	171	205	219	105
MAX	756	406	282	619	798	502	350	480	300	361	538	290
MIN	61	143	111	139	234	257	180	158	105	115	103	75
CFSM	2.00	2.43	1.73	3.02	4.71	3.95	2.84	2.52	1.98	2.37	2.53	1.21
IN.	2.31	2.70	2.00	3.48	4.90	4.56	3.18	2.91	2.20	2.73	2.92	1.36

CAL YR 1970 TOTAL 68,004 MEAN 186 MAX 807 MIN 61 CFSM 2.15 IN 29.25
WTR YR 1971 TOTAL 81,970 MEAN 225 MAX 798 MIN 61 CFSM 2.60 IN 35.25

PEAK DISCHARGE (BASE, 2,000 CFS).--No peak above base.

03503000 Little Tennessee River at Needmore, N. C.

LOCATION.--Lat 35°20'11", long 83°31'39", Swain County, on left bank 0.8 mile downstream from DeHart Creek, 0.8 mile north of Needmore, 2.4 miles downstream from Brush Creek, 6.3 miles downstream from Tellico Creek, and at mile 92.9.

DRAINAGE AREA.--436 sq mi.

PERIOD OF RECORD.--October 1943 to current year. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 1,761.19 ft above mean sea level (levels by Tennessee Valley Authority).

AVERAGE DISCHARGE.--28 years, 1,032 cfs (32.14 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,370 cfs Feb. 22 (gage height, 5.30 ft); minimum, 243 cfs Dec. 10 (gage height, 1.76 ft); minimum daily, 304 cfs Oct. 6.
Period of record: Maximum discharge, 22,100 cfs Oct. 5, 1964 (gage height, 12.87 ft in gage well, 13.06 ft from outside gage); minimum, 52 cfs Nov. 7, 8, 1954 (gage height, 1.16 ft); minimum daily, 71 cfs Nov. 7, 1954.
Floods of October 1898 and Aug. 30, 1940, reached stages of about 13 and 11.5 ft, respectively, from flood profiles by Tennessee Valley Authority.

REMARKS.--Records good. Considerable diurnal fluctuation caused by Porters Bend powerplant at Lake Emory 20 miles upstream. Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	345	1,220	552	654	1,290	1,830	1,690	961	779	1,100	1,790	551
2	338	1,030	547	613	1,130	1,950	1,680	952	765	865	1,560	611
3	337	981	536	606	1,100	2,210	1,600	930	728	912	1,930	592
4	323	867	526	721	1,520	2,190	1,450	914	784	736	2,360	527
5	308	775	506	2,300	3,290	1,900	1,390	883	737	683	1,980	504
6	304	721	504	1,470	2,850	1,780	1,660	884	704	1,050	1,690	569
7	307	663	620	1,110	2,210	1,950	1,830	909	679	1,270	1,710	554
8	324	651	556	1,000	2,480	1,740	1,580	1,040	740	973	1,320	563
9	331	627	485	944	2,300	1,600	1,460	1,060	795	829	1,210	518
10	704	1,080	310	891	1,810	1,570	1,380	902	1,020	849	1,240	496
11	1,050	1,120	449	843	1,610	1,570	1,300	849	937	878	1,120	473
12	629	874	587	793	1,460	1,460	1,250	887	822	824	1,030	479
13	463	786	666	753	1,840	1,460	1,220	1,780	747	997	953	505
14	441	721	554	758	1,740	1,540	1,160	1,890	781	792	910	510
15	572	757	534	937	1,510	1,540	1,120	1,450	698	707	827	464
16	496	696	617	923	1,460	1,790	1,100	2,100	674	694	816	447
17	445	662	880	814	1,420	1,420	1,070	1,620	705	655	767	501
18	396	633	657	777	1,350	1,260	1,050	1,380	1,000	626	759	1,060
19	425	635	590	728	1,310	1,470	1,040	1,220	1,070	1,590	718	836
20	619	738	593	663	1,430	1,460	1,020	1,150	1,170	2,140	718	602
21	1,370	885	643	681	1,390	1,290	1,050	1,110	918	1,160	667	592
22	879	729	580	788	2,670	1,230	1,050	1,030	883	879	634	554
23	673	711	1,090	3,090	3,400	1,180	1,280	967	843	759	774	479
24	565	639	1,450	2,950	2,150	1,110	1,480	938	717	866	640	498
25	637	606	1,040	3,060	1,780	1,120	1,170	932	686	963	630	474
26	628	613	810	2,200	2,110	1,250	1,110	900	649	1,270	605	521
27	545	575	739	1,630	2,570	1,230	1,050	844	654	1,320	591	525
28	503	610	727	1,350	2,050	1,540	1,050	881	736	1,120	579	490
29	987	579	670	1,210	------	2,430	1,080	904	949	1,250	553	506
30	3,010	573	670	1,350	------	2,280	989	906	834	1,170	546	471
31	1,900	------	652	1,640	------	1,910	------	822	------	1,610	545	------
TOTAL	20,854	22,757	20,340	38,247	53,230	50,260	38,359	33,995	24,204	31,537	32,172	16,472
MEAN	673	759	656	1,234	1,901	1,621	1,279	1,097	807	1,017	1,038	549
MAX	3,010	1,220	1,450	3,090	3,400	2,430	1,830	2,100	1,170	2,140	2,360	1,060
MIN	304	573	310	606	1,100	1,110	989	822	649	626	545	447
CFSM	1.54	1.74	1.50	2.83	4.36	3.72	2.93	2.52	1.85	2.33	2.38	1.26
IN.	1.78	1.94	1.74	3.26	4.54	4.29	3.27	2.90	2.07	2.69	2.74	1.41

CAL YR 1970 TOTAL 300,347 MEAN 823 MAX 5,490 MIN 304 CFSM 1.89 IN 25.63
WTR YR 1971 TOTAL 382,427 MEAN 1,048 MAX 3,400 MIN 304 CFSM 2.40 IN 32.63

PEAK DISHARGE (BASE, 5,000 CFS).--No peak above base.

03504000 Nantahala River near Rainbow Springs, N. C.

LOCATION.--Lat 35°07'35", long 83°37'11", Macon County, on right bank on Nantahala Forest Service Road 437, 300 ft upstream from Roaring Fork, 0.2 mile downstream from Buck Creek, 5 miles downstream from town of Rainbow Springs, and at mile 34.3.

DRAINAGE AREA.--51.9 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 3,072.97 ft above mean sea level.

AVERAGE DISCHARGE.--31 years, 198 cfs (51.81 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,050 cfs Jan. 23 (gage height, 4.71 ft); minimum, 51 cfs Oct. 4, 5, 6, 7 (gage height, 0.77 ft).
Period of record: Maximum discharge, 6,300 cfs June 16, 1949 (gage height, 9.70 ft), from rating curve extended above 3,000 cfs on basis of slope-area measurement of peak flow; minimum, 33 cfs Nov. 18, 19, 1953 (gage height, 0.60 ft).

REMARKS.--Records good. Occasional slight diurnal fluctuation at low flow caused by small ponds on tributaries above station.

REVISIONS (WATER YEARS).--WSP 973: 1941(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	225	106	142	325	366	293	172	143	144	339	122
2	56	204	104	137	304	435	373	168	151	139	364	116
3	55	189	102	135	356	465	302	163	139	125	370	106
4	53	170	98	366	601	397	280	158	143	116	326	102
5	52	160	96	377	854	363	266	155	137	116	300	99
6	52	150	95	253	618	373	342	155	128	255	271	105
7	52	141	92	222	597	426	307	151	126	180	263	98
8	57	134	91	212	593	355	286	209	152	152	247	95
9	90	128	91	217	505	329	271	158	177	149	224	91
10	212	338	89	194	450	323	258	150	172	180	219	88
11	117	195	104	193	405	307	246	150	146	167	215	92
12	82	177	318	180	389	303	236	213	151	155	230	104
13	74	162	164	172	483	337	227	557	170	163	197	94
14	86	158	137	214	376	317	217	334	146	134	198	86
15	107	149	127	267	351	369	209	352	130	126	177	83
16	79	139	170	210	327	318	202	327	131	127	171	83
17	74	133	156	198	315	294	196	282	141	115	166	134
18	71	130	137	188	307	278	190	257	223	109	160	222
19	69	127	131	173	299	354	185	237	181	257	152	112
20	257	201	136	170	361	295	182	222	191	239	146	113
21	186	149	144	165	367	276	197	209	159	163	143	124
22	138	138	132	447	662	268	205	198	150	145	152	100
23	119	132	329	1,180	528	254	272	189	139	133	160	92
24	111	130	291	865	437	240	214	182	132	226	140	89
25	123	130	222	732	384	247	194	193	126	213	130	88
26	104	125	193	571	556	251	185	171	120	321	123	87
27	98	120	180	451	459	243	179	163	117	480	120	87
28	95	115	164	390	400	262	228	174	123	307	116	89
29	379	112	163	351	------	464	185	171	138	343	113	84
30	413	109	152	411	------	356	178	160	189	324	113	79
31	271	------	152	393	------	316	------	150	------	387	111	------
TOTAL	3,789	4,670	4,666	10,176	12,609	10,181	7,105	6,530	4,471	6,190	6,156	3,064
MEAN	122	156	151	328	450	328	237	211	149	200	199	102
MAX	413	338	329	1,180	854	465	373	557	223	480	370	222
MIN	52	109	89	135	299	240	178	150	117	109	111	79
CFSM	2.35	3.01	2.91	6.32	8.67	6.32	4.57	4.07	2.87	3.85	3.83	1.97
IN.	2.72	3.35	3.34	7.29	9.04	7.30	5.09	4.68	3.20	4.44	4.41	2.20

CAL YR 1970 TOTAL 62,126 MEAN 170 MAX 1,200 MIN 52 CFSM 3.28 IN 44.53
WTR YR 1971 TOTAL 79,607 MEAN 218 MAX 1,180 MIN 52 CFSM 4.20 IN 57.06

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-23	0430	4.71	2,050				

03505500 Nantahala River at Nantahala, N. C.

LOCATION.--Lat 35°17'55", long 83°39'22", Swain County, on left bank on U. S. Highway 19, 1.0 mile northeast of Nantahala, 2.3 miles downstream from Rowlin Creek, 2.8 miles downstream from Nantahala Dam powerhouse, and at mile 10.8.

DRAINAGE AREA.--144 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,894.68 ft above mean sea level (levels by Tennessee Valley Authority).

AVERAGE DISCHARGE.--29 years, 484 cfs (45.64 inches per year) adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 1,630 cfs July 19 (gage height, 4.36 ft); minimum, 19 cfs Oct. 18, 19 (gage height, 1.36 ft); minimum daily, 25 cfs Oct. 26.
Period of record: Maximum discharge, 7,510 cfs Feb. 10, 1946 (gage height, 8.15 ft); minimum, 16 cfs Nov. 9, 1953, Dec. 16, 1958; minimum gage height, 1.19 ft Nov. 9, 1953; minimum daily discharge, 17 cfs Nov. 8, 16, 1952, Oct. 25, 1953.

REMARKS.--Records good. Flow regulated by Nantahala Lake 12 miles upstream (see p. 198) and Queens Creek Lake (capacity, about 300 cfs-days). Water quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	413	47	68	66	638	759	752	465	450	437	873	527
2	432	450	38	110	596	766	759	98	421	418	910	509
3	409	468	240	46	572	773	724	440	466	331	871	514
4	40	469	302	355	614	572	717	465	428	267	897	523
5	431	466	231	440	930	801	717	445	423	356	859	98
6	450	452	138	519	738	752	766	450	342	410	827	456
7	390	372	412	668	836	787	752	460	418	427	812	543
8	413	179	331	385	822	752	745	481	429	416	792	493
9	457	406	354	311	773	745	738	94	429	413	783	471
10	445	452	422	89	787	752	724	403	453	457	779	492
11	139	425	622	380	752	738	530	486	438	91	771	481
12	438	417	526	180	745	717	536	724	422	399	762	123
13	427	428	315	92	780	745	503	710	241	443	751	444
14	241	393	348	212	752	738	486	752	443	404	732	460
15	425	370	495	291	745	745	566	596	435	414	540	441
16	419	440	398	271	738	738	503	514	429	390	578	511
17	462	457	475	74	680	724	492	519	449	393	272	647
18	26	400	367	130	724	724	460	508	469	83	569	704
19	411	252	319	475	724	759	508	503	428	608	539	110
20	490	86	236	578	731	738	481	497	71	571	550	429
21	240	88	392	327	724	724	440	503	444	473	534	458
22	436	42	322	263	946	731	470	450	486	499	530	485
23	451	375	261	794	858	724	536	77	466	485	564	521
24	404	630	205	407	794	674	530	450	428	484	696	511
25	37	559	196	362	766	717	123	525	442	136	539	525
26	25	233	396	486	822	717	503	497	385	573	524	81
27	121	447	392	572	787	704	486	503	392	871	511	446
28	402	61	79	566	766	724	497	508	435	586	516	485
29	582	33	339	530	------	866	475	519	441	838	107	521
30	557	84	435	602	------	801	492	92	419	932	464	661
31	518	------	332	668	------	766	------	416	------	986	541	------
TOTAL	11,131	9,981	9,986	11,249	21,140	22,973	17,011	14,150	12,422	14,591	19,993	13,670
MEAN	359	333	322	363	755	741	567	456	414	471	645	456
MAX	582	630	622	794	946	866	766	752	486	986	910	704
MIN	25	33	38	46	572	572	123	77	71	83	107	81
(†)	-3,253.3	-498.9	+1,368.1	+11,587.9	+7,762.0	+2,003.6	+876.3	+1,507.6	-1,287.9	+3,021.4	+2,931.3	-5,318.7
MEAN‡	254	316	366	737	1,032	806	596	505	371	568	550	278
CFSM‡	1.76	2.19	2.54	5.12	7.17	5.60	4.14	3.51	2.58	3.94	3.82	1.93
IN.‡	2.03	2.45	2.93	5.90	7.46	6.45	4.62	4.04	2.88	4.55	4.41	2.16

CAL YR 1970 TOTAL 149,531 MEAN 410 MAX 854 MIN 25 MEAN‡ 392 CFSM‡ 2.72 IN.‡ 36.94
WTR YR 1971 TOTAL 178,297 MEAN 488 MAX 986 MIN 25 MEAN‡ 529 CFSM‡ 3.67 IN.‡ 49.88

† Change in contents, in cfs-days, in Nantahala and Queens Creek Lakes; furnished by Tennessee Valley Authority and Nantahala Power and Light Co.
‡ Adjusted for change in contents in Nantahala and Queens Creek Lakes.

03508000 Tuckasegee River at Tuckasegee, N. C.

LOCATION.--Lat 35°16'55", long 83°07'37", Jackson County, on right bank 0.9 mile north of Tuckasegee, 1.1 miles downstream from bridge on State Highway 107 and West Fork Tuckasegee River, 10.8 miles downstream from Thorpe Dam, and at mile 48.5.

DRAINAGE AREA.--143 sq mi.

PERIOD OF RECORD.--June 1934 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,125.16 ft above mean sea level (levels by Tennessee Valley Authority).

AVERAGE DISCHARGE.--37 years, 392 cfs (37.23 inches per year) adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 1,010 cfs Oct. 20, June 19 (gage height, 3.14 ft); minimum, 9.0 cfs Oct. 4, 5 (gage height, 0.64 ft); minimum daily, 23 cfs Oct. 4.
Period of record: Maximum discharge, 40,800 cfs Aug. 30, 1940 (gage height, 21.1 ft, from floodmarks), from rating curve extended above 13,500 cfs on basis of slope-area measurements at gage heights 14.3 and 21.1 ft; minimum, 5.2 cfs Sept. 3, 1956 (gage height, 0.54 ft); minimum daily, 6.4 cfs Oct. 7, 1956.
Maximum stage observed since at least 1840, that of Aug. 30, 1940, from studies by Tennessee Valley Authority.

REMARKS.--Records good. Flow regulated by Thorpe Reservoir, Cedar Cliff Lake, Bear Creek Lake, and Tennessee Creek project lakes (see pp. 198, 199).

REVISIONS (WATER YEARS).--WSP 823: Drainage area. WSP 1053: 1943.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	136	551	275	335	301	414	541	92	348	176	173	163
2	182	459	181	72	232	449	578	61	334	427	692	272
3	41	402	376	30	355	699	407	311	506	66	720	322
4	23	479	415	507	396	747	121	338	481	34	677	245
5	209	506	124	696	654	598	352	168	192	147	708	153
6	252	496	64	537	504	524	573	468	143	474	744	162
7	314	483	410	626	478	505	676	392	409	661	600	283
8	275	365	267	440	738	592	516	311	512	428	545	299
9	459	466	252	390	492	602	98	58	434	421	480	308
10	495	509	485	80	365	492	74	195	404	360	420	321
11	531	656	615	480	310	433	72	305	509	109	260	168
12	354	665	445	265	451	465	548	409	215	442	372	179
13	299	660	135	189	655	444	671	643	265	353	532	227
14	225	408	249	399	348	435	305	692	372	318	508	271
15	272	466	407	467	419	567	328	430	337	329	362	232
16	514	666	488	149	417	751	537	552	452	642	489	280
17	489	267	529	52	332	562	136	582	297	149	505	575
18	41	173	476	324	368	489	84	344	418	38	509	347
19	491	205	150	489	374	487	487	496	575	666	495	53
20	542	55	108	494	100	695	420	379	124	535	511	328
21	551	345	470	290	393	105	299	550	474	393	472	244
22	202	49	628	217	751	444	293	89	524	386	155	220
23	392	320	549	560	707	648	556	56	258	427	300	258
24	317	568	120	645	614	392	659	469	496	592	336	227
25	352	579	61	462	434	578	153	317	544	553	153	151
26	493	131	160	520	657	755	478	277	182	398	296	46
27	372	503	165	354	632	511	390	386	145	223	90	324
28	94	88	387	385	601	133	309	699	436	200	114	146
29	213	25	601	180	------	474	257	374	374	191	56	267
30	559	351	479	391	------	683	245	83	273	276	257	381
31	699	------	422	546	------	584	------	187	------	83	256	------
TOTAL	10,388	11,896	10,493	11,571	13,078	16,257	11,163	10,713	11,033	10,497	12,787	7,452
MEAN	335	397	338	373	467	524	372	346	368	339	412	248
MAX	699	666	628	696	751	755	676	699	575	666	744	575
MIN	23	25	61	30	100	105	72	56	124	34	56	46
(†)	+1,212	-746	-2,212	+2,065	+5,602	+2,011	+1,228	+934	-1,328	-107	-1,421	-1,446
MEAN‡	374	372	267	440	667	589	413	376	324	335	367	200
CFSM‡	2.62	2.60	1.87	3.08	4.66	4.12	2.89	2.63	2.27	2.34	2.57	1.40
IN.‡	3.02	2.90	2.15	3.55	4.86	4.75	3.22	3.03	2.52	2.70	2.96	1.56

CAL YR 1970 TOTAL 130,453 MEAN 357 MAX 905 MIN 22 MEAN‡ 339 CFSM‡ 2.37 IN.‡ 32.14
WTR YR 1971 TOTAL 137,328 MEAN 376 MAX 755 MIN 23 MEAN‡ 392 CFSM‡ 2.74 IN.‡ 37.22

† Change in contents, in cfs-days, in Thorpe Reservoir, Cedar Cliff, Bear Creek, and Tennessee Creek project lakes; furnished by Tennessee Valley Authority and Nantahala Power and Light Co.
‡ Adjusted for change in contents in Thorpe Reservoir, Cedar Cliff, Bear Creek, and Tennessee Creek project lakes.

03509000 Scott Creek above Sylva, N. C.

LOCATION.--Lat 35°23'02", long 83°12'51", Jackson County, on right bank 100 ft downstream from bridge on Secondary Road 1431, 800 ft downstream from Allens Branch, 0.7 mile upstream from Cope Creek, 0.8 mile upstream from Sylva, and 3.3 miles upstream from mouth.

DRAINAGE AREA.--50.7 sq mi.

PERIOD OF RECORD.--June 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,056.42 ft above mean sea level (levels by Tennessee Valley Authority).

AVERAGE DISCHARGE.--30 years, 111 cfs (29.73 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,820 cfs July 19 (gage height, 7.30 ft); minimum, 25 cfs Oct. 6, 7 (gage height, 2.66 ft). Period of record: Maximum discharge, 2,530 cfs Apr. 7, 1964 (gage height, 8.6 ft, from highwater profile); minimum, 8.0 cfs Sept. 22, 23, 1941 (gage height, 1.30 ft); minimum daily, 22 cfs Sept. 19, 29, 30, Oct. 4, 1954.
Flood of Aug. 30, 1940, reached a stage of 8.6 ft, from floodmarks (discharge, about 3,200 cfs) from rating curve extended above 1,800 cfs.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1053: 1942-44(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	63	45	68	128	192	173	104	82	89	207	96
2	30	57	44	66	125	223	190	102	82	87	212	81
3	30	61	42	68	138	282	165	100	81	79	242	74
4	28	54	41	171	231	238	155	97	81	74	214	72
5	26	54	39	192	366	208	149	95	77	74	218	71
6	26	55	39	121	243	199	180	117	74	309	205	74
7	25	53	38	102	264	223	163	109	93	241	185	105
8	26	50	37	95	282	188	151	141	81	228	170	81
9	31	47	38	93	231	177	143	105	90	157	158	68
10	54	99	39	84	197	175	138	98	107	151	151	65
11	83	69	39	82	186	171	132	95	97	132	149	70
12	43	62	60	76	173	165	128	107	84	136	141	73
13	36	63	50	73	197	192	126	171	81	190	131	64
14	37	57	43	102	165	192	123	128	76	136	124	61
15	47	56	41	95	157	184	117	151	110	123	118	59
16	37	52	56	81	153	167	116	149	109	114	114	59
17	34	50	62	77	153	157	112	130	138	109	111	82
18	33	48	53	76	151	149	112	121	173	102	108	99
19	32	48	48	65	153	173	110	114	163	479	103	67
20	41	86	48	61	182	155	112	110	141	256	101	63
21	53	61	63	73	180	147	114	105	126	180	97	72
22	45	55	55	119	360	145	114	102	151	161	96	62
23	39	53	379	542	277	140	171	98	112	141	104	60
24	36	46	211	337	241	134	134	97	102	153	92	58
25	47	46	130	282	202	140	119	105	95	173	89	58
26	44	45	104	236	269	143	114	93	90	233	87	58
27	38	45	90	182	248	161	112	89	85	204	91	59
28	36	45	81	165	208	175	123	112	84	167	83	58
29	114	47	79	149	------	295	109	95	81	218	80	54
30	135	46	73	167	------	211	105	90	84	205	78	52
31	75	------	73	165	------	186	------	85	------	240	76	------
TOTAL	1,392	1,673	2,240	4,265	5,860	5,687	4,010	3,415	3,030	5,341	4,135	2,075
MEAN	44.9	55.8	72.3	138	209	183	134	110	101	172	133	69.2
MAX	135	99	379	542	366	295	190	171	173	479	242	105
MIN	25	45	37	61	125	134	105	85	74	74	76	52
CFSM	.89	1.10	1.43	2.72	4.12	3.61	2.64	2.17	1.99	3.39	2.62	1.36
IN.	1.02	1.23	1.64	3.13	4.30	4.17	2.94	2.51	2.22	3.92	3.03	1.52

CAL YR 1970 TOTAL 30,218 MEAN 82.8 MAX 388 MIN 25 CFSM 1.63 IN 22.17
WTR YR 1971 TOTAL 43,123 MEAN 118 MAX 542 MIN 25 CFSM 2.33 IN 31.64

PEAK DISCHARGE (BASE, 900 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-23	0515	6.08	1,120	7-19	1330	7.30	1,820
7- 7	2115	6.07	1,120				

03510500 Tuckasegee River at Dillsboro, N. C.

LOCATION.--Lat 35°21'59", long 83°15'38", Jackson County, on left bank on Secondary Road 1377, 0.4 mile downstream from Scott Creek, 0.5 mile downstream from bridge on U. S. Highway 23 at Dillsboro, and at mile 31.1.

DRAINAGE AREA.--347 sq mi.

PERIOD OF RECORD.--June 1928 to current year (prior to October 1933 monthly discharge only, published in WSP 1306; figures of daily discharge published in WSP 663, 683, 698, 713, 728, 743, are unreliable).

GAGE.--Water-stage recorder. Datum of gage is 1,950.15 ft above mean sea level (levels by Tennessee Valley Authority). Prior to May 24, 1934, nonrecording gage at site below Scott Creek 0.4 mile upstream at datum 7.27 ft higher.

AVERAGE DISCHARGE.--43 years, 769 cfs (30.10 inches per year) unadjusted.

EXTREMES.--Current year: Maximum discharge, 3,100 cfs July 19 (gage height, 6.06 ft); minimum, 114 cfs Oct. 6 (gage height, 2.05 ft); minimum daily, 135 cfs Oct. 4.
Period of record: Maximum discharge, 52,600 cfs Aug. 30, 1940 (gage height, 21.96 ft, from floodmarks), from rating curve extended above 8,400 cfs on basis of slope-area measurement and computation of peak flow over dam; minimum, 35 cfs Sept. 17, 1953 (gage height, 1.60 ft); minimum daily, 107 cfs Sept. 19, 1954.
Flood in May 1840 was approximately equal to that of Aug. 30, 1940, from studies by Tennessee Valley Authority.

REMARKS.--Records good. Considerable diurnal fluctuation caused by Dillsboro powerplant 0.7 mile above station. Flow partly regulated by Thorpe Reservoir 28 miles upstream (see p. 198), and by Cedar Cliff Lake, Bear Creek Lake, and Tennessee Creek project lakes (see p. 199).

REVISIONS (WATER YEARS).--WSP 823: Drainage area. WSP 923: 1940(M). WSP 1306: 1929-33. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	259	861	529	575	842	1,190	1,140	478	631	520	634	443
2	252	774	388	425	694	1,050	1,180	413	619	618	1,260	515
3	270	656	410	273	694	1,490	1,090	567	697	519	1,530	576
4	135	566	566	755	1,090	1,500	720	686	792	294	1,410	413
5	220	716	430	1,370	1,760	1,280	786	576	567	294	1,460	519
6	370	696	244	1,100	1,330	1,230	1,070	641	411	1,140	1,500	373
7	396	682	443	882	1,350	1,210	1,250	885	689	1,270	1,400	556
8	430	646	506	942	1,640	1,160	1,090	822	714	1,110	1,190	559
9	498	563	401	590	1,310	1,180	746	422	788	828	1,000	532
10	820	924	483	573	1,190	1,070	558	515	817	762	889	415
11	938	952	776	580	1,060	1,030	532	562	756	706	1,030	433
12	643	928	796	695	1,040	969	796	682	569	874	828	481
13	480	930	361	503	1,380	1,040	1,120	1,180	559	865	976	413
14	453	803	399	582	971	1,030	904	1,180	603	782	911	479
15	390	532	532	763	918	1,130	707	969	846	610	810	389
16	521	884	580	585	1,020	1,320	825	1,150	695	1,020	802	446
17	685	594	735	361	847	1,110	719	1,010	796	569	868	919
18	380	363	666	497	841	1,020	493	964	862	410	857	746
19	402	346	469	640	859	1,040	686	739	1,170	1,530	834	398
20	709	467	291	732	800	1,230	871	919	852	1,340	825	389
21	826	455	520	659	828	761	751	768	657	898	789	548
22	393	398	821	584	1,760	750	733	634	1,010	846	617	448
23	496	425	1,540	1,840	1,660	1,190	1,040	403	743	827	582	456
24	587	636	898	1,690	1,380	885	1,230	596	696	1,120	639	448
25	421	749	455	1,500	1,100	901	694	798	869	1,060	508	374
26	717	528	451	1,200	1,520	1,260	778	607	592	1,120	499	350
27	451	475	443	972	1,430	1,060	843	604	459	834	455	388
28	428	491	563	835	1,290	868	804	1,050	629	698	319	392
29	498	210	837	802	------	1,260	576	766	630	780	393	451
30	1,030	374	712	802	------	1,360	676	544	616	765	374	569
31	942	------	718	1,190	------	1,240	------	402	------	874	539	------
TOTAL	16,040	18,624	17,963	25,497	32,604	34,814	25,408	22,532	21,334	25,883	26,728	14,418
MEAN	517	621	579	822	1,164	1,123	847	727	711	835	862	481
MAX	1,030	952	1,540	1,840	1,760	1,500	1,250	1,180	1,170	1,530	1,530	919
MIN	135	210	244	273	694	750	493	402	411	294	319	350

CAL YR 1970 TOTAL 232,130 MEAN 636 MAX 2,130 MIN 135 CFSM 1.83 IN 24.88
WTR YR 1971 TOTAL 281,845 MEAN 772 MAX 1,840 MIN 135 CFSM 2.22 IN 30.21

PEAK DISCHARGE (BASE, 4,500 CFS).--No peak above base.

03512000 Oconaluftee River at Birdtown, N. C.

LOCATION.--Lat 35°27'42", long 83°21'13", Swain County, in Cherokee Indian Reservation, on left bank 200 ft upstream from bridge on Secondary Road 1359, 0.5 mile south of Birdtown, 0.6 mile downstream from Adams Creek, 0.6 mile upstream from Goose Creek, 2.2 miles southwest of Cherokee, and at mile 3.1.

DRAINAGE AREA.--184 sq mi.

PERIOD OF RECORD.--July 1945 to September 1946, July 1948 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,843.30 ft above mean sea level. Prior to Oct. 1, 1946, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--24 years, 503 cfs (37.12 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,040 cfs July 19 (gage height, 5.86 ft); minimum 121 cfs Oct. 7, 8 (gage height, 0.93 ft).
Period of record: Maximum discharge, 15,900 cfs Dec. 30, 1969 (gage height, 12.46 ft, from floodmarks); minimum, 80 cfs Oct. 19, 1954 (gage height, 0.66 ft).
Floods of Nov. 19, 1906 and Mar. 27, 1913 reached stages of 18 and 14.5 ft, respectively (discharge not determined), from studies by Tennessee Valley Authority.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	149	430	190	338	707	798	678	363	315	378	2,180	294
2	143	357	184	294	664	830	855	354	312	416	1,940	311
3	140	335	179	294	641	1,490	748	350	304	384	1,480	266
4	130	285	173	629	792	1,160	664	338	299	341	1,210	252
5	128	277	167	1,520	2,120	954	623	329	292	321	1,240	245
6	128	255	166	781	1,310	882	740	375	280	595	1,380	258
7	126	240	158	629	1,190	1,170	685	390	283	644	1,010	291
8	127	229	159	548	1,290	929	627	508	310	629	852	263
9	130	221	158	506	1,140	835	614	411	357	510	741	233
10	186	630	158	445	964	803	602	371	338	538	663	222
11	331	433	162	425	865	738	573	355	388	581	651	218
12	196	357	543	390	767	702	555	365	325	548	630	217
13	166	331	374	370	844	773	539	1,030	326	683	617	219
14	157	299	277	518	683	879	515	809	302	482	528	213
15	200	277	249	590	629	1,040	483	672	759	435	480	199
16	189	255	298	488	582	899	463	652	563	410	446	198
17	179	240	339	445	557	776	444	569	479	375	424	252
18	160	229	288	415	546	704	433	517	730	352	417	359
19	152	223	270	361	560	778	421	477	694	1,740	394	250
20	201	361	275	365	819	698	417	449	562	1,460	378	217
21	239	322	359	400	718	638	427	425	520	760	359	239
22	205	269	330	476	1,940	613	422	402	556	676	349	237
23	179	251	2,260	2,170	1,330	592	585	386	476	554	611	227
24	169	216	1,480	1,500	967	541	521	374	430	530	405	235
25	187	224	855	1,470	819	541	442	409	399	616	347	217
26	160	228	637	1,150	1,070	548	419	366	375	1,060	325	207
27	152	219	521	872	1,040	535	404	345	359	1,070	321	205
28	147	212	445	760	875	579	433	380	345	781	299	205
29	714	205	415	669	------	1,040	388	351	357	1,160	285	193
30	1,300	201	375	861	------	853	374	345	410	1,180	275	183
31	668	------	361	923	------	737	------	332	------	2,840	268	------
TOTAL	7,438	8,611	12,805	21,602	26,429	25,055	16,093	13,799	12,445	23,049	21,505	7,125
MEAN	240	287	413	697	944	808	536	445	415	744	694	238
MAX	1,300	630	2,260	2,170	2,120	1,490	855	1,030	759	2,840	2,180	359
MIN	126	201	158	294	546	535	374	329	280	321	268	183
CFSM	1.30	1.56	2.24	3.79	5.13	4.39	2.91	2.42	2.26	4.04	3.77	1.29
IN.	1.50	1.74	2.59	4.37	5.34	5.07	3.25	2.79	2.52	4.66	4.35	1.44

CAL YR 1970 TOTAL 142,699 MEAN 391 MAX 2,880 MIN 126 CFSM 2.13 IN 28.85
WTR YR 1971 TOTAL 195,956 MEAN 537 MAX 2,840 MIN 126 CFSM 2.92 IN 39.62

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-23	1600	5.20	4,120	7-19	1830	5.86	5,040
2- 5	0930	5.15	4,050	7-31	1100	5.78	4,930
2-22	1430	5.50	4,540				

03513000 Tuckasegee River at Bryson City, N. C.

LOCATION.--Lat 35°25'40", long 83°26'50", Swain County, on left bank 400 ft downstream from bridge on Secondary Road 1364, Everett Street, in Bryson City, 0.6 mile downstream from Deep Creek, and at mile 12.6.

DRAINAGE AREA.--655 sq mi.

PERIOD OF RECORD.--October 1897 to current year. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 1,714.54 ft above mean sea level (levels by Tennessee Valley Authority). Nov. 7, 1897, to Feb. 2, 1914, and May 18, 1920, to June 27, 1927, nonrecording gage at bridge 400 ft upstream at datum 2.00 ft higher. Feb. 3, 1914, to May 17, 1920, water-stage recorder at site 200 ft upstream at datum 2.00 ft higher. June 28, 1927, to Sept. 30, 1960, water-stage recorder at present site at datum 2.00 ft higher.

AVERAGE DISCHARGE.--74 years, 1,565 cfs (32.45 inches per year) unadjusted.

EXTREMES.--Current year: Maximum discharge, 8,780 cfs July 19 (gage height, 6.58 ft); minimum, 304 cfs Oct. 4, 5 (gage height, 1.36 ft); minimum daily, 317 cfs Oct. 5.

Period of record: Maximum discharge, 61,600 cfs Aug. 30, 1940 (gage height, 15.96 ft, datum then in use), from rating curve extended above 28,000 cfs on basis of slope-area measurement of peak flow; minimum, 27 cfs Sept. 10, 1925, minimum gage height, 0.47 ft Oct. 26, 1952, datum then in use; minimum daily discharge, 31 cfs Sept. 9, 10, 1925, caused by filling reservoir on Ocona-luftee River; minimum daily during normal regulation, 186 cfs Oct. 13, 1925.

Floods of May 1840, Mar. 6, 1867, and June 1876 reached stages of 22, 19, and 19 ft, respectively, present site and datum (discharge not determined), from studies by Tennessee Valley Authority. The flood in May 1840 exceeded all other observed floods at this location.

REMARKS.--Records good. Considerable diurnal fluctuation caused by powerplants above station. Flow regulated by Thorpe Reservoir, Cedar Cliff Lake, Bear Creek Lake, Tennessee Creek project lakes (see pp. 198, 199), and two small reservoirs with combined capacity of 250 cfs-days. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 523: 1916, 1918-20. WSP 823: Drainage area. WSP 1306: 1898-1913. WSP 1336: 1907, 1915(M), 1916-20, 1921-29(M), 1933-34(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	476	1,680	875	1,160	2,110	2,630	2,310	1,160	1,070	1,110	3,600	938
2	469	1,450	732	1,090	1,830	2,420	2,600	1,050	1,150	1,090	3,940	957
3	523	1,240	645	765	1,780	3,740	2,440	1,090	1,140	1,260	3,760	922
4	337	997	862	1,220	2,410	3,510	1,970	1,280	1,330	756	3,310	926
5	317	1,180	864	3,810	4,990	2,890	1,780	1,200	1,200	715	3,260	856
6	490	1,150	538	2,450	3,560	2,760	2,260	1,170	926	1,710	3,220	739
7	559	1,110	529	1,900	3,310	3,170	2,510	1,640	958	2,250	3,010	966
8	608	1,100	835	1,980	3,760	2,710	2,170	1,860	1,220	2,180	2,450	928
9	589	928	683	1,480	3,270	2,570	1,970	1,190	1,410	1,500	2,200	881
10	1,160	1,900	667	1,500	2,800	2,460	1,610	1,110	1,310	1,500	1,760	857
11	1,630	1,730	1,070	1,160	2,550	2,290	1,540	1,150	1,400	1,640	2,030	821
12	974	1,540	1,650	1,500	2,400	2,160	1,580	1,370	1,250	1,590	1,850	771
13	788	1,520	1,140	1,160	2,800	2,300	2,070	2,690	1,000	1,730	1,970	688
14	729	1,390	781	1,430	2,220	2,540	1,850	2,570	1,060	1,450	1,770	742
15	742	945	845	1,850	2,090	2,570	1,560	2,110	1,890	1,230	1,650	740
16	736	1,340	1,080	1,580	2,120	2,810	1,550	2,350	1,630	1,440	1,460	691
17	986	1,160	1,270	1,160	1,920	2,460	1,670	2,000	1,460	1,220	1,540	1,110
18	858	789	1,190	1,110	1,890	2,210	1,250	1,950	2,030	848	1,520	1,470
19	422	741	1,060	1,250	1,900	2,310	1,230	1,570	2,050	3,560	1,460	841
20	1,050	1,050	754	1,310	2,290	2,400	1,640	1,750	1,990	3,610	1,410	629
21	1,310	881	925	1,360	1,940	2,010	1,520	1,510	1,280	2,130	1,460	881
22	861	1,010	1,350	1,460	4,520	1,690	1,450	1,530	1,790	1,890	1,280	786
23	677	673	4,810	5,430	3,930	2,180	1,890	1,080	1,590	1,640	1,270	762
24	842	978	3,610	4,290	3,010	1,880	2,200	1,060	1,220	1,860	1,290	780
25	795	1,130	1,960	4,210	2,520	1,790	1,630	1,620	1,430	1,880	1,090	736
26	1,030	1,050	1,530	3,250	3,290	2,250	1,350	1,250	1,300	2,760	909	633
27	749	696	1,360	2,580	3,240	2,040	1,620	1,200	981	2,520	1,070	522
28	818	1,070	1,240	2,190	2,830	2,060	1,580	1,600	920	1,900	802	809
29	1,340	562	1,570	2,100	------	2,900	1,320	1,460	1,210	2,450	814	613
30	3,200	528	1,330	2,150	------	2,880	1,330	1,240	1,240	2,500	692	788
31	2,060	------	1,330	2,790	------	2,590	------	899	------	4,650	932	------
TOTAL	28,125	33,518	39,085	62,675	77,280	77,180	53,450	46,709	40,435	58,569	58,779	24,783
MEAN	907	1,117	1,261	2,022	2,760	2,490	1,782	1,507	1,348	1,889	1,896	826
MAX	3,200	1,900	4,810	5,430	4,990	3,740	2,600	2,690	2,050	4,650	3,940	1,470
MIN	317	528	529	765	1,780	1,690	1,230	899	920	715	692	522

CAL YR 1970 TOTAL 476,055 MEAN 1,304 MAX 6,150 MIN 317 CFSM 1.99 IN 27.03
WTR YR 1971 TOTAL 600,588 MEAN 1,645 MAX 5,430 MIN 317 CFSM 2.51 IN 34.10

PEAK DISCHARGE (BASE, 9,000 CFS).--No peak above base.

03513500 Noland Creek near Bryson City, N. C.

LOCATION.--Lat 35°29'06", long 83°30'15", Swain County, in Great Smoky Mountains National Park, on right bank, 1.1 miles downstream from Mill Creek, 3.6 miles upstream from Fontana Lake, 5 miles northwest of Bryson City, and at mile 4.8.

DRAINAGE AREA.--13.8 sq mi.

PERIOD OF RECORD.--October 1935 to September 1971 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 2,268.60 ft above mean sea level.

AVERAGE DISCHARGE.--36 years, 44.9 cfs (44.18 inches per year).

EXTREMES.--Current year: Maximum discharge, 885 cfs July 31 (gage height, 4.05 ft); minimum daily, 13 cfs Oct. 6, 7; minimum gage height, 1.20 ft Oct. 7, 9.
Period of record: Maximum discharge, 2,310 cfs Feb. 13, 1966 (gage height, 5.55 ft), from rating curve extended above 540 cfs on basis of critical-depth measurement at gage height 4.87 ft; minimum, 3.5 cfs Oct. 24, 1939 (gage height, 0.66 ft).
Floods of March 1876 and November 1906 (gage height and discharge unknown) probably exceeded any flood during period of record, from studies by Tennessee Valley Authority.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 823: Drainage area. WSP 893: 1936, 1937-39(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	70	27	45	73	76	67	34	27	43	253	35
2	15	64	26	43	69	82	94	34	27	43	233	31
3	15	57	25	41	69	131	73	33	26	34	176	29
4	14	50	25	113	97	94	68	32	26	30	139	27
5	14	47	24	127	182	86	64	31	25	29	122	27
6	13	45	23	85	122	87	73	41	24	129	104	26
7	13	42	23	74	116	107	67	37	23	70	90	31
8	14	40	22	67	119	88	63	44	25	80	78	26
9	15	38	22	63	105	80	61	38	23	66	69	25
10	83	76	22	56	94	77	59	36	24	82	63	24
11	46	54	25	54	86	70	56	34	24	79	62	23
12	27	52	82	50	78	68	55	38	23	99	59	23
13	24	49	44	47	75	76	55	99	24	71	149	23
14	31	45	36	83	65	82	51	65	22	60	83	22
15	36	43	34	71	61	111	47	60	44	52	71	21
16	26	40	40	60	56	86	45	57	32	46	63	21
17	24	38	42	57	53	78	44	51	38	42	59	29
18	22	36	30	53	50	72	43	47	124	38	55	53
19	21	34	29	47	49	74	42	45	68	155	50	29
20	34	47	38	45	71	66	42	42	51	102	46	26
21	40	38	54	45	58	62	41	40	54	75	44	26
22	30	36	44	81	178	59	39	37	50	68	42	24
23	27	34	301	290	97	56	58	36	42	57	50	24
24	26	32	162	185	80	52	46	34	38	52	41	23
25	27	33	111	172	71	51	42	40	35	71	38	23
26	24	30	86	139	103	51	40	33	32	126	36	22
27	23	30	72	110	94	51	38	31	31	104	34	23
28	22	29	61	95	82	55	42	31	29	84	33	22
29	182	28	57	83	------	103	37	30	28	105	31	21
30	160	28	51	98	------	81	35	29	27	98	30	19
31	92	------	49	89	------	72	------	28	------	425	33	------
TOTAL	1,156	1,285	1,687	2,668	2,453	2,384	1,587	1,267	1,066	2,615	2,436	778
MEAN	37.3	42.8	54.4	86.1	87.6	76.9	52.9	40.9	35.5	84.4	78.6	25.9
MAX	182	76	301	290	182	131	94	99	124	425	253	53
MIN	13	28	22	41	49	51	35	28	22	29	30	19
CFSM	2.70	3.10	3.94	6.24	6.35	5.57	3.83	2.96	2.57	6.12	5.70	1.88
IN.	3.12	3.46	4.55	7.19	6.61	6.43	4.28	3.42	2.87	7.05	6.57	2.10

CAL YR 1970 TOTAL 14,719 MEAN 40.3 MAX 301 MIN 13 CFSM 2.92 IN 39.68
WTR YR 1971 TOTAL 21,382 MEAN 58.6 MAX 425 MIN 13 CFSM 4.25 IN 57.64

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-23	0730	3.65	652	7- 6	1415	3.92	807
2-22	1115	3.72	691	7-31	0730	4.05	885

03547000 Hiwassee River below Chatuge Dam, near Hayesville, N. C.

LOCATION.--Lat 35°01'45", long 83°47'45", Clay County, on left bank 0.3 mile downstream from bridge on Secondary Road 1146, 0.4 mile upstream from Hyatt Mill Creek, 1.6 miles southeast of Hayesville, 1.7 miles downstream from Chatuge Dam, and at mile 119.3.

DRAINAGE AREA.--190 sq mi.

PERIOD OF RECORD.--May 1907 to December 1909 (fragmentary), August 1922 to September 1923 (gage heights only), April 1942 to current year. Published as "near Hayesville" 1907-9, 1922-23.

GAGE.--Water-stage recorder. Datum of gage is 1,789.90 ft above mean sea level (levels by Tennessee Valley Authority). Prior to Apr. 1, 1942, nonrecording gage at site 1.1 miles upstream at different datum.

AVERAGE DISCHARGE.--29 years (1942-71), 434 cfs (31.02 inches per year) adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 1,440 cfs Sept. 27 (gage height, 5.43 ft); minimum, 0.66 cfs Dec. 4, 5 (gage height, 0.35 ft); minimum daily, 0.66 cfs Dec. 4.
Period of record: Maximum gage height recorded, 11.9 ft Mar. 13, 1909, site and datum then in use (discharge not determined); minimum discharge, 0.6 cfs Oct. 21, 1952; minimum gage height, 0.30 ft Aug. 3, 1942, Oct. 21, 1952.

REMARKS.--Records good. Flow completely regulated by Chatuge Lake (see p. 198). Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 973: 1942.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	379	1.7	2.0	576	579	663	154	7.7	659	656	16	649
2	498	1.7	.90	576	579	670	103	7.7	785	719	64	684
3	261	1.8	.70	567	582	673	20	7.4	871	715	16	705
4	12	1.6	.66	567	576	673	19	7.4	754	54	15	495
5	185	1.5	.70	573	588	670	17	7.2	799	701	15	17
6	4.7	1.6	.75	573	585	670	17	7.4	267	722	15	15
7	1.7	2.0	2.5	588	582	670	16	7.4	715	719	14	663
8	1.7	1.8	1.8	576	579	325	15	8.2	570	670	14	673
9	1.8	1.0	68	567	576	5.5	14	7.4	719	612	198	726
10	2.0	2.7	3.4	567	573	69	12	8.8	645	311	15	712
11	1.6	1.5	.96	567	567	579	12	3.6	698	15	283	91
12	1.7	1.0	1.6	567	603	588	11	4.2	733	638	322	408
13	2.4	1.3	.90	564	656	579	11	4.4	283	453	15	705
14	1.7	.90	2.5	567	656	582	10	3.3	694	477	14	709
15	1.7	1.1	.96	564	652	579	10	4.1	684	540	531	705
16	1.0	1.1	272	564	659	591	9.7	3.9	687	450	471	743
17	.90	1.5	468	564	659	588	9.1	3.3	680	15	297	845
18	1.6	1.2	462	558	663	582	8.8	3.3	698	14	297	729
19	1.5	1.2	180	558	659	582	8.5	3.6	701	313	288	291
20	2.5	2.5	459	558	656	585	8.5	3.2	58	549	278	701
21	1.8	1.3	456	555	663	591	8.8	3.1	659	540	15	691
22	1.6	1.2	474	558	663	588	8.8	3.1	600	561	15	694
23	1.6	1.1	534	564	659	543	9.7	2.9	645	528	561	705
24	1.6	1.3	570	567	659	456	8.2	4.4	609	24	701	701
25	1.6	.96	564	567	659	432	8.0	190	639	15	687	492
26	1.5	.82	564	573	673	367	7.7	666	659	501	705	15
27	1.3	.82	555	573	677	251	7.4	588	376	663	691	733
28	1.7	.96	564	570	666	251	8.8	698	684	677	330	712
29	5.3	1.1	576	588	------	256	7.7	531	677	666	15	799
30	2.7	1.1	576	576	------	253	7.7	40	736	350	630	750
31	1.5	------	582	579	------	216	------	705	------	19	666	------
TOTAL	1,385.70	41.36	7,944.33	17,631	17,548	15,127.5	568.4	3,545.0	18,984	13,882	8,194	17,557
MEAN	44.7	1.38	256	569	627	488	18.9	114	633	448	264	585
MAX	498	2.7	582	588	677	673	154	705	871	722	705	845
MIN	.90	.82	.66	555	567	5.5	7.4	2.9	58	14	14	15
(†)	+7,200	+9,000	+500	-1,800	+6,600	+6,900	+15,000	+10,200	-10,800	-2,300	+4,600	-11,200
MEAN‡	277	301	272	511	862	711	519	443	273	374	413	212
CFSM‡	1.46	1.58	1.43	2.69	4.54	3.74	2.73	2.33	1.44	1.97	2.17	1.12
IN.‡	1.68	1.77	1.65	3.10	4.73	4.31	3.05	2.69	1.60	2.27	2.50	1.24

CAL YR 1970 TOTAL 123,746.89 MEAN 339 MAX 1,370 MIN .66 MEAN‡ 366 CFSM‡ 1.93 IN.‡ 26.16
WTR YR 1971 TOTAL 122,408.29 MEAN 335 MAX 871 MIN .66 MEAN‡ 428 CFSM‡ 2.25 IN.‡ 30.60

† Change in contents, in cfs-days, in Chatuge Lake, furnished by Tennessee Valley Authority.
‡ Adjusted for change in lake contents.

03548500 Hiwassee River above Murphy, N. C.

LOCATION.--Lat 35°04'50", long 84°00'10", Cherokee County, on right bank on U. S. Highway 64, 600 ft upstream from Will Scott Creek, 2.0 miles southeast of Murphy, and at mile 99.1.

DRAINAGE AREA.--406 sq mi.

PERIOD OF RECORD.--June 1896 to August 1897 (gage heights only), October 1897 to current year. Published as "at Murphy" 1897-1940. Records published for both sites August 1939 to April 1940. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 1,538.23 ft above mean sea level (levels by Tennessee Valley Authority). Prior to Jan. 30, 1921, nonrecording gage at bridge 2.8 miles downstream at datum 30.40 ft lower. Jan. 30, 1921, to Nov. 8, 1926, nonrecording gage 2.8 miles downstream at datum 28.40 ft lower. Nov. 9, 1926, to Apr. 30, 1940, water-stage recorder 2.8 miles downstream at datum 28.20 ft lower.

AVERAGE DISCHARGE.--74 years (1897-1971), 907 cfs (30.34 inches per year) adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 5,130 cfs Jan. 23 (gage height, 7.25 ft); minimum, 77 cfs Oct. 14 (gage height, 1.98 ft); minimum daily, 79 cfs Oct. 13.
Period of record: Maximum discharge, 23,100 cfs Mar. 19, 1899 (gage height, 18.4 ft, from graph based on gage readings, site and datum then in use), from rating curve extended above 5,000 cfs; minimum daily, 10 cfs Dec. 3, 1924, result of freezeup and filling of Andrews Lake; minimum daily during normal regulation, 62 cfs Oct. 19, 1952.
Maximum stage observed is that of Mar. 19, 1899.

REMARKS.--Records good. Considerable diurnal fluctuation since 1924 caused by Mission powerplant at Andrews Dam 7 miles upstream (normal regulated storage, about 75 cfs-days). Flow regulated since 1942 by Chatuge Lake 22 miles upstream (see p. 198). Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 583: 1899(M). WSP 973: Drainage area. WSP 1003: 1943. WSP 1306: 1901-2, 1904-17, 1919(M), 1922(M), 1924-26(M). WSP 1706: 1899, 1907.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	282	153	815	1,150	1,530	913	399	985	1,020	1,390	968
2	658	246	153	791	1,100	1,660	960	384	1,140	1,070	1,390	1,010
3	535	225	143	775	1,110	1,820	712	375	1,260	1,060	1,170	1,000
4	291	200	150	872	1,690	1,720	642	360	1,110	684	1,010	815
5	264	197	136	1,350	2,840	1,580	597	343	1,140	579	802	557
6	133	185	136	1,130	2,050	1,510	752	360	895	1,320	839	198
7	118	170	143	1,030	1,870	1,700	749	465	680	1,270	797	546
8	112	163	136	967	1,860	1,370	673	444	904	1,120	620	944
9	106	163	133	925	1,670	707	624	368	1,070	1,080	690	986
10	124	365	204	884	1,450	702	583	342	1,370	932	548	983
11	133	286	150	877	1,330	1,160	540	336	1,150	499	761	617
12	106	242	291	849	1,260	1,260	498	356	1,300	617	770	562
13	79	216	309	832	1,390	1,320	492	671	816	949	546	748
14	124	208	233	883	1,270	1,380	468	566	720	872	395	966
15	153	189	212	1,170	1,230	1,450	445	538	1,090	807	684	952
16	115	181	309	1,060	1,210	1,380	428	557	1,080	823	911	1,020
17	101	163	672	973	1,190	1,290	416	476	1,110	463	654	1,200
18	109	167	651	925	1,170	1,230	404	426	1,120	212	615	1,250
19	96	170	535	876	1,150	1,270	391	358	1,100	672	721	744
20	204	300	499	833	1,220	1,220	379	334	726	1,180	681	860
21	208	250	665	822	1,300	1,170	409	351	624	932	362	1,090
22	146	216	665	1,160	2,480	1,160	487	333	933	923	273	1,010
23	124	208	1,010	3,450	2,170	1,120	617	315	955	708	542	995
24	124	185	1,360	2,740	1,680	943	589	309	918	679	1,140	986
25	139	174	1,080	2,570	1,480	927	490	347	948	320	951	854
26	124	170	949	1,830	2,180	1,070	446	846	959	807	1,030	490
27	112	178	872	1,440	1,990	908	423	989	941	2,770	1,020	576
28	112	163	831	1,250	1,680	1,010	538	1,000	827	1,580	827	975
29	559	170	847	1,170	------	1,860	444	986	1,070	2,300	397	1,110
30	831	160	831	1,220	------	1,530	421	567	1,160	1,850	522	1,020
31	412	------	831	1,310	------	1,180	------	679	------	1,980	979	------
TOTAL	6,605	6,192	15,289	37,779	44,170	40,137	16,530	15,180	30,101	32,078	24,037	26,032
MEAN	213	206	493	1,219	1,578	1,295	551	490	1,003	1,035	775	868
MAX	831	365	1,360	3,450	2,840	1,860	960	1,000	1,370	2,770	1,390	1,250
MIN	79	160	133	775	1,100	702	379	309	624	212	273	198

CAL YR 1970 TOTAL 245,294 MEAN 672 MAX 2,430 MIN 79 MEAN† 699 CFSM† 1.72 IN.† 23.38
WTR YR 1971 TOTAL 294,130 MEAN 806 MAX 3,450 MIN 79 MEAN† 899 CFSM† 2.21 IN.† 30.05

† Adjusted for change in contents in Chatuge Lake.

03550000 Valley River at Tomotla, N. C.

LOCATION.--Lat 35°08'20", long 83°58'50", Cherokee County, on right bank 15 ft downstream from bridge on Secondary Road 1373 at Tomotla, 0.2 mile upstream from Rogers Creek, 4.7 miles northeast of Murphy, and at mile 6.6.

DRAINAGE AREA.--104 sq mi.

PERIOD OF RECORD.--June 1904 to December 1909, January 1914 to April 1917, October 1918 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,556.46 ft above mean sea level (levels by Tennessee Valley Authority). Prior to May 11, 1934, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--59 years (1904-9, 1914-16, 1919-71), 252 cfs (32.91 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,700 cfs Jan. 23 (gage height, 11.11 ft); minimum, 39 cfs Oct. 7, 9, 10 (gage height, 1.70 ft).
Period of record: Maximum discharge, 18,000 cfs Nov. 19, 1906 (gage height, 20.5 ft, from flood profile by Tennessee Valley Authority), from rating curve extended above 5,800 cfs on basis of slope-conveyance study; minimum, 12 cfs several times in August and September 1925 (gage height, 0.52 ft).
Flood of September 1898 reached a stage of 21.2 ft, from floodmark by Tennessee Valley Authority (discharge, about 20,000 cfs).

REMARKS.--Records good. Water quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 503: 1905-9, 1915-17. WSP 823: Drainage area. WSP 1306: 1917(M), 1920(M), 1922(M), 1925(M), 1930(M), 1933(M). WSP 1626: 1907(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	133	81	162	510	472	475	203	118	137	1,200	130
2	46	115	79	149	419	481	511	198	138	165	1,180	130
3	46	109	77	144	421	589	441	193	142	163	776	118
4	43	99	75	239	636	524	400	183	211	126	719	112
5	41	97	72	476	1,430	468	369	175	138	114	625	109
6	41	91	74	346	1,000	452	509	184	123	273	631	107
7	41	86	71	279	828	572	500	183	135	254	679	107
8	41	83	69	247	810	490	449	261	158	188	512	110
9	40	80	69	244	684	435	409	205	169	166	416	99
10	63	237	69	216	550	451	372	186	307	196	358	97
11	67	156	80	209	477	421	342	179	215	164	337	103
12	50	130	294	191	432	400	321	193	157	146	311	112
13	47	115	217	178	458	441	304	364	176	129	287	100
14	71	106	155	226	385	468	287	312	162	119	258	96
15	81	99	132	319	358	496	273	297	143	114	235	91
16	55	92	166	277	342	458	262	289	140	120	218	91
17	50	87	165	251	333	410	251	254	156	106	210	122
18	49	85	146	227	322	372	242	231	169	99	208	184
19	48	84	134	199	309	499	231	210	143	309	191	111
20	127	186	134	176	401	461	227	196	134	534	176	105
21	94	148	159	168	407	412	246	183	125	264	168	134
22	70	125	145	437	1,150	383	249	170	121	207	163	102
23	61	114	803	2,400	1,000	354	336	162	118	166	182	97
24	59	102	729	1,480	643	326	299	155	109	156	156	93
25	65	95	401	1,350	509	327	262	179	104	216	145	89
26	59	94	291	913	685	420	244	152	99	604	140	89
27	56	92	236	628	643	401	232	141	121	1,600	135	89
28	54	89	201	491	534	460	249	140	141	609	129	86
29	347	86	185	414	------	979	221	135	131	782	124	85
30	351	83	171	589	------	779	211	130	161	704	120	81
31	186	------	176	727	------	570	------	125	------	1,400	122	------
TOTAL	2,496	3,298	5,856	14,352	16,676	14,771	9,724	6,168	4,464	10,330	11,111	3,179
MEAN	80.5	110	189	463	596	476	324	199	149	333	358	106
MAX	351	237	803	2,400	1,430	979	511	364	307	1,600	1,200	184
MIN	40	80	69	144	309	326	211	125	99	99	120	81
CFSM	.77	1.06	1.82	4.45	5.73	4.58	3.12	1.91	1.43	3.20	3.44	1.02
IN.	.89	1.18	2.09	5.13	5.96	5.28	3.48	2.21	1.60	3.69	3.97	1.14

CAL YR 1970 TOTAL 61,908.0 MEAN 170 MAX 916 MIN 40 CFSM 1.63 IN 22.14
WTR YR 1971 TOTAL 102,425.0 MEAN 281 MAX 2,400 MIN 40 CFSM 2.70 IN 36.64

PEAK DISCHARGE (BASE, 1,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-23	0930	11.11	3,700	7-27	0330	9.12	2,750
2- 5	0845	6.61	1,810	8- 1	2200	7.61	2,160
2-22	1345	6.92	1,920				

Lakes and Reservoirs in Ohio River basin

03460242 LAKE WALTERS.--Lat 35°41'41", long 83°03'02", Haywood County, at Waterville Dam on Pigeon River, 0.1 mile downstream from Cataloochee Creek, 5.5 miles southeast of Mount Sterling, and at mile 38.0 Drainage area, 455 sq mi. Period of record, October 1961 to current year. Nonrecording gage read once daily. Datum of gage is at mean sea level. Extremes for current year: Maximum contents observed, 12,800 cfs-days Aug. 15 (elevation, 2,258.1 ft); minimum observed, 7,600 cfs-days Feb. 13 (elevation, 2,224.1 ft). Extremes for period of record: Maximum contents observed, 12,800 cfs-days (revised) several days each year (elevation, 2,258.6 ft); minimum observed, 4,510 cfs-days (revised) Feb. 15, 1962 (elevation, 2,198.8 ft).

Reservoir is formed by single arch, variable radius, concrete dam with fourteen taintor gates 10 ft high by 24 ft wide. Dam was completed in 1929 and filling began October 1929; water in reservoir first reached minimum pool elevation November 1929. Total capacity (new capacity table put into use Jan. 1, 1971), at elevation 2,258.6 ft (top of gates) is 12,800 cfs-days, of which 10,400 cfs-days is controlled storage above elevation 2,175 ft (minimum pool). Reservoir is used for power. Prior to Jan. 1, 1971 records furnished by Carolina Power & Light Co. Gage-height record furnished by Carolina Power & Light Co.; level storage records furnished by Tennessee Valley Authority.

03504500 NANTAHALA LAKE.--Lat 35°11'56", long 83°39'17", Cherokee County, at Nantahala Dam on Nantahala River, 4.2 miles southeast of Topton, 5.5 miles upstream from Whiteoak Creek, and at mile 22.8. Drainage area, 91.0 sq mi. Period of record, January 1942 to current year. Prior to October 1944 monthend contents only, published in WSP 1306. Gage, water-stage recorder. Datum of gage is a local datum which is 122.16 ft above mean sea level. Prior to June 3, 1942, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 68,000 cfs-days Aug. 5 (elevation, 2,888.47 ft); minimum, 39,100 cfs-days Dec. 19 (elevation, 2,845.94 ft). Extremes for period of record: Maximum contents, 70,400 cfs-days Apr. 12, 1957 (elevation, 2,890.55 ft); minimum (after first filling), 6,700 cfs-days Jan. 28, 1955 (elevation, 2,760.11 ft).

Reservoir is formed by rockfill dam with side channel gate-controlled spillway supplemented by fuse-plug dam. Dam completed and storage began Jan. 30, 1942; water in reservoir first reached minimum pool elevation Feb. 16, 1942. Total capacity (based on 1969 resurvey; new capacity table put into use Jan. 1, 1971), at elevation 2,890.0 ft (top of gates) is 69,200 cfs-days, of which 63,500 cfs-days is controlled storage above 2,758.84 ft (minimum pool). Reservoir is used for flood control and power. Gage-height record furnished by the Aluminum Co. of America; level storage records furnished by Tennessee Valley Authority. (See sta 03505500)

03507500 THORPE RESERVOIR.--Lat 35°11'46", long 83°09'09", Jackson County, at Thorpe Dam on West Fork Tuckasegee River, 2.3 miles northwest of Glenville, 3.0 miles upstream from Shoal Creek, and at mile 9.7. Drainage area, 36.7 sq mi. Period of record, February 1941 to current year. Prior to October 1944 monthend contents only, published in WSP 1306. Prior to October 1948, published as Glenville Reservoir. Gage, water-stage recorder. Datum of gage is a local datum which is 391.75 ft above mean sea level. Prior to Apr. 9, 1941, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 32,000 cfs-days May 24 (elevation, 3,095.06 ft); minimum, 20,100 cfs-days Dec. 22 (elevation, 3,076.21 ft). Extremes for period of record: Maximum contents, 35,700 cfs-days Mar. 13, 1950 (elevation, 3,100.01 ft); minimum (after first filling), 2,200 cfs-days Feb. 5, 1955, Jan. 13, 1956; minimum elevation, 3,025.10 ft Feb. 5, 1955.

Reservoir is formed by earth and rock dam and six 40-foot fuse-plug dams. Side channel spillway equipped with two taintor gates 12 ft high by 25 ft wide. Dam completed and storage began Feb. 12, 1941. Water in reservoir first reached minimum pool elevation Mar. 15, 1941. Total capacity (based on 1969 resurvey; new capacity table put into use Jan. 1, 1971), at elevation 3,100.0 ft (top of gates) is 35,500 cfs-days, of which 33,700 cfs-days is controlled storage above elevation 3,023.25 ft (minimum pool). Reservoir is used for flood control and power. Gage-height record furnished by Aluminum Co. of America; level storage records furnished by Tennessee Valley Authority. (See sta 03508000)

03514500 FONTANA LAKE.--Lat 35°27'07", long 83°48'18", Graham County, at Fontana Dam on Little Tennessee River, 5.7 miles upstream from Twenty Mile Creek, 9.0 miles north of Robbinsville, 9.6 miles upstream from Cheoah Dam, and at mile 61.0. Drainage area, 1,571 sq mi. Period of record, October 1944 to current year. Prior to November 1944, monthend contents only, published in WSP 1306. Gage, water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 682,000 cfs-days Aug. 8 (elevation, 1,701.40 ft); minimum, 271,200 cfs-days Dec. 22 (elevation, 1,588.92 ft). Extremes for period of record: Maximum contents, 722,300 cfs-days July 23, 1949 (elevation, 1,708.91 ft); minimum (after first filling), 78,300 cfs-days Jan. 29, 1955 (elevation, 1,472.0 ft).

Reservoir is formed by gravity nonoverflow type concrete dam. Spillway equipped with four radial gates 35 ft high by 35 ft wide. Storage began Nov. 7, 1944; dam completed March 1945; water in reservoir first reached minimum pool elevation Jan. 16, 1945. Total capacity (based on 1967 resurvey; new capacity table put into use Jan. 1, 1971), at elevation, 1,710.0 ft (top of gates) is 727,500 cfs-days, of which 578,000 cfs-days is controlled storage above elevation 1,525.0 ft (minimum pool). Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

03516500 SANTEETLAH LAKE.--Lat 35°22'38", long 83°52'33", Graham County, at Santeetlah Dam on Cheoah River, 1 mile downstream from Santeetlah Creek, 5.5 miles northwest of Robbinsville, and at mile 9.3. Drainage area, 176 sq mi. Period of record, December 1927 to current year. Prior to October 1946 monthend contents only, published in WSP 1306. Gage, water-stage recorder. Datum of gage is a local datum which is 122.92 ft above mean sea level. Prior to February 1937, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 69,900 cfs-days Aug. 10 (elevation, 1,810.57 ft); minimum, 27,900 cfs-days Nov. 27 (elevation, 1,768.55 ft). Extremes for period of record: Maximum contents, 81,100 cfs-days Sept. 3, 1928 (elevation, 1,817.90 ft); minimum (after first filling), 13,100 cfs-days Feb. 6, 1940 (elevation, 1,741.39 ft).

Reservoir is formed by concrete gravity and arch dam with concrete spillway controlled by six taintor gates 12 ft high by 25 ft wide. Dam completed and storage began Dec. 7, 1927. Water in reservoir first reached minimum pool elevation December 1927. Total capacity (new capacity table put into use Jan. 1, 1971), at elevation 1,817.00 ft (top of gates) is 78,800 cfs-days, of which 66,600 cfs-days is controlled storage above 1,740.08 ft (minimum pool). Reservoir is used for power. Gage-height record furnished by Aluminum Co. of America; level storage records furnished by Tennessee Valley Authority.

03546500 CHATUGE LAKE.--Lat 35°01'01", long 83°47'28", Clay County, at Chatuge Dam on Hiwassee River 2.0 miles upstream from Hyatt Mill Creek, 2.5 miles downstream from Georgia-North Carolina State line, 2.4 miles southeast of Hayesville, and at mile 121.0. Drainage area, 189 sq mi. Period of record, February 1942 to current year. Gage, water-stage recorder. Datum of gage is at mean sea level. Prior to Aug. 4, 1942, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 117,300 cfs-days May 25 (elevation, 1,926.89 ft); minimum, 60,100 cfs-days Oct. 5 (elevation, 1,905.30 ft). Extremes for period of record: Maximum contents, 124,200 cfs-days Apr. 20, 1943 (elevation, 1,927.80 ft); minimum (after first filling), 9,400 cfs-days Sept. 5, 1947, Jan. 27, 1956; minimum elevation, 1,860.11 ft Sept. 5, 1947.

Reservoir is formed by a rolled earthfill dam with side channel spillway equipped with flashboards. Dam completed and storage began Feb. 12, 1942; water in reservoir first reached minimum pool elevation Feb. 26, 1942. Total capacity (based on 1965 resurvey; new capacity table put into use Jan. 1, 1971), at elevation 1,928.0 ft (top of flashboards) is 121,200 cfs-days, of which 111,900 cfs-days is controlled storage above elevation 1,860.0 ft (minimum pool). Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority. (See sta 03547000)

Lakes and Reservoirs in Ohio River basin--Continued

03554500 HIWASSEE LAKE.--Lat 35°09'01", long 84°10'40", Cherokee County, at Hiwassee Dam on Hiwassee River, 0.3 mile northwest of village of Hiwassee Dam, 3.9 miles upstream from Shoal Creek, and at mile 75.8. Drainage area, 968 sq mi. Period of record, September 1939 to current year. Gage, water-stage recorder. Datum of gage is at mean sea level. Subtract 0.63 ft from all elevations to reduce to datum of 1929, supplementary adjustment of 1936. Extremes for current year: Maximum contents, 210,600 cfs-days Aug. 2 (elevation, 1,523.83 ft); minimum, 57,700 cfs-days Dec. 17 (elevation, 1,443.44 ft). Extremes for period of record: Maximum contents, 220,700 cfs-days Apr. 24, 1944 (elevation, 1,526.48 ft); minimum (after first filling), 35,800 cfs-days Jan. 28, 1948 (elevation, 1,413.41 ft).

Reservoir is formed by gravity overflow concrete dam with seven taintor gates 23 ft high by 32 ft long. Slight storage began Apr. 13, 1939, during construction; systematic storage operation began Jan. 14, 1940; dam completed February 1940; water in reservoir first reached minimum pool elevation Feb. 23, 1940. Total capacity (based on 1965 resurvey; new capacity table put into use Jan. 1, 1971), at elevation 1,526.5 ft (top of gates) is 218,800 cfs-days, of which 182,700 cfs-days is controlled storage above elevation 1,415.0 ft (minimum pool). Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

03555500 APALACHIA LAKE.--Lat 35°10'04", long 84°17'49", Cherokee County, at Apalachia Dam on Hiwassee River, 0.1 mile upstream from North Carolina-Tennessee State line, 1.5 miles northeast of Farner, Tenn., 9.8 miles downstream from Hiwassee Dam, and at mile 66.0. Drainage area, 1,018 sq mi. Period of record, February 1943 to current year. Gage, water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 29,100 cfs-days May 26 (elevation, 1,279.95 ft); minimum, 15,300 cfs-days Apr. 25 (elevation, 1,251.00 ft). Extremes for period of record: Maximum contents, 30,300 cfs-days June 13, 1952 (elevation, 1,281.40 ft); minimum (after first filling), 15,300 cfs-days Apr. 25, 1971 (elevation, 1,251.00 ft).

Reservoir is formed by concrete gravity dam. Spillway equipped with 10 radial gates. Dam completed and storage began Feb. 14, 1943; water in reservoir first reached minimum pool elevation Feb. 21, 1943. Total capacity (based on 1965 resurvey; new capacity table put into use Jan. 1, 1971), at elevation 1,280.00 ft (top of gates) is 29,100 cfs-days, of which 24,500 cfs-days is controlled storage above elevation 1,212.00 ft (minimum pool). Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

OTHER RESERVOIRS.--The following smaller reservoirs in the Tennessee River basin are described below, but records of contents are not published herein:

03447832 LAKE JULIAN.--Lat 35°28'37", long 82°32'51", Buncombe County, cooling water reservoir for Carolina Power & Light Co. plant, on Powells Creek near Skyland. Prior to November 1967, published as Asheville Steam-electric Generating Plant Lake. Drainage area, 4.78 sq mi. Total capacity is 4,540 cfs-days, of which 2,120 cfs-days is controlled storage. Storage began Mar. 27, 1963, and lake reached spillway elevation of 2,160 ft on June 3, 1963. Most of initial storage and occasional supplemental storage provided by pumped diversion from French Broad River.

03448959 BURNETT LAKE.--Lat 35°39'44", long 82°20'43", Buncombe County, part of Asheville's municipal water supply, on North Fork Swannanoa River near Black Mountain. Drainage area, 21.9 sq mi. Total capacity is 11,600 cfs-days (crest of spillway), of which 8,900 cfs-days is controlled storage. Storage began Jan. 28, 1954. (See sta 03451000)

03450134 BEETREE RESERVOIR.--Lat 35°38'27", long 82°24'04", Buncombe County, part of Asheville's municipal water supply, on Beetree Creek near Swannanoa. Drainage area, 7.62 sq mi. Total capacity is 844 cfs-days, of which 823 cfs-days is controlled storage. Dam completed December 1926, and storage began Jan. 11, 1927; water in reservoir first reached maximum pool elevation Mar. 8, 1927. No diversion since June 1963.

03455773 LAKE LOGAN.--Lat 35°25'15", long 82°55'30", Haywood County, on West Fork Pigeon River near Canton, and at mile 7.0. Drainage area, 33.3 sq mi. Total capacity is 1,040 cfs-days (top of flashboards), all of which is usable. Storage began November 1931. (See sta 03456000)

03458319 LAKE JUNALUSKA.--Lat 35°31'38", long 82°57'48", Haywood County, on Richland Creek at Lake Junaluska, and at mile 2.40. Drainage area, 63.6 sq mi. Total surface area, about 195 acres. Lake reached spillway elevation in the spring of 1913.

03500466 SEQUOYAH LAKE.--Lat 35°04'02", long 83°13'31", Macon County, on Cullasaja River near Highlands, and at mile 18.4. Drainage area, 14.4 sq mi. Total capacity is 233 cfs-days (spillway crest), of which approximately 116 cfs-days is usable. Storage began in 1926. (See sta 03500500)

03507111; 03507131 EAST FORK LAKE AND WOLF CREEK LAKE.--These two reservoirs are operated as a unit for storage of water for the Tennessee Creek Project. East Fork Dam (drainage area, 24.9 sq mi) on Tuckasegee River near Tuckasegee, Jackson County, is at lat 35°12'48", long 83°00'08", Wolf Creek Dam (drainage area, 15.2 sq mi) on Wolf Creek near Tuckasegee, is at lat 35°13'18", long 83°00'00".

Total capacity of East Fork Lake is 671 cfs-days, of which 625 cfs-days is controlled storage. Storage began Apr. 18, 1955. Total capacity of Wolf Creek Lake is 5,070 cfs-days, of which 3,850 cfs-days is controlled storage. Storage began Mar. 22, 1955. (See sta 03508000)

03507216 BEAR CREEK LAKE.--Lat 35°14'29", long 83°04'22", Jackson County, on Tuckasegee River near Tuckasegee. Drainage area, 75.3 sq mi. Total capacity is 17,500 cfs-days, of which 2,290 cfs-days is controlled storage. Storage began Oct. 9, 1953. (See sta 03508000)

03507289 CEDAR CLIFF LAKE.--Lat 35°15'12", long 83°05'58", Jackson County, on Tuckasegee River near Tuckasegee, and at mile 51.9. Drainage area, 80.3 sq mi. Total capacity is 3,200 cfs-days, of which 400 cfs-days is controlled storage. Storage began Apr. 26, 1952. (See sta 03508000)

03515152 CHEOAH LAKE.--Lat 35°26'54", long 83°56'11", Graham County, on Little Tennessee River at Cheoah, and at mile 51.4. Drainage area, 1,608 sq mi. Total capacity is 17,700 cfs-days, of which 3,700 cfs-days is controlled storage. Storage began Dec. 8, 1918.

Lakes and Reservoirs in Ohio River basin--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Gage height (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Gage height (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
	03460242 Lake Walters			03504500 Nantahala Lake			03507500 Thorpe Reservoir			03514500 Fontana Lake		
Sept. 30	2,255.2	11,100	-	2,853.87	44,500	-	3,078.43	21,600	-	1,627.02	376,600	-
Oct. 31	2,252.4	10,600	-500	2,848.47	41,200	-3,300	3,078.42	21,600	0	1,611.24	328,300	-48,300
Nov. 30	2,254.8	11,000	+400	2,847.47	40,700	-500	3,078.12	21,400	-200	1,599.52	295,800	-32,500
Dec. 31	2,226.8	6,710	-4,290	2,849.96	42,100	+1,400	3,076.70	20,600	-800	1,597.88	291,500	-4,300
CAL YR 1970	-	-	-4,490	-	-	-6,500	-	-	-6,400	-	-	-23,500
Jan. 31	2,234.7	9,100	+2,390	2,868.99	53,700	+11,600	3,080.95	22,800	+2,200	1,629.03	384,900	+93,400
Feb. 28	2,240.6	10,000	+900	2,879.98	61,500	+7,800	3,089.41	28,100	+5,300	1,647.08	444,300	+59,400
Mar. 31	2,232.9	8,800	-1,200	2,882.59	63,500	+2,000	3,093.55	31,000	+2,900	1,666.09	520,300	+76,000
Apr. 30	2,243.7	10,500	+1,700	2,883.86	64,400	+900	3,093.77	31,100	+100	1,684.58	600,700	+80,400
May 31	2,254.2	12,100	+1,600	2,885.59	65,800	+1,400	3,094.72	31,800	+700	1,695.44	652,500	+51,800
June 30	2,245.3	10,700	-1,400	2,883.93	64,500	-1,300	3,092.77	30,400	-1,400	1,690.76	629,800	-22,700
July 31	2,253.1	12,000	+1,300	2,887.86	67,500	+3,000	3,091.88	29,800	-600	1,695.65	653,500	+23,700
Aug. 31	2,250.1	11,500	-500	2,884.06	64,600	-2,900	3,091.78	29,700	-100	1,696.11	655,800	+2,300
Sept. 30	2,237.1	9,500	-2,000	2,876.94	59,300	-5,300	3,088.35	27,400	-2,300	1,676.87	565,900	-89,900
WTR YR 1971	-	-	-1,600	-	-	+14,800	-	-	+5,800	-	-	+189,300

Date	Gage height (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
	03516500 Santeetlah Lake			03546500 Chatuge Lake			03554500 Hiwassee Lake			03555500 Apalachia Lake		
Sept. 30	1,774.70	33,100	-	1,905.71	62,200	-	1,500.76	151,300	-	1,276.47	27,600	-
Oct. 31	1,773.31	32,000	-1,100	1,909.00	69,400	+7,200	1,482.19	114,000	-37,300	1,275.27	26,900	-700
Nov. 30	1,769.51	29,100	-2,900	1,912.72	78,400	+9,000	1,461.02	81,700	-32,300	1,275.90	27,200	+300
Dec. 31	1,779.86	37,400	+8,300	1,912.90	78,900	+500	1,454.18	73,100	-8,600	1,277.00	27,800	+600
CAL YR 1970	-	-	-3,200	-	-	+9,900	-	-	+6,800	-	-	+300
Jan. 31	1,799.91	56,800	+19,400	1,913.12	77,100	-1,800	1,474.04	96,200	+23,100	1,275.08	26,300	-1,500
Feb. 28	1,807.88	66,400	+9,600	1,915.64	83,700	+6,600	1,481.26	108,600	+12,400	1,276.36	27,100	+800
Mar. 31	1,809.14	68,100	+1,700	1,918.30	90,600	+6,900	1,498.19	142,100	+33,500	1,271.24	24,300	-2,800
Apr. 30	1,808.18	66,800	-1,300	1,923.39	105,600	+15,000	1,512.56	177,500	+35,400	1,254.84	16,800	-7,500
May 31	1,806.28	64,400	-2,400	1,926.45	115,800	+10,200	1,514.23	181,900	+4,400	1,276.75	27,300	+10,500
June 30	1,801.22	58,300	-6,100	1,923.18	105,000	-10,800	1,518.18	192,700	+10,800	1,276.96	27,400	+100
July 31	1,806.75	65,000	+6,700	1,922.46	102,700	-2,300	1,522.72	207,000	+14,300	1,274.39	26,000	-1,400
Aug. 31	1,807.02	65,300	+300	1,923.89	107,300	+4,600	1,515.89	186,300	-20,700	1,275.83	26,800	+800
Sept. 30	1,805.54	63,500	-1,800	1,920.26	96,100	-11,200	1,505.54	159,600	-26,700	1,275.64	26,600	-200
WTR YR 1971	-	-	+30,400	-	-	+33,900	-	-	+8,300	-	-	-1,000

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 floodflow 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 is 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. 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 nearby streams where continuous records are available, will give a picture of the low-flow potentiality of the stream. The column headed "Period of record" shows the water years of operation at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1971, in South Atlantic Slope basins

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Pamlico River basin				
02084150	Chicod Creek near Simpson, N. C.	Lat 35°32'47", long 77°12'43", Pitt County, at bridge on Secondary Road 1777, 0.2 mile upstream from Cow Swamp and 4.2 miles southeast of Simpson.	a25	1966-71	10- 9-70	0
		Neuse River basin				
02088275	Mill Creek near Cox Mill, N. C.	Lat 35°20'42", long 78°10'58", Johnston County, at bridge on Secondary Road 1200, 0.8 mile upstream from mouth and 2.5 miles east of Cox Mill.	a190	1954, 1958, 1965-68, 1971	10-12-70	10.2
02088465	Buffalo Creek near Bagley, N. C.	Lat 35°35'18", long 78°12'39", Johnston County, at bridge on Secondary Road 2130, 1 mile upstream from mouth and 2.5 miles northwest of Bagley.	a56	1954, 1958, 1965-68, 1971	10-12-70	1.91
02088480	Little Buffalo Creek near Kenly, N. C.	Lat 35°37'17", long 78°09'34", Johnston County, at bridge on Secondary Road 2148, 3 miles upstream from mouth and 3 miles northwest of Kenly.	a10	1965-68, 1971	10-12-70	0
02089690	Stonyton Creek near Graingers, N. C.	Lat 35°19'05", long 77°29'42", Lenoir County, at bridge on Secondary Road 1809, 0.5 mile east of Graingers, and 1.0 mile upstream from mouth.	a36	1954, 1956-57, 1965-68, 1970-71	10-12-70	.09
02089730	Mosleys Creek near Grifton, N. C.	Lat 35°19'51", long 77°25'39", Lenoir County, at bridge on Secondary Road 1803, 1 mile upstream from mouth and 3 miles southeast of Grifton.	a46	1954-57, 1964-68, 1971	10-12-70	4.15
02090360	Turkey Creek near Connor, N. C.	Lat 35°43'42", long 78°10'18", Wilson County, at bridge on Secondary Road 1128, 1.2 miles upstream from mouth and 1.5 miles southwest of Connor.	a74	1958, 1965-68, 1971	10-13-70	.27
02090590	Great Swamp near Black Creek, N. C.	Lat 35°36'29", long 77°57'03", Wilson County, at bridge on Secondary Road 1634, 0.9 mile upstream from mouth and 2.2 miles southwest of Black Creek.	a39	1958, 1965-68, 1971	10-13-70	.03
02090620	Aycock Swamp near Stantonsburg, N. C.	Lat 35°35'40", long 77°53'10", Wilson County, at bridge on Secondary Road 1629, 0.7 mile upstream from mouth and 3.5 miles west of Stantonsburg.	a11	1958, 1965-68, 1971	10-13-70	.33
*02090960	Nahunta Swamp near Pikeville, N. C.	Lat 35°30'49", long 77°58'56", Wayne County, at bridge on U.S. Highway 117, 0.2 mile downstream from Seaboard Coast Line Railroad and 1 mile north of Pikeville.	a19	1957, 1965-68, 1971	10-12-70	1.09
*02092020	Palmetto Swamp near Vanceboro, N. C.	Lat 35°17'57", long 77°08'46", Craven County, at bridge on State Highway 43, 1.3 miles upstream from mouth and 2.5 miles northwest of Vanceboro.	a24	1956-68, 1970-71	10- 6-70 10- 9-70	.08 .03
02092040	Poplar Branch near Vanceboro, N. C.	Lat 35°16'13", long 77°08'55", Craven County, at bridge on Secondary Road 1440, 0.9 mile upstream from mouth and 2.8 miles south of Vanceboro.	a3.6	1957, 1964-68, 1970-71	10- 9-70	.49

* Also a Crest-stage partial-record station.
a Approximately.

Discharge measurements made at low-flow partial-record stations during water year 1971, in South Atlantic Slope basins--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Neuse River basin--Continued				
02092210	Trent River at Pleasant Hill, N. C.	Lat 35°04'03", long 77°35'25", Jones County, at bridge on Secondary Road 1153, at Pleasant Hill, and 1.7 miles upstream from Joshua Creek.	27.5	1965-68, 1970-71	10- 9-70	1.73
02092230	Joshua Creek near Combs Fork, N. C.	Lat 35°05'36", long 77°34'25", Jones County, at bridge on Secondary Road 1155, 0.2 mile downstream from Back Branch and 3.7 miles northwest of Combs Fork.	12.1	1965-68, 1970-71	10- 9-70	0
02092390	Tuckahoe Creek near Pleasant Hill, N. C.	Lat 35°01'55", long 77°34'47", Jones County, at bridge on Secondary Road 1142, 1.0 mile upstream from mouth and 2.5 miles south of Pleasant Hill.	49.7	1957, 1966-68, 1970-71	10- 9-70	.45
02092550	Musselshell Creek near Trenton, N. C.	Lat 35°04'58", long 77°21'11", Jones County, at bridge on Secondary Road 1319, 0.5 mile upstream from mouth and 1.0 mile north of Trenton.	a9.7	1954, 1957, 1965-68, 1970-71	10- 9-70	.64
		Cape Fear River basin				
*02097910	White Oak Creek near Wilsonville, N. C.	Lat 35°44'47", long 79°00'44", Chatham County, at bridge on Secondary Road 1008, 1.0 mile upstream from mouth and 1.0 mile north of Wilsonville.	a24	1953, 1955, 1960, 1962, 1964-68, 1970-71	3-15-71 3-25-71 4- 5-71	16.4 8.00 14.5
02101045	Buffalo Creek at McConnell, N. C.	Lat 35°28'14", long 79°31'00", Moore County, at bridge on State Highway 22, 0.5 mile northwest of McConnell, and 1.0 mile upstream from mouth.	a21	1962, 1965-68, 1970-71	10- 9-70	.03
02101290	McLendons Creek near Putnam, N. C.	Lat 35°26'58", long 79°25'15", Moore County, at bridge on Secondary Road 1628, 2 miles upstream from mouth and 3.0 miles east of Putnam.	a96	1963-68, 1970-71	10- 9-70	.52
02102280	Hector Creek near Chalybeate, N. C.	Lat 35°28'00", long 78°51'30", Harnett County, at culvert on Secondary Road 1412, 1.5 mile upstream from mouth and 3.8 miles southwest of Chalybeate.	a16	1965-68, 1970-71	10- 9-70	1.74
02102520	East Buies Creek at Buies Creek, N. C.	Lat 35°24'57", long 78°44'06", Harnett County, at bridge on Secondary Road 2054, 0.5 mile south of Buies Creek, and 1.0 mile upstream from mouth.	a7.4	1965-68, 1970-71	10- 9-70	e.01
02103620	Cape Fear River tributary near Slocumb, N. C.	Lat 35°11'13", long 78°47'00", Cumberland County, at bridge on Secondary Road 1710, 1.6 miles upstream from mouth and 2.4 miles northeast of Slocumb.	a17	1960-68, 1971	10- 9-70	.02
02103650	Carvers Creek near Fayetteville, N. C.	Lat 35°09'14", long 78°15'18", Cumberland County, at Norfolk Southern Railroad, 1.3 miles upstream from mouth and 7.2 miles north of City Hall, in Fayetteville.	9.48	1966-68, 1970-71	10- 9-70	1.88
02103770	Cross Creek at Langdon Street at Fayetteville, N. C.	Lat 35°04'48", long 78°53'19", Cumberland County, at intake structure upstream from bridge on Langdon Street, at Fayetteville and 1.0 mile upstream from Little Cross Creek.	14.7	1955, 1966-68, 1970-71	10- 9-70	9.20
02104090	Locks Creek at East Fayetteville, N. C.	Lat 35°02'48", long 78°51'19", Cumberland County, at bridge on State Highway 24, at East Fayetteville, and 0.4 mile upstream from mouth.	a38	1955-56, 1966-68, 1970-71	10- 9-70	4.26
02104255	Beaver Creek near Arabia, N. C.	Lat 34°58'36", long 79°07'17", Hoke County, at bridge on Secondary Road 1422, 0.5 mile upstream from mouth, and 1.8 miles north of Arabia.	a11	1965-68, 1971	10- 9-70	4.54
		Pee Dee River basin				
02112460	Little Fisher River at Oak Grove, N. C.	Lat 36°29'07", long 80°44'57", Surry County, at bridge on State Highway 89, at Oak Grove, and 2.8 miles upstream from Wood Fork Branch.	a17	1963-68, 1970-71	10- 9-70	8.04
02114500	Little Yadkin River near Donnaha, N. C.	Lat 36°15'21", long 80°26'34", Forsyth County, at bridge on Secondary Road 1604, 2.1 miles upstream from mouth and 2.1 miles northwest of Donnaha.	a60	1955-63, 1971	10- 9-70	13.6
02115890	South Fork Muddy Creek near Winston-Salem, N. C.	Lat 36°00'38", long 80°16'15", Forsyth County, at bridge on State Highway 150, downstream from Leak Creek and 6.3 miles south of Winston-Salem	38.5	1955-59, 1961-63, 1971	10- 9-70	.94

* Also a Crest-stage partial-record station.
a Approximately.
e Estimated.

Discharge measurements made at low-flow partial-record stations during water year 1971, in South Atlantic Slope basins--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Pee Dee River basin--Continued				
02116770	Dutchmans Creek near Maine, N. C.	Lat 35°56'34", long 80°31'50", Davie County, at bridge on U.S. Highway 158, 1.2 miles upstream from Cedar Creek and 1.2 miles northeast of Maine.	a61	1964-71	10-10-70	8.70
02116790	Cedar Creek near Smithgrove, N. C.	Lat 35°57'12", long 80°30'46", Davie County, at bridge on U.S. Highway 158, 1 mile upstream from mouth and 1 mile southwest of Smithgrove.	a19	1963-71	10-10-70	.81
02117220	South Yadkin River near Statesville, N. C.	Lat 35°53'02", long 80°56'46", Iredell County, at bridge on State Highway 115, 3.0 miles upstream from Rocky Creek and 7.0 miles north of Statesville.	a77	1955-59, 1963, 1971	10-12-70	22.9
02117285	Snow Creek near Scotts, N. C.	Lat 35°54'09", long 80°56'53", Iredell County, at bridge on State Highway 115, 2.8 miles upstream from mouth and 5 miles northeast of Scotts.	a29	1955-56, 1963-68, 1971	10-12-70	6.21
02117395	Rocky Creek at Union Grove, N. C.	Lat 35°59'36", long 81°51'28", Iredell County, at bridge on Secondary Road 1811, 2 miles south of Union Grove, and 6.8 miles upstream from Patterson Creek.	a47	1963-68, 1971	10-12-70	15.6
02117480	Patterson Creek near Charles, N. C.	Lat 35°55'42", long 80°50'50", Iredell County, at bridge on Secondary Road 1886, 0.5 mile upstream from Olin Creek and 2.5 miles northeast of Charles.	a22	1963, 1967-71	10-12-70	6.91
02118390	Hunting Creek at Union Grove, N. C.	Lat 36°04'00", long 80°54'20", Iredell County, at bridge on Secondary Road 1807, 2.5 miles northwest of Union Grove, and 8.5 miles upstream from North Hunting Creek.	a63	1967-71	10-12-70	26.8
02119435	Third Creek near Barium Springs, N.C.	Lat 35°44'45", long 80°55'18", Iredell County, at bridge on Secondary Road 1004, 3.5 miles north of Barium Springs, and 5.5 miles upstream from Duck Creek.	a29	1963-71	10-12-70	10.9
02120640	Third Creek at Cooleemee, N. C.	Lat 35°47'43", long 80°33'40", Rowan County, at bridge on State Highway 801, 1 mile south of Cooleemee and 3 miles upstream from mouth.	a180	1952-53, 1963-71	10-10-70	58.8
02120695	Withrow Creek near Bear Poplar, N. C.	Lat 35°41'42", long 80°40'47", Rowan County, at bridge on Secondary Road 1743, 1.5 miles upstream from Beaverdam Creek and 1 mile north of Bear Poplar.	a33	1963-71	10-12-70	11.1
02120740	Back Creek near Mill Bridge, N. C.	Lat 35°40'46", long 80°38'20", Rowan County, at bridge on Secondary Road 1737, 0.8 mile upstream from mouth and 2.5 miles north of Mill Bridge.	a39	1956, 1963-71	10-12-70	9.35
02120760	Sloans Creek near Mill Bridge, N. C.	Lat 35°40'46", long 80°38'20", Rowan County, at bridge on Secondary Road 1735, 1 mile upstream from mouth and 1.2 miles north of Mill Bridge.	a17	1956, 1963-71	10-12-70	4.72
02121240	South Potts Creek near Linwood, N. C.	Lat 35°44'55", long 80°21'11", Davidson County, at bridge on U.S. Highway 29, 1 mile upstream from mouth and 2 miles southwest of Linwood.	13.4	1957, 1961-69, 1971	10-10-70	2.35
02121370	Crane Creek near Granite Quarry, N.C.	Lat 35°38'15", long 80°26'55", Rowan County, at bridge on U.S. Highway 52, 0.5 mile downstream from Southern Railway and 2 miles north of Granite Quarry.	a17	1963-71	10-12-70	.32
02123300	Caraway Creek near Flint Hill, N. C.	Lat 35°46'10", long 79°54'21", Randolph County, at bridge on Secondary Road 1004, 2.5 miles southwest of Flint Hill, and 3.0 miles upstream from Little Caraway Creek.	24.1	1960-67, 1969, 1971	10-11-70	2.14
02124080	Clarke Creek near Harrisburg, N. C.	Lat 35°24'50", long 80°45'08", Cabarrus County, at bridge on Secondary Road 1449, 3.0 miles upstream from mouth and 8.5 miles northwest of Harrisburg.	21.8	1952-71	10-11-70	2.22
02124460	Dutch Buffalo Creek near Rimer, N. C.	Lat 35°26'30", long 80°26'38", Cabarrus County, at bridge on Secondary Road 1006, 0.4 mile upstream from Black Run Creek and 3.2 miles southeast of Rimer.	33.1	1964-71	10-11-70	1.30
02124745	North Fork Crooked Creek near Fairview, N. C.	Lat 35°06'32", long 80°33'43", Union County, at bridge on Secondary Road 1004, 1 mile upstream from mouth and 2.5 miles southwest of Fairview.	a16	1961-62, 1965-69, 1971	10-11-70	0
02128025	Densons Creek at Troy, N. C.	Lat 35°23'32", long 79°52'38", Montgomery County, at bridge on Secondary Road 1312, 0.4 mile downstream from Dumas Creek and 2.5 miles north of Troy.	26.4	1961-62, 1964-67, 1969-71	10-13-70	.17
02128380	Buffalo Creek near Covington, N. C.	Lat 35°08'27", long 79°53'29", Richmond County, at bridge on State Highway 73, 1.3 miles upstream from mouth and 2.1 miles west of Covington.	10.9	1957, 1961-62, 1964-67, 1969-71	10- 9-70	0

* Also a Crest-stage partial-record station.
a Approximately.

Discharge measurements made at low-flow partial-record stations during water year 1971, in South Atlantic Slope basins--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Pee Dee River basin--Continued				
02129040	Bells Creek near Ellerbe, N. C.	Lat 35°02'17", long 79°42'10", Richmond County, at bridge on Secondary Road 1451, 0.2 mile upstream from mouth and 4.0 miles southeast of Ellerbe.	8.72	1959, 1962, 1964-69, 1971	10- 9-70	0.28
02132285	Big Shoe Heel Creek near Wagram, N. C.	Lat 34°50'47", long 79°22'46", Scotland County, at bridge on Secondary Road 1421, 1.5 miles downstream from Little Shoe Heel Creek and 3.0 miles southeast of Wagram.	17.2	1959, 1964-68, 1971	10-10-70	5.40
02132300	Juniper Creek near Silver Hill, N. C.	Lat 34°53'02", long 79°27'08", Scotland County, at bridge on U.S. Highway 15, 1.8 miles west of Silver Hill, and 2.2 miles downstream from Beaver Dam Creek.	19.1	1959, 1962, 1964-68, 1971	10-10-70	18.9
02133595	Quewhiffle Creek at Pine Hall, N. C.	Lat 35°02'56", long 79°25'01", Hoke County, at bridge on Secondary Road 1225, 0.8 mile west of Pine Hill and 3.3 miles upstream from mouth.	17.8	1959, 1962-68, 1971	10-11-70	13.4
02134620	Ashpole Swamp Canal near Fair Bluff, N. C.	Lat 34°20'22", long 79°03'38", Robeson County, at bridge on Secondary Road 2256, 2.2 miles upstream from mouth and 2.3 miles northwest of Fair Bluff.	a200	1965-68, 1971	10-10-70	46.4
		Santee River basin				
02142660	McDowell Creek near Charlotte, N. C.	Lat 35°23'22", long 80°55'16", Mecklenburg County at bridge on Beatty Ford Road, 2.1 miles downstream from Torrence Creek and 11.2 miles north of Charlotte.	26.3	1955-71	10- 9-70	3.08
02142910	Long Creek near Thrift, N. C.	Lat 35°18'53", long 80°56'38", Mecklenburg County, at bridge on State Highway 16, 1.0 mile upstream from Gum Branch and 2.5 miles northwest of Thrift.	22.0	1956-57, 1959-67, 1969-71	10- 5-70 10- 9-70 7-22-71	1.39 1.43 5.84
02143545	Little Beaverdam Creek near Cherryville, N. C.	Lat 35°22'42", long 81°17'45", Gaston County, at bridge on Secondary Road 1624, 0.8 mile upstream from mouth and 4.8 miles east of Cherryville.	a5.6	1957, 1962-69, 1971	10- 9-70	1.25
02143960	Long Creek at Bessemer City, N. C.	Lat 35°18'04", long 81°18'44", Gaston County, at bridge on Secondary Road 1405, 0.8 mile upstream from State Highway 274, and 2 miles northwest of Bessemer City.	a10	1962-69, 1971	10- 9-70	2.86

a Approximately.

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.

Annual maximum discharge at crest-stage partial-record stations during water year 1971, in South Atlantic Slope basins

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
Dismal Swamp basin							
02043550	Folly Swamp near Sunbury, N. C.	Lat 36°29'18", long 76°34'30", Gates County, at culvert on State Highway 32, 1.5 miles upstream from Dismal Swamp and 4.0 miles north of Sunbury.	3.43	1953-58, 1960-71	2-13-71	19.74	146
Chowan River basin							
02053110	Wildcat Swamp near Jackson, N. C.	Lat 36°25'48", long 77°22'24", Northampton County, at culvert on U.S. Highway 158, 4 miles northeast of Jackson, and 8.2 miles upstream from mouth.	a.7	1953-71	1- 5-71	24.54	82
02053170	Cutawhiskie Creek near Woodland, N. C.	Lat 36°17'54", long 77°11'58", Northampton County, at bridge on State Highway 35, 2.5 miles south of Woodland, and 6.5 miles upstream from Chapel Branch.	a12	1953-71	2- 3-70 2- 8-71	19.76 19.20	c294 208
02053550	Chinkapin Creek near Colerain, N. C.	Lat 36°11'52", long 76°47'14", Bertie County, at culvert on State Highway 350, 0.8 mile upstream from Peele Branch, and 1.0 mile west of Colerain.	a8.9	1951-71	2-13-71	21.46	305
Roanoke River basin							
02068610	Hog Rock Creek near Moores Springs, N.C.	Lat 36°23'53", long 80°19'46", Stokes County, at culvert on State Highway 66, 0.1 mile upstream from mouth, and 2.8 miles southwest of Moores Springs.	.30	1954-71	2-22-71	19.32	110
02068660	Little Snow Creek near Lawsonville, N. C.	Lat 36°27'54", long 80°10'28", Stokes County, at bridge on Secondary Road 1657, 0.8 mile upstream from mouth, and 3.5 miles southeast of Lawsonville.	a5.4	1954-71	2-22-71	21.58	840
02069030	Belews Creek near Kernersville, N. C.	Lat 36°12'20", long 80°04'25", Forsyth County, at bridge on U.S. Highway 158, 4.7 miles upstream from East Belews Creek, and 6 miles north of Kernersville.	a15	1954-71	10-15-54 9- 7-59 12- 4-62 10-18-64 5-13-71	23.98 23.75 23.16 23.40 22.64	c2,500 c2,050 c1,180 f1,500 710
02070810	Jacobs Creek near Wentworth, N. C.	Lat 36°20'54", long 79°53'14", Rockingham County, at bridge on Secondary Road 2316, 3.5 miles upstream from mouth, and 7.2 miles southwest of Wentworth.	a16	1954-71	5-13-71	27.02	2,100
02071410	Matrimony Creek near Leaksville, N. C.	Lat 36°31'39", long 79°50'08", Rockingham County, at bridge on Secondary Road 1501, 0.5 mile upstream from Little Matrimony Creek, and 5 miles northwest of Leaksville.	12.0	1958-71	5-16-71	13.44	†
02075230	South Country Line Creek near Hightowers, N. C.	Lat 36°19'29", long 79°18'20", Caswell County, at bridge on Secondary Road 1759, 1.8 miles upstream from Penson Creek, and 3.5 miles west of Hightowers.	a7.1	1954-71	8-27-71	18.28	1,150
02077210	Kilgore Creek tributary near Leasburg, N. C.	Lat 36°22'38", long 79°09'57", Caswell County, at culvert on Secondary Road 1702, 1.2 miles south of Leasburg, and 1.5 miles upstream from mouth.	.22	1954-71	2- 8-71	19.40	42
02077310	Storys Creek near Roxboro, N. C.	Lat 36°23'48", long 79°01'14", Person County, at culvert on State Highway 57, 1.5 miles upstream from Lake Isaac Walton, and 2.2 miles west of Roxboro.	a2.0	1954-71	2- 8-71	19.07	138
02081060	Smithwick Creek tributary near Williamston, N. C.	Lat 35°43'51", long 77°04'42", Martin County, at culvert on U.S. Highway 17, 0.2 mile upstream from mouth, and 9.5 miles south of Williamston.	a.9	1953-71	3- 3-71	23.65	220
02081110	White Oak Swamp near Windsor, N. C.	Lat 36°04'46", long 76°58'36", Bertie County, at bridge on U.S. Highway 13, 0.8 mile upstream from mouth, and 6 miles north of Windsor.	a17	1953-71	3- 3-71	17.36	500
Pamlico River basin							
02081210	Shelton Creek near Oxford, N. C.	Lat 36°18'47", long 78°43'16", Granville County, at culvert on U.S. Highway 158, 1.8 miles upstream from mouth, and 7.5 miles west of Oxford.	22.2	1954-71	5-29-71	16.05	630
02081710	Long Creek at Kittrell, N. C.	Lat 36°13'30", long 78°27'15", Vance County, at bridge on Secondary Road 1105, 0.8 mile west of Kittrell, and 2.5 miles upstream from mouth.	a7.5	1954-71	2- 8-71	14.84	†

See footnotes at end of table, p. 211.

Annual maximum discharge at crest-stage partial-record stations during water year 1971, in South Atlantic Slope basins--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					
02081935	Tar River at Spring Hope, N. C.	Lat 35°55'42", long 78°08'53", Nash County, 500 ft downstream from U.S. Highway 64, 0.5 mile downstream from Turkey Creek, and 2.2 miles southwest of Spring Hope.	a660	1968-71	2-10-71	152.83	4,600
02082540	Wildcat Branch near Mapleville, N. C.	Lat 36°03'29", long 78°08'39", Franklin County, at culvert on Secondary Road 1616, 1.8 miles upstream from mouth, and 5 miles east of Mapleville.	a.4	1953-71	1- 6-71	20.84	†
*02082630	Harts Mill Run near Tarboro, N. C.	Lat 35°55'35", long 77°37'10", Edgecombe County, at bridge on U.S. Highway 64, 2.2 miles upstream from mouth, and 5 miles northwest of Tarboro.	a8.6	1953-71	3- 4-71	20.15	210
02082835	Fishing Creek near Warrenton, N. C.	Lat 36°23'00", long 78°10'54", Warren County, at bridge on Secondary Road 1001, 0.5 mile downstream from Phoebes Creek, and 2 miles southwest of Warrenton.	a45	1954-71	5-31-71	17.14	†
02082955	Fishing Creek near Glenview, N. C.	Lat 36°08'44", long 77°50'31", Halifax County, upstream from bridge on Secondary Road 1342, 2.2 miles downstream from Little Fishing Creek, and 2.3 miles southwest of Glenview.	a440	1967-71	5-31-71	112.33	2,900
02083090	Beaverdam Swamp near Heathsville, N. C.	Lat 36°16'49", long 77°41'48", Halifax County, at culvert on State Highway 561, 3.5 miles northeast of Heathsville, and 6 miles upstream from mouth.	a9.4	1953-71	2- 9-71	19.31	140
02083410	Deep Creek near Scotland Neck, N. C.	Lat 36°09'26", long 77°28'24", Halifax County, at culvert on State Highway 125, 3 miles west of Scotland Neck, and 4.5 miles upstream from Canal Creek.	a12	1953-71	1- 7-71	18.25	500
02084240	Collie Swamp near Everetts, N. C.	Lat 35°49'34", long 77°12'03", Martin County, at bridge on U.S. Highway 64, 1.6 miles west of Everetts, and 4.8 miles upstream from mouth.	a29	1953-71	3- 5-71	20.70	740
02084520	Upper Goose Creek near Yeatsville, N. C.	Lat 35°31'25", long 76°53'23", Beaufort County, at culvert on U.S. Highway 264, 5.2 miles upstream from mouth, and 8.5 miles west of Yeatsville.	1.49	1953-71	1-21-63	20.95	f78
					9-13-64	24.45	f320
					7-28-65	22.80	f152
					2-28-66	21.78	f107
					2- 7-67	19.96	f48
					5-27-68	21.22	f88
					6-19-69	23.29	f182
					2- 3-70	20.49	f62
					6-18-71	22.18	122
		Neuse River basin					
02085020	Stony Creek tributary near Hillsborough, N. C.	Lat 36°03'01", long 79°02'14", Orange County, at culvert on private road south of U.S. Highway 70, 1 mile upstream from mouth, and 4.8 miles southeast of Hillsborough.	.8	1953-71	2- 8-71	19.37	32
02085190	North Fork Little River tributary near Rougemont, N. C.	Lat 36°11'41", long 79°00'52", Orange County, at culvert on State Highway 57, 1.5 miles upstream from mouth, and 6 miles west of Rougemont.	1.02	1954-71	8-27-71	20.78	75
02087030	Lick Creek near Durham, N. C.	Lat 35°58'50", long 78°44'19", Durham County, at culvert on State Highway 98, 0.2 mile downstream from Rocky Branch, and 8 miles east of Durham.	13.8	1954-71	2- 8-71	19.69	680
02087140	Lower Barton Creek tributary near Raleigh, N. C.	Lat 35°54'44", long 78°40'55", Wake County, at culvert on State Highway 50, 1.6 miles upstream from mouth, and 7 miles north of Raleigh.	.70	1954-71	2- 8-71	20.07	41
02087240	Stirrup Iron Creek tributary near Nelson, N. C.	Lat 35°53'06", long 78°49'37", Durham County, at culvert on Secondary Road 1972, 0.5 mile upstream from mouth, and 1.5 miles east of Nelson.	.25	1952, 1954-71	2- 8-71	46.28	36
02087580	Swift Creek near Apex, N. C.	Lat 35°43'00", long 78°45'00", Wake County, at bridge on Secondary Road 1152, 2.8 miles downstream from Williams Creek, and 6 miles east of Apex.	a20	1954-71	2- 8-71	21.57	1,050
02087910	Middle Creek near Holly Springs, N. C.	Lat 35°39'28", long 78°48'06", Wake County, at culvert on Secondary Road 1152, 1 mile upstream from Oxfords Lake, and 1.8 miles northeast of Holly Springs.	a8.2	1954-71	3- 4-71	22.43	283
02088140	Stone Creek near Newton Grove, N. C.	Lat 35°20'24", long 78°21'54", Johnston County, at bridge on U.S. Highway 701, 1 mile upstream from mouth, and 6.5 miles north of Newton Grove.	a28	1953-71	3- 4-71	21.85	770

See footnotes at end of table, p. 211.

Annual maximum discharge at crest-stage partial-record stations during water year 1971, in South Atlantic Slope basins--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					
02088210	Hannah Creek near Benson, N. C.	Lat 35°23'36", long 78°31'48", Johnston County, at culvert on U.S. Highway 301, 2 miles northeast of Benson, and 3 miles upstream from Stony Fork.	a2.6	1953-71	3- 4-71	20.38	80
02088420	Long Branch near Selma, N. C.	Lat 35°38'11", long 78°15'06", Johnston County, at culvert on State Highway 39, 2.8 miles upstream from mouth, and 7 miles northeast of Selma.	7.64	1953-71	3- 4-71	22.10	310
02090560	Lee Swamp tributary near Lucama, N. C.	Lat 35°38'21", long 78°01'37", Wilson County, at culvert on U.S. Highway 301, 0.5 mile upstream from mouth, and 1.1 miles southwest of Lucama.	a2.8	1953-71	3- 4-71	22.70	190
02090780	Whiteoak Swamp tributary near Wilson, N. C.	Lat 35°42'24", long 77°47'11", Wilson County, at culvert on Secondary Road 1514, 1.9 miles upstream from mouth, and 7 miles east of Wilson.	a2.6	1953-71	3- 4-71	21.30	145
*02090960	Nahunta Swamp near Pikeville, N. C.	Lat 35°30'40", long 77°58'56", Wayne County, at bridge on U.S. Highway 117, 0.2 mile downstream from Seaboard Coast Line Railroad, and 1 mile north of Pikeville.	a19	1953-71	3- 4-71	18.55	510
02091430	Shepherd Run near Snow Hill, N. C.	Lat 35°26'06", long 77°38'42", Greene County, at culvert on State Highway 91, 1 mile upstream from mouth, and 2.0 miles south of Snow Hill.	a1.5	1953-71	3- 4-71	20.15	79
02091810	Halfmoon Creek near Fort Barnwell, N. C.	Lat 35°17'58", long 77°21'14", Craven County, at bridge on State Highway 55, 1.5 miles northwest of Fort Barnwell, and 2.3 miles upstream from mouth.	a4.9	1953-71	3- 4-71	19.00	†
02092120	Bachelor Creek near New Bern, N. C.	Lat 35°10'24", long 77°06'14", Craven County, at bridge on U.S. Highway 70, 2.1 miles downstream from Rollover Creek, and 6.7 miles northwest of New Bern.	a34	1953-71	3- 4-71	15.69	760
02092290	Rattlesnake Branch near Comfort, N. C.	Lat 35°00'31", long 77°35'50", Jones County, at culvert on State Highway 41, 1.5 miles upstream from mouth, and 5.5 miles west of Comfort.	a2.5	1953-71	3- 4-71	22.42	161
02092520	Vine Swamp near Kinston, N. C.	Lat 35°09'29", long 77°33'16", Lenoir County, at bridge on State Highway 58, 7 miles south of Kinston, and 9 miles upstream from mouth.	6.30	1953-71	3- 4-71	22.24	325
02092620	Upper Broad Creek tributary near Grantsboro, N. C.	Lat 35°08'06", long 76°56'31", Pamlico County, at bridge on State Highway 55, 1 mile upstream from mouth, and 5.5 miles west of Grantsboro.	a3.3	1953-71	8-18-71	22.20	940
		White Oak River basin					
02092720	White Oak River at Belgrade, N. C.	Lat 34°53'30", long 77°14'02", Onslow County, at bridge on U.S. Highway 17, 0.8 mile north of Belgrade, and 1.1 miles upstream from Mirey Branch.	a53	1953-71	3- 4-71	13.36	530
		Queen Creek basin					
02092780	Bell Swamp near Hubert, N. C.	Lat 34°42'04", long 77°14'01", Onslow County, at culvert on State Highway 172, 1.1 miles southeast of Hubert, and 2.0 miles upstream from mouth.	a5.0	1953-71	1971	†	†
		New River basin					
02093040	Southwest Creek tributary near Jacksonville, N. C.	Lat 34°47'18", long 77°33'08", Onslow County, at culvert on Secondary Road 1211, 0.5 mile upstream from mouth, and 2 8miles northwest of Jacksonville.	a1.0	1953-71	8-18-71	19.55	29
02093070	Southwest Creek near Jacksonville, N. C.	Lat 34°43'56", long 77°32'02", Onslow County, at bridge on State Highway 53, 0.5 mile upstream from Harris Creek, and 4.5 miles southwest of Jacksonville.	a27	1953-71	8-18-71	17.53	525
		Cape Fear River basin					
02093290	Haw River near Summerfield, N. C.	Lat 36°14'32", long 79°52'20", Guilford County, at bridge on Secondary Road 2303, 3.5 miles northeast of Summerfield, and 6 miles upstream from Mears Fork Creek.	a26	1954-71	5-13-71	22.96	800
02093549	Haw River at Altamahaw, N. C.	Lat 36°10'43", long 79°30'09", Alamance County, at dam, upstream from bridge on State Highway 87, at Altamahaw, and 1.2 miles upstream from Reedy Fork.	188	1967-71	5-13-71	40.72	†

See footnotes at end of table, p. 211.

Annual maximum discharge at crest-stage partial-record stations during water year 1971, in South Atlantic Slope basins--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					
02096660	Rock Creek near Whitsett, N. C.	Lat 36°04'49", long 78°47'45", Guilford County, at culvert on U.S. Highway 70A, 0.8 mile upstream from mouth, and 2 miles west of Whitsett.	a14	1954-71	10-15-70	16.88	1,180
02096740	Gun Branch near Alamance, N. C.	Lat 36°02'58", long 79°28'35", Alamance County, at bridge on State Highway 62, 1 mile north of Alamance, and 1.5 miles upstream from mouth.	a5.0	1954-71	10-15-70	16.38	85
02097010	Robeson Creek near Pittsboro, N. C.	Lat 35°43'29", long 79°12'33", Chatham County, at culvert 500 ft upstream from culvert on U.S. Highway 64, and 1.8 miles west of Pittsboro.	a1.1	1954-71	1- 5-71	22.97	†
02097240	Third Fork Creek tributary at University Drive, Durham, N. C.	Lat 35°58'46", long 78°54'54", Durham County, at culvert on Secondary Road 1183, 0.1 mile upstream from mouth, and 1.3 miles southwest of courthouse in Durham.	.52	1967-71	1971	†	†
02097410	Crooked Creek near Lowes Grove, N. C.	Lat 35°54'21", long 78°56'02", Durham County, at culvert on Secondary Road 1105, 2.5 miles west of Lowes Grove, and 5.4 miles upstream from mouth.	1.82	1967-71	7-18-68 3-19-69 4-14-70 1- 5-71	13.20 13.50 16.52 18.10	f185 f210 f550 710
*02097910	White Oak Creek near Wilsonville, N. C.	Lat 35°44'47", long 79°00'44", Chatham County, at bridge on Secondary Road 1008, 1 mile upstream from mouth, and 1 mile north of Wilsonville.	a24	1954-71	3- 3-71	22.48	740
02101030	Falls Creek near Bennett, N. C.	Lat 35°33'20", long 79°29'56", Chatham County, at culvert on State Highway 902, 2.5 miles southeast of Bennett, and 6 miles upstream from mouth.	a3.0	1954-71	8-18-71	24.29	950
02101480	Sugar Creek near Tramway, N. C.	Lat 35°25'28", long 79°14'50", Lee County, at culvert on Secondary Road 1303, 1.2 miles upstream from mouth, and 2 miles southwest of Tramway.	a.9	1954-71	8- 5-71	21.74	142
02101890	Bear Creek near Goldston, N. C.	Lat 35°37'33", long 79°17'54", Chatham County, at bridge on Secondary Road 2187, 3 miles northeast of Goldston, and 6.5 miles upstream from mouth.	a43	1952, 1954-71	3- 3-71	20.02	2,100
02102910	Dunhams Creek tributary near Carthage, N. C.	Lat 35°18'41", long 79°22'53", Moore County, at culvert on Secondary Road 1802, 0.5 mile upstream from mouth, and 3.5 miles southeast of Carthage.	a2.2	1954-71	3- 3-71	21.22	78
02102930	Crane Creek near Vass, N. C.	Lat 35°17'53", long 79°16'19", Moore County, at bridge on U.S. Highway 1, 0.5 mile upstream from Little Crane Creek, and 2 miles northeast of Vass.	a32	1954-71	3- 3-71	21.89	840
02103390	South Prong Anderson Creek near Lillington, N. C.	Lat 35°15'31", long 78°55'27", Harnett County, at culvert on State Highway 210, 2.5 miles upstream from mouth, and 11 miles southwest of Lillington.	7.56	1953-71	3- 4-71	21.43	150
02104080	Reese Creek near Fayetteville, N. C.	Lat 35°04'49", long 78°47'45", Cumberland County, at bridge on Secondary Road 1838, 3.2 miles upstream from mouth, and 4.3 miles northeast of Fayetteville.	7.89	1953-71	3- 4-71	20.68	355
02105570	Browns Creek near Elizabethtown, N. C.	Lat 34°36'32", long 78°36'57", Bladen County, at bridge on U.S. Highway 701, 1.5 miles south of Elizabethtown, and 3.5 miles upstream from mouth.	a14	1953-71	3- 4-71	19.76	620
02105630	Turnbull Creek near Elizabethtown, N. C.	Lat 34°41'32", long 78°35'02", Bladen County, at bridge on Secondary Road 1511, 1.9 miles downstream from Panther Branch, and 4.5 miles north of Elizabethtown.	71.6	1949, 1953-71	3- 4-71	23.89	1,120
02106240	Turkey Creek near Turkey, N. C.	Lat 35°00'11", long 78°11'06", Sampson County, at bridge on Secondary Road 1911, 1 mile north of Turkey, and 2.8 miles upstream from mouth.	a16	1953-71	3- 4-71	21.91	760
02106410	Stewarts Creek tributary near Warsaw, N. C.	Lat 34°57'25", long 78°04'42", Duplin County, at culvert on U.S. Highway 117, 0.5 mile upstream from mouth, and 3 miles southeast of Warsaw.	.46	1953-71	3- 4-71	23.08	90
02106910	Big Swamp near Roseboro, N. C.	Lat 34°58'38", long 78°34'07", Sampson County, at bridge on State Highway 24, 4 miles northwest of Roseboro, and 5 miles upstream from mouth.	a32	1953-71	3- 4-71	21.88	1,900
02107590	Northeast Cape Fear River tributary near Mount Olive, N. C.	Lat 35°11'06", long 77°57'34", Wayne County, at culvert on State Highway 55, 1.4 miles upstream from mouth, and 5.9 miles east of Mount Olive.	.63	1953-71	3- 4-71	19.95	43
02107620	Mathews Creek near Pink Hill, N. C.	Lat 35°05'49", long 77°49'10", Duplin County, at bridge on State Highway 111, 1 mile upstream from mouth and 5.5 miles northwest of Pink Hill.	8.61	1953-71	3- 4-71	20.73	†

See footnotes at end of table, p. 211.

Annual maximum discharge at crest-stage partial-record stations during water year 1971, in South Atlantic Slope basins--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					
02107980	Limestone Creek near Beulaville, N. C.	Lat 34°55'48", long 77°48'15", Duplin County, at bridge on State Highway 24, 1.5 miles west of Beulaville, and 2.5 miles upstream from mouth.	a50	1953-71	3- 4-71	22.50	1,600
02108610	Pike Creek near Burgaw, N. C.	Lat 34°30'00", long 77°53'58", Pender County, at culvert on U.S. Highway 117, 4.2 miles south of Burgaw, and 4.4 miles upstream from mouth.	a1.1	1953-71	8-17-71	22.68	330
02108630	Turkey Creek near Castle Hayne, N. C.	Lat 34°23'47", long 77°54'48", Pender County, at bridge on State Highway 133, 3.2 miles upstream from mouth, and 3 miles north of Castle Hayne.	a10	1953-71	8-17-71	24.09	1,100
		Waccamaw River basin					
02108960	Buckhead Branch near Bolton, N. C.	Lat 34°20'52", long 78°26'19", Columbus County, at culvert on State Highway 211, 0.8 mile upstream from mouth, and 2.6 miles northwest of Bolton.	15.3	1953-71	3- 3-71	21.41	690
02109640	Wet Ash Swamp near Ash, N. C.	Lat 34°02'17", long 78°30'14", Brunswick County, at bridge on State Highway 130, 0.6 mile upstream from Flat Branch, and 2.4 miles southeast of Ash.	a16	1953-61	8-18-71	20.54	580
02110020	Mill Branch near Tabor City, N. C.	Lat 34°10'59", long 78°48'08", Columbus County, at culvert on U.S. Highway 701, 2.8 miles upstream from mouth, and 4.8 miles northeast of Tabor City.	a3.8	1953-71	3- 3-71	21.12	140
		Pee Dee River basin					
02111340	South Prong Lewis Fork Creek near North Wilkesboro, N. C.	Lat 36°11'23", long 81°24'40", Wilkes County, at culvert on U.S. Highway 421, 10 miles upstream from North Prong, and 15 miles west of North Wilkesboro.	a11	1955-71	10-31-70	11.33	210
02112410	Fisher River near Bottom, N. C.	Lat 36°26'35", long 80°46'12", Surry County, at bridge on Secondary Road 1341, 3 miles south of Bottom, and 5 miles upstream from Little Fisher River.	a45	1954-71	9-21-71	14.07	1,800
02115520	Logan Creek near Smithtown, N. C.	Lat 36°12'50", long 80°33'32", Yadkin County, at culvert on State Highway 67, 1 mile south of Smithtown, and 9.5 miles upstream from Spillman Creek.	.90	1954-71	2-22-71	21.70	330
02115765	Silas Creek tributary at Pine Valley Road, Winston-Salem, N. C.	Lat 36°06'19", long 80°17'52", Forsyth County, at culvert on Pine Valley Road, 0.7 mile upstream from mouth, and 3 miles northwest of post office in Winston-Salem.	.89	1968-71	c6-14-70 10-30-70	8.3 5.15	646 316
02115830	Kerners Mill Creek near Kernersville, N. C.	Lat 36°06'19", long 80°06'19", Forsyth County, at culvert on State Highway 150, 2.2 miles southwest of Kernersville, and 3.5 miles upstream from Fishers Branch.	a2.2	1954-71	5-13-71	18.63	190
02115839	Brushy Creek tributary 2 at U.S. 311, Winston-Salem, N. C.	Lat 36°06'10", long 80°13'21", Forsyth County, at culvert on U.S. Highway 311, 0.4 mile upstream from mouth, and 1.3 miles northeast of city hall in Winston-Salem.	0.55	1969-71	5-12-71	3.03	305
02115843	Tar Branch at Walnut Street, Winston-Salem, N. C.	Lat 36°05'02", long 80°14'34", Forsyth County, at culvert on Walnut Street, 0.3 mile upstream from mouth, and 0.8 mile south of city hall in Winston-Salem.	.59	1968-71	6-21-71	5.27	375
02115845	Peters Creek at Winston-Salem, N. C.	Lat 36°04'56", long 80°15'30", Forsyth County, at downstream side of culvert off Peters Creek Parkway, 0.1 mile downstream from Academy Street, and 1.4 miles southwest of post office in Winston-Salem.	5.30	1965-71	5-13-71	16.60	1,370
02117410	McClelland Creek near Statesville, N. C.	Lat 35°57'04", long 80°56'46", Iredell County, at culvert on State Highway 115, 2.2 miles upstream from mouth, and 12 miles northwest of Statesville.	a1.6	1954-61	2-22-71	19.49	380
02120820	Deals Creek near Salisbury, N. C.	Lat 35°44'43", long 80°30'25", Rowan County, at culvert on U.S. Highway 601, 3.2 miles upstream from mouth, and 3.8 miles north of Salisbury.	a3.9	1954-71	10-30-70	22.42	1,200
02121940	Flat Swamp Creek near Lexington, N. C.	Lat 35°43'59", long 80°06'37", Davidson County, at culvert on Secondary Road 2205, 1.6 miles upstream from Rocky Meadow Branch, and 10 miles southeast of Lexington.	6.56	1954-71	3- 3-71	23.40	345
02122560	Cabin Creek near Jackson Hill, N. C.	Lat 35°34'57", long 80°09'12", Davidson County, at culvert on State Highway 8, 0.6 mile north of Jackson Hill, and 4 miles upstream from mouth.	13.7	1954-71	5-16-71	22.07	860
02122720	Beaverdam Creek tributary near Denton, N. C.	Lat 35°31'57", long 80°05'04", Davidson County, at culvert on State Highway 109, 1.5 miles upstream from mouth, and 7.2 miles southeast of Denton.	2.90	1954-71	3- 3-71	20.07	255

See footnotes at end of table, p. 211.

Annual maximum discharge at crest-stage partial-record stations during water year 1971, in South Atlantic Slope basins--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					
02124060	North Prong Clarke Creek near Huntersville, N. C.	Lat 35°25'13", long 80°47'54", Mecklenburg County, at bridge on Secondary Road 2442, 1.0 mile upstream from South Prong, and 3 miles east of Huntersville.	3.61	1954-71	2- 5-60 5-16-71	17.72 16.97	c430 305
02124130	Mallard Creek near Charlotte, N. C.	Lat 35°19'05", long 80°44'16", Mecklenburg County, at bridge on U.S. Highway 29, 0.1 mile upstream from Toby Creek, and 8.8 miles northeast of Charlotte.	20.7	1954-71	5-13-71	22.78	2,900
02125410	Chinkapin Creek near Monroe, N. C.	Lat 35°02'48", long 80°29'33", Union County, at bridge on Secondary Road 1627, 2.2 miles upstream from Stewarts Creek, and 5 miles northeast of Monroe.	a8.5	1954-71	6-20-71	23.40	2,700
02127390	Palmetto Branch at Ansonville, N. C.	Lat 35°06'03", long 80°07'11", Anson County, at culvert on Secondary Road 1418, 0.2 mile west of Ansonville, and 3.5 miles upstream from mouth.	a.9	1953-71	1- 5-71	22.95	247
02128260	Cheek Creek near Pekin, N. C.	Lat 35°12'37", long 79°50'49", Montgomery County, at bridge on State Highway 731, 1.4 miles east of Pekin, and 5 miles upstream from mouth.	15.4	1954-71	1- 5-71	22.46	1,900
02129440	South Fork Jones Creek near Morven, N. C.	Lat 34°53'51", long 80°00'24", Anson County, at bridge on State Highway 742, 5.2 miles west of Morven, and 9.8 miles upstream from mouth.	a17	1954-71	3- 3-71	17.45	1,100
02129530	Little Creek tributary near Pee Dee, N. C.	Lat 34°55'07", long 79°54'38", Anson County, at culvert on State Highway 145, upstream from mouth and 1.7 miles southwest of Pee Dee.	0.14	1954-71	5-15-71	17.98	8.3
02132230	Bridge Creek tributary at Johns, N. C.	Lat 34°42'12", long 79°26'34", Scotland County, at culvert on U.S. Highway 501, 0.2 mile north of Johns, and 0.8 mile upstream from mouth.	a6.2	1953-71	3- 4-71	18.91	87
02133590	Beaver Dam Creek near Aberdeen, N. C.	Lat 35°00'42", long 79°26'50", Scotland County, at culvert on U.S. Highway 15, 1.0 mile upstream from mouth, and 8.3 miles south of Aberdeen.	4.66	1953-71	5-15-71	20.75	86
02133960	Raft Swamp near Red Springs, N. C.	Lat 34°52'16", long 79°10'12", Hoke County, at bridge on Secondary Road 1436, 2.5 miles downstream from Hodgins Pond, and 3.5 miles northeast of Red Springs.	a40	1953-71	3- 4-71	20.05	690
02134380	Tenmile Swamp near Lumberton, N. C.	Lat 34°43'34", long 78°59'31", Robeson County, at culvert on U.S. Highway 301, 1.4 miles downstream from Cowpen Branch, and 7.7 miles north of Lumberton	a16	1953-71	2- 9-71	20.81	268
		Santee River basin					
02138680	White Branch near Marion, N. C.	Lat 35°38'46", long 81°55'18", McDowell County, at culvert on State Highway 226, 0.8 mile upstream from mouth, and 5.1 miles southeast of high school in Marion.	.50	1955-71	5-13-71	19.65	66
02139610	Hunting Creek at Morganton, N. C.	Lat 35°44'17", long 81°40'45", Burke County, upstream from bridge on College Street, 0.6 mile southeast of courthouse in Morganton, and 1.6 miles upstream from East Prong.	8.26	1967-71	7- 7-71	3.54	266
02140980	Carroll Creek near Collettsville, N. C.	Lat 35°53'21", long 81°44'18", Burke County, at bridge on Secondary Road 1405, 0.9 mile upstream from mouth, and 5.0 miles southwest of Collettsville.	2.38	1955-71	7- 2-71	17.96	56
02141130	Zacks Fork Creek near Lenoir, N. C.	Lat 35°55'32", long 81°31'13", Caldwell County, at bridge on Secondary Road 1563, 1.3 miles northeast of courthouse in Lenoir, and 1.6 miles upstream from mouth.	9.14	1967-71	5-13-71	19.64	310
c02141184	Blair Fork at Lenoir, N. C.	Lat 35°55'39", long 81°32'39", Caldwell County, at bridge on old North Main Street, 0.1 mile downstream from Long Branch, and 0.9 mile north of courthouse in Lenoir (revised).	c6.91	1967-71	5-13-71	17.94	460
02141190	Greasy Creek at Lenoir, N. C.	Lat 35°54'21",long 81°34'00", Caldwell County, at bridge on Secondary Road 1310, 1.3 miles upstream from mouth, and 1.6 miles southwest of courthouse in Lenoir.	4.40	1967-71	9-11-71	4.24	162
*02141890	Duck Creek near Taylorsville, N. C.	Lat 35°55'04", long 81°18'42", Alexander County, at bridge on State Highway 127, 1 mile upstream from mouth, and 8 miles west of Taylorsville.	a19	1954-71	2-22-71	15.37	850
02142480	Hagan Creek near Catawba, N. C.	Lat 35°40'20", long 81°08'12", Catawba County, at culvert on State Highway 10, 1.5 miles upstream from mouth, and 4.5 miles southwest of Catawba.	a7.8	1954-71	9-20-71	22.3	1,100

See footnotes at end of table, p. 211.

Annual maximum discharge at crest-stage partial-record stations during water year 1971, in South Atlantic Slope basins--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Santee River basin--Continued					
02143310	Lithia Inn Branch near Lincolnton, N. C.	Lat 35°27'47", long 81°13'17", Lincoln County, at culvert on Secondary Road 1262, 2 miles east of Lincolnton, and 2.5 miles upstream from mouth.	a1.0	1954-71	9-22-71	22.20	†
02146436	Briar Creek tributary 7 at Shamrock Drive, Charlotte, N. C.	Lat 35°14'06", long 80°47'23", Mecklenburg County, at culvert on Shamrock Drive, 0.5 mile upstream from mouth, and 2.8 miles northeast of courthouse in Charlotte.	.52	1967-71	5-13-71	9.70	391
02146890	East Fork Twelve Mile Creek near Waxhaw, N. C.	Lat 34°57'46", long 80°42'40", Union County, at bridge on Secondary Road 1008, 3 miles upstream from mouth, and 3.5 miles northeast of Waxhaw.	a42	1954-71	10-31-70	23.25	3,000
02150420	Camp Creek near Rutherfordton, N. C.	Lat 35°27'47", long 81°54'29", Rutherford County, at bridge on Secondary Road 1504, 1 mile upstream from Little Camp Creek, and 7 miles northeast of Rutherfordton.	a13	1955-71	5-13-71	16.39	550
02152420	Big Knob Creek near Fallston, N. C.	Lat 35°29'34", long 81°32'25", Cleveland County, at bridge on Secondary Road 1614, 2.5 miles upstream from mouth, and 5 miles north of Fallston.	16.4	1953-71	2-22-71	10.26	1,050

Annual maximum discharge at crest-stage partial-record stations during water year 1971, in Ohio River basin

		Kanawha River basin					
03160610	Old Field Creek near West Jefferson, N. C.	Lat 36°21'29", long 81°31'46", Ashe County, at bridge on U.S. Highway 221, 4.5 miles upstream from mouth, and 4.8 miles south of West Jefferson.	a2.4	1955-71	5-21-71	21.13	185
*03162110	Buffalo Creek at Warrensville, N. C.	Lat 36°27'14", long 81°30'37", Ashe County, at bridge on Secondary Road 1507, 1 mile south of Warrensville, and 1 mile upstream from mouth.	a23	1940, 1955-71	10-31-70	12.38	600
03162880	Vile Creek near Sparta, N. C.	Lat 36°30'39", long 81°06'16", Alleghany County, at culvert on State Highway 18, 0.5 mile upstream from mouth, and 1.2 miles northeast of Sparta.	3.51	1955-71	9-21-71	16.26	244
		Tennessee River basin					
03446410	Laurel Branch near Edneyville, N. C.	Lat 35°22'15", long 82°24'10", Henderson County, at culvert on U.S. Highway 64, 0.5 mile upstream from mouth, and 4 miles southwest of Edneyville.	.57	1955-71	1971	(d)	†
03453880	Brush Creek at Walnut, N. C.	Lat 35°50'41", long 82°44'33", Madison County, at bridge on Secondary Road 1151, 0.7 mile southwest of Walnut, and 0.8 mile upstream from mouth.	7.96	1954-71	8- 1-71	14.54	780
*03461910	North Toe River at Newland, N. C.	Lat 36°05'01", long 81°55'45", Avery County, at culvert on State Highway 194, at Newland, and downstream from Kentucky Creek.	9.24	1955-71	10-30-70	18.74	280
03463910	Phipps Creek near Burnsville, N. C.	Lat 35°54'43", long 82°22'10", Yancey County, at culvert on U.S. Highway 19E, 0.4 mile upstream from mouth, and 3.9 miles west of Burnsville.	1.61	1955-71	8- 7-71	16.91	112
03478910	Cove Creek at Sherwood, N. C.	Lat 36°15'50", long 81°47'03", Watauga County, at bridge on Secondary Road 1214, 0.3 mile downstream from Isaac Hollow, and 0.5 mile southwest of Sherwood.	23.1	1940, 1955-71	7-31-71	17.53	730
03480540	Peavine Branch near Banner Elk, N. C.	Lat 36°10'20", long 81°54'42", Avery County, at culvert on State Highway 194, upstream from mouth, and 2.7 miles west of Banner Elk.	.51	1955-71	1971	(d)	†
03501760	Coon Creek near Franklin, N. C.	Lat 35°14'04", long 83°20'28", Macon County, at culvert on U.S. Highway 23, 0.7 mile upstream from mouth, and 4.5 miles northeast of Franklin.	1.60	1958-71	10-29-70	5.62	240
03513410	Jenkins Branch tributary at Bryson City, N. C.	Lat 35°24'50", long 83°27'21", Swain County, at culvert on Secondary Road 1154, 0.1 mile upstream from mouth, and 1.0 mile southwest of Bryson City.	.46	1955-71	12-31-69 9- 7-71	16.28 16.31	f15 16

* Also a low-flow partial-record station.
† Not determined.
a Approximately.
c Revised.
d Peak stage did not reach bottom of gage.
f Not previously published.

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 (*).

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Roanoke River basin						
Dan River 02074218	Roanoke River	Lat 36°32'29", long 79°36'21", Rockingham County, at bridge on Secondary Road 1761, at North Carolina-Virginia State line, 2.2 miles upstream from Whiteoak Creek, and 3 miles northwest of Mayfield.	a1,780	1969-70	1-28-71 5-26-71 8- 4-71 9- 9-71	1,240 2,760 1,820 905
Pamlico River basin						
Tar River 02082506	Pamlico River	Lat 35°54'00", long 77°52'00", Nash County, at bridge on Secondary Road 1544, 1.1 miles south of Easonburg, and 3.0 miles downstream from Sapony Creek.	a780		8-11-71	53.2
Neuse River basin						
Little Creek 02087761	Swift Creek	Lat 35°39'19", long 78°28'52", Johnston County, at bridge on Secondary Road 1553, 0.5 mile downstream from unnamed tributary, and 1.4 miles northwest of Clayton	3.84	1954-55	10-12-70	*.16
Little River 02088415	Neuse River	Lat 35°40'00", long 78°15'32", Johnston County, at bridge on N.C. Highway 42, 0.5 mile southwest of Hares Crossroads, N. C. and 0.5 mile downstream from Cattail Creek.	103	1969-70	2- 9-71 9- 8-71	815 18.0
Creeping Swamp 02091960	Clayroot Swamp	Lat 35°25'46", long 77°11'12", Beaufort County, at bridge on State Highway 102, 4.2 miles northeast of Calico, and 4.5 miles upstream from mouth.	a9.8		10- 6-70	*e.03
Creeping Swamp 02091970	Clayroot Swamp	Lat 35°23'30", long 77°13'46", Craven County, at bridge on State Highway 43, 1.0 mile upstream from mouth, and 7.9 miles northwest of Vanceboro.	a27		10- 6-70	*0
Palmetto Swamp 02092018	Swift Creek	Lat 35°21'40", long 77°08'50", Craven County, at bridge on U.S. Highway 17, 3.5 miles north of Vanceboro, 3.7 miles upstream from mouth.	a16		10- 6-70	*0
Bachelor Creek 02092120	Neuse River	Lat 35°10'24", long 77°06'14", Craven County, at bridge on U.S. Highway 70, 2.1 miles downstream from Rollover Creek, and 6.7 miles northwest of New Bern.	a34	1953-69	10- 9-70	*1.59
Queen Creek basin						
Bell Swamp 02092780	Queen Creek	Lat 34°42'04", long 77°14'01", Onslow County, at culvert on State Highway 172, 1.1 miles southeast of Hubert, and 2.0 miles upstream from mouth.	a5.0	1953-69	5-25-71	3.39
New River basin						
Quarrleys Branch 02092815	New River	Lat 34°54'54", long 77°45'57", Onslow County, at culvert on State Highway 24, 0.6 mile upstream from mouth, and 3.1 miles west of Richlands.			5-26-71	1.17
Mill Swamp 02092864	New River	Lat 34°54'24", long 77°32'25", Onslow County, at bridge on Secondary Road 1003, 0.6 mile northeast of Richlands, and 2.6 miles upstream from mouth.			5-26-71	9.76
Mill Swamp 02092865	New River	Lat 34°54'24", long 77°32'25", Onslow County, at bridge on Secondary Road 1307, 0.8 mile northeast of Richlands, and 1.6 miles upstream from mouth.			5-26-71	12.6
New River tributary 0209303255	New River	Lat 34°44'52", long 77°26'35", Onslow County, at culvert on Secondary Road 1562, 0.4 mile upstream from mouth, and 0.8 mile west of Jacksonville.			5-26-71	e.14
Wolf Swamp 02093168	Northeast Creek	Lat 34°47'48", long 77°22'00", Onslow County, at bridge on U.S. Highway 17, 0.8 mile upstream from mouth, and 0.8 mile southwest of Kellum			5-26-71	.59
Northeast Creek 02093170	New River	Lat 34°46'25", long 77°21'40", Onslow County, at bridge on Secondary Road 1406, 1.6 miles downstream from Wolf Swamp, and 2.1 miles south of Kellum.	ca28	1941, 1953-54, 1956-58	5-26-71	11.7
Mott Creek 02093184	Northeast Creek	Lat 34°43'26", long 77°19'14", Onslow County, at culvert on Secondary Road 1413, 0.5 mile north of Piney Green, and 2.4 miles upstream from mouth.			5-25-71	.46
Wallace Creek 02093188	New River	Lat 34°42'26", long 77°16'27", Onslow County, at culvert on State Highway 24, 0.2 mile east of Kellumtown, 7.4 miles upstream from mouth.			5-25-71	.74

a Approximately.
c Revised.
e Estimated.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Cape Fear River basin						
Haw River 02093248	Cape Fear River	Lat 36°11'52", long 79°59'08", Guilford County, at bridge on State Highway 68, 1.6 miles north of Oak Ridge, and 1.8 miles upstream from Rocky Branch.	7.9	1962, 1966	10- 1-70	0.82
Haw River 02093250	Cape Fear River	Lat 36°12'47", long 79°57'24", Guilford County, at bridge on Secondary Road 2109, 0.2 mile downstream from Rocky Branch, and 3.3 miles northeast of Oak Ridge.			10- 1-70 1-14-71 1-28-71	1.64 8.51 11.7
Little Troublesome Creek 02093383	Haw River	Lat 36°19'53", long 79°39'48", Rockingham County, at bridge on U.S. Highway 29A, 0.4 mile upstream from mouth, and 2.1 miles south of Reidsville.	a3.7	1970	1-13-71	9.15
Little Troublesome Creek 02093423	Haw River	Lat 36°16'53", long 79°36'37", Rockingham County, at bridge on Secondary Road 2600, 0.8 mile west of Thompsonville, and 1.0 mile upstream from mouth.	a13	1970	1-28-71	7.61
Haw River 02093599	Cape Fear River	Lat 36°10'27", long 79°30'08", Alamance County, at bridge on Secondary Road 1561, 0.5 mile southwest of Altamahaw, and 0.8 mile upstream from Reedy Fork.	189	1969-70	1-14-71	150
Moores Creek 02093822	Reedy Fork	Lat 36°08'38", long 79°56'52", Guilford County, at bridge on Secondary Road 2132, 3.1 miles southeast of Oak Ridge, and 4.0 miles upstream from mouth.			10- 1-70 1-14-71	.13 .85
Reedy Fork 02094377	Haw River	Lat 36°10'55", long 79°40'27", Guilford County, 0.1 mile upstream from Smith Branch, 0.4 mile downstream from bridge on Secondary Road 2732, and 2.7 miles south of Monticello.	119	1969-70	1-13-71	67.9
South Buffalo Creek 02094819	Buffalo Creek	Lat 36°02'36", long 79°46'27", Guilford County, at bridge on U.S. Highway 421, 1.5 miles downstream from Ryan Creek and 2.2 miles southwest of Greensboro.	27.5	1947, 1969-70	1-14-71 1-28-71	14.2 12.1
North Buffalo Creek 02095228	Buffalo Creek	Lat 36°04'53", long 79°48'09", Guilford County, at bridge on Battleground Avenue, at Greensboro, and 5.3 miles upstream from Muddy Creek.		1969-70	1-14-71	.50
North Buffalo Creek 02095317	Buffalo Creek	Lat 36°06'17", long 79°45'44", Guilford County, at culvert on U.S. Highway 29, at Greensboro, and 2.0 miles upstream from Muddy Creek.		1969-70	1-13-71	13.0
Buffalo Creek 02095554	Reedy Fork	Lat 36°08'34", long 79°38'54", Guilford County, at bridge on Secondary Road 2795, 1.2 miles upstream from Blackwood Creek, and 2.6 miles north of McLeansville.	91.6	1969-70	10-14-70 10-29-70 1-15-71 1-28-71	43.1 54.6 77.8 71.8
Reedy Fork 02095608	Haw River	Lat 36°10'39", long 79°34'32", Guilford County, at bridge on State Highway 61, 1.7 miles downstream from Buffalo Creek, and 3.5 miles northwest of Ossipee.	a240	1969-70	1-15-71 1-28-71	143 196
Haw River 02095716	Cape Fear River	Lat 36°09'02", long 79°29'12", Alamance County, at bridge on Secondary Road 1530, 0.9 mile upstream from Travis Creek, and 2.0 miles southeast of Ossipee.	450	1969-70	1-14-71	308
Travis Creek 02095862	Haw River	Lat 36°08'21", long 79°29'36", Alamance County, at culvert on State Highway 87, 0.7 mile upstream from mouth, and 2.2 miles southeast of Ossipee.	14.5	1969-70	1-14-71	8.37
County Home Branch 0209651955	Town Branch	Lat 36°02'52", long 79°22'33", Alamance County, at bridge on Secondary Road 2100, 100 ft upstream from Town Branch, and 2.0 miles southeast of Graham.			10- 1-70	e.005
Haw River 02096587	Cape Fear River	Lat 36°01'12", long 79°12'56", Alamance County, at bridge on Secondary Road 2158, 0.3 mile northwest of Swepsonville, and 0.5 mile upstream from Alamance Creek.	697	1969	1-14-71	653
Little Alamance Creek 02096605	Alamance Creek	Lat 36°02'26", long 79°40'59", Guilford County, at bridge on Secondary Road 3077, 1.3 miles upstream from Beaver Creek, and 3.9 miles southwest of Sedalia.			10- 2-70	.53
Alamance Creek 02096758	Haw River	Lat 36°01'27", long 79°21'38", Alamance County, at bridge on State Highway 49, 0.5 mile northeast of Bellemont, and 1.6 miles upstream from Stinking Creek.	157	1970	1-14-71	107
Robeson Creek 02097159	Haw River	Lat 35°42'23", long 79°09'13", Chatham County, 1.3 miles downstream from Turkey Creek, 1.6 miles southeast of Pittsboro.	18.6	1970	1- 7-71 1-29-71	21.4 8.90

a Approximately.
e Estimated.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Cape Fear River basin--Continued						
Robeson Creek 02097189	Haw River	Lat 35°42'10", long 79°05'44", Chatham County, at bridge on Secondary Road 1939, 0.5 mile upstream from mouth and 4.5 miles southwest of Seaforth.	a27	1954, 1966, 1970	1- 7-71 1-29-71	29.6 16.0
New Hope Creek 02097198	Haw River	Lat 35°59'56", long 79°07'18", Orange County, at bridge on Secondary Road 1113, 0.3 mile upstream from Long Branch, and 3.0 miles northeast of Dobsons Crossroads.			10- 1-70	0
New Hope Creek 0209719840	New Hope River	Lat 35°59'59", long 79°06'55", Orange County, at bridge on Secondary Road 1113, 0.4 mile upstream from Garrett Branch and 3.0 miles northwest of Blackwood.			10 -1-70	0
New Hope Creek 0209719850	New Hope River	Lat 36°00'12", long 79°05'36", Orange County, at bridge on Secondary Road 1723, 1.0 mile downstream from Steep Bottom Branch, and 6.7 miles northwest of Chapel Hill.	a9.0		10- 1-70	e.01
New Hope Creek 0209719950	New Hope River	Lat 35°59'42", long 79°04'22", Orange County, at bridge on N. C. Highway 86, 0.1 mile north of Blackwood, and 0.7 mile downstream from Mountain Creek.			10- 1-70	e.02
New Hope Creek 02097201	New Hope River	Lat 35°59'45", long 79°03'16", Orange County, at bridge on Secondary Road 1718, 0.7 mile upstream from Old Field Creek, and 5.7 miles north of Chapel Hill.	a17	1968	10- 1-70 1- 7-71 1-29-71 3- 4-71	e.02 14.0 5.03 157
New Hope Creek 02097203	New Hope River	Lat 35°59'31", long 79°02'45", Orange County, at bridge on Secondary Road 1730, 0.5 mile downstream from Old Field Creek, and 1.5 miles east of Blackwood.	a22	1962, 1966, 1968	10- 1-70	.04
Little Creek 02097206	New Hope Creek	Lat 35°59'32", long 79°00'10", Orange County, at bridge on Secondary Road 1718, 0.5 mile upstream from mouth, and 3.9 miles east of Blackwood.	a4.1	1968	10- 1-70	.05
Little Creek tributary 02097207	Little Creek	Lat 35°59'20", long 78°59'46", Orange County, 0.1 mile south of entrance to Triangle Nursing Home #1 (on Secondary Road 1718), 200 ft upstream from sewage outfall at Triangle Nursing Home #1, and 4.3 miles east of Blackwood Station.			10- 1-70 1- 7-71 1-29-71 3- 4-71	.02 .02 .01 .27
New Hope Creek tributary 02097208	New Hope Creek	Lat 35°58'47", long 78°59'49", Durham County, at culvert on Secondary Road 1303, 0.3 mile upstream from mouth, and 5.7 miles northwest of Keene.	.36	1968	10- 1-70 1- 7-71 1-29-71 3- 4-71	.02 .32 .12 1.54
New Hope Creek 02097209	New Hope River	Lat 35°58'30", long 79°00'00", Orange County, downstream from New Hope Creek tributary, 1.2 miles downstream from Little Creek, and 4.1 miles east of Eubanks.	a32		10- 1-70	e.10
New Hope Creek 02097220	New Hope River	Lat 35°57'34", long 78°58'54", Durham County, at bridge on U.S. Highways 15-501, 0.5 mile upstream from Mud Creek, and 2.5 miles southwest of Durham.	a36	1932, 1954-68	1- 7-71 1-29-71 3- 4-71	40.2 20.4 421
New Hope Creek tributary 02097233	New Hope Creek	Lat 35°57'16", long 78°58'23", Durham County, at culvert on Secondary Road 1116, 0.4 mile upstream from mouth, and 5.0 miles southwest of Durham.		1970	1- 6-71 1-29-71	2.97 .25
New Hope Creek 02097234	Haw River	Lat 35°56'33", long 78°58'32", Durham County, at bridge on Secondary Road 1127, 1.0 mile downstream from Sandy Creek, and 5.7 miles northwest of Lowes Grove.	a52	1968, 1970	10- 4-70 1- 6-71 3- 4-71	13.1 184 683
Third Fork Creek 02097259	New Hope River	Lat 35°57'40", long 78°54'55", Durham County, at bridge on Cornwallis Road at Durham, and 5.5 miles upstream from mouth.	7.52	1970	1- 6-71 1-29-71	10.0 1.63
Third Fork Creek 02097262	New Hope River	Lat 35°56'47", long 78°55'49", Durham County, at end of Secondary Road 1168, downstream from effluent outfall at Durham's Third Fork Creek waste treatment plant and upstream from sewage effluent outfall at Durham's Hope Valley waste treatment plant, and 1.5 miles west of Keene.		1970	1- 6-71 1-29-71	34.1 5.82
Third Fork Creek 02097299	New Hope River	Lat 35°54'38", long 78°57'39", Durham County, at bridge on State Highway 751, 0.9 mile upstream from mouth, and 1.6 miles north of Bland.	16.5	1970	1- 5-71 1-29-71	32.1 6.54

a Approximately.
e Estimated.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Cape Fear River basin--Continued						
Northeast Creek 0209741955	New Hope Creek	Lat 35°52'20", long 78°54'49", Durham Count, at bridge on Secondary Road 1100, 1.3 miles west of Genlee, and 1.6 miles downstream from Burdens Creek.		1970	11- 4-70 1- 6-71 3-15-71 3-25-71 4- 5-71	4.22 318 7.52 3.20 8.99
Morgan Creek 02097514	New Hope River	Lat 35°53'38', long 79°01'46", Orange County, 150 ft downstream from sewage treatment plant, 0.8 mile upstream from Chapel Creek, and 2.0 miles southeast of Chapel Hill.	a38	1970	1- 7-71 1-29-71	67.1 18.6
Beaver Creek 02098139	New Hope River	Lat 35°41'48", long 79°01'17", Chatham County, at bridge on Secondary Road 1008, 2.0 miles upstream from mouth, and 3.0 miles south of Seaforth.	a37	1962, 1966	3-15-71 3-25-71 4- 5-71 4-27-71	23.7 11.9 19.8 5.58
Deep River 02099193	Cape Fear River	Lat 35°58'46", long 79°55'41", Guilford County, at bridge on Secondary Road 1352, 250 ft upstream from Bull Run, and 1.1 miles southeast of Jamestown.			10 -1-70	3.11
Deep River 02099324	Cape Fear River	Lat 36°58'22", long 79°55'05", Guilford County, at bridge on U.S. Highway 29 and 70, 0.7 mile downstream from Bull Run, and 1.8 miles southeast of Jamestown.			10 -1-70	3.21
Richland Creek 02099480	Deep River	Lat 35°56'28", long 79°55'56", Guilford County, at bridge on Secondary Road 1154, 0.4 mile downstream from Mile Branch, and 2.9 miles northeast of Archdale.	12.7	1954-56, 1958-60, 1962, 1966	10- 1-70	1.81
Richland Creek 02099484	Deep River	Lat 35°56'26", long 79°54'08", Guilford County, at bridge on Secondary Road 1147, 0.2 mile upstream from mouth, and 4 miles southwest of Groomtown.	16.3		10- 1-70	10.0
Deep River 0209948955	Cape Fear River	Lat 35°56'16", long 79°53'26", Guilford County, at bridge on Secondary Road 1129, 0.8 mile downstream from Richland Creek, and 4.6 miles southeast of Jamestown.			10- 1-70 10-28-70	13.2 17.5
Reddicks Creek 0209949155	Deep River	Lat 36°00'39", long 79°53'02", Guilford County, at bridge on Secondary Road 1372, 0.7 mile south of Sedgefield, and 3.0 miles upstream from Jenny Branch.			10- 1-70	e.01
Hickory Creek tributary 0209948992	Hickory Creek	Lat 35°57'50", long 79°50'49", Guilford County, at bridge on Secondary Road 1132, 1.1 miles upstream from mouth, and 2.3 miles southeast of Groomtown.			10- 1-70	0
Reddicks Creek 02099492	Deep River	Lat 35°59'10", long 79°52'36", Guilford County, at bridge on Secondary Road 1383, 1.3 miles upstream from Jenny Branch, and 2.4 miles east of Jamestown.	4.93		10- 1-70	.08
Deep River tributary 02100082	Deep River	Lat 35°50'05", long 79°49'10", Randolph County, at bridge on Secondary Road 1958, 0.2 mile upstream from mouth, and 1.5 miles northwest of Randleman.	a.8		10- 2-70	0
Deep River 02100096	Cape Fear River	Lat 35°49'24", long 79°48'12", Randolph County, at bridge on U.S. Highway 220, 0.5 mile north of Randleman, and 2.2 miles upstream from Polecat Creek.			10- 2-70	20.0
Deep River 02100219	Cape Fear River	Lat 35°48'05", long 79°46'40", Randolph County, at bridge on Secondary Road 2128, 0.2 mile downstream from Polecat Creek, and 0.5 mile northeast of Worthville.	a230		10- 2-70	22.4
Haskett Creek 02100294	Deep River	Lat 35°45'33", long 79°47'35", Randolph County, at bridge on Secondary Road 2149, 0.1 mile downstream from Penwood Branch, and 3.5 miles north of Asheboro.	a9.9		10- 2-70	.27
Haskett Creek 02100307	Deep River	Lat 35°46'05", long 79°46'45", Randolph County, at culvert on Secondary Road 2128, 0.2 mile upstream from mouth, and 0.5 mile north of Central Falls.		1966	10- 2-70	5.28
Deep River 02100344	Cape Fear River	Lat 35°44'20", long 79°44'10", Randolph County, at bridge on Secondary Road 2221, at Cedar Falls, 0.5 mile upstream from Bush Creek.	a260		10- 2-70	27.8
Deep River 02100599	Cape Fear River	Lat 35°40'20", long 79°37'39", Randolph County, at bridge on Secondary Road 2628, 0.8 mile downstream from Mill Creek, and 2.5 miles southwest of Parks Crossroads.	a390		10- 1-70	86.2

a Approximately.
e Estimated.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Cape Fear River basin--Continued						
Bear Creek 02100769	Deep River	Lat 35°31'57", long 79°46'09", Randolph County, 50 ft upstream from sewage outfall at Luck's Inc., 0.2 mile upstream from culvert on State Highway 705, and 0.6 mile southeast of Seagrove.			10- 2-70	0
Bear Creek 02100771	Deep River	Lat 36°31'55", long 79°45'54", Randolph County, at culvert on State Highway 705, 0.2 mile upstream from first culvert on State Highway 705, and 0.8 mile southeast of Seagrove.			10- 2-70	.11
Bear Creek 02100772	Deep River	Lat 35°31'45", long 79°45'48", Randolph County, at culvert on Secondary Road 2859, 0.1 mile downstream from first culvert on State Highway 705 (first crossing of Bear Creek), and 1.0 mile southeast of Seagrove.			10- 2-70	.13
Bear Creek 02100824	Deep River	Lat 35°24'48", long 79°38'33", Moore County, at bridge on Secondary Road 1425, 2.5 miles northeast of Spies, and 3.0 miles upstream from Cabin Creek.	a44	1954-55	10- 2-70	1.60
Cabin Creek 02100842	Bear Creek	Lat 35°13'07", long 79°44'07", Montgomery County, 0.1 mile downstream from sewage outfall at Candor's Sewage Treament Plant, 0.6 mile upstream from culvert on Secondary Road 1509, and 0.7 mile northeast of Candor.			10- 1-70	.09
Cabin Creek 02100843	Bear Creek	Lat 35°18'38", long 79°44'14", Montgomery County, at bridge on Secondary Road 1509, 1.2 miles north of Candor, and 6.5 miles upstream from Cotton Creek.			10- 1-70	.47
Cotton Creek 02100859	Cabin Creek	Lat 35°23'15", long 79°45'55", Montgonery County, at culvert on Secondary Road 1369, 1.3 miles upstream from Lick Creek, and 1.5 miles southeast of Star.			10 -1-70	.15
Mill Creek 02100862	Lick Creek	Lat 35°21'38", long 79°45'48", Montgomery County, at bridge on State Highway 27, 0.5 mile upstream from mouth, and 1 mile northeast of Biscoe.	a1.4		10- 1-70	.03
Bear Creek 02101005	Deep River	Lat 35°27'08", long 79°34'48", Moore County, at end of Secondary Road 1475, 1.5 miles north of Robbins, and 2.5 miles upstream from mouth.			10- 2-70	16.1
Killetts Creek 02101179	McLendons Creek	Lat 35°20'03", long 79°26'13", Moore County, at culvert on Secondary Road 1240, 1.4 miles southwest of Carthage, and 3.4 miles upstream from mouth.			10- 1-70	e<.01
Killetts Creek 02101183	McLendons Creek	Lat 35°21'14", long 79°27'15", Moore County, at bridge on Secondary Road 1261, 1.5 miles upstream from mouth, and 2.2 miles west of Carthage.	a8.7		10- 1-70	.08
Richland Creek 02101283	McLendons Creek	Lat 35°25'58", long 79°25'58", Moore County, at bridge on Secondary Road 1640, 0.8 mile upstream from mouth, and 2.2 miles southeast of Putnam.	a26	1962-64, 1966	10- 9-70	0
Big Buffalo Creek 02101513	Deep River	Lat 35°28'55", long 79°12'03", Lee County, at bridge on Secondary Road 1009, 1.0 mile downstream from Skunk Creek, and 1.5 miles northwest of Sanford.	a9.7	1954, 1962	10- 9-70	*.02
North Branch Rocky River 02101686	Rocky River	Lat 35°51'20", long 79°32'30", Randolph County, at bridge on State Highway 49, 1.5 miles northeast of Liberty, and 6.3 miles upstream from mouth.			10 -1-70	.42
Upper Little River 02102622	Cape Fear River	Lat 35°20'05", long 78°47'03", Harnett County, at bridge on U.S. Highway 401, 0.1 mile upstream from Norfolk and Southern Railway, and 1.8 miles north of Bunnlevel.	a200	1930, 1955, 1968	10- 9-70	*9.28
Northeast Cape Fear River 02107672	Cape Fear River	Lat 35°03'10", long 77°50'17", Duplin County, at bridge on State Highway 11, 0.2 mile upstream from Burn Coal Branch, and 0.8 mile southwest of Kornegay.	a120	1956	7-13-71 7-23-71	138 57.0
Waccamaw River basin						
Brown Marsh Swamp 02108994	Brown Marsh	Lat 34°31'32", long 78°38'57", Bladen County, at culvert on U.S. Highway 701, 0.2 mile upstream from Whites Creek, and 2.7 miles north of Clarkton.			5-25-71	5.90
Big Foot Branch 02109054	Brown Marsh Swamp	Lat 34°28'19", long 78°38'34", Bladen County, 0.1 mile downstream from sewage outfall at Clarkton Waste Treatment Plant, 0.3 mile upstream from mouth, and 1.3 miles southeast of Clarkton.			5-25-71	.39

a Approximately.
e Estimated.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Waccamaw River basin--Continued						
Soules Swamp 02109184	White Marsh	Lat 34°19'33", long 78°48'44", Columbus County, at culvert on U.S. Highway 74 and 76, 0.2 mile upstream from Horsepen Branch, and 0.7 mile northeast of Chadbourn.		1959	5-25-71	0.20
Horsepen Branch 02109224	Soules Swamp	Lat 34°19'05", long 78°49'15", Columbus County, at downstream side of culvert on Secondary Road 1317, 0.5 mile southeast of Chadbourn, and 0.8 mile upstream from mouth.			5-25-71	.14
Soules Swamp 02109244	White Marsh	Lat 34°19'27", long 78°47'58", Columbus County, at culvert on Secondary Road 1005, 1.6 miles east of Chadbourn, and 1.7 miles upstream from Juniper Creek.	2.85		5-25-71	.83
Pine Log Branch 02109294	Soules Swamp	Lat 34°20'40", long 78°45'08", Columbus County, at bridge on Secondary Road 1435, 2.8 miles west of Whiteville, and 3.1 miles upstream from mouth.			5-25-71	0
Pine Log Swamp 02109296	Soules Swamp	Lat 34°20'09", long 78°43'51", Columbus County, at bridge on U.S. Highway 74, 1 mile north of Pine Log, and 1.8 miles upstream from mouth.	8.30		5-25-71	0
Richardson Swamp 02109345	White Marsh	Lat 35°17'17", long 78°42'39", Columbis County, at culvert on Old State Highway 120, 0.5 mile west of Brunswick, and 0.9 mile upstream from Richardson Millpond.			5-25-71	0
Richardson Swamp tributary 02109365	Richardson Swamp	Lat 34°17'36", long 78°41'44", Columbus County, at culvert on Secondary Road 1951, 0.3 mile upstream from mouth, and 0.6 mile northeast of Brunswick.			5-25-71	e.01
Town Canal 02109771	Grissett Swamp	Lat 34°08'56", long 78°51'44", Columbus County, at bridge on U.S. Highway 701 Bypass, 0.5 mile east of Tabor City, and 0.5 mile upstream from mouth.	a.30		5-26-71	e<.01
Town Canal 02109772	Grissett Swamp	Lat 34°08'56", long 78°51'28", Columbus County, 0.2 mile downstream from sewage outfall at Tabor City's Waste Treatment Plant, 0.3 mile upstream from mouth, and 0.9 mile east of Tabor City.			5-26-71	43
Skeebo Branch 02109779	Grissett Swamp	Lat 34°07'56", long 78°52'35", Horry County, S. C., at culvert on U.S. Highway 701, 1.5 miles south of Tabor City, N. C., and 2.0 miles upstream from mouth.			5-26-71	.04
Grissett Swamp 02109821	Seven Creeks	Lat 34°08'55", long 78°46'56", Columbus County, at bridge on Secondary Road 1005, 1.0 mile north of Ironhill, and 2.8 miles upstream from Toms Fork.	ca22	1959	5-26-71	3.94
Pee Dee River basin						
Yadkin River 02110826	Pee Dee River	Lat 36°04'08", long 81°35'08", Caldwell County, at bridge on Secondary Road 1372, at Finley, and 0.5 mile upstream from Jackson Camp Creek.	a11	1970	12-15-70 8-16-71 9-23-71	12.6 12.2 18.7
Buffalo Creek 02111084	Yadkin River	Lat 36°01'40", long 81°30'45", Caldwell County, at bridge on Secondary Road 1505, 1.0 mile downstream from Licklog Branch and 1.0 mile northwest of Yadkin Valley.	32.3	1963, 1970	12-15-70 8-16-71 9-23-71	34.3 30.8 63.8
Yadkin River 02111119	Pee Dee River	Lat 36°02'12", long 81°28'37", Caldwell County, at bridge on State Highway 268, 0.1 mile downstream from Hawkins Creek, and 0.9 mile northeast of Yadkin Valley.		1970	8-16-71 9-23-71	73.2 159
Yadkin River 02111192	Pee Dee River	Lat 36°07'43", long 80°22'02", Wilkes County, at bridge on State Highway 268, 0.2 mile east of Ferguson, and 1.2 miles upstream from Beaver Creek.	a180	1961, 1963, 1970	12-15-70 8-16-71	181 165
Cub Creek 02112007	Yadkin River	Lat 36°08'44", long 81°08'33", Wilkes County, at bridge on Secondary Road 2460, 0.6 mile east of Wilkesboro, and 1.0 mile upstream from Little Cub Creek.		1970	12-18-70 8-16-71 9-23-71	11.5 13.9 37.0
Mulberry Creek 02112040	Yadkin River	Lat 36°11'30", long 81°06'48", Wilkes County, at bridge on State Highway 268, 1.0 mile upstream from mouth, and 1.2 miles east of North Wilkesboro.	a43	1952-58, 1963, 1970	8-16-71 9-23-71	38.3 140
Long Creek 02112052	Mulberry Creek	Lat 36°11'24", long 81°08'52", Wilkes County, at culvert on Secondary Road 1973, 1.7 miles north of North Wilkesboro, and 2.7 miles upstream from mouth.		1970	12-18-70 8-16-71 9-23-71	e.10 e.01 .08

a Approximately.
c Revised.
e Estimated.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Pee Dee River basin--Continued						
Long Creek 02112054	Mulberry Creek	Lat 36°10'48", long 81°08'01", Wilkes County, at culvert on State Highway 268, 1.1 miles north of North Wilkesboro, and 1.9 miles upstream from mouth.		1970	8-16-71 9-23-71	1.57 1.76
Long Creek 02112056	Mulberry Creek	Lat 36°11'12", long 81°06'53", Wilkes County, at bridge on Secondary Road 2334, 0.1 mile upstream from mouth, and 2.6 miles northeast of North Wilkesboro.		1970	12-18-70 8-16-71 9-23-71	2.50 2.19 3.28
Yadkin River 02112152	Pee Dee River	Lat 36°12'02", long 81°00'20", Wilkes County, at bridge on Secondary Road 2327, 0.2 mile downstream from Roaring River, and 0.5 mile south of Roaring River.	a740	1952, 1970	12-18-70 9-23-71	840 1,610
Elkin River 02112245	Yadkin River	Lat 36°16'31", long 80°53'05", Wilkes County, at bridge on Secondary Road 2044, 1.6 miles north of West Elkin, and 3.2 miles upstream from mouth.		1970	12-18-70	25.7
Elkin River 02112248	Yadkin River	Lat 36°15'09", long 80°51'48", Surry County, at foot of bridge in Memorial Park, 0.3 mile upstream from mouth, and 0.4 mile west of Elkin.		1970	10-28-70 7-31-71 8-19-71	15.6 49.9 28.7
Dutchmans Creek 02112251	Yadkin River	Lat 36°14'46", long 80°49'51", Surry County, at bridge on State Highway 268, 0.2 mile upstream from mouth, and 1.0 mile east of Elkin.		1970	10-28-70 7-31-71 8-19-71	.40 .70 .52
Cobb Creek 02112257	Yadkin River	Lat 36°14'14", long 80°49'54", Yadkin County, at bridge on State Highway 67, 0.9 mile east of Jonesville, and 1.0 mile upstream from mouth.	a5.3	1970	10-27-70 7-31-71 8-19-71	2.79 5.62 4.36
Yadkin River 02112397	Pee Dee River	Lat 36°16'04", long 80°42'50", Surry County, at bridge on U.S. Highway 601, 0.1 mile south of Crutchfield, and 1.2 miles upstream from Fisher River.	a1,010	1970	10-28-70 7-15-71 8-19-71	970 1,500 1,340
Fisher River 02112410	Yadkin River	Lat 36°26'35", long 80°46'12", Surry County, at bridge on Secondary Road 1341, 3 miles south of Bottom, and 5 miles upstream from Little Fisher River.	45	1954-69	7-13-71	49.0
Fisher River tributary 02112613	Fisher River	Lat 36°23'26", long 80°43'05", Surry County, 60 ft upstream from Lagoon effluent outfall, 600 ft southeast of Secondary Road 1100, and 0.5 miles southeast of Dobson.		1970	10-28-70 7-13-71 7-16-71 8-18-71	.12 .24 .12 .11
Fisher River tributary 02112614	Fisher River	Lat 36°22'41", long 80°41'48", Surry County, at end of Secondary Road 2249, 0.6 mile upstream from mouth, and 2.0 miles southeast of Dobson.		1970	10-29-70 7-13-71 7-16-71 8-18-71	1.10 1.00 1.34 1.59
Fisher River 02112996	Yadkin River	Lat 36°21'24", long 80°40'49", Surry County, at bridge on Secondary Road 2222, 0.5 mile downstream from Beaver Creek, and 4.0 miles southeast of Dobson.		1970	10-29-70 7-13-71 7-16-71 8-18-71	82.9 124 237 121
Cody Creek 02113108	Fisher River	Lat 36°22'00", long 80°43'11", Surry County, at bridge on Secondary Road 1104, 1.0 mile downstream from Kick Shin Creek, and 2.0 miles south of Dobson.	a7.3	1963, 1970	10-28-70 7-16-71 8-18-71	4.20 5.16 6.33
Tanyard Creek 02113182	Yadkin River	Lat 36°14'25", long 80°42'58", Yadkin County, at bridge on Secondary Road 1367, less than 0.1 mile downstream from Fork in Tanyard Creek, and 0.7 mile northwest of Boonville.		1970	10-30-70 7-15-71 8-19-71	2.45 .36 .32
Tanyard Creek 02113186	Yadkin River	Lat 36°15'04", long 80°40'50", Yadkin County, at bridge on Secondary Road 1367, 1.0 mile upstream from mouth, and 1.8 miles northeast of Boonville.	a1.9	1970	10-30-70 7-15-71 8-19-71	7.13 1.35 1.66
Yadkin River 02113500	Pee Dee River	Lat 35°16'42", long 80°33'18", Surry County, at bridge on Secondary Road 1003, at Siloam, and 75 ft upstream from Hagan Creek.	1,220	1952-56, 1970	10-28-70 7-16-71 8-17-71	956 1,370 1,220
Ararat River 02113576	Yadkin River	Lat 36°33'12", long 80°34'07", Surry County, at bridge on State Highway 104, 2.1 miles northeast of Salem, and 2.2 miles upstream from Johnson Creek.	36.2	1970	10-29-70 7-13-71 8-18-71	13.8 23.3 23.2
Ararat River 02113620	Yadkin River	Lat 36°30'08", long 80°36'02", Surry County, at bridge on State Highway 103, at Mt. Airy, and 1.7 miles downstream from Champ Creek.	65.5	1925, 1947, 1952-58, 1963, 1970	10-29-70 7-13-71 8-18-71	32.3 43.1 44.9

a Approximately.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basin--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Pee Dee River basin--Continued				
Ararat River 02113642	Yadkin River	Lat 36°28'49", long 80°35'54", Surry County, at bridge on U.S. Highway 52 bypass, 0.1 mile upstream from Cane Branch, and 1.4 miles southeast of Mt. Airy.		1970	10-29-70 7-13-71 8-17-71	34.8 47.8 45.8
Cane Branch 02113643	Ararat River	Lat 36°28'56", long 80°35'04", Surry County, at culvert on U.S. Highway 52, 0.9 mile upstream from mouth, and 1.8 miles southeast of Mt. Airy.		1970	10-29-70 7-13-71 8-18-71	.69 .84 .83
Lovills Creek 02113654	Ararat River	Lat 36°32'31", long 80°37'33", Surry County, at bridge on Secondary Road 1700, 2.7 mile upstream from Short Town Branch, and 3 miles north of Mt. Airy.	27.0	1970	10-29-70 7-13-71 8-18-71	15.1 23.4 26.2
Lovills Creek 02113661	Ararat River	Lat 36°29'42", long 80°37'08", Surry County, at bridge on State Highway 89, at Mt Airy, and 2.6 miles upstream from mouth.	33.9	1970	10-29-70 7-13-71 8-18-71	14.4 26.0 28.7
Lovills Creek 02113681	Ararat River	Lat 36°29'06", long 80°36'49", Surry County, at bridge on U.S. Highway 601, at Mt Airy, and 1.8 miles upstream from mouth.	35.1	1955, 1963, 1970	10-29-70 7-13-71 8-17-71	17.3 29.1 26.9
Ararat River 02113792	Yadkin River	Lat 36°27'51", long 80°35'34", Surry County, at Mt. Airy Dam No. 1, 1.0 mile upstream from Rutledge Creek, and 2.5 miles south of Mt. Airy.	a200	1970	7-13-71	175
Stony Creek 02113832	Ararat River	Lat 36°26'43", long 80°33'23", Surry County, at bridge on Secondary Road 2012, 2.8 miles upstream from mouth, and 4.7 miles southeast of Mt. Airy.		1970	10-29-70 7-13-71 8-17-71	1.88 3.09 2.65
Stony Creek 02113833	Ararat River	Lat 36°26'32", long 80°34'35", Surry County, at bridge on Secondary Road 2015, 1.4 miles upstream from mouth, and 4.4 miles southeast of Mt. Airy.		1970	10-29-70 7-13-71 8-17-71	2.56 4.00 3.72
Heatherly Creek 02113926	Toms Creek	Lat 36°22'41", long 80°28'52", Surry County, at bridge on State Highway 268, 0.8 mile southwest of Pilot Mountain, and 1.8 miles upstream from mouth.	1.00	1970	10-30-70 7-31-71 8-17-71	2.38 1.18 .27
Heatherly Creek 0211392655	Toms Creek	Lat 36°23'11", long 80°29'23", Surry County, at bridge on U.S. Highway 52, 0.9 mile upstream from mouth, and 1.1 miles southwest of Pilot Mountain.	1.00	1970	10-30-70 7-31-71 8-17-71	52.2 36.8 12.0
Toms Creek 0211395955	Ararat River	Lat 36°23'29", long 80°30'47", Surry County, at bridge on Secondary Road 1315, 0.5 mile downstream from Heatherly Creek, and 2.5 miles west of Pilot Mountain.	a33	1970	10-30-70 7-31-71 8-17-71	57.8 40.1 15.2
North Deep Creek tributary 0211559755	North Deep Creek	Lat 36°12'32", long 80°41'29", Yadkin County, at bridge on Secondary Road 1513, 0.1 mile upstream from mouth, and 1.9 miles southeast of Boonville.		1970	10-30-70 7-15-71 8-19-71	4.14 1.08 .99
Yadkin River 02115674	Pee Dee River	Lat 36°00'31", long 80°25'22", Forsyth County, at bridge on U.S. Highway 158, 2.0 miles southwest of Clemmons, and 1.0 mile downstream from Blanket Creek.	a1,920	1970	10-27-70 8-16-71 9-14-71	1;300 2,240 2,480
Grassy Creek 02115731	Mill Creek	Lat 36°11'37", long 81°17'37", Forsyth County, at bridge on Secondary Road 1669, 0.8 mile southwest of Stanleyville, and 1.6 miles upstream from mouth.		1970	10-26-70 8-16-71 9-15-71	1.16 1.16 .99
Little Creek 02115802	Muddy Creek	Lat 36°03'14", long 80°19'43", Forsyth County, at bridge on Secondary Road 1126, 1.3 miles northwest of Frontis, and 3.4 miles upstream from mouth.		1970	10-27-70 8-16-71 9-15-71	.82 1.25 .97
Little Creek 02115804	Muddy Creek	Lat 36°04'04", long 80°19'43", Forsyth County, at bridge on Secondary Road 1122, 0.7 mile west of Atwood, and 1.8 miles upstream from mouth.		1970	10-27-70 8-16-71 9-15-71	1.67 2.10 1.56
Little Creek 02115810	Muddy Creek	Lat 36°02'19", long 80°20'46", Forsyth County, at bridge on Secondary Road 1120, 0.9 mile upstream from mouth, and 1.9 miles northeast of Clemmons.	6.81	1965-69	10- 9-70	*1.60
Muddy Creek 02115820	Yadkin River	Lat 36°01'28", long 80°21'16", Forsyth County, at bridge on U.S. Highway 158, 0.2 mile downstream from Little Creek, and 1.1 miles east of Clemmons.	105	1949-57, 1959, 1961-63, 1968, 1970	10-27-70 8-16-71 9-14-71	34.3 40.0 36.8

a Approximately.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Pee Dee River basin--Continued						
Salem Creek 02115826	Muddy Creek	Lat 36°06'58", long 80°05'37", Forsyth County, at Kernersville's water treatment plant upstream from sewage effluent outfall, 1.3 miles southwest of Kernersville, and 2.8 miles upstream from Kerners Mill Creek.		1970	10-26-70 8-16-71 9-15-71	0.12 .15 .16
Salem Creek 02115827	Muddy Creek	Lat 36°07'24", long 80°05'52", Forsyth County, 0.6 mile southwest of dam on Salem Creek tributary at end of Secondary Road 2650, 1.4 miles west of Kernersville, and 2.3 miles upstream from Kerners Mill Creek.		1970	10-26-70 8-16-71 9-15-71	.60 .80 .81
Salem Creek 02115852	Muddy Creek	Lat 36°03'18", long 80 17'09", Forsyth County, at bridge on Ebert Road, 0.6 mile upstream Burke Creek, 2.0 miles north of Five Points.	57.4	1970	10-27-70 8-13-71 9-14-71	19.0 26.9 16.8
Salem Creek 02115857	Muddy Creek	Lat 36°01'52", long 80°18'50", Forsyth County, at bridge on Secondary Road 1120, 3.0 miles upstream from mouth, and 5 miles southwest of Winston-Salem.	66.2	1968, 1970	10-27-70 8-13-71 9-14-71	47.3 69.6 61.7
Salem Creek 02115858	Muddy Creek	Lat 36°00'31", long 80°20'07", Forsyth County, at bridge on Secondary Road 2991, 0.5 mile upstream from mouth, and 2.2 miles northeast of Muddy Creek.	69.5	1968, 1970	10-27-70 8-13-71 9-14-71	50.6 68.5 62.5
Swain Creek 02115865	South Fork Muddy Creek	Lat 36°03'26", long 80°08'47", Forsyth County, at culvert on U.S. Highway 311, 0.1 mile upstream from mouth, and 1.6 miles northwest of Union Cross.		1970	10-26-70 8-19-71 9-15-71	.62 .83 .68
South Fork Muddy Creek 02115866	Muddy Creek	Lat 36°02'41", long 80°10'06", Forsyth County, at bridge on Secondary Road 2643, 0.3 mile upstream from Sawmill Branch, and 2.8 miles southeast of Easton View.	a4.1	1970	10-26-70 8-16-71 9-15-71	1.69 2.01 1.56
Leak Creek 02115888	South Fork Muddy Creek	Lat 36°00'00", long 80°14'59", Forsyth County, at culvert on Secondary Road 2931, 1.9 miles upstream from mouth, and 2.1 miles south of Union Ridge.		1970	10-26-70 8-13-71 9-14-71	.54 .92 .74
Dutchmans Creek 02117000	Yadkin River	Lat 35°55'20", long 80°30'13", Davie County, at bridge on Secondary Road 1600, 0.1 mile downstream from Cedar Creek, and 1.5 miles west of Cornatzer.	83.6	1940-42, 1970	11- 3-70 8-13-71	73.1 59.4
Elisha Creek tributary 02117009	Elisha Creek	Lat 36°54'31", long 80°32'58", Davie County, at culvert on Secondary Road 1400, 0.6 mile upstream from mouth, and 1.3 miles southwest of Maine.		1970	10-30-70 8-12-71	29.9 .60
Elisha Creek 02117010	Dutchmans Creek	Lat 35°54'31", long 80°32'58", Davie County, at bridge on Secondary Road 1403, 0.8 mile south of Maine, and 3.2 miles upstream from mouth.		1970	10-30-70 8-13-71	215 2.02
Elisha Creek 02117012	Dutchmans Creek	Lat 36°54'11", long 80°30'58", Davie County, at bridge on Secondary Road 1600, 1.2 miles upstream from mouth, and 2.8 miles northeast of Mocksville.	a8.7	1963, 1970	11- 3-70 8-13-71	5.68 2.19
Leonards Creek 02117013	Dutchmans Creek	Lat 35°52'39", long 80°30'37", Davie County, at culvert on U.S. Highway 64, 0.8 mile upstream from mouth, and 2.8 miles east of Mocksville.		1970	11- 3-70 8-12-71	4.11 6.74
Dutchmans Creek 02117022	Yadkin River	Lat 35°50'18", long 80°28'41", Davie County, at bridge on State Highway 801, 1.2 miles upstream from mouth, and 2.8 miles southwest of Fork.	a130	1970	11- 3-70 8- 12-71	91.1 132
South Yadkin River 02117068	Yadkin River	Lat 35°56'28", long 81°04'16", Alexander County, at bridge on Secondary Road 1461, 2.0 miles downstream from Mill Creek, and 3.0 miles southwest of Hiddenite.		1970	8-19-71 9-27-71	18.2 45.2
Wallace Creek tributary 02117085	Wallace Creek	Lat 35°55'18", long 81°06'24", Alexander County, at bridge on Secondary Road 1498, 0.8 mile upstream from mouth, and 1.6 miles northwest of Hiddenite.		1970	8-19-71 9-27-71	1.33 1.21
Greasy Creek 02117090	South Yadkin River	Lat 35°55'08", long 80°05'12", Alexander County, at bridge on Secondary Road 1001, 1.2 miles north of Hiddenite, and 2.2 miles upstream from mouth.	a15	1956, 1963, 1967-70	8-19-71 9-27-71	15.9 19.1
South Yadkin River 02117132	Yadkin River	Lat 35°53'50", long 81°03'24", Alexander County, at bridge on Secondary Road 1456, 1.2 miles downstream from Greasy Creek, and 2.0 miles east of Hiddenite.	a54	1963, 1970	8-19-71 9-27-71	56.0 78.6
South Yadkin River 02118251	Yadkin River	Lat 35°50'01", long 80°39'56", Davie County, at bridge on Secondary Road 1142, 2.0 miles upstream from Hunting Creek, and 4.0 miles Northwest of Cooleemee.	a320	1963, 1970	11- 5-70 8-11-71	223 151

a Approximately.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Pee Dee River basin--Continued				
Bear Creek 02118794	South Yadkin River	Lat 35°53'01", long 80°35'19", Davie County, at bridge on U.S. Highway 64, 1.0 mile southeast of Center, and 5.1 miles upstream from Baxter Creek.		1970	11- 5-70 8-12-71	6.60 6.68
Bear Creek 02118910	South Yadkin River	Lat 35°52'24", long 80°34'36", Davie County, at bridge on Secondary Road 1139, 1.5 miles southwest of Mocksville, and 4.5 miles upstream from mouth.	a23	1952-58, 1963, 1970	11- 5-70 8-12-71	8.09 8.06
South Yadkin River 02119000	Yadkin River	Lat 35°48'10", long 80°33'22", Davie County, at Cooleemee, upstream from State Highway 801, 2.5 miles upstream from Third Creek, and 7.2 miles upstream from mouth.	569	1928-65, 1970	11- 8-70 8-11-71	449 344
Third Creek 0211929010	South Yadkin River	Lat 35°53'12", long 81°05'04", Alexander County, at bridge on Secondary Road 1632, 1.3 miles southeast of Hiddenite, and 3.8 miles upstream from county line.	a3.2	1970	8-19-71 9-27-71	5.25 3.11
Third Creek 02119431	South Yadkin River	Lat 35°46'32", long 80°56'40", Iredell County, at bridge on U.S. Highway 64 and 70, 1.3 miles downstream from Interstate Highway 40 bridge, and 3.2 miles west of Statesville.		1970	8-19-71 9-27-71	40.1 18.9
Third Creek 02119435	South Yadkin River	Lat 35°44'45", long 80°55'18", Iredell County, at bridge on Secondary Road 1004, 3.5 miles north of Barium Springs, and 5.5 miles upstream from Duck Creek.	a29	1963-70	8-19-71 9-27-71	48.9 25.9
Third Creek 02119437	South Yadkin River	Lat 35°45'06", long 80°53'29", Iredell County, at bridge on State Highway 115, 1.7 miles upstream from Duck Creek, and 2.4 miles south of Statesville.		1970	8-17-71 9-27-71	41.5 33.4
Third Creek 02119438	South Yadkin River	Lat 35°44'54", long 80°52'39", Iredell County, at bridge on Secondary Road 2342, 2.4 miles upstream from Duck Creek, and 2.6 miles southeast of Statesville.			9-27-71	32.9
Third Creek 02119439	South Yadkin River	Lat 35°44'46", long 80°51'38", Iredell County, at bridge on Interstate Highway 77, 1.1 miles upstream from Duck Creek, and 3.2 miles southeast of Statesville.		1970	8-17-71 9-28-71	30.5 34.2
Morrison Creek tributary 02120605	Morrison Creek	Lat 35°48'20", long 80°54'26", Iredell County, at culvert on State Highway 115, 1.1 miles upstream from mouth, and 1.6 miles northwest of Statesville.		1970	8-17-71 9-28-71	1.37 1.44
Fourth Creek 02120606	South Yadkin River	Lat 35°48'14", long 80°51'42", Iredell County, at bridge on Interstate Highway 77, 1.2 miles downstream from Morrison Creek, and 2.1 miles northeast of Statesville.		1970	8-17-71 9-28-71	32.6 21.5
Fourth Creek 0212060645	South Yadkin River	Lat 35°47'22", long 80°50'00", Iredell County, at bridge on Secondary Road 2320, 3.2 miles east of Statesville, and 3.4 miles downstream from Morrison Creek.		1970	8-17-71 9-24-71	41.6 36.5
Fourth Creek 0212060665	South Yadkin River	Lat 35°46'34", long 80°47'45", Iredell County, at bridge on Secondary Road 2316, 2.3 miles south of Vance, and 5.9 miles downstream from Morrison Creek		1970	8-17-71 9-28-71	37.4 36.9
South Yadkin River 02120668	Yadkin River	Lat 35°46'49", long 80°30'24", Davie County, at bridge on U.S. Highway 601, 1.5 miles downstream from Third Creek, and 4 miles north of Franklin.	a760	1968-70	12- 4-70 2-17-71 6-17-71 9-14-71 9-15-71	458 1,240 996 743 475
Beaverdam Creek tributary 02120705	Beaverdam Creek	Lat 35°43'04", long 80°40'14", Rowan County, at culvert on Secondary Road 1741, 0.9 mile upstream from mouth, and 1.6 miles southeast of Cleveland.		1970	10-13-70 11- 6-70 9-16-71	e.04 .16 .02
Winthrow Creek 02120713	North Second Creek	Lat 35°42'27", long 80°38'32", Rowan County, at bridge on State Highway 801, 1.2 miles south of Barber, and 2.0 miles upstream from Second creek.		1956, 1963, 1970	11- 6-70	24.7
Back Creek 02120763	North Second Creek.	Lat 35°41'50", long 80°36'40", Rowan County, at bridge on Secondary Road 1526, 0.5 mile upstream from Withrow Creek, and 2.5 miles southeast of Barber.	a63	1970	11- 6-70 9-16-71	33.1 23.0
North Second Creek 02120780	South Yadkin River	Lat 35°43'05", long 80°35'45", Rowan County, at bridge on U.S. Highway 70, 1.2 miles downstream from Withrow Creek, and 2.8 miles east of Barber.	a120	1949-57, 1961-63, 1970	10-13-70 11- 6-70 9-16-71	22.0 54.0 44.6

a Approximately.
e Estimated.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Pee Dee basin--Continued				
Walnut Branch 02120784	North Second Creek	Lat 35°42'54", long 80°34'42", Rowan County, at culvert on U.S. Highway 70, 1.3 miles upstream from mouth, and 3.7 miles east of Barber.		1970	10-13-70 11- 6-70 9-16-71	0.34 .96 .27
South Branch Grants Creek 02120845	Grants Creek	Lat 35°33'46", long 80°37'18", Rowan County, at bridge on Secondary Road 1210, 1.4 miles north of Landis, and 3.4 miles upstream from North Branch Grants Creek.		1970	10- 6-70	.42
South Branch Grants Creek tributary 02120848	South Branch Grants Creek	Lat 35°33'34", long 80°35'14", Rowan County, at bridge on Secondary Road 1197, 0.4 mile upstream from mouth, and 1.2 miles northeast of Landis.		1970	10- 6-70 9-17-71	1.81 1.55
South Branch Grants Creek 02120852	Grants Creek	Lat 35°34'44", long 80°35'15", Rowan County, at culvert on State Highway 152, 0.8 mile northwest of China Grove, and 1.0 mile upstream from mouth.		1970	10- 6-70 9-17-71	1.75 2.33
Grants Creek 02120879	Yadkin River	Lat 35°35'28", long 80°34'37", Rowan County, at bridge on Secondary Road 1506, 0.2 mile upstream from Fork in Grants Creek, and 1.4 miles north of China Grove.		1970	10- 6-70 9-17-71	4.21 5.91
Grants Creek 02120881	Yadkin River	Lat 35°35'57", long 80°34'02", Rowan County, at bridge on Secondary Road 1505, 2 miles north of China Grove, and 15 miles upstream from mouth.		1970	10- 6-70 11- 6-70 9-17-71	4.39 9.97 6.46
Grants Creek tributary 02120891	Grants Creek	Lat 35°36'54", long 80°33'14", Rowan County, at bridge on Secondary Road 1500, 0.3 mile upstream from mouth, and 3.3 miles northeast of China Grove.		1970	10- 6-70 11- 5-70 9-17-71	.15 .50 .17
Grants Creek 02120898	Yadkin River	Lat 35°38'24", long 80°32'55", Rowan County, at bridge on Secondary Road 1516, 4.1 miles downstream from Grants Creek Fork, and 4.9 miles southwest of Salisbury.		1970	10- 6-70 11- 5-70 9-17-71	6.94 18.2 9.26
Grants Creek tributary No. 2 02120901	Grants Creek	Lat 35°38'21", long 80°31'39", Rowan County, at culvert on Secondary Road 1516, below sewage outfall from trailer part, 1.0 mile upstream from mouth, and 4.0 miles southwest of Salisbury.		1970	10- 6-70 11- 5-70 9-17-71	.04 .23 .09
Grants Creek 02120908	Yadkin River	Lat 35°38'29", long 80°30'58", Rowan County, at bridge on Secondary Road 1526, 1.0 mile northwest of Rowan Mills, and 8.2 miles upstream from mouth.		1970	10- 9-70 11- 5-70 9-17-71	7.95 23.1 9.76
Grants Creek 02120932	Yadkin River	Lat 35°41'45", long 80°28'54", Rowan County, at bridge on U.S. Highway 601, 2.1 miles north of Salisbury, and 4.8 miles upstream from mouth.		1970	10-13-70 11- 5-70 9-16-71	8.24 34.4 15.4
Grants Creek 02120971	Yadkin River	Lat 35°42'25", long 80°26'10", Rowan County, at bridge on Secondary Road 1915, 1.5 miles upstream from mouth, and 1.5 miles north of Spencer.	a67	1948, 1963, 1970	11- 5-70 9-16-71	44.1 19.9
North Potts Creek 02121181	High Rock Lake	Lat 35°45'07", long 80°19'17", Davidson County, at bridge on Secondary Road 1133, 0.4 mile southwest of Linwood, and 2.0 miles upstream from mouth.	10.0	1955, 1961-62	7- 9-71	4.10
Swearing Creek 02121301	High Rock Lake	Lat 35°50'13", long 80°17'28", Davidson County, at bridge on Secondary Road 1231, 0.8 mile upstream from Indian Grove Creek, and 2.2 miles west of Lexington.	a11	1952-53, 1955, 1957, 1961	10-10-70	*1.88
Swearing Creek 02121312	Yadkin River	Lat 35°49'40", long 80°17'47", Davidson County, at bridge on Secondary Road 1192, downstream from Indian Grave Creek, and 2 miles southwest of Jakesville.	a15	1962-63, 1970	11- 2-70 7- 9-71 8-31-71	9.86 6.18 4.37
Swearing Creek 02121326	Yadkin River	Lat 35°47'58", long 80°18'03", Davidson County, at bridge on Secondary Road 1147, downstream from Beaverdam Creek, 3.6 miles southeast of Reeds Crossroads.	a26	1970	11- 2-70 7- 9-71 8-31-71	17.0 10.7 6.29
Swearing Creek 02121332	Yadkin River	Lat 35°47'32", long 80°17'44", Davidson County, at bridge on U.S. Highway 29 North, 0.6 mile downstream from Beaverdam Creek, and 4.5 miles east of Tyro.	26.4	1970	11- 2-70 7- 9-71 8-31-71	17.2 11.9 7.51
Swearing Creek 02121360	Yadkin River	Lat 35°45'19", long 80°18'22", Davidson County, at bridge on Secondary Road 1130, 0.5 mile east of Linwood, and 2.0 miles upstream from mouth.	35.3	1948-57, 1961-63, 1970	11- 2-70 7- 8-71 7- 9-71 9-31-71	26.1 16.8 13.1 10.8

a Approximately.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Pee Dee River basin--Continued				
Sooky Creek 02121362	Swearing Creek	Lat 35°45'24", long 80°17'08", Davidson County, at culvert on Secondary Road 1323, 1.7 miles east of Linwood, and 2.1 miles upstream from mouth.		1970	7- 8-71 8-31-71	0.11 .13
Swearing Creek 02121365	Yadkin River	Lat 35°41'30", long 80°18'07", Davidson County, at bridge on Secondary Road 1104, 1.3 miles upstream from mouth, and 1.8 miles west of Feezor.		1970	11- 2-70 8-31-71	24.4 10.1
Crane Creek 02121368	Yadkin River	Lat 35°37'35", long 80°27'25", Rowan County, at bridge on Secondary Road 2300, 0.2 mile upstream from Southern Railway and 1 mile northwest of Granite Quarry.	a15	1970	10- 7-70 11- 2-70 6-28-71 8-30-71	.61 13.8 6.90 4.20
Crane Creek 02121370	Yadkin River	Lat 35°38'15", long 80°26'55", Rowan County, at bridge on U.S. Highway 52, 0.5 mile downstream from Southern Railway, and 2 miles north of Granite Quarry.	a17	1963-70	10- 7-70 11- 2-70 6-28-71 8-30-71	.85 15.6 9.62 6.05
Crane Creek 0212137045	Yadkin River	Lat 35°39'41", long 80°25'34", Rowan County, at bridge on Secondary Road 1002, 1.5 miles southeast of Spencer, and 3.0 miles upstream from mouth.		1970	10- 7-70 11- 5-70 6-28-71 8-30-71	.88 12.3 10.4 6.42
Town Creek 02121383	Yadkin River	Lat 35°40'43", long 80°24'58", Rowan County, at bridge on Secondary Road 1915, 1.4 miles southeast of Spencer, and 2.1 miles upstream from Crane Creek.		1970	10- 7-70 11- 2-70 6-29-71 8-30-71	.91 9.89 4.78 3.35
Town Creek 02121397	Crane Creek	Lat 35°41'10", long 80°24'15", Rowan County, at culvert on Interstate Highway 85, 0.5 mile upstream from mouth, and 2 miles east of Spencer.	a18	1970	10- 7-70 11- 5-70 6-28-71 8-30-71	4.70 11.5 11.0 7.74
Second Creek 02121408	Yadkin River	Lat 35°32'12", long 80°24'23", Rowan County, at bridge on Secondary Road 2337, 1.1 miles south of Rockwell, and 8.5 miles upstream from Reedy Creek.		1970	10- 7-70 11- 2-70 6-30-71 8-30-71	2.16 10.8 5.40 7.63
Second Creek 02121409	Yadkin River	Lat 35°32'17", long 80°23'34", Rowan County, at bridge on Secondary Road 2338, 1.4 miles southeast of Rockwell, and 7.7 miles upstream from Reedy Creek.		1970	10- 7-70 11- 2-70 6-30-71 8-30-71	2.80 21.6 7.61 8.91
Second Creek tributary 0212140945	Second Creek	Lat 35°30'51", long 80°23'35", Rowan County, at first bridge on Secondary Road 2340, 0.9 mile east of Rockwell, and 1.9 miles upstream from mouth.		1970	10- 7-70 11- 2-70 6-30-71 8-30-71	.15 .52 .41 .29
Second Creek tributary 0212140947	Second Creek	Lat 35°33'50", long 80°22'58", Rowan County, at bridge on Secondary Road 2369, 1.1 miles upstream from mouth, and 1.7 miles northeast of Rockwell.		1970	10- 7-70 11- 2-70 6-30-71 8-30-71	.16 .66 .50 .42
Abbotts Creek 0212141355	Yadkin River	Lat 36°06'36", long 80°04'29", Forsyth County, at bridge over sludge beds at Kernersville's Abbotts Creek waste treatment plant, 0.1 mile downstream from bridge on Interstage Highway 40, and 0.9 mile south of Kernersville.		1970	8-16-71 9-15-71	.12 .07
Abbotts Creek 02121414	Yadkin River	Lat 36°05'45", long 80°04'15", Forsyth County, at bridge on Secondary Road 2640, 0.8 mile downstream from sewage outfall, and 1.9 miles northeast of Mathis.	a1.4	1970	11- 5-70 8-16-71 9-15-71	2.32 1.01 1.08
Rich Fork 02121464	Abbotts Creek	Lat 35°59'36", long 80°03'18", Davidson County, at bridge on Secondary Road 1738, 1.4 miles downstream from county line, and 5.5 miles southeast of Union Cross.	a2.3	1963	10-10-70	*e.18
Rich Fork 02121468	Abbotts Creek	Lat 35°56'56", long 80°06'08", Davidson County, at bridge on Secondary Road 1755, 4.5 miles east of Wallburg, and 4.8 miles upstream from Hunts Fork.	9.83	1952-53, 1961-62, 1970	10-10-70 11- 3-70 7- 8-71 8-31-71 9-18-71	*e.38 3.53 3.12 1.07 1.01
Rich Fork 0212147355	Abbotts Creek	Lat 35°55'36", long 80°07'31", Davidson County, at bridge on Secondary Road 1800, 1.4 miles downstream from High Point sewage disposal plant, and 3.9 miles northwest of Thomasville		1970	11- 2-70 7- 8-71 8-31-71 9-16-71	12.0 13.3 4.75 6.93

a Approximately.
e Estimated.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Pee Dee River basin--Continued				
Hanks Branch 0212147515	Hunts Fork	Lat 35°54'27", long 80°02'30", Randolph County, at culvert on Secondary Road 1627, 3.8 miles upstream from mouth, and 4.5 miles southeast of Archdale.	a.6	1970	7- 9-71 8-31-71	0.05 .02
Hanks Branch 0212147555	Hunts Fork	Lat 36°05'36", long 80°04'29", Davidson County, at bridge on Secondary Road 1769, 2.2 miles northeast of Thomasville, and 3.1 miles upstream from mouth.		1970	11- 2-70 7- 8-71 8-31-71	.81 .48 .14
Hamby Creek 0212148335	Rich Fork	Lat 35°51'19", long 80°06'40", Davidson County, at bridge on Secondary Road 2085, 2.5 miles southwest of Thomasville, and 7.2 miles upstream from mouth.	a3.9	1970	11- 2-70 7- 8-71 8-31-71	1.45 1.14 .82
Hamby Creek 02121484	Rich Fork	Lat 35°50'50", long 80°06'50", Davidson County, 2.2 miles west of Fair Grove, and 6.5 miles upstream from mouth.	13.3	1970	11- 2-70 7- 8-71 8-31-71	11.2 9.09 6.25
Leonard Creek tributary 02121492	Leonard Creek	Lat 35°52'00", long 80°13'54", Davidson County, at bridge on Secondary Road 1841, 1.2 miles upstream from mouth, and 3.4 miles northeast of Lexington.	6.01	1955, 1957, 1961-62	10-10-70	*.95
Abbotts Creek 02121500	Yadkin River	Lat 35°48'23", long 80°14'05", Davidson County, upstream from bridge on Secondary Road 2205, 1.5 miles southeast of Lexington, and 4.9 miles downstream from Rich Fork.	174	1940-57, 1970	11- 2-70 7- 8-71 8-31-71	144 100 31.4
Yadkin River 02122500	Pee Dee River	Lat 35°35'46", long 80°13'59", Davidson County, 0.3 mile downstream from High Rock Dam, and 0.6 mile west of High Rock.	4,000	1919-27, 1941-62	4-23-70 7- 9-71	f6,650 6,900
Lick Creek tributary 02122525	Lick Creek	Lat 35°37'49", long 80°07'04", Davidson County, at bridge on Secondary Road 1002, 0.3 mile south of Denton, and 2.9 miles upstream from mouth.		1970	10-10-70 7- 9-71 7-21-71 8-30-71	.02 .04 .02 .04
Lick Creek tributary 02122526	Lick Creek	Lat 35°36'57", long 80°08'25", Davidson County, at bridge on Secondary Road 2505, 1.2 miles upstream from mouth, and 2.0 miles southwest of Denton.		1970	10-10-70 7- 9-71 7-21-71 8-30-71	.05 .16 .18 .34
Curltail Creek 02122629	Riles Creek	Lat 35°29'32", long 80°17'43", Stanly County, 75 ft upstream from sewage outfall at College Heights Waste Treatment Plant off Secondary Road 1599, 0.6 mile northwest of Misenheimer.			7- 7-71	.18
Curltail Creek 0212263155	Riles Creek	Lat 35°29'08", long 80°17'18", Stanly County, at bridge on Secondary Road 1500, 0.1 mile north of Misenheimer, and 4.9 miles upstream from Riles Creek.		1970	10-10-70 7- 7-71 7-17-71 7-20-71	0 .26 0 e.001
Curltail Creek 0212263161	Riles Creek	Lat 35°28'52", long 80°16'37", Stanly County, at end of Delight Lane, 0.7 mile southeast of Misenheimer, and 4.1 miles upstream from Riles Creek.		1970	10-10-70 7- 7-71 7-20-71	.02 .24 .04
Curltail Creek 0212263166	Riles Creek	Lat 35°28'32", long 80°15'16", Stanly County, at bridge on Secondary Road 1134, 0.2 mile downstream from State Highway 50, and 0.6 mile northeast of Richfield.			10- 9-70	.10
Toms Creek 02123419	Uwharrie River	Lat 35°37'39", long 80°05'22", Davidson County, at culvert on Secondary Road 2515, 1.4 miles east of Denton, and 11.8 miles upstream from mouth.		1970	10-10-70 7- 9-71 7-21-71 8-11-71 9-16-71	.07 .11 .02 .13 .06
Toms Creek 02123420	Uwharrie River	Lat 35°32'43", long 80°04'38", Davidson County, at bridge on Secondary Road 2517, 2.2 miles east of Denton, and 10.8 miles upstream from mouth.		1970	10-10-70	.04
Little Mountain Creek 02123629	Mountain Creek	Lat 35°24'00", long 80°07'24", Stanly County, at culvert on State Highway 740, 0.5 mile southwest of Badin, and 3.2 miles upstream from mouth.			10- 9-70	.12
Little Mountain Creek 02123631	Mountain Creek	Lat 35°22'51", long 80°06'44", Stanly County, at bridge on Secondary Road 1720, 1.6 miles upstream from mouth, and 1.7 miles south of Badin.		1970	9-17-71	4.46
Clarks Creek 02123772	Pee Dee River	Lat 35°14'08", long 80°01'21", Montgomery County, at bridge on State Highway 73, 1.8 miles northwest of Mount Gilead, and 3.5 miles upstream from mouth.	22.0	1955, 1961-62, 1969	10-11-70	0

a Approximately.
e Estimated.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Pee Dee River basin--Continued				
Clarks Creek 02123777	Pee Dee River	Lat 35°12'33", long 80°02'30", Montgomery County, at bridge on Secondary Road 1110, 1.6 miles upstream from mouth, and 12.2 miles southwest of Troy.	30.9	1970	10-10-70 9-17-71	0.55 4.39
Clarks Creek 02123781	Pee Dee River	Lat 35°12'19", long 80°03'23", Montgomery County, at Norfolk Southern Railroad bridge, 0.4 mile upstream from mouth, and 4 miles southeast of Norwood.	33.1		10-10-70 10-11-70 7-16-71	1.41 *1.84 25.8
Dye Branch 02123844	Rocky River	Lat 35°32'14", long 80°47'41", Iredell County, at culvert on Secondary Road 1147, 1.5 miles upstream from mouth, and 3.2 miles south of Mooresville.	a2.9	1970	8-17-71 9-28-71	13.4 8.17
Rocky River 02123881	Pee Dee River	Lat 35°28'28", long 80°46'47", Mecklenburg County, at bridge 1.3 miles upstream from West Branch, and 4.2 miles southeast of Davidson.	13.4	1970	10- 7-70 10- 7-70	10.2 9.08
South Prong West Branch Rocky River 02123932	West Branch Rocky River	Lat 35°28'23", long 80°49'02", Mecklenburg County, at bridge on State Highway 73, 1.7 miles upstream from mouth, and 2.4 miles east of Cornelius.	5.00	1969-70	10- 7-70 7-22-71	1.07 2.02
Rocky River 02123994	Pee Dee River	Lat 35°25'26", long 80°44'28", Cabarrus County, at bridge on Secondary Road 1449, 2.7 miles southwest of Deweese, and 3.1 miles upstream from Clarke Creek.			7-16-71	62.3
South Prong Clarke Creek 02124050	Clarke Creek	Lat 35°24'22", long 80°48'06", Mecklenburg County, at bridge on Secondary Road 2442, 0.9 mile upstream from mouth, and 2.2 miles east of Huntersville.		1969-70	10- 7-70 7-22-71	.60 1.82
Toby Creek 02124140	Mallard Creek	Lat 35°17'42", long 80°44'39", Mecklenburg County, at culvert on State Highway 49, 1.2 miles northwest of Newell, and 1.7 miles upstream from mouth.		1969-70	10- 7-70 7-16-71	.15 2.60
Mallard Creek 02124146	Rocky River	Lat 35°19'12", long 80°43'55", Mecklenburg County, at bridge on Secondary Road 2833, 0.2 mile downstream from Toby Creek, and 2.8 miles north of Newell.	26.4	1954-55, 1961-62	10- 9-70	*1.18
Stony Creek 0212414860	Mallard Creek	Lat 35°20'01", long 80°43'13", Mecklenburg County, at culvert on U.S. Highway 29, 0.2 mile upstream from mouth, and 3.9 miles north of Newell.		1969-70	10- 7-70 7-20-71	.001 1.12
Mallard Creek 0212414865	Rocky River	Lat 35°20'03", long 80°42'19", Mecklenburg County, 1.0 mile downstream from Stony Creek, 1.7 miles downstream from bridge on U.S. Highway 29, and 7.3 miles north of Charlotte.		1969	7-20-71	15.3
Mallard Creek 02124160	Rocky Creek	Lat 35°20'01", long 80°40'06", Cabarrus County, at bridge on Secondary Road 1300, 0.2 mile upstream from mouth, and 1.3 miles northwest of Harrisburg.	41.2	1955-65	7-16-71	54.0
Rocky River 0212418255	Pee Dee River	Lat 35°20'06", long 80°37'41", Cabarrus County, at bridge on Secondary Road 1304, 1.1 miles north of Harrisburg, and 1.7 miles downstream from Mallard Creek.		1970	7- 9-71	97.8
Back Creek 02124269	Rocky River	Lat 35°18'34", long 80°40'24", Cabarrus County, at bridge on Secondary Road 1173, 1.7 miles upstream from Fuda Creek.		1970	10- 7-70 7- 7-71	e.01 4.99
Back Creek 02124270	Rocky River	Lat 35°18'48", long 80°39'10", Cabarrus County, at bridge on Secondary Road 1166, 0.6 mile south of Harrisburg, and 1.8 miles upstream from Fuda Creek.		1970	10- 7-70 7- 8-71	e.02 7.90
Reedy Creek 0212430295	Rocky River	Lat 35°15'32", long 80°39'46", Mecklenburg County, at bridge on Secondary Road 2804, 3.3 miles upstream from McKee Creek, and 3.5 miles north of Wilgrove.		1969-70	10- 7-70 7-20-71	1.17 5.77
McKee Creek 02124306	Reedy Creek	Lat 35°14'24", long 80°39'00", Mecklenburg County, at bridge on Secondary Road 2808, 2.5 miles northeast of Wilgrove, and 4.1 miles upstream from mouth.		1969-70	10- 7-70 7-20-71	.14 .99
Rocky River 02124334	Pee Dee River	Lat 35°19'27", long 80°33'40", Cabarrus County, at bridge on Secondary Road 1132, 1.5 miles upstream from Irish Buffalo Creek, and 2.5 miles northeast of Rocky River.	276	1952-56, 1961-62	10-11-70 7-16-71	17.7 257
Irish Buffalo Creek tributary 0212433839	Irish Buffalo Creek	Lat 35°30'37", long 80°37'58", Rowan County, at bridge on Secondary Road 1100, 0.9 mile upstream from mouth, and 1.0 mile northwest of Kannapolis.		1970	10- 6-70 7- 7-71 8-20-71	2.60 2.76 2.74

a Approximately.
e Estimated.

Discharge measurements made at miscellaneous sites dur ng water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Pee Dee River basin--Continued						
Irish Buffalo Creek tributary 0212433843	Irish Buffalo Creek	Lat 35°30'34", long 80°38'49", Rowan County, at bridge on Secondary Road 1109, 50 yards upstream from mouth, and 1.4 miles northwest of Kannapolis.		1970	7- 7-71 8-20-71	10.5 21.1
Irish Buffalo Creek 0212433845	Rocky River	Lat 35°30'30", long 80°38'54", Rowan County, 0.1 mile downstream from Irish Buffalo Creek tributary, and 1.4 miles northwest of Kannapolis.		1970	10- 6-70 7- 7-71 8-20-71	17.5 23.8 21.4
Irish Buffalo Creek 0212434059	Rocky River	Lat 35°29'16", long 80°39'13", Cabarrus County, at bridge on Secondary Road 1609, 1.8 miles downstream from Buffalo Creek tributary, and 1.8 miles west of Kannapolis.		1970	10- 6-70 7- 7-71 8-20-71	18.1 26.4 21.5
Irish Buffalo Creek 02124341	Rocky River	Lat 35°29'15", long 80°39'12", Cabarrus County, at bridge on Secondary Road 1609 on Pine Street, 2 miles southwest of Kannapolis, and 13 miles upstream from mouth.	15.7	1970	10- 6-70 7- 7-71 8-20-71	18.7 41.4 25.3
Irish Buffalo Creek 02124357	Rocky River	Lat 35°24'52", long 80°36'46", Cabarrus County, at bridge on Secondary Road 1394, 2.0 miles west of Concord, and 8.1 miles upstream from mouth.		1970	10- 6-70 7- 7-71 8-20-71	20.4 30.2 30.3
Irish Buffalo Creek 02124366	Rocky River	Lat 35°22'15", long 80°33'50", Cabarrus County, at bridge on N. C. Highway 49, 2.8 miles southeast of courthouse in Concord, and 4.5 miles upstream from mouth.	40.3	1970	10- 6-70 7- 8-71 8-20-71	16.3 37.9 30.4
Irish Buffalo Creek 02124368	Rocky River	Lat 35°21'49", long 80°33'25", Cabarrus County, on Secondary Road 1153, 2.7 miles upstream from mouth, and 3 miles southeast of Concord.	42.2	1970	10- 6-70 10- 8-70 7- 7-71 8-20-71	33.3 32.6 43.4 33.3
Rocky River 02124401	Pee Dee River	Lat 35°19'26", long 81°30'59", Cabarrus County, at bridge on U.S. Highway 601, 1.0 mile upstream from Hamby Branch, and 3 miles southeast of Faggarts Crossroads.	390	1970	10- 7-70 7- 9-71	72.6 281
Dutch Buffalo Creek 02124500	Rocky River	Lat 35°23'45", long 80°25'00", Cabarrus County, at bridge on State Highway 73, 1 mile east of Mount Pleasant, 1.8 miles downstream from Little Buffalo Creek.	64.1	1940-42, 1970	10- 7-70 7- 8-71	2.74 14.6
Clear Creek 02124660	Rocky River	Lat 35°12'29", long 80°34'48", Mecklenburg County, at bridge on Secondary Road 3181, 4.3 miles northeast of Mint Hill, and 7.1 miles upstream from mouth.		1969-70	10- 8-70 7-20-71	.67 3.53
Goose Creek 02124675	Rocky River	Lat 35°07'48", long 80°37'51", Union County, at bridge on Secondary Road 1524, 0.8 mile downstream from Stevens Creek, and 3.6 miles south of Mint Hill		1969-70	10- 8-70 7-20-71	1.03 4.84
Rock Hole Creek 02124773	Rocky River	Lat 35°12'58", long 80°26'34", Stanly County, at bridge on Secondary Road 1147, 2.0 miles southwest of Stanfield, and 4.0 miles upstream from mouth.		1970	10- 9-70 7- 6-71 7-19-71 9- 2-71	.01 1.88 1.53 .98
Rock Hole Creek 02124776	Rocky River	Lat 35°12'12", long 80°26'00", Stanly County, at bridge on Secondary Road 1001, 3.0 miles upstream from mouth, and 2.2 miles south of Stanfield.	a6.6	1970	10 -9-70 7- 6-71 7-19-71 9- 2-71	0 3.53 2.63 1.90
Rocky River 02124781	Pee Dee River	Lat 35°09'49", long 80°23'43", Stanly County, at bridge on State Highway 200, 0.5 mile downstream from Rock Hole Creek, and 5.0 miles southeast of Stanfield.			7-22-71 9- 2-71	207 199
Rocky River 02124798	Pee Dee River	Lat 35°10'00", long 80°20'31", Stanly County, at bridge on State Highway 205, 2.3 miles downstream from Island Creek, and 3.9 miles southwest of Oakboro.			7-22-71	198
Rocky River 02124813	Pee Dee River	Lat 35°11'42", long 80°16'48", Stanly County, at bridge on Secondary Road 1970, 1.9 miles upstream from Long Creek, and 3.5 miles southeast of Oakboro.	757	1970	10-20-70 7- 6-71 7-19-71 9- 2-71	71.3 248 221 178
Long Creek 02124841	Rocky River	Lat 35°19'55", long 80°12'45", Stanly County, upstream from Little Long Creek, and 1.5 miles southwest of Albemarle Post Office	33.1	1970	10- 9-70 7- 6-71 7-20-71 9- 2-71	.07 11.8 8.56 4.43
Little Long Creek 02124869	Long Creek	Lat 35°20'13", long 80°12'38", Stanly County, at bridge on Secondary Road 1903, 0.4 mile upstream from mouth, and 1.2 miles southwest of Albemarle.		1970	10- 9-70 7- 6-71 7-20-71 9- 2-71	.59 7.45 4.30 4.56

a Approximately.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Pee Dee River basin--Continued				
Long Creek 02124908	Rocky River	Lat 35°16'57", long 80°14'52", Stanly County, at bridge on Secondary Road 1967, 2 miles upstream from Little Bear Creek, and 2.2 miles south of Hills.	a72	1970	10- 9-70 7- 6-71 7-20-71 9- 2-71	8.13 24.7 26.2 23.3
Little Bear Creek 02124941	Long Creek	Lat 35°18'20", long 80°16'25", Stanly County, at bridge on State Highway 27, 1 mile southwest of Hills, and 3.6 miles upstream from mouth.	6.99	1970	10- 9-70 7- 6-71 7-20-71 9- 2-71	0 3.25 1.06 1.53
Little Bear Creek 02124944	Long Creek	Lat 35°16'02", long 80°16'04", Stanly County, at bridge on Secondary Road 1968, 0.4 mile northeast of Saint Martin, and 0.6 miles upstream from mouth.	12.5	1961-62, 1970	10- 9-70 7- 6-71 7-20-71 9- 2-71	.20 2.79 1.45 1.78
Stony Run tributary 02125091	Stony Run	Lat 35°14'54", long 80°18'45", Stanly County, at bridge on Secondary Road 1975, 0.1 mile upstream from mouth, and 2.0 miles north of Oakboro.		1970	10- 9-70 7- 6-71 7-19-71 9- 2-71	.30 .15 .42 .33
Long Creek 02125126	Rocky River	Lat 35°13'05", long 80°15'28", Stanly County, at bridge on Secondary Road 1917, 1 mile upstream from mouth, and 4 miles east of Oakboro.	198	1970	10- 9-70 7- 1-71 7-19-71 9- 2-71	12.8 47.5 18.8 32.2
Rocky River 02125139	Pee Dee River	Lat 35°10'09", long 80°14'30", Stanly County, at end of Secondary Road 1944, 2.7 miles downstream from Long Creek, and 3.8 miles southwest of Aquadale.			7-22-71	332
Richardson Creek 02125183	Rocky River	Lat 34°57'53", long 80°30'58", Union County, at Boat Landing on south bank of Lake Monroe, 0.1 mile upstream from Monroe Lake Dam, and 2.5 miles southeast of Monroe.			10- 8-70	.24
Richardson Creek 02125247	Rocky River	Lat 34°59'24", long 80°30'36", Union County, at bridge on Secondary Road 1751, 0.1 mile downstream from Bearskin Creek, and 2.e miles east of Monroe.		1970	10- 8-70 6-30-71	.41 3.32
Richardson Creek 02125310	Rocky River	Lat 35°01'58", long 80°28'20", Union County, at bridge on Secondary Road 1006, 0.5 mile upstream from Stewarts Creek, and 13.5 miles north of Wingate.	a98	1953-54, 1956-58, 1970	10- 8-70 6-30-71	3.24 11.0
Meadow Branch 02125462	Richardson Creek	Lat 35°00'25", long 80°26'54", Union County, at bridge on Secondary Road 1751, 1.6 miles north of Wingate, and 2.6 miles upstream from mouth.	a4.1	1970	10- 8-70 6-30-71	0 1.53
Meadow Branch 02125464	Richardson Creek	Lat 35°01'53", long 80°27'07", Union County, at bridge on Secondary Road 1006, 1 mile upstream from mouth, and 2.3 miles north of Wingate.	6.6	1970	10- 8-70 6-30-71	.29 3.84
Niggerhead Creek 02125538	Richardson Creek	Lat 34°59'09", long 80°24'14", Union County, at bridge on U.S. Highway 74, 2.0 miles west of Marshville, and 9.5 miles upstream from mouth.	a1.2	1954, 1961, 1970	10- 8-70 6-30-71	0 0
Niggerhead Creek 0212553855	Richardson Creek	Lat 34°59'51", long 80°23'35", Union County, at bridge on Secondary Road 1751, 1.4 miles northwest of Marshville, and 8.5 miles upstream from mouth.		1970	10- 8-70 6-30-71	.49 .60
Niggerhead Creek 02125543	Richardson Creek	Lat 35°00'52", long 80°22'34", Union County, at bridge on State Highway 205, 1.9 miles north of Marshville, and 6.3 miles upstream from mouth.		1970	10- 8-70 7- 1-71	.41 .99
Niggerhead Creek 02125546	Richardson Creek	Lat 35°02'37", long 80°21'56", Union County, at bridge on Secondary Road 1002, 1.2 miles west of Hamilton, and 4.5 miles upstream from mouth.	a15	1953, 1970	7- 1-71	1.57
Niggerhead Creek 02125549	Richardson Creek	Lat 35°04'25", long 80°22'14", Union County, at bridge on Secondary Road 1006, 1.6 miles northeast of Fairfield, and 2.2 miles upstream from mouth.	a24	1961-62, 1970	10- 9-70 7- 1-71	.06 1.93
Beaverdam Creek 02125771	Lanes Creek	Lat 34°57'15", long 80°21'11", Union County, at bridge on Secondary Road 1005, 2.5 miles upstream from mouth, and 2.5 miles south of Marshville.	a15	1953, 1961-62	10-11-70	*.02
Lanes Creek 02125812	Rocky River	Lat 34°58'08", long 80°18'44", Union County, at end of Secondary Road 1900, 0.1 mile downstream from Beaverdam Creek, and 3.7 miles southeast of Marshville.		1970	10-20-70 7- 1-71	.05 29.7

a Approximately.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Pee Dee River basin--Continued				
Lick Branch 02125813	Lanes Creek	Lat 34°58'42", long 80°14'18", Union County, at bridge on Secondary Road 1901, 0.9 mile upstream from mouth, and 3.0 miles southeast of Marshville.		1970	10-20-70 7- 1-71	0.11 .05
Hardy Creek tributary 02126088	Hardy Creek	Lat 35°12'53", long 80°12'27", Stanly County, at culvert on Secondary Road 1940, 1.1 miles southeast of Aquadale, and 3.1 miles upstream from mouth.		1970	10-22-70 7- 1-71 7-19-71 9- 2-71	0 .03 0 .04
Hardy Creek tributary 02126091	Hardy Creek	Lat 35°12'13", long 80°11'09", Stanly County, at bridge on Secondary Road 1918, 0.8 mile north of Cottonville, and 1.5 miles upstream from mouth.	a3.4	1970	10-22-70 7- 1-71 7-19-71 9- 2-71	0 .04 e.002 .17
Little River 02127613	Pee Dee River	Lat 35°33'22", long 79°50'43", Randolph County, at bridge on Secondary Road 1127, 0.1 mile downstream from Reedy Creek, and 1.5 miles east of Pisgah.	24.7	1961-63	10-13-70	*.50
Dumas Creek 02128024	Densons Creek	Lat 35°23'41", long 79°52'58", Montgomery County, at mouth, and 2.6 miles north of Troy.	14.6	1969	10-11-70	*.03
Densons Creek 02128025	Little River	Lat 35°23'32", long 79°52'38", Montgomery County, at bridge on Secondary Road 1312, 0.4 mile downstream from Dumas Creek, and 2.5 mi miles north of Troy.	26.4	1961-62 1964-67, 1969-70	10-22-70 7- 7-71 9-10-71	1.25 8.32 5.08
Blake Branch 02128032	Densons Creek	Lat 35°22'24", long 79°51'51", Montgomery County, at bridge on Secondary Road 1324, 0.3 mile upstream from mouth, and 1.9 miles northeast of Troy.	1.41	1963, 1969-70	10-22-70 7- 7-71 9-10-71	.28 .34 *.18
Densons Creek 0212803281	Little River	Lat 35°21'50", long 79°51'08", Montgomery County, at bridge on small dirt road off Secondary Road 1324, 0.4 mile upstream from mouth, and 2.5 miles east of Troy.		1970	10-22-70 7- 7-71 9-10-71	.81 12.7 *5.84
Big Mountain Creek 02128441	Mountain Creek	Lat 35°10'31", long 79°47'03", Richmond County, at bridge on Secondary Road 1153, 0.1 mile upstream from Silver Creek, and 3.5 miles west of Norman.	15.6	1959, 1962, 1969	10- 9-70	*3.10
Tom Branch 02128555	Little Mountain Creek	Lat 35°05'16", long 79°47'24", Richmond County, at culvert on Secondary Road 1310, 1.4 miles upstream from mouth, and 1.9 miles northwest of Ellerbe.		1970	10-21-70 7- 2-71 9-10-71	1.09 .83 *.56
Smith Creek 02128676	Pee Dee River	Lat 34°58'29", long 79°59'08", Anson County, at culvert on road to Lilesville northwest waste treatment plant, 0.5 mile north of Lilesville, and 4.6 miles upstream from Blewett Falls Lake.		1970	10-21-70 7- 1-71 9- 9-71	.07 .09 *.15
Smith Creek 02128677	Pee Dee River	Lat 34°58'36", long 79°58'53", Anson County, 300 ft downstream from effluent outfall from Lilesville's northwest waste treatment plant, 0.7 mile northeast of Lilesville, and 4.3 miles upstream from Blewett Falls Lake.		1970	10-21-70 7- 1-71 9- 9-71	..07 .18 *e.15
Hitchcock Creek 02129121	Pee Dee River	Lat 34°58'12", long 79°44'39", Richmond County, at bridge on Secondary Road 1424, at Roberdell, and 2.9 miles downstream from Ledbetter Lake.	90.9	1970	10-21-70 7- 2-71 9- 9-71	41.9 65.6 *54.9
Hitchock Creek 02129159	Pee Dee River	Lat 34°56'55", long 79°46'21", Richmond County, at bridge on Secondary Road 1419, 0.2 mile upstream from Steely Creek, and 0.6 mile north of Rockingham.		1970	10-21-70 7- 2-71 9- 9-71	64.4 68.0 *56.7
Hitchock Creek 02129181	Pee Dee River	Lat 34°56'37", long 79°46'36", Richmond County. at railroad bridge, 0.2 mile north of Rockingham, and 0.3 mile downstream from Steely Branch.	104	1970	10-21-70 7- 2-71 9- 9-71	65.3 32.1 *57.1
South Fork Falling Creek 02129298	Hitchcock Creek	Lat 34°55'13", long 79°45'39", Richmond County, at culvert on Secondary Road 1650, 1.2 miles upstream from mouth, and 1.5 miles southeast of Rockingham.		1970	10-21-70 7- 2-71 9- 9-71	8.70 10.8 8.87
Hitchcock Creek 02129341	Pee Dee River	Lat 34°55'05", long 79°49'50", Richmond County, downstream from dam at Cordova, and 1.2 miles upstream from mouth.	140	1970	10-21-70 7- 2-71 9- 9-71	69.9 99.3 *84.1
Brush Fork 0212950877	Bailey Creek	Lat 34°57'28", long 80°03'34", Anson County, at culvert on U. S. Highway 52, 1.1 miles upstream from Derita Creek, and 1.2 miles southeast of Wadesboro.		1970	10-20-70 7- 1-71 9- 9-71	.33 .27 *.29

a Approximately.
e Estimated.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Pee Dee River basin--Continued						
Brush Fork 02129509	Bailey Creek	Lat 34°57'00", long 80°02'50", Anson County, at Wade Mills sewage effluent outfall, 0.4 mile upstream from Derita Creek, 1.7 miles east of Wadesboro Post Office.	3.01	1970	10-21-70 7- 1-71 9- 9-71	3.45 3.97 3.44
Reedy Fork tributary 0212951250	Reedy Fork	Lat 34°57'47", long 80°00'14", Anson County, at culvert on U.S. Highway 74, 0.9 mile southwest of Lilesville, and 1.0 mile upstream from mouth.		1970	10-21-70	.40
Mill Creek tributary 02129537	Mill Creek	Lat 34°51'12", long 79°59'31", Anson County, at culvert on Secondary Road 1831, 0.9 mile south of Morven, and 1.2 miles upstream from mouth.		1970	10-20-70 7- 1-71 9- 9-71	1.19 .65 *1.03
Marks Creek 0212955645	Pee Dee River	Lat 34°53'37", long 79°40'42", Richmond County, at bridge on Secondary Road 1608, 100 ft downstream from Boyd Lake, and 1.4 miles east of Hamlet.		1970	10-21-70 7- 2-71 9- 9-71	2.03 2.67 *2.63
Marks Creek 0212955655	Pee Dee River	Lat 34°53'07", long 79°41'27", Richmond County, at end of pier behine VFW Post on Secondary Road 1608, 0.2 mile upstream from Spillway on City Lake, and 0.8 mile southeast of Hamlet.		1970	10-21-70 7- 2-71 9- 9-71	10.0 5.43 *7.11
Marks Creek 0212955666	Pee Dee River	Lat 34°52'30", long 79°41'46", Richmond County, at bridge on Secondary Road 1615, 0.3 mile downstream from City Lake spillway, and 0.9 mile southeast of Hamlet.		1970	10-21-70 7- 2-71 9- 9-71	5.79 4.60 *7.65
Marks Creek 0212955844	Pee Dee River	Lat 34°51'45", long 79°43'09", Richmond County, at bridge on Secondary Road 1812, 1.3 miles downstream from City Lake spillway, and 2.4 miles southwest of Hamlet.		1970	10-21-70 7- 2-71 9- 9-71	12.5 10.6 *12.8
Joes Creek 02132214	Gum Swamp Creek	Lat 34°42'27", long 79°32'51", Scotland County, at bridge on Secondary Road 1128, 0.3 mile upstream from mouth, and 1.8 miles north of Masons Crossroads.	34.3	1959, 1962, 1968	10-10-70	*23.7
Maxton Branch 02132326	Big Shoe Heel Creek	Lat 34°44'33", long 79°21'04", Robeson County, at culvert on U.S. Highway 74, at Maxton, and 1.5 miles upstream from mouth.	a1.4	1959, 1962, 1968	10-10-70	*.14
Drowning Creek 02132838	Lumber River	Lat 35°16'49", long 79°42'32", Montgomery County, at bridge on Secondary Road 1514, 1.0 mile downstream from Norfolk and Southern Railroad, and 2.0 miles east of Candor.	a.7	1959, 1962, 1968	10-11-70	*1.41
Aberdeen Creek 02133504	Drowning Creek	Lat 35°10'36", long 79°26'21", Moore County, at bridge on Secondary Road 1205, 2.2 miles southeast of Pinehurst, and 3.5 miles upstream from Rays Mill Creek.	3.91	1959-60, 1962, 1968,	10- 9-70	*1.50
Aberdeen Creek tributary 02133533	Aberdeen Creek	Lat 35°07'36", long 79°25'42", Moore County, at culvert on private road, 0.2 mile upstream from mouth, and 0.3 mile south of Aberdeen.	.84	1959, 1962	10- 9-70	*.46
Mountain Creek 02133604	Drowning Creek	Lat 35°00'51", long 79°23'26", Hoke County, at bridge on Secondary Road 1215, 2.1 miles upstream from mouth, and 3.7 miles southwest of Montrose.	9.97	1954, 1959, 1962, 1968	10-11-70	*5.59
Big Swamp 02134488	Lumber River	Lat 34°34'30", long 78°51'27", Bladen County, at bridge on State Highway 211, 2.5 miles upstream from Peter Swamp, and 4.8 miles northwest of Bladenboro.	a380	1959-60, 1962, 1968	10-10-70	*28.0
Santee River basin						
Catawba River 02136500	Santee River	Lat 35°37'29", long 82°10'28", McDowell County, at bridge on Secondary Road 1103, 0.5 mile upstream from Mill Creek, and 0.5 mile south of Old Fort.	13.9	1907, 1949-54, 1956, 1963-64, 1970	10- 6-70 7-20-71 9- 3-71	7.64 12.7 9.04
Catawba River tributary No. 2 02137345	Catawba River	Lat 35°37'46", long 82°10'08", McDowell County, at culvert on Interstate Highway 40, upstream from mouth and at Old Fort.		1970	9- 3-71	5.16
Catawba River 02137348	Santee River	Lat 35°38'06", long 82°09'48", McDowell County, at garbage dump on Secondary Road 1234, 0.4 mile upstream from Curtis Creek, and 1.1 miles northeast of Old Fort.			6- 2-71 7-20-71 7-29-71 9- 3-71	47.6 33.9 62.4 26.7

a Approximately.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Santee River basin--Continued						
Curtis Creek 02137460	Catawba River	Lat 35°38'43", long 82°09'31", McDowell County, at bridge on U.S. Highway 70, 0.7 mile upstream from mouth, and 1.7 miles northeast of Old Fort.	a17	1930-31, 1949-54, 1956, 1963-64 1970	10- 6-70 9- 3-71	8.30 16.4
Curtis Creek 02137465	Catawba River	Lat 35°38'18", long 82°09'30", McDowell County, at bridge on Interstate Highway 40, 0.2 mile upstream from mouth, and 1.5 miles northeast of Old Fort.		1970	10- 6-70 9- 3-71	9.00 16.7
Jake Creek 02137723	Catawba River	Lat 35°40'48", long 82°04'00", McDowell County, at culvert on Secondary Road 1214, 0.4 mile upstream from mouth, and 0.8 mile southeast of Pleasant Gardens.		1970	6-28-71 7-20-71 9- 2-71	.82 .97 .73
Catawba River 02137727	Santee River	Lat 35°41'09", long 82°03'40", McDowell County, at bridge on Secondary Road 1221, 0.8 mile upstream from Buck Creek, and 0.8 mile south east of Pleasant Gardens.	127	1963, 1970	7-29-71	73.7
North Fork Catawba River 02138051	Catawba River	Lat 35°48'04", long 82°01'07", McDowell County, at bridge on Secondary Road 1560, at Sevier, and 0.8 mile upstream from Armstrong Creek.	a44	1963, 1970	7-29-71 9- 2-71	71.3 33.5
Armstrong Creek 02138070	North Fork Catawba River	Lat 35°47'38", long 82°01'14", McDowell County, at bridge on Secondary Road 1556, upstream from mouth, and 0.7 mile southwest of Sevier.	a30	1956-63, 1970	7-29-71 9- 2-71	27.2 30.7
Limekiln Creek 02138092	North Fork Catawba River	Lat 35°47'29", long 82°01'28", McDowell County, at bridge on Secondary Road 1556, 0.3 mile upstream from mouth, and 0.9 mile southwest of Sevier.	a3.8	1970	7-28-71 9- 2-71	1.83 1.35
Limekiln Creek 02138095	North Fork Catawba River	Lat 35°47'35", long 82°01'08", McDowell County, at bridge on Secondary Road 1559, at mouth and at Sevier.		1970	7-29-71 7-30-71 9- 2-71	8.93 5.47 6.02
North Fork Catawba River 02138103	Catawba River	Lat 35°47'31", long 82°00'56", McDowell County, 0.2 mile downstream from Limekiln Creek, and 0.8 mile south of Sevier.	a79	1970	7-30-71	79.3
Catawba River tributary No. 3 02138138	Catawba River	Lat 35°41'33", long 81°59'34", McDowell County, at culvert on U.S. Highway 70, at Marion, and 2.1 miles upstream from mouth.		1970	7-30-71	.58
Catawba River tributary 02138139	Catawba River	Lat 35°42'27", long 81°59'49", McDowell County, 0.2 mile downstream from sewage treatment plant, 0.9 mile upstream from mouth, and 1.6 miles northeast of Marion.		1970	6-28-71 7-20-71 7-30-71	.91 .98 1.11
Linville River 02138288	Catawba River	Lat 36°04'22", long 81°52'14", Avery County, at culvert on State Highway 105, at Linveille, and 1.8 miles upstream from Grandmother Creek.		1970	6-29-71 7-21-71 7-29-71 9- 1-71	5.22 6.34 69.9 5.20
Linville River 02138293	Catawba River	Lat 36°04'16", long 81°52'34", Avery County, at bridge on Secondary Road 1349, at Linville, and 1.6 miles upstream from Grandmother Creek.		1970	6-29-71 7-21-71 7-29-71 8-13-71 9- 1-71	9.23 10.7 64.6 23.9 9.16
Stacey Creek 0213829666	Linville River	Lat 36°00'29", long 81°53'39", Avery County, at culvert at entrance to P. H. Hanes Knitting Co. on State Highway 181, 0.3 mile upstream from mouth, and 1.4 miles south of Pineola.		1970	6-29-71 7-29-71 9- 1-71	1.89 7.58 e.04
Linville River 02138306	Catawba River	Lat 36°01'44", long 81°53'47", Avery County, at bridge on U.S. Highway 221, at Pineola, and 0.7 mile downstream from Anthony Creek		1970	6-28-71 7-21-71 7-29-71 9- 1-71	27.8 13.0 38.9 20.3
Stacey Creek tributary 02138312	Stacey Creek	Lat 36°00'22", long 81°53'33", Avery County, at culvert on State Highway 181, upstream from mouth, and 1.5 miles south of Pineola.		1970	6-29-71 7-29-71 9- 1-71	.77 2.56 .93
Mill Timber Creek 02138340	Linville River	Lat 36°01'17", long 81°55'14", Avery County, at bridge on Secondary Road 1524, at Crossnore, and 0.7 mile upstream from mouth.	4.01	1970	7-21-71 7-29-71 8-13-71	10.2 33.1 9.92
Mill Timber Creek 02138439	Linville River	Lat 36°00'55", long 81°55'35", Avery County, at mouth, at Crossnore, and 0.4 mile downstream from Clark Branch.		1970	8-13-71 9- 1-71	10.0 6.50

a Approximately.
e Estimated.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Santee River basin--Continued						
Linville River 02138443	Catawba River	Lat 36°00'13", long 81°56'09", Avery County, at bridge on Secondary Road 1536, 0.1 mile upstream from Bill White Creek, and 1.3 miles south of Crossnore.		1970	6-28-71	37.9
					7-21-71	31.1
					7-29-71	302
					9- 1-71	27.0
North Muddy Creek 02138606	Muddy Creek	Lat 35°38'10", long 81°57'22", McDowell County, at bridge on Secondary Road 1796, 0.8 mile upstream from Bobs Creek, and 4.5 miles southeast of Marion.		1970	6-29-71	20.0
					7-20-71	18.3
					7-30-71	29.9
					9- 2-71	21.3
Youngs Fork Creek 02138645	North Muddy Creek	Lat 35°39'14", long 81°57'48", McDowell County, at bridge on private road, 0.3 mile upstream from Jacktown Creek, and 1.0 mile southeast of Jacktown.		1970	7-30-71	7.41
					9- 2-71	6.98
Youngs Fork Creek 02138671	North Muddy Creek	Lat 35°38'48", long 81°57'16", McDowell County, at bridge on Secondary Road 1794, 1.1 miles upstream from mouth, and 4.1 miles southeast of Marion.	8.11	1970	7-30-71	12.4
					9- 2-71	10.8
North Muddy Creek 02138674	Muddy Creek	Lat 35°38'41", long 81°56'27", McDowell County, at bridge on State Highway 226, downstream from Youngs Fork Creek, and 4.8 miles southeast of Marion.		1970	7-30-71	43.0
					9- 2-71	32.5
North Muddy Creek 02138720	Muddy Creek	Lat 35°40'30", long 81°54'25", McDowell County, at bridge on Secondary Road 1747, 1.9 miles downstream from Caleb Branch, and 3.2 miles southeast of Nebo.	44.6	1970	6-29-71	48.0
					7-20-71	41.7
					7-30-71	52.9
					9- 2-71	46.8
Silver Creek 02139256	Catawba River	Lat 35°44'09", long 81°42'45", Burke County, at bridge on U.S. Highway 70, 0.5 mile upstream from mouth, and 1 mile west of Morganton.	68.6	1955, 1970	6-29-71	55.6
					7-20-71	48.9
					7-27-71	62.1
Catawba River 02139282	Santee River	Lat 35°44'58", long 81°42'20", Burke County, at bridge on State Highway 181, 0.8 mile downstream from Silver Creek, 1 mile northwest of Morganton.	593	1968, 1970	3-29-71	531
					9-15-71	2,550
Hunting Creek 02139801	Catawba River	Lat 35°45'35", long 81°39'19", Burke County, at bridge on Secondary Road 1512, 2.1 miles northeast of Morganton, and 2.2 miles upstream from mouth.	23.5	1970	6-30-71	20.9
					7-20-71	21.5
					7-27-71	24.6
					9- 2-71	25.3
Hunting Creek 02139806	Catawba River	Lat 35°46'02", long 81°39'41", Burke County, at bridge on Secondary Road 1571, 1.1 miles upstream from mouth, and 2.1 miles northeast of Morganton.		1970	6-30-71	27.1
					7-27-71	35.6
					9- 2-71	31.9
Lower Creek 02141150	Catawba River	Lat 35°54'20", long 81°31'59", Caldwell County, at bridge on Mulberry Street, 0.2 mile downstream from Zacks Fork Creek, and 0.8 mile southeast of Courthouse in Lenoir.	a32		5-28-70	8.90
					6-23-70	7.39
					6-30-71	10.5
					7-22-71	8.45
					7-27-71	9.26
					9- 3-71	8.41
Lower Creek 02141188	Catawba River	Lat 35°53'42", long 81°33'39", Caldwell County, at bridge on Secondary Road 1188, downstream from Blair Fork, and 1.8 miles southwest of Courthouse in Lenoir.		1970	6-30-71	31.6
					7-22-71	28.0
					7-29-71	27.9
					9- 3-71	24.8
Lower Creek 02141214	Catawba River	Lat 35°51'52", long 81°35'38", Caldwell County, at bridge on Secondary Road 1143, 0.3 mile southeast of Gamewell, and 1.9 miles downstream from Millers Creek.	60.9	1970	6-30-71	54.4
					7-22-71	38.2
					7-27-71	44.0
					9- 3-71	38.3
Howard Creek 02141319	Catawba River	Lat 35°46'18", long 81°35'11", Burke County, at bridge on Secondary Road 1536, 1.0 mile upstream from mouth, and 1.4 miles northeast of Drexel.	3.08	1970	10- 6-70	1.30
					7- 1-71	2.10
					7-27-71	2.85
					9- 3-71	1.84
Howard Creek 02141334	Catawba River	Lat 35°46'26", long 81°34'56", Burke County, at bridge on Secondary Road 1512, 0.3 mile downstream from Secrets Creek, and 6.3 miles northeast of Morganton.	5.05	1950, 1963, 1970	10- 6-70	1.52
					7- 1-71	3.69
					7-27-71	5.40
					9- 3-71	3.26
McGalliard Creek 02141355	Catawba River	Lat 35°44'52", long 81°35'08", Burke County, at culvert on U.S. Highways 64 and 70, 0.9 mile upstream from Dye Creek, and 1.2 miles west of Valdese.		1970	10- 6-70	.92
					7- 1-71	2.57
					7-22-71	1.28
					7-27-71	1.89
					9- 3-71	1.57

a Approximately.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Santee River basin--Continued						
McGalliard Creek 02141424	Catawba River	Lat 35°45'48", long 81°34'12", Burke County, at bridge on Secondary Road 1538, 0.9 mile north of Valdese, and 1.9 miles upstream from mouth.	7.36	1970	10- 6-70 7- 1-71 7-22-71 7-27-71 9- 3-71	7.69 10.6 13.0 13.5 10.8
Hoyle Creek 02141455	Catawba River	Lat 35°45'38", long 81°32'59", Burke County, upstream from sewage effluent outfall, 1.4 miles northeast of Valdese, and 1.6 miles upstream from mouth.		1970	10- 6-70 7- 1-71 7-21-71 7-27-71 9- 3-71	2.82 6.57 3.80 4.43 3.66
Hoyle Creek 02141456	Catawba River	Lat 35°45'42", long 81°32'58", Burke County, at bridge on Secondary Road 1546, 1.5 miles upstream from mouth, and 1.6 miles northeast of Valdese.		1970	7-27-71 9- 3-71	5.37 3.82
Drowning Creek 02141515	Catawba River	Lat 35°43'40", long 81°28'36", Burke County, at culvert on U.S. Highway 64 and 70, 0.5 mile west of Icard, and 7.0 miles upstream from mouth.		1970	10- 6-70 7-28-71	1.70 3.05
Drowning Creek tributary No. 2 02141538	Drowning Creek	Lat 35°43'38", long 81°26'48", Burke County, at bridge on Secondary Road 1623, 1.3 miles east of Icard, and 1.6 miles upstream from mouth.		1970	10- 7-70 7-28-71	1.01 2.53
Drowning Creek tributary No. 4 02141543	Drowning Creek tributary No. 3	Lat 35°43'38", long 81°26'22", Burke County, at culvert on U.S. Highways 64 and 70, 0.5 mile upstream from mouth, and 1.0 mile west of Hildebran.		1970	10- 6-70 7-28-71	.48 .92
Drowning Creek tributary No. 2 02141545	Drowning Creek	Lat 35°44'20", long 81°26'22", Burke County, at bridge on Secondary Road 1627, 0.6 mile upstream from mouth, and 2.5 miles west of Penelope.		1970	10- 7-70	1.29
Drowning Creek tributary 02141548	Drowning Creek	Lat 35°43'38", long 81°25'12", Burke County, at bridge on Secondary Road 1630, 0.8 mile north of Hildebran, and 1.0 mile upstream from mouth.	.98	1970	10- 7-70 7-28-71	1.10 1.22
Drowning Creek 02141560	Catawba River	Lat 35°44'50", long 81°24'52", Burke County, at bridge on Secondary Road 1647, 1.5 miles upstream from mouth, and 2.2 miles north of Hildebran.	a15	1957-64, 1970	10- 7-70 7-28-71	8.48 16.6
Fry Creek 02141618	Catawba River	Lat 35°44'48", long 81°21'40", Catawba County, at culvert on Secondary Road 1314, at Hickory, and 1.9 miles upstream from mouth.		1970	10- 8-70 11- 6-70 7- 1-71 7-22-71 7-28-71	.85 1.52 1.84 1.24 1.28
Gunpowder Creek 02141634	Catawba River	Lat 35°53'01", long 81°31'29", Caldwell County, at culvert on Secondary Road 1181, at Whitnel, and 0.3 mile upstream from unnamed tributary.		1970	10- 8-70 6-30-71 7-22-71 7-26-71	.28 .21 .19 .31
Connelly Creek 02141652	Gunpowder Creek	Lat 35°51'58", long 81°31'04", Caldwell County, at bridge on Secondary Road 1165, 1.2 miles upstream from mouth, and 1.8 miles northwest of Hudson.		1970	10- 8-70 6-30-71 7-26-71	.89 1.42 1.62
Connelly Creek 02141654	Gunpowder Creek	Lat 35°51'47", long 81°30'26", Caldwell County, at bridge on U.S. Highway 321-A, 0.5 mile upstream from mouth, and 1.2 miles north of Hudson.		1970	10- 8-70 7-26-71	1.38 3.06
Gunpowder Creek 02141666	Catawba River	Lat 35°51'20", long 81°29'12", Caldwell County, at bridge on Secondary Road 1160, 1.0 mile northeast of Hudson, and 6.5 miles upstream from Little Gunpowder Creek	a11	1955, 1963, 1970	10- 8-70 7- 1-71 7-22-71 7-26-71	4.77 10.9 8.48 9.64
Falling Creek 02141851	Catawba River	Lat 35°47'45", long 81°18'50", Catawba County, at bridge on Secondary Road 1402, 1.4 miles upstream from mouth, and 4.0 miles northeast of Hickory.		1970	10- 8-70 11- 4-71 7-28-71	1.40 3.53 2.20
Falling Creek 02141853	Catawba River	Lat 35°47'16", long 81°18'24", Catawba County, at bridge on Secondary Road 1400, 0.8 mile upstream from mouth, and 4.2 miles north of Hickory.	a5.0	1963, 1970	11- 4-70 7-28-71	9.39 7.44
Muddy Fork Creek 02142032	Lower Little River	Lat 35°56'50", long 81°11'08", Alexander County, at bridge on Secondary Road 1409, 1.8 miles northwest of Taylorsville, and 3 miles upstream from mouth.	5.6	1963, 1970	10- 8-70 11- 4-70 7-26-71	2.39 7.49 6.92

a Approximately.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Santee River basin--Continued						
Muddy Fork Creek 02142043	Lower Little River	Lat 35°56'02", long 81°11'22", Alexander County, at bridge on State Highway 16, 1.2 miles northwest of Taylorsville, and 2.0 miles upstream from mouth.		1970	10- 8-70 11- 4-70 7-26-71	3.97 8.89 1.12
Stirewalt Creek 02142219	Lower Little River	Lat 35°54'44", long 81°10'46", Alexander County, downstream from sewage effluent outfall, 1.1 miles south of Taylorsville, and 2.8 miles upstream from mouth.	1.16	1970	10- 8-70 11- 4-70 7-26-71	.53 1.26 .89
Stirewalt Creek 02142272	Lower Little River	Lat 35°53'48", long 81°11'02", Alexander County, at bridge on Secondary Road 1111, 1.8 miles upstream from mouth, and 2.0 miles south of Taylorsville.	1.57	1970	10- 8-70 11- 4-70 7-26-71	.73 1.88 1.14
Lower Little River 02142326	Catawba River	Lat 35°51'56", long 81°12'24", Alexander County, at bridge on Secondary Road 1131, 1.1 miles downstream from Sitrewalt Creek, and 1.7 miles northwest of Millersville.	79.4	1970	10- 8-70 11- 4-70 7-26-71	35.9 79.4 81.3
Glade Creek 02142380	Lower Little River	Lat 35°51'24", long 81°10'50", Alexander County, at bridge on Secondary Road 1131, at Millersville, and 0.2 mile upstream from mouth.	a13	1956-63, 1970	10- 8-70 11- 4-70 7-26-71	4.35 10.4 7.53
Lyle Creek 02142442	Catawba River	Lat 35°43'53", long 81°15'59", Catawba County, at bridge on Secondary Road 1441, 1.2 miles upstream from tributary, and 3.3 miles northwest of Conover.		1970	10- 8-70 11- 5-70 7- 1-71 7-23-71	.78 1.58 1.25 1.00
Lyle Creek 02142443	Catawba River	Lat 35°43'36", long 81°14'34", Catawba County, at bridge on Secondary Road 1491, just downstream from tributary, and 2.4 miles northwest of Conover.		1970	10- 8-70 11- 5-70 7- 1-71 7-23-71	1.98 4.32 2.94 3.36
Lyle Creek 02142445	Catawba River	Lat 35°44'14", long 81°11'16", Catawba County, at bridge on State Highway 16, upstream from Lyle Creek tributary, and 2.8 miles northeast of Conover.	a19	1963, 1970	11- 6-70 7-23-71	14.1 10.4
Bakers Creek 02142446	Lyle Creek	Lat 35°45'02", long 81°10'26", Catawba County, at bridge on State Highway 16, 0.2 mile upstream from mouth, and 4.0 miles northeast of Conover.	a5.6	1963, 1970	10- 8-70 11- 6-70 7-23-71	2.95 5.11 4.93
Lyle Creek 02142447	Catawba River	Lat 35°44'27", long 81°09'35", Catawba County, at bridge on Secondary Road 1709, just downstream from tributary, and 4.7 miles northeast of Conover.		1970	10- 8-70 11- 6-70 7-23-71	13.0 22.9 18.2
Mull Creek 02142450	Lyle Creek	Lat 35°43'20", long 81°09'34", Catawba County, at bridge on Secondary Road 1715, 0.8 mile northwest of Claremont, and 1.8 miles upstream from mouth.		1970	10- 8-70 11- 6-70 7-23-71	1.72 3.03 2.08
Lyle Creek 02142451	Catawba River	Lat 35°44'20", long 81°07'52", Catawba County, at bridge on Secondary Road 1716, 0.2 mile downstream from Mull Creek, and 1.7 miles northeast of Claremont.		1970	11- 6-70 7-23-71	27.8 20.3
McLin Creek 02142467	Lyle Creek	Lat 35°41'18", long 81°11'56", Catawba County, at bridge on Secondary Road 1739, 1.8 miles southeast of Conover, and 4.5 miles from Long Creek.		1970	10- 8-70 11- 6-70 7-23-71	.67 1.60 1.16
McLin Creek 02142469	Lyle Creek	Lat 35°40'36", long 81°10'32", Catawba County, at bridge on Secondary Road 1734, 2.4 miles east of Newton, and 2.8 miles upstream from Long Creek.		1970	10- 8-70 11- 6-70 7-23-71	1.43 3.22 2.47
Long Creek 02142470	McLin Creek	Lat 35°41'58", long 81°11'13", Catawba County, at culvert on Secondary Road 1771, 1.9 miles east of Conover, and 4.1 miles upstream from mouth.		1970	10-12-70 11- 7-70 7-26-71	e.03 e.03 .04
McLin Creek 02142471	Lyle Creek	Lat 35°41'40", long 81°08'50", Catawba County, at bridge on Secondary Road 1722, 1.2 miles upstream from Hagan Fork, and 1.2 miles south of Claremont.	a9.9	1963, 1970	10-12-70 11- 5-70 7-26-71	5.22 11.6 6.91
Lyle Creek 02142490	Catawba River	Lat 35°42'40", long 81°04'53", Catawba County, at bridge on State Highway 10, 0.5 mile north of Catawba, and 1.0 mile upstream from mouth.	a71	1949-57, 1962, 1970	7-26-71	66.1
Lyle Creek 02142491	Catawba River	Lat 35°42'45", long 81°04'26", Catawba County, just downstream from sewage outfall 0.3 mile upstream from mouth, 0.4 mile north of Catawba, and 0.5 mile downstream from bridge on N.C. Highway 10.		1970	10-12-70	e25.0

a Approximately.
e Estimated.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Santee River basin--Continued						
Ball Creek 02142530	Catawba River	Lat 35°41'54", long 81°02'19", Catawba County, at bridge on Secondary Road 1831, 2.6 miles southeast of Catawba, and 2.9 miles upstream from mouth.		1970	10-12-70 11- 5-70 7-26-71	4.48 18.4 10.6
Big Branch 02142535	Norwood Creek	Lat 35°41'15", long 80°54'39", Iredell County, at sewage treatment plant just off Secondary Road 1303, 1.0 mile upstream from mouth, and 1.3 miles southwest of Troutmans.		1970	10-13-70 11- 6-70 8-17-71 9-23-71 9-28-71	.10 .18 .63 .90 .18
Norwood Creek 02142537	Catawba River	Lat 35°39'49", long 80°56'06", Iredell County, at bridge on Secondary Road 1322, 3.1 miles upstream from mouth, and 3.6 miles southwest of Troutmans.		1970	10-13-70 11- 6-70 8-17-71 9-23-71 9-28-71	1.30 2.01 2.79 7.10 2.37
McDowell Creek 02142652	Catawba River	Lat 35°26'37", long 80°52'40", Mecklenburg County, at bridge on Secondary Road 2145, 0.2 mile upstream from tributary, and 4.2 miles southwest of Davidson.		1970	7-22-71	1.08
Terrence Creek 02142658	McDowell Creek	Lat 35°24'04", long 80°52'11", Mecklenburg County, at bridge on Secondary Road 2138, 1.5 miles from mouth, and 1.7 miles west of Huntersville.		1969-70	7-22-71	1.50
McDowell Creek 02142661	Catawba River	Lat 35°23'22", long 80°55'16", Mecklenburg County, at bridge on Beatty Ford Road, 2.1 miles downstream from Terrence Creek, and 11.2 miles north of Charlotte.	26.3	1955, 1957, 1959-67, 1969-70	10- 5-70 7-22-71	2.43 8.52
Armstrong Branch 02142687	Dillinger Creek	Lat 35°26'14", long 81°07'42", Lincoln County, at culvert on Secondary Road 1358, 0.9 mile upstream from mouth, and 7.6 miles east of Lincolnton.		1970	10-13-70	.55
Leepers Creek 02142689	Dutchmans Creek	Lat 35°26'34", long 81°06'18", Lincoln County, at bridge on Secondary Road 1360, 0.8 mile downstream from Dellinger Branch, and 2.9 miles east of Iron Station.	a23	1962, 1970	10-13-70	17.0
Fites Creek tributary No. 2 02142860	Fites Creek	Lat 35°16'34", long 81°02'48", Gaston County, at culvert on Secondary Road 2032, at North Belmont, and 0.4 mile upstream from mouth.		1970	10-26-70 3-24-71 8-25-71	*.01 .10 *.16
Fites Creek tributary No. 2 02142861	Fites Creek	Lat 35°16'36", long 81°02'25", Gaston County, 0.2 mile upstream from mouth, and 0.8 mile west of North Belmont.	a.30	1970	10-26-70 3-24-71 8-25-71	*.12 .33 *.26
Dixon Branch 02142880	Long Creek	Lat 35°20'53", long 80°51'46", Mecklenburg County, at culvert on Secondary Road 2113, 0.2 mile upstream from mouth, and 2.2 miles west of Croft.		1969-70	10- 5-70 7-22-71	.25 .91
McIntyre Creek 02142888	Long Creek	Lat 35°19'08", long 80°51'54", Mecklenburg County, at bridge on Beatty Ford Road, 3.3 miles upstream from mouth, and 4.3 miles northwest of Derita.	2.04	1969-70	7-22-71	.76
McIntyre Creek 02142889	Long Creek	Lat 35°19'41", long 80°53'48", Mecklenburg County, at bridge on Secondary Road 2025, 0.8 mile upstream from mouth, and 5.0 miles north of Charlotte.		1969-70	7-22-71	1.23
Gum Branch 02142913	Long Creek	Lat 35°17'54", long 80°56'04", Mecklenburg County, at bridge on Secondary Road 1785, 1.4 miles north of Thrift, and 1.5 miles upstream from mouth.		1969-70	10- 7-70 7-22-71	.03 .78
Gum Branch 02142914	Long Creek	Lat 35°17'57", long 80°56'48", Mecklenburg County, at bridge on Secondary Road 1775, 0.6 mile upstream from mouth, and 1.7 miles northwest of Thrift.	5.39	1957, 1962, 1969-70	7-22-71	.88
Long Creek 02142916	Catawba Creek	Lat 35°17'53", long 80°58'45", Mecklenburg County, at bridge on State Highway 27, 2.3 miles downstream from Gum Branch, and 3.0 miles northwest of Thrift.	32.2	1955, 1957, 1969-70	8-16-71	10.3
Paw Creek 02142952	Catawba Creek	Lat 35°15'19", long 80°55'38", Mecklenburg County, at bridge on Secondary Road 1650, 1.7 miles southeast of Thrift.		1969-70	10- 5-70 8-16-71	.09 1.47
Paw Creek 02142955	Catawba Creek	Lat 35°14'58", long 80°58'15", Mecklenburg County, at bridge on Interstate Highway 85, 1.1 miles upstream from Ticer Branch, and 6.0 miles west of Charlotte.		1969-70	10- 8-70 8-16-71	.84 2.62

a Approximately.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Santee River basin--Continued						
Longview Creek 02143005	Henry Fork	Lat 35 43'24", long 81°22'32", Catawba County, at bridge on Secondary Road 1196, 0.8 mile southeast of Longview, and 1.6 miles upstream from mouth.		1970	10- 7-70 11- 5-70 7-27-71	0.47 .73 .65
Henry Fork 02143027	South Fork Catawba River	Lat 35°39'49", long 81°18'26", Catawba County, at bridge on Secondary Road 1143, 1.7 miles upstream from mouth, and 2.5 miles northwest of Startown.	106	1970	10- 7-70 11- 5-70 7-27-71	73.7 184 137
South Fork Catawba River 02143084	Catawba River	Lat 35°29'00", long 81°16'50", Lincoln County, 0.2 mile upstream from Clark Creek, and 1.5 miles northwest of Lincolnton.	a260	1970	12- 2-70 3-29-71	251 489
Clark Creek 02143105	South Fork Catawba River	Lat 35°42'36", long 81°16'48", Catawba County, at bridge on Secondary Road 1468, 2.8 miles upstream from Cline Creek, and 3.4 miles west of Conover.		1970	10- 7-70 11- 5-70 7-27-71	2.08 4.39 4.57
Bolicks Dry Branch 02143107	Clark Creek	Lat 35°42'42", long 81°16'30", Catawba County, at culvert on Secondary Road 1478, 0.3 mile upstream from mouth, and 3.9 miles east of Hickory.		1970	10- 7-70 11- 5-70 7-27-71	.82 1.76 1.94
Clark Creek 02143109	South Fork Catawba River	Lat 35°41'50", long 81°16'08", Catawba County, at bridge on U.S. Highway 64, 1.6 miles upstream from Cline Creek, and 4.5 miles southeast of Hickory.	6.32	1970	11- 5-70 7-27-71	12.0 6.95
Canover Branch 02143115	Cline Creek	Lat 35°42'08", long 81°13'52", Catawba County, upstream from Conover sewage effluent outfall, 0.8 mile upstream from mouth, and 1.0 mile west of Conover.		1970	10- 7-70 11- 5-70 7-27-71	.15 .27 .38
Cline Creek 02143121	Clark Creek	Lat 35°41'14", long 81°15'08", Catawba County, at bridge on Secondary Road 1164, 0.8 mile upstream from mouth, and 2.4 miles southwest of Conover.		1970	10- 7-70 11- 5-70 7-27-71	2.02 4.79 23.0
Clark Creek 02143172	South Fork Catawba River	Lat 35°37'58", long 81°13'34", Catawba County, at bridge on Secondary Road 2014, 0.4 mile downstream from Town Creek, and 2.2 miles south of Newton.	30.1	1970	10- 7-70 11- 5-70 7-28-71	13.6 28.0 55.2
Clark Creek 02143176	South Fork Catawba River	Lat 35°35'24", long 81°16'04", Catawba County, at bridge on Secondary Road 2007, 0.5 mile upstream from Maiden Creek, and 1.5 miles northwest of Maiden.		1970	10-13-70 11- 5-70 7-28-71	18.8 36.3 73.8
Maiden Creek 02143178	Clark Creek	Lat 35°35'12", long 81°11'32", Catawba County, at bridge on Secondary Road 1810, at Cotton Factory, and 1.2 miles upstream from Pinch Gut Creek.	9.11		7-26-71	4.85
Pinch Gut Creek 02143189	Maiden Creek	Lat 35°35'34", long 81°12'26", Catawba County, at bridge on U.S. Highway 321, 0.2 mile upstream from mouth, and 1.0 mile north of Maiden.	a6.3	1956, 1963, 1970	10-12-70 11- 5-70 7-28-71	2.69 6.14 4.75
Pinch Gut Creek 02143191	Maiden Creek	Lat 35°36'36", long 81°12'38", Catawba County, at bridge on Secondary Road 1882, 1.5 miles upstream from mouth, and 2.2 miles north of Maiden.		1970	7-26-71	3.84
Maiden Creek 02143192	Clark Creek	Lat 35°35'21", long 81°13'18", Catawba County, at bridge on West Main Street (Secondary Road 2007), at Maiden, and 1.1 miles upstream from mouth.		1970	10-12-70 11- 5-70 7-26-71	8.53 22.9 35.8
Clark Creek 02143224	South Fork Catawba River	Lat 35°32'54", long 81°14'59", Lincoln County, at bridge on Secondary Road 1274, 3.1 miles downstream from Maiden Creek, and 3.1 miles southwest of Maiden.	a68	1970	10-13-70 11- 5-70 7-28-71	30.1 63.8 100
Clark Creek 02143236	South Fork Catawba River	Lat 35°31'10", long 81°14'43", Lincoln County, at bridge on Secondary Road 1282, 2.3 miles upstream from Walker Branch, and 2.8 miles north of Lincolnton.	a85	1970	10-13-70 11- 5-70 7-28-71	35.6 76.3 120
Clark Creek 02143260	South Fork Catawba River	Lat 35°28'30", long 81°16'00", Lincoln County, at bridge on Secondary Road 1008, at Lincolnton, and 0.2 mile upstream from mouth.	a92	1947, 1949-57, 1962-64, 1970	10-13-70 11- 5-70 7-29-71	36.9 84.0 80.2
South Fork Catawba River 02143284	Catawba River	Lat 35°27'35", long 81°15'37", Lincoln County, at bridge on Secondary Road 1222, at Lincolnton, and 3.2 miles downstream from Clark Creek.	392	1970	10-13-70 7-29-71	186 358
Boger Branch 02143309	South Fork Catawba River	Lat 35°28'02", long 81°14'21", Lincoln County, at culvert on Secondary Roads 1520 and 1262, at Lincolnton.		1970	10-13-70 7-29-71	e.33 1.14

a Approximately.
e Estimated.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Santee River basin--Continued						
Lithia Inn Branch 02143310	South Fork Catawba River	Lat 35°27'50", long 81°13'20", Lincoln County, at culvert on Secondary Road 1262, 2 miles east of Lincolnton, and 2.5 miles upstream from mouth.	a1.0	1970	10-13-70	e.15
					7-29-71	.79
South Fork Catawba River 02143336	Catawba River	Lat 35°26'50", long 81°15'50", Lincoln County, 0.8 mile northwest of Laboratory, and 2.5 miles upstream from Indian Creek.	a400	1970	7-29-71	436
Lick Fork Creek 02143471	Indian Creek	Lat 35°25'00", long 81°22'30", Gaston County, at bridge on Secondary Road 1637, 0.5 mile upstream from mouth, and 2.5 miles north of Cherryville.	a5.0	1956, 1963, 1970	10- 9-70	*1.88
					10-27-70	2.26
					4- 2-71	6.85
					5-19-71	8.56
					8-25-71	*3.08
Indian Creek 02143481	South Fork Catawba River	Lat 35°24'50", long 81°20'40", Gaston County, at bridge on Secondary Road 1002, 1.8 miles upstream from Leonard Fork, and 2.2 miles southwest of Crouse.	a49	1963, 1970	10- 9-70	*14.8
					10-27-70	21.5
					4- 1-71	69.4
					5-19-71	78.1
					8-25-71	*20.8
Beaverdam Creek 02143519	South Fork Catawba River	Lat 35°22'29", long 81°21'45", Gaston County, at culvert on Junction of Secondary Road 1430 and 1431, 1.1 miles east of Cherryville, and 5.2 miles upstream from mouth.		1970	10-27-70	.14
					4- 2-71	.92
					5-19-71	.70
					8-25-71	*.17
Beaverdam Creek 02143531	South Fork Catawba River	Lat 35°22'37", long 81°20'32", Gaston County, at bridge on State Highway 277, 2.3 miles east of Cherryville, and 4.0 miles upstream from Little Beaverdam Creek.	a3.3	1970	10-27-70	1.09
					4- 2-71	4.33
					5-19-71	4.48
					8-25-71	*1.62
South Fork Catawba River 02143720	Catawba River	Lat 35°22'58", long 81°11'12", Gaston County, at bridge on Secondary Road 1607, at Hardin, and 0.7 mile upstream from Rattle Shoals Creek.		1970	10-28-70	*344
					4- 1-71	757
					5-19-71	867
					8-24-71	*479
South Fork Catawba River 02143740	Catawba River	Lat 35°21'32", long 81°09'46", Gaston County, at bridge on Secondary Road 1001, 0.2 mile downstream from Coley Creek, and 2.1 miles southeast of Hardin.		1970	10-28-70	*380
					4- 1-71	791
					8-24-71	*572
Hoyle Creek 02143757	South Fork Catawba River	Lat 35°27'34", long 81°11'12", Lincoln County, at bridge on Secondary Road 1321, 1.3 miles downstream from Seaboard Air Line Railroad, and 2.0 miles southeast of Iron Station.		1970	10-13-70	e.18
					7-28-71	.89
				1970	10-28-70	*.14
Mauney Creek tributary 02143832	Mauney Creek	Lat 35°21'46", long 81°07'03", Gaston County, at culvert on Secondary Road 1847, 0.5 mile west of Stanley, and 0.7 mile upstream from mouth.			3-24-71	.17
					5-19-71	.24
					8-24-71	*.22
Mauney Creek 02143844	Hoyle Creek	Lat 35°21'20", long 81°07'00", Gaston County, at bridge 1.2 miles west of Stanley, and 1.5 miles upstream from mouth.	a2.7	1970	10-28-70	*2.26
					3-24-71	3.16
					4- 1-71	3.99
					5-19-71	3.72
					8-24-71	*2.91
Hoyle Creek 02143887	South Fork Catawba River	Lat 35°20'10", long 81°08'00", Gaston County, at bridge on Secondary Road 1836, 0.2 mile upstream from mouth, and 2.8 miles northeast of Dallas.	a28	1970	10-28-70	*9.08
					3-25-71	22.9
					5-20-71	32.3
					8-24-71	*13.7
South Fork Catawba River 02143908	Catawba River	Lat 35°19'50", long 81°08'00", Gaston County, at bridge on State Highway 275, 0.1 mile downstream from Hoyle Creek and 3 miles southwest of Stanley.	a560	1970	10-28-70	*400
					4- 1-71	1,020
					5-20-71	874
					8-24-71	*593
Long Creek tributary No. 2 02143989	Long Creek	Lat 35°20'11", long 87°17'43", Gaston County, at bridge on Secondary Road 1443, 1.6 miles upstream from mouth, and 4.4 miles northwest of West Gastonia.		1970	10-27-70	1.77
					4- 2-71	1.78
					8-25-71	*1.11
Long Creek 02144425	South Fork Catawba River	Lat 35°17'46", long 81°11'16", Gaston County, at bridge on U.S. Highway 321, 0.3 mile upstream from Carolina and Northwestern Railroad bridge, and 1.5 miles from Dallas.		1970	10-27-70	1.81
					3-23-71	19.2
					4- 1-71	42.7
Long Creek 02144546	South Fork Catawba River	Lat 35°17'30", long 81°11'00", Gaston County, at bridge 0.2 mile downstream from Carolina and Northwestern Railroad, and 1.8 miles south of Dallas.	a43	1970	10-27-70	8.46
					3-23-71	25.4

a Approximately.
e Estimated.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Santee River basin--Continued				
Long Creek 02144636	South Fork Catawba River	Lat 35°18'00", long 81°09'40", Gaston County, at bridge 1.2 miles southeast of Dallas, 3 miles upstream from mouth.	a48	1970	10-28-70 3-23-71	*4.66 27.1
Dillard Creek tributary 02144644	Dillard Creek	Lat 35°17'54", long 81°07'44", Gaston County, near dirt road (off Duff Street) upstream from Town of Ranlo and Rex Mill water treatment plant sewage outfall, at Ranlo.		1970	10-27-70 3-19-71 3-25-71 5-20-71 8-24-71	*.07 .25 .13 .14 *.08
Dillard Creek tributary 02144645	Dillard Creek	Lat 35°17'49", long 81°07'45", Gaston County, 0.1 mile downstream from sewage effluent outfall at Ranlo and Rex Mill waste treatment plant, 0.4 mile upstream from mouth, and 1.3 miles north of Ranlo.		1970	10-27-70 3-19-71 3-25-71 5-20-71 8-24-71	*.14 .52 .16 .21 *.21
Little Long Creek 02144671	Long Creek	Lat 35°19'24", long 81°11'32", Gaston County, at concrete bridge on U.S. Highway 321, 1.1 miles northwest of Dallas, and 4.9 miles upstream from mouth.		1970	10-27-70 3-19-71 8-24-71	1.22 6.37 *2.50
Little Long Creek 02144676	Long Creek	Lat 35°19'32", long 81°10'54", Gaston County, at bridge on Secondary Road 1008, 0.7 mile north of Dallas, and 4.1 miles upstream from mouth.		1970	10-27-70 3-15-71	1.60 6.45
Long Creek 02144761	South Fork Catawba River	Lat 35°18'30", long 81°07'00", Gaston County, at bridge 0.2 mile upstream from mouth, 0.5 mile west of Spencer Mountain.	a61	1970	10-27-70 3-19-71 3-25-71 8-24-71	*17.8 71.3 42.9 *25.2
Housers Branch 0214483966	South Fork Catawba River	Lat 35°16'52", long 81°07'09", Gaston County, 150 ft downstream from sand filters at Burlington Industries waste treatment plant, 0.9 mile east of Ranlo, and 1.4 miles upstream from mouth.		1970	10-27-70 3-19-71 3-25-71 8-24-71	*.02 .59 .08 *.03
Housers Branch tributary 0214483988	Housers Branch	Lat 35°16'45", long 81°06'53", Gaston County, downstream from effluent discharge from Cocker Machine and Foundry waste treatment plant, 0.1 mile upstream from mouth, and 1.1 miles east of Ranlo.		1970	10-27-70 3-19-71 3-25-71 5-20-71 8-24-71	*.01 .21 .10 .11 *.04
Housers Branch 02144841	South Fork Catawba River	Lat 35°17'00", long 81°06'20", Gaston County, at bridge 0.5 mile upstream from mouth, and 0.8 mile north of Lowell.	a1.4	1970	10-27-70 4- 1-71	*.37 1.57
South Fork Catawba River 02145112	Catawba River	Lat 35°15'35", long 81°04'28", Gaston County, at bridge on N.C. Highway 7, 0.3 mile northeast of McAdenville, and 3.1 miles downstream from House Creek.	a630	1970	10-26-70 3-31-71	*468 1,020
South Fork Catawba River tributary No. 2 02145167	South Fork Catawba River	Lat 35°16'00", long 81°03'19", Gaston County, at end of Secondary Road 2025, 1.2 miles northeast of McAdenville, and 1.4 miles upstream from mouth.		1970	10-26-70 4- 1-71 8-25-71	*.08 .12 *.08
South Fork Catawba River tributary No. 2 02145169	South Fork Catawba River	Lat 35°15'53", long 81°03'31", Gaston County, at culvert on Interstate Highway I-85, 0.9 mile northeast of McAdenville, and 1.1 miles upstream from mouth.		1970	10-26-70 4- 1-71 8-25-71	*.15 .36 *.20
Duharts Creek tributary 02145265	Duharts Creek	Lat 35°16'23", long 81°07'52", Gaston County, 100 ft downstream from sand filters on Secondary Road 2230, 0.5 mile southeast of Ranlo, and 1.0 mile upstream from mouth.		1970	10-27-70 4- 1-71 8-25-71	*.08 .13 *.10
Duharts Creek 02145268	South Fork Catawba River	Lat 35°14'51", long 81°05'51", Gaston County, at bridge on Secondary Road 2439, 1.1 mile northwest of Cramerton, and 2.0 miles upstream from mouth.		1970	10-27-70 3-31-71 8-25-71	*1.45 6.48 *2.46
Catawba Creek 02145509	Catawba River	Lat 35°13'48", long 81°08'02", Gaston County, at bridge on Secondary Road 2446, 0.9 mile downstream from Anthony Creek, and 4.0 miles southeast of Gastonia.	a9.8	1969-70	10-27-70 3-31-71 8-25-71	*8.19 9.74 *4.65
Catawba Creek 02145512	Catawba River	Lat 35°12'31", long 81°06'28", Gaston County, at bridge 3 miles east of Boogertown, and 6 miles upstream from mouth.	17.4	1969-70	10-27-70 3-31-71 8-25-71	*18.9 28.4 *14.6
McGill Creek 02145536	Crowders Creek	Lat 35°14'44", long 81°20'12", Cleveland County, at culvert on State Highway 161, 0.8 mile east of Kings Mountain, and 2.7 miles upstream from mouth.		1970	3-18-71 3-24-71 8-24-71	*.28 .18 *.25

a Approximately.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Santee River basin--Continued						
McGill Creek 02145538	Crowders Creek	Lat 35°14'40", long 81°19'08", Gaston County, at bridge on Secondary Road 1300, 1.7 miles upstream from mouth, and 1.8 miles west of Mountain View.		1970	3-18-71 3-24-71 8-24-71	*2.98 3.50 *1.85
Crowders Creek 02145544	Catawba River	Lat 35°19'45", long 81°16'43", Gaston County, at bridge on Secondary Road 1122, 0.8 mile upstream from Abernathy Creek, and 3.8 miles east of Kings Mountain		1970	3-31-71 8-25-71	11.4 *6.04
First Creek 02145551	Abernathy Creek	Lat 35°15'21", long 81°17'27", Gaston County, at first culvert under south end of Interstate Highway I-85 bridge, 0.1 mile upstream from mouth, and 2.0 miles south of Bessemer City.		1970	3-18-71 3-24-71	*2.15 2.10
Oats Creek 0214555555	Crowders Creek	Lat 35°16'31", long 81°17'06", Gaston County, at concrete pipeline support at wooden bridge, 0.7 mile south of Bessemer City, and 1.4 miles upstream from mouth.		1970	10-26-70 3-18-71 3-24-71 8-25-71	.23 *1.29 .46 *.45
Oats Creek 02145556	Crowders Creek	Lat 35°16'03", long 81°16'58", Gaston County, at culvert on Secondary Road 1306, 1.0 mile south of Bessemer City, and 1.3 miles upstream from mouth.	a1.0	1970	3-18-71 8-25-71	*2.11 *1.61
Abernathy Creek 02145562	Crowders Creek	Lat 35°15'20", long 81°16'10", Gaston County, at culvert on U.S. Highway 29, at Mountain View, and 0.1 mile upstream from mouth.	a7.2	1955, 1970	3-18-71	*10.0
Crowders Creek 02145568	Catawba River	Lat 35°15'10", long 81°15'20", Gaston County, at bridge 1 mile downstream from Abernathy Creek, 2.8 miles southeast of Bessemer City.	a16	1957, 1970	3-18-71	*19.1
Bessemer Branch 02145573	Crowders Creek	Lat 35°16'19", long 81°15'11", Gaston County, at culvert on Secondary Road 1312, and 2.4 miles southeast of Bessemer City.		1970	3-18-71 3-24-71 8-25-71	*.38 .20 *.17
Crowders Creek 02145581	Catawba River	Lat 35°14'02", long 81°13'59", Gaston County, at bridge on Linwood Road, 3 miles upstream from Ferguson Branch, and 3.2 miles east of Mountain View.	a24	1970	3-18-71 8-25-71	*24.0 *16.8
Blackwood Creek 02145583	Crowders Creek	Lat 35°13'34", long 81°12'53", Gaston County, at bridge on Secondary Road 1136, and 2.9 miles south of Gastonia.		1970	3-18-71 3-23-71 3-31-71 8-24-71	*1.84 2.08 2.98 *1.36
Blackwood Creek tributary 02145584	Blackwood Creek	Lat 35°12'15", long 81°11'49", Gaston County, at culvert on Secondary Road 1136, and 3.5 miles south of Gastonia.		1970	3-18-71 3-23-71	*.12 .11
Crowders Creek 02145585	Catawba River	Lat 35°11'38", long 81°13'22", Gaston County, at bridge on Secondary Road 1103, and 5.0 miles south of Gastonia.		1970	3-18-71 8-24-71	*31.9 *18.9
Crowders Creek 02145610	Catawba River	Lat 35°10'09", long 81°11'44". Gaston County, at bridge on U.S. Highway 321, 0.1 mile downstream from South Fork, and 6.5 miles south of Gastonia.	a71	1949-57, 1962, 1964, 1970	10-26-70 3-17-71	21.8 *72.2
Crowders Creek tributary No. 3 02145611	Crowders Creek	Lat 35°13'14", long 81°11'51", Gaston County, at culvert on Secondary Road 2406, and 2.9 miles south of Gastonia.		1970	10-26-70 3-18-71 3-23-71 3-31-71 8-24-71	.13 *.21 .31 .25 *.17
Crowders Creek tributary No. 3 02145613	Crowders Creek	Lat 35°12'44", long 81°11'50", Gaston County, at bridge on Secondary Road 2412, and 4.0 miles south of Gastonia.		1970	10-26-70 3-18-71 3-23-71	1.38 2.94 2.43
Crowders Creek tributary No. 2 02145614	Crowders Creek	Lat 35°11'18", long 81°12'03", Gaston County, at bridge on Secondary Road 2420, 0.4 mile northeast of Crowders, and 1.4 miles upstream from mouth.	4.55	1962, 1970	10-26-70 3-18-71 3-23-71 3-31-71 8-24-71	1.97 *4.35 4.31 6.08 *1.99
Crowders Creek tributary 02145617	Crowders Creek	Lat 35°10'21", long 81°11'37", Gaston County, at bridge on Secondary Road 2416, 0.2 mile upstream from mouth, and 6.2 miles south of G Gastonia.	6.63	1962, 1970	10-26-70 3-17-71 8-24-71	2.68 *6.64 *4.59
Crowders Creek 02145633	Catawba River	Lat 35°09'31", long 81°10'49", Gaston County, at bridge 0.8 mile upstream from State line, 1.5 miles downstream from South Fork, 7.2 miles south of Gastonia.	a80	1970	10-26-70 3-17-71 8-24-71	24.6 123 *43.6

a Approximately.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Santee River basin--Continued						
Crowders Creek 02145655	Catawba River	Lat 35°08'15", long 81°08'15", York County, at bridge on Ridge Road, 3.4 miles upstream from Beaver Dam Creek, and 5.5 miles northeast of Clover, S. C.			3-23-71 3-31-71 8-24-71	81.5 108 *46.0
Irwin Creek 02146211	Sugar Creek	Lat 35°15'43", long 80°50'14", Mecklenburg County, at culvert on U.S. Highway 21 in Charlotte, and 3.4 miles upstream from mouth.	6.03	1969-70	10- 8-70 7-20-71	.36 *2.66
Kennedy Branch 02146222	Irwin Creek	Lat 35°16'25", long 80°50'50", Mecklenburg County, at culvert on Interstate Highway 85, 1.0 mile upstream from mouth, and 3.6 miles north of County Courthouse in Charlotte.	2.27	1969-70	10- 8-70 7-20-71	0 *.50
Irwin Creek 02146243	Sugar Creek	Lat 35°14'08", long 80°15'17", Mecklenburg County, at bridge on State Highway 16, at Charlotte, and 1.2 miles upstream from Stewart Creek.		1969-70	10- 6-70 7-19-71	2.10 14.0
Irwin Creek 02146287	Sugar Creek	Lat 35°13'03", long 80°52'22", Mecklenburg County, at bridge on West Boulevard at Charlotte, and 0.5 mile downstream from Stewart Creek.		1969-70	7-19-71	62.5
Irwin Creek tributary 02146288	Irwin Creek	Lat 35°12'35", long 80°52'04", Mecklenburg County, 200 ft downstream from culvert on State Highway 49, 0.5 mile upstream from mouth, and 1.2 miles southwest of intersection of State Highway 49 and U.S. Highway 21 in Charlotte.		1970	10- 6-70 7-19-71	.36 4.70
Irwin Creek 02146291	Sugar Creek	Lat 35°12'48", long 80°52'56", Mecklenburg County, at bridge on Remount Road, at Charlotte.		1970	10- 6-70 7-19-71	8.04 18.6
Sugar Creek 02146328	Catawba River	Lat 35°09'51", long 80°54'46", Mecklenburg County, at bridge on N.C. Highway 49, at Charlotte, and 2.5 miles from Taggart Creek.		1969-70	10- 6-70 7-19-71	23.6 44.3
Sugar Creek 02146330	Catawba River	Lat 35°08'21", long 80°54'41", Mecklenburg County, at bridge on Arrowood Road, 1.0 mile upstream from Coffey Creek, and 7.4 miles southwest of Charlotte.	43.7	1969-70	7-19-71	29.1
Coffey Creek 02146348	Sugar Creek	Lat 35°08'43", long 80°55'37", Mecklenburg County, at bridge on State Highway 49, 1.2 miles upstream from mouth, and 7.5 miles southwest of Charlotte.	9.19	1957, 1962, 1969-70	10- 5-70 7-23-71	.18 2.14
Sugar Creek 02146354	Catawba River	Lat 35°07'16", long 80°54'10", Mecklenburg County, at bridge on Secondary Road 1126, 1.6 miles upstream from King's Branch, and 2.7 miles north of Pineville.		1969-70	10- 6-70 7-19-71	14.4 36.7
Kings Branch 02146364	Sugar Creek	Lat 35°08'12", long 80°53'11", Mecklenburg County, at bridge on Secondary Road 1138, 2.0 miles upstream from mouth, and 7.4 miles south of Charlotte.	2.63	1962, 1969-70	10- 6-70 7-19-71	.18 1.04
Sugar Creek 02146381	Catawba River	Lat 35°05'20", long 80°54'00", Mecklenburg County, at bridge 0.5 mile upstream from McCullough Branch, and 0.8 mile west of Pineville.	a64	1969-70	7-23-71	41.6
Sugar Creek 02146398	Catawba River	Lat 35°04'30", long 80°54'20", Mecklenburg County, at Railroad bridge at North Carolina-South Carolina State line, 1 mile upstream from Little Sugar Creek, and 1 mile southwest of Pineville.	a69	1969-70	10- 7-70 7-23-71	20.6 48.5
Little Sugar Creek 02146421	Sugar Creek	Lat 35°10'21", long 80°50'49", Mecklenburg County, at bridge on Secondary Road 3814, at Charlotte, and 1.3 miles upstream from Briar Creek.		1969-70	7-19-71	5.95
Briar Creek tributary No. 4 02146427	Briar Creek	Lat 35°14'37", long 80°45'07", Mecklenburg County, at culvert on Milton Road, 1.0 mile upstream from mouth, and 5.5 miles east of Post Office in Charlotte.	.82	1969-70	10- 8-70 7-20-71	.06 .62
Briar Creek 02146461	Little Sugar Creek	Lat 35°09'30", long 80°50'56", Mecklenburg County, at bridge on Secondary Road 3686, 0.2 mile upstream from mouth, and 4.9 miles south of Charlotte.	21.4	1957, 1962, 1969-70	10- 7-70 7-19-71	.93 7.02
Little Sugar Creek 02146520	Sugar Creek	Lat 35°07'05", long 80°52'06", Mecklenburg County, at bridge on Secondary Road 3657, 2.5 miles northeast of Pineville.		1969-70	7-19-71	25.8
Little Sugar Creek 02146538	Sugar Creek	Lat 35°04'40", long 80°53'10", Mecklenburg County, at bridge 0.5 mile southeast of Pineville, and 3.5 miles upstream from mouth.	49.3	1969-70	7-21-71	26.4

a Approximately.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Santee River basin--Continued						
McAlpine Creek 02146556	Sugar Creek	Lat 35°09'46", long 80°43'57", Mecklenburg County, at bridge on Secondary Road 3156, 0.2 mile upstream from Campbell Creek, and 5 miles west of Mint Hill.	8.66	1969-70	10-14-70 8-20-71	0.84 2.42
Campbell Creek 02146563	McAlpine Creek	Lat 35°09'50", long 80°44'20", Mecklenburg County, at culvert on Secondary Road 3156, 0.4 mile upstream from mouth, and 5.3 miles west of Mint Hill.		1969-70	10-14-70 7-20-71	e.001 3.15
Irvins Creek 0214658055	McAlpine Creek	Lat 35°08'57", Long 80°43'34", Mecklenburg County, at culvert on new U.S. Highway 74, 1.2 miles upstream from mouth, and 2.4 miles north of Matthews.		1969-70	7-20-71	3.21
McAlpine Creek 02146592	Sugar Creek	Lat 35°08'53", long 80°44'44", Mecklenburg County, at bridge on Secondary Road 1009, 0.2 mile downstream from Irvins Creek, and 2.5 miles north of Matthews.	32.5	1930, 1957, 1962, 1969-70	7-20-71	17.3
McAlpine Creek 02146655	Sugar Creek	Lat 35°05'02", long 80°50'05", Mecklenburg County, at bridge on State Highway 51, 1 mile upstream from Fourmile Creek, and 10.2 miles south of Post Office in Charlotte.	a51	1969-70	10- 7-70 7-21-71	2.23 16.6
Fourmile Creek 02146668	McAlpine Creek	Lat 35°05'17", long 80°46'30", Mecklenburg County, at bridge on N.C. Highway 16, 3.6 miles west of Matthews, and 4.5 miles upstream from mouth.		1969-70	10- 7-70 7-21-71	0 2.18
Fourmile Creek 02146670	McAlpine Creek	Lat 35°04'33", long 80°49'24", Mecklenburg County, at bridge on Secondary Road 3649, 1 mile upstream from mouth, and 4 miles east of Pineville.	a18	1957, 1962, 1964-67, 1969-70	10- 7-70 7-21-71	.02 3.35
McMullen Creek 02146716	McAlpine Creek	Lat 36°06'30", long 80°50'35", Mecklenburg County, 2.2 miles southeast of Hebron, and 3.8 miles upstream from mouth.	10.7	1969-70	10 -7-70 7-21-71	.36 1.97
McMullen Creek 02146734	McAlpine Creek	Lat 35°05'14", long 80°51'24", Mecklenburg County, at bridge on State Highway 51, 1.8 miles upstream from mouth, and 2 miles east of Pineville.	a14	1957, 1962, 1969-70	10- 7-70 7-21-71	*.32 3.76
McAlpine Creek 02146760	Sugar Creek	Lat 35°03'43", long 80°52'39", Mecklenburg County, at bridge on U.S. Highway 521, 1 mile downstream from McMullen Creek, and 2 miles south of Pineville.	91.7	1949-57, 1962-67, 1969-70	10- 7-70 7-21-71	4.66 38.1
McAlpine Creek 02146761	Sugar Creek	Lat 35°03'12", long 80°53'06", Mecklenburg County, 1.0 mile downstream from bridge on U.S. Highway 521, 2.2 miles upstream from mouth, and 2.2 miles south of Pineville.		1969-70	10- 7-70 7-21-71	5.70 38.3
Steel Creek 02146780	Sugar Creek	Lat 35°07'18", long 80°57'12", Mecklenburg County, at bridge on Secondary Road 1344, 2.0 miles upstream from Walker Branch, and 3.5 miles south of Shopton.	a5.2	1966-67, 1969-70	7-23-71	1.21
Steel Creek 02146782	Sugar Creek	Lat 35°05'54", long 80°57'21", Mecklenburg County, at bridge on Secondary Road 1124, 0.3 miles upstream from Walker Branch, and 4.0 miles west of Pineville.		1969-70	7-23-71	1.38
Polk Ditch 02146783	Walker Branch	Lat 35°05'51", long 80°57'44", Mecklenburg County, at bridge on Secondary Road 1122, 0.2 mile upstream from mouth, and 4.4 miles west of Pineville.		1969-70	10- 6-70 7-23-71	e.004 .13
Sugar Creek 02146800	Catawba River	Lat 35°00'21", long 80°54'09", York County, at bridge on State Highway 160, 0.7 mile downstream from Clems Branch, and 2.6 miles east of Fort Mill, S. C.	262	1969-70	12-15-70 1-19-71 2-24-71 3-23-71 5-19-71 6-16-71 7-30-71 7-30-71 8-17-71 9-24-71	84.7 151 432 172 273 118 2,460 3,180 120 174
East Fork Twelve Mile Creek tributary 02146877	Wast Fork Twelve Mile Creek	Lat 35°04'17", long 80°41'23", Union County, at culvert on Secondary Road 1362, 1.4 miles southwest of Indian Trail, and 6.8 miles upstream from mouth.	a.9		8-30-71 9- 3-71 9- 9-71	*.02 *.01 .01
East Fork Twelve Mile Creek 02146890	Twelve Mile Creek	Lat 34°57'46", long 80°42'40", Union County, at bridge on Secondary Road 1008, 3 miles upstream from mouth, and 3.5 miles northeast of Waxhaw.	a42	1954-69	8-30-71 9- 3-71	*4.12 *2.56

a Approximately.
e Estimated.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Santee River basin--Continued						
West Fork Twelve Mile Creek 02146897	Twelve Mile Creek	Lat 34°57'26", long 80°45'19", Union County, at bridge on Secondary Road 1321, 0.5 mile upstream from mouth, and 2.5 miles north of Waxhaw.	a22	1962	8-30-71 9- 3-71	*1.92 *1.76
Broad River 02148751	Santee River	Lat 35°25'27", long 82°09'56", Rutherford County, at bridge on U.S. Highway 74, 0.2 mile west of Uree, and 2.8 miles downstream from Cane Creek.	a100	1970	4- 2-71	188
Cleghorn Creek 02149322	Broad River	Lat 35°21'59", long 81°57'21", Rutherford County, on downstream side of U.S. Highway 74, 0.2 mile south of Rutherfordton, and 6.0 miles upstream from mouth.	a1.1	1959, 1964, 1970	5-21-71 8-11-71	1.44 1.20
Cleghorn Creek 02149342	Broad River	Lat 35°20'31", long 81°57'52", Rutherford County, at bridge on Secondary Road 1005, 2.0 miles south of Rutherfordton, and 4 miles upstream from mouth.	a7.9	1970	10-21-70 11-21-70 5-21-71 8-11-71	20.3 13.3 15.3 10.2
Broad River 02149377	Santee River	Lat 35°17'30", long 81°59'33", Rutherford County, at bridge on Secondary Road 1005, 0.3 mile downstream from Cleghorn Creek, and 5.8 miles southwest of Rutherfordton.	a270	1970	12-18-70 5-21-71	376 659
Camp Creek 02149612	Green River	Lat 35°15'30", long 82°22'14", Henderson County, at bridge on Secondary Road 1006, 1.2 miles north of Saluda, and 1.7 miles upstream from mouth.		1970	10-20-70 12- 2-70 5-13-71	4.99 *5.51 28.7
Cove Creek 02149672	Green River	Lat 35°14'28", long 82°19'06", Polk County, at bridge on Secondary Road 1122, 0.3 mile downstream from Neals tributary, and 1.7 miles east of Saluda.	1.69	1970	10-20-70 12- 2-70 5-13-71 8-11-71	1.42 *2.07 .88 2.89
White Oak Creek tributary 02150020	White Oak Creek	Lat 35°15'13", long 82°10'19", Polk County, at bridge on Secondary Road 1532, 1.5 miles east of Columbus, and 2.9 miles upstream from Fork of White Oak Creek.		1970	10-20-70 12- 2-70 5-12-71	1.47 *2.18 4.04
White Oak Creek tributary 02150022	White Oak Creek	Lat 35°14'28", long 82°09'12", Polk County, at bridge on Secondary Road 1519, 0.2 mile upstream from mouth, and 2.7 miles southeast of Mill Spring.	a4.8	1970	10-20-70 12- 2-70 5-12-71	2.24 *3.51 6.10
White Oak Creek 02150031	Green River	Lat 35°16'08", long 82°08'23", Polk County, at bridge on Secondary Road 1519, 3.5 miles northeast of Columbus, and 4.2 miles upstream from Machine Creek.	a12	1964, 1970	5-12-71	21.5
South Branch 02150034	White Oak Creek	Lat 35°17'41", long 82°09'58", Polk County, just upstream from effluent discharge at entrance of Stone Cutter Mills Corporation, 0.3 mile southwest of Mill Spring, and 3.5 miles upstream from mouth.		1970	10-20-70 12- 2-70 5-12-71 8-11-71	.26 *.33 .50 .39
South Branch 02150035	White Oak Creek	Lat 35°17'43", long 82°09'52", Polk County, at culvert on N.C. Highway 108, 0.2 mile southwest of Mill Spring, and 3.4 miles upstream from the mouth.		1970	10-20-70 12- 2-70 5-12-71	.58 *.60 1.23
Green River 02150062	Broad River	Lat 35°15'35", long 81°59'02", Polk County, at bridge on Secondary Road 1302, 1 mile upstream from mouth, and 4 miles east of Green River.	a240	1970	12-18-70 5-21-71 8-13-71	196 1,180 722
Second Broad River 02150495	Broad River	Lat 35°24'16", long 81°52'20", Rutherford County, at bridge on Secondary Road 1538, 2.2 miles southeast of Logan, and 2.7 miles upstream from Catheys Creek.		1970	10-21-70 5-21-71	107 145
Catheys Creek 02150618	Second Broad River	Lat 35°24'35", long 81°56'26", Rutherford County, at bridge on Secondary Road 1520, 3.1 miles southeast of Gilkey, and 4.6 miles upstream from Hollands Creek.		1970	10-21-70 4- 2-71 5-21-71 8-11-71	42.4 35.2 37.0 34.9
Catheys Creek tributary 02150619	Catheys Creek	Lat 35°24'18", long 81°56'32", Rutherford County, at culvert on Secondary Road 1520, 0.3 mile upstream from the mouth, and 3.2 miles southeast of Gilkey.		1970	10-21-70 11-12-70 4- 2-71 5-21-71 8-11-71	.91 .86 .90 .72 .64
Holland Creek 02150628	Catheys Creek	Lat 35°23'22", long 81°52'02", Rutherford County, at culvert on U.S. Highway 64, 0.3 mile upstream from mouth, and 1.5 miles north of Ruth.		1970	10-21-70 11-12-70 4- 2-71	4.98 4.82 4.11
Cox Branch 02150644	Holland Creek	Lat 35°22'32", long 81°54'56", Rutherford County, at culvert on Secondary Road 1591, 0.3 mile upstream from mouth, and 1.6 miles northeast of Spindale.		1970	10-21-70 11-12-70 4- 2-71	8.50 6.41 2.06

a Approximately.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Santee River basin--Continued						
Catheys Creek 02150647	Second Broad River	Lat 35°22'52", long 81°53'16", Rutherford County, at bridge on Secondary Road 1510, 500 ft downstream from Hollands Creek, and 3.0 miles northeast of Spindale.		1970	11-12-70 4- 2-71	65.6 55.1
Catheys Creek 02150651	Second Broad River	Lat 35°22'51", long 81°51'57", Rutherford County, at bridge on Secondary Road 1549, 0.8 mile upstream from mouth, and 3.5 miles north of Forest City.	a45	1970	11-12-70 4- 2-71	76.1 64.4
Second Broad River 02150742	Broad River	Lat 35°20'00", long 81°50'23", Rutherford County, at bridge on U.S. Highway 74, 1.2 miles upstream from Morrow Creek, and 1.5 miles east of Forest City.	a170	1970	11-13-70 5-21-71	272 276
Second Broad River 02150744	Broad River	Lat 35°19'37", long 81°40'06", Rutherford County, 0.3 mile downstream from Forest City sewage disposal plant, 0.5 mile upstream from Morrow Creek, and 1.8 miles east of Forest City.	a170	1970	4- 2-71 5-21-71 8-11-71	270 251 167
Morrow Creek 02150814	Second Broad River	Lat 35°18'34", long 81°50'39", Rutherford County, at bridge on Secondary Road 1903, 0.8 mile east of Alexander, and 1.2 miles upstream from mouth.	a.7	1970	11-13-70 5-21-71 8-10-71	1.19 1.42 .67
Morrow Creek 02150816	Second Broad River	Lat 35°18'23", long 81°49'52", Rutherford County, at culvert on Secondary Road 1901, 0.2 mile upstream from mouth, and 2.0 miles southeast of Forest City.		1970	11-13-70 5-21-71 8-10-71	3.58 4.12 2.56
Second Broad River 02150826	Broad River	Lat 35°18'30", long 81°48'24", Rutherford County, at Southern Railway bridge, 0.5 mile upstream from Webbs Creek, and 2.8 miles east of Alexander Mills.	a190	1959, 1964, 1970	8-10-71	179
Second Broad River 02150904	Broad River	Lat 35°16'54", long 81°48'05", Rutherford County, at bridge on U.S. Highway 221A, 0.2 mile west of Coroleen, and 2.6 miles downstream from Webbs Creek.		1970	11-13-70 5-21-71 8-10-71	281 309 187
Second Broad River 02150906	Broad River	Lat 35°16'12", long 81°47'59", Rutherford County, at bridge on Secondary Road 2138, 0.5 mile southwest of Avondale, and 3.0 miles downstream from Webb Creek.	a210	1970	8-10-71	188
Sandy Run 02151742	Broad River	Lat 35°15'22", long 81°41'48", Cleveland County, at bridge on Secondary Road 1003, 0.8 mile downstream from Sandy Creek tributary 2, 1.8 miles northwest of Boiling Springs.	a52	1970	5-18-71 8-10-71	101 43.4
Sandy Run 02151917	Broad River	Lat 35°14'43", long 81°41'39", Cleveland County, at bridge on Secondary Road 1194, 1.6 miles west of Boiling Springs, and 1.9 miles upstream from Grog Creek.		1970	5-18-71	106
First Broad River 02152474	Broad River	Lat 35°24'55", long 81°33'42", Cleveland County, at bridge on State Highway 182, at Lawndale, and 0.8 mile downstream from Maple Creek.	a190	1959-60, 1962, 1964, 1970	3-31-71 5-19-71 8-12-71	356 316 617
First Broad River tributary No. 2 02152478	First Broad River	Lat 35°24'40", long 81°33'57", Cleveland County, at culvert on Secondary Road 1813, 0.2 mile southwest of Lawndale, and 0.2 mile upstream from mouth.	.99	1970	5-13-71 5-18-71	.57 1.03
First Broad River 02152517	Broad River	Lat 35°20'45", long 81°32'47", Cleveland County, at bridge on Secondary Road 1832, 1.7 miles southeast of Metcalf, and 4.0 miles downstream from Harris Creek.		1970	3-31-71 5-19-71	*406 363
Brushy Creek 02152544	First Broad River	Lat 35°20'24", long 81°37'00", Cleveland County, at bridge on Secondary Road 1323, 1.0 mile upstream from Little Creek, and 1.0 mile northeast of Washburn.	15.1	1959, 1964, 1970	3-31-71 5-18-71	*23.7 25.7
Brushy Creek 02152546	First Broad River	Lat 35°19'40", long 81°35'38", Cleveland County, at bridge 0.8 mile downstream from Little Creek, and 2 miles east of Washburn.	20.1	1970	3-31-71 5-18-71 8-11-71	*31.3 35.2 22.3
Brushy Creek 02152564	First Broad River	Lat 35°18'08", long 81°34'43", Cleveland County, at bridge on Secondary Road 1308, 2.2 miles northwest of Shelby, and 2.4 miles upstream from mouth.	26.7	1970	3-31-71 5-18-71	*52.8 47.5
Brushy Creek 02152580	First Broad River	Lat 35°19'08", long 81°34'45", Cleveland County, at bridge on U.S. Highway 74, 0.7 mile west of Shelby, and 1.0 mile upstream from mouth.	27.6	1952, 1955, 1964-67, 1970	3-31-71 8-11-71	*43.6 24.5
First Broad River 02152584	Broad River	Lat 35°15'18", Long 81°35'02", Cleveland County, at bridge on State Highway 150, 2 miles southwest of Shelby, and 3.5 miles downstream from Brushy Creek.	263	1970	10-26-70 3-31-71 8-12-71	182 *513 1,040

a Approximately.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Santee River basin--Continued				
Hickory Creek tributary 02152585	Hickory Creek	Lat 35°17'39", long 81°30'31", Cleveland County, at culvert on U.S. Highway 74, 1.5 miles upstream from mouth, and 1.8 miles east of Shelby.		1970	4- 1-71 5-19-71 8-13-71	*1.62 1.56 .59
Hickory Creek 02152587	First Broad River	Lat 35°14'40", long 81°33'50", Cleveland County, at bridge on Secondary Road 1110, 0.2 mile upstream from Little Hickory Creek, and 3.8 miles south of Shelby.	14.6	1959, 1964, 1970	10-26-70 4- 1-71 5-18-71 8-12-71	5.34 *18.8 24.6 25.9
First Broad River 02152596	Broad River	Lat 35°13'03", long 81°37'37", Cleveland County, at bridge on Secondary Road 1140, 3 miles upstream from mouth, and 4.8 miles northwest of Earl.	292	1968-70	5-21-70 9-24-70 2-25-71 8-12-71	231 176 840 1,220
Beaverdam Creek 02152599	First Broad River	Lat 35°18'44", long 81°38'33", Cleveland County, at bridge on Secondary Road 1314, 1.2 miles southeast of Lattimore, and 6.8 miles upstream from Poplar Branch.		1970	5-18-71 8-11-71	2.79 2.04
Beaverdam Creek tributary 02152600	Beaverdam Creek	Lat 35°18'33", long 81°37'55", Cleveland County, at bridge on Secondary Road 1314, 0.1 mile upstream from mouth, and 1.8 miles southeast of Lattimore.		1970	5-18-71 8-11-71	1.12 .55
East Fork Beaverdam Creek 02152601	Beaverdam Creek	Lat 35°17'36", long 81°36'26", Cleveland County, at culvert on U.S. Highway 74, 1.7 miles upstream from mouth, and 3.7 miles west of Shelby.		1970	8-11-71	1.59
Poplar Branch 02152612	Beaverdam Creek	Lat 35°14'34", long 81°38'51", Cleveland County, at bridge on Secondary Road 1149, 1.2 miles upstream from mouth, and 1.2 miles southeast of Boiling Springs.		1970	8-11-71	1.03
Buffalo Creek 02153296	Broad River	Lat 35°19'40", long 81°28'40", Cleveland County, at Seaboard Coast Line Railroad Bridge, downstream from Long Creek, and 0.5 mile west of Stubbs.	a53	1949, 1964, 1970	10-26-70 5-19-71 8-13-71	26.8 78.7 33.2
Buffalo Creek 02153297	Broad River	Lat 35°19'30", long 81°28'40", Cleveland County, 0.5 mile southwest of Stubbs, 0.5 mile downstream from Seaboard Coast Line Railroad bridge, 0.5 mile downstream from Long Creek.	a54	1970	5-19-71 8-13-71	78.6 30.7
Buffalo Creek 02153299	Broad River	Lat 35°16'40", long 81°27'10", Cleveland County, at bridge on Secondary Road 2033, 1.2 miles upstream from Muddy Fork, and 1.8 miles west of Oak Grove.	68.0		3-12-71	172
Gilliam Creek 02153309	Muddy Fork	Lat 35°20'54", long 81°23'58", Cleveland County, at bridge on dirt road extension of Secondary Road 2000, 0.4 mile upstream from mouth, and 2.4 miles southwest of Cherryville.		1970	4- 1-71	*2.67
Gilliam Creek tributary 02153311	Gilliam Creek	Lat 35°20'54", long 81°23'17", Gaston County, at bridge on Secondary Road 1422, 0.8 mile upstream from mouth, and 2.2 miles southwest of Cherryville.		1970	4- 1-71 5-19-71	*5.78 6.40
Muddy Fork 02153314	Buffalo Creek	Lat 35°20'20", long 81°24'40", Cleveland County, at bridge on Secondary Road 2002, 2.0 miles southeast of Waco, and 4.5 miles upstream from Persimmon Creek.	a14	1964, 1970	4- 1-71	*19.7
Potts Creek 02153328	Muddy Fork	Lat 35°16'00", long 81°25'30", Cleveland County, at bridge on Secondary Road 1001, 0.5 mile south of Oak Grove, and 2 miles upstream from mouth.	a10	1970	5-19-71 8-13-71	11.7 7.18
Buffalo Creek 02153332	Broad River	Lat 35°15'20", long 81°27'30", Cleveland County, at bridge on U.S. Highway 74, 0.2 mile downstream from Muddy Fork, and 5.5 miles southeast of Shelby.	a120	1959-60, 1964, 1970	4- 1-71 5-18-71 8-13-71	*174 297 117
Roberts Branch tributary 02153333	Roberts Branch	Lat 35°15'31", long 81°28'49", Cleveland County, at culvert on Secondary Road 2201, 1.4 miles upstream from mouth, and 4.1 miles southeast of Shelby.		1970	4- 1-71 5-18-71 8-13-71	*.42 1.33 .75
Buffalo Creek 02153334	Broad River	Lat 35°14'07", long 81°28'23", Cleveland County, at bridge on Secondary Road 1103, 1.2 miles downstream from Roberts Branch, and 4.5 miles southeast of Shelby.		1970	4- 1-71 5-18-71	*166 307
Beason Creek 02153341	Buffalo Creek	Lat 35°14'10", long 81°22'00", Cleveland County, at bridge 0.2 mile upstream from unnamed tributary, and 1.2 miles southwest of Kings Mountain.	.95	1970	5-18-71	.72

a Approximately.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic Slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Santee River basin--Continued						
Beason Creek 0215334140	Buffalo Creek	Lat 35°13'45", long 81°23'28", Cleveland County, at bridge on Secondary Road 2252, 2.7 miles southwest of Kings Mountain, and 6.7 miles upstream from mouth.		1970	5-18-71	3.38
Beason Creek 02153342	Buffalo Creek	Lat 35°13'50", long 81°23'30", Cleveland County, at bridge, 5 miles upstream from Long Branch, 3 miles south of Sandy Plains.	a2.9	1970	5-18-71	7.14
Buffalo Creek tributary 02153401	Buffalo Creek	Lat 35°11'29", long 81°30'22", Cleveland County, at bridge on Secondary Road 2212, 0.3 mile upstream from mouth, and 1.6 miles southeast of Earl.		1970	10-26-70 5-18-71	2.72 5.37
Buffalo Creek 03153403	Broad River	Lat 35°11'20", long 81°30'20", Cleveland County, at bridge on Secondary Road 2226, 1.8 miles east of Earl, and 2.5 miles downstream from Beason Creek.	a160	1959-60, 1964, 1970	10-26-70	80.7
Lick Branch 02153429	Buffalo Creek	Lat 35°10'30", long 81°38'00", Cleveland County, at bridge 1.2 miles west of Grover, and 2.8 miles upstream from mouth.	1.09	1970	10-26-70 5-18-71	1.04 1.76
Lick Branch 02153431	Buffalo Creek	Lat 35°10'37", long 81°30'01", Cleveland County, at bridge on Secondary Road 2227, 0.7 mile upstream from mouth, and 2.9 miles west of Grover.		1970	10-26-70 5-18-71	1.81 5.21
Buffalo Creek 02153456	Broad River	Lat 35°10'21", long 81°31'03", Cleveland County, at bridge on State Highway 198, 0.1 mile upstream from North Carolina-South Carolina State line and 4 miles west of Grover.	a170	1968-70	11-24-70 12-17-70 2-25-71 3-12-71 6-21-71 7-29-71 9-23-71	91.9 162 372 272 152 215 648
North Pacolet River 02153872	Pacolet River	Lat 35°13'19", long 82°18'24", Polk County, at second bridge on U.S. Highway 176, 0.5 mile downstream from Bear Creek, and 2.6 miles southeast of Saluda.		1970	5-12-71	37.6
North Pacolet River 02153898	Pacolet River	Lat 35°14'04", long 82°13'42", Polk County, at bridge on State Highway 108, at Lynn, and 2.5 miles upstream from Horse Creek.	a22	1959, 1964, 1970	5-13-71	131
South Pacolet River tributary No. 2 02153912	South Pacolet River	Lat 35°13'09", long 82°14'02", Polk County, at bridge on Secondary Road 1508, 0.7 mile upstream from mouth, and 0.8 mile northeast of Tryon.		1970	10-20-70 12- 2-70 5-13-71	3.05 *.89 9.41
North Pacolet River 02153916	Pacolet River	Lat 35°13'25", long 82°13'03", Polk County, at bridge on Secondary Road 1506, 0.5 mile upstream from Vaughn Creek, and 1.0 mile northeast of Tryon.	a28	1959, 1964, 1970	5-13-71	187
Vaughn Creek 02153945	North Pacolet River	Lat 35°11'54", long 82°13'54", Polk County, at bridge on U.S. Highway 176, 0.2 mile downstream from Little Creek, and 0.8 mile southeast of Tryon.		1970	10-20-70 8-11-71	6.38 33.9
Vaughn Creek 02153948	North Pacolet River	Lat 35°12'25", long 82°13'37", Polk County, at bridge on Secondary Road 1502, 0.7 mile southeast of Tryon, and 0.8 mile upstream from mouth.		1970	10-20-70 5-13-71	9.46 71.8
North Pacolet River 02154020	Pacolet River	Lat 35°12'58", long 82°10'52", Polk County, at bridge on Secondary Road 1517, 1.2 miles downstream from Horse Creek, and 5.6 miles southwest of Sandy Plains.	44.8	1968-70	11-24-70 12-17-70 1-20-71 3-29-71 4-22-71 5-20-71 6-18-71 8-13-71	46.8 72.8 53.9 146 73.2 94.5 63.3 92.6
Savannah River basin						
Chattooga River 02176908	Tugaloo Creek	Lat 35°04'26", long 83°06'27", Jackson County, at bridge on Secondary Road 1107, 0.8 mile upstream from Fowler Creek, and 2.3 miles south of Cashiers.		1969-70	12- 1-70 6- 3-71	*16.8 15.8
Chattooga River 02176912	Tugaloo Creek	Lat 35°00'57", long 83°07'36", Macon County, at bridge on Secondary Road 1603, upstream from Ammons Branch, and 4.7 miles southwest of Highlands.	22.9	1959, 1969-70	6- 3-71	*41.3
Toxaway River 02184123	Keowee River	Lat 35°07'26", long 82°55'54", Transylvania County, at bridge on U.S. Highway 64, 0.7 mile south of Lake Toxaway, and 1.6 miles upstream from Indian Creek.		1969-70	6- 3-71	*13.7

a Approximately.

Discharge measurements made at miscellaneous sites during water year 1971, in Atlantic slope basins--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Savannah River basin--Continued						
Horsepasture River 02184240	Toxaway River	Lat 35°06'23", long 82°59'18", Transylvania County, on left bank 200 ft downstream from Rock Creek, 250 ft upstream from bridge on Secondary Road 1152, 0.9 mile east of Sapphire, and 1.0 mile downstream from Jackson-Transylvania County line.	21.0	1963-69	9-24-71	*45.2
Whitewater River 02184260	Toxaway River	Lat 35°02'13", long 83°01'10", Jackson County, at bridge on Secondary Road 1177, upstream from Upper Falls, and 6.4 miles southeast of Cashiers.	12.9	1959, 1963-66, 1968-69	6- 3-71	*31.2
Thompson River 02184302	Whitewater River	Lat 35°04'35", long 82°59'53", Transylvania County, at bridge on Secondary Road 1149, 1.2 miles upstream from Reid Branch, and 5.7 miles southwest of Lake Toxaway.	2.56	1959, 1963, 1969, 1970	12- 1-70 6- 3-71 9-24-71	*9.03 *6.16 *8.50
Discharge measurements made at miscellaneous sites during water year 1971, in Ohio River basin						
Kanawha River basin						
Chetola Lake at Spillway 03160071	South Fork New River	Lat 36°08'20", long 71°40'16", Watauga County, at spillway, 0.5 mile northeast of Blowing Rock, and 0.7 mile downstream from Bass Lake.			5-10-71 8- 3-71 9-15-71	4.65 13.3 2.91
Middle Fork of South Fork New River 03160082	South Fork New River	Lat 36°08'40", long 81°39'51", Watauga County, at culvert on U.S. Highway 321, 0.2 mile downstream from Penley Branch, and 1.1 miles northeast of Blowing Rock.	3.8		5-10-71 8- 3-71 9-15-71	6.70 25.3 4.82
Middle Fork at South Fork New River 03160103	South Fork New River	Lat 36°09'48", long 81°38'37" Watauga County, at bridge on Secondary Road 1533, 0.1 mile downstream from Moore Branch, and 1.3 miles west of Aho.	8.14		5-10-71 8- 3-71 9-15-71	14.6 43.2 9.58
Winkler Creek 03160206	South Fork New River	Lat 36°11'33", long 81°41'13", Watauga County, at Boone Water Supply Reservoir, 0.6 mile upstream from Flannery Fork, and 1.7 miles south of Boone.			5-11-71 8- 3-71 9-15-71	1.19 4.29 5.87
Boone Creek 03160213	Winkler Creek	Lat 36°13'16", long 81°41'32", Watauga County, at bridge on U.S. Highway 421 at Boone, and 2.1 miles upstream from mouth.	.45		5-10-71 8- 3-71 9-15-71	.77 1.22 .40
Boone Creek 03160222	Winkler Creek	Lat 36°12'19", long 81°40'13", Watauga County, at bridge on State Highway 105, 0.2 mile upstream from Hodges Creek, and 1.4 miles southeast of Boone.			5-10-71 8- 3-71 9-15-71	3.34 4.55 2.13
South Fork New River 03160264	New River	Lat 36°12'50", long 81°38'52", Watauga County, 50 ft upstream from sewage outfall at Boone's waste treatment plant, 0.5 mile upstream from Mutton Creek, and 2.0 miles east of Boone.			5-10-71 8- 3-71 9-15-71	58.9 145 36.9
Howard Creek 03160307	South Fork New River	Lat 36°14'44", long 81°40'28", Watauga County, 0.2 mile downstream from Doe Fork, 0.9 mile upstream from Secondary Road 1306, and 2.0 miles north of Boone.			5-10-71 8- 4-71 9-15-71	17.1 26.1 9.02
South Fork New River 03160449	New River	Lat 36°14'44", long 81°35'40", Watauga County, at bridge on Secondary Road 1355, 0.2 mile upstream from Pine Run Creek, and 1.5 miles north of Rutherwood.			5-11-71 8- 4-71 9-15-71	126 231 93.8
South Fork New River 03160955	New River	Lat 36°20'48", long 81°23'14", Ashe County, at bridge on Secondary Road 1159, 100 ft upstream from Obids Creek, and 1.3 miles west of Glendale Springs.			5-11-71 8- 4-71 9-16-71	302 606 216
Naked Creek 03161014	South Fork New River	Lat 36°25'14", long 81°31'31", Ashe County, at culvert on State Highway 88, at Jefferson, 1.8 miles upstream from Ezra Fork.			5-11-71 8- 4-71 9-16-71	.71 1.16 .53
Naked Creek 03161018	South Fork New River	Lat 36°25'13", long 81°28'29", Ashe County, at bridge on State Highway 88, 0.5 mile east of Jefferson, and 4 miles upstream from mouth.	1.88		5-11-71 8- 4-71 9-17-71	11.4 15.0 5.88
Naked Creek 03161035	South Fork New River	Lat 36°24'34", long 81°25'09", Ashe County, at bridge on Secondary Road 1585, 100 ft upstream from Little Naked Creek, and 3.0 miles southeast of Jefferson.			5-11-71 9-17-71	10.9 6.66
Dog Creek 03161052	South Fork New River	Lat 36°26'22", long 81°24'22", Ashe County, at bridge on Secondary Road 1579, 1.1 miles southwest of Nathans Creek, and 1.5 miles upstream from mouth.			5-12-71 8- 4-71 9-17-71	2.49 5.14 2.10

Discharge measurementa made at miscellaneous sites during water year 1971, in Ohio River basin--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Kanawha River basin--Continued				
Little Buffalo Creek 03162078	Buffalo Creek	Lat 36°24'15", long 81°29'26", Ashe County, at culvert on Second Street in West Jefferson, and 2.5 miles upstream from mouth.	a1.6		5-12-71 8- 4-71 9-16-71	1.83 1.94 .93
Little Buffalo Creek 03162086	Buffalo Creek	Lat 36°25'18", long 81°29'49", Ashe County, at bridge on State Highway 88, 1 mile upstream from mouth, and 1.5 miles north of West Jefferson.	a3.6		5-12-71 8- 4-71 9-16-71	4.73 6.94 3.40
North Fork New River 03162184	New River	Lat 36°28'52", long 81°30'20", Ashe County, at bridge at Sprage Electric Company, 0.5 mile west of Bina, 1.5 miles downstream from Buffalo Creek.	145		5-11-71 8- 4-71 9-16-71	343 343 50.1
North Fork New River 03162500	New River	Lat 36°30'14", long 81°23'25", Ashe County, 0.2 mile downstream from bridge on State Highway 16, at Crumpler, and 6 miles upstream from South Fork.	277	1908-16, 1928-58, 1968	9-15-71	*191
New River 03162850	Kanawha River	Lat 36°33'08", long 81°11'00" Alleghany County, at bridge on Secondary Road 1345, 0.8 mile downstream from Rock Creek, and 1.3 miles northeast of Amelia.	820	1968-69	12- 3-70 9-14-71	1,040 *791
New River 03162851	Kanawha River	Lat 36°34'31", long 81°09'37", Greyson County, Virginia, at bridge on U.S. Highway 221-21, 50 ft downstream from Brush Creek, and 3.3 miles northeast of Amelia.	a830		5-12-71	2,090
Little River 03162871	New River	Lat 36°29'49", long 81°06'26", Alleghany County, 0.2 mile downstream from Bledsoe Creek, and 2 miles southeast of Sparta.	34.2		5-12-71 8- 5-71 9-17-71	53.5 38.4 35.4
Little River 03162884	New River	Lat 36°31'28", long 81°04'12", Alleghany County, at bridge on Secondary Road 1424, 3.1 miles northeast of Sparta, and 3.7 miles upstream from Glade Creek.			5-12-71 8- 5-71 9-17-71	66.6 47.6 42.2
		Tennessee River basin				
West Fork French Broad River 03438879	French Broad River	Lat 35°08'20", long 82°51'04", Transylvania County, at bridge on U.S. Highway 64, 1.2 miles upstream from North Fork, and 1.7 miles west of Rosman.	27.2	1968-70	7-29-71	67.7
West Fork French Broad River 03438881	French Broad River	Lat 35°08'28", long 82°50'20", Transylvania County, at bridge on Secondary Road 1135, 0.1 mile upstream from North Fork, and 1.0 mile west of Rosman.	29.4	1944, 1953-55, 1963, 1966, 1968-70	7-29-71	72.7
Galloway Creek 03439471	French Broad River	Lat 35°09'06", long 82°48'40", Transylvania County, at culvert on entrance road to American Thread Company from U.S. Highway 64, 0.5 mile upstream from mouth, and 0.5 mile south of Calvert.	.56	1968-70	5- 6-71	*1.27
Galloway Creek 03439474	French Broad River	Lat 35°09'00", long 82°48'30", Transylvania County, at culvert below American Thread Company plant, 0.2 mile upstream from mouth, and 0.5 mile south of Calvert.	.64	1968-70	5- 6-71	*1.64
French Broad River 03439500	Tennessee River	Lat 35°08'55", long 82°47'59", Transylvania County, at bridge on Secondary Road 1129, 0.8 mile southeast of Calbert, and 1.4 miles downstream from East Fork.	103	1924-55†, 1963, 1968-70	7-29-71	301
King Creek 03440272	French Broad River	Lat 35°14'22", long 82°43'49", Translyvania County, at culvert on U.S. Highway 64, at Brevard, and 1.3 miles upstream from mouth.	.37	1968-69	12- 1-70 5- 6-71	*6.78 *7.43
King Creek 03440276	French Broad River	Lat 35°14'04", long 82°43'13", Translyvania County, at bridge on Secondary Road 1546, 0.6 mile upstream from mouth, and 0.8 mile east of Brevard.	4.17	1968-69	12- 1-70 5- 6-71 7-13-71	*10.4 *9.64 8.76
French Broad River 03440293	Tennessee River	Lat 35°15'03", long 82°41'58", Transylvania County, at bridge on Secondary Road 1540 at Dunns Rock, and 0.3 mile upstream from Davidson River, at mile 192.1	170	1968-69	7-13-71	413
Davidson River 03441141	French Broad River	Lat 35°15'18", long 82°41'53", Transylvania County, at bridge on Secondary Road 1533, 0.2 mile northeast of Pisgah Forest.	47.2	1968-70	5- 6-71	90.9

a Approximately.
† Operated as a continuous gaging station.

Discharge measurements made at miscellaneous sites during water year 1971, in Ohio River basin--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Tennessee River basin--Continued				
French Broad River 03441181	Tennessee River	Lat 35°15'06", long 82°40'45", Transylvania County, at Patton Bridge on Secondary Road 1533, 0.3 mile southeast of Davidson River, and 1.5 miles upstream from Glad Creek, at mile 190.6.	222	1968-70	7-13-71	533
French Broad River 03442652	Tennessee River	Lat 35°16'06", long 82°38'13", Transylvania County, at bridge on Secondary Road 1528, 0.2 mile south of Penrose, and 0.3 mile downstream from Little River.	291	1968-70	7-29-71	757
French Broad River 03443133	Tennessee River	Lat 35°17'49", long 82°34'51", Henderson County, at bridge on Secondary Road 1205, 0.1 mile downstream from Little Willow Creek, and 1.6 miles southeast of Etowah, and at mile 180.8.	308	1968-70	7-13-71	686
French Broad River 03443500	Tennessee River	Lat 35°20'41", long 82°33'37", Henderson County, at bridge on Secondary Road 1314 at Horseshoe, 2.5 miles upstream from Boylston Creek.	326	1904-06, 1968-70	7-13-71	744
North Fork Mills River 03445425	Tennessee River	Lat 35°24'20", long 82°38'32", Henderson County, downstream from sewage effluent outfall, 0.2 mile upstream from boundary of Pisgah National Forest, and 0.5 mile downstream from Rocky Fork.		1969-70	12- 1-70 4-15-71 5- 3-71 5- 6-71 7-12-71 9-24-71	*31.1 *48.1 *40.2 *31.0 *28.1 27.1
Little Mud Creek 03446044	Mud Creek	Lat 35°15'57", long 82°30'24", Henderson County, 600 ft upstream from culvert on Secondary Road 1127, 0.6 mile upstream from Wolk Lake Dam. 1.1 miles upstream from Mud Creek, and 3.7 miles west of Flat Rock.			4-15-71 5- 3-71 5-20-71 7-13-71 7-30-71 9-24-71	5.19 3.87 4.50 3.16 3.00 2.23
Bat Fork Creek 03446106	Johnson's Drainage Ditch	Lat 35°16'36", long 82°24'30", Henderson County, at culvert on Secondary Road 1809, 0.8 mile southeast of East Flat Rock, and 1.2 miles upstream from Dunn Creek.	1.02	1968-70	5- 6-71 7-12-71 7-30-71 9-24-71	3.39 *3.69 3.92 3.13
Mud Creek 03446363	French Broad River	Lat 35°20'30", long 82°28'05", Henderson County, at bridge on Secondary Road 1508, 0.4 mile southeast of Balfour, and 0.6 mile upstream from Clear Creek.	52.1	1968-70	5-20-71	102
Mud Creek 03446569	French Broad River	Lat 35°21'10", long 82°27'51", Henderson County, at bridge on Secondary Road 1508, 0.2 mile downstream from Clear Creek, and 0.6 mile northeast of Balfour.	97.4	1968-70	5-20-71 7-12-71 9-24-71	157 138 133
French Broad River 03447066	Tennessee River	Lat 35°24'26", long 82°31'53", Henderson County, at Butler Bridge on Secondary Road 1345, 0.6 mile upstream from Cane Creek, and 1.0 mile west of Brickton, and at mile 167.4.	545	1969-70	7-30-71	1,300
French Broad River tributary 03447671	French Broad River	Lat 35°25'41", long 82°32'41", Henderson County, at culvert on Secondary Road 3526, 0.2 mile upstream from mouth, and 2.4 miles west of Fletcher.	.05	1968-70	5- 6-71 9-24-71	*.27 .28
French Broad River 03447687	Tennessee River	Lat 35°25'45", long 82°33'12", Henderson County, at Fanning Bridge on Secondary Road 1419, 0.4 mile downstream from McDowell Creek, 2.9 miles west of Fletcher, at mile 165.3	640	1968-69	5-20-71	1,590
Hominy Creek tributary 03448204	Hominy Creek	Lat 35°32'33", long 82°43'48", Buncombe County, at bridge on Secondary Road 1140, 0.6 mile upstream from mouth, and 1.0 mile southwest of Jugtown.		1970	11- 3-70 12- 1-70 5- 4-71 7-22-71 9-13-71	.26 *.24 *.25 .25 .36
Hominy Creek tributary 03448206	Hominy Creek	Lat 35°32'17", long 82°43'31", Buncombe County, at bridge on Secondary Road 1140, 0.1 mile upstream from mouth, and 0.7 mile east of Luther.		1970	11- 3-70 12- 1-70 5- 4-71 7-22-71 9-13-71	.48 *.42 *.46 .45 .38
Hominy Creek 03448616	French Broad River	Lat 35°32'41", long 82°38'05", Buncombe County, at bridge on Sand Hill Road downstream from Enka Plant, 1.2 miles downstream from Moore Creek, 3.3 miles east of Candler.	91.1	1968-70	5-11-71 5-14-71	*76.9 111
Lee Creek 03451644	French Broad River	Lat 35°36'52", long 82°37'41", Buncombe County, at culvert on Secondary Road 1369, 4.1 miles upstream from mouth, and 4.6 miles northeast of Enka.		1970	11- 2-70 12- 2-70 5- 4-71 7-22-71	.21 *.30 *.41 .16

Discharge measurements at miscellaneous sites during water year 1971, in Ohio River basin--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Tennessee River basin--Continued				
Lee Creek 03451646	French Broad River	Lat 35°37'25", long 82°37'27", Buncombe County, at culvert on Secondary Road 1367, 2.4 miles northwest of Emma, and 3.7 miles upstream from mouth.		1970	11- 3-70 12- 2-70 5- 4-71 7-22-71	0.49 *.40 *.79 .48
Lee Creek 03451648	French Broad River	Lat 35°37'58", long 82°37'46", Buncombe County, at bridge on Secondary Road 1002, 1.5 miles southwest of Elk Mountain, 2.6 miles upstream from the mouth.		1970	11- 3 70 12- 2-70 5- 4-71 7-22-71	.89 *.89 *1.19 .82
Reems Creek 03451826	French Broad River	Lat 35°41'20", long 82°35'40", Buncombe County, 800 ft upstream from Wagner Branch, 2 miles west of Weaverville.	33.4	1968-70	5- 6-71	*17.1
Reems Creek 03451890	French Broad River	Lat 35°41'40", long 82°36'48", Buncombe County, at bridge on U.S. Highway 25, at mouth, and 0.5 mile south of Alexander.	36.3	1944, 1953-54, 1960-63, 1968-70	5- 6-71	*16.2
French Broad River 03451926	Tennessee River	Lat 35°42'04", long 82°37'00", Buncombe County, at bridge on Secondary Road 1634, at Alexander, 0.5 mile downstream from Reems Creek.	1,050	1968-70	10-15-70	1,730
Gabriel Creek 03452824	Ivy Creek	Lat 35°50'39", long 82°33'00", Madison County, at culvert on Secondary Road 1355, 1.2 miles north of Mars Hill, and 1.4 miles upstream from Banjo Branch.	1.61	1968-70	12- 2-70 5- 6-71 7-21-71 9- 8-71	*.19 *.91 1.12 *.43
Banjo Branch 03452826	Gabriel Creek	Lat 35°50'33", long 82°33'31", Madison County, at culvert on Secondary Road 1356, 1.1 mile upstream from mouth, and 1.2 miles northwest of Mars Hill.	.71	1968-70	12- 2-70 5- 6-71 7-21-71 9- 8-71	*.09 *.31 .25 *.19
Banjo Branch 03452827	Gabriel Creek	Lat 35°49'48", long 82°33'20", Madison County, at bridge on Forest Street, 0.2 mile upstream from mouth, and 0.4 mile northwest of Mars Hill.	1.34	1968-70	12- 2-70 5- 6-71 7-21-71 9- 8-71	*.31 .66 .43 *.56
Gabriel Creek 03452832	Ivy Creek	Lat 35°49'35", long 82°33'32", Madison County, at culvert on State Highway 213, 0.1 mile downstream from Banjo Branch, and 0.6 mile west of Mars Hill.	3.83	1968-70	12- 2-70 5- 6-71 7-21-71 9- 8-71	1.28 2.20 2.70 *1.86
French Broad River 03453631	Tennessee River	Lat 35°47'41", long 82°43'03", Madison County, at bridge on Secondary Road 1135 at Redmon, and 0.1 mile downstream from Bear Creek, and at mile 122.5	1,346	1968-69	12- 2-70	*1,800
Pigeon River 03457124	French Broad River	Lat 35°32'06", long 82°54'40", Haywood County, at bridge on Secondary Road 1818, at Clyde, and 0.2 mile downstream from Chambers Branch.	162	1968-70	4-21-71	*281
Pigeon River 03457138	French Broad River	Lat 35°32'55", long 82°56'21", Haywood County, at bridge on road connecting Secondary Roads 1513 and 1519, and 0.5 mile upstream from Richlands Creek, 2.0 miles northeast of Lake Junaluska Dam, and at mile 55.5	167	1969-70	4-22-71 9-13-71	316 142
Richland Creek 03457332	Pigeon River	Lat 35°27'50", long 83°00'40", Haywood County, 0.1 mile upstream from Hyatt Creek, and 0.5 mile south of Hazelwood.	10.9	1968-70	12-11-70 5-11-71 5-14-71 9-13-71	*10.0 *19.9 26.9 15.5
Richland Creek 03457893	Pigeon River	Lat 35°28'45", long 83°00'29", Haywood County, downstream from bridge on West Main St. (Secondary Road 1173), downstream from Camp Branch, and at Hazelwood.	35.7	1968-70	12- 1-70 5-11-71 5-14-71 9-13-71	*26.9 *57.1 116 37.2
Richland Creek 03458421	Pigeon River	Lat 35°32'51", long 82°56'44", Haywood County, at bridge on Secondary Road 1519, 0.2 mile upstream from mouth, and 2.2 miles northwest of Clyde.	68.4	1969-70	4-21-71	197
Pigeon River 03458441	French Broad River	Lat 35°33'41", long 82°57'14", Haywood County, at bridge on Secondary Road 1625, 0.5 mile downstream from Yates Cove, and 3 miles northwest of Clyde.	238	1968-70	4-22-71 9-13-71	449 242
Pigeon River 03458638	French Broad River	Lat 35°36'52", long 82°58'01", Haywood County, at bridge on Secondary Road 1363, 0.1 mile downstream from Dotson Branch, and 1.8 miles northwest of Crabtree.	278	1969-70	4-22-71	451

Discharge measurements made at miscellaneous sites during water year 1971, in Ohio River basin--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Tennessee River basin--Continued						
Pigeon River 03460766	French Broad River	Lat 35°46'32", long 83°06'01", Haywood County, at Carolina Power and Light power plant, downstream from Big Creek, and at Waterville.	536	1968-70	7-28-71	1,340
North Toe River 03461910	Nolichucky River	Lat 36°05'01", long 81°55'45", Avery County, at culvert on State Highway 194, at Newland, and downstream from Kentucky Creek.	9.24	1954-55, 1962-69	5-10-71	*17.4
North Toe River 03461912	Nolichucky River	Lat 36°05'42", long 81°57'07", Avery County, at bridge on Secondary Road 1157, 0.2 mile upstream from Banjo Branch, and 1.5 miles northwest of Newland.		1969-70	5-10-71	*30.6
North Toe River 03461951	Nolichucky River	Lat 36°03'30", long 82°01'08", Avery County, at bridge on U.S. Highway 19E, 0.3 mile upstream from Powder Mill Creek, 0.8 mile southwest of Frank, and at mile 58.5		1969-70	5-10-71 8-10-71	*94.2 105
North Toe River 03461971	Nolichucky River	Lat 36°00'06", long 82°01'14", Avery County, 0.5 mile upstream from Pyatt Creek, 1.3 miles downstream from Justice Creek, 1.5 miles south of Spear, and at mile 52.8		1969-70	5-10-71	*145
North Toe River 03461976	Nolichucky River	Lat 35°58'42", long 82°00'59", Avery County, at bridge on U.S. Highway 19E, 0.1 mile downstream from Jones Creek, 0.7 mile north of Ingalls, and at mile 50.9		1969-70	5-10-71	*158
Brushy Creek 03461979	North Toe River	Lat 35°57'23", long 81°58'23", Avery County, 2.1 miles upstream from mouth, and 2.4 miles southeast of Ingalls.		1969-70	8-10-71	1.99
North Toe River 03461995	Nolichucky River	Lat 35°55'04", long 82°00'19", Mitchell County, at bridge on Secondary Road 1129, 0.1 mile upstream from Holley Branch, 1.8 miles northeast of Altapass, and at mile 39.3		1969-70	8-10-71	213
North Toe River 03462000	Nolichuck River	Lat 35°53'59", long 82°01'50", Mitchell County, 0.1 mile upstream from Rose Creek, and 1.0 mile northwest of Altapass.	104	1934-57‡, 1963-63, 1968-70	3-18-71 6-30-71 9-28-71	292 393 126
Grassy Creek 03462655	North Toe River	Lat 35°51'30", long 82°04'32", Mitchell County, at bridge on Secondary Road 1106, 0.8 mile upstream from East Fork Grassy Creek, and 2.2 miles south of Spruce Pine.		1969-70	7-22-71 9-10-71	*6.21 *4.89
Grassy Creek 03462659	North Toe River	Lat 35°53'42", long 82°04'03", Mitchell County, at bridge on Secondary Road 1117, 0.2 mile upstream from Rockhouse Creek, and 2.7 miles west of Altapass.		1969-70	7-22-71 9-10-71	*10.1 *7.56
South Toe River 03463402	Nort Toe River	Lat 35°52'17", long 82°11'49", Yancey County, at bridge on Secondary Road 1152, 1.0 mile north of Celo.		1969-70	7-23-71	*62.6
South Toe River 03463505	North Toe River	Lat 35°54'32", long 82°11'29", Yancey County, at bridge on N.C. Highway 80 at Newdale, and 0.2 mile downstream from Long Branch.		1969-70	7-23-71	*70.4
Cane Creek 03463651	North Toe River	Lat 36°00'48", long 82°09'49", Mitchell County, at Iron Rail bridge, 0.3 mile downstream from Honeycutt Branch, and 0.3 mile southwest of Bakersville.		1970	11- 6-70 3-18-71 9-10-71	*36.6 43.4 *9.05
Cane Creek 03463654	North Toe River	Lat 36°00'58", long 82°10'19", Mitchell County, at bridge on Secondary Road 1188, 0.7 mile west of Bakersville, and 1.4 miles upstream from Cub Creek.		1970	11- 6-70 3-18-71 9-10-71	*39.0 41.8 *9.92
Mine Fork Creek 03463716	Jacks Creek	Lat 35°58'09", long 82°17'13", Yancey County, at second bridge on Secondary Road 1416, 0.7 mile upstream from Hampton Branch, and 3.7 miles northeast of Burnsville.		1970	11- 6-70 3-18-71 5-11-71 8-10-71	*1.19 3.71 3.27 3.26
North Toe River 03463786	Nolichucky River	Lat 36°01'35", long 82°19'16", Mitchell County, at bridge on State Highway 26, at Huntdale, and 0.5 mile upstream from Cane River.	442	1968-70	6-30-71	543
Cane River 03463801	Nolichucky River	Lat 35°54'16", long 82°19'59", Yancey County, upstream from Pine Swamp Branch, and 2.1 miles southwest of Burnsville.		1969-70	5-11-71 7-23-71	*109 *47.1
McIntosh Branch 03463802	Pine Branch	Lat 35°54'49", long 82°18'14", Yancey County, at culvert on West Main Street (old U.S. 19E), 0.1 mile upstream from mouth, and 1.2 miles west of Burnsville.		1969-70	8-10-71	.41
McIntosh Branch 03463803	Pine Branch	Lat 35°54'48", long 82°18'13", Yancey County, at culvert on U.S. Highway 19E by-pass at mouth, and 1.2 miles west of Burnsville.		1969	5-11-71 9-10-71	.99 *.51
Cane River 03463808	Nolichucky River	Lat 35°54'38", long 82°20'53", Yancey County, at bridge on U.S. Highway 19E, 0.4 mile upstream from Roland Branch, and 2.8 miles west of Burnsville.	58.9	1969	5-11-71	*106

‡ Operated as a continuous gaging station.

Discharge measurements made at miscellaneous sites during water year 1971, in Ohio River basin--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Tennessee River basin--Continued				
Nolichucky River 03464500	French Broad River	Lat 36°04'29", long 82°20'41", Mitchell County, at Poplar, and 0.7 mile upstream from Hollow Poplar Creek.	608	1925-55‡, 1962-63, 1968-70	9-28-71	543
Cold Prong 03478741	Boone Fork	Lat 36°07'57", long 81°44'58", Watauga County, 0.9 mile upstream from Boone Fork, and 4.0 miles west of Blowing Rock.	.85	1969-70	10- 6-70	*1.40
Lance Creek 03478751	Watauga River	Lat 36°10'15", long 81°43'00", Watauga County, at culvert on Secondary Road 1552, at Camp Yonahlossee, and 2.6 miles northwest of Blowing Rock.		1960	4-20-71 7-22-71	*.61 *.26
Watauga River 03478819	South Fork Holston River	Lat 36°11'39", long 81°44'45", Watauga County, at bridge on State Highway 105, 300 ft upstream from Laurel Fork, and 1.4 miles north of Shulls Mills.			4-20-71 9-27-71	*43.7 39.5
Watauga River 03478884	South Fork Holston River	Lat 36°13'00", long 81°47'11", Watauga County, at bridge on State Highway 194, 50 ft downstream from Dutch Creek, and 0.7 mile northwest of Valle Crucis.	48.5	1967-68	4-20-71 9- 2-71 9-27-71	*64.8 135 61.0
Cove Creek 03478899	Watauga River	Lat 36°16'42", long 81°46'46", Watauga County, at bridge on Secondary Road 1233, at Amantha, and 1.1 miles downstream from Laurel Branch.	18.0	1960	4-21-71 7-29-71	*18.6 42.2
Cove Creek 03478934	Watauga River	Lat 36°15'13", long 81°47'27", Watauga County, at bridge on U.S. Highway 321, at Sugar Grove, and 100 ft upstream from Brush Fork.	30.6	1960	4-20-71 7-29-71	*21.1 61.6
Watauga River 03479269	South Fork Holston River	Lat 36°16'08", long 81°53'04", Watauga County, at bridge on Secondary Road 1200, 0.6 mile upstream from Beech Creek, and 1.2 miles northeast of community of Beech Creek.	126	1960, 1967-68	4-21-71 9-27-71	*195 95.9
Banner Elk Creek 03480406	Elk River	Lat 36°08'45", long 81°51'43", Avery County, at bridge on Secondary Road 1341, 0.2 mile upstream from Sugar Creek, and 1.0 mile southeast of Banner Elk.			4-20-71 7-22-71 9-27-71	*6.06 *3.27 2.86
Elk River 03480454	Watauga River	Lat 36°09'30", long 81°52'58", Avery County, at Banner Elk, 900 ft upstream from Wildcat Creek, and 0.6 mile downstream mill pond dam.	11.2		4-20-71 7-22-71 9-27-71	*15.3 *12.7 11.1
Cranberry Creek 03480775	Elk River	Lat 36°08'09", long 82°58'20", Avery County, at bridge on U.S. Highway 19E, 0.6 mile south of Cranberry, and 0.7 mile upstream from Cooper Branch.			4-20-71 7-22-71	*5.15 *3.95
Cranberry Creek 03480778	Elk River	Lat 36°09'10", long 82°57'53", Avery County, at bridge on Secondary Road 1169, 300 ft upstream from Blevins Creek, and 0.5 mile east of Elk Park.			4-20-71 7-22-71	*8.37 *7.47
Elk River 03481000	Watauga River	Lat 36°11'01", long 81°57'45", Avery County, 0.3 mile downstream from Skalley Creek, and 2.0 miles northeast of Elk Park.	42.0	1934-55, 1962-63, 1968-69	4-20-71	*59.4
Little Tennessee River 03499929	Tennessee River	Lat 34°59'05", long 83°22'56", Rabun County, at bridge on Georgia State Road 246, 0.7 mile south of Georgia-North Carolina State line, and 1.0 mile north of Dillard, Ga.		1969-70	12- 1-70	*98.8
Cartoogechaye Creek 03500012	Little Tennessee River	Lat 35°06'53", long 83°27'56", Macon County, at bridge on Secondary Road 1128, 0.8 mile upstream from Allison Creek, and 1.7 miles southeast of Cartoogechaye.	5.81	1968-70	7- 9-71	*27.3
Mill Creek 03500324	Cullasaja River	Lat 35°03'18", long 83°11'49", Macon County, at culvert on U.S. Highway 64 at Highlands, and 0.4 mile upstream from Satulah Branch.	1.15	1958, 1968-70	9-24-71	*1.33
Mill Creek 03500328	Cullasaja River	Lat 35°03'43", long 83°12'24", Macon County, at bridge on Secondary Road 1552, 0.2 mile upstream from mouth, and 0.8 mile northwest of Highlands.	1.56	1968-70	8-11-71	6.76
Cullowhee Creek 03508621	Tuckasegee River	Lat 35°18'09", long 83°11'01", Jackson County, at bridge on Secondary Road 1330, and 1.7 miles upstream from mouth.	20.6	1968-70	8-11-71	54.1
Cullowhee Creek 03508646	Tuckasegee River	Lat 35°18'46", long 83°11'16", Jackson County, at Cullowhee, 0.3 mile downstream from Long Branch, and 0.9 mile upstream from mouth.	23.1	1968-70	8-11-71 9-23-71	54.4 25.2
Scott Creek 03509666	Tuckasegee River	Lat 35°22'29", long 83°13'23", Jackson County, at bridge at City Hall, at Sylva, and 0.4 mile downstream from Cope Creek.	55.2	1968-70	9-23-71	61.0

‡ Operated as a continuous gaging station.

Discharge measurements made at miscellaneous sites during water year 1971, in Ohio River basin--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Tennessee River basin--Continued						
Scott Creek 03510064	Tuckasegee River	Lat 35°22'08", long 83°14'56", Jackson County, at bridge near Dillsboro old railroad station, 0.3 mile upstream from mouth, and 1.5 miles west of Sylva.	58.9	1968-70	9-23-71	65.6
Tulula Creek 03515244	Cheoah River	Lat 35°19'15", long 83°48'08", Graham County, at bridge on Secondary Road 1211, 0.3 mile southeast of Robbinsville, and 0.5 mile upstream from Sweetwater Creek.	28.6	1944, 1947, 1953-55, 1958	9- 2-71	*22.9
Sweetwater Creek 03515360	Cheoah River	Lat 35°19'30", long 83°47'36", Swain County, at bridge on Secondary Road 1214, 0.5 mile upstream from Tulula Creek, and 0.8 mile east of Robbinsville.	13.6	1944, 1953-55, 1963-69	9- 2-71	*17.6
Long Creek 03515522	Cheoah River	Lat 35°18'39", long 83°48'52", Graham County, at bridge on Secondary Road 1127, at Milltown, and 0.4 mile downstream from Poson Branch.	6.03	1968-70	9- 2-71 9-23-71	*5.73 4.87
Long Creek 03515610	Cheoah River	Lat 35°19'44", long 83°48'40", Graham County, at bridge on Secondary Road 1116, upstream from mouth, and 0.5 mile north of Robbinsville.	11.8	1944, 1953-55, 1958-63, 1968-70	9- 2-71 9-23-71	*16.1 12.5
Cheoah River 03515633	Little Tennessee River	Lat 35°20'05", long 83°48'20", Graham County, 0.1 mile upstream from Mountain Creek, and 0.9 mile north of Robbinsville.	55.3	1968-69	9- 2-71	*64.0
Town Creek 03547123	Hiwassee River	Lat 35°02'35", long 83°48'56", Clay County, at bridge on U.S. Highway 64, at Hayesville, 0.7 mile upstream from mouth.	1.12	1968-70	9- 3-71 9-16-71	*.86 *.99
Town Creek 03547133	Hiwassee River	Lat 35°02'40", long 83°48'40", Clay County, 0.3 mile upstream from mouth, n0.4 mile southeast of Hayesville.	1.22	1968-70	9- 3-71 9-16-71	*.94 .90
Hiwassee River 03547233	Tennessee River	Lat 35°03'20", long 83°48'58", Clay County, at Sanderson Bridge, 0.2 mile upstream from Qualls Creek, 0.7 mile north of Hayesville.	198	1968-70	9- 3-71	*1,390
Valley River 03549583	Hiwassee River	Lat 35°12'10", long 83°50'27", Cherokee County, at bridge on U.S. Highway 19, 0.2 mile upstream from Webb Creek, and 0.9 mile west of Andrews.	49.4	1968-70	9- 3-71	*49.2
Valley River 03549637	Hiwassee River	Lat 35°10'54", long 83°53'28", Cherokee County, 0.1 mile upstream from Taylor Creek, and 0.5 mile south of Coalville.	62.6	1968, 1970	9- 3-71	*61.5
Valley River 03550132	Hiwassee River	Lat 35°05'34", long 84°02'20", Cherokee County, at bridge on Joe Brown Highway at Murphy, and 0.1 mile upstream from mouth.	117	1968-70	9- 3-71	*163

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